2-MegaPixel FullHD WDR IP SPEED DOME CAMERA

User Manual
DN-16085

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All lead-free products offered by the company comply with the requirements of the European law on the Restriction of Hazardous Substances (RoHS) directive, which means our manufacture processes and products are strictly “lead-free” and without the hazardous substances cited in the directive.

The crossed-out wheeled bin mark symbolizes that within the European Union the product must be collected separately at the product end-of-life. This applies to your product and any peripherals marked with this symbol. Do not dispose of these products as unsorted municipal waste. Contact your local dealer for procedures for recycling this equipment.

This apparatus is manufactured to comply with the radio interference requirements.

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This equipment has been tested and found to comply with the limits for a Class B digital service, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user’s authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.
- FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.
- All external cables connecting to this basic unit must be shielded.
  For cables connecting to PCMCIA cards, see the option manual or installation instructions.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device mat not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

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We are pleased to provide our modifications to the Linux Kernel, as well as a few new commands, and some tools to get you into the code. The codes are provided on the FTP site, and please download them from the following site or you can refer to your distributor:

http://download.dvrtw.com.tw/GPL/IPCAM/A-Seriers/linux.tar.gz

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1. OVERVIEW

1.1 Product Features

- **Quick network setup** with your iOS® / Android™ mobile device
- **External alarm I/O device connection**
  -- For more accurate detection
- **POE (Power-over-Ethernet)** support to eliminate the use of power cables and reduce installation costs
- **ONVIF** standard supported to simplify system integration
- **Remote Surveillance**
  -- Fully compatibility on **iPhone & iPad**, and **Internet Explorer** on Windows operating system
- **PTZ mechanism** for wide and seamless surveillance
- Zoom lens of f6.0 ~ 60mm with **10x optical zoom**, **16x digital zoom** and **auto focus**, suitable for various monitoring environments
- Up to **16 preset points** & **4 sequence groups** for regular monitoring
- **WDR** support to make everything still visible and clear in a scene where exists both bright and dark areas

1.2 Package Content

■ **Standard package**

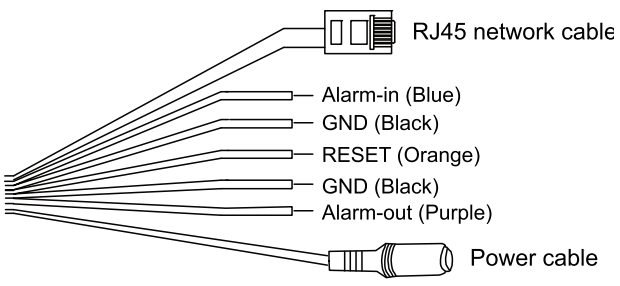
☐ IP camera	☐ Quick guide

■ **Optional Bracket**

☐ Bracket	☐ Mounting base
☐ Screws	

Note: Below is the bracket we have to use with this camera, and it is not supplied in the camera sales package. Please purchase separately.

1.3 Cable Overview



Color	Cable	Description
--	Power cable	DC12V power supply.
--	RJ45 network cable*	Connect it to a RJ45 cable.
Black & Brown	GND	Ground wire
Yellow	Alarm-in	Reserved for external alarm device connection
Pink	Alarm-out	Reserved for external alarm device connection
Red	RESET	Remove the insulating coating of wire, and twist it with a ground wire together to reset default camera

* For PoE (IEEE802.3af) installation, make sure your network cable has the maximum cable resistance of 20Ω, such as CAT.5e or CAT.6 cables, to conform to the standard of IEEE802.3af.

2. CAMERA ACCESS WITH INTERNET EXPLORER

This camera can be accessed via Microsoft® Internet Explorer®, and iOS® / Android™ mobile devices with our self-developed program “EagleEyes” installed depending on different using situations.

Note: For details about accessing this camera via iOS® / Android™ mobile devices, please refer to http://www.eagleeyescctv.com.

Before using the camera, make sure you have configured the network settings, and the network connection is fine.

- For network configurations, please refer to “**Advanced Network Setup**” downloadable from www.surveillance-download.com/user/m571.swf.

2.1 Camera Login

Step1: Open your web browser, and key in http://*ipaddress*:*portnum* in the URL address box.

For example, for the IP address 60.121.46.236 and port No. 888, please key in ”http://60.121.46.236:888” into the URL address box, and press “Enter”.

Step2: In the login page, key in the user name and password, and enter the security code from the image below if any. Then, click “LOGIN”.

Step3: The wizard is then started.

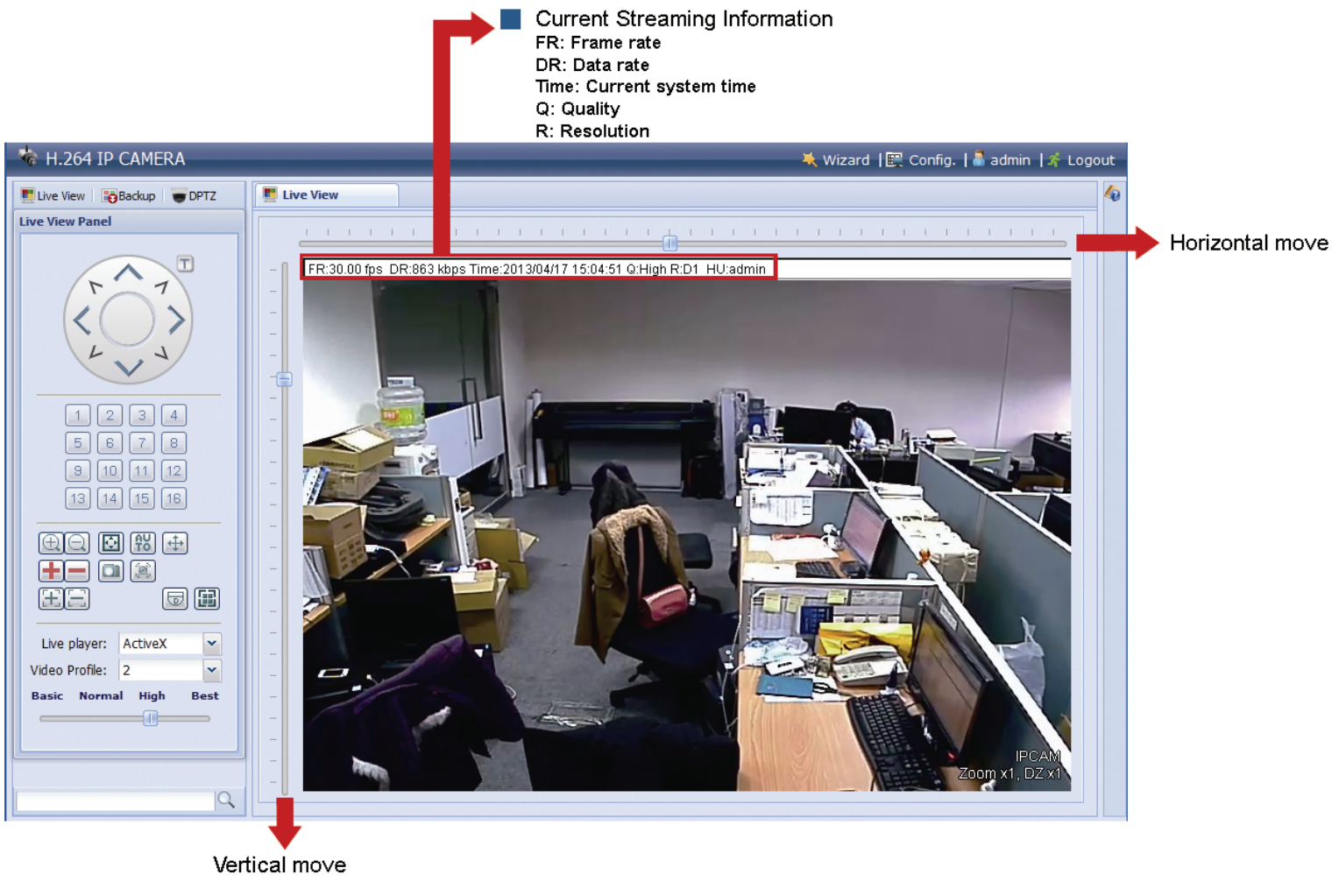
- To skip the wizard and directly access the camera live view, click “Close”.
- To directly access the camera live view without starting the wizard for the login next time, check “Do not start wizard at login”.

Note: If you’re prompted to install “VLC player”, “Software” or “H264 Streaming Viewer”, please agree to proceed the installation. Or, you might not be able to see the live view properly.

Step5: When the login is successful, the live view is shown.

2.2 Control Panel Overview

Note: The buttons available depend on the camera model you have, and the user level used to log in.



Function	Icon	User Level	Description
Live		Supervisor / Power User / Normal User / Guest	Switch to the live view page.
DPTZ		Supervisor / Power User / Normal User	Switch to the DPTZ configuration page. For details, please refer to “2.3 Digital PTZ (DPTZ) Operations” at page 8.
Backup		Supervisor / Power User	Enter the event record list for video playback. For details, please refer to “2.4 Event Record Search & Playback’ at page 9.
Config.		Supervisor	Switch to the system configuration page, and the functions available for “Supervisor” and “Power User” are different. For details, please refer to “3.1 System configuration menu” at page 10.
Arrow keys panel	--	Supervisor / Power User / Normal User	Click to move the camera lens up / up-left / down / up-right / left / down-right / right / down-left.
Turbo		Supervisor / Power User / Normal User	Speed up one mouse-click from 1 to 10. Note: When this function is enabled, the supported buttons will turn to red. Ex: If the value of the turbo step is set to 5, one mouse-click will function as 5 mouse-clicks when you click the arrow keys. To use this function, you need to set it in “General” → “General”.
Preset points	--	Supervisor / Power User / Normal User	Click the numbering of the preset point you want to move the PTZ camera to the selected preset point. To set preset points, please refer to “3.3.2 Preset” at page 16.
Zoom-in / out		Supervisor / Power User / Normal User	Click to zoom in / out the current image.
Max. Zoom-in / out		Supervisor / Power User / Normal User	Click to zoom in the image to the largest / zoom out the image to its original size.
Focus near / far		Supervisor / Power User / Normal User	Click to adjust the clearness of the video images.
Full Screen		Supervisor / Power User / Normal User	Click to display the image in full screen. To exit the full screen mode, press “Esc” on your keyboard.
Snapshot		Supervisor / Power User / Normal User	Click to take a snapshot of the current view on a new window. Right click on the picture and re-save it to the location you want.
Auto Mode		Supervisor / Power User / Normal User	Click to activate the auto function. Before using it, you need to assign a specific function that will be enabled when “AUTO” is clicked. For details, please refer to “3.3.3 Cruise” at page 16. *This function will be disabled when DPTZ is enabled.*
Auto Move		Supervisor / Power User / Normal User	Click to enable the auto move function. It allows the camera to move to the direction where your cursor stays. *This function will be disabled when DPTZ is enabled.*
Manual Alarm Out		Supervisor / Power User / Normal User	Click to force the connected alarm-out device to work. For example, when your alarm device is a buzzer, click this button and your buzzer will start to sound even if there’s no alarm event.
Live View Size:		Supervisor / Power User / Normal User	
Normal Size			The current live view size is the same as the selected resolution.
Fit to screen			The selected resolution is resized to fit into the current live view size. *This icon doesn’t work when the selected resolution is VGA or QVGA.*
Scale*			Click and hold the movable square on the left bottom corner of the live view to move *This icon appears only when the selected resolution is larger than the current live view size.*
Double Size			The QVGA resolution is resized to fit into the current live view size. *This icon appears only when the selected resolution is QVGA (320 x 240) or CIF (352 x 240).*
DPTZ		Supervisor / Power User / Normal User	Click to enable digital PTZ functions with zoom-in ratio up to 16X.
Focus Zone		Supervisor / Power User / Normal User	Click to assign the point for focus adjustment. *This function will be disabled when DPTZ is enabled.*

Function	Icon	User Level	Description
Live player	--	Supervisor / Power User / Normal User / Guest	Select the image player from the drop-down list: ■ ActiveX ■ QuickTime QuickTime is Apple Inc.'s multimedia software. You need to have QuickTime installed in your operating system before selecting "QuickTime". When it is selected, you will be promoted to enter the user name and password to access the camera. ■ VLC
Video Profile	--	Supervisor / Power User / Normal User	Select the image resolution from the drop list: ■ 1920 x 1080 ■ 1280 x 720 ■ 720 x 480 ■ 352 x 240
Quality	--	Supervisor / Power User / Normal User	Click & drag the slider to select the video quality: Basic / Normal / High / Best.

