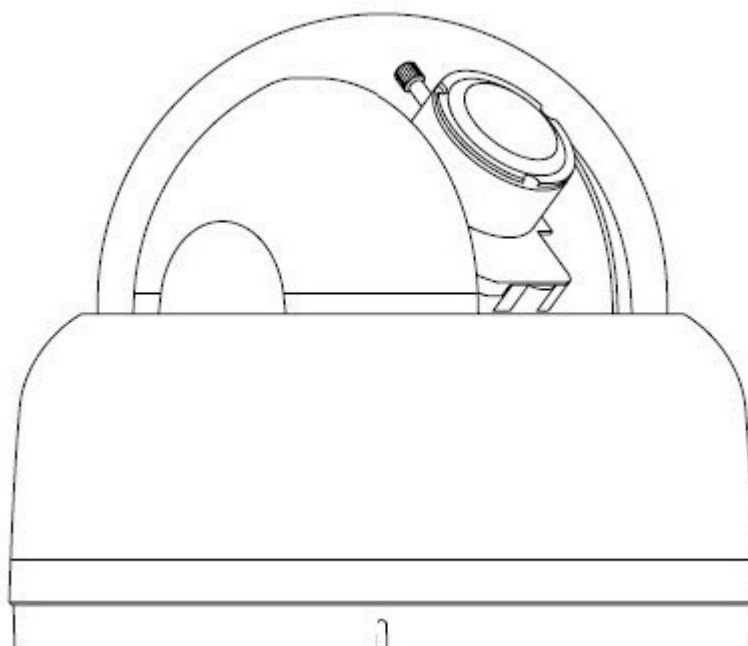


JVC

VN-T216/U

FIXED HD IP DOME CAMERA

QUICK GUIDE



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1 Introduction

Thank you for purchasing the camera. Before installing it, read the guide carefully and check the model.

For more information, please refer to the INSTRUCTIONS on CD-ROM.

Unpack Everything

- **FIXED HD IP DOME CAMERA**
- **WARRANTY CARD**
- **SAFETY PRECAUTIONS**
- **QUICK GUIDE**
- **2-PIN TERMINAL BLOCK** for power input
- **8-PIN TERMINAL BLOCK** for alarm input/output
- **CD-ROM** containing INSTRUCTIONS and IP Finder software
- **TEMPLATE** : mounting template
- **2 SCREW ANCHORS**
- **2 SCREWS**

Preparation

The following tools might help you to complete the installation:

- Drill
- Screwdrivers
- Wire cutters

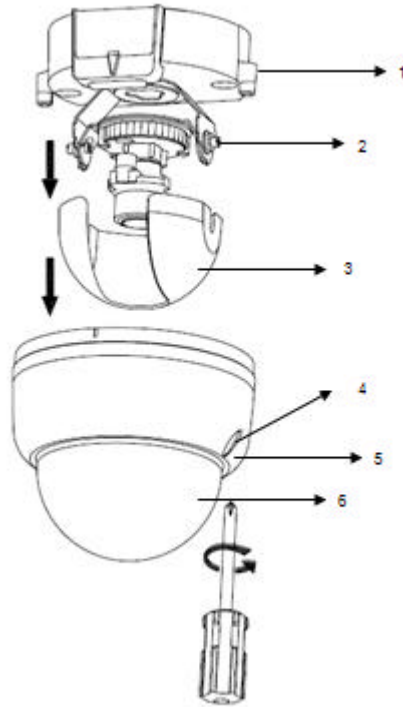
Camera Installation

Note

All the installation and operations here should conform to your local electricity safety rules.

Disassembling the Camera

- Gently remove the screw to take off camera housing (4)
- Remove the inner liner (3) by pulling it free of the two notches (2) in the housing.
- Set the camera housing (5) and liner (3) aside.



Connecting the Power Wiring

Connect the power supply cable to the power connectors.

Select one of the following options.

- **For DC12V**
 - Connect 12 V (-) to terminal =DC12V
 - Connect 12 V (+) to terminal =DC12V+
- **For AC24V**
 - Connect 24 V (~) cables to terminals ~AC24V.
- **PoE**
 - Connect the network cable to the RJ45 terminal using a switch.

