

ED5000

User Manual



FCC NOTICE (Class A)



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.

Federal Communications Commission Statement

NOTE- 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 tuning 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/television technician for help.

Class A ITE

Class A ITE is a category of all other ITE which satisfies the class A ITE limits but not the class B ITE limits. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:

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

European Community Compliance Statement (Class A)



This product is herewith confirmed to comply with the requirements set out in the Council Directives on the Approximation of the laws of the Member States relating to Electromagnetic Compatibility Directive 2004/108/EC.

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

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Trademark

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NOTICE

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE. THE INFORMATION CONTAINED HEREIN IS TO BE CONSIDERED FOR REFERENCE ONLY.

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Package Contents

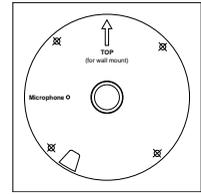
The following items are included in the package.



ED5000



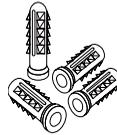
Software & Manual CD



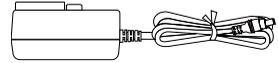
Alignment Sticker



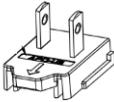
4 Screws



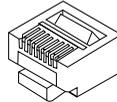
4 Plastic Anchors



Power Adapter



Power plug**



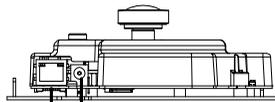
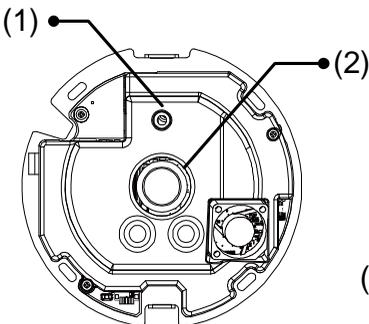
RJ-45 header



External speaker line

**The power plug will vary depending on the standard power outlet of the country where it is sold.

Camera Parts



- (1) MIC
- (2) Lens
- (3) RJ45 Ethernet Port
- (4) Power DC

IP Camera Installation

Mount the IP Camera

User can install the camera on the ceiling or on the wall. The following steps are describing how to install the camera on the ceiling and wall.

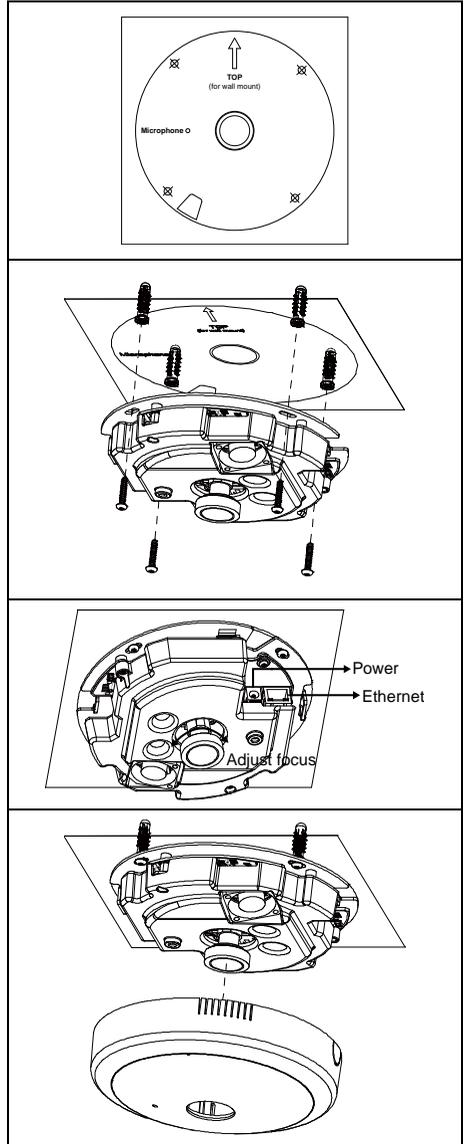
1. Place the alignment sticker on the wall surface.
Then spot the mark and drill the 4 holes indicated on the sticker.

[Note] If the camera is installed on ceiling, no need to follow the arrow position on alignment sticker.

2. Insert the 4 plastic anchors in the ceiling or wall. Next, hook the Camera and use the screws to secure the camera.

3. Connect the power and Ethernet to the camera.
4. Next, adjust the focus manually.

5. After adjusting the focus, secure the cover case of camera.



External Speaker Line Installation

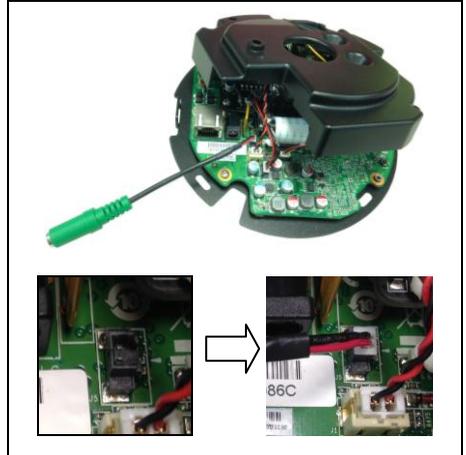
1. Un-screw the screws as figure shown.



2. Open the black cover.



3. Connect the external speaker line to the camera.



4. Close the black cover and screw it tight.

5. Finally, close camera case cover and security it.



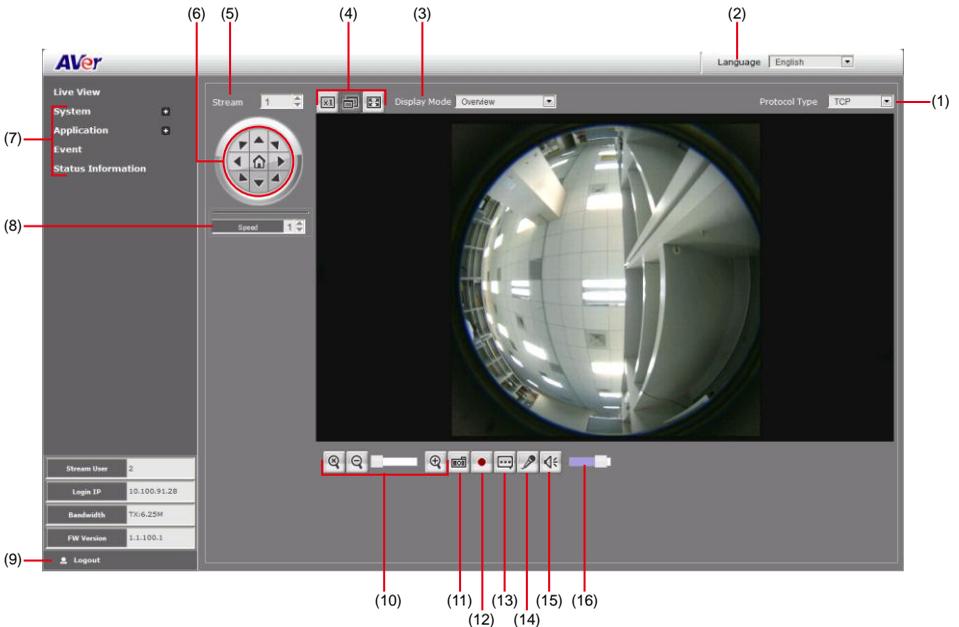
Using the IP Camera Browser Interface

The admin have the full access to the IP camera browser interface. The menu on the left, you can expand and navigate to access all the features.

Open the IE browser and enter the IP address of IP camera to access the IP camera Web configuration interface. In login dialog, enter the ID and Password (default is **admin/admin**).

Live View

In the Live View page, all three user levels can view and change the language setting, the IP camera video stream setting, capture screen shot, record video, turn on/off 2-way talk, mic and volume, and adjust the zoom and volume level.



Name	Function
(1) Protocol Type	Select the protocol for the live view video stream.
(2) Language	Select the browser interface language.

Name	Function
------	----------

(3) Display mode The display modes are depended on the Stream mode that user has selected; they will have different type of display modes

Stream mode	Display mode
Normal ceiling	Overview/Panoramic/Dual Panoramic/Quad/Dual Panoramic
Quad ceiling	Area1/Area2/Area3/Area4/Overview
Wall mode	Panoramic

[Note] Stream mode setup is in System > Video Stream.

(4) Video screen Change the video screen display.

-  Display the actual video pixel size.
-  Display the video screen in compact size.
-  Display the video on the entire screen. Press ESC to exit full screen mode.

(5) Stream Switch to view the different video stream. The number of video streams are depended on Stream mode that user has selected.

Stream mode	Stream
Normal ceiling	1/2/5
Quad ceiling	1/2/3/4/5
Wall mode	1/2

(6) Direction buttons Use to move the position of the view point while in zoom mode.

[Note] When object tracking is enabled, the PTZ function of upper left channel is disabled.

(7) System/Application/
Event/Status Information Set up IP camera's configuration.

(8) Speed control Set the speed when panning, tilting, or zooming.

(9) Logout Exit the application

- (10) Zoom control
-  Reset zoom level.
 -  Increase zoom level.
 -  Decrease zoom level.

(11) Capture  Capture and save the image on the screen in *.bmp format.

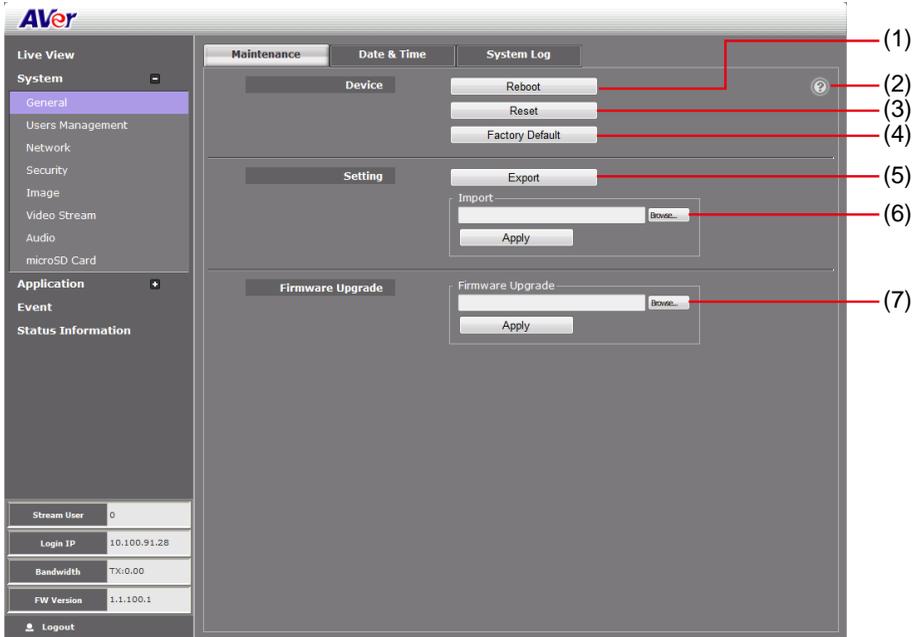
Name	Function
(12) Record	 Start/stop audio and video recording. The recorded video will be saved in *.mp4 format.
(13) 2-way talk	 Enable/disable mic from IP camera browser side.
(14) Mic	 Enable/disable mic from the IP camera side.
(15) Sound	 Enable/disable audio from the IP camera side.
(16) Volume bar	Adjust the volume.

