



Instruction Manual LNZ44P4 SERIES 4x IP PTZ DOME CAMERA



Instruction Manual LNZ44P4 SERIES 4x IP PTZ DOME CAMERA

Thank you for purchasing this product. Lorex is committed to providing our customers with a high quality, reliable security solution.

This manual refers to the following model:

LNZ44P4

For the latest online manual, downloads and product updates, and to learn about our complete line of accessory products, please visit our website at:

lorextechnology.com



WARNING

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER. NO USER SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF THE PLUG TO THE WIDE SLOT AND FULLY INSERT.

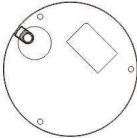
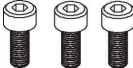
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Safety Instructions

- 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 the Technical Specifications.
- Camera is rated for outdoor use and is weatherproof when properly installed. Camera is not intended for submersion in water. Installation under a sheltered environment is recommended.
- Do not disassemble the camera.
- Do not point the camera directly towards the sun or a source of intense light.
- Use only the supplied regulated power supply. Use of a non-regulated, non-conforming power supply can damage this product and voids the warranty.
- Make sure to install the camera in a location that can support the camera weight.
- Make sure there are no live electrical cables in the area where you plan to mount the camera.
- Periodic cleaning may be required. Use a damp cloth only. Do not use anything other than water to clean the dome cover, as chemicals such as acetone can permanently damage the plastic.

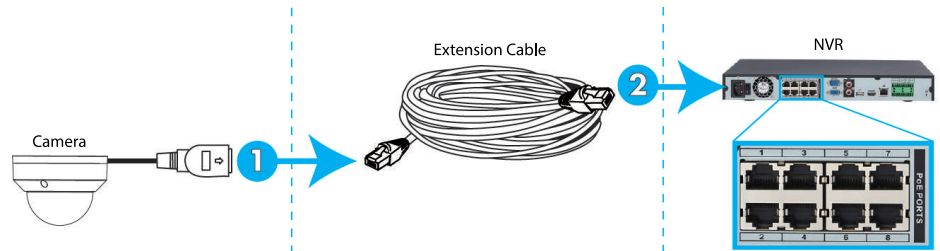
The system comes with the following components:

 IP PTZ Dome Camera	 100ft (30.5m) Ethernet Extension Cable	 Allen Key (x2)
 Mounting Template	 Mounting Screws (x3) & Anchors (x3) (For camera)	 Wall Mounting Bracket
 Mounting Screws ST4 (x4) & Anchors S6 (x4) (For wall mounting bracket)	 Hex Bolt M4x10 (x3) (For wall mounting bracket)	 Installation Diagram Guide and Instructional Manual

Connecting the Camera

It is recommended to connect the camera to your NVR and test the PTZ controls before permanent installation. For instructions on how to setup PTZ controls, see 5 *Controlling the PTZ Camera with an NVR*, page 14.

3.1 OPTION 1: Connecting Cameras to an NVR



1. Connect the PoE connector on the camera cable to the included Ethernet extension cable.
2. Connect the Ethernet extension cable to one of the PoE ports on the back panel of your NVR.



NOTE

- You can use a single CAT5e Ethernet cable up to 300ft (91m) to connect the camera to your NVR.
- Compatible with the **LNR / NR / LNK** Series NVRs, excluding the LNR200 and LNR300 Series. For the most up-to-date list of compatible recorders, please visit lorextechnology.com/compatibility.

3.2 OPTION 2: Connecting Cameras to the Local Area Network (LAN)

For flexibility, you may also connect the camera to the same Local Area Network (LAN) as the NVR. This is accomplished by connecting the camera to the same router (not included) as the NVR. For these installations, an external PoE switch (sold separately) or power adapter (not included) must be used to provide power to the camera. You must also add the camera on the NVR before it will show a picture on the monitor or be recorded by the NVR.

What is PoE?

PoE is a technology that allows Ethernet cables to carry electrical power to connected devices. Compatible NVRs use integrated PoE ports to provide power and PTZ commands to the camera, as well as video connection to the NVR over a single CAT5E cable. In order to use PoE with this IP camera, you must connect it directly to a compatible NVR or a PoE switch on the same network as the NVR.

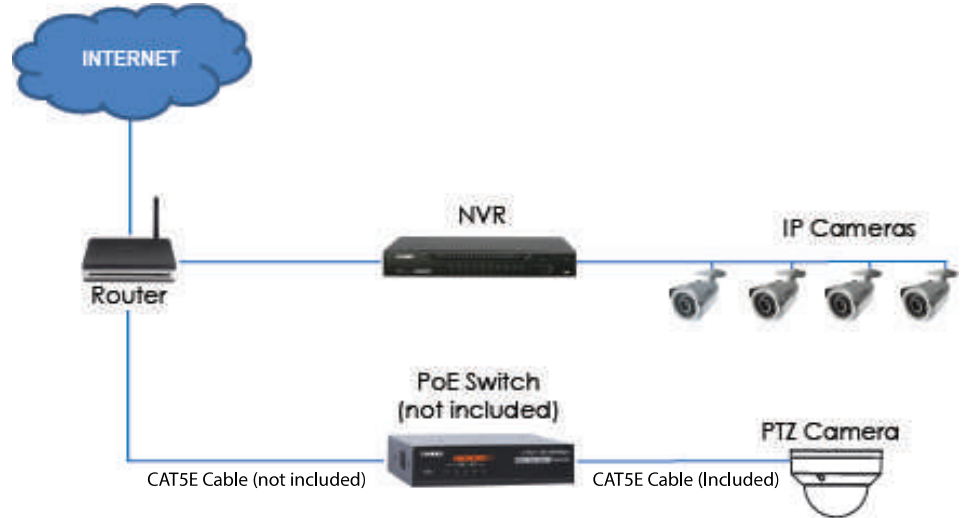


NOTE

- For the most up-to-date list of compatible recorders, please visit lorextechnology.com/compatibility
- PoE switches are available for purchase on lorextechnology.com.

