

AVN808 IR Dome NETWORK CAMERA SERIES OPERATION GUIDE

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

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

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1. OVERVIEW

1.1 Product Features

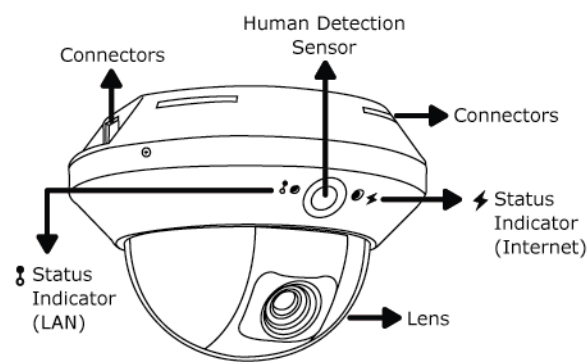
- Easy **network setup** with your **iPhone / iPad**
- **1.3 Megapixel** SONY sensor with **HDTV 720p** quality, allowing users to notice minor details more easily
- **Push Video** support to send an event notification to your iPad, iPhone and Android mobile device immediately once the specified event type is triggered, and play video recording once you confirm the receipt
- **External alarm I/O device** connection
- **3-axis mechanism** for flexible ceiling and wall-mount installation
- Supports external microphone & speaker connection for **audio transmission**
- **Remote Surveillance**
 - **Fully compatibility** on **iPhone & iPad**, and **Internet Explorer®** on **Windows®** operating system

1.2 Package Content

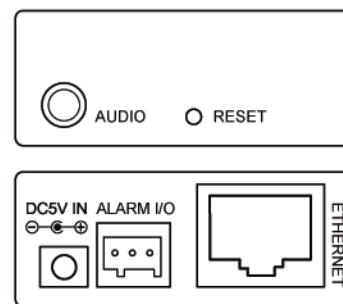
| | | |
|---|--|---|
| <input type="checkbox"/> Network camera | <input type="checkbox"/> Screws & Wall Plugs | <input type="checkbox"/> 3-pin Terminal |
| <input type="checkbox"/> Quick Setup with iPhone / iPad | <input type="checkbox"/> Adapter | <input type="checkbox"/> Audio Cable |

1.3 Product Overview

Camera Overview



Connectors



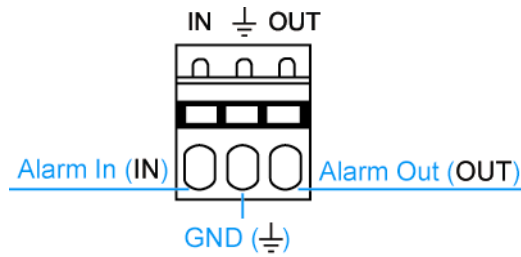
1.4 Connectors

| | |
|------------|--|
| Ethernet: | Connect a RJ45 network cable. |
| DC5V IN: | Connect the regulated power supply. |
| RESET: | With the power connected, press to reset all parameters, including the IP address to factory default settings. The camera will reboot after default reset. Please do not disconnect your camera during the reset process. |
| Alarm I/O: | A 3-pin I/O terminal is supplied with the camera for external alarm device connection. For details, please refer to "1.5 External I/O Port" at page 2. |
| AUDIO: | Plug in the supplied audio cable for speaker and microphone connection. <i>* The speaker and microphone are not supplied with the sales package and should be purchased separately.</i> |

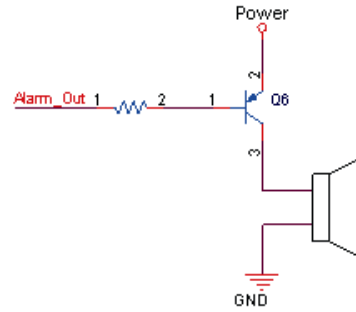
1.5 External I/O Port

This camera supports external I/O device connection, and a 3-pin I/O terminal is supplied with this camera for easy connection.

Below shows which input on the I/O terminal you should use for wiring when you want to connect an external device to this camera.





3-pin I/O Terminal



Alarm Out Connection

1.6 Status Indicator

| ICON |  LAN connection status |  Internet connection status |
|---|--|---|
| System Status | | |
| During powering on | Always on | Always on |
| Reset default | Blinking (on 250 ms, off 250 ms) ●○○●○○●○○● | Always off |
| Upgrade | Blinking (on 250 ms, off 250 ms) ●○○●○○●○○● | Blinking (on 250 ms, off 250 ms) ●○○●○○●○○● |
| Connection Status | | |
| LAN connected | Always on | -- |
| LAN disconnected | Blinking (on 100 ms, off 500 ms) ●○○●○○●○○ | -- |
| Internet connected | -- | Always on |
| Internet disconnected | -- | Blinking (on 100 ms, off 500 ms) ●○○●○○●○○ |
| 3G Connection Error on iPhone / iPad / Android Mobile Device | | |
| 3G Connection Setting Uncompleted | -- | Blinking (on 5 sec, off 0.5 sec, on 0.5 sec, off 0.5 sec, on 5 sec) ●●●●○○●●●● |

* LED blinking frequency - ●LED on / ○LED off

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/n808.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.

