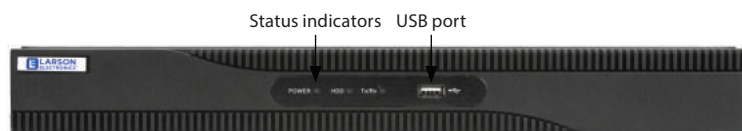


This quick setup guide provides instructions to initially setup and use the NVR-POE network video recorders (NVRs).

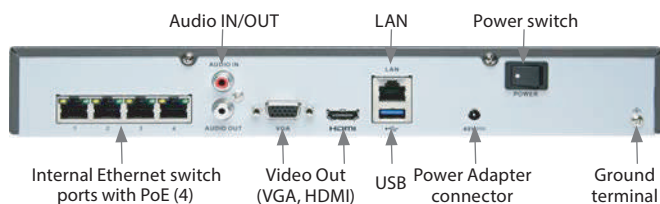
Controls and Indicators

Front panel

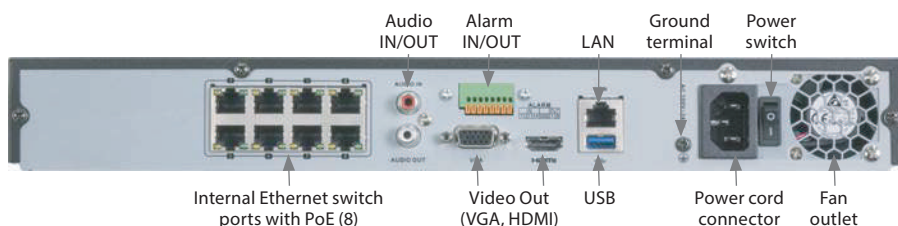


Item	Function / Description	
Status Indicators	POWER	Indicator is green when the unit is powered on. When the unit is off, the LED is red if power is available.
	HDD	HDD indicator blinks red when data is being read from or written to an HDD.
	TX/RX	Blinks green when the network connection is functioning normally.
USB Interfaces	Universal Serial Bus (USB) 2.0 port for additional USB devices such as a mouse or Hard Disk Drive (HDD).	

NVR-POE-4CH Backpanel

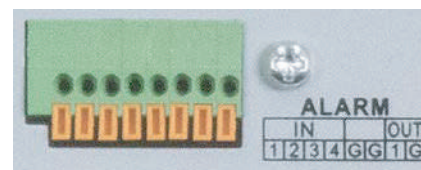


NVR-POE-8CH Backpanel



Item	Description
VIDEO OUT (VGA, HDMI)	1 channel (HDMI/VGA). See "Specifications" on page 4 for supported output resolutions.
Audio IN / OUT	RCA connectors for audio line input and line output
Alarm IN / OUT	Terminations are provided for 4 alarm inputs (N.O. or N.C.) and 1 alarm output. See below. (If applicable)
Power connector	NVR-POE-4CH: Connect the 48 Vdc power adapter provided with the recorder to this port, and to a standard 100 ~ 240 Vac power source using the power cord provided. NVR-POE-8CH: Connect the power cord provided with the recorder to this port and to a standard 100 ~ 240 Vac power source.
ON / OFF Switch	Switch for powering the recorder on or off.
GROUND	Terminal for ground. Connect to earth ground before powering on the NVR.
LAN	10/100BASE-T (NVR-POE-4CH) or 10/100/1000BASE-T (NVR-POE-8CH) Ethernet network interface
USB interface	Universal Serial Bus (USB) port for additional devices such as USB mouse and USB Hard Disk Drive (HDD). USB 3.0 port in NVR-POE-8CH only.
Internal Ethernet switch ports	4 (NVR-POE-4CH) or 8 (NVR-POE-8CH) 10/100 Mbps ports for IP cameras. These ports provide Power over Ethernet (PoE).

Alarm IN / OUT Terminals (If applicable)



Item	Description
ALARM IN (1 through 4 and G, G (ground))	Alarm inputs 1 - 4. Alarm input is tied to ground at G or G terminals through the alarm sensor (N.O. or N.C.).
ALARM OUT (1 and G)	Alarm outputs 1 with ground termination.

