
iCAM-MR/ZMR
Dome Fixed-Focal/Vari-Focal
Bullet Auto Focus
Day & Night IR IP Camera



User Manual

Version 1.0



ICP DAS CO., LTD.
泓格科技股份有限公司

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Summary

iCAM-MR6322/6422X/ZMR-8422X Series high performance 2MP and 4MP IP camera is equipped with the latest technologies including 100 dB high dynamic range, super low light, P-Iris, multi-streaming, HTML5 streaming, Smart H.264, HTTPs, IPv6, auto focus and adjustable IR LEDs.

The IP cameras provide various alarm notifications including SD card recording, mobile device live access, email notification with JPEG snapshots, MQTT, SNMP, HTTP push notification, and JPEG-to-FTP upload. Moreover, the IP cameras are equipped with an intelligent video analytics (IVS) engine that features sound detection, tampering detection, object counting, and motion detection, in which advanced alarm information can be integrated by other applications.

The powerful combination of central management system software and IP cameras will maximize your system performance and deliver an integrated system solution for your migration to IP videos.

Key Features

- Supports various encoding formats (H.264 and MJPEG)
- Built-in intelligent video analytics engine that can send Email or FTP snapshot alarms
- Day/night video quality independent scheduling
- Audio and motion detection
- Two-way audio
- Bit rate and frame rate on-the-fly adjustment
- Supports Android, iPad, and iPhone mobile live monitoring
- Supports dynamic DNS (DDNS) and network time protocol (NTP)
- Supports HTTP API integration
- Supports G.711
- Supports ONVIF protocol
- Supports Navigator CMS software

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Other References

Mobile devices

For mobile surveillance, refer to the detail page of IPCamPlus on Apple App Store or Google Play.

Universal ActiveX Control: For viewing MJPEG, H.264 real-time images in Microsoft's IE browser.

Caution

- Do not drop or damage the equipment
- Do not install the equipment near fire or heat sources
- Keep the equipment from rain, moisture, smoke, or dust
- Do not cover the opening of the cabinet with cloth and/or plastic or install the unit in poorly ventilated places. Allow 10cm between this unit and its surroundings
- Do not continue to operate the unit under abnormal conditions such as smoke, odor, or loss of signal whilst power is turned on
- Do not touch the power cord with wet hands
- Do not damage the power cord or leave it under pressure
- To avoid unnecessary magnetic interference, do not operate this unit near magnets, speaker systems, etc.
- All connection cables should be grounded properly



Document Version Modify List:

Version	Description	Date
1.0	The First Version: <ol style="list-style-type: none">1. Edit and modify to the format of ICP DAS2. Add Chapter 2: Connect WISE and iCAM3. Modify and delete content	2021/01/21

Chapter 1 System Overview

1-1 System Architecture

The iCAM series IP cameras can be used with WISE-523x/WISE-2x4xM. At the same time, the general NVR host can also connect to the iCAM streaming screen through the ONVIF protocol or the RTSP protocol for 24 hours a day uninterrupted recording.

When WISE-523x/WISE-2x4xM is used with iCAM series network cameras, only when certain conditions are met, will it take pictures or record videos. Compared with normal NVR mainframes that use 24 hours a day non-stop video recording, WISE-523x/WISE-2x4xM only stores key photos or videos, which can greatly reduce storage space, making it easier and faster to find key photos or videos at the moment of the event.

WISE-523x/WISE-2x4xM supports LINE Notify, which can send photos of the event and various on-site data (such as temperature, door opening and closing status) to the mobile phone immediately.



1-2 Integrating WISE Edge Controller with iCAM IP Camera

■ Perform Interlocking Operations of I/O & Video Recording by IP Camera

WISE-523x/WISE-2x4xM supports max. 4 ICP DAS iCAM IP Camera series. Users can trigger the connected IP camera to perform snapshot or video recording with IF-THEN-ELSE logic rules. WISE-523x/WISE-2x4xM provides the IP Camera Status webpage to display the event list ordered by time, and you can just click and play the images or videos on the browser. In addition, WISE-523x/WISE-2x4xM provides remote backup mechanism to upload images and videos to the remote FTP server automatically



- WISE-523x/2x4xM can connect to 4 cameras. There are two methods to get images and videos:
 - (1) If-Then-Else rule sends commands to trigger camera to take snapshots and/or a video.
 - (2) Camera takes snapshots and/or a video when senses motion event. And then sends the snapshots and/or video to the WISE controller.



Module	iCAM-ZMR8422X iCAM-MR6422X iCAM-MR6322
Camera Name on OSD	Yes
Time Stamp on OSD	Yes
Text Message on OSD	Yes, user defined. (Chinese and English fonts)
No. of LINE Notify	2

- OSD with camera name, time stamp and user's defined text message.

WISE controller supports user's defined text message and show on the video screen. WISE controller has to sends 2 LINE notifies to delivery completed information. Since the text message is directly embedded on the screen, a single image can fully express the picture and data at the time of the event.

```

DI#0 triggers camera
From WISE#1
< IF >
  XV-Board XV310 DIO = Status Change
< THEN >
  iCAM-MR6322 (192.168.255.2:80) Snapshot Capture (One Time)
< ELSE >
  No action
    
```

◀ If-Then-Else rule
▼ LINE APP chat room

iCAM_1F 19/12/03 14:11:329

温度: 56.300 °C

Euro Trip (6)

LINE Notify

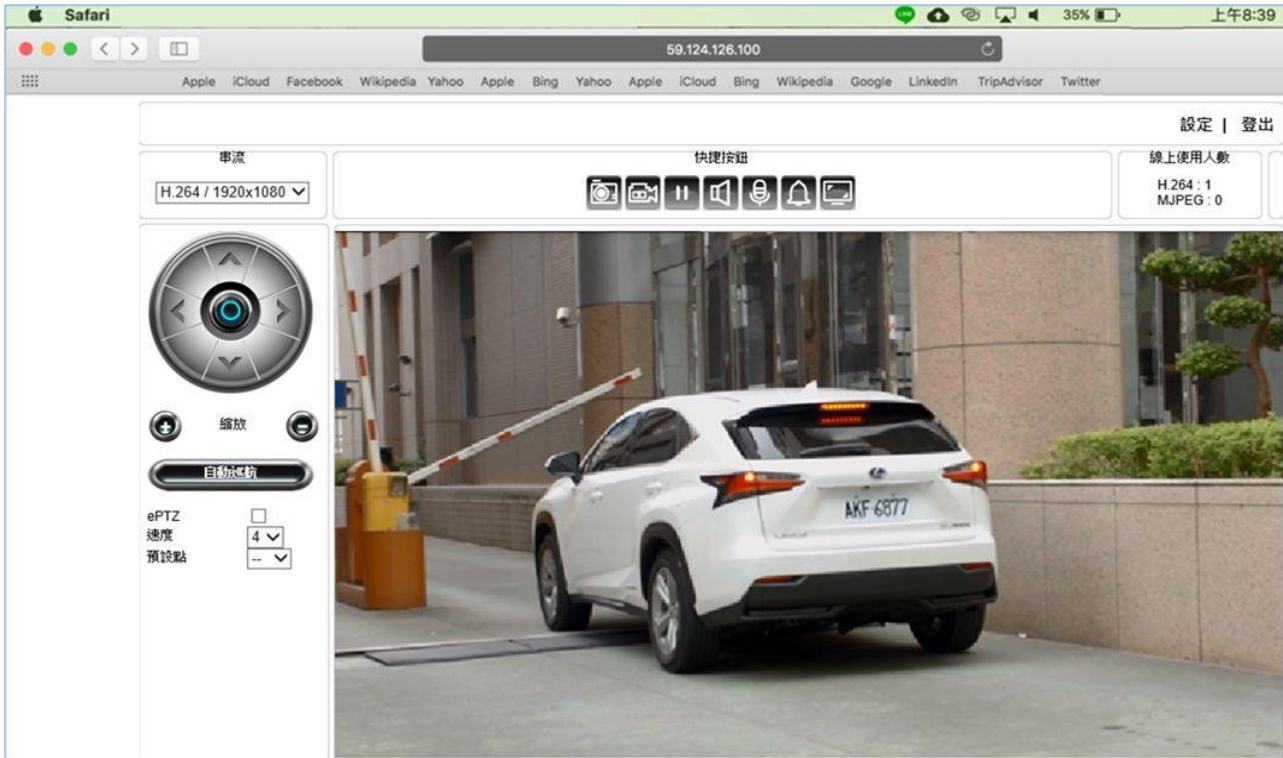
Kevin Demo: [DI#0 triggers camera(From WISE#2)] Camera #1 [20180511104502.jpg]

LINE Notify

1-3 Software Requirements

1-3-1 Apple Mac OS

The IP camera uses HTML5 streaming which supports Safari browser for accessing video streaming of the IP camera on Apple Mac OS without any software plug-in.



1-3-2 PC Windows OS

Chrome and Edge web browsers that support HTML5 do not need any external software to view camera images. If you are using the IE web browser, you need to install the Universal ActiveX component to display MJPEG or H.264 images. When you first log in to our IP camera, you may see a prompt box as below via Windows OS.



Click Install and follow the instructions to install the necessary components.

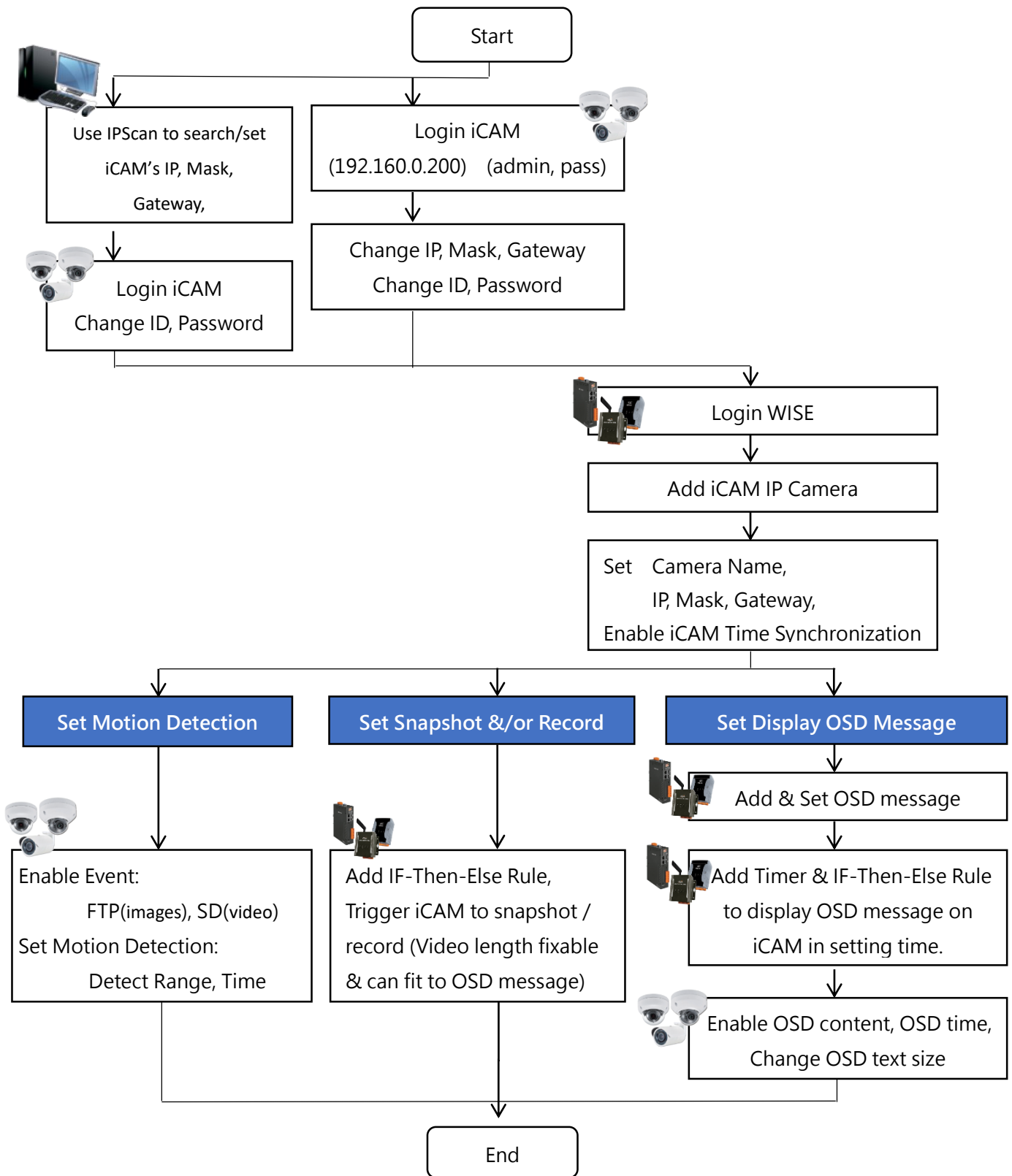
In addition, please go to <http://www.adobe.com/products/flashplayer> to download the Flash player to control the PTZ control panel.

Chapter 2 Set up iCAM via WISE Controller

WISE can connect to ICP DAS iCAM series IP cameras. In the IP camera setting page, users can add the iCAM camera that WISE wants to connect to, and set the IP, port and model name.

Camera Model	iCAM-ZMR8422X iCAM-MR6422X iCAM-MR6322
Supported WISE firmware version	1.4.0 or above
Default login account / password	admin / pass
Record video length	10~60 seconds (configurable)
OSD message setting function	English, Chinese
Supported Event Type	Motion Detection Tampering Detection Network Lost Detection

2-1 Flowchart of Setting WISE and iCAM



2-2 Add iCAM IP Camera

Note : One WISE-523x/WISE-224x controller allows connections to max. 4 IP Cameras.

The steps to add iCAM are as below:

- i. No: The number will be the order of the IP Cameras. The range is 1 to 4.
- ii. "IP" & "Port" : Input the IP address and Port of this IP Camera.

IP Camera Setting Page

No.	*IP	Port	*Module Name
1		80	Search ?

