

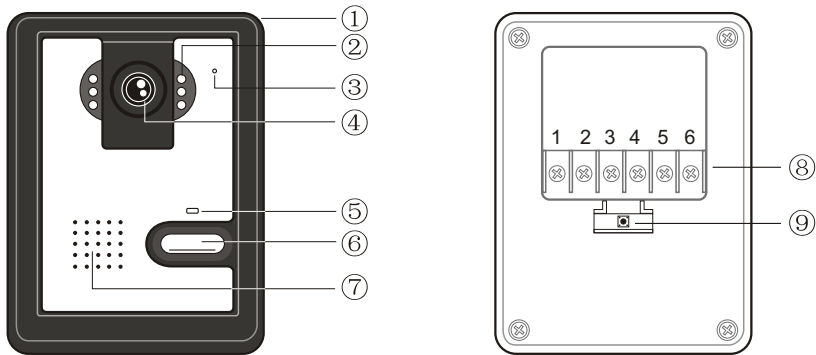
OPERATION INSTRUCTION

┌ Villa Wireless color high definition
video intercom system ┘



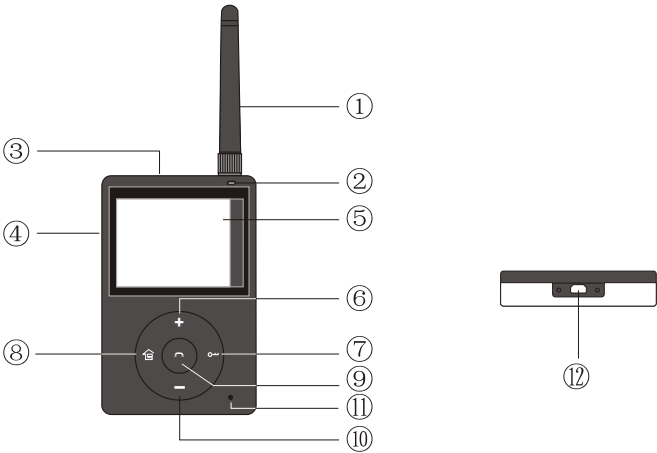
FEATURES

◆ OUTDOOR CAMERA



NO.	Name	Descriptions
1	Installation bracket	Affix and protect the outdoor camera from rain/snow
2	IR LED	Provides illumination with IR LEDs for better night vision
3	Microphone	Transmit outdoor voice to indoor monitor
4	Camera sensor	Capture image and transmit it to display
5	LED indicator	Work status indication
6	Call button	Call indoor monitor for intercommunication
7	Speaker	Sound from indoor monitor
8	Terminal	Connect to power supply and door lock
9	Reset button	Initialize outdoor camera

◆ INDOOR MONITOR

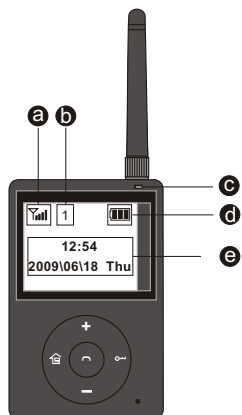


NO.	Name	Descriptions
1	Antenna	Transmit high frequency wireless data
2	Power LED	Power status indication
3	Speaker	Sound from outdoor camera
4	Switch	Turn on/off the power supply of indoor monitor
5	TFT display	2.5inch display, resolution:480X3(RGB)X234
6	+	The shortcut key to enable video-record mode / internal communication mode
7	🔑 Unlock	Release the door lock by pressing this button
8	🏠 Monitoring	Monitor and surveillance outside status
9	🗣️ Talking	Start Conversation with outdoor camera
10	—	Shortcut key to enable picture capture mode
11	Microphone	Transmit indoor voice to outdoor camera
12	USB interface	Rechargeable port via a external USB cable

SPECIFICATIONS

- Adopts 2.4G ISM digital common channel :2402~2483.5MHz
- Max. 2Mbps wireless data rate transmission
- 16-digital voice sampling precision ,8K sampling rate, DAC port with 16-digital audio output
- Full-duplex audio communication mode
- Digital RF IC can synchronously transmit video and audio data
- Adopts Ov7725 camera , 2.4 inch TFT display with high definition
- MJPEG video compressed format , max.10~16fps unilateral transmission
- Transmission power 16-20dBm, receiving power -90~-100dBm
- Transmission distance:100m(line of sight)
- Indoor monitor provided with DC 3.7V , outdoor camera provided with DC5V,1000MA
- Adopts AFH intelligent frequency hopping and can synchronously share 2.4GHz channel with other device e.g. WLAN, Bluetooth, microwave oven, cordless phone etc.
- Random configure both of communication and synchronization channel
- Operation temperature:-30℃ ~+50℃

STANDBY MODE



In the standby mode ,indoor unit will display a standby picture as the left .

a	RF signal intensity indication
b	Own ID number
c	Power LED
d	Li battery capacity indication
e	Time ,Date and Week

Please note that the system will go into the darkscreen savers in 10s of time span without any button is pressed until you press the button to relight the screen again , meanwhile the powerLED is slowly flashing red.

