

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

**PRECAUTIONS**

Read and understand all instructions before beginning installation.

CAUTION: FOR USE WITH CLASS 2, LOW VOLTAGE SYSTEMS ONLY. DO NOT USE IN HIGH VOLTAGE APPLICATIONS.

NOTICE: Class 2 Device, 12-24V, 10mA

NOTICE: Suitable for Use in Other Environmental Air Space (Plenums) in Accordance with Section 300.22 (c) of the National Electrical Code.

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

Confirm device ratings are suitable for application prior to installation. Use of this device in applications beyond its specified ratings 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.

NOTICE: Do not use this equipment for other than its intended use.

**REGULATORY INFORMATION**

1. Contains Transmitter Module FCC ID: YH9NXSMP2 IC: 9044A-NXSMP2

1. This device complies with FCC part 15 Rules. Operation is subject to the following two conditions: This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

2. FCC Interference Statement (Part 15.105(b)): This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

3. FCC Part 15 Clause 15.21: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

4. ISED RSS-Gen Notice

This device complies with Industry Canada's license-exempt RSSs. Operation is subject to the following two conditions:

1. The device may not cause interference; and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. l'appareil ne doit pas produire de brouillage;
2. l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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

## DESCRIPTION

NXSMP2 Series Digital Smart Sensors are a combination PIR Occupancy Sensor and Closed Loop Daylight sensor specifically designed for installation within a lighting fixture and ceiling mount applications. When used with corresponding NXFM2 Series Fixture Module, the NXSMP2 Series Sensors can be programmed to provide Automatic On/Off control based on occupancy and/or Automatic Light Level Control based on the amount of ambient daylight. The NXSMP2 Series sensors also include a wireless 2.4GHz radio and Integral Bluetooth® for wireless networking and ladder-less programming from a mobile device. The NXSMP2 Series Digital Sensors can be configured via the NX Lighting Controls mobile application and can be utilized in either stand alone or networked applications with other NX Room Control or NX Network devices.

## SPECIFICATIONS

### CONSTRUCTION

- Housing: ABS (UL-945VA) Flame Class Rating, UV Inhibitors
- Color: White, Gray, Black
- 3.2oz (90.7g)
- Overall Dimensions: 1.87" (47.50mm) H x 3.48" (88.39mm) W
- Mounting Barrel: 1.31" (33.27mm) H x 1.4" (35.56mm) W
- Complies for use in a plenum area
- IP65 Rated for Indoor and Outdoor use

### MOUNTING

- Mounts directly in 1.5" diameter aperture, secured by supplied nut on threaded housing
- Recommended (HMO) Max Outdoor Mounting Height: 40 ft. (12.19m)
- Recommended (HMO) Max Indoor Mounting Height: 45 ft. (13.72m)
- Recommended (LMO) Max Mounting Height: 16 ft. (4.27m)
- Recommended (LMO) Minimum Mounting Height: 8 ft. (2.43m)

### ELECTRICAL

#### Input:

- Input Voltage: 12-24VDC supplied by NXFM2 (NX Fixture Module)
- Power Consumption: 30mA
- Wiring: Uses NXV

#### STANDBY POWER (W):

- 120VAC: 0.1W
- 277VAC: 0.1W
- 347VAC: 0.1W

### OPERATING ENVIRONMENT

- Rated for Indoor and Outdoor Use
- Operating temperature: -40°F to 185°F (-40°C to 85°C)
- Relative humidity (non-condensing) 0% to 95%

### WIRELESS

- 2.4GHz: IEEE 802.15.1 based
- Bluetooth® Version V5.2

### SENSORS

- Detection Technology: Passive Infrared Sensor

### SENSORS (Continued)

- 1:1.4 Coverage Pattern (HMO) (mounting height: coverage radius)
- 1:3 Coverage Pattern (LMO) (mounting height: coverage radius)
- (HMO) Max Outdoor Mounting Height 40ft
- (HMO) Max Indoor Mounting Height 45ft
- (LMO) Max Mounting Height 16ft
- LED Indicator (Red) indicates occupancy detection

