

YACHT CAM PTZ Cameras

User Manual V2.0



Thank You for Choosing Our **Yacht cam** Thermal PTZ

Camera! When you open the box:

1. Check that the packing and the contents are not visibly damaged. Contact your supplier immediately if any parts are either missing or damaged.
2. Make sure if the contents are all included as per the packing list.
3. Do not attempt to use the device with missing or damaged parts. Send the product back in its original packing if it is damaged.

[Note] The information contained in the document is subject to change without notice.

Table of Contents

ABOUT THE YACHTcam	1
FEATURES	1
PACKING LIST	1
FUNCTIONS.....	2
TECHNICAL DATA.....	4
PREPARATION.....	6
INITIAL POWER ON TEST	6
CHECK INSTALLATION ENVIRONMENT	7
KEEP PACKAGE	7
DIMENSIONS	8
CONNECTIONS.....	9
MENU SETTINGS	10
MENU CONFIGURATION	10
MENU EXPLANATION.....	12
VIDEO	12
PAN TILT	15
SYSTEM	16
SYMBOLOLOGY	17
REBOOT.....	18
RESTORE FACTORY DEFAULTS	18
NETWORK SETTINGS	18
SPECIAL CONTROL COMMANDS.....	18
OPERATION.....	20
NETWORK SETTING	21
NETWORK CONNECTION.....	21
SOFTWARE QUICK GUIDE	22

SOFTWARE OPERATION.....	23
CONFIGURE	31
TROUBLE SHOOTING.....	33

Safety Notes --- Important

The following important notes must be followed carefully to use the camera and respective accessories in total safety. Before installing the camera, please read this manual carefully; when installing please follow instructions of installation indicated in this manual. Please keep this manual for future use.

- The following installation should be performed by qualified service personnel or system installers in accordance with all local regulations.
- Before powering on the camera, **please check the power voltage carefully**. Make sure that you are using the right power source or you may damage the equipment.
- Always store the power cable, video cable and control cable in secure place.
- Do not operate the camera beyond the specified temperature and humidity.
- When transporting, avoid violent shaking or force to the camera.
- To prevent electric shock, do not remove screws or covers of the camera. There are no self-serviceable parts inside. Refer to qualified service personnel for servicing.
- Video cable and RS485 cable should be a distance away from other cables. Shielded and independent wiring is necessary for video and control cables to work most effectively.
- Never aim the lens of the camera at the sun or other extremely bright objects as it may cause damage.
- When cleaning the camera, use a soft cloth so as not to damage the lens. If the camera is very dirty, wipe it off gently with a soft cloth moistened with a weak solution of water and a neutral kitchen detergent. Squeeze all liquid from the cloth before wiping the camera, then wipe off all remaining dirt with a soft, dry cloth. Use lens cleaning paper to clean the lens.
- **Do not move the camera module manually**. In doing so could result in malfunction of the camera. Do not hold the camera module when carrying the video camera carry it by the base.
- Make sure the camera is far away from area where radiation, X-rays, strong electric waves, or magnetism is generated.

About The

The thermal imaging camera system is specially designed for maritime use. It consists of: thermal imaging sensor, HD zoom module, precise PTZ system, and mounting riser. It ensures a clear view of details under total dark and/or foggy environment.

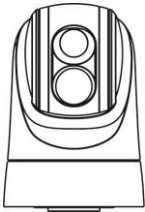
Features

- Color sensor: 1/2.8" CMOS, 2.13 mega pixel, 30x optical zoom;
- Un-Cooled thermal imaging sensor, 640x480 / 384x288, provide clear view in total darkness;
- Dual HD-SDI output (up to 1080P30) for color and thermal video at the same time;
- Dual H.264 stream output for color and thermal video at the same time;
- Single axis vertical image stabilization;
- With WDR, True D/N;
- Camera address is easily changeable via controller. Baud rate and protocol is self-adaptive;
- 10.8-28V voltage input;
- Auto power-off with low power supply;
- IP67 weatherproof.

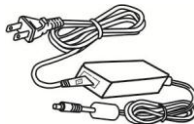
Packing List

When you open the package, please make sure below items are included. If any item is missing, please contact your supplier.

Thermal PTZ Camera(1)



Power Adapter(1)



Functions

Soft Address

Camera address can be changed via calling specific presets.

Baud Rate and Protocol Self-adaptive

Camera can detect Pelco D protocols and 4800bps baud rate automatically.

Set Camera Address, Baud Rate and Protocol

Every camera needs to have its own address, baud rate and protocol, the camera only responds to the commands sent with the same settings, please refer to DIP settings for more information about setting address, baud rate and protocol.

Proportional Pan

Proportional pan automatically reduces or increases the pan and tilt speeds in proportion to the zooming times. At telephoto zoom settings, the pan and tilt speeds will be slower for a given amount of joystick deflection than at wide zoom settings. This keeps the image from moving too fast on the monitor when there is a large amount of zoom.

Auto Flip

When the camera tilts downward and goes just beyond the vertical angle, the camera rotates 180°. When the camera rotates (flips), the camera starts moving upward as you continue to hold joystick in the down position. Once you let go of the joystick after the dome rotates, joystick control returns to normal operation. The auto-flip feature is useful for following a person who passes directly beneath the camera if the camera is being used for security purposes.