Complete the following steps to connect the camera to the NVR over the LAN.

Step 1 of 2 — OPTION A: Connecting the camera to your local network using an optional PoE switch:



1. Connect an Ethernet cable of up to 300ft (91m) rated CAT5e or higher (not included) from the LAN port on an external PoE switch (sold separately on lorextechnology.com) to your router. Connect the power cable to the PoE switch and plug into a power outlet or surge protector.

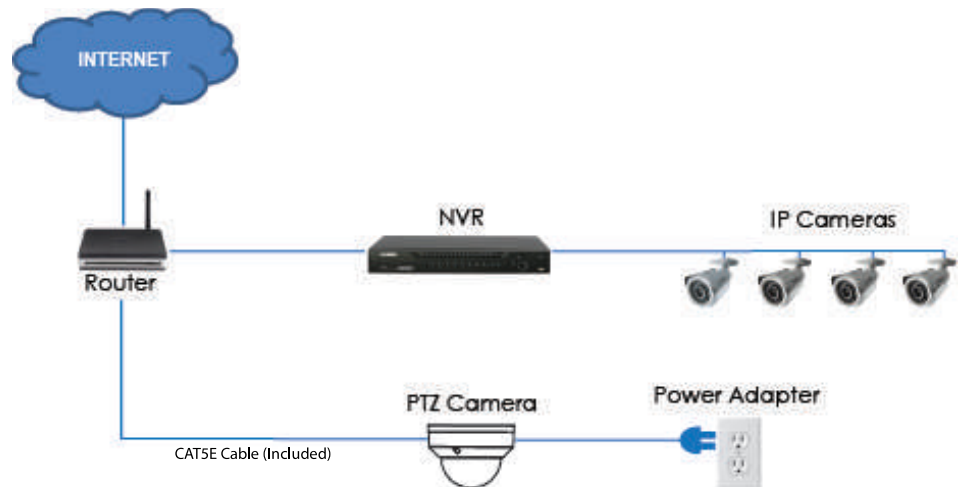


NOTE

Terminology may vary depending on the model of PoE switch you have.

2. Connect the camera to the PoE switch using the included Ethernet cable (or a CAT5e Ethernet cable of up to 300ft (91m)). The PoE switch will provide power and video transmission the same way as your NVR.

Step 1 of 2 — OPTION B: Connecting the camera to your local network using a power adapter:



1. Connect the camera to a power adapter (not included).



NOTE

For power requirement specification, see 8 *Technical Specifications*.

2. Connect the camera to a router in the same network as your NVR using the included Ethernet cable (or an Ethernet cable of up to 300ft (91m) rated CAT5e or higher).

Step 2 of 2: Add the camera to your NVR:

- For instructions on adding the PTZ camera to the LNR / NR Series NVRs , see 3.3 *Adding the PTZ Camera to the LNR / NR Series NVRs*, page 5
- For instructions on adding the PTZ camera to the LNK Series NVRs, see 3.4 *Adding the PTZ camera to the LNK Series NVRs*, page 6



NOTE

For instructions on how to locate the serial and model number of your recorder, visit www.lorextechnology.com and search for "Where is the Serial and Model Number located".

3.3 Adding the PTZ Camera to the LNR / NR Series NVRs

To add the PTZ camera to the LNR / NR Series NVRs:

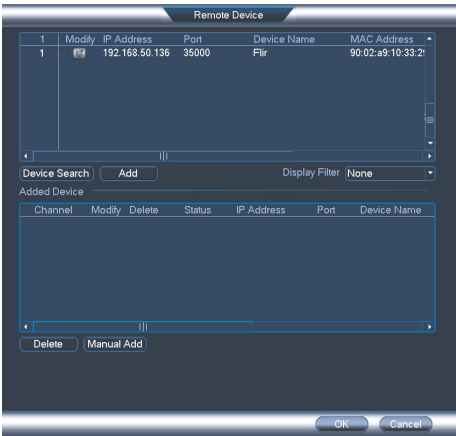
The following instructions are based on the LNR400 Series NVR. See your NVR's instruction manual for instructions on controlling the PTZ camera with your system.



NOTE

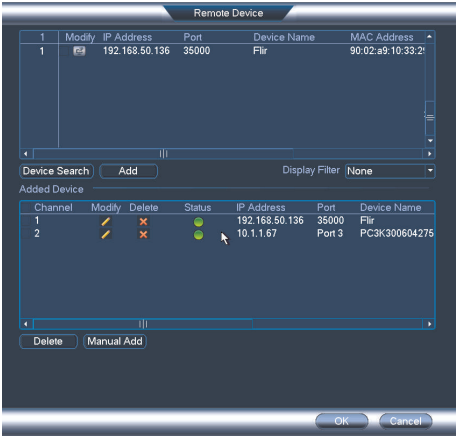
- Not compatible with LNR200 / LNR300 Series NVRs. For the latest list of compatible recorders, see lorextechnology.com/compatibility.
- You must have at least one empty channel before attempting to add the camera to the NVR.

