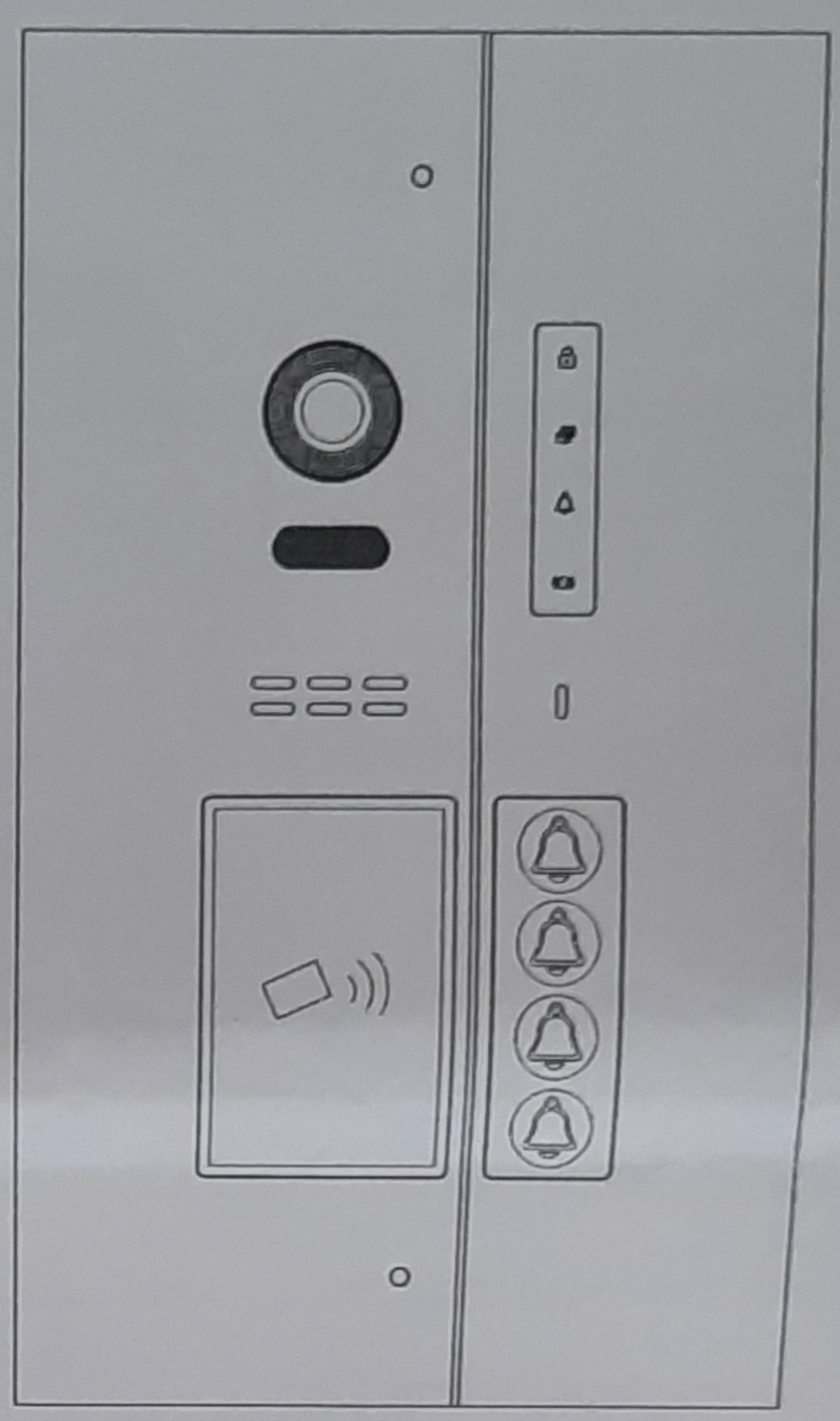
2-Wire Door Station
User Manual





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

1. Product Features and Main Function 1

2. The Function and Name of Each Part 1

2.1 Names of Each Part 1

2.2 Terminal Description 3

3. Packing List 4

4. Wiring Diagram 5

4.1 Electrical Lock Wiring Diagram 5

4.11 Door Lock Controlled with Internal Power 5

4.12 Door Lock Controlled with External Power 5

4.2 External Door Unlock Button (Exit Button) 6

4.3 Door Status Check and Wiegand 7

4.4 Wiring Diagram 7

5. Installation Guide 9

5.1 Cautions 9

5.2 Wire Distance 10

5.3 Surface Mounted & Flush mounted 11

6. RFID Access Control Management 12

6.1 Access State 12

6.2 Register Access Card(125KHz ID card) 12

6.3 Check/Manage Registered Card Information 12

6.4 Backup Registered Card Information 13

6.5 Restore Registered Card Information 13

7. Specification 14

V1.0

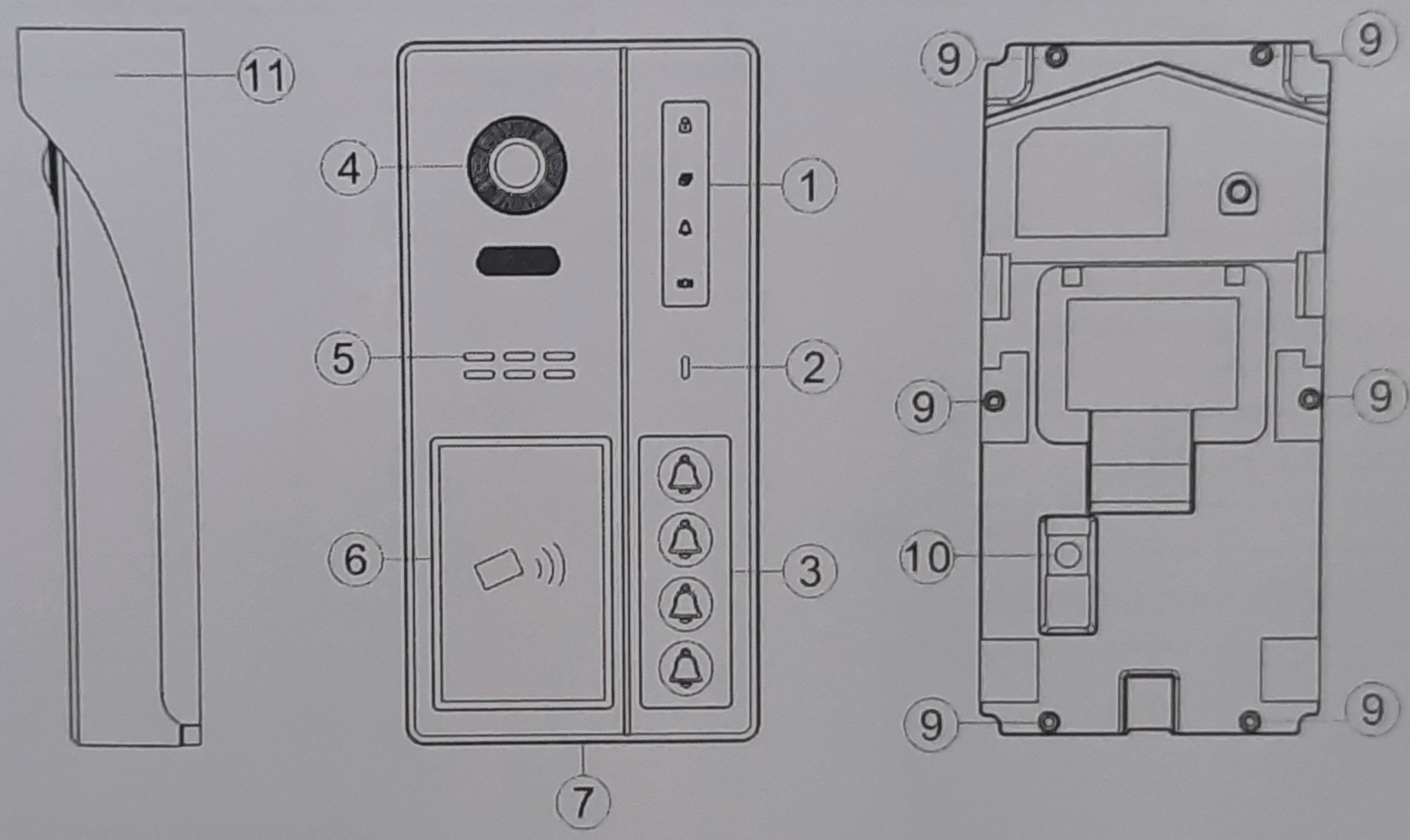
1. Product Features and Main Function

- ◆ 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 & IP54 high protection level
- ◆ Support RFID unlocking (ID card)
- ◆ Support connecting an exit button
- ◆ Support door status checking
- ◆ Tamper alarm

