

PUSH VIDEO

AVN807A

MEGAPIXEL

NETWORK CAMERA SERIES

OPERATION GUIDE

Please read instructions thoroughly before operation and retain it for future reference.

IMPORTANT SAFEGUARD



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 is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Federal Communications Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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

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

Trademark Acknowledgements

iPad® & iPhone® are the registered trademarks of Apple Inc.

Android™ is a trademark of Google Inc. Use of this trademark is subject to Google Permissions.

Microsoft®, Windows® & Internet Explorer® are registered trademarks of Microsoft Corporation in the United States and/or other countries.

Disclaimer

We reserve the right to revise or remove any content in this manual at any time. We do not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of this manual. The content of this manual is subject to change without notice.

This product doesn't have a standby / off mode.

MPEG4 Licensing

THIS PRODUCT IS LICENSED UNDER THE MPEG4 VISUAL PATENT PORTFOLIO LICENSE FOR THE PERSONAL AND NON-COMMERCIAL USE OF A CONSUMER FOR (i) ENCODING VIDEO IN COMPLIANCE WITH THE MPEG4 VISUAL STANDARD ("MPEG-4 VIDEO") AND/OR (ii) DECODING MPEG4 VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL AND NON-COMMERCIAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED BY MPEG LA TO PROVIDE MPEG4 VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION INCLUDING THAT RELATING TO PROMOTIONAL INTERNAL AND COMMERCIAL USES AND LICENSING MAY BE OBTAINED FROM MPEG LA, LLC. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com).

GPL Licensing



This product contains codes which are developed by Third-Party-Companies and which are subject to the GNU General Public License ("GPL") or the GNU Lesser Public License ("LGPL").

The GPL Code used in this product is released without warranty and is subject to the copyright of the corresponding author.

Further source codes which are subject to the GPL-licenses are available upon request.

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/076D_Series/arm-linux-2.6.tar.gz

TABLE OF CONTENTS

1. OVERVIEW.....	1
1.1 Product Features.....	1
1.2 Package Content.....	1
1.3 Cable Overview.....	1
2. CAMERA ACCESS WITH INTERNET EXPLORER.....	2
2.1 Camera Login.....	2
2.2 Control Panel Overview	2
2.3 Digital PTZ (DPTZ) Operations	4
2.4 Event Record Search & Playback	5
3. CAMERA CONFIGURATIONS.....	6
3.1 System configuration menu.....	6
3.2 Network	7
3.2.1 Network	7
3.2.2 DDNS	7
3.2.3 SNTP	7
3.2.4 FTP.....	7
3.2.5 MAIL	8
3.2.6 Filter	8
3.2.7 UPnP	9
3.3 Camera	9
3.3.1 Camera.....	9
3.3.2 Preset.....	10
3.3.3 Cruise.....	11
3.3.4 Color.....	12
3.4 Record Timer.....	12
3.4.1 Record.....	12
3.4.2 Record Timer.....	13
3.5 Storage.....	13
3.5.1 Memory	13
3.6 Trigger	13
3.6.1 Trigger	13
3.6.2 Push Video	15
3.7 General	15
3.7.1 General.....	15
3.7.2 Time.....	16
3.7.3 Server Log.....	16
3.7.4 Online	17
3.7.5 Account.....	17
3.7.6 Maintenance.....	18
APPENDIX 1 PRODUCT SPECIFICATIONS.....	20
APPENDIX 2 BIT RATE TABLE FOR REFERENCE	21
APPENDIX 3 Q&A	23

1. OVERVIEW

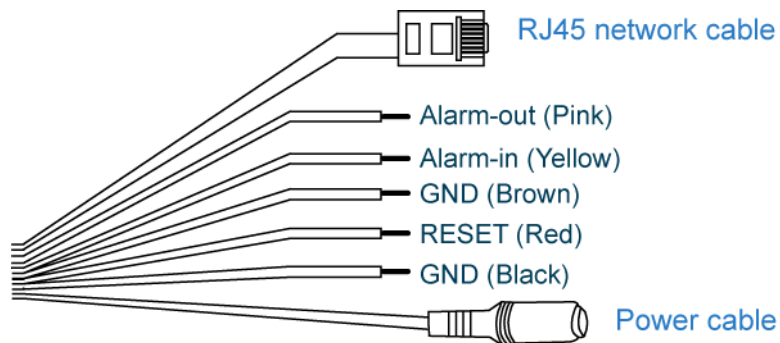
1.1 Product Features

- Easy **network setup** with your **iPhone / iPad**
- **1.3 Megapixel** live MOS sensor with **HDTV 720p** quality, allowing users to notice minor details more easily
- **Push Video** support to send an event notification to your iPhone, iPad and Android mobile devices immediately once the specified event type is triggered, and play video recording once you confirm the receipt.
- **External alarm I/O device** connection
- **Remote Surveillance**
 - **Fully compatibility** on **iPhone & iPad**, and **Internet Explorer®** on Windows® operating system
- 35 IR LEDs built-in for **night surveillance**

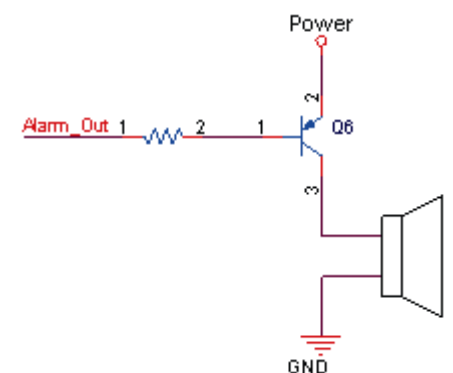
1.2 Package Content

- | | |
|---|----------------------------------|
| <input type="checkbox"/> Network camera | <input type="checkbox"/> Bracket |
| <input type="checkbox"/> Quick Setup with iPhone / iPad | <input type="checkbox"/> Adapter |

1.3 Cable Overview



Color	Cable	Description
--	Power cable	Connect to DC12V power supply. Note: The power adapter is optional.
--	RJ45 network cable	Connect it to the supplied RJ45 cable extender adapter for cable extension, and prepare another RJ45 network cable with suitable length for your connection.
Black & Brown	GND	Ground wire, used for reset default or external device connection.
Yellow	Alarm-in	Reserved for connecting to an external alarm device. For details, please refer the user manual of your alarm device.
Pink	Alarm-out	Reserved for connecting to an external alarm device. For details, please refer the user manual of your alarm device.
Red	RESET	Remove the insulating coating of this wire, and twist it with a ground wire together to reset default. This will reset all parameters, including the IP address to factory default settings. Note: Disconnect power before twisting these two wires together, and connect to power again for reset default.



2. CAMERA ACCESS WITH INTERNET EXPLORER

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

Note: For details about accessing network cameras via iPhone / iPad / 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:

- **“Quick Setup With iPhone / iPad”** supplied with your camera if you’re using iPhone / iPad, and your network environment is wireless.
- **“ADVANCED NETWORK SETUP”** downloadable from www.surveillance-download.com/user/n807a.swf if your network environment is not wireless.

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.

