

714N-POE Network Zone Expander Module

INSTALLATION AND PROGRAMMING GUIDE

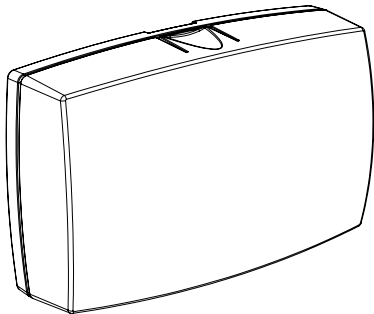


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ABOUT THE 714N-POE

The 714N-POE Network Zone Expander Module allow you to add 4 zones to XR150/XR550 Series panels using IP network capability. The 714N-POE is compatible with 1k to 10k resistors, giving a wide variety of options for takeovers.

POWER SUPPLY

714N-POE module operates at 12 VDC from a power supply. The 714N-POE can also be powered from POE.

ZONE TERMINALS

Four input zones are provided to allow connection of nearby burglary devices.

PROGRAMMING CONNECTION

The module also provides a keypad programming connection for use with a standard DMP LCD keypad for initial setup. Programming can be completed using a keypad connected to the module or from XR150/XR550 panels.

PCB FEATURES

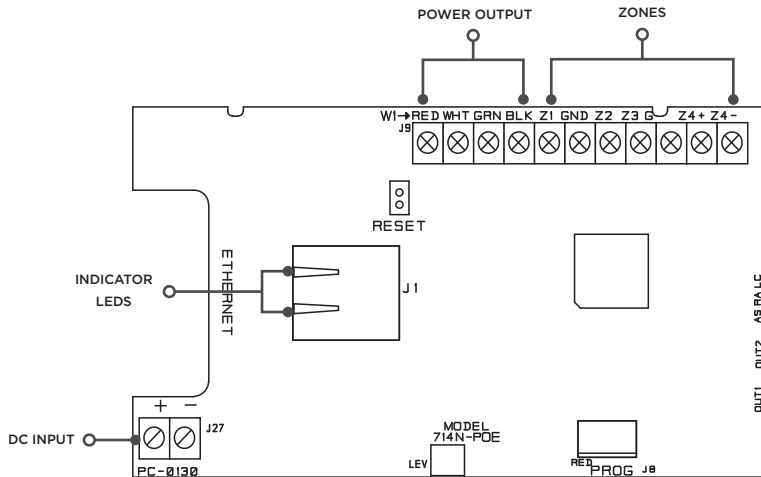


Figure 1: PCB Features

INSTALL THE 714N-POE MODULE

MOUNT THE DEVICE

The module comes in a high-impact plastic housing that you can mount directly to a wall, backboard, or other flat surface.

For easy installation, the back and ends of the housing have wire entrances. The back also contains multiple mounting holes that allow you to mount the module on a single-gang switch box.

1. Remove the circuit board from the plastic housing by loosening the clips on one side and gently lifting it out of the housing base.
2. Use the included screws in the desired mounting hole locations to attach the remote module to the surface. See the shaded mounting hole locations in Figure 2.
3. Reinstall the circuit board in the housing base.

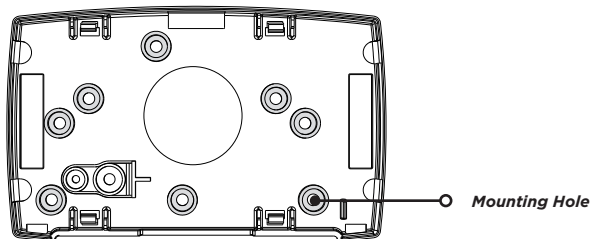


Figure 2: Mounting Hole Locations

NETWORK CONNECTION

Connect an IP network cable from the LAN/WAN connection to the 714N-POE Network connector. The 714N-POE module communicates AES encrypted TCP with panels that have network installed.

Two LED's are located on the ethernet jack.

- The green LED indicates data sent to the panel.
- The yellow LED indicates the speed of the transmission. A solid yellow LED indicates the network is connected at 100 Base-T. A flashing yellow LED indicates the network is connected at 10 Base-T.

WIRE THE ZONE TERMINALS

Terminals 5-9 connect grounded zones 1 through 3. Zone 4 terminals provide a non-powered Class B, Style A zone. The valid range of EOL resistors is 1k to 10k, allowing for a wider range of takeovers. Refer to the panel programming guide for programming instructions. See Figure 2 for more information on wiring the zone terminals.

