Alarm Control Panels

INTEGRA

USER
MANUAL

Satel✷

GDAŃSK

CE

⚠️ **WARNING**

In order to avoid any operational problems with the control panel, it is recommended that you become familiar with this manual before you start using the equipment.

Making any construction changes or unauthorized repairs is prohibited. This applies, in particular, to modification of assemblies and components. Maintenance and/or repair operations should be performed by authorized personnel (i.e. the installer or factory service).

The control panel should be connected to **<u>analog lines only</u>**. Connecting its telephone circuit to a digital network (e.g. ISDN) may cause damage to the equipment. In case of changing the analog line to the digital one, it is necessary to contact the alarm system installer.

Pay special attention if the telephone line used by the control panel is frequently busy and/or failures are reported concerning the line and/or monitoring. Report such situations to the alarm system installer immediately.

CAUTION!

The alarm system is fitted with a battery. After expiry of its lifetime, the battery must not be thrown away, but disposed of as required by the existing regulations (European Directives 91/157/EEC and 93/86/EEC).

The latest EC declaration of conformity and product approval certificates are available for downloading on website **www.satel.pl**	CE

The INTEGRA alarm control panels INTEGRA 24, INTEGRA 32, INTGERA 64 and INTEGRA 128 meet requirements as per CLC/TS 50131-3, Grade 3, and have been certified by Det Norske Veritas Certification AS, Norway.

Environmental class of the INTEGRA series control panels: II.

Changes in the INTEGRA control panels with firmware in version 1.06

Support for new modules	INT-RS – converter enabling events to be monitored by means of a special external device, integration of the alarm control panel with other systems (e.g. with the so-called smart house) or connecting a computer with installed GUARDX program in the same way as to LCD keypad.
Users	The service can add, edit and delete object users, if the SERVICE CAN EDIT option is enabled by the administrator. APT-100 key fob can be assigned to each user.
Arming	A new way of arming: the "full+bypasses" feature. A change in the function of quick arming in LCD keypads and partition keypads: pressing the [1] and [#] keys in turn will activate the "full+bypasses" arming mode. The arming procedure in LCD keypad has been modified. If arming turns out to be impossible, because a zone with enabled PRIORITY option is violated or the DO NOT ARM IF TAMPERED option is enabled and the zone is tampered, you can bypass such a zone by pressing the key [4].
User functions	In the TESTS function, the EDIT WITH DLOADX option has been replaced by the SERVICE CAN EDIT option. The FIRE DOOR OPENING FINISHED function has been added. New functions have been added in the TESTS function: – BATTERY TEST – PROXIMITY CARD TEST – ST PROGRAM VERSION – GSM IMEI/V/SIG. Capability to quickly control the outputs by means of LCD keypad without the necessity of entering any password (pressing successively the [8] and [#] keys will start the OUTPUT CONTROL function). Capability to freely define the cut-off time of MONO SWITCH type of output, if it is controlled from LCD keypad. Capability to deactivate any output from LCD keypad (irrespective of the cut-off time that has been programmed for the output) by pressing any numerical key. In the DOWNLOADING function, starting communication by the built-in modem has been separated from starting communication by the external modem.

CONTENTS

1. GENERAL

Thank you for choosing the product offered by the SATEL Company. High quality, large number of functions and simple operation are the main advantages of our alarm control panel. Wishing you full satisfaction with the choice you made, we are always ready to provide you with professional assistance and information on our products. Please note that, besides the control panels, SATEL manufactures many other components of alarm systems. Detailed information on our full offer can be found nationwide at retail dealers offering our products, on website **www.satel.pl**.

2. ABOUT THIS MANUAL

This Manual allows you to familiarize yourself with the basic operation of modules designed to control the operation of alarm systems based on the INTEGRA control panels and with the functions performed by these panels. The INTEGRA includes alarm control panels: INTEGRA 24, INTEGRA 32, INTEGRA 64 and INTEGRA 128 and INTEGRA 128-WRL.

The part "*Operation of INTEGRA Control Panel*" of this Manual describes the modules that control operation of the control panel and how they should be used. It also presents some functions related to the alarm system operation, and includes some basic information on functioning of the system and use of the telephone line by the control panel.

The part "*User Functions*" of this Manual contains full specification of functions accessible from the alphanumeric LCD keypad.

The text in this Manual contains some technical terms: for explanation please refer to APPENDIX B at the end of this Manual.

Please read carefully the entire manual since familiarity with the control panel functions will allow you to take full advantage of the equipment possibilities. The control panel can perform functions that are nor related directly to monitoring. The use of all control panel functions and the operational efficiency of the entire system depend to a large extent on its installation method and its programming by the installer. The control panel may perform its functions in many ways, which are defined when installing and programming the system. Therefore, you should obtain from the installer more detailed information on how the alarm system operates and how it should be used.

All situations in which the way of the control panel operation depends on previous installer decisions (made at the time of programming) are additionally marked by inserting the **PROG** symbol (after description of the situation).

The term "**service**", as used in this manual, refers to the user who takes care of the alarm system and is authorized to use the service code. He can be installer, maintenance technician, security guard employed for protection of the facility, etc.

This manual applies to the control panel program version **1.06**.

3. TECHNICAL RELIABILITY OF THE ALARM SYSTEM

The alarm system is composed of technical devices whose reliability is vital for the effectiveness of the facility protection. The elements of the alarm system are exposed to the impact of various outside factors, including weather conditions (outside sirens), atmospheric discharges (overhead telephone lines, power lines, outside sirens), mechanical damage (keypads, detectors, etc.). Only routine inspection of the alarm system operation will make it possible to keep a high level of burglary and fire protection.

The control panel is provided with a number of safeguards and auto-diagnostic functions for testing the system reliability. The control panel signals detection of a problem by lighting up the LED labeled [TROUBLE] on the keypad. **You should immediately respond to such a signal, and, if necessary, consult the installer**.

It is necessary to periodically carry out a functional test of the alarm system. Check that the control panel responds to violation of individual detectors, that their fields of view are not masked, that there is a reaction to opening protected windows, and that sirens and telephone messaging work normally.

Detailed instructions on the system testing should be provided by the installer. It is recommended that the installer carry out periodic maintenance of the alarm system, when ordered by the user.

It is in the user's best interest to anticipate and plan beforehand appropriate procedures in case the control panel signals an alarm condition. It is important that he should be able to verify the alarm, determine its source on the basis of keypad information, and take appropriate measures, e.g., to organize evacuation.

4. ALARM SYSTEM OPERATING COSTS

The main task of the control panel is signaling and efficient reporting of alarm situations and, in the case of the monitoring function, providing the monitoring station with real-time information about the protected facility status. Realization of these functions, based on the use of telephone line, entails financial costs. Generally, the level of costs incurred by the alarm system owner depends on the amount of information the control panel has to transfer to the monitoring station. A failure of the telephone links, as well as incorrect programming of the control panel, may to a large degree increase these costs. Such a situation is usually related to an excessive number of connections made.

The installer can adjust functioning of the alarm system to the specific conditions and kind of the protected site, however it is the user who should decide if his or her priority is transferring information at any price, or, if some technical problems occur, the control panel is allowed to skip some events, the reception of which has not been confirmed by the monitoring station.

5. INTEGRA CONTROL PANEL

The INTEGRA alarm control panel is designed for the security supervision in small, medium-size and large facilities. The supervision is not limited to protection against burglary, but it may also include monitoring of the facility for correct functioning for 24 hours a day. The status of the alarm system is monitored on a continuous basis. Violation of any alarm system component triggers the so-called tamper alarm. The control panel responds to signals from individual detectors and decides whether to signal the alarm or not. Since various detectors may be connected to the control panel, the type and way of alarming depends on the way of control panel programming (the control panel may respond in one way to a signal from fire detector and in another way to a signal from a water level detector).

The control panel makes it possible to group zones and detectors connected to them into so-called partitions, and to freely determine which partition is to be supervised (armed). Activation of any detector from such a group (hereinafter called "zone violation") may trigger an alarm. A great advantage of the control panel is its high flexibility in determination which partitions may be armed at the moment.

5.1 BASIC FUNCTIONS OF THE CONTROL PANEL

- signaling burglary, attack, fire, technical and auxiliary alarms,
- monitoring – communication with the monitoring stations (real time sending detailed information on selected events in the protected facility),
- telephone messaging on alarms – either with the use of a voice message or to a pager,
- answering phone calls (this function is protected with a separate code) which makes it possible to:
  - inform the user on the system status,
  - control via telephone some of the control panel functions, which were programmed by the service,

- real-time printout of information regarding all or selected events that have occurred in the alarm system with the use of an external printer,
- control of access to the facilities through doors provided with electromagnetic locks,
- monitoring individual alarm system components (e.g. power supplies, batteries, wiring) for correct operation.

5.2 CONTROL PANEL PERFORMANCE

- various means of operating and controlling the security system:
  – LCD keypad,
  – partition keypad,
  – proximity card reader,
  – 433 MHz key fob (optionally, with INT-RX module installed),
  – 868 MHz key fob (INTEGRA 128-WRL control panel and, optionally, the other control panels, if ACU-100 controller with firmware version 2.0 or later is connected),
  – computer with DLOADX or GUARDX program installed,
  – SMS message (INTEGRA 128-WRL control panel and, optionally, the other control panels, if GSM-4S module is connected),
  – Internet browser (optionally, with ETHM-1 module connected),
  – cellular phone with MobileKPD application installed (optionally, with ETHM-1 module connected),
  – palmtop (PDA or MDA) with suitable application installed (optionally, with ETHM-1 module connected).
- installer defined descriptions of zones and partitions for easy identification of the alarm source,
- visible system date and time to better check the real-time dependent functions for correct operation,
- optional display of the status of partitions (up to 16 selected or all),
- available viewing of the alarm/trouble log (or detailed memory of all events) with textual description of event, name of zone, module, partition or the user who operates the system, together with accurate time of the event occurrence,
- monitoring, depending on the mainboard, of up to 8 independent alarm systems and up to 32 armed independently partitions,
- individual control of the output types of MONO SWITCH, BI SWITCH, REMOTE SWITCH, SHUTTER UP and SHUTTER DOWN,
- dynamically changeable menu (dependent on authority level) to provide access to a number of user functions, the selection made by accepting the suitable function from the list shown on the LCD keypad screen,
- key shortcuts to facilitate calling frequently used functions,
- service note shown on LCD display.

6. OPERATION OF INTEGRA CONTROL PANEL

6.1 BASIC INFORMATION

LCD keypads and **partition keypads** are mainly used for operating the alarm system based on the INTEGRA control panel. Additionally, the control panel supervises and registers usage of **code locks** as well as **proximity card** and **Dallas chip readers,** installed at the doors in individual spaces of the facility. Partition keypads may be also used as code locks.

The LCD keypads may be used to control many partitions in various objects. The partition keypads control just one partition. Individual control devices are assigned by the installer to specified partitions. The users may operate the control panel only if they have **access** to

partitions operated by particular keypads. This means that the partitions assigned to the user at the stage of creating/editing a new user (see DESCRIPTION OF USER FUNCTIONS →USERS) must correspond to those operated by the keypad. The list of partitions operated by individual LCD keypads is defined by the installer.

Example: LCD keypad controls partitions 1,2,3,4,5 and 6. The user has access to partitions 5,6,7 and 8. Hence, using this LCD keypad he can control partitions 5 and 6.

A similar principle applies to partition keypads, code locks, proximity card readers and DALLAS chip readers. With keypads, the user can control the partitions he has access to, and he may open the doors with code locks and proximity card/DALLAS chip readers, to opening of which he has been authorized. The installer defines the list of users of individual partition keypads, code locks and readers (separately for each module).

The access to the control panel control functions and the vital information on the system status are protected with **a CODE** (the code is a combination of 4 to 8 digits). In systems which require enhanced protection, it is possible to extend the code by a prefix (1 to 8 digits), periodically changed by the object master user code.

It is possible to obtain some information on system and call some functions without entering any code, but by holding down (for approximately 3 seconds) one of the keypad keys **PROG**.

INFORMATION FUNCTIONS

[1] – viewing zones status,
[4] – viewing partitions status,
[5] – viewing alarms log,
[6] – viewing troubles memory,
[7] – viewing current troubles,
[8] – switching on/off chime signal in LCD keypad,
[9] – toggling partition display modes: selected / all,
▶ – viewing names of partitions, where alarm occurred (also ◀) (press the ▶ key quickly to activate viewing names of partitions selected for display),
▲ – viewing names of zones which caused an alarm (also ▼)

ALARM FUNCTIONS

① – AUXILIARY alarm (for example, calling for medical aid)
🔥 – FIRE alarm
🛡 – PANIC alarm

Functions of arrows and keys from 1 to 9 are accessible from LCD keypad only, while the other functions (alarm) may be accessible from each keypad installed in the system (LCD keypad, partition keypad, code lock) **PROG**. Thus activated viewing functions provide information on all partitions operated with specific LCD keypads. They are also accessible from the user menu (see: *Description of user functions* – TESTS, EVENTS, TROUBLES, CHANGE OPTIONS), however, when called via the user menu they only provide information on the partitions accessible to the user who called that function.

⚠ **It is recommended that the above way of calling functions be only available in LCD keypads fully protected against unauthorized access.**

If the function of partition status display is activated, the key 9 changes the display operating mode. The following display options are provided:

• date and status of any selected 16 partitions,

• status of all partitions in the system (no date and/or time indication). The partition numbers correspond to those provided around the display.

The "PANIC alarm" may be signaled externally, in much the same way as the "burglary" alarm (buzzers, lights); it can also be set not to activate any external signaling but function as a "silent PANIC alarm" **PROG**.

The service (installer) can enable the quick arming function in LCD keypad / partition keypad without entering the access code (the armed modes available in the control panel are described in section SYSTEM ARMED MODE):

– press in turn the [0] and [#] keys – fully armed mode;
– press in turn the [1] and [#] keys – fully armed mode plus bypassing zones with BYPASSED IF NO EXIT option enabled,
– press in turn the [2] and [#] keys – armed without interior mode (stay);
– press in turn the [3] and [#] keys – armed without interior and without entry delay mode (stay, delay 0).

In case of the LCD keypad, the armed mode can be enabled in several partitions which have been assigned by the service to the Quick Arm function. In case of the partition keypad, the armed mode will be enabled in the partition to which the keypad has been assigned.

Also, if you simultaneously hold down both ▲ and ▼ keys (for approx. 40 seconds) the keypad processor will restart and display the version numbers of keypad and control panel programs.

6.2 LCD KEYPADS

SATEL offers the following LCD keypads for INTEGRA control panels:

– INT-KLCD-GR/INT-KLCD-BL
– INT-KLCDR-GR/INT-KLCDR-BL
– INT-KLCDK-GR
– INT-KLCDL-GR/INT-KLCDL-BL
– INT-KLCDS-GR/INT-KLCDS-BL
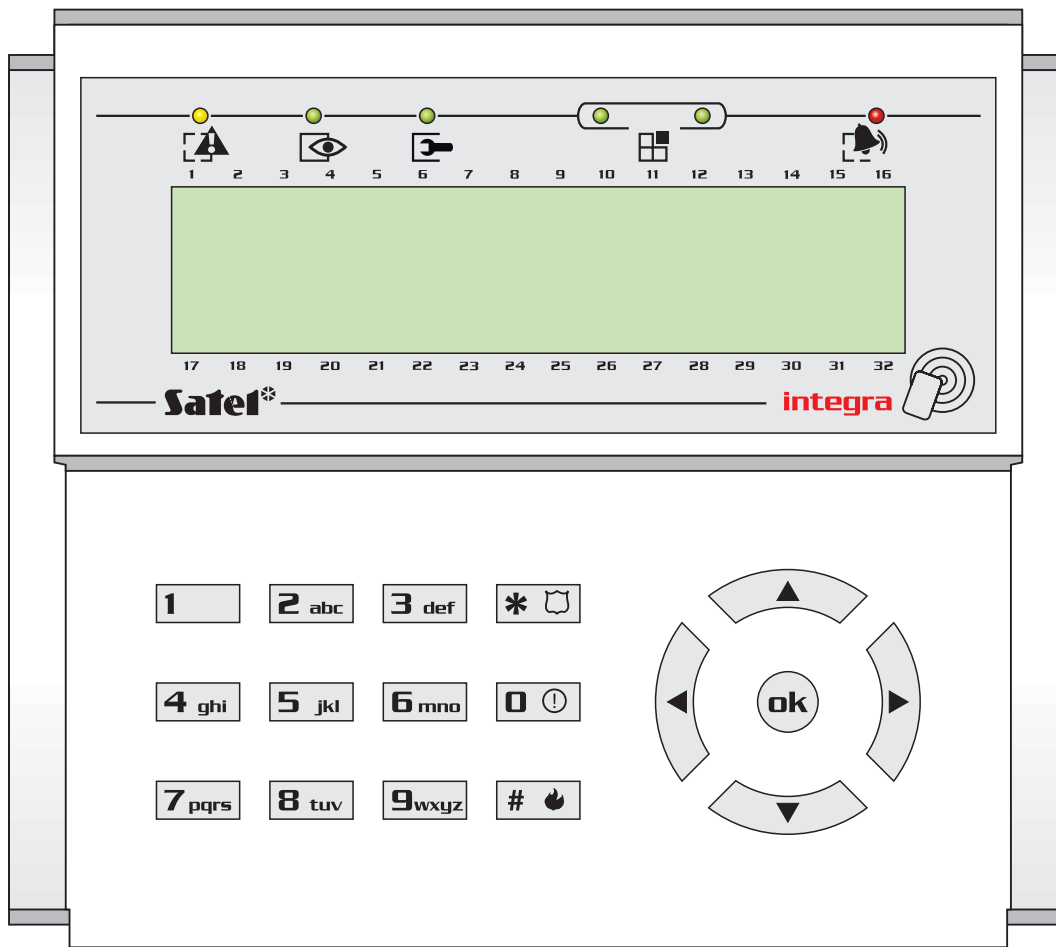
Fig. 1. View of INT-KLCDR-GR keypad.
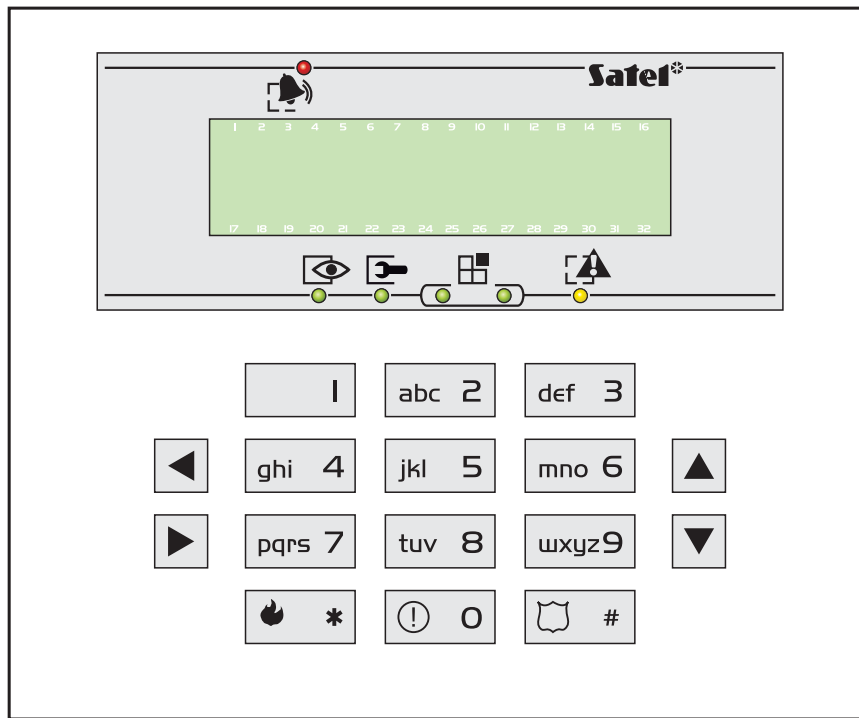
Fig. 2. View of INT-KLCDS-GR keypad.
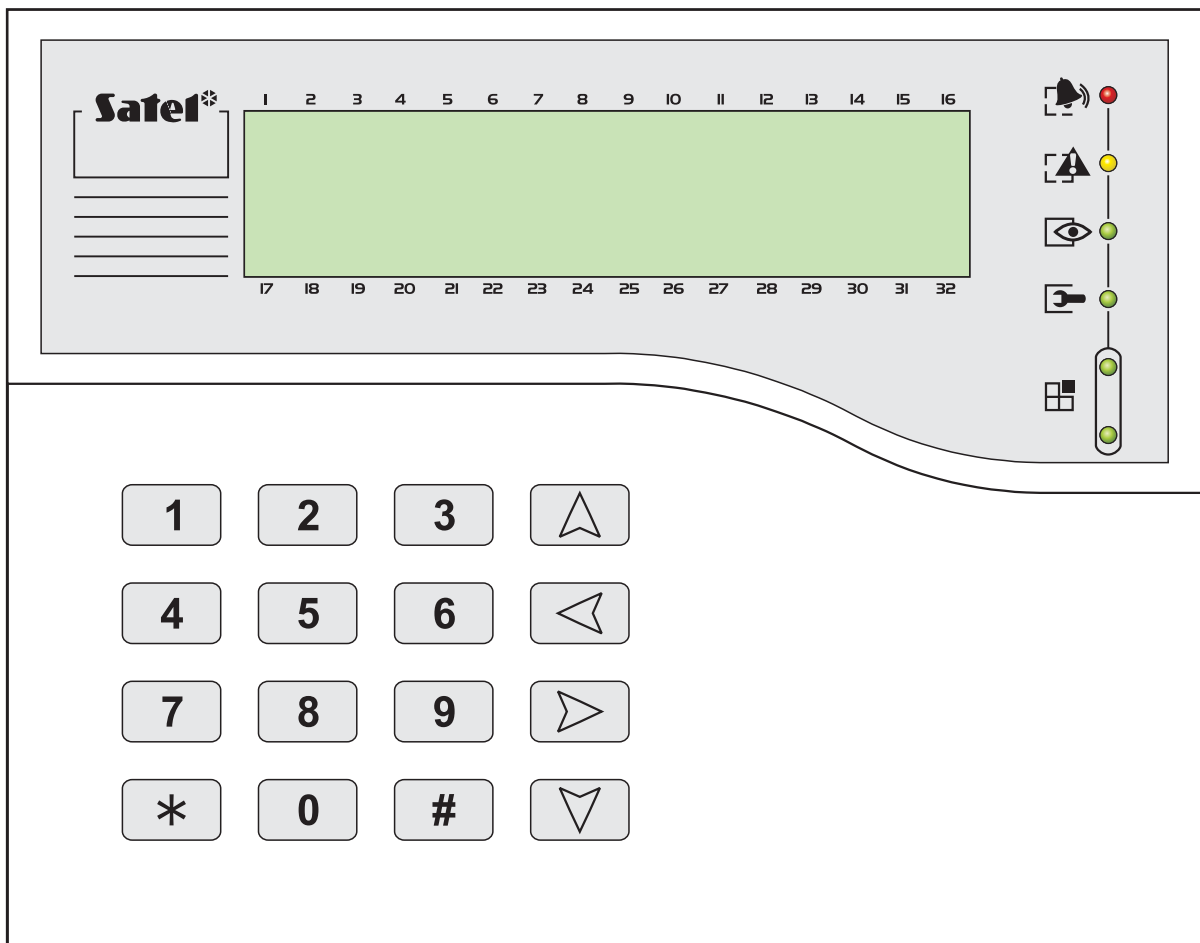
Fig. 3. View of INT-KLCDK-GR keypad.