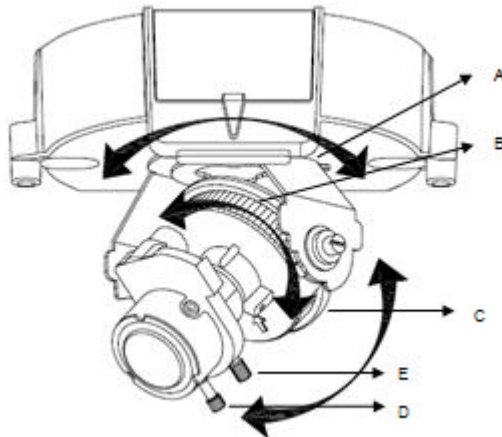
Caution If using a DC supply, make sure the polarity is correct. Incorrect connection may cause malfunction and / or damage to the camera.

Note Connectors and field wiring terminals for external Class 2 circuits provided with marking indicating minimum Class of wiring to be used. Class 2 shall be marked adjacent to the field wiring terminals.

Adjusting the Camera Position

The dome camera has three axes for positioning the camera. While monitoring the picture on the monitor, adjust the camera position as follows:

- **Pan Adjustment (A)** For Wall Mount and Tilted Ceilings Rotate the lens base (maximum 360°) until you are satisfied with the field of view.
- **Horizontal Rotation (B)** Rotate 3D assembly in the base. Do not turn assembly more than 360° as this assembly may cause the internal cables to twist and disconnect or break.
- **Tilt Adjustment (C)** After loosening the thumbnuts, position the camera as desired, then finger –tighten the thumbnuts to set the position.



Caution Do not turn the lens more than 360° as this may cause internal cables to disconnect or break.

Adjusting Zoom and Focus

- Loosen the zoom lever (D) / locking screw by turning it counter-clockwise.
- Rotate the zoom ring to achieve the desired picture.
- Loosen the focus lever (E) / locking screw by turning it counter-clockwise.
- Rotate the focus ring to adjust the focus.
- If re-adjustment is necessary, repeat the steps above.
- Retighten the zoom lever (D) / locking screw and the focus lever (E) / locking screw.

Caution Retighten the locking screws to prevent loss of adjustment.

Mounting the Camera

- Place the mounting template (supplied) on the mounting surface and mark the holes.
- Drill two holes, and then insert the screw anchors into the holes.
- Take off the camera housing.
- Connect the Safety Wire (Fall Prevention Wire, not supplied) to the ceiling.

- Secure the camera bottom case (1) to the wall/ceiling with the TP4 x 15 mm tapping screws, supplied.
- Insert the power cable, LAN cable and Audio cables.
- Adjust the view angle (zoom, focus, and Horizontal Rotation).

To prevent the camera from falling off, ensure that it is connected to a firm place (ceiling slab or channel) using a Safety Wire (Fall Prevention Wire is not supplied).

Warning

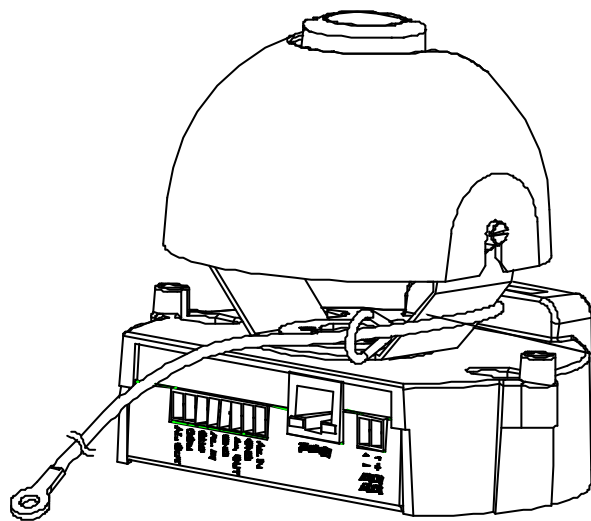
Pay also careful attention to the length, strength, wiring, and material (insulating properties) of the fall prevention wire to be used. The length should be as short as possible within the permissible range of the mounting length. The wire should be strong enough to withstand the total weight of this product. (Pay also attention to the finishing at the end of the wire.)

