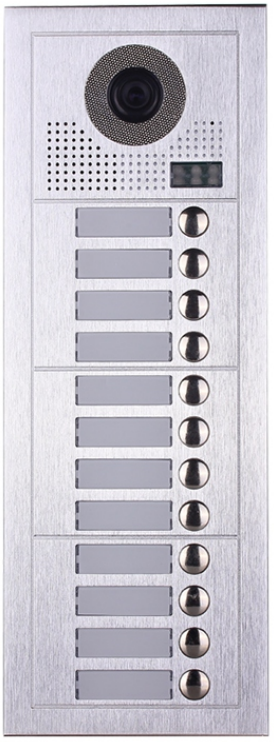
Installation Manual and
Programming Guide



# VIDEO INTERCOM SYSTEM

## 2-wire Door Station

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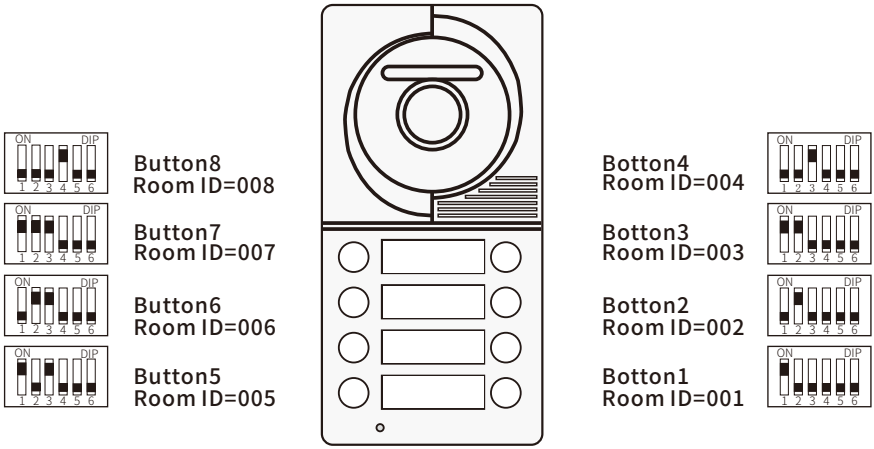
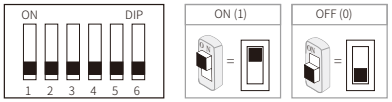
# Getting Started

Thank you for choosing our Video Intercom System! We are proud to introduce the new updated 2-wire system, providing a straight forward installation, and a simple, intuitive user experience.
This manual includes installation steps, programming instructions, and wiring diagrams.
Please read all instructions in this manual carefully, and check all components before installing them in the building. We recommend installing and testing one component at a time (ie. room stations) making it easier to detect a potential error before completion.
Attached at the end of this installation section is a detachable End-User manual.




**DIP** Switches Settings

Total 6 bits in the DIP switches can be configured. The switches can be modified either before or after installation.




**Bit-1,Bit-2 are used for door station ID setting(1=on,0=off).**

When multi door stations are installed in the system. These three bits must be set correctly,the first door station set to 00,the second one set to 10,the third one set to 01,the fourth one set to 11.If only one door station isintalled,set to 00

00 - First door station
10 - Second door station
01 - Third door station
11 - Fourth door station

**Bit-3 Set the ring back tone**

Bit3=0 Turn on the call waiting ring tone

Bit3=1 Disable call waiting ringtone (mute)

**Bit-4 and Bit-5 is used for unlock time setting.**

00 - 1 second (Default setting)
10 - 5 seconds
01 - 10 seconds
11 - 15 seconds

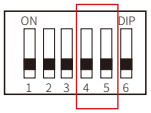
**Bit-6 is used for connecting extra camera.**

0 - No extra camera (Default setting)
1 - Connecting with extra camera

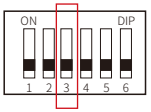
# Electric Lock

Adjust the timer setting with Bit-4 and Bit-5 at the outdoor station (00 = Off/Off):

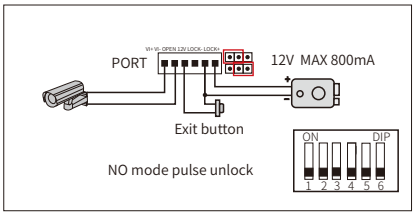
**00** - 1 sec.
**01** - 5 sec.
**10** - 10 sec.
**11** - 15 sec.

