



FCS-3091

2-Megapixel Fish-Eye PoE Dome Network Camera



User's Manual

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Contents

General Public License	2
Notices	3
Introduction	4
Installation	5
Terminal block for I/O connectors	7
Using the Web UI	16
1. Live View	17
2. Video	20
General	20
3. Camera	24
General	24
Advance	26
4. Event	31
Event Server	31
Motion Detection	32
I/O Ports	35
Event Configuration	36
5. Schedule	37
General	37
Storage	38
6. Network	39
General	39
Advanced	40
SMTP (E-Mail)	41
DDNS	42
7. System	43
Information	43
User	44
Date & Time	45
Server Maintenance	46
Log Service	47
8. Customize	48
FAQ	50
Restore Factory Default	50
I/O Terminal Connector - Pin Assignment	51

General Public License

This product incorporates open source code into the software and therefore falls under the guidelines governed by the General Public License (GPL) agreement.

Adhering to the GPL requirements, the open source code and open source license for the source code are available for free download at <http://global.level1.com>.

If you would like a copy of the GPL or other open source code in this software on a physical CD medium, LevelOne (Digital Data Communications) offers to mail this CD to you upon request, for a price of US\$9.99 plus the cost of shipping.

Default Settings

IP Address	DHCP
Username	root
Password	Null (without password)

Notices

This user manual is intended for administrators and users of the FCS-3091 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.**

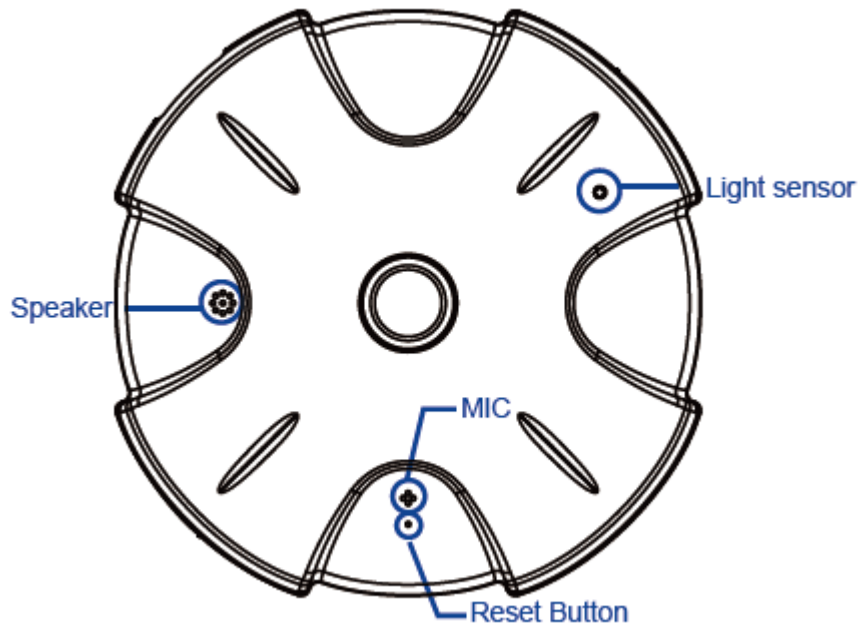
Introduction

FCS-3091 is a Fish-Eye Panorama Network Dome Camera featured with 2Mega Pixel resolution and superior H.264-AVC performance and rich functions. FCS-3091 includes a fish-eye lens for 360° panoramic wide angle view without blind spot. It is very suitable to view a wide area with single camera such as hallway, store, and office without the need to install multiple cameras.

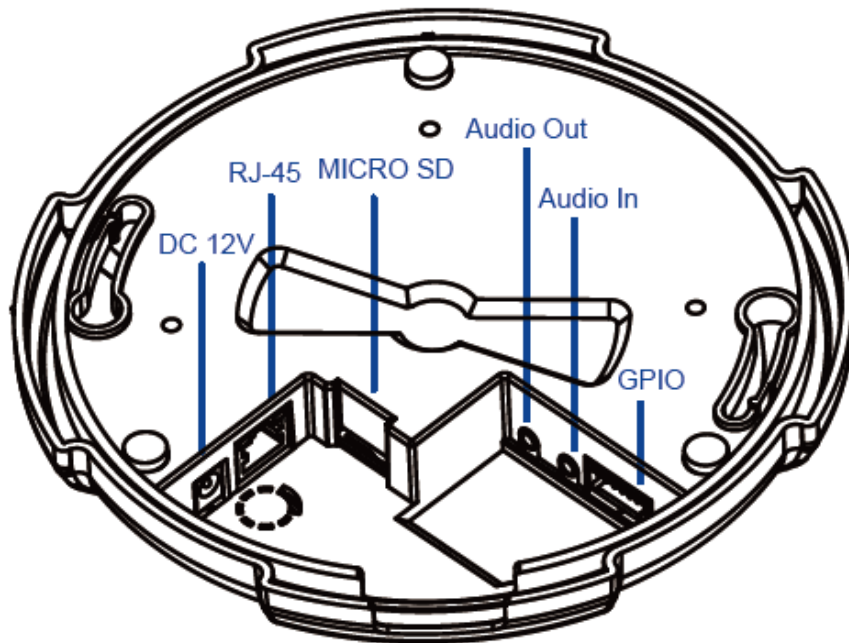
The hardware base panorama video processing ability provides user flexible video layout including broad view, double broad view, 3 PTZ view, QUAD view, and table view. The e-PTZ function, auto pan and auto patrol without moving parts, can replace traditional PTZ camera and thus save lost of traditional mechanical Pan/Tilt maintain cost.

Installation

FCS-3091 – Physical Overview



Interface	Description
Light Sensor	The Light sensor is for detecting IP Camera environmental illumination, and if IP Camera was in the dark/night environment, IR Cut Filter is switched off to let infrared light pass through for clear night view.
MIC	The IP Camera has built-in an internal microphone, which is hidden in the pinhole located on the front panel.
Speaker	The IP Camera has built-in an internal speaker, which is hidden in the pinhole located on the front panel.
Reset Button	This button is hidden in the pinhole. For more information, please refer to page 53 FAQ for Restore Factory Default instruction.

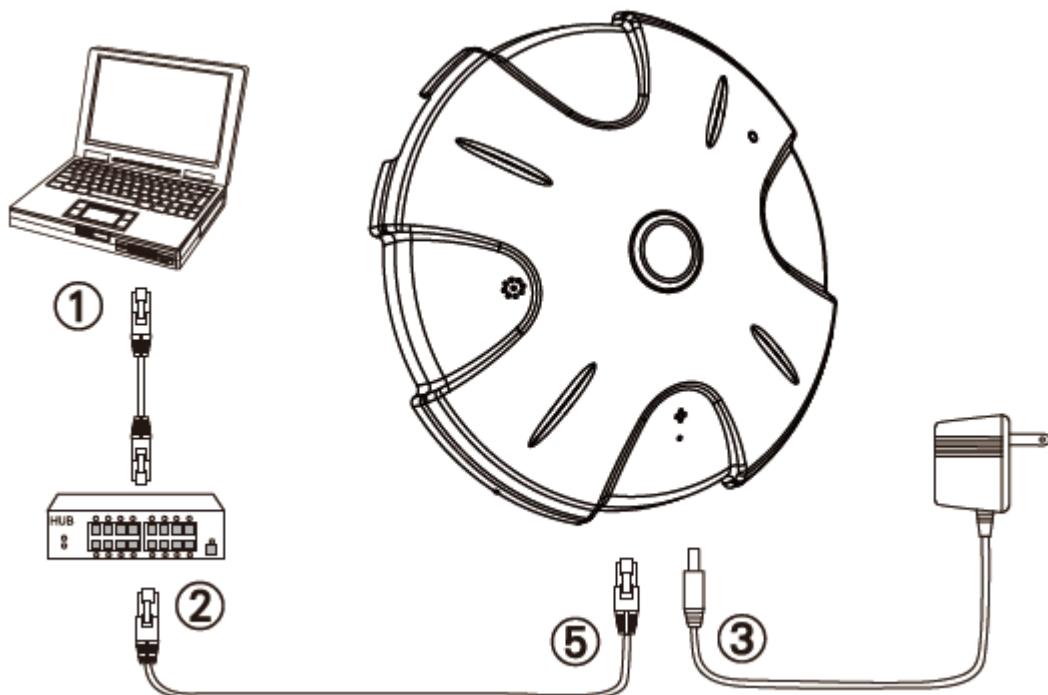


Interface	Contents
Power Jack	<p>The input power is DC 12V, 2A.</p> <p>Note: ONLY use package power adapter supplied with the internet. Otherwise, the product may be damaged.</p>
RJ-45 LAN Socket	<p>Connect to PC or Hub / Switch.</p> <p>For connect to 10Base-T Ethernet or 100Base-TX Fast Ethernet Cabling. This Ethernet port built audio-negotiation protocol which can detect or negotiate the transmission speed of the network automatically.</p> <p>Please use CAT-5 cable to connect the Network Camera to a 100Mbps Fast Ethernet network switch or hub.</p> <p>Note: ONLY use one power source, either from DC or from 802.3af Power over Ethernet.</p>
MicroSD Card slot	<p>The IP Camera has built-in a MicroSD card slot which can accepts MicroSD memory card for image / video event recording.</p>
Audio In	<p>Connect a microphone to the IP Camera, be noted to use actively microphone (normally with power supplier on microphone) for this application.</p>
Audio Out	<p>Connect a loud speaker to the IP Camera.</p> <p>This is for voice alerting and two-way audio. Be noted to use actively speaker (normally with power supplier on speaker) for this application.</p>
GPIO	<p>The 7 pin terminal block includes 4 input ports and 1 output ports.</p>

