



Network Camera Installation Guide

3 MP Proline Motorized Dome Camera

Model CV-P3D10-ODHIWM



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Description

The 3 MP Proline Motorized Dome Camera is a high resolution fixed dome IP camera with 3 MP and a built-in fan and heater, making it an ideal choice for all-weather outdoor applications where image detail and/or a wider coverage is important. Capable of 2048 × 1536 resolution, the motorized varifocal lens incorporates a 120 dB wide dynamic range and 30 meter IR LEDs to deliver crisp images regardless of ambient light conditions. The PoE Dome Camera pans (0-355 degrees) and tilts (0-80 degrees), includes a micro SD slot for up to 32 GB local memory, and is encased in a vandal-resistant housing.

Package contents

- 1X circular metal back cover
- 3X long metal anchors with Phillips head
- 3X small screws with T20 head
- 1X BNC to RCA adapter
- 1X hex tool (90 degree wrench)
- 1X large flush mounting and ceiling mounting sticker
- 1X large circular pad
- 2X ceiling stickers
- 1X 24 VAC power supply

Safety instruction

Follow these instructions to ensure that the product is used correctly and to avoid danger or property loss. Serious injury or death may occur if any of the warnings are ignored. Injury or equipment damage may occur if any of the cautions are neglected.

WARNINGS

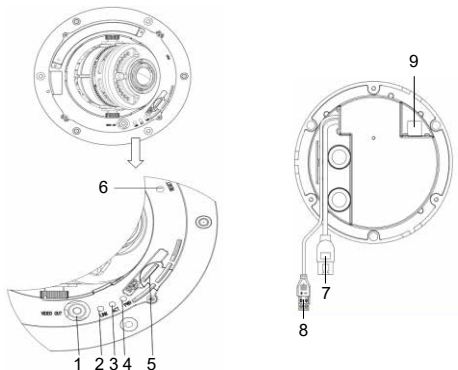
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Refer to the technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 24 VAC or 12 VDC according to the IEC60950-1 standard. Refer to the technical specifications for detailed information.
- Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.
- Make sure that the plug is firmly connected to the power socket.
- When the product is mounted on the wall or ceiling, the device should be firmly fixed.
- If smoke, odor, or noise rise from the device, turn off the power at once and unplug the power cable. Contact the service center.
- If the product does not work properly, contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

CAUTIONS

- Make sure the power supply voltage is correct before using the camera.
- Do not drop the camera or subject it to physical shock.
- Do not touch CMOS modules with fingers. If cleaning is necessary, use a clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period, replace the lens cap to protect the CMOS from dirt.
- Do not aim the camera at the sun or exceedingly bright places. Blooming or smearing may occur (which is not a malfunction), and affect the endurance of CMOS at the same time.
- The CMOS may be burned out by a laser beam, so when laser equipment is in use, make sure that the surface of CMOS will not be exposed to the laser beam.
- Do not expose the camera to high electromagnetic radiation, extremely hot or cold environments (the operating temperature should be -30°C to $+60^{\circ}\text{C}$), or dusty or damp locations.
- To avoid heat accumulation, good ventilation is required for operating environment.
- Keep the camera away from liquid while in use.
- When returning a camera, pack it in its original packing, or similar packing materials.

Overview

Figure 1: Camera overview

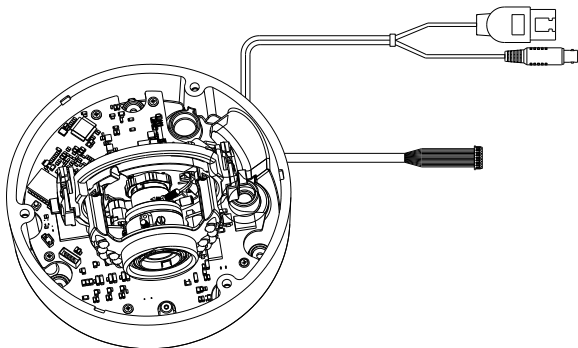


- (1) Video output interface
- (2) LINK: Indicator is solid yellow when network is connected
- (3) ACT: Indicator flashes blue when network connection is functioning properly
- (4) PWR: Indicator is solid red when the device is powered on
- (5) Micro SD slot
- (6) RESET: Reset the camera
- (7) 10 M/100 M self-adaptive Ethernet interface
- (8) Power supply interface
- (9) Extended interface

Notes

- The extended interface can be connected to an alarm input/output interface, audio input/output interface, or RS-485 interface.
- After the powering on of the camera, pressing and holding the RESET button for about 10 seconds will reset all the parameters to the default settings.