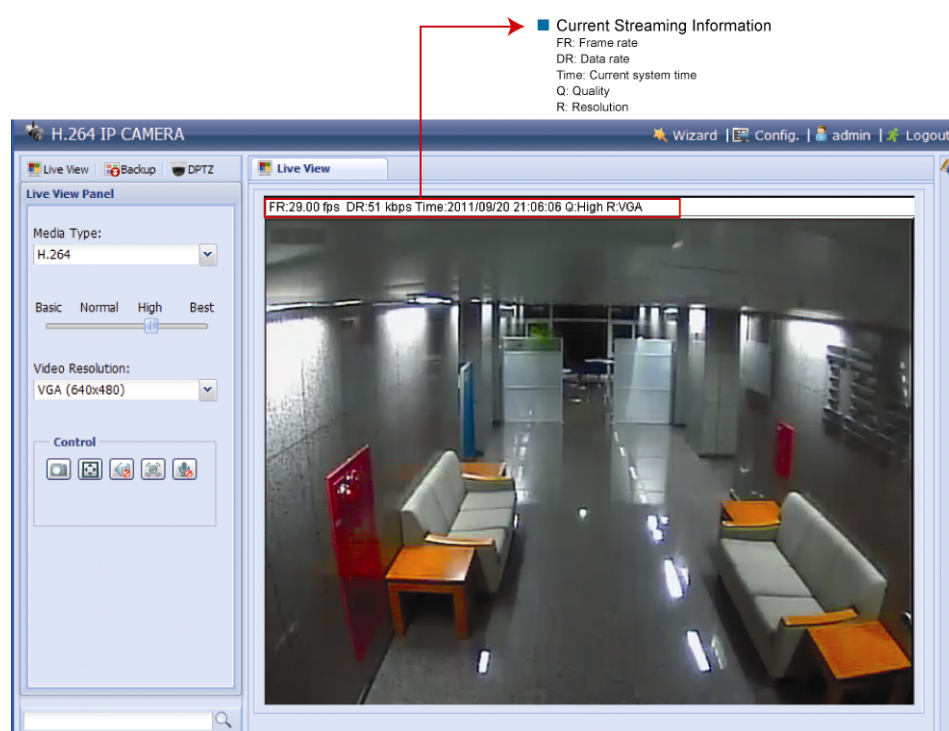
- To skip the wizard and directly access the camera live view, click “Close”.
- To directly access the camera live view without starting the wizard for the login next time, check “Do not start wizard at login”.














Note: If you’re prompted to install “VLC player”, “Software” 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 model number used and the user level used to log in.

