www.aver.com

AVer IP Camera

User Manual

Table of Contents

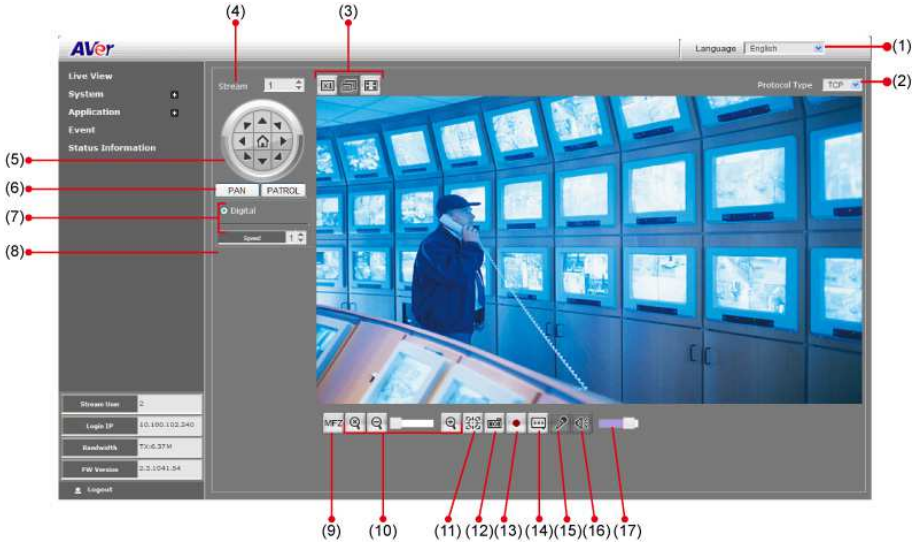
Using the IP Camera Browser Interface

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, use the digital or RS-485 Pan and Patrol control, capture screen shot, record video, turn on/off 2-way talk, mic and volume, and adjust the zoom and volume level.



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

Name	Function
(3) 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.
(4) Stream	Switch to view the video stream type. The IP camera can send multiple video streams of up to 3 types. To change the video stream setting, go to System > Video Stream.
(5) Direction buttons	- Use to move the position of the view point while in zoom mode. - Use to control the position of the RS-485 pan tilt device
(6) Pan & Patrol button	**Pan:** automatically move the view point from left to right when in zoom in mode. **Patrol:** automatically move the view point around the preset locations in Application > Patrol.
(7) Digital /RS-485	- Select Digital to control the IP camera ePTZ operation. This allows you to closely view the target area without having to physically move the IP camera. The image will be zoomed in and you can use the direction control to pan the zoomed image. - Select RS-485 to control the PTZ driver or scanner via RS-485 connection to I/O terminal block. The IP camera is mounted on an RS-485 pan tilt device.
(8) Speed control	Set the speed when panning, tilting, or zooming.
(9) MFZ function	Motorized focus and zoom the IP camera(see aslo Using MFZ Function)
(10) Zoom control	 Reset zoom level.  Increase zoom level.  Decrease zoom level.
(11) Quick Focus	It help user to adujst foucs of IP camera more easily(see aslo Using Quick Focus).
(12) Capture	 Capture and save the image on the screen in *.bmp format.

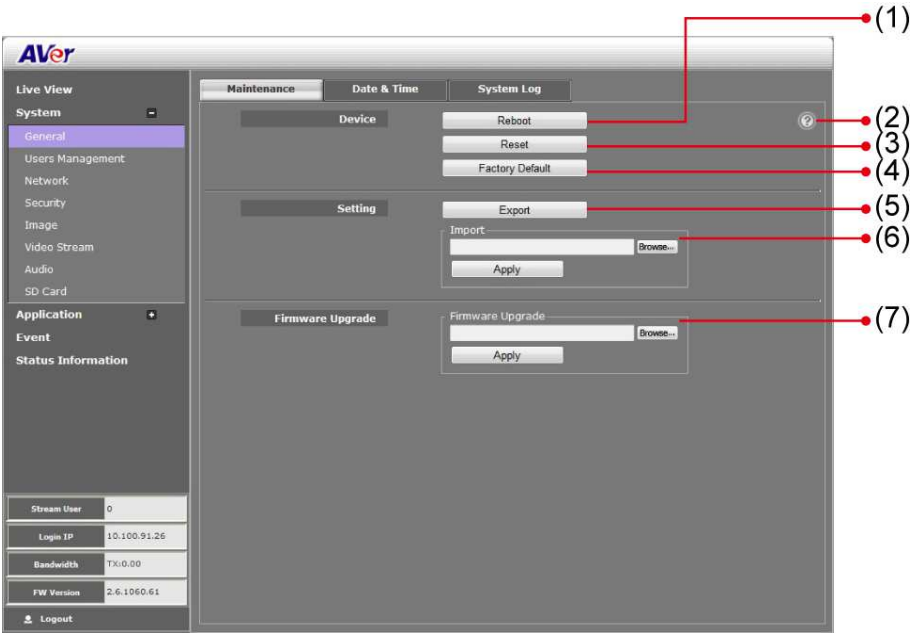
Name	Function
(13) Record	 Start/stop audio and video recording. The recorded video will be saved in *.mp4 format.
(14) 2-way talk	 Enable/disable mic from IP camera browser side.
(15) Mic	 Enable/disable mic from the IP camera side.
(16) Sound	 Enable/disable audio from the IP camera side.
(17) Volume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

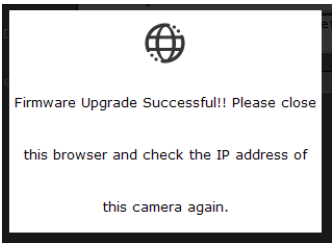


Name	Function
(1) Reboot	Restart the IP camera.
(2) Information	Displays the explanation of Reboot, Reset, and Factory default.
(3) Reset	Set all the configuration settings back to default except the user management and network settings.
(4) Factory Default	Set all the configuration settings back to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

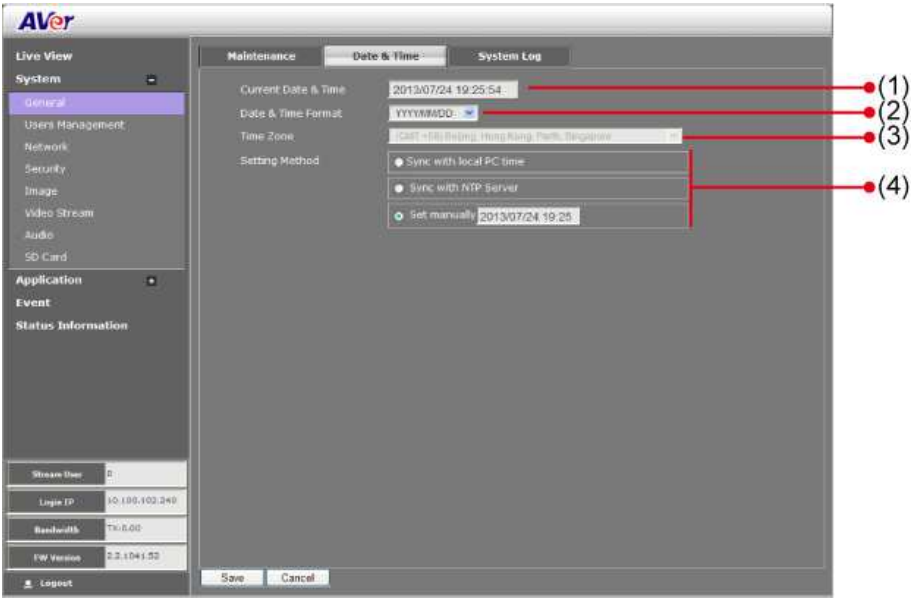
To Upgrade the IP Camera Firmware

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 massage “Firmware Upgrade OK!!”. You may now click the IE browser refresh button or press F5. The login page will appear.

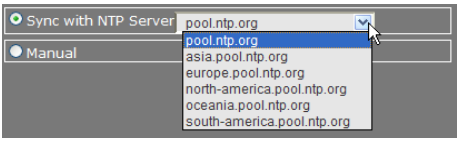


System > General > Date & Time

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.

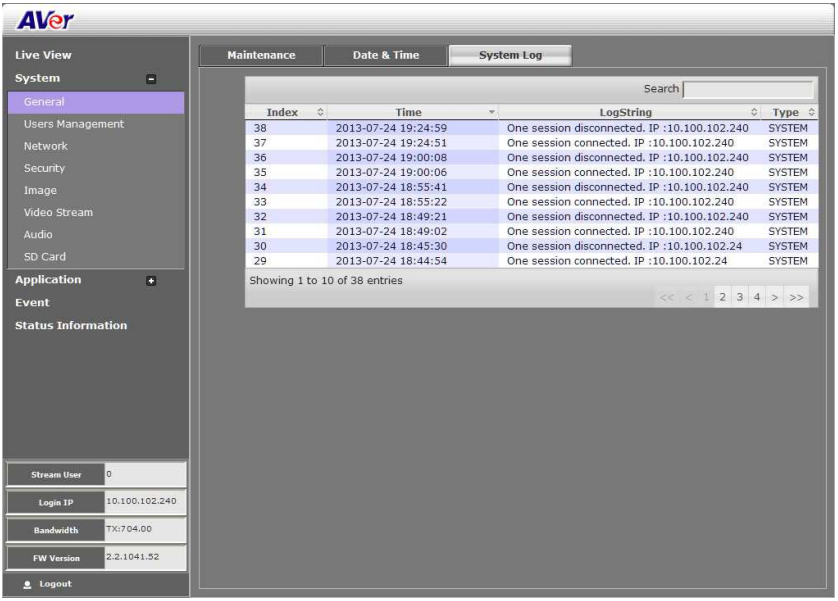


Name	Function
(1) Current Date & Time	Display the current date and time setting.
(2) Date Format	Select the date display format.
(3) Time Zone	Set the local time zone.

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.



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

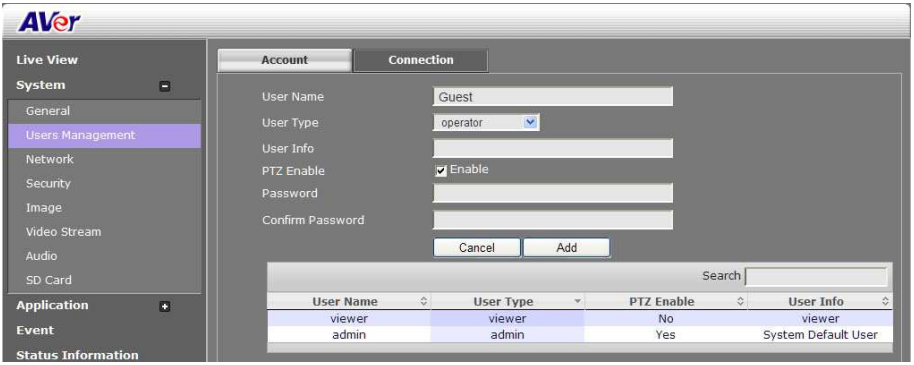
In Account page, admin can create, delete and set the access level of the user account.