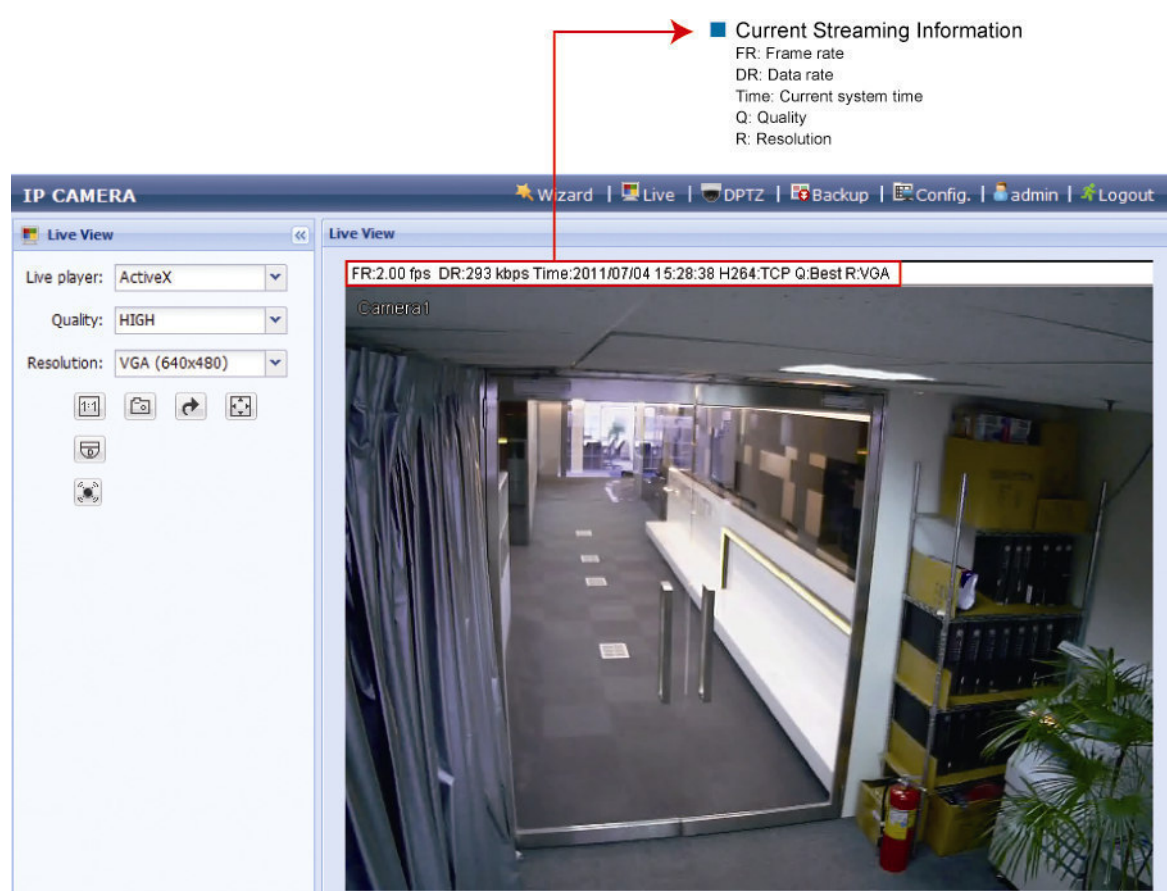
- To skip the wizard and directly access the camera live view, click “Close”.
- To directly access the camera live view without starting the wizard for the login next time, check “Do not start wizard at login”.














Note: If you’re prompted to install “VLC player”, “Software” and “H264 Streaming Viewer”, please agree to proceed the installation.

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

2.2 Control Panel Overview

Note: The buttons available depend on the user level used to log in.

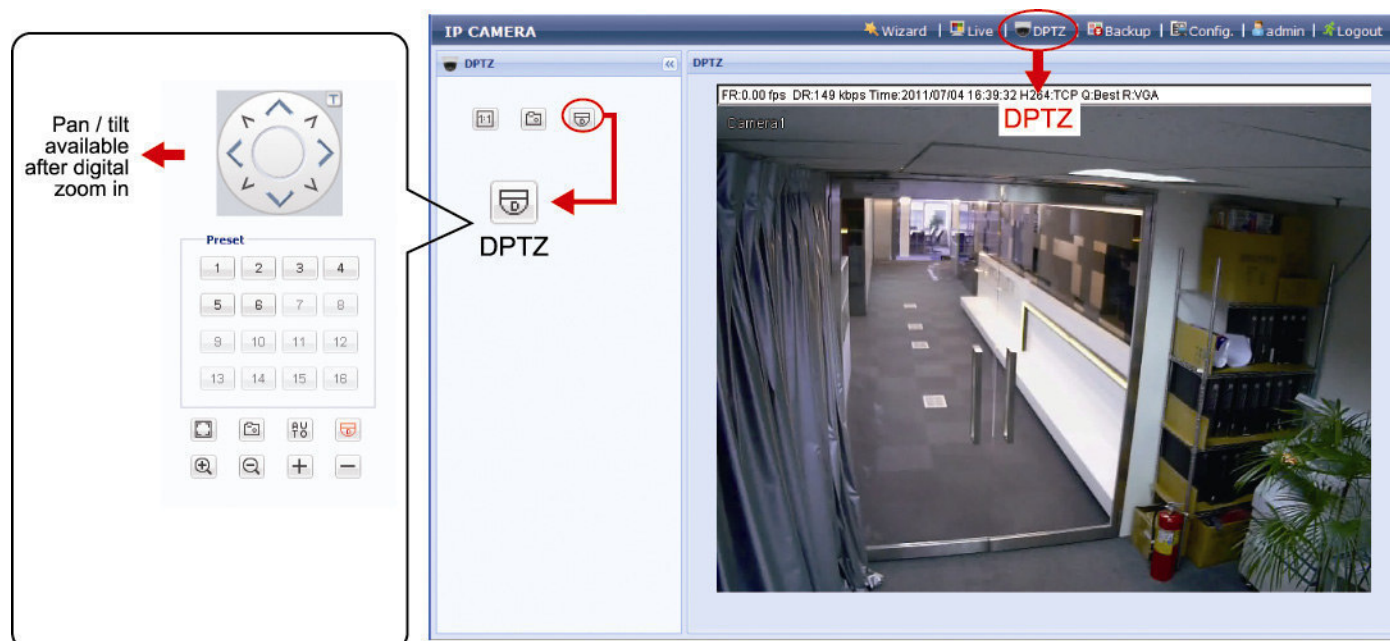


Function	Icon	User Level	Description
Live		Supervisor / Power User / Normal User / Guest	Switch to the live view page.
DPTZ		Supervisor / Power User / Normal User	Switch to the DPTZ configuration page. For details, please refer to “2.3 Digital PTZ (DPTZ) Operations” at page 4.
Backup		Supervisor / Power User	Enter the event record list for video playback. For details, please refer to “2.4 Event Record Search & Playback” at page 5.
Config.		Supervisor / Power User	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 6.
Live player	--	Supervisor / Power User / Normal User / Guest	Select the image player from the drop-down list: <ul style="list-style-type: none"> ■ ActiveX ■ QuickTime <p>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.</p> <ul style="list-style-type: none"> ■ VLC
Quality	--	Supervisor / Power User / Normal User	Click & drag the slider to select the video quality: BASIC / NORMAL / HIGH / BEST.
Resolution	--	Supervisor / Power User / Normal User	Select the image resolution from the drop list: <ul style="list-style-type: none"> ■ SXGA (1280 x 1024) ■ SXVGA (1280 x 960) ■ 720P (1280 x 720) ■ VGA (640 x 480) ■ QVGA (320 x 240) <p><i>When Push Video is on, the live resolution will be fixed to VGA.</i></p>
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. <i>This icon doesn't work when the selected resolution is VGA or QVGA.</i>
Scale			Click and hold the movable square on the left bottom corner of the live view to move <i>This icon appears only when the selected resolution is larger than the current live view size.</i>
CIF Resize			The QVGA resolution is resized to fit into the current live view size. <i>This icon appears only when the selected resolution is QVGA (CIF).</i>
Snapshot		Supervisor / Power User / Normal User	Click to take a snapshot of the current view, and save to the location specified in “Config.” → “Camera” → “Camera” → “Snapshot Path”.
Flip		Supervisor / Power User / Normal User	Click to rotate the image 180° when necessary.
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.
DPTZ		Supervisor / Power User / Normal User	Click to enable digital PTZ functions.
Alarm Out		Supervisor / Power User / Normal User	Click to force your 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. <i>Before using this function, make sure your alarm-out device is connected properly to this camera and also configured well in “Trigger” → “Trigger”.</i>












