

EAN800A/EAN800AW



User's Manual



Copyright © EverFocus Electronics Corp,
Release: Jan. 2009 Rev.A

Product Name: EAN 800A EverFocus IP Network Cameras

Model Number(s): EAN800A/EAN800AW

FCC Notice "Declaration of Conformity Information"

RF Declaration should be added. Please check Safety team.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning: Changes or modifications made to this equipment, not expressly approved by EverFocus or parties authorized by EverFocus could void the user's authority to operate the equipment.

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

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

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

EverFocus Electronics Corp.

12F, No. 79, Sec. 1, Shin-Tai Wu Rd., His-Chi,
Taipei Hsien, Taiwan, R.O.C.

EAN800A/EAN800AW complies with CE and FCC.

About this document

All the safety and operating instructions should be read and followed before the unit is operated. This manual should be retained for future reference. The information in this manual was current when published. The manufacturer reserves the right to revise and improve its products. All specifications are therefore subject to change without notice.

Safety Notice

- These limits are designed to provide reasonable protection. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: -Reorient or relocate the receiving antenna.
- Increase these separations between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



To reduce risk of fire or electric shock, do not expose this appliance to rain or moisture.



Do not attempt to disassemble the appliance. To prevent electric shock, do not remove screws or covers. There are no user-serviceable parts inside. Contact qualified service personnel for maintenance. Handle the appliance with care. Do not strike or shake, as this may damage the appliance.



Do not use strong or abrasive detergents when cleaning the appliance body. Use a dry cloth to clean the appliance when it is dirty. When the dirt is hard to

remove, use a mild detergent and wipe gently.



Do not operate the appliance beyond its specified temperature, humidity or power source ratings. Do not use the appliance in an extreme environment where high temperature or high humidity exists. Use the appliance at temperature within 0°C ~ +40°C / 32°F ~ 104°F and a humidity below 90%. The input power source for this appliance is 12 VDC & PoE.



Use only the recommended power supplies. Power supplies must comply with the requirement of the latest version of IEC60950-1. Substitutions may damage the unit or cause a fire or shock hazard.



Electrostatic-sensitive device. Use proper CMOS/MOSFET handling precautions to avoid electrostatic discharge.



Installation should be performed by qualified service personnel only in accordance with the National Electrical Code or applicable local codes.

Terms and Trademark

Ethernet, Internet Explorer, Linux, Microsoft, Windows, WWW are registered trademarks of the respective holders. Other product names appearing in this User's Guide may be trademarks or registered trademarks of their respective holders. Java™ and all Java-related logos and trademarks are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and other countries.

Support

If the unit ever needs repair service, the customer should contact the nearest EverFocus Electronics Corp. Service Center for return authorization and shipping instruction.

About AC Adaptor

Specifications for AC adaptor

Power Supply: 12VDC, 1 A

Power Output: 12VDC, 1 A

Operating Temperature: 0°C ~ 40°C / 32°F ~ 104°F

External Dimensions: 56 mm x 68 mm x 101 mm / 2.24" x 2.72" x 4.04"

TABLE OF CONTENTS

1. INTRODUCTION.....	6
2. FEATURES	6
3. ACCESSING THE CAMERA MENU	7
4. SETTING.....	10
4.1 SYSTEM INFO	10
4.1.1 Information	10
4.1.2 Log	11
4.2 USER CONFIG	12
4.3 NETWORK	14
4.3.1 Network.....	14
4.3.2 DDNS.....	16
4.3.3 Bandwidth	17
4.3.4 SMTP/FTP	18
4.3.5 Network Alarm (reserved for PowerCon).....	20
4.3.6 Wireless (EAN800AW).....	21
4.4 VIDEO	22
4.4.1 Multi Streaming	22
4.4.2 Camera	24
4.5 AUDIO	26
4.6 USER.....	27
4.7 EVENT.....	28
4.7.1 Event	28
4.7.2 Motion.....	31
4.7.3 Alarm.....	32
4.7.4 Time Mask	33
4.8 SYSTEM.....	34
4.8.1 Date/Time.....	34
4.8.2 Daylight Saving	36
4.8.3 SD Card.....	37
4.8.4 Maintenance	39
5. SPECIFICATIONS.....	41

1. INTRODUCTION

The EAN800A/EAN800AW network camera provides H.264, MPEG-4 and MJPEG compression for multi-streaming capabilities. H.264 is the most advanced video compression technology that saves your bandwidth without sacrificing video quality. Designed with advanced digital processing circuitry for high resolution 1/3" color CCD sensor, it can control AGC, BLC, FL, ES, H-Mirror, IRIS Level and Day/Night function through web browser. Built-in IEEE 802.11b/g wireless connection gives you the freedom to place the camera where it's needed. EAN800A/EAN800AW is the most flexible IP solution for all your application needs.

2. FEATURES

- Built-in H.264, MPEG-4 and MJPEG digital signal output at Full D1 image size with up to 30fps.
- H.264/MPEG4/MJPEG multi stream output for simultaneous live monitoring and high resolution recording.
- Support 4 independent video streams that can provide different compression formats and resolutions.
- The high sensitivity of 0.4Lux/F=1.2 is achieved by using the advanced 1/3"Sony Super HAD color CCD.
- Power over Ethernet (PoE) IEEE 802.3af.
- Support MDI/MDI-X auto crossover function
- Bandwidth control:64K/128K/256K/1M/2M/4M/8M bps and unlimited.
- Built-in network interface (10Base-T/100Base-TX) for remote monitoring by PC.
- Smart Wizard settings for varied event and schedule recording conditions.
- Built-in SD memory card slot for local storage and support SD High Capacity (optional).
- Built-in digital Motion Detection.
- Built-in digital zoom function.
- AGC, BLC, FL, ES, H-Mirror, IRIS Level and Day/Night function control through web browser.
- Two way audio.
- Built-in IEEE 802.11b/g wireless module (EAN800AW).

3. ACCESSING THE CAMERA MENU

Step 1. Start an Internet Explorer browser.

Step 2. Enter the IP address or host name of the camera in the **Location/Address** field of your Internet Explorer browser. (Please refer to EAN800A/EAN800AW Installation Guide for how to find the IP address)


Step 3. Input "Username" and "Password". Default Username is "**user1**" and default password is "**11111111**".

Step 4. Click "Login" button.


Step 5. You might be required to download Active X, which is required to view camera video. Please click "Yes".

Step 6. Congratulation!! You should be able to see the live image now.



1. Press  button to display the "Live" page.

Double click on the image to show a full screen display, double click again or press ESC to return normal display.

2. Press  button to enter Setting page. In Setting page, there are 8 sections: [System Info], [User Config], [Network], [Video], [Audio], [User], [Event] and [System]. Please refer to "4. SETTING" for further information.

3. Press  button to close the network page.

4. Video Stream



Select Video Stream from Stream 1 / Stream 2, Stream 3 and Stream 4. Please refer to "4.4.1 Multi Streaming" for further information.

5. View Size



You can select View size to either reduce or enlarge the image to the appropriate view size.

Select the view size for live images from:

NTSC: 704*480/640*480/352*240/320*240/176*120

PAL: 704*576/640*480/352*288/320*240/176*144

6. Digital Zoom



Press "+" or "-" button to enlarge / reduce the displayed image. (max. is X10)


7. Record



The record button is used to record the current video stream. The location where the image file is saved can be specified in Setting -> User's Config. Please refer to "4.2 User Config" for further information.

***Note:** Record segment is limited to 1 min. If you need to do long time recording, please set schedule recording. For more details about schedule recording, please see “4.7 Event”.*

8. Snapshot

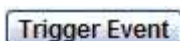
The  Snapshot button saves a snapshot of the video image currently being displayed. The location where the snapshot data is saved can be specified in Setting -> User's Config. Please refer to “4.2 User Config” for further information.

9~10. Play Audio/Transmit Audio



Click the “Play Audio” and “Transmit Audio” buttons to switch the sound off and on for the speaker and microphone, respectively.

11. Manual Control – Trigger Event



Press “Trigger Event” button to trigger an event directly from live view page, and event actions will be effective if they have been set in “Event” menu. (Please refer to “4.7.1 Event”)

12. Manual Control – Reset Alarm

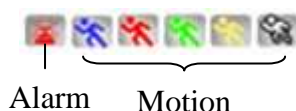


Press “Reset Alarm” button to reset alarm output remotely.

13. Status Display

The name of the camera whose settings currently being configured, current date/time and current frame rate will be displayed.

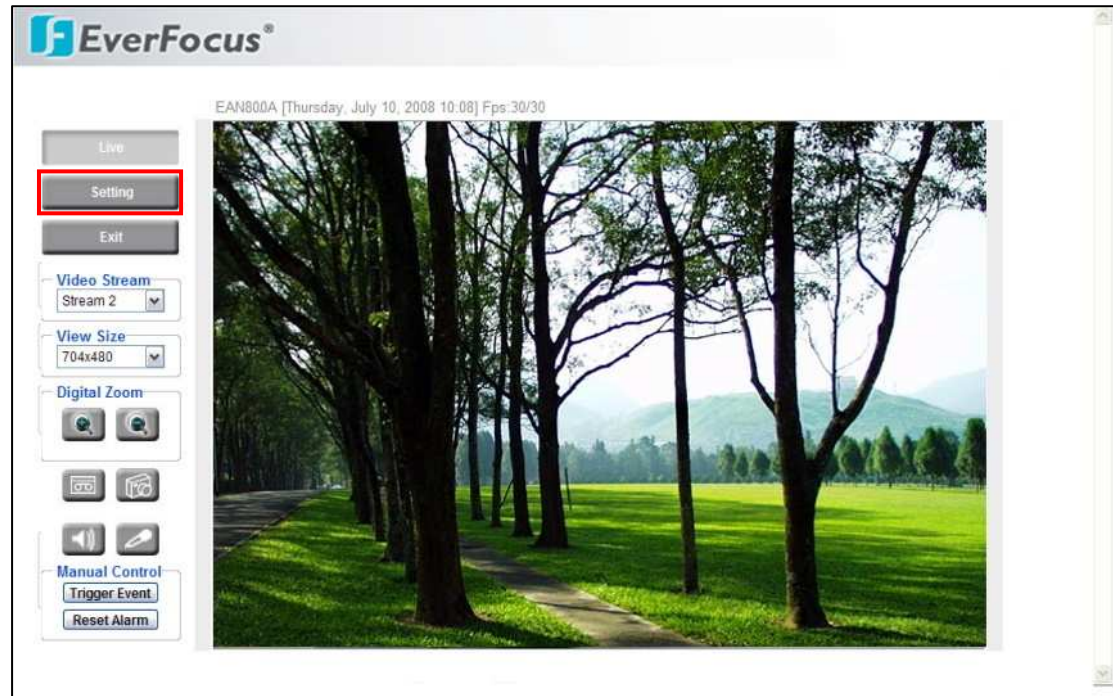
14. Event signals



When an alarm or motion event is triggered, a signal icon will flash to alert user. The first icon is for alarm event and rest of the 5 icons are for motion event. The motion event icons which differed by colors correspond to the motion trigger areas you have set in Motion menu. Please refer to “4.7.2 Motion” for detailed information about Motion setup.

4. SETTING

Click this button to display the setup menu.

