# Quick Guide

## Roughneck V2360W-12

## Outdoor Panoramic Camera

XX318-70-05

**Cybersecurity Notification:** All network connected devices should use best practices for accessing the device. To that end, these network cameras do not have a default password. A user defined password with minimum password strength requirements must be set to access the device. See page 13 of this Quick Guide for set-up instructions.

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# WARNING

- This camera operates at 12 VDC/24 VAC/PoE+ (IEEE 802.3at Class 4).
- Installation and service should be performed only by qualified and experienced technicians and comply with all local codes and rules to maintain your warranty.
- We are NOT liable of any damage arising either directly or indirectly from inappropriate installation which is not depicted within this documentation.
- To reduce the risk of fire or electric shock, do not expose the product to rain or moisture.
- Wipe the camera with a dry soft cloth. For tough stains, slightly apply diluted neutral detergent and wipe with a dry soft cloth.
- Do not apply benzene or thinner to the camera, which may cause the surface to melt or lens fog.
- Avoid aligning the lens with extremely bright objects (e.g., light fixtures) for long periods of time.
- Although this camera is waterproof and suitable for both indoor and outdoor usages, do not immerse the camera into water.
- Avoid operating or storing the camera in the following locations:
  - Extremely humid, dusty, or hot/cold environments (recommended operating temperature: -40°F to +122°F/-40°C to +50°C)
  - Close to sources of powerful radio or TV transmitters
  - Close to fluorescent lamps or objects with reflections
  - Under unstable or flickering light sources

| CAUTION | THIS SYMBOL INDICATES |
|---------|----------------------|
| ⚡ **CAUTION** RISK OF ELECTRIC SHOCK DO NOT OPEN ⚠ | ⚡ THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THE UNIT. |
| CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. | ⚠ THIS SYMBOL INDICATES THAT IMPORTANT OPERATING AND MAINTENANCE INSTRUCTIONS ACCOMPANY THIS UNIT. |

**WEEE (Waste Electrical and Electronic Equipment).** Correct disposal of this product (applicable in the European Union and other European countries with separate collection systems). This product should be disposed of, at the end of its useful life, as per applicable local laws, regulations, and procedures.

# Get Started

This quick guide is designed as a reference for installation of the camera. For additional information on the camera's features, functions, and detailed explanation of the web interface controls, refer to User's Manual for details. Please read this quick guide thoroughly and save it for future use before attempting to install the camera. From this guide you will get:

- Product Overview: The physical parts, features and dimensions of the camera
- Installation and Connection: The instructions on installation and wires connection for the camera.

# FCC Compliance Statement

Information to the user: This unit has been tested and found to comply with the limits for a Class B digital device pursuant to 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. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This unit generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this unit does cause harmful interference to radio or television reception, which can be determined by turning the unit off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

● Reorient or relocate the receiving antenna.
● Increase the separation between the unit and receiver.
● Connect the unit to an outlet on a circuit different from that to which the receiver is connected.
● Consult the dealer or an experienced radio/TV technician for help.

| Caution | Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the unit. |
|---------|------|

# CE Statement

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. The manufacturer declares that the unit supplied with this guide is compliant with the essential protection requirements of EMC directive and General Product Safety Directive GPSD conforming to requirements of standards EN55022 for emission, EN 50130-4 for immunity, EN 300 and EN 328 for WIFI.

This product is IP67 rated for outdoor environments and IK10 rate for impact protection. The camera also meets regulations required to be NDAA, GSA schedule and TAA approved.