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 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.

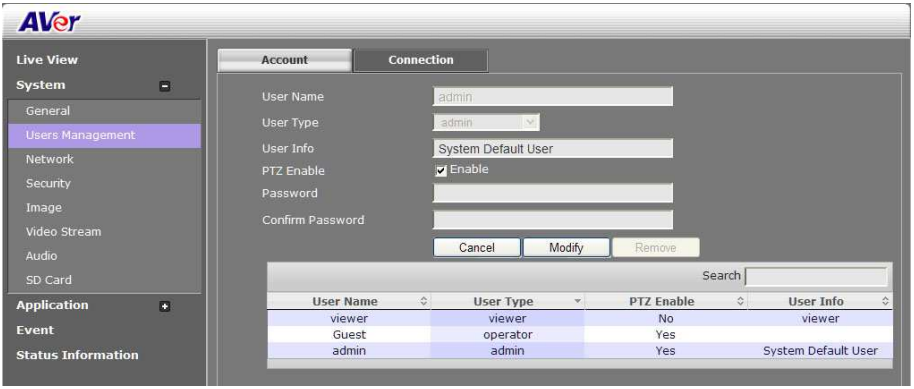
3. Enter the same password in **Password** and **Confirm Password** column. Then click **Add**.



To Delete or Edit a User Account

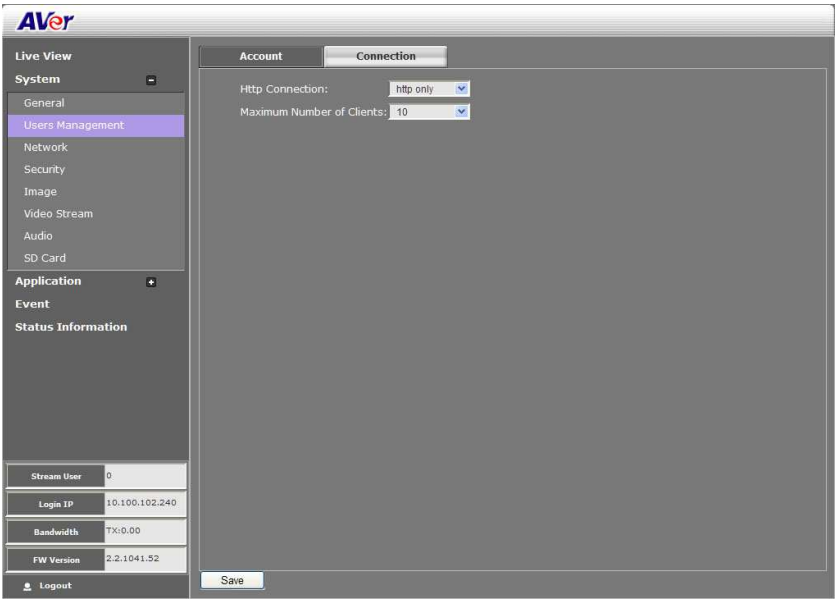
Select the user account that you want to delete or edit.

- 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.



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.



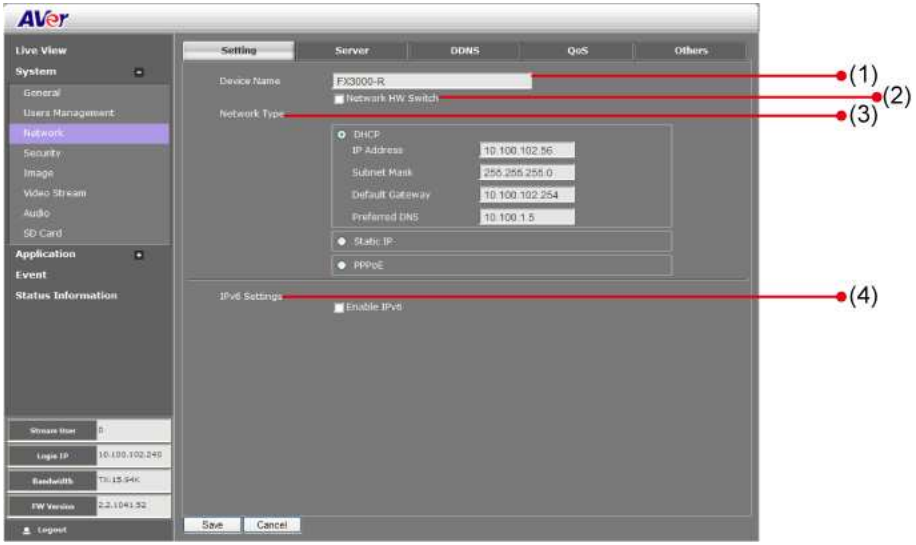
- **Http Connection:** Select the connection type. For higher security data transmission level, select http & https or http only. The authenticated and encrypted the data is over the SSL (Secure Socket Layer).
- **Maximum Number of Clients:** Select the max number of users to simultaneously access the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

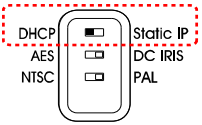
System > Network

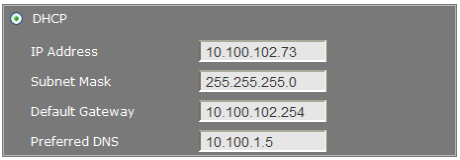
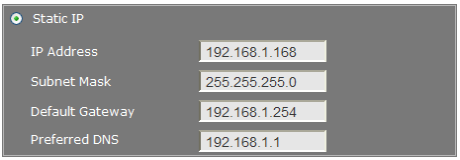
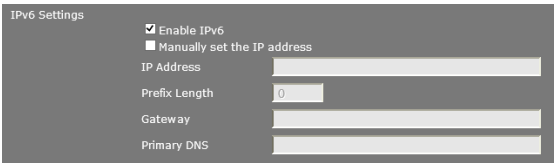
In this section, only admin level is authorized to configure the Network settings.

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.

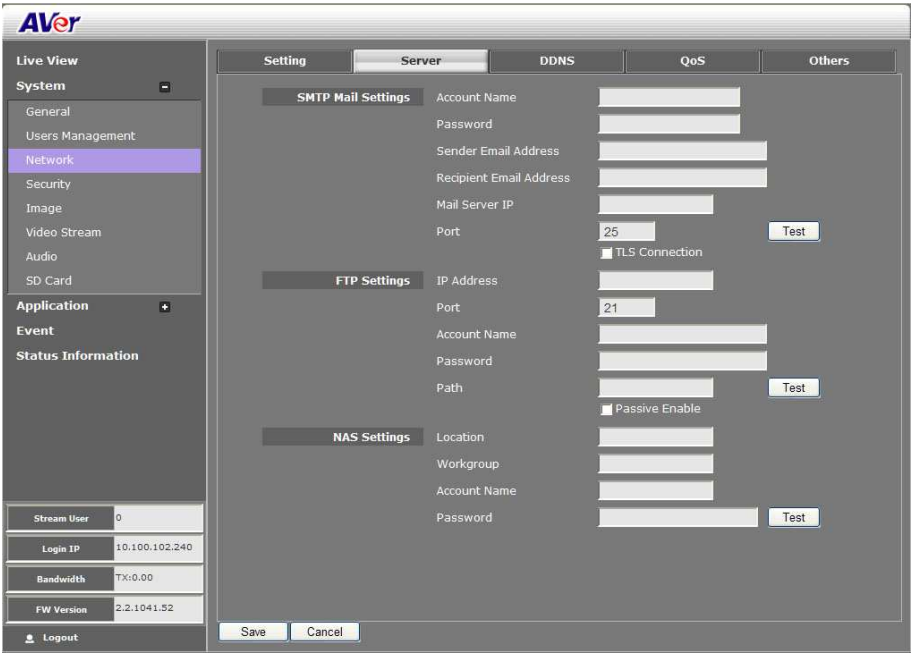


Name	Function
(1) Device Name	Assign name for the IP camera.
(2) Network HW Switch 	Enable/disable to use the IP camera DIP switch network setting. If this is enabled, make sure the DIP switch behind the IP camera is set properly. * (Available for FX series and SF2121H-R Box type only)

Name	Function
(3) 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. 
(4) IPv6 Settings	Enable IPv6 support  Select “Manually set the IP address” to specify IP address manually.

System > Network > Server

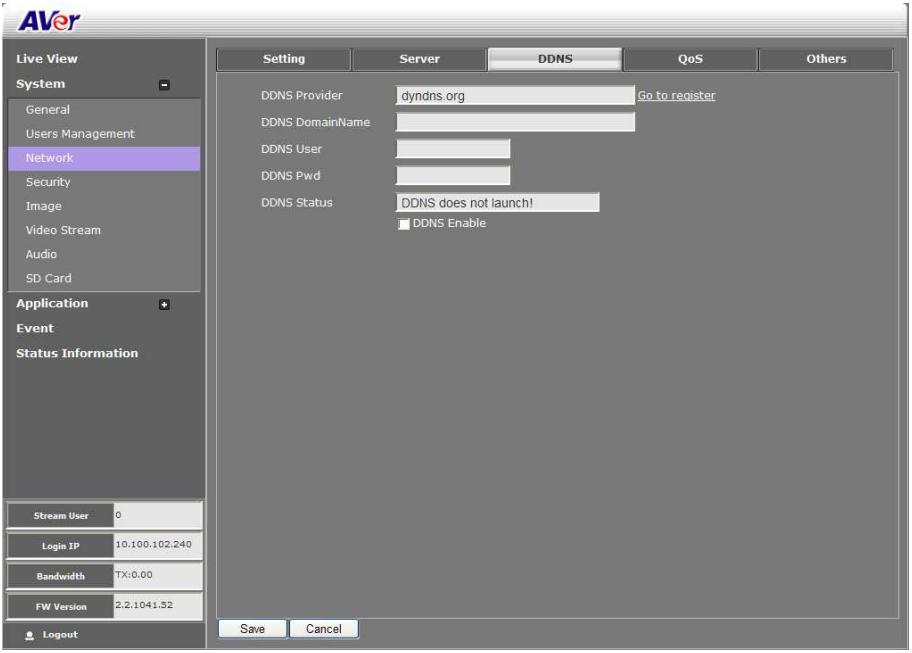
In Server page, you can configure the Email, FTP, and NAS setting. It is necessary to configure the server settings so that IP camera can perform the task in the Event setting when a trigger is activated. You can configure either one or all of it. After completing the setting, click **Save** to apply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