System > General

In this section, only admin level is authorized to configure the IP camera general settings. There are 3 tabs in General settings: Maintenance, Date & Time, and System Log.

System > General > Maintenance

In the Maintenance tab, the admin can easily backup and restore the IP camera setting, reboot the IP camera, reset all the settings to factory default, and upgrade the IP camera firmware.



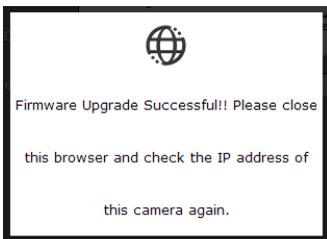
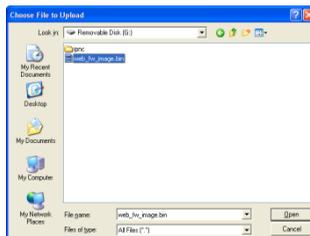
Name	Function
(1) Reboot	Restart the IP camera.
(2) Information	Displays the explanation of Reboot, Reset, and Factory default.
(3) Reset	Set all the configuration settings back to default except the user management and network settings.
(4) Factory Default	Set all the configuration settings back to factory default.
(5) Export	Backup all the configuration settings.

Name	Function
(6) Import Settings	Restore or replace the current settings with the backup file.

(7) Firmware Upgrade Upgrade the firmware to the latest version.

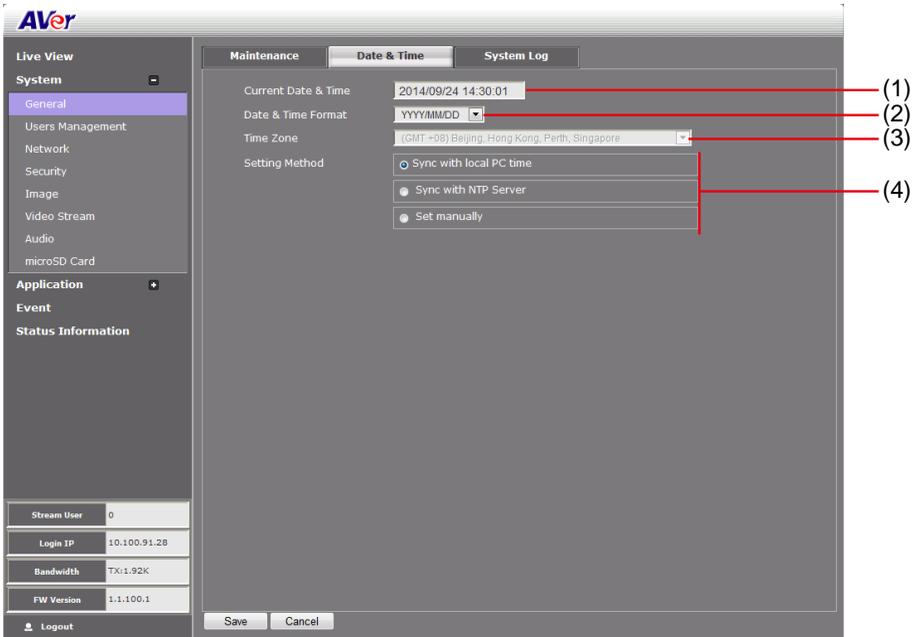
To Upgrade the IP Camera Firmware

1. Download the file from our website and save it in your computer hard disk.
2. Click Browse. Locate and select the file and click Open.
3. Click Apply. Wait till you see the message “Firmware Upgrade OK!!”. You may now click the IE browser refresh button or press F5. The login page will appear.



System > General > Date & Time

In the Date & Time tab, admin can manually set the date and time setting or synchronize it with the Internet time server or the computer date and time setting. This is used to record the time whenever there is a significant occurrence listed in system log and is also used in event scheduling. After completing the setting, click Save to apply the new setting and Cancel to keep the old setting.



Name	Function
(1) Current Date & Time	Display the current date and time setting.
(2) Date Format	Select the date display format.
(3) Time Zone	Set the local time zone.

Name**Function****(4) Setting Method**

Select the date & time setting method.

Sync with current PC: obtain the date and time setting on the current login computer.

Sync with NTP Server: obtain the date and time setting from NTP server. In the drop-down list, select the NTP host name.



Manual: manually set the date and time. Click Now to set the date base on the computer time setting and Done to close the date and time interface.

System > General > System Log

In the System Log, admin can view and search the significant event occurred in the IP camera.

The screenshot shows the AVer system log interface. On the left is a navigation menu with categories: Live View, System (General, Users Management, Network, Security, Image, Video Stream, Audio, microSD Card), Application, Event, and Status Information. The main area has tabs for Maintenance, Date & Time, and System Log. The System Log tab is active, displaying a table of events with columns for Index, Time, LogString, and Type. A search bar is at the top of the table. Below the table, it says 'Showing 1 to 10 of 84 entries' and includes pagination controls.

Index	Time	LogString	Type
84	2014-07-24 18:04:29	One session disconnected. IP :10.100.91.28	SYSTEM
83	2014-07-24 18:04:23	One session connected. IP :10.100.91.28	SYSTEM
82	2014-07-24 17:41:20	One session disconnected. IP :10.100.91.28	SYSTEM
81	2014-07-24 17:33:47	One session connected. IP :10.100.91.28	SYSTEM
80	2014-07-24 17:33:46	One session disconnected. IP :10.100.91.28	SYSTEM
78	2014-07-24 17:33:43	One session disconnected. IP :10.100.91.28	SYSTEM
79	2014-07-24 17:33:43	One session connected. IP :10.100.91.28	SYSTEM
77	2014-07-24 17:27:29	One session connected. IP :10.100.91.28	SYSTEM
76	2014-07-24 17:26:47	Network abnormal	EVENT
73	2014-07-24 17:26:46	Abnormal reboot	SYSTEM

Showing 1 to 10 of 84 entries

<< < 1 2 3 4 5 >>

Stream User: 0
 Login IP: 10.100.91.28
 Bandwidth: TX:0.00
 FW Version: 1.1.100.1
 Logout

System > User Management

In User Management, only admin level is authorized to create, delete, and edit account to connect to the IP camera and configure the client connection setting. There are 2 tabs in User Management setting: Account and Connection.

System > User Management > Account

In Account page, admin can create, delete and set the access level of the user account.

To Create a User Account

1. Click **System > User Management > Account** tab.
2. Enter the **User Name**, **User Info**, and select the **User Type**. Then, click **Create**.

User Name	User Type	PTZ Enable	User Info
admin	admin	Yes	System Default User

User Type

Access rights

Admin	Allow to access all the configuration pages.
Operator	Allow to preview live image, modify and adjust certain settings; except in System > General, User Management, Network, and SD/microSD Card > Management. As for the I/O Control, admin could enable/disable to allow operator to access it.

Viewer

Only allow to access the preview and status information pages.

3. Enter the same password in **Password** and **Confirm Password** column. Then click **Add**.

User Name	User Type	PTZ Enable	User Info
Guest	viewer	No	Guest
admin	admin	Yes	System Default User

To Delete or Edit a User Account

Select the user account that you want to delete or edit.

- Click **Cancel** to cancel the operation.
- Click **Modify** to apply the new changes. Make sure to edit the account before clicking the Modify button.
- Click **Remove** to delete the account.

User Name	User Type	PTZ Enable	User Info
Guest	viewer	No	Guest
User1	operator	Yes	
admin	admin	Yes	System Default User

System > User Management > Connection

In Connection page, admin can set the total number of user for accessing the IP camera, and filtering the IP address to allow or deny accessing the IP camera.

The screenshot shows the AVer web interface. On the left is a sidebar with a 'Live View' section and a 'System' section containing 'General', 'Users Management' (highlighted), 'Network', 'Security', 'Image', 'Video Stream', 'Audio', and 'microSD Card'. Below this are 'Application', 'Event', and 'Status Information' sections. At the bottom of the sidebar is a table with the following data:

Stream User	0
Login IP	10.100.91.28
Bandwidth	Tx:0.00
FW Version	1.1.100.1

Below the table is a 'Logout' button. The main content area has two tabs: 'Account' and 'Connection'. The 'Connection' tab is active, showing two settings: 'Http Connection' set to 'http only' and 'Maximum Number of Clients' set to '10'. A 'Save' button is located at the bottom of the main content area.

- **Http Connection:** Select the connection type. For higher security data transmission level, select http & https or http only. The authenticated and encrypted the data is over the SSL (Secure Socket Layer).
- **Maximum Number of Clients:** Select the max number of users to simultaneously access the IP camera.

System > Network

In this section, only admin level is authorized to configure the Network settings.

System > Network > Setting

In Setting page, you can configure the type of network connection for IP camera and assign name for the IP camera. Depending on the network connection, IP camera can be accessed from the computer within the same local area network (LAN) or anywhere with Internet connection. After completing the setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.

The screenshot shows the AVer network configuration interface. On the left is a navigation menu with categories like System, Application, and Event. The main area is titled 'Setting' and contains several tabs: Setting, Server, Streaming, QoS, and Others. The 'Setting' tab is selected. It features a 'Device Name' field with the value 'ED5000'. Below it is the 'Network Type' section with radio buttons for 'DHCP' (selected), 'Static IP', and 'PPPoE'. The DHCP section includes input fields for 'IP Address' (10.100.91.49), 'Subnet Mask' (255.255.255.0), 'Default Gateway' (10.100.91.254), and 'Preferred DNS' (10.100.1.5). At the bottom of the main area is the 'IPv6 Settings' section with a checkbox for 'Enable IPv6' which is checked. At the very bottom are 'Save' and 'Cancel' buttons. Red lines with numbers (1), (2), and (3) point to the Device Name field, the Network Type section, and the IPv6 Settings section respectively.

Name

Function

(1) Device Name Assign name for the IP camera.

Name	Function
------	----------

(2) Network Type

Select the type of IP camera network connection.

DHCP: select this option to automatically obtain an IP address from the DHCP server, whenever the IP camera is connected to the network. You can use the IP camera UPnP Discovery software in the CD to easily setup the IP camera network.

Static IP: select this option to manually assign a fix IP address to the IP camera.

PPPoE: select this option to access the IP camera anywhere with Internet connection. To use this option, this requires an account provided by the ISP. Set this setting while connected to the LAN and click **Save**. Connect the IP camera directly to DSL or cable modem.

