

AVer FD2000

User Manual

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Preface

The FD2000 is an H.264 2-megapixel; full HD dome camera designed with ultra-discreet, recessed-mount and super mini dimension (Φ:97mm) for indoor use. With innovative and unique fix supports, FD2000 is specifically developed for recessed mounting in suspended ceilings (drop ceilings), offering discreet video surveillance solutions that is ideal for retail stores, boutiques, schools, banks, elevators and other office buildings. FD2000 can provide superior quality video during the day without compromising on nighttime performance with its digital day and night function.

Product Features

- 2M-pixel, full HD Definition (1080p) 30fps support
- Ultra compact size and easy installation, specifically for suspended ceilings
- Digital Day and Night
- Wide Dynamic Range
- Noise reduction
- Enhanced Backlight Compensation up to 6 selectable areas
- Adjustable Shutter Speed
- Power over Ethernet (PoE)
- H.264/MJPEG compression formats
- Android/iOS mobile phone/PDA support
- Free bundled AVer NXU Lite recording software

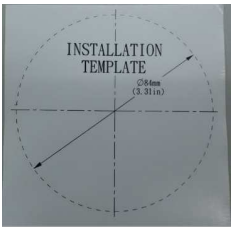
Specifications

Hardware	
RAM	256MB
Flash	256MB
Image Sensor	1/3” CMOS (2 megapixels)
Lens Type	Fixed lens, f=3.4mm
Electric Shutter	1/25~ 1/8192 sec (PAL); 1/30~ 1/8192 sec (NTSC)
I/O	N/A
Video Out	N/A
Audio In	1 (built-in microphone, mono type)
	G.711 (64K)
Audio Out	N/A
Power over Ethernet	Yes
Power Consumption	PoE Class 0 (IEEE802.3af): 5.5W This unit operates with PoE as power supply only.
Dimensions	Ø : 97 x 104.5 H (mm)
Weight	380g
Network	
Ethernet	Ethernet (10/100 Base-T), RJ45 connector
Network Protocol	IPv4, HTTP, TCP, RTSP/RTCP/RTP, ICMP, UDP, IGMP, DNS, DHCP, ARP, NTP
System	
Video Resolution	1080p(1920x1080), 720p(1280x720), VGA(640x480), CIF(352x240), QVGA(320x240)
Video Adjust	Brightness, Contrast, Saturation, Sharpness, Shutter Speed, Day-Night Mode, WDR, Backlight Compensation.
Triple Streaming	Yes
Image Snapshot	Yes
Full Screen Monitoring	Yes
Privacy Mask	Yes,4 different areas
Compression Format	H.264/ MJPEG
Video Bitrates Adjust	Yes (CBR/VBR)

System	
Motion Detection	Yes, 4 different areas
Triggered Action	N/A. All the triggered actions have to be done on VMS software or standalone NVR device.
Pre/ Post Alarm	N/A. All the triggered actions have to be done on VMS software or standalone NVR device.
Security	Password Protection
Firmware Upgrade	HTTP mode (can be upgraded remotely)
Simultaneous Connection	Suggestion up to 6 clients (H.264,1080p, 8Mbps)
Audio	Yes, 1-way (mono)
Operation Temperature	-10℃ to 50℃
Operation Humidity	0% ~ 90%, non-condensing
Storage Temperature	-20℃ to 60℃
Storage Humidity	0% ~ 90%, non-condensing
Web browsing requirement	
OS	Windows® XP (32-bit), 7 (32/64-bit) Microsoft® IE 8~IE10. (It doesn't support IE11 or above)
Hardware Suggested	CPU: Intel® Pentium 4 2.4GHz or equivalent RAM: 1 GB or above Display: NVIDIA GeForce 6 Series or ATI Mobility Radeon 9500 (DirectX 9 compatible)
Mobil support	iOS 4.3 or above, Android 1.6 or above.

***SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.**

Package contents

Item	Descriptions
	1. FD2000
	2. CD (User's Manual and Quick Guide included)
	3. Mounting template label

***This model doesn't support power adapter and only supports PoE power.**

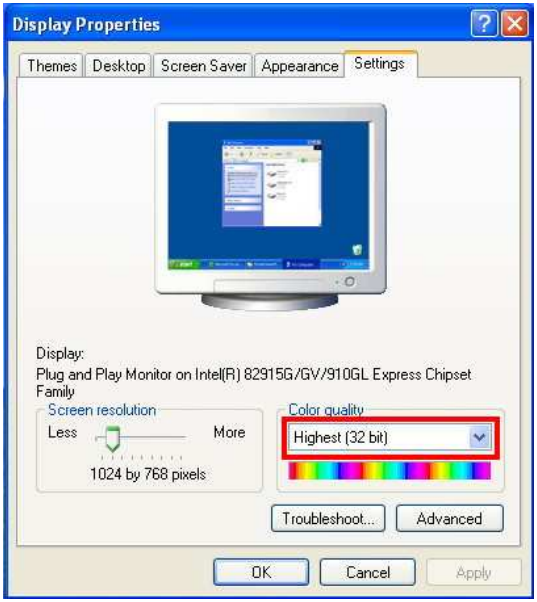
Product Installation

Monitor Setting

1. Right-click on the desktop. Select " **Properties**"

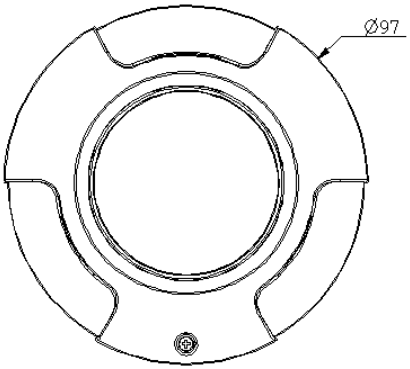


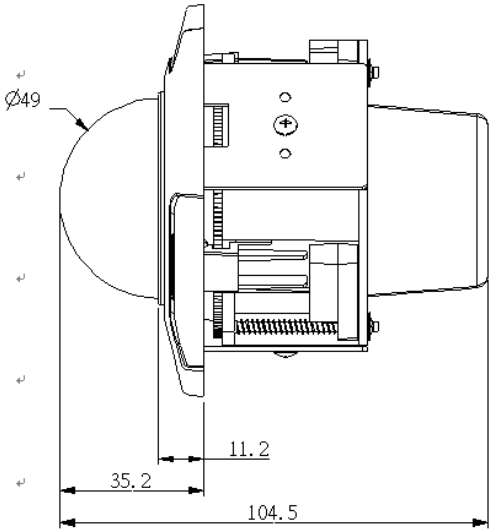
2. Change "Color quality" to "**Highest (32-bit)**".

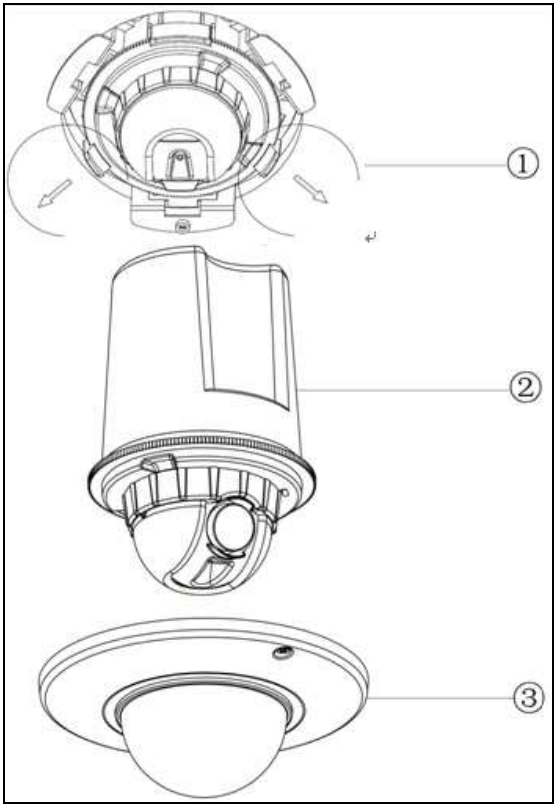


Hardware Installation and I/O Pin Assignment

1. Product Overview





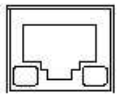
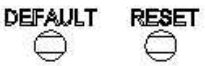


Definition:

Index #	Name
1	Bracket
2	Body
3	Top Case

Network LED and Button Definition

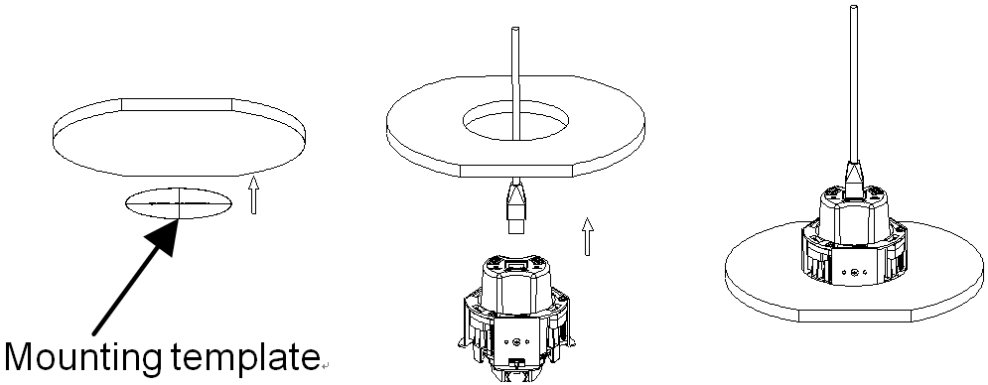
TABLE 1-2: NETWORK LED AND BUTTON DEFINITION

	Green LED	Indicates network connected when steady on
	Amber LED	Indicates network activity when flashes
	DEFAULT	Press and hold for 5 seconds to return to factory default
	RESET	Press to reboot system

2. Installation

Step 1:

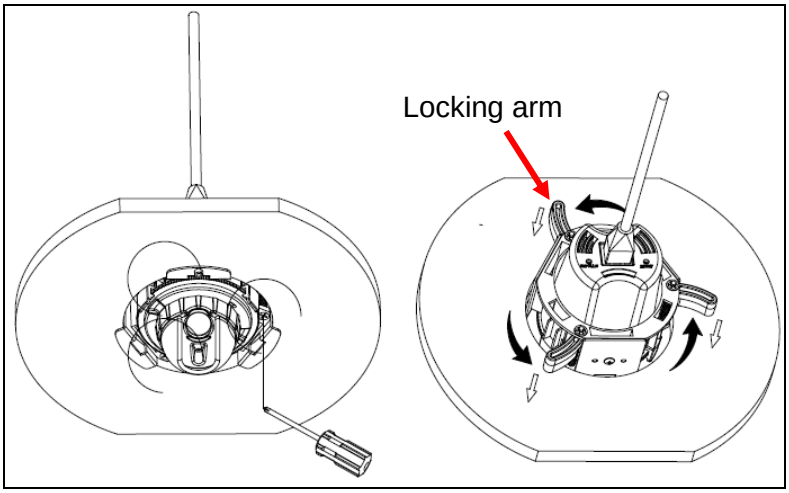
- Use the mounting template label to mark-out and prepare the mounting area.
- Drill a round hole with Ø84 ㎜ in diameter in the ceiling.
- Put network cable through the round hole on the ceiling, and then attach to the camera body.
- Put camera into the round hole on the ceiling. Please hold the camera body to avoid falling.