1. Right-click during live view and select **Device Search**.
2. Log in using the admin account (default user name: **admin**; default password: **000000**).
3. Click **Device Search**. The system searches the network for compatible cameras.



4. Check the camera(s) you would like to add.

5. Click **Add**. The Status indicator turns green to show the camera is successfully connected.



6. Click **OK** to save changes.

 **NOTE**

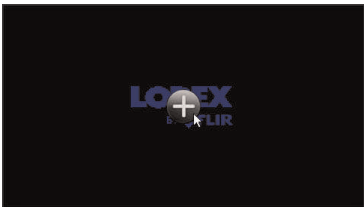
You can also add a camera to a specific channel by hovering the mouse over an empty channel in split-screen view and clicking . Click **Device Search** and double-click the camera you would like to add. Right click to exit.

3.4 Adding the PTZ camera to the LNK Series NVRs

To add the PTZ camera to the LNK Series NVRs:

The following instructions are based on the LNK7000 Series NVR. See your NVR's instruction manual for instructions on controlling the PTZ camera with your system.

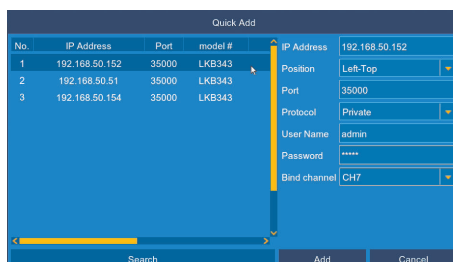
1. From live view, hover over a blank channel. Click  in the center of the channel to add the PTZ camera from the LAN. A **Quick Add** menu opens.



 **NOTE**

If prompted, enter the system user name (default: **admin**) and your password.

2. Click **Search**. The NVR scans the network for compatible cameras. A list of compatible cameras appear on the left-side of the screen.



3. Click the camera you would like to add. The selected camera's attributes appear on the right-side of the screen.
4. Under **Protocol**, select **ONVIF**.
5. Click **Add**.

4.1 Installation Tips and Warnings

- Camera is rated for outdoor use. It is recommended to install the camera in a sheltered area, such as under the eaves on a roof.
- Use the included wall mounting bracket for wall installation. Otherwise, the camera image will be sideways. You can also refer to the included installation diagram guide for wall mounting instructions.
- Camera is capable of seeing in low light conditions (0.2 Lux), but it cannot see in total darkness.



NOTE

It is recommended to install the camera where there is some ambient light (for example, street lighting or starlight, moonlight, etc.) or leave some lighting on in the area where the camera is installed.

- Mount the camera in a location that can support the camera weight.
- Mount the camera where the lens is away from direct and intense sunlight.
- Plan your cable wiring so that it does not interfere with power lines or telephone lines.
- Ensure you adhere to local building codes.
- Ensure that the camera wiring is not exposed or easily cut.
- Mount the camera in an area that is visible but out of reach.



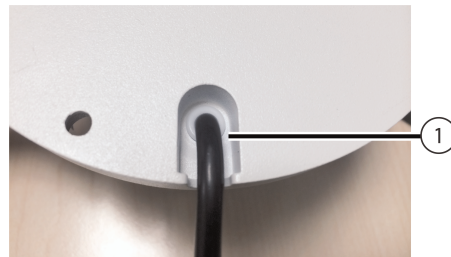
NOTE

This camera is suitable for ceiling mounting. Wall mounting requires included wall mount.

4.2 Installation (Indoor/Outdoor)

The camera includes all necessary components for ceiling mounting and wall mounting. For full instructions on each type of mounting, see 4.2.1 *Wall Mounting* or 4.2.2 *Ceiling Mounting*.

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 dome camera base. This will keep the dome camera base flush to the ceiling when mounted.



1. Cable Notch

4.2.1 Wall Mounting

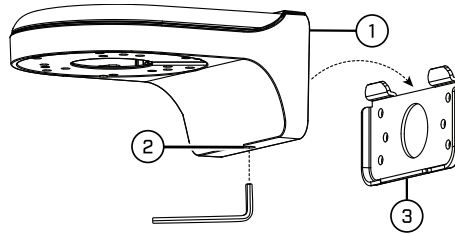


CAUTION

Make sure to install in a location that can support the combined weight of the wall mounting bracket and the camera.

To wall mount the camera:

1. Use the Allen key (S3.0) included with the wall mounting bracket kit to loosen the hex lock on the bottom of the wall mounting bracket. Once loose, remove the back plate of the mounting bracket.

