

**IMPORTANT SAFEGUARDS**  
**READ AND FOLLOW ALL SAFETY 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.

**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.

Use only approved materials and components (i.e. wire nuts, electrical box, etc.) as appropriate for installation.

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

**DESCRIPTION**

The Dry Contact Output Control Module provides a low voltage dry contact output interface for the control of third-party devices and systems such as HVAC, shades as well as other non NX Lighting or other control systems. The NXDCO is a digital device and connects to an FX Port or SP Port.

**CONSTRUCTION**

- Housing: Rugged injection molded plastic, PC-FR UL 94-5VA flame class rating
- Color: Blue
- Weight: 1.59oz (45g)
- Dimensions:  
0.98" (24.89mm) H x 1.53" (38.86mm) W x 2.61" (66.29mm) D

**MOUNTING**

- DIN Rail Mount
- Direct Screw Mount
- Single Tie Wrap

**ELECTRICAL**

Input:

- Input Voltage: 12-24VDC supplied by FX or SmartPORT Bus
- Power Consumption: 24mA (3 NX PBU's)

Output:

- Max 500mA @24VDC/VAC Load (Relay mode)
- Max 50mA Sink Current (0-10VDC/CCT mode)

**OPERATING ENVIRONMENT**

- Rated for indoor use only
- Operating Temperature: 32° to 104°F (0°C to +40°C)
- Relative humidity (non-condensing) 0% to 90%

**PROGRAMMING INTERFACE**

- NX Lighting Controls Mobile App
- NX Area Controller (NXAC2) for Network Applications

**CERTIFICATIONS**

- cULus Listed
- UL2043 Plenum Rated

**WARRANTY**

- 5-year limited warranty
- See website for additional information

**SAVE THESE INSTRUCTIONS AND PROVIDE TO OWNER AFTER INSTALLATION IS COMPLETED**

## INSTALLATION

1. The NXDCO Dry Contact Output Control Module is designed to mount via DIN rail, direct screw mount, or with a single tie wrap.
2. Plug a CAT5 cable into one of the RJ45 SmartPORT connectors on the NXDCO. Use an appropriate strain relief bushing on one of the box knock outs to exit the cable from the box.

NOTE: The other SmartPORT connector on the NXDCO can be used to connect other NX room devices if needed.

3. Plug the other end of the CAT5 cable into one of the available FX or SP ports on the NX room controller or NX enabled luminaire with dual SmartPORT.
4. Use appropriate low voltage wire when connecting to the terminals on the NXDCO. When using the NXDCO for a dry contact output, connect to the Common (Com) terminal and either the Normally Open (NO) or Normally Closed (NC) terminal depending on the application. When programmed as a dry contact output based on occupancy, the Normally Open terminal will be closed if any of the occupancy sensors in the room are reporting occupancy and will be open after all the sensors time out and report that the room is unoccupied. The Normally Closed terminal will be open when the room is occupied and closed when the room is unoccupied.

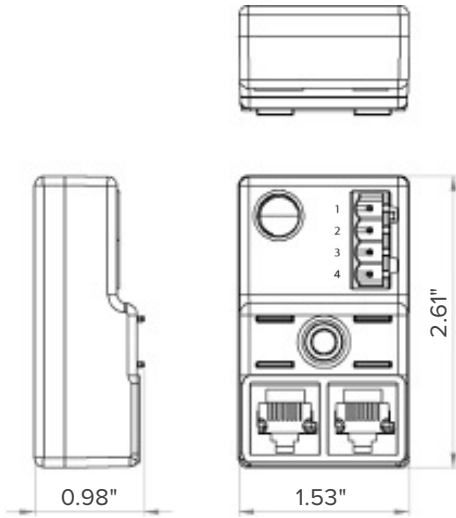
5. The NXDCO can be configured as one of the following operating modes through the NX App, or an NXAC2:

- Relay Mode
  - Maintained On/Off
  - Momentary – with configurable pulse duration
    - Configurable to 500 – 60,000ms (0.5 to 60 seconds) in 100ms steps
- 0-10VDC/CCT Mode
  - 0-10VDC Dimming with Dim to Off Shunt
  - 0-10VDC CCT Control

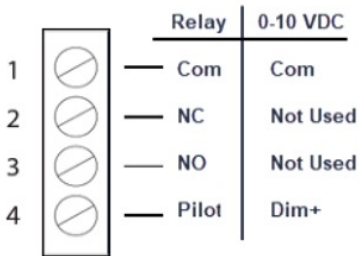
6. The NXDCO provides a momentary pushbutton with a blue LED to facilitate test and manual override of the control module. Functions of the button/LED are as follows:

- Relay Mode - Single momentary press:
  - Device will turn relay On/Off
  - LED will turn On for On, and turn Off for Off
  - If button is held for 10+ seconds, device will factory reset and blink once
- Dimming Mode - Maintained press (10 seconds)
  - Device will turn On and raise 0-10VDC level to 100%
  - LED will blink On/Off while raising dimming level, and will stay On when at 100%
  - Repeat maintained press to lower dimming level back down to 0%
    - Device will remain in this state until the button is depressed for 10 seconds, which will return it to normal operation
    - If device is left untouched for 5min or has experienced a power cycle, the device will return to normal operation
  - If button is held for more than 10 seconds, device will factory reset and blink once

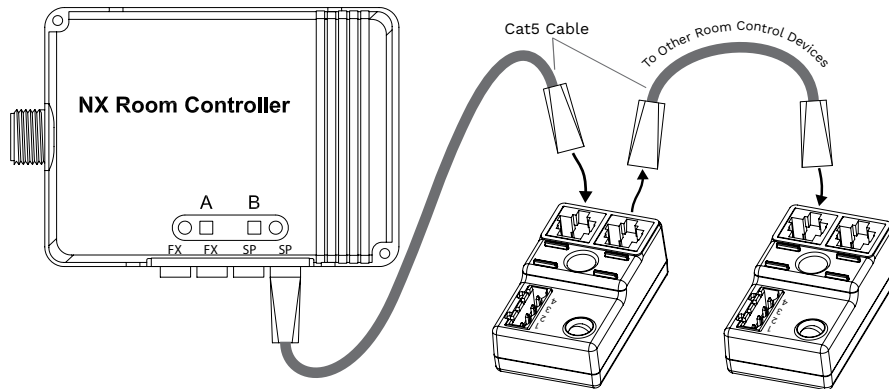
**DIMENSIONS**



**TERMINAL HEADER DIAGRAM**



**WIRING DIAGRAM**




NXDCO with NXRCFX Room Controller

**BATTERY STATEMENT**

Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate. Even used batteries may cause severe injury or death. Call a local poison control center for treatment information.

Battery used in device is a MS412FE LITH VRT 3V 1mAh 4.8MM coin battery. Battery is not rechargeable and non-replaceable. Non-rechargeable batteries are not to be recharged.

Do not force discharge, recharge, disassemble, heat above +60°C or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.

 <b>WARNING</b>	
<ul style="list-style-type: none"> <li>• <b>INGESTION HAZARD:</b> This product contains a button cell or coin battery.</li> <li>• <b>DEATH</b> or serious injury can occur if ingested.</li> <li>• A swallowed button cell or coin battery can cause <b>Internal Chemical Burns</b> in as little as <b>2 hours</b>.</li> <li>• <b>KEEP</b> new and used batteries <b>OUT OF REACH OF CHILDREN</b>.</li> <li>• <b>Seek immediate medical attention</b> if a battery is suspected to be swallowed or inserted inside any part of the body.</li> </ul>	