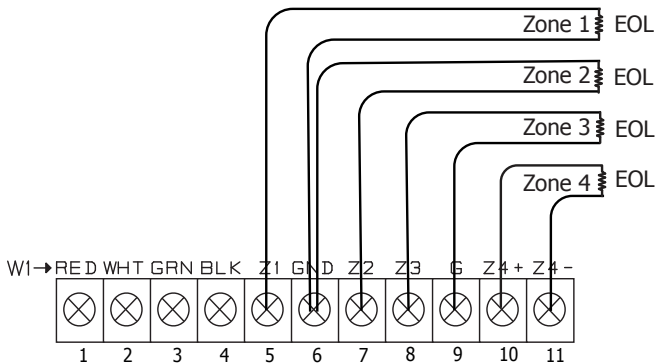


Figure 2: Zone Terminal Wiring

ADDRESSING THE 714N-POE



Note: For XR Series Version 192 firmware and lower, the 714N-POE must be programmed as a network door. In Version 193 firmware and higher, the 714N-POE should be programmed as a network expander. Refer to the XR Series panel programming guide ([LT-1232](#)) as needed.

Keypad Bus Addresses

DMP XR150/XR550 Series panels use keypad bus addresses 1 through 16. Each keypad bus address can accommodate one 714N-POE. A module with an address of 2 on the keypad bus would represent Door 2 and zones 21-24. A module with a keypad address of 14 would represent Door 14 and zones 141-144.

AX-Bus Addresses (XR550 only)

DMP XR550 panels are capable of access control expansion using any of the five AX/LX-Bus headers (AX/LX500, 600, 700, 800, and 900). The 714N-POE takes up an AX-Bus address that can no longer be used for a door. The 714N-POE module shares AX-bus addresses with the 734N, which limits the number of devices to 16. A module with an address of 501 on AX500 would represent zones 501-504. A module with an address of 505 on AX500 would represent zones 505-508. A module with an address of 701 on AX700 would represent zones 701-704.

Setting the 714N-POE Addresses

Only valid zone numbers can be assigned 714N-POE in device setup. For complete keypad and AX-Bus address mapping, see the chart below.

DEVICE	ZONES	DEVICE	ZONES	DEVICE	ZONES	DEVICE	ZONES	DEVICE	ZONES	DEVICE	ZONES
1	11-14	501	501-504	601	601-604	701	701-704	801	801-804	901	901-904
2	21-24	505	505-508	605	605-608	705	705-708	805	805-808	905	905-908
3	31-34	509	509-512	609	609-612	709	709-712	809	809-812	909	909-912
4	41-44	513	513-516	613	613-616	713	713-716	813	813-816	913	913-916
5	51-54	517	517-520	617	617-620	717	717-720	817	817-820	917	917-920
6	61-64	521	521-524	621	621-624	721	721-724	821	821-824	921	921-924
7	71-74	525	525-528	625	625-628	725	725-728	825	825-828	925	925-928
8	81-84	529	529-532	629	629-632	729	729-732	829	829-832	929	929-932
9	91-94	533	533-536	633	633-636	733	733-736	833	833-836	933	933-936
10	101-104	537	537-540	637	637-640	737	737-740	837	837-840	937	937-940
11	111-114	541	541-544	641	641-644	741	741-744	841	841-844	941	941-944
12	121-124	545	545-548	645	645-648	745	745-748	845	845-848	945	945-948
13	131-134	549	549-552	649	649-652	749	749-752	849	849-852	949	949-952
14	141-144	553	553-556	653	653-656	753	753-756	853	853-856	953	953-956
15	151-154	557	557-560	657	657-660	757	757-760	857	857-860	957	957-960
16	161-164	561	561-564	661	661-664	761	761-764	861	861-864	961	961-964

**Table 1: Device Addresses and 714N-POE
Zone Numbers**

PROGRAM THE 714N-POE MODULE

When you program the 714N-POE module, you must use a keypad connected to the programming header and set to address 1.

You can also program the module from an XR150/XR550 Series panel. Initial programming of device and communication must be performed with a keypad. Afterwards, device programming and 714N-POE options may be programmed from the panel's programming interface. The panel's programming overrides any programming performed from a keypad connected to the module.

RESET HEADER

To reset the module when first installing the system, short the two pins on the reset header before applying power to the module.

To reset the module while the system is operational, short the two pins on the reset header for one or two seconds without powering down the system.

714N PROGRAMMING
VER VVV MM/DD/YY

PROGRAM START DISPLAY

When you connect the keypad to the module, the version number and release date display. Press **6653** (PROG) then **CMD** to enter the Programming Menu.

INITIALIZE ALL?
NO YES

INITIALIZATION OPTION

These options can set the 714N-POE module programming memory back to factory defaults. Press any select key or area to enter the initialization menu.

