

H.264 Series Fish-Eye Compact Network Camera

NB670E

User's Manual



Version: 1.03

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Revision History

Version	Description	Author
1.01	Original document	Anthony
1.02	Modify the GPIO picture	Eric_Y
1.03	Change Wall 720P Mount	SamKao

Notices

This user manual is intended for administrators and users of the NB670 Series Network Camera, including instructions for using and managing the camera on your network. The use of surveillance devices may be prohibited by law in your country. It is the user's responsibility to ensure that the operation of such devices is legal before installing this unit for its intended use.

Before the Network Camera is installed, all the safety and operating instructions should be carefully read and followed to avoid damage due to faulty assembly and installation. This also ensures the product is used properly as intended.

Heed all warnings

- **Do not drop or strike this equipment**
Sensitive electronics inside the camera are vulnerable to excessive strike.
- **Do not install the equipment near any flames or heat sources**
Excessive heat could damage this equipment.
- **Do not cover cloth or to install this equipment in poorly ventilated places.**
Overheating could damage this equipment.
- **Do not expose this equipment to rain or moisture. Do not touch the power connection with wet hands**
Risk of short circuit, electric shock or fire
- **Do not damage the power cord or leave it under pressure**
Risk of fire or shock circuit
- **To reduce the risk of electric shock, do not remove the Cover (or Back).**
No user-serviceable parts inside. Misusage, improper, and negligence could damage this equipment. Need to refer servicing to qualified service personnel.
- **Do not continue to operate if there appears to be fault.**
If the unit ceases to function, contact qualified service personnel for help.
- All work related to the installation of this product should be made by qualified service personnel or system installers.

Introduction

NB670 is a Fish-Eye Network Camera; it is featured with superior H.264-AVC performance and rich functions. Fish-Eye Camera includes a fish-eye lens for 360° wide angle view without blind spot. Thus Fish-Eye Camera is very suitable to view a wide area with single camera such as hallway, store, office, etc.

The H.264-AVC video compression enables to lower bandwidth and storage requirements without compromising image quality; Motion JPEG is supported for increased flexibility, as well as multiple independent video streaming.

The hardware based panorama video processing ability can provide user multiple video modes including source image, double broad view, triple mode view and quad view. , and it is support Wall, Ceiling, Table, Wall 720P high performances many mounts.

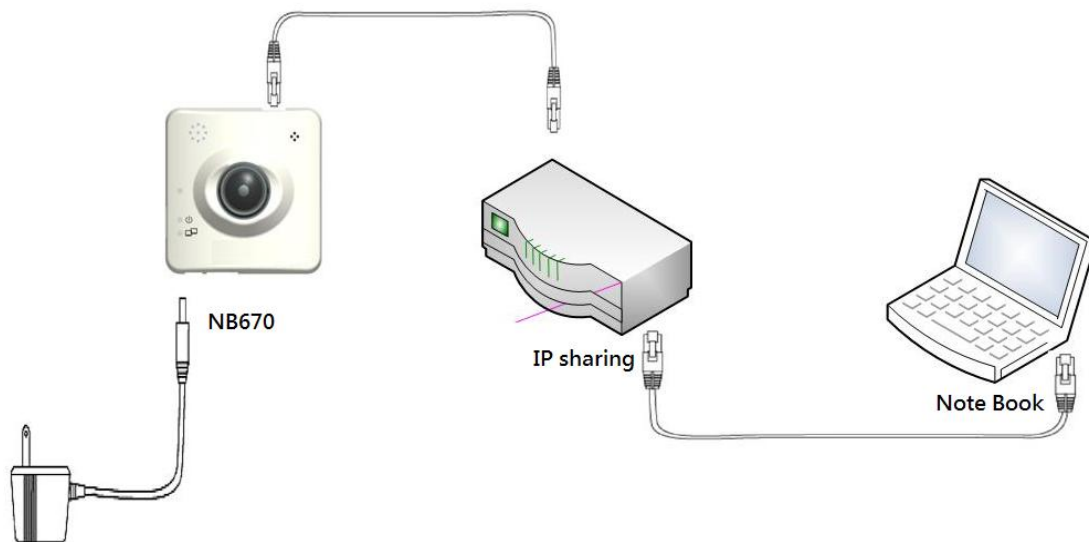
NB670 offers the Keystone Correction function, and it can adjust image to the best display mode

The e-PTZ function, including preset point without moving parts, can replace part of traditional PTZ camera and thus save lost of traditional mechanical Pan/Tilt maintain cost.

The camera offers optional POE and POE (NB670E) type for installation; the PoE (IEEE802.03af) feature provides an easy installation through a single Ethernet cable, lessening the installation of power plugs or extensions. Further functions include two-way audio and micro SD card support for local storage application.

Installation

1. Hardware Connection



1. Prepare a PC with Ethernet link to the network
2. Connect LAN port (RJ45) of the camera to a network switch/hub
3. Connect power jack / POE support only for NB670E
4. Ensure the power adaptor specification matches the power system (110V or 220V) and connect the adaptor to the outlet
5. Check LED status (Power/Network)

2. Software Installation

The following software is necessary for the proper display and use of the Fish-eye camera from the Web site. The software will be taken from the Software Package CD.

IP Installer

The IP Installer is used to locate and configure network cameras and video servers on the LAN. This utility is useful for conveniently configuring the network settings of the device, or for finding a device once the network settings have been modified.

To install the IP Installer, from the Software Package CD UI, select IP installer, then follow the on screen instructions.

XVID Codec

An H.264 codec is applied for displaying the video stream and playing the recorded AVI files. If the video stream can't be displayed or the recorded AVI files can't be play on PC, install this software from the Software Package CD.

VLC

Though not necessary, this can be used for viewing the streaming without a Web browser.

3. Network Configuration

IP Installer is a utility that provides an easier, more efficient way to configure the IP address and network settings of the devices. It even provides a convenient way to set the network settings for multiple devices simultaneously using the batch setting function. Moreover, IP Installer can save the network settings for all devices as a backup and restore them when necessary.

Preparation before IP Assignment

1. Always consult your network administrator before assigning an IP address to your server in order to avoid using a previously assigned IP address.
2. Ensure the camera is powered on and correctly connected to the network.
3. MAC Address: Each device has a unique Ethernet address (MAC address) shown on the label of the device as the serial number (S/N) with 12 digits (e.g. 000429-XXXXXX).



4. Although the IP Installer is able to find and configure any device on the LAN except those that are behind a router, it is a good idea to set the host PC to the same subnet. In order to connect to the Web-based user interface of the camera, the host PC must be in the same subnet. For more information about subnets, please consult your network administrator.

Using IP Installer to Assign an IP Address to NB670

1. Once IP Installer has been successfully installed on the PC, double click the IP Installer icon



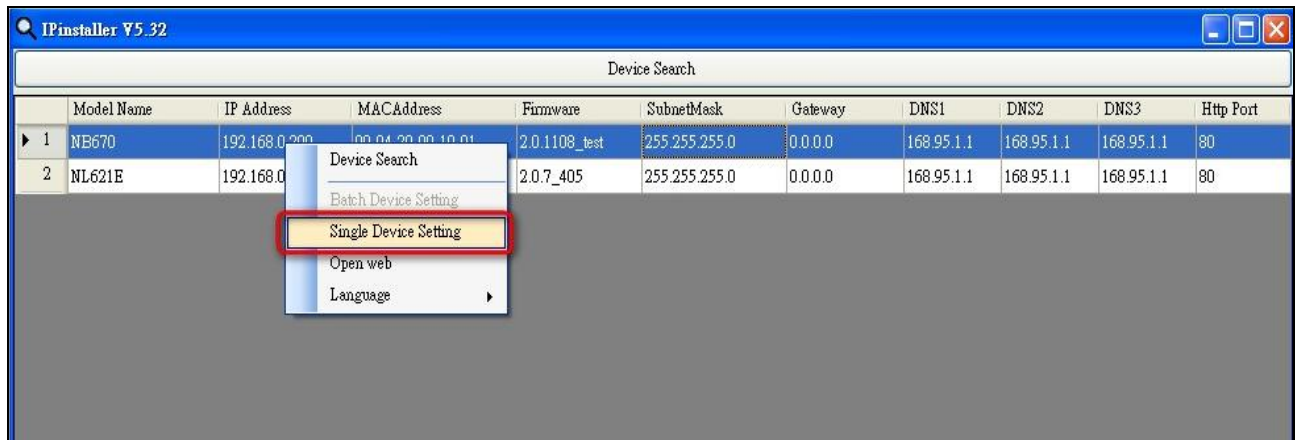
on the desktop,

2. Click the **[Device Search]** to search the device in the LAN.

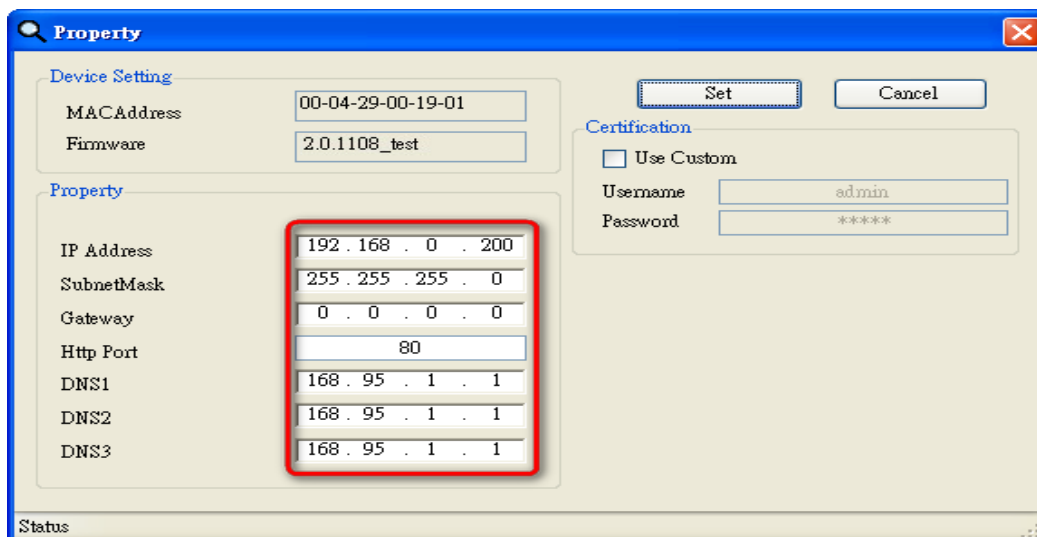
A screenshot of the 'IPInstaller V5.32' application window. The title bar is blue with the text 'IPInstaller V5.32' and standard window controls. The main area is titled 'Device Search' and contains a table with the following data:

	Model Name	IP Address	MACAddress	Firmware	SubnetMask	Gateway	DNS1	DNS2	DNS3	Http Port
▶ 1	NB670	192.168.0.200	00-04-29-00-19-01	2.0.1108_test	255.255.255.0	0.0.0.0	168.95.1.1	168.95.1.1	168.95.1.1	80
2	NL621E	192.168.0.166	00-04-29-0b-c2-01	2.0.7_405	255.255.255.0	0.0.0.0	168.95.1.1	168.95.1.1	168.95.1.1	80

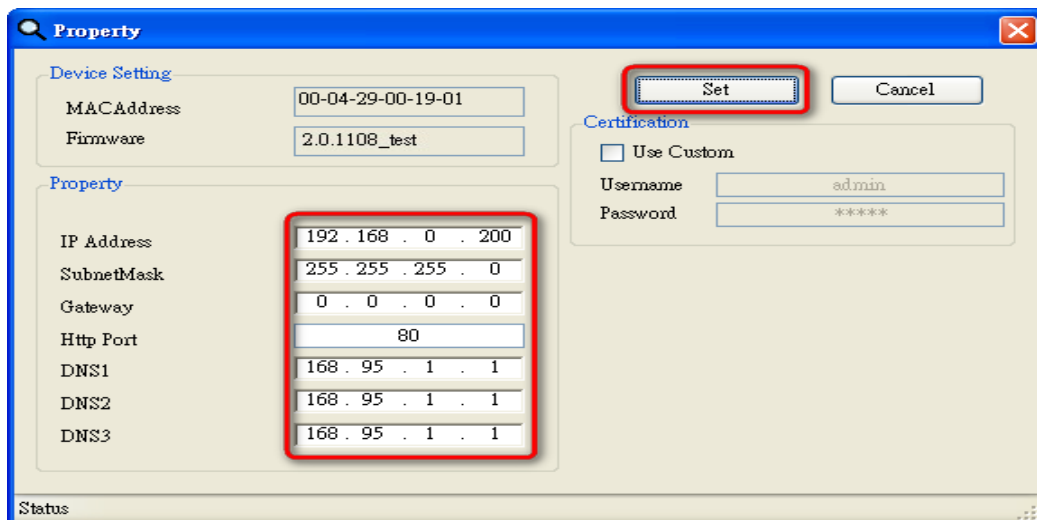
- From the list, select the device with the MAC Address that corresponds to the camera that is to be configured. The MAC Address is identical to the unit's S/N (Serial Number).
- Double click the select item to open the Property Page or right click the item to select the **[Single Device Setting]**.



