



If you have any problem during the installation or the usage, please send email to our support team, we will help you solve the problem ASAP.

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# OPERATION INSTRUCTION

4-Wire Video Door Phone

7" Indoor Monitor

User Manual

## Statement

- \* If there is any doubt or disputable regarding information in this manual, you can call our company for clarification.
- \* There maybe some difference between the description provided here and the actual devices, as our products are constantly developing and upgrading. We apologize if this manual does not contain all of the latest updates. Thanks



## LIMITATION OF LIABILITY

- ※ This users' manual is supplied 'as is', with no warranties, be it expressed or implied, including, but not limited to, the implied warranties of merchantability, suitability for any exact purpose, or non-infringement of any third party's rights.
- ※ This publication may include technical inaccuracies or typos. The manufacturer holds the right to introduce any changes to the information contained herein, for any purpose, including but not limited to, improvements of the publications and/or related to the product, at any time, without prior notice.

## DISCLAIMER OF WARRANTY

The supplier shall not be liable to any party or any person, except for replacement or reasonable maintenance of this product, for the cases, included but not limited to the following:

- ※ Any damage or loss, including but not limited to: direct/indirect, consequential, special, exemplary, arising out of or related to the product;
- ※ Inappropriate use or negligence of the user in operation of the product, resulting in personal injury or any damage;
- ※ Unauthorized disassembly, repair or modification of the product by the user;
- ※ Any problems or consequential inconvenience, loss or damage, caused by connecting this product to devices of the third parties;
- ※ Any claim or action for damages, brought by any photogenic subject, be it a person or organization, due to violation of privacy whereby the pictures taken by the device and/or saved data become public or are used for the purposes other than intended.

## SAFETY INSTRUCTIONS

- ※ Read these instructions and keep them in a safe place for future reference.
- ※ Please refer all work related to the installation of this product to qualified service personnel or system technician.
- ※ Do not operate the appliance beyond its specified temperature, humidity or power source ratings.
- ※ Securely install the devices on vertical surfaces (solid walls/doors) not prone to vibration or impact.
- ※ Install the devices away from heat sources such as radiators, heat registers and stoves. Installation of the terminal near consumer electronics devices, e.g. stereo receiver/amplifiers and televisions, is permitted as long as the air surrounding the terminal does not exceed the above mentioned temperature range.
- ※ Handle the appliance with care. Do not strike or shake, as this may damage the device.

- ※ The doorbell/camera units should be fitted with an approved weather shield if the chosen position is in direct sunlight, or in contact with rain, snow or irrigation sprinkler systems.
- ※ Do not use strong or abrasive detergents when cleaning the appliance body. When the dirt is hard to remove, use a mild detergent and wipe gently.
- ※ Do not overload outlets and extension cords as this may result in a risk of fire or electric shock. Distributing, copying, disassembling, reverse compiling, reverse engineering, and also exporting in violation of export laws of the software provided with this product, is expressly prohibited.

## CARING FOR THE ENVIRONMENT BY RECYCLING



When you see this symbol on a product, do not dispose of the product with residential or commercial waste.

### Recycling your electrical equipment

Please do not dispose of this product with your residential or commercial waste. Some countries or regions, such as the European Union, have set up systems to collect and recycle electrical and electronic waste items. Contact your local authorities for information about practices established for your region.

## COPYRIGHT STATEMENT

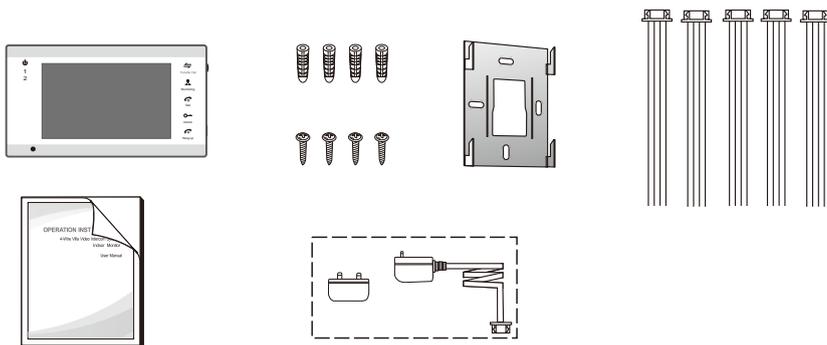
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## FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
  - Increase the separation between the equipment and receiver.
  - Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
  - Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

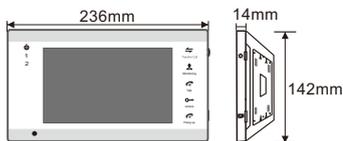
## Accessories



### Indoor Monitor

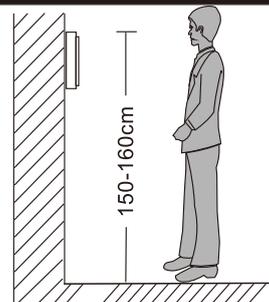
- Indoor Monitor ----- 1pc
- Plastic Anchors ----- 4pcs
- Screws ----- 4pcs
- Bracket ----- 1pc
- 4 Pin line ----- 5pcs
- User manual ----- 1pc
- External switching power supply DC 12V-----1pcs

## Specification



Display screen	7" TFT LCD Screen
Definition	1024(H)*600(V)
Standard	PAL/NTSC
Calling mode	Two-way conversation
Calling time	120s
Standby current	Maximum 400mA
Work current	Maximum 800mA
Power supply	External switching power supply(DC12V)
Work temperature	-10°C~60°C
Installation way	Surface mounting
Built-in storage	Yes
Picture format	JPEG standard format
Extension memory	SD card (maximum 64GB)(≥Class 10)

## Install the indoor unit

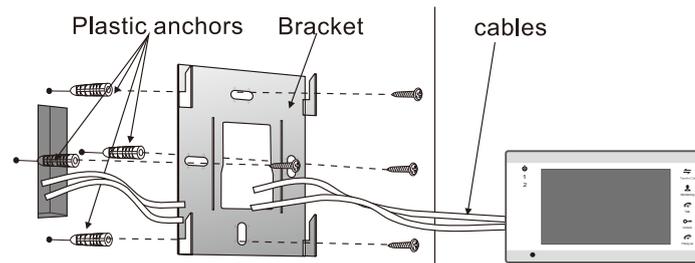


**Note:**

- Please be far from the devices with intense radiation: TV, DVR, etc.
- Do not disassemble privately to avoid the electric shock.
- Do not drop, shake or knock the device, otherwise will damage the elements.
- Choose the best position to install.
- Please power down before installation.

- Keep at a distance of more than 30cm with AC power to avoid interference.
- Keep away from the water, magnetic field and chemicals.

### How to install the indoor unit



## Note On Wiring Connection

**i** The power supplies for electric lock, CCTV cameras and extension cables are not included in the package, user can purchase according to actual requirement.

**!** The indoor monitor is with an external switching power supply DC 12V. If you don't want to use the external power supply, please use 2 pin cable and DIN rail power supply to extend the power cable to your home power supply center and hide the wire in the wall. If over 3m, we suggest you to use the thicker power cable and higher ampere power supply, or the monitor and doorbell can not get enough power, which will affect the conversation and unlocking.



