

#### INTRODUCTION

This edition contains helpful information on the operation and installation of Farfisa video intercoms systems.

In order to make the systems work properly it is necessary to install only Farfisa equipment, keeping strictly to the items referred to in each diagram.

Read all the notes carefully, (even the small ones) in each installation scheme and the working instructions of the system given in the following pages.

For the sake of clarity, please notice that the sequence of the terminals of each article <u>has not been followed</u>. Only the terminal code (letter and/or number) is valid not the graphic sequence.

The items may have more terminals than the ones in the installation diagrams. The excess terminals must not be used.

#### Notice to the installer and user

Check the integrity of the product after removing it from the packing.

Packing materials (such as plastic bags, cardboard, polystyrene foam, etc.) must be kept out of the reach of children.

The manufacturer cannot be held responsible for possible damages caused by improper, erroneous and unreasonable use.

The cable runs of any intercom and video-intercom system must be kept separate from the mains or any other electrical installation as required by **International Safety Standards**.

#### **WARNINGS**

An all-pole mains switch with a contact separation of at least 3mm in each pole shall be incorporated in the electrical installation of the building.

Before connecting the unit, make sure its data correspond to those of the mains.

The apparatus shall not be exposed to dripping or splashing.

For correct operation make sure that ventilation or heat dissipation openings are not obstructed.

Do not open or tamper with power supply or video intercom apparatus when they are ON. There is high voltage inside.

Avoid bumping and hitting the video intercom apparatus, it could break of the CRT with consequent projections of fragmented glass.

For installation or maintenance refer only to qualified personnel.



European Mark of conformity to the EEC Directives.

#### CEMARK

The CE mark ensures that the product complies with the requirements of the European Community Directives in force; in particular, Electrical Safety LVD73/23, Electromagnetic Compatibility EMC89/336 and Telecommunication Terminals R&TTE99/5 Directives.

As set forth by the Directives, the technical documentation and Conformity Declarations are available in the Company's offices for verifications and controls by competent Authorities.



Mark of VDE a German Testing and Certification Institute.



Quality assured firm.



Italian Association of Electrotechnical and Electronic Industries

# 11 TECHNICAL MANUAL

2006 edition

INDEX	Page
General characteristics	2
Composition of Studio series internal stations	3
Intercoms	5
- Internal stations	6
- External door stations	11
- Power supplies and service modules	32
- Installation instructions	35
- Installation diagrams	38
Video Intercoms	81
- Internal stations	82
- External door stations	95
- Power supplies, control units and service modules	109
- Installation instructions	111
- Installation diagrams	116
Telecommunication	191
- Internal stations	192
- Intercom-telephone interface	204
- Electronic PABX	206
- Installation instructions	212
- Installation diagrams	214
Intercom/videointercom systems with reduced wires technology	231
- Internal stations	232
- External door stations	236
- Power supplies, control units and service modules	242
- Installation instructions	243
- Installation diagrams	245
Product List	255





# **GENERAL CHARACTERISTICS**

The Farfisa electronic call system allows for the realisation of intercom, video intercom, digital and intercom-telephone systems.

The modularity of Farfisa indoor and outdoor devices allows for system extension to satisfy the most diverse user's requirements, from individual houses to apartment buildings, from simple intercoms to complete video intercomtelephone sets.

#### Selecting the system

The Farfisa electronic call system allows for the realisation of different types of installation.

- · Intercom systems
- · Video intercom systems
- Intercom-telephone systems
- Video intercom systems
- Digital systems (see technical manual n.10)
- Mixed systems (intercom/video intercom/ telephone)

#### Intercom systems

It is the simplest of the installations. It provides bidirectional audio communication between intercoms and external door stations with dooropening function. The following variants of the basic installation are possible:

- intercommunicating service. It allows for communication between different intercoms of the same apartment or between different apartments with private conversation to other users and to external stations.
- -private conversation. By adding a board to each intercom you can restrict the communication between internal and external user to the called user. The other users do not hear the conversation in progress when they lift the handset.

For the realisation of a basic intercom system you need 4 common wires + 1 single for each user.

#### Video intercom systems

Apart from audio communication and dooropening function, video intercom systems provide visual control of the entrance. The typical characteristics of video intercom systems are:

- **Timed operation**. The video intercom of the called user is enabled for about 40 seconds. The time doubles if the handset is lifted. The system returns to the stand-by state when the handset is replaced.
- **Private conversation**. Video intercom systems allow for audio communication only for the called user. The other users do not hear the conversation in progress when they lift the handset
- Intercommunicating service. This service allows for audio communication between different intercoms or video intercoms of the same apartment or between different apartments with private conversation to other users or external stations.
- Control switching ON. The user can enable the system, switch ON his/her own video intercom and monitor the area framed by the camera. Additional wires and activation buttons are needed in case of multiple entrances.

For the realisation of basic video intercom systems you need 7 common wires + 1 single for each user + common coaxial cable or twisted pair.

#### Intercom-telephone and video intercomtelephone systems

It is a variant of traditional intercom and video intercom systems in which internal stations use telephones (with monitors for video intercomtelephone functions) instead of intercoms or video intercoms. In this case intercom connections are established over an interface board that provides telephone and intercom communication. The interface can be a stand alone product (art. FT11D) or an interface board to be installed inside the FT105P or FT208P electronic PABX (art. ES60 or ES65). Internal stations can use:

- a standard telephone in which intercomfunctions are obtained by dialling specific codes on the keypad
- -an intercom-telephone set (art.ST740) or video intercom-telephone set (art.ST740 + ST7100) with telephone functions and specific buttons for the main intercom services. In intercom-telephone systems the intercommunicating service can be realized by means of a PABX that allows also for private conver-

Intercom-telephone systems need 4 common wires + 1 single for each user (+ 3 common wires + common coaxial cable or twisted pair in case of video intercom-telephone systems) for connections to the riser. Telephone connections are made with a telephone pair.

#### Digital systems

sation.

Digital technology allows for reducing installation time and cost of systems with medium or large number of users. All calls are sent to a common data wire, thus eliminating the traditional single call wire for each user. FN4000 digital systems need 5 common wires for intercom systems and 5 common wires + common coaxial cable (or twisted pair) for video intercom systems.

Digital systems provide all traditional functions of intercom, video intercom and telephone systems, with additional communication function with door-keeper service and anti-panic alarms. For technical details, information on installation and description of the articles that can be used for this type of installation refer to Technical Manual 10 (2005 edition).

# Mixed systems (intercom/video intercom/ telephone)

All intercom, video intercom and telephone systems can be combined according to the user's requirements. It should not be forgotten that there are considerable differences (with specific products and interfaces) in the realisation of digital or analogue installations.

#### Choosing the correct article

When choosing the article and type of installation, you should consider:

- · user's requirements
- number of users
- installation possibilities
- · possible location of articles.

The following options are possible for **external door stations**:

- Mody series push-button panels for digital/ analogue intercom, telephone and video intercom systems
- Matrix series stainless steel push-button panels for digital/analogue intercom, telephone and video intercom systems
- Profilo series push-button panels for analogue intercom, telephone and video intercom systems
- Prestige series brass push-button panels for analogue intercom, telephone and video intercom systems
- ErreP/R series push-button panels for analogue intercom, telephone and video intercom systems
- TM series push-button panels for analogue intercom and telephone systems
- UP series push-button panels for analogue intercom and telephone systems with maximum 2 calls

The following options are possible for **internal stations**:

- Studio modular line for intercom, video intercom and telephone systems
- Compact line for intercom and video intercom systems
- Project line for intercom systems
- PuntoVirgola line for intercom systems
- Slim (900) line for intercom systems

Slim, PuntoVirgola intercoms and some models of the Project series are provided with a mechanical buzzer that is not normally used in electronic call intercom systems.





000000

**10** Ö Ö Ö Ö Ö

224 8 13/1,8

10 0 0 0 0 0 0 0 0

224 8134.8

224

0.0

0

# COMPOSITION BOARD OF STUDIO SERIES INTERNAL STATIONS

Function	Articles	Articles and quantities				Wall or table brackets	e brackets		Table adap	Table adapters (optional)	
	ST 720	ST 740	ST 7100 ST 7100C	ST 7M32	ST4231	WB 700	WB 700   WB7100	WB 7100DG TA 700 TA720	TA 700	TA720	TA 7100
Intercom	_	1	,	1	,					1(+1WB700)	ı
Intercom telephone set		-				-			-		
Digital intercom **	-	ı	,		-		ı	ı		1(+1WB700)	ı
Monitor			_				-				-
Video intercom	-		-			-	_		*		-
Video intercom-telephone		-	-		,	-	_		_		-
Digital video intercom **	_		_		-	-		_	_		-
Video intercom with video memory	-	ı	-	_	ı	2	-	ı	* 2	ı	-
Video intercom-telephone with video memory		-	-	_		2	-		2		-
Digital video intercom with video memory **	1	ı	_	1	1	2	ı	1	2	ı	1

Or TA720 if the 20 wires of TA7100 are not enough. \*\* Digital intercoms and video intercoms are described in Farfisa Technical Manual 10 (2005 edition).

Video intercom+ video memory Digital video intercom+ video memory Video intercom-telephone+ video memory

342 13 <sup>7</sup>/<sub>16</sub>

67 25/8"

249

Digital video intercom Video intercom-telephone

Video intercom

0.0 156 6 1/6" Monitor 2 3 6.1 209 **₹0** Ŏ Ŏ Ŏ Ô Ō Ō Intercom-telephone set 3,4% Digital intercom 67 2 %.





\*

# INSTALLATION INSTRUCTIONS

The following pages show the installation diagrams that are most commonly used in intercom, video intercom and telephone systems. Upon request ACI Farfisa can supply installation diagrams for configurations that are not included in this manual.

- Systems with 1 or more main entrances
- Systems with 1 or more main entrances and secondary door stations
- . Systems with private conversation
- Intercommunicating systems without external door station
- Intercommunicating systems with 1 or more main entrances
- Intercommunicating systems with 1 or more main entrances and secondary door stations
- Systems with floor-call
- · Systems with intercommunicating service between intercoms-video intercoms in individual flats

For a clearer understanding of the diagrams, the sequence of terminals in each individual article has not been followed. Only the terminal code (letter and/or number) is valid, not the graphic sequence.

Terminals with the same letter or number have the same functions.

The following symbols are used in the installation diagrams:

The items may have more terminals than the ones shown in the installation diagrams. The excess terminals must not be connected.

- The intercommunicating installation diagrams connected to 1 or more door stations allow for the use of 5 intercommunicating intercoms (see diagrams from page 55 to 71). If a different number is required, the installation diagrams on pages 74÷80 should be looked at, paying attention to the type of installation (single electronic call, common electronic or alternate current call from door station). The installation diagram to use (2. 3, 4, 6 or 7 intercoms) should be also photocopied and placed over the 5-intercom basic diagram.

Example: photocopying the installation diagram of 4 intercommunicating intercoms on page 78 and placing it to the installation diagram on page 65 (Si 221L/5S), aligning the 6 cables at the riser, will produce a system of 4 intercommunicating intercoms connected to 2 external door stations with common call and electronic ringing for internal and external calls.

- The "telecommunication" section contains only some intercom-telephone (pages 215 and 216) and video intercom-telephone (pages 217÷227) installation diagrams, with application diagrams (see pages 228÷230); many of the installation diagrams contained in the intercom and video intercom sections can be however used, following the indications on pages 212 and 213.

# **Graphic symbols**

Diode Coaxial cable Speaker Microphone Electronic buzzer SR41

Call wires (second and last)

**Button** AP Additional speaker Telephone pair

Resistance Optional wire (usually control switching ON, door release button or intercommunicating

Lamp

Dashed line (for schematic purposes the first and last monitors are shown in the multifamily systems. Required additional monitors can be inserted in such dashed line to complete the installation).



Electric door lock



Edition 2006

# **INTERCOMS**

INDEX		Page
Internal stat	ions	6
- Studio serie	es intercoms	6
- Compact se	eries intercoms	9
- Project serie	es intercoms	10
External do	or stations	11
- Mody series	push-button panels	11
- Matrix series	s push-button panels	20
- Profilo serie	s push-button panels	26
- ErreP/R ser	ies push-button panels	30
- UP series pu	ush-button panels	31
Power supp	lies	32
Service mod	lules	33
Installation i	nstructions	35
Working ins	tructions	36
Troublesho	oting	37
Basic install	lation diagrams	38
- Si 21MO/1	Intercoms connected to 1 external door station	39
- Si 21MO/3	Intercoms with private conversation connected to 1 external door station	41
- Si 22MO/1	Intercoms connected to 2 automatically switched external door stations	43
- Si 23MO/1	Intercoms connected to 3 automatically switched external door stations	45
- Si 26MO/1	Intercom system with secondary door stations and 1 main common station (multiple entrance)	47
- Si 26MO/2	One-way intercom system with secondary door stations and 1 main common station (multiple entrance)	49
- Si 27MO/1	Intercom system with secondary door stations and 2 main common stations (multiple entrance)	51
Intercommu	nicating installation diagrams	52
- Si 200L/7	Intercommunicating intercoms (2 to 7 users)	53
- Si 200L/11	Intercommunicating intercoms (2 to 11 users)	53
- Si 215L/5	5 intercommunicating intercoms connected to 1 external door station with single calls	55
- Si 211L/5	5 intercommunicating intercoms connected to 1 external door station with common call. Call from external door station with alternate current.	57
- Si 211L/5S	5 intercommunicating intercoms connected to 1 external door station with common call	59
- Si 225L/5	5 intercommunicating intercoms connected to 2 external door stations with single calls	61
- Si 221L/5	5in tercommunicatingin tercomsconnectedto2externaldoorstationswithcommoncall.Callfromexternaldoorstations	63
	with alternate current	
- Si 221L/5S	5 intercommunicating intercoms connected to 2 external door stations with common call	65
- Si 235L/5	5 intercommunicating intercoms connected to 3 external door stations with single calls	67
- Si 231L/5	5in tercommunicatingin tercomsconnectedto3externaldoorstationswithcommoncall.Callfromexternaldoorstations	69
	with alternate current	
- Si 231L/5S	5 intercommunicating intercoms connected to 3 external door stations with common call	71
- Si 261L/1S	One-way intercommunicating system with secondary door stations and 1 main common station (multiple entrance)	73
Application	diagrams	74
	mmunicating systems with single call from external door station	74
- For interco	mmunicating systems with common alternate current call from external door station and electronic internal call.	76
- For interco	mmunicating systems with common electronic call from external door station and electronic internal call	78



Technical manual 11



79

- For the realisation of one-way intercommunicating services in apartment building systems. External electronic call.

 $- \ \, \text{For the realisation of one-way intercommunicating services in apartment building systems. External call on electronic buzzer}$ 

ELECOMMUNICATION

# **INTERCOMS**

Electronic call systems can use all intercoms of the Compact, Studio, Project, PuntoVirgola and 900 series (except for models for installation with reduced number of wires; KM811, PT511, PV111, 924D and openvoice 910). Although incorporated in the intercom, the buzzer is not normally used in this type of installation. For more information see the table.

General characteristics of intercoms for systems with electronic call

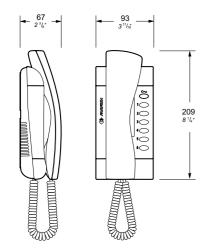
				∕જં ૄ		rd indired of hundred
		/	ric le	Catall /	a stion	alingly of or
.\@	our	/×	onic Bulle	1110	icisio vitto	all diples
Article	Colour	tied.		Cole Priva	te sation Addition	na indinas
<b>*</b>	/ I	/ · &	/ '	7 .00	in	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
ST720W	white	*	-	*	*	1+6 (art.ST701)
KM810W	white	*	-	*	*	1+1 (art.ST701)
PT510EW	white	*	-	*	*	1
PT510	two-coloui	*	*	*	*	1
PT510N	beige	*	*	*	*	1
PT510W	white	*	*	*	*	1
PT526EW	white	*	-	*	*	2+8 (art.PT501)
PT520	two-coloui	*	*	*	*	2+8 (art.PT501)
PT520N	beige	*	*	*	*	2+8 (art.PT501)
PT520W	white	*	*	*	*	2+8 (art.PT501)
PV100	two-coloui	*	*	-	-	1
PV100W	white	*	*	-	-	1
924W	white	*	*	-	_	1

#### **Accessories**

ST 701. Single button unit for ST720 intercoms. Maximum contact current is 0.1A. For higher currents use a relay.

**Note.** For easier reference the 2 terminals of the module are defined as C and P, but they have no polarity and can be inverted.

# **INTERCOMS Studio series**

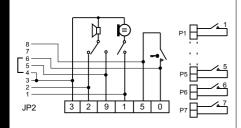


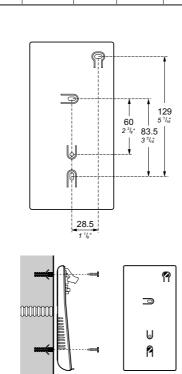
ST 720W. White colour intercom for 4+1 intercom systems and intercommunicating systems connected to 1 or more external door stations. Complete with spiral cord, electronic microphone and 1 button extendable to 7 by adding the ST 701 single button unit.

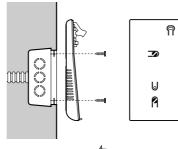
Wall-mountable with expansion plugs or wall box or with **WB700** bracket if combined with **ST7100** monitor or other modules.

# Terminals

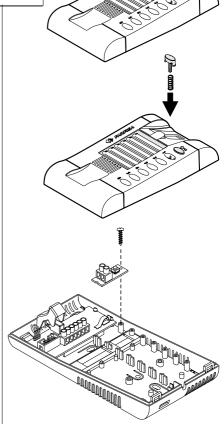
- 1 microphone
- 2 speaker
- 3 ground
- 5 door release button ⊕ (max 1A)
- o common button grounded with the jumper present in the JP2 connector
- 9 electronic call input

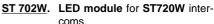


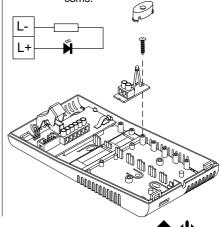














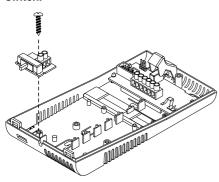




# INTERNAL STATIONS

#### **INTERCOMS Studio series**

switch.

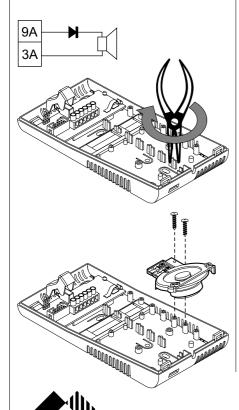


to terminal 9 of the intercom or 9A of ST 704 additional loudspeaker. 9 call button 0 OFF MED

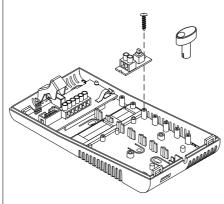
> 3 levels to adjust ringing volume (off, medium and maximum)

ST 704. Additional loudspeaker. It allows to receive calls with off-hook handset, or in systems with 2 calls, with 1 single call and 1 call in common to other intercoms.

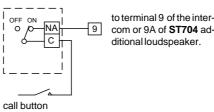
To install the module the last module holder on the intercombase must be removed (see drawing). The article takes the space of 2 modules, and therefore reduces the number of additional buttons to 4.



Ringing volume adjustment | ST 715. Switch module. It allows to activate or deactivate one of the intercom functions (for example call, door lock release, etc.). Maximum contact current is 0.1A.



Example of switch module application to deactivate the intercom call



RL 36. Relay module. When installed inside intercoms it allows to activate additional bells (see page 26). Maximum switching current is 1A (24V).

#### **Terminals**

common terminal of relay

NA normally open contact of relay

NC normally closed contact of relay

ground

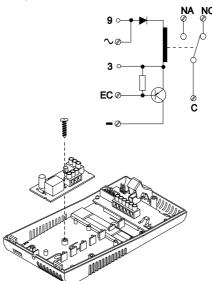
13Vac/dc voltage input

EC relay activation input (ground command)

#### Wires

electronic call input without resistive load 9

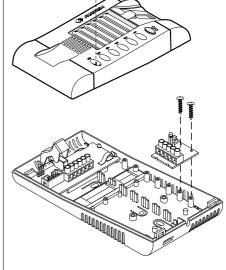
ground



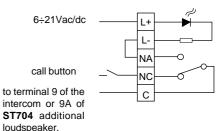
ST 716. Switch module with LED. It allows to activate/deactivate/divert one of the intercom functions (for example call, door lock release, etc.) with visual indication of the function. Maximum contact current of switch module is 0.1A.

The article takes the space of 2 modules. It is recommended to install it in the last position in order to use the space in the bottom part of the

intercom.



Example of switch module with LED application to deactivate the intercom call with visual indication





ELECOMMUNICATION

#### INTERNAL STATIONS

#### **INTERCOMS Studio series**

#### SM 50E. Private conversation module.

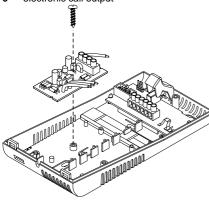
When installed inside all the intercoms of the multi-way intercom system it allows only the called user to be put in communication with the external door station. The module cannot be used in intercommunicating systems and if the intercom is combined with a monitor (in this case the service is provided by the monitor itself).

#### **Terminals**

- B audio line transmitter
- C audio line receiver
- 9 electronic call input
- ground

#### Wires

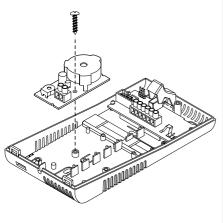
- 1 microphone
- 2 speaker
- 3 ground
- 9 electronic call output



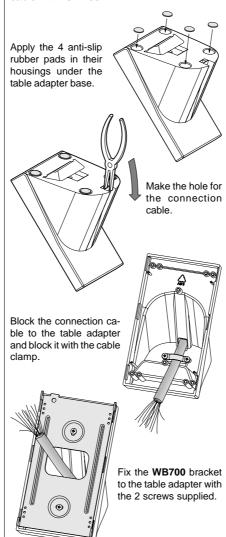
<u>SR 41</u>. Electronic buzzer module. Thanks to low current consumption, it can be used for parallel call to several intercoms. Provided with volume adjustment.

# Terminals

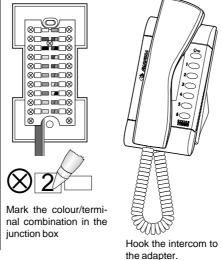
- 3 ground
- power supply input (13Vac-70mA; 9÷20Vdc-15mA)



TA 720W. Table adapter, white colour. Complete with junction box and 2.4m connection cable with 20 wires.

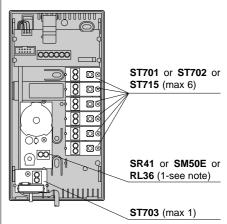


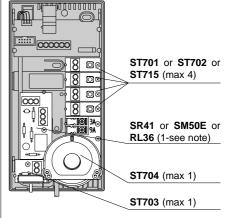
Open the intercom and make the connections as shown in the installation diagram.

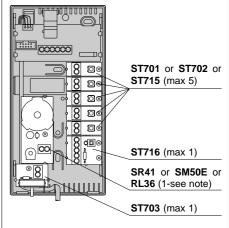


#### **Combination of additional modules**

All modules described above can be installed inside the **ST720** intercoms. It must be kept in mind that they cannot be installed all at the same time. Below are some examples of possible combinations.







#### Note

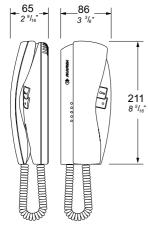
An additional **SR41** or **SM50E** or **RL36** module can be installed taking the place of the last 4 positions of the push-button modules after removing the plastic holders.





# INTERNAL STATIONS

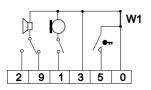
# **INTERCOMS** Compact series

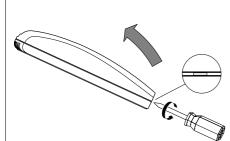


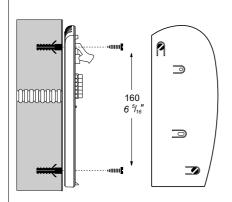
KM810W. White electronic intercom with 1 button, spiral cord, electronic microphone, and possibility of installation of SR41, SM50E modules and a ST701 additional push-button. Wall-mountable with expansion plugs or wall box.

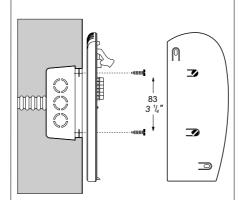
#### **Terminals**

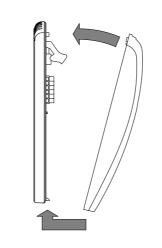
- 1 microphone
- 2 speaker
- 3 ground
- 5 door release button (max 1A)
- 7 common door release button (connected to terminal 3 with jumper W1)
- 9 electronic call input



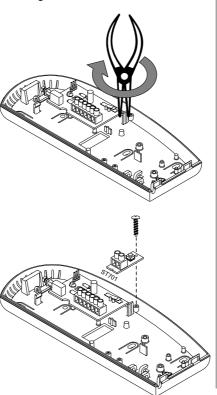




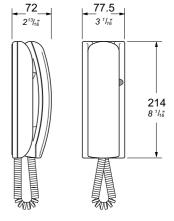




Mounting of the additional button ST701.



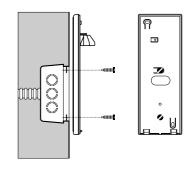
# **INTERCOMS Project series**

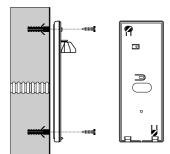


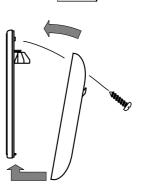
PT510EW. White electronic intercom with 1 button, spiral cord, electronic microphone, and possibility of installation of SR41 and SM50E modules. Wall-mountable with expansion plugs or wall box.

#### **Terminals**

- 1 microphone
- 2 speaker
- ground
- 5 door release button 2 9 1 (max 1A)
- 7 common door release button (connected to terminal 3 with jumper W1)
- 9 electronic call input





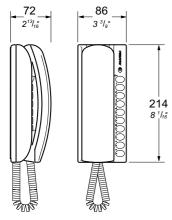






# **INTERNAL STATIONS**

# **INTERCOMS Project series**

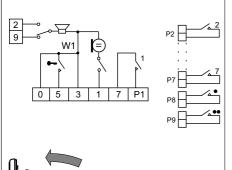


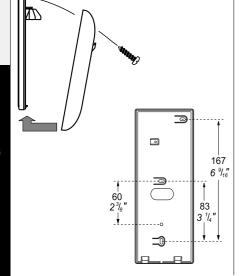
PT526EW. White electronic intercom with spiral cord, electronic microphone and 2 buttons extendable up to 10 by adding the PT501 single button unit.

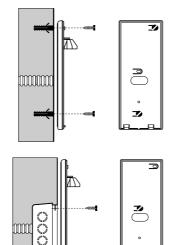
Wall-mountable with expansion plugs or wall box.

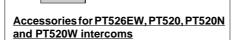
#### **Terminals**

- microphone
- speaker 2
- 3 ground
- 5 door release button - (max 1A)
- common contact of button (connected 0
- to terminal 3 with jumper W1) 7 common contact of button 1
- electronic call input
- **P**1 service button (max 1A)
- P2 ÷ P9 service buttons (max 0.5A)



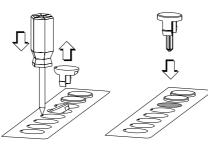


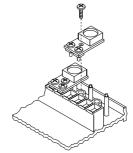




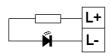
#### PT501. Single button unit.

100000

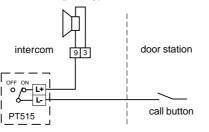




PT502. LED module for door open indication and other functions.



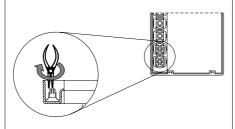
PT515. Switch module to deactivate the intercom call (privacy).



#### Note

It is recommended to install the PT502 LED module and the PT515 switch module in the last 2 positions marked with • and • •.

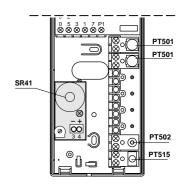
To install them, the plastic button slides must be removed from the internal part of the intercom cover (see figure).



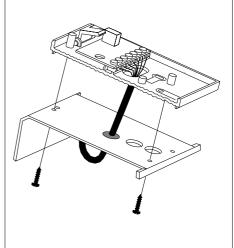
SR41. Electronic buzzer module. It allows for parallel connection of several intercom calls.

#### **Terminals**

- 3 alternated voltage input (13Vac-70mA; 9÷20Vdc-15mA)
- 4 call input (ground command)



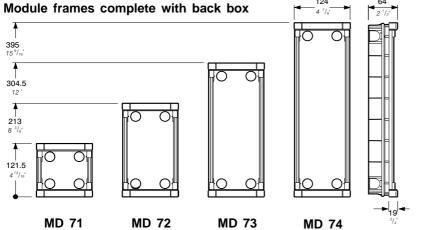
PT538. Table adapter for Project series intercoms, with weighted base, junction box and 2.4m connection cable with 13 wires.







# **PUSH-BUTTONS MODY series**

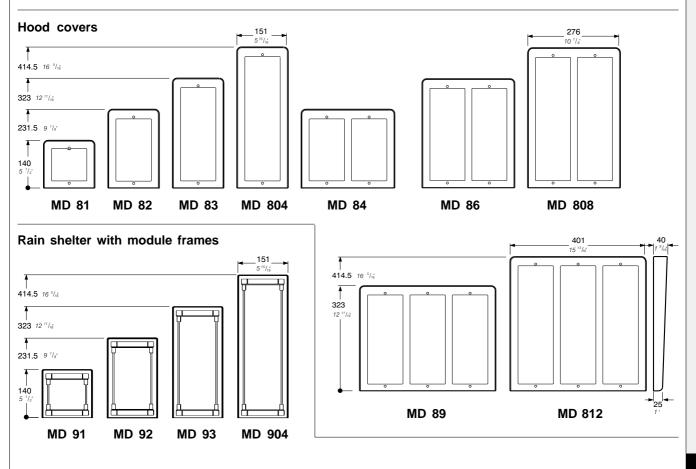


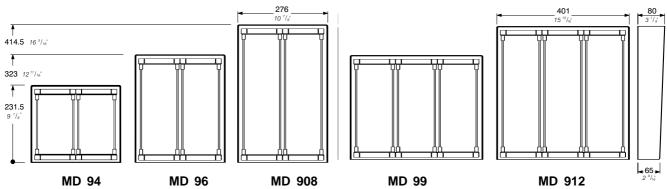
Push-button panels in extruded aluminium made up of modular elements. Suitable for the most diverse installation requirements.

 $\underline{MD71.72.73.74}$ . Plastic back boxes complete with module frames.

MD81.82.83.804.84.86.808.89.812. Aluminium hood covers. To be added to MD71.72.73.74 back boxes.

MD91.92.93.904.94.96.908.99.912. Anodized aluminium rain shelters with module frames. Used for wall mounting.









# **PUSH-BUTTONS MODY series**

#### 1 row push-button modules

Modules for electric door speaker (amplifier)



MD 10 without call buttons



MD 11 1 call button



MD 12 2 call buttons

#### **Button modules**



MD 21 1 call button



MD 22 2 call buttons



MD 23 3 call buttons



MD 24 4 call buttons

# 2 row push-button modules

Modules for electric door speaker (amplifier)



MD 122 2 call buttons



MD 124 4 call buttons

# Button modules



MD 222 2 call buttons



MD 224 4 call buttons



MD 226 6 call buttons



MD 228 8 call buttons

# Modules: blank, number, amplified door stations, access control and cameras



MD20 blank module



MD50 number module



MD 100 Amplified door station with 1 call button (see page 13)



MD 200

Amplified door station with 2 call buttons (see page 13)



FC52P. Keypad module for access control (see page 13)

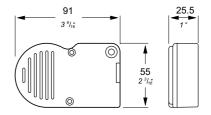


**FP52.** Proximity reader for access control (see characteristics on page 13).



MD41. MD41D. Black and white cameras. MD41C. Colour cameras (see characteristics on page 95).

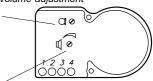
#### **ELECTRIC DOOR SPEAKER**



#### MD 30.

It consists of a double amplifier (receiver and transmitter) with adjustable volume of 2 channels. Also fittable to **Prestige** and **ErreP/R** series push-button panels (for **ErreP/R** door stations by means of **299/1** adapter).

Transmitting volume adjustment

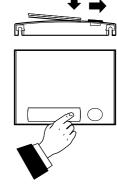


Receiving volume adjustment

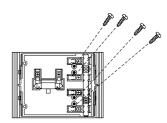
#### **Terminals**

- 1 audio receiver
- 2 audio transmitter
- 3 positive power supply 6 ÷ 8Vdc 60mA
- 4 ground

# Dismounting and protection of name labels



Dismounting of name holder to insert name label



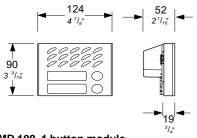
In any button module, in order to avoid the dismounting of name holder, insert a 3MAx12 screw in the holes shown in the picture for each name plate to be blocked. Screws are not supplied by the manufacturer.





#### **PUSH-BUTTONS MODY series**

#### **AMPLIFIED DOOR STATIONS**



#### MD 100. 1 button module.

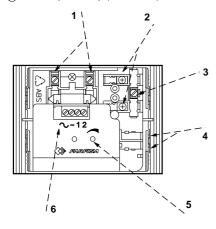
Fittable in all intercom, telephone, intercommunicating and video intercom systems.

Complete with electric door speaker amplified in the two channels, receiving adjustable volume, call button and anodized aluminium front plate. It can replace the MD11 and MD30 module and use all the other accessories of the Mody series.

#### MD 200. 2 buttons module.

#### **Terminals**

- ground
- supply 13Vac/ 12-21Vdc-60mA
- audio receiver
- audio transmitter
- С call push-buttons common
- call push-buttons
- name-plate lamp (24V-70mA)

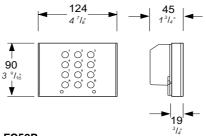


- 1 Lamp terminals
- 2 Push-button terminal board
- Common contact of call push-buttons
- Terminals on stair light push-button
- 5 External volume adjustment
- 6 Terminal board for connection to the system

#### Installation diagrams

For the installation of the MD100 and MD200 modules see the installation diagrams for systems with one entrance in the "intercom". "video intercom" and "telecommunication" section (for example pages 38, 48, 54, 56, 58, 118, 120, 126, 128, 162, 164, 214, 220, 222, 224 and 226).

#### ACCESS CONTROL KEYPAD



#### FC52P.

Access control keypad with 12 digits and 2 relays for lock release. 4 programmable access codes for each relay. Programmable door opening time from 1 up 99 sec. for each relay (or bistable operation of relay 1). Acoustic and visual confirmation for entered keys, accepted programming and for wrong codes.

#### Technical data

Power supply: 12Vac/dc±10% Stand-by current: 0.015A Maximum current consumption: 0.1A Contact ratings: 12Vac-5A Numbers of codes for relays 1:

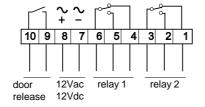
Numbers of codes for relays 2: 4 or direct activation

Activation time for each relay: from 1 to 99sec. (or bistable relay 1)

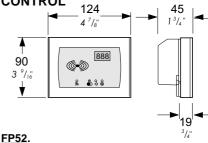
Operating temperature: 0° ÷ +40°C Maximum permissible humidity: 85% RH

#### **Terminals**

- normally closed contact of relay 2
- normally open contact of relay 2
- common contact of relay 2
- normally closed contact of relay 1
- normally open contact of relay 1 common contact of relay 1
- ground or alternate voltage input
- positive or alternate voltage input
- 9-10 connection to optional door lock release



## PROXIMITY READER FOR ACCESS CONTROL



This article allows for the activation of 2 relays by means of keytags or electronic ISO cards based on transponder technology.

Programmable activation time from 1 to 63 seconds for every relay. 4 user cards and 1 master card supplied with the product. Acoustic and visual control signals and 3-digit display to view numbers and codes during set-up and operation.

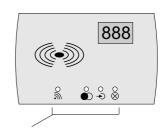
#### Technical data

Power supply	12Vac/dc ±109
Stand-by current	0.1A
Maximum current consumption	0.25A
Contact ratings	24Vac - 2A
Max. number of cards	490
Max. number of Master cards	10
Number of relays	2
Relay time	1 to 63 sec.
Minimum recognition distance	3 cm
Maximum recognition time	1 sec.
Operating temperature	0° ÷ +40°C
Maximum permitted humidity	85% RH

#### Terminals

+/A positive or alternate current input ground or alternate current input PB door open button NC2 normally closed contact of relay 2 NA2 normally open contact of relay 2 C2 common terminal of relay 2 NC1 normally closed contact of relay 1

NA1 normally open contact of relay 1 C1 common terminal of relay 1

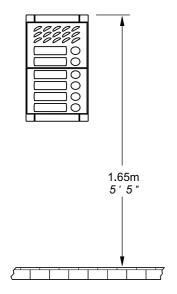


- Card recognition LED. It turns ON during card recognition.
- Relay activation LED. It indicates relay deactivation (red) or activation (green).
- Program LED. It turns ON during system programming.
- Card cancellation and system setup LED. It turns ON during Master or user card cancellation and system setup.

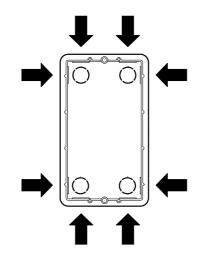




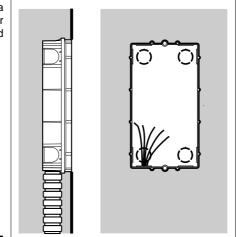
# **PUSH-BUTTONS MODY series**



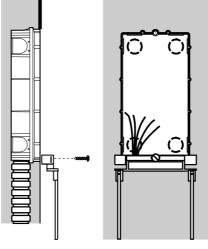
Place the box of the push button panel at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.



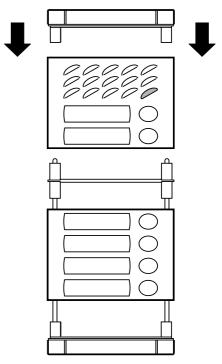
Openings for cables.



Flush mounting and cables placing.



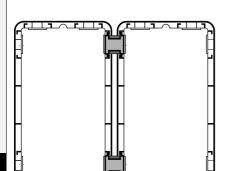
Lower fixing of the module frame.



Mounting of button module.



Lower fixing of the module frame on back box. It is advised to insert a protection (a) between panel and wall while fixing.

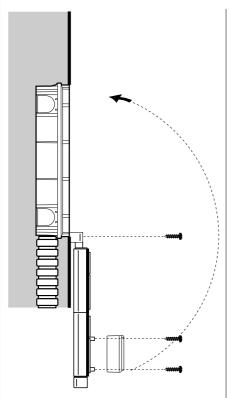


Insertion of cable bush between back boxes. The cable bushes must be inserted before brickwork.

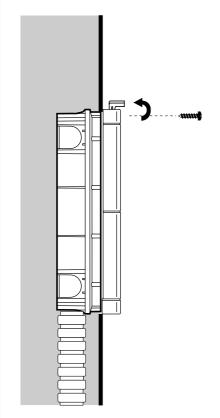




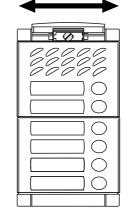
# **PUSH-BUTTONS MODY series**



Mounting of frame bottom and door speaker (amplifier).

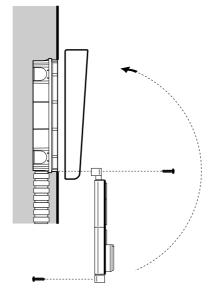


Top fixing of the panel.



Alignment of the panel.

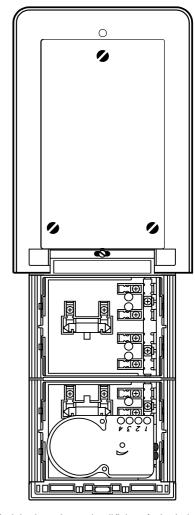
#### **Hood covers**



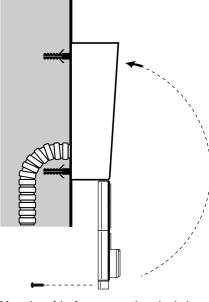
Fixing of the hood cover between the back box and the module frame.



Dismounting of the frame top side from the rain shelter.



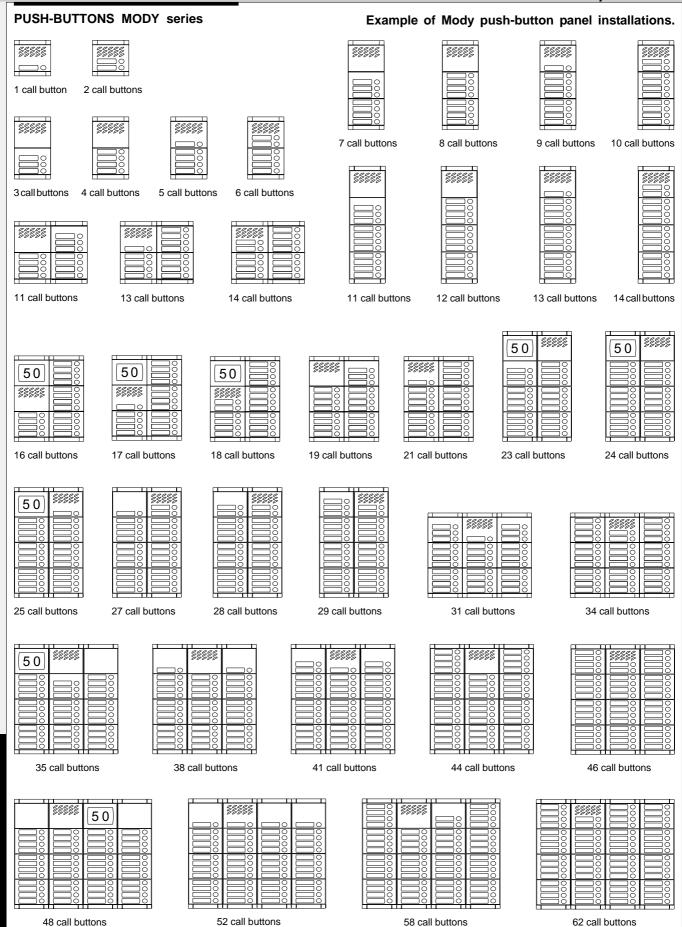
 $Modules\,insertion\,and\,wall\,fixing\,of\,rain\,shelter.$ 



Mounting of the frame top to the rain shelter.







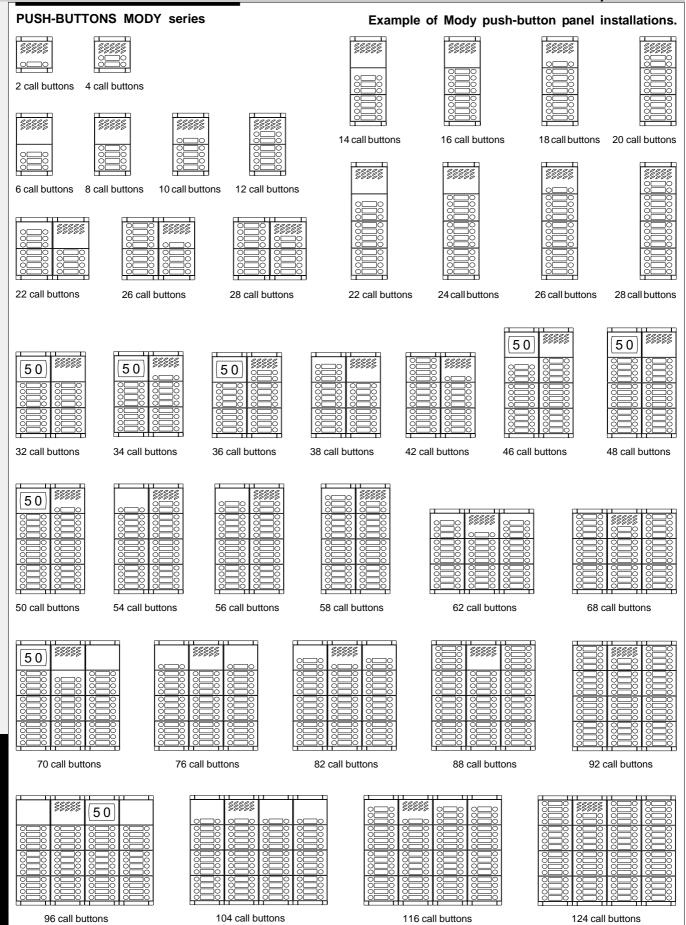




PUS	H-BUTTONS MODY	series		Cor	npositio	n boar	d of Mody	push-butto	on panels.
N° calls	Compositions and dimensions	Door speaker (amplifier)	Module for speaker		n modules ar r or blank mod		Back box and module frame	Hood covers	Rain shelters
1	124x121.5x19	1 MD30	1 MD11	-	-	-	1 MD71	1 MD81	1 MD91
2	$(4^{7}/_{8}" \times 4^{13}/_{16}" \times 3^{3}/_{4}")$	1 MD30	1 MD12	-	-	-	1 MD71	1 MD81	1 MD91
3		1 MD30	1 MD10	1 MD23	-	-	1 MD72	1 MD82	1 MD92
4		1 MD30	1 MD10	1 MD24	-	-	1 MD72	1 MD82	1 MD92
5	124x213x19	1 MD30	1 MD11	1 MD24	-	-	1 MD72	1 MD82	1 MD92
6	$(4^{7}/_{8}" \times 8^{3}/_{8}" \times 3^{3}/_{4}")$	1 MD30	1 MD12	1 MD24	-	-	1 MD72	1 MD82	1 MD92
7		1 MD30	1 MD10	1 MD24	1 MD23	-	1 MD73	1 MD83	1 MD93
8		1 MD30	1 MD10	2 MD24	-	-	1 MD73	1 MD83	1 MD93
9	124x304,5x19	1 MD30	1 MD11	2 MD24	-	-	1 MD73	1 MD83	1 MD93
10	$(4^{7}/_{8}" \times 12" \times {}^{3}/_{4}")$	1 MD30	1 MD12	2 MD24	-	-	1 MD73	1 MD83	1 MD93
11	00000	1 MD30	1 MD10	2 MD24	1 MD23	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
12		1 MD30	1 MD10	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
13	248x213x19	1 MD30	1 MD11	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
14	(9 <sup>3</sup> / <sub>4</sub> "x 8 <sup>3</sup> / <sub>8</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD30	1 MD12	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
15		1 MD30	1 MD10	3 MD24	1 MD23	1 *	2 MD73	1 MD86	1 MD96
16		1 MD30	1 MD10	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
17		1 MD30	1 MD11	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
18		1 MD30	1 MD12	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
19		1 MD30	1 MD10	4 MD24	1 MD23	-	2 MD73	1 MD86	1 MD96
20	248x304.5x19	1 MD30	1 MD10	5 MD24	-	-	2 MD73	1 MD86	1 MD96
21	(9 ³/ <sub>4</sub> " x 12" x³/ <sub>4</sub> ")	1 MD30	1 MD11	5 MD24	-	-	2 MD73	1 MD86	1 MD96
22		1 MD30	1 MD12	5 MD24	-	-	2 MD73	1 MD86	1 MD96
23		1 MD30	1 MD10	5 MD24	1 MD23	1 *	2 MD74	1 MD808	1 MD908
24		1 MD30	1 MD10	6 MD24	-	1 *	2 MD74	1 MD808	1 MD908
25		1 MD30	1 MD11	6 MD24	-	1 *	2 MD74	1 MD808	1 MD908
26		1 MD30	1 MD12	6 MD24	-	1 *	2 MD74	1 MD808	1 MD908
27		1 MD30	1 MD12	6 MD24	1 MD21	-	2 MD74	1 MD808	1 MD908
28		1 MD30	1 MD12	6 MD24	1 MD22	-	2 MD74	1 MD808	1 MD908
29	248x395x19 (9 ³/ <sub>4</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x ³/ <sub>4</sub> ")	1 MD30	1 MD12	6 MD24	1 MD23	-	2 MD74	1 MD808	1 MD908
30		1 MD30	1 MD12	7 MD24	-	-	2 MD74	1 MD808	1 MD908
31		1 MD30	1 MD10	7 MD24	2 MD23	-	3 MD73	1 MD89	1 MD99
32		1 MD30	1 MD10	8 MD24	-	-	3 MD73	1 MD89	1 MD99
33	372x304.5x19 (14 <sup>5</sup> / <sub>8</sub> "x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD30	1 MD11	8 MD24	-	-	3 MD73	1 MD89	1 MD99
34	(17/8 X 12 X 74)	1 MD30	1 MD12	8 MD24	4 14000	-	3 MD73	1 MD89	1 MD99
35		1 MD30	1 MD10	8 MD24	1 MD23	2 *	3 MD74	1 MD812	1 MD912
36		1 MD30	1 MD12	8 MD24	2 MD21	•	3 MD74	1 MD812	1 MD912
37		1 MD30 1 MD30	1 MD11	9 MD24 9 MD24	- 2 MD24	2 *	3 MD74 3 MD74	1 MD812 1 MD812	1 MD912
39		1 MD30	1 MD10 1 MD11	9 MD24	2 MD21 2 MD21		3 MD74	1 MD812	1 MD912 1 MD912
40		1 MD30	1 MD12	9 MD24	2 MD21		3 MD74	1 MD812	1 MD912
41		1 MD30	1 MD12	9 MD24	2 MD21		3 MD74	1 MD812	1 MD912
43	372x395x19	1 MD30	1 MD12	10 MD24	1 MD21		3 MD74	1 MD812	1 MD912
45	$(14^{5}/_{8}" \times 15^{9}/_{16}" \times 3/_{4}")$	1 MD30	1 MD12	10 MD24	1 MD23		3 MD74	1 MD812	1 MD912
46		1 MD30	1 MD12	11 MD24	-	-	3 MD74	1 MD812	1 MD912
48	0 22222 0 0 0 0	1 MD30	1 MD10	12 MD24	-	3 *	4 MD74	-	-
50		1 MD30	1 MD10	12 MD24	2 MD21	1 *	4 MD74	-	-
52		1 MD30	1 MD11	12 MD24	3 MD21	-	4 MD74	-	-
53		1 MD30	1 MD12	12 MD24	3 MD21		4 MD74	-	-
55		1 MD30	1 MD11	13 MD24	2 MD21	-	4 MD74	-	-
58	496x395x19	1 MD30	1 MD10	14 MD24	1 MD22	-	4 MD74	-	-
62	$(19\frac{1}{2}"x 15\frac{9}{16}"x^{3}/4")$	1 MD30	1 MD12	15 MD24	-	-	4 MD74	-	-
<u> </u>		or MD74 or MD80			or MD50 or F	C52P or F		Optional It	replaces
								N	1D71, 72, 73, 74









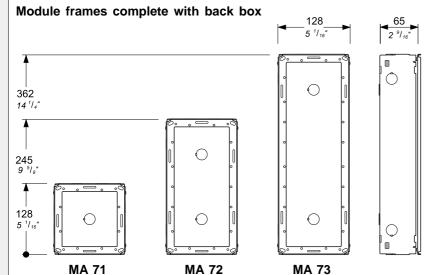


PUS	H-BUTTONS MODY	Y series		Con	nposition	n boar	d of Mody	push-butt	on panels.
N°	Compositions	Door speaker	Module for		modules and		Back box and	Hood	Rain
calls	and dimensions	(amplifier)	speaker	number	or blank mod	ule	module frame	covers	shelters
2	124x121.5x19 (4 <sup>7</sup> / <sub>-</sub> " x 4 <sup>13</sup> / <sub>-</sub> " x 3 <sup>1</sup> / <sub>-</sub> ")	1 MD30	1 MD122	-	-	-	1 MD71	1 MD81	1 MD91
4	$(4^{7}/_{8}" \times 4^{13}/_{16}" \times 3^{3}/_{4}")$	1 MD30	1 MD124	-	-	-	1 MD71	1 MD81	1 MD91
6		1 MD30	1 MD10	1 MD226	-	-	1 MD72	1 MD82	1 MD92
8		1 MD30	1 MD10	1 MD228	-	-	1 MD72	1 MD82	1 MD92
10	124x213x19	1 MD30	1 MD122	1 MD228	-	-	1 MD72	1 MD82	1 MD92
12	$(4^{7}/_{8}" \times 8^{3}/_{8}" \times {}^{3}/_{4}")$	1 MD30	1 MD124	1 MD228	-	-	1 MD72	1 MD82	1 MD92
14		1 MD30	1 MD10	1 MD228	1 MD226	-	1 MD73	1 MD83	1 MD93
16		1 MD30	1 MD10	2 MD228	-	-	1 MD73	1 MD83	1 MD93
18		1 MD30	1 MD122	2 MD228	-	-	1 MD73	1 MD83	1 MD93
20	$(4^{7}/_{8}" \times 12" \times {}^{3}/_{4}")$	1 MD30	1 MD124	2 MD228	-	-	1 MD73	1 MD83	1 MD93
22	0 0 0000	1 MD30	1 MD10	2 MD228	1 MD226	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
24		1 MD30	1 MD10	3 MD228	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
26	248x213x19	1 MD30	1 MD122	3 MD228	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
28	(9 <sup>3</sup> / <sub>4</sub> "x 8 <sup>3</sup> / <sub>8</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD30	1 MD124	3 MD228	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
30		1 MD30	1 MD10	3 MD228	1 MD226	1 *	2 MD73	1 MD86	1 MD96
32		1 MD30	1 MD10	4 MD228	-	1 *	2 MD73	1 MD86	1 MD96
34		1 MD30	1 MD122	4 MD228	-	1 *	2 MD73	1 MD86	1 MD96
36		1 MD30	1 MD124	4 MD228	-	1 *	2 MD73	1 MD86	1 MD96
38		1 MD30	1 MD10	4 MD228	1 MD226	-	2 MD73	1 MD86	1 MD96
40	248x304.5x19	1 MD30	1 MD10	5 MD228	-	-	2 MD73	1 MD86	1 MD96
42	$(9^{3}/_{4}"x 12"x^{3}/_{4}")$	1 MD30	1 MD122	5 MD228	-	-	2 MD73	1 MD86	1 MD96
44		1 MD30	1 MD124	5 MD228	-	-	2 MD73	1 MD86	1 MD96
46	0 0 0000	1 MD30	1 MD10	5 MD228	1 MD226	1 *	2 MD74	1 MD808	1 MD908
48		1 MD30	1 MD10	6 MD228	-	1 *	2 MD74	1 MD808	1 MD908
50		1 MD30	1 MD122	6 MD228	-	1 *	2 MD74	1 MD808	1 MD908
52		1 MD30	1 MD124	6 MD228	-	1 *	2 MD74	1 MD808	1 MD908
54		1 MD30	1 MD124	6 MD228	1 MD222	-	2 MD74	1 MD808	1 MD908
56		1 MD30	1 MD124	6 MD228	1 MD224	-	2 MD74	1 MD808	1 MD908
58	248x395x19	1 MD30	1 MD124	6 MD228	1 MD226	-	2 MD74	1 MD808	1 MD908
60	$(9^{3}/_{4}" \times 15^{9}/_{16}" \times {}^{3}/_{4}")$	1 MD30	1 MD124	7 MD228	-	-	2 MD74	1 MD808	1 MD908
62		1 MD30	1 MD122	6 MD228	2 MD226	-	3 MD73	1 MD89	1 MD99
64		1 MD30	1 MD10	8 MD228	-	-	3 MD73	1 MD89	1 MD99
66	372x304.5x19	1 MD30	1 MD122	8 MD228	-	-	3 MD73	1 MD89	1 MD99
68	$(14^{5}/_{8}" \times 12" \times 3/_{4}")$	1 MD30	1 MD124	8 MD228	-	-	3 MD73	1 MD89	1 MD99
70		1 MD30	1 MD10	8 MD228	1 MD226	2 *	3 MD74	1 MD812	1 MD912
72		1 MD30	1 MD124	8 MD228	2 MD222	1 *	3 MD74	1 MD812	1 MD912
74		1 MD30	1 MD122	9 MD228	-	2 *	3 MD74	1 MD812	1 MD912
76		1 MD30	1 MD10	9 MD228	2 MD222	-	3 MD74	1 MD812	1 MD912
78		1 MD30	1 MD122	9 MD228	2 MD222	-	3 MD74	1 MD812	1 MD912
80		1 MD30	1 MD124	9 MD228	2 MD222	-	3 MD74	1 MD812	1 MD912
82		1 MD30	1 MD122	9 MD228	2 MD224	-	3 MD74	1 MD812	1 MD912
86	372x395x19	1 MD30	1 MD124	10 MD228	1 MD222	-	3 MD74	1 MD812	1 MD912
90	$(14^{5/8}"x 15^{9/16}"x^{3/4}")$	1 MD30	1 MD124	10 MD228	1 MD226	-	3 MD74	1 MD812	1 MD912
92		1 MD30	1 MD124	11 MD228	-	-	3 MD74	1 MD812	1 MD912
96		1 MD30	1 MD10	12 MD228	-	3 *	4 MD74	-	-
100		1 MD30	1 MD10	12 MD228	2 MD222	1 *	4 MD74	-	-
104		1 MD30	1 MD122	12 MD228	3 MD222	-	4 MD74	-	-
106		1 MD30	1 MD124	12 MD228	3 MD222	-	4 MD74	-	-
110		1 MD30	1 MD122	12 MD228	3 MD224	-	4 MD74	-	-
116	496x395x19	1 MD30	1 MD122	12 MD228	3 MD226	-	4 MD74	-	-
124	$(19^{1}/_{2}" \times 15^{9}/_{16}" \times {}^{3}/_{4}")$	1 MD30	1 MD124	15 MD228		-	4 MD74	-	-
	•	or MD74 or MD8	04 or MD904	* MD20	or MD50 or I	FC52P o	r FP52		It replaces
									MD71, 72, 73, 74





# **PUSH-BUTTONS MATRIX series**



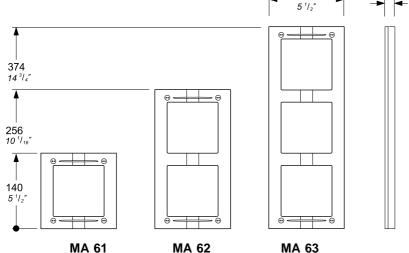
Stainless steel anti-vandalism push-button panels especially studied to withstand burglary, penetration of solids and water jets (IP 45 protection degree against the penetration of external solids and water; IK09 against shocks).

The Matrix push-button panels include back boxes, module frames, die-cast aluminium decorative frames, button modules, and modules with built-in speaker unit (with or without camera).

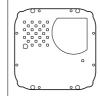
The careful selection of modules allows for multiple application opportunities; from one-way installations to blocks of flats; from intercom to video intercom installations

The push-button elements have been developed to allow both for horizontal and vertical configuration.

# Front frames



# Video modules with door speaker integrated



19 ³/₄"

140

#### **MA 42**

without call buttons and with B/W camera

#### MA 42C

without call buttons and with colour camera



#### MA 43

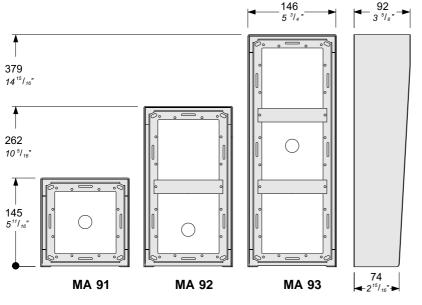
with 1 call button and B/W camera

#### MA 43C

with 1 call button and colour camera

For specifications see page 100.

#### Rain shelters



# Push-button modules



#### MA 20.

Blank module in stainless steel.



#### MA 22.

Module with 2 call buttons and name plate panel with breakproof transparent screen and green LED backlight.



### MA 24.

With 4 call buttons.

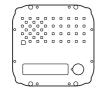




#### **PUSH-BUTTONS MATRIX series**

#### Modules with door speaker integrated







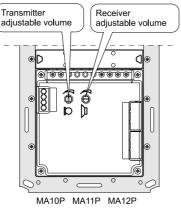
**MA 10P.** Amplified speaker unit with volume adjustment of 2 channels (reception and transmission), steel front plate and red operation LED.

MA 11P. Same as MA 10P, with call button and name plate panel with breakproof transparent screen and green LED backlight.

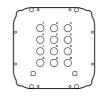
MA 12P. With 2 call buttons.

# **Audio adjustments**

If necessary, it is possible to adjust the volume of the 2 channels audio opportunely varying the external knobs.



#### **ACCESS CONTROL KEYPAD**



**FC 52MA**. Electronic keypad with 12 keys and 2 relays for lock release and access control of door stations. 12 programmable access codes for each relay. Programmable door opening time from 1 up 99 sec. for each relay (or bistable operation of relay). Acoustic and visual confirmation for entered keys, accepted programming and for wrong codes.

#### **Technical data**

Power supply: 12Vac/dc ±10%

Stand-by current: 0.02A

Max. current consumption: 0.1A

Contact ratings: 12Vac - 2A

Numbers of codes for relay 1: 12 direct

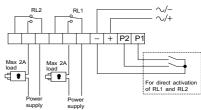
Numbers of codes for relay 1: 12 + direct activation
Numbers of codes for relay 2: 12 + direct activation
Activation time for each relay: from 1 to 99 sec. (or bistable)

 $\begin{array}{lll} \mbox{Operating temperature:} & \mbox{0}^{\circ} \div + 40^{\circ} \mbox{C} \\ \mbox{Maximum permissible humidity:} & 85\% \mbox{ RH} \\ \mbox{Degree of protection} & \mbox{IP } 45 \\ \end{array}$ 

#### **Terminals**

- normally closed contact of relay 2 or normally open contact of relay 2
  - common contact of relay 2
  - common contact of relay 2
     normally closed contact of relay 1
- 1 ormally open contact of relay 1
- common contact of relay 1
- ground or alternating voltage input positive or alternating voltage input
- **P2** activation of the relay 2;
- if momentarily connected to ground it allows the activation for the
- programmed time
  P1 activation of the relay 1;
  if momentarily connected to ground it al-

nected to ground it allows the activation for the programmed time



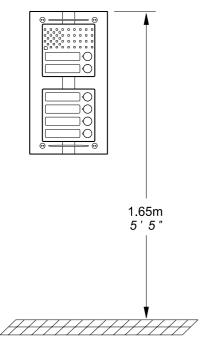
#### Technical characteristics of MATRIX modules terminal boards

MA10P	MA11P	MA12P	MA20	MA22	MA24	MA42 MA42C	MA43	
1	1	1				1	1	Reception audio line
2	2	2				2	2	Transmission audio line
	3	3				3	3	Power supply input for electric door speaker (6÷12Vdc)
	4	4				4	4	Audio ground
	-	-	-	-	-	-	-	Alternated power supply input or ground for name-plate Led
1	Α	Α	Α	Α	Α	Α	Α	AC or DC power supply input for name-plate Led (12Vac-dc)
	С	С		С	С		С	Call push-buttons common
	P1	P1		P1	P1		P1	Call push-button
		P2		P2	P2			Call push-button
					P3			Call push-button
					P4			Call push-button
						V	٧	Video signal output (coaxial cable)
						М	М	Video ground (coaxial shield)
						Н	Н	Positive voltage input for camera (18÷24Vdc)
-	L-	L-				L-	L-	Alternated power supply input or ground for service Led
.+	L+	L+				L+	L+	AC or DC power supply input for service Led (12Vac-dc)

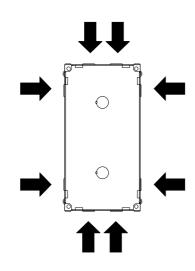




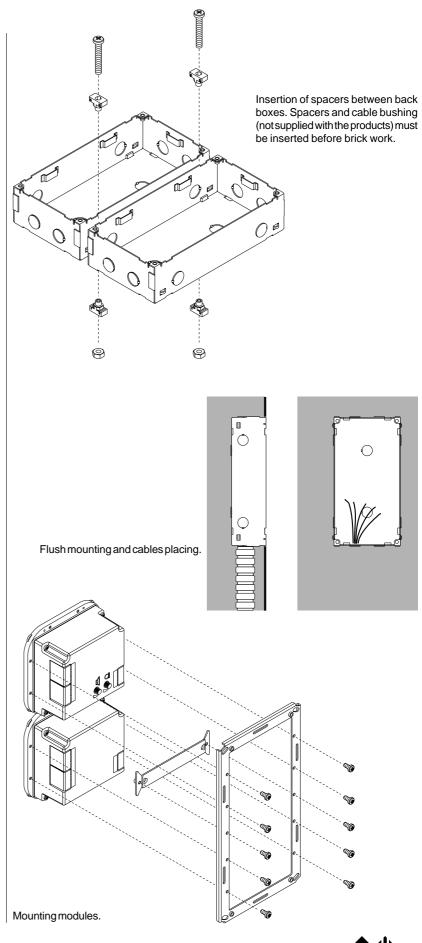
# **PUSH-BUTTONS MATRIX series**



Place the box of the push button panel at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.



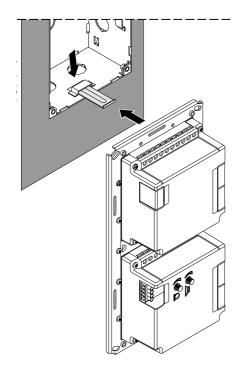
Openings for cables.



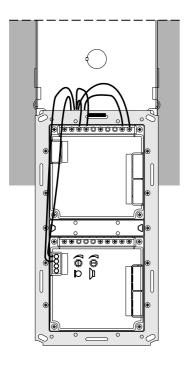




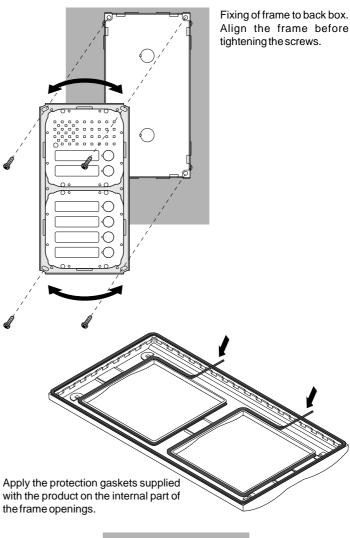
# **PUSH-BUTTONS MATRIX series**

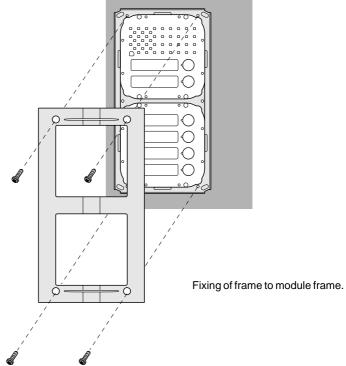


For easier connection to the electrical system, it is recommended to insert the metal plate supplied with the product in the back box opening, as shown in the figure. The plate is used to hook the frame with pre-assembled modules. Leave the plate in the box to reuse it for maintenance operations.



Connection of wires to module terminal boxes.









# **PUSH-BUTTONS MATRIX series**







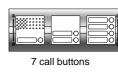


6 call buttons



8 call buttons

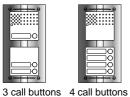
Example of Matrix push-button panel installations.





9 call buttons 10 call buttons

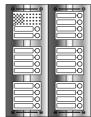
10 call buttons

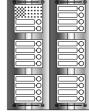


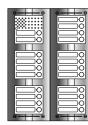




6 call buttons







11 call buttons

23 call buttons

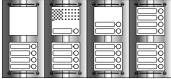
12 call buttons

14 call buttons

15 call buttons

18 call buttons

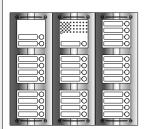
22 call buttons



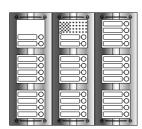


26 call buttons

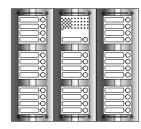
30 call buttons



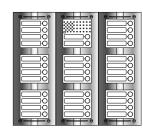
31 call buttons



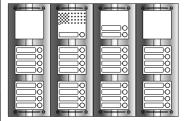
32 call buttons



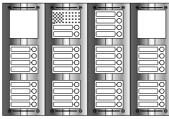
33 call buttons



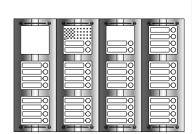
34 call buttons



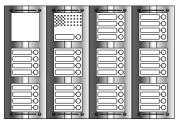
35 call buttons



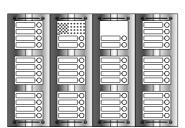
38 call buttons



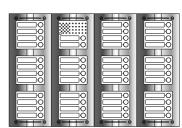
40 call buttons



41 call buttons



44 call buttons



46 call buttons





# **PUSH-BUTTONS MATRIX series**

# **Composition board of Matrix push-button panels.**

N°	Compositions	Door speaker		n modules a		Front	Back box and	Rain
calls	and dimensions	module (ampl.)	number	or blank mo	odule	frames	module frame	shelters
1	140x140x19	1 MA11P	-	-	-	1 MA61	1 MA71	1 MA91
2	$(5^{1}/_{2}" \times 5^{1}/_{2}" \times 3^{3}/_{4}")$	1 MA12P	-	-	-	1 MA61	1 MA71	1 MA91
3		1 MA11P	1 MA22	-	-	1 MA62	1 MA72	1 MA92
4		1 MA10P	1 MA24	-	-	1 MA62	1 MA72	1 MA92
5	140x256x19 (5 ½" x 10 ½" x 3½")	1 MA11P	1 MA24	-	-	1 MA62	1 MA72	1 MA92
6	. 2 10 47	1 MA12P	1 MA24	-	-	1 MA62	1 MA72	1 MA92
7	140x374x19	1 MA11P	1 MA24	1 MA22	-	1 MA63	1 MA73	1 MA93
8	$(5^{1}/_{2}" \times 14^{3}/_{4}" \times 3^{3}/_{4}")$	1 MA10P	2 MA24	-	-	1 MA63	1 MA73	1 MA93
9		1 MA11P	2 MA24	-	-	1 MA63	1 MA73	1 MA93
10		1 MA12P	2 MA24	-	-	1 MA63	1 MA73	1 MA93
11		1 MA11P	2 MA24	1 MA22	-	2 MA62	2 MA72	2 MA92
12	280x256x19	1 MA12P	2 MA24	1 MA22	-	2 MA62	2 MA72	2 MA92
	$(11" \times 10^{1}/_{16}" \times 3^{3}/_{4}")$	1 MA11P	3 MA24	-	-	2 MA62	2 MA72	2 MA92
14		1 MA12P	3 MA24	-	-	2 MA62	2 MA72	2 MA92
15		1 MA11P	3 MA24	1 MA22	1 MA20	2 MA63	2 MA73	2 MA93
16		1 MA10P	4 MA24	-	1 MA20	2 MA63	2 MA73	2 MA93
17		1 MA11P	4 MA24	-	1 MA20	2 MA63	2 MA73	2 MA93
18		1 MA10P	4 MA24	1 MA22	-	2 MA63	2 MA73	2 MA93
19		1 MA11P	4 MA24	1 MA22	-	2 MA63	2 MA73	2 MA93
20	280x374x19	1 MA12P	4 MA24	1 MA22	-	2 MA63	2 MA73	2 MA93
21	$(11" \times 14^{3}/_{4}" \times {}^{3}/_{4}")$	1 MA11P	5 MA24	-	-	2 MA63	2 MA73	2 MA93
22	1	1 MA12P	5 MA24	-	-	2 MA63	2 MA73	2 MA93
23		1 MA11P	5 MA24	1 MA22	1 MA20	4 MA62	4 MA72	4 MA92
24		1 MA10P	6 MA24	-	1 MA20	4 MA62	4 MA72	4 MA92
25		1 MA11P	6 MA24	-	1 MA20	4 MA62	4 MA72	4 MA92
26		1 MA12P	6 MA24	-	1 MA20	4 MA62	4 MA72	4 MA92
	560x256x19	1 MA11P 1 MA12P	6 MA24	1 MA22	-	4 MA62	4 MA72	4 MA92
28	$(22^{1}/_{16}" \times 10^{1}/_{16}" \times 3/_{4}")$	1 MA11P	6 MA24 7 MA24	1 MA22	-	4 MA62 4 MA62	4 MA72 4 MA72	4 MA92 4 MA92
30		1 MA12P	7 MA24			4 MA62	4 MA72	4 MA92
31		1 MA11P	7 MA24	1 MA22		3 MA63	3 MA73	3 MA93
32	420x374x19		7 MA24			3 MA63	3 MA73	3 MA93
33	16°/ <sub>16</sub> " x 14³/ <sub>4</sub> " x³/ <sub>4</sub> ")	1 MA11P	8 MA24	1 MA22		3 MA63	3 MA73	3 MA93
34		1 MA12P	8 MA24			3 MA63	3 MA73	3 MA93
35		1 MA11P	8 MA24	1 MA22	2 MA20	4 MA63	4 MA73	4 MA93
36		1 MA10P	9 MA24	I WAZZ	2 MA20	4 MA63	4 MA73	4 MA93
37		1 MA11P	9 MA24		2 MA20	4 MA63	4 MA73	4 MA93
38		1 MA12P	9 MA24		2 MA20	4 MA63	4 MA73	4 MA93
39		1 MA11P	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73	4 MA93
40		1 MA12P	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73	4 MA93
41		1 MA11P	10 MA24	-	1 MA20	4 MA63	4 MA73	4 MA93
42		1 MA12P	10 MA24		1 MA20	4 MA63	4 MA73	4 MA93
43	560x374x19	1 MA11P	10 MA24	1 MA22	-	4 MA63	4 MA73	4 MA93
44	$(22^{1}/_{16}" \times 14^{3}/_{4}" \times {}^{3}/_{4}")$	1 MA12P	10 MA24	1 MA22	_	4 MA63	4 MA73	4 MA93
45		1 MA11P	11 MA24	-	_	4 MA63	4 MA73	4 MA93
46		1 MA12P	11 MA24	-	-	4 MA63	4 MA73	4 MA93
							1	





#### **PUSH-BUTTONS PROFILO series**

Push-button panels in extruded aluminium and steel push-buttons made up of modular elements. Suitable for the most diverse installation requirements. The careful selection of modules allows for multiple application opportunities; from one-way installations to blocks of flats; from intercom to video intercom installations.

The optimized size of modules allows for easy installation on the gage jamb.

# Modules with door speaker integrated

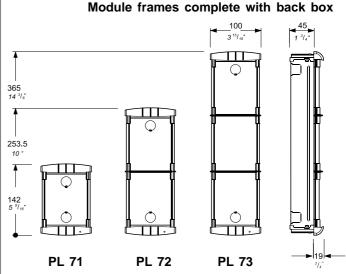






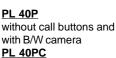
PL 10P PL 11P PL 12P with out call buttons with 1 call button with 2 call buttons

# 000



#### Video modules with door speaker integrated







PL 41P with 1 call button and B/W camera PL 41PC colour version



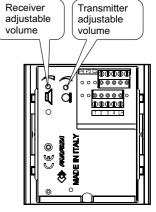
PL 42P with 2 call buttons and B/W camera PL 42PC

colour version

For specifications see page 104.

# **Audio adjustments**

If necessary, it is possible to adjust the volume of the 2 channels audio opportunely varying the external knobs.



# Push-button modules



colour version

PL 20 Blank module



PL 21 with 1 call button



PL 22 with 2 call buttons



PL 23 with 3 call buttons



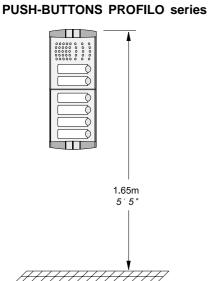
PL 24 with 4 call buttons

# Technical characteristics of PROFILO modules terminal boards

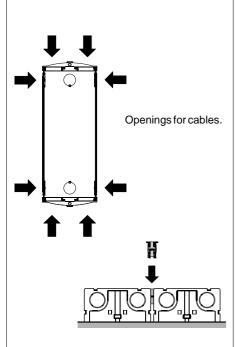
PL10P	PL11P	PL12P	PL21	PL22	PL23	PL24	PL40P	PL41P	PL42P	
							PL40PC	PL41P	PL42PC	
1	1	1					1	1	1	Reception audio line
2	2	2					2	2	2	Transmission audio line
3	3	3					3	3	3	Power supply input for electric door speaker (6÷12Vdc)
4	4	4					4	4	4	Audio ground
-	-	-	-	-	-	-	-	-	-	Alternated power supply input or ground for name-plate Led
Α	Α	Α	Α	Α	Α	Α	Α	Α	Α	AC or DC power supply input for name-plate Led (12Vac-dc)
	С	С	С	С	С	С		С	С	Call push-buttons common
	P1	P1	P1	P1	P1	P1		P1	P1	Call push-button
		P2		P2	P2	P2			P2	Call push-button
					P3	P3				Call push-button
						P4	i			Call push-button
							V	٧	٧	Video signal output (coaxial cable)
							М	М	М	Video ground (coaxial shield)
							Н	Н	Н	Positive voltage input for camera (18÷24Vdc)
L+	L+	L+					L+	L+	L+	DC power supply input for service Led (12Vdc)

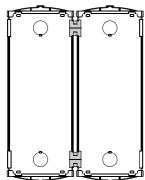




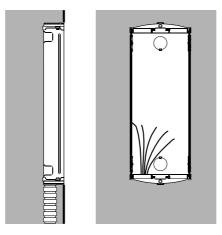


Place the box of the push button panel at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.

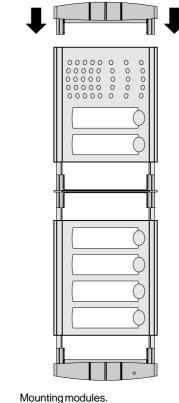


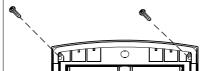


Insertion of spacers between back boxes. Spacers and cable bushing (not supplied with the products) must be inserted before brick work.