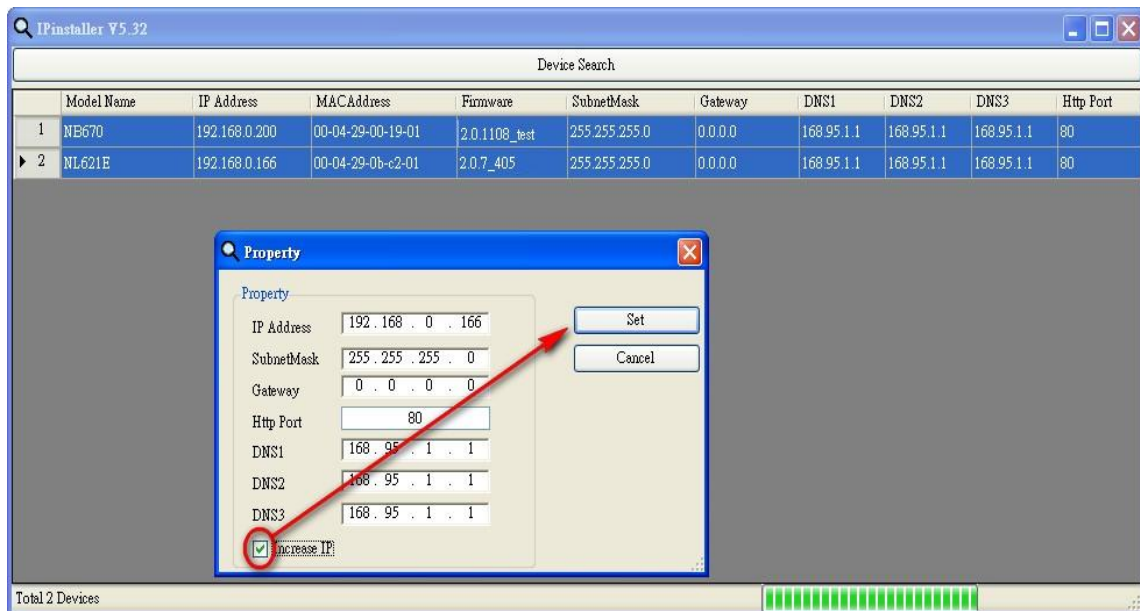
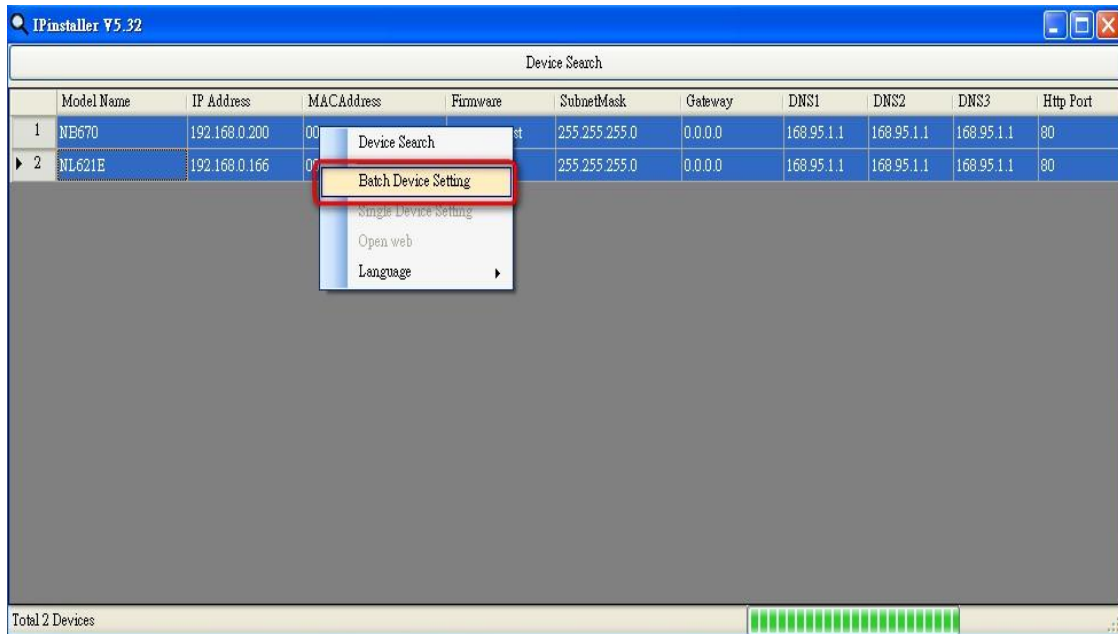
- Modify the network settings of the camera.



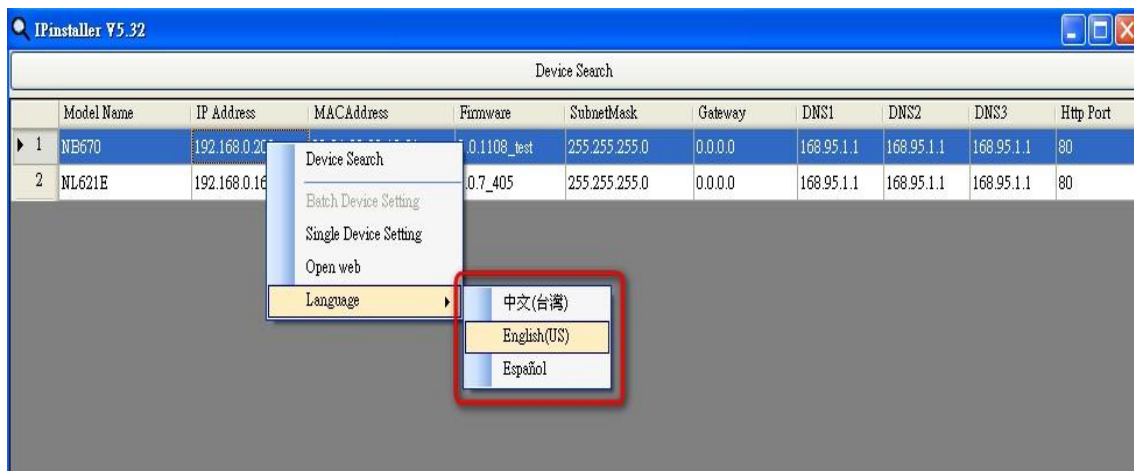
- After filling in the properties, click **[Set]** button to complete the configuration settings.

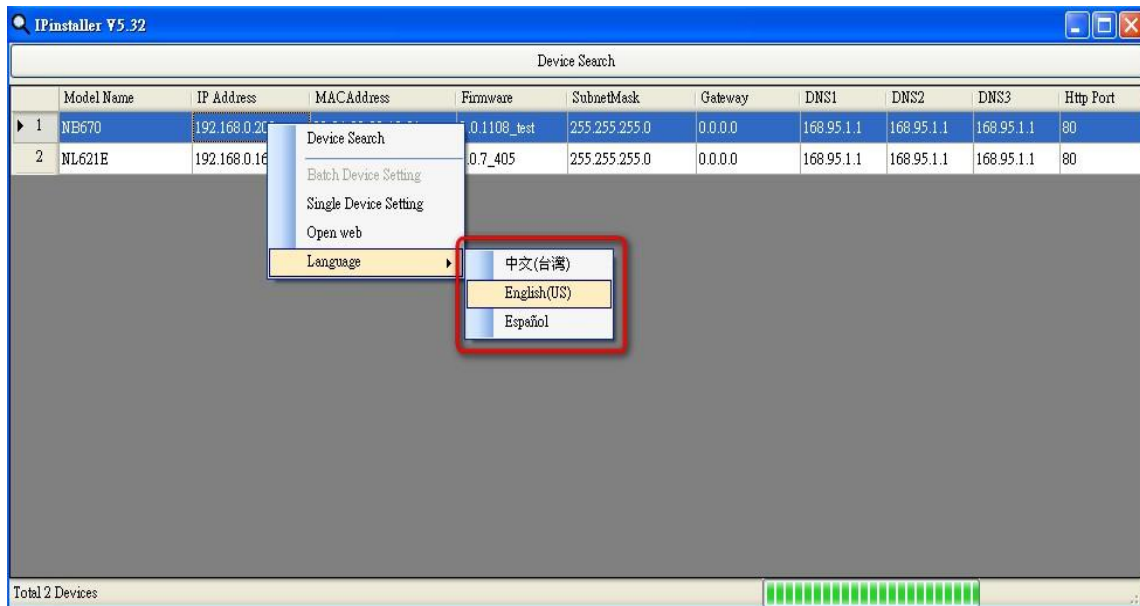


7. Click the **[Batch Device Setting]** to set several devices.



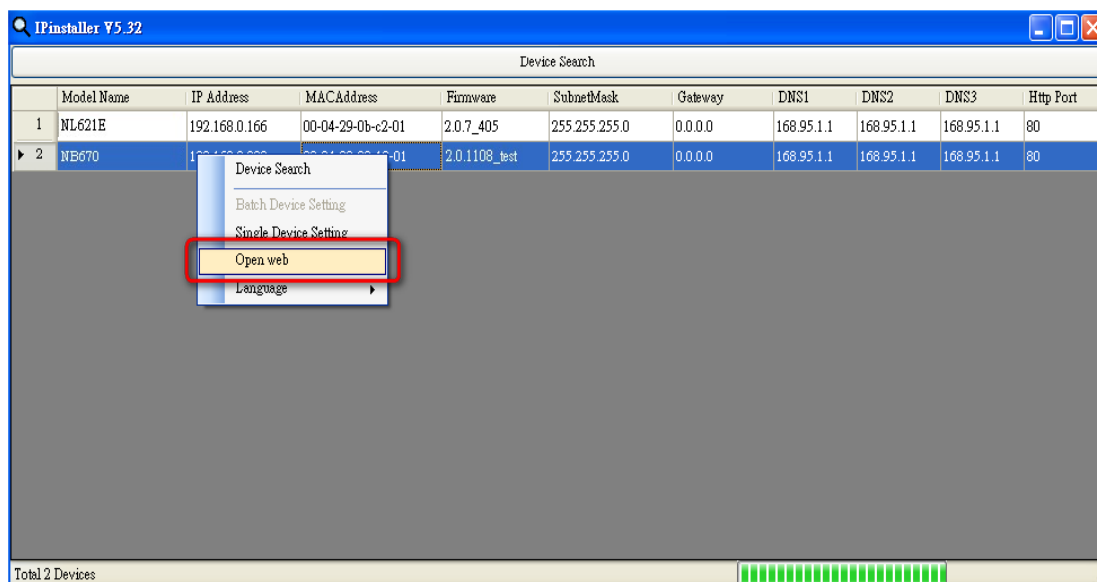
8. Language support for Chinese, English and Spanish.



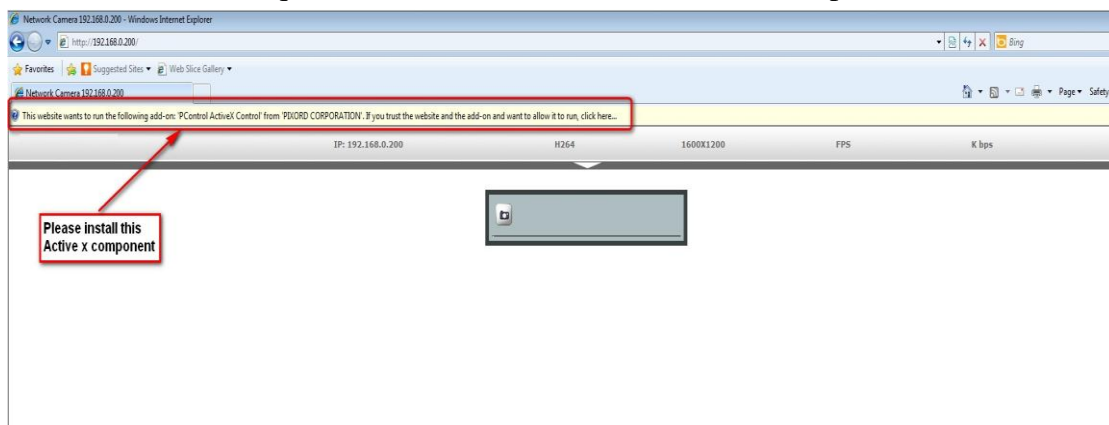


Open the Web-based UI of the Selected camera

1. To access the Web-based UI of the selected unit, run the View > Open Web on the menu bar.



2. For first time user, there will be a prompt to install the ActiveX control. Confirm the installation as it is required to view the video stream and some operations.



3. If the device has been configured correctly, the default Web browser will open to the home page of the selected device.