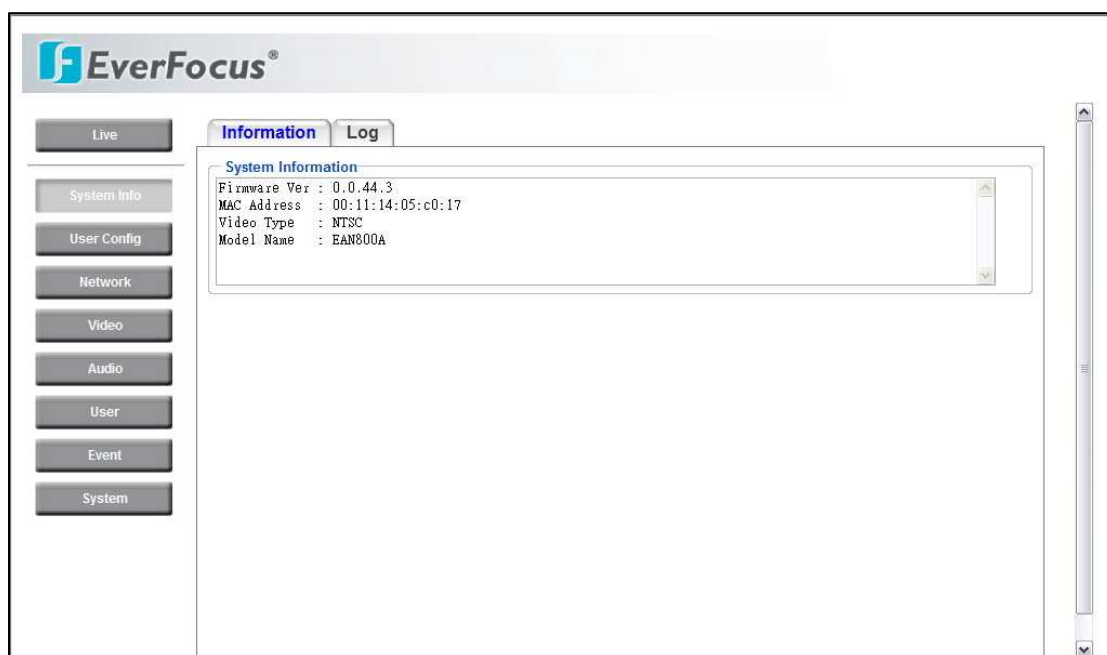


4.1 System Info

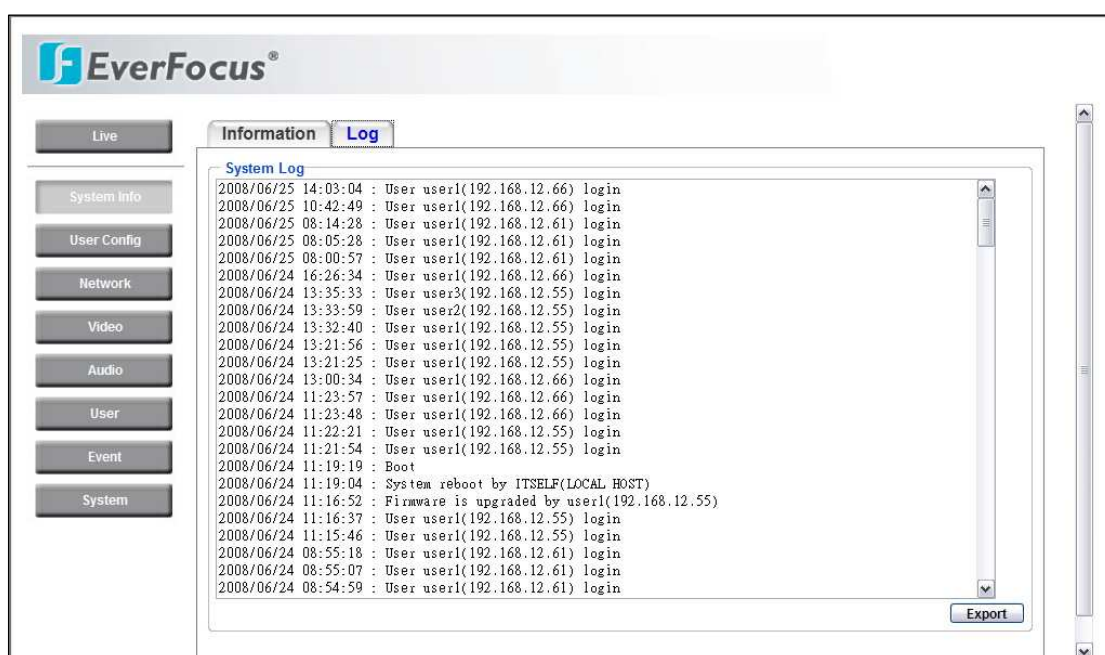
System information and system log check of the setup menu can be performed on this page. The “System Info” page has 2 tabs: [Information] tab and the [Log] tab.

4.1.1 Information

System Information: Firmware version, MAC address, Video Type, Model number.
(unchangeable, for reference only)



4.1.2 Log



System Log:

Date/Time: displaying date and time of the log.

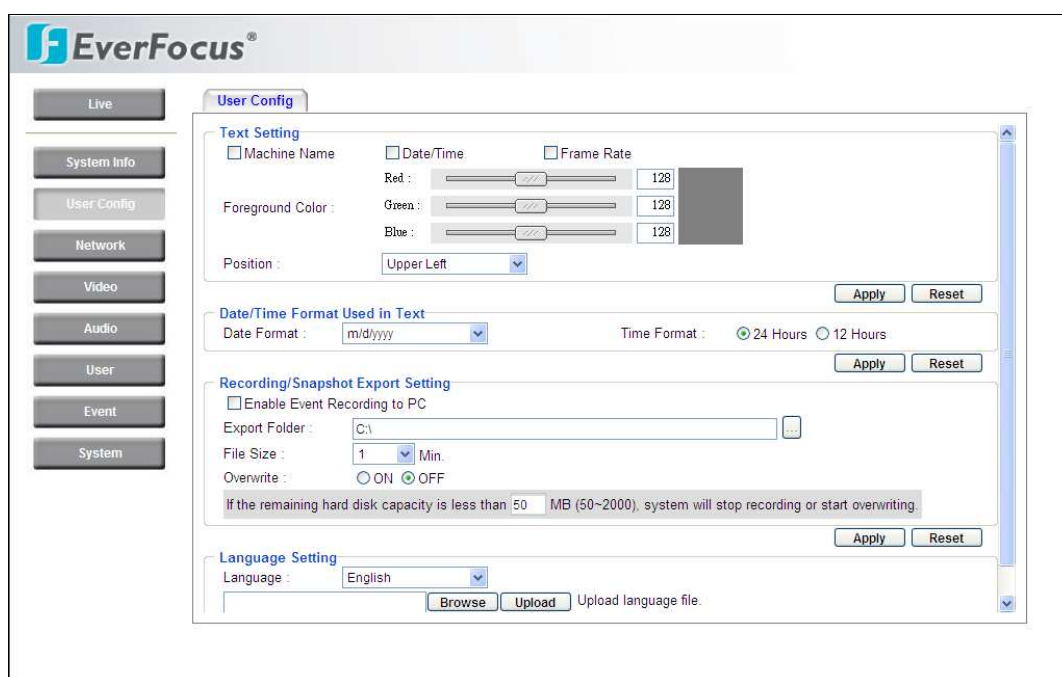
Log message: all information and event message, including login, user's IP, reboot, firmware upgrade, load factory default, configuration reset and event detected.

System will keep the newest 256 records.

Press **Export** button to export system log into “.txt” file and select the location where the exported log file will be saved to.

4.2 User Config

Live view configuration is to be set by user. Each login user can make his/her own settings for the following items:



Text Setting

Check the box for text of **Machine name**, **Date/Time** or **Frame Rate** to be displayed on the screen.

Text Color

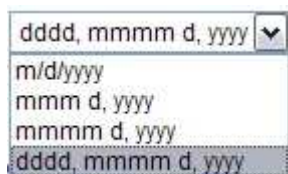
Foreground Color: Select the foreground color of text to be displayed by moving the slide bar between **Red**, **Green** and **Blue** until your desire color is obtained.

Position: Select the position where the text will be displaying from Upper Left / Lower Right / Lower Left.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

Date/Time Format Used in Text

Select Date/Time Format from the following options:



Time Format: 24 Hours or 12 Hours.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

Recording/Snapshot Export Setting

Enable Event Recording to PC: Allow event video recorded to users' PC if any events have been set to record to PC.

Export folder: Select Export folder by clicking on  button, then direct to the folder to be exported.

File size: Able to limit the size of the single recording file in minutes. When the single recording file size exceeds the time you set, system will create a new file to continue recording.

Overwrite: Select “ON” for overwriting recording/snapshot file when the disk storage capacity is full.

If the remaining hard disk capacity is less than ____ MB (enter the value you wish to set between 50~2000), system will stop recording or start overwriting.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

Language Setting

Language: Select the language to be displayed in web page. Default language is English. To add a new language which is not listed in the original configuration,

press the Browse button to locate the new language file (.evb) and then click the Load button.

***Note:** Upload a new language file will reboot system automatically. Please reconnect IP camera after reboot.*

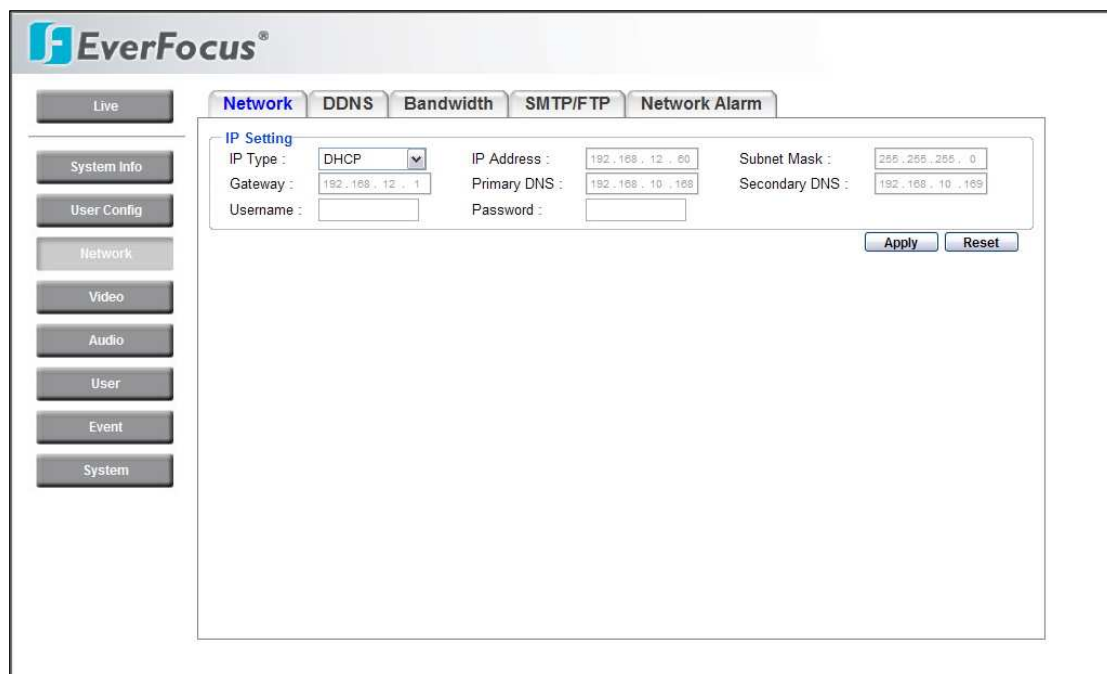
Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.3 Network

The network settings and the settings relating to Network, DDNS, Bandwidth, SMTP/FTP and Network Alarm can be configured on this page.