2.3 Digital PTZ (DPTZ) Operations

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

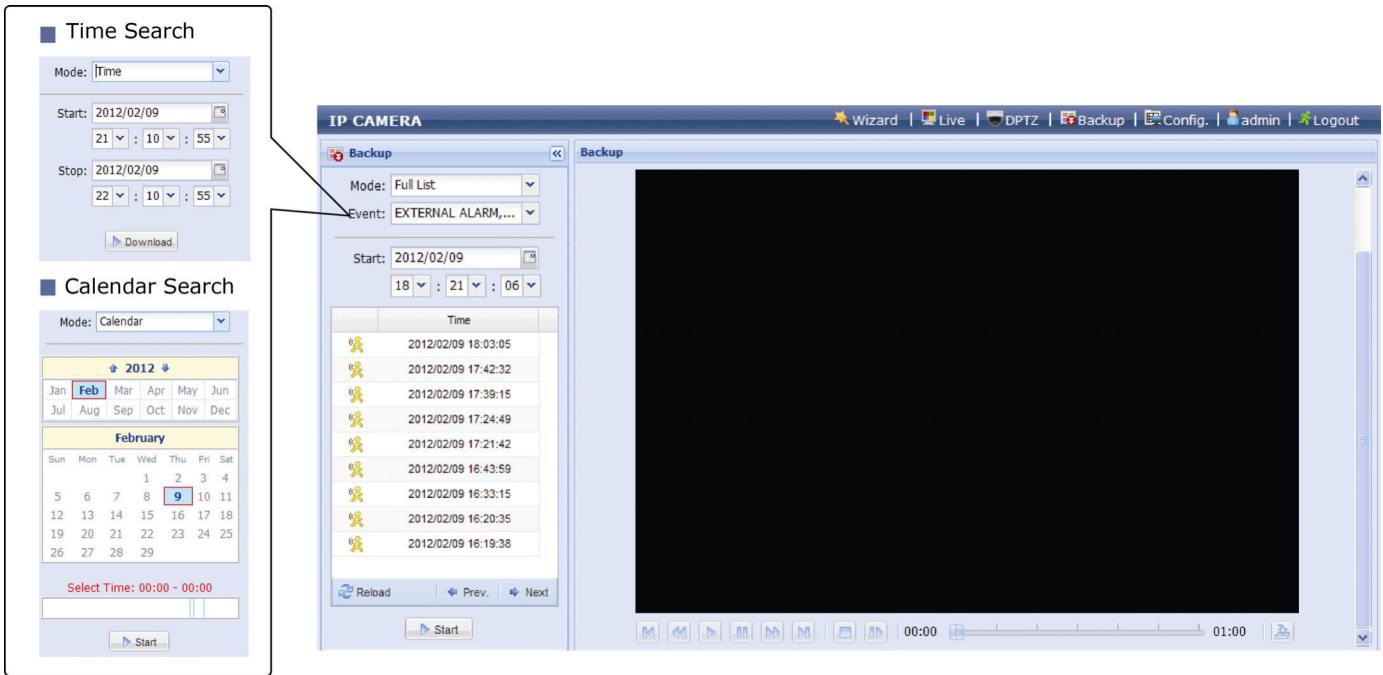
STEP1: Click “DPTZ” to show the DPTZ control panel.











STEP2: Select the functions when needed:

ICON	FUNCTION	DESCRIPTION
 / 	Fit to screen / Original size	<p>There are several display resolutions available. When the selected resolution is out of your current live view support, a part of your surveillance area might get covered on the screen, and you need to manually move on the screen to check the covered part.</p> <hr/> <p> : This shows the selected resolution is scaled to fit in the current live view size. Click to restore the scaled resolution to its original size.</p> <hr/> <p> : This shows the live view resolution is in its original size.</p>
	Take snapshots	Click to take a snapshot of the current view, and save to the location specified in “Config.” → “Camera” → “Camera” → “Snapshot Path”.
	Enable Auto mode	<p>Click to activate the auto mode of the camera. The auto mode could be “Sequence” or “Auto Pan” specified in “Config.” → “Camera” → “Cruise” → “Active Mode”.</p> <p>Note: This function is available only when DPTZ is enabled.</p> <hr/> <p>Sequence: Move to several preset points accordingly and regularly specified in “Config.” → “Camera” → “Cruise” → “Active Mode” → “Sequence”.</p> <p>Note: Preset points are set in “Config.” → “Camera” → “Preset”.</p> <hr/> <p>Auto Pan: Pan automatically and horizontally.</p>
	Enable DPTZ	<p>Click to activate the digital PTZ function. When this function is enabled, the following operations are available:</p> <ul style="list-style-type: none"> ■ Auto mode ■ Move up / down / left / right after digital zoom-in.
 / 	Zoom in / out	Click to zoom in / out the image.
 / 	Max. zoom in / out	Click to zoom in / out the image.

2.4 Event Record Search & Playback



	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 & 32X speed forward eventually.
	Fast Rewind	Increase the speed for fast forward. Click to get 2X, 4X, 8X, 16X & 32X 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.
	Download	Click to download the current video clip to the specified path in your PC.

3. CAMERA CONFIGURATIONS

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

Note: You need to be “Supervisor” or “Power User” to enter the system configuration page. If not, please re-log into the camera with the supervisor user level.

3.1 System configuration menu

Click “Config.” to enter the configuration page.

Note: You need to be “Supervisor” or “Power User” to enter the system configuration page, and the functions available for these two user levels are different. If you’re not either of these two user levels, please re-log into the camera with one of them.

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 7.
- For details about “Camera”, please refer to “3.3 Camera” at page 9.
- For details about “Record Timer”, please refer to “3.4 Record Timer” at page 12.
- For details about “Storage”, please refer to “3.5 Storage” at page 13.
- For details about “Trigger”, please refer to “3.6 Trigger” at page 13.
- For details about “General”, please refer to “3.7 General” at page 15.

Main Menu	Sub-Menu	Reference
Network	Network	Configure network settings.
	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”.
	Filter	Choose to permit or block the IP address(es) which can access this camera.
	UpnP	Allow this camera to be detected among devices within the same network area for easy and quick usage.
Camera	Camera	1. Set the camera title. 2. Specify the snapshot path. 3. Select the streaming settings based on your network environment.
	Preset	Set the preset points for the DPTZ function.
	Cruise	Set the cruise mode when the auto mode is enabled: Sequence or Auto Pan.
	Color	Adjust the color performance.
Record Timer	Record	Configure the record function.
	Record Timer	Schedule the PIR and external alarm recording.
Storage	Memory	Check the current storage capacity and clear all recorded data when needed.
Trigger	Trigger	Configure how the camera reacts for any event.
	Push Video	Set Push Video rules.
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	<i>Available for Supervisor only.</i> Check the system event logs.
	Online	<i>Available for Supervisor only.</i> Check the current online user(s).
	Account	<i>Available for Supervisor only.</i> 1. Create a new user account with different access privilege. 2. Modify or delete an existing user account.
	Maintenance	<i>Available for Supervisor only.</i> 1. Check the current firmware version and upgrade your camera. 2. Copy system configurations. 3. Download the video player to play the recorded data.

