Mini Bullet IR IP Camera

XIP-B01 PANTHER

User's Manual

Ver. 1.2

Table of Contents

1. Overview

The Full HD Multiple Stream Mini Bullet IR IP Camera XIP-B01 PANTHER, Camera is a compact camera with an easy setup design. PoE is supported to reduce complicated cabling without sacrificing performance. 3 Megapixel Resolution is available for providing high definition images. Quad Stream Compression (H.264 Baseline / Main / High Profile + MJPEG) are supported for efficient bandwidth and storage management. Moreover, the camera is featured with functions such as WDR, 3D Noise Reduction, Day/Night ICR, etc. For more camera features, please see the feature list below.

1.1 Features

- Progressive Scan CMOS Sensor
- 2M Resolution
- Quad Stream Support
- Dual Stream- Full HD 1080P Real Time + D1 Real Time
- Quad Stream Compression- H.264 Baseline / Main / High Profile + MJPEG
- Multi-language Support
- Wide Dynamic Range
- Two-Way Audio Support
- Motion Detection
- Privacy Masks
- Smart Picture Quality / 3D Noise Reduction
- Smart IR Mode
- Day/Night (ICR)
- IR LED Module (working distance up to 15m)
- microSD Support
- Weatherproof (IP66 International)*
- Sunshield
- Integrated Mounting Bracket with Cable Management*
- BNC Analog Output*
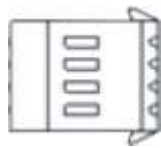- ONVIF Support

(*) Optional

1.2　Package Contents

Please check the package contains the following items listed below.

<u>Indoor</u>

Full HD Multiple Stream

Mini Bullet IR IP Camera XIP-B01 PANTHER

Alarm I/O Terminal Block	Quick Guide	CD (bundled software and documentation)

Outdoor (without Cable Management)

Full HD Multiple Stream Mini Bullet IR IP Camera XIP-B01 PANTHER

Self Tapping Screws (x5)	Plastic Screw Anchors (x5)	Desiccant

Quick Guide	CD (bundled software and documentation)

4

Outdoor (with Cable Management)

Full HD Multiple Stream
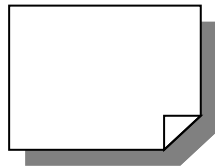
Mini Bullet IR IP Camera XIP-B01 PANTHER

Self Tapping Screws (x5)	Plastic Screw Anchors (x5)	Desiccant
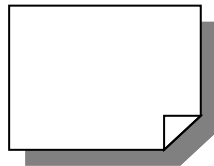
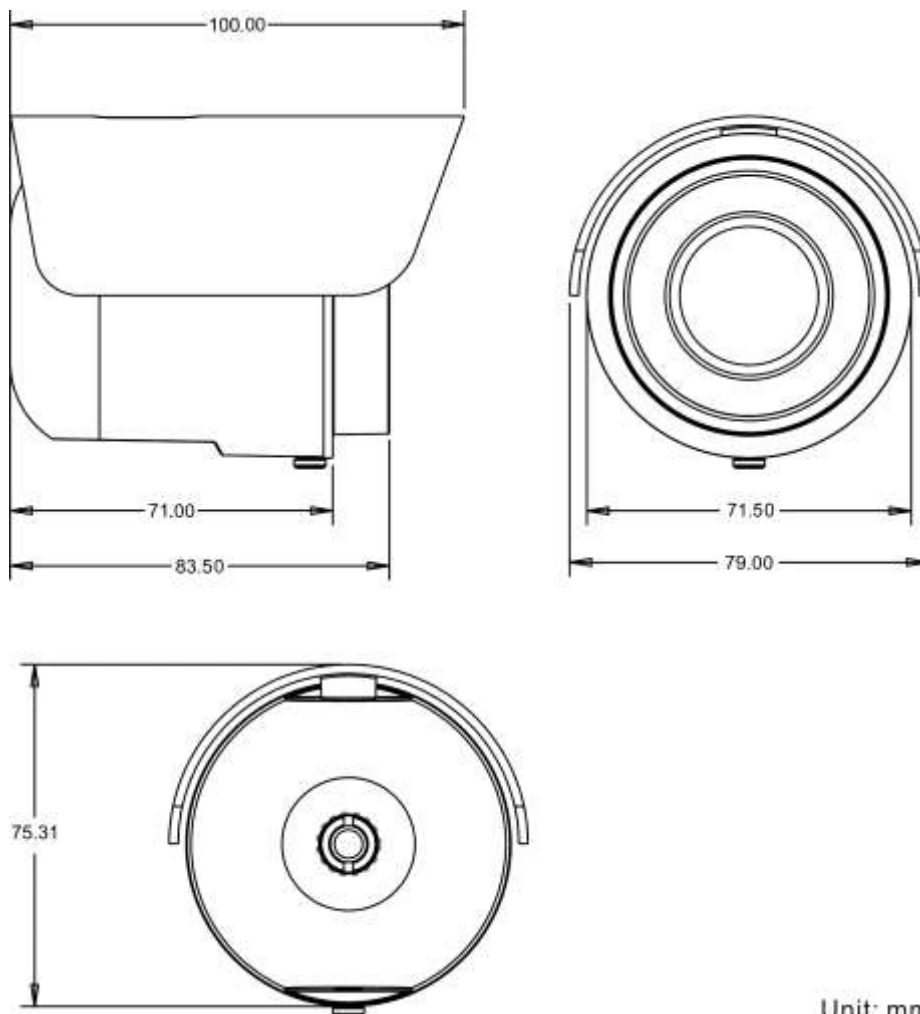| Quick Guide	CD (bundled software and documentation)

1.3   Dimensions

The dimensions of the camera are shown below.

