JB-304

Video Villa Door Entry System

Installer's Manual (V1.0)

⚠️ Please read this manual carefully before the products are installed. Technical specifications and contents are subject to change accordingly without notice.

CONTENT

Part 1. Product introduction

1.1 Use Purpose

The system is applied to single family houses, offices, shops, warehouses, and other access control purpose.

1.2 System Configuration

Configuration	Options	Remarks
Door station	Model：Ⅵ（metal）	1）B/W and color cameras are optional.
	Model：Ⅸ（metal）	2）The system supports up to 4 door stations.
	Model：Ⅴ（plastic）	3）Card reader is available on Model V.
Indoor phone	Model：V12	1）4' B/W CRT and color screens are optional on Model V12, V20 and V21.
	Model：V16	
	Model：V17	2）3.5" & 4" color screens are optional on Model V18.
	Model：V18	3）5"and 7" color screens are optional on Model V16, V17, V22, and V23.
	Model：V20	
	Model：V21	4）ABS and Aluminium panels are optional on Model V16, V17, V22, and V23.
	Model：V22	5）The system supports up to 4 indoor phones.
	Model：V23	6）Each indoor phone requires a 18VDC power supply.
Power supply	Adapters with any plug style	DC18V, 1A

⚠ We may provide more options for the devices.

1.2.1 Door stations

Model: Ⅵ
（94X138X38mm）

Model：Ⅴ
（121X202X46mm）

Model:Ⅸ
（54.5x140.5x40mm）

1. 2. 2 Indoor phones

Model： V18
（170X114X22mm）

Model: V12
（203x221x53mm）

Model：V20
（195x225x50mm）

Model: V21
（192x214x48mm）

Model: V16
（266x184x23mm）

Model: V17
（266x184x23㎜）

Model: V22
（266x175x24.8mm）

Model: V23
（266x175x24.8mm）

1.2.3 Power supply

1.3 Features and Functions

◆ All common functions are available, such as calling, answering, and releasing doors.;

◆ DIY with 4 wires (usually RVV0.5mm^2 in 100 meters);

◆ PLUG & PLAY connection;

◆ More than 10 optional melody rings;

◆ Both door stations and indoor phones have e-lock output port ;

◆ Two options to release doors, by SIGNAL or by POWER, except Model Ⅸ;

◆ Surface and flush mounting are optional (Model Ⅳ and Ⅴ).

◆ Rainproof and anti-vandal (Model Ⅳ and Ⅸ).

◆ Night viewing with infrared LEDs（B/W) or white LEDs（color).

◆ Illuminated call button;

◆ INTERCOM between indoor phones 120 seconds;

◆ Transfer a line to other indoor phones.

Part 2. Technical Parameters

2.1 Parameters

2.1.1 Door station parameters

Camera: 1/3" CCD (color), CMOS (b/w)

Min. illumination: 0.01LUX

Video Output: $1V_{P-P}/75\,\Omega$

Working voltage: DC18V±10%

Working Current: ≤500mA

Environment Temperature: -40℃ ~ 70℃
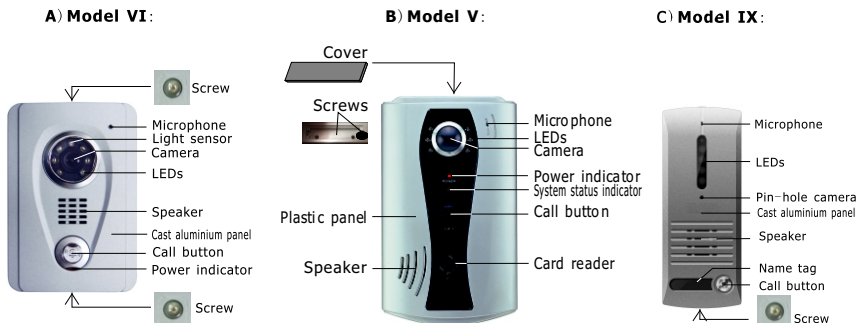
2.1.2 Indoor phone parameters

