

# 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, 12V - 24V, 55mA

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 outdoors. For In-fixture use only.

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

#### **REGULATORY INFORMATION**

- 1a. This device may not cause harmful inference.
- 1b. This device must accept any interference received, including interference that may cause undesired operation.
- 2. 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.
- 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.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique 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.
- 5. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance 20 cm between the radiator and your body.
- 6. This equipment complies with RSS-102 radio frequency radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body

Cet équipement est conforme aux limites d'exposition CNR-102 aux radiofréquences établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20 cm de distance entre la source de rayonnement et votre corps.

SAVE THESE INSTRUCTIONS AND PROVIDE TO OWNER AFTER INSTALLATION IS COMPLETED

93147266 Rev. A



# **DESCRIPTION**

NXSMDT-OMNI Digital Smart Sensor is a combination Passive Infrared and Ultrasonic Occupancy Sensor with Closed Loop Daylight Harvesting specifically designed for ceiling mount applications. When used with corresponding NXRCFX2 Series Room Controller, the NXSMDT-OMNI Digital Sensor 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 NXSMDT-OMNI Digital Sensor also includes an Integral Bluetooth® for wireless networking and ladder-less programming from a mobile device. The NXSMDT-OMNI Digital Sensor 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: Rugged injection molded plastic, Polylac FR-ABS, (UL-94 5VA) flame class rating
- · Color: White, Black; Gray
- Weight: 5.0oz (141.7g)
- Dimensions: 4.0" (101.60mm) W x 1.5" (38.10mm) H

## MOUNTING

- · Mounting base provided
- Recommended mounting height: 8ft (2.44m) with a max mounting height of 12ft (3.66m)

#### **ELECTRICAL**

## Input:

- Input Voltage: 12-24VDC Class 2 supplied by NX Actuator
- Power Consumption: 55mA
- Wiring: NX PBU: 7

## OPERATING ENVIRONMENT

- Indoor, dry location installation only
- Operating temperature: 32° to 104°F (0° to 40°C)
- Relative humidity (non-condensing) 0% to 95%

#### **WIRELESS**

- 2.4GHz: IEEE 802.15.1
- Range: -100ft (30m) Note: actual range is dependent upon building construction and radio location
- Bluetooth® Version V5.2 (Range: Up to 50ft - Clear Line of Sight)

#### SENSORS

- Detection Technology: Passive Infrared and Ultrasonic
- 1:2.75 Coverage Pattern (mounting height: coverage radius)
- Coverage: 500 2,000 square feet (152.4 - 609.6 square meters)
- Max Mounting Height 12ft.
- LED Indicator (Red) indicates infrared motion
- LED Indicator (Green) indicates ultrasonic motion

## 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: YH9NXSMDT-OMNI
  - IC: 9044A-NXSMDTOMNI

#### WARRANTY

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

# **PASSWORD**

Default: HubbN3T!

# **NXSMDT-OMNI INSTALLATION**

# **NXSMDT-OMNI IS RATED FOR INDOOR AND OUTDOOR USE**

NOTE: The NXSMDT-OMNI 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 and minimize interference with the wireless radio.
  - For hard ceilings: Mount to a junction box.
  - For false ceilings: Attach the cover plate by either using machine screws and punching a small hole through the ceiling tile for the NXCBL-P OR using the threaded mounting post then running the NXCBL-P through the center of the post.

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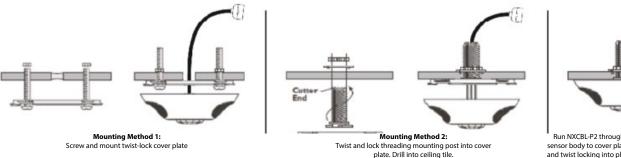


## INSTALLATION FOR CEILING MOUNT DEPLOYMENT

- 2. Attach the sensor to the mounting plate by aligning the keys in the mounting plate with those in the sensor housing. Rotate the sensor housing until proper orientation is achieved.
- 3. Plug the CAT5 cable into any available SmartPORT™ on the NX™ Room Controller. Verify solid snap-in connection.
- 4.Route the CAT5 cable from the Room Controller to the Occupancy Sensor. NOTE: Low voltage wiring must be isolated from line voltage wiring. Consult National and Local Electrical Codes for conduit requirements
- 5. Plug the CAT5 cable into the NXCBL-P connected to the Sensor. Verify solid snap-in connection. NOTE: If using multiple NXSMDT-OMNI sensors in a daisy chain configuration NXCBL-P2 must be used to provide in and out connection.
- 6.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.

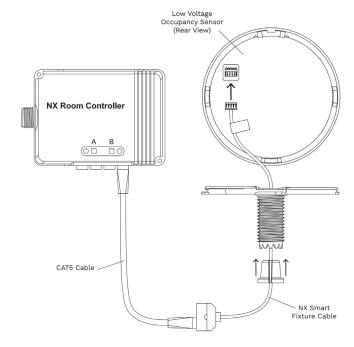
FOR SENSOR PROGRAMMING SEE QUICK STARTUP GUIDE FOR DISCOVERING AND CONFIGURING NXSMP2 SERIES SENSORS.

#### **MOUNTING DETAIL**



#### Run NXCBL-P2 through ceiling tile. Attach sensor body to cover plate by aligning arrows and twist locking into place. Connect cable to the mini SmartPort on sensor

# **WIRING DIAGRAM**

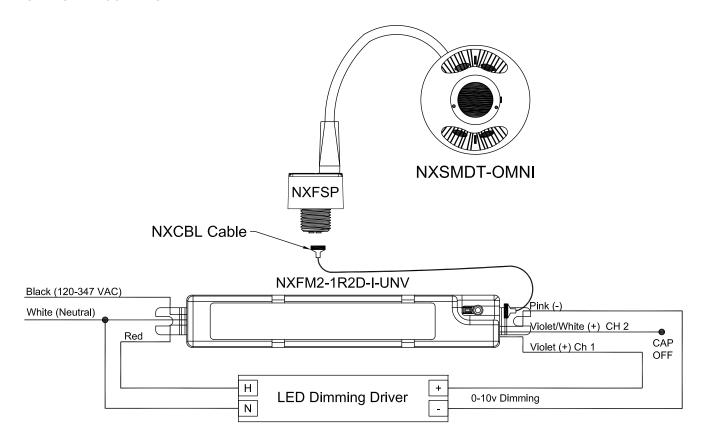


**NXSDMT-OMNI with NXRCFX2 Room Controller** 





# **WIRING DIAGRAM CONTINUED**



**NXSMDT-OMNI with NXFM2-I Fixture Module**