No camera exists, press this button to create one.

Save

Figure2: Set up the No, IP address and Port of the IP Cameras

- iii. Select the IP Camera's module name: For ICP DAS IP Cameras, the user could select the model name from the dropdown list.


IP Camera Setting Page

No.	*IP	Port	*Module Name
1		80	iCAM-MR6322 iCAM-MR6422X iCAM-ZMR8422X

No camera exists, press this button to create one.

Save

Figure3 : Set up the Model Name of the IP Cameras

- iv. Click  to add the IP Camera to the list. After adding the IP Camera, click "Save" button to save the changes.

IP Camera Setting Page

No.	*IP	Port	*Module Name
1	192 168 100 218	80	iCAM-MR6322 ?

No camera exists, press this button to create one.

Save

Figure4: Add the IP Cameras

2-3 IP Camera List Operation Interface

After the ICP DAS iCAM IP Cameras are added to the IP Camera list via manual work, the IP Cameras will be listed as below:

No.	*IP	Port	*Module Name
4	<input type="text"/>	80	<input type="text" value="Search"/> ?
<input checked="" type="radio"/> 1	192.168.1.100	80	iCAM-MR6322
<input type="radio"/> 2	192.168.1.101	80	iCAM-MR6422X
<input type="radio"/> 3	192.168.1.102	80	iCAM-ZMR8422X

Figure5: iCAM IP Camera List Operation Interface

The following functions allow to perform settings or rearrange the orders of the IP Cameras. Please select the IP Camera and click on the function button to perform the operations:

- **Setting:** Click the radio button in front of the IP Camera and click on “Setting” to get into the setting page of the iCAM IP Camera. The settings for each iCAM IP Camera will be given in the following section.
- **Move Up:** Click the radio button in front of the iCAM IP Camera and click on “Move Up” to move the iCAM IP Camera to upper order (decrease the index number (No)).
- **Move Down:** Click the radio button in front of the iCAM IP Camera and click on “Move Down” to move the iCAM IP Camera to lower order (increase the index number (No)).
- **Copy:** To copy the settings of a pre-set iCAM IP Camera to the new iCAM IP Camera, please click the radio button in front of the pre-set iCAM IP Camera and then click on “Copy”, a new iCAM IP Camera (in sequence) will be added to the list and the settings of the old iCAM IP Camera will be copied to this newly added iCAM IP Camera.
- **Remove:** Click the radio button in front of the iCAM IP Camera and click on “Remove” to remove the selected iCAM IP Camera.

After all settings are completed, click “Save” button to save the changes. The following will describe the setting of ICP DAS iCAM IP Camera.

2-4 The Setting of iCAM IP Camera (Use WISE)

The iCAM IP Camera setting interface is shown as below (using iCAM-MR6422X as an example):

OSD Message Setting		
Nickname	Content	Duration
+ Add new OSD Message		

Figure6: iCAM IP Camera Setting page

The settings are as below:

- **Nickname:** For user to define nickname for the IP Camera, the nickname will be displayed on the “IP Camera Status” and “Rule Setting” pages.
- **Description:** The field provides a space for the user to make a brief description of this IP Camera.
- **IP:** Enter the IP address of the IP Camera for the connection.
- **Port:** Enter the Port number of the IP Camera for the connection.
- **Authentication:** Because IP Camera requires account and password validation, please enter the login ID and Password of the IP Camera in the “Authentication” field. About content of the “Authentication” field, WISE will pre-input the IP Camera's default login ID and Password, if user has changed the login ID and Password, please also remember to change them in the page.
- **Time Synchronization:** if user click “Enable” to enable the Time Synchronization function. The WISE will actively connect with IP Camera to synchronize the clock of IP Camera through network. If user does not click “Enable” , then IP Camera will synchronize its clock by its original setting.
- **File Transfer:** The Image files and Video files captured by IP Camera can be uploaded to remote FTP server of the manage center via FTP protocol. User can directly select the pre-defined FTP server from the FTP server list or click on “Add new FTP Server” to add a new FTP Server to set up parameters for FTP Upload.
- **Connection Testing:** The user could test if the IP Camera setting is correct or not. After clicking “Testing” button, the WISE will verify the connection status with the IP Camera and reply the result.

iCAM-ZMR8422X, iCAM-MR6422X and iCAM-MR6322 support to set OSD messages displayed on the camera stream. The user can edit the OSD messages to be displayed on the Camera stream when a special event occurs, and the content of OSD message can include the real-time I/O channel data. User can set the color of the OSD message and the length of the display time, and can set the current message to be cleared or display another message after the length of the display time is exceeded. The settings are as below:

- Click on "Add new OSD message" , a setting page will appear as below:

The screenshot shows a web-based configuration interface for an OSD message. The title is "OSD Message OSD Message 1 Setting". It has several input fields and sections:

- *Nickname:** A text box containing "OSD Message 1".
- Description:** An empty text box.
- Display Setting:** A section with "View" and "Edit" buttons. Below them is a large text area containing the message content: "IT Room, Temp=DL-302 Temperature(°C), CO2=DL-302 CO2 ppm".
- *Content:** This label is positioned to the left of the message content text area.
- Color:** A dropdown menu currently set to "White".
- Duration Setting:** A section with a "Time" field set to "10" and the unit "seconds".
- Timeout Action:** Two radio button options: "Clear the content" (which is selected) and "Change the content".
- Buttons:** "OK" and "Cancel" buttons at the bottom right.

Figure7: iCAM IP Camera OSD Message Setting page

- Input a name in the "Nickname" field and could input the description of this OSD message in the "Description" field.
- Enter the content of the OSD message in the "Content" field. WISE provides the "Real-time variable editor" for users to add current I/O channel values or Internal Register values into the content of the message.
- In the "Color" field, select the color of the OSD message. There are six options: white, black, red, green, blue and yellow.
- In the "Duration Setting" section, set the duration of the OSD message in the "Time" field. The range is from 0 to 65535 seconds.
- In "Timeout Action" field, users can set "Clear the content" to clear the OSD message when the length of the display time of the current message is exceeded the setting of "Duration"; or set "Change the content" to change the content and the color of the OSD message with the

settings below. The changed OSD message would be displayed until next OSD message is triggered to display.

- After all settings are completed, click "OK" button to save the setting of OSD message, and return to the IP Camera setting page.

Note: The OSD message only can be entered in one line, and be displayed at the left-top corner of the camera stream. Following is example for reference.

The image shows a multi-part screenshot. At the top is the 'System >> General' settings page. It includes fields for MAC Address, Firmware Version, OS Version, System Reboot Time, Device Name (set to '2F_Office'), and OSD Font/Time settings. A red callout box points to the 'OSD Font' and 'OSD Time' settings with the text: 'WISE DONOT set these items, please set them in the IP camera.' Below this is a camera stream showing OSD messages: '2F_Office', '21/01/05 16:08:3836', and 'Auto, DL-302 Temp.=22.000, CO2=642ppm'. At the bottom is the 'OSD Message Setting' dialog box, which lists 'OSD Message 1' with the content 'Auto, DL-302 Temp.=DL-302 Input Register 2(Temp.(°C)), CO2=DL-302 Input Register 0(CO2)ppm' and a duration of 10 seconds. A blue arrow points from this message to the corresponding OSD message in the camera stream.

The number of characters that can be displayed is depended on the resolution setting of the IP Camera. If the OSD message cannot be displayed completely, please reduce the character number of the message.

After all settings of the IP Camera are completed, click "OK" button to save the changes and return to IP Camera List.

2-5 The Setting of iCAM IP Camera (Use iCAM)

ICP DAS iCAM IP Camera provides Schedule, Motion Detection, GPIO, Snapshot and Video recording functions. If the user wants to add the iCAM IP Camera's event into the WISE's IF-THEN-ELSE rule as the IF Condition or THEN/ELSE action, or requires the iCAM IP Camera to report the status of Motion detection to WISE, please complete the Event setting of iCAM IP Camera in advance. The setting screen references are as below:

The screenshot shows the ICP DAS web interface. At the top, there is a navigation bar with 'Live | Basic Mode | **Advance Mode** | Language | Logout'. Below this is a menu with 'System | Video / Audio | Network | **Event** | Notification | Maintenance'. The 'Event' section is expanded, showing a list of event types: Event, IVS, Motion Detection, Tampering Detection, Network Detection, and Push Service Setting. The 'Motion Detection' option is selected, leading to the 'Advance >> Event >> Event' configuration page. This page has an 'Event Name' dropdown set to 'Motion Detection' and an 'Edit Event' button. Below is a table of event settings:

Event	Status	FTP	SMTP	SD Card	SAMBA	HTTP POST	SNMP Trap	Push Service	Schedule
Motion Detection	Enable	V		V					Auto
Tampering Detection	Disable								Auto
Network Detection	Disable	-	-		-	-	-	-	Auto

The 'Motion Detection' row is highlighted. Below the table, the 'Motion Detection' configuration page is shown, titled 'Advance >> Event >> Motion Detection'. It features a video preview window with a red grid overlay, indicating the motion detection range. Below the preview, there are controls for 'Motion Detection' (radio buttons for Enable and Disable, with 'Enable' selected) and 'Motion Sensitivity (Low:99~High:1)' (a dropdown menu set to '30'). 'Submit' and 'Clean' buttons are at the bottom.

Figure 8: iCAM IP Camera Motion Detection Range Setting Page

Advance >> Event >> Event

Event Name

Event	Status	FTP	SMTP	SD Card	SAMBA	HTTP POST	SNMP Trap	Push Service	Schedule
Motion Detection	Enable	V							Auto
Tampering Detection	Disable								Auto
Network Detection	Disable	-	-		-	-	-	-	Auto

Here you can configure the detection settings for motion, facial, tamper, audio, alarm, and network failure. Choose an event type in the drop-down menu, and click “**Edit Event**”.

Then the page allows you to choose the action to take when the chosen events are detected, such as sending JPEG images to an FTP server or an email account, and/or triggering SD card video recording. To schedule event monitoring, choose “**Schedule**” when you edit an event and highlight the time periods you want the IP camera to detect events. Click “**Submit**” for the changes to take effect.

Event

Enable

Action

FTP Service Dwell Time Sec.

SMTP Service Dwell Time Sec.

SD Card Service Dwell Time Sec.

SAMBA Service Dwell Time Sec.

HTTP POST Service Dwell Time Sec.

HTTP POST Service : URL

SNMP Trap Service

Push Service Dwell Time Sec.

Schedule Setting

Always

Schedule

- **FTP Service:** If event is detected, send JPEG images to the preset FTP server in the preset time.
- **SMTP Service:** If event is detected, send JPEG images to the preset email account in the preset time.
- **SD Card Service:** If event is detected, trigger SD card video recording and send video (*.mp4) to the preset FTP server in the preset time.
- **SAMBA Service:** If event is detected, send alarms to the device linked with the iCAM in the preset time.
- **HTTP POST Service:** If event is detected, send JPEG images to the filled URL website in the preset time.

To change the action and event types, go to the detail settings.

After setting up WISE to connect to the iCAM, there is **no need** to set up the FTP settings on the iCAM about FTP of the event. The WISE will **automatically** assign the FTP settings into the iCAM IP camera.

✘ **If you need more detailed information, please refer to the WISE user manual for advanced function settings.**

Chapter 3 Before Accessing IP Cameras

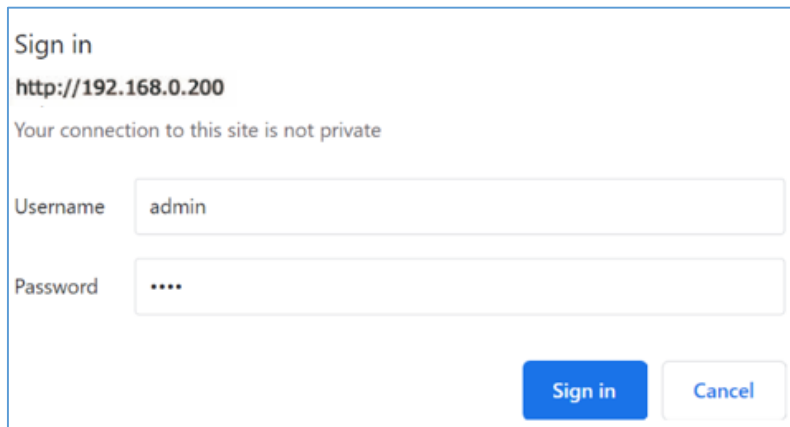
Before accessing the IP cameras, make sure that the camera's RJ-45 network connector, audio cable, and power cable are properly connected. To set the IP address, consult your network administrator. The default IP address for each IP camera is 192.168.0.200. Users can use the default IP address to verify the camera's network connection.

3-1 Login

You can log in to the camera as administrator or guest. The default username for **administrator** is **admin**, and the password **pass**. Then press **Sign in** to log in.

