



nBRG 8

8-PORT nLIGHT BRIDGE

INSTALLATION INSTRUCTIONS



SPECIFICATIONS (rCMSB)

Electrical	Input Ratings	15-24VDC, 60mA, Class 2 (via included PS-150 or PS-150-347 power supply with KIT option) 15-24VDC, 40mA, Class 2 per port (e.g. from a connected nPP16)
	Low Voltage Output Ratings	15VDC, 40mA per RJ-45 Port (90mA total with connected PS-150 or PS-150-347 power supply)
	Standards/ Ratings	Energy Management Equipment, UL916 (E167435)
Mechanical	Dimensions	4.90H" x 4.90W" x 1.05D" (124mm x 124mm x 27mm)
	Mounting	Directly to 4" x 4" Square Box Surface Mount
	Color	White
	Connection Type	RJ-45 nLight Network Ports (8) Low-Voltage Terminals
Environmental	Warrantied Operating Temperature	Standard: 32°F to 140°F (0°C to 60°C) LT option: -4°F to 140°F (-20°C to 60°C)
	Relative Humidity	Up to 90%, Non-Condensing
	Standards/ Ratings	RoHS, Plenum UL2043
General	Standards/ Ratings	System Component to aid in compliance with Title 24, ASHRAE 90.1, IECC
	Security	Complies with California Civil Code Title 1.81.26, Security of Connected Devices, approved under Senate Bill No.327 (2018)

IMPORTANT SAFEGUARDS
WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED INCLUDING THE FOLLOWING:

- **DO NOT USE OUTDOORS.**
- DO NOT MOUNT NEAR GAS OR ELECTRIC HEATERS.
- EQUIPMENT SHOULD BE MOUNTED IN LOCATIONS AND AT HEIGHTS WHERE IT WILL NOT READILY BE SUBJECTED TO TAMPERING BY UNAUTHORIZED PERSONNEL.
- THE USE OF ACCESSORY EQUIPMENT NOT RECOMMENDED BY THE MANUFACTURER MAY CAUSE AN UNSAFE CONDITION.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS!
SAVE THESE INSTRUCTIONS AND DELIVER TO OWNER AFTER INSTALLATION



Expanding the boundaries of lighting™



WARRANTY

5-year limited warranty.

Full warranty terms located at: www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

NOTE: Specifications subject to change without notice.

Actual performance may differ as a result of end-user environment and application.

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards please read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance upon this equipment, follow these general precautions.
- Installation and service should be performed by a qualified licensed electrician.
- Maintenance should be performed by qualified person(s) familiar with the products' construction & operation & any hazards involved. Regular maintenance programs recommended.
- To be installed to a circuit with overvoltage control to Overvoltage category Cat.III or less, minimum suppression rating 6.0 kV for a 600 V ac rms system voltage
- **DO NOT INSTALL DAMAGED PRODUCT!** This product has been properly packed so that no parts should have been damaged during transit. Inspect to confirm. Any part damaged or broken during or after assembly should be replaced.

CAUTION - RISK OF PRODUCT DAMAGE

- ✓ Electrostatic Discharge (ESD): ESD can damage product(s). Personal grounding equipment should be worn during all installation or servicing of the unit.
- ✓ Do not touch individual electrical components, as this can cause ESD and affect product performance.
- ✓ Do not stretch or use cable sets that are too short or are of insufficient length.
- ✓ Do not tamper with contacts.
- ✓ Do not modify the product.
- ✓ Do not change or alter internal wiring or installation circuitry.
- ✓ Do not use product for anything other than its intended use.

WARNING - RISK OF ELECTRIC SHOCK

- ✓ Disconnect or turn off power before installation or servicing.
- ✓ Verify that supply voltage is correct by comparing it with the product information.
- ✓ Make all electrical and grounded connections in accordance with the National Electrical Code (NEC) and any applicable local code requirements.
- ✓ All wiring connections should be capped with UL approved recognized wire connectors.
- ✓ All unused connector openings must be capped.