Display: 4" CRT/ 3.5", 4", 5", & 7" TFT-LCD

Resolution: 480X234 (3.5")/960X234 (4",5")/1440X234 (7")

Working voltage: DC18V±10%

Working Current: ≤500mA

Environment Temperature: -10℃ ~ 55℃

2.1.3 Power supply parameters

Voltage Input: AC100V~240V

Voltage Output: DC18V
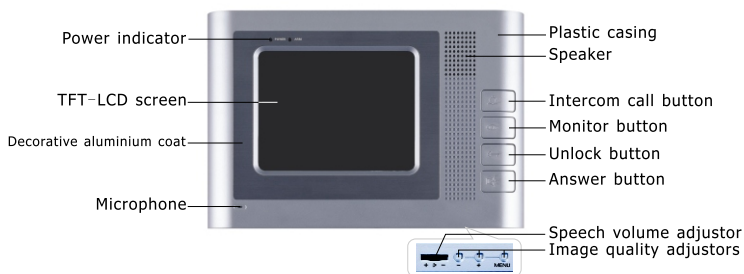
Current Output: 1A

Power plug style: Optional

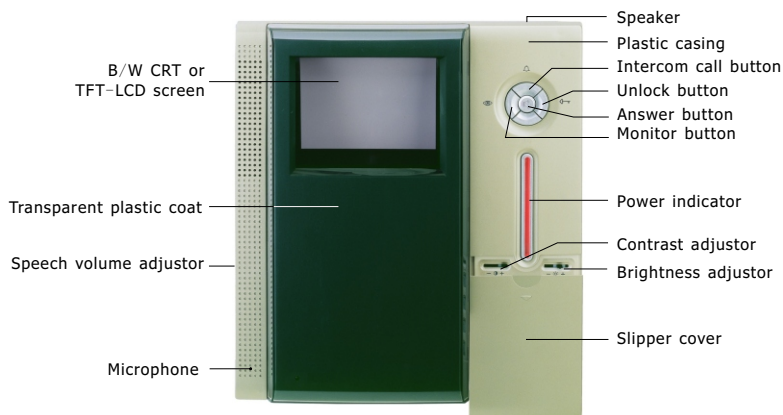## 2.2 Structure

2.2.1 Door station structures

A) **Model VI:**
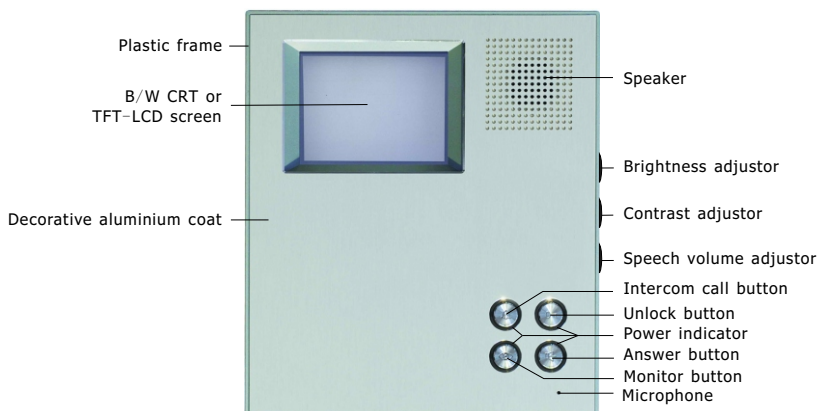

Screw
Microphone
Light sensor
Camera
LEDs
Speaker
Cast aluminium panel
Call button
Power indicator
Screw

B) **Model V:**

Cover
Screws
Plastic panel
Speaker
Microphone
LEDs
Camera
Power indicator
System status indicator
Call button
Card reader

