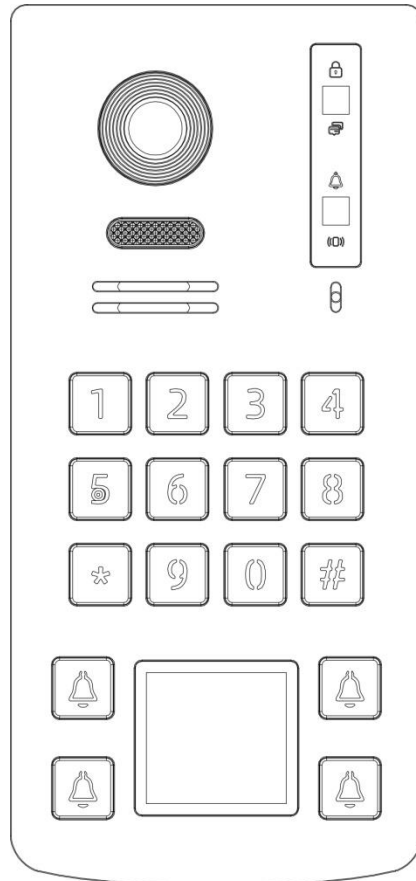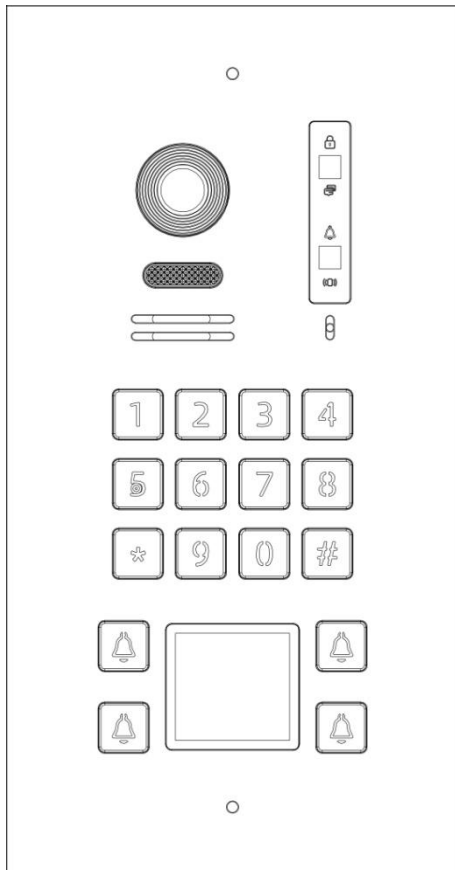# 2-Wire Door Station
User Manual

- Thank you for purchasing our products.

- Please read this User Manual carefully before using this product.

- Products are subject to change without prior notice.

Index

VER:V1.0

1. Product Features and Main Function

◆ Digital 2 wire, easy wiring

◆ Support 2 locks

◆ 1080P HD color CMOS camera

◆ Night vision with automatic lumens adjustment

◆ Support surface mounted

◆ Aluminum housing with IK07 & IP55 high protection level

◆ Support RFID unlocking (ID card)

◆ Support connecting an exit button

◆ Support door status checking

◆ Tamper alarm

2. The Function and Name of each part

2.1. The name of each part

Surface mounted
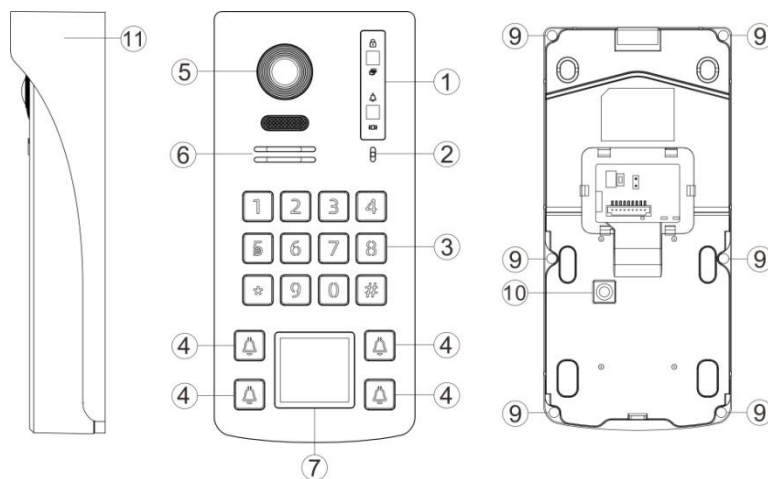
Flush mounted
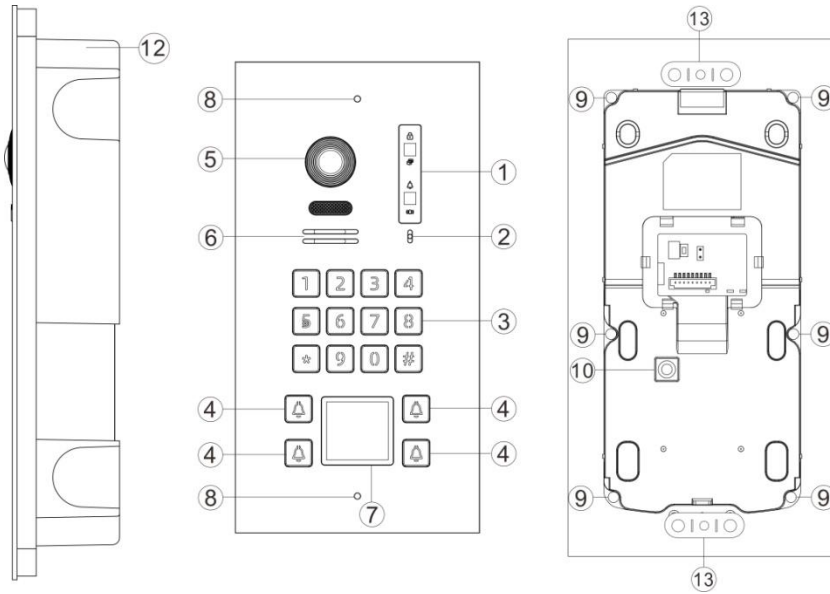
Item	Name	Item	Name
（1）	Status indicator	（2）	Microphone
（3）	Pushbutton（0-9 as digit，*as Back button，#as OK button）	（4）	Call button
（5）	Camera	（6）	Speaker
（7）	Nameplates/ID Card reader	（8）	Screws holes to lock rain hood
（9）	Screw for locking front panel	（10）	Tamper
（11）	Rain hood	（12）	Wall Box
（13）	Wall Box accessories		