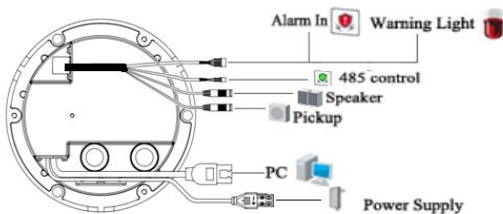
Figure 2: Audio and alarm interfaces



Wiring

Wire your dome camera as shown in Figure 3.

Figure 3: Wiring



Installation

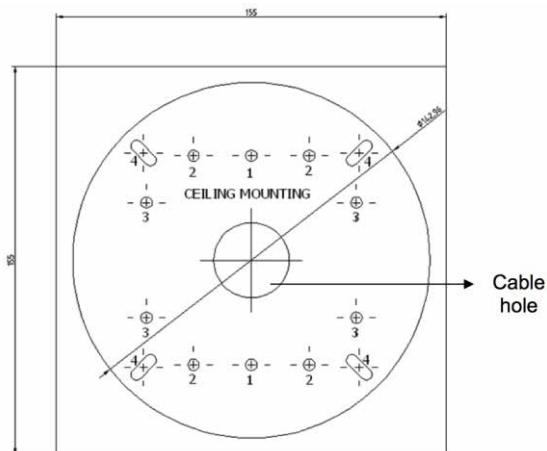
To ensure the camera operates properly, install the camera according to the instructions below.

Before you start

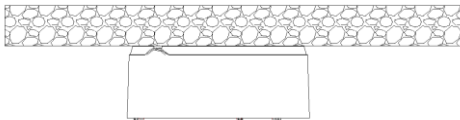
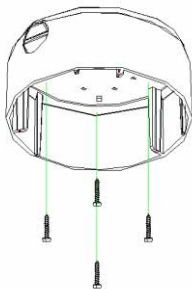
- Make sure that the device in the package is in good condition and all the assembly parts are included.
- Make sure that all the related equipment is powered off during the installation.
- To determine the proper environmental operating conditions, refer “Specifications” on page 44.
- Make sure the power supply matches the required voltage to avoid damage.
- If the product does not function properly, contact your dealer or the nearest service center. Do not disassemble the camera for repair or maintenance by yourself.
- Make sure that the wall is strong enough to withstand three times the weight of the camera.

To mount on a ceiling:

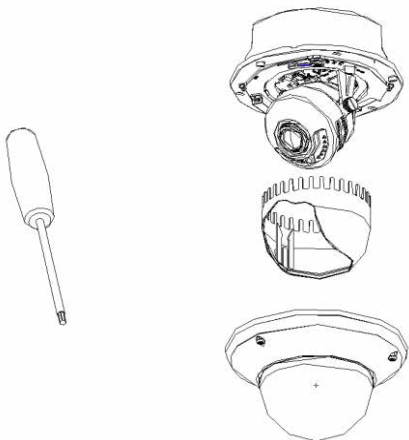
1. Drill the screw holes on the ceiling with the supplied drilling template. If you need to route the cables from the bottom of the camera, cut a cable hole in the ceiling.



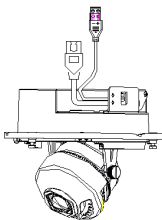
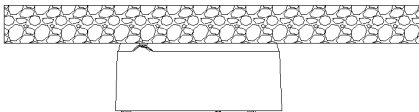
2. Secure the back box to the ceiling with screws, as shown below.



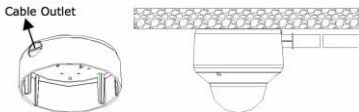
3. Loosen the set screws with the hex tool (supplied) to remove the lower dome, and then remove the dome liner.



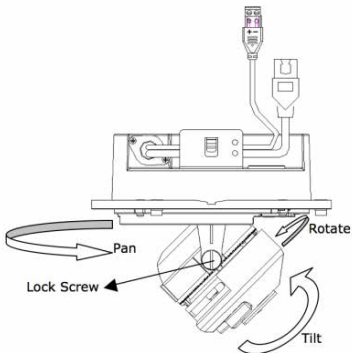
4. Install the dome module to the back box and pull the cables through the cable outlet on the bottom of the back box.