Mouse control

A standard 3-button (left / right / scroll-wheel) USB mouse can also be used with this NVR. To use a USB mouse:

1. Plug the USB mouse into the either the front panel or back panel USB connector of the NVR.
2. The mouse will be automatically detected. If the mouse is not detected, the mouse may not be compatible with the NVR. Please refer to the recommended device list from your provider.

Using the mouse

Action	Effect
Left click	Single click: Live view: Select channel and show the quick set menu. Menu: Select and enter.
	Double click: Live view: Switch between single-screen and multi-screen.
	Click and drag: PTZ control: pan, tilt and zoom. Tamper-proof, privacy mask and motion detection: Select target area. Digital zoom-in: Drag and select target area. Live view: Drag channel / time bar
Right click	Live view: Show menu. Menu: Exit current menu to upper level menu.
Scroll wheel	Scroll up: Live view: Previous screen. Menu: Previous item.
	Scroll down: Live view: Next screen. Menu: Next item.

Step 1. Getting Started: Unpacking the Equipment

What’s in the box

Your system includes:

- NVR
- 48 Vdc power adapter (NVR-POE-4CH only)
- 6 foot Ethernet cable
- 6 foot HDMI cable
- Power cable, power adapter and cable
- HDD SATA and power interface cables for internal hard disk drive(s)

Remove the equipment from its packaging and place it on a flat, clean surface. Inspect each item. If any visible damage is present, contact your supplier for a replacement. Verify that your order is complete.

What you need

Although each security system installation is different, most require the following items not included with your system components:

- VGA or HDMI compatible computer monitor
- IP cameras and cables compatible with the NVR
- Tools to install the cameras and route power and Ethernet cables
- Fasteners to attach the cameras to the mounting surfaces
- A display device to connect to the NVR. The NVR will connect directly to a VGA video monitor or an HDMI monitor (HDMI cable is provided). The display device is usually needed only for system setup. It can be disconnected when the NVR is networked for access across a LAN or Internet.
- Uninterruptible power supply (UPS). This device is used to ensure system stability during voltage surges, sags, and outages. If a UPS is not available, a power strip with strong surge protection is highly recommended.

Step 2. HDD Installation

HDD comes preinstalled. Please contact Larson Electronics for replacement information.

Step 3. Install the NVR

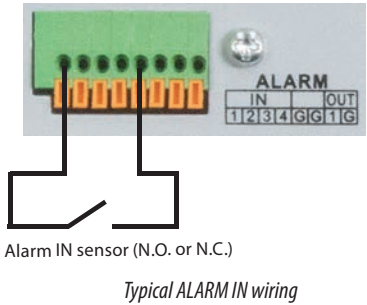
For the following steps, refer to the back panel photo above for the location of connectors.

1. Place the NVR in a location that is secure, well ventilated and clean. The NVR should be positioned such that the back panel connectors are accessible and the ventilation holes on the sides are not blocked.
2. Connect the ground terminal on the back of the NVR to an earth ground. Refer to local codes for proper grounding.

Step 4. Connect alarm devices to the NVR

Wiring alarm inputs to the NVR

You can wire up to 4 alarm inputs to the NVR.

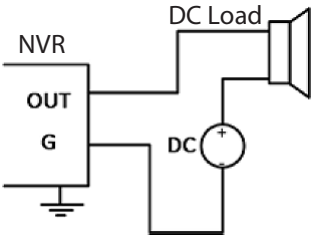


Wiring alarm outputs to the NVR

The NVR provides 1 alarm output termination that supports a DC load alarm out circuit. These terminations are marked on the back of the NVR and are labeled OUT 1 G (G = ground termination).

DC load alarm output circuits

DC loads must operate within the limitation of 12V / 1A. To connect to a DC alarm output, use the following diagram:



Step 5. Install a monitor, mouse, power

For the following steps, refer to the back panel photo above for the location of connectors.

1. Install and setup your monitor in accordance with the instructions provided with the monitor. Do not power it on at this time.
2. Cable the HDMI or VGA connector to your monitor's VGA or HDMI input. The HDMI interface provides the best performance.
3. Plug the mouse into the USB connector on the front or back of the NVR.
4. If you plan to access your NVR remotely, or configure your NVR to transmit alerts, email, etc. to external servers, plug a drop cable from your local area network (LAN) into the RJ45 LAN connector on the back of the NVR.
5. Connect the power cord (or power adapter for NVR-POE only) to the power connector on the back panel of the NVR, and then into a UPS (recommended) or surge protector.

