WIFI Visual Intercom Doorbell

Instructions for Installation and Operation

9"

Please read the instructions carefully before using to guarantee correct and proper operation

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I.Product Description
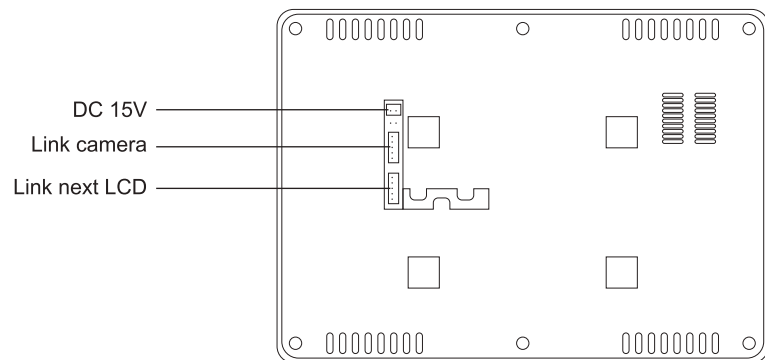
1.Product overview

This product is a Visual intercom doorbell which integrates wired connection and remotecontrol of mobile phone.

2.Product features

1.The outdoor unit can make a video call with the indoor unit. unlock and record videos.(support for 32GB memory card at maximum)

2.It can also make a remote video call with the mobile phone terminal unlock,take photos and record videos

3.Support Android 6.0 and IOS 8.0 or above mobile phone system.

4.One device can be added and connected to several mobile phones in the meantime,and up to four mobile phones are allowed to open and view the outdoor unit in the meantime

5.This product will be upgraded based on demand, the actual product shall prevail, and our company reserves the right of final interpretation.

II. Indoor Unit

1.Product introduction

Color LCD

Screen brin_ghtness adjust
Screen color adjust
Intercom volume adjust
TF memory card slot

MIC

Power LED/
Setting indicator light

Ring cancel
Ring&Volume adjustment
Monitor
Unlock
Intercom/Hang Key

DC 15V
Link camera
Link next LCD
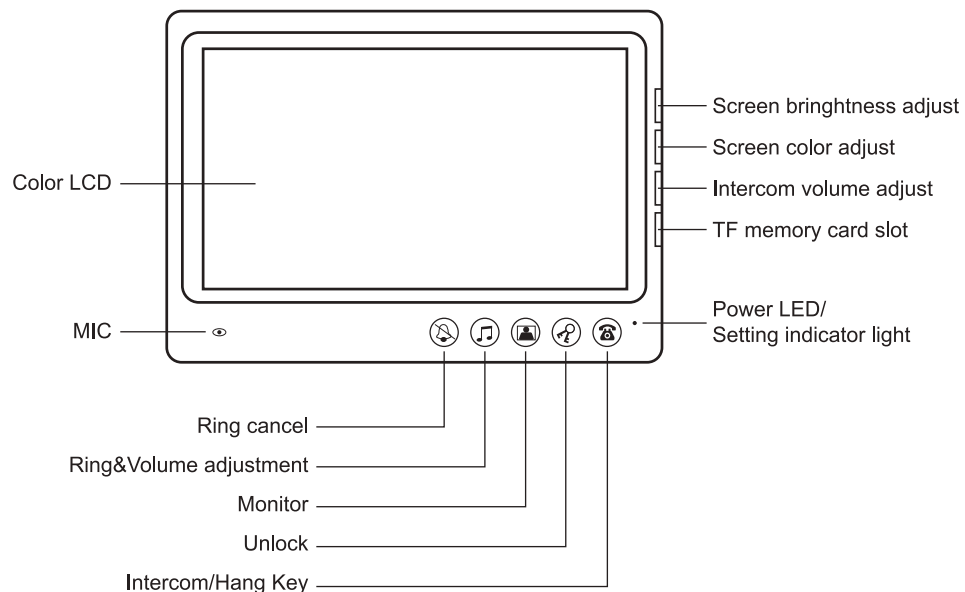
2.Functions of indoor unit

A.Indoor unit ringtone setting

1.Mute setting

In the standby mode of the indoor unit,press the button "▲"first to turn on the screen,and then press the button "🔔"to turn off the bell and intercom,making no effects on image display and intercom.If it is required to recovery of ringtone, press the button " ▲ " again in the monitor " 🔔 "mode.

● **Disturbance-free mode will be activated after the mute function is enabled**

2.Change ringtone

In the standby mode of the indoor unit, press the button "▲" first to turn on the screen, and then press the button "♫ " to activate the ringtone and enter "change ringtone" settings. The system is equipped with 25 ringtones of various lengths. The button "♫ " is pressed once to change one ringtone. After a suitable ringtone is selected, stop pressing the button. The last ringtone will be the ringtone when the system is called by anyone.

