



310 Series PTZ  
IP Surveillance Camera

# Quick-Start Guide

## Read this *before* you go on site!

**Install your camera with a connection to the Internet** via your NVR or through a network router. **This allows you to use OvrC**, a powerful remote maintenance tool. See OvrC.com for details.

In addition, your client can use the Luma Surveillance mobile app to check on the camera from anywhere.

**For installation using this guide, you must be able to access this camera through a personal computer.** If your surveillance system is not on a network, you'll have to use the NVR's local interface for installation. See the NVR user's manual for details.

### Additional Resources

You can acquire a PDF of the web interface manual and other materials from the camera's product page at SnapAV.com.



**WARNING:** This product can expose you to chemicals including cadmium, which is known to the State of California to cause cancer. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

## Box Contents

- Camera
- Mounting plate
- 3 × wall anchors with screws (2 sets)
- Weatherproofing kit for PoE cable

You must provide:

- Standard slot-head screwdriver
- A network connection (and an NVR, if desired)
- Admin rights to a computer that can access the network
- Mobile device with Luma Surveillance app (recommended) or CCTV tester
- Power source: PoE or 12V DC
- Phillips screwdriver

## Safety Tips

- Handle this device with care.
- Do not strike or shake this device.
- Protect the power cord from being stepped on or pinched, particularly where it connects to the device and the power outlet.
- Do not operate this device beyond its specified power ratings.
- Do not use this device near any heat sources such as radiators, heat registers, stoves, or other such heat-generating equipment.
- The performance and lifespan of the camera is affected by temperature. For best results, use this device in temperatures ranging from -20–140 °F.
- Clean this device with a dry cloth. Do not use strong or abrasive detergents, especially when cleaning the lens. If dirt is hard to remove, use a mild detergent and wipe gently.
- Save a copy of the configuration settings. This helps when changing the configuration, when upgrading the device, or with recovery if unexpected failure or trouble occurs.
- Avoid the chance of a laser striking the camera's light sensor.

## Precautions

Before you start, ensure that the device is in good condition and all the assembly parts are included. **Also ensure that your recorder has the very latest firmware.** Use OvrC to update the firmware, or consult your NVR manual.

- Ensure that all equipment is powered off during installation.
- Ensure the mounting surface is strong enough to hold three times the weight of the camera and the mount.
- If the mounting surface is cement, use the included expansion screws to install the camera. If mounting to a wood surface, use self-tapping wood screws (not included) to secure the camera.
- If the product does not function properly, please contact technical support. Do not disassemble the camera for repair or maintenance.

## **Your Camera**

Before installing, familiarize yourself with your camera.

### **Tails**

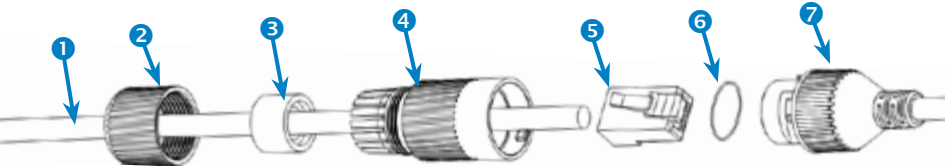
The PTZ camera has two leads: a 12V power lead, and a network jack.

The power cable ends in a standard barrel connector. Attach this to your 12V power supply.

For outdoor installs, be sure to use the waterproofing kit on your network cable, as shown on the next page.

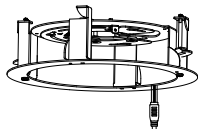
## Weatherproofing the PoE Cable

1. Slide the unterminated cable **1** through the lock nut **2**, the rubber gasket **3**, and the weatherproof endcap. Face the notched side of the rubber gasket **3** toward the endcap, as shown.
2. Terminate the RJ45 cable **1** with a network plug **5**.
3. Place the O-ring **6** onto the end of the camera's network interface socket **7** with the flat side toward the camera. Push it past the locking teeth as far as it easily goes.
4. Connect the RJ45 plug **5** to the camera's network socket **7**.
5. Align the teeth on the weatherproof endcap **4** with the gaps on the camera's network socket **7**. Insert the socket into the endcap. Twist until they click into position (the O-ring **6** gives you some give while still weatherproofing the connection).
6. Slide the rubber gasket **3** into the weatherproof endcap **4**. Secure it by screwing the lock nut **2** tightly onto the endcap **4**.