Indicator for Unlock

Indicator for answering

Indicator for calling

Indicator for reading a card
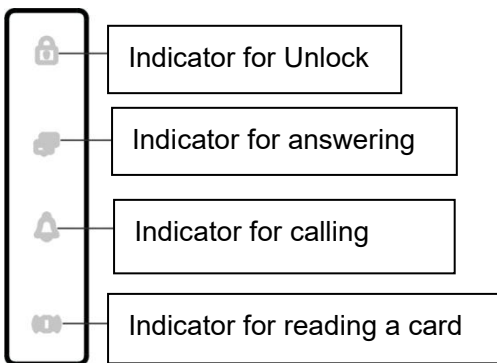
2.2. Terminal Description
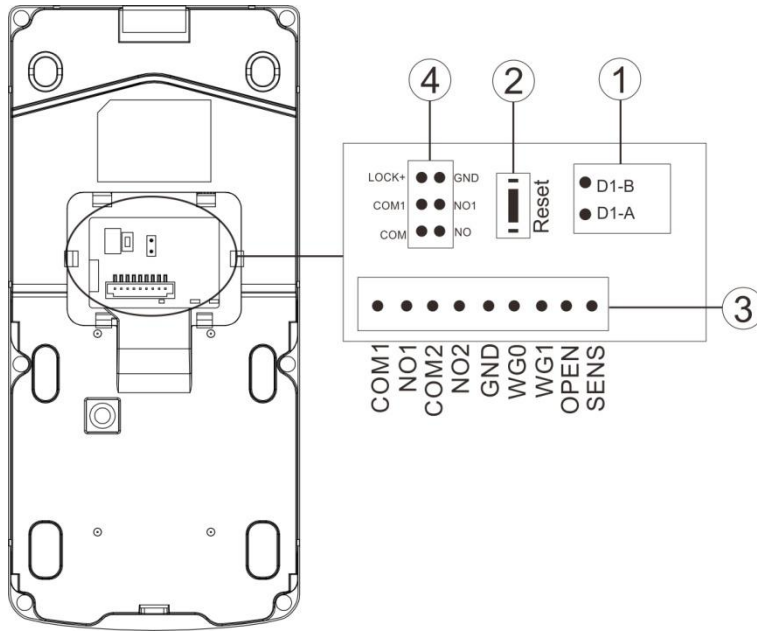
（1）**2-Wire BUS Port:** Connect the 2-wire BUS. No polarized.

（2）**Password Reset Button:** Reboot the door station, then press and hold on the reset button within 1 minute. The password resets successfully after two beeps.

（3）**Connection Port**

D-A	2 Wire BUS	COM2	Gate lock
D-B		NO2	
WG0	WG output	OPEN	Exit Button
WG1		GND	
GND			
COM1	Electronic Lock	SENS	Door detection
NO1		GND	

（4）**Lock Control Jumper：** Set the power supply mode for Door Lock.