The "Network setup" page has 5 tabs of the [Network] tab, the [DDNS] tab, the [SMTP/FTP] tab and the [Network Alarm] tab.

4.3.1 Network



The screenshot shows the EverFocus web interface for network configuration. On the left is a sidebar with buttons for Live, System Info, User Config, Network (selected), Video, Audio, User, Event, and System. The main area has five tabs: Network, DDNS, Bandwidth, SMTP/FTP, and Network Alarm. The Network tab is active, showing the 'IP Setting' section. It includes fields for IP Type (set to DHCP), IP Address (192.168.12.20), Subnet Mask (255.255.255.0), Gateway (192.168.12.1), Primary DNS (192.168.10.168), Secondary DNS (192.168.10.168), Username, and Password. At the bottom right of the form are 'Apply' and 'Reset' buttons.

The following information is required to configure the network settings. Contact the network administrator or your Internet service provider.

- IP Type
- IP address
- Subnet mask
- Gateway (when using the gateway server/router)
- Primary DNS, Secondary DNS (when using DNS)

IP Type

DHCP: Configure the DHCP server not to assign the same IP addresses used for the other network cameras and PCs whose IP address is unique.

Refer to the network administrator for the settings of the server.

Default: DHCP.

Static IP: User can manually set the static IP for network connection.

PPPoE: This is a DSL connection application, ISP will ask user to input user name and password.

Note: If PPPoE is used as IP type, IP Utility software will not be able to detect the device.

IP address

When not using DHCP, enter the IP address of the camera. Do not enter the IP address already used for PC or other network cameras.

Subnet Mask

This field is to set the netmask for your network so as the IP camera will be recognized within the network. Example: 255.255.255.000. When DHCP is selected, the DHCP server will assign this value automatically.

Gateway

This field is to set the gateway for your network so the IP camera will be recognized within the network. When DHCP is selected, the DHCP server will assign this value automatically.

Primary DNS

An IP address of DNS server that is provided by ISP.

Secondary DNS

If your ISP provides you an IP address secondary DNS, please set it here.

Username

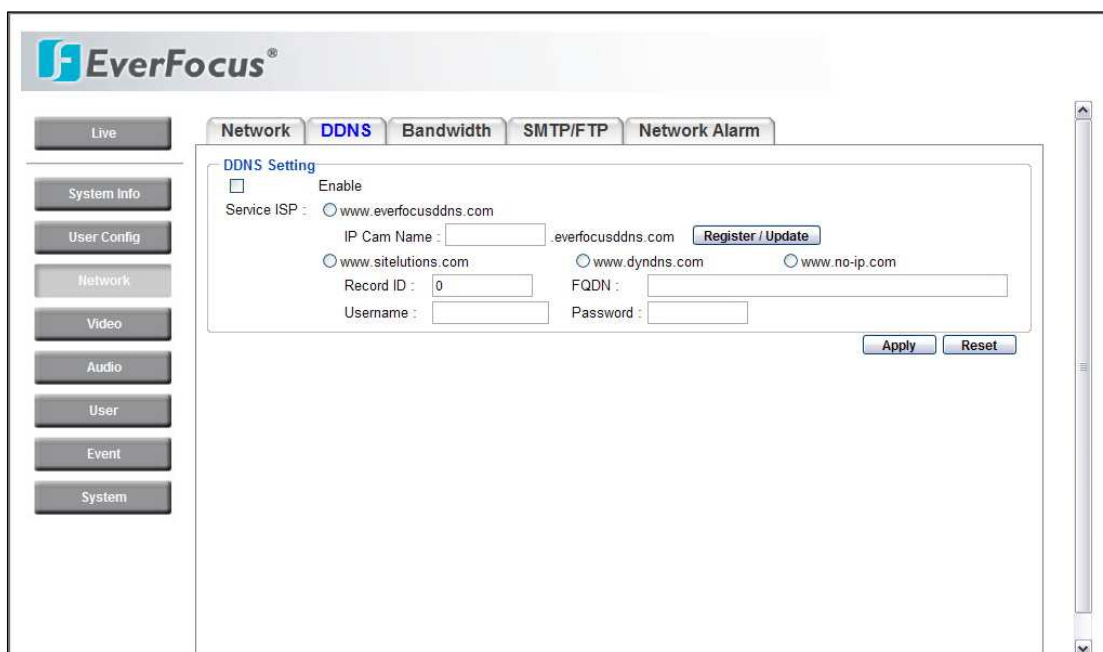
Enter User name of the account (used only for PPPoE).

Password

Enter Password of the account (used only for PPPoE).

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.3.2 DDNS



DDNS setting

When accessing the camera via the Internet from the network environment of which the global IP address is obtained using DHCP, the DDNS function is necessary.

To use the DDNS function, it is necessary to connect to the dedicated DDNS server. We offer 4 DDNS server providers as follow:

- ☐ www.everfocusddns.com
- ☐ www.sitelutions.com
- ☐ www.dyndns.com
- ☐ www.no-ip.com

Enable: Check the box to enable DDNS setting.

Service ISP: If you choose EverFocus DDNS server, you can obtain a free account name from EverFocus ”www.everfocusddns.com”.

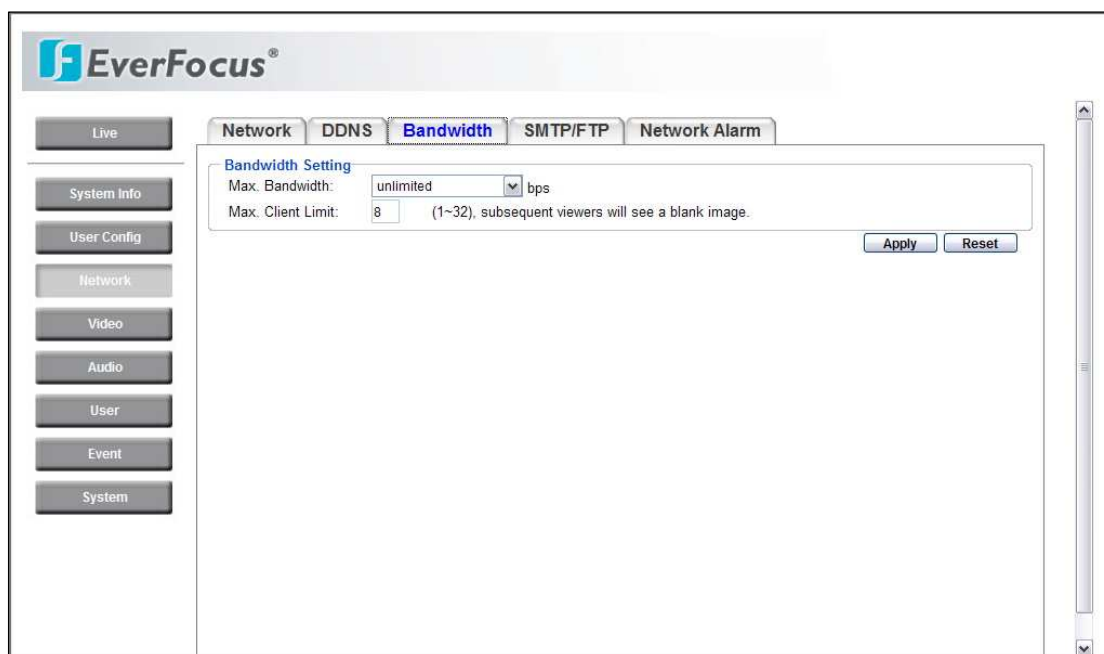
Enter an IP Cam Account Name: _____everfocusddns.com

Press **Register / Update** button to register or update DDNS account.

If you wish to get a domain name from other DDNS provider, it is necessary to configure Record ID, FQDN, Username and password and register in DDNS server. Refer to the web site for further information about the DDNS.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.3.3 Bandwidth



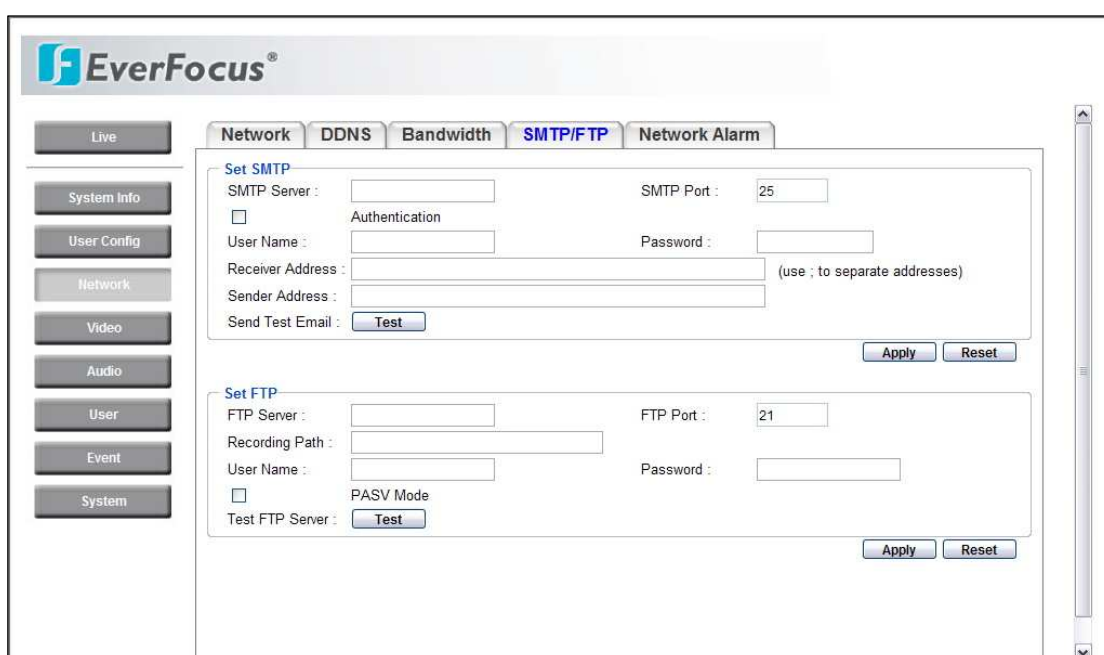
Bandwidth Setting

Max. Bandwidth: Specify, Unlimited / 64 K / 128 K / 256 K / 512 K / 1M / 2M / 4M / 8M bps. the maximum bandwidth that the camera is allowed to use on the network. This is a useful function when connecting the camera to busy or heavily loaded networks. The default setting is Unlimited.

Max. Client Limit: enter a value here to restrict the number of clients accessing the camera. This is useful if you need to save on bandwidth. Up to 32 clients is allowed to see live video simultaneously. Subsequent viewers will see a blank image.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.3.4 SMTP/FTP



Set SMTP

The settings relating to the mail server used to send the e-mail notification from the camera to predefined addresses via SMTP can be configured.

SMTP Server: Enter the IP address or the host name of the SMTP server used to send e-mails.

SMTP Port: Enter the port number for SMTP. Default is 25.

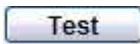
Authentication: Check the box, if the SMTP server requires Authentication (user/password).

User name: Input the login user ID if the SMTP server requires Authentication.

Password: Input the password if the SMTP server requires authentication.

Receiver Address: Input the e-mail address for receiving e-mail message when the EVENT is enabled and triggered. Please use “;” to separate address.

Sender Address: Input sender’s e-mail address, so that receiver can recognize the sender when an event message is sent out.