Indoor

65.30
50.80
60.77
14.55
Ø71.50
Unit: mm

Outdoor (without Cable Management)

100.00
71.00
83.50
71.50
79.00
75.31
Unit: mm
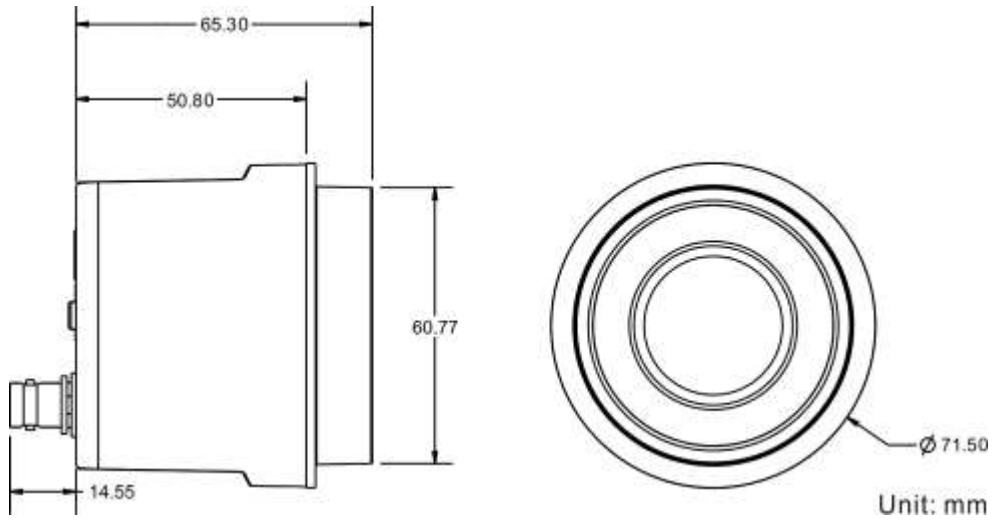
Outdoor (with Cable Management)

Unit: mm

7
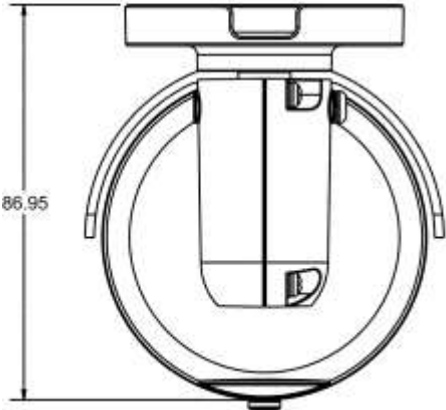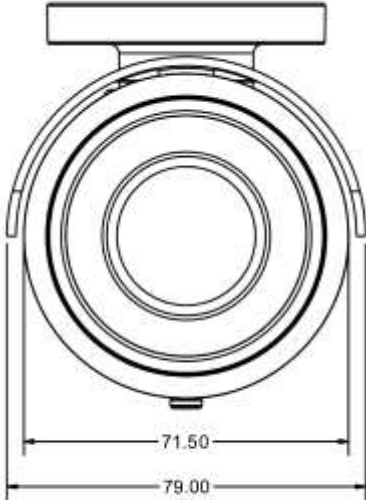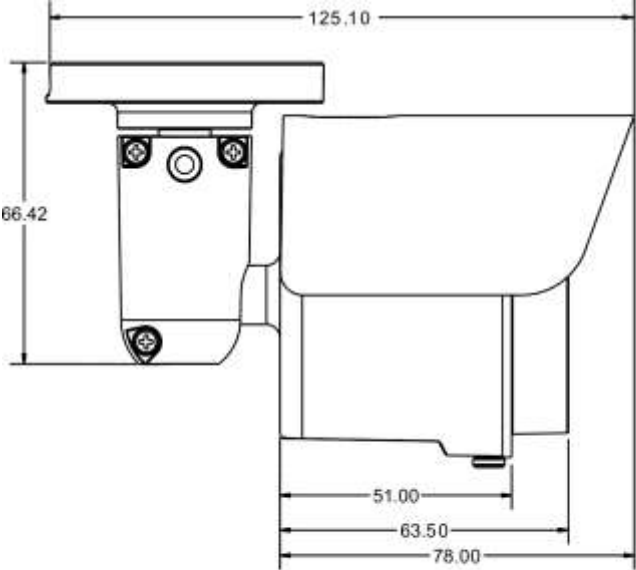
1.4 Connectors (Indoor Only)

The diagram below shows the connectors of the IP Camera. Definition for each connector will be given as follows.