Caution

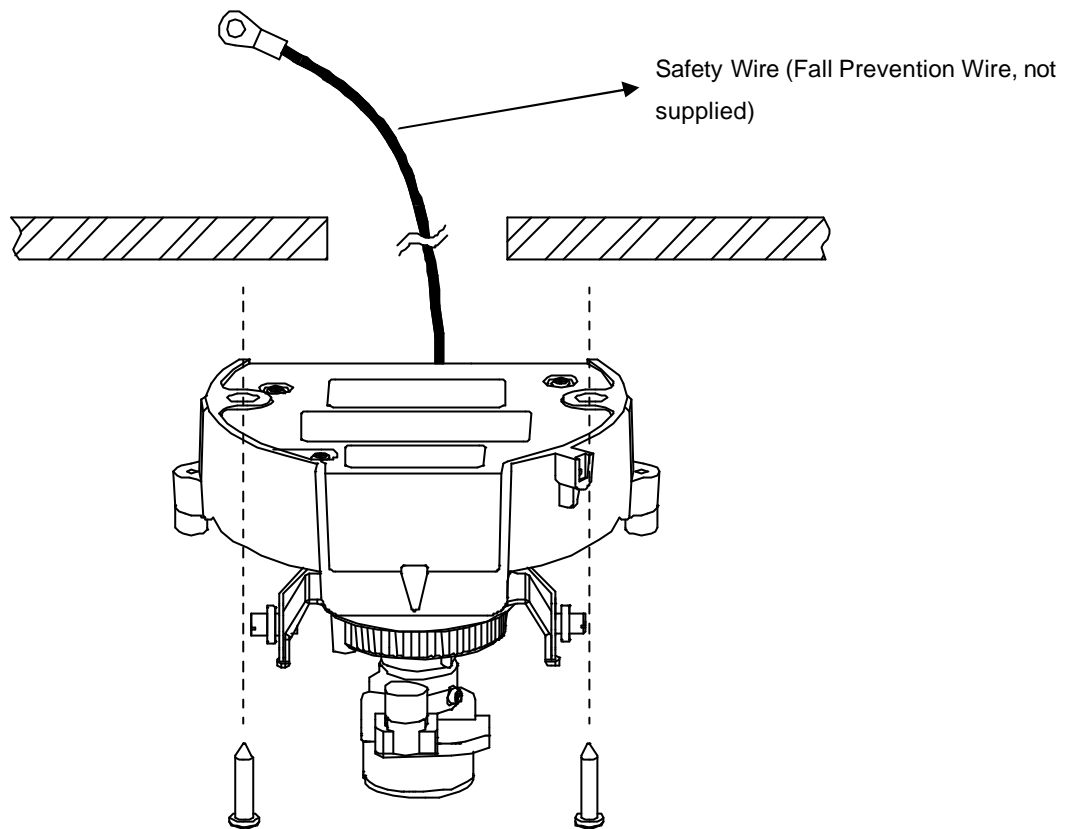
Must be isolated camera and the wall/ceiling which are connected by the Safety Wire (Fall Prevention Wire).

Note

Depending on the material of your mounting surface, you may require different screws and anchors than those supplied.



Safety Wire (fall prevention wire is not supplied).
Please tighten a safety wire on a firm place as figure.



Locking the Camera

- Use soft, lint-free cloth to wipe the dome cover clean and remove fingerprints.
- Attach the inner liner and camera housing.
- Turn the power on after you have installed the camera.

Network Configuration

Setting IP

This is a network-based camera and must be assigned an IP address first.

The camera's default IP address is 192.168.0.2 and sub mask is 255.255.255.0. To change IP address, open Network Settings page described later.

If your network uses a DHCP server, an IP address can be assigned automatically from the DHCP server by enabling DHCP in the Network Settings page described later.

