



nBRG

BRIDGE



**SPECIFICATIONS**

**FEATURES**

- Communicates w/ nLight Network
- Remotely Configurable/Upgradeable
- Push-Button Programmable
- Green LED Indicators for each Port
- Supports up to 128 Devices per Port\*
- \*with adequate power and Gateway capacity

**PHYSICAL SPECS**

- SIZE 4.90" H x 4.90" W x 1.05" D (12.45cm x 12.54cm x 2.67cm)
- WEIGHT 7 oz
- MOUNTING 4" x 4" Square Box
- COLOR White
- NETWORK CONNECTION 4/8 RJ-45 Ports

**ELECTRICAL SPECS**

- INPUT VOLTAGE 12-24 VAC/VDC
- INPUT CURRENT NON-WIRELESS 60 mA WIRELESS 90 mA
- OUTPUT CURRENT / PORT 40 mA
- WIRES None
- RECOMMENDED POWER SUPPLY PS-150 via Terminal Connections

**ENVIRONMENTAL SPECS**

- OPERATING TEMP 14° to 160° F (-10° to 71° C)
- STORAGE TEMP -14° to 160° F (-26° to 71° C)
- RELATIVE HUMIDITY 20 to 90% non-condensing

**OTHER**

- UL and CUL Listed
- Plenum Rated
- 5 Year Warranty
- Made in the U.S.A.

**NOTE (-RF VERSION ONLY)**

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

The nLight Bridge increases the number of lighting control zones in an nLight system. This ability stems from the fact that each Bridge has up to 8 RJ-45 ports into which zones of daisy-chained nLight-enabled devices can connect. The Bridge also is an integral component of the communication backbone in an nLight network. Fundamentally, Bridges act as hubs by aggregating traffic from the connected downstream zones and placing it onto the backbone. They also act as routers by forwarding information from the backbone out to the applicable downstream zones.

The Bridge's actual backbone link is formed by connecting to another Bridge or a Gateway via CAT-5 cabling through one of its RJ-45 ports. Alternatively, with the Bridge's RF option, this link can be made wirelessly using the ZigBee® mesh networking protocol.

Finally, Bridges can combine system power from zones that are net contributors of power (i.e. those with downstream power packs and power supplies) and distribute it to zones that are net consumers of power (i.e. those with only sensors). Maximum power output per port is 40mA.

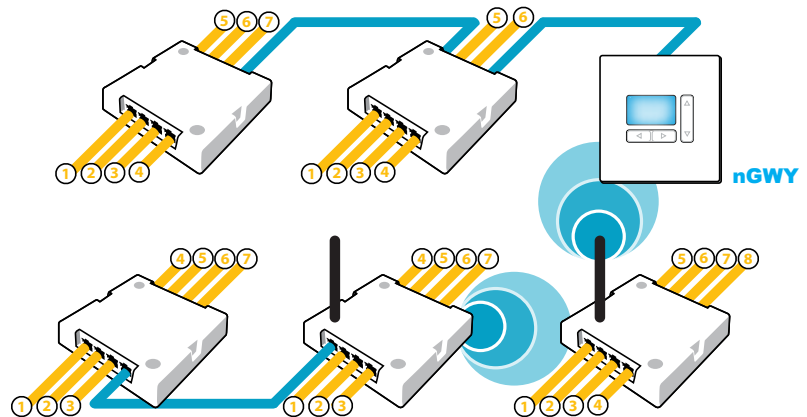
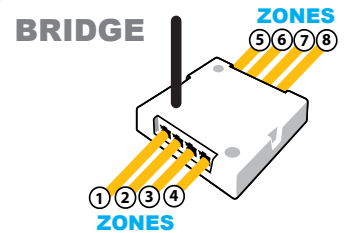
**OPTIONS**

**WIRELESS (-RF)**

- Designed for Zigbee®
- Transmits at 2.4 GHz
- Creates Sensor Switch wireless network
- Push button commissioning
- FCC Certified

**LOW TEMP/HIGH HUMIDITY (-LT)**

- Sensor is corrosion resistant to moisture
- Operates down to -40° F/C



**NETWORK CONFIGURATION**

An nLight network backbone consists of one or more Bridges and a Gateway communicating over either a CAT-5 wired or a ZigBee® wireless connection. If a wired connection is required, one of the Bridge's RJ-45 ports is used. The above diagram illustrates several common Bridge configurations.

