

Quick Guide



V988B
Network 4K Bullet Camera

XX302-20-00



Vicon Industries Inc. does not warrant that the functions contained in this equipment will meet your requirements or that the operation will be entirely error free or perform precisely as described in the documentation. This system has not been designed to be used in life-critical situations and must not be used for this purpose.

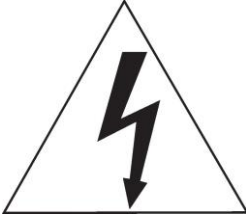

Document Number: 8009-8302-20-00 Product specifications subject to change without notice. Issued: 6/18 Copyright © 2018 Vicon Industries Inc. All rights reserved.

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WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EX-POSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

CAUTION

	<table border="1"><tr><td>CAUTION</td></tr><tr><td>RISK OF ELECTRIC SHOCK DO NOT OPEN</td></tr></table>	CAUTION	RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION				
RISK OF ELECTRIC SHOCK DO NOT OPEN				
<p>WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>				

EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

FCC COMPLIANCE STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC INFORMATION: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radiofrequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class A digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

CE COMPLIANCE STATEMENT

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.
DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. **CAUTION – THESE SERVICING INSTRUCTIONS ARE FOR USE BY QUALIFIED SERVICE PERSONNEL ONLY. TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT PERFORM ANY SERVICING OTHER THAN THAT CONTAINED IN THE OPERATING INSTRUCTIONS UNLESS YOU ARE QUALIFIED TO DO SO.**
16. Use satisfy clause 2.5 of IEC60950-1/UL60950-1 or Certified/Listed Class 2 power source only.
17. ITE is to be connected only to PoE networks without routing to the outside plant.



1 Introduction

Vicon's V988B-W311MIR HD IP Bullet Camera is designed for performance in demanding security installations. The camera provides 4K (8 MP) resolution with a 3.6-11 mm motorized varifocal lens. The camera offers IR illuminators that provide superior images in low-light environments.

The V988B-W311MIR supports H.264/H.265 compression technology, drastically reducing file sizes and conserving valuable network bandwidth. M-JPEG compression is also provided. The camera can provides quad streaming for multi-camera displays.

1.1 Components

This system comes with the following components; Network

Camera	1
Installation Guide	1
Accessory Kit	1

Note 1. Check your package to make sure that you received the complete system, including all components listed above.

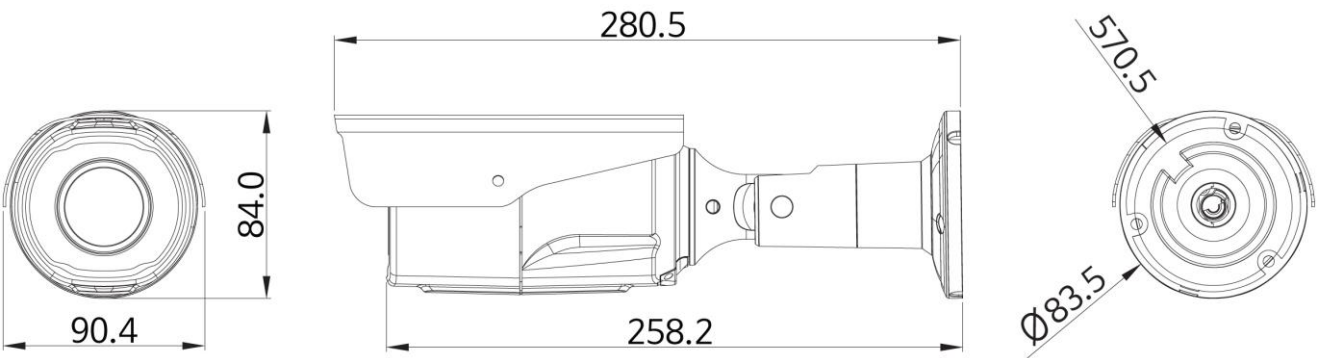
Note 2. Adapter for 12 VDC is not supplied.

2 Installation

For the network camera to operate, it is necessary to connect a network cable for data transmission and power connection from a power adapter. Depending on operation methods, it is possible to connect an alarm cable.

