

Roughneck AI V2000D-W28IRM

Outdoor Micro Dome Camera with Integral Microphone

XX320-20-01

AI ANALYTICS INSIDE



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.

Be sure to check Vicon's website to be see if you have the most up-to-date camera firmware.



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: 8009-8320-20-01 Product specifications subject to change without notice.

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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

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WARNING

- This camera operates at PoE (IEEE 802.3af Class 3).
- 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 with 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 be melted or lens fogged.
- 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: -4°F to +131°F/-20°C to +55°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 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

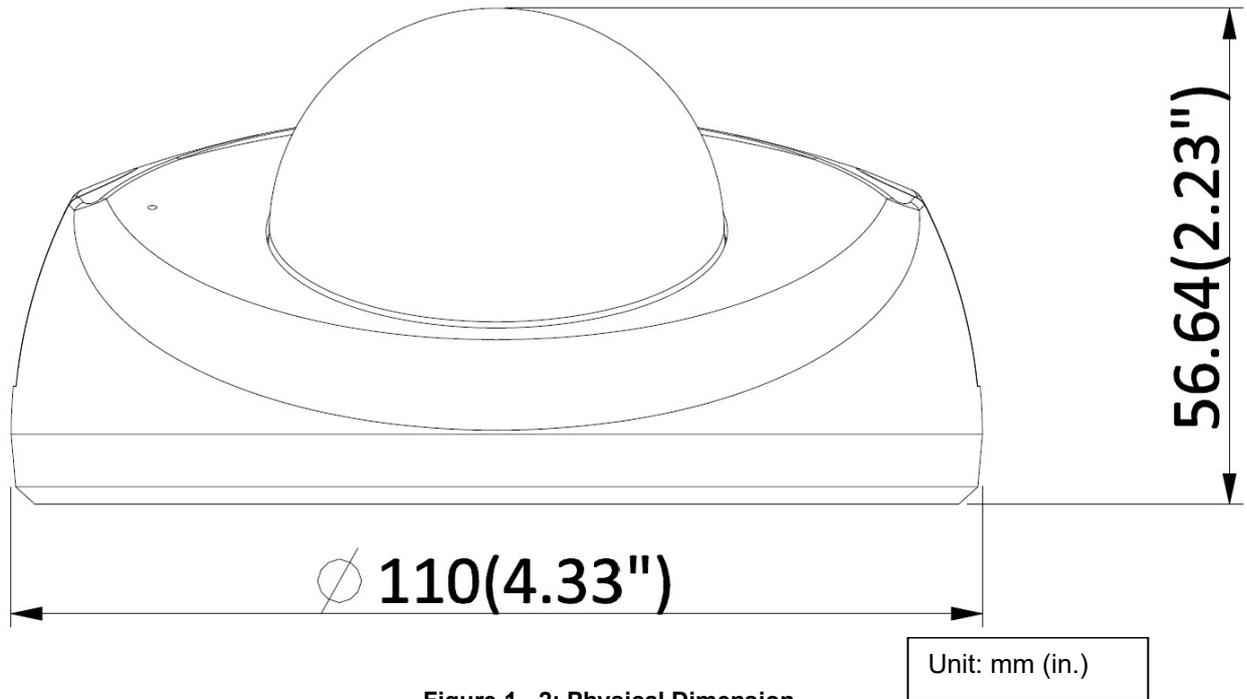


Figure 1 - 2: Physical Dimension

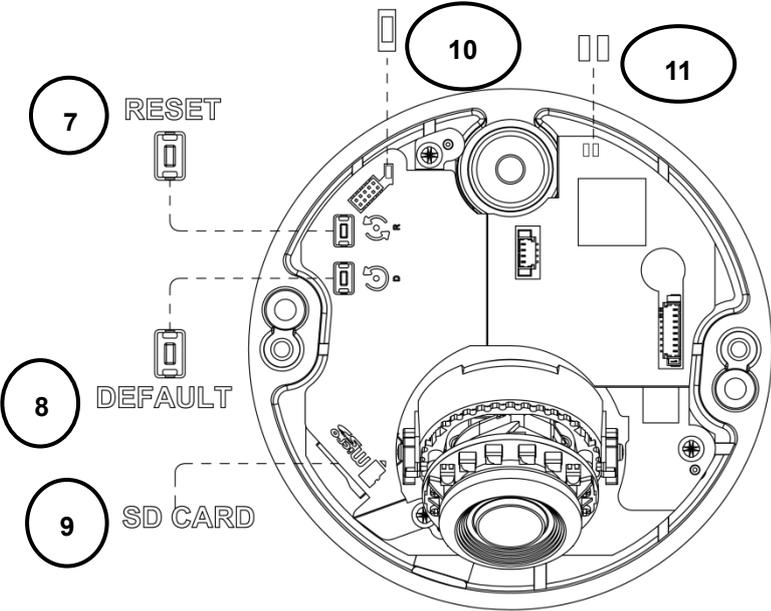
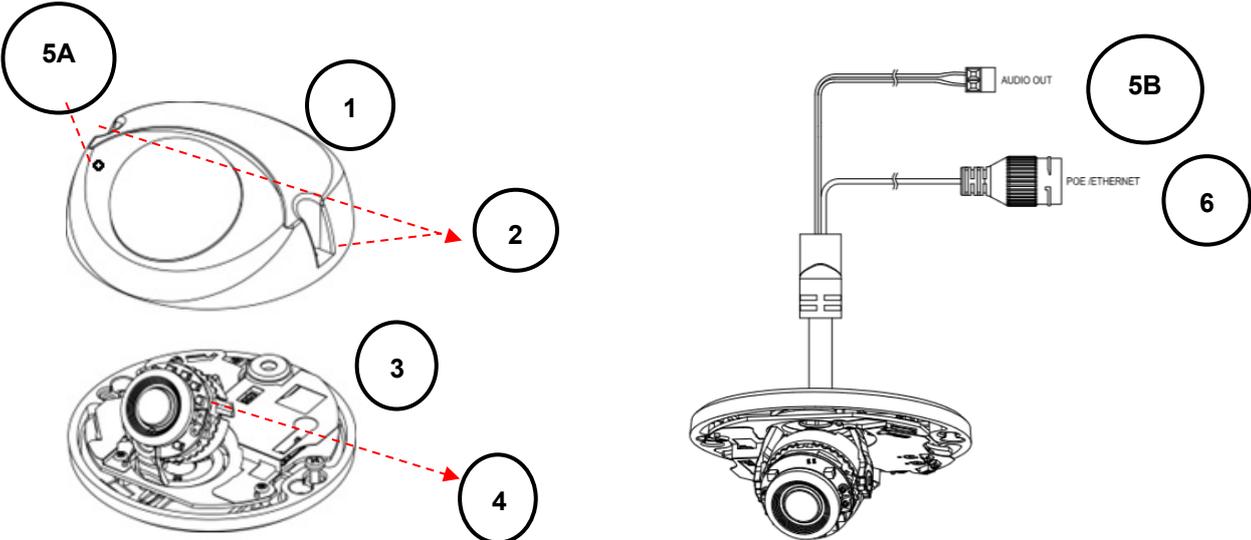


Figure 1 - 3: Parts Pictorial Index

No	Name	Description	
1	Camera Housing	Top cover of the camera.	
2	Screws of Camera Housing	Screws for fixing Camera Housing to Camera Bottom Case.	
3	Camera Bottom Case	Bottom base of the camera.	
4	IR Board	IR LED embedded board for illumination under low-light environment.	
5A	Mic	Microphone that receives sound from camera.	
5B	Audio Out	Audio Out: connect to device like speaker to be triggered through alarm output signals.	
6	RJ-45 Ethernet/PoE Port	Connect an Ethernet cable terminated with RJ-45 connector to the PoE RJ-45 port for both power supply and network connectivity purposes simultaneously.	
7	Reset Button	Press the button for 1 second to reboot the camera.	
8	Default Button	Press the button for 6 seconds to restore camera's settings to factory default settings.	
9	Micro SD Card Slot	Insert a micro-SD card (customer-supplied) into the slot for recording and file storage.	
10	Status LED	Solid Red	Indicates boot up is running. After 2 ~ 3 seconds: <ul style="list-style-type: none"> - Solid Red to Flashing Green if boot up is normal. - Remains Solid Red if an error occurs. - Turns off 3 minutes after a successful boot.
		Flashing Amber	Indicates firmware upgrade is running.
11	LED Indicators	Solid Green	Indicates a live connection is established.
		Flashing Orange	Indicates data is being transmitted/received between camera and the network.