Send Test Mail: Press  button to send a testing mail to the assigned address.

Set FTP

The settings relating to the FTP server used to transmit the alarm images can be configured.

FTP Server: Enter the IP address or the host name of the FTP server.


FTP Port: Enter the port number for FTP server. Default is 21.

Recording Path: Assign the recording path.

User Name: Set FTP User’s name.

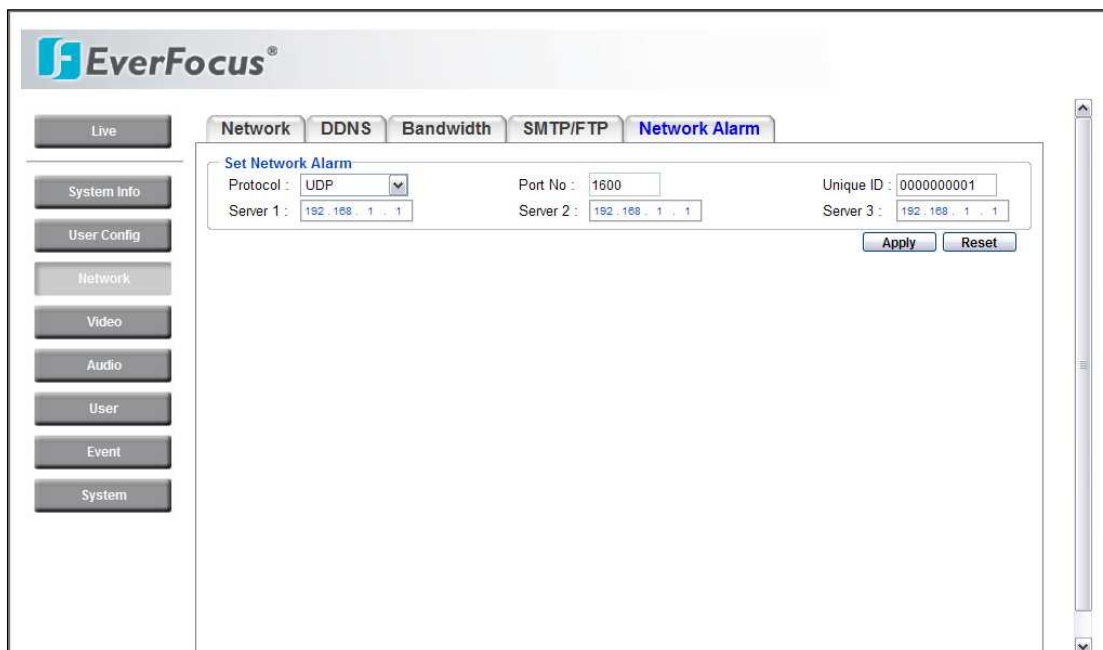
Password: Set FTP password.

PASV mode: Check to enable Passive mode, normally enable Passive mode. When failed to establish the connection, uncheck "PASV" mode.

Test FTP Server: Press  button to send a testing file to the assigned FTP server.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.3.5 Network Alarm (reserved for PowerCon)



The screenshot displays the EverFocus web interface. On the left is a sidebar with buttons for 'Live', 'System Info', 'User Config', 'Network', 'Video', 'Audio', 'User', 'Event', and 'System'. The 'Network' button is highlighted. The main area features tabs for 'Network', 'DDNS', 'Bandwidth', 'SMTP/FTP', and 'Network Alarm'. The 'Network Alarm' tab is selected. Below the tabs is a 'Set Network Alarm' section containing the following fields:

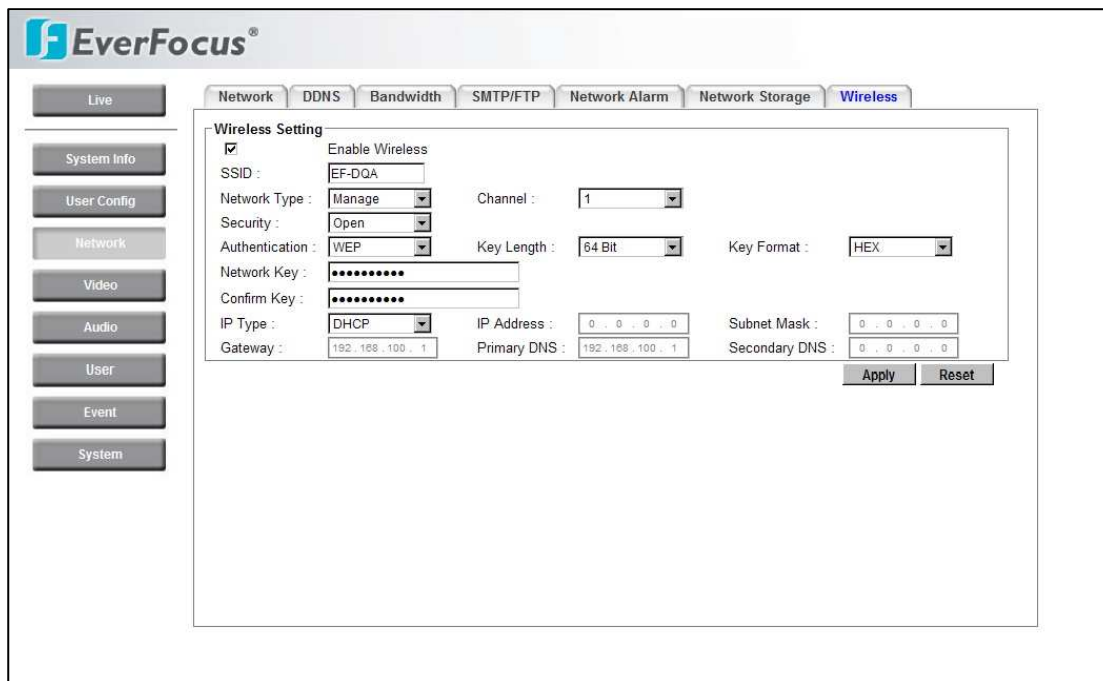
- Protocol:
- Port No:
- Unique ID:
- Server 1:
- Server 2:
- Server 3:

At the bottom right of the form are 'Apply' and 'Reset' buttons.

Set Network Alarm

This function is reserved for PowerCon software, for the detail setting please refer to PowerCon network alarm protocol.

4.3.6 Wireless (EAN800AW)



Wireless Setting

Enable: Check the box to enable wireless connection.

SSID: Name of the wireless network the camera. The field accepts up to 32 alphanumeric characters. The name must be exactly the same as the used in the wireless access point or the connection will not be established.

Network Type: Infrastructure or Ad-Hoc. Default is Infrastructure.

“Infrastructure” Make the Network Camera connect to the WLAN via an Access Point.

“Ad-Hoc” Make the Network Camera connect directly to a host equipped with a wireless adapter in a peer-to-peer environment.

Channel: Shows the wireless channel currently in use. Default is 1.

Security: WPA or WEP. Default is WPA.

Authentication: Open or Shared. Default is Open.

“Open” – communicates the key across the network.

“Shared” – allows communication only with other devices with identical WEP settings.

Key Length: 64 or 128 bits. Default is 64 bits.

Key Format: Hexadecimal or ASCII. Default is HEX.

Network Key: Entering a key in either hexadecimal or ASCII format.

Confirm Key: Double confirm network key.

WPA (Wi-Fi Protected Access) key should follow either one of the following rules:

- As 64 hexadecimal (0-9, A-F) characters.
- As 8 to 63 ASCII characters.

WEP (Wired Equivalent Protection) key should follow either one of the following rules:

- As 5 characters for 64-bit WEP and 13 characters for 128-bit WEP.
- As 10 hexadecimal (0-9, A-F) characters for 64-bit WEP and 26 hexadecimal (0-9, A-F) characters for 128-bit WEP.

IP Status: Show IP status when wireless connection, including IP Type, IP Address, Subnet mask, Gateway, Primary DNS, Secondary DNS.

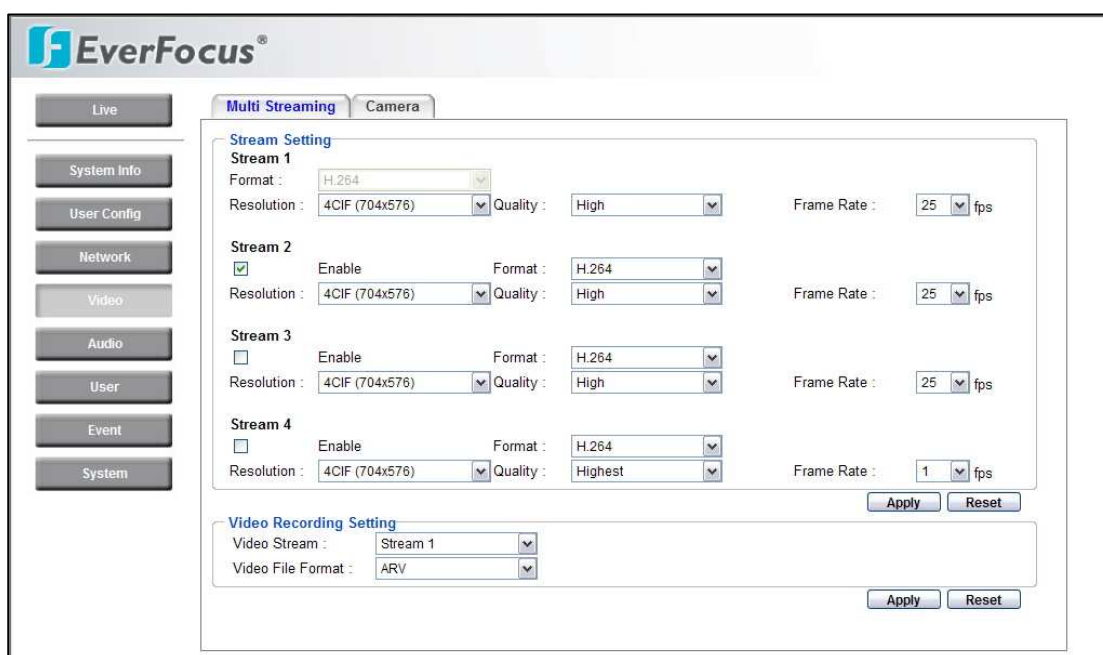
Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.4 Video

The settings relating video such as streaming, camera OSD can be configured on this page.

The "Video" page has 2 tabs: the [Multi-streaming] tab and the [Camera] tab.

4.4.1 Multi Streaming



The screenshot shows the EverFocus web interface for the Multi Streaming configuration. On the left is a sidebar with buttons for Live, System Info, User Config, Network, Video (selected), Audio, User, Event, and System. The main area has two tabs: Multi Streaming (active) and Camera. Under the Multi Streaming tab, there are two sections: Stream Setting and Video Recording Setting. The Stream Setting section contains four streams (Stream 1 to Stream 4). Each stream has an 'Enable' checkbox, a 'Format' dropdown (all set to H.264), a 'Resolution' dropdown (all set to 4CIF (704x576)), a 'Quality' dropdown (Stream 1-3 set to High, Stream 4 set to Highest), and a 'Frame Rate' dropdown (Stream 1-3 set to 25 fps, Stream 4 set to 1 fps). Below the stream settings are 'Apply' and 'Reset' buttons. The Video Recording Setting section has a 'Video Stream' dropdown (set to Stream 1) and a 'Video File Format' dropdown (set to ARV), with 'Apply' and 'Reset' buttons at the bottom.

Stream Setting

The system can output 4 video streams simultaneously. For each of them, user can set compression format, resolution, quality and frame rate individually. Stream 1 is always enabled for live view.