(3) IPv6 Settings

Enable IPv6 support

Select "Manually set the IP address" to specify IP address manually.

System > Network > Server

In Server page, you can configure the Email, FTP, and NAS setting. It is necessary to configure the server settings so that IP camera can perform the task in the Event setting when a trigger is activated. You can configure either one or all of it. After completing the setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.

The screenshot displays the Aver network configuration interface. The left sidebar shows a navigation menu with categories: Live View, System (General, Users Management, Network, Security, Image, Video Stream, Audio, microSD Card), Application, Event, and Status Information. The main content area is titled 'Server' and contains three sections: SMTP Mail Settings, FTP Settings, and NAS Settings. Each section has several input fields and a 'Test' button. At the bottom, there are 'Save' and 'Cancel' buttons.

Setting	Server	Streaming	QoS	Others
SMTP Mail Settings				
	Account Name			
	Password			
	Sender Email Address			
	Recipient Email Address			
	Mail Server IP			
	Port	25		Test
		<input type="checkbox"/> TLS Connection		
FTP Settings				
	IP Address			
	Port	21		
	Account Name			
	Password			
	Path			Test
		<input type="checkbox"/> Passive Enable		
NAS Settings				
	Location			
	Workgroup			
	Account Name			
	Password			Test

Stream User: 0
Login IP: 10.100.91.28
Bandwidth: TX:0.00
FW Version: 1.1.100.1
Logout

Save Cancel

System > Network > Streaming

In Streaming page, you can configure the HTTP/HTTPS/RTSP port and multicast setting.

Setting	Server	Streaming	QoS	Others
HTTP Port		80		
HTTPS Port		443		
RTSP Port		554		
Multicast group address 1		239.128.1.5		
Multicast video port 1		5566		
Multicast RTCP video port 1		5567		
Multicast audio port 1		5568		
Multicast RTCP audio port 1		5569		
Multicast TTL 1		255		
Multicast group address 2		239.128.1.6		
Multicast video port 2		5570		
Multicast RTCP video port 2		5571		
Multicast audio port 2		5572		
Multicast RTCP audio port 2		5573		
Multicast TTL 2		255		
Multicast group address 3		239.128.1.7		
Multicast video port 3		5574		
Multicast RTCP video port 3		5575		
Multicast audio port 3		5576		
Multicast RTCP audio port 3		5577		
Multicast TTL 3		255		

Stream User: 0
Login IP: 10.100.91.28
Bandwidth: Tx:0.00
FW Version: 1.1.100.1
Logout

Save Cancel

- **HTTP Port:** Setup web page connecting port and video transmitting port (Default is 80).
- **HTTPS Port:** AVer IP Camera supports encrypted browsing using HTTPS.
- **RTSP Port:** Setup port for RTSP transmitting (Default is 554).
- **Multicast group address 1/2/3:** Set multicast group address.
- **Multicast video port 1/2/3:** Set multicast video port number.
- **Multicast RTCP video port 1/2/3:** Set multicast RTCP video port number.
- **Multicast TTL 1/2/3:** Set multicast TTL value.

System > Network > QoS

In QoS page, you can configure the Quality of Service setting. Enabling the QoS allows you to set the parameter and prioritize the IP camera to provide stable streaming performance at a certain level in a traffic network.

The screenshot displays the AVer network configuration interface. The left sidebar contains a navigation menu with sections: Live View, System (General, Users Management, Network, Security, Image, Video Stream, Audio, microSD Card), Application, Event, and Status Information. The main content area is titled 'QoS' and features a table with columns: Setting, Server, Streaming, QoS, and Others. The 'QoS' column is highlighted. The table contains three rows of settings:

Setting	Server	Streaming	QoS	Others
CoS Enable	<input type="radio"/> No <input checked="" type="radio"/> Yes			
VLAN ID		1		(0~4094)
CoS Priority		4		(0~7)
QoS/DSCP Enable	<input type="radio"/> No <input checked="" type="radio"/> Yes			
QoS Priority		4		(0~63)

At the bottom of the main content area, there is a 'Save' button. Below the main content area, there is a status bar with the following information:

Stream User	0
Login IP	10.100.91.28
Bandwidth	Tx:172.91K
FW Version	1.1.100.1

A 'Logout' button is located at the bottom left of the status bar.

System > Network > Others

In Others page, you can enable/disable the UPnP setting, DDNS, and SNMP function. If your router does not support UPnP function, you can enable the UPnP forwarding and set the port mapping. Click **Save** button to apply the settings.

The screenshot shows the AVer web interface. On the left is a navigation menu with sections: Live View, System (General, Users Management, Network, Security, Image, Video Stream, Audio, microSD Card), Application, Event, and Status Information. The 'Status Information' section contains a table:

Stream User	0
Login IP	10.100.91.28
Bandwidth	TX:0.00
FW Version	1.1.100.1

At the bottom left is a 'Logout' button. The main content area has tabs: Setting, Server, Streaming, QoS, and Others. The 'Others' tab is selected, showing:

- UPnP Support: OFF ON
- UPnP Forwarding: OFF ON
- DDNS Provider:
- DDNS DomainName:
- DDNS User:
- DDNS Pwd:
- DDNS Status:
- DDNS Enable

Below this is the 'SNMP Configuration' section:

- Enable SNMPv1, SNMPv2
 - Read/Write community:
 - Read only community:
- Enable SNMPv3
 - Read/Write security name:
 - Authentication type: MD5
 - Authentication password:
 - Encryption password:
 - Read only security name:
 - Authentication type: MD5
 - Authentication password:
 - Encryption password:

At the bottom are 'Save' and 'Cancel' buttons.

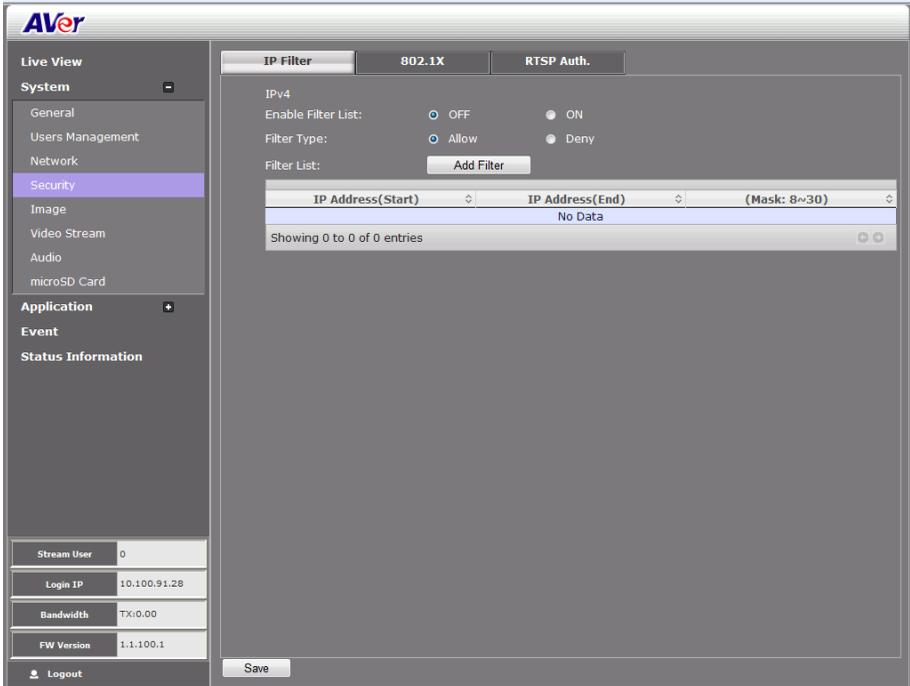
- **UPnP Support:** The IP camera supports UPnP, if this service is enabled on your computer.
[Note] UPnP must be enabled on your PC.
- **UPnP Port Forwarding:** If the IP camera is installed behind the firewall, please select **ON** to enable it.
- **DDNS setting:** Setup DDNS server.
 - Mark "**Enabled DDNS**" to enable DDNS function.
 - Enter the **DDNS Provider**, **Domain Name**, **User Name**, and **Password** that the user has registered on the DDNS service provider in the appropriate columns.
 - DDNS Status** displays the DDNS function current status.
- **SNMP** (Simple Network Management Protocol) provides a simple framework for administering networked hardware. SNMPv1, SNMPv2c, and SNMPv3 can be enabled simultaneously.

- **SNMPv1 and SNMPv2:** The term "Community name" in SNMPv1 and SNMPv2 can be roughly regarded as key. The person who has the community name has the authority to read or edit the information of IP camera via SNMP. Check the box to enable SNMPv1 and SNMPv2 protocol, and specify the community name for **Read/Write** and **Read only community**. The user who uses read community name to access the IP camera cannot modify any data of this camera
- **SNMPv3:** For data security reason, the authentication and encryption assurances are added when developing SNMPv3. The user has to give not only the security name (the same as "community name" in v1&v2, or sometimes we call it "context name") but the password in order to access the IP camera. Please set **Security name, Authentication type, Authentication password, Encryption type, Encryption password** of **Write/Read** and **Read Only** respectively. The password must be 8–64 bits in length.

System > Security

Only admin levels can adjust the Image setting. There are 2 function tabs: **IP Filter**, **802.1x**, **RSTP Auth...**

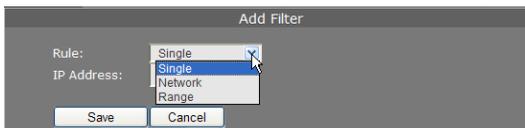
System > Security > IP Filter



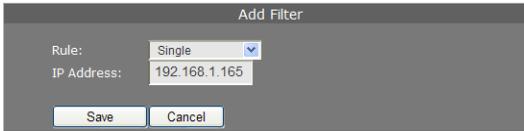
- **Enable Filter List:** Select to turn the IP address filtering on or off.
- **Filter Type:** Select to allow or deny the IP address in the filter list to access the IP camera.
- **Filter List:** Create and display the filtered IP address.

To Add Filter

1. Click **System > Security > IP Filter** tab, then, click **Add Filter**.
2. In Rule drop down list, select from the 3 types of rules: Single, Network and Range.

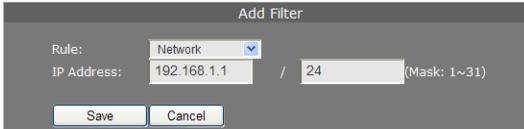


Single – add an IP address



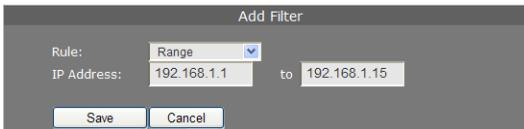
The screenshot shows a dialog box titled "Add Filter". It has a "Rule:" dropdown menu set to "Single". Below it, the "IP Address:" field contains "192.168.1.165". At the bottom, there are two buttons: "Save" and "Cancel".

Network – assign a network address and the corresponding subnet mask to be filtered.