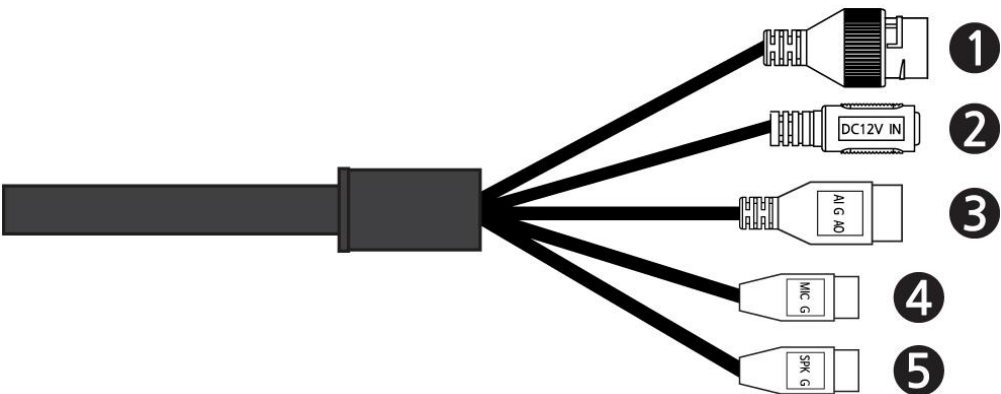
2.1 Overview

- Dimension



Dimensions Unit: mm

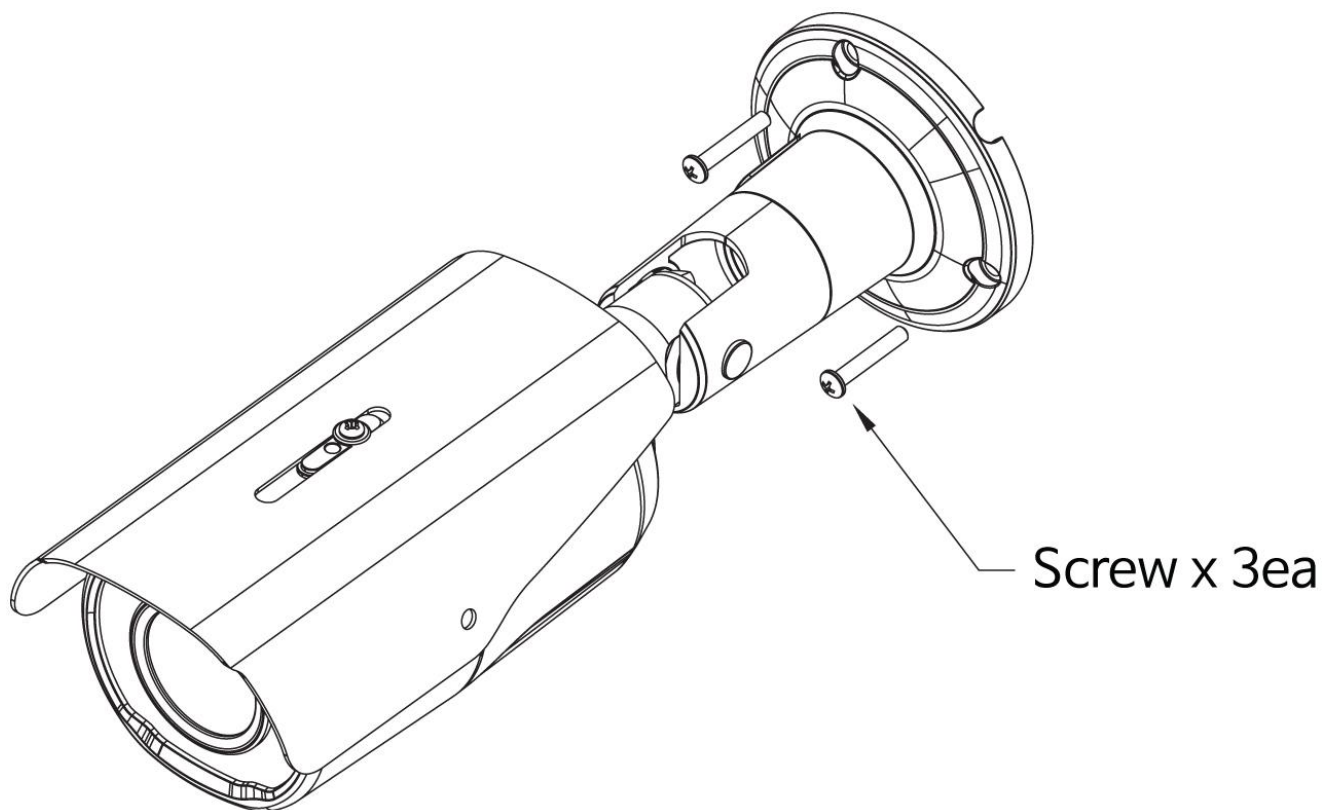
- Extension Cable



No.	Item	Description
1	RJ-45	Ethernet, RJ-45 port compatible with 10/100Mbps PoE Modular Jack
2	DC Jack	Main Power, DC Jack, 12 VDC
3	AI: Alarm In	Alarm input and output, 3-pin terminal
	G: GND	
	AO: Alarm Out	
4	MIC: Audio In	Audio line input, 2-pin terminal
	G: GND	
5	SPK: Audio Out	Audio line output, 2-pin terminal
	G: GND	

- **Installing Camera**

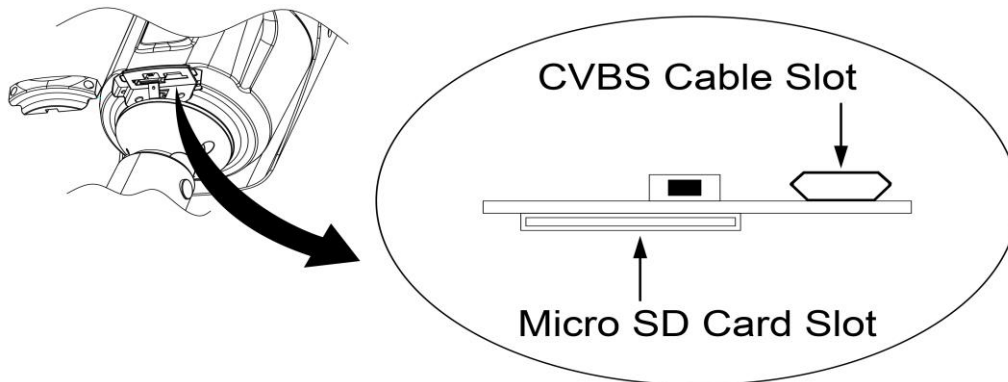
To mount the bullet camera, fix the base of the camera with the three screws provided in the accessory kit.



2.2 Connection

- **Micro SD memory slot on the bottom board**

Remove the cap at bottom of the camera to insert the SD memory card.



- **Connecting to the RJ-45**

Connect a standard RJ-45 cable to the network port of the network camera. Generally a cross-over cable is used for direct connection to PC, while a direct cable is used for connection to a hub. You can also use a router featuring PoE (Power over Ethernet) to supply power to the camera.

- **Connecting Alarms**

AI (Alarm In): You can use external devices to signal the network camera to react on events. Mechanical or electrical switches can be wired to the AI (Alarm In) and G (Ground) connectors.

G (Ground): Connect the ground side of the alarm input and/or alarm output to the G (Ground) connector.

AO (Alarm Out): The network camera can activate external devices such as buzzers or lights. Connect the device to the AO (Alarm Out) and G (Ground) connectors.

- **Connecting the Power**

Connect the power of 12VDC for the network camera. Connect the positive (+) pole to the '+' position and the negative (-) pole to the '-' position for the DC power.

- Be careful not to reverse the polarity when connecting the power cable.
- A router featuring PoE (Power over Ethernet) can also be used to supply power to the camera.
- For the power specifications, refer to the appendix, product specification in the User manual.
- If PoE and 12 VDC are both applied, the camera will be supplied with power from PoE.