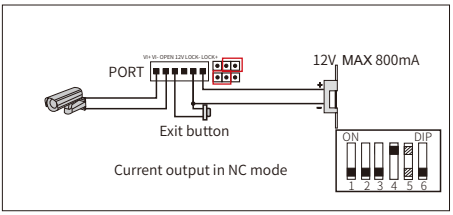


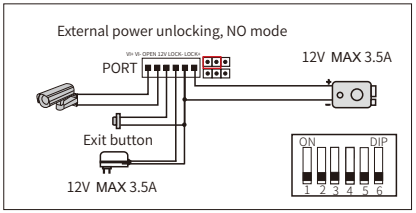

Set the ring back tone
Bit3=0 Turn on the ringtone
Bit3=1 Turn off the ringer

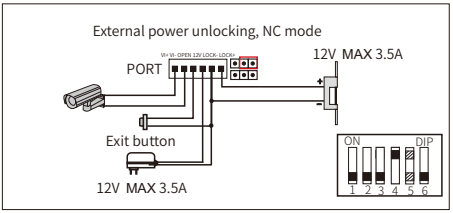



for their reference.

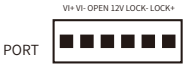


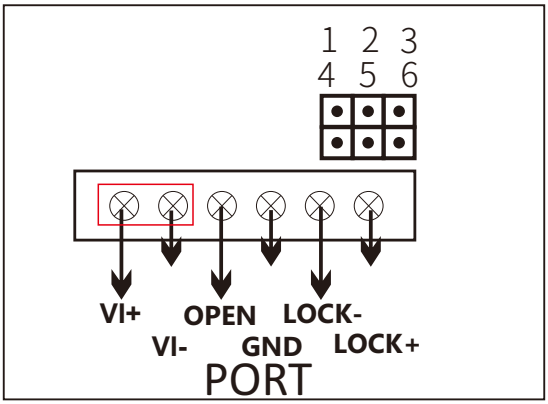




Press **OPEN**, hear unlock sound and realse the lock.
Long press **OPEN** 5s, and keep long press, hear circular ringing, release OPEN and choose interphone volume.
Idle time, bluetooth "**DOORBT**" turn on, use Android APP "V-Intercom" connect and modify data.






Set the jump pin 1-2 plus 5-6 to be NO mode for internal power supply

Set the jump pin 1-2 plus 4-5-6 to be free is external power supply NO mode

Set jump pin 2-3 plus 4-5 to be internal power supply NC mode

Set the jump pin 2-3 plus 4-5-6 to be free is external power supply NC mode

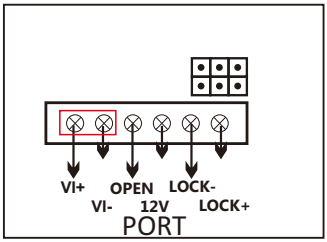
Jump pin 1-2-3 is the NC/NO mode for Lock