3.2 Network

3.2.1 Network

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

For details, please refer to “Advanced Network Setup” from www.surveillance-download.com/user/n807a.swf.

Network Configuration

IP Type:

☒ Static IP

☐ PPPoE

☐ DHCP

Server IP:

Gateway:

Net Mask:

Port:

DNS1:

DNS2:

MAC Address:

ADSL Upload Speed:

Local (>2Mbps)

Save

Reload

3.2.2 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/n807a.swf.

DDNS Configuration

DDNS:

☒ Enable

☐ Disable

System Name:

default

Hostname:

MAC000e531d6ff1

.ddns.eagleeyes.tw

E-Mail:

Save

Reload

3.2.3 SNTP

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

SNTP Configuration

GMT:

(GMT+08:00) Taipei

NTP Server:

Server Time:

Sync

Save

Reload

Function	Description
GMT	Once users choose the time zone, the network 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	Click and the network camera will synchronize the time with the network time.

3.2.4 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”.

FTP Configuration

Username:

Password:

Server:

Port:

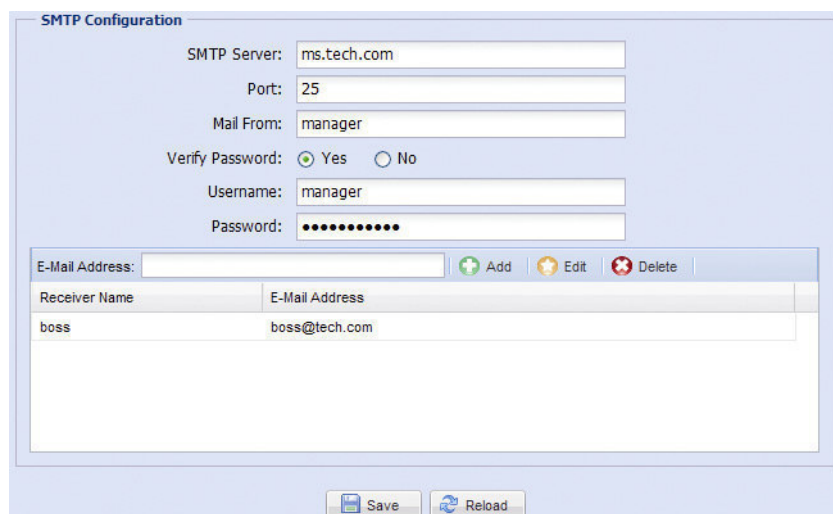
Directory:

Save

Reload

3.2.5 MAIL

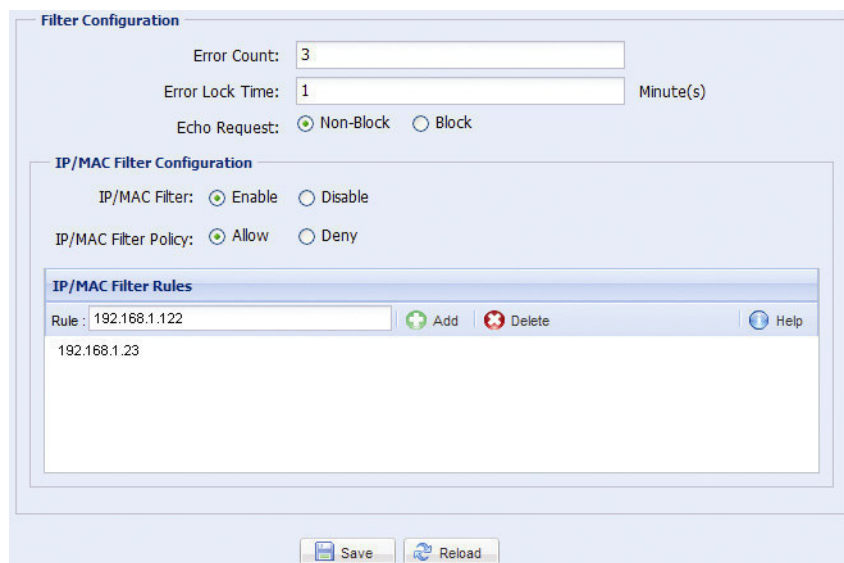
Enter the detailed e-mail information and click “Save” to confirm. The information you set here will be applied when “Email” is selected in “Trigger” → “Trigger”.

The image shows the 'SMTP Configuration' window. It contains several input fields: 'SMTP Server' (ms.tech.com), 'Port' (25), 'Mail From' (manager), 'Verify Password' (radio buttons for Yes and No, with 'Yes' selected), 'Username' (manager), and 'Password' (masked with dots). Below these is a table for 'E-Mail Address List' with columns 'Receiver Name' and 'E-Mail Address'. The table has one entry: 'boss' and 'boss@tech.com'. At the bottom are 'Save' and 'Reload' buttons.

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.
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).

3.2.6 Filter

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

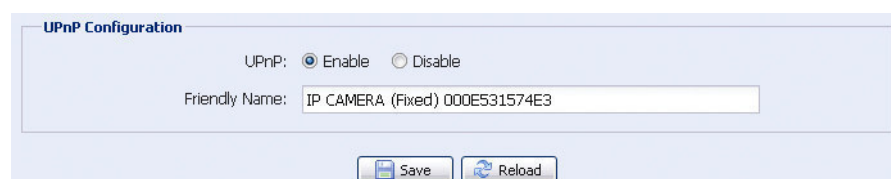
The image shows the 'Filter Configuration' window. It includes 'Error Count' (3), 'Error Lock Time' (1 Minute(s)), and 'Echo Request' (radio buttons for Non-Block and Block, with 'Non-Block' selected). Below is the 'IP/MAC Filter Configuration' section with 'IP/MAC Filter' (radio buttons for Enable and Disable, with 'Enable' selected) and 'IP/MAC Filter Policy' (radio buttons for Allow and Deny, with 'Allow' selected). At the bottom is the 'IP/MAC Filter Rules' table with columns 'Rule' and 'Action'. The table has one entry: '192.168.1.122' and '192.168.1.23'. At the bottom are 'Save' and 'Reload' buttons.

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 network 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 network 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	<ul style="list-style-type: none">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”.

3.2.7 UPnP

“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.

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

The image shows the 'UPnP Configuration' window. It has a title bar 'UPnP Configuration'. Inside, there are two radio buttons: 'UPnP: Enable' (selected) and 'Disable'. Below them is a text field labeled 'Friendly Name:' containing the text 'IP CAMERA (Fixed) 000E531574E3'. At the bottom, there are two buttons: 'Save' and 'Reload'.

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

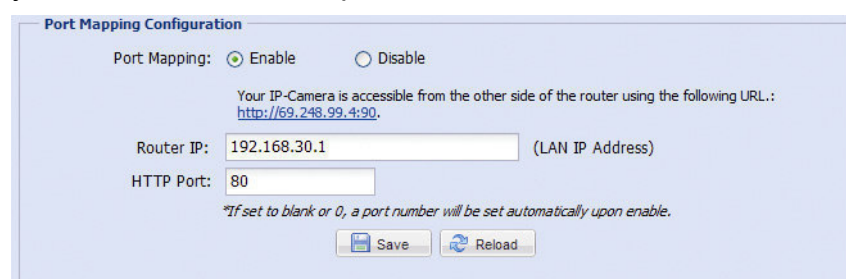
Port Mapping

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/n807a.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.