Table 1 - 1: Parts Pictorial Index Description

Color	Name
White	Audio Out (+)
Gray	Audio Out (-)

Table 1 - 2: Wire Color Code Chart

2 Installation, Mounting and Connections

2.1 Package Contents

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

- Fixed Flat Dome Camera * 1
- Plastic Anchor * 2
- Pan Head Screw (Tapping Type) * 2
- Security Torx Bit (T20) * 1
- Mounting Template * 1
- RJ45 Waterproof Connector Kit * 1
- Desiccant * 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 2 screws of camera housing counterclockwise using the T20 security torx bit.
2. Gently pull the camera housing upward to separate it from the camera bottom case.

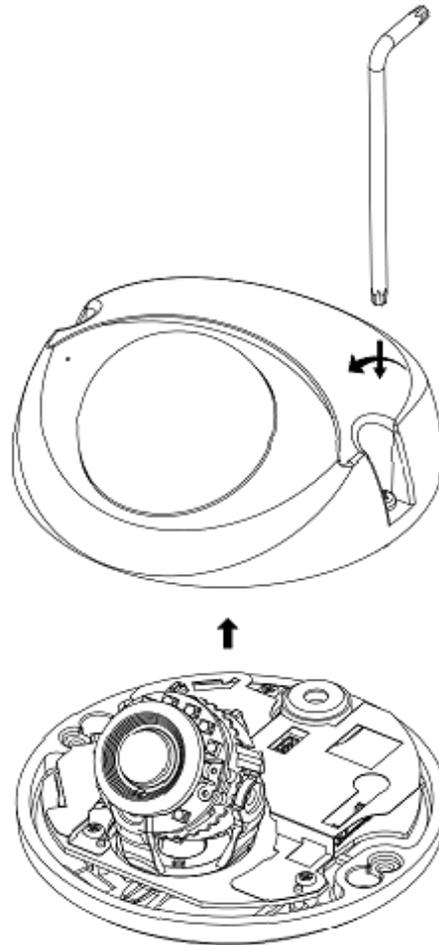


Figure 2 - 1: Disassembling the Camera

2.2.3 Mounting the Camera

1. Attach the mounting template to the wall or ceiling.
2. Drill two holes indicated on the mounting template and insert the supplied plastic anchors into the holes.
3. Drill another hole with $\text{Ø}30\text{mm}$ in diameter, as indicated on the mounting template, in the wall or ceiling.
4. Pass all the signal cables through the hole.
5. Secure the camera bottom case to the wall or ceiling with the 2 pan head screws (TP4) supplied.

NOTE: The mounting height above ground level should be more than 9.8 ft (3 m) for wall mount height.

