



Network Camera Installation Guide

1.3 MP Budget Mini-Dome Camera

Model CV-B13D20-ODIW



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Description

The 1.3 MP Budget Mini-Dome Camera is an affordable PoE 1.3 MP IP mini- dome camera for outdoor use. The fixed-lens camera produces high resolution 1.3 MP output at 1280 × 960 in low illumination with an IR LED range to 10 m. Features include digital wide dynamic range, zone-configurable backlight compensation and a vandal-resistant housing.

Package contents

- 1X 12 VDC power supply
- 3X anchor screws
- 3X plastic anchors
- 1X hex wrench (90 degree wrench)
- 2X metric mount screws
- 1X drill template
- 1X drill template
- 1X Ethernet weather housing
- 1X plastic ring
- 1X mounting plate

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

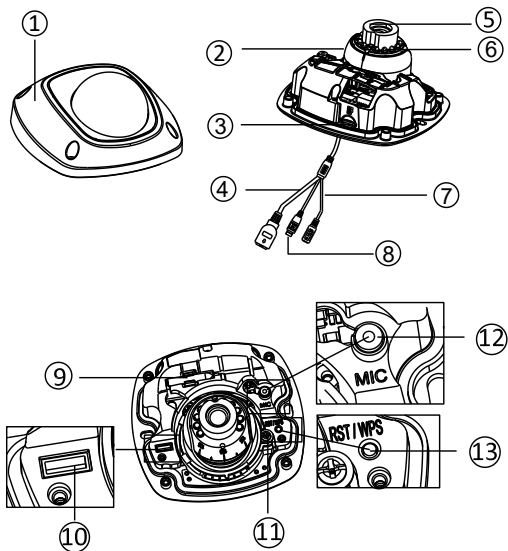
- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region.
- Refer to the technical specifications for detailed information.
- Input voltage should meet both the SELV (Safety Extra Low Voltage) and the Limited Power Source with 24 VAC 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 $-30^{\circ}\text{C} \sim +60^{\circ}\text{C}$), 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.
- Improper use or replacement of the battery may result in hazard of explosion. Replace it with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

Overview

Figure 1: Camera overview



- | | |
|------------------------|----------------------------|
| (1) Front cover | (8) Audio/alarm cables |
| (2) Dome drive | (9) Wi-Fi antenna |
| (3) Micro SD card slot | (10) Serial port interface |
| (4) Network cable | (11) Hex screw |
| (5) Lens | (12) MIC |
| (6) IR LED | (13) RESET/WPS button |
| (7) Power cable | |

Notes

- Press RESET about 10 s when the camera is powering on or rebooting to restore the default settings, including the user name, password, IP address, port No., etc.
- No. 8 is the audio/alarm cable interface, of which the “I” mark connects to the alarm input, the “O” mark connects to the alarm output, the “GND” mark connects the grounding, and the “A” mark connects the audio output.
- WPS (Wi-Fi Protected Setup, also known as AOSS or QSS) is a computing standard that allows you to easily establish a secure wireless network.
- A wireless router with the WPS function is required to enable the WPS function of the camera. Refer to the steps below.

To enable the WPS function of the camera:

1. Press the WPS button on the router.
2. Press the WPS button (about 2 s) on the camera within 120 s you enable the WPS of the router to join in the wireless network.

Notes

- The WPS button works as a reset button only when pressed as the camera is powering on.
- Press the WPS button on the camera, and then press the WPS button on the router to establish a connection. The expiration time of WPS connection on the camera is 120 s.

- The link indicator blinks if the wireless connection is successful.

Installation

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

Before you start

- Make sure the device in the package is in good condition and all the assembly parts are included.
- Make sure all the related equipment is power-off during the installation.
- Check the specification of the products for the installation environment.
- 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.
- For the camera that supports IR, you are required to pay attention to the following precautions to prevent IR reflection:
 - Dust or grease on the dome cover will cause IR reflection. Do not remove the dome cover film until the installation is finished. If there is dust or grease on the dome cover, clean the dome cover with clean soft cloth and isopropyl alcohol.
 - Make sure that there is no reflective surface too close to the camera lens. The IR light from the camera may reflect back into the lens causing reflection.

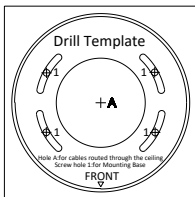
- The foam ring around the lens must be seated flush against the inner surface of the bubble to isolate the lens from the IR LEDS. Fasten the dome cover to camera body so that the foam ring and the dome cover are attached seamlessly.