The screenshot shows a dialog box titled "Add Filter". It has a "Rule:" dropdown menu set to "Network". Below it, the "IP Address:" field contains "192.168.1.1" followed by a slash and the number "24" in a separate field, with "(Mask: 1~31)" in parentheses to the right. At the bottom, there are two buttons: "Save" and "Cancel".

Range – assign a range of IP address to be filtered.



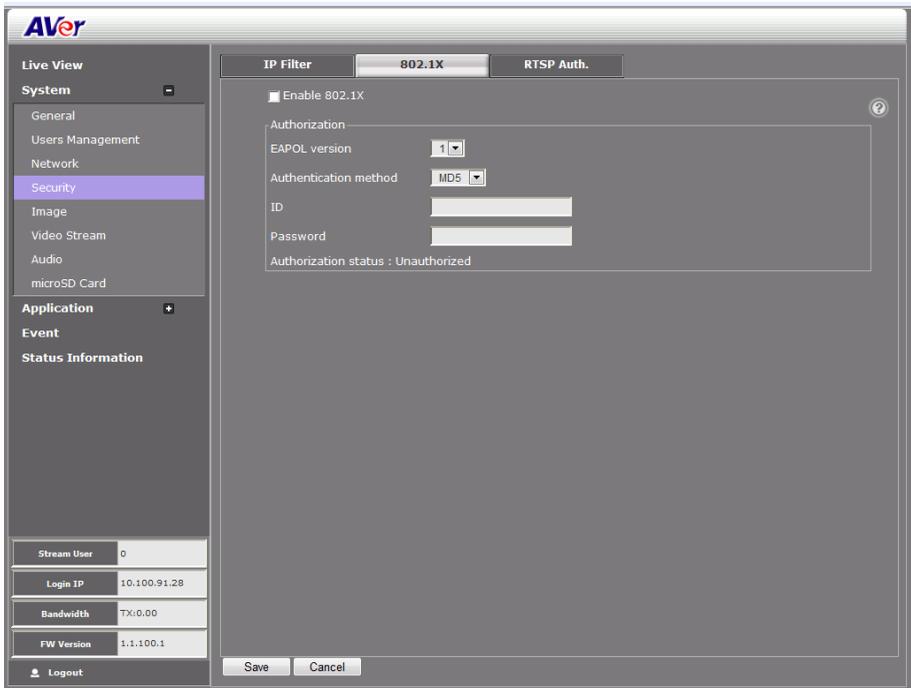
The screenshot shows a dialog box titled "Add Filter". It has a "Rule:" dropdown menu set to "Range". Below it, the "IP Address:" field contains "192.168.1.1" followed by "to" and another field containing "192.168.1.15". At the bottom, there are two buttons: "Save" and "Cancel".

3. Click **Save** to add the created data in the filter list or click **Cancel** to exit and without saving data.
- **IPv6 Filter:** Please follow the IPv4 filter rules to set up IPv6 filter. The IPv6 setting needs to be enabled first (**System > Network > Setting**).

System > Security > 802.1X

IEEE 802.1X is an IEEE Standard for port-based Network Access Control. It provides an authentication mechanism to devices wishing to attach to a LAN or WLAN.

Mark the check box to **Enable 802.1X** protocol. Select the **EAPOL** (EAP over LAN) **version**, **Authentication method** and enter the **ID** and **Password**.



The screenshot displays the AVer network management interface. The left sidebar contains a navigation menu with the following sections: **Live View**, **System** (with sub-items: General, Users Management, Network, Security, Image, Video Stream, Audio, microSD Card), **Application**, **Event**, and **Status Information**. The **Security** menu item is highlighted. Below the menu is a status table:

Stream User	0
Login IP	10.100.91.28
Bandwidth	Tx:0.00
FW Version	1.1.100.1

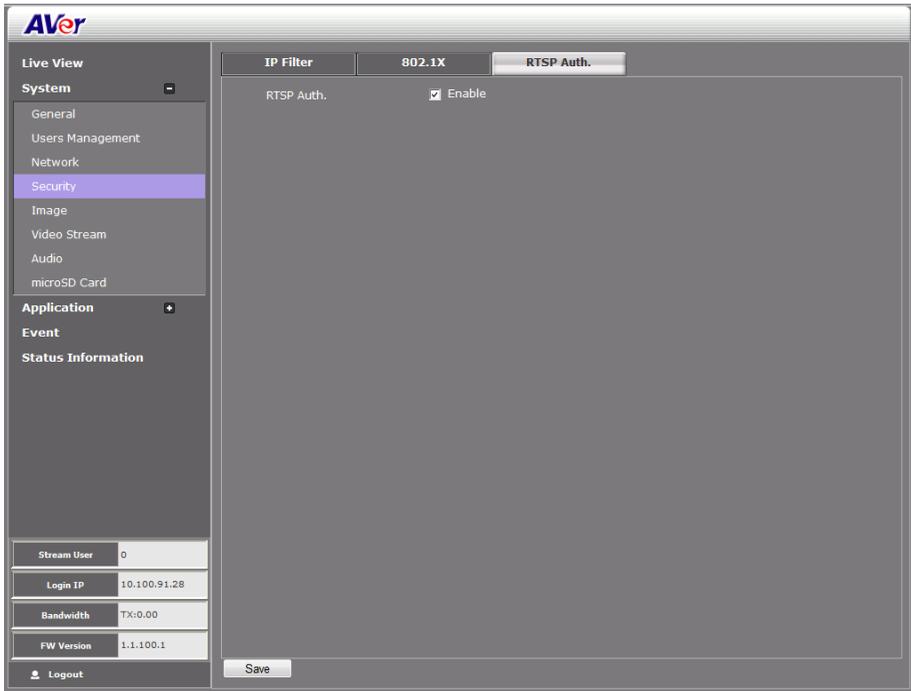
At the bottom of the sidebar is a **Logout** button. The main content area has three tabs: **IP Filter**, **802.1X** (selected), and **RTSP Auth.**. The **802.1X** configuration panel includes:

- Enable 802.1X**
- Authorization** section:
 - EAPOL version: 1
 - Authentication method: MD5
 - ID: [text input field]
 - Password: [text input field]
 - Authorization status: Unauthorized

At the bottom of the configuration panel are **Save** and **Cancel** buttons.

System > Security > RTSP Auth.

Enable/disable RTST authentication. After completing the setting, click **Save** to apply the new setting.



The screenshot displays the AVer system configuration interface. The left sidebar contains a navigation menu with the following sections:

- Live View**
- System** (expanded):
 - General
 - Users Management
 - Network
 - Security** (highlighted)
 - Image
 - Video Stream
 - Audio
 - microSD Card
- Application**
- Event**
- Status Information**

At the bottom of the sidebar, there is a status table:

Stream User	0
Login IP	10.100.91.28
Bandwidth	Tx:0.00
FW Version	1.1.100.1

Below the table is a **Logout** button.

The main content area shows the configuration for **RTSP Auth.** under the **802.1X** tab. The setting is **RTSP Auth.** with a checked **Enable** checkbox. A **Save** button is located at the bottom of the main content area.

System > Image

Both admin and operator levels can adjust the Image setting. There are 5 function tabs: **OSD**, **Preference**, **Exposure**, **Advanced**, and **Privacy Mask**.

System > Image > OSD

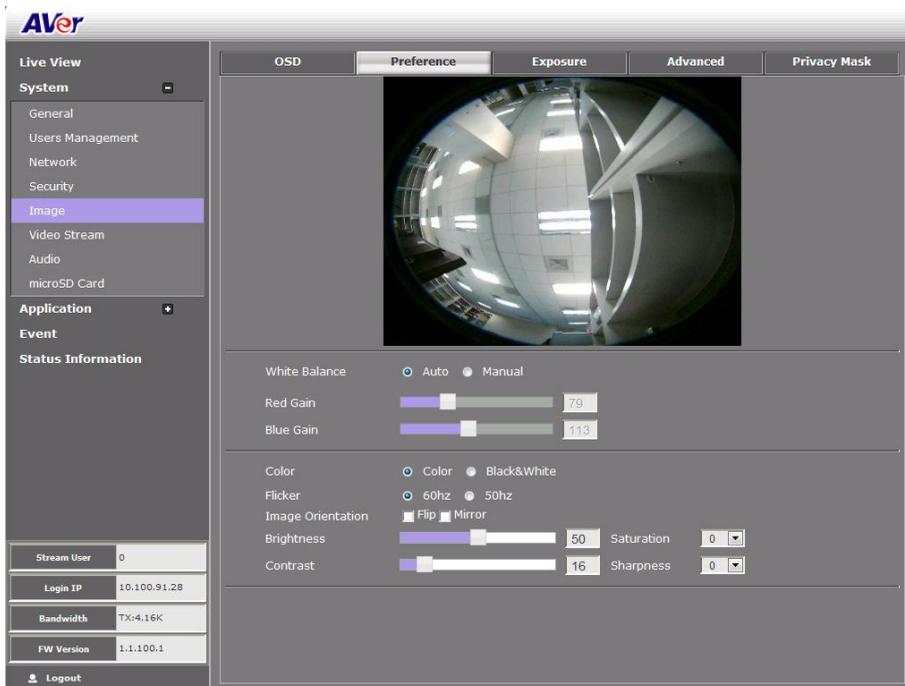
In OSD page, you can enable/disable overlaying time stamp, text title and add logo.

The screenshot shows the AVer OSD configuration interface. On the left is a navigation menu with categories like System, Application, and Status Information. The main area has five tabs: OSD, Preference, Exposure, Advanced, and Privacy Mask. The OSD tab is selected and displays a live video feed. Below the feed are five settings sections, each with a dropdown menu and a checkbox. Red lines with numbers 1 through 5 point to the following elements: (1) Time Stamp location dropdown (Bottom-Right), (2) Customize Title location dropdown (Top-Right), (3) Title Text input field (AVer), (4) Logo location dropdown (Top-Right), and (5) Upload button in the Customize Logo section.

Name	Function
(1) Time Stamp	Select the location of the Time Stamp. Click the checkbox to enable/disable display the date and time stamp.
(2) Customize Title	Select the location of the Text Title. Click the checkbox to enable/disable display the text title.
(3) Title Text	Enter the title text, e.g. AVer.
(4) Logo	Select the location of the logo image file. Click the checkbox to enable/disable display the logo.
(5) Customize Logo	Upload your company logo. The maximum size is 64 x 64 pixels.

System > Image > Preference

In Preference page, you can tune the IP camera white balance, select display color or black & white, set the flicker frequency, change the video orientation, and adjust the brightness and contrast.