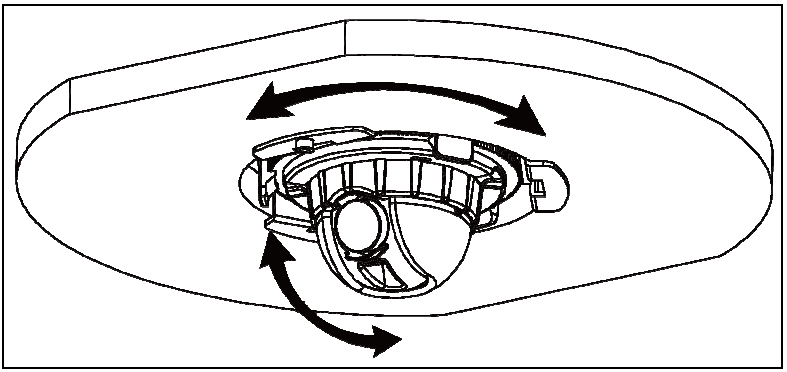
Step 2:

- Use a screwdriver to swivel three screws to bring out three locking arms.
- Tighten the screws sufficiently to compress the arms to adjust to mounting surface.

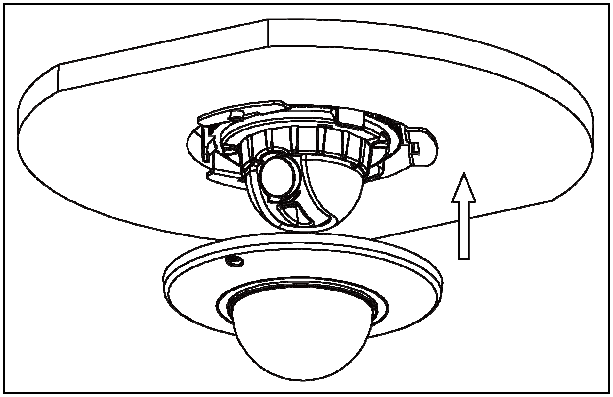
[Notes] The clip design is suitable for the suspended ceiling less than 25.5mm in thickness



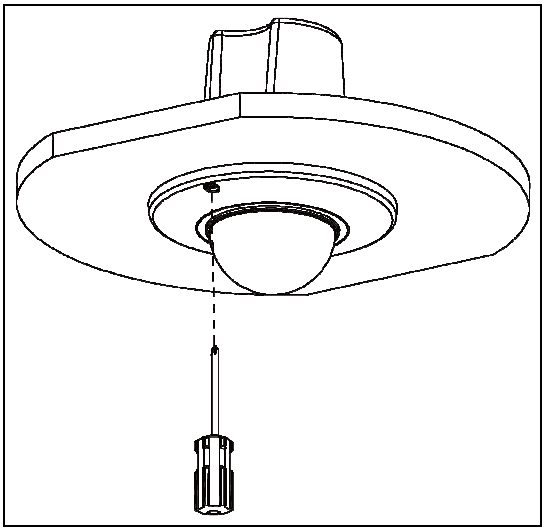
Step 3: Then adjust the tilt angle screw to shoot the suitable scenery



Step 4: Attach the camera housing with extra care on direction.

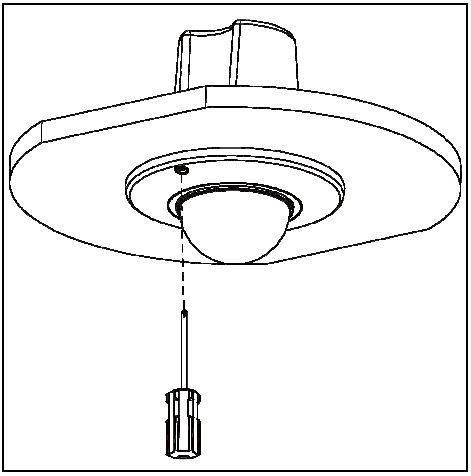


Step 5: Fasten the camera by screwing cover to the pedestal with screws and complete installation**.**

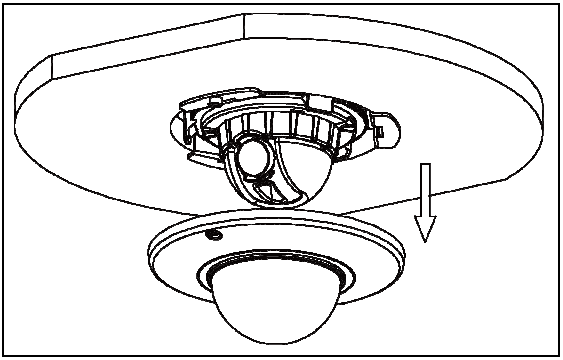


3. Disassembling the Camera

Step 1: Loosen the screws on the cover.

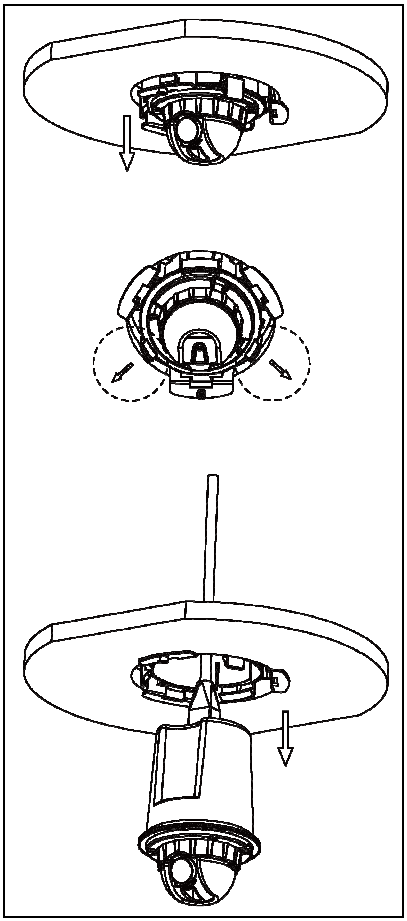


Step 2: Remove the camera housing

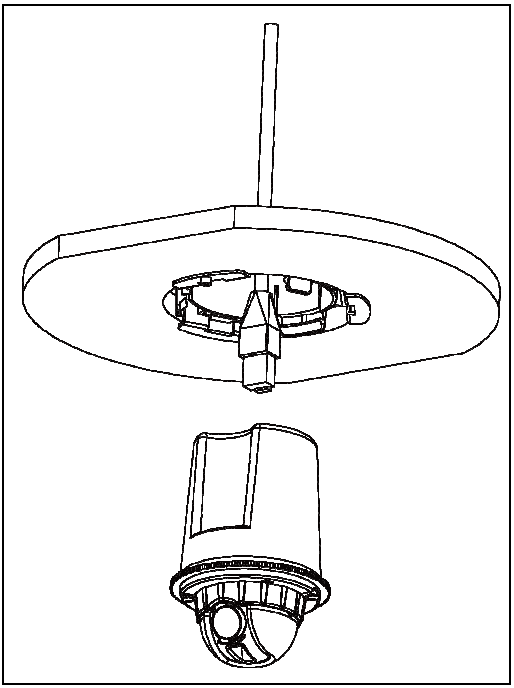


Step 3:

- Pull down the camera while the bracket is still attached to the ceiling.
- Move the two fasteners to take out the camera body. (Two of three applicable fasteners in total can be forced to move).
- Take off the camera body while the bracket is still attached to the ceiling.



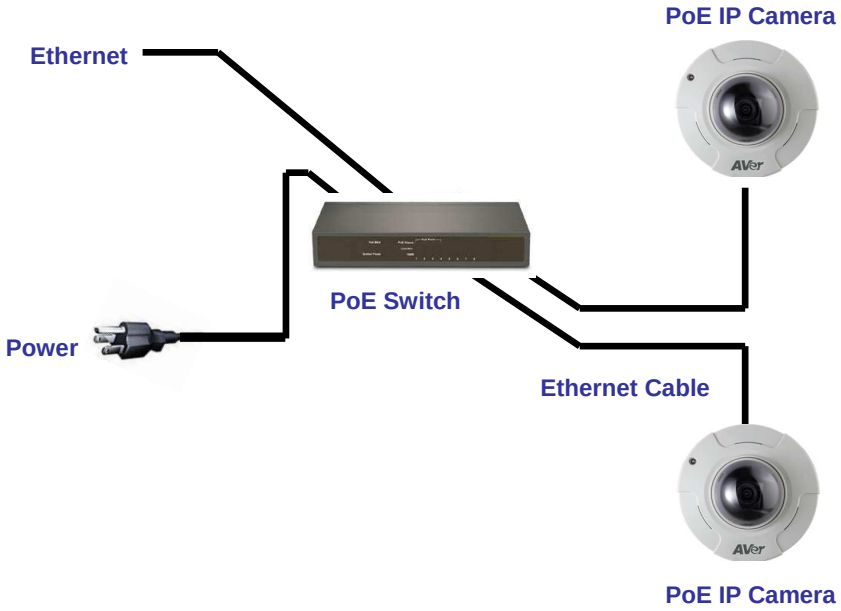
Step 4： Pull down network cable and finish disassembly.



Power Over Ethernet (PoE)

Set up the IP camera through Power over Ethernet (PoE). PoE is a technology that integrates power into a standard LAN infrastructure. It enables power to be provided to the network device, such as an IP camera, using the same cable as that used for network connection. It eliminates the need for power outlets at the camera locations.