These keypads differ by their size, shape and current consumption. The INT-KLCDR-GR / INT-KLCDR-BL keypad incorporates a built-in proximity card reader. Most of the keypads are available in two versions: with green or blue display and key backlight of the same color. Designation of the models with green display ends with "GR" letters, and that of the models with blue display – with "BL" letters.

6.2.1 Display

The LCD keypad comes with a large LCD display (2 x 16 characters) with permanent or temporary backlighting; the temporary backlighting is activated either by pressing any key or by violation of any zone (service setting).

The backlighting (including illumination of the keys) may be automatically switched off in the case of the control panel 230 V AC voltage loss.

During normal operation, the display shows the current date and time, it can also permanently show the keypad name. The format of displayed information is defined by the installer. The lower display line can be used to show the current status of selected partitions (up to 16), the displayed symbols being as described in the TESTS function. The first character in the lower line (from left) shows the status of the lowest number partition, as selected by the installer. The following numbers show information on the partitions in the ascending order.

The LCD display can also show important information transmitted by the service using the so-called SERVICE MESSAGE. The displayed text can contain up to 29 characters and can be displayed either permanently, or for a specified period of time. It can be visible either to all users, or only to some of them after entering the access code.

6.2.2 Keys

Situated under the display are keys (illuminated in much the same way as the keypad screen), which are used for:

- entering codes,
- moving through menu and selecting appropriate functions from the list,
- entering data for called functions.

The letters provided on numerical keys can help to memorize the access code by associating it with a particular word (e.g. the code "[7][8][2][7][8]" corresponds to the word "START"). The [#] and [ok] keys are electrically connected to each other and may be used interchangeably. Therefore, if using the [#] key is mentioned elsewhere in the following part of this manual, it should be understood that the [ok] key may also be used instead.

6.2.3 LED indicators

Arranged at the LCD display are 6 LEDs which indicate current status of the system.

- – **ALARM** (red) – permanent lighting of the LED indicates alarm. After expiry of the alarm time, the blinking LED means alarm memory. The LED is going off after deletion of alarm (see: ALARMS).

Note: The LED may not signal alarms in the armed mode if the installer has enabled the option DO NOT SHOW ALARM IF ARMED, as required by the CLC/TS 50131-3 standard.

- – **TROUBLE** (yellow) – blinking light indicates that a technical trouble has occurred in the system. Emergency situations causing this LED to light up are described further in this Manual (see *Description Of User Functions* →TROUBLES). The LED goes temporarily off when the LCD keypad is in partially armed mode (at least one partition accessible to the given LCD keypad is armed) or in fully armed mode (all partitions accessible to the LCD keypad are armed) **PROG**. The LED is blinking until the troubles are viewed and the trouble memory is reset (the option TROUBLE MEMORY UNTIL REVIEW enabled) or until the trouble cause stops (the option TROUBLE MEMORY UNTIL REVIEW disabled) **PROG**.

- – **ARMED** (green) – the LED is blinking when some partitions are armed and lights steadily when all partitions operated by the keypad are armed.

- – **SERVICE** (green) – the LED is blinking when the control panel is in the service mode (function only available to the user having a service code).

Note: *The service mode limits normal operation of the control panel. Alarms from most zones (except for the following types: PANIC, 24H CASH MACHINE, and 24H VIBRATION) as well as tamper alarms are not signaled. To restore normal operation of the control panel, you should exit the service mode, because the control panel will not automatically return to its normal operating mode.*

⊞ – **GROUP** (two green LEDs) – used in graphic mode functions to indicate which data set is currently displayed. The LEDs can show the number of zones or outputs, or indicate the corresponding expander bus. (See: *Description of user functions* →BYPASS ZONES; TESTS).

INDICATION	LED		DESCRIPTION
	left side/upper	right side/lower	
ZONES/ OUTPUTS	OFF	OFF	group 1; numbers **1–32** (n)
	OFF	ON	group 2; numbers **33–64** (32+n)
	ON	OFF	group 3; numbers **65–96** (64+n)
	ON	ON	group 4; numbers **97–128** (96+n)
EXPANDER BUSES	OFF	OFF	**first** expander bus bus 1 numbers (addresses) 0-31 (DEC) system addresses **00–1F** (HEX)
	OFF	ON	**second** expander bus bus 2 numbers (addresses 0-31 (DEC) system addresses **20–3F** (HEX)

n – number of LCD keypad field

6.2.4   Audible signals

When using the keypad the following signals, characteristic of some situations, can be heard **PROG**.

- **One long beep** – refusal of arming - the zone, which shouldn't be violated at the time of arming, is violated (PRIORITY option), there was a trouble with the battery, expander, or keypad. The refusal includes all zones selected for arming. Also, warning of the system failure - prior to arming.
- **Two long beeps** – the code not recognized by the control panel; function not accessible; wrong data; acknowledgement of canceling the selected function (after pressing [∗] on the keypad); pressed key is not active; card code not recognized.
- **Three long beeps** – the code is recognized, but the function called is not accessible (for example, temporary partition blocking is activated or the user has no access to partitions operated from the keypad).
- **Two short beeps** – selection accepted – entering more detailed menu level.
- **Three short beeps** – acknowledgement of arming or disarming.
- **Four short and one long beeps** – acceptance of execution of the selected function.
- **Three pairs of short beeps** – it is necessary to change the code (for example, another user, when changing his code, indicated the combination of digits identical with that in the given user code; the code validity is expiring).

Additionally, the following situations may be signaled:

- **Alarm in partition** – continuous beep for the total alarm duration (time programmed by service).
- **Fire alarm** – series of long beeps every second for the total alarm duration.
- **Countdown of entry delay** – 2 short beeps every second.

Note: *The signaling of entry delay countdown by 2 short beeps refers to the LCD keypads type INT-KLCD-GR/BL and INT-KLCDR-GR/BL with firmware in version 1.05, and to*

the keypads type INT-KLCDL-GR/BL, INT-KLCDS-GR/BL and INT-KLCDK-GR with firmware in version 6.05. In keypads with earlier firmware versions, the entry delay countdown is signaled by short beeps every 3 seconds.

- **Countdown of exit delay** – long beeps every 3 seconds, completed with a series of short beeps (for 10 seconds) and a single long beep. The way of "exit delay" signaling informs that the countdown is ending prior to arming.
- **Auto arming delay countdown** (timer-controlled partitions) – a series of 7 sounds (of diminishing length).
- **Chime in LCD keypad** – five short beeps – this is a response to activation of some detectors when the zone is disarmed.

6.3 USING LCD KEYPAD

Operation of the system from LCD keypad starts with entering the user **CODE** and pressing the key marked [**#**], [ok] or [∗]. The control panel response (accessible functions) after pressing the [#] or [ok] key is different than that after pressing [∗].

[CODE][#] or [CODE][ok]   you get access to functions of arming/disarming type,

[CODE][∗]   you get access to all functions in the user menu to which the user is authorized.

Example: When you enter your code and press [#], the control panel will make available the functions of partition arming (provided that no partition, operated from the LCD keypad, is already armed) or disarming (if any of partitions is armed). In the event of alarm occurrence in the system, the control panel may cancel this alarm and provide access to the function of partition disarming (if the user is authorized to do that). When the function of telephone messaging is activated – the *Clear voice messaging* function may appear in menu. When the user has access to a single partition only, entering the code and pressing [#] results in immediate arming or disarming (if the partition is armed).

Entering the code and pressing [∗] displays the list of functions accessible from the *User Menu*. The *User Menu* provides also access to the following functions: *Arming* and *Disarming* (if some partitions are armed). When all partitions are armed, the function *Arming* will not be accessible.

Note: Entering a wrong code (not recognized by the panel) three times may:
- *trigger an alarm* **PROG***,*
- *block a keypad for 90 sec. After this time each next wrong code entering will block the keypad* **PROG***.*

The specific feature of the control panel is the dynamic changing of the accessible menu, dependant on the system programmed parameters, as well as on the authorization level of the user who entered the code. The user get access only to those function in the user menu to which he is authorized.

In order to call some functions more quickly, the user can use some SHORTCUT KEYS. Having called the menu ([CODE][∗]), press the suitable numerical key – the control panel will enter directly the called function.

The following user functions are assigned to the corresponding keys:

    [1] Change own code
    [2] Users/Masters
    [3] *none*
    [4] Zone bypasses
    [5] Events
    [6] Set time

[7] Troubles

[8] Outputs control

[9] Service mode

[0] Downloading

The installer can assign functions to the **arrow keys** to facilitate the everyday operation of the system. These functions are called in the following way:

[CODE] ▲

[CODE] ◄

[CODE] ►

[CODE] ▼

One of the following functions can be assigned to each arrow:

- Arming (full)
- Arming (without interior zones)
- Arming (without interior zones, without entry delay)
- Disarming
- Alarm clearing
- Zones bypassing
- Bypass clearing
- Output MONO ON
- Output BI switch state
- Output BI ON
- Output BI OFF
- Arming (full+bypasses)

For each of the functions the installer determines the number of partition, zone or output it refers to. The user, who wants to perform the given function must have an appropriate authority level and access to the selected partitions.

The control panel may fail to arm the system, if the selected partitions contain a violated zone which is monitored during arming.

All user functions, which are accessible from LCD keypad, are described in section "*Description Of User Functions*".

6.3.1   Selecting functions from menu

When the control panel has recognized the code, the first user function (from all functions accessible at the moment) will appear in the upper line of the display. You can move through the list of functions made available by the control panel by pressing ▲ and ▼, and select the required item from the list (single-selection list) by pressing [#] or ►. If the selected function requires making further selection (submenu, options), the next list appears on the display, which allows you to select required item in a similar way.

Some functions may need selection of a few items from the list (multi-selection list). To do that, scroll the list by pressing ▲ and ▼ key and "mark" all items in the list, which should be selected. The item is marked by pressing any numeric key, then the ▊ symbol appears in the upper display corner next to the text. Press the numeric key again to cancel you selection.

By scrolling the list upwards or downwards (the list contents is displayed cyclically), you can see all the items and check the selections. Pressing the [#] or ► key accepts the selection (execution of function may be confirmed with a beep), and the control panel returns to previously displayed menu or displays a corresponding message and returns to the **basic status** (waiting for code). Then, current **date** and **time** is displayed. Date and time display format is defined by the installer **PROG**.

There is a control panel setting option which activates the procedure of double confirmation of some user functions. After pressing the [#] or ▶ key (normal mode of selecting a function), a prompt appears on the screen asking to confirm the function, together with information: **1=Yes**. Press the key with digit **1** to confirm this function. This procedure is a safeguard against accidental double pressing [#] (or ▶) and execution of function, which should not yet be executed. The description of user functions in this Manual relates to situation when this option is switched off.

If you want to give up the selection of function after opening the User Menu, press the [∗] key. If no keypad button is pressed (within 2 minutes) after menu opening, the control panel will automatically close this menu and return to its basic status.

6.3.2 Entering data

Some functions require entering a new code or user name. The way of entering the new data that relate to system users is described below. When changing the code, the control panel does not show the old code, unless the user has not yet changed the code assigned to him by the person introducing him into the system. However, the old name always is shown on the display when the old name is being changed. The entered user name appears in selection lists, printouts and when viewing the events log in the computer.

- **new code, time limit:** numeric data are entered by means of the numeric keys. The arrow keys are used for modification of numbers to be entered. Below the text field, where the entered digits appear, a cursor (dash) can be seen. The ◀ and ▶ arrows are used for moving the cursor to show the successive digits. Press the key with a digit to enter the given digit at the left side of cursor, and press the ▲ arrow to delete the digit at the left side of cursor. The ▼ arrow changes the cursor type – a blinking dark rectangle appears. This type of cursor allows changing the digit above the dash to the digit entered from the keyboard. Press the ▼ key again to return to the previous cursor type.

- **user name:** the user name is entered by means of numeric keys which in this case change their meaning and enable text data (letters) to be entered into the control panel. *Table 2* contains characters accessible from the keypad. By pressing the numeric key again will cyclically change the available characters. The new user name is entered by changing the factory-entered name. You may delete the old name by pressing the ▲ arrow key (each single press deletes the character at the left side of the cursor). Press the ▼ arrow key to enter space at the left side of the cursor; use the ◀ and ▶ arrow keys to move the cursor under the user name to highlight the position which can be changed. To change the character at the position indicated by the cursor, repeatedly press the key with the proper digit until the proper character appears. Then, move the cursor to the next position and repeat the procedure.

Pressing [#] accepts the entered data.

Key	Characters accessible after key pressing																
1	1	!	?	'	`	↵	"	{	}	$	%	&	@	\	^	|	⌂	#
2	A	a	B	b	C	c	2										
3	D	d	E	e	F	f	3										
4	G	g	H	h	I	i	4										
5	J	j	K	k	L	l	5										
6	M	m	N	n	O	o	6										
7	P	p	Q	q	R	r	S	s	7								
8	T	t	U	u	V	v	8	·	⌘	█	⌂	↑	←	→	↓		
9	W	w	X	x	Y	y	Z	z	9								
0		0	.	,	:	;	+	-	✳	/	=	_	<	>	(	)	[	]

Table 2. Characters accessible in the text mode of data entering.

6.3.3   Graphic mode

The functions regarding selection of partitions, zones and outputs provide also another way of multiple selection from the list (for example, selection of partitions for arming). It is the so-called **graphic mode**. When the selection list is already open, you can enter this mode by pressing the ▶ or ◀ keys. Dots will appear on the keypad display under the number of each accessible partition (numbers 1–32 around the display). The dash under the dot (cursor) indicates which item can be selected. Use the ▶ and ◀ keys to move the cursor to the required item. Pressing any numeric key causes the symbol ▯ to appear at the item selected. Press the numeric key again to deselect the item. By pressing ▲ or ▼ the previous display mode (with name) will be restored.

Likewise, when selecting zones or outputs, the dots stand for the available zones or outputs, but if their number exceeds 32, they are displayed in groups, 32 items in each group (up to 4 groups with 32 zones/outputs each for INTEGRA 128). The number of the currently displayed group is indicated by two lit LEDs labeled ▤ [GROUP] (see description of the LEDs, p. 11). To calculate the number of the zone/output indicated by the cursor, add, respectively, 32, 64 or 96, depending on the number of displayed group, to the number placed on the keypad glass next to the cursor.

In the graphic mode, the keys 0, 1 and 2 have special editing functions assigned to them. Pressing one of them three times results in:

[0][0][0] – deletion of all selected items (▯ symbol OFF)

[1][1][1] – selection of all available items (▯ symbol ON)

[2][2][2] – negation of state of all available fields (inversion of selection)

6.3.4   Reading alarm source name

The installer can enable the function of displaying the name of alarm source on the LCD keypad, without necessity of entering the code. In such a case, the partition or zone name is displayed on the keypad screen when an alarm occurs. If there are a few alarm causes, you may scroll through the zone names which caused the alarm, and the names of partitions where the alarm is (or was) signaled. The ◀ and ▶ arrow keys allow viewing partition names (if the alarm occurred in several partitions), while the ▲ and ▼ keys allow viewing the names of zones which caused the alarm. These names (entered by the installer) are displayed cyclically in the lower keypad screen line, in the order corresponding to the numbers of zones/partitions in the system. To view the names of alarm sources when the alarm signaling is over, press and hold down the corresponding arrow key.

6.3.5   Proximity card reader (INT-KLCDR-GR/INT-KLCDR-BL only)

The INT-KLCDR-GR/INT-KLCDR-BL keypads with built-in proximity card reader make available a few extra functions, including:

- card code readout when the card is assigned to its user (functions: NEW USER, EDIT USER),
- performance of function specified by the installer,
- registering the guard round.

The keypad can respond to the card being **briefly presented** to the reader or to its being **presented and held** for a few seconds (approx. 3 sec.). It is also possible to perform two consecutive functions which are assigned to bringing the card closer and holding it at the reader. This feature makes it possible, by a single use of the card, to perform rather complicated functions which might be time-consuming when called from the keypad.