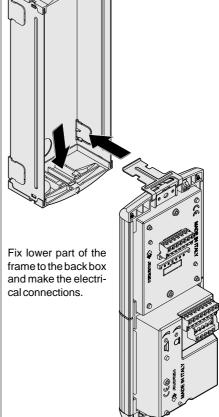


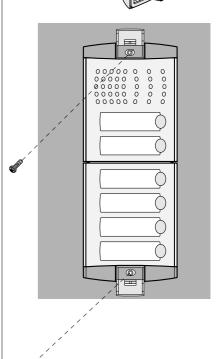
Flush mounting and cables placing.





Fixing of the module frames on the upper side by the 2 small screws included in the back boxes.





Fixing of frame to back box. Align the frame before tightening the screws.





# **PUSH-BUTTONS PROFILO series**



1 call button

2 call buttons



3 call buttons



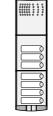
4 call buttons



5 call buttons



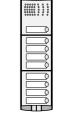
6 call buttons



7 call buttons

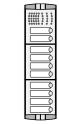


8 call buttons



Example of Profilo push-button panel installations.

9 call buttons



10 call buttons



11 call buttons



12 call buttons



14 call buttons



15 call buttons



18 call buttons



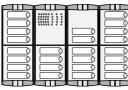
22 call buttons



23 call buttons



25 call buttons



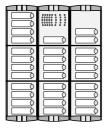
26 call buttons



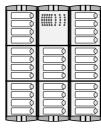
28 call buttons



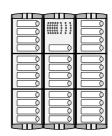
30 call buttons



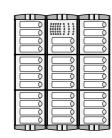
31 call buttons



32 call buttons



33 call buttons



34 call buttons



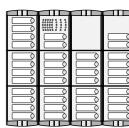
35 call buttons



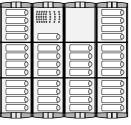
37 call buttons



38 call buttons



40 call buttons



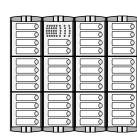
41 call buttons



42 call buttons



44 call buttons



46 call buttons





# **PUSH-BUTTONS PROFILO series**

# Composition board of Profilo push-button panels.

N° calls	Compositions and dimensions	Door speaker module (ampl.)	Buttonm	nodules and blar	nk module	Back box and module frame
1	100x142x19	1 PL11P	-	-	-	1 PL71
2	$(3^{15}/_{16}" \times 5^{9}/_{16}" \times 3^{3}/_{4}")$	1 PL12P	-	-	-	1 PL71
3		1 PL10P	1 PL23	-	-	1 PL72
4	100x253,5x19	1 PL10P	1 PL24	-	-	1 PL72
5	$(3^{15}/_{16}" \times 10" \times 3/_{4}")$	1 PL11P	1 PL24	-	-	1 PL72
6		1 PL12P	1 PL24	-	-	1 PL72
7		1 PL10P	1 PL24	1 PL23	-	1 PL73
8	100x365x19	1 PL10P	2 PL24	-	-	1 PL73
9	$(3^{15}/_{16}" \times 14^{3}/_{8}" \times 3^{3}/_{4}")$	1 PL11P	2 PL24	-	-	1 PL73
10		1 PL12P	2 PL24	-	-	1 PL73
11		1 PL11P	2 PL24	1 PL22	-	2 PL72
12	200x253,5x19	1 PL12P	2 PL24	1 PL22	-	2 PL72
13	$(7^{7}/_{8}" \times 10" \times {}^{3}/_{4}")$	1 PL11P	3 PL24	-	-	2 PL72
14		1 PL12P	3 PL24	-	-	2 PL72
15		1 PL10P	3 PL24	1 PL23	1 PL20	2 PL73
16		1 PL10P	4 PL24	-	1 PL20	2 PL73
17		1 PL11P	4 PL24	-	1 PL20	2 PL73
18		1 PL12P	4 PL24	-	1 PL20	2 PL73
19	200x365x19	1 PL11P	4 PL24	1 PL22	-	2 PL73
20	$(7^{7}/_{8}" \times 14^{3}/_{8}" \times 3^{3}/_{4}")$	1 PL12P	4 PL24	1 PL22	-	2 PL73
21		1 PL11P	5 PL24	-	-	2 PL73
22		1 PL12P	5 PL24	-	-	2 PL73
23		1 PL11P	5 PL24	1 PL22	1 PL20	4 PL72
24		1 PL10P	6 PL24	-	1 PL20	4 PL72
25		1 PL11P	6 PL24	-	1 PL20	4 PL72
26		1 PL10P	6 PL24	1 PL22	-	4 PL72
27		1 PL11P	6 PL24	1 PL22	-	4 PL72
28	400x253,5x19 (15 ³/ <sub>4</sub> " x 10" x ³/ <sub>4</sub> ")	1 PL10P	7 PL24	-	-	4 PL72
29		1 PL11P	7 PL24	-	-	4 PL72
30		1 PL12P	7 PL24	-	-	4 PL72
31		1 PL11P	7 PL24	1 PL22	-	3 PL73
32	300x365x19 (11 <sup>13</sup> / <sub>16</sub> " x 14 <sup>3</sup> / <sub>8</sub> "	1 PL10P	8 PL24	-	-	3 PL73
33	x <sup>3</sup> / <sub>4</sub> ")	1 PL11P	8 PL24	-	-	3 PL73
34		1 PL12P	8 PL24	-	-	3 PL73
35		1 PL11P	8 PL24	1 PL22	2 PL20	4 PL73
36		1 PL10P	8 PL24	2 PL22	1 PL20	4 PL73
37		1 PL11P	8 PL24	2 PL22	1 PL20	4 PL73
38		1 PL12P	8 PL24	2 PL22	1 PL20	4 PL73
39		1 PL11P	9 PL24	1 PL22	1 PL20	4 PL73
40		1 PL12P	9 PL24	1 PL22	1 PL20	4 PL73
41		1 PL11P	10 PL24	-	1 PL20	4 PL73
42		1 PL12P	10 PL24	-	1 PL20	4 PL73
43	400x365x19 (15 ³/ <sub>4</sub> " x 14 ³/ <sub>8</sub> " x ³/ <sub>4</sub> ")	1 PL11P	10 PL24	1 PL22	-	4 PL73
44	(107 <sub>4</sub> × 147 <sub>8</sub> ×7 <sub>4</sub> )	1 PL12P	10 PL24	1 PL22	-	4 PL73
45		1 PL11P	11 PL24	-	-	4 PL73
46		1 PL12P	11 PL24	-	-	4 PL73



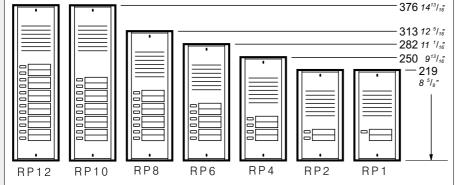


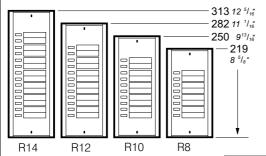
40mm 1 9/16

C

# **EXTERNAL DOOR STATIONS**

#### **PUSH-BUTTONS ErreP/R series**





R. Push-button panels provided only with buttons.

An electric door speaker

cannot be fitted inside. When

such panels are installed to-

gether with the previous

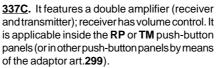
ones, a system with over 12

calls is obtained (see table).

RP. Push-button panels with anodized aluminium front panel and buttons, complete with name plate lights. The electric door speaker can be fitted inside the push-button panel.

The unit should be flush-mounted and the microphone should be firmly attached to the front panel to avoid feedback and to obtain the highest audio quality.

# **ELECTRIC DOOR SPEAKER (amplifier)**

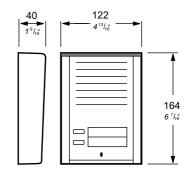


Provided with an electret microphone and tropicalized speaker.

#### **Terminals**

- audio receiver
- audio transmitter
- positive power supply 6÷8Vdc -60mA
- ground

#### **AMPLIFIED DOOR STATIONS**



# RP100. 1-button amplified door station.

It is complete with an amplifier, in both channels, electric door speaker, volume control of the receiving channel, front panel in anodized aluminium, call button, rain shelter and name plate light.

It can be installed on the wall with expansion plugs or on a wall box.

# RP200. 2-button amplified door station.

#### Technical data

Power supply: 13Vac Operating current: 130mA

#### **Terminals**

- audio receiver
- audio transmitter
- С common contact of call push-buttons
- P1 call push-button
- P2 call push-button
- around
- alternate voltage input 13Vac

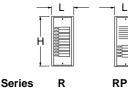
Note. The W1 jumper must be cut in order to be used in electronic call systems.

## Instructions of the various ErreP/R push-button panel series and their dimensions en mm (and inches)

L and H = Dimensions of the panel

I and h = Dimensions of the back-box

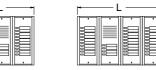
R+RP+R





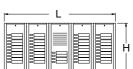
R+RP





R+RP+R+R





R+R+RP+R+R

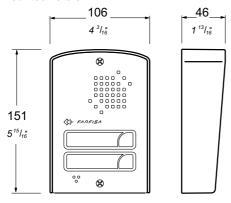
H	112 (4	1 <sup>7</sup> / <sub>16</sub> ")	224 (8 <sup>13</sup> / <sub>16</sub> ")	336 (13 1/4")	448 (175/8")	560 (22 <sup>1</sup> / <sub>16</sub> ")	L h
218.5	R8	RP1	R8+RP1= <b>9</b>	2R8+RP1= <b>17</b>	3R8+RP1= <b>25</b>	4R8+RP1= <b>33</b>	206.5
(8 <sup>5</sup> / <sub>8</sub> ")	R8	RP2	R8+RP2= <b>10</b>	2R8+RP2= <b>18</b>	3R8+RP2= <b>26</b>	4R8+RP2= <b>34</b>	(8 <sup>1</sup> / <sub>8</sub> ")
250 (9 <sup>13</sup> / <sub>16</sub> ")	R10	RP4	R10+RP4= <b>14</b>	2R10+RP4= <b>24</b>	3R10+RP4= <b>34</b>	4R10+RP4= <b>44</b>	238 (9³/ <sub>8</sub> ")
281.5 (11 <sup>1</sup> / <sub>16</sub> ")	R12	RP6	R12+RP6= <b>18</b>	2R12+RP6= <b>30</b>	3R12+RP6= <b>42</b>	4R12+RP6= <b>54</b>	269.5 (10 <sup>5</sup> / <sub>8</sub> ")
313 (12 <sup>5</sup> / <sub>16</sub> ")	R14	RP8	R14+RP8= <b>22</b>	2R14+RP8= <b>36</b>	3R14+RP8= <b>50</b>	4R14+RP8= <b>64</b>	301 (11 <sup>7</sup> / <sub>8</sub> ")
H	103 (4	4 1/16")	215 (8 <sup>7</sup> / <sub>16</sub> ")	327 (12 7/8")	439 (175/16")	551 (21 11/16")	l h





#### **PUSH-BUTTONS UP series**

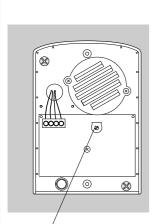
#### Surface mounted version



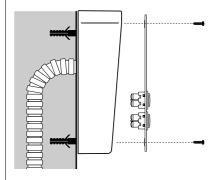
#### UP 100. Amplified push-button panel with 1 call button.

Fittable in all 4+1 intercom and intercommunicating systems. Complete with electric door speaker amplified in the two channels, volume control of the receiving channel, front panel in anodized aluminium with call button. Wall-mountable with expansion plugs.

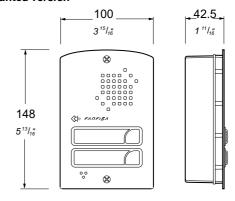
#### UP 200. Amplified push-button panel with 2 call buttons.



External volume adjustment



#### Flush mounted version



#### UP 11. Amplified push-button panel with 1 call button.

Fittable in all 4+1 intercom and intercommunicating systems.

Complete with electric door speaker amplified in the two channels, volume control of the receiving channel, front panel in anodized aluminium with call button.

To install it you must:

- fix the back box to the wall;
- install the speaker unit;
- make the connections;
- screw the front panel onto the back box.

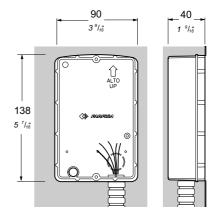
#### UP 12. Amplified push-button panel with 2 call buttons.

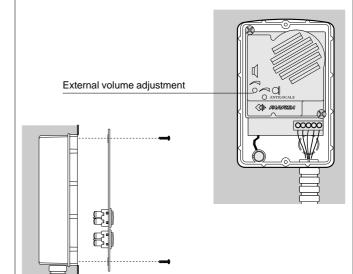
#### Terminals

- ground
- $\sim$  13Vac-70mA voltage input
- 1 audio receiver
- 2 audio transmitter

#### Wires in electronic call systems

C the yellow wire must not be used; it is recommended to insulate or cut it.









#### **POWER SUPPLIES**

Power supplies are not provided with fuses, but they are protected against overloading or short-circuiting by a heat sensor (thermoprotector), to restore power, it is necessary to cut OFF the mains voltage for about one minute. Reconnect power after having eliminated the problem.

Do not obstruct the openings for ventilation or heat dissipation to allow the equipment to operate correctly. The power supply can be fixed on DIN bar or screwed to the wall.

All power supplies can provide power for a maximum of **6 (24V-3W) lamps** for illuminating push-button panel name plates. If required add the necessary **PRS210** transformers (approx. 1 for 10 lamps).

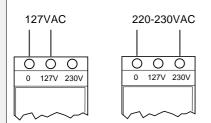
#### General technical data

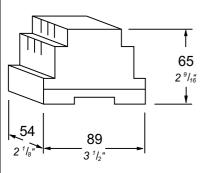
Input voltage: 127Vac or 220-230Vac Working temperature: 0°÷+50°C Maximum of humidity: 90%RH

#### Warning

All power supplies in this manual can work either 127Vac or 220-230Vac.

#### Check carefully the right connection.





# PRS 210. TRANSFORMER.

Used to power 13 Vac devices; MD100, MD200, RP100, RP200, UP series amplified external door stations, accessories, additional door locks, name plate light, etc.

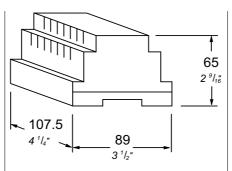
#### Technical data

Power: 15VA Output voltage: 13Vac Maximum load: 0.7A

Maximum of intermittent load: 1A Housing: DIN 3 modules A Weight: 0.42 Kg. (0.93lb)

Approved by: VDE according to the Safety

Standard EN60065



# PRS 240. STABILIZED POWER SUPPLY WITH 2 ELECTRONIC RINGING GENERATORS.

Power supply with two electronic ringing generators for calls. It supplies the voltages needed for the correct operation of intercom systems.

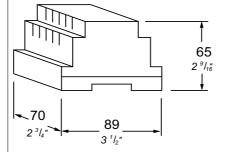
#### Technical data

Power: 18VA
Ringing frequency: 450Hz modulated
Housing: DIN 6 modules A
Weight: 0.5 Kg. (1.1lb)

Approved by: VDE according to the Safety Standard EN60065

#### **Output terminals**

- Ground
- Audio line power supply 7.2Vdc-0.1A
- X Power supply for aux. services 12Vdc-0.2A
- $\sim$  Power supply 13Vac for:
  - name plate lamps (continuous load 0.6A)
- electric door lock and bells (intermittent load 1A)
- C+ Modulated electronic call output 12Vpp-0.25A
  Continuous electronic call output 12Vpp-0.25A



# PRS 220. STABILIZED INTERCOM POWER SUPPLY.

Used in intercom systems where the ringing generator is located in a different power supply or service module.

# Technical data

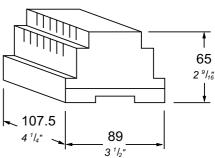
Power: 15VA

Housing: DIN 4 modules A Weight: 0.45 Kg. (0.99lb)

Approved by: VDE-SASO according to the Safety
Standard EN60065

#### **Output terminals**

- Ground
- + Audio line power supply 6Vdc-0.1A
- $\sim$  Power supply 13Vac for:
  - name plate lamps, exchangers (continuous load 0.6A)
  - electric door lock and bells (intermittent load 1A)



# PRS 226E. POWER SUPPLY – SWITCHER FOR INTERCOMMUNICATING SYSTEMS.

Used to power intercom intercommunicating systems. It allows for automatic switching between the audio connection of the external door station and the intercommunicating service to the intercoms.

#### Technical data

Power: 18VA

Housing: DIN 6 modules A Weight: 0.5 Kg (1.1lb)

Approved: VDE according to the Safety Standard

EN60065

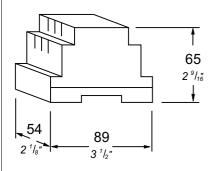
#### **Output terminals**

- Ground
- + 8Vdc-0.1A power supply for door speaker unit
- X 12Vdc-0.2A power supply for auxiliary services
- $\sim$  13Vac power supply for:
  - name plate light, switcher (continuous service 0.6A)
- electric door lock (intermittent service 1A)
- 7 Electronic call output for intercommunication
- Y Electronic call output for push-button panelsA Output for alternate current calls from push-
- button panels 13Vca-0.15A
- G Audio line receiver from intercoms
- 2 Audio line transmitter to intercoms
- D Audio line transmitter to electric door speaker
- C+ Audio line receiver from electric door speaker9 Electronic call input for audio switching in
- multi-family systems
  4 Common contact of relay activated by terminal 9
- **4a** Normally closed contact of relay activated by terminal 9
- **4b** Normally open contact of relay activated by terminal 9





# **SERVICE MODULES**



# **GN30**. ELECTRONIC RINGING GENERATOR WITH 3 DIFFERENT SOUNDS.

It allows for differentiating calls from external door stations or from door station and floor-calls. It can be used either in electronic or alternate current call systems.

Can be fixed on DIN bar or screwed to the wall with 2 expansion plugs.

#### Technical data

Power supply: 13Vac

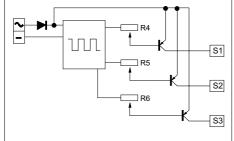
Current consumption with ringing ON: 0.6A

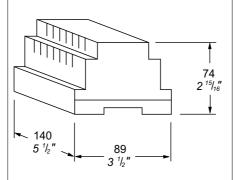
Housing: DIN 3 modules A
Operating temperature: 0° ÷ 50°C
Maximum permissible humidity: 90% RH

#### **Terminals**

- $\sim$  Alternate current input
- Ground
- S1 Modulated electronic ringing output (standard tone)
- **S2** Continuous electronic ringing output
- S3 Modulated electronic ringing output (acute tone)

**Note**. If necessary, the volumes of the electronic ringing generator can be individually adjusted by means of R4 (S1), R5 (S2) and R6 (S3) trimmers.





#### 1473. 4-CONTACT ANALOG EXCHANGER.

Used in systems with 2 or more door stations to automatically switch audio lines and door lock release on the calling station.

Both 3-4 terminals and 11 (side b) or 5-6 terminals and 12 (side a) can be used to activate switching.

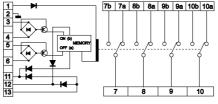
Can be fixed on DIN bar or screwed to the wall with 2 expansion plugs.

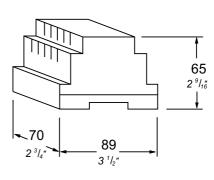
#### Technical data

Power supply: 13Vac; 15÷21Vdc
Current consumption: 0.1A
Number of exchanges: 4
Max. switching current: 5A (50V)
Housing: DIN 8 modules A
Operating temperature: 0° ÷ 50°C
Maximum permissible humidity: 90% RH

#### **Terminals**

- 1 Power supply 13Vac-0.1A
- 2 Ground
- 3 and 4 Driver to switch the relay to "b" position ON position
- 5 and 6 Driver to switch the relay to "a" position OFF position
- 7, 8, 9 and 10 Common contact of relays
- 7a, 8a, 9a and 10a OFF position of the relay contacts
- **7b**, **8b**, **9b** and **10b** ON position of the relay contacts
- 11 Ground command to switch the relay to "a" position OFF position
- 12 Ground command to switch the relay to "b" position ON position
- 13 Electronic call input





#### RL37. RELAY MODULE.

Relay module used to regenerate the electronic call for additional 3 intercoms or video intercoms. It permits to activate/deactivate max. 3 additional video power supplies. Complete with electronic ringing generator for intercommunication.

Can be fixed on DIN bar or screwed to the wall with 2 expansion plugs.

#### **Technical data**

Power supply: 13Vac Current consumption: 0.04A

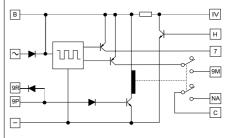
Current consumption with ringing ON: 0.6A

Number of exchanges: 1 Max. switching current: 1A (24V) Housing: DIN 4 modules A Operating temperature:0° ÷ 50°C

Maximum permissible humidity: 90% RH

#### **Terminals**

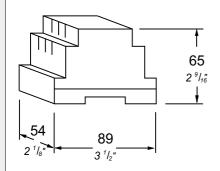
- $\sim$  Alternate current input
- Ground
- H Timed continuous current input 21Vdc
- IV Additional power supply activation
- C Common contact of relay
- NA Normally open contact of relay
- 9P Electronic call input
- 9M Regenerated electronic call output activated by terminal 9P
- 9R Direct electronic call output from terminal 9P
- 8Vdc voltage output







# **SERVICE MODULES**



#### 1471E. RELAY UNIT.

It is used when it is not possible to actuate commands directly. For example:

- stair light switching ON,
- activation of additional bells,
- additional door lock release, etc.

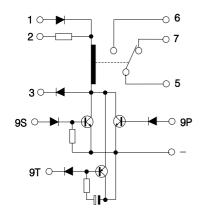
Can be fixed on DIN bar or screwed to the wall with 2 expansion plugs.

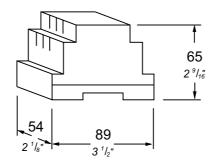
#### **Technical data**

Power supply: 13Vac; 12÷24Vdc

#### **Terminals**

- 1 Alternate current input 13Vac-dc
- 2 Continuous current input 21Vdc
- 3 Negative half-wave input or ground
- 5 Common contact of relay
- 6 Normally open contact of relay
- 7 Normally closed contact of relay
- 9P Electronic call input without resistive load
- **9S** Electronic call input with resistive load
- **9T** Electronic call input timed operation (1 sec.)
- Ground





#### **1471**. RELAY UNIT.

As **1471E**, with lower number of terminals and in a small housing.

#### Technical data

Power supply: 13Vac; 12÷24Vdc

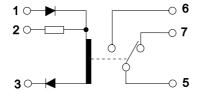
Current consumption: 0.05A Number of exchanges: 1

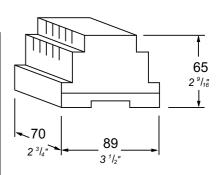
Switching current: 5A (50V)

Housing: DIN 3 modules A
Operating temperature: 0° ÷ 50°C
Maximum permissible humidity: 90% R

#### **Terminals**

- 1 Alternate current input 13Vac-dc
- 2 Continuous current input 21Vdc
- 3 Negative half-wave input or ground
- 5 Common relay contact
- 6 Normally open contact of relay
- 7 Normally closed contact of relay





#### 1472. 2- CONTACT RELAY UNIT.

As **1471E**, with higher number of exchanges and without terminals 9P and 9T.

#### Technical data

Power supply: 13Vac; 12÷24Vdc

Current consumption: 0.05A

Number of exchanges: 2

Switching current: 1A (24V)

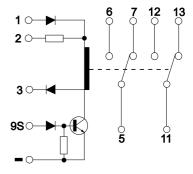
Housing: DIN 4 modules A

Operating temperature: 0° ÷ 50°C

Maximum permissible humidity: 90% RH

#### **Terminals**

- 1 Alternate current input 13Vac-dc
- 2 Continuous current input 21Vdc
- 3 Negative half-wave input or ground
  - 5 Common contact of exchange 1
  - 6 Normally open contact of exchange 1
  - 7 Normally closed contact of exchange 1
  - 11 Common contact of exchange 2
  - 12 Normally open contact of exchange 2
  - 13 Normally closed contact of exchange 2
- 9S Electronic call input with resistive load
  - Ground







# INSTALLATION INSTRUCTIONS

# General characteristics

- The cable runs of intercom and video intercom installations must be kept separate from the mains or any other electrical installation as required by the International Safety Standards and the entire installation must be realized in compliance with the safety rules in force in any specific Country.
- It is necessary to provide a disconnecting and safety switch before the power supply. Use a single general switch in case of several power supplies (also in multiple entrance).
- Before connecting the power supply make sure that its rating data corresponds to this of the mains.
- For electromagnetic reasons, all service modules must be installed near their power supply.

### Wires

- 1) For the correct operation of the intercom system you must choose the correct type of cable.
- Wires must be dimensioned according to the distance of the different devices and their current consumption.
- 3) Do not connect wires in parallel to reach the required cross-section (for example multi-pair telephone cables). Only use a single wire with suitable cross-section. When using multi-core cables you must select them with low parasite parameters (low capacitance per metre, low inductance over Ohm).
- 4) If the installation includes additional power supplies you must place them near the device to be powered.

# **Background noise**

To avoid possible background noise over the speech line, it is advisable:

- not to lay intercom or telephone cables in the same runaway as the wires used to power alternate current loads;
- 6) to avoid using the same multi-core cable to transmit audio signals and alternate current power supplies (lamps, amplified external door stations, electrical door locks). Always use separate wires for alternate current power supplies;
- 7) not to connect name-plate lamps (or other devices powered with alternate current) to terminal 4 (-) of the speaker unit; 2 wires must originate from terminal - (minus sign) of the power supply, one for terminal 4 of the speaker unit and one for the lamps (or other devices powered with alternate current);
- 8) for name-plate lamps, to use an additional 12Vac transformer (PRS210 type) with suitable power (consumption is 75mA for each lamp) with 2 power supply wires separate from audio wires;
- 9) in case of long distances between the external door station and the last intercom, to place the power supply near the external door station and use a relay for the electric door lock in order to avoid alternate current induction along the riser (see diagrams of lateral column).

# WIRE CROSS-SECTION

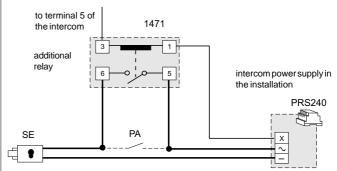
Distance	Audio and calls		Door lo	ck and gr	ound (*)	
HH						
m.	mm² S	mm Ø	AWG	mm² S	mm Ø	AWG
50 100 200 300 400	0,35 0,35 0,5 0,75 1	0,7 0,7 0,8 1 1,2	21 21 20 18 16	0,75 1 2 2,5	1 1,2 1,4 1,6	18 16 14 13

(\*) Wires in bold face type.

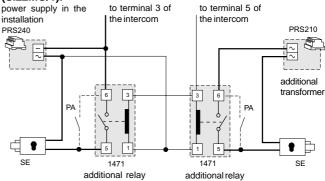
### **ELECTRIC DOOR LOCK ACTIVATION**

In case of long distances or if you want to control several door locks at the same time, install a relay as shown in the following installation diagrams.

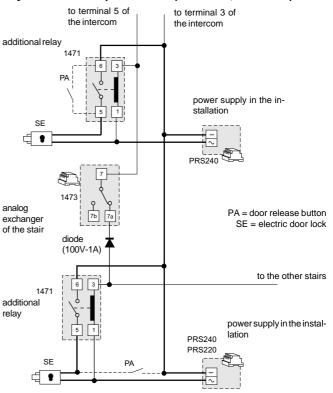
# Electric door lock activation by means of an additional relay



# Connection of 2 door locks with simultaneous opening (Si22MO/1).



# Connection of 2 door locks, one of which always activable, in a system with multiple entrance (Si26MO/1; Si 26MO/2).





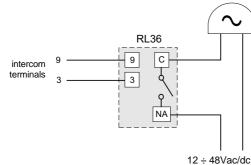


# INSTALLATION INSTRUCTIONS

# **ADDITIONAL BELL**

If the ringing volume is not sufficient or if you need to chime the call in a different place, you can add an additional bell enabled by a relay.

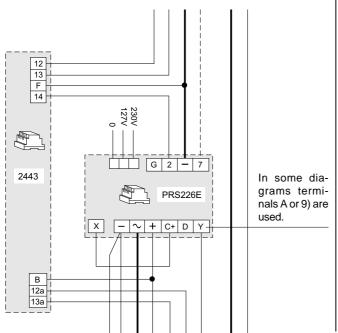
# Additional bell enabled by a relay to be installed inside the intercom



# Additional bell enabled by a relay in a DIN housing intercom terminals power supply terminal 12Vac/dc ÷ 230Vac

# **ADDITIONAL AUDIO AMPLIFIER**

In intercommunicating systems with long distances between intercoms and power supply, to increase the intercommunication audio level, it is advisable to install an amplifier art. **2443** (see page 110 for characteristics). The following diagram can be applied to all intercommunicating systems (from page 55 to page 71).



# WORKING INSTRUCTIONS

# **Basic systems**

For all the intercom systems, simply lift the handset to speak to the door station. The call is indicated by a sound signal on the loudspeaker of the handset. If the handset of the intercom is not properly hung-up the sound is not reproduced.

To activate the door release, press the push-button with the key symbol. In systems with two or more entrances the communication and door release are switched automatically on the entrance from which the call is made while the other entrances are isolated.

# Systems with private conversation module

In all standard intercom systems (not intercommunicating) a private audio system can be provided (only the intercom which has been called can speak to the door station) by installing the "private conversation module" art. **SM50E** in every intercom. After the call, the user has about 30 seconds to lift handset and answer. There is no time limit for the private conversation. When the handset is replaced the system returns to the OFF condition. If a user does not replace the handset properly, the next call from another intercom, automatically cuts him out of the audio connection with the door station.

# Intercommunicating systems

Intercommunicating systems allow users to speak to one another by simply lifting the handset; any user can join in to a conversation already in progress. To avoid interference it is necessary to observe the following instructions:

- lift the handset;
- make sure that there is not a conversation already in progress;
- then press the call push-button corresponding to the desired user.

# Intercommunicating systems connected to door station

Such systems allow conversation between two or more inside users with the exclusion of the door station, or between one inside user and the door station.

When there is a call from an external push-button panel the audio line of the electric door speaker is activated automatically; when a call is made from one of the intercoms, the internal intercommunicating audio line is automatically activated.

The user called has simply to lift the handset.

Any user can join in to a conversation already in progress.

To avoid interference it is necessary to observe the following instructions:

- lift the handset;
- make sure that there is not a conversation already in progress;
- then press the call push-button corresponding to the desired user. Internal calls have a different sound (continuous tone) from external calls (modulate tone or electronic buzzer).

To actuate the electric door lock you must press the button with the key.





# **TROUBLESHOOTING**

# PRELIMINARY CHECKS

- Check for the presence of the mains voltage in the terminals 230Vac (or 127Vac) of the power supply.
- The power supply is not provided with fuses, but it is protected against overloading or short-circuiting by a heat sensor (thermo-
- protector), to restore power, it is necessary to cut OFF the mains voltage for about one minute. Reconnect power after having eliminated the problem.
- Check the voltage output of the power supply (see in detail the values indicated in the power
- supply chapter).
- Check that the cross section of the cables corresponds to what is indicated on page 35 and in the descriptions of each individual diagram.

# PROBLEM, REASON AND SOLUTIONS

# Nothing at all is working

Absence of main voltage. Short-circuit or overload of the terminals of the power supply output. Faulty power supply.

### The lock does not work

Faulty lock. Faulty door release push-button. The cross section of the cables indicated in bold type is insufficient. A connecting cable to the lock has been interrupted. Faulty power supply.

# Calls from the door station do not work

The common connection of the push-buttons on the push-button panel has been interrupted. Faulty power supply.

# A call to an individual intercom does not work

The connecting wire from the door station to the intercom has been interrupted. The handset has not been replaced correctly (in electronic call systems the ringing sound is reproduced directly by the loudspeaker of the handset which is disconnected when the handset is lifted to avoid ringing sound during the conversation). Faulty intercom.

# No audio from both channels

Absence of power between  $\bf 3$  (+) and  $\bf 4$  ( - ) of the electric door-speaker (6÷8Vdc). Short-circuit between + and - of the power supply. Faulty power supply.

# No audio from the intercoms to door station

Connection 1 from the intercoms to the electric door-speaker has been interrupted or short-circuited. There is no ground connection to terminal 4 of the electric door-speaker (amplifier). Faulty electric door-speaker (amplifier).

### No audio from the door station to the intercoms

Connection 2 from the intercoms to the electric door-speaker (amplifier) has been interrupted or short-circuited. Faulty electric door-speaker (amplifier).

# Audio with humming in the background (50/60Hz)

The wires have been canalized together with the cables that power AC loads. Wrong connections or under dimensioned cross-section of wires (see recommendation and table on page 35). Faulty power supply.

# A whistle is heard at the external door station (Larsen effect)

The electric door-speaker (amplifier) is badly housed in the push-button panel. The microphone hole of the external door station might be clogged. Lower the volume.

# Radio reception on the door station

The defect can occur when there is a transmitter working in the proximity. Apply a capacitor from  $0.1\mu F$  between terminals **1** and **3** of the electric door speaker (amplifier).

### INTERCOMMUNICATING SYSTEMS

# No audio in both channels. Intercommunicating service is not working

Short-circuit between + and - of the power supply. Faulty power supply.

# Calls from the door station work. No audio in both channels. Intercommunicating service is working

No power supply between **3** (+) and **4** (-) of the electric door-speaker (8Vdc). Faulty power supply.

# No audio from the intercoms to the door station

The connection between 1 of the intercoms and G of the power supply has been interrupted. The connection between D of the power supply and 1 of the electric door-speaker (amplifier) has been interrupted. Faulty electric doorspeaker (amplifier). Faulty power supply.

# No audio from the door station to the intercoms

The connection between 2 of the intercoms and 2 of the power supply has been interrupted. The connection between C+ of the power supply and 2 of the electric door-speaker (amplifier) has been interrupted. Faulty electric doorspeaker (amplifier). Faulty power supply.

# The intercommunicating calls work, but the door station is still connected Faulty power supply.

The intercommunicating calls do not work Check that cable 7 is connected to 7 of the power supply. Faulty power supply.

# No audio in the intercommunicating service

Faulty power supply.

# SYSTEM WITH MORE ENTRANCES

### Entrance A is never activated

Short-circuit between **5** and **6** of the exchanger. Faulty exchanger.

### Entrance B is never activated

Short-circuit between 3 and 4 of the exchanger. Faulty exchanger. No power supply to 1 and 2 of the exchanger (13Vac).





# INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
1	PRS240	Power supply with electronic ringing generator
1	PA **	Door release push-button (optional)
1	SE **	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 16÷19)

	1 row	2 row	
	MD71÷74	MD71÷74	Module frames with back box
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
1	MD30	MD30	Electric door speaker (amplifier)

Door station series Matrix (for right item set see on pages 24 and 25)

MA71÷73	Module frames with back box
MA10P-11P-12P	Modules with integrated audio amplifier
MA20-22-24	Blank and button modules
MA61÷63	Frontframes
MA91 ÷ 93 *	Rain shelters with module frames
	MA10P-11P-12P MA20-22-24 MA61÷63

Door station series Profilo (for right item set see on pages 28 and 29)

	PL71÷73	Module frames with back box
1	PL10P-11P-12P	Modules with integrated audio amplifier
	PL20 ÷ 24	Blank and button modules

- ... Refers to number of users.
- Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

Working instructions. See page 36.

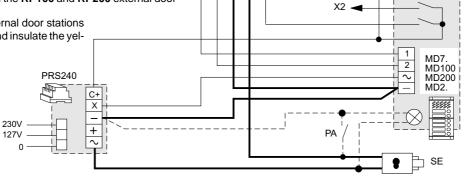
# Notes

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page 35.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

# **Application diagram**

When using MD100, MD200, RP100, RP200 and UP amplified external door stations, place this diagram on the diagram on page 39 and line it up with the riser. One or two-way systems can be realized with RP and UP series. As regards the Mody series, multi-family systems can be realized by adding the required quantity of button modules. Warning. Cut jumper W1 in the RP100 and RP200 external door

- stations.
- In UP series external door stations do not connect and insulate the yellow wire.
- For alternate current wires refer to note 6 of the installation instructions on page 35.







RP100 RP200

P1

С

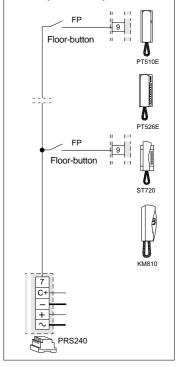
À

UP11

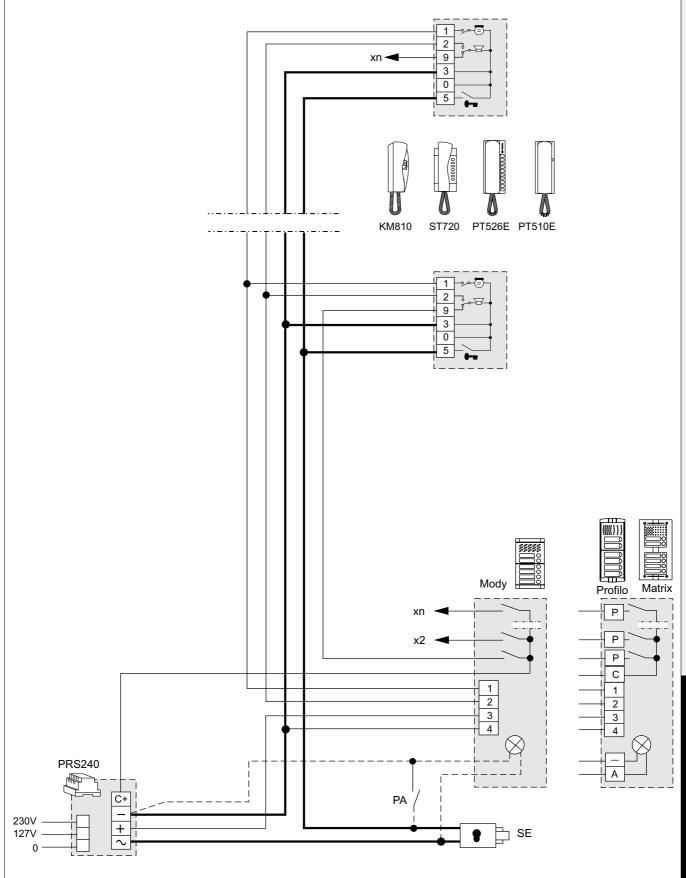
UP100

UP12 UP200

This work diagram allows for differentiating the floor-call from the call from the push-button panel.



# INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION



# INTERCOMS WITH PRIVATE CONVERSATION CONNECTED TO 1 EXTERNAL DOOR STATION

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
	SM50E	Private conversation module
1	PRS240	Power supply with electronic ringing generator
1	1471E	Relaysunit
1	PA **	Door release push-button (optional)
1	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody** (for right item set see on pages 16÷19)

	1 row	2 row	
	MD71÷74	MD71÷74	Module frames with back box
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
1	MD30	MD30	Electric door speaker (amplifier)

# Door station series Matrix (for right item set see on pages 24 and 25)

	MA71÷73	Module frames with back box
1	MA10P-11P-12P	Modules with integrated audio amplifier
	MA20-22-24	Blank and button modules
	MA61÷63	Frontframes
	MA91 ÷ 93 *	Rain shelters with module frames

# Door station series Profilo (for right item set see on pages 28 and 29)

	PL71÷73	Module frames with back box
1	PL10P-11P-12P	Modules with integrated audio amplifier
	PL20 ÷ 24	Blank and button modules

- ... Refers to number of users.
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions. See page 36.

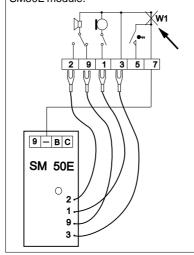
# **Notes**

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page 35.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

# **Project and Compact series intercoms**

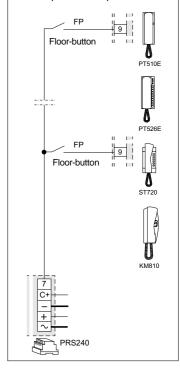
In each intercom you must:

- **cut jumper W1** joining terminals 3 and 0 (7 for art. PT510EW)
- **connect** terminal 0 (7 for art. PT510EW) of the intercom and terminal (minus) of the SM50E module.



### Floor call

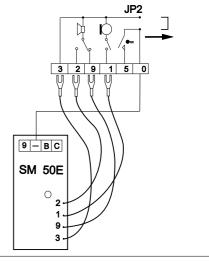
This work diagram allows for differentiating the floor-call from the call from the push-button panel.



# Studio series intercoms

In each intercom you must:

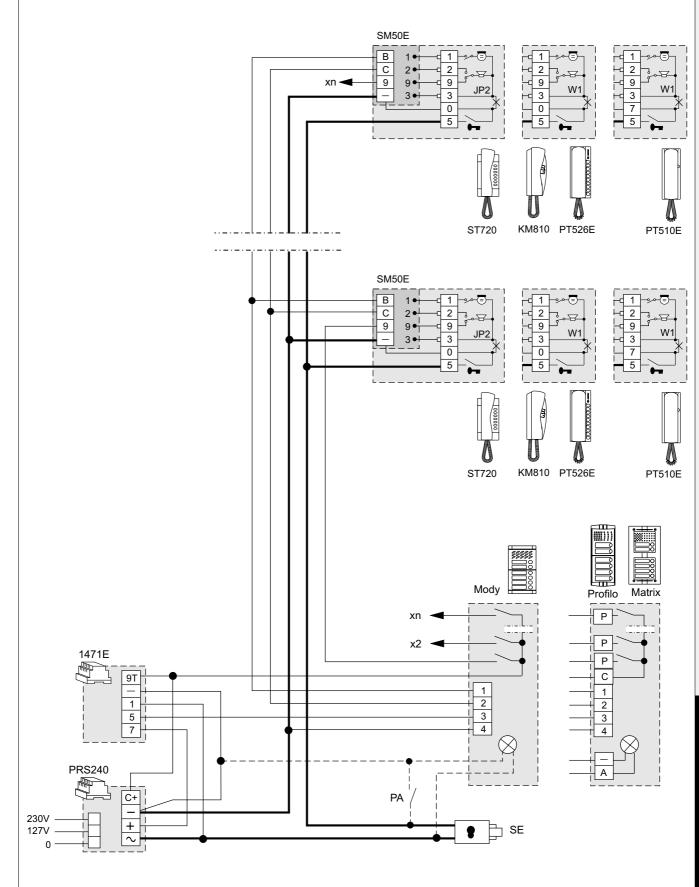
- remove the mobile jumper inside connector JP2
- **connect** terminal 0 of the intercom and terminal (minus) of the SM50E module.







# INTERCOMS WITH PRIVATE CONVERSATION CONNECTED TO 1 EXTERNAL DOOR STATION







# INTERCOMS CONNECTED TO 2 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
1	PRS240	Power supply with electronic ringing generator
1	1473	Exchanger
2	PA **	Door release push-button (optional)
2	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody** (for right item set see on pages 16÷19)

 2 	1 row MD71÷74 MD10-11-12 MD21 ÷ 24	2 row MD71÷74 MD10-122-124 MD222 ÷ 228	Module frames with back box Modules for electric door speaker Button modules
	MD20 - 50	MD20 - 50	Blank and info modules Hood covers Rain shelters with module frames Electric door speaker (amplifier)
2	MD82 ÷ 812	MD82 ÷ 812	
2	MD92 ÷ 912*	MD92 ÷ 912*	
2	MD30	MD30	

# **Door station series Matrix** (for right item set see on pages 24 and 25)

	MA71÷73	Module frames with back box
2	MA10P-11P-12P	Modules with integrated audio amplifier
	MA20-22-24	Blank and button modules
	MA61÷63	Frontframes
	MA91 ÷ 93 *	Rain shelters with module frames

# Door station series Profilo (for right item set see on pages 28 and 29)

	PL71÷73	Module frames with back box
2	PL10P-11P-12P	Modules with integrated audio amplifier
	PL20 ÷ 24	Blank and button modules

- ... Refers to number of users.
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions.

As the basic system described on page 36, with the following variations:

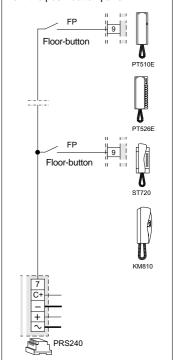
- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

# Notes

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page 35.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

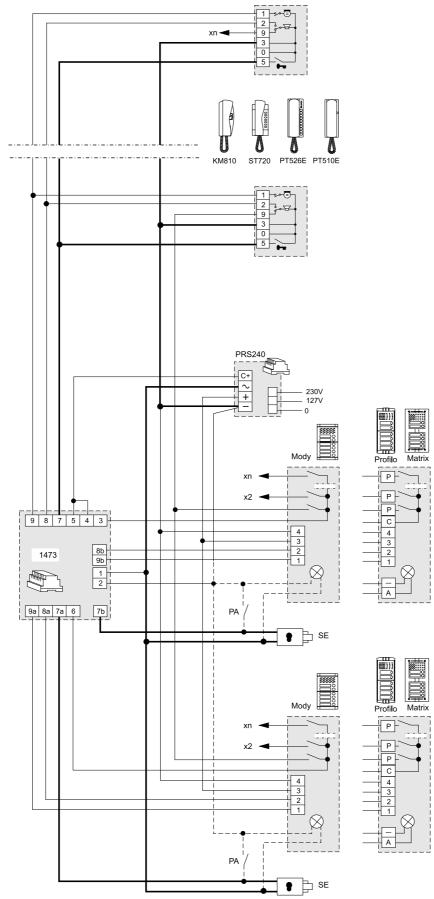
# Floor call

This work diagram allows for differentiating the floor-call from the call from the push-button panel.





# INTERCOMS CONNECTED TO 2 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS







# INTERCOMS CONNECTED TO 3 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
1	PRS240	Power supply with electronic ringing generator
2	1473	Exchanger
3	PA **	Door release push-button (optional)
3	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody** (for right item set see on pages 16÷19)

 3   3	1 row MD71÷74 MD10-11-12 MD21 ÷ 24 MD20 - 50 MD82 ÷ 812	2 row MD71÷74 MD10-122-124 MD222 ÷ 228 MD20 - 50 MD82 ÷ 812	Module frames with back box Modules for electric door speaker Button modules Blank and info modules Hood covers
3	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
	MD30	MD30	Electric door speaker (amplifier)

# **Door station series Matrix** (for right item set see on pages 24 and 25)

	MA71÷73	Module frames with back box
3	MA10P-11P-12P	Modules with integrated audio amplifier
	MA20-22-24	Blank and button modules
	MA61÷63	Frontframes
	MA91 ± 93 *	Rain shelters with module frames

# Door station series Profilo (for right item set see on pages 28 and 29)

	PL71÷73	Module frames with back box
3	PL10P-11P-12P	Modules with integrated audio amplifier
	PL20 ÷ 24	Blank and button modules

- ... Refers to number of users.
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions.

As the basic system described on page 36, with the following variations:

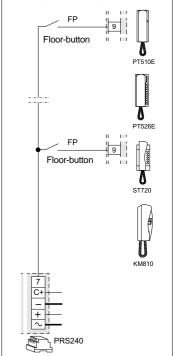
- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

# Notes

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page 35.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

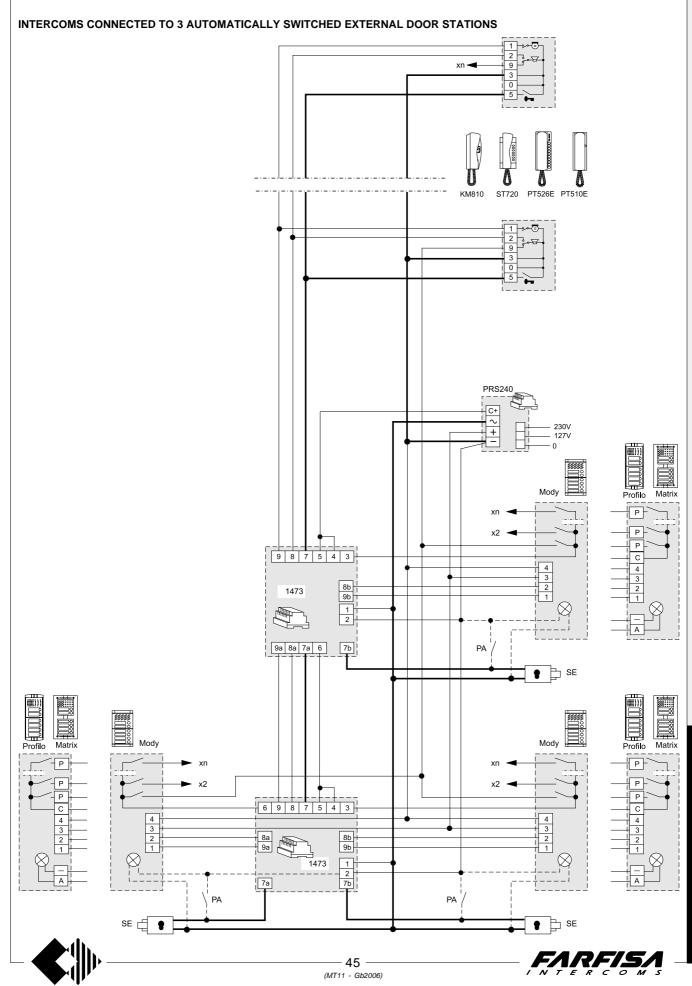
# Floor call This work of

This work diagram allows for differentiating the floor-call from the call from the push-button panel.









# INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
Χ	PRS240	Power supply with electronic ringing generator
1	PRS220	Powersupply
Χ	1473	Exchanger
1+X	PA **	Door release push-button (optional)
1+X	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody** (for right item set see on pages 16÷19)

	1 row	2 row	
	MD71÷74	MD71÷74	Module frames with back box
1+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
1+X	MD30	MD30	Electric door speaker (amplifier)

# **Door station series Matrix** (for right item set see on pages 24 and 25)

	MA71÷73	Module frames with back box
1+X	MA10P-11P-12P	Modules with integrated audio amplifier
	MA20-22-24	Blank and button modules
	MA61÷63	Frontframes
	MA91 ÷ 93 *	Rain shelters with module frames

# Door station series Profilo (for right item set see on pages 28 and 29)

	PL71÷73	Module frames with back box
1+X	PL10P-11P-12P	Modules with integrated audio amplifier
	PL20 ÷ 24	Blank and button modules

- ... Refers to number of users.
- X Refers to the number of stairways.
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions.

As the basic system described on page 36, with the following variations:

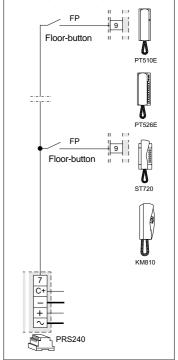
- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

# Notes

- You can also use **Prestige** and **TM** push-button panels. For the latter series you must request the version with separate common terminals.
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

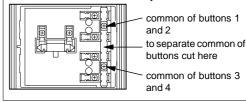
# Floor call

This work diagram allows for differentiating the floor-call from the call from the push-button panel.



The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.

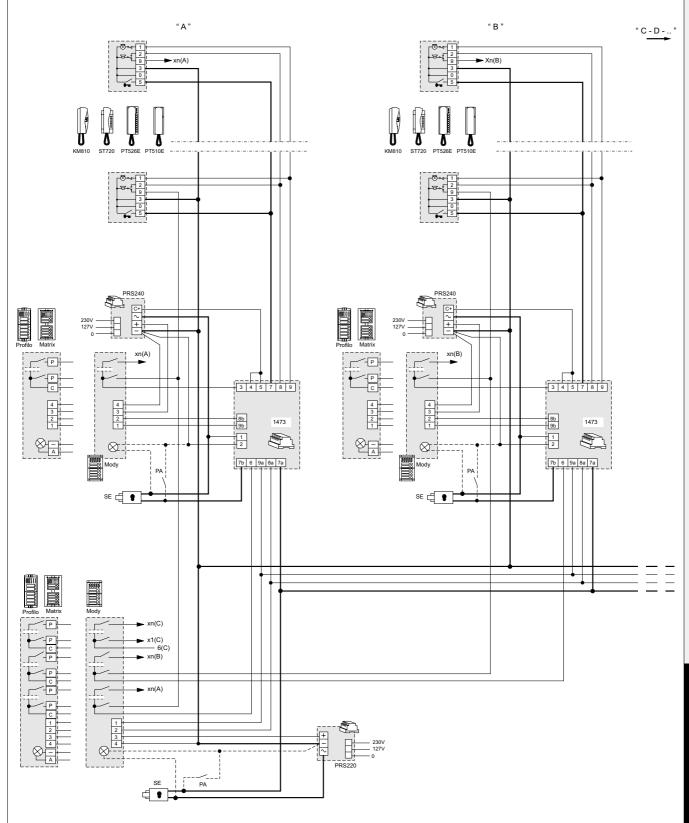
Call button modules series Mody















# ONE WAY INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
1+X	PRS240	Power supply with electronic ringing generator
Χ	1473	Exchanger
1+X	PA **	Door release push-button (optional)
1+X	SE **	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 16÷19)

# Secondary door stations

X	MD71	Module frames with back box
Χ	MD11	Module for electric door speaker
Χ	MD81	Hood cover
Χ	MD91*	Rain shelter with module frames
Χ	MD30	Electric door speaker (amplifier)

# Main entrance

	1 row	2 row	
	MD71÷74	MD71÷74	Module frames with back box
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
1	MD30	MD30	Electric door speaker (amplifier)

**Door station series Matrix** (for right item set see on pages 24 and 25)

# Secondary door stations

Χ	MA71	Module frames with back box
Χ	MA11P	Module with integrated audio amplifier
V	MAGA	Frantframa

# Main entrance

	MA71÷73	Module frames with back box
1	MA10P-11P-12P	Modules with integrated audio amplifie
	MA20-22-24	Blank and button modules
	MA61÷63	Frontframes

MA91 ÷ 93 \* Rain shelters with module frames

Door station series Profilo (for right item set see on pages 28 and 29)

# Secondary door stations

Х	PL71	Module frames with back box
Χ	PL11P	Module with integrated audio amplifier

ıvıaın e	entrance	
	PL71÷73	Module frames with back box

1	PL10P-11P-12P	Modules with integrated audio amplifier

PL20 ÷ 24 Blank and button modules

- ... Refers to number of users.
- X Refers to the number of stairways.
- Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions.

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

# Notes

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page 35.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

# FARFISA

# **Application diagram**

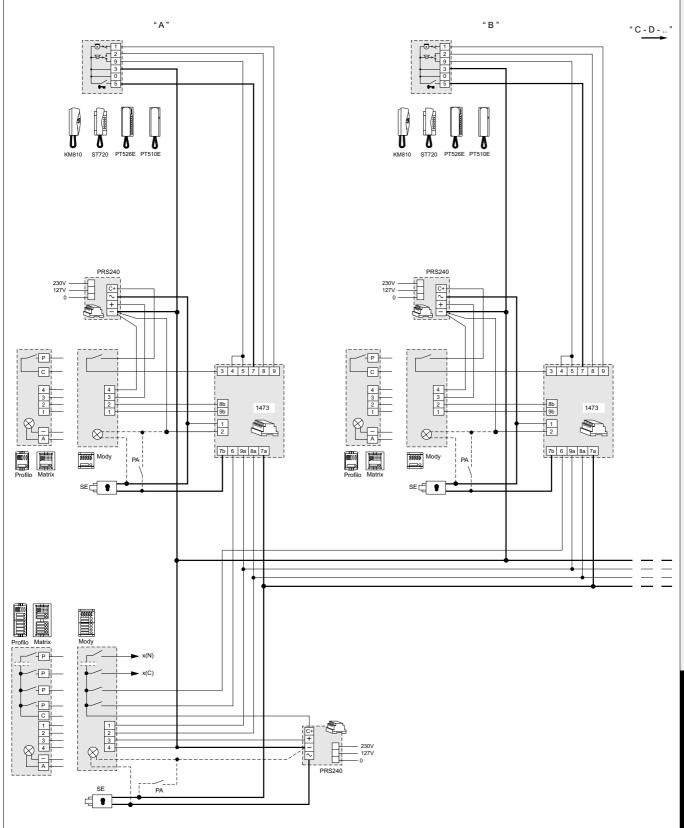
When using MD100, RP100, UP11 and UP100 amplified external door stations as one-way secondary door stations, place this diagram on the diagram on page 49 and line it up with the riser.

# Warning.

- Cut jumper W1 in the RP100 external door stations.
- In UP series external door stations do not connect and insulate the yellow wire.
- For alternate current wires refer to note 6 of the installation instructions on page 35.

1473

# ONE WAY INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)







**I ELECOMMUNICATION** 

# INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 2 MAIN COMMON STATIONS (multiple entrance)

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
Χ	PRS240	Power supply with electronic ringing generator
1	PRS220	Power supply
2xX	1473	Exchanger
2+X	PA **	Door release push-button (optional)
2+X	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody** (for right item set see on pages 16÷19)

	1 row MD71÷74	2 row MD71÷74	Module frames with back box
	-		
2+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
2+X	MD30	MD30	Electric door speaker (amplifier)

# Door station series Matrix (for right item set see on pages 24 and 25)

	MA71÷73	Module frames with back box
2+X	MA10P-11P-12P	Modules with integrated audio amplifier
	MA20-22-24	Blank and button modules
	MA61÷63	Frontframes
	MA91 ÷ 93 *	Rain shelters with module frames

# Door station series Profilo (for right item set see on pages 28 and 29)

	PL71÷73	Module frames with back box
2+X	PL10P-11P-12P	Modules with integrated audio amplifier
	PL20 ÷ 24	Blank and button modules

- ... Refers to number of users.
- X Refers to the number of stairways.
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions.

As the basic system described on page 36, with the following variations:

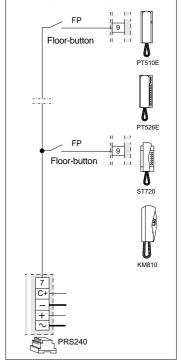
- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

# Notes

- You can also use **Prestige** and **TM** push-button panels. For the latter series you must request the version with separate common terminals.
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page 35.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

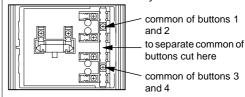
# Floor call

This work diagram allows for differentiating the floor-call from the call from the push-button panel.



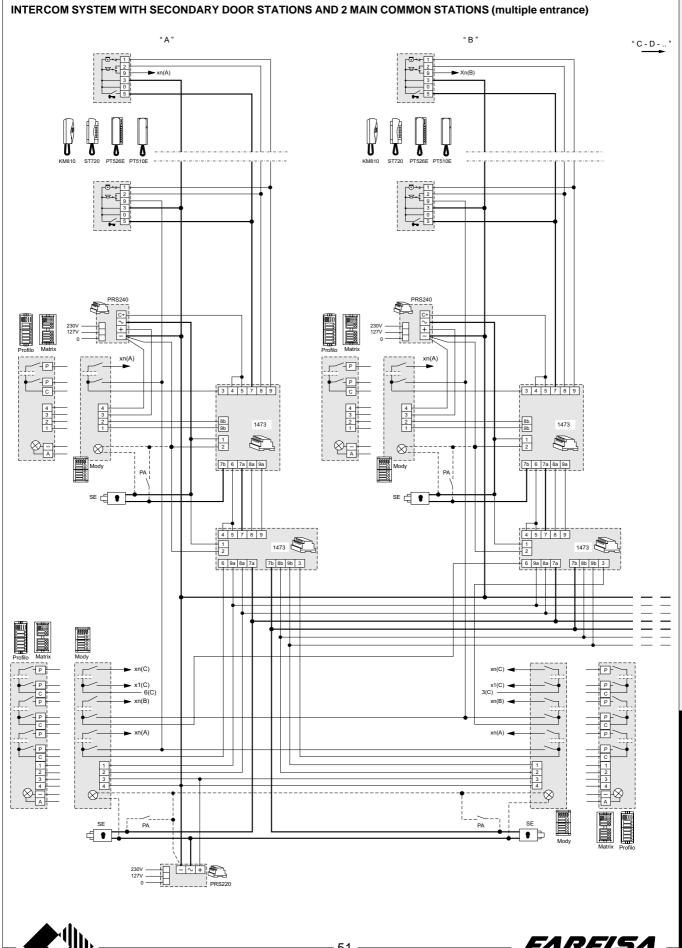
The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.

Call button modules series Mody









TELECOMMUNICATION

# Si 200L/7

# STUDIO series INTERCOMMUNICATING INTERCOMS (2 to 7 users)

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
1	PRS226E	Power supply-switcher

... Refers to number of users.

# Working instructions.

See page 36.

# Notes

- Do not forget to connect all terminals C of the additional buttons.
- Do not use KEY button for intercommunication calls.
- For wires dimensioning refer to the installation instructions and table on page 35.

# COMPACT series INTERCOMMUNICATING INTERCOMS (max. 2 users)

Q.ty	Article	Description
2	KM810W	Compact series intercom
2	ST 701	Single button unit
1	PRS226E	Power supply-switcher

# Working instructions.

See page 36.

### Notes

- Do not use KEY button for intercommunication calls.
- For wires dimensioning refer to the installation instructions and table on page 35.

# Si 200L/11

# PROJECT series INTERCOMMUNICATING INTERCOMS (2 to 11 users)

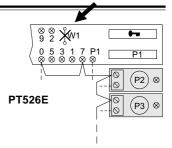
Q.ty	Article	Description	
  1	PT526EW PT501 PRS226E	Project series modular intercom Single button unit Power supply-switcher	
Refe	rs to number of users		

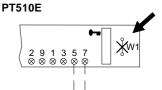
... Refers to number of users.

Working instructions. See page 36.

# Notes

- Cut jumper W1 in all the intercoms.
- Do not forget to connect terminals 0, 7 and the common terminal of all the additional buttons.
- Art. PT510EW can be used for intercommunicating systems with 2 intercoms. In this case, terminal 0 becomes terminal 7 in the diagram.
- For wires dimensioning refer to installation instructions and table on page 35.



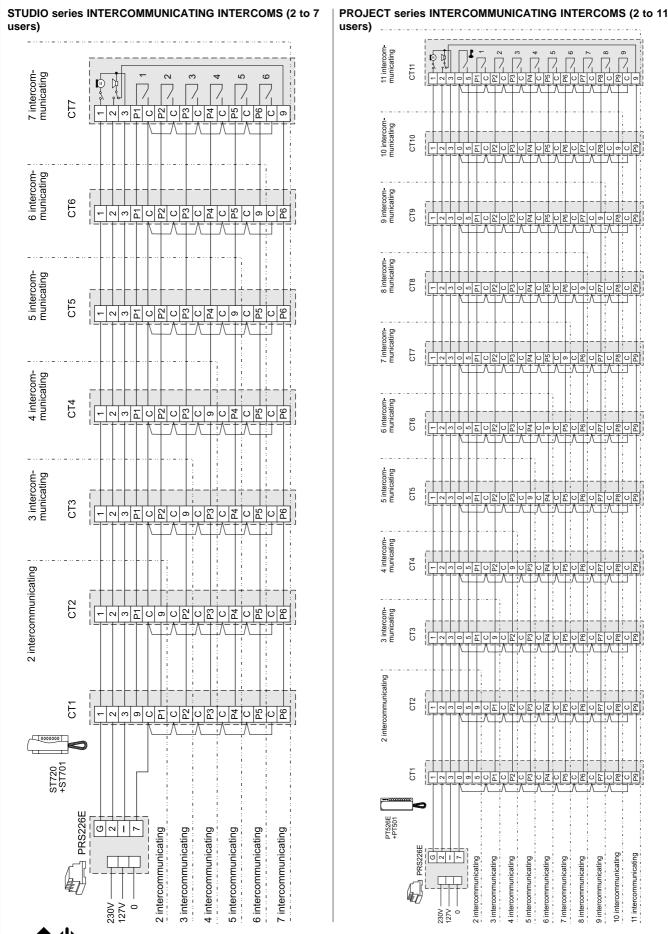


# Table for choosing intercoms and accessories for the required type of installation

Number of inter-	Studio			Project	Compact		
communicating	ST 720W	ST 701	PT526EW	PT501	PT510EW	KM810W	ST701
2	2	2	2	0	2	2	2
3	3	6	3	0			
4	4	12	4	4			
5	5	20	5	10			
6	6	30	6	18			
7	7	42	7	28			
8			8	40			
9			9	54			
10			10	70			
11			11	88			







11 intercom- municating	-	2 - 2		7		7	<u> </u>	4	<u> </u>	- 7. [		 7 [	5
11 in	CT11	[-2]	m c	0 00	Σ   Ο    - Λ	Ϊ, Νοιε Ι.Α.	201	1 V	\ \ \ \	7	\ \ \	\ \ \	
10 intercom- municating	CT10	1-2	mc	D		208	202	4 0 2	2 0 8		       	U o	OB
9 intercom- municating	CT9	2	e c			208	201	1 V	2  U  &			       	08
8 intercom- municating	CT8	2	m c			208	2   O   2	1 V 4 10 15	2  U E	)       	) O &	       	OB
7 intercom- municating	CT7	2	m c			208	202	1 0 g				       	08
6 intercom- municating	СТ6	2	m c			208	2  o  2	1 V	»  ∪ \ <u>{</u>			o 8 √	08
5 intercom- municating	CT5	2	m c	100		208	200		± 0 €	) o s		08	08
4 intercom- municating	CT4	2	m c				) O [2		Z	)   S		       	08
3 intercom- municating	СТЗ	2	m c				2 0 2		2 0 E	) o &		       	08
2 intercommunicating	CT2	1-2	8 0	200	<b>□</b> □	Z   0   2	702	202	V			       	08
	CT1	2 - 2	m c		- N	7 O E	2012	X 0 2	\           	)         	206 A	       	0[8
PT526E +PT501		201			caung	Cating	cating	cating	cating	cating	cating	nicating	oicating
		7 3300 3300			z intercommunicating	A intercommunicating	tintorooming and a state of the	6 intercommunicating	7 intercommunicating	8 intercommunicating	9 intercommunicating	10 intercommunicating	11 intercomminicating



### 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH SINGLE CALLS

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	PT526EW	Project series modular intercom
	PT501	Single button unit
1	PRS226E	Power supply-switcher
1	PA **	Door release push-button (optional)
1	SE **	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 16÷19)

	1 row	2 row	
	MD71÷73	MD71÷73	Module frames with back box
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD81 ÷ 83	MD81 ÷ 83	Hood covers
1	MD91 ÷ 93*	MD91 ÷ 93*	Rain shelters with module frames
1	MD30	MD30	Electric door speaker (amplifier)

Door station series Matrix (for right item set see on pages 24 and 25)

 MA71÷73	Module frames with back box

1 MA10P-11P-12P Modules with integrated audio amplifier

MA20-22-24 Blank and button modules

... MA61÷63 Front frames

...  $MA91 \div 93^*$  Rain shelters with module frames

Door station series Profilo (for right item set see on pages 28 and 29)

PL71÷73 Module frames with back box

1 **PL10P-11P-12P** Modules with integrated audio amplifier

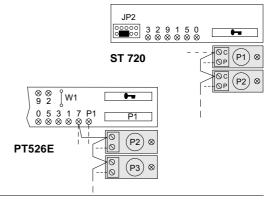
. **PL20÷24** Blank and button modules

- .. Refers to number of users (see table).
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions. See page 36.

# Notes

- Do not forget to connect terminals C of the additional buttons.
- If only 2 intercommunicating intercoms are requested, even **Compact** series can be used (see page 74).
- When using intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

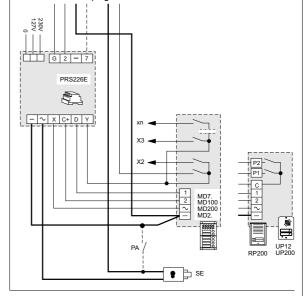


# **Application diagram**

When using MD100, MD200, RP200, UP12 and UP200 amplified external door stations (RP and UP series for two-way systems only) place this diagram on the diagram on page 55 and line it up with the riser.

# Warning.

- In the external door stations RP200 cut the jumper W1.
- In the external door stations **UP** do not connect the yellow wire and insulate it
- For alternate current wires refer to note 6 of the installation instructions on page 35.



# Table for choosing intercoms and accessories for the required type of installation

Number of	Stu	ıdio	Project		Comp	pact	Application dia-	
intercommunicating	ST 720W	ST 701	PT526EW	PT501	KM810W	ST 701	gram on page:	
2	2	2	2	0	2	2	74	
3	3	6	3	3			74	
4	4	12	4	8			74	
5	5	20	5	15			55	
6	6	30	6	24			75	
7	7	42	7	35			75	
8			8	48			*	
9			9	63			*	
10			10	80			*	

\* upon request





CT5

1

2

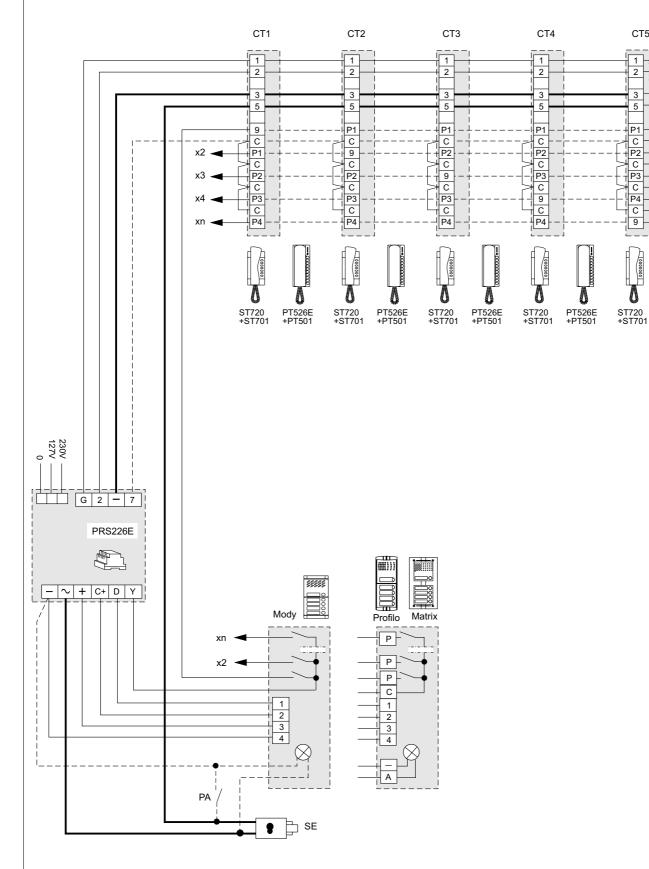
3

5

ħ

PT526E +PT501

# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH SINGLE CALLS







Article

# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH COMMON CALL. Call from external door station with alternate current.

Q.ty	Aitioic	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	PT526EW	Project series modular intercom
	PT501	Single button unit
	SR41	Electronic buzzer
1	PRS226E	Power supply-switcher
1	PA **	Door release push-button (optional)
1	SE **	Electric door lock (12VAC-1A)

Description

# **Door station series Mody**

1	MD71	Module frames with back box
1	MD11	Module for electric door speaker
1	MD81	Hood cover
1	MD91*	Rain shelter with module frames
1	MD30	Flectric door speaker (amplifier)

# **Door station series Matrix**

1	MA71	Module frames with back box
1	MA11P	Module with integrated audio amplifier
1	MA61	Frontframe
1	MA91*	Rain shelter with module frames

# **Door station series Profilo**

1	PL71	Module frames with back box
1	PL11P	Module with integrated audio amplifier

- ... Refers to number of users (see table).

  \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions. See page 36.

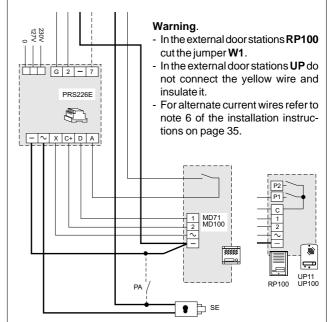
# Notes

- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in each intercom.
- If only 2 intercommunicating intercoms are requested, even Compact series can be used (see page 76).
- When using intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

### JP2 (P1) $\otimes$ ΟP ⊗ ⊗ 9 2 (P2) $\otimes$ 3 ⊗ ⊘ ⊘ 4 3 **ST 720** SR4 P2 8 Ø Ø 4 3 (P3) PT526E SR4

# **Application diagram**

When using MD100, RP100, UP11 and UP100 amplified external door stations place this diagram on the diagram on page 57 and line it up with the riser.



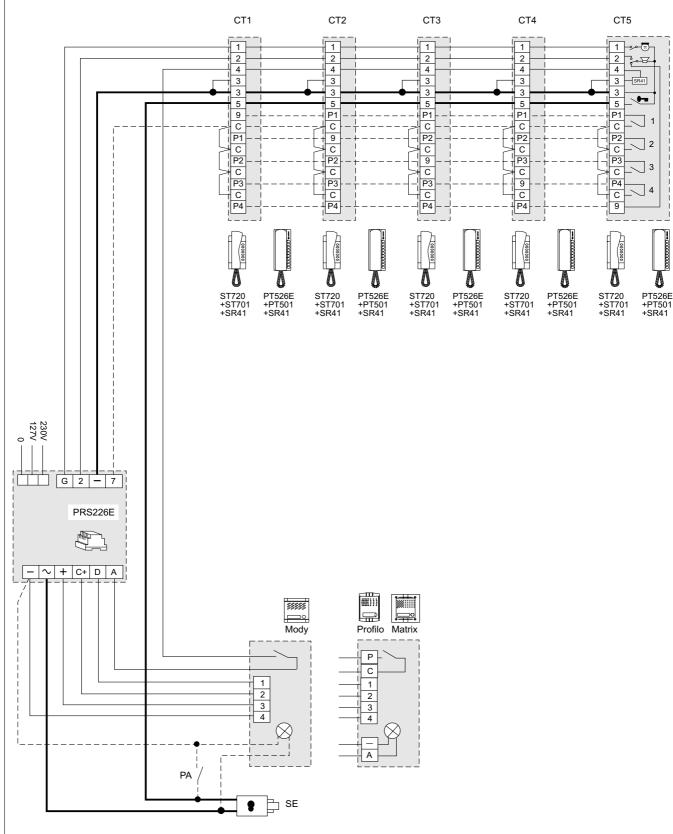
# Table for choosing intercoms and accessories for the required type of installation

Number of inter-		Studio			Project			Compact		Application dia-
communicating	ST 720W	ST 701	SR41	PT526EW	PT501	SR41	KM810W	ST 701	SR41	gram on page:
2	2	2	2	2	0	2	2	2	2	76
3	3	6	3	3	3	3				76
4	4	12	4	4	8	4				76
5	5	20	5	5	15	5				57
6	6	30	6	6	24	6				77
7	7	42	7	7	35	7				77
8				8	48	8				*
9				9	63	9				*
10				10	80	10				*













INTERCOMS

# Si 211L/5S

# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH COMMON CALL

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	ST 704	Additional loudspeaker
1	PRS226E	Power supply-switcher
	PRS210	Transformer
	RL 37	Relay module
1	PA **	Door release push-button (optional)
1	SE **	Electric door lock (12VAC-1A)

# ST 720

# **Door station series Mody**

1	MD71	Module frames with back box
1	MD11	Module for electric door speaker
1	MD81	Hood cover
1	MD91*	Rain shelter with module frames
1	MD30	Electric door speaker (amplifier)

# **Door station series Matrix**

1	MA71	Module frames with back box
1	MA11P	Module with integrated audio amplifier
1	MA61	Front frame

MA91\* Rain shelter with module frames

# **Door station series Profilo**

1	PL71	Module frames with back box
1	PL11P	Module with audio amplifier

- ... Refers to number of users (see table).
- Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

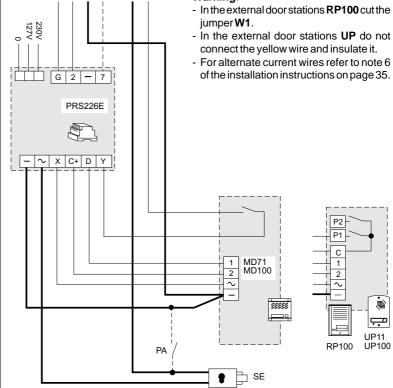
# Working instructions. See page 36.

- Do not forget to connect terminals C of the additional buttons and install the ST704 speaker module in every intercom.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

# **Application diagram**

When using MD100, RP100, UP11 and UP100 amplified external door stations place this diagram on the diagram on page 59 and line it up with the riser.