Jump pin 4-5-6 is to set the mode of Lock' s output

Jum pin 4-5 is continuous current output mode, maximum is 800 mA

Jump pin 5-6 is Current Limiting Mode, only suitable for electric control lock

Jump pin 4-5-6 to be free is used for external power supply




**Ports description:**

VI+: Camera positive electrode

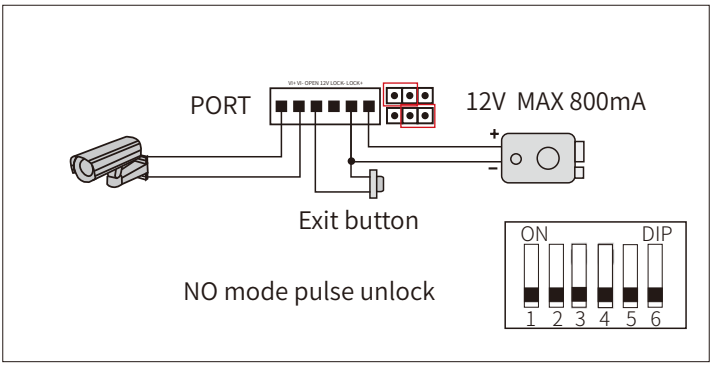
VI-:Camera negative electrode

OPEN : Door unlock button

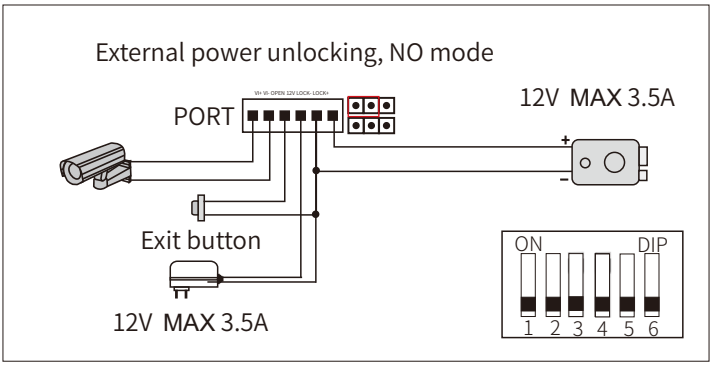
12V: Unlock the external power input - (COM) IN +12V

LOCK-: Negative lock

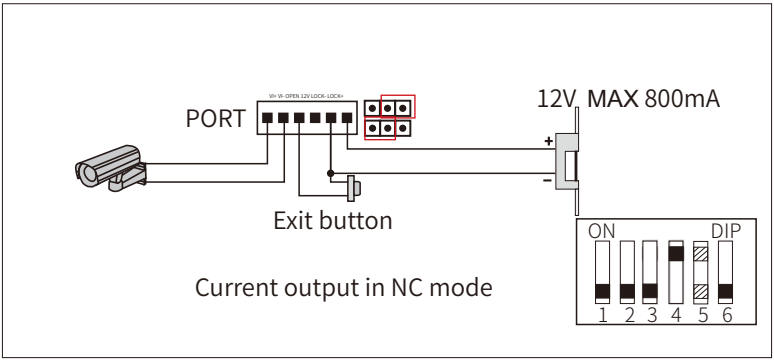
LOCK+: Positive lock



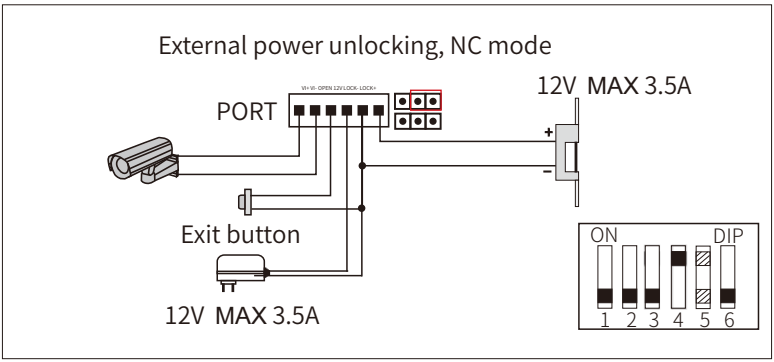

**This is the internal power comb NO unlock mode. Bit 4-5 dosen’ t need to set.**
**The above picture is mainly to turn on the electronic contorl lock**



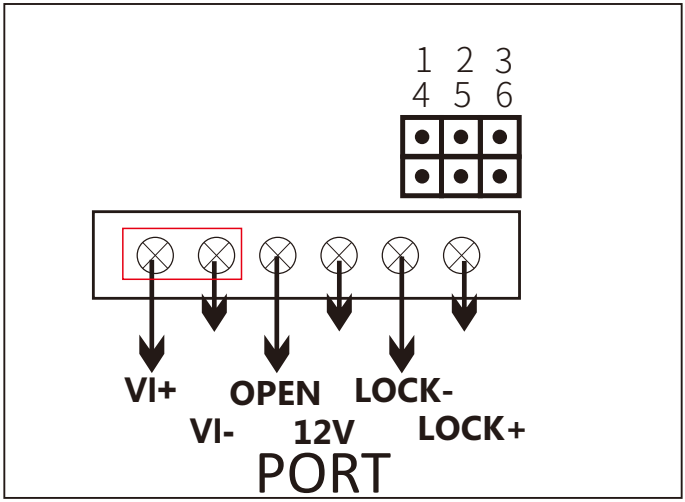

**This is the external power comb NO unlock mode. Bit 4-5 no need to set.**
**The above picture is mainly to the Power-on unlocking**




**This is the internal power supply NC mode Bit4-5, which needs to set the door opening delay according to your own needs. The output current of the door lock that mainly opens the magnetic lock, electric plug lock and other power locks is maximum 800mA**




