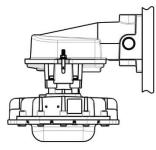


# DuroSite® & SafeSite® Area Light with Adapters

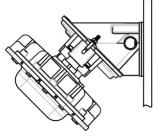
Important Information:

These instructions contain safety information, read and follow them carefully. Dialight will not accept any responsibility for injury, damage or loss which may occur due to incorrect installation, operation or maintenance.

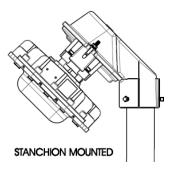
# **Operating Instructions**

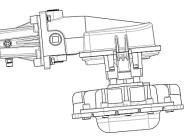


**0 DEGREE WALL MOUNTED** 



45 DEGREE WALL MOUNTED





CONVEYOR AREA LIGHT

Languages

English

Note: Save these instructions for future use

# Dialiaht

# DuroSite® & SafeSite® Area Light with Adapters

#### Safety Instruction:

- 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.
- Be certain electrical power is OFF ٠ before and during installation and maintenance.
- Luminaire must be connected to a wiring system with an equipmentgrounding conductor.
- Make sure the supply voltage is within the luminaries' voltage rating.
- Ensure the marked T Rating is less than the ignition temperature of the Hazardous Atmosphere.
- Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
- Do not operate if the lens is cracked or damaged. All fasteners should be properly seated.
- Do not let power cord touch hot surfaces
- Do not mount near gas or electric heaters
- Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
- The use of accessory equipment by not the recommend manufacture may cause an unsafe condition
- DO NOT use this equipment for • other than intended use
- The technical data indicated on the Luminaire are to be observed.
- Changes to the design and . modifications of the Luminaire are not permitted
- Only genuine Dialight replacement • parts are to be used when unforeseen maintenance required
- Must install using NEMA 4x rated . components to maintain rating
- Do not remove or tamper with cable gland. The gland has been supplied and installed to the luminaire accordance with the manufacturer's instructions.
- Substitution of components may impair suitability for certification of the luminaire.

#### Introduction

This Area Light series luminaire is designed for illumination of hazardous 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.

#### 100-277 VAC

An internal power-factor-corrected supply allows it to be used from any nominal 100V-277V, 60/50Hz single phase AC supply without any variation in light output.

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 in-line with the white wire (normally the Neutral) a fuse may be connected in series with it if reauired.

#### 347-480 VAC

An internal power-factor-corrected supply allows it to be used from any nominal 347V-480V, 60/50Hz AC supply without any variation in light output.

#### 24-48 VDC

An internal power supply allows it to be used from any nominal 24-48VDC supply without any variation in light output.

#### Installation

These instructions contain important safety information, read and follow them carefully. Dialight will not accept any responsibility for injury, damage or loss which may occur due to incorrect installation, operation or maintenance.

Ensure that the mains voltage supply is disconnected before connecting the luminaire. Install the equipment in accordance with the manufacturer's instructions as well as any other applicable electric codes.

Always transport and store the equipment in its original packaging and keep in a dry location. When unpacking check for any cracks or damage in the housing, glass, and glass frame. If in doubt, do not install.

For supply connections use wire rated for at least: 90°C for 100-277V AC units 110°C for 347-480V AC units 90°C for 24-48V DC units

The Area Light series luminaire are factory supplied with 10feet (3meters) of cable. If longer lengths of cables are required a minimum of 18awg (1.5mm diameter) is required.

It is recommended that to ensure moisture does not flow through the cable a loop in the cord should be implemented where possible during installation. If this is not practical for the install than necessary precautions should be taken to prevent moisture entering the conduit thus entering the fixture.

Recommended mounting height: 8 feet to 24 feet (2.4 m to 7.3 m)

The cable glands used with this fixture must be certified to the IP requirements. The cable used must be suitable for the site application and/or the site requirements.

When assembling the cable entries for the mains connection, always observe the manufacturer's specifications for the glands used. Unused cable entries must be closed and sealed by a certified blankina plua.

NOTE: Improper installation and operation of this luminaire may invalidate the warranty

#### **Further Information**

All other information should be obtained from the primary instruction manual provided with your model. This instruction manual details models sold mounting options built in and covers the procedures to install such units.

NOTE: All wiring and technical information will be contained in the primary instruction manual provided with this manual.