**i** Wiring connection according to the following to avoid interference:





Please note the silk printing marked on PCB in order to avoid incorrect connecting.  
The wiring connection requirement(**The actual effect and the quality of wire rod has the very big relations**):

1. 4-Core ordinary unshielded and shielded wiring cable;
2. Effective distance from the outdoor camera to furthest indoor monitor:  
Transmission  $\leq 30\text{m}$  ( $4 \times 0.4\text{mm}^2$ )  
Transmission  $\leq 60\text{m}$  ( $4 \times 0.65\text{mm}^2$ )

**Unshielded wiring cable:**



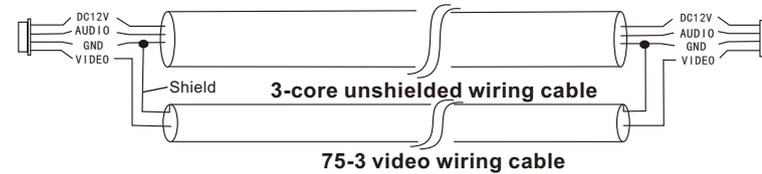
3. If you want to extend the distance over 60m, you'd better to choose a thick copper core cable, or a shielded wiring cable, or a 3-core ordinary unshielded wire + a 75-3 video wire.  
**Connect the shield terminal with the GND.**

**Shielded wiring cable:**



**3-core unshielded wiring cable+75-3 video wiring cable:**

Connect the shield of the 75-3 video wiring cable with the GND of the 3-core unshielded wiring cable.



4. If user wants to use CAT5 or CAT6 network cable, effective distance from the outdoor camera to the furthest indoor monitor will be limited. For unshielded network cable, the distance will be up to 20m. For shielded network cable, the distance will be up to 40m. So CAT5 or CAT6 network cable is not recommended.

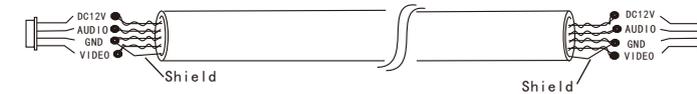
CAT5 or CAT6 network cable consists of 4 pairs of twisted pairs(8 wires), here one pair of twisted pair will be used as one cable.  
Green&White+Green, Brown&White+Brown, Orange&White+Orange, Blue&White+Blue.

**Unshielded network cable:**



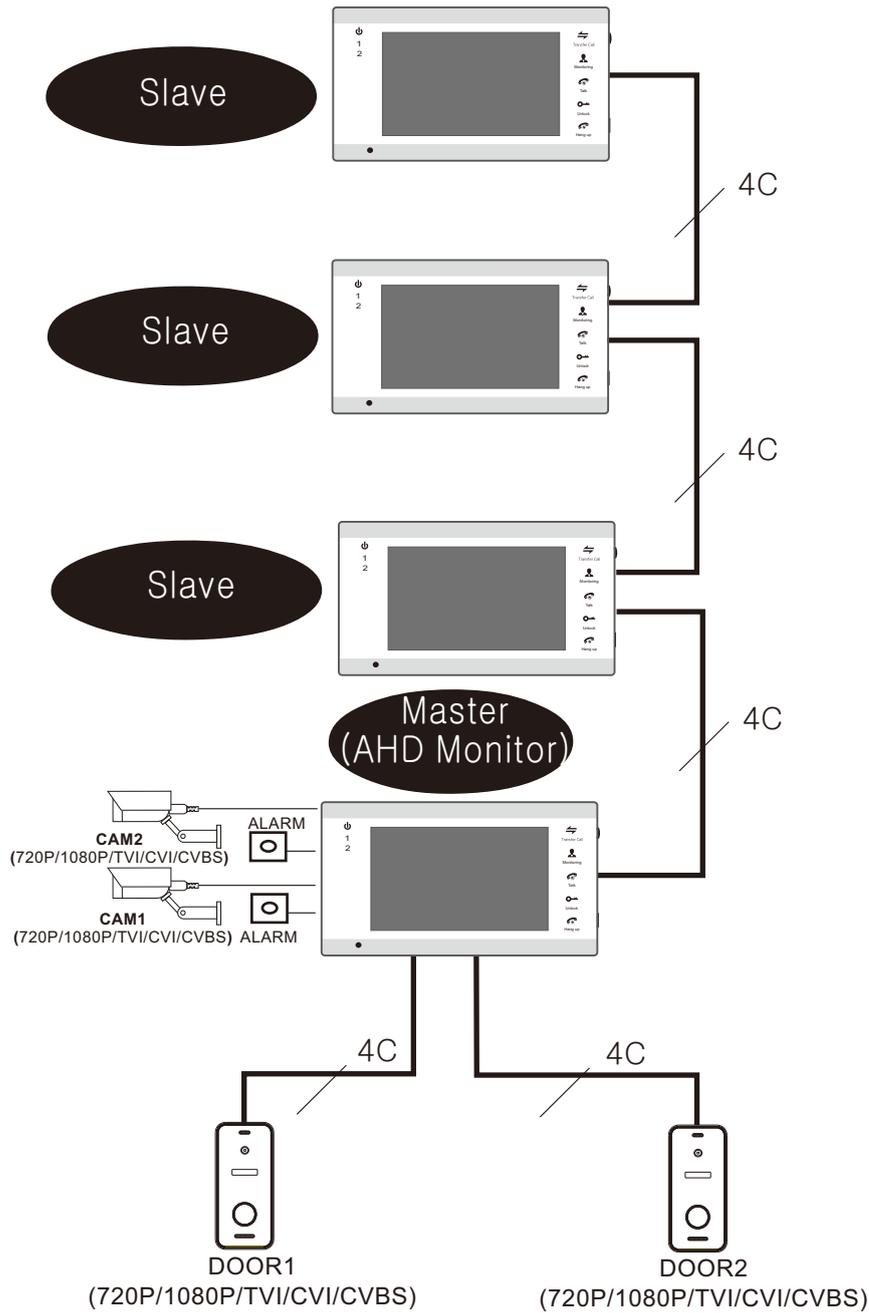
**Shielded network cable:**

**Connect the shield of the network cable with the GND.**



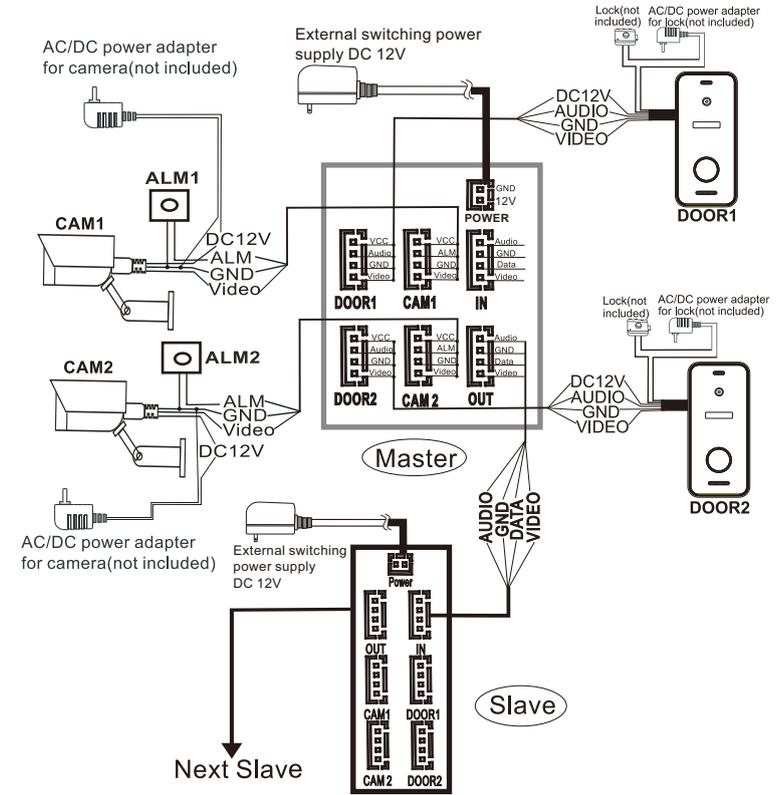
**When the distance from the outdoor doorbell to the indoor monitor is too far, maybe over 50m or 60m, please make sure that the input voltage to the outdoor doorbell must reach 11v.**

# WIRING DIAGRAM



Users can connect up to two AHD(720P/1080P) / TVI / CVI / CVBS definition outdoor doorbells & two AHD(720P/1080P) / TVI / CVI / CVBS definition analog cameras simultaneously, and three extension indoor monitors one by one to the corresponding interfaces by their own's requirement according to the following wiring diagram.