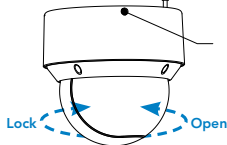
## Installation: On-Ceiling

Route the cables either from the top of the mount into the ceiling, or out the side of the mount to run across the ceiling.



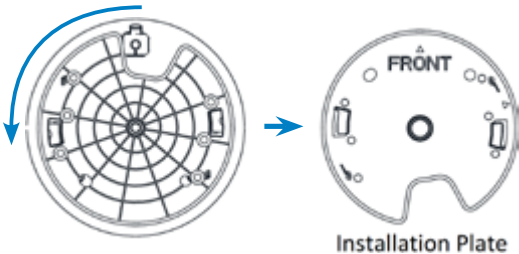
### Requirements

The ceiling must be able to hold four times the weight of the camera and mount. The ceiling tiles should be be 5–40mm thick.



### Steps

1. Turn the camera over. Turn the install plate counterclockwise to separate it from the camera.
2. Place the install plate in location. Ensure the front aims toward the primary viewing area; the camera's cabling routes out the back.





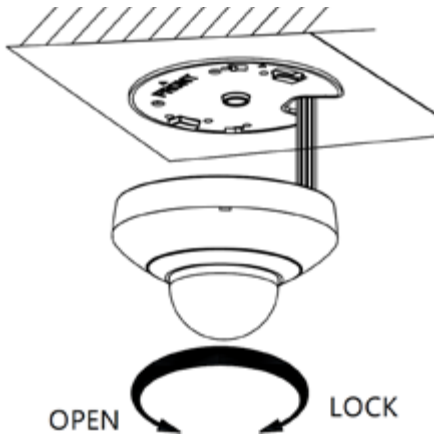
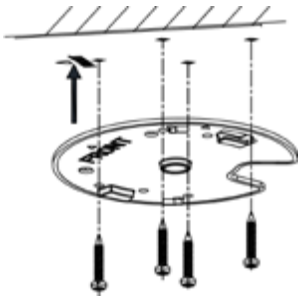
3. Holding the installation plate in place, use a pencil to mark the drilling locations using the plate as a guide.

4. Drill four holes for mounting screws.

5. Flip the base plate over and attach it to the ceiling as shown.

6. Route the cables through the cable hole or conduit and connect them to the camera tails.

7. Align the PTZ camera with the base plate. Insert the PTZ camera and rotate it clockwise into the base plate until the camera can turn no further (this is the opposite of step 1). Note the icons on the side of the PTZ to ensure you rotate it properly.



## Install and Run the Luma Utility

Use the Luma Utility to locate your camera and set it up.



Visit your product page at [SnapAV.com](http://SnapAV.com) and download the Luma Utility installer from the Support tab. **You must use v3.0.0.53 build 20170426 or later! Earlier versions of the utility will not work!**

Run the installer. You can click through and accept the defaults.

### Pre-Installation Camera Configuration

**You'll find it easiest to connect the camera directly to your PC, making most adjustments to the camera from the convenience of your table (prior to physical installation), rather than from atop a ladder.**

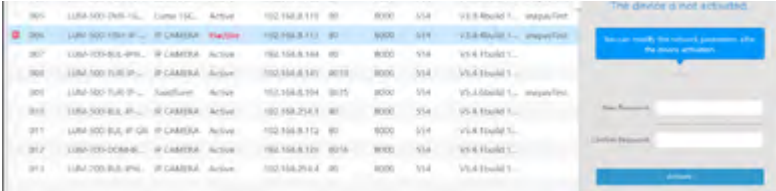


Connect the camera to your PC and run the Luma Utility. It searches for attached Luma Surveillance devices. If your camera does not appear, check the connection, ensure the camera is powered up, then click the **Refresh** button.