2.2.1 Pan- / Tilt-Move Manually

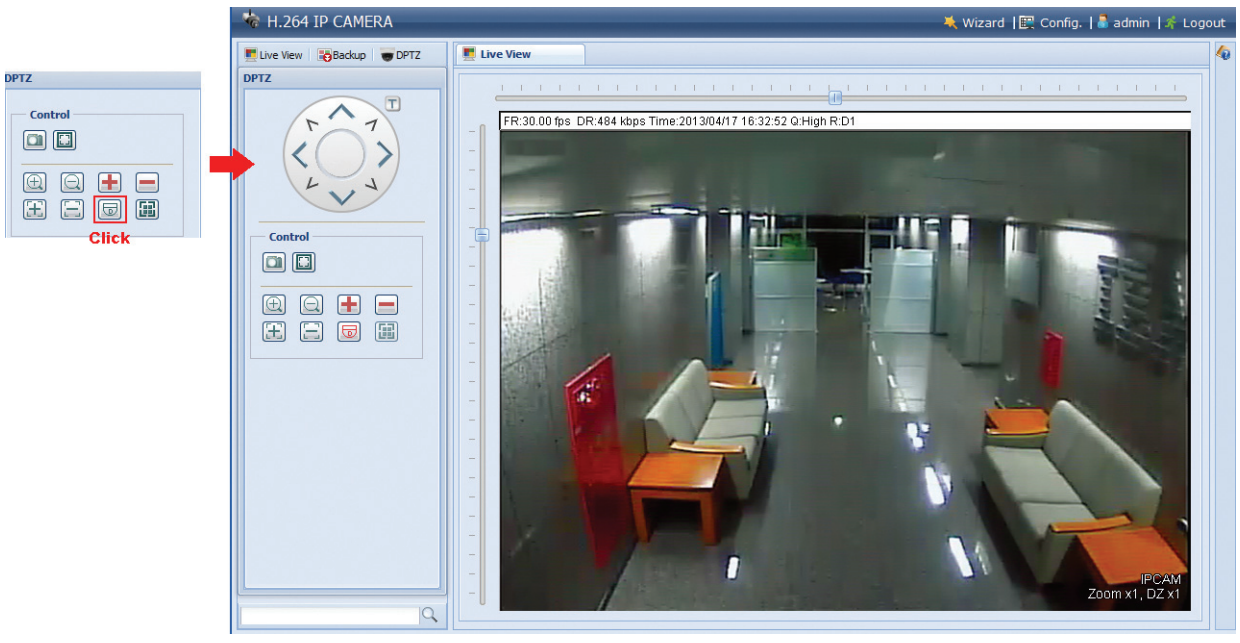
There are three ways to manually move the camera view by:

- Using the arrow key panel
- Hot point – Directly click on the live view to move the camera view.
- Using sliders – Click and drag sliders on the top and left side of the live view to move the camera view.

2.3 Digital PTZ (DPTZ) Operations

This camera series has PTZ capability, i.e. digital PTZ (hereafter called "DPTZ"), for wide area monitoring.

Click "DPTZ" on the top left corner to show the DPTZ control panel.

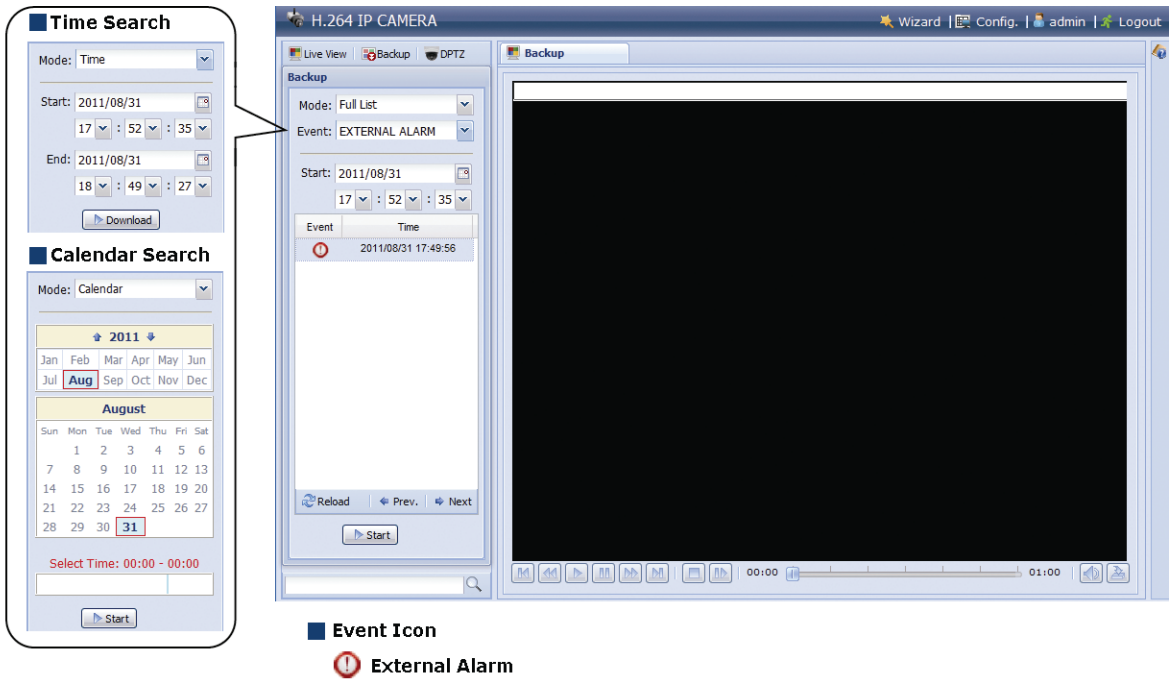


FUNCTION	ICON	DESCRIPTION
Moving panel	--	When is selected, the moving control panel will be shown to move the picture after zoom-in is performed.
Take snapshots		Click to take a snapshot of the current view on a new window. Right click on the picture and re-save it to the location you want.
Fit to screen		The selected resolution is resized to fit into the current live view size. *This icon doesn't work when the selected resolution is VGA or QVGA.*
Zoom in / out	/	Click once to enlarge the picture by 1X, and click once to restore the zoom ratio by 1X.
Max. zoom in / out	/	Click once to enlarge the picture to the max zoom ratio by 16X, and click once to restore the picture ratio to 1X.
Focus near / far	/	Click to adjust the clearness of the video images.
Focus Zone		Click to assign the point for focus adjustment. *This function will be disabled when DPTZ is enabled.*

2.4 Event Record Search & Playback

This camera can only save a few recordings.

Note: To save more recorded data, it's recommended to use this camera with the compatible NVR.



/	Previous / Next Hour	Click to jump to the next / previous time interval in an hour, for example, 11:00 ~ 12:00 or 14:00 ~ 15:00, and start playing the earliest event video clip recorded during this whole hour.
	Fast Forward	Increase the speed for fast forward. Click to get 2X, 4X, 8X & 16X speed forward eventually.
	Fast Rewind	Increase the speed for fast rewind. Click to get 2X, 4X, 8X & 16X speed rewind eventually.
	Play	Click to play the current video clip.
	Pause	Click to pause the video playback.
	Stop	Click to stop the video playback.
	Step	In the pause mode, click to get one frame forward.
	Audio	Click to mute the playback if necessary, and click again to restore.
	Download	Click to download the current video clip to the specified path in your PC. *The downloaded video can only be opened by our own video player. Please go to "General" → "Maintenance" to download the video player, or get the player from the CD supplied with the sales package.*

3. CAMERA CONFIGURATIONS

Users can further configure this camera by accessing via Internet Explorer.

3.1 System configuration menu

Click “Config.” to enter the configuration page.

Note: You need to be “Supervisor” to enter the system configuration page. If you’re not a “Supervisor”, please re-log into the camera with the correct user name and password.

The functions are categorized into six menus: Network, Camera, Record Timer, Storage, Trigger and General.

- For details about “Network”, please refer to “3.2 Network” at page 11.
- For details about “Camera”, please refer to 3.3 Camera” at page 16.
- For details about “Camera”, please refer to “3.4 Record” at page 18.
- For details about “Storage”, please refer to “3.5 Storage”’ at page 19.
- For details about “Trigger”, please refer to “3.6 Trigger” at page 20.
- For details about “General”, please refer to “3.7 General” at page 20.

Main Menu	Sub-Menu	Reference
Network	Network	Configure network settings.
	QoS	Limit the data flow for live streaming.
	DDNS	Enter DDNS information when the network type is PPPOE or DHCP.
	SNTP	Synchronize your camera time with the networked computer systems.
	FTP	Enter the FTP information for event notifications when “FTP” is chosen in “Trigger” → “Trigger”.
	Mail	Enter Email information for event notifications when “Email” is chosen in “Trigger” → “Trigger”.
	SMS	Enter text messaging information for SMS notifications when “SMS” is chosen in “Trigger” → “Trigger”.
	Filter	Choose to permit or block the IP address(es) which can access this camera.
	UpnP	**Suitable for Windows-based operating system.* Allow this camera to be detected among devices within the same network area for easy and quick usage.
	Bonjour	**Suitable for Apple Mac-based operating system.* Allow this camera to be detected among devices within the same network area for easy and quick usage.
	RTP	Set the parameters for video data transmission when you’re using multimedia other than web browsers and Video Viewer for remote access.
Camera	Camera	1. Set the camera title. 2. Specify the display position of the camera title. 3. Specify where the snapshot files should be saved.
	Preset	Set the preset points for the DPTZ function.
	Cruise	Set the cruise mode when the auto mode is enabled: Sequence or Auto Pan.
	Video	Adjust video-related settings in different video format.
	Color	Adjust the color performance.
	Advanced	Adjust the camera parameters if necessary.
Record	Record	Configure the record function.
	Record Timer	Schedule external alarm recording.
Storage	Memory	Check the current storage capacity and clear all recorded data when needed.
Trigger	Trigger	1. Enable / disable motion and alarm detection. 2. Set the motion detection area. 3. Configure how the camera reacts for any event.