The screenshot displays the AVer IP camera web interface. The left sidebar shows the navigation menu with 'Image' selected. The main content area is titled 'Preference' and contains a live video feed of a fisheye camera view. Below the feed are several configuration sections:

- White Balance:** Radio buttons for 'Auto' (selected) and 'Manual'.
- Red Gain:** A slider set to 79.
- Blue Gain:** A slider set to 113.
- Color:** Radio buttons for 'Color' (selected) and 'Black&White'.
- Flicker:** Radio buttons for '60hz' (selected) and '50hz'.
- Image Orientation:** Checkboxes for 'Flip' and 'Mirror'.
- Brightness:** A slider set to 50.
- Contrast:** A slider set to 16.
- Saturation:** A dropdown menu set to 0.
- Sharpness:** A dropdown menu set to 0.

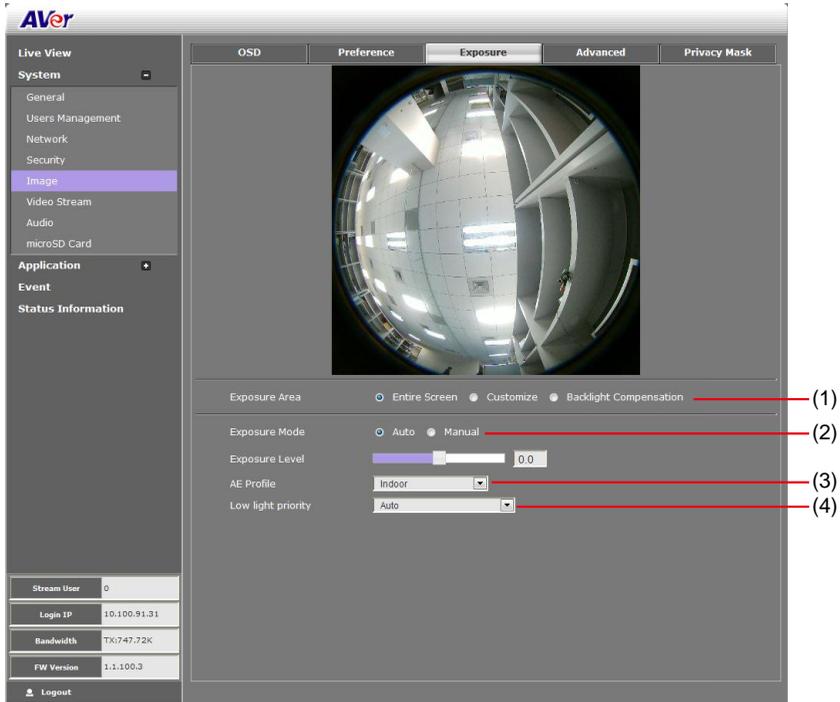
At the bottom left, there is a 'Status Information' table:

Stream User	0
Login IP	10.100.91.28
Bandwidth	Tx:4.16K
FW Version	1.1.100.1

A 'Logout' button is located at the bottom left of the interface.

System > Image > Exposure

In Exposure page, you can set the exposure zone, exposure mode, and calibrate the DC Iris.



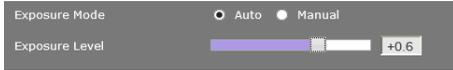
Name	Function
(1) Exposure Area	Select the exposure area to define the light distribution and bring out more details. Entire screen: measure the entire screen to adjust the exposure. Customize: measure the exposure to where the adjustable and movable frame on the screen is located. Move the spot to dark zone to adjust the light condition. Backlight compensation: measure the exposure at the center of the screen.

Name	Function
------	----------

(2) Exposure Mode

Select to automatically or manually adjust the exposure.

Auto: adjust exposure level from -2.0 to +2.0

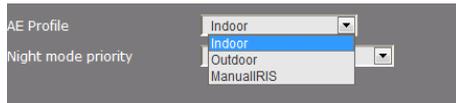


Manual: adjust max shutter and gain control



(3) AE Profile

Select the auto exposure scenes – Indoor, Outdoor, or ManualIRIS.



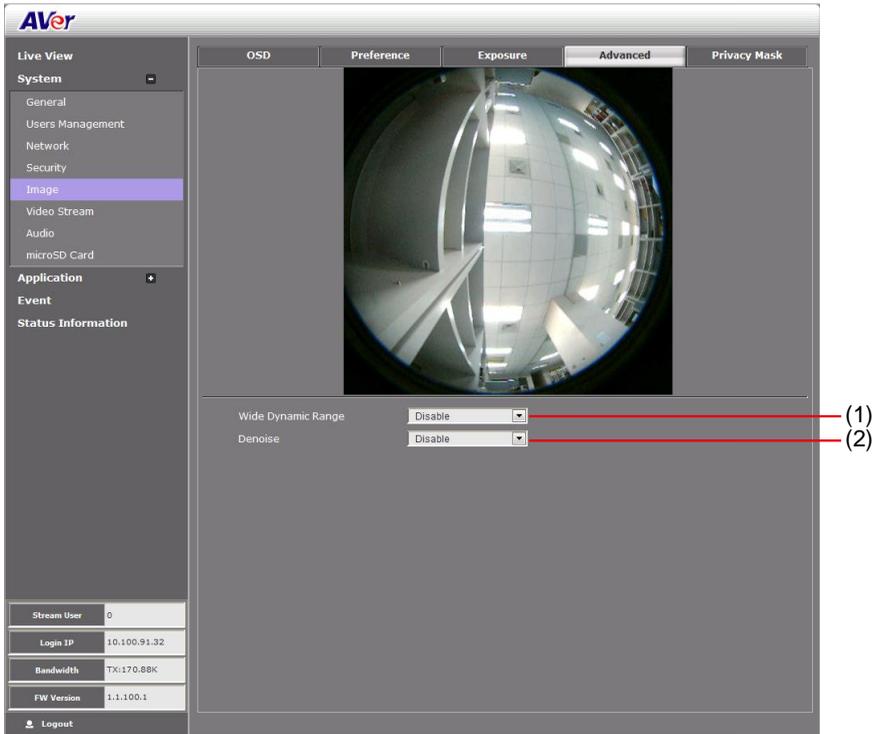
(4) Low light priority

Select the one you want to prioritize during low light mode image quality or frame rate.



System > Image > Advanced

In Advanced page, you can configure the Wide Dynamic Range, Denoise, and AE profile.



The screenshot shows the AVer camera web interface. The left sidebar contains a menu with 'Image' selected. The main area shows the 'Advanced' settings page with a live video feed of a fisheye camera view. Below the feed, the 'Wide Dynamic Range' and 'Denoise' settings are both set to 'Disable'. Red lines with labels (1) and (2) point to these settings.

Name	Function
(1) Wide Dynamic Range	WDR effectively balances the video image on the screen in both bright and dark areas making it possible to see clear details. There are 3 levels for your choice or disable WDR.
(2) Denoise	Select Disable/2D/3D/Auto to reduce the excessive noise on the video image.



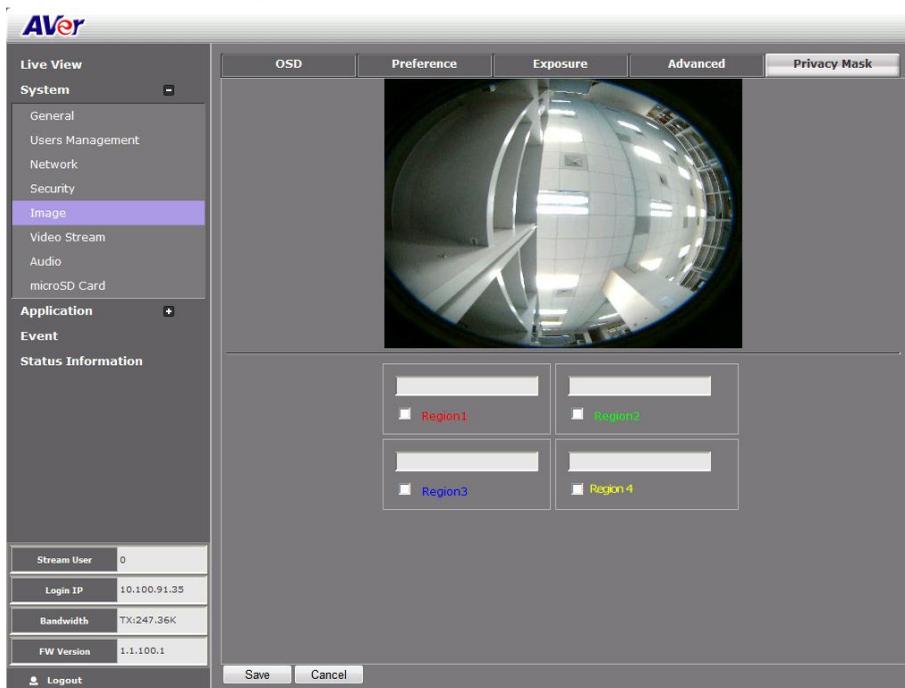
Denoise

- 2D
- Disable
- 2D
- 3D
- Auto

Auto: automatically switch between 2D, 3D, and Disable.

System > Image > Privacy Mask

In Privacy Mask page, you can enable 4 privacy masks. Simply adjust the size and position the mask on the area you want to conceal. The viewer will not be able to see the masked area. It will cover the video screen with black frame. After completing the setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.



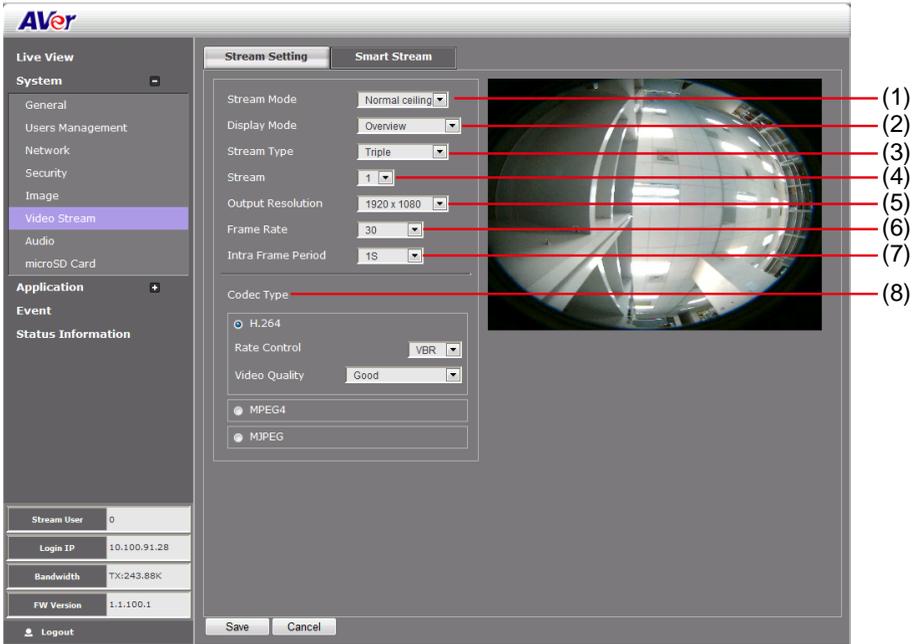
The screenshot displays the AVer web interface for configuring privacy masks. The interface is divided into several sections:

- Left Sidebar:** Contains navigation menus for "Live View", "System", "Application", and "Status Information". The "Image" option under "System" is currently selected.
- Top Tabs:** Includes "OSD", "Preference", "Exposure", "Advanced", and "Privacy Mask". The "Privacy Mask" tab is active.
- Main Viewport:** Shows a live video feed of a spherical structure with a black rectangular mask overlaid on the right side.
- Configuration Area:** Below the video feed, there are four input fields for defining the mask regions, each with a corresponding color-coded label and a checkbox:
 - Region 1 (Red)
 - Region 2 (Green)
 - Region 3 (Blue)
 - Region 4 (Yellow)
- Bottom Buttons:** "Save" and "Cancel" buttons are located at the bottom of the configuration area.
- Status Information Table:** Located at the bottom left of the sidebar, it displays the following data:

Stream User	0
Login IP	10.100.91.35
Bandwidth	TX:247.36K
FW Version	1.1.100.1

System > Video Stream

Both admin and operator levels can configure the Video Stream. After configuring the video stream setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.