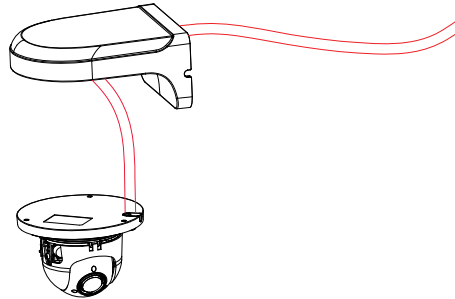


1. Wall Mount

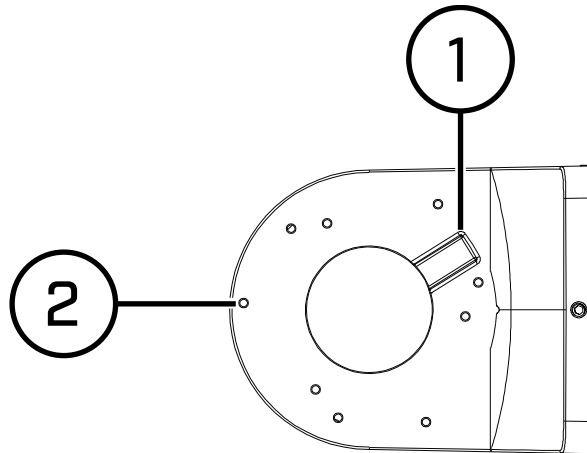
2. Hex Lock

3. Back Plate

2. Use the Allen key included with the camera mounting kit to loosen the dome camera cover screws (x3). Remove the dome camera cover.
3. Insert the camera cable through the hole in the wall mounting bracket.



4. Ensure that the cable notch on the dome camera base is aligned with the cable notch on the wall mounting bracket. Align the 3 mounting holes on the dome camera base with the 3 corresponding mounting holes on the wall mounting bracket.



1: Cable Notch

2: Mounting Holes



NOTE

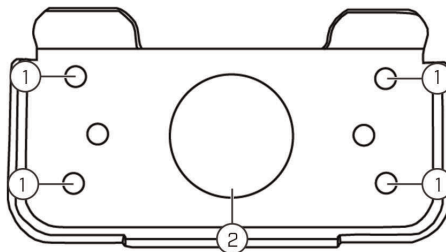
The mounting holes (3x) on the dome camera base will align with the corresponding mounting holes on the wall mount.

5. Use the Hex Bolt M4x10 (x3) screws included with the wall mounting bracket kit to secure the position of the dome camera base.
6. Holding the flat side of the back plate against the mounting surface, mark holes for the mounting screws ST4 (x4) and the camera cable. Remove the back plate and drill where marked.



NOTE

You do not need to mark holes for the camera cable if you plan to run it along the wall / ceiling.

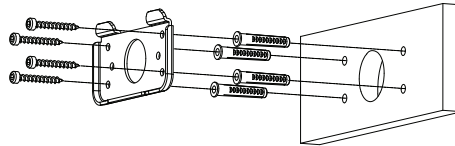


1: Mounting screw ST4 (x4) holes, 2: Camera cable hole

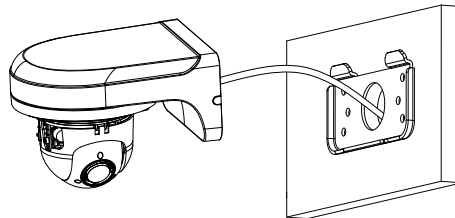
7. Attach the back plate to the mounting surface using the mounting screws ST4 (x4) included with the wall mounting bracket kit.

**NOTE**

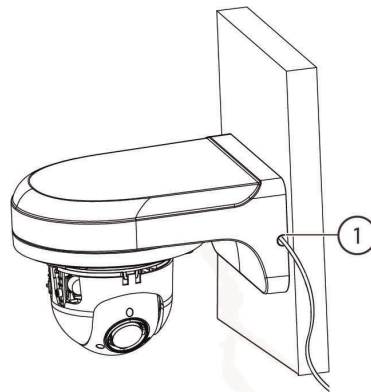
Use the drywall anchors included with the wall mounting bracket kit if installing on a drywall surface.



8. Connect the camera cable as shown in the 3 *Connecting the Camera* section, then feed the cables through the cable hole in the back plate (attached to the mounting surface).

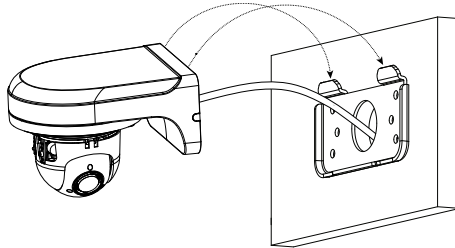
**CAUTION**

If you run the cables along the mounting surface, you must run the cable through the side notch on the wall mounting bracket. The camera cable will hang alongside the wall mounting bracket — see image below for reference:

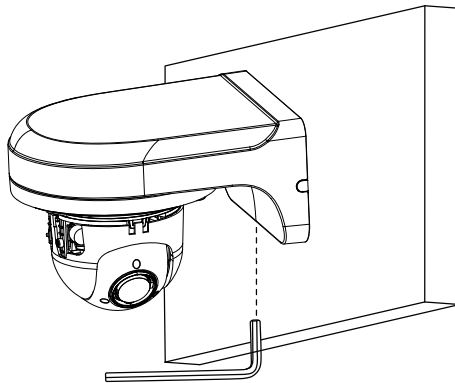


1. Side Notch

-
9. Lower the wall mounting bracket onto the back plate. Ensure that the 2 metal flaps on the back plate lock into the 2 grooves in the wall mounting plate.