Terminal block for I/O connectors

Pin	Function	Description
1	GND	Four sets of Digital Input, DI1 until DI4; the internal device is also photo-coupled electrical relay. In practice, the external device can be simply an On/Off switch. Four sets of On/Off switch can be connected as different trigger source.
2	Digital input 4	
3	Digital input 3	
4	Digital input 2	
5	Digital input 1	
6	DO_NO	Digital output implementation; Pin6 to COM (Pin7) 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.
7	DO_COM	

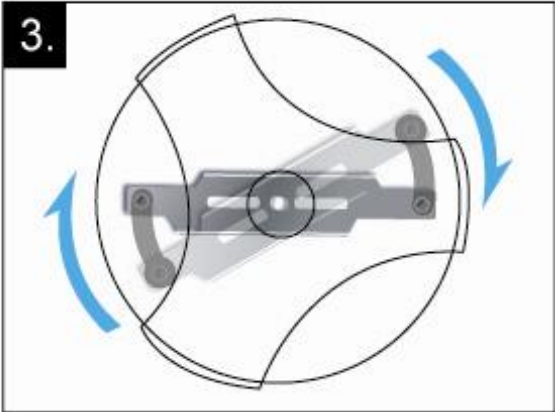
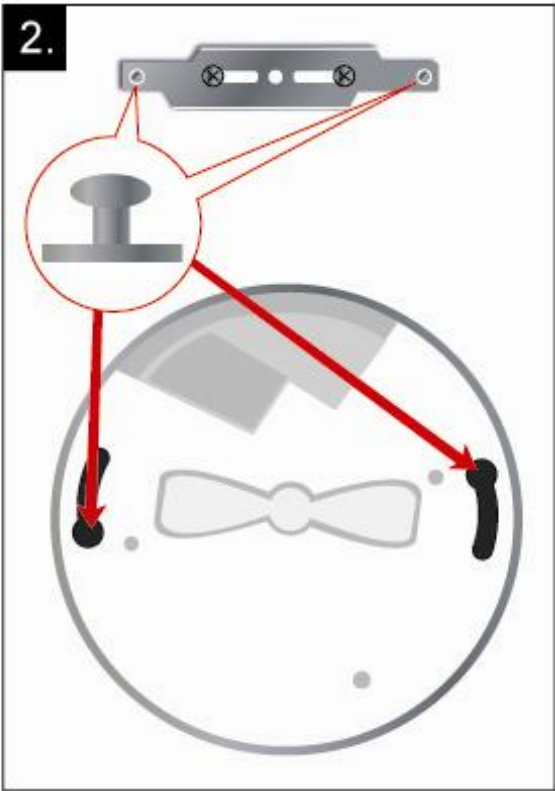
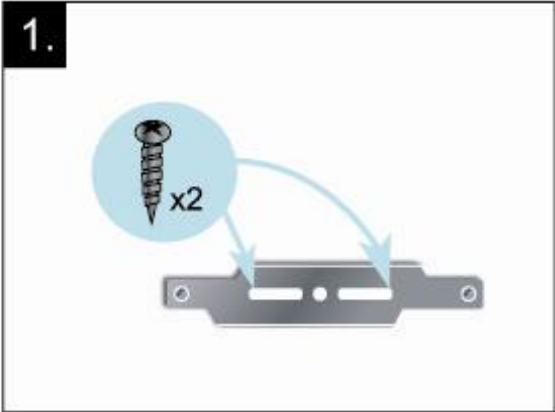
1. Hardware Connection



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
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. Mounting Bracket Installation

Carefully follow the steps to ensure correct installation.



3. Software Installation

The following software is necessary for the proper display and use of the FCS-3091 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 CD, select IP installer, then follow the on instructions to complete the installation.

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 CD.

VLC

Though not necessary, this can be used for viewing the streaming without a Web browser. The camera's manual recording format is MP4, you also need to use like VLC player to view.

Here is the reference link : <http://www.videolan.org>

4. 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

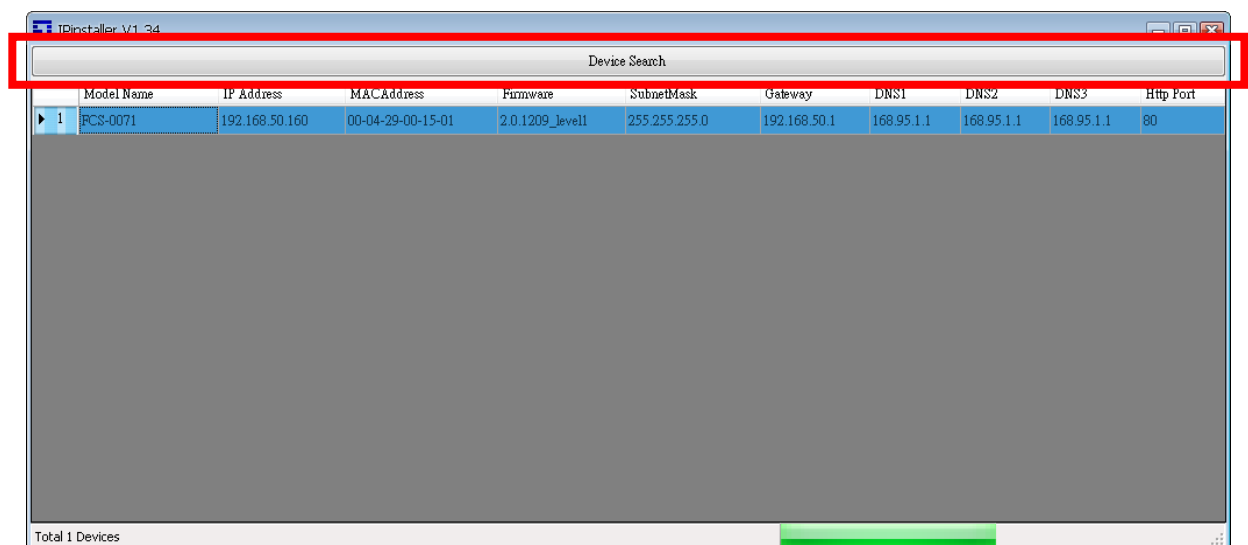
1. Always consult your network administrator before assigning an IP address to your server in order to avoid using a previously assigned IP address.
2. Ensure the FCS-3091 is powered on and correctly connected to the network.
3. MAC Address: Each device has a unique Ethernet address (MAC address) shown on the label of the device as the serial number (S/N) with 12 digits (e.g. 00116B-XXXXXX).
4. Although the IP Installer is able to find and configure any FCS-3091 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 FCS-3091

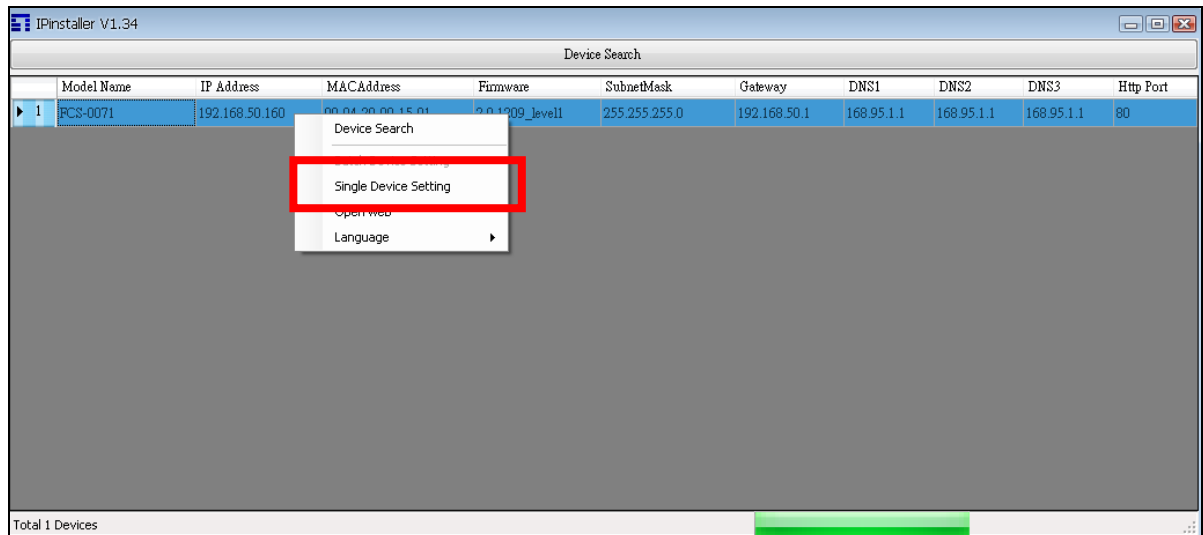
1. Once IP Installer has been successfully installed on the PC, double click the IP Installer icon



