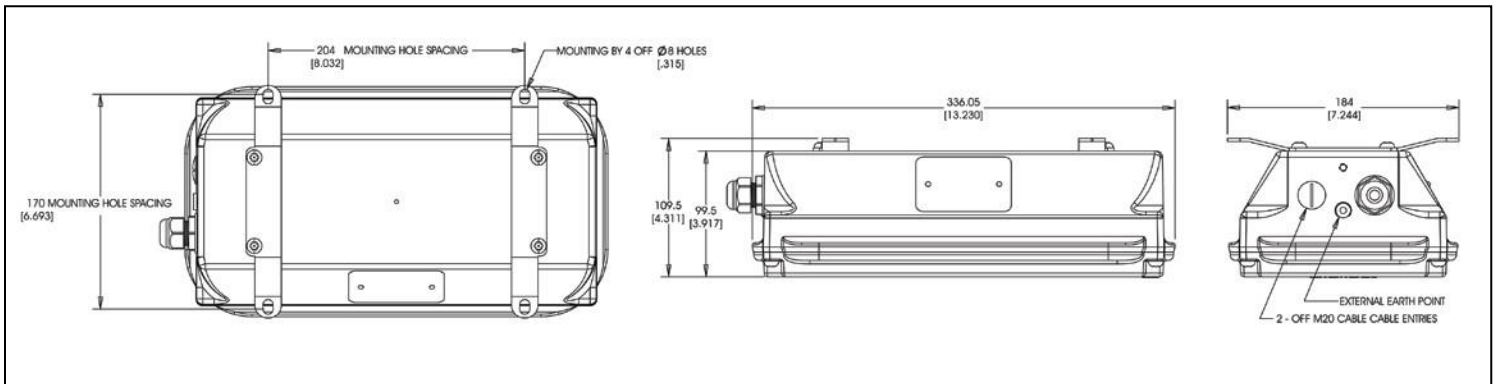
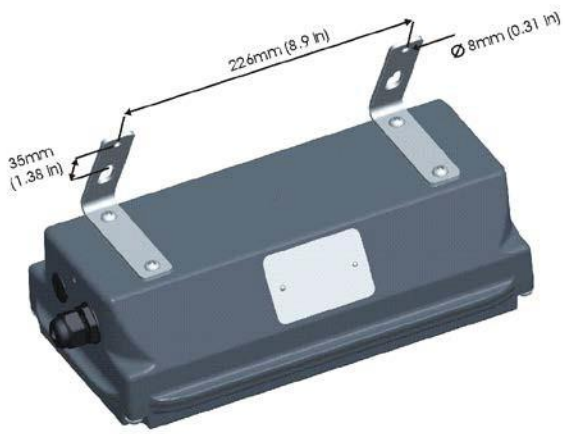
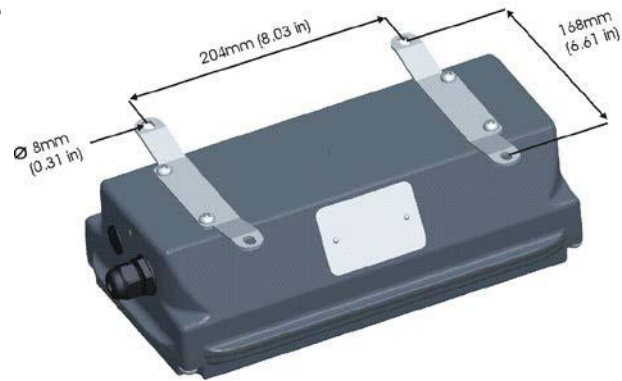
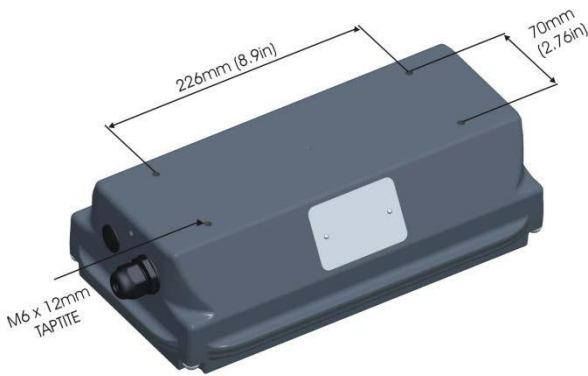


Important information:

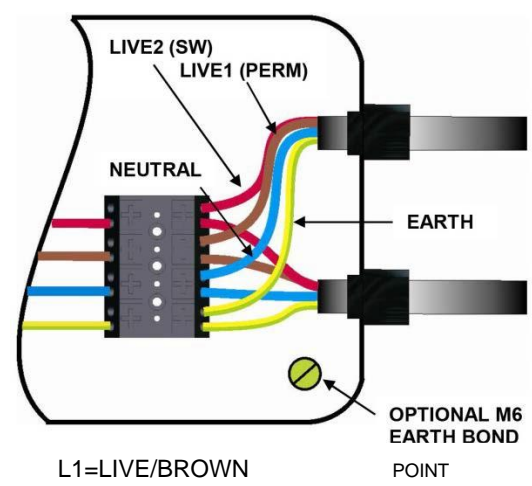
These instructions contain safety information, read and follow them carefully. Dialight will not accept any responsibility for injury, damage or loss which may occur due to incorrect installation, operation or maintenance

Operating Instructions





Tightening Torques	
Front assembly to main body	3.6Nm / 32.0 in lb
Body mounting	8.0Nm / 71.0 in lb
Certified Blanking Plug	2.0Nm / 18.0 in lb



L1=LIVE/BROWN
 L2=SWITCHED LIVE/RED
 N=NEUTRAL/BLUE
 E=EARTH/GREEN & YELLOW



Safety Instruction:

The installation, operation and maintenance must be carried out by an electrician suitably trained in hazardous areas with knowledge of increased safety explosion protection IEC 60079-14

- The technical data indicated on the LED fixtures are to be observed.
- Changes of the design and modifications to the LED fixture are not permitted
- Repairs must only be carried out by a qualified electrician with hazardous area knowledge
- Only genuine Dialight Replacement must be used when unforeseen repairs are required.
- Observe the national safety rules and regulations during installation.
- NO user serviceable Parts inside.
- NO field replaceable parts.

Technical Data

Category of Application:

Ex d e mb IIC T6 Gb
Ex tb IIC T85°C Db
IP66/67
 II 2GD

Operating Temp:

9 LED Model 0°C to +50°C
18 LED Model 0°C to +50°C
27 LED Model -20°C to +40°C

IECEx/ATEX

IECEx BAS 10.0051X/
Baseefa10ATEX0092X

Input Voltage:

110/120V AC 50/60Hz or
230/240V AC 50/60Hz

Input Current:

9 LED Model 140mA @ 110V
85mA @ 230V

18 LED Model

250mA @ 110V
130mA @ 230V

27 LED Model

180mA @ 230V

Housing Material:

LM6 Alum (Copper free)

Lens:

Toughened Glass
Frosted or Clear

Cable Entries:

M20
M25
3/4" NPT
Refer To Part Code

Weight:

9 LED Model 5.4kg (11.9lb)
18 LED Model 5.4kg (11.9lb)
27 LED Model 6.1kg (13.50lb)

Dimensions:

See figure

Conformity with Standards

This equipment conforms to the standards specified in the Declaration of Conformity. It has been designed, manufactured and tested in accordance with BS EN 9001.

2014/34/EU Equipment and protective systems intended for use in potentially explosive atmospheres.

2014/30/EU Electromagnetic Compatibility.

Equipment Application

This lighting equipment is intended for use in a potentially explosive atmosphere in Zones 1 and 2 to the requirements of the ATEX Directive 2014/34/EU. The product can be used inside or outside to illuminate areas with potentially explosive atmosphere. The WEA version may use as a maintained or non-maintained emergency light. The internal battery pack provides a minimum 3 hour emergency duration (at reduced light output).

Installation

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 gasket seal, if in doubt do not install!

The improper installation, operation and maintenance of these luminaires may result in the invalidation of the guarantee.

Mounting Luminaire

There are 3 mounting options for this luminaire, depending which mounting accessories were supplied on purchase (See Luminaire Mounting Options).

Option 1. Direct Mounting

or directly mounting the luminaire to a cable tray or similar no brackets are supplied and the fixture can be secured directly using the 4 TORX screws supplied

Option 2. Ceiling or Flat Wall Mounting

Assemble the mounting brackets to the luminaire with the 4 TORX screws supplied, refer to table for tightening torques. Use the dimensions in Option 2 to locate the luminaire into the desired position. Maximum screw/bolt size 8mm (not supplied).

Option 3. 30° Angled Bracket

Assemble the 30° angled mounting bracket to the luminaire with the 4 TORX screws provided, refer to table for tightening torques. Use the dimensions in Option 3 to locate lighting equipment into the desired position. Maximum screw/bolt size 8mm (not supplied).

Opening the Luminaire

ATTENTION: Always disconnect from the power supply before opening the luminaire. Wait 10 minutes after disconnection before opening.

Unscrew the 4 front TORX bolts to gain access to the wiring tray. The front of the luminaire with LED tray can now be lowered and supported by the drop cable.

