

INSTALLATION OVERVIEW

The installation instructions contained in this document are provided as a guide for proper and reliable installation and connection of NX Lighting Control Panel V2 Single Pole (p/n NXP2-RL2-SP) and Double Pole Relays (p/n NXP2-RL-DP).

These instructions include information as follows:

Precautions
Description
Installing Individual Relays
Relay Specifications

PRECAUTIONS

IMPORTANT SAFEGUARDS

When using electrical equipment, basic safety precautions should always be followed including the following:

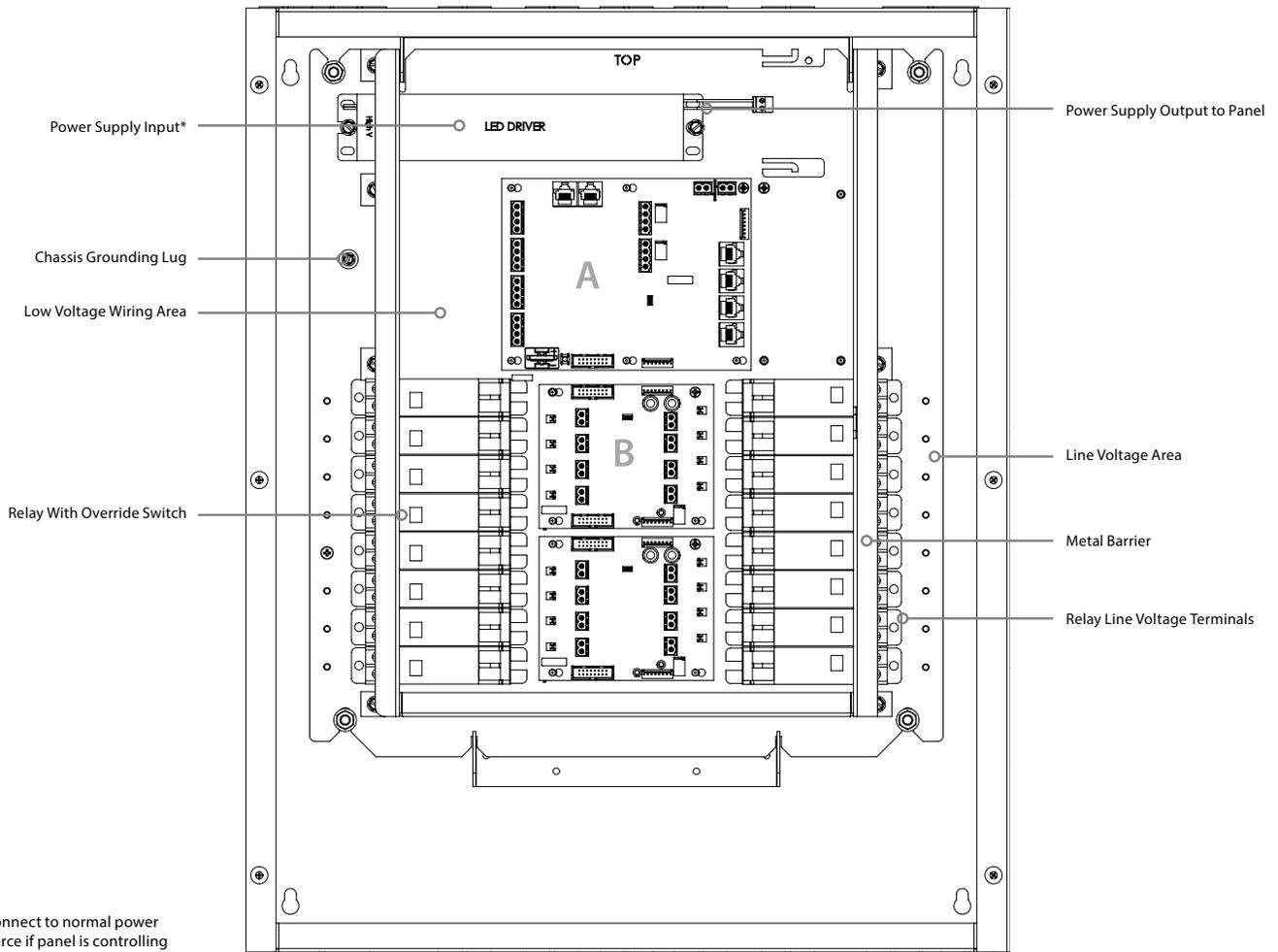
READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

- **CAUTION - RISK OF ELECTRICAL SHOCK.** To prevent electrical shock, turn off power at the circuit breaker before installing or servicing unit. Never wire energized electrical components.
- **NOTICE:** For installation by a licensed electrician in accordance with national and/or local Electrical Codes and the following instructions.
- **CAUTION: USE COPPER CONDUCTOR ONLY.**
- **CAUTION: This equipment provides more than one power supply output source. To reduce the risk of electric shock disconnect both normal and emergency sources within this unit before servicing any equipment connected to this unit.**
- Be sure to read and understand all instructions before installing or servicing unit
- For Indoor use only. Do not use outdoors.
- Do not install near gas or electric heaters.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Confirm that device ratings are suitable for application prior to installation.
- Equipment should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
- Use only approved materials and components (i.e. twist on connectors, electrical box, etc.) as appropriate for installation.
- **NOTICE:** Do not install if product appears to be damaged.
- If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.
- Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS!