OPERATIONS



◆ turn on/off

In the power off state ,the highlighted **[Welcome]** will appear on the background whilst press and hold the button(shown in the picture on the left), release this button until two brief tones with Di-Di- will be heard .

In the standby mode ,the highlighted **[Goodbye]** will appear on the background whilst press and hold the button(shown in the picture on the left), release this button until a brief tone with Di will be heard .

◆ Menu operation

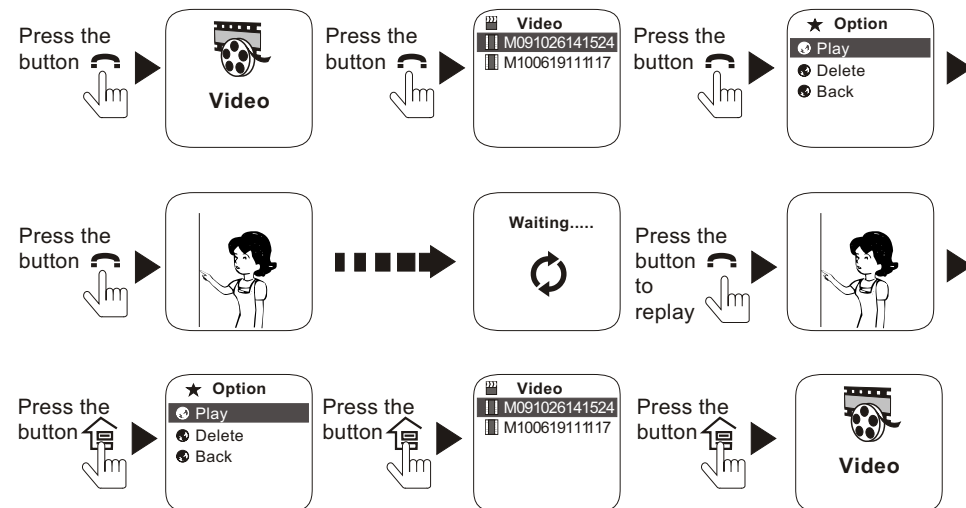
In standby mode, pressing the button to enable the menu mode.

In menu mode, the system will go into the darkscreen savers in 10s of time span without any button is pressed until you press any of buttons to relight the screen again; Pressing the button any time will exit the present menu and return to the previous menu.

A. Video

This function is used to playback the stored video

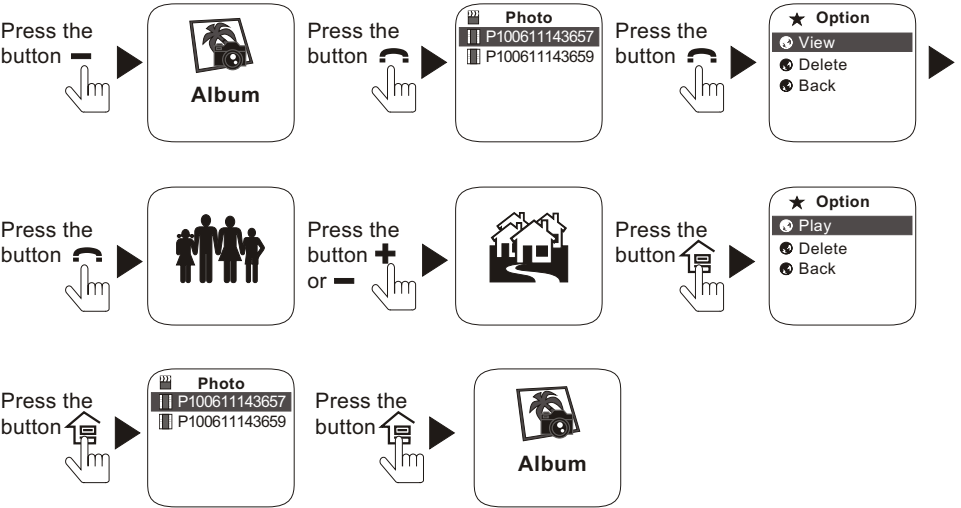
Standby mode






If you need to delete this video, please select **[Delete]** and press the button , then select **[Yes]** and press the button to confirm. To return to the previous menu, you can also select **[Back]** and press the button .