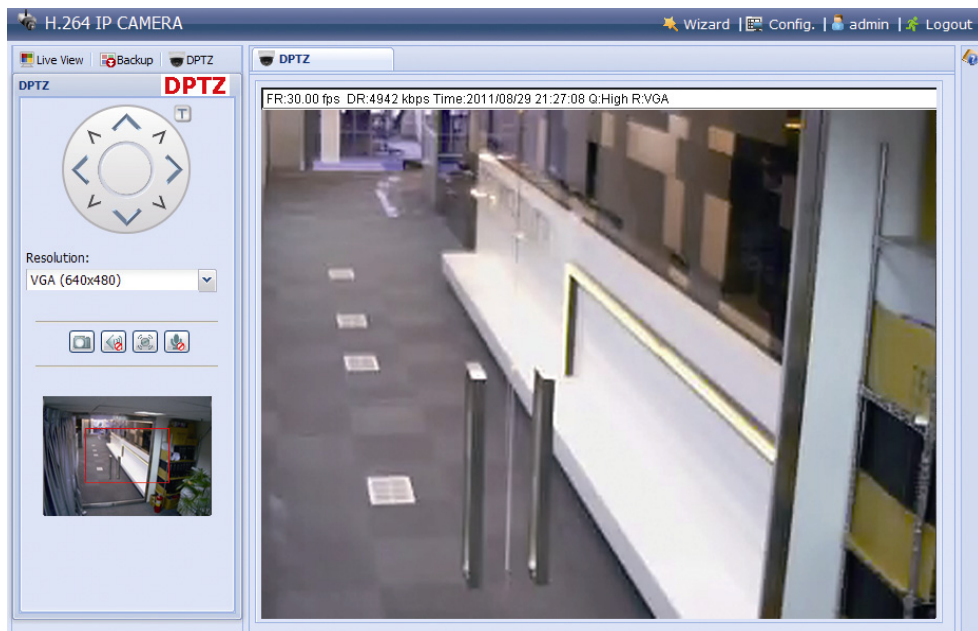


| Function | Icon | User Level | Description |
|------------------|---|---|--|
| Live |  | Supervisor / Power User / Normal User / Guest | Switch to the live view page. |
| Backup |  | Supervisor / Power User | Enter the event record list for video playback. For details, please refer to "2.4 Event Record Search & Playback" at page 6. |
| 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 5. |
| 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 7. |
| Media Type | -- | Supervisor / Power User / Normal User / Guest | Select the image player from the drop-down list: <ul style="list-style-type: none"> ■ H.264 / MPEG-4 / Motion JPEG ■ 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. |
| Video Resolution | -- | Supervisor / Power User / Normal User | Select the image resolution from the drop list: <ul style="list-style-type: none"> ■ SXGA (1280 x 1024) ■ HD720P (1280 x 720) ■ VGA (640 x 480) ■ QVGA (320 x 240) |
| Live View Size: | | Supervisor / Power User / Normal User | |
| Full Screen |  | | Click to display the image in full screen. To exit the full screen mode, press "Esc" on your keyboard. <i>This icon appears only when the selected resolution is SXGA or HD720P & VGA.</i> |
| Double size |  | | The QVGA resolution is resized to fit into the current live view size. <i>This icon appears only when the selected resolution is QVGA.</i> |
| Normal Size |  | | The current live view size is the same as the selected resolution. <i>This icon appear only when the selected resolution is SXGA or HD720P or HD1080P.</i> |
| Fit to screen |  | | The selected resolution is resized to fit into the current live view size. <i>This icon appear only when the selected resolution is SXGA or HD720P.</i> |
| No Scale |  | | Click and hold the movable square on the left bottom corner of the live view to move <i>This icon appear only when the selected resolution is SXGA or HD720P.</i> |
| 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. |
| Audio On / Off |  | Supervisor / Power User / Normal User | Click to switch the audio-in on / off. <i>This function is available only when a microphone is connected.</i> |
| 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. |
| Microphone |  | Supervisor | Click to switch the audio-out on / off. <i>This function is available only when a speaker is connected.</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.



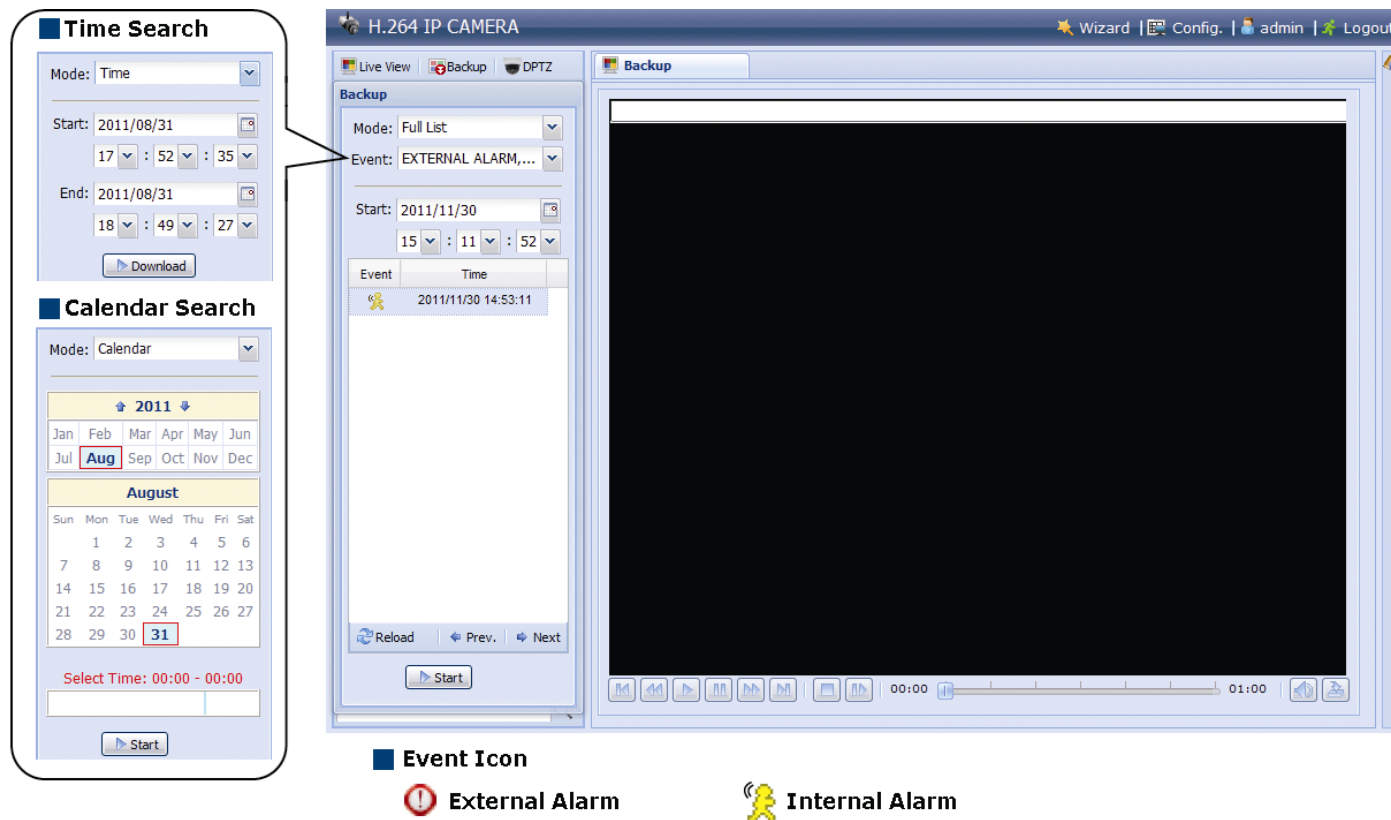
STEP2: Select the functions when needed:










| FUNCTION | ICON | DESCRIPTION |
|----------------|---|--|
| Resolution | -- | Select the video resolution for the DPTZ function. Only “VGA” and “QVGA” are available. |
| 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. |
| Audio On / Off |  | Click to switch the audio-in on / off. <i>This function is available only when a speaker is connected.</i> |
| Alarm Out |  | 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. |
| Microphone |  | Click to switch the audio-out on / off. <i>This function is available only when a speaker is connected, and when you’re a “Supervisor”.</i> |

2.4 Event Record Search & Playback

This camera can only save up to three alarm 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. <i>This function is available only when a speaker is connected during recording.</i> |
|  | Download | Click to download the current video clip to the specified path in your PC. <i>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.</i> |

3. CAMERA CONFIGURATIONS

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

3.1 System configuration menu

Click “Config.” to enter the configuration page.

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 8.
- For details about “Camera”, please refer to “3.3 Camera” at page 11.
- For details about “Record”, please refer to “3.4 Record” at page 13.
- 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 14.
- For details about “General”, please refer to “3.7 General” at page 15.

| 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”. |
| | Filter | Choose to permit or block the IP address(es) which can access this camera. |
| | UPnP | <i>*Suitable for Windows-based operating system.</i> Allow this camera to be detected among devices within the same network area for easy and quick usage. |
| Camera | Bonjour | <i>*Suitable for Apple Mac-based operating system.</i> Allow this camera to be detected among devices within the same network area for easy and quick usage. |
| | Camera | 1. Rename the camera. 2. Change the place where the camera name is shown on the screen. |
| | Video | Adjust video-related settings in different video format. |
| | Color | Adjust the color performance. |
| | Audio | Adjust the audio volume of the microphone and speaker. |
| Record | Advanced | Adjust the camera parameters if necessary. |
| | Record | Configure the record function. |
| Storage | Record Timer | Schedule internal and external alarm recording. |
| | Memory | Check the current storage capacity and clear all recorded data when needed. |
| Trigger | Trigger | 1. Enable / disable motion, alarm and PIR detection. 2. Set the motion detection area. 3. Configure how the camera reacts for any event. |
| | Push Video | 1. Set Push Video rules. 2. Schedule Push Video timer. |
| 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. 4. Enable or disable LED status indication. |
| | 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. |
| Maintenance | 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 network camera depending on your network type.

For details, please refer to “Advanced Network Setup” from www.surveillance-download.com/user/n808.swf.

The screenshot shows the 'Network Configuration' window. It features three radio buttons for IP Type: 'Static IP' (selected), 'PPPoE', and 'DHCP'. Below these are input fields for: Server IP (192.168.1.10), Gateway (192.168.1.1), Net Mask (255.255.255.0), Port (80), DNS1 (168.95.1.1), DNS2 (139.175.55.244), and MAC Address (00:0E:53:20:E7:3E). At the bottom, there are 'Save' and 'Reload' buttons.

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.

The screenshot shows the 'QoS Configuration' window. It has two radio buttons: 'QoS: Enable' (selected) and 'Disable'. There is a dropdown menu for 'Interface' set to 'Ethernet' and a text input for 'Max. Upload Rate' set to '4096' kbps. 'Save' and 'Reload' buttons are at the bottom.

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/n808.swf.

The screenshot shows the 'DDNS Configuration' window. It has two radio buttons: 'DDNS: Enable' (selected) and 'Disable'. There is a dropdown for 'System Name' set to 'eagleeyes', an input for 'Hostname' set to 'MAC000E5320E73E' with '.ddns.eagleeyes.tw' next to it, and an empty 'E-Mail' field. 'Save' and 'Reload' buttons are at the bottom.