Lock Power supply from panel: Lock Power supply from Adapter：
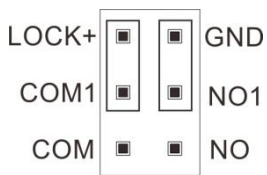
3. Packing list

Outdoor panel	Rain hood	Wall bracket	2P Terminal	9P Cable

4*3.5*30MM	4*Expansion column	Wrench	User manual
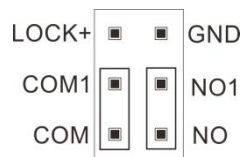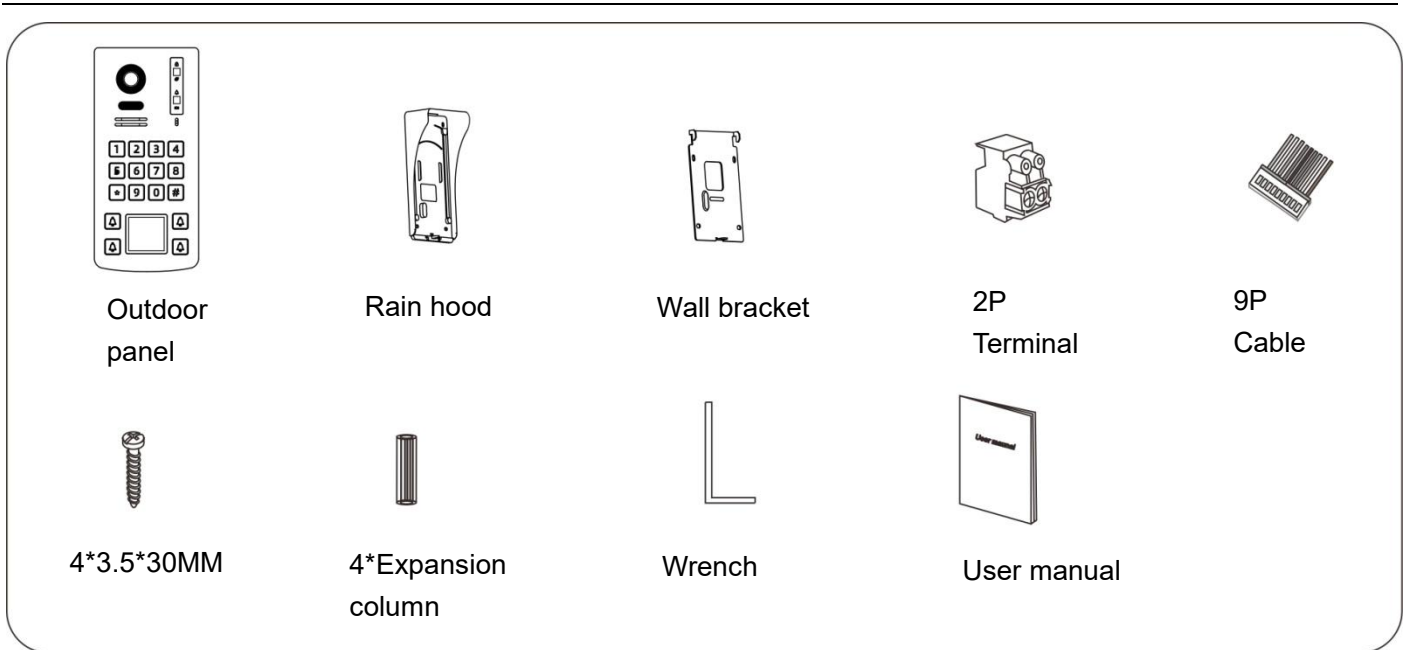
4. Wiring diagram

4.1 Electrical Lock wiring

4.11 Door Lock Controlled with Internal Power
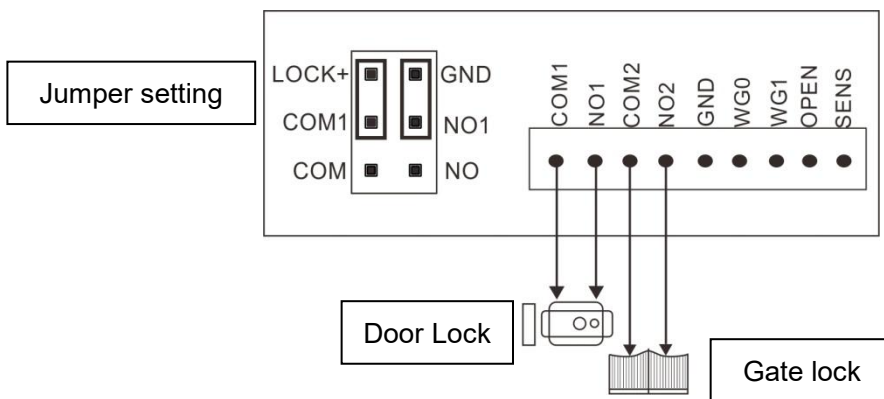
(1) **Support Door Lock type:**

A: NC (normal close) lock, power off to unlock. Support lock of DC12V 0.35A (Max).

B: NO (normal open) lock, power on to unlock. Support lock of DC12V ≤2A (instantaneous), DC12V ≤0.35A (Continuous current).

Gate Lock Type: AC 125V, ≤0.5A Or DC ≤30V, ≤1A

(2) **Jumper Setting:** As the above picture.