Check “Enable” box to enable other streams.

Format: Select encode format from H.264, MPEG4 and MJPEG.

Resolution:

NTSC: 4CIF (704*480) / VGA (640*480) / CIF (352*240) / QVGA (320*240) / QCIF (176*120)

PAL: 4CIF (704*576) / VGA (640*480) / CIF (352*288) / QVGA (320*240) / QCIF (176*144)

Quality: there are 8 types of quality, please choose from Highest / Higher / High / Middle / Normal / Low / Lower / Lowest.

Frame Rate: select from NTSC: 1 / 3 / 5 / 15 / 30 fps, PAL: 1/ 2.5/5/12.5/25 fps

Note: Total frame rate cannot exceed 60 fps.

System performance may be influenced if user enables 4 video streams simultaneously.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

Video Recording Setting

User can set video recording by selecting one of the enabled video streamings. This will allow user to view live images as well as to record video of the other video streaming.

Video Stream: Select video recording stream from any enabled stream.

Video File format: Recording file will be saved as AVI or ARV, select which file format to be used.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.4.2 Camera

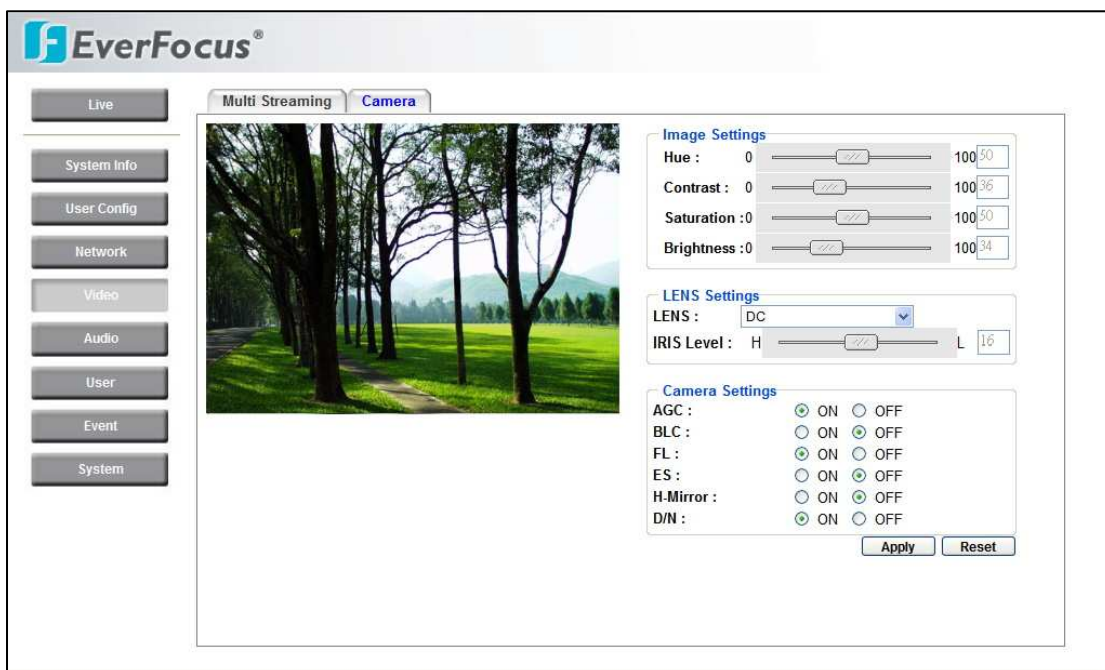


Image setting

Hue: to increase or decrease hue of video images. It is adjustable from 0~255.

Contrast: to increase or decrease object contrast of images. It is adjustable from 0~255.

Saturation: to increase or decrease color saturation of video images. It is adjustable from 0~255.

Brightness: to increase or decrease object contrast of images. It is adjustable Brightness from 0~255.

Lens Setting

LENS: Select DC or Fixed of the lens type used for camera.

DC: DC driven Lens

Fixed: Manual Lens

IRIS setting: to manually adjust IRIS level of Lens when selecting DC driven Lens. It's adjustable from 0~31.

Camera Setting

AGC: Select ON or OFF for Auto Gain Control.

ON: when illuminance becomes darker, gain will automatically be incremented and screen will become brighter.

OFF: Gain will not be incremented.

BLC: Select ON or OFF for Backlight Compensation.

ON: When the background of the subject is very bright and the subject itself is dark, set the BLC ON. The BLC will measure the light of the image center and the lens iris will automatically set for optimum image quality.

OFF: Backlight will not be compensated.

FL: Select ON or OFF for Flickerless.

ON: When picture flicker fiercely, turn FL on, then the camera will stabilize the speed of electronic shutter automatically, and reduce the flicker immediately.

OFF: Disable Flickerless function.

ES: Select ON or OFF for Electronic Shutter.

ON: the auto control of the shutter speed can be performed according to the brightness of the screen.

OFF: Disable electronic shutter.

H-Mirror: Select ON or OFF for Horizontal Mirror.

ON: Enable a horizontal image inversion.

OFF: Disable the inversion.

D/N: Select ON or OFF for Day/Night function.

ON: Enabling the image to turn from color to B/W when the illumination is about 5 Lux

OFF: Disable D/N function.

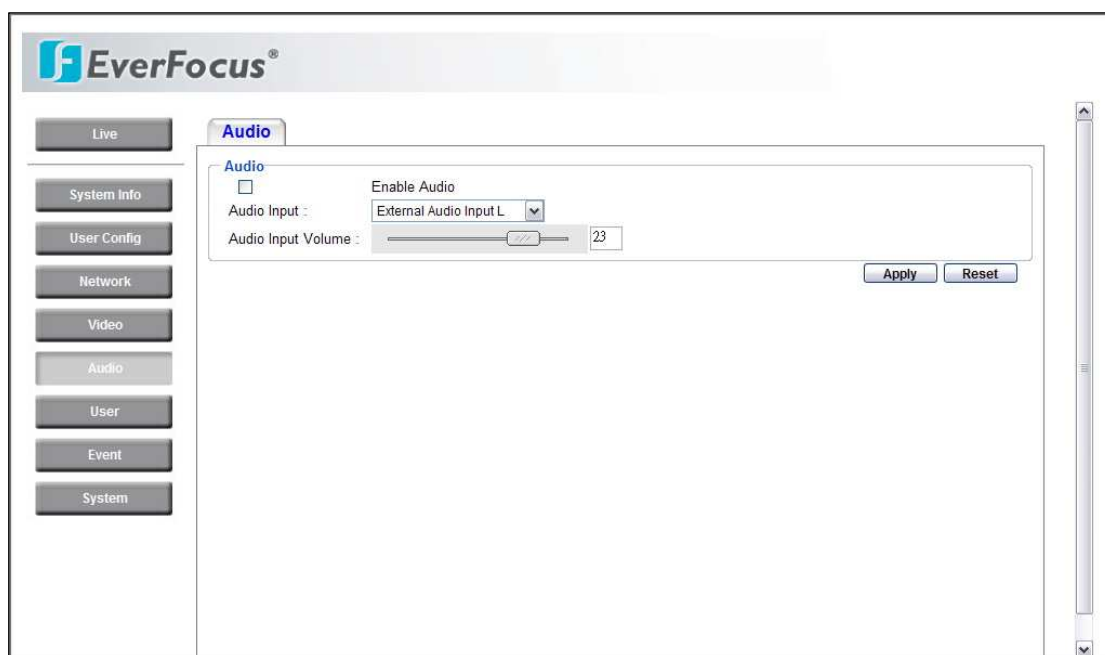
Note:

- 1) If ES is on, FL takes no effect. $ES > FL$
- 2) If AGC is off, BLC has no effect., BLC works when AGC is on. $AGC > BLC$
- 3) AGC must be on to Day/Night auto switch function work.
- 4) If ES is on, IRIS level adjustment takes no effect, $ES > IRIS$ level
- 5) If using DC driven Lens, BLC and ES should be off.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.5 Audio

The EAN800A/EAN800AW camera can transmit audio to other clients using a built-in microphone or connecting to external microphone to play audio received from other clients via connected speakers. This section describes how to configure the basic audio settings.



Audio

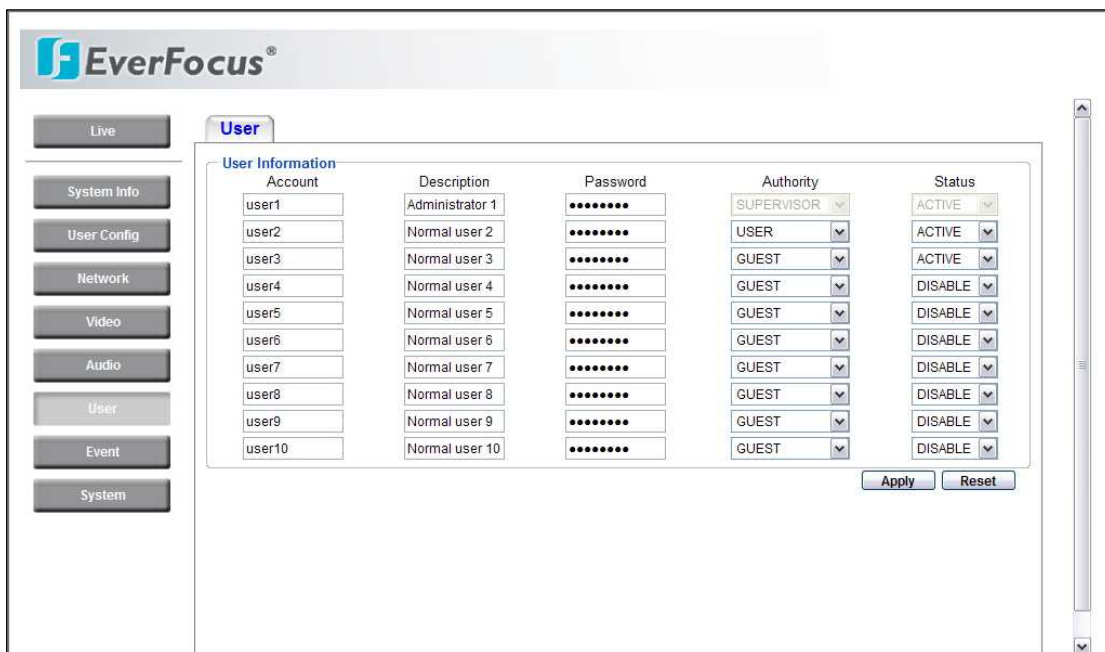
Check **Enable Audio** box to enable audio function.

Audio Input: Audio from an internal microphone or a line source can be connected to the Audio connector of EAN800A/EAN800AW. The audio source can be selected from Internal Microphone, External Audio Input L and External Audio Input R.

Audio Input volume: Adjust the Audio Input Volume for the audio input devices connected to the camera if there are problems with the sound input being too low or high.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.6 USER



Account	Description	Password	Authority	Status
user1	Administrator 1	*****	SUPERVISOR	ACTIVE
user2	Normal user 2	*****	USER	ACTIVE
user3	Normal user 3	*****	GUEST	ACTIVE
user4	Normal user 4	*****	GUEST	DISABLE
user5	Normal user 5	*****	GUEST	DISABLE
user6	Normal user 6	*****	GUEST	DISABLE
user7	Normal user 7	*****	GUEST	DISABLE
user8	Normal user 8	*****	GUEST	DISABLE
user9	Normal user 9	*****	GUEST	DISABLE
user10	Normal user 10	*****	GUEST	DISABLE

User Information

Maximum 10 users can be set for using the IP camera. The **user information** displays the authorized users and access levels:

- **Supervisor/Administrator** –a supervisor/administrator has unrestricted access to the Setting menu and can determine the registration of all other users. However, administrator is not allowed to change supervisor’s account and password.
- **User**- a user can view the Live View page, system info, network, video, audio, and adjust user config settings. The user does not have access to the “user”, “event” and “system pages”.
- **Guest**- the lowest level of access, which only allows the user access to the Live View page.