Mounting

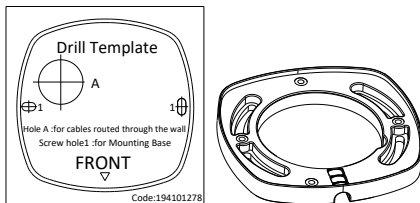
Ceiling mounting

To mount on a ceiling:

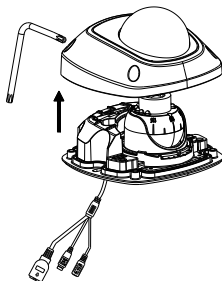
1. Drill the screw holes and the cable hole in the ceiling according to the supplied drill template.



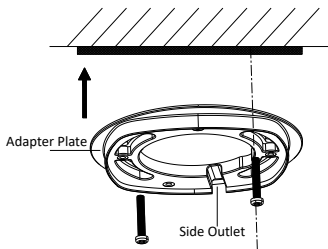
Note: A different type of drill template might be provided because of the different batches of products. And also, the contained adapter plate matches with type II drill template differs as well. See figure below.



2. Loosen the set screw on the front cover to disassemble the camera with the supplied Allen key.

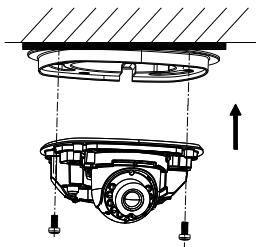


3. Fix the adapter plate to the ceiling with the supplied expansion screws.



If the supplied drill template is type II drill template, you can just skip step 3 and go straight to step 4.

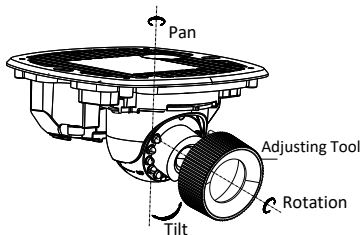
4. Fix the dome drive with the supplied screws.



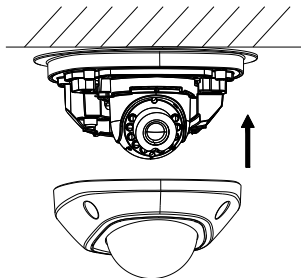
5. Connect the power cable, network cable, and the audio/alarm cables.

Note: Use a plier to remove the removable part and route the cables via side outlet (as shown in step 3) if no cable hole is drilled in step 1, and connect the corresponding cables.

6. View the image via the web browser.
7. Slightly loosen the hex screw beside the WPS/RESET button to adjust the surveillance angle.
8. Use the supplied adjusting tool to adjust the pan [$\pm 30^\circ$], tilt [$0\sim 80^\circ$], and rotation direction [$0\sim 360^\circ$].



9. Tighten the hex screw to fix the well-adjusted surveillance angle.
10. Align the front cover to the dome drive and tighten the set screws on the front cover.



11. Tear off the protection film softly to complete the installation.

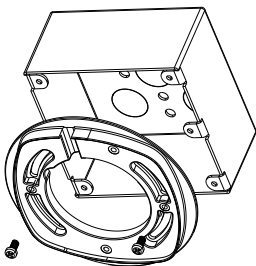
Notes

- Do not tear off the protection film until the installation is completed.
- Do not touch the inside face of the bubble with your hands.

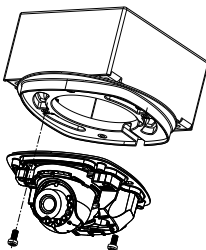
Ceiling mounting with gang box

To mount the camera on the ceiling with a gang box:

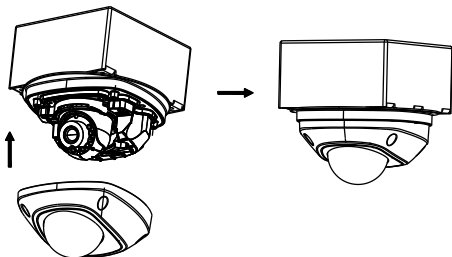
1. Fix the adapter plate to the gang box with the supplied PM 4 × 8 screws.



2. Fix the dome drive to the adapter plate with the supplied PM 4 × 8 screws.



3. Connect the power cable, network cable, and the alarm/audio cables.
4. Align the front cover to the dome drive and tighten the set screws on the front cover.



5. Tear off the protection film softly to complete the installation.

Notes:

- Do not tear off the protection film until the installation is completed.
- Do not touch the inside face of the bubble with your hands.

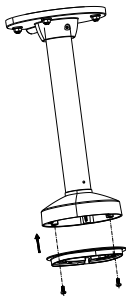
Ceiling bracket mounting

To mount the camera on the ceiling with a bracket:

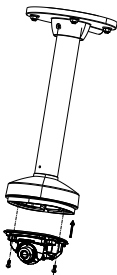
1. Install the bracket to the ceiling with the supplied screws in the ceiling bracket package.

Note: The matched ceiling bracket model is DS-1271ZJ-120, and you need to purchase it separately the ceiling bracket mounting is used.