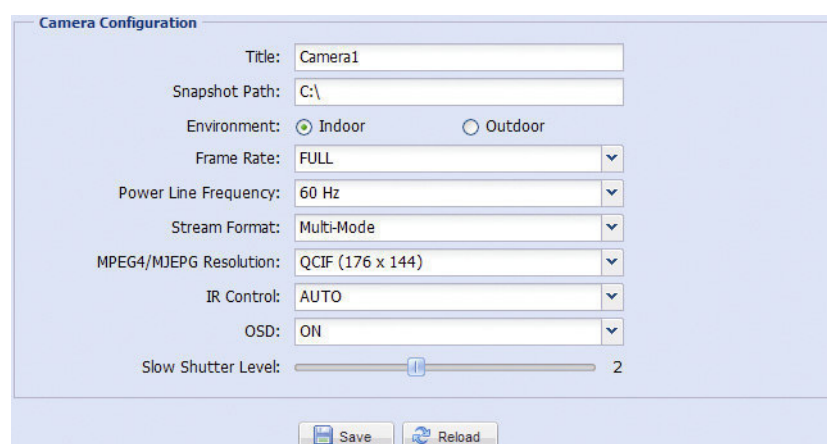
The image shows the 'Port Mapping Configuration' window. It has a title bar 'Port Mapping Configuration'. Inside, there are two radio buttons: 'Port Mapping: Enable' (selected) and 'Disable'. Below them is a text field labeled 'Your IP-Camera is accessible from the other side of the router using the following URL.:' containing the text 'http://69.248.99.4:90.'. Below that are two text fields: 'Router IP:' containing '192.168.30.1' and '(LAN IP Address)', and 'HTTP Port:' containing '80'. Below these fields is a note: '*If set to blank or 0, a port number will be set automatically upon enable.'. At the bottom, there are two buttons: 'Save' and 'Reload'.

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

3.3 Camera

3.3.1 Camera

Adjust the camera parameters if necessary.

The image shows the 'Camera Configuration' window. It has a title bar 'Camera Configuration'. Inside, there are several fields and controls: 'Title:' with text 'Camera1'; 'Snapshot Path:' with text 'C:\'; 'Environment:' with radio buttons 'Indoor' (selected) and 'Outdoor'; 'Frame Rate:' with a dropdown menu showing 'FULL'; 'Power Line Frequency:' with a dropdown menu showing '60 Hz'; 'Stream Format:' with a dropdown menu showing 'Multi-Mode'; 'MPEG4/MJPEG Resolution:' with a dropdown menu showing 'QCIF (176 x 144)'; 'IR Control:' with a dropdown menu showing 'AUTO'; 'OSD:' with a dropdown menu showing 'ON'; and 'Slow Shutter Level:' with a slider bar and the number '2'. At the bottom, there are two buttons: 'Save' and 'Reload'.

Item	Description
Title	Enter the title for the camera with up to 15 alphabetic characters.
Snapshot Path	Specify the location to save the snapshot pictures.
Environment	Select the current environment for the camera to automatically adjust itself to produce the images suitable for the selected environment.

Item	Description
Frame Rate	The frame rate allowed to each viewer can be adjusted to adapt to the bandwidth on the network. Set the desired image frame rate to the maximum (FULL) or to a specified frame rate (1/2; 1/3; 1/4; 1/5; 1/10; 1/15). The actual frame rate depends on the actual network connection, and may be lower than the specified one.
Power Line Frequency	Select only when your camera video keeps flashing.
Stream Format	Select the stream format to Single H.264 / Single MPEG-4 / Single Motion JPEG / Multi-Mode. <i>Note: Motion detection is not supported when the stream format is set to Motion JPEG.</i>
MPEG4 / MJPEG Resolution	Select the video resolution when the stream format is set to "MPEG4" or "MJPEG". The options are: VGA (640 x 480), QVGA (320 x 240), and QCIF (176 x 144).
IR Control	Select "AUTO" to automatically enable IR LEDs at night or in the dark environment, or "OFF" to disable this function. <i>Note: This camera is designed for indoor use. Color shift might occur at daytime because this model doesn't support ICR (IR Cut Filter Removal) to remove excessive infrared light in the environment.</i>
OSD	Select "ON" to show the camera title on the live view, or "OFF" to hide the camera title.
Slow Shutter Level	This function is used to extend the exposure time for clearer images when the light is not sufficient. Select 1 ~ 5 to extend the exposure time based on your current light condition. The larger the value, the longer the exposure time, and the less the fps. 0 means function off.

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

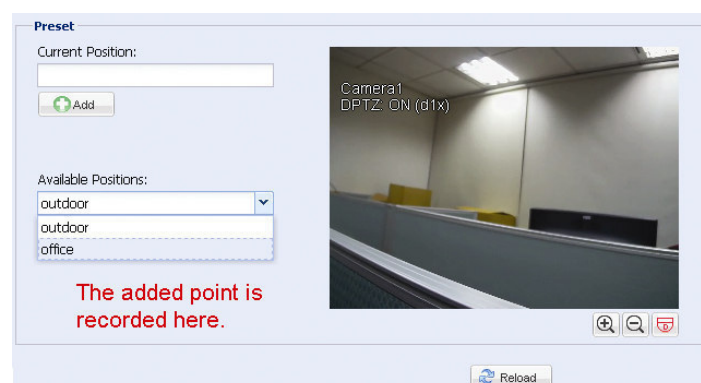
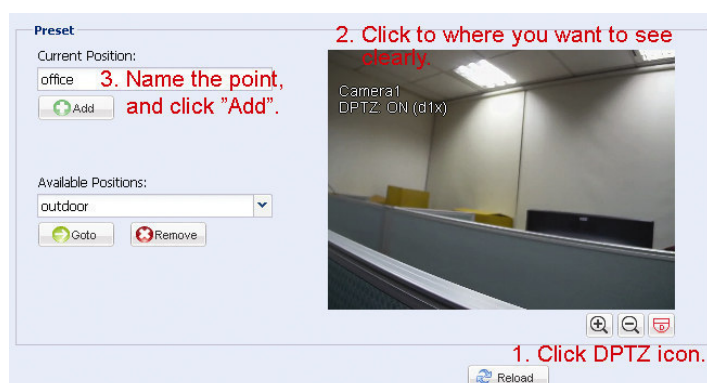
Step1: Click DPTZ icon.

Step2: Move to the point with proper ratio that suits your need.

■ To zoom in / out, you may:

- Click  (zoom in) /  (zoom out).
- Move the cursor to the preview screen, and roll the mouse wheel up (zoom-in) and down (zoom-out).
- Click any point on the preview screen to get a 5X image.
- Draw a square from the top left to bottom right or bottom right to top left to switch among 1x, 3x and 5x images.

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".

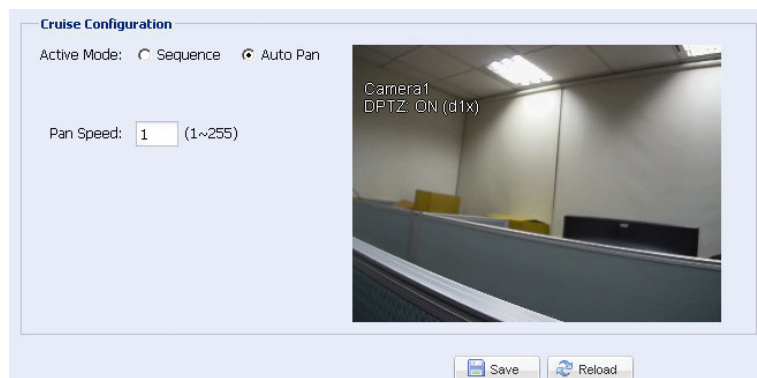
3.3.3 Cruise

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  is selected: Sequence or Auto Pan.

Auto Pan

When “Auto Pan” is selected here and  is clicked on the DPTZ page, the camera will start panning in the 5x zoom-in ratio.