Default camera IP/user name/password:

IP: 192.168.0.200	Username: admin
Subnet Mask: 255.255.255.0	Password: pass
Gateway: 192.168.0.1	



3-2 Configure IP Addresses using the Web Browser

To change an IP address on a webpage, type the default IP address (192.168.0.200) into the browser address bar and follow the steps below:

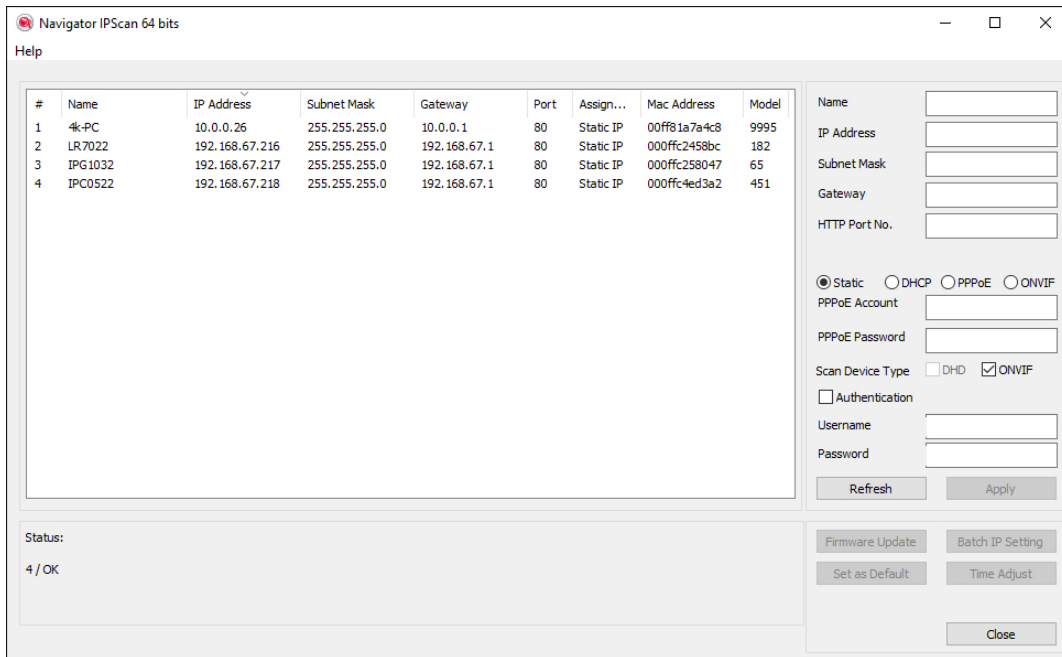
- Log in to your IP camera using the default username **admin** and default password **pass**
- Click **Setup** → **Network** to edit or modify IP address, subnet mask, gateway, or HTTP port
- Click **Submit** for the changes to take effect.

3-3 Configure IP Addresses using the IPScan Utility

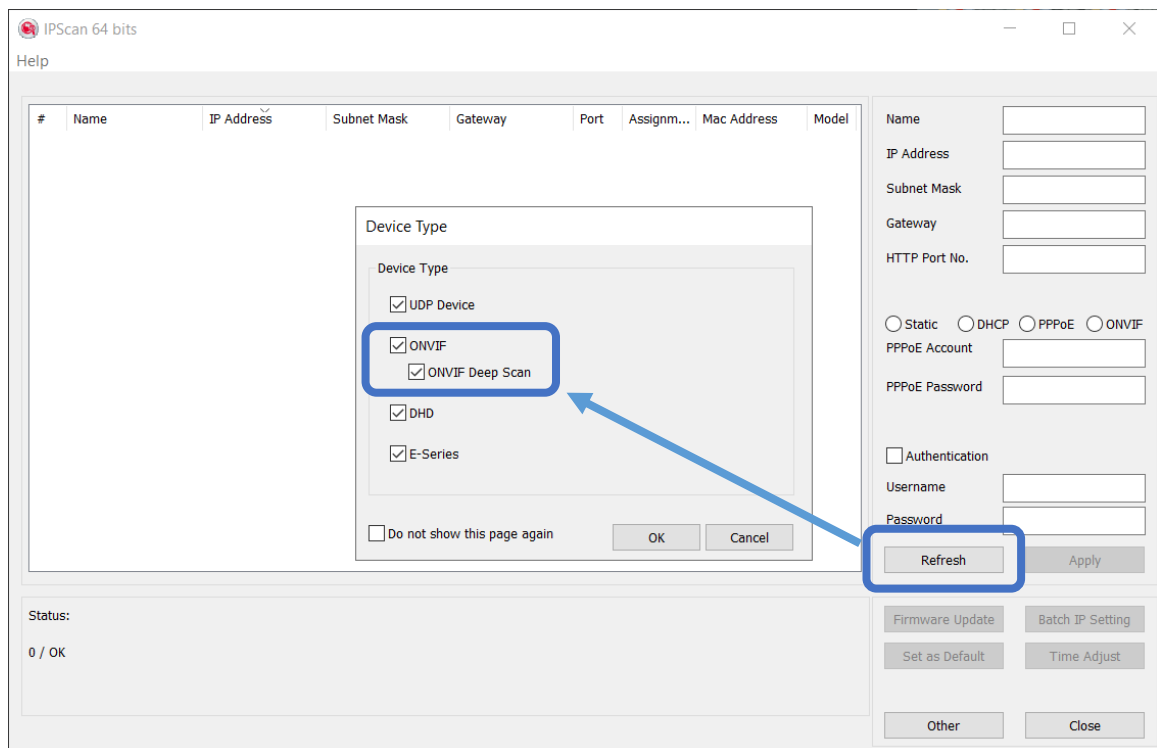
To configure the IP address of your cameras, download IPScan from our official website. To change the IP address, subnet mask, gateway, or HTTP port of your cameras, follow the steps below:

- Run the IPScan utility
- Click **Refresh**. All available devices will be listed on the screen

- Select the device item from the device list
- To edit or modify IP address, subnet mask, gateway, or HTTP port, use the box
- Click **Apply** for the changes to take effect
- Click **Refresh** again to verify the changed settings

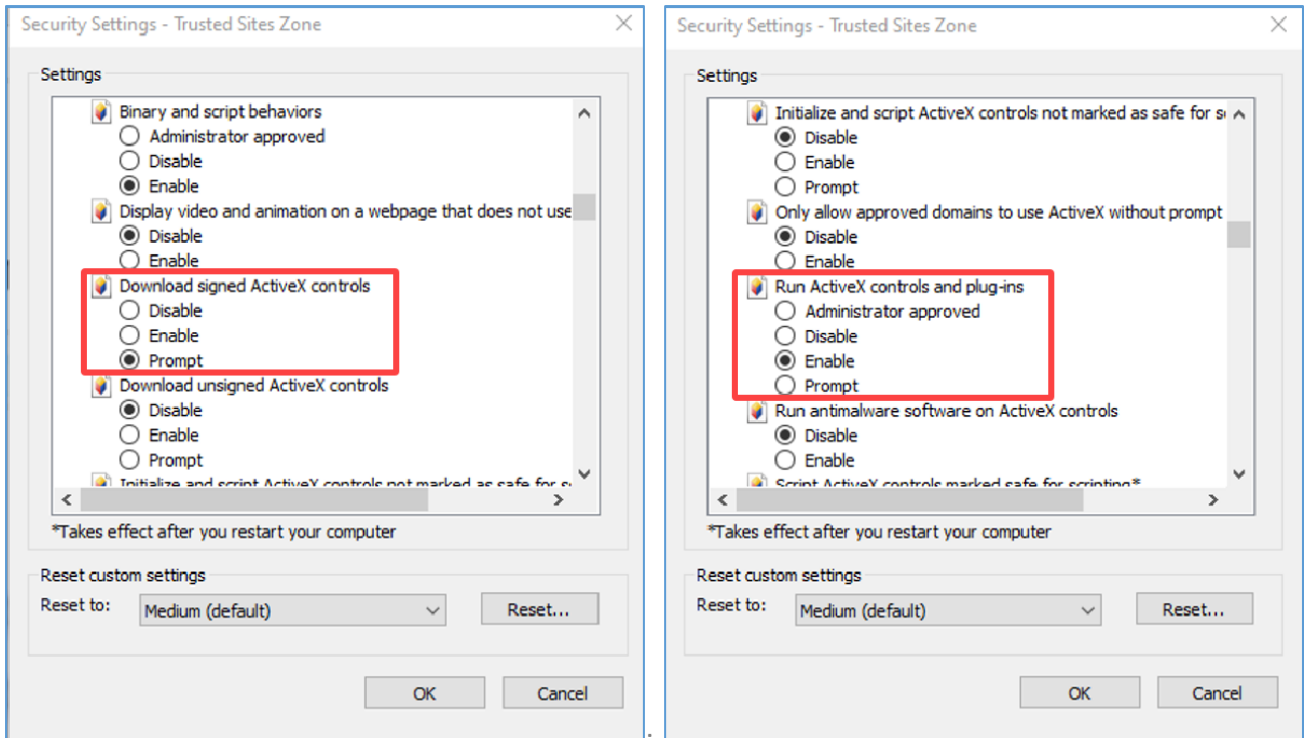


If the device cannot be scanned, check "ONVIF" & "ONVIF Deep Search" in the device type and refresh again.



3-4 Web Browser Settings & Software Components Required

Make sure your Internet browser allows signed ActiveX plug-in to run on your PC. Set Download Signed ActiveX plug-in controls to **Prompt** and **enable** Run ActiveX control and plug-in. You can set this in Internet Explorer → Tools → Internet Options → Security → Custom Settings.

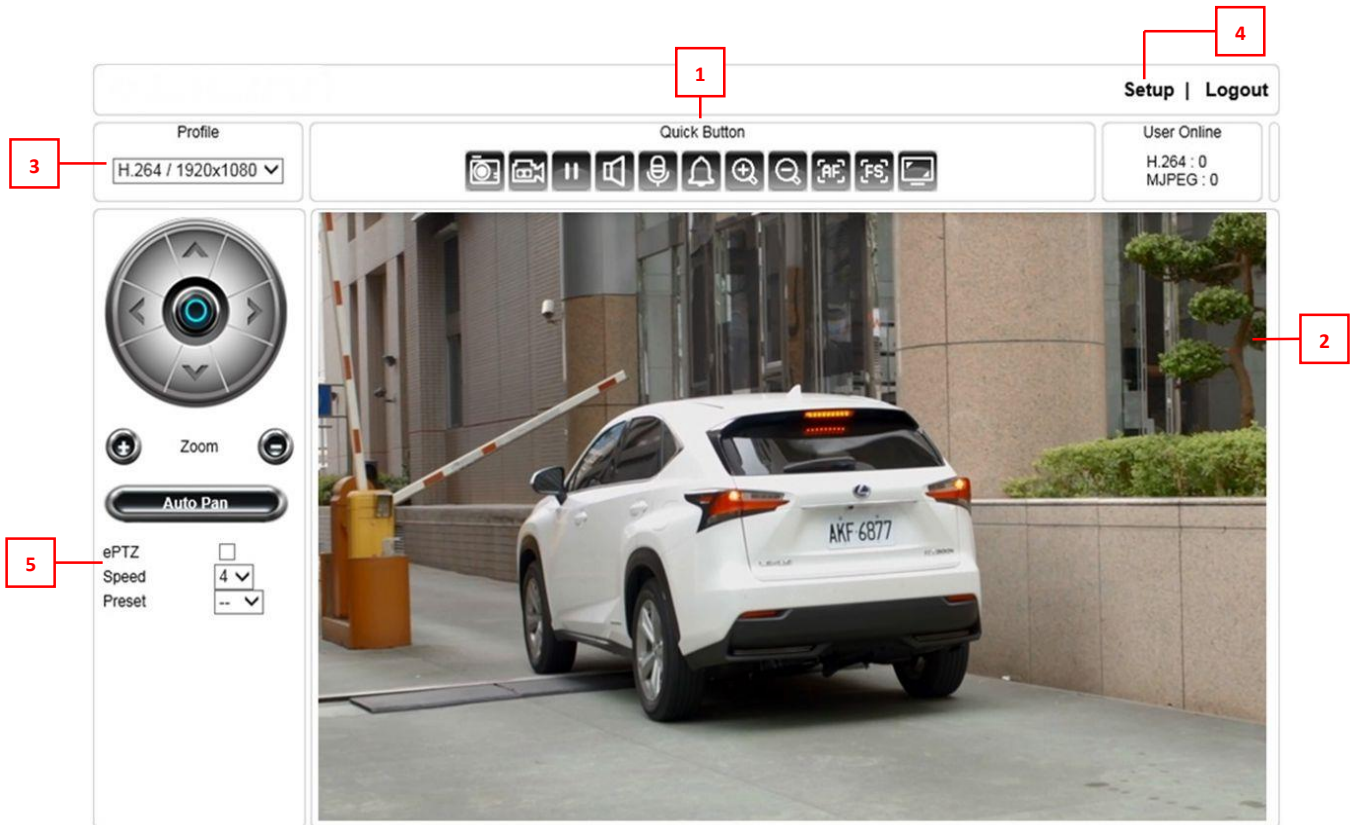


Once completed, you can access the IP camera's live video by entering the default IP address via a web browser. A security warning dialog box will appear. Click **OK** to download the ActiveX directly from the IP camera.

Chapter 4 IP Camera Operations

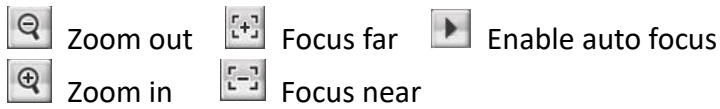
4-1 HTML Operations

When logged in as an administrator, two main features are available: 1) camera operations and 2) configurations.