(3) **Lock Type and Unlock Time Setting:**

Touch "Device configuration" in the System Setting menu of 2-wire indoor monitor to enter the "Doorbell list", select the door station, then enter the "Add to monitoring devices list" menu, choose the "Modify" to input the

correct password and enter the modification interface, select the lock type to set the State to be ON or OFF, and set "Unlock Time" according to the actual needs.

4.12. Door Lock Controlled with External Power

(1)**Support Door Lock type:** Support lock of AC125V, Current ≤1A or DC≤30V, Current ≤4A.
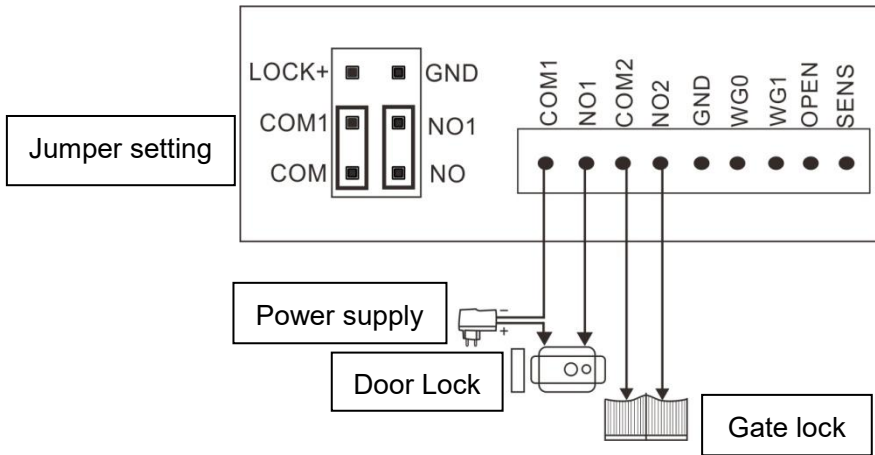(2)**Support Gate Lock type**: Support lock of AC 125V, Current ≤0.5A or DC≤30V, Current ≤1A.
(3)**Jumper Setting:** As the above picture
(4)**Lock Type and Unlock Time Setting:**

Touch "Device configuration" in the System Setting menu of 2-wire indoor monitor to enter the "Doorbell list", select the door station, then enter the "Add to monitoring devices list" menu, choose the "Modify" item to input the correct password and enter the modification interface, selects the lock type to set the state to be ON or OFF, and set "Unlock Time" according to the actual needs.
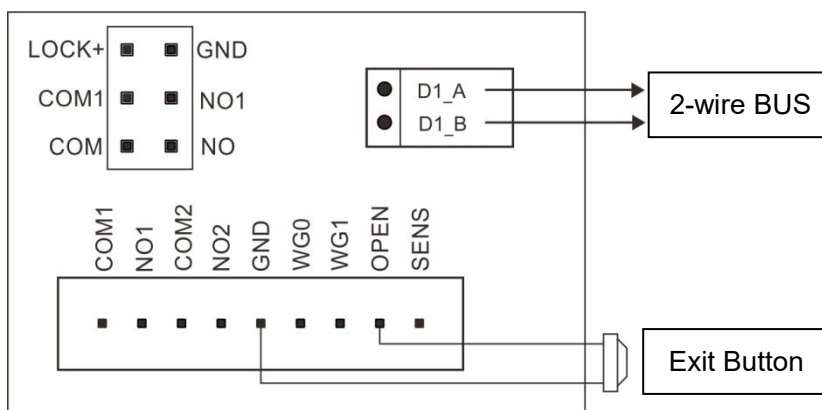
4.2 Bus/External Door Unlock Button (Exit Button)

(1) **2-wire BUS Terminal Match Setting**: The last monitor on 2-wire BUS should set SW1 to be ON, The other monitors should set SW1 to be OFF, the default setting is ON.

(2) The **Exit Button** is indoor. It will unlock the door or gate when pressing the Exit Button. For choosing the door or gate lock, please go to "Exit button control type" in the "Doorbell list" of 2-wire indoor monitor system setting.

4.3 Door Status Check and Wiegand
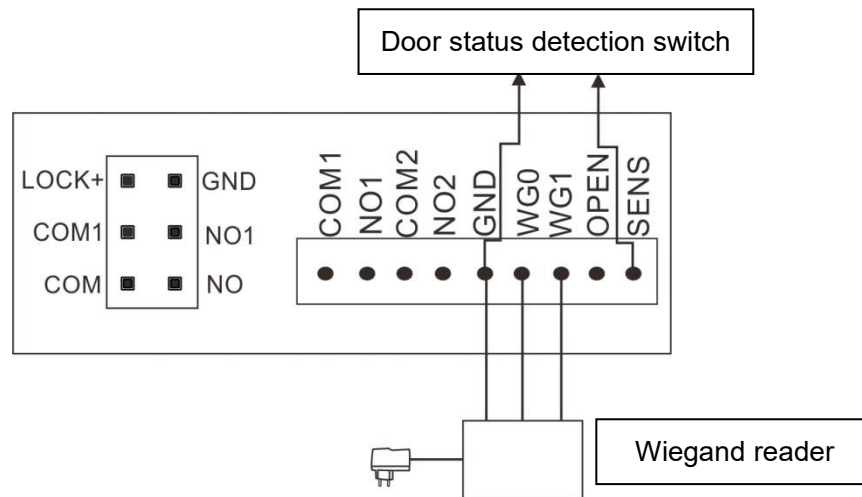
(1) Door Status Detection switch for the function of door status checking. Enter system setting of indoor monitors to set the door open time, when the door open exceed the pre-set time,
The outdoor panel will alarm. The sensor could be set as Normal Open or Normal Close.