Connecting the Camera to a Personal Computer

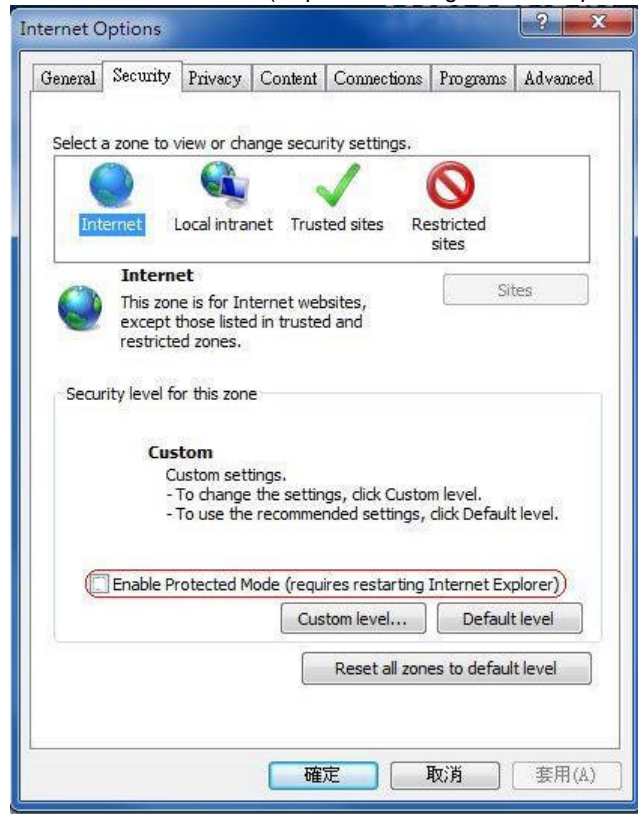
1. Connect the network cable to the camera and then turn on the camera's power.

2. Set the personal computer's IP address. The camera's default IP address is 192.168.0.2 and sub mask is 255.255.255.0.
3. Check that the camera and computer are connected by Pinging the IP address you have set. To do this, start a command prompt (Windows: from the Start Menu, select Program. Then select Accessories and choose Command Prompt.) Type: Ping 192.168.0.2. If the message "Reply from..." appears, it means the connection is done.
4. Start Internet Explorer and enter IP address: **192.168.0.2**. A login window will appear. Enter the default user name: **admin** and password: **jvc** to log in.

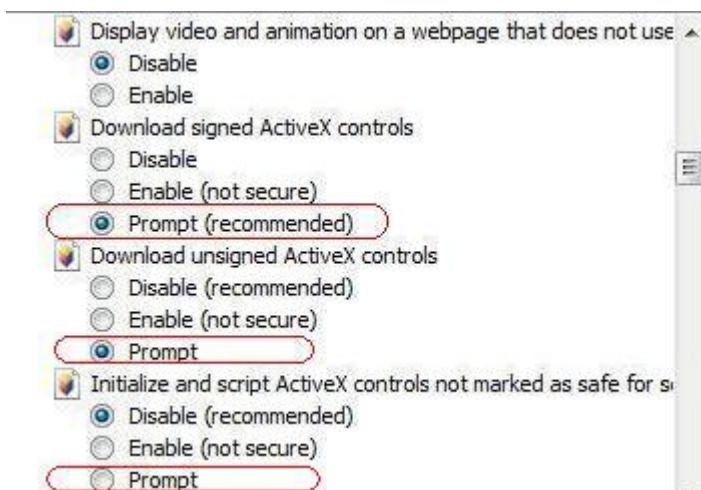


5. Images of the camera can be viewed through Internet Explorer. Before viewing, follow these steps to enable the display.
 - a. Enable Cookies as shown below:
 - In Internet Explorer, click Internet Options on the Tools menu.
 - On the Privacy tab, move the settings slider to Low or Accept All Cookies .
 - Click OK.
 - b. When a proxy server is used, click **Internet Options** on the **Tools** menu of Internet Explorer, select **Connect** tab, click **LAN** button, and set proxy server.
 - c. Change **Security** in Internet options as shown below:
 - On **tool** menu, click **Internet Option**.
 - Press the **Security** tab.
 - If the camera operates inside the Intranet, click the **Intranet** icon. If the camera operates on the Internet, click the **Internet** icon.