# 1 Product Overview
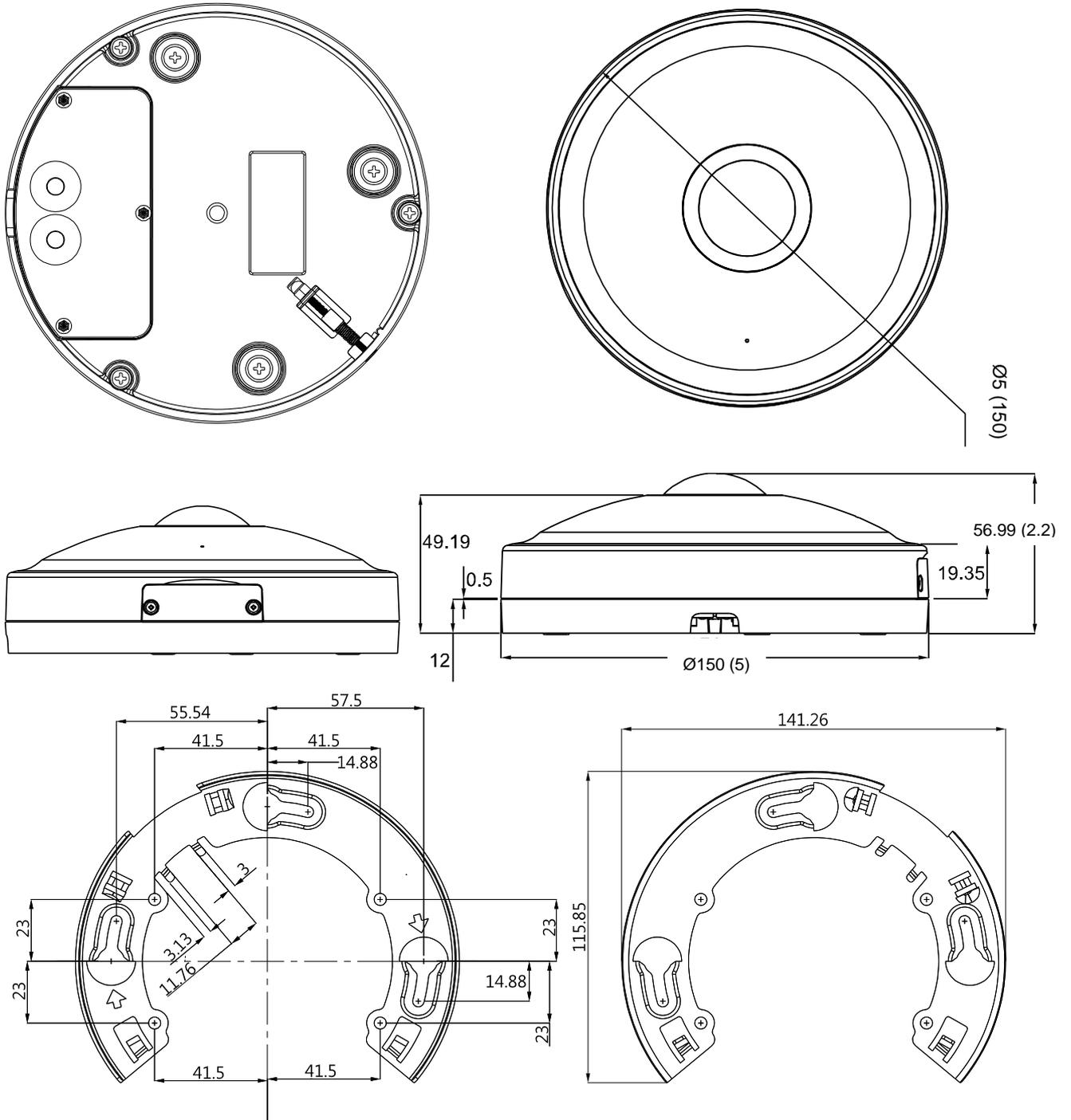
## 1.1 Physical Characteristics



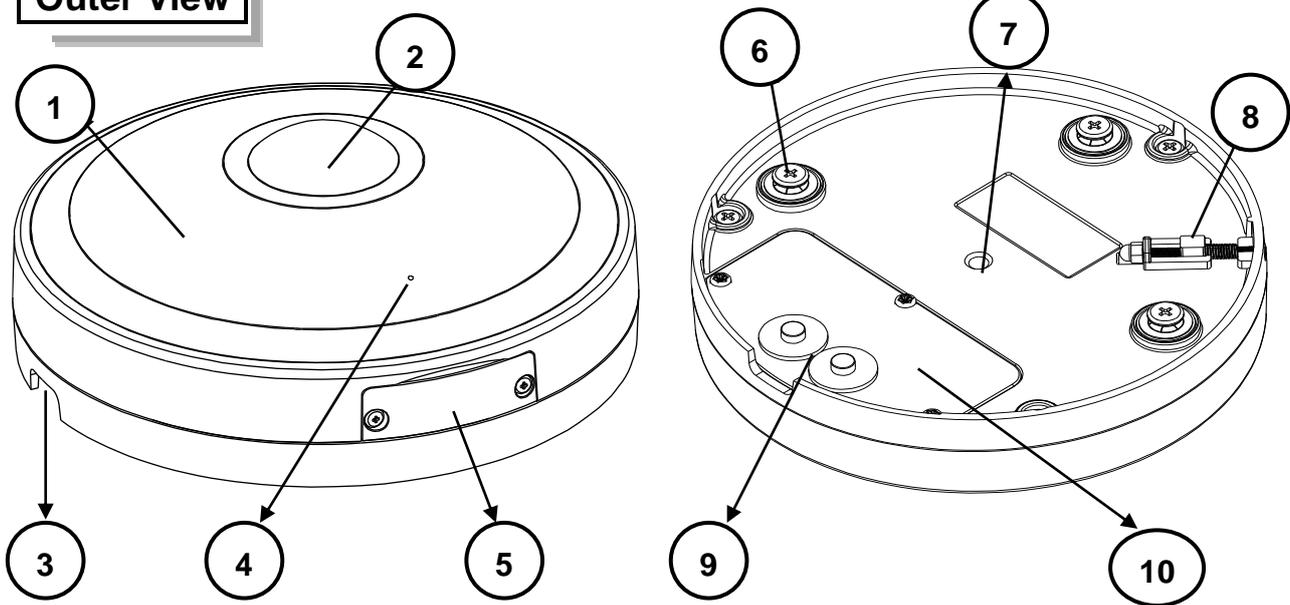**Figure 1 - 1: Physical Dimension**

Unit: mm (in.)

## Outer View



**Figure 1 - 2: Outer View Pictorial Index**

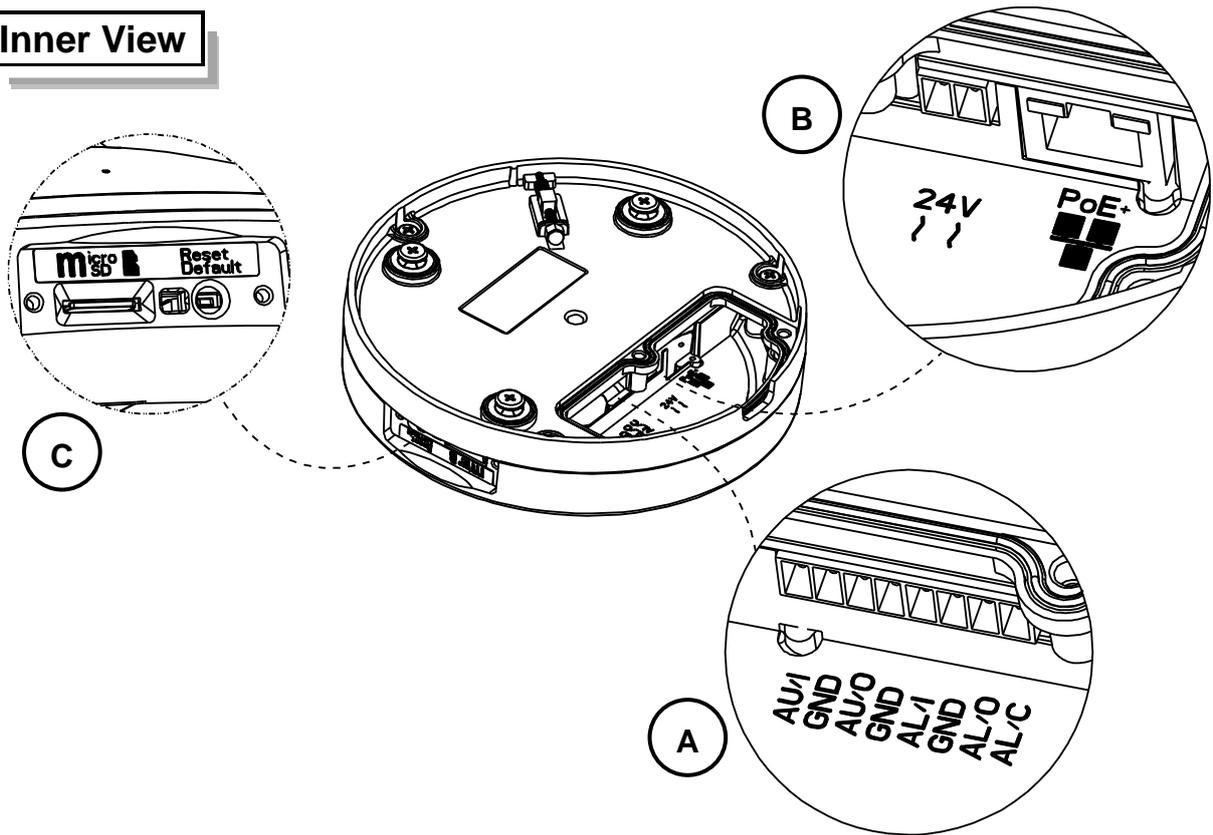| No | Name | Description |
|----|------|-------------|
| 1 | Dome Cover | The upper dome-shape cover provides protection |
| 2 | Lens | The proprietary fisheye lens provides wide hemispheric view |
| 3 | Cabling Cutout | The cutout hole for cables threading |
| 4 | Microphone Vent | The hole for built-in microphone to receive audio input |
| 5 | Side Cap | Loosen the 2 screws to open the side cap to access inner interfaces for use. |
| 6 | Mounting Screws | The 3 symmetrical screws designed for mounting with bracket |
| 7 | Mounting Thread Hole | With the standard female thread 1/4-20, the hole is for attaching an additional bracket (sold separately) for installation flexibility. |
| 8 | Security Lock | The proprietary security lock design ensures camera is mounted securely onto the bracket. Refer to the "*Security Lock Settlement*" chapter for details on how to properly set up. |
| 9 | Waterproof Grommet | The specifically designed dual waterproof grommet (rubber plug) allows multiple cables to thread through and provides waterproof function at the same time. Prior to threading, pull the rubber plug out. Seal the plug back to the position when no cable thread is in use. |
| 10 | Rear Cap | Loosen the 3 screws to open the rear cap to access the inner ports and interfaces for further use. |