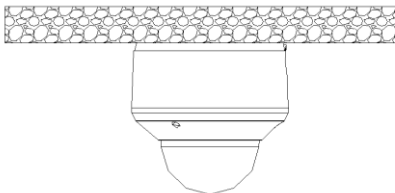
Note: If you need to pull the cable through the cable outlet from the side of the camera, remove the cover and use waterproof joints and a waterproof pipe to route the cables.



5. After connecting the network and power cables, view the image of the camera over the network. Loosen the lock screws and adjust the panning position and tilting position. Rotate the lens to get the desired surveillance angle, and then refasten the lock screws.

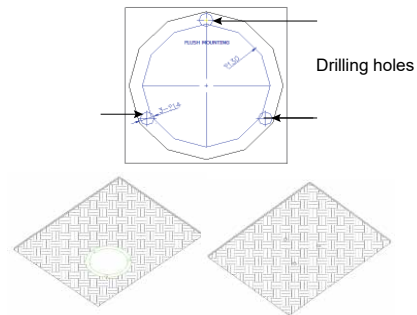


6. Reinstall the dome liner and lower dome to finish the installation.

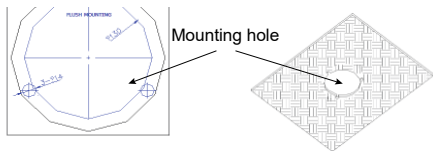


To mount in-ceiling:

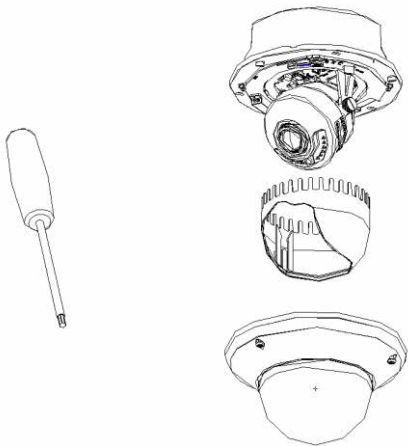
1. Drill the screw holes on the ceiling with the supplied drilling template.



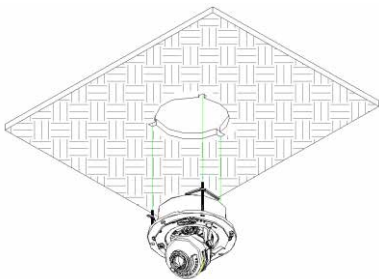
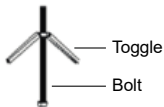
2. Cut the mounting holes on the ceiling with the supplied drilling template.



3. Loosen the set screws with the hex tool (supplied) to remove the lower dome, and then remove the dome liner.



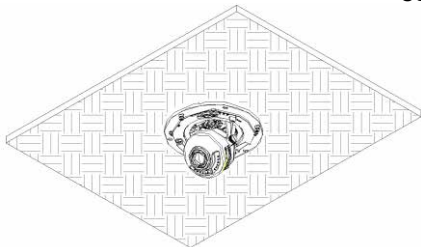
4. Rotate the toggle to remove it from the toggle bolt. Insert the bolt into the toggle bolt hole on the dome module and use the screwdriver to rotate the bolt slightly but not tightly. Reinstall the toggle and push the dome module to the mounting hole on the ceiling with toggle bolts aligned with the screw holes.



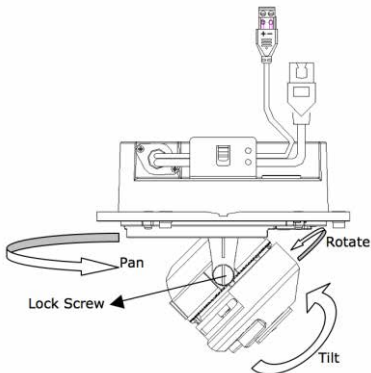
5. Fasten the toggle bolt and the toggle will automatically secure the dome module to the ceiling.



Ceiling



6. After connecting the network cable and power cable, view the image of the camera over the network. Loosen the lock screws, and then adjust the panning and tilting positions. Rotate the lens to get the desired surveillance angle, and then refasten the lock screws.