- **Connecting Audio**

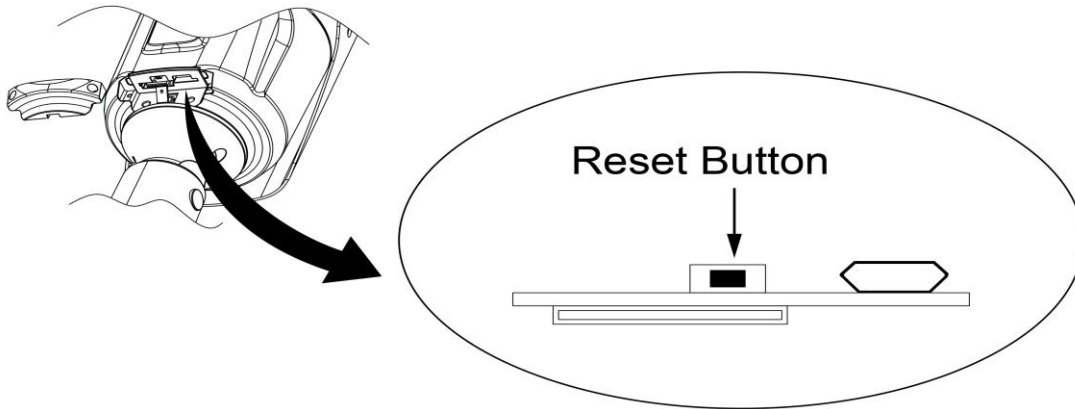
Connect speaker to audio line output and external Mic to audio input line.

- **Connecting Test Monitor Out (CVBS)**

Connect 5-pin micro USB test video cable (optional) to check test video. Use optional cable assembly V988B-USB-BNC.

2.3 Resetting to the Factory Default Settings

To reset the network camera to the original factory settings, go to the Setup > System > Maintenance web page (described in "System > Maintenance" of User Manual) or use the **Reset** button on the network camera inside the bottom cap.



- **Using the Reset button:**

Follow the instructions below to reset the network camera to the factory default settings using the Reset button.

- 1) Switch off the network camera by disconnecting the power adapter.
- 2) Open the top cap.
- 3) Press and hold the Reset button with a straightened paperclip while reconnecting the power.
- 4) Keep the Reset button pressed at least 5 (or more) seconds.
- 5) Release the Reset button.
- 6) The network camera resets to factory defaults and restarts after completing the factory reset.
- 7) Close the bottom cap tightly to ensure waterproof.

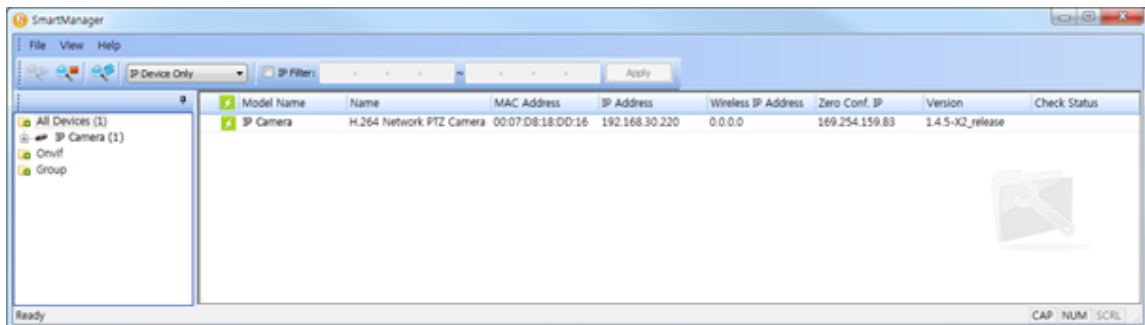
CAUTION: When performing a Factory Reset, you will lose any settings that have been saved.