**Table 1 - 1: Outer View Pictorial Index Definition**

**Inner View**



**Figure 1 - 3: Inner View Pictorial Index**

| No | Interface | Description |
|----|-----------|-------------|
| A | DI/DO Terminal Ports | Connect to several external devices for audio and alarm input/output functions, which can expand usability of camera for a variety of field applications. Refer to *Table 1 - 3* for details on port definitions. |
| B | RJ-45 PoE Port | Insert an Ethernet cable that connects with internet device into the PoE port for network connection and PoE (Power over Ethernet) capability. |
| B | 24 VAC/12 VDC Power Ports | To power on camera, connect 12 VDC or 24 VAC power source to the corresponding 2-pin ports. Pay attention to polarity while cabling 12 VDC power supply. |
| C | Reset & Default Button | Press the button for less than 1 second to reboot the camera; pressing for 6 seconds will restore the camera to the factory default settings. |
| C | Micro SD Card Slot | Insert a micro SDHC/SDXC card (customer supplied) into the slot for recording and file storage |

**Table 1 - 2: Inner Interface Pictorial Index Definition**

| Name | Port |
|---|---|
| AUDIO IN | AU/I |
| | GND |
| AUDIO OUT | AU/O |
| | GND |
| ALARM IN | AL/I |
| | GND |
| ALARM OUT | AL/O |
| | AL/C |

**Table 1 - 3: I/O Port Definitions**

| | |
|---|---|
| **Note** | Power supply terminal/adaptor for IO connectors and field wiring should comply with the Class 2 Circuit standard for ensuring safety from electrical fires and providing acceptable protection against electrical shock. |
| | The Alarm out pin is a 30 VDC output signal with a maximum load of 1 A. |
| | The Alarm in pin acts as a switch, which is either NO (Normal Open) or NC (Normal Closed). |

# 2 Installation and Connection

## 2.1    Package Contents

Check if all items listed below are included in the packing box.

- Network Fisheye Camera * 1
- Flat Bracket * 1
- Safety Wire * 1
- Plastic Anchors * 4
- Tapping Screws * 4
- Torx Wrench * 1
- 2-pin Terminal Block * 1
- 8-pin Terminal Block * 1
- Printed Quick Guide * 1
- Guide Pattern * 1

## 2.2    Installation

The following tools might help you complete the process of installation:
- Drill
- Screwdrivers
- Wire Cutters

### 2.2.1  Checking Appearance

When unpacking, check to see if there is any visible damage to the appearance of the camera and its accessories. The protective materials used for the packaging should protect the camera from most accidents during shipment. Remove the protective materials from the camera after every item is properly checked in accordance with the list in *Package Contents*.

## 2.2.2  Mounting Camera

1.  Attach the Guide Pattern to the mounting surface.
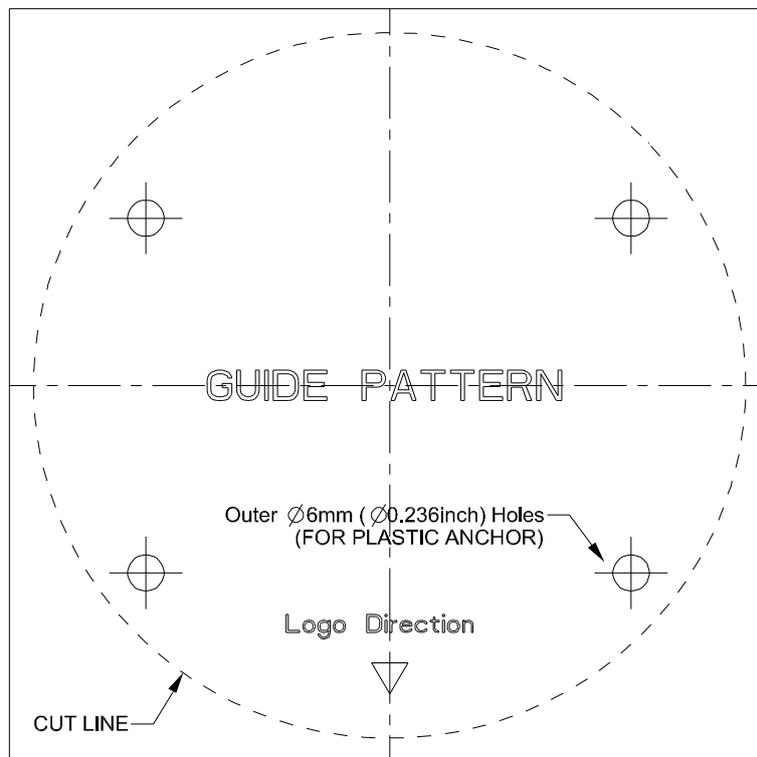


2.  Drill 4 relative holes on a clean flat surface (ceiling or wall). Insert 4 plastic anchors into the drilled holes.
3.  Attach the flat bracket onto the surface by fixing it tightly with the 4 screws (TP4).
    Be sure to plug the drilled holes with the 4 plastic anchors prior to securing the bracket with the screws.
4.  Open the rear cap by loosening the 3 screws. Connect the required cable threads as needed: 24 VAC/ 12 VDC power cord to the 2-pin power terminal, Ethernet cable to the PoE port, and the additional audio and alarm input/output cables to the 8-pin terminal block. Remove the rubber plug and insert the required jacketed cables through the waterproof grommet to ensure proper IP66 water ingress protection; terminate the cables. Note: do not slit or alter the grommet. If required, open the side cap by loosening the 2 screws and insert a customer-supplied Micro SDHC/SDXC card into the embedded slot. Restore each of the caps back to their positions and fasten the screws securely.