- Note: 1. The CCTV cameras must use an external power supply.**
- 2. AHD/TVI/CVI/CVBS definition cameras can be mixed connected.**
- 3. When mixed resolution cameras are connected to the main monitor, suggest that slave monitors connected to be AHD(720P or 1080P). If connect a standard definition slave monitor, can only view CVBS camera's image on the slave.**
- 4. All the cameras must be connected to the monitor before the monitor power on.**



## DESCRIPTION ON INDOOR UNIT



NO.	Name	Descriptions
1		Power LED, the power indicator of the indoor monitor.
2	1	The door 1 state lights, to door 1 working when the LED is on.
3	2	The door 2 state lights, to door 2 working when the LED is on.
4	TFT display	View visitor's image displayed on the TFT screen.
5	Microphone	Transmit the voice to outdoor camera.
6	 Transfer call	<ol style="list-style-type: none"> <li>1. Transfer call, during conversation with the doorbell, press this button to intercom call or transfer calls to another indoor monitor.</li> <li>2. Internal call, when all the indoor monitors are in standby mode, press this button to intercom call to another indoor monitor.</li> <li>3. On sub-menus, press this button to switch the menu pages.</li> <li>4. Press this button to confirm after adjusting parameter values.</li> </ol>
7	 Monitoring	<ol style="list-style-type: none"> <li>1. Monitoring, press the button to watch the outdoor bell and CCTV camera images.</li> <li>2. On files list interface, press this button to the previous page.</li> <li>3. During playback video record, press this button to pause/play.</li> </ol>
8	 Talk	<ol style="list-style-type: none"> <li>1. Talk, press this button to activate conversation mode.</li> <li>2. On files list interface, press this button to the next page.</li> </ol>
9	 Unlock	<ol style="list-style-type: none"> <li>1. Unlock, release the door lock.</li> <li>2. During playback video record, press this button to delete the current video file. During playback pictures, press this button to delete the current picture file.</li> <li>3. On video record files list and snapshot files list, press this button to delete all the files.</li> </ol>
10	 Hang up	<ol style="list-style-type: none"> <li>1. Hang up, press this button to end conversation mode.</li> <li>2. Press this button to return to previous menu or cancel the selection.</li> </ol>
11	 Setting	<ol style="list-style-type: none"> <li>1. In standby mode, press the button "⚙️" once to access the main menu.</li> <li>2. On main menu settings, scroll the button "⚙️" to upwards or downwards to move the cursor, then press the button "⚙️" to enter sub-menu interface.</li> <li>3. In monitoring mode, press this button to bring up "Brightness, contrast, Hue" menu options, scroll the button "⚙️" upwards or downwards to adjust values.</li> <li>4. In intercom mode, press this button to bring up the volume order, scroll the button "⚙️" upwards/downwards to increase/decrease the volume.</li> <li>5. In calling mode, press this button to bring up the ring order, and scroll the button "⚙️" upwards/downwards to increase/decrease the ring volume.</li> </ol>
12	Speaker	Hear the sound from outdoor doorbell.
13	TF card slot	TF card interface, support up to 64GB card for recording and capturing photographs. Recoding files and snapshot files will be stored in the TF card. And suggest that it's better to use a TF card more than class 10 onto the device.

## OPERATION INTRODUCTION

### ◆ VISITOR CALL

#### Standby mode

The Visitor press the **call** button on outdoor camera 1



A continuous ring tone is heard inside and outside

The Visitor press the **call** button on outdoor camera 2



**NOTICE:**

The visitor's image automatically displayed on the screen



If both call button on two outdoor camera are pressed at approximate to the same time, the preference will be given to the outdoor camera which call button was pressed first, unless the call button is pressed again after the indoor monitor go into standby mode, please be aware of that there is no indication on second outdoor camera .

Press the **"Talk"** button on indoor monitor



Stop ringing

**NOTICE:**

Start conversation with outdoor camera

The conversation duration is 120s at a time



The indoor unit will automatically go into standby mode if you are not at home or have not reached the indoor unit in 60s.

Press the **unlock** button on indoor monitor



release the door lock

Press the **"Hang up"** button on indoor monitor.

End

**NOTICE:** Both the visitor's voice and image will not be switched off within 20s of time span when the **unlock** button is pressed, this individualized function allow you to make sure whether the visitor already come in.

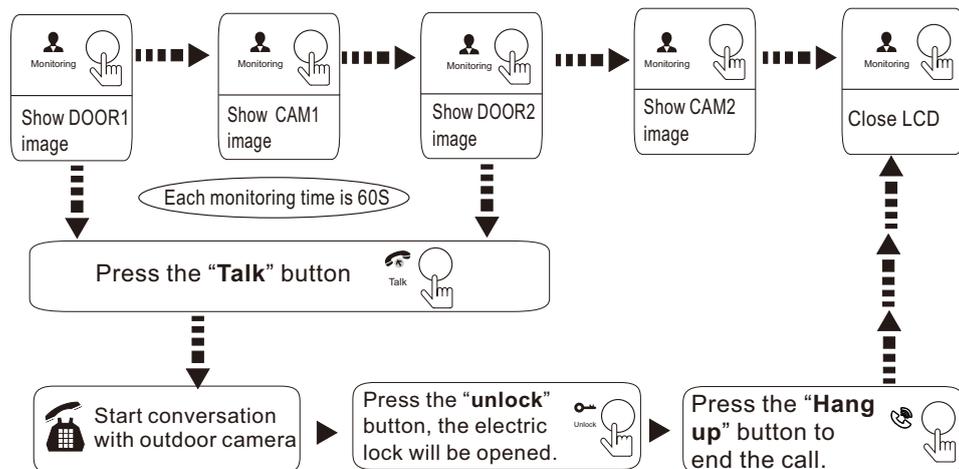
**NOTICE:** For the models with TF card, when the doorbell record for the video mode: From the start of a call, the whole process will be recording. When the doorbell record for the snapshot mode: if a visitor press the call button on the outdoor camera, the first picture will be captured.

**NOTICE:** In the monitoring mode, you can press the button "⚙️" to conversation and press the button "⚙️" to unlock.

## MONITORING

Option in the settings on the menu: DOOR1, CAM1, DOOR2, CAM2 operating mode (open or closed)

### Standby Mode



### NOTICE:

- i** If you are using only one outdoor camera in monitoring mode, you can also end the monitoring mode by pressing the monitoring button again (Must be Close CAM1; DOOR2; CAM2 in the menu option).
- i** If you use two indoor units, you can also simultaneously in other indoor unit starts monitoring mode, the same images are displayed on the screen of the different indoor unit.
- i** If the indoor unit is underway in monitoring mode, during this time a visitor press the call button on either of outdoor unit, the monitoring mode will be switched off, the just visitor's image will appear on its screen and continuous ringing will be heard. If you are using the indoor unit with hands-free, you can press the talk button to reactivate conversation with the visitor.
- i** If a conversation with an outdoor camera is underway in calling mode, during this time a visitor press the call button on another outdoor camera, a beep sounds from the indoor monitor and the doorbell's icon will display on the screen for about 3 seconds.