System > Network > DDNS

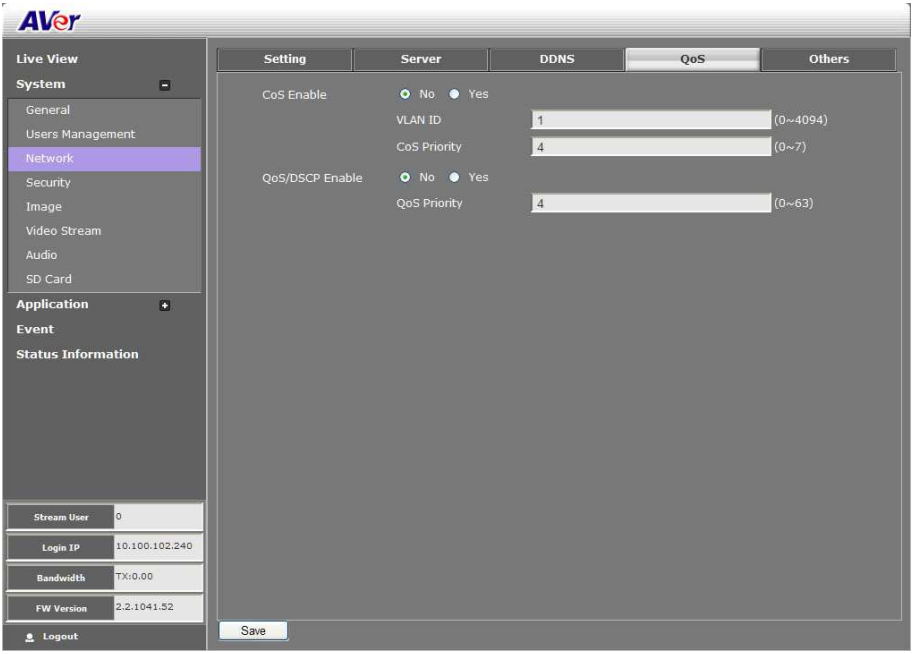
In DDNS page, you can configure the dynamic domain name service setting. DDNS is a service that provides fixed host and domain name for the IP camera with dynamic IP address. It automatically updates the new IP address to the dynamic server of the domain name.

To use this feature, you need to register a domain name at http://dyn.com/dns/ . Enter the **DDNS domain name**, **user**, **password** and enable **DDNS Enable** check box. After completing the setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.



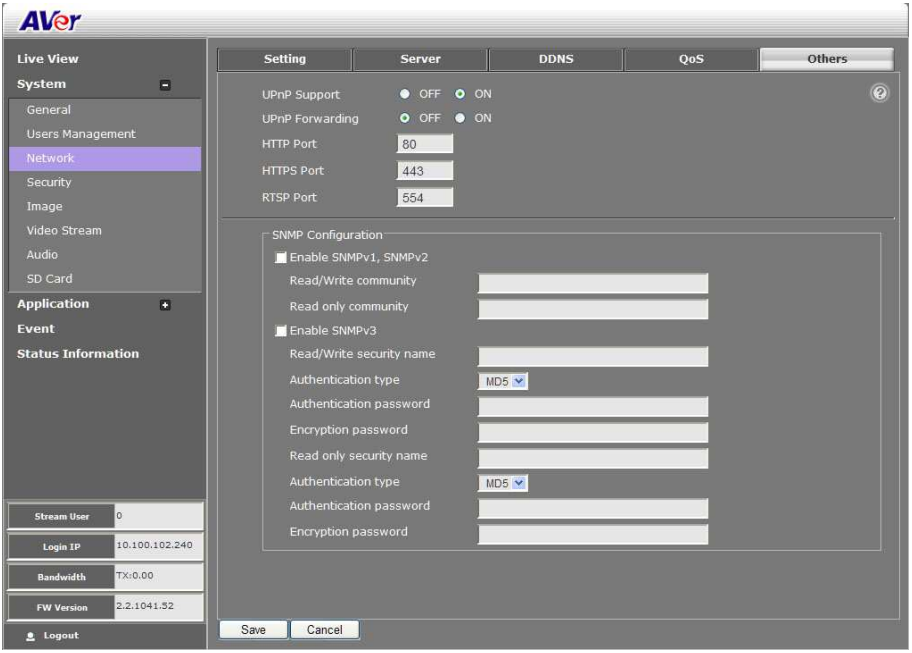
System > Network > QoS

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.



System > Network > Others

In Others page, you can enable/disable the UPnP setting. If your router does not support UPnP function, you can enable the UPnP forwarding and set the port mapping.



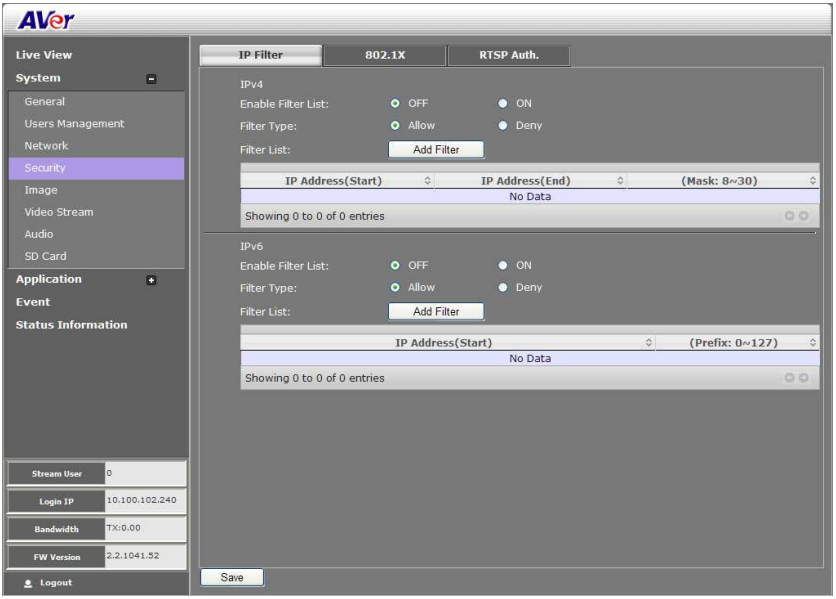
- **UPnP Support:** The IP camera supports UPnP, if this service is enabled on your computer. **[Note]** UPnP must be enabled on your PC.
- **UPnP Port Forwarding:** If the IP camera is installed behind the firewall, please select **ON** to enable it.
- **HTTP Port:** Setup web page connecting port and 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).
- **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.**.

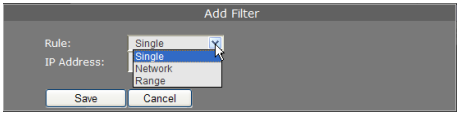
System > Security > IP Filter



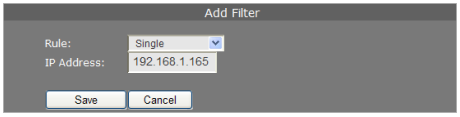
- **Enable Filter List:** Select to turn the IP address filtering on or off.
- **Filter Type:** Select to allow or deny the IP address in the filter list to access the IP camera.
- **Filter List:** Create and display the filtered IP address.

To Add Filter

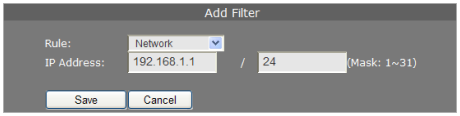
1. Click **System** > **Security > IP Filter** tab, then, click **Add Filter**.
2. In Rule drop down list, select from the 3 types of rules: Single, Network and Range.



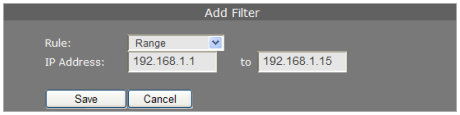
Single – add an IP address



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



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



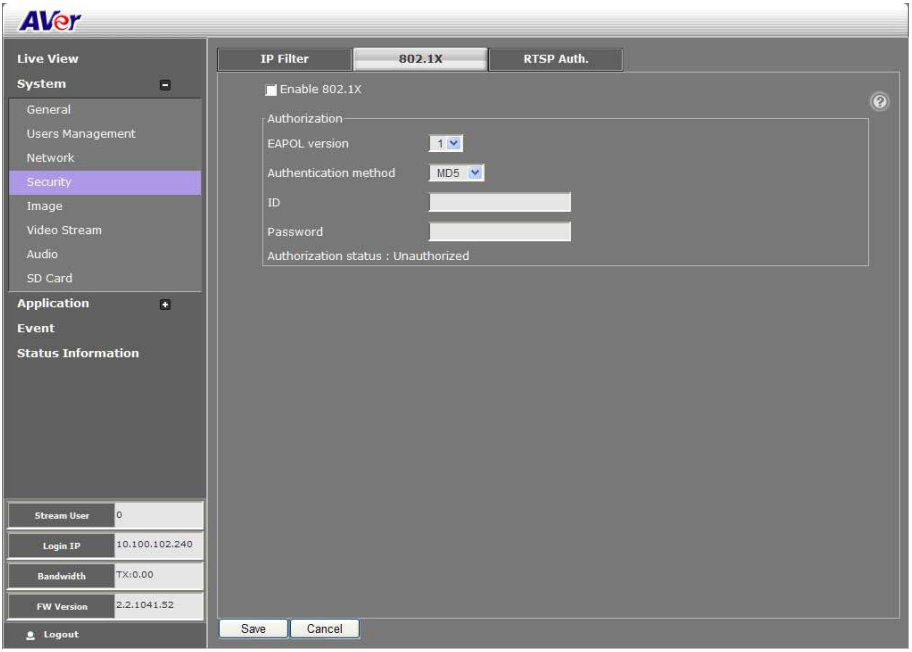
3. Click **Save** to add the created data in the filter list or click **Cancel** to exit and without saving data.