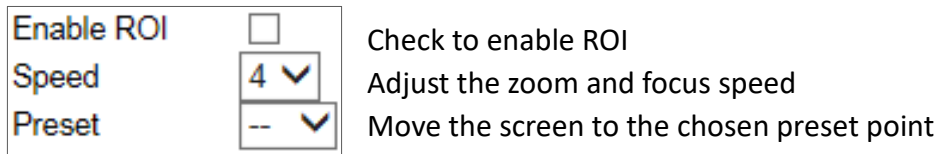


1. **Quick buttons**—IP camera shortcuts
2. **ActiveX display screen**—Display RTSP H.264 or MJPEG streaming video
3. **Profile switching menu**—Switching from one profile to another
4. **Setup buttons**—IP camera setup menu
5. **Zoom & Focus control panel**

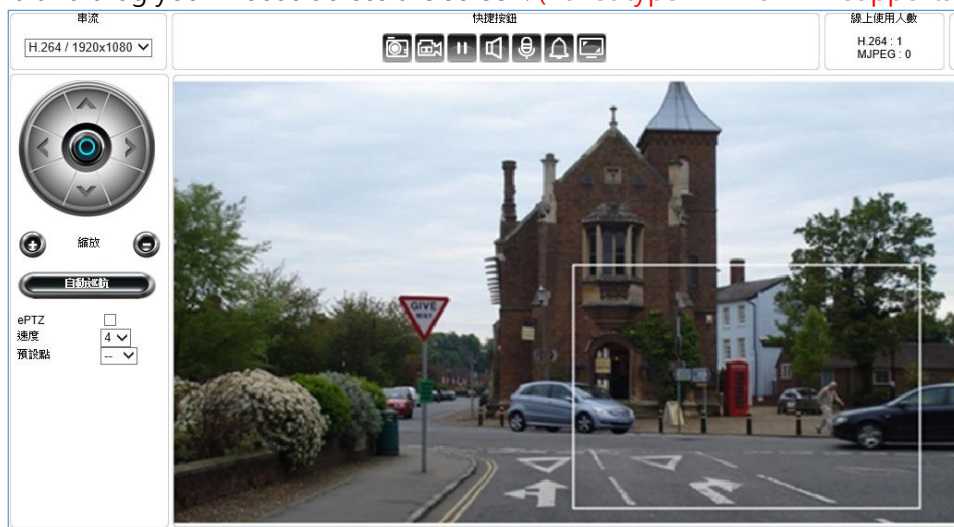
4-2 Control Functions



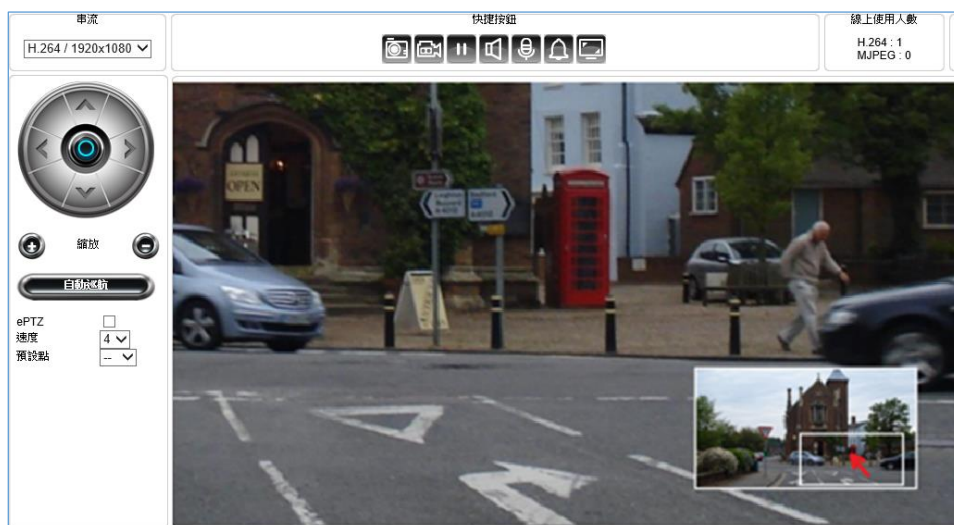
ROI Function



The ActiveX control provides an ePTZ (electronic Pan, Tilt, and Zoom) feature. To perform an ePTZ operation, hold and drag your mouse across the screen. (Bullet type ZMR-8422X supports this.)













Move your cursor to the PIP window and drag inside it to perform ePan and eTilt actions. The scroll wheel can be used to zoom in and zoom out. (Bullet type ZMR-8422X supports this.)



Right-click on the video to exit the ePTZ mode.

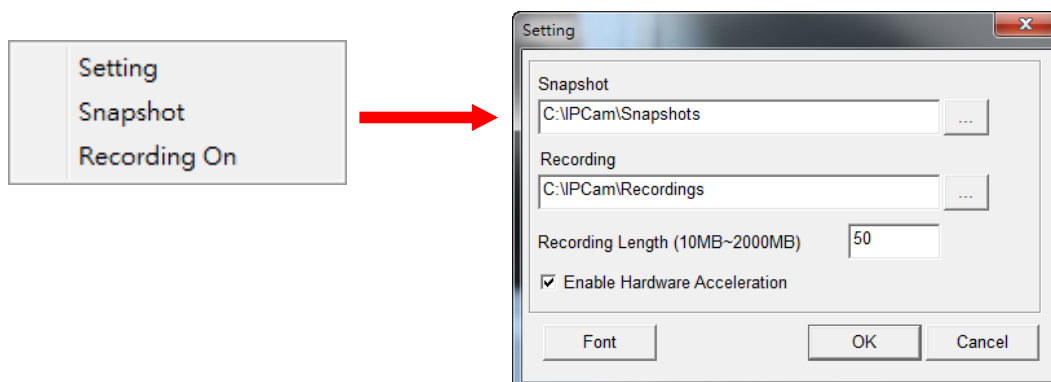
4-3 Quick Buttons

The quick control panel buttons are described below:

	Take a snapshot of the video
	Start recording
	Pause recording
	Speaker on/off
	Microphone on/off
	Enlarge the live view
	Three ROI views and one panoramic view (panoramic camera only)
	Four ROI views (panoramic camera only)
	One 180-degree view and two ROI views and one panoramic view (panoramic camera only)
	Two 180 degree views (panoramic camera only)

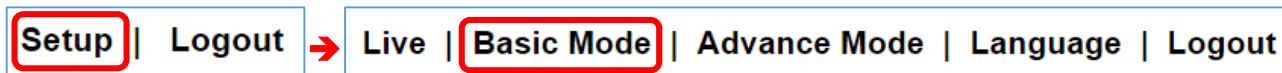
4-3-1 Record to a Local PC

To record to a local PC, right-click anywhere on the screen. Choose **Setting** to specify the recording paths and recording sizes, and choose **Recording On** to start recording.



Chapter 5 Basic Mode Setting

As an administrator, you can configure the IP camera via a standard HTML webpage. Click **Setup** at the top-right corner of the screen after log in to the camera, and will enter the **Basic Mode** settings.



5-1 System



5-1-1 General

Under System Setup → General, you will see server system information, such as MAC address, firmware version, user settings, and system time settings. To modify these options, follow the instructions below

Basic >> System >> General

MAC Address	00:0f:fc:51:e6:43
Firmware Version	4.2.92.8358M
OS Version	Linux 3.10.104+(Wed Oct 2 14:39:26 CST 2019)
System Reboot Time	2021/01/19 10:31:09
Device Name	<input type="text" value="iCAM-MR6422X-51e643"/>
OSD Font	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
OSD Time	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Streaming 1:OSD Font Size	<input type="text" value="1"/> (Small:1~Large:4)
Streaming 4:OSD Font Size	<input type="text" value="1"/> (Small:1~Large:2)
ActiveX OSD Display	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
ActiveX OSD Name	<input type="text" value="iCAM-MR6322"/>
Web Title Name	<input type="text" value="iCAM-MR6322"/>
ActiveX Low Latency Mode	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

We strongly recommend you to change the default username and password
To do so, visit the [User](#)

Disclaimer:
To prevent possible unauthorized access to this device, please change the default ADMIN password now. Failure to do so may leave this device vulnerable, compromising your privacy. By ticking this box, you accept responsibility for establishing and maintaining the security of this device on your network(s) and the wider internet. Please document the new password in a safe place. Forgetting the new password means you will no longer be able to access this network device and will need to perform a hardware reset to restore the default username and password.

- **MAC Address:** The MAC address of the camera
- **Firmware Version:** Firmware version of the camera
- **OS Version:** The version number of the camera
- **System Reboot Time:** The last time your system was rebooted.
- **Device Name:** The device name can be found using the IPscan utility, which allows you to

identify IP cameras. To change the device name, enter a new name for the IP camera and click Submit.

- **OSD Font:** Enable to display the device name on the ActiveX OSD.
- **OSD Time:** Enable to display camera time on the ActiveX OSD.
- **OSD Font Size:** Adjust the size of the ActiveX OSD.
- **OSD Zoom Ratio:** Enable to display camera zoom ratio on the OSD.
- **1920 x 1080 OSD Font Size:** The streaming font size at 1920x1080 resolution
- **720 x 480 OSD Font Size:** The streaming font size at 720x480 resolution
- **352 x 240 OSD Font Size:** The streaming font size at 352x240 resolution
- **ActiveX OSD Display:** Enable/disable to display/hide the device name.
- **ActiveX OSD Name:** The name you enter here will be displayed on the ActiveX
- **Web Title Name:** Enter the name to be displayed on the web browser.
- **Low Latency Mode:** Enable to reduce latency of the ActiveX.

Note: ActiveX is for Windows OS only.

5-1-2 User

The IP camera supports up to 10 user accounts. Each account can be individually configured for its access rights. To add/edit a user, click Add/Edit User. To access an IP camera without authentication, switch the Bypass Logon option to On. Enable IPScan Bypass Logon to log in the camera through IPScan without authentication. To add a user, press Add User, and you will see the following screen.

Basic >> System >> User

Bypass Logon On Off
IPScan Bypass Logon On Off

Account
New Password
Confirm Password
User Group Administrator , Operator , Viewer
Administrator
Panel Control
ePTZ Control

Enter the account name and password for the new account, and then check to assign the access rights for this account.

To edit account information, click Edit User. To delete a user, click Remove User. Click Submit to update the settings.

5-1-3 Timer

You can change the time of your camera through a HTML web page. Simply select the date and time in the drop-down menus, and click Submit to apply. You may also set the daylight saving time in this page.

Basic >> System >> Timer

Server Time Tue, 19 Jan 2021 12:52:39 GMT+0800

Synchronize with NTP Every Hour Off

Time Server time.stdtime.gov.tw

Time Zone (GMT +08:00) Taipei

Time 2021 / 1 / 19 12 : 52 : 39

Daylight Saving Time On Off

Start Date 1 / 1 / 0 (Month/Date/Hour)

End Date 12 / 31 / 23 (Month/Date/Hour)

Synchronize with an NTP server **Note: This function requires Internet connection.**

To synchronize with an NTP server, change the Synchronize with NTP to Every Hour. The camera will synchronize its system time with a time server every hour.

Synchronize with an WISE controller **Note: This function requires Internet connection.**

To synchronize with an WISE controller, need to set up the IP camera on the WISE. Enable the "Time Synchronization", and the WISE will synchronize the IP camera time.

Web Inside, Smart Engine
Web Anywhere, Automation Anywhere!

Module Setting IP Camera Setting IP Camera iCAM-MR6422X Setting

XV-Board Setting
Remote I/O Module Setting
IP Camera Setting

IP Camera iCAM-MR6422X Setting

Nickname

Description

IP 192 . 168 . 255 . 8

Port 80

Authentication *ID admin *Password ****

Time Synchronization Enable

File Transfer Do not upload to any FTP server

Connection Testing Testing

5-2 Video / Audio

System

Video / Audio

Network

Maintenance

To transmit video over a low bandwidth network such as the Internet, set the bit rate close to the actual upload bandwidth. The camera encodes frames based on the bit rate setting.

5-2-1 General

Basic >> Video / Audio >> General

H.264 Encoding Mode : Main Profile High Profile

Encoder2 : Enable Disable

Encoder3 : Enable Disable

Video Standard : 60Hz 50Hz

Fixed Bitrate Mode : Enable Disable

Image Enhance Mode :

Encoder1

Profile Name

Resolution

Output Frame Rate

GOP (Group of Pictures)

Stream Mode

Bit Rate

RTSP URL

Encoder3

Profile Name

Resolution

Output Frame Rate

Image Quality

RTSP URL

Encoder4

Profile Name

Resolution

Output Frame Rate

Image Quality

RTSP URL

- **Encoder#:** 4 customizable Encoders
- **Video Standard:** NTSC/PAL video systems
- **Fixed Bitrate Mode:** Enable to set the bitrate to a fixed constant
- **Corridor Mode:** Rotate the screen 90° or 270° clockwise
- **Output Frame Rate:** The frame rate of the video
- **GOP:** The number of I-frames to be displayed in one second
- **VBR/CBR Mode:** Variable bit rate, an encoding mode that reduces the use of bandwidth; CBR: constant bit rate, an encoding mode that consumes more bandwidth
- **Bit rate:** The maximum bit rate available for your network connection
- **Alarm Weighted Mode:** Enable to prioritize as the output stream you want to see when an alarm is detected
- **RTSP URL:** Allows you to see the video stream through the Real Time Streaming Protocol
- **Image Quality:** The compression rate of the MJPEG stream

5-2-2 Smart H.264

The IP camera supports Smart H.264 for higher compression without sacrificing video quality. Choose Smart H.264 at Stream Mode.

Encoder1	
Profile Name	H.264 ▾
Resolution	1920x1080 ▾
Output Frame Rate	30 ▾
GOP (Group of Pictures)	30 ▾
Stream Mode	Smart H.264 ▾
Smart H.264 Mode	Auto ▾
Foreground Quality	0 ▾ (Best:-15~Worst:15)
Background Quality	0 ▾ (Best:-15~Worst:15)
Sensitivity	30 ▾ (High:1~Low:99)
Bit Rate	3 Mbps ▾
RTSP URL	rtsp://192.168.255.108/stream0

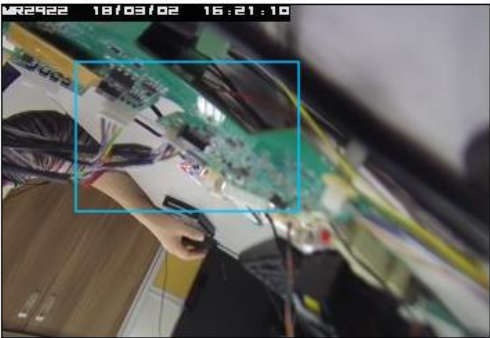
Note: Smart H.264 model only

From the picture below, Smart H.264 can have higher compression in bitrate at 1080P video. The foreground is the moving objects or the region of interest window. The background is the non-moving objects in a video.








To setup Smart H.264 feature, follow the steps below:

- **Stream Mode:** Select Smart H.264
- **Smart H.264 Mode:** Auto, Area, or Hybrid selection mode
- **Foreground Quality:** Moving object or Smart H.264 window
- **Background Quality:** Non-moving objects or none Smart H.264 defined windows
- **Sensitivity:** Smart H.264 moving objects (foreground) detection sensitivity, the higher sensitivity means higher compression rate.
- **Window:** Select which window for defining the Smart H.264 window.
- **Window Enable:** Enable Smart H.264 window.
- **End Edit:** Finish defining the setting of Smart H.264 window.
- **Clean:** Clean the current defined Smart H.264 window.
- **Clean All:** Clean all the defined Smart H.264 windows.