Caution: Fully tighten screws after installing cable and uSD card to ensure IP66 sealing of camera.

5. Attach the rear side of camera to the fixed flat bracket and align the 3 screws with the corresponding holes on the bracket as shown in figure below. Rotate the camera clockwise until it clicks into place so that camera will be firmly mounted onto the bracket. To disassemble, rotate the camera counterclockwise and remove it from bracket.
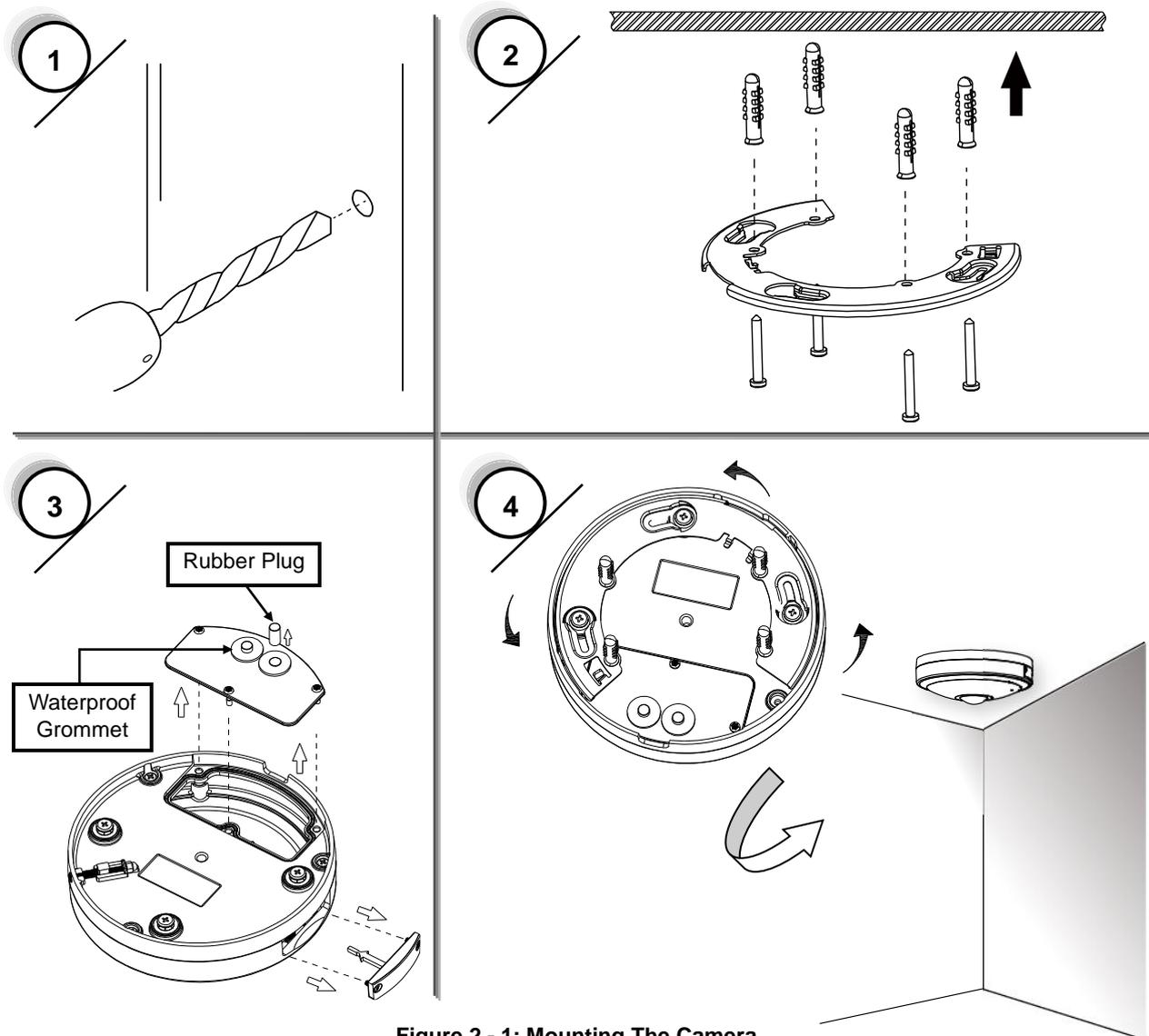
**Figure 2 - 1: Mounting The Camera**

**Note**: Feed the unterminated CAT5 cable through the hole in the solid grommet and terminate the cable with the appropriate connector.
To maintain watertight integrity/warranty, be sure to use the appropriate grommet. Jacketed cables with a diameter between 0.165-0.2 in. (4.2mm- 5mm) must be used.
Fully tighten screws after installing cables and uSD to ensure IP66 seal.

**Note**
- The correct size holes for TP4 screws with plastic anchors are of diameter φ 6.35 mm (0.25 in,).
- Seal up waterproof rubber hole with plug when no cable is in use.

## Security Lock Settlement

After mounting the camera onto the flat bracket, bolt the security lock by fastening the security screw counterclockwise, as the figure shown below, so that camera will be mounted to bracket securely. To disassemble camera from flat bracket, loosen the security screw clockwise first.
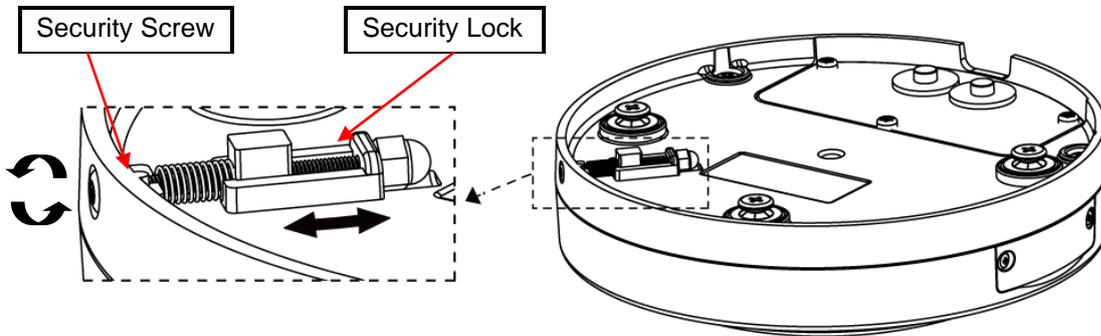
**Figure 2 - 2: Security Lock Settlement**