# Warning.



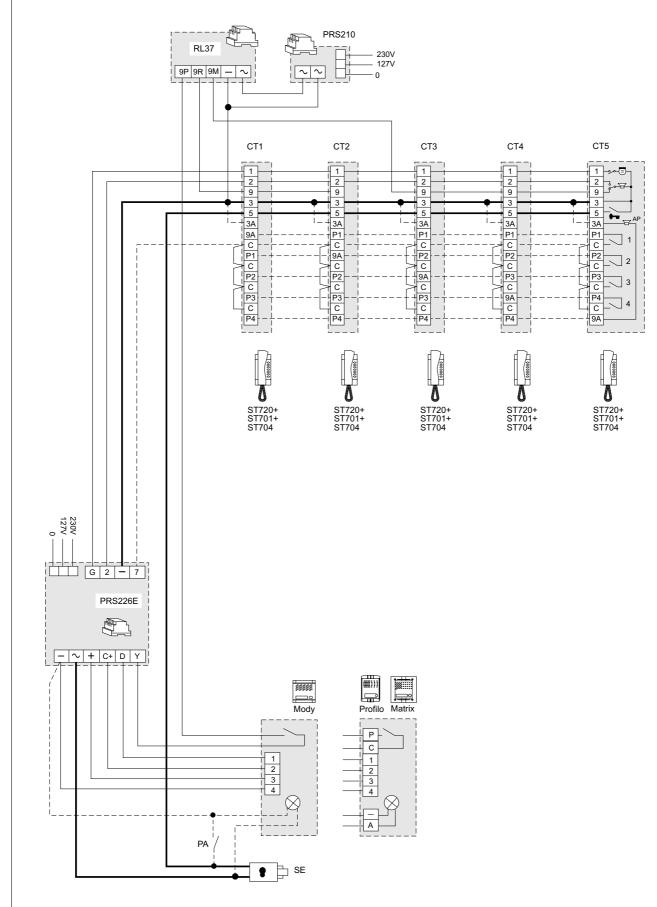
# Table for choosing intercoms and accessories for the required type of installation

Number of inter-		Application dia-				
communicating	ST 720W	gram on page:				
2	2	2	2	0	0	78
3	3	6	3	0	0	78
4	4	12	4	1	1	78
5	5	20	5	1	1	59





# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION WITH COMMON CALL







TELECOMMUNICATION

# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH SINGLE CALLS

ST 720

JP2

PT526E

⊗ ⊗ 9 2

> 5 3 ⊗ ⊗

Ŵ1

 $\begin{smallmatrix} 3 & 2 & 9 & 1 & 5 & 0 \\ \otimes & \otimes & \otimes & \otimes & \otimes & \otimes \end{smallmatrix}$ 

(P1) ⊗

(P2)⊗

(P3)⊗

⊗ρ

Q.ty	Article	Description				
	ST 720W	Studio series modular intercom				
	ST 701	Single button unit				
	PT526EW	Project series modular intercom				
	PT501	Single button unit				
1	PRS226E	Power supply-switcher				
1	1473	Exchanger				
2	PA **	Door release push-button (optional)				
2	SE **	Electric door lock (12VAC-1A)				

# **Door station series Mody** (for right item set see on pages 16÷19)

 2	1 row MD71÷73 MD10-11-12 MD21 ÷ 24	2 row MD71÷73 MD10-122-124 MD222 ÷ 228	Module frames with back box Modules for electric door speaker Button modules
	MD20 - 50	MD20 - 50	Blank and info modules Hood covers Rain shelters with module frames Electric door speaker (amplifier)
2	MD81 ÷ 83	MD81 ÷ 83	
2	MD91 ÷ 93*	MD91 ÷ 93*	
2	MD30	MD30	

# Door station series Matrix (for right item set see on pages 24 and 25)

... MA71÷73 Module frames with back box

2 MA10P-11P-12P Modules with integrated audio amplifier

... MA20-22-24 Blank and button modules

... MA61÷63 Frontframes

... MA91 ÷ 93\* Rain shelters with module frames

# Door station series Profilo (for right item set see on pages 28 and 29)

... PL71÷73 Module frames with back box

2 PL10P-11P-12P Modules with integrated audio amplifier

... PL20÷24 Blank and button modules

- ... Refers to number of users (see table).
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

# Notes

- Do not forget to connect terminals C of the additional buttons.
- If only 2 intercommunicating intercoms are requested, even Compact series can be used (see page 74).
- When using intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

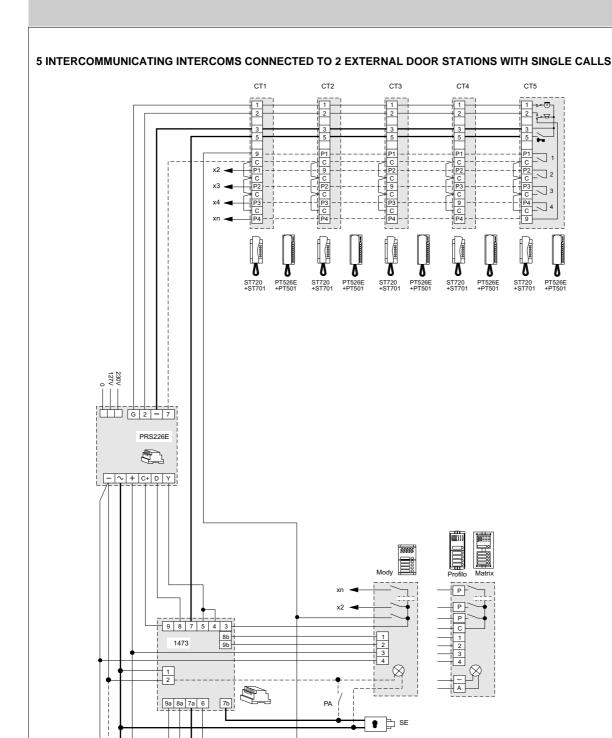
# Table for choosing intercoms and accessories for the required type of installation

Number of	Studio		Project		Com	oact	Application dia-	
intercommunicating	ST 720W	ST 701	PT526EW	PT501	KM810W	ST 701	gram on page:	
2	2	2	2	0	2	2	74	
3	3	6	3	3			74	
4	4	12	4	8			74	
5	5	20	5	15			61	
6	6	30	6	24			75	
7	7	42	7	35			75	
8			8	48			*	
9			9	63			*	
10			10	80			*	

\* upon request











PA

 $\otimes$ 

♥ ☐ SE

Mody

P

INTERCOMS

Si 221L/5

5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH COMMON CALL. Call from external

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	PT526EW	Project series modular intercom
	PT501	Single button unit
	SR41	Electronic buzzer
1	PRS226E	Power supply-switcher
1	1473	Exchanger
2	PA **	Door release push-button (optional)
2	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody**

door station with alternate current

Module frames with back box
Module for electric door speaker
Hood cover
Rain shelter with module frames
Electric door speaker (amplifier)

# **Door station series Matrix**

2	MA71	Module frames with back box
2	MA11P	Module with integrated audio amplifier
2	MA61	Frontframe
2	MA91*	Rain shelter with module frames

# **Door station series Profilo**

2	PL71	Module frames with back box
2	PL11P	Module with integrated audio amplifier

- ... Refers to number of users (see table).
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# **Working instructions**

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

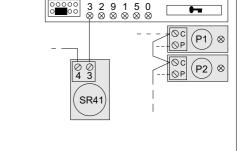
# **Notes**

- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in each intercom.
- If only 2 intercommunicating intercoms are requested, even Compact series can be used (see page 76).
- When using intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

# Table for choosing intercoms and accessories for the required type of installation

Number of inter-		Studio			Project			Compact		Application dia-
communicating	ST 720W	ST 701	SR41	PT526EW	PT501	SR41	KM810W	ST 701	SR41	gram on page:
2	2	2	2	2	0	2	2	2	2	76
3	3	6	3	3	3	3				76
4	4	12	4	4	8	4				76
5	5	20	5	5	15	5				63
6	6	30	6	6	24	6				77
7	7	42	7	7	35	7				77
8				8	48	8				*
9				9	63	9				*
10				10	80	10				*
L					1		1			

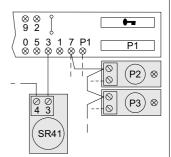
\*upon request



JP2

### PT526E

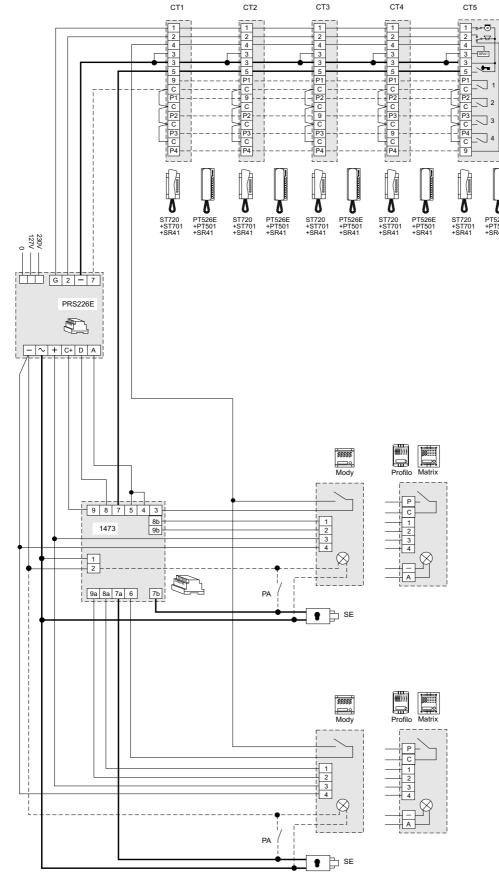
**ST 720** 







# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH COMMON CALL. Call from external door station with alternate current







# Si 221L/5S

# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH COMMON CALL

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	ST 704	Additional loudspeaker
1	PRS226E	Power supply-switcher
1	1473	Exchanger
	PRS210	Transformer
	RL 37	Relaymodule
2	PA **	Door release push-button (optional)
2	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody**

2	MD71	Module frames with back box
2	MD11	Module for electric door speaker
2	MD81	Hood cover
2	MD91*	Rain shelter with module frames
2	MD30	Electric door speaker (amplifier)

# **Door station series Matrix**

2	MA71	Module frames with back box
2	MA11P	Module with integrated audio amplifier
2	MA61	Frontframe
2	MA91*	Rain shelter with module frames

# **Door station series Profilo**

2	PL71	Module frames with back box
2	PL11P	Module with audio amplifier

- ... Refers to number of users (see table).
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# **Working instructions**

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

# Notes

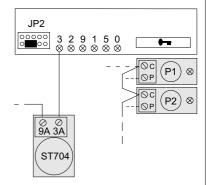
- Do not forget to connect terminals C of the additional buttons and install the ST704 speaker module in every intercom.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

# Table for choosing intercoms and accessories for the required type of installation

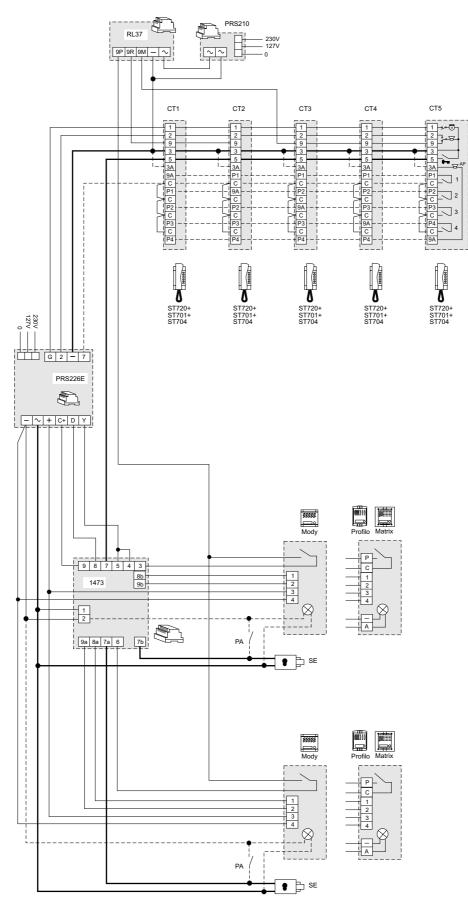
Number of inter-	Studio				Application dia-	
communicating	ST 720W	ST 701	ST 704	RL37	PRS210	gram on page:
2	2	2	2	0	0	78
3	3	6	3	0	0	78
4	4	12	4	1	1	78
5	5	20	5	1	1	65



# ST 720



# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 2 EXTERNAL DOOR STATIONS WITH COMMON CALL







# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 3 EXTERNAL DOOR STATIONS WITH SINGLE CALLS

ST 720

PT526E

JP2

 $\begin{smallmatrix} 3 & 2 & 9 & 1 & 5 & 0 \\ \otimes & \otimes & \otimes & \otimes & \otimes & \otimes \end{smallmatrix}$ 

W1

8

⊘c ⊘p

 $(\mathsf{P2}) \otimes$ 

(P3)

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	PT526EW	Project series modular intercom
	PT501	Single button unit
1	PRS226E	Power supply-switcher
2	1473	Exchanger
3	PA **	Door release push-button (optional)
3	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody** (for right item set see on pages 16÷19)

1 row 2 row  MD71÷73 MD71÷73  3 MD10-11-12 MD10-122-124  MD21÷ 24 MD222÷ 228  MD20 - 50 MD20 - 50  3 MD81÷ 83 MD81÷ 83  3 MD91÷ 93* MD91÷ 93*  3 MD30 MD30	Module frames with back box Modules for electric door speaker Button modules Blank and info modules Hood covers Rain shelters with module frames Electric door speaker (amplifier)
--	--

# **Door station series Matrix** (for right item set see on pages 24 and 25)

... MA71÷73 Module frames with back box

3 MA10P-11P-12P Modules with integrated audio amplifier

... MA20-22-24 Blank and button modules

.. MA61÷63 Frontframes

... MA91 ÷ 93\* Rain shelters with module frames

# Door station series Profilo (for right item set see on pages 28 and 29)

.. PL71÷73 Module frames with back box

3 PL10P-11P-12P Modules with integrated audio amplifier

... PL20÷24 Blank and button modules

- ... Refers to number of users (see table).
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# Working instructions

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

# Notes

- Do not forget to connect terminals C of the additional buttons.
- If only 2 intercommunicating intercoms are requested, even Compact series can be used (see page 74).
- When using intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

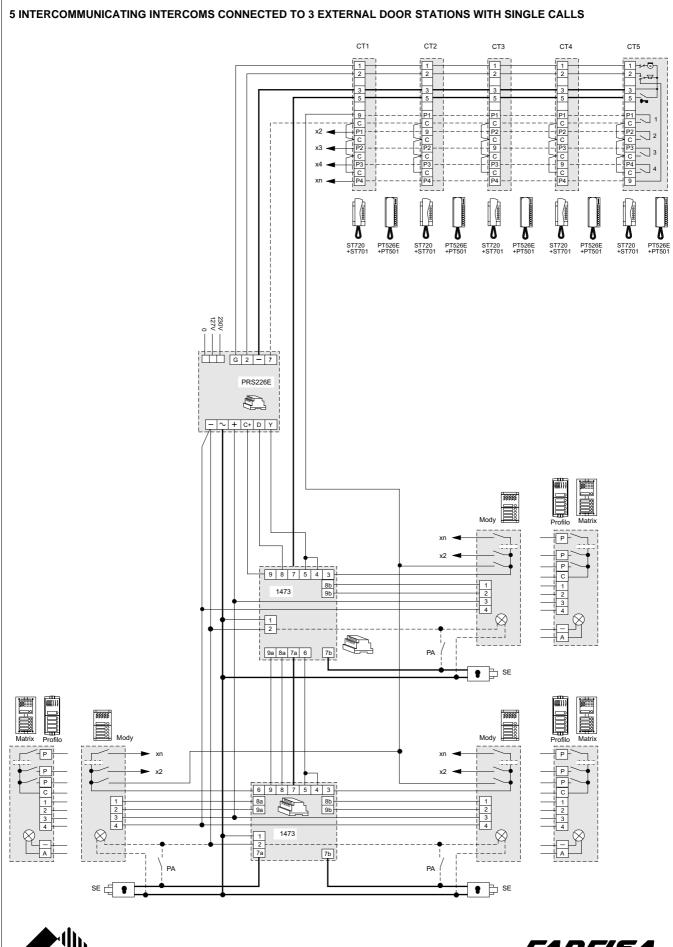
# Table for choosing intercoms and accessories for the required type of installation

Number of	Studio		Project		Compact		Application dia-
intercommunicating	ST 720W	ST 701	PT526EW	PT501	KM810W	ST 701	gram on page:
2	2	2	2	0	2	2	74
3	3	6	3	3			74
4	4	12	4	8			74
5	5	20	5	15			67
6	6	30	6	24			75
7	7	42	7	35			75
8			8	48			*
9			9	63			*
10			10	80			*

\* upon request







INTERCOMS

# Si 231L/5

# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 3 EXTERNAL DOOR STATIONS WITH COMMON CALL. Call from external door station with alternate current

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	PT526EW	Project series modular intercom
	PT501	Single button unit
	SR41	Electronic buzzer
1	PRS226E	Power supply-switcher
2	1473	Exchanger
3	PA **	Door release push-button (optional)
3	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody**

3	MD71	Module frames with back box
3	MD11	Module for electric door speaker
3	MD81	Hood cover
3	MD91*	Rain shelter with module frames
3	MD30	Electric door speaker (amplifier)

# **Door station series Matrix**

3	MA71	Module frames with back box
3	MA11P	Module with integrated audio amplifier
3	MA61	Frontframe
3	MA91*	Rain shelter with module frames

# **Door station series Profilo**

3	PL71	Module frames with back box
3	PL11P	Module with integrated audio amplifier

- ... Refers to number of users (see table).
- Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# **Working instructions**

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

# Notes

- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in each intercom.
- If only 2 intercommunicating intercoms are requested, even Compact series can be used (see page 76).
- When using intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

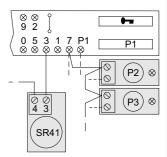
# Table for choosing intercoms and accessories for the required type of installation

Number of inter-	Studio			Project			Compact			Application dia-
communicating	ST 720W	ST 701	SR41	PT526EW	PT501	SR41	KM810W	ST 701	SR41	gram on page:
2	2	2	2	2	0	2	2	2	2	76
3	3	6	3	3	3	3				76
4	4	12	4	4	8	4				76
5	5	20	5	5	15	5				69
6	6	30	6	6	24	6				77
7	7	42	7	7	35	7				77
8				8	48	8				*
9				9	63	9				*
10				10	80	10				*





JP2



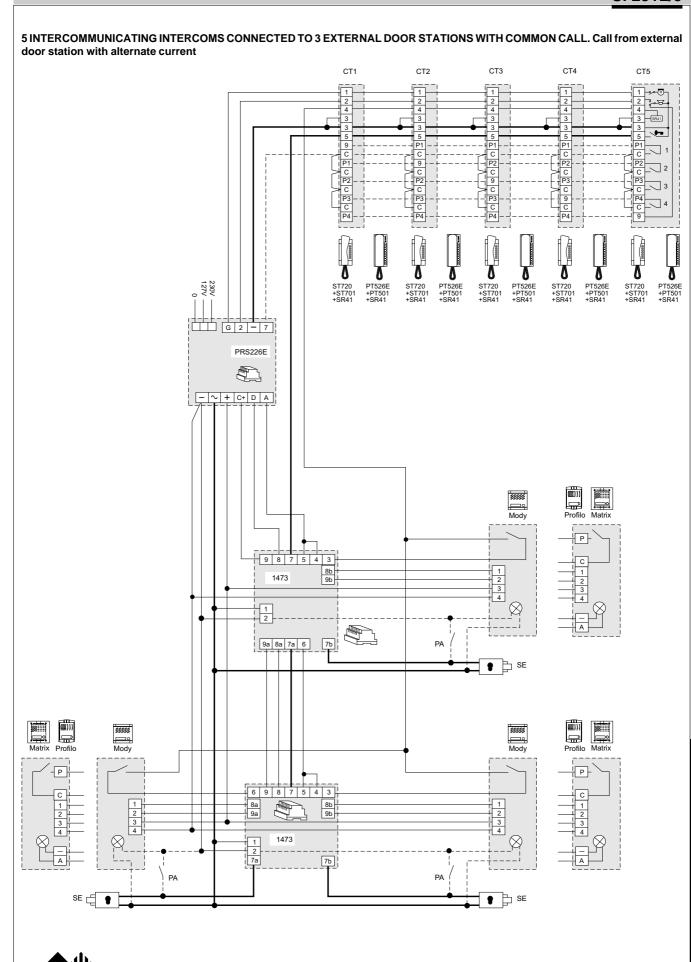
ST 720

OC (P1)  $\otimes$ 

ΟP







# 5 INTERCOMMUNICATING INTERCOMS CONNECTED TO 3 EXTERNAL DOOR STATIONS WITH COMMON CALL

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	ST 704	Additional loudspeaker
1	PRS226E	Power supply-switcher
2	1473	Exchanger
	PRS210	Transformer
	RL 37	Relay module
3	PA **	Door release push-button (optional)
3	SE **	Electric door lock (12VAC-1A)

# **Door station series Mody**

3	MD71	Module frames with back box
3	MD11	Module for electric door speaker
3	MD81	Hood cover
3	MD91*	Rain shelter with module frames
3	MD30	Electric door speaker (amplifier)

# **Door station series Matrix**

3	MA71	Module frames with back box
3	MA11P	Module with integrated audio amplifier
3	MA61	Frontframe
3	MA91*	Rain shelter with module frames

# **Door station series Profilo**

3	PL71	Module frames with back box
3	PL11P	Module with audio amplifier

- ... Refers to number of users (see table).\* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

# **Working instructions**

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.

# Notes

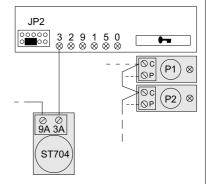
- Do not forget to connect terminals C of the additional buttons and install the \$T704 speaker module in every intercom.
- For the connection of name-plate lamps, read notes 6 and 7 of the installation instructions on
- For wires dimensioning refer to installation instructions and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

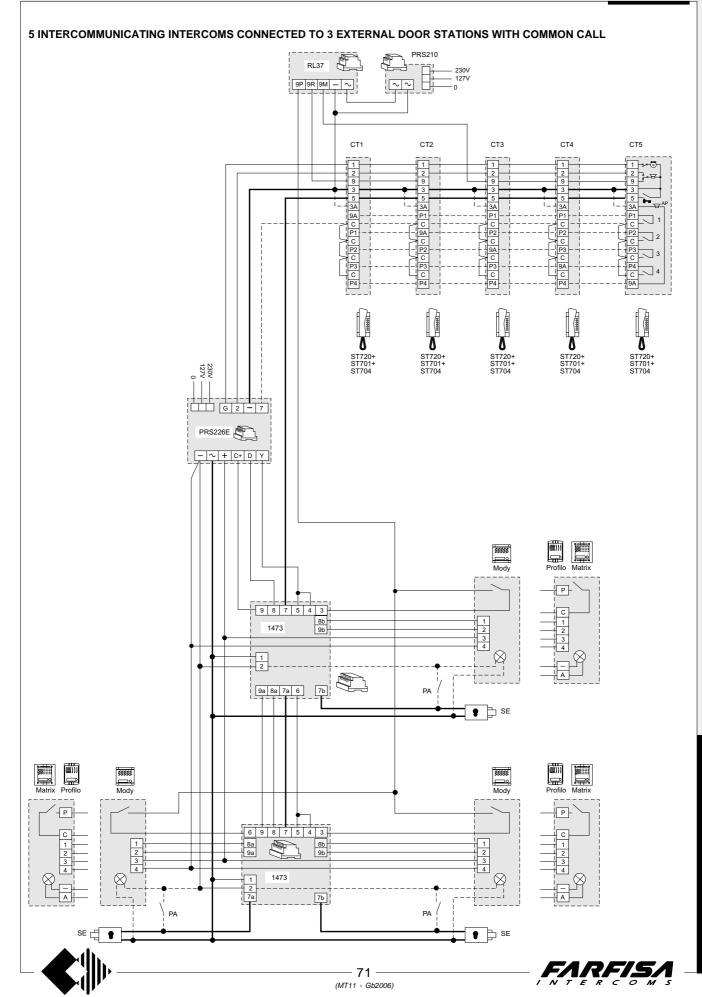
# Table for choosing intercoms and accessories for the required type of installation

Number of inter-	per of inter-					Application dia-
communicating	ST 720W	ST 701	ST 704	RL37	PRS210	gram on page:
2	2	2	2	0	0	78
3	3	6	3	0	0	78
4	4	12	4	1	1	78
5	5	20	5	1	1	71



# ST 720





TELECOMMUNICATION

### Si 261L/1S

#### ONE-WAY INTERCOMMUNICATING SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)

Q.ty	Article	Description
	ST 720W	Studio series modular intercom
	ST 701	Single button unit
	ST 704	Additional loudspeaker
1	PRS220	Power supply
Χ	PRS226E	Power supply-switcher
Χ	1473	Exchanger
1+X	PA **	Door release push-button (optional)
1+X	SE **	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 16÷19)

#### Secondary entrances

Χ	MD71	Module frames with back box
Χ	MD11	Module for electric door speaker
Χ	MD81	Hood cover
Χ	MD91*	Rain shelter with module frames
Χ	MD30	Electric door speaker (amplifier)

#### Main entrance

	1 row	2 row	
	MD71÷74	MD71÷74	Module frames with back box
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood cover
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
1	MD30	MD30	Electric door speaker (amplifier)

**Door station series Matrix** (for right item set see on pages 24 and 25)

#### Secondary entrances

0000	aar y orra arrooo	
Χ	MA71	Module frames with back box
Χ	MA11P	Module with integrated audio amplifier
Χ	MA61	Frontframe
Χ	MA91*	Rain shelter with module frames

#### Main entrance

	MA71÷73	Module frames with back box
1	MA10P-11P-12P	Modules with integrated audio amplifier
	MA20-22-24	Blank and button modules
	MA61÷63	Frontframes
	MA91÷93*	Rain shelters with module frames

**Door station series Profilo** (for right item set see on pages 28 and 29)

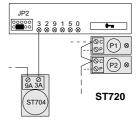
### Secondary entrances

X	PL71	Module frames with back box
X	PL11P	Module with audio amplifier

Main entrance				
	PL71÷73	Module frames with back box		

PL20+24 Blank and button modules

PL10P-11P-12P



- Do not forget to connect terminals C of the additional buttons and install the ST704 speaker module in every intercom.

- ... Refers to number of users (see table).
- X Refers to the number of stairways.
- Rain shelters are used instead of back boxes and hood covers.
- Articles not supplied by ACI Farfisa.

#### Working instructions

As the basic system described on page 36, with the following variations:

- The audio functions and door lock opening are automatically switched to the door station which has made the call and remain in this state until a call from another entrance is received.
- Services to secondary door stations are independent and can be operated at the same time.

#### **Notes**

- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to installation instructions and table on page 35.
- The diagram shows 2 and 3 intercommunicating intercoms. In case of a higher number of intercoms see pages 59 and 78.
- If only 2 intercommunicating intercoms are requested, even Compact series can be used (see page 76).

#### Table for choosing intercoms and accessories for the required type of installation

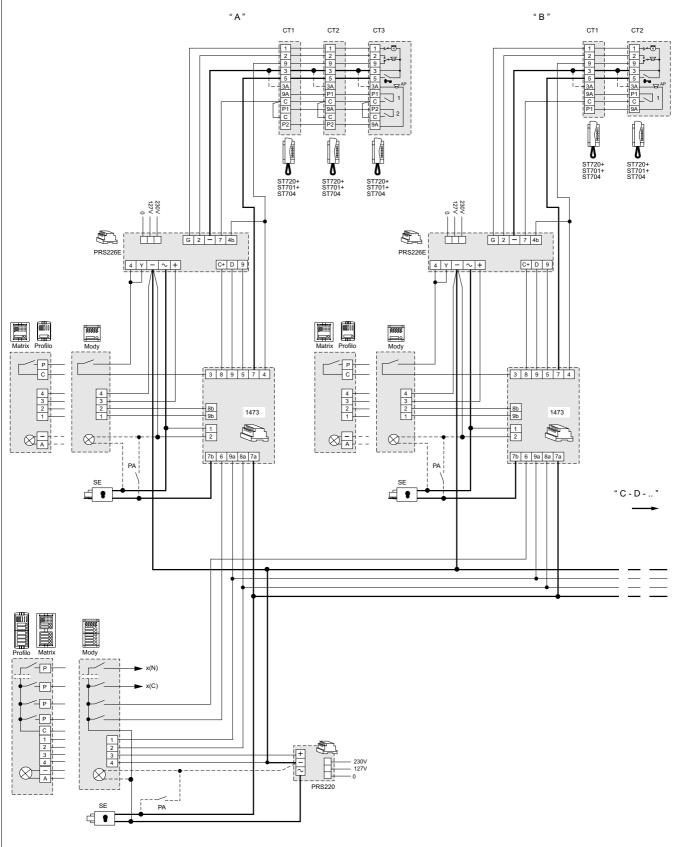
Number of inter-	Studio			Application dia-		
communicating	ST 720W	ST 701	ST 704	RL37	PRS210	gram on page:
2	2	2	2	0	0	73
3	3	6	3	0	0	73
4	4	12	4	1	1	78
5	5	20	5	1	1	59

Modules with integrated audio amplifier









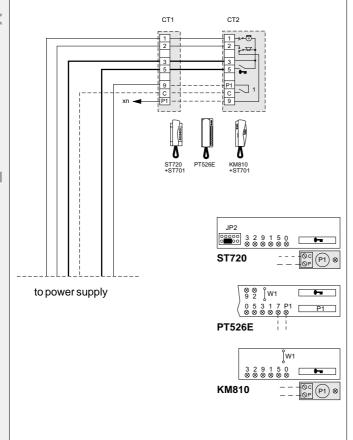




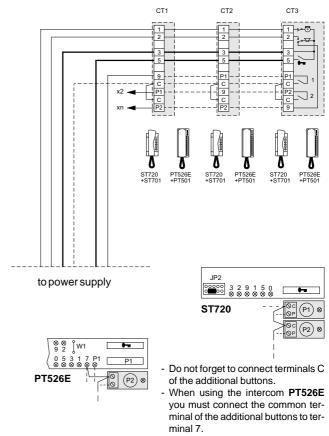
### APPLICATION DIAGRAMS FOR INTERCOMMUNICATING SYSTEM WITH SINGLE CALL FROM EXTERNAL STATION

- To match with diagrams: Si 215L/5; Si 225L/5; Si 235L/5

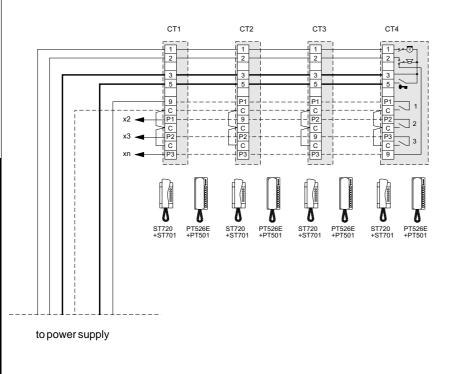
#### **2 INTERCOMMUNICATING INTERCOMS**

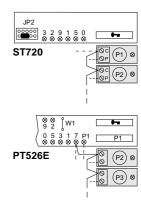


#### **3 INTERCOMMUNICATING INTERCOMS**



#### **4 INTERCOMMUNICATING INTERCOMS**



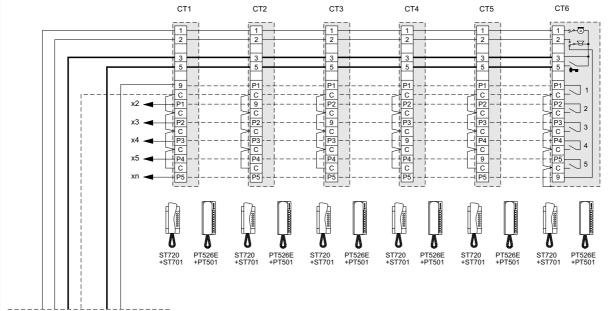


- Do not forget to connect terminals C of the additional buttons.
- When using the intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.

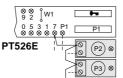




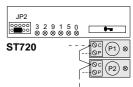
#### **6 INTERCOMMUNICATING INTERCOMS**



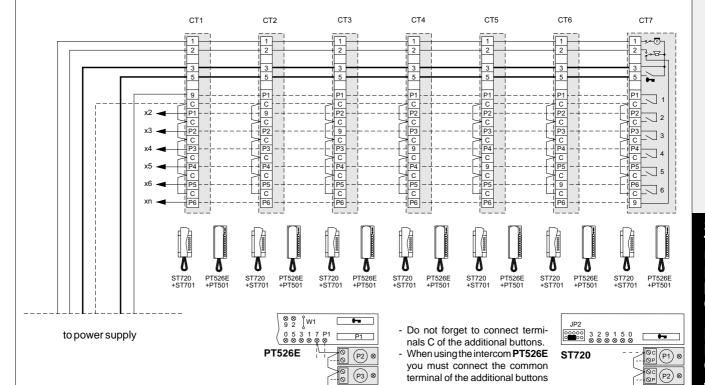
to power supply



- Do not forget to connect terminals C of the additional buttons.
- When using the intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.



#### 7 INTERCOMMUNICATING INTERCOMS





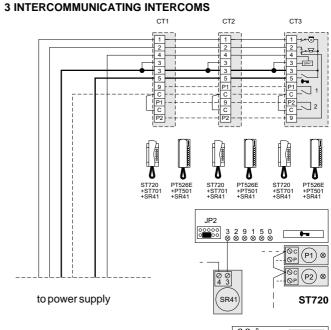


to terminal 7.

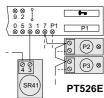
APPLICATION DIAGRAMS FOR INTERCOMMUNICATING SYSTEMS WITH COMMON ALTERNATE CURRENT CALL FROM EXTERNAL STATION AND ELECTRONIC CALL FOR EXTENSIONS

- To match with diagrams: Si 211L/5; Si 221L/5; Si 231L/5; Si 261L/1S

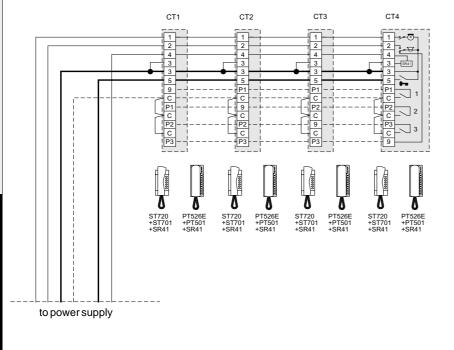
## **2 INTERCOMMUNICATING INTERCOMS** CT2 ٥ JP2 ©¢ ⊗p (P1) ⊗ ST720 to power supply SR41 ÎW1 -3 2 9 1 5 0 8 8 8 8 8 8 - Do not forget to in-P1 stall the SR41 0c 0P (P1) ⊗ PT526E electronic buzzer KM810 in every intercom.

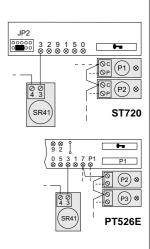


- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in every intercom.
   When using the intercom PT526E you must
- When using the intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.



### 4 INTERCOMMUNICATING INTERCOMS



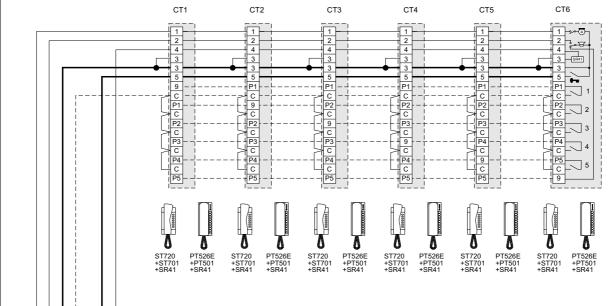


- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in every intercom.
- When using the intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.

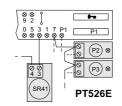




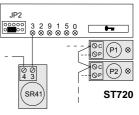
#### **6 INTERCOMMUNICATING INTERCOMS**



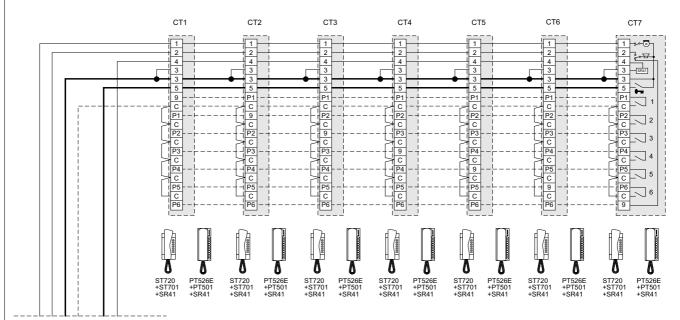
to power supply



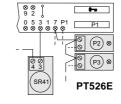
- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in every intercom.
- When using the intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.



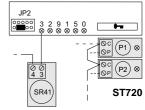
#### 7 INTERCOMMUNICATING INTERCOMS



to power supply



- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in every intercom.
- When using the intercom PT526E you must connect the common terminal of the additional buttons to terminal 7.







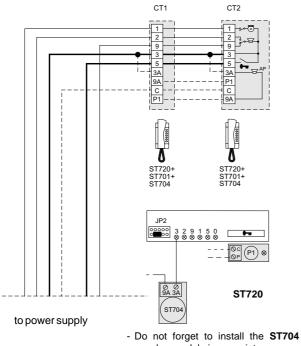
VIDEOINTERCOMS

## **Application diagrams**

APPLICATION DIAGRAMS FOR INTERCOMMUNICATING SYSTEMS WITH COMMON ELECTRONIC CALL FROM EXTERNAL STATION AND ELECTRONIC CALL FOR EXTENSIONS

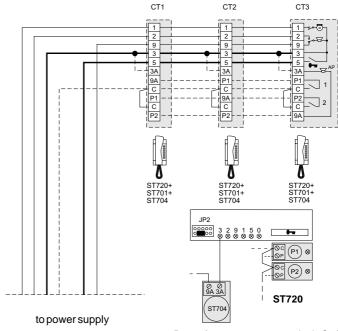
- To match with diagrams: Si 211L/5S; Si 221L/5S; Si 231L/5S; Si261L/1S

#### **2 INTERCOMMUNICATING INTERCOMS**

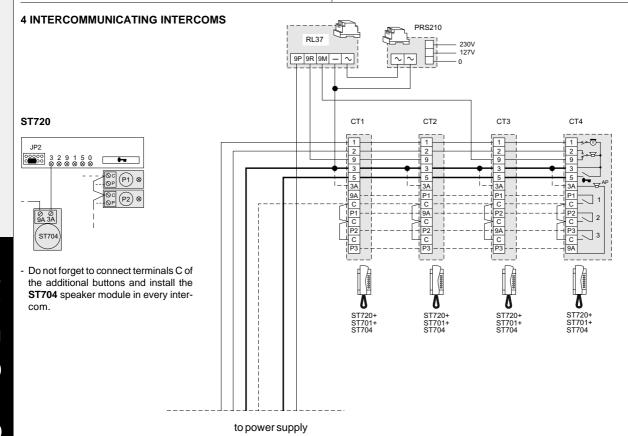


speaker module in every intercom.

#### **3 INTERCOMMUNICATING INTERCOMS**



- Do not forget to connect terminals C of the additional buttons and install the ST704 speaker module in every intercom.



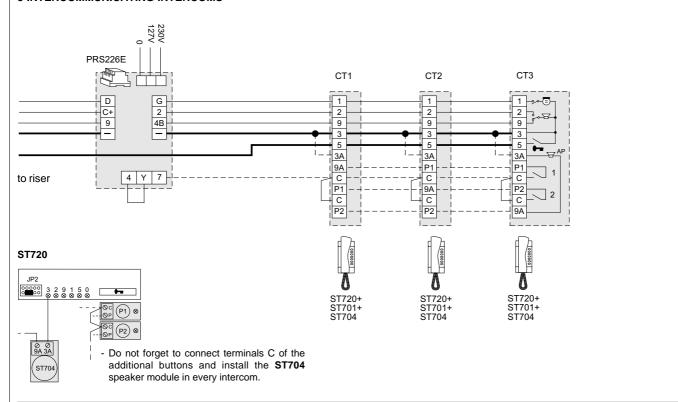




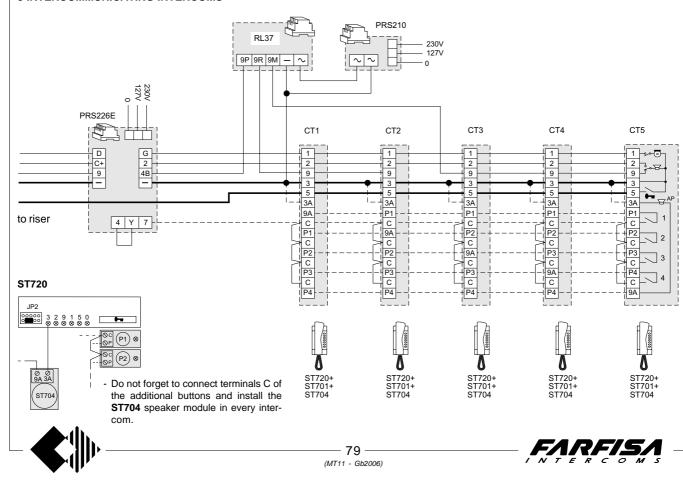
APPLICATION DIAGRAMS FOR ONE-WAY INTERCOMMUNICATING SERVICES IN APARTMENT BUILDING SYSTEMS. ELECTRONIC CALL FROM THE DOOR STATION.

- To match with diagrams: Si 21MO/1; Si 21MO/3; Si 22MO/1; Si 23MO/1; Si 26MO/1; Si 27MO/1.

#### **3 INTERCOMMUNICATING INTERCOMS**

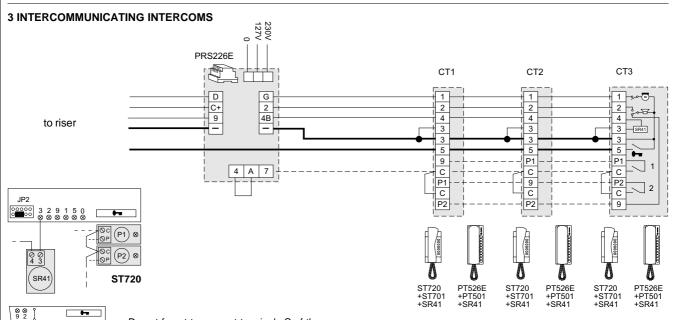


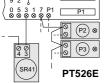
#### **5 INTERCOMMUNICATING INTERCOMS**



APPLICATION DIAGRAMS FOR ONE-WAY INTERCOMMUNICATING SERVICES IN APARTMENT BUILDING SYSTEMS. EXTERNAL CALL ON ELECTRONIC BUZZER.

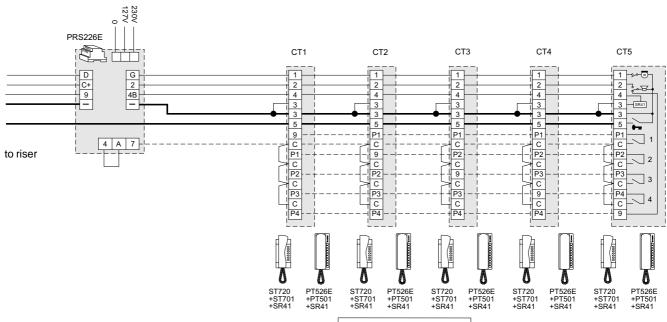
- To match with diagrams: Si 21MO/1; Si 21MO/3; Si 22MO/1; Si 23MO/1; Si 26MO/1; Si 27MO/1.

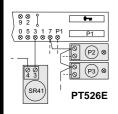




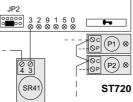
- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in every intercom.
- When using the intercom **PT526E** you must connect the common terminal of the additional buttons to terminal 7.

#### **5 INTERCOMMUNICATING INTERCOMS**





- Do not forget to connect terminals C of the additional buttons and install the SR41 electronic buzzer in every intercom.
- When using the intercom **PT526E** you must connect the common terminal of the additional buttons to terminal 7.







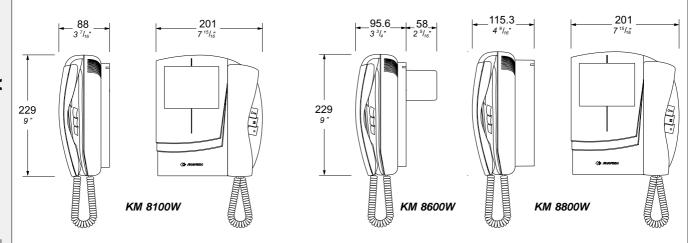
echnical manual 11	VIDEO INTERCOM	Edition 2006

INDEX		Page
Internal stati	ions	82
- Compact se	ries video intercoms	82
- Studio serie	s monitors	84
- Studio serie	s video intercoms	87
- Video memo	•	90
External dod		95
	push-button panels	95
	s push-button panels	100
	s push-button panels	104
	of video signal from coaxial cable to balanced line  Iy and control units	108 <b>109</b>
Service mod	·	110
Installation		111
- General cha		111
- Wires		111
- Video signa	l distribution with coaxial cable	112
_	l distribution with twisted pair (balanced line)	114
Working ins	tructions	115
Troubleshoo	pting	115
Rasic install	ation diagrams	116
- Si 4110/1	One-way video intercom system connected to one external door station (coaxial cable)	116
- Si 4110/2	One-way video intercom system connected to one external door station (twisted pair)	117
- Si 4110/3	One-way video intercom system with long distance between video intercom and main power supply (coaxial cable)	117
- Si 41MO/1	Video intercom system connected to one external door station (coaxial cable)	119
- Si 41MO/2	Video intercom system connected to one external door station (twisted pair)	121
- Si 41MO/3	Mixed intercom and video intercom system connected to one external door station (coaxial cable)	123
- Si 41MO/4	Mixed intercom and video intercom system connected to one external door station (twisted pair)	125
- Si 41MO/5	Video intercom system connected to one external door station with surveillance camera (coaxial cable)	127
- Si 41MO/6	Video intercom system connected to one external door station with surveillance camera (twisted pair)	129
- Si 42MO/1	Video intercom system connected to two external door stations (coaxial cable)	131
- Si 42MO/2	Video intercom system connected to two external door stations (twisted pair)	133
- Si 42MO/3	Video intercom system connected to two external door stations, one of which only audio (coaxial cable)	135
- Si 42MO/4	Video intercom system connected to two external door stations, one of which only audio (twisted pair)	137
- Si 43MO/1	Video intercom system connected to three external door stations (coaxial cable)	139
- Si 43MO/2	Video intercom system connected to three external door stations (twisted pair)	141
- Si 43MO/3	Video intercom system connected to three external door stations, one of which only audio (coaxial cable)	143
- Si 43MO/4	Video intercom system connected to three external door stations, of one which only audio (twisted pair)	145
- Si 43MO/5	Video intercom system connected to three external door stations, two of which only audio (coaxial cable)	147
- Si 43MO/6	Video intercom system connected to three external door stations, two of which only audio (twisted pair)	149
- Si 46MO/1	Video intercom system with secondary video stations and 1 main common video station (coaxial cable)	151
- Si 46MO/2	Video intercom system with secondary video stations and 1 main common video station (twisted pair)	153
- Si 46MO/3	Video intercom system with secondary door stations only audio and 1 main common video station (coaxial cable)	155
- Si 46MO/4 - Si 46MO/5	Video intercom system with secondary door stations audio only and 1 main common video station (twisted pair)  Video intercom system with secondary video stations and 1 main common station only audio (coaxial cable)	157 159
- Si 46MO/6	Video intercom system with secondary video stations and 1 main common station only audio ( <i>coaxia cable</i> )  Video intercom system with secondary video stations and 1 main common station only audio ( <i>twisted pair</i> )	161
- Si 46MO/7	Video intercom system with one-way secondary door stations only audio and 1 main common video station (coaxial cable)	163
- Si 46MO/8	Video intercom system with one-way secondary door stations only audio and 1 main common video station (twisted pair)	165
- Si 47MO/1	Video intercom system with secondary video stations and 2 main common video stations (coaxial cable)	167
- Si 47MO/2	Video intercom system with secondary video stations and 2 main common video stations (twisted pair)	169
- Si 47MO/3	Video intercom system with secondary video stations and 2 main common stations, one of which only audio (coaxial cable)	171
- Si 47MO/5	Video intercom system with secondary door stations only audio and 2 main common video stations (coaxial cable)	173
- Si 47MO/6	Video intercom system with secondary door stations only audio and 2 main common video stations (twisted pair)	175
Additional d	iagrams	176
- floor call	iayi anis	176
	iagrams for Compact series	170
	agrams for one-way Studio series	180
	agrams for multi-way Studio series	187
SSS. STIGITUI	and the same of th	





#### VIDEO INTERCOMS



KM 8100W. White colour videointercom with flat CRT, audio-video privacy, electronic microphone and terminal board for the connection to the wall-bracket. With three buttons for door lock release, control switch ON and auxiliary service. The maximum acceptable current to the button terminals is 0.3A. For higher currents use relay unit art. 1471 or 1472. It can be installed on the wall (with no built-in) by using the wall-bracket WB8600.

KM 8600W. White colour videointercom with traditional cathode tube, audio-video privacy, electronic microphone and terminal board for the connection to the wall-bracket. With three buttons for door lock release, control switch ON and auxiliary service. The maximum acceptable current to the button terminals is 0.3A. For higher currents use relay unit art.1471 or 1472. It can be installed on the wall (with no built-in) by using the wall-bracket WB8600 and the backbox art.8083.

KM 8800W. White colour reflex videointercom, with audio-video privacy, electronic microphone and terminal board for the connection to the wall-bracket. With three buttons for door lock release, control switch ON and auxiliary service. The maximum acceptable current to the button terminals is 0.3A. For higher currents use relay unit art.1471 or 1472. It can be installed on the wall (with no built-in) by using the wall-bracket WB8600.

#### Technical data

18÷24Vdc Power supply Operating current 0.5A Video tube 4" FLAT CRT TV standard CCIR-625 lines Horizontal frequency 15625Hz Vertical frequency 50Hz Bandwidth >5MHz Video signal on 75Ω 0.8÷1.5Vpp Starting up time 2÷4 sec. 0°÷+50°C Operating temperature Max. permissible humidity 90%RH

#### Technical data

18÷24Vdc Power supply Operating current 0.7A Video tube 4,5-90° TV standard CCIR-625 lines Horizontal frequency 15625Hz Vertical frequency 50÷60Hz Bandwidth >5MHz Video signal on  $75\Omega$ 0.8÷1.5Vpp Starting up time 5÷7 sec. Operating temperature 0°÷+50°C Max. permissible humidity 90%RH

#### Technical data

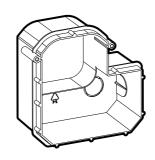
18÷24Vdc Power supply Operating current 0.7A Video tube 4,5-90° CCIR-625 lines TV standard Horizontal frequency 15625Hz 50÷60Hz Vertical frequency Bandwidth >5MHz Video signal on 75Ω 0.8÷1.5Vpp Starting up time 5÷7 sec. Operating temperature 0°÷+50°C Max. permissible humidity 90%RH

**WB 8600.** Plastic bracket to fix the video intercoms **KM8100W**, **KM8600W** and **KM8800W** to the wall. Complete with terminal board for connection to the system and connectors for connection to the video intercom.

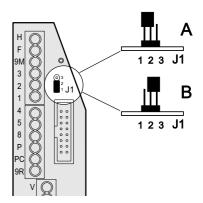
#### Terminals

- V Video signal input 0.8÷1.5Vpp
- M Video ground
- F General ground
- **H** Positive power supply input 18÷24Vdc
- Microphone output
- 2 Speaker and automatic switching OFF input
- 3 Audio ground
- 4 Control switching ON button
- 5 Door lock release button on intercom
- 8 Positive power supply output for video distributors 12Vdc
- 9M Call input from external door station (250mA)
- **9R** Intercommunicating or floor-call input
- P Service button (symbol ●)
- PC Common of service button

# **8083.** Back-box for video intercom art.KM8600W.



# Choosing the private conversation or intercommunicating service



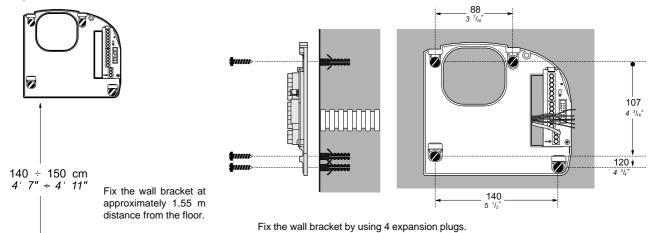
- A = Video intercom without audio privacy
- **B** = Video intercom with audio privacy





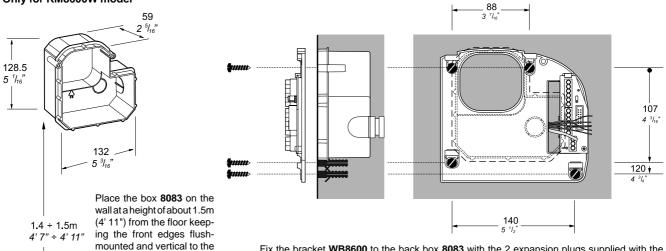
#### Installation

### Only for KM8100W and KM8800W models

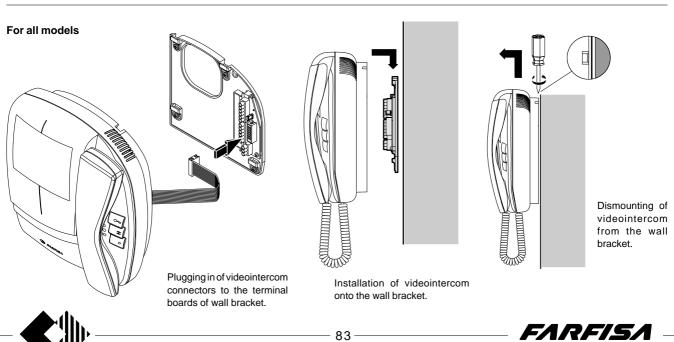


Only for KM8600W model

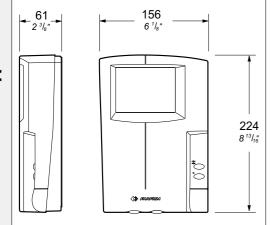
finished plaster.



Fix the bracket WB8600 to the back box 8083 with the 2 expansion plugs supplied with the bracket and adding 2 expansion plugs for the lower fixing.



#### **MONITORS**



**ST 7100W**. White monitor with flat CRT and 2 buttons. One button for control switch ON and one button for supplementary services. Maximum acceptable current of buttons is 0.3A. For higher currents use relay art. **1471** or **1472**.

The monitor can be surface mounted on the wall with bracket art. **WB7100**.

#### Technical data

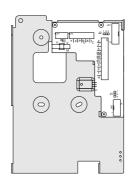
rcommour data	
Power supply	18÷24Vdc
Operating current	0.35A
Monitor	4" FLAT CRT
TV standard	CCIR-625 lines
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	2÷4 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

**ST 7100CW.** Version with colour LCD of monitor **ST7100W**.

### Technical data

roommour auta	
Power supply	18÷24Vdc
Operating current	0.4A
Monitor	4" LCD
TV standard	PAL
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Bandwidth	>5MHz
Video signal on 75Ω	0.8÷1.5Vpp
Starting up time	1 sec.
Operating temperature	0°÷+50°C
Max. permissible humidity	90%RH

#### FIXING ELEMENTS for Studio series.



WB 7100. Bracket to fix the monitor ST7100 to the wall or to the table adapter (art.TA7100). Complete with terminal board for connection to the system and connectors for connection to the monitor. One or more brackets WB 700 can be combined with WB 7100 to expand the system. The bracket is arranged to be electrically connected to the intercom ST720 (the connection cable is supplied with bracket WB 700).

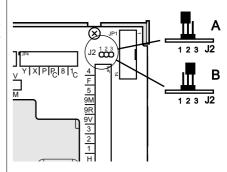
#### **Terminals**

- V Video signal input 0.8÷1.5Vpp
- M Video ground
- F General ground
- H Positive power supply input 18÷24Vdc
- X Negative balanced video signal input
- Y Positive balanced video signal input
- 1 Microphone output
- 2 Speaker and automatic switching OFF input
- 3 Audio ground
- 4 Control switching ON button •
- 5 Door lock release button on intercom
- 8 Positive power supply output for video distributors 12Vdc
- **9M** Call input from external door station (250mA)
- **9R** Intercommunicating or floor-call input
- 9V Input for direct activation from FN4000 digital system (ground command)
- 1C Common of buttons for control switching ON
- P Service button (symbol ●)
- PC Common of service button

With monitor **ST7100** the video connection can be made with 75 Ohm coaxial cable or twisted pair. The choice between the two systems depends on the correct selection of video distributor and camera. The number of wires

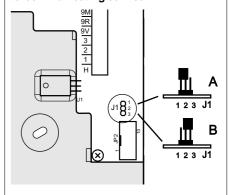
and possible installations does not change. Do not forget to position jumper J2 correctly and use the proper input terminals on bracket WB7100.

Choosing the video connection with coaxial cable or twisted pair



- A = Video connection with coaxial cable at terminals **V** and **M**
- **B** = Video connection with twisted pair at terminals **X** and **Y**

# Choosing the private conversation or intercommunicating service



- A = Monitor without audio privacy
- **B** = Monitor with audio privacy

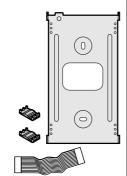




4'13'

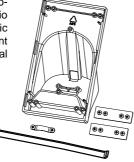
WB 700. Bracket for fixing mechanically intercom ST 720 and/or accessories of Studio line to monitor ST7100 or among them. Complete with:

- flat cable for electrical connection of one intercom ST 720 to monitor ST 7100
- templates for correct alignment with bracket **WB7100** and/or brackets **WB700**.



TA7100W. White Table adapter for ST7100W and ST7100CW monitors. Complete with cable clamp, junction box and 2.4m connection cable with 20 wires.

**TA700W.** White table adapter for accessories, intercoms and telephones of Studio series. Complete with cable clamp, plastic and metallic frames for correct alignment with **TA7100** adapters and/or additional **TA700** or **TA720**.



TA720W. White table adapter for ST720W intercoms. Complete with cable clamp, junction box and 2.4m connection cable with 20 wires, plastic and metallic frames for correct alignment with TA7100 adapters and/or additional TA700 or TA720.

**Note**. Choose model **TA720** when the 20 wires of the **TA7100** connection cable are not sufficient to cover the system requirements.

#### **INSTALLATION**

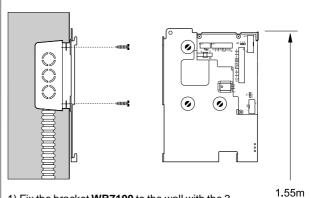
The modularity of the Studio articles permits the realisation of different types of system. Some of the possible compositions are illustrated below.

- monitor only
- video intercom
- video intercom with video memory
- digital video intercom (see manual 10 2005 edition)
- video intercom-telephone set (see page 196)

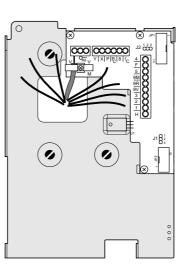
#### MONITOR ONLY

Installation steps for monitor **ST7100** or **ST 7100C** in wall or table version.

### Wall version



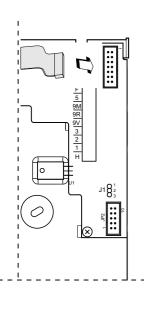
 Fix the bracket WB7100 to the wall with the 3 fixing points at approximately 1.55 m distance from the floor to the upper part of the bracket.



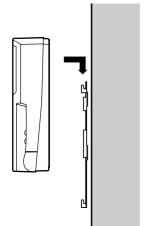
2) Make the connections on the bracket terminal board.





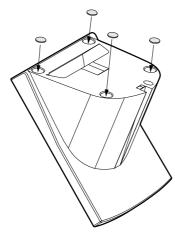


3) Connect the monitor cable to the bracket.

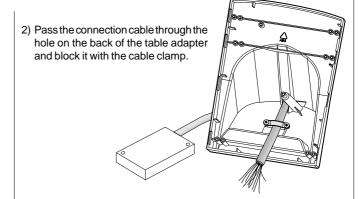


4) Hook the monitor to the bracket.

### Table version

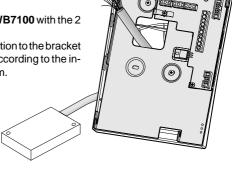


1) Apply the 4 anti-slip rubber pads in their housing under the table adapter base.

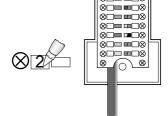


3) Fix the bracket WB7100 with the 2 screws supplied.

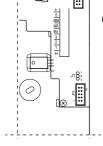
4) Make the connection to the bracket terminal board according to the installation diagram.



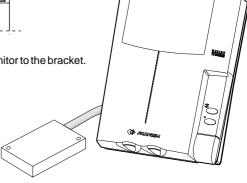
5) Mark the colour/terminal combination on the junction box.



6) Connect the monitor cable to the bracket.



7) Hook the monitor to the bracket.



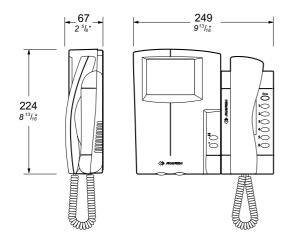


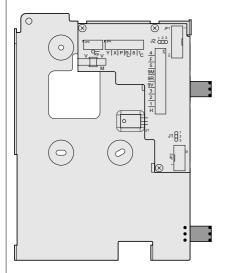


#### **VIDEO INTERCOM**

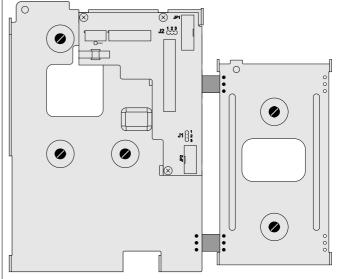
Installation steps for monitor **ST7100** (or **ST7100C**), intercom **ST720**, brackets **WB7100** and **WB700** and table adapters (if required) for the realisation of an internal station with video intercom functions.

### Wall version

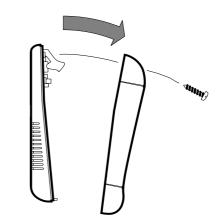




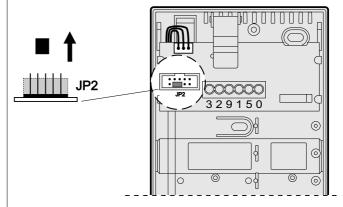
1) Splice the bracket **WB700** with the **WB7100** inserting the 2 plastic templates in the proper holes.



2) Fix the 2 brackets to the wall following the indications of drawing 1 on page 85.



3) Remove the intercom cover.



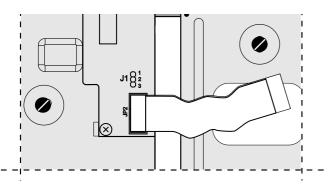
4) Remove the  $\boldsymbol{mobile\ jumper}$  of  $\boldsymbol{connector\ JP2}$  of the intercom.



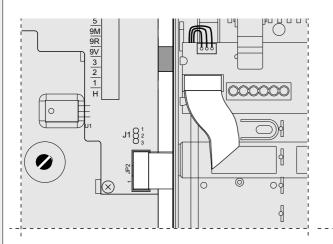


INTERCOMS

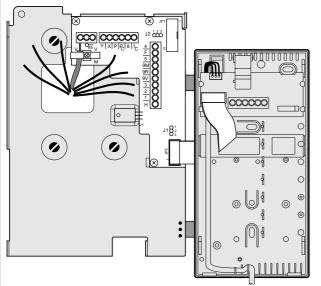
### **INTERNAL STATIONS**



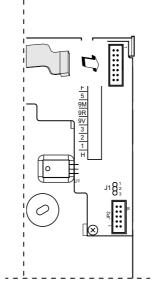
 Connect the flat cable supplied with bracket WB700 to connector JP2 of bracket WB7100.



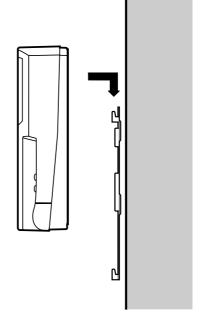
6) Hook the intercom base to bracket **WB700** and connect the other end of the flat cable to connector JP2 of the intercom by passing the cable between the intercom base and the bracket. Pull the cable in such a way that the extra part of the cable remains inside the intercom.



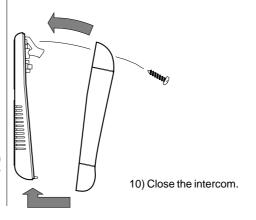
7) Make the connection on the terminal board of bracket WB7100 according to the installation diagram. In case of additional buttons or modules, additional connections must be made inside the intercom.



8) Connect the monitor cable to the bracket.



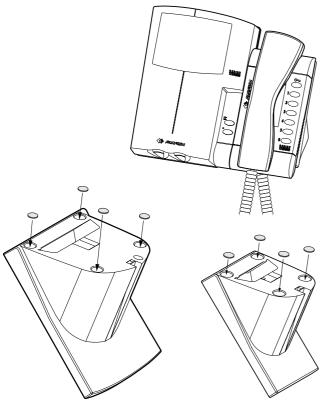
9) Hook the monitor to the bracket.



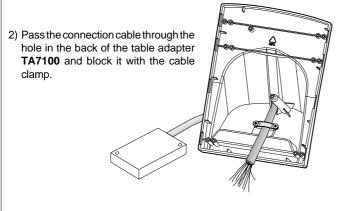


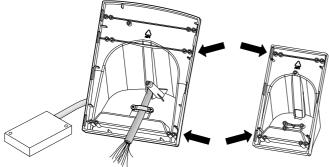


### Table version

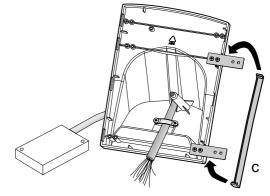


1) Apply the 8 anti-slip rubber pads in their housings under the base of table adapters **TA7100** and **TA700**.

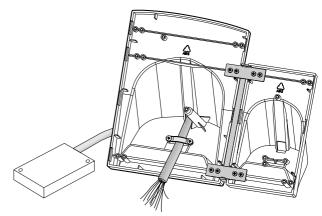




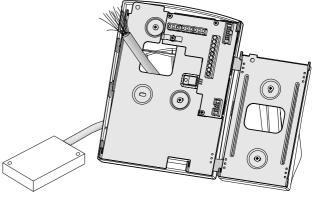
The arrows indicate the breaking points for the application of the metallic frames.



4) Screw the 2 metallic frames to the desk adapter **TA7100** and hook the plastic frame to them.



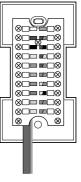
5) Fix the table adapter TA700 to the 2 metallic frames.



- 6) Screw the brackets WB7100 and WB700 to the table adapters.
- 7) Hook the monitor and intercom according to the instructions on pages 87 and 88 (from point 3 to 10).

When connecting the wires to the terminal boards of bracket **WB7100** (point 7) you must mark the colour/terminal combination on the junction box.

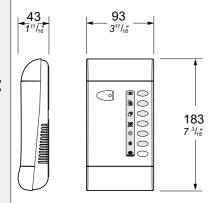








### VIDEO INTERCOM WITH VIDEO MEMORY



#### ST 7M32W. 32-image video memory.

With white housing, it records the image, hour and date of the last 32 persons who have made a call from the video intercom station.

It can be installed in any video intercom system through coaxial cable or twisted pair connec-

#### Technical data

Positive power supply: 12Vdc-0.3A Alternate power supply: 13Vac-0.5A Video signal standard: CCIR Recording delay after a call: 5 sec. Rec. inhibition after image storing: 30 sec.

Memory capacity: 32 images

Hour and date storage in case of power failure: 5

#### **Terminals**

- Video input into  $75\Omega$  1Vpp VI
- VO Video output into 75 $\Omega$  1Vpp
- Video ground М
- ΧI Balanced negative video input
- ΥI Balanced positive video input
- XO Balanced negative video output
- YO Balanced positive video output
- +12Vdc power supply +
- Ground
- 13Vac power supply
- 12Vdc voltage input (from video intercom) 8 12Vdc voltage output (to video distributor)
- DV F
- Input supplementary command D



- R Input supplementary command
- Input supplementary command Α
- Input supplementary command

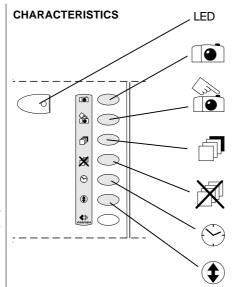


The video memory can be powered with: 13VAC by connecting a transformer (i.e.

PRS210) to terminals  $\sim /\sim$ 

12VDC by connecting a power supply (i.e. 4220) to terminals +/ -

15VDC by connecting a power supply (i.e. 6220) to terminals  $\sim$  / -



automatic recording indication

automatic image recording activation/deacti-

manual image recording

recorded image visualisation

recorded image cancellation

date and time setting

date and time setting enabling

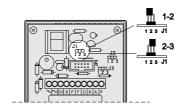
#### **INSTALLATION DIAGRAMS**

The video memory ST7M32 is designed for application in one-way video intercom systems with video connection through coaxial cable. It

can be also installed in multi-way video intercom systems and/or with video connection through twisted pair by changing the configuration of some of the jumpers.

#### ONE/MULTI-WAY INSTALLATIONS

#### Configuration of jumper J1

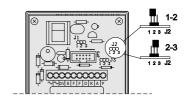


- for one-way installations
- for multi-way installations

#### 1-2 2-3

#### **INSTALLATIONS WITH COAXIAL CABLE** OR TWISTED PAIR

#### Configuration of jumper J2

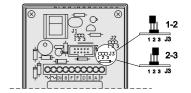


- for video input with coaxial cable

1-2

- for video input with twisted pair

### Configuration of jumper J3



- for video output with coaxial cable
  - 1-2 2-3
- for video output with twisted pair





Installation steps for the assembly of one video intercom station with video memory in wall or table version.

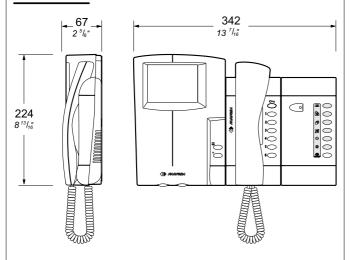
For this composition you need:

- 1 **ST7100** or **ST7100C** (monitor)
- 1 ST720 (intercom)
- 1 ST7M32 (video memory)
- 1 WB7100 (bracket for monitor)
- 2 WB700 (brackets for intercom and video memory)

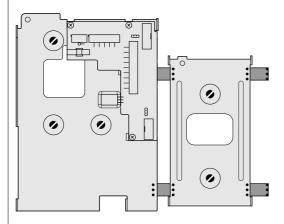
For the table version you must add:

- 1 **TA7100** (table adapter for monitor)
- 2 TA700 (table adapter for intercom and video memory)

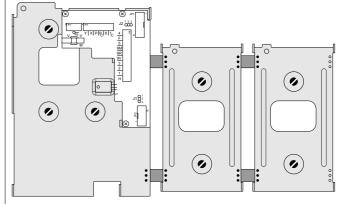
### Wall version



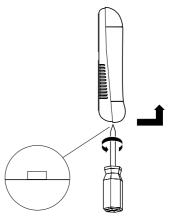
To apply a video memory module next to the monitor and intercom (or telephone) you must position in the proper holes the 2 plastic templates contained in the packing before fixing bracket **WB700**.



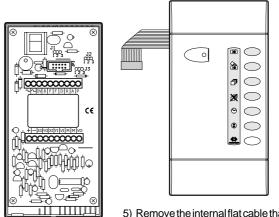
1) Before splicing the second bracket **WB700**, position the 2 plastic templates in the proper holes of the bracket.



- 2) Fix the third bracket to the wall.
- 3) Connect the monitor and intercom according to the instructions on pages 87 and 88 from point 3 to 10.



4) Remove the video memory cover by disengaging it from the bottom part.



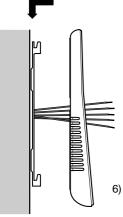
5) Remove the internal flat cable that connects the 2 boards.



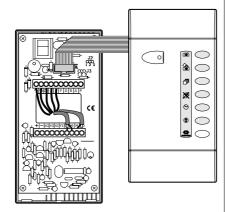


INTERCOMS

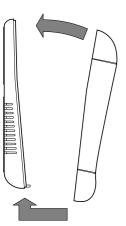
## **INTERNAL STATIONS**



6) Pass the connection wires through the hole on the base and hook the base to the bracket.

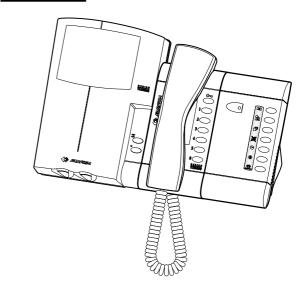


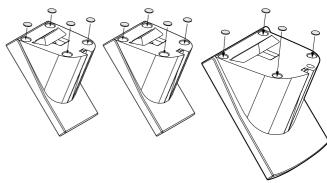
7) Make the connection as shown in the installation diagram and reconnect the internal flat cable.



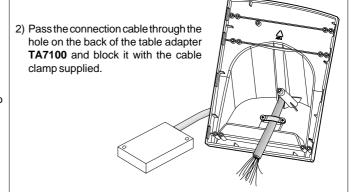
8) Close the cover on the base of the video memory.

### Table version



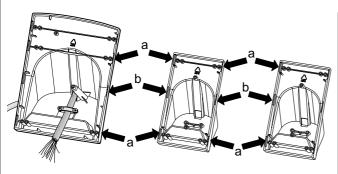


1) Apply the 12 anti-slip rubber pads supplied in their housing under the base of the table adapters **TA7100** and **TA700**.

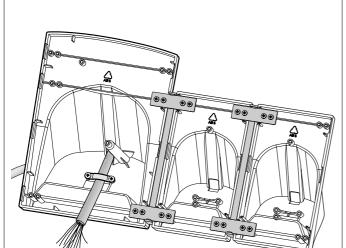




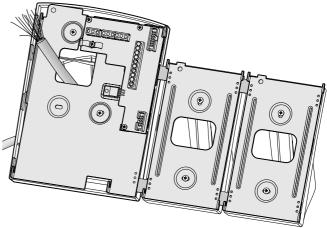




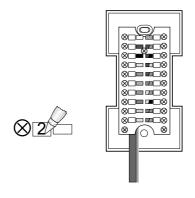
3) The arrows indicate the breaking points for the application of the metallic frames (a) and for the video memory wires (b).



4) Screw the 4 metallic frames on the table adapters and hook the 2 plastic frames to them (see drawing 4 on page 89).



5) Screw the brackets WB7100 and WB700 on the table adapters.



6) Hook the monitor and intercom according to the instructions on pages 87, 88 (point 3 to 10) and the video memory according to the instructions on pages 91 and 92 (point 3 to 8).

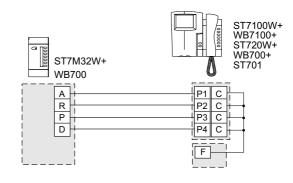
When connecting the wires on the terminal boards of bracket  ${\bf WB7100}$  (point 7), mark the colour/terminal combination on the junction box.

#### **VIDEO MEMORY INSTALLATION DIAGRAMS**

It is advisable to install the video memory close to the video intercom and use the control buttons on the video memory. If this is not possible or if the system uses one video memory for several video intercoms, you can

connect in parallel the 4 main commands ( , , and ) and ; terminals A, R, P and D, respectively) and use the video intercombuttons.

For the operation of video memory, see the instruction manual provided with the product.







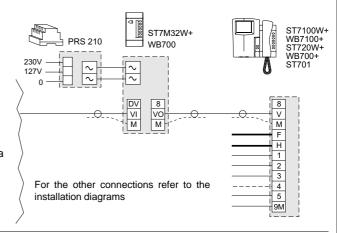
#### SYSTEMS with COAXIAL CABLE

- One-way system.

**Jumper configuration** 

**J1 J2 J3** 1-2 1-2

to the video camera



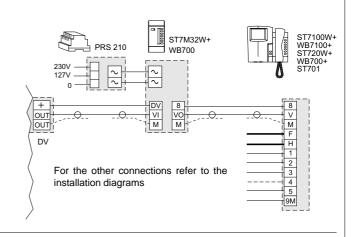
#### - Multi-way system.

Terminal 8 must be always connected (even if the video distributor is not included in the system).

**Jumper configuration** 

**J1 J2 J3** 2-3 1-2 1-2

to the riser



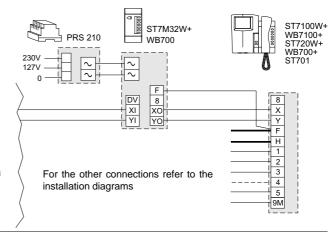
#### **CONNECTION IN SYSTEMS with TWISTED PAIR**

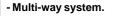
- One-way system.

**Jumper configuration** 

**J1 J2 J3** 1-2 2-3 2-3

to the video camera

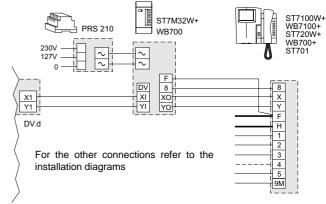




**Jumper configuration** 

**J1 J2 J3** 2-3 2-3









#### **EXTERNAL DOOR STATIONS**

#### **PUSH-BUTTON PANELS**

For information on characteristics and assembly of push-button panels, electric door speakers, back boxes, rain shelters, hood covers and modules see section "intercoms" on page 11 to

#### **CAMERAS**

For the realisation of video intercom systems you must select the camera according to the type of installation:

- Video intercom system with coaxial ca-
- Video intercom system with twisted pair

### For system with coaxial cable

#### MD41.

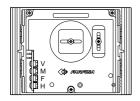
B/W adjustable camera complete with:

- solid-state sensor (CCD), electronic autoiris, 3.6mm fixed optics and 6 infrared LEDs;
- front plate of anodized aluminium with breakproof transparent screen;
- horizontal and vertical adjustment.

#### MD41C Color.

Colour adjustable camera complete with:

- solid-state sensor (CCD), autoiris and 4mm fixed optics;
- -front plate of anodized aluminium with breakproof transparent screen;
- horizontal and vertical adjustment.



### **Terminals**

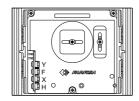
- Video signal output
- Ground
- Not connected
- Power supply input

### For system with twisted pair

#### MD41D.

B/W adjustable camera complete with:

- solid-state sensor (CCD), electronic autoiris, 3.6mm fixed optics and 6 infrared LEDs;
- front plate of anodized aluminium with breakproof transparent screen;
- horizontal and vertical adjustment.



#### Terminals

- Positive video signal output
- Ground
- Negative video signal output
- Н Power supply input

For colour installations use the video signal converter CV01 (see page 108).

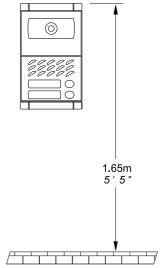
MD41	MD41C	MD41D
21±3Vdc	21±3Vdc	15÷21Vdc
0.3A	0.4A	0.3A
1Vpp on 75 $\Omega$	1Vpp on 75 $\Omega$	1Vpp balanced
CCIR	PAL	CCIR
2 Lux	2.5 Lux	2 Lux
-	auto	-
CCD 1/4" B/W	CCD 1/3" colour	CCD 1/4" B/W
291000	291000	291000
15625Hz	15625Hz	15625Hz
50Hz	50Hz	50Hz
3.6mm; F5	4mm; F4	3.6mm; F5
0.1m ÷ ∞	0.6m ÷ ∞	0.1m ÷ ∞
electronic	electronic	electronic
± 15°	± 15°	± 15°
± 15°	± 15°	± 15°
-10°÷+40°C	-10°÷+40°C	-10°÷+40°C
80%RH	80%RH	80%RH
	21±3Vdc 0.3A 1Vpp on 75Ω CCIR 2Lux - CCD 1/4" B/W 291000 15625Hz 50Hz 3.6mm; F5 0.1m ÷ ∞ electronic ± 15° ± 15° -10°÷+40°C	$\begin{array}{cccccccccccccccccccccccccccccccccccc$

MD40, MD40C and MD40D cameras have the same specifications as models MD41, MD41C and MD41D, except that they have not horizontal and vertical adjustment.