B. Album

This function is used to view the stored pictures.



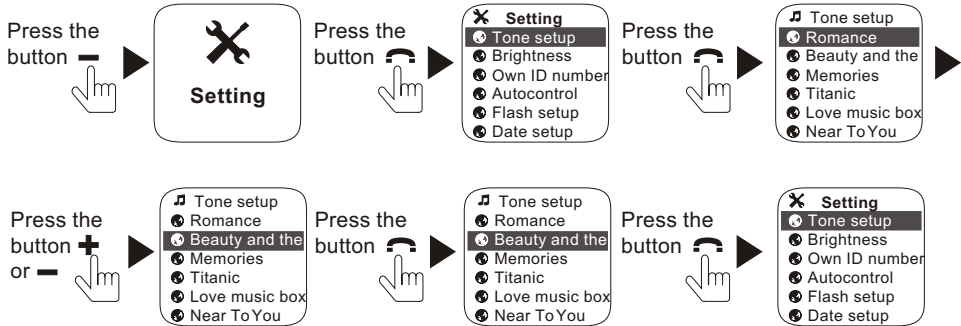
If you need to delete this picture, please select [Delete] and press the button , then select [Yes] and press the button  to confirm. To return to the previous menu, you can also select [Back] and press the button .


C.Setting

C1.Tone setup

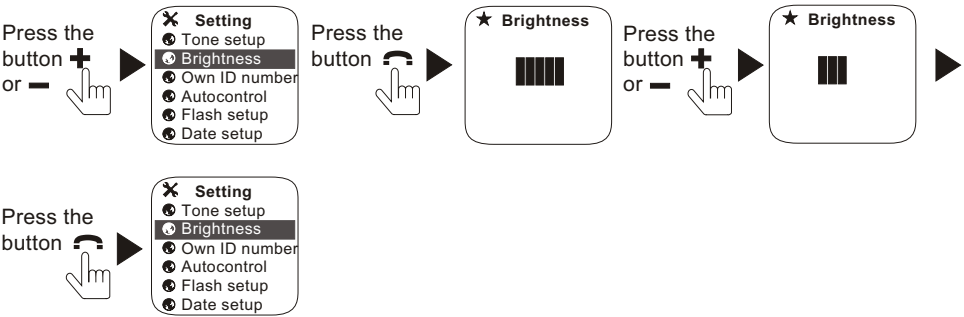
This function allows you to select any of melodies as a ringing tone, built-in up to 12 melodies are selectable:

Romance	Love Music Box	For Elise
Beauty and the Beast	Near To You	Rhythm Of The Rain
Memories	Green sleeves	Love Is Blue
Titanic	Whisper in Autumn	Romeo and Juliet



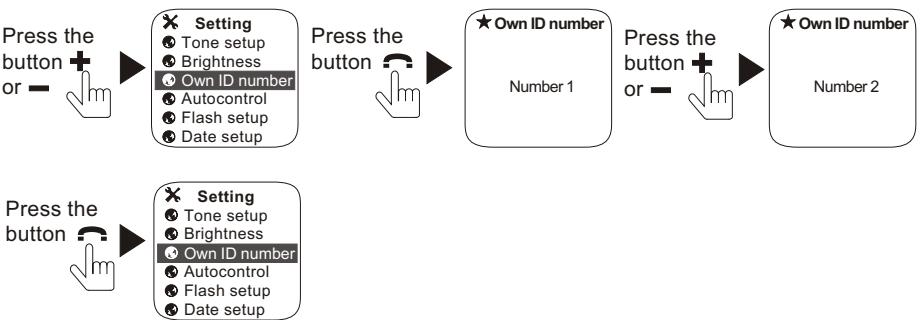
If you select the favourite tone, pressing the button  will start to play the melody.

C2.Brightness



It is useless to press the button if the brightness of TFT display reaches to Min. Value or Max. Value.

C3.Own ID number

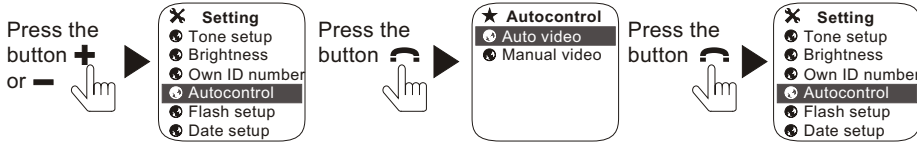



This system allows up to 3 video indoor monitors to connect with 1 outdoor camera, therefore each indoor monitor needs to program the different ID number respectively, otherwise the same ID number maybe result in some unknown malfunctions.