Note: Please select Active in Status section to activate user account.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.7 EVENT

An event in the camera is when an Event Type is activated and causes certain actions to be performed. The event type is the set of conditions that specifies how and when which actions will be performed.

This table describes how to setup action types and event type.

Event Type Action Type	Alarm Input	Manual Trigger	Motion Detection	Schedule Recording	Pre/Post-Alarm
Trigger Alarm	x	x	x		
Send Mail notification	x	x	x		
Upload to FTP**	x	x	x		x
Record to SD Card	x	x	x	x	x
Record to PC*	x	x	x	x	x
Network Alarm	x	x	x		
Re-trigger	x	x	x		

Note: 1. * Record to PC only works when PC and IP camera are connected.
 2. **Either Upload to FTP or Record to Network Storage can be selected to record event video to remote site.
 3. Up to 10 event types can be configured in the camera, and up to 3 of these can be configured to upload images.

4.7.1 Event

The settings relating to event occurrences such as settings for the event occurrence, motion, alarm and time mask can be configured on this page.

The "Event " page has 4 tabs: [Event] tab, the [Motion] tab, the [Alarm] tab and the [Time Mask] tab.



Press **Add** button to add an event condition.

To modify the event list, click on the event and it will be highlighted. Press

Modify button to modify the setting.

To remove an event from event list, click on the event and it will be highlighted.

Press **Remove** button to remove the event.

Check **Enable** checkbox to activate event actions when the event occurs in the specified time zone.

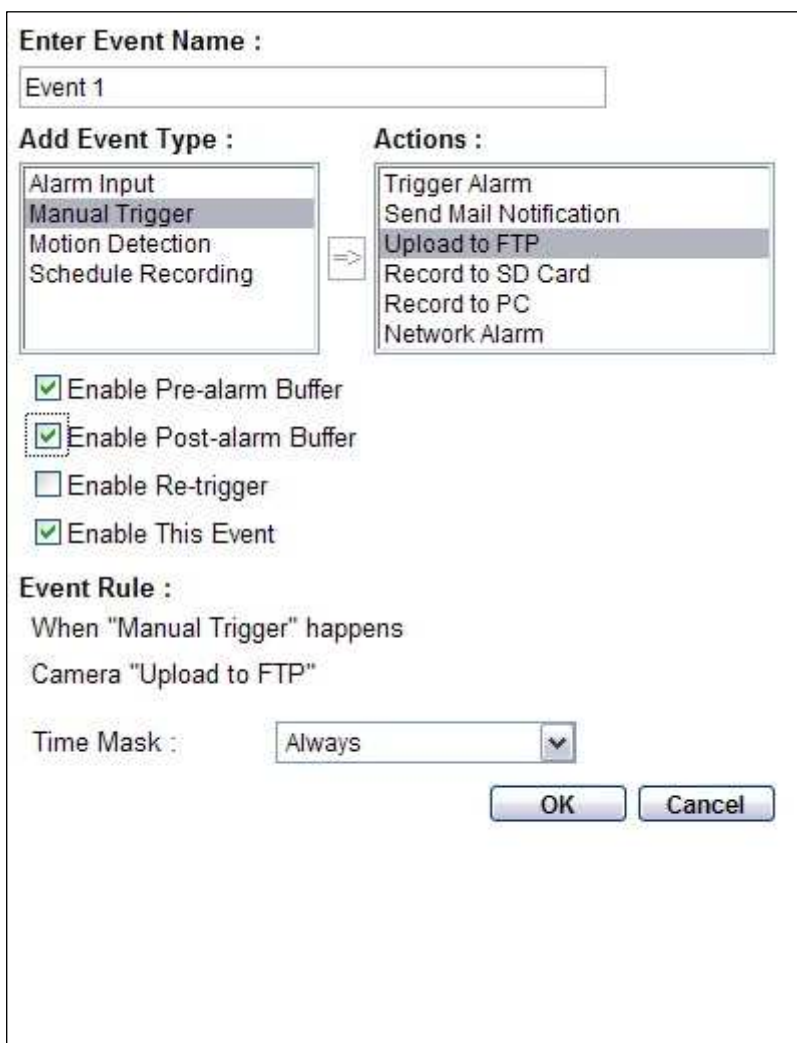
Event List				
Enable	Name	Event Type	Actions	Time Zone
<input type="checkbox"/>	new event	Motion Detection MD1	Trigger Alarm	Always
<input checked="" type="checkbox"/>	motion	Motion Detection MD1	Record to PC	Always

To change the priority of events, click on the event and it will be highlighted. Press

Move Down or **Move Up** button to move between events. The event that has highest priority will be activated first.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

This example describes how to set the camera to upload images to FTP when someone press Manual trigger button:



Enter Event Name :
Event 1

Add Event Type :
Alarm Input
Manual Trigger
Motion Detection
Schedule Recording

Actions :
Trigger Alarm
Send Mail Notification
Upload to FTP
Record to SD Card
Record to PC
Network Alarm

☒ Enable Pre-alarm Buffer
☒ Enable Post-alarm Buffer
☐ Enable Re-trigger
☒ Enable This Event

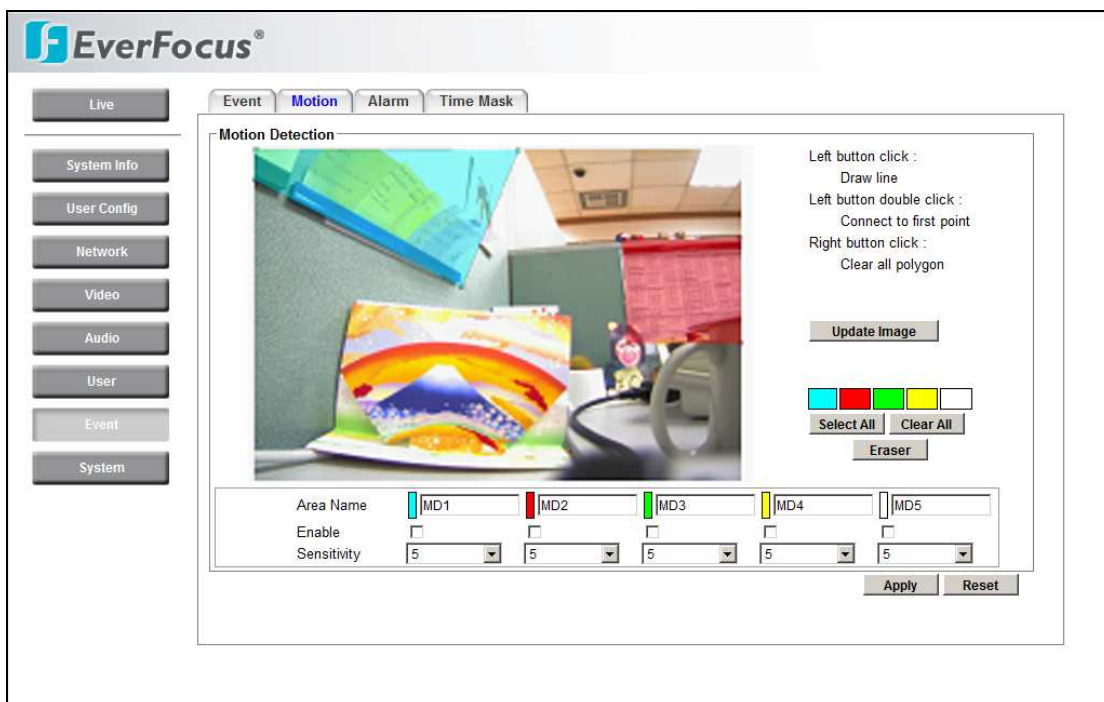
Event Rule :
 When "Manual Trigger" happens
 Camera "Upload to FTP"

Time Mask : Always

OK Cancel


1. Click **Add** button in Event page.
2. Enter an event name for the event, e.g. Event 1
3. Select "Manual Trigger" as event type.
4. Select "Upload to FTP" as action type.
5. Check "Enable Pre-alarm Buffer" and "Enable Post-alarm Buffer". For pre-and post alarm buffer setting, please refer to "4.7.3 Alarm".
6. Check "Enable This Event".
7. Select "Always" for time mask. For detail about Time Mask, please refer to "4.7.4 Time Mask".
8. Click **OK** to save this event in event list.


4.7.2 Motion

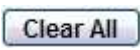



Motion Detection

User can define the motion area to be detected by left clicking the mouse to draw lines. Every click is an end point of the line. When the detection area is formed, double click the mouse to have all the lines connected. To remove the selection, simply right click the mouse, the selected polygon will be deleted.

Press  to update the current image.

Press  to have the entire screen selected for motion detection.

Press  to clear all selections.

Press  and click on the polygon, to erase that polygon.

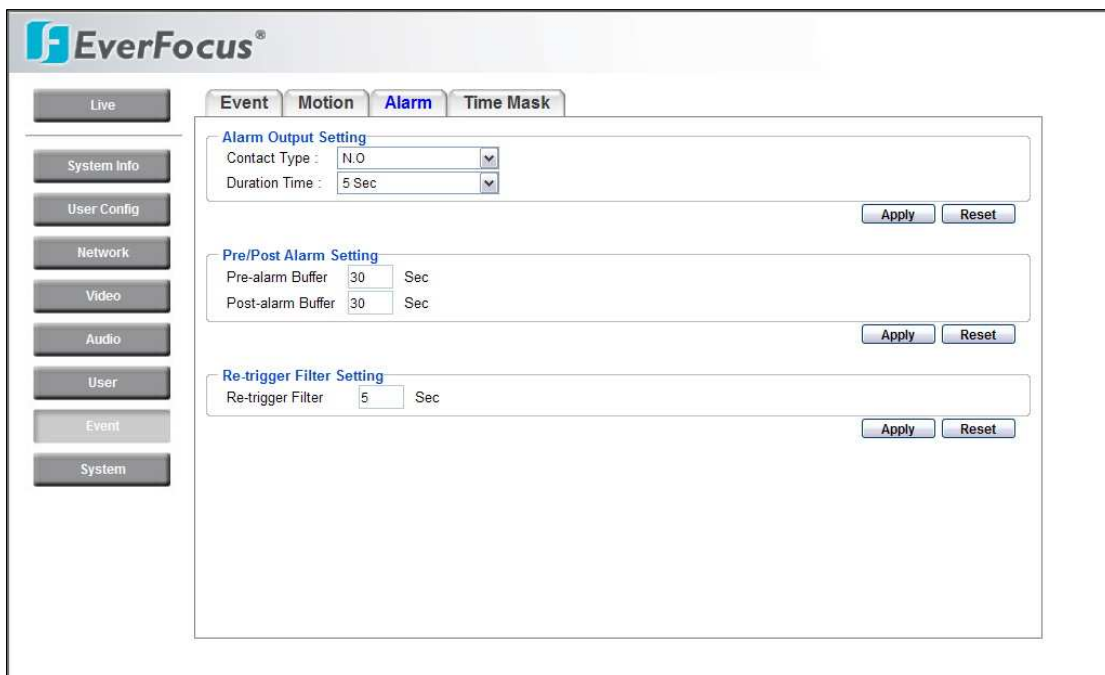
There are 5 motion trigger areas, which can be distinguished by 5 different colors. Check **Enable** checkbox to enable event action.