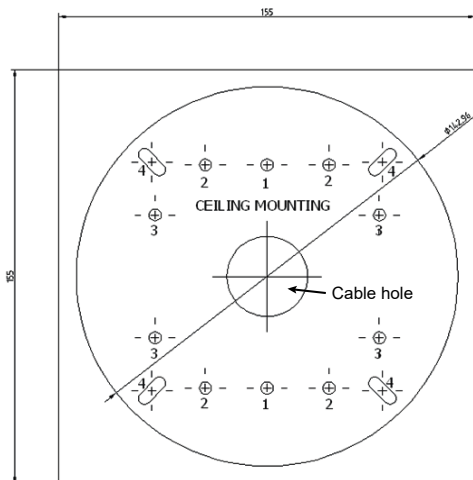


7. Reinstall the dome liner and lower dome to finish the installation.



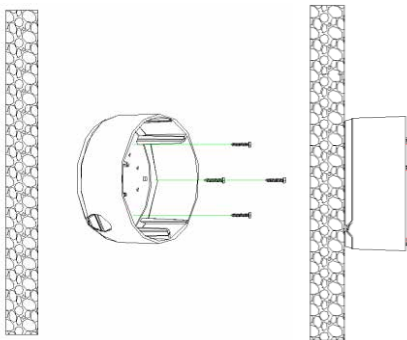
To mount on a wall:

1. Drill the screw holes on the wall with the supplied drilling template. If you need to route the cables from the bottom of the camera, cut a cable hole in the wall.

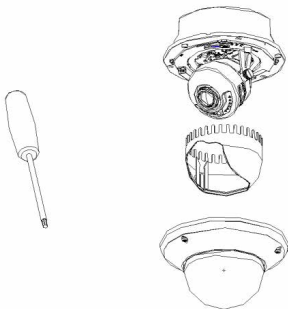


2. Secure the back box to the wall with screws.

Note: Position the side cable outlet directly below to prevent moisture from getting inside the camera.

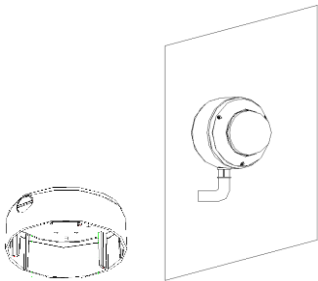


3. Loosen the set screws with the hex tool (supplied) to remove the lower dome; remove the dome liner.

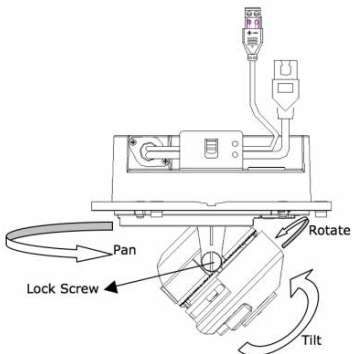


4. Install the dome module to the back box and pull the cables through the cable outlet on the bottom of the back box.

Note: If you need to pull the cable through the cable outlet from the side of the camera, remove the cover and use waterproof joints and a waterproof pipe to route the cables.



5. After connecting the network cable and power cable, view the image of the camera over the network. Loosen the lock screws, and then adjust the panning and tilting positions. Rotate the lens to get the desired surveillance angle, and then fasten the lock screws.



6. Reinstall the dome liner and lower dome to finish the installation.

Outdoor mounting

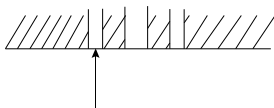
You can use the Dome Camera with outdoor mounting.



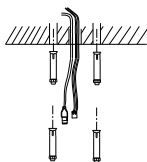
To mount outdoors:

Note: Make sure that the ceiling is strong enough to withstand three times the weight of the camera and the housing.

1. Drill the holes in the ceiling.
 - a. Drill four expansion screw holes and one cable hole in the ceiling.
 - b. Strike the four expansion screws into the screw hole.
 - c. Route one end of the power/video cable to the ceiling from the cable hole on the mounting base.