[Note] 802.3at, 30W PoE Switch is recommended.
[Note] PoE switch compatible list: D-Link DES-1316/
ZyXEL ES-2024/D-Link-1005A/A5-20S4B/WS-C3560X-24P-L/VD2



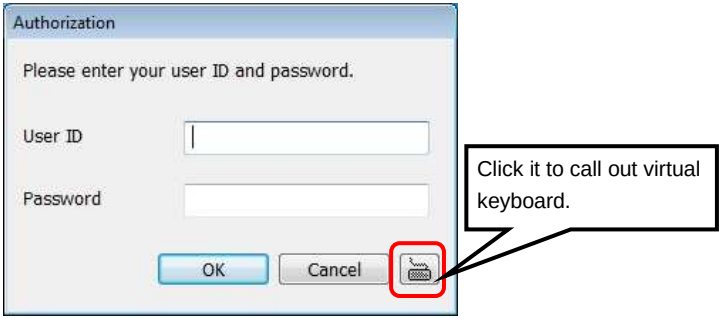
IP Assignment

There are two ways to find IP Camera:

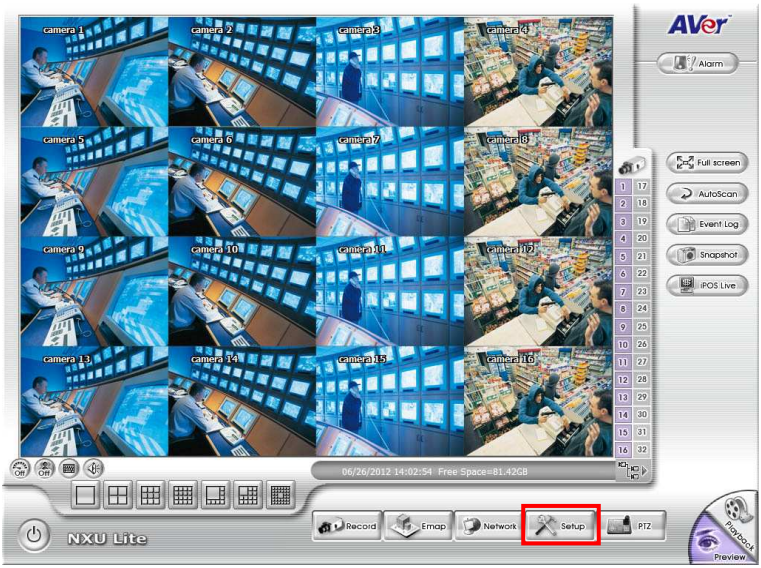
- Finding IP Camera by using “NXU Lite recording software”
- Finding IP Camera by using “AVer IPCam Utility”

Finding IP Camera by using “NXU Lite recording software”

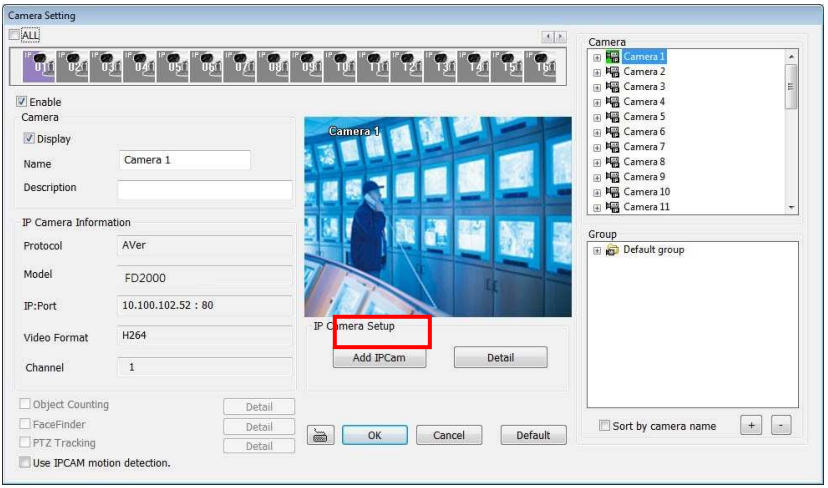
1. The NXU Lite software is in the attached software CD. Before launching it, please install the software first. During the installing process, users will be required to input a User name and Password for login NXU Lite system. Users can define the User name and Password as wishes. Please refer to NXU Lite user manual for detailed installation instruction.
2. To run the application, double-click  on your PC desktop or click **Start** > **Programs** > **DVR** > **NXU Lite**. For security purpose, some of the features would require you to enter User name and Password before it can be accessed. When the Authorization dialog box appears, key in your User ID and Password. (If this is the first time, enter the one you have registered when installing the software.



3. Click “**Setup**” button.



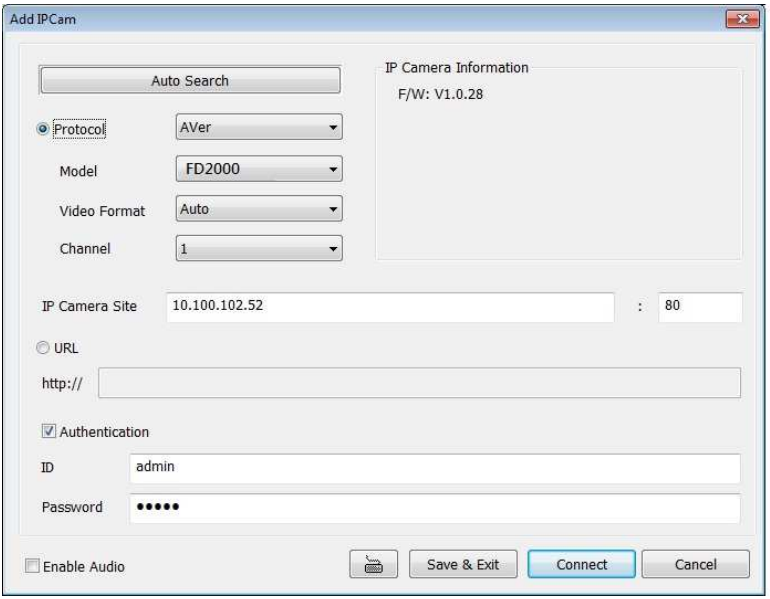
4. Click “**Add IPCam**” button.



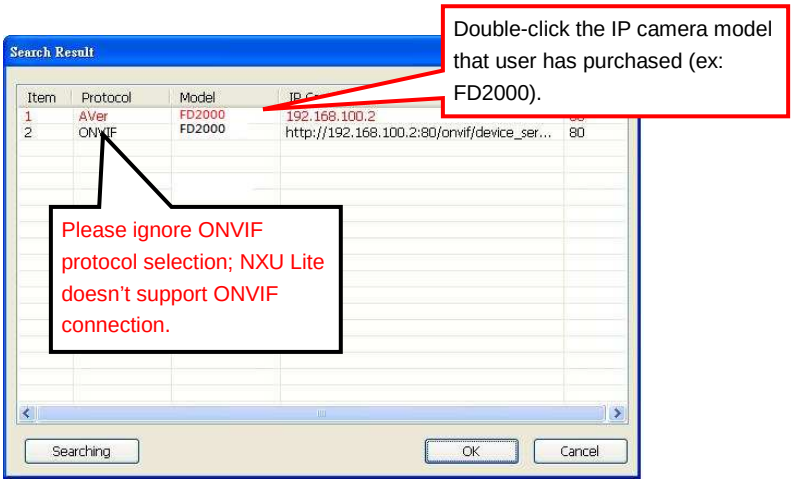
5. Select “**IP Camera**” item.



6. Key in IP Camera's ID and Password (default is **admin/admin**) and click "**Auto Search**" to find camera.

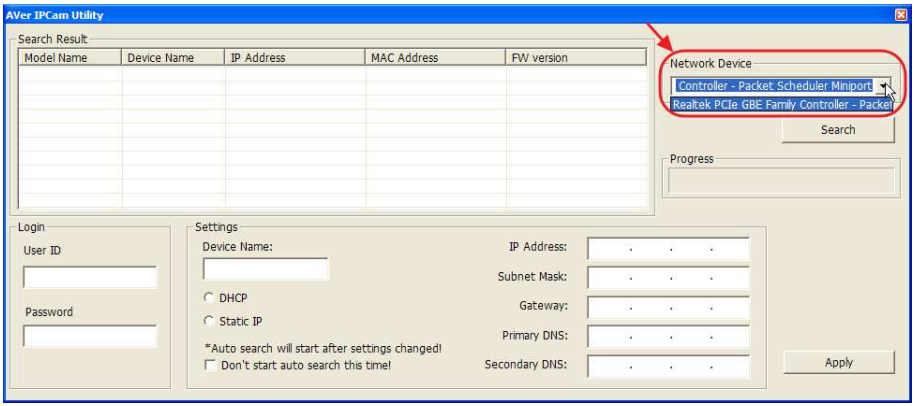


7. In Search Result window, click it the IP camera model that user has purchased (**Please ignore ONVIF connection item**); the camera is in red text that is configurable. User can double-click on the camera is in red text and configure the IP camera's setting; even the IP camera is not in the same IP segment. Press "**OK**" to back to previous screen and press **"Connect**" to start live view.

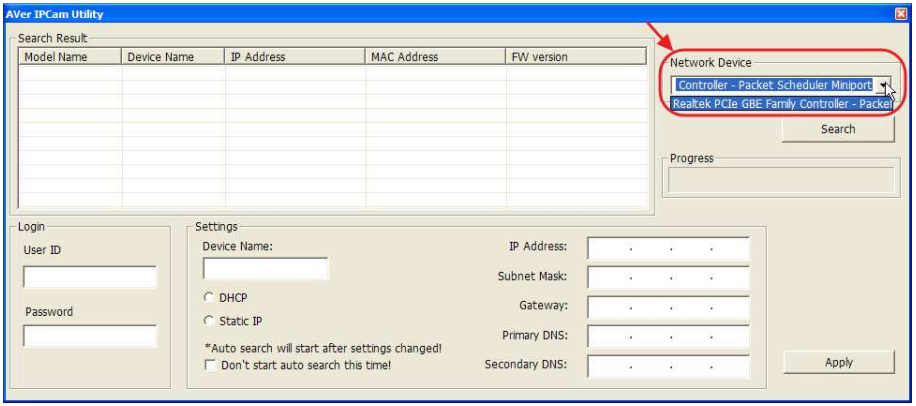


Finding IP Camera by using “AVer IPCam Utility”

1. Use the software, “**AVer IPCam Utility**” to assign the IP address of the IP camera. The software is in the attached software CD.
2. Run the IPCam Utility
3. Select the proper network adapter and click [Search] to begin searching.