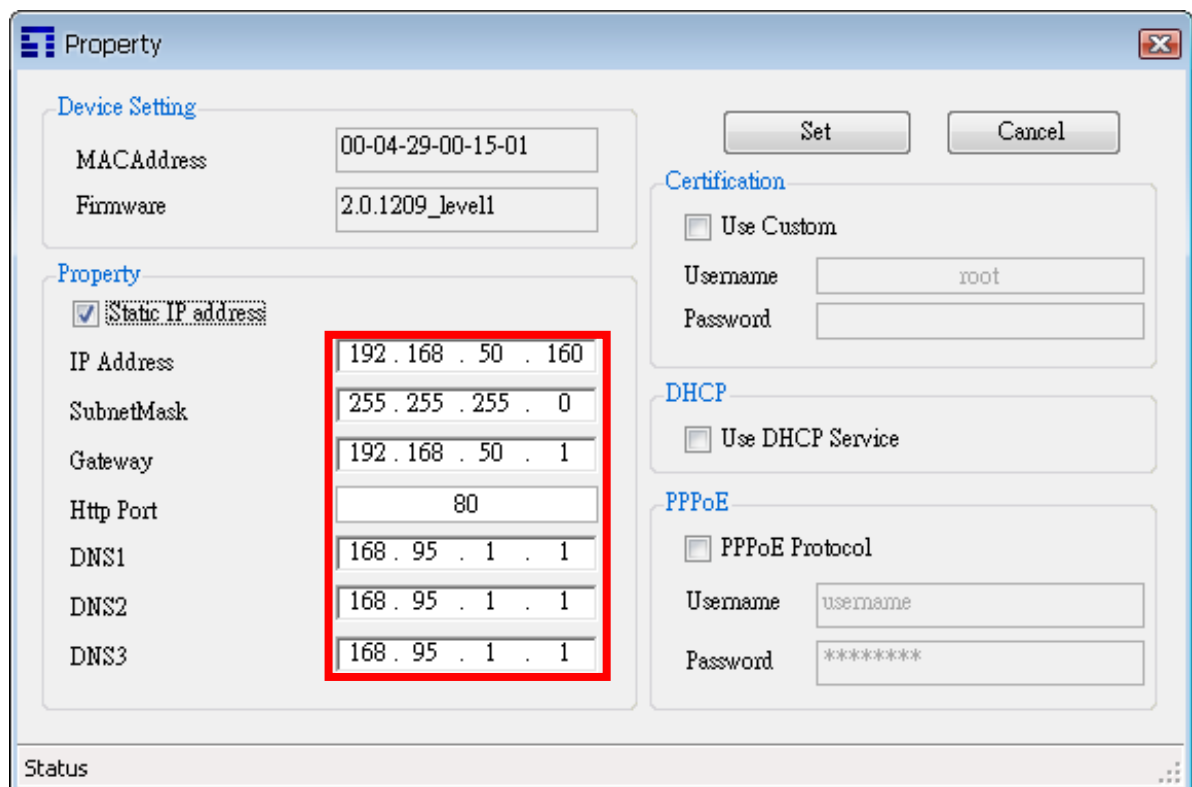
2. Click the **[Device Search]** to search the device in the LAN.



3. 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).
4. Double click the select item to open the Property Page or right click the item to select the **[Single Device Setting]**.



5. Modify the network settings of the camera.



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

Property

Device Setting

MACAddress: 00-04-29-00-15-01

Firmware: 2.0.1209_level1

Property

☒ Static IP address

IP Address: 192.168.50.160

SubnetMask: 255.255.255.0

Gateway: 192.168.50.1

Http Port: 80

DNS1: 168.95.1.1

DNS2: 168.95.1.1

DNS3: 168.95.1.1

Certification

☒ Use Custom

Username: root

Password:

DHCP

☐ Use DHCP Service

PPPoE

☐ PPPoE Protocol

Username: username

Password: *****

Set **Cancel**

Status

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

IPInstaller V1.34

Device Search

	Model Name	IP Address	MACAddress	Firmware	SubnetMask	Gateway	DNS1	DNS2	DNS3	Http Port
1	PCS-0071	192.168.50.160	00-04-29-00-15-01	2.0.1209_level1	255.255.255.0	192.168.50.1	168.95.1.1	168.95.1.1	168.95.1.1	80
2	PCS-3091	192.168.0.15	00-04-29-00-15-01	2.1.0202_level1	255.255.255.0	192.168.0.1	168.95.1.1	168.95.1.1	168.95.1.1	80

Total 2 Devices

Batch Device Setting

Open web

Language

IPInstaller V1.34

Device Search

	Model Name	IP Address	MACAddress	Firmware	SubnetMask	Gateway	DNS1	DNS2	DNS3	Http Port
1	PCS-0071	192.168.50.160	00-04-29-00-15-01	2.0.1209_level1	255.255.255.0	192.168.50.1	168.95.1.1	168.95.1.1	168.95.1.1	80
2	PCS-3091	192.168.0.15	00-04-29-00-15-01	2.1.0202_level1	255.255.255.0	192.168.0.1	168.95.1.1	168.95.1.1	168.95.1.1	80

Total 2 Devices

Property

☒ Static IP address

IP Address: 192.168.50.160

SubnetMask: 255.255.255.0

Gateway: 192.168.50.1

Http Port: 80

DNS1: 168.95.1.1

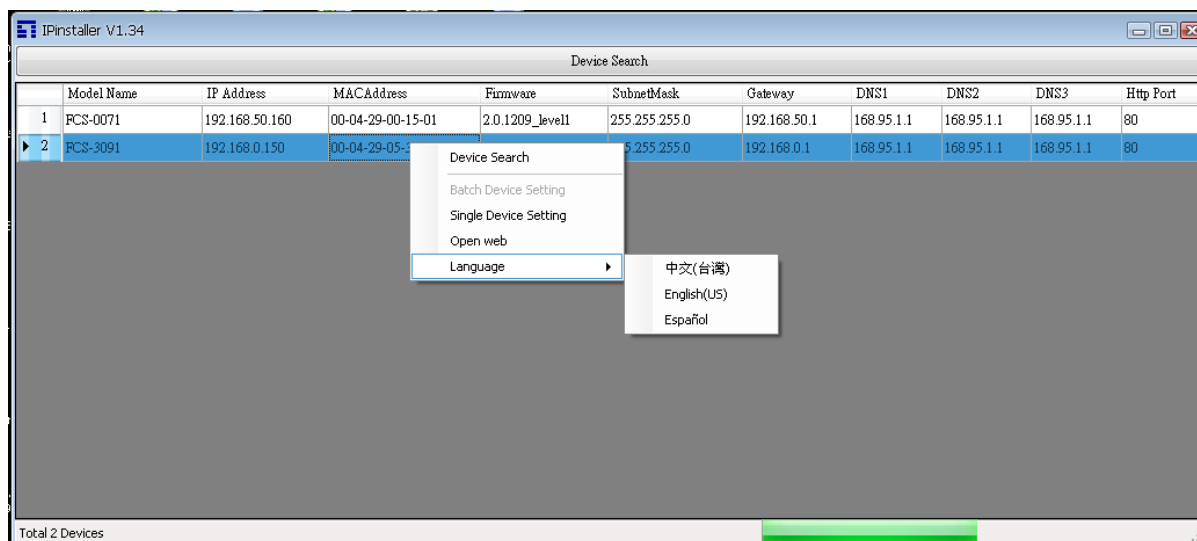
DNS2: 168.95.1.1

DNS3: 168.95.1.1

☐ Increase IP

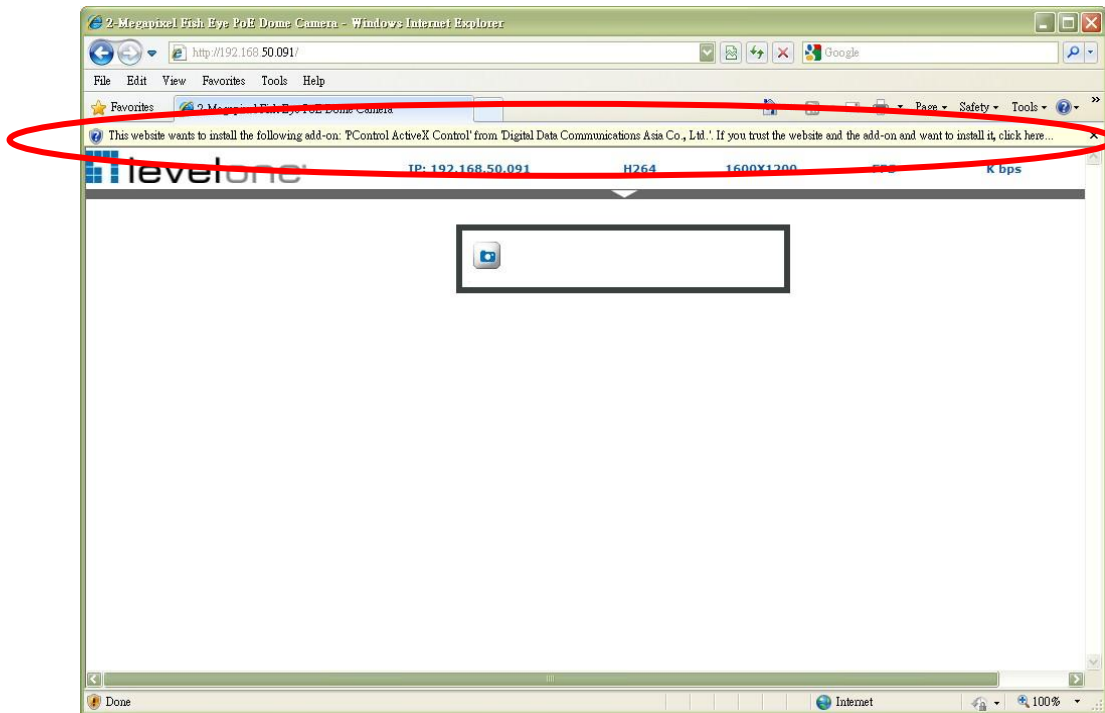
Set **Cancel**

8. Language support for Chinese, English and Spanish.

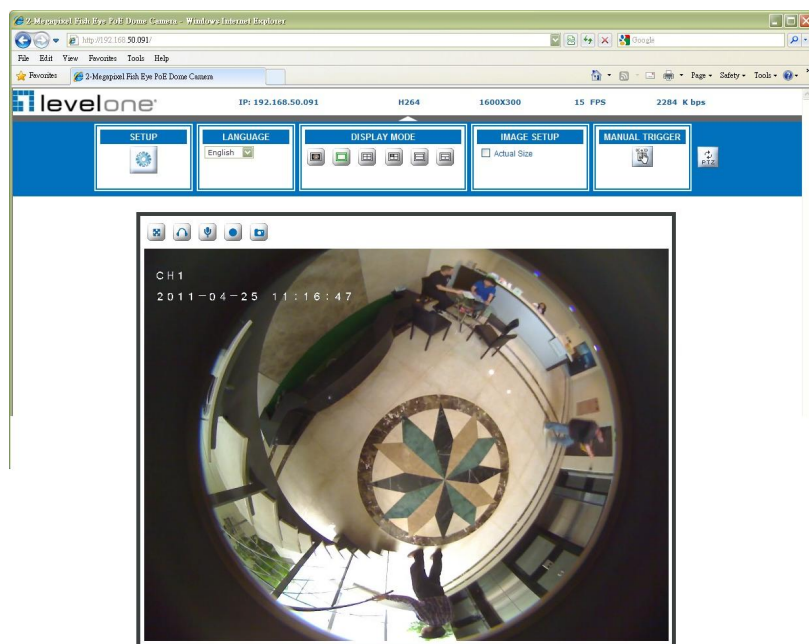


Open the Web-based UI of the selected camera

1. To access the Web-based UI of the selected unit, run the **Open Web** on the select item.
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