Rear Panel 1
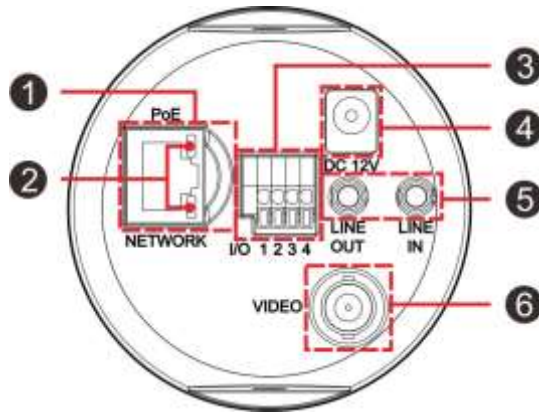
Rear Panel 2
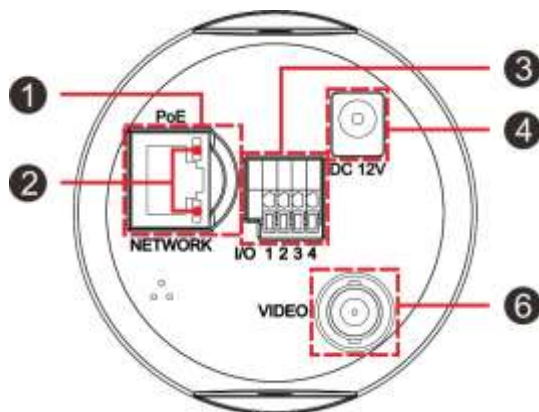
Pin Definition

No.	Connector	Definition			
1	PoE NETWORK	For Ethernet cable and PSE connection			
2	Network LEDs	Network connection and activity indication			
3	Alarm I/O	1	Input −	3	Output −
		2	Input +	4	Output +
4	Power Jack	DC 12V connector for power connection			
5	LINE IN & LINE OUT	Two-way audio transmission			
6	VIDEO (BNC Connector)	For analog videos output			

1.5 Function Cables (Outdoor Only)

RJ-45 Cable

RJ-45 & DC 12V Cable
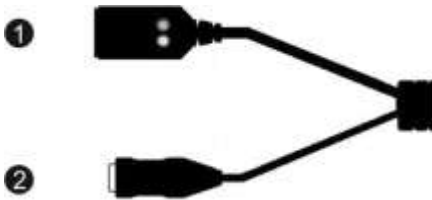
Pin Definition

No.	Connector	Definition
1	**RJ-45**	For Ethernet cable and PSE connection
2	**Power Jack**	DC 12V connector for power connection

1.6   MicroSD Card Slot / Default Button

The positions of the microSD card slot and the default button are shown as below.
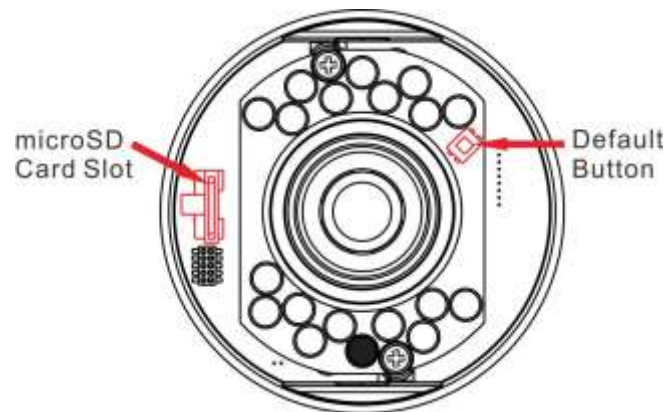
MicroSD Card Slot

Insert the SD Card in the microSD card slot to store videos and snapshots.

Default Button

Press the button with a proper tool for at least 20 seconds to restore the system.

2. Camera Cabling

Before users connect cables, make sure that all cables and the power adaptor are placed in dry and well-waterproofed environments, e.g. waterproof boxes. The purpose is to prevent moisture accumulation inside the camera and moisture penetration into cables, which might lead to camera breakdown. Please follow the instructions below to complete IP Camera connection.

2.1 Connect Power

For power connection, please refer to section Connectors (Indoor Only) for Indoor models, and see section Function Cables (Outdoor Only) for Outdoor models. Alternatively, users can power the camera by PoE. For Indoor models, use an Ethernet cable and connect it to the camera and a PoE switch. As for Outdoor models, connect the Ethernet cable to the function cable of the camera and a PoE switch.

NOTE: If PoE is used, make sure Power Sourcing Equipment (PSE) is in used in the network.