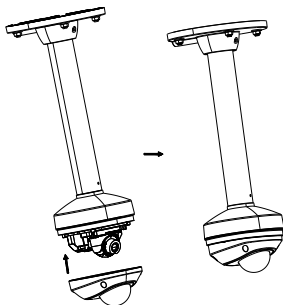
2. Fix the adapter plate to the ceiling bracket with the supplied PM 4 × 8 screws.



3. Install the dome drive to the adapter plate.



4. Align the front cover to the dome drive and tighten the set screws on the front cover to complete the installation.



5. Tear off the protection film softly to complete the installation.

Notes

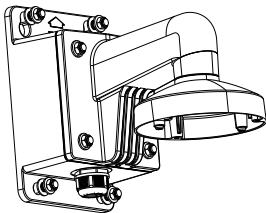
- Do not tear off the protection film until the installation is completed.
- Do not touch the inside face of the bubble with your hands.

Wall bracket mounting

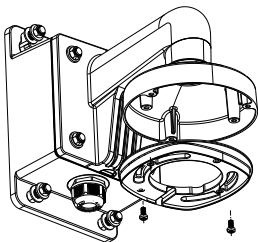
To mount the camera on the wall using a bracket:

1. Install the wall bracket to the wall with the supplied screws in the wall bracket package.

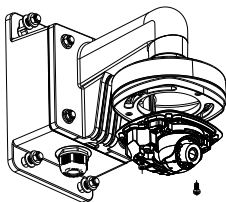
Note: The matched ceiling bracket model is DS-1272ZJ-120B, and you need to purchase it separately if wall bracket mounting is adopted.



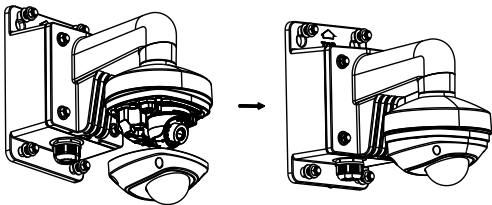
2. Fix the adapter plate to the wall bracket.



3. Fix the dome drive to the wall bracket with the supplied screws.



4. Align the front cover to the dome drive and tighten the set screws on the front cover to complete the installation.



5. Tear off the protection film softly to complete the installation.

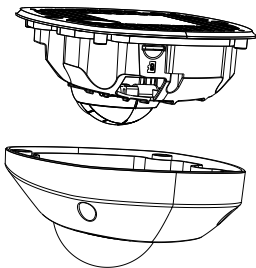
Notes

- Do not tear off the protection film until the installation is completed.
- Do not touch the inside face of the bubble with your hands.

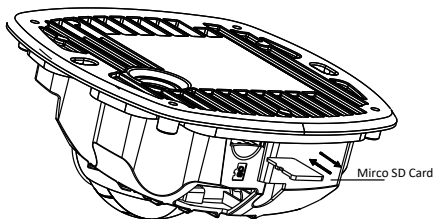
Installing the micro SD card

To install the micro SD card:

1. Remove the front cover by loosening the set screws.



2. Insert the micro SD card to the card slot until you hear a click.
3. (Optional) Slightly push the inserted micro SD card to uninstall it from the camera.

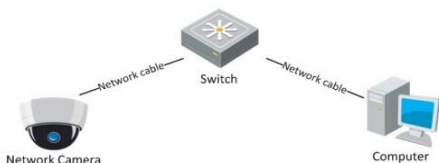


Setting the network camera over LAN

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 SADP software to search and change the IP of network camera.

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

Figure 2: Wiring over LAN

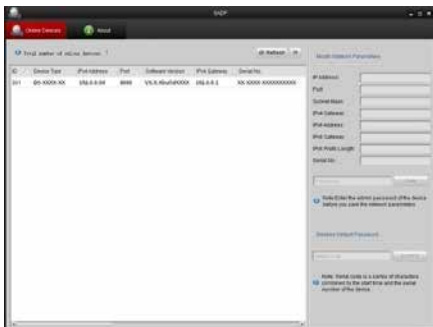


To set the IP address of the camera for accessing via LAN:

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 the figure in step 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.

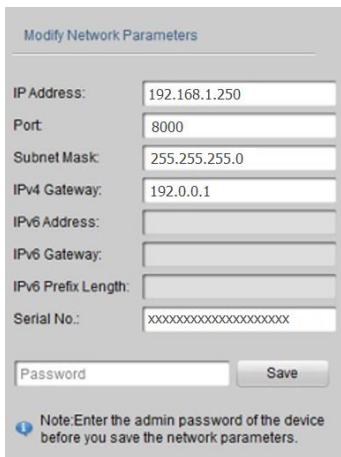
To modify device information:

1. Select the device to be modified from the device list as shown below.



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

2. The network parameters of the device will be displayed in the Modify Network Parameters panel on the right side 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.

