OPERATION INSTRUCTION

4-Wire Villa Video Intercom System

Indoor Monitor

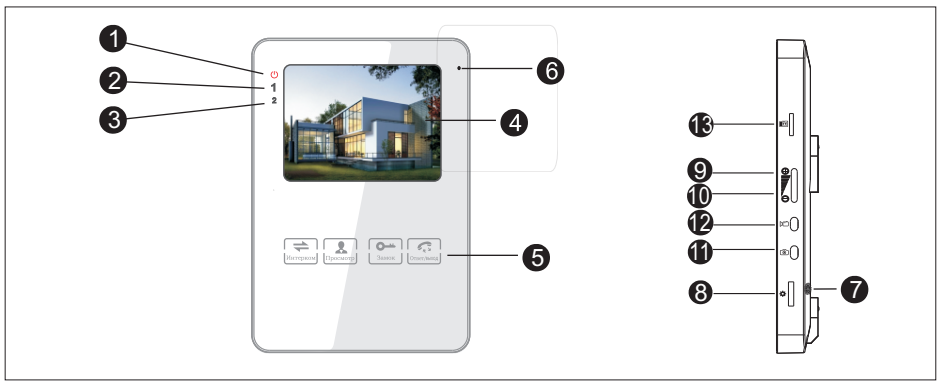
User Manual

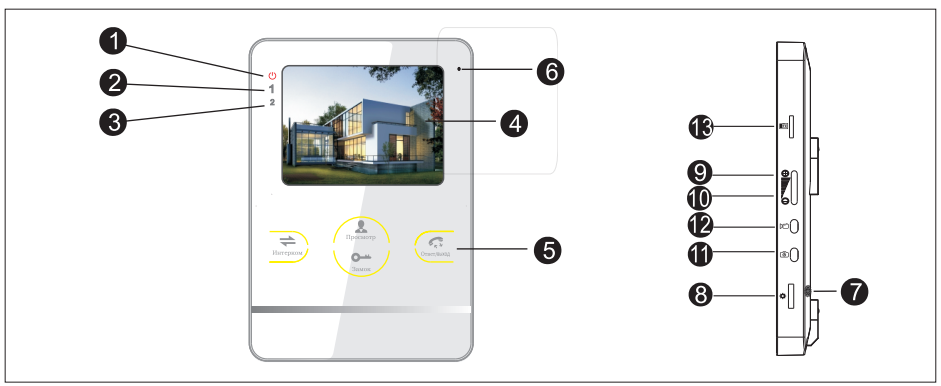
Statement

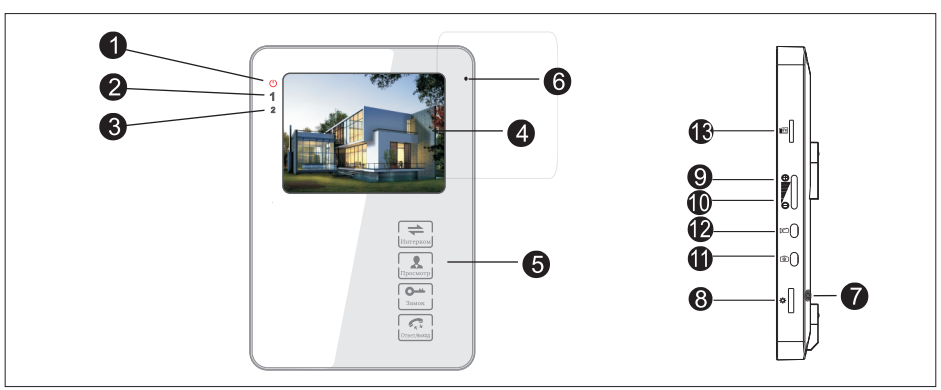
* If there is any doubt or disputable regarding information in this manual, you can call our company for clarification.
* There maybe some difference between the description provided here and the actual devices, as our products are constantly developing and upgrading. We apologize if this manual does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

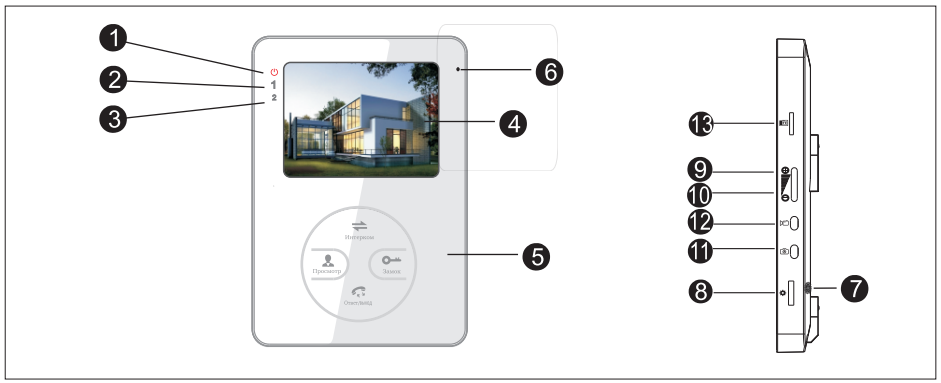
DESCRIPTION ON INDOOR UNIT

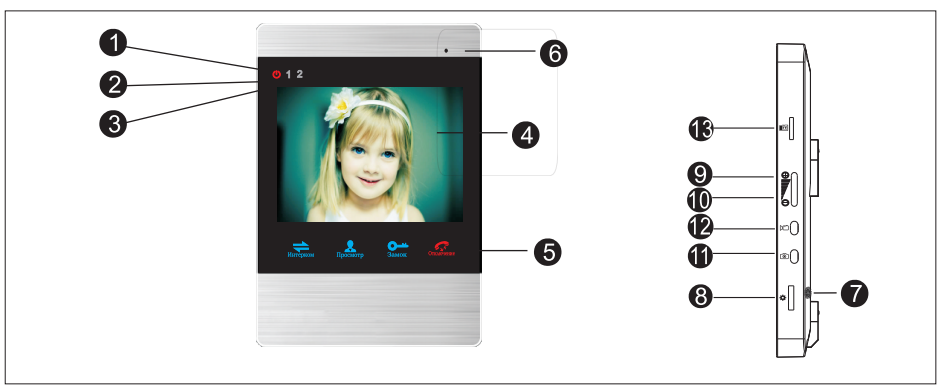
Note: The following are diagrams of all of the available indoor unit models, not all models have the same layout or features, please take actual model as quasi.

