

EXP-EMG-EXT-LE6-4L

Explosion Proof Bug Eye Emergency LED Fixture Instruction Manual



E X P E D I T E D S H I P P I N G · S U P E R I O R C U S T O M F A B R I C A T I O N

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Congratulations on the purchase of your new Explosion Proof Bug Eye Emergency LED Exit Fixture. Please read these instructions carefully to familiarize yourself with the safe operation and maintenance of your new emergency fixture. Following these instructions will insure many years of safe and dependable service.

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***Please visit our website for all warranty/return related questions.*

I. Installation & Operation

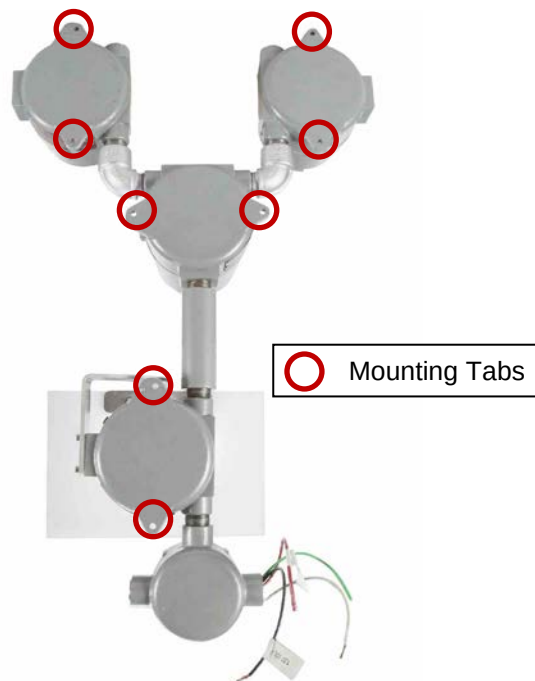
NOTE: The EXP-EMG-EXT-LE6-4L is designed to be surface mounted to flat surfaces such as walls.

I. Installation

Mounting for this fixture is achieved via mounting tabs located on the back side of the light.

The EXP-EMG-2L-LE6 explosion proof emergency self-testing LED fixture is NOT a factory sealed fixture. Operators will bring their own rigid conduit to a junction box and complete their connects. Cap off any hubs that are not in use.

Both battery legs *must be* connected together. This prevents the battery from draining during storage and transit. **DO NOT CONNECT HIGH VOLTAGE TO BATTERY LEGS.**



II. Operation

1. Apply AC power to the light. The LED indicator will turn RED.
2. See wires labeled for connections.
3. Use appropriate methods for wiring within hazardous areas following all appropriate NEC codes. Consult an electrician if unsure.
4. In the event of power loss, the fixture will illuminate all lights automatically. Once power is restored, the lights will turn off and the batteries will charge.



AC LIVE (120V)	BLACK
AC LIVE (277V)	RED
AC NEUTRAL	WHITE
GROUND	GREEN

II. Trouble-Shooting and Maintenance

CAUTION: Always turn AC power to the equipment OFF before servicing. Servicing should be performed only by a qualified service technician.

I. Trouble-Shooting

1. Problem: Emergency lights do not operate.

If the charge indicator light is OFF, check that the circuit breaker for AC supply is ON.

If the charge indicator light is OFF, check that the battery is properly connected. If the problem persists, replace the battery.

2. Problem: Emergency lights are dim.

The battery might not be fully charged. Allow battery to recharge for 24 hours and then retest. If the lights are still dim, replace the battery.

II. Maintenance

1. Battery: The battery supplied in the fixture requires no maintenance. However, it should be tested periodically and replaced when it no longer operates the connected fixtures for the duration of a 30-second or 90-minute test.

2. Other: Clean lenses and replace lamps as and when required.



Charger/Battery Fault LEDs



III. Safety Warnings and Ratings

I. Warnings

WARNING: Risk of electric shock - never connect to, disconnect from or service while equipment is energized.

WARNING: Risk of fire - Lamps are hot. Keep combustible material away from the hot parts. Observe lamp manufacturer's warnings, recommendations and restrictions on lamp operation and maintenance. Make sure lamps are correctly installed.

The battery in this emergency fixture may not be fully charged. After electricity is connected, let the battery charge for at *least* 24 hours.

Consult local building code for approved wiring and installation.

Disconnect AC power before servicing and installation.