Verify and Complete the Installation from Your Browser

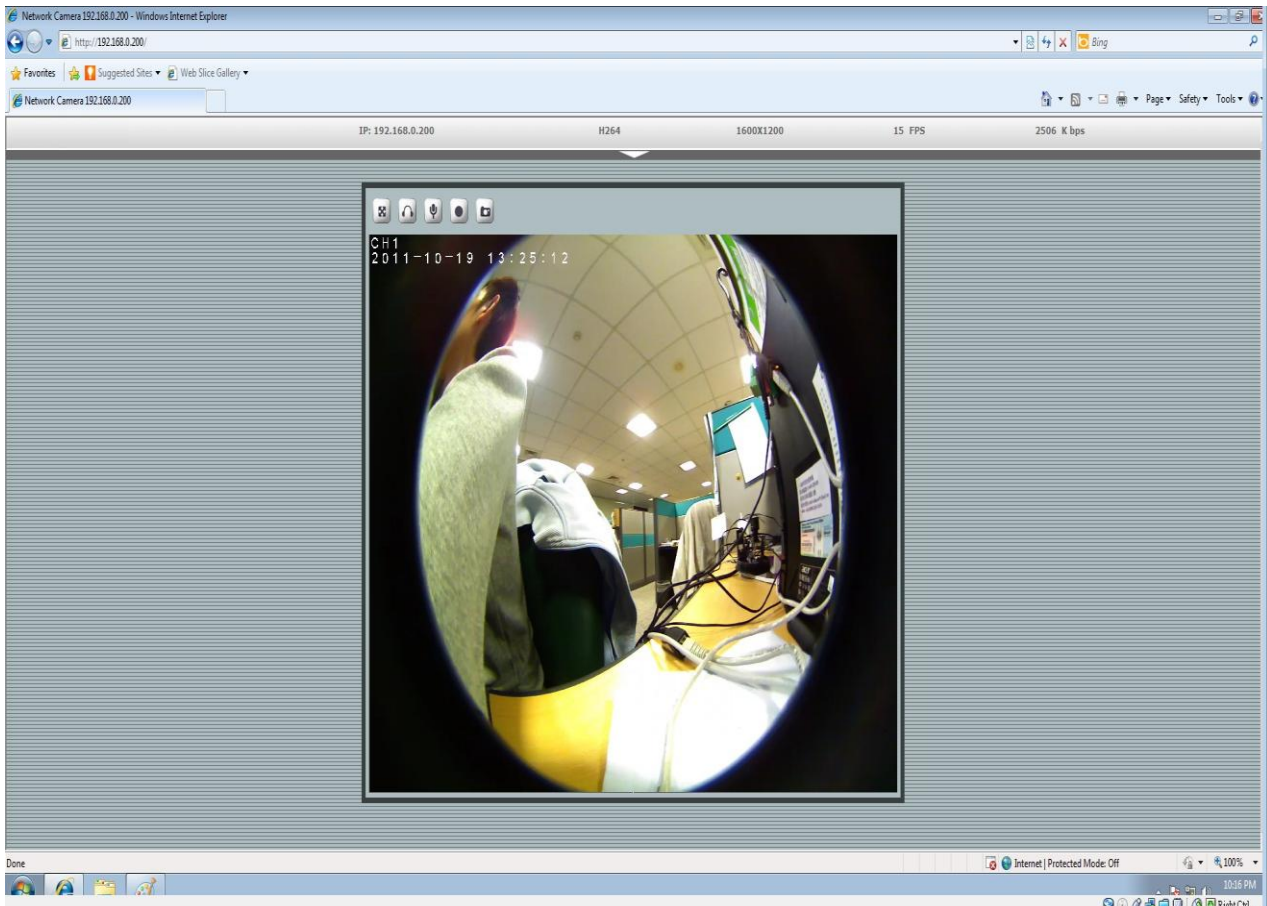
When browsing the Home Page at the first time with the Microsoft Internet Explorer™, you must temporarily lower your security settings to perform a one-time-only installation of the ActiveX component onto your workstation, as described below:

1. From the Tools menu, select [Internet Options]
2. Click the [Security] tab and then click [Custom Level] button to see your current security settings.
3. Set the security level to Low and click [OK].
4. Type the URL or IP address of your camera into the Address field.
5. A dialog box will pop up asking if the ActiveX control should be installed. Click [Yes] to start the installation.

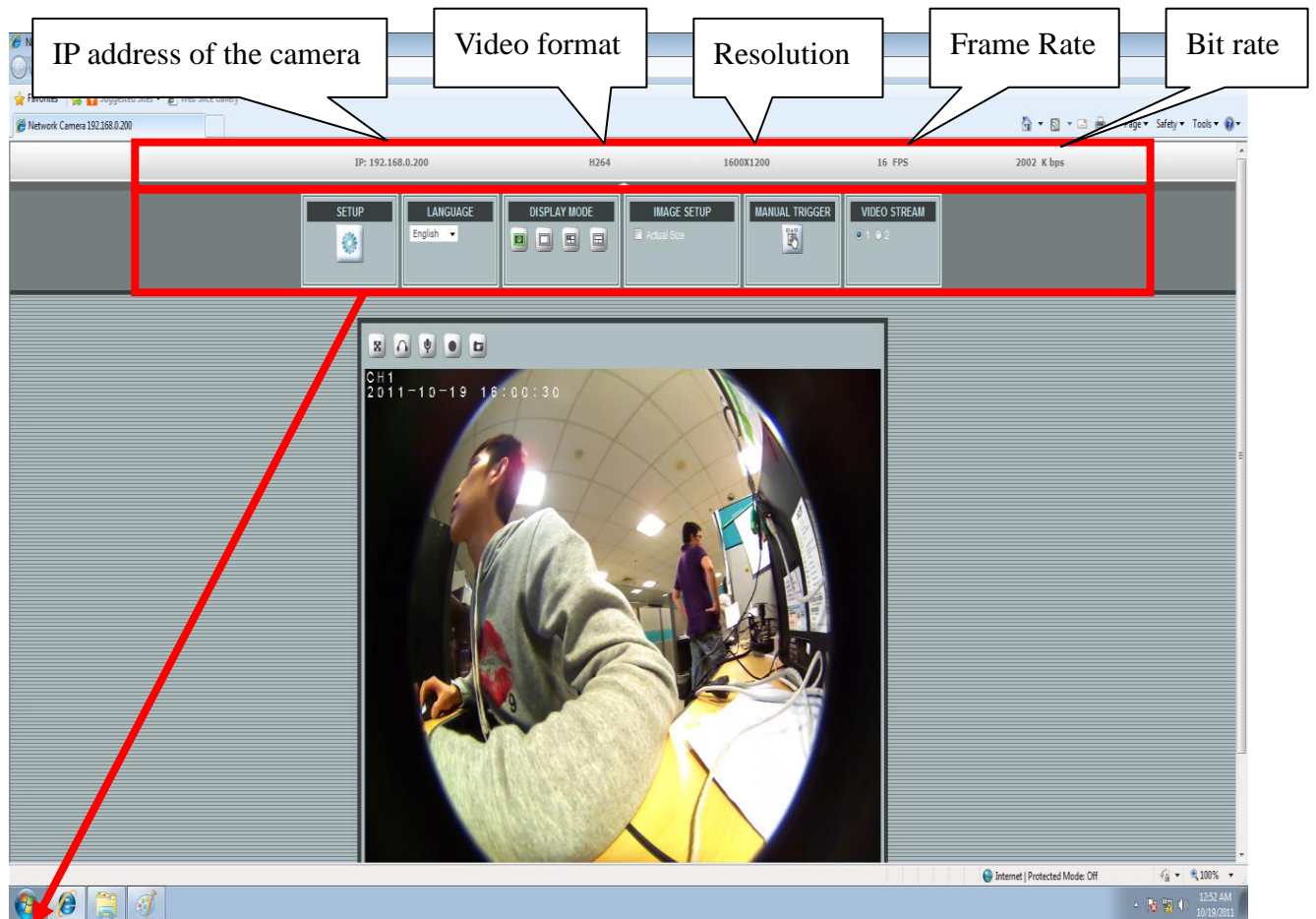
Once the ActiveX installation is complete, return the security settings to their original value, as noted above.

Using the Web UI

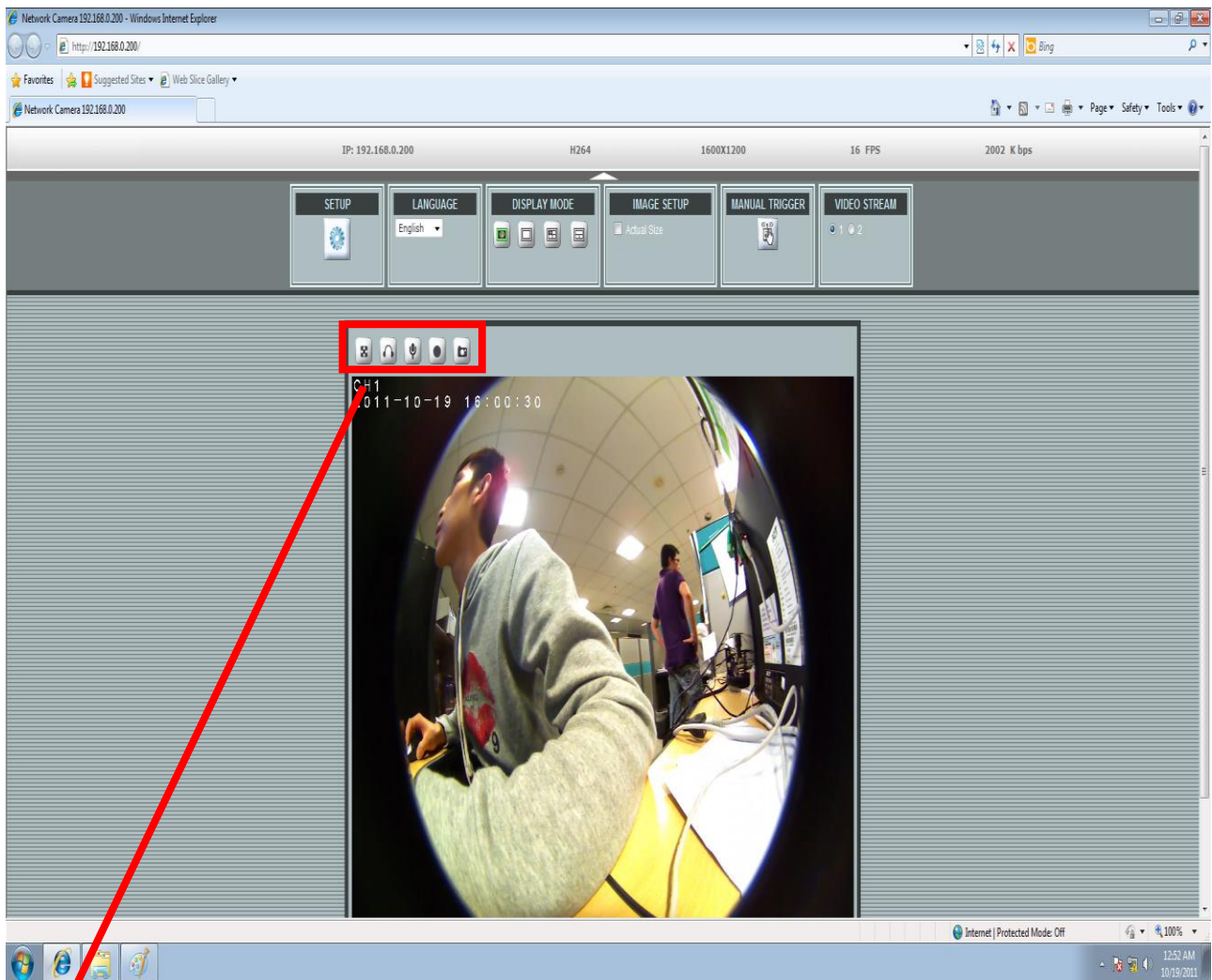
Start your Web browser and enter the URL or IP address in the Address field. The Home page of the camera is now displayed.








1. Live View



Button	Description
	Click for more general/Advanced camera settings
	Select languages among English, traditional Chinese and simplify Chinese
	Click on different video modes to display different views
	Check actual size to view the actual size (resolution) of the image
	Triggers manually a preset event in the configuration page
	Choose among the 2 streams for viewing



Button	Description
	Full screen
	Listen the audio input from local end
	Talk function
	Record instant live video
	Snapshot the image

Configuration Pages List

Video

- General
- Advanced

Camera

- General
- Advanced

Event

- Event Server
- Motion Detection
- I/O ports
- Event Configuration

Schedule

- General
- Storage

Network

- General
- Advanced
- SMTP (E-mail)
- DDNS

System

- Information
- User
- Date & Time
- Server Maintenance
- Log Service

Customize

- Style Layout

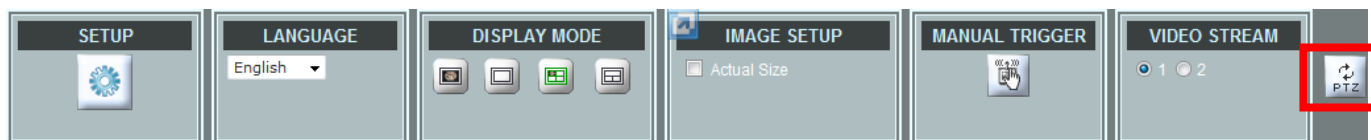
2. Video

General


The screenshot shows a web interface with a top navigation bar containing tabs: Live View, Video (highlighted), Camera, Event, Schedule, Network, System, and Customize. Below this, there are two sub-tabs: General (highlighted) and Advanced. The General tab contains an 'OSD Setting' section with three options: 'Enable' (checked), 'Camera Name' (set to 'CH1' with a '(20 character max)' limit), and 'Date/Time' (checked). A 'Save' button is located at the bottom of the General tab.

