

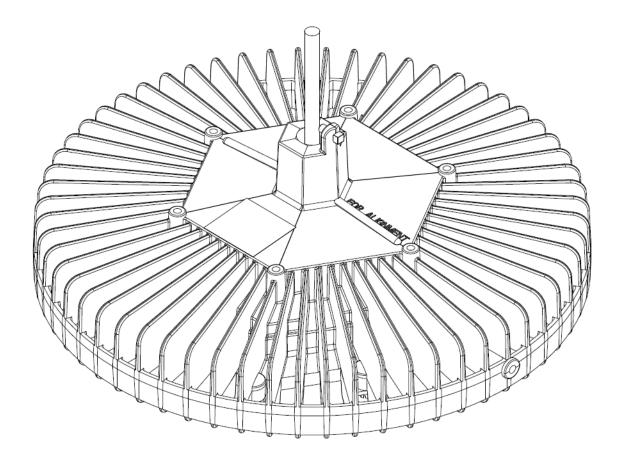
# INSTALLATION AND MAINTENANCE MANUAL DuroSite® / Vigilant® SERIES LED HIGH BAY Document No: 9100-127-1660-99 Rev C

August 2015

<b>IMPORTANT</b> : Please read carefully before installation and retain for future
reference

MODEL #'s

HB2x4x-PW HB2xMx-PW HB7x4x-PW HB7xMx-PW HBGx4x-PW HBGxMx-PW HExxx4xxxPx





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## 1: Introduction

This High Bay light is designed for illumination of industrial locations. It uses the latest in solid state lighting technology for long life, low maintenance, and high efficiency.

The unique optical design focuses light downward to where it is needed, giving improved efficiency over a conventional HID luminaire.

An internal power-factor-corrected switch-mode supply allows it to be used from any rated supply voltage (see product label) without a variation in light output.

Models HB2xxx-PW, HB7xxx-PW, HBGxxx-PW, and HExxx4xxxPx are suitable for use in the following locations:

- Wet Locations as per UL 1598
- Outdoor Type (Salt Water) as per UL 1598A

These models are also suitable for applications where high pressure wash-down is used to clean and sanitize equipment.

Note: Save these instructions for future reference.

## "THE ELECTRICAL CHARACTERISTICS OF THE LIGHT FIXTURE ARE THOSE INDICATED ON THE PRODUCT LABEL"

## 2: Installation

#### Marning:

To avoid the risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician only, in accordance with all applicable electrical codes.

### \land <u>Warning:</u>

To avoid electric shock:

- Be certain electrical power is OFF before and during installation and maintenance.
- Luminaire must be connected to a wiring system with an equipment-grounding conductor.

#### Marning:

- Make sure the supply voltage is the same as the rated luminaire voltage.
- Do not operate in ambient temperatures above those indicated on the luminaire nameplate.

Recommended mounting height: 25-40 feet

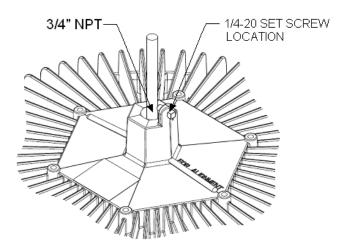
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#### Pendent Mount Installation Steps:

- For maximum long term reliability and light output, the light must be installed in free air.
  - The High Bay fixture design incorporates an over-temperature control circuit that reduces input power should internal temperatures reach a maximum level. As a result, light output may be reduced.
- The High Bay fixture is threaded for 3/4" NPT in order to be assembled to conduit.
  - Calculate and measure required conduit length.
  - Feed the power cable through the conduit and into the junction box.
  - Attach the fixture to the conduit (using Teflon tape or pipe sealant).
  - Insert 1/4-20 anti-rotation screw in order to secure the fixture to the conduit.
  - Note: For model numbers HB6xxx, HB7xxx, and HExExxxxxxx only, alignment bar on top of fixture corresponds to major axis of the "narrow oval" light pattern.
- Connect power cable conductors as follows:
  - Green wire connects to Safety Ground.
    - White wire connects to Neutral Black wire connects to Live
    - When using 208V (two 120V phases) connect the black wire to one phase and the white wire to the other phase.
      - Since the light fixture does not have an internal fuse on the white wire (as it is normally the neutral), a fuse may be connected in series with the white wire if required.
- Restore power and verify operation.