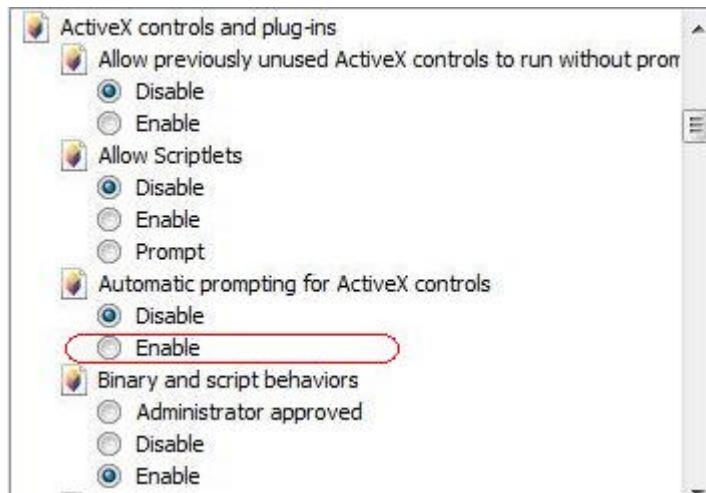
- In Windows 7 only, Click **【 Tools 】** → **【 Internet Options 】** → **【 Security 】**
Enable Protected Mode (require restarting Internet Explorer) → **Unchecked**



- Click **Custom Level**. This will open the **Security Settings – Internet Zone** screen.
- 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**

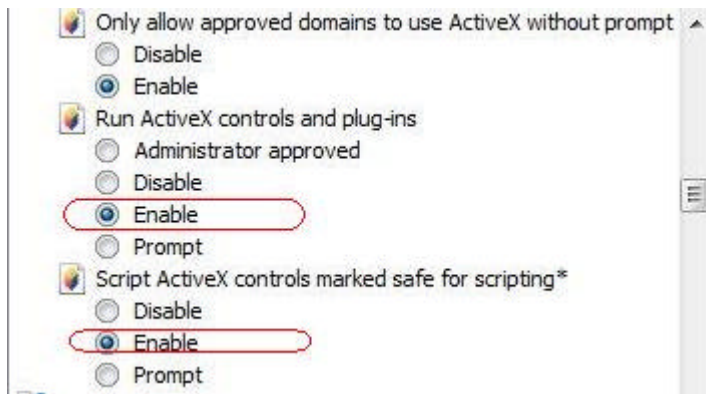


【 Automatic prompting for ActiveX controls 】 → **Enable**



【Run ActiveX controls and plug-ins】 → Enable

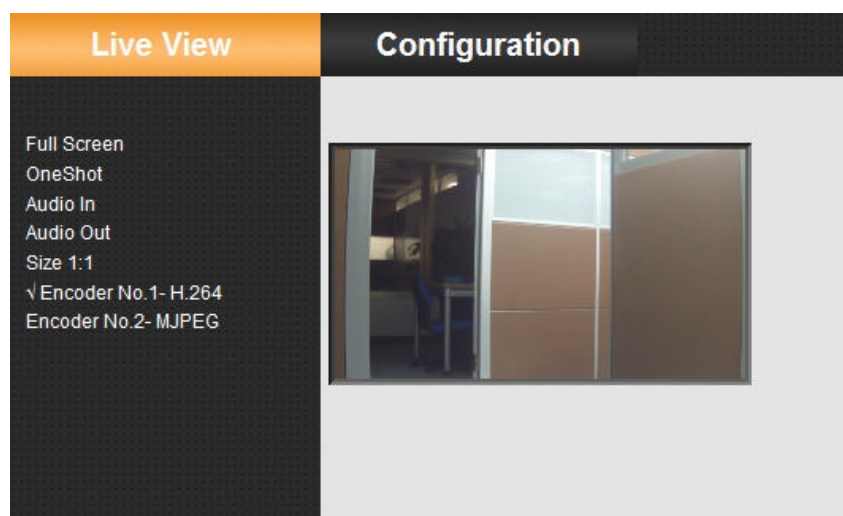
【Script ActiveX controls marked safe for scripting*】 → Enable



- Press **OK** to save the settings. Close all Internet Explorer windows and start a new window. This will allow the new settings to take effect.