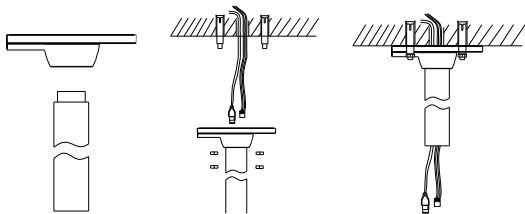


Four expansion screw holes



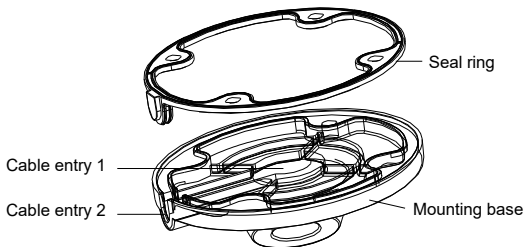
Note: You may only see two expansion screw holes from the above figure, because the visual line is horizontal, and the other two expansion screw holes are directly behind the visible ones.

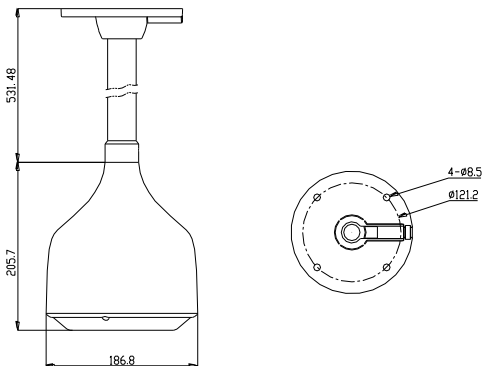
2. Install the mounting base.
 - a. Remove the nuts from the expansion screws.
 - b. Rotate the aluminum pipe to the mounting base and secure every joint with the supplied lock screws.
 - c. Align the mounting base (with the aluminum pipe) to the ceiling. Pull the other end of the power/video cable through the aluminum pipe.
 - d. Secure the mounting base to the ceiling with the removed nuts.



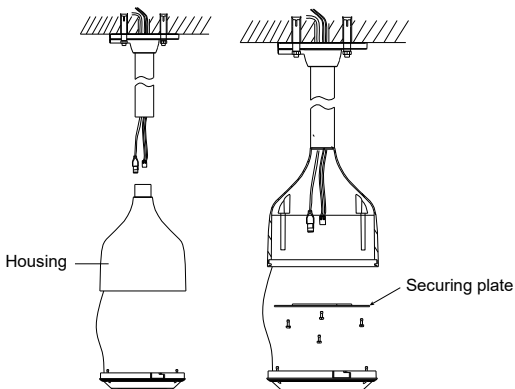
Notes

- There are two aluminum pipes in the package. You can choose either one or two pipes in actual use according to different height demand.
- There are two cable entries on the mounting base. One is in the middle of the mounting base; the other one is hidden by the seal ring that is inserted in the mounting base. See the figure below.





3. Install the housing.
 - a. Secure the housing to the threaded end of the aluminum pipe with the M4 × 6 lock screws.
 - b. Insert the securing plate for the network camera, and secure them with the M4 × 8 set screws.



Notes

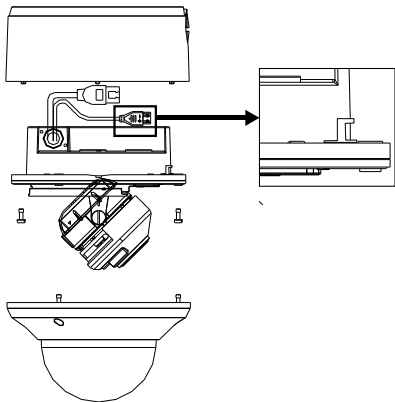
- Because of the different production batches, some type 11 securing plates may be already installed on the housing. Check it carefully during the installation.
- As to the securing plates, which are not yet installed on the housing, the plate side with the dimpled holes on it should face the ground when being inserted to the housing.



Type 11 securing plate

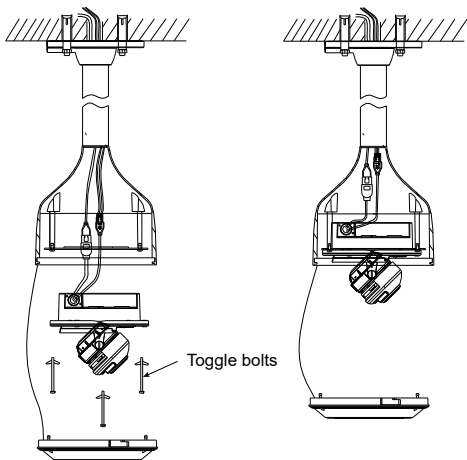
Type 17 securing plate

4. Disassemble the camera.
 - a. Remove the hex screws from the dome camera with the supplied screwdriver to separate the camera lid and the camera.
 - b. Remove the camera hook because it is not necessary here. See the figure below.