ARE YOU SURE?
YES NO

INITIALIZE CONFIRM OPTION

The module displays **SURE? YES NO** for confirmation to clear the memory. This is a safeguard against accidentally erasing the programming. No memory is cleared from the programming until you answer **YES** to the **SURE?** option. Selecting **NO** leaves communication options unchanged.

714N
COMMUNICATION

COMMUNICATION MENU

Press any select key or area to enter the Communication menu. Select **NET** as the communication type.

714N
DHCP? NO YES

714N IP ADDRESS
192.168.0.201

SUBNET MASK
255.255.255.0

GATEWAY ADDRESS
192.168.0.1

PANEL IP ADDR
192.168.0.1

714N DHCP

Select **YES** to use dynamic IP address information for the module's IP Address, Subnet Mask, and Gateway Address. Select **NO** to enter static IP information.

714N IP ADDRESS

Enter the static IP address of the module if the DHCP is set to **NO**. Default is **192.168.0.201**.

SUBNET MASK

Enter the local subnet mask assigned to the module. Default is **255.255.255.0**.

GATEWAY ADDRESS

Enter the local gateway address of the module. Default is **192.168.0.1**.

PANEL IP ADDRESS

Enter the IP address of the panel. Default is **192.168.0.1**.



Note: This IP address must match the address programmed in the panel at the Local IP Address option in Network Options. The DHCP programming in the panel must be set to **NO**.

PANEL IP PORT
2002

PANEL IP PORT

Enter the port number that the module uses to send communication to the panel. This must be the same port that is programmed in the 714N-POE Listen Port in Network Options programming of the panel. The panel IP port cannot be the same as the panel network programming port. Default is **2002**.

734N
PASSPHRASE

714N-POE PASSPHRASE

You must enter an 8-16 character alphanumeric passphrase to encrypt communication with the panel. The passphrase for the 714N-POE must match the 734N passphrase entered in Network Options programming of the panel. If no 734N has been installed, a passphrase is still required for the 714N-POE to communicate with the panel. The passphrase is blank by default.

714N-POE NETWORK SPECIFICATIONS

The 714N-POE was designed to have minimum impact on network performance.

- If required, all of the traffic between the 714N-POE(s) and the panel can be completely isolated from the rest of the existing network by connecting all of the 714N-POE modules and the panel to the same switch, then connecting the switch to the remainder of the network. All traffic between the 714N-POE and the panel would then be confined to the switch where they are connected, while still allowing the panel to communicate with the central station through the normal network.
- The 714N-POE is a single purpose network device. The module establishes outbound panel communication using the TCP/IP protocol that remains open indefinitely. No inbound communication is allowed. This prevents a potential intruder from making any type of connection with the 714N-POE through the network.
- All communication between the 714N-POE and the control panel is encrypted using 128-bit AES encryption. This is the same encryption standard approved and used by the U.S. government, including the National Security Agency for encrypting secret information.
- The socket can be closed by the 714N-POE or panel after a time-out.
- The connection is re-established by the 714N-POE after the time-out.
- A pair of supervision packets are sent every 5 seconds.
 - The payload for each packet is 18 bytes and the total traffic, including overhead, is approximately 2 kilobytes per minute for each 714N-POE.
 - Non-Supervision messages have a payload range of 18-50 bytes.

714N-POE encryption has not been evaluated by UL.

COMPLIANCE LISTING SPECIFICATIONS

COMMERCIAL BURGLARY (XR550 SERIES PANELS)

When using the zones of the 714N-POE in a listed application, place the module in a listed enclosure and connect a DMP Model 307 Clip-on Tamper Switch to the enclosure programmed as a 24-Hour zone. The 714N-POE zones can be used in a Low Risk application.

CERTIFICATIONS

FCC Part 15

UNDERWRITERS LABORATORY (UL LISTED)

714N-POE

ANSI/UL 294

Access Control System Units

ANSI/UL 609

Local Burglar Alarm Units And Systems

ANSI/UL 1076

Proprietary Burglar Alarm Units And Systems

ANSI/UL 1610

Central Station Burglar-Alarm Units

PRODUCT SPECIFICATIONS

Primary Power 8.5 VDC to 28.5 VDC if 12 VDC

Current Draw

Standby/Alarm 75 mA at 12 VDC

When powered from POE

Standby/Alarm 25 mA

Output Voltage (POE) 12 VDC

Maximum Power Draw (POE) 12.95 W

Available Output Current 750 mA

Zones 5 VDC, 2 mA max

Dimensions 4.5W x 2.75H x 1.75D in
11.43W x 7H x 4.45D cm

Weight 8 oz .23 kg

