

NX AREA CONTROLLER (NXAC-UNV-001) INSTALLATION AND OPERATION INSTRUCTIONS

PRECAUTIONS

Read and understand all instructions before beginning installation.

NOTICE: For installation by a licensed electrician in accordance with National and/or local Electrical Codes and the following instructions.

Disconnect switch or a circuit breaker must be provided and marked as the disconnecting device.

Disconnect switch / circuit breaker must be within reach of operator.

CAUTION: RISK OF ELECTRICAL SHOCK. Turn power off at service panel before beginning installation. Never wire energized electrical components.

CAUTION: USE COPPER CONDUCTOR ONLY

Confirm device ratings are suitable for application prior to installation. Use of device in applications beyond its specified ratings or in applications other than its intended use may cause an unsafe condition and will void manufacturer's warranty.

NOTICE: Do not install if product appears to be damaged.

SAVE THESE INSTRUCTIONS!

DESCRIPTION

The NX Area Controller is the central component in an NX Networked Lighting Control System. The Area Controller contains the system processor, web server based user interface, solid state disk storage and network interface components required for system operation. The Area Controller connects with the NX network components using a NX Networked POE (power over Ethernet) Cat5e network. A standard Ethernet connection is provided in addition to allow the Area Controller to be connected directly to a PC, to a dedicated BAS network or an Enterprise IT network. The NEMA1 grade enclosure has a hinged locking door and is suitable for surface wall mounting in a conditioned electrical room.



Figure 1: Component Layout

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NX AREA CONTROLLER (NXAC-UNV-001) INSTALLATION AND OPERATION INSTRUCTIONS

INSTALLATION

- 1. Do not install the Area Controller in an unconditioned space.
- 2. The Area Controller is shipped completely assembled and requires some disassembly for installation.
- 3. Remove the screw on cover and set aside
- 4. Unplug the low voltage power supply connector from the interface board located near the NX Networked connectors.
- 5. Remove the four screws retaining the interior mounting plate to the rear housing. Carefully remove the interior assembly and set it aside.
- 6. Remove the screw retaining the high voltage compartment cover and set the cover aside.
- 7. With the interior removed and safely stored, proceed with mounting the enclosure to the wall in a suitable location using the three keyhole mounting holes.
- 8. Remove the appropriate conduit knock out in the high voltage section of the housing and proceed with connecting to a source of 120 volt power. It is highly recommended that the Area Controller be powered from a dedicated circuit breaker. Note: If necessary, the Area Controller can be powered by a 277 volt circuit. Carefully, follow the wire color markings on the power supply housing.
- 9. Reinstall the high voltage area cover.
- 10. Carefully reinstall the interior mounting plate into the enclosure using the four provided screws.
- 11. Reconnect the low voltage power supply connector to the interface board connector observing the plug polarity.
- 12. All additional connections to the Area Controller will be made using Cat5e cable with RJ45 connectors.
- 13. The Area Controller supplies 24VDC power to the NX Networked which provides backup power to the NXHNB Network Bridge Modules. The right hand RJ45 port labeled "NX Network OUT" on the circuit board is used to connect the NXHNB Network Bridge Modules to the Area Controller using Cat5e cable. See figure 2.
- 14. The left hand RJ45 port on the Area Controller circuit board labeled "NX Network IN" is used to connect NXP series relay/dimmer panel(s) if present.



Figure 2: Network Port Layout

STARTING UP THE AREA CONTROLLER

- 1. Energize the circuit feeding the Area Controller.
- 2. Using a standard Cat5e or Cat6 Ethernet patch cable (not supplied), connect a PC to the RJ45 port in the Area Controller labeled "User Interface Ethernet".



REV B 72-00664

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NX AREA CONTROLLER (NXAC-UNV-001) INSTALLATION AND OPERATION INSTRUCTIONS

STARTING UP THE AREA CONTROLLER (CONTINUED)

- 3. Your Area Controller ships with a static default IP address (192.168.1.1) from the factory. In order to access it, you will need to change your computer's network adapter settings.
- 4. In your network adapter settings, click on "Change Adapter Settings", then click "Ethernet".



a. Go to Ethernet Properties and select "Ethernet Protocol Version (TCP/IPv4). (as shown below.)

← → · · ↑ 🔮 · Control Panel · Netw	ork and Internet > Network Connections		v	Ö	Search Network Connections	٩
Organize Disable this network device	Diagnose this connection Rename this c	onnection Change settings of this connection				?
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4 items 1 item selected		ОК	Incel			800 📼

b. Manaually enter the IP address (as shown below). The subnet field should populate automatically as you enter the IP address.

n Kename this co	onnection Change settings of t	this connection			
nalugaad	Internet Protocol Version 4 (TCP/	IPv4) Properties ×	:		
Connection (4) I	General		1x4A 802.11ac		
	You can get IP settings assigned this capability. Otherwise, you ne for the appropriate IP settings.				
	Obtain an IP address autom	atically			
	Use the following IP address				
	IP address:	192.168.1.7			
	Subnet mask:	255.255.255.0			
	Default gateway:				
	Obtain DNS server address automatically				
	Use the following DNS serve	r addresses:			
	Preferred DNS server:				
	Alternate DNS server:	· · ·			
	Validate settings upon exit	Advanced			
		OK Cancel			
		OK Cancel			

- c. Click OK when done.
- 5. Open your browser (Internet Explorer or equal) and type 192.168.1.1 into the URL address line at the top of the page and press "Enter". This is the default IP address of the area controller as shipped from the factory.

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STARTING UP THE AREA CONTROLLER (CONTINUED)

6. The NX Area Controller Login in Screen will now appear.



*Please Note: Login screen design is subject to changes over time, however the login process will remain the same as described here.

7. Use the following default login details to log into the web portal:

Default user name: admin Default password: Nextgen.1

- 8. Upon a successful login, you are now ready to handover the configuration of the area controller and network commissioning to your startup technician.
- 9. There is no guarantee that the network can still be discovered and commissioned successfully by the startup technician. It is contingent upon all devices in the system being connected properly and functioning.
- 10. Work with your start-up technician to find out if there are any wiring, connection or functionality issues in the system.
- 11. Refer to the NXAC User Guide for complete details on network configuration and steps for a successful system startup.