C4. Autocontrol

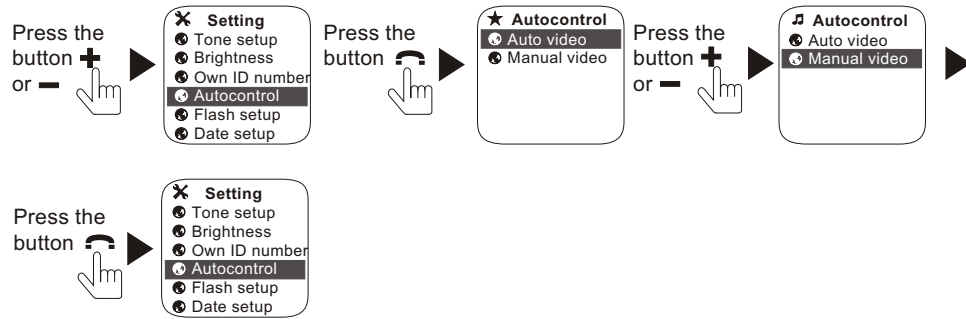
C4.1.Auto Video record

This function allows a real time video is to be automatic recorded in case you are not at home. Please note that only the indoor unit which is programmed as ID number 1 can be allowed to select **Auto video record** mode



If the **Auto video record** mode is selected, when the call button is pressed on the outdoor camera, and then your indoor unit will sound melodies meanwhile the visitor's image will display on the screen, in the upper left of the screen, an superimposed icon  indicates that a real time video record is underway.

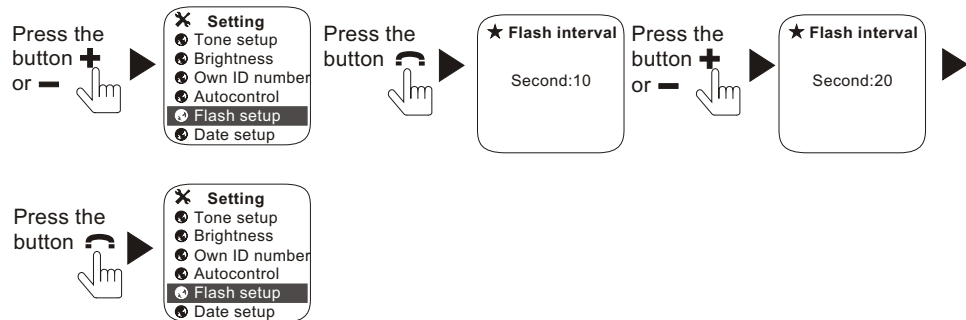
C4.2.Manual video record



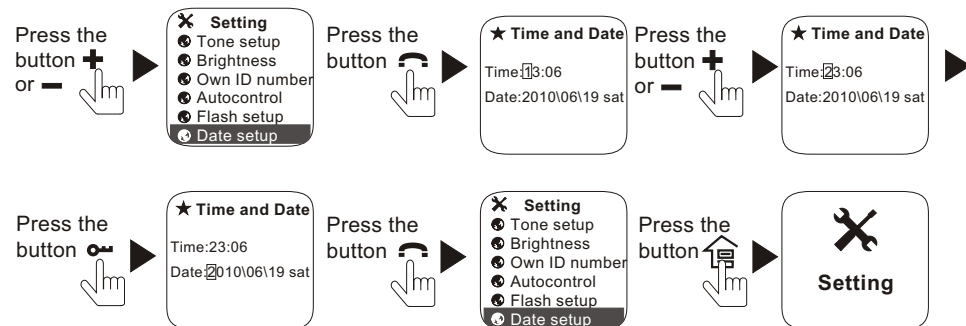
If the **manual video record** mode is selected, when the call button is pressed on the outdoor camera, and then your indoor unit will sound melody meanwhile the visitor's image will display on the screen, press the button to start conversation with visitor, and then press the button **+** to enable video record, in the upper left of the screen, an superimposed icon indicates that a real time video record is underway; pressing the button **+** will end video record.

C5. Flash setup

This function is used to adjust the time span that start screen savers every time.



C6. Date setup



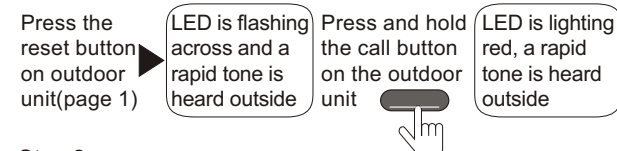
In the process of **Time and Date**, if you need to select the next item, please press the button to move the rectangle frame, press either of the button **+** or **-** to change the target value.