Save/Call Preset

Preset function is that camera saves current horizontal angle and title angle of pan/tilt, zoom and position parameters into memory. When necessary camera calls these parameters and adjusts Pan/Tilt and camera to that position. User can save and call presets easily and promptly by using keyboard controller or other controller. The camera supports up to 256 presets.

Zoom control

User can adjust zoom wide or tele by controller and get desired image.

Focus control

System defaults Auto Focus mode, that is, the lens and camera will automatically adjust the focus to get the best image.

Focus can also be controlled manually from the controller if required. Press Focus Near or Focus Far key to manually focus. Focus can be manual via keyboard or matrix, please refer to control keyboard or matrix operation manual for detailed operation. When adjusting position is set with focus status, it goes back to auto focus.

- The camera will NOT auto focus in the following status. Target is not in the center of image.
- Targets are in near and far at the same time.
- Target is of strong light object. Such as spotlight etc.
- Target is behind the glass with water drop or dust.
- Target moves too fast.
- Large area target such as wall.
- Target is too dark or vague.

IRIS Control

System defaults Auto IRIS. Camera can adjust immediately according to the alteration of background illumination so that a lightness steady image can be achieved.

You may adjust IRIS by controller to get required image brightness, and call back Auto IRIS by controlling the joystick.

Back Light Compensation (BLC)

If a bright backlight presents, the subjects in the picture may appear dark or as a silhouette.

Backlight compensation enhances objects in the center of the picture. The camera uses the center of the picture to adjust the IRIS. If there is a bright light source outside this area, it will wash out to white. The camera will adjust the IRIS so that the object in the sensitive area is properly exposed.

Auto White Balance

Camera can automatically adjust white balance (WB) according to the alteration of background lightness to give a true color image.

Technical Data

Thermal Imaging Camera				
Sensor Type	Uncooled Amorphous Silicon FPA			
Working Band	8 μ m~14 μ m			
Resolutions	384X288	640X480		
Sensor Size	17 μ m			
NETD(300K)	≤60MK			
FOV	19mm: 19.5°x14.7°	19mm: 32.0°x24.2°	40mm: 15.5°x11.6°	
Digital Zoom	1X, 2X, 4X			
Video Display	White Hot/ Black Hot			
Detecting Range	Boat Person	1.4nm- 2570m 1804 ft. -550m	1.4nm -2570m 1804 ft. -550m	2.9 nm -5400m 3838 ft. -1170m
Recognition Range	Boat Person	2099 ft. - 640m 426 ft. - 130m	2099 ft. - 640m 426 ft. - 130m	4429 ft. -1350m 951 ft. -290m
Daylight Imaging Camera				
Video Sensor	1/2.8" CMOS, 2.13MP			
Effective Pixel	1920(H) x 1080(V)			
HD Video (Network)	1080P25, 720P50, 720P25			
HD Video (SDI)	1080P25, 1080I50, 720P50, 720P25			
Optical Zoom	30x			
Digital Zoom	12X			
Lens	f=4.7mm(wide)-94mm(tele),F1.6-3.5			
View Angle	59.5°(wide)–3.3°(tele)			
Min Illumination	Color:0.0013Lux, Mono: 0.0008lux			
WDR	On/Off			
WB	Auto			
Focus	Auto / Manual			
IRIS	Auto / Manual			
S/N Ratio	Not less than 50 dB			
BLC	On/Off			
DNR	1-5 Steps / Off			
Day / Night	Auto / Manual			

PTZ	
Pan Range	360° Continuous
Pan Speed	Control speed: 0.04° ~100°/s; Preset speed: 100°/s
Tilt Range	-15°~90° (Auto Flip)
Tilt Speed	Control speed:0.04° ~90°/s, adjustable; Preset speed:90°/s
Preset	256
Preset Precision	±0.2°
Stabilization	Single axis vertical image stabilization
Network	
Resolution	Max 1920X1080@30fps
Video Compression	H.264
Network Protocol	HTTP,RTSP, TCP,UDP,ONVIF
Dual Stream	Support
General	
OSD Language	English
Comm. Interface	RS-485
Address	0-255
Video Output	HD-SDI
Network Interface	10M/100M
Protocol	PELCO-D (Self-adaptive)
Baud Rate	4800bps
Power Supply	DC10.8-28V
Power Consumption	35W
Work Temperature	-25℃~+55℃
IP Protection	IP67
Dimension	Standard: Φ190(mm)×285(mm)
Weight	Standard: 6.3 (±0.1) kg

Preparation

This section contains detailed instructions for installing the camera. These instructions assume that the installer has a good knowledge of installation techniques and is capable of adopting safe installation methods.

Initial Power On Test

To ensure the camera works well after installation, please power on it for an initial test with the following steps:

- Connect the camera with correct power supply;
- Connect control cable, video cable;
- Power on the camera;

The camera will run a calibration procedure on power up and show the following messages.

```
ADDRESS   : 001
PROTOCOL  : PELCO-D
BAUD RATE : 4800
SOFTWARE  : V1.4.10
```

If the camera fails at initialization, the following message will show on screen.

```
ADDRESS   : 001
PROTOCOL  : PELCO-D
BAUD RATE : 4800
SOFTWARE  : V1.4.10
```

CAM FAIL

Preparation

Please refer to the following code to check the failures:

PAN FAIL	Failure of pan initialization
TILT FAIL	Failure of tilt initialization
CAM FAIL	Failure of block camera initialization
P/T FAIL	Failure of pan and tilt initializations
T/Z FAIL	Failure of tilt and block camera initializations
P/T/Z FAIL	Failure of pan, tilt and block camera initializations

Check Installation Environment

Please confirm the installed place has enough room to install the camera and its relative accessories, and the installation place must be able to stand four times the weight of the camera.