3.2.4 SNTP

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

The screenshot shows the 'SNTP Configuration' window. It has a dropdown for 'GMT' set to '(GMT+08:00) Taipei', an input for 'NTP Server' set to 'tock.stdtime.gov.tw', a dropdown for 'Sync. Period' set to 'Daily', and a 'Server Time' display showing '2011-08-30 20:34:42'. There is a 'Sync.' button and 'Save' and 'Reload' buttons at the bottom.

| 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. 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 network 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 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 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". |

3.2.8 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 network 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" (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/n808.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.

Port Mapping Configuration

Port Mapping: Enable Disable

Your IP-Camera is accessible from the other side of the router using the following URL:
 http://60.248.97.4:80 or https://60.248.97.4:59207.

Router IP: (LAN IP Address)

HTTP Port:

HTTPS Port:

*If set to blank or 0, a port number will be set automatically upon enable.

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

Rename the camera, and change the place where the camera name is shown on the screen, UP-LEFT / UP-RIGHT / DOWN-LEFT / DOWN-RIGHT.

Camera

Camera Configuration

Title:

Position:

3.3.2 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.

Note: QQVGA is for mobile surveillance only.

Video Configuration

Configuration

Power Line Frequency: Hz

H264

| Resolution | Quality | FPS | Max Bit Rate |
|---------------|---------|-----|--------------|
| SXGA / HD720P | HIGH | 30 | 5000 |
| VGA | HIGH | 30 | 3000 |
| QVGA | HIGH | 30 | 3000 |
| QQVGA | HIGH | 30 | 3000 |

MPEG4

| Resolution | Quality | FPS | Max Bit Rate |
|---------------|---------|-----|--------------|
| SXGA / HD720P | HIGH | 20 | 5000 |
| VGA | HIGH | 30 | 3000 |
| QVGA | HIGH | 30 | 3000 |
| QQVGA | HIGH | 30 | 3000 |

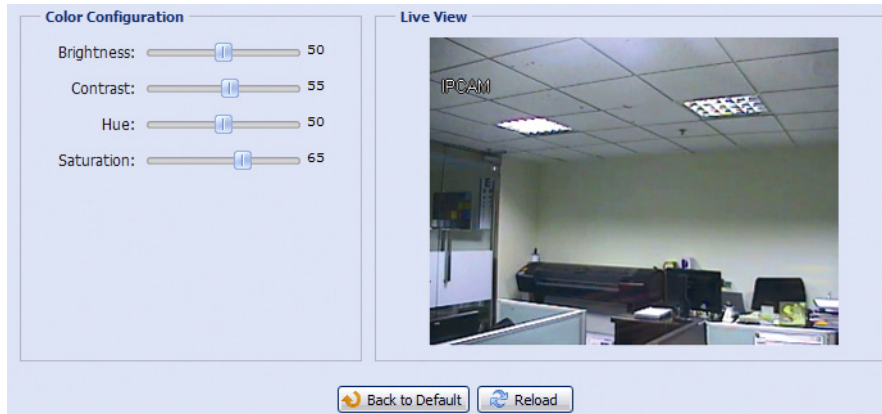
JPEG

| Resolution | Quality | FPS |
|---------------|---------|-----|
| SXGA / HD720P | HIGH | 30 |
| VGA | HIGH | 30 |
| QVGA | HIGH | 30 |
| QQVGA | HIGH | 30 |

3.3.3 Color

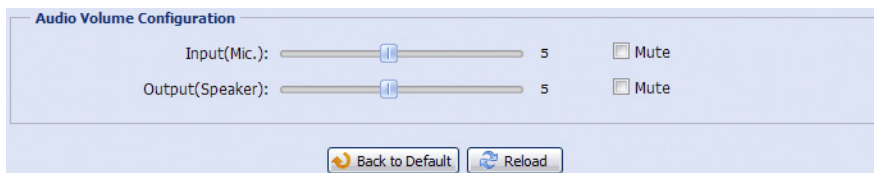
Adjust the color performance from Brightness, Contrast, Hue and Saturation. Click and drag the slider to preview the color change on the right side of this page and adjust the image color.

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



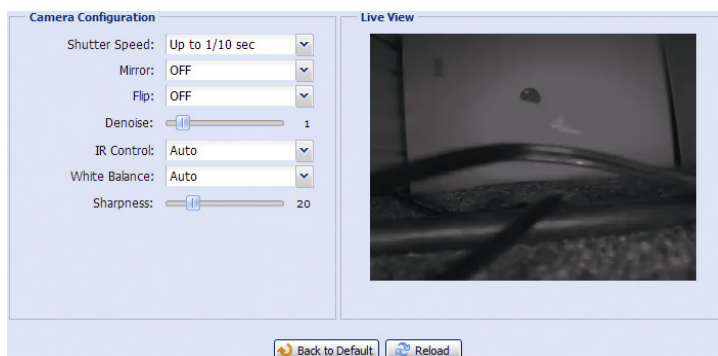
3.3.4 Audio

Drag the slider to adjust the volume of the microphone and speaker.



