

Quick Guide



Roughneck V2100D Series

Outdoor Dome Cameras

XX318-20-04



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 14 of this Quick Guide for set-up instructions.



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: 8009-8318-20-04 Product specifications subject to change without notice.

Issued: 9/2022 Copyright © 2022 Vicon Industries Inc. All rights reserved.




Vicon Industries Inc.
Tel: 631-952-2288) Fax: 631-951-2288
Toll Free: 800-645-9116
24-Hour Technical Support: 800-34-VICON
(800-348-4266)
UK: 44/(0) 1489-566300
www.vicon-security.com

Table of Content

1	Product Overview	4
1.1	Physical Characteristics	4
2	Installation and Mounting	6
2.1	Package Contents	6
2.2	Installation	6
2.2.1	Checking Appearance	6
2.2.2	Disassembling the Camera	7
2.2.3	Wiring the Camera	8
2.2.4	Mounting the Camera	9
2.2.5	Adjusting the Camera Position	12
3	Connection	13
3.1	Network Topology	13
3.2	System Requirements	13
3.3	Connecting Process	14
3.3.1	Default IP address	14
3.3.2	Connecting from a Computer & Viewing Preparation	14
3.4	IP Toolbox	18

WARNING

- This camera operates at 12 VDC/PoE (IEEE 802.3af Class 3) only.
- 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, lightly 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 to 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, please 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 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 wire connections 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

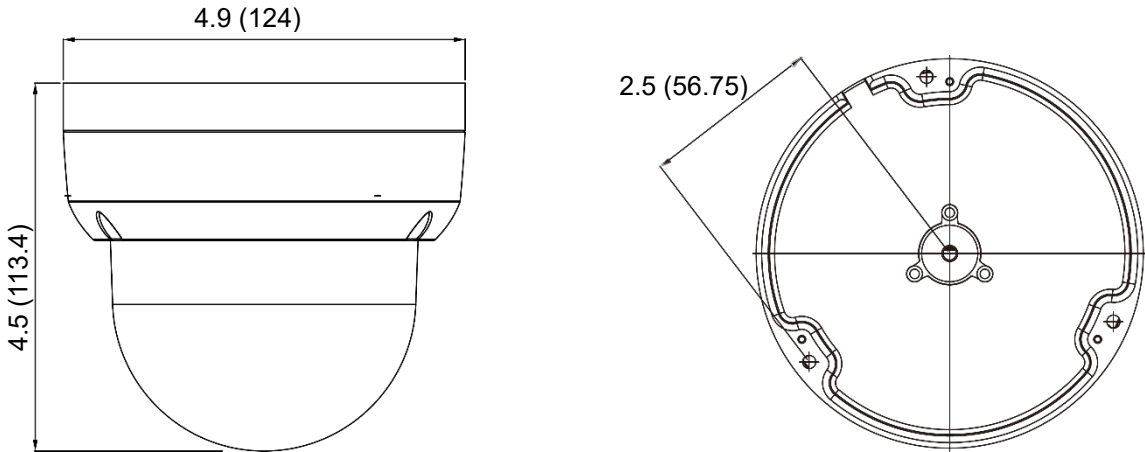


Figure 1 - 1: Physical Dimension
Unit: in. (mm)