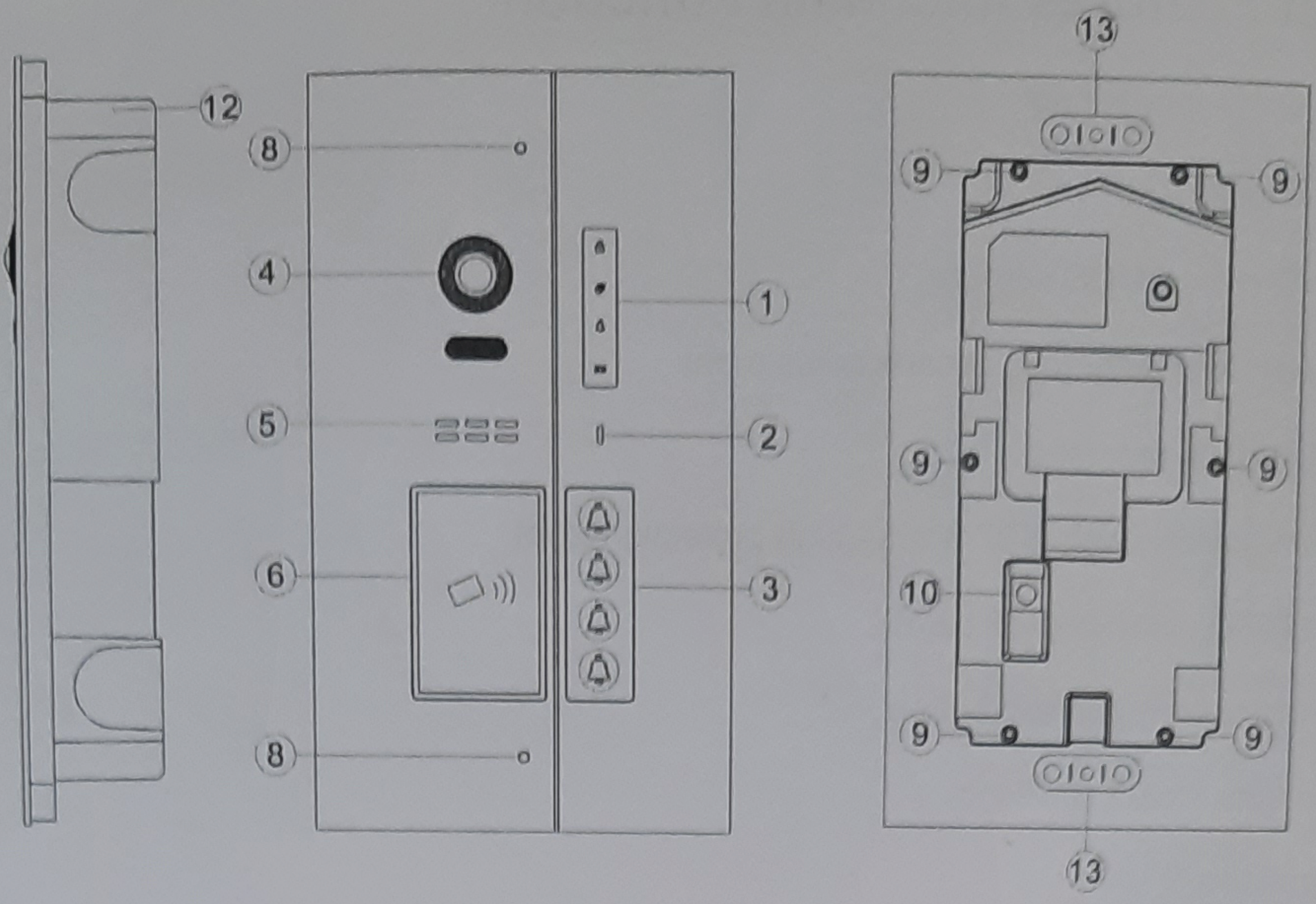
2. Name and the Function of Each Part

2.1 Names of Each Part

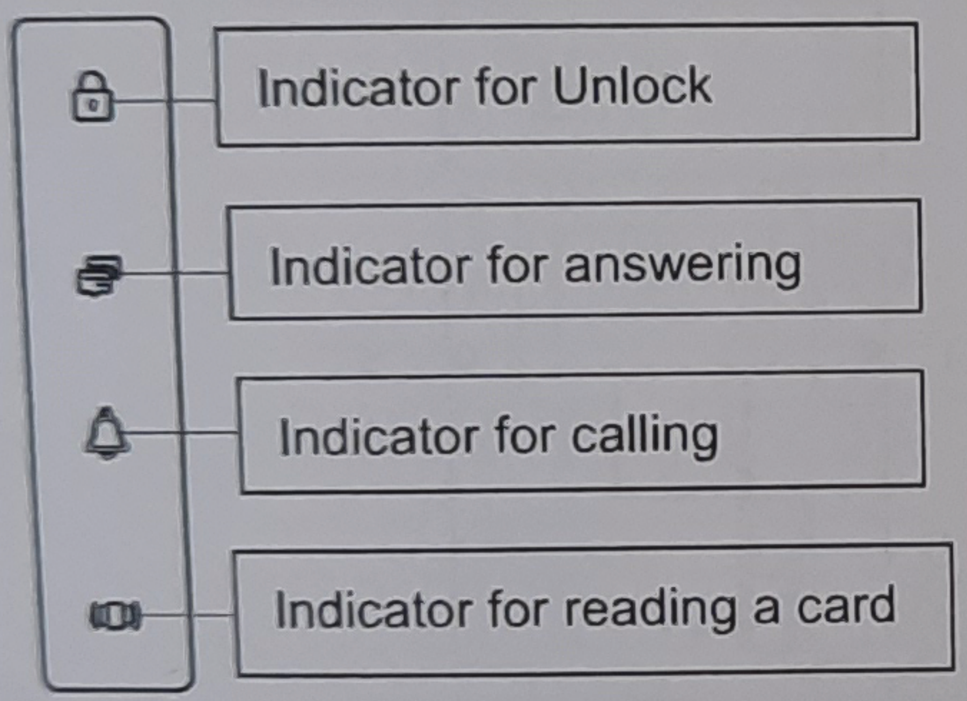
Surface mounted



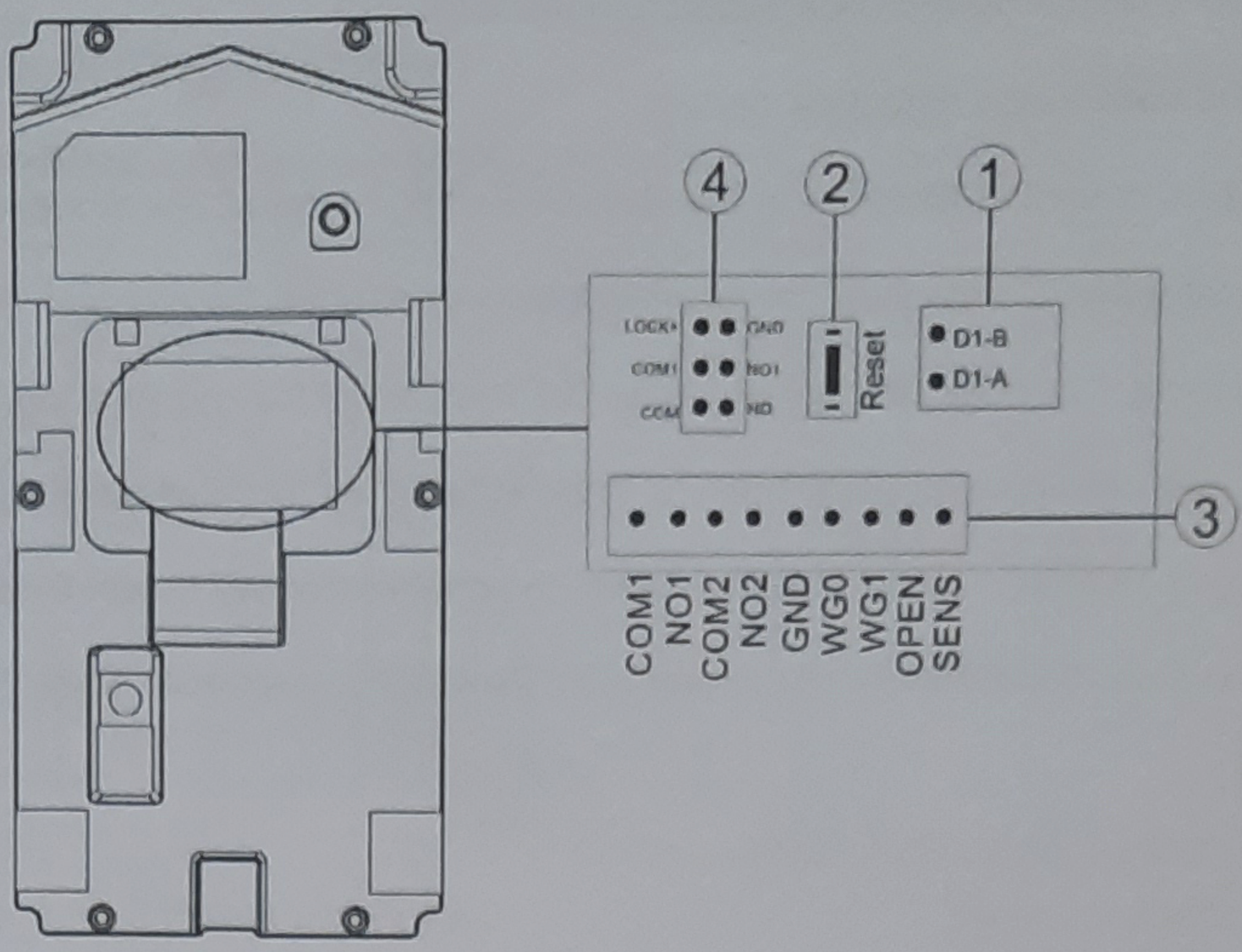
Flush Mounted



NO.	Name of Parts	NO.	Name of Parts
(1)	Status Indicator	(2)	Microphone
(3)	Mechanical Call button	(4)	Camera
(5)	Speaker	(6)	Nameplate/ ID Card reader place
(7)	Screws holes to lock rain hood	(8)	Screws for locking panel to mounting box
(9)	Screw for locking front panel	(10)	Tamper
(11)	Rain hood	(12)	Mounting Box
(13)	Installation Bracket		



2.2 Terminal Description



①**2-Wire BUS Port:** Connect the 2-wire BUS. No polarized.

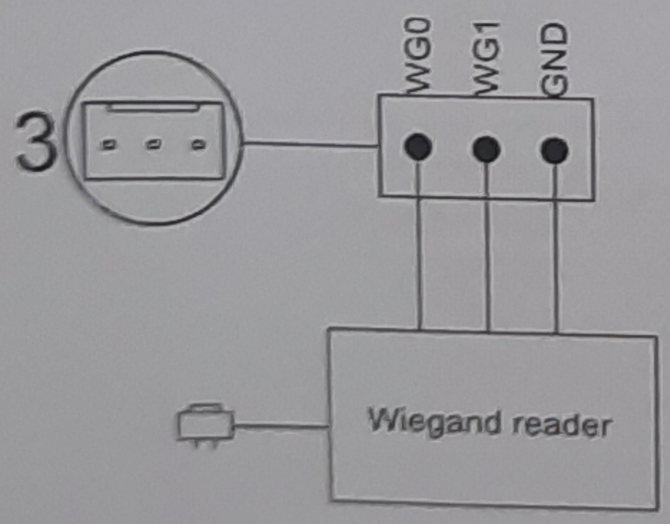
Lock Control Jumper: Set the power supply mode for Door Lock.

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**

COM1	Electronic Lock
NO1	
COM2	Gate lock
