

## Model# NOVA XHM LED



**CAUTION: BEFORE PERFORMING ANY WORK, BE SURE ALL POWER IS OFF PRIOR TO INSTALLING LUMINAIRES. PLEASE READ AND FOLLOW ALL SAFETY INSTRUCTIONS!**

- To avoid 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 the fixture box and all fixture labels.
- Installation and maintenance of luminaires should be performed by a *qualified electrician* only, in accordance with all applicable electrical codes.
- **DO NOT INSTALL DAMAGED PRODUCT!** This luminaire has been properly packaged 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 via RMA.
- **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 luminaire label information. Luminaire must be connected to a wiring system with an equipment-grounding conductor.
- **WARNING RISK OF BURN:** Allow lamp/fixture to cool before handling. Do not touch enclosure or light source. Do not exceed maximum wattage marked on luminaire label. Do not operate in close proximity to persons, combustible materials or substances affected by heat or drying.
- **WARNING RISK OF PERSONAL INJURY:** Wear gloves and safety glasses at all times when installing or servicing the luminaire. Avoid direct eye exposure to the light source while it is on.
- These instructions may not address all details or variations in equipment or provide every possible contingency to meet in connection with installation, operation, or maintenance. For further information please contact Bright Light Systems, Inc. at <https://www.brightlightsystems.com>.

### Regulatory Compliance

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

### Introduction

Bright Light Systems Nova XHM (High Mast) LED luminaire is specifically designed for harsh operating environments found in ports, airports, highways and rail yards. It offers superior performance and coverage over large areas and comes with a variety of optical distributions. Consuming only 500 watts, the Nova XHM dramatically reduces energy costs by over 50% when compared to traditional 1000 watt HID lighting. Our high-brightness LED Modules are IP68 rated and come with a UV resistant, high-impact polycarbonate lens. Luminaire is UL 1598 safety listed to 45°C. The RCM marking of this product applies to AS/NZS CISPR15:2017 (EMC) "Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment". This product is designed to conform to AS/NZS 60598 "Luminaires, general requirements and tests". Suitable for operation in wet locations.

### Installation

#### Materials Required

**DESCRIPTION**

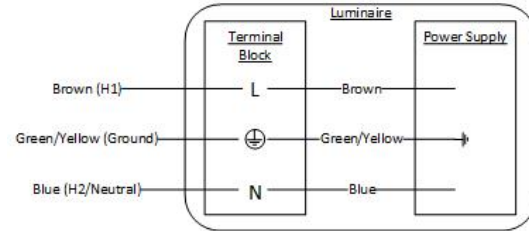
Phillips Screwdriver #3  
Flathead Screwdriver #3  
9/16" Wrench  
1/2" Wrench  
11/32" Torque Wrench  
3/8" Hex key

**USE**

Terminal block enclosure  
Flanged hex head chassis screws  
Trunnion hex head cap screws  
Slipfitter hex head cap screws  
Power supply hex nuts  
Chassis cap screws

**Luminaire Wiring**

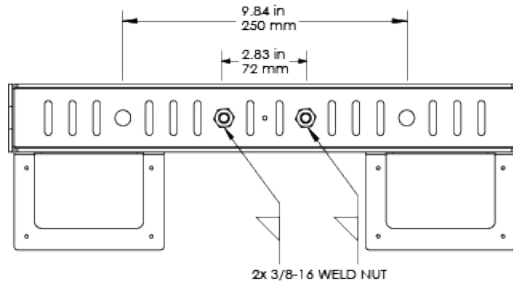
Brown + (H1)  
Blue - (H2/Neutral)  
Green/Yellow ⊥ (Earth/Ground)


**Mounting**

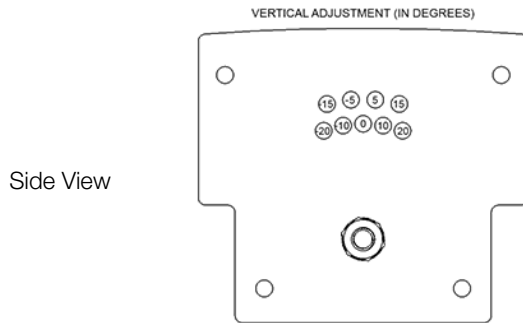
Trunnion mount comes standard with the NOVA LED luminaire. Use standard trunnion or optional slipfitter mount for mounting heights up to 60 meters or 200 feet. Luminaire offers preset adjustable angles of 0, 5, 10, 15, and 20 degrees above/below horizontal.

