Quick Installation Guide

ROUGHNECK V-CELL-HD-B
Corner-Mount Network Camera

XX247-32-01

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.

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1. Description

The information in this manual provides quick installation and setup procedures for the V-CELL-HD-B of High-Security Corner-Mounted Cameras. These units should only be installed by a qualified technician using approved materials in conformance with federal, state, and local codes. Read these instructions thoroughly before beginning an installation. Refer to the complete manual for detailed information. Always refer to Vicon's website to assure you have the most up-to-date manual, http://www.vicon-security.com.

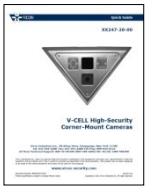
The Roughneck® V-CELL-HD-B high-security camera is an integrated housing, camera, lens and IR illuminators system specifically designed for use in custodial suites and prison cells. It is available in an IP version that is fully compatible with all Vicon Valerus® and ViconNet® systems; its ONVIF certification provides an open-platform for integration into other video management systems.

The housing is designed to fit into a corner; once installed, the base plate should be permanently sealed to the wall so that the housing is ligature proof. The housing consists of a two part stainless steel assembly, a fixed base plate and a removable front plate, that allows ease of installation and servicing. The front plate is secured with security screws and has two polycarbonate windows to protect the camera and IR illuminators. The alarm input and alarm output can be used to connect various third party devices, such as door sensors and alarm bells.

1.1 Components

The system comes with the following components:

Camera unit



Installation Guide

Installation CD

Accessory Kit

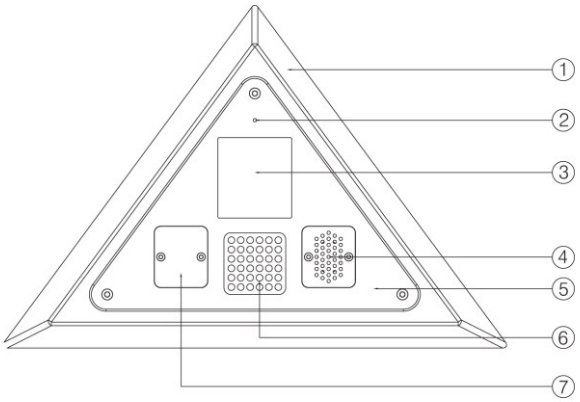
Check your package to make sure that you received the complete system, including all components shown above.

2. Installation

For the network camera to operate, it is necessary to connect a network cable for data transmission and power connection from customer-supplied power supply.

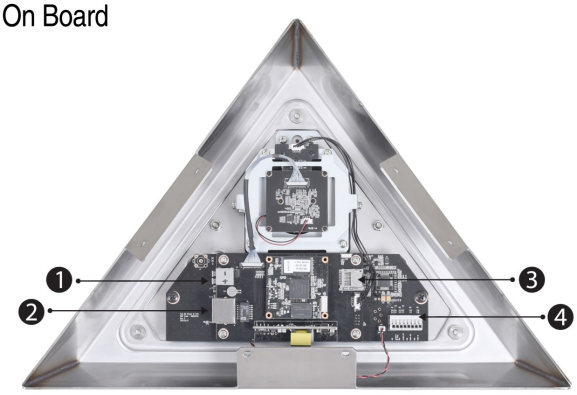
2.1 Overview

- **Parts and Description**



① Mounting Frame
② Mic
③ Camera/Lens
④ Speaker
⑤ Camera Bracket
⑥ IR Window & IR LED
⑦ Status LED