D.Code

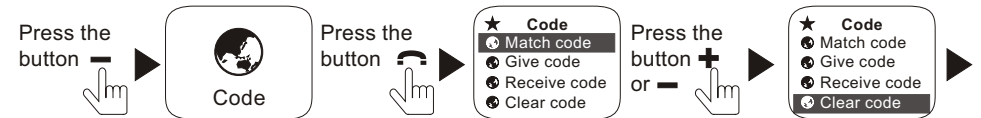
D1.Pair code(Notice: Please don't pair code unless necessary)

In the process of **menu** mode, to pair code both of the outdoor camera and indoor monitor, please follow these steps as below:

Step 1:



Step 2:

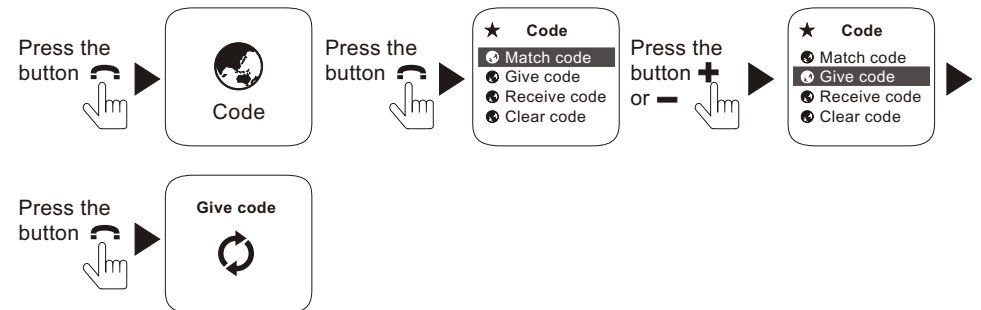


Step 3:

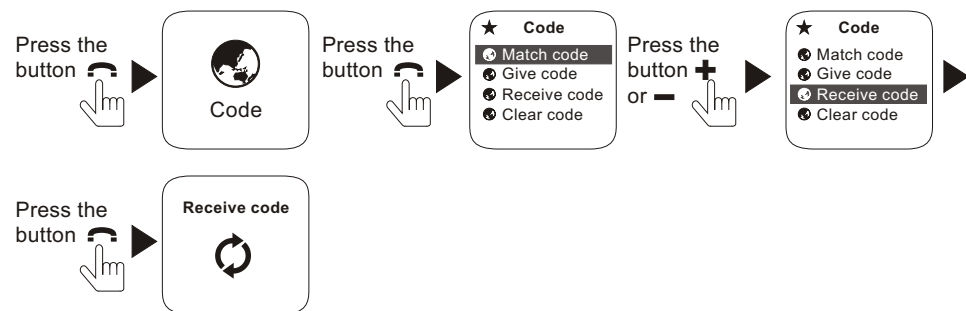


If the highlighted **[success]** appeared on the screen, it means that the paired code is successful both of the indoor monitor and outdoor unit. If the highlighted **[failed]** appeared, that means that it is to fail to pair code, please retry the step as above.

D2.Give code(indoor unit that has already been paired code)



D3.Receive code(another indoor unit that is not paired code)