2.4 Network Connection & IP Assignment

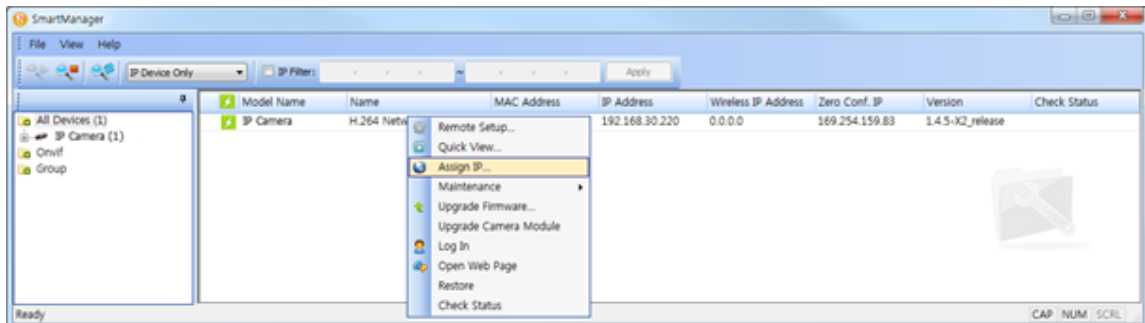
The network camera is designed for use on an Ethernet network and requires an IP address for access. Most networks today have a DHCP server that automatically assigns IP addresses to connected devices. By the factory default, your camera is set to obtain the IP address automatically via DHCP server. If your network does not have a DHCP server the network camera will use 192.168.1.100 as the default IP address.

If DHCP is enabled and the product cannot be accessed, run the “Smart Manager” utility to search and allocate an IP address to your products, or reset the product to the factory default settings and then perform the installation again. The utility can be found on the Vicon website www.vicon-security.com, on the Software Downloads page for Vicon cameras.

- 1) Connect the network camera/device to the network and power up.
- 2) Start SmartManager utility (Start > All programs > SmartManager > SmartManager); the main window displays. After a short while any network devices connected to the network will be displayed in the list.



- 3) Select the camera on the list and click right button of the mouse. The pop-up menu below displays.



- 4) Select Assign IP. The Assign IP window displays. Enter the required IP address.



NOTE: For more information, refer to the SmartManager User Manual.

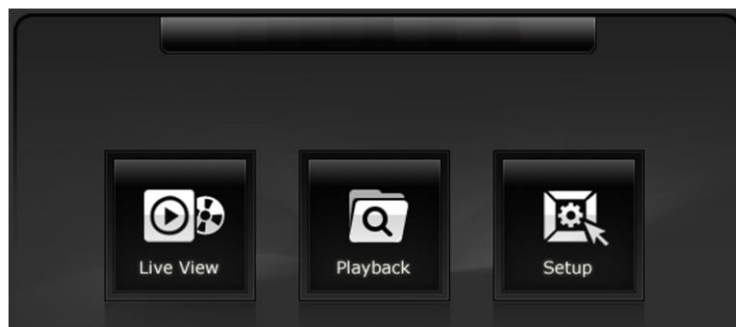
3. Operation

The network camera can be used with Windows® operating system and browsers. The recommended browsers are Internet Explorer®, Safari®, Firefox®, Opera® and Google® Chrome® with Windows.

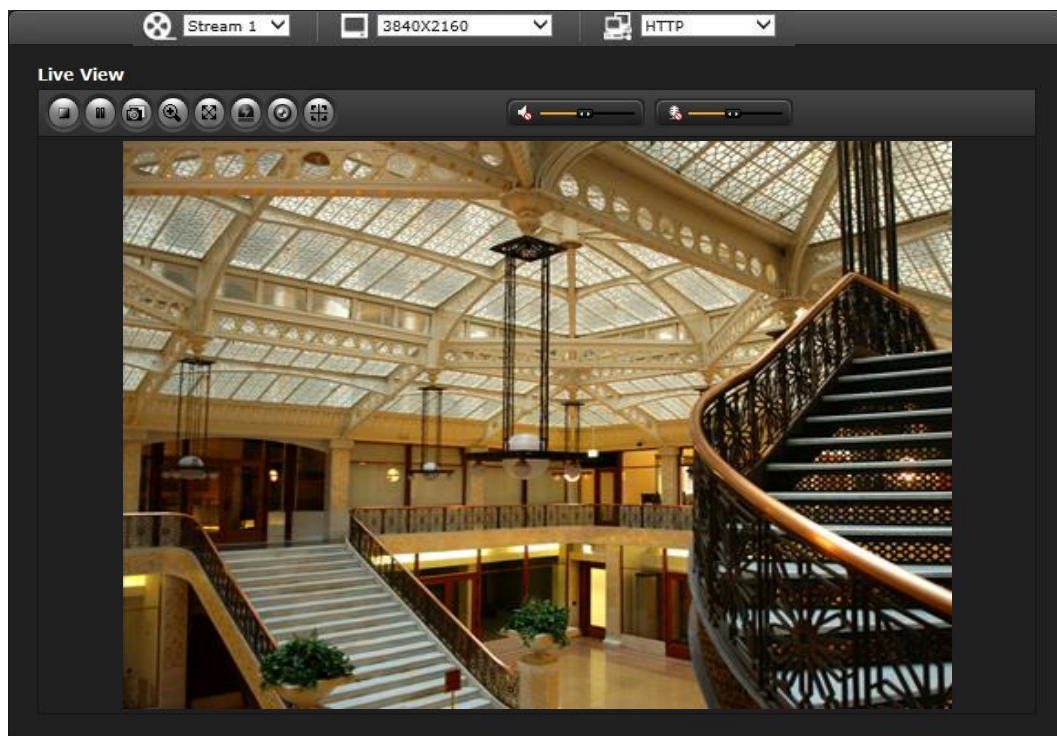
Note: To view streaming video in Microsoft® Internet Explorer, set your browser to allow ActiveX controls.

