

BEST LEDR-1

BEST LEDR-1 LED Emergency Light User Manual

Model: LEDR-1

1. INTRODUCTION

This manual provides essential instructions for the safe installation, operation, and maintenance of your BEST LEDR-1 LED Emergency Light. Please read this manual thoroughly before installation and retain it for future reference. The LEDR-1 is designed to provide reliable emergency illumination during power outages, ensuring safety in commercial and residential environments.

2. IMPORTANT SAFETY INSTRUCTIONS

WARNING: Risk of electric shock. Disconnect power before installation or servicing.

- All servicing should be performed by qualified personnel only.
- Do not mount near gas or electric heaters.
- Ensure the electrical wiring is properly grounded.
- Do not use outdoors. This unit is designed for indoor use only.
- Do not let power supply cords touch hot surfaces.
- Mount the unit in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than its intended use.
- Allow battery to charge for a minimum of 24 hours after installation before testing.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon opening the package:

- BEST LEDR-1 LED Emergency Light Fixture (1 unit)
- Mounting Hardware (screws, anchors)

- Wire Nuts
- User Manual (this document)
- AA NiCAD Battery (pre-installed or included separately)

4. PRODUCT OVERVIEW

The BEST LEDR-1 is a compact and efficient LED emergency light designed for wall-mount applications. It features a durable white thermoplastic housing and two adjustable LED lamp heads, providing 98 lumens of bright, white light (5000 Kelvin) during emergency situations. The unit operates on 120 Volts AC and includes a rechargeable NiCAD battery for backup power.



Figure 1: Front view of the BEST LEDR-1 Emergency Light. This image shows the compact white thermoplastic housing with two adjustable LED lamp heads.

Key Features:

- **Housing:** White Thermoplastic
- **Light Source:** 2 LED heads
- **Voltage:** 120 Volts AC
- **Battery:** NiCAD, 90 minutes average life

- **Light Output:** 98 Lumens
- **Dimensions:** Approximately 14.75" L x 3.75" W x 3.75" H

5. INSTALLATION

The LEDR-1 is designed for flush wall mounting. Follow these steps for proper installation:

1. **Power Disconnection:** Before beginning any installation, ensure that the main power supply to the circuit where the emergency light will be installed is turned OFF at the circuit breaker or fuse box.
2. **Mounting Location:** Select a suitable wall location for mounting. The unit should be mounted at a height and in a position that allows for optimal light distribution during an emergency. Ensure the mounting surface is solid and can support the fixture's weight.
3. **Prepare Mounting Surface:** Use the provided mounting hardware (screws and anchors) to secure the mounting plate or backplate of the emergency light to the wall. If the unit has a separate mounting plate, attach it first.
4. **Wiring Connections:**
 - Connect the **black wire** from the emergency light to the **hot (live) wire** from the building's electrical supply.
 - Connect the **white wire** from the emergency light to the **neutral wire** from the building's electrical supply.
 - Connect the **green wire** from the emergency light to the **ground wire** from the building's electrical supply.
 - Use the provided wire nuts to