NO2	
WG0	WG output
WG1	
GND	
OPEN	Exit Button
GND	
SENS	Door detection
GND	

Diagram for Wiegand Connection:



External Door Control Port:

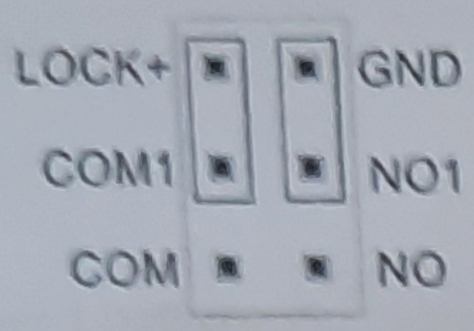
OPEN: Connect the external door unlock button (Exit button).

SENS: Connect the door status detection switch.

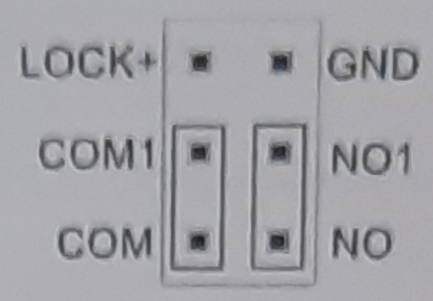
Set up of door status detection function: In the System Setting menu of 2-wire indoor monitor, touch "Device configuration" to enter the "Doorbell list", select the door station, enter the menu of "Add to monitoring devices list", select the "Modify "to input the correct password, then enter the modification interface, enable "Check door state". 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 beep sound.

Jumper Setting: Power supply mode for lock

Lock Power supply from panel:



Lock Power supply from Adapter:



3.Packing List



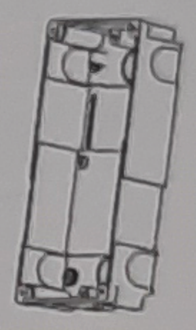
Outdoor station



Rain hood optional



Bracket（Optional）



Mounting box（optional）



2P Connector



4*3.5*30MM



4*Expansion column



Wrench



User Manual



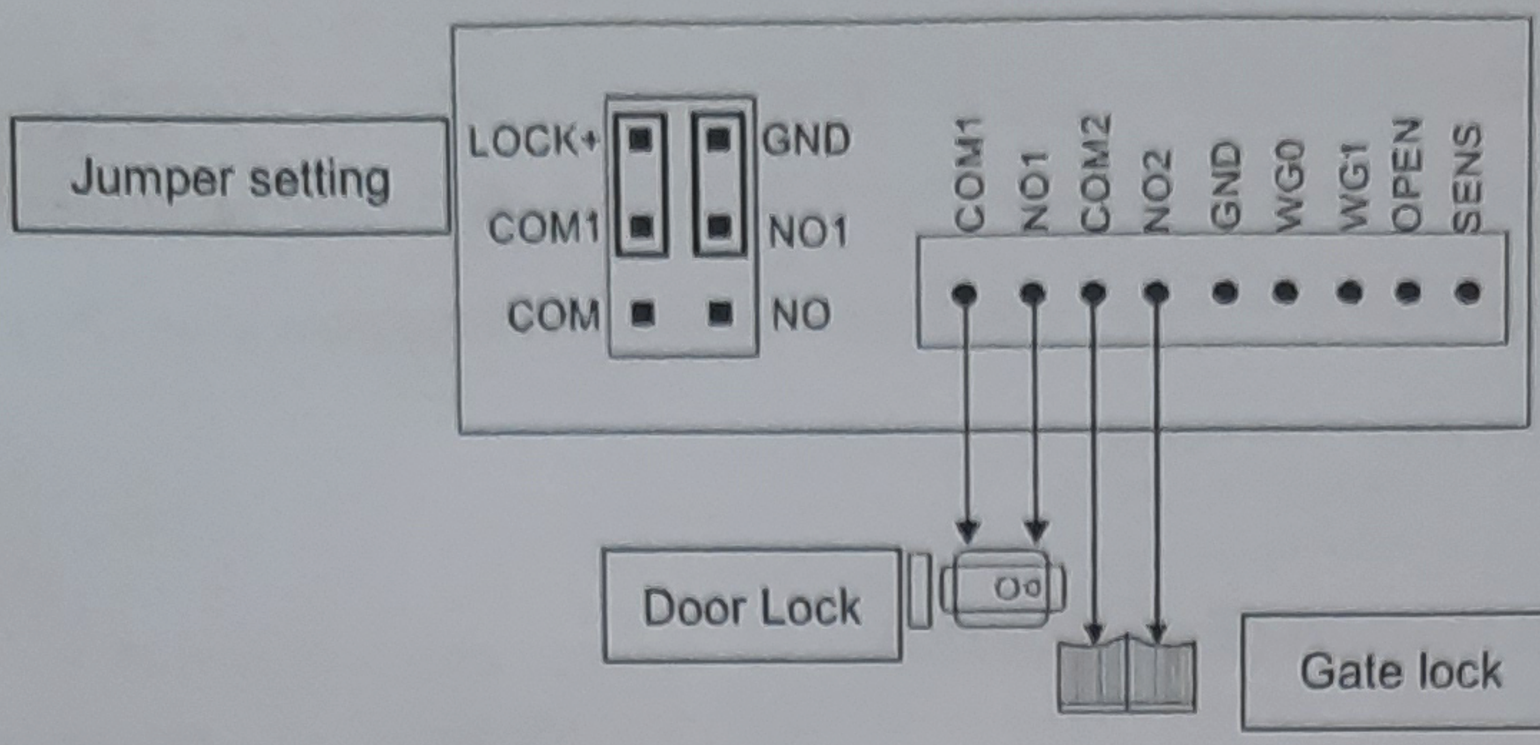
9P wire connector

Remark: The rain hood can only be used for surface mounted version door station.

4. Wiring Diagram

4.1 Electrical Lock Wiring Diagram

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).

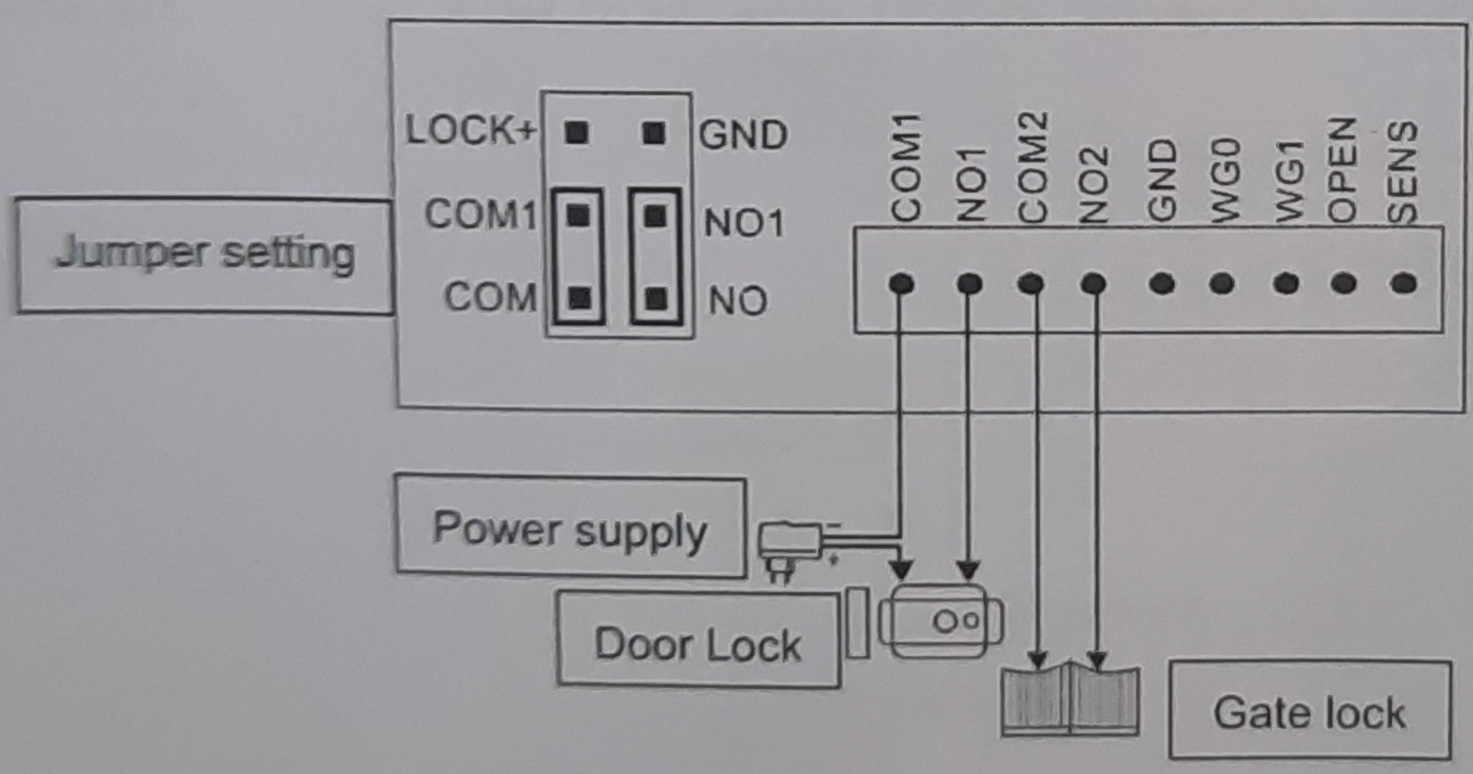
Gate Lock Type: AC 125V, ≤0.5A Or DC ≤30V, ≤1A

(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



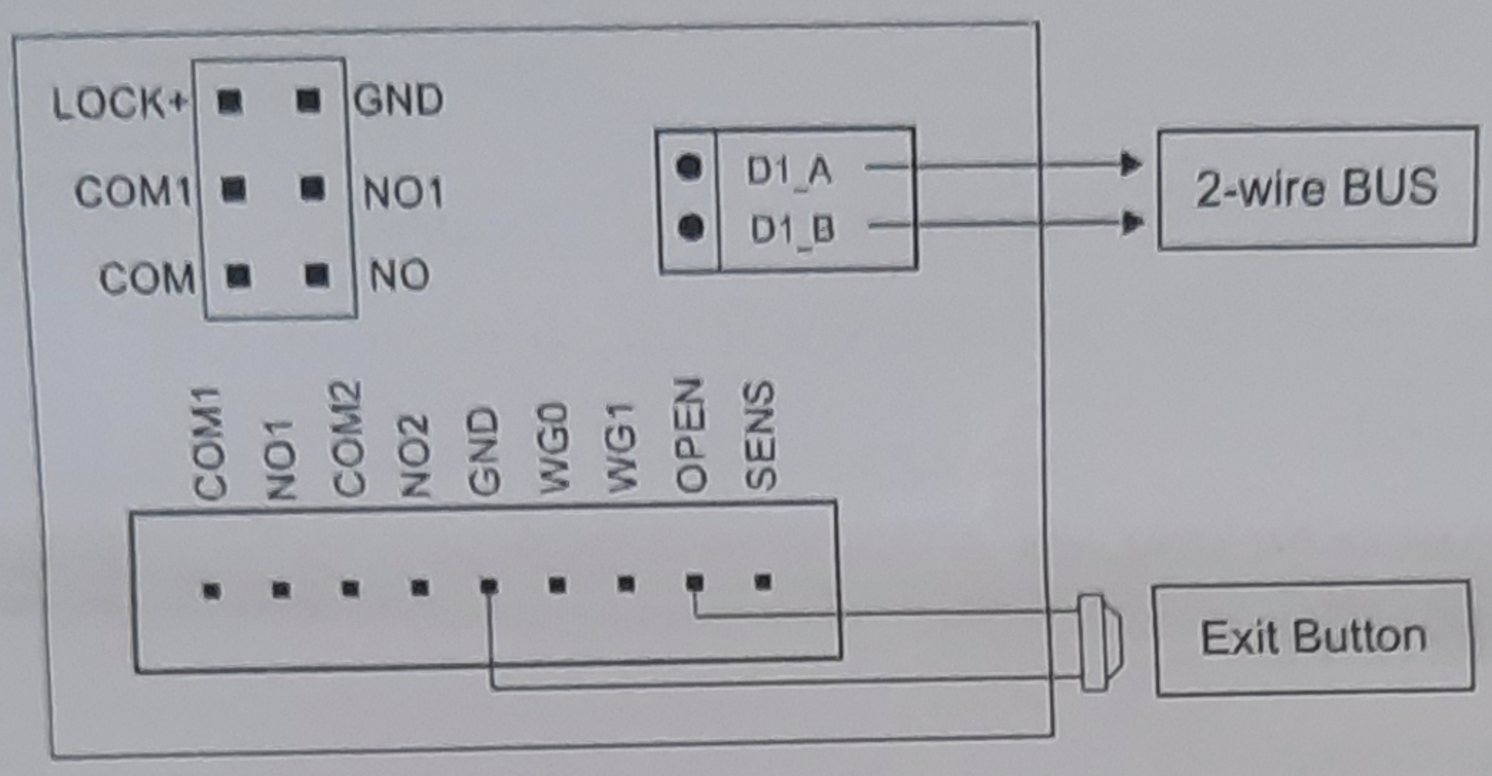
(1) Support Door Lock type: NO (normal open) lock, power on to unlock. Support lock of AC/DC5V-24V, current≤3A.