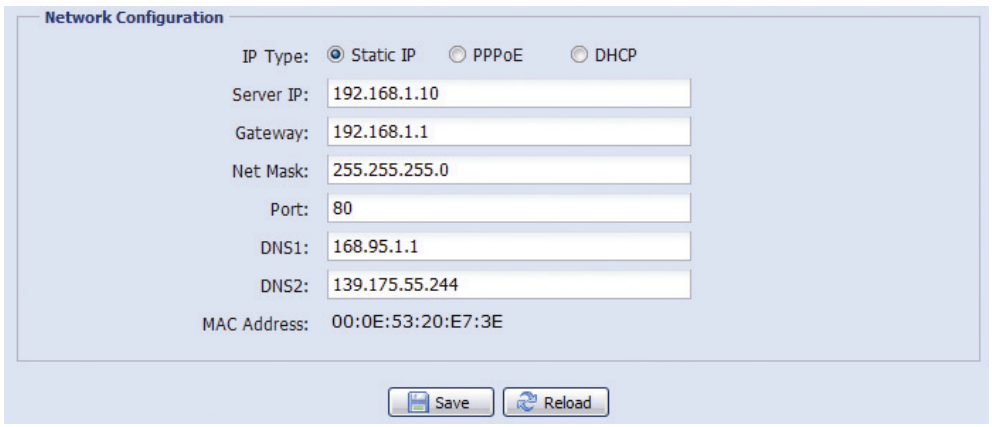
Main Menu	Sub-Menu	Reference
General	General	1. Select the language of the web browser. 2. Check the MAC address of the camera. 3. Lock camera access after the specified time.
	Time	Set daylight saving time and the current time.
	Server Log	Check the system event logs.
	Online	Check the current online user(s).
	Account	1. Create a new user account with different access privilege. 2. Modify or delete an existing user account.
	Google Maps	Allow you to know where the camera is.
	Maintenance	1. Check the current firmware version and upgrade your camera. 2. Copy system configurations. 3. Reboot the camera. 4. Download the video player to play the recorded data.

3.2 Network

3.2.1 Network

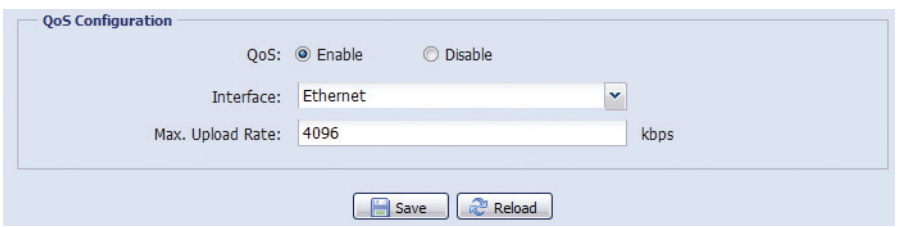
You can set the network configuration of the camera depending on your network type.

For details, please refer to “Advanced Network Setup” from www.surveillance-download.com/user/m571.swf.



3.2.2 QoS

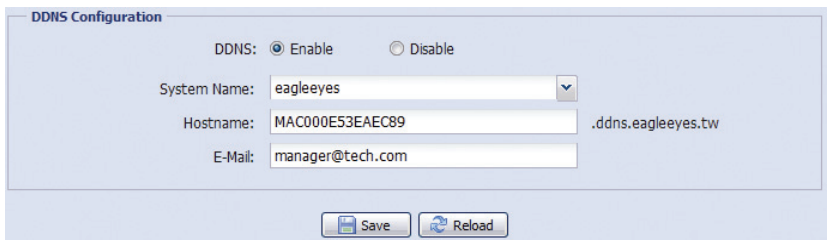
QoS, Quality of Service, is the ability to control the data flow for real-time streaming. This function is important if your network bandwidth is insufficient and you have other devices to share the network bandwidth.
Check “QoS Enable”, and set the max. upload rate from 256 to 10240 kbps.



3.2.3 DDNS

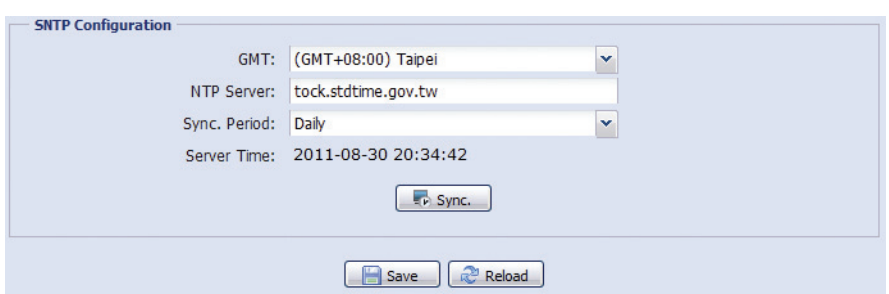
Select “On” when the selected network type in “Network” is “PPPOE” or “DHCP”.

For details, please refer to “Advanced Network Setup” from www.surveillance-download.com/user/m571.swf.



3.2.4 SNTP

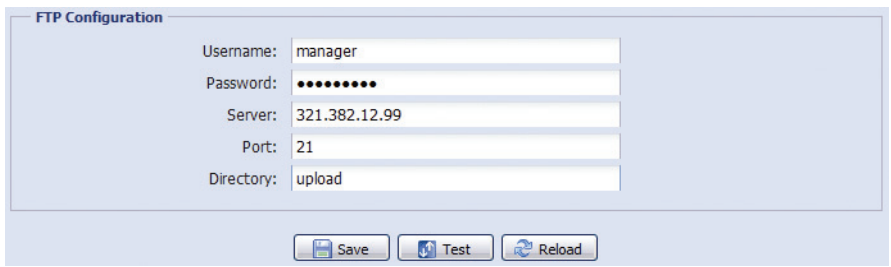
SNTP (Simple Network Time Protocol) is used to synchronize your camera time with the networked computer systems.



Function	Description
GMT	Once users choose the time zone, the camera will adjust the local area time of the system automatically.
NTP Server	Simply use the default SNTP server (For example, tock.stdtime.gov.tw) or change to another server with which users are familiar.
Sync. Period	Select “Daily” to synchronize the camera time with the network time every day or “None” to turn off this function.
Sync	Click and the camera will synchronize the time with the network time.

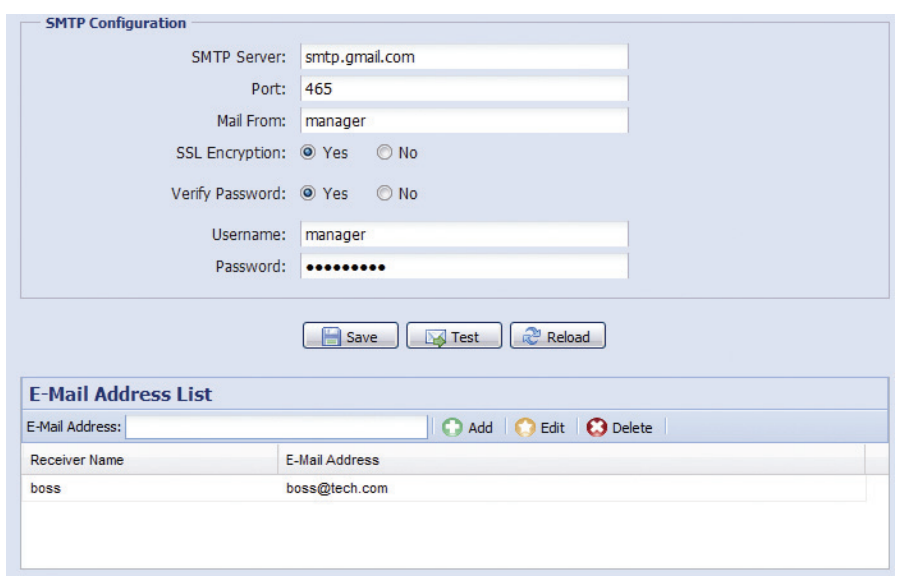
3.2.5 FTP

Enter the detailed FTP information and click “Save” to confirm. The information you set here will be applied when “FTP” is selected in “Trigger” → “Trigger”.



3.2.6 MAIL

Enter the detailed e-mail information and click “Save” to confirm. The information you set here will be applied when “Email” is selected in “Trigger” → “Trigger”.

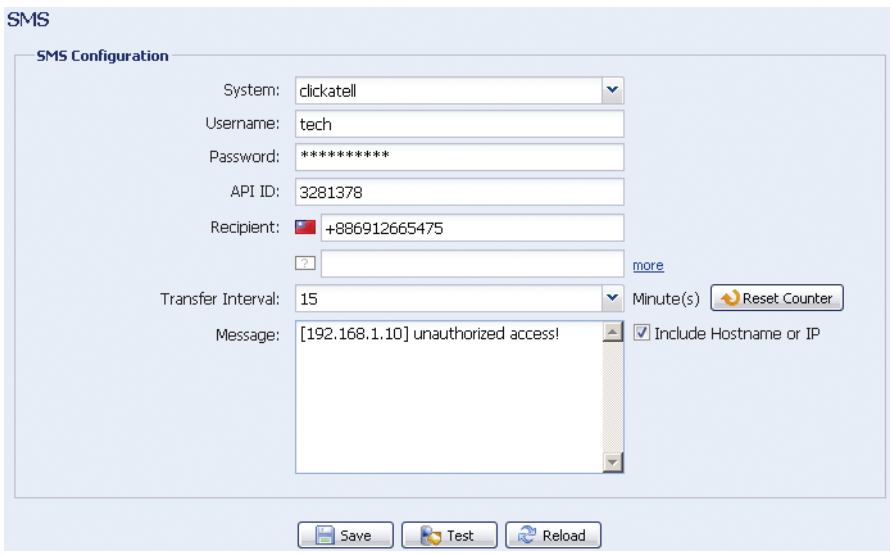


Function	Description
SMTP Server	Enter the SMTP server address provided from your e-mail system supplier.
Port	Enter the port number provided from your e-mail system supplier. If this column is left blank, the e-mail server will use port 25 to send e-mails.
Mail From	Enter the name of the sender.
SSL Encryption	Select “Yes” if your e-mail server is using SSL encryption to protect your e-mail content from unauthorized access.
Verify Password	Some mail servers are required to verify the password. Please enter the “user name” and “password”.
E-Mail Address List	Add the e-mail address(s) of the assigned recipient(s).
Test	When all information is entered, click “Test Mail” to try if the receipt.

3.2.7 SMS

Note: Before using this function, you need to apply an account and get an API ID from the mobile messaging company, such as Clickatell and EVERY8D.
For details, please refer to “APPENDIX 4 API ID APPLICATION FOR SMS MESSAGING” at page 30.