### PROGRAMMING INTERFACE

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

### CERTIFICATIONS

- cULus Listed
- Complies with FCC Part 15.247
  - FCC ID: YH9NXSMP2
  - IC: 9044A-NXSMP2

### WARRANTY

- 5-year limited warranty
- See HCS Standard Warranty for additional information

## NXSMP2-HMO/LMO INSTALLATION

### NXSMP2-HMO/LMO is Rated for Indoor and Outdoor Use

The NXSMP2-HMO/LMO is designed to be mounted on flat surface either for in-fixture or ceiling mount applications.

### INSTALLATION FOR CEILING MOUNT DEPLOYMENT

1. Choose a mounting location on ceiling with a flat surface where the sensor face and sensor lens will be oriented in the downward position as close to level as possible. NOTE: The sensor should be clear from obstructions to ensure proper detection.
2. Once a position is selected a 1-2/5" to 1-1/2" round opening in the ceiling or junction box needs to be made in order for the sensor to slide into position. After the sensor is in position use the provided locking ring and gasket to secure the sensor in place. NOTE: Do not over tighten the locking ring and gasket. This can cause damage to the sensor gasket.
3. After the sensor is mounted locate the miniature 4-pin SmartPORT positioned on the back of the sensor. Using a NXCBL-P plug the miniature 4-pin SmartPORT connector into the back of the sensor.
4. Once the cable has been connected to the sensor using the opposite end of the NXCBL-P utilize the RJ45 port and CAT5e cable to connect the sensor to a NX Room Controller on the FX SmartPORT. NOTE: If using multiple NXSMP2 sensors in a daisy chain configuration Qty:(2) NXCBL-P must be used to provide in and out connection.
5. Once all connections are made take one of the provided MAC Address labels and affix it to the reflected ceiling plan, layouts, drawings or project documentation identifying its location. This will be used by the Field Engineer to program and calibrate the sensor during system startup.

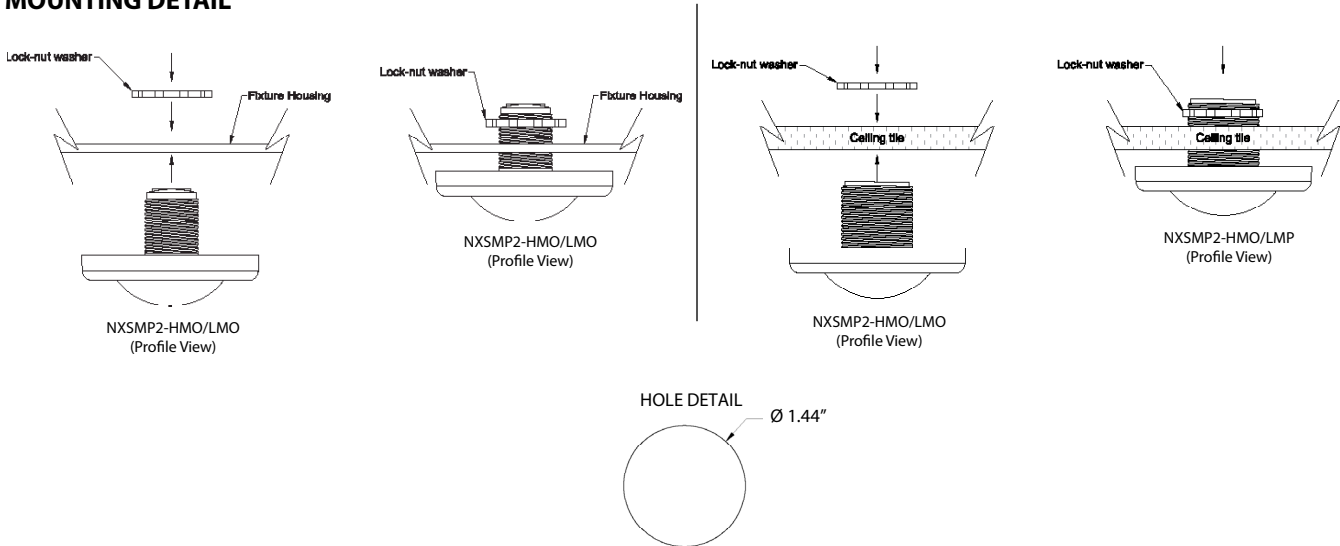
**FOR SENSOR PROGRAMMING SEE QUICK STARTUP GUIDE FOR DISCOVERING AND CONFIGURING NXSMP SERIES SENSORS.**