On Board

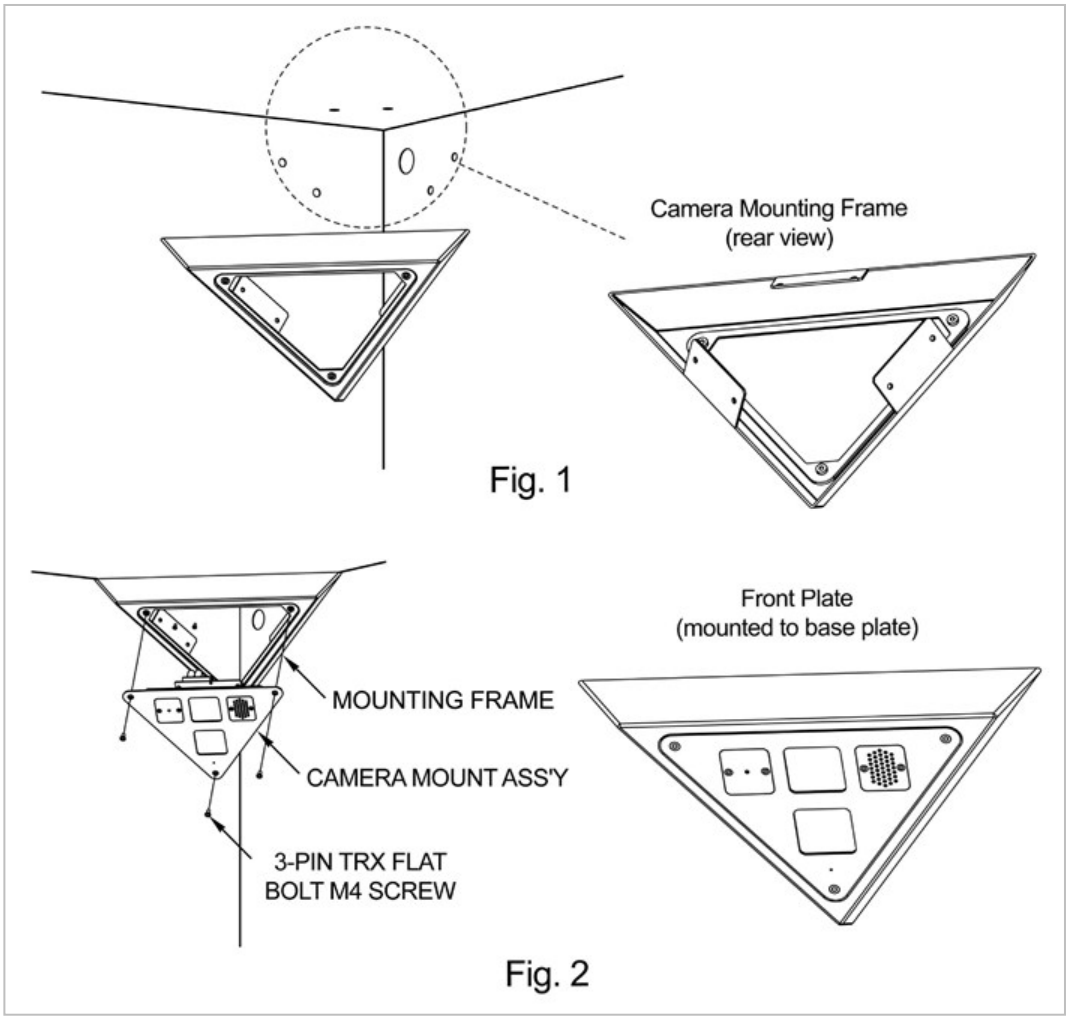


① Main Power 12 VDC (↑ (-) pole / ↓ (+) pole)
② RJ45 (PoE) Port
③ Micro-SD Card Slot
④ Alarm & Audio In/Out Port
⑤ Status LED
Upon boot-up, green and red LEDs are both on for a short time and then only green will be on. If red is lit, this indicates a failure (no picture); if flashing green and no red, this indicates that a good picture is displaying.