3.1 Access from a Browser

1. Start a browser (i.e., Internet Explorer).
2. Enter the IP address or host name of the network camera in the Location/Address field of the browser.
3. A starting page displays. Click **Live View**, **Playback**, or **Setup** to enter web page.



4. Click Live View for the network camera's **Live View** page to appear in the browser.



3.2 Access from the internet

Once connected, the network camera is accessible on your local network (LAN). To access the network camera from the Internet you must configure your broadband router to allow incoming data traffic to the network camera. To do this, enable the NAT traversal feature, which will attempt to automatically configure the router

to allow access to the network camera. This is enabled from Setup > System > Network > NAT. For more information, refer to section "System>Network>NAT" of the User manual.

3.3 Setting the admin password over a secure connection

To gain access to the product, the password for the default administrator user must be set. This is done in the "Admin Password" dialog, which is displayed when the network camera is accessed for the setup at the first time. Enter your admin name and password, set by the administrator.



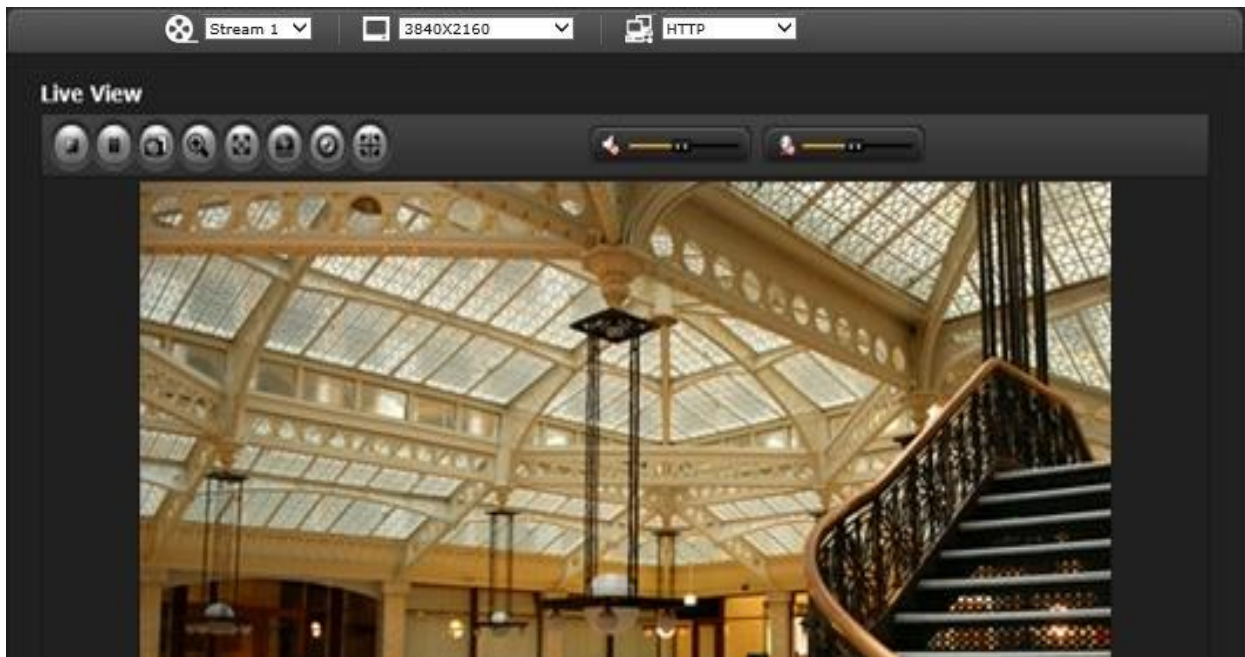
NOTE: The default administrator user name and password is "ADMIN" and the password is "1234". If the password is lost, the network camera must be reset to the factory default settings. See section "Resetting to the factory default settings" for more details