OSD Setting

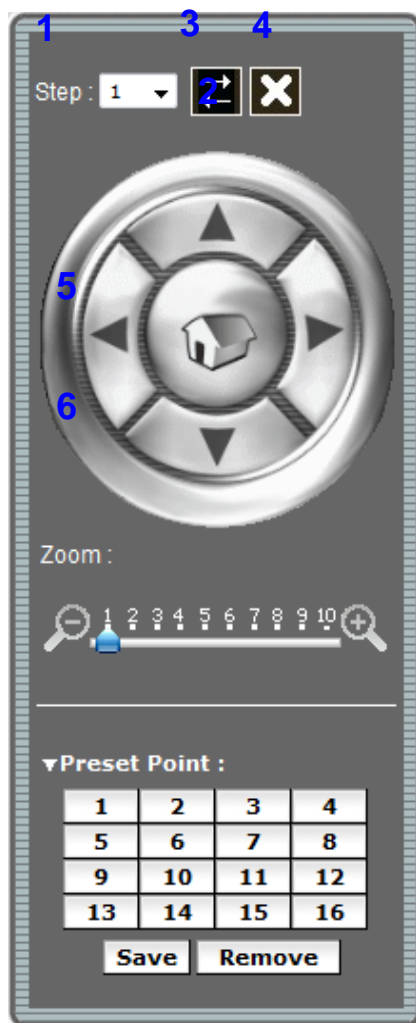
Enable the On Screen Display (OSD) information. A line of text message (e.g. Camera Name or Position) and the date/time string are available to be selected for displaying or hiding on the images.



The PTZ function will display in Quad with source view , Double with source view , Double view and Triple view of Wall and Wall 720P Mount

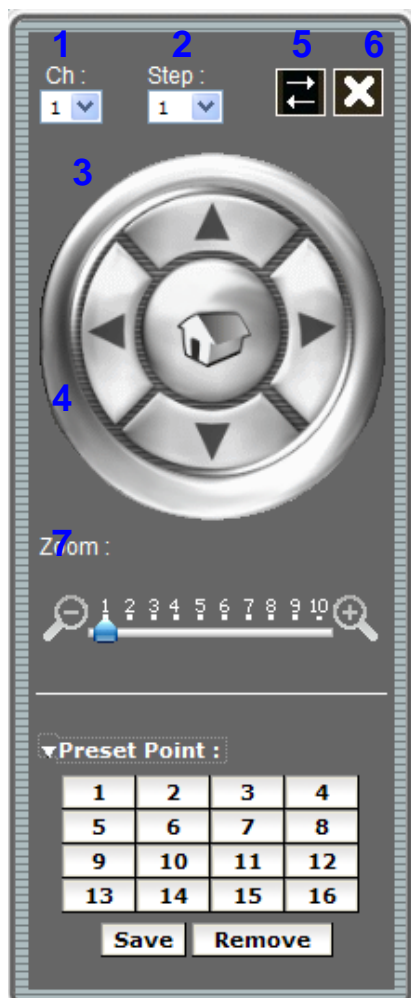
Click on the PTZ  icon, the web will popup the control panel to control e-PTZ function of NB670

Double with source view PTZ control panel:



1. Step: Setting the speed of Pan function. (1~10)
2. Pan Arrow: Click to control Pan function.
3. Move the control panel.
4. Close the control panel.
5. Zoom: Digital zoom in/out.(1~10)
6. List of preset points. (1~16)

Triple & Quad with source & Double view PTZ control panel:



1. Ch : Select the channel. (1~4) & (2~4)
2. Step : Sets the speed of Pan/Tilt function. (1~10)
3. Pan Tilt Arrow : Click to control the Pan/Tilt function.
4. Zoom : Digital zoom in/out. (1~10)
5. Move the control panel.
6. Close the control panel.
7. List of preset points. (1~16)

Advanced

The screenshot shows the 'Advanced' settings tab for video configuration. It contains two main sections: 'Stream 1 Setting' and 'Stream 2 Setting'. Each section has several configurable parameters including RTSP Path, Image Format, Resolution, GOP, Video Mode, Frame Rates, and Target Bit Rates/Quality Level. A 'Save' button is positioned at the bottom of the settings area.

Stream 1 Setting	
RTSP Path:	v00
Image Format:	H.264
Resolution:	1600 x 1200
GOP:	15 (2~32)
Video Mode:	CBR
Frame Rates:	15 (5~15 FPS)
Target Bit Rates:	2000 (1000~6000 Kb)

Stream 2 Setting	
RTSP Path:	v01
Image Format:	H.264
Resolution:	640 x 480
GOP:	15 (2~32)
Video Mode:	VBR
Frame Rates:	15 (5~15 FPS)
Quality Level:	Best

Save

Stream 1 Setting:

- RTSP Path: It is the stream ID used for RTSP client streaming connection, such as VLC player. (default v00)
- Resolution: 1600x1200, 800x600, 640x480.
- Video Mode: Choose between variable bit rate (VBR) and constant bit rate (CBR)
 - <1>: VBR-> Choose quality level from best to standard, for some environment it is very important to ensure the video quality level but after selecting video quality level, the bandwidth consumption will be variable.
 - <2>: CBR-> Choose target bit rate range from 1000kb to 6000kb, for some environment it is very helpful for network bandwidth management but the video quality will be variable up to the complexity of video scene.
- Image Format: 2 kinds of format to choose from; MJPEG and H.264.
- GOP: Choose the number of P-frame or B-frame between I-frame from 2 to 32, the shorter of the number
 - Indicates the higher video quality you may get, while it will consume more network bandwidth and storage size.
- Frame Rates (FPS): input the number of frames to display per second from 5 to 15

3. Camera

General

Live ViewVideoCameraEventScheduleNetworkSystemCustomize

GeneralAdvanced

CH1
2011-10-19 18:11:07



Camera General Setting

Brightness:

0

Hue:

0

Saturation:

0

Contrast:

0

Sharpness:

0

Audio Setting

☒ Audio Enable

Encoder:

G711

Bitrate:

64000

Input of Listen Pattern:

☒ Mic In

☐ Line In

Output of Talking Pattern:

☒ Speaker Out

☐ Line Out

Web Record Setting

Save Path:

File Name:

Browse

Web Snapshot Image Setting

Save Path:

File Name:

Browse

DefaultSave

Camera General Setting:

Brightness: the luminance of image view

Hue: refer to pure a pure color, or described by its name, such as red, green or blue.

Saturation: intensity of a specific color

The 3 correlates are referring image appearance in terms of color/vision. These are adjustable from this page.

Rotation: rotate the image, so it looks up-side down. This can be applied when camera unit must be ceiling mounted and the image is therefore reversed.

Audio Setting:

Enable this option, so the video stream will be transferring accompanied with the audio data.

Web Record/Snapshot Setting:/

Web Record / Snapshot: define the location where snapshot images and video clips will be stored.

The file name is referring to the prefix of the actual file name of each snapshot image or video clip generated.

Default:

Set [**camera general setting**] and [**audio setting**] back to default

Note: Will not change the configuration of [**Web Record Setting**] and [**web Snapshot Image Setting**]

Save:

Save the changes that have been made

Advanced

Live View

Video

Camera

Event

Schedule

Network

System

Customize

General

Advanced

CH1
2011-10-20 15:15:36



Camera Advanced Setting:

White balance:

Auto

Exposure:

Flicker-free 50 Hz

Max Exposure Time:

1/30

s

Max Gain Control:

36

dB

Infrared(IR) Cut Filter:

Auto

Day / Night Threshold:

20

(Lux , Default: 20)

Color/Mono Mode:

Auto

Camera Mount:

Ceiling

Save

White balance: Adjustment to compensate for different environments in terms of light source.

Exposure: Anti-flicker setting for image sensor to fit the frequency of light (power) source. For instance, the power frequency is 50Hz for most European countries, while 60Hz is typically for US. This setting is therefore regionally different. **Note: Default setting is 50Hz**

Max Exposure Time: Referring to the shutter speed.

Max Gain Control: The amplification factor for the incoming light.

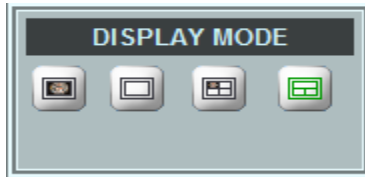
Infrared (IR) Cut Filter: The default is automatically switched according to the light intensity. Enable indicates the filter is enable to cut IR light to make sure the color is correct, Disable indicates the filter is disabled and allows the infrared (such as IR LED illuminator) to enter the camera to execute low lux surveillance application,

Day / Night Threshold: The threshold to change Day or Night mode, default is 20 lux, it indicate that when the lux is lower than 20 lux, the camera will automatically change to night mode and allow Infrared to enter the camera.

Color/Mono Mode: The default is automatically switched according to light intensity. It can also be forced to display color image even in a low light environment.

Camera Mount: Choose camera mounting type; Wall, Ceiling, Wall 720P

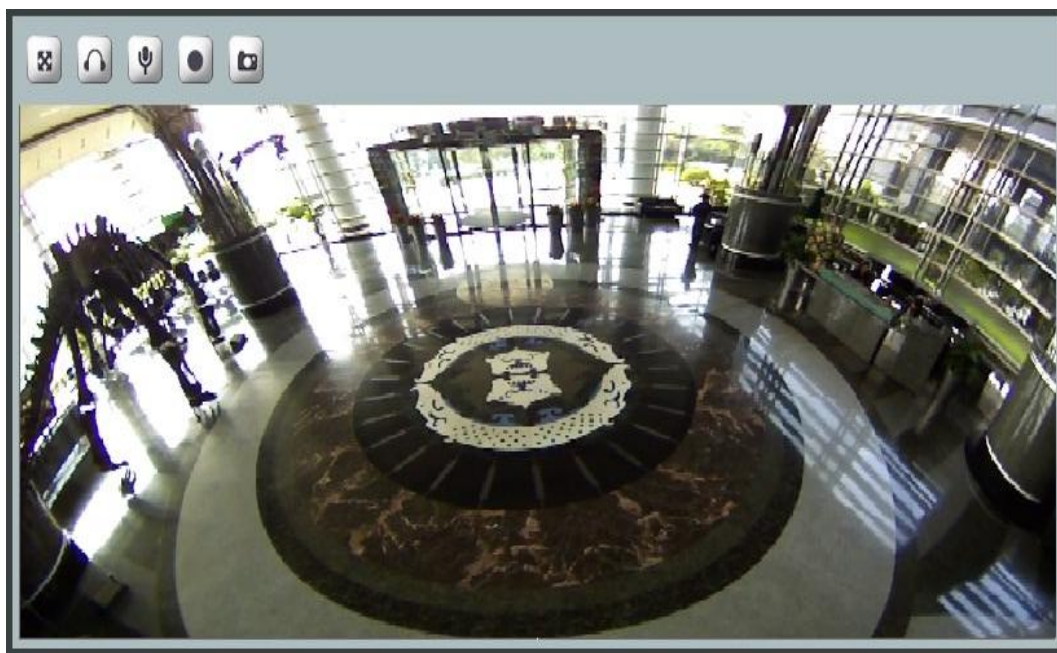
Wall Mount: Choose Wall mount type, Go back to Live view, there are 4 kinds of video layout to choose including Original view, Broad view, Quad with source view and Triple view.