C) **Model IX:**

Microphone
LEDs
Pin-hole camera
Cast aluminium panel
Speaker
Name tag
Call button
Screw

2.2.2 Indoor phone structures

A) Model V18

Power indicator — Plastic casing — Speaker

TFT-LCD screen — Intercom call button — Monitor button

Decorative aluminium coat — Unlock button — Answer button

Microphone — Speech volume adjustor — Image quality adjustors

B) Model V12:

B/W CRT or TFT-LCD screen — Speaker — Plastic casing — Intercom call button — Unlock button — Answer button — Monitor button

Transparent plastic coat — Power indicator

Speech volume adjustor — Contrast adjustor — Brightness adjustor

Microphone — Slipper cover

C) Model V20

Plastic frame — B/W CRT or TFT-LCD screen — Speaker

Decorative aluminium coat — Brightness adjustor — Contrast adjustor — Speech volume adjustor — Intercom call button — Unlock button — Power indicator — Answer button — Monitor button — Microphone

D) Model V21

Decorative ABS coat

B/W CRT or
TFT-LCD screen

Speaker

Power indicator

Plastic casing

Intercom call button

Monitor button

Unlock button

Answer button

Microphone

Contrast adjustor
Brightness adjustor
Speech volume adjustor

E) Model V16

Plastic casing

Decorative ABS coat

TFT-LCD Screen

Speech volume adjustor

Image quality adjustors

Power indicator
Intercom call button
Microphone
Monitor button

Answer button
Speaker
Unlock button

F) Model V17

Plastic casing

Decorative ABS coat

TFT-LCD Screen

Speech volume adjustor

Image quality adjustors

Power indicator

Microphone

Unlock button
Monitor button
Answer button
Intercom call button
Speaker

G) Model V22

Chromeplated frame
Decorative ABS coat

TFT-LCD screen
Speaker

Speech volume adjuster
Image quality adjustors
Microphone
Answer button(illuminate)
Unlock button
Monitor button
Intercom call button

H) Model V23

Chromeplated lath
Decorative ABS coat
Powrer indicator
TFT-LCD screen
Plastic casing
Microphone

Speaker
Speech volume adjustor
Intercom call button
Iamge quality adjustors
Monitor button
Unlock button
Answer button
Chromeplated lath

Part 3. Installation and connection

3.1 Installation

3.1.1 Door stations

Model IX

A. Release the panel from the bracket with the
    enclosed driver (②).

B. Choose a proper position and fix the waterproof
    sealer and bracket on the wall with 2 screws (①②).

C. Put the panel on the bracket after connect wires
    (③④). ③ is a sealer too.

D. Fix the panel from the bottom with the screw(②).

④　③　②　①

Sealer

Bracket
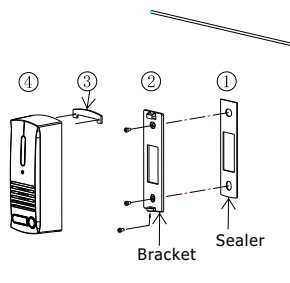
Model VI

1) Surface mounting

A. Take off the screws with the enclosed driver (①).

B. Put the big seal behind the rain shield and fix them(④⑤).

C. Put the small seal in the rain shield and
    fix the door station after connect
    wires (②③).

D. Before fix the panel (①), please
    mind if the soft plastic protector
    is put on the call switch.

⑤
Big seal
④
③　Rain shield
Small seal
②
①
Soft plastic protector
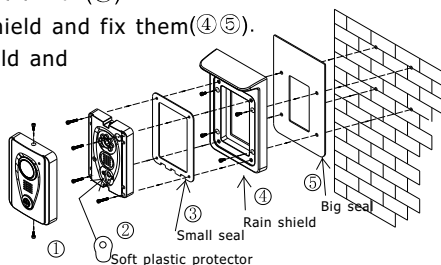
2) Flush mounting