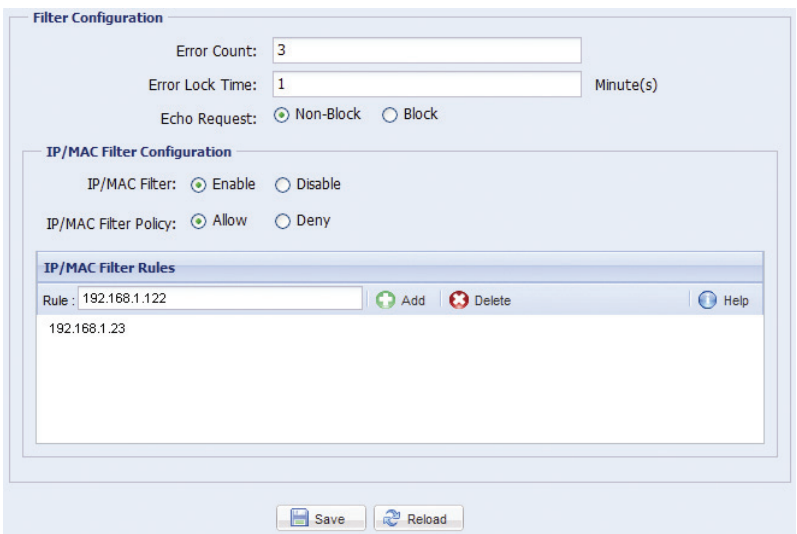
Enter the detailed information needed for text messaging, and click “Save” to confirm. The information you set here will be applied when “SMS” is selected in “General” → "Trigger".



Function	Description
System	The text messaging service provider is Clickatell.
User name / Password	Enter the account user name and password you created in Clickatell.
API ID	Enter the API ID you applied from Clickatell.
Recipient	Click “Add” to enter the phone number, including the country code, to receive the text message. Five sets of phone numbers are allowed.
Transfer Interval	Set the interval time in minutes between two-message sending. The options are 0, 15, 30 & 60.
Reset Counter	Click to restart the text messaging, and the SMS will be sent after the specified time interval since you click this button.
Message	Enter the text content (up to 70 characters) you want to send with the text message.
Test	To know whether your SMS setting is correct, click this button to immediately send a SMS to your phone. Note: This testing is not free and you will be charged for SMS sending base on your local rate.

3.2.8 Filter

Choose to permit or block the IP address(es) which can access this camera, and click “Save” to confirm.



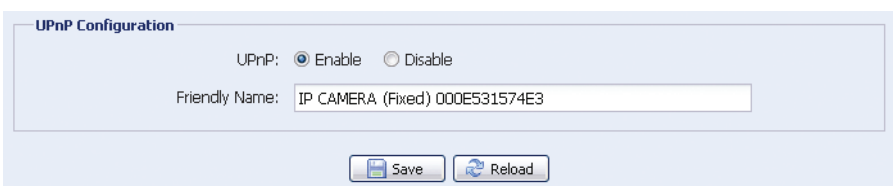
Function	Description
■ **Filter Configuration**	
Error Count	Set the maximum count for login failure. When the maximum count is reached, the IP address trying to access the camera will be locked.
Error Lock Time	Set the lock time in minutes when the maximum count of error login for an IP address is reached.
Echo Request	Select “Non-Block” to allow other users to use the ping command to detect the IP address of your camera, or “Block” to deny the ping command request.
■ **IP/MAC Filter Configuration**	
IP/MAC Filter	Choose to enable or disable the filter function.
IP/MAC Filter Policy	If “Enable” is selected, choose whether you want to permit (Allow) or block (Deny) the IP address list below.
■ **IP/MAC Filter Rules**	
Rule	• To add an item to the IP address list, key in the IP address in “Rule”, and click “Add”. • To remove an existing item in the IP address list, click the item you want to remove, and click “Delete”.

3.2.9 UPnP / Bonjour

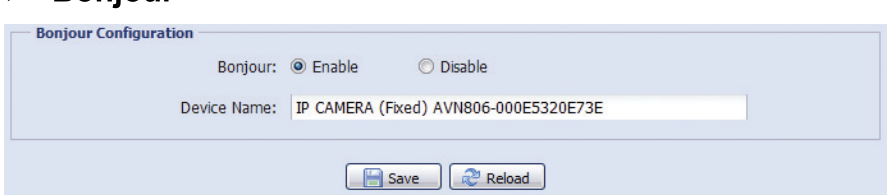
“UPnP” stands for “Universal Plug and Play”, which allows devices to connect seamlessly in the home and corporate environments and simplify installation of computer components, and is only suitable for Microsoft Windows-based operating system.

“Bonjour” functions the same as “UPnP”, but it’s only suitable for Apple Mac-based operating system.

➢ UPnP



➢ Bonjour



Check “Enable” to allow the camera to be detected among devices within the same network area, and set the identification name of the camera in “Friendly name”.

When this function is activated, the other PC within the same domain as this camera will be able to search this camera in:

- “Network Neighbor” with the identification name set in “Friendly name” for Windows-based PC, or
- “” (finder) or “Bookmark” with the identification name set in “Device Name” for Mac-based PC.

Double-click it to quickly open the web browser for camera access.

Port Mapping (Available only in UPnP)

This function can eliminate the need to additionally access the router for port forwarding.

For details, please refer to “Advanced Network Setup” from www.surveillance-download.com/user/m571.swf.

Note: Before using this function, make sure your router supports UPnP, and this function is enabled. If not, please access your router additionally for port forwarding.

When “Port Mapping” is set to “Enable”, the system will automatically assign an IP address or port number for you if no IP address or port number is entered.

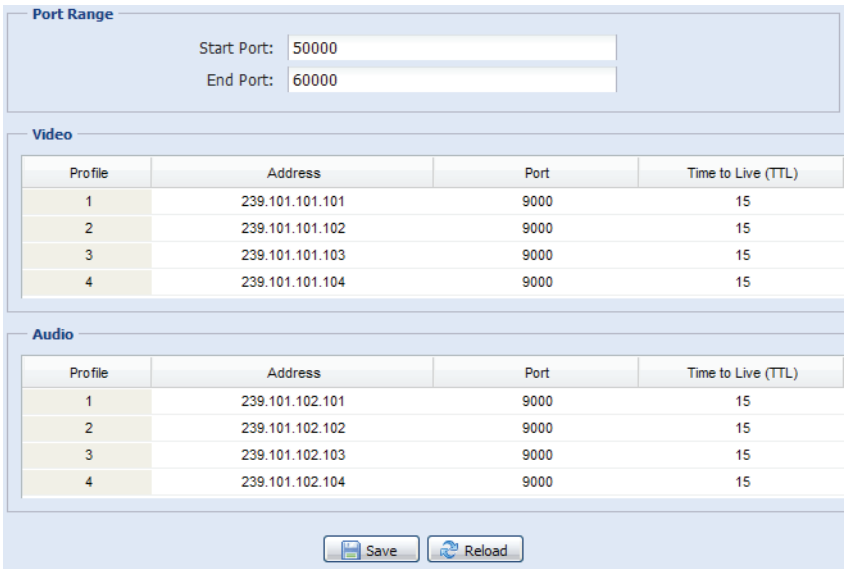
Note: When the configurations are saved successfully, you’ll see a message indicating the IP address and port number assigned to this camera.

3.2.10 RTP

The Real-time Transport Protocol (RTP) is an Internet protocol standard to manage the real-time transmission of multimedia, such as VLC player.

The media player you want to use for remote access must support RTP transmission for this function to work normally.

Note: When you’re about to end the remote access, please press the stop button on your media player first, and then close the program. This is to ensure the server receives the stop command, and also help to protect the server from redundant data transmission.



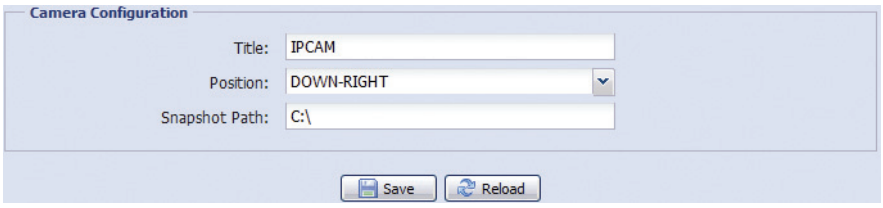
Function	Description
■ **Port Range** The port range used by RTP is limited, and preserving 100 ports between the start port and end port is necessary.	
Start Port	The range of the start port is 1024 ~ 65434.
End Port	The range of the end port is 1124 ~ 65534.
■ **Video**	
Address and port for video transmission	Set a specific address and port for multicast of profile 1 ~ 4. The range of the address is limited between 224.0.0.1 ~ 239.255.255.255. The port for multicast must be an even number.
■ **Audio**	
Address and port for audio transmission	Set a specific address and port for multicast of audio. The range of the address is limited between 224.0.0.1 ~ 239.255.255.255. The port for multicast must be an even number.

3.3 Camera

3.3.1 Camera

In this menu, you can set the camera title, and specify where to display this title on the display.

"Snapshot Path" is used to specify the path to save snapshot files.



3.3.2 Preset

Note: Before using this function, make sure the DPTZ function is enabled.

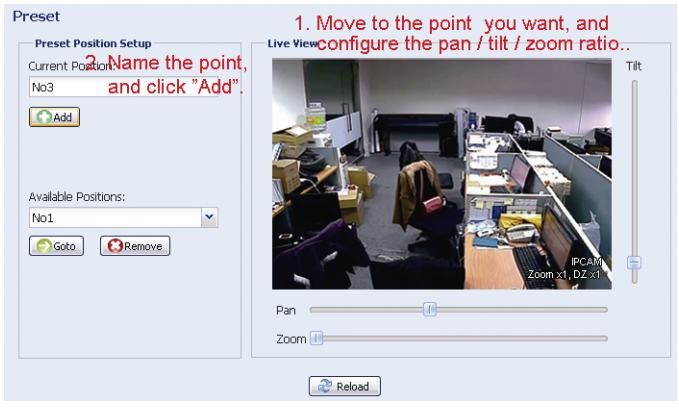
You can set new preset points (up to 16) or check existing points here.

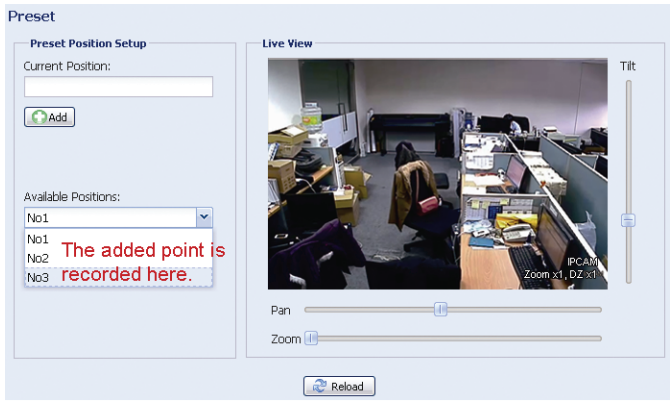
How to set a new preset point

Step1: Click DPTZ icon.

Step2: Click to where you want to see, and you'll get a 5x zoom-in image. To slightly zoom out, draw a square from the bottom right to top left, and you'll get a 3x image. Draw the square again and you'll return to the original size.

Step3: In "Current Position", give a name to this point, and click "Add".