3.Ringtone volume adjustment

Ringtone volume it has three levels ,large,medium and small.In the standby mode of the indoor unit,press the button " ▲ " first to turn on the screen,press the button "♫ " for two seconds each time to decrease the volume progressively.

● **After power-off, all ringtone settings will be restored to factory settings**

B. Instructions for doorbell operation

1. When any visitor presses the call button on the outdoor unit, the indoor unit screen will display the outdoor image in real time and the bell will ring.

2.The indoor user may press the button " ☎ " to talk with the visitor.

Note: Talking will be enabled by pressing the button " ☎ " for the first time, and it will be disabled if the button is pressed again. The screen will be off automatically in 30 seconds if the calling is not answered.

3. In the intercom mode, the indoor user may press the button " ⚷ " to open the door.

4. In the intercom mode, the indoor user may press the button " ☎ " to finish talking or talking will finish automatically in 90 seconds.
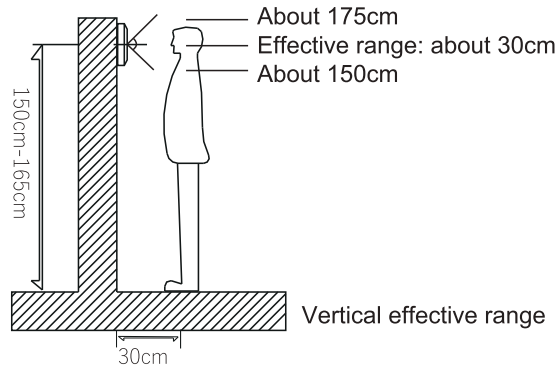
5.If it is required to resume talking after hang-up, press the button " ▲" first and then the button " ☎ " to talk with the visitor.

6.In the standby mode of indoor unit can actively view the image of outdoor , press the button " ▲ " first to view, press the button "▲"again to restore standby.

# 3.Instructions for indoor unit installation

A. Installation & location of indoor unit

At first, determine the location and height for installing the indoor unit; the reference height is 150-165cm from the display screen center to ground.

About 175cm
Effective range: about 30cm
About 150cm

150cm-165cm

Vertical effective range

30cm

B. Make a mark and drill a hole on the wall

Make a mark and drill a hole after finishing location on the wall

Electric drill

Bore diameter: about 1.5cm
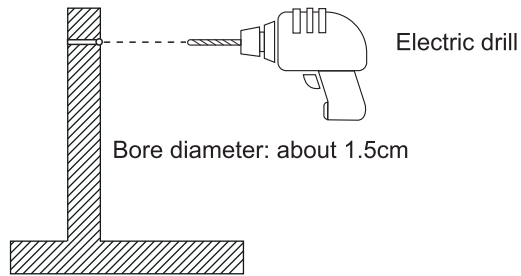
C. Fix the indoor unit hanging board

As shown in the figure: Take out the hanging board; open the package of screws to take out the rubber plug and screws

1. Drill a hole, bore diameter: about 6mm;
2. Fix the rubber plug at the above hole;
3. Fix the hanging board with screws.

Indoor unit hanging board

Screw

5-core wire
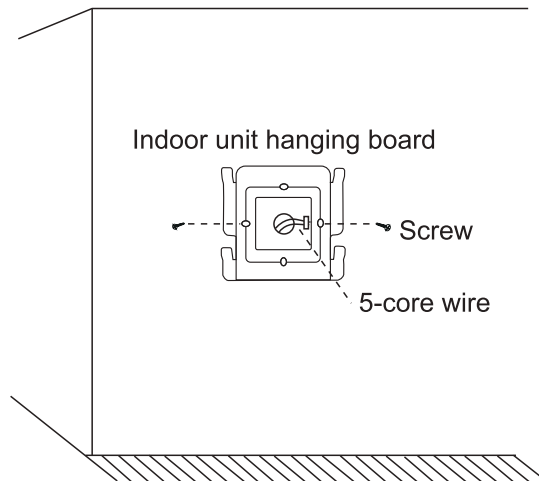
D. Fix the indoor unit

1.Take out the indoor unit and power supply;

2.Insert the power plug and 5-core connector;

3.Horizontally hang the indoor unit on the fixed hanging board.

Hanging board buckle

15V power supply
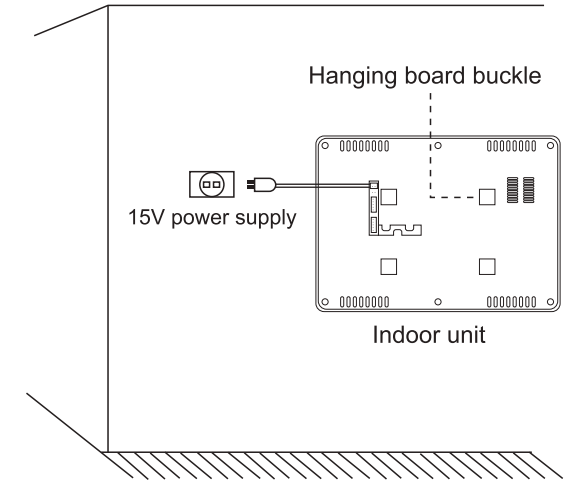
Indoor unit

4. Parameters of indoor unit

Screen	Color HD TFT LCD
Resolution	800*480
Power supply	Input: AC100-240 Output: DC15V 1200mA
Power	Standby: ≤1W Operating: ≤10W
Wiring terminal	5PX2.54
Operating temperature	-20℃-60℃
Monitoring time	90 seconds
Talking time	90 seconds
Number of calling ringtones	25