List of functions which can be called by using the proximity card:

1. **no function** – no response
2. **as code *** – enters the user functions menu
3. **as code #** – calls the function of selecting partitions to be armed or disarmed (arming/disarming if the selection list for the particular code is limited to just one partition)

4. **as code ↑** – performs function assigned to the arrow key (p. 47)
5. **as code ←** – performs function assigned to the arrow key
6. **as code →** – performs function assigned to the arrow key
7. **as code ↓** – performs function assigned to the arrow key
8. **open door (entry)** – controls the electromagnetic door lock (generates a USER ACCESS event)
9. **open door (exit)** - controls the electromagnetic door lock (generates a USER EXIT event)
10. **2 long sounds** – signals reading of the card code
11. **1 short beep** – signals that the card code has been read

Notes:

- *Selecting the function 2 or 3 to be started by PRESENT CARD will block access to the HOLD CARD.*

- *The 8 and 9 functions require that the installer select the door to be opened by the keypad. It is possible to control any door handled by the system (i.e. opened by code locks, partition keypads or expanders of proximity card readers).*

- *Two long beeps can also mean readout of a card with unknown code.*

- *Readout of an unknown (wrong) code, if repeated three times, may generate a panel recorded event or an alarm* **PROG**. *It can also block the reader in the keypad for 90 sec.*

6.4 PARTITION KEYPADS

SATEL offers the following partition keypads for INTEGRA control panels:
- INT-S-GR/INT-S-BL
- INT-SK-GR
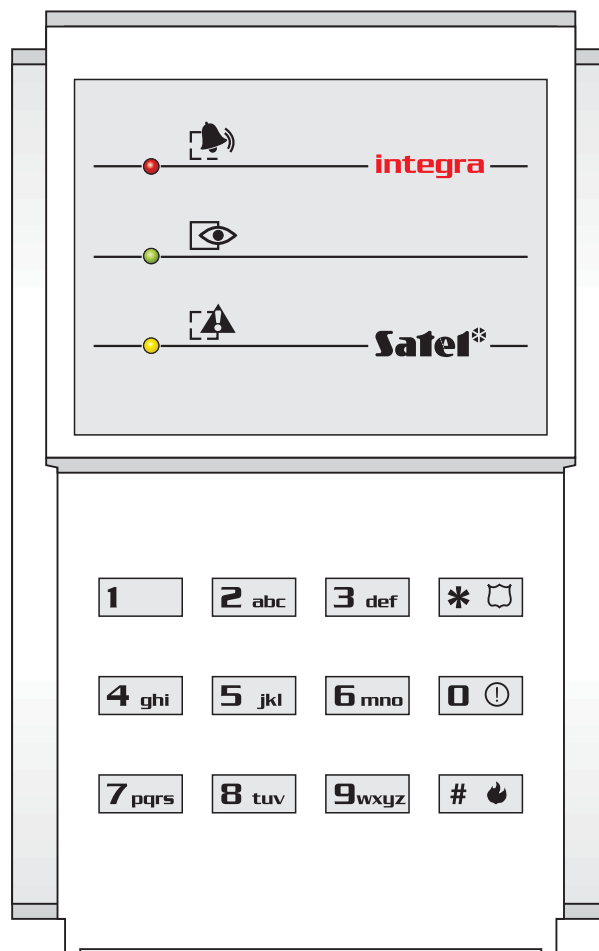
Fig. 4. INT-S-GR/INT-S-BL partition keypad.
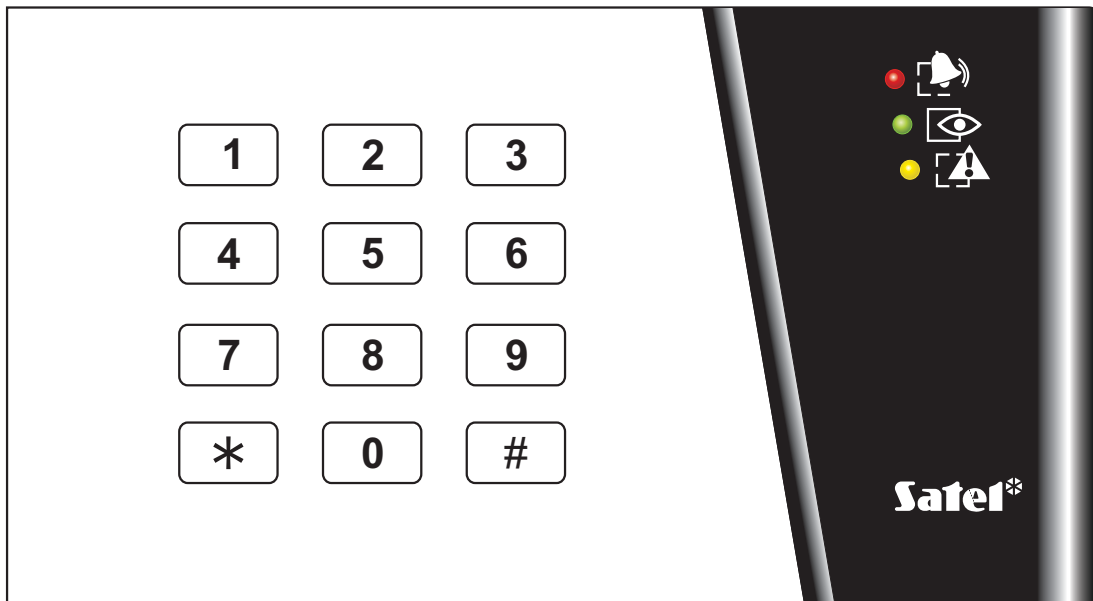
Fig. 5. INT-SK-GR partition keypad.

These keypads differ by size and shape. The keypads are available with green or blue backlighting of the keys. Designation of the models with green display ends with "GR" letters, and that of the models with blue display – with "BL" letters. The backlighting may be permanent or time-controlled (switched on automatically).

The partition keypads are provided with LED indicators:

– **ALARM** (red) – permanent lighting of the LED means alarm. After the alarm time expires, blinking of the LED indicates the alarm memory. The LED goes off after the alarm is cleared (see: ALARMS).

Note: The LED may not signal alarms in the armed mode if the installer has enabled the option DO NOT SHOW ALARM IF ARMED, as required by the CLC/TS 50131-3 standard.

– **ARMED** (green) – steady light indicates that the partition assigned to this keypad has been armed. The LEDs are blinking during exit delay countdown. Blinking indicates that exit delay countdown is underway.

– **TROUBLE** (yellow) – blinking indicates occurrence of a technical problem. The signaling refers to the troubles from the entire alarm system, not only from the keypad controlled partition. Check the LCD keypad for the type of trouble. The trouble signaling is temporarily disabled, when arming the keypad controlled partition. Disarming will restore the trouble signaling. The LED is blinking until troubles are viewed in the LCD keypad and the trouble memory is reset (option TROUBLE MEMORY UNTIL REVIEW enabled) or until the trouble cause stops (option TROUBLE MEMORY UNTIL REVIEW disabled) **PROG**.

When all the LEDs are alternately blinking (from top to bottom), there is no communication between the keypad and the control panel. This situation may occur when the STARTER program is running in the control panel or the cable connecting the partition keypad to the control panel is damaged.

It is possible to program the partition **PROG** to be armed or disarmed after entering two codes. In this case, entering the first code causes the LEDs labeled ▣ [ARMED] and ▣ [TROUBLE] and to blink alternately, while the control panel waits for entering the second code.

Like the LCD keypad, the partition keypad may generate audible signals. Considering the lack of a display, this is how the control panel acknowledges acceptance of the called function.

- **One short beep** – acceptance of the code entry (provided that the option ACCES CODE SIGNALING (HARDWARE) is enabled).
- **One long beep** – refusal of arming.
- **Two long beeps** – the code is unknown to the control panel.
- **Two short beeps** – acceptance of the first of two codes required for arming or disarming.
- **Three long beeps** – the code cannot control this partition.
- **Three short beeps** – confirmation of partition arming and disarming.
- **Three pairs of short beeps** – it is necessary to change the code – another user, when changing his code, entered the identical combination of digits to that of the given user, or the code validity period is expiring.
- **Four short and one long beeps** – confirmation of performance of a control function, code change, or a guard round.
- **Five short beeps** – the dependent door is open – the door control has not been performed. To operate the lock it is necessary to close the dependent door and reenter the code.

The audible signaling may be substituted by the keypad illumination blinking **PROG**. The beeps are consequently translated into the keypad extinguishing pulses, when the backlighting is on, or illumination pulses, when the backlighting is normally off.

The partition keypad may also audibly indicate other situations **PROG**.

- **Alarm in partition** – continuous sound for the total alarm duration.
- **Alarm memory** – long beeps every two seconds until the alarm is reset. The sounds are synchronized with the [ALARM] LED blinking. Pressing any numeric key will mute the signaling for approximately 40 seconds.
- **Fire alarm** – a series of long beeps every second for the total alarm duration.
- **Fire alarm memory** – short beeps every two seconds until the alarm is reset. The sounds are synchronized with the [ALARM] LED blinking. Pressing any numeric key will mute the signaling for approximately 40 seconds.
- **Countdown of entry delay** – 2 short beeps every second.
- **Countdown of exit delay** – long beeps every 3 seconds, ended with a series of short beeps (for 10 seconds) and a single long beep. This way of signaling the exit delay indicates that the countdown is coming to an end before arming.
- **Autoarming delay time countdown** (timer-controlled partitions) – a series of 7 beeps (of ever shorter duration).
- **Door open too long** – short beeps repeated with a high frequency until the door is closed (with door control function activated).
- **Chime in expander** – five short beeps – information on violating selected zones in the partition (CHIME option must be enabled in the partition keypad, and CHIME IN MODULE option must be active for the zone).

Operating the system from the partition keypad is very limited and only applies to the partition to which the keypad has been assigned by the installer. There is a possibility to operate an electromagnetic door lock from the partition keypad by means of the user's code. Several partition keypads can be assigned to a single partition.

Functions accessible from the keypad include:

[CODE][#] arming and disarming of partition; alarm clearing; and/or execution of control function,

[CODE][∗] control of module on-board relay (e.g. electromagnetic door lock opening) can also be used for disarming (if the partition was armed, and the relay will not be activated for the armed mode time) **PROG**.

Notes:

- *If the given partition is armed, and the keypad is also used to operate the electromagnetic door lock, then entering [CODE][∗] will disarm the partition and open the door - unless the partition is temporarily blocked.*

- *Entering [CODE][∗] will not disarm the partition, if the option CODE + ∗ DOES NOT DISARM is enabled for the expander. Nevertheless, the door can be opened, if the option ACCESS IF ARMED is enabled in the expander.*

Likewise the LCD keypad, the user who wants to start the above mentioned functions must have access to the given partition as well as appropriate authority level. In addition, he must be authorized to use the given keypad by the master user or by the installer (service).

Notes: Entering a wrong (not recognize) code three times may:

- *trigger an alarm* **PROG***;*
- *block a keypad for 90 sec. After this time each next wrong code entering will block the keypad* **PROG***.*

Functions accessible from the partition keypad without entering the password:

– press in turn the [0] and [#] keys – fully armed mode;

– press in turn the [1] and [#] keys – enabling the fully armed mode and bypassing zones with enabled BYPASSED IF NO EXIT option;

– press in turn the [2] and [#] keys – armed without interior mode (stay);

– press in turn the [3] and [#] keys – armed without interior and without entry delay mode (stay, delay 0);

– press and hold down the ⟦# ♨⟧ (INT-S-GR / INT-S-BL) or ⟦∗⟧ (INT-SK-GR) keys for approx. 3 seconds – FIRE alarm;

– press and hold down the ⟦◻ ①⟧ (INT-S-GR / INT-S-BL) or ⟦0⟧ (INT-SK-GR) keys for approx. 3 seconds – AUX (medical) alarm;

– press and hold down the ⟦∗ ⬚⟧ (INT-S-GR / INT-S-BL) or ⟦#⟧ (INT-SK-GR) keys for approx. 3 seconds – PANIC alarm.

Another function of the partition keypad is the option of **code change** by the user **PROG**. The user code change is performed as follows:

- Press and hold down (for approx. 3 seconds) the key with digit **1** (labeled 🔔 [ALARM] and 👁 [ARMED] LEDs – red and green – start blinking alternately).

- Enter the old CODE and press [#] (the 🔔 [ALARM] and ⚠ [TROUBLE] LEDs – red and yellow – start blinking alternately).

- Enter the new CODE and press [#] (the LEDs will stop blinking and the module will generate a signal to confirm execution of the function).

The control panel **cannot accept** the change of code (which is signaled with two long beeps) in the following four cases

1. the new code is too short or too long (acceptable are codes 4 to 8 digits long);

2. the new code is too simple (the function of rejecting simple codes is activated);

3. the new code is identical with that of another user of the alarm system (someone else's code was "hit"),

4. change of the code has been blocked because another user "hit" this code at an attempt to change his own code. If the function of prompting about the necessity to change the code is activated, each use of such a "hit" code will be signaled with three double beeps. In such a case the change of the code will be only possible by means of the LCD keypad – and confirmation of the code change will be required (see: description of the CHANGE OWN CODE function) by the object master user. This feature makes impossible "capture" of the code by a user who accidentally "hit" the code.

Note: With a large number of users it is advisable to use longer, at least 5-digit codes, to reduce the chance of "hitting" another user's code. The CLC/TS 50131-3 standard requires that 6-digit codes be used.

6.5 MULTIFUNCTIONAL KEYPAD WITH PROXIMITY CARD READER

The INT-SCR-BL multifunctional keypad with proximity card reader can work as:

- partition keypad (see section: PARTITION KEYPADS);

- partition keypad with proximity card reader - having the functionality of partition keypad, enhanced by an option to identify users, based on the proximity card;

- entry keypad – entering the access code (password) or reading in the card will unlock the time delay for interior delayed zones.

The keypad design enables it to be installed outdoors. Additionally, the device is fitted with a bell button.

The keypad has two LEDs which are intended for signaling:

- **ALARM** (red color).

- **ARMED** (green color).

- **TROUBLE** (yellow color).

Information conveyed with the LEDs depends on the keypad operating mode. Blinking of all the LEDs in turn (from left to right) indicates that there is no communication with the control panel. Such a situation may take place when the STARTER program is running in the control panel, or the connecting cable between keypad and control panel is defective.

6.5.1 Operation in partition keypad mode (INT-S/SK)

The proximity card reader is not supported in this mode. Information conveyed by means of the LEDs, audible signaling and functionality have been described in section PARTITION KEYPADS.

Note: In order to trigger the fire alarm, press and hold down the # *key for approx. 3 seconds, and to trigger the PANIC alarm, press and hold down the* * *key for approx. 3 seconds.*

Fig. 6. Multifunctional keypad INT-SCR-BL.

6.5.2   Operation in partition keypad mode with proximity card reader (INT-SCR)

The device executes functions of the partition keypad, however it allows the users not only to use the access code, but the proximity card as well. Presenting the card is read out in much the same way as entering the access code and confirming it by the ✳ key. Holding the card (for approx. 3s) is recognized as entering the access code and confirming it by the # key.

Note: *Entering an invalid access code (i.e. unknown to the control panel) or placing an unknown card in proximity may:*
  - *trigger the alarm* **PROG***;*
  - *block the keypad for 90 seconds. After the blocking time has expired, entering another invalid access code / reading in an unknown card will each time block the keypad* **PROG***.*

Functions executed after entering the access code and confirming it with the ✳ key or presenting the card (the function to be executed depends on the user authority level, keypad settings and security system status):
– relay activation
– disarming
– clearing alarm
– 24. MONO SWITCH output control
– 25. BI SWITCH output control
– guard round confirmation
– enabling temporary partition blocking

Note: *Most of the abovementioned functions is available after enabling the LOCK [LOCK FEATURE] option. Availability of the functions may also depend on other keypad options (e.g. if the lock executes the ON IF PARTITION ARMED function, most of the operations will be unavailable). None of these limitations refers to the functions executed after entering the access code and confirming it with the # key or holding the card.*

Functions executed after entering the access code and confirming it with the # key or holding the card (the function to be executed depends on the user authority level, keypad settings and security system status):
– arming
– disarming
– clearing alarm
– 24. MONO SWITCH output control
– 25. BI SWITCH output control
– guard round confirmation
– enabling temporary partition blocking

Functions accessible from the partition keypad without entering the password:
– press in turn the **0** and # keys – fully armed mode;
– press in turn the **1** and # keys – enabling the fully armed mode and bypassing zones with enabled BYPASSED IF NO EXIT option,
– press in turn the **2** and # keys – armed without interior mode (stay);
– press in turn the **3** and # keys – armed without interior and without entry delay mode (stay, delay 0);
– hold down the # key for about 3 seconds – FIRE alarm
– hold down the **0** key for about 3 seconds – AUX (medical) alarm
– hold down the ✳ key for about 3 seconds – PANIC alarm

Another function of the keypad is the option to **change the access code** by the user PROG. In order to change the user code, do the following:

1. Press and hold down the 1 key for about 3 seconds (LEDs designated 🔔 and 👁 [ALARM AND ARMED] will start blinking alternately – red and green).

2. Enter the old ACCESS CODE and press # (LEDs designated 🔔 and ⚠ [ALARM and ARMED] will start blinking alternately – red and yellow).

3. Enter the new ACCESS CODE and press # (the LEDs will stop blinking and the module will generate a signal to confirm execution of the function).

The control panel may in four cases **fail to accept** the access code change (which will be signaled by two long beeps):

1. The new access code is too short or too long (permissible length is from 4 to 8 digits),

2. The new access code is too simple (simple access code checking feature has been started in the control panel),

3. The new access code is the same as that of another user of the security alarm system (somebody else's password has been „hit"),

4. The change of access code has been blocked, because the code has been „hit" by another user trying to change his own code. If the option to remind of the need to change the code is enabled, each use of such a „hit" code will be signaled by three double beeps. If this is the case, the access code change will only be possible by means of the LCD keypad - with a necessary change confirmation (see description of the CHANGE OWN CODE function) by the object administrator. This feature prevents the access code and its authority from being „intercepted" by the user who accidentally has „hit" the password.

Note: In case of a large number of users, it is recommended that longer, at least 5-digit access codes be used in order to reduce the probability of another user code being „hit". The CLC/TS 50131-3 standard requires that 6-digit access codes be used.

Information conveyed by the keypad by means of the LED indicators has been described in section PARTITION KEYPADS. Additionally, the keypad can signal by all the LEDs blinking simultaneously that it is waiting for the card to be read in (during the procedure of adding a card to the user).

The partition keypad with proximity card reader can generate the following audible signals:

- **One short beep** – acknowledgment of entering the access code / reading the card (the ACCESS CODE SIGNALING (HARDWARE) option must be enabled by the installer).

- **One long beep** – refusal to arm.

- **Two long beeps** – access code / card unknown to the control panel.

- **Two short beeps** – acceptance of the first out of two access codes required for arming or disarming.

- **Three long beeps** – access code / card cannot control the given partition.

- **Three short beeps** – confirmation of arming / disarming.

- **Three pairs of short beeps** – the user code needs to be changed (the NOTIFY OF NECESSITY TO CHANGE ACCESS CODE option is enabled in the control panel).

- **Four short beeps and one long beep** – confirmation of control function execution, change of access code, confirmation of guard rounds.

- **Five short beeps** – dependent door open – lock control has not been executed. In order to operate the lock, close the dependent door and enter the code / read in the card again.

The audible signaling may be replaced by blinking of the keys backlight PROG. The beeps will translate, respectively, into keypad backlight extinguishments – if the backlight is ON, or into keypad backlight going on - if it is normally OFF.

The keypad can also signal other situations, as selected by the installer (see section PARTITION KEYPADS).

6.5.3   Operation in entry keypad mode (INT-ENT)

The main task of the entry keypad is to unblock the delay for zones with reaction time 3. INTERIOR DELAYED. The time period during which these zones will act as delayed ones is programmable for the keypad. If several entry keypads are assigned to one partition, a different time of delay activation can be programmed for each of them. After the programmed time period expires, the interior delayed zones will again act as instant ones.

The keypad will execute its functions after:

– entering the access code and confirming it with the ✳ key,

– entering the access code and confirming it with the # key,

– presenting the card.

Apart from the delay activation, the entry keypad may also execute the following functions:

– 24. MONO SWITCH output control

– 25. BI SWITCH output control

– guard rounds confirmation

The user who wants to run any function from the entry keypad must be authorized to use it (the right is granted by the administrator or installer (service)). Except for the guard round confirmation function, he must also have access to the given partition. Realized by the keypad after entering the access code / presenting the card, the function depends on the user authority level, keypad settings and security system status.

Note: Entering an invalid access code (i.e. unknown to the control panel) or placing an unknown card in proximity may:
  – trigger the alarm **PROG***;*
  – block the keypad for 90 seconds. After the blocking time has expired, entering another invalid access code / reading in an unknown card will each time block the keypad **PROG***.*

In the entry keypad, only the LED designated 👁 is used for signaling. Blinking of the LED indicates that countdown of the delay activation time is running (disarming has no effect on the LED blinking).

The entry keypad can generate the following audible signals:

- **One short beep** – confirmation of access code entry or card read-in (the ACCESS CODE SIGNALING (HARDWARE) OPTION must be enabled by the installer).

- **Two long beeps** – access code / card unknown to the control panel.

- **Three long beeps** – activation the delay is impossible (the partition is disarmed or the delay has already been started) or the function is unavailable.

- **Three short beeps** – confirmation of delay activation.

- **Three pairs of short beeps** – the user code needs to be changed (the NOTIFY OF NECESSITY TO CHANGE ACCESS CODE option is enabled in the control panel).

- **Four short beeps and one long beep** – confirmation of the guard round or execution of the 24. MONO SWITCH or 25. BI SWITCH control function.

The audible signaling may be replaced by blinking of the keys backlight **PROG**. The beeps will translate, respectively, into keypad backlight extinguishments – if the backlight is ON, or into keypad backlight going on - if it is normally OFF.

The keypad can also audibly signal the DELAY ACTIVATION TIME **PROG**.