#### **Technical Data**

Temperature -40°F to +149°F [-40°C to +65°C]

# **Housing Material**

Powder Coated Aluminum

#### Finish

**Epoxy Powder Coat** Gray, RAL 7040 ACP Black, RAL 9017 Orange, RAL 2001 White, RAL 9010 Yellow, RAL 1018 Bronze, RAL 7022

#### Dimensions

Conveyor

0° Wall Mount	See Figure 19
45° Wall Mount	See Figure 20
45° Stanchion	See Figure 21
Conveyor	See Figure 22

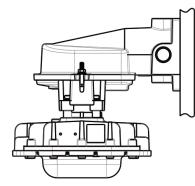
Weight	[lbs.]	<b>[kg]</b>
0° Wall Mount	15.0	6.8
45° Wall Mount	14.2	6.4
45° Stanchion	14.8	6.7
Conveyor	16.5	7.5
Conveyor	16.5	7.5

Wall Mounts	<sup>3</sup> /4"-14 NPT ports (five total)
45° Stanchion	2"-11.5 NPT port (1.5"-11.5 NPT with reducer)

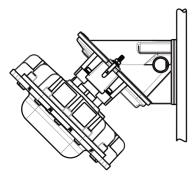
DN 25 [33.7mm]OD 0.114in [2.9mm] min. wall thickness



#### Wall Mount Installation



**0 DEGREE WALL MOUNTED** 



**45 DEGREE WALL MOUNTED** 

**NOTE:** Wall Mount Fixtures are to be mounted to vertical surfaces structurally adequate to support the fixture in a safe manner. All 5 conduit connection ports are %-14 NPT. The 0° Wall Mount shown in all figures below. All steps also apply to the 45° Wall Mount.

Assure electrical power is OFF.

Mark and drill 4 holes of the appropriate size and depth to accept 5/16 (or M8) diameter threaded fasteners. (not supplied) Spacing per Figure 1.

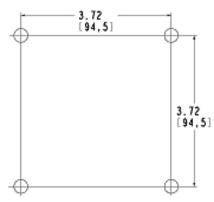
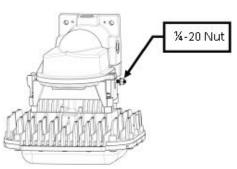


Figure 1 - Required Wall Hole Pattern

# DuroSite® & SafeSite® Area Light with Adapters

Separate the Wall Mount from the fixture assembly by loosening the single ¼-20 nut and swing the bolt free (do not remove the nut.) Rotate the Wall mount until it freely separates from the fixture. See Figure 2 and Figure 3.





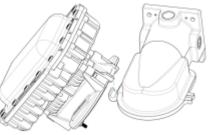


Figure 3 - Separate Wall Mount from Fixture

Firmly secure the Wall Mount to the wall surface using four 5/16 or M8 diameter fasteners with the appropriate anchoring system. Fastener hardware not provided. See Figure 4

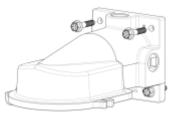


Figure 4 - Anchor Wall Mount to Wall

Attach %-14 NPT threaded conduit into the required ports and bring the electrical wiring into the Wall Mount. All conduit connections and unused %-14 NPT ports must be environmentally sealed. Un-used ports are closed using the NPT threaded plugs provided or equivalent.

**NOTE:** The Wall Mount is supplied with 5 conduit entries top, bottom, left, right and rear. The top conduit entry port is open (no NPT plug). If this port not used assure it is environmental sealed using a proper <sup>3</sup>/<sub>-</sub>14 NPT plug.

Make all wire connections per wiring section in primary instruction manual provided.

Rotate fixture shut. Swing  $\frac{1}{-20}$  bolt into place and tighten nut to seal assembly shut. Torque  $\frac{1}{-20}$  not to 4 f.t-lbs. [5.4 N-m]. See Figure 5.

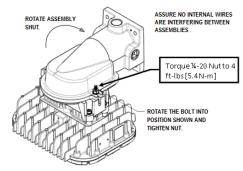


Figure 5 - Close & Torque 1/4-20 Nut

#### WARNING:

When closing the assembly, assure that the red colored o-ring is properly seated and there are no wires or objects interfering with the o-ring seal or sealing surfaces.

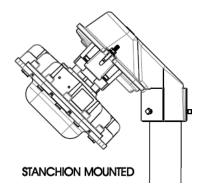
Restore power and verify operation.

#### WARNING:

Prior to restoring power, assure that all unused ¾"-14 ports are properly plugged.