For each of them, you can set the event action to be activated. Event action can be set in “Event” section.

Moreover, you can set the **Sensitivity** level for motion triggered by selecting from

1 (low), 2, 3, 4, 5, 6, 7, 8, 9 to 10 (high).

4.7.3 Alarm



Alarm Output Setting

Contact Type: Normal Close, Normal Open

Duration Time: Select duration time of alarm output from 5 sec, 10 sec, 20 sec, 30 sec, 60 sec, 2 min, 3 min and 5 min.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

Pre/Post Alarm Setting

This function is used to check what happened immediately before and after a trigger, e.g. 5 seconds before or after a motion has been detected.

Pre-Alarm Buffer: Image saved internally in the server from the time immediately preceding the trigger. Input the desired length of pre-trigger buffer time. It can be set up to 120 seconds.

Post-Alarm Buffer: Image saved internally in the server from the time immediately after the trigger. Input the desired length of post-trigger buffer time. It can be set up to 120 seconds.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the

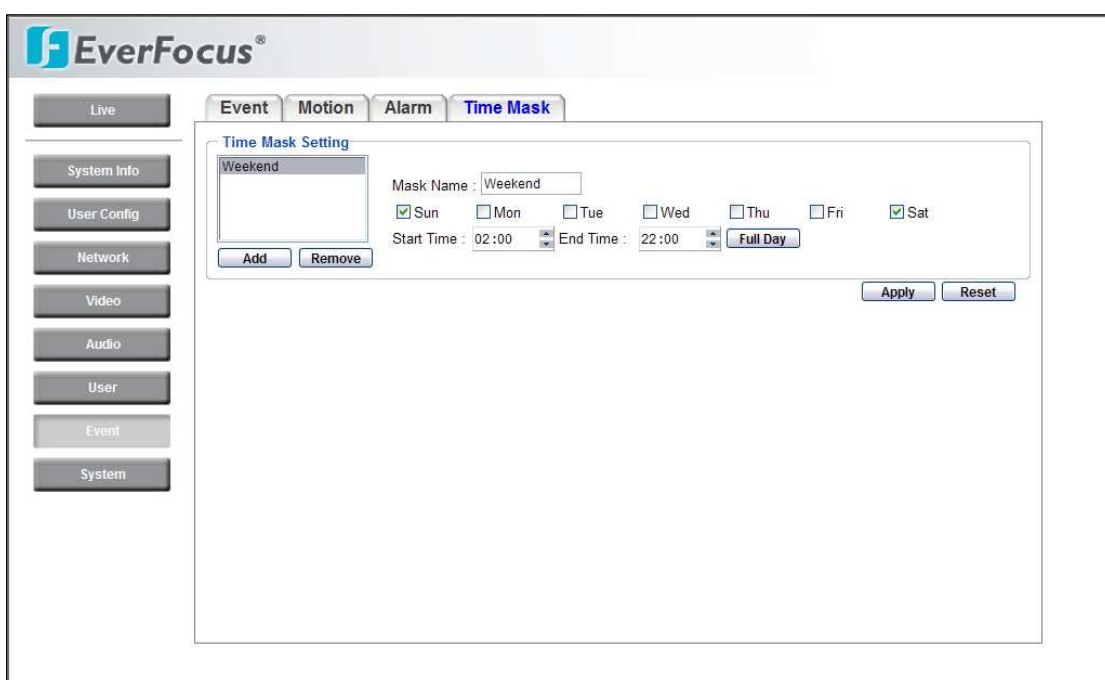
change.

Re-trigger Filter Setting

Re-trigger Filter: Set a re-trigger filter time, if another event is triggered during this time, this triggered event will be ignored.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.7.4 Time Mask



Time Mask Setting

Time mask setting allows you to schedule event actions.

Select **Always** for event action to be taken continuously.

Press **Add** button to add new time period.

Mask name: Input a mask name for the new time period.

Check the check box for the day to be scheduled: Sun, Mon, Tue, Wed, Thu, Fri & Sat.

Set the **Start time** and **End time** for time mask by clicking Up arrow or Down arrow. Or simply press **Full Day** for a full day of event action.

Press **Remove** button to remove a scheduled time period.

An example on how to set weekend as time mask is as follows:

1. Click **Add** from time mask setting.
2. Enter Mask name, e.g. Weekend.
3. Check “Sun” & “Sat” boxes.
4. Select “Start time” and “End time” or “Full day”.

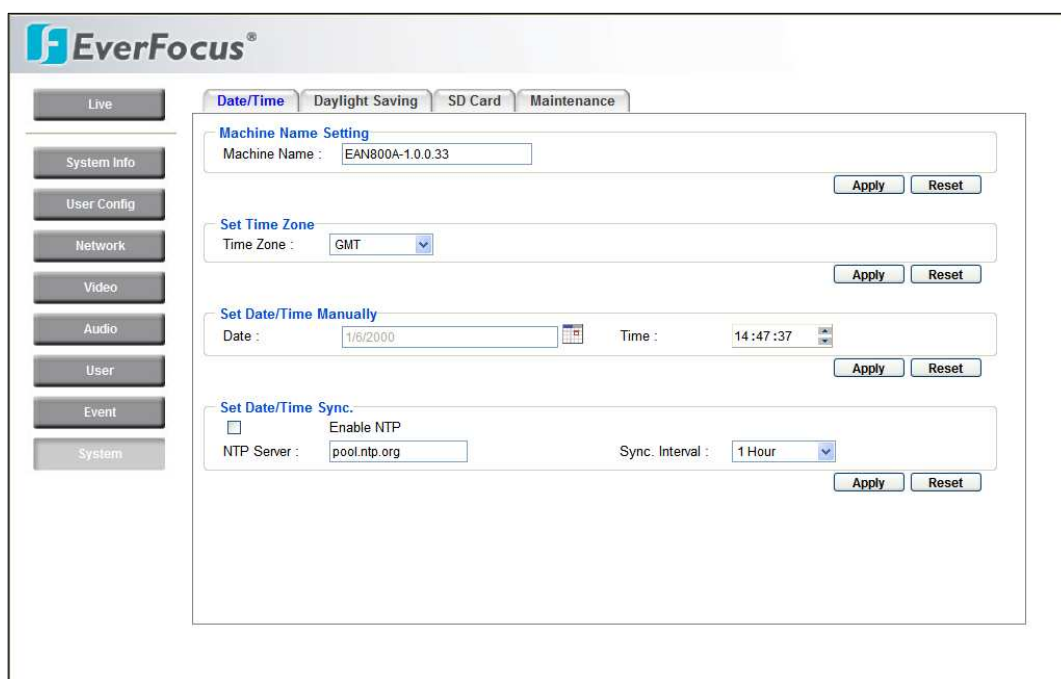
Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.8 SYSTEM

Date/Time, Daylight Saving, SD card and Maintenance settings can be performed on this page.

The "System" page has 4 tabs of the [Date/Time] tab, the [Daylight Saving] tab, the [SD card] tab and the [Maintenance] tab.

4.8.1 Date/Time



The screenshot shows the EverFocus web interface for the 'Date/Time' tab. On the left is a sidebar with buttons for 'Live', 'System Info', 'User Config', 'Network', 'Video', 'Audio', 'User', 'Event', and 'System'. The main content area has four tabs: 'Date/Time' (selected), 'Daylight Saving', 'SD Card', and 'Maintenance'. Under the 'Date/Time' tab, there are four sections:

- Machine Name Setting:** A text field containing 'EAN800A-1.0.0.33' with 'Apply' and 'Reset' buttons.
- Set Time Zone:** A dropdown menu set to 'GMT' with 'Apply' and 'Reset' buttons.
- Set Date/Time Manually:** Fields for 'Date' (1/6/2000) and 'Time' (14:47:37) with 'Apply' and 'Reset' buttons.
- Set Date/Time Sync:** A checkbox for 'Enable NTP' (unchecked), an 'NTP Server' field (pool.ntp.org), a 'Sync. Interval' dropdown (1 Hour), and 'Apply' and 'Reset' buttons.

Machine Name Setting

Machine Name: Enter the name of the camera. The entered name will be displayed in the status display area.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

Set Time Zone

Time Zone: Select a time zone according to the location where the camera is in use.

Set Date/Time Manually

Date: Click the calendar and pick the date. Press << to go previous year, < to go previous month, > to go next month and >> to go next year.



Time: Click on Hour, Minute, Seconds, am/pm; then use up arrow to increase value and down arrow to decrease value.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

Set Date/Time Sync.


Check Enable NTP checkbox to enable NTP server.

NTP server: Time automatically adjusted by synchronizing with NTP server will be used as the standard time of the camera.

Sync. Internal: Select an interval (1 - 24 hours: in 1 hour intervals) of synchronization with the NTP server.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.8.2 Daylight Saving



Set Daylight Saving

Check **Enable Daylight Saving** checkbox to enable daylight saving.

Set the start time to daylight saving time.

Set the start week of daylight saving time: 1st / 2nd / 3rd / 4th / Last

Set the start date of daylight saving time: Sunday / Monday / Tuesday / Wednesday / Thursday / Friday / Saturday

Set the start month of daylight saving time: January / February / March / April / May / June / July / August / September / October / November / December.

Set the starting time change of daylight saving time: Choose the “From” time and “End” time when daylight saving starts.

Set the end time of daylight saving time.

Set the end week of daylight saving time: 1st / 2nd / 3rd / 4th / Last

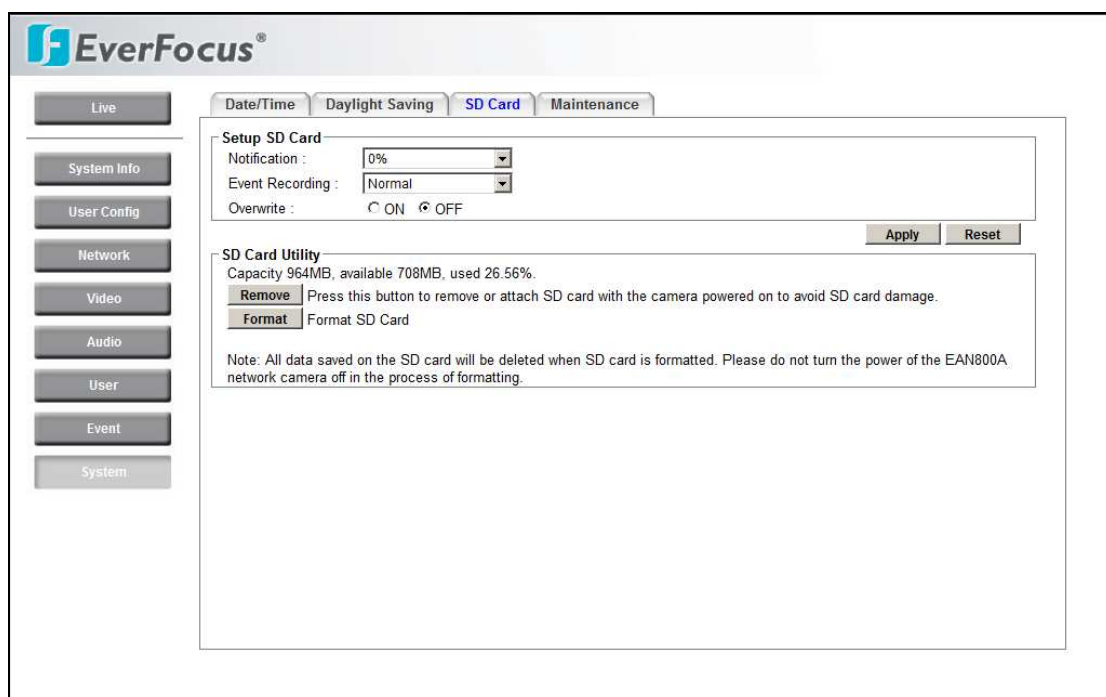
Set the end date of daylight saving time: Sunday / Monday / Tuesday / Wednesday / Thursday / Friday / Saturday

Set the end month of daylight saving time: January / February / March / April / May / June / July / August / September / October / November / December.