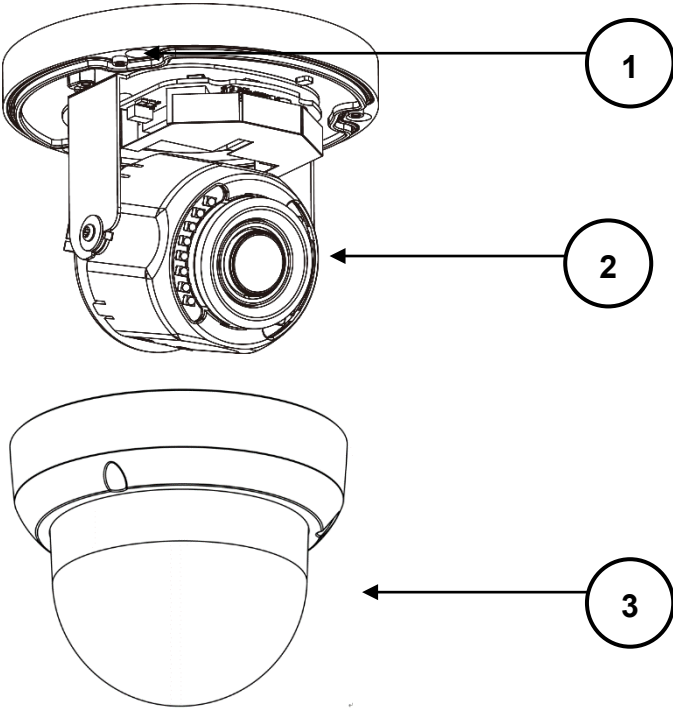


Table 1 - 1: Pictorial Index Definition

No	Name
1	Conduit Hole
2	Camera Body
3	Top Cover

Figure 1 - 2: Pictorial Index

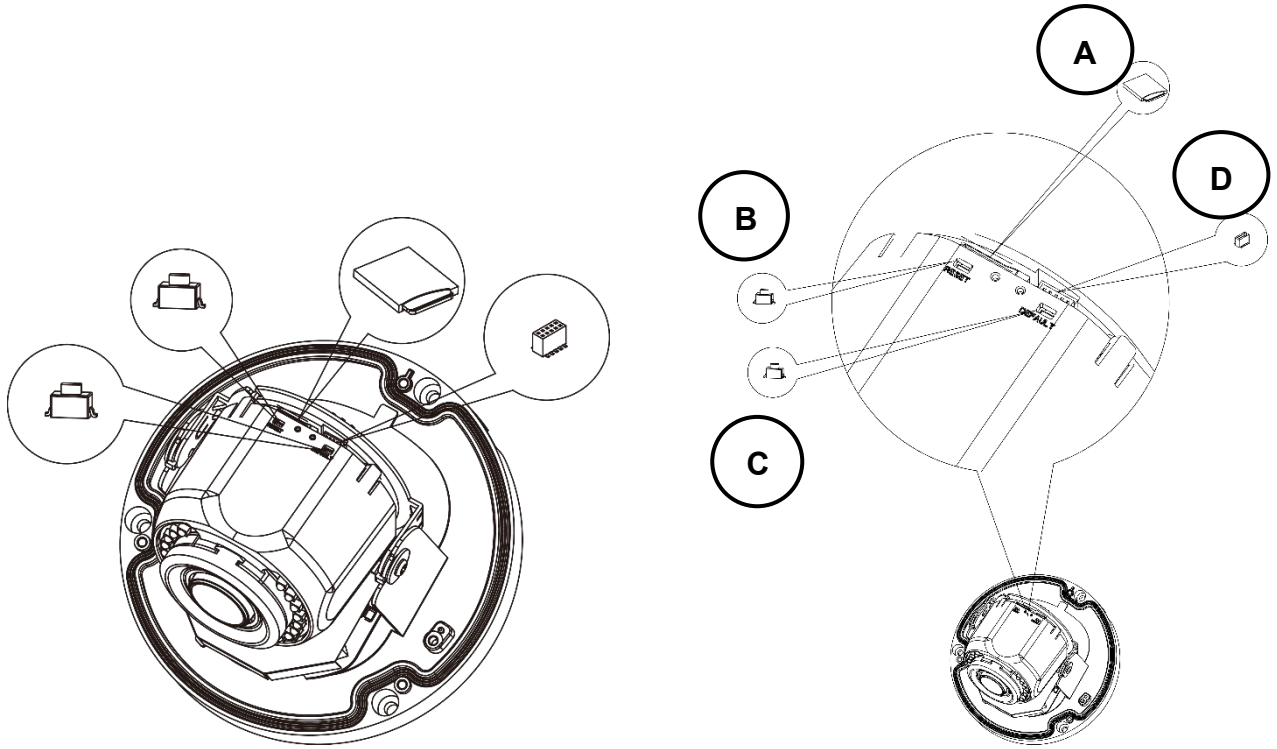


Figure 1 - 3: Internal Interface Pictorial Index

No	Name	Description
A	Micro SD card slot	Insert a micro SD card into the slot for recording and file storage.
B	Reset Button	Press the button for less than 1 second to reboot the camera.
C	Default Button	Press the button for 6 seconds to restore the camera's settings back to the factory default.
D	Technical Debug Port	Connect with a RS-232 serial cable for debugging purposes, which is useful for technician to get error logs from camera.

Table 1 - 2: Internal Interface Index Definition

2 Installation and Mounting

2.1 Package Contents

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

- Network Outdoor Dome Camera * 1
- Quick Guide * 1
- Desiccant * 2
- Torx Wrench * 1
- Plastic Anchors * 3
- Tapping Screws * 3
- Mounting Template * 1

2.2 Installation

The following tools may be helpful to complete the 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 Disassembling the Camera

Refer to the steps and figure below for correct disassembly order of the camera.

1. Loosen the 3 torx screws turning counterclockwise using the torx wrench.
2. Gently pull the top cover downward to separate it from the camera body.

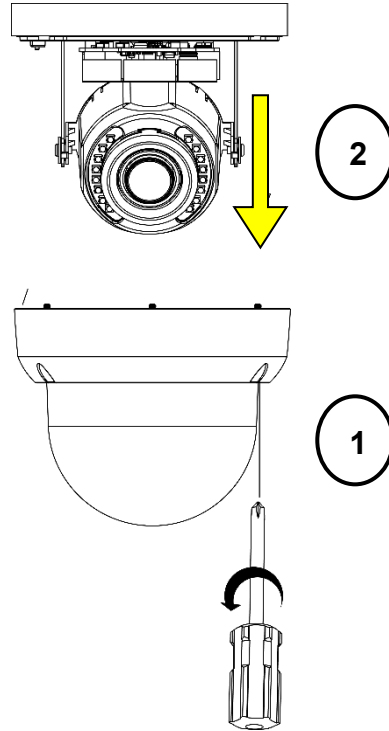


Figure 2 - 1: Disassembling the Camera

2.2.3 Installing Desiccants

After the camera disassembly is complete, the desiccants are installed.

1. Secure each desiccant (2x) (via the sticker that is attached to each desiccant) on the inside part of camera bottom case as shown in the following figure.