### Installation



Place the push-button panel back box at a height of about 1.65m from the floor keeping the front edges flush-mounted and vertical to the finished plaster.

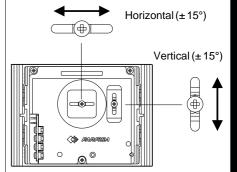
Position the camera in such a way that sunlight or other direct or reflected light sources with high intensity do not hit the camera lens.

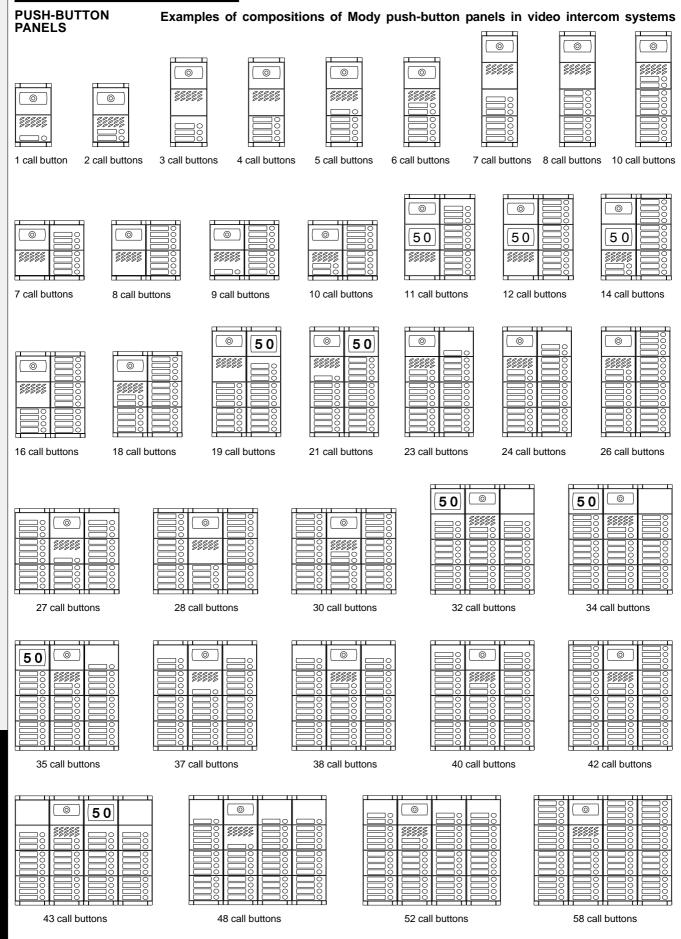
#### Adjustments

If necessary, you can manually modify the camera position by means of the horizontal and vertical adjustments located on the back of the camera.

To do this, you must:

- remove the upper screw of the push-button panel to access the back of the camera:
- loosen the screw of the horizontal or vertical adjustment (or both screws, if you want to adjust the image in all the directions);
- move the camera in the desired direction:
- tighten the screw to block the camera in the desired position;
- fix the push-button panel.

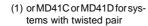








PUS	PUSH-BUTTON PANELS Composition board of Mody push-button panels.									
N° calls	Compositions and dimensions	Camera module (1)	Door speaker (amplifier)	Module for speaker		on modules ar		Back box and module frame	Hood cover	Rain shelter
1	124x213x19	1 MD41	1 MD30	1 MD11	-	-	-	1 MD72	1 MD82	1 MD92
2	124x213x19 (4 <sup>7</sup> / <sub>8</sub> " x 8 <sup>3</sup> / <sub>8</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41	1 MD30	1 MD12	+			1 MD72	1 MD82	1 MD92
3		1 MD41	1 MD30	1 MD10	1 MD23			1 MD73	1 MD83	1 MD93
4	0	1 MD41	1 MD30	1 MD10	1 MD24		-	1 MD73	1 MD83	1 MD93
5	124x304,5x19	1 MD41	1 MD30	1 MD10	1 MD24			1 MD73	1 MD83	1 MD93
6	124x304,5x19 (4 <sup>7</sup> / <sub>8</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD41	1 MD30	1 MD12	1 MD24			1 MD73	1 MD83	1 MD93
7		1 MD41	1 MD30	1 MD12	1 MD24	1 MD23		2 MD72 ■	1 MD84 ■	1 MD93 ■
8		1 MD41	1 MD30	1 MD10	2 MD24	-		2 MD72 ■	1 MD84 ■	1 MD94 ■
9		1 MD41	1 MD30	1 MD10	2 MD24			2 MD72 ■ 2 MD72 ■	1 MD84 ■	1 MD94 ■
10	248x213x19 (9 ³/ "x 8 ³/ " x ³/ ")	4.140.44	1 MD30	1 MD12	2 MD24			2 MD72 ■	1 MD84 ■	1 MD94 ■
11	(9 <sup>3</sup> / <sub>4</sub> " x 8 <sup>3</sup> / <sub>8</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41	1 MD30	1 MD12	2 MD24	1 MD23	1 *	2 MD72 ■ 2 MD73	1 MD84 <b>■</b>	1 MD94 <b>1</b>
12	†	1 MD41	1 MD30	1 MD10	3 MD24	-	1 *	2 MD73	1 MD86	1 MD96
13		1 MD41	1 MD30	1 MD10	3 MD24	<u> </u>	1 *	2 MD73	1 MD86	1 MD96
14	0 000	1 MD41	1 MD30	1 MD11	3 MD24	<u> </u>	1 *	2 MD73 2 MD73	1 MD86	1 MD96 1 MD96
15		1 MD41 1 MD41	1 MD30 1 MD30	1 MD12 1 MD10	3 MD24	1 MD23	1 -	2 MD73 2 MD73	1 MD86	1 MD96 1 MD96
16		1 MD41 1 MD41	1 MD30 1 MD30	1 MD10 1 MD10	3 MD24 4 MD24	T IVIDES		2 MD73 2 MD73	1 MD86 1 MD86	1 MD96 1 MD96
17	049-204 5v10				4 MD24 4 MD24				1 MD86 1 MD86	1 MD96 1 MD96
	248x304.5x19 (9 ³/₄" x 12" x ³/₄")	1 MD41	1 MD30	1 MD11				2 MD73		
18	· · ·	1 MD41	1 MD30	1 MD12	4 MD24		1 *	2 MD73	1 MD86	1 MD96
19	·	1 MD41	1 MD30	1 MD10	4 MD24	1 MD23	'	2 MD74	1 MD808	1 MD908
20		1 MD41	1 MD30	1 MD10	5 MD24		'	2 MD74	1 MD808	1 MD908
21		1 MD41	1 MD30	1 MD11	5 MD24	-	'	2 MD74	1 MD808	1 MD908
22		1 MD41	1 MD30	1 MD12	5 MD24	- 4 MD04	1 *	2 MD74	1 MD808	1 MD908
23		1 MD41	1 MD30	1 MD12	5 MD24	1 MD21	-	2 MD74	1 MD808	1 MD908
24		1 MD41	1 MD30	1 MD12	5 MD24	1 MD22		2 MD74	1 MD808	1 MD908
25	248x395x19 (9 <sup>3</sup> / <sub>4</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41	1 MD30	1 MD12	5 MD24	1 MD23		2 MD74	1 MD808	1 MD908
26	(0 ,4 10	1 MD41	1 MD30	1 MD12	6 MD24	-		2 MD74	1 MD808	1 MD908
27		1 MD41	1 MD30	1 MD11	5 MD24	2 MD23	-	3 MD73	1 MD89	1 MD99
28	372x304.5x19	1 MD41	1 MD30	1 MD10	7 MD24			3 MD73	1 MD89	1 MD99
29	(14 <sup>5</sup> / <sub>8</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD41	1 MD30	1 MD11	7 MD24		-	3 MD73	1 MD89	1 MD99
30		1 MD41	1 MD30	1 MD12	7 MD24			3 MD73	1 MD89	1 MD99
31	ı	1 MD41	1 MD30	1 MD11	6 MD24	2 MD23	2 *	3 MD74	1 MD812	1 MD912
32		1 MD41	1 MD30	1 MD12	6 MD24	2 MD23	2 *	3 MD74	1 MD812	1 MD912
33		1 MD41	1 MD30	1 MD11	8 MD24	-	2 *	3 MD74	1 MD812	1 MD912
34		1 MD41	1 MD30	1 MD12	8 MD24	-	2 *	3 MD74	1 MD812	1 MD912
35		1 MD41	1 MD30	1 MD12	8 MD24	1 MD21	1 *	3 MD74	1 MD812	1 MD912
36		1 MD41	1 MD30	1 MD12	8 MD24	2 MD21	-	3 MD74	1 MD812	1 MD912
37		1 MD41	1 MD30	1 MD11	8 MD24	2 MD22	-	3 MD74	1 MD812	1 MD912
38	372x395x19	1 MD41	1 MD30	1 MD12	8 MD24	2 MD22	-	3 MD74	1 MD812	1 MD912
39	(14 <sup>5</sup> / <sub>8</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41	1 MD30	1 MD11	8 MD24	2 MD23	-	3 MD74	1 MD812	1 MD912
40	1	1 MD41	1 MD30	1 MD12	8 MD24	2 MD23	-	3 MD74	1 MD812	1 MD912
41	ı	1 MD41	1 MD30	1 MD12	9 MD24	1 MD23	-	3 MD74	1 MD812	1 MD912
42		1 MD41	1 MD30	1 MD12	10 MD24	-	-	3 MD74	1 MD812	1 MD912
43		1 MD41	1 MD30	1 MD12	8 MD24	3 MD23	3 *	4 MD74	-	-
45		1 MD41	1 MD30	1 MD11	11 MD24	-	3 *	4 MD74	-	-
47		1 MD41	1 MD30	1 MD10	11 MD24	3 MD21	-	4 MD74		-
48		1 MD41	1 MD30	1 MD11	11 MD24	3 MD21		4 MD74		
50		1 MD41	1 MD30	1 MD10	11 MD24	3 MD22	-	4 MD74		-
52		1 MD41	1 MD30	1 MD12	11 MD24	3 MD22	-	4 MD74	-	-
53	496x395x19 (19 <sup>1</sup> / " x 15 <sup>9</sup> / " x <sup>3</sup> / ")	1 MD41	1 MD30	1 MD10	11 MD24	3 MD23	_	4 MD74		
55	$(19^{1}/_{2}" \times 15^{9}/_{16}" \times {}^{3}/_{4}")$	1 MD41	1 MD30	1 MD12	11 MD24	3 MD23	-	4 MD74		_
58	ı	1 MD41	1 MD30	1 MD12	14 MD24	-		4 MD74		_
			I MESS	, I WD 12	ILA MIDE!				Optional It	t replaces

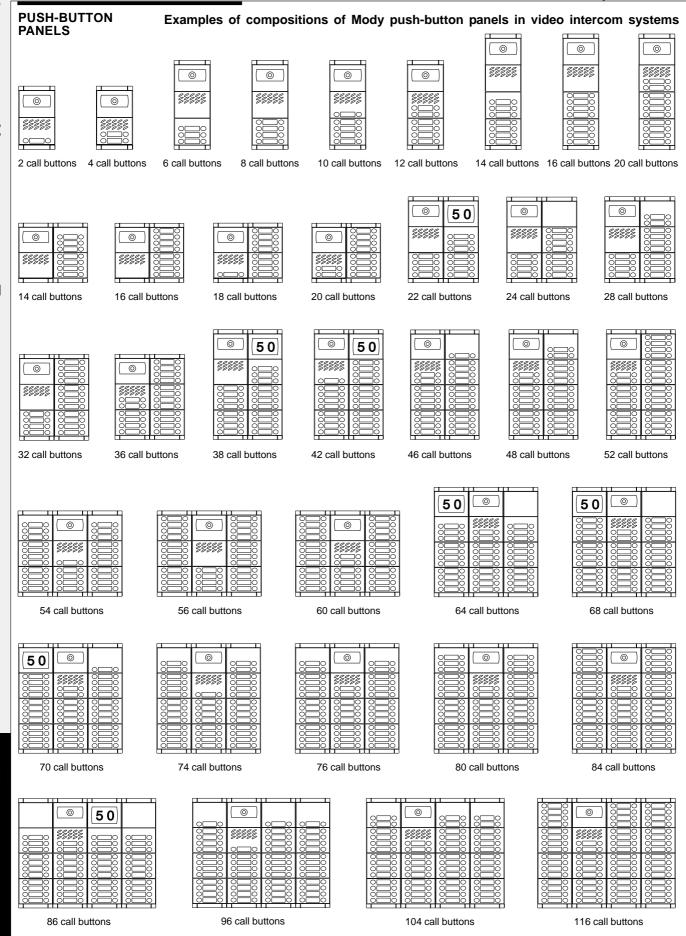


It replaces MD72, 73, 74





<sup>\*</sup> MD20 or MD50 or FC52P or MD74 or MD804 or MD904 Optional

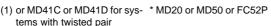






VIDEOINTERCOMS

#### **PUSH-BUTTON PANELS** Composition board of Mody push-button panels. Ν° Compositions Camera Door speaker Module for Button modules and Back box and Hood calls number or blank module module frame and dimensions module (1) (amplifier) speaker cover shelter 2 1 MD41 1 MD30 1 MD122 1 MD72 1 MD82 1 MD92 0 124x213x19 4 88888 $(4^{7}/_{8}" \times 8^{3}/_{8}" \times 3^{3}/_{4}"$ 1 MD41 1 MD30 1 MD124 1 MD72 1 MD82 1 MD92 6 1 MD10 1 MD226 1 MD41 1 MD30 \_ 1 MD73 1 MD83 1 MD93 0 8 1 MD41 1 MD30 1 MD10 1 MD228 1 MD73 1 MD83 1 MD93 88888 1 MD93 10 1 MD41 1 MD30 1 MD122 1 MD228 1 MD73 1 MD83 124x304,5x19 (4<sup>7</sup>/<sub>8</sub>" x 12" x <sup>3</sup>/<sub>4</sub>") 12 1 MD93 1 MD41 1 MD30 1 MD124 1 MD228 1 MD73 1 MD83 1 MD94 ■ 14 1 MD41 1 MD30 1 MD10 1 MD228 1 MD226 2 MD72 ■ 1 MD84 ■ 0 16 1 MD41 1 MD30 1 MD10 2 MD228 2 MD72 ■ 1 MD84 ■ 1 MD94 ■ 88888 18 1 MD30 1 MD122 1 MD94 ■ 1 MD41 2 MD228 2 MD72 ■ 1 MD84 ■ \_ 48x213x19 20 1 MD94 ■ (9 3/4" x 8 3/8" x 3/4" 1 MD41 1 MD30 1 MD124 2 MD228 2 MD72 ■ 1 MD84 ■ \* 22 1 MD226 1 1 MD96 1 MD41 1 MD30 1 MD10 2 MD228 2 MD73 1 MD86 24 \* 1 MD41 1 MD30 1 MD10 3 MD228 2 MD73 1 MD86 1 MD96 26 1 MD41 1 MD30 1 MD122 3 MD228 1 2 MD73 1 MD86 1 MD96 0 1 \* 28 1 MD41 1 MD30 1 MD124 3 MD228 2 MD73 1 MD86 1 MD96 30 1 MD41 1 MD30 1 MD10 3 MD228 1 MD226 1 MD86 1 MD96 2 MD73 32 1 MD41 1 MD30 1 MD10 4 MD228 2 MD73 1 MD86 1 MD96 34 4 MD228 1 MD96 1 MD41 1 MD30 1 MD122 2 MD73 1 MD86 248x304 5x19 (9 3/4" x 12" x 3/4") 36 1 MD41 1 MD30 1 MD124 4 MD228 2 MD73 1 MD86 1 MD96 1 \* 38 1 MD10 4 MD228 1 MD226 1 MD908 1 MD41 1 MD30 2 MD74 1 MD808 1 \* 40 1 MD41 1 MD30 1 MD10 5 MD228 2 MD74 1 MD808 1 MD908 0 42 1 MD908 1 MD30 1 MD122 5 MD228 2 MD74 1 MD808 1 MD41 1 44 1 MD41 1 MD30 1 MD124 5 MD228 1 \* 2 MD74 1 MD808 1 MD908 46 5 MD228 1 MD222 1 MD908 1 MD41 1 MD30 1 MD124 2 MD74 1 MD808 48 1 MD41 1 MD30 1 MD124 5 MD228 1 MD224 2 MD74 1 MD808 1 MD908 50 1 MD30 1 MD124 5 MD228 1 MD226 1 MD808 1 MD908 1 MD41 2 MD74 248x395x19 (9 3/4" x 15 9/16" x 3/4") 52 1 MD41 1 MD30 1 MD124 6 MD228 2 MD74 1 MD808 1 MD908 54 1 MD41 1 MD30 1 MD122 5 MD228 2 MD226 3 MD74 1 MD812 1 MD912 56 1 MD41 1 MD30 1 MD124 7 MD228 3 MD74 1 MD812 1 MD912 372x304.5x19 58 1 MD41 1 MD30 1 MD122 7 MD228 3 MD74 1 MD812 1 MD912 (14 <sup>5</sup>/<sub>8</sub>" x 12" x <sup>3</sup>/<sub>4</sub>") 60 1 MD41 1 MD30 1 MD124 7 MD228 3 MD74 1 MD812 1 MD912 62 2 \* 1 MD41 1 MD30 1 MD122 6 MD228 2 MD226 3 MD74 1 MD812 1 MD912 \* 2 64 1 MD41 1 MD30 1 MD124 6 MD228 2 MD226 3 MD74 1 MD812 1 MD912 0 66 1 MD41 1 MD30 1 MD122 8 MD228 2 \* 3 MD74 1 MD812 1 MD912 2000 68 1 MD41 1 MD30 1 MD124 8 MD228 2 3 MD74 1 MD812 1 MD912 1 \* 70 1 MD41 1 MD30 1 MD124 8 MD228 1 MD222 3 MD74 1 MD812 1 MD912 72 1 MD41 1 MD30 1 MD124 8 MD228 2 MD222 3 MD74 1 MD812 1 MD912 74 1 MD41 1 MD30 1 MD122 8 MD228 2 MD224 3 MD74 1 MD812 1 MD912 76 1 MD41 1 MD30 1 MD124 8 MD228 2 MD224 3 MD74 1 MD812 1 MD912 372x395x19 (14 5/8" x 159/16" x 3/4") 78 1 MD41 1 MD30 1 MD122 8 MD228 2 MD226 3 MD74 1 MD812 1 MD912 80 1 MD41 1 MD30 1 MD124 8 MD228 2 MD226 3 MD74 1 MD812 1 MD912 82 1 MD41 1 MD30 1 MD124 9 MD228 1 MD226 3 MD74 1 MD812 1 MD912 84 1 MD30 1 MD124 10 MD228 1 MD812 1 MD912 1 MD41 3 MD74 86 3 MD226 \* 1 MD41 1 MD30 1 MD124 8 MD228 3 4 MD74 3 \* 90 1 MD30 1 MD122 11 MD228 4 MD74 0 1 MD41 94 88888 1 MD41 1 MD30 1 MD10 11 MD228 3 MD222 4 MD74 96 11 MD228 3 MD222 1 MD41 1 MD30 1 MD122 4 MD74 100 1 MD41 1 MD30 1 MD10 11 MD228 3 MD224 4 MD74 104 1 MD41 11 MD228 1 MD30 1 MD124 3 MD224 4 MD74 496x395x19 106 1 MD41 1 MD30 1 MD10 11 MD228 3 MD226 4 MD74 $(19^{1/2}x 15^{9/1}x x^{3/4})$ 110 1 MD41 1 MD30 1 MD124 11 MD228 3 MD226 4 MD74 116 1 MD41 1 MD30 1 MD124 14 MD228 4 MD74 Optional



<sup>■</sup> or MD74 or MD804 or MD904

It replaces MD72, 73, 74

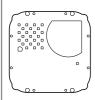


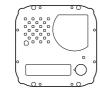


### **EXTERNAL DOOR STATIONS**

#### **PUSH-BUTTON PANELS**

#### Video modules with integrated audio amplifier





#### MA 42.

Modules complete with:

- CCD camera with autoiris, fixed 3.6mm lens and 6 infrared LED's.
- amplified speaker unit with volume adjustment of 2 channels (reception and transmission)
- steel front plate with breakproof transparent screen
- red operation LED
- horizontal and vertical adjustments

#### MA 42C.

Colour version of model **MA 42**.

#### MΔ 43

Same as **MA 42**, with call button and name plate panel with breakproof transparent screen and green LED backlighting.

#### MA 43C.

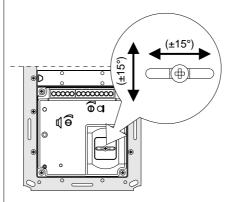
Colour version of model MA 43.

#### Terminals

- Reception audio line
- 2 Transmission audio line
- 3 Power supply input for electric door speaker (6÷12Vdc)
- 4 Audio ground
- Alternated power supply input or ground for name-plate Led
- A AC or DC power supply input for name-plate Led (12Vac-dc)
- C Call push-buttons common
- P1 Call push-button
- V Video signal output (coaxial cable)
- M Video ground (coaxial shield)
- H Positive voltage input for camera (18÷24Vdc)
- L- Negative power supply input for service Led
- L+ Positive power supply input for service Led

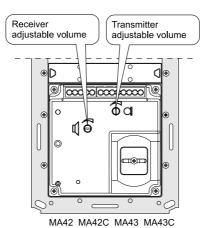
#### Adjustments

You can manually change the camera framing by unloosening and adjusting the horizontal and vertical screws in the desired direction.

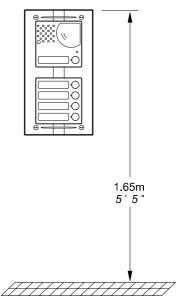


### **Audio adjustments**

If necessary, it is possible to adjust the volume of the 2 audio channels opportunely varying the external knobs.

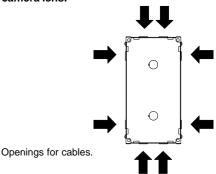


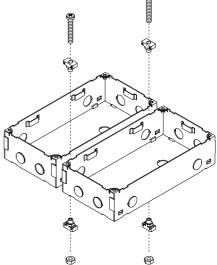
#### Installation



Place the push-button panel back box at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.

Position the camera in such a way that sunlight or other direct or reflected light sources with high intensity do not hit the camera lens.



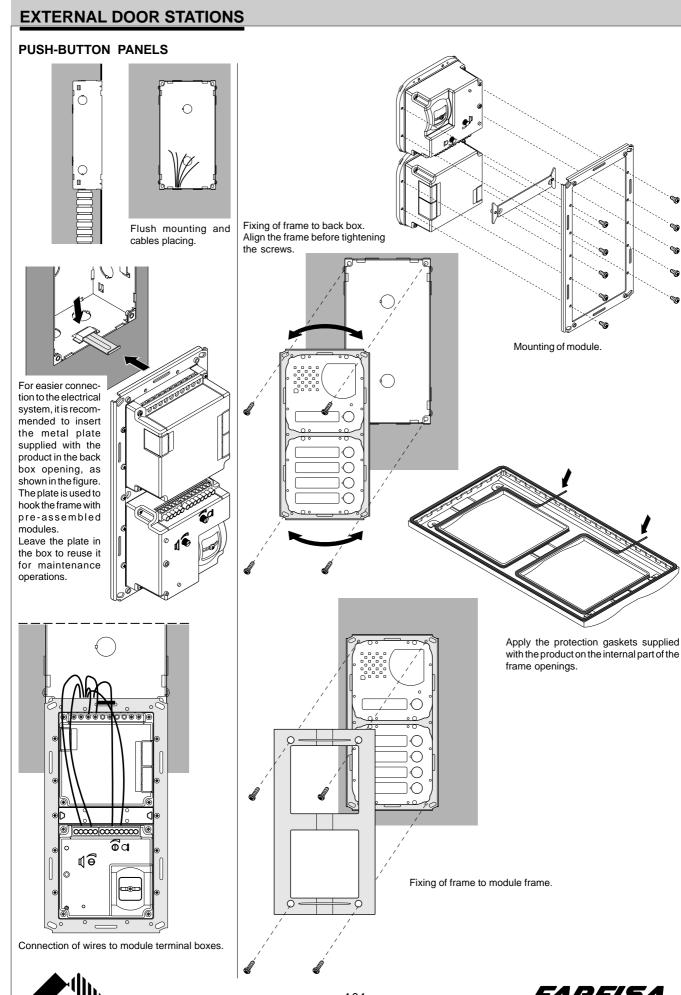


Insertion of spacers between back boxes. Spacers and cable bushing (not supplied with the products) must be inserted before brick work.



#### Technical data MA42-MA43 MA42C-MA43C

Powersupply	21±3Vdc	21±3Vdc
Operating current	0.3A	0.4A
Video signal output	1Vpp on $75\Omega$	1Vpp on $75\Omega$
Video signal standard	CCIR	PAL
Minimum illumination	2 Lux	2.5 Lux
White balance	-	auto
Sensor	CCD 1/4" B/W	CCD 1/3" colour
Number of pixels	291,000	291,000
Horizontal frequency	15,625Hz	15,625Hz
Vertical frequency	50Hz	50Hz
Lens	3.6mm; F5	4mm; F4
Focus	0.1m ÷ ∞	0.6m ÷ ∞
Autoiris	electronic	electronic
Horizontal adjustment	± 15°	± 15°
Vertical adjustment	± 15°	± 15°
Operating temperature	-10°÷+40°C	-10°÷+40°C
Max. permissible humidity	80%RH	80%RH



## **EXTERNAL DOOR STATIONS**

### **PUSH-BUTTON PANELS**



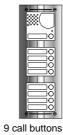




5 call buttons



8 call buttons





9 call buttons

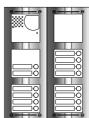


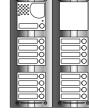
2 call buttons 3 call buttons

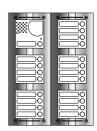




6 call buttons







10 call buttons

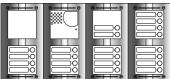
11 call buttons

13 call buttons

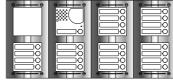
14 call buttons

17 call buttons

21 call buttons





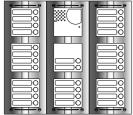




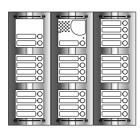
22 call buttons

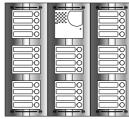
25 call buttons

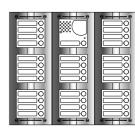
29 call buttons









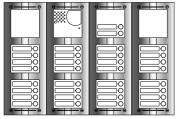


30 call buttons

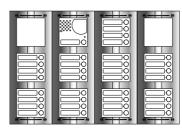
31 call buttons

32 call buttons

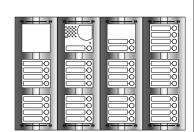
33 call buttons



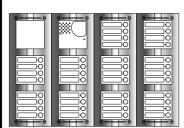
34 call buttons



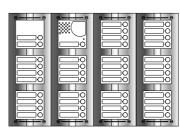
37 call buttons



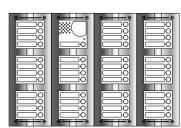
39 call buttons



40 call buttons



43 call buttons



45 call buttons





### **PUSH-BUTTON PANELS**

### Composition board of Matrix push-button panels.

N°	Compositions and	Camera module	But	ton and info	or	Front	Back box and	Rain
calls	dimensions	and door speaker		ank module		frame	module frame	shelter
1	140x140x19 (5 ½" x 5 ½" x 3½")	1 MA43	-	-	-	1 MA61	1 MA71	1 MA91
2		1 MA42	1 MA22	-	-	1 MA62	1 MA72	1 MA92
3	140x256x19	1 MA43	1 MA22	-	-	1 MA62	1 MA72	1 MA92
4	$(5^{1}/_{2}" \times 10^{1}/_{16}" \times 3^{3}/_{4}")$	1 MA42	1 MA24	-	-	1 MA62	1 MA72	1 MA92
5		1 MA43	1 MA24	-	-	1 MA62	1 MA72	1 MA92
6		1 MA42	1 MA24	1 MA22	-	1 MA63	1 MA73	1 MA93
7	440.074.40	1 MA43	1 MA24	1 MA22	-	1 MA63	1 MA73	1 MA93
8	140x374x19 (5 <sup>1</sup> / <sub>2</sub> " x 14 <sup>3</sup> / <sub>4</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MA42	2 MA24	-	-	1 MA63	1 MA73	1 MA93
9		1 MA43	2 MA24	-	-	1 MA63	1 MA73	1 MA93
10		1 MA42	2 MA24	1 MA22	-	2 MA62	2 MA72	2 MA92
11		1 MA43	2 MA24	1 MA22	-	2 MA62	2 MA72	2 MA92
12	280x256x19 (11" x 10 <sup>1</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MA42	3 MA24	-	-	2 MA62	2 MA72	2 MA92
13		1 MA43	3 MA24	-	-	2 MA62	2 MA72	2 MA92
14		1 MA42	3 MA24	1 MA22	1 MA20	2 MA63	2 MA73	2 MA93
15		1 MA43	3 MA24	1 MA22	1 MA20	2 MA63	2 MA73	2 MA93
16		1 MA42	4 MA24	-	1 MA20	2 MA63	2 MA73	2 MA93
17		1 MA43	4 MA24	-	1 MA20	2 MA63	2 MA73	2 MA93
18		1 MA42	4 MA24	1 MA22	-	2 MA63	2 MA73	2 MA93
19		1 MA43	4 MA24	1 MA22	-	2 MA63	2 MA73	2 MA93
20	280x374x19 (11" x 14³/ <sub>4</sub> " x ³/ <sub>4</sub> ")	1 MA42	5 MA24	-	-	2 MA63	2 MA73	2 MA93
21		1 MA43	5 MA24	-	-	2 MA63	2 MA73	2 MA93
22		1 MA42	5 MA24	1 MA22	1 MA20	4 MA62	4 MA72	4 MA92
23		1 MA43	5 MA24	1 MA22	1 MA20	4 MA62	4 MA72	4 MA92
24		1 MA42	6 MA24	-	1 MA20	4 MA62	4 MA72	4 MA92
25		1 MA43	6 MA24	-	1 MA20	4 MA62	4 MA72	4 MA92
26		1 MA42	6 MA24	1 MA22	-	4 MA62	4 MA72	4 MA92
27		1 MA43	6 MA24	1 MA22	-	4 MA62	4 MA72	4 MA92
28	560x256x19 (22 <sup>1</sup> / <sub>16</sub> " x 10 <sup>1</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MA42	7 MA24	-	-	4 MA62	4 MA72	4 MA92
29	16 16 47	1 MA43	7 MA24	-	-	4 MA62	4 MA72	4 MA92
30		1 MA42	7 MA24	1 MA22	-	3 MA63	3 MA73	3 MA93
31	420x374x19	1 MA43	7 MA24	1 MA22	-	3 MA63	3 MA73	3 MA93
32	(16 <sup>9</sup> / <sub>16</sub> "x 14 <sup>3</sup> / <sub>4</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MA42	8 MA24	-	-	3 MA63	3 MA73	3 MA93
33		1 MA43	8 MA24	-	-	3 MA63	3 MA73	3 MA93
34		1 MA42	8 MA24	1 MA22	2 MA20	4 MA63	4 MA73	4 MA93
35		1 MA43	8 MA24	1 MA22	2 MA20	4 MA63	4 MA73	4 MA93
36		1 MA42	9 MA24	-	2 MA20	4 MA63	4 MA73	4 MA93
37		1 MA43	9 MA24	-	2 MA20	4 MA63	4 MA73	4 MA93
38		1 MA42	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73	4 MA93
39		1 MA43	9 MA24	1 MA22	1 MA20	4 MA63	4 MA73	4 MA93
40		1 MA42	10 MA24	-	1 MA20	4 MA63	4 MA73	4 MA93
41		1 MA43	10 MA24	-	1 MA20	4 MA63	4 MA73	4 MA93
42	560x374x19	1 MA42	10 MA24	1 MA22	-	4 MA63	4 MA73	4 MA93
43	$(22^{1}/_{16}" \times 14^{3}/_{4}" \times {}^{3}/_{4}")$	1 MA43	10 MA24	1 MA22	-	4 MA63	4 MA73	4 MA93
44		1 MA42	11 MA24	-	-	4 MA63	4 MA73	4 MA93
45		1 MA43	11 MA24	-	-	4 MA63	4 MA73	4 MA93
(*) or MA42C or MA43C							It replaces	

(\*) or MA42C or MA43C

It replaces MA71, 72, 72





TELECOMMUNICATION

### **EXTERNAL DOOR STATIONS**

#### **PUSH-BUTTON PANELS**

### Video modules with integrated audio amplifier







#### PL40P.

Modules complete with:

- CCD camera with autoiris, fixed 3.6mm lens and 6 infrared LED's.
- amplified speaker unit with volume adjustment of 2 channels (reception and transmission)
- aluminium front plate with transparent screen
- red operation LED
- horizontal and vertical adjustments

PL40PC. Colour version of model PL40P.

#### PI 41P.

Same as **PL40P**, with call button and name plate panel with transparent screen and green LED backlighting.

PL41PC. Colour version of model PL41P.

PL42P. Same as PL41P, with 2 call buttons.

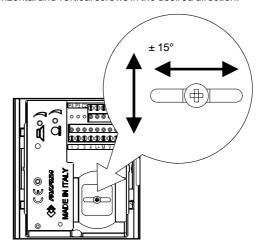
PL42PC. Colour version of model PL42P.

#### **Terminals**

- Reception audio line
- 2 Transmission audio line
- 3 Power supply input for electric door speaker (6÷12Vdc)
- 4 Audio ground
- Alternated power supply input or ground for name-plate Led
- A AC or DC power supply input for name-plate Led (12Vac-dc)
- C Call push-buttons common
- P1 Call push-button
- V Video signal output (coaxial cable)
- M Video ground (coaxial shield)
- H Positive voltage input for camera (18÷24Vdc)
- L- Negative power supply input for service Led
- L+ Positive power supply input for service Led

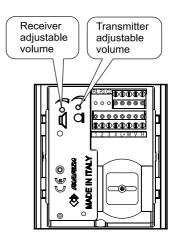
#### Adjustments

You can manually change the camera framing by unloosening and adjusting the horizontal and vertical screws in the desired direction.



### **Audio adjustments**

If necessary, it is possible to adjust the volume of the 2 audio channels opportunely varying the external knobs.



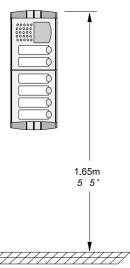
Technical data	PL40P÷42P	PL40PC÷42PC
Powersupply	21±3Vdc	21±3Vdc
Operating current	0.3A	0.4A
Video signal output	1Vpp on 75 $\Omega$	1Vpp on 75 $\Omega$
Video signal standard	CCIR	PAL
Minimum illumination	2 Lux	2.5 Lux
White balance	=	auto
Sensor	CCD 1/4" B/W	CCD 1/3" colour
Number of pixels	291,000	291,000
Horizontal frequency	15,625Hz	15,625Hz
Vertical frequency	50Hz	50Hz
Lens	3.6mm; F5	4mm; F4
Focus	0.1m ÷ ∞	0.6m ÷ ∞
Autoiris	electronic	electronic
Horizontal adjustment	± 15°	± 15°
Vertical adjustment	± 15°	± 15°
Operating temperature	-10°÷+40°C	-10°÷+40°C
Max. permissible humidity	80%RH	80%RH





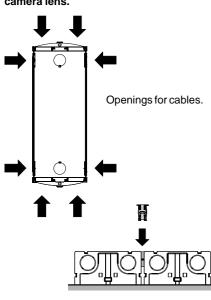
### **EXTERNAL DOOR STATIONS**

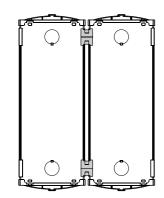
### **PUSH-BUTTON PANELS**



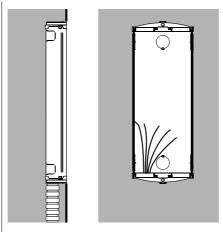
Place the push-button panel back box at a height of about 1.65m (5' 5") from the floor keeping the front edges flush-mounted and vertical to the finished plaster.

Position the camera in such a way that sunlight or other direct or reflected light sources with high intensity do not hit the camera lens.

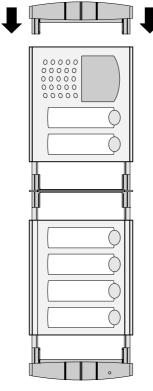




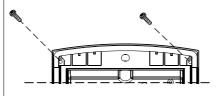
Insertion of spacers between back boxes. Spacers and cable bushing (not supplied with the products) must be inserted before brick work.



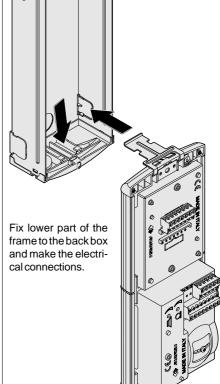
Flush mounting and cables placing.

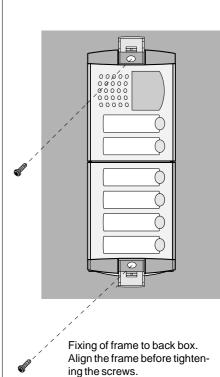


Mounting of module.



Fixing of module frames to the upper side by the 2 small screws included in the back boxes.









## **EXTERNAL DOOR STATIONS**

### **PUSH-BUTTON PANELS**



1 call button

2 call buttons





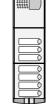
3 call buttons 4 call buttons



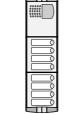
5 call buttons



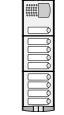
6 call buttons



7 call buttons

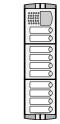


8 call buttons



Examples of compositions in video intercom systems

9 call buttons



10 call buttons



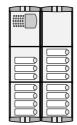
11 call buttons



12 call buttons



14 call buttons



15 call buttons



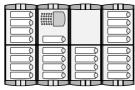
18 call buttons



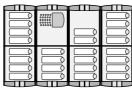
22 call buttons



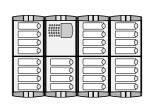
23 call buttons



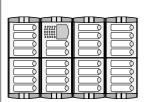
25 call buttons



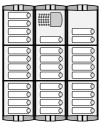
26 call buttons



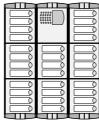
28 call buttons



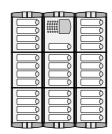
30 call buttons



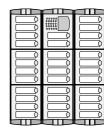
31 call buttons



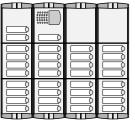
32 call buttons



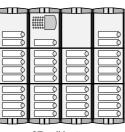
33 call buttons



34 call buttons



35 call buttons



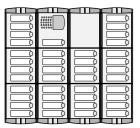
37 call buttons



38 call buttons



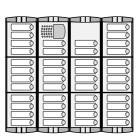
40 call buttons



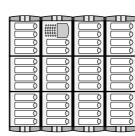
41 call buttons



42 call buttons



44 call buttons



46 call buttons





### **PUSH-BUTTON PANELS**

### Composition board of Profilo push-button panels.

N° calls	Compositions and dimensions	Camera module and door speaker (*)	Butte	on and blank mo	odules	Back box and module frame
1	100x142x19	1 PL41P	-	-	-	1 PL71
2	$(3^{15}/_{16}" \times 5^{9}/_{16}" \times 3^{3}/_{4}")$	1 PL42P	-	-	-	1 PL71
3		1 PL40P	1 PL23	-	-	1 PL72
4	100x253,5x19	1 PL40P	1 PL24	-	-	1 PL72
5	(3 15/ <sub>16</sub> " x 10" x 3/ <sub>4</sub> ")	1 PL41P	1 PL24	-	-	1 PL72
6		1 PL42P	1 PL24	-	-	1 PL72
7		1 PL40P	1 PL24	1 PL23	-	1 PL73
8	100x365x19	1 PL40P	2 PL24	-	-	1 PL73
9	$(3^{15}/_{16}" \times 14^{3}/_{8}" \times 3^{3}/_{4}")$	1 PL41P	2 PL24	-	-	1 PL73
0		1 PL42P	2 PL24	-	-	1 PL73
1		1 PL41P	2 PL24	1 PL22	-	2 PL72
2		1 PL42P	2 PL24	1 PL22	-	2 PL72
3	200x253,5x19 (7 <sup>7</sup> / <sub>8</sub> " x 10" x <sup>3</sup> / <sub>4</sub> ")	1 PL41P	3 PL24	-	-	2 PL72
4		1 PL42P	3 PL24	-	-	2 PL72
5		1 PL40P	3 PL24	1 PL23	1 PL20	2 PL73
6		1 PL40P	4 PL24	-	1 PL20	2 PL73
7		1 PL41P	4 PL24	_	1 PL20	2 PL73
8		1 PL42P	4 PL24	-	1 PL20	2 PL73
9	200,005,40	1 PL41P	4 PL24	1 PL22	-	2 PL73
	200x365x19	1 PL42P	4 PL24	1 PL22	-	2 PL73
1		1 PL41P	5 PL24	-		2 PL73
2		1 PL42P	5 PL24	_	_	2 PL73
3		1 PL41P	5 PL24	1 PL22	1 PL20	4 PL72
4		1 PL40P	6 PL24	-	1 PL20	4 PL72
5		1 PL41P	6 PL24		1 PL20	4 PL72
6		1 PL40P	6 PL24	1 PL22	-	4 PL72
7		1 PL41P	6 PL24	1 PL22		4 PL72
8	400x253,5x19	1 PL40P	7 PL24	-		4 PL72
9	$(15^{3}/_{4}" \times 10" \times {}^{3}/_{4}")$	1 PL41P	7 PL24		_	4 PL72
0		1 PL42P	7 PL24			4 PL72
1		1 PL41P	7 PL24	1 PL22		3 PL73
2	300x365x19	. 5:	8 PL24	-		3 PL73
3	(11 <sup>13</sup> / <sub>16</sub> " x 14 <sup>3</sup> / <sub>8</sub> x <sup>3</sup> / <sub>4</sub> ")	1 PL41P	8 PL24			3 PL73
4		1 PL41P	8 PL24	-	-	3 PL73
5		1 PL41P	8 PL24	1 PL22	2 PL20	4 PL73
6		1 PL41P	8 PL24	2 PL22	1 PL20	4 PL73
7		1 PL41P	8 PL24	2 PL22 2 PL22	1 PL20	4 PL73
8		1 PL41P	8 PL24	2 PL22	1 PL20	4 PL73
9		1 PL41P	9 PL24	1 PL22	1 PL20	4 PL73
0		1 PL41P	9 PL24 9 PL24	1 PL22	1 PL20	4 PL73
1		1 PL42P	9 PL24 10 PL24		1 PL20 1 PL20	4 PL73
2		1 PL41P	10 PL24 10 PL24	-	1 PL20	4 PL73
3	400x365x19	1 PL41P	10 PL24 10 PL24	1 PL22	- r LZU	4 PL73
.4	$(15\sqrt[3]_4" \times 14\sqrt[3]_8" \times \sqrt[3]_4")$	1 PL41P	10 PL24 10 PL24	1 PL22	-	4 PL73
						4 PL73
5		1 PL41P	11 PL24	-	-	4 PL73
6		1 PL42P	11 PL24	-	-	4 FL/3

(\*) or PL40PC or PL41PC or PL42PC





### **EXTERNAL DOOR STATIONS**

### VIDEO SIGNAL CONVERSION FROM COAXIAL CABLE TO BALANCED LINE

The **Studio** video intercom line allows for the realisation of video intercom systems by simply using a twisted pair and the camera **MD41D**. If the system includes colour cameras Matrix or Profilo series or models for CCTV, you must use a video converter to transform the video signal from coaxial to balanced. The board **CV01** permits this type of conversion and can be fixed on the back of **Mody, Matrix** or **Profilo** cameras (all models, except for **MD41D**) or near any **CCTV camera** (in outdoor housings, connector blocks, etc).

### CV 01.

Video signal converter from coaxial cable to balanced line (twisted pairs).

### Wires

V (white) video signal input
M (green) video ground
-F (black) ground

+H (red) 12÷21Vdc power supply input (according to the position of

jumper J1)

### **Terminals**

X negative balanced video signal output

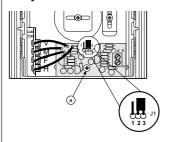
positive balanced video signal output

# SYSTEMS WITH MODY, MATRIX OR PROFILO CAMERAS

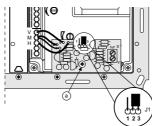
### Installation

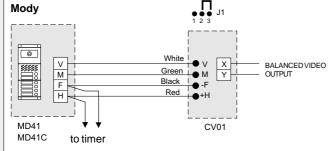
- Fix the **CV01** board on the back of the housing of the camera with the screw supplied (a).
- Make the connections as shown on the diagram.
- Check that the jumper J1 is in position 2-3 (power supply =21Vdc).

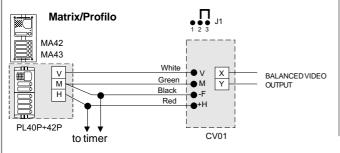
### Modv



### Matrix/Profilo







### SYSTEMS WITH CCTV CAMERAS

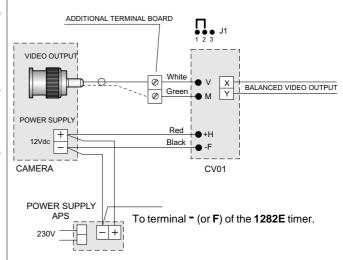
### Installation

- Place the CV01 board in the outdoor housing of the CCTV camera or in any other housing.
- Make the connections as shown on the diagram.

### Connection with 12Vdc CCTV camera

This type of connection allows for powering the board with the camera power supply.

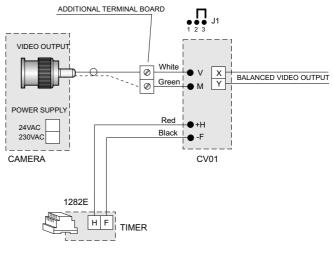
- Move the jumper J1 from position 2-3 to 1-2 (power supply=12Vdc).



### Connection with 24Vac or 230Vac CCTV camera

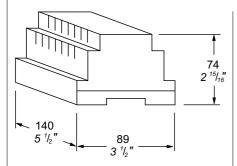
This type of connection allows for powering the board in timed mode.

- Check that the **jumper J1** is in position 2-3 (power supply=21Vdc).









# 1281E. AUDIO-VIDEO POWER SUPPLY-TIMER.

It allows to power in timed way (about 100 seconds) a videointercominstallation with electronic call. Moreover it allows to switch-ON one monitor at a time and to switch it OFF at the end of the timing.

### Technical data

Input voltage 127 or 220-230 Vac Frequency 50/60Hz Power 48VA Operating temperature 0°÷+40°C 90%RH Maximum permissible humidity Housing DIN 8 modules A Weight 0.95Kg. VDE according to safety stan-Approved dard EN60065

A Output voltage 13Vac for:

-name plate light, exchangers and timer (continuous service 0.6A)

-electric door lock and bells (intermittent service 1A)

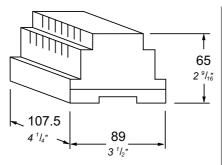
Ground

Terminals

- **H** Timed positive voltage input-output 18÷21Vdc-1A max.
- F Ground
- ${f X}$  Auxiliary voltage output 12Vdc-0.2A
- 4 Control switching ON input from the monitors 7.5Vdc-8mA
- 5 Command for door lock release command 3mA
- S Alternate voltage for door lock release 13Vac-
- C+ Electronic ringing generator for calls from external station 12Vpp-0.25A
- 3+ Positive voltage output 8Vdc-0.1A

### Notes

- The power supply is not provided with fuses, but all of its outputs are protected against overloading and short circuiting by temperature sensors. To reset the power supply, power must be cut OFF for about one minute and can be restored after having eliminated the problem.
- The power supply must be installed in a dry place and can be fixed on DIN bar or on a wall by using the expansion plugs.



# 1281. STABILIZED POWER SUPPLY WITH SWITCHING REGULATOR.

Connected to the timer art.1282E, allows to drive at low voltage a monitor (or 2 in parallel in FLAT type), a camera unit with a solid state sensor (CCD), electric door lock, name plate lights, etc.

### Technical data

127 or 220-230\/ac Input voltage Frequency 50/60Hz Power 48VA Operating temperature 0°÷+40°C Maximum permissible humidity 90%RH DIN 8 modules A Housing 0.95Kg. Weight VDE according to safety stan-Approved dard EN60065

### ----

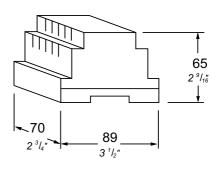
- A Output voltage 13Vac for:
  - -name plate light, exchangers and timer (continuous service 0.6A)
  - -electric door lock and bells (intermittent service 1A)
- Ground

**Terminals** 

- Continuous output 21Vdc-1A (timed operation)
- Logic command input from timing 0 = activated
- +5Vdc = non activated

### Notes

- The power supply is not provided with fuses, but all of its outputs are protected against overloading and short circuiting by temperature sensors. To reset the power supply, power must be cut OFF for about one minute and can be restored after having eliminated the problem.
- The power supply must be installed in a dry place and can be fixed on DIN bar or on a wall by using the expansion plugs.
- The connection between power supply 1281 and timer 1282E must not to be longer than 25cm.



### 1282E. AUDIO-VIDEO TIMER.

Connected to the stabilized power supply art.1281, it allows a video intercom system to be timed (50 seconds).

It also allows time to be increased during a conversation (3 minutes), automatic power OFF at the end of the conversation; switching ON of one monitor at a time. By adding the intercommunicating module art.1443E on the proper connector, an intercommunicating service with privacy towards the external station is obtained.

### Technical data

Turn ON time: -50 sec. with handset replaced
-3 min. with handset lifted
Operating temperature 0°÷+50°C
Maximum permissible humidity 90%RH
Housing DIN 6 modules A

### **Terminals**

- IV Logic command output of timing 0/5Vdc
- X Auxiliary voltage output 12Vdc-0.2A
- A Alternate voltage input-output 13Vac-1.6A
- F Ground
- H Timed positive voltage input-output 18÷21Vdc-1A max.
- 4 Control switching ON input from the monitors 7.5Vdc-8mA
- 5 Command for door lock release command 3mA
- S Alternate Voltage for door lock release 13Vac-1A max
- **1D** Transmitter audio channel input 5Vdc-20mA
- **2D** Receiver audio channel input 1.5Vdc-20mA **3D** Audio ground
- **C+** Electronic ringing generator for calls from external station 12Vpp-0.25A
- 7 Electronic ringing generator for intercommunicating calls 12Vpp-0.25A
- 1 Transmitter audio channel output 5Vdc-20mA
- 2 Receiver audio channel output 1.5Vdc-20mA
- **3+** Positive voltage output 8Vdc-0.1A

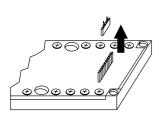


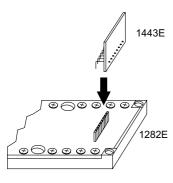


### **SERVICE MODULES**

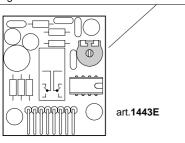
## 1443E. INTERCOMMUNICATING MODULE.

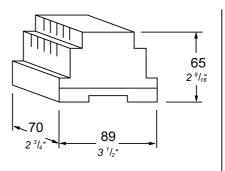
Added inside the timer art.1282E, it allows for the intercommunicating service with privacy towards the external station.





Use the trimmer to adjust the intercommunicating volume.





### 2443. AMPLIFIER-SWITCHER FOR INTER-COMMUNICATING SYSTEMS.

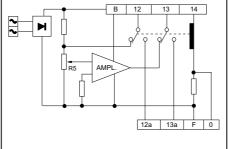
It is suitable for video intercom systems where it is necessary to have the intercommunicating service in different flats with privacy towards both outside and other users. Use one art. 2443 in every intercommunicating flat. Can be fixed on DIN bar or with two expansion plugs. In housing DIN 4 modules A.

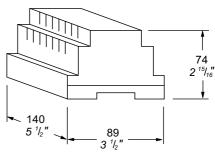
### **Terminals**

- F General ground
- B Power supply 8Vdc-60mA
- $\sim$  Power supply 13Vac-70mA
- 12 Connection toward the microphone of the monitors
- 12a Audio output from door station (transmitter channel)
- 13 Connection towards the loudspeaker of the monitors
- **13a** Audio input from the door station (receiver channel)
- **14** Timed power supply for audio connection toward the door station 12÷24Vdc-60mA
- To connect to terminal F when the terminal 14 is powered to 12Vdc (terminal 8 of the monitor)

### Note

If it is necessary to adjust the volume of the intercommunicating audio turn trimmer R5.





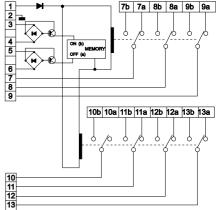
# 1273TV. 7-CONTACT ANALOG EXCHANGER.

It is used in systems with 2 or more video entrances for switching automatically the video signals, the audio lines and door lock on the calling entrance. Can be fixed on DIN bar or with two expansion plugs. In housing DIN 8 modules A. For the switching of video signals it is advisable to use terminals 8-8a-8b and 9-9a-9b, being that they are physically closer.

### **Terminals**

- 1 Power supply 13Vac-0.1A (15÷21Vdc)
- 2 Ground
- 3 and 4 Driver to switch the relay in "b" positionON position
- 5 and 6 Driver to switch the relay in "a" position OFF position
- **7,8,9,10,11,12,13** Common contact of relay **7a,8a,9a,10a,11a,12a, 13a** OFF position of relay contacts

**7b**,**8b**,**9b**,**10b**,**11b**,**12b**,**13b** ON position of relay contacts



- 1473. EXCHANGER. See page 33.
- RL37. RELAY MODULE. See page 33.
- **1471. RELAY UNIT.** See page 34.
- 1471E. RELAY UNIT. See page 34.
- 1472. 2-CONTACT RELAY UNIT. See page 34.





### General characteristics

- The cable runs of intercom and video intercom installations must be kept separate from the mains or any other electrical installation as required by the International Safety Standards and the entire installation must be realized in compliance with the safety rules in force in any specific Country.
- It is necessary to provide an all contact switch before the power supply. Use a single general switch in case of several power supplies (also in multiple entrance).
- Before connecting the power supply make sure that its rating data corresponds to this of the mains.
- For electromagnetic reasons, all service modules must be installed near their power supply.

### Wires

- 1) For the correct operation of the video intercom system you must choose the correct type of cable
- 2) Wires must be dimensioned according to the distance of the different devices and their current consumption.
- 3) Do not connect wires in parallel to reach the required cross-section (for example multi-pair telephone cables). Only use a single wire with suitable cross-section. When using multi-core cables you must select them with low parasite parameters (low capacitance per metre, low inductance over Ohm).
- 4) If the installation includes additional power supplies you must place them near the device to be powered.

### **Background** noise

To avoid possible background noise over the speech line, it is advisable:

- not to lay intercom or telephone cables in the same runaway as the wires used to power alternate current loads;
- 6) to avoid using the same multi-core cable to transmit audio signals and alternate current power supplies (lamps, amplified external door stations, electrical door locks). Always use separate wires for alternate current power supplies;
- 7) do not connect the name plate lamps (or other AC powered devices) to terminal 4 (-) of the speaker unit; two wires must start from terminal F of the timer, one for terminal 4 of the speaker unit and one for the connection of the lamps (or other AC powered devices);
- 8) for name-plate lamps, to use an additional 12Vac transformer (PRS210 type) with suitable power (consumption is 75mA for each lamp) with 2 power supply wires separate from audio wires:
- 9) for systems with long distance between the external door station and the last video intercom, it is advisable to position the power supply near the external door station (see diagram on page 117).

### WIRE CROSS-SECTION

Distance			D . 2D . 3D . A . C+ . 9M (	. 4 . 5		. <b>S</b> . — es in <b>bold face</b>	type)
m.	feet	mm² S	mm Ø	AWG	mm² S	mm Ø	AWG
50 100 200 300	165 330 660 990	0,5 0,75 1 1,5	0,8 1 1,2 1,4	20 18 16 15	0,75 1 1,5 2,5	1 1,2 1,4 1,8	18 16 15 12

For the video signal use a TV  $75\Omega$  low loss coaxial cable or a twisted pair (see next pages).



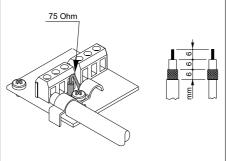


### VIDEO SIGNAL DISTRIBUTION WITH COAXIAL CABLE

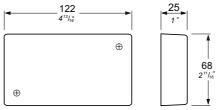
For the video signal use a TV 75 $\Omega$  low loss coaxial cable.

### Monitors terminal board

The resistance for terminate the video signal  $(75\Omega)$  is located on the terminal board of the monitor wall bracket.



### **DV2-DV4. VIDEO SIGNAL DISTRIBUTORS.**

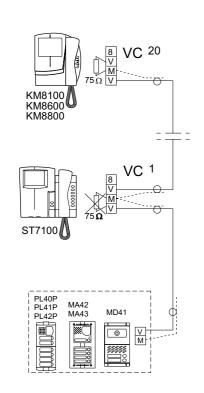


They allow the distribution of the video signal on 2 or 4 outputs. It can be installed on the wall, on a wall box, with expansion plugs or it can be placed in the junction box.

### Technical data Power supply 12Vdc±2 Operating current DV2 50mA 100mA DV4 Insertion loss 0.8dB Max. input video signal 2Vpp Bandwidth >5MHz IN OUT 2 OUT 1 OUT 4 OUT 3

# Serial connection of the coaxial cable (input and output from monitor)

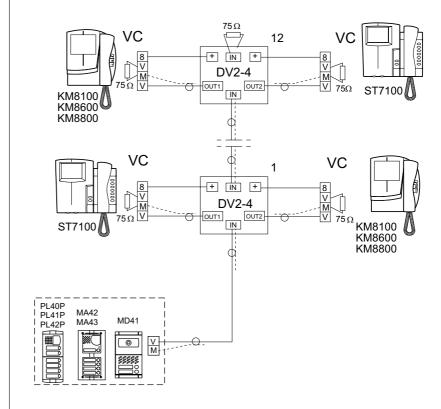
To carry out the video connection in a serial mode it is necessary to cut the resistance of  $75\Omega$  located on the wall-bracket terminal board. Leave it only on the last monitor. The monitors serially connectable are max. 20.



### Connection of the coaxial cable with video distributors

For multi-way video systems it is advisable to use video distributor that, being powered by the monitors connected to it (terminal 8), do not create overloads on the video power supply. The

outputs that are not used must be closed with resistances of  $75\Omega$  that are provided in kit. Maximum 12 video distributors can be connected together.







### 476. VIDEO DISTRIBUTOR-AMPLIFIER.

It allows for the distribution of the video signal coming from the cameras on 5 independent lines. It is not necessary to terminate on  $75\Omega$  the unused outputs.

### **Terminals**

F General ground
14 Positive power supply
IN Video signal input
1-2-3-4-5 Video signal outputs

Video ground (shield of the coaxial cable)

### Technical data

 $\begin{array}{lll} \mbox{Power supply} & 21 \pm 3\mbox{Vdc} \\ \mbox{Operating current at max. load} & 250\mbox{mA} \\ \mbox{Gain at max. load} & \mbox{from 0 to 3.5dB (adjustable)} \\ \mbox{Gain with one output terminated to } 75\Omega \end{array}$ 

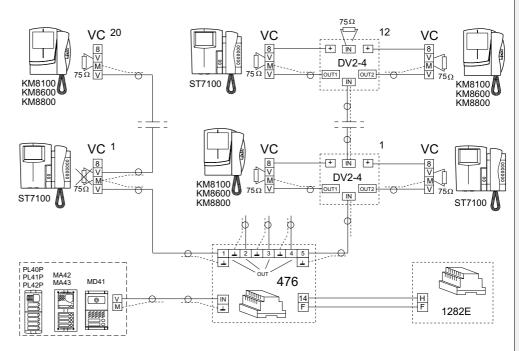
from 0 to 9dB (adjustable)

Bandwidth >5MHz
Operating temperature 0°÷+50°C
Maximum permissible humidity 90% RH
Housing DIN 8 modules A

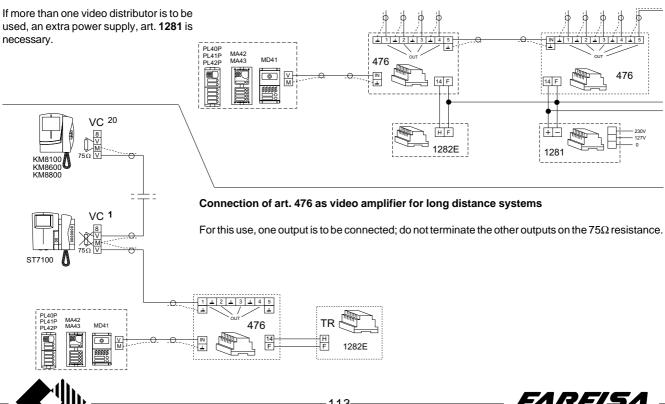
### Connection of the coaxial cable with distribution on maximum 5 column rising (serial and/or with video distributors)

In video systems with different columns rising or with a high number of users, it is necessary to use the video distributor-amplifier art. 476.

It is not necessary to terminate the unused outputs on the  $75\Omega$  resistance.



### Connection of the coaxial cable with video signal distribution on more than 5 risers

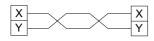






### VIDEO SIGNAL DISTRIBUTION WITH TWISTED PAIR

If the distance between the camera and the last video intercom in the system is lower than 200 m, the connection can be made with 2x0.35mm² wires (Ø=0,6mm) instead of the coaxial cable. For distances from 100m to 200m a twisted pair must be used.



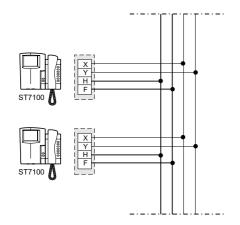
For the connection of the video signal you can choose from:

- connection with junction box
- serial connection (input and output)
- connection with floor distributor

### **CONNECTION WITH JUNCTION BOX**

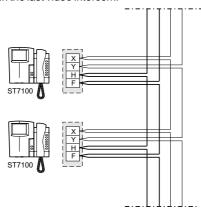
All wires are distributed in the floor junction box.

Due to the signal loss introduced by each connection, the maximum number of video intercoms that can be connected in serial mode is 20. Two  $75\Omega$  resistances must be inserted between X and F and between Y and F in the last video intercom. The maximum distance between the video intercoms and the connector block is 2.5 metres.



### SERIAL CONNECTION

Connections are made on the video intercom brackets, and not in the junction box. Due to the signal loss introduced by each connection, the maximum number of video intercoms that can be connected in serial mode is 20. Two  $75\Omega$  resistances must be inserted between X and F and between Y and F in the last video intercom.



### **CONNECTION WITH FLOOR DISTRIBUTOR**

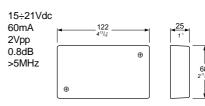
The video wires of each video intercom are insulated from the riser. Connections are made on the **DV2D** or **DV4D** floor video signal distributor box.

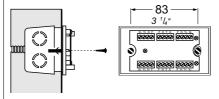
### DV2D-DV4D. FLOOR VIDEO SIGNAL DISTRIBUTORS.

They allow for the distribution of the video signal taken from the riser on 2 or 4 outputs. They can be installed on the wall on a wall box, with expansion plugs or it can be placed in the junction box.

### Technical data

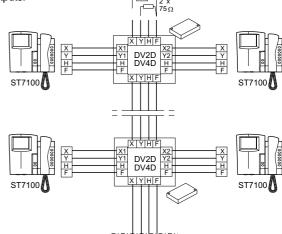
Power supply Operating current Max. input video signal Insertion loss Bandwidth





### Connection of the video signal on a single riser

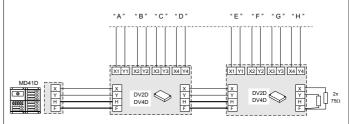
Terminals X and Y of the last distributor must be terminated with the 75 $\Omega$  resistances supplied with the article. It is not necessary to terminate the unused outputs.



## Connection of the video signal with distribution on several risers In video systems with different risers you must user 1 or more video

In video systems with different risers you must user 1 or more video distributors art. **DV2D** or **DV4D**.

Terminals X and Y of the last distributor must be terminated with the 75 $\Omega$  resistances supplied with the article. It is not necessary to terminate the unused outputs.



Example of connection on 8 risers





Check that the connections of the system are carried out correctly.

Put the system in use by connecting the power supply to the mains.

By pushing a call button from the external push-button panel, the call is sent to the corresponding video intercom, the system is activated for about 50 seconds (100 seconds with 1281E power supply-timer) and the image appears on the monitor a few seconds after the call.

By lifting the handset, the called user can speak with the external station and increases at the same time the activation time of the system (about 3 minutes) (feature not available for 1281E power supply-timer).

If a call to another internal station occurs in the meantime, the monitor switches OFF and the last monitor called is activated.

By using 1281 power supply and 1282E timer, the installation can be switched OFF by replacing the handset or at the end of the timing; by using 1281E the installation can be switched OFF only at the end of the timing.

By making a call to a video intercom with offhook handset, the monitors is activated without hearing the ringing call.

If more calls occur simultaneously, a protection circuit against overloading and short circuiting is provided to disable the timer and switch OFF the system. If provided for in the system, from any monitor it is possible to control the entrance by pressing the ① button (control switch ON). It is not possible to make this control using 1281 power supply together with 1282E timer during a conversation. Vice versa using 1281E power supply-timer the control switch ON is always possible.

To operate the electric door lock release press the — button.

In systems with 2 or more entrances, audio, video and door lock release switching between two entrances is automatic upon the call or control switching ON.

In systems with 2 or more entrances, the control switch ON from the monitors interrupt the communication in progress, consequently in multi-way systems it is advisable to interrupt during a communication the switch ON function by means of a relay art. 1471 or 1472, giving the priority to the communication to the external door stations (see installation diagrams of video intercom systems with several entrances).

In systems with intercommunicating service, the communication between monitors and/ or intercoms is possible only when the system is in stand-by.

### Adjustments

Being subject to the environmental lighting conditions, contrast and brightness can be adjusted by means of external knobs.

All the other adjustments can be carried out inside the monitor. For any necessary maintenance intervention of a specialized technician is mandatory.

The probability of breakdown in the video-intercom systems is obviously greater than in the intercom system. Consequently this brief troubleshooting takes into consideration the most common defects. When a defect is limited to only one monitor it is evident that the trouble is a short circuit to the monitor itself, to the connecting terminal board or to the wires that go to the riser. The simplest way to test the efficiency of a monitor is to connect it in another flat where everything functions correctly.

### Preliminary checks

- Check for the presence of the mains voltage between terminals 230 (or 127) and 0 of the power supply.
- The power supply is not provided with fuses, but all of its outputs are protected against overloading and short circuiting by temperature sensors.
   To reset the power supply, power must be cut OFF for about one minute and can be restored after having eliminated the problem.
- Check the voltage output of the power supply (see in detail the values indicated in the power supply and control chapter-page 109).
- Check that the cross section of the wire corresponds to what is indicated on page 111 and on the descriptions of each diagram.
- Check that the connection of the wire corresponds to the installation diagram.

### Problem, reason and solutions

# Monitors shut OFF. Ringing tone not present. Control switching ON not functioning.

Absence of main voltage. Short circuits or overloading of the output terminals of the power supply and/or timer. Faulty power supply. Faulty timer.

## Monitors shut OFF. Ringing tone not present. Control switch ON functioning.

The **C+** wire is interrupted. Faulty timer.

### Monitors turn ON. Absence of image.

The wire **H** that powers the camera is interrupted. The coaxial cable is interrupted or has a short circuit. The shield of the coaxial cable is interrupted. The video distributors (if present) are not being powered. Faulty camera unit.

# Control switch ON by monitors does not function.

Wire  ${\bf 4}$  is interrupted. Faulty timer. The system is working.

# The system does not shut OFF by replacing the handset.

Such a defect can be due to the non-working audio section from the door station to the monitors (see related section). Faulty timer. Faulty electric door speaker.

### Unfocused image.

Dirty optics or lens. Faulty camera.

# Image only slightly contrasted and/or out of synchronism.

Bad quality of coaxial cable or coaxial cable in dispersion. Nominal impedance of coaxial cable not of  $75\Omega$ . High distance system (use video amplifier art.476). Check the correct connection of the coaxial cable (see pages 112 and 113).

### The electric door lock does not function.

Faulty lock. The cross section of the wires indicated in bold type is insufficient. A connecting wire to the lock has been interrupted. The **5** wire is interrupted. Faulty timer.

### **Audio section**

### No audio from both channels.

Absence of power supply voltage between 3 and 4 of the electric door speaker (6÷8Vdc). Short circuit between 3 and F of the timer. The 3D wire is interrupted. Faulty timer.

### No audio from the monitors to the door station.

The **1D** or **1** wire (from the timer to the door station) is interrupted or has a short circuit. Absence of the ground connection to terminal **4** of the electric door speaker (amplifier). Faulty electric door speaker.

### No audio from the door station to the monitors.

The **2D** or **2** wire (from the timer to the door station) is interrupted or has a short circuit. Defective electric door speaker (amplifier).

# Audio with humming in the background (50/60Hz).

The wires have been canalized together with the cables that power AC loads. Separate the ground connection of the electric door speaker (amplifier) and of the name plate lights, or power them with an additional transformer (see recommendations on page 111). Faulty power supply.

# A whistle is heard at the external door station (Larsen effect).

The microphone hole of the external door station might be clogged. Lower the volume.

### Radio reception on the door station.

The defect can occur when there is a transmitter working in the proximity. Apply a capacitor from  $0.1\mu\text{F}$  between terminals 1 and 3 of the electric door speaker (amplifier).

### Intercommunicating systems

# During the intercommunication the door speaker is still connected.

The video system is ON (privacy towards the outside only when the video system is in standby). The module for intercommunicating has not been plugged in the timer art.1443E. Faulty timer.

### No audio in the intercommunicating service.

The wall-brackets of the monitors have the **J1** jumper in position of audio privacy (see pages 82 and 84). Defective module for intercommunicating. Faulty timer.

### The intercommunicating calls does not work.

Faulty timer. Check that wire **7** is connected correctly. Check the button connections inside the intercoms

### System with more entrances

### Entrance A is never activated.

Short circuit between  ${\bf 5}$  and  ${\bf 6}$  of the exchanger. Faulty exchanger.

### Entrance B is never activated.

Short circuit between **3** and **4** of the exchanger. Faulty exchanger. No power supply to **1** and **2** of the exchanger (12Vac; 17÷21Vdc).





1

### ONE-WAY VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION. Video connection with coaxial cable.

Q.ty	Article	Description
1	KM8100W+WB8600	Compact videointercom Fla

KINI8100W+WB8600 Cor	npact videointercom Fiat + bracket	
KM8600W+WB8600+8083	Compact videointercom + bracket +	
haali hay		

back box

KM8800W+WB8600 Compact videointercom reflex + bracket

ST7100W+WB7100 Studio series monitor + bracket ST720W+WB700 Studio series intercom + bracket

1281 **Power supply** 

1282E Timer

PA \*\* Door release button (optional) SE \*\* Electric door lock (12Vac-1A)

### Mody series external door station

1	MD/2	Back box and module frame
1	MD11	Module for electric door speaker
1	MD82	Hood cover
1	MD92*	Rain shelter and module frame
1	MD30	Electric door speaker (amplifier)
1	MD41	Camera

### Matrix series external door station

1	MA71	Back box and module frame
1	MA61	Frontframe

**MA43** Camera with audio amplifier and button call

MA91\* Rain shelter and module frame

### Profilo series external door station

PL71 Back box and module frame

PL41P Camera with audio amplifier and button call

- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- For the connection of name plate lamps read notes 6 and 7 of the installation instructions on page 111.
- For wires dimensioning refer to the installation instructions and table on page 111.

### 1304. MULTI-CORE CABLE

Video intercom cable with 10 wires of different cross-sections and  $75\Omega$  coaxial cable. It can be used in systems with a maximum distance of 100 meters (50m between timer and camera unit and 50m between timer and video intercom).

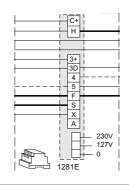


### Wire characteristics

Colour Red	Cross-section (mm²) 1	<i>AWG</i> 16
Yellow	0.5	20
Blue	0.5	20
Black	0.35	21
Green	0.35	21
Orange	0.35	21
White	0.25	23
Pink	0.25	23
Light blue	0.25	23
Grey	0.25	23

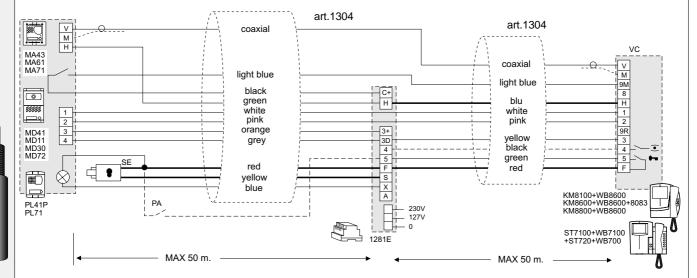
75 $\Omega$  low loss coaxial cable.

### Connection of 1281E power supply-timer instead of 1281 plus 1282E.



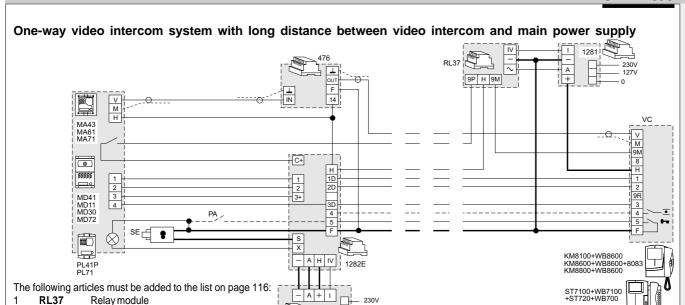
By adding 1281E to the schematics on pages 116 and 117 (si4110/1, si4110/2 and si411O/3) instead of 1281 plus 1282E, the installation will be switched OFF at the end of the timing only.

### **ONE-WAY VIDEO INTERCOM CONNECTION WITH MULTI-CORE CABLE art. 1304**



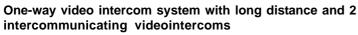






1281

\_ 127V



The following articles must be added to the list on page 116:

RL37 Relay module 1281 Power supply 476 Video amplifie

Power supply

Video amplifier

1 476 Video amplifier
1 2443 Amplifier-switcher for intercommunicating

PRS210 Transformer

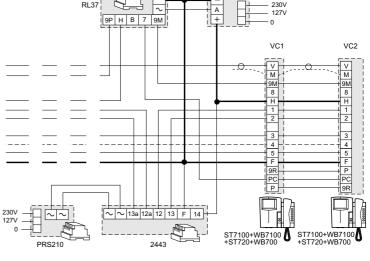
### Notes

1

1281

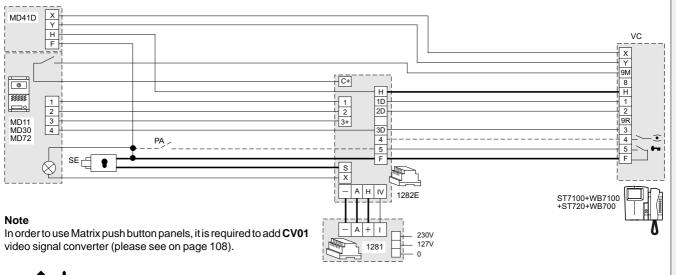
476

- On brackets **WB7100** the **jumper J1** must be moved from position **2-3** to **1-2**.
- On the bracket **WB7100** of the first video intercom you must  ${\bf cut}$  the 75 $\Omega$  resistance.



### Si 4110/2

### ONE-WAY VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION. Video connection with twisted pair







### VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1	MD30	MD30	Electric door speaker (amplifier)
1	MD41	MD41	Camera

### Matrix series external door station (for the composition see pages 102÷103)

MA71-72-73	Back boxes and module frames
MA61-62-63	Frontframes
MA20-22-24	Blank and button modules
MA42-43	Cameras with integrated audio amplifier
MA91-92-93*	Rain shelters and module frames
	MA61-62-63 MA20-22-24 MA42-43

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL40P-41P-42P	Cameras with integrated audio amplifier

- ... Refers to number of users.
- The rain shelter is used in the place of the back box and hood cover.
- Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

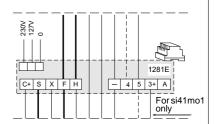
### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distribu-
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

When using MD100 and MD200 amplified external door stations, it is advisable to place this diagram on the diagram of page 119 and line it up with the riser.

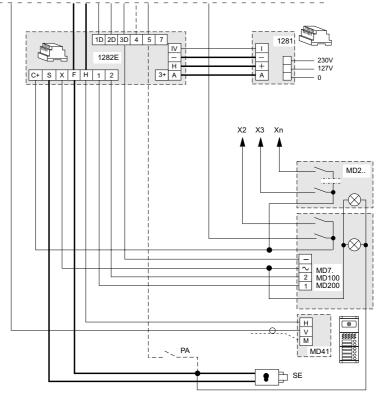
For AC powered wires refer to the indications on page

### Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.