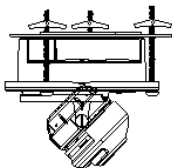
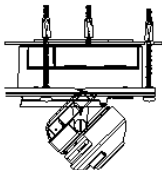
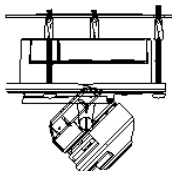
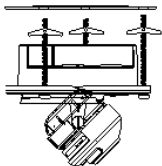


5. Install the camera.
 - a. Connect the corresponding power/video cables.
 - b. Insert the bolt into the toggle bolt hole on the plate.

- c. Use the screwdriver to rotate the bolt slightly but not tightly.

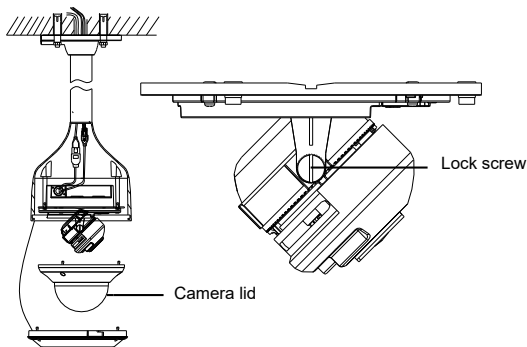


Note: Getting the bolt inserted to the toggle bolt hole and tightened the camera with the toggle bolt correctly is a key point during the installation.

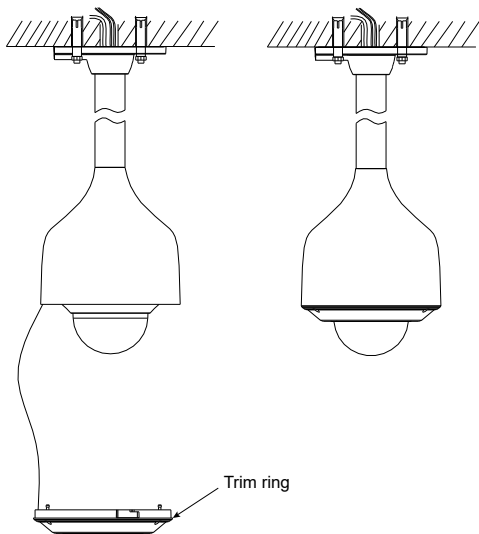


7. Mount the camera to the ceiling.
 - a. Insert the bolt into the toggle bolt hole and attach the toggle on its top.
 - b. Fold the toggle to get the toggle bolt through the securing plate.
 - c. Unfold the toggle to get it hang on the securing plate, and screw the bolt tight.
8. Adjust the lens.
 - a. View the camera image via the monitor.
 - b. Adjust the panning position and tilting position and rotate the lens to get the desired surveillance angle.

- c. Fasten the lock screws to secure the lens, attach the black inner cover and camera lid to the camera.
- d. Tighten the screws.



9. Complete the installation.
- a. Attach the trim ring to the housing.
 - b. Secure the trim ring and the housing with the hex screws.
 - c. Complete the installation.

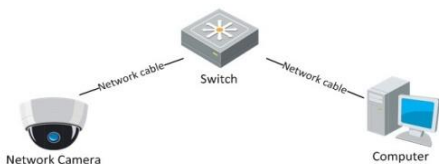


Setting the network camera over LAN

To view and configure the camera via LAN (Local Area Network), you will need to connect the network camera in the same subnet with your PC. Then, install the software to search and change the IP of network camera.

The following figure shows the cable connection of network camera and PC.