Name	Function
------	----------

(1) Stream Mode The ED5000 supports 3 stream mode – Normal ceiling, Quad ceiling, and Wall mode. Each stream mode has supported different type of display mode; refer to (2) Display mode.

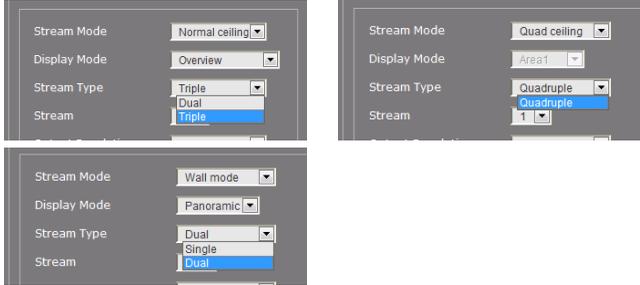
(2) Display mode According to stream mode, display mode supports are different.

Stream mode	Display mode
Normal ceiling	Overview/Panoramic/Dual Panoramic/Quad/Dual Panoramic
Quad ceiling	Area1/Area2/Area3/Area4
Wall mode	Panoramic

Name	Function
------	----------

(3) Stream Type

According to stream mode, stream type supports are different.



(4) Stream

Select the streaming source. According to stream mode, stream supports are different.

Stream mode	Stream
Normal ceiling	1/2/5
Quad ceiling	1/2/3/4/5
Wall mode	1/2

(5) Output Resolution

Select the video size. According to stream mode, output resolution supports are different.

(6) Frame Rate

Select frame rate per second of video.

(7) Intra Frame Period

Select frame internal time period.

(8) Code Type

Select the type of video compression codec. The supported codec is H.264, MPEG4, and MJPEG. On each stream, adjust rate control and video quality setting.

VBR (Variable Bit Rate): by default use this setting if there is a need to maintain the image quality whenever there is lot of activities on the scene or no motion. This setting keeps the video stream constant as possible which increases the bandwidth requirement when there is high motion and decreases when there is no motion. The bandwidth must be able to accommodate high throughputs.

CBR (Constant Bit Rate): use this setting if there is bandwidth concern. This setting is restricted to keep the bit rate setting. This could affect the image quality and frame rate if there is high activity that result in a bit rate that is higher than the set bit rate.

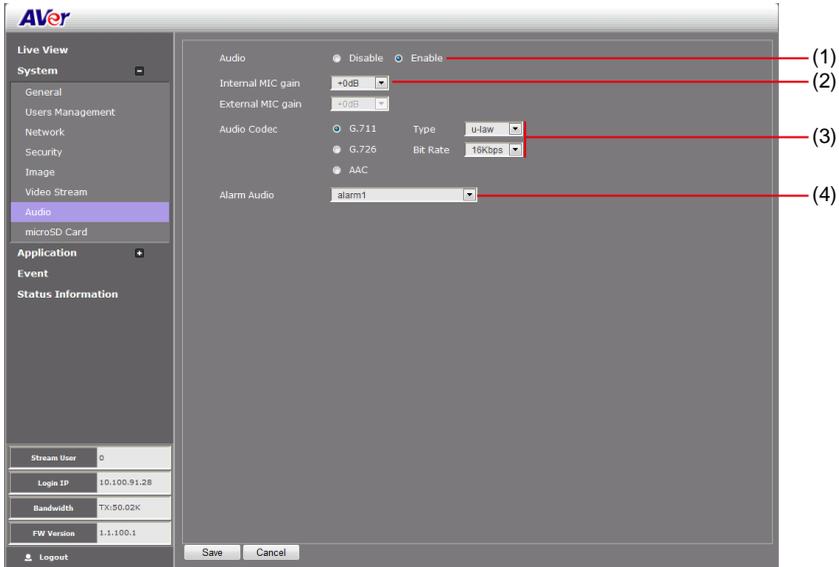
Smart Stream



Name	Function
(1) Stream	Select the streaming source. This option is only applied to H.264.
(2) Quality	High: video quality of selected area is better than that of un-selected area. Low: video quality of selected area is worse than that of un-selected area.

System > Audio

Both admin and operator levels can configure the IP camera audio setting. After configuring the Audio setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.

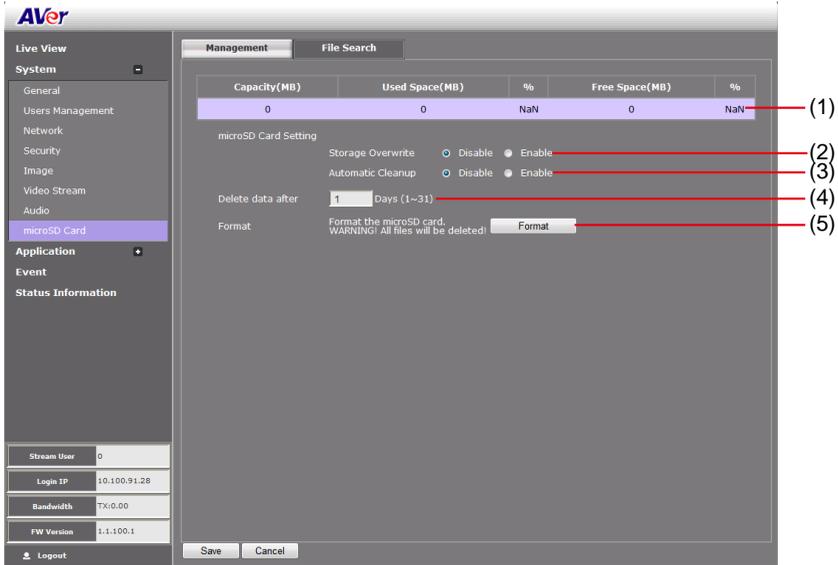


Name	Function
(1) Audio	Select to enable/disable the IP camera built-in mic and mic port.
(2) Internal/External MIC gain	Select to boost up the internal/external mic gain or set to normal.
(3) Audio Codec	Select the audio protocol, algorithm, and audio bit rate. G.711: uses Pulse code modulation (PCM) of voice. G.726: uses 40, 32, 24, 16 kbit/s adaptive differential pulse code modulation (ADPCM) AAC: uses AAC codec
(4) Alarm Audio	Select to choose from 2 types of alarms sound or customer alarm to use the uploaded alarm sound. The supported sound format are in *.wav (PCM 8KHz/16bit Mono, 10 seconds).



System > SD/microSD Card > Management

Both admin and operator levels can manage the SD/microSD Card local storage. After managing the SD/microSD Card setting, click Save to apply the new setting and Cancel to keep the old setting. We recommend formatting the SD/microSD card when using it for the first time.



Name	Function
(1) SD/microSD Card Info	Shows the SD/microSD card details. No details will appear if SD/microSD Card is not inserted.
(2) Storage Overwrite	Enable/disable cycle recording. The old file in the SD/microSD card will be overwritten with the latest one when it has reached the maximum capacity.
(3) Automatic Cleanup	Enable/disable automatic clear the data in SD/microSD card. The file will be deleted when it reached the number of days set in Delete data after [xx] days .
(4) Delete data after	Enter the number of days you wish to retain a file.
(5) Format	To delete all the data in the SD/microSD card.

System > SD/microSD Card > File Search

Use this to search the captured image in the SD/microSD card.

The screenshot displays the AVer system's File Search interface. The sidebar on the left contains the following menu items: Live View, System (with a minus sign), General, Users Management, Network, Security, Image, Video Stream, Audio, microSD Card (highlighted in purple), Application (with a plus sign), Event, and Status Information. At the bottom of the sidebar, there is a table with the following data:

Stream User	0
Login IP	10.100.91.28
Bandwidth	Tx:0.00
FW Version	1.1:100.1

The main content area is titled "File Search" and includes the following elements:

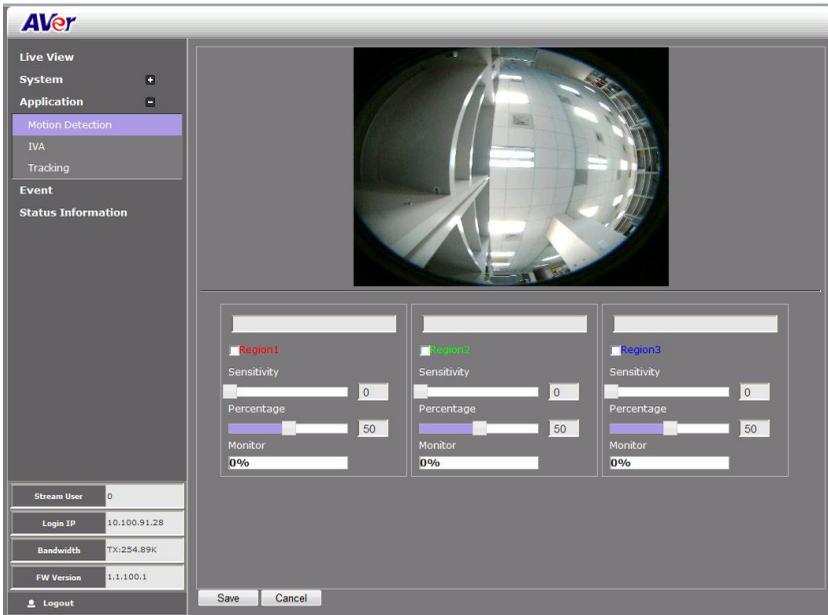
- Start Time: 2014-09-26 00:00
- End Time: 2014-09-26 23:59
- A Search button
- A table with the following structure:

File Name	Time	Type
No Data		

At the bottom of the main content area, there is a Logout button.

Application > Motion Detection

Both admin and operator levels can specify up to 3 areas on the screen to monitor the motion. In the motion detection page, the frame will blink when the motion detected has reached the percentage threshold setting. This feature can be utilized to trigger a response in Event setting.