III. Outdoor unit

1.Product introduction

- Microphone
- Camera
- Infrared night vision lamp
- Call button
- Speaker

- 4P indoor unit connector socket
- 2P electronic control lock connector socket
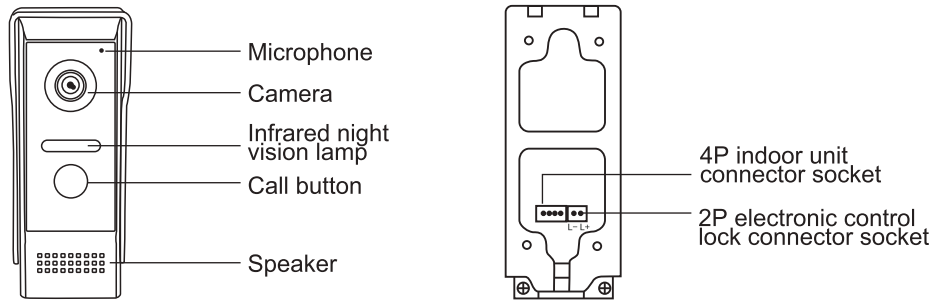
2.Functions of outdoor unit

A. Calling & intercom

A visitor presses the call button on the outdoor unit to call the indoor by pressing one key; intercom talking can be made after the indoor unit is answered;

B. Night vision

An infrared or white light night vision lamp is used to clearly see any visitor one meter away at night;

C. Rain-proof

Equipped with a rain cover, Ingress protection – level 4, for outdoor uses;

D. Outdoor unit unlocking

With 12V unlocking voltage signals, it can be directly connected with a 12V electronic control lock. If any other type of electronic control locks is used, access control power supply with (control +, control-) 12V terminal control shall be available.

3.Installation of outdoor unit

A. Installation and location of outdoor unit

At first, determine the location and height for installing the outdoor unit; the reference height is 150-165cm from the outdoor unit center to ground.

It's required to avoid installing the outdoor unit at any place with strong direct sunlight.
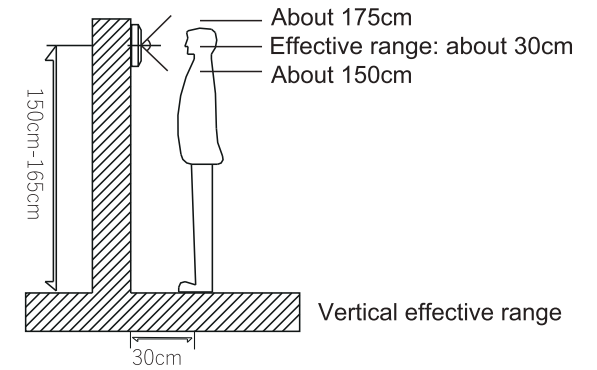

- About 175cm
- Effective range: about 30cm
- About 150cm
- 150cm-165cm
- 30cm
- Vertical effective range

Figure 8

- Horizontal effective range
- 30cm
- Effective range: about 50cm
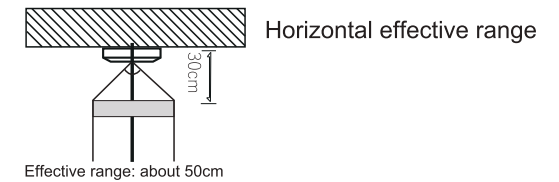
Figure 9

B. Make a mark and drill a hole on the wall

Make a mark and drill a hole after finishing location on the wall.

- Electric drill
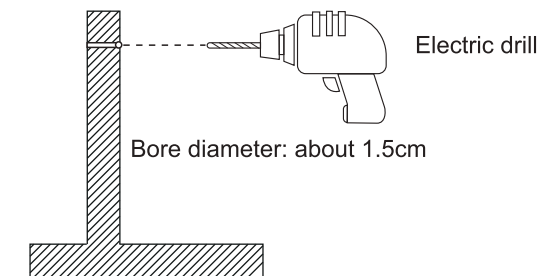- Bore diameter: about 1.5cm

Figure 10

C. Fix the outdoor unit rain cover

As shown in the figure: Take out the rain cover; open the package of screws to take out the rubber plug and screws

1. Drill a hole, bore diameter: about 6mm;
2. Fix the rubber plug at the above hole;
3. Fix the hanging board with screws.