To prevent network eavesdropping when setting the admin password, this can be done via an encrypted HTTPS connection, which requires an HTTPS certificate (see NOTE below). To set the password via a standard HTTP connection, enter it directly in the first dialog shown below. To set the password via an encrypted HTTPS connection, see section "System>Security >HTTPS" of User Manual.

NOTE: HTTPS (Hypertext Transfer Protocol over SSL) is a protocol used to encrypt the traffic between web browsers and servers. The HTTPS certificate controls the encrypted exchange of information.

3.4 Live View Page

The Live View page provides several screen modes. Select the most suitable mode in accordance with your PC specifications and monitoring purposes.



1) General controls



Live View Page



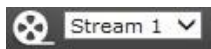
Playback Page



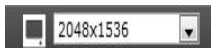
Setup Page



Help Page



The video drop-down list allows you to select a customized or pre-programmed video stream on the Live View page. Stream profiles are configured under Setup > Basic Configuration > Video & Image. For more information, see "Basic Configuration > Video & Image" of User Manual.



The resolution drop-down list allows the selection of the most suitable video resolutions to be displayed on Live View page.



The protocol drop-down list allows the selection of the combination of protocols and methods to use depending on your viewing requirements and on the properties of your network.

2) Control toolbar

The live viewer toolbar is available in the web browser page only. It displays the following buttons:



The **Stop** button stops the video stream being played. Pressing the key again toggles the start and stop. The **Start** button connects to the network camera or starts playing a video stream.



The **Pause** button temporarily stops (pauses) the video stream being played.



The **Snapshot** button takes a picture (snapshot) of the current image. The location where the image is saved can be specified.



The **Digital Zoom** button activates a zoom-in or zoom-out function for video image on the live screen.



The **Full Screen** button causes the video image to fill the entire screen area. No other windows will be visible. Press the 'Esc' button on the computer keyboard to cancel full screen view.



The **Manual Trigger** button activates a pop-up window to manually start or stop the event.



The **Remote Focus** button enables users to adjust focus and zoom remotely via network (motorized lens models only).



The **Fine Focus** (one push focus) button readjusts focus automatically to set the focus to the optimum position (motorized lens models only).



Use the **Speaker** icon scale to control the volume of the speakers.




Use the **Microphone** icon scale to control the volume of the microphone.