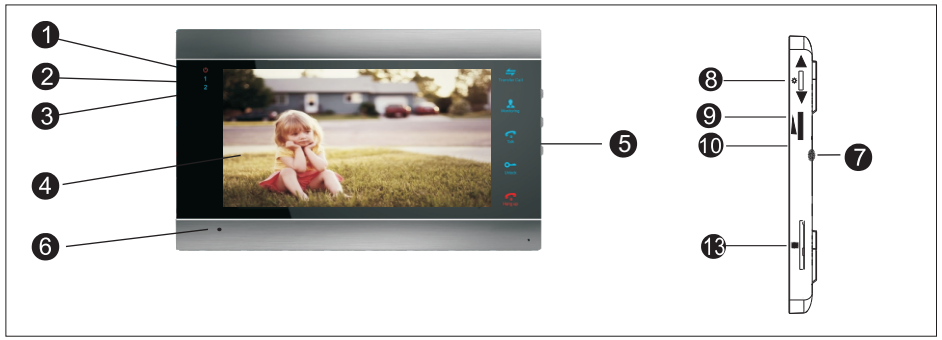


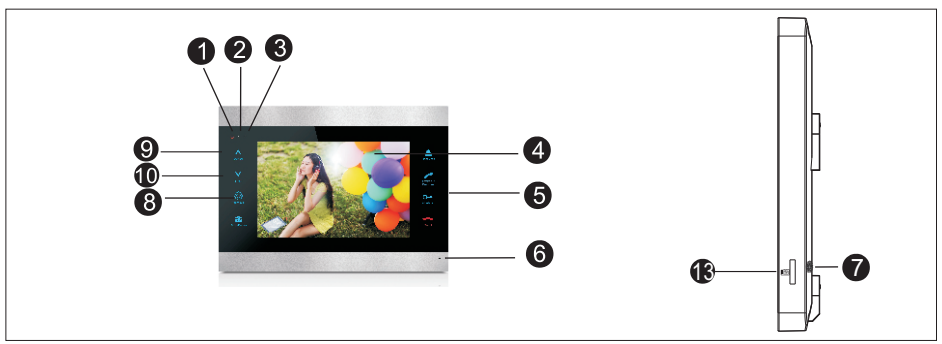


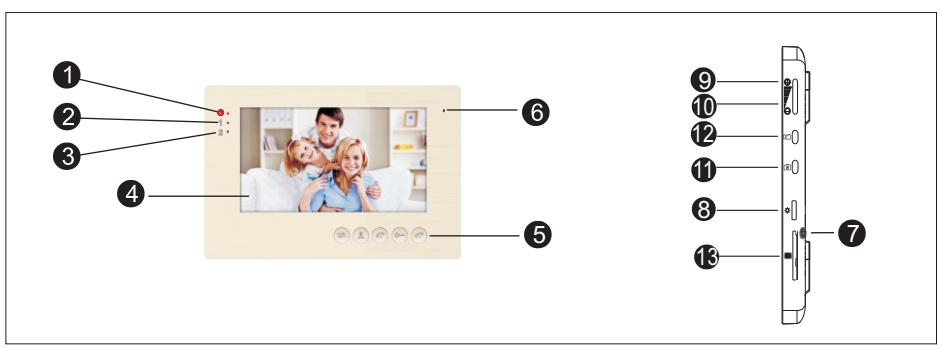


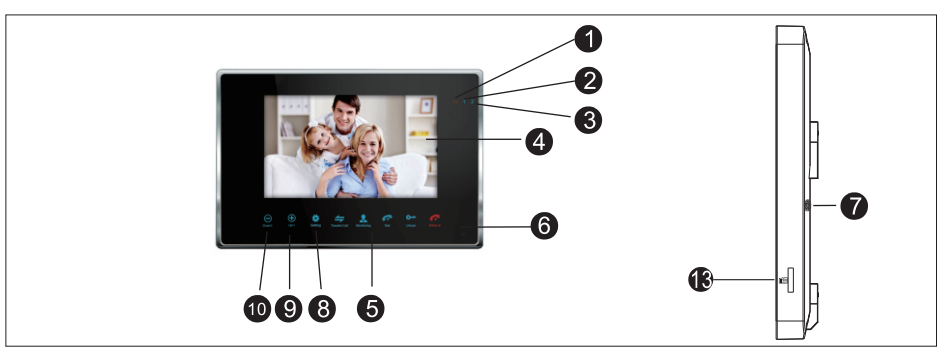


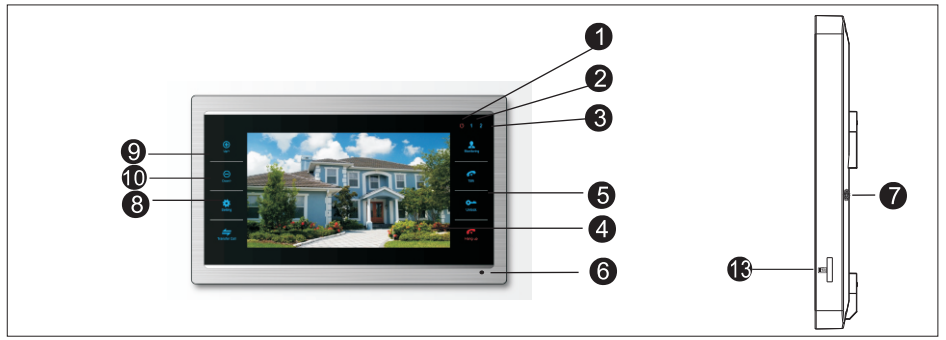


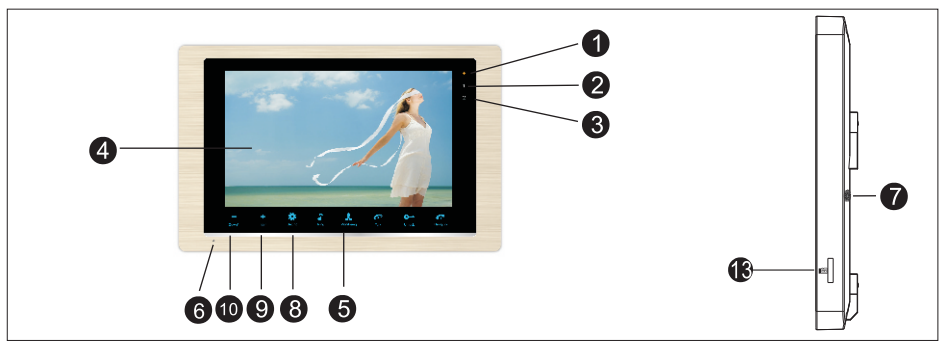

1
2
3
4
5
6
8
9
10
7
13

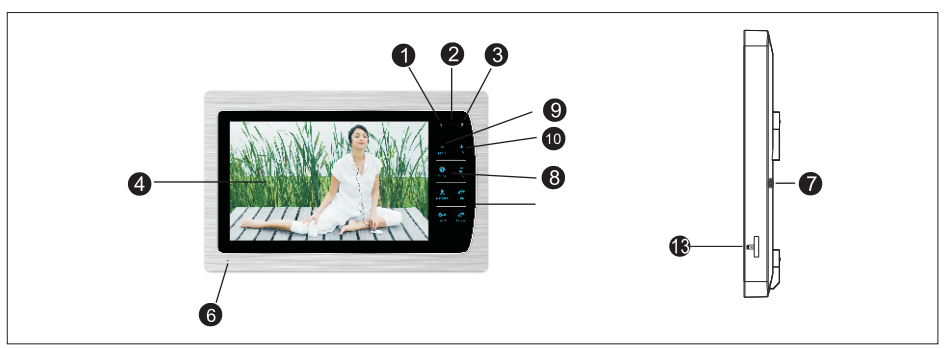

1
2
3
9
10
8
4
5
6
13
7

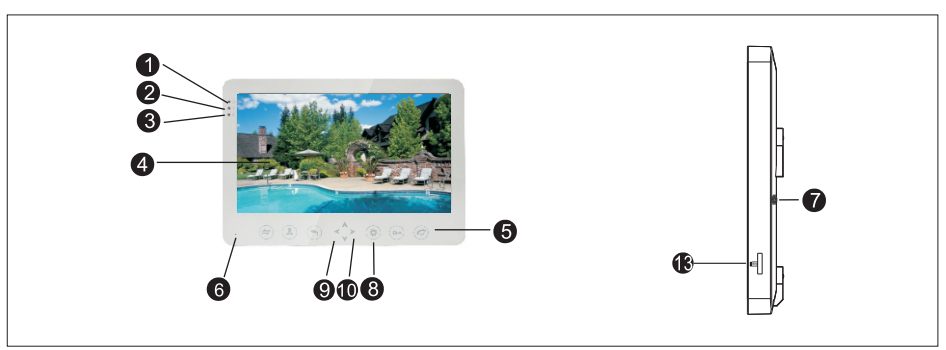

1
2
3
4
6
5
9
10
12
11
8
13
7


1
2
3
4
6
10
9
8
5
13
7


1
2
3
9
10
8
5
4
6
13
7


1
2
3
4
6
10
9
8
5
13
7


1
2
3
9
10
8
4
6
13
7


1
2
3
4
5
6
9
10
8
13
7

NO.	Name	Descriptions
1	LED1	Power LED
2	LED2	DOOR 1 LED
3	LED3	DOOR 2 LED
4	TFT display	View visitor's image displayed on the TFT screen.
5	Operation buttons	Human body sensor touch buttons.
6	Microphone	Transmit the voice to outdoor camera.
7	Speaker	Sound from outdoor camera.
8	Settings button	Menu Settings button
9	Increase volume	Increase the ringer volume of the indoor device or increase volume for the indoor device during intercom.
10	Decrease volume	Decrease the ringer volume of the indoor device or decrease volume for the indoor device during intercom.
11	Snapshot	To capture a frame of the video stream as a still photo.
12	Record	Start manual record or stop manual record.
13	SD card slot	For the models with SD card, insert the SD card for recording and photograph.

DESCRIPTION ON LED INDICATOR

In the panel you can find out 3 LED indicators , with the detailed descriptions, please see the below:

LED 1

The power indicator of the indoor unit

1 LED 2

The door 1 state lights, to door 1 working when the light is on.