By adding 1281E to the schematics on pages 118 and 119 instead of 1281 plus 1282E, the system working will modify as follows:

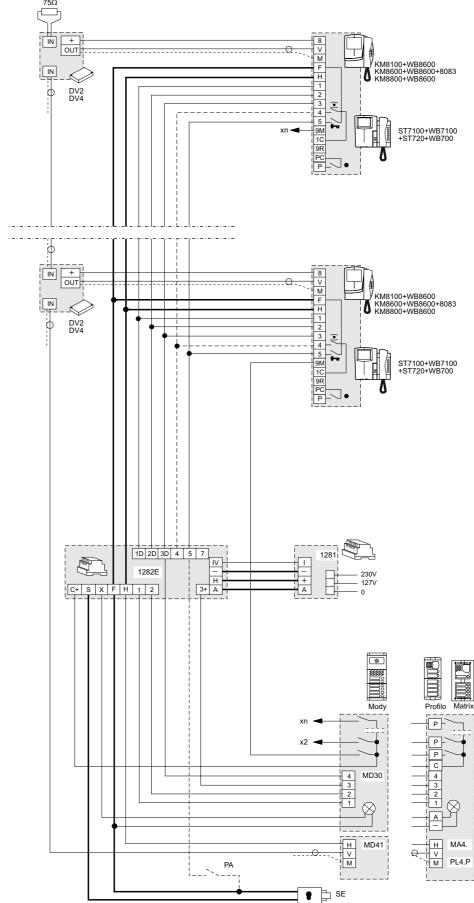
- switching-OFF at the end of the timing only
- no control switch-ON interruption with the video intercoms during external audiovideo connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.















## VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1	1281	Power supply
1	1282E	Timer
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1	MD30	MD30	Electric door speaker (amplifier)
1	MD41D(1)	MD41D(1)	Camera

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA42-43	Cameras with integrated audio amplifier
1	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL40P-41P-42P	Cameras with integrated audio amplifier
1	CV01	Video signal converter

... Refers to number of users.

- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

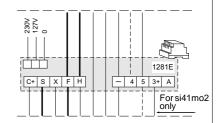
### Working instructions. See page 115.

### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

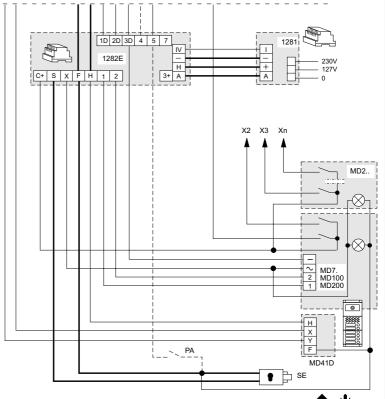
When using MD100 and MD200 amplified external door stations, it is advisable to place this diagram on the diagram of page 121 and line it up with the riser. For AC powered wires refer to the indications on page 111.

# Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.



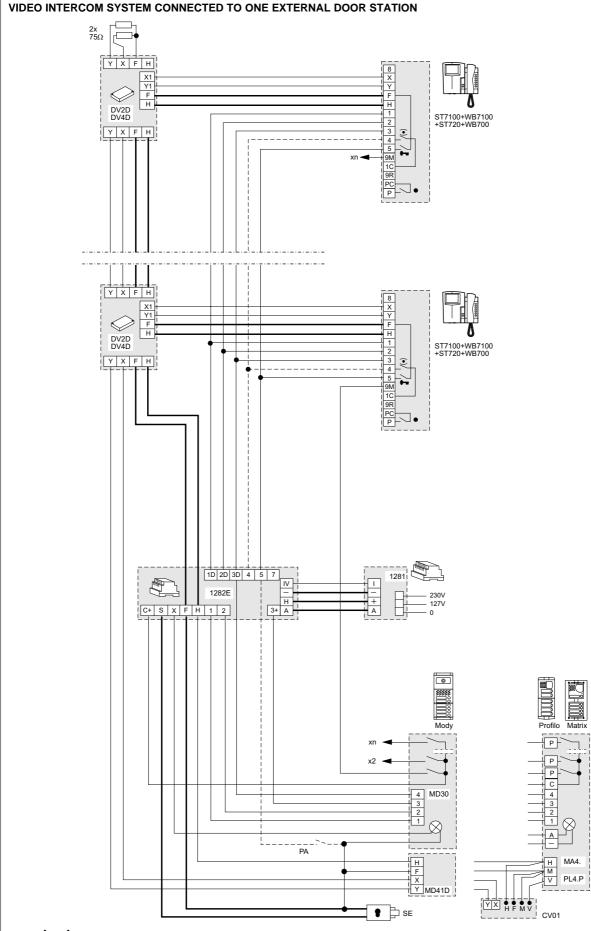
By adding **1281E** to the schematics on pages 120 and 121 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only
- no control switch-ON interruption with the video intercoms during external audiovideo connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.













INTERCOMS

### Si 41MO/3

### MIXED INTERCOM AND VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
	ST720W	Studio series intercom
	KM810W	Compact series intercom
	SM50E	Private conversation module
1	1281	Powersupply
1	1282E	Timer
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1	MD30	MD30	Electric door speaker (amplifier)
1	MD41	MD41	Camera

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA42-43	Cameras with integrated audio amplif
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frame
	PL20÷24	Blank and button modules
1	PL40P-41P-42P	Cameras with audio amplifier

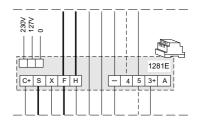
- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.
- By using MD100 and MD200 amplified external door stations, we recommend to place schematic on page 118 on the other on page 123.

# Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.



By adding **1281E** to the schematics on page 123 instead of 1281 plus 1282E, the system working will modify as follows:

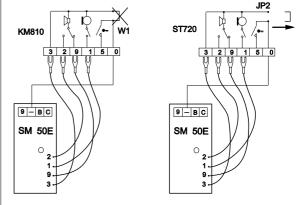
- switching-OFF at the end of the timing only
- no control switch-ON interruption with the video intercoms during external audiovideo connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.

### Private conversation

When the intercom is installed with the monitor (video intercom function), the service is provided by the bracket **WB7100** (position 2-3 of **jumper J1**).

If the user has the intercom function only, you must install the **SM50E** private conversation module in the intercom and:

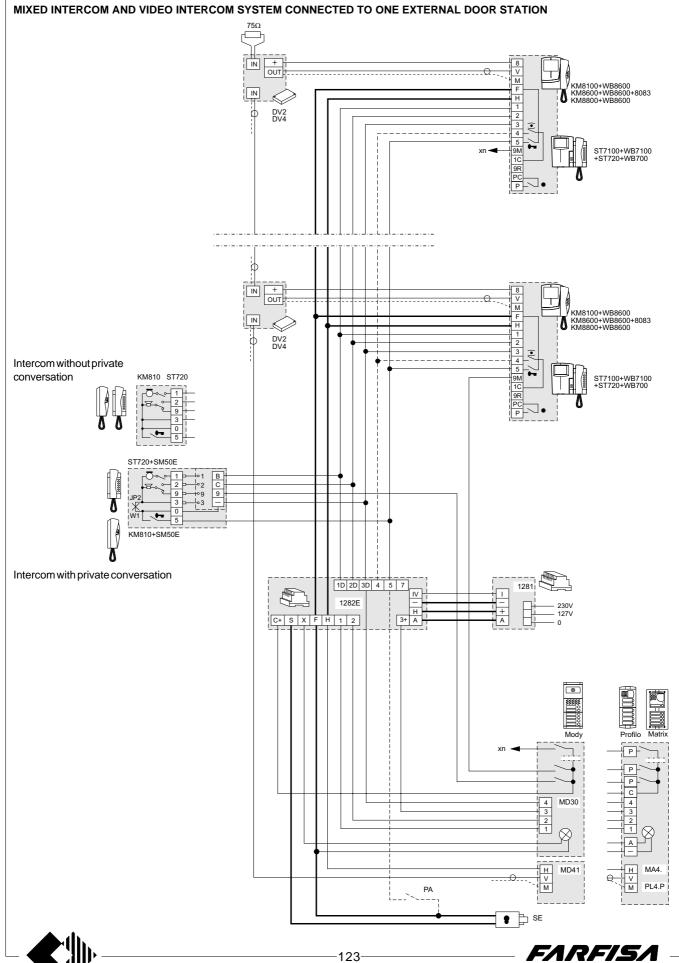
- (ST 720) remove the mobile jumper inside the connector JP2
- (KM 810) cut jumper W1 joining terminals 3 and 0.
- **connect** terminal 0 of the intercom to terminal (minus) of the SM50E module.











### MIXED INTERCOM AND VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
	ST720W	Studio series intercom
	SM50E	Private conversation module
1	1281	Power supply
1	1282E	Timer
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

 1   1 1	1 row MD71÷74 MD10-11-12 MD21 ÷ 24 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30		Back boxes and module frames Modules for electric door speaker Button modules Blank and info modules Hood covers Rain shelters and module frames Electric door speaker (amplifier)
1	MD30	MD30	Electric door speaker (amplifier)
1	MD41D(1)	MD41D(1)	Camera

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA42-43	Cameras with integrated audio amplifier
1	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

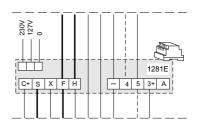
	PL71-72-73	Back boxes and module frame:
	PL20÷24	Blank and button modules
1	PL40P-41P-42P	Cameras with audio amplifier
1	CV01	Video signal converter

- Refers to number of users.The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

### Working instructions. See page 115.

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

### Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.



By adding 1281 E to the schematics on page 125 instead of 1281 plus 1282E, the system working will modify as follows:

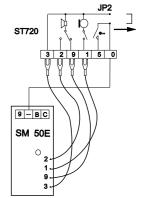
- switching-OFF at the end of the timing only
- no control switch-ON interruption with the video intercoms during external audiovideo connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.

### **Private conversation**

When the intercom is installed with the monitor (video intercom function), the service is provided by the bracket WB7100 (position 2-3 of jumper J1).

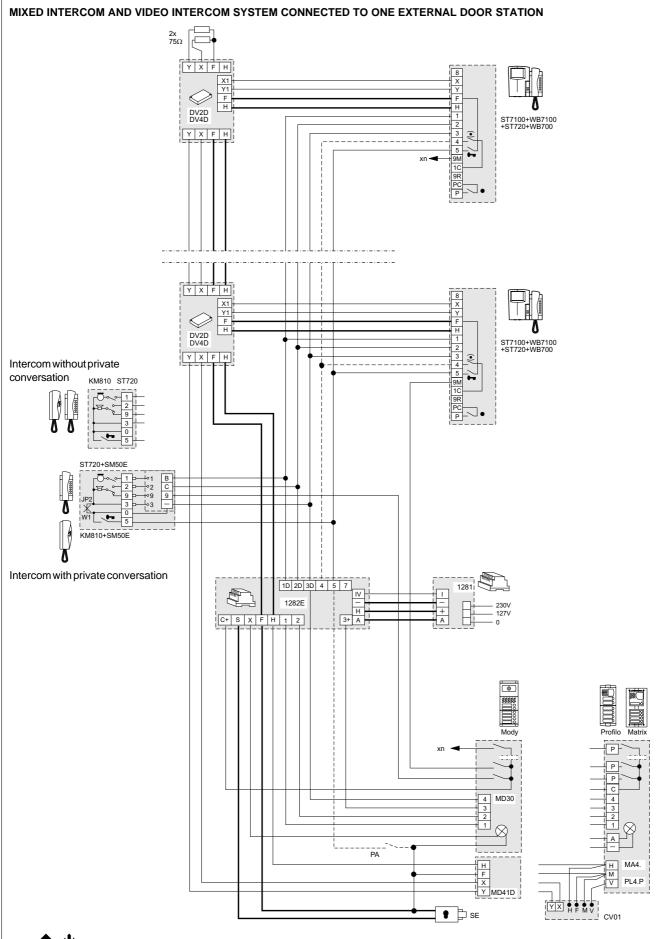
If the user has the intercomfunction only, you must install the **SM50E** private conversation module in the intercom and:

- remove the mobile jumper inside the connector JP2
- -connect terminal 0 of the intercom to terminal -(minus) of the SM50E module.











### Si 41MO/5

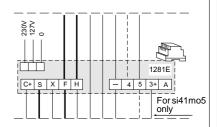
### VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION WITH SURVEILLANCE CAMERA

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	1471	Relayunit
1	TVT	CCTV camera
1	Н	Lens with or without autoiris
1	CU	Outdoor heated housing
1	AST	Bracket for camera or housing
1	APS	Power supply for camera
1	LL**	Lamp with maximum power 800W (optional)
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

 1 	1 row MD71÷74 MD10-11-12 MD21 ÷ 24 MD20 - 50	2 row MD71÷74 MD10-122-124 MD222 ÷ 228 MD20 - 50	Back boxes and module frames Modules for electric door speaker Button modules Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers Rain shelters and module frames Electric door speaker (amplifier)
1	MD92 ÷ 912*	MD92 ÷ 912*	
1	MD30	MD30	

# Connection of 1281E power supply-timer instead of 1281 plus 1282E.



By adding **1281E** to the schematics on pages 126 and 127 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only
- no control switch-ON interruption with the video intercoms during external audiovideo connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.

# Matrix series external door station (for the composition see pages 102÷103)

	MA/1-/2-/3	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
	MA91-92-93*	Rain shelters and module frames

# Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frame:
	PL20÷24	Blank and button modules
1	PL10P-11P-12P	Modules with audio amplifier

- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

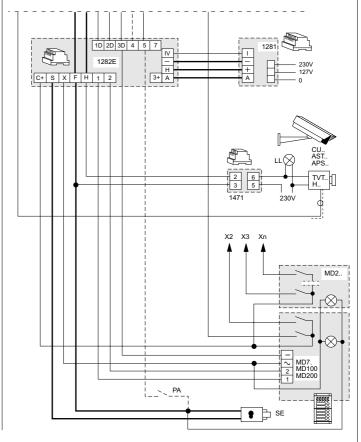
### Working instructions. See page 115.

### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the **ST7100CW** video intercoms and the **colour CCTV** cameras must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For the selection of CCTV equipment or other types of pushbutton panels see the general catalogue.

When using **MD100** and **MD200** amplified external door stations, it is advisable to place this diagram on the diagram of page 127 and line it up with the riser.

For AC powered wires refer to the indications on page 111.

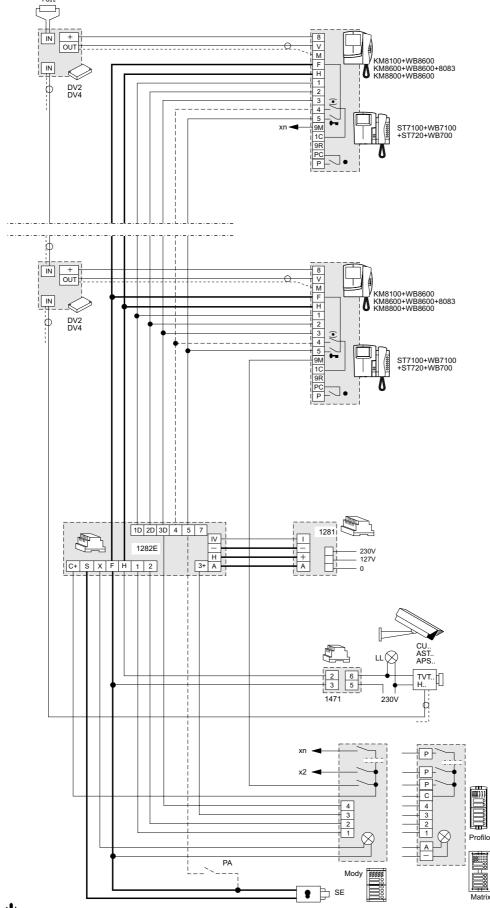
















**I** ELECOMMUNICATION

## VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION WITH SURVEILLANCE CAMERA

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1	1281	Power supply
1	1282E	Timer
1	CV01	Video signal converter
1	1471	Relayunit
1	TVT	CCTV camera
1	Н	Lens with or without autoiris
1	CU	Outdoor heated housing
1	AST	Bracket for camera or housing
1	APS	Power supply for camera
1	LL**	Lamp with maximum power 800W (optional)
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1	MD30	MD30	Electric door speaker (amplifier)

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
	MA91-92-93*	Rain shelters and module frames

# Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL10P-11P-12P	Modules with audio amplifier

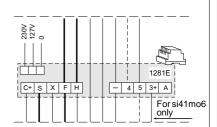
- ... Refers to number of users.
- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the **ST7100CW** video intercoms and the **colour CCTV** cameras must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For the selection of CCTV equipment or other types of pushbutton panels see the general catalogue.

# Connection of 1281 E power supply-timer instead of 1281 plus 1282 E.

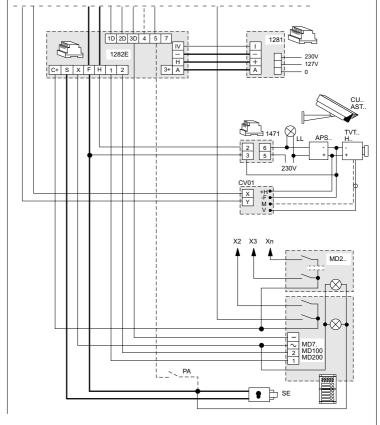


By adding **1281E** to the schematics on pages 128 and 129 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only
- no control switch-ON interruption with the video intercoms during external audiovideo connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.

When using **MD100** and **MD200** amplified external door stations, it is advisable to place this diagram on the diagram of page 129 and line it up with the riser.

For AC powered wires refer to the indications on page 111.

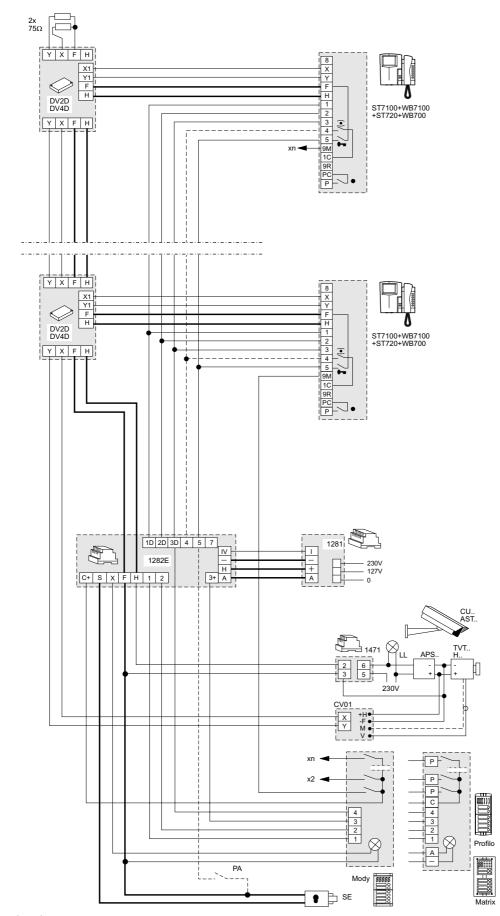






**VIDEOINTERCOMS** 

### VIDEO INTERCOM SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION WITH SURVEILLANCE CAMERA







### VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	1273TV	Exchanger
2	PA **	Door release button (optional)
2	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2	MD30	MD30	Electric door speaker (amplifier)
2	MD41	MD41	Camera

### Matrix series external door station (for the composition see pages 102÷103)

 MA71-72-73	Back boxes	s and module	frames

... MA61-62-63 Front frames

... MA20-22-24 Blank and button modules

2 MA42-43 Cameras with integrated audio amplifier

... MA91-92-93\* Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

.. PL71-72-73 Back boxes and module frames
.. PL20÷24 Blank and button modules

2 **PL40P-41P-42P** Cameras with integrated audio amplifier

... Refers to number of users.

- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

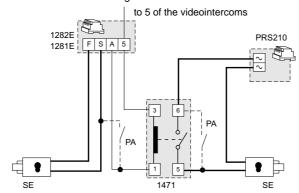
### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, you must connect the dashed wires and the two terminals 1C and PC in each video intercom.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

### Connection of 2 door locks with simultaneous opening

If it is necessary to operate the 2 door locks of the system at the same time, you must:

- add a 12Vac transformer with suitable power (type PRS210)
- add a 12Vac relay (type 1471)
- make the connections as shown in the diagram below.



## Control switching ON deactivation

To activate the control switching ON from the intercoms only when the system is in standby, it is necessary to install a 2-exchange relay (type **1472**) and connect it as shown on the diagram.

Connection of 1281 Epower supply-timer

By adding 1281E to the schematics on page

131 instead of 1281 plus 1282E, the system

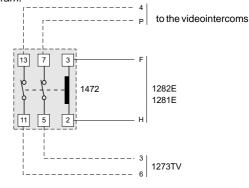
- switching-OFF at the end of the timing only

working will modify as follows:

instead of 1281 plus 1282E.

230V

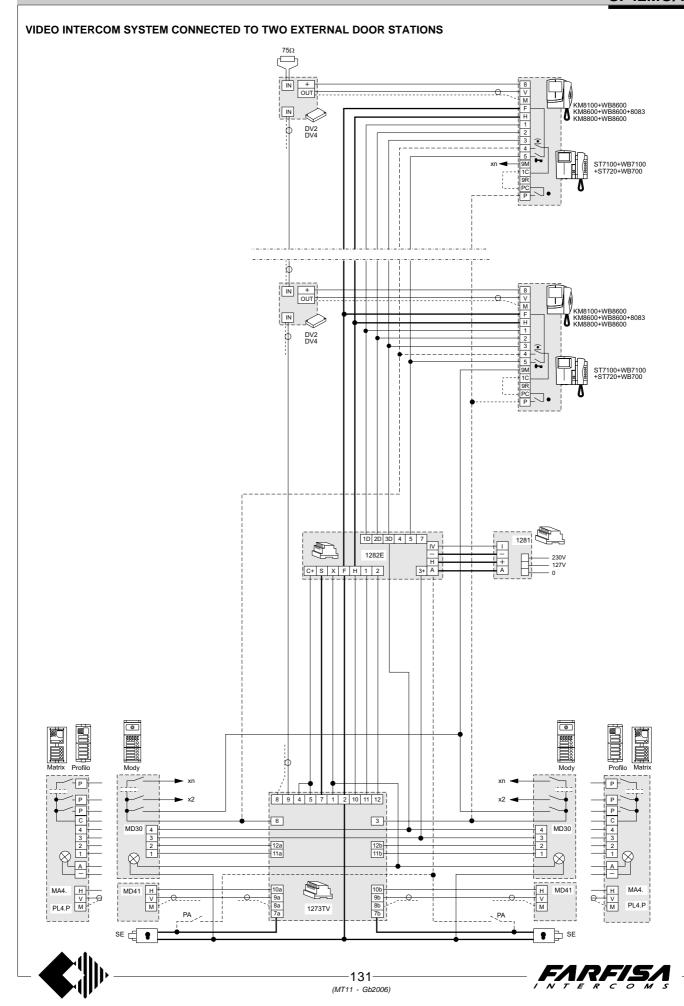
C+ S X











### VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	1273TV	Exchanger
2	PA **	Door release button (optional)
2	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2	MD30	MD30	Electric door speaker (amplifier)
2	MD41D (1)	MD41D (1)	Camera

Matri	<u>ix series external door :</u>	<u>station (for the composition see pages 102÷103</u>
	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
2	MA42-43	Cameras with integrated audio amplifier
2	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
2	PL40P-41P-42P	Cameras with integrated audio amplifier
2	CV01	Video signal converter

... Refers to number of users.

- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

### Working instructions. See page 115.

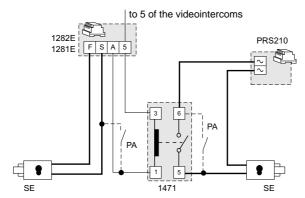
### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, you must connect the dashed wires and the two terminals 1C and PC in each video intercom.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

### Connection of 2 door locks with simultaneous opening

If it is necessary to operate the 2 door locks of the system at the same time, you must:

- add a 12Vac transformer with suitable power (type PRS210)
- add a 12Vac relay (type 1471)
- make the connections as shown in the diagram below.



## **Control switching ON deactivation**

To activate the control switching ON from the intercoms only when the system is in standby, it is necessary to install a 2exchange relay (type 1472) and connect it as shown on the diagram.

Connection of 1281 Epower supply-timer

By adding 1281E to the schematics on page 133 instead of 1281 plus 1282E, the system

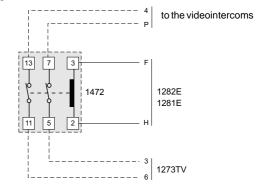
- switching-OFF at the end of the timing only

working will modify as follows:

4 5 3+

instead of 1281 plus 1282E.

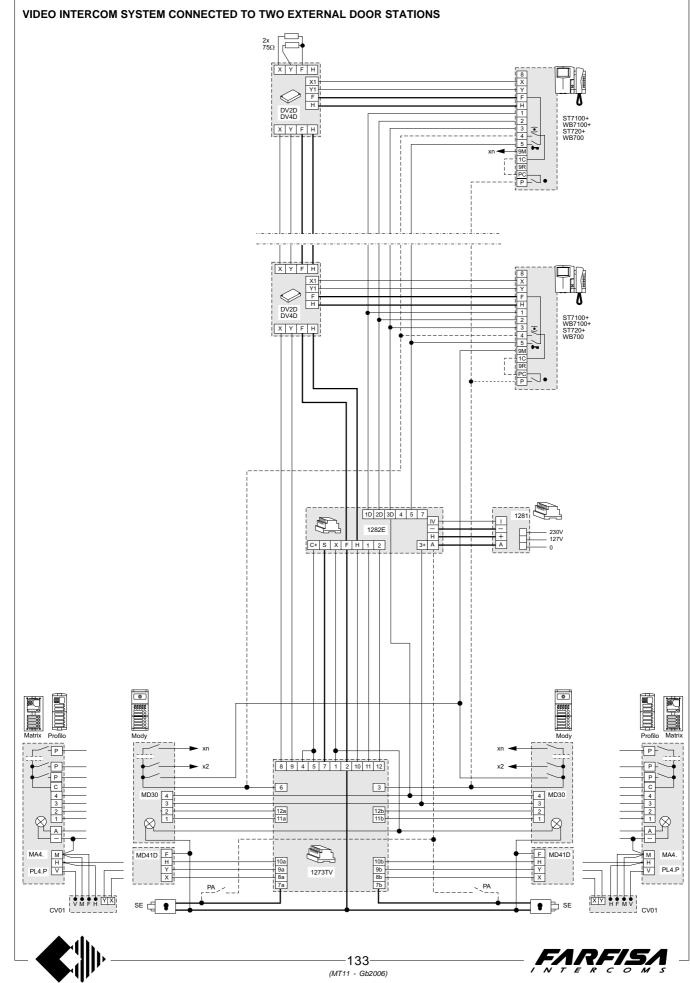
230V











### VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	1473	Exchanger
2	PA **	Door release button (optional)
2	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2	MD30	MD30	Electric door speaker (amplifier)
1	MD41	MD41	Camera

### Matrix series external door station (for the composition see pages 102÷103)

	MA/1-/2-/3	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL10P-11P-12P	Modules with audio amplifier
1	PL40P-41P-42P	Cameras with integrated audio amplifier

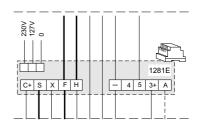
- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section)
- For other types of push-button panels see the general catalogue.

# Connection of 1281 E power supply-timer instead of 1281 plus 1282 E.

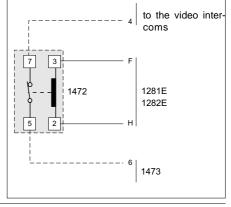


By adding **1281E** to the schematics on page 135 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

### **Control switching ON deactivation**

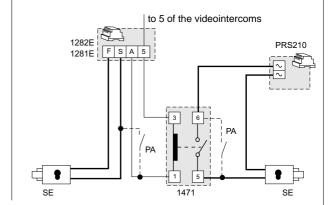
To activate the control switching ON from the intercoms only when the system is in standby, it is necessary to install a relay (type **1471** or **1472**) and connect it as shown on the diagram.



### Connection of 2 door locks with simultaneous opening

If it is necessary to operate the 2 door locks of the system at the same time, you must:

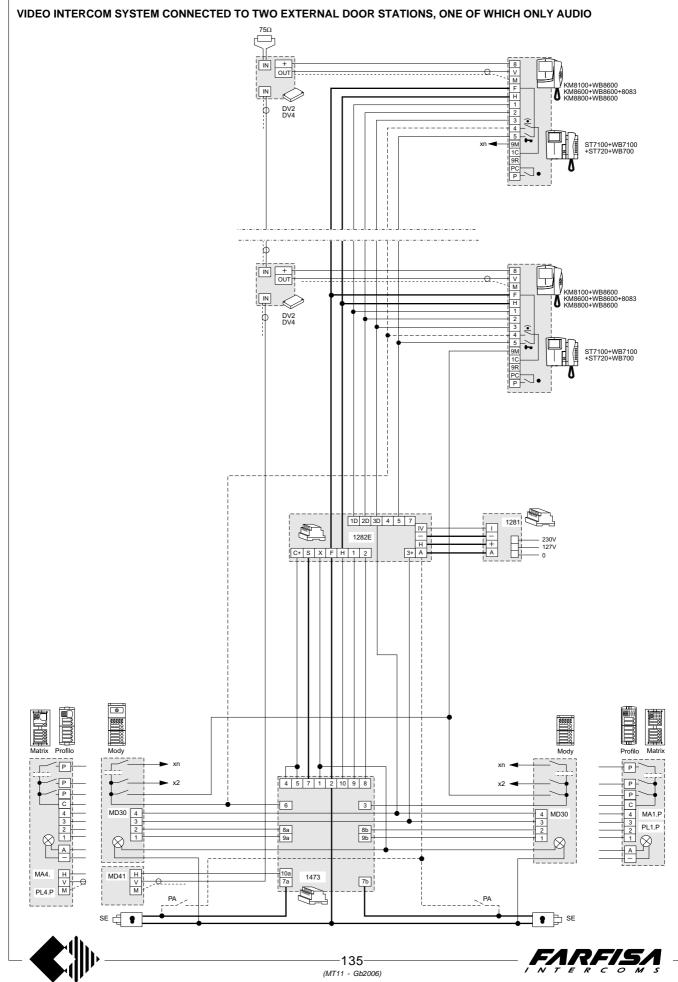
- add a 12Vac transformer with suitable power (type PRS210)
- add a 12Vac relay (type 1471)
- make the connections as shown in the diagram below.











### VIDEO INTERCOM SYSTEM CONNECTED TO TWO EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	1473	Exchanger
2	PA **	Door release button (optional)
2	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2	MD30	MD30	Electric door speaker (amplifier)
1	MD41D (1)	MD41D (1)	Camera

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier
1	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL10P-11P-12P	Modules with audio amplifier
1	DI 40D 41D 42D	Camarae with intograted audio am

Cameras with integrated audio amplifier

1 **CV01** Video signal converter

- ... Refers to number of users.
- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

### Working instructions. See page 115.

### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication"
- For other types of push-button panels see the general catalogue.

### Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.

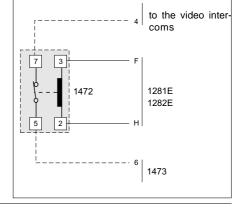


By adding 1281E to the schematics on page 137 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

### **Control switching ON deactivation**

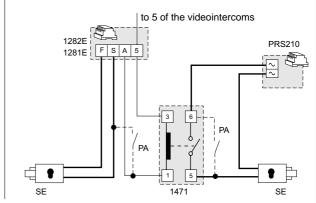
To activate the control switching ON from the intercoms only when the system is in standby, it is necessary to install a relay (type 1471 or 1472) and connect it as shown on the diagram.



### Connection of 2 door locks with simultaneous opening

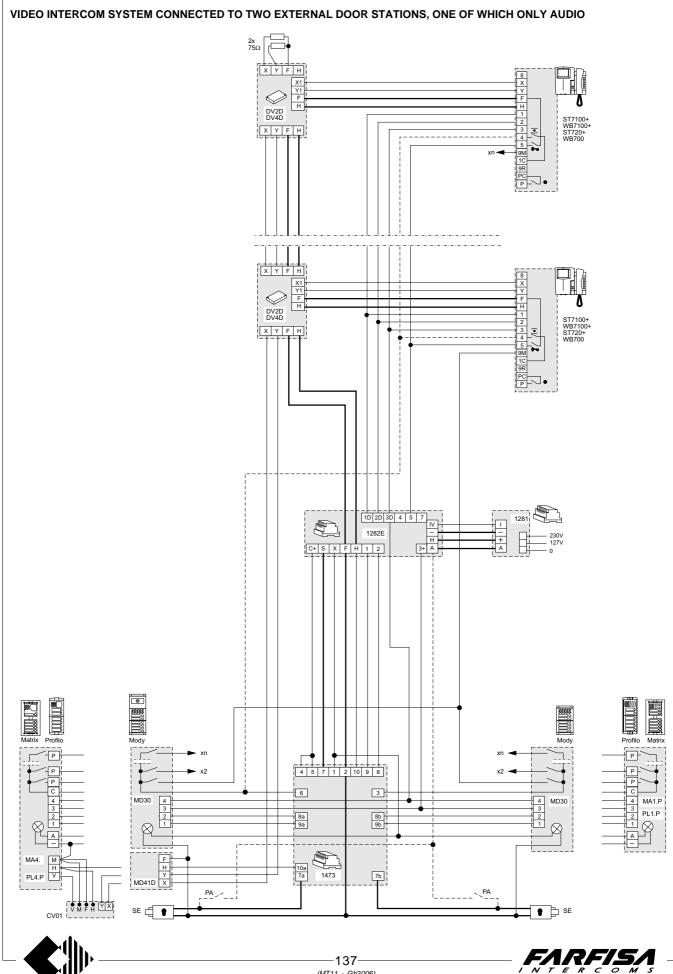
If it is necessary to operate the 2 door locks of the system at the same time, you must:

- add a 12Vac transformer with suitable power (type **PRS210**)
- add a 12Vac relay (type 1471)
- make the connections as shown in the diagram below.









### VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Powersupply
1	1282E	Timer
2	1273TV	Exchanger
3	PA **	Door release button (optional)
3	SE **	Flectric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

3 MD10-11-12 MD10-122-124 Moc MD21 ÷ 24 MD222 ÷ 228 But MD20 - 50 MD20 - 50 Blan 3 MD82 ÷ 812 MD82 ÷ 812 Hoc 3 MD92 ÷ 912* MD92 ÷ 912* Rain 3 MD30 MD30 Elec	ack boxes and module frames odules for electric door speaker utton modules lank and info modules ood covers ain shelters and module frames lectric door speaker (amplifier) amera
--	--

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
3	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
3	PL40P-41P-42P	Cameras with integrated audio amplifier

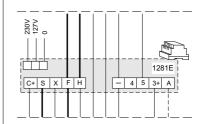
- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If control switch-ON is required, connect the dashed conductors and connect terminals 1C with PC of the bracket and, for Studio monitors, also with terminal C of the additional button to be added to the intercom. Control switch-on of "C" entrance can be made with Studio monitors only, by adding 1 additional button on the intercom and by making directly the connections in the intercom.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

# $Connection of 1281 Epower supply-timer instead of 1281 \ plus \ 1282 E.$

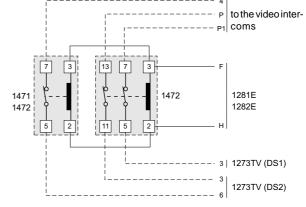


By adding **1281E** to the schematics on page 139 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

### **Control switching ON deactivation**

To activate the control switching ON from the video intercoms only when the system is in standby, it is necessary to install two 2-exchange relays (type **1472**) and connect them as shown on the diagram.

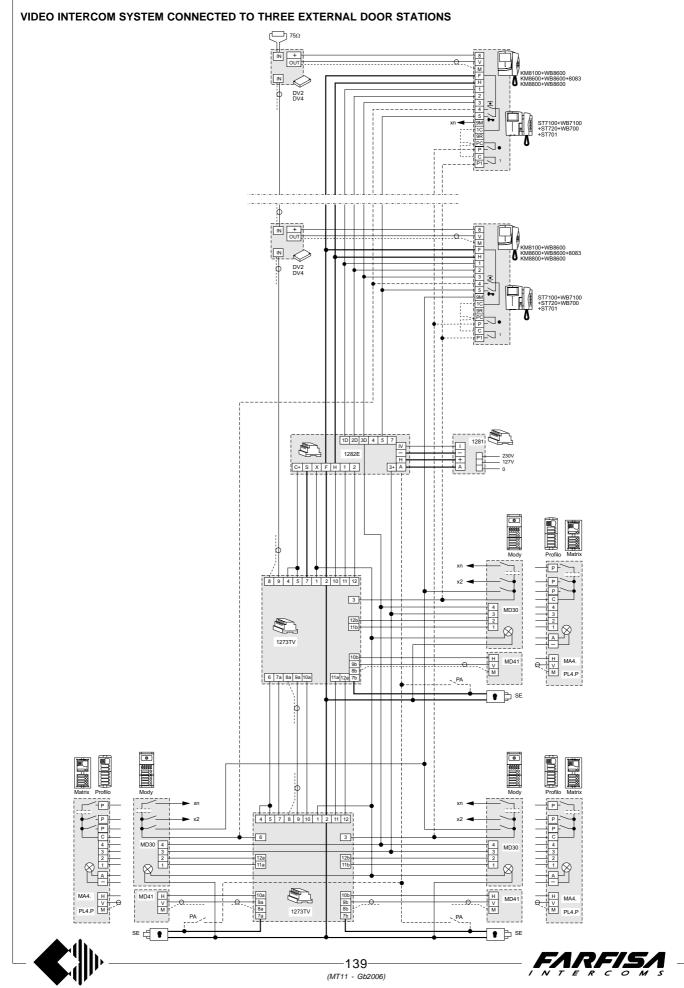


DS1 and DS2 are diagram references.









### VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1	1281	Power supply
1	1282E	Timer
2	1273TV	Exchanger
3	PA **	Door release button (optional)
3	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

1 row	2 row	
MD71÷74	MD71÷74	Back boxes and module frames
MD10-11-12	MD10-122-124	Modules for electric door speaker
MD21 ÷ 24	MD222 ÷ 228	Button modules
MD20 - 50	MD20 - 50	Blank and info modules
MD82 ÷ 812	MD82 ÷ 812	Hood covers
MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
MD30	MD30	Electric door speaker (amplifier)
MD41D(1)	MD41D(1)	Camera
	MD71÷74 MD10-11-12 MD21 ÷ 24 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30	MD71÷74 MD71÷74 MD10-11-12 MD10-122-124 MD21 ÷ 24 MD20 - 50 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30 MD30

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
3	MA42-43	Cameras with integrated audio amplifier
3	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

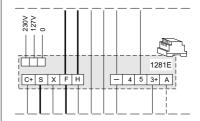
	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
3	PL40P-41P-42P	Cameras with integrated audio amplifier
3	CV01	Video signal converter

- ... Refers to number of users.
- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

### Working instructions. See page 115.

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is needed, connect the dashed wires and connect terminals 1C and PC of the bracket and terminal C of the additional button to be applied in the intercom.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

### Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.

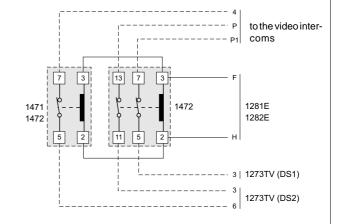


By adding 1281 E to the schematics on page 141 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

### Control switching ON deactivation

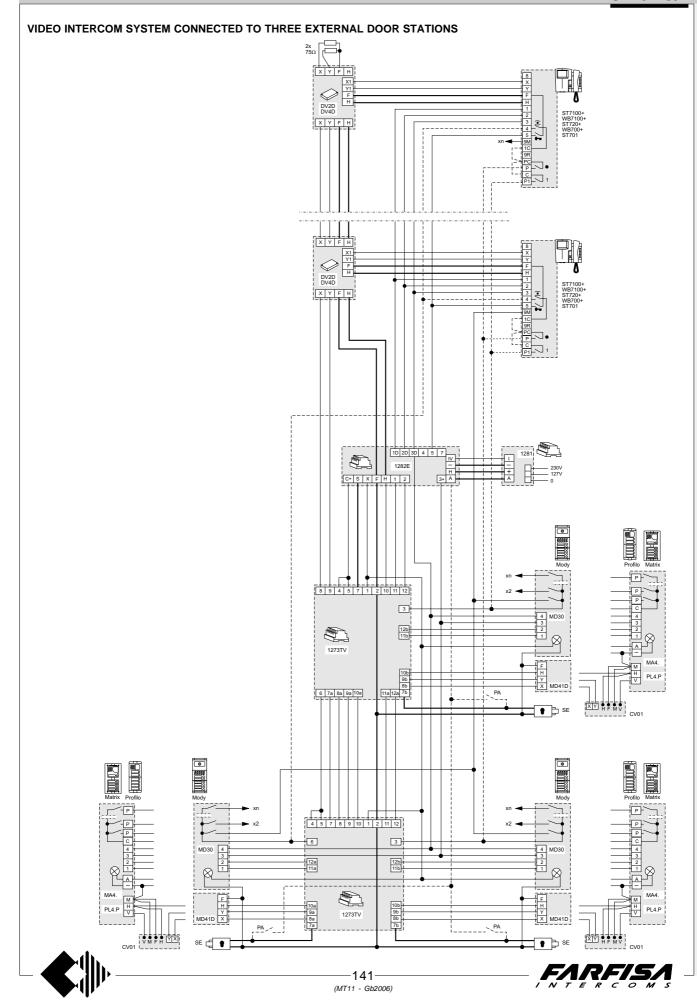
To activate the control switching ON from the video intercoms only when the system is in standby, it is necessary to install two 2-exchange relays (type 1472) and connect them as shown on the diagram.



DS1 and DS2 are diagram references.







VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Power supply
1	1282E	Timer
1	1473	Exchanger
1	1273TV	Exchanger
3	PA **	Door release button (optional)
3	SE **	Electric door lock (12Vac-1A)

### Mody series external door station (for the composition see pages 96÷99)

 3  3 3 3	1 row MD71÷74 MD10-11-12 MD21 ÷ 24 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30 MD41	2row MD71÷74 MD10-122-124 MD222 ÷ 228 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30 MD41	Back boxes and module frames Modules for electric door speaker Button modules Blank and info modules Hood covers Rain shelters and module frames Electric door speaker (amplifier) Camera
--------------------------	---	--	--

### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
2	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL10P-11P-12P	Modules with audio amplifier

2 **PL40P-41P-42P** Cameras with integrated audio amplifier

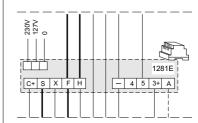
- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

### Working instructions. See page 115.

### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, you must connect the dashed wires and the two terminals 1C and PC in each video intercom.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

# Connection of 1281E power supply-timer instead of 1281 plus 1282E.

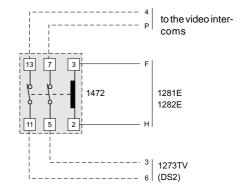


By adding **1281E** to the schematics on page 143 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

### **Control switching ON deactivation**

To activate the control switching ON from the intercoms only when the system is in standby, it is necessary to install a 2-exchange relay (type **1472**) and connect it as shown on the diagram.



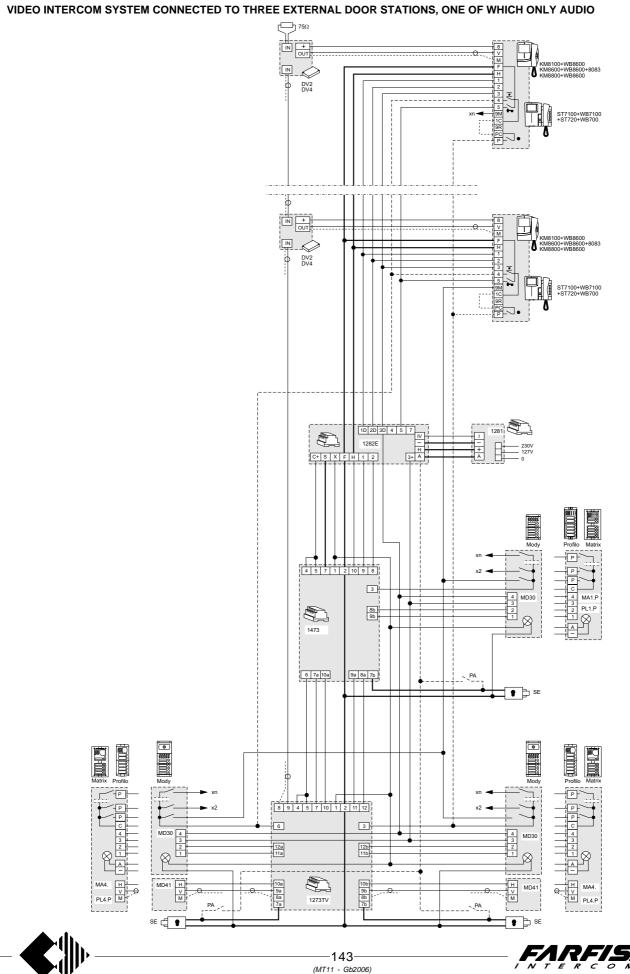
DS2 is a diagram reference















#### VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	1473	Exchanger
1	1273TV	Exchanger
3	PA **	Door release button (optional)
3	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
3	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
3	MD82 ÷ 812	MD82 ÷ 812	Hood covers
3	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
3	MD30	MD30	Electric door speaker (amplifier)
2	MD41D(1)	MD41D(1)	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

IVIALI	TIX Series external door st	ation (for the composition see pages 102+103)
	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
2	MA42-43	Cameras with integrated audio amplifier
2	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames
1		

#### Profilo series external door station (for the composition see pages 106÷107)

Video signal converter

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL10P-11P-12P	Modules with audio amplifier
2	PL40P-41P-42P	Cameras with integrated audio amplifier

... Refers to number of users.

CV01

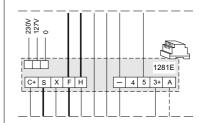
- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

#### Working instructions. See page 115.

2

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, you must connect the dashed wires and the two terminals 1C and PC in each video intercom.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

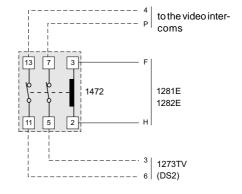
#### Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.



By adding 1281E to the schematics on page 145 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

### **Control switching ON deactivation**

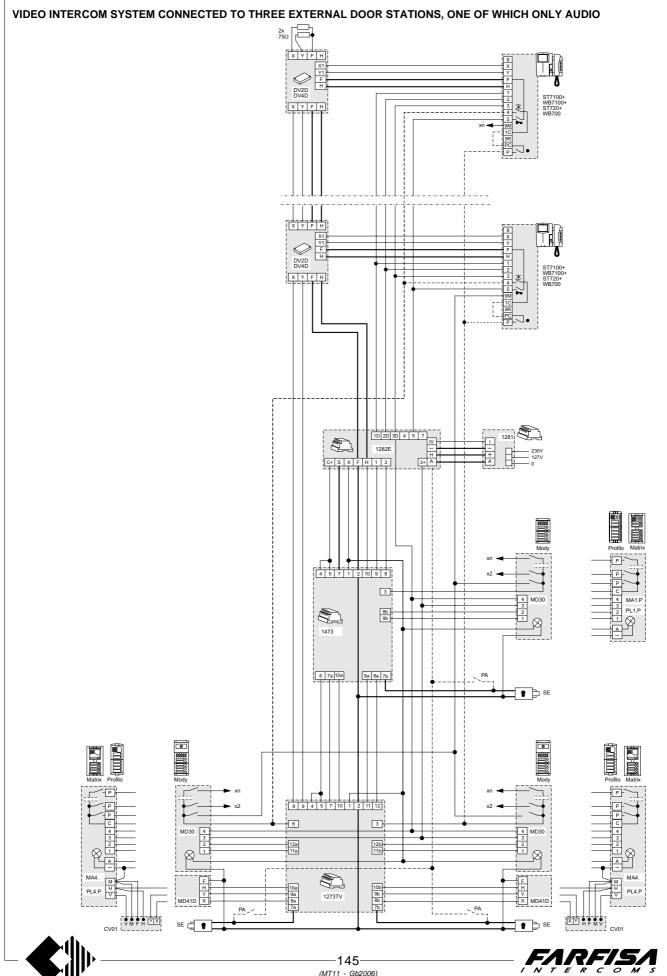


DS2 is a diagram reference











INTERCOMS

#### Si 43MO/5

#### VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, TWO OF WHICH ONLY AUDIO

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Power supply
1	1282E	Timer
2	1473	Exchanger
3	PA **	Door release button (optional)
3	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
3	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
3	MD82 ÷ 812	MD82 ÷ 812	Hood covers
3	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
3	MD30	MD30	Electric door speaker (amplifier)
1	MD41	MD41	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
2	MA10P-11P-12P	Modules with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
2	PL10P-11P-12P	Modules with audio amplifier
1	DI 40D 44D 42D	Compress with integrated audio

1 PL40P-41P-42P Cameras with integrated audio amplifier

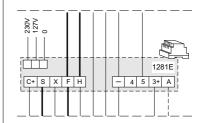
- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

#### Working instructions. See page 115.

#### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

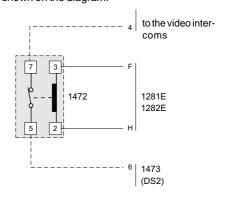
## $Connection of 1281 Epower supply-timer instead of 1281 \ plus 1282 E.$



By adding **1281E** to the schematics on page 147 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

#### Control switching ON deactivation

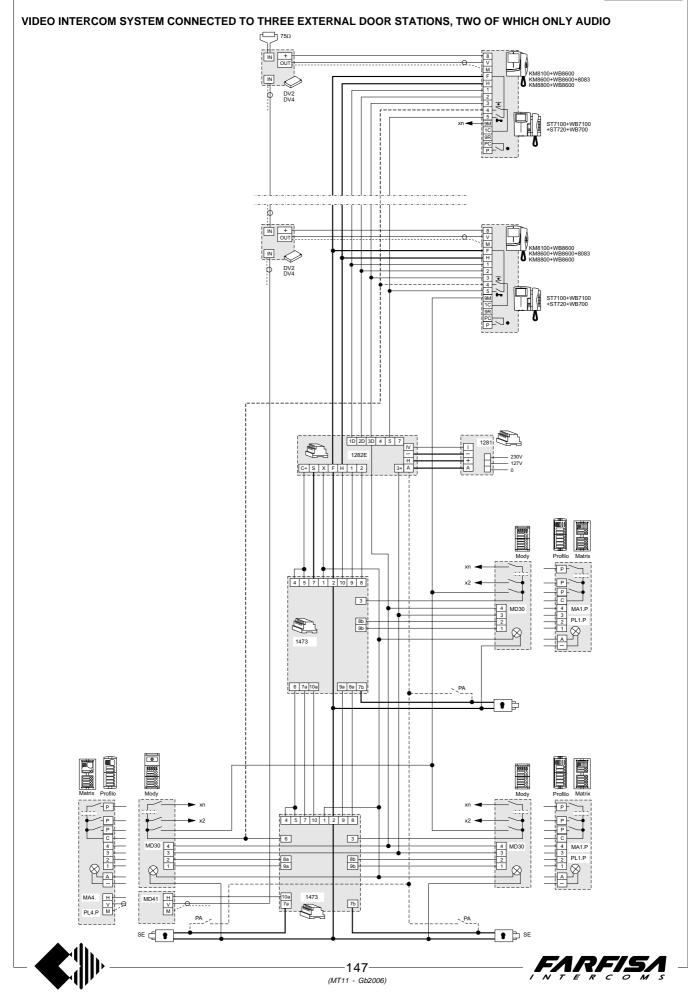


DS2 is a diagram reference









#### VIDEO INTERCOM SYSTEM CONNECTED TO THREE EXTERNAL DOOR STATIONS, TWO OF WHICH ONLY AUDIO

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1	1281	Powersupply
1	1282E	Timer
2	1473	Exchanger
3	PA **	Door release button (optional)
3	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

2 row	
MD71÷74	Back boxes and module frames
MD10-122-124	Modules for electric door speaker
MD222 ÷ 228	Button modules .
MD20 - 50	Blank and info modules
MD82 ÷ 812	Hood covers
MD92 ÷ 912*	Rain shelters and module frames
MD30	Electric door speaker (amplifier)
MD41D(1)	Camera
	MD71÷74 MD10-122-124 MD222 ÷ 228 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
2	MA10P-11P-12P	Modules with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier
1	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	DI 74 70 70	De alabassa an desa della forma
	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
2	PL10P-11P-12P	Modules with audio amplifier
1	PL40P-41P-42P	Cameras with integrated audio amplifier
1	CV01	Video signal converter

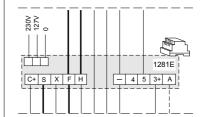
- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

#### Working instructions. See page 115.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For one-way systems connect the coaxial cable to the monitor bracket directly, without using the video distributor.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

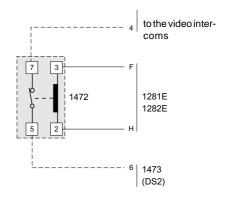
## Connection of 1281 E power supply-timer instead of 1281 plus 1282 E.



By adding **1281E** to the schematics on page 149 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

#### Control switching ON deactivation

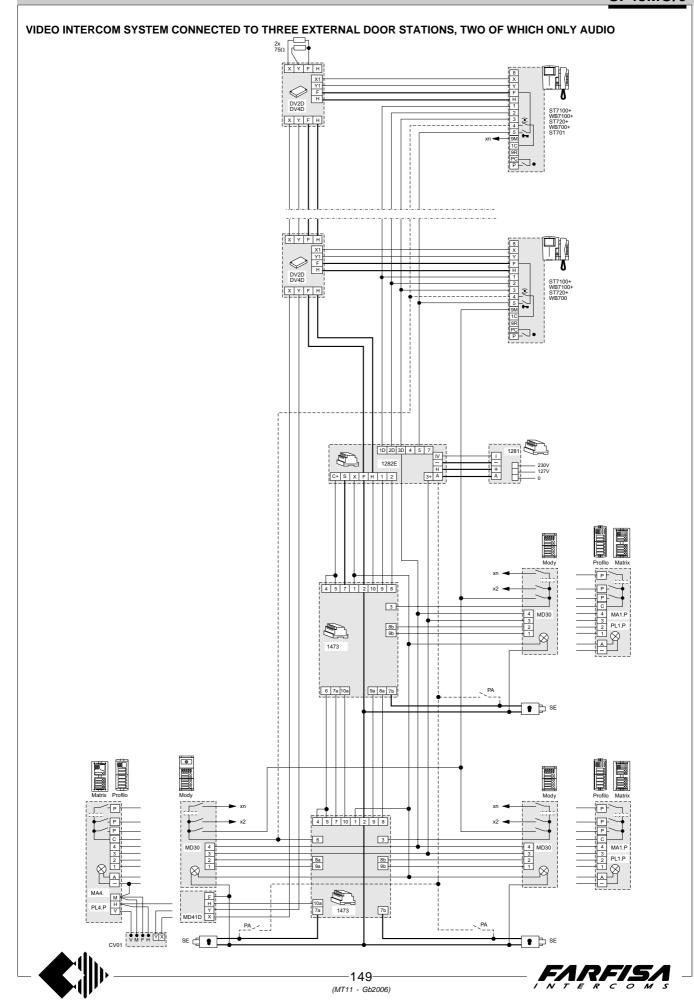


DS2 is a diagram reference









Article

SE \*\*

1+X

#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Q.ly	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1+X	1281	Powersupply
1+X	1282E	Timer
Χ	1273TV	Exchanger
1+	476	Video distributor-amplifier
1+X	PA **	Door release button (optional)

Electric door lock (12Vac-1A)

Description

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1+X	MD30	MD30	Electric door speaker (amplifier)
1+X	MD41	MD41	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73 MA61-62-63	Back boxes and module frames Frontframes
	MA20-22-24	Blank and button modules
1+X	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

Profilo series external door station (for the composition see pages 106÷107)

 PL71-72-73	Back boxes and module frames
 PL20÷24	Blank and button modules

1+X PL40P÷42P Cameras with integrated audio amplifier

- ... Refers to number of users.
- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

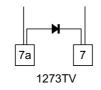
### Working instructions. See page 115.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

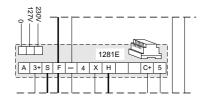
### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.

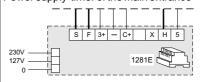


## Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



#### Power supply-timer of the main entrance

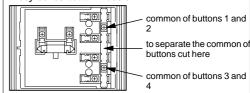


By adding **1281E** to the schematic on page 151 instead of 1281 plus 1282E, the system working will modify as follows:

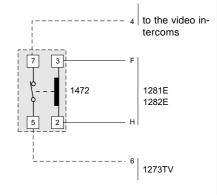
- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.

Mody series button module



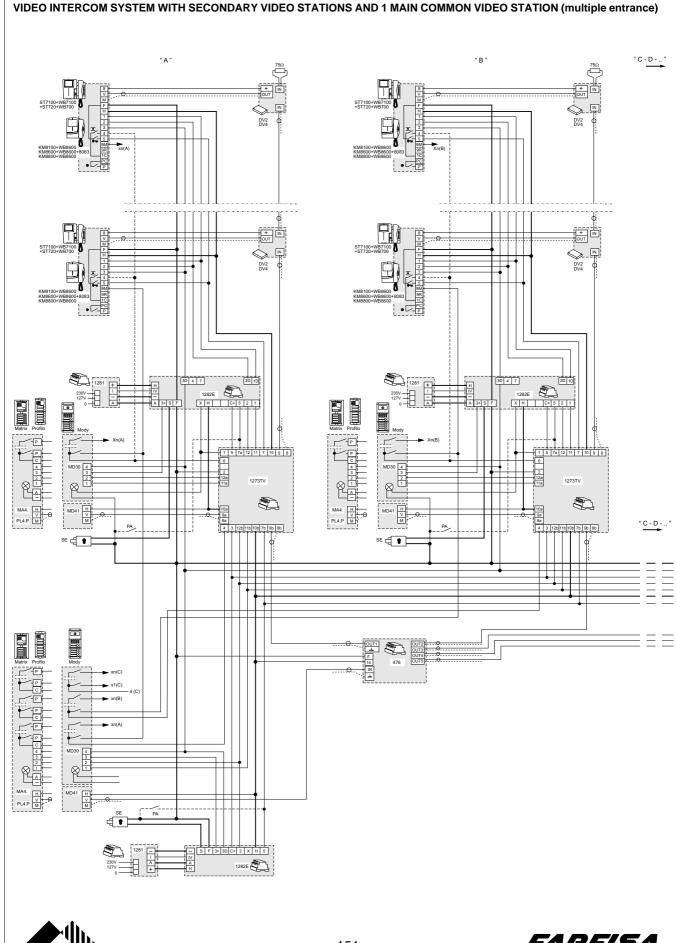
#### **Control switching ON deactivation**











#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1+X	1281	Power supply
1+X	1282E	Timer
Χ	1273TV	Exchanger
1+X	PA **	Door release button (optional)
1+X	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1+X	MD30	MD30	Electric door speaker (amplifier)
1+X	MD41D(1)	MD41D(1)	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1+X	MA42-43	Cameras with integrated audio amplifier
1+X	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	1 L1 1-12-13	Dack boxes and module frames
	PL20÷24	Blank and button modules
1+X	PL40P÷42P	Cameras with integrated audio amplifier
1+X	CV01	Video signal converter

- ... Refers to number of users.
- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

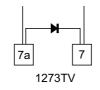
#### Working instructions. See page 115.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

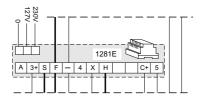
### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.

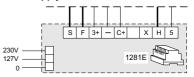


### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



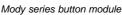
Power supply-timer of the main entrance

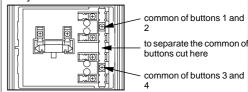


By adding **1281E** to the schematic on page 153 instead of 1281 plus 1282E, the system working will modify as follows:

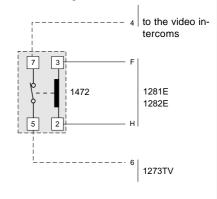
- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.





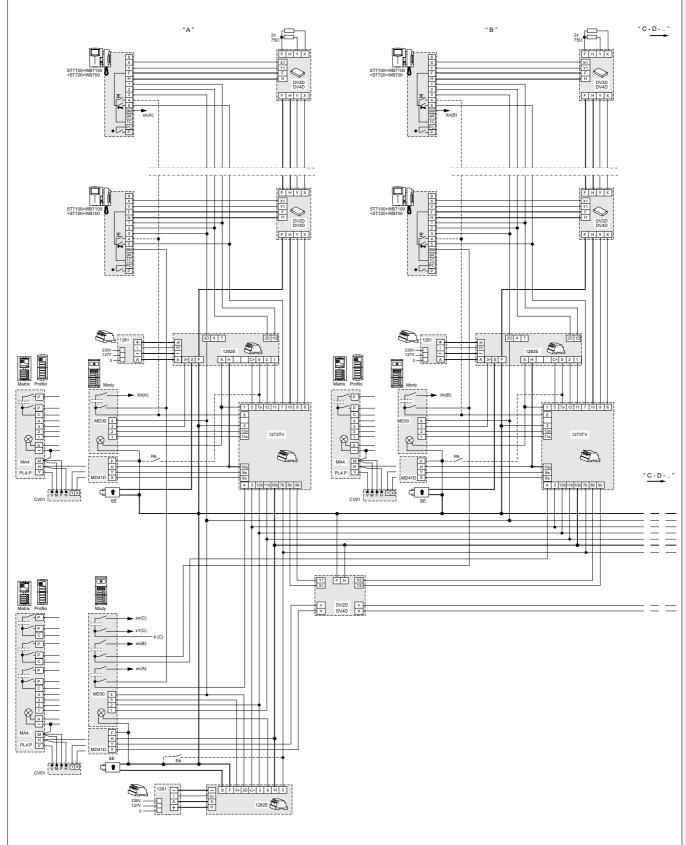
#### **Control switching ON deactivation**







#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON VIDEO STATION (multiple entrance)







#### Si 46MO/3

### VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1+X	1281	Powersupply
1+X	1282E	Timer
X	1273TV	Exchanger
1+	476	Video distributor-amplifier
1+X	PA **	Door release button (optional)
1+X	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1+X	MD30	MD30	Electric door speaker (amplifier)
1	MD41	MD41	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier

1 PL40P÷42P Cameras with integrated audio amplifier

- ... Refers to number of users.
- ${f X}$  Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

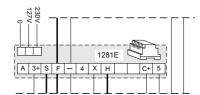
### Working instructions. See page 115.

#### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



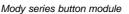
#### Power supply-timer of the main entrance

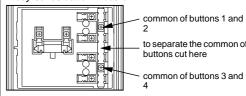


By adding **1281E** to the schematic on page 155 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.





# Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.

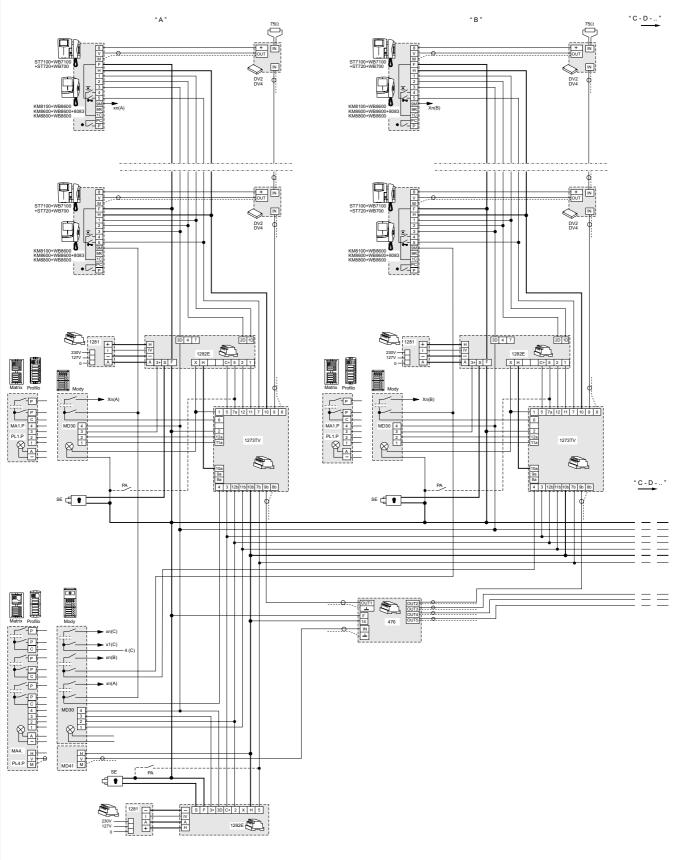








### VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)







## VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1+X	1281	Powersupply
1+X	1282E	Timer
Χ	1273TV	Exchanger
1+X	PA **	Door release button (optional)
1+X	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1+X	MD30	MD30	Electric door speaker (amplifier)
1	MD41D (1)	MD41D (1)	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier
1	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier
1	PL40P÷42P	Cameras with integrated audio amplifier

CV01 Video signal converter

... Refers to number of users.

- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

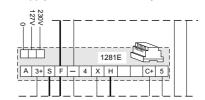
#### Working instructions. See page 115.

#### **Notes**

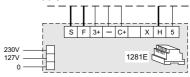
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

## Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



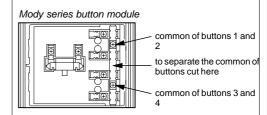
#### Power supply-timer of the main entrance



By adding **1281E** to the schematic on page 157 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.



# Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

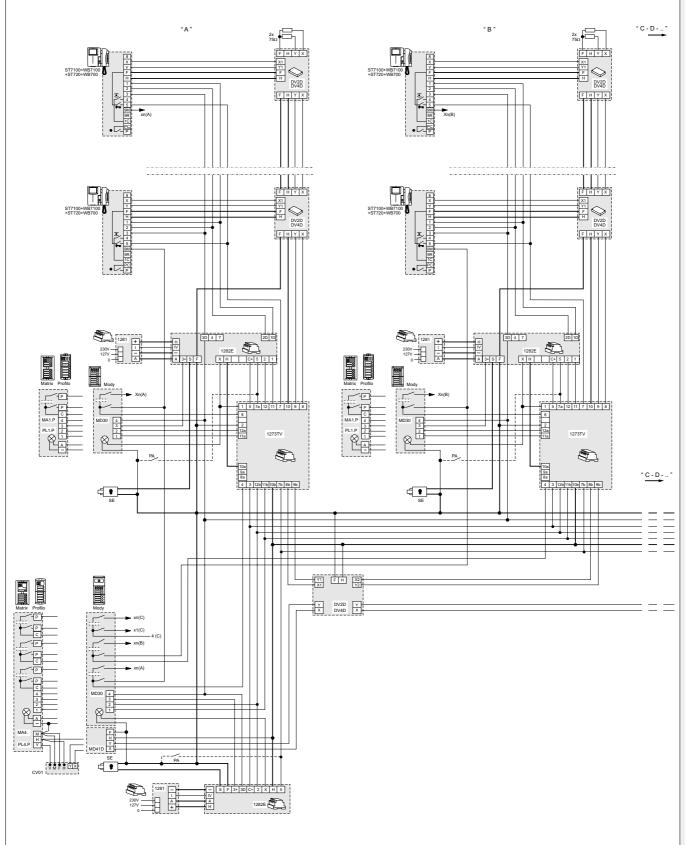
For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.















1+X

SE \*\*

INTERCOMS

#### Si 46MO/5

#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON STATION ONLY AUDIO (multiple entrance)

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1+X	1281	Power supply
1+X	1282E	Timer
Χ	1273TV	Exchanger
1+X	PA **	Door release button (optional)

Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1+X	MD30	MD30	Electric door speaker (amplifier)
Χ	MD41	MD41	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
Χ	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier

X PL40P÷42P Cameras with integrated audio amplifier

- ... Refers to number of users.
- **X** Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

#### Working instructions. See page 115.

#### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

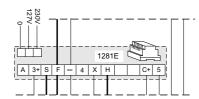
### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.

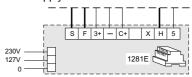


### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



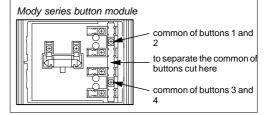
#### Power supply-timer of the main entrance



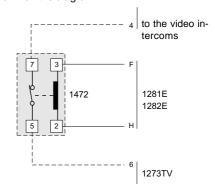
By adding **1281E** to the schematic on page 159 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.



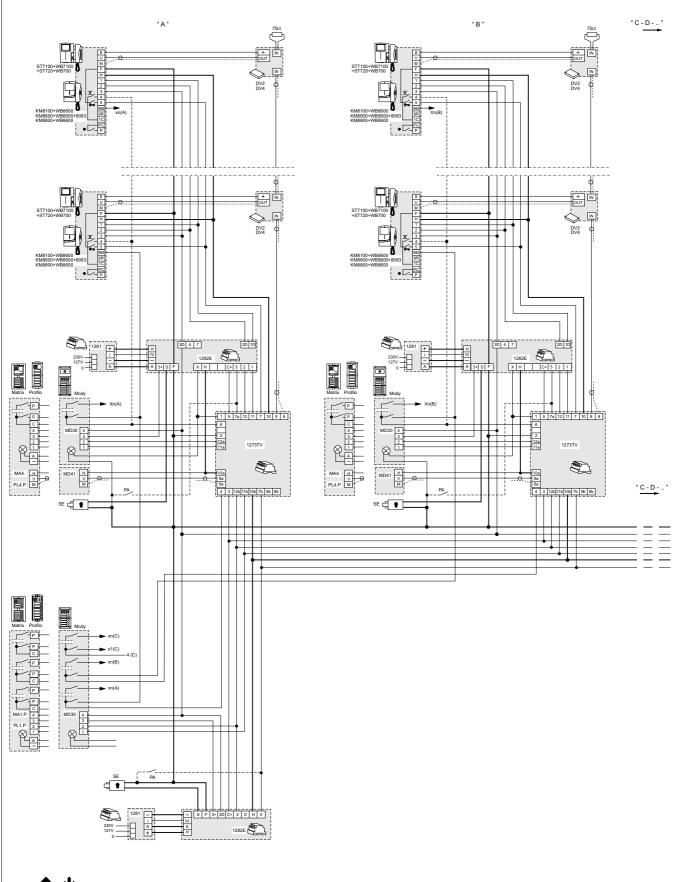
#### **Control switching ON deactivation**







#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON STATION ONLY AUDIO (multiple entrance)





#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON STATION ONLY AUDIO (multiple entrance)

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
1+X	1281	Powersupply
1+X	1282E	Timer
Χ	1273TV	Exchanger
1+X	PA **	Door release button (optional)
1+X	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1+X	MD30	MD30	Electric door speaker (amplifier)
X	MD41D (1)	MD41D (1)	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
Χ	MA42-43	Cameras with integrated audio amplifier
Χ	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
Χ	PL40P÷42P	Cameras with integrated audio amplifier

**CV01** Χ Video signal converter

... Refers to number of users.

- X Refers to number of secondary door stations.
- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

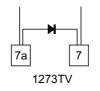
#### Working instructions. See page 115.

#### **Notes**

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

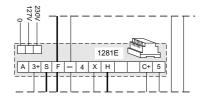
#### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



#### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



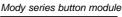
Power supply-timer of the main entrance

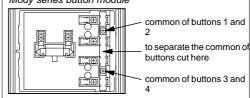


By adding 1281E to the schematic on page 161 instead of 1281 plus 1282E, the system working will modify as follows:

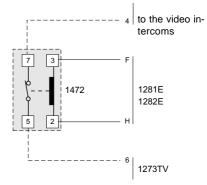
- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.





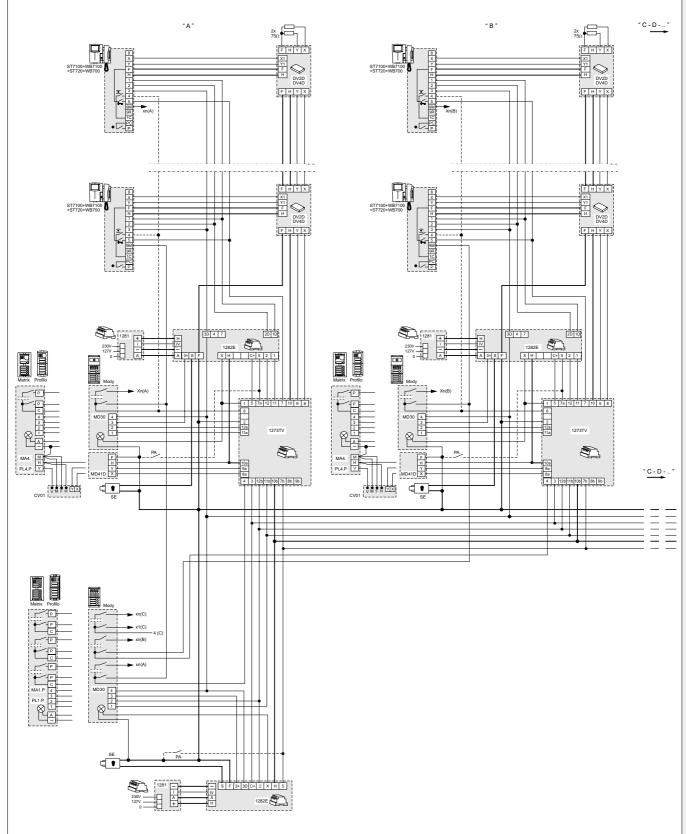
#### **Control switching ON deactivation**







#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 1 MAIN COMMON STATION ONLY AUDIO (multiple entrance)







### VIDEO INTERCOM SYSTEM WITH ONE-WAY SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
1	1281	Powersupply
1	1282E	Timer
X	1473	Exchanger
X	PRS240	Power supply
X	1471	Relayunit

1+...476Video distributor-amplifier1+XPA \*\*Door release button (optional)1+XSE \*\*Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

 X X 1  1+X 1+X 1+X	1 row MD72÷74 MD71 MD11 MD10-11-12 MD21 ÷ 24 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30 MD41	2row MD72÷74 - - MD10-122-124 MD222 ÷ 228 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30 MD41	Back boxes and module frames Back box and module frames Module for electric door speaker Modules for electric door speaker Button modules Blank and info modules Hood covers Rain shelters and module frames Electric door speaker (amplifier) Camera
--	---	--	---

#### Matrix series external door station (for the composition see pages 102÷103)

	MA72-73	Back boxes and module frames
Χ	MA71	Back box and module frames
	MA62-63	Frontframes
Χ	MA61	Frontframe
	MA20-22-24	Blank and button modules
Χ	MA11P	Module with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier

Profilo series external door station (for the composition see pages 106÷107)

Rain shelters and module frames

•••	PL71-72-73	Back boxes and module frames
Χ	PL71	Back box and module frames
	PL20÷24	Blank and button modules
Χ	MA11P	Modules with audio amplifier
1	PL40P÷42P	Cameras with integrated audio amplifier

... Refers to number of users.

MA91-92-93\*

- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

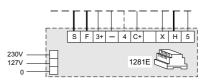
**Working instructions.** See page 115. By making the call from the secondary audio station, the video intercom remains switched OFF.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the main door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- DV.. distributors can be used instead of the video distributors 476 by adding a power supply wire (from + to terminal 8 of every video intercom).
- Telephones can be used instead of intercoms (see "telecommunication" section).

### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the main entrance



By adding **1281E** to the schematic on page 163 instead of 1281 plus 1282E, the system working will modify as follows:

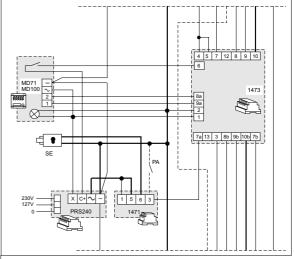
- switching-OFF at the end of the timing only

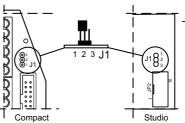
# Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



Connection of the MD100 amplified external door station to the secondary door station instead of electric door speaker MD30 and module MD11.



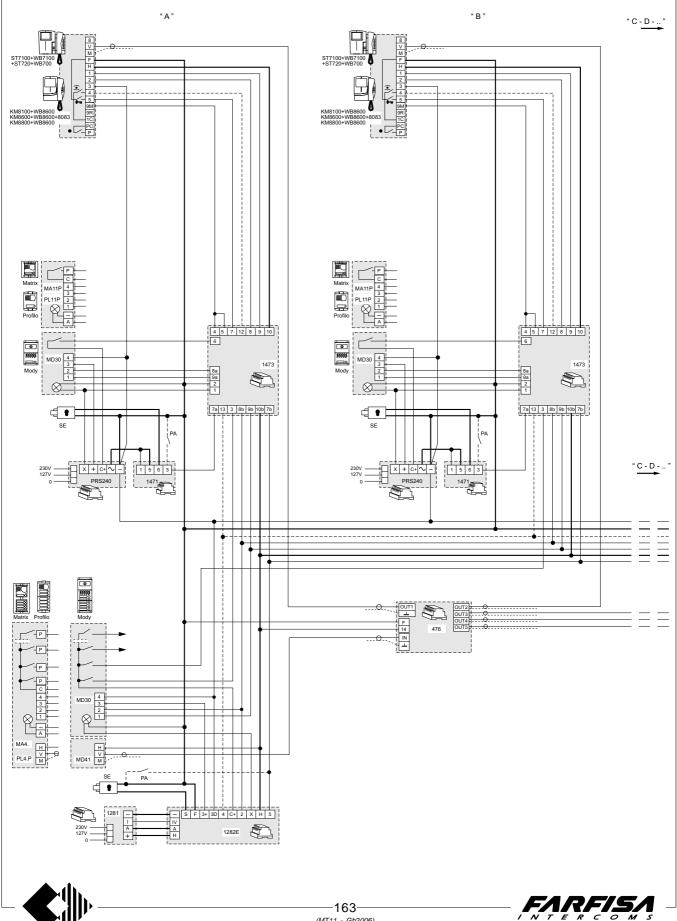


 On video intercom brackets you must move jumper J1 from position 2-3 to 1-2. If the private conversation is necessary, use the Si46MO/5 diagram.