- **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

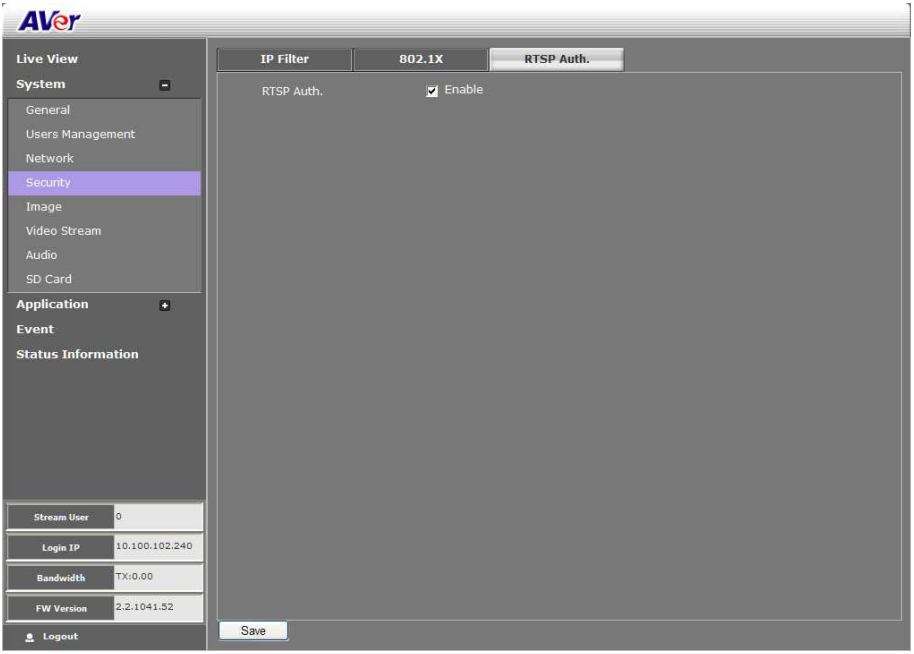
IEEE 802.1X is an IEEE Standard for port-based Network Access Control. It provides an authentication mechanism to devices wishing to attach to a LAN or WLAN.

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



System > Security > RTSP Auth.

Enable/disable RTST authentication.

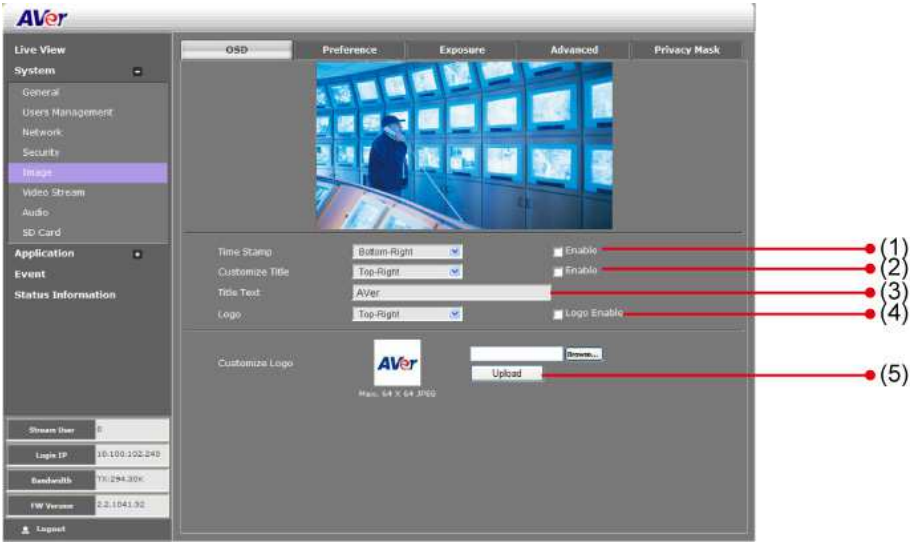


System > Image

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

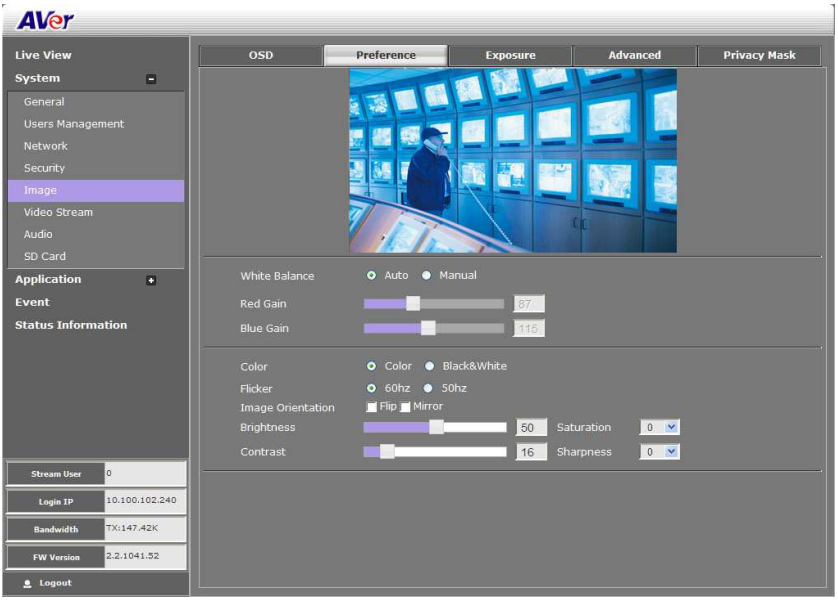
In OSD page, you can enable/disable overlaying time stamp, text title and add logo. After completing the setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.



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.

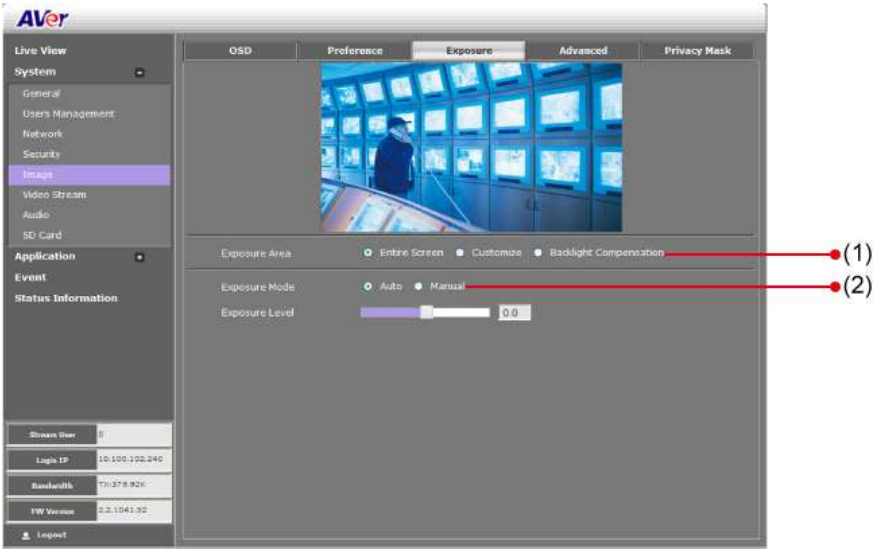
System > Image > Preference

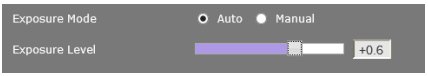
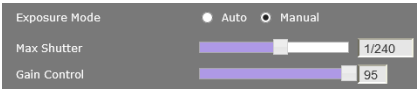
In Preference page, you can tune the IP camera white balance, select display color or black & white, set the flicker frequency, change the video orientation, and adjust the brightness and contrast. After completing the setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.



System > Image > Exposure

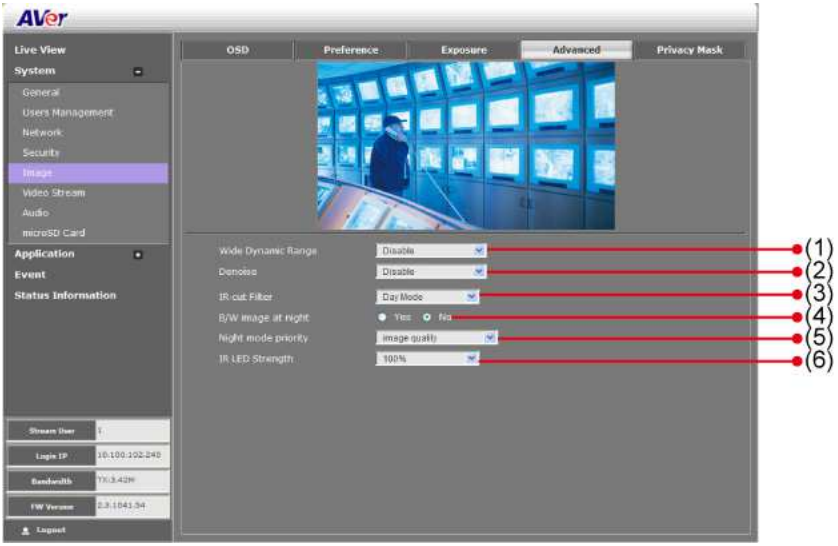
In Exposure page, you can set the exposure zone, exposure mode, and calibrate the DC Iris. After completing the setting, click Save to apply the new setting and Cancel to keep the old setting.



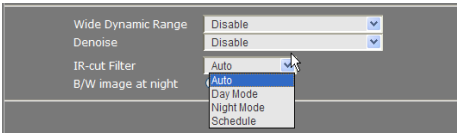
Name	Function
(1) Exposure Area	Select the exposure area to define the light distribution and bring out more details. **Entire screen:** measure the entire screen to adjust the exposure. **Customize:** measure the exposure to where the adjustable and movable frame on the screen is located. Move the spot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

System > Image > Advanced

In Advanced page, you can configure the Wide Dynamic Range, Denoise, IR-Cut Filter, B/W image at night and IR LED Strength. After completing the setting, click **Save** to apply the new setting and **Cancel** to keep the old setting.

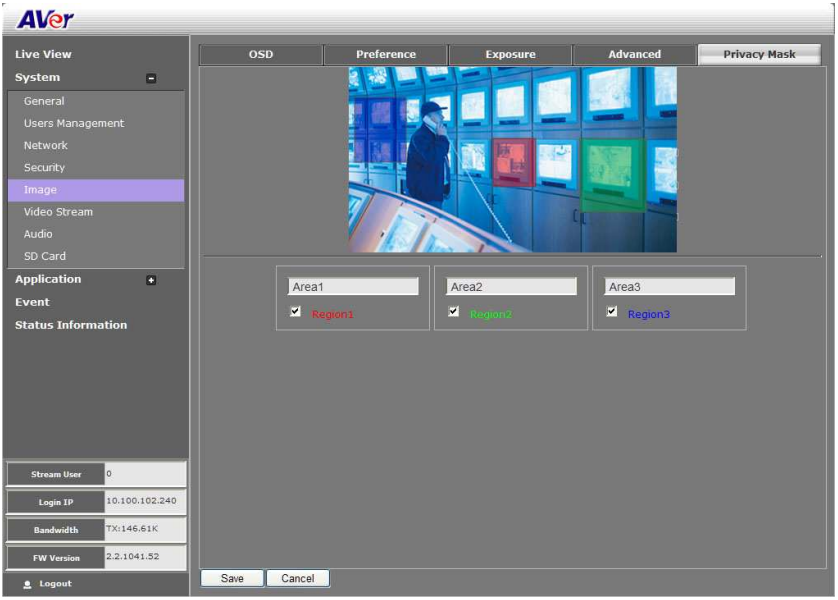


Name	Function
(1) Wide Dynamic Range	WDR effectively balances the video image on the screen in both bright and dark areas making it possible to see clear details. There are 3 levels for your choice or disable WDR.
(2) Denoise	Select Disable/2D/3D/Auto to reduce the excessive noise on the video image. **[Note]** The 3D de-noises works under resolution 2M.  **Auto:** automatically switch between 2D and Disable. Use Sensitivity option to adjust sensitive level. The higher level means the higher sensitivity. 