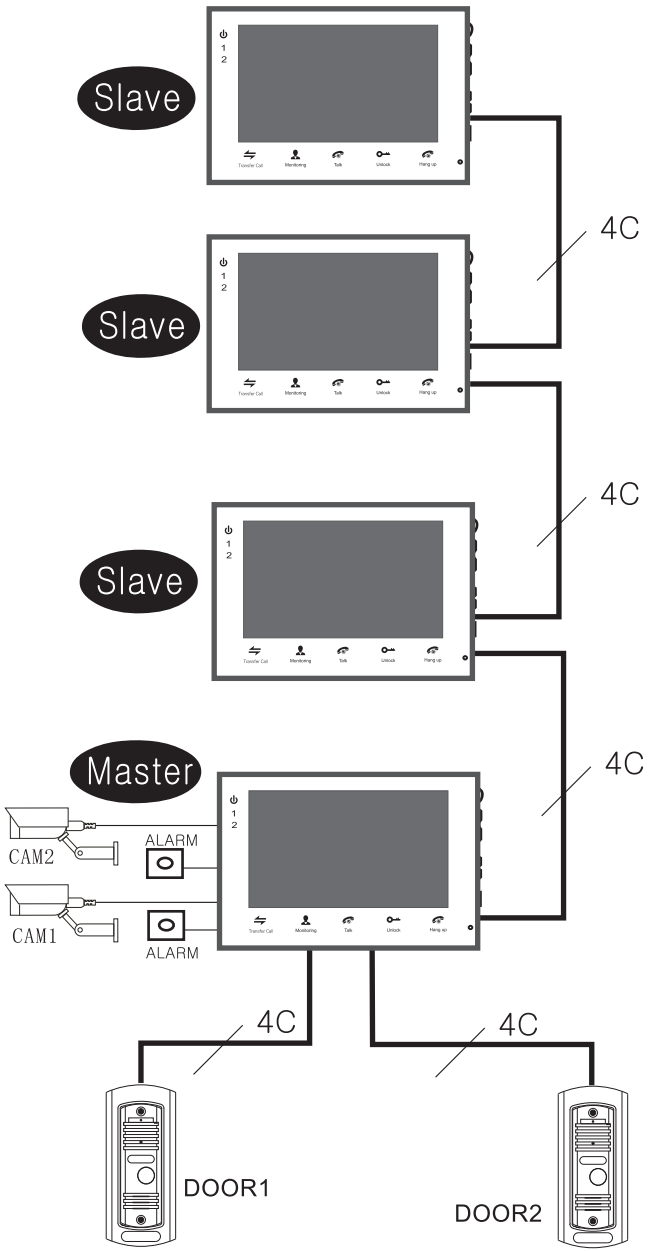
2 LED 3

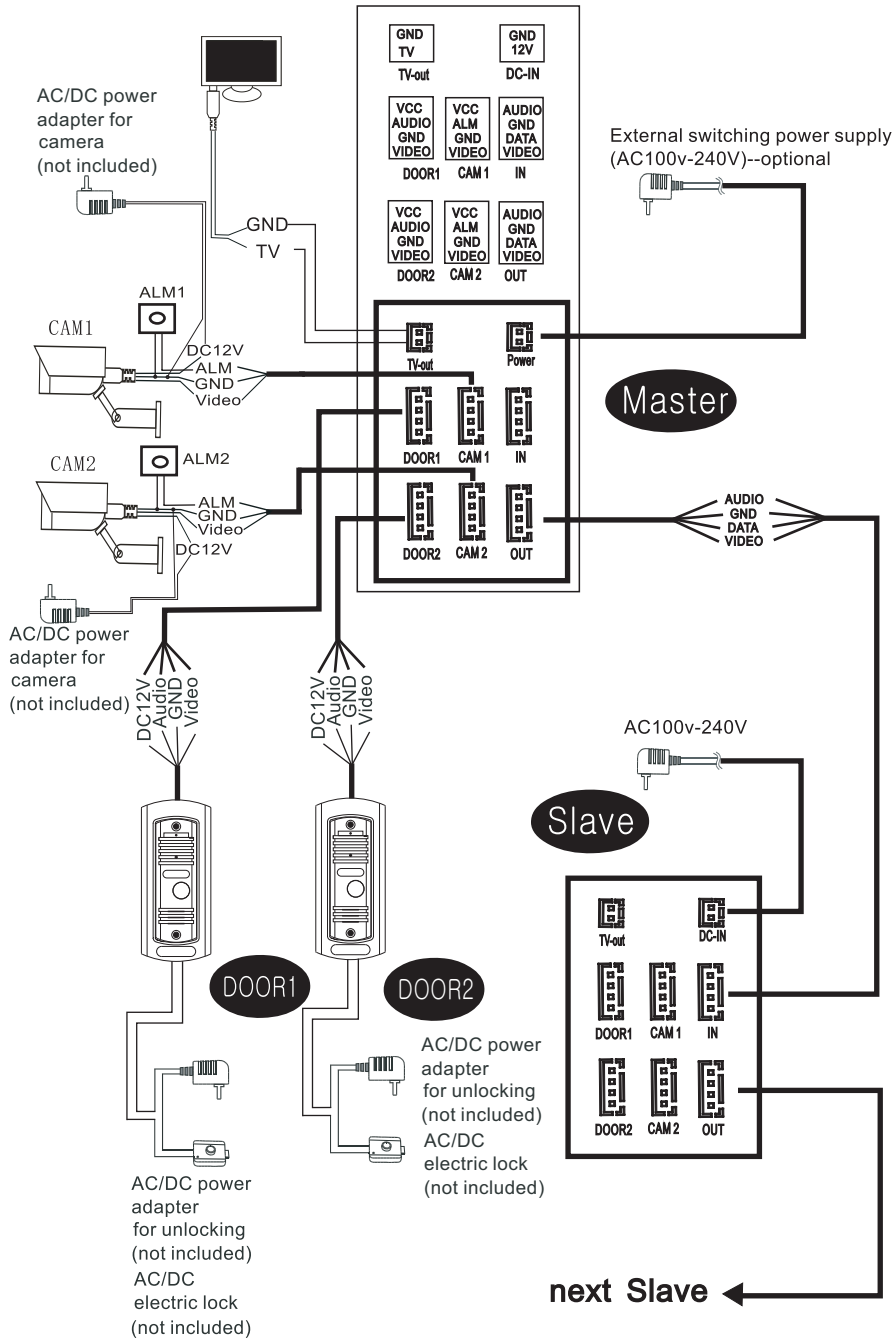
The door 2 state lights, to door 2 working when the light is on.

DESCRIPTION ON SYMBOL

1	Transfer Call	Intercom call or transfer calls to another indoor unit
2	Monitoring	Watch the door and camera images
3	Unlock	Release the door lock
4	Talk	Call Button
5	Hang up	Hang up buttons
6	Setting	1. The button is a composite key, users can press the button, scroll the button upward or downward. For more details, please refer to the section "Menu Operations".
		2. In standby mode, press the button "⚙" once to quickly access the menu.
		3. In main menu settings, scroll the button "⚙" upward or downward to select sub-menu, then press "⚙" again to enter sub-menu. In sub-menu settings, press "⚙" to select menu options, scroll "⚙" upward or downward to adjust values of each option, then press "⚙" to confirm. When select option "Return" on the main menu, press "⚙" to exit menu interface, and the indoor device will be into standby mode.
7		In monitoring or talking mode, press the button to capture a frame of the current video stream as a still photo.
8		In monitoring or talking mode, press the button to start manual record, and press it again to stop manual record.

WIRING DIAGRAM





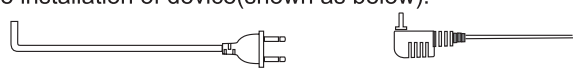
NOTE ON WIRING CONNECTION

The electric lock/source/camera is not included in the package, you can purchase an electric lock which is suitable for actual requirement.

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 is opened so the lock is kept under constant closed state. If the unlocking push-button is pressed and the dry contact is changed to closed, then the lock is released.

Please note that the 2P Short Pin is designed for programming the indoor monitor, the indoor monitor will be programmed to main monitor if you plug the 2P Short Pin in; however the indoor monitor will be programmed to extension monitor if the 2P Short Pin is pulled out. Setup ok, after power machine automatically detects, if it is in state machine work Set, need makes the machine to detect electric.