6.6 CODE LOCKS

SATEL offers the following code locks for the INTEGRA control panels:

- INT-SZ-GR/INT-SZ-BL
- INT-SZK-GR
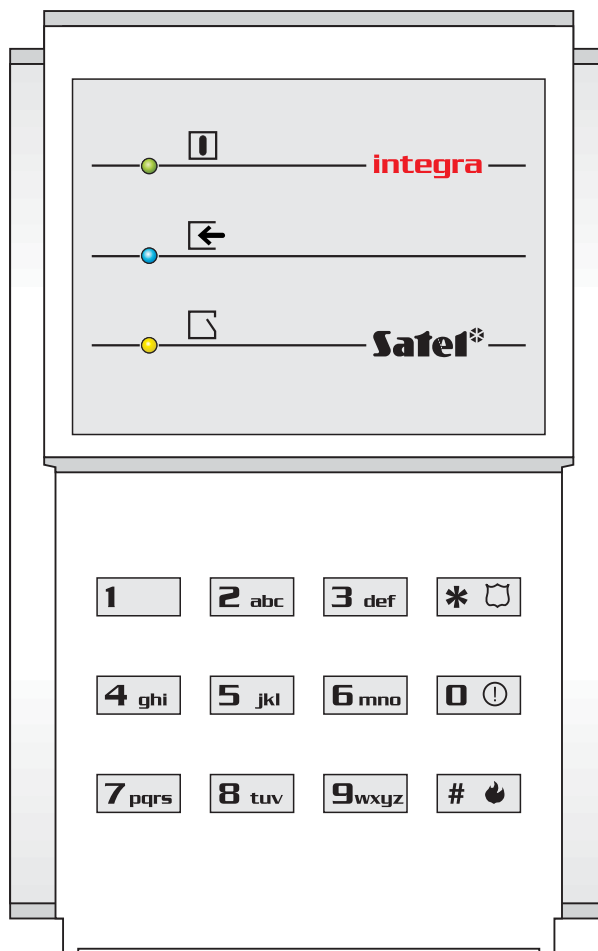
Fig. 7. Code lock type INT-SZ-GR/INT-SZ-BL.
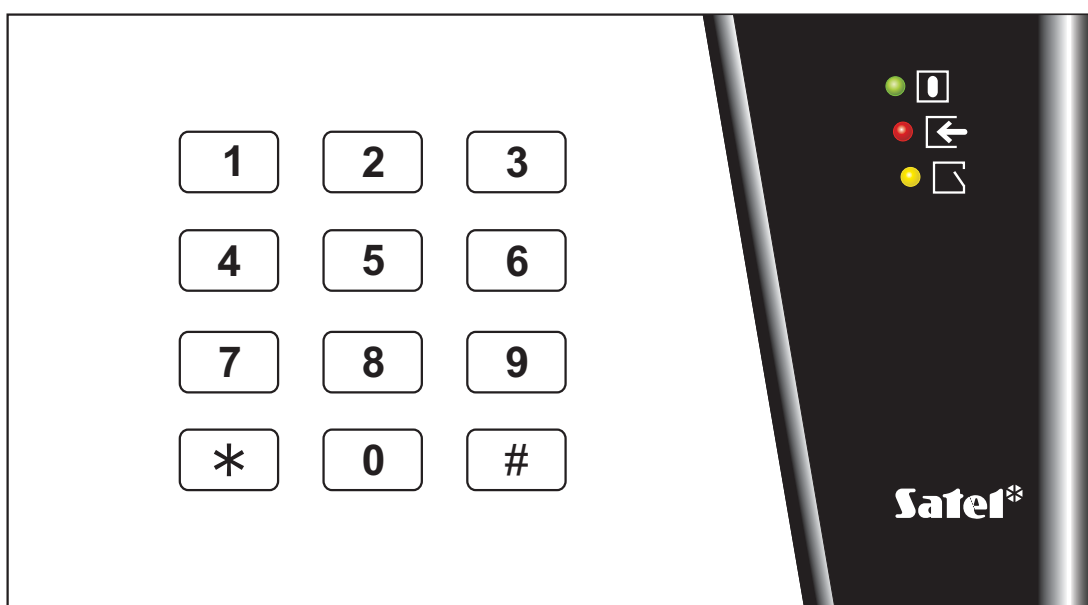
Fig. 8. Code lock type INT-SZK-GR.

They differ by their size and shape. The code locks are available with green or blue backlighting. Designation of the models with green backlighting ends with "GR" letters, while

that of the models with blue backlighting – with "BL" letters. The backlighting can be either permanent, or time-controlled (automatically activated).

The code locks are provided with LED indicators:

⊡ – **ACTIVE** (green) – lighting of the LED indicates that the lock is operated by the control panel.

⬅ – **ACCESS** (depending on the lock type, of blue or red color) – lighting indicates unlocking of the door lock, which means that the door may be opened.

⬅ – **DOOR** (yellow) – lighting informs that the door is open.

When all the LEDs are alternately blinking (from top to bottom), there is no communication between the code lock and the control panel. This situation may occur when the STARTER program is running in the control panel or the cable connecting the code lock to the control panel is damaged.

The basic function of the code lock is **to control access** to the room where the door provided with electric catch, bolt or electromagnetic interlock is installed. The lock may also be used for partition control during a guard round in the facility.

In order to open the door, enter the user **CODE** from the lock keypad and press [#] or [∗]. The user must be authorized to use the particular code lock.

[CODE][#]   door opening

[CODE][∗]   door opening

Note: Entering a wrong (not recognized) code three times may:
- *Trigger an alarm* **PROG***;*
- *block a code lock for 90 seconds. After this time each next wrong code entering will block the code lock* **PROG***.*

The code lock keypad can be used to **change the user code**, the change procedure being the same as for the partition keypad.

The following special alarms can be quickly triggered from the code lock keypad:
- FIRE alarm – press and hold down the ⊞ (INT-SZ-GR / INT-SZ-BL) or ✳ (INT-SZK-GR) key for approx. 3 seconds;
- AUX (medical) alarm – press and hold down the ⊡ (INT-SZ-GR / INT-SZ-BL) or ⓪ (INT-SZK-GR) key for approx. 3 seconds;
- PANIC alarm – press and hold down the ✳ (INT-SZ-GR / INT-SZ-BL) or ⌗ (INT-SZK-GR) key for approx. 3 seconds.

Acknowledgement of acceptance by the control panel of the called control function (by sound or illumination of the code lock keypad) is identical as for the partition keypad.

6.7 PROXIMITY CARD AND DALLAS CHIP READER

Using the card/chips activates control in the partition the reader is assigned to - in much the same way as entering this type of code from a partition keypad. Presenting the card to the reader/touching the reader with the chip is recognized by the reader in much the same way as entering the code and confirming it by the [∗] key in the partition keypad. Holding the card/chip (for approx. 3s) is recognized in the same way as entering the code and confirming it by the [#] key. The reader reaction to presenting the card/touching the reader with the chip, or holding the card/chip, depends on the expander settings. By using the proximity card/DALLAS chip you can:
- control the expander relay, and, by means of the expander relay, the electromagnetic door lock, latch, lighting, actuators (ventilation, pumps, etc.);
- arm partitions;
- disarm the system and clear alarms.

The proximity card readers come with two-color LED and buzzer for communication of the control panel with the user. The DALLAS chip heads come only with two-color LED. It is possible for the installer to provide an additional signaling out of the head. Description of the reader acoustic and optical signaling - see the CA-64 DR, CA-64 SR expander manuals.

Note: Reading in a wrong (not recognized by control panel) card/chip three times may:

- *trigger an alarm* **PROG***;*
- *block a reader for 90 seconds. After this time each next wrong card /chip reading in will block the keypad reader* **PROG***.*

6.8 CODES AND USERS

Access to the control functions of the panel is possible after entering a proper code (4 to 8 digits) and pressing the [∗] or [#] key. Three basic code types are distinguished:

1. **Service code** – this code identifies the user with special authority: he can control all partitions and open all doors controlled by the control panel; he has access to most of the control panel functions (except for the SERVICE ACCESS, VIEW MASTERS, CHANGE PREFIX, USERS and some options – see *Description of user functions*), and may enter and delete the object master users. Factory preprogrammed service code: 12345.

2. **Master user** (supervisor) **code** – this code identifies the user with the highest authority in the object. The master user has access to all partitions within his object and determines the service code access to the system. There is a function, available to the maser user only, which enables the service access (see *Description of user functions:* SERVICE ACCESS, CHANGE OPTION*)*. The default master user code for the first object is 1111. Other master user authority levels may be limited by the service (installer). If several objects are defined in the system, each object can have its own master user code. This user has the right to enter new users into the system.

3. **User code** – the remaining codes entered in the system by service, master users or users (authorized to edit the user). These are codes for everyday operation of the system. The number of available codes depends on the control panel size:
   - INTEGRA 24: 16
   - INTEGRA 32: 64
   - INTEGRA 64: 192
   - INTEGRA 128 and INTEGRA 128-WRL: 240

Notes:

- *The service can add, edit and delete the object users, provided that the SERVICE CAN EDIT option has been enabled by the master user (administrator).*

- *Each user of the system (except for the master) can have a telephone code assigned to him – see section "Answering Phone Calls".*

- *Service code is rejected by the control panel when the service access is disabled. The master user can enable the service access to the alarm system temporarily or permanently.*

- *If there is no master user code in the system (all master users are removed), the service access to the system is unlimited.*

- *It is recommended that the master user code not to used everyday (due to possibility of unauthorized capture). The master user should enter for himself an ordinary user code, with "strategic" functions disabled, and he should use it for everyday work. The main reason for this is to protect access to the service mode and prevent entering codes by unauthorized persons.*

Additionally, a code can be assigned a specific control function which will be executed after entering the code and pressing the [#] key (see: *Description of user functions* →USERS) or after using the proximity card assigned to the given code.

The installer (using the service code) grants codes and names to the master users (one master user per each object), as well as he defines their rights.

The service and the master user have the right to enter ordinary system users. They grant them the authority, type and define the partitions, to which the users will have access. Also, the ordinary user may be authorized to enter new users. The new user may only have access to the functions and partitions which are accessible to the user who enters the new code.

Note: If the entered user is authorized to change the code, he should change it after the first use of his code. The control panel reminds the user to perform this operation by means of a prompt on the keypad display and an audible signal **PROG**.

The system saves the order in which the users are entered. The person authorized to enter and delete the users may only remove from the control panel memory the users entered by himself or by his subordinates. The service has the right to edit all master users (as well as to change their codes). The master user can edit and delete all users of his object. This also applies to the service, provided that the master user has authorized the service to manage the users in his partition. Ordinary users have authority to edit the users they entered themselves. This is quite convenient in case the code is lost. The supervisor of the user concerned may enter a new code and assign it the possibility to control the system (of course, within the range limited by the authority).

The control panel assigns a number to the users to identify them in the system. This number is used in messages transmitted to the monitoring station and in event descriptions (see: *Description of user functions* →EVENTS).

Further information on entering new users or editing the existing users can be found in description of the USERS function (page 48).

6.9 PREFIXES

In extended systems, which require an enhanced security level, the codes used are sometimes composed of two parts: one which is periodically changed by the master user (**prefix**) and the other which is determined by the user (**user code**). This ensures a periodic change of the system access codes, while the users do not have to change their codes individually. The prefix length (from 1 to 8 digits) is determined by the installer. There are two types of prefixes:

Normal – normally entered before each use of the code, by default programmed as 0 or 00, or 000 ... (the number of zeros depends on the length of prefix).

Duress – entered before use of the code in emergency, e.g. when the user is forced by third parties to disarm the system, bypass the zones, etc., by default programmed as 4 or 44, or 444 ... (the number of fours depending on the length of prefix).

For security reasons, it is useful to periodically change the prefixes. The master user of the object is authorized to change the prefixes and define the change *Recall time* (see function →CHANGE PREFIX).

Notes!

• *Changing the length of prefixes is possible only from the real keypads.*

• *Changing the length of prefixes by the installer restores their default values.*

6.10 PROXIMITY CARDS/DALLAS CHIPS

The users of INTEGRA security alarm system (excluding the service) can be assigned a proximity card and a DALLAS chip. The maser users can only be assigned a card / chip by the service. The other users can be assigned a card / chip by the serviceman (if he has been authorized to do so by the master user), master user or a user with the EDIT USER authority level. The card / DALLAS chip can be added / removed by means of the LCD keypad, or the GUARDX or DLOADX program.

Note: The same card/chip cannot be assigned to two users.

6.10.1 Adding proximity card / DALLAS chip by means of LCD keypad

1. Start the NEW PROX. CARD / NEW DALLAS function.
2. Specify the reader where the card/chip is to be read in, or select entering the card/chip number manually.
3. Depending on the indicated method of card addition:
   − read in the card/chip twice, following the prompts on the keypad display, and, after the "Card read"/"DALLAS read" message is displayed, press [#];
   − enter the card/chip number.

⚠️ **The card/chip will only be actually added after completion of the user adding / editing procedure, i.e. after exiting the function by means of the [∗] key and saving the changes by means of the [1] key.**

6.10.2 Adding proximity card / DALLAS chip by means of DLOADX program

1. Open the USERS window.
2. Click with your mouse pointer on the selected user.
3. Click with your mouse pointer on the CARD / DALLAS button. The card/chip adding window will open.
4. Select the reader to be used for reading in the card/chip.
5. Click with your mouse pointer on the ADD CARD / ADD DALLAS button.
6. According to the commands displayed in the window, read in the card/chip twice and, after the CARD READ / DALLAS READ message appears, close the window.
7. Save the data to the control panel. The card/chip is now added.

Note: You can also add the card/chip by entering its number in the CARD / DALLAS field, USERS window, and saving the data to the control panel.

6.10.3 Adding proximity card / DALLAS chip by means of GuardX program

1. Open the USERS window.
2. Click with your mouse pointer on the selected user.
3. Click with your mouse pointer on the CARD / DALLAS button. The card/chip adding window will open.
4. Select the method of adding the card/chip: by reading in on the reader, or by entering the number manually.
5. Depending on the selected method of adding the card/chip, select the reader and read in the card/chip or enter its number twice.
6. Click with your mouse pointer on the ADD button. A window will open where you are supposed to enter the access code.
7. Having entered the code, click your mouse on the OK button to save the data to the control panel. The card/chip is now added.

6.10.4 Deleting cards/DALLAS chips by means of LCD keypad

1. Start the NEW PROX. CARD / NEW DALLAS function.
2. After the card/chip number is displayed, press the key [1].

Note: By using the "Erase prox. card"/"Erase chip" function you can check the number of the card/chip.

⚠️ **The card/chip will only be actually deleted after completion of the user editing procedure, i.e. after exiting the function by means of the [∗] key and saving the changes by means of the [1] key.**

6.10.5 Deleting proximity card / DALLAS chip by means of DLOADX program

1. Open the USERS window.
2. Click your mouse twice with the pointer in the CARD / DALLAS field of the user, whose card/chip we wish to remove.
3. Delete the card/chip number.
4. Save the data to the control panel. The card/chip is now removed.

6.10.6 Deleting proximity card / DALLAS chip by means of GUARDX program

1. Open the USERS window.
2. Click with your mouse pointer on the selected user.
3. Click with your mouse pointer on the CARD / DALLAS button. The card/chip deleting window will open.
4. Click with your mouse pointer on the DELETE button. A window will open where the access code is to be entered.
5. Having entered the code, click your mouse button on the OK button to save the data to the control panel. The card/chip is now deleted.

6.11 APT-100 KEY FOBS

In case of the INTEGRA 128-WRL control panel and any other INTEGRA control panel to which the ACU-100 controller with firmware version 2.0 is connected, an APT-100 key fob can be assigned to each user of the system (excepting the service). Administrators can only be assigned a key fob by the service. The other users can be assigned a key fob by the service (if the latter has been authorized by the administrator), administrator and/or user with the EDIT USER authority.

Using the key fob, it is possible to control up to 6 zones in the security system. The zones do not have to exist physically. The line type programmed in both the physically existing zones and the virtual ones which are to be controlled by means of the key fob must be different from NOT USED and FOLLOW OUTPUT. Any type of reaction can be programmed for these zones. Pressing a button (or, simultaneously, the two buttons 1 and 5) in the key fob will result in violation of the zone (the zone will be violated as long as the key fob button is depressed) and a corresponding reaction of the control panel. A button/combination of buttons can control one zone in the system. Zones are assigned to buttons/combinations of buttons individually for each user.

Pressing any button/combination of buttons in the key fob can generate an event informing that a key fob has been used. Generating such events can be enabled or disabled, so as to reduce the number of events in the system

Note: Dependencies between the key fob buttons and the security system zones, as defined for the user, will not be reset after the key fob is removed (the only exception being the REMOVE ABAX KEY FOB function, available in the service menu of LCD keypad). After

a new key fob is added to the user, the buttons will control exactly the same zones, as the buttons of the removed key fob.

You can add the key fob by entering its serial number manually or reading the serial number during transmission which is sent after the button is pressed.

Note: The same key fob cannot be assigned to two users.

The key fob data are stored by the ABAX system (i.e. the wireless system of the mainboard of INTEGRA 128-WRL control panel or the ACU-100 controller with firmware version 2.0 or later). Connecting the ACU-100 controller with key fob data to the INTEGRA 24, INTEGRA 32, INTEGRA 64 or INTEGRA 128 control panel will result in key fobs being automatically assigned to the users of that control panel. This only applies to the users who have already been created.

⚠ **In case of LCD keypad, the key fob will be added to / removed from the system and the zones will only be assigned to the buttons after completion of the function of adding/editing administrator or user, i.e. after exiting the function with the [∗] key and saving the introduced changes by pressing the key [1].**

In case of DLOADX program, the key fob will be added to / removed from the system and the zones will only be assigned to the buttons after the data are saved into the ABAX system (INTEGRA 128-WRL control panel mainboard and ACU-100 controllers). In case of the INTEGRA 128-WRL control panel, click your mouse on the 🔧 button. In case of the other control panels, click on the Write button in the ABAX Keyfobs window.

6.11.1 Adding key fob by means of LCD keypad

Adding of the key fobs is possible owing to the NEW ABAX KEYFOB function ([service code][∗] →MASTERS →NEW MASTER/EDIT MASTER →NEW ABAX KEYFOB or [code][∗] →USERS →NEW USER/EDIT USER →NEW ABAX KEYFOB).

Entering the serial number manually

1. Select ENTER MANUALLY from the list.
2. Enter the key fob number and press the [#] key.

Reading the serial number during transmission

1. Select from the list the device which is to receive the transmission containing serial number (depending on configuration, this can be mainboard of INTEGRA 128-WRL control panel or ACU-100 controller).
2. Following the prompts displayed on the keypad, press the key fob button twice, and after the message KEYFOB READ appears press the [#] key.

6.11.2 Adding key fob by means of DLOADX program

Adding the key fobs is possible in the ABAX KEYFOBS window. To open the window, click your mouse on the ABAX KEYFOBS item in the USERS menu.

In case of the INTEGRA 128-WRL control panel, the key fob data will be displayed automatically. These will be the data of the mainboard ABAX system (the program will not be able to read the data from ACU-100 controllers connected to the INTEGRA 128-WRL control panel). In case of the other control panels, it is necessary that the key fob data be read before the attempt of adding a new key fob. For this purpose, click on the READ button. The program will read data from the lowest address ACU-100 controller with key fob support. The name(s) of controller(s) (displayed at the top of the window) with which the control panel can communicate will be highlighted in green (the names of controllers which cannot support key fobs will be highlighted in yellow).

In order to make the key fob data uniform in all controllers, e.g. when connecting new ACU-100 controllers to a system in which such controllers are already in operation, do the following:

– in case of the INTEGRA 128-WRL control panel click on the WRITE TO ALL button (the button is available when ACU-100 controllers with key fob support are connected to the control panel and no changes have been made to the key fob data read from the mainboard ABAX system);

– in case of the other control panels click on the WRITE button (before making any changes to the read data).

Note: *If there are several ACU-100 controllers working with the control panel and communication with any of them is lost, saving the key fob related data will not be possible.*

Entering the serial number manually

1. Click your mouse on the field in S/N column next to the name of user to whom you want to assign a key fob.

2. Enter the key fob serial number and confirm with ENTER. The background color of the field in which the serial number is shown will change to pink. After the data are written to the ABAX system, thus ending the procedure, the background color will change to white.

6.11.3   Reading serial number during transmission

1. Click your mouse on the field in S/N column next to the name of user to whom you want to assign a key fob.

2. Click on the NEW button. The NEW window will open.

3. According to the prompt which will appear in the window, press the key fob button and, when the key fob serial number is displayed in the window, press OK. The NEW window will close and the key fob serial number will be shown in the S/N column, next to the user name. The background color of the field in which the serial number is shown will change to pink. After the data are written to the ABAX system, thus ending the procedure, the background color will change to white.

6.11.4   Removing key fob by means of LCD keypad

1. Start the DELETE ABAX KEYFOB function ([service code][*] →MASTERS →NEW MASTER/EDIT MASTER →DELETE ABAX KEYFOB or [code][*] →USERS →NEW USER/EDIT USER →DELETE ABAX KEYFOB).

2. When the key fob number is displayed, press the key [1].

6.11.5   Removing key fob by means of DLOADX program

Removal of the key fobs is possible by using the ABAX KEYFOBS window, after the key fob data have been read (see section: ADDING KEYFOB BY MEANS OF DLOADX PROGRAM).

1. Click your mouse on the field in S/N column next to the name of user whose key fob you want to remove.

2. Click on the REMOVE button.

3. A window will open. Confirm your intention to remove the key fob by clicking your mouse on the YES button. The key fob serial number will be deleted. The background color of the field in which the serial number is shown will change to pink. After the data are written to the ABAX system, thus ending the procedure, the background color will change to white.

6.11.6   Assigning zones to buttons by means of LCD keypad

Assigning zones to a button/combination of buttons is made possible by the functions available when adding/editing administrator ([service code][*] →MASTERS →NEW MASTER/EDIT MASTER   →BUTTON 1/BUTTON 2/BUTTON 3/BUTTON 4/BUTTON 5/BUTTON 1 and 5)   or   user

([code][*] →USERS →NEW USER/EDIT USER →BUTTON 1/BUTTON 2/BUTTON 3/BUTTON 4/ BUTTON 5/ BUTTON 1 and 5).