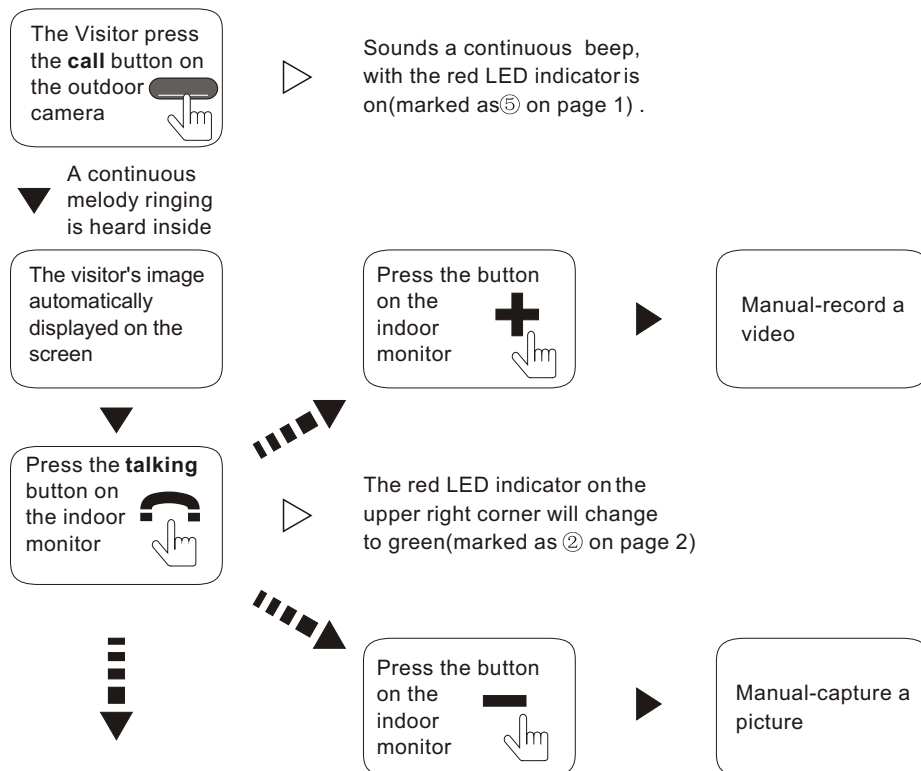


If the the highlighted **[success]** appeared on the screen, it means that receive code is successful both of two indoor monitors. If the highlighted **[failed]** appeared, that means that it is to fail to receive code, please retry the step as above.

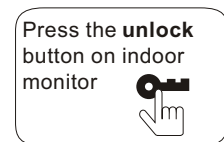
◆ Function-key operation

VISITOR CALL

Standby mode



Conversation duration is up to 120 seconds at a time



An icon are superimposed on the screen



Automatically switch off the display and conversation

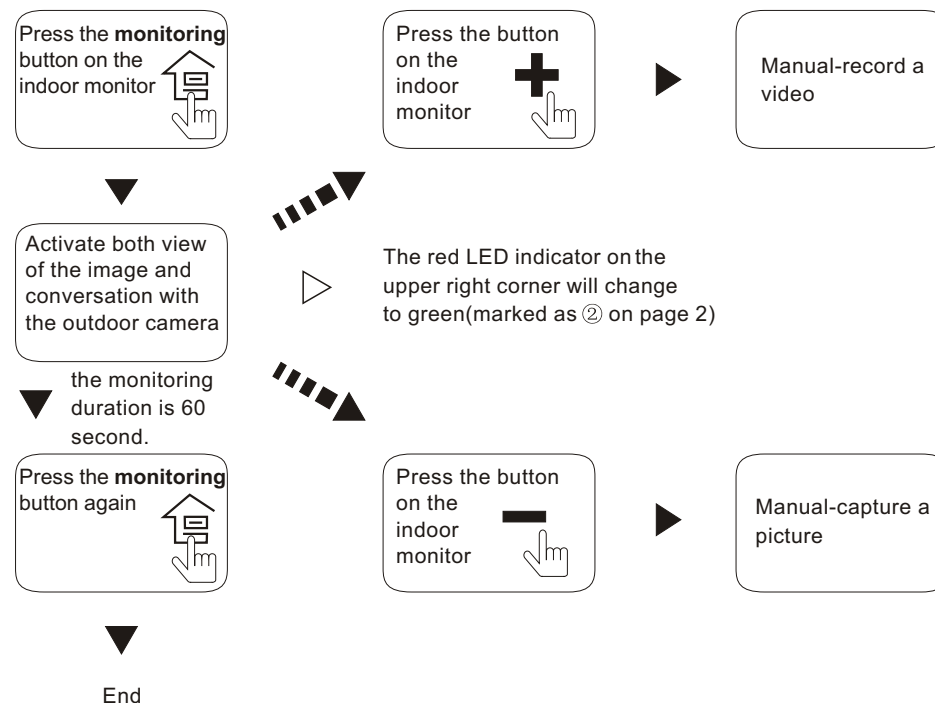
Please be aware that the outdoor camera will return to standby mode with 4 brief tones if indoor unit failed to response within 4 seconds.

Please note that if the indoor monitor is in the recharging status, it will affect the quality of communication, please make sure to pull out the USB cable before using this device.