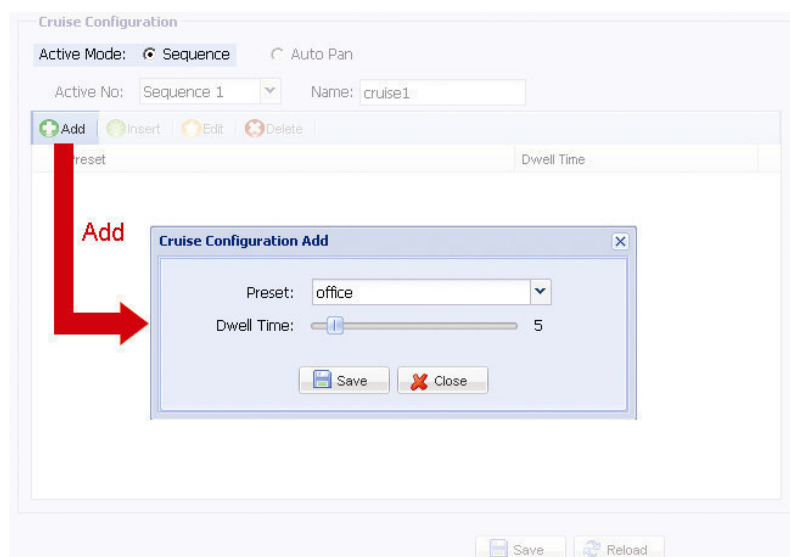


Sequence

When “Sequence” is selected here and  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 seconds.

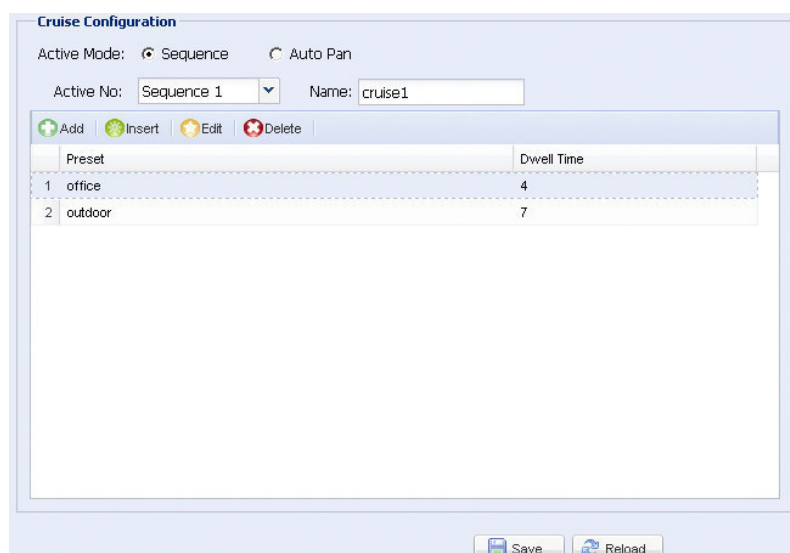
Then, click “Save” to confirm.



Step2: Click “Add” again to add more preset points.

To modify the existing preset point setting, click “Edit”. To insert a preset point before the selected point, click “Insert”. To remove the added preset point, click “Delete”.

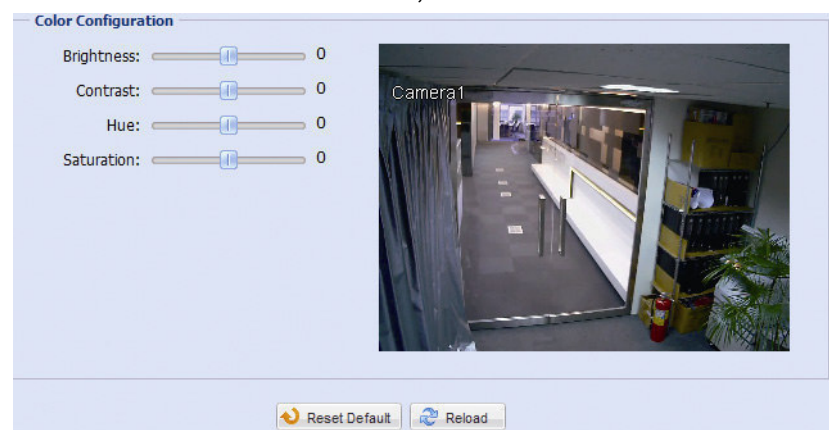
Step3: When all the points are added, click “Save” to confirm.



3.3.4 Color

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

To restore the default values, click “Reset Default”.



3.4 Record Timer

3.4.1 Record

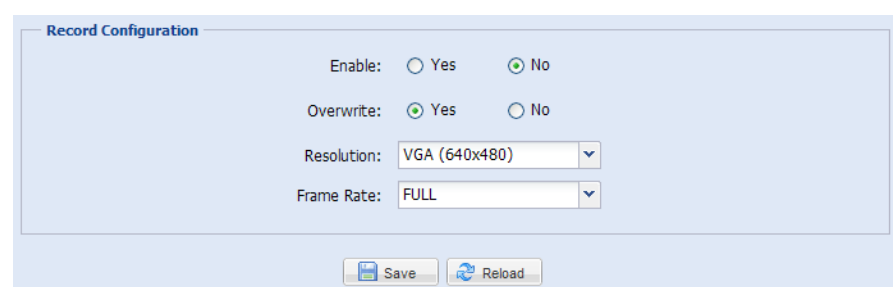
In “Record Configuration”, you can:

- Enable or disable all the record functions, such as manual record, motion record and alarm record. When “Enable” is set to “No”, all record functions are disabled even if you enable any of them in other configuration pages.
- Select if the data should be overwritten when the memory storage is full.
- Select the video resolution 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.

- Select the frame rate for event recording.

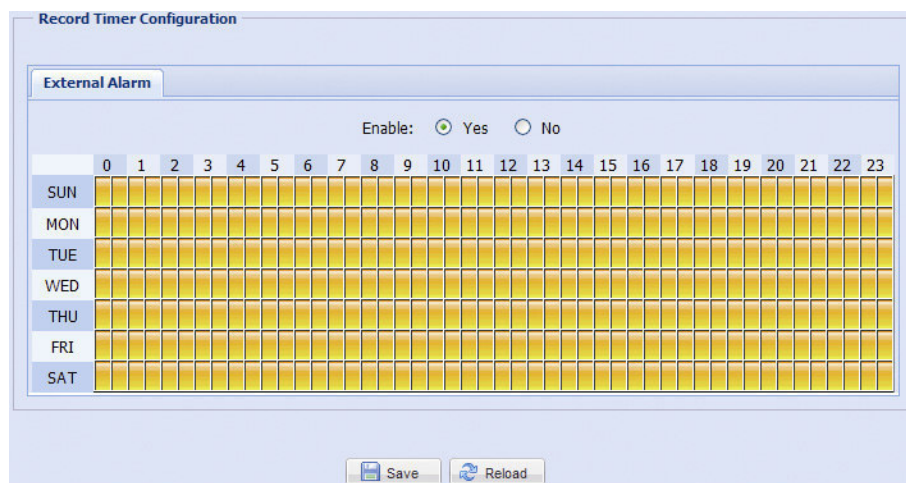
Note: The higher frame rate you choose, the more fluency the recording will be, but the faster the memory storage is consumed and become full.



3.4.2 Record Timer

To schedule alarm recording, click “External Alarm” to enable the recording, and select the time for recording.