Keep Package

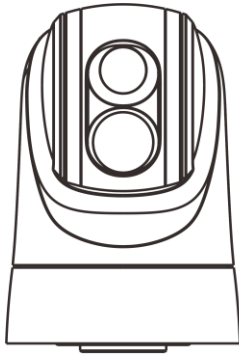
After unpacking, please keep the packing stuffs in good place, in case the camera needs to be returned, please use its original packing stuffs to send back.

Menu Settings

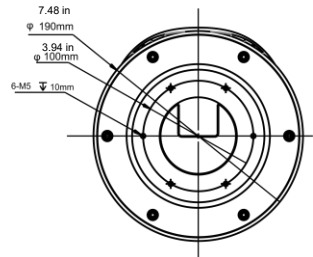
Dimensions

The camera installation type is fixed.

Fixed Installation 1 (User provides mounting bracket)



Standard

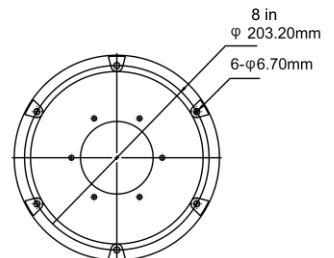


Bottom View

Fixed Installation 2 (with mounting bracket)



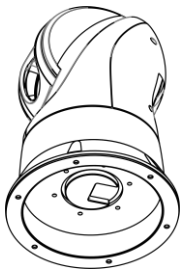
Dimensions



Bottom view

Fixed Installation 2 (with mounting bracket) Instructions

1) Fix the mounting riser with the camera with 6 screws;



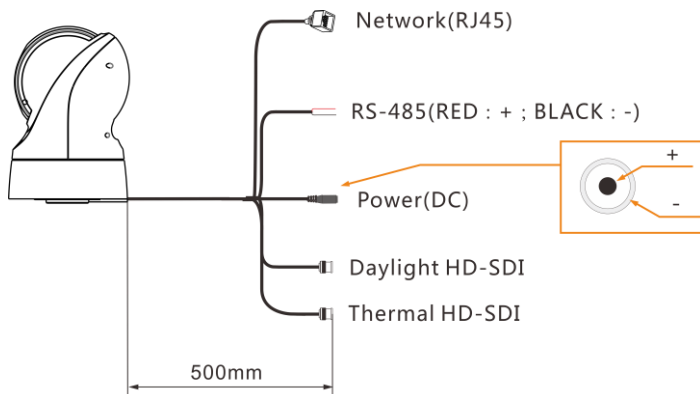
2) Fix the sealing ring to the mounting plate;



3) Fix 6 screws supplied by users to the mounting plate

Connections

Connect the cable with the correct pins as per following picture.



Menu Settings

Menu Settings

Menu Configuration

Refer to Page 12	<VIDEO>	FORMAT	1080P25, 1080I25, 720P50, 720P25
		WIDE DYNAMIC	ON, OFF
		DNR	1, 2, 3, 4, 5, OFF
		FOCUS	MANUAL, AUTO
		FREEZE	ON, OFF
		DIGI ZOOM	ON, OFF
		DIS	OFF
		DAY/ NIGHT	AUTO, DAY, NIGHT
		EXPOSURE...	

Refer to page 15	<PAN TILT>	PAN/TILT SPEED	1, 2, 3
		AUTO FLIP	ON, OFF
		PARK ACTION.....	

<SYSTEM>

Refer to page
16

ADDRESS	_____	0~255
PROTOCOL	_____	PELCO-D
BAUD RATE	_____	4800
VIDEO FORMAT	_____	1080P30
MOUNT MODE	_____	STAND, CEILING
DISPLAY INFO	_____	ON, OFF
RS-485	_____	CU, NMEA0183
SOFTWARE VER	_____	V1.4.10

<SYMBOLGY>

Refer to page
17

SCENE	_____	ON, OFF
RADAR	_____	ON, OFF
TEXT	_____	ON, OFF
TEXT EDIT		

<REBOOT>

Refer to page 18

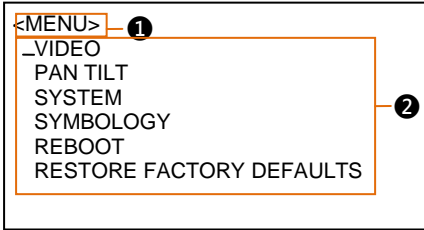
< RESTORE FACTORY DEFAULTS>

Refer to page 18

Menu Explanation

Main Menu

Call preset 64 to enter menu.





1 Menu

It displays currently selected menu options.

2 Menu Operations

It displays options under current menu.

Navigate up or down to choose option, the mark  shows current option has been chosen, press Iris Open button to get into this menu.

 IRIS OPEN can be replaced with NEAR or ZOOM IN; IRIS CLOSE can be replaced with FAR or ZOOM OUT.