3.3.5 Advanced

Adjust the camera parameters if necessary.



| Item | Description |
|---------------|--|
| Shutter Speed | Set the shutter speed based on your need. The options are: Up to 1/10 sec, Up to 1/30, Up to 1/15, Up to 1/6, Up to 1 and Up to 2. |
| 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. |
| De-noise | Click and drag the slider to adjust the level from 0 ~ 10 to decrease the noise shown in the dark environment. |
| IR Control | Select “Auto” to automatically enable IR LEDs at night or in the dark environment, “On” to always enable IR LEDs, or “OFF” to disable this function. |
| White Balance | Process the current image to retain color balance over a color temperature range. The options are: Auto, Incandescent Light, Cool Light, sun Light, Cloudy & Sun Shade. |
| 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 from 0 ~ 100. The higher the value, the sharper the image. |

3.4 Record

3.4.1 Record

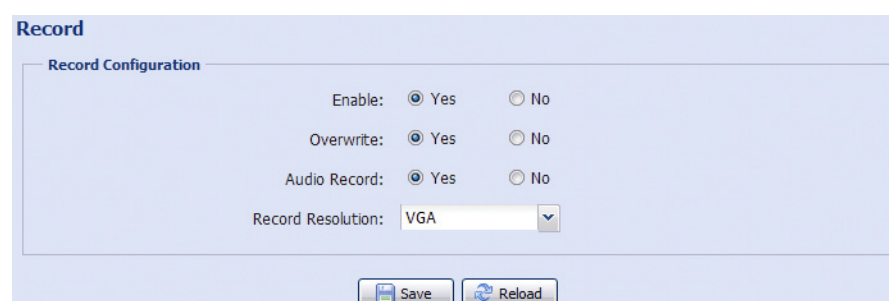
In “Record Configuration”, you can:

- 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.
- Enable or disable the audio record function.

Note: This function is available only when a microphone is connected to this camera.

- Select the video resolution for event recording.

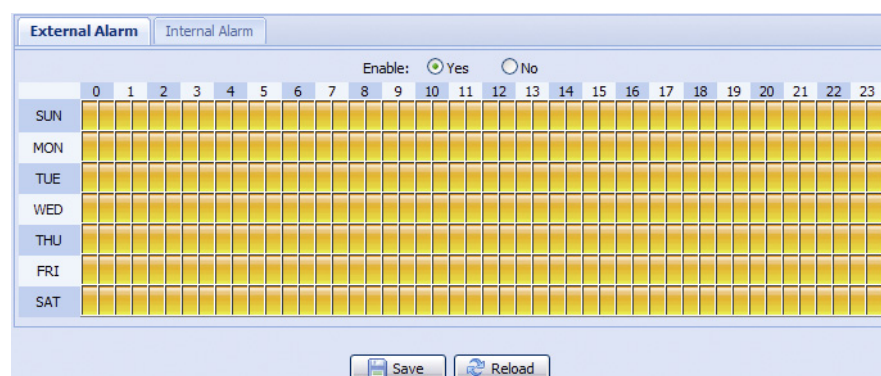
Note: The higher resolution you choose, the more accuracy and higher image quality the recording will be, but the faster the memory storage is consumed and become full.



3.4.2 Record Timer

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

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



3.5 Storage

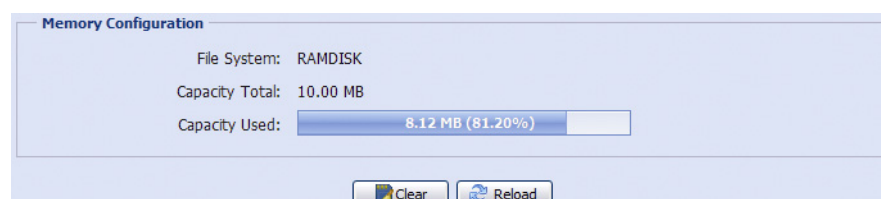
3.5.1 Memory

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.

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 4 RECORDING TIME TABLE” at page 24.



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

External Alarm: ON
 Motion: ON
 PIR: ON
 Duration: 10 Sec.