● **For outdoor installation, waterproofing treatment shall be made for the wall.**

Outdoor unit rain cover
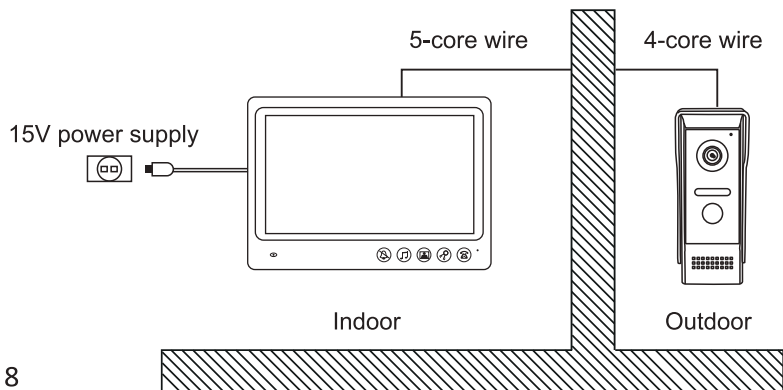
Screw

4-core wire
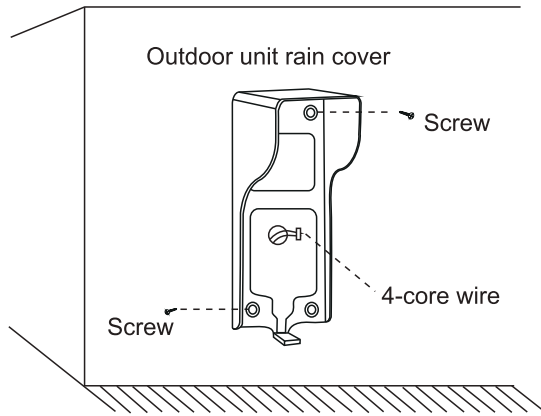
Screw

D. Fix the outdoor unit

1. Take out the outdoor unit;
2. Connect the 4-core connector and 2-core connecting connector;
3. Put the outdoor unit body behind the rain cover and fix the bottom with a hexagonal screw.

Outdoor unit rain cover   Outdoor unit

Hexagonal screw
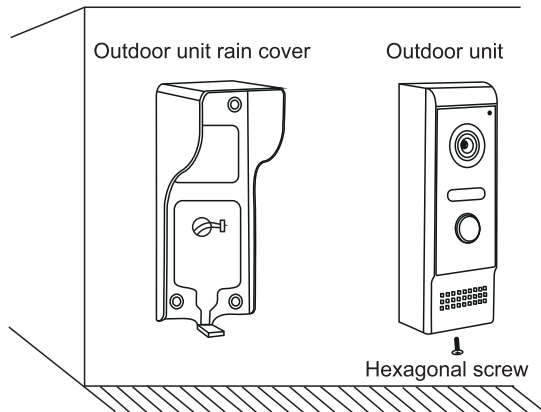
E. Completion of installation

5-core wire   4-core wire

15V power supply

Indoor   Outdoor

4.Parameters of outdoor unit

Camera	HD CMOS camera
Rain cover	With a rain cover
Power supply	Indoor unit power supply
Power	Standby: ≤1W Operating: ≤2W
Wiring terminal	4PX2.54
Unlocking terminal	2PX2.54
Operating temperature	-20℃-60℃
Night vision	Infrared or white light night vision lamp
Unlocking voltage	DC12V

IV. Wiring

1. Wiring requirements

A. Intercom wiring requirements

Based on various distances, the wiring and wire diameter requirements are different.
The table below lists the wire requirements for different distances:

1-30m	RVV4*0.30
31-50m	RVV4*0.50
51-100m	RVV4*1.0

Colors and functions of wiring terminals:
Yellow --- Video   Blue --- Audio
Black --- Ground wire   Red --- VCC
Green— Intercom between the screens
(Multiple screens can use)

B. Power supply wiring requirements

1. It's not allowed to arrange power supply wiring and AC or other high frequency wire in the same conduit, and the spacing distance shall be larger than 60cm.
2. The power supply wire for the indoor unit may be laid with intercom wiring in the same conduit.

C. Effective distance

Distance from outdoor unit to indoor unit < 100M (Refer to Figure 14)

＜100m
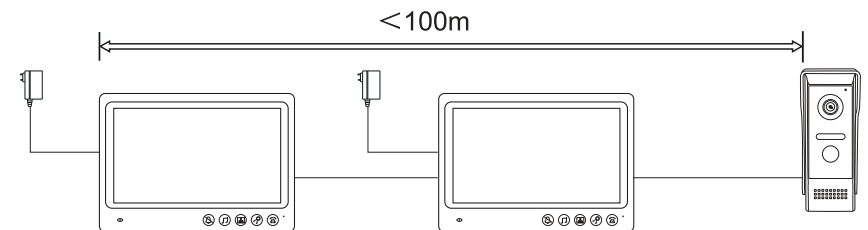
2.Wiring diagram

A.One outdoor unit connects with one or more indoor units

When it connects with 1-4 indoor units, the screens are connected in series by handshaking, and connected by 4-core wire.