1. Start the selected function.
2. Using the ▲ and▼ keys, select a zone from the list or enter the zone number from the keypad.
3. Press the [#] key.

6.11.7 Assigning zones to buttons by means of DLOADX program

Assigning zones to key fob buttons is possible in the ABAX KEYFOBS window after reading the key fob data (see section ADDING KEY FOB BY MEANS OF DLOADX PROGRAM).

1. Click at the selected user in the column corresponding to the button/combination of buttons to which you want to assign the zone.
2. Using the keyboard, enter the number of zone which is to be controlled by the button, and confirm by pressing ENTER. Part of the field in which the zone number is displayed will change its color to pink. After the data are saved into the ABAX system, which completes the procedure, the field background will change its color to white.

6.11.8 Configuring event generation rules by means of LCD keypad

Enabling/disabling generation of events for particular key fob buttons is possible by using the ABAX EVENTS function, which is available when adding/editing administrator ([service code][*] →MASTERS →NEW MASTER/EDIT MASTER →ABAX EVENTS) or user ([code][*] →USERS →NEW USER/EDIT USER →ABAX EVENTS). To enable/disable the event generation feature, press any numerical key. Event generation for the given button is enabled, when the 🔣 symbol is displayed in the upper line.

6.11.9 Configuring event generation rules by means of DLOADX program

Enabling/disabling generation of events for particular key fob buttons is possible by using the ABAX KEYFOBS window, after the key fob data have been read (see section ADDING KEY FOB BY MEANS OF DLOADX PROGRAM).

1. Click at the selected user in the column corresponding to the button/combination of buttons for which you want to enable/disable the generation of events.
2. Using the SPACE button, enable/disable the event generation feature. The event generation for the given button is disabled, if the ✗ symbol is shown next to the number of zone controlled by the button (lack of the symbol means that the event generation is enabled). Any modification of the settings will change the background color in part of the field next to the zone number into pink. After the data are saved into the ABAX system, which completes the procedure, the field background will change its color to white.

6.12 SYSTEM ARMED MODE

Armed mode is the basic status the control panel is designed for. In this mode, the control panel detectors monitor the protected object, and any violation of the protected partition is signaled by the control panel with all available means (as programmed by the installer). The INTEGRA control panel enables individual control of armed status in each partition of the object. A single partition, several partitions and/or all partitions may be armed.

The user can arm the system using one of the following ways:

- **entering [CODE][#] in LCD keypad** – all partitions or some selected partitions only can be armed;
- **entering [CODE][#] in partition keypad** – the partition to which the keypad is assigned can be armed;

- **entering [CODE][∗] in LCD keypad and choosing "Arm" function** – selected partitions can be armed; if any of the partitions controlled by the keypad is armed, this is the only way to arm of the other partitions;

- **entering [0][#] in LCD keypad** – all installer programmed partitions will be armed;

- **entering [0][#] in partition keypad** – the partition to which the keypad is assigned will be armed;

- holding card in the proximity of the reader for approximately 3 seconds – the partition to which the reader is assigned will be armed;

- **holding DALLAS chip in the reader for approximately 3 seconds** – the partition to which the reader is assigned will be armed.

Notes:

- *The control panel will not arm the partition(s) in the following cases:*
  - *at least one zone with active PRIORITY option is violated in the selected partition;*
  - *the options REQUIRED SYSTEM RESET AFTER VERIFIED ALARM, DO NOT ARM IF TAMPER, DO NOT ARM IF BATTERY TROUBLE, DO NOT ARM IF TROUBLE, DO NOT ARM IF OUTPUTS TROUBLE and DO NOT ARM IF REPORTING TROUBLE are enabled and at least one of such situations takes place.*

  In case of arming by means of the LCD keypad, a list of causes which prevent arming will be displayed. Press the [∗] key to cancel the arming. Press the [#] key to repeat the attempt of arming (without having to select partitions or armed mode status). If the cause which prevented arming has been in the meantime removed, the partition will be armed. Otherwise, the list of causes which prevent arming will be displayed again.

- *If the arming by means of the LCD keypad is impossible because:*
  - *a zone with enabled PRIORITY option is violated;*
  - *the DO NOT ARM IF TAMPERED option is enabled and the zone is tampered (type 2EOL zone, too long violation of the zone or too long non-violation of the zone),*

  you can bypass the selected zone by pressing the key [4] during review of the causes which prevent arming.

- *If the option WARN WHILE ARMING IF TROUBLE is enabled, the partitions are armed from the LCD keypad and there are troubles in the system, the control panel will inform the user of it with a suitable message before arming. Pressing the key [1] will arm the partition(s), and pressing the key [2] will display information on troubles. Pressing the [∗] key will make it possible to cancel the arming and trouble review. If the key [2] was pressed, there will be return to the question about arming or trouble viewing after the review is completed and the [∗] key is pressed.*

- *If the arming is performed by means of the LCD keypad in a partition with temporary blocking, the control panel will ask to indicate the block time before arming.*

- *If the option VIOLATED/BYPASSED ZONE PREVIEW WHEN ARMING is active and the arming is performed from the LCD keypad, the control panel will check that there are no violated/bypassed zones. Checked for possible violation are the zones for which the PRIORITY option has not been enabled. If violated or bypassed zones are found, the following message will be displayed on the keypad: "Viol./Bypass z. 1=Arm 2=Check". Pressing the key [1] will arm the partition, and pressing the key [2] will display information on violated/bypassed zones. The [∗] key will cancel the arming and viewing. If the key [2] is pressed, the question about arming and viewing will be asked again after completion of the viewing and pressing of the [∗] key.*

In case of zones for which the exit delay time has been programmed, the arming will take place after the countdown ends. It is possible to terminate the exit delay countdown and arm

the partition immediately by entering [9][#] from the keypad or partition keypad **PROG**. Reduction of the exit time is only possible on the same keypad/partition keypad from which the arming was done.

A special armed mode can be enabled in the partition to allow the user to stay in the facility where the system has been armed:

– **Full arm with bypass** – the zones with enabled Bypassed if no exit function will be bypassed, i.e. the control panel will not respond to their violation. Otherwise, the facility is normally protected.

– **armed without interior** – the control panel will not react to violation of the interior zones (zone type 3. Interior delayed). The exterior zones (zone type 8. Exterior) will trigger silent alarm. Otherwise, the facility is normally protected and all functions are executed.

– **armed without interior and without entry delay** – the control panel will react in the same way as above, but, additionally, the delayed zones (zone type: 0. Entry/Exit, 1. Entry, 2. Delayed with delay signaling) will act as instant ones.

In order to enable the special armed mode by means of LCD keypad, do the following:

1. Enter ACCESS CODE and press the [∗] key.
2. Call the ARMING MODE function.
3. Using the ▲ and ▼ keys select one of the suggested arming modes and press [#].
4. Call the ARM function and select (highlight) the partition to be armed.
5. Press the [#] key.

In order to re-enable the special armed mode, the above procedure must be repeated.

If the function of quick arming without code entry has been made available by the service in LCD keypad /partition keypad, you can enable the special armed mode by successively pressing the keys:

[1] and [#] – full arm with bypass;

[2] and [#] – armed without interior;

[3] and [#] – armed without interior and without entry delay.

The procedure of arming the system from a LCD keypad in the partition to which the type (10) **24h vibration** zone belongs and the testing function of vibration sensors is activated **PROG** is somewhat different.

When the arming function is called, the following message appears on the LCD display:

"*Vibr. zone test xx s (1=arm)*" where the *xx* field indicates the number of seconds before the end of test.

During the test, the control panel is waiting for the violation of vibration zones in a given partition. If all the vibration zones of the given zone are violated, the alarm control panel will proceed to counting the exit delay time and arming the system. If any of the vibration zones is not violated during this time, the control panel will display a list of faulty zones (number and name of zone) and will not arm the system.

Pressing the digit **1** key during the process of countdown will interrupt the test and arm the system in normal mode, while pressing the [∗] key will make it possible to cancel the arming.

Arming the system from the partition keypad will bypass the testing of vibration sensors in the particular partition.

The user can disarm the system using one of the following ways:

• **entering [CODE][#] in LCD keypad** – all partitions or some selected partitions only can be disarmed;

• **entering [CODE][∗] or [CODE][#] in partition keypad** – the partition to which the keypad is assigned can be disarmed;

- **entering [CODE][∗] in LCD keypad and choosing "Disarm" function** – selected partitions can be disarmed;
- **bringing closer or holding card in the proximity of the reader (depending on expander settings)** – the partition to which the reader is assigned will be disarmed;
- **bringing closer or holding DALLAS chip in the reader (depending on expander settings)** – the partition to which the reader is assigned will be disarmed.

Also, special control ways of partition status are possible:

- partition arming and disarming by means of *timers*. The timer is an internal control panel logic unit which measures time. Timer operation is programmed by the service;
- partition arming and disarming by the "*partition user timer*". Operation of this timer may be programmed by the partition user, without having the installer (or the service) to do the job. There is a single partition timer of this type, which can be programmed in daily or weekly cycle (see: *Description of user functions* →CHANGE OPTIONS);

Note: The special armed modes, as described earlier, are also defined for timers.

- partition arming control by means of a special zone programmed (by the installer) as arming control zone. In practice, it may be a mechanical switch; key switch, pushbutton, radio switch. It is also possible to control such a zone by means of the REMOTE SWITCH type output (see: *Answering phone call*). Disarming by means of the zone can also clear the alarm and telephone messaging;

Note: The zone will arm always, unless the option CHECK ARM POSSIBILITY is enabled. If this is the case, all the conditions which make arming impossible (see page 33) will be taken into consideration.

- arming/disarming by the use of code and arrow keys (see: *Use of LCD keypad*) – this mode facilitates access to the above mentioned "special ways of arming".

6.13 ALARMS

The system may signal alarms as the response to various situations that occurred in the protected facility. The basic control panel alarms include:

Burglary alarm – activated when the zone is violated in the partition where arming is on. Violation of the "delayed zone" starts countdown of the delay time, after expiry of which an alarm is activated unless the partition is disarmed.

Fire alarm – activated by fire detectors, from keypad or otherwise (e.g., by pressing pushbutton).

Tamper alarm – activated by violation of any tamper contacts in the alarm system (located in detector and module casings), damage to cables, etc.

Panic alarm – activated from keypad or otherwise as defined by the installer (e.g., by pressing pushbutton).

Auxiliary alarm – activated from keypad (for example, call for medical aid) or otherwise as defined by the installer (e.g., remote controller or pushbutton).

Technical alarm – activated by various specialist detectors.

The way of signaling individual alarms may be different, as defined by the system installer. It may be an alarm siren, information to the monitoring station, visual alarm, audible alarm and/or keypad message, telephone message, activation of other external devices.

The alarm is cleared simultaneously with disarming. Clearing the alarm without disarming is possible by means of the user function CLEAR ALARM.

The alarm can be cleared by a user authorized to clear alarms in the given partition/object. The alarm will be cleared after entering the code and confirming it with the [#] key. If the user

is authorized to disarm the partition, the alarm clearance will be accompanied by disarming. The disarming will not be effected automatically, if the user may disarm more than one partition. He must then chose the partitions to be disarmed. He can also cancel the disarming by pressing the [∗] key. In order to clear the alarm without disarming the partition, it is possible to use the user function CLEAR ALARM.

Immediately after the alarm is cleared, viewing of the violated zones is possible. If the user decides not to view them immediately, he can do it at a later date by means of the user option VIEW CLEARED ALARMS. The function will be available in the user menu until the viewing is done.

6.14 ALARM MESSAGING BY TELEPHONE

All the INTEGRA series control panels can inform about events in the system by means of voice messages (connection of voice synthesizer is required), as well as PAGER type text messages. The INTEGRA 128-WRL control panel can additionally notify by means of SMS type messages. The SATEL made GSM modules offer the feature of converting the PAGER messages into SMS messages, thus allowing the use of this form of notifying also in the other INTEGRA control panels.

The number of telephones to which the messaging is effected, and the number of available voice messages or text messages, depends on the control panel size.

In case of notifying by a voice message, the control panel settings may require confirmation (acknowledgement) that the message has been listened to. If there is no such confirmation, the control panel can make further attempts to connect and play back the message. The number of redials and the confirmation rules (code) are defined by the installer. A telephone with DTMF tone dialing must be used for the confirmation.

If the entered code is wrong, the control panel will signal the fact with two long tones (beeps). Correct code is confirmed by four short and one long beeps.

If a single short beep is heard every three seconds instead of the above mentioned signals, the code is correct but you must wait, because there are several messages regarding different alarms.

If you make a mistake when entering the code, press any numeric key to supplement the code to four digits (then the control panel will signal a wrong code), and then re-enter the correct code.

Notes:
- *The control panel analyzes telephone signals in order to recognize whether the call is answered. Therefore, it may occur that you will hear the message after few seconds (up to 4 seconds) from picking the handset. This is not an error – the effect is a result of the phone call-back signal. When you say "hallo..." to the handset, the message will be reproduced immediately.*

- *Acknowledgement of message reception by the user can reset the function of messaging to other users* **PROG**.

- *If no confirmation rules for having listened to the message are defined in the control panel by the installer, the control panel will recognize reception of the message as confirmed, when the receiver is lifted after two rings and any sound occurs.*

6.15 ANSWERING PHONE CALLS

The users having a **telephone code** (not to be confused with the acknowledgement code for receipt of a telephone message) can use the call answering and telephone control functions. The call answering function allows the control panel users to obtain the partition status information (armed mode, alarms) to which the user has access. Owing to the telephone

control function, the users with a telephone code can use telephone to control the REMOTE SWITCH outputs. The installer defines which switchs can be controlled by the given user. The call answering and telephone control functions require that a telephone with DTMF tone dialing be used.

Note: Not all cellular telephones allow control in DTMF tone system.

How to use this function:

- Dial the telephone number (line) of the control panel. The method of dialing is defined by the installer. The control panel may establish connection after a defined number of dialing signals (rings). The dialing can be single or double. When double dialing is used, wait until a defined number of "rings" is completed, put the handset off, and then dial the control panel telephone number again. After the number is dialed the second time, the control panel should answer immediately.

- After the connection is established, the control panel is ready to receive the user telephone code – three short beeps (handshake).

- Enter the code from the telephone keypad (in tone system). The control panel will acknowledge the correct code with a series consisting of four short and one long beeps. Two long beeps follow receipt of an incorrect code. If the entered code is invalid, the control panel will signal it by two long beeps and will not be answering any calls for the next 4 minutes.

- The control panel is in partition status information mode. It waits for user's response for 15 seconds, generating one short beep every two seconds. You are expected to enter the partition number from the telephone keypad (in two-digit format, e.g., 01; 05; 12; 25). If there is no response within this time, the control panel will ring off.

- After the partition number is entered, the control panel generates the message. Three short beeps inform that the partition is disarmed and four short and one long beeps mean that the partition is armed.

- Alarm memory is the extra information given by the control panel. If an alarm occurred in the partition, the control panel generates a series of double beeps – one lower and the other higher – following the partition status information. If there was no alarm, the control panel will generate a single short beep every two seconds.

- In order to proceed to the control of the remote switches status, press [**2**] and [**#**] on the telephone keypad. After the control function is entered, a periodic signal in the form of two short beeps can be heard in the receiver.

- Now the control panel waits for the (two-digit) switch number to be entered. Entering the telephone number from the telephone keypad will switch the relay status to the opposite one. Three short beeps mean that the relay is switched off and four short and one long beeps - that the relay is switched on. Each time you enter the same number, the relay status is changed to the opposite one.

- It is possible to move back to the partition status indication mode by pressing in turn the [**1**] and [**#**] keys.

- Pressing in turn the [**0**] and [**#**] keys will exit the function and terminate the telephone connection.

6.16 OTHER FUNCTIONS USING TELEPHONE LINE

If functions of the control panel telephone communicator are used in the alarm system, then the facility public line should be directly connected to the control panel, and all telephone sets should be installed after the control panel. Therefore, no signals are heard in telephones connected after the control panel, when the panel is on the telephone line. This situation may frequently occur in multi-partition systems, when monitoring is activated (a special reporting

system intended for sending information on the object status to a security agency, working independently of the aforementioned user notification system). Moreover, the control panel will disconnect telephone conversations to capture the telephone line in order to transmit an information on a new event. It should be noted that such connections do not last very long (from a few seconds to one minute, depending on the selected format of data transmission).

Another function, when the control panel occupies the telephone line, is programming by telephone ("downloading"). The service may initialize this function by phone. During data interchange with the service computer, the telephone line may be occupied for a long time. Even if the programming is initialized by the user, the service may suspend communication with the control panel to reduce the connection costs, and then resume it without involvement of the user.

Note:

- *The downloading function will be automatically stopped, if 255 minutes have elapsed since the last use of the DLOADX program, and the service access was blocked or expired in the meantime.*

- *The control panel is protected against any attempts to scan the code – after three consecutive attempts to get access to the panel using wrong codes within one telephone communication session, the function of answering the modem signals will be disabled for 30 minutes.*

6.17 SMS CONTROL ONLY INTEGRA 128-WRL

The INTEGRA 128-WRL control panel makes available to the users the function of control by SMS messages. Receiving by the control panel of a message containing appropriate command may result in violation of a zone, launching of a selected function or sending a return message with information on the system status. Several control commands may be included in one SMS message. The contents of the messages and additional rules for using them (case sensitivity, adding the telephone code to the body of sent SMS message, etc.) shall be defined by the installer.

7. USER FUNCTIONS

7.1 MAIN MENU

Presented on the next few pages is menu of all the user functions. These functions are made available by the control panel in LCD keypad on entering the service code, master code or normal user code and pressing the [#] or [∗] key. Some of the specified functions are only accessible to a selected code type. All details concerning the particular functions are described hereunder. Function descriptions are arranged in the order corresponding to that of the menu available on entering the [CODE][∗].

7.1.1   User function menu

Note: As the menu changes dynamically, depending on the programmed system parameters and the user authority level, not all functions are visible to the user.