(2) Wiegand reader：Connecting to Wiegand reader

4.4 Wiring diagram

4.41 **Powered by PW03A（Maximum support 1 Outdoor +4 Indoor monitor）**

4.42 PW03C + NV20

NP: Non-polarized
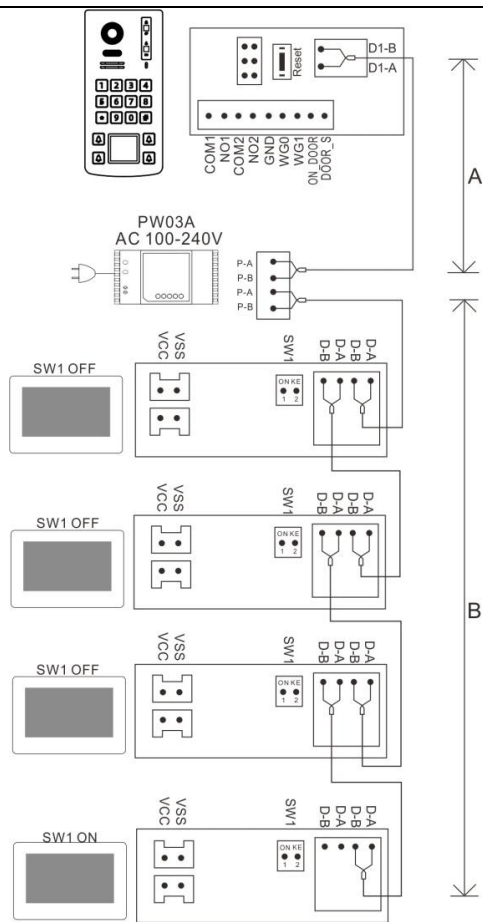
Remark: (1) All the cable should be unshielded.

　　　　(2) The monitors on NV20 connecting to M1 and M2 should using the same cable, and also the

same cable for the monitors connecting to M3 and M4.

（3）Each last monitor on BUS should match correct terminal as above picture.

4.5 Cable specification and distance

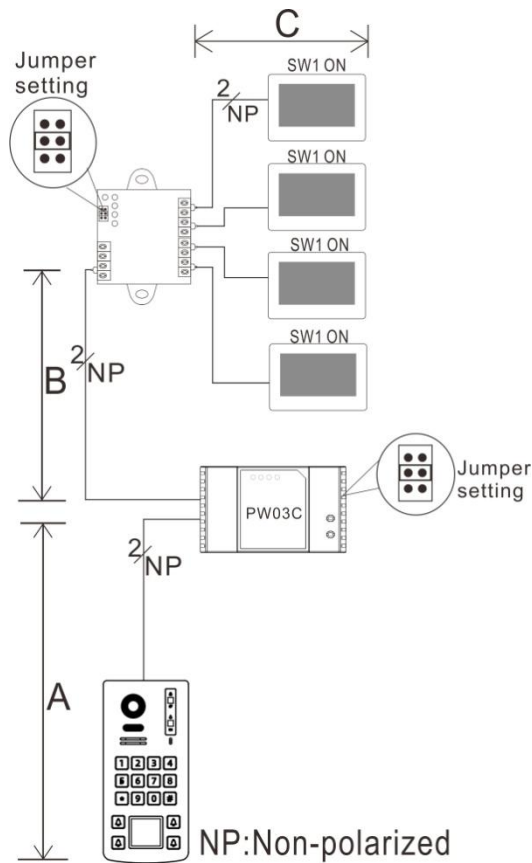| Device Quantity on the Master BUS / Cable Type		8 (2pcs PW03B + 6pcs NV20)	7 (2pcs PW03B + 5pcs NV20)	6 (2pcs PW03B + 4pcs NV20)	≤5
Parallel pair cable (BVVB)2*0.5mm²	A	100	100	100	100
	C	50	50	50	50
	B/D/E/F	60	85	90	90
Parallel pair cable (BVVB)2*0.75mm²	A	100	100	100	100
	C	50	50	50	50
	B/D/E/F	75	90	100	115
Double pair cable (Standard CAT-5)	A	100	100	100	100
	C	50	50	50	50
	B/D/E/F	120	150	180	180
Twisted pair cable (ZC-RVS)2*0.5mm²	A	100	100	100	100
	C	50	50	50	50
	B/D/E/F	55	100	110	110
Twisted pair cable (ZC-RVS)2*0.75mm²	A	100	100	100	100
	C	50	50	50	50
	B/D/E/F	55	95	95	95
Parallel pair cable 2*0.3 mm²	A	100	100	100	100
	C	50	50	50	50
	B/D/E/F	60	85	100	110

Remark:（1）All cables must be unshielded.