DO NOT use this electrical equipment for anything other than its intended use.

The use of accessory equipment is not recommended by the manufacturer and will void product listing and warranty and may cause unsafe conditions.

Any service on this equipment should be performed by qualified personnel only.

Cap unused wires with enclosed wire nuts or other approved method.

Make sure wire terminations are secure and leads are properly tucked in appropriate wire channels.

II. Ratings/Approvals

Class I, Divisions 1 & 2 Groups A, B, C, D

Class I, Zones 1 & 2 Groups IIB + H2

Class II, Divisions 1 & 2 Groups E, F, G

Class III, Divisions 1 & 2

90 Minute Emergency Runtime

24 Hour Battery Recharge Time

Self-Testing Unit

Horizontal and Vertical Adjustable

Explosion Proof Remote LED Light Head Instruction Manual

Do not attempt installation until you are familiar with all warnings, precautions, and procedures outlined within this instruction sheet.

WARNING:

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE. CRITICAL SAFETY INSTRUCTIONS:

- 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.

To avoid electric shock:

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

To avoid burning hands:

- Make sure lens and housing are cool when performing maintenance.

To avoid explosion:

- Make sure the supply voltage is the same as the luminaire voltage.
- Do not install where the marked operating temperatures exceed the ignition temperature of the hazardous atmosphere.
- Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
- Use proper supply wiring as specified on the luminaire nameplate.
- All gasket seals must be clean.
- Before opening, electrical power to the luminaire must be turned off. Keep tightly closed when in operation.
- Use only UL listed components suitable for Class I Division 1, Groups C & D and Class II Division 1, Groups F & G installation.
- All threaded connections must engage five full threads.

Refer to the luminaire nameplate for specific classification information, maximum ambient temperature suitability, and corresponding operating temperature (TCode).

MOUNTING & WIRING

1. Mount the enclosure to surface in a location that can support the load. Use single bolt to provide rotation when mounting.
2. Loosen the two set screws on the bracket to adjust vertical position as necessary.

Voltage: 12V DC

WIRING

1. Remove the front cover module by loosening the single set screw and rotating counter-clockwise.
2. Pull field wiring into module. This light connects to the corresponding wires on the main unit.
3. Close all unused conduit entries with conduit plugs. To ensure water-tightness, lubricate conduit plugs with lubricant before installing, and secure wrench-tight with at least five (5) full threads engaged (42-52 ft.-lb. for 3/4" plugs, and 58-68 ft.-lb. for 1" plugs).
4. Connect supply wires to luminaire wire leads (or terminal blocks) using methods that comply with all applicable codes. Tighten all electrical connections.
5. Close cover module, making sure that all wires are safely inside driver. Tighten captive closing screw.
6. Turn power on and aim light.

MAINTENANCE

1. Perform visual, electrical, and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However, it is recommended that checks be made at least once a year. We recommend an Electrical Preventive Maintenance Program as described in the National Fire
2. Protection Association Bulletin NFPA No. 70B: Recommended Practice For Electrical Equipment Maintenance (www.nfpa.org).
3. The lens should be cleaned periodically to ensure continued lighting performance. To clean, wipe the lens with a clean, damp cloth. If this is not sufficient, use a mild soap or a liquid cleaner such as Collinite NCF or Duco #7. Do not use an abrasive, strong alkaline, or acid cleaner. Damage may result.
4. Visually check for undue heating evidenced by discoloration of wires or other components, damaged parts, or leakage evidenced by water or corrosion in the interior. Replace all worn, damaged, or malfunctioning components, and clean gasket seals before putting the luminaire back into service.
5. Electrically check to make sure that all connections are clean and tight.
6. Mechanically check that all parts are properly assembled.

INSTALLATION, OPERATION & MAINTENANCE DATA SHEET TYPE "EYS" HORIZONTAL / VERTICAL SEALING FITTING

SUITABLE FOR CLASS I, DIV. 1 & 2, GROUPS A, B, C & D
AND CLASS II, DIV. 1 & 2, GROUPS E, F & G HAZARDOUS LOCATIONS.

Sealing fittings are installed in conduit runs to minimize the passage of gases, vapors, or flames from one portion of the electrical installation to another through the conduit, as well as to prevent precompression or "pressure-piling" of vapors or gases in conduit systems.

