# **OPERATION INSTRUCTION**

AHD Video Intercom System Indoor Monitor User Manual

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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

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### INDOOR MONITOR SPECIFICATION

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.



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



### DESCRIPTION ON SYMBOL

Increasing button	idler wheel move up	Move to next item. If use it for adjust the volume, scroll up is for increase the value.
Decreasing button	idler wheel move down	Move to next item. If use it for adjust the volume, scroll down is for decrease the value.
Setting button	*	Composite keys (main menu+confirm) 1.In standby mode, press "♣" enter main menu. 2.On main menu, press "♣" means confirm. 3.On talking or monitoring mode, if set as recording, press "♣" stop record, press "♣" again start new record; if set assnapshot, press snapshot one picture. 4. During play musics, videos and pictures, press "♣" pause, press "♣" again is continute. Play musics or videos, keep long time press "♣" display volume bar
Transfer button	Transfer Cal	<ul> <li>Internal call , transfer call and color coordination</li> <li>1. On standby mode long time press  call slave monitor do internal call</li> <li>2. During outdoor station talk with indoor monitor, long time press  do transfer call.</li> <li>3. During talking or monitoring, press  dispaly show color coordination: volume, brightness, contrast, saturability, refresh, return back (volume adjust for outdoor station and indoor monitor talking sounds; Refresh: when mix connect PAL/NTSC cctv camera or outdoor station and CVBS/AHD cctv camera or ourdoor station; during keep power on and do some connection change for cctv camera or outdoor station, if no image come in, please press "R" refresh signal.</li> </ul>
Monitoring	R Monitoring	Monitoring outdoor station image
Talk button	Talk	Received visitor call and talking, during monitoring press" & "can talk with outdoor station.
Unlock button	<b>O</b> Unlock	Open the door
Hang up button	Kang up	End of talk
Back button	Hang up	Press can back to the previous page
Volume button		Talking volume setting idler wheel move up means"+".idler wheel move down means"-".

### INSTALLATION NOTE

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which is suitable for actual requirement.



(i) The electric lock/alarm/camera is not included in the package, you can purchase an electric lock

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

### **OPERATION INTRODUCTION**

### VISITOR CALL



When in a call, can't press monitor to switch over.

When in a call, if another outdoor unit call or start alarm, indoor unit will have text or sound "du..du..'prompt.

### MONITORING

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



## 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).
- (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.
- When intercom in monitor mode, if outdoor station call, the monitor will end up communication (i) or switch to call image.
- With SD card, if record mode is video, press first time setting button start to record a video, press setting button again will stop recording. If record mode is snapshot, press next setting button will snapshot a picture, and will snapshot more pictures.

### CALL TRANSFER TO OTHER EXTENSION

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



Keep pressing

button

the Transfer Call

Select a extension

Press the talking 🛛 🕋

button on called of

indoor units

which you want

V

4

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Jm

The called slave monitor will get ring tone

### NOTICE:

Press the button "(+)" or "(-)" upward or downward to select the extension, then press "\* to confirm.

End the call

and return to

standby mode.

Notice: Intercom can't tune out color option. can't adjust communication volume.



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### **MOTION DETECTION**

1. On standby mode, press "♣" to enter into the main menu as the following picture. It includes system, time, digital photo, mode, meida, record. Pres "⊕" or "⊖" to move the cursor and return button to back to the standby mode.



 Press the button "#" downward to move the cursor to the option "Motion Detection", the motion detection has 4CH for choose: Door1, Door2, CAM1, CAM2; but you can only choose one option when working.



3. On standby mode, when detect motion start to recording or snapshot.

### **MENU OPERATIONS**

### I ) There are two ways to display in the standby status

The clock is displayed in the monitor with standby state by default. If the digital photo frame function is on, the image saved in the SD card will be automatically played in standby state.

SD card must have name with "ring" and "user" two folders, the music must save in ring folder, system can find it, identify it and set it as definite ring tone. Pictures must save in photo folder of "user", can be found and show, video saved in "user" file can be found and show.

10:50	
Monday	
07-08-2017	
07 00 2017	

### Time & Date standby mode

If the user did not do any operation. system will be back to standby mode after 60s (except playing music, video, picture). Clock keep display 60s on standby mode, after enter black screen protection.

In standby mode, press the button " $\clubsuit$ " to access the main menu interface, shows the main interface as shown below. On menus, press " $\textcircled{\mbox{\circle*{1.5}}}$ " or " $\textcircled{\mbox{\circle*{1.5}}}$ " upward or downward to move the cursor to the option you want, and then press " $\Huge{\mbox{\circle*{1.5}}}$ " back to previous step.