15V power supply   Indoor unit   Outdoor unit

Connect with next indoor unit

Electronic control lock
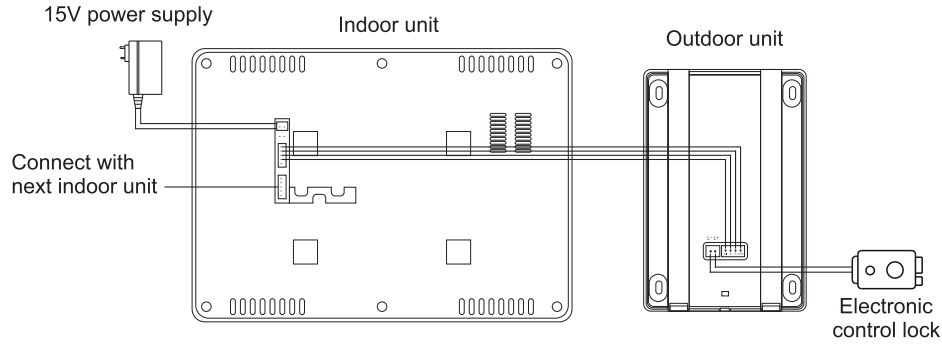
VIDEO— Yellow   AUDIO— Blue   GND--- Black   VCC— Red   CALL—Green

+15V--- Red   Lock- --- Black   Lock+--- Red

B.In combination with access control power supply wiring

15V power supply   Indoor unit   Outdoor unit
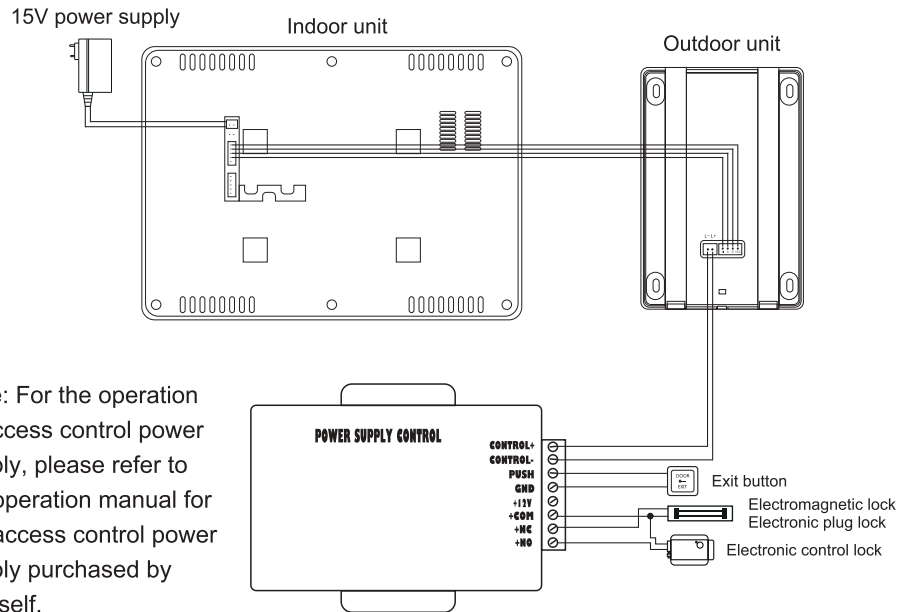
Note: For the operation of access control power supply, please refer to the operation manual for the access control power supply purchased by yourself.

POWER SUPPLY CONTROL

CONTROL+
CONTROL-
PUSH
GND
+12V
+COM
+NC
+NO

Exit button

Electromagnetic lock
Electronic plug lock

Electronic control lock

V. Introduction of testing method for connectionbetween doorbell indoor unit and mobile phone APP

Precautions for installation and testing:

Before installing and using the product, it is recommended to use the original power adapter. The non-original power adapter may produce interference fringe in the screen or noise etc. Test the product within the range of effective WIFI signal, if the installation distance is beyond the effective range of the router or the signal is weak, it may cause intercom or picture delay, stuttering and so on.

1. APP download and installation:

Apple / Android
Scan QR Card Download APP

2.1 Android system: Scan Android QR code and download APP

Step 1   Step 2   Step 3


Step 4   Step 5

2.2 Apple system: Scan the QR code or search for "LookCam" in Apple APP store directly and click download.

2. Add the device and WIFI configuration

1. Connect the outdoor unit and the indoor unit with RVV4 core wire, connect the indoor unit to power supply, and confirm the doorbell works properly.