● Quick Installation

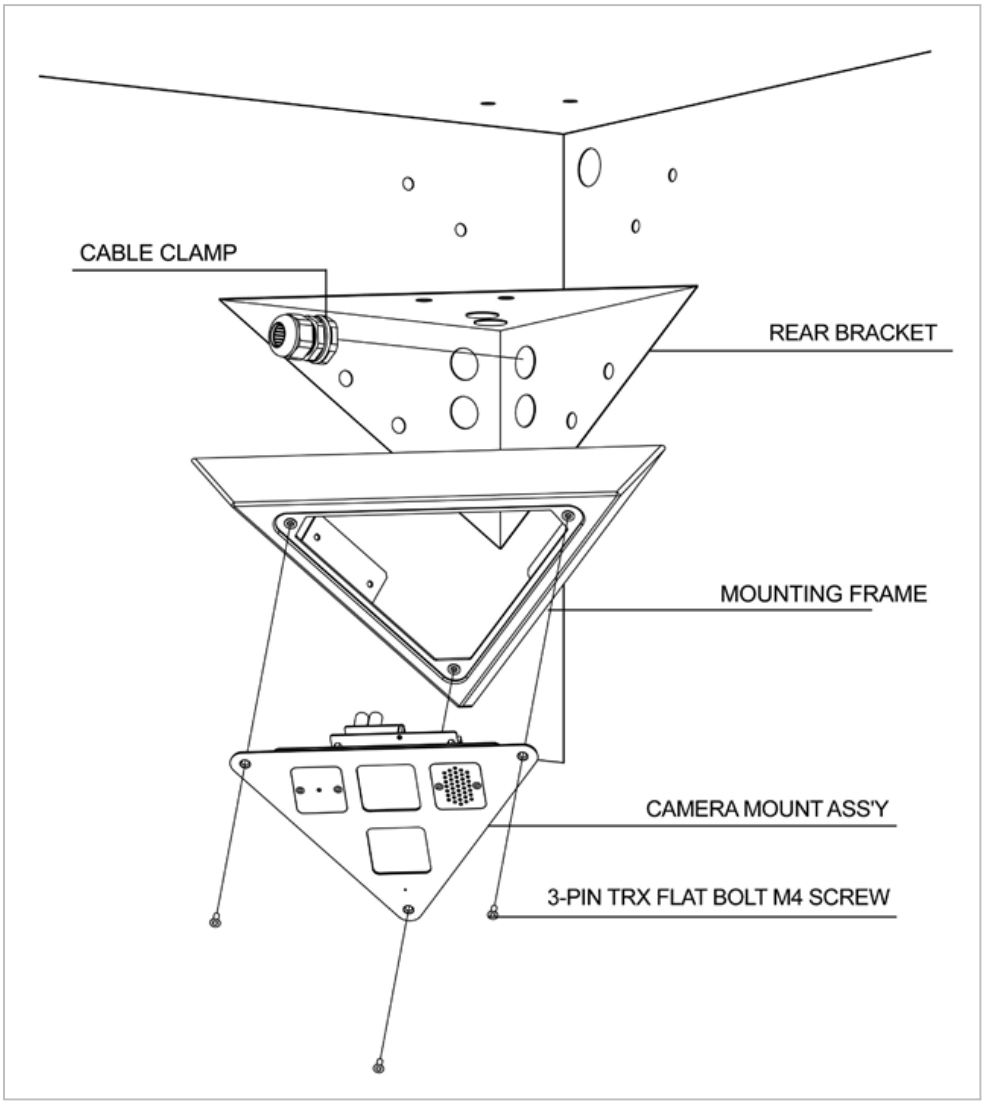
Below is an overview for installing the camera.

1) Installation (without Rear Cover)



1. Use camera mounting frame as template to mark mounting holes on mounting surface. (Fig.1)
2. Drill holes for mounting base and a minimum 3/4 in. hole for routing wines. (Fig.1)
3. Mount camera mounting frame using appropriate hardware for mounting surface. (Fig.2)
4. Route wires through hole in wall and out through base plate. (Fig.2).
5. Terminate wires to camera board.
6. Mount front plate to base plate. (Fig.2)

2) Installation (using Rear Cover)



1. Use rear cover as template to mark mounting and cable access holes.
2. Drill mounting and cable access holes in mounting surface.
3. Insert cable clamp into access hole, route cables through clamp and mount cover using appropriate hardware.
4. Use camera mounting frame to mark its mounting holes, drill holes and mount using appropriate hardware.
5. Terminate wires to camera board. Feed the excess wire back through cable clamp and tighten clamp.
6. Mount front plate to camera mounting frame.