Stream Mode	Smart H.264 ▾
Smart H.264 Mode	Auto Area Hybrid
Foreground Quality	0 ▾ (Best:-15~Worst:15)
Background Quality	0 ▾ (Best:-15~Worst:15)
Sensitivity	30 ▾ (High:1~Low:99)
Window	1 ▾ <input checked="" type="checkbox"/>
Window Enable	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
	End Edit Clean Clean all
	
Bit Rate	1 Mbps ▾
RTSP URL	rtsp://192.168.3.206/stream0

5-2-3 Quality Basic

This menu allows you to adjust brightness, auto contrast, contrast, hue, saturation, and sharpness both for the Day Mode and Night Mode. Individual day/night settings ensure the camera to provide optimal video quality.

Day Mode	Night Mode
Brightness : 50 (Low / High)	
	
Contrast : 50 (Low / High)	
	
Hue : 50 (Low / High)	
	
Saturation : 45 (Low / High)	
	
Sharpness : 10 (Low / High)	
	
Load Default	

5-3 Network

System

Video / Audio

Network

Maintenance

5-3-1 General

Network settings are the basic settings that connect IP cameras to the network. The default IP address of our IP cameras is 192.168.0.200. Enter this IP address into your web browser to verify the network connection between a local PC and your IP camera.

To set up a local area network, enter the IP address, subnet mask, gateway, and DNS. Also enter account name and password if you are using PPPoE to connect to the network. Click Submit to update the settings.

Basic >> Network >> General

Network	<input checked="" type="radio"/> Static <input type="radio"/> DHCP <input type="radio"/> PPPoE
IP Address	<input type="text" value="192.168.255.108"/>
Subnet Mask	<input type="text" value="255.255.0.0"/>
Gateway	<input type="text" value="192.168.255.255"/>
Primary DNS	<input type="text" value="168.95.1.1"/>
Secondary DNS	<input type="text" value="168.95.1.1"/>
Account	<input type="text" value="account@pppoe.com"/>
Password	<input type="password" value="....."/>
QoS(DSCP)	<input type="text" value="0"/> (0~63)
2nd IP Address	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
2nd IP Address	<input type="text" value="192.168.0.200"/>
2nd Subnet Mask	<input type="text" value="255.255.255.0"/>
3rd IP Address	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
3rd IP Address	<input type="text" value="192.168.0.200"/>
3rd Subnet Mask	<input type="text" value="255.255.255.0"/>

To acquire Internet access, contact your local Internet Service Provider (ISP) for a global IP address. Enter the IP address (global), subnet mask, and gateway IP provided by your ISP.

- **Default DNS**—The IP address of the default and first DNS server
- **Second DNS IP Address**—The IP address of the backup and second DNS server to the default DNS
- **PPPoE Account**—Username of the PPPoE service
- **PPPoE Password**—Password of the PPPoE service

5-3-2 General IPv6

Basic >> Network >> General IPv6

Network On Off

IP Address

Default Gateway

Primary DNS

Enter IPv6 IP address, default router, and default DNS for IPv6 service.

5-3-3 HTTP/RTSP Service

HTTP and RTSP are two reliable protocols for video streaming. With correct port forwarding, videos can be sent over the Internet. Details are described in the appendix. To change the HTTP port number, consult your network administrator. Choose the streaming type you want to use (HTTP or RTSP/UDP). Click Submit for the changes to take effect.

Basic >> Network >> HTTP/RTSP Service

HTTP Port

RTSP Port

ONVIF

RTSP Package Size KB

METADATA On Off

RTCP Check On Off

Repeated delivery of SPS/PPS On Off

RTSP Authentication On Off

Video Port HTTP Port RTSP/UDP Port

Profile Name H264 1920x1080

Profile Name JPEG 720x480

Profile Name H264 720x480

Profile Name JPEG 352x240

Settings on this page are described below:

- **ONVIF:** Choose a ONVIF protocol from the drop-down list
- **RTSP Package Size:** Choose the size of each RTSP package depending on your bandwidth
- **METADATA:** Enable/disable METADATA
- **RTCP Check:** Enable to send RTCP packages for transmission optimization
- **Repeated Delivery of SPS/PPS:** Enable to send SPS/PPS information before I frames

- **RTSP Authentication:** Enabling this option will require username and password when connecting to the RTSP stream
- **Video Port:** Choose between HTTP or RTSP/UDP for your stream
- **Profile Name:** Change the profile name

5-3-4 HTTPs Service

Basic >> Network >> HTTPS Service

HTTPS Service	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
HTTPS Port	<input type="text" value="443"/>
Status	Not installed
Method	<input type="text" value="Create self-signed certificate"/> ▾
Country	<input type="text" value="TW"/>
State or province	<input type="text" value="Taiwan"/>
Locality	<input type="text" value="Taipei"/>
Organization	<input type="text" value="IPCAM"/>
Organization unit	<input type="text" value="IPCAM"/>
Common name	<input type="text" value="www.example.com"/>
Validity	<input type="text" value="365"/>

5-4 Maintenance

System

Video / Audio

Network

Maintenance

Basic >> Maintenance >> Firmware Update

Please do not turn off power and wait until this web page shows up automatically. Fail to update firmware correctly due to network communication issue that it may damage this machine and is required to ship back to your vender for repair.

flashS2LM.bin:Application Firmware

No file chosen Initialize without Network Settings

Upload 0%

Export Config File

Import Config File No file chosen

Reboot System

Default Settings

Initialize without Network Settings

Initialize All Settings

- **Initialize without Network Settings:** Restoring to factory settings does not affect the network settings. The network account ID, password, camera name, IP addresses, subnet mask and gateway will be kept, all others settings will be restored to factory settings.
- **Initialize All Settings:** Restoring all items to factory settings

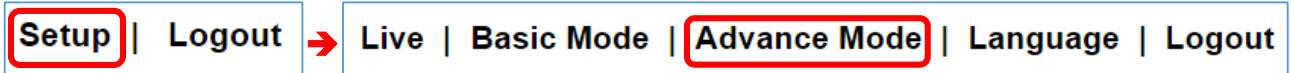
In the **Maintenance** page, to update the firmware of your IP camera, click **Choose File** and locate the update file. Click **Submit** to start the firmware update. To export the configuration file of your IP camera, click **Export**. To import the configuration file of IP camera, click **Choose File** beside the **Import** and click **Upgrade**.

In the **Maintenance** page, you can click **Load Default** to restore the camera to factory settings, or click **Reboot System** to restart the camera.

Warning: Never disconnect the power during the update. This could cause irreversible damage to your device.

Chapter 6 Advance Mode Setting

As an administrator, you can configure the IP camera via a standard HTML webpage. Click **Setup** at the top-right corner of the screen after log in to the camera, and will enter the **Advance Mode**. The **Advanced Mode provides several professional settings that are not available in the Basic Mode**.



6-1 System



6-1-1 System Log

You can view the system-generated log in this page. Click Save to export the log to a text file.

Advance >> System >> System Log

Search

Page 1 ▾

IP Position	User	Date	Log Info
		2021/01/19 14:23:52	MOTION DETECT SEND FTP (SYSTEM ALARM)
		2021/01/19 14:23:51	MOTION DETECT SEND FTP (SYSTEM ALARM)
		2021/01/19 14:23:51	MOTION DETECT (SYSTEM ALARM)
		2021/01/19 14:23:48	MOTION DETECT SEND FTP (SYSTEM ALARM)
		2021/01/19 14:23:47	MOTION DETECT SEND FTP (SYSTEM ALARM)

6-2 Video/Audio



Note: Setting options may differ depending on the model you use.

6-2-1 Quality Advance

In this page, you have access to Exposure, Automatic Gain Control, White Balance Control, Sense Up, Shutter Speed, IR-Cut, and Iris settings allowing you to adjust camera video quality for day and night.

6-2-2 Day Mode / Night Mode

The IP camera provides two sets of video quality database for day or night mode. This is very useful settings for video quality especially for ANPR/LPR application where the shutter speed can be customized at night. The video quality settings can be applied by Day and Night Switch explained later in this chapter.

Day Mode	Night Mode
White Balance Control	Auto
Mirror	Off
Flip	Off
Exposure Value	4
WDR	Auto
Back-light Compensation	Off
DC Iris Mode	On
Shutter Limit(sec):	Min 1/8000 Max 1/25
Auto Gain Control(SENSE UP+)	36dB
3D Noise Reduction	3
Sense Up	Off
Color Mode	Color
IR LED	Off
IR Cut Filter	On
Load Default	

Video setting options are described as follows:

- **White Balance Control:** sets white balance configurations for different scenarios including tungsten, indoor, fluorescents, or outdoor environments, or choose **Auto** for the camera to automatically switch between white balance settings
- **Mirror:** flips the video horizontally
- **Flip:** flips the video vertically
- **Exposure Value:** adjusts the value of exposure; the higher the value is set, the brighter the video is
- **WDR:** enables or disables Wide Dynamic Range to capture greater details
- **Back-light Compensation:** increases the exposure of objects with insufficient light
- **DC- Iris/P-Iris Mode:** turn on to enable auto iris adjustment
- **Shutter Limit:** set the min and max shutter values
- **Auto Gain Control (Sense Up+):** see the below description
- **3D Noise Reduction:** suppresses noise occurred in low lighting conditions
- **Sense Up:** select the level of Sense Up to enhance the video
- **Color Mode:** switch between color/black-and-white mode
- **IR LED:** Turn on to activate the infrared LED
- **IR Cut Filter:** enable/disable the IR cut filter

Without Sense Up



Sense Up by 3 Frames



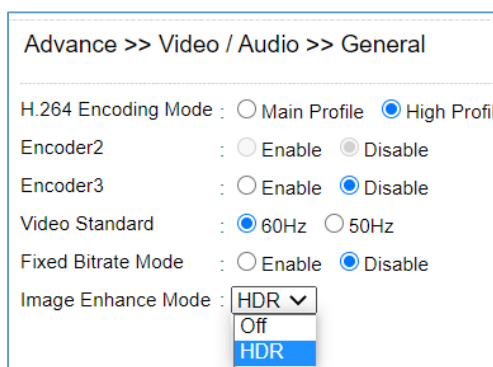
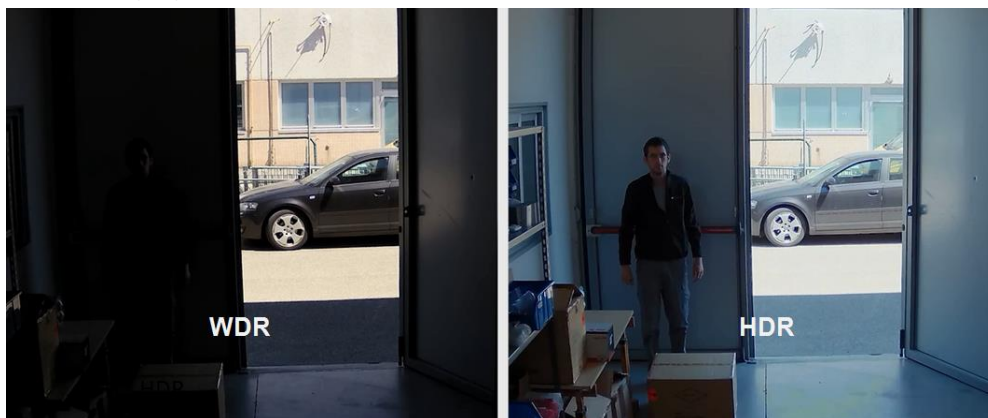
6-2-3 AGC/Sense Up+

Sense Up+ (AGC) is a low-light and high-sensitivity DSP control that enables outstanding video quality even in low-light environments. Sense Up+ technology can be used for both black-and-white and/or color video modes. To enable Sense Up+, first enable Auto Gain Control (AGC). Use Sense Up+ with 3D noise reduction (3D DNR) can reduce noise that occurs in low light environments. AGC and 3D DNR do not cause motion blur. If the picture is still too dark under the environment, turn on Sense Up (slow shutter) instead, however, it may cause motion blur in low-light conditions.



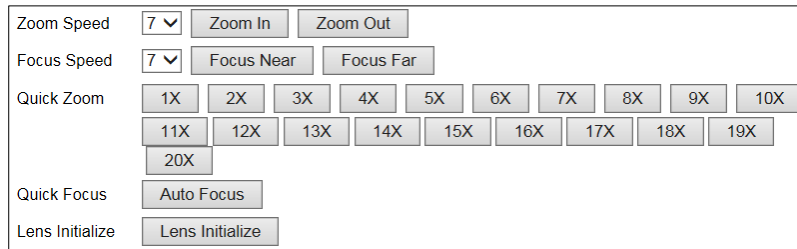
6-2-4 HDR vs WDR

The IP camera contains HDR or WDR for strong back light environment. Turn on HDR mode if the camera points to strong light environment.



Note: Once HDR mode is activated, video frame rate and resolution get dropped.

6-2-5 Auto Focus



Zoom Speed	7	Zoom In	Zoom Out																	
Focus Speed	7	Focus Near	Focus Far																	
Quick Zoom	1X	2X	3X	4X	5X	6X	7X	8X	9X	10X	11X	12X	13X	14X	15X	16X	17X	18X	19X	20X
Quick Focus	Auto Focus																			
Lens Initialize	Lens Initialize																			

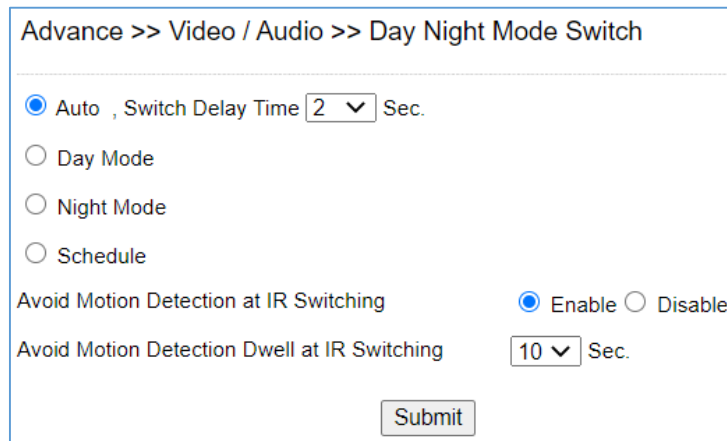
Here you are allowed to change the settings of autofocus functions for autofocus-supported cameras.