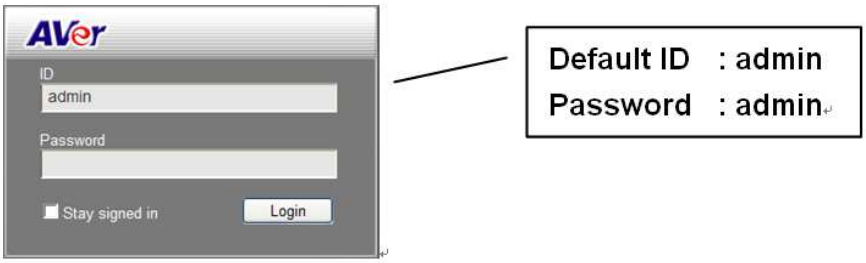


4. Select and double click the IP camera you want to access. If you want to change the setting of the selected IP camera, enter the user ID, correct password, and change the settings and then click [Apply]. This will change the setting and rescan the network again.



[Notes]: The default Gateway number is 192.168.1.254. Users can change Gateway number only when choosing Static IP

The IE browser will open and direct you to IP camera login page. This requires IPViewer.ocx to run. If the IE ActiveX warning message appears, click to allow running the add-on.

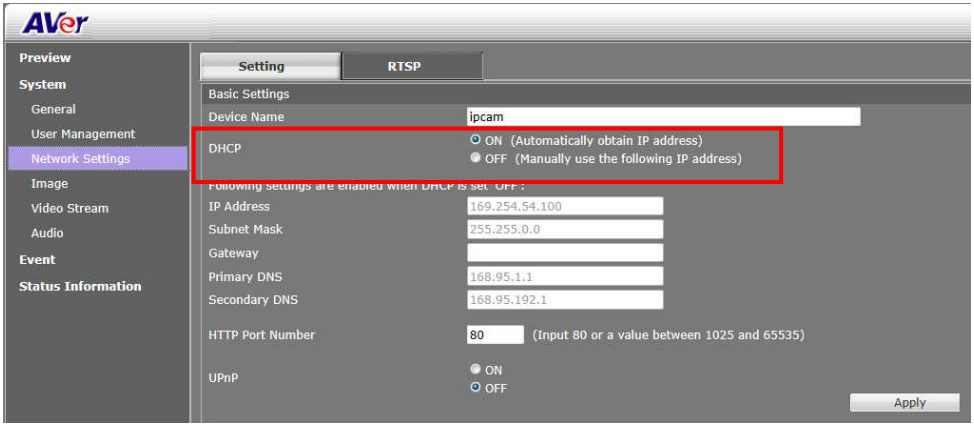


[Note]

- The default IP address is: 192.168.1.168
- The default ID and Password are both ”**admin**”.
- It is not allowed to enter device name in Chinese and any other special characters (' " \ & ^).
- Gateway number can’t be “0”.
- IP camera device name should be less than 30 digits

Using DHCP Server/Router Network

To use DHCP, please change the setting on the IE: IE → configuration → network setting →enable DHCP function → Apply.



After finishing the setting, please use AVer IPCam Utility to find IP Camera.

Using NON-DHCP Server/Router Network

In Non-DHCP server/router network, the static IP address must be assigned to the device each time when adding another IP camera to the network; the default IP address of the current one must be changed to avoid conflict.

Please make sure the Subnet of the PC's IP address and the IP camera's IP address are the same.

[Example]

The same Subnet:

IP camera IP address: 192.168.1.168

PC IP address: 192.168.1.100

Different Subnets:

IP camera IP address: 192.168.1.168

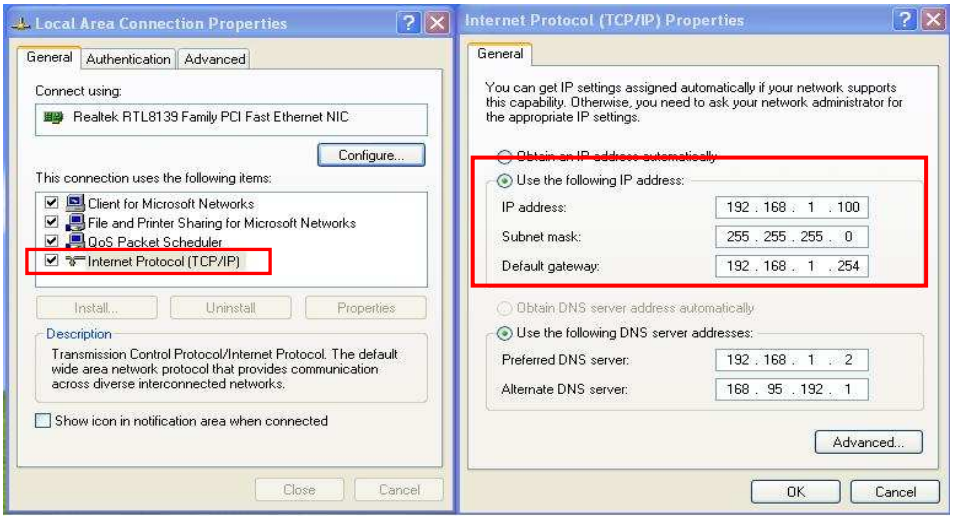
PC IP address: 192.168.2.100

To Change PC IP Address:

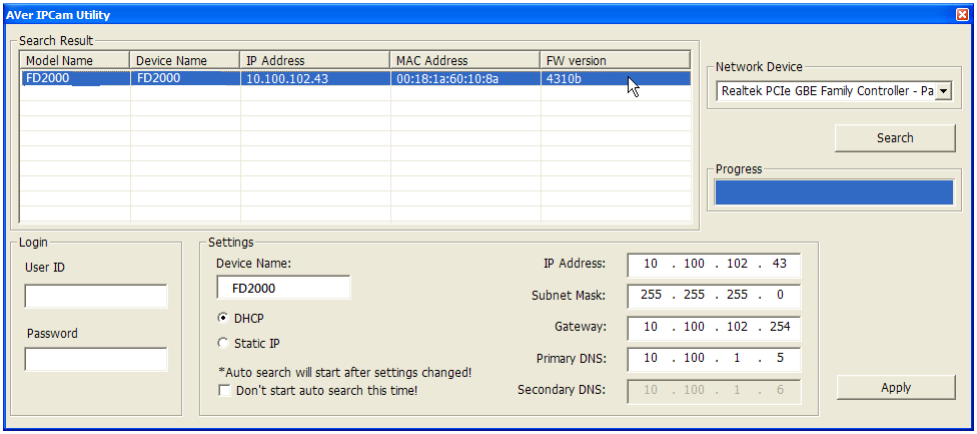
Control Panel→Network Connections → Local Area Connection Properties → Internet Protocol (TCP/IP) → Properties

Please make sure your IP camera and PC have the same Subnet. If not, please change IP camera subnet or PC IP subnet accordingly.

PC's IP address:



IP camera IP addresses:



A quick way to access remote monitoring is to double-click on a selected IP camera in "Camera Name list" in AVer IPCam Utility. Then, the IE browser will open and connect to IP camera.

[Notes]: The default Gateway number is 192.168.1.254 Users can change Gateway number only when choosing Static IP.

5. Then, please key in the default "**ID**" and "**Password**", both of which are "**admin**".



Install ActiveX Control

The first time you attempt to view the camera video via Internet Explorer, it will ask you to install the ActiveX component.

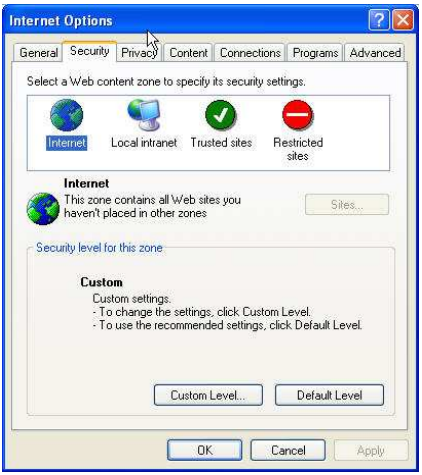
If the installation fails, please check the security settings for the Internet Explorer browser.

1. IE → Tools → Internet Options… → Security Tab → Custom Level… → Security Settings → Download unsigned ActiveX controls→ Select "**Enable**" or Prompt.
2. IE → Tools → Internet Options… → Security Tab → Custom Level… →Initialize and script ActiveX controls not marked as safe → Select "Enable" or Prompt.

1



2



3

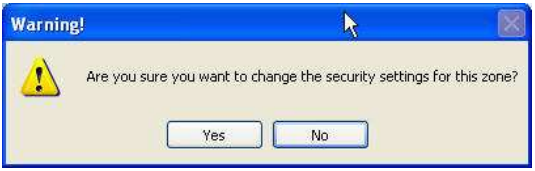


4



5

When the following dialogue box appears, click “**Yes**”.



Using the IP Camera Browser Interface

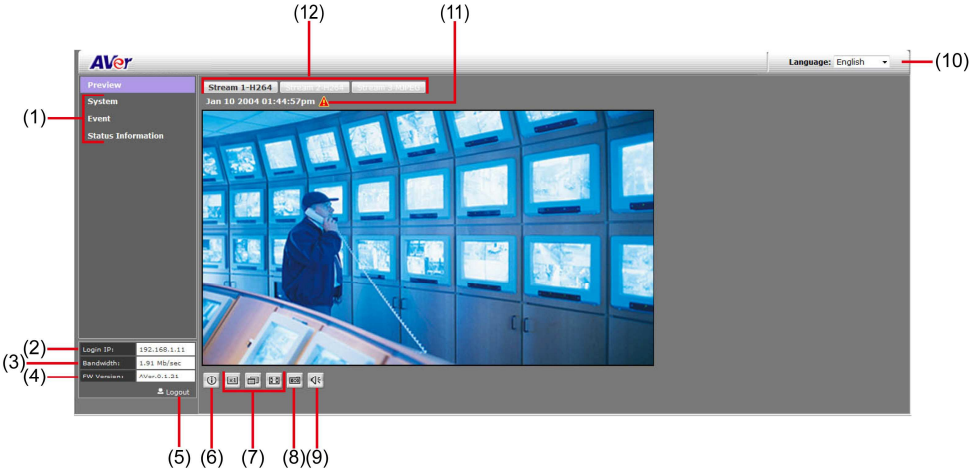
The admin have the full access to the IP Camera browser interface. The menu on the left, you can expand and navigate to access all the features.