(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" 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) 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.

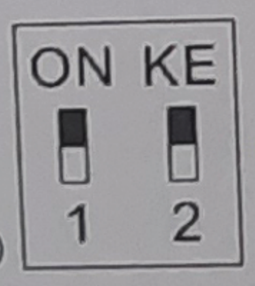
(2) The 2-wire BUS has no polarity.

(3) 2-wire BUS Terminal Match Setting: You need to make right terminal match setting for 2-wire BUS.

Setting Guide: The last monitor on 2-wire BUS should set SW1 to be ON as below picture①. The other monitors should set SW1 to be OFF as below picture ②.

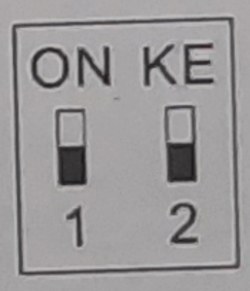
Remark: SW1 DIP Switch is ON by default.

Picture ①



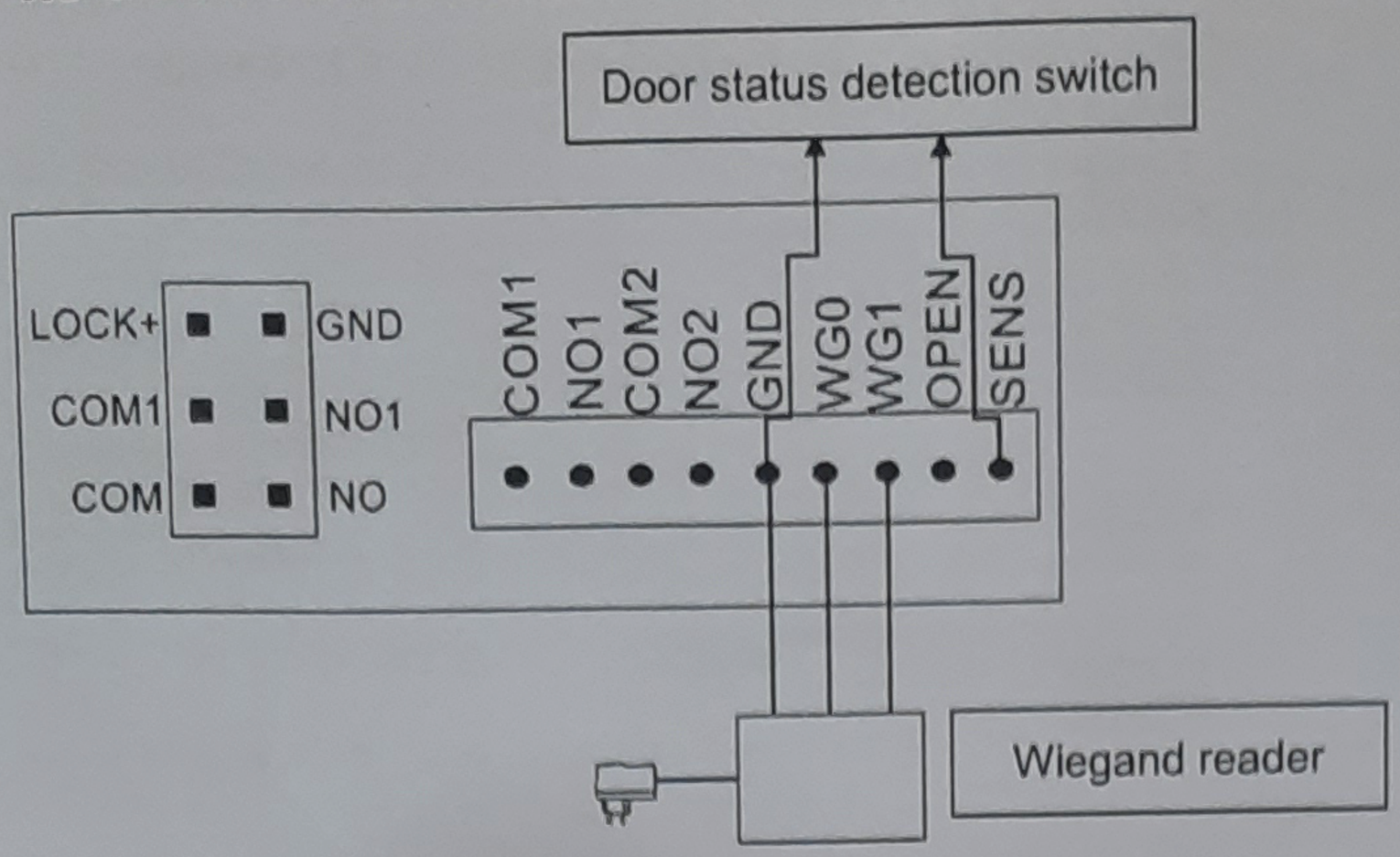
SW1 ON

Picture ②



SW1 OFF

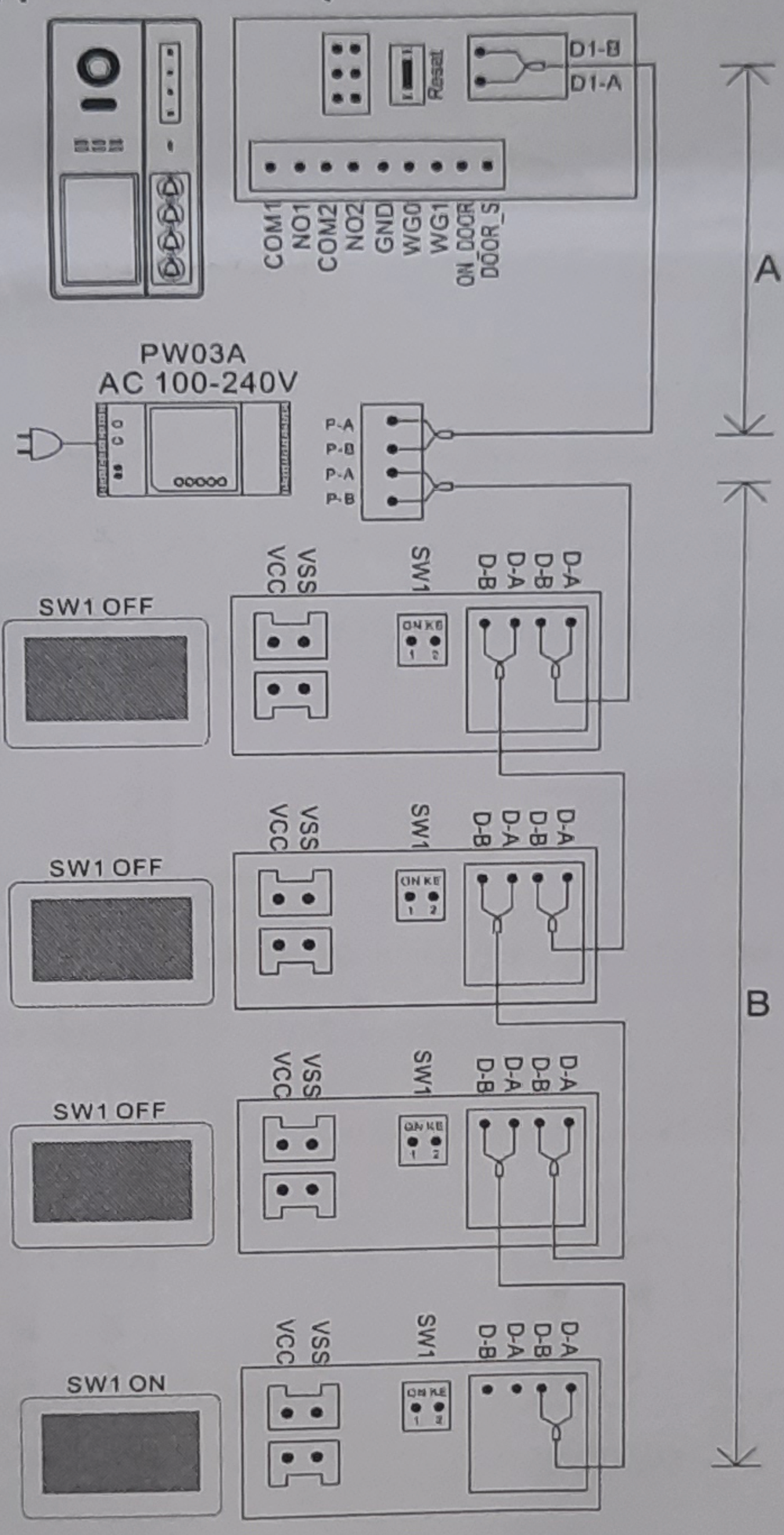
4.3 Door Status Check and Wiegand



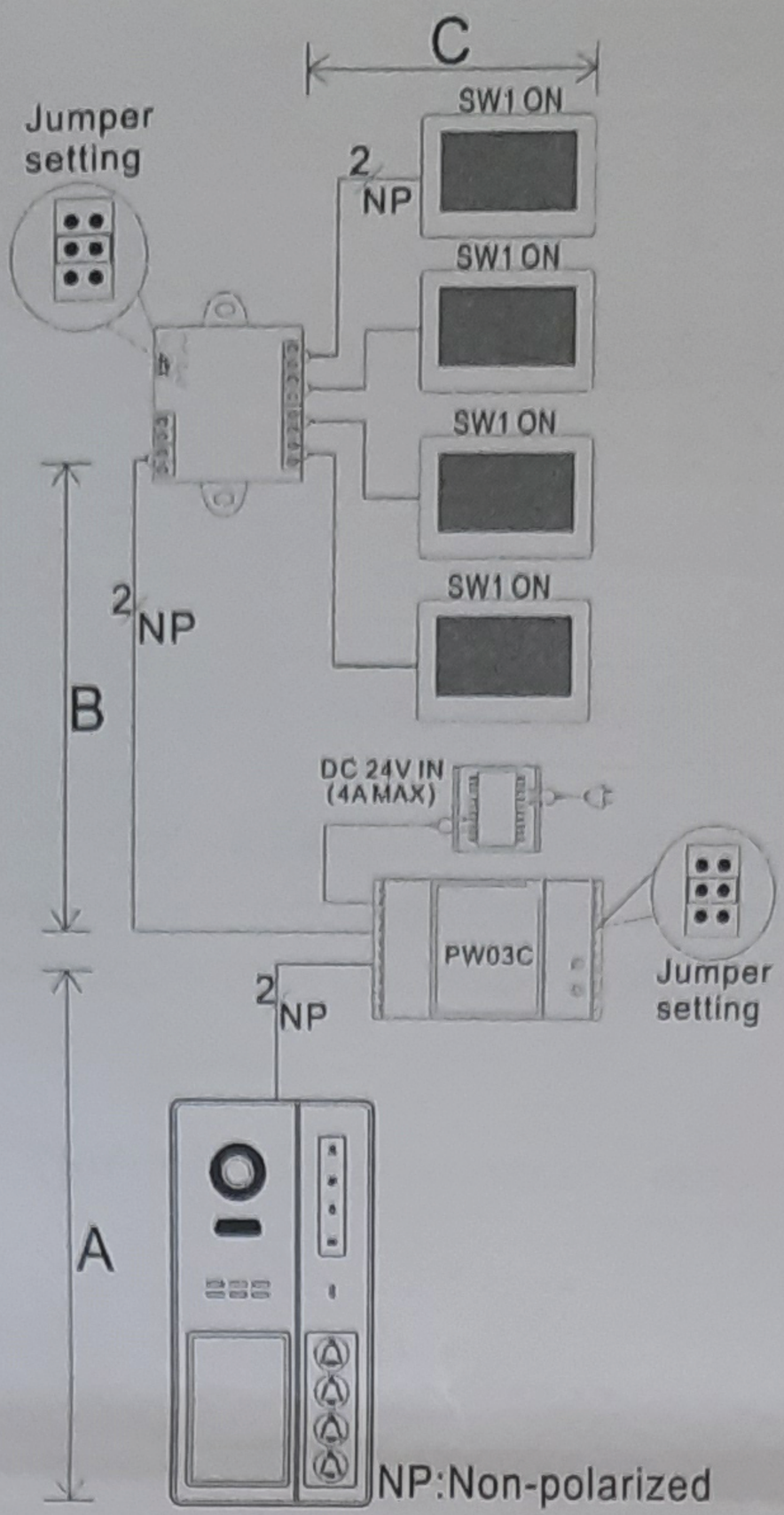
Door Status Detection switch for the function of door status checking. Enter system setting of indoor monitors to set the door open time, when the door open exceed the pre-set time,
The outdoor panel will alarm. The sensor could be set as Normal Open or Normal Close.

4.4 Wiring Diagram

4.41Power with PW03A(Support 1 outdoor panel+4 Indoor monitor)



4.42 Power with PW03C+NV20 Distributor



4.43 Button Address Setting

The 2/4 buttons address must be set for each button:

Touch "Device configuration" in the System Setting menu of 2-wire indoor monitor to enter the "Doorbell list", select the door station needs to set, then enter the "Add to monitoring devices list" menu, choose the "Modify" to input the correct password and enter the modification interface. Go to "Button Index" to set call target for each button.

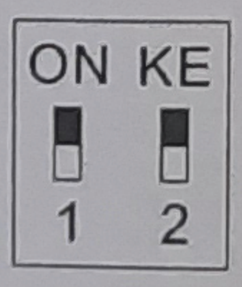
Remark (For all diagrams in 4.41 & 4.42):

(1) All cables must be unshielded.

(2) The same BUS should use the same wire with same specification.

(3) 2-wire BUS terminal match setting: The last monitor on 2-wire BUS should set SW1 to be ON as below picture ①. Other monitors should set SW1 to be OFF as below picture ② .

Picture ①



SW1 ON

Picture ②



SW1 OFF

SW1 DIP Switch is ON by default.

(4) L1 represents the length of the BUS, and for detail L1 distance, please refer to the Wire Distance.

(5) The BUS has no polarity.

Remark:

(1) All cables must be unshielded.

(2) L1 means the 2 wire BUS length.

(3) L2 means the distance from the door station to the power supply.

(4) 2-wire BUS terminal match setting:

The last monitor on 2-wire BUS should set SW1 to be ON as below picture ①. Other monitors should set SW1 to be OFF as below picture ② .