To Set the Motion Detection

1. Click **Application > Motion Detection**.
2. Enable the region check box (Region 1, Region 2, Region 3) to create a motion detection frame.
3. Move and adjust the frame to the area you want to detect the motion.
4. Adjust the sensitivity and percentage. Sensitivity detects the motion on the screen and assesses the changes in pixel thru percentage. The motion detection will activate when the Monitor level reaches the defined percentage.
5. Click **Save** to apply the new setting and **Cancel** to keep the old setting.

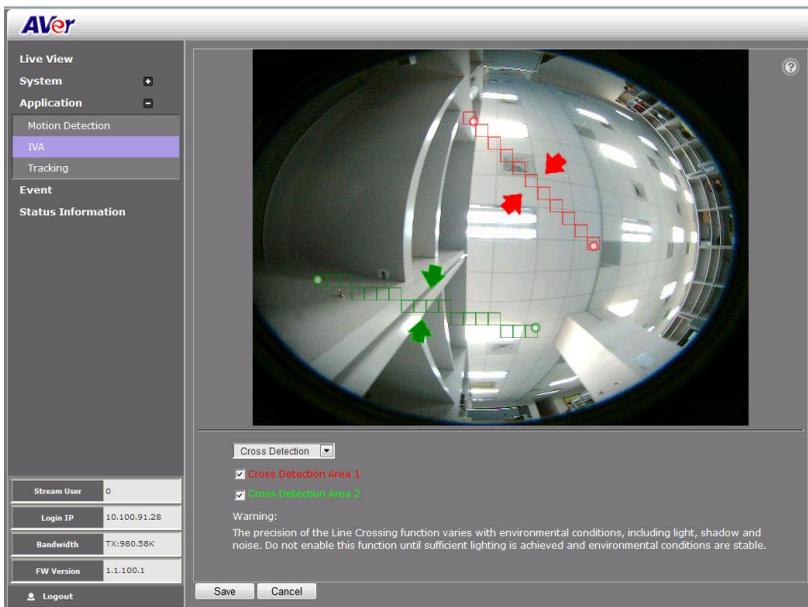
Application > IVA

If IVA function has been disabled, the all corresponded functions are disabled.

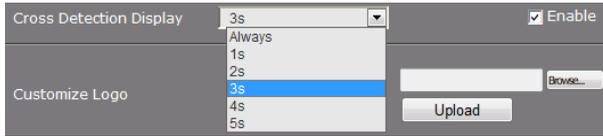
Application > IVA > Cross Detection

Cross detection function detects moving objects that cross the virtual lines that user has set up in IP camera application and to trigger the alarm.

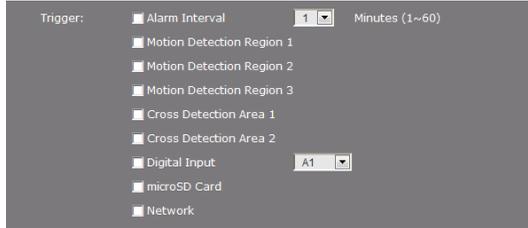
1. Click **Application > IVA**, select **Cross Detection** from the drop-down list.
2. Enable Cross Detection Area 1/2 check box
3. You will see the red/green line is shown on the video screen.
4. Drag the red line (area 1) or green line (area 2) to set the area for cross detection. You can set both lines for cross detection or one of the lines. There is no priority for the 2 lines; the color is just for you to differentiate when both lines are set.
5. After setting the cross detection area, click the arrow to set cross detect direction. The arrow point is the direction of cross way.
6. Click **Save** to save the setting.



7. Go to **System > Image > Cross Detection Display** to set the display lines of cross detection on live view screen when cross detection is triggered. If user wants to see the cross detection line(s) always display on the screen, select **always**. If user only wants to see the cross detection line(s) when the cross detection has triggered, select the time in second (1s, 2s, 3s, 4s, or 5s) to display the cross line(s) on the screen. The cross detection line(s) only can be viewed in Quad mode in stream 5.



8. To set the cross detection alarm, please go to the [Event Setting](#).

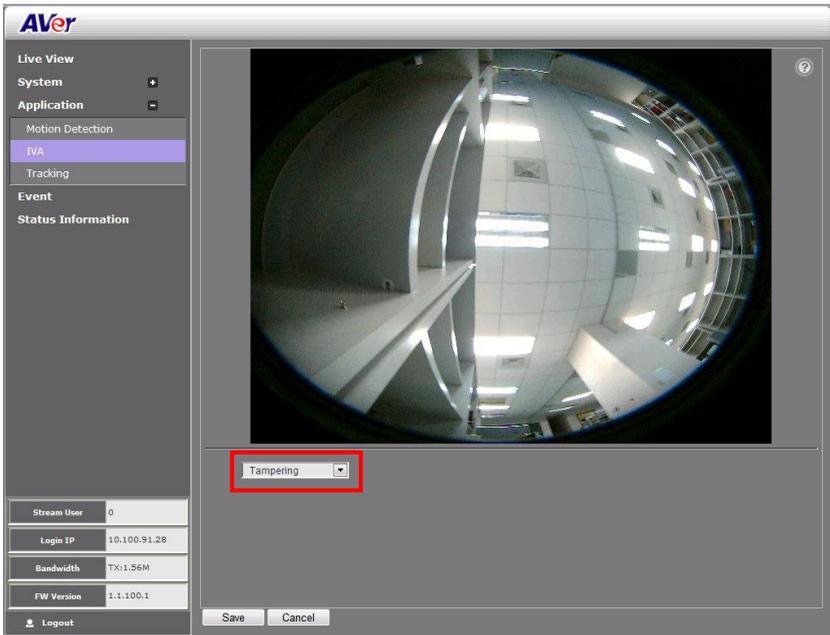


Application > IVA > Tampering

Alarm triggers when the following situation has occurred.

- **Spray-painting:** Alarm is triggered when the camera has detected the painting sprayed on the camera's view for over 2 seconds.
- **Intention Block /Cover:** Alarm is triggered when the camera has detected the camera's view being blocked intentionally over 2 seconds.
- **Accidental redirection:** Alarm is triggered when someone re-directs the position or direction of camera accidentally.
- **Defocusing:** Alarm is triggered when the camera has lost focus.

1. Click **Application > IVA**, select the **Tampering** from the drop-down list.
2. Click **Save** to enable the Tampering function.



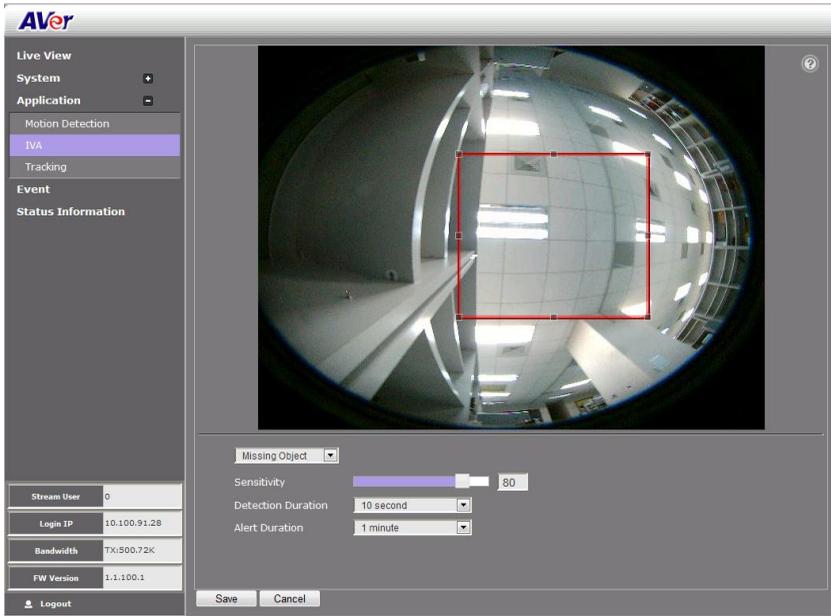
3. Go to **Event setting** and mark **Tampering** to enable tampering alarm.
4. When alarm has been triggered, there will be a red-frame flashing on the live video screen for 30 seconds.



Application > IVA > Missing Object

Select a certain object on the screen for the camera system to detect; System gives alarm when the object disappears.

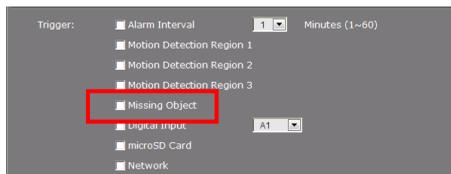
1. Click **Application > IVA**, select the **Missing Object** from the drop-down list.
2. A red frame will show up on the screen. Click and drag the red frame to the object position and click the frame to adjust the size of frame.
3. **Sensitivity**: Set the degree of response of detection.
4. **Detection Duration**: Set the lasting time for camera system to detect the object.
5. **Alert Duration**: Set the alarm lasting time after alarm has been triggered.



6. Click **Save** to save the settings.
7. Go to **System > Image > Missing Object Display** to set the display missing object frame on live view screen when the missing object is triggered.

Missing Object Display Enable

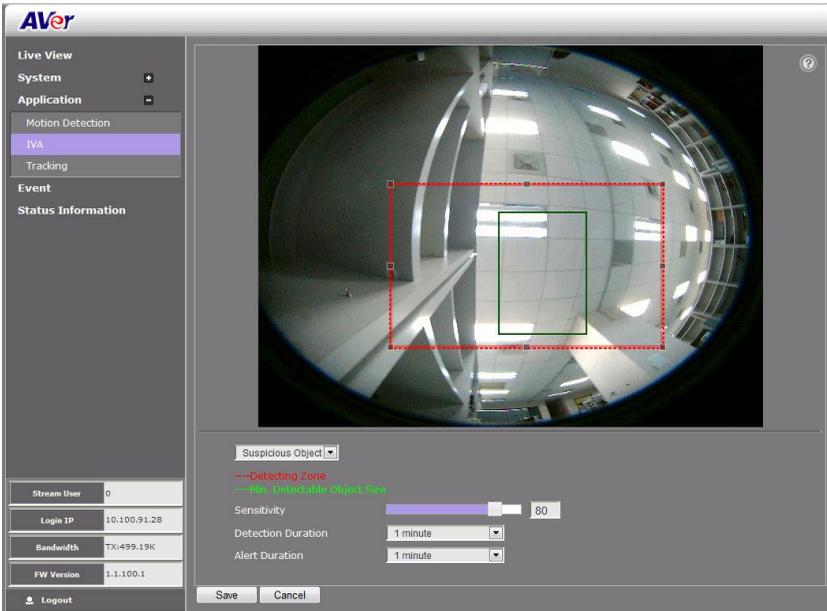
8. Go to **Event setting** and mark **Missing Object** to enable the alarm.