Preview

Launch the Internet Explorer browser, type the IP address of the IP camera in the address field. It will show the following dialogue box. Key-in the "**ID**" and "**Password**". The default"**ID**" and "**Password**" are both "**admin**".



Once connected to the IP camera, the following program interface will appear.



Name	Function
(1) System/Event/Status Information	Set up IP camera's configuration.
(2) Login IP	Show PC's IP address
(3) Bandwidth	Show current IP camera's transmitting bandwidth

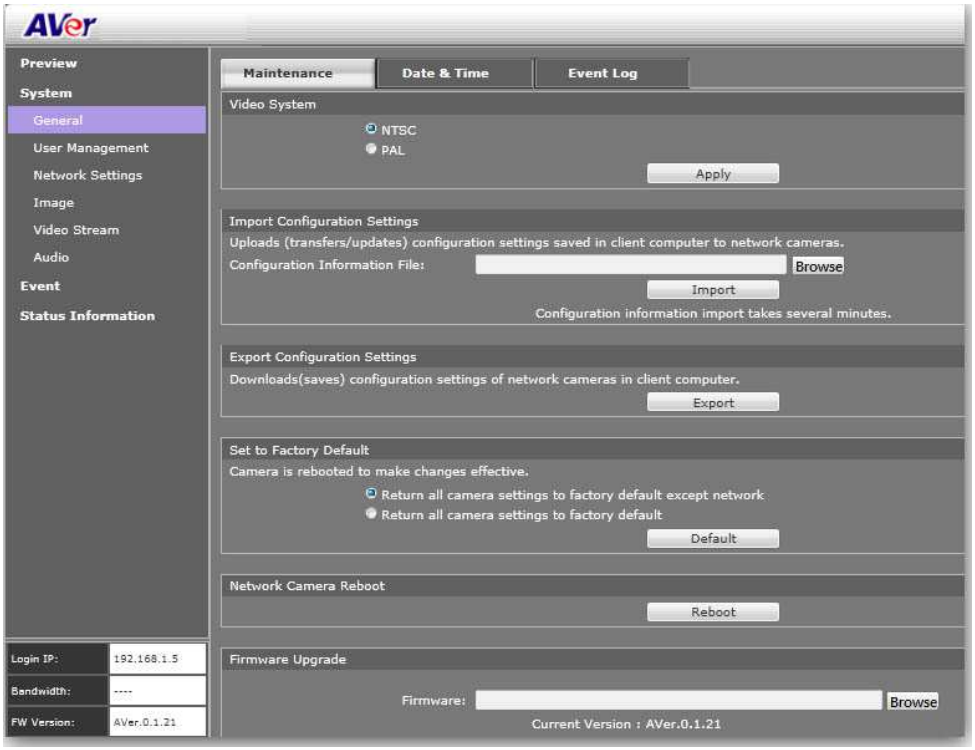
Name	Function
(4) FW Version	Show IP camera's current firmware version
(5) Logout	Exit the application
(6) Stream status display	Press button to display video stream status, such as codec and frame rate. Press it again to turn off. 
(7) Video screen	Change the video screen display. Display the actual video pixel size Display the video screen in fixed size. Display the video in full screen mode. Press ESC to exit full screen mode.
(8) Capture	Capture and save the image on the screen in *.bmp format
(9) Speaker	Turn on the PC's speaker so that PC side can hear sound from IP camera side. Click this button again to mute this function.
(10) Language	Select the browser interface language.
(11) Motion detection	While detecting motion objects, the triangle icon shows up. Press it to release the notice.
(12) 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. **[Notes]** When streaming 2 setting in "Video Setting" is closed, there won't have other stream option

System > General

In this section, only admin level is authorized to configure the IP camera system maintenance and the date and time settings.

System > General > Maintenance

In the Maintenance tab, the administrator can upgrade the system firmware; reset the configuration settings, reboot, and restore all back to factory default settings.



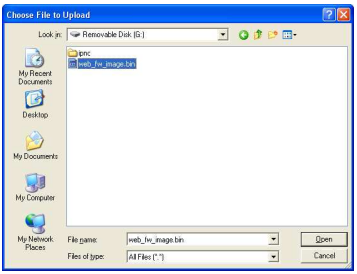
Name	Function
(1) Video System	Select the video format.
(2) Import Configuration Settings	Download to replace the current settings with the configuration settings file from the computer hard disk to IP camera.
(3) Export Configuration Settings	Upload to save all the configuration settings from the IP camera to computer hard disk.
(4) Set to Factory Default	Set all the configuration settings back to default.

	Name	Function
(5)	Network Camera Reboot	Turn the IP camera off and on again.

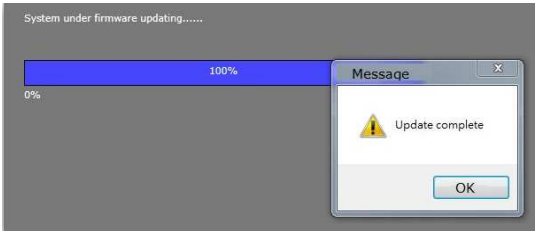
(6) Firmware Upgrade

Upgrade the firmware to the latest version. All camera motions will shut down during firmware update. Close any other screens before starting a firmware update. Never disconnect power and LAN cable during the firmware update process, or an update failure will occur and maintenance will be required. Rebooting the unit after firmware update may take approximately 3 minutes.

To Upgrade the IP Camera Firmware:

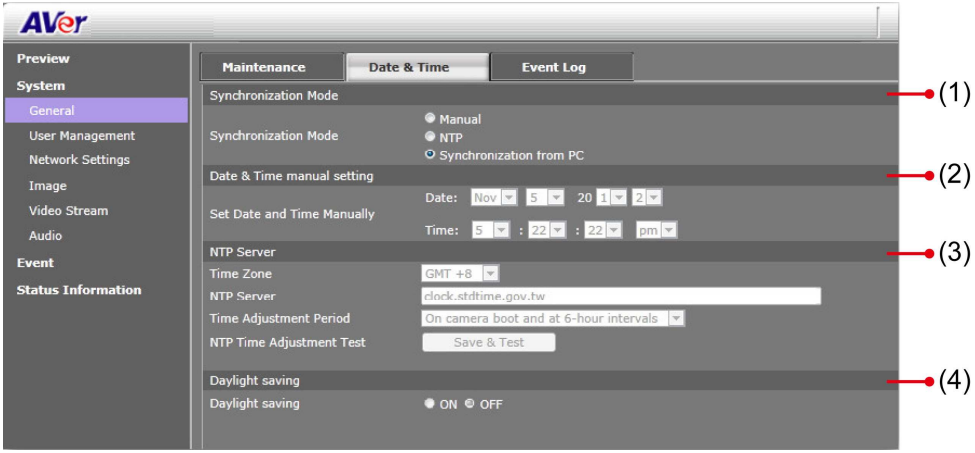


1. Download the file from our website and save it in your computer hard disk.
2. Click Browse. Locate and select the file and click Open.
3. Click Apply. Wait till you see the massage “Update complete” You may now click the Internet Explorer browser refresh button. The login page will appear.



System > General > Date & Time

In the **"**Date & Time**"** tab, the administrator can set and update the system's date and time. After filling in the correct settings, click **Apply** to apply the new settings.

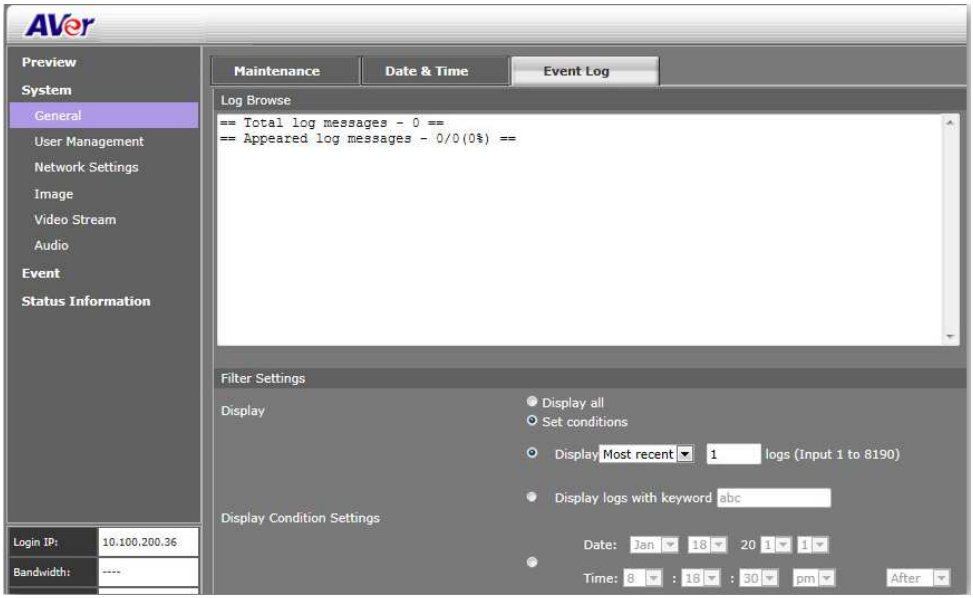


Name	Function
(1) Synchronization Mode	Select the date & time settings method. **Manual** – Manually set the date and time. **Sync with NTP Server** – Obtain the date and time setting from NTP server. Key in the NTP server name. **Sync from PC** – Obtain the date and time setting on the current login computer.
(2) Date & Time manual setting	When choosing "Manual" time setting, please set the date and time here.
(3) NTP Server	When choosing "NTP" time setting, please set the date here. **Time Zone**: To select the time zone where the unit is located. **NTP Server**: To state the address of NTP server to synchronize date and time with the unit when If "NTP" is selected in the Synchronization Mode. **Time Adjustment Period**: To select the interval to calibrate the time of the unit. **Save &Test:** To save and test NTP server settings
(4) Daylight saving	Check the ON/OFF box to enable or disable Daylight Saving to enable and setup the start date and end date for daylight saving

Name	Function
	time. (effective in NTP mode only)

System> General > Event Log

In this section, it displays the IP camera system event log.