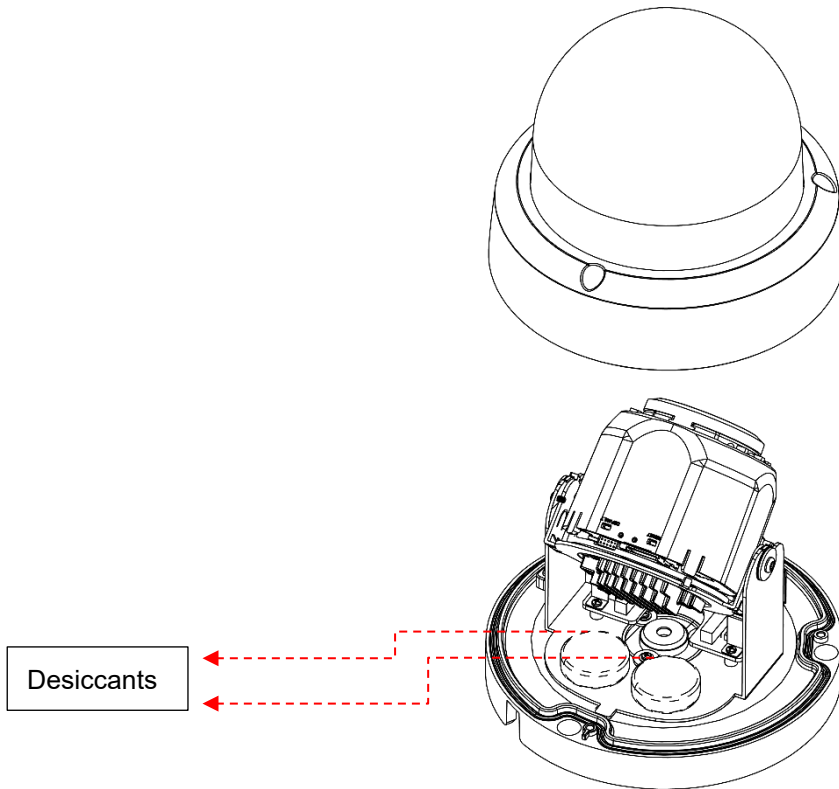


Figure 2 - 2: Installing the Desiccants

2.2.4 Wiring the Camera

The PoE RJ-45 Ethernet and DC power ports can be found at the end of the conduit for user (based on user's need) to connect an Ethernet cable for both power supply and network connectivity purposes and/or a DC cable for power supply. There are two (2) methods to route the cable(S) to the camera, by the side conduit or bottom conduit openings. The following figures are for reference for the two routing methods.

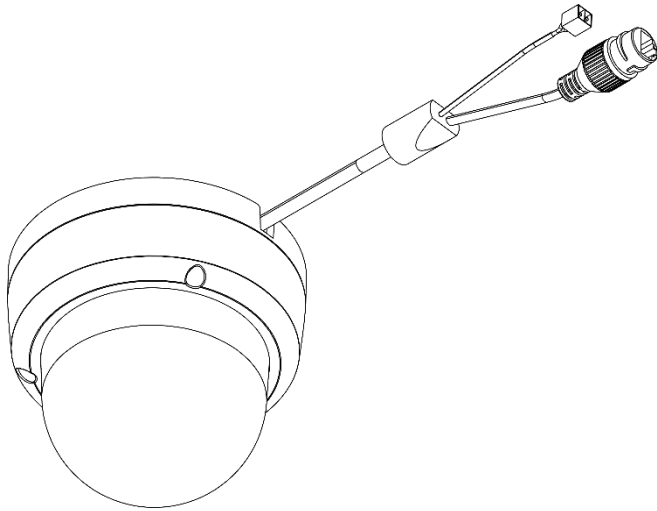


Figure 2 - 3: Side Conduit

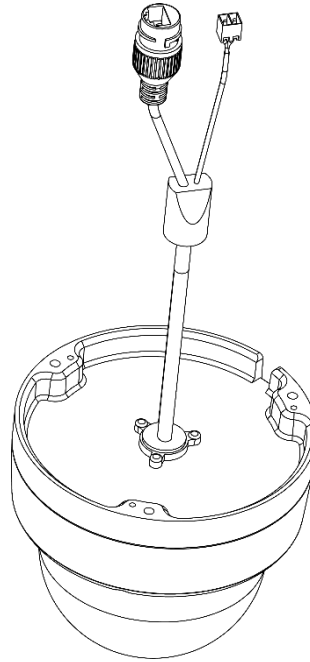


Figure 2 - 4: Bottom Conduit

2.2.5 Mounting the Camera

Step 1. Mounting Preparation

Note: Be sure the area where the camera is to be mounted can support the weight of the camera.

Secure the included mounting template onto the wall/ceiling where the IP camera is to be located and drill the three (3) hole pattern in accordance with the indications on the mounting template (3x Ø4.5 holes); then install the three (3) plastic anchors into the drilled holes, using a hammer as needed. Also, drill another hole for conduit cable entry at the indication of "Cable Entry Hole" (ignore drilling cable hole if using the side conduit routing method).