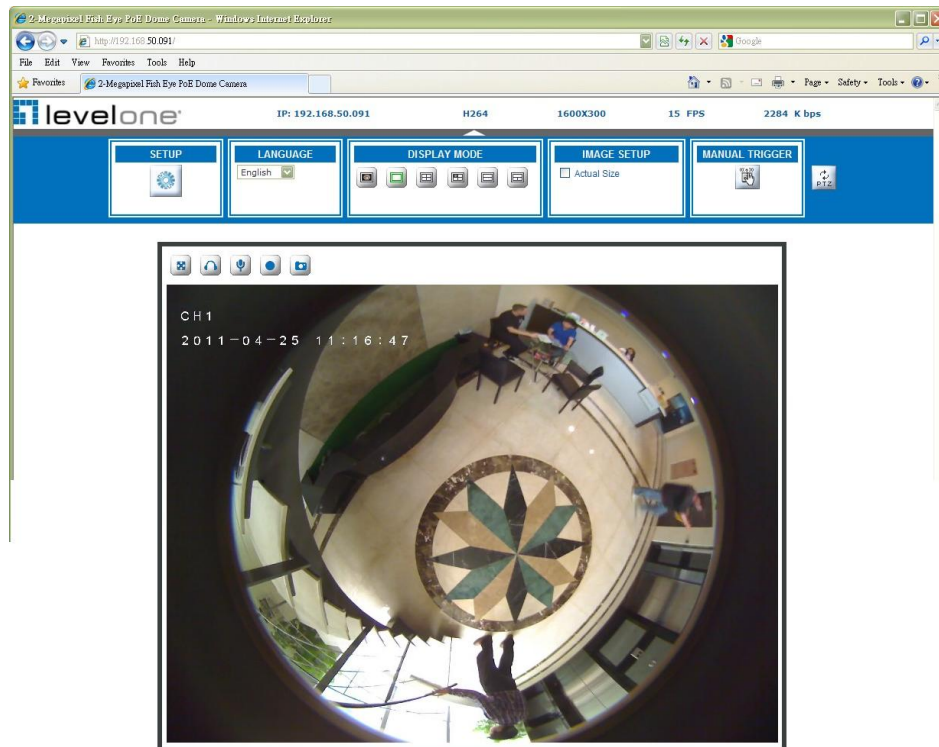
When browsing the Home Page at the first time with the Microsoft Internet Explorer™, you must temporarily lower your security settings to perform a one-time-only installation of the ActiveX component onto your workstation, as described below:

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.

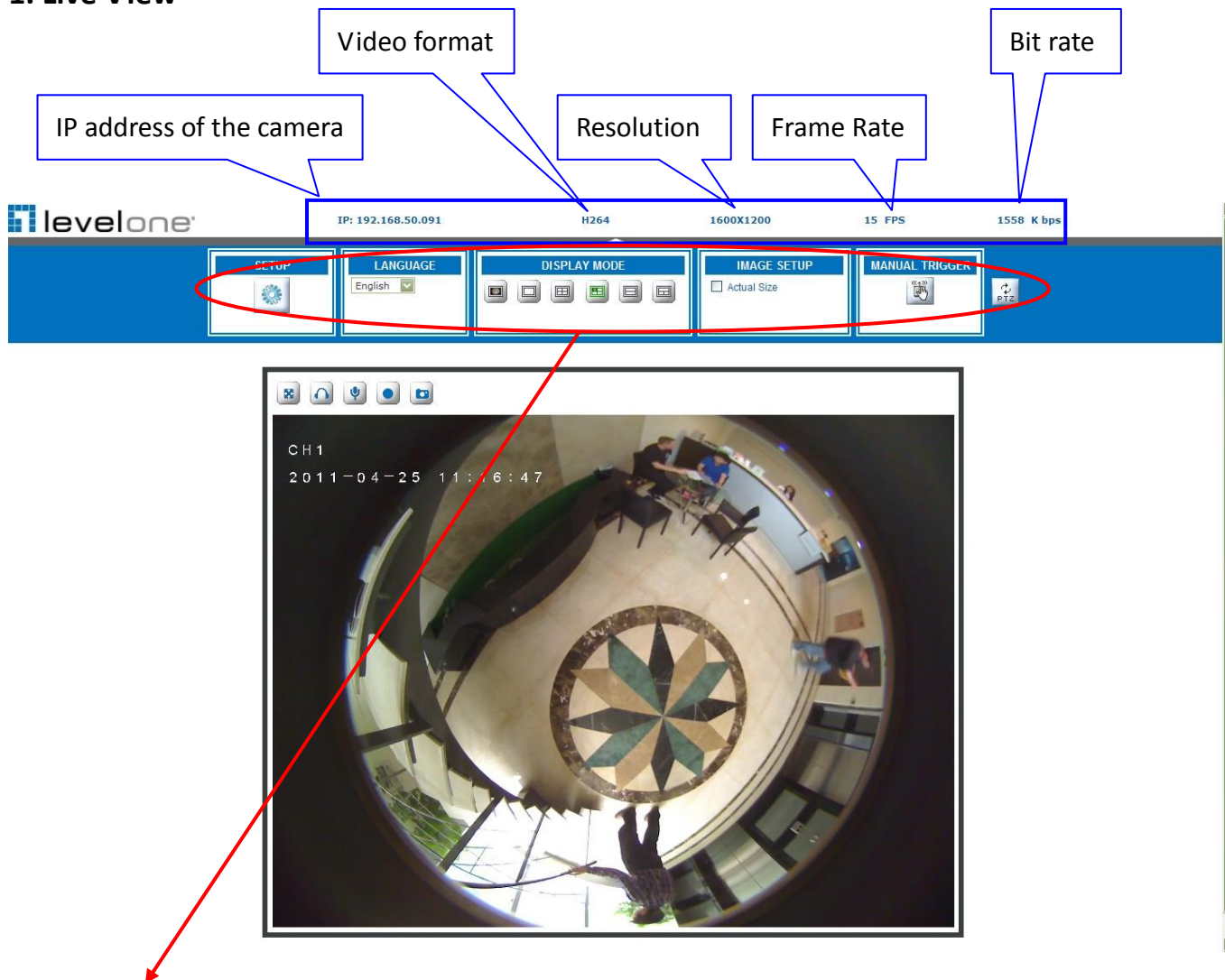
Once the ActiveX installation is complete, return the security settings to their original value, as noted above.


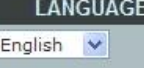



Using the Web UI

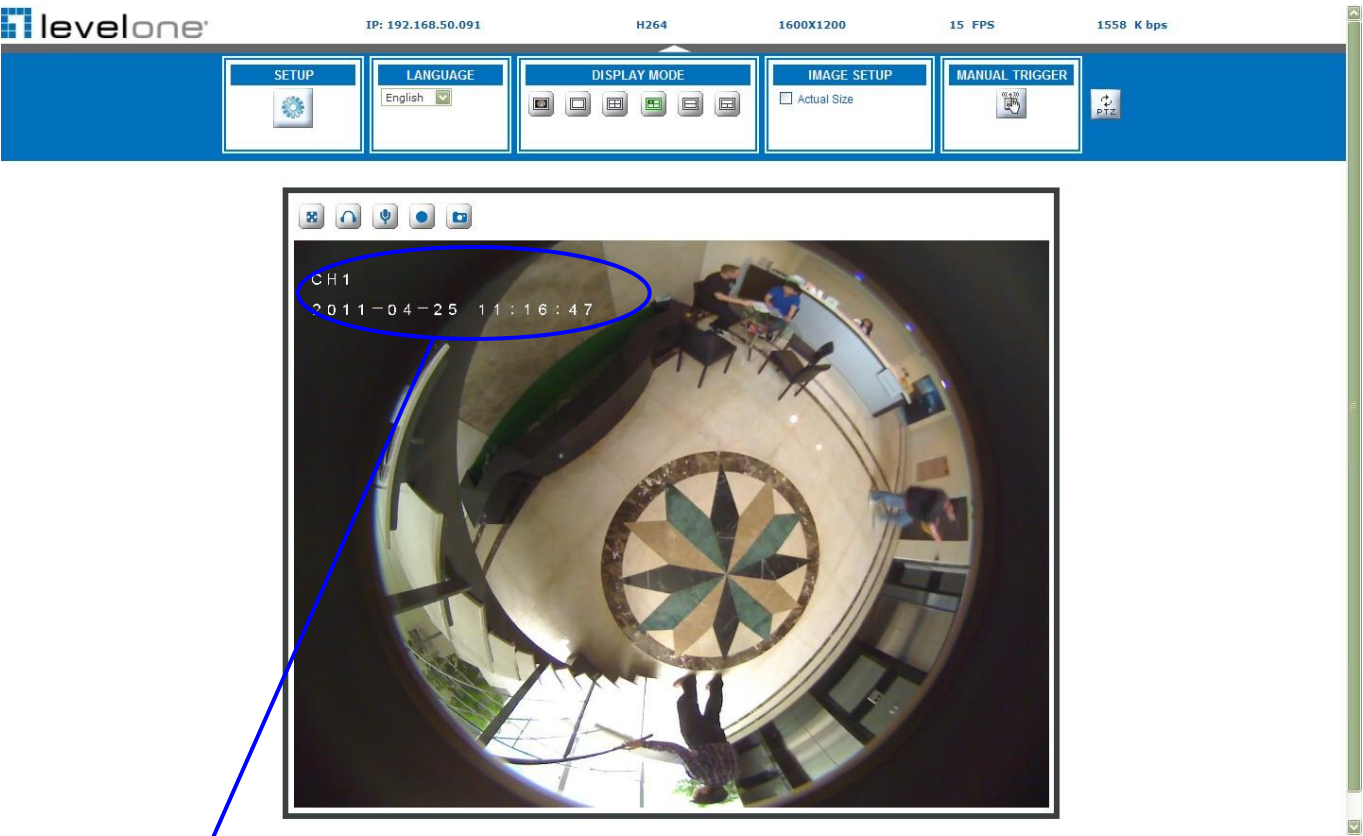
Start your Web browser and enter the URL or IP address in the Address field. The Home page of the camera is now displayed.