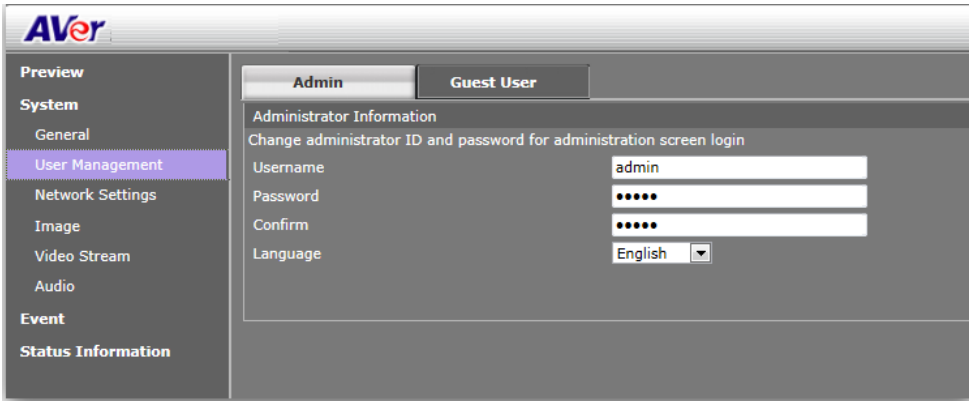


System > User Management

In this section, only admin level is authorized to create, delete, and edit the account in Account tab and configure the client connection setting in Connection tab.

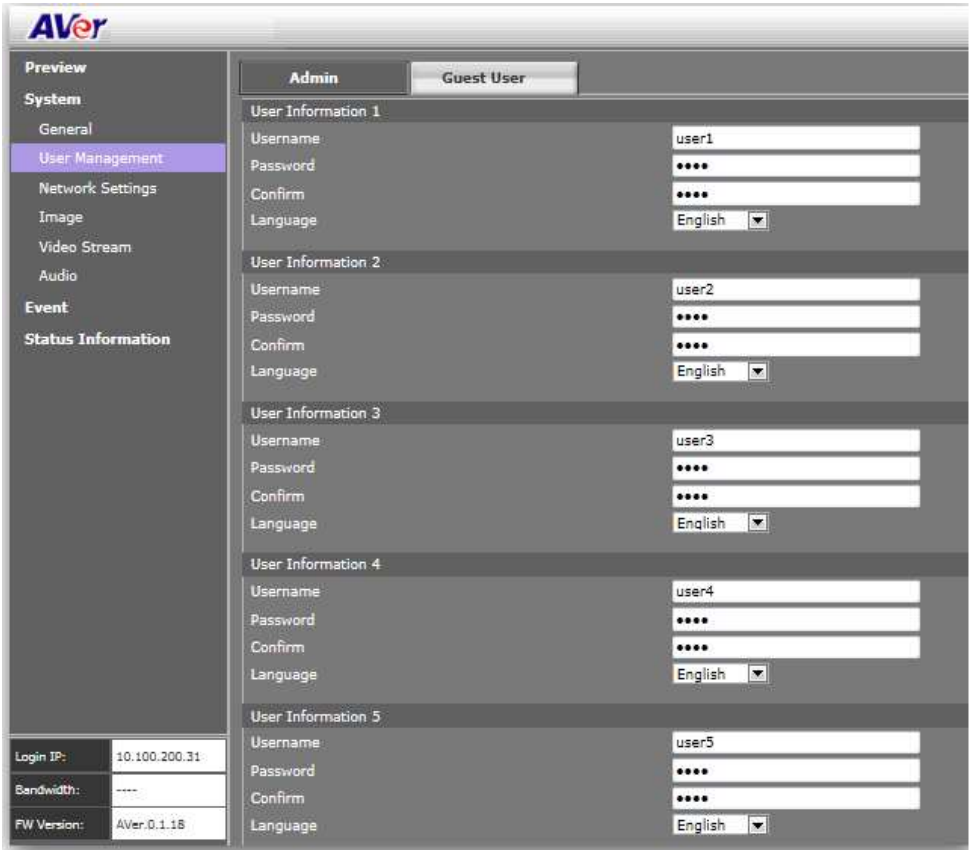
System > User Management > Admin

IP camera supports two different user accounts – Administrator (Admin) and Guest User.



User Type	Access Rights
Admin	Can access all the configuration pages
Guest User	Can only access the preview and status information pages.

System > User Management > Guest User

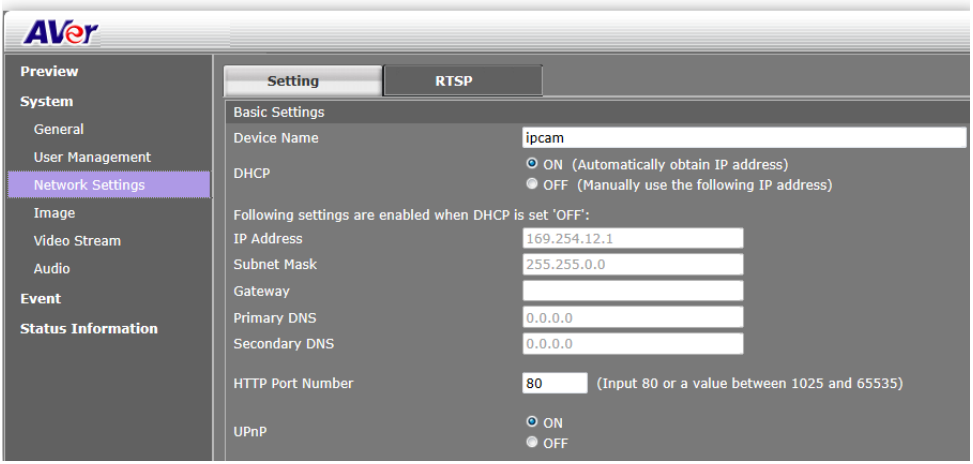


There are five Guest Users. Enter the user name in “Username”, the password in “Password”, and re-enter the password to confirm. The default language is English.

[Note]

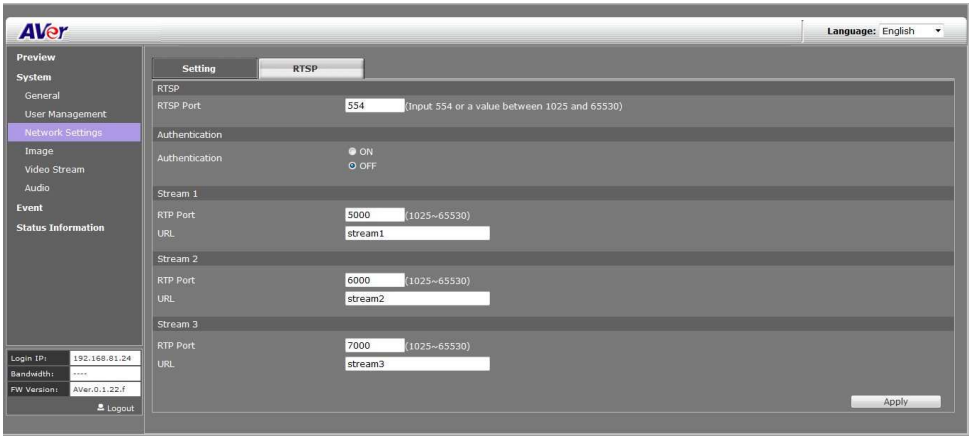
1. The password can’t be empty, otherwise, user are not able to login successfully.
2. Please don’t use special symbols as user name such as *, %, $, &.

System > Network Setting > Setting



- **Device Name:** Key in the preferred device name to rename it. Default name is “ipcam”.
- **Network Type:** IP camera supports DHCP, static IP. Click **Apply** to save the configuration.
  - **DHCP:** Using DHCP, please choose “**ON**” to enable it and IP camera will get all the network parameters from DHCP server automatically.
  - **Static IP:** Please choose “**OFF**” on DHCP item so that the IP camera will use static IP setting. Please enter the IP address, subnet mask, gateway, Primary DNS, and Secondary DNS.

System > Network Setting > RTSP



Users can set RTSP port here.

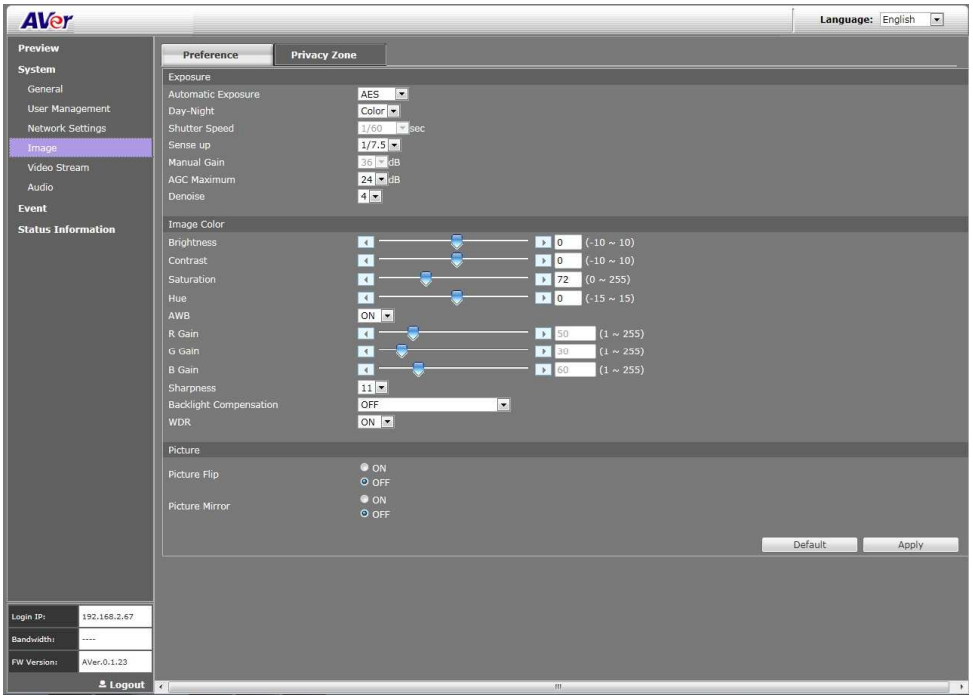
1. RTSP URLs for Stream 1, Stream 2 and Stream3 are: rtsp://(ip address):(RTSP port)/stream1, rtsp://(ip address):(RTSP port)/stream2, rtsp://(ip address): (RTSP port)/stream3, respectively.
2. RTSP default ID/Password: When RTSP “Authentication” is “on”, Administrator’s ID/PW will be required to make RTSP connection".