MONITORING

This function is to view the image at entrance

Standby mode

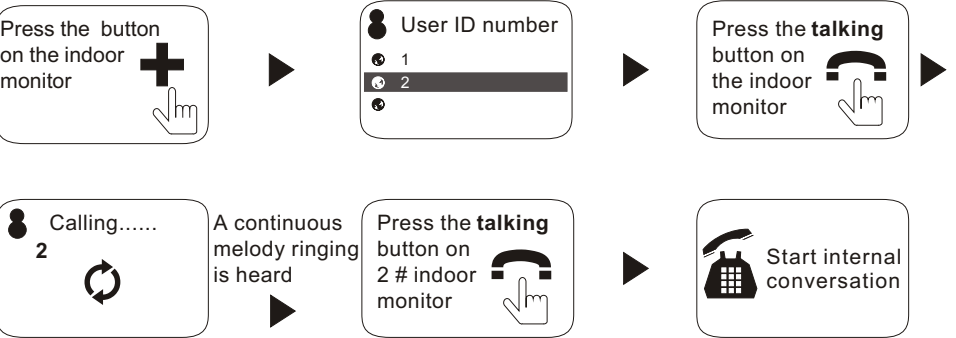


End

INTERNAL COMMUNICATION

The system supports up to 3 indoor units are connected with 1 outdoor camera, therefore this function is required at least 2 indoor units for intercommunication among internal indoor unit.

Standby mode



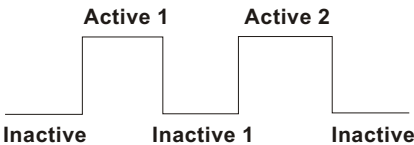
The internal conversation duration is up to 120 seconds at a time

If the highlighted **[user not online]** appeared on the screen, it means that the indoor unit that you called can not be connected, please double check that the indoor units are in the working condition.

UNLOCK TIME SETTING ON OUTDOOR CAMERA

Factory default: unlock time is set for 1.8s. please follow these steps as below:
press and hold the call button on outdoor camera whilst plug into power, a brief tone will be heard in the meantime the red LED indicator is on, release the call button and a brief tone indicates success of setting.

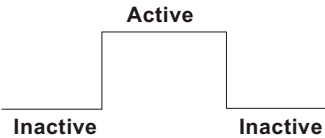
Unlock Relay Output Pulse



The dry contact is kept under active or inactive condition if the unlock button is pressed on indoor monitor, with Active 1 duration is 600ms, Inactive 1 duration is 400ms and Active 2 duration is 800ms.

Secondly mode: unlock time is set for 4s.
press and hold the call button on outdoor camera whilst plug into power, a brief tone will be heard in the meantime the red LED indicator is on, release the call button until 2 brief tones will be heard and last a brief tone indicates success of setting.

Output:4s



The dry contact is kept under active or inactive condition if the unlock button is pressed on indoor monitor, with active duration is 4s.

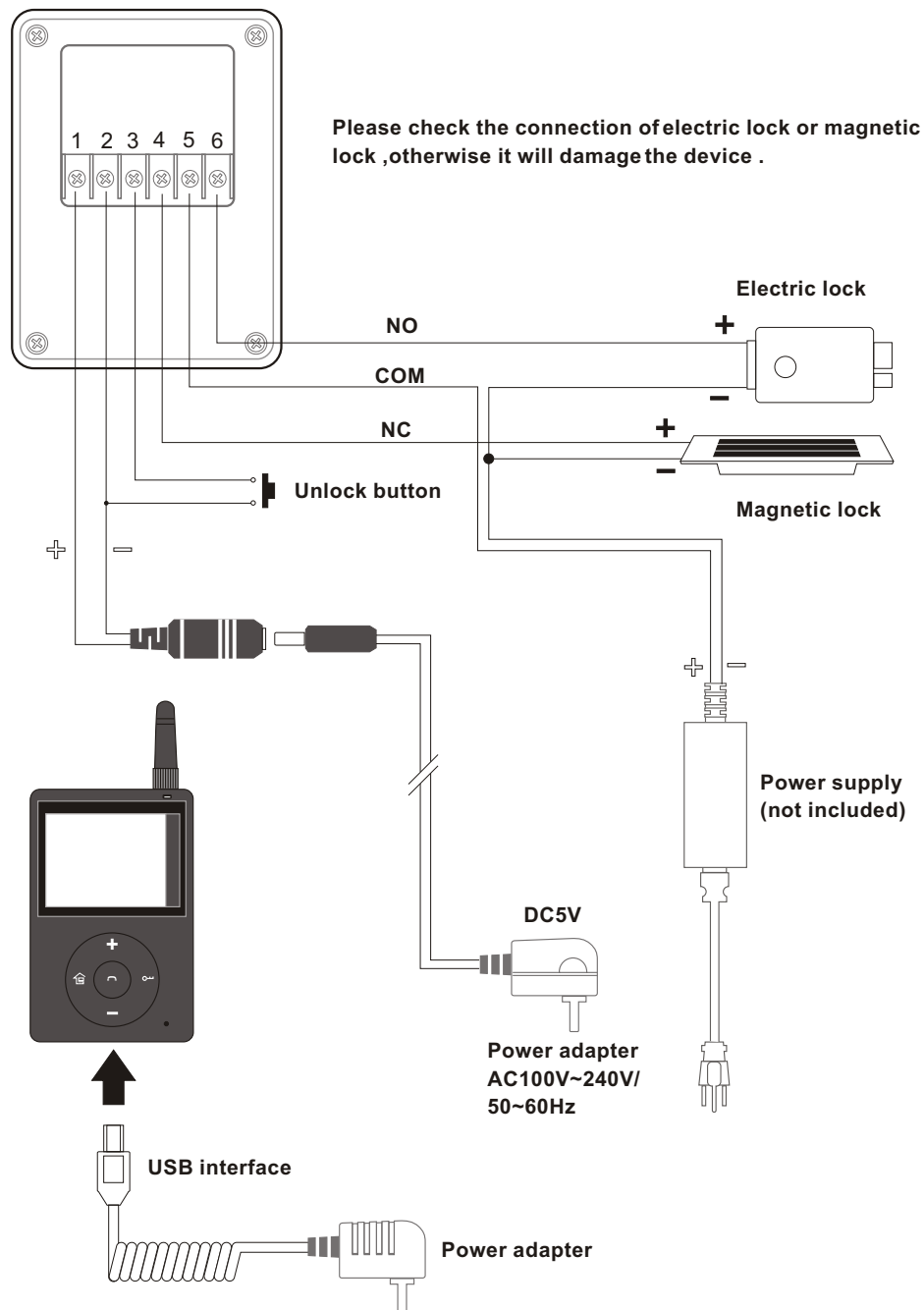
Thirdly mode: unlock time is set for 8s.
press and hold the call button on outdoor camera whilst plug into power, a brief tone will be heard in the meantime the red LED indicator is on, then 2 brief tones continue, release the call button until 3 brief tones will be heard and last a brief tone indicates success of setting.