How to check an existing preset point

In "Available Positions", select the name of the point you want to check from the drop-down list, and click "Goto".

You will see the camera view on the right side moving to the point it's recorded.

How to delete an existing preset point

In "Available Positions", select the name of the point you want to check from the drop-down list, and click "Remove".

3.3.3 Cruise

Note: Before using this function, make sure you have finished setting several preset points.

Here defines how the auto mode of the camera is going to work when AUTO is selected: Sequence or Auto Pan.

Auto Pan

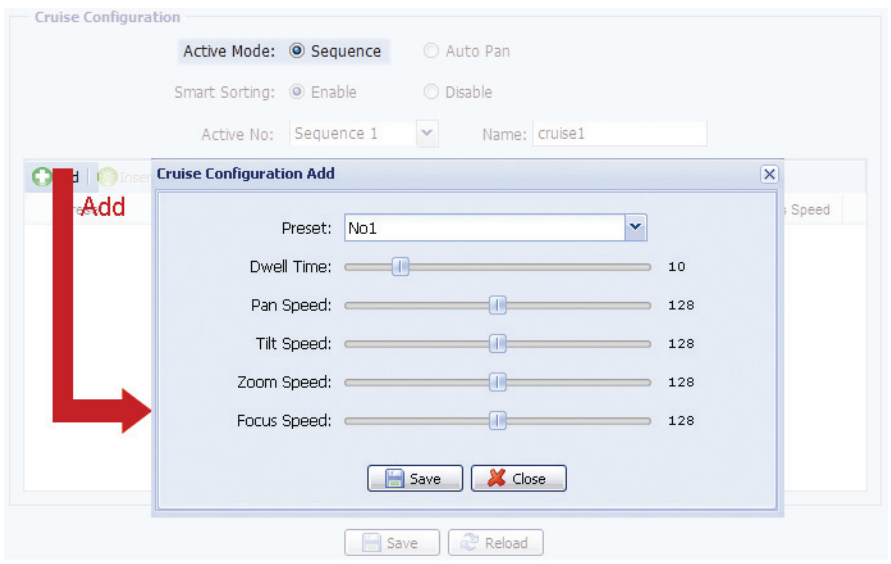
When "Auto Pan" is selected here and AUTO is clicked on the live view page, the camera will start panning.

Sequence

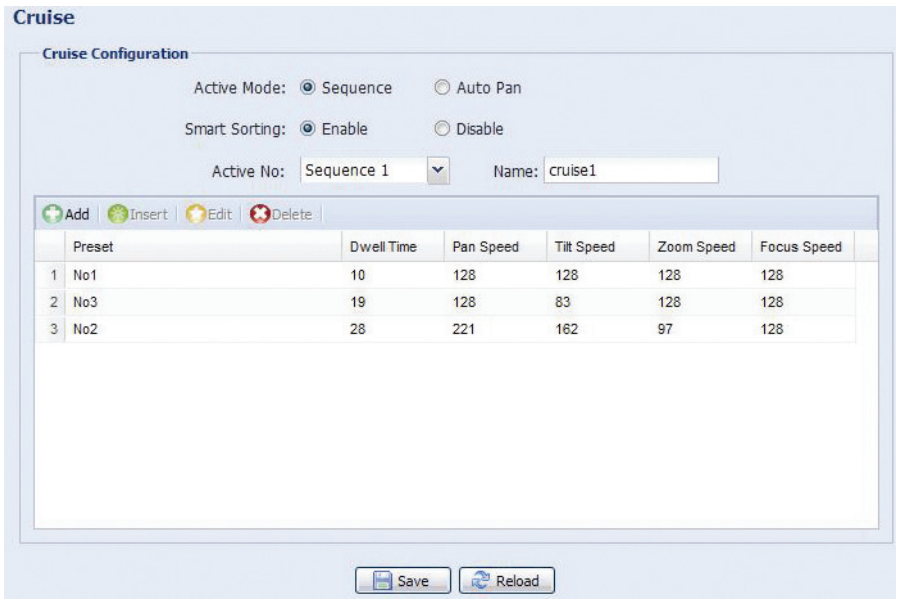
When “Sequence” is selected here and AUTO is clicked on the live view page, the camera will start patrolling each preset point defined in “Sequence”.

Step1: Click “Add” to choose a preset point from the drop-down list, and select the duration to stay at this point from 1 ~ 60 minutes.

Then, click “Save” to confirm.



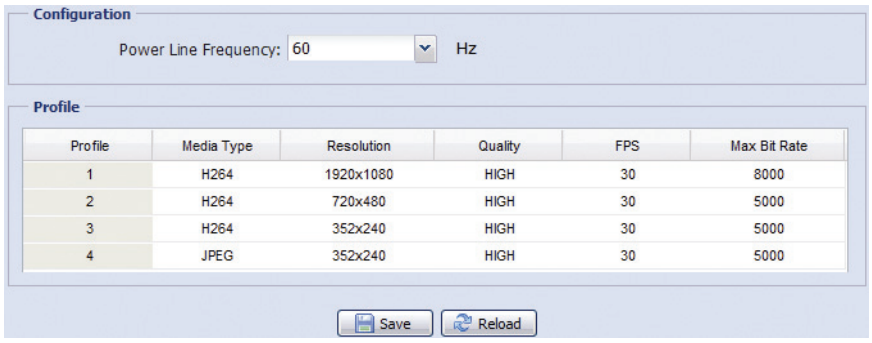
Step2: Click “Add” again to add more preset points. When all the points are added, click “Save” to confirm.



3.3.4 Video

Adjust video-related settings in different video format.

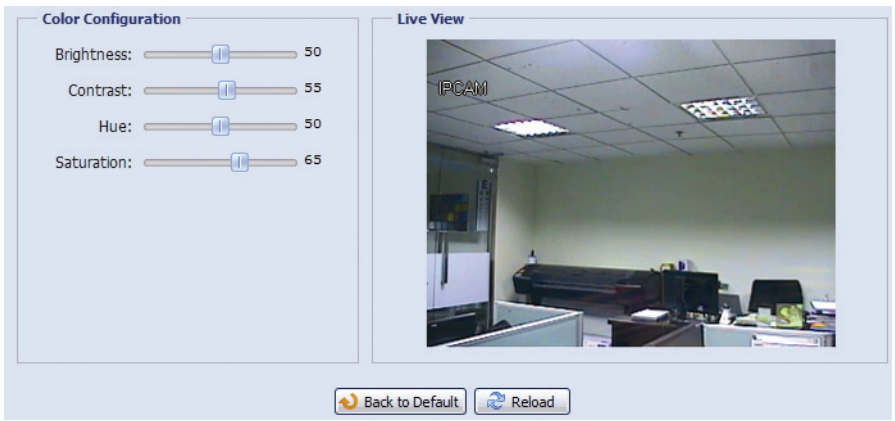
- “Quality” is related to image clearness.
- “FPS” is related to the fluency of the video. The more the FPS, the more fluent the video.
- “Max Bit Rate” is the maximum limitation of data transmission in the selected image format and resolution.



3.3.5 Color

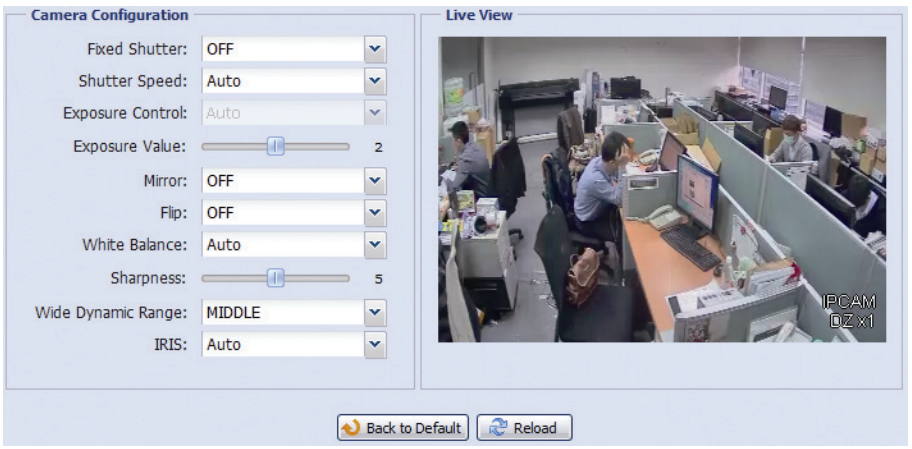
Adjust the color performance from Brightness, Contract, Hue and Saturation. Click and drag the slider to preview the color change on the right side of ths page and adjust the image color.

To restore the default values, click “Back to Default”.



3.3.6 Advanced

Adjust the camera parameters if necessary.



Item	Description
Fixed Shutter	Shutter Speed is a function that can adjust the duration of the electronic shutter to produce optimum image quality. Select the shutter speed suitable for your environment.
Shutter Speed	Select the shutter speed suitable for your environment. A slower shutter speed in dark conditions will help to produce a brighter image, but will produce fewer frames per second, which may cause images to get blurry during motion. ● When “Auto” is selected, the iris mode is “AES”. ● When a certain speed is selected, the iris mode is switched to “AI”, and the image brightness is available to adjust from “IRIS”.
Exposure Control	This function is used to synchronize the shutter time to the fluorescent light to suppress image flickering.
Exposure Value	Drag the slider to adjust the exposure level from 0 ~ 4.
Mirror	Select “ON” to rotate the images horizontally based on your installation situation when necessary.
Flip	Select “ON” to rotate the image 180° when necessary.
White Balance	Process the current image to retain color balance over a color temperature range.
Sharpness	Sharpness enhances the clarity of image detail by adjusting the aperture and sharpening the edges in the pictures. Hold and drag the slider to adjust the level of sharpness. The higher the value, the sharper the image.
Wide Dynamic Range*	Wide Dynamic Range (WDR) is used when users need to increase image recognizability in overexposure and dark areas. The options are: LOW / MIDDLE / HIGH / OFF
IRIS	IRIS is used to adjust the amount of light reaching the image sensor for best image results. When the shutter speed is selected to a certain value, the iris mode is switched to “AI”. Please adjust the image brightness here when necessary.

** For selected models only*

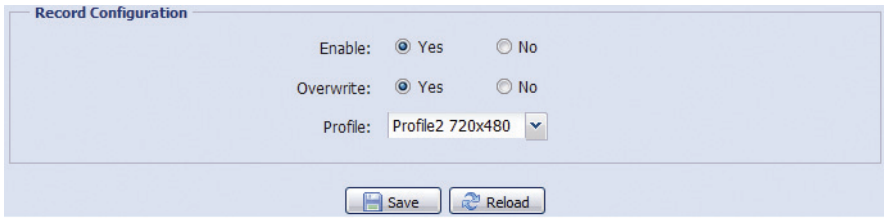
3.4 Record

3.4.1 Record

In “Record Configuration”, you can:

- Enable or disable the alarm record function. When “Enable” is set to “No”, the alarm record function is disabled even if you enable it in other configuration pages.
- Select if the data should be overwritten when the memory storage is full.
- Select the video resolution or video profile for event recording.

Note: The higher resolution you choose, the more accuracy and higher image quality the recording will be, but the faster the memory storage is consumed and become full.