System > Image

There are 2 tabs: Preference and Privacy Mask.

System > Image>Preference

In Preference tab, you can adjust the IP camera image parameters, change the video orientation, and adjust the enhanced functions, such as Shutter Speed, Day-Night and D-WDR.



Exposure:

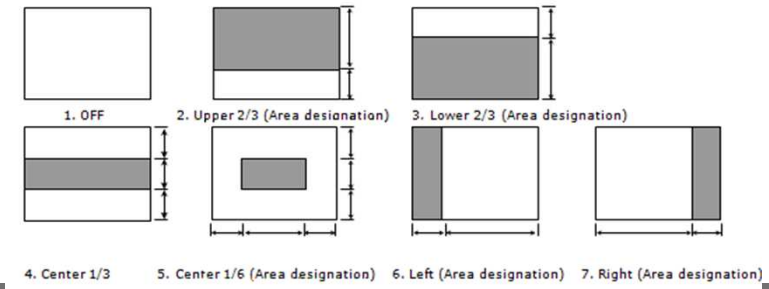
- **Auto Exposure:** Automatic Exposure controls the light intensity of picture. Users can select Manual or AES (Automatic Electronic Shutter) for the unit depending on applications. When choose the Manual, Shutter Speed and Manual Gain can be adjusted
- **Day-Night:** Only when Automatic Exposure set to Manual can this function be adjusted. To set DAY/NIGHT function, simply move the cursor to select Auto, Color, or BW mode. If Color selected, the unit is forced to stay in COLOR mode all day. If BW selected, the unit is forced to stay in NIGHT mode all day.
- **Shutter Speed:** Only when Automatic Exposure set to Manual can this function be adjusted. Set desired Shutter Speed from 1/30s to 1/8192s. The IP camera will adjust the aperture according to the amount of outside light.

- **Sense up:** Sense up can be enabled if the sensitivity is still not good enough under “High” gain condition at dark. Optimal image level can be maintained by appropriate gain and shutter combination that determined automatically inside the unit system. Sense up can be selected from OFF, 1/30, 1/15, and 1/7.5. As Sense up activates, the exposure time becomes longer and frame rate becomes smaller, and moving objects may result in blurred images.
- **Manual Gain:** Only when Automatic Exposure set to Manual can Shutter Speed be adjusted. The value of Manual Gain can be set from 6 to 30dB as an increment of 6. This function applies to manual lens only.
- **AGC Maximum:** As an adaptive system found in many electronic devices, the average output signal level is fed back to adjust the gain to an appropriate level for a range of input signal levels.
- **Denoise:** Noise reduction is the process of removing noise from signal. Users can configure the noise reduction related setting to manipulate noise on the screen.

Image Color:

Users can adjust Brightness, Contrast, Saturation, Hue, AWB, R/G/B Gain, Sharpness, Backlight Compensation and D-WDR functions.

- **R/G/B Gain:** This function is able to reduce the contrast in the view to set manual gain value of R Gain, G Gain, & B Gain from level 0 to 255. The red (R) gain is used to adjust the color red in the viewing image. It allows adjusting red gain manually according to user requirement ranging from level 0 to 255. The green (G) gain is used to adjust the color of green in the viewing image. It allows adjusting green gain manually according to user requirement ranging from level to 255. The blue (B) gain is used to adjust the color of blue in the viewing image. It allows adjusting blue gain manually according to user requirement ranging from level 0 to 255.
- **Sharpness:** Increasing the sharpness value will sharpen the edges and small feature of viewing images. If the edges appear too smooth or blurred, increase the sharpness; otherwise, decrease the sharpness. Sharpness value can be set from 1 to 15.
- **Backlight Compensation:** Set an area for Backlight Compensation. Backlight Compensation is a function that achieves the brightness of a selected area to optimal image level. This function is necessary when an auto iris lens tends to close due to an intense light coming from back of object in the area wished to view so that the area is too dark and difficult to see. In this case, users may set the area correspond to the portion wished to see. The area size illustrations are roughly as follows:



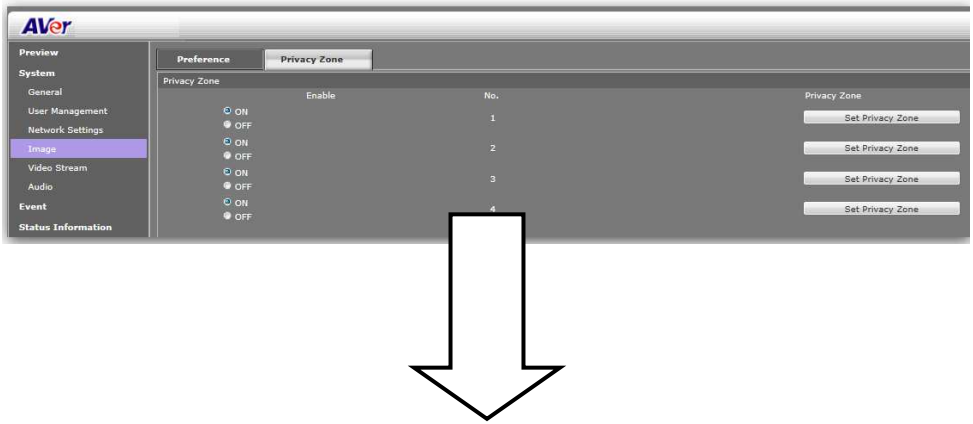
WDR: This function to provide clear images even under back light circumstances where intensity of illumination can vary excessively namely when there are both very bright and very dark areas simultaneously in the field of view of the unit. WDR enables capturing and displaying of both bright and dark areas in the same frame in a way that there are details in both areas, i.e. bright areas are not saturated, and dark areas are not too dark.

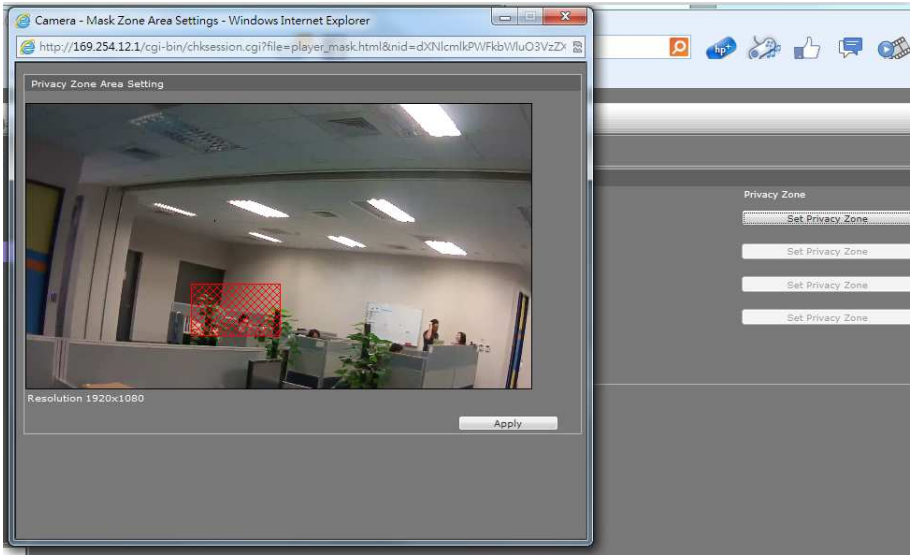
Picture:

- **Picture Flip:** Set image to be upside or down. Select ON or OFF to activate or deactivate the flip function.
- **Picture Mirror:** Set image to be left or right. Select ON or OFF to activate or deactivate the mirror function.

System > Image > Privacy Zone

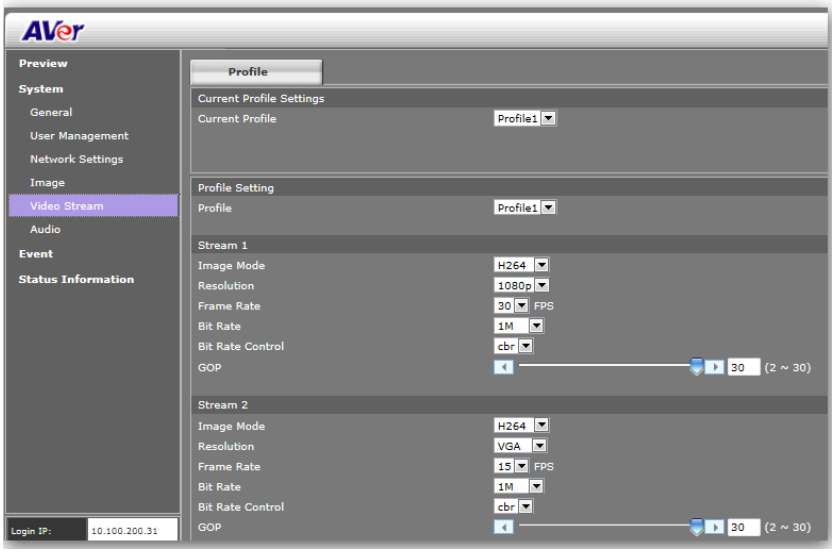
For the security purpose, there are four areas can be setup for privacy mask. Click **"Set Privacy Zone"** button first and drag an area on the image screen. Then, click **Apply** button to save the setting. Please set up these four privacy zones one by one.





System > Video Stream > Profile

There are up to six profiles to choose from. The one that users are using will be in Current Profile. In each profile, parameters are all configurable including Image Mode, Resolution, Frame Rate, Bit Rate, Bit Rate Control, and GOP. Be sure to click Apply when done.