### **1.Set System Parameters**

Press the button "⊕" or "⊖" upward or downward to move the cursor to the option "System", then press "♣" to enter the "System" menu. System setup includes:"Lanugage", "Time", "Information", "Ring", "Volume", and "network setting".



### 1.1 System - Language

In system menu, move cursor to "Language", press "🏘" enter to "Language" menu. It is to modify menu text and screen language of indoor unit. Press "🏘" one time, the arrows in two sides will change color, means can adjust parameters, press confirm again after adjustment, language setup successfully.



### 1.2 System - Clock

In the system menu, move the cursor to "Clock" and press " &" to enter the "clock" menu. The clock switch controls whether the clock is displayed in the standby mode, the on is the open display, and the off is closed. Mobile cursor to "clock", press " &" to turn off the clock, and then will not display the clock when standby mode is closed. The screen is all black, and the digital photo frame will not be opened, nor will the picture be played. "Date format" can set the display format of the clock in the main menu and standby mode. Press the key to move the cursor down key to move up the cursor. Select the parameter option according to the setting key to confirm the adjustment, then press the " will button to increase the volume, press " will button to reduce the volum, adjust it and press" will be confirm.



### 1.3 System - Information

On "system" menu, move the cursor to the "system information" and press "#" button into it. It includes software version, MCU version, release date, reboot, SD free space.



# **(i)** Note: The product only supports the SD cards that are written at a speed of more than 10MB/s with a memory of less than 32G.

- [Update]: Users can upgrade the firmware of the device via SD card.
- [Format SD card]: Move the cursor to Format SD and select " com ". Press " #", the pop-up window will remind if format SD card is needed. Select "Yes" to forward and "No" to cancel. If the format card is finished, there will be notification of "format SD card successfully"

# Note: The system upgrade can be upgraded using the SD card, and the system upgrade is illustraded in the media menu.

[Return]: Exit the current menu.

### 2. Ring select

On system menu, move the cursor to the option "Ring", then press "at to enter the "Ring" menu, set up the doorbell tone of the outdoor camera.



- [Mode]: Two types of ringtone: Default or Custom bell. Default Ringtone: Built-in ringtone from system Custom bell: Download music save on SD card and select it as ringtone.
- [Door1]: Two type mode: Default or Custom bell (Notice: Custom bell select from SD card).
- [Door2]: Two type mode: Default or Custom bell (Notice: Custom bell select from SD card).



Set up file folder name as "Ring" from SD card, keep all music under "Ring" folder, after it can be found and select as customs bell. Music name should creat as ring 1~ring 12.

### 3 Ring Volume

"On system menu, move the cursor to "Volume" and press "\*" to enter the "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.

[Button Voice]: This option can open or close button voice. Note:

The timing volume is the volume of the call.



### 4. System-Network Setting

Enternetwork setting, monitor connect networkandserver, outdoor station call indoor monitor, smart phone APP getmessage at the same time. Network setting included:wifi set and server set.



### 4.1 WiFi Set

Two mode: Smartlink and AP mode.

Notice: Use WiFi set function must bework with smart phone, APP name (Wifi intercom-D) Andrioddownload from "Google Play", IOS download from "APP Store"



### Smartlink mode connection:

- (1). Use smartlink and confirm, interface tips"smartlink mode active please wait....."
- (2). Monitor tips "please choose smartlink mode from APP and send SSID and password" At this moment switch on APP(Wifi intercom-D) and press "+" enter smartlink mode, input wifi password press next step.
- (3).Send right information monitor tips" connectrouter, please wait....."monitor autoregister from server within 3Min.Note: during processdo notpressany button, feedbacksuccessful tips and do next step.
- (4).After, interface show wifi connecting tips, if wifi name, passwordorovertime connection, please start from step 1 again.
- (5).If monitor display "register server success" tips means connect wifi success, press setting key confirm, and back to standby mode, left corner appear wifi icon means monitor already connect wifi.
- (6).Interface connect success.

### AP Mode:

- (1). Choose AP mode and confirm, monitor active smart bell wifi flashpoint.
- (2). Monitor show tips", please choose AP mode from APP and send SSID and password" Smart phone connect wifi name: smart bell wifi password: 87654321, connection successed, switch on smart phone APP(Wifi intercom-D), press "+" enter AP mode, input wifi name and password, press next step.
- (3).Send right information monitor tips "connect router, please wait....."monitor auto register from server within 3Min. Note: during process do not press any button, feedback successful tips and do next step.
- (4).After, interface show wifi connecting tips, if wifi name, password or overtime connection, please start from step 1 again.
- (5).If monitor display "register server success" tips means connect wifi success, press setting key confirm, and back to standby mode, left corner appear wifi icon means monitor already connect wifi.
- (6).Interface connect success.
- Notice: Localinternet will remember last connect wifi information, so rebootmonitorwill auto connect wifi. In order to make sure and check wifi connect success, through monitor QR code and scan it, APPwill displaymonitor connect or disconnectSIP server.