## Safety Wire Preparation

In order to prevent the camera from accidentally falling, connect the included safety wire with one end on the mounted bracket and the other end to the safety-wire screw on the camera. Referring to the figure below, fasten the metal-circle end of wire with the safety-wire screw onto the rear side of camera and attach the other wire end to the hook of mounted bracket.
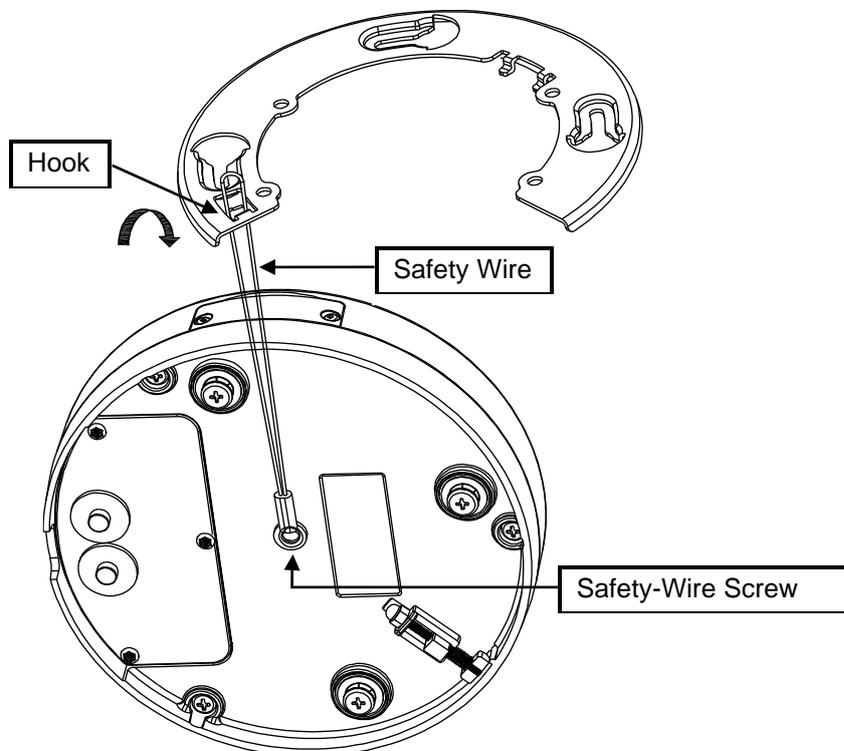
**Figure 2 - 3: Safety Wire Connection**

| **Note** | Safety wire must be firmly connected with one end to the hook of bracket and the other end to the safety-wire screw of the camera to ensure anti-dropping function. |
|---|---|

# 3 Connection

## 3.1　Network Topology

The camera, which is equipped with Ethernet RJ-45 network interface, can deliver live view image in real time via both Internet and Intranet manners. Review the topology drawings shown below.
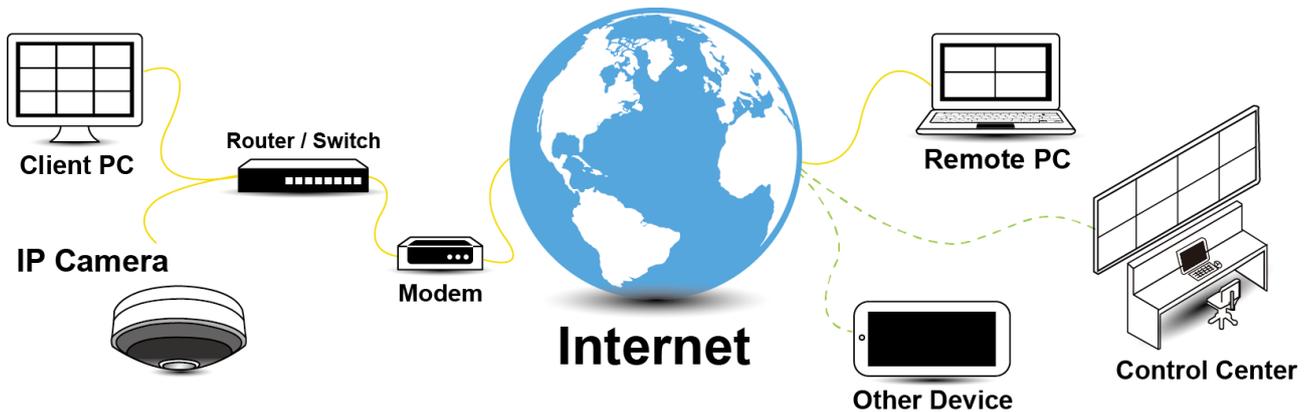


**Figure 3 - 1: Network Topology**

## 3.2　System Requirements

The table below lists the minimum requirement to implement and operate the camera. It is recommended not to use any hardware/software component below these requirements for proper performance.

**Table 3 - 1: System Requirements**

| System Hardware | |
|---|---|
| CPU | i5-2430M CPU@ 2.40GHZ |
| RAM | 6 GB or above |
| Display | NVIDIA GeForce 6 Series or ATI Mobility Radeon 9500 |
| **System Software** | |
| Operating System | Windows 7 SP1, Windows 8, Windows 10 |
| Browser | Internet Explorer 10/11, Mozilla Firefox, Chrome, Safari, Microsoft Edge |
| **Unit** | |
| Power Supply | 24 VAC/12 VDC/PoE+ (IEEE 802.3at Class 4) |
| **Networking** | |
| Wired* | 10/100BASE-T Ethernet (RJ-45 connector) |

*A switch is required for surveillance on multiple cameras.*

| Note | All the installation and operations should comply with your local electricity safety rules. |
|---|---|
| **Caution** | When powering on via PoE+, this camera is to be connected only to PoE+ networks without routing to heterogeneous devices. A heterogeneous network is a network connecting computers and other devices where the operating systems and protocols have significant differences. |

## 3.3    Connecting Process

### 3.3.1  Default IP address

Since this is a network-based camera, an IP address must be assigned. The camera's default IP address is obtained automatically through a DHCP server in your network; be sure to enable DHCP in "Network Settings." If DHCP is not available, the camera will use APIPA (link-local address); IPv4 link-local addresses are assigned from address block 169.254.0.0/16 (169.254.0.0 through 169.254.255.255).