**Trunnion Mount**

The trunnion bracket assembly is used for mounting luminaire to a cross arm or truss. It contains two 3/8"-16 weld nuts (for slipfitter mount) and two 1/2" holes spread 10" apart for accommodating 1/2" bolt screws.

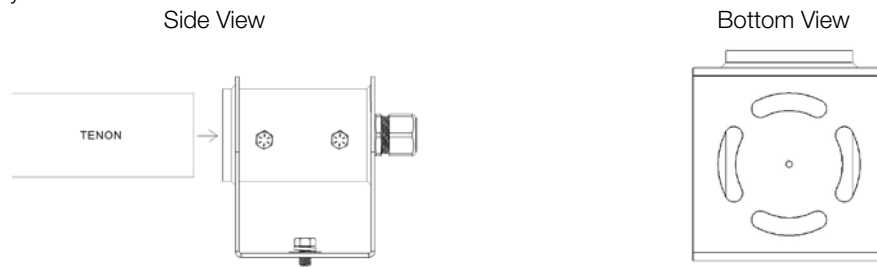
**Top View**

**To install:**

1. Verify the luminaire voltage listed on the product label is the same as the voltage to be supplied to the luminaire.
2. Fasten fixture with 1/2" bolts through holes/slots in trunnion bracket assembly to recommended torque of 40 foot lbs. Avoid mounting on lightweight cross members which may vibrate or flex excessively.
3. Using Phillips head screwdriver, loosen four (4) fastener screws on cover of terminal block enclosure. Terminal block enclosure is the polycarbonate enclosure with the product label affixed to the top. Retain enclosure cover.
4. Pull main power feed leads (by others) through loosened cord grip on terminal block enclosure.
5. Make all electrical connections per NEC or any applicable local codes.
6. Tighten and seal terminal block enclosure cover using Philips screwdriver. Recommended torque is 7 inch lbs.
7. Tighten cord grip on terminal block enclosure.
8. Adjust vertical angle accordingly using the clevis fastener pin and pre-defined slots on side of trunnion bracket assembly.



### Slipfitter Mount

The slipfitter adapter is used for mounting to a horizontal or vertical tenon. It accommodates a 2-3/8" (60mm) O.D. tenon and comes with four (4) stainless steel hex head cap screws. The fixture can be rotated around its axis 90, 180, or 270 degrees for optimal aiming flexibility.



#### To install:

1. Verify the luminaire voltage listed on the product label is the same as the voltage to be supplied to the luminaire.
2. Attach slipfitter adapter to trunnion bracket weld nuts using two (2) 9/16" hex head cap screws (supplied), two (2) 316 stainless steel split-lock washers (supplied) and two (2) 316 stainless steel flat washers (supplied).
3. Loosen four (4) hex head cap screws (supplied) and raise luminaire to support tenon (by others).
4. Slide adapter over support tenon (by others) and ensure the tenon pipe hits the slipfitter stop.
5. Using Phillips head screwdriver, loosen four (4) fastener screws on cover of terminal block enclosure. Terminal block enclosure is the polycarbonate enclosure with the product label affixed to the top. Retain enclosure cover.
6. Pull main power feed leads (by others) through slipfitter and then through loosened cord grip on terminal block enclosure.
7. Make all electrical connections per NEC or any applicable local codes.
8. Tighten and seal terminal block enclosure cover using Phillips screwdriver. Recommended torque is 7 inch lbs.
9. Tighten cord grip on terminal block enclosure.
10. Firmly tighten four (4) 1/2" hex head cap screws on slipfitter and make sure luminaire is level.
11. Adjust rotation and horizontal angle and tighten 9/16" hex head cap screws attached to trunnion bracket. Proper optical direction should be noted on the luminaire.
12. Adjust vertical angle accordingly using the clevis fastener and pre-defined degree slots on side of trunnion bracket.

### Wireless

Units configured for a wireless controller will include an ANSI C136.41 Dimming Receptacle and external BLS LC211 controller. If no wireless controller included attach shorting cap (supplied) to NEMA twist-lock receptacle.

### Maintenance

#### LED Module Maintenance

The product is designed with the supplied LED Module(s) tray and it is strongly recommended that any LED module(s) change (if any) be made in accordance with the type and brand supplied. BLS is not responsible for the product performance if alternative LED Module(s) used.