- **Zoom Speed:** Set the speed for **Zoom In** and **Zoom Out**
- **Focus Speed:** Set the speed for **Focus Near** and **Focus Far**
- **Quick Zoom:** Zoom to the ratio you specified
- **Quick Focus:** Click to focus automatically
- **Lens Initialize:** Click to reset zoom speed, focus speed, and zoom ratio to factory defaults

Note: Auto focus camera only

6-2-6 Day Night Mode Switch

The Day Night Mode Switch allows you to schedule IR activities by (1) auto, (2) day, (3) night, (4) schedule, or (5) external control. When the setting is set to Auto, the IR module is turned on/off automatically according to the signal from the light sensor. The Night setting removes the IR cut filter, and the Day setting keeps the filter on. If you choose Schedule, the filter turns on/off according to the set time period.



Advance >> Video / Audio >> Day Night Mode Switch

Auto , Switch Delay Time Sec.

Day Mode

Night Mode

Schedule

Avoid Motion Detection at IR Switching Enable Disable

Avoid Motion Detection Dwell at IR Switching Sec.

Day Night Mode Switch setting options are described as follows:

- **Auto:** select the delay time for switching day/night mode
- **Day Mode:** fix the camera to day mode
- **Night Mode:** fix the camera to night mode and turn on the infrared function
- **Schedule:** Set the switching time of day/night mode

Note: IR-cut camera model only.

6-2-7 ROI

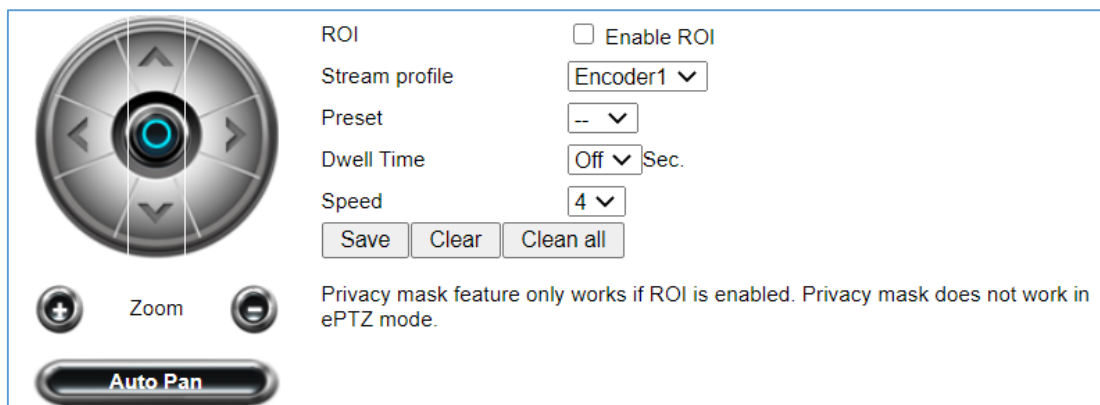
The IP camera supports the Region of Interest (ROI) function. Click Enable ROI to enable the function, and use the arrow buttons to move the view for each preset.

- **Stream Profile:** choose the stream format for the ROI
- **Preset:** provides 16 ROI presets to choose from
- **Dwell Time:** the amount of time the camera stays on the ROI
- **Speed:** the speed for the camera to move to the ROI

Click Save for the changes to take effect, or Clear all to clear all the settings

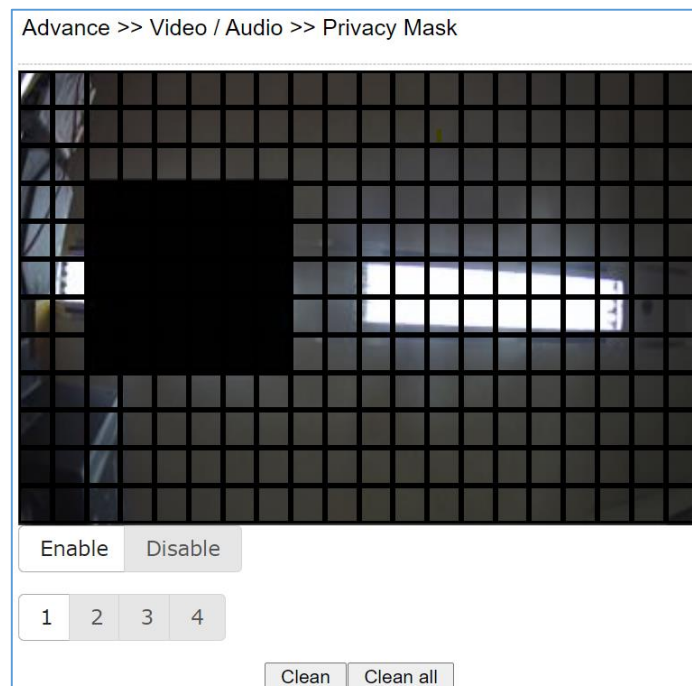
Note: Options may differ depending on the model you use.

Note: By enabling privacy masking, ROI will be turned on automatically, and EPTZ will be disabled.



6-2-8 Privacy Mask

The IP camera provides up to 4 sets of privacy masking. Select any of the masking numbers and drag to mask specific areas. Select **Clean** to clean one set, select **Clean all** to clean all 4 sets.



6-2-9 Lens Distortion Correction

Lens distortion correction (LDC) is software based wide lens distortion correction via DSP/ISP. Retail application normally requires a wide angle lens (1.8mm~2.2mm) for its video. LDC feature allows correcting the distortion. Click Zoom and Strength features for the correction.

Lens Distortion Correction Mode Enable Disable

Strength : 80 (Low / High)

Zoom : 50 (In / Out)



Warning: LDC feature does not support 4:3 resolution ratio for the main stream. For LED feature, please set the main stream at 16:9 resolution ratio.

6-3 Network

System

Video / Audio

Network

Event

Notification

Maintenance

6-3-1 Multicast

The IP camera supports video streaming of 4 different content formats. Under this page, you can configure the settings for individual streams.

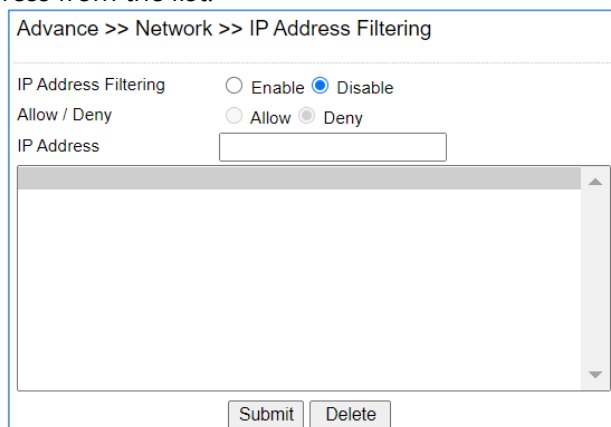
Note: The user does not need to set the stream setting value that IP camera to connect with the WISE controller here. The WISE controller will issue a CGI command to the Camera to set a specific value.

Advance >> Network >> Multicast

Encoder1	Multicast	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
	IP Address	<input type="text" value="239.0.0.0"/>
	Video Port	<input type="text" value="1234"/> (2~65534)
	Video Port(RTCP)	<input type="text" value="1235"/> (2~65534)
	Audio Port	<input type="text" value="1236"/> (2~65534)
	Audio Port(RTCP)	<input type="text" value="1237"/> (2~65534)
	TTL	<input type="text" value="5"/> (1~255)
Encoder2	No Service	
Encoder3	Multicast	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
	IP Address	<input type="text" value="239.0.0.2"/>
	Video Port	<input type="text" value="5568"/> (2~65534)
	Video Port(RTCP)	<input type="text" value="5569"/> (2~65534)
	Audio Port	<input type="text" value="5570"/> (2~65534)
	Audio Port(RTCP)	<input type="text" value="5571"/> (2~65534)
	TTL	<input type="text" value="5"/> (1~255)
Encoder4	Multicast	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
	IP Address	<input type="text" value="239.0.0.3"/>
	Video Port	<input type="text" value="5572"/> (2~65534)
	Video Port(RTCP)	<input type="text" value="5573"/> (2~65534)
	Audio Port	<input type="text" value="5574"/> (2~65534)
	Audio Port(RTCP)	<input type="text" value="5575"/> (2~65534)
	TTL	<input type="text" value="5"/> (1~255)

6-3-2 IP Address Filtering

The IP camera provides an IP address filter to help you block unauthorized IP addresses from accessing the IP camera. Enable the service before you enter the IP address you want to block, and press Add. Click Delete to remove an IP address from the list.



Advance >> Network >> IP Address Filtering

IP Address Filtering Enable Disable

Allow / Deny Allow Deny

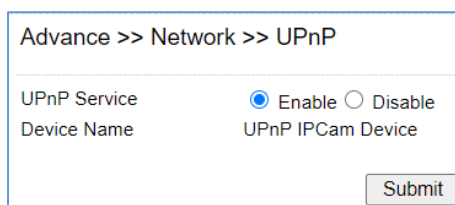
IP Address

--

Submit Delete

6-3-3 UPnP Settings

The UPnP service is a network protocol that allows Windows PC users to identify IP cameras in a LAN environment. To activate the UPnP service, choose Enable to activate. In Windows, go to Network→File Explorer to see the IP cameras via the UPnP protocol.



Advance >> Network >> UPnP

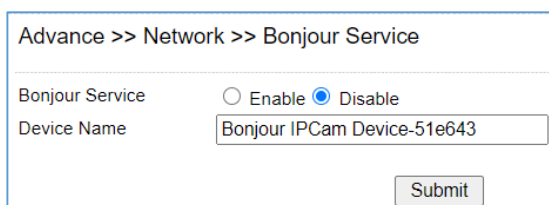
UPnP Service Enable Disable

Device Name UPnP IPCam Device

Submit

6-3-4 Bonjour Service

Bonjour is Apple's implementation of zero-configuration networking protocol. Click Enable to activate this service.



Advance >> Network >> Bonjour Service

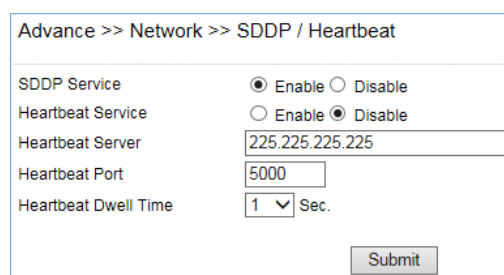
Bonjour Service Enable Disable

Device Name Bonjour IPCam Device-51e643

Submit

6-3-5 SDDP/Heartbeat

With SDDP/Heartbeat support, you can connect to any compatible devices. Enable the service before you make the connection.



Advance >> Network >> SDDP / Heartbeat

SDDP Service Enable Disable

Heartbeat Service Enable Disable

Heartbeat Server 225.225.225.225

Heartbeat Port 5000

Heartbeat Dwell Time 1 Sec.

Submit

6-4 Event



Live | Basic Mode | **Advance Mode** | Language | Logout

System | **Video / Audio** | **Network** | **Event** | **Notification** | **Maintenance**

- Event
- IVS
- Motion Detection
- Tampering Detection
- Network Detection
- Push Service Setting

3 Advance >> Event >> Event

Event Name

Event	Status	FTP	SMTP	SD Card	SAMBA	HTTP POST	SNMP Trap	Push Service	Schedule
Motion Detection	Enable	V		V					Auto
Tampering Detection	Disable								Auto
Network Detection	Disable	-	-		-	-	-	-	Auto

Here you can configure the detection settings for motion, facial, tamper, audio, alarm, and network failure. Choose an event type in the drop-down menu, and click **Edit Event**.

Then the page you see allows you to choose the action to take when the chosen events are detected, such as sending JPEG images to an FTP server or an email account, and/or triggering SD card video recording. To schedule event monitoring, choose Schedule when you edit an event and highlight the time periods you want the IP camera to detect events. Click Submit for the changes to take effect.

Advance >> Event >> Event

Event: Motion Detection

Enable:

Action:

- FTP Service Dwell Time: Sec.
- SMTP Service Dwell Time: Sec.
- SD Card Service Dwell Time: Sec.
- SAMBA Service Dwell Time: Sec.
- HTTP POST Service Dwell Time: Sec.
HTTP POST Service : URL
- SNMP Trap Service
- Push Service Dwell Time: Sec.

Schedule Setting:

- Always
- Schedule

- **FTP Service:** If event is detected, send JPEG images to the preset FTP server in the preset time.
- **SMTP Service:** If event is detected, send JPEG images to the preset email account in the preset time.
- **SD Card Service:** If event is detected, trigger SD card video recording and send video (*.mp4) to the preset FTP server in the preset time.
- **SAMBA Service:** If event is detected, send alarms to the device linked with the iCAM in the preset time.
- **HTTP POST Service:** If event is detected, send JPEG images to the filled URL website in the preset time.

To change the action and event types, go to the detail settings.

6-4-1 IVS Setting

The IP camera provides IVS features including tampering detection, audio detection, tripe wire, and object counting. The features are described below:

Advance >> Event >> IVS

Motion Detection, Tampering Detection

Advanced Motion Detection (Less false alarm at night)

Tripwire, Traffic Light Detection

Object Counting

The OSD of streaming #4 is disabled, if Motion Detection gets enabled.

Mirror and Flip will be turned off due to changing IVS.


Submit

Note: IVS model only

6-4-2 Motion Detection

Once the above configurations are set, click Motion Detection to determine the areas to monitor. Simply double-click or drag across the areas you want to monitor, and cancel your selection by double-click again or drag across the areas you don't want to monitor with the right mouse button.