6. Type your setting IP address into the browser.

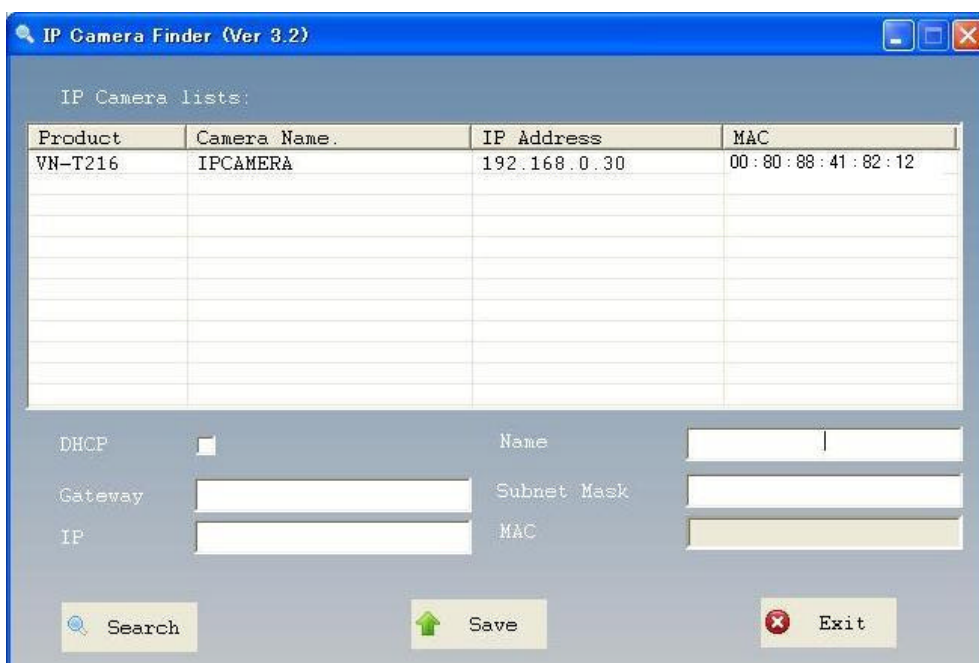
7. Then you should be able to see the camera image screen.



Using “IP Finder” to Search Camera’s IP Address

The **IP Finder** is a tool which helps users to find VN-T16/216 series network cameras in the LAN which your computer is connected. Please note that **IP Finder** is only compatible with Windows 7, windows Vista and Windows XP.

1. Insert the CD-ROM in the CD-ROM drive.
2. Copy the IP Finder’s folder to your computer.
3. Double click the **IpFinder.exe** in your computer’s IP Finder folder. An IP Camera Finder window will pop out. The window will display a list of IP cameras which you are using currently.
4. Press Search to search cameras.






2 Notice of Use

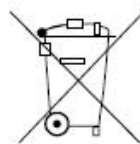
- This manual is designed for administrators and users of the network camera. Please read it carefully before use. All requirements should be followed before using this camera.
- Keep this document for future reference.
- Please make sure the power source is DC12V / AC24V / PoE. Only connect the camera to this power system.
- The camera must be installed on a solid mounting surface.
- Keep the camera and other accessories dry.
- We are not responsible for any damage caused by inappropriate use.
- Because the camera controls auto exposure by shutter speed, flicker can be shown by fluorescent light. To reduce the flicker, please select PAL mode if the power is 50Hz, or NTSC mode if the power is 60Hz. (Refer to INSTRUCTIONS “4 Overview of Navigation and Controls” - “Video Type”)

3 Warnings

Installation and maintenance should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.