10. Use the included Allen key (S3.0) to tighten the hex lock on the bottom of the wall mounting bracket.

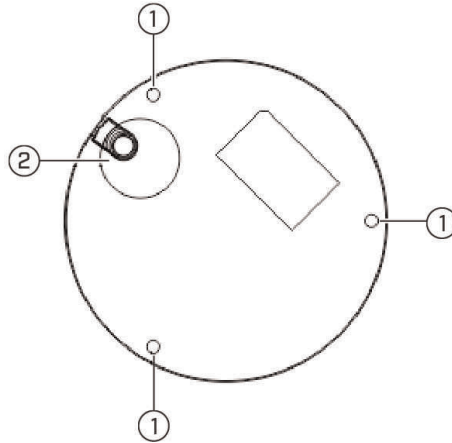


11. Replace the dome camera cover and tighten the dome camera cover screws using the Allen key included with the camera mounting kit.
12. Remove the vinyl film from the dome cover once installation is complete.

4.2.2 Ceiling Mounting

To ceiling mount the camera:

1. Use the mounting template included with the camera mounting kit to mark holes for the mounting screws (x3) and camera cable.



1. Mounting screw holes; 2. Camera cable hole (Optional)
2. Drill holes for the mounting screws, drywall anchors (optional) and camera cable (optional).



NOTE

- Use the included drywall anchors if installing on a drywall surface.
- If you are planning on running the cables along the mounting surface, there is no need to drill a hole for the camera cable.

3. Use the Allen key included with the camera mounting kit to loosen the dome camera cover screws (x3). Remove the dome camera cover.
4. Connect the camera cables as shown in 3 *Connecting the Camera*.
5. Mount the dome camera base to the mounting surface using the mounting screws (x3) and drywall anchors (x3) (optional) included with the camera mounting kit.
6. Replace the dome camera cover and tighten the dome camera cover screws using the included Allen key.
7. Remove the vinyl film from the dome cover once installation is complete.

Controlling the PTZ Camera with an NVR

The camera can accept PTZ commands directly through the Ethernet cable. There is no need to run special wiring to control the movement of the PTZ camera.

LNZ44P4 camera is compatible with **LNR / NR / LNK** Series NVRs, excluding the LNR200 and LNR300 Series NVRs.

- For instructions on controlling the PTZ camera with the LNR / NR Series NVRs, see 6 *Controlling the PTZ camera with LNR / NR Series NVRs*, page 15
- For instructions on controlling the PTZ camera with the LNK Series NVRs, see 7 *Controlling the PTZ camera with LNK Series NVRs*, page 20

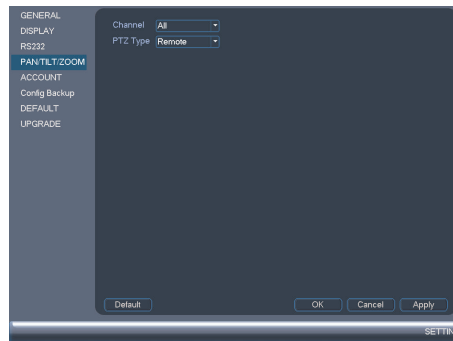
Controlling the PTZ camera with LNR / NR Series NVRs

The following instructions are based on the LNR400 Series NVR. See your NVR's instruction manual for instructions on controlling the PTZ camera with your system. For the latest list of compatible NVRs, please visit lorextechnology.com/compatibility.

To connect the PTZ camera to the system:

1. Connect the camera to your NVR as detailed in 3 *Connecting the Camera*, page 3.
2. Right-click on the live view of the PTZ camera and click **Main Menu**. Enter the system user name (default: **admin**) and password (default: **000000**) if prompted.

3. Click  > **SETTING** > **PAN/TILT/ZOOM**.

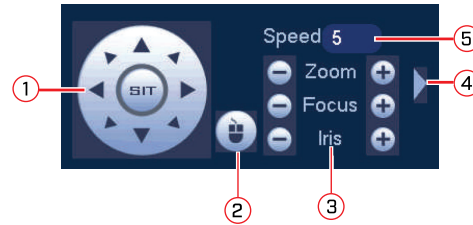


4. Under **Channel**, select the channel your PTZ camera is connected to.
5. Under **PTZ Type**, select **Remote**.
6. Click **OK**. You can now control your PTZ camera using the system.

6.1 Controlling the PTZ Camera

1. In Live View, double-click the channel that has the PTZ camera connected to open in full-screen.
2. Right-click and click **PTZ**. Enter the system user name and password if prompted. The PTZ menu opens.
3. Use the on-screen controls to control the camera.

PTZ Controls



1. **Direction keys:** Click to pan and tilt the camera. Click **SIT** to stop the current action.
2. **PTZ Trace:** Click to activate mouse PTZ Trace mode. You can do the following:
 - Click and drag to move the camera.
 - Use the scroll wheel to zoom in and out.
 - Right-click to exit and return to normal PTZ controls.
3. **Zoom/Focus/Iris:** Click +/- to adjust the zoom, focus, and iris. Adjusting the camera's iris settings allow you to control the amount of light that enters the camera's lens. The higher the iris value, the greater the amount of light that enters the camera's lens.



CAUTION

Adjust the camera's iris settings to match the environment where the camera is installed. Too much light exposure might result in a very bright camera image.

4. **Advanced controls:** Click to open advanced PTZ controls.
5. **Speed:** Enter a PTZ speed between **1** (slowest) and **8** (fastest).