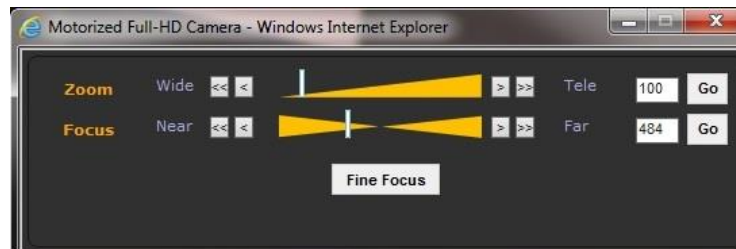
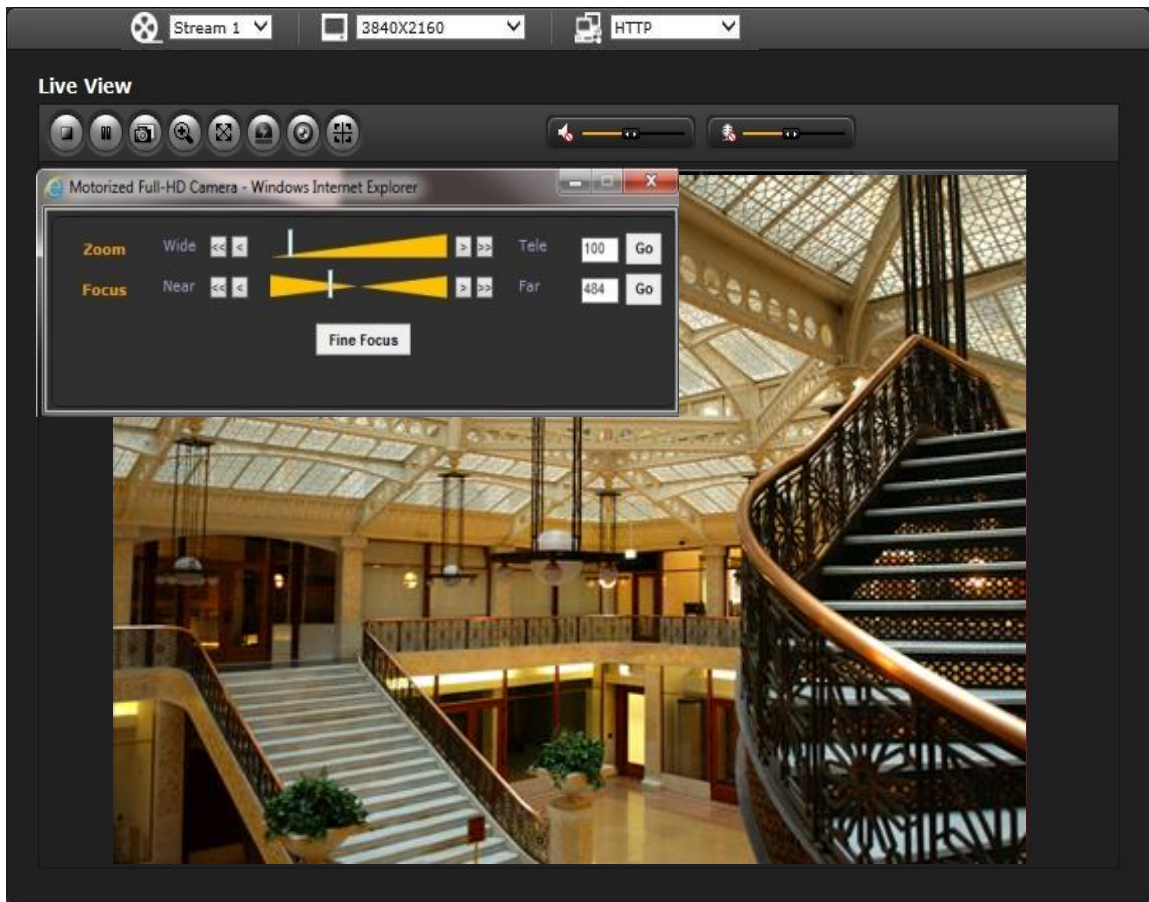
3) Video Streams

The network camera provides several images and video stream formats. Your requirements and the properties of your network will determine the type you use.


The Live View page in the network camera provides access to H.264, H.265 and Motion JPEG video streams, and to the list of available video streams. Other applications and clients can also access these video streams/images directly, without going via the Live View page.

4) Focus and Zoom Control (motorized lens models only).

You can control Zoom and Focus from the Live View screen. Press the  button on the left top in the Live View screen to activate the Zoom and Focus control panel.



- Adjusting Zoom:
Click "<" button to zoom out and click ">" button to zoom in. The focus is moved slightly after adjusting zoom; adjust the focus again, as necessary.
- Adjusting Focus:
Click ">" button for far focus and click "<" button to near focus.
- Fine Focus:
Click "Fine Focus" to fine tune and readjust focus automatically.

Note: Click the  button in the Live View screen to set the focus to the optimum position.