VIDEO

From Main menu, navigate to VIDEO option, press Iris Open to get into VIDEO menu shown as below:

<VIDEO>		
- FORMAT		1080P25
WIDE DYNAMIC		OFF
DNR		5
FOCUS		AUTO
FREEZE		OFF
DIGI ZOOM		OFF
DIS		OFF
DAY/NIGHT		OFF
EXPOSURE...		

Options	Available Values	Explanation
FORMAT	1080P25, 1080I50, 720P50,720P25	
WIDE DYNAMIC	ON, OFF	Switch wide dynamic mode.
DNR	1, 2, 3, 4, 5, OFF	If camera displays color image, it is suggested to turn off the DNR level, otherwise, the video trails will be generated. The higher the level is, the better is the noise reduction performance, but more video trails will be generated.
FOCUS	AUTO MANUAL	AUTO: Camera is in auto focus mode. MANUAL: Change to Manual focus mode, press Focus Near / Far to adjust focus.
FREEZE	ON, OFF	When the camera is cruising among presets, if FREEZE is on, the image from first preset until the second preset will be frozen, after second preset is reached, the image will resume to normal.
DIGI ZOOM	ON, OFF	Switch digital zoom ON or OFF.
DIS	OFF	Switch digital image stabilization ON or OFF.
DAY/NIGHT	AUTO, DAY, NIGHT	In "AUTO" mode, daylight camera switches to day or night mode automatically according to environmental light. In "DAY" or "NIGHT" mode, force the daylight camera to switch to color or B/W mode.
EXPOSURE...	-	Set Exposure values

Menu Operations

Navigate up or down to choose option, The mark  shows current option has been chosen, use Right control arrow to get into menu, then use Left or Right control arrow to choose from options. If there is no need to change, press Iris Close button to get back to the last menu.

EXPOSURE

```
<EXPOSURE>
MODE          FULL AUTO
SLOW SHT.LIMIT  OFF
```

Options	Available Values	Explanation
MODE	FULL AUTO MANUAL SHUTTER PRI IRIS PRI)	Switch among exposure modes.

FULL AUTO: Gain, Shutter Speed and Iris value are adjusted automatically accordingly to working environment.

SLOW SHT. LIMIT: this option sits under “Full Auto”, there are On and Off options.

MANUAL: manually adjust Gain, Shutter Speed and Iris.


GAIN Values: -3, 0, +2, +4, +6, +8, +10, +12, +14, +16, +18, +20, +22, +24, +26, +28.

SPEED Values: 1/1, 1/2, 1/3, 1/6, 1/12, 1/25, 1/50, 1/75, 1/100, 1/120, 1/150, 1/215, 1/300, 1/425, 1/600, 1/1000, 1/1250, 1/1750, 1/2500, 1/3500, 1/6000, 1/10000s.

IRIS Values: F14, F11, F9.6, F8, F6.8, F5.6, F4.8, F4, F3.4, F2.8, F2.4, F2, F1.6, CLOSE.

SHUTTER PRI: Gain and Iris value are adjusted automatically according to working environment; shutter speed value is adjustable manually.

SPEED Values: 1/1, 1/2, 1/3, 1/6, 1/12, 1/25, 1/50, 1/75, 1/100, 1/120, 1/150, 1/215, 1/300, 1/425, 1/600, 1/1000, 1/1250, 1/1750, 1/2500, 1/3500, 1/6000, 1/10000s.

 When shutter speed is set too fast, to avoid the camera from changing between Color / B/W, suggested to call preset 21 to change to manual D/N mode.

IRIS PRI: Gain and shutter speed value are adjusted automatically according to working environment; Iris value is adjustable manually.

IRIS Values: F14, F11, F9.6, F8, F6.8, F5.6, F4.8, F4, F3.4, F2.8, F2.4, F2, F1.6, CLOSE.

PAN TILT

PAN/TILT is used to change pan/tilt/zoom value; available options are shown as below:

<PAN TILT>	
PAN/TILT SPEED	2
AUTO FLIP	ON
PARK ACTION...	

Options	Available Values	Explanation
PAN/TILT SPEED	1, 2, 3	Set camera's Pan / Tilt speeds.
AUTO FLIP	ON, OFF	Set auto flip On or Off.
PARK ACION...		When camera is kept idle for a specific period, it will performance the park action.

PARK ACTION

```

<PARK>
↵ ACTION                NONE
  TIME  H                0
        M                5
        S                0
    
```

Option	Value	Explanation
ACTION	NONE, STANDBY	
TIME	H 0~23 M 0~59 S 0~59	

SYSTEM

Under main menu, navigate up or down to choose <SYSTEM> , press Iris Open to get into the menu shown as below:

```

<SYSTEM>
- ADDRESS                1
  PROTOCOL              PELCO-D
  BAUD RATE             4800
  VIDEO FORMAT          1080P25
  MOUNT MODE            STAND
  DISPLAY INFO          ON
  RS485                 CU
  SOFTWARE VER          V1.4.10
    
```

Options	Available Values	Explanations
ADDRESS	0~255	Suggested to call presets to change camera's address, new address will take into effect after camera is rebooted.
PROTOCOL		Displays current protocol, camera supports Pelco D protocols, and the camera can detect protocols automatically.