Action

E-Mail: External Alarm Motion PIR
 FTP: External Alarm Motion PIR
 Alarm Out: External Alarm Motion PIR
 Record: External Alarm Internal Alarm
 Audio Alert: Manual Alarm-Out

Save Reload

◆ 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 | <p>Enable or disable motion detection.</p> <p><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>Sensitivity: Set the detection sensitivity from the drop-down list: High, Normal or Low.</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> |
| PIR | Enable (ON) or disable (OFF) PIR 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 (H264 / JPEG / MPEG4), file format (AVC / AVI), and record time (1 ~ 5 seconds) for the event video clip. The camera will send the captured video clip 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. |
| 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. |
| Audio Alert | Select the event type you want to enable audio alert when it occurs. |

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".

| 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". |
| Message | Define the context when you receive the Push Video message on your iPhone or Android mobile device. Up to 28 characters are allowed. |

To configure Push video to enable in the specified time, select "Yes" to enable the timer function, and select the time you want to enable.

3.7 General

3.7.1 General

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

To allow the status LED indicators to show the status as indicated in “1.6 Status Indicator” at page 2, select “Enable” in “Status LED Mode”; to hide the status, select “OFF”; to only show the error status, select “Temporary Disable”.

Note: The status LED mode will be restored to “Enable” after camera reboot when “Temporary OFF” is selected.

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.

The screenshot shows the 'General Configuration' section of a web interface. It contains four rows of configuration options, each with a label and a dropdown menu. The first row is 'Language' set to 'English'. The second row is 'Status LED Mode' set to 'Enable'. The third row is 'Auto Lock Time' set to '15 MIN'. The fourth row is 'MAC Address' with the value '00:0E:53:E6:29:B3'. Below these fields are two buttons: 'Save' and 'Reload'.

3.7.2 Time

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

The screenshot shows the 'Time Configuration' section of a web interface. It is divided into two main parts. The top part, 'Time Configuration', includes an 'OSD' section with radio buttons for 'Enable' and 'Disable' (selected), a 'Date' field set to '2011/08/30', and a 'Time' field with three dropdowns set to '21 : 16 : 41'. The bottom part, 'Daylight Saving Time Configuration', includes a 'Daylight Saving Time' section with radio buttons for 'Enable' and 'Disable' (selected). Below this are three rows of time settings: 'Start Time' (August, First Week, Monday, 6 : 00), 'End Time' (October, Fifth Week, Monday, 10 : 00), and 'Adjust Time' (1 : 00). Both sections have 'Save' and 'Reload' buttons at the bottom.

| 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”.

Server Log List

| No. | Event | Time | Result |
|-----|--------------|---------------------|--------|
| 1 | Remote Login | 2011/08/30 20:54:41 | admin |
| 2 | Remote Login | 2011/08/30 20:29:58 | admin |
| 3 | Remote Login | 2011/08/30 18:22:08 | admin |
| 4 | SNTTP Update | 2011/08/30 18:20:06 | Failed |
| 5 | Remote Login | 2011/08/30 18:20:03 | admin |
| 6 | Power On | 2011/08/30 18:19:24 | ON |
| 7 | Power On | 2011/08/30 18:18:46 | OFF |
| 8 | Remote Login | 2011/08/30 18:11:21 | admin |
| 9 | Remote Login | 2011/08/30 18:11:18 | admin |
| 10 | Remote Login | 2011/08/30 18:07:10 | admin |
| 11 | Remote Login | 2011/08/30 18:03:19 | admin |
| 12 | Remote Login | 2011/08/30 18:02:15 | admin |
| 13 | Remote Login | 2011/08/30 18:02:07 | admin |
| 14 | Remote Login | 2011/08/30 18:01:51 | admin |
| 15 | Remote Login | 2011/08/30 17:57:01 | admin |
| 16 | Remote Login | 2011/08/30 17:56:55 | admin |
| 17 | Remote Login | 2011/08/30 17:56:53 | admin |
| 18 | Remote Login | 2011/08/30 17:54:44 | admin |
| 19 | SNTTP Update | 2011/08/30 17:50:48 | Failed |
| 20 | Power On | 2011/08/30 17:50:07 | ON |

Prev. Page Next Page Reload Clean 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”.

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

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

| Username | User Level | Life Time |
|----------|------------|-----------|
| admin | SUPERVISOR | INFINITE |
| power | POWER USER | 1 HOUR |
| normal | NORMAL | 1 HOUR |
| guest | GUEST | 1 HOUR |

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

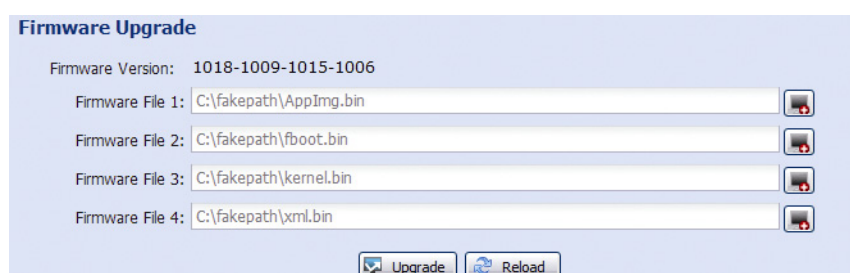
Firmware Upgrade

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.