## CALL TRANSFER TO OTHER EXTENSION

Internal communication function requires at least two indoor and one outdoor units to be connected.

Outdoor camera call indoor monitor and conversation is underway

### **i** NOTICE:

When you are transferring a call to other extension, the original conversation indoor unit will return to standby mode, and the indoor unit which the call is being transferred will also sound a continuous ring tone and the video image will appear on its screen.

Press the "Transfer call" button to activate the function of call transfer to other extension

▼ A continuous ring tone is heard

Press the "talk" button on any of indoor units

Talking with visitor

The Electric lock can be opened

End the call and return to standby mode.

## INTERNAL COMMUNICATION AMONG INDOOR UNITS

At least 2 indoor units are required.

### Standby Mode

Press the "Transfer Call" button

▼ A continuous ring tone is heard

Press the "Talk" button on any of indoor units

Start conversation among indoor units.

Press the "Hang up" button

End

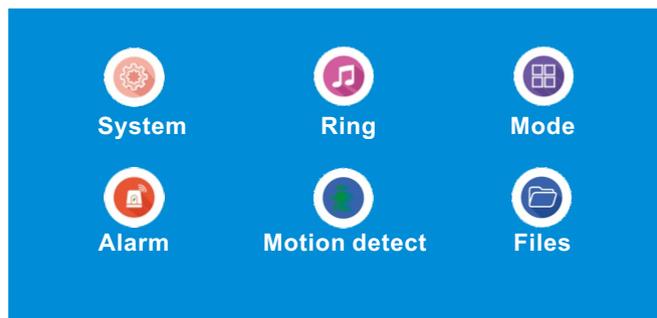
### **i** NOTICE:

In **internal communication** mode, if a visitor press the call button on either of outdoor unit, the **internal communication** mode will be switched off. The just visitor's image will appear on its screen and continuous ringing will be heard, you can press the **talk** button to reactivate conversation with the visitor.

## MENU OPERATIONS

When the screen saver function is disabled, if users don't do any operate or enter any interface about the indoor monitor, the indoor device will be into standby mode after 1 minute automatically. The back-light of each button will be on when user presses any button or some visitor calls on the outdoor doorbell. If the indoor monitor is in standby mode, the back-light of each button will be off if user doesn't do any operate on the device in 10 seconds.

In standby mode, press the button “⚙️” to access the main menu interface, shows the main interface as shown below. On main menu settings, scroll the button “⚙️” upwards or downwards to move the cursor to select sub-menu, the selected icon will be highlighted, then press the button “⚙️” again to enter sub-menu interface. On sub-menu settings, scroll the button “⚙️” upwards or downwards to select menu options, and press the button “↔️” to toggle menu page or to confirm after modifying parameters. Press the button “🏠” to cancel and exit current menu interface.



### 1. Set System Parameters

On main menu move the cursor to “System” option, and press “⚙️” to enter the “System” menu. System setup includes: Settings, Video setting and system. Press “↔️” to switch menu pages. Press “🏠” to return to previous.

#### 1.1 System-Settings

On settings menu, to set up Screen saver and Time Setting.

[>>↔️]: Press the “↔️” button to switch menu pages.

[🏠]: Press the “🏠” button to return to previous.



**[Screen saver]:** Options include “Disable”, “1min”, “3min”, “5min”, “10min” and “Never close”. For example, “1min” means when the device is in standby mode, the system date and time will display on the screen for about 1 minute. “Disable” indicates that the system date and time won't be displayed on the screen. “Never close” indicates that the system date and time will always display on the screen.

**[Modify (↔️)]:** After choosing the menu option, press the “↔️” button to confirm.

**[🏠 (🏠)]:** Press the “🏠” button to cancel and return to the previous.



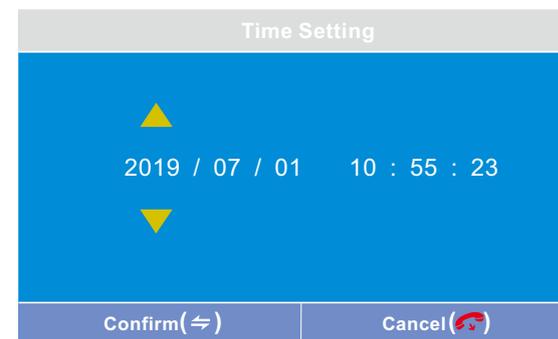
**[Language]:** Use this field to change the language of the device menu text and the on-screen display.

**[Time Setting]:** Use this field to set up system date and time.

Press the “⚙️” button to move the cursor, scroll the “⚙️” button upwards or downwards to modify the parameters. After modifying the parameters, press the “↔️” button to confirm and exit, press the “🏠” button to cancel and exit.

**[Confirm (↔️)]:** After modifying the parameters, press the “↔️” button to confirm and exit.

**[Cancel (🏠)]:** Press the “🏠” button to cancel and return to the previous.



#### 1.2 System-Video setting

On settings menu, press the “↔️” button to enter “Video setting”.

Scroll the “⚙️” button to move the cursor, press the “⚙️” button to select menu option, press the “↔️” button to confirm and exit, press the “🏠” button to cancel and exit.

**[Auto check]:** “On” indicates that the indoor monitor will automatically check the video input format when the monitor starts up. Support AHD(720P/1080P), TVI, CVI and CVBS. When it set as “Off”, user can set up video setting parameters manually. Choose “Door1/Door2/CAM1/CAM2” to configure “Transfer mode, Image size and Video mode”.

**[Transfer mode]:** Options include AHD, TVI, CVI and CVBS.

**[Image size]:** 720P and 1080P can be selected.

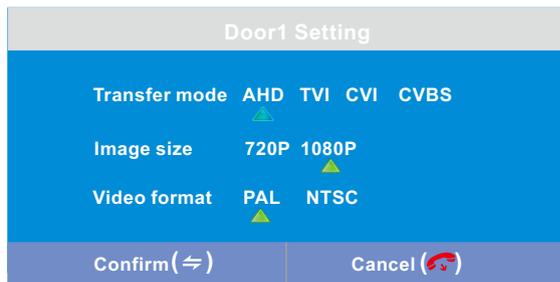
**[Video format]:** Options include PAL and NTSC.

**[>> (↔)]:** Press the “↔” button to switch menu pages.

**[⏪ (↶)]:** Press the “↶” button to return to previous.

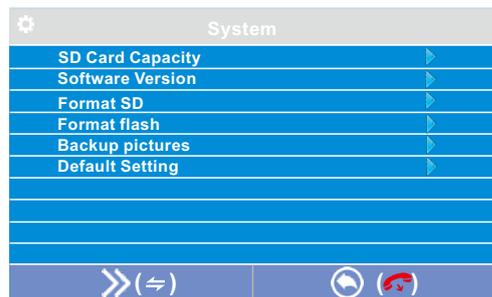


On “Door Setting” or “Camera Setting” interface, press the “⚙️” button to move the cursor, scroll the “⚙️” button upwards or downwards to modify the parameters. After modifying the parameters, press the “↔” button to confirm and exit, press the “↶” button to cancel and exit.



### 1.3 System-System

On settings menu, press the “↔” button to switch menu pages to enter system menu interface.



Scroll the “⚙️” button upwards or downwards to move the cursor, press the “⚙️” button to enter the menu interface.

**[Confirm (↔)]:** Press the “↔” button to confirm.

**[Cancel (↶)]:** Press the “↶” button to cancel to return.

**[SD card capacity]:** To view the SD card usage state.

**[Software Version]:** To view the device software version.

**[Format SD]:** To format the SD card. For the first time please format the SD card inserted first before using. When format a TF card on the monitor, it will auto-creat five folds which named as “FRAME”, “PHOTO”, “VIDEO”, “BACKUP” and “RING”. “FRAME” is used to store E-Photos, “Photo” is used to store snapshot files, “VIDEO” is used to store video recordings, “BACKUP” is used to store the pictures backing up from the built-in storage, and “RING” is used to store Mp3 ring tones.