Indoor machine power with a built-in power or an external power optional. Please refer to actual control using. If the indoor machine with a built-in power source, applicable to wide voltage range(AC100V-240V). Please first pull out the AC power plug before installation of device(shown as below).

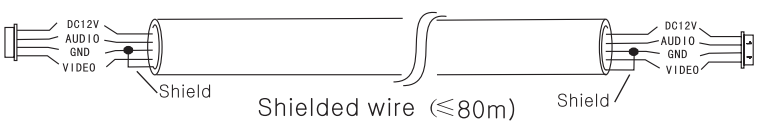


Use and selection of wire, please refer to the following.(The actual effect and the quality of wire rod has the very big relations)

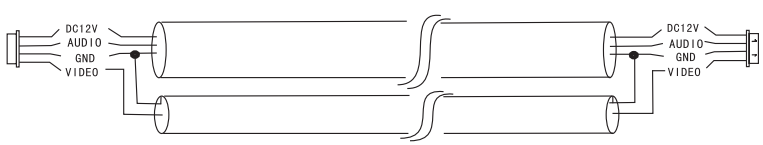
1. 4C ordinary unshielded and shielded wire connection mode:

Distance ≤28m (4*0. 2mm^2); Distance ≤50m (4*0. 3mm^2); Distance ≤80m (4*0. 5mm^2)

Unshielded wire (≤50m)

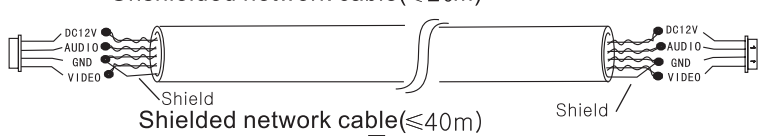


2. 3C ordinary unshielded +video wire (75-3) connection mode:



3. CAT5 orCAT6 network cable connection mode: (Not recommended)

Unshielded network cable(≤20m)



OPERATION INTRODUCTION

◆ VISITOR CALL

Standby mode

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

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

▼ A 10s of continuous Ding Dong tone is heard inside and outside

NOTICE:

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 .

The visitor's image automatically displayed on the screen

▼

Press the **talking** button on indoor monitor (Talk)

▼ Stop ringing

NOTICE:

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

Start conversation with outdoor camera

▼ The conversation duration is 120s at a time

Press the **unlock** button on indoor monitor

▶ release the door lock

Press the hang up button on indoor monitor (Hang up)

▶ End

Both the visitor's voice and image will be not 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.

For the models with SD card, when the doorbell record for the video mode: From the start of a call, the whole process will be recording. If the user press the button "▯", the recording will be stopped manually.

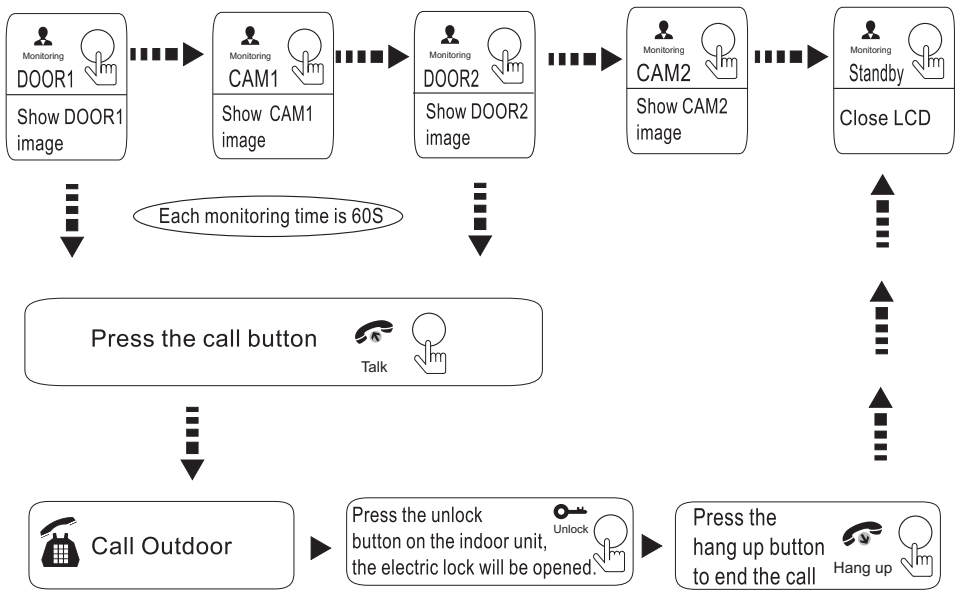
For the models with SD card, when the doorbell record for the snapshot mode: The whole process will be capture, user can press the button "◉" to capture an image.

In the monitoring state: the machine can listen to the sound of the outdoor machine, you can press the button "✆" to conversation and press the button "🔑" to unlock.

MONITORING

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

Standby Mode



NOTICE:

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）.

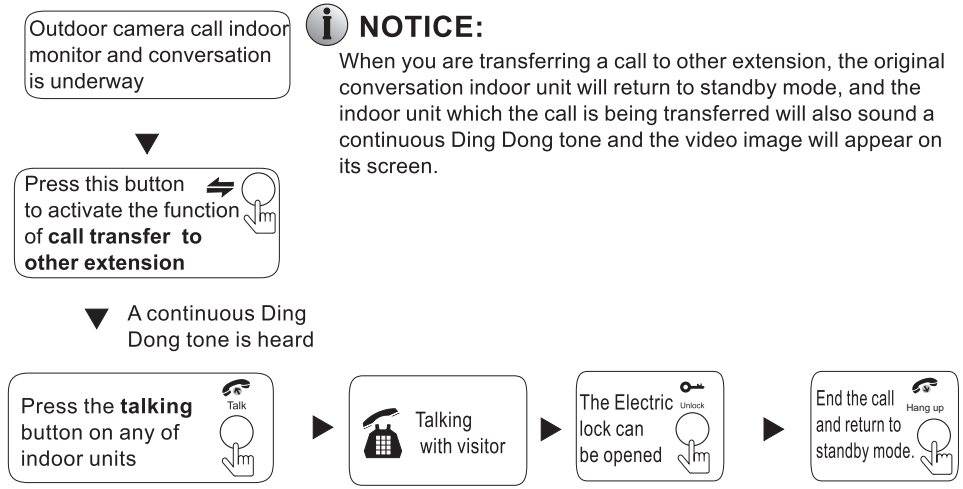
If you use two indoor units, you can also simultaneously in other indoor unit starts monitoring mode, the same images are displayed on the screen of the different indoor unit.