2. The WIFI module starts after the indoor unit is powered on for 20 seconds, and the blue light in the lower right corner slowly flashes and then turns on, and then you can start the mobile phone network setting.

3. Start the phone and enter WIFI settings, search for the doorbell hotspot name (such as: F007***), and click Connect.
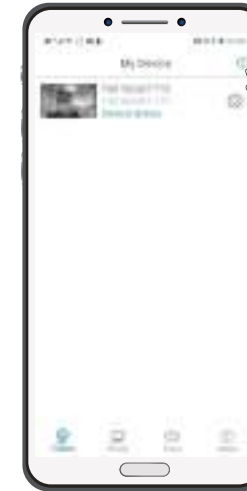
4. After the hotspot is connected, open the APP and the doorbell device is automatically added successfully. Or click the "+" number in the upper right corner to add the device manually(show camera online).Please refer to page 13 for the specific steps of adding equipment.

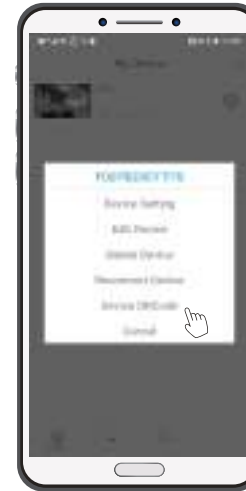5. After the device is connected successfully, click Confirm to enter the router settings on the device configuration.

6. Select the network normally used at home.

7. Enter the wireless password and press Confirm to complete the doorbell network connection configuration.

8. When the connection is successful, it indicates that the network configuration is successful. The doorbell restarts and the phone reconnects to the wireless network.

9. After 60 seconds, the doorbell restarts successfully, and the doorbell shows the camera online status again (the blue light in the lower right corner of the indoor extension is always on).

VI. Introduction of APP main interface features (take Android as an example)

1. Device QR code viewing

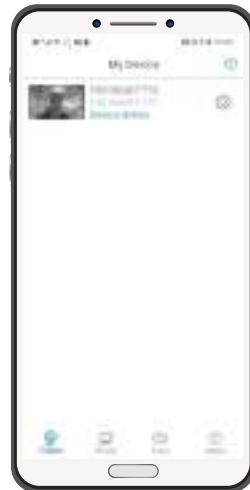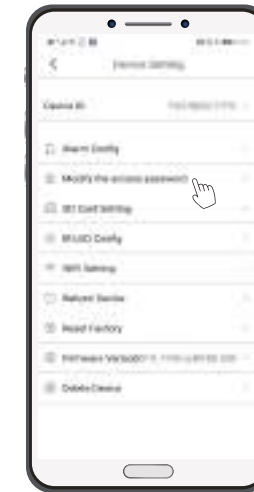Long press the online device and click Device QR Code,then you can view the ID QR code of this device.

When you bind the mobile phone APP software, you can scan this QR code and add.

2. Change the password of the device

Figures 1

Figures 2

After the doorbell is connected successfully, you will be prompted to change the password or manually enter the advanced configuration to change the password. (Since the system will automatically add devices after downloading APP on the same local area network, please change the default password after the first successful connection to ensure privacy) (Figure 1,2)

Enter the 6-digit initial device access password (the initial device password is 123456 by default), then enter the 6-digit new device password and click Confirm to complete the device password modification, and you will be prompted that the password change is successful. (shown as figure)

3. Format TF card

Please format the memory card for the first time (Note for inserting memory card: insert the TF memory card before the indoor unit is powered on), click Settings to enter the advanced configuration. Then click SD card video settings, and click Format SD card, the system will prompt that SD card is formatted successfully. In addition, if circular video recording is turned on, after the memory card is full of video data, the system automatically overwrites the previous files.
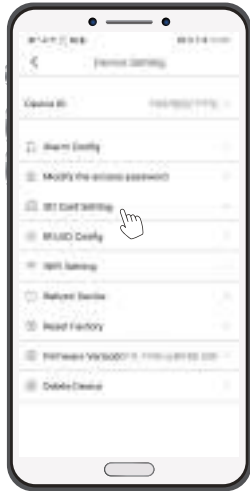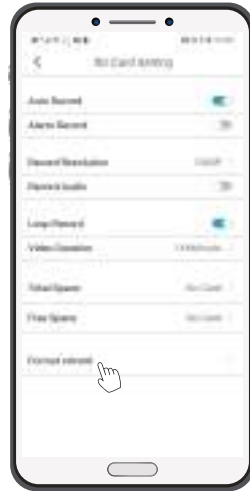
Figures 1   Figures 2
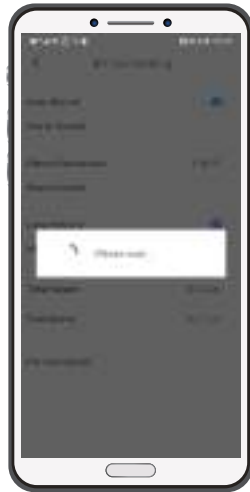
Figures 3   Figures 4   Figures 5