A. Produce a groove (111x66mm) on a proper position in the wall (④).

B. Take off the screws and disjoin the aluminate panel
    and door station with the enclosed driver(①)

C. Put the smaller seal behind the door
    station and fix them on the groove
    with screws after connect wires (②③).

D. Cover the panel on the door station
    and fix it(①).

④

③
②　Small seal
①　Soft plastic protector
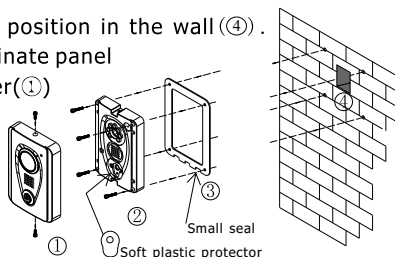
⚠ There is a soft plastic protector on the call button switch. Do not lose it.

Model V:
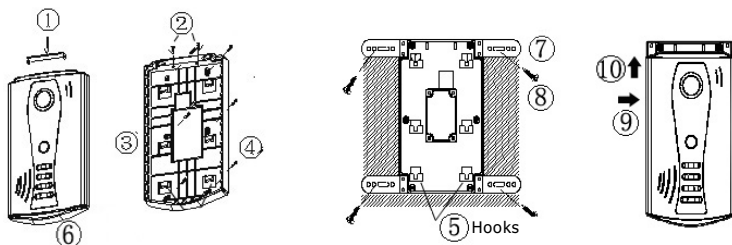
1) Surface mounting
A. Take off the cover block and screws from the panel(①②).
B. Move the panel(⑥) down and disjoin it and the bracket(③).
C. Choose a proper position and fix the bracket on the wall with the enclosed 6 screws(④).
D. Put the panel on the bracket after connect wires, and move it up in order to lock it in the hooks(⑨⑩).
E. Fix the panel with screws and put the cover block on the original positions(②①).

2) Flush mounting
A. Choose a proper position and produce a square hole in the door or square groove in the wall, as the same size of the bracket.
B. Take off the cover block and screws from the panel(①②).
C. Move the panel(⑥) down and disjoin it and the bracket(③).
D. Put the bracket in the hole/groove.
E. Fix the bracket in the door with the enclosed aluminate tapes and screws (⑦⑧); Or, fix the bracket in the wall with the enclosed 6 screws(④).
F. Put the panel on the bracket after connect wires, and move it up in order to lock it in the hooks(⑨⑩).
G. Fix the panel with screws and put the cover block on the original positions(②①).

3.1.2 Indoor phones
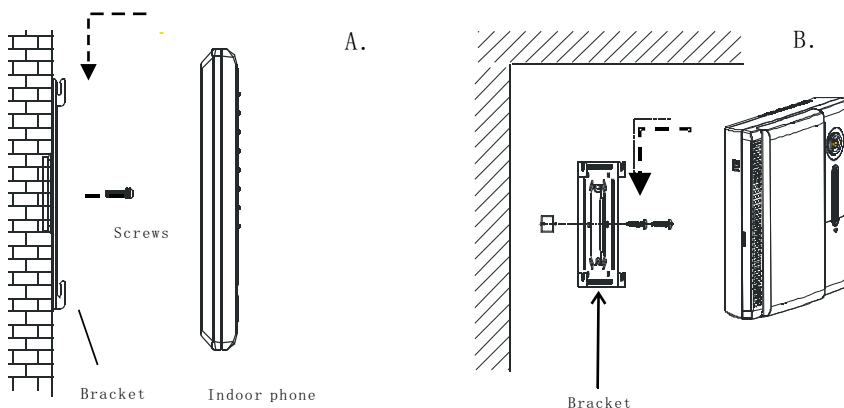
Fix the bracket on the wall with screws and put the indoor phone on the bracket.
(Attention: indoor phones may have different sizes of bracket.)