Removing the front of the luminaire will terminate any emergency mode operation and place the unit into "rest" mode. On a new luminaire, the battery will have been disconnected, and be in an unknown state of charge. Do not allow sudden or excessive

forces to be applied to the drop cable as this could damage the LED tray.

Cable Entries and Cables

IMPORTANT: The cable glands used with this luminaire must be certified to the Ex e 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 suitable certified blanking plug.

Note: This luminaire is supplied with one dust cap and one certified blanking plug.

The cable entries should be securely tightened to ensure that the minimum protection rating is achieved. The cable entry should be rated to minimum of IP66 to maintain the protection level of the luminaire.

Do not over tighten as the protection rating may be compromised. Always refer to gland manufacturers data for torque settings.

Special Conditions for Safe Use

Suitably certified cable entries must be used which include a sealing washer to maintain the IP66/67 rating of the enclosure. The supply to the luminaire must include a fuse which is capable of interrupting a 1500A short circuit current.

The glands must be suitable for use within an operating temperature range of -40°C to +80°C. The gland is required for increased safety (Ex-e) protection, the entry thread shall be suitably sealed (in accordance with IEC 60079-14) to maintain the ingress protection rating of the fixture.

When used with steel basket weave armour or braided (screened) cable the basket weave armour or braid is unable to carry the cable load without fracture therefore the cable must be clamped and cleated to prevent pulling on the cable being transmitted to the cable terminations.

Battery

Two battery options are available, 3.6V 4Ah (part ref WPX000799BATT) is provided with standard temperature range 9 and 18 LED units. It is secured in place with releasable cable ties, and need not be removed during installation.

3.6V 10Ah (part ref WPX001500BATT) is provided with 27 LED units, optionally for -20C operation on 9 and 18 LED units. The 10Ah battery is mounted on a bracket which must be removed during installation. DISCONNECT the 2-pole battery connector and remove two M4 Torx screws (T20 head) adjacent to the battery. The screws are retained to the bracket. Unhook the bracket and remove to gain access to the terminal block below.

Electrical Connection

When connecting the conductors extra care should be taken in order to maintain the hazardous protection. The insulation of the conductors shall reach up to the terminal block. The conductor itself shall not be damaged. The connectable minimum and maximum conductor cross sections shall be observed (see electrical connection data).



A maintained mode emergency luminaire requires 2 live feeds.

The L1 connection is a permanent live feed. It powers the main normal mode operation, battery charger and is used to activate emergency mode. It may be supplied via an emergency lighting "Test" switch.

The L2 connection is a switched live feed to control luminaire normal mode on or off. It is a signal input that consumes negligible current.

Battery and Magnetic interlock

The driver electronics (inside the flameproof Ex-d tube) incorporate a magnetic sensor device to shut down all battery related circuits when the fixture front is removed. A small disc magnet is mounted onto the inside of the LED tray assembly, which when properly in place activates battery related functions (charging, monitoring and emergency operation).

Upon completion of electrical wiring and testing, refit the battery and bracket (10Ah version), then re-connect the battery by mating together to the 2 pole plug and socket.

Closing the LED Luminaire

Remove any foreign bodies from the fixture Pay attention when fitting the LED tray to the enclosure; make sure the seals are clean and undamaged.

Do not allow any cables to become trapped between the LED tray and the enclosure, battery or driver tube. Tighten all 4 TORX screws evenly (see table)

Taking into operation

Prior to operating, check the luminaire for its correct installation in compliance with these operating instructions and other applicable regulations.

Attention: Only fully certified equipment may be put into operation. Improper installation and operation of this luminaire may invalidate the warranty.

Upon applying power, confirm the operation of battery circuits by observing the green status LED located in the corner of the LED tray. The green status LED will light only if: The LED tray is properly fitted, activating the magnetic sensor, the battery is connected, the battery is charging and within acceptable voltage limits

If the green Status LED is not lit with power applied to the L1 feed, disconnect power and rectify any faults.

In Service, Battery charging and condition monitoring

When power is applied (initially or after an outage), the battery will be charged for 36 hours, thereafter, in order to maximize battery life while maintaining emergency capacity, the battery charging operates for 1 minute in every hour.

The battery is continually monitored for voltage limits and charge current acceptance (during charge pulses). If the mains power supply is interrupted, the fixture will switch to emergency mode operation at reduced light output. Expected emergency mode duration exceeds 3 hours.

If, during an emergency mode cycle, the battery capacity has deteriorated to the point that 3 hours is not achieved, then when power is restored this battery "failure" will be signaled by flashing the green status LED once every 8 seconds. The fault indication will be automatically reset when a successful charge/discharge cycle is completed.

Maintenance and Battery Replacement

WARNING: Disconnect the power supply to the luminaire before maintenance or repair.