Name	Function
(3) IR-cut Filter	The IR cut filter is a mechanism that prevents the infrared light from hitting the sensor. During day time the IR light has an interfering effect on the image quality of the camera, which leads to corruption of color and contrast as well as blurring. At night time, the infrared light is used to achieve more detailed images in the dark or with low ambient light.  **Auto:** automatically switch on/off the IR cut filter. It uses the light sensor in front of the camera to determine the level of ambient light. **Day Mode:** switch on the IR cut filter at all time to prevent the IR light from hitting the sensor so that the color will not be corrupted. **Night Mode:** switch off the IR cut filter at all time to let the sensor receives the IR light which could help improve low light sensitivity. **Schedule:** specify the time on when to switch off the IR cut filter to night mode. The time format is hh:mm and in 24-hour clock time.
(4) B/W image at night	Select to enable/disable switching to B/W during night mode.
(5) Night mode priority	Select the one you want to prioritize during night mode image quality or frame rate.
(6) IR LED Strength	Select the intensity of IR LED  **[Note]** The IR LED Strength doesn't support for SF2121H Series, FX2000, and FX3000-R.

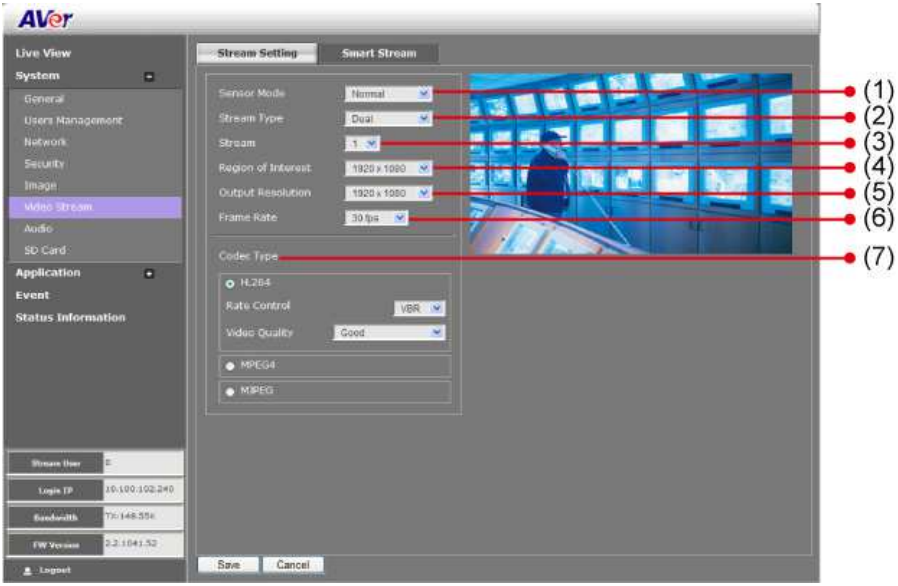
System > Image > Privacy Mask

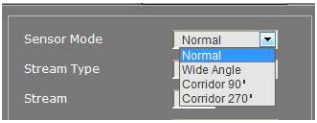
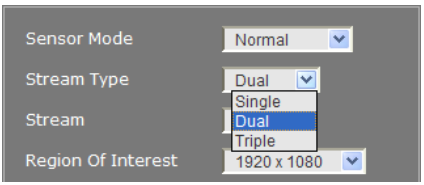
In Privacy Mask page, you can enable 3 privacy masks. Simply adjust the size and position the mask on the area you want to conceal. The viewer will not be able to see the masked area. It will cover the video screen with black frame.

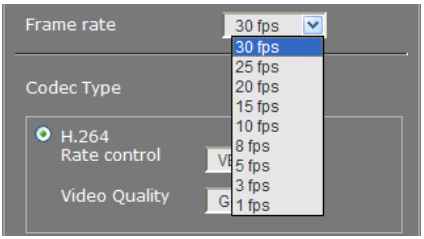


System > Video Stream

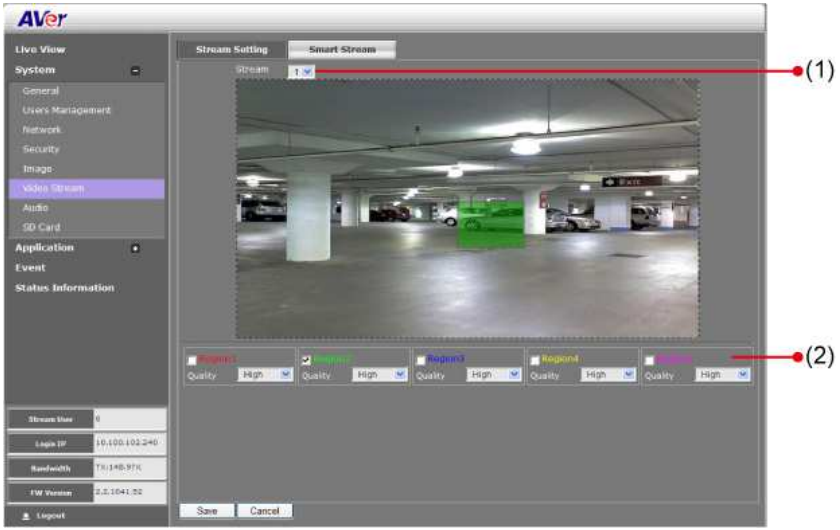
Both admin and operator levels can configure the Video Stream. After configuring the video stream setting, click Save to apply the new setting and Cancel to keep the old setting.



Name	Function
(1) Sensor Mode	Select sensor input resolution from either Norma, Wide Angle, Corridor 90˚, or Corridor 270˚. In corridor mode, the screen will flip to allow more deep view.  * (Available for 3M pixel or above model)
(2) Stream Type	Select to transmit single or simultaneous multiple streams of 2 or 3 videos. 

Name	Function
(3) Stream	Select the streaming source.
(4) Region of Interest	Select the cropping size of video.
(5) Output Resolution	Select the video size.
(6) Frame Rate	Select frame rate per second of video
(7) 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.

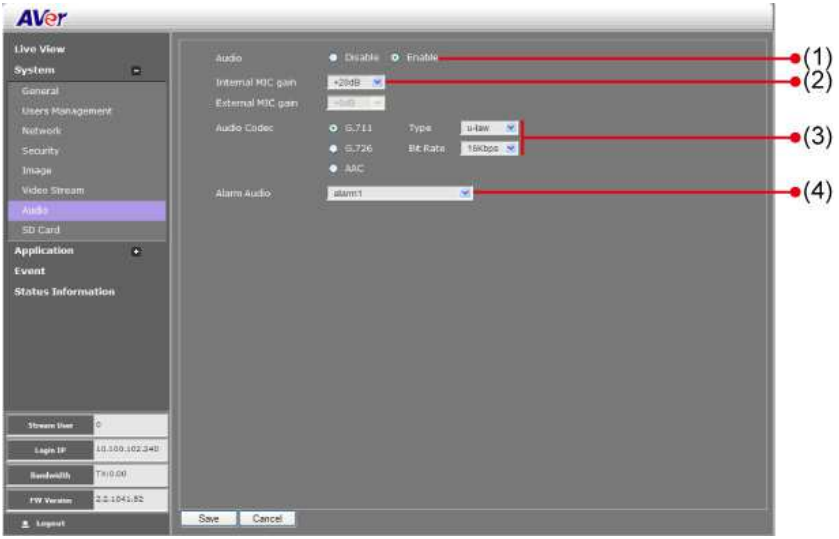
Smart Stream



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

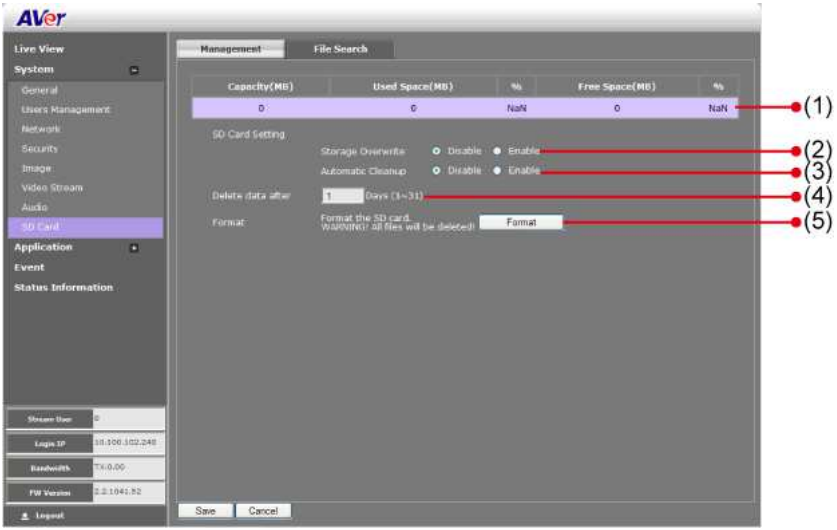
Both admin and operator levels can configure the IP camera audio setting. After configuring the Audio setting, click Save to apply the new setting and Cancel to keep the old setting.