（2）If you cannot unlock high power electronic lock due to long distance, please add a power supply as picture 4.12.

5. Installation Guide

5.1. Cautions:

(1)Choosing a suitable position for installation to avoid direct sunlight and rain.

(2)Suggest installation height: 1.5~1.6Meters.

(3)Ensure power off before installation finished.
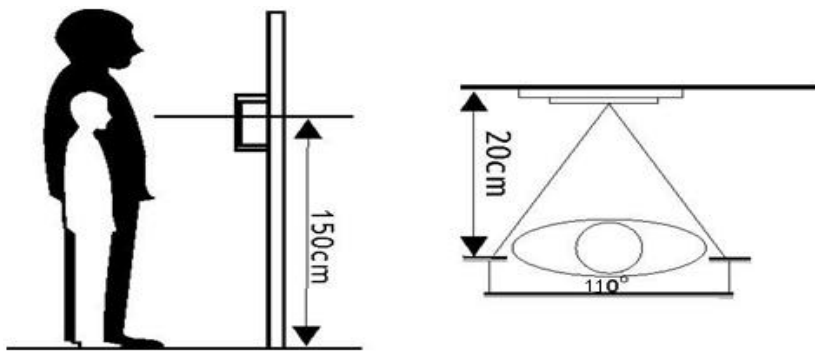
5.2 Surface mounted
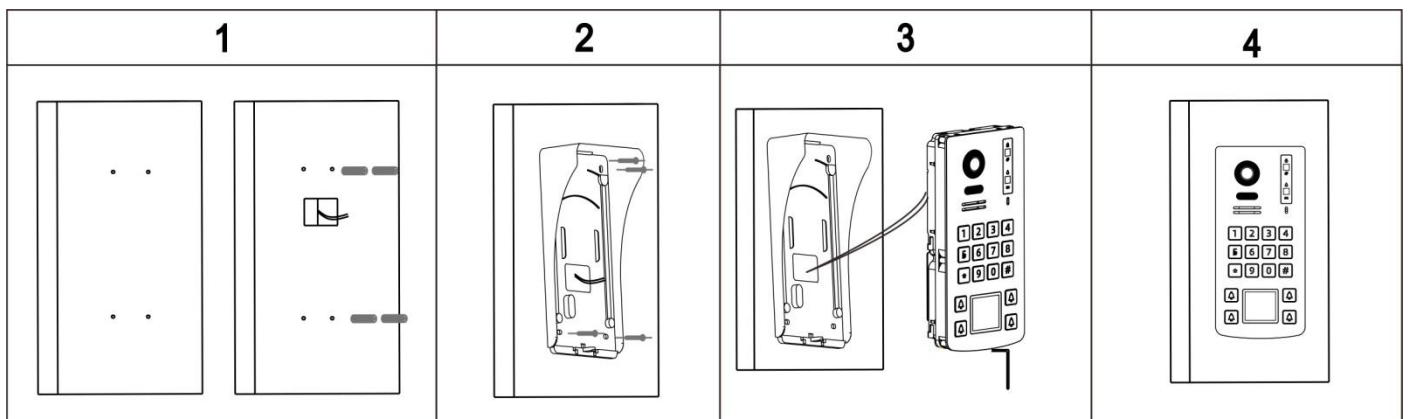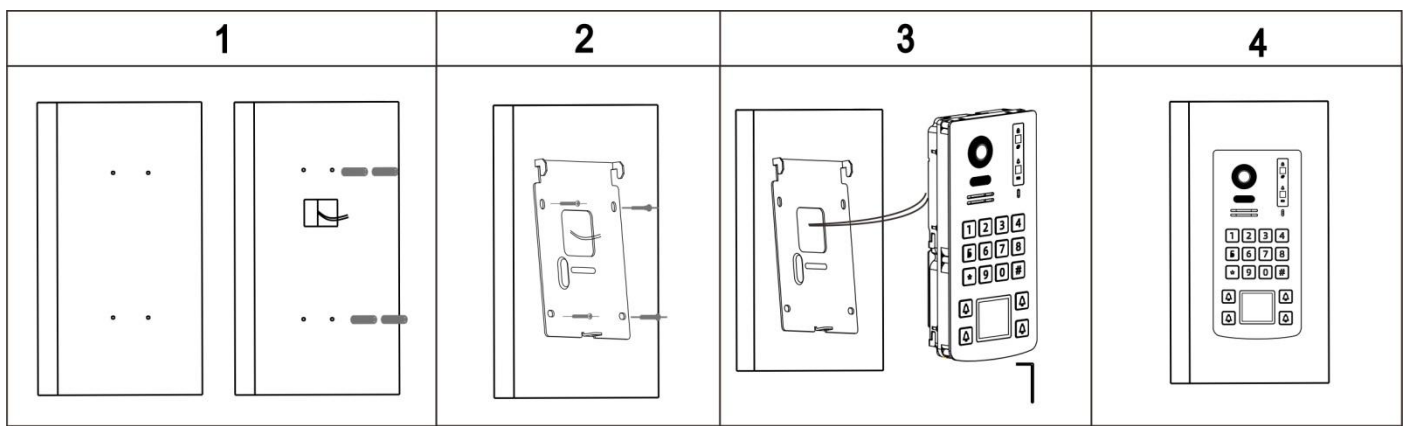
(1)Drill holes at a suitable height on the wall and fit the plastic expansion posts into the holes.
(2)Fix the wall-mounted iron/rainproof cover on the wall with screws and expansion columns.
(3)Install the Outdoor on the wall bracket/rainhood.
(4)Correct cable connection.
(5)Fix the outdoor station on the wall bracket/rainhood and lock it with screws.