**Notice: Suggest use a SD card more than Class 10 onto the monitor. And the SD card capacity can be up to 64GB.**

**[Format Flash]:** To format the built-in storage of the monitor.

**[Backup pictures]:** To backup the pictures stored in the monitor built-in storage to a folder named “BACKUP” on the SD card manually. And all the pictures in the built-in storage will be removed. And the pictures backed up to the SD card need to preview on PC.

**[Default Setting]:** To restore all the parameters to be the factory default values.

## 2. Set the tone parameters

On main menu, move the cursor to “Ring” and press “⚙️” to enter the “Ring” menu.



Move the cursor to “Door 1 ring select” or “Door2 ring select”, press “⚙️” to enter the menu to set up.



**[Door1 ring select]:** To set up the doorbell tone of the outdoor camera 1, a total of 8.

**[Door2 ring select]:** To set up the doorbell tone of the outdoor camera 2, a total of 8.

**[Modify (↔)]:** Press the “↔” button to confirm after choosing the option.

**[Cancel (📞)]:** Press the “📞” button to cancel to return.

### Ring volume

On ring menu, scroll the “⚙️” button upwards or downward to move the cursor, press the “⚙️” button to enter edit mode, then scroll the “⚙️” button to adjust the parameter value.

**[Confirm (↔)]:** Press the “↔” button to confirm after modifying the parameters.

**[Cancel (📞)]:** Press the “📞” button to cancel to return.

on “Ring settings” menu to set up the ring volume. Users can set up different ring volume during three different time period, the vibrate and ring time can be adjusted from 5s to 45s when calling.

**[Ring Vol1]:** the volume level of Ring Vol1: 0-10.

**[Ring Vol2]:** the volume level of Ring Vol2: 0-10.

**[Ring Vol3]:** the volume level of Ring Vol3: 0-10.

**[Silence mode]:** To set up the period time for the silence mode. User must turn on the silence mode first.



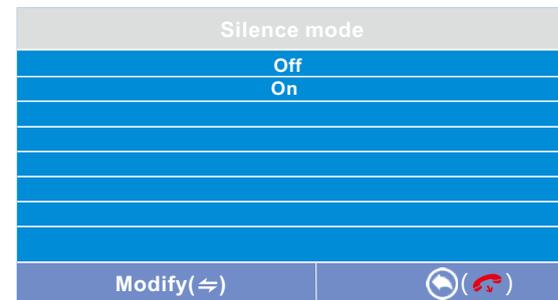
**[Ring to door]:** “On” means that user will hear the ring tone on the outdoor bell when calling on the doorbell. “Off” means that the outdoor bell will be silence during calling on the doorbell.



**[Modify (↔)]:** Press the “↔” button to confirm after choosing the option.

**[Cancel (📞)]:** Press the “📞” button to cancel to return.

**[Silence mode]:** Silence mode is Do Not Disturb mode. When Do Not Disturb mode is enabled, outdoor doorbell calls and alerts will be silenced during the period time of the silence mode.



### 3. Set the monitor mode

On main menu, move the cursor to select “Mode” and press the “⚙️” button to enter the menu interface to set those parameters such as “Mode, Door2 status, Record mode, door1 unlock time, door2 unlock time, key backlight, keyboard sound and door panel backlight”.



**[Modify (↔)]:** Press the “↔” button to confirm after choosing the option.

**[Cancel (📞)]:** Press the “📞” button to cancel to return.

**[Mode]:** Options include “Master” and “Slave”. “Master” indicates that the indoor monitor connects the outdoors or cameras, “Slave” indicates that the indoor monitor connects the main or sub indoor monitor.

**[Door2 status]:** Enable or disable the preview of Door2.

**[Record mode]:** Options include “Record” and “Snap”. “Record” indicates that the device with SD card will start record automatically when a visitor press the call button on the outdoor camera. “Snapshot” indicates that the device with SD card will capture a frame of the video stream as a still photo if a visitor press the call button on the outdoor camera.

**[Door1 unlock time]:** The time duration for the doorlock opened, values can be set as 1 second, 3 seconds, 5 seconds, 7seconds and 9 seconds.

**[Door2 unlock time]:** The time duration for the doorlock opened, values can be set as 1 second, 3 seconds, 5 seconds, 7seconds and 9 seconds.

**[Key backlight]:** Enable or disable the key backlight when operating on the indoor monitor.

**[Keyboard sound]:** Enable or disable the keyboard sound when pressing the front keys.

**[Door panel backlight]:** Enable or disable the door backlight function for the doorbell which supports it.

#### 4. Set the alarm parameters

On main menu, move the cursor to the option “Alarm” and press the “⚙️” button to enter the “Alarm” menu.

Alarm setting	
CAM1 sensor type	Off
CAM2 sensor type	Off
CAM1 status	On
CAM2 status	On
CAM1 ring time	10 sec.
CAM2 ring time	35 sec.
Alarm record	Record

**[CAM1 sensor type or CAM2 sensor type]:** Each camera channel corresponds to an I/O status (see the following status explanations), which means that when an alarm is triggered, it will activate the corresponding channel to start alarm recording or capture a snapshot.

#### I/O status types:

**NO:** “Normally open”, it means that in its normal state, the sensor is kept under constant low voltage. If the output voltage changes from low to high, then the alarm will be triggered.

**NC:** “Normally closed”, the normal state of the sensor is under constant high voltage. If the output voltage changes from high to low, then the alarm will be triggered.

**Off:** Set the I/O to “Off”, it means that external sensor alarms are not in use.

**[CAM1 status]:** Enable or disable the preview of camera 1.

**[CAM2 status]:** Enable or disable the preview of camera 2.

**[CAM 1 ring time]:** The alarm ring time of camera 1 if camera 1 has been triggered by activity detected by the sensor, values can be set as 00s, 10s, 15s, 20s, 25s, 30s, 35s and 40s.

**[CAM 2 ring time]:** The alarm ring time of camera 2 if camera 2 has been triggered by activity detected by the sensor, values can be set as 00s, 10s, 15s, 20s, 25s, 30s, 35s and 40s.

**[Alarm record]:** Options include “Record” and “Snapshot”. “Record” indicates that when an alarm is triggered, it will activate the corresponding channel to start alarm recording. “Snapshot” indicates that when an alarm is triggered, it will activate the corresponding channel to capture a picture of the current video stream as a still photo.

**[Modify (≠)]:** Press the “↩️” button to confirm after choosing the option.

**[⏪ ⏩]:** Press the “↶” button to cancel to return.

#### 5. Set the motion detect alarm parameters

On main menu, move the cursor to the option “Motion detect” and press “⚙️” to enter the “MD setting” menu.

MD setting	
MD source	Off
MD sensitive	middle
MD area	
Store mode	Record
MD notification	On

**[MD source]:** In this field, select the channel to be set up. Options include Door1, Door2, CAM1, CAM2 and Off.

**[MD sensitive]:** There are five levels: “lowest”, “low”, “middle”, “high” and “highest”, and with “highest” being the highest level of sensitivity.

**[Motion detect area]:** Sometimes, it is necessary to have some regions in the camera's coverage area enabled with the motion detection feature, while other regions in the same coverage area do not require this functionality. This may be handy when, for example, the camera covers the road and an adjoining area. While it would be useful to have the motion detection enabled on the area near the entrance to a building, it would most likely not be helpful to see it triggered every time a car or truck passes by on the nearby road. Each channel has a specific regional motion detecting setting.