4、Restore factory settings

Step 1   Step 2

Click Confirm to restore the factory settings of the system. Or press the indoor extension mute button for 5 seconds to restore the factory system setting （Operate the indoor unit in standby mode）

5、Delete device

Figures 1   Figures 2

Click Confirm to delete the device (Figure 1). Or long press the online device to enter the settings interface and click Delete the Device Directly. (Figure 2)

6、Restart device

Figures 1   Figures 2   Figures 3

Click Confirm to restart the built-in WiFi module (Figures 1, 2). Or long press the online device to enter the settings interface and click Reconnect (Figure 3)
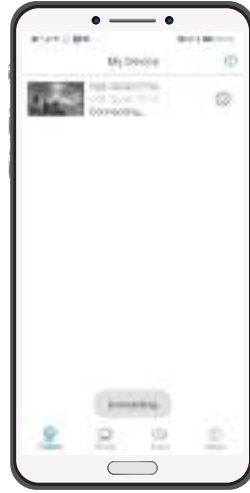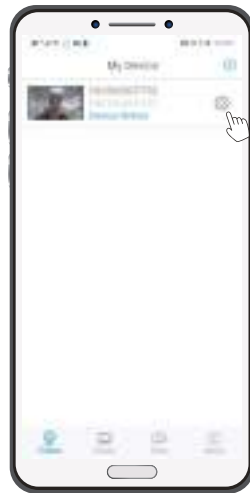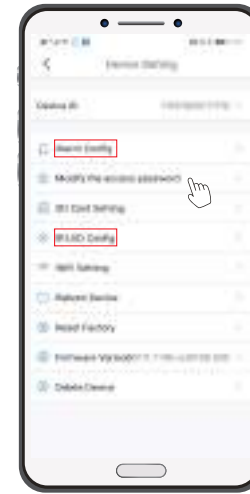
7、Advanced configuration

Figures 1

1.Long press the online camera to enter the settings interface or click the settings icon to enter the advanced configuration

Figures 2

2. Modify the access password

Figures 3   Figures 4

Special reminder: "Alarm Config"and "IR-LED Config", without these two functions, no setting is required.

3.Enter the 6-digit initial device access password (the initial device password is 123456 by default), then enter the 6-digit new device password and click Confirm to complete the device password modification.You will be prompted that the password change is successful.

8、File viewing

a.The device displays:
This interface shows the number of devices connected online in the mobile phone, and you can switch and view any device freely.

b. Photos viewing:
Enter the screenshot folder to view the photos and images saved in the mobile phone.
Click the funnel icon in the upper right corner to switch to view the information stored by different devices.

c. View the extension memory card stores video information：
Click Video Recording to enter the extension memory card video folder, download and view the extension memory card storage file information.
Click the funnel icon in the upper right corner to switch to download and view video information of different devices.

9、APP system version viewing

d. Click More to display the current APP software version number.

VII. Note for mobile phone APP operation

1. When the visitor come for a visit and press the outdoor unit, the indoor unit will ring and display the visitor image, you can directly press the answer button of the indoor unit to make a video call with the visitor, and press the unlock button to open the door.

2. The mobile APP will also receive the message pushed by the server at the same time. You can enter the APP interface to make remote video calls with visitors, open doors remotely, take photos, record videos, etc. When it is answered by the the mobile phone, the indoor unit automatically hangs up and enters the standby mode.

3. When the mobile phone answers and enters the video interface, you need to mute the intercom speaker of the interface before you can hear the sound of outdoor visitors on the mobile phone. When talking to the outdoor unit, you need to long press the microphone icon before the sound of the phone can be transmitted to the outdoor unit (see picture). When the mobile phone is in the intercom state with the outdoor unit or the mobile phone is in the monitoring state, the red indicator light in the lower right corner of the indoor unit will always be on.

4. When the visitor presses the outdoor unit, the system will automatically turn on video recording by default. For manual video recording, videos will be saved in the screenshot folder. If the extended TF memory card has been inserted into the indoor unit, videos will be saved in the video folder for download and view.

VIII. Add multiple WIFI devices

1. Open APP to enter the add page and click the + icon in the upper right corner to add.

2. Click Add Online Camera to the next step

3. Click Search the Local Area Network, search the devices that can be added in the same local area network.

4. Click the device to be added

5. Scan the QR code to add (change the device name and device password and click Confirm to complete the add setting). You can also manually enter the device name, device ID, device password, and then click Confirmed.

6. Finish adding settings

IX. FAQ

1. "Password is incorrect" is displayed when connecting the indoor unit in APP.

    The user password has been changed. You need to log in with a new password.

2. The indoor unit is found offline in APP.

    Check if the indoor unit is connected to the router (check if the blue light is always on), or check if the phone is connected to WIFI.