1. Using Phillips head screwdriver, loosen four (4) pan head screws securing top module cover plate from fixture.
2. Remove top cover plate from fixture.



3. Unscrew six (6) pan head screws on both front and back LED module tray reinforcement brackets.
4. Detach quick disconnect from power supply cord to LED Module(s).
5. Remove LED Module(s) tray from fixture.
6. Slide new LED Module(s) tray into place.
7. Attach reinforcement brackets and tighten screws.
8. Attach top cover plate and tighten screws.

**Driver/Power Supply Maintenance**

1. Perform steps 1 through 4 above. Inside control wire block enclosure, disconnect power supply feeds from terminal block. Also, disconnect any low-voltage control wires if unit is equipped for wireless controller.
2. Unscrew four (4) chassis cap screws securing power supply brackets and retain screws.
3. Unscrew four (4) hex head nuts and remove Power Supply from back of tray
4. Attach new power supply and tighten four (4) hex head nuts.
5. Run power supply cord through enclosure cord grip.
6. Reattach power supply wires to terminal block.
7. Repeat step 8 above.

**Cleaning Maintenance**

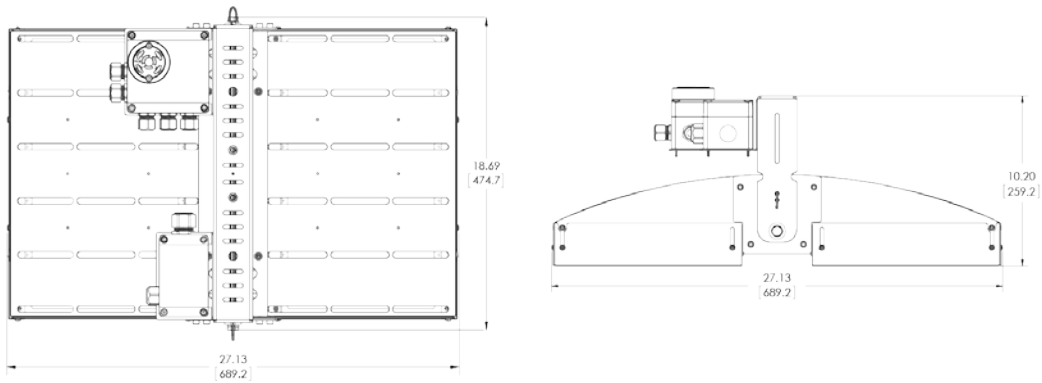
The luminaire features a self-cleaning enclosure, however, on occasion the lenses on the modules may get dirty and require cleaning to ensure continued photometric performance. Clean the module lenses with a damp, non-abrasive, lint-free cloth. If not sufficient, use mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur. Inspect the heat sinks on the modules to ensure that they are free of any obstructions or contamination. Clean with a non-abrasive cloth if necessary. For environments with lots of particulates in the air, e.g. ports and terminals, BLS recommends cleaning the module lenses at least once every 2 years.

**Specifications**

Power Draw	<500 W at 277V / 480V input
Current @ 480V	1.1 A
Current @ 277	1.8 A
Power Factor	0.95 @ 480V (min.)
PSU Leakage Current	2.0 mA at 480V
Inrush Product	3.87 A <sup>2</sup> s
CCT	3000K, 4000K, 5000K, 5700K
CRI	>74
L83	100,000 hrs
Lumen Output	80,000 lumens
Power Supply	100,000 hrs. @ 60C case temp
Measurements	26.9”L x 17.4”W x 9.8”H
Weight	39.6 lbs (18 kg)
Approvals	UL1598 Wet Location, DLC v4.1, RCM, CE

\*Specifications subject to change without notice.

## Dimensions



## Warranty

### To Request a Return or Exchange

1. Send a request for a Return Material Authorization number (RMA) via email to [support@brightlightsystems.com](mailto:support@brightlightsystems.com), or by phone at US +1 (404) 490-4132, Customer Service Dept. Returns or exchanges require BLS' prior written approval and afterwards an RMA will be issued.
2. Print the Return Label we will provide to you when we issue your RMA.
3. Prepare and ship your product:
  - a. Replace all items in original packaging (if available).
  - b. Remove, cover, or mark over any original shipping labels.
  - c. Write in bold letters on the outside of the package: "RMA <RMA number you were issued>"
  - d. Return the package using the provided Return Label at an authorized shipper.

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