5.3 Flush mounted
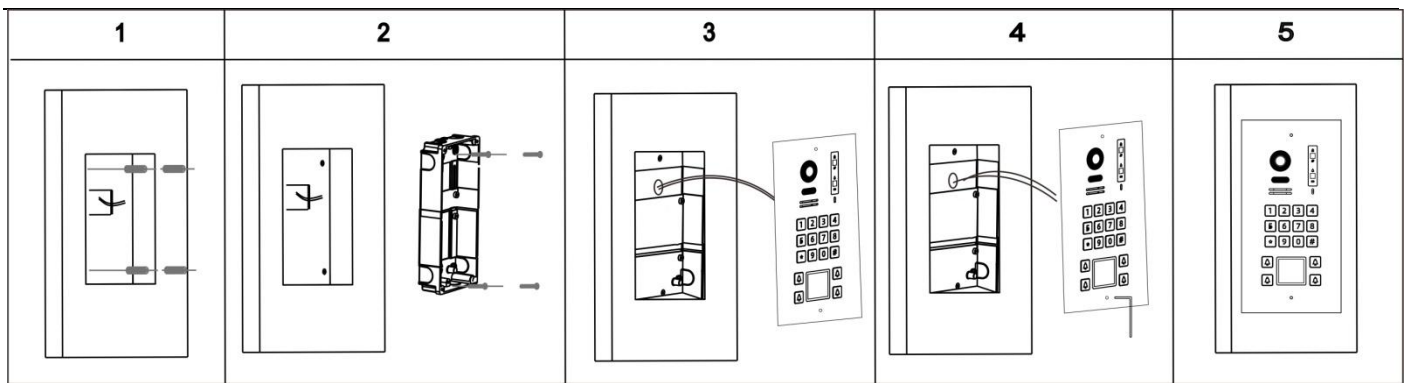
1	2	3	4	5

(1)Drill holes at a suitable height on the wall and fit the plastic expansion posts into the holes.

(2)Fix the embedded wall box on the wall with screws and expansion columns.

(3)Correct cable connection.

(4) Fix the Outdoor panel on the wall box and lock it with screws.

6. Outdoor panel setting

Touch ⊞ on the indoor monitor to enter main menu, touch ⚙ to enter setting menu, short touch ⊞ and then select Device configuration to enter Device configuration menu, then select Doorbell list to enter Doorbell list menu, select the outdoor need to modify, enter password and # .

6.1 Device name and address

Select Device Name/ NO to change outdoor panel name and address, you can setting 8 digits, if you have multi outdoor panel on one system, the address must be different.

6.2 Pushbutton address

The number of outdoor panel button, default as 1-2 from left to right on the first row, default as3-4 from left to right on the second row, the Room Address should be the same with indoor monitor's.

6.3 Private outdoor station

If enable this function, this door station can be set as a private device for one family. The private door station can only be monitored by this family, and it can only call to this family. Please disable it if you installed on apartment system.

6.4 Monitor

If enable this function, the door station can be monitored by indoor monitors.

6.5 Setting lock parameter

You can check DOOR /GATE state and setting unlock time, enter Associated Unlocking Device you can check.

6.6 RFID management

On standby state, reading an registered card, the outdoor panel would beep and unlock the door.

Reading an unregistered card, the outdoor panel would two beeps, means it is unvalid.

Touch ⊞ on the indoor monitor to enter main menu, touch ⚙ to enter setting menu, and short touch ⊞ and select Device configuration to Device configuration menu and then select Doorbell list to enter Doorbell list menu select the outdoor station you need to modify and enter password and #. select Access control management to setting.

6.61 Access control setting

Default as ON, you can disable it if you don't need this function.

6.62 Register Access Card (125KHz ID card)

Click Register access card on indoor monior to enter Register access card page, it would shows: Please show your card to the card reading area on the door panel…

At such state, the user can register new cards at the door station. When the user shows a new ID card to the card reading area on the door panel, the card will be registered after a beep. Same operation to add more access cards. After registered all the cards, please exit REGISTER ACCESS CARD interface.