#### VIDEO INTERCOM SYSTEM WITH ONE-WAY SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)



### VIDEO INTERCOM SYSTEM WITH ONE-WAY SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-DV4D	Video distributor
1	1281	Powersupply
1	1282E	Timer
Χ	1473	Exchanger
X	PRS240	Powersupply
Χ	1471	Relayunit
1+X	PA **	Door release button (optional)
1+X	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD72÷74	MD72÷74	Back boxes and module frames
Χ	MD71	-	Back box and module frames
Χ	MD11	-	Module for electric door speaker
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1+X	MD30	MD30	Electric door speaker (amplifier)
1	MD41D (1)	MD41D (1)	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA/2-/3	Back boxes and module frames
Χ	MA71	Back box and module frames
	MA62-63	Frontframes
Χ	MA61	Frontframe
	MA20-22-24	Blank and button modules
Χ	MA11P	Module with audio amplifier
1	MA42-43	Cameras with integrated audio amplifier
1	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
Χ	PL71	Back box and module frames
	PL20÷24	Blank and button modules
Χ	MA11P	Modules with audio amplifier
1	PL40P÷42P	Cameras with integrated audio amplifie
1	CV01	Video signal converter

- ... Refers to number of users.
- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

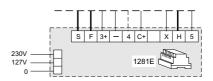
**Working instructions.** See page 115. By making the call from the secondary audio station, the video intercom remains switched OFF.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the main door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- Telephones can be used instead of intercoms (see "telecommunication" section).

### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the main entrance



By adding **1281E** to the schematic on page 163 instead of 1281 plus 1282E, the system working will modify as follows:

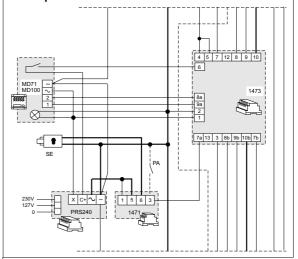
- switching-OFF at the end of the timing only

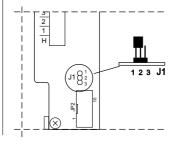
# Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



Connection of the MD100 amplified external door station to the secondary door station instead of electric door speaker MD30 and module MD11.



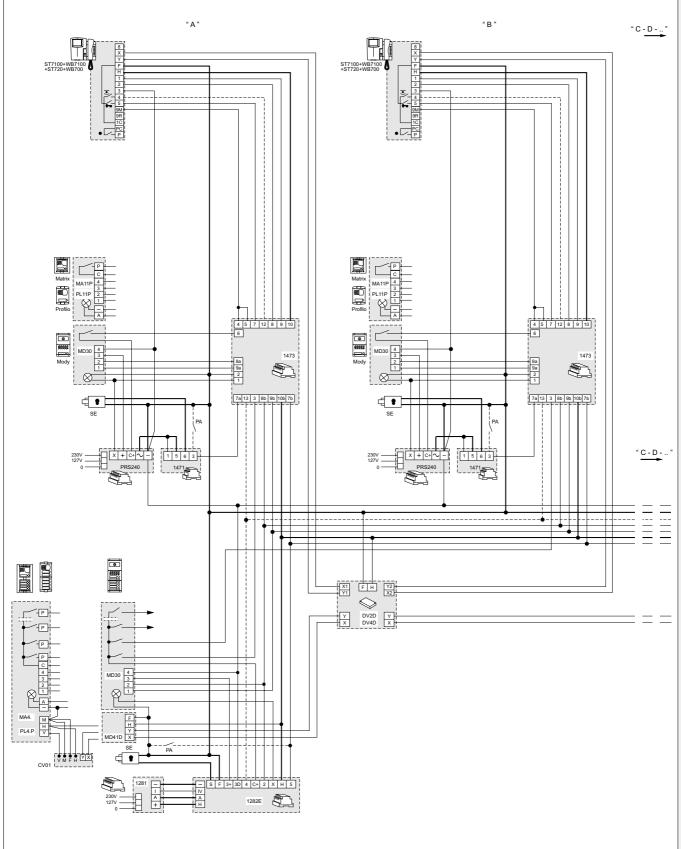


 On video intercom brackets you must move jumper J1 from position 2-3 to 1-2. If the private conversation is necessary, use the Si46MO/6 diagram.





### VIDEO INTERCOM SYSTEM WITH ONE-WAY SECONDARY DOOR STATIONS ONLY AUDIO AND 1 MAIN COMMON VIDEO STATION (multiple entrance)







2

#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
2+X	1281	Powersupply
1+X	1282E	Timer
2xX	1273TV	Exchanger
2+	476	Video distributor-amplifier
1	1471	Relayunit
2+X	PA **	Door release button (optional)
2+X	SE **	Electric door lock (12Vac-1A)

Min. 100V-1A diodes (1N4007 type)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2+X	MD30	MD30	Electric door speaker (amplifier)
2+X	MD41	MD41	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
2+X	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
2+X	PL40P÷42P	Cameras with integrated audio amplifier

- ... Refers to number of users.
- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

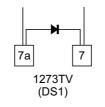
#### Working instructions. See page 115.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

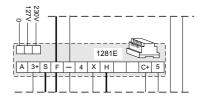
### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.

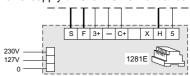


### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



Power supply-timer of the main entrance

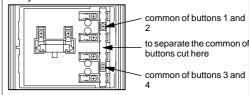


By adding **1281E** to the schematic on page 167 instead of 1281 plus 1282E, the system working will modify as follows:

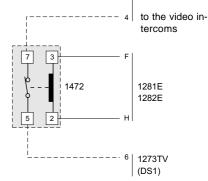
- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.

Mody series button module



#### **Control switching ON deactivation**

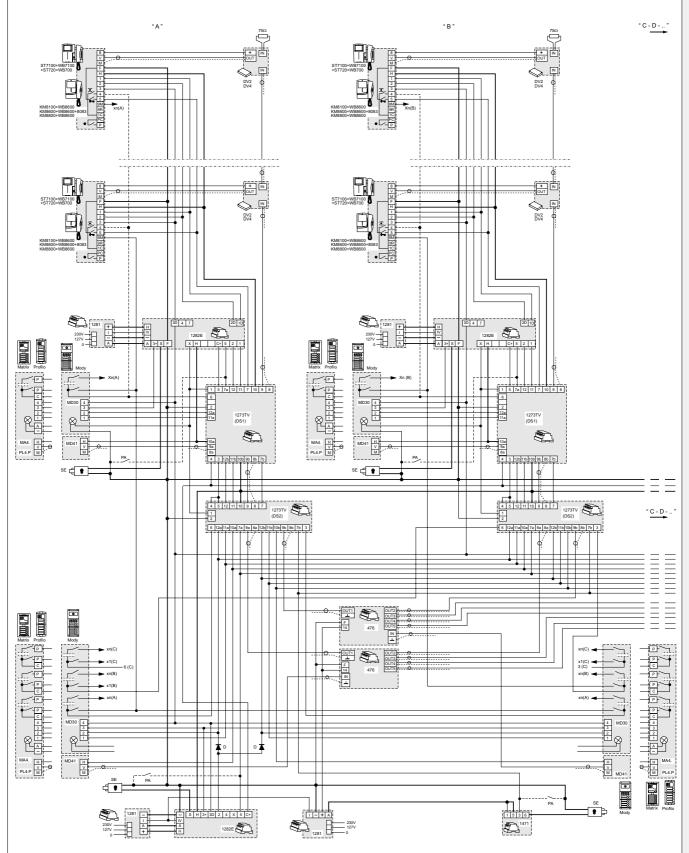


DS1 is a diagram reference





#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)



**D** The 2 diodes in the schematic are not necessary if, instead of 1281 plus 1282E of the main entrances, 1281E power supply-timer is used (please see relative drawing on previous page).





Article

Q.ty

#### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)

	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
2+X	1281	Powersupply
1+X	1282E	Timer
2xX	1273TV	Exchanger
1	1471	Relayunit
2+X	PA **	Door release button (optional)
2+X	SE **	Electric door lock (12Vac-1A)
2	D **	Min. 100V-1A diodes (1N4007 type)

Description

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2+X	MD30	MD30	Electric door speaker (amplifier)
2+X	MD41D (1)	MD41D (1)	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
2+X	MA42-43	Cameras with integrated audio amplifier
2+X	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

PL71-72-73	Back boxes and module frames
PL20÷24	Blank and button modules
2+X PL40P÷42P	Cameras with integrated audio amplifier
2+X CV01	Video signal converter

- ... Refers to number of users.
- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

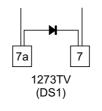
#### Working instructions. See page 115.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

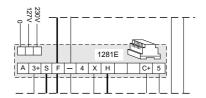
### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.

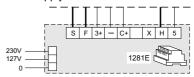


### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



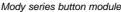
#### Power supply-timer of the main entrance

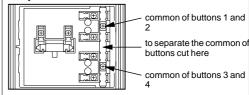


By adding **1281E** to the schematic on page 169 instead of 1281 plus 1282E, the system working will modify as follows:

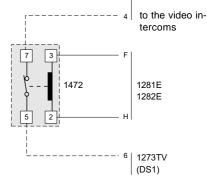
- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.





#### Control switching ON deactivation

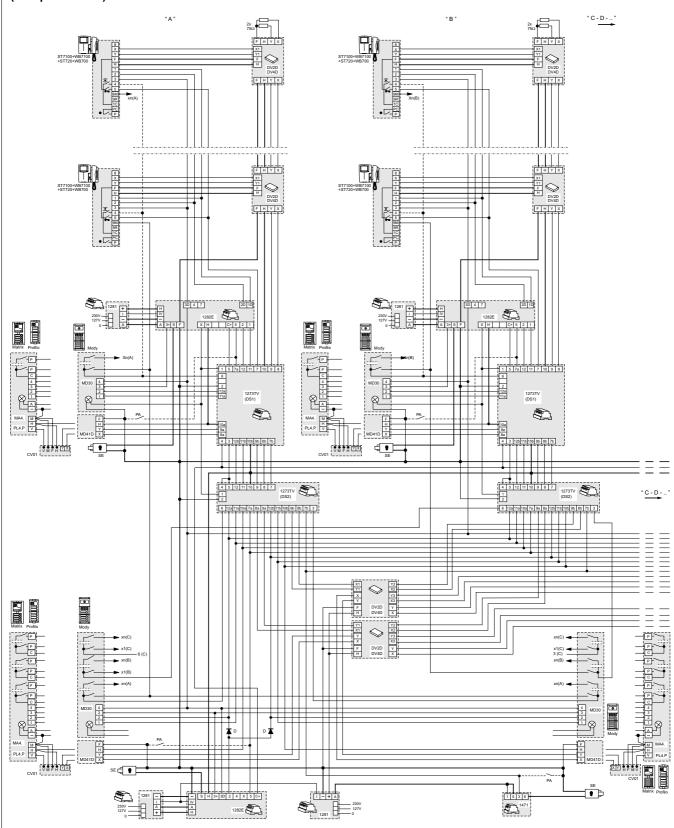


DS1 is a diagram reference





### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON STATIONS, ONE OF WHICH ONLY AUDIO (multiple entrance)



**D** The 2 diodes in the schematic are not necessary if, instead of 1281 plus 1282E of the main entrances, 1281E power supply-timer is used (please see relative drawing on previous page).





INTERCOMS

2

#### Si 47MO/3

D \*\*

### VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON STATIONS, ONE OF WHICH ONLY AUDIO (multiple entrance)

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
2+X	1281	Powersupply
1+X	1282E	Timer
2xX	1273TV	Exchanger
1+	476	Video distributor-amplifier
1	1471	Relayunit
2+X	PA **	Door release button (optional)
2+X	SE **	Electric door lock (12Vac-1A)

Min. 100V-1A diodes (1N4007 type)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2+X	MD30	MD30	Electric door speaker (amplifier)
1+X	MD41	MD41	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
1+X	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	MA10P-11P-12P	Modules with audio amplifier
1+X	PL40P÷42P	Cameras with integrated audio amplifier

... Refers to number of users.

- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

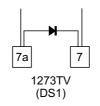
#### Working instructions. See page 115.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- Connect the video intercom terminal 4 (wire shown with dotted line) if the control switch on from the secondary door station is required.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

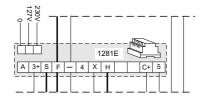
### Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.



### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



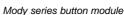
Power supply-timer of the main entrance

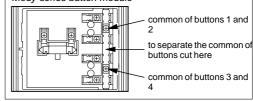


By adding **1281E** to the schematic on page 171 instead of 1281 plus 1282E, the system working will modify as follows:

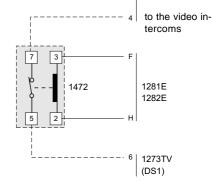
- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.





#### **Control switching ON deactivation**

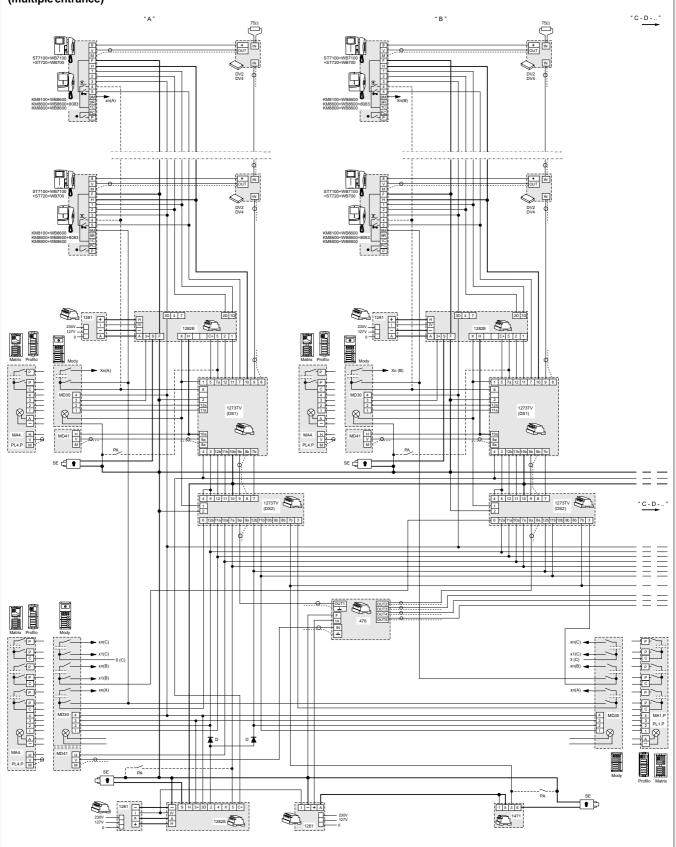


DS1 is a diagram reference





## VIDEO INTERCOM SYSTEM WITH SECONDARY VIDEO STATIONS AND 2 MAIN COMMON STATIONS, ONE OF WHICH ONLY AUDIO (multiple entrance)



**D** The 2 diodes in the schematic are not necessary if, instead of 1281 plus 1282E of the main entrances, 1281E power supply-timer is used (please see relative drawing on previous page).





#### Si 47MO/5

D \*\*

### VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)

Q.ty	Article	Description
	KM8100W+WB8600	Compact videointercom Flat + bracket
	KM8600W+WB8600+8083	Compact videointercom + bracket + back box
	KM8800W+WB8600	Compact videointercom reflex + bracket
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2-4	Video distributor
2+X	1281	Power supply
1+X	1282E	Timer
2xX	1273TV	Exchanger
2+	476	Video distributor-amplifier
1	1471	Relayunit
2+X	PA **	Door release button (optional)
2+X	SE **	Electric door lock (12Vac-1A)

Min. 100V-1A diodes (1N4007 type)

#### Mody series external door station (for the composition see pages 96÷99)

 2+X  2+X 2+X 2+X	1 row MD71÷74 MD10-11-12 MD21 ÷ 24 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30	2 row MD71÷74 MD10-122-124 MD222 ÷ 228 MD20 - 50 MD82 ÷ 812 MD92 ÷ 912* MD30	Back boxes and module frames Modules for electric door speaker Button modules Blank and info modules Hood covers Rain shelters and module frames Electric door speaker (amplifier)

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier
2	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier

2 **PL40P÷42P** Cameras with integrated audio amplifier

#### ... Refers to number of users.

- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

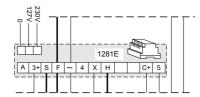
#### Working instructions. See page 115.

#### Notes

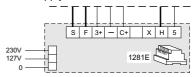
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

## Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



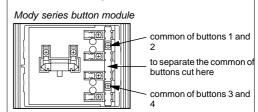
#### Power supply-timer of the main entrance



By adding **1281E** to the schematic on page 173 instead of 1281 plus 1282E, the system working will modify as follows:

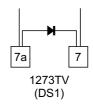
- switching-OFF at the end of the timing only

The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.



# Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.

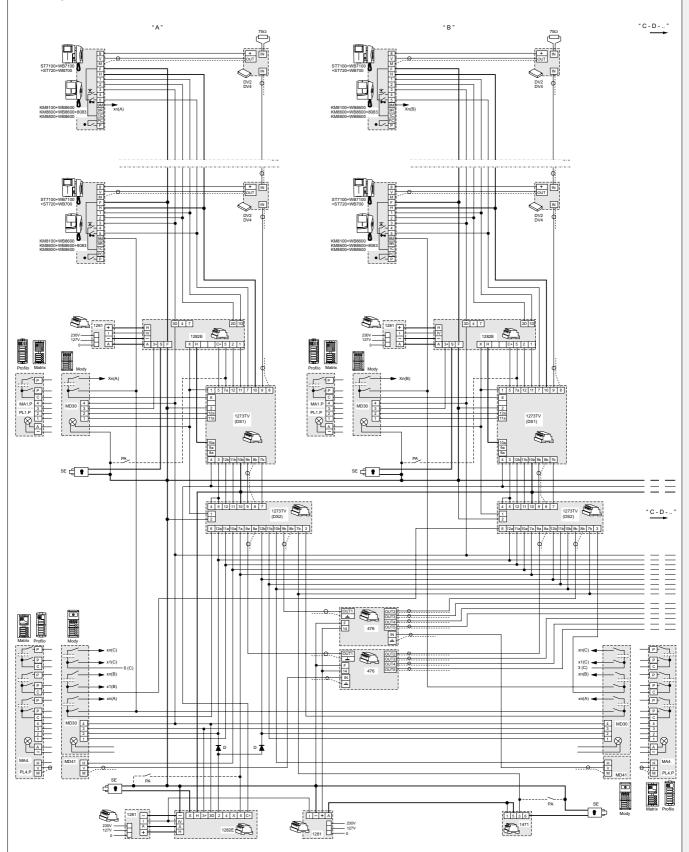








#### VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)



D The 2 diodes in the schematic are not necessary if, instead of 1281 plus 1282E of the main entrances, 1281E power supply-timer is used (please see relative drawing on previous page).





INTERCOMS

## VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	DV2D-4D	Video distributor
2+X	1281	Powersupply
1+X	1282E	Timer
2xX	1273TV	Exchanger
1	1471	Relayunit
2+X	PA **	Door release button (optional)
2+X	SE **	Electric door lock (12Vac-1A)
2	D **	Min. 100V-1A diodes (1N4007 type)

#### Mody series external door station (for the composition see pages 96÷99)

	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
2+X	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
2+X	MD82 ÷ 812	MD82 ÷ 812	Hood covers
2+X	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
2+X	MD30	MD30	Electric door speaker (amplifier)
2	MD41D (1)	MD41D (1)	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier
2	MA42-43	Cameras with integrated audio amplifier
2	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
Χ	MA10P-11P-12P	Modules with audio amplifier

2 **PL40P÷42P** Cameras with integrated audio amplifier

2 **CV01** Video signal converter

... Refers to number of users.

- X Refers to number of secondary door stations.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

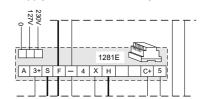
#### Working instructions. See page 115.

#### **Notes**

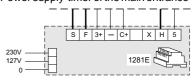
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- Telephones can be used instead of intercoms (see "telecommunication" section).
- For other types of push-button panels see the general catalogue.

### Connection of 1281E power supply-timer instead of 1281 plus 1282E

Power supply-timer of the secondary entrance



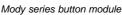
#### Power supply-timer of the main entrance

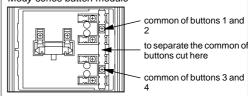


By adding **1281E** to the schematic on page 175 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only

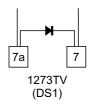
The main entrance push-button panel must have separate common terminals. One common terminal for each secondary door station. Buttons of the Mody series can be divided into 2-button groups. Common terminals of Matrix and Profilo push buttons cannot be separated.





# Connection of two door locks, of which the secondary is always activable, in a system with multiple entrance

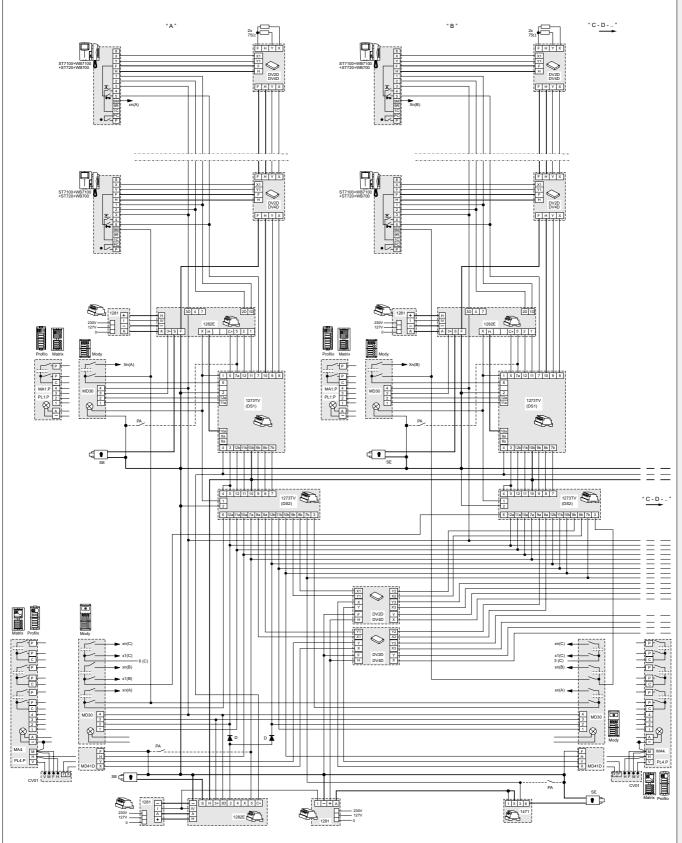
For this option it is necessary to install a diode (100V-1A; type 1N4007) between terminals 7 (cathode) and 7a (anode) of every secondary exchanger.







### VIDEO INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS ONLY AUDIO AND 2 MAIN COMMON VIDEO STATIONS (multiple entrance)



**D** The 2 diodes in the schematic are not necessary if, instead of 1281 plus 1282E of the main entrances, 1281E power supply-timer is used (please see relative drawing on previous page).





### **Additional diagrams**

#### **EXTENSION OF VIDEO INTERCOM SYSTEM**

All installation diagrams in this technical manual are drawn with only one video intercom for each user. It is possible to "personalise" the installation by properly matching the applications on the following pages (page 179 to 190) to the basic diagrams (page 119 to page 175). Such examples refer to applications with one video intercom entrance. To realise systems with 2 or more audio/video entrances were more than one control switch ON is needed, use for this function the first buttons of the video intercom (P, P1, P2, etc.) and the lower ones (P3, P4, etc.) for the intercommunicating calls

In the basic diagrams the dashed lines identify the wires for control switch ON, whereas in the additional diagrams the dashed lines also refer to the wires for intercommunicating service.

When the simultaneous switch ON of several video intercoms is needed and extra power supplies are to be added, do not forget that terminal IV of timer 1282E can be connected to a maximum of 3 power supplies 1281.

Ħ١

118

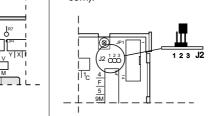
1 2 3 J1

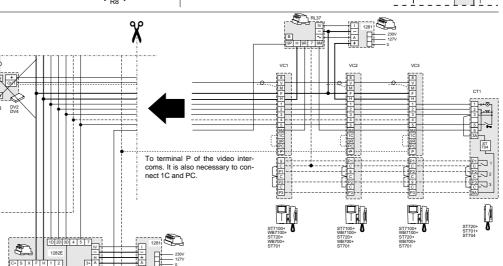
#### **NOTES**

- To provide the intercommunicating service, make the dashed connections, install the module 1443E inside timer 1282E and move the jumper J1 of the bracket WB7100 from position 2-3 to 1-2.
- 2) The diode shown in this installation diagram must be connected to power video distributors DV2 and DV4. If the system is realized with twisted pair, or if video distributors are not used, the diode must not be connected.
- If the video system is realized with coaxial cable connected in serial mode (input and output from the video intercom), you must cut the 75Ω resistance R8 of the bracket and leave it only on the last video intercom.

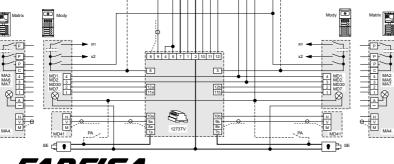


- Additional diagrams refer to video connection with coaxial cable. If the system is realized with twisted pair, it is necessary to:
- connect the pair to terminals  ${\bf X}$  and  ${\bf Y}$  and leave terminals  ${\bf V}$  and  ${\bf M}$  unconnected;
- move the **jumper J2** of bracket **WB7100** from position **1-2** to **2-3**.
- if the installation diagram includes more than 2 video intercoms in parallel make the video connection with distributors **DV..D** (or connect them serially **cutting** the 75 $\Omega$  resistances **R7** and **R10** of bracket **WB7100** and leaving them only on the last video intercom).





Example of combination of an additional diagram with a basic diagram for the realisation of a one-way system with intercoms and video intercoms in parallel with or without intercommunicating service (description on page 177).



**4** 

——176— (MT11 - Gb2006)

#### **EXTENSION OF VIDEO INTERCOM SYSTEM**

#### **Extension of ONE-WAY system**

To realise a one-way system with several monitors and/or intercoms in parallel, with or without intercommunicating service, you must proceed as follows:

- make a photocopy of the additional diagram desired, selecting it among those of pages 179 to 186;
- place the diagram on the basic diagram so as to cover the existing video intercom and line up the wires of the two diagrams;
- if specified in the additional diagram, connect the wires I and C (common terminal of additional buttons) to terminals IV and 7 of art. 1282E;
- to obtain the intercommunicating service, make the connections which have been drawn with a dashed line, install the 1443E module inside timer 1282E and move the jumper J1 of bracket WB7100 from position 2-3 to 1-2.

Example (see page 176): by making a photocopy of the additional diagram of page 181 (3 video intercoms and 1 intercom in parallel with or without intercommunicating service), placing it on the installation diagram of page 131 (Si 42MO/1), lining it up to the wires of the first video intercom and eliminating the second video intercom and the video distributor, it is possible to obtain a one-way system with 3 video intercoms and 1 intercom in parallel connected to 2 external video stations.

#### Extension in one apartment of a MULTI-WAY system

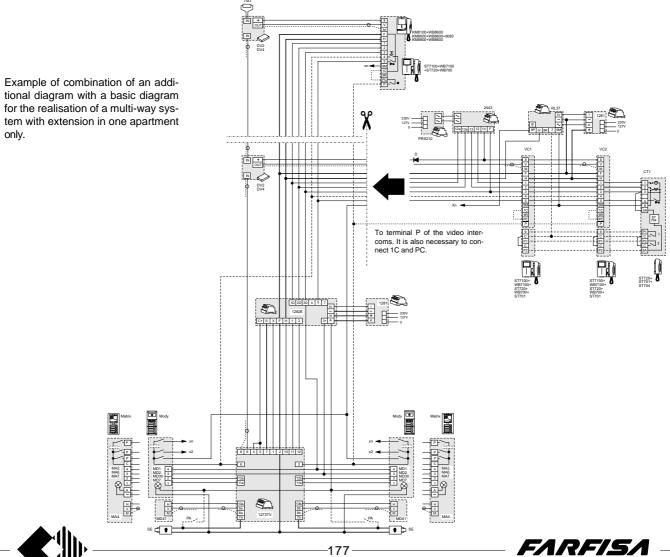
To realise a multi-way system with several video intercoms and/or intercoms in parallel in one apartment with or without intercommunicating service, you must proceed as follows:

- make a photocopy of the additional diagram desired, selecting it among those of pages 187 to 190:
- place the diagram on the basic diagram so as to cover the existing video intercom and line up the wires of the two diagrams;
- to obtain the intercommunicating service, make the connections which have been drawn with a dashed line and move the jumper J1 of bracket WB7100 from position 2-3 to 1-2.

Example: by making a photocopy of the additional diagram of page 187 (2 videointercoms and 1 intercom in parallel with or without intercommunicating service), placing it on the installation diagram of page 131 (Si 42MO/1), lining it up to the wires of the first video intercom, it is possible to obtain a multi-way system with 2 video intercoms and 1 intercom in parallel in one apartment and intercommunicating connected to 2 external video stations.

#### Extension of a MULTI-WAY system in several apartments

To realise a multi-way system with several video intercoms and/or intercoms in parallel in 2 or more apartments with or without intercommunicating service, you must repeat the operations described in the preceding section several times.





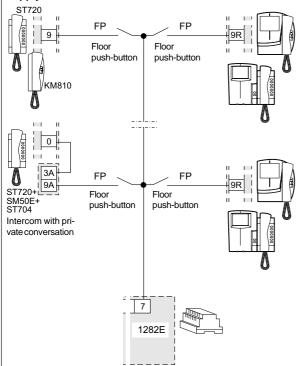


### **Additional diagrams**

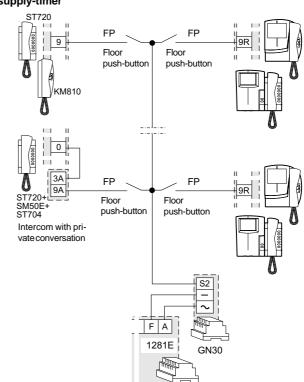
#### Floor call

In all the installation schematics it is possible to have a floor call with different sound from the one coming from the push button panel, by adding a conductor to the riser connected to all the buttons of the floor calls. The other terminal of each button has to be connected to the user intercom or videointercom.

### Connection of the floor call on an installation with 1281 power supply and 1282E timer.



### Connection of the floor call on an installation with 1281E power supply-timer

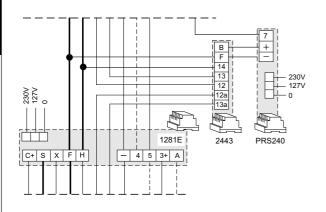


When in the installation 1281E power supply-timer is foreseen, in order to have a differentiated chime, add GN30 ringer generator.

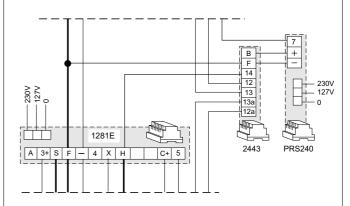
### Installation of 1281E power supply-timer in ONE-WAY systems with intercommunicating service

In order to have the intercommunicating service amongst intercoms and/or videointercoms with privacy towards the external station, it is necessary to install inside 1282E timer the 1443E intercommunicating module. If the installation has to use 1281E power supply-timer it is necessary to add, and properly connect, a 2443 relay-amplifier and a PRS240 power supply (see schematics).

### Application on all one- or multi-way systems with one or more main entrances. Schematics from page 119 to page 149.



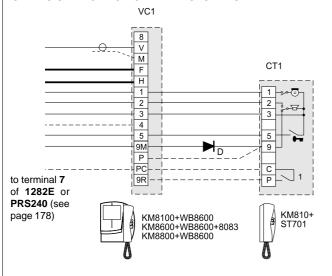
### Application on all multi-way systems with main and secondary entrances. Schematics from page 151 to page 175.







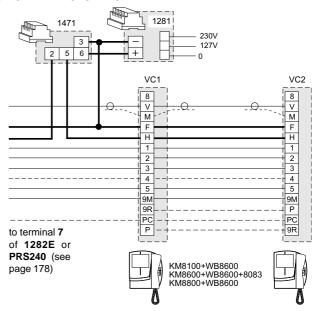
### 1 VIDEO INTERCOM AND 1 INTERCOM WITH INTERCOMMUNI-CATING SERVICE FOR ONE-WAY SYSTEMS



D = 100V-1A diode (type 1N4007).

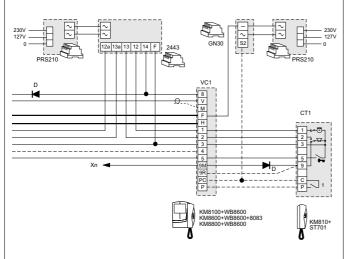
Read notes 1 of page 176.

# 2 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE FOR ONE-WAY SYSTEMS



Read notes 1 and 3 of page 176.

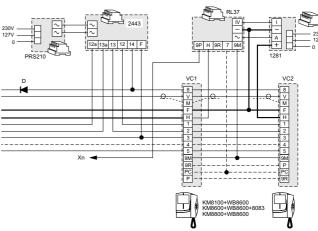
### 1 VIDEO INTERCOM AND 1 INTERCOM WITH INTERCOMMUNI-CATING SERVICE FOR MULTI-WAY SYSTEMS



D = 100V-1A diode (type 1N4007).

Read notes 1 and 3 of page 176.

# 2 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE FOR MULTI-WAY SYSTEMS



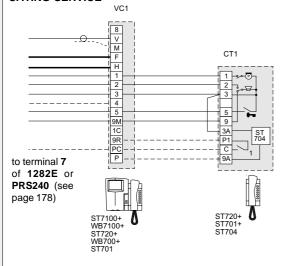
D = 100V-1A diode (type 1N4007).

Read notes 1 and 3 of page 176.



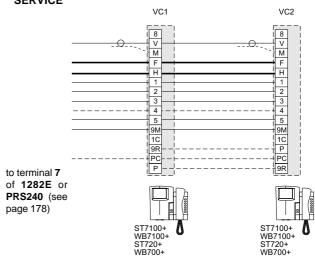


# 1 VIDEO INTERCOM AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



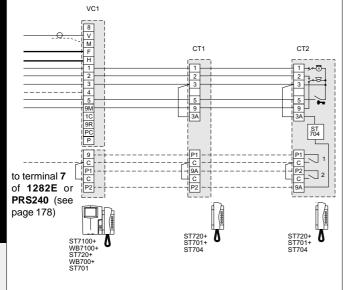
Read notes 1 and 4 of page 176.

# 2 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE



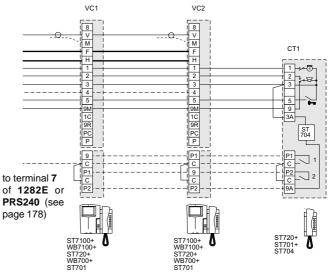
Read notes 1, 3 and 4 of page 176.

# 1 VIDEO INTERCOM AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1 and 4 of page 176.

# 2 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE

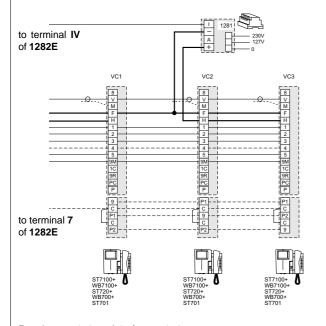


Read notes 1, 3 and 4 of page 176.



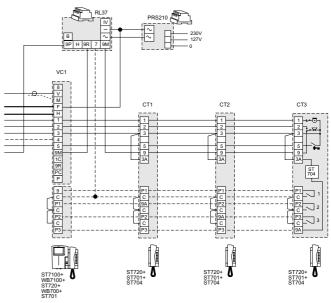


### 3 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE



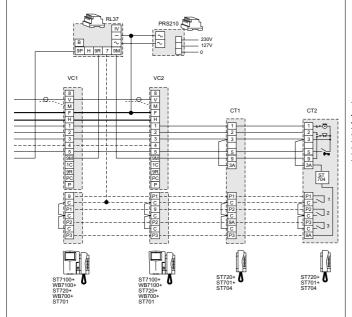
Read notes 1, 3 and 4 of page 176.

# 1 VIDEO INTERCOM AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



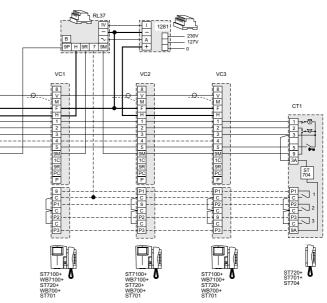
Read notes 1 and 4 of page 176.

# 2 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1, 3 and 4 of page 176.

# 3 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



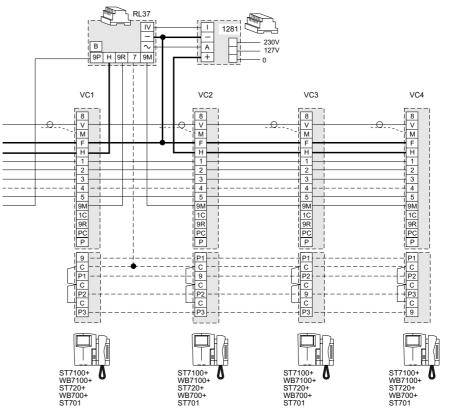
Read notes 1, 3 and 4 of page 176.





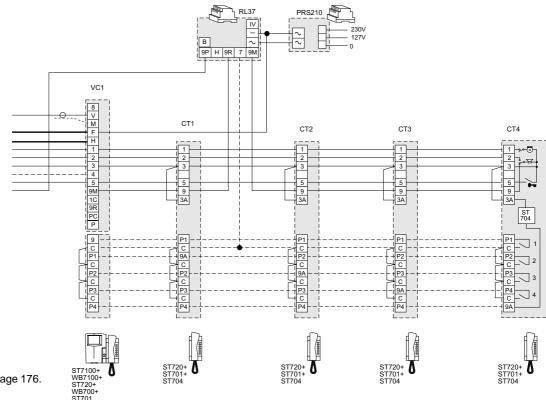
# **ONE-WAY** additional diagrams

### 4 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1, 3 and 4 of page 176.

### 1 VIDEO INTERCOM AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE

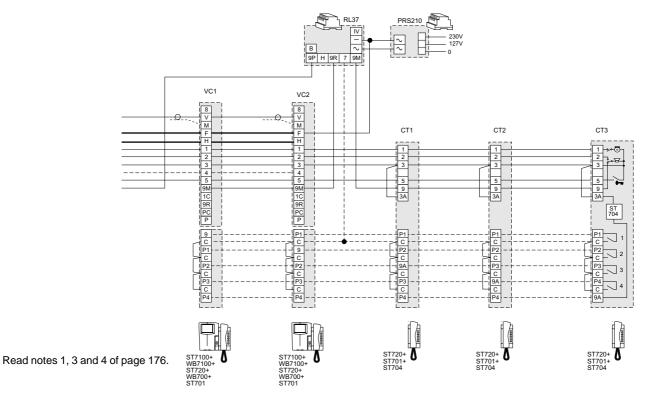


Read notes 1 and 4 of page 176.

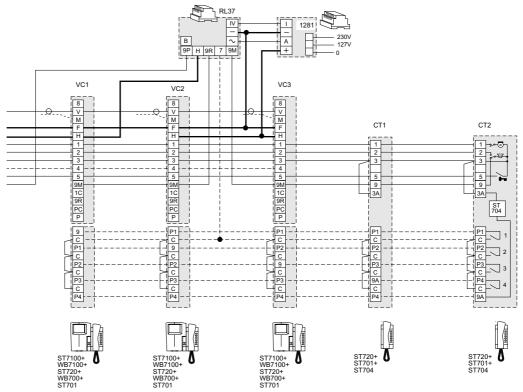




### 2 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



### 3 VIDEO INTERCOMS AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1, 2 and 3 of page 176.

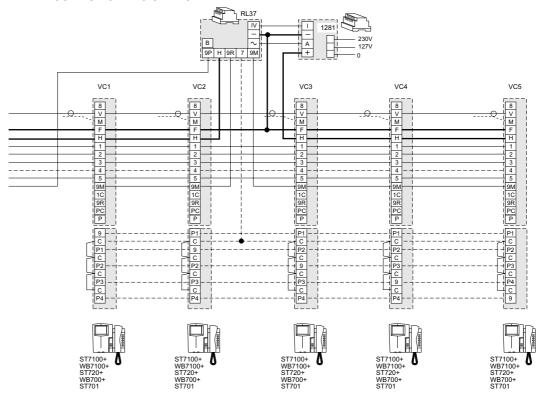




INTERCOMS

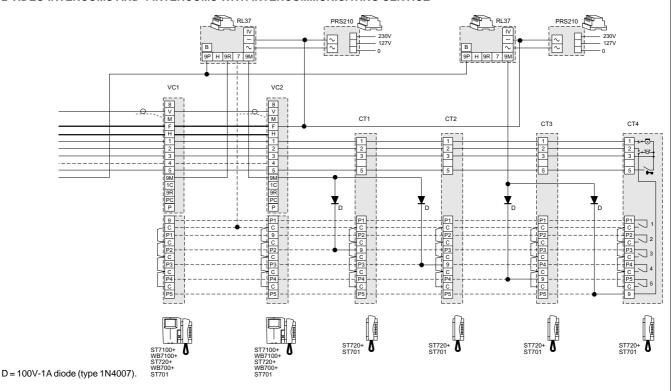
# **ONE-WAY additional diagrams**

### 5 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1, 3 and 4 of page 176.

### 2 VIDEO INTERCOMS AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE

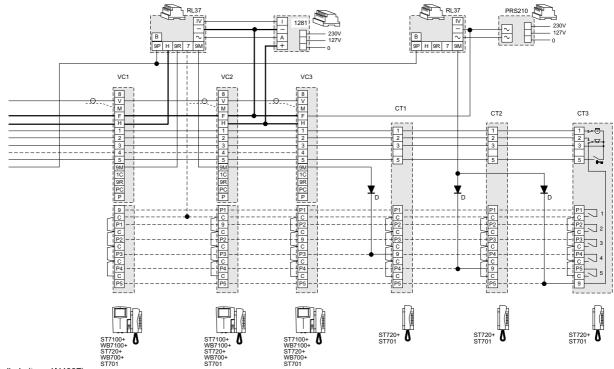


Read notes 1, 3 and 4 of page 176.





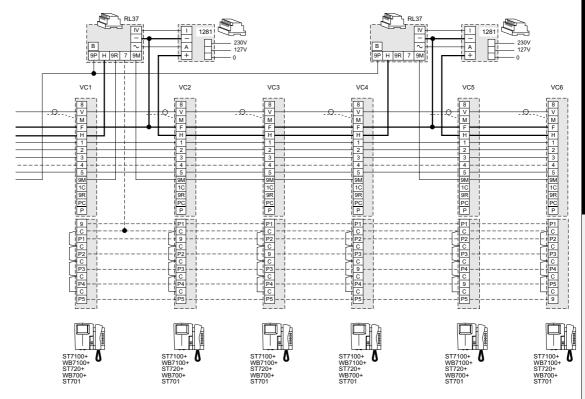
### 3 VIDEO INTERCOMS AND 3 INTERCOMS WITH INTERCOMMUNICATING SERVICE



D = 100V-1A diode (type 1N4007).

Read notes 1, 3 and 4 of page 176.

### **6 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE**

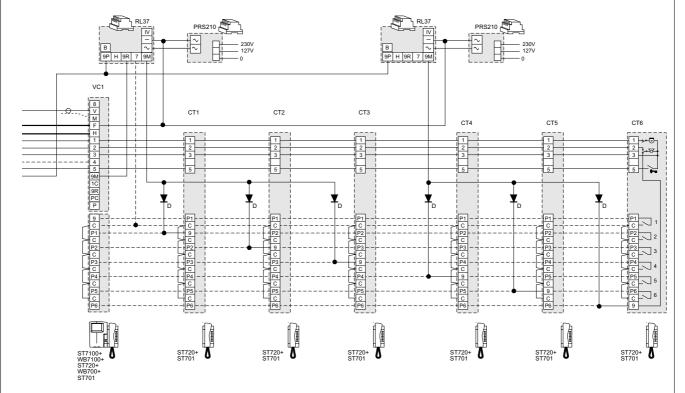


Read notes 1, 3 and 4 of page 176.





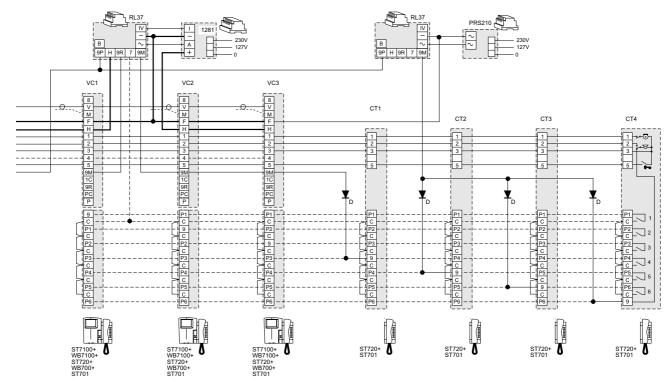
### 1 VIDEO INTERCOM AND 6 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1, 3 and 4 of page 176.

D = 100V-1A diode (type 1N4007).

### 3 VIDEO INTERCOMS AND 4 INTERCOMS WITH INTERCOMMUNICATING SERVICE



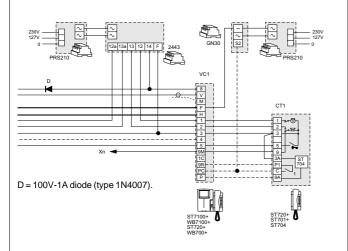
Read notes 1, 3 and 4 of page 176.

D = 100V-1A diode (type 1N4007).



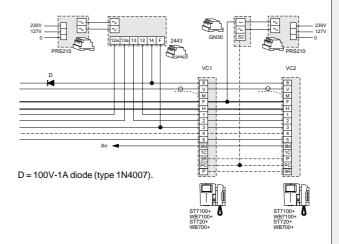


# 1 VIDEO INTERCOM AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



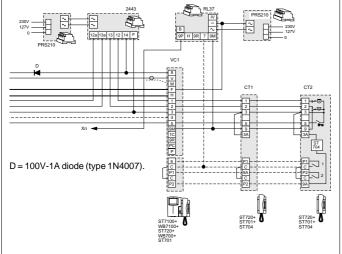
Read notes 1, 2 and 4 of page 176.

# 2 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE



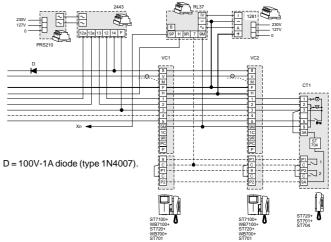
Read notes 1, 2, 3 and 4 of page 176.

# 1 VIDEO INTERCOM AND 2 INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1, 2 and 4 of page 176.

# 2 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE

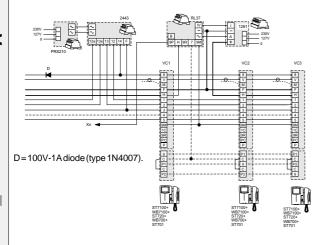


Read notes 1, 2, 3 and 4 of page 176.



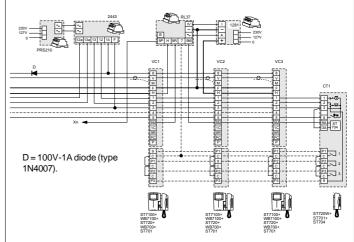


# 3 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE



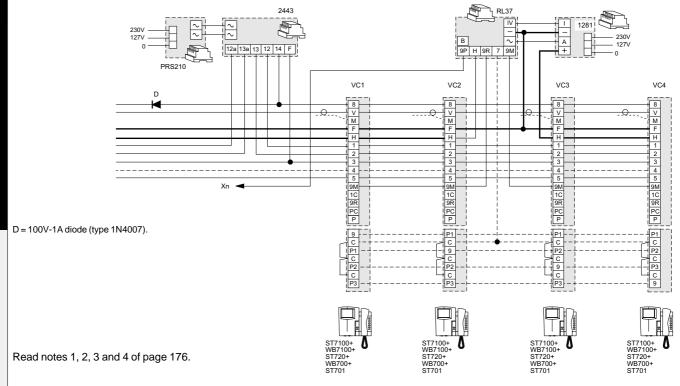
Read notes 1, 2, 3 and 4 of page 176.

# 3 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



Read notes 1, 2, 3 and 4 of page 176.

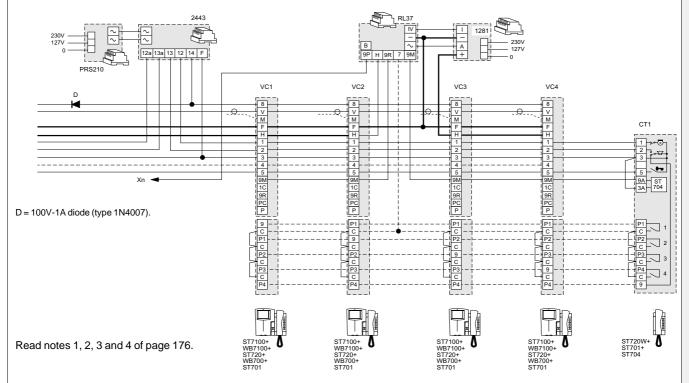
### **4 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE**



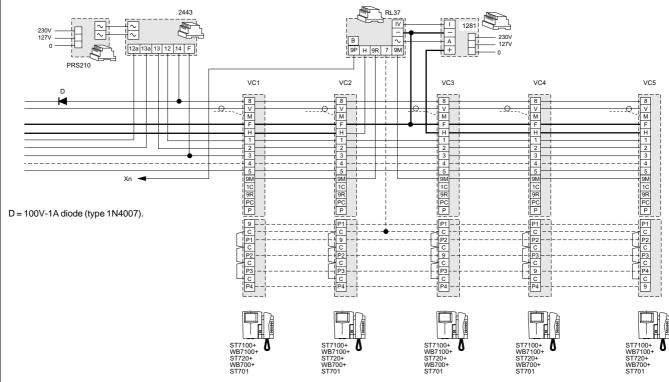




### 4 VIDEO INTERCOMS AND 1 INTERCOM WITH INTERCOMMUNICATING SERVICE



### **5 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE**

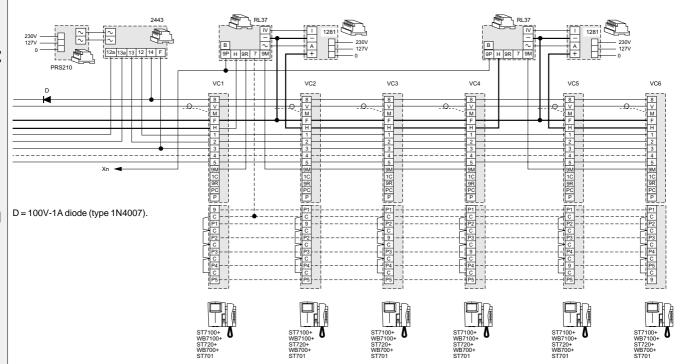


Read notes 1, 2, 3 and 4 of page 176.



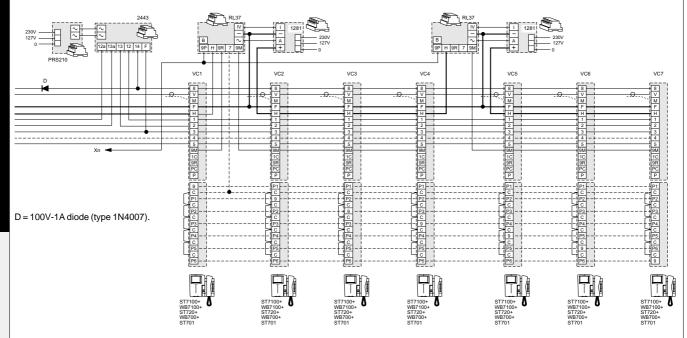


### **6 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE**



Read notes 1, 2, 3 and 4 of page 176.

### 7 VIDEO INTERCOMS WITH INTERCOMMUNICATING SERVICE



Read notes 1, 2, 3 and 4 of page 176.





Technical manual 11

# **TELECOMMUNICATION**

Edition 2006

INDEX		Page
Internal stati	ons	192
-Telephone		192
- Studio series	s video and intercom-telephone set	196
- Video memo	•	202
	ephone interface	204
Telephone p	rotections	205
PABX		206
Installation i	nstructions	212
- Intercom-tele	ephone systems	212
- Video interco	om-telephone systems	212
Basic installa	ation diagrams	214
- Si 21MT/1	Mixed intercom/telephone system connected to one external door station	215
- Si 211T/1	One way intercom-telephone system with telephone interface and connection to one external door station	216
- Si 211T/2	One-way intercom-telephone intercommunicating system with PABX and connection to one external door station	216
- Si 411T/1	One-way video intercom-telephone system with telephone interface and connection to one external door station (with	217
	coaxial cable)	
- Si 411T/2	One-way video intercom-telephone system with PABX and connection to one external door station (with coaxial cable)	217
- Si 411T/3	One-way video intercom-telephone system with telephone interface and connection to one external door station (with	218
	1281E and coaxial cable)	
- Si 411T/4	One-way video intercom-telephone system with PABX and connection to one external door station (with 1281E and coaxial cable)	218
- Si 411T/11	One-way video intercom-telephone system with telephone interface and connection to one external door station (with twisted pair)	219
- Si 411T/12	One-way video intercom-telephone system with PABX and connection to one external door station (with twisted pair)	219
- Si 41MT/1	Mixed video intercom/telephone system connected to one external door station (with coaxial cable)	221
- Si 41MT/2	Mixed video intercom/telephone system connected to one external door station (with twisted pair)	223
- Si 412T/1	$Two-way \ video \ intercom-telephone \ intercommunicating \ system \ with \ PABX \ connected \ to \ one \ external \ door \ station \ (\textit{with} \ bullet \ $	225
	coaxial cable)	
- Si 412T/2	Two-way video intercom-telephone intercommunicating system with PABX connected to one external door station (with twisted pair)	227
Video interco	om-telephone additional diagrams	228
- Video intercom-telephone systems with coaxial cable		
- Video intercom-telephone systems with twisted pair		

### Notes

The main intercom and video intercom functions can also be provided with an ordinary telephone set by installing a suitable interface in the intercom system.

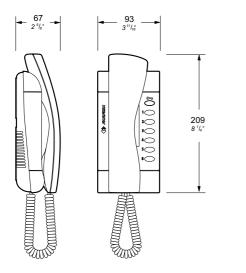
For better intercom/telephone integration it is advisable to use the dedicated Farfisa telephone art. **ST740W**. In addition to the normal telephone functions, this telephone has extra buttons for intuitive and easy use of intercomfunctions.





### INTERNAL STATIONS

### **TELEPHONE**

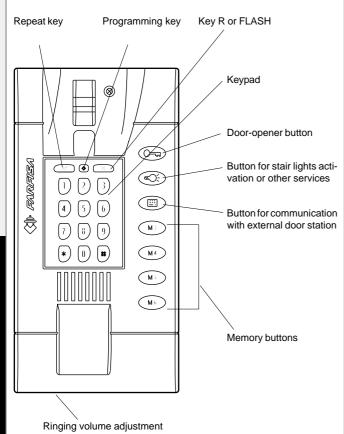


**ST740W.** White telephone for intercom or video intercom-telephone systems. Complete with spiral cord, electronic microphone, 15 buttons for telephone functions, 7 buttons for intercom functions and direct memories. The buttons dedicated to intercom functions can operate only by means of a suitable telephone interface (FT11D) or PABX (FT105P or FT208P).

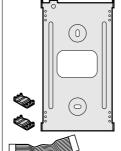
The telephone permits DTMF dialling only.

Wall mounting with bracket WB700 or table version with adapter TA700 and bracket WB700.

### Description



### **FIXING ELEMENTS**



WB 700. Bracket for fixing on wall or to table adapter (with art. TA700) the ST740 telephone and/or accessories of the Studio series. Complete with plastic templates for the correct alignment with bracket WB 7100 and/or other brackets WB700.

### Note

The flat cable supplied with the bracket cannot be used in telephone systems.



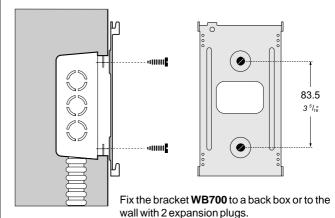
TA700W. White table adapter for telephone ST740W and/or accessories of the Studio series.

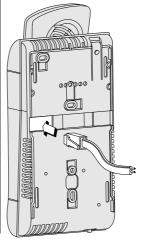
Complete with cable clamp, plastic and metallic frames for the correct alignment to adapters TA7100 and/or additional TA700.



The telephone can be installed on the wall or on the table with dedicated accessories.

### Wall version



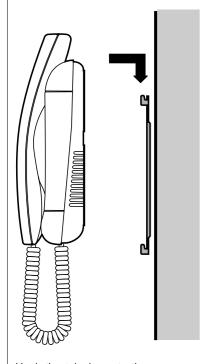


Connect the telephone cable supplied with the product to the plug on the back of the telephone.

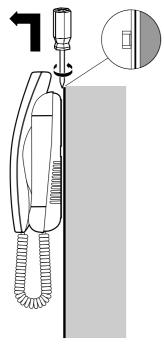




Connect the 2 wires of the cable to terminals DER41÷48 of the **PABX (FT105P** or **FT208P)** or L+ and L- of the telephone interface **FT11D**.

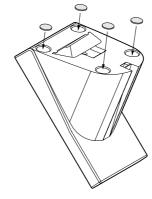


Hook the telephone to the bracket.

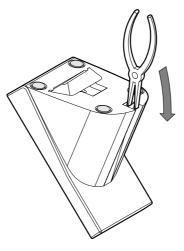


 $Unhook \, the \, telephone \, from \, the \, bracket.$ 

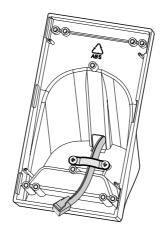
### Table version



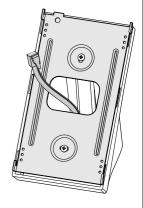
Apply the 4 anti-slip rubber pads in their housings under the table adapter base.



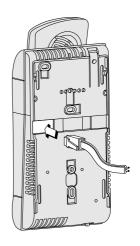
Make the hole for the telephone cable.



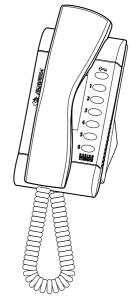
Block the telephone cable to the table adapter with the cable clamp.



Fix the WB700 bracket to the table adapter with the 2 screws supplied.



Connect the telephone cable to the plug on the back of the telephone.



Hook the telephone to the adapter





### INTERNAL STATIONS

### **PROGRAMMING**

The **ST740W** has been developed for exclusive use with **Farfisa** PABX's or telephone interface. It is programmed for use with **FT105P** and **FT208P** PABX by default. The default setting can be modified as described below in this manual.

### Default setting

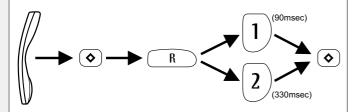
Button	Code	Function
<b>○</b>	6R1	activation of relay 1 of FT105P and FT208P PABX
<b>∞</b> ;	6R2	activation of relay 2 of FT105P and FT208P PABX
<u>:::</u>	6	audio connection with external door station connected to FT105P and FT208P PABX
R	1	timing of R key equal to 90 msec

The ringing volume is set at the maximum value.

### How to program the timing of R (FLASH) key

To change programming:

- pick-up the handset
- -press >; no tone is heard on the loudspeaker
- -press R
- -press 1 or 2 (90 or 330msec, respectively)
- -press o; if programming is correct, you hear the actual tone of the PABX. If not, you hear a continuous sharp tone to indicate incorrect programming.



**Note**: in case of error replace the handset and repeat the programming procedure.

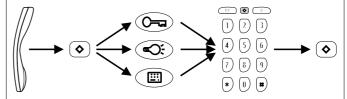
### How to program the buttons 🖳, « ; 🚟

The buttons can change their function by changing programming as desired. They can be used to:

- enable PABX short numbers
- enable audio and door opening in installations with FT11D interface
- -change operation mode of relay (i.e. for two-way installations with differentiated door locks, activation of relays 3 and 4, etc.). See the PABX instructions on pages 208 and 209.

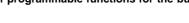
To change programming:

- pick-up the handset
- -press >; no tone is heard on the loudspeaker
- -press the button you want to program ( , , , or :::)
- dial the new code on the keypad (see table)
- press ; if programming is correct, you hear the actual tone of PABX.
   If not, you hear a continuous sharp tone to indicate incorrect programming.



**Note**: in case of error replace the handset and repeat the programming procedure.

### Table of programmable functions for the buttons ( ), ( ),



Code	Function
Code	TUTICION
6R1	activation of <b>relay 1</b> of <b>ES60</b> or <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
6R2	activation of relay 2 of ES60 or ES65 intercominterface with FT105P and FT208P PABX's
6R3	simultaneous activation of <b>relays 1</b> and <b>2</b> of <b>ES60</b> or <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
7832	activation of <b>relay 3</b> of <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's
7842	activation of <b>relay 4</b> of <b>ES65</b> intercom interface with <b>FT105P</b> and <b>FT208P</b> PABX's

Apart from the codes in the table, you can program numbers or functions (\*,#,R,RP) for a **max. of 6 digits** (short numbers, emergency numbers, numbers of special services offered by the telephone provider, etc.). The **RP** key inserts a 3-sec. pause in the numerical sequence to be pro-

door opening with FT11D telephone interface

telephone interface

audio connection with external door station with ES60 or ES65 intercom interface and FT105P or FT208P PABX's

audio connection with external door station with FT11D





6

**RRRR** 

grammed.

RR

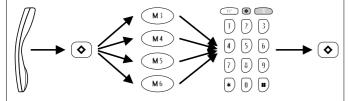
### **PROGRAMMING**

# How to program the M3, M4, M5 and M6 memory buttons

You can use these buttons to program frequently used numbers.

To program the buttons:

- pick-up the handset
- -press �; no tone is heard on the loudspeaker
- press the button you want to program (M3, M4, M5 or M6)
- dial the number on the keypad (max. 24 digits)
- press ; if programming is correct, you hear the actual tone of PABX.
   If not, you hear a continuous sharp tone to indicate incorrect programming.



**Note**: in case of error replace the handset and repeat the programming procedure.

### Important:

- if the telephone is connected to the FT105P or FT208P PABX's, you must dial 0, 81 or 82 before telephone number of the user to access the external line (i.e. 810548975615); in case of international calls, it is recommended to insert a pause (by pressing RP) between the international code and the user number (i.e. 81001RP67859063).
- if the telephone is connected to the **FT11D** interface you can program the telephone number directly; in case of international numbers it is recommended to insert a pause (i.e.001**RP**678599063).

### **OPERATION**

Answer a call Pick-up the handset.

Replace the handset after conversation.

### Make a call

Pick-up the handset.

Dial the number.

Replace the handset after conversation.

**Note**. If the telephone is connected to a Farfisa PABX's, you must dial **0.81** or **82** to access the external line.

### Redial of the last call number dialled

Pick-up the handset.

Press RP.

Replace the handset after conversation.

**Note.** The key RP redials the last call number dialled only if it is the first button you press after picking-up the handset. If not, this key inserts a 3-sec. pause during dialling.

### Intercom function buttons

These functions can be used only if an intercom installation is connected to the PABX or telephone interface.

Pick-up the handset.

Press:

to operate the electric door lock

to activate stair light or other service

to enable intercom conversation

Replace the handset.

**Note**. When using the **FT11D** telephone interface you must program properly the buttons and for correct operations wait for the public exchanger tone before using them.

### Memory buttons

These buttons need to be programmed.

Pick-up the handset.

Press the button associated to the telephone number you want to dial (M3, M4, M5 or M6).

Replace the handset after conversation.

### Ringing volume adjustment

Move the switch located on the bottom of the telephone on the desired position (OFF, min. and max.).





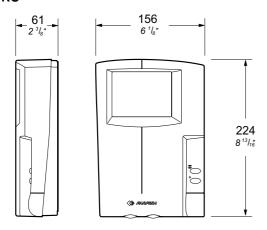


### **INTERNAL STATIONS**

### **VIDEO INTERCOM-TELEPHONE SET**

To realise a video intercom-telephone system you must combine the ST740 telephone with bracket WB700 to a monitor ST7100 (or ST7100C) and bracket WB7100.

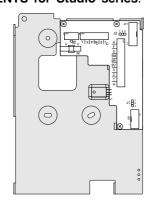
### **MONITORS**



**ST 7100W**. White monitor with B/W flat CRT. For description and technical data see page 84.

ST 7100CW. White monitor with colour LCD. For description and technical data see page 84.

### FIXING ELEMENTS for Studio series.



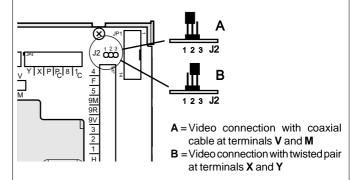
<u>WB 7100</u>. The bracket allows for wall-fixing of monitor **ST7100**. Complete with terminal board for connection to the system and connectors for connection to the monitor. One or more brackets **WB 700** can be used to expand the system.

### **Terminals**

- V Video signal input 0.8÷1.5Vpp
- M Video ground
- F General ground
- H Positive power supply input 18÷24Vdc
- X Negative balanced video signal input
- Y Positive balanced video signal input
- 1, 2, 3, 5 Not used.
- 4 Control switching ON button €
- 8 Positive power supply output for video distributors 12Vdc
- 9M Call input from external door station (250mA)
- 9R Intercommunicating or floor-call input
- **9V** Activation input for FN4000 digital systems (ground command)
- 1C Common of button for control switching ON
- PC Common of service button
- P Service button (symbol ●)

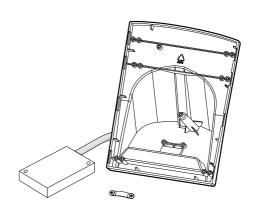
### Choosing the video connection with coaxial cable or twisted pair

With monitor **ST7100** the video connection can be made either with 75 Ohm coaxial cable or twisted pair. The choice between the two systems depends on the correct selection of video distributor and camera. The number of wires and possible installations does not change. **Do not forget to position jumper J2 correctly and use the proper input terminals of bracket WB7100**.



### Note

The bracket is also equipped with connector J1. This connector shall not be used in video intercom-telephone systems.



**TA 7100W.** White Table adapter for **ST7100W** and **ST7100CW** monitors. Complete with cable clamp, junction box and 2.4m connection cable with 20 wires.



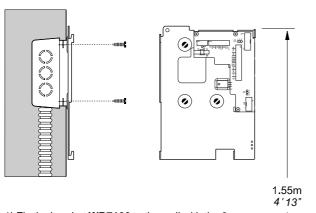


The video intercom-telephone system can be also realized by separating the intercom/telephone function from the video function. For example: install the monitor on the wall and use a standard or cordless telephone to answer to intercom/telephone calls.

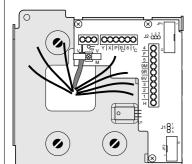
### MONITOR ONLY

Installation steps for monitor ST7100 or ST~7100C in wall or table version.

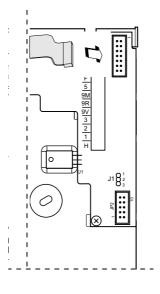
### Wall version



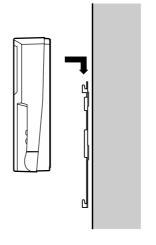
 Fix the bracket WB7100 to the wall with the 3 fixing points at approximately 1.55 m distance from the floor to the upper part of the bracket.



2) Make the connections on the bracket terminal board.



3) Connect the monitor cable to the bracket.



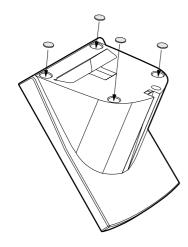
4) Hook the monitor to the bracket.



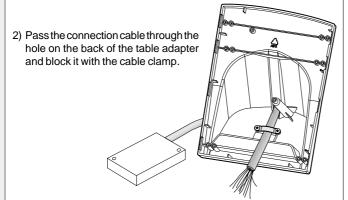


### **INTERNAL STATIONS**

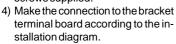
### Table version

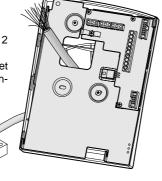


1) Apply the 4 anti-slip rubber pads in their housing under the table adapter base.

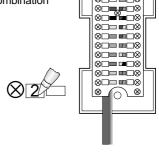


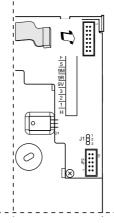
3) Fix the bracket **WB7100** with the 2 screws supplied.



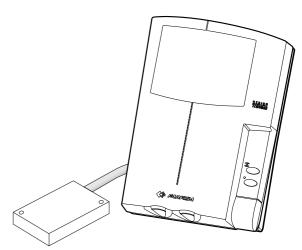


5) Mark the colour/terminal combination on the junction box.





6) Connect the monitor cable to the bracket.



7) Hook the monitor to the bracket.

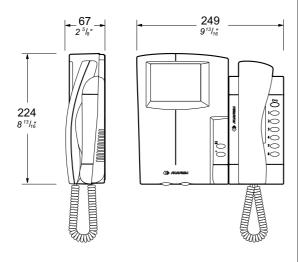


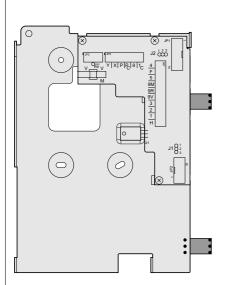


### **VIDEO INTERCOM-TELEPHONE SET**

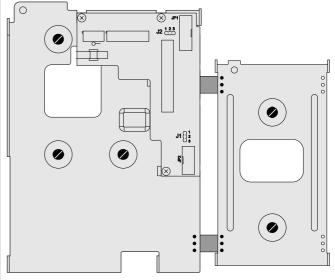
Installation steps for monitor **ST7100W** (or **ST7100CW**), telephone **ST740W**, brackets **WB7100** and **WB700** and table adapters (if necessary) to obtain an internal station with video intercom-telephone functions.

### Wall version

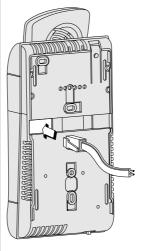




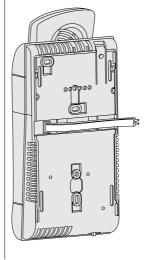
1) Before fixing the bracket **WB700**, position the 2 plastic templates on the holes of bracket **WB7100**.



Fix the 2 brackets to the wall according to the instructions of figure 1 on page 197.



3) Connect the telephone cable supplied with the product to the plug on the back of the telephone.



4) Pass the telephone cable through the space between the telephone and the bracket. Pull the cable in such a way that the extra part of the cable faces the monitor bracket.

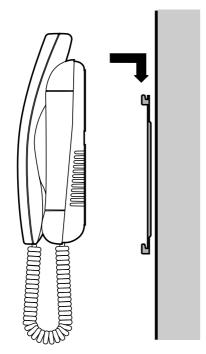
### Note.

If necessary, to make it easier to pass the cable between the telephone and monitor, you can use the breaking points on the base of telephone and monitor (only the sides that are interested by the passage of the cable).

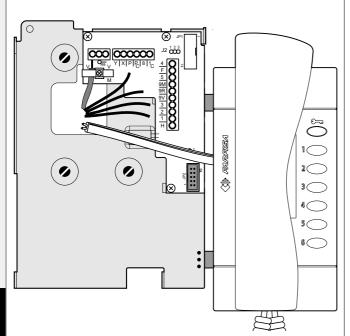




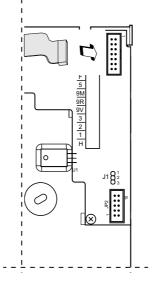
# **INTERNAL STATIONS**



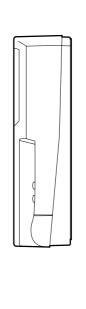
5) Hook the telephone to the bracket WB700.



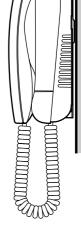
6) Make the connections on the terminal board of bracket **WB7100** according to the installation diagram.



7) Connect the monitor cable to the bracket.



8) Hook the monitor to the bracket.

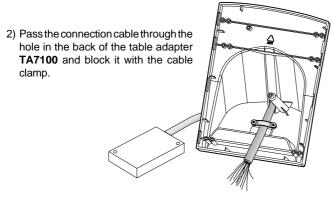


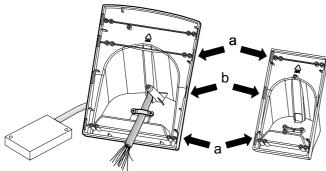




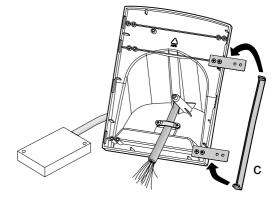
# Table version

 Apply the 8 anti-slip rubber pads in their housings under the base of the table adapters TA7100 and TA700.

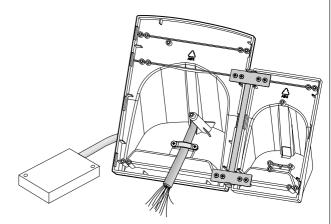




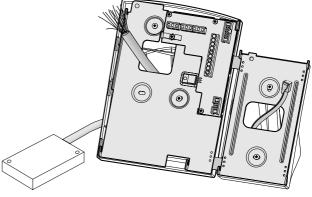
3) The arrow indicate the breaking points for the application of the metallic frames (a) and the passage of the telephone cable (b).



4) Screw the 2 metallic frames to the table adapter **TA7100** and hook the plastic frame to them (c).



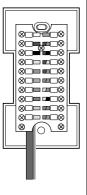
5) Screw the table adapter  ${\bf TA700}$  to the 2 metallic frames.



- 6) Screw brackets WB7100 and WB700 to the table adapters.
- 7) Apply the monitor and telephone according to the instructions on pages 199 and 200 (from point 3 to 8).

When connecting the wires to the terminal boards of bracket **WB7100** (point 6) you must mark the colour/terminal combination on the junction box.









### INTERNAL STATIONS

### VIDEO INTERCOM-TELEPHONE WITH VIDEO MEMORY

### ST7M32W. Video memory.

For the connection and characteristics see pages 90 and 94. The only difference between video intercom and video intercom-telephone connections is represented by the fact that in video intercom-telephone systems the 4 main functions of the video memory can not be remotely actuated with the telephone because it is not provided with buttons for these functions.

### Installation

Installation steps for the realisation of one video intercom-telephone internal station with video memory in wall or table version.

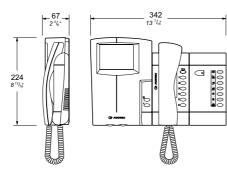
For this composition you need:

- 1 ST7100 or ST7100C (monitor)
- 1 ST740 (telephone)
- 1 ST7M32 (video memory)
- 1 WB7100 (bracket for monitor)
- 2 WB700 (brackets for telephone and video memory)

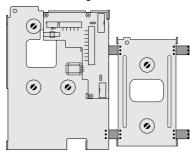
For the table version you must add:

- 1 TA7100 (table adapter for monitor)
- 2 TA700 (table adapter for telephone and video memory)

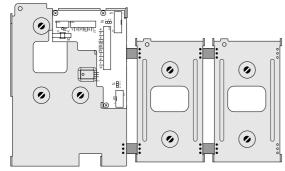
### Wall version



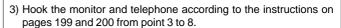
To install a video memory module next to the monitor and telephone, you must insert the 2 plastic templates contained in the packing on the proper holes of the bracket **WB700** before fixing it.



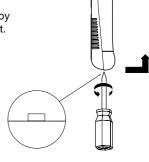
 Before fixing the second bracket WB700, position the 2 plastic templates on the bracket holes.

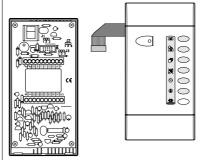


2) Fix the third bracket to the wall.

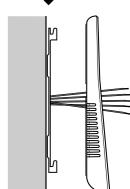


4) Remove the video memory cover by disengaging it from the bottom part.

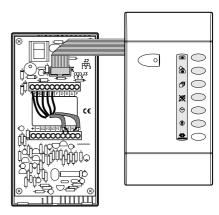




5) Remove the flat cable that connects the 2 boards.



 Pass the connection wires through the hole on the base and hook the base to the bracket.

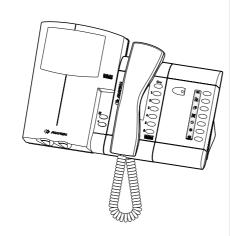


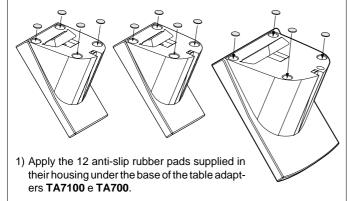
 Make the connection as shown in the installation diagram, reconnect the internal flat cable and replace the cover at the base of the video memory.

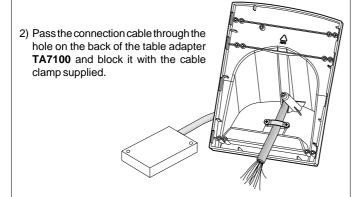


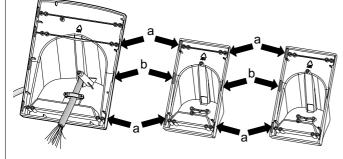


### Table version

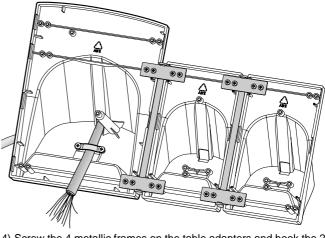




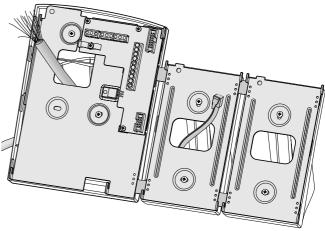




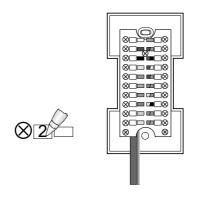
3) The arrows indicate the breaking points for the application of the metallic frames (a) and for the video memory wires (b).



4) Screw the 4 metallic frames on the table adapters and hook the 2 plastic frames to them (see drawing 4 on page 201).



5) Screw the brackets WB7100 and WB700 on the table adapters.



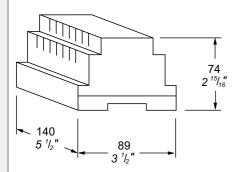
6) Hook the monitor and intercom according to the instructions on pages 199 and 200 (point 3 to 8) and the video memory according to the instructions on page 186 (point 4 to 7).