Picture ①



SW1 ON

Picture ②



SW1 OFF

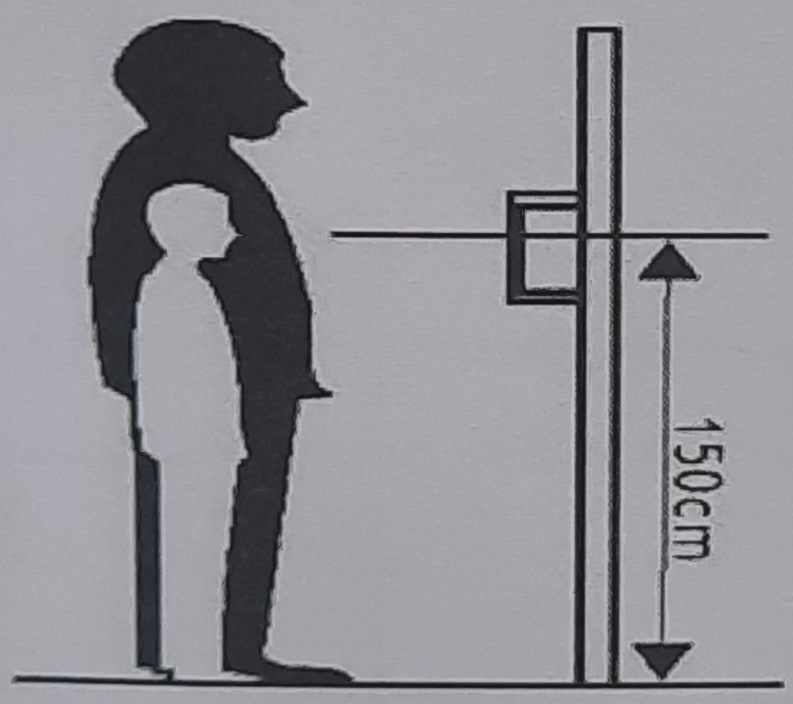
5. Installation Guide

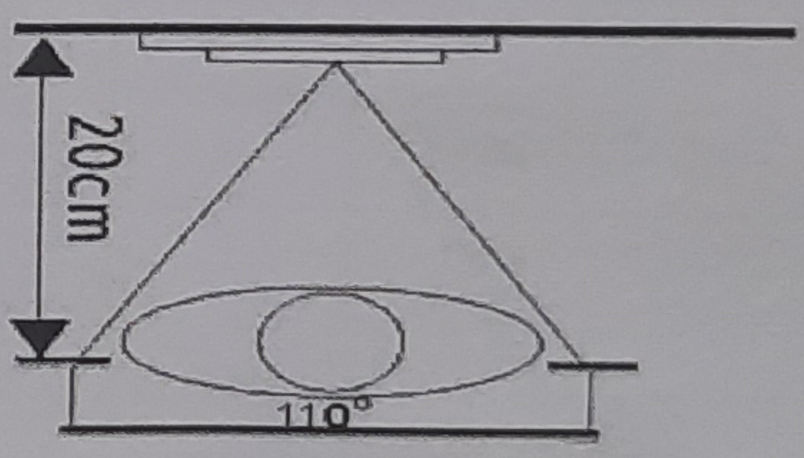
5.1 Cautions

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

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

(5.13) Ensure no power supply before installation finished.





5.2 Wire Distance

Remark:

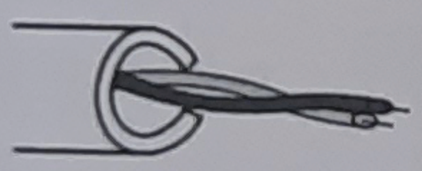
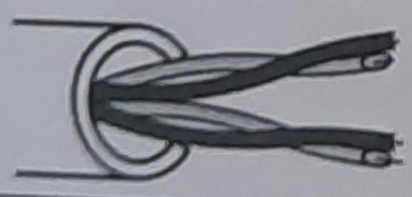
(1) Inner power unlock distance L2 means the distance from the 1st door station to the system power supply.

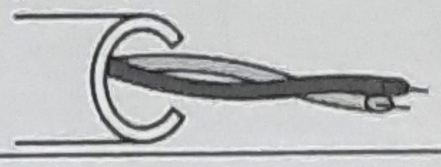
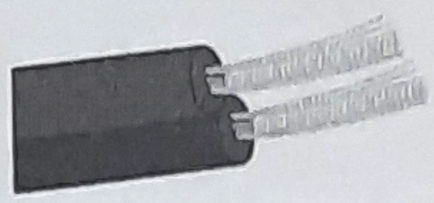
(2) If using system power to supply power to the door lock, the maximum wiring distance must not exceed L2.

(3) If using additional power supply for the door lock, the maximum wiring distance is L1.

(4) External power unlock distance means the distance from door lock to additional lock power supply.

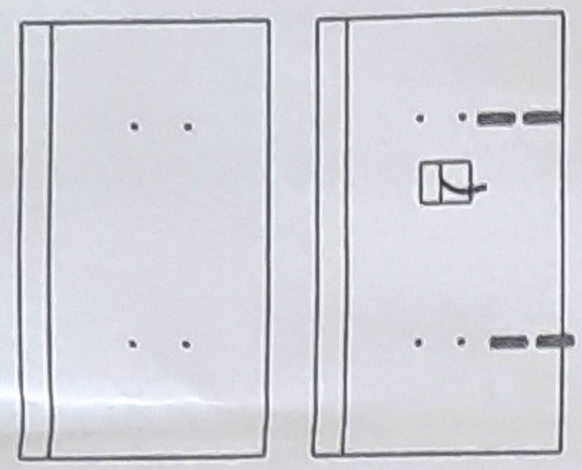
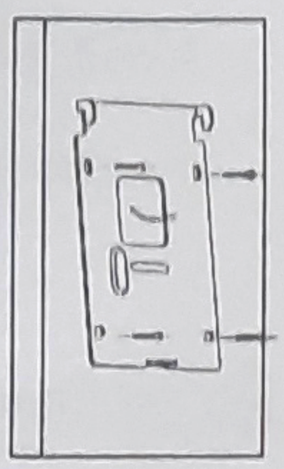
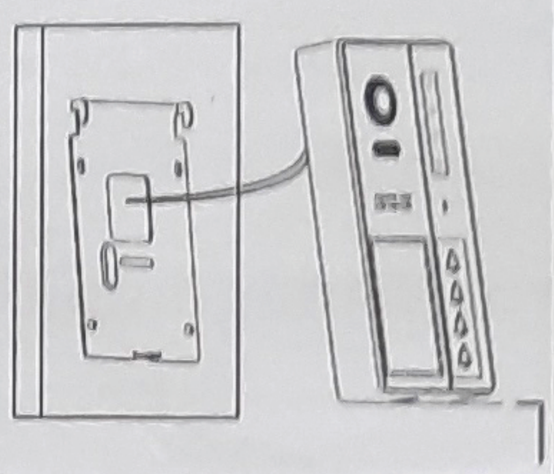
(5) All cables must be unshielded

No.	Cable Type	DC24V 1A Adapter			PW03A		
		Intercom distance L1(m) (MAX)	Inner power unlock distance L2 (m) (MAX)	External power unlock distance (m) (MAX)	Intercom distance L1(m) (MAX)	Inner power unlock distance L2 (m) (MAX)	External power unlock distance (m) (MAX)
1	Parallel pair cable (BVVB)2*0.5mm 	125	125	10	125	125	10
2	Parallel pair cable (BVVB) 2*0.75mm² 	125	125	10	125	125	10
3	Twisted cable (ZC-RVS)2*0.5mm² 	150	150	10	150	150	10
4	Twisted cable (ZC-RVS) 2*0.75mm² 	150	150	10	150	150	10
5	Single pair cable (Standard CAT-5) 	150	100	10	150	100	10
6	Double pair cable (Standard CAT-5) 	200	150	10	200	150	10