1. Live View



Button	Description
	Click for more general/advance camera settings
	Select languages among English, traditional Chinese and simplify Chinese
	Select display mode to view the different type of the video layout.
	Check actual size to view the actual size (resolution) of the image
	Applied as one of the trigger conditions



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
- Advance
- External Video Source

Camera

- General
- Advance

Event

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

Schedule

- General
- Storage

Network

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

System

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

Customize

- Style Layout

2. Video

General

The screenshot shows the 'Video' configuration page. At the top, there are tabs: 'Live View', 'Video', 'Camera', 'Event', 'Schedule', 'Network', 'System', and 'Customize'. The 'Video' tab is selected. Below it, there are two sub-tabs: 'General' and 'Advanced'. The 'General' sub-tab is active. Inside the 'General' sub-tab, there is a section titled 'OSD Setting'. This section contains three items: a checked checkbox for 'Enable', a checked checkbox for 'Camera Name' with a text input field containing 'CH1' and a note '(20 character max)', and a checked checkbox for 'Date/Time'. At the bottom of the 'General' sub-tab, there is a 'Save' button.

OSD Setting: Enable OSD to display camera name and date/time on the image.



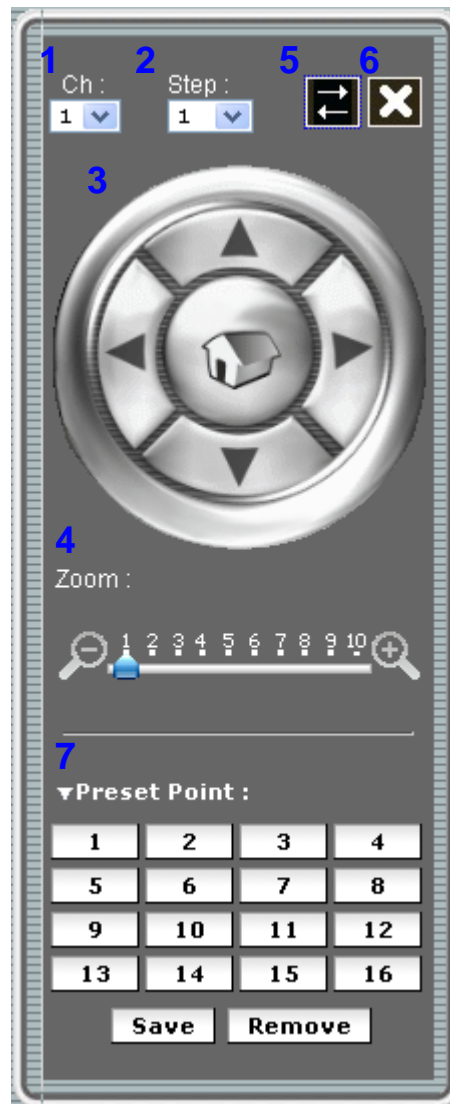
The PTZ function will display in Broad view, Quad view, Quad with source view, Double view and Triple view of Ceiling Mount.

Click on the PTZ icon, the web will popup the control panel to control e-PTZ function of FCS-3091.

Broad 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.

Quad view & Quad with source view PTZ control panel:



1. Ch : Select the channel. (1~4) & (2~4)
2. Step : Setting the speed of Pan/Tilt function. (1~10)
3. Pan Tilt Arrow : Click to control 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 displays the 'Advanced' settings for 'Stream 1 Setting' within a web interface. The interface has a top navigation bar with tabs: Live View, Video, Camera, Event, Schedule, Network, System, and Customize. The 'Video' tab is selected. Below it, there are two sub-tabs: 'General' and 'Advanced'. The 'Advanced' sub-tab is active, showing the 'Stream 1 Setting' configuration. The settings are as follows:

Stream 1 Setting	
RTSP Path:	v00
Image Format:	H.264
Resolution:	1600 x 1200
GOP:	30 (2~32)
Video Mode:	CBR
Frame Rates:	15 (5~15 FPS)
Target Bit Rates:	6000 (1000~6000 Kb)

A 'Save' button is located at the bottom of the settings panel.

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)
 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.
 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 indicated the higher video quality you may get, while it will consumer more network bandwidth and storage size.
- Frame Rates (FPS): Choose the number of frames to display per second from 5 to15.

3. Camera

General

Live ViewVideoCameraEventScheduleNetworkSystemCustomize

GeneralAdvanced

Camera General Setting

Brightness:0

Hue:0

Saturation:0

Contrast:0

Sharpness:0

Audio Setting

☒ Audio Enable

Input of Listen Pattern:

☒ Mic In☐ Line In

Output of Talking Pattern:

☒ Speaker Out☐ Line Out

Web Record Setting

Save Path:(ex: C:\tmp\)

File Name:(ex: test)

Browse

Web Snapshot Image Setting

Save Path:(ex: C:\tmp\)

File Name:(ex: test)

Browse

DefaultSave

Camera General Setting:

- Brightness: the luminance of image view.
- Hue: refer to pure color, it can modify the different display of specific color such as red, green or blue.
- Saturation: intensity of a specific color.
- Contrast: the difference in color and light between parts of an image.
- Sharpness: the sharpness of camera.

The 5 parameters above are referring to image appearance in terms of color/vision. These are adjustable from this page.

Audio Setting:

- Audio Enable: Turn on/off the audio.
- Input of listen pattern:
Mic In/Line In: Click to choose audio source.
- Output of talking pattern:
Speaker Out/Line Out: Click to choose audio source.

Web Record Setting:

- Save Path / File name: Click on the "Browse" button to select the desired path to save as well as naming the video file.

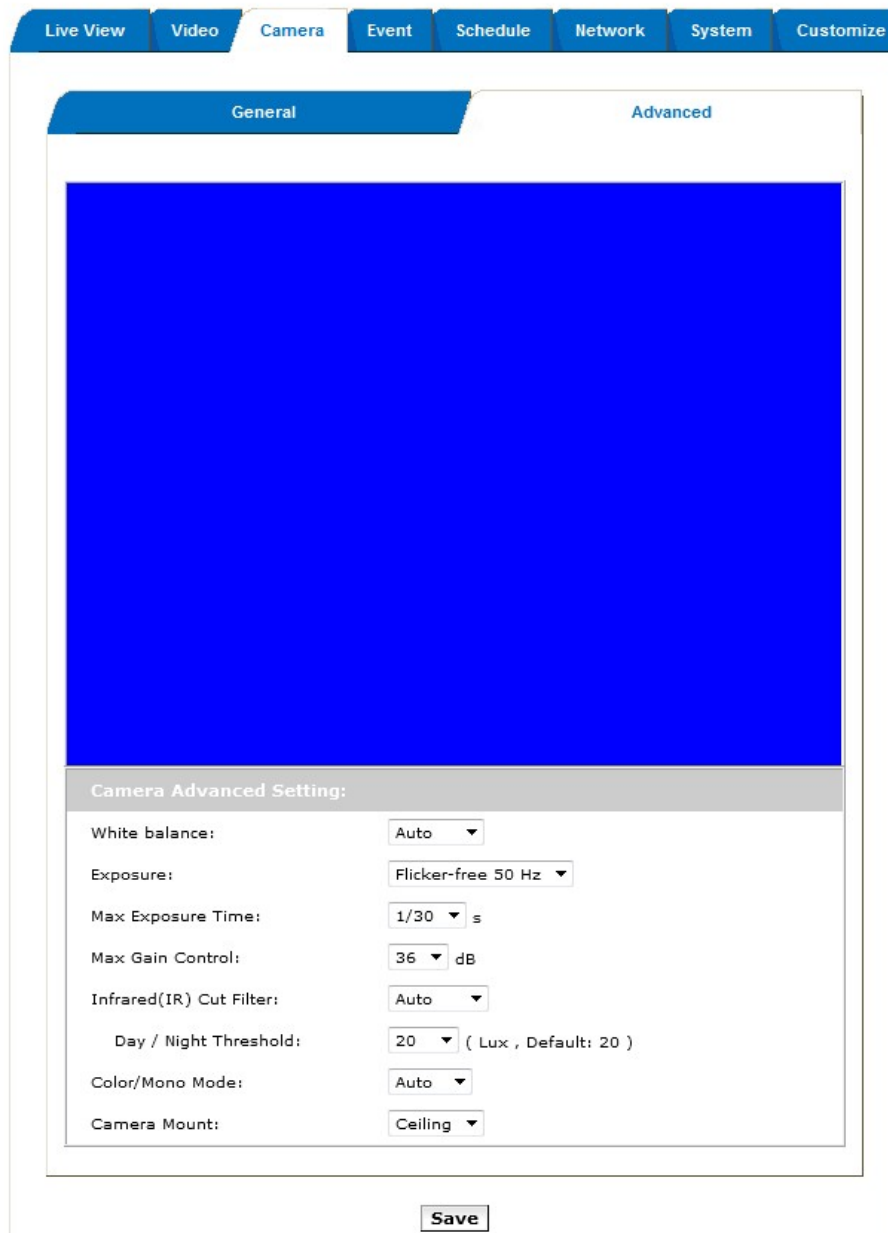
Web Snapshot Image Setting:

- Save Path / File name: Click on the "Browse" button to select the desired path to save as well as naming the snapshot.