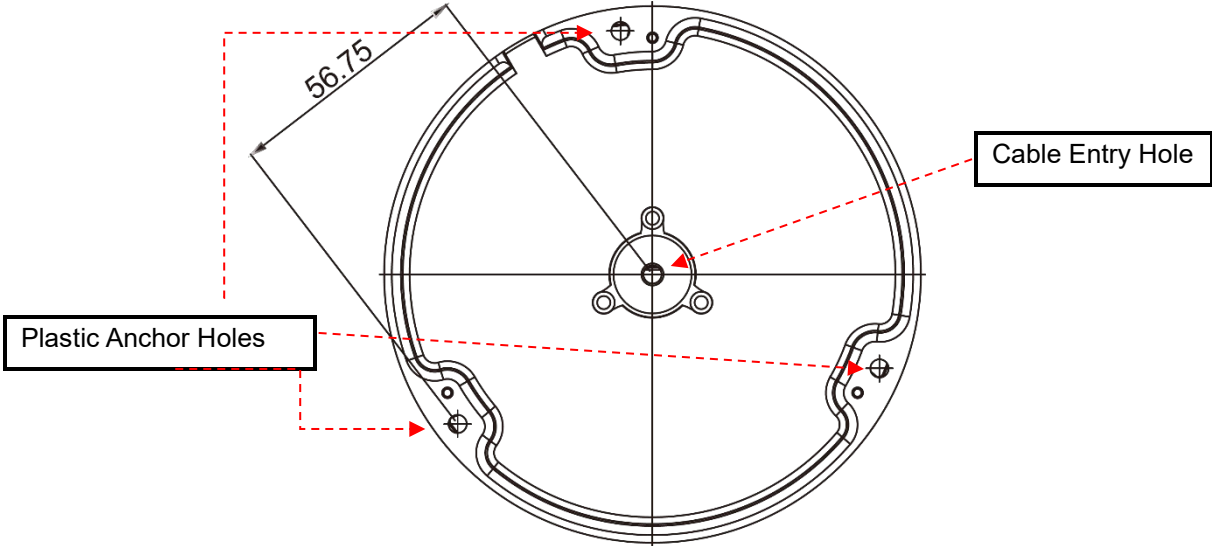


Figure 2 - 5: Mounting Template for Hole Pattern

Step 2. Mounting the Camera

Place the camera on the prepared surface and fasten the three (3) tapping screws, turning clockwise into the plugged plastic anchors to securely fix the camera onto the location.

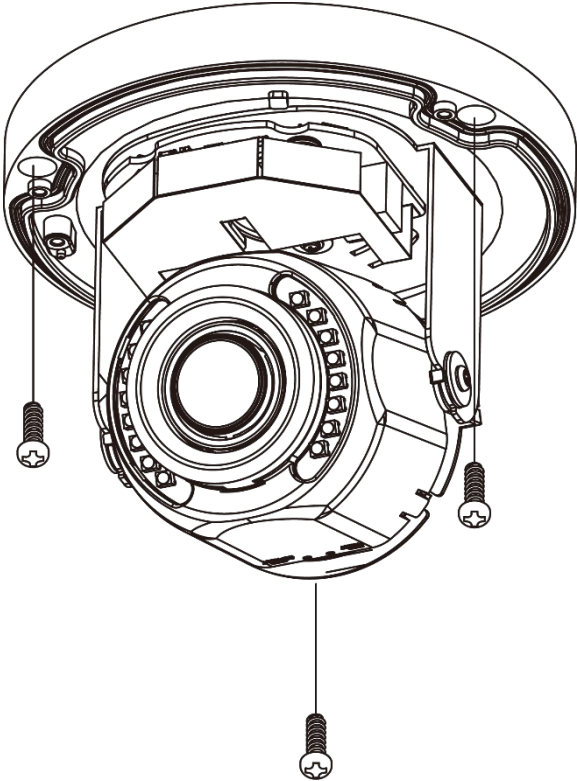


Figure 2 - 6: Mounting the Camera

Step 3. Re-Assembling the Camera

Refer to the following steps and figure for the correct re-assembly order.

1. After adjusting the camera position, gently push the top cover upward to attach to the camera body.
See Adjusting the Camera Position below.
2. Fasten the three (3) torx screws with the camera body, turning clockwise, to complete the mounting.

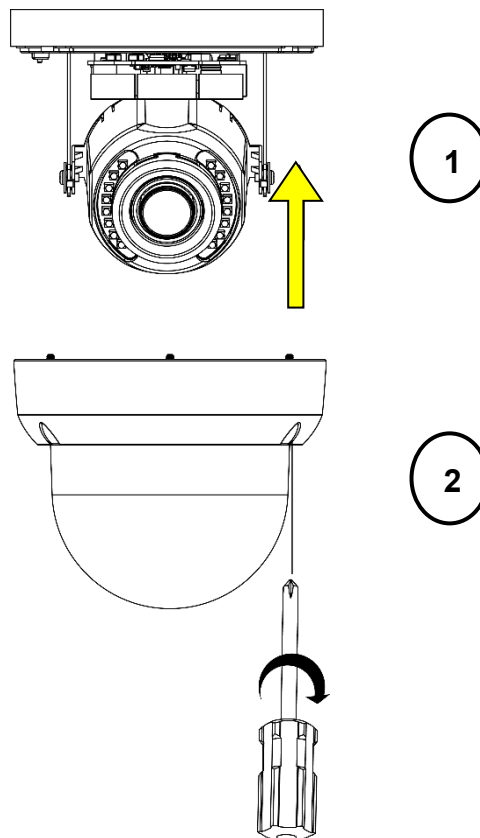


Figure 2 - 7: Assembling and Completing Camera Mounting

2.2.6 Adjusting the Camera Position

The camera has three axes to adjust field-of-view for different applications. While screening live view on your monitor, adjust the axes using the procedures below for desired coverage of field-of-view. Refer to the figure that follows.