When connecting the wires on the terminal boards of bracket  $\pmb{WB7100}$  (point 6), mark the colour/terminal combination on the junction box.





### INTERCOM-TELEPHONE INTERFACE



### FT11D. Intercom-telephone interface.

It allows the connection of the trunk line and the intercom system to home telephone.

### Technical data

Power supply 127/230Vac

Maximum power consumption 7VA

Flashing time (button "R") 80 ÷ 330msec

Ringing Voltage 48Vac - 15mA

Operating temperature 0° ÷ +40°C

Maximum humidity 85% RH

Housing DIN 8 modules A

### Note

The model is not provided with fuses, but it is protected against overloading or short-circuiting by temperature sensors (thermoprotector). In order to reset them, it is necessary to cut off the mains voltage for about one minute. Reconnect power after correcting the fault.

### **Terminals**

Tip/ Ring trunk line connection
L-/ L+ telephone connection
0/ 127 input voltage 127Vac
0/ 230 input voltage 230Vac

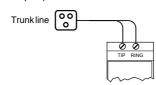
- 1 audio transmission
- 2 audio receiver
- 3 ground
- 4 terminal connected to ground. It can be isolated by cutting W5 jumper. The normally open contact of relay, is connected between terminals 4 and 5.
- 5 lock release max 1A (common relay contact)
- 6 intercom call input (12Vac 150 mA)
- 7 normally closed contact of relay

### INSTALLATION

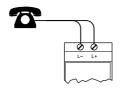
The intercom-telephone interface FT11D in DIN housing 8 modules A can be installed in suitable electrical box provided with bar support in compliance with DIN 46277 standards. It can also be fixed to the wall with two screws and expansion plugs not supplied with the product. The two plastic protections of the terminal boards must be mounted in case of wall installation. They can be eliminated in case of installation on DIN bar in electrical box.

### Telephone and electrical connections

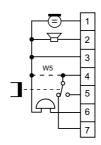
- Connect the two wires of the trunk line (telephone pair) to terminals **TIP** and **RING**.



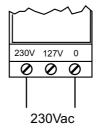
- Connect the two wires of the telephone to terminals L- and L+ (telephone pair). The maximum distance between the interface and the last telephone is 350m with 0.6mm² pair. Do not lay the telephone cables together with electrical cables.



- Connect the five wires of the intercom system to terminals 1, 2, 3, 5 and 6.



- Connect the two wires of the electrical mains to terminals 0 and 230 (or 0-127 according to the ratings of the mains). It is necessary to provide a disconnecting and safety bipolar switch before the device.



- Insert the 2 plastic protection of the terminal covers supplied with the product.

# PROGRAMMING THE TELEPHONE ST740W

Both a **standard** telephone and model **ST740** can be used as internal extension.

When using art.**ST740** it is necessary to program it in order to use the buttons dedicated to intercom functions. For information on programming see page 194. Following are the codes that can be assigned to the intercom buttons.

Button Code

 RR RRRR

can be programmed with a **maximum number of 6 digits** (emergency number, telephone provider special services).

### **OPERATION AND USE**

Do not open or tamper with the device since it contains high voltages inside. Installation and maintenance must be done exclusively by specialized personnel.

Please consider that also if the telephone interface is ON for outgoing / incoming calls the telephone is connected to the trunk line directly. To operate the telephone interface set the switch on "I".

A flashing indicator (LED) shows the system is working properly.

### Incoming outside calls

- When receiving a call from the trunk line it is enough to pick up the handset and to answer.

### **Outgoing external calls**

- Pick up the handset.
- Wait for the dial tone of public exchanger.
- Dial the number.

# Intercom connection without an outdoor incoming call

- Pick up the handset.
- Wait for the dial tone of public exchanger.

(ST740) - press :::

(Standard) - the "R" key twice (R+R) in a 3seconds lapse of time.





### TELEPHONE PROTECTIONS

### Intercom call

An intercom call is signalled on the telephone with a faster ringing tone than a conventional incoming outside call. The telephone is automatically connected to the intercom line, to answer it is enough to pick up the handset.

If within 25 seconds you don't answer, the telephone is connected again to the trunk line.

### Door-opener

When the telephone is connected to the external door intercom station, the user can open the door by pressing:

(ST740) - the \_\_\_\_ button (Standard) - the "R" key twice (R+R) in a 3seconds lapse of time.

### Intercom call during a telephone conversation

During a telephone conversation, an acoustic signal (beep) indicates the intercom call.

The user can:

-answer the intercom call and put the telephone conversation on hold (music on hold) by pressing:

(ST740) -the <u>∷</u> button

(Standard) - the "R" key twice (R+R) in a 3seconds lapse of time.

To retrieve the telephone conversation the user must replace the handset and wait for the telephone ringing back;

- answer to the intercom call and clear the telephone call by replacing the handset and waiting for the incoming intercom call to ring;
- ignore the intercom call and continue the telephone call. The intercom call remains active for 25 seconds, while the beep signal remains active only for 10 seconds.

### Phone call during an intercom conversation

During an intercom conversation, any phone call is signalled by a bip on the background. In order to answer the phone call, the user has to replace the handset and wait for the incoming outside call.

### Emergency

In case of power failure, the telephone is connected directly to the trunk line.

### Signalling table

Intercom call/call back ringing tone



PR1. Protection for 1 telephone line.

PR2. Protection for 2 telephone lines.

PRAL. Protection for electrical line (230Vac).

### **WARNINGS**

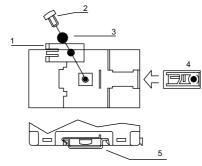
- . Do not install the protections in humid places or near heat sources.
- Do not introduce objects or pour liquids inside the protections.
- Do not install the protections during a storm.
- Do not touch non-insulated cables, unless they are not disconnected from the mains.
- The protections do not contain user-serviceable parts: do not open the protection housings. If necessary, contact an authorized service cen-

### MECHANICAL ASSEMBLING

For the mechanical assembling use the fastening means supplied with the kit.

The protection devices can be assembled on Gtype (EN 50035) and OMEGA-type (EN 50022) DIN bars.

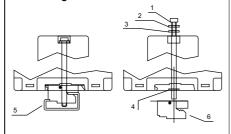
### Assembling on OMEGA bar



- Ground spring
- 2 Fixing screw
- 3 Notched washer Ø5
- 4 Plastic fastener 5 Omega bar

Note: Only use the plastic fastener in case of assembling on OMEGA bar without ground connection.

### Assembling on G bar

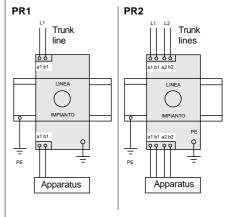


- 1 Fixing screw
- 2 Split washer Ø4
- 3 Flat washer Ø4
- 4 Notched washer Ø4
- 5 Omega bar
- 6 Mechanical fastener and ground terminal

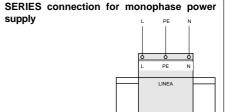
### ELECTRICAL ASSEMBLING

The protection device must be connected to the ground system using the terminals provided and/ or the grounded DIN bar. The lower the resistance of the ground system, the higher the efficacy of the protection device. Disconnect the power supply before making the connections and refer to the wiring diagrams.

### **INSTALLATION DIAGRAMS**



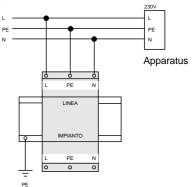
### PRAI



# **Apparatus**

# PARALLEL connection for monophase power

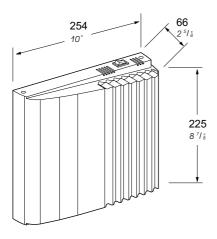
Connect the protection device in parallel to prevent it from being crossed by the operating current. This allows for connecting devices that absorb a higher current than the current stated by the protection device.





In addition to the traditional functions, the PABX allows for intercom connection to your own entrance or to the building system intercom and intercommunicating service between Farfisa dedicated telephones (art. **ST740**) or pulse/DTMF standard telephones.

The PABX are sold with basic programming by default. For the intercom connection or for changing the default programming, carefully read the instructions manual supplied with the product.



FT105P. PABX with 1 external and 5 extension lines

FT208P. PABX with 2 external and 8 extension lines

### **SAFETY RULES**

- Only use the devices for the purpose it was designed for. The manufacturer is not responsible for possible damages arising from improper, incorrect or unreasonable use.
- The devices complies with the EEC directives (CE European Mark).
- The installation must comply with the CE regulations in force.
- A disconnecting and protection switch must be placed before the PABX in the installation.
- Before powering up the PABX, make sure that the rating complies with the power mains.
- Never open the devices when turned ON.
- In case of failure, malfunctioning or modification of the installation, disconnect the power mains by means of the general switch and contact specialized personnel.

### **EMERGENCY**

In case of power failure, the following lines can be used to make/receive calls:

for FT105P extension 41 for FT208P extension 41 for external line 1 extension 42 for external line 2

An EEPROM memory guarantees the storing of the general programming data (or system data) and restore them when the power is restored.

### Technical data

	FT105P	FT208P
Supply voltage (+6÷-10%):	230Vac	230Vac
Maximum power consumption:	16W	18W
Power consumption in stand-by:	10W	10W
Input protection fuse:	0.315A	0.315A
Maximum distance of an extension line with 0.6 mm <sup>2</sup>		
telephone pair:	350m	350m
Dimensions:	226x254x66	226x254x66
Weight:	1.3 Kg	1.4 Kg
Operating temperature:	0°÷40°C	0°÷40°C
Maximum humidity permitted:	85%RH	85%RH
Number of external lines:	1	2
Number of extension lines:	5	8
Number of DTMF receivers:	1	2
Simultaneous internal conversations:	2	2
Simultaneous external conversations:	1	2
Paging communication:	1	1
Intercom calls (additional board):	1 or 2	1 or 2
Storing of data in case of power failure:	EEprom	EEprom
Extension lines in emergency mode:	41	41 and 42
Extension line for facsimiles, modems, answering machines:	45 *	48 *
Microprocessor control with recorded program		

\* The other extension lines can also be used but in this case the use of the general call function is not recommended.



Solid-state switching matrix 2-wire internal telephone network



### INSTALLATION

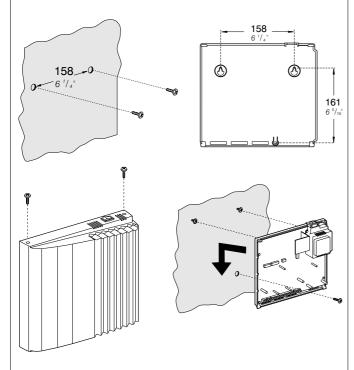
For correct operation, make sure that the openings or slots for ventilation and heat dissipation are not blocked.

Install the PABX away from devices generating strong magnetic fields (such as copying machines).

### **Mechanical installation**

To install the PABX:

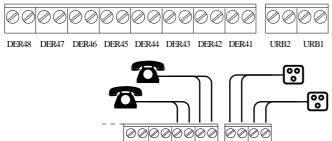
- position two screws on the wall at a distance of 158 mm without tightening them
- unscrew the 2 screws to remove the cover
- hook the PABX to the screws
- mark and drill the bottom hole
- place the PABX on the wall in correspondence with the 2 upper screws and move it downwards
- insert the bottom screw to block the PABX.



### Telephone and electrical connections

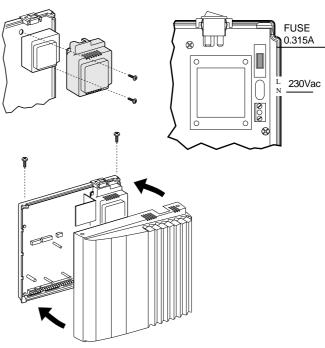
Use a telephone pair to connect telephones and external lines. The maximum distance between the PABX and the last telephone is 350 m. using a 0.6 mm² telephone pair. Do not use multi-pair cables to reduce crosstalk problems.

- check that the ON/OFF switch is OFF
- connect the wires of the external lines 1 and 2 to terminals URB1 and URB2 (URB1 for FT105P)
- connect the wires of the telephones to DER41, .... DER48 (DER41, ... DER45 for FT105P)



DER44 DER43 DER42 DER41 URB2 URB1

- unscrew the 2 screws to remove the protection cover of the power supply
- connect the 2 electrical conductors to terminals L and N
- · replace the protection cover
- close the PABX
- power ON the PABX.



### Notes

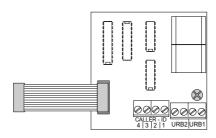
- Although already present in the PABX, place external protections against overvoltage or lightning on the external lines, on the electric mains and on the extension lines, if partially located outside the building.
- The correct operation of the telephone installation is guaranteed when using homologated telephones.
- If the general call function is required, connect facsimiles, modems and answering machines to the last extension (DER45 for FT105P; DER48 for FT208P) because they do not receive the call signal.





### **EXPANSION BOARDS**

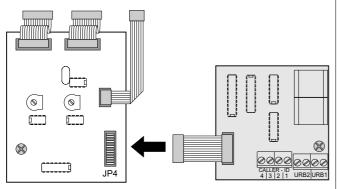
### ES70. Caller identifier board



The installation of the caller identifier board (art. **ES70**) into the **FT105P** or **FT208P** PABX allows you to display the caller's telephone number. The board allows for connecting up to 4 terminals. **The service must be requested to the telephone provider.** 

### Installing the board into the PABX

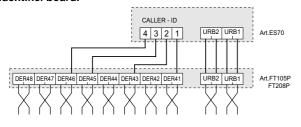
- . Check that the PABX is turned OFF
- Remove the cover by unscrewing the 2 top screws
- Fix the board on the provided space
- Connect the ES70 board cable to the JP4 connector of the PABX (faxswitch board)
- Connect the 2 wires of each external line to the URB1 and URB2 terminal boards of the PABX and the ES70 board
- Remember to correctly program the PABX



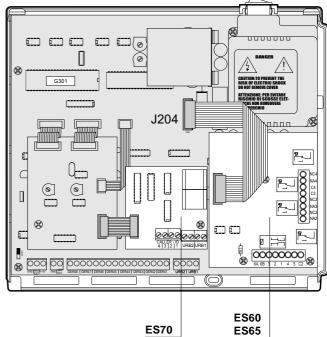
• Connect the **right terminal** of the 1<sup>st</sup> extension to terminal 1 of the CALLER-ID terminal board. Connect the **right terminal** of the 2<sup>nd</sup> terminal to terminal 2 of the CALLER-ID terminal board. Repeat the connection up to the 4<sup>th</sup> extension. You can choose any of the extensions, as long as you comply with the correct sequence (i.e. right terminal of DER 41 connected to terminal 1 of the CALLER-ID terminal board, right terminal of DER 43 connected to terminal 2, right terminal of DER 45 connected to terminal 3, right terminal of DER 46 connected to terminal 4).

**Warning**: If the telephone installation includes the ISDN interface board, for the correct operation of the ES70 check that the microcontroller of the FT105P or FT208P PABX is provided with H301 or G301 software or higher.

# Connection of the FT105P or FT208P PABX with the ES70 caller identifier board.



Installation of the ES60 (or ES65) intercom interface and ES70 caller identifier board in the FT105P or FT208P PABX.



### **PROGRAMMING**

You need to enter the number of each extension you require the service for. It is recommended to note down the type of programming in the enclosed table.

- 0 service disabled
- 1 service enabled

### Program:

- pick up the handset of the extension 41 (dialling tone);
- dial the access code 333316;
- $(only\ FT105P)$  dial 5 digits to program 5 extensions (see Table). Always dial a number of 5 digits even if extensions are less than 5.
- $(only\ FT208P)$  dial 8 digits to program 8 extensions (see Table). Always dial a number of 8 digits even if extensions are less than 8.
- wait for the acknowledgment tone and hang up.

### **Notes**

- The caller ID service will not work if the external lines are programmed for direct dialling (DISA) (see page 14 of the PABX technical manual for DISA programming).
- The maximum number of extensions with the caller ID function is
   If a higher number of telephones is enabled during programming, the exchanger will automatically recognise only the first 4 telephones and exclude the others from the service.



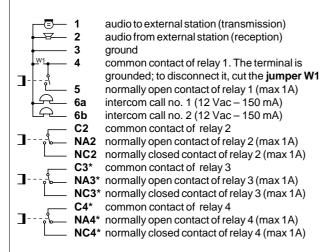


### **INTERCOMINTERFACES**

The intercom board art. **ES60** or **ES65** can be installed in the PABX in order to connect with the external intercom station, open the door/ automatic gate, turn ON the staircase lighting, etc.

**ES60.** Intercom interface with two calls and 2 relays for door-opener. Same as ES60, with 4 relays for door-opener and activation of electrical equipment.

### Terminal specifications of the intercom boards

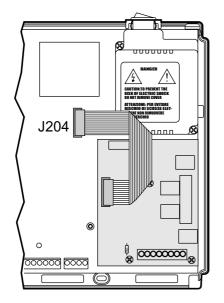


<sup>\*</sup> Terminals only available on the ES65 intercom board.

### **INSTALLATION**

### Installing the board

- Make sure that the PABX is OFF
- Unscrew the 2 upper screws to remove the cover
- Fix the board on the provided place
- Connect the flat cable of the intercom board to the J204 connector
- Connect the intercom wires to the terminal block (see diagrams below)
- Remember to correctly program the PABX



### **PROGRAMMING**

Programming allows for personalizing the PABX according to the user's needs and for setting the operating mode for the each individual telephone connected to the PABX.

# PROGRAMMING CAN ONLY BE CARRIED OUT FROM EXTENSION 41.

When switching it ON, the PABX is programmed for standard operation. The basic programming is described in the sections of the instructions manual supplied with the product. For information on the PABX programming see the PABX manual.

Only reprogram the PABX parts that need to be modified and leave the rest unchanged.

It is possible to return to base programming at any time, by dialling code **333399** from telephone 41.

PABX are provided with two operating modes: **day** and **night** service. It is possible to simplify the PABX use by selecting the desired programming at any time during the day.

To recall the **day** service, dial **333301** from telephone 41 (operating mode set in the base programming).

To recall the night service, dial 333300.

### PABX programming procedure

- pick up the handset (dialling tone);
- · dial the access code;
- (only FT105P) dial 5 digits to program 5 extensions (see Table).
   Always dial a number of 5 digits even if extensions are less than
   5.
- $(only\ FT208P)$  dial 8 digits to program 8 extensions (see Table). Always dial a number of 8 digits even if extensions are less than 8.
- wait for the acknowledgment tone and hang up.

### **HOW TO ASSIGN INCOMING EXTERNAL LINES**

The access code for this service is - day 333307 - night 333309

- 0 the extension: is not enabled to receive calls from the external lines
- ${f 1}$  the extension: is enabled to receive calls from external line 1
- $\boldsymbol{2}\,$  the extension: is enabled to receive calls from external line 2
- 3 the extension: is enabled to receive calls from external lines 1 and

### **HOW TO ASSIGN OUTGOING EXTERNAL LINES**

The access code for this service is - day - night 333306

- 0 the extension: is not enabled to make calls on the external lines
- 1 the extension: is enabled to make calls on external line 1
- 2 the extension: is enabled to make calls on external line 2
- ${\bf 3} \ \ \text{the extension:} \ \ \text{-} \ \text{is enabled to receive calls on external lines 1 and 2}$





TELECOMMUNICATION

### **ENABLING THE INTERCOM INTERFACE**

The access code for this service is - day - night 333310

0 the extension: -is not enabled to have conversations with the exter-

nal intercom station

- is not enabled to activate relays (door-opener, stair-

case lighting, etc.)

1 the extension: - is enabled to have conversations with the external

intercom station

- is not enabled to activate relays (door-opener, stair-

case lighting, etc.)

 ${\bf 2} \ \ the \ extension: \ \ -is \ not \ enabled \ to \ have \ conversations \ with \ the \ exter-$ 

nal intercom station

- is enabled to activate relays (door-opener, staircase

lighting, etc.

3 the extension: - is enabled to have conversations with the external

intercom station

- is enabled to activate relays (door-opener, staircase

lighting, etc.)

### **ENABLING TO INTERCOM CALLS**

The access code for this service is -day 333311

-night 333313

0 the extension: - is not enabled to receive calls from the external

intercom station

1 the extension: - is enabled to receive calls from the external inter-

com station - button no. 1 (terminal 6a of board ES60

or ES65)

2 the extension: - is enabled to receive calls from the external inter-

 $com\,station-button\,no.\,2\,(terminal\,6b\,of\,board\,ES60$ 

or ES65)

3 the extension: - is enabled to receive calls from both buttons of the

external intercom station (terminals 6a and 6b of

board ES60 or ES65)

### OPERATION

The functions of the dedicated buttons of the **ST740** telephone are factory-set.

### Answering an intercom incoming call

This function allows for answering calls coming from one or more external intercom stations (if properly programmed in both the sections "enabling the intercom interface" and "enabling to intercom calls").

When the call from the external station is received:

• pick up the handset and answer

### Intercom communication without receiving any call

This function allows for having a conversation without receiving a call from one or more external intercom stations (if properly programmed in the section "enabling the intercom section").

- pick up the handset
- dialling tone

(ST740) • press <u>□</u>::

(Standard) . dial 6

- conversation with the external intercom station starts

### Transfer an intercom call

To transfer an intercom call to an enabled user:

- hang up to suspend the intercom conversation
- · pick up the handset
- · call the desired extension and hang up after the message

The called user can:

press FLASH

(ST740) • press <u>□</u>::

(Standard) • dial 6

- conversation with the external intercom station starts

### Relay activation during conversation

This function allows for activating the relays no.1 and 2 of the intercom board ES60 or ES65 in order to operate electrical locks, turn ON the staircase lighting, etc.

During the conversation with the external intercom station:

(ST740) • press the ◯¬¬¬ button to activate relay 1

• press the 🖎 - button to activate relay 2

For the simultaneous activation of the two relays follow the procedure of the standard telephone.

### (Standard) • press FLASH

- dialling tone
- dial the number of the relay to be activated:
- 1 immediate enabling of relay 1 for about 3 seconds
- 2 immediate enabling of relay 2 for about 3 seconds
- 3 enabling of relays 1 and 2 in sequence.\*
- \* Relays 1 and 2 are not enabled at the same time, in order not to overcharge the intercom power supply unit when used to activate electrical locks. Relay 2 is enabled with about 3 sec. delay.

### **RELAY ACTIVATION**

This function allows for activating the relays of the intercom board **ES60** or **ES65** for auxiliary services (lights, thermostats, heating and air conditioning installations, etc.).

### Note

# Only one board at time can be added in the PABX (either ES60 or ES65).

For installing the board and connection terminal block see on page 209.

### Operation

For the first two relays also refer to the previous sections on this page:

- enabling the intercom interface;
- relay activation during conversation.
- pick up the handset
  - call waiting tone
- dial 78 followed by the number of the relay to be activated
  - 1 relay1
  - 2 relay 2
  - 3 relay3
  - **3** relay **3 4** relay **4**
- select the relay action (only for relays 2, 3 and 4)
  - 0 the relay is deactivated
  - 1 the relay is activated permanently
  - 2 the relay is activated for 3 seconds
- hang up after the acknowledgment tone.

**Example**: - dial 7821 to activate permanently relay 2. To deactivate it, dial 7820.

- dial 7832 to activate only for 3 seconds relay 3.





### REMOTE ACTIVATION OF AUXILIARY RELAYS USING A CODE

# This service only works when calling over the public line with a DTMF telephone.

It allows the user with password to activate from long distance the 4 actuator relays for auxiliary services (lights, thermostats, heating and air conditioning installations, etc.) by making a call to the user's number.

### Storing the passwords for external line 1 and 2

Chose a 4-digit password for line no. 1 and no.2 (i.e. 0190, 3233, 0010, etc.) and write them in the table below.

Programming External line 1 password		Password to be stored
External line 2 password	2222_21	(only ET209D

To program:

- pick up the handset of the extension 41
- dialling tone
- dial the access code 333320 to store password related to external line no.1
- dial a chosen 4-digit password (from 0000 to 9999). Always dial a 4digit number
- · wait for the acknowledgment tone and hang up.

Repeat the above procedure with a different access code and password for external line 2 (only FT208P).

**Example:** if the number below has been dialled from the extension 41: 3333200100 the actuator boards installed in the PABX can be activated by making a call to external line 1 and dialling password 0100.

### Operation

- select the subscriber number to which the PABX is connected from an external telephone
- Public Exchange call control tone
- wait for the D.I.S.A. post-dialling tone
- dial 7
- dial the password programmed for the specific external line
- dial the number of the relay to be activated
  - 1 relay 1
  - 2 relay 2
  - 3 relay 3
  - 4 relay 4
- select the relay action (only for relays 2, 3 and 4. Relay 1 is always activated for 3 seconds)
  - 0 the relay is deactivated
  - 1 the relay is activated
  - 2 the relay is activated for 3 seconds
- acknowledgment tone.

**Examples:** make the connection with the user's number and dial 7010032: relay 3 is activated for 3 seconds, being 0100 the password related to external line 1 (see example above). To enable relay 1, dial 7 + the password code + 1. Relay 1 can only be activated for about 3 seconds.

### Note

In case of incorrect dialling, wrong password or no password within 5 seconds, the call is automatically sent to all extensions enabled to receive external calls.

Legenda

R

lift the handset

button of ST740W telephone

button of ST740W telephone

telephone numerical and functional

buttons

### SUMMARY TABLE OF OPERATIONS FOR THE ACTIVATION OF THE MAIN INTERCOM FUNCTIONS

Intercom functions	ST740 telephone		Standard telephone	
	connected	to:	connected to:	
	FT11D <sup>(1) (2)</sup>	FT105P FT208P	FT11D <sup>(2)</sup>	FT105P FT208P
Door lock release during conversation			R + R (twice R)	R + 1
Door lock release without receiving a call	+ 0=3	+ 0	+R+R+R+R (four times R)	+ 6+R+1
Intercom communication after receiving a call				
Intercom communication without receiving a call	+ ::::	+ ::::	+ R+R (twice R)	+6

<sup>(1)</sup> To have these functions you must programme the buttons of the **ST740** telephone (see page 194).

<sup>(2)</sup> Lift the handset and wait for the exchange tone.





### INSTALLATION INSTRUCTIONS

### INTERCOM-TELEPHONE SYSTEMS

The installation of intercom interfaces (ES60, ES65 or FT11D) in an intercom system allows for using the telephone (traditional, dedicated or cordless) also for intercom functions.

- conversation with one or more external stations
- electric door lock release (or more locks with boards ES60, ES65)
- activation of electrical equipment in direct or remote mode (with boards ES60, ES65)

### **APPLICATION IN INTERCOM SYSTEMS**

The intercom interface boards **ES60**, **ES65** and art. **FT11D** have the same numbers as the terminals and the same functions as a Farfisa intercom connected in 4+1 intercom systems with one or more entrances.

### The only difference is the call terminal.

The call terminal is **9** in the intercom systems and **6** in the interfaces.

For this reason, the intercom diagrams shown in this manual can be converted into intercomtelephone diagrams by changing terminal 9 to 6.

If the private conversation is necessary, the module SM50E must be installed only inside the intercoms, and not in apartments with telephone interfaces because the service is provided by the interface board directly.

The intercommunicating diagrams cannot be used because the intercommunicating service is provided by the PABX.

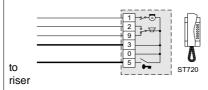
### List of diagrams

Following is a list of installation diagrams in which one or more intercom and telephone interfaces can be installed instead of intercoms.

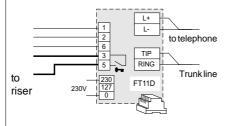
Diagram code	Page reference
Si21MO/1	39
Si22MO/1	43
Si23MO/1	45
Si26MO/1	47
Si26MO/2	49
Si27MO/1	51

For installation instructions and wire crosssection see page 35.

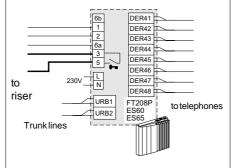
### Intercom connection



# Intercom-telephone connection with interface FT11D



# Intercom-telephone connection with PABX FT208P



# VIDEO INTERCOM-TELEPHONE SYSTEMS

For the realisation of a video intercom system combined to a telephone system, it is necessary to install a monitor **ST7100** or **ST7100C** to your domestic telephone. In this case, in addition to the intercom characteristics described in the previous section, you can visualise your own entrance.

# APPLICATION IN VIDEO INTERCOM SYSTEMS

The intercom interface boards **ES60**, **ES65** and art. **FT11D** have the same numbers as the terminals and the same functions as a Farfisa intercom connected in traditional video intercom systems (7 wires + coaxial cable or twisted pair).

For this reason, the video intercom diagrams contained in this manual can be converted into video intercom-telephone diagrams with the following variations:

- intercom connections (terminals 1, 2, 3 and 5) must be connected to the terminal board of the intercom interface and not to the terminal board of the monitor bracket;
- connect the call terminal 9M with call terminal 6 of the interface.

The intercommunicating diagrams cannot be used because the intercommunicating service is provided by the PABX.

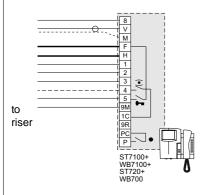




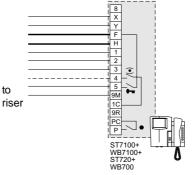
### VIDEO INTERCOM-TELEPHONE SYSTEMS

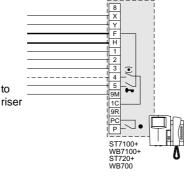
### Video connections with COAXIAL CABLE | Video connections with TWISTED PAIR

### Traditional video intercom-telephone

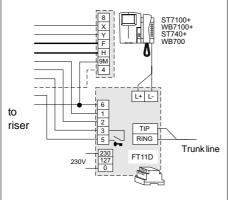


# Traditional video intercom-telephone

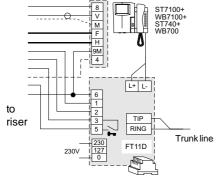




# Video intercom-telephone with interface

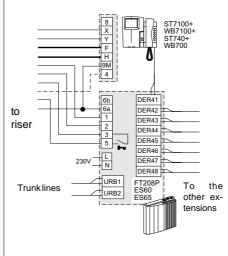


# Video intercom-telephone with interface



Video intercom-telephone with PABX

FT208P



For installation instructions and wire crosssection see pages 111 to 114.

List of diagrams

Diagram code

Si4110/1

Si4110/2

Si41MO/1

Si41MO/2

Si41MO/3

Si41MO/4

Si41MO/5

Si41MO/6

Si42MO/1

Si42MO/2

Si42MO/3

Si42MO/4

Si43MO/1

Si43MO/2

Si43MO/3

Si43MO/4

Si43MO/5

Si43MO/6

Si46MO/1

Si46MO/2

Si46MO/3

Si46MO/4

Si46MO/5

Si46MO/6

Si46MO/7

Si46MO/8

Si47MO/1

Si47MO/2

Si47MO/3

Si47MO/5

Si47MO/6

coms.

Following is a list of installation diagrams in

which one or more intercom-telephone inter-

faces can be installed instead of video inter-

Page reference

116

117

119

121

123

125

127

129

131

133

135

137

139

141

143

145

147

149

151

153

155

157

159

161

163

165

167

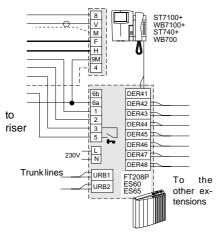
169

171

173

175

### Video intercom-telephone with PABX FT208P







### MIXED INTERCOM/TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
	KM 810W	Compact series intercom with 1 call button
	ST 720W	Studio series modular intercom
	PT 510EW	Project series intercom with 1 call button
	PT 526EW	Project series modular intercom
	ST740W	Studio series telephone
	WB700	Bracket for telephone
	FT11D	Intercom-telephone interface
	FT105P-FT208P	PABX
	ES60-ES65	Intercom-telephone interface for PABX
1	PRS240	Power supply with electronic ringing generator
1	PA **	Door release push-button (optional)
1	SE **	Electric door lock (12VAC-1A)

**Door station series Mody** (for right item set see on pages 16÷19)

	1 row	2 row	
	MD71÷74	MD71÷74	Module frames with back box
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters with module frames
1	MD30	MD30	Electric door speaker (amplifier)

### **Door station series Matrix** (for right item set see on pages 24 and 25)

	MA71÷73	Module frames with back box
1	MA10P-11P-12P	Modules with integrated audio amplifier
	MA20-22-24	Blank and button modules

MA61÷63 Frontframes

... MA91 ÷ 93 \* Rain shelters with module frames

### Door station series Profilo (for right item set see on pages 28 and 29)

	PL71÷73	Module frames with back box
1	PL10P-11P-12P	Modules with integrated audio amplifier
	PL20 ÷ 24	Blank and button modules

- ... Refers to number of users.
- \* Rain shelters are used instead of back boxes and hood covers.
- \*\* Articles not supplied by ACI Farfisa.

Working instructions. See page 36.

### **Notes**

- If the maximum number of extensions is 5, you can use the PABX FT105P.
- For the connection of name-plate lamps, read notes 6, 7 and 8 of the installation instructions on page 35.
- For wires dimensioning refer to the installation recommendations and table on page 35.
- For other types of push-button panels see pages 30 and 31 or the general catalogue.

### **Programming**

When using the telephone interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 204).

When using the PABX, the following programming must be **absolutely** carried out:

- intercom interface activation
- activation to receive intercom calls

See page 210.

If the PABX is **only used for the intercommunicating service,** without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
- how to assign outgoing external lines

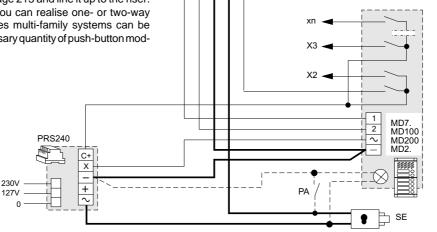
See page 209.

### **Application diagram notes**

When using the MD100, MD200, RP100, RP200 and UP amplified external door stations, it is advisable to place this diagram on the diagram of page 215 and line it up to the riser. For the RP and UP series you can realise one- or two-way systems; for the Mody series multi-family systems can be obtained by adding the necessary quantity of push-button modules.

### Warning.

- In the external door stations RP100 and RP200 cut the jumper W1.
- In the external door stations UP do not connect the yellow wire and insulate it.
- -For AC power supply wires refer to the instructions on page 35.

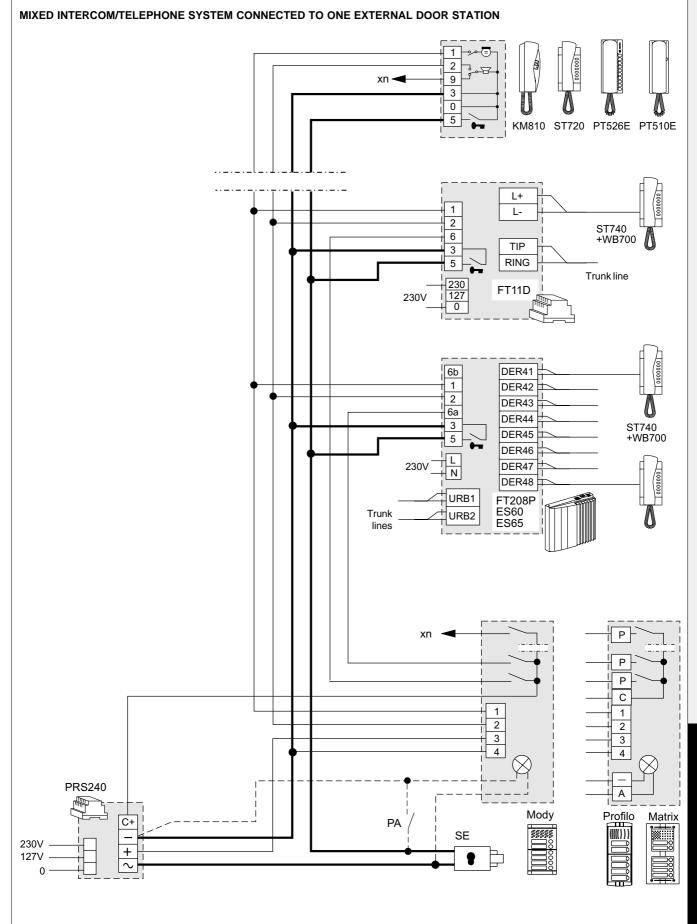






RP100

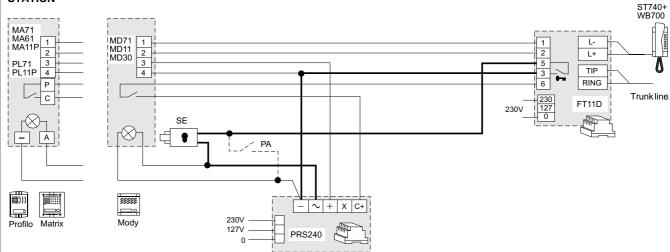
UP11 UP100 UP12







## ONE-WAY INTERCOM-TELEPHONE SYSTEM WITH TELEPHONE INTERFACE AND CONNECTION TO ONE EXTERNAL DOOR STATION



PA = Door release button (optional)

SE = Electric door lock (12Vac-1Amax.)

#### Programming

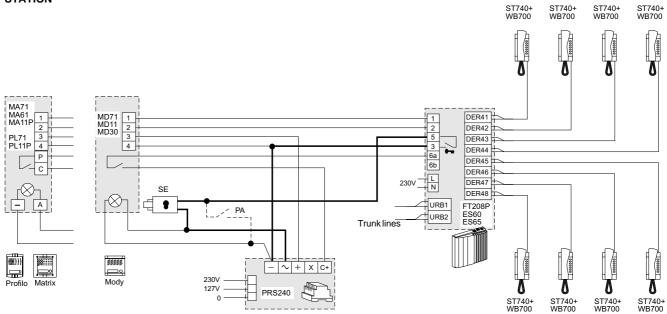
When using the interface FT11D with the telephone ST740 it is necessary to programme the buttons dedicated to the intercomfunctions (see page 204).

#### Note

For wires dimensioning refer to the installation recommendations and table on page 35.

## Si 211T/2

## ONE-WAY INTERCOM-TELEPHONE INTERCOMMUNICATING SYSTEM WITH PABX AND CONNECTION TO ONE EXTERNAL DOOR STATION



**PA** = Door release button (optional)

**SE** = Electric door lock (12Vac-1Amax.)

#### Note

For wires dimensioning refer to the installation recommendations and table on page 35.

#### **Programming**

For this type of system the following programming must be **absolutely** carried out on the PABX:

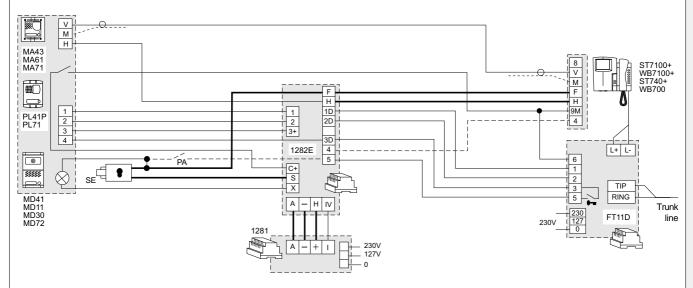
- enabling the intercom interface - enabling to intercom calls See page 210. If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
- how to assign outgoing external lines See page 209.





## ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH TELEPHONE INTERFACE AND CONNECTION TO ONE EXTERNAL DOOR STATION



#### Notes

- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA43Cor PL41PC camera must be used.

**PA** = Door release button (*optional*)

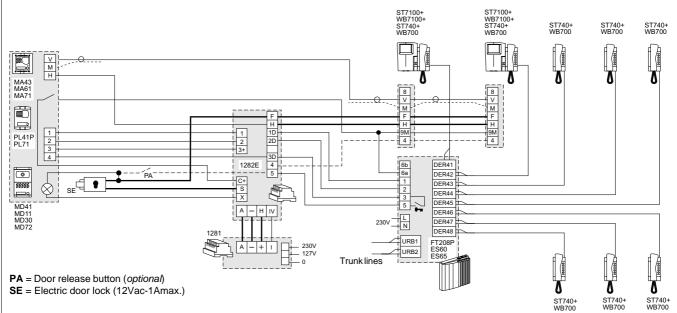
SE = Electric door lock (12Vac-1Amax.)

#### Programming

When using the interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 204).

Si 411T/2

#### ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH PABX AND CONNECTION TO ONE EXTERNAL DOOR STATION



#### Notes

- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA43Cor PL41PC camera must be used.

#### Programming

For this type of system the following programming must be **absolutely** carried out on the PABX:

- enabling the intercom interface
- enabling to intercom calls See page 210.

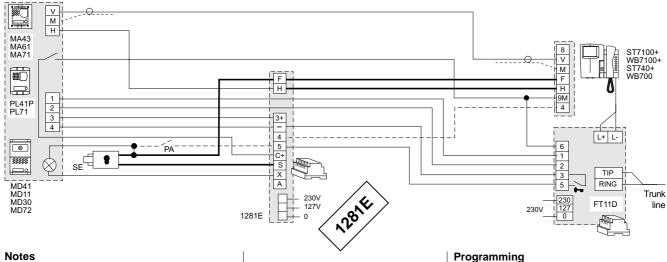
If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
- how to assign outgoing external lines See page 209.





#### ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH TELEPHONE INTERFACE, CONNECTION TO ONE EXTERNAL DOOR STATION AND 1281E POWER SUPPLY-TIMER

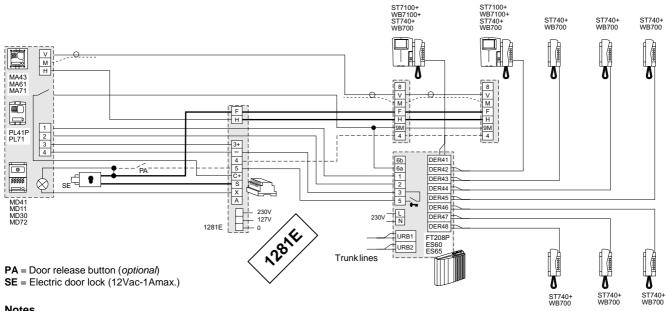


- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA43Cor PL41PC camera must be used.
- PA = Door release button (optional)
- SE = Electric door lock (12Vac-1Amax.)

When using the interface FT11D with the telephone ST740 it is necessary to programme the buttons dedicated to the intercom functions (see page 204).

## Si 411T/4

#### ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH PABX, CONNECTION TO ONE EXTERNAL DOOR STATION AND 1281E **POWER SUPPLY-TIMER**



- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA43Cor PL41PC camera must be used.

#### **Programming**

For this type of system the following programming must be absolutely carried out on the PABX:

- enabling the intercom interface
- enabling to intercom calls See page 210.

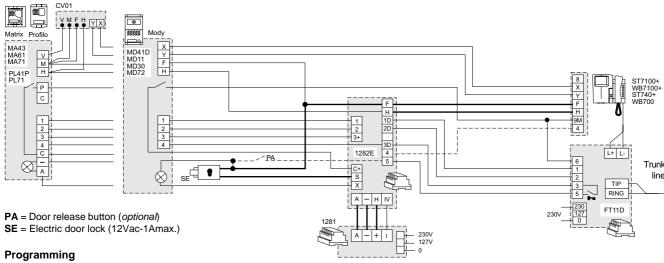
If the PABX is only used for the intercommunicating service, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following program-

- how to assign incoming external lines
- how to assign outgoing external lines See page 209.





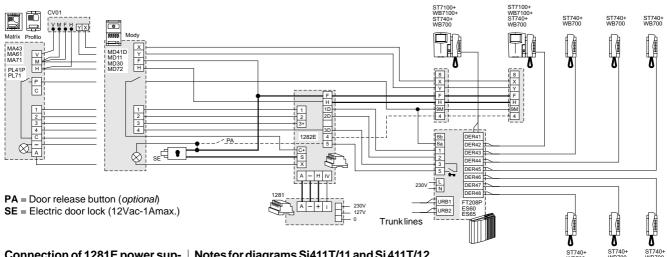
#### ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH TELEPHONE INTERFACE AND CONNECTION TO ONE EXTERNAL DOOR STATION



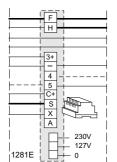
When using the interface FT11D with the telephone ST740 it is necessary to programme the buttons dedicated to the intercomfunctions (see page 204).

Si 411T/12

#### ONE-WAY VIDEO INTERCOM-TELEPHONE SYSTEM WITH PABX AND CONNECTION TO ONE EXTERNAL DOOR STATION



#### Connection of 1281E power supply-timer instead of 1281 plus 1282E.



In the schematics of this page, 1281E power supply-timer can be used instead of 1281 plus 1282E. The only change is in the switching-OFF of the installation that will be at the end of the timing.

## Notes for diagrams Si411T/11 and Si411T/12

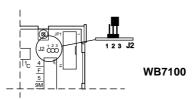
On the WB7100 brackets you must:

- -move the jumper J2 from position 1-2 to 2-3;
- -cut the 75 $\Omega$  resistances R7 and R10 of WB7100 bracket:
- -add two 75Ω resistances among the terminals X-F and Y-F of the last video intercom.

For the video connection with twisted pair, use the camera MD41D and read note 4 on page 158 or add the video converter CV01 (see page 108).

To install a colour system, the ST7100CW video intercoms and the MD41C, MA43Cor PL41PC camera must be used.

For wires dimensioning refer to the installation recommendations and table on page 111.



#### **Programming**

For this type of system the following programming must be absolutely carried out on the PABX:

- enabling the intercom interface
- enabling to intercom calls See page 210.

If the PABX is only used for the intercommunicating service, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming:

- how to assign incoming external lines
- how to assign outgoing external lines See page 209.





1

1

#### Si 41MT/1

1282E

#### MIXED VIDEO INTERCOM/TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty Article	Description
KM8100W+WB8600	Compact videointercom Flat + bracket
KM8600W+WB8600+80	OB3 Compact videointercom + bracket + back box
KM8800W+WB8600	Compact videointercom reflex + bracket
ST7100W+WB7100	Studio series monitor + bracket
ST720W+WB700	Studio series intercom + bracket
ST740W+WB700	Studio series telephone + bracket
FT11D	Intercom-telephone interface
FT105P-FT208P	PABX
ES60-ES65	Intercom-telephone interface for PABX
DV2-4	Video distributor
1 <b>1281</b>	Power supply

Timer

PA \*\* Door release button (optional) SE \*\* 1 Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

	Trow	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1	MD30	MD30	Electric door speaker (amplifier)
1	MD41	MD41	Camera

#### Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA42-43	Cameras with integrated audio amplifier
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL40P-41P-42P	Cameras with audio amplifier

- Refers to number of users.
- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

#### **Notes**

- If the maximum number of extensions is 5, you can use the PABX FT105P.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113.
- For other types of push-button panels see the general catalogue.

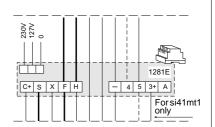
When using the telephone interface FT11D with the telephone ST740 it is necessary to programme the buttons dedicated to the intercom functions (see page 204).

When using the PABX, the following programming must be absolutely carried out: - intercom interface activation:

- activation to receive intercom calls. See page 210.

If the PABX is only used for the intercommunicating service, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming: - how to assign incoming external lines; - how to assign outgoing external lines. See page 209.

### Connection of 1281 E power supply-timer instead of 1281 plus 1282E.

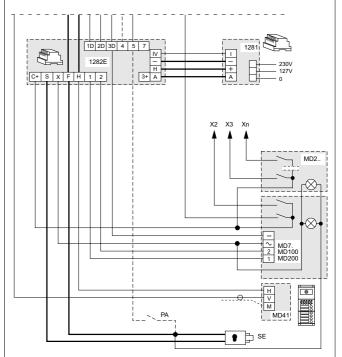


By adding 1281E to the schematics on page 221 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only
- no control switch-ON interruption with the videointercoms during external audio-video connection. If the service is necessary, add **1471** relay in order to interrupt conductor 4.

#### Application diagram

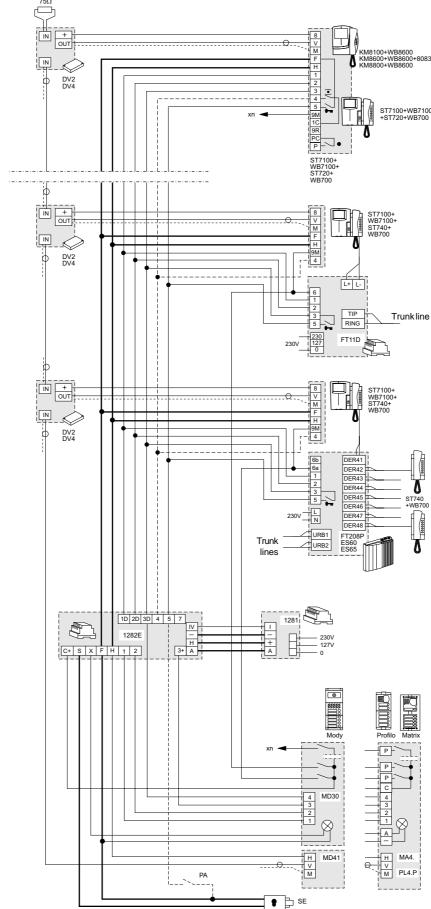
When using MD100, MD200 amplified external door stations, place this diagram on the diagram on page 221 and line it up with the riser.







# MIXED VIDEO INTERCOM/TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION $^{75\Omega}_{\Box}$







#### MIXED VIDEO INTERCOM/TELEPHONE SYSTEM CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
	ST7100W+WB7100	Studio series monitor + bracket
	ST720W+WB700	Studio series intercom + bracket
	ST740W+WB700	Studio series telephone + bracket
	FT11D	Intercom-telephone interface
	FT105P-FT208P	PABX
	ES60-ES65	Intercom-telephone interface for PABX
	DV2D-4D	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)

#### Mody series external door station (for the composition see pages 96÷99)

_	1 row	2 row	
	MD71÷74	MD71÷74	Back boxes and module frames
1	MD10-11-12	MD10-122-124	Modules for electric door speaker
	MD21 ÷ 24	MD222 ÷ 228	Button modules .
	MD20 - 50	MD20 - 50	Blank and info modules
1	MD82 ÷ 812	MD82 ÷ 812	Hood covers
1	MD92 ÷ 912*	MD92 ÷ 912*	Rain shelters and module frames
1	MD30	MD30	Electric door speaker (amplifier)
1	MD41D (1)	MD41D (1)	Camera

## Matrix series external door station (for the composition see pages 102÷103)

	MA71-72-73	Back boxes and module frames
	MA61-62-63	Frontframes
	MA20-22-24	Blank and button modules
1	MA42-43	Cameras with integrated audio amplifier
1	CV01	Video signal converter
	MA91-92-93*	Rain shelters and module frames

#### Profilo series external door station (for the composition see pages 106÷107)

	PL71-72-73	Back boxes and module frames
	PL20÷24	Blank and button modules
1	PL40P-41P-42P	Cameras with audio amplifier
1	CV01	Video signal converter

- ... Refers to number of users.
- \* The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.
- (1) For other types of cameras see page 108.

#### Notes

- If the maximum number of extensions is 5, you can use the PABX FT105P.
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C, MA43C, PL40PC, PL41PC or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For other types of push-button panels see the general catalogue.

#### **Programming**

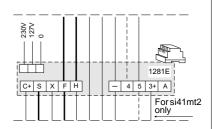
When using the telephone interface **FT11D** with the telephone **ST740** it is necessary to programme the buttons dedicated to the intercom functions (see page 204).

When using the PABX, the following programming must be **absolutely** carried out: - intercom interface activation:

- activation to receive intercom calls. See page 210.

If the PABX is **only used for the intercommunicating service**, without connection to the public telephone lines (URB1 and URB2), it is necessary to deactivate the incoming and outgoing external lines with the following programming: - how to assign incoming external lines; - how to assign outgoing external lines. See page 209.

## Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.

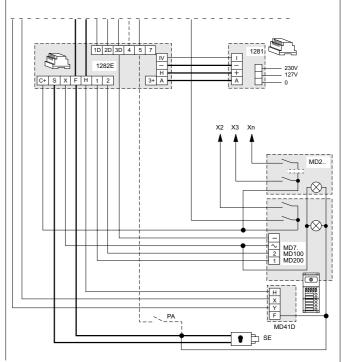


By adding **1281E** to the schematics on page 223 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only
- no control switch-ON interruption with the videointercoms during external audio-video connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.

### **Application diagram**

When using MD100, MD200 amplified external door stations, place this diagram on the diagram on page 223 and line it up with the riser.



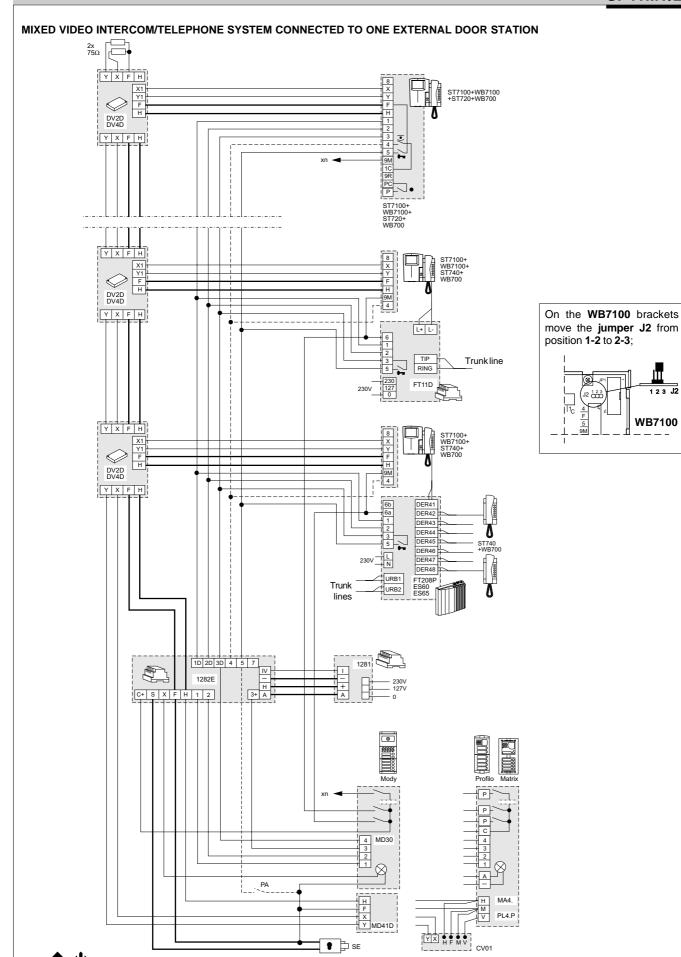




▥

WB7100

1 2 3 J2







### Si 412T/1

## TWO-WAY VIDEO INTERCOM-TELEPHONE INTERCOMMUNICATING SYSTEM WITH PABX CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description	
4	ST7100W+WB7100	Studio series monitor + bracket	
8	ST740W+WB700	Studio series telephone + bracket	
1	FT208P	PABX	
1	ES60-ES65	Intercom-telephone interface for PABX	
1	DV2	Video distributor	
1	1281	Powersupply	
1	1282E	Timer	
1	PA **	Door release button (optional)	
1	SE **	Electric door lock (12Vac-1A)	
Mody	Mody series external door station		

#### Mody series external door station

1	MD72	Back box and module frames
1	MD12	Module for electric door speaker
1	MD82	Hood cover
1	MD92*	Rain shelter and module frames
1	MD30	Electric door speaker (amplifier)
1	MD41	Camera

#### Matrix series external door station

1	MA72	Back box and module frames
1	MA62	Frontframe
1	MA22	Button module
1	MA42	Camera with integrated audio amplifier
1	MA92*	Rain shelter and module frames

#### Profilo series external door station

1	PL71	Back box and module frames
1	PL42P	Camera with audio amplifier

- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

#### Notes

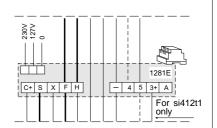
- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111÷113 and note 3 of page 176.
- For other types of push-button panels see the general catalogue.

## **Programming**

When using the PABX, the following programming must be absolutely carried out:

- intercom interface activation
- activation to receive intercom calls
- how to assign incoming external lines
- how to assign outgoing external lines See pages 209 and 210.

## Connection of 1281 Epower supply-timer instead of 1281 plus 1282E.

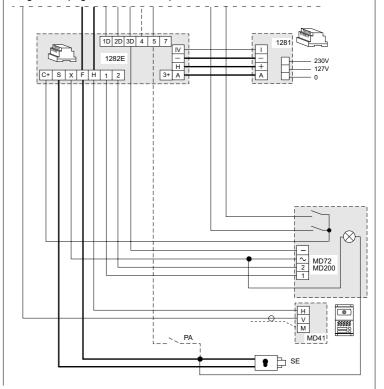


By adding **1281E** to the schematics on page 225 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only
- no control switch-ON interruption with the videointercoms during external audio-video connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.

#### **Application diagram**

When using **MD200** amplified external door stations, place this diagram on the diagram on page 225 and line it up with the riser.

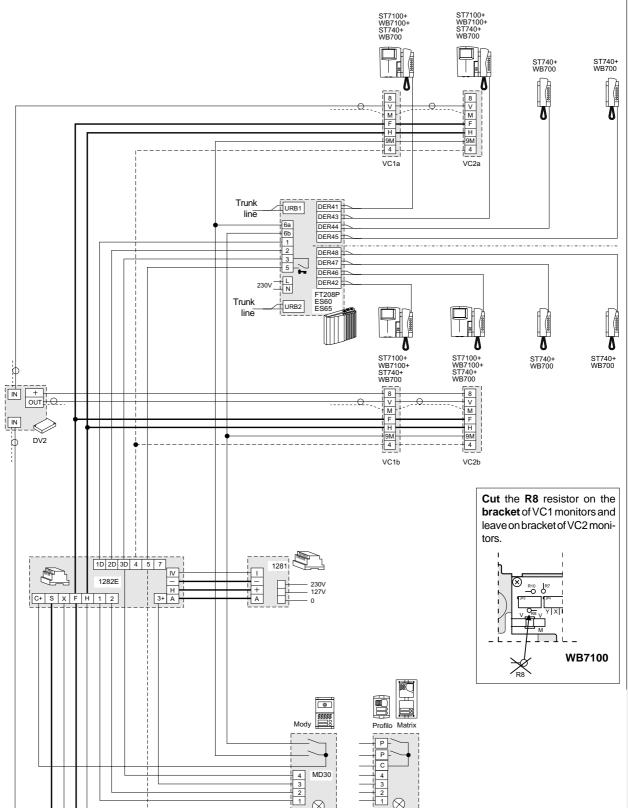
















H V M

MD41

....0...

₱ Þ SE

H MA4

M PL4.P

INTERCOMS

## Si 412T/2

## TWO-WAY VIDEO INTERCOM-TELEPHONE INTERCOMMUNICATING SYSTEM WITH PABX CONNECTED TO ONE EXTERNAL DOOR STATION

Q.ty	Article	Description
4	ST7100W+WB7100	Studio series monitor + bracket
8	ST740W+WB700	Studio series telephone + bracket
1	FT208P	PABX .
1	ES60-ES65	Intercom-telephone interface for PABX
1	DV2	Video distributor
1	1281	Powersupply
1	1282E	Timer
1	PA **	Door release button (optional)
1	SE **	Electric door lock (12Vac-1A)
		,

#### Mody series external door station

1	MD72	Back box and module frames
1	MD12	Module for electric door speaker
1	MD82	Hood cover
1	MD92*	Rain shelter and module frames
1	MD30	Electric door speaker (amplifier)
1	MD41D	Camera

#### Matrix series external door station

1	MA72	Back box and module frames
1	MA62	Frontframe
1	MA22	Button module
1	MA42	Camera with integrated audio amplifie
1	CV01	Video signal converter
1	MA92*	Rain shelter and module frames

#### Profilo series external door station

1	PL71	Back box and module frames
1	PL42P	Camera with audio amplifier
1	CV01	Video signal converter

- The rain shelter is used in the place of the back box and hood cover.
- \*\* Articles not supplied by ACI Farfisa.

#### Notes

- For the connection of name plate lamps read notes 6, 7 and 8 of the installation instructions on page 111.
- If the control switching ON is necessary, connect terminal 4 of the timer (dashed wire).
- To install a colour system, the ST7100CW video intercoms and the MD41C, MA42C or PL42PC camera must be used.
- For wires dimensioning and video connection refer to the installation instructions and table on pages 111 and 114.
- For other types of push-button panels see the general catalogue.

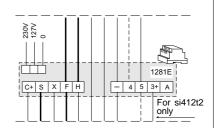
### **Programming**

When using the PABX, the following programming must be absolutely carried out:

- intercom interface activation
- activation to receive intercom calls
- how to assign incoming external lines
- how to assign outgoing external lines

See pages 209 and 210.

## Connection of 1281 E power supply-timer instead of 1281 plus 1282 E.

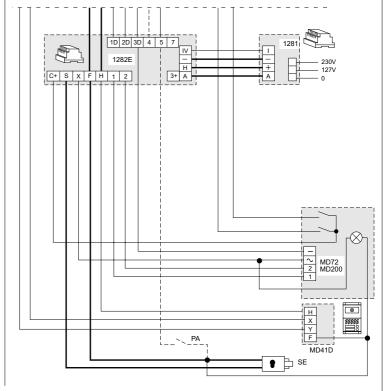


By adding **1281E** to the schematics on page 227 instead of 1281 plus 1282E, the system working will modify as follows:

- switching-OFF at the end of the timing only
- no control switch-ON interruption with the videointercoms during external audio-video connection. If the service is necessary, add 1471 relay in order to interrupt conductor 4.

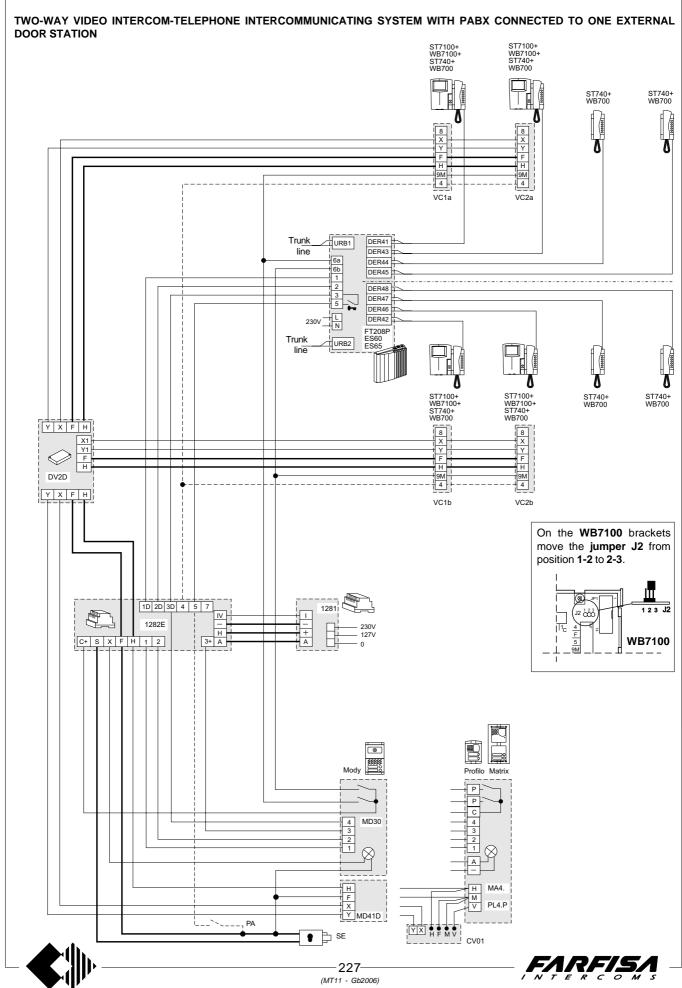
#### Application diagram

When using **MD200** amplified external door stations, place this diagram on the diagram on page 227 and line it up with the riser.





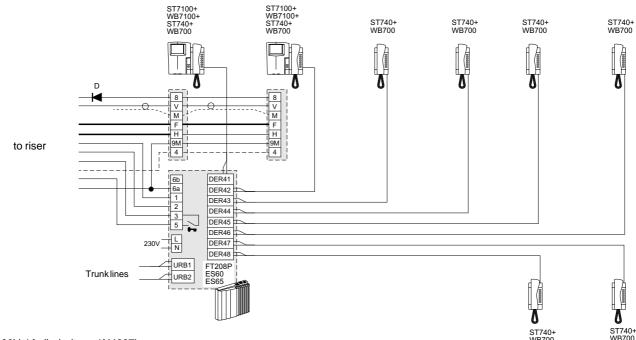




## **VIDEO INTERCOM-TELEPHONE additional diagrams**

Note: the extensions of these 2 pages can be applied to all the video intercoms diagrams with connection video to coaxial cable.

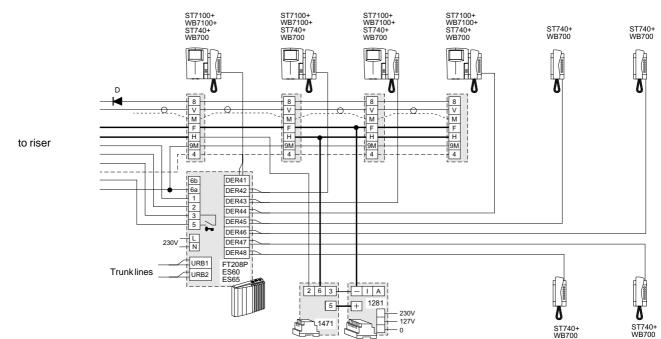
#### 1 PABX, 3 VIDEO INTERCOM-TELEPHONE SETS AND 5 INTERCOMMUNICATING TELEPHONES



D = 100V-1A diode (type 1N4007)

Read notes 2 and 3 on page 176.

#### 1 PABX, 4 VIDEO INTERCOM-TELEPHONE SETS AND 4 INTERCOMMUNICATING TELEPHONES



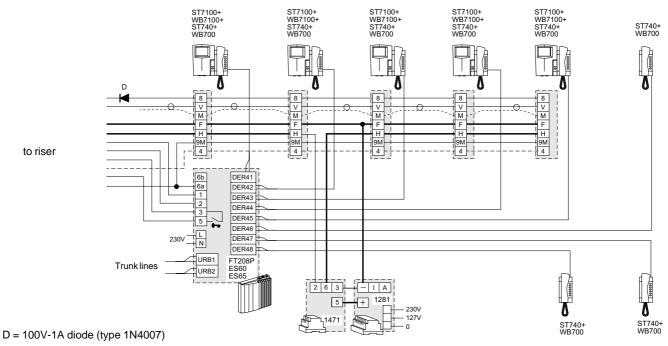
D = 100V-1A diode (type 1N4007)

Read notes 2 and 3 on page 176.



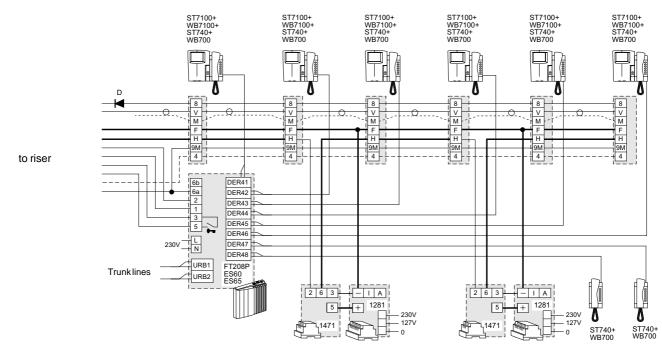


### 1 PABX, 5 VIDEO INTERCOM-TELEPHONE SETS AND 3 INTERCOMMUNICATING TELEPHONES



Read notes 2 and 3 on page 176.

#### 1 PABX, 6 VIDEO INTERCOM-TELEPHONE SETS AND 2 INTERCOMMUNICATING TELEPHONES



D = 100V-1A diode (type 1N4007)

Read notes 2 and 3 on page 176.

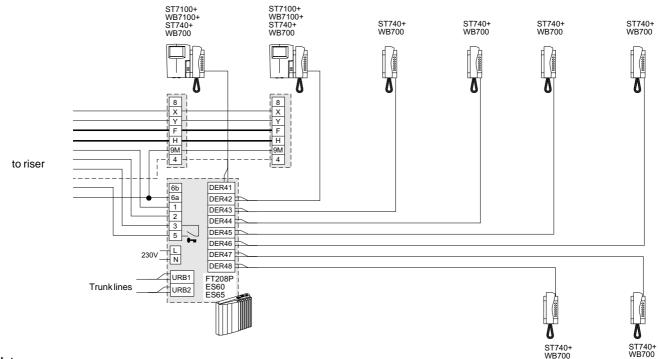




## **VIDEO INTERCOM-TELEPHONE additional diagrams**

Attention: the extensions of this page can be applied only to the video intercoms diagrams with connection to twisted pair.

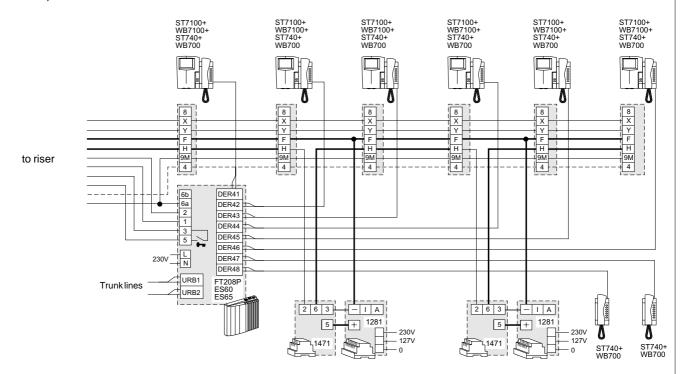
#### 1 PABX, 2 VIDEO INTERCOM-TELEPHONE SETS AND 6 INTERCOMMUNICATING TELEPHONES



Note

On the WB7100 brackets move the jumper J2 from position 1-2 to 2-3.

#### 1 PABX, 6 VIDEO INTERCOM-TELEPHONE SETS AND 2 INTERCOMMUNICATING TELEPHONES



Note

On the WB7100 brackets move the jumper J2 from position 1-2 to 2-3.





Technical manual 11

## INTERCOMS AND VIDEOINTERCOMS

2006 edition

## REDUCED WIRES TECHNOLOGY

INDEX		Page
Internal stat	ions	232
- Compact se	eries intercoms	232
- Project seri	es intercoms	233
- Compact se	eries videointercoms	234
- Project seri	es videointercoms	235
External do	or stations	236
- Mody series	s push-button panels	236
- Matrix serie	s push-button panels	239
Power supp	olies	242
Service mo	dules	242
Installation	instructions	243
Working ins	structions	244
Basic instal	lation diagrams	245
- Si 21MR/1	Intercoms connected to 1 external door station	246
- Si 21MR/2	Intercoms with private conversation connected to 1 external door station	246
- Si 22MR/1	Intercoms connected to 2 automatically switched external door stations	247
- Si 26MR/1	Intercom system with secondary door stations and 1 main common station (multiple entrance)	248
- Si 411R/1	One-way video intercom system	249
- Si 41MR/2	Multi-way mixed intercom and video intercom system connected to one external door station	250
- Si 42MR/1	Multi-way video intercom system connected to two external door stations, one of which only audio	251
- Si 42MR/2	Multi-way video intercom system connected to two external door stations	252
- Si 46MR/1	Multi-way video intercom system with secondary video stations and 1 main common video station (multiple entrance)	253
- Si 46MR/2	Multi-way video intercom system with secondary door stations only audio and 1 main common video station (multiple	254
	entrance)	

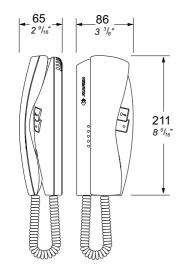




1+1 INTERCOM

## **INTERNAL STATIONS**

### **INTERCOMS series COMPACT**



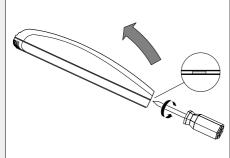
KM811W. White electronic intercom with 1 push-button, spiral cord, electronic microphone and possibility to insert SR41 modules, SM50 and an additional ST701 button. It can be installed on the wall with screws or on a back box.

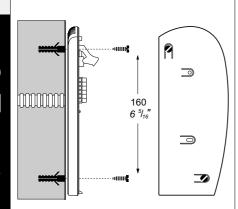
#### **Terminals**

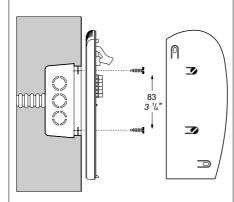
- 1 audio line, bell and door release control
- 3 ground
- 6 output electronic bell \*
- 7 ground. Connected to terminal 3 with jumper

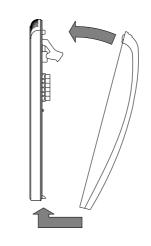
A1 floor call input

\* terminals to be used when installing the private conversation module **SM50** in the intercom.

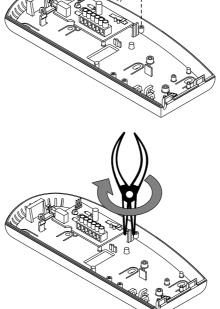








Mounting of the additional ST701 button.



#### SM50. Private conversation module.

To have complete audio privacy between users it is necessary to add to each **KM811** intercom the private conversation module.

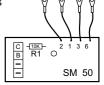
The intercom can communicate with the outside (for an unlimited period) only after having received the call. The intercom becomes disactived when there is a call from another intercom or the door re-

lease push-button is pressed.

#### **Terminals**

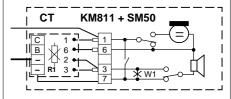
C audio line receiver

- B audio line transmitter
- ground



#### Note

**B** and **C** terminals are unused in an 1+1 intercom system.



#### **Notes**

In each intercom KM811 it is necessary:

- to cut the jumper (W1) that links the terminals 3 and 7;
- to make the connection between terminal 7 of the intercom and the - (minus) of the private conversation module.

In all **SM50** private conversation modules **cut** the resistance **R1**.

<u>SR41</u>. Electronic buzzer module. In the intercoms can be added for having a further call signal.

#### **Terminals**

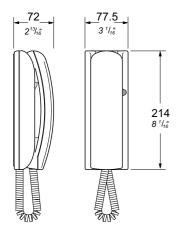
- **4** power supply input (13Vac-70mA; 9÷20Vdc-15mA)
- 3 ground







#### **INTERCOMS series PROJECT**



<u>PT511E</u>. Two colour intercom with 1 pushbutton, spiral cord, electronic microphone. It can be installed on the wall with screws or on a back box. For the table version to use the adapter art.**PT538**.

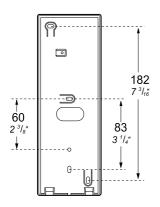
#### PT511EW. Colour: white.

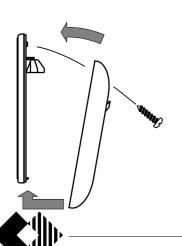
#### **Terminals**

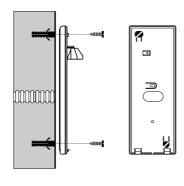
- 1 audio line, bell and door release control
- 3 ground
- 6 output electronic bell \*
- 7 ground. Connected to terminal 3 with jumper W1 \*

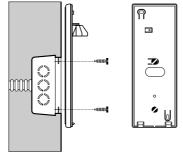
A1 floor call input

\* terminals to be used when installing the private conversation module **SM50** in the intercom.



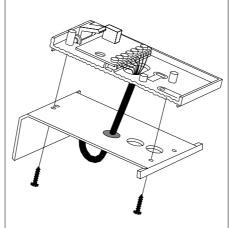






#### **Accessories**

<u>PT538</u>. Table adapter for Project series intercoms, with weighted base, junction box and 2.4m connection cable with 13 wires.



<u>SR41</u>. Electronic buzzer module. In the intercoms can be added for having a further call signal.

#### **Terminals**

- 4 power supply input (13Vac-70mA; 9÷20Vdc-15mA)
- 3 ground



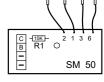
#### SM50. Private conversation module.

To have complete audio privacy between users it is necessary to add to each **PT511E** intercom the private conversation module.

The intercom can communicate with the outside (for an unlimited period) only after having received the call. The intercom becomes disactived when there is a call from another intercom or the door release push-button is pressed.

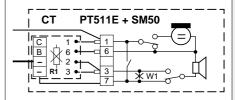
## Terminals

- C audio line receiver
- **B** audio line transmitter
- around



#### Note

**B** and **C** terminals are unused in an 1+1 intercom system.



#### **Notes**

In each intercom PT511E it is necessary:

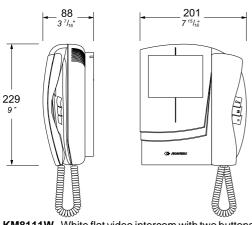
- to cut the jumper (W1) that links the terminals 3 and 7;
- to make the connection between terminal 7 of the intercom and the - (minus) of the private conversation module.

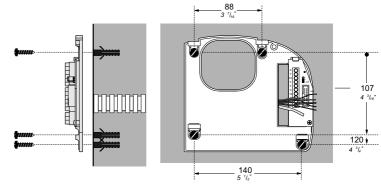
In all **SM50** private conversation modules **cut the resistance R1**.



### INTERNAL STATIONS

#### **VIDEOINTERCOMS series COMPACT**





Fix the wall bracket by using 4 expansion plugs

**KM8111W**. White flat video intercom with two buttons, one for control switch ON and one for door lock release, audio-video privacy, electronic microphone, electronic modulated call note, terminal board for the connection to the wall-bracket. It can be installed on the wall (with no built-in) by using the art. **WB8111**.