Save:

- Save the changes that have been made.

Advance



The screenshot displays the 'Camera' configuration page of the FCS-3091 interface. The top navigation bar includes 'Live View', 'Video', 'Camera', 'Event', 'Schedule', 'Network', 'System', and 'Customize'. The 'Camera' section has two sub-tabs: 'General' (selected) and 'Advanced'. A large blue video feed placeholder occupies the upper half of the page. Below the feed, the 'Camera Advanced Setting:' section contains the following settings:

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 ▼

A 'Save' button is located at the bottom center of the settings panel.

White balance: Adjustment to compensate for different environments in terms of light source, user can choose auto/hold/sunny/coludy/indoor so that FCS-3091 can determine the correct color compensation due to different light environment. Be noted that hold indicate that the parameter will apply default setting.

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.

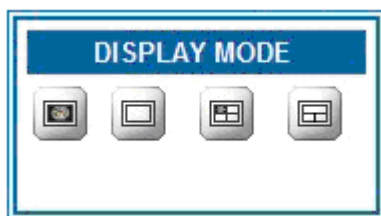
Infrared (IR) Cut Filter: The default is automatically switched according to light intensity. Enable indicate the filter is enable to cut IR light to make sure the color is correct, Disable indicate the filter is disable and allow the infrared (such as IR LED illuminator) to enter the camera to execute 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 and Table.

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.

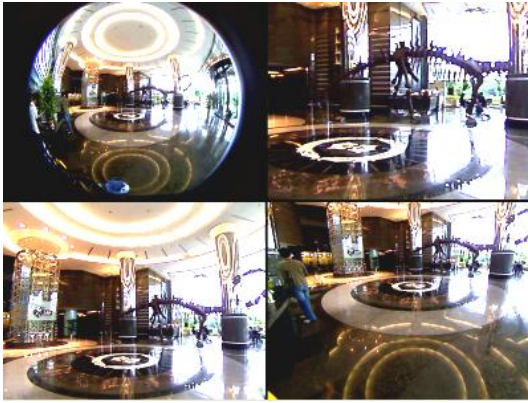


1. Original view:

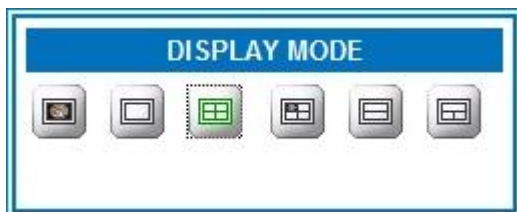


2. Broad view:



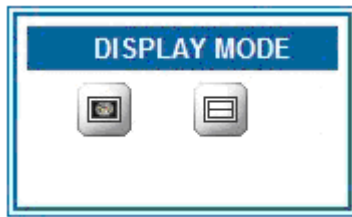
3. Quad with source view:**4. Triple view:**

Ceiling Mount: Choose Ceiling mount, Go back to live view, there are 6 kinds of video layout to choose from; Original view, Broad view, Quad view, Quad with source view, Double view and Triple view.

**1. Original view:****2. Broad view:**

3. Quad view:**4. Quad with source view:****5. Double view:****6. Triple view:**

Table Mount: Choose Table mount, Go back to live view, there are 2 kinds of video layout to choose from; Original view and Double view.



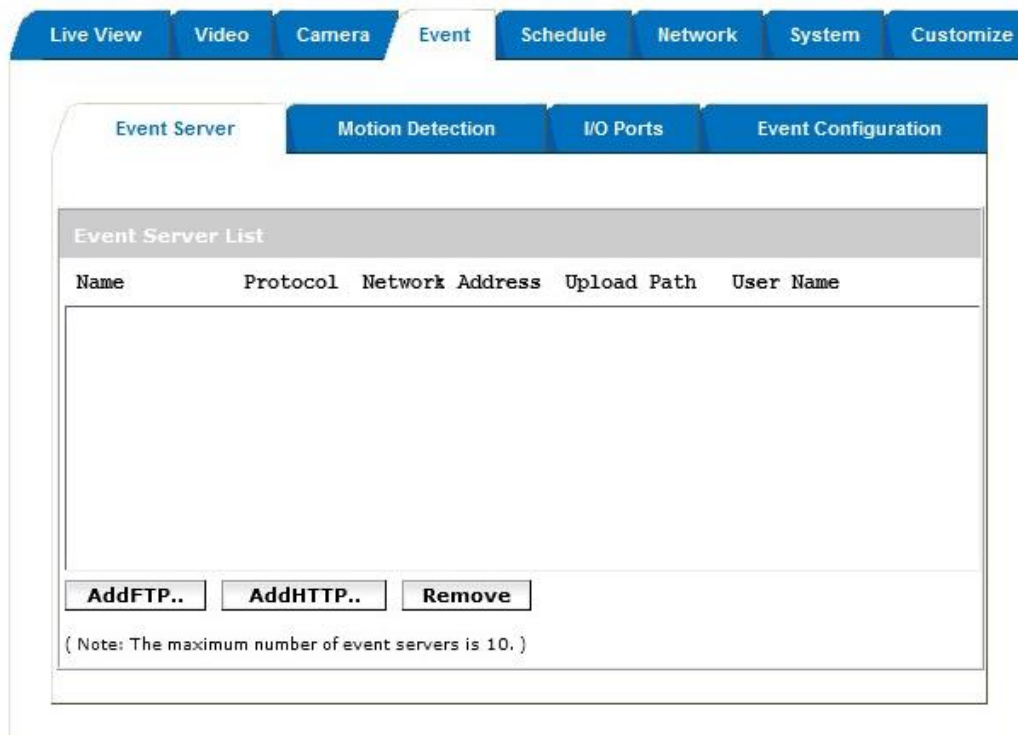
1. Original view:



2. Double view:



4. Event



Event Server

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

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

Click **[Remove]** to delete selected event servers. (Circled in red)

Motion Detection

Live View Video Camera Event Schedule Network System Customize

Event Server Motion Detection I/O Ports Event Configuration

DefaultWindow

Refresh

Motion Detection List

Windows Area Name
DefaultWindow

1 Add Del

(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)


Motion Detection Setup **2**

Windows Area Name:

Trigger Level : **3** 0

Sensitivity : 0


(Sensitivity value:0~100[low~High])

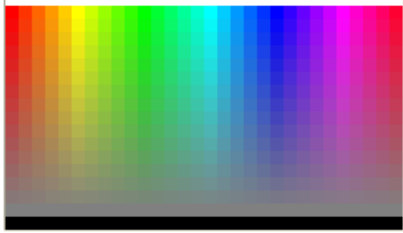
Color: 

☒ View All Windows

☐ View Selected Window

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.

Color: 



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

Add

Del

(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.
2. Motion Detection windows need to be modified if users changed video layout.

I/O Ports

This model supports 4 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 ViewVideoCameraEventScheduleNetworkSystemCustomize

Event ServerMotion DetectionI/O PortsEvent Configuration

Input Ports Setting 1

Name:Input1

Current State:high

Input Ports Setting 2

Name:Input2

Current State:high

Input Ports Setting 3

Name:Input3

Current State:high

Input Ports Setting 4

Name:Input4

Current State:high

Output Ports Setting

Name:Output1

Current State:low

Event Configuration

1 **Add...** **Remove**

(Note: The maximum number of events is 10.
Fu=FTP Upload, Eu=Email Upload, Du=Disk Upload, O=Output Port, En=Email Notification,
Tn=TCP Notification.)

Event Type Setup

Name: 2

Set min time between triggers: 3 (max 23:59:59)

Respond to Trigger

4 ☒ Always

☐ During time between

☒ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat

Start Time : (max 23:59:59)

Duration : (max 168:00:00)

☐ Never

Trigger by

When Triggered...

5 ☒ Upload Images

Select Upload type:

☐ Activate Output Port

☐ Send Email Notification

☐ Send Message Notification (TCP)

6 **Save**

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

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 shows when recording is on process; Micro SD card should not be removed during the recording process.

The screenshot shows the 'Storage' tab in the configuration menu. The 'General' sub-tab is active, displaying the 'Disk Status' section. The status shows the disk is recording, with a warning message at the bottom: 'The system is recording now, please stop recording first!'.

Disk Status	
Model Name:	/dev/mmcblk0p1
Total Size:	1929024 KB
Used Size:	1788864 KB
Free Size:	140160 KB
Disk Type:	SD
Disk Status:	recording

Buttons: Refresh, Browse, Remove Event Images

Warning: The system is recording now, please stop recording first!

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.

The screenshot shows a web interface for network configuration. At the top, there is a navigation bar with tabs: Live View, Video, Camera, Event, Schedule, Network (selected), System, and Customize. Below this, there is a sub-navigation bar with tabs: General (selected), Advanced, SMTP(E-Mail), and DDNS. The main content area is titled "General" and contains the following settings:

- ☒ DHCP Service
- ☐ Static IP Address:
 - IP Address: 192.168.10.100
 - Netmask: 255.255.255.0
 - Gateway: 192.168.10.1
 - DNS 1: 192.168.1.1
 - DNS 2: 168.95.1.1
- ☐ PPPoE:
 - User Name: username
 - Password:

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

☒ Enable ARP/Ping

At the bottom right of the configuration area, there is a "Save" button.