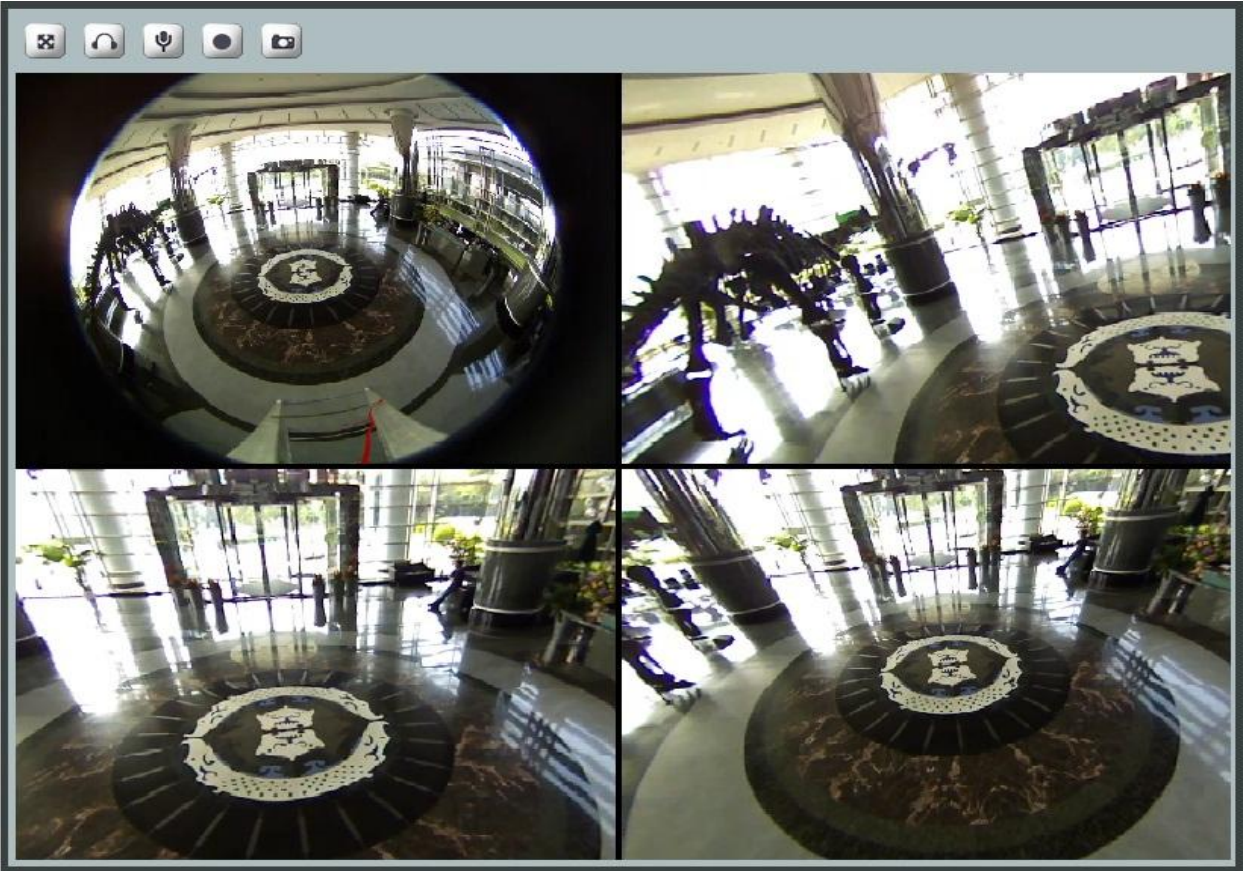
1: Original view



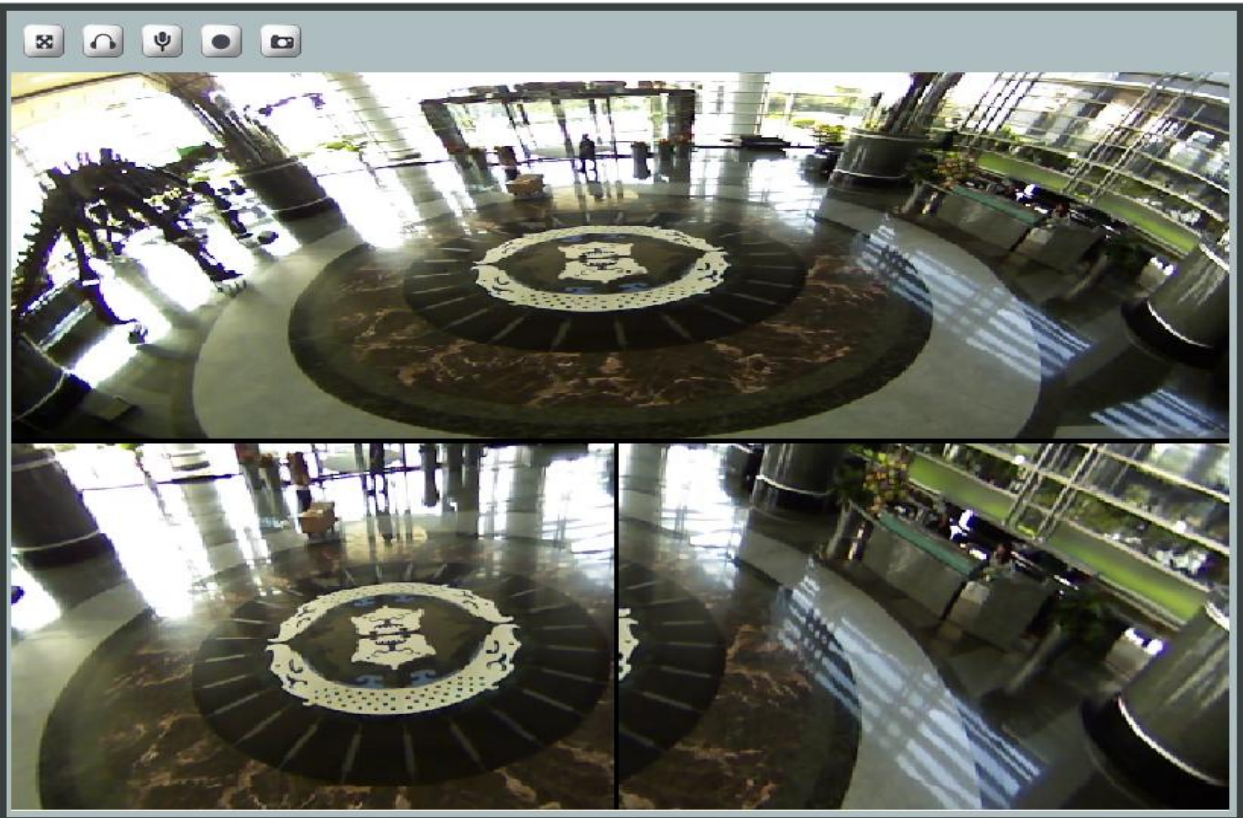
2: Board view



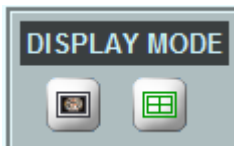
3: Quid with source view



4: Triple view



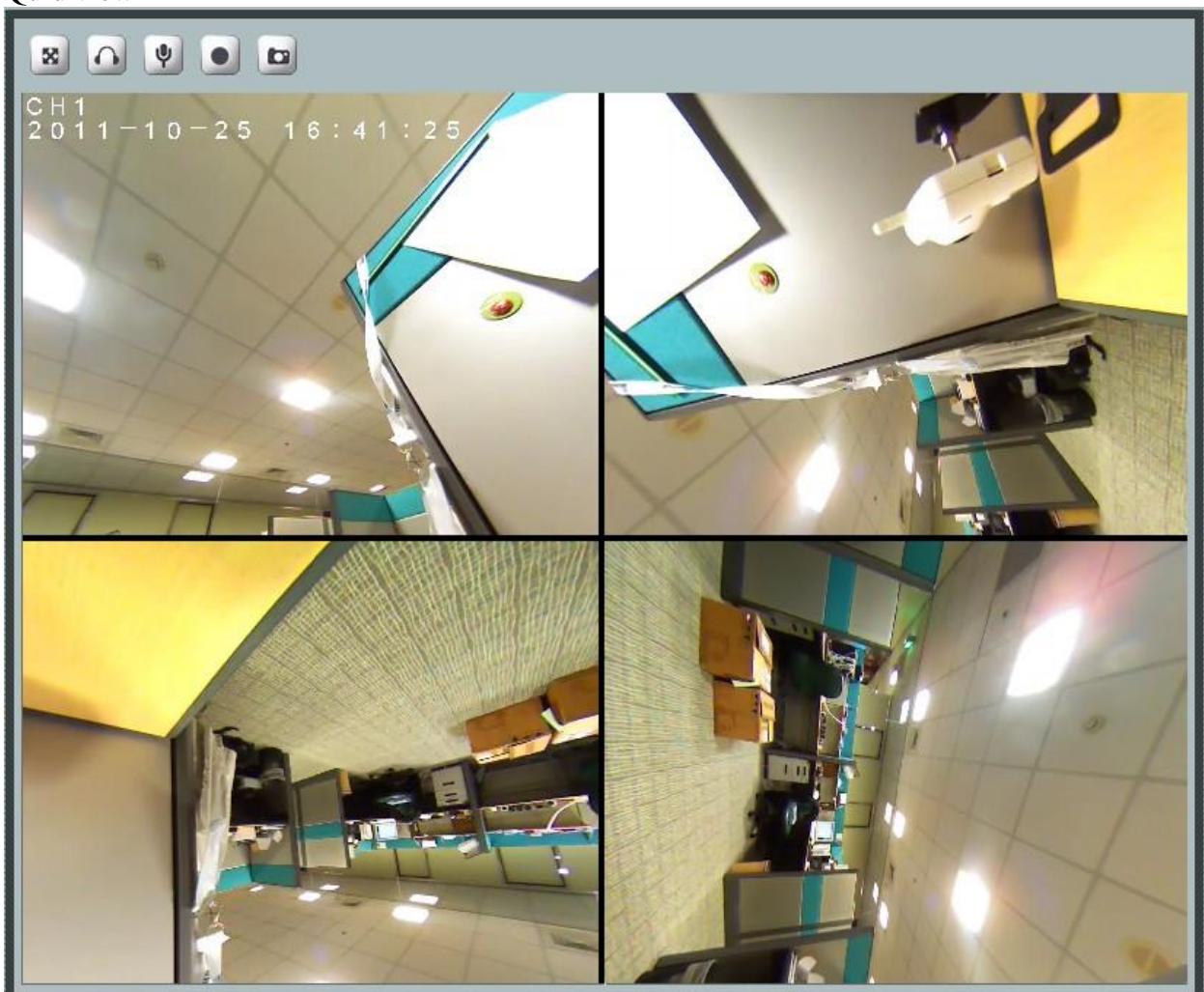
Ceiling Mount: Choose Ceiling mount, Go back to live view, there are 2 kinds of video layout to choose from; Original view, Quad view,



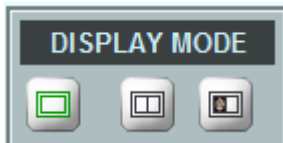
1: Original view



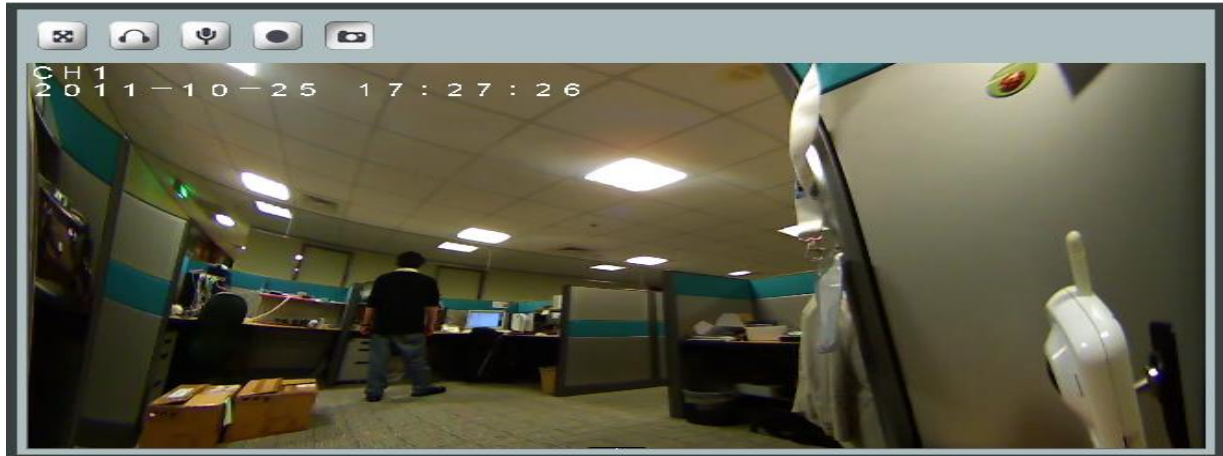
2: Quad view



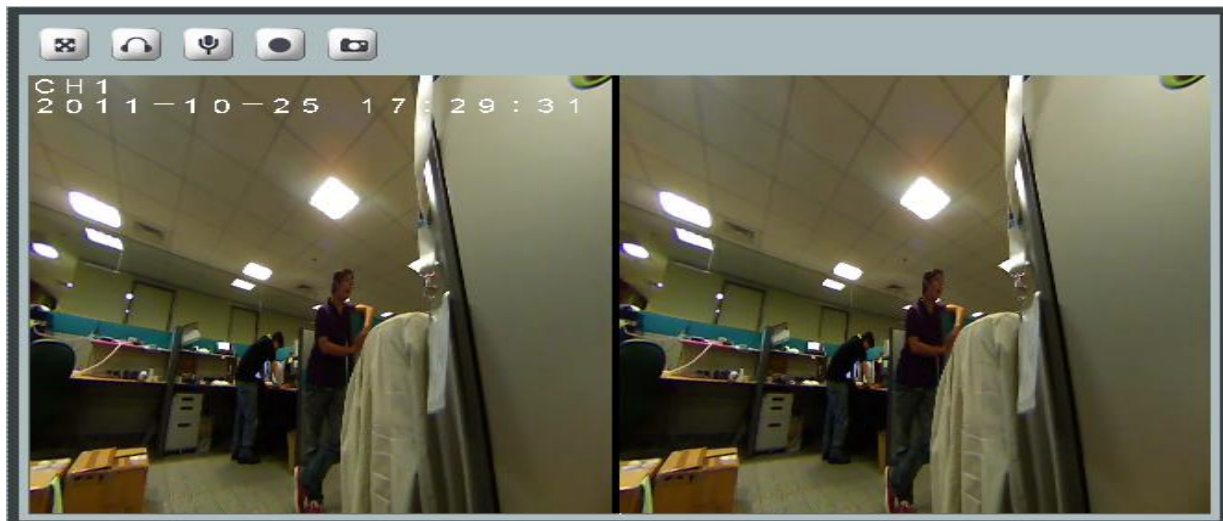
Wall 720P Mount: Choose Wall 720P mount type, Go back to Live view, there are 3 kinds of video layout to choose including Broad view 、Double view 、Double with source view