Figure 4: Wiring over LAN

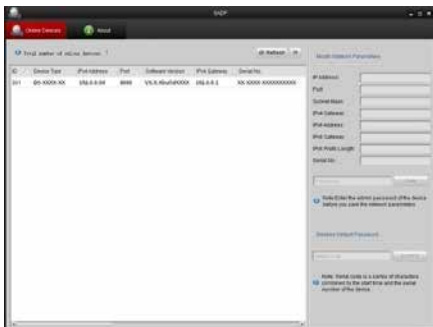


To set the IP address of the camera for accessing via LAN:





1. To get the IP address, use the SADP tool. It can automatically detect the network camera in the LAN. It can also list the device information like IP address, subnet mask, port number, device serial number, and device version, shown in Figure 3-2.
2. Change the IP address and subnet mask to the same subnet as of your PC.

After launching the SADP software, it automatically searches the online devices every 15 seconds from the

subnet where your computer is located. It displays the total number and information of the searched devices in the Online Devices interface. The interface displays the device type, IP address, port number, and gateway.



Notes

- The camera takes 15 seconds to show up online, and 45 seconds to show offline when it is removed.
- Click **Refresh Every 15s** to refresh the online device list manually.
- Click  or  on each column heading to change the order of the displayed information.
- Click  to show the device table and hide the network parameter panel, or click  to show the network parameter panel.

To modify device information:

1. Select the device from the device list, as shown below.

Online Devices

About

Total number of online devices: 1

Refresh >>

ID	Device Type	IPv4 Address	Port	Software Version	IPv4 Gateway	Serial No.
001	D5-XXXX-XX	192.0.0.64	8000	VX.X.XbuildXXXX	192.0.0.1	XX-XXXX-XXXXXXXXXX

- The network parameters of the device displays in the Modify Network Parameters, as shown below.

Modify Network Parameters

IP Address:

Port:

Subnet Mask:

IPv4 Gateway:

IPv6 Address:

IPv6 Gateway:

IPv6 Prefix Length:

Serial No.:

Note: Enter the admin password of the device before you save the network parameters.

- Edit the modifiable network parameters as necessary.
- Enter the password of the admin account of the device in the Password field and click **Save** to save the changes.

5. Enter the IP address of the network camera in the address field of the web browser to view the live video.

Notes

- The default value of the IP address is 1925.168.1.250. The default user name is "clareadmin," and password is "secure7."
- When accessing the network camera from different subnets, set the gateway for the network camera after you log in.

Accessing via a web browser

System requirements

- Operating System: Microsoft Windows XP SP1 and above version / Vista / Win7 / Server 2003 / Server 2008 32 bits
- CPU: Intel Pentium IV 3.0 GHz or higher
- RAM: 1 G or higher
- Display: 1024 × 768 resolution or higher
- Web browser: Internet Explorer 7.0 and above, Apple Safari 5.02 and above, Mozilla Firefox 3.5 and above, and Google Chrome8 and above

To access via a web browser:

1. Open the web browser.
2. Enter the IP address of the network camera in the browser's address bar.
3. Enter the user name and password, and then click **Login**.

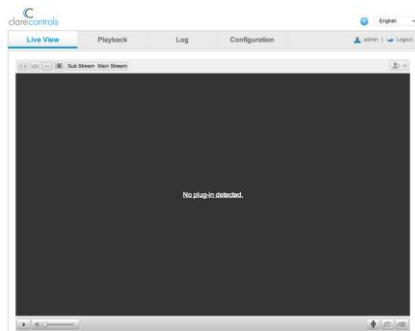


The screenshot shows a web browser window displaying the login page for 'clarecontrols'. The page has a light blue background with a white wavy line at the top. On the left side, the 'clarecontrols' logo is visible. On the right side, there is a login form with a language dropdown menu set to 'English'. Below the language menu, there are two input fields labeled 'User Name' and 'Password'. At the bottom of the form is a 'Login' button.

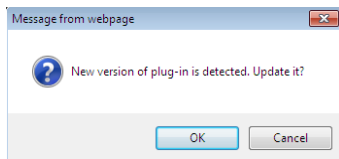
4. Install the plug-in as prompted to view the live video and manage the camera.

Notes

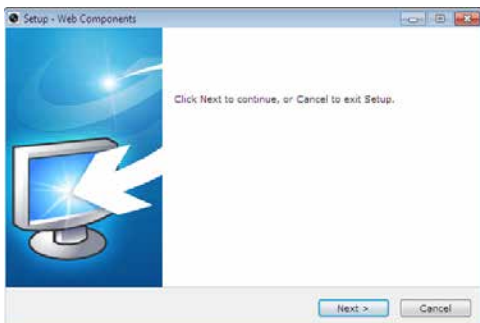
- You may need to close the web browser to finish the installation of the plug-in.
- Mac's require the plug-in to be downloaded manually. See the [Clare Controls ClareVision IP CCTV Dashboard](#) to download the plug-in.