### 3.3.2  Connecting from a Computer & Viewing Preparation

#### Connecting from a computer

1.    Make sure the camera and your computer are in the same subnet.
2.    Check whether the network available between the camera and the computer by executing ping the default IP address. To do this, simply start a command prompt (Windows: from the "Start Menu", select "Program". Then select "Accessories" and choose "Command Prompt"), and type Ping" and then type in your IP address. If the message "Reply from…" appears, it means the connection is available.
3.    Start a browser e.g., Internet Explorer and enter IP address. A login window as shown below should pop up. In the window, enter the default user name: **ADMIN**; it is required to change the password when you login for the first time for added security**,** which requires at least 8 characters including 1 uppercase letter, 1 special character, alphanumeric characters to log in.
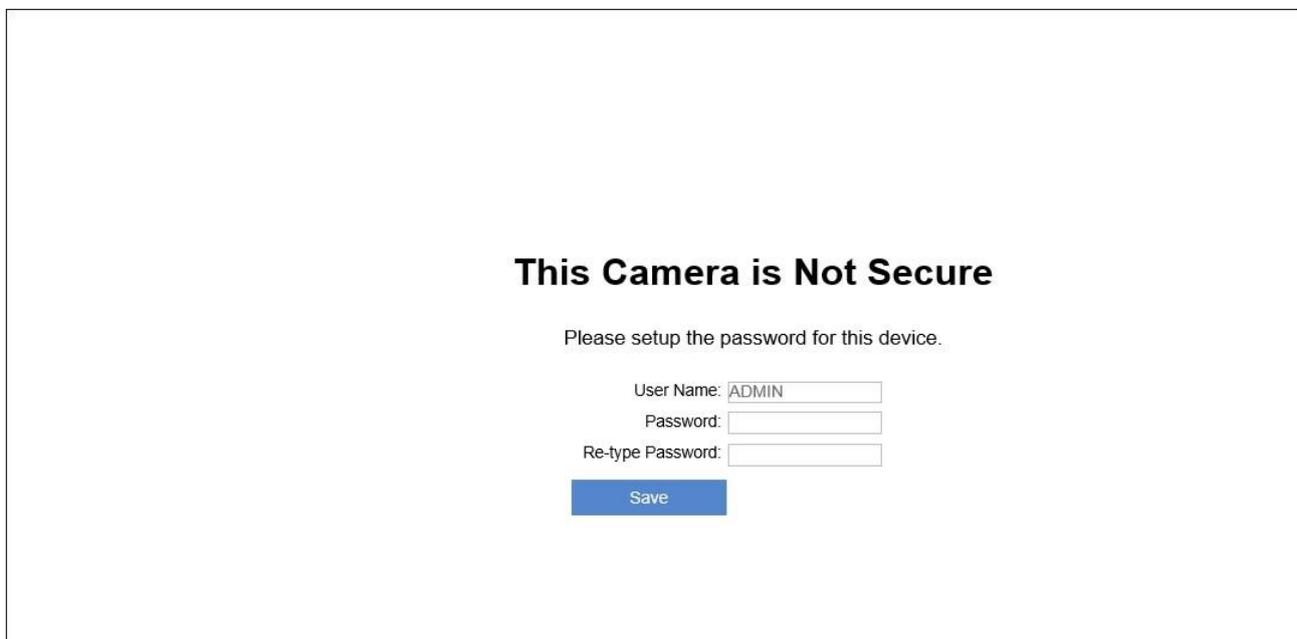     Further administration on the unit can be found in "**User Manual**".



**This Camera is Not Secure**

Please setup the password for this device.

User Name: ADMIN
Password:
Re-type Password:

Save

**Figure 3 - 2: Login Window**

## <u>Viewing Preparation</u>

Images of the unit can be viewed through various browsers. Before viewing, follow these steps to enable the display.

1.  Enable Cookies per instructions below:
    *   In Internet Explorer, click **Internet Options** on the **Tools** menu.
    *   On the **Privacy** tab, move the settings slider to **Low** or **Accept All Cookies**.
    *   Click **OK**.
2.  When a proxy server is used, click **Internet Options** on the Tools menus of Internet Explorer, select **Connect** tab, click **LAN** button and set proxy server.
3.  Change Security in Internet options per instructions below
    *   On tool menu, click **Internet Options**.
    *   Press the **Security** tab.
    *   If the camera operates inside of the intranet, click the **Intranet** icon.
    *   If the camera operates outside of the intranet, click the **Internet** icon.
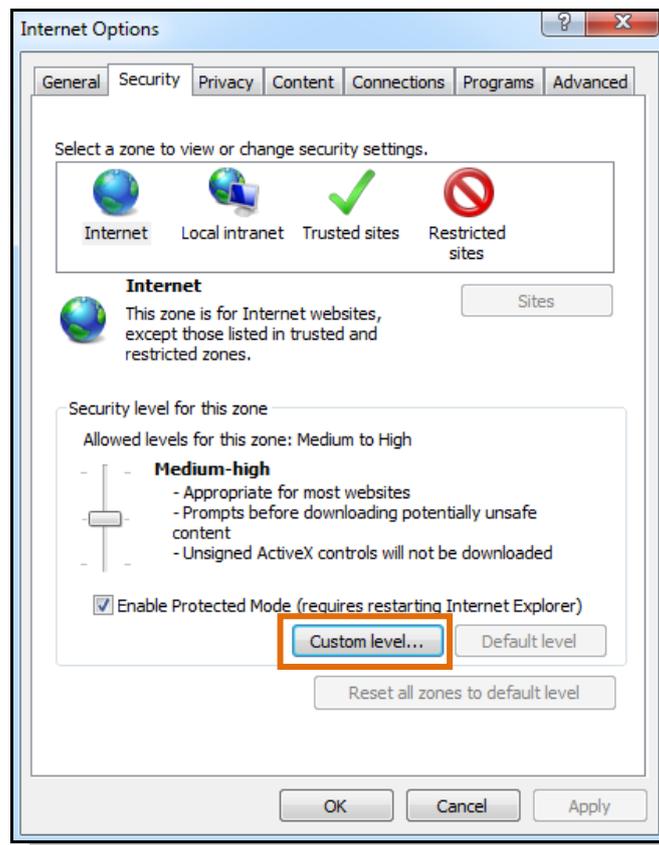    *   Click **Custom Level**. This will open the Security Settings – Internet Zone screen.