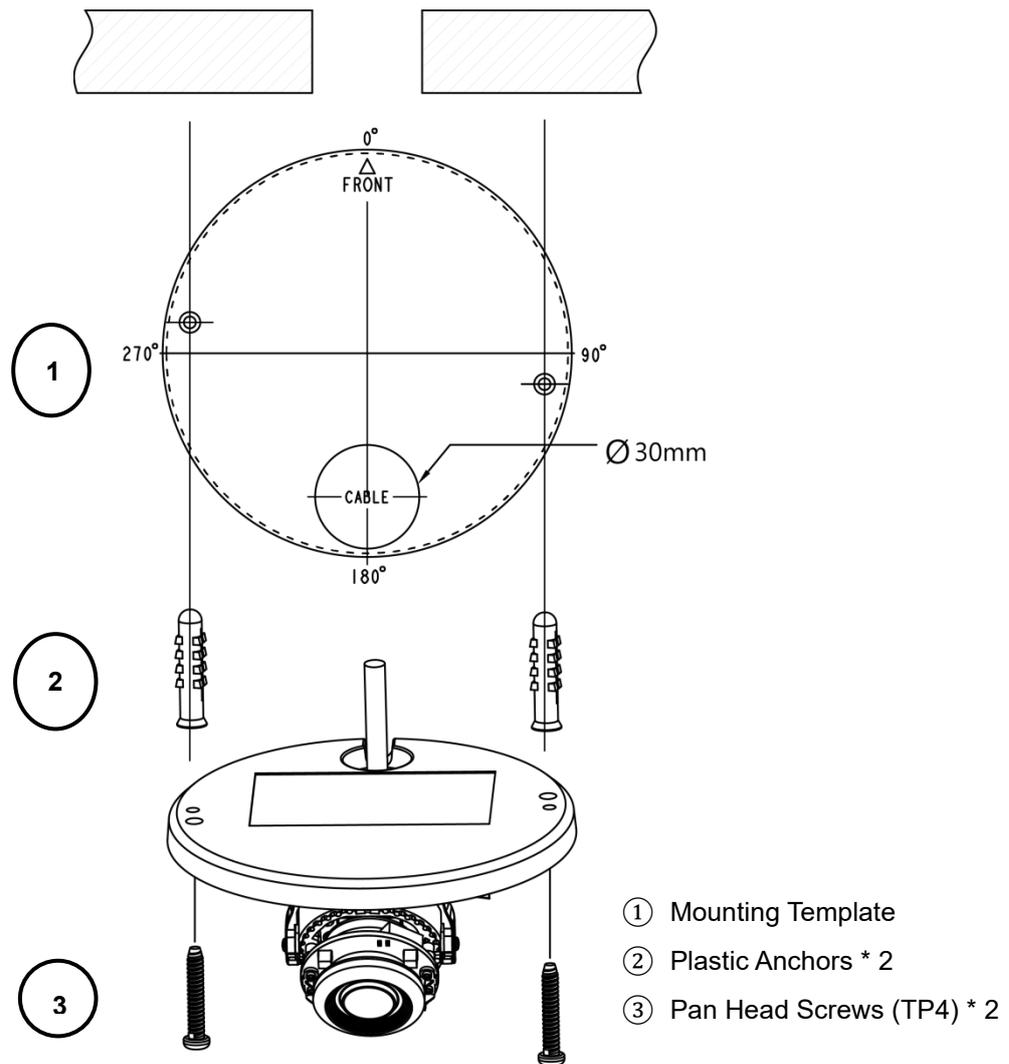


Figure 2 - 2: Mounting the Camera

2.2.4 Connecting the Cables

1. **PoE (Class 3):** Connect an Ethernet cable terminated with RJ-45 connector to the PoE RJ-45 port for both power supply and network connectivity purposes.
2. Insert audio in/out cables to the corresponding terminals of the camera, if required.

2.2.5 PoE Port & Waterproof Connector (IWPWPC) Wiring Procedure

1. Terminate the Ethernet cable with a RJ-45 connector after passing the cable through the waterproof connector.
2. Encircle the PoE port with the rubber O-Ring firmly.
3. Plug the RJ-45 connector into the PoE port solidly for power supply and network connection.
4. Assemble the waterproof connector together with the PoE port tightly for ingress protection.

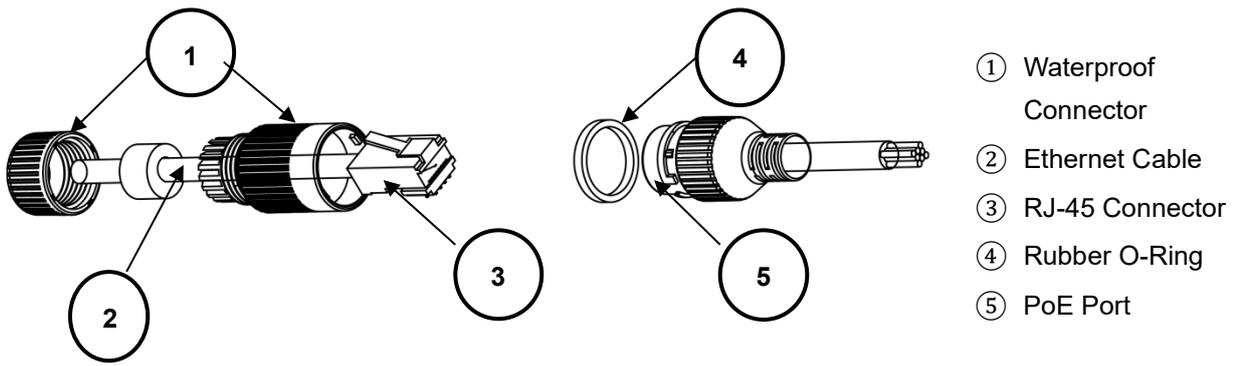


Figure 2 - 3: Waterproof Connector Wiring

2.2.6 Positioning the Camera

- **Pan Adjustment (A)**
Rotate the lens camera assembly to the desired field of view.
- **Horizontal Rotation (B)**
Rotate the lens camera assembly in the camera module, but do not turn assembly more than 355°, as this may cause the internal cables to be twisted, disconnected or broken.
- **Tilt Adjustment (C)**
Tilt the camera lens to desired angle.