If a conversation with outdoor 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 talking button to reactivate conversation with the visitor.

For the models with SD card, in monitoring mode, press the button "▭" or "📷" to perform manual video / camera; press the button "▭" can manually stop recording; Decided to video or snapshot mode.

CALL TRANSFER TO OTHER EXTENSION

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



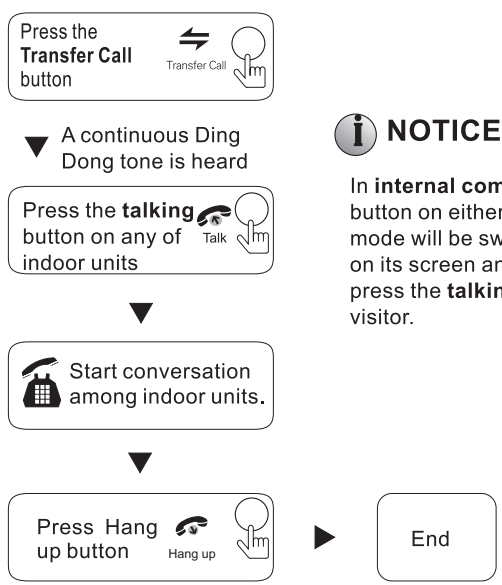
NOTICE:

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 Ding Dong tone and the video image will appear on its screen.

INTERNAL COMMUNICATION AMONG INDOOR UNITS

At least 2 indoor units is required.

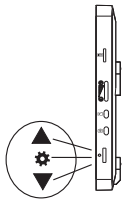
Standby Mode



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 **talking** button to reactivate conversation with the visitor.

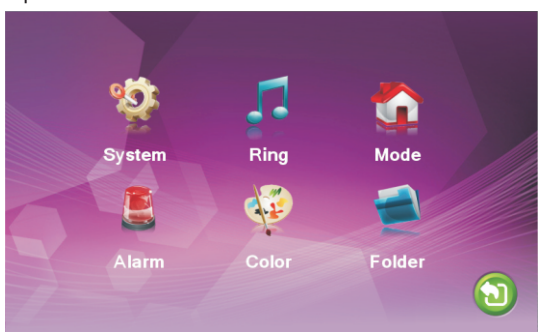
MENU OPERATIONS



NOTICE:

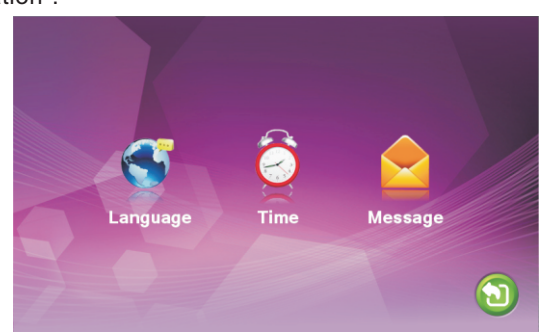
The button "⚙" is a three-in-one key, but also composite keys:
In standby mode, press the button "⚙" once to enter the main menu settings. In main menu settings, scroll the button "⚙" upward or downward to select sub-menu, then press "⚙" again to enter sub-menu. In sub-menu settings, press "⚙" to select menu options, scroll "⚙" upward or downward to adjust values of each option, then press "⚙" to confirm. When select option "Return" on main menu, press the button "⚙" to exit menu interface, and the indoor device will be into standby mode.

If users don't do any operate or enter any interface about the indoor machine, the indoor device will be into standby mode after 1 minute automatically.
In standby mode, press the button "⚙" to access the main menu interface, shows the main interface as shown below. On menus, scroll "⚙" upward or downward to move the cursor to the option "Return", and then press "⚙" to exit.



1. Set System Parameters

Scroll the button "⚙" upward or downward to move the cursor to the option "System", then press "⚙" to enter the "System" menu. System setup includes: "Language", "Time" and "Information".



1.1 System – Language

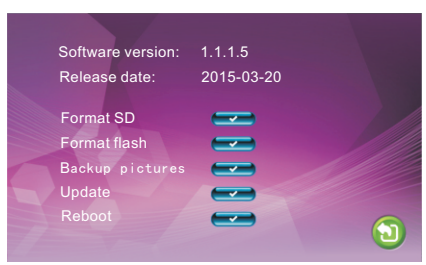
On system menu, move the cursor to "Language" and press "⚙" to enter the "Language" menu. Use this field to change the language of the machine menu text and the on-screen display. Press "⚙" to select menu options, and then scroll "⚙" upward or downward to adjust values, then press "⚙" again to confirm.

1.2 System – Time

On system menu, move the cursor to "Time" and press "⚙" to enter the "Time" menu. Use this field to switch the date format, include "YY-MM-DD" and "DD-MM-YY", to adjust system date and time. First scroll "⚙" upward or downward to move the cursor, and press "⚙" to select menu options, and then scroll "⚙" upward or downward to adjust values, then press "⚙" again to confirm.

1.3 System – Information

On system menu, move the cursor to "Information" and press "⚙" to enter the "Information" menu. The information includes software version and release date.



optional

optional

[Format SD]: This option is for the models with SD card. Format SD card, please format SD card firstly before using. – optional

Note: **The product only supports those SD cards more than Class10.**

[Format]: This option is for the model without SD card. Format built-in storage of the indoor device. – optional

[Reboot]: Move the cursor to " ", and press "⚙". It will pop-up a window, choose "Yes" to restart the machine, choose "NO" to cancel.

[Update]: For the models with SD card, users can upgrade the firmware of the device via SD card. – optional

Note: During the system upgrading, don't remove the SD card or turn the indoor device disable. After completing the upgrade, the device will restart.

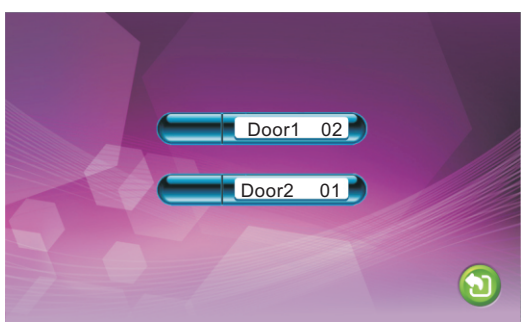
[Return]: Exit the current menu.