2.2 Connect Ethernet Cable

To have best transmission quality, cable length shall not exceed 100 meters. Connect one end of the Ethernet cable to the PoE Network connector of the camera for Indoor models or the RJ-45 connector of the function cable for Outdoor models. Then plug the other end of the cable to the network switch or PC.

NOTE: In some cases, Ethernet Crossover cable might be needed when connecting the IP Camera directly to the PC.

Check the status of the link indicator and activity indicator LEDs. If the LEDs are unlit, please check the LAN connection.
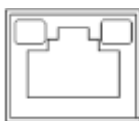
Green Link Light indicates good network connection.
Orange Activity Light flashes for network activity indication.

2.3 Connect Alarm I/O (Indoor Only)

The camera equips one alarm input and one relay output for alarm application. Refer to the alarm pin definition below to connect alarm devices to the camera.
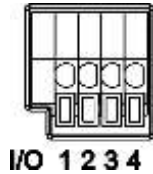
PIN 1: Input −   PIN 3: Output −

PIN 2: Input +   PIN 4: Output +

2.4 Waterproof Cable Connectors (Outdoor Only)

Follow the instruction below to waterproof the connectors of different types of cables. The supported cables are as shown below, from left to right are: RJ-45 & DC 12V Cable, RJ-45 Cable, IP66 RJ-45 Cable 1 and IP66 RJ-45 Cable 2.

RJ-45 & DC 12V Cable

Follow the steps below to waterproof the connectors of the RJ-45 & DC 12V cable.

Step 1:

Connect the required devices to the RJ-45 & DC 12V cable and coat the joints with silicone gel. There should be no gap between the connectors and the cables.

Step 2:

Seal the spot indicated in the figure on the right with silicone gel. Make sure there is no gap between the cables and the hole; otherwise, waterproof function cannot be guaranteed.

RJ-45 Cable

Follow the instruction below to waterproof the connector of the RJ-45 cable.

Plug the Ethernet cable to the connector of the RJ-45 cable and coat the joint with silicone gel. Make sure there is no gap between the Ethernet cable and the connector; otherwise, waterproof function cannot be guaranteed.

IP66 RJ-45 Cable 1 / IP66 RJ-45 Cable 2

For IP66 RJ-45 cable 1 and IP66 RJ-45 cable 2, please use an RJ-45 IP66 plug for connection to prevent water damage. Follow the steps below for cable connection.

Step 1:

Loosen the thread-lock sealing nut on the RJ-45 IP66 plug. For IP66 RJ-45 cable 2, please take out the supplied connector from the RJ-45 IP66 plug first. Then thread the Ethernet cable through the thread-lock sealing nut and the RJ-45 IP66 plug. If the Ethernet cable is attached to a connector already, please remove it first.

IP66 RJ-45 Cable 1

IP66 RJ-45 Cable 2

Step 2:

Carefully remove a section of rubber coating from the end of the Ethernet cable to reveal the wires. Inset the wires to the correct pins of the connector. Plug the Ethernet cable to the connector of IP66 RJ-45 cable 1 / cable 2.

IP66 RJ-45 Cable 1

IP66 RJ-45 Cable 2

Step 3:

Fasten the RJ-45 IP66 plug to the connector of the IP66 RJ-45 cable 1 / cable 2.

Lastly, tighten the thread-lock sealing nut to the plug.

IP66 RJ-45 Cable 1

IP66 RJ-45 Cable 2

3. System Requirements

To perform the IP Camera via web browser, please ensure the PC is in good network connection, and meet system requirements as described below.

Items	System Requirement
Personal Computer	1. Intel® Pentium® M, 2.16 GHz or Intel® Core™2 Duo, 2.0 GHz 2. 2 GB RAM or more
Operating System	Windows VISTA / Windows XP / Windows 7
Web Browser	Microsoft Internet Explorer 6.0 or later Firefox Chrome Safari
Network Card	10Base-T (10 Mbps) or 100Base-TX (100 Mbps) operation
Viewer	ActiveX control plug-in for Microsoft IE

4. Access Camera

For initial access to the camera, users can search the camera through the installer program: DeviceSearch.exe, which can be found in "Device Search" folder in the supplied CD.

Accessing the Camera by Device Search Software

Step 1: Double click on the program Device Search.exe.

Step 2: After its window appears, click on the <Device Search> button on the top. All the finding IP devices will be listed in the page.

Step 3: Find the camera in the list by its IP address and click on it. The default IP address of the camera is: **192.168.0.250**.

Step 4: The default IP address of the camera may not be in the same LAN as the IP address of the PC. If so, the IP address of the camera needs to be changed. Right click on the camera and click <Network Setup>. Meanwhile, record the MAC address of the camera, for future identification.

Step 5: The <Network Setup> page will come out. Select <DHCP> and click <Apply> down the page. The camera will be assigned with a new IP address.

Step 6: Click <OK> on the Note of setting change. Wait for one minute to re-search the camera.

Step 7: Click on the <Device Search> button to re-search all the devices. Find the camera in the list by its MAC address. Then double click or right click and select <Browse> to access the camera directly via a web browser.