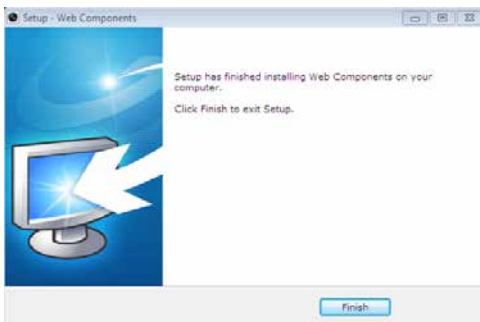
5. Click **OK**.



6. Click **Next**.



7. Click **Finish**.



8. Reopen the web browser after the installation of the plug-in and repeat steps 2 and 3 to login.

Note: For detailed instructions of further configuration, refer to the *Network Camera User Guide* (Doc ID 343).

Specifications

Camera module	
Image sensor	1/3 in. progressive scan CMOS
Image resolution	2048 × 1536 (max.)
Shutter time	1/25 s to 1/100,000 s
Minimum illumination	0.1 lux at F1.2, AGC on 0.17 lux at F1.6, AGC on 0 lux with IR
Lens	2.7 to 9 mm at F1.6, Angle of view: 101° to 30.4°
Angle adjustment	Pan: 0 to 355°, Tilt: 0 to 80°, Rotation: 0 to 355°
Day and night	Electronic (-I: IR cut filter with auto switch)
Video	
Compression format	H.264 / MPEG4 / MJPEG
Number of streams	Dual stream
Frame rate	50 Hz: 12.5 fps (2048 × 1536) 25 fps (1920 × 1080), 25 fps (1600 × 1200) 60 Hz: 15 fps (2048 × 1536) 30 fps (1920 × 1080) 30 fps (1600 × 1200)
Bit rate	32 Kbps to 16 Mbps
Motion detection	Yes
Function	
Communication interface	1 RJ45 10 M/100 M Ethernet interface
Video output	1 Vp-p composite output (75 Ω/RCA)

System compatibility	CPI, PSIA, ONVIF
Protocol	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1 x, QoS (SIP, SRTP, IPv6 optional)
SD memory	Built-in Micro SD slot, up to 32 GB
Electrical	
Power source	24 VAC / PoE
Power over Ethernet	PoE (802.3 at)
Power consumption (approx.)	-I: max. 12 W -H: max. 24 W with heater & fan on
Environmental	
Operating temperature fan and heater	14 to 140 °F (10 to 60 °C) -40 to 140 °F (-40 to 60 °C)
Relative humidity	0 to 95% noncondensing
Mechanical	
Housing	IP66
Color	White
Dimension	Φ6.29 in. × 5.75 in. (Φ159.8 × 146 mm)
Weight (approx.)	4.62 lbs. (2100 g)

Regulatory information

DISCLAIMER

Underwriters Laboratories Inc. (UL) has not tested the performance or reliability of the security or signaling aspects of this product. UL has only tested for fire, shock or casualty hazards as outlined in UL's Standard(s) for Safety, UL60950-1. UL Certification does not cover the performance or reliability of the security or signaling aspects of this product. UL MAKES NO REPRESENTATIONS, WARRANTIES OR CERTIFICATIONS WHATSOEVER REGARDING THE PERFORMANCE OR RELIABILITY OF ANY SECURITY OR SIGNALING RELATED FUNCTIONS OF THIS PRODUCT.

FCC

This device complies with 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.



This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the Low Voltage Directive 2006/95/EC, the EMC Directive 2004/108/EC, the RoHS Directive 2011/65/EU



2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see www.recyclethis.info.



2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see www.recyclethis.info.

Warranty information

Clare Controls offers a three (3) year limited warranty on original Clare Controls components, from the date of shipment from Clare Controls. To view complete limited warranty details, including limitations and exclusions, www.clarecontrols.com/warranty.



Scan the code to
view product
warranty details.

Contact information

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