2. Set the tone parameters

On main menu, move the cursor to the option "Ring", then press "⚙" to enter the "Ring" menu. Ring setup includes: "Ring select" and "Ring volume".

2.1 Ring – Ring select

On ring menu, move the cursor to "Ring select" and press "⚙" to enter the "Ring select" menu to set up the doorbell tone of the outdoor camera.



[Door1]: To set up the doorbell tone of the outdoor camera 1, a total of 12.

[Door2]: To set up the doorbell tone of the outdoor camera 2, a total of 12.

[Return]: Exit the current menu.

2.2 Ring – Ring volume

On ring menu, move the cursor to "Ring volume" and press "⚙" to enter the "Ring volume" 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 10s to 45s when calling.

[Ring Vol1]: the volume level of Ring Vol1: 01−10.

[Ring Vol2]: the volume level of Ring Vol2: 01−10.

[Ring Vol3]: the volume level of Ring Vol3: 01−10.

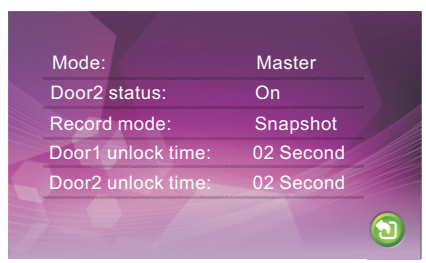
Note:

The timing volume is connected with the manual volume, so please set the manual volume to the most level, then set the timing volume. The timing volume is the volume of internal ring chip, and the manual volume is the total volume of the power amplifier.

Return

3. Set the mode of indoor unit

On main menu, move the cursor to the option "Mode", then press "⚙" to enter the "Mode" menu.



Return

[Mode]: Options include "Master" and "Slave". "Master" indicates that the indoor unit connects the outdoors or cameras, "Slave" indicates that the indoor unit connects the main or sub indoor unit.

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

[Record mode]: Options include "Record" and "Snapshot". "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 or built-in storage will capture a frame of the video stream as a still photo if a visitor press the call button on the outdoor camera.

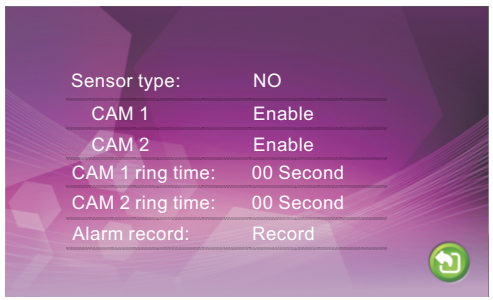
[Door1 Unlock Time]: From 02 seconds to 10 seconds.

[Door2 unlock time]: From 02 seconds to 10 second.

[Return]: Exit the current menu.

4. Set the alarm parameters

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



[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.

Disable: Set the I/O to “Close”, if external sensor alarms are not in use.

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

[CAM2]: 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 from 0~30 seconds.

[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 from 0~30 seconds.

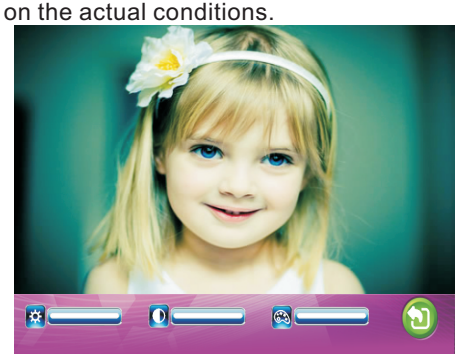
[Alarm record]: Options include “Record” and “Snapshot”. “Record” indicates that when an alarm is triggered, it will activate the corresponding channel to start alarm recording. “Snapshot” indicates that when an alarm is triggered, it will activate the corresponding channel to capture a picture of the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

[Return]: Exit the current menu.

5. Set the color parameters

On main menu, move the cursor to the option “Color”, then press “⚙” to enter the “color” menu.

On the color menu the video color of Door1/Door2/CAM1/CAM2 attributes can be adjusted for the best image quality. Scroll the button “⚙” upward or downward to move the cursor to the option “Door1” or “Door2” or “CAM1” or “CAM2”, then press “⚙” to enter the corresponding menu to adjust values of brightness, contrast and chrome depending on the actual conditions.



Brightness, values can be set up from 0 to 50, default as 25.

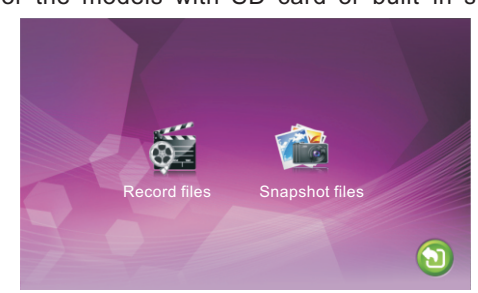
Contrast, values can be set up from 0 to 50, default as 25.

Chrome, values can be set up from 0 to 50, default as 25.

[Return]: Exit the current menu.

6. Playback

On main menu, move the cursor to the option “Files”, then press “⚙” to enter the “Files” menu. Options include “Record files”(for the models with SD card) and “Snapshot files”(for the models with SD card or built-in storage).

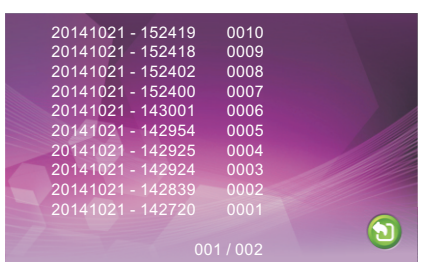


6.1 Files – Record files(optional, for the models with SD card)

On “Files” menu scroll the button “⚙” upward or downward to move the cursor to the option “Record Files”, press the button “⚙” to enter the “record files list”. Scroll the the button “⚙” upward or downward to move the cursor to select file to playback, a red list indicates that the list has been selected, press the button “⚙” to playback. During playback scroll the button “⚙” upward or downward, it will switch the current video to the last file or the next file, and press the button “⚙” again to exit. Move the cursor to the option “Return” and press “⚙” to exit the current menu.