**This is the outside electronic supply NC mode.Bit 4-5 can set the door-open delay according to your own demand. The above picture is mainly for unlocking the electric plug-in lock and magnetic lock.**
**Maximum control electric current is 3.5A**




Port "12V" corresponds to the common end of the dry contactor

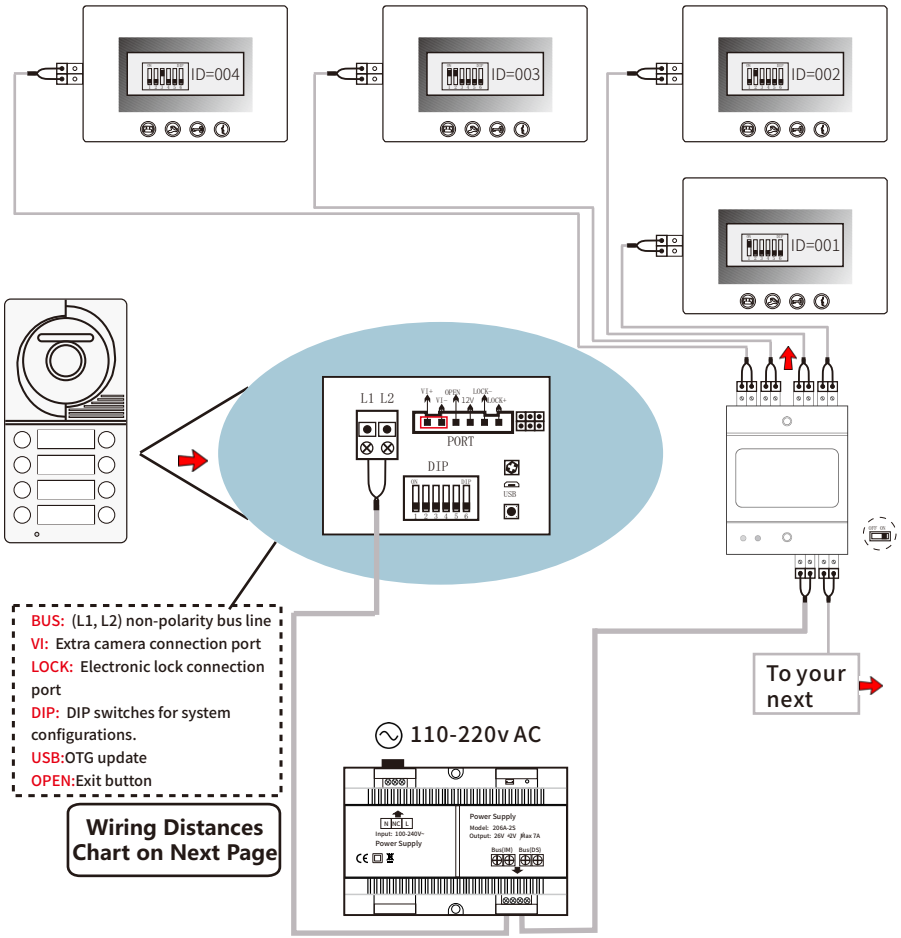
Port "lock+" corresponds to NC/NO of the dry contactor
Mode is selected by the "1-2-3" jump pin

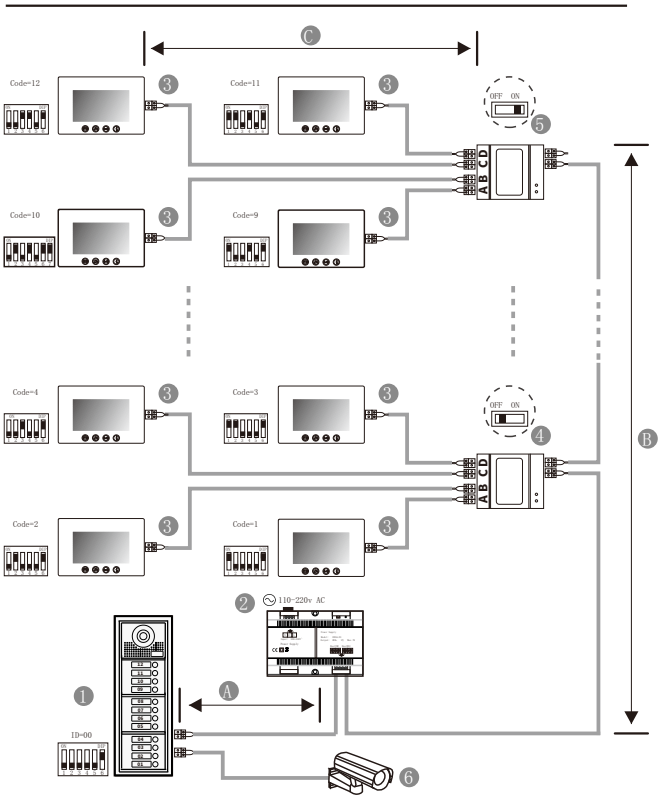
Port "lock-" is the negative GND of the lock