6.2 Advanced PTZ Controls

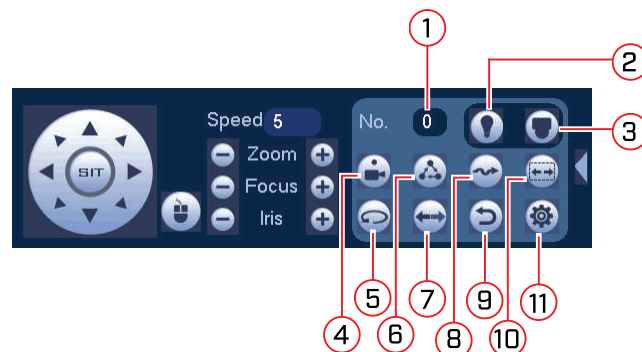
Advanced PTZ controls can be used to save camera positions and cycle through various positions, and automate camera actions.

To open advanced PTZ controls:

- Click the arrow in the PTZ control window to open advanced controls.



Advanced PTZ controls overview:



-
1. **No.:** Click to select the number of the action you want to perform.
 2. **Not supported.**
 3. **Not supported.**
 4. **Preset:** Click to call the selected preset.
 5. **Not supported.**
 6. **Tour:** Click to run the selected tour.
 7. **Not supported.**
 8. **Pattern:** Click to run the selected pattern.
 9. **Not supported.**
 10. **Not supported.**
 11.  : Click to open the **PAN/TILT/ZOOM** menu, where you can set up Presets, Tours, and Patterns.

6.2.1 Presets

Presets will save a camera position for quick retrieval.

To add presets:

1. Click  to open the **PAN/TILT/ZOOM** menu.
2. Click the **Preset** tab.



3. Under the **Preset** text box, enter the number of the preset you want to create.
4. Move the camera to the desired position and click **Set**.



NOTE

Click **Del Preset** to delete a preset.

5. Right-click to return to the advanced PTZ controls window.

To go to a preset:

- Under **No.**, select the number of the preset you would like to go to and click .

6.2.2 Tours

Tours will cycle through a set of presets.

To create a tour:

1. Click  to open the **PAN/TILT/ZOOM** menu.

2. Click the **Tour** tab.



- 3. Under **Patrol No.**, select the tour you would like to configure.
- 4. Under **Preset**, select a preset you would like to add to the tour.
- 5. Click **Add Preset**.
- 6. Repeat steps 4 and 5 to add additional presets to the tour.



NOTE

Click **Del Tour** to clear all presets from a tour.

7. Right-click to return to the advanced PTZ controls window.

To run a tour:

- Under **No.**, select the number of the tour you would like to go to and click .



NOTE

- There is a 5 second minimum pause between presets.
- Tour panning / tilting speed is slower than manual panning / tilting speed. The reduced speed maximizes reliability.
- The camera's full panning range is 355°. However, we recommend you do not make the camera pan more than 270° between any two points in a tour.

6.2.3 Pattern

Patterns automatically cycle the camera between two positions.

To create a pattern:

- 1. Click  to open the **PAN/TILT/ZOOM** menu.
- 2. Click the **Pattern** tab.



- 3. Under **Pattern**, enter the pattern you would like to configure.
- 4. Move the camera into the desired start position and click **Start**.

-
5. Move the camera into the desired end position and click **End**.
 6. Right-click to return to the advanced PTZ controls window.

To run a pattern:

- Under **No.**, select the number of the pattern you would like to go to and click .



NOTE

- The camera's full panning range is 355°. However, we recommend you do not make the camera pan more than 270° between any two points in a pattern.
- For instructions on how to control the PTZ camera using the smartphone or tablet app, refer to your NVR's instructional manual.

Controlling the PTZ camera with LNK Series NVRs

The following instructions are based on the LNK7000 Series NVR. See your NVR's instruction manual for instructions on controlling the PTZ camera with your system. For the latest list of compatible NVRs, please visit lorextechnology.com/compatibility.

To connect the PTZ camera to the system:

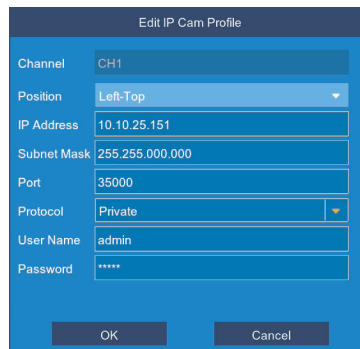
1. Connect the camera to your NVR as detailed in 3 *Connecting the Camera*.
2. Right-click anywhere on the live viewing mode to open the Quick Menu, then select **Main Menu**.



NOTE

If prompted, enter the system user name (default: **admin**) and your password.

3. Under **Settings**, click **Display** to open the **IP Camera** tab.
4. Click  next to the connected PTZ camera you want to edit. The camera attributes appear.



5. Under **Protocol**, select **ONVIF**.
6. Click **OK** to save changes.

7.1 Controlling the PTZ camera

To access the PTZ controls:

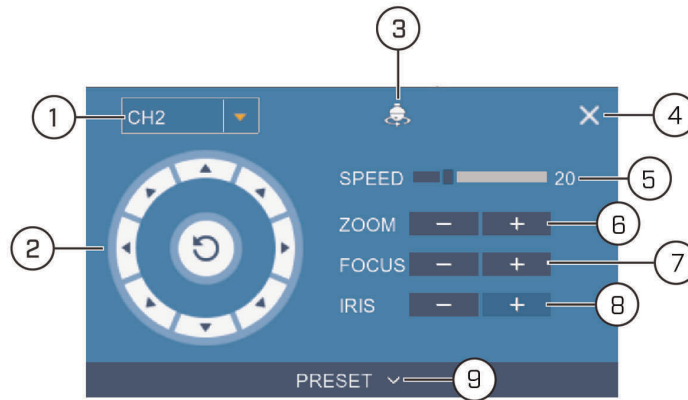
- Right-click on the live viewing area for the PTZ camera to open the Quick Menu, then click **PTZ**.
OR
- Hover the mouse near the top of the live viewing area for the PTZ camera to reveal the Mini Menu, then click .