**Figure 3 - 3: Security Settings 1/4**

- Scroll down to the ActiveX controls and plug-ins radio buttons and set as follows:

  【Download signed ActiveX controls】➔ Prompt (recommended)

  【Download unsigned ActiveX controls】➔ Prompt

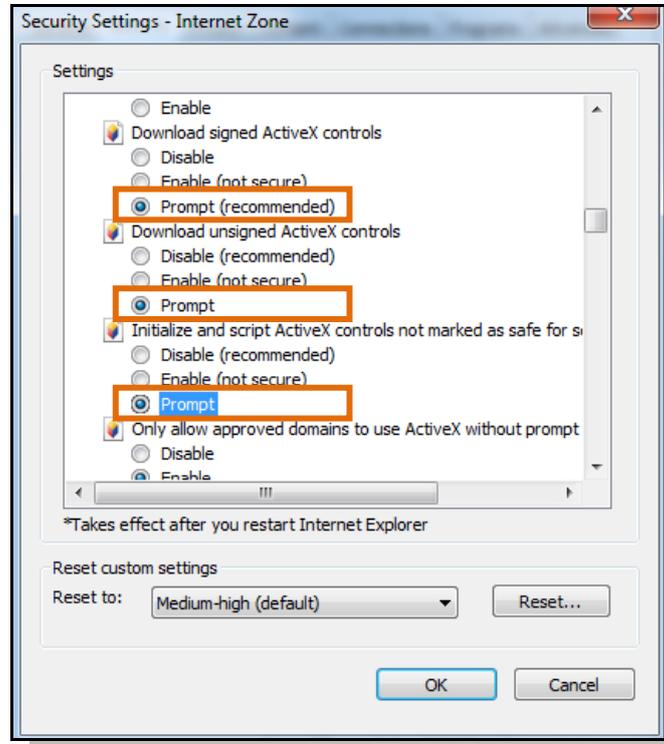  【Initialize and script ActiveX not marked as safe for scripting】➔ Prompt



**Figure 3 - 4: Security Settings 2/4**

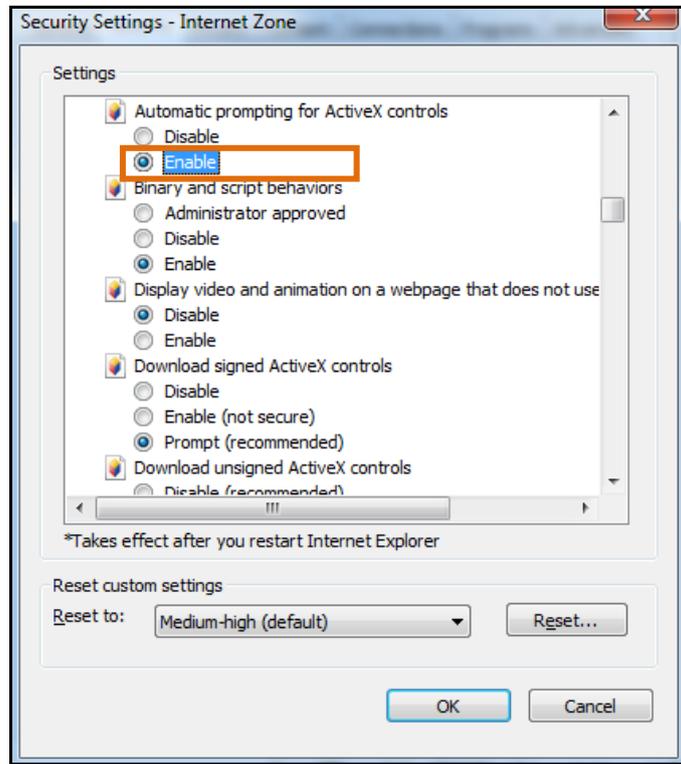【Automatic prompting for ActiveX controls】➔ **Enable**



**Figure 3 - 5: Security Settings 3/4**

【Run ActiveX controls and plug-ins】 ➔ Enable

【Script ActiveX controls marked safe for scripting*】 ➔ Enable
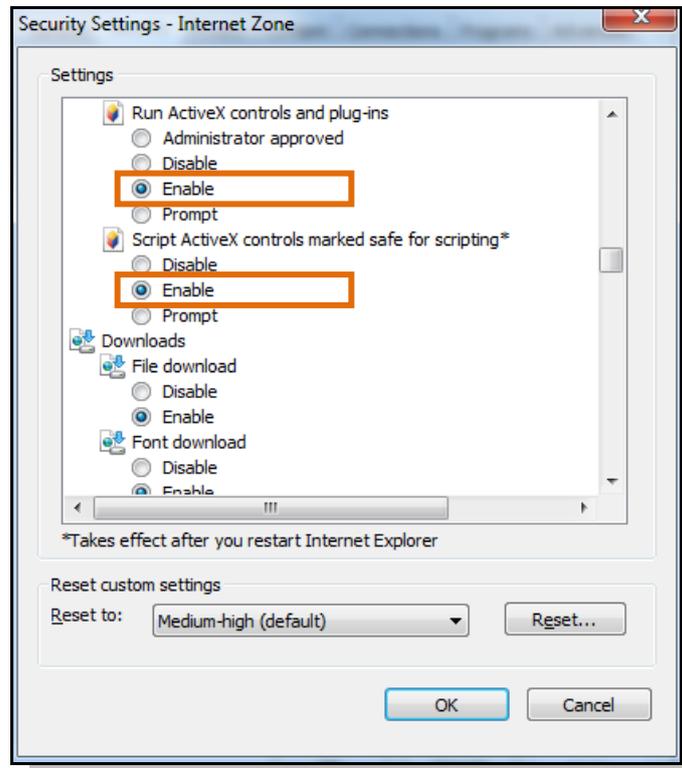


**Figure 3 - 6: Security Settings 4/4**

- Press **OK** to save the settings.
- Close all browser windows and restart the browser. This will allow the new settings to take effect.
- Type your IP address into the browser.
- You should be able to see the camera image screen.

## 3.4    IP Toolbox

IP Toolbox is a utility program that helps users to locate the camera(s) in local area network that computer is connected to. Note that IP Toolbox works only in Microsoft Windows XP, Microsoft Windows Vista, and Microsoft Windows 7 or above. Steps to get the utility program running are listed below.

1. Download the IP Toolbox folder to local computer. The latest IP Toolbox can be found on Vicon's website Camera Software Download page, vicon-security.com.
2. Double click on **IPToolbox.exe** in the IP Toolbox's folder, and the IP Toolbox window should pop up as below.
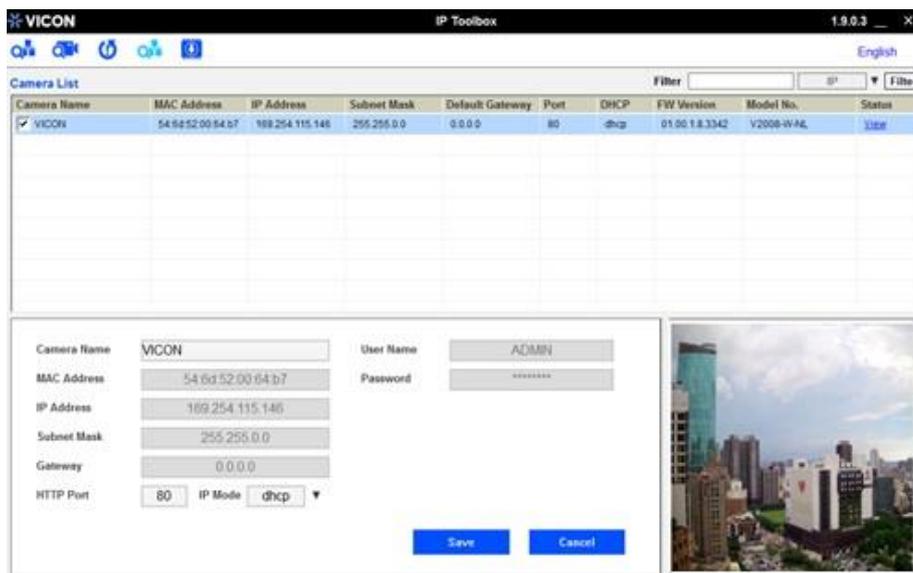