[USER CODE][#] (calling the functions arming / disarming)

```
├─ Arm all
├─ Arm selected ─────────────────── Select partitions
├─ Disarm all
└─ Disarm selected ───────────────── Select partitions
```

[USER CODE][∗] (calling the user functions)

```
├─ View cleared alarms
├─ System reset*
├─ Disarm ─────────────────────── Select partitions
├─ Clear alarm
├─ Clear other alarms
├─ Abort voice messaging
├─ Arm ───────────────────────── Select partitions
├─ Arm (2 codes) ───────────── 1st code ───────────── Code validity period
├─ Disarm (2codes) ─────────── 1st code ───────────── Code validity period
├─ Defer auto-arming ───────── Select partition ─────── Defer auto-arm for
├─ Set auto-arming delay ────── Select partition ─────── Defer auto-arm for
├─ Arming mode ────────────── Select mode
├─ Cancel 1st code──────────── Select partitions
├─ Change own code ─────────── New code
└─ Change prefix**───────────┬─ Prefix normal
                             ├─ Prefix duress
                             └─ Recall time
```

Masters* ─── New master
             ── Edit master ──────── *Select* ── Code
                                              ── Rights ─────── *Assign authority*
                                              ── Keypads etc. ──── *Assign keypads*
                                              ── New prox. card ── Select reader ┬ Read card for the first time
                                                                                 └ Read card for the second time
                                              ── Rem. prox. card
                                              ── New DALLAS ── Select reader ┬ Read DALLAS for the first time
                                                                             └ Read DALLAS for the second time
                                              ── Remove DALLAS
                                              ── New RX keyfob ── Select reader ┬ Press button the first time
                                                                                └ Press button the second time
                                              ── Delete RX keyfob
                                              ── Button 1
                                              ── Button 2
                                              ── Button 3
                                              ── Button 4
                                              ── Button 1 and 2
                                              ── Button 1 and 3
                                              ── RX events
                                              ── New ABAX keyfob
                                              ── Delete ABAX keyfob
                                              ── Button 1
                                              ── Button 2
                                              ── Button 3
                                              ── Button 4
                                              ── Button 5
                                              ── Button 1 and 5
                                              ── ABAX events
                                              ── Confirm. (ABAX)
                                              └ Name
             └── Remove master ─────── *Select*

```
├─ Users ─────────────────── New user ───────────────
                             ├─ Edit user ──────────── Select ─┬─ Code
                                                               ├─ Telephone code
                                                               ├─ Object─────── Assign partitions
                                                               ├─ Type──────── Select type
                                                               ├─ Rights  ────── Assign authority
                                                               ├─ Keypads etc.── Assign keypads
                                                               ├─ Schedule
                                                               ├─ Existence time
                                                               ├─ Bypass time
                                                               ├─ New prox. card ─ Select reader ─┬─ Read card for the first time
                                                               │                                  └─ Read card for the first time
                                                               ├─ Delete prox. card
                                                               ├─ New DALLAS ── Select reader ─┬─ Read DALLAS for the first time
                                                               │                               └─ Read DALLAS for the second time
                                                               ├─ Remove DALLAS
                                                               ├─ New RX keyfob ─ Select reader ─┬─ Press button the first time
                                                               │                                 └─ Press button the second time
                                                               ├─ Delete RX keyfob
                                                               ├─ Button 1
                                                               ├─ Button 2
                                                               ├─ Button 3
                                                               ├─ Button 4
                                                               ├─ Button 1 and 2
                                                               ├─ Button 1 and 3
                                                               └─ RX events
```

```
                                                    ── New ABAX keyfob
                                                    ── Delete ABAX keyfob
                                                    ── Button 1
                                                    ── Button 2
                                                    ── Button 3
                                                    ── Button 4
                                                    ── Button 5
                                                    ── Button 1 and 5
                                                    ── ABAX event
                                                    ── Confirm. (ABAX)
                                                    ── Name
                        ── Remove user ────── Select
── Zone bypasses ─────────────── Select zones
── Set time ────────────────── Set time ─────── Select events
── Troubles
── Events ──────────────── Selected ──────── Select events
                                                    ── Select partition
                                                    ── View
                          ── View

── Reset zones
── Clear latched outputs
── Fire door opening finished
```

```
├─ Change options ──────────────┬─ Keypad chime
│                               ├─ Outputs chime ──────── Outputs chime blocking ──── Select partitions
│                               ├─ Partition timers ─────── Select partition ──────┬─ Active
│                               │                                                  └─ Type────────┬─ Everyday
│                               │                                                                 └─ Weekly
│                               │
│                               ├─ No expanders tamper alarms*
│                               ├─ Permanent service access**
│                               ├─ Serv. can edit **
│                               └─ Clear service message
├─ Tests ───────────────────────┬─ Partitions
│                               ├─ Zones
│                               ├─ Supply voltage*
│                               ├─ Radio devices
│                               ├─ Zones test ───────────┬─ New ──────────────────┬─ Burglary zones
│                               │                        │                        └─ Fire / technical zones
│                               │                        ├─ View results
│                               │                        ├─ Finish test
│                               │                        └─ Clear results
│                               │
│                               ├─ Battery test*
│                               └─ Manual tr. Test
```

```
                                          ├─ Station 1A test
                                          ├─ Station 1A test
                                          ├─ Station 2A test
                                          ├─ Station 2B test
                                          ├─ Messaging test
                                          ├─ Answering test
                                          ├─ Prox. card test
                                          ├─ View masters**
                                          ├─ Keypad name
                                          ├─ File in DloadX
                                          ├─ Panel version
                                          ├─ ST prog.version [only INTEGRA 128-WRL]
                                          ├─ GSM IMEI/v/sig. [only INTEGRA 128-WRL]
                                          ├─ IP/MAC ETHM-1
                                          ├─ Modules version
                                          └─ Time synchron
 ├─ Service access** ─────────────────────── Service access time
 ├─ Open door
 ├─ Outputs control ──────────────── Select output group ──── Selects outputs to be controlled
 ├─ Service mode*
 ├─ Take SM (service mode) over*
 └─ Downloading ───────────────────── Start DWNL-RS*
                                          ├─ Finish DWNL-RS*
                                          ├─ Start DWNL-MOD.
                                          ├─ Start DWNL-TEL
                                          ├─ Start DWNL-CSD [only INTEGRA 128-WRL]
                                          └─ Start DWNL-GPRS [only INTEGRA 128-WRL]
```

*- functions only available to the service
** - functions only available to the master user

7.2 DESCRIPTION OF USER FUNCTIONS

View cleared alarms

The function is available, provided that the user has not viewed the violated zones. It makes it possible to check which zones triggered the alarm. After completion of the viewing, the function will be unavailable.

System reset

The function is available to the installer (service), if the option REQUIRED SYSTEM RESET AFTER VERIFIED ALARM is enabled, and a verified alarm took place. After occurrence of the verified alarm, it is necessary to reset the system by means of this function, in order to make re-arming possible.

Disarm

The function allows disarming of one or several selected partitions, or all partitions accessible to the user, from the given keypad.

Clear alarm

The function clears alarm signaling on outputs, in partition keypads, in code locks and proximity cards/DALLAS chip readers.

Clear other alarms

The function makes it possible to cancel alarms from other objects, to which the user has normally no access.

Abort voice messaging

When this function is called, the telephone messaging is stopped – the control panel should ring off. If the telephone line is still occupied, there must be messaging in the process from a partition non-accessible to the given user.

The messaging by telephone may be cancelled automatically together with an alarm clearing **PROG**.

Note: If the installer fails to assign the selected telephone number to a partition the users of which are authorized to cancel the voice messaging, the procedure of voice messaging will run to the end, without any possibility to stop it.

Arm

The function allows arming of one or several selected partitions, or all partitions accessible to the user.

Arm (2 codes)

The function arms special partitions, where two different codes must be used for arming. The presence of such partitions is declared (programmed) by the installer.

Entering the first code on the LCD keypad will display a list of partitions from which you should select those to be armed. After acknowledgement of the selected partitions, the control panel enables programming of the code validity time – you should indicate the time period within which the second code can be entered (maximum 18 hours, 12 min.); by default, this time is set at 1 minute.

During the first code validity time, the partitions available for arming are indicated on the LCD keypad by slow blinking of the partition status indicator (2s/2s), and on the partition keypad - by rapid, alternate blinking of the � [ARMED] and � [TROUBLES]. LEDs. During that time the control panel makes available the selected partitions for arming to the users who may enter the other code in the same way as for the partitions armed with a single code. The user

who has entered the first code has the option to cancel his "consent" to arming of selected partitions (see description of the CANCEL 1ST CODE function).

If the first code was entered from the partition keypad, then the other one must be entered within 1 minute of entering the first one, as after expiry of that time the control panel returns to its basic mode. The system may demand that the second code be entered from another keypad (partition keypad) which operates that partition. The users authorized to enter the first or second code in such partitions are assigned by the installer.

Disarm (2codes)

The function disarms special partitions where two different codes must be used for disarming. The presence of such partitions is declared (programmed) by the installer.

Entering the first code on the LCD keypad will display a list of partitions from which you should select those to be disarmed. After acknowledgement of the selected partitions, the control panel will request the code validity time – you should indicate within what time the second code can be entered (maximum 18 hours, 12 min.).

During the first code validity time, the partitions available for disarming are indicated on the LCD keypad by slow blinking of the partition status indicator (2s/2s), and on the partition keypad – by rapid, alternate blinking of the [ARMED] and [TROUBLES] LEDs. During that time the control panel makes available the selected partitions for disarming to the users who may enter the other code in the same way as for the partitions disarmed with a single code. The user who has entered the first code has the option to cancel his "consent" to disarming of selected partitions (see description of the CANCEL 1ST CODE function).

If the first code was entered on the partition keypad, then the other one must be entered within 1 minute of entering the first one, as after expiry of that time the control panel returns to its basic mode. The system may demand that the second code be entered from another keypad (partition keypad) which operates that partition. The users authorized to enter the first or second code in such partitions are assigned by the installer.

Defer auto-arming

The function puts off (delays) arming of a timer-controlled partition (auto-arming). It is used for programming the value of time interval by which the moment of automatic arming of a partition is to be delayed. The maximum delay time is 4 hours, 33 minutes and 3 seconds. Entering a higher value will set the maximum permissible value, while entering the zeros alone will cancel the timer-controlled arming until the particular timer is activated again. Operation of this function pertains both to the partition timers programmed by the user, as well as to the those programmed by the installer.

The function makes it possible to select the partitions where the countdown of the auto-arming delay has begun. Exactly this feature distinguishes the said function from the described below SET AUTO-ARMING DELAY user function which gives access to all the partitions armed automatically with time delay and available to the individual user. In view of a low value of the auto-arming time (max. 255 seconds), it is important that a quick option of the partition arming delay be available in case it is necessary to stay inside.

Upon commencement of the countdown, the control panel can display on the LCD keypad the partition name and the delay time which remains to arming **PROG**. If the time is simultaneously counted in several partitions, the display shows the name of the partition which will be armed first.

The delay time is programmed individually for each partition for which the auto-arming delay countdown has begun.

Set auto-arming delay

The function puts off (delays) arming of a timer-controlled partition (auto-arming). It is used for programming the value of time interval by which the moment of automatic arming of

a partition is to be delayed. The maximum delay time is <u>4 hours, 33 minutes and 3 seconds</u>. Entering a higher value will set the maximum permissible value, while entering the zeros alone will restore the partition control according to the installer's settings. Operation of this function pertains both to the partition timers programmed by the user, as well as to the those programmed by the installer.

The delay time is programmed individually for each automatically controlled partition.

The function is available in the user menu if the user is authorized to get access to at least one partition for which a **non-zero "*auto-arming delay*" time** has been set **PROG**. The value of such a delay may vary from 1 to 255 seconds.

Activation of the timer controlling the particular partition starts the process of counting the auto-arming delay time. Then, countdown of the partition exit delay takes place (if any), followed by arming of the partition.

Arming mode

This function makes it possible to select a special mode of arming, which will allow the user to stay in the facility. The following armed modes are available:

- Full (default)
- Full + bypasses
- Stay
- Stay, delay = 0 (off)

The special armed modes are discussed in section SYSTEM ARMED MODE, page 34.

After selection of the arming mode, the control panel returns to the user function menu, thus enabling the selected partitions to be armed.

Exiting the menu without arming ([∗] key) will cancel the selection made with this function.

Cancel 1st code

This function makes it possible to cancel the decision to enter the first code for arming/disarming the two-code operated partitions. After calling the function, the control panel will display the list of partitions for which the given user has entered the first code, and will start countdown of the code validity time. You should select the required partitions from the list and press [#]. Validity of the first code for arming/disarming the selected partitions will be cancelled.

Change own code

This function makes it possible to change the code of the user, who called this function. For a better safety of the system, it is recommended to change user code periodically (there is always a risk that an unauthorized person might have seen the code).

The control panel requests the user to change his code in the following cases:

- New user – the new user code is known to the person who has entered him in the system, therefore it must be changed. Until the code is changed by the new user, the "*Change code*" message will be displayed. A failure to comply with this request has no consequences in terms of the assigned authority level and/or access to the partitions.

- Expiry of the validity time of the "*Time renewable*" code (see the USERS function).

- Hitting the user code – it may happen when entering a new code by any user that he enters a code already used in the system. Such a "guessed" code will be rejected, however its present user will be informed that it is necessary to change the code.

In the first two cases, the procedure of entering a new code is simple: having started the function, enter the new code and confirm it by pressing the [#] key.

If the code has been guessed, the procedure is more complicated, as it requires confirmation of the code change by the master user or the serviceman: having entered the new code,

confirmed by pressing [#], it is necessary to enter the master code or the service code (in case the master user code has been guessed).

Note: Using the service code is possible after enabling the service access by the master user.

It is possible for the service to activate the option which blocks creating easy-to-guess codes. When this option is activated, the control panel does not allow to create such codes as e.g. 1111, 1234, 1122 etc. These codes will be rejected, and the control panel will wait for another combination of digits.

Note: The control panel does not recognize the code which is identical to the old code as a new one.

Change prefix

This function, which is available to the master user only, makes it possible to change the system prefixes. (see page 27).

The installer, using the corresponding service function (→SERVICE MODE →OPTIONS →PREFIX LENGTH), can determine the prefix length (1–8 digits). If the length of prefixes programmed by the installer is 0, the function forcing the prefixes to be inserted before the user function will be disabled.

If prefixes (NORMAL and DURESS) are used in the security alarm system, the master user of each object must change the default setting of the prefixes and define the time period to the next change (1–255 days).

Masters

This function is used for entering new users with master authority level, changing data related to the existing master user, or for removing the master user. Only the installer having a service code is authorized to use this function. Only one user with such authority level may be assigned to each object. The list of all rights which may be assigned to the master user is identical to that shown in the description of the USERS function. The function makes it possible to select the keypads, locks and card readers which could be operated by the given master user. The introduced changes become valid in the system as from exiting the function by pressing the [*] key and accepting the changes with the key [1].

Note: In order to create a new administrator, an access code must be assigned to him.

Users

This function makes it possible to enter new users in the system, as well as edit or remove the existing ones.

Note: A user will be created after at least one identifier is assigned to him: an access code, proximity card, DALLAS chip or key fob.

For each user, the following can be defined:

Code – a password assigned to the new user (if the new user is authorized to change his own code, he should change it!). The password that has been changed cannot be intercepted in the DLOADX and GUARDX programs.

Telephone code – a code by which the system will recognize the user in the **answering phone calls** function. If this code is not assigned, the user will be unable to check the status of partitions he has access to, and control the REMOTE SWITCH type outputs by phone (see section "Answering Phone Calls"). This code may be also required to control the INTEGRA 128-WRL control panel by means of SMS messages (see section SMS CONTROL in the PROGRAMMING manual).

Partitions – assignment of partitions the user has access to (i.e. he is authorized to arm or disarm them, clear alarms, and start the control functions). The list of partitions shown by this function is limited to the partitions accessible to the user entering a new user.

Type – determination of additional properties of the code – one type can be chosen for the particular code. Below is the list of types:

1. **Normal** – basic code type assigned to the user.

2. **Single** – code to be used once only.

3. **Time renewable** – code for which the validity time is given when entering a new user. Before the validity period expires, the control panel prompts the user with such a code that he must change the code. After the change, the validity period is counted from the beginning. After this user code type is chosen (when entering or editing), the EXISTENCE TIME function appears in menu, where number of code validity days should be defined.

4. **Time not renewable** – code, for which the validity time period is limited to the number of days specified when entering a new user. After this user code type is chosen (when entering or editing), the EXISTENCE TIME function appears in the menu, where the number of code validity days should be defined. The code validity period may be changed by the user who entered a new user, or by the master user.

5. **Duress** – code similar to the normal user type, but the use of it generates an additional event, which is sent to the monitoring station ("Duress alarm"). At the same time, this code may activate a special alarm, as may be required (programmed by the installer). This code is intended for use in the case of attack.

6. **MONO outputs** – code, the use of which switches on the MONO SWITCH type outputs. This function may be executed in partitions assigned to this type of code.

7. **BI outputs** – code, the use of which changes the status of the BI SWITCH type outputs. This function may be executed in partitions assigned to a code of this type.

Note: The control panel makes it possible to define outputs used for controlling different types of equipment, which require controlled access. Such a control is carried out by means of the MONO OUTPUTS and BI OUTPUTS codes. The installer should inform the user which devices are controlled in this way.

8. **Temporary partition blocking** – code which de-activates partition detectors for a certain time period (assigned to the code) when the partition is armed. After this type of user code is chosen (when entering or editing), the BYPASS TIME function appears in the menu, which makes it possible to set the partition bypass time period (1–109min). Using this type of code on LCD keypad will bypass zones in the partitions controlled by the keypad and also assigned to the user, while using this code on the partition keypad will only bypass the zones in the partition to which the partition keypad is assigned. The installer selects zones which can be bypassed by the user. A proximity card or DALLAS chip can be assigned to the code. Use of the code generates a TEMPORARY PARTITION blocking event.

9. **Access to cash dispenser** – code which activates the procedure of access to cash machine. The cash machine is protected 24 hours a day, but activities connected with operating it require bypassing of detectors. The control panel automatically restores detector operation after a strictly determined time period **PROG**.

10. **Guard** – global code, which may be used for making rounds by guard in all partitions of the system. Using this code (entering [CODE][#]) on the partition keypad assigned to the partition, which the specific user has access to, will generate the "Guard round" event and, optionally, activates partition bypass for the time of guard round **PROG**. Entering this code on the electric lock keypad or execution of access by means of a proximity card or DALLAS chip will generate the "User Access" type of event. When the guard has the authority of access to partitions, the partitions may be controlled in

much the same way as with using the Normal type of code (calling function in LCD keypad: [CODE][∗]).

Entering the guard code, or using the guard card/DALLAS chip on the equipment assigned to the partition, in which the guard round is programmed, will start the time countdown to the next guard round from the beginning.

The installer defines the keypads with the use of which the guard should enter his code when making his rounds in the protected facility, and sets the maximum time interval between subsequent guard rounds. The time interval between guard rounds is determined for each partition individually, and also separately when the partition is armed and disarmed.

It is possible to plan the guard rounds only for one of the above situations (for example, when the partition is armed). Missing guard round will generate the "No guard" event which may be signaled at one of control panel outputs.

11. **Schematic** – code allowing the user to get access to the system according to a time scheme. One of the eight time schemes as may be defined by the installer should be assigned to such a code. The access scheme is based on 64 system timers. The user can control the system only when one of the particular scheme timers is active. Also, duration of the actual code must be set (0–254 days) – entering 0 will set an indefinite duration (until canceled).

Rights list indicates which functions are available to the user. The available list of rights is limited by the authority level of the user who has called the Users function: the user being added / edited may not be granted higher authority than that of the person adding / editing the user.

The list of all rights which can be assigned to the new user includes:

- Arming
- Disarming
- Can always disarm
- Partition alarm clearing
- Object alarm clearing
- Other alarm clearing
- Voice messaging clearing
- Arm deferring
- Entering first code
- Entering second code
- Access to blocked partitions
- Code changing
- Users editing
- Zones bypassing
- Clock setting
- Troubles viewing
- Events viewing
- Zones reset
- Options changing
- Test
- Downloading
- Outputs control
- GuardX using
- Clear latched outputs

Notes:

- *The right CAN ALWAYS DISARM defines whether the user always may <u>disarm</u> the system (option selected) or only when he previously armed it himself (option deselected).*

- *The right ACCESS TO BLOCKED PARTITIONS refers to the ACCESS ACCORDING TO TIMER and WITH TEMPORARY BLOCKING partitions. If this option is selected, the partition of this type is always accessible, if not selected, the partition is only accessible when the selected timer is active or the partition blocking time has expired.*

- *The installer may define a list of rights to be instantly assigned to the new user. The other rights, available but not included in the list, will have to be assigned individually by the person entering the new user.*

Keypads – assignment of partition keypads, code locks, and expanders of proximity cards/DALLAS chips readers which the user will be authorized to use.

Proximity cards and DALLAS chips – if there is a proximity card/DALLAS chip reader in the system, a card or chip to be used for access control may be assigned to each code.

Key fobs – if the INT-RX module is connected to the control panel, a key fob can be assigned to each user.

Buttons – a zone which will be violated on pressing a button / combination of buttons (1 & 2 and 1 & 3) can be assigned to each key fob button and the two button combinations. Any zone can be assigned, including a virtual one. The functions are available, if the INT-RX module is connected to the control panel and a key fob has been assigned to the user.

Note: Removal of the key fob will not reset the button settings: after a new key fob has been added to the user, the buttons will control exactly the same zones as the buttons of the removed key fob.

Name – user's name which appears on selection lists, printouts, and when viewing event logs.

Life time/bypass time – parameter to be only programmed for codes with a specified time of validity or activity (see Type = 3, 4, 11 or 8).

Zone bypasses

This function bypasses zones from the moment it is executed. The control panel ignores all information coming from detectors connected to bypassed zones. The function is used in case of a detector (zone) trouble or its incorrect operation. It enables the system to be armed while ignoring the bypassed zones. The bypass entered with this function is cancelled after disarming. Also, zones may be unbypassed with the use of this function. To do so, carry out the reverse operation to bypassing the zones i.e. deselect the selected zones. Zones which cannot be bypassed with this function are to be defined by the installer.

Set time

The function makes it possible to enter the actual time and date in the alarm system. The data are entered in the following format:

time – HH:mm:SS (hour:minute:second),
date – DD:MM:YYYY (day:month:year)

New data should be entered from the keypad by typing the correct digit at the place of the cursor flashing. After the digit is entered, the flashing indicator moves to the next position on the right. The cursor can also be moved by using the ◀ and ▶ keys.

Troubles

This function makes it possible to view the troubles which have occurred in the alarm system. It is only accessible when the [TROUBLE] LED is blinking on the LCD keypad and partition keypads. The list of possible trouble messages is included at the end of this manual in APPENDIX A.

The name of particular element (entered by the installer) appears in messages related to zones, expanders and keypads, in the bottom line of the display. No additional message is displayed at the end of this function.

Note:

- *If any emergency situation occurs in the system, it is necessary to report the fact immediately to the alarm system service person, and rectify the cause of the trouble alarm.*
- *The troubles also include tamper information.*

Events

The function makes possible to scroll the list of events stored in the control panel memory. The events are given in the sequence order of their occurrence. The ▲ key permits going back to the previous event, while the ▼ key – to the next one. If none of these keys is depressed for a few seconds, names related to the particular event will appear on the display, shown alternately with the event description.

The event description contains data displayed in the following format:

date –	DD:MM (day:month),
time –	HH:mm (hour:minute),
identifier –	xxxx (four characters – IDEN) which identifies the number of zone, partition, module, user operating the system, special symbol,
event name –	text in second display line.