NOTE

If prompted, enter the user name (default: **admin**) and your secure password.

To use the PTZ controls:



1. **Channel:** Select the channel of the PTZ camera you want to control.
2. **Navigation Controls:** Click the directional arrows to move the PTZ camera. Click  to begin autopan (PTZ camera pans around automatically).
3. **Start Cruise:** Cycles between preset viewing points automatically.
4. **Close PTZ Controls**
5. **Speed:** Set the speed of the PTZ camera's movement.
6. **Zoom:** Click -/+ to zoom in or out.
7. **Focus:** Click -/+ to adjust the focus.
8. **Iris:** Click -/+ to set the iris. Adjusting the camera's iris settings allow you to control the amount of light that enters the camera's lens. The higher the iris value, the greater the amount of light that enters the camera's lens.



CAUTION

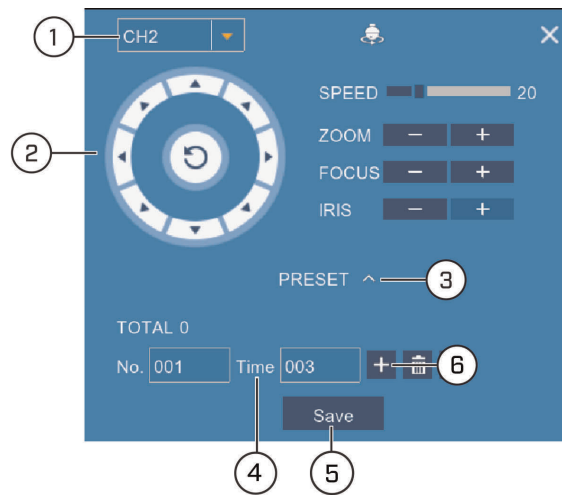
Adjust the camera's iris settings to match the environment where the camera is installed. Too much light exposure might result in a very bright camera image.

9. **Preset:** Click to access preset settings. For details on setting presets, see 7.1.1 *Setting PTZ Presets*, page 22

7.1.1 Setting PTZ Presets

Access the PTZ control menu to set preset viewing points for the PTZ. This is helpful for saving frequently-monitored areas for quick viewing. Once you have saved a few preset viewing points, you can start a PTZ cruise to switch between preset points automatically by clicking .

To set PTZ presets:



1. Select the channel for the PTZ camera you want to set presets for.
2. Use the directional arrows to move the PTZ camera to the desired view for the preset.
3. Click the arrow next to **PRESET** to reveal preset controls.
4. In the field next to **Time**, enter an amount of time in seconds. This will determine how long the PTZ camera looks at the preset area before switching to the next preset in a cruise.
5. Click **Save** to confirm the current preset point.
6. Click **+** to move to the next preset number in the **No.** field. Repeat for as many preset points as you wish to add.



NOTE

- Each preset viewing area you add to the system must have a unique ID number (**No.**). Using the same ID number as an existing preset will result in the old preset being overwritten.
- To cycle through preset viewing points automatically, click  to start PTZ Cruise. Ensure you have enabled cruise on the selected PTZ camera (see 7.1 *Controlling the PTZ camera*, page 20 for details).
- Click  to delete a preset.

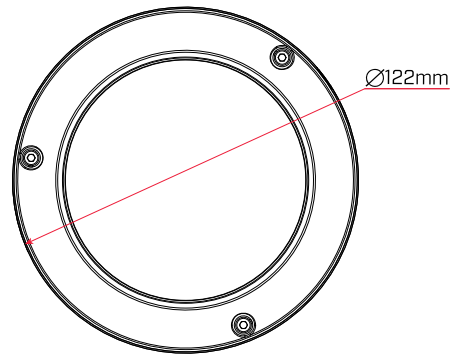
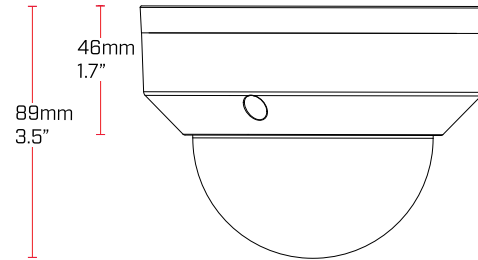
Technical Specifications