Advanced

Enable or configure other network functions.

NTP: Configure a NTP (Network Time Protocol) server, so that the device system date and time can be synchronized with a specified Time Server or DHCP server.

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

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

Bonjour: Enable Bonjour service, so that the device can be discovered with “Bonjour” service applied.

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.

The screenshot shows a web interface for network configuration. At the top, there are tabs: Live View, Video, Camera, Event, Schedule, Network (selected), System, and Customize. Below these, there are sub-tabs: General, Advanced (selected), SMTP(E-Mail), and DDNS. The main content area is titled 'NTP Configuration' and contains several 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, there is a text input field for 'Network address:' containing 'time.windows.com' and a note '(host name or IP address)'.
- HTTP Setting:** A text input field for 'HTTP Port:' containing '80' and a range '(0 ~ 65535, Default : 80)'.
- RTSP Setting:** A text input field for 'RTSP Port:' containing '554' and a range '(0 ~ 65535, Default : 554)'.
- HTTPS Setting:** A checkbox labeled 'Enable HTTPS' which is unchecked.
- Bonjour Setting:** A checkbox labeled 'Enable Bonjour' which is checked.
- 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 form, there is a 'Save' button.

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

The screenshot displays a web-based configuration interface for an FCS-3091 device. At the top, a navigation bar includes tabs for 'Live View', 'Video', 'Camera', 'Event', 'Schedule', 'Network', 'System', and 'Customize'. The 'Network' tab is selected, and within it, the 'SMTP(E-Mail)' sub-tab is active. Below this, there are two sub-tabs: 'General' and 'Advanced'. The 'General' sub-tab is selected, showing the 'SMTP (email) Setting' section. This section contains several input fields: 'Mail Server' with the value 'msa.hinet.net' and a hint '(host name or IP address)', 'Server Port' with the value '25' and a range '[0..65535]', an 'Authentication' checkbox which is unchecked, 'User Name' with the value 'username', 'Password' with masked characters '.....', 'From (Email Address)' with the value 'winson@ddcasia.com.tw', and 'Send email to:' with the value 'winson@ddcasia.com.tw'. A 'Test' button is located at the bottom right of the settings area. A 'Save' button is positioned at the bottom center of the entire configuration window.

SMTP (email) Setting	
Mail Server:	msa.hinet.net (host name or IP address)
Server Port:	25 [0..65535]
<input type="checkbox"/> Authentication	
User Name:	username
Password:
From (Email Address):	winson@ddcasia.com.tw
Send email to:	winson@ddcasia.com.tw

Test

Save

DDNS

Dynamic DNS configuration; the network device can be assigned with a host name 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 interface with a top navigation bar containing tabs: Live View, Video, Camera, Event, Schedule, Network, System, and Customize. The 'Network' tab is selected. Below it, there are sub-tabs: General, Advanced, SMTP(E-Mail), and DDNS. The 'DDNS' sub-tab is active. 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

The screenshot displays the FCS-3091 web interface. At the top, there is a navigation bar with tabs: Live View, Video, Camera, Event, Schedule, Network, System (selected), and Customize. Below this, a sub-navigation bar contains tabs: Information (selected), User, Date & Time, Server Maintenance, and Log Service. The main content area is divided into several sections, each with a title bar and a table of configuration details.

System	
Model:	FCS-3091
System up time:	2011-04-28 15:23:37
Firmware version:	2.0.0413_level1
MAC Address:	00:11:68:05:3e:ff
ActiveX Control version:	1.0.1.140

Ethernet	
Status:	Connected
Mode:	DHCP
IP Address:	192.168.10.100
Netmask:	255.255.255.0
Default Gateway:	192.168.10.1

PPPoE	
Status:	No connection
IP Address:	none

DNS Server	
Primary DNS IP address:	192.168.1.1
Secondary DNS IP address:	168.95.1.1

DDNS	
Status:	no

Refresh

User

Login users for Web access and operations; authentication required. The Check box is for anonymous logging on to the live view page. Logging for further configurations will still require user name and password.

The screenshot displays the 'User' management interface within the 'System' menu. It features a 'User Setting' section with a checkbox for 'Enable anonymous login (no user name or password required)'. Below this is a 'User List' table with two columns: 'User Name' and 'User Group'. The table contains one entry: 'admin' under 'User Name' and 'Administrator' under 'User Group'. At the bottom of the table are 'Add...' and 'Remove' buttons. A 'Save' button is located at the bottom center of the interface.

User Name	User Group
admin	Administrator

Date & Time

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

The screenshot displays the 'Date & Time' configuration page within a web interface. The top navigation bar includes 'Live View', 'Video', 'Camera', 'Event', 'Schedule', 'Network', 'System', and 'Customize'. The 'System' tab is active, and the sub-tab 'Date & Time' is selected. The page is divided into two main sections: 'Current Server Time' and 'Set Server Time'. The 'Current Server Time' section shows the current date as '2011-04-28' and time as '15:23:55'. The 'Set Server Time' section offers three time modes: 'Synchronize with computer time', 'Synchronize with NTP server' (which is highlighted with a blue link), and 'Set Manually'. The 'Synchronize with computer time' mode shows a date of '2011-04-28' and time of '15:15:55'. The 'Synchronize with NTP server' mode shows a date of '2011-04-28' and time of '15:15:52'. The 'Set Manually' mode shows a date of '2011-04-28' and time of '15:15:52', with examples provided for date and time. A 'Save' button is located at the bottom of the page.

Current Server Time

Date: 2011-04-28 Time: 15:23:55

Set Server Time

Time Mode:

☐ Synchronize with computer time

Date: 2011-04-28 Time: 15:15:55

☒ [Synchronize with NTP server](#)

Time zone:

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

☒ Set Manually

Date: 2011-04-28 Time: 15:15:52

(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.

The screenshot displays the 'Server Maintenance' section of a web interface. At the top, a navigation bar includes 'Live View', 'Video', 'Camera', 'Event', 'Schedule', 'Network', 'System' (selected), and 'Customize'. Below this, a sub-navigation bar contains 'Information', 'User', 'Date & Time', 'Server Maintenance' (selected), and 'Log Service'. The main content area is divided into several sections: 1. 'Maintain Server' with 'Reboot' and 'Load default' buttons. 2. 'Firmware Upgrade' showing device details (Model: FCS-3091, Firmware Version: 2.0.0413_level1, MAC Address: 00:11:68:05:3e:ff, ActiveX Version: 1.0.1.140) and an 'Upgrade' button. 3. 'Backup' with a description and a 'Backup' button. 4. 'Upload Setting' with a description and an 'Upload' button. 5. 'Add Language' with a language dropdown (currently '日本語'), a link to '/lang/en/lang.js', and an 'Upload Language' button.

Maintain Server	
Reboot	Load default

Firmware Upgrade	
Model:	FCS-3091
Firmware Version:	2.0.0413_level1
MAC Address:	00:11:68:05:3e:ff
ActiveX Version:	1.0.1.140
Specify the firmware to upgrade:	
<input type="text"/>	Upgrade

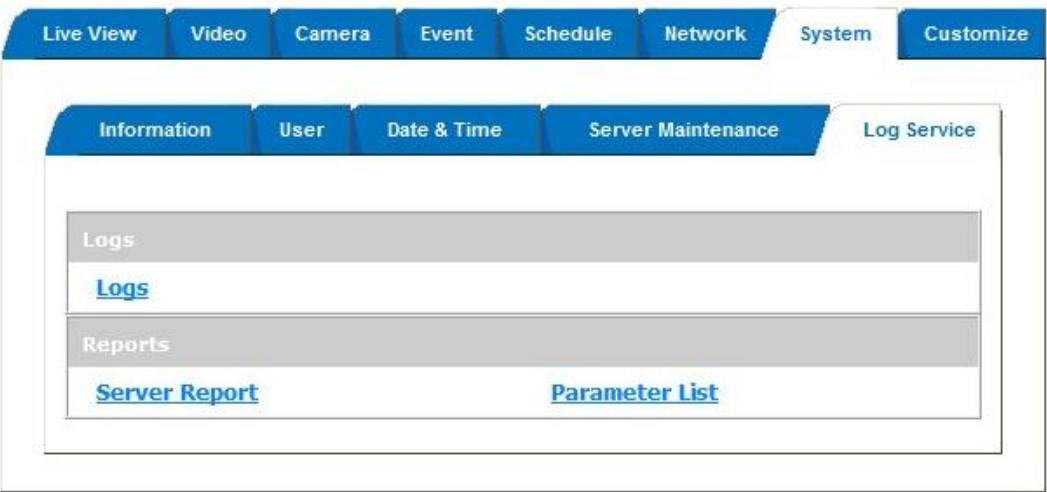
Backup	
Save all parameters and user-defined scripts to a backup file.	
	Backup

Upload Setting	
Use a saved backup file to return the unit to a previous configuration.	
Specify the backup file to use:	
<input type="text"/>	Upload

Add Language	
Choose language:	日本語 ▼
Get a language file from /lang/en/lang.js	
Select language file to upload:	
<input type="text"/>	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 the 'Customize' configuration page. At the top, there is a navigation bar with tabs for 'Live View', 'Video', 'Camera', 'Event', 'Network', 'System', and 'Customize'. The 'Customize' tab is selected. Below the navigation bar, the 'Live View Layout Setting' section contains two radio buttons: 'Use Default Look' (which is selected) and 'Use Custom Settings'. Below this, the 'User Defined Links' section lists four custom links. Each link has a checkbox to 'Show Custom Link', a text field for 'Name', and a text field for 'URL'. The names are 'Custom Link 0', 'Custom Link 1', 'Custom Link 2', and 'Custom Link 3'. The URLs are all 'http://'. A 'Save' button is located at the bottom right of the form.