Step 8: A prompt window requesting for default username and password will appear. Enter the default username and password shown below to login to the camera.

Login ID	Password
Admin	1234

⚠ **NOTE:** ID and password are case sensitive.

⚠ **NOTE:** It is strongly advised that administrator's password be altered for the security concerns. Refer to Full HD Multiple Stream IP Camera Menu Tree for further details.

Installing DC Viewer Software Online

For the initial access to the camera, a client program, DC Viewer, will be automatically installed to the PC when connecting to the camera.

If the web browser doesn't allow DC Viewer installation, please check the Internet security settings or ActiveX controls and plug-ins settings (refer to Appendix C: Setup Internet Security) to continue the process.

The Information Bar (just below the URL bar) may come out and ask for permission to install the ActiveX Control for displaying video in browser. Right click on the Information Bar and select <Install ActiveX Control…> to allow the installation. Then the security warning window will pop up. Click on <Install> to carry on software installation.

The download procedure of DC Viewer software is specified as follows.

Step 1: In the DC Viewer installation window, click on <Next> to start the installation.

Step 2: A status bar will be displayed to show the installation progress. After the installation is completed, click on <Finish> to exit the installation process.

Step 3: Click on <Finish> to close the DC Viewer installation page.

Once the DC Viewer is successfully installed, the Home page of the IP Camera will be displayed as the figure below.
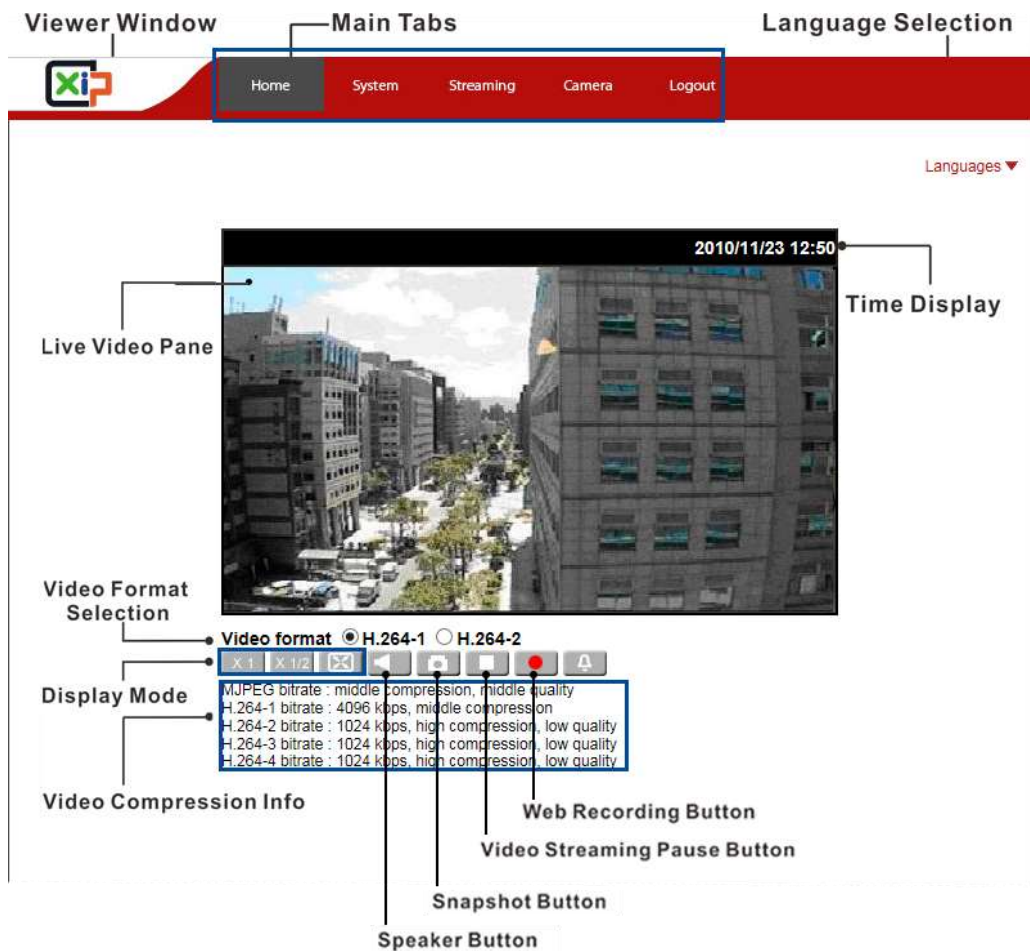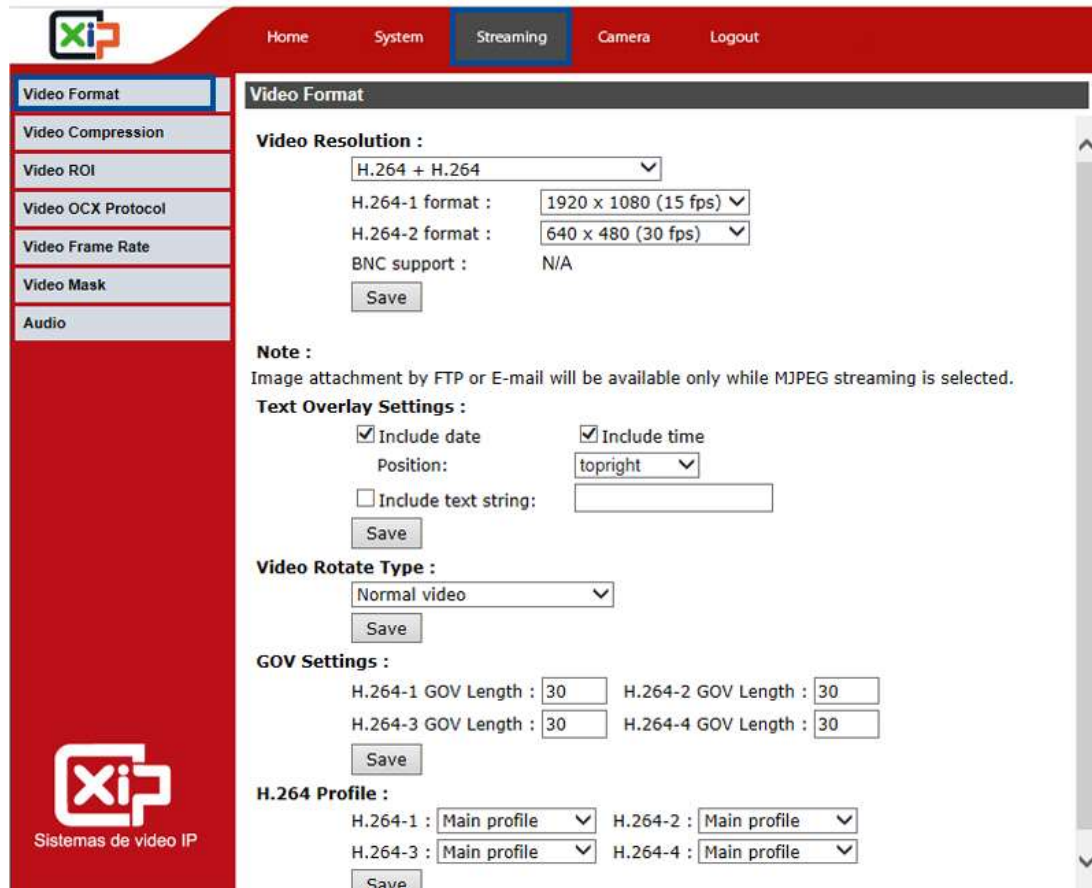
NOTE: Please refer to <u>Full HD Multiple Stream IP Camera Menu Tree</u> for more button function details.

