# **Sure-Lites**

# Instructions for Surelites LED Emergency Battery Packs

Includes the following model numbers: EBPLED7W, EBPLED14W

## WARNING

#### **Risk of Fire/Electric Shock**

If not qualified, consult an electrician.



For use in temperature rating 0°C to 55°C

# WARNING

#### **Risk of Electric Shock**

Disconnect power at fuse or circuit breaker before installing or servicing.

CONTAINS NICKEL-CADMIUM RECHARGEABLE BATTERY. MUST BE RECYCLED OR DISPOSED OF PROPERLY.



## **Important Safeguards**

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE OBSERVED INCLUDING THE FOLLOWING.

- 1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS
- 2. Do not use outdoors.
- 3. Do not mount near gas or electric heaters
- 4. Equipment should be mounted in locations and at adequate heights to prevent tampering by unauthorized personnel.
- 5. The use of accessory equipment not recommended by Eaton may cause an unsafe condition and will void the warranty.
- 6. Do not use this equipment for other than its intended purpose.
- 7. Not for use with sealed and gasketed fixtures
- 8. SAVE THESE INSTRUCTIONS

#### NOTES

- To prevent voltage from being present on the output wires (Red/White & Blue/White), do not connect the test button assembly to the EBP or insure the EZ key is securely in place.
- 2. This product is for use with LED fixtures that have LED loads capable of the output wattage and that have LED forward voltage within the ranges below.



	Output Power (W)	Min Vf (V)	Max Vf (V)
All 7 Watt Versions	7	8	55
All 14 Watt Versions	14	16	55

- 3. Make sure all of the connections are in accordance with the National Electrical Code and any local regulations.
- 4. To reduce the risk of electrical shock, disconnect both normal and emergency power supplies and the test button indicator light (which disconnects the battery) before servicing. Insuring the battery disconnect is securely in place also prevents battery powered operation.
- 5. These emergency ballasts can be field or factory installed depending on version. See mounting section for details.
- This product is for use in indoor fixtures only. Do NOT use near heated air handling outlets, wet locations or hazardous locations.
- 7. An un-switched AC power source is required. (120 277 volts 50/60 HZ) for proper operation.
- Do not attempt to service the battery. The sealed, no-maintenance battery is not field replaceable. Contact the manufacturer for information on service.
- 9. All maintenance should be performed by qualified service personnel.

#### FEATURES

This emergency battery pack (EBP) includes extra features which enhance its operation and maintainability.

- Patented EZ key battery disconnect: When the EZ key is inserted into the test button, the battery is disconnected. This feature prevents unnecessary cycling of the battery during the construction process. It can also be used if the room is decommissioned for an extended period of time to prevent the batteries from being over discharged.
- 2. **Patent pending Test Button / Indicator Light / Laser Input:** The test button houses the EZ key, powers the indicator light, contains the laser input for testing and functions as the mechanical test button. Integration of these functions improves performance and fixture aesthetics.

3. **Power controlled output**: This feature maintains consistent light output during the entire 90 minutes of emergency operation ensuring there is no drop in lumen output as the battery voltage drops.

### Field Installation Classification (EBPLED7W, EBPLED14W)

1. **Determine electrical compatability with fixture**: Verify the emergency driver wattage (7 watts or 14 watts depending on model) does not exceed the drivers AC input. Also, verify that the forward voltage of the LEDs are within the operating parameters of the selected model (see table below).

	Output Power (W)	Min Vf (V)	Max Vf (V)
EBPLED7W	7	8	55
EBPLED14W	14	16	55

- 2. Calculate Lumen output during emergency operation: Go to the website www.designlights.org and identify the light fixture by using the available search criteria. Determine the fixture rated data – efficacy in lumens/watt. Multiply the fixture efficacy by the output wattage of the selected emergency battery pack to determine the lumen output of the fixture during emergency operation.
  - Example: Fixture efficacy = 100 lumens/watt

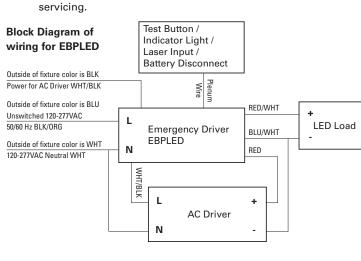
EBPLED7W provides 7 watts of constant power (Use 14W for EBPLED14W)

Fixture output = 100 lumens/watt X 7 watts = 700 lumens during emergency operation

3. **Insure means of egress lighting levels**: Follow industry standard methods of lighting layout to determine placement of emergency battery pack equipped fixtures. Verify the selected EBP will provide sufficient lumen output to meet path of egress illumination requirements.

#### INSTALLATION

- Mounting The EBP can be mounted inside a fixture channel, on the back of a fixture, or near the fixture. The flex conduit should be connected to a junction enclosure which allows access to the wiring connections for grounding. (Note: EBP assemblies without conduit must be factory installed in the wireway of the fixture).
- Wiring Refer to the block diagram below for the wiring of the LED load, AC driver, and AC power. The unswitched AC power for the EBP and the power for the AC driver should be from the same branch circuit to prevent disconnecting 2 sources of power and the battery during





Eaton 1121 Highway 74 South Peachtree City, GA 30269 eaton.com/lighting 3. **Mounting the Test Button / Indicator Light / Laser Input** Mount the Test Button / Indicator Light / Laser Input so the indicator light is visible once the fixture is installed. Proper mounting is required for accessibility and functionality of the laser input testing feature and EZ key battery disconnect.

#### **OPERATION**

Once AC power is permanently applied to the blue wire of the fixture remove the EZ key and store it for later use. When AC power is applied, the charging indicator light is illuminated, indicating the battery is being charged. When the power fails, the emergency ballast automatically switches to emergency power, operating its LED load at the rated output for at least 90 minutes.

**NOTE:** The battery is not fully charged until 24 hours after the AC power is applied.

#### MAINTENANCE

Although no routine maintenance is required to keep the emergency LED driver functional, it should be checked periodically to verify proper operation. Follow any applicable local or national codes. The following schedule is the minimum required to meet NFPA 101 standards:

- 1. Visually inspect that the charging light is illuminated monthly.
- 2. Test the emergency operation of the fixture monthly for a minimum of 30 seconds. Perform the test by pressing the test button / indicator light for 30 seconds or aiming a laser pointer at the clear test button. The LED load should operate at the rated output.

(**Note:** The laser test will not trigger if the ambient light is too high. The light must be switched off in fixtures where the test button is in close proximity to the light, or the test will need to be triggered mechanically)

- Conduct a 90 minute discharge test annually by disconnecting the unswitched power. The LED load should operate at the rated output for at least 90 minutes.
- 4. Keep written records of testing

# Refer any service requirements indicated by these checks to qualified personnel.

#### WARRANTIES AND LIMITATION OF LIABILITY

Please refer to **www.eaton.com/LightingWarrantyTerms** for our terms and conditions.

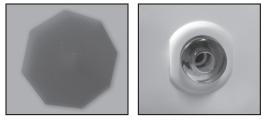


Image of Test Button / Indicator Light / Laser Input With Battery Disconnected (Left) Without Battery Disconnected (Right)

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