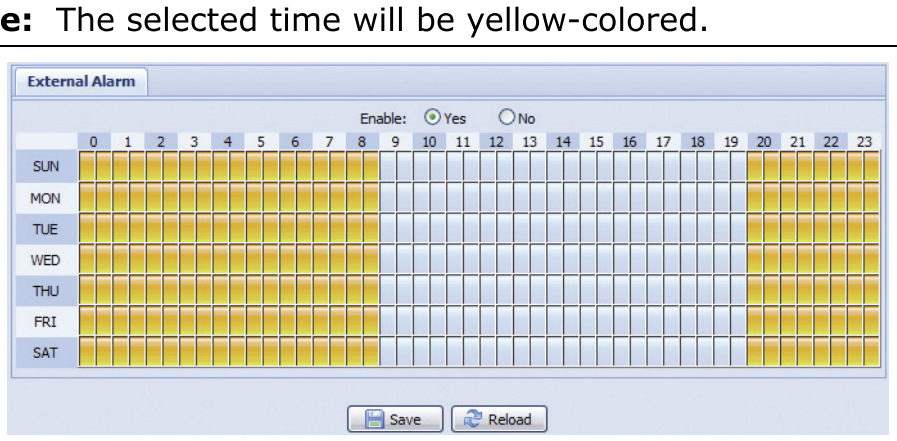


3.4.2 Record Timer

To schedule alarm recording, enable the recording, and select the day and time for recording.

Note: The timer must be enabled for the record function to work properly.

Note: The selected time will be yellow-colored.



3.5 Storage

3.5.1 Memory

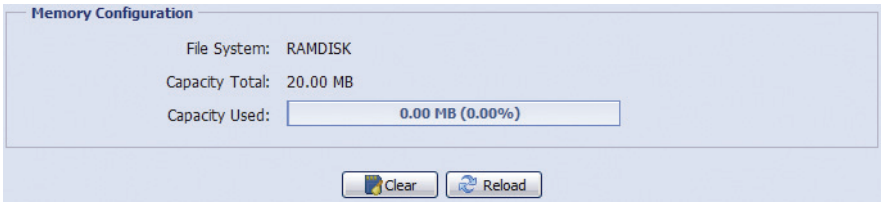
In “Memory”, you can check the remaining capacity for recording, or clear all recorded data saved if needed.

Note: The recorded data will be removed also when you reset or reboot this camera.

You can only record a limited number of recordings.

Note: To save more recorded data, it’s recommended to use this camera with the compatible NVR.

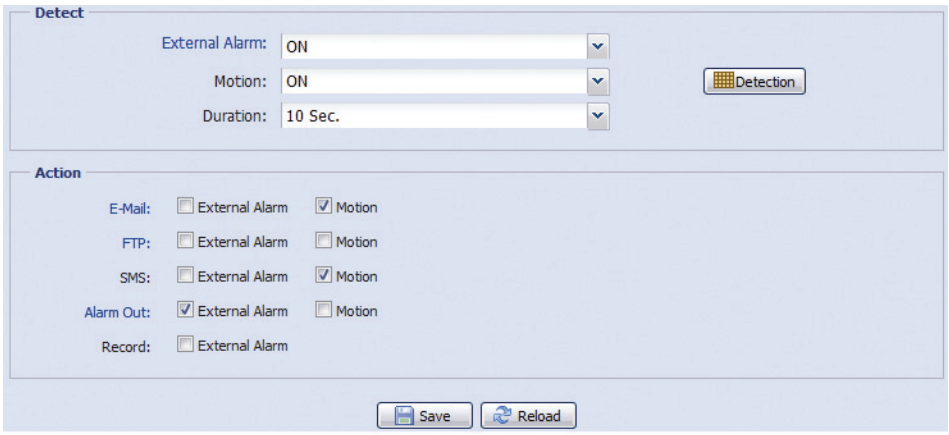
Note: To know the total recording time per recording resolution, please refer to “APPENDIX 3 RECORDING TIME TABLE” at page 29.



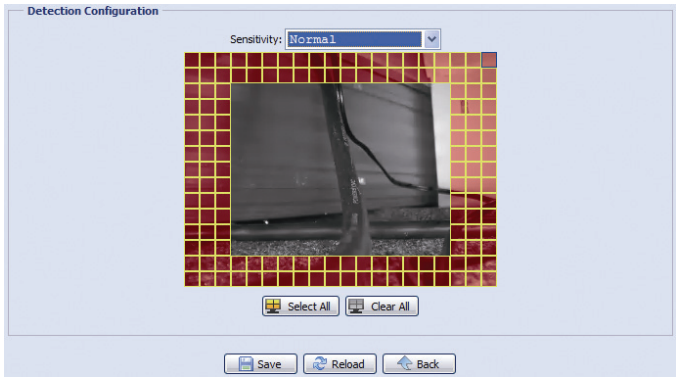
3.6 Trigger

3.6.1 Trigger

You can configure how this camera reacts when there's an alarm, a motion or a PIR event.



◆ Detect

Item	Description
External Alarm	Enable or disable detection from external alarm-in device, and click the title "External Alarm" (in blue) to set "N.O." or "N.C." depending on the configuration of your alarm-in device.
Motion	Enable or disable motion detection. *Motion detection is not supported when the stream format is Motion JPEG.*
	When "ON" is selected, click "Detection" to enter the motion detection area setting page as follows: 
	Sensitivity: Set the detection sensitivity from the drop-down list: High, Normal or Low.
	Area Setting: Set the motion detection area by selecting the area grids with your mouse. Pink grids represent the area that is not being detected while the transparent grids are the area under detection. You can set multiple areas under detection. Click "Clear All" to set the whole area undetected. Click "Select All" to set the whole area under detection.
Duration	Set the duration time for trigger recording (5 / 10 / 20 / 40 seconds).

◆ Action

Here defines how the camera delivers alerts to you for any event.

Item	Description
E-Mail	Select the event type you want to receive E-mail notifications when it occurs. Then, click the title "E-Mail" (in blue) to configure the media type or profile, file format (AVC / AVI) and record time (1 ~ 5 seconds) for the event video clip. If you don't want event video clips to be attached in the email, select "No" in "Email Attachment". The camera will send an Email to the E-mail address(s) you assigned in "Network" → "Mail" once the selected event type occurs.
FTP	Select the event type you want to receive FTP notifications when it occurs. Then, click the title "FTP" (in blue) to configure the media type (H264 / JPEG / MPEG4), file format (AVC / AVI), and record time (1 ~ 5 seconds) for the event video clip. The camera will upload the captured video clip to the FTP site you assigned in "Network" → "FTP" once the selected event type occurs.
SMS	Select the event type you want to receive text message when it occurs. The camera will send a text message to the phone number you assigned in "Network" → "SMS" once the selected event type occurs.
Alarm Out	Select the event type you want to trigger the alarm-out device to work when it occurs. Then, click the title "Alarm Out" (in blue) to configure the trigger rule (LOW / HIGH).
Record	Select the event type you want to enable event recording when it occurs.

** For selected models only*

3.7 General

3.7.1 General

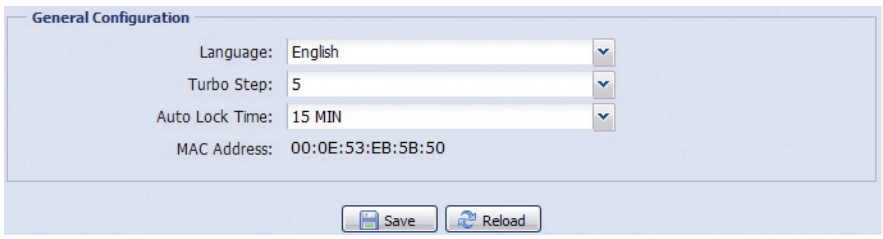
To change the language of UI interface, select from the drop-down list in “Language”.

“Turbo Steps” is used to speed up one-click from 1 to 10. For example, if the value of the turbo step is set to 5, one mouse-click will function as 5 mouse-clicks when you click the arrow keys.

Note: When this function is enabled, the supported buttons will turn to red.

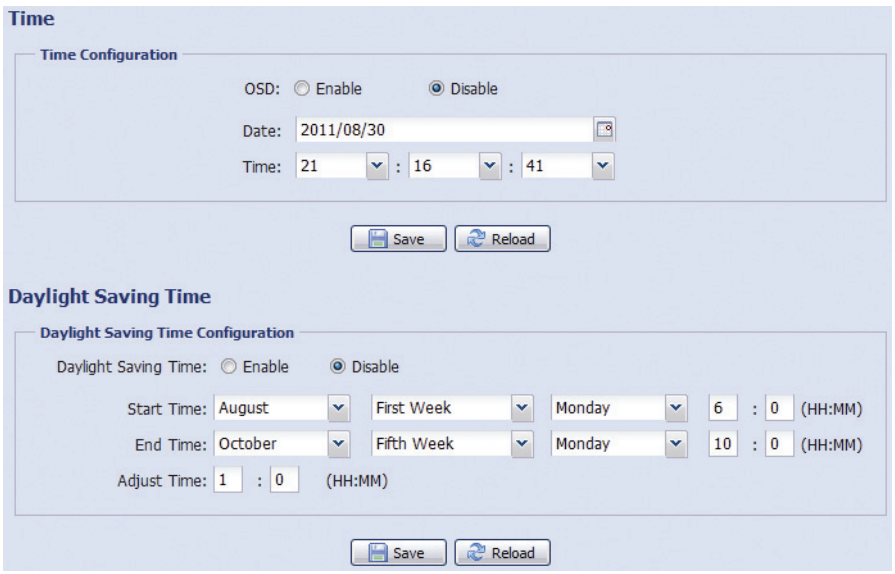
To lock camera access when it’s not used after the specified time, select “5 MIN”, “15 MIN” or “30 MIN” from the drop-down list of “Auto Lock Time”, or select “NEVER” to disable this function.

Note: When the camera access is locked after the specified time, to resume camera access, please enter the password.



3.7.2 Time

Set daylight saving time and the current time, and click “Save” to confirm.

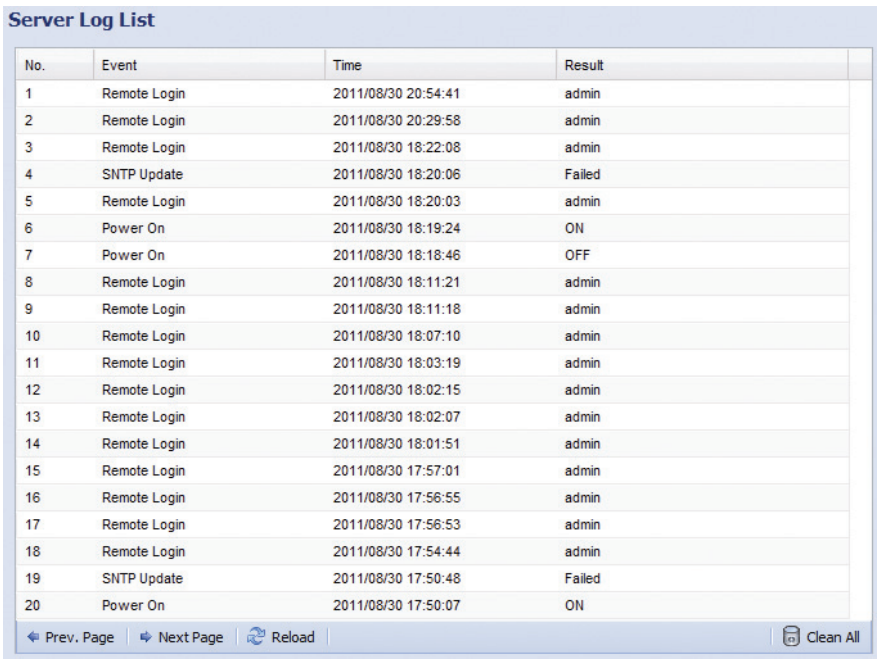


Function	Description
■ **Time Configuration**	
Date	Set the current date.
Time	Set the current time.
■ **Daylight Saving Time Configuration**	
Daylight Saving Time	Specify whether to use daylight saving time (Enable / Disable).
	If this function is enabled, set the time period (Start Time / End Time), and adjust the daylight saving time in hours (Adjust Time).