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

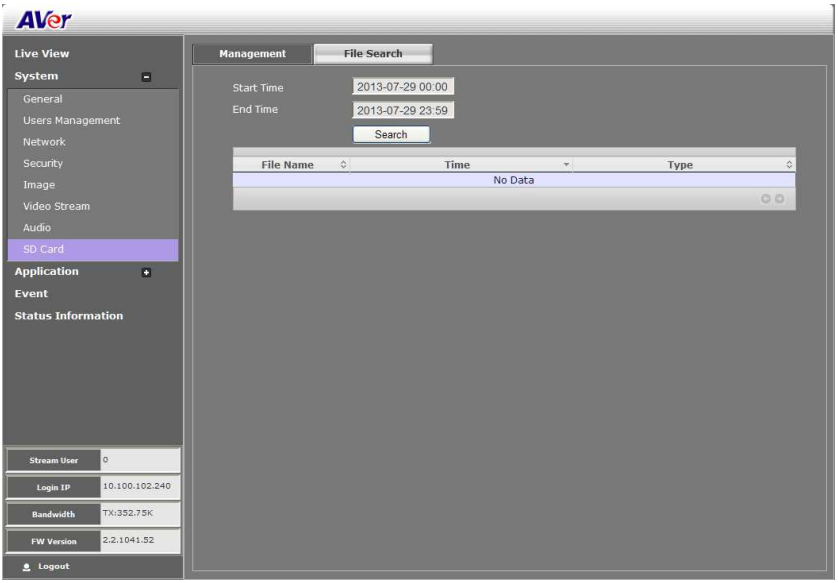
Both admin and operator levels can manage the SD/microSD Card local storage. After managing the SD/microSD Card setting, click Save to apply the new setting and Cancel to keep the old setting. We recommend formatting the SD/microSD card when using it for the first time.



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) Cycle Storage	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.

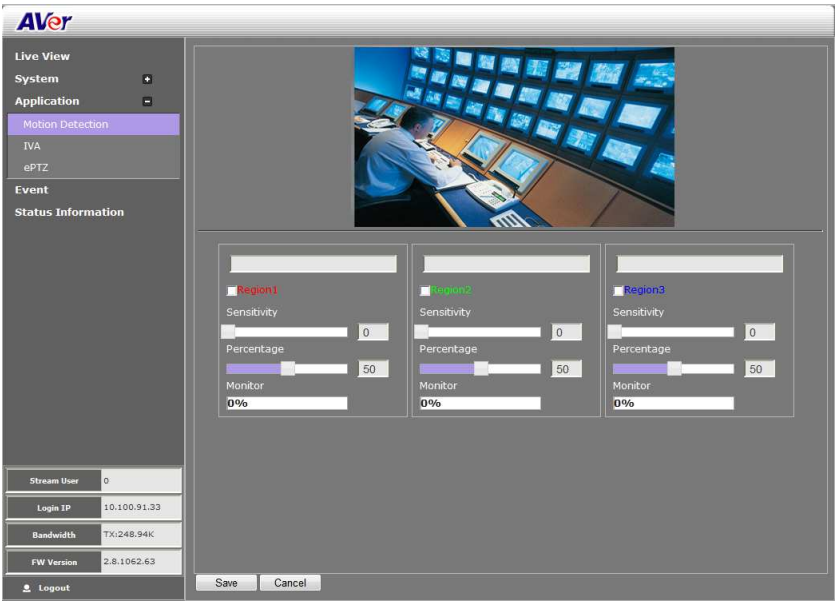
System > SD/microSD Card > File Search

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



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

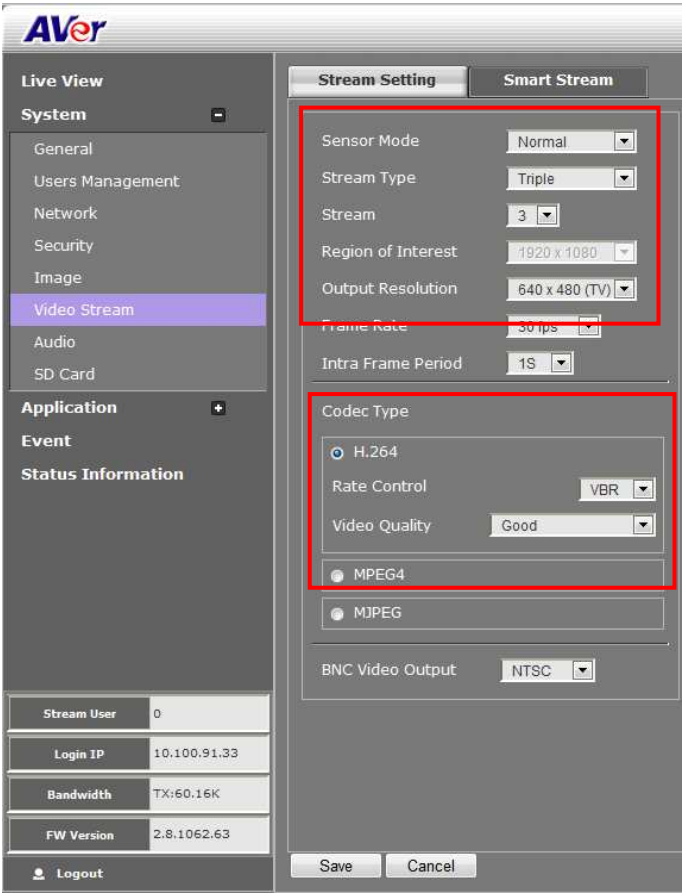
1. Click **Application** > **Motion Detection**.
2. Enable the region check box (Region 1, Region 2, Region 3) to create a motion detection frame.
3. Move and adjust the frame to the area you want to detect the motion.
4. Adjust the sensitivity and percentage. Sensitivity detects the motion on the screen 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.

To enable IVA function, must meet the following conditions:

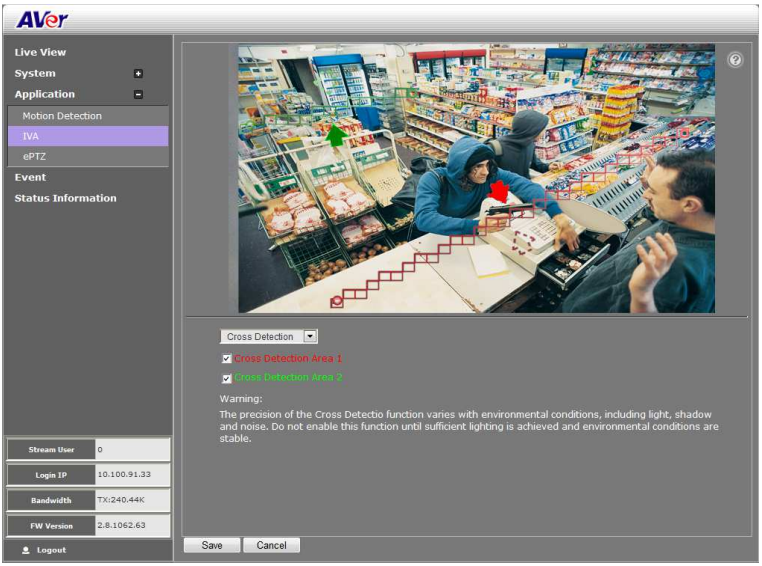
1. CODEC type is set to H264 or MPEG4.
2. Stream type is set to “triple” and Stream 3 resolution set to 640x480.
3. Sensor mode should be set to Normal/Wide Angel mode.



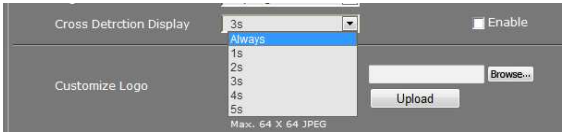
Application > IVA > Cross Detection

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 status of cross detection line(s). 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.



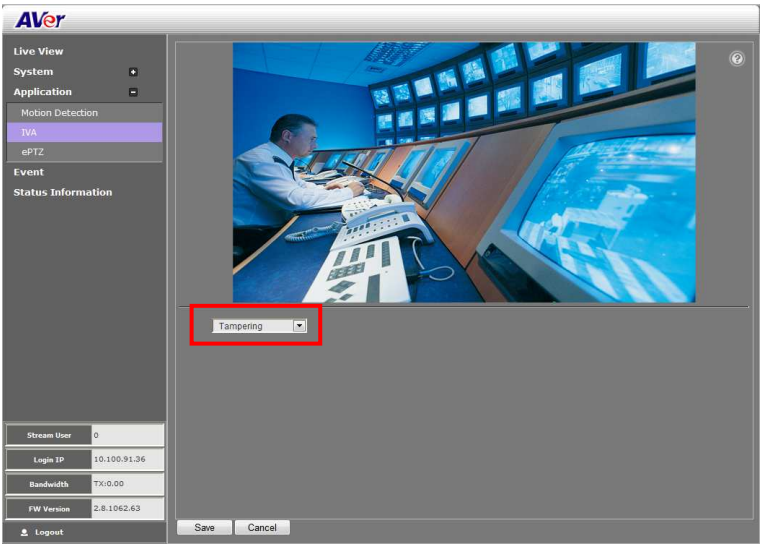
8. To set the cross detection alarm, please go to the Event Setting.

Application > IVA > Tampering

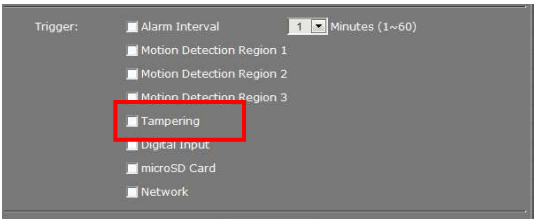
Alarm triggers when the following situation has occurred.

- **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.



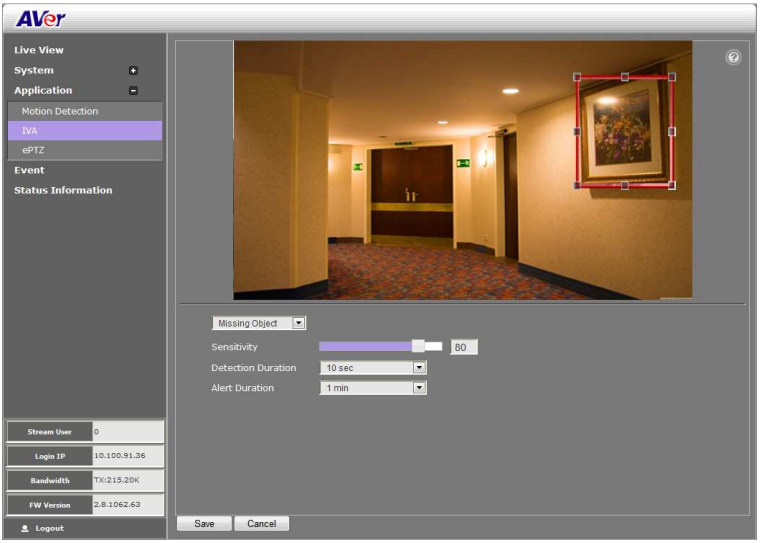
3. Go to **Event setting** and mark **Tampering** to enable tampering alarm.
4. When alarm has been triggered, there will be a red-frame flashing on the live video screen for 30 seconds.



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.