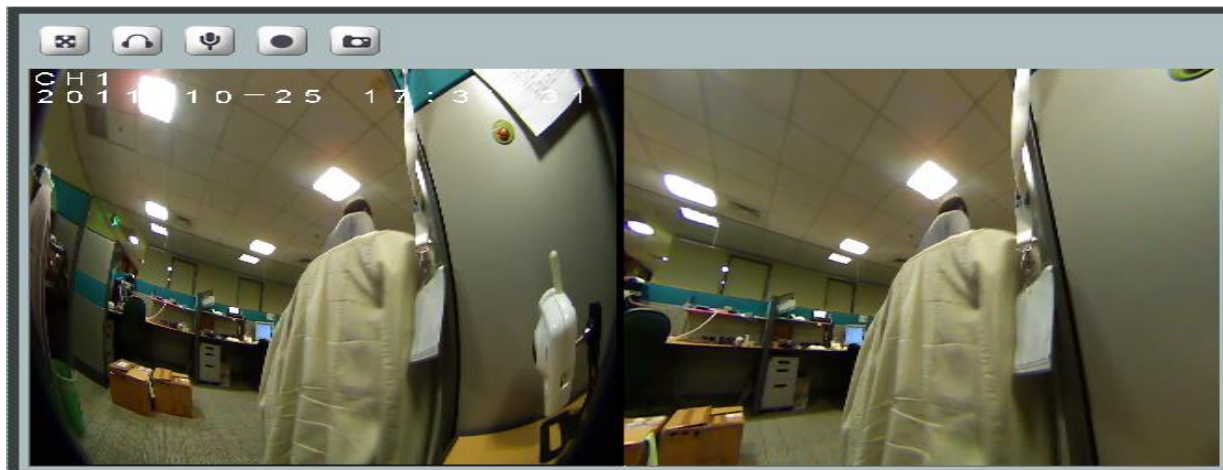
1:Board view



2:Double view



3: Double with source view



4. Event

Live ViewVideoCamera**Event**ScheduleNetworkSystemCustomize

Event ServerMotion DetectionI/O PortsEvent Configuration

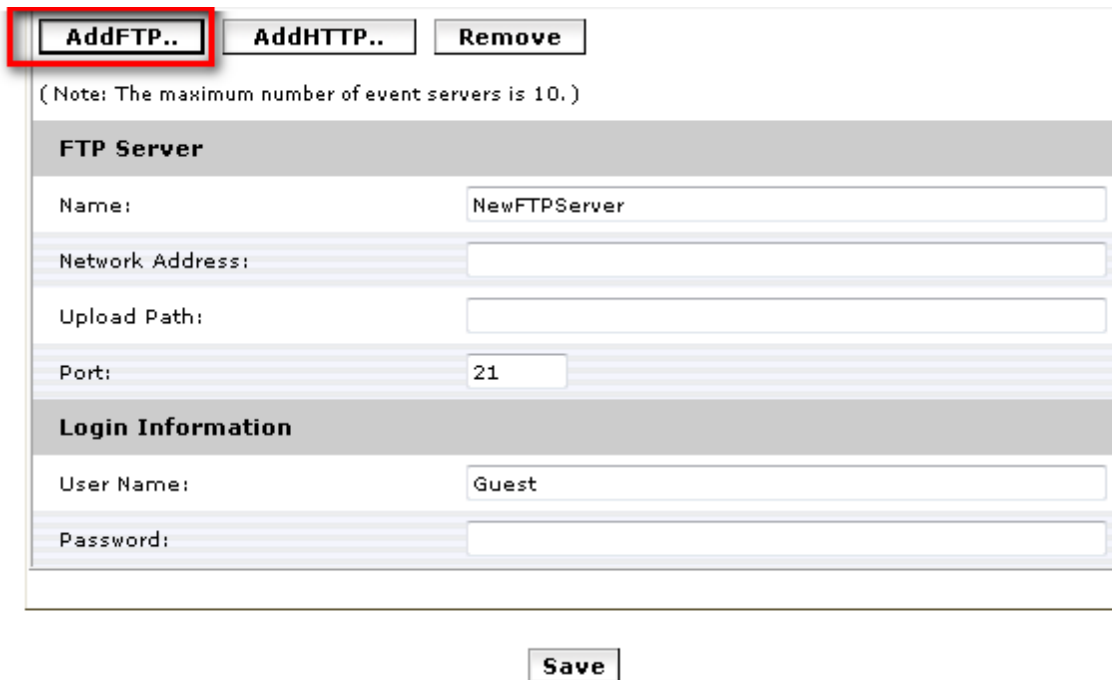
Event Server List

Name	Protocol	Network Address	Upload Path	User Name
------	----------	-----------------	-------------	-----------

AddFTP..AddHTTP..Remove

(Note: The maximum number of event servers is 10.)

Event Server



The screenshot shows a web interface for configuring event servers. At the top, there are three buttons: "AddFTP..", "AddHTTP..", and "Remove". The "AddFTP.." button is highlighted with a red rectangular box. Below these buttons, a note states: "(Note: The maximum number of event servers is 10.)". The main configuration area is titled "FTP Server" and contains several input fields: "Name:" with the value "NewFTPServer", "Network Address:", "Upload Path:", "Port:" with the value "21", "Login Information" section, "User Name:" with the value "Guest", and "Password:". At the bottom of the form is a "Save" button.

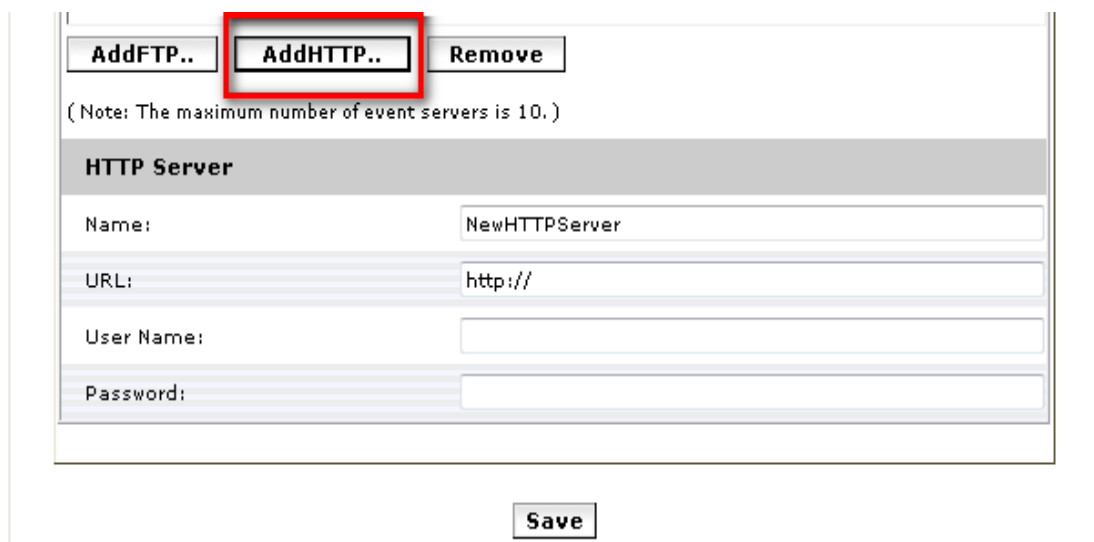
Click on the [Add FTP] to expand FTP server setting

FTP Server:

- Name: Give a name for the FTP server
- Network Address: Input the network address of the FTP server
- Upload Path: Choose the desired upload path for events
- Port: Input the port number of the FTP server

Login Information:

- Username / Password: Input the username and password of the FTP



The screenshot shows the same web interface as before, but now the "AddHTTP.." button is highlighted with a red rectangular box. The configuration area is titled "HTTP Server" and contains input fields for "Name:" (value "NewHTTPServer"), "URL:" (value "http://"), "User Name:", and "Password:". The "Save" button is still at the bottom.

Click on the **[Add HTTP]** to expand HTTP server setting.

HTTP Server:

- Name: Give a name for the HTTP server
- URL: Input the network address of the HTTP server
- Username / Password: Input the username and password of the HTTP

The screenshot shows a web interface with a top navigation bar containing tabs: Live View, Video, Camera, Event (selected), Schedule, Network, System, and Customize. Below this, a sub-navigation bar has tabs: Event Server (selected), Motion Detection, I/O Ports, and Event Configuration. The main content area displays the 'Event Server List' table.

Name	Protocol	Network Address	Upload Path	User Name
NewFTPServer	FTP			Guest
NewHTTPSe...	HTTP	http://		

Below the table are three buttons: AddFTP.., AddHTTP.., and Remove (circled in blue). A note at the bottom states: (Note: The maximum number of event servers is 10.)


Click **[Remove]** to delete selected event servers (circled in blue)

Motion Detection

Live ViewVideoCamera**Event**ScheduleNetworkSystemCustomize

Event Server**Motion Detection**I/O PortsEvent Configuration

CH1
2011-10-25 18:03:48



Refresh

Motion Detection List

Windows Area Name

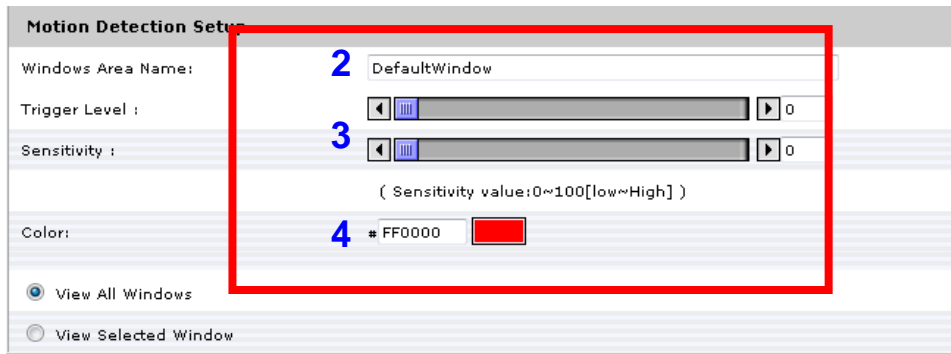
1

AddDel

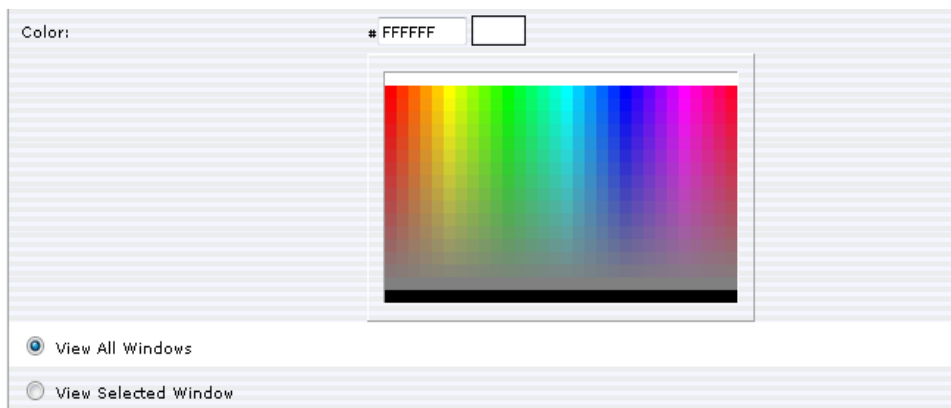
(Note: The maximum number of motion detections is 10.
Set New Motion Detection Area :
1. Click 'Add' and rename the windows area.
2. Drag a detection area on the image.)

To add a motion detection area:

1. Click on **[Add]** to set up a detection area.
(Set up panel will be expanded)



2. Give a name to this window area.
3. Select the trigger level and sensitivity for this detection window. (0~100, low~high)
4. Select color for detection window.



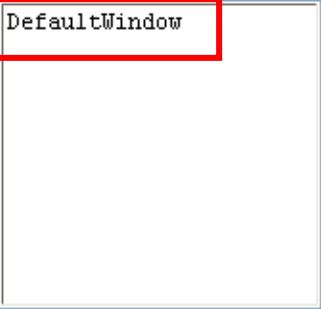
5. Draw detection window on the image.



6. Once everything is done, click on **[Save]** to save the configuration made.

Configured detection window will be displayed in motion detection list. (Circled in blue)

Motion Detection List

Windows	Area Name
	DefaultWindow

(Note: The maximum number of motion detections is 10.
Set New Motion Detection Area :
1. Click 'Add' and rename the windows area.
2. Drag a detection area on the image.)

Note:

1. Maximum number of detection window is 10.

I/O Ports

This model supports 1 photo-coupled relay inputs and 1 relay outputs, see “**I/O Terminal Connectors**” for detail pin description and application. The tab shows the status of them; with external trigger/alarm devices.

Live View	Video	Camera	Event	Schedule	Network	System	Customize
-----------	-------	--------	-------	----------	---------	--------	-----------

Event Server	Motion Detection	I/O Ports	Event Configuration
--------------	------------------	-----------	---------------------

Input Ports Setting	
Name:	Input1
Current State:	high

Output Ports Setting	
Name:	Output1
Current State:	low

Event Configuration

The Event Configuration is to assign the actions responding to the specified events (Trigger Conditions).

The table lists the configured events. Click on “**Add...**” or choose an event from the list to expand the panel for detail configurations. “**Remove**” is to delete a selected event.

The screenshot shows the 'Event Configuration' window. At the top, there are 'Add...' and 'Remove' buttons. Below them is a note: '(Note: The maximum number of events is 10. Fu=FTP Upload, Eu=Email Upload, Du=Disk Upload, O=Output Port, En=Email Notification, Hn=HTTP Notification, Tn=TCP Notification.)'. The main section is titled 'Event Type Setup'. It contains a 'Name:' field with 'NewEvent' entered. Below it is 'Set min time between triggers:' with a value of '00:00:00' and a maximum of '(max 23:59:59)'. The 'Respond to Trigger' section has three radio buttons: 'Always' (selected), 'During time between', and 'Never'. The 'During time between' section is expanded, showing days of the week (Sun, Mon, Tue, Wed, Thu, Fri, Sat) and 'Start Time' and 'Duration' fields. The 'When Triggered...' section is also expanded, showing a list of actions: 'Upload Images' (checked), 'Activate Output Port', 'Send Email Notification', 'Send HTTP Notification to', and 'Send Message Notification (TCP)'. A dropdown menu for 'Select Upload type:' is open, showing 'FTP', 'Email', and 'Disk'. At the bottom, there is a 'Save' button.