Application > IVA > Suspicious Object

Suspicious Object is an unusual object appears on the screen.

1. Click **Application > IVA**, select the **Suspicious Object** from the drop-down list.
2. A red frame and green frame will show up on the screen. The red frame is defined as detecting zone and green frame is defined as object size frame. Click and drag the red frame to the position and click the frame to adjust the size of frame. Next, click and drag the green frame the detecting zone and adjust the size of object for detection.
3. **Sensitivity**: Set the degree of response of detection.
4. **Detection Duration**: Set the lasting time for camera system to detect the object.
5. **Alert Duration**: Set the alarm lasting time after alarm has been triggered.

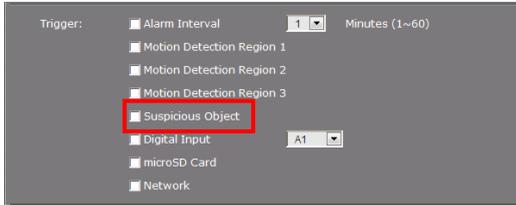


6. Click **Save** to save the settings.
7. Go to **System > Image > Suspicious Object Display**, mark **Enable** to display suspicious object frame on live view screen when suspicious object is triggered.

Suspicious Object Display

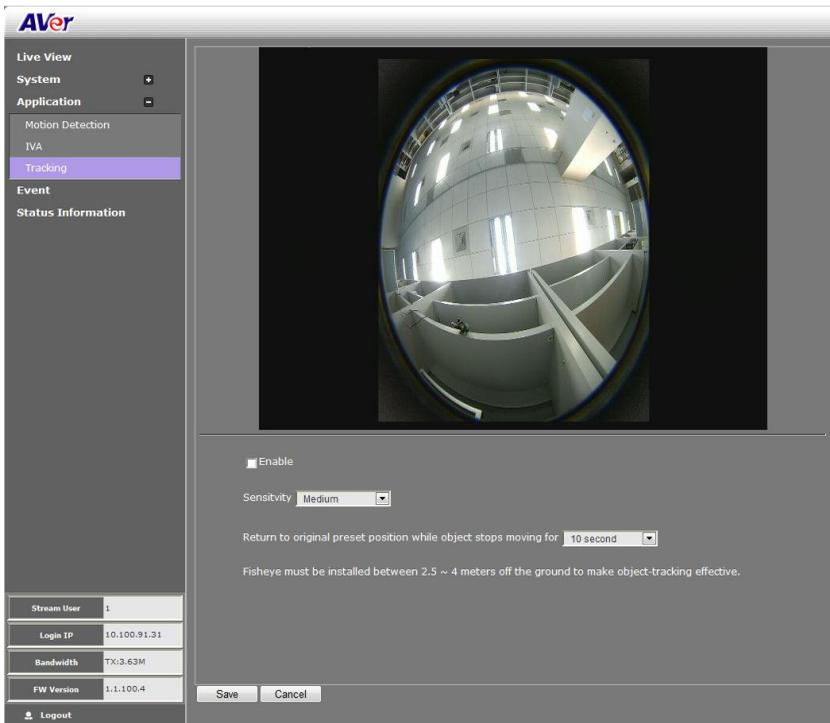
Enable

8. Go to **Event setting** and mark **Suspicious Object** to enable the alarm.



Application > Tracking

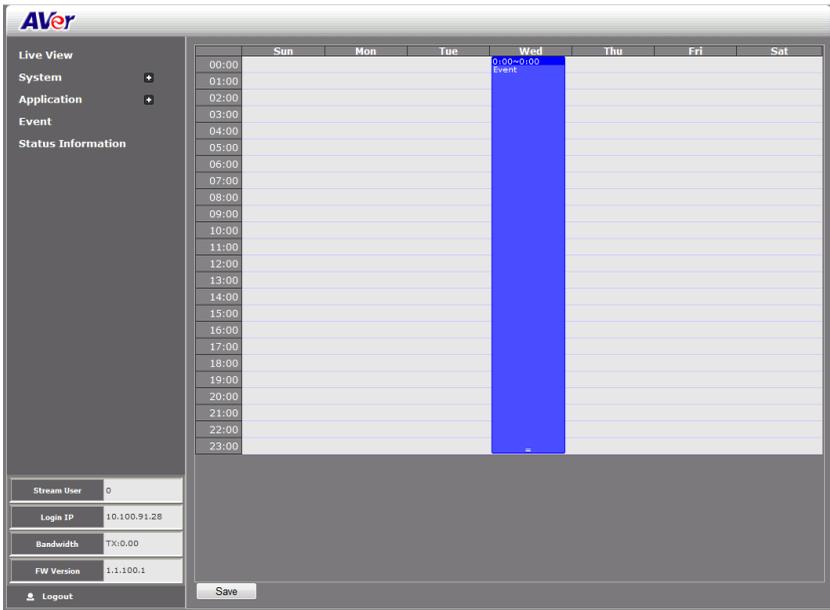
Enable to track the moving object. The camera lens will track the moving object and display on left-corner screen view.



- **Sensitivity:** Select the sensitivity level of tracking object – High, Medium, or Low.
- **Return to original position while object stops moving for:** Set the time for camera lens reset back to pre-position.

Event Setting

Both admin and operator levels can configure the Event setting. In this section, the IP camera can be configured to perform an action when an event is triggered at the specified time.



To Setup the Event

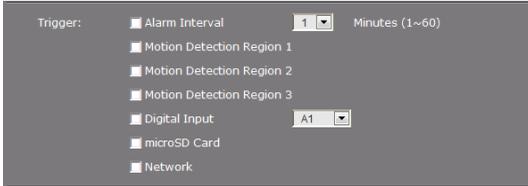
1. Click **Event**.
2. On the time table, click-drag to select the time period to specify the period of the event.
3. Type a name for the event. The naming rule is no space between each character and number and no special character. The length of name is 20 in both characters and numbers.
4. Select the color to represent the event

Event Name:	<input type="text" value="Event"/> (1~20 digital)
Event Color:	<input type="text" value="Blue"/> <input type="text" value="Blue"/> <input type="text" value="Red"/> <input type="text" value="Yellow"/> <input type="text" value="Green"/>
Schedule: Time:	<input type="text" value="0"/> to <input type="text" value="0"/>

5. Set the schedule. You can set the time period and choose another day(s) to apply the same event setting.

Schedule: Time:	<input type="radio"/> From <input type="text" value="0"/> to <input type="text" value="0"/>
Days:	<input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input checked="" type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat

6. Enable the type of event for the IP camera to trigger.



- **Alarm Interval**

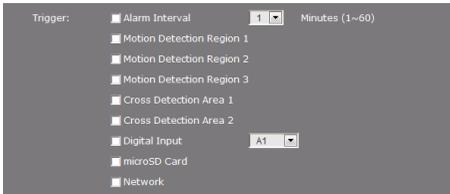
This triggers the IP camera based on the time that use has set in **Minutes** column. The interval time rage is 1~60 minutes.

- **Motion Detection Region 1/2/3**

This triggers the IP camera when a motion is detected on the motion detection region.

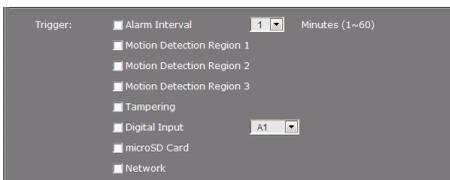
- **Alarm Cross Detection Area 1/2**

This triggers the IP camera when a cross detection is detected on the cross detection area.



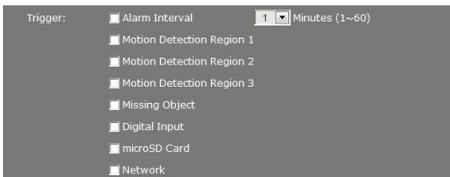
- **Tampering**

This triggers the IP camera when tampering situation has met (Spray-painting, Intention Block /Cover, Accidental redirection, or Defocusing). The tampering alarm selection will display only when tampering function has enabled.



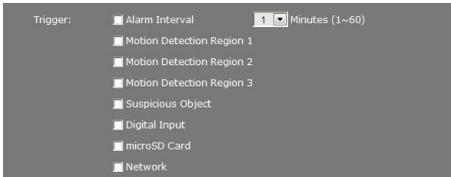
- **Missing Object**

This triggers the IP camera when a missing object is occurred. The missing object alarm selection will display only when missing object function has enabled.



- **Suspicious Object**

This triggers the IP camera when a suspicious object is occurred. The suspicious object alarm selection will display only when suspicious object function has enabled.



- **Digital Input**

This triggers the IP camera when the external digital input device or sensor is activated.

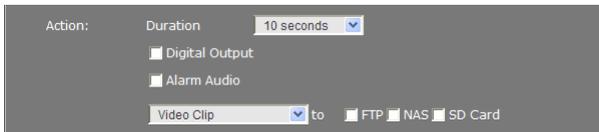
- **SD Card / microSD Card**

This triggers the IP camera when the SD/microSD card is removed.

- **Network**

This triggers the IP camera when the Internet connection is disconnected.

7. Select the type of action for the IP camera to perform when a trigger is activated. Set the duration. Choose digital output to send recorded video or still image, or Alarm Audio to sound the alarm. Then select the type of server/media to where to send the file. To configure the FTP and NAS setting, go to **System > Network > Server** tab.



[Note]

- a. **Snapshot** and **System log** support sending the file thru Mail, and storing in FTP, NAS or SD/microSD card. You can enable multiple options to send and save the captured image.
 - b. **Video Clip** supports storing in FTP, NAS or SD/microSD card. You can only select one storage option to save the video file. For better performance, we recommend to set the video stream is default value.
8. Click **OK** to add the event setting, **Delete** to remove, and **Cancel** to without save and close the event setting.

Status Information

Show the information about the device and network setting.

The screenshot displays the AVer web interface for status information. On the left is a navigation sidebar with the AVer logo at the top. Below the logo are menu items: 'Live View', 'System' (with a plus icon), 'Application' (with a plus icon), 'Event', and 'Status Information' (highlighted). At the bottom of the sidebar is a table with system statistics and a 'Logout' button.

The main content area is divided into two sections: 'Device' and 'Network'. The 'Device' section lists hardware details, and the 'Network' section is further divided into 'IPv4 Information' and 'General'.

Stream User	0
Login IP	10.100.91.34
Bandwidth	Tx:0.00
FW Version	1.1.100.2

Device	
Model Name	ED5000
System up Time	0 Days, 0:39:57
Hardware	1.0.0.0
Firmware	1.1.100.2 / 080CN07F-DSX
microSD Card	

Network	
IPv4 Information	
IP Address	10.100.91.57
Mask	255.255.255.0
Gateway	10.100.91.254
Primary DNS	10.100.1.5
Second DNS	10.100.1.6
General	
MAC Address	80:18:1a:00:05:e8
DDNS Status	DDNS does not launch!