Set the ending time change of daylight saving time: Choose the “From” time and “End” time when daylight saving ends.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

4.8.3 SD Card



Setup SD Card

Notification: Notification will be made via e-mail when the remaining space of the SD memory card reached the value selected from the following.

50%, 20%, 10%, 5%, 2%, 0%

Notes:

- When "50%" is selected, e-mail notification will be made each time the remaining space reaches 50%, 20%, 10%, 5%, 2% and 0%.
- E-mail notification may not always be made at a very moment when the remaining space of the SD memory card reached the selected value.

Event Recording:

FTP backup only: Event video will record to SD card when network is disconnected.

Normal: Follow the event actions settings you have made in “Event” menu to record event video to SD card.

Overwrite: Select ON for overwriting data when SD card memory is full. Select OFF for not overwriting SD card data.

Press **Apply** to apply the setting changes or **Reset** to reset without saving the change.

SD Card Utility

The total size and available size of the SD memory card will be displayed. Depending on the state of the SD memory card, the size indications will differ as follows.

Indication Description

Capacity ____ MB, available ____MB, used ____ %

Before formatting the SD memory card, it is necessary to press **Remove** button.

Once **Remove** button is pressed, **Attach** button will be shown for user to insert the SD card back.

Press **Format** button to format SD card.

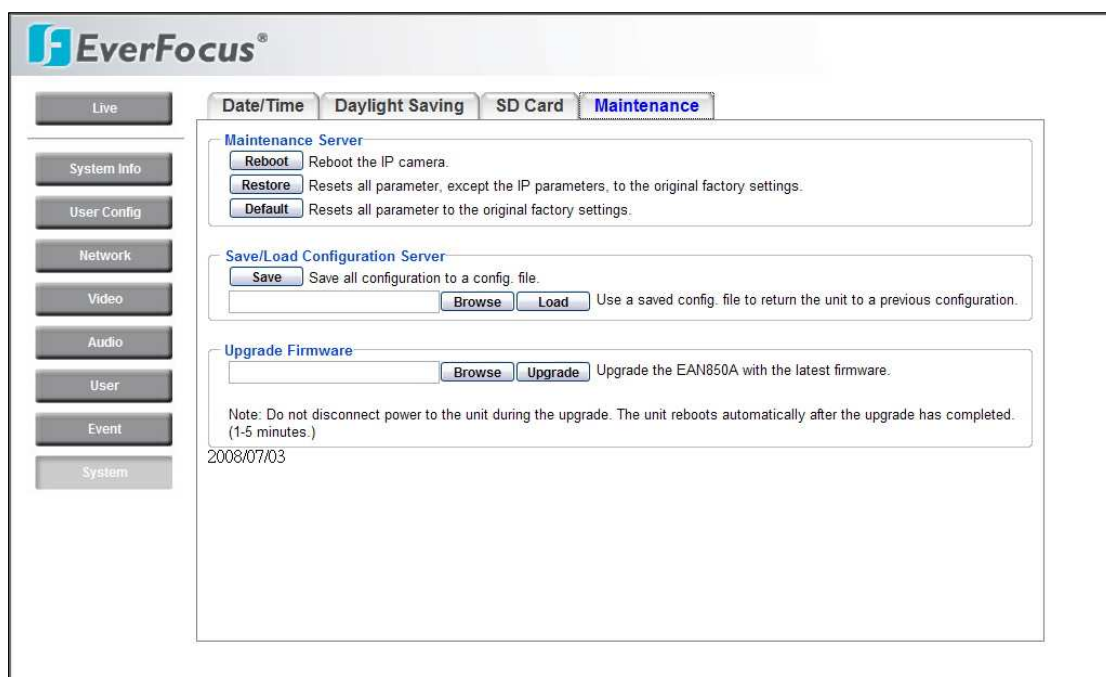
Obtain images on the SD memory card

1. Access the camera using the Windows command prompt or FTP client software.
→ The window with the user name and password entry fields will be displayed.
2. Enter the user name whose access level is "1. Administrator" and its password.
→ Log in the camera.
3. A directory of all saved data will be displayed. You are now ready to obtain images from SD card.

Note:

- It is impossible to access the SD memory card in the process of formatting.
- All data saved on the SD memory card will be deleted when the SD memory card is formatted.
- Do not turn the power of the camera off in the process of formatting.

4.8.4 Maintenance



Maintenance Server

Reboot: The unit is rebooted without changing any of the settings. Use this method by pressing **Reboot** button if the unit is not behaving as expected.

Restore: The unit is restarted and most current settings are reset to the factory default values by pressing **Restore** button. The only settings saved are:

- IP setting
- DDNS setting

Default: The **Default** button should be used with caution. Pressing this button will return all of the camera's settings, including the IP address, to the factory default values. The camera will then have to be re-installed.

Save/Load Configuration Server

To take a backup of all of the configurations, press **Save** to save all configurations to a config. file. If necessary, it is then possible to return to the previous settings if the settings are changed and there is unexpected behavior.

Press the **Browse** button to locate the saved config. file (see above) and then click the **Load** button. The settings will be restored to the previous configuration.

Upgrade Firmware

Upgrade the EAN800A/EAN800AW with the latest firmware.

Press **Browse** button to search firmware file. Press **Upgrade** button to upgrade the firmware.

Note 1: Do not disconnect power to the unit during the upgrade. The unit reboots automatically after the upgrade has completed. (1-5 minutes.)

2. During upgrading process, all event recording actions will be stopped. It will continue to record after the camera is rebooted.

5. SPECIFICATIONS

CAMERA	
Pickup Device	1/3" Sony Super HAD Interlaced CCD
Pixel Effective	NTSC: 768 (H) x 494 (V); PAL: 752 (H) x 582 (V)
Sensitivity	0.4 Lux / F=1.2
Day & Night	Yes
Lens	Optional C/CS mount, manual / DD control supported
Video Output	BNC socket, composite 1 V p-p / 75Ω
Video Output Resolution	520 TVL
VIDEO STREAMING	
Video Compression	H.264/MPEG-4/M-JPEG
Video Resolution	D1, VGA, CIF, QVGA, QCIF
Video Quality	8 levels adjustable
Frame Rate	Up to 30fps
AUDIO	
Microphone	Built-in omni-directional microphone
Audio Input	3.5 mm stereo socket, sensitivity 1 Vrms
Audio Output	3.5 mm stereo socket, sensitivity 1 Vrms at load of 10KOhm and 50pf.
Compression Method	IMA ADPCM (Pulse Code Modulation)
Operation Mode	2 way audio
NETWORK	
Interface	10Base-T/100Base-TX auto-negotiation, RJ-45 socket Support MDI/MDI-X auto crossover function
Supported Protocols	HTTP, TCP / IP, UDP, RTP, RTSP, FTP, SMTP, DHCP, DNS, DDNS, NTP
Bandwidth Control	Min. 64 kbps adjustable
Max. Client Limit	32 simultaneous clients
ALARM	
Alarm Input	1 x input for dry contacts, Normal Open / Normal Closed adjustable
Alarm Output	1 x dry relay contact, Normal Open / Normal Closed adjustable, 70 VDC / 200 mA max
SERIAL INTERFACE	
RS-485	RS-485 interface bi-direction half-duplex (functionality reserved)
EVENT MANAGEMENT	
Event Triggered By	Alarm input, Manual trigger, Motion detection and Schedule recording
Notification Over	Trigger alarm output, Send mail notification, Upload video to FTP, Record video to SD card, Record video to PC and Network alarm
Pre- and Post- alarm Buffer	48MB RAM reserved for pre-alarm record up to 120 sec.
LOCAL STORAGE	
SD Card (Optional)	Secure Disk physical layer specification version 2.0 Supports SDHC Host Specification
POWER	

Power Supply	12 VDC & PoE Power cord with 5.5 mm cable socket, 5.5 mm adapter cable 20 cm included in package
Power Over Ethernet	Yes (PoE 802.3af)
Power Consumption	5W max. (12VDC)
PHYSICAL	
Weight	500 g ; 1.102 LBS
Dimensions	68 (W) x 57 (H) x 136 (D) mm / 2.7" (W) x 2.2" (H) x 5.4" (D) With BNC socket: 68 (W) x 57 (H) x 146 (D) mm / 2.7" (W) x 2.2" (H) x 5.7" (D) With Antenna: 68 (W) x 125 (H) x 167 (D) mm / 2.7" (W) x 4.9" (H) x 6.6" (D)
ENVIRONMENTAL	
Operating Temp.	0°C ~ 40°C ; 32°F ~ 104°F
Humidity	< 90% not condensing

EverFocus Electronics Corp.

Head Office:

12F, No.79 Sec. 1 Shin-Tai Wu Road,
Hsi-Chi, Taipei, Taiwan
TEL: 886-2-26982334
FAX: 886-2-26982380
www.everfocus.com.tw

USA Office:

1801 Highland Ave. Unit A
Duarte, CA 91010, U.S.A.
TEL: +1-626-844-8888
FAX: +1-626-844-8838
www.everfocus.com

USA N.Y. Office:

415 Oser Avenue Unit S
Hauppauge, NY 11788
Tel: 631-436-5070
FAX: 631-436-5027
www.everfocus.com

China Office:

Room B-05D-1, KESHI PLAZA, Shangdi
Information Industry Base, Haidian
District, Beijing China
100085
TEL: +86-10-62973336/37/38/39
FAX: +86-10-62971423
www.everfocus.com.cn

Europe Office:

Albert-Einstein-Strasse 1
D-46446 Emmerich, Germany
TEL: 49-2822-9394-0
FAX: 49-2822-939495
www.everfocus.de

Japan Office:

1809 WBG Maribu East 18F,
2-6 Nakase, Mihama-ku.
Chiba city 261-7118, Japan
TEL: 81-43-212-8188
FAX: 81-43-297-0081
www.everfocus.co.jp



Your EverFocus product is designed and manufactured with high quality materials and components which can be recycled and reused. This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste. Please, dispose of this equipment at your local community waste collection/recycling centre. In the European Union there are separate collection systems for used electrical and electronic product. Please, help us to conserve the environment we live in!

Ihr EverFocus Produkt wurde entwickelt und hergestellt mit qualitativ hochwertigen Materialien und Komponenten, die recycelt und wieder verwendet werden können. Dieses Symbol bedeutet, dass elektrische und elektronische Geräte am Ende ihrer Nutzungsdauer vom Hausmüll getrennt entsorgt werden sollen. Bitte entsorgen Sie dieses Gerät bei Ihrer örtlichen kommunalen Sammelstelle oder im Recycling Centre. Helfen Sie uns bitte, die Umwelt zu erhalten, in der wir leben!