Description of meaning of identifiers:

Ser.		user – service code,
Mst[n]	[n]=1–8	user – object master code,
u [n]	[n]=1–240	ordinary user of the system,
k [n]	[n]=0–15	keypad – module connected to the keypad bus or virtual keypad accessible from the program GUARDX,
	0–7	numbers of keypads in the system,
	8–15	numbers of keypads accessible from the program GUARDX, defined as follows: no. of keypad to which the user computer is connected plus 8,
DLrs		keypad connected to the main board RS port, accessible from the program DLOADX,
DLtl		keypad connected to telephone line at the main board, accessible from the program DLOADX,
e [n]	[n]=0–63	expander - module connected to the expander bus (0–31 bus 1, 32-63 bus 2),
p [n]	[n]=1–32	partition,
z [n]	[n]=1–128	zone,
T [n]	[n]=1–64	timer,
Tpar		partition timer,
MnPl		control panel main board.

Some of event descriptions allow readout of two identifiers, for example: partition number and zone number, keypad number and user number, etc. To read the second identifier, press the ◄ key. Press the key again to change the displayed identifier for the previous one. Press the ► key to display the names related to identifiers, and again to restore the event description display. Using one of the ◄ ► keys stops the automatic changeover between displaying the particular event description and the names related to the identifiers. Going over to a next event (key ▲ or ▼) will restore the mode of automatic changeover of the display contents.

Either viewing of all events or viewing of selected events is possible. Also, you may choose partitions to be viewed. The selection is made for partitions controlled by the keypad and, at the same time, accessible to the user, who called the function.

If the user wants to view selected events, he has to mark at least one event type (the ▊ symbol must appear at the name of event type), otherwise the menu function VIEW is not accessible. Marking of a partition is not necessary. When the partitions are not marked, the list of events from all partitions accessible for the user is displayed.

Selection of partitions influences the contents of the list displayed when viewing event types from 1 to 4 (event type numbers according to the list given below).

List of event types:

1. Zone & tamp.al. – alarms for zones, tamper alarms

2. Other alarms – other alarms. fire, auxiliary, technical alarms, no guard round.

3. Arm/Disarm/Clr – arming and disarming, alarm clearing.

4. Zone bypasses – the use of function ZONES BYPASSES, bypass canceling after disarming.

5. Access control – use of keypads and proximity card readers for controlling electromagnetic door locks, door status monitoring, temporary blocking of partitions.

6. Troubles – technical problems in the system, restarts of modules.

7. Functions – calls for user functions to control the operation of the control panel.

8. System – service mode, clock programming, etc.

Note: The messages about the following event types are not displayed in the event lists on the LCD keypad:
- PANIC alarm,
- Silent PANIC alarm,
- DURESS alarm.

No additional message is displayed when exiting the function.

Reset zones

This function causes a momentarily voltage loss on detector power supply outputs with activation memory (e.g., fire detectors). This operation clears memory of detectors.

If some identical detectors are connected to a single output, the activation memory makes it possible to find the detector which triggered the alarm.

Clear latched outputs

The function clear outputs of control panel working in the "latch" mode. It does not affect the **alarm outputs** which remain active until alarm is canceled.

Some outputs in the system may work in the "latch" mode as indicators of the use of selected codes or violation of selected zones. The "latch" type functioning prevents the activated output from returning to its basic state until it is deactivated with the herein described function.

Fire door opening finished

This function is connected with the new option of access control modules (the option makes possible to define the door unblocking rules in case of fire). It ends unblocking of the doors and restores normal operating status in all access control modules.

Change options

This function controls the **"CHIME" type signaling** and allows setting the **partition user timer** which automatically arms and disarms the partition, sets the mode of service code access to the system, and deletes the **service message**.

Keypad chime – signals the violation of any zone (detector) selected by the installer. Some zones may be selected which will activate signaling in the keypad. The chime signal in each keypad may be activated from different zones. The function makes it possible to disable and enable this signaling in the keypad from which it was called.

Outputs chime – the function makes it possible to block the signaling of zone violations from selected partitions on the CHIME type output, provided that the installer permits blocking for those partitions.

Partition timers (see section *System Armed Mode*) allow automatic zone arming and disarming.

For the timer to operate it is necessary to:

1. Start the ACTIVE function and enable it (▯).
2. Select operation mode: *everyday* or *weekly*.
3. Set the timer on and/or off time.

   - In case of the daily cycle timer, after selecting the mode, the "*Every day timer turned on: HH:MM*" text will appear on the display. Enter the hour (HH) and minute (MM) of switching the timer on. Press ▲ or ▼ to enter hour and minutes of switching the timer off.

   - For the weekly cycle timer, the time of switching on and/or off is programmed in the same way, but it should be done for each weekday separately.

     Note: *Entering the nines only will deactivate the given function (arming or disarming).*

     Example: The timer may arm only at a specified time, but disarming must be done by the user himself; automatic partition control may be activated on some weekdays only.

4. Determine the armed mode which should be enabled by timer: 1 – fully armed, 2 - armed without interior, 3 – armed without interior and without entry delay. By default, the control panel assumes that each new timer enables the fully armed mode (type 1).
5. Confirm the entered data by pressing [#]. The name of the timer set will be displayed, together with preprogrammed data.
6. Save the timer settings in the control panel memory. For this purpose, press the [∗] key and accept the changes with the key [1].

No expanders tamper alarms – should any problems occur in communication with the expansion modules, report it to the service. The function allows to temporarily disable the expander tamper control.

Permanent service access – selecting this option will make unnecessary entering the service access time by the master user – the service code will be always accepted by the control panel. This function is accessible to the master user only.

Note: *Setting any "access time" by means of the SERVICE ACCESS user function will disable the option, while selecting the option will reset time limitations entered by this function.*

Service can edit – the option is available to the master user (administrator). If selected, it allows the service to add, edit and delete users in the administrator's object.

Clear service message – it is possible to delete the service message (see *LCD keypad*), which is displayed by the installer using a suitable service function. The installer can define the user(s) authorized to deactivate the display of technical information, such a user getting access to the option described herein.

Tests

The function allows performing various operations to check the system for correct operation.

Partitions – checking the current status of partitions accessible to the given user and operated from the LCD keypad. The partition status is shown in the form of a suitable symbol (character) adjacent to the number (numbers around the keypad display) which corresponds to the partition number in the system. The installer assigns symbols (characters) to particular situations.

It is possible to read the following information of partitions:

b – temporary partition blocking,

? – entry delay,

E – exit delay (less than 10 seconds),

e – exit delay (more than 10 seconds),

P – fire alarm

A – alarm

p – fire alarm memory

a – alarm memory

a – zone is armed,

✚ – violated zones,

· – zone is disarmed, zones OK.

Note: *The characters shown above are default settings which can be changed. The installer should inform how the particular states of zones and partitions will be identified on the display.*

Zones – checking the current status of each zone in partitions accessible to the particular user. Zone status is shown in the form of a symbol (character) next to the number (numbers around the keypad display) which corresponds to the zone number in the system. The installer assigns symbols (characters) to particular situations. Information on zones is displayed, depending on the control panel size, in, 2 or 4 (INTEGRA 128) sets (see p. 11, description of ⊞ [GROUP] LEDs). On starting the function the status of zones 1-32 is displayed. Press the ▶ key to display the status of the next group, or the ◀ key to display the previous group. The amount of available information depends on the type of detector connected to the zone. The detectors configured as 2EOL provide the most information.

It is possible to read the following information of zones:

b – zone bypass,

l – trouble "long violation",

f – trouble "no violation",

T – tamper alarm,

A – alarm,

█ – zone tamper,

✚ – zone violation,

t – tamper alarm memory,

a – alarm memory,

· – zone OK.

Supply voltages – the function enabling power supply voltage level to be checked for individual expanders. The display shows the expander name and approximate power supply voltage level for the given expander.

Radio devices – the function makes it possible to check the radio signal level in the ABAX wireless system devices working in conjunction with the control panel.

Zone Test – the function makes it possible to check the working capacity of zones (detectors and other devices connected to the zones). The testing may include the burglary and fire zones. Duration of the test must not exceed 25 minutes. During the test, violation of a zone

can be signaled by sound in the keypad. The test results can be viewed (→Vɪᴇᴡ ʀᴇsᴜʟᴛs), and also cleared after completion of the test (→Cʟᴇᴀʀ ʀᴇsᴜʟᴛs). Pressing the ▶ key when viewing the test results will change the display mode from descriptive to graphic. The displayed symbols have the following meaning:

· - zone was not violated,

▦ - zone was violated.

Note: *Beginning of the zone test in any partition will start the test mode in all ABAX system wireless devices which are used together with the control panel.*

The zone test can be terminated before expiry of the programmed time by using the Fɪɴɪsʜ ᴛᴇsᴛ command. Maximum 6 seconds can elapse from the moment of giving the command to the control panel to the actual end of the test (during that time the Fɪɴɪsʜ ᴛᴇsᴛ command will still be visible in the menu).

Manual test transmission – the function generates the event which starts the procedure of message transmission to the monitoring station (a code sent with the system identifier).

Battery test –after launching this function, the control panel will generate an event informing about the status of batteries of mainboard and hardwired expanders with power supply unit. Additionally, the status of zones type 60. Tᴇᴄʜ.-Bᴀᴛᴛᴇʀʏ ʟᴏᴡ is analyzed. The function is only available to the service.

Monitoring station test (1A,1B,2A,2B) – the function makes it possible to carry out the test transmission to the monitoring station (to each available telephone number separately). The test transmission is carried out with simultaneously tracking the data transmission process. Messages on the keypad display indicate the current activity. Practically, this function is used by the installer when starting communication with a monitoring station.

Messaging test – the function enables carrying out the messaging test. To this effect you should choose one of the telephone numbers programmed in the control panel and one of the 16 messages (navigate throughout the function using the ▼ and ▲ keys) and press the [#] key. If the messaging is working OK, the control panel will call the indicated number and play back the message.

Answering test – if started when answering the phone call, the function displays information on the number of rings received by the control panel, and on answered phone call.

Prox. card test – the function makes it possible to check the proximity card number and determine to whom the tested card belongs (if the card belongs to a user of the system).

Viewing masters – the function is accessible to the master user only. It makes it possible to check in which objects the master users are created. It allows to control the number of users who are able to grant permission to access the system in the service mode.

Keypad name – the function shows on display the name of particular keypad (default or installer assigned).

ST program version – this function displays on the keypad monitor the number of current firmware version of the processor handling the mainboard ABAX wireless system and the mainboard zones. The function is only available in the INTEGRA 128-WRL control panel.

GSM IMEI/v/sig. – this function makes it possible to check the level of signal received by the GSM telephone antenna, individual identification number of the telephone, and the telephone version. The ▲ and ▼ keys are to be used for scrolling through the displayed information. The function is only available in the INTEGRA 128-WRL control panel.

File in DLOADX – the function displays the date and time of writing the computer data (DLOADX program) to the control panel, as well as the name of data file.

Panel version – the function shows the current control panel firmware version number on the keypad display.

IP/MAC ETHM-1 – the function displays the IP address and MAC number of the ETHM-1 module connected to the control panel.

Module versions – the function makes it possible to check the firmware version of the devices connected to keypad/expander bus.

Note: *Not all modules are supported by this function.*

Time synchronization – the function makes it possible to manually initialize synchronization of the control panel clock with the time server (automatic time synchronization takes place everyday at 05:30). It is available to the installer or administrator. It refers to the INTEGRA 128-WRL control panel and any other panel to which the Ethernet module is connected. The time synchronization server address must be programmed in the control panel.

Note: *If the time synchronization is going on (initialized automatically or manually), the function is unavailable.*

No additional message is displayed at the time of exiting the function.

Service access

The function allows the installer to access the system by means of the service code. It is only accessible in the master user menu. It requires some data to be entered i.e. the number of hours during which the alarm system will be available to the installer (service). After that time the access to the system will be blocked.

Entering "zero" with this function (in place of number of hours), when the system is open to the service, will automatically block the access.

The access time countdown is running whether the service mode is started or not, and can only be interrupted by disconnecting power supply (230V mains and battery). By calling this function you can check how much time is left (out of the access time limit granted by the master user) – "00" indicates that the last hour is expiring.

Open door

By using this function it is possible to open any door controlled by the alarm system (CARD READ – EXPANDER type outputs, partition keypads, code locks and proximity card/DALLAS chip reader expanders).

Outputs control

The function is available to the users with assigned CONTROL right. It allows the user to enable/disable single outputs, type MONO SWITCH, BI SWITCH, REMOTE SWITCH, SHUTTER UP and SHUTTER DOWN, and, thereby, to operate particular devices. In order to make the output available for control, it must be assigned by the installer to one of the 4 output groups. An individual name can be assigned to each group.

The function can be started from LCD keypad, without entering of any code, by pressing successively the [8] and [#] keys **PROG.**

Starting the function by the user will display a list of output groups. You can scroll the by means of the ▲ and ▼ keys. After selecting one of the output groups and pressing the [#] or ► key, a list of controllable outputs will be displayed. Press the ◄ key to return to the group list.

Note: *If the outputs are only assigned to one output group, starting the OUTPUTS CONTROL function will not be followed by displaying the list of output groups in the keypad, but immediately by the list of controllable outputs.*

To quit the function, press the [*] key.

Controlling the MONO SWITCH type of output

The output status is indicated on the display in the following manner:

   · – output inactive (disabled),

   ⊞ – output active (enabled).

The output is controlled by using the ▶ or [#] key. Press the ▶ key to activate the output for the time programmed in the control panel. Press the [#] key to define the output cutoff time (irrespective of the time programmed in the control panel by the installer). Having defined the output cutoff time (the ◀ and ▶ keys enable changing position of the cursor, and the numerical keys – entering a new time setting), press the [#] again to activate the output. Activation of the output is signaled by four short beeps and one long beep. You can disable the output by pressing any numerical key.

Controlling the BI SWITCH type of output

The output status is indicated on the display in the following manner:

   · – output inactive (disabled),

   ⊞ – output active (enabled).

The output state can be toggled by using the [#] or ▶ key. To change over the output state to the inactive one, press any numerical key. Activation of the output is signaled by four short beeps and one long beep. Deactivation of the output is signaled by three short beeps.

Controlling the REMOTE SWITCH type of outputs

The control is effected by means of the [#] or ▶ key. Pressing the key will activate the output for a preprogrammed period of time or toggle the status of the output. It depends on the output settings. The REMOTE SWITCH type of output will work similarly as the MONO SWITCH, if its preset operation time is different from 0, or as the BI SWITCH, if the preset operation time is equal to 0 or the LATCH option has been enabled. Also, you can always disable the output by pressing any numerical key.

In case of the REMOTE SWITCH type of outputs, the output status can also be displayed on the basis of zone status, hence the meaning of displayed symbols depends on output settings:

   · – output inactive (off) or zone non-violated (device controlled by inactive output),

   ⊞ – output active (on) or zone violated (device controlled by active output).

Note: If the output works in the same way as the MONO SWITCH, and its status is not displayed on the basis of zone status, then repeatedly pressing the [#] or ▶ key with the output active will change the symbol displayed, but the output will remain active for the preprogrammed period of time.

Controlling the SHUTTER UP and SHUTTER DOWN type of outputs

The SHUTTER UP and SHUTTER DOWN type of outputs are always programmed as consecutive and in pairs. Displayed on the list of outputs is only the name of output programmed as SHUTTER UP. The current status of the outputs is indicated on the display next to the output name in the following way:

   · – outputs inactive (off),

   ↑ – SHUTTER UP output active (on),

   ↓ – SHUTTER DOWN output active (on).

Only one of the outputs can be activated at a time. After pressing the [#] or ▶ key, a line mark appears under the field, in which the output status is displayed. Pressing the ▲ key will activate the SHUTTER UP output (if both outputs were inactive) or toggle the SHUTTER DOWN output to its inactive state (if it was active). Pressing the ▼ key will activate the SHUTTER DOWN output (if both outputs were inactive) or toggle the SHUTTER UP output to its inactive state (if it was active). Irrespective of which output is currently active, it will be deactivated by

pressing any numerical key. When the control is over, press the [#] or ◄ key to go back to the list of controllable outputs (the line mark under the output status field will disappear).

Service mode

The function starts a special control panel operation mode and displays the list of SERVICE FUNCTIONS. The control panel does not signal alarms from most of zones (including tamper alarms), it only responds to violation of some zones armed for 24 hours and to alarms from partition keypads and code locks (hold-down functions). In this operation mode, the control panel programming is possible with the use of **DLOADX** program via RS port (on the mainboard) and through the telephone line. The control panel remains in the service mode until exiting it with the END OF SM function (from the service functions list).

The function is accessible after enabling the service access by the master user and entering the service code.

Take SM over

The function makes it possible to switch over the operation control of the control panel being in the service mode to a keypad other than that from which the service mode was called. The function, which is accessible to the service only, is intended for use in large facilities, with several keypads installed, to facilitate the installer's work.

Downloading

This function refers to communication with the service computer. Availability of the function may depend on the settings programmed in control panel by the installer.

Start DWNL-RS – the function starts communication through the RS-232 port of control panel. Available to the service only.

Finish DWNL-RS– the function ends communication through the RS-232 port of control panel. Available to the service only.

Start DWNL-MOD. – the function starts communication through the external modem (analog, GSM or ISDN)).

Start DWNL-TEL – the function starts communication through the built-in 300 bps modem.

Start DWNL-CSD – the function starts communication through the built-in GSM communicator, using CSD technology. **only INTEGRA 128-WRL**

Start DWNL-GPRS – the function starts communication through the built-in GSM communicator, using GPRS technology. **only INTEGRA 128-WRL**

8. CONFORMANCE TO CLC/TS 50131-3 REQUIREMENTS

If the control panel has been configured in accordance with the requirements of CLC/TS 50131-3:

- the maximum number of events generated by a single source is 3;
- at least 6-digit codes must be used, to make minimum 100 000 codes available to every system user. The total number of combinations when using the 6-digit codes is 1 000 000, however in practice it is lower due to combinations chosen by other users and because simple codes (like 123456, 111111 or 111222) must not be used. The total number of available codes can be determined as follows: $t=10^n$, where n=number of digits in the code;
- the system may not accept simple codes (e.g. 111111 or 123456);
- the EDIT USER authority cannot be assigned to ordinary users;
- the master user (administrator) should limit the service access time.

9. APPENDIX A

List of messages displayed in keypad when viewing the troubles:

```
OUT[n] trouble:          [n] =1–4 – number of control panel output
AUX trouble
Keypad supply trouble
Expander supply trouble
System battery trouble
System AC (230V) trouble
Data bus DT1 trouble
Data bus DT2 trouble
Keypad data bus DTM trouble
System real-time clock trouble
No DTR signal on RS printer port
No system battery
Modem initialization error
Modem answers ERROR on AT...
No voltage on telephone line
Zones circuit trouble (ST)
Broken tone on telephone line
No connection with MS 1 (TEL)
No connection with MS 2 (TEL)
No tone on telephone line
1st monitoring station trouble
2nd monitoring station trouble
RTC chip trouble
CRC error in RAM memory
INTEGRA panel restart
No connection with MS 1 (ETHM)
No connection with MS 2 (ETHM)
No connection with MS 1 (GSM)
No connection with MS 1 (GSM)
Time server trouble
```
`GSM module initialization error` [only INTEGRA 128-WRL]
`Jam of main panel` [only INTEGRA 128-WRL]

`No 230V vis.m.[n]:`	[n]=0–7	number of mimic board on keypad bus
`Batt.trbl.vis.[n]:`	[n]=0–7	number of mimic board on keypad bus
`No batt vis.m.[n]:`	[n]=0–7	number of mimic board on keypad bus
`No LCD [n]:`	[n]=0–7	keypad number
`Changed LCD [n]:`	[n]=0–7	keypad number
`LCD [n] tamper:`	[n]=0–7	keypad number
`No LAN.cable [n]:`	[n]=0–7	number of ETHM-1 module on keypad bus
`LCD [n] ini.err.:`	[n]=0–7	number of device on keypad bus
`Trouble zone[n]:`	[n]=1–128	zone number
`Tamp.z.vio. [n]:`	[n]=1–128	zone number
`Long viol. z.[n]:`	[n]=1–128	zone number
`No violat. z.[n]:`	[n]=1–128	zone number
`No AC exp.[n]:`	[n]=0–63	expander number
`Batt.trb.exp.[n]:`	[n]=0–63	expander number

```
No bat. exp.[n]:        [n]=0–63  expander number
Exp.[n] restart:        [n]=0–63  expander number
No expander [n]:        [n]=0–63  expander number
Changed exp.[n]:        [n]=0–63  expander number
Exp. [n] tamper:        [n]=0–63  expander number
Reader A exp.[n]:       [n]=0–63  expander number
Reader B exp.[n]:       [n]=0–63  expander number
Overload exp.[n]:       [n]=0–63  expander number
BUS shrt.exp.[n]:       [n]=0–63  expander number
Jam of r.exp.[n]:       [n]=0–63  expander number
Low batt. z.[n]:        [n]=1–128 zone number
No radio z.[n]:         [n]=1–128 zone number
No rad. out.[n]:        [n]=1–128 output number
Zn. bypass [n]:         [n]=1-128 zone number
Zn. [n] tamper:         [n]=1–128 zone number
viol. of zone [n]:      [n]=1-128 zone number
V.zn. trbl. [n]:        [n]=1-128 zone number
Low batt.u. [n]:        [n]=1-248 user number
```

10. APPENDIX B

EXPLANATION OF SOME TECHNICAL TERMS

All definitions apply to the alarm system based on the INTEGRA control panel.