On motion detect menu, move the cursor to “MD area” and press the “⚙️” button to enter the “Motion detect area” menu, scroll the button “⚙️” upward or downward to move the cursor to “⬆️”, “⬇️”, “⬅️” or “➡️”, and press “⚙️” to adjust detect area. “⬆️” indicates the whole selected area will be moved during adjusted.

When viewing the selected channel's coverage area using the MD Area option, the area within the yellow arrow is where motion detection is activated, and the area outside the yellow arrow is where motion detection is not activated.

When the setup is finished, move the cursor to “⏪” and press the “⚙️” button to return.



**[Store mode]:** Options include “Record” and “Snapshot”. “Record” indicates that when a motion detection alarm is triggered, it will activate the corresponding channel to start alarm recording. “Snapshot” indicates that when an alarm is triggered, it will activate the corresponding channel to capture a picture of the current video stream as a still photo.

**[MD Notification]:**Options include “On” and “Off”. When select “On”, when the indoor monitor is in standby mode, all the buttons will be flashing if a motion detect alarm is triggered.

**[Modify (↔)]:** Press the “↔” button to confirm after choosing the option.

**[↶ (↶)]:** Press the “↶” button to cancel to return.

## 6. Playback

On main menu, move the cursor to the option “Files” and press “⚙” to enter the video recording files menu, snapshot files menu, Ring files menu and frame files menu.

### 6.1 Files – Video files

On main menu choose “Files” to enter the “record video files list”. Scroll the button “⚙” upwards or downwards to move the cursor to select file, then press “⚙” to playback, press “⤴” or “⤵” to page up or page down, press “🔑” to delete all video files whether or not, press “↔” to the next menu interface. During playback, scroll the “⚙” button to adjust volume, press “⤴” to pause/playback, press “🔑”, some tips “are you sure to delete this video?” Press “↔” to remove the current video file, press “⤵” to cancel, then press “⤵” to return to the previous.

**[⤴ (⤴)]:** On file lists, press the “⤴” button to page up.

**[⤵ (⤵)]:** On file lists, press the “⤵” button to page down.

**[🗑 (🗑)]:** On file lists, press the “🗑” button to delete all the video files whether or not.

**[>>(↔)]:** Press the “↔” button to switch to the next menu interface.

**[↶ (↶)]:** Press the “↶” button to cancel to return.

Video		001/001
0001	2019/03/12 10:47:26	
0002	2019/03/12 10:59:31	
0003	2019/03/12 11:00:05	
0004	2019/03/12 11:01:10	
0005	2019/03/12 11:02:10	

### 6.2 Files – Snapshot files

On main menu choose “Files” to enter the “record video files list”. Press “↔” to switch to “Photo”. Scroll the button “⚙” upwards or downwards to move the cursor to select file, then press “⚙” to playback, press “⤴” or “⤵” to page up or page down, press “🔑” to delete all photos whether or not, press “↔” to the next menu interface. During playback, scroll the “⚙” button to the last file or the next file, press the “🔑” button, some tips “are you sure to delete this photo?” Press “↔” to remove the current picture, press the “↶” to cancel to return to the previous.

**[⤴ (⤴)]:** On file lists, press the “⤴” button to page up.

**[⤵ (⤵)]:** On file lists, press the “⤵” button to page down.

**[🗑 (🗑)]:** On file lists, press the “🗑” button to delete all the snapshot files whether or not.

**[>>(↔)]:** Press the “↔” button to switch to the next menu interface.

**[↶ (↶)]:** Press the “↶” button to cancel to return.

Photo		001/001
0001	2019/03/12 10:49:21	
0002	2019/03/12 10:50:09	
0003	2019/03/12 10:51:55	
0004	2019/03/12 11:44:25	

## 7. User-defined ring tone

User can customize the ring tone for the outdoor bell. When format a TF card on the monitor, it will auto-create a folder called “Ring” on the TF card, copy those Mp3 format ring files to this folder, notice that those mp3 ring files must named at most 8 characters, contains number or letter. Insert the SD card into the monitor. On main menu move the cursor to the option “Files”, press “⚙️” to enter the “record video files lists”, press “↔️” to switch to “Ring” menu, the mp3 ring files will appear on the file list, press “⚙️” to play back the ring tone, and press the “⚙️” button again to stop playback. On file lists press “⬆️” or “⬇️” to page up or page down.

[⬆️(⬆️)]: On file lists, press the “⬆️” button to page up.

[⬇️(⬇️)]: On file lists, press the “⬇️” button to page down.

[⚙️(⚙️)]: On file lists, press the “⚙️” button to enter “Ring select” menu interface.

[>>(↔️)]: Press the “↔️” button to switch to the next menu interface.

[⬅️(⬅️)]: Press the “⬅️” button to cancel to return.



After moving the cursor to one ringtone, press the “⚙️” button to enter “Ring select”.

**[Door1 ring]:** The ring selected will be the ring tone of the outdoor camera 1.

**[Door2 ring]:** The ring selected will be the ring tone of the outdoor camera 2.

**[Door1 Door2 ring]:** The ring selected will be the ring tone of the outdoor camera1 & 2.

[Modify(↔️)]: Press the “↔️” button to confirm after choosing the option.

[⬅️(⬅️)]: Press the “⬅️” button to cancel to return.



## 8. FRAME--For E-Photo

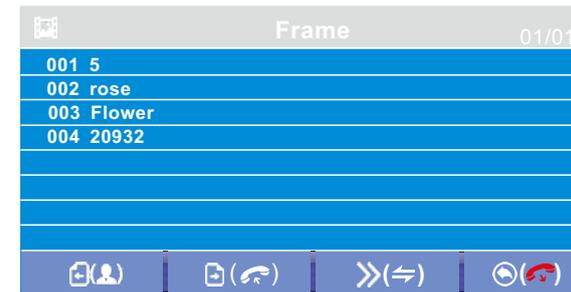
This field is for E-Photo, when format a TF card on the monitor, it will auto-create a folder named “FRAME”. User can copy jpg pictures to this folder from PC. On main menu, move the cursor to the option “Files” to enter the “record video files lists”, press the “⚙️” button to switch to “Frame” menu, you will see all jpg photo files stored in this folder on the TF card, select one to preview. On file lists, press “⬆️” or “⬇️” to page up or page down. During playback, scroll the “⚙️” button to the last or the next picture, and press “⬅️” to exit.

[⬆️(⬆️)]: On file lists, press the “⬆️” button to page up.

[⬇️(⬇️)]: On file lists, press the “⬇️” button to page down.

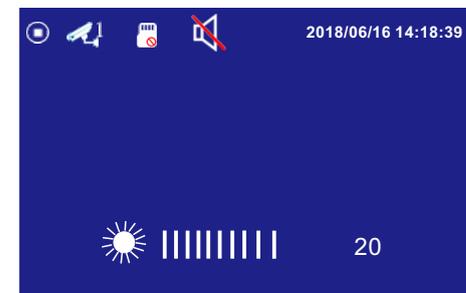
[>>(↔️)]: Press the “↔️” button to switch to the next menu interface.

[⬅️(⬅️)]: Press the “⬅️” button to cancel to return.