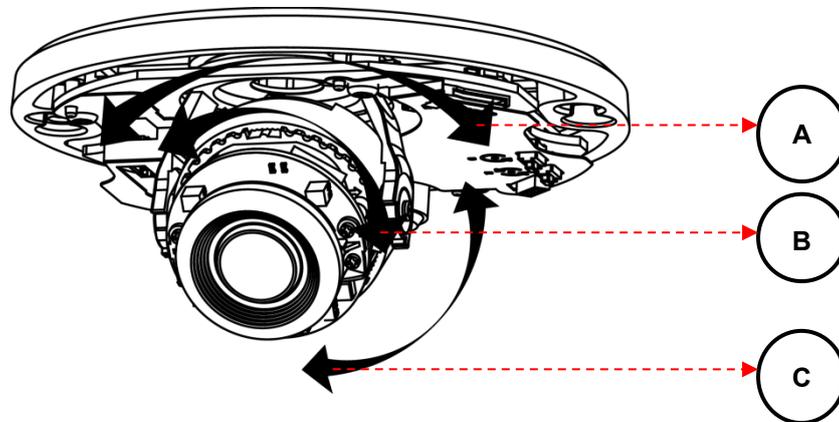


Figure 2 - 4: Positioning the Camera

Caution

Limitation for three axes position:

- Pan range: 0° ~ 180°
 - Rotation range: 0° ~ 355°
 - Tilt range: 0° ~ 80°
-

2.2.7 Securing Desiccant

1. Remove the desiccant from the package.
2. Flip over the camera housing and apply desiccant to the circle recess, as shown in the figure below.

NOTE: Be sure to apply the desiccant before camera assembly to avoid fogging.

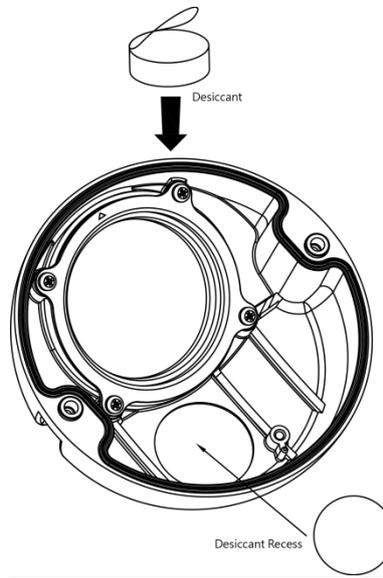


Figure 2 - 5: Securing Desiccant

2.2.8 Reassembling the Camera

1. After mounting the camera bottom case to the surface, reattach the camera housing taking care to have it in the correct direction.
2. Fasten the camera housing with camera bottom case by securing screws tightly using T20 torx bit to complete installation.

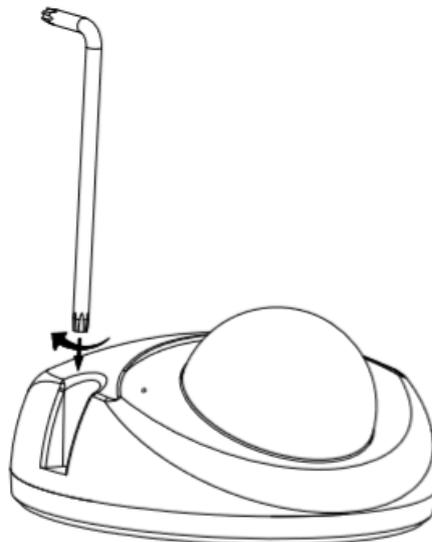


Figure 2 - 6: Reassembling the Camera

3 Connection

3.1 Network

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.

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	Mozilla Firefox, Chrome, Safari, Microsoft Edge
Unit	
Power Supply	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 electricity safety rules.

Caution When using PoE, this camera is to be connected 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 Accessing the Camera

The camera can be accessed directly from its web page or using Vicon's [PRONTO Device Manager](#), which can be found on Vicon's website. Note that when accessing the camera for the first time, a message will display to reset the password.