Step 6. Install cameras

Install your security cameras. Always follow the installation instructions provided with the camera. **NOTE:** If the cameras feature Power over Ethernet (PoE), the cameras that plug into the ports on the back of the NVR can be powered through those ports.

Step 7. Connecting it together – initial system setup

1. Plug the Ethernet drop cables from the cameras into the RJ-45 Ethernet Switch Ports on back of the NVR.
2. Power on your cameras.
3. Power on the NVR using the power on / off (I / O) switch on the back panel.
4. Power on the monitor.

NOTE

Some monitors have multiple inputs such including VGA ,HDMI, BNC, etc. If you are using this kind of monitor, configure your monitor to display the input connected to your NVR (HDMI or VGA).

Step 8. Use the Wizard for basic configuration setup

Power on the NVR. Normally, an splash screen appears within 2 minutes.

Password _____
(Write New Password Here)



By default, the Setup Wizard will open automatically.

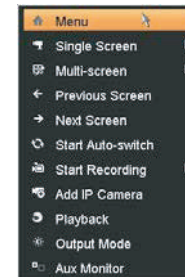
Important Notes for using the Wizard:

Default Password: **12345abc!**

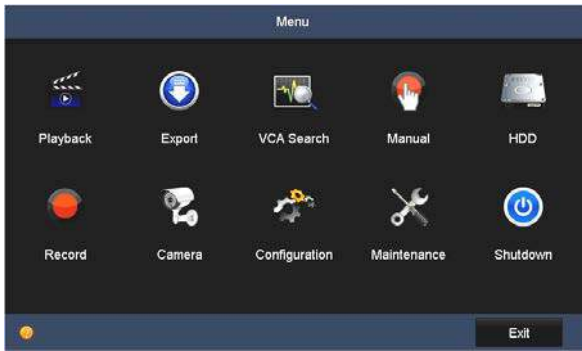
- **Password:** When logging into the recorder for the first time, create a “**Strong**” administrator user password. Follow the on-screen instructions, and save this password and the GUID file created by the firmware in a secure location. **NOTE:** There is no factory default password for this device.
- **Date and Time:** Set the time zone, date and time correctly. All recorded video and capture (photo) files are time stamped.
- **Storage - HDD:** In the HDD Management wizard, if a new recorder is shipped with a pre-configured HDD, nothing needs to be done with it in this window. If you installed an HDD or replaced the HDD, that HDD needs to be initialized by the recorder before it can be used to record data. Select (check the box for) that HDD, then click **Init** to initialize the disk. **NOTE: Init** will erase all data from the disk and can take several minutes to complete. When the initialization is complete, click **Next** to continue.
- **Network Settings:** By default, the recorder acquires it's network settings using DHCP (dynamic network settings). Depending on the configuration of the network, these settings may change. To improve remote access to the recorder, Observint recommends that you configure the DVR with fixed network settings. To easily change the DHCP acquired network settings to fixed network settings, un-check the **Enable DHCP** option in the network setup menu, and then click **Apply**.

Step 9. Access the Menu system

After the initial setup of your QVR using the Wizard, the Menus interface enables you to refine your configuration settings and expand the functionality of the system. To use most menus, the user must log into the NVR system, either locally or remotely, with administrative privileges. To open the Menu system from the Live View screen, right click anywhere in the screen, then select **Menu**.



If ID Authentication is not disabled (see the **Menu | Configuration | General** settings), a login window will open. In the Login window, select a User Name with administrative privileges, enter its password, then click **OK**. A window of Menu icons will open.



For additional information about using your system, refer to the ***Embedded Network Video Recorder Firmware V3.4.x User Manual*** provided electronically with your system.