- **Pan Adjustment (A)**

Rotate the lens base to required field-of-view. Use caution to NOT rotate over the default limit.

- **Horizontal Rotation (B)**

Rotate 3D assembly of the lens, but DO NOT turn assembly more than the limit, as this may twist, disconnect or break the internal cables.

- **Tilt Adjustment (C)**

Tilt the camera lens within range (70°) to desired field-of-view.

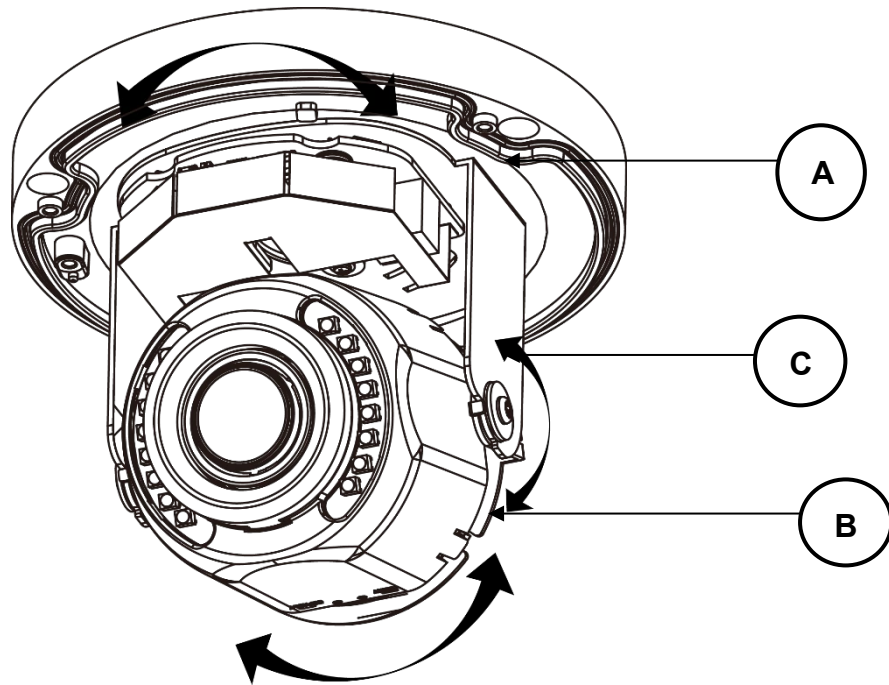


Figure 2 - 8: Adjusting the Camera Position

Limitations for three axes position:

Caution

- Pan range: >355°
 - Rotate range: ±355°
 - Tilt range: 70°
-

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. Review the topology drawings shown below.

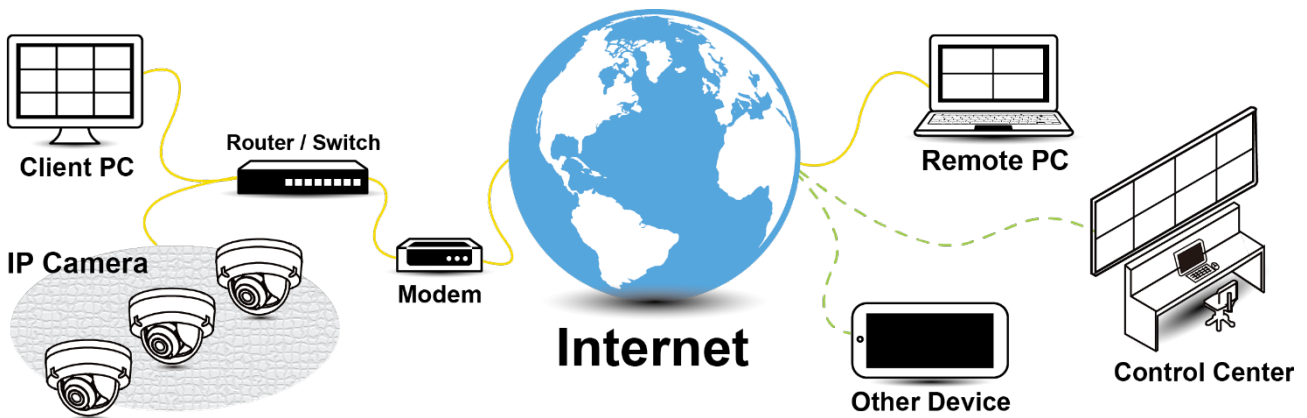


Figure 3 - 1: Network Topology

3.2 System Requirements

The table below lists the minimum requirements 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 2.40 GHZ
RAM	6 GB min
Display	NVIDIA GeForce 6 Series or ATI Mobility Radeon 9500
System Software	
Operating System	Windows 7 SP1, Windows 8, Windows 10
Browser	Internet Explorer 11, Mozilla Firefox, Chrome, Safari, Microsoft Edge
Unit	
Power Supply	12 VDC/PoE (IEEE 802.3af Class 3)
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 electrical safety rules.