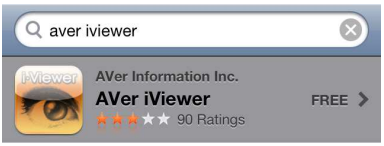


STREAMS/VIDEO QUALITY BASIS

	Single Stream	Double Stream	Triple Stream
Profile 1	1920x1080 / H.264	640x480 / MJPEG	
Profile 2	1920x1080 / MJPEG	640x480 / H.264	
Profile 3	1920x1080 / H.264	640x480 / H.264	-
Profile 4	1920x1080 / H.264	320x240 / H.264	320x240 / MJPEG
Profile 5	1280x720 / MJPEG	320x240 / H.264	320x240 / MJPEG
Profile 6	1280x720 / H.264	1280x720 / MJPEG	

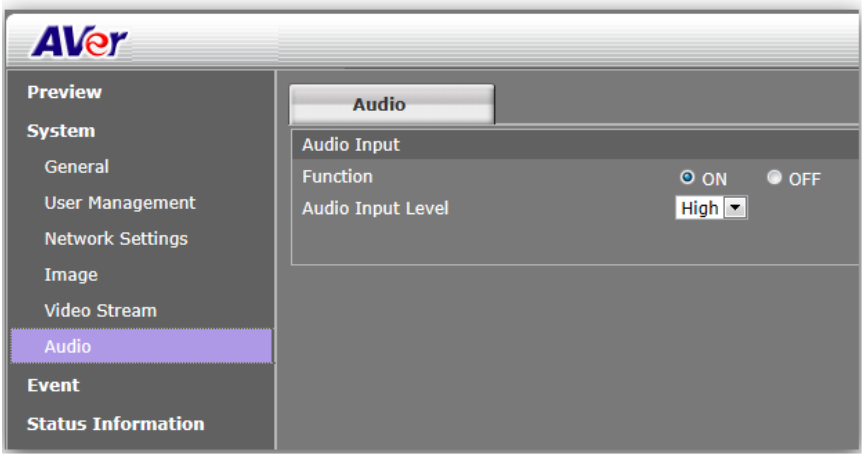
[Note]

1. To get the best mobile viewing quality, please download AVer iViewer (AndroidViewer) from the Apple App store or Google Play. iViewer takes video from Stream 1 or Stream 2.



System > Audio

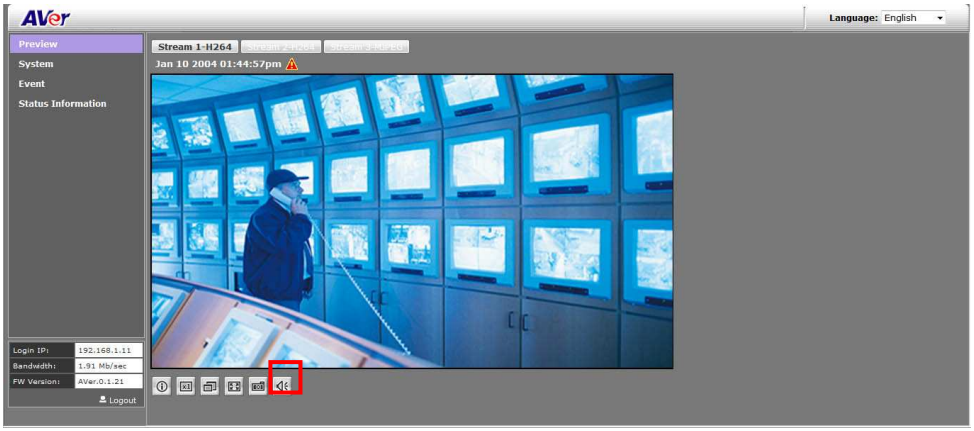
FD2000 supports 1-way audio (mono). User can send audio from IP camera built-in MIC to remote site.



a. IP Camera to PC: select "**ON**" to start this function.

b. Select audio input level among High, Mid, and Low for sound input level.

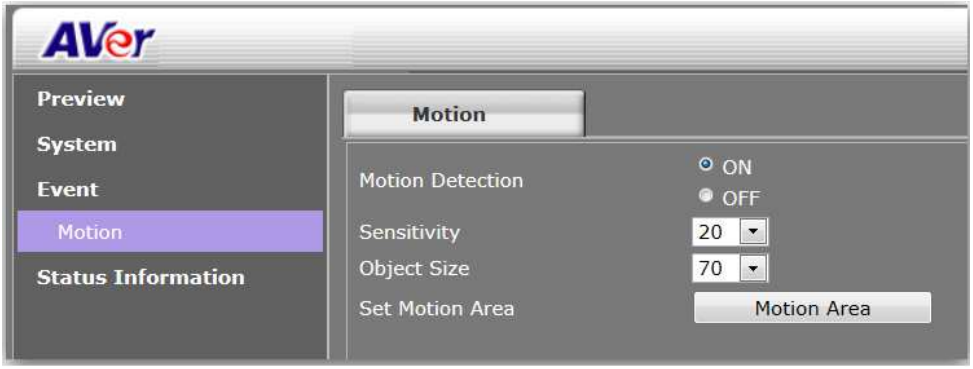
c. In live video screen, click  button to turn on or off  the speaker of PC.

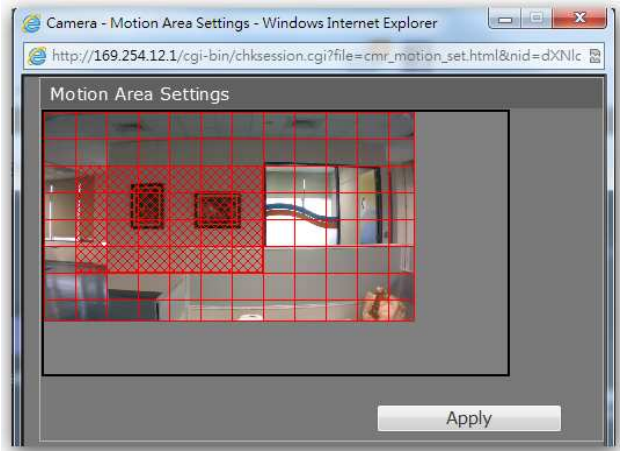


Event > Motion

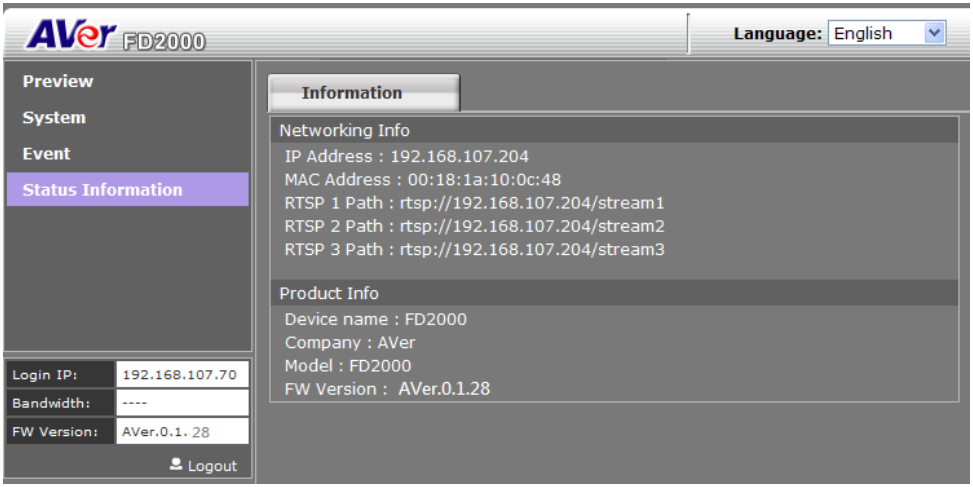
This function is designed to trigger a video recording when the unit detects a motion.

- **Motion Detection:** Set “ON” to turn on motion detection and set motion sensitivity and area.
- **Sensitivity:** Choose different levels of 1~100 for sensitivity. “100”: Motion is activated with slight changes in brightness or motion. “1”: Motion is activated with big changes in brightness or motion.
- **Object Size:** Choose different levels of 1~100 for object size. Set the percentage area size for a recognizable object. “100”: Very large objects trigger motion. “30”: Small objects trigger motion.
- **Set Motion Area:** Set the area you want to trigger motion detection. The motion setup screen will be opened for selecting the detection area by clicking/dragging the mouse.





Status Information

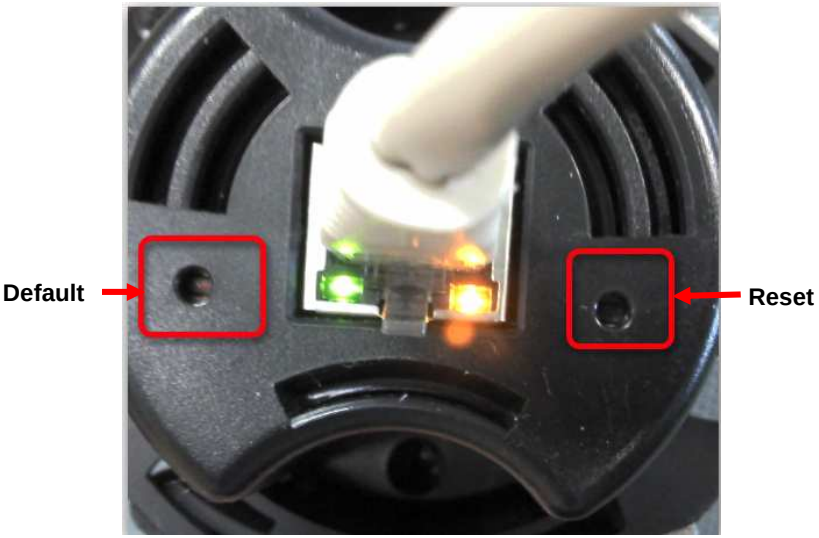


- **Networking Info:** Displays network information of the IP camera.
- **Product Info:** Displays product information of IP camera.

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Factory Default

1. Beside Ethernet jack, find the default hole at left side.
2. Press and hold for 5 seconds to return to factory default.
3. To reboot system, press reset hole for 5 seconds.
4. When it goes back to default setting, the default gateway is 0.0.0.0. Please change the setting in IP finder utility from DHCP to Static IP and then modify the gateway number so that the IP finder utility can find the IP camera successfully.



Troubleshooting

Here are some useful tips on how to solve some common problems.

Problem	Solution
I forgot the account and password for FD2000. How can I go back to default setting?	Please refer to the manual of “Factory Default setting” description.
How can I record video clip from Web GUI?	We don’t support recording on IE. Please use the attached free NXU Lite software in CD to record.
I have updated new firmware but the firmware version on web GUI doesn’t change to the updated one.	After finishing firmware update, please clean up the cookie history.
When I reset the FD2000 to default, I couldn’t change Gateway number from IP finder utility.	Users can change Gateway number from IP finder utility only when choosing Static, instead of DHCP.

FCC NOTICE (Class B)

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 B 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.

European Community Compliance Statement (Class B)

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.

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