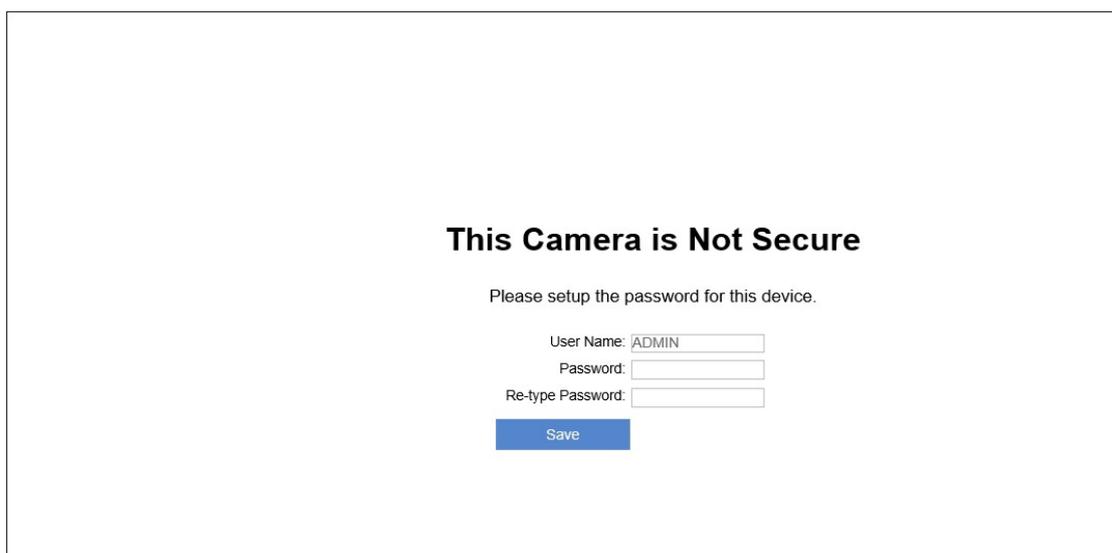
Since this is a network-based camera, an IP address must be assigned. The camera's default IP address is obtained automatically through a DHCP server in your network; be sure to enable DHCP in "Network Settings." If DHCP is not available, the camera will use APIPA (link-local address); IPv4 link-local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

Connecting from a computer

1. Make sure the camera and your computer are in the same subnet.
2. Check whether the network is 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 username: **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.**"



The screenshot shows a web browser window with a white background. At the top, the text "This Camera is Not Secure" is displayed in bold black font. Below this, a smaller line of text reads "Please setup the password for this device." There are three input fields: "User Name:" with "ADMIN" entered, "Password:" which is empty, and "Re-type Password:" which is also empty. At the bottom of the form is a blue button with the word "Save" in white text.

Figure 3 - 1: Login Window

3.4 PRONTO Device Manager

PRONTO is Vicon's device manager (Discovery tool) that can be used to discover all Vicon cameras on a system. The complete [User Manual](#) can be found on Vicon's website.

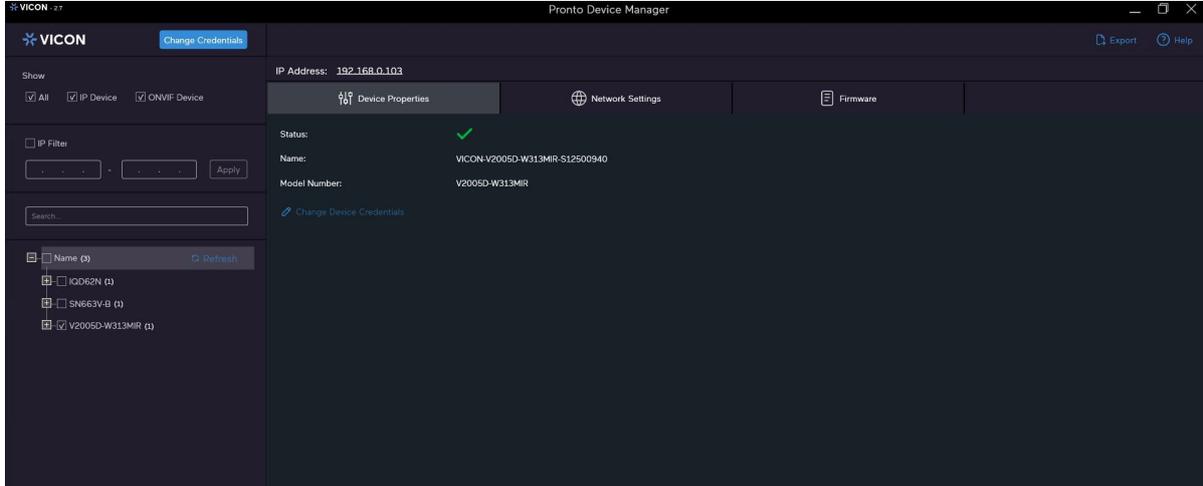


Figure 3 - 2: PRONTO Interface

- Upon startup of the PRONTO Device Manager, the tool's auto-discovery function generates a list of the discovered cameras on the network in a resource list.
- There are a variety of filtering options, including filter by All Devices/IP Device/ONVIF Device; IP range or text.
- There are tabs for Device Properties, Network Settings and Firmware.



VICON INDUSTRIES INC.

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