#### Interfacing to an Occupancy Sensor:

The Dialight High Bay fixture is ideally suited for control by an external occupancy sensor (not provided by Dialight) in order to maximize energy savings based on its instant-on behavior and low power consumption. Instructions for connecting the High Bay fixture to an occupancy sensor are listed below.

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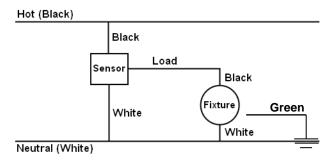


Document No: 9100-127-1660-99 Rev C WARNING: TO BE INSTALLED AND/OR USED IN ACCORDANCE WITH APPROPRIATE ELECTRICAL CODES AND REGULATIONS.

**WARNING**: CONTROLLING A LOAD IN EXCESS OF THE SPECIFIED RATINGS OF THE OCCUPANCY SENSOR COULD DAMAGE THE UNIT AND POSE RISK OF FIRE, ELECTRIC SHOCK, PERSONAL INJURY, OR DEATH. CHECK LOAD RATINGS TO DETERMINE THE UNIT'S SUITABILITY FOR YOUR APPLICATION.

**NOTE**: SEE OCCUPANCY SENSOR INSTALLATION INSTRUCTIONS FOR ADDITIONAL INFORMATION.

- 1) WARNING: TO AVOID FIRE, SHOCK OR DEATH, TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT THE POWER IS OFF BEFORE WIRING.
- 2) Install occupancy sensor as per sensor instructions to provide desired coverage of area.
- 3) Connect luminaire wires per wiring diagram as follows: Black lead to load of the occupancy sensor, White lead to the line (neutral), Green lead to earth ground. Multiple fixtures may be connected to a sensor, as long as the rated load of the sensor is not exceeded.
- 4) Restore power at circuit breaker or fuse.
- 5) Verify operation of system. If the light will not turn on, check the operation of the fixture and sensor individually, and check that the wiring is done correctly. If the light will not turn off or turns off and on quickly, see the sensor's installation instructions for further guidance.



## 3: Maintenance

- To avoid personal injury, disconnect power to the light and allow the unit to cool down before performing maintenance.
- Marning: No user serviceable parts inside of fixture. Risk of electric shock. Removal of the lens will void the warranty.
- Perform visual, mechanical and electrical inspections on a regular basis. We recommend routine checks to be made on a yearly basis. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in NFPA 70B: Recommended Practice for Electrical Equipment.

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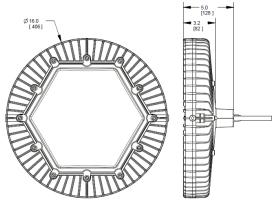


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- 2) The lens should be cleaned periodically as needed to ensure continued photometric performance. Clean the lens with a damp, non-abrasive, lint-free cloth. If not sufficient, use mild soap or a liquid cleaner. Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.
- 3) Inspect the cooling fins on the luminaire to ensure that they are free of any obstructions or contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.

### 4. Specifications:

Nominal AC Supply Voltage	100-277VAC, 50/60Hz single phase HExxxxPxxxx: 110-277VAC, 50/60 Hz single phase
Power consumption	HBxx4x-PW: 146W nominal HBxxMx-PW: 172W nominal HExxx4Dxxxx: 88W nominal HExxx4Gxxxx: 112W nominal HExxx4Kxxxx: 144W nominal HExxx4Pxxxx: 212W nominal
Operating temperature range	-40°C to +65°C [-40°F to +149°F]
Power factor	>0.9
ATHD	<20%
Dimensions (Height x Diameter)	5" x 16" [12.7cm x 40.6cm]
Weight	17 lbs [7.7 kg] HExxxxxxxx: 18 lbs [8.2kg]



#### DIMENSIONS ARE FOR REFERENCE ONLY.

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof is not guaranteed. In accordance with Dialight Corporation "Terms and Conditions of Sale", and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.

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