6.2 Files – Snapshot files(optional, for the models with SD card or built-in storage)

On “Files” menu scroll the button “⚙” upward or downward to move the cursor to the option “Snapshot Files”, press the button “⚙” to enter the “snapshot files list”. Scroll the the button “⚙” upward or downward to move the cursor to select file to view, a red list indicates that the list has been selected, press the button “⚙” to playback. During playback scroll the button “⚙” upward or downward, it will switch the current picture to the last file or the next file, and press the button “⚙” again to exit. Move the cursor to the option “Return” and press “⚙” to exit the current menu.



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 unit rings and continues 120s, during this time, click “Hang up” 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, click “Hang up” 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).

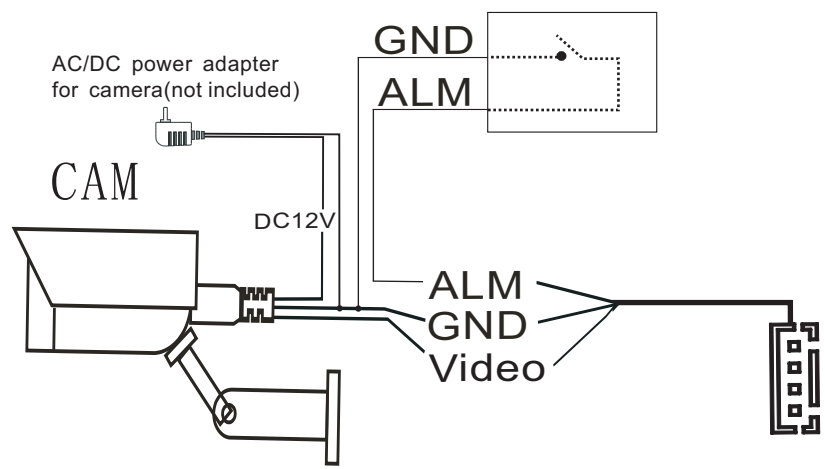
ALM terminal of the alarm detector is connected in parallel with the ALM terminal (The alarm detector shall be supplied by external power supply).

Ground terminal of the alarm detector is connected in parallel with the GND terminal of the camera.

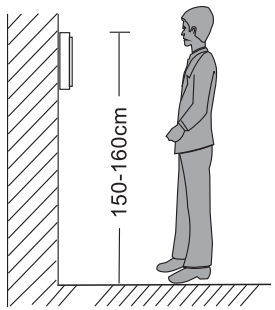
For NO alarm inputs, when the GND and ALM are in the connection state, it will trigger the alarm.

For NC alarm inputs, when the GND and ALM are in the disconnect state, it will trigger the alarm.

It applys to any alarm sensor.



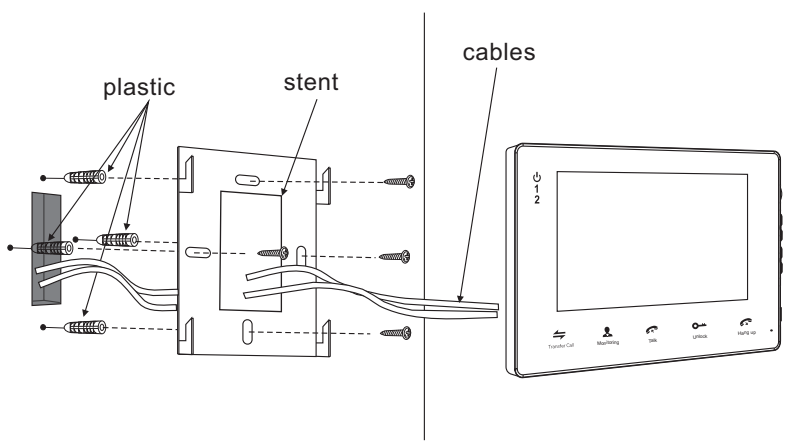
Install the indoor unit



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, the horizontal view is 150cm.
- Please power down before installation.
- Keep at a distance of more than 30cm with AC power to avoid interference.
- Away from the water, magnetic field and chemicals.

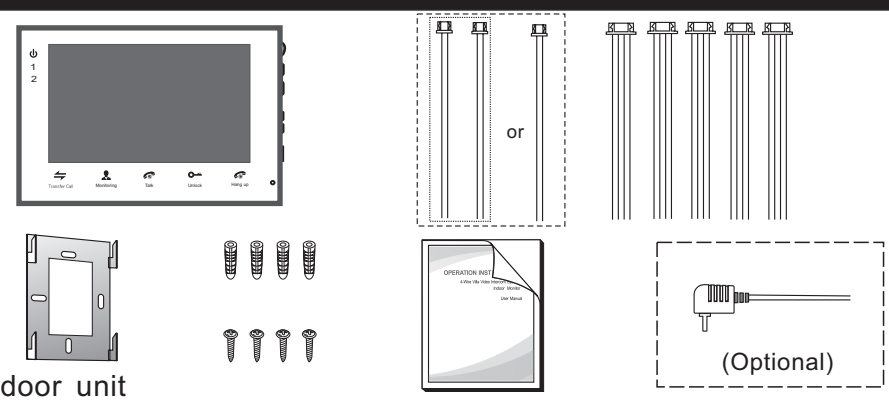
How to install the indoor unit



Specification

Display screen	4″;4.3″;7″;10.1″TFT LCD screen
Definition	4″(320X240) 4.3″(480X272) 7″(800X480) 10.1″(1024X600)
Standard	PAL/NTSC
Calling mode	Two-way conversation
Calling time	120s
Standby current	Maximum 250MA
Work current	Maximum 600MA
Power supply	External switching power supply(DC12V)--Optional
	Built-in power supply--Optional
Work temperature	0~+50℃
Installation way	Surface mounting
Built-in storage	(Depends on goods)
Picture format	JPEG standard format
Extension memory (Optional)	SD card (maximum 32GB)(≥Class 10)

Accessories



Indoor unit

- Indoor unit ---------- 1pcs
- Plastic Anchors ---------- 4pcs
- Screws ---------- 4pcs
- Bracket ---------- 1pcs
- 4 Pin line ---------- 5pcs
- 2 Pin line(optional, please take actual model as quasi) ---------- 1pcs or 2pcs
- User manual ---------- 1pcs
- External power supply switch(**Optional**) ---------- 1pcs

* If the indoor unit includes the internal power supply ,there is no external power supply switch of the picture on the above.