Note: Installation of the rear cover is required for UL/Canadian UL compliance.

2.2 Cable Connections

All cabling is done to the boards located on the back of the front plate.

1) Micro SD memory slot on the Board

Card Slot for Micro SD memory: Socket "J10." (SD card customer-supplied.)

2) Connecting to the RJ-45

Connect a standard RJ-45 cable to the network port of the network camera. Generally a crossover cable is used for direct connection to a PC, while a direct cable is used for connection to a hub.

3) Connecting Alarms

- **AI (Alarm In):**
  External devices can be used to signal the network camera to react upon 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.
- **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.

4) Connecting the Power

Connect the power of 12 VDC 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.
- The heater can be powered by a 12 VDC, or PoE power source.
- For the power specifications, refer to the Appendix, Product Specification.
- If PoE and 12 VDC are both applied, the camera will be supplied with power from PoE. If PoE power goes down, 12 VDC will take over.

5) IR Control

To adjust the intensity of the IR illuminators, use the Day & Night menu in the web browser.

● Final Installation

When all connections are made, secure the front plate to the base plate using the security screws previously removed using no. 20 Torx bit.

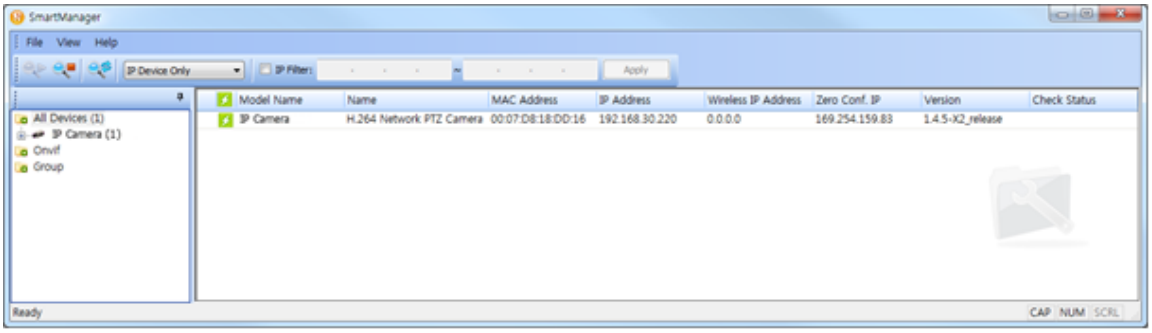
2.3 Network Connection and IP assignment

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.

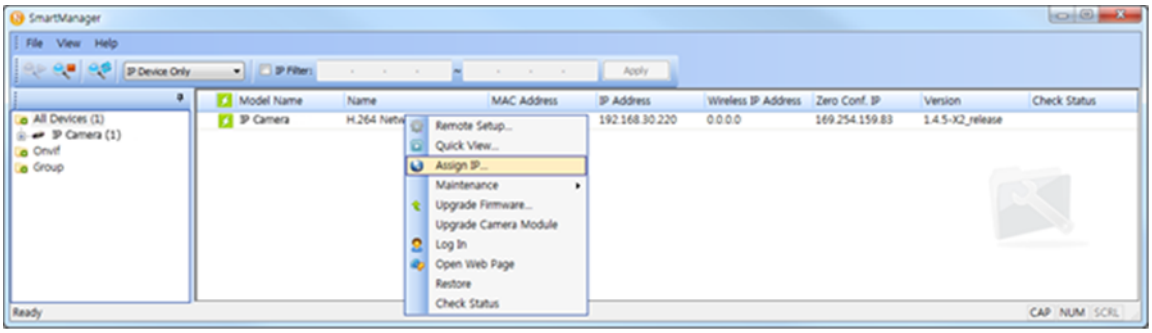
If DHCP is enabled and the product cannot be accessed, run the "Smart Manager" utility on the CD to search and allocate an IP address to your products, or reset the product to the factory default settings and then perform the installation again.