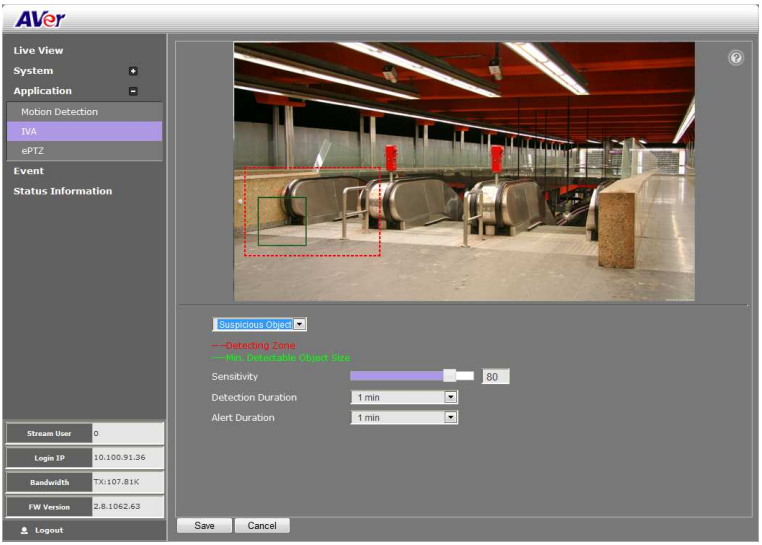


6. Click **Save** to save the settings.
7. Go to **Event setting** and mark **Missing Object** to enable the alarm.

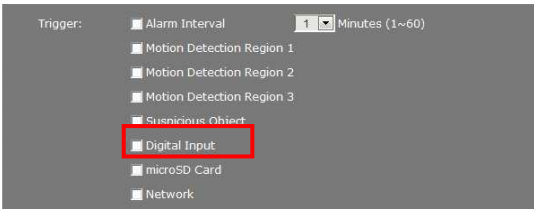
Application > IVA > Suspicious Object

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.

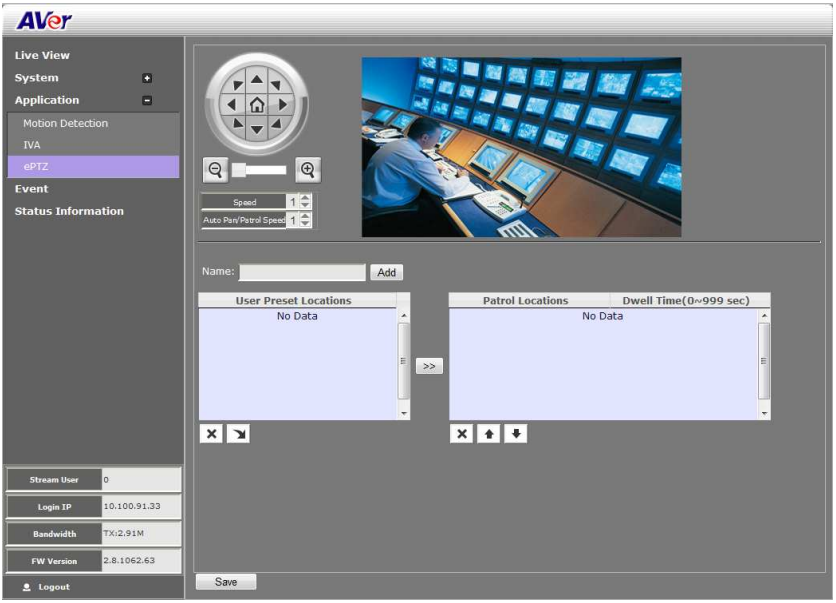


6. Click **Save** to save the settings.
7. Go to **Event setting** and mark **Suspicious Object** to enable the alarm.



Application > ePTZ

Both admin and operator levels can customize the ePTZ setting. In this section, you can set the patrol target area, patrol sequence and dwelling time.

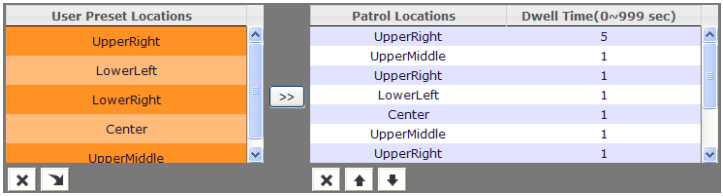


To Setup the ePTZ

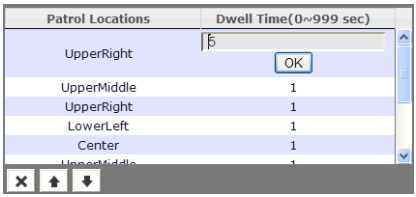
1. Click **Application** > **ePTZ**.
2. Use the direction buttons and zoom button to locate the patrol target area. Press  to view the full image and reset the zoom level.

3. Type a name for the patrol shooting area e.g. type “UpperLeft” in the Name text box and press **Add** button. The preset target area will be listed in the User Preset Locations. Click  to delete the preset target area and to show the preset target area. Repeat step 2 and 3 to add more preset locations.

4. Select the preset target area in the list and press [>>] to create the patrol sequence. The selected present target area will be listed in the Patrol Locations.



5. Set the dwelling time for how long you want to stay in the preset target area. Double-click and enter the time. Then click **OK** or press enter to apply the changes.

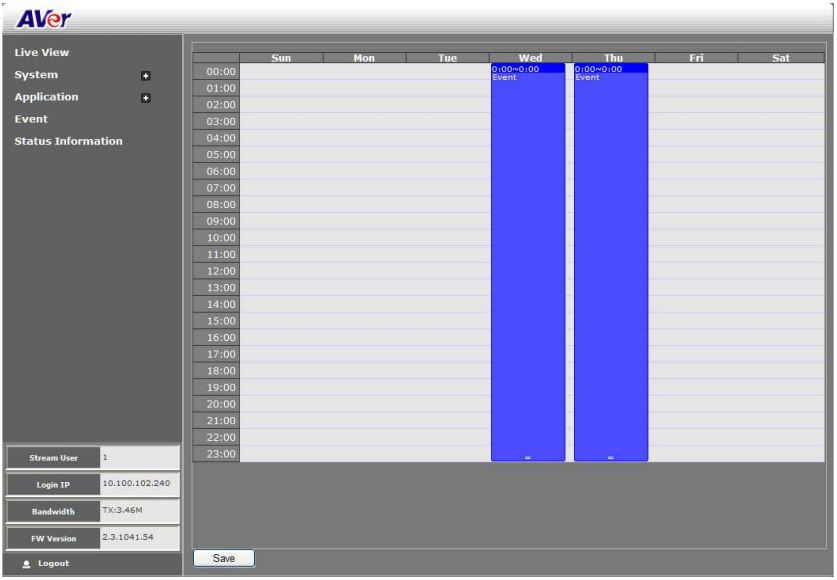


6. Click [×] to delete the selected preset location in the Portal Locations list and [↑][↓] to arrange the patrol order.

7. Click **Save** to implement the preset patrol setting.

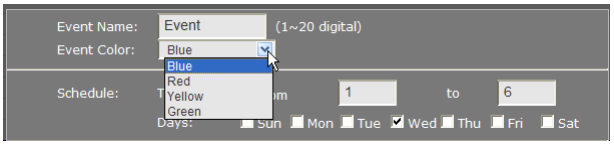
Event Setting

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.

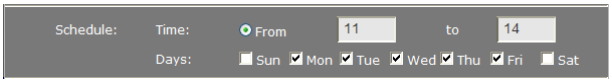


To Setup the Event

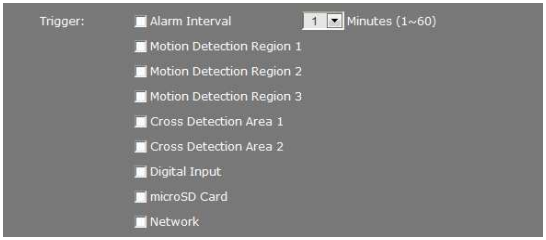
1. Click **Event**.
2. On the time table, click-drag to select the time period to specify the period of the event.
3. Type a name for the event. The naming rule is no space between each character and number and no special character. The length of name is 20 in both characters and numbers.
4. Select the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



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



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**

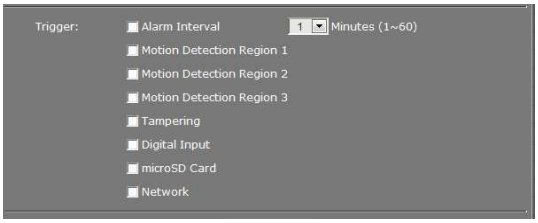
  This triggers the IP camera when a motion is detected on the motion detection region.

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

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

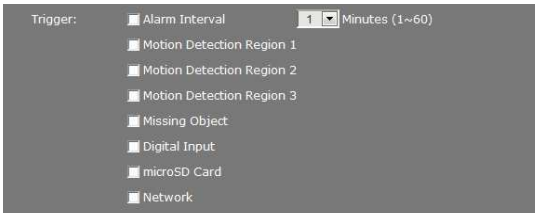
- **Tampering**

  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.



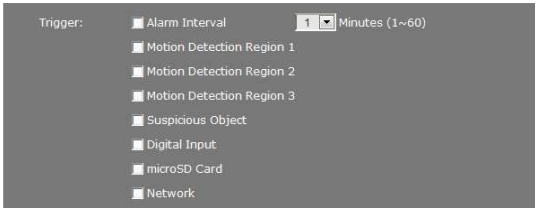
- **Missing Object**

  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.

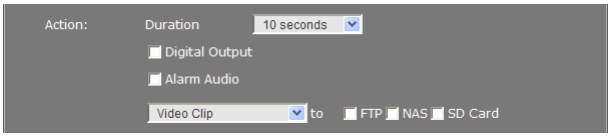
- **SD Card / microSD Card**

  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]

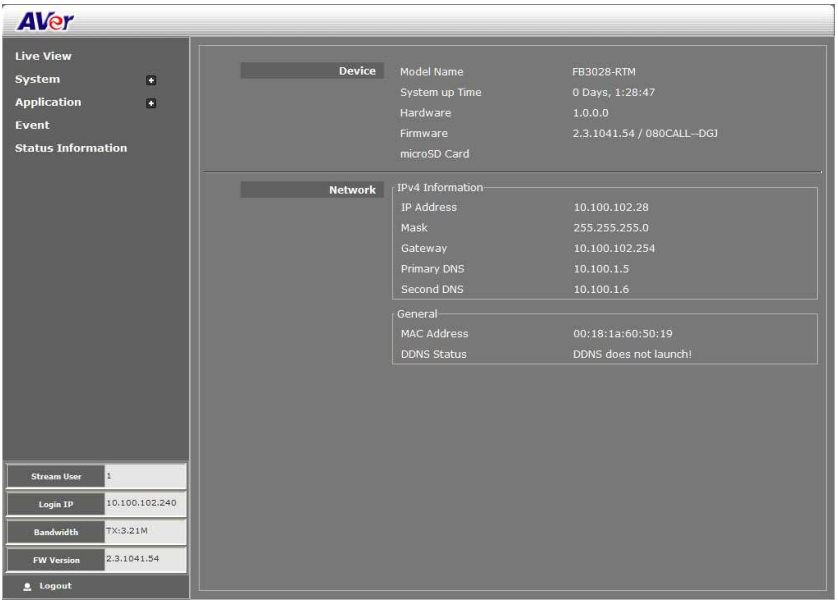
a. **Snapshot** and **System log** support sending the file thru Mail, and storing in FTP, NAS or SD/microSD card. You can enable multiple options to send and save the captured image.