### INSTALLATION FOR IN-FIXTURE DEPLOYMENT

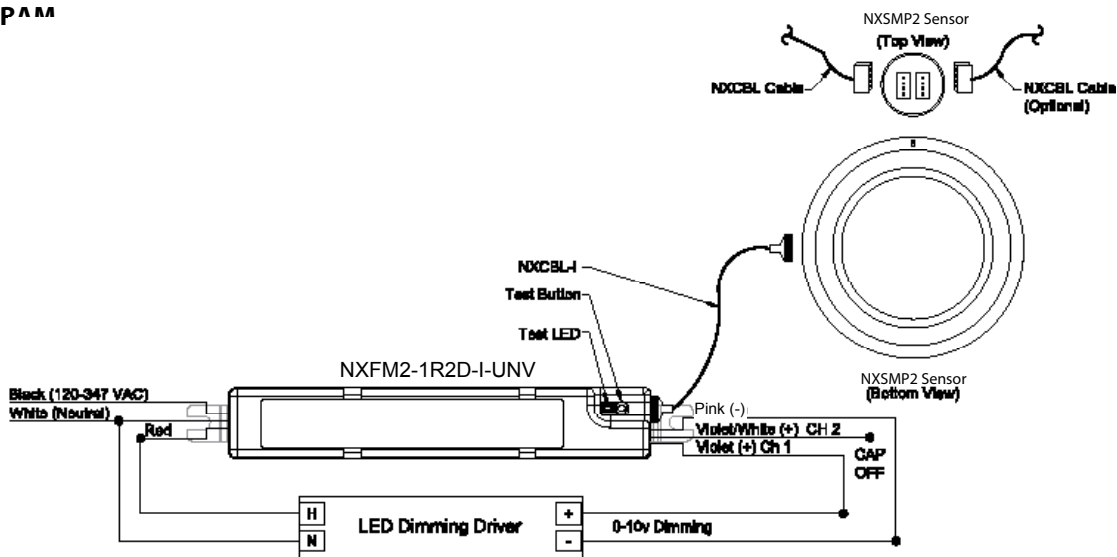
6. Choose a mounting location on the housing or lens with a flat surface where the sensor face and sensor lens will be oriented in the downward position as close to level as possible. NOTE: The sensor should be clear from obstructions to ensure proper detection.
7. Once a position is selected a 1-2/5" to 1-1/2" round opening in the housing or lens needs to made in order for the sensor to slide into position. After the sensor is in position use the provided locking ring and gasket to secure the sensor in place. NOTE: Do not over tighten the locking ring and gasket. This can cause damage to either the fixture or gasket.
8. After the sensor is mounted locate the miniature 4-pin SmartPORT positioned on the back of the sensor. Using a NXCBL-I or NXCBL-O insert the connector into the back of the sensor.
9. Once the cable has been connected to the sensor connect the opposite end of the NXCBL to additional NX Devices mounted inside the luminaire.
10. Once all connections are made take one of the provided MAC Address labels and affix it to the outside of the luminaire in a visible location. This will be used by the Field Engineer to program and calibrate the sensor during system startup. NOTE: Provide the additional labels in packaging for use in field on layouts, drawings or similar project documentation.
11. After install is complete perform end of line testing as provided by HCS for verification of performance.