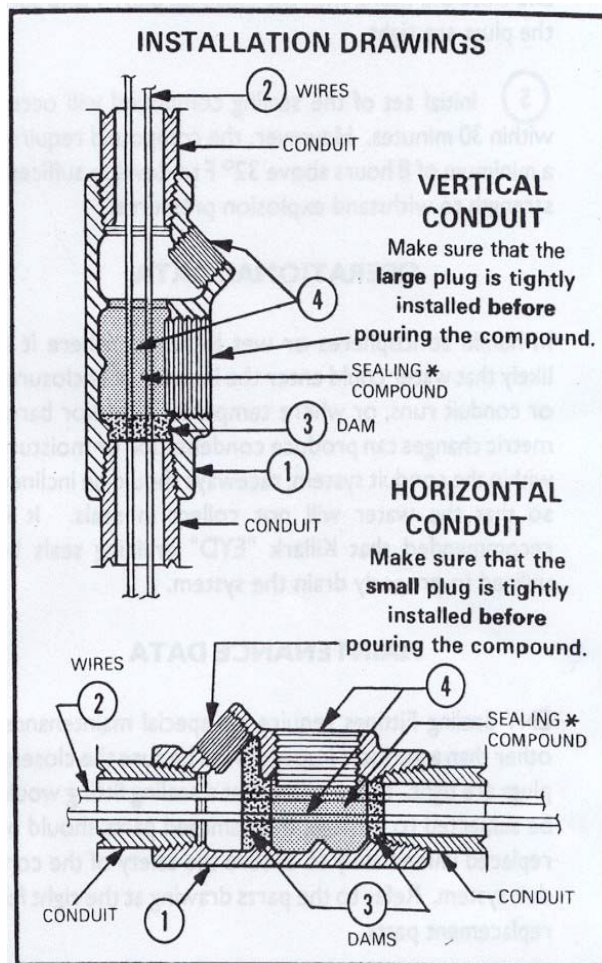
NOTE: Seals should be made only by experienced, careful persons in strict compliance with these instructions. Even slight variations can cause serious field problems. Read directions completely.

DIRECTIONS FOR INSTALLATION

- ① Using the drawings and chart at the right as a guide, install the sealing fitting into the conduit system. Refer to the National Electrical Code, Articles 501-5 and 502-5 for the regulations covering your specific application.
- ② Pull the conductors (wires) through the conduit system.
- ③ Using Packing Fiber, build a dam at each conduit hub (except upper hubs in vertical seals.) Use a wooden stick to force the wires apart, and pack the fiber tightly around all wires. The dam must be tight and strong enough to keep the liquid sealing compound from leaking out before it sets up. The completed dam should be even with the conduit stop.
- ④ Use the included Sealing Compound with these fittings. The sealing compound is mixed with water at the rate of three (3) parts of sealing compound to one (1) part of water by volume. See chart to determine the amount of compound required for a specific fitting. Use a clean mixing vessel for each batch. Sprinkle the sealing compound into the water while stirring, until a thick paste is formed. Continue mixing for AT LEAST THREE (3) MINUTES. The proper consistency is just fluid enough to pour SLOWLY, like thick gravy, from an inverted container, NOT WATERY. Do not mix more material than can be poured in 15 minutes. Discard any material that becomes too stiff to use. Never attempt to restore workability by stirring in more water.

After the compound is mixed, slowly pour it into the sealing fitting to the required level. Make sure that the wires are well separated, so the compound completely surrounds them. Pour slowly to avoid trapping air bubbles in the compound. Immediately wipe any spilled compound from conduits and threads, and close the fitting with the close-up plug. Make sure the plugs are tight.

- ⑤ Initial set of the sealing compound will occur within thirty (30) minutes. However, the compound requires a minimum of 8 hours above 32° F to develop sufficient strength to withstand explosion pressures.



* NOTE: These fittings are approved for use only with Killark "SC" Sealing Compound.

CONDUIT SIZE	MIN. POUR DEPTH	APPROX. AMOUNT MIXED COMPOUND REQ'D. (OZ.)
1/2"	"	1.0
3/4"	3/4"	1.5
1"	1"	2.5
1 1/4"	1 1/4"	5.5
1 1/2"	1 1/2"	7.5
2"	2"	10.5

Wiring Diagram

WARNING: DO NOT SERVICE WHILE ENERGIZED!

*SEE WIRE LABELS