Image Sensor	1/3", CMOS 4 MP
Video Format	NTSC / PAL
Effective Pixels	2592 (H) x 1520 (V)
Resolution	Up to 4MP
Range	0° ~ 355° Pan; 0° ~ 90° Tilt
Pan/Tilt Speed	Manual Speed — Max 100°/Sec Pan; Max 60°/Sec Tilt Preset Speed — Max 100°/Sec Pan; Max 60°/Sec Tilt
Zoom	4x Optical Zoom & 16x Digital Zoom
Scan System	Progressive
Synchronization	Internal
S / N Ratio	≥50dB
Iris	Auto Iris
Min. Illumination	0.2 Lux in Color; 0.02 Lux in Black and White
Lens / Lens Type	2.7mm ~ 11mm, F1.6 ~ F2.8 / Zoom Module
Field of View (Horizontal)	104° ~ 33°
Day/Night	Auto (ICR) / Color / B/W
Termination	RJ45 (10Base-T/100Base-TX) / DC Jack
Video Output	IP
Power Requirement	PoE (802.3af); 12V DC (Optional)
Power Consumption	Max. 850mA
Operating Temperature Range	-22°F ~ 140°F / -30°C ~ 60°C
Operating Humidity Range	<90%RH
Indoor/Outdoor	Both (IP66) ¹
Vandal Resistance	IK10
Weight (Camera Alone)	1.20lbs / 0.54kg
Weight (Camera & Wall Mount)	2.35lbs / 1.06kg

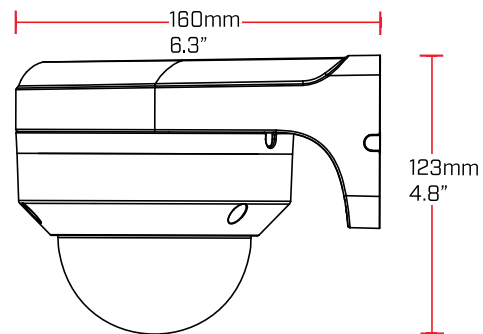
1. Not intended for submersion in water. Installation in a sheltered location recommended.

8.1 Dimensions

Camera Alone:



Camera and Wall Mount:



There is no picture at night.

- Camera is capable of seeing in extremely low light conditions (0.2 Lux), but it cannot see in total darkness. It is recommended to install the camera where there is some ambient light (e.g. street lighting, starlight, moonlight, etc.) or leave a light on in the area where the camera is installed.

No image at startup.

- The camera may take up to 1 minute to power up after being connected to the NVR. Wait 2 minutes before following steps below.
- Check to ensure your camera is properly connected (see 3 *Connecting the Camera*).
- Ensure the camera is connected to a router on the same network as the NVR.
- If the camera is connected to the LAN, you must search your network for cameras using the NVR. See your NVR's instruction manual for details.
- Make sure that the cable run is within the limitations specified in 3 *Connecting the Camera*. All Ethernet cables must be rated CAT5e or higher.
- If using the power adapter (not included), connect the power adapter to a different outlet.
- Ethernet cable may be damaged or not connected properly. Check your cable run or try a different cable.
- Reset the camera to factory default settings. See 10 *Resetting the Camera* for details.

No image or camera image is unclear.

- Dome cover is dirty. Clean the dome cover with a soft, slightly damp cloth. Do not use anything other than water to clean the dome cover, as chemicals such as acetone can permanently damage the plastic.

Image is distorted.

- Digital zoom is activated. Activating digital zoom may reduce the resolution of the camera image. Zoom out completely to return to the camera's optimal resolution. See 6.1 *Controlling the PTZ Camera* for instructions on using the zoom controls.
- Image may become unclear when camera is tilted too close to the camera base (e.g. pointed parallel to the ceiling). Tilt the camera using NVR PTZ controls.

Image is too bright.

- Ensure your camera isn't pointed directly at a source of light (e.g. sun or spot light).
- Check your NVR's brightness and contrast settings.
- Move your camera to a different location.

Image is too dark.

- Check your NVR's brightness and contrast settings.
- Move your camera to a different location.

NVR motion detection is constantly triggering.

- Turn off motion detection on the channel the PTZ camera is connected to. NVRs use video motion detection, which means they detect motion by looking for changes between frames (images) in the video. If the camera is moving, the NVR will detect this as motion.

The camera features a hard reset button that is used to reset all camera settings back to the default values. This is useful in case you want to revert camera image settings back to the default values.

To reset the camera:

1. Connect the camera as detailed in 3 *Connecting the Camera*. Make sure the camera is powered on.
2. Use the Allen key included with the camera mounting kit to loosen the dome camera cover screws (x3). Remove the dome camera cover.
3. Press and hold the reset button below the camera module for at least 10 seconds to reset the camera to default settings.



1. Reset Button



NOTE

- It may take few minutes for the camera image to reappear on the screen.
- This camera does not support micro SD card recording.

This product has been certified and found to comply with the limits regulated by FCC, EMC, and LVD. Therefore, it is designated to provide reasonable protection against interference and will not cause interference with other appliance usage. However, it is imperative that the user follows the guidelines in this manual to avoid improper usage, which may result in damage to the product, electrical shock and fire hazard injury.

11.1 FCC/IC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception (which can be determined by turning the equipment on and off), the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio or television technician for assistance.

11.2 Modification

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the device.

Toute modification non approuvée explicitement par le fournisseur de licence de l'appareil peut entraîner l'annulation du droit de l'utilisateur à utiliser l'appareil.

11.3 ROHS

This product is fully compliant with the European Union Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment ("RoHS") Directive (2002/95/EC). The RoHS directive prohibits the sale of electronic equipment containing certain hazardous substances such as lead, cadmium, mercury, and hexavalent chromium, PBB, and PBDE in the European Union.



Website

www.lorextechnology.com

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