WARNING - RISK OF BURN OR FIRE

- ✓ Do not exceed maximum wattage, ratings, or published operation conditions of product.
- ✓ Do not overload.
- ✓ Follow all manufacturer's warnings, recommendations and restrictions to ensure proper operation of product.

CAUTION - RISK OF INJURY

- ✓ Wear gloves and safety glasses at all times when installing, servicing or performing maintenance.



OVERVIEW

The nLight Bridge increases the number of lighting control zones in an nLight system. This ability stems from the fact that each Bridge has 8 RJ-45 ports into which zones of daisy-chained nLight 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.

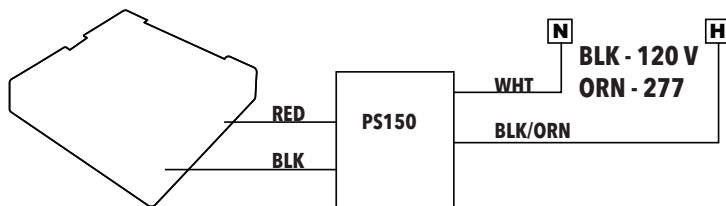
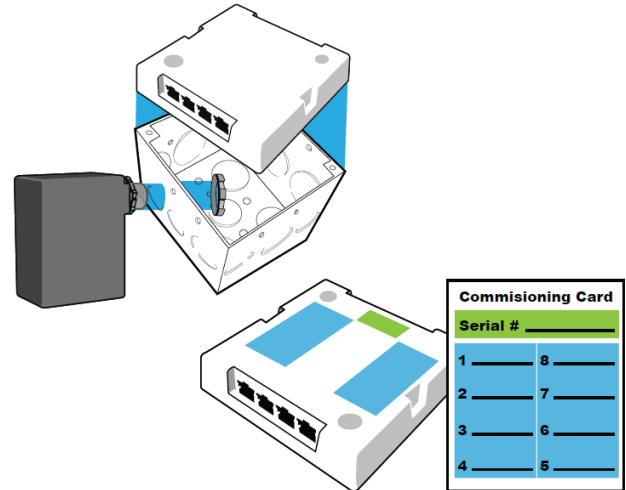
INSTALLATION INSTRUCTIONS

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

NOTE

Polarity of low voltage wires is not important for connection. Wire positions can be exchanged without damaging the Bridge.

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



GENERAL INFORMATION

Each RJ-45 port on a Bridge has an associated LED that provides status information and programming feedback. Additionally, the Bridge has a push-button that is used to interface with the unit. This instruction card provides information on how to interpret the LED blink patterns.

POWER UP

When power is first applied to a Bridge (or when the unit is reset), the LEDs will flash all ON together, then all OFF together. This will repeat several times.

INITIAL DEVICE DISCOVERY

When a new nLight device or a string of new nLight devices is plugged into a port, the corresponding LED will continuously flash quickly to indicate that the port is in discovery mode. Discovery should be completed within a few seconds. To force rediscovery, reset the Bridge by pressing and holding the button for 6 seconds.

NORMAL LED OPERATION

- After discovery has finished, the port LEDs will operate in one of two modes: Activity Mode (default) or Device Count Mode.
- Pressing the button once toggles between the two modes.
- In Activity Mode, each port LED (in alternating sequence) will regularly blink one of the following states:

1 Blink = Port is polling connected zone of devices

2 Blinks = Port is wired to an upstream Transceiver/Bridge or the Gateway

4 Blinks = Port is wired to a Transceiver/Bridge further downstream from the Gateway

- In Device Count Mode, each port LED (in alternating sequence) will indicate the number of detected devices by blinking out a two digit number.

1st DIGIT (pause) 2nd DIGIT

- Rapid blinking indicates the number zero. If the count is greater than 99, three digits will be blinked in a similar manner.
- A port LED that does not blink, or blinks erratically, indicates a broken or miswired CAT-5 connection.