**WB8111. Wall-bracket** for the **KM8111W** video intercoms. It includes a terminal board for connection to the system.

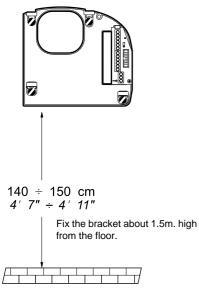
#### **Technical data**

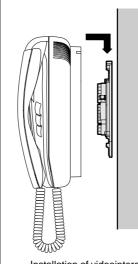
Power Supply 18÷24Vdc Operating current 0.5A 4" FLAT CRT Video tube Television standard CCIR-625 lines Horizontal frequency 15625Hz Vertical frequency 50Hz Bandwidth >5MHz Video signal balanced Starting up time 2÷4 sec. Operating temperature 0°÷+50°C Max. permissible humidity 90%RH

#### **Terminals**

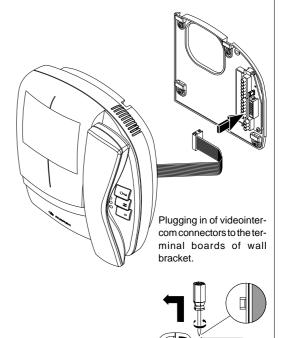
- H Positive power supply input 18÷24Vdc-0.5AF Ground
- X and Y Video signal input
- 10 Call, audio reception/transmission, door releasing
- 4 Control switch ON button
- A1 Floor call input

#### Installation

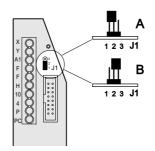




Installation of videointercom onto the wall bracket.



### Audio privacy



**1-2** = Videointercom without audio privacy

Dismounting of videointercom

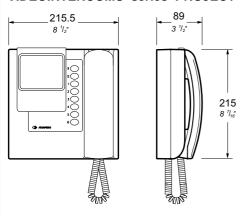
from the wall bracket.

**2-3** = Videointercom with audio privacy





#### **VIDEOINTERCOMS** series PROJECT



**PT5111E**. Two-colour flat monitor with two buttons, one for control switch ON and one for door lock release, audio-video privacy, electronic microphone, electronic modulated call note, terminal board for the connection to the wall-bracket. It can be installed on the wall (with no built-in) by using the art. **WB5111E**.

PT5111EW. Colour: white.

<u>WB5111E</u>. Wall-bracket for the PT5111E and PT5111EW monitors. It includes a terminal board for connection to the system.

#### Technical data

Power Supply 18÷24Vdc Operating current 0.35A

4" FLAT CRT Video tube Television standard CCIR-625 lines Horizontal frequency 15625Hz Vertical frequency 50Hz >5MHz Bandwidth Video signal balanced Starting up time 2÷4 sec. Operating temperature 0°÷+50°C Max. permissible humidity 90%RH

#### **Terminals**

H Positive power supply input 18÷24Vdc-0.35A

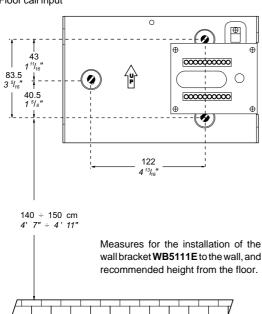
F Ground

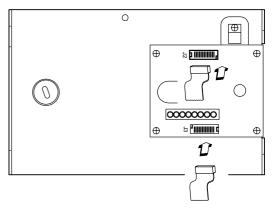
X and Y Video signal input

10 Call, audio reception/transmission, door releasing

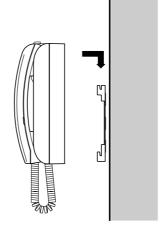
4 Control switch ON - button •

A1 Floor call input

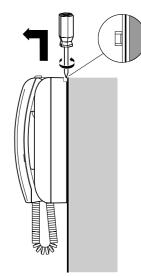




Plugging in of videointer-com connectors to the terminal boards of wall bracket.

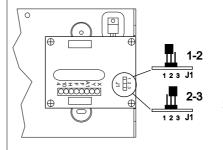


Installation of videointercom onto the wall bracket.



Dismounting of videointercom from the wall bracket.

#### Audio privacy



- **1-2** = Videointercom without audio privacy
- **2-3** = Videointercom with audio privacy





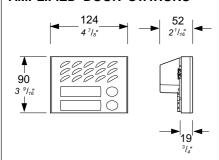
#### **EXTERNAL DOOR STATIONS**

### **PUSH-BUTTON PANELS**

#### Mody series.

To plan a 4+1 video intercom system all the button modules can be used, as well as the back boxes, the protective shelters and the decorative shields which have been described on pages 11 to 19. Only the CCD camera MD41 and the modules MD10, MD11 and MD12 are different, in that they have not been adapted for functioning with a reduced number of wires (product MD41D, MD10ED, MD11ED and MD12ED must be used).

#### **AMPLIFIED DOOR STATIONS**



**MD10ED**. Module without call buttons, with front plate in anodized aluminium, amplified door speaker in two channels and control of volume of "receiver".

<u>MD11ED.</u> Module with 1 call button. MD12ED. Module with 2 call buttons.

### Testing and adjustments

Adjustments are carried out in the factory; should any be necessary they can be re-adjusted from the outside with a screwdriver with the trimmers identified by the words "antilocale" and "volume" (—).

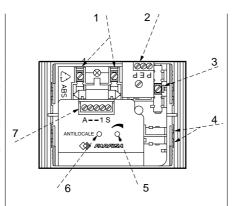
#### Volume adjustment

To increase the volume from the amplifier in the transmission mode, turn the trimmer "—" in a clockwise direction.

#### Antilocale adjustment

In case of "feedback" (Larsen effect) in the external unit it is necessary to operate as follow:

- make the call from the door station and lift the handset of an intercom;
- adjust the trimmer "antilocale" until the whistling stops (Larsen effect).



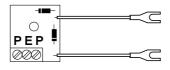
- 1 Lamp terminals
- 2 Button terminal board
- 3 Call buttons common (terminal C)
- 4 Stair light button terminals
- 5 External volume adjustment
- 6 Feedback adjustment
- 7 Terminal board for audio/powering/electric lock

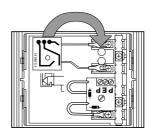
#### **Terminals**

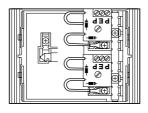
- A Supply 13VAC-70mA
- Ground
- 1 Reception-transmission; electric lock release; call
- S Electric lock
- E Reception-transmission; electric lock release
- P Call button

#### 241D. Module with diodes for 2 users.

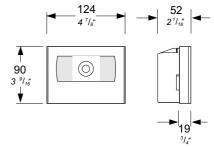
It allows for the use of the button modules MD21, MD22, MD23, MD24, MD222, MD224, MD226, MD228 in the 1+1 intercom systems and 4+1 video intercom systems. It is applied inside the button modules.







#### **CAMERAS**



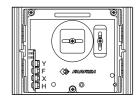
#### MD 41D.

B/W camera module for 4+1 video systems without coaxial cable, including:

- solid-state CCD camera, with auto iris, 3.6mm fixed optics and 6 infrared LED's;
- front plate in anodized aluminium with breakproof transparent screen;
- horizontal/vertical sweep.

#### **Technical data**

21±3Vdc Power supply Operating current 0.3A Output of balanced video signal Minimum illumination 2 lux Sensor CCD 1/4 B/W 291000 Pixel number Horizontal frequency 15625Hz Vertical frequency 50Hz Lens 3.6mm; F5 Adjustable focus 0,1m ÷ ∞ Auto-iris electronic Horizontal adjustment 15° Vertical adjustment 15° Operating temperature -10°÷+40°C Maximum permissible humidity 80%RH



#### **Terminals**

- Y positive video signal output
- ground
- X negative video signal output
- H positive power supply input 21Vdc

#### Notes

For the installation and adjustment instruction see page 95.

For the colour or CCTV cameras use the video signal converter art. **CV01** (see page 108).

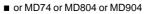




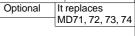
## MODY series push-button panel

## Composition board of Mody push-button panels.

								T	
N° calls	Compositions and dimensions	Module with door speaker	2 diode module		itton and info oi blank modules	<i>r</i>	Back box and module frame	Hood covers	Rain shelters
1	124x121.5x19	1 MD11ED	-	-	-	-	1 MD71	1 MD81	1 MD91
2	$(4^{7}/_{8}"x 4^{13}/_{16}"x^{3}/_{4}")$	1 MD12ED	-	-	-	-	1 MD71	1 MD81	1 MD91
3		1 MD10ED	2 241D	1 MD23	<u> </u>		1 MD72	1 MD82	1 MD92
4		1 MD10ED	2 241D	1 MD24	-	-	1 MD72	1 MD82	1 MD92
5	124x213x19	1 MD11ED	2 241D	1 MD24	-	-	1 MD72	1 MD82	1 MD92
6	(4 <sup>7</sup> / <sub>8</sub> "x 8 <sup>3</sup> / <sub>8</sub> "x <sup>3</sup> / <sub>4</sub> ")	1 MD12ED	2 241D	1 MD24			1 MD72	1 MD82	1 MD92
7		1 MD10ED	4 241D	1 MD24	1 MD23	-	1 MD73	1 MD83	1 MD93
8		1 MD10ED	4 241D	2 MD24	-	-	1 MD73	1 MD83	1 MD93
9	124x304.5x19	1 MD11ED	4 241D	2 MD24		-	1 MD73	1 MD83	1 MD93
10	(4 <sup>7</sup> / <sub>8</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD12ED	4 241D	2 MD24	-	-	1 MD73	1 MD83	1 MD93
11		1 MD11ED	5 241D	2 MD24	1 MD22	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
12		1 MD10ED	6 241D	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
13	248x213x19	1 MD11ED	6 241D	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
14	(9 <sup>3</sup> / <sub>4</sub> " x 8 <sup>3</sup> / <sub>8</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD12ED	6 241D	3 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
15		1 MD11ED	7 241D	3 MD24	1 MD22	1 *	2 MD73	1 MD86	1 MD96
16		1 MD10ED	8 241D	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
17		1 MD11ED	8 241D	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
18		1 MD12ED	8 241D	4 MD24	-	1 *	2 MD73	1 MD86	1 MD96
19		1 MD11ED	9 241D	4 MD24	1 MD22		2 MD73	1 MD86	1 MD96
20	248x304.5x19	1 MD10ED	10 241D	5 MD24	<u> </u>	-	2 MD73	1 MD86	1 MD96
21	(9 <sup>3</sup> / <sub>4</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD11ED	10 241D	5 MD24	-	-	2 MD73	1 MD86	1 MD96
22	,	1 MD12ED	10 241D	5 MD24	-	-	2 MD73	1 MD86	1 MD96
23		1 MD11ED	11 241D	5 MD24	1 MD22	1 *	2 MD74	1 MD808	1 MD908
24		1 MD12ED	11 241D	5 MD24	1 MD22	1 *	2 MD74	1 MD808	1 MD908
25		1 MD11ED	12 241D	6 MD24	-	1 *	2 MD74	1 MD808	1 MD908
26		1 MD12ED	12 241D	6 MD24		1 *	2 MD74	1 MD808	1 MD908
27		1 MD11ED	13 241D	6 MD24	1 MD22		2 MD74	1 MD808	1 MD908
28		1 MD12ED	13 241D	6 MD24	1 MD22		2 MD74	1 MD808	1 MD908
29	248x395x19	1 MD11ED	14 241D	7 MD24	-		2 MD74	1 MD808	1 MD908
30	(9 <sup>3</sup> / <sub>4</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD12ED	14 241D	7 MD24			2 MD74	1 MD808	1 MD908
31		1 MD12ED	15 241D	7 MD24 7 MD24	1 MD22		3 MD73	1 MD89	1 MD900
	372x 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 MD12ED	15 241D 15 241D	7 MD24 7 MD24	1 MD22		3 MD73	1 MD89	1 MD99
	(14 <sup>5</sup> / <sub>8</sub> "x	1 MD12ED	16 241D	8 MD24	-	<u> </u>	3 MD73	1 MD89	1 MD99
34	12" x <sup>3</sup> / <sub>4</sub> ")		16 241D	8 MD24		<u> </u>	3 MD73	1 MD89	1 MD99
35		1 MD12ED	10 241D 17 241D	8 MD24	1 MD22	2 *	3 MD73	1 MD812	1 MD99
36		1 MD12ED	17 241D	8 MD24	1 MD22	2 *	3 MD74	1 MD812	1 MD912
37	eeggs O	1 MD12ED	17 241D 18 241D	9 MD24	- 1 1415	2 *	3 MD74	1 MD812	1 MD912
38		1 MD12ED	18 241D	9 MD24		2 *	3 MD74	1 MD812	1 MD912
39		1 MD12ED	16 241D 19 241D	9 MD24	1 MD22	1 *	3 MD74	1 MD812	1 MD912 1 MD912
40		1 MD12ED	19 241D 19 241D	9 MD24	1 MD22 1 MD22	1 *	3 MD74	1 MD812	1 MD912 1 MD912
42		1 MD12ED	21 241D	10 MD24	1 MD22 1 MD22	-	3 MD74	1 MD812	1 MD912 1 MD912
43	372x395x19	1 MD10ED	21 241D 21 241D	10 MD24	1 MD22 1 MD22	<u> </u>	3 MD74	1 MD812	1 MD912 1 MD912
45	$(14.5^{1}/_{8}$ x 15.9 $^{1}/_{16}$ x $^{3}/_{4}$ ")	1 MD11ED	21 241D 22 241D	10 MD24	-	<u> </u>	3 MD74	1 MD812	1 MD912 1 MD912
46	i i	1 MD11ED	22 241D 22 241D	11 MD24	<u> </u>	-	3 MD74 3 MD74	1 MD812 1 MD812	1 MD912 1 MD912
48		1 MD12ED	22 241D 24 241D	11 MD24 12 MD24	-	3 *	4 MD74	I MIDOIS	I MIDSIE
50		1 MD10ED 1 MD12ED	24 241D 24 241D	12 MD24 12 MD24	-	3 *	4 MD74 4 MD74		
53		1 MD12ED 1 MD11ED	24 241D 26 241D		2 MD22	1 *			-
55				12 MD24			4 MD74	-	
		1 MD11ED	27 241D	12 MD24	3 MD22		4 MD74	-	-
58 62	496x395x19 (191/"× 15 9/ " × 3/")	1 MD10ED	29 241D	14 MD24	1 MD22		4 MD74		<u>-</u>
62	$(19^{1/2}"x 15^{9/16}"x^{3/4}")$	1 MD12ED	30 241D 4D804 or MD904	15 MD24	20 or MD50 or		4 MD74	Optional It r	replaces
				^ I\/II )*·	7(1) Or 1(/11) 15(1) Or	- F( 5)P Or F	· D5.7		



<sup>\*</sup> MD20 or MD50 or FC52P or FP52







## MODY series push-button panel

## Composition board of Mody push-button panels.

		_				•				
N° ∣	Compositions and	Camera	Module with	2 diode		on and info		Back box and	Hood	Rain
calls	dimensions	module	door speaker	module	bla	ank modules		module frame	covers	shelters
1	124x213x19	1 MD41D	1 MD11ED	-	-	-	-	1 MD72	1 MD82	1 MD92
2	(4 <sup>7</sup> / <sub>8</sub> "x 8 <sup>3</sup> / <sub>8</sub> "x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD12ED	-	-	-	-	1 MD72	1 MD82	1 MD92
3		1 MD41D	1 MD10ED	2 241D	1 MD23	-	-	1 MD73	1 MD83	1 MD93
4	35335	1 MD41D	1 MD10ED	2 241D	1 MD24	-	-	1 MD73	1 MD83	1 MD93
5	124x304.5x19 (4 <sup>7</sup> / <sub>8</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD11ED	2 241D	1 MD24	-	-	1 MD73	1 MD83	1 MD93
6	(4 <sup>7</sup> / <sub>8</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD12ED	2 241D	1 MD24	-	-	1 MD73	1 MD83	1 MD93
7		1 MD41D	1 MD11ED	3 241D	1 MD24	1 MD22	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
8		1 MD41D	1 MD10ED	4 241D	2 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
9	248x213x19	1 MD41D	1 MD11ED	4 241D	2 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
10	(9 <sup>3</sup> / <sub>4</sub> " x 8 <sup>3</sup> / <sub>8</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD12ED	4 241D	2 MD24	-	-	2 MD72 ■	1 MD84 ■	1 MD94 ■
11		1 MD41D	1 MD11ED	5 241D	2 MD24	1 MD22	1 *	2 MD73	1 MD86	1 MD96
12		1 MD41D	1 MD10ED	6 241D	3 MD24	-	1 *	2 MD73	1 MD86	1 MD96
13		1 MD41D	1 MD11ED	6 241D	3 MD24	-	1 *	2 MD73	1 MD86	1 MD96
14		1 MD41D	1 MD12ED	6 241D	3 MD24	-	1 *	2 MD73	1 MD86	1 MD96
15		1 MD41D	1 MD11ED	7 241D	3 MD24	1 MD22	-	2 MD73	1 MD86	1 MD96
16		1 MD41D	1 MD10ED	8 241D	4 MD24	-	-	2 MD73	1 MD86	1 MD96
17	248x304.5x19	1 MD41D	1 MD11ED	8 241D	4 MD24	-	-	2 MD73	1 MD86	1 MD96
18	(9 <sup>3</sup> / <sub>4</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD12ED	8 241D	4 MD24	-	-	2 MD73	1 MD86	1 MD96
19		1 MD41D	1 MD11ED	9 241D	4 MD24	1 MD22	1 *	2 MD74	1 MD808	1 MD908
20		1 MD41D	1 MD10ED	10 241D	5 MD24	-	1 *	2 MD74	1 MD808	1 MD908
21		1 MD41D	1 MD11ED	10 241D	5 MD24	-	1 *	2 MD74	1 MD808	1 MD908
22		1 MD41D	1 MD12ED	10 241D	5 MD24	-	1 *	2 MD74	1 MD808	1 MD908
23		1 MD41D	1 MD11ED	11 241D	5 MD24	1 MD22	-	2 MD74	1 MD808	1 MD908
24		1 MD41D	1 MD12ED	11 241D	5 MD24	1 MD22	-	2 MD74	1 MD808	1 MD908
25	248x395x19	1 MD41D	1 MD11ED	12 241D	6 MD24	-	-	2 MD74	1 MD808	1 MD908
26	(9 <sup>3</sup> / <sub>4</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD12ED	12 241D	6 MD24	-	-	2 MD74	1 MD808	1 MD908
27		1 MD41D	1 MD11ED	13 241D	6 MD24	1 MD22	-	3 MD73	1 MD89	1 MD99
28	070 004 5 40	1 MD41D	1 MD10ED	14 241D	7 MD24	-	-	3 MD73	1 MD89	1 MD99
29	372x304.5x19 (14 <sup>5</sup> / <sub>8</sub> " x 12" x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD11ED	14 241D	7 MD24	-	-	3 MD73	1 MD89	1 MD99
30		1 MD41D	1 MD12ED	14 241D	7 MD24	-	-	3 MD73	1 MD89	1 MD99
31		1 MD41D	1 MD11ED	15 241D	7 MD24	1 MD22	2 *	3 MD74	1 MD812	1 MD912
32		1 MD41D	1 MD12ED	15 241D	7 MD24	1 MD22	2 *	3 MD74	1 MD812	1 MD912
33		1 MD41D	1 MD11ED	16 241D	8 MD24	-	2 *	3 MD74	1 MD812	1 MD912
34		1 MD41D	1 MD12ED	16 241D	8 MD24	-	2 *	3 MD74	1 MD812	1 MD912
35		1 MD41D	1 MD11ED	17 241D	8 MD24	1 MD22	1 *	3 MD74	1 MD812	1 MD912
36		1 MD41D	1 MD12ED	17 241D	8 MD24	1 MD22	-	3 MD74	1 MD812	1 MD912
37		1 MD41D	1 MD11ED	18 241D	8 MD24	2 MD22	-	3 MD74	1 MD812	1 MD912
38	372x395x19	1 MD41D	1 MD12ED	18 241D	8 MD24	2 MD22	-	3 MD74	1 MD812	1 MD912
39	(14 <sup>5</sup> / <sub>8</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD11ED	19 241D	9 MD24	1 MD22	-	3 MD74	1 MD812	1 MD912
40		1 MD41D	1 MD12ED	19 241D	9 MD24	1 MD22	-	3 MD74	1 MD812	1 MD912
41		1 MD41D	1 MD11ED	20 241D	10 MD24	-	-	3 MD74	1 MD812	1 MD912
42		1 MD41D	1 MD12ED	20 241D	10 MD24	-	-	3 MD74	1 MD812	1 MD912
43	<del></del>	1 MD41D	1 MD11ED	21 241D	9 MD24	3 MD22	2 *	4 MD74	-	-
44		1 MD41D	1 MD10ED	22 241D	10 MD24	2 MD22	2 *	4 MD74	-	-
45		1 MD41D	1 MD11ED	22 241D	10 MD24	2 MD22	2 *	4 MD74	-	-
46		1 MD41D	1 MD12ED	22 241D	10 MD24	2 MD22	2 *	4 MD74	-	-
47		1 MD41D	1 MD11ED	23 241D	10 MD24	3 MD22	1 *	4 MD74	-	-
48	400 000	1 MD41D	1 MD12ED	23 241D	10 MD24	3 MD22	1 *	4 MD74	-	-
49	496x395x19 (19 <sup>1</sup> / <sub>2</sub> " x 15 <sup>9</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MD41D	1 MD11ED	25 241D	11 MD24	2 MD22	1 *	4 MD74	-	-
50	_ 10 47	1 MD41D	1 MD12ED	25 241D	11 MD24	2 MD22	1 *	4 MD74	-	-
			or MD804 or MD		* MD20 or N				Optional I	t replaces

<sup>■</sup> or MD74 or MD804 or MD904

MD72, 73, 74



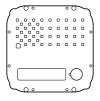


<sup>\*</sup> MD20 or MD50 or FC52P or FP52

#### **PUSH-BUTTON PANELS**

To plan a 4+1 video intercom system all the button modules can be used, as well as the back boxes, the protective shelters and the frontframes shields which have been described on pages 20 to 25. Only the CCD cameras and the modules with door speaker are different, in that they have not been adapted for functioning with a reduced number of wires (product MA43ED, MA11PED and MA12PED must be used).

#### **AMPLIFIED DOOR STATIONS**



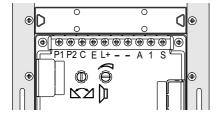


**MA11PED**. Module with front plate and 1 call button in stainless steel, red operation LED, amplified door speaker in two channels and control of volume of "receiver".

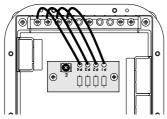
MA12PED. Module with 2 call buttons.

#### **Terminals**

- A Supply 13VAC-70mA
- Ground
- Reception-transmission; electric lock release; call
- S Electric lock
- E Reception-transmission; electric lock release
- P1-P2 Call push-buttons
- C Call push-buttons common
- L+ DC power supply input for service Led



241 DMA. Module with diodes for 4 users. It allows for the use of the button modules MA22 and MA24 in the 1+1 intercom systems and 4+1 video intercom systems. It is fixed on the back of the button modules using the 2 supplied screws. Connect the conductors of the diode module to the corresponding terminal on MA24 module; if MA22 module is used do not connect P3 and P4 conductors and properly insulate them.



#### **CAMERAS**



#### MA43ED.

B/W camera module for 4+1 video systems without coaxial cable, including:

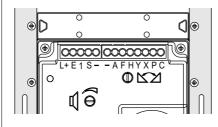
- solid-state CCD camera, with auto iris, 3.6mm fixed optics and 6 infrared LED's;
- stainless steel front plate complete with transparent anti-temper screen, steel call button with corresponding name plate holder;
- horizontal/vertical adjustment;
- red operation LED;
- amplified door speaker.

#### Technical data

Power supply	21±3Vdc
Operating current	0.3A
Output of balanced video signal	
Minimum illumination	2 lux
Sensor	CCD 1/4 B/W
Pixel number	291000
Horizontal frequency	15625Hz
Vertical frequency	50Hz
Lens	3.6mm; F5
Adjustable focus	0,1m ÷ ∞
Auto-iris	electronic
Horizontal adjustment	15°
Vertical adjustment	15°
Operating temperature	-10°÷+40°C
Maximum permissible humidity	80%RH

#### Terminals

- A Supply 13VAC-70mA
- Ground
- Reception-transmission; electric lock release; call
- S Electric lock
- E Reception-transmission; electric lock release
- P1-P2 Call push-buttons
- C Call push-buttons common
  - + DC power supply input for service Led
- Y positive video signal output
- F ground
- X negative video signal output
- H positive power supply input 21Vdc



#### Notes

For the installation and adjustment instruction see page 100.

For the colour or CCTV cameras use the video signal converter art. **CV01** (see page 108).

#### **Testing and adjustments**

Adjustments are carried out in the factory; should any be necessary they can be re-adjusted from the outside with a screwdriver with the trimmers identified by the symbols and "\2\2\1."

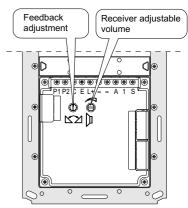
#### Volume adjustment

To increase the volume from the amplifier in the transmission mode, turn the trimmer "—" in a clockwise direction.

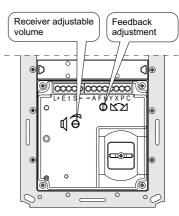
#### Antilocale adjustment

In case of "feedback" (Larsen effect) in the external unit it is necessary to operate as follow:

- make the call from the door station and lift the handset of an intercom or videointercom;
- adjust the trimmer \( \sum \sum \) until the whistling stops (Larsen effect).



MA11PED MA12PED



MA43ED





## **EXTERNAL DOOR STATIONS**

## Push-button panel

## Composition board of Matrix push-button panels.

N° calls	Compositions and dimensions	Module with door speaker	Button a	nd blank m	odules	4 diode module	Front frames	Back box and module frame	Rain shelters
1	140x140x19	1 MA11PED	-	-	-	-	1 MA61	1 MA71	1 MA91
2	$(5^{1}/_{2}" \times 5^{1}/_{2}" \times 3^{3}/_{4}")$	1 MA12PED	-	-	-	-	1 MA61	1 MA71	1 MA91
3	•	1 MA11PED	1 MA22	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
4	140x256x19	1 MA11PED	1 MA24	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
5	(5 ½" x 10 ½" x 3½")	1 MA11PED	1 MA24	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
6		1 MA12PED	1 MA24	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
7		1 MA11PED	1 MA24	1 MA22	-	2 241DMA	1 MA63	1 MA73	1 MA93
8	140x374x19 (5 ½" x 14 ¾" x ¾")	1 MA11PED	2 MA24	-	-	2 241DMA	1 MA63	1 MA73	1 MA93
9		1 MA11PED	2 MA24	-	-	2 241DMA	1 MA63	1 MA73	1 MA93
10		1 MA12PED	2 MA24	-	-	2 241DMA	1 MA63	1 MA73	1 MA93
11		1 MA11PED	2 MA24	1 MA22	-	3 241DMA	2 MA62	2 MA72	2 MA92
12	280x256x19	1 MA11PED	3 MA24	-	-	3 241DMA	2 MA62	2 MA72	2 MA92
13	(11" x 10 <sup>1</sup> / <sub>16</sub> "	1 MA11PED	3 MA24	-	-	3 241DMA	2 MA62	2 MA72	2 MA92
14		1 MA12PED	3 MA24	-	-	3 241DMA	2 MA62	2 MA72	2 MA92
15		1 MA11PED	3 MA24	1 MA22	1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
16		1 MA11PED	4 MA24	-	1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
17		1 MA11PED	4 MA24	-	1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
18		1 MA12PED	4 MA24	-	1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
19		1 MA11PED	4 MA24	1 MA22	-	5 241DMA	2 MA63	2 MA73	2 MA93
20		1 MA11PED	5 MA24	-	-	5 241DMA	2 MA63	2 MA73	2 MA93
21	280x374x19 (11" x 14³/₄" x ³/₄")	1 MA11PED	5 MA24	-	-	5 241DMA	2 MA63	2 MA73	2 MA93
22	* **	1 MA12PED	5 MA24	-	-	5 241DMA	2 MA63	2 MA73	2 MA93
23		1 MA11PED	5 MA24	1 MA22	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
24		1 MA12PED	5 MA24	1 MA22	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
25		1 MA11PED	6 MA24	-	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
26		1 MA12PED	6 MA24	-	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
27	560x256x19	1 MA11PED	6 MA24	1 MA22	-	7 241DMA	4 MA62	4 MA72	4 MA92
28	$(22^{1}/_{16}" \times 10^{1}/_{16}" \times {}^{3}/_{4}")$	1 MA12PED	6 MA24	1 MA22	-	7 241DMA	4 MA62	4 MA72	4 MA92
29		1 MA11PED	7 MA24	-	-	7 241DMA	4 MA62	4 MA72	4 MA92
30		1 MA12PED	7 MA24	-	-	7 241DMA	4 MA62	4 MA72	4 MA92
31	420v374v19	1 MA11PED	7 MA24	1 MA22	-	8 241DMA	3 MA63	3 MA73	3 MA93
32	420x374x19 (16 <sup>9</sup> / <sub>16</sub> " x 14 <sup>3</sup> / <sub>4</sub> "x <sup>3</sup> / <sub>4</sub> ")	1 MA12PED	7 MA24	1 MA22	-	8 241DMA	3 MA63	3 MA73	3 MA93
33	14 <sup>3</sup> / <sub>4</sub> "x <sup>3</sup> / <sub>4</sub> ")	1 MA11PED	8 MA24	-	-	8 241DMA	3 MA63	3 MA73	3 MA93
34		1 MA12PED	8 MA24	-	-	8 241DMA	3 MA63	3 MA73	3 MA93
35		1 MA11PED	8 MA24	1 MA22	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
36		1 MA12PED	8 MA24	1 MA22	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
37		1 MA11PED	9 MA24	-	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
38		1 MA12PED	9 MA24	-	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
39		1 MA11PED	9 MA24	1 MA22	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
40		1 MA12PED	9 MA24	1 MA22	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
41		1 MA11PED	10 MA24	-	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
42	560x374x19	1 MA12PED	10 MA24	-	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
43	$(22^{1}/_{16}" \times 14^{3}/_{4}" \times {}^{3}/_{4}")$	1 MA11PED	10 MA24	1 MA22	-	11 241DMA	4 MA63	4 MA73	4 MA93
44		1 MA12PED	10 MA24	1 MA22	-	11 241DMA	4 MA63	4 MA73	4 MA93
45		1 MA11PED	11 MA24	-	-	11 241DMA	4 MA63	4 MA73	4 MA93
46		1 MA12PED	11 MA24	-	-	11 241DMA	4 MA63	4 MA73	4 MA93

It replaces MA71, 72, 72





## **EXTERNAL DOOR STATIONS**

## Push-button panel

## Composition board of Matrix push-button panels.

N° calls	Compositions and dimensions	Module with camera and door speaker	Button a	and blank mo	odules	4 diode module	Front frames	Back box and module frame	
1	140x140x19	1 MA43ED	-			-	1 MA61	1 MA71	1 MA91
2	(5 ½" x 5½" x 3¼")	1 MA42ED	1 MA22	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
3	140 05040	1 MA43ED	1 MA22	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
4	140x256x19 (5 ½" x 10 ½" x 3½")	1 MA42ED	1 MA24	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
5		1 MA43ED	1 MA24	-	-	1 241DMA	1 MA62	1 MA72	1 MA92
6		1 MA42ED	1 MA24	1 MA22	-	2 241DMA	1 MA63	1 MA73	1 MA93
7		1 MA43ED	1 MA24	1 MA22	-	2 241DMA	1 MA63	1 MA73	1 MA93
8	140x374x19 (5 ½," x 14³½," x ³½")	1 MA42ED	2 MA24	-	-	2 241DMA	1 MA63	1 MA73	1 MA93
9	10 / <sub>2</sub> X 17 / <sub>4</sub> X / <sub>4</sub> /	1 MA43ED	2 MA24	-	-	2 241DMA	1 MA63	1 MA73	1 MA93
10		1 MA42ED	2 MA24	1 MA22	-	3 241DMA	2 MA62	2 MA72	2 MA92
11		1 MA43ED	2 MA24	1 MA22	-	3 241DMA	2 MA62	2 MA72	2 MA92
12	280x256x19	1 MA42ED	3 MA24	-	-	3 241DMA	2 MA62	2 MA72	2 MA92
13	$(11" \times 10^{1/}_{16}"  \times^{3/}_{4}")$	1 MA43ED	3 MA24			3 241DMA	2 MA62	2 MA72	2 MA92
14		1 MA42ED	3 MA24	1 MA22	1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
15		1 MA43ED	3 MA24	1 MA22	1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
16		1 MA42ED	4 MA24		1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
17		1 MA43ED	4 MA24	-	1 MA20	4 241DMA	2 MA63	2 MA73	2 MA93
18		1 MA42ED	4 MA24	1 MA22	-	5 241DMA	2 MA63	2 MA73	2 MA93
19	) John Market	1 MA43ED	4 MA24	1 MA22	-	5 241DMA	2 MA63	2 MA73	2 MA93
20	200-274-40	1 MA42ED	5 MA24	-	-	5 241DMA	2 MA63	2 MA73	2 MA93
21	280x374x19 (11" x 14³/₄" x ³/₄")	1 MA43ED	5 MA24			5 241DMA	2 MA63	2 MA73	2 MA93
22		1 MA42ED	5 MA24	1 MA22	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
23		1 MA43ED	5 MA24	1 MA22	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
24		1 MA42ED	6 MA24	1 101722	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
25		1 MA43ED	6 MA24	<u> </u>	1 MA20	6 241DMA	4 MA62	4 MA72	4 MA92
26		1 MA43ED	6 MA24	1 MA22	I IVIAZU		4 MA62	4 MA72	4 MA92
27		1 MA43ED	6 MA24	1 MA22		7 241DMA 7 241DMA	4 MA62	4 MA72	4 MA92
28	560x256x19 (22 <sup>1</sup> / <sub>16</sub> " x 10 <sup>1</sup> / <sub>16</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MA43ED 1 MA42ED	7 MA24	I IVIAZZ	-	7 241DMA	4 MA62	4 MA72	4 MA92
29	, 70 10 47	1 MA43ED	7 MA24		-	7 241DMA			4 MA92
	0 0 0 0			4 14022			4 MA62	4 MA72	
30		1 MA42ED	7 MA24	1 MA22	<u> </u>	8 241DMA	3 MA63	3 MA73	3 MA93 3 MA93
	420x374x19 (16 <sup>9</sup> / <sub>16</sub> " x 14 <sup>3</sup> / <sub>4</sub> " x <sup>3</sup> / <sub>4</sub> ")		7 MA24	1 MA22		8 241DMA	3 MA63	3 MA73	
32	14 <sup>3</sup> / <sub>4</sub> "x <sup>3</sup> / <sub>4</sub> ")		8 MA24		-	8 241DMA	3 MA63	3 MA73	3 MA93
33		1 MA43ED	8 MA24	4 14422		8 241DMA	3 MA63	3 MA73	3 MA93
34	6 6 6 6	1 MA42ED	8 MA24	1 MA22	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
35		1 MA43ED	8 MA24	1 MA22	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
36		1 MA42ED	9 MA24	-	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
37		1 MA43ED	9 MA24	- 4 144.00	2 MA20	9 241DMA	4 MA63	4 MA73	4 MA93
38		1 MA42ED	9 MA24	1 MA22	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
39		1 MA43ED	9 MA24	1 MA22	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
40		1 MA42ED	10 MA24	-	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
41	6 6 6 6 6 6 6	1 MA43ED	10 MA24	-	1 MA20	10 241DMA	4 MA63	4 MA73	4 MA93
42	560x374x19 (22 <sup>1</sup> / <sub>16</sub> " x 14 <sup>3</sup> / <sub>4</sub> " x <sup>3</sup> / <sub>4</sub> ")	1 MA42ED	10 MA24		-	11 241DMA	4 MA63	4 MA73	4 MA93
43	10 4 4.	1 MA43ED	10 MA24	1 MA22	-	11 241DMA	4 MA63	4 MA73	4 MA93
44	4	1 MA42ED	11 MA24		-	11 241DMA	4 MA63	4 MA73	4 MA93
45		1 MA43ED	11 MA24		-	11 241DMA	4 MA63	4 MA73	4 MA93
									It replaces

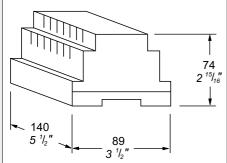
It replaces MA71, 72, 72





#### **POWER SUPPLIES AND SERVICE MODULES**

## **Timed power supply**



<u>1181E</u>. Timed supply for videointercoms, CCD cameras, electric lock and name-plate lights, etc.

#### **Technical data**

Input voltage: 127 or 220-230Vac
Frequency: 50/60Hz
Power: 48VA
Switch-ONtime: 100 sec.
Housing: DIN 8 modules A
Weight: 0.95Kg.
Approved by: VDE according to the safety

standard EN60065 Operating temperature: 0°÷40°C Maximum permissible humidity: 90%RH

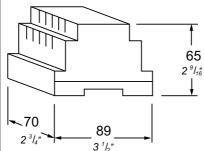
#### Notes

- The power supply is not provided with fuses, but all of its outputs are protected against overloading and short circuiting by temperature sensors. To reset the power supply, power must be cut off for about one minute and can be restored after having eliminated the defect.
- The power supply must be installed in a dry place and can be fixed on DIN bar or on a wall by using the expansion plugs.

#### **Output terminals**

- A Output voltage 13Vac for:
  - -name plate light, exchangers and climatized camera (continuous service 0.6A) -electric door lock and bells (intermittent service 1A)
- Ground for AC power supply
- F Ground for DC power supply
- H Continuous output 21Vdc-1A (timed operation)
- C- Electronic bell output for external calls 0.25A
- 4 Control switch-ON input from monitors
- Positive voltage output not stabilized 12Vcc-0.2A
- **3+** Stabilized positive voltage output 8Vcc-0.1A

#### **Transformers**



**PRS210ED.** Transformer with electronic bell used to power the 1+1 intercom system with electronic call.

#### Technical data

Input voltage 127 or 220-230Vac Power: 15VA
Output voltage: 13Vac
Ringing frequency: 450Hz modulated Maximum load: 0.6A
Maximum of intermittent load: 1A
Housing: DIN 4 modules A

Housing: DIN 4 modules
Weight: 0.42Kg
Operating temperature: 0°÷40°C
Maximum permissible humidity: 90%RH

#### **Output terminals**

- A Output voltage 13Vac for:
  - -name plate light, exchangers and climatized camera (continuous service 0.6A)
  - -electric door lock and bells (intermittent service 1A)
- Ground
- C- Negative electronic bell output 10Vpp-0.25A

#### PRS210.

It can replace **PRS210ED** in all the applications where the electronic call generation is not required. Used to power 13Vac devices; supplementary amplified door stations, name plate light, additional door locks, etc.

## Technical data

Input voltage 127 or 220-230Vac Power: 15VA
Output voltage: 13Vac Maximum load: 0.7A
Maximum of intermittent load: 1A
Housing: DIN 3 modules A
Weight: 0.42Kg
Approved by: VDE according to the safety

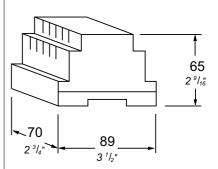
standard EN60065
Operating temperature: 0°÷40°C

Maximum permissible humidity: 90%RH

**Output terminals** 

- $\sim$ / $\sim$  Output voltage 13Vac for:
- -name plate light, exchangers and climatized camera (continuous service 0.6A)
- -electric door lock and bells (intermittent service 1A)

#### Service modules



#### RL37D. Supplementary call module

When installed in 1+1 intercom and 4+1 video intercom systems with electronic call, it provides a supplementary input for external calls, enables supplementary video power supply and provide a second ringer for floor calls.

#### Technical data

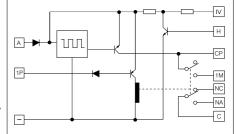
Power supply: 13Vac
Stand-by current: 40mA
Max. switching current: 1A (24V)
Housing: DIN 4 A modules
Operating temperature: 0° ÷ 50°C
Max. permissible humidity: 90% RH

#### **Terminals**

- A 13Vac alternate voltage input
- ground
- H timed positive continuous voltage input 21Vdc
- IV supplementary power supply enabling
- C common contact of relay
- NA normally open contact of relay
- NC normally closed contact of relay
- 1P electronic call input
- **1M** electronic call output enabled from terminal 1P
- CP electronic call output

**Note**: Remove the cover and move jumper **J2** to change the sounds of electronic ringer. Position **1-2**: modulated note

Position 1-2: modulated note Position 2-3: continuous note



1473. EXCHANGER. See page 33.

1471. RELAY UNIT. See page 34.

1471E. RELAY UNIT. See page 34.

**1472. 2-CONTACT RELAY UNIT.** See page 34.





#### **INSTALLATION INSTRUCTIONS**

- The cable runs of intercom and video intercom installations must be kept separate
  from the mains or any other electrical installation as required by the International
  Safety Standards and the entire installation must be realized in compliance with the
  safety rules in force in any specific Country.
- It is necessary to provide a disconnecting and safety switch before the power supply. Use a single general switch in case of several power supplies (also in multiple entrance).
- Before connecting the power supply make sure that its rating data corresponds to this of the mains.
- For electromagnetic reasons, all service modules must be installed near their power supply.

#### Wires

- 1) For the correct operation of the intercom and videointercom system you must choose the correct type of cable.
- Wires must be dimensioned according to the distance of the different devices and their current consumption.
- 3) Do not connect wires in parallel to reach the required cross-section (for example multi-pair telephone cables). Only use a single wire with suitable cross-section. When using multi-core cables you must select them with low parasite parameters (low capacitance per meter, low inductance over Ohm).
- If the installation includes additional power supplies you must place them near the device to be powered.

#### **Background noise**

To avoid possible background noise over the speech line, it is advisable:

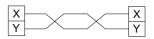
- not to lay intercom or telephone cables in the same runaway as the wires used to power alternate current loads;
- 6) to avoid using the same multi-core cable to transmit audio signals and alternate current power supplies (lamps, amplified external door stations, electrical door locks). Always use separate wires for alternate current power supplies;
- 7) for name-plate lamps, to use an additional 12Vac transformer (PRS210 type) with suitable power (consumption is 75mA for each lamp) with 2 power supply wires separate from audio wires;
- 8) in case of long distances between the external door station and the last intercom, to place the power supply near by the external door station.

### WIRE CROSS SECTION

Distar	се	Article terminals								
		1.3 (into 10.4.1.	ercom) <b>C-</b> (videoin	itercom)	F.H.A.S. — (wires in <b>bold face type</b> )					
<b> </b>	<del>-</del>									
m.	feet	mm² S	mm Ø	AWG	mm² S	mm Ø	AWG			
50 100 200	165 330 660	0.5 0.75 1	0.8 1 1.2	20 18 16	0.75 1 2	1 1.2 1.4	18 16 14			

## VIDEO SIGNAL DISTRIBUTION WITH TWISTED PAIR

If the distance between the camera and the last video intercom in the system is lower than 200 m, the connection can be made with 2x0.35mm² wires (Ø=0,6mm; AWG22) instead of the coaxial cable. For distances from 100m to 200m a twisted pair must be used.

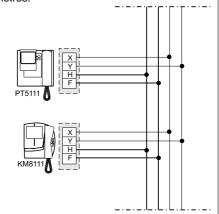


For the connection of the video signal you can choose from:

- connection with junction box
- serial connection (input and output)
- connection with floor distributors

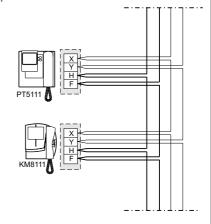
#### **CONNECTION WITH JUNCTION BOX**

All wires are distributed in the floor junction box. Due to the signal loss introduced by each connection, the maximum number of video intercoms that can be connected in serial mode is 20. Two 75 $\Omega$  resistances must be inserted between X and F and between Y and F in the last video intercom. The maximum distance between the video intercoms and the connector block is 2.5 metres.



#### **SERIAL CONNECTION**

Connections are made on the video intercom brackets, and not in the junction box. Due to the signal loss introduced by each connection, the maximum number of video intercoms that can be connected in serial mode is 20. Two  $75\Omega$  resistances must be inserted between X and F and between Y and F in the last video intercom







### INSTALLATION INSTRUCTIONS

#### WORKING INSTRUCTIONS

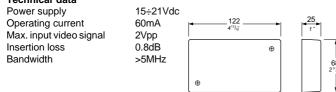
#### **CONNECTION WITH FLOOR DISTRIBUTORS**

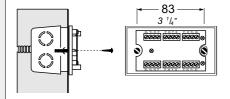
The video wires of each video intercom are insulated from the riser. Connections are made on the **DV2D** or **DV4D** floor video signal distributor box.

### DV2D-DV4D. FLOOR VIDEO SIGNAL DISTRIBUTORS.

They allow for the distribution of the video signal taken from the riser on 2 or 4 outputs. They can be installed on the wall on a wall box, with expansion plugs or it can be placed in the junction box.

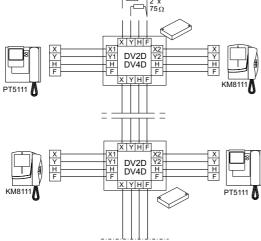
#### Technical data





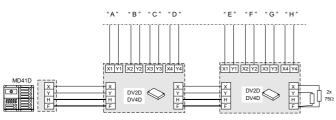
#### Connection of the video signal on a single riser

Terminals X and Y of the last distributor must be terminated with the  $75\Omega$  resistances supplied with the article. It is not necessary to terminate the unused outputs.



Connection of the video signal with distribution on several risers In video systems with different risers you must use 1 or more video distributors art. DV2D or DV4D.

Terminals X and Y of the last distributor must be terminated with the 75 $\Omega$  resistances supplied with the article. It is not necessary to terminate the unused outputs.



Example of connection on 8 risers

Check that the connections of the system are carried out correctly. Put the system in use by connecting the power supply to the mains. By pushing a call button from the external push-button panel, it activates the bell of the corresponding video intercom and it activates the system for a time of about 100 seconds. The images appear on the video intercom a few seconds after the call.

If in the meantime another call occurs, the video intercom shuts itself OFF and connects the last call. The system switches OFF automatically after 100 sec.

In case more calls occur simultaneously, a protection circuit against overloading and short circuiting is provided to disable the timer and therefore to shut OFF the system.

In the absence of calls from the door station, from any video intercom (if provided in the system) it is possible to control the entrance by pressing the ③ button (control switch ON).

To work the electric door lock release press the — button from video intercoms.

In the two or more entrance systems all the audio and video communications and door lock release, from one entrance to the other, are automatically switched with the call or the control switch ON.

In these systems the control switch ON from the video intercoms can interrupt a running communication, for this reason it is advisable to interrupt, by means of a relay. This function when the video system is active, giving the priority of the communication to the door stations for some examples see pages 251 and 252.

#### Adjustments

All the regulations are carried out in the factory. For possible corrections the intervention of a specialized technician is advisable. The Contrast and Brightness adjustments, being subject to the environmental lighting conditions, are accessible from the under-neath by means of a screw driver.

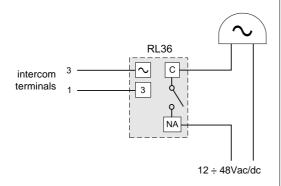




# **INSTALLATION DIAGRAMS**

#### **ADDITIONAL BELL**

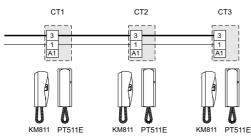
If the ringing volume is not sufficient or if you need to chime the call in a different place, you can add an additional bell enabled by a relay.



#### **PARALLELINTERCOMS**

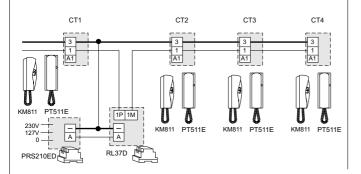
In an intercom system it is possible to connect up to 3 intercoms in parallel.

#### 3 parallel intercoms



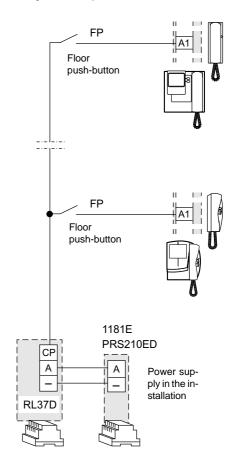
More intercoms can be connected using the service module RL37D.

#### 4 parallel intercoms



#### FLOOR CALL (intercom and videointercom systems)

In all the diagrams reported in this manual, using the service module RL37D, it would be possible to have the floor call with different sound with respect to that generated by the door station.



#### Note:

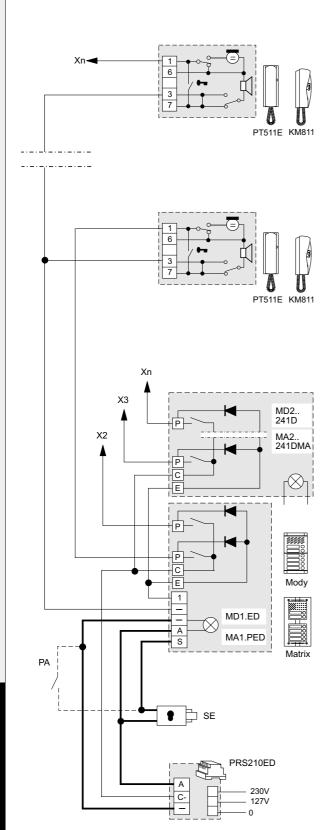
**Move the jumper J2**, present inside the **RL37D** module, from the position **1-2** to the **2-3** to have a different ringing sound.





## Si 21MR/2

### INTERCOMS CONNECTED TO 1 EXTERNAL DOOR STATION



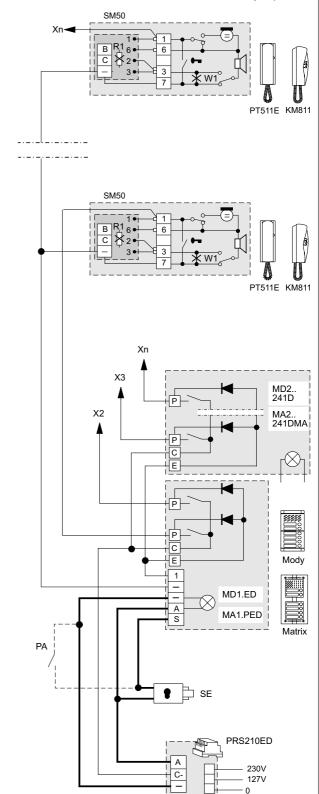
**PA** = Door release push-button (*optional*) **SE** = Electric door lock (12VAC-1A max.)

For the installation read the notes on page 243.

## INTERCOMS WITH PRIVATE CONVERSATION CONNECTED TO 1 EXTERNAL DOOR STATION

#### Note

- In all SM50 cut the resistance R1 and in the intercom the jumper W1.



**PA** = Door release push-button (optional)

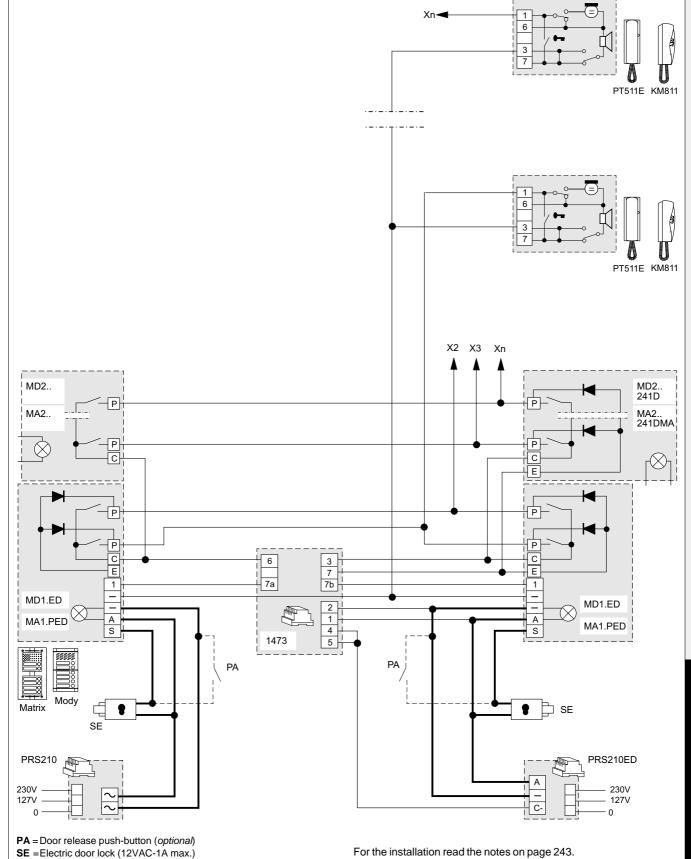
SE = Electric door lock (12VAC-1A max.)

For the installation read the notes on page 243.





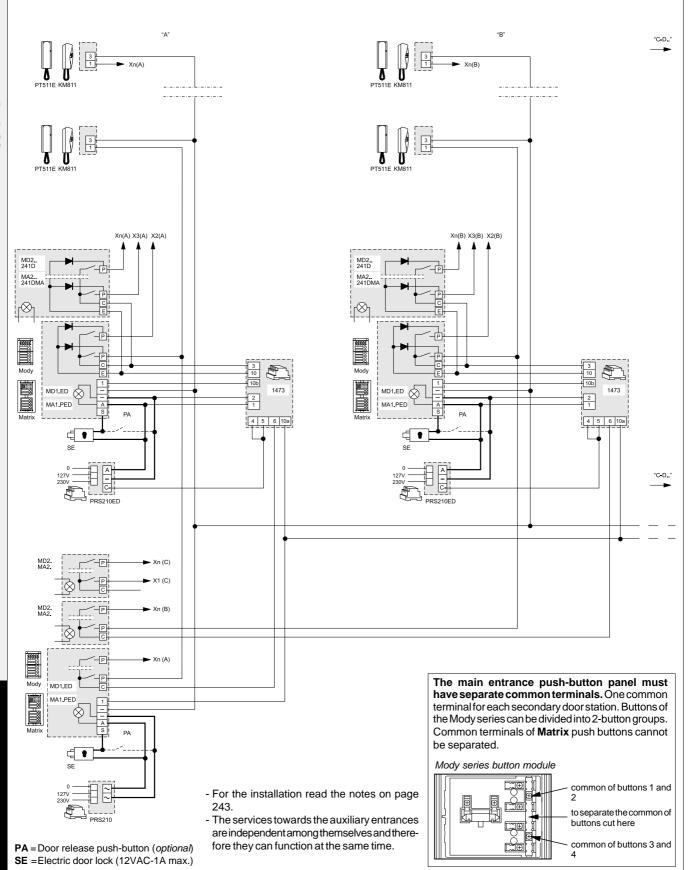
### INTERCOMS CONNECTED TO 2 AUTOMATICALLY SWITCHED EXTERNAL DOOR STATIONS







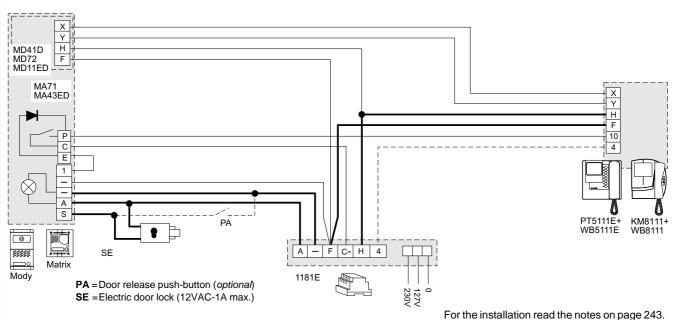
#### INTERCOM SYSTEM WITH SECONDARY DOOR STATIONS AND 1 MAIN COMMON STATION (multiple entrance)



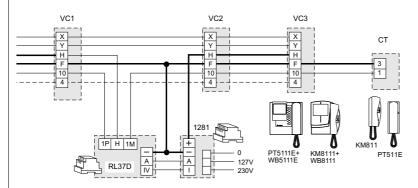






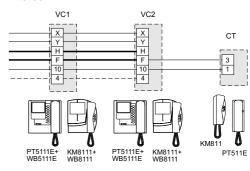






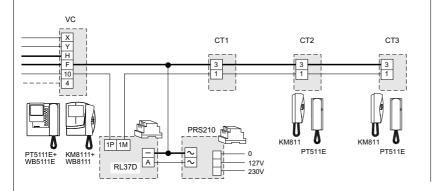
Read the note on the bottom of this page

#### Application of 2 videointercoms and 1 parallel intercom

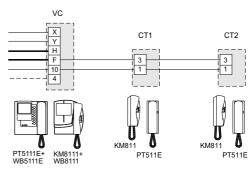


Read the note on the bottom of this page

### Application of 1 videointercom and 3 parallel intercoms



#### Application of 1 videointercom and 2 parallel intercoms



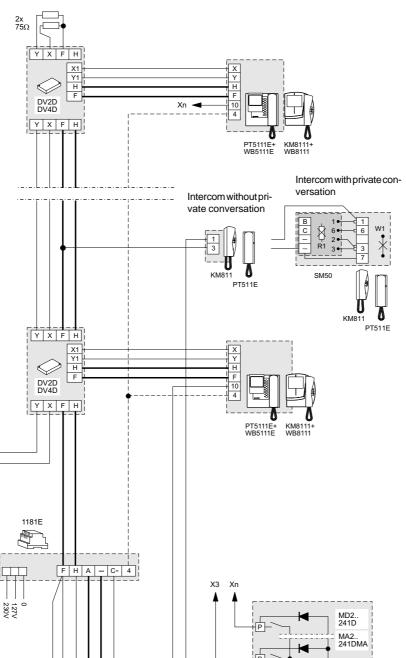
#### Note

In all the 4+1 video intercom systems it is possible to add further monitors and/or intercoms. To do this, insert the 2 application examples in this page instead of the monitor which has been represented in the various installation diagrams of pages 249, 250, 251, 252 and 253.



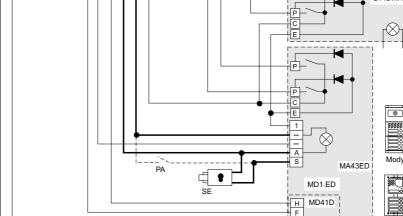


### MULTI-WAY MIXED INTERCOM AND VIDEO INTERCOM SYSTEM CONNECTED TO 1 EXTERNAL DOOR STATION



#### Conversation privacy

In case of conversation privacy function, jumper W1 of the intercom and resistance R1 of module SM50 must be cut.



For the installation read the notes on pages 243 and 244.

**PA** = Door release push-button (*optional*) **SE** = Electric door lock (12VAC-1A max.)

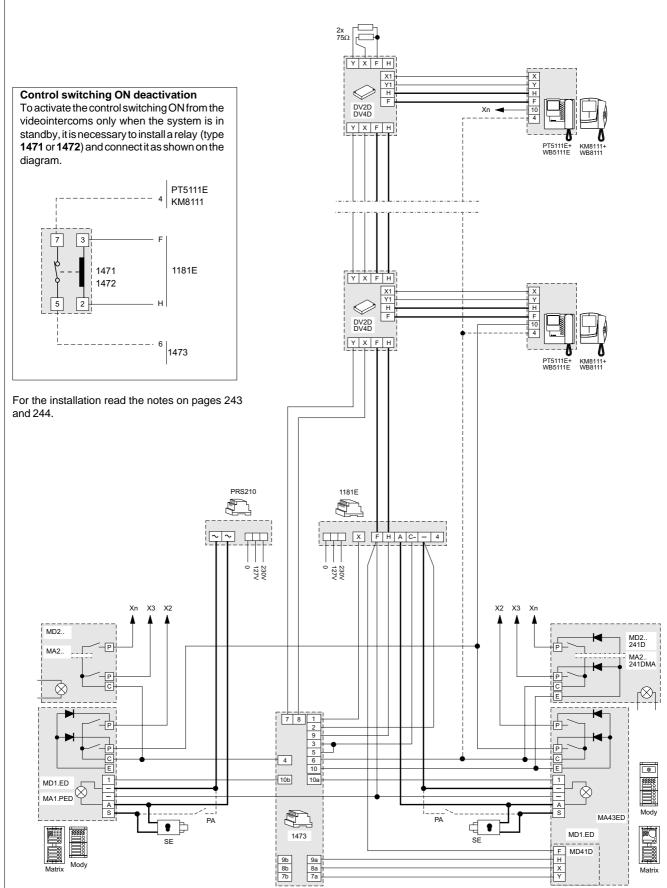




X

Matrix

## MULTI-WAY VIDEO INTERCOM SYSTEM CONNECTED TO 2 EXTERNAL DOOR STATIONS, ONE OF WHICH ONLY AUDIO

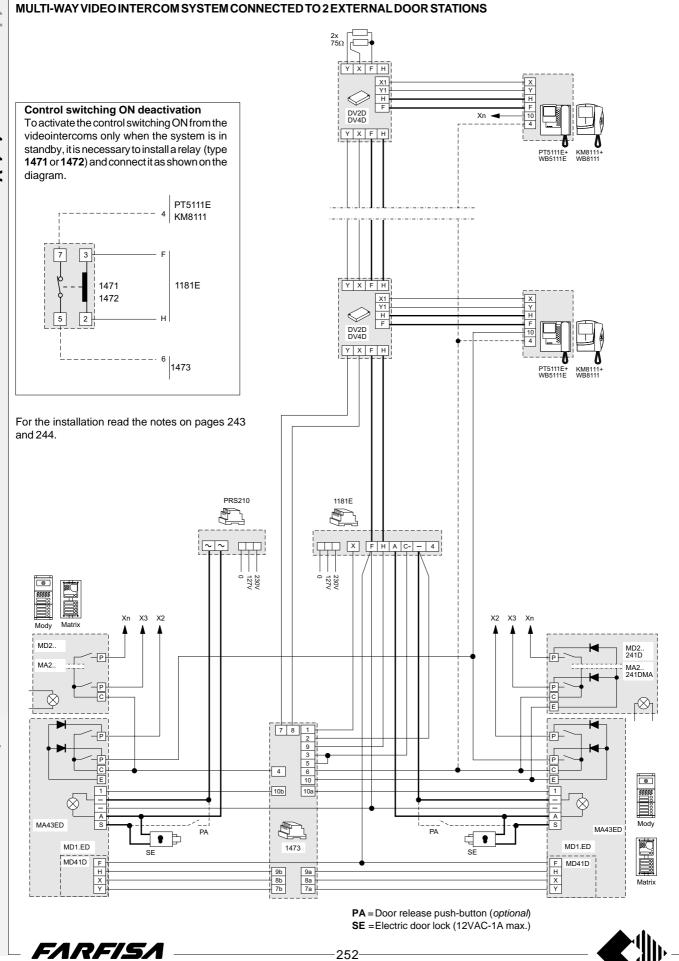




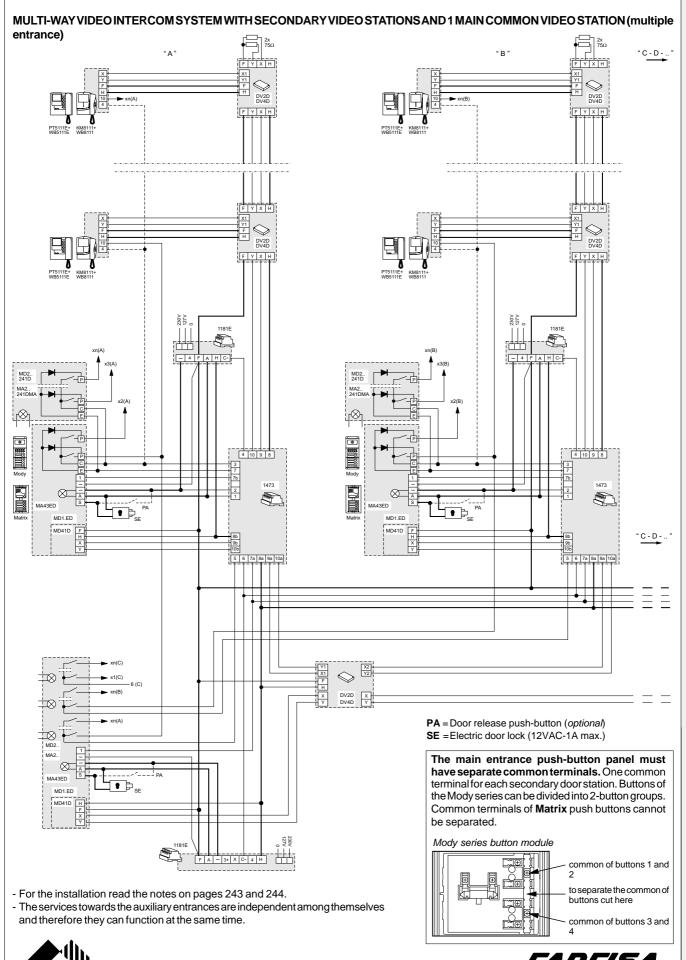
SE = Electric door lock (12VAC-1A max.)

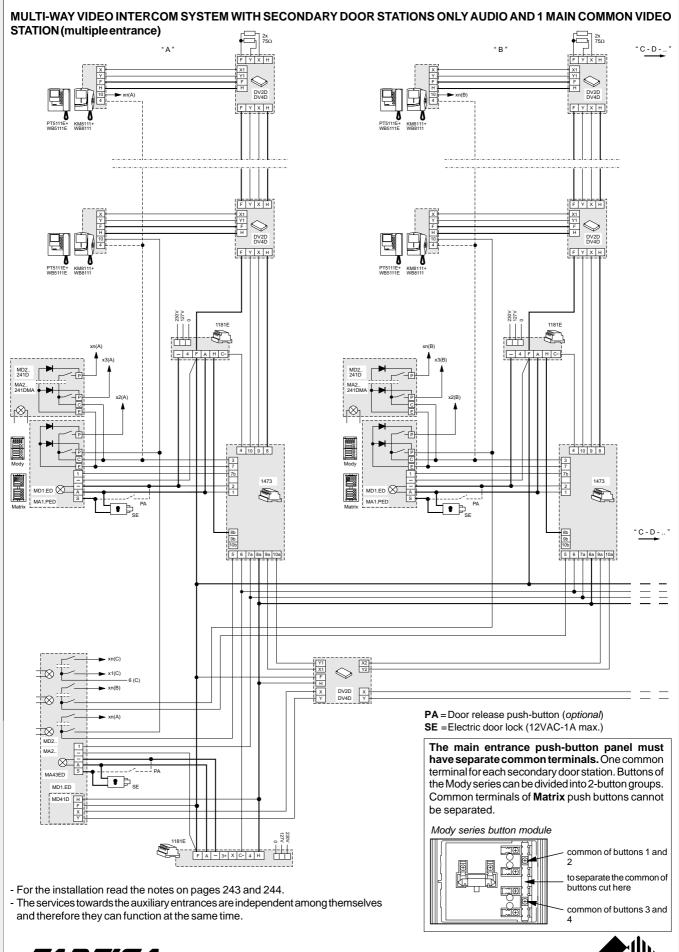






INTERCOM





—254— (MT11 - Gb2006)



## PRODUCT LIST

List of article that can be used in electronic call systems with page reference.

Article	Description Pa	ge ref.	Article	Description Pa	ge ref.
337C	Electric door-speaker for ErreP/R push-button panel	30	MD808	Hood cover for 8 modules (2 frames with 4 modules)	11
476	5-output video distributor	113	MD89	Hood cover for 9 modules (3 frames with 3 modules)	11
924W	White intercom Slim series	6	MD812	Hood cover for 12 modules (3 frames with 4 modules)	11
1273TV	7-contact exchanger	110	MD91	Rain shelter for 1 module. Mody series	11
1281	Video power supply	109	MD92	Rain shelter for 2 modules. Mody series	11
1281E 1282E	Power supply-timer	109	MD93 MD94	Rain shelter for 3 modules. Mody series	11 11
1304	Audio-video timer Video intercom cable with 10 wires + coaxial	109 116	MD94	Rain shelter for 4 modules (2 frames with 2 modules) Rain shelter for 4 modules (1 frame with 4 modules)	11
1443E	Intercommunicanting module	110	MD96	Rain shelter for 6 modules (2 frames with 3 modules)	11
1471	Relay unit	34	MD908	Rain shelter for 8 modules (2 frames with 4 modules)	11
1471E	Relay unit	34	MD99	Rain shelter for 9 modules (3 frames with 3 modules)	11
1472	2-contact relay unit	34	MD912	Rain shelter for 12 modules (3 frames with 4 modules)	11
1473	4-contact exchanger	33	MD100 MD122	Amplified door station with 1 push-button. Mody series	13
2443 8083	Audio-relay amplifier Back-box for KM8600W video-intercom	110 82	MD124	Module for door speaker with 2 push-buttons, 2 row Module for door speaker with 4 push-buttons, 2 row	12 12
CV01	Video signal converter	108	MD200	Amplified door station with 2 push-buttons. Mody series	13
DV2	2-output video distributor	112	MD222	Button module with 2 push-buttons, 2 row. Mody series	12
DV2D	2-output video distributor	114	MD224	Button module with 4 push-buttons, 2 row. Mody series	12
DV4	4-output video distributor	112	MD226	Button module with 6 push-buttons, 2 row. Mody series	12
DV4D	4-output video distributor	114	MD228 PL10P	Button module with 8 push-buttons, 2 row. Mody series	12
ES60 ES65	Intercom interface with 2 relays for FT105P and FT208P Intercom interface with 4 relays for FT105P and FT208P	209 209	PL11P	Module with door speaker and without buttons. Profilo serie Module with door speaker and with 1 button. Profilo serie	
ES70	Caller identifier board for FT105P and FT208P	208	PL12P	Module with door speaker and with 2 buttons. Profile serie	
FC52MA	Access control keypad. Matrix series	21	PL20	Blank module Profilo series	26
FC52P	Access control keypad. Mody series	13	PL21	Module without door speaker and with 1 button. Profilo serie	es 26
FP52	Proximity reader for access control. Mody series	13	PL22	Module without door speaker and with 2 buttons. Profilo s	
FT11D	Intercom-telephone interface	204	PL23	Module without door speaker and with 3 buttons. Profile s	
FT105P FT208P	PABX with 1 trunk line / 5 internal lines PABX with 2 trunk lines / 8 internal lines	206 206	PL24 PL40P	Module without door speaker and with 4 buttons. Profile s Camera module with door speaker, without buttons. Profile	
GN30	Electronic ringing generator with 3 different sounds	33	PL40PC	Colour camera module with speaker, without buttons. Prof	
KM810W	Electronic intercom with 1 expandable button to 2	9	PL41P	Camera module with door speaker and 1 button. Profilo s	
1	White Flat videointercom Compact series	82	PL41PC	Colour camera module with speaker and 1 button. Profilo	
1	White videointercom Compact series	82	PL42P	Colour camera module with speaker and 2 buttons. Profile	
MA10P	White Reflex videointercom Compact series  Module with door speaker and without buttons. Matrix series	82 ies 21	PL42PC PL71	Camera module with door speaker and 2 buttons. Profilo Back box with frames for 1 module. Profilo series	26
MA11P	Module with door speaker and with 1 button. Matrix series		PL72	Back box with frames for 2 modules. Profile series	26
MA12P	Module with door speaker and with 2 buttons. Matrix series		PL73	Back box with frames for 3 modules. Profilo series	26
MA20	Blank module Matrix series	20	PR1	Protection for 1 telephone line	205
MA22 MA24	Module without door speaker and with 2 buttons. Matrix seri Module without door speaker and with 4 buttons. Matrix seri		PR2 PRAL	Protection for 2 telephone lines Protection for electrical line	205 205
MA42	Camera module with door speaker, without buttons. Matrix		PRS210	Transformer 13Vac - 15VA	32
MA42C	Colour camera module with speaker, without buttons. Mat		PRS220	Intercom power supply 6Vdc/13Vac - 15VA	32
MA43	Camera module with door speaker and 1 button. Matrix s		PRS226E	Power supply-switcher for intercommunicating 18VA	32
MA43C MA61	Colour camera module with door speaker and 1 button. Mat		PRS240 PT501	Power supply with electronic ringing 7Vdc/13Vac - 18VA	32 10
MA62	Front frame for 1 module. Matrix series Front frame for 2 modules. Matrix series	20 20	PT502	Single button unit for PT526EW and PT520,N,W LED module for PT526EW and PT520,N,W	10
MA63	Front frame for 2 modules. Matrix series	20	PT510	Bicolour intercom Project series	6
MA71	Back box with frames for 1 module. Matrix series	20	PT510EW	White intercom Project series for electronic call	9
MA72	Back box with frames for 2 modules. Matrix series	20	PT510N	Beige intercom Project series	6
MA73 MA91	Back box with frames for 3 modules. Matrix series Rain shelter with frames for 1 module. Matrix series	20 20	PT510W PT515	White intercom Project series Switch module for PT526EW and PT520,N,W	6 10
MA92	Rain shelter with frames for 2 modules. Matrix series	20	PT520	Bicolour extendable intercom Project series	6
MA93	Rain shelter with frames for 3 modules. Matrix series	20	PT520W	White extendable intercom Project series	6
MD10	Module for door speaker without push-buttons. Mody seri	es 12	PT526EW	White extendable intercom Project series for electronic ca	
MD11	Module for door speaker with 1 push-button. Mody series		PT538	Desk adapter for intercom Project series	10
MD12 MD20	Module for door speaker with 2 push-buttons. Mody series Blank module. Mody series	es 12 12	PV100 PV100W	Bicolour intercom Puntovirgola series White intercom Puntovirgola series	6 6
MD21	Button module with 1 push-button. Mody series	12	R8	Push-button panel with 8 buttons ErreP/R series	30
MD22	Button module with 2 push-buttons. Mody series	12	R10	Push-button panel with 10 buttons ErreP/R series	30
MD23	Button module with 3 push-buttons. Mody series	12	R12	Push-button panel with 12 buttons ErreP/R series	30
MD24	Button module with 4 push-buttons. Mody series	12	R14	Push-button panel with 14 buttons ErreP/R series	30
MD30 MD41	Electric door speaker. Mody series Camera module. Mody series	12 95	RL36 RL37	Relay module for intercoms Studio and Project series Relay module	7 33
MD41C	Colour camera module. Mody series	95	RP1	Push-button panel with 1 button ErreP/R series	30
MD41D	Camera module. Mody series	95	RP2	Push-button panel with 2 buttons ErreP/R series	30
MD50	Street number module. Mody series	12	RP4	Push-button panel with 4 buttons ErreP/R series	30
MD71	Back box with frames for 1 module. Mody series	11	RP6	Push-button panel with 6 buttons ErreP/R series	30
MD72 MD73	Back box with frames for 2 modules. Mody series Back box with frames for 2 modules. Mody series	11 11	RP8 RP10	Push-button panel with 8 buttons ErreP/R series Push-button panel with 10 buttons ErreP/R series	30 30
MD74	Back box with frames for 2 modules. Mody series	11	RP12	Push-button panel with 12 buttons ErreP/R series	30
MD81	Hood cover for 1 module. Mody series	11	RP100	Amplified door station with 1 push-button	30
MD82	Hood cover for 2 modules. Mody series	11	RP200	Amplified door station with 2 push-buttons	30
MD83	Hood cover for 3 modules. Mody series	11	SM50E	Private conversation module for intercom Studio and Projet	
MD84 MD804	Hood cover for 4 modules (2 frames with 2 modules) Hood cover for 4 modules (1 frame with 4 modules)	11 11	SR41 ST701	Electronic buzzer module for intercom Studio and Project Single button unit for intercom Studio and Compact series	
MD86	Hood cover for 6 modules (2 frames with 3 modules)	11	ST702W	LED module for intercom Studio series	6
	·				





## **PRODUCT LIST**

List of article that can be used in electronic call systems with page reference.

Article	Description Pag	e ref.
ST703	Ringing volume adjustment for intercom Studio series	7
ST704	Additional loudspeaker for intercom Studio series	7
ST715	Switch module for intercom Studio series	7
ST716	Switch module with LED for intercom Studio series	7
ST720W	White extendable intercom Studio series	6
ST740W	White telephone Studio series	192
ST7100W	White Flat monitor Studio series	84
ST7100CW	Colour Flat monitor Studio series. White colour	84
ST7M32W	32-image video memory for Studio series	90
TA700W	Desk adapter for ST740W telephone Studio series	192
TA720W	Desk adapter for ST720W intercom Studio series	8
TA7100W	Desk adapter for ST7100W monitor Studio series	85
UP11	Amplified door station with 1 push-button, flush mounted UF series	31
UP12	Amplified door station with 2 push-buttons, flush mounted Uf series	31
UP100	Amplified door station with 1 push-button, surface mounted UP series	31
UP200	Amplified door station with 1 push-button, surface mounted UP series	d 31
WB700	Wall bracket for ST740W telephone and accessories Studio series	192
WB7100	Wall bracket for ST7100W monitor	84
WB8600	Wall bracket for videointercoms Compact series	82

## Reduced wires technology

Article	Description Page	ref.
044	Madula with diadas for Owners Madu and brutter and	000
241 241DMA	Module with diodes for 2 users. Mody push-button panel	236 239
241DMA 1181E	Module with diodes for 4 users. Matrix push-button panel	239
1471	Power supply-timer Relay unit	242
1471 1471E	Relay unit	242
14715	2-contact relay unit	242
1472	4-contact exchanger	242
DV2D	2-output video distributor	244
DV2D DV4D	4-output video distributor	244
KM811W	Electronic intercom with 1 expandable button to 2	232
	White Flat videointercom Compact series	234
MA11PED	Module with door speaker and with 1 button. Matrix series	239
MA12PED	Module with door speaker and with 1 button. Matrix series	239
MA43ED	Camera module with door speaker and 1 button. Matrix s.	239
MD10ED	Module with door speaker and without buttons. Mody s.	236
MD10ED	Module with door speaker and with 1 button. Mody series	236
MD12ED	Module with door speaker and with 2 buttons. Mody series	236
MD41D	Camera module Mody series	236
PRS210	Transformer 13Vac - 15VA	242
	Transformer with electronic ringing 13Vac - 15VA	242
PT511E	Bicolour intercom with 1 push-button. Project series	233
PT511EW	White intercom with 1 push-button. Project series	233
PT538	Desk adapter for intercom Project series	233
PT5111	White Flat videointercom Project series	235
PT5111W	White Flat videointercom Project series	235
RL37D	Supplementary call module	242
SM50	Private conversation module for intercom Compact and	232
	Project series	
SR41	Electronic buzzer module for intercom Compact and	232
	Project series	
WB5111E	Wall bracket for videointercoms Project series	235
WB8111	Wall bracket for videointercoms Compact series	234