Remark: The registered card information is save in the door station, so you can mange it at any indoor monitor which connects to the door station. If it's a private door station, it can only be managed by its call target monitors.

6.63 Check/Manage Registered Card Information

All the registered access card information could be found in Valid registered card list. Click Valid registered card list to Valid registered card list page, Click any card and edit the ID card info.

Main index：Main index could edit as 6 digits, could be a room number.

SUB index：Sub index could edit as 3 digits, could be a series number.

If you want to pause one access card, Click Move to invid registered card list and confirm.

If you want to delete one access card, Click Delete access card and confirm.

If you want to delete all registered card information, please back to Access control management pageand click Delete all registered card information and confirm.

Delete access information: Delete card info, the card would be deleted if you selected this operation.

6.64 Backup Registered Card Information

Insert a micro SD card into the indoor monitor. Then go to ACCESS CONTROL MANAGEMENT, touch BACKUP REGISTERED CARD INFORMATION, a sub menu will appear, touch CONFIRM to start backup. When backup finished, it will go back to ACCESS CONTROL MANAGEMENT interface.

6.65 Restore Registered Card Information

Insert the micro SD card, which has registered card backup information, into the indoor monitor. Then go to ACCESS CONTROL MANAGEMENT, touch RESTORE REGISTERED CARD INDORMATION. Choose ACCESS DATE folder, a sub menu will appear, Click to restore registered card information.

6.7 Outdoor security parameter setting

6.71 Tamper Alarm

The tamper in the door station will be active after enable this function, and it will alarm when someone tries to disassemble the door station. Also you need to set TARGET ROOM NUMBER FOR HANDLING ALARMS.

6.72 Door status checking

If enable this function, the system will check the door state after longest door open time. Set MAGNETIC CONTACT NODE TYPE to NORMAL OPEN or NORMAL CLOSE according to actual needs. Set LONGEST DOOR OPEN TIME. Once the door is open, the door station will detect the door state after it reaches longest door open time. If the door is not closed after the longest door open time, the door station will alarm with beeps sound.

6.8 Camera angle adjusting

You can adjust the viewing angle for the door station, touch "adjusting angle" to monitoring, touch any place on the screen you need to enlarge, then touch hang up button to exit. Touch the back icon on the top left or Swipe left to confirm the setting. The display would shows the focus place when you finished setting.

6.9 Outdoor password setting

The default password is 0. you can setting from 1 to 8 digits, the first digits should not be 0. if you entered the wrong password, you could only enter VIEW model and could not change any setting on Outdoor station.

7.0 Setup mode

It's on by default. At this state, the ROOM ADDRESS and FLOOR POSITION of the monitors in the network can be set freely. If disable it for all the door stations in the network, the addresses of the monitors in the network cannot be changed. So if you do not want users to change the monitors address by mistake, please disable this function for all door stations after installation.

7.1 Audio message

There are different audio message under different state, the type are: "Door is open", "System is busy, try later", "You can speak now", "The residence is unavailable", "Call is in process", "Communication is finished".

7.2 Password unlock

Enable the password unlock function on Indoor monitor, when you enter unlock password andpress #, the screen would shows "Please come in", the door is open.

Enable Password unlock guide on monitor:

Touch ⊞ to enter main menu and short touch ⚙ to enter setting menu, short press ⊞ and select Device configuration to enter Device configuration menu, then touch Doorbell list to enter Doorbell list menu, select the corrosponding outdoor and click Modify, then enter passwor and # to enter Modify interface, Turn on Password unlock enable status, enter Unlock password setting to change the password, the default unlock password is 0000 0000, Please be noted the first digit must not be 0 for your new password.

Remark: when the Password unlock enable status is OFF, you cannot unlock th door when you enter Unlock password.

8. Specifications

NO.	ITEM	CONTENTS
1	Connection	2 Wire Non-polarize
2	Subscriber	Multi
3	Audio	Digital audio (2 Way)
4	Video	1 Channel Digital output(video)
5	Camera	1080P HD Camera
6	Night Vision	IR (self-adjustment)
7	Minimum illumination	0 LUX (within 0.5 Meters)
8	Video Angel	Horizontal 110°, Vertical 60°
9	Button	Pushbutton
10	Working Voltage	DC 18-30V
11	Lock Type	See 4.11& 4.12

12	Gate Lock Type	1 Channel Dry contact signal, See 4.11& 4.12
13	Unlock control	Communication command
14	Working Consumption	6W MAX
15	Card Type	125KHz RFID Card
16	Reading Cards distance	≤20mm
17	Q'ty Of ID card	1000（MAX）
18	Working Temperature	-25 ℃ to +60 ℃
19	Storage Temperature	-30 ℃ to +60 ℃
20	Dimension	Surface mounted(with rainhood)：200*16*40.2 MM Surface mounted(No rainhood)：198.3*92.5*29.2 MM Flush mounted：240*124.5*47.7 MM