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.



Using MFZ Function

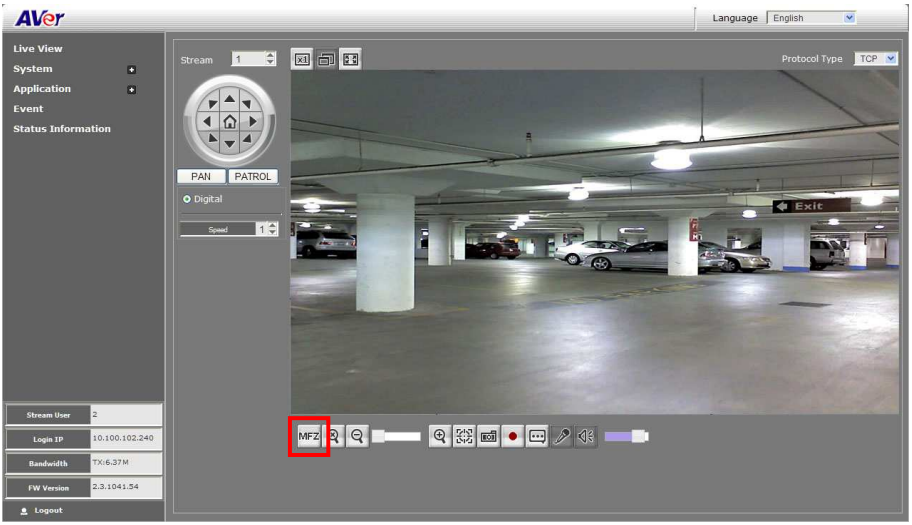
The IP camera has motorized lens can perform MFZ function(motorized focus and zoom).

- **MFZ supported model list**

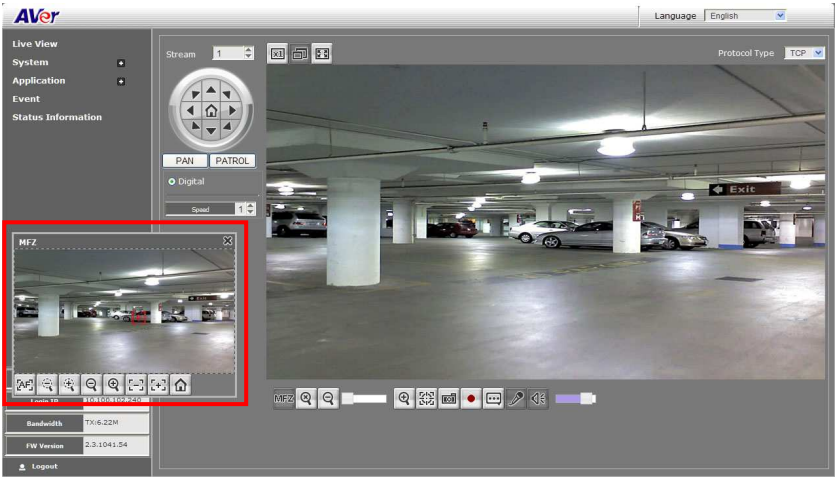
Camera Type	Model
Rugged Bullet	FB2028-TM
Rugged Bullet	FB3028-RTM
Vantal Dome	FV2028-TM
Vantal Dome	FV3028-RTM
Dome	FD2020-M
Dome	FD3020-M

To user MFZ function

1. In preview UI, click MFZ(MFZ button).

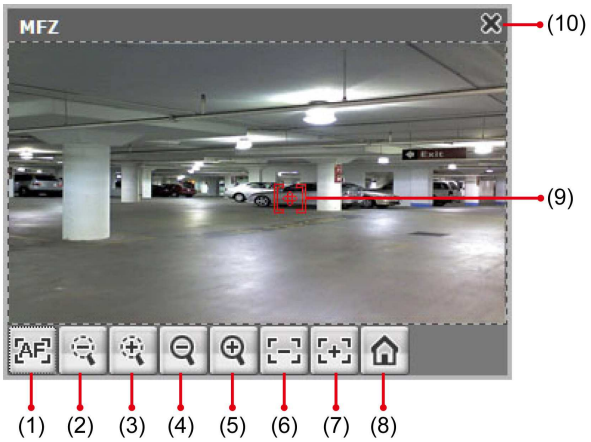


2. A MFZ window will show up on screen.



3. User can click the object or point on screen to foucs or use the function buttons on MFZ window to do the focus adjustment.

4. The function buttons of MFZ window are described in following:



Name	Function
(1) Auto focus	Automatically focus on the center of screen view. If use has click the focus point/object, then, the focus will be the point/object user has click.
(2) One step zoom in	To zoom in one step by step for fine focus adjusting.
(3) One step zoom out	To zoom out one step by step for fine focus adjusting.

Name	Function
(4) Zoom in	To zoom in for focus adjusting
(5) Zoom out	To zoom out for focus adjusting.
(6) Focus far side	To adjust the far side of focus.
(7) Focus near side	To adjust the near side of focus.
(8) Reset	To reset the zoom back to the center of screen view in default value (1x).
(9) Focus cursor	A focus cursor; click the screen to set the focus point.
(10) Close	Click to close the MFZ window.

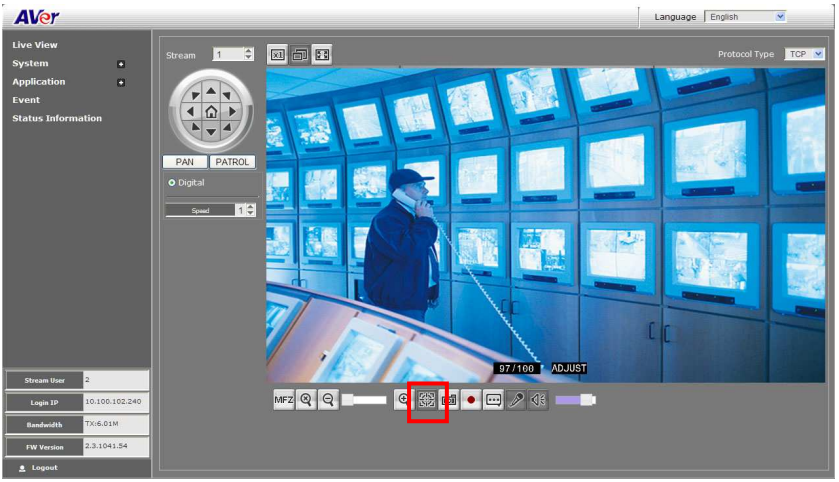
Using Quick Focus

The Quick Focus function can help user to adjust foucs of IP camera more easy and quick.
There are 2 ways to use Quick Focus and describe in following:

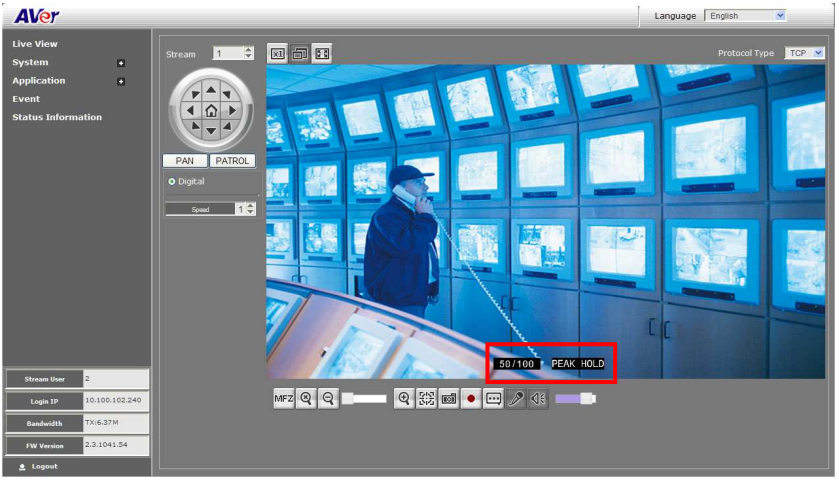
- **Web UI Interface**

Open the browser of your PC and enter the IP address of IP camera to make a connection.

After connecting, click  button to enable Quick Focus function.



On the preview screen, user should see 2 black blocks (number and text)are appeared. The number indicates the accurate of focus value and text shows current focus status.



75/100 : first number value will change when adjust the focus and will reach 100 when focus is done. The second number is best focust value and always is 100.

Adjust : It meas the Quick Focus is enabled and ready for focus adjusment.

PEAK HOLD : It shows the foucs is adjusting.

BEST FOCUS : It shows the current foucs valus is 100% foucs.

- **CCTV Test Monitor**

1. Connect the CCTV test monitor to IP camera.
2. Create a file named “FocusAssistant.txt” (The file nam is case senstive) in SD card. The FoucsAssistant.txt file doesn’t need to enter any contents; just a empty file with the named “FoucsAssistant.txt”.
3. Insert the SD card into SD card slot of IP camera. Then, the Quick Foucs will be actived.
4. User should see 2 black blocks (number and text)are appeared. The number indicates the accurate of focus value and text shows current focus status. The description of number and text refer to **Web UI interface** part.

Using RTSP and ONVIF Protocol to Access the IP Camera

When use the RTSP and ONVIF protocol to access the IP camera, please refer to the below path link and port information.

■ **RTSP**

Stream 1	RTSP:// <IPCAM_IP_Address>:554/live_st1
Stream 2 (if stream 2 is enable)	RTSP:// <IPCAM_IP_Address>:554/live_st2
Stream 3 (if stream 3 is enable)	RTSP:// <IPCAM_IP_Address>:554/live_st3

■ **ONVIF**

ONVIF protocol port = 2048

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