1. Connect the network camera 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 Smart Manger User's 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.
Note: Some screens may appear different (i.e., color scheme) depending on the firmware version, but the functionality is the same or similar.

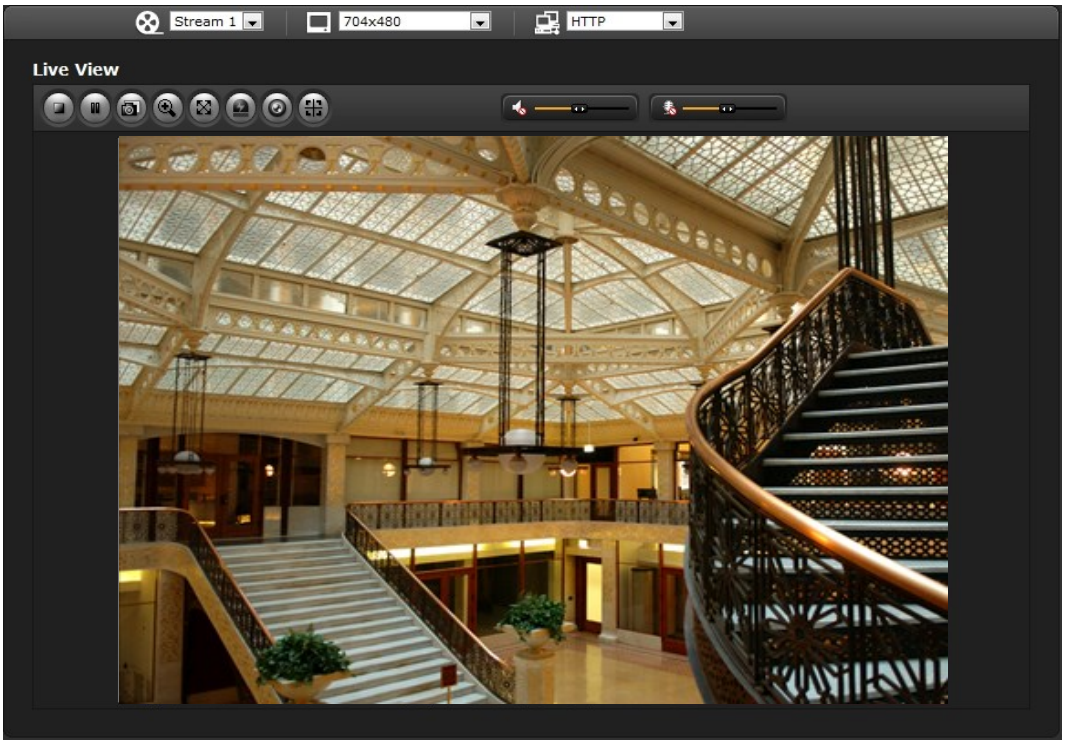
3.1 Access from a Browser

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 select corresponding 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 "3.5.6 System>Network>NAT" of the User's manual.

3.3 Setting the Admin Password Over a Secure Connection

To gain access to the camera, 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 setup the first time. Enter your admin name and password, set by the administrator.

Note: The default administrator username is "ADMIN" and password is "1234". If the password is lost, the network camera must be reset to the factory default settings. See section "3.8 Resetting to the Factory Default Settings" for more details.

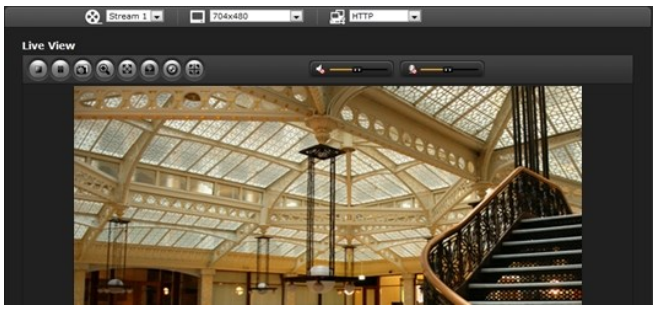
To prevent network eavesdropping when setting the admin password, it can be done via an encrypted HTTPS connection, which requires an HTTPS certificate (see note below).