Caution When using PoE, this camera is to be connecting only to PoE networks without routing to any 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

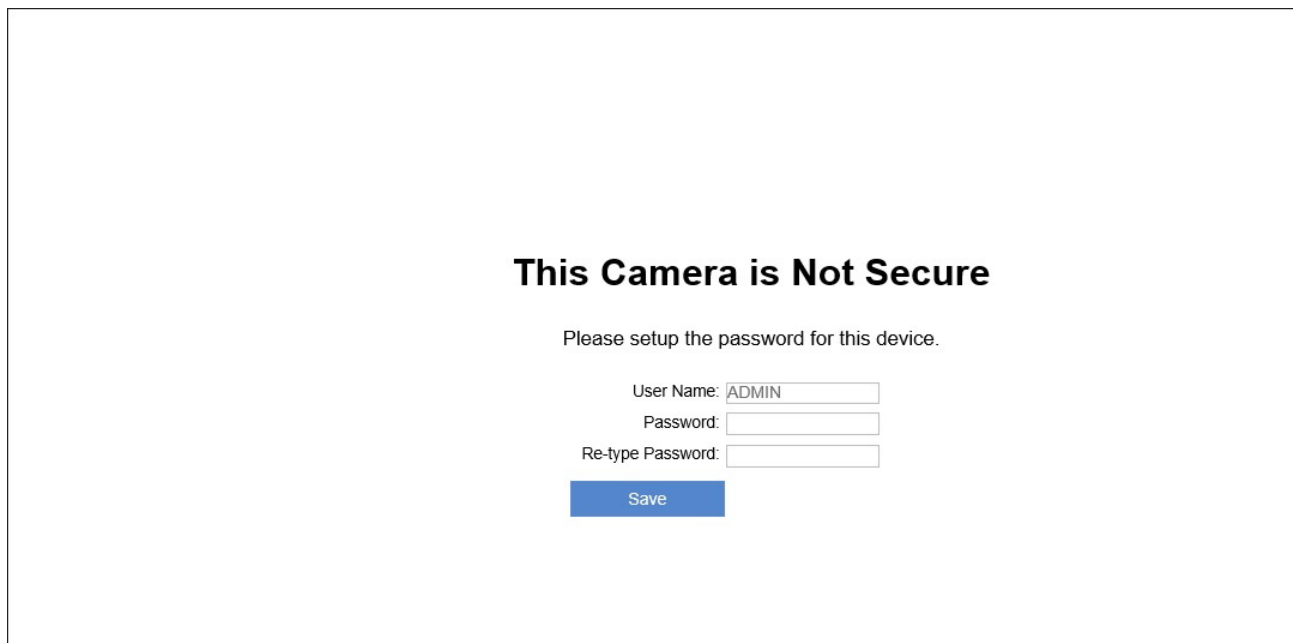
3.3.1 Default IP address

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 the network available between the camera and the computer by executing a ping of 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, 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.



This Camera is Not Secure

Please setup the password for this device.

User Name:

Password:

Re-type Password:

Figure 3 - 2: Login Window

Viewing Preparation

Images from 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 as instructions below:
 - On the 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.