3.7.3 Server Log

To quickly search the system logs you want by event type, click “Prev. Page” or “Next Page” to find the logs you want, or check the event type(s) and click “Reload” to start searching.

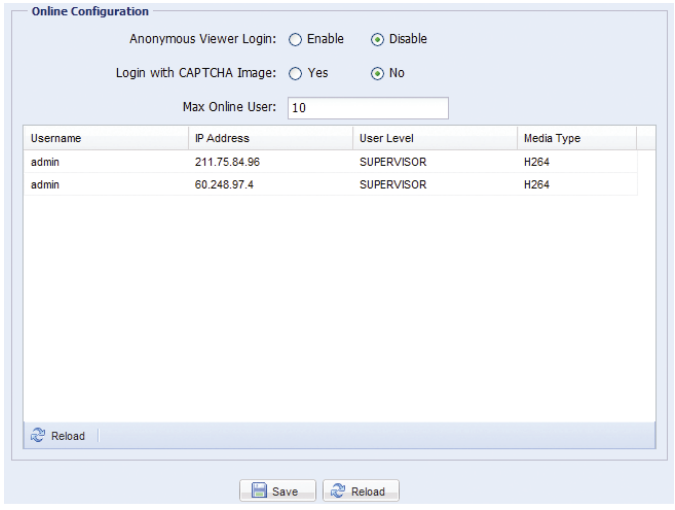
To clear all system event logs, click “Clear All”.



3.7.4 Online

You can check the current online user(s) with respective online information. To refresh the list, click “Reload”.

- To allow anonymous login, select “Enable” in “Anonymous Viewer Login”.
- To disable image code verification at login, select “No” in “Login with CAPTCHA Image”.

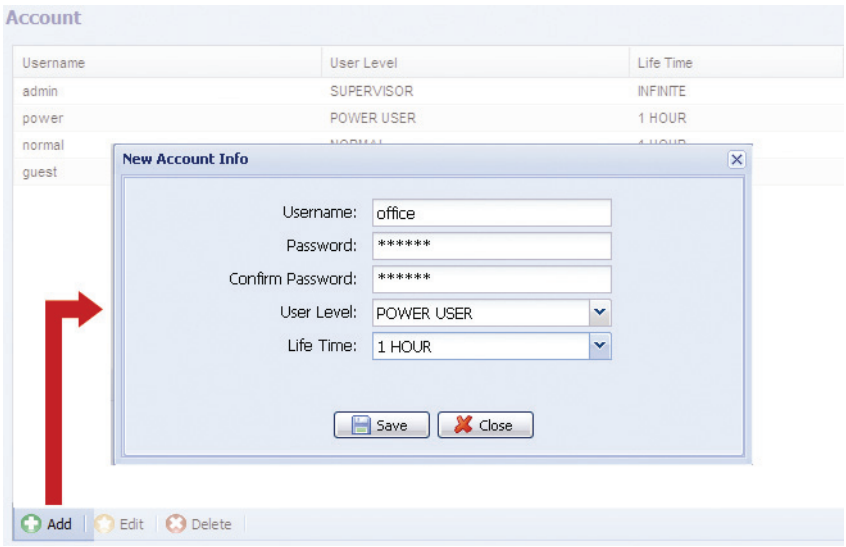


3.7.5 Account

You can create a new account with different user access privilege, or delete or modify an existing account setting.

How to create a new account

Step1: Click “New”, and fill in the following columns.



Column	Description
User Name	Set a user name that will be used for camera access. The user name allows up to 16 alphanumeric characters.
Password	Set the password that will be used for remote login. The password allows up to 16 alphanumeric characters.
Confirm Password	Enter the password again to confirm.
User Level	Set the security level of an account to give the permission to control different functions. There are four user levels: SUPERVISOR, POWER USER, NORMAL USER and GUEST.
Life Time	Select how long this account is allowed to stay online (1 MIN / 5 MIN / 10 MIN / 1 HOUR / 1 DAY / INFINITE)

Step2: Then, click “Save” to save your setting and create a new account.

How to modify or delete an existing account

Step1: Select the account you want to modify or delete.

Step2: To modify the account, click “Edit” to change the settings, and click “Save”.
To remove the account, click “Delete”.

Note: It’s not allowed to remove an account when there’s only one account in the account list.

3.7.6 Google Maps

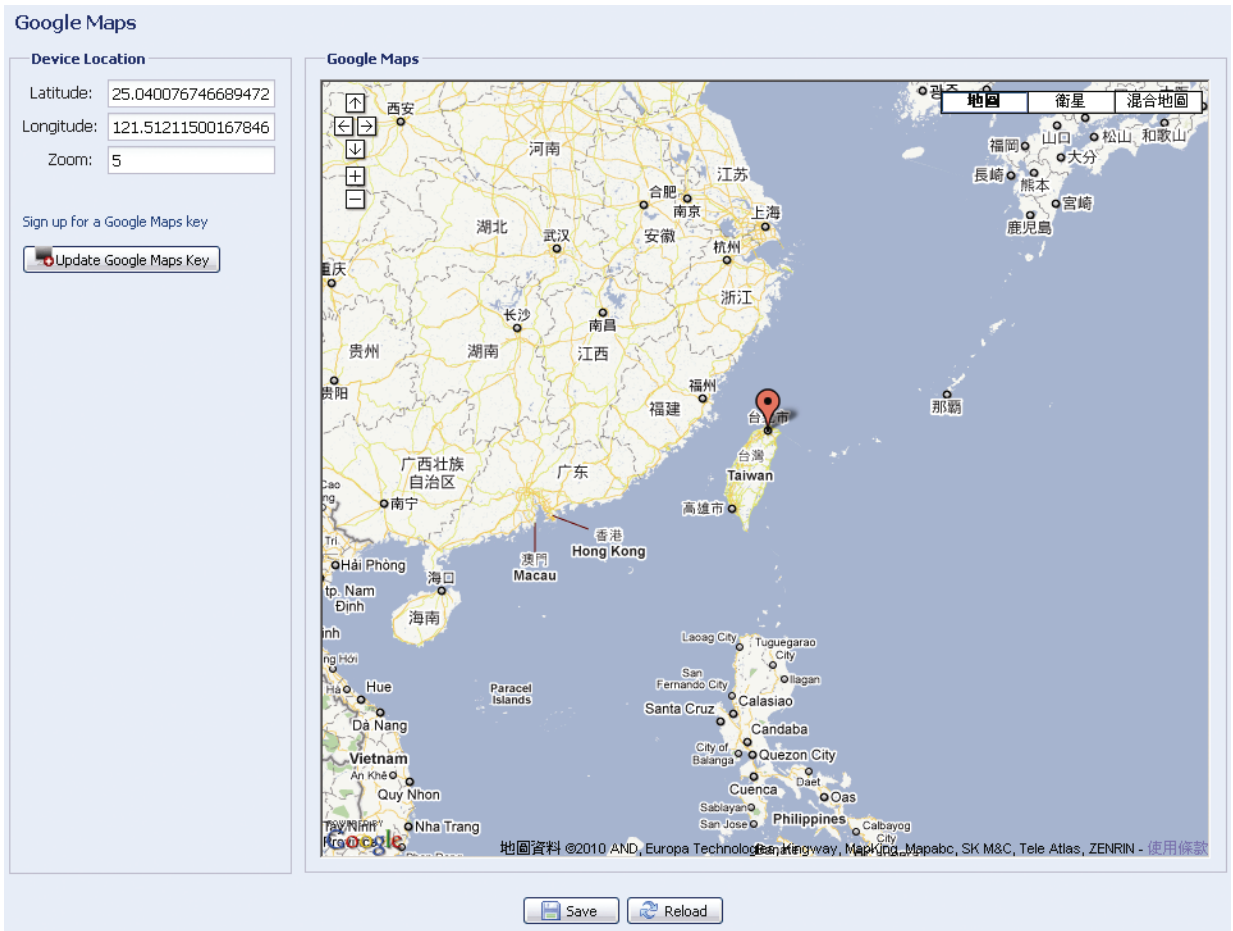
This function is used to let you know where the camera is.

The system will prompt you to apply a Goole Maps Key if your access is denied. Please follow the instructions below when you’re denied:

Step1: Click “Sign up for a Google Maps key” to enter the application page.

Step2: Check the terms and conditions, and enter the IP address of the camera. Then, click “Generate API Key”.

Step3: Copy the generated API key, and click “Update Google Maps Key” on the web browser to paste it.



3.7.7 Maintenance

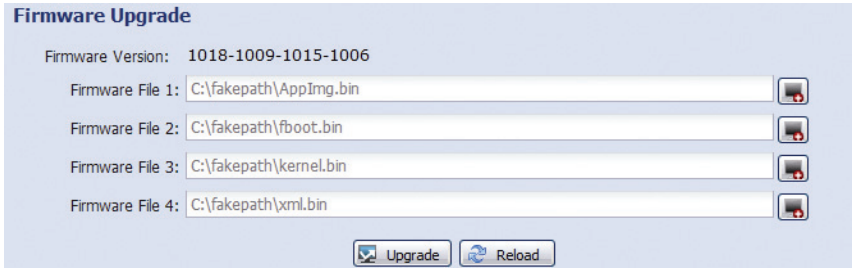
Firmware Upgrade

This function is used when users need to upgrade the camera for function scalability.

Note: Before using this function, make sure you have the correct upgrade files provided by your installer or distributor.

Note: The event videos saved in the camera will be removed after firmware upgrade. Make sure you've copied important events to your PC before firmware upgrade.

Step1: Select " " to browse to where you save the upgrade files, and select them one by one until all files are selected (up to four files).



Step2: Select "Upgrade" to start system upgrading.

Note: You'll be prompted to keep current configurations. It's recommended to keep them, or all configurations will be restored to default values after upgrade.

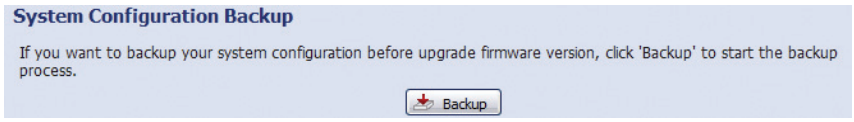
Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The camera will reboot after the upgrade.