Output:8s



The dry contact is kept under active or inactive condition if the unlock button is pressed on indoor monitor, with active duration is 8s.

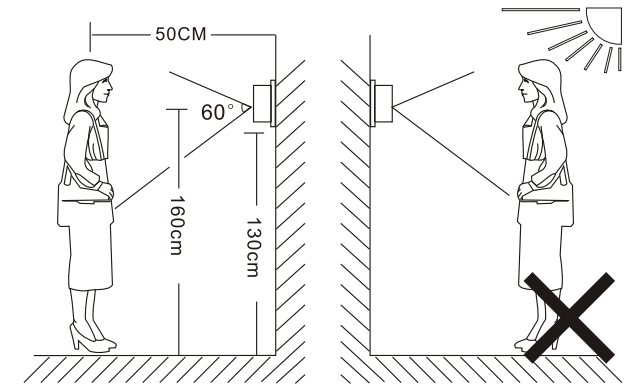
SYSTEM CONNECTION



INSTALLATION PROCESS OF OUTDOOR UNITS

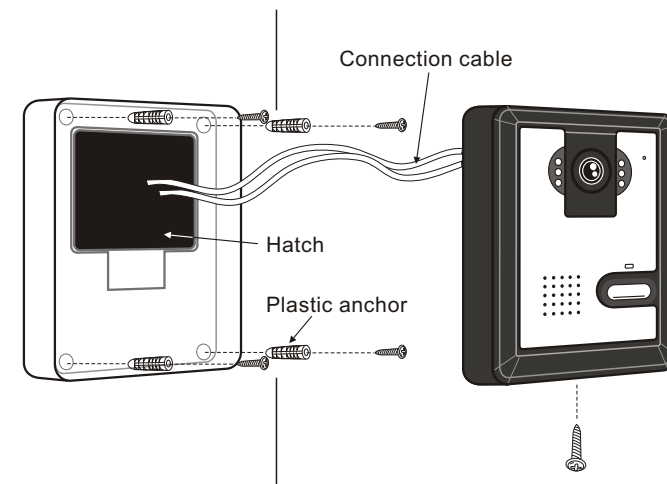


NOTE:



- 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 the user's eye sight
- 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.

To install the outdoor unit, please follow these steps as below:



Federal Communications Commission (FCC) Statement

This equipment has been tested. And it 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 and uses and radiates radio frequency energy and, if not installed and used in accordance with the instruction, 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.

Warning: A shielded-type power cord is required in order to meet FCC emission limits and also to prevent interference to the nearby radio and television reception.

It is essential that only the supplied power cord be used.

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
3. RF exposure warning:
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.