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



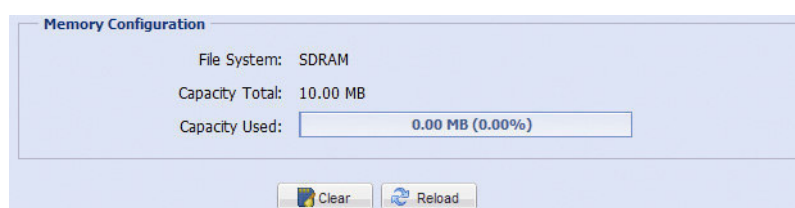
The "Record Timer Configuration" window shows the "External Alarm" tab. It includes an "Enable" section with radio buttons for "Yes" (selected) and "No". Below this is a 7x24 grid for scheduling recording by day of the week (SUN to SAT) and hour (0 to 23). The grid cells are yellow, indicating recording is enabled for all times. At the bottom are "Save" and "Reload" buttons.

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.

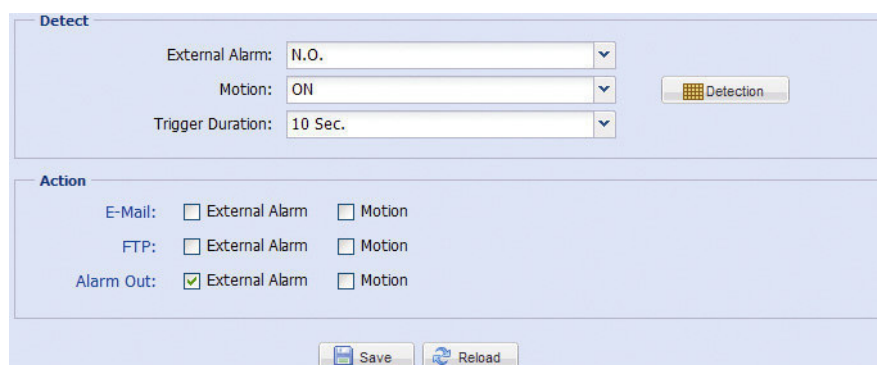


The "Memory Configuration" window displays the "File System" as "SDRAM". It shows "Capacity Total: 10.00 MB" and "Capacity Used: 0.00 MB (0.00%)". At the bottom are "Clear" and "Reload" buttons.

3.6 Trigger

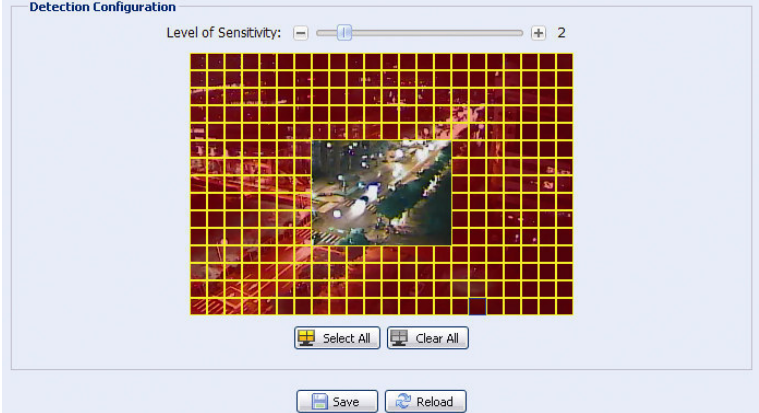
3.6.1 Trigger

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



The configuration interface is divided into two sections: "Detect" and "Action".
In the "Detect" section, "External Alarm" is set to "N.O.", "Motion" is set to "ON", and "Trigger Duration" is set to "10 Sec.". There is a "Detection" button with a grid icon.
In the "Action" section, there are checkboxes for "E-Mail", "FTP", and "Alarm Out". For each, "External Alarm" and "Motion" can be selected. "Alarm Out" has "External Alarm" checked.
At the bottom are "Save" and "Reload" buttons.

◆ Detect

Item	Description
External Alarm	Set "N.O." or "N.C." depending on the configuration of your alarm-in device.
Motion	<p>Enable (ON) or disable (OFF) motion detection. <i>Motion detection is not supported when the stream format is Motion JPEG.</i></p> <p>When "Enable" is selected, click "Detection" to enter the motion detection area setting page as follows:</p>  <p>Level of Sensitivity: Set the detection sensitivity from 1 ~ 10.</p> <p>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.</p>
Trigger 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	<p>Select the event type you want to receive E-mail notifications when it occurs. Then, click the title "E-Mail" to configure the record time from 1 ~ 5 seconds. The camera will send the captured video clip to the E-mail address(s) assigned in "Network" → "Mail" once the selected event type occurs.</p>
FTP	<p>Select the event type you want to receive FTP notifications when it occurs. Then, click the title "FTP" to configure the record time from 1 ~ 5 seconds. The camera will upload the captured video clip to the FTP site assigned in "Network" → "Mail" once the selected event type occurs.</p>
Alarm Out	<p>Select the event type you want to trigger the alarm-out device to work when it occurs. Then, click the title "Alarm Out" to configure the trigger rule.</p>

3.6.2 Push Video

“Push Video” is an active notification system, different from traditional FTP and Email notification methods.

Note: For Push Video to work properly, make sure the record function is on in “Record” → “Record”, and the record timer for the external alarm is on in “Record” → “Record Timer”.

Push Video

Guard: ☒ Enable ☐ Disable

Slow Shutter Lock: ☒ Enable ☐ Disable

Guard Rule: External Alarm

Record Frame Rate: 1/3

Message: Push Video Alarm!

Save

Reload

Push Video Timer Configuration

Enable: ☒ Yes ☐ No

	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
SUN																								
MON																								
TUE																								
WED																								
THU																								
FRI																								
SAT																								

Save

Reload

Item	Description
Guard	Select to enable or disable Push Video. This function can also be enabled from your iPhone or Android mobile devices. <i>When this function is enabled, the image resolution is fixed to “VGA”.</i>
Slow Shutter Lock	Select to fix the slow shutter level to level 2 (Enable) or remain the current slow shutter level (Disable) when Push Video is enabled. When this function is enabled, it could ensure Push Video recording to get clear images when the environment is dark. This function is set to “Enable” by default.
Guard Rule	Select the rule to enable Push Video from “External Alarm”.
Record Frame Rate	Select the frame rate for Push Video recording.
SMS Text	Define the context when you receive the Push Video message on your iPhone or Android mobile device. Up to 28 characters are allowed.

3.7 General

3.7.1 General

In “General”, you can select the UI language, and check the MAC address of your camera.

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.

General Configuration

Language: English

Auto Lock Time: 15 MIN

MAC Address: 00:0e:53:18:c8:0c

Save

Reload

3.7.2 Time

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

Time

Time Configuration

Date:2010/06/09

Time:19:09:20

Save

Reload

Daylight Saving Time

Daylight Saving Time Configuration

Daylight Saving Time:EnableDisable

Start Time:AugustFirst WeekMonday6:0(HH:MM)

End Time:OctoberFifth WeekMonday10:0(HH:MM)

Adjust Time:1:0(HH:MM)

Save

Reload

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

Note: This function is available only for “Supervisor”.

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”.

Server Log List

No.	Event	Time	Result
1	Remote Login	2011/03/31 17:54:36	admin
2	Remote Login	2011/03/31 17:54:04	normal
3	Remote Login	2011/03/31 17:35:01	admin
4	Remote Login	2011/03/31 17:26:11	normal
5	Remote Login	2011/03/31 17:25:25	power
6	Remote Login	2011/03/31 17:21:00	admin
7	SNTP Update	2011/03/31 17:20:55	Failed
8	Power On	2011/03/31 17:20:21	ON
9	SNTP Update	2011/03/31 17:17:37	Failed
10	Power On	2011/03/31 17:17:04	ON
11	Remote Login	2011/03/31 16:48:56	admin
12	Remote Login	2011/03/31 16:42:17	admin

Prev. PageNext PageReloadClean All

☒ Power On☒ Remote Login☒ Reset Default☒ E-Mail☒ FTP☒ DDNS☒ PPPoE☒ DHCP☒ SNTP Update

16

3.7.4 Online

Note: This function is available only for “Supervisor”.