5.   Setup Video Resolution

Users can setup video resolution on Video Format page of the user-friendly browser-based configuration interface.

Video Format can be found under this path: **Streaming> Video Format**.

The default value of video resolution is as below.

2M	H.264- 1920 x 1080 (30 fps) + H.264- 720 x 480 (30 fps)

For more video resolution combination details, please refer to Full HD Multiple Stream IP Camera Menu Tree.

6. Configuration Files Export / Import

To export / import configuration files, users can access the Maintenance page on the user-friendly browser-based configuration interface.

The Maintenance setting can be found under this path: **System> Maintenance**.

Users can export configuration files to a specified location and retrieve data by uploading an existing configuration file to the IP Camera. It is especially convenient to make multiple cameras having the same configuration.

Export

Users can save the system settings by exporting the configuration file (.bin) to a specified location for future use. Click on the <Export> button, and the pop up File Download window will come out. Click on <Save> and specify a desired location for saving the configuration file.

Upload

To upload an existing configuration file to the IP Camera, please first click on <Browse> to select the configuration file, and then click on the <Upload> button for uploading.

Appendix A: Technical Specifications

Camera	2M		
Image Sensor	1/2.7" Progressive CMOS		
Effective Pixels	1920 (H) x 1080 (V)		
Minimum Illumination	TBD		
White Balance	Manual / AWB / ATW		
Shutter Speed	1 ~ 1/10000 sec.		
Lens			
Focal Length	3.0 ~ 6.0 mm / 3.6 mm / 4.0 mm / 2.8 mm		
F Number	3.0 ~ 6.0 mm- F 2.0 3.6 mm- F 1.8 4.0 mm- F 1.5 2.8 mm- F 2.0		
Operation			
Multiple Languages	English / French / German / Italian / Japanese / Korean / Portuguese / Russian / Simplified Chinese / Spanish / Traditional Chinese		
Image Setting	Backlight Compensation	On / Off	
	White Balance	Auto / Manual / ATW	
	Noise Reduction (3D)	On / Off	
	Wide Dynamic Range	On / Off	
	Privacy Mask	On / Off	
	Brightness	Manual	
	Exposure	Auto / Manual	
	Sharpness	Manual	
	Contrast	Manual	
	Saturation	Manual	
	Hue	Manual	
	Digital Zoom	Support	
	Motion Detection	On / Off / By Schedule	
	Privacy Mask Type	Color	
	ICR	Auto / On / Off / Smart	
	ICR + IR LED	Auto / LED On / LED Off / Smart IR / Light Sensor	
	Tampering Alarm	On / Off / By Schedule	
Audio	Two-way Audio	Indoor	Terminal Block
		Outdoor	Pone Jack*
	Compression	G.711 / G.726	
Network			
Interface	RJ-45, 10/100 Mbps		
Video Compression	H.264 / MJPEG		
Video Streaming	Dual Stream- H.264 + MJPEG / H.264 + H.264 Quad Stream- H.264 x 4 / H.264 x 3 + MJPEG		
Video Resolution	H.264- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF MJPEG- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF		
Frame Rate	Single Stream- 1080P (30/25 fps) Dual Stream- 1080P (15/13 fps) + 720P (30/25 fps)		
Protocol	IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF		
Security	HTTPS / IP Filter / IEEE 802.1X		
Alarm	Input	1 Set, 5V 10kΩ pull up	
	Output	1 Set, Photo Relay Output 300V DC/AC	
Event Notification	HTTP / FTP / SMTP		
microSD	microSDHC 32GB support		
Supported Web Browser	Internet Explorer (6.0+) / Chrome / Firefox / Safari		
User Account	20		
Password Levels	User and Administrator		

Mechanical			
Built-in IR Illuminator*	Working Distance		up to 15 m
	Wavelength		850 nm
	Number of LEDs		18
Power Connection			PoE / DC Jack*
Bracket			Cable Management*
LED Indicator			Power / Link / ACT
Connectors	Alarm	Indoor	4 of 7 Pin Terminal Block (Female)
		Outdoor	N/A
	Power	Indoor	DC Jack
		Outdoor	DC Jack of All in One Cable*
	Ethernet	Indoor	RJ-45
		Outdoor	RJ-45 of All in One Cable*
	Analog Video	Indoor	1.0 Vp-p / 75Ω, BNC
		Outdoor	BNC of All in One Cable*
	Audio	Indoor	3 of 7 Pin Terminal Block
		Outdoor	Phone Jack of All in One Cable*
General			
Operating Temperature			-10°C ~ 50°C (14°F ~ 122°F)
Humidity			10% ~ 90%, No Condensation
Weatherproof Standard			IP66 (Optional)
Dimension	Indoor		Ø 71.50 x 79.85 mm (Ø 2.82 x 3.14 in.)
	Outdoor		Ø 71.50 x 100.00 mm (Ø 2.82 x 3.94 in.)
	Outdoor w/ Cable Management		Ø 71.50 x 125.10 x 86.95 mm (Ø 2.82 x 4.93 x 3.42 in.)
Weight			330 g
Power Source			PoE / DC 12V
Power Consumption	System		2.5 W
	Built-in IR Illuminator		1.3 W
Regulatory			FCC / EMC / LVD / RoHS

(*) Optional

Camera	2M Real Time
Image Sensor	1/2.7" Progressive CMOS
Effective Pixels	1920 (H) x 1080 (V)
Minimum Illumination	TBD
White Balance	Manual / AWB / ATW
Shutter Speed	1 ~ 1/10000 sec.

Lens	
Focal Length	3.0 ~ 6.0 mm / 3.6 mm / 4.0 mm / 2.8 mm
F Number	3.0 ~ 6.0 mm- F 2.0 3.6 mm- F 1.8 4.0 mm- F 1.5 2.8 mm- F 2.0

Operation		
Multiple Languages		English / French / German / Italian / Japanese / Korean / Portuguese / Russian / Simplified Chinese / Spanish / Traditional Chinese
Image Setting	Backlight Compensation	On / Off
	White Balance	Auto / Manual / ATW
	Noise Reduction (3D)	On / Off
	Wide Dynamic Range	On / Off
	Privacy Mask	On / Off
	Brightness	Manual
	Exposure	Auto / Manual
	Sharpness	Manual
	Contrast	Manual
	Saturation	Manual
	Hue	Manual
	Digital Zoom	Support
	Motion Detection	On / Off / By Schedule
	Privacy Mask Type	Color
	ICR	Auto / On / Off / Smart
	ICR + IR LED	Auto / LED On / LED Off / Smart IR / Light Sensor
	Tampering Alarm	On / Off / By Schedule
Audio	Two-way Audio	Indoor	Terminal Block
		Outdoor	Pone Jack*
	Compression		G.711 / G.726