# Set-Up/Installation

## Wiring

Below is a sample four-monitor, single-entry wiring diagram using minimum 18-awg, unsheilded, stranded wire. Please take careful note of the monitor bit-codes.
The diagram on the next page shows a 32-monitor configuration with an additional camera .
Take note of the distance chart at the bottom of the page to ensure your wire distances are under the listed limits.






## Legend

[1]: Door station, when there is only one Door station, the DIP bit-1 bit-2 should be set to 00.

[2]:Power supply: Integrated power supply no need connect with power separator. Conventional power supply must connect with power separator.

[3]: Monitor, each one with an unique User Code, note that all the bit-6 of the DIP should be set to 1(ON) in this case.

[4]: Video distributor set switch to OFF unless at the end of the line.

[5]: Video distributor set switch to ON at the end of the line.

[6]: Extra camera.

## Distances

When monitor quantity < 20

| Cable Usage | A | B | C |
|---|---|---|---|
| Parallel cable 2x0.75㎟ | 60m | 60m | 30m |
| Parallel cable 2x1㎟ | 80m | 80m | 40m |

When monitor quantity > 20

| Cable Usage | A | B | C |
|---|---|---|---|
| Parallel cable 2x1㎟ | 60m | 60m | 30m |
| Parallel cable 2x1.5㎟ | 80m | 80m | 40m |

# Programming

## Answering a door call

Press **CALL** button on door station, the monitor rings, the **CALL** visitor can be seen on the monitor screen. If nobody answers the call, the screen will automatically turn off in 60 seconds.
To answer an incoming call, press **TALK** to answer, calls last for 60 seconds,**DO NOT** have to hold talk to enable voice communication. Press **TALK** again to end the conversation. If the system connects with two or more monitors, answering any monitor, the others will turn off automatically.

If there is an extra camera, during and incoming call, press **MONITOR** switch to see the view of extra camera.
Door Release
During the conversation with the visitor, press **UNLOCK** button to unlock the door.

Monitoring
Press **MONITOR** button while in standby mode you will be able to see the view of outdoor station camera. Press **MONITOR** again switch to next door stations camera or extra camera. Press **TALK** button twice to exit.(firstly you should finish setting door station camera and extra camera, see bellow).

How to set door station camera and extra camera?
Keep pressing **ALARM** button until you hear a long beep. Start setting state of multiple door stations and extra cameras. Press **MONITOR** as many times as the quantities of specific code of door state.

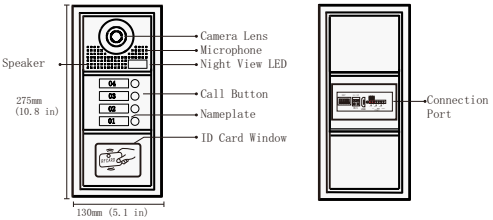
| Bit state | User Code | Bit state | User Code | Bit state | User Code |
|---|---|---|---|---|---|
| | Code=1 | | Code=12 | | Code=23 |
| | Code=2 | | Code=13 | | Code=24 |
| | Code=3 | | Code=14 | | Code=25 |
| | Code=4 | | Code=15 | | Code=26 |
| | Code=5 | | Code=16 | | Code=27 |
| | Code=6 | | Code=17 | | Code=28 |
| | Code=7 | | Code=18 | | Code=29 |
| | Code=8 | | Code=19 | | Code=30 |
| | Code=9 | | Code=20 | | Code=31 |
| | Code=10 | | Code=21 | | Code=32 |
| | Code=11 | | Code=22 | | |