Advance >> Event >> Motion Detection



Motion Detection Enable Disable

Motion Sensitivity(Low:99~High:1) 30

Submit Clean

6-4-3 Tampering Detection

Tampering Detection Enable Disable
Tampering Detection Time Sec.
Tampering Detection Dwell Sec.

The IP camera can send tamper alarms when the focus or view of the IP camera is changed, or the lens is obstructed by paint or stain. Click Enable to activate this function and configure the settings.

6-4-4 Alarm Detection

If you connect an external alarm digital input to the IP camera, enable Alarm Notification and switch between NO (normally open) and NC (normally closed) for the input.

Advance >> Event >> Alarm Detection

Alarm Notification Enable Disable
Alarm Input Mode NO NC

6-4-5 Network Detection

Enable this option to send a notification upon network failure.

Advance >> Event >> Network Detection

No Network Activity Disable
 No Network Detection
 No Stream Connection Detection

6-4-6 Push Service Setting

After an alarm event occurs, iOS or Android alarm events can be pushed. When IPCamPlus is connected to the camera, this form will record the ID of the push phone. You can use this form to determine whether IPCamPlus has completed the connection with the camera. Click Delete to cancel the push service of the mobile phone.

Advance >> Event >> Push Service Setting

Key Version 20190520

iOS			
Number	ID	Action	Status
1		<input type="button" value="Delete"/>	
2		<input type="button" value="Delete"/>	
3		<input type="button" value="Delete"/>	
4		<input type="button" value="Delete"/>	
5		<input type="button" value="Delete"/>	
6		<input type="button" value="Delete"/>	
7		<input type="button" value="Delete"/>	
8		<input type="button" value="Delete"/>	
9		<input type="button" value="Delete"/>	
10		<input type="button" value="Delete"/>	

6-5 Notification

System

Video / Audio

Network

Event

Notification

Maintenance

6-5-1 FTP Service

Enter the required FTP information to send alarm snapshots to an FTP server.

Note: When used with WISE, the WISE controller will set the related FTP parameters actively.

Advance >> Notification >> FTP Service

FTP/DNS Server	<input type="text" value="192.168.255.101"/>
FTP/DNS Server Port	<input type="text" value="21"/>
Account	<input type="text" value="admin"/>
Password	<input type="password" value="*****"/>
Directory	<input type="text" value="/IPCamera/iCAM-MR6422X_255.108"/>
Prefix	<input type="text"/>
Date Format	<input type="text" value="YYMMDD_hhmmss"/> ▼
Postfix	<input type="text"/>
File Format	<input type="text" value="Encoder3"/> ▼
Auto FTP Sent	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Auto FTP Sent Dwell time	<input type="text" value="1 Hour"/> ▼

- FTP server IP/DNS— IP address or domain name of the FTP server
- Account— account name to log in to the FTP server
- Password— password of the account
- Directory—file path for storing the JPEG snapshots
- Prefix—prefix of the JPEG filename
- Date format—date string for the JPEG filename
- Postfix—postfix of the JPEG filename

6-5-2 SMTP (Email) Service

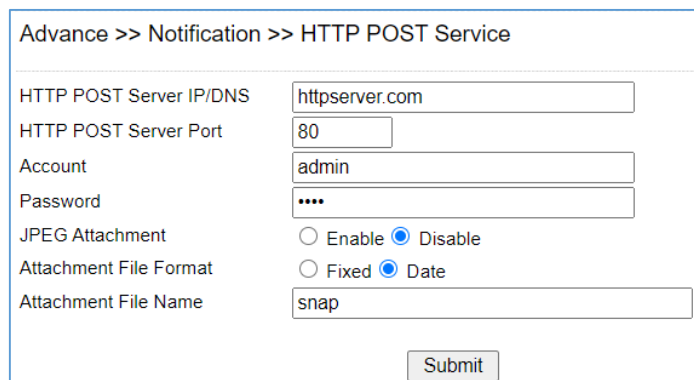
For alarm notification with JPEG snapshots, enter the required information to enable this Email notification service.

Advance >> Notification >> SMTP Service

E-mail Receiver Setting	
E-mail Address1	<input type="text" value="receiver@mail.com"/>
E-mail Address2	<input type="text"/>
E-mail Address3	<input type="text"/>
E-mail Address4	<input type="text"/>
E-mail Address5	<input type="text"/>
E-mail Sender Setting	
E-mail Address	<input type="text" value="sender@mail.com"/>
SMTP Server	<input type="text" value="mail.com"/>
SMTP Authentication	<input checked="" type="radio"/> AUTH LOGIN <input type="radio"/> AUTH SSL <input type="radio"/> AUTH TLS
SMTP Port	<input type="text" value="25"/>
Authentication	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Auth Account	<input type="text" value="sender"/>
Auth Password	<input type="password" value="****"/>

6-5-3 HTTP POST Service

Through the POST protocol, the IP camera can automatically send notification snapshots to a website if an alarm is triggered.

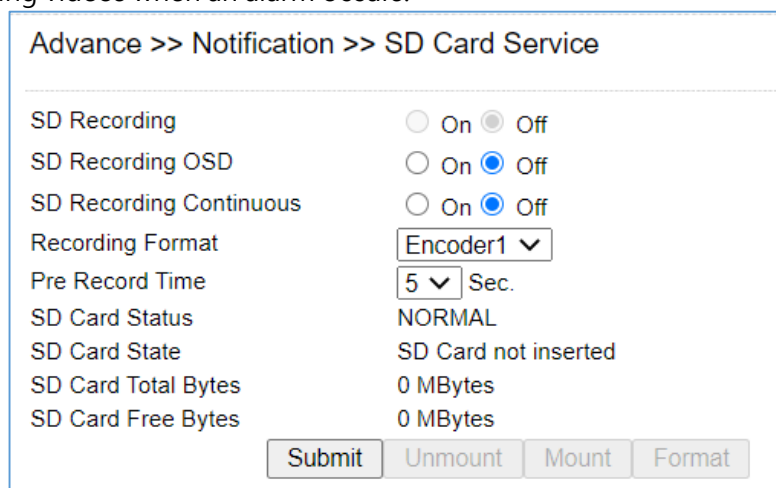


Advance >> Notification >> HTTP POST Service

HTTP POST Server IP/DNS	<input type="text" value="httpserver.com"/>
HTTP POST Server Port	<input type="text" value="80"/>
Account	<input type="text" value="admin"/>
Password	<input type="password" value="****"/>
JPEG Attachment	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Attachment File Format	<input type="radio"/> Fixed <input checked="" type="radio"/> Date
Attachment File Name	<input type="text" value="snap"/>

6-5-4 SD Card Service

Ensure a SD card is properly installed to the IP camera before you enable the SD recording option. The IP camera will start recording videos when an alarm occurs.



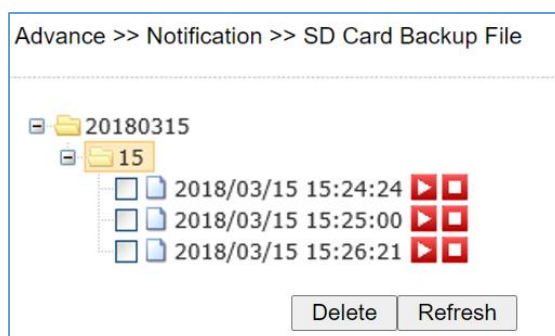
Advance >> Notification >> SD Card Service

SD Recording	<input type="radio"/> On <input checked="" type="radio"/> Off
SD Recording OSD	<input type="radio"/> On <input checked="" type="radio"/> Off
SD Recording Continuous	<input type="radio"/> On <input checked="" type="radio"/> Off
Recording Format	<input type="text" value="Encoder1"/>
Pre Record Time	<input type="text" value="5"/> Sec.
SD Card Status	NORMAL
SD Card State	SD Card not inserted
SD Card Total Bytes	0 MBytes
SD Card Free Bytes	0 MBytes

Warning: Ensure to click Unmount before removing the SD card, or the system may crash.

6-5-5 SD Card Backup

To download a specific clip, right-click the file you want to download and save the AVI file to a local PC.



Advance >> Notification >> SD Card Backup File

- 20180315
 - 15
 - 2018/03/15 15:24:24
 - 2018/03/15 15:25:00
 - 2018/03/15 15:26:21

6-5-6 SAMBA Service

The streaming of the IP camera can be recorded as AVI files to a Samba server. Continuous and pre-alarm recordings are available. To do so, provide required information for Samba service. Circular recording is available for overwriting the oldest recording files if the Samba server gets full.

- **Samba Recording:** Enable Samba recording service.
- **Samba Recording OSD:** Timestamp OSD on the AVI files
- **Recording Format:** The resolution of the AVI files
- **Pre-record Time:** Pre-alarm recording based on the alarm settings
- **Samba Server IP:** The IP address of the Samba server
- **Samba Server's Port:** The port number of the Samba server
- **Samba Server Password:** The password of the Samba server
- **Samba Server Directory:** The target path of the recordings on the Samba server
- **Samba Status:** The connection status of the Samba server
- **Samba Total Bytes:** The storage size of the Samba server
- **Samba Free Bytes:** The free storage size of the Samba server

Advance >> Notification >> SAMBA Service

SAMBA Recording	<input type="radio"/> On <input checked="" type="radio"/> Off
SAMBA Recording OSD	<input type="radio"/> On <input checked="" type="radio"/> Off
SAMBA Recording Continuous	<input type="radio"/> On <input checked="" type="radio"/> Off
Recording Format	Encoder1 ▾
Pre Record Time	5 ▾ Sec.
SAMBA Server IP	<input type="text" value="192.168.0.100"/>
SAMBA Server PORT	<input type="text" value="5000"/>
SAMBA Server Account	<input type="text" value="admin"/>
SAMBA Server Password	<input type="password" value="...."/>
SAMBA Server Directory	<input type="text" value="/Public"/>
SAMBA Status	NORMAL
SAMBA State	SAMBA service is not connected
SAMBA Total Bytes	0 MBytes
SAMBA Free Bytes	0 MBytes
	http://192.168.0.100:5000
	<input type="button" value="Submit"/> <input type="button" value="Disconnected"/> <input type="button" value="Connected"/>

6-5-7 MQTT Service

The IP camera provides MQTT service. MQTT server is widely used by IoT applications. The IP camera provides MQTT service for (1) event notifications, (2) controls and (3) returns. The services of Publish and Subscribe are supported. For more programming information, visit web site for IP Camera MQTT SDK.

To configure MQTT service, follow the descriptions below:

- **MQTT Status:** Enable MQTT service of the IP camera
- **MQTT Server:**The MQTT server
- **MQTT Port:** The port number of the MQTT server
- **MQTT Client ID:** The client ID of the camera for uniqueness
- **MQTT UUID:** The MQTT UID of the camera
- **Authentication:** Enable authentication for accessing the IP camera
- **Account:** The account for accessing the IP camera
- **Password:** The password for accessing the IP camera

Advance >> Notification >> MQTT Service

MQTT Status	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
MQTT Server	<input type="text" value="mqtt.cc"/>
MQTT Port	<input type="text" value="1883"/>
MQTT Client ID	<input type="text" value="000ffc51e63e"/>
MQTT UUID	<input type="text" value="477_000ffc51e63e"/>
Authentication	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Account	<input type="text" value="admin"/>
Password	<input type="text" value="pass"/>

Publish:
ipcam/477_000ffc51e63e/device/event

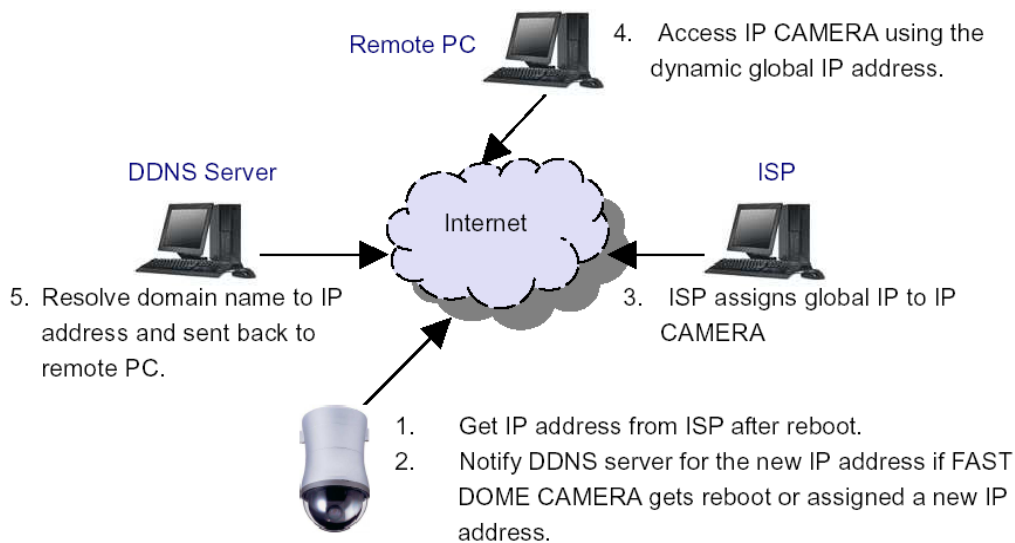
Subscribe:
ipcam/477_000ffc51e63e/device/event

Appendix

DDNS and PPPoE Network Settings

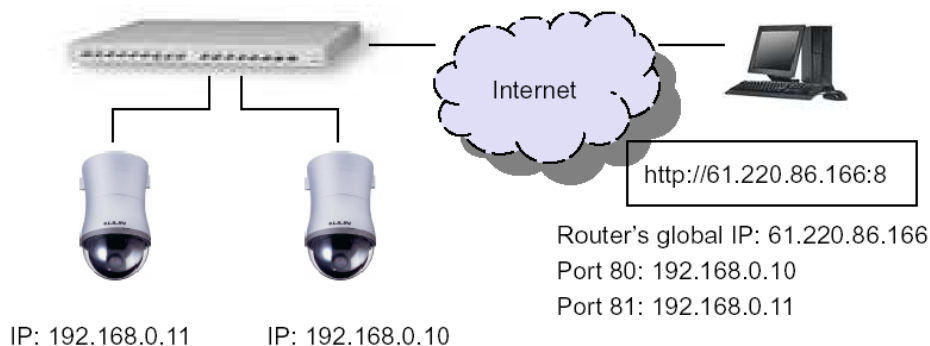
One of the advantages of adopting DDNS and PPPoE services is to save the cost of renting a global IP address. When you power on a IP camera with a video server and connect to the Internet with the PPPoE service, the camera asks your ISP for a dynamic global IP address. This Internet-accessible IP address will be renewed by the ISP every time you log on the Internet.