1. To add an event trigger, click on **Add...** and setup panel will be expanded.

2. Give a name to this event.

3. Set the time interval between each trigger.

4. Set the time period for the trigger. Choose “Always” or “During time between” or “Never”.

5. The trigger condition is Motion Detection.

The responding actions can be “Upload images” and “Activate Output Port” and “Send Email Notification” and “Send HTTP Notification to” and “Send Message Notification (TCP)”.

6. Click on **Save** to save the configuration made.

5. Schedule

General

Define the day (specified by days of a week) and time (specified by each single hour) for that will be recording during the scheduled period. Note that only video data will be recorded. User can select which video stream should be recorded, and the size of each sliced file. When the check box is ticked and setting is saved, recording process starts. Recording files are saved to the Micro SD storage.

Live ViewVideoCameraEventScheduleNetworkSystemCustomize

GeneralStorage

☒ Enabled

Stream: ☒ 1 ☐ 2

Slice File Size: 50 (MB)

Save Device Type: Local Disk

All	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
Mon.																								
Tue.																								
Wed.																								
Thu.																								
Fri.																								
Sat.																								
Sun.																								

☒ Scheduled

Save

Storage

Display the storage information, includes disk size info, type and status. The warning message (red text) shows when recording is on process; SD card should not be removed during the recording process.

The screenshot shows a web interface with a top navigation bar containing tabs: Live View, Video, Camera, Event, Schedule (highlighted in red), Network, System, and Customize. Below this, there are two sub-tabs: General and Storage (highlighted in blue). The Storage tab displays the following information:

Disk Status	
Total Size:	7761928 KB
Used Size:	5164 KB
Free Size:	7756764 KB
Disk Type:	SD
Disk Status:	recording

Below the table are three buttons: Refresh, Browse, and Remove Event Images. At the bottom, a red warning message states: "The system is recording now, please stop recording first!"









The “**Browse**” button allows viewing the list of recorded files. The web page will then be redirect to the root path of the SD storage (if one is inserted). The list includes couple of folders, the **Oevent_images** which contains all the still images captured by any event trigger, and **folders specified by date** where the recorded video files are located.

Index of /SD/

Name	Last modified	Size	Description
 Parent Directory			
 Oevent_images/	25-Oct-2011 16:21	4K	
 20111027/	27-Oct-2011 15:40	4K	

Mbedthis Appweb 2.4.2 at Port 80

The recorded files are named in **date_time format**, and the extension file name is “**.h264**”. While file is in h264 raw format, it can be played in **VLC** player. Note that the recorded file includes video only; no audio information is recorded.

Index of /SD/20111027/15/			
<u>Name</u>	<u>Last modified</u>	<u>Size</u>	<u>Description</u>
 Parent Directory			
 201110271540%9.h264	27-Oct-2011 15:41	2.2M	
 20111027154114.h264	27-Oct-2011 16:00	50.7M	
 20111027154450.h264	27-Oct-2011 15:48	50.6M	
 20111027155546.h264	27-Oct-2011 15:59	50.3M	
 20111027155922.h264	27-Oct-2011 16:03	50.9M	
 2011127155209.h264	27-Oct-2011 15:55	50.6M	
 209110~4.126	27-Oct-2011 15:52	50.7M	

Mbedthis Appweb 2.4.2 at Port 80

※ Noted~!! Please into the SD memory card in the slot before start the machine~!!

6. Network

General

Device IP configuration, includes DHCP and Static IP setting. “Enable ARP/Ping” enable device to accept ARP or ping packets from the network. Disable this option may provide extra security from intentional ping.

Live View	Video	Camera	Event	Schedule	Network	System	Customize
-----------	-------	--------	-------	----------	----------------	--------	-----------

General	Advanced	SMTP(E-Mail)	DDNS
----------------	----------	--------------	------

☒ DHCP Service

☐ Static IP Address:

IP Address:

Netmask:

Gateway:

DNS 1:

DNS 2:

☐ PPPoE:

User Name:

Password:

(Note : Please make sure 'Email Setting' has been set!)

☒ Enable ARP/Ping

Save

Advanced

Enable or configure other network functions.

The screenshot shows a web interface with a top navigation bar containing tabs: Live View, Video, Camera, Event, Schedule, Network (highlighted with a red underline), System, and Customize. Below this is a sub-navigation bar with tabs: General, Advanced (highlighted with a blue underline), SMTP(E-Mail), and DDNS. The main content area is titled 'Advanced' and contains several configuration sections:

- NTP Configuration:** Two radio buttons. The first is 'Obtain NTP server address via DHCP'. The second is 'Use the following NTP server address:', which is selected. Below it is a text input field for 'Network address:' containing 'time.stdtime.gov.tw' and a note '(host name or IP address)'.
- HTTP Setting:** A text input field for 'HTTP Port:' containing '80' and a note '(0 ~ 65535, Default : 80)'.
- RTSP Setting:** A text input field for 'RTSP Port:' containing '554' and a note '(0 ~ 65535, Default : 554)'.
- UPnP Notification:** A checkbox labeled 'Enable UPnP' which is checked.
- NAT Traversal Setting:** A checkbox labeled 'Enable NAT Traversal' which is unchecked.

At the bottom of the configuration area is a 'Save' button.

NTP: Configure a NTP (Network Time Protocol) server, so that the device system date and time can be synchronized with a specified Time Server. This configuration is provided for one of the options of system date/time adjustment.

HTTP: set the HTTP port that will be applied for Web UI access.

RTSP: set the RTSP (Video) port for video data transmission.

UPnP: Enable UPnP, so that the device can be discovered in an UPnP Compliant Network.

NAT Traversal: Enable NAT traversal, so that client from Internet can have access to the devices behind the Router.

Note: with UPnP enabled, the IP Sharing device (Router) capable of UPnP function will automatically be noticed with the device's NAT port.

SMTP (E-Mail)

Configure an email host in the device that will send email on behalf of the configured email account in a circumstance like sending an email notice to a specified mail address (Event Configuration).

Sender: Complete the Mail Server, Server Port, Authentication information (if required) and the sender's email address.

Receiver: The receiver email address.

The screenshot shows a web management console with a top navigation bar containing tabs: Live View, Video, Camera, Event, Schedule, Network (highlighted in red), System, and Customize. Below this is a sub-navigation bar with tabs: General, Advanced, SMTP(E-Mail) (highlighted in blue), and DDNS. The main content area is titled "SMTP (email) Setting" and contains the following fields:

- Mail Server: (host name or IP address)
- Server Port: [0..65535]
- ☐ Authentication
 - User Name:
 - Password:
- From (Email Address):
- Send email to:

At the bottom right of the form is a **Test** button. At the bottom center of the console is a **Save** button.

DDNS

Dynamic DNS configuration; the network device can be assigned and accessed with a host name instead of IP address by registering this service (Internet access required).

Host Name: Assigned name that will be used for access to the device

User Name/Password: Account authentication for logging to this service

Update Time: Periodically, the device updates its access info to sever in the configured time.

Response: the device responds the connection info.

The screenshot shows a web management interface with a top navigation bar containing tabs: Live View, Video, Camera, Event, Schedule, Network (highlighted in red), System, and Customize. Below this, there is a sub-navigation bar with tabs: General, Advanced (highlighted in blue), SMTP(E-Mail), and DDNS. The main content area is titled "Dynamic DNS Setting" and contains the following fields:

- ☐ DDNS Enable
- Host Name:
(Link to <http://www.dyndns.org>)
- User Name:
- Password:
- Update Time: (600~86400 Seconds)
- Response:

At the bottom of the form is a "Save" button.

7. System

Information

Lists of System and Network configurations

Live View	Video	Camera	Event	Schedule	Network	System	Customize
-----------	-------	--------	-------	----------	---------	---------------	-----------

Information	User	Date & Time	Server Maintenance	Log Service
--------------------	------	-------------	--------------------	-------------

System	
Model:	NB670
System up time:	2011-11-14 15:22:30
Firmware version:	2.0.1108_test
MAC Address:	00:04:29:00:19:01
ActiveX Control version:	1.0.1.149
Ethernet	
Status:	Connected
Mode:	STATIC
IP Address:	192.168.2.162
Netmask:	255.255.255.0
Default Gateway:	192.168.2.254
PPPoE	
Status:	No connection
IP Address:	none
DNS Server	
Primary DNS IP address:	168.95.1.1
Secondary DNS IP address:	168.95.1.1
DDNS	
Status:	no

Refresh

User

Sets the users for accessing the network camera for viewing and configuring the device. Enabling anonymous login allows guest users access the Web User interface without any authentication.

Note: For configuration settings an Administrator username and password is still required. The default username and password is admin/admin respectively.

User Setting

☒ Enable anonymous login (no user name or password required)

User List

User Name	User Group
admin	Administrator

Add... **Remove**

Save

Date & Time

System date/time configuration. Options of synchronizing with PC and NTP server are provided for automatic adjustment.

Live ViewVideoCameraEventScheduleNetworkSystemCustomize

InformationUserDate & TimeServer MaintenanceLog Service

Current Server Time

Date:2011-10-28Time:11:30:47

Set Server Time

Time Mode:

☐ Synchronize with computer time

Date:2011-10-28Time:11:22:17

☐ Synchronize with NTP server

Time zone:

GMT+08 (Beijing, Hong Kong, Shanghai, Taipei)

☒ Set Manually

Date:2011-10-28Time:11:22:10

(ex: 2008-01-01)(ex: 01:00:00)

Save

Server Maintenance

This page provides tool for system maintenance; Reboot and Load default settings, as well as functionalities of launching upgrade process, backup/restore user settings and language defines.

Live View	Video	Camera	Event	Schedule	Network	System	Customize
-----------	-------	--------	-------	----------	---------	--------	-----------

Information	User	Date & Time	Server Maintenance	Log Service
-------------	------	-------------	--------------------	-------------

Maintain Server

Reboot

Load default

Firmware Upgrade

Model: NB670

Firmware Version: 2.0.1108_test

MAC Address: 00:04:29:00:19:01

ActiveX Version: 1.0.1.149

Specify the firmware to upgrade:

Upgrade

Backup

Save all parameters and user-defined scripts to a backup file.

Backup

Upload Setting

Use a saved backup file to return the unit to a previous configuration.

Specify the backup file to use:

Upload

Add Language

Choose language: 日本語 ▼

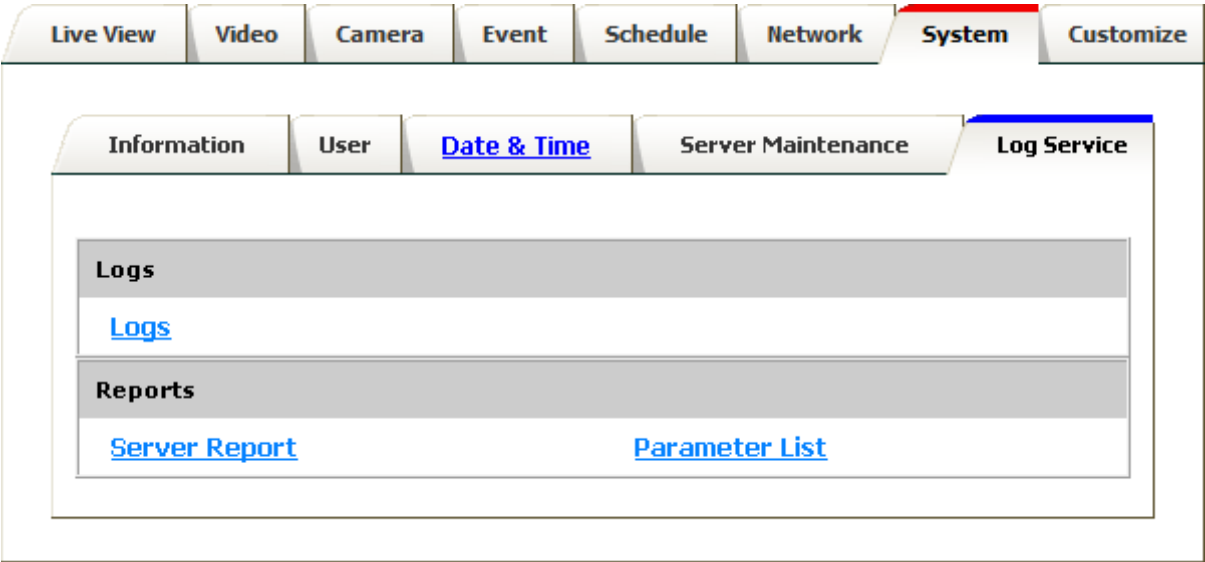
Get a language file from </lang/en/lang.js>

Select language file to upload:

Upload Language

Log Service

Most system operations and / or process will be kept in a log system. The link provides the review of these records.



8. Customize

This page provides the function of adjusting the look of live view page. There are two types of layout settings; use default look or use custom settings.