### 4.2 Server setting

Choose smartlink modeor AP modeconnect wifi, aftermake server set.

- (1). Enter "Server set" choose the server which one nearby your located, when tips "server register success" open APP (Wifi intercom-D) press "+" scanQR code
- (2). Binding successback to standby mode, interfaceright cornerappear "network" icon means success.
- (3). If wifi and serverconnect success, outdoorstation call indoor monitor, smart phonecan get message at the same time.



### 5. Digital Photo

"On main menu, move the cursor to the option "Digital Photo", then press "#" to enter the "Digital Photo" menu. (for the models with SD card)

### Note: If open digital photo, can't use motion detection.



[Digital Switch]: This option can open or close digital switch.

[Interval Time]: The time level of picture play: 01-10.



There need to be separated file named as "User" for SD card. The picture can only be found and shown when they are saved in the file named "User".

### 6. Set the mode of indoor unit

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



[Mode]: Options include "01,02,03,04,05,06". "01" indicates that the indoor unit as master monitor, "02-06" indicates that the indoor unit as slave monitor.

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

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

[Door2 Unlock Time]: From 02 seconds to 10 seconds.

[Record mode]: Options include: Video and Snapshot. Video means when the visitor presses the call button of outdoor unit, the indoor monitor with the SD card will automatically start the video until the end of the call or the user's manual stop. The snapshot means that when the visitor press the call button of outdoor unit, the indoor monitor with SD card automatically snapshot the next photo of the doorway camera, and the user can press "a" manually for continuous snapping.

[Motion Detection]: Options include "Door1", "Door2", "CAM1", "CAM2" and "Disable".

[Message]: Enable or disable message.

[Return]: Exit the current menu.

### 7. Set the alarm parameters

"On main menu, move the cursor to the option "Alarm", then press "\*" to enter the "Alarm" menu.



- [Alarm record]: Options include "Video" and "Snapshot". "Video" 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.
- [CAM1 Sensor type]: CAM1 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.
- [CAM2 Sensor type]: CAM2 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: "Normal 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: "Normal closed", the normal state of the sensor is under constant high voltage. If the output voltage changes from low to high, 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 camera1
- [CAM2]: Enable or disable the preview of camera2
- [CAM1 ring time]: The alarm ring time of camera 1 if camera 1 has been triggered by activety detected by the sensor, values can be set from 0~20 seconds.

# [CAM2 ring time]: The alarm ring time of camera 2 if camera 2 has been triggered by activety detected by the sensor, values can be set from 0~20 seconds.

[Return]: Back to previous menu.

### 8. Media

"On main menu, move the cursor to the option "Media", then press "🏘" to enter the "Media" menu. Options include "music", "photo" and "File" (for the models with SD card ).



### 8.1 Music ( for the models with SD card )

In the media menu, press "O" or " $\bigcirc$ " to move the cursor to the "music" option, press "A" into the playlist, automatically play the first music into the music list, pressing "O" move the cursor down, press "O" move the cursor moving upward, keep pressing the "O" is move forward, keep press "O" is back forward, press " $\oiint$ " once to pause, select a song with setting is confirmed to play, press "O" is return to the previous menu.

When playing music, press a transfer button switch a play mode. The playing modes include single play, random play, sequential play, single cycle and list loop. Single player: after playing this song will auto stop; random playback: random play all the songs, do not stop. Circle playing; the order of play: play all the songs from top to bottom, the player stop after the last song; Single cycle: always repeat the same song, do not stop; Cycle: repeat the order of play all songs, play the last song again from the first to the last to circulat the order of play.

Note: Set up file folder name as "Music" from SD card, keep music under "music" folder. "music" folder max. save 30 music.

is to pause and pop up picture information at a long time, The picture information includes shooting time, file size, storage location and image size. After pressing "\*" again, the key will become a manual play, and the next picture is played. Press 🎰 is returned to the list of pictures.

Note: The next picture is played automatically when the picture is played, unless you change it to a manual play.

Note: Photo folder contains only photo files in SD card.



In SD card, a separate folder is called "user". There is a folder called "picture" in the user. It can be found and displayed only when the picture is saved in the file named "picture".

### 8.3 File Manager ( suit for support SD card device )

Enter manager system, there will show two file "DCIM" "USER".

[Delete file]: Press"+"or"-"choose the file you want delete, long time set key show tip"delete file?"