3. Edit the modifiable network parameters as necessary.
4. 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 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:

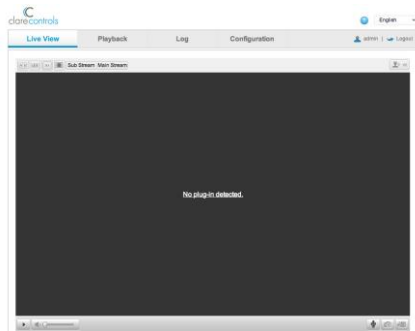
1. Open the web browser.
2. In the browser address bar, enter the IP address of the network camera – for example, 192.168.1.250 and press **Enter** to display the login interface.
3. Enter the user name and password, and then click **Login**.



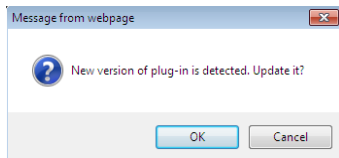
4. Install the plug-in as prompted to view the live video and manage the camera.

Notes

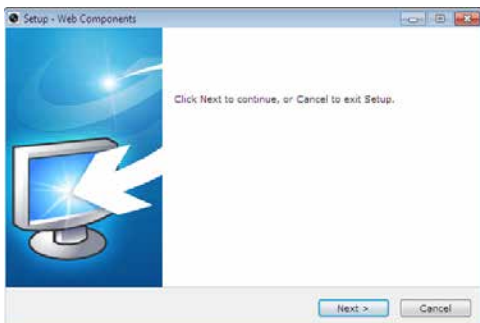
- You may need to close the web browser to finish the installation of the plug-in.
- Mac's require the plug-in to be downloaded manually. See the [Clare Controls ClareVision IP CCTV Dashboard](#) to download the plug-in.



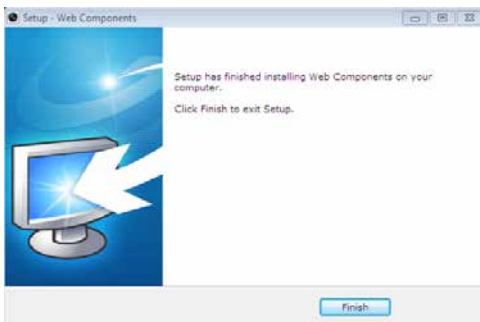
5. Click **OK**.



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).

Configuring for wireless use

To connect your camera for wireless use:

1. In your web browser's address bar, enter the cameras IP address.
 2. Log in with the User Name: **clareadmin** and the Password: **secure7**.
 3. Click the **Configuration** tab (along the top of the window), the **Network** Tab (on the left side of the window), and then the **Wi-Fi** tab (below the Configuration tab).
 4. From the Wireless list, select your home wireless network, and then enter the password.
 5. Click **Save**, and then reboot the camera.
- Ensure you have a live stream from your camera.

Specifications

Camera module	
Image sensor	1/3 in. progressive scan CMOS
Image resolution	1280 × 960.
Shutter time	1/25 s to 1/100,000 s
Illumination	0.01 lux at F1.2, AGC on 0 lux with IR (min.)
Lens	24 mm at F2.0, Angle of view: 68° (4 mm)
Angle adjustment	Pan: ~20°, Tilt: 0°-90°, Rotation: ~90°
Day and night	IR cut filter with auto switch
Video	
Compression format	H.264 / MJPEG
Number of streams	Dual stream, configurable
Frame rate	50 Hz: 25 fps (1280 × 960) 25 fps (1280 × 720) 60 Hz: 30 fps (1280 × 960) 30 fps (1280 × 720)
Bit rate	32 Kbps ~ 16 Mbps
Motion detection	Yes
Digital noise reduction	3D DNR
Wide dynamic range	Digital WDR
Backlight compensation	Yes, zone configurable
Function	
Communication interface	1 RJ45 10 M/100 M Ethernet interface

System compatibility	ONVIF, PSIA, CGI
Protocol	TCP/IP, HTTP, DHCP, DNS, DDNS, RTP, RTSP, PPPoE, SMTP, NTP, SNMP, HTTPS, FTP, 802.1 x, QoS, UPnP (SIP, SRTP, optional)
SD memory	Built-in Micro SD card slot
Electrical	
Power source	12 V DC \pm 10%, PoE (802.3a f)
Power consumption	Max. 5 W (maximum 7 W with ICR on)
Environmental	
Temperature	-22 to 140°F (-30 to 60°C)
Relative humidity	0 to 95% noncondensing
Mechanical	
Housing	IP66
Dimension	3.93 × 3.38 × 2.22 in. (9.99 × 9.75 × 5.65 cm)
Weight (approx.)	.772 lb. (350 g)
Video setup	
Privacy zones	Yes
Tamper detection	Detects camera tampering

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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