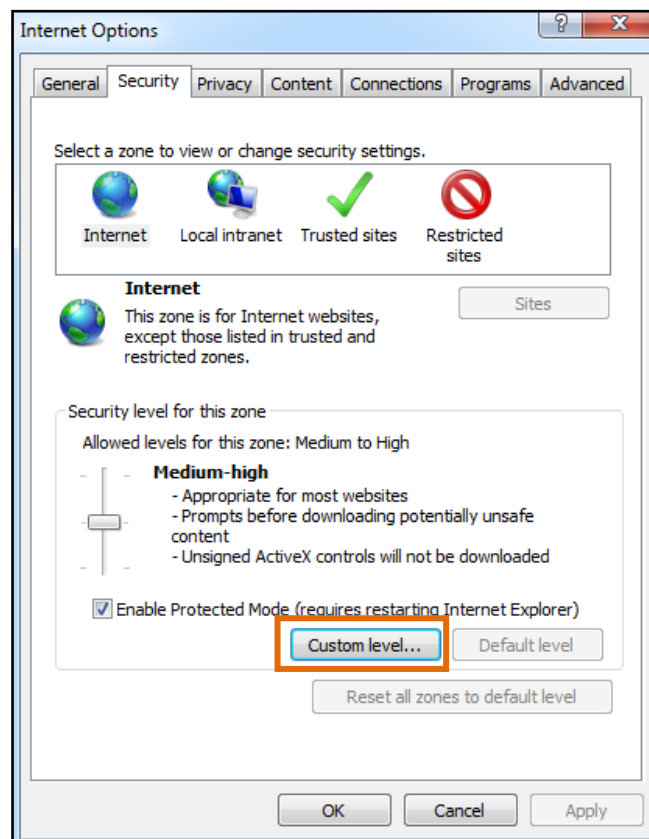


Figure 3 - 3: Security Settings 1/4

- 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

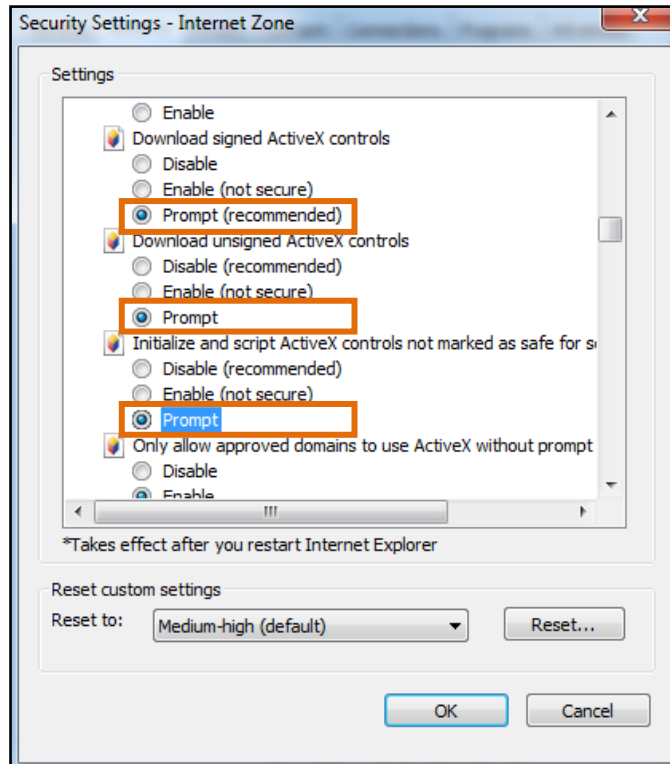


Figure 3 - 4: Security Settings 2/4

- 【Automatic prompting for ActiveX controls】 → Enable

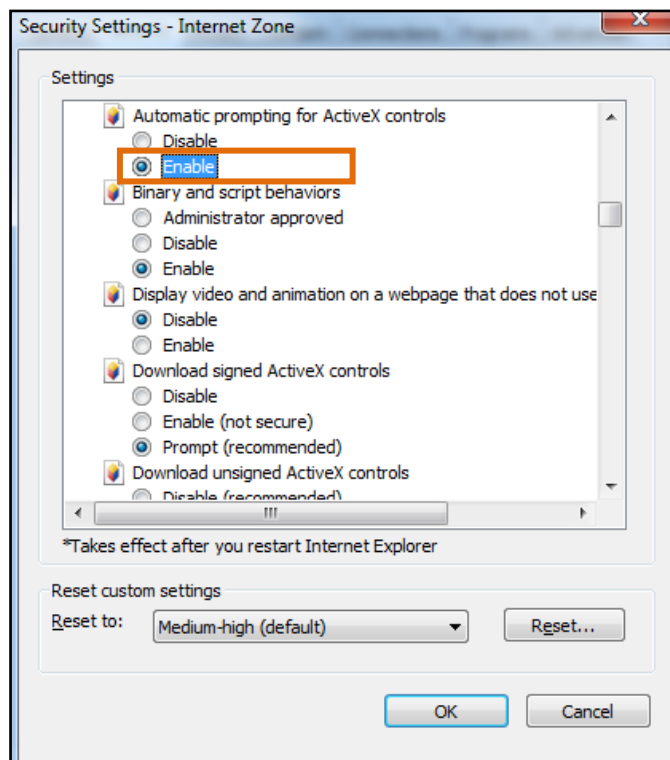


Figure 3 - 5: Security Settings 3/4

【Run ActiveX controls and plug-ins】 → Enable

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

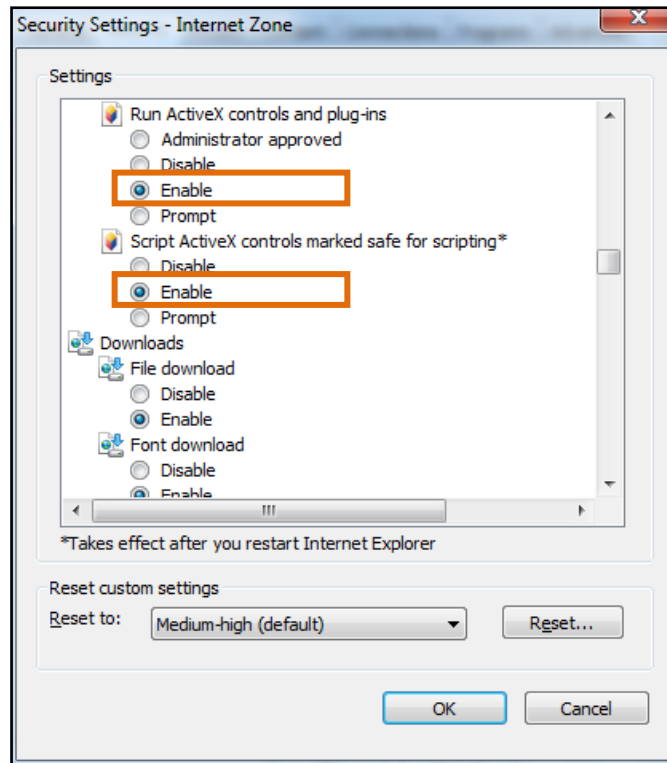


Figure 3 - 6: Security Settings 4/4

- 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.