The screenshot shows a web interface with a top navigation bar containing tabs: Live View, Video, Camera, Event, Schedule, Network, System, and Customize (which is highlighted with a red border). Below the tabs is a form titled 'Live View Layout Setting'. Inside this form, there are two radio buttons: 'Use Default Look' (which is selected) and 'Use Custom Settings'. Below these is a section titled 'User Defined Links'. This section contains four rows, each with a checkbox labeled 'Show Custom Link' followed by a number (1, 2, 3, 4). Each row also has a 'Name' text input field and a 'URL' text input field. The values in the input fields are 'Custom Link 0', 'Custom Link 1', 'Custom Link 2', and 'Custom Link 3' for the names, and 'http://' for the URLs. At the bottom of the form is a 'Save' button.

Use Default Look: the default layout of live/configuration pages

Use Defined Links: Web link(s) will be presented on the live page when enabled. It can be a link to another IP camera for instance, or other preferred web link.

Use Custom Settings: The modifications allowed are change of Background / Text Color, Background picture, Title, Description, Logo and etc.

Live View Layout Setting

☐ Use Default Look ☒ Use Custom Settings

User Defined Links

☐ Show Custom Link 1
Name: Custom Link 0 URL: http://

☐ Show Custom Link 2
Name: Custom Link 1 URL: http://

☐ Show Custom Link 3
Name: Custom Link 2 URL: http://

☐ Show Custom Link 4
Name: Custom Link URL: http://

Custom Settings

Modify the Default Look:

Background Color: ☒ Default ☐ Own: White

Text Color: ☒ Default ☐ Own: Black

Background picture: ☒ None ☐ External: http://

Title: ☒ None ☐ Default ☐ Own: Title

Description: ☒ None ☐ Default ☐ Own: Description

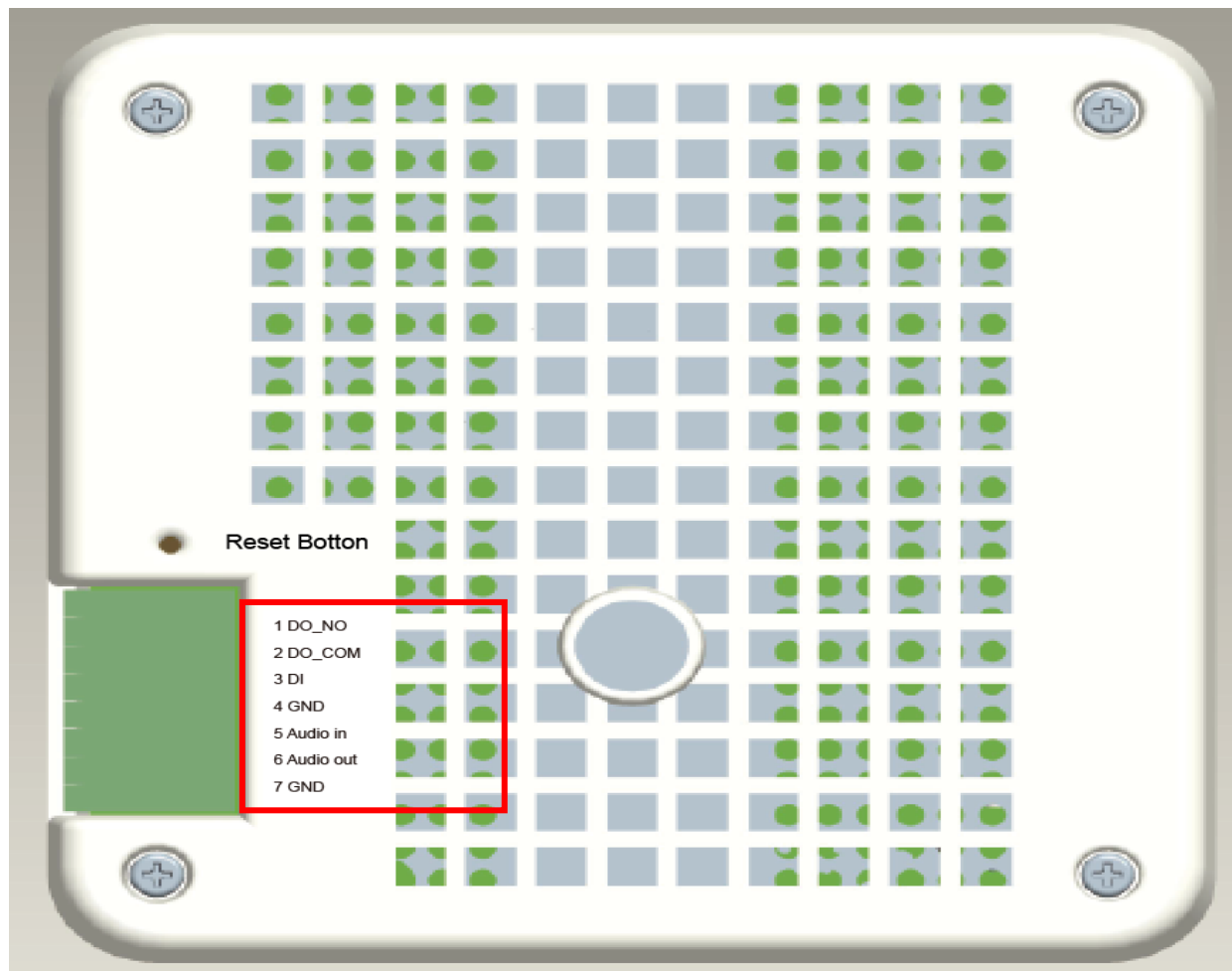
Logo Link: ☒ None ☐ Default ☐ Own: http://

Logo: ☐ None ☒ Default ☐ External: http:// ☐ Own

Select image file to upload:

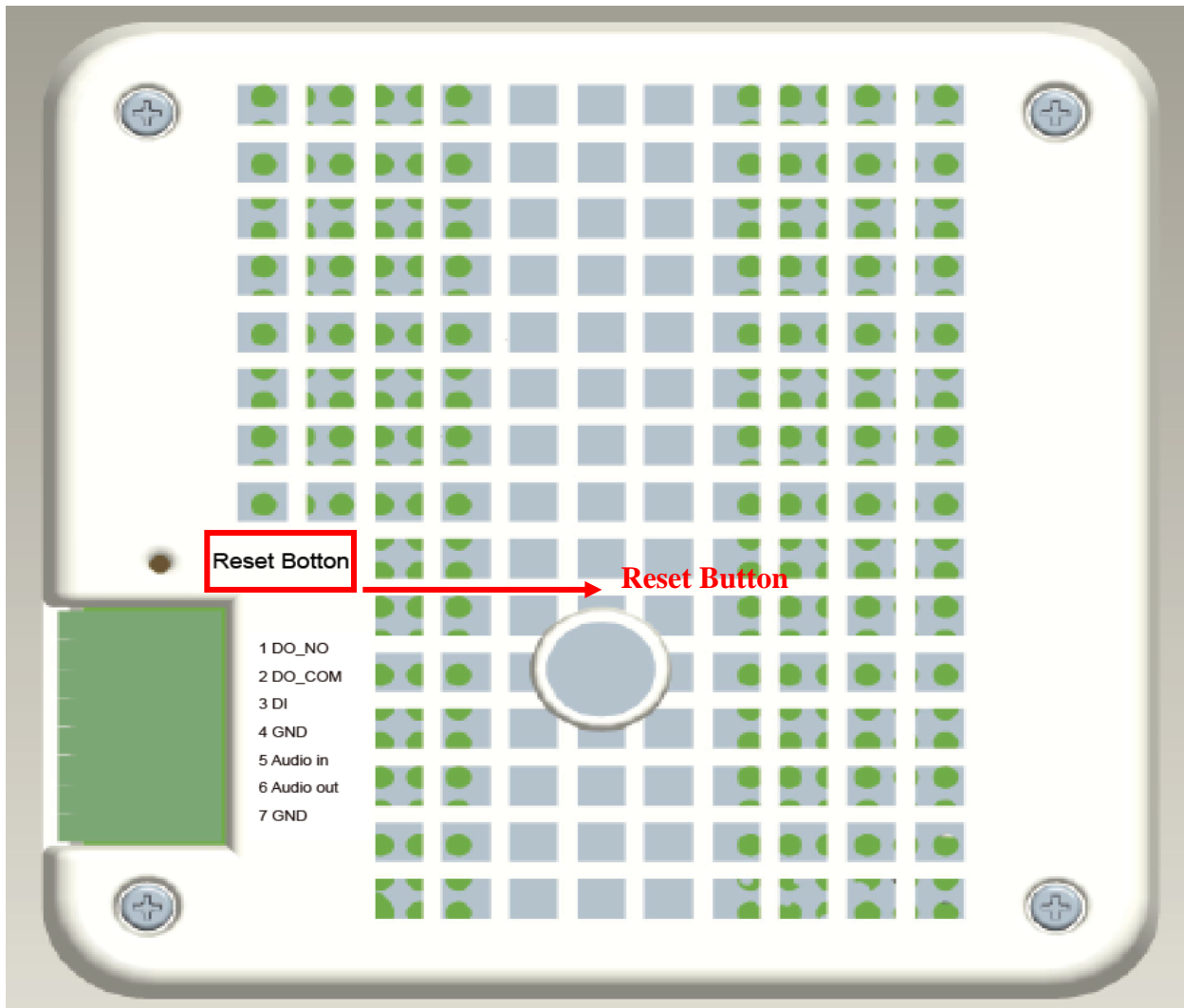
FAQ

I/O Terminal Connector - Pin Assignment



Pin	Function	Description
1	DO_NO	Digital output implementation; Pin7 to COM (Pin6) is a Photo-coupled relay on Normal Open status. External device can directly connect to the terminals. However the current that will go through the 2 nodes must not exceed 130mA. An external “Relay” can also be connected to the terminals as an implementation. In this case, current (or/and voltage) limitation is specified by the external Relay.
2	DO__COM	
3	DI	Connect to GND to activate, or leave floating (or unconnected) to deactivate.
4	GND	
5	Audio In	2 way Audio connectors , and connect to GND to activate
6	Audio Out	
7	GND	

Restore Factory Default



To restore factory default, please follow the steps:

1. Unplug the power jack to turn off the power of the camera.
2. Insert a pin into the reset hole as circled with red in the below figures. Sense a button and keep it pressed until instructed to release.
3. Plug in the power jack to turn on device, and the status LED will be quick flashing after a few minutes.
4. Release the button (remove the pin from the reset hole). The camera should now be back to factory default.

Upgrade device firmware

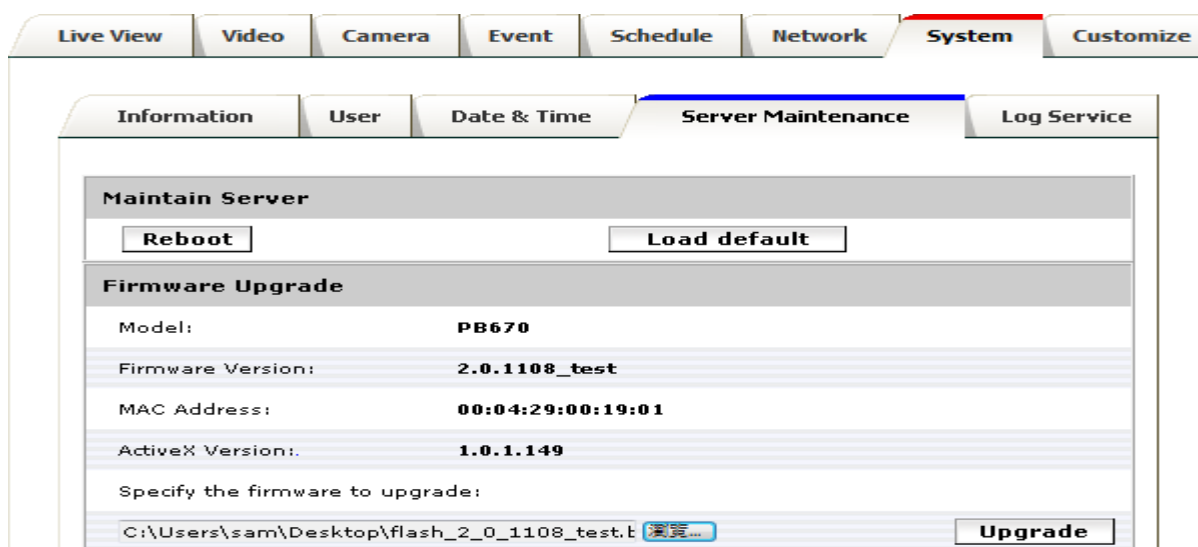
Firmware upgrade process should be done via the web configuration; **Setup -> Server**

Maintenance -> Firmware Upgrade. Before the process, read the instructions and release notes coming with each new released version. For the steps,

1. Check and retrieve the latest firmware bin file.
2. Disconnect all clients (e.g. streaming requests) to the device.
3. Stop the local (schedule) recording if it was enabled.
4. Go to the Firmware Upgrade page, browse and locate the downloaded firmware bin file.

Click the

“Upgrade” button.



5. The upgrade should start in minutes, depending on file transferring status. The web will then be directed to the system writing progress. Overall upgrading process takes about 5~10 minutes. In this period, **DO NOT DISCONNECT** the power. System of the unit can be damaged otherwise.

Firmware Upgrade

It is strongly recommended to stop any unnecessary jobs while updating firmware.
Please be patient and the updating process may take a long time.
Please waiting about two or three minutes!

Writing Progress:



6. The power LED (orange one) will be quick/slow flashing during the upgrading process. When it becomes steady on again, the camera is ready to be accessed. Check the firmware version. If the system is not upgraded, redo the above steps. In the case, restore factory default process may be required.