⚠ ① Make sure if the door station is waterproof and choose a proper position.;

② Mind the width of actual camera viewing angle and put the door station on a proper position (the manufacturer suggests 1.4~1.8m of height.;

③ Do not put the devices at the places where there are high voltage, high temperature, strong magnet, corrosive, humidification, etc;

④ Do not drag the wires.

⑤ Keep the devices clean;

⑥ Make sure the lens and microphones are protected from dust.;

⑦ If the distance is over 100 meters between door station and indoor phone, the manufacturer suggests thicker wires.

3.2 Connection
3.2.1 Component diagram
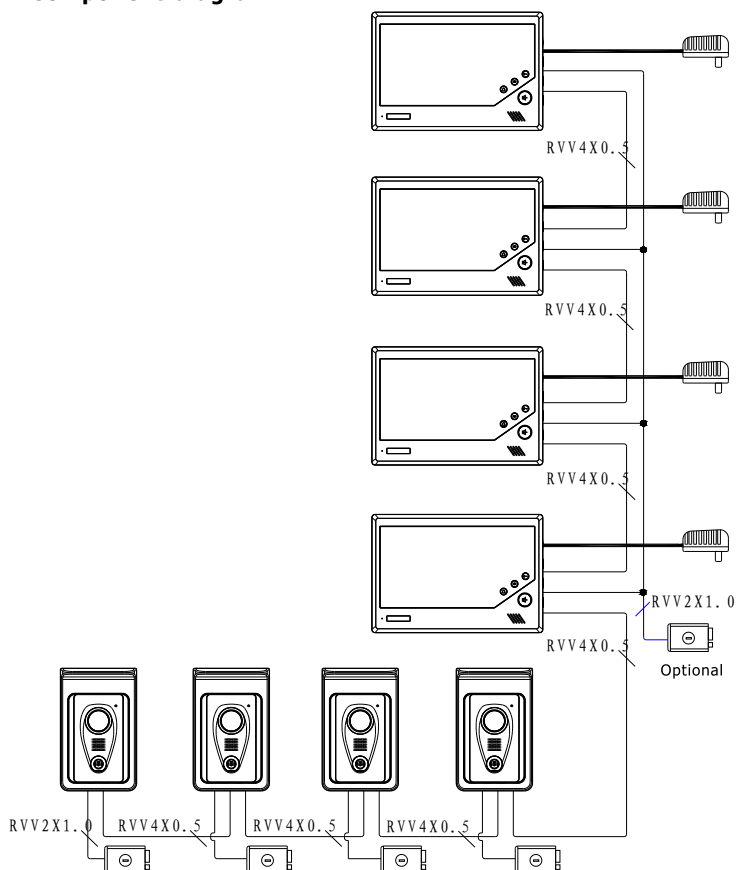
⚠ ① Both door stations and indoor phones（except V18）have e-lock output port. Users may choose any accordingly.

② Model IX supports to release doors by signal only.