## Activate the Camera

Click on the entry for your camera to view its details. If the camera is inactive, use the text boxes at the lower right of the Luma utility window to activate the camera by creating a new secure password.

- Passwords cannot be longer than 16 characters. To ensure compatibility with the local interface, only use numbers, letters, spaces, and the following special characters: . , : - /
- Use a password that is long and easy to remember. A password like *parisinthspring* is more secure and easier to remember than a password like *D3x-7b*.



The screenshot displays a table of camera entries and a dialog box for password creation.

305	LUM-100-026-1G...	Cam1 1G...	Active	192.168.8.119	80	8000	514	V5.4 Model 1...	unapp/ten
306	LUM-100-026-1G...	IF CAMERA	InActive	192.168.8.113	80	8000	514	V5.4 Model 1...	unapp/ten
307	LUM-100-026-1G...	IF CAMERA	Active	192.168.8.104	80	8000	514	V5.4 Model 1...	
308	LUM-100-026-1G...	IF CAMERA	Active	192.168.8.140	8019	8000	514	V5.4 Model 1...	
309	LUM-100-026-1G...	SwifView	Active	192.168.8.104	8015	8000	514	V5.4 Model 1...	unapp/ten
310	LUM-100-026-1G...	IF CAMERA	Active	192.168.8.254	80	8000	514	V5.4 Model 1...	
311	LUM-100-026-1G...	IF CAM	Active	192.168.8.112	80	8000	514	V5.4 Model 1...	
312	LUM-100-026-1G...	IF CAMERA	Active	192.168.8.120	8016	8000	514	V5.4 Model 1...	
313	LUM-100-026-1G...	IF CAMERA	Active	192.168.8.104	80	8000	514	V5.4 Model 1...	

The dialog box on the right is titled "The device is not activated" and contains the following text: "Secure mode: the initial password (the first activation)". It includes fields for "New Password:" and "Confirm Password:" and a "Submit" button.

## Edit the Network Settings



Modify Network Parameters

Enable DHCP

Device Serial No: 0420150625AAWFD092017

Device Name: Luma-4CH-DVR

IP Address: 10.102.155.94

Server Port: 8000

HTTP Port: 255.255.0.0

Default: 10.102.0.1

Web Address: http://10.102.155.94:8000

Web Default: -

Web Port Length: 64

HTTP Port: 80

HTTPS Port: 443

Admin Password:

**Suggested Best Practices:** Ensure the **Enable DHCP** box is activated. In your router, reserve an IP address and assign it to the camera's MAC address (found on its box). See your router's documentation for details.

The HTTP port defaults to 80. It allows you to access your camera through a web browser.

The server port defaults to 8000. The Luma mobile application uses it to access the camera.

For security reasons, change your ports and record the new numbers. Consult your manual for reserved port numbers to avoid.

To confirm changes, enter the password that you just created and then click **Save**.

## Complete Port Forwarding

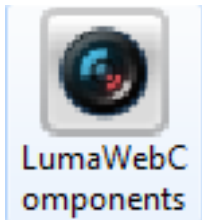
Port forwarding allows you to access the camera from the internet for remote operations. These settings are entered in your network router, typically in a menu called *Port Forwarding* or *Applications and Gaming*.

Refer to your router manual for help. Find the settings you need, then log in to the router and enter the new ports.

Port	Def.	New	Protocol
HTTP	80		TCP/UDP
Server	8000		TCP/UDP
RTSP	554		TCP/UDP

Camera IP Address
Admin Password

## Start the Web Interface



Open your browser and navigate to the camera's IP address.

Below the login area, you may see: “Please click here to download and install the plug-in. Close the browser when installing the plug-in.” If so, download the plug-in and close all browser windows.

Install the LumaWebComponents plug-in, restart your browser and go to your camera's login window. Log in as admin using the password you created.