BAUD RATE		Displays current baud rate.
VIDEO FORMAT		Displays current video output format
MOUNT MODE	CEILING STAND	Flip the image 180 degree vertically in CEILING mode.
DISPLAY INFO	ON, OFF	Enable or disable the display information on the image.
RS-485	CU(control unit), NMEA0183	Set control mode of RS-485.
SOFTWARE VER		-

SYMBOLOLOGY

Under main menu, navigate up or down to choose <SYMBOLOLOGY> , press Iris Open to get into the menu shown as below:

<SYMBOLOLOGY>	
SCENE	ON
RADAR	ON
TEXT	ON
TEXT EDIT	ON

Options	Available Values	Explanations
SCENE	ON , OFF	Used to switch among different scenes, the relative scene icon will display on the thermal image once it is selected.
RADAR	ON , OFF	Used to turn on / off Radar tracking, the RADAR icon will display on the thermal image once it is on.
TEXT	ON , OFF	Used to turn on camera name display on its thermal image.
TEXT EDIT	ON , OFF	Used to edit camera name.

REBOOT

Under main menu, navigate up or down to choose <REBOOT> , press Iris Open to get into the menu shown as below:

<REBOOT>
CLICK IRIS OPEN TO REBOOT

CLICK IRIS CLOSE TO CANCEL

RESTORE FACTORY DEFAULTS

Under main menu, navigate up or down to choose < RESTORE FACTORY DEFAULTS> ,press Iris Open to get into the menu shown as below:

< RESTORE FACTORY DEFAULTS>
CLICK IRIS OPEN TO CONFIRM
RESTORE FACTORY DEFAULTS

CLICK IRIS CLOSE TO CANCEL

Menu Operations: Press Iris Open will resume camera's settings to factory default

Network Settings

The camera is ONVIF compliant to be implemented together with your NVR and etc. Detailed implementation tools like SDK and etc will be provided separately.

Special Control Commands

The camera can be programmed and operated using various quick control commands listed as below.

Preset Number	Function	Default Value
21	Manual switch daylight camera between color mode and mono mode	-

22	Auto switch daylight camera between color mode and mono mode	√
23	Turn on image mirror	Off
24	Turn off image mirror	Off
25	Turn on/off Back Light Compensation (BLC)	Off
26	Switch between stand and ceiling mount	Off
27	Turn on/off Digital Noise Reduction (DNR, 1-5steps) of daylight camera	Off
28	Turn on/off image freeze	Off
29	Turn on Scene Day mode of thermal camera	Off
30	Turn on Scene Night mode of thermal camera	Off
31	Turn on Scene Docking mode of thermal camera	Off
32	Turn on Scene MOB (Man Over Board) mode of thermal camera	Off
33	Turn off Scene	Off
34	Put camera into Park mode(hide camera inside housing)	Off
35	Move camera out of Park mode	Off
39	Turn on/off digital zoom	Off
40	Turn on/off on screen display	Off
43	Turn on digital stabilization	Off
44	Turn off digital stabilization	Off
45	Turn on display track target	Off
46	Turn on video tracking	Off
47	Turn off video tracking	Off
52	Clear all user presets	Off
53	Switch between thermal polarity	Off
54	Switch among thermal color palette	Off
55	Reboot PTZ	Off
57	Turn On/Off display of preset tips	Off
58	Choose a camera (daylight/thermal) to control	Off
59	PTZ Speed - Fast	Off
60	PTZ speed - Normal	Off
61	PTZ speed - Slow	Off
62	Decrease the camera Address By -1	Off
63	Increase the camera Address By +1	Off
64	Enter Menu	Off

Network setting

Operation

As the baud rate and protocol are self-adaptive, the PTZ cameras may not response for seconds on power up. It is recognizing the commands and adapting the setting.

Digital Noise Reduction

The function is off as default.

When the camera is in color mode, it is recommended to turn off DNR, or there will be video trails.

When the camera is in mono mode, call preset 27 to turn on/off this function. There are 1~5 steps from low to high. The higher the level is, the better the image quality is, but there will be more video trails.

Soft Address

The camera address can be changed via presets 62 and 63. The new address will take effect after the camera is rebooted.

Safe Position of Thermal Camera

When the PTZ camera is stand by, call preset 34 and the PTZ camera will tilt to -90Deg and hide the thermal camera to a safe position. The PTZ camera does not respond to any command until preset 56 is called and the thermal camera moves away from the position.

STANDBY NOW
CALL PRST 35 TO EXIT

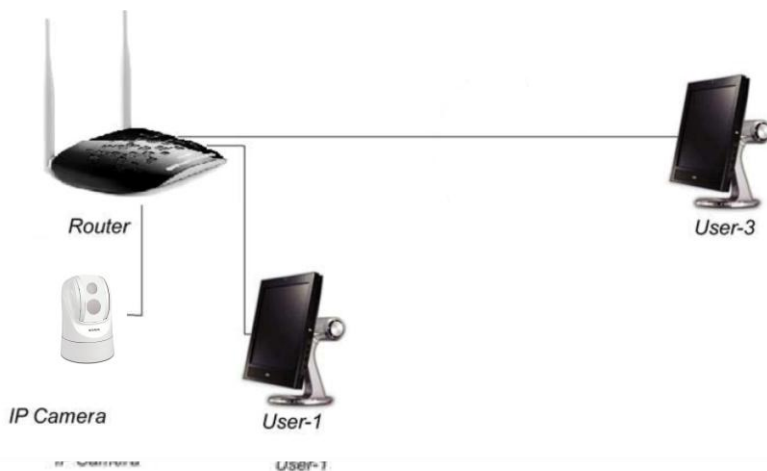
Network Setting

Network Connection

Use RJ45 Ethernet cable to connect the PTZ into the network

LAN

No special setting is needed for LAN environment. The PTZ is Plug-N-Play. Please refer to the following connection and set the camera IP as DHCP or static.