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”.

Online Configuration

Anonymous Viewer Login: ☐ Enable ☒ Disable

Login with CAPTCHA Image: ☐ Yes ☒ No

Max Online User:

Username	IP Address	User Level	Media Type
admin	211.75.84.96	SUPERVISOR	H264
admin	60.248.97.4	SUPERVISOR	H264

Reload

Save Reload

3.7.5 Account

Note: This function is available only for “Supervisor”.

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.

Account Configuration

Username	User Level	Life Time
admin	SUPERVISOR	INFINITE
guest	SUPERVISOR	5 MIN

New Account Info

Username:

Password:

Confirm Password:

User Level:

Life Time:

Save Close

Add Edit Delete

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 Maintenance

Note: This function is available only for “Supervisor”.

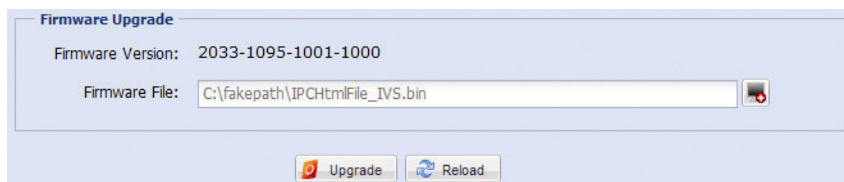
Firmware Upgrade

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: For system upgrade, you can only upgrade one file at a time. To upgrade all files, you need to start from Step1 again when one file is upgraded.

Step1: Click “” to browse to where you save the upgrade files, and select one of them (two files in total).



Step2: Click “Upgrade” to start system upgrading. The camera will reboot after file 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.

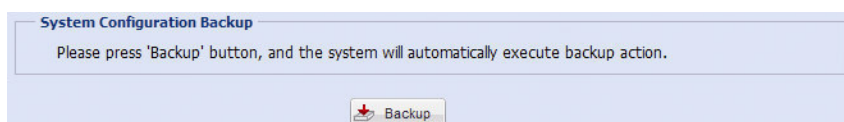
Step3: Repeat Step1 ~ 2 again, but select the other file to upgrade this time.

System Configuration Backup

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

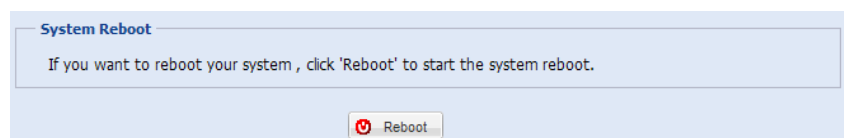
You may import the same system configuration to another AVN807A, or restore your system configuration when AVN807A is reset to default values.

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.

Player Download

If you want to open the video downloaded from playback. Please download and install the player at first.

 [Free Download](#)

APPENDIX 1 PRODUCT SPECIFICATIONS

	AVN807A
■ Network	
Network Compression	H.264 / MPEG4 / MJPEG
Multiple Video Streaming (Encode Modes, IPS, Resolution)	3 (H.264, MJPEG, MPEG4)
LAN Port	YES
LAN Speed	10/100 Based-T Ethernet
Supported Protocols	DDNS, PPPoE, DHCP, NTP, SNTP, TCP/IP, ICMP, SMTP, FTP, HTTP, RTP, RTSP, RTCP, IPv4, Bonjour, UPnP, DNS, UDP, IGMP
Frame Rate	NTSC:30, PAL:25
Number of Online Users	10
Security	(1) Multiple user access levels with password (2) IP address filtering (3) Digest authentication
Remote Access	(1) Internet Explorer® on Windows® operating system (2) EagleEyes on iPhone, iPad & Android mobile devices
■ Camera	
Image Sensor	1/3" MOS image sensor
Video Resolution	SXGA, SXVGA, 720P, VGA, QVGA
Min Illumination	0.1 Lux / F1.5, 0 Lux (LED ON)
Shutter Speed	1 / 60 (1/50) to 1 / 100,000 sec.
S/N Ratio	More than 48dB (AGC off)
Lens	f3.8mm / F1.5
Viewing Angle	80.4°(Diagonal)
IR LED	35 units
IR Effective Range	Up to 20 meters
White Balance	ATW
AGC	Auto
IRIS Mode	AES
External Alarm I/O	YES
IP Rating	IP67
Power Source (±10%)	DC12V / 1A
Power Consumption	8W ~ 10W
Operating Temperature	-20℃ ~ 40℃
Dimensions (mm)**	75(φ) x 114(H)
■ Others	
Mobile Surveillance	iPad, iPhone & Android mobile device
RTC (real-time clock)	YES
Motion Detection	YES
Digital Pan / Tilt / Zoom	YES
Event Notification	Push Video / FTP / Email
Minimum Web Browsing Requirements	<ul style="list-style-type: none"> • Pentium 4 CPU 1.3 GHz or higher, or equivalent AMD • 256 MB RAM • AGP graphics card, Direct Draw, 32MB RAM • Windows 7, Vista & XP, DirectX 9.0 or later • Internet Explorer 7.x or later

** The specifications are subject to change without notice.

** Dimensional tolerance: ± 5mm

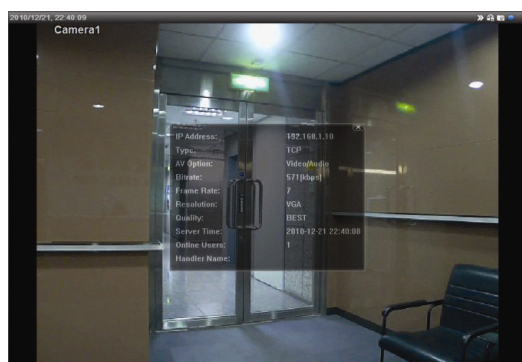
APPENDIX 2 BIT RATE TABLE FOR REFERENCE

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 3 Q&A

For more details about Q&A, please visit our official website: www.eagleeyesccv.com/supp_QnA.aspx.

Question	Answer
<p>I can connect to this camera in my house or office where it's installed with wireless network.</p> <p>But when I leave my house or office, I can't connect to it from my mobile phone (with 3G network), or other computer (connected to Internet). Why?</p>	<p>You didn't configure this camera to Internet, but only in LAN.</p> <p>Please follow the steps in "Advanced Network Setup" downloadable from www.surveillance-download.com/user/n807a.swf to complete network configurations, or it's recommended for you to check with your local installer or reseller for this service because it's usually hard for a person who doesn't have network knowledge to set network configurations.</p>
<p>My live images are not fluent. Why?</p>	<p>Image fluency could be affected by the local network upload bandwidth, router efficiency, client network download bandwidth, complexity of live view, and more.</p> <p>(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".</p>
<p>What's "Push Video"?</p>	<p>"Push Video" is an active notification system, different from traditional FTP & Email notification methods.</p> <p>When "Push Video" is enabled and any human detection event occurs, you'll be able to receive notifications on your iPhone / iPad / Android mobile device within 5 seconds.</p>
<p>The live video keeps flickering. Why?</p>	<p>Please try adjusting the power line frequency to "60 Hz" or "50 Hz" for the camera.</p> <p>For iPhone users, access the camera, and select "⚙️" on the top right corner to enter IPCAM Configuration page. Then, go to "Advance Setup" → "Camera" to change setting.</p> <p>For access from Internet Explorer, log into the camera, and select "Config." → "Camera" → "Camera".</p>