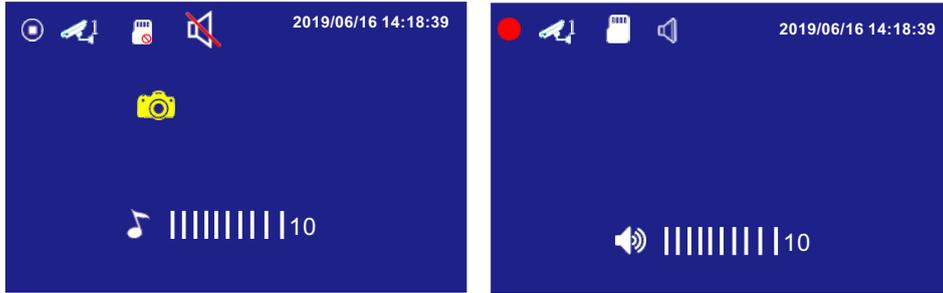


## 9. Set Color parameters

In monitoring mode, press the button “⚙️” to bring up the corresponding menu to adjust values of brightness, contrast, and Hue depending on the actual conditions. Scroll the “⚙️” button upwards or downwards to adjust parameter value. All of the values can be set up from 0 to 50.



## 10. Icons on the monitor



● / 📄 Scroll the “⚙️” button downwards to start manual record, a red icon “●” will appear on the left top of the screen. Scroll the “⚙️” button again to stop manual record, the icon “●” will be switched to “📄”.

**[Snapshot]:** When the screen is highlighted, scroll the “⚙️” button upwards to capture a frame of the video stream as a still photo, a yellow icon “📷” will appear on the screen for about 1 second.

- 📄 No SD card on the monitor.
- 📄 A SD card has been detected on the monitor.
- 🔊 The monitor is in silence mode.

**[Indoor ring volume]:** When some visitor calls on the outdoor bell, user can press the “⚙️” button to bring up the options “🎵 ||||| 10”, then scroll the “⚙️” button upwards or downwards to increase or decrease the ring volume of the indoor monitor.

**[Indoor call volume]:** When the indoor monitor is during intercom with the outdoor bell, user can press the “⚙️” button to bring up the options “🔊 ||||| 10”, then scroll the “⚙️” button downwards or upwards to decrease or increase the volume for the indoor monitor.

## 11. Update the system software

User can upgrade the software through a TF card. First copy the upgrade firmware named “update.bin” to the TF card, make sure that the screen of the monitor is highlighted, then insert the TF card into the monitor, the TF card will be detected automatically. And some tips “**the system upgrade package has been found. press the button to select**”, Press “↔️” to confirm to update the firmware, press “🔴” to cancel.

### Note:

1. Please make sure the SD system format is fat32.
2. Before inserting the TF card, make sure the screen is highlighted.
3. If the upgrade firmware version is the same as the current version of the indoor monitor, the monitor will not recognize the upgrade software.
4. During updating the monitor, please don't remove the SD card or power off the monitor.

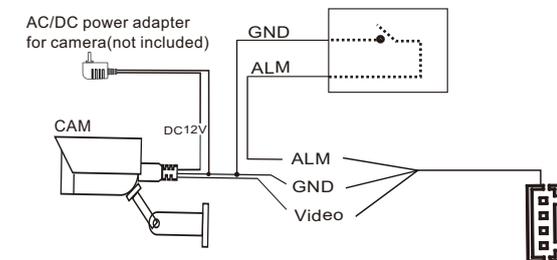
## Alarm Instructions

CAM1 and CAM2 of this production have each an alarm function. When the trigger terminal and GND is shorted, the alarm is activate, the speaker of the indoor monitor rings and continues the duration according to the menu “Alarm setting->CAM 1 ring time/CAM2 ring time”, during this time, press “🔴” to stop alarming and enter the standby mode.

For the models with SD card, simultaneously, triggers recording or snapshotting (related to the system settings). The recording time is 120s, during this time, press “🔴” to stop alarming and enter the standby mode.

## Connection diagram:

- 📌 Be applicable to connect 2 normally closed (NC) or normally open (NO) alarm inputs.
  - 2 camera channels of alarm input without limitations on input type (can either be the normally open type or the normally closed type).
  - ALM terminal of the alarm detector is connected in parallel with the ALM terminal (The alarm detector shall be supplied by external power supply).
  - Ground terminal of the alarm detector is connected in parallel with the GND terminal of the camera.
  - For NO alarm inputs, when the GND and ALM are in the connection state, it will trigger the alarm.
  - For NC alarm inputs, when the GND and ALM are in the disconnect state, it will trigger the alarm.
  - It applies to any alarm sensor.



# OPERATION INSTRUCTION

## Video intercom system

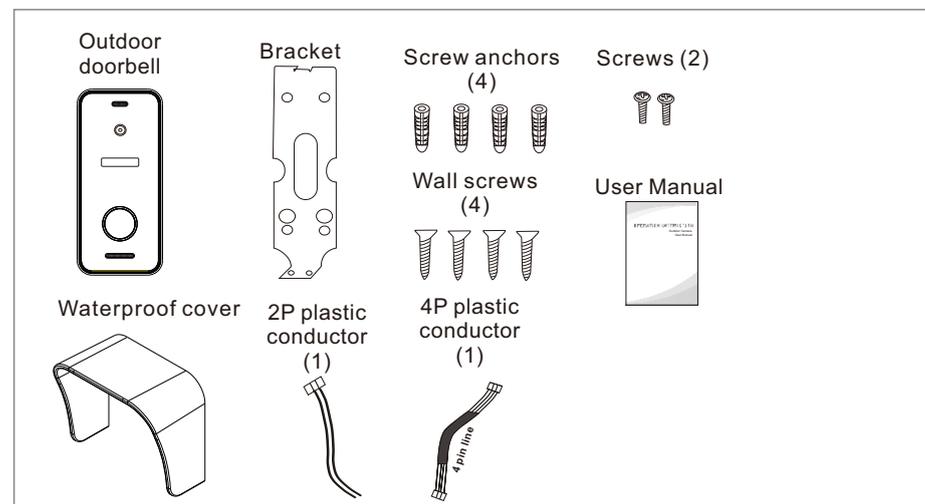
Outdoor Camera

User Manual

## 1. Safety Instructions

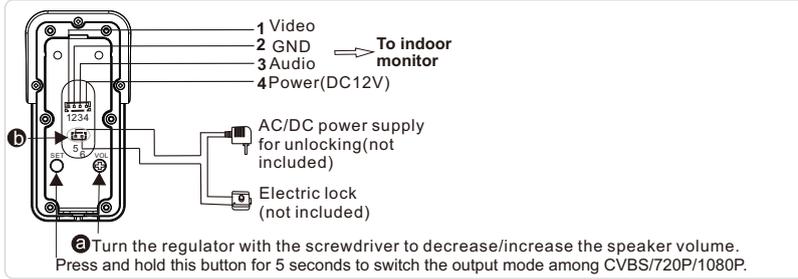
- ※ Read these instructions and keep them in a safe place for future reference.
- ※ Please refer all work related to the installation of this product to qualified service personnel or system technician.
- ※ Do not operate the appliance beyond its specified temperature, humidity or power source ratings.
- ※ Securely install the devices on vertical surfaces(solid walls/doors)not prone to vibration or impact.
- ※ Install the devices away from heat sources such as radiators, heat registers and stoves.
- ※ Installation of the terminal near consumer electronics devices, e.g. stereo receiver/ amplifiers and televisions, is permitted as long as the air surrounding the terminal does not exceed the above mentioned temperature range.
- ※ Handle the appliance with care. Do not strike or shake, as this may damage the device.
- ※ The doorbell/camera units should be fitted with an approved weather shield if the chosen position is in direct sunlight, or in contact with rain, snow or irrigation sprinkler systems.
- ※ Do not use strong or abrasive detergents when cleaning the appliance body. When the dirt is hard to remove, use a mild detergent and wipe gently.
- ※ Do not overload outlets and extension cords as this may result in a risk of fire or electric shock. Distributing, copying, disassembling, reverse compiling, reverse engineering, and also exporting in violation of export laws of the software provided with this product, is expressly prohibited.