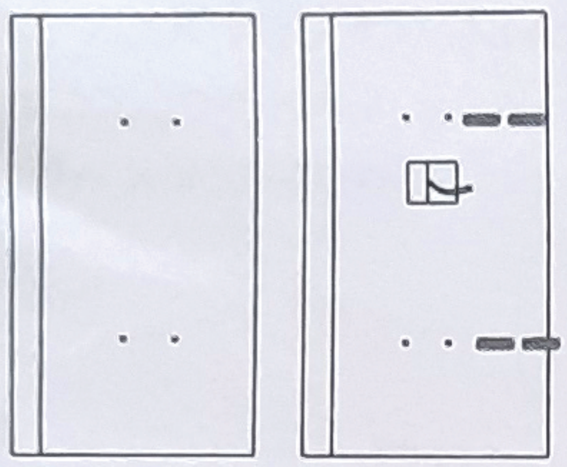
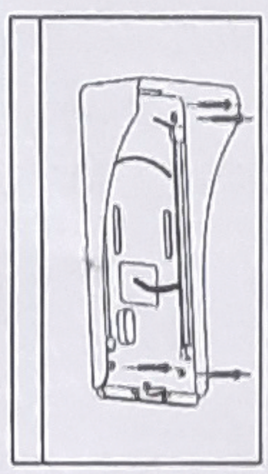
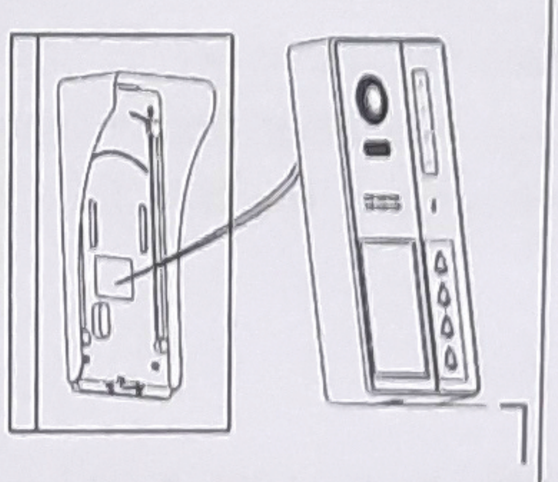
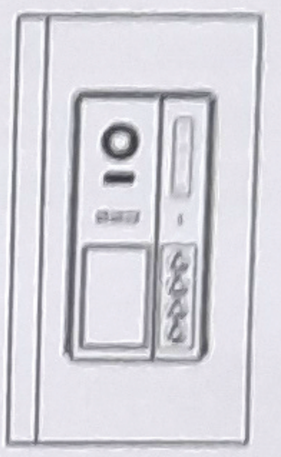
7	Telephone line (HBV) 2*0.2mm² 	50	50	10	50	50	10
8	Parallel pair cable 2*0.3 mm² 	100	100	10	100	100	10

5.3 Surface Mounted& Flush mounted

Without Rain hood

1	2	3	4
			

With Rain hood

1	2	3	4
			

(1) Drill 4 holes according to the rain hood position, then insert the expansion columns into the holes.

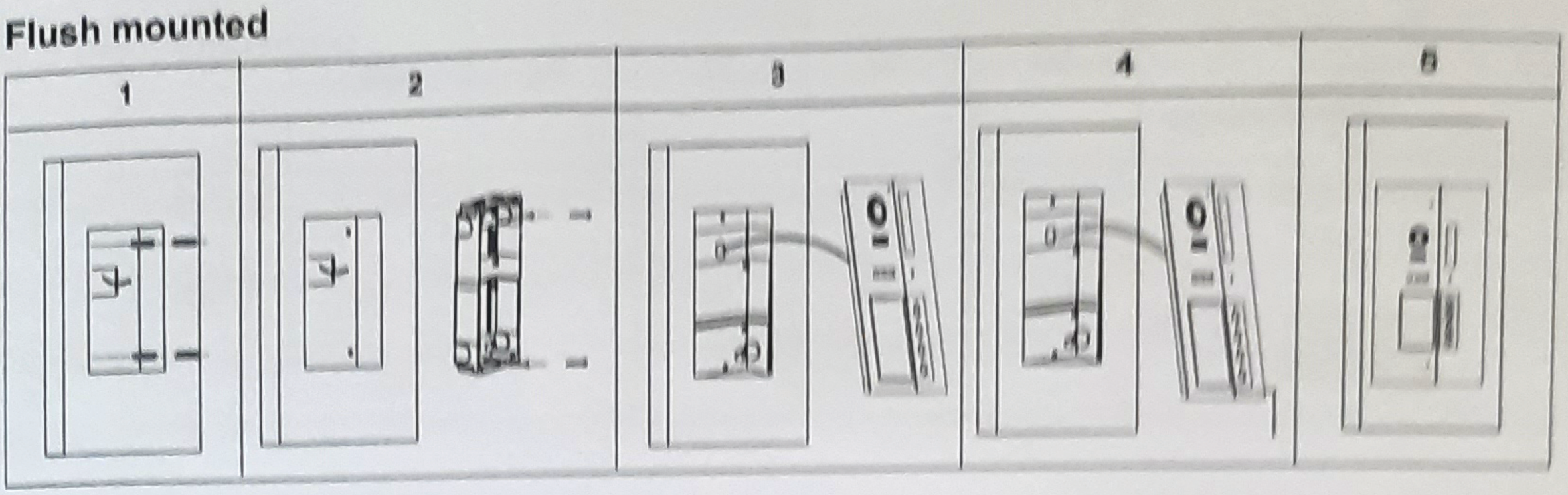
(2) Disassemble the front panel to install the name plate, then lock the front panel again.

(3) Fix the mounting box and rain hood with 4 screws.

(4) Connect the cable according to the system wiring diagram.

(5) Fix the door station onto the mounting box with a special screw driver

Flush mounted



(1) Open a mounting hole on the wall, Drill 4 holes for the mounting box, then insert the expansion columns into the holes.

(2) Fix the mounting box and 4 screws.

(3) Connect the cable according to the system wiring diagram.

(4) Fix the door station onto the mounting box with the wrench included in the package.

6. RFID Access Control Management

At standby state, read a registered card at the door station, the door will be open after a beep.

If want to open the gate lock, press and hold on the call button on the door station, the button light will be on, read a registered card within 3 seconds, the gate lock will be open.

If read a unregistered card at the door station, there will be 2 beeps to remind you that it's invalid card.

Touch SETTING icon  on Main Menu to enter SETTINGS interface, then touch DEVICE CONFIGURATION, then touch DOOEBELL LIST. Touch the Door Station you want to change the settings, touch MODIFY, input password and # to enter MODIFY interface. Touch ACCESS CONTROL MANAGEMENT to do the below settings:

6.1 Access State

It's on by default. If users do not want to use card access control function, please disable this item.

6.2 Register Access Card (125KHz ID card)

Touch it, the screen will display below message: 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.

6.3 Check/Manage Registered Card Information

All the registered access card information could be found in VALID REGISTERED CARD LIST. Touch any

registered card to enter a sub menu, then you can edit the card information.
MAIN INDEX can be a room no. or any easily remember no. for one family.
SUB INDEX can be a series no. for registered card of one family.
If you want to pause one access card, touch MOVE TO INVID REGISTERED CARD LIST.
If you want to delete one access card, touch DELETE ACCESS CARD.
If you want to delete all registered card information, touch DELETE ALL REGISTERED CARD INFORMATION.

6.4 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.

6.5 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, touch  to restore registered card information.

7. Specification

No	Item	Content
1	Connection	2 Wire Non-polarize
2	Subscriber	2-4
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	Mechanical Buttons
10	Working Voltage	DC 18-30V
11	Lock Type	See 4.11 &4.12
12	Gate Lock Type	1 Channel Dry contact signal
13	Working Consumption	6W MAX
14	Card Type	125KHz RFID Card
15	Reading Cards distance	≤20mm
16	Q'ty Of ID card	1000（MAX）
17	Working Temperature	-25 ℃ to +60 ℃
18	Storage Temperature	-30 ℃ to +60 ℃
19	Dimension	Surface:176.83*93.87*39.7MM Flush: 241.05*139*45MM