**ORDERING INFO**

**nBRG-[# OF PORTS]-[WIRELESS]-[TEMP/HUMIDITY]**

OPTIONS

# OF PORTS

WIRELESS

TEMP/HUMIDITY

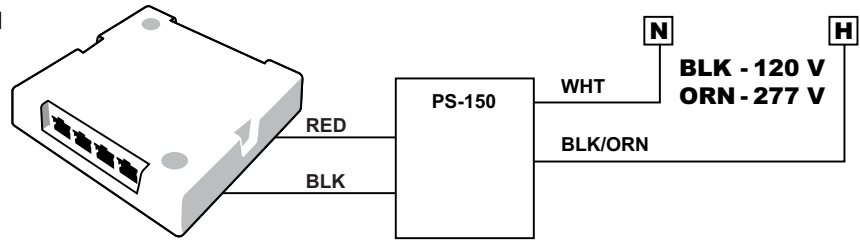
- 4 = 4 Ports
- 8 = 8 Ports

- Blank = Non-Wireless
- RF = Wireless

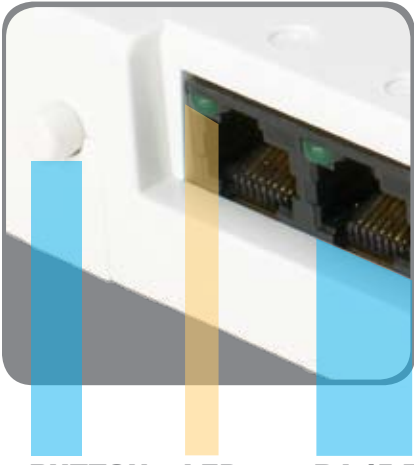
- Blank = Standard
- LT = Low Temp

## WIRING (DO NOT WIRE HOT)

The recommended method of powering a Bridge is via a PS-150 power supply wired to the unit's power terminal connectors.



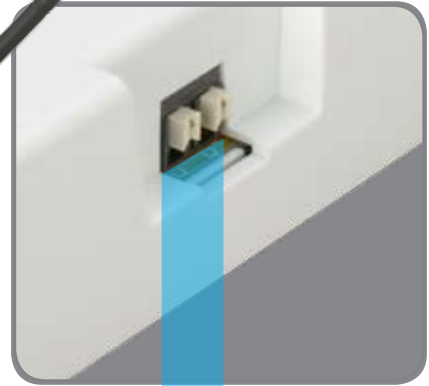
## DETAILED DIAGRAM



**BUTTON LED RJ-45 PORT**



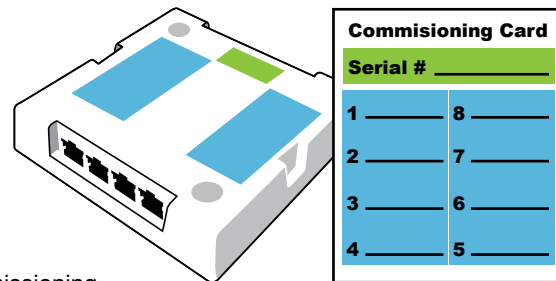
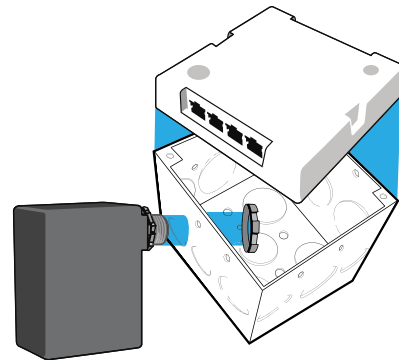
**SCREW HOLES**



**POWER TERMINAL CONNECTION**

## INSTALLATION

- 1 Mount power supply to a 4" x 4" square junction box (through a 1/2" knockout)
- 2 Connect the supply's class 1 line voltage wires
- 3 Mount Bridge unit to top of same junction box
- 4 Connect the power supply's class 2 low voltage wires to the Bridge's terminal connectors. Unit's LEDs will flash indicating power up
- 5 Attach CAT-5 cables from lighting zones to the appropriate Bridge RJ-45 ports according to system design
- 6 Fill out Bridge's port identification sticker(s) and commissioning card



Commissioning Card	
Serial # _____	
1 _____	8 _____
2 _____	7 _____
3 _____	6 _____
4 _____	5 _____

## PROGRAMMING

Refer to included instructions on LED indications and RF commissioning.

**sensorswitch**

**WARRANTY:** Sensor Switch, Inc. warrants these products to be free of defects in manufacture and workmanship for a period of 60 months. Sensor Switch, Inc., upon prompt notice of such defect, will, at its option, provide a Returned Material Authorization number and repair or replace returned product.

**LIMITATIONS AND EXCLUSIONS:** This Warranty is in full lieu of all other representation and expressed and implied warranties (including the implied warranties of merchantability and fitness for use) and under no circumstances shall Sensor Switch, Inc. be liable for any incidental or consequential property damages or losses.

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