Wait at least 10 minutes before opening the LED luminaire after de-energising.

The battery pack should be replaced every 4 years for continued reliable operation. To replace the battery :

- 1) Disconnect the mains power – Emergency mode will operate.
- 2) Unscrew the 4 front TORX bolts to gain access to the inside. The front of the fixture with LED tray can now be lowered and supported by the drop cable.
- 3) Check the Emergency mode has been terminated, i.e. all LEDs are extinguished.
- 4) Disconnect the two pole battery connector.
- 5) Squeeze the release tab on the cable ties holding the battery pack and remove.
- 6) Unpack the new battery pack and inspect for damage.
- 7) Install new battery pack and secure in place by re-attaching the cable ties.
- 8) Reconnect the battery connector.
- 9) Refit the front LED tray, ensuring seals are not damaged, and cable or straps are not trapped.
- 10) Re-energise the circuits and check the green status LED illuminates. Allow 24 hours charging before expecting full emergency duration.

The battery is protected to IP30, and may be safely transported through hazardous areas subject to local or site regulations. Dispose of old batteries in accordance with regulations.

If any unforeseen repairs are required then always observe explosion protection regulations and requirements.

Inspection

Within the scope of the maintenance or inspection routine the following should be included.

Protective hoses covering the connecting cables. Cable entries must be free from corrosion. Status LED must be illuminated and not flashing.

Repairs / Overhaul / Modification

The relevant national regulations which apply to the maintenance/servicing of electrical apparatus in explosive atmospheres shall be observed.

Any unforeseen repairs or overhaul may only be carried out with genuine Dialight spare parts.

Should the luminaire enclosure be damaged, only a replacement will be permitted. In case of doubt, the equipment should be returned to Dialight for inspection/repair. Modifications to the device or changes of its design are not permitted.

Disposal/Recycling

When the apparatus is disposed of, the respective national regulations on waste disposal should be observed.

Ordering Spare Parts

Replacement Batteries

Dialight Part Number **WPX000799BATT** (3.6V 4Ah Ni-mh battery pack) or **WPX001500BATT** (3.6V 10Ah Ni-mh battery pack)

Should any unforeseen spares be required then please contact Dialight for availability.

Chemical Compatibility Guide

The chemical compatibility data referenced in this manual was supplied by the raw material manufacturers and is intended as a general guide. The data represents the basic material properties and does not necessarily represent the performance of the final product due to manufacturing process and design variations for each final product. Chemical compatibility is highly dependent on concentration, temperature, humidity, and other environmental conditions and therefore the customer assumes responsibility for evaluation of gaseous or direct contact chemical compatibility at their site prior to product installation.

www.dialight.com/pubs/MDTFCHEMRFLX001.pdf

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.





Year CE Mark Affixed: 10

EU DECLARATION OF CONFORMITY

Manufacturer: Dialight Corporation
1501 Route 34 South, Farmingdale, New Jersey, 07727
1 (732) 919 3119

Equipment: Bulkhead LED Luminaire

Model Series: WPA Series, WEA Series LED Luminaire

Directives: Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres Directive 2014/34/EC
Electromagnetic Compatibility Directive 2014/30/EC

Standards:	Radio Disturbance	EN 55015:2013+A1:2015
	EMC - Immunity	EN 61547:2009 (includes):
	EMC - Electromagnetic compatibility	EN 61000-4-2:2009
		EN 61000-4-3: 2006
		EN 61000-4-4: 2004
		EN 61000-4-5: 2006
		EN 61000-4-6: 2006
		EN 61000-4-11: 2004
		EN 60079-0:2009
	Explosive Atmospheres - General Requirements	
	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"	EN 60079-1:2007
	Explosive Atmospheres - Part 7 : Increased Safety "e"	EN 60079-7:2007
	Explosive Atmospheres - Part 18 : Encapsulation "m"	IEC 60079-18:2009
	Explosive Atmospheres - Part 31: Dust Ignition Protection "t"	IEC 60079-31:2008

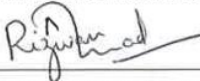
Equipment Marking is based on type examination via Baseefa, File 10ATEX0092X / IECEx BAS 10.0051X

Ex d e mb IIC T6 Gb
Ex tb IIIC T85°C Db IP66/67
Ta = -40°C to +50°C

Quality Assurance Notification: Baseefa file (5801)

Quality Management System Accreditation to ISO 9001: BSI file FM518958

We declare that our products to which this declaration relates are in conformity with the listed directives per the provisions of the aforementioned standards.

X  Date: 18 - JAN - 2017

Rizwan Ahmad, VP Engineering & Technology - Power & Connectivity
1501 Route 34 South, Farmingdale, NJ 07727 USA

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