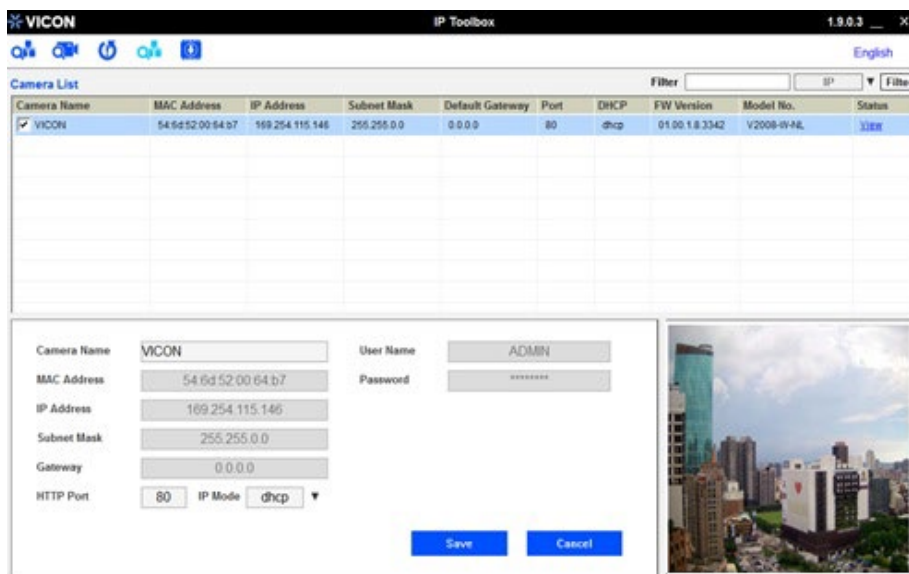



Figure 3 - 7: IP Toolbox

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 username 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 performing the selected function.
8. The **“Filter”** button on the upper-right corner allows user to perform a filtering search, which means certain

keywords can be input 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.

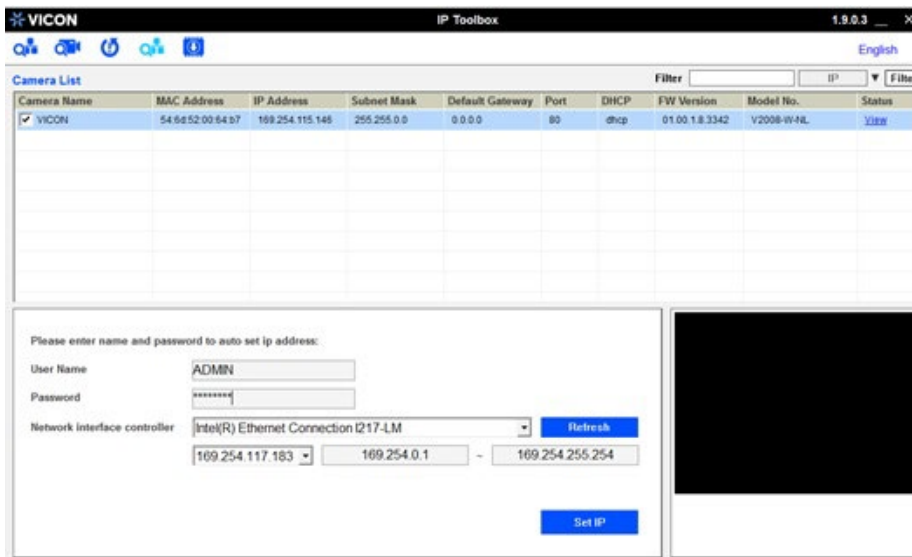



Figure 3 - 8: Auto Set IP Address

10. Click  **“FW Upgrade”** button to upgrade the firmware of selected camera. A pop up window like the image below will display.

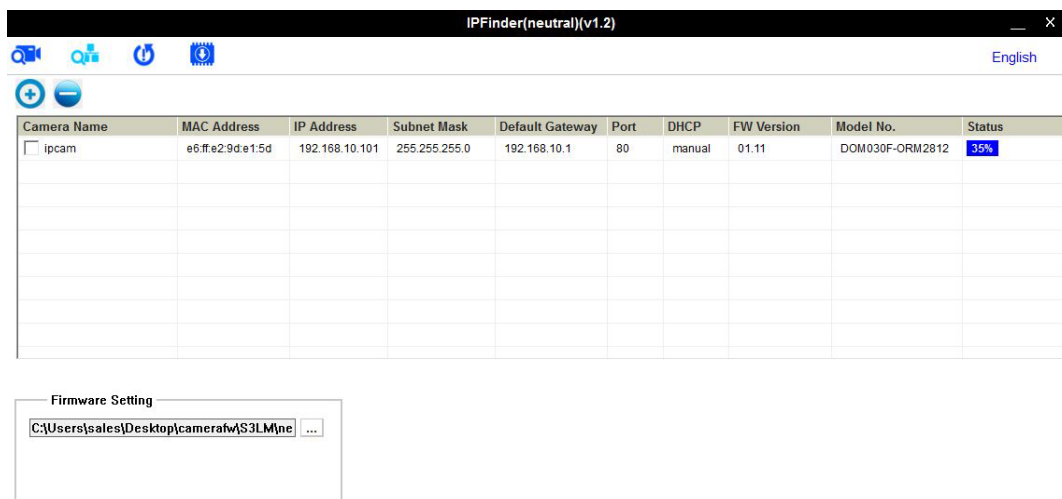






Figure 3 - 9: IP Toolbox FW Upgrade

Follow the steps below to complete firmware upgrade:

- Click  or  to add or remove a 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 INDUSTRIES INC.

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