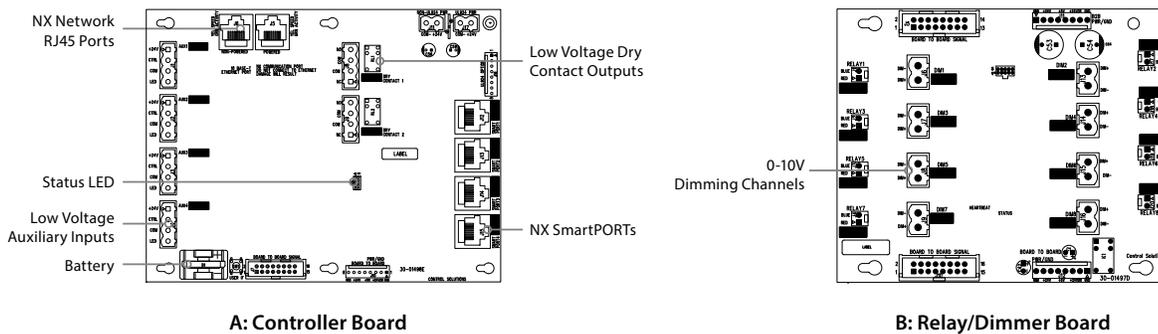
DESCRIPTION

The NX Panel is a configurable lighting control panel consisting of single and/or double pole relays, 0-10V dimming channels, low voltage inputs, dry contact outputs, NX SmartPORTs™ for NX Occupancy Sensors, Daylight Sensors and Smart Wall Stations, and an optional UL924 Emergency Interface. Panels can be configured with all relays of the same type installed or with space available for relays to be installed in the field. The relays are mounted with lighting circuit terminals in the high voltage area. The low voltage control inputs/outputs are in the low voltage area of the panel. See Figure 1.



*Connect to normal power source if panel is controlling emergency circuits.

Figure 1: Fully populated 16 relay interior mounted in the exterior enclosure



1 Available in Q2-2021

INSTALLING INDIVIDUAL RELAYS

The NX Panel can be configured with single and/or double pole mechanically latching relays pre-installed. If the project requires additional relays (and space is available in the panel), additional relays can be field installed as shown in Figure 2.

CAUTION! ALWAYS REMOVE POWER FROM THE NX PANEL'S TRANSFORMER PRIOR TO MAKING ANY ELECTRICAL CONNECTIONS INSIDE THE PANEL. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY, DAMAGE TO THE PANEL, AND VOID ITS WARRANTY.

1. Verify that power is turned off at breaker panel before installing relay in panel.
2. Remove panel door assembly from panel enclosure.
3. Locate an open relay position (two adjacent positions for a double pole relay) in the panel and remove the relay guard cover(s).
4. Insert relay into mounting bracket noting proper orientation of input/output sides. Verify that relay is securely held in mounting bracket.
5. Connect relay input and output as shown in the wiring diagram below. Connect input to panel I/O control card using relay connector cable. Attach red lead to red screw and blue wire to blue screw. Slide connector on to header pins of I/O control card. Connect line and load leads to relay output.

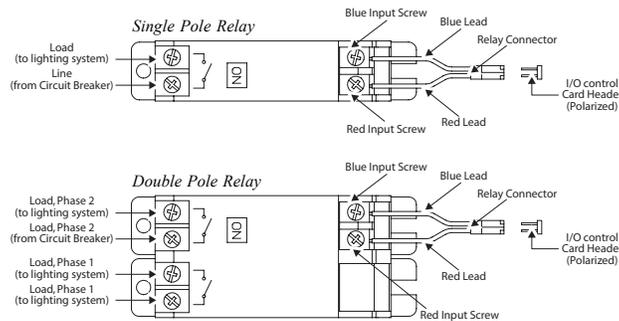


Figure 2: Relay Wiring Diagrams

6. If necessary, reinstall relay guard covers over open relay positions.
7. Re-install panel door assembly to panel enclosure.
8. Reapply power to panel.
9. Verify relay operation by manually switching relay on and off using the manual control switch located on the relay.

SPECIFICATIONS

CONSTRUCTION

Relay Dimensions

- Single Pole - L:106.5mm x W:24.5mm x H:60mm
- Double Pole - L:96mm x W:49.5mm x H:60mm*

MOUNTING

- Mounts directly to NX Lighting Control Panel V2 relay mounting strap

ELECTRICAL

Relay Operating Voltages

- Single Pole (p/n NXP2-RL2-SP):
 - General Use: 30A @ 347VAC
 - Tungsten: 1920W @ 120VAC
 - (Standard) Ballast: 10A @ 347VAC
 - Electronic Ballast: 16A @ 277VAC
 - Motor Starting: ½ HP @ 110-125VAC; 1.5HP @ 220-277VAC
 - Short Circuit Current Rating (SCCR) of 14,000A @ 277VAC

ELECTRICAL (CONTINUED)

- Double Pole (p/n NXP2-RL-DP)*:
 - General Use: 20A @ 347/480VAC
 - Tungsten: 2400W @ 120VAC
 - (Standard) Ballast: 20A @ 347/480VAC
 - Motor Starting: ½ HP @ 110-125VAC; 1½ HP @ 220-277VAC
 - Short Circuit Current Rating (SCCR) of 5,000A @ 277VAC

Relay Electrical Ratings

- Rated for minimum 60,000+ operations (30,000+ cycles) at full 20A load
- Rated full-life with HID load

Relay Mechanical Ratings

- Rated for minimum 120,000+ operations (60,000+ cycles)

OPERATION

- Mechanically latching
- Provides at-a-glance indication of ON or OFF relay status

OPERATION (CONTINUED)

- Includes manual override switch (integral to the relay)

OPERATING ENVIRONMENT

- Indoor use only
- 32° to 112°F (0° to 50°C)
- Relative humidity (non-condensing): 10% to 90%

CERTIFICATIONS

- UL Listed
- CSA Approved

WARRANTY

- 5 year limited warranty

*Double pole relays occupy (2) relay spaces