[DCIM Folder]: DCIM file is systemauto built up and keep recordfolder, inside havephoto file and video file. Photo foldersave monitor auto snapshot andmanual capturepictures; Videofolder save monitor auto record or manualrecordvideos.

[USER Folder]: USER folder included "music, photo, ring, update" folder.

Music folder save mediamusic.

Photo folder savedigital photoframepictures.

- Ring folder save default ringtone.
- Update folder save upgrade file.
- [Upgrade]: MoveFW(xxx.dd) under update folder, chooseupgrade file name as"xxx.dd", press set keysystem display"update"choose "Yes" and waitupgrading tillsuccess.
- [MCU Upgrade]: copy MCU file(xxx.bin) to update file folder, select MCUfile(xxx.bin) and confirm "update or not".
- Notice: During system upgrading, not allowmove out SD card orcut off power. Only wait upgrade success device will auto reboot.

manager	system
USER	
DCIM	
ring	

### 8.2 Photo ( for the models with SD card )

In the "Media" menu press up or down button to move the cursor down to the "picture" option. Press the button " $\clubsuit$ " to enter the picture list, press " $\circledast$ " or " $\ominus$ " to move the cursor, select the picture you want to play, and confirm the play by pressing setting button once. In the picture, keep pressing " $\clubsuit$ "

### 9. Record

"On main menu, move the cursor to the option Record", then press " **#**" to enter the "Record" menu. Options include "Video", "Picture" and "Return" (for the models with SD card )



### 9.1 Video ( for the models with SD card )

On "Record" menu press the button "O" or "O" upward or downward to move the cursor to the option "Video files", press the button "O" or "O" upward or downward to move the cursor to select file to playback, a black list indicates that the list has been selected, press the button " $\oiint$ " to playback. During playback press the button "O" or "O" to exit the current menu.

Note: Video folder contains only the video file recorded by the outdoor station.

### Note: Picture folder contains only picture file taken by the outdoor station.

(I) The file of the photo or video is stored in the "DCIM" folder that the system automatically generates.

### 10. Set the color parameters

In monitoring, calling, intercom, alarm and other modes, click the transfer button to activate the color adjustment, including volume, brightness, contrast, saturation, refresh and return.

Note: The volume regulation here is the volume of the call.

[Bright]: 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.

[Saturation]: values can be set up from 0 to 50, default as 25.

[Volume]: Adjust the voice of the call of the indoor monitor.

[Refresh]: When mix connect PAL/NTSC cctv camera or outdoor station and CVBS/AHD cctv camera or outdoor station; during keep power on and do some connection change for cctv camera or outdoor station, if no image come in, please press "R" refresh signal.



### 9.2 Picture ( for the models with SD card )

On "Record" menu scroll the button " $_{\textcircled{O}}$ " or " $_{\textcircled{O}}$ " upward or downward to move the cursor to the option "Picture files", press the button " $_{\textcircled{O}}$ " to enter the "Picuter files list". Scroll the button " $_{\textcircled{O}}$ " or " $_{\textcircled{O}}$ " upward or downward to move the cursor to select file to playback, a black list indicates that the list has been selected, press the button"  $_{\textcircled{O}}$ " to playback. During playback press the button " $_{\textcircled{O}}$ " to exit the current menu.

### ALARM INSTRUCTIONS

Terminal and GND is shorted, the alarm is activate, the speaker of the indoor unit rings and continues 120s, during this time, click 🖛 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 🔊 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.

### 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



# 150-160cm

### SPECIFICATION

Product Type	AHD 720P/960P/CVBS Video Input, CVI Video Input, TVI Video Input
Monitor	7" TFT LCD
Resolution	7"(1024*600)
Standard	PAL/NTSC
Calling Mode	Duplex/clound intercom
Power Consumption	Maximum 500mA/600mA
Power supply	External power DC 12V; Built in power AC100-240V
Work Temperature	0~+50°C
Installation Way	Surface mounting
SD Card Max Capacity	2GB~32GB class 10 TF mini card (write/read speed≥Class10)
Input Video Signal	CVBS, CVI, TVI, AHD2.0
Motion Detection	Yes
System	Support 6 indoor monitor + 2 call panel + 2 camera
Function	Unlocking/Monitoring/Intercom/Transfer Call/Video recording/APP monitoring
Advantage	Digital photo frame/MP3/Clock & message/Background music /cloud intercom

### ACCESSORIES



### Indoor unit

٠	Indoor unit	1pcs
•	Plastic Anchors	4pcs
•	Screws	4pcs
٠	Bracket	1pcs
٠	4 Pin line	5pcs
٠	2 Pin line (optional, please take actual model as quasi) 1pcs or	2pcs
•	User manual	1pcs
٠	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.	пе