3. When an outdoor phone calls, there is no push notification in APP.

    a. Android phones: Check if the indoor unit and mobile phone network are normal, and if APP is running in the backstage.

    b. Apple iPhone: Check if the indoor unit and mobile phone network are normal.

4. Problem: Device ID cannot be found when adding doorbell?

    Long press the mute button, restore the factory settings, open the phone WLAN and refresh, and search the device ID again.

X. Troubleshooting

Failure Type	Failure Description	Failure Elimination
Sound	No intercom sound	Inspect whether the connection wires of various colors are properly connected and whether the indoor unit can hear the sounds from the outdoor unit.
	Anyone at the indoor unit cannot hear what one says in front of the outdoor unit	1. Whether there is ringtone during calling? The main board or microphone of the outdoor unit needs to be repaired or replaced if no ringtone or intercom sound can be heard. 2. The indoor unit main board needs to be repaired or replaced if no ringtone or intercom sound can be heard during calling.
	Anyone at the outdoor unit cannot hear what one says in front of the indoor unit	1. Inspect whether a ringback can be heard on the outdoor unit when calling the indoor unit, the ringback means that the outdoor unit works normally. 2. If any talk cannot be heard if a ringback can be heard on the outdoor unit, it means that the indoor unit main board or microphone has a failure. 3. If no ringback is heard, it means that the speaker or main board of the outdoor unit has a failure.
	The intercom sound is low	1. First of all, determine the distance from the speaker's mouth to the microphone. 2. Inspect whether the turbine is rotated to the maximum level. 3. Inspect whether the wire diameter exceeds the specified proportion. 4. Determine whether original power source is used. 5. Use the test wire to test whether the sound is normal.
	Intercom noise	1. Determine whether it is noise due to the short-distance test of the two units. 2. Whether the original power source is used. 3. Whether the wire for installation is too thin or too long.
Video	Black screen	1. Inspect whether the indoor unit intercom indicator is on. If the intercom indicator is on, it means that the display screen or driver board has a failure and the board needs to be repaired or replaced. 2. In case intercom is not working and the indicator is off, determine whether the power source is normal. If the power source is normal and the black screen remains, it is determined that the indoor unit main board needs to be repaired or replaced.

Failure Type	Failure Description	Failure Elimination
Video	Blue screen	1. Inspect whether the wires are correctly connected. 2. If the blue screen remains after confirming the wires are correctly connected, it means that the outdoor camera needs to be replaced.
	Blurred screen	1. First of all, determine whether the display screen is damaged, and it shall be replaced if it is damaged. 2. If the screen is normal, the driver board needs to be repaired or replaced.
	The display screen is normally on	1. The indoor unit main board needs to be repaired or replaced.
	The display screen is normally on with whitening, black & white and too bright effects	1. If it is whitening, it means that the driver board needs to be repaired or the screen and driver board need to be replaced. 2. If it is black & white, adjust the side color turbine. The driver board needs to be repaired or replaced if there is no response. The turbine may have a failure if the colors are unstable when adjusting the turbine, and the turbine or main board needs to be replaced. 3. If it is too bright, the side turbine controls brightness, color and intercom sound respectively. Any user may choose the most appropriate position by itself.
Call	No response after calling	1. Inspect whether the power source is normal. Press the monitor button of the indoor unit to see whether the screen is normal. The power source is normal if the screen is normal. If the screen is off, use another power source to test it. If the screen is on, the power source has a failure. If the screen is still off, the indoor unit main board has a failure. 2. If the screen is normal, please inspect whether the connection is correct. 3. If the screen and wires are normal, short circuit the blue wire and black wire to see whether the indoor unit has ringtone. The outdoor unit has a failure if the blue screen has ringtone.
	Intercom is normal but no ringtone is heard	1. Inspect whether the mute mode is used. Reset it to see whether it can resume to normal state. 2. If no ringtone can be heard after resetting it, the indoor unit main board needs to be repaired or replaced.
Touch key	No response after pressing it	1. Inspect whether the device gets stuck due to the rapid responses of the keys. 2. Inspect whether many keys are pressed at the same time.

XI. Instructions

1.When cleaning the device, power it off first and use soft and dry cloth to wipe it;

2.Don't use benzene, diluent or organic solvent such as gasoline to wipe it,for these may damage the shell or discolor the device and keys;

3.The device shall be installed at a secure place with good ventilation, dry air and without direct sunlight, high-intensity magnetic field or dust;

4.Don't use it with any product not produced by our company;

5.Don't dismantle it without authorization. Please contact your local distributor or our technical department in case it has any failure;

6.Users shall follow the user manual strictly to install and test the product.Please call our company for technical support if you have any question;

7.The door-open button, electronic control lock and access control power supply are not accessories, and users need to purchase them by themselves;

8.The product is updated from time to time, so the manual is for your reference only. Please be subject to the actual product in case there are differences.