Note: The camera can be used for video and audio surveillance. Please make sure it's used within law and regulation for privacy and other protection.

Software Quick Guide

The camera can be previewed and controlled through below methods:

- Application software IPCamConf: to search, control and adjust network settings, original password of the software is null.
- VLC: to preview daylight camera image from main stream and thermal camera image from substream.
- IE: to preview daylight camera image from main stream and thermal camera image from substream, in addition, it can be used to control camera and adjust network settings; default ID: admin, Password: null.
- SDK: provided separately for further development.
- ONVIF: the camera supports ONVIF 2.1 version, default ID: admin, Password: 123456.

RTSP operation:

- 1) Make sure your PC and the camera are in the same LAN;
- 2) Main stream link: rtsp://IP:port number/main.h264;
- 3) Substream link: rtsp://IP:port number/sub.h264;
- 4) IP address and port number of the camera can be acquired from IPCamConf application software.

Internet Explorer operation

- 1) Make sure your PC and the camera are in the same LAN;
- 2) Operation system of your PC should be Win 7 or plus, Windows XP is not supported;
- 3) From your Internet Explorer, input camera's IP address and port number 88 (the port number is fixed at 88), please refer to below example:
<http://192.168.18.229:88>;
- 4) Install plugs and controls to get it working.

oftware Operation

Main Interface

Start IPCamConf and the main interface shows as follows:



Pic 1-1

There are 5 modules in the main interface: System menu, Camera list, PTZ, View and Camera info.

- System menu: entrance of 5 functions.



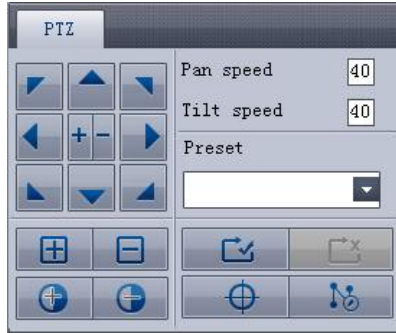
Pic 1-2

- Camera list: list all the cameras found;



Pic 1-3

- PTZ: PTZ set and control of the current camera when available;



Pic 1-4

- View: view the video, snapshot, audio and SD recorded video clip of the current camera;



Pic 1-5

- Camera info: display ID, IP and firmware version of the current camera;

Device ID:	G4X6R6H2B00PQUY154J5	Type:	PATC-F
IP:	192.168.18.241	Image edition:	1.0.00
		Encode Type:	main.h264

Pic 1-6


Local Surveillance and Setting


Video view


IPCamConf will automatically search the cameras in LAN and display them in Camera list.

In Camera list, double click a camera and the video from the camera will be displayed in the view interface. Right click to select main or sub stream to view.

Before each camera name. An icon is used to display the camera status.

: There is a red blinking “S” when the SD card built in the camera is recording the video.

: There is a red static “S” when there is an SD card in the camera but it’s not recording any video.

: There is no “S” and the icon is static when the camera has no built-in SD card.

PTZ



Pic 1-7

Left area: PTZ control including pan, tilt, zoom, focus, IRIS. A hint will show when the mouse is over the button;

Right-Up area: adjust the pan and tilt speed;

Right-Bottom area: select and manage presets, set, start and stop cruise;

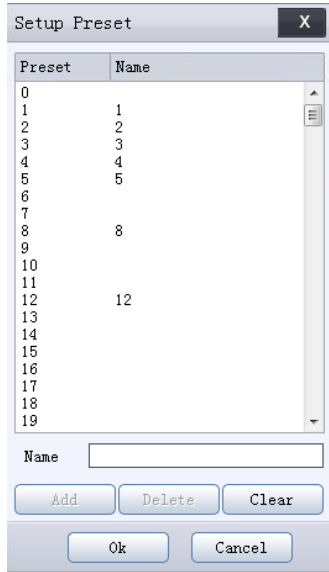
Note: PTZ function is only available to a PTZ camera.

1) Preset setting and management

A preset is used to define a location of the camera with certain degrees of pan and tilt, zoom parameters. To define a preset:

- Adjust the pan, tilt and zoom of the camera to the position;
- Click SETUP PRESET;

- Select a preset number and setup a name, save the preset.
- To run the camera to a preset, just select the preset number in the preset list in PTZ interface.