3.2.2 Wiring diagram
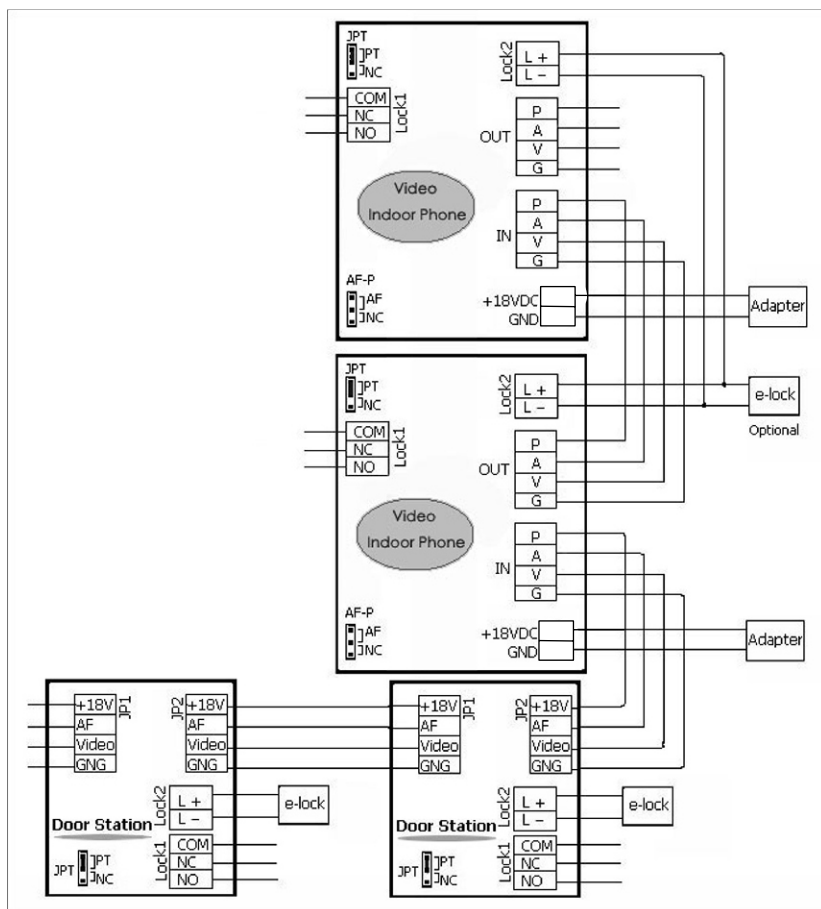
⚠ ① The basic components are 1 door station, 1 indoor phone, and 1 adapter;

② The system supports up to 4 door stations and 4 indoor phones;

③ Each video indoor phone requires an adapter with 18VDC. But all door stations require no power supply.

④ If there are more than 2 door stations or 2 indoor phones, the devices have to be programmed. Please have details in Part 4.

⑤ Model Ⅸ panels are without JPT and Lock2 terminals. They support to release doors by signal only.

3.2.3 E-locks

There are various electronic locks. People from different countries have different practice of using electronic locks. Generally speaking, there are two methods to release doors via door entry system. They are SIGNAL and POWER. The system supports both. Users can adopt any accordingly.

A. Diagram of POWER e-locks
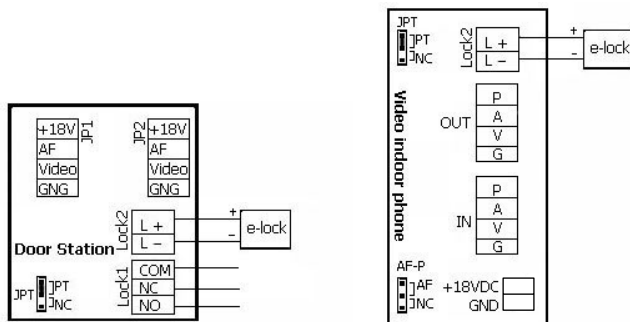
⚠ ① Instant output 12VDC, 500mA;
   ② Please use the jumper on PT position of JPT (Except Model Ⅸ);
   ③ The e-locks can keep releasing in 0.5s only.

B. Diagram of SIGNAL e-locks
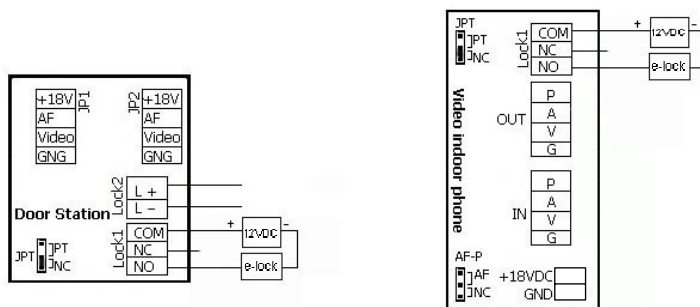
⚠ ① COM terminal has to be connected. NC means close circuit. NO means open circuit. Please choose a right terminal according to the e-lock;
   ② Please use the jumper on NC position of JPT (Except Model Ⅸ);
   ③ The e-locks can keep releasing in 5 seconds.