Specifications

Model	NVR-POE-4CH	NVR-POE-8CH	
Number of Channels Supported	4	8	
Compression Format	Supports H.265/H.264/H.264 OVC		
Recording Performance	40 Mbps max	80 Mbps max	
Remote Viewing Output Capacity	80 Mbps max	160 Mbps max	
Supported Frame Rate per Channel	Main stream: Up to 60 fps Sub-stream: Up to 60 fps		
Recording Type	Continuous, Schedule, Event, Motion Detection, VCA		
Supported IP Camera Resolution	8MP / 6MP / 5MP / 4MP / 3MP / 1080p / UXGA / 720p / VGA / 4CIF / DCIF / 2CIF / CIF / QCIF		
Supported Playback Resolution	8MP / 6MP / 5MP / 4MP / 3MP / 1080p / UXGA / 720p / VGA / 4CIF / DCIF / 2CIF / CIF / QCIF		
Synchronous Playback	4-ch @ 1080p	2-ch @ 4K, or 8-ch @ 1080p	
Video Output	VGA, HDMI		
HDMI Video Output Formats	4K (3840 × 2160)/30 Hz, 1920 × 1080/60 Hz, 1600 × 1200/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz		
VGA Video Output Formats	1920 × 1080/60 Hz, 1600 × 1200/60 Hz, 1280 × 1024/60 Hz, 1280 × 720/60 Hz, 1024 × 768/60 Hz		
Two Way Audio Input	1-ch, RCA (Linear, 1kΩ)		
Audio Output	1-ch, RCA (Linear, 1kΩ)		
Export Formats	MPEG4		

Model	NVR-POE-4CH	NVR-POE-8CH	
Ethernet	1x 10/100 Mbps RJ-45 self-adaptive Ethernet interface, 4 independent 10 /100 Mbps PoE Ethernet interfaces	1x Gigabit RJ-45 self-adaptive Ethernet interface, 8 independent 10 /100 Mbps PoE Ethernet interfaces	
Power Over Ethernet	Max Power: 40 W Supported Standards: 802.3af, 802.3at	Max Power: 120 W Supported Standards: 802.3af, 802.3at	
USB	2x USB 2.0	1x USB 2.0 (front panel), 1x USB 3.0 (rear panel)	
Hard Drive Interface	1x SATA	2x SATA	
Hard Drive Capacity	1x HDDs max, up to 6TB capacity	2x HDDs max, up to 6TB capacity each	
Alarm Input	Camera Dependent	x4 (NVR) and Camera Dependent	
Alarm Output	Camera Dependent	x1 (NVR) and Camera Dependent	
Operating System	Embedded Linux		
Security	Password Protection		
Protocols	TCP/IP, DHCP, DNS, DDNS, NTP, SADP, SMTP, NFS, iSCSI, UPnP™, HTTPS		
Power Requirements	48 Vdc	100~240 Vac ≤ 180 W	
Power Consumption	≤ 10 W (without HDD)	≤ 15 W (without HDD)	
Weight	2.2 lbs. (without HDD)	6.6 lbs. (without HDD)	
Dimensions (in.)	12.4" W×9.1" D×1.8" H	15.0" W×11.4" D×1.8" H	
Operating Temperature	14°F ~ 131°F		
Color / Material	Black		
Material	Aluminum		
Approvals	CE, FCC, RoHS, UL		
Remote Client System Requirements			
Operating System	Microsoft Windows XP, Vista, 7, 8, 10 (32-bit and 64-bit version) Apple MacOS X 10.5 (Intel x86 only), 10.6 and 10.7		
Web Browser	Microsoft Internet Explorer 8.0, 9.0, 10, and 11 (32-bit version), Safari 5 and higher		
Software Requirements	Web Component Installation		

Password Reset

1. If they are not already connected, connect a monitor and a USB mouse to the NVR. Use the USB port at the back on the unit to connect the mouse. The device will not accept a keyboard; you will use an on-screen keyboard to enter information.
2. Power up the NVR if it is not already running.
3. Right-click anywhere on the screen to bring up an initial menu. Select Menu from this list. You will then get a dialog box asking for a username and password.
4. Double-click in the lower left corner of this dialog box (not the lower left corner of the screen). There is an invisible button in this dialog box. Another dialog box will appear, asking for the unit's serial number and a secure code. A unique serial number will populate on its own. Product ID located on bottom of unit.
5. Call Larson Electronics tech support at **877-348-9680**. When a support tech answers, tell them that you have lost the administrative password to your NVR and wish to reset it to factory default. They will ask for the unit's serial number, which you got in step 4. Please provide a return contact number with the serial number. The tech will have to validate the serial number and call back with a confirmation number. They will provide you with the secure code. Write this code down before entering it into the dialog box on screen to make sure that you got it correctly from the tech. Click OK when done.
6. After entering the secure code and clicking OK, you will then be able to set the admin password to one of your choosing.

Note: As a security feature, be aware that the secure code that the tech provides will only be good for 24 hours.