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 3 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://

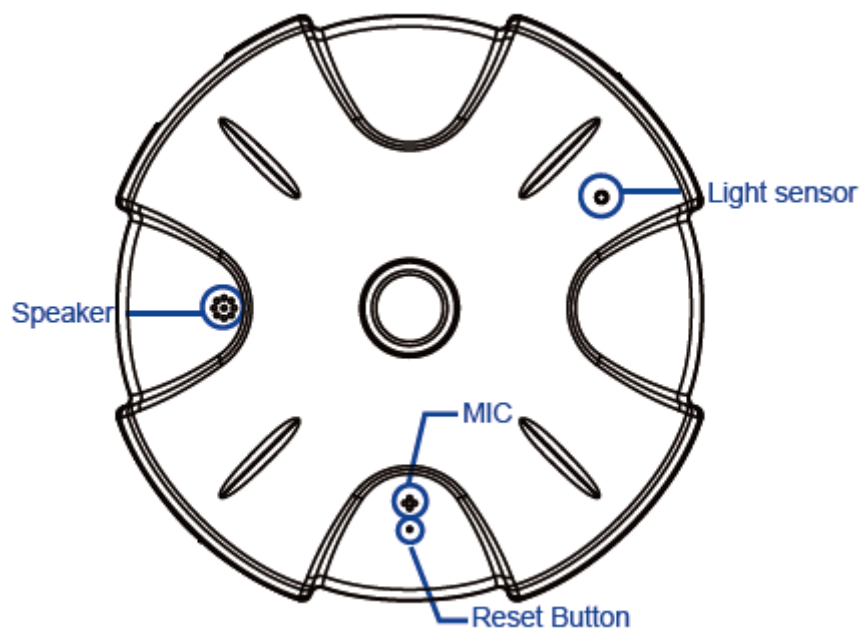
Logo: ☐ None ☒ Default ☐ External: http:// ☐ Own

Select image file to upload:

FAQ

Restore Factory Default

In some cases, system does not respond to any operation, this process gets the unit back to initial status, so that it can be reconfigurable for up and running again.

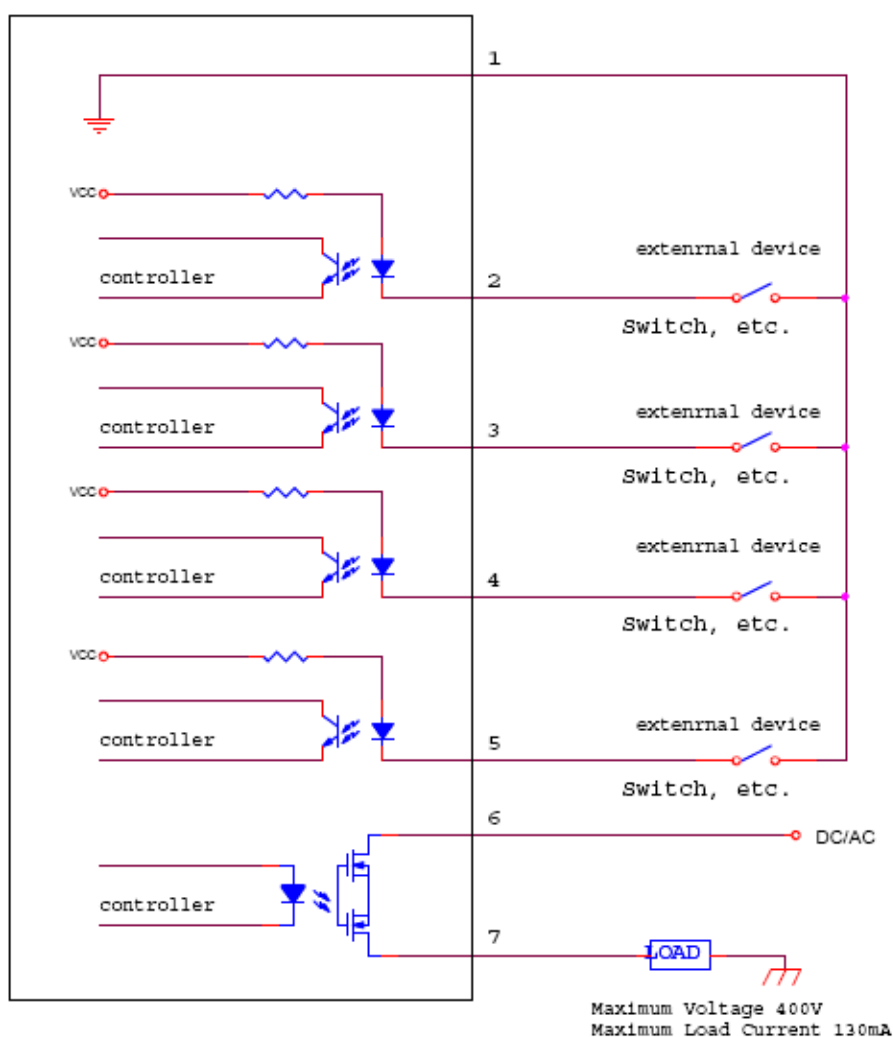


To restore factory default, please follow the steps:

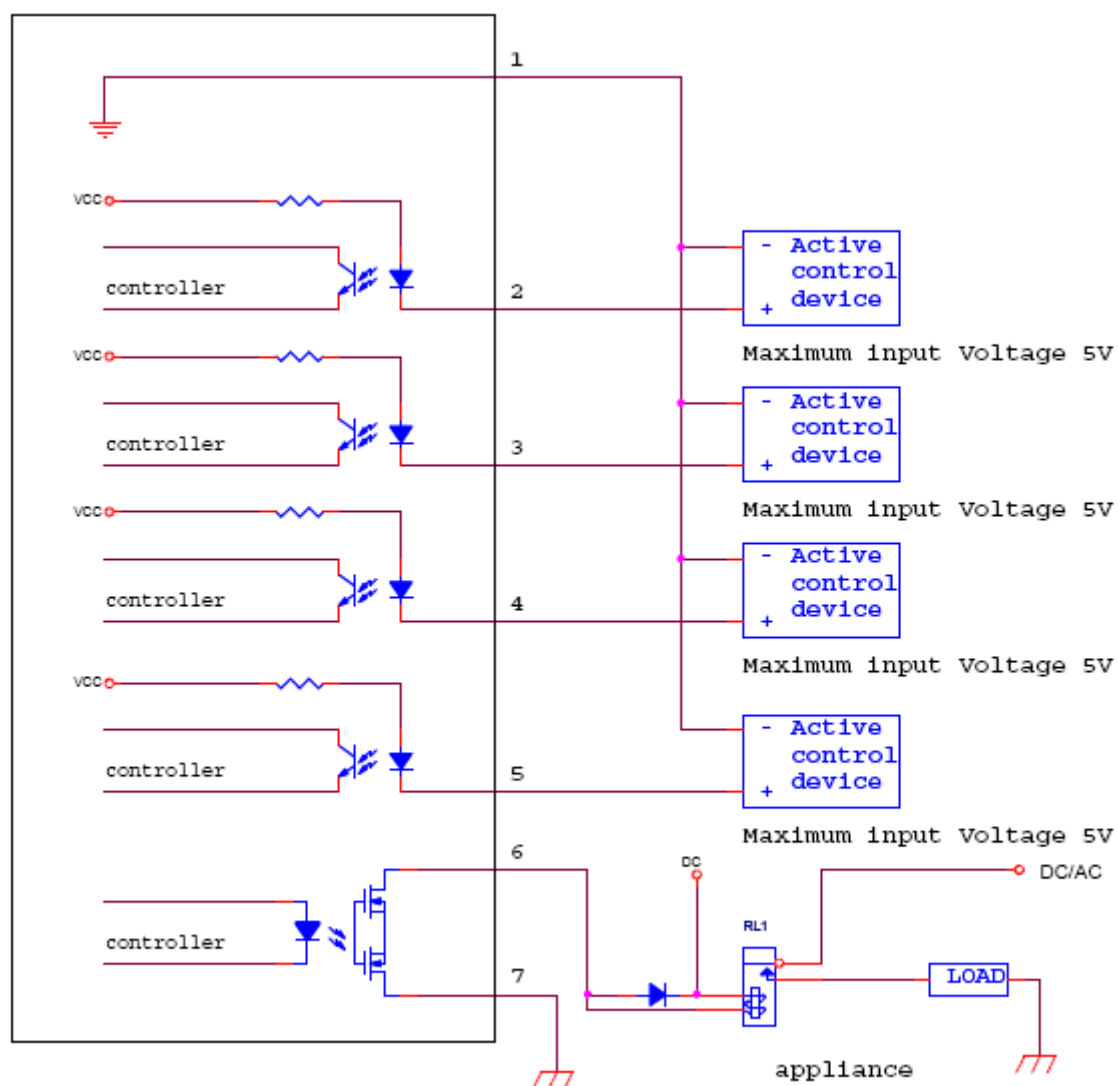
1. Unplug the power jack to turn off the camera
2. Insert a pin into the reset hole pressed the reset button and keep it pressed until instructed to release.
3. Plug in the power jack to turn on the camera. The power LED will start flashing in a short while.
4. Release the pin when the LED starts quick flashing. The device should be set back to factory default.

I/O Terminal Connector - Pin Assignment

Pin	Function	Description
1	GND	Four sets of Digital Input, DI1 until DI4; the internal device is also photo-coupled electrical relay. In practice, the external device can be simply an On/Off switch. Four sets of On/Off switch can be connected as different trigger source.
2	Digital input 4	
3	Digital input 3	
4	Digital input 2	
5	Digital input 1	
6	DO_NO	Digital output implementation; Pin6 to COM (Pin7) 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.
7	DO_COM	



Application 1



Application 2