Part 4. System programming

4.1 Audio Jumper

The audio jumper has to be put on AF position in the indoor phone. If there are more than 1 indoor phones, only the last indoor phone is required to do that while the others keep it on NC position.
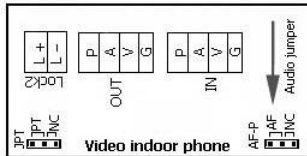
4.2 Video resistor

In order to assure the image quality, a video resistor is required to connect between GND（G）and VIDEO（V）terminals in the last video indoor phone.
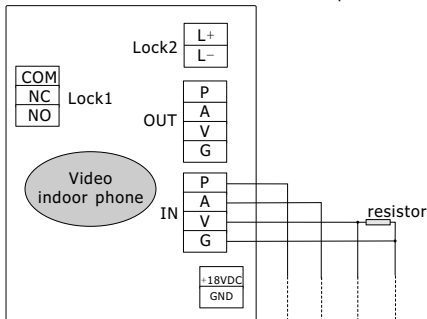

4.3 Door station address

If there are two or more door stations, the door stations have to be addressed by cutting the code wires as the following table. The code wires are usually besides the terminals and marked as S1 and S2.

Door station address No.	Code wire: S1	Code wire: S2
0 (1st door station)	/	/
1 (2nd door station)	Cut	/
2 (3rd door station	/	Cut
3 (4th door station)	Cut	Cut

⚠ In Model IX door stations, S1 and S2 code wires can be found after taking off the metal bracket.

4.4 Register/Cancel cards (**Model V only**)
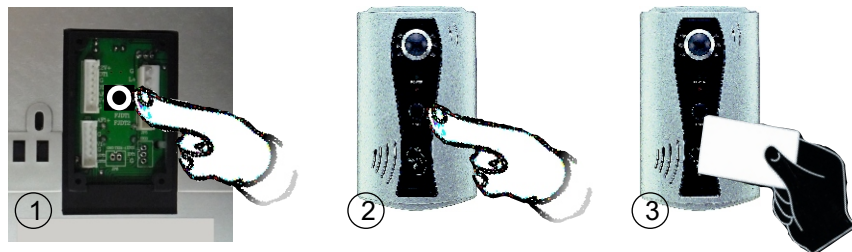
4.4.1 Register cards
A. Push the button in the back side of the villa door station (①). It will sound a beep.
B. Keep pushing the CALL button for 2 seconds (②).
C. Release the CALL button after the door station sounds double beep.
D.Put the cards close to the card reader one by one (③).
E. Push the button in the back side of the villa door station again (①) to exit.

4.4.2 Cancel cards
A. Push the button in the back side of the villa door station (①). It will sound a beep.
B. Keep pushing the CALL button for 4 seconds or more (②).
C. Release the CALL button after the door station sounds a long beep.
D. Push the button in the back side of the villa door station again (①) to exit.

Part 5. Operation

5.1 Operation on door stations

Push CALL button on the door station.The door station will sound a feedback ring if the calling is successful. The calling can be ended immediately once the call button is pushed again. If there is no answer, the calling will end itself after 15 seconds.
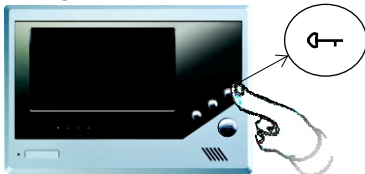
5.2 Operation on indoor phones

### 5.2.1 Answer
When receive a call, please push 🔊 button to answer.
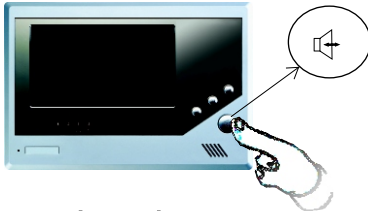
5.2.2 Release door
During intercom status the door can be released by pushing 🔑 button.