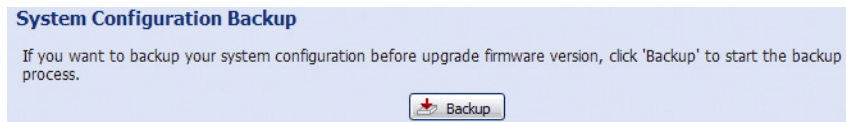
Note: It takes a few minutes to finish the upgrade process. Do not disconnect the power during firmware upgrade, or the upgrade may be failed. The camera will reboot after the upgrade.

System Configuration Backup

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

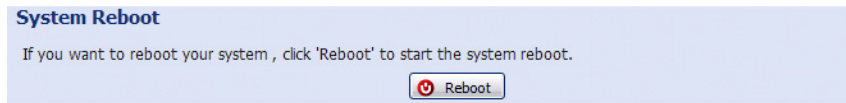
You may import the same system configuration to another camera, or restore your system configuration when the camera is reset to default values.

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



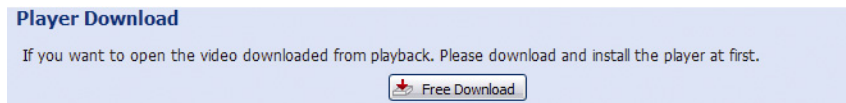
System Reboot

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 PRODUCT SPECIFICATIONS

| ■ 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, QoS |
| Frame Rate | 30 FPS |
| Number of Online Users | 10 |
| Security | <ol style="list-style-type: none"> Multiple user access levels with password IP address filtering Digest authentication |
| Remote Access | <ol style="list-style-type: none"> Internet Explorer on Windows operating system EagleEyes on iPhone, iPad and Android mobile devices |
| ■ Camera | |
| Image Sensor | 1/4" SONY H.R. image sensor |
| Video Resolution | SXGA / HD720P / VGA / QVGA |
| Min Illumination | 0.1 Lux / F1.5, 0 Lux (IR LED ON) |
| S/N Ratio | More than 48dB (AGC off) |
| Lens | f3.8mm / F1.5 |
| Viewing Angle | 62.7° (Diagonal) / 53.7° (Horizontal) / 34.1° (Vertical) |
| IR LED | 12 units (10 meters) |
| IR Shift | YES |
| White Balance | ATW |
| AGC | Auto |
| IRIS Mode | AES |
| PIR Sensor | Detection Range 76° wide angle with up to 5m long distance at 2.5m height (under 30°C) |
| External Alarm I/O | YES |
| External Audio In / Out | YES |
| Power Source (±10%) | 5V / 1A |
| Operating Temperature | 0°C~40°C |
| ■ Others | |
| Mobile Surveillance | iPad / iPhone / Android mobile device |
| RTC (real-time clock) | YES |
| Motion Detection | YES |
| Digital Pan / Tilt / Zoom | YES |
| Event Notification | FTP / Email / Push Video |
| 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

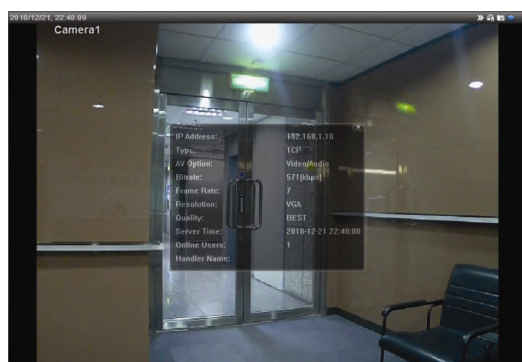
APPENDIX 2 BIT RATE TABLE FOR REFERENCE

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 EagleEyes Q&A, please visit our official website: www.eagleeyesctv.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 PC (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 the advanced network setup guide downloadable from www.surveillance-download.com/user/n808.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>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>For more details about "Push Video", please refer to "Advanced Network Setup" (APPENDIX3 ENABLE PUSH VIDEO).</p> |
| <p>The detection range of the built-in human detection sensor seems too short and the sensor is not sensitive enough. Did I do anything wrong on installation?</p> | <p>The human detection sensor might be influenced by the temperature of ambient environment and human beings, and the applicable working temperature is up to 30°C. To get more accurate and precise detection, you may connect external alarm devices, such as magnetic contacts.</p> <p>There're some tips for installation. For details, please go to www.eagleeyesctv.com/supp_QnA.aspx.</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" based on the model you have; to have normal image fluency and quality, select "VGA".</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" → "Video".</p> |

APPENDIX 4 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 |