Contents
- IR Bullet IP Camera*
- Mounting Kit*
- Mounting Template*
- Cat5e UL Compliant (CM) Ethernet Extension Cable*

* Per camera.

**ATTENTION** - It is recommended to connect the camera to the NVR or an external PoE switch. If using a DC power adapter with the camera, a REGULATED power supply is REQUIRED for use with this camera. Use of a non-regulated, non-conforming power supply can damage this product and voids the warranty.

**Warning/Caution**
- Use the camera only with compatible Lorex NVRs
- Read this guide carefully and keep it for future reference
- Follow all instructions for safe use of the product and handle with care
- Do not disassemble the camera
- Do not point the camera directly towards the sun or a source of intense light
- Periodic cleaning may be required. Use a damp cloth only. Do not use harsh cleaners or aerosol cleaners
- The supplied cable is rated for in-wall and surface mounting. Cables for floor-to-floor installations are sold separately (CMR type). These and other cables are available at www.lorextechnology.com

**Installation Tips**
- Point the camera where there is the least amount of obstructions (i.e. tree branches)
- Install the camera in a location that is difficult for vandals to reach
- Secure cabling so that it is not exposed or easily cut
- Camera rated for outdoor use. Installation in a sheltered location recommended

**Resources**

Visit us online for up-to-date software and complete instruction manuals

1. Go to www.lorextechnology.com
2. Search the model number of your product
3. Click on your product in the search results
4. Click on the Downloads tab

**The following resources are always at your fingertips**

- Product Information
- Specification Sheets
- User Manuals
- Software Upgrades
- Quick Start Guides
- Firmware Upgrades

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Installing the Camera

**ATTENTION** - Ensure the camera is working correctly prior to permanent installation by temporarily connecting the camera(s) and cable(s) to the NVR.

**Before installing the camera:**
- Decide whether to run the cables through the wall / ceiling (drilling required) or along the wall / ceiling.
- If you run the cables along the wall / ceiling, you must run the cable through the cable notch on the base. This will keep the camera base flush to the wall / ceiling when mounted.

**To install the camera:**
1. Use the included mounting template to mark holes for the screws. Drill holes for the mounting screws.
   
   **NOTE:** Insert the included drywall anchors if you are installing the camera in drywall.
2. Connect cables as shown in the section "Connecting the Camera".
3. Feed the cable through the mounting surface or cable notch and mount the camera stand to the surface using the provided screws.
4. Use a Philips head screwdriver (not included) to loosen the adjustment screw.
5. Adjust the camera position as needed:
   - Rotate the camera base 360°.
   - Twist the camera around the stand 360°.
   - Tilt the camera on the stand up to 90°.
6. Tighten the adjustment screw to secure the position.

**ATTENTION** - This camera is only compatible with select NVRs. For a list of compatible recorders, please visit [https://www.lorextechnology.com/support/selfServe.jsp](https://www.lorextechnology.com/support/selfServe.jsp) and search for "Lorex High Definition Cameras Compatibility".

Connecting the Camera

**To Camera:**

1. Connect the Ethernet cable to the camera.

**NOTE:** A 12V DC power adapter (Model#: CVA4902, not included) is only required if connecting the camera’s Ethernet cable to a router or switch that does not support PoE.

2. Connect the other end of the Ethernet cable to the NVR's PoE ports. The camera may take up to 1 minute to power up after being connected to the NVR.

**OR**

3. Connect the other end of the Ethernet cable to a router or switch on your network. See the NVR Instruction Manual for details on connecting the camera to your NVR.

**To NVR:**

- This camera is only compatible with select NVRs. For a list of compatible recorders, please visit [https://www.lorextechnology.com/support/selfServe.jsp](https://www.lorextechnology.com/support/selfServe.jsp) and search for "Lorex High Definition Cameras Compatibility".
- The camera may take up to 1 minute to power up after being connected to the NVR.
- Ensure the camera is working correctly prior to permanent installation by temporarily connecting the camera(s) and cable(s) to the NVR.

**Setup Diagram**

**SCENARIO 1:** Connect Cameras to NVR

- Router
- NVR
- Camera
- Ethernet Cable
- 12V DC (optional)
- PoE Switch

**SCENARIO 2:** Connect Cameras to Local Area Network (LAN)

- Router
- NVR
- Camera
- Ethernet Cable
- 12V DC (optional)

**ATTENTION** - This camera includes an Auto Mechanical IR Cut Filter. When the camera changes between Day/Night viewing modes, an audible clicking noise may be heard from the camera. This clicking is normal, and indicates that the camera filter is working.

Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
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| No picture / signal | - Ensure the camera is connected to a compatible NVR. Visit [https://www.lorextechnology.com/support/selfServe.jsp](https://www.lorextechnology.com/support/selfServe.jsp), and search for "Lorex High Definition Cameras Compatibility".  
  - The camera may take up to 1 minute to power up after being connected to the NVR.  
  - Ensure the camera is connected to your NVR or to your local network.  
  - If you are not using PoE, you must connect the camera to a 12V DC power adapter (not included)  
  - If the camera is connected to the LAN, you must search your network for cameras using the NVR. See the NVR’s Instruction Manual.  
  - Ensure your NVR is connected to a TV/monitor.  
  - There may be an issue with your extension cable run. Connect the camera to the NVR using a different Ethernet cable. |
| Picture is too bright | - Ensure your camera isn’t pointed directly at a source of light (e.g. sun or spot light)  
  - Slide the sunshade (bullet cameras featuring adjustable sunshades only) forward to block excess light  
  - Move your camera to a different location  
  - Check the brightness and contrast settings on the NVR |
| Picture is too dark | - If using during the day, the camera may not be getting enough light. Slide the sunshade (bullet cameras featuring adjustable sunshades only) backwards to let in more light  
  - Check the brightness and contrast settings on the NVR |
| Night vision is not working | - The night vision activates when light levels drop. The area may have too much light |
| Picture is not clear | - Check the camera lens for dirt, dust, spiderwebs. Clean the lens with a soft, clean cloth  
  - Make sure that the cable run is within the limitations specified in the section 'Cable Extension Options' |
| Bright spot in video when viewing camera at night | - Night vision reflects when pointing a camera at a light source. Move the camera to a different location |
| Picture is in color in dark conditions | This camera comes with an image sensor that is extra sensitive to light, meaning that the camera stays in color mode at low-light conditions. For instructions on how to make your camera switch to night mode, visit [https://www.lorextechnology.com/support/selfServe.jsp](https://www.lorextechnology.com/support/selfServe.jsp), and search for "How do I make my camera switch to night mode?" |

Cable Extension Options

**Extend the Ethernet cable run for your camera up to 300ft.** See table below:

- This camera includes an Auto Mechanical IR Cut Filter. When the camera changes between Day/Night viewing modes, an audible clicking noise may be heard from the camera. This clicking is normal, and indicates that the camera filter is working.

<table>
<thead>
<tr>
<th>Cable Type</th>
<th>Max Cable Run Distance</th>
<th>Max # of Extensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cat5e or higher Ethernet cable</td>
<td>300ft / 92m</td>
<td>3</td>
</tr>
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You can use a RJ45 Coupler (not included) or switch (not included) to connect male ends of Ethernet cable together.