For example :
There are 3 door stations, 2 door stations with extra camera, specific code of door state is 8.
Keep press **ALARM** (Long beep) – press MONITOR 8 time – press ALARM
There are 1 door stations,0 door station with extra camera, specific code of door state is 1.
Keep press **ALARM** (Long beep) – press MONITOR 1 time – press ALARM

The form of the special code of the door state is as follows:

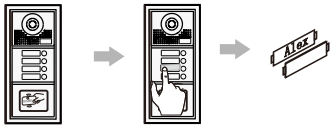
| Door state | Specific code | Door state | Specific code | Door state | Specific code | Door state | Specific code |
|---|---|---|---|---|---|---|---|
| 1 0 Door Cam | Code=1 | 2 2 Door Cam | Code=5 | 3 3 Door Cam | Code=9 | 4 3 Door Cam | Code=13 |
| 1 1 Door Cam | Code=2 | 3 0 Door Cam | Code=6 | 4 0 Door Cam | Code=10 | 4 4 Door Cam | Code=14 |
| 2 0 Door Cam | Code=3 | 3 1 Door Cam | Code=7 | 4 1 Door Cam | Code=11 | | |
| 2 1 Door Cam | Code=4 | 3 2 Door Cam | Code=8 | 4 2 Door Cam | Code=12 | | |

# Parts and Functions

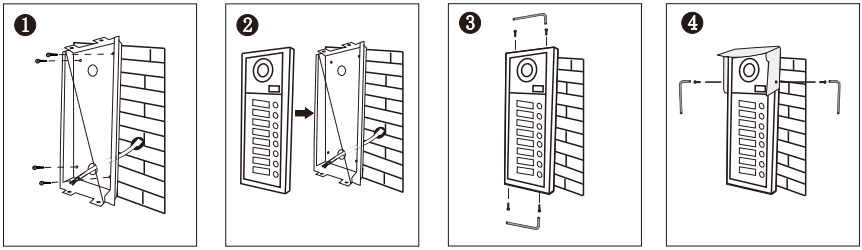



## Place Name Label

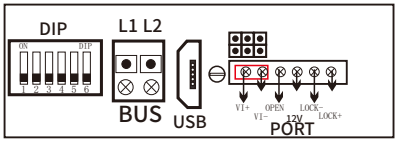
Press down and move left to open the transparent nameplate cover.
Then insert the name paper and put the cover back.




## Mounting

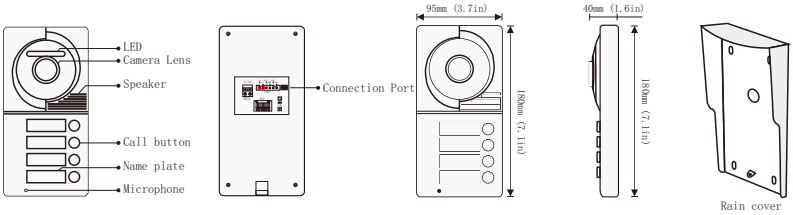



## Terminal Description




BUS: (L1, L2) non-polarity bus line
LOCK: Electronic lock connection port
DIP: DIP switches for system configurations.
Potentiometer: Set the volume of intercom
VI: Extra camera connection port
USB: OTG update
OPEN: Exit button

# Parts and Functions

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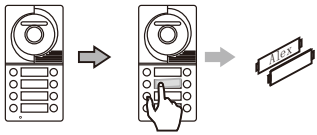

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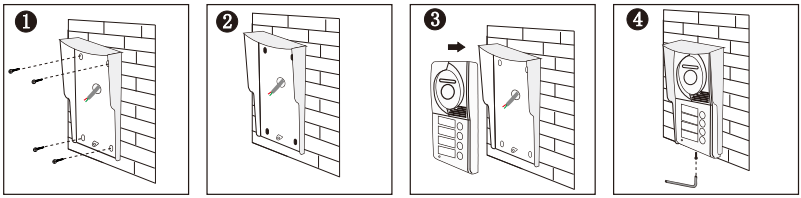


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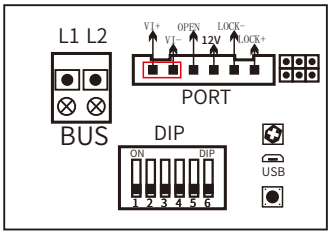