Whenever the IP is changed, the camera with the video server will notify the DDNS server of your new IP address. A remote user who intends to connect to the camera with the video server can enter the domain name in the web browser. The domain name will be translated to a new IP address to be used by the camera.

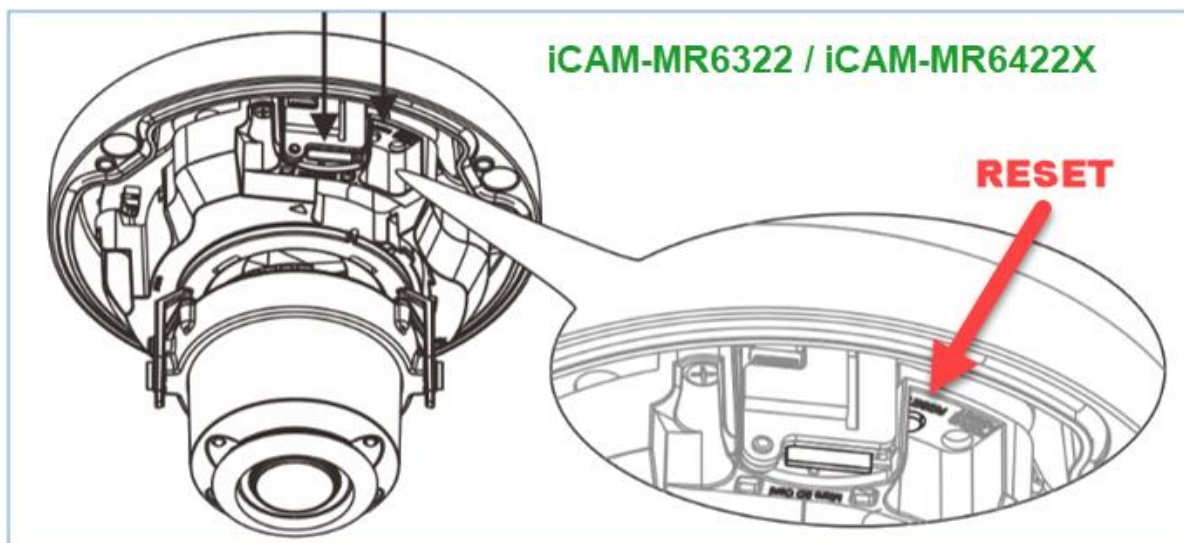


Advanced Port Forwarding Technology

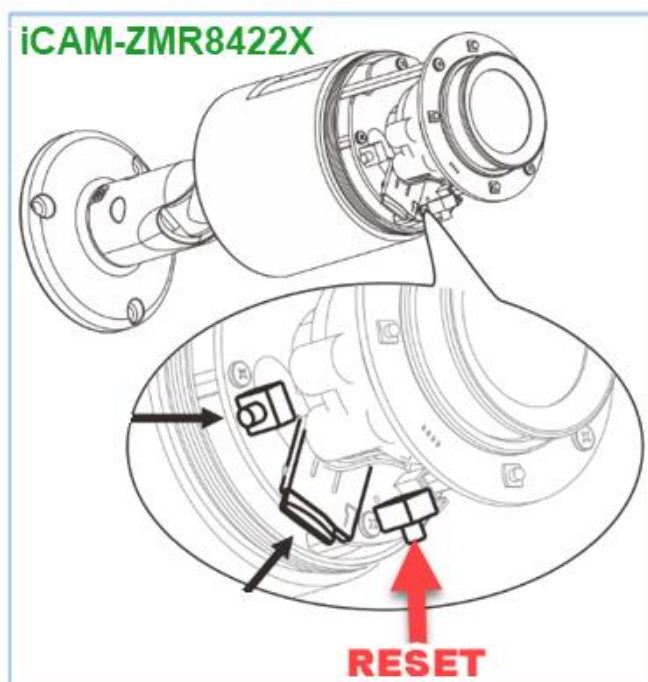
Communication port forwarding technology has been widely used to share a global Internet IP to other devices on the network. The infrastructure of this technology is shown in the below figure, in which the port 80 of the IP router is forwarded to the device with an IP of 192.168.0.10, and the port 81 of the router is forwarded to the device with an IP of 192.168.0.11. When a remote PC on the Internet tries to access the port 81, the user is actually accessing 192.168.0.11, private IP given by the router.



Restore to Factory Default



- To restore the IP camera to the factory default, follow the below procedures:
 1. Remove the cover of IP Camera. Press and hold the **RESET** button (as the figure) for more than **10** seconds until the Len LED flashes once, then release the button.
 2. The IP camera will restart.
 3. Launch to IPScan Utility to search for the IP camera.
 4. Access the IP camera via an Internet browser.
 5. Enter the default username (**admin**) and password (**pass**).

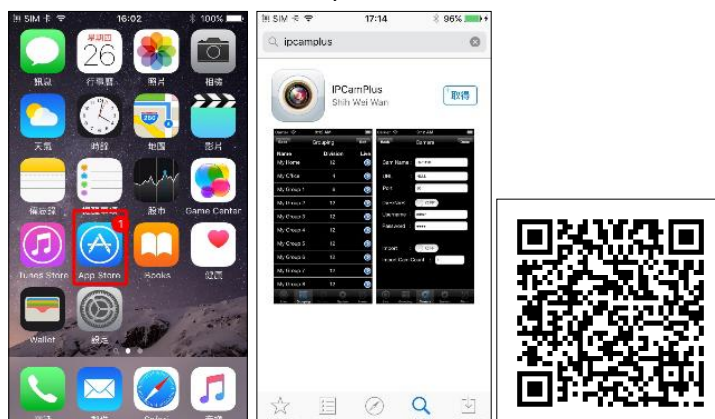


Default camera IP/user name/password:

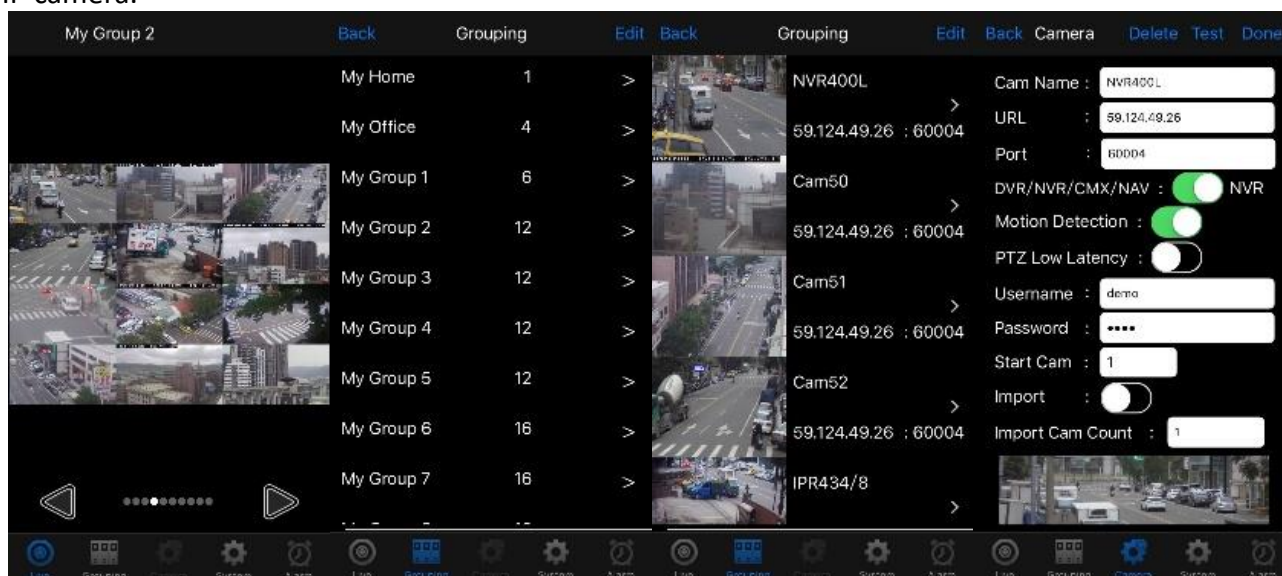
IP: 192.168.0.200	Username: admin
Subnet Mask: 255.255.255.0	Password: pass
Gateway: 192.168.0.1	

For iPhone Users

Tap App Store, and search and download **IPCamPlus**. Or, you can scan the QR Code below:



Open **IPCamPlus**, then choose tab **Groupings**. Select a group, choose an IP camera type, and add a IP camera.



Next, enter IP camera information as follows:

1. Cam Name: IP Camera or DVR camera name
2. URL: IP address
3. Port
4. Enter your username and password. The default IP camera user name is **admin**, password **pass**. The default DVR user name is **admin**, password **1111**.

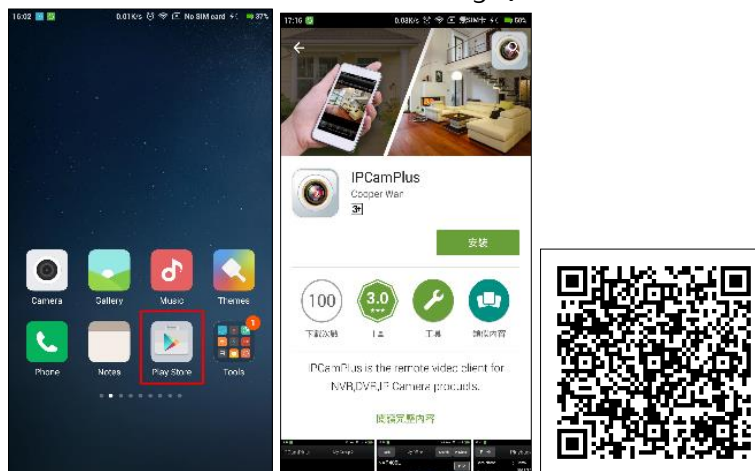
After you enter the above information, tap **Done** to save the changes, and the live view of your IP camera or DVR will appear.

Note:

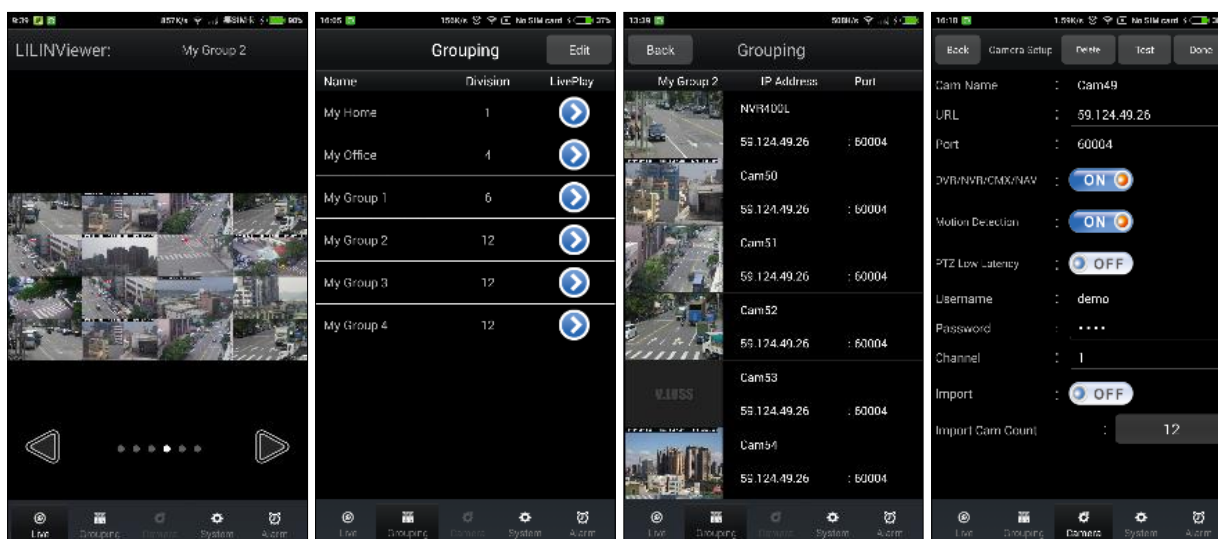
The IPCamplus APP communicate with the camera directly through the IP address, not through the network service platform. Therefore, to connect the camera from the external network to the internal network, you need to ask the network administrator to set the NAT on the router. Although it is not very convenient, but, it does not need to go through the network service platform, the security of the data can be ensured, and It is no need to worry about the IPCamplus APP being unavailable after the network service platform stops serving.

For Android Users

Tap Play Store to download IPCamPlus, or scan the following QR code.



Open **IPCamPlus**, then choose tab **Groupings**. Select a group, choose a IP camera type, and add an IP camera.



Next, enter IP camera information as follows:

1. Cam Name: IP Camera or DVR camera name
2. URL: IP address
3. Port
4. Enter your username and password. The default IP camera user name is **admin**, password **pass**.
The default DVR user name is **admin**, password **1111**.

After you enter the above information, tap **Done** to save the changes, and the live view of your IP camera or DVR will appear.

Note:

The IPCamplus APP communicate with the camera directly through the IP address, not through the network service platform. Therefore, to connect the camera from the external network to the internal network, you need to ask the network administrator to set the NAT on the router. Although it is not very convenient, but, it does not need to go through the network service platform, the security of the data can be ensured, and It is no need to worry about the IPCamplus APP being unavailable after the network service platform stops serving.