Contents

- IP Bullet Camera*
- Mounting Kit*
- 100ft Cat5e Ethernet 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 UL / CSA APPROVED 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.

Features

- H.264 video compression technology
- Full HD1080P resolution
- Plug-and-play Power over Ethernet (PoE) connection to NVR
- Camera is automatically detected when connected to the same local network of the NVR using Cat5E power and video over Ethernet for simple and flexible installation
- 3D DNR Frame-to-frame Digital Noise Reduction combined with Spatial Noise Reduction, delivering a cleaner, more accurate image, with better clarity, sharpness, greater disc space for storage, and improved motion detection.
- Digital-Wide Dynamic Range backlight compensation provides clear detailed images where very bright and very dark areas are in the same field of view and frame of the camera.
- Outstanding Night Vision up to 150ft away in typical night time ambient lighting and up to 100ft away total darkness*
- Automatic Infrared Filter ensures true & accurate color in all lighting conditions
- Wide angle 4mm lens for superior detail (75° diagonal FOV)
- Weatherproof (IP66) rated aluminum housing for indoor/outdoor installations**
- Vandal-resistant design: Cable pass-through wall-mount bracket protects connection cables
- Close-up recognition at night with auto light compensation prevents washout effect
- Anti-glare feature ensures clear images under strong lighting conditions
- Set It and Forget It -Auto-Detect pre-configured cameras***

Disclaimers:

- * Stated IR illumination range is based on ideal conditions in total darkness and in typical outdoor night time ambient lighting. Actual range and an image clarity depends on installation location, viewing area and light reflection / obsorption level of object.
- ** Not intended for submersion in water. Installation in a sheltered location recommended
- *** 1 minute discovery time when connecting a new camera to NVR.

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
- Use the camera within given temperature, humidity and voltage levels noted in Camera Specifications
- 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 extension cable is rated for surface mounting only
- Cables for in-wall / floor-to-floor installations are sold separately

Installation Tips

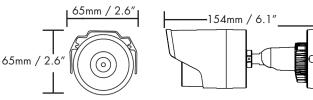
- Point the camera where there is the least amount of obstructions (i.e. tree branches)
- Install the camera in a location that is difficult for vandals to reach
- · Secure cabling so that it is not exposed or easily cut
- Camera rated for outdoor use. Installation in a sheltered location recommended

Camera Specifications

Image Sensor	1/3" Color Image Sensor	
Video Format	NTSC	
Effective Pixels	H: 1920 V: 1080	
Resolution	1080P @ 30FPS (Frames Per Second)	
Scan System	Progressive	
Sync System	Internal	
Iris	Auto Iris	
AES Shutter Speed	1/25 ~ 1/100,000 Sec.	
Min. Illumination	O.1 Lux without IR LED O Lux with IR LED	
Lens / Lens Type	4mm F1.2 / Fixed	
Digital Noise Reduction	3D-DNR	
Wide Dynamic Range	Digital WDR	
FOV (Diagonal)	75°	
Termination	RJ45 10 M / 100M Ethernet	
IR LED Qty. / Type	30 pieces / 850nm	
Night Vision Range*	100ft (30m) / 150ft (45m)	
Power Requirement	PoE (Power over Ethernet) Class 2 / 12V DC	
Power Consumption	350mA	
Operating Temp. Range	14° ~ 140°F / –10° ~ 60°C	
Operating Humidity Range	< 95% RH	
Indoor/Outdoor**	Both (IP66)	
Weight (including stand)	0.9lbs / 0.4kg	

^{*} Stated IR illumination range is based on ideal conditions in total darkness and in typical outdoor night time ambient lighting. Actual range and image clarity depends on installation location, viewing area and light reflection of absorption level of object.

Dimensions



FOR SUPPORT AND INFORMATION, VISIT WWW.LOREXTECHNOLOGY.COM

Product Information

Specification Sheets

User Manuals

☐ Software Upgrades

(7) Quick Start Guides

Lea Firmware Upgrades

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^{**} Not intended for submersion in water. Installation in a sheltered location recommended

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.

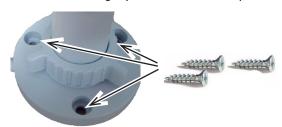
Before installing the camera:

- 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. Set the camera in the desired mountina position and mark holes for the screws.
- 2. Drill the holes, then feed the cable through the mounting surface or cable notch and mount the camera stand to the surface using the provided screws. Make sure all three screws are fastened tightly at the connection points.



3. Loosen the ring around the camera base.



4. Adjust the camera position as needed, and then tighten the ring to secure the position. See below for suggested stand positions.



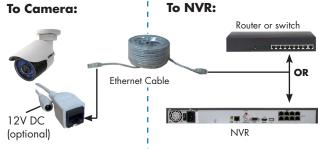




Wall Mount Table Mount

Ceiling Mount

Connecting the 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 11 minute to power up after being connected to the NVR

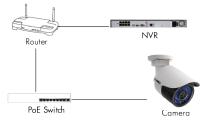
OR

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.

Setup Diagram



SCENARIO 2: Connect cameras to local area network (LAN)



Cable Extension Options

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

Cable Type	Max Cable Run Distance	Max # of Extensions
Cat5e or higher Ethernet cable	300ft / 92m	3

You can use a RJ45 Coupler (not included) or switch (not included) to connect male ends of Ethernet cable together.

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

Problem	Solution
No picture / signal	The camera may take up to 1 minute to power up after being connected to the NVR. Wait two minutes before following the steps below 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 Reset the camera to factory default settings. See 'Resetting the Camera' for details
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 window. Move the camera to a different location

Resetting the Camera

If there is an issue with seeing the camera on the NVR, try to correct it by resetting the camera to factory default settings.

To reset the camera to factory default settings:

- 1. Make sure the camera is connected to the NVR via the Ethernet cable to the PoE ports.
- 2. Press and hold the Reset button on the back of the camera.
- 3. While still holding the Reset button, disconnect and then reconnect the Ethernet cable. Continue to hold the button for 15 seconds before
- 4. The camera will reset to factory defaults and restart, which may take a