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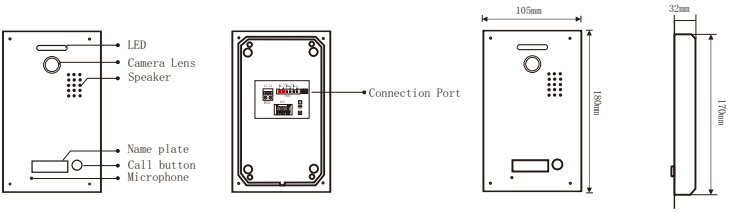
Potentiometer: Set the volume of intercom

Button: 1. Used for Management card recording for Outdoor stations with RFIC card function

2. Short press to unlock; Press and hold the button for 5 seconds until there is a buzz sound, and then enter the management card recording mode; Press and hold for 10 seconds until the second sound to delete all cards.

# Parts and Functions

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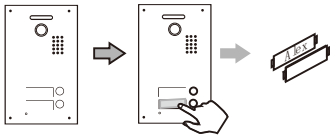

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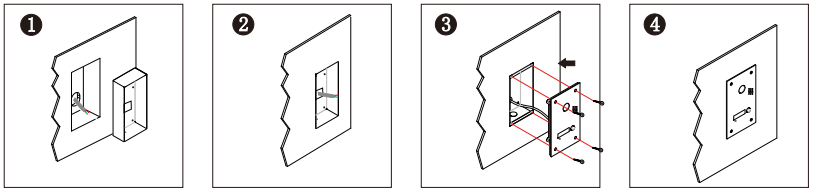


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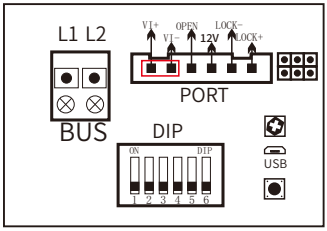


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# User Instructions of RFID & RFID AccessControl

# IC Card Control

**1) Using IC Card Encryption Mode(Factory Default):**

When disconnected Encryot stitch, means IC card encryption mode.When swiping card unlocking, IC card should be with corresponding . password. This function prevent copy IC card by others

**2) Using IC Card No Encryption Model:**

When connected Encryot stitch, means IC card no encryption mode.When swiping card unlocking, unlocking only with corresponding IC ard number. After copy IC card, use the copy card unlocking.

**3) Record Manage Card**

First, connect Manage stitch, then will be a beep sound every second to get into record manage card mode. Then, swipe a new IC card, and a long beep will indicate the successful recording of a new management card. Finally cut off the Manage stitch

**4) Record User Card**

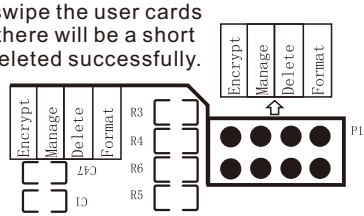
First, swipe the manage card, then swipe a new user card one by one. Next, swipe the manage card again - The user cards are recorded. The limit for the number of recorded user cards is 1000 pcs.

**5) Delete User Card**

Connecting Delete stitch, then will be a beep. Next, swipe the user cards which needs to delete and hold in 10 seconds. Then there will be a short beep three times indicating the user card has been deleted successfully. Finally, cut off the Delete stitch.

**6) Format All the Cards**

Connecting Format stitch, then will be a beep to start formatting. Next will a beep after 5 seconds, all the manage cards and user cards will be deleted. Finally, cut off the Format stitch.




# ID Card Control

**1) Record Manage Card**

First, disconnect the power to the Outdoor Station. Next, after connecting JP1, there will be a beep sound every 1.5 seconds. Then, swipe an ID card, and a long beep will indicate the successful recording of a new management card. Finally cut off the JP1.

**2) Record User Card**

First, swipe the manage card, then swipe a new user card one by one. Next, swipe the manage card again - The user cards are recorded. The limit for the number of recorded user cards is 2720 pcs.

**3) Delete User Card**

First, disconnect the power to the Outdoor Station. Next, after connecting JP3, there will be a long beep indicating all user cards has been deleted. Finally, cut off the JP3.

## Specification

| | | | |
|---|---|---|---|
| Power Supply: | DC 24V | Power Consumption: | 1W in standby, 5W in working |
| Unlock Power output: | 12Vdc, MAX 800mA | Working Temperature: | -20℃~ +55℃ |