## 2. Package Contents



### 3. Wiring diagram

The power supply of the outdoor doorbell is supplied with an indoor monitor. User can connect electric lock to the doorbell.



The terminal is defined functionality as below:

1. Video 2. GND 3.Audio 4. Power(DC 12V) 5/6. Unlock: Connect to door lock.

#### a The speaker volume is too low, how to increase it?

At the backside of outdoor unit, you can find out a regulator (Marked as a) which is used to adjust the speaker volume, turn the regulator with the screwdriver to decrease/increase the speaker volume.

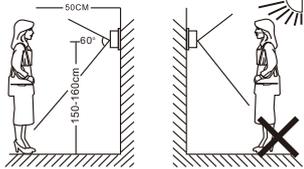
#### b Dry contact

In the standard delivery the system supports locks with Normally Open(N.O.) door unlocking method. It means that in the normal state the dry contact(marked as b) is opened, so the lock is kept under constant closed state. If the unlocking button is pressed and the dry contact is changed to closed, then the lock is released.

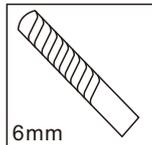
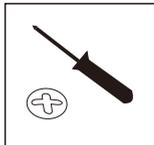
### 4. Installation process of outdoor units

#### NOTE:

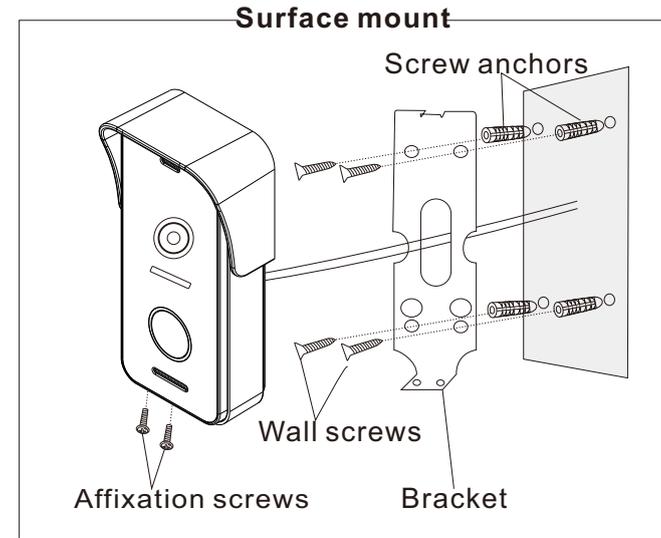
- \* Avoid installation of the device near strong radiation e.g. AC motor and lift.
- \* Maintenance should be complied with qualified technician.
- \* Avoid hard shake, beating and collision. otherwise the internal exact components maybe be damaged.
- \* Do not expose the outdoor camera under strong light or sunshine.
- \* Do not install the outdoor camera in the environment e.g. direct sunlight, contact rain, high temperature, high humidity, full of dust and chemistry corrosive.
- \* Select the most suitable position where the camera is located at user's eye level.
- \* Switch off power supply before installation.
- \* Keep more than 30cm away from AC power supply to avoid external interference.
- \* Keep it away from the water and magnetic field.



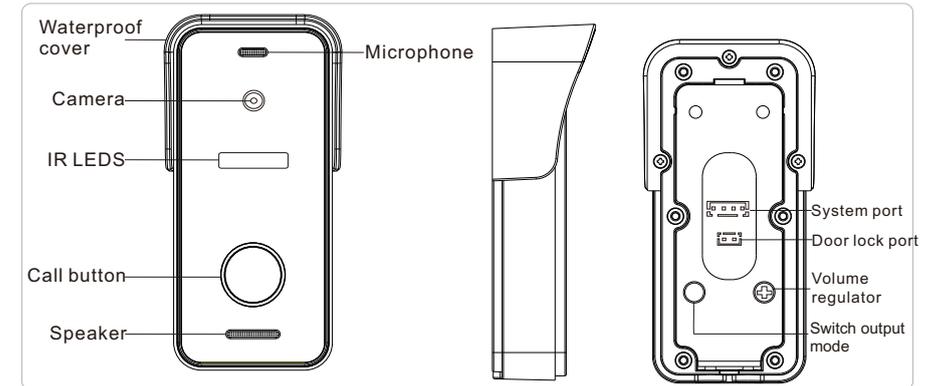
You will need



You can install the outdoor camera as follows:

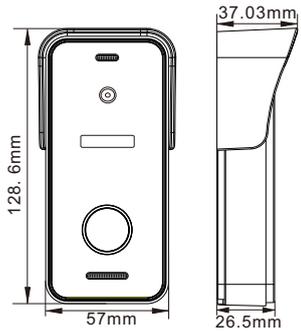


### 5. Feature



Function	Descriptions
Waterproof cover	Affix and protect outdoor camera from rain/ snow
IR LEDs	Provides illumination with IR LEDs for better visibility.
Camera	Capture image to transmit to display
Speaker	Sound from indoor monitor
Call button	Call indoor monitor for intercommunication
Microphone	Transmit voice to indoor monitor
System port	Connect the indoor unit and the door lock
Volume regulator	To increase or decrease the speaker volume.
Switch output mode	Press and hold this button for 5 seconds to switch the output mode among CVBS/720P/1080P.
Door lock port	Connect to the door lock.

## 6. Specification



Camera	1/3 inch CMOS camera
View angle	115°(H.)
Definition	1080P(1920*1080)/720P(1280*720)/CVBS
LEDs for night	IR LEDs(120°)
Day/Night	IR-CUT
Power consumption	300mA max.
Power supplier	Supplied from indoor monitor
Operation temp.	-20°C~+60°C
Installation	Surface mount

## Note on door lock connection

**The electric locks are usually divided into NC lock and NO lock, their wiring is different, the NC lock need to work with the additional power supply control.**

Video of door lock connection: <https://youtu.be/yTnUTr9ncPk>

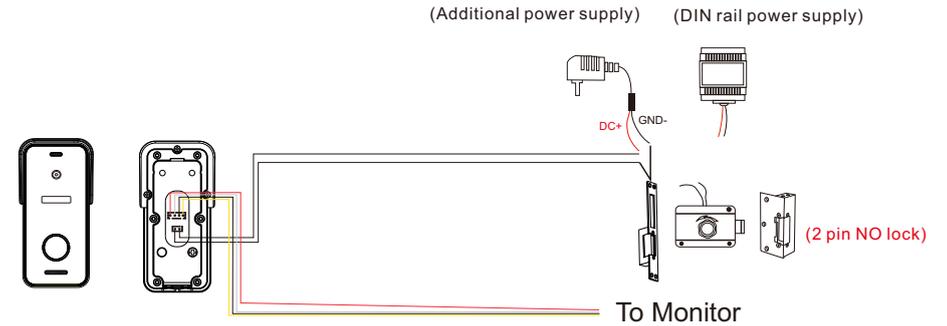
### Note:

1. The doorbell or the monitor will not provide the power to door lock.
2. The doorbell can support door locks within 30V.
3. Door lock's power supply depends on its door lock, if the door lock is 12V, the corresponding power supply is 12V, etc.
4. When the distance from the outdoor doorbell to the indoor monitor is too far (over 50m or 60m), or the cable is too thin, the power to doorbell will be decreased and it cannot open the door. So make sure the input voltage from the monitor to the outdoor doorbell must reach 11v when unlocking.

**NO Lock:** Always closed when power or power off, only open when press unlock.

**NC Lock:** Always open when power off. Closed when power and open after press unlock.

## NO lock connection



## NC lock connection (Need add power supply control)