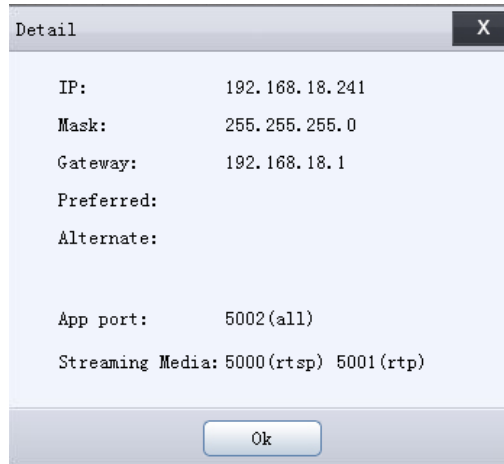
Pic 1-8

Camera info

Device ID: G4X6R6H2B00PQUY154J5	Type: PATC-F
IP: 192.168.18.241	Image edition: 1.0.00
	Encode Type: main.h264

Pic 1-9

- Device ID : camera's ID. Click  to copy the ID.
- Type: The camera type number
- IP : camera IP address. Click to show more network info of the camera such as IP, mask, gateway etc.

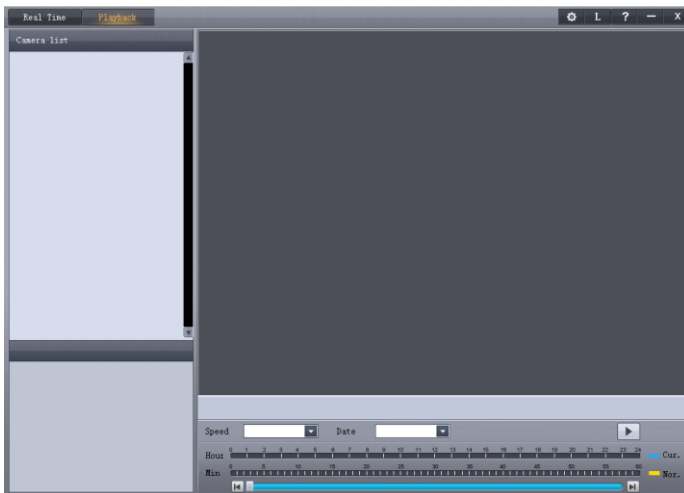


Pic 1-10

- Image Version: camera firmware version.

Playback

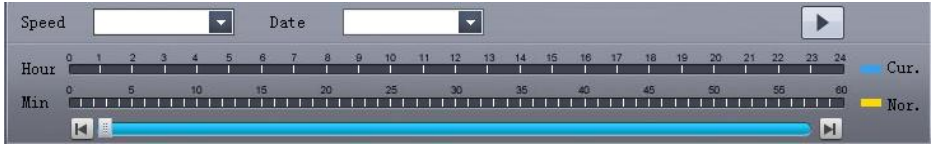
Click playback to start playback. Click Real time to exit.



Pic 1-11

- Playback:

Select a camera for playback. Hour, minute and speed can be programmed. Snapshot can be captured and saved.

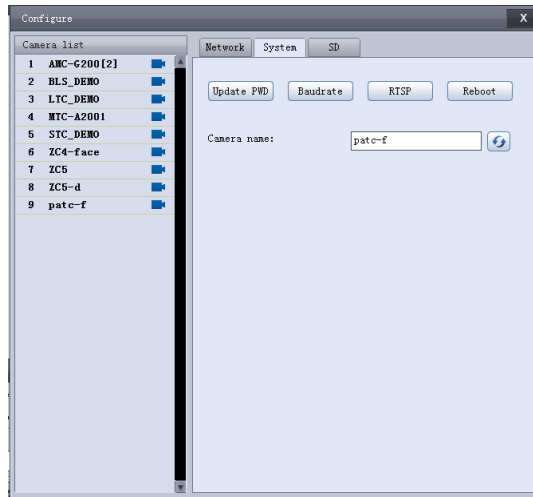


Pic 1-12

System

Click CONFIGURE and click SYSTEM:

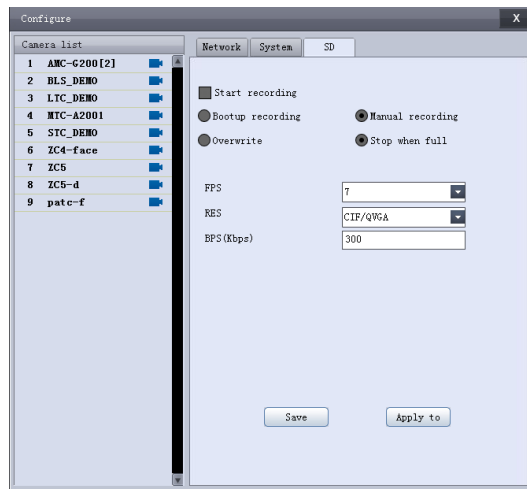
- Password: set password to prevent unauthorized view of the camera video and audio;
- PTZ: when the camera is equipped with external PTZ unit, camera address and baud rate shall be programmed;
- Reboot: reboot the camera;
- Camera name: edit the camera name



Pic 1-13

SD

Click CONFIGURE and click SD to set SD card recording.