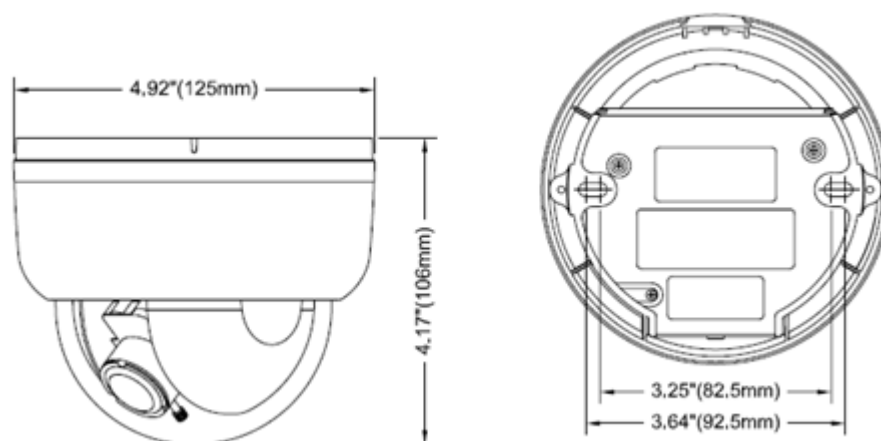
DANGER! AC24V models require the use of CSA Certified/UL Listed Class 2 power adapters to ensure compliance with electrical safety standards. Power over Ethernet (PoE) should meet the IEEE 802.3af. PoE standard.

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



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.

4 Dimensions



5 Specifications

Operational Specifications	
Image device	1/2.7-type Mega-pixel CMOS sensor
Sensitivity	Color:0.6 lx, B/W: 0.6 lx (50%)
Day/Night	Easy D/N
Auto Gain Control	Off/On, selectable
White Balance	ATW (2800K 8500K) and Manual
Electric Shutter	NTSC: 1/30~1/10000 sec PAL:1/25~1/10000 sec
Noise Reduction	Yes
3 Axis Gimbals	Yes
Motion detection	Yes
Lens Type	1/3-type 3-9mm —F:1.2
BLC	Yes
Audio	Line in/out
Alarm	1 in / 1 out (Alarm out spec: 0.5A / AC120V max)
IP Specifications	
Video Compression	H.264 & MPEG4 & MJPEG
Video Streaming	Real time stream: 1080P H.264 or 720P H.264+D1 or D1+D1 Independent controllable frame rate and bandwidth. Constant or variable bitrate control
Resolution	NTSC: 1080P(1920 x 1080), 720P(1280 x 720), D1(720 x 480), 4CIF(704 x 480), VGA(640 x 480), CIF(352 x 240), QVGA(320 x 240)

	PAL: 1080P(1920 x 1080), 720P(1280 x 720), D1(720 x 576), 4CIF(704 x 576), VGA(640 x 480), CIF(352 x 288), QVGA(320 x 240)
Image Frame Rate	NTSC: Up to 30fps PAL: Up to 25fps
Security	Multiple user access levels with password protection
Users	1 Administrator, 5 Users
Video Access from Web Browser	Full control of all camera settings available to administrator
Minimum Web Browsing Requirements	Windows XP or Windows 7 as OS, Internet Explorer Version 6.0-8.0, CPU: Intel Pentium IV X2 2.4 GHz or equivalent AMD, Memory: 1G or above
Supported Protocols	IPv4, HTTP, TCP, RTSP, RTP, ICMP, UDP, IGMP, RTCP, FTP, DNS, DHCP, ARP
Network interface	RJ-45, 100BASE-TX/10BASE-T, FULL/HALF/Auto negotiation
Surveillance Protocol	ONVIF Compatible (pass compliance test tool)
Onboard Storage	SDHC (suggest class 10)
Electrical	
Power Supply	PoE IEEE 802.3af Class 0, DC12V, AC24V
Power Consumption	PoE 0.13A, DC12V 550mA
Mechanical	
Dimension	Ø126mm x 106mm
Weight	490g

Connectors	Power Input: removable terminal block Network: RJ45 connector Audio In/out: removable terminal block Alarm In/out: removable terminal block
Environmental	
Operating Temperature	-10° C to 50° C
Operating Humidity	0% to 90%
Storage Temperature	-20° C to 60° C