**FOR SENSOR PROGRAMMING SEE QUICK STARTUP GUIDE FOR DISCOVERING AND CONFIGURING NX SMP SERIES SENSORS.**

### MOUNTING DETAIL



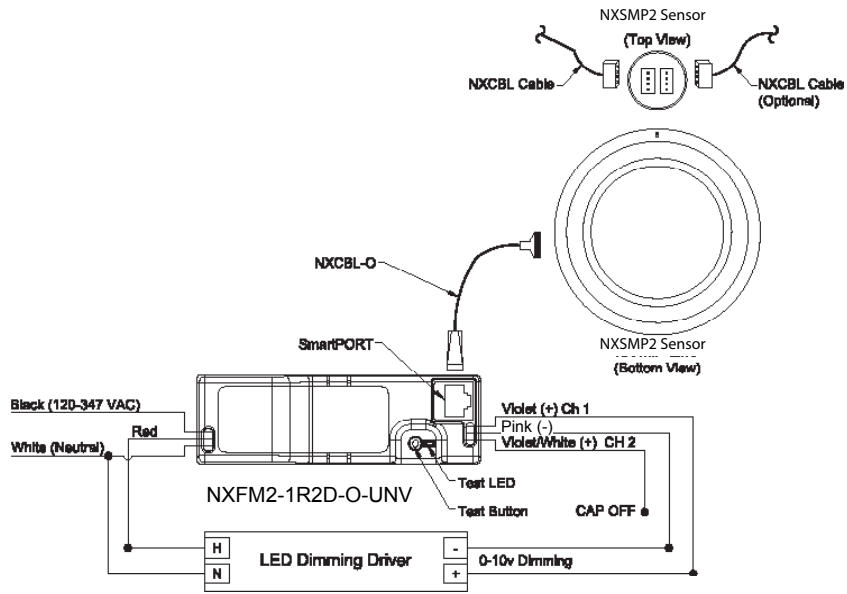
### WIRING DIAGRAM



### NX SMP2 Sensor with NX FM2-1R2D-I-UNV

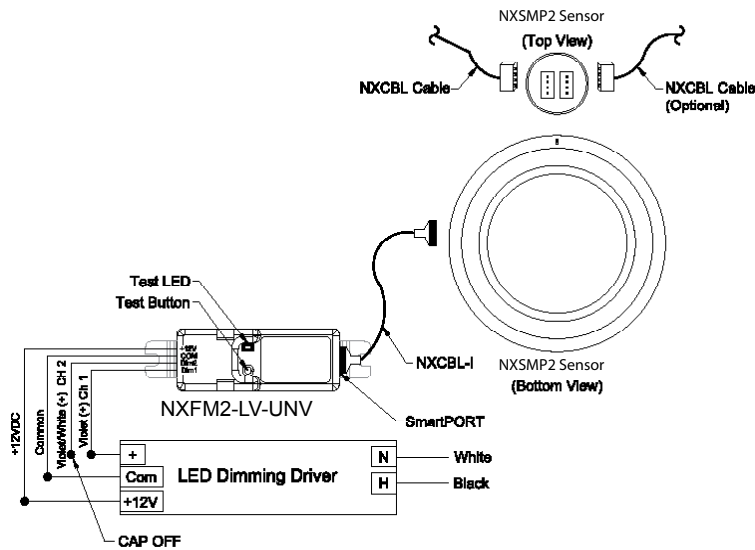
Pink wire replace previous gray wire. Unit with a gray instead of pink wire should be wired as the pink wire shown in the diagram.

**WIRING DIAGRAM**



**NXSMP2 Sensor with NXFM2-1R2D-O-UNV**

Pink wire replace previous gray wire. Unit with a gray instead of pink wire should be wired as the pink wire shown in the diagram.



**NXSMP2 Sensor with NXFM2-LV**

Pink wire replace previous gray wire. Unit with a gray instead of pink wire should be wired as the pink wire shown in the diagram.