You might get a pop-up message that asks whether you want to run the Luma Web Components plug-in. You must allow the plug-in to access your system over the web.

[Save your camera's web page as a favorite in your browser.](#)


## Check the Camera

After logging in, your screen shows the live page, similar to the illustration below. If it does not appear, check the connection to your NVR or network, and ensure that the camera is powered up. Click the **Settings** icon to access the web interface and finish setup.



## Zoom and Focus

This camera has a motorized varifocal lens.

To adjust the focus, return to the live screen (see previous page) and click the PTZ icon . This opens up the PTZ menu on your screen.


In the PTZ menu, the buttons circled control the lens.

- The Zoom- button on the top left widens the angle of vision, providing a more panoramic view.
- The Zoom+ button on the top right lowers the angle of vision, providing a tighter view.
- The Focus- button on the bottom left focuses on near objects.
- The Focus+ button on the bottom right focuses on distant ones.





## Set Up Presets

To set up presets, go to the live page and click the PTZ icon . This opens up the PTZ menu on your screen.

You can set up to 300 different presets. To set a preset, click the flag button on the PTZ menu to open the preset tab. Use the arrow, zoom, and focus buttons to move your camera to a desired alignment. When you are satisfied, click the preset number you want it to be, then press the gear button to save the position.



To call a preset, press the arrow on the preset's button. Clicking X deletes the associated preset.

Presets 33–45 and 92–105 are reserved for system use. They cannot be overwritten.

## Set Up Dynamic DNS

DDNS lets you connect to your system over the internet.

Click the **Settings Menu** icon (page 15) and navigate to **Basic Network Settings > DDNS**. Click **Enable DDNS**. Choose a type from the **DDNS Type** drop-down. Next, choose a server address. [We recommend WirepathDDNS and ns2.wirepathdns.com.](#)

Enter your desired domain in the Domain box. This creates a custom address, shown under Device URL. If someone has already registered your desired domain, the system adds two to four digits to your domain.

If you changed your HTTP port (see page 11), add a colon and the port number to the URL (e.g., myhome.wirepathdns.com:8402).

**NOTE: All your network devices now use this DNS (with their appropriate port numbers)!**

Click **Save**.



The screenshot shows the DDNS configuration page with the following fields:

TCRMP	DDNS	PPPoE	Ports	NAT
<input checked="" type="checkbox"/>	Enable DDNS			
	DDNS Type	WirepathDDNS		
	Server Address	ns2.wirepathdns.com		
	Domain	myhome		
	User Name	<input type="text"/>		
	Port	<input type="text"/>		
	Password	<input type="text"/>		
	Confirm	<input type="text"/>		
	Device URL	myhome.wirepathdns.com		

## Final Steps

### Add Additional Users

Click on **User Management**. Click the **Add** button.

Account names can be 32 characters long. To ensure compatibility, only use letters and numbers. Add accounts by individuals' names, so that you know which user is involved with any activity.

Passwords can be up to 16 characters. To ensure compatibility, only use numbers, letters, spaces, and these characters: . , : - /

Choose the account's level. Customize permissions for each account individually. See the camera web interface manual (available online on your camera's product page) for more.

### Calibrate the Camera's Clock

Click on **System Settings** > **Time Settings**. Choose your time zone. By default, the system uses network time protocol (NTP) to synchronize your system. **We strongly recommend using NTP.**

To use manual time sync, or if your system is isolated from the Internet, or your location that does not observe daylight saving time, see the camera web interface manual (available online).

# Support

If you need help, email [support@SnapAV.com](mailto:support@SnapAV.com). For information, instructional videos, support documentation, or ideas, visit our website.

## 3-Year Limited Warranty

This Luma Surveillance™ product has a 3-Year Limited Warranty. This warranty includes parts and labor repairs on all components found to be defective in material or workmanship under normal conditions of use. This warranty shall not apply to products that have been abused, modified or disassembled. Products to be repaired under this warranty must be returned to a designated service center with an assigned return authorization (RA) number. Contact technical support for an RA number.

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