**Figure 3 - 7: IP Toolbox**

3. The window lists information of camera(s) in operation at the present time. Click the camera in the list for which you want to configure the network settings.
4. Configure the following settings as needed:
   - **User Name & Password:** Before performing any operation to any listed camera, enter user name and password for the selected camera, and then click "**Verify**" for authentication purposes.
   - **Camera Name:** Enter a descriptive name for the camera.
   - **Network Settings:** If you have a DHCP server on your network to assign IP addresses to network devices, enable the "dhcp" option from dropdown menu of **IP MODE**. Otherwise, select "manual" to manually enter the values for **IP Address**, **Subnet Mask**, **Gateway** and **HTTP Port** fields.
   - Click **"Save"** to enable the settings. Click "**Cancel**" to discard the settings.
5. Press  **"View"** button; the designated browser page of the selected camera will pop up. Input the corresponding **User Name** & **Password** to log in to the specific page of camera.
6. Press  **"Refresh"** button; all the cameras currently connected to the network will appear on the list.
7. Press  **"Initialize"** button; there are three options, Software default, Hardware default, and Reboot camera, for user to perform the factory default or reboot the camera. After clicking the preferred item, a warning message will appear. Confirm again before you perform the selected function.
8. The "**Filter**" button on the upper-right corner allows user to perform filtering search, which means you can

input certain keywords into the field and also narrow down the range by selecting the criteria from the dropdown menu for a target search on cameras connected.

9. Press ⬛ "**Auto Set IP Address**" button to automatically give each camera an IP address from predefined range and connected to predefined network internet controller.

   ▪ **User Name & Password:** Enter username and password for the current auto set IP address setting.
   ▪ **Network Interface Controller:** Select desired network interface controller that each camera(s) will be connected to and also select the IP address and IP address range of the controller.
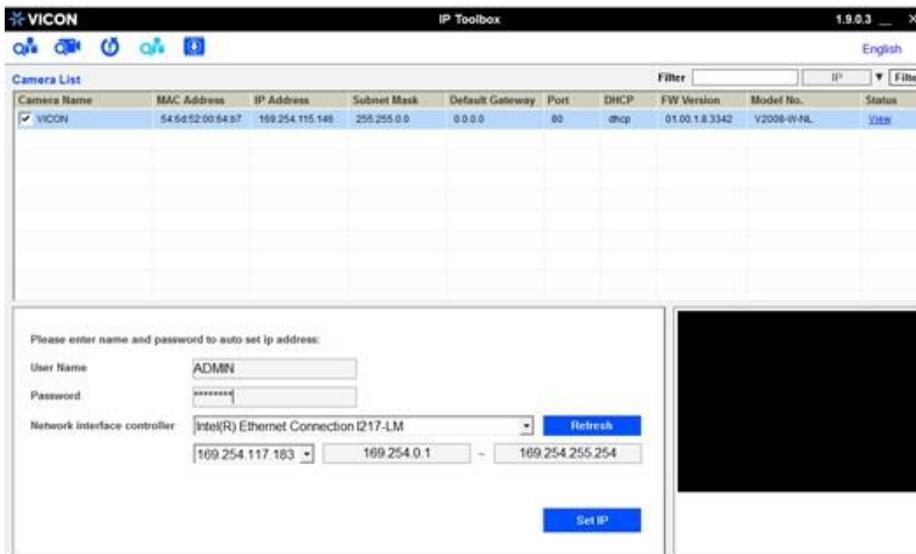


**Figure 3 - 8: Auto Set IP Address**

10. Click ⬛ "**FW Upgrade**" button to upgrade the firmware of selected camera. A pop up window like the image below will show up.
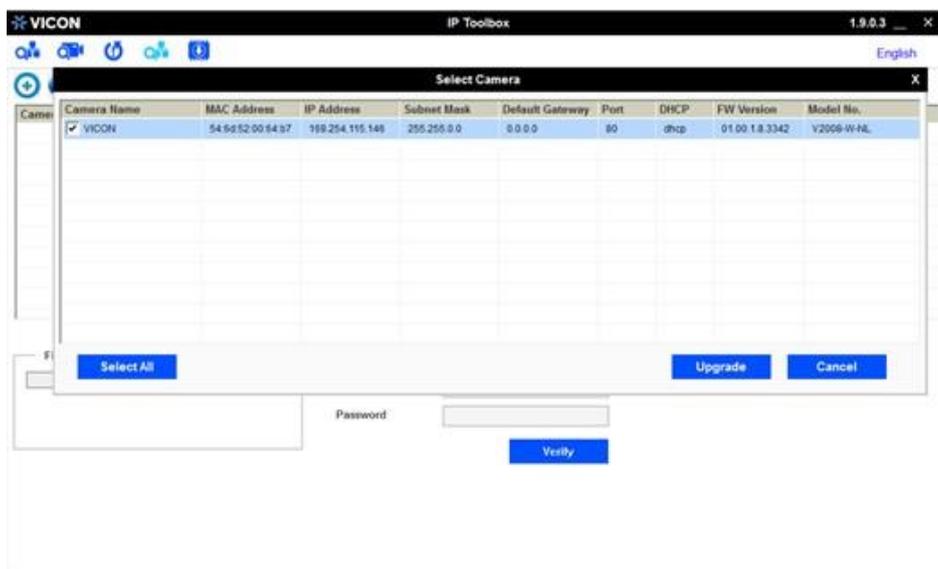


**Figure 3 - 9: IP Toolbox FW Upgrade**

Follow the steps below to complete firmware upgrade:

- Click  or  to add or remove camera to be upgraded (only verified cameras will be shown on this list).
- Select a camera or click "**Select All**" button to select a camera or all the cameras on the firmware upgrade list, respectively.
- Click "**Add**" or "**Cancel**" button to confirm the selected cameras for upgrade or to cancel the selection, respectively.
- Enter the path for the desired firmware (.tar) or click  and then follow the instructions to find and upload the .tar file.
- When the process is complete, click  again to return to the list of all cameras located in the local network.

**VICON**

VICON INDUSTRIES INC.

For office locations, visit the website: vicon-security.com