5.2.3 Video surveillance
If there are two or more door stations, their cameras can be activated by turn by pushing 👁 button 2nd, 3rd and 4th times.(During surveilling, users can speak to the people outside by pushing 🔊 button; release the door by pushing 🔑 button.)
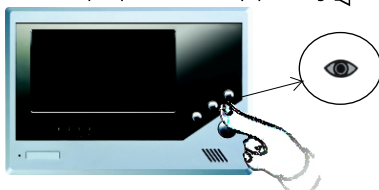
5.2.3 Intercom call
If there are two or more indoor phones, the intercom between them is available. Please just keep pushing 🔔 button for 2 seconds to ring the other indoor phones.
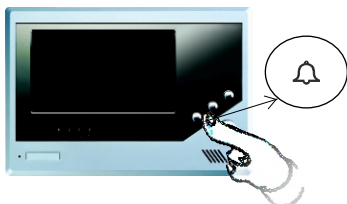
5.2.4 Transfer calling
If a call has to be transferred to another indoor phone, please just push 🔔 button to ring the indoor phone; after somebody answers there the line will be transferred.

B-b. Answer the indoor phone's calling

A. answer the visitor's calling   B-a. Ring another indoor phone

5.2.5 Adjust image quality
While the screen is displaying, users may push ″MENU + -″ buttons to adjust the color, brightness, and contrast for the quality image.
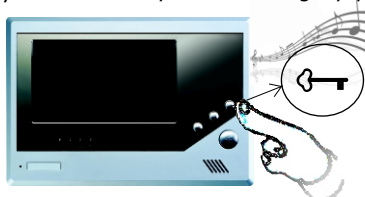
```
+
-
MENU
```
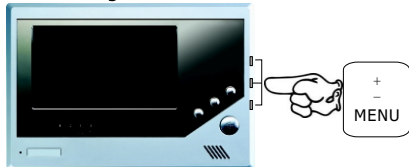
5.2.6 Adjust the ring & speech volume

5.2.7 Change ring tones
Keep pushing 🔑 button for more than 2 seconds when the indoor phone is idle, then push the button again and again until a favourite ring tone is played. Users may end the ring by pushing 🔊 button.

Part 6. Test

6.1 Test methods

After all components are installed and connected as the user's manual, please switch the power on ; ane then try to operate all features on all door stations and indoor phones as Part 5.

6.2 Malfunction analysis & obviation

Malfunctions	Analysis	Obviation
The whole system cannot work.	①No power. ②wrong/bad connection.	①Check power supply. ②check connectors and wiring.
The door station cannot work.	①No power. ②wrong/bad connection. ③Wrong address number. ④the door station is broken.	①Check power supply. ②check connectors and wiring. ③Check address number. ④repair or replace the door station.
The indoor phone cannot work.	①No power. ②wrong/bad connection. ③the indoor phone is broken.	①Check power supply. ②check connectors and wiring. ③repair or replace the indoor phone.
The video indoor phone doesn't display.	①No 18VDC power supported. ②the power is cut off. ③the screen is broken.	①add 18VDC power on the indoor pone.②check power supply. ③replace the screen.
The indoor phone ring volume is too low or too high.	The volume wheel is on an improper level.	Turn the volume wheel to adjust in the indoor phone.
The indoor phone doesn't ring.	The volume wheel is on off position.	Turn the volume wheel.
Poor image quality	①Contrast, brightness, color adjusters are on improper positions. ②Video resistor is not connected. ③Video resistor is not matched.	①Adjust the adjusters. ②Connect the video resistor (as 4.2). ③Change the video resistor (as 4.2)
Video display is ok. But intercom between indoor phone and door station is not available.	①Wrong connection. ②Audio Jumper is not properly capped.	①Check the connector and wiring. ②Cap the audio jumpers correctly (as 4.1)