Pic1-14

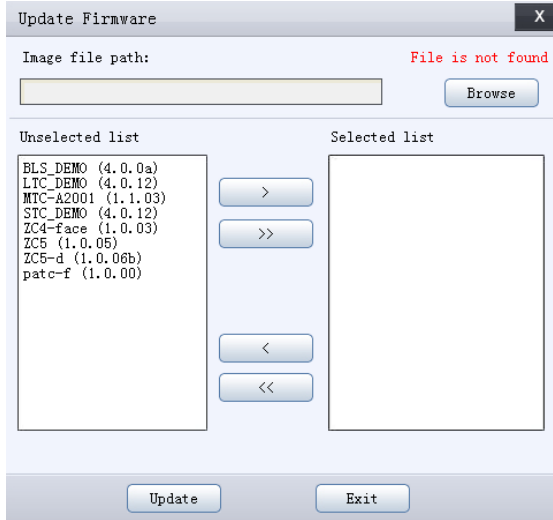
1) Start recording: the camera will start recording with the SD card. Other parameters shall be programmed for recording to take effective.

- Bootup recording: the camera will start recording when it's power up and online. Start recording shall be enabled.
- Overwrite: the new recorded file will overwrite the oldest one when SD is full;
- Stop when full: stop recording when SD card is full;



2) Recording quality: adjust FPS, RES and BPS as per the bandwidth and requirement.

Update Firmware

Click Browse to choose a firmware file to update. The file can be obtained from the manufacturer or your seller.



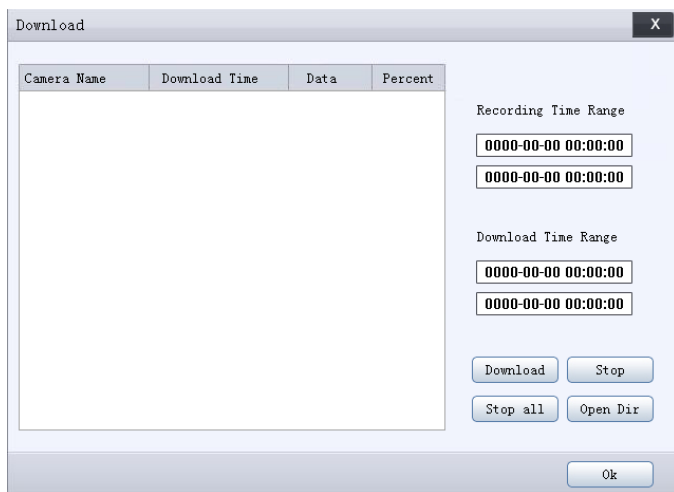
Pic 1-15

- Unselected list: the cameras in the list do not need update;
- Selected list: the cameras in the list need update.
- Choose cameras to update: Select camera in unselected list and click  to add the cameras for update.
- Remove cameras from update: Select camera in unselected list and click  to remove the cameras from the list of update.
- Click update to start firmware update. Please make sure the camera cannot be powered off during the whole process.

Download

Click [Download] to download recorded videos in the SD card.

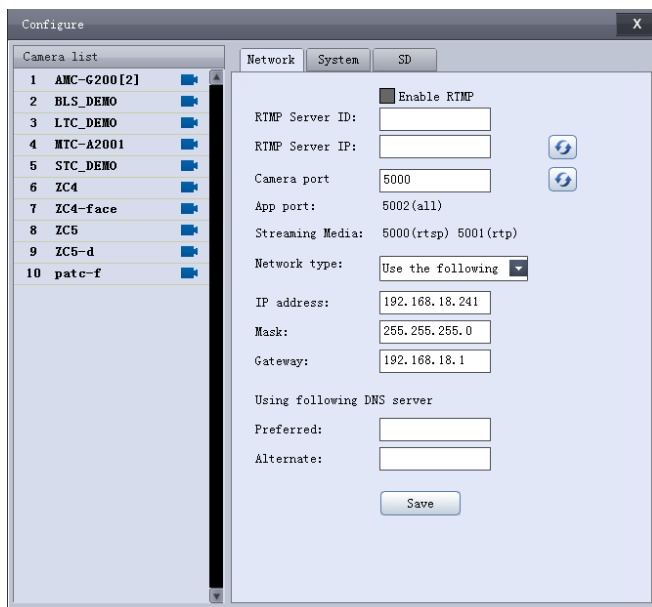
Select a camera and click download. Click STOP to cancel downloading. Click OPEN DIR to view the downloaded file directory.



Pic 1-16

Configure

Click [CONFIGURE] and click Network.



Pic 1-17

Network setting

- RTMP: not supported;
- Ports: the port to exchange data with the selected camera. It can be predefined (from 3479~7000) or randomly selected. However, it shall be 5000 for RTSP communication;
- Network type: the type of camera IP to be assigned. It can be static (Use the following) or DHCP, based on the actual usage. In case of static IP, the info of IP address, gateway and DNS server (preferred and alternate) shall be provided.

Trouble Shooting

Problems	Possible Causes	Solutions
No action when powered on	Power supply failure	Replace power supply
	Wrong connection of the power	Check & reconnect the cables
Abnormal self-test with motor noise	Mechanical failure	Repair
	Camera inclined	Reinstall the camera
	Inadequate power supply	Replace the power supply
Normal self-test but out of control	Wrong connection of RS485 cable	Check and reconnect the cable
	Wrong camera ID set	Check and reset the Switches
	Wrong baud rate set	Check and reset the Switches
Vague image	Bad connection of the video	Check and reconnect the cables
	Inadequate power supply	Replace the power supply
Dome camera out of control	Self test error	Restart the camera
	Wrong connection of RS485 cable	Check and reconnect the cables

The user manual is only for reference, it is subject to changes, please ask for the latest version from your supplier