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 "3.5.6 System > Security > HTTPS".

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.

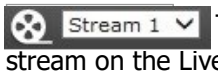
3.4 Live View Page

The Live View page provides several screen modes, including: 2048x1536, 1920x1080, 1280x1024, 1280x720, 704x480 (576), 640x480, 352x240 (288), and 320x240. Select the most suitable mode in accordance with your PC specifications and monitoring purposes.



1) General controls

 Live View Page  Search & Playback Page  Setup Page  Help Page



The video drop-down list allows the selection of 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 section "3.5.1 Basic Configuration > Video & Image" of User's 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 the network.

2) Control toolbar

The live viewer toolbar is available on 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 start 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 the 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.

 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 image and video stream formats. Your requirements and the properties of your network will determine the type you use.

The Live View page of the network camera provides access to H.264, MPEG-4 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.

3.5 Network Camera Setup

This section describes how to configure the network camera and is intended for product Administrators, who have unrestricted access to all the Setup tools, and Operators, who have access to the settings for Basic, Live View, Video & Image, Audio, Event, and System Configuration.

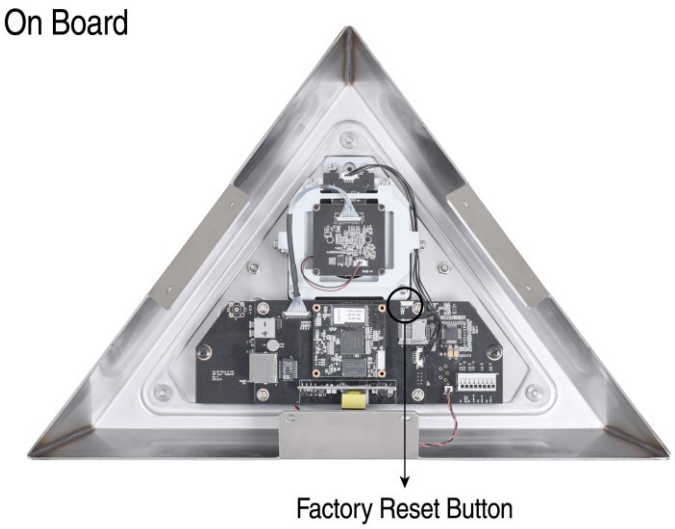
The network camera is configured by clicking Setup in the top right-hand corner of the Live View page. Click on this page to access the online help that explains the setup tools.

When accessing the network camera for the first time, the "Admin Password" dialog appears. Enter your admin name and password, set by the administrator.

Note: If the password is lost, the network camera must be reset to the factory default settings. See section "3.8 Resetting to the Factory Default Settings". The default administrator username is "ADMIN" and password is "1234".

3.6 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's Manual) or use the **Reset** button on the network camera.



- **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. Press and hold the Reset button with a straightened paperclip while reconnecting the power.
  3. Keep the Reset button pressed until the Status indicator blink.
  4. Release the Reset button.
  5. When the Power Indicator changes to Green (may take up to 40 seconds), the process is complete and the network video camera has been reset.
  6. The network camera resets to factory defaults and restarts after completing the factory reset.

CAUTION: When performing a Factory Reset, you will lose any settings that have been saved. (Default IP 192.168.1.100)

System Requirement for Web Browser

Operating System: Microsoft® Windows® 98, Microsoft Windows ME, Microsoft Windows 2000, Microsoft Windows XP, Microsoft Windows Vista®, Windows 7, Windows 8.1 or Windows 10.
CPU: Intel® Core™ 2 Duo 2GHz or higher, 1 GB RAM or more, 10 GB free disk or higher
VGA: AGP, Video RAM 32 MB or higher (1024x768, 24 bpp or higher)

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