STARTER The program activated in the control panel after power-up to check integrity of the basic program stored in FLASH memory and to enable a new control panel firmware version to be loaded into this memory.

FLASH memory The memory, where the control panel basic program is stored. It is cleared electrically and its contents can be replaced with the use of computer.

2402 memory Additional non-volatile memory, where important system parameters are stored (for example, master user codes, etc.).

DLOADX The computer program which enables programming the control panel settings with the use of computer; the so-called service program.

GUARDX The computer program which enables operation of the alarm system with the use of computer; the so-called user program.

object A group of partitions forming an independent alarm system. Based on the INTEGRA control panel, one, four or eight such groups can be created, depending on the mainboard size.

partition A group of zones supervising a separate part of the facility Arming and disarming of such a group is performed simultaneously. The INTEGRA alarm control panel allows to create 4, 16 or 32 independent partitions, depending on the mainboard size.

zone A pair of contacts on the control panel mainboard or module board (connected to the control panel by means of a bus), to which detectors are connected.

zone violation A change of the zone status when the detector is activated (e.g. zone contact shorting to ground or opening, change of detector parametric resistance at least by 20%).

output A pair of contacts on the control panel mainboard or expander module boards, where the voltage is controlled by the control panel.

relay output An electromagnetic switch located on the expander board, controlled (switched over) by the control panel.

remote switch An output the status of which can be controlled by means of a telephone and DTMF signals.

bus A group of wires to which the modules interfacing with control panel mainboard are connected. The INTEGRA 64 and INTEGRA 128 control panels come with three buses. One bus is used to connect LCD keypads, and two buses – to connect expanders.

expander An electronic device used to extend control panel capabilities. There are expanders for increasing the number of control panel zones and/or outputs. The expanders include also partition keypads, code locks and proximity card readers. It is possible to connect up to 64 expanders to the control panel.

11. APPENDIX C

This appendix contains **typical descriptions** of the operations to be carried out when calling some user functions. Since the **user function menu** depends on programming by the installer and particular user authority level, the following keypad displayed texts may look different in practice and are shown here for reference only.

Example 1: ARMING (part I: [CODE][#])

- partition No. 2 named "Book-keeping", belonging to Object 1; user – the master user.

[1][1][1][1][#]   Enter the user code (the factory set master code for Object 1). You can also enter the code of any user, who has access to Partition 2 and authorization for arming.

```
Change your code
       (press #)
```

This message is displayed when the user has the right to change the code and **should** make this change (see *User Manual, INTEGRA*, description of function *Change own code*).

[#]   Confirm the message.

```
→Arm all
 Arm selected
```

By pressing [#] or ▶, all partitions accessible to the user will be armed.

*Note: If some of partitions accessible to the user are already armed, the control panel will only make available the functions of **disarming**, but if just one partition is armed, it will be disarmed. To arm the remaining partitions, first call the user function menu by typing [CODE][∗] (see continuation of the example: ARMING (part II) below).*

▼   Indicate **Arm selected** function.
▶ or [#]   Call the function.

```
What to arm:
Storeroom
```

▼ or ▲   Scroll through the list with partition names. Press one of these keys as many times as needed to display the name of the partition required (partition 2 – **Book-keeping**).

After the function is called, the control panel will display names of partitions (factory set or entered by the installer), which may be armed by the user. Press key ▶ to move to the **graphic mode** of partition selection.

[3]   Indicate the partition selected for arming (▓ mark at the right-hand side of the display) using any numeric key.

```
What to arm:      ▓
Book-keeping
```

You may select for arming (mark) any number of partitions accessible to you. Also, you may cancel marking for partitions selected earlier.

[#]   End of selection and arming of all marked partitions.

```
System armed
```

When this message appears, countdown of the time for leaving is started in the armed partitions.

GRAPHIC MODE

There are two ways of selecting the partitions to be armed:

• using names – as described above,

- using partition numbers – in the graphic mode described below.

This is the mode for the user who exactly knows the numbers of partitions in the alarm system, or the user, who wants to quickly check how many partitions are not armed yet.

▶ ◀   These keys are used to select partitions in the graphic mode.

▲ ▼   These keys are used to select partitions in the basic mode (using partition names).

It is possible to toggle between modes as many times as necessary.

```
. . . .
.....
```

Dots next to numbers 1‒32 indicate partitions, which may be armed (1, 2, 3 and 4). The cursor under a dot allows to select the partition, which may be marked for arming.

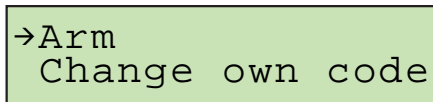▶   Move cursor under Partition 2 field.

[3]   Mark the partition for arming using any numeric key.

```
. ▓ . .
.....
```

Pressing the [#] key after selection is made will arm the partitions, independently of the display mode.

ARMING (part II: [CODE][*])

[1][1][1][1][*]   Enter code – calling the user function menu.

```
→Arm
  Change own code
```

[#] or ▶   Select the function indicated with arrow – you will be moved to the stage of partition selection for arming as described in detail in the first part of this example.

*Note: When all partitions accessible to you are armed, the **Arm** function will not be shown in the menu (on the keypad display). If some partitions in the object are already armed, the following texts will appear on the display:*

```
→Disarm
  Arm
```
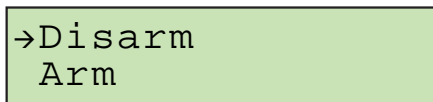
In this situation, do the following:

▼   Indicate the **Arm** function.

[#] or ▶   Select the function indicated with arrow – you will be moved to the stage of partition selection for arming, as described in detail in the first part of this example.
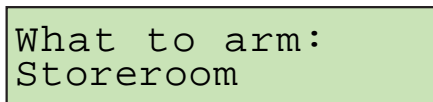
```
What to arm:
Storeroom
```

Assuming (for this example) that Partition 2 (Book-keeping) has been already armed, then, after calling the **Arm** function again and entering the graphic mode of partition selection, the keypad display will be as shown below:

```
.   . .
.....
```

It is possible now to arm Partitions 1, 3 and 4.

Example 2: DISARMING (part I: [CODE][#])

- Partition No. 2 named "Book-keeping", belonging to Object 1; user – the object master.

Note: The function is only available to the user when at least one of partitions accessible to him is armed.

[1][1][1][1][#]   Enter the user code (factory set master user code for Object 1).

You can also enter the code of any user who has access to Partition 2 and is authorized for disarming.

```
→Disarm all
 Disarm selected
```

By pressing [#] or ▶, all partitions armed and accessible to the user will be disarmed.

Note: If only one partition is armed, it will be disarmed immediately after pressing the [#] key (and the end message will be displayed). If an alarm is signaled for the partition, it may be cleared together with disarming.

▼   Indicate the **Disarm selected** function**.**

▶ or [#]   Call the function.

```
What to disarm:
Workroom 1
```

▲ or ▼   Scroll through the list with partition names. Press one of these keys as many times as needed to display the name of the required partition (partition 2 – **Book-keeping**).

After the function is called, the control panel will display names of partitions (factory set or entered by the installer) which may be disarmed by the user. Press ▶ to move to the **graphic mode** of partition selection (selection in the graphic mode is done in the same way as when arming).

[3]   Mark the partition selected for disarming (█ mark at the right-hand side of display) using any numeric key).

```
What to disarm:█
Book-keeping
```

You may select for disarming (mark) any number of armed partitions which are accessible to you. You may also deselect partitions selected earlier.

[#]   End of selection and disarming of all partitions marked.

```
System disarmed
```

DISARMING (part II: [CODE][∗])

[1][1][1][1][∗]   Enter code – call the user function menu.

```
→Disarm
 Change own code
```

[#] or ▶   Select the function indicated with arrow – you will be taken to the stage of partition selection for disarming, as described in detail in the first part of this example.

```
What to disarm:
Workroom 1
```

Note: If only some partitions in the object are armed, the following texts will appear on the display:

```
→Disarm
 Arm
```

In this case you should act in the same way as when all accessible partitions are armed.
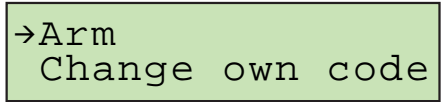
Assuming that Partition 2 is disarmed, and Partitions 1, 3 and 4 are armed, the pattern shown on keypad display in the graphic mode may look like the one below:

```
.  ..
███
```

Example 3: ZONE BYPASSING

- bypass Zone No. 4 named **Entrance door** and Zone No 49 named **PIR secr.office**; the user code: 38407.

[3][8][4][0][7][∗] Enter code – calling the user function menu.

```
→Arm
 Change own code
```

Using most of the user functions (except for the key "hold-down" and quick arming functions) starts with entering code and pressing [∗] (or [#] – Example 1 and 2).

▼ or ▲   Scroll through the list with accessible function names. Press one of these keys as many times as needed to display the name of proper user function next to the arrow.

```
 Change own code
→Zone bypasses
```
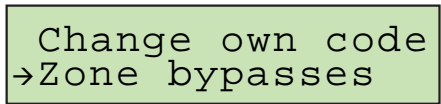
[#] or ▶   Select function indicated with arrow – you will be moved to the stage of selecting zones (detectors) to be bypassed.

```
Zone bypass:
DUAL conf. room
```
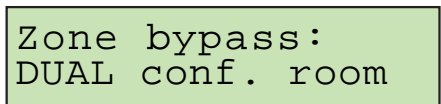
▼ or ▲   Scroll through the list with zone names. Press one of these keys as many times as needed to display the name of the first zone to be bypassed (**Entrance door**) next to the arrow).

```
Zone bypass:
Entrance door
```
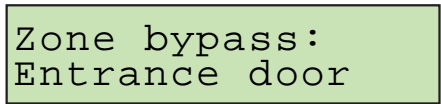
[9]   Mark the zone selected for bypassing (█ mark on the right-hand side of display) using any numeric key.

```
Zone bypass:     █
Entrance door
```
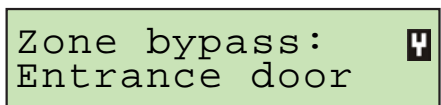
▼ or ▲   Scroll the list with zone names to select next zone (detector) for bypassing (**PIR secretary office**).

[9]   Marking of the zone selected for bypassing.

```
Zone bypass:    █
PIR secr. office
```
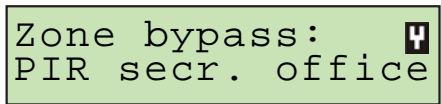
[#]   End of selection and bypassing the status monitoring for all zones (detectors) marked).

```
Zones bypassed
```
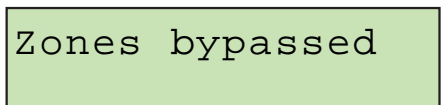
Note: Zone bypass is cancelled after disarming of the partition to which the bypassed zones belong.

Example 4: ZONE STATUS VIEWING

- call function by holding down the key [1].

[1]   Call the function of control panel zone status viewing. Hold down the key for approximately 3 seconds – information on the first 32 system zones will be displayed in the graphic mode.

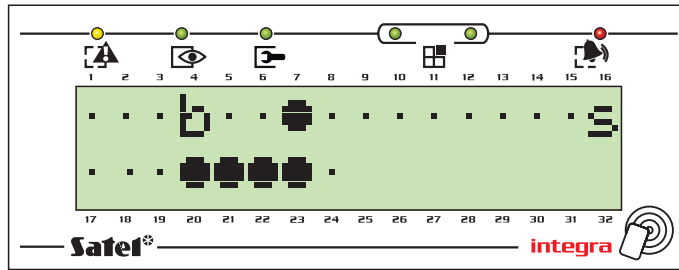The extinguished ⊞ [GROUP] LEDs indicate that the first set of zones Nos. 1–32, is displayed. The symbols representing zone status – see description of the *Tests* function.

◀   Move to the fourth zone set display, zones 97–128 (INTEGRA 128) / INTEGRA 128-WRL).
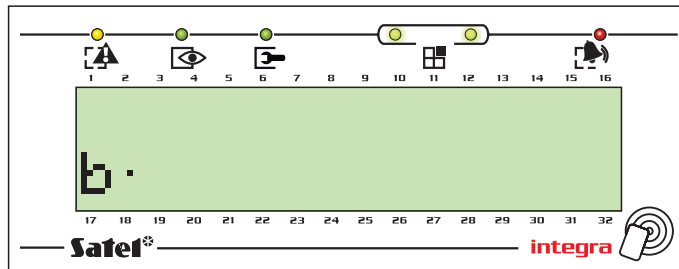
The two lit ⊞ [GROUP] LEDs indicate the set of zones Nos. 97–128. The lower line displays the status of zones in the keypad with address "0". The zone number is to be calculated as described on p. 11.

The status of all zones with breakdown into groups can be displayed by pressing ◀ or ▶. The INTEGRA 64 can display the status of all zones in two groups, and the INTEGRA 128 / INTEGRA 128-WRL in four groups.

[∗]   End the function.

Key functions and LED signaling on LCD keypad (details – see pages 8–12).

TROUBLE – indicates detection of technical problem in the system – to check, press and hold key [7] for 3 seconds

SERVICE – blinking informs that the service mode is activated

LCD DISPLAY:
date and hour;
partition status (p. 10)

ARMED
steady light – all partitions operated by the keypad are armed; blinking light – some partitions are armed

GROUP – zones or exp. bus
0 – OFF, 1 – ON
00 – 1–32 or bus 1
01 – 33–64 or bus 2
10 – 65–96
11 – 97–128

ALARM
steady light – alarm in operated partition; blinking light – memory of partition alarm

☼ – hold down for 3 sec.
to activate **PANIC ALARM**

[CODE]+[∗] – call user function menu
[CODE][∗][1] – change own code
[CODE][∗][2] – users/masters
[CODE][∗][4] – zone bypasses
[CODE][∗][5] – events
[CODE][∗][6] – set time
[CODE][∗][7] – troubles
[CODE][∗][8] – outputs control
[CODE][∗][9] – service mode
[CODE][∗][0] – downloading

Moving through the menu.
▶ ◀ – hold down for 3 sec. to start scrolling through names of zones which triggered alarm.
▲ – hold down for 3 sec. to start scrolling through names of partitions where alarm occurred.
▼ – Press briefly to view names of partitions shown on display.

1] to [6] – hold down for 3 seconds to get **access to the viewing functions**

[1] – zone status viewing
[4] – partition armed status viewing
[5] – alarm memory viewing
[6] – trouble memory viewing
(see: descriptions of functions TESTS and EVENTS)

[7] – hold down for 3 seconds to **display messages on currently detected troubles**

[8] – hold down for 3 seconds to switch keypad chime signaling ON/OFF
[8][#] – quick control

[9] – hold down for 3 seconds to toggle between partition status display modes: **selected/all**
[9][#] – end of exit time countdown

[0] – hold down for 3 seconds to activate **AUXILIARY ALARM**

🔔 or **[ok]** – hold down for 3 seconds to activate **FIRE ALARM**

[0][#] – arming
[HASŁO][#] – arming/disarming

12. HISTORY OF THE MANUAL UPDATES

Given below is a description of changes as compared with the manual for the control panel with firmware in version v1.00.

DATE	FIRMWARE VERSION	INTRODUCED CHANGES
2005-09	1.03	• Supplemented information on the ETHM-1 module (p. 6, 57). • Added information on optional blocking of keypad (p. 12), partition keypad (p. 19) and code lock (p. 25) after three wrong codes are entered. • Modified section on the proximity card/DALLAS chip readers (p. 25). • Added information on optional blocking of the proximity card/DALLAS chip reader after three attempts to read in a card/chip unknown to the control panel (p. 16, 26). • Described modification of the method to change the prefix length (s. 27). • Added section "Proximity cards/DALLAS chips" (p. 28). • Changed and supplemented section "System armed mode " (p. 32). • Added information on inactive downloading function being automatically quitted by the control panel (p. 38). • Supplemented the diagram showing the user function menu (p. 39). • Description of the "Tests" user function supplemented with information on new functions: "Radio devices (p. 55) and "IP/MAC ETHM-1" (p. 57). • Supplemented the list of messages displayed in the keypad when viewing the troubles (p. 60).
2006-07	1.04	• Manual supplemented by adding information on icons introduced in keypads, partition keypads and code locks (instead of previous verbal descriptions of LEDs). • In connection with offer extension and changes in trade names of keypads, and also appearance of new functions, sections on LCD keypads (p. 8–16), partition keypads (p. 16–20) and code locks (p. 24–25) have been modified. • Supplemented information on cases when partitions cannot be armed (p. 33). • Added information on optional trouble review prior to arming (p. 33). • Modified and supplemented description of viewing violated/bypassed zones before arming (p. 33). • Added information on optional reduction of the exit delay time (p. 33). • Added description of alarm clearing methods (p. 35). • Added information on viewing cleared alarms (p. 36). • Added information on reset of messaging to other users after reception of the message by the indicated user (p. 36) • Supplemented diagram showing the user functions menu (p. 39). • Added descriptions of new user functions: "View cleared alarms " (p. 45), "Restore system" (p. 45) and "Open door" (p. 57). • Changed description of the user function "Change options", by modifying information on function "Outputs chime" (p. 54). • Changed description of the user function "Tests" by deletion of information on the functions "LCD keypads" and "Expanders", by modifying information on functions "Partitions" (p. 54) and "Zone test" (p. 55) and by adding information on functions "Messaging test" (p. 56) and "Module versions" (p. 57). • Changed and supplemented description of the user function "Outputs control" (p. 57). • Added section regarding CLC/TS 50131-3 requirements (p. 59). • Supplemented list of messages displayed on keypad when viewing the troubles (p. 60).
2007-08	1.05	• Information on signaling of entry delay countdown in partition keypads has been modified (p. 18). • Information on INT-SCR-BL multifunctional keypad has been added and operating modes available for it have been described (p. 20-23). • Information has been added regarding modification of the arming procedure in LCD keypad in case when arming was impossible (p. 33). • Added information on defining the armed mode which is to be enabled by means of a timer (p. 35, 54).

		• Supplemented the diagram showing user functions menu (p. 39). • Added information on the option to assign key fobs to the users (p. 51). • Added information on the option to assign zones to key fob buttons (p. 51). • Added information on the option to terminate zones test before expiry of programmed time (p. 56). • In description of the "Tests" function, information on the "Time synchronization" function has been added (p. 57). • Supplemented list of messages displayed on keypad when viewing the troubles (p. 60).
2007-10	1.05	• Information on new shortcut keys for arming the system added (p. 8, 19, 21, 34). • Description of quick alarm triggering by means of code lock modified (p. 25). • Information on user editing by the service added in section "Codes and users": (p. 26). • Section "Proximity cards / DALLAS chips " modified and supplemented (p. 28). • Section "System armed mode" modified and supplemented (p. 32). • Scheme of user functions menu supplemented (p. 39-44). • Information on "Edit in DloadX" option added in "Change options" description (p. 54).
2008-06	1.06	• Manual has been extended to include information on INTEGRA 128-WRL control panel. • Section "Control panel performance" has been modified and supplemented (p. 6) • Information on new mode of arming (full+bypasses) has been added (p. 8, 13, 19, 21, 34, 34). • Section on APT-100 key fobs supported by ABAX wireless system has been added (p. 29). • Information on capability for bypassing violated or tampered zones during arming has been added (p. 33). • Section "Alarm messaging by telephone" has been modified and supplemented (p. 36). • Section "Answering phone calls" has been modified and supplemented (p. 36). • Section on controlling the INTEGRA 128-WRL control panel by SMS messages has been added (p. 38). • Diagram showing the user functions menu has been supplemented (p. 39-44). • Information on telephone code has been supplemented (p. 48). • Description of "Fire door opening finished" function has been added (p. 53). • In description of "Change options" function, information has been added on "Service can edit" option, which has replaced "Edit in DloadX" option (p. 54). • In description of "Tests" function, information on functions "Battery test" (p. 56), „Proximity card test" (p. 56), „ST program version" (p. 56) and „GSM IMEI/v/sig." (p. 56) has been added and description of "Time synchronization" function has been modified and supplemented (p. 57). • Description of "Output control" function has been modified and supplemented (p. 57). • Description of "Downloading" function has been modified and supplemented (p. 59). • List of messages displayed in the keypad when viewing trouble memory has been supplemented (p. 60).