System Configuration Backup

This function is used to copy your system configuration to a "System.bin" file.

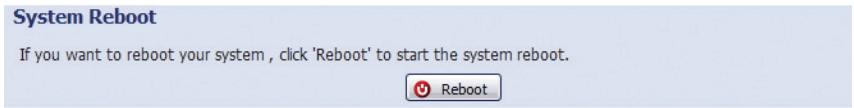
You may import the same system configuration to another camera, or restore your system configuration when the camera is reset to default values.

Select “System.bin” in “Firmware Upgrade”, and select “Upgrade” to import the system configuration.



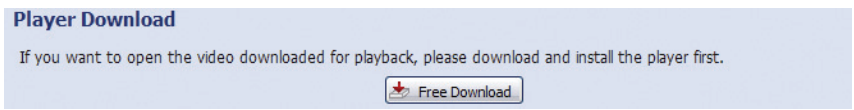
System Reboot

Select “Reboot” to restart your camera if needed.



Player Download

To see the event video clips downloaded to your PC, you need to first install our own video player in your PC. Select “Free Download” to download the video player, and double click the file to install it.



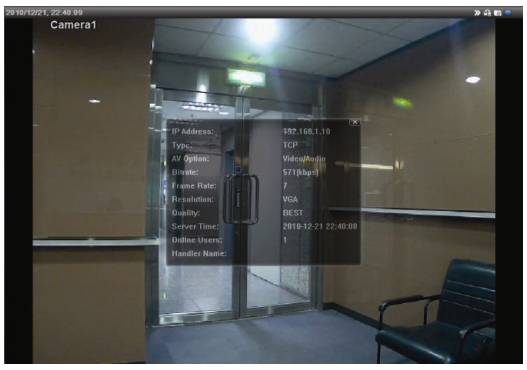
APPENDIX 1 BIT RATE TABLE FOR REFERENCE

The data below is for reference only.

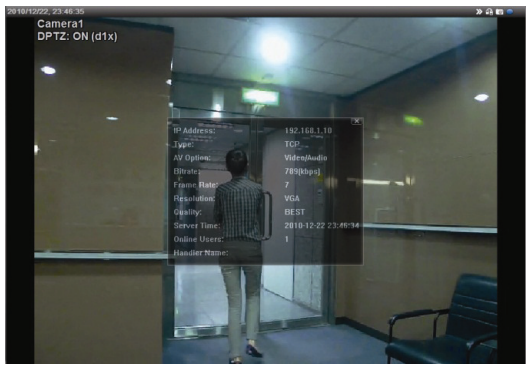
The bit rates listed here may vary depending on the resolution, image quality & frame rate you choose, the complexity of your monitoring area, and how often the moving objects show in your monitoring area.

Testing Environment

- Place: Office Entrance
- Network translation: H.264
- Camera type: Megapixel camera



Static: No one coming in and out



Dynamic: One or two people coming in and out

Resolution	Quality	Frame Rate	(Dynamic) kbps	(Static) kbps
SXGA	Best	FULL	3253	3216
	High		2375	2160
	Normal		1571	1266
	Basic		1465	873
VGA	Best		2010	1261
	High		1042	1034
	Normal		685	572
	Basic		457	350
QVGA	Best		646	366
	High		482	350
	Normal		302	286
	Basic		168	161
SXGA	Best	1/4	1163	1076
	High		989	715
	Normal		855	534
	Basic		719	443
VGA	Best		789	571
	High		451	447
	Normal		349	237
	Basic		217	165
QVGA	Best		269	147
	High		182	131
	Normal		164	113
	Basic		97	71

Resolution	Quality	Frame Rate	(Dynamic) kbps	(Static) kbps
SXGA	Best	1/15	581	374
	High		405	342
	Normal		487	248
	Basic		337	141
VGA	Best		358	79
	High		201	63
	Normal		180	28
	Basic		92	15
QVGA	Best		111	84
	High		99	68
	Normal		97	54
	Basic		58	42

APPENDIX 2 Q&A

For more details about EagleEyes Q&A, please visit our official website: www.eagleeyescctv.com.

Question	Answer
My live images are not fluent. Why?	There are two suggestions to improve the image fluency as listed below: Image fluency is affected by the local network upload bandwidth, router efficiency, client network download bandwidth, complexity of live view, and more. (Recommended) To have the best image fluency, select “QVGA”; to have the best image quality, select “SXVGA”; to have normal image fluency and quality, select “VGA”
The live video keeps flickering. Why?	Please try adjusting the power line frequency to “60 Hz” or “50 Hz” for the camera. For iPhone / iPad users, access the camera, and select “ ” on the top right corner to enter IPCAM Configuration page. Then, scroll down and select “Advanced”. Go to “Advanced Setup” → “Camera” to change setting. For access from Internet Explorer, log into the camera, and select “Config.” → “Camera” → “Camera”.

APPENDIX 3 RECORDING TIME TABLE

Below shows the estimated total recording time for each recording resolution.

The recording time per resolution is the average value collected from the both alarm trigger conditions indicated in “Testing Environment”, and is for reference only.

The time may vary depending on the resolution, image quality & frame rate you choose, the complexity of your monitoring area, and how often the moving objects show in your monitoring area.

Testing Environment

- Place: Office
- Monitoring area: 1.5 meters away from the camera
- Alarm trigger conditions:
  (1) One person walks by the monitoring area and leaves immediately.
  (2) Two persons walk by the monitoring area. One goes away immediately, and the other one stays a while and goes away.

Recording Resolution	SXGA	VGA	QVGA
Recording time (second)	25	115	211

APPENDIX 4 API ID APPLICATION FOR SMS MESSAGING

To allow the camera automatically sending a text message when an event happens, you need to apply an API ID from a mobile messaging company first, such as Clickatell or EVERY8D.

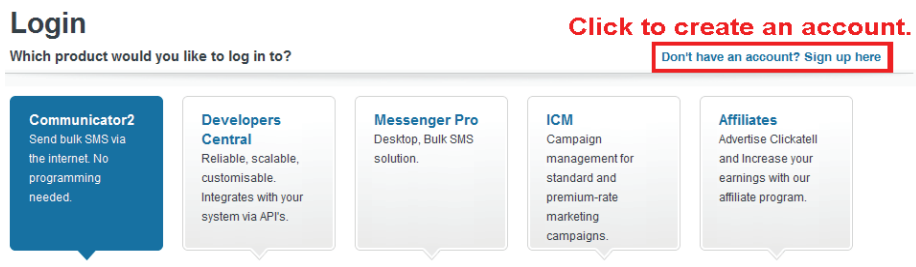
Below shows an example of how to get an API ID from Clickatell.

Note: The SMS messaging may not be totally free. Please check the charge policy of the messaging service you use.

Note: The instructions below are for reference only and may vary when Clickatell's official website is updated.

Please follow the steps below for application.

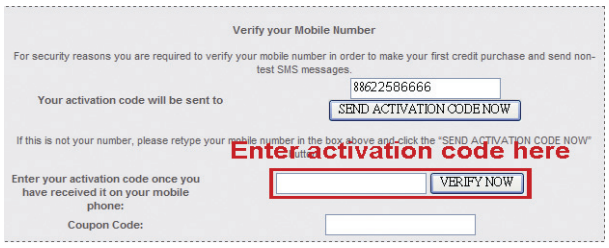
Step1: Go to http://www.clickatell.com/login.php. Sign up an account first.



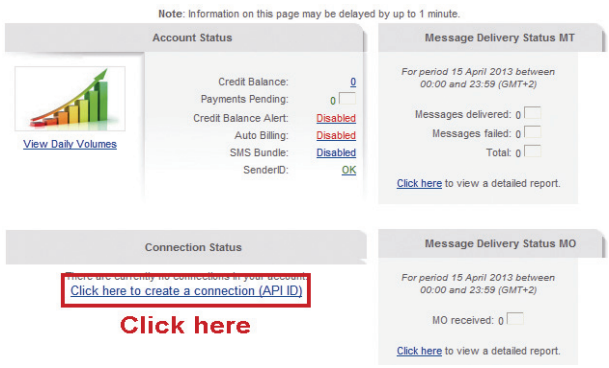
Step2: Select "Developers Central", select the location where you want to use this service, and fill in your information to create an account.

Step3: When the account is created, the system will automatically send an Email to your specified Email address with the user name, password, and client ID used to log into the service.

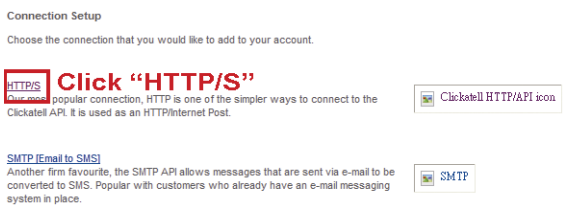
Step4: Click the link within the email to log in, and you will be prompted to validate your mobile phone number. Select "SEND ACTIVATION CODE". The system will send an activation code to that number for verification. Check if you receive a text message from Clickatell, and enter the activation code.



Step4: In your account, find “Connection Status” and create a connection (API ID).



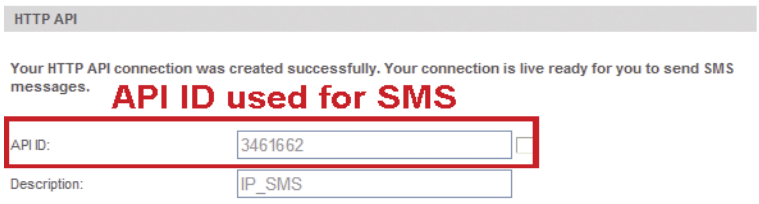
Step5: Select “HTTP/S”.



Give a meaning name for this connection, and click “Submit and Get API ID”.

Step5: An API ID will be generated as follows.

Note: Note down the API ID for SMS notification setting later.



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Hinweis: Bei falscher Installation und unsachgemäßem Gebrauch im Wohnbereich kann das Gerät Störungen bei Rundfunkgeräten und anderen elektronischen Geräten verursachen. Ein sachgemäßer Gebrauch liegt vor, wenn das Gerät, soweit durchführbar, mit geschirmten Anschlusskabeln betrieben wird (bei Netzwerkprodukten zusätzlich geschirmter Kabel der Kategorie 5e und höher). Das Gerät wurde getestet und liegt innerhalb der Grenzen für Computerzubehör der Klasse A gemäß den Anforderungen nach EN 55022. Warnung: Dieses Produkt entspricht der Prüfklasse A –es kann im Wohnbereich Funkstörungen verursachen; in diesem Fall kann vom Betreiber verlangt werden, angemessene Maßnahmen durchzuführen und dafür aufzukommen. Konformitätserklärung: Das Gerät erfüllt die EMV-Anforderungen nach EN 55022 Klasse A für ITE und EN 55024. Geräte mit externer oder eingebauter Spannungsversorgung erfüllen weiterhin die Anforderungen nach EN 61000-3-2 und EN 61000-3-3. Damit sind die grundlegenden Schutzanforderungen der EMV-Richtlinie 2004/108/EC erfüllt. Die CE-Konformität wurde nachgewiesen. Die entsprechenden Erklärungen sind beim Hersteller hinterlegt.