Network			
Interface			RJ-45, 10/100 Mbps
Video Compression			H.264 / MJPEG
Video Streaming			Dual Stream- H.264 + MJPEG / H.264 + H.264 Quad Stream- H.264 x 4 / H.264 x 3 + MJPEG
Video Resolution			H.264- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF MJPEG- Full HD 1080P / SXGA / HD 720P / XGA / SVGA / D1 / VGA / CIF
Frame Rate			Dual Stream- 1080P (30/25 fps) + D1 (30/25 fps)
Protocol			IPv4/v6, TCP/IP, UDP, RTP, RTSP, HTTP, HTTPS, ICMP, FTP, SMTP, DHCP, PPPoE, UPnP, IGMP, SNMP, QoS, ONVIF
Security			HTTPS / IP Filter / IEEE 802.1X
Alarm	Input	Indoor	1 Set, 5V 10kΩ pull up
		Outdoor	N/A
	Output	Indoor	1 Set, Photo Relay Output 300V DC/AC
		Outdoor	N/A
Event Notification			HTTP / FTP / SMTP
microSD			microSDHC 32GB support
Supported Web Browser			Internet Explorer (6.0+) / Chrome / Firefox / Safari
User Account			20
Password Levels			User and Administrator

Mechanical			
Built-in IR Illuminator*	Working Distance		up to 15 m
	Wavelength		850 nm
	Number of LEDs		18
Power Connection			PoE / DC Jack*
Bracket			Cable Management*
LED Indicator			Power / Link / ACT
Connectors	Alarm	Indoor	4 of 7 Pin Terminal Block (Female)
		Outdoor	N/A
	Power	Indoor	DC Jack
		Outdoor	DC Jack of All in One Cable*
	Ethernet	Indoor	RJ-45
		Outdoor	RJ-45 of All in One Cable*
	Analog Video	Indoor	1.0 Vp-p / 75Ω, BNC
		Outdoor	BNC of All in One Cable*
	Audio	Indoor	3 of 7 Pin Terminal Block
		Outdoor	Phone Jack of All in One Cable*
General			
Operating Temperature			-10°C ~ 50°C (14°F ~ 122°F)
Humidity			10% ~ 90%, No Condensation
Weatherproof Standard			IP66 (Optional)
Dimension	Indoor		Ø 71.50 x 79.85 mm (Ø 2.82 x 3.14 in.)
	Outdoor		Ø 71.50 x 100.00 mm (Ø 2.82 x 3.94 in.)
	Outdoor w/ Cable Management		Ø 71.50 x 125.10 x 86.95 mm (Ø 2.82 x 4.93 x 3.42 in.)
Weight			330 g
Power Source			PoE / DC 12V
Power Consumption	System		2.5 W
	Built-in IR Illuminator		1.3 W
Regulatory			FCC / EMC / LVD / RoHS

(*) Optional

Appendix B: Delete the Existing DC Viewer

For users who have installed DC Viewer in the PC previously, please remove the existing DC Viewer before accessing the IP Camera.

Deleting the DC Viewer
Activate the <Control Panel>, and then double click on <Add or Remove Programs>. In the <Currently installed programs> list, select <DC Viewer> and click on <Remove> to uninstall the existing DC Viewer.

Deleting Temporary Internet Files
To improve browser performance, it is suggested to clean up all the files in the <Temporary Internet Files>. The procedure is as follows.

Step 1: In the web browser, click on the <Tools> tab on the menu bar and select <Internet Options>.

Step 2: Click on the <Delete> button under the <Browsing History> section.

Step 3: In the appeared window, tick the box beside <Temporary Internet Files> and click on <Delete> to start deleting the files.

Appendix C: Setup Internet Security

If ActiveX control installation is blocked, please either set Internet security level to default or change ActiveX controls and plug-ins settings.

Internet Security Level: Default

Step 1: Start the Internet Explorer (IE).

Step 2: Click on the <Tools> tab on the menu bar and select <Internet Options>.

Step 3: Click on the <Security> tab, and select <Internet> zone.

Step 4: Down the page, click on the <Default Level> button and click on <OK> to confirm the setting. Close the browser window, and restart a new one later to access the camera.

ActiveX Controls and Plug-ins Settings

Step 1: Repeat **Step 1 to Step 3** of the previous section above.

Step 2: Down the page, click on the <Custom Level> button to change ActiveX controls and plug-ins settings. The Security Settings window will pop up.

Step 3: Under <ActiveX controls and plug-ins>, set **ALL** items (as listed below) to <Enable> or <Prompt>. Please note that the items vary by IE version.

> **ActiveX controls and plug-ins settings:**
>
> 1. Binary and script behaviors.
> 2. Download signed ActiveX controls.
> 3. Download unsigned ActiveX controls.
> 4. Allow previously unused ActiveX controls to run without prompt.
> 5. Allow Scriptlets.
> 6. Automatic prompting for ActiveX controls.
> 7. Initialize and script ActiveX controls not marked as safe for scripting.
> 8. Run ActiveX controls and plug-ins.
> 9. Only allow approved domains to use ActiveX without prompt.
> 10. Script ActiveX controls marked safe for scripting*.
> 11. Display video and animation on a webpage that does not use external media player.

Step 4: Click on <OK> to accept the settings. A prompt window will appear for confirming the setting changes, click <Yes(Y)> to close the Security Setting window.

Step 5: Click on <OK> to close the Internet Options screen.

Step 6: Close the browser window, and restart a new one later to access the camera.