45° Stanchion Mount



NOTE: The 45° Stanchion Mount fixture is intended to be mounted to 2" x 11-1/2 NPT threaded vertical pole sealed to the proper IPXX rating for the application. Use the appropriate NPT threaded reducing bushing to adapter a stanchion Mount fixture to a 1.5" x 11-1/2 NPT threaded pole.

Assure the electrical power is OFF.

Loosen and back off 1/4-20 nut. Do not remove nut. Rotate bolt and separate the Stanchion Mount from the Light Fixture assembly. See Figure 6 and Figure 7.

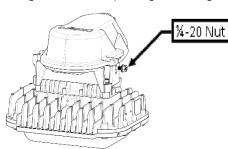


Figure 6 - Loosen & Rotate Bolt Clear

interfere with the attachment operation. Firmly thread the Stanchion Mount to the 2X11.5 NPT threaded pole. Properly engage the threads and turn the Stanchion Mount by hand until tight. Continue tightening using a wrench until the proper orientation is achieved. Torque the 5/16-18 screw to 10 ft-lbs [14 N-m]. If attaching to a 1.5x11.5 NPT threaded pole attach the reducer bushing to the pole first. See Figure 8 and Figure 9.

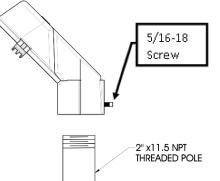


Figure 8 - 2" x 11.5 NPT Threaded Pole

primary instruction manual provided.

#### WARNING:

When closing the assembly, assure that the red colored o-ring is properly seated and there are no wires or objects interfering with the o-ring seal or sealing surfaces.

Rotate the fixture shut, assure no object is interfering with the o-ring seal or sealing surfaces. Swing 1/4-20 bolt into place and tighten nut to seal assembly shut. Torque 1/4-20 nut to 4 ft.-lbs. [5.4 N-m]. Then Torque the 5/16-18 screw to 10 ft.-lbs. [14 N-m]. See Figure 11.

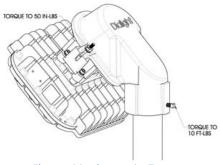
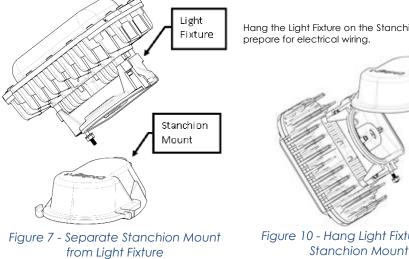


Figure 11 - Screw to Torque

Restore power and verify operation.



EDUCER BUSHING 2" X 11.5 TO 1.5" X 11.5 NPT 1.5" x11.5 NPT THREADED POLE



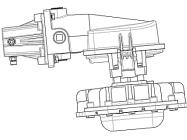
Hang the Light Fixture on the Stanchion Mount and



Back off 5/16-18 screw provided such that it will not Make all wire connections per wiring section in

# Dialight

#### **Conveyor Area Light**



**CONVEYOR AREA LIGHT** 

The Conveyor Area Light is designed to mount to a DN25 (33.7mm) diameter pipe. It is the responsibility of the installer to assure the pipe, or any other structure being mounted too, is structurally suited to support the light fixture in a safe secure manner. The pipe entering the Conveyer Bracket must be environmentally sealed too the proper IP rating for the application. To help reduce the chance of ingress contaminates It is recommended the pipe be oriented such that there is a 5° pitch angle as shown.

NOTE: All views in this document are shown mounting to a SwivelPole<sup>™</sup> LMK1101-40-HG or LMK1101-50-HG Luminaire Mount. The Luminaire Mount entering the Conveyor Bracket must be environmentally sealed to the proper IP rating or the application. SwivelPole<sup>™</sup> is a registered trade mark of SwivelPole<sup>™</sup>.

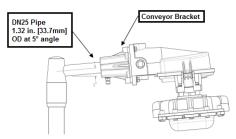


Figure 12 - Typical Pole Mounting

Assure the electrical power is OFF.

Loosen and back off ½-20 nut. Do not remove nut. Rotate bolt and separate the Conveyor Bracket from the Light Fixture. Do not loosen any other fastener. See Figure 13 and Figure 14.

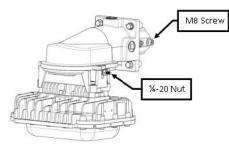
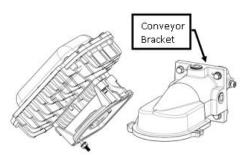


Figure 13 - Loosen & Rotate Bolt Clear



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### Figure 14 - Separate Conveyor Bracket from Light Fixture

Back off the two M8 screws provided such that they will not interfere with the attachment operation.

Assure the red gasket is present and fully seated inside the Conveyor Bracket hole.

Feed the electrical wiring from the pole into the Conveyor Bracket.

Slide the Conveyor Bracket onto a suitable pipe or SwivelPole<sup>™</sup> until contact with the gasket has been made. Apply approximately 15 lbs. [6.8 kg] force to compress the gasket adequately.

While compressing the gasket secure in place by torqueing the M8 screws to 10 ft.-lbs. [13.5 N-m] then torque the hex nut to 10 ft.-lbs. [13.5 N-m] See Figure 15 and Figure 16.



Figure 17 - Hanging Light Fixture

Make all wire connections per wiring section in primary instruction manual provided. If the fixture contains a terminal block make connections at the terminal block.

**NOTE:** Inspect and assure connections are made properly.

Assure the red o-ring seal is present and properly seated. Rotate fixture shut, Swing ¼-20 bolt into place and tighten nut to seal assembly shut. Torque ¼-20 nut to 4 ft.-lbs. See Figure 18

#### WARNING:

When closing the assembly assure that the red colored o-ring is properly seated and there is no wires or object interfering with the o-ring seal or sealing surfaces.

Rotate fixture shut, assure no object is interfering with the o-ring seal or sealing surfaces. Swing  $\frac{1}{2}$ -20 bolt into place and tighten nut to seal assembly shut. Torque  $\frac{1}{2}$ -20 nut to 40 in-lbs.

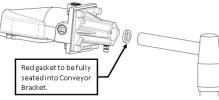
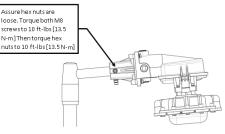


Figure 15 - Conveyor Bracket Mounting



## Figure 16 - Conveyor Bracket Attached to Pole

#### WARNING:

It is the responsibility of the installer to assure pole entering the Conveyor Bracket is environmentally sealed to prevent moister and contaminates from entering the Conveyor Bracket.

Hang the Light Fixture on the Conveyor Bracket. Prepare for electrical wiring.

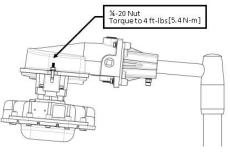


Figure 18 - Complete Installation

Restore power and verify operation.



# **Technical Diagrams**

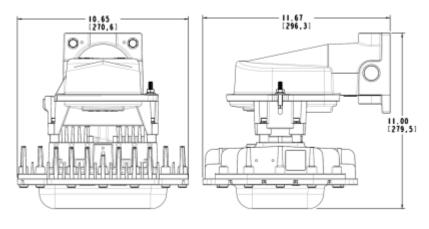


Figure 19 - 0° Wall Mount

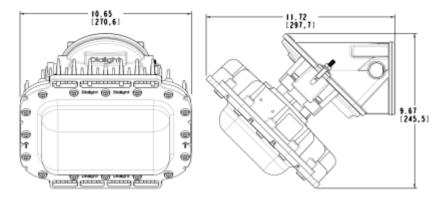


Figure 20 - 45° Wall Mount

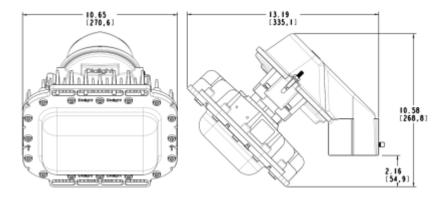


Figure 21 - 45° Stanchion Mount



# Technical Diagrams (cont.)

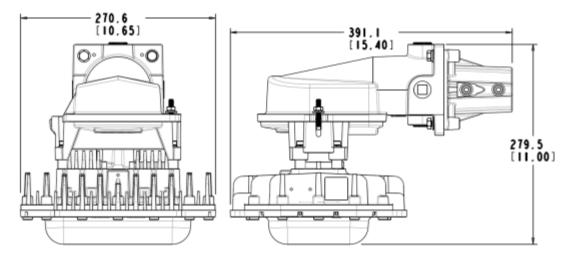


Figure 22 - Conveyor Area Light

### **Official Statement**

All statements, technical information, and recommendations contained herein are based on information and tests that Dialight believes to be reliable. The accuracy or completeness thereof is not guaranteed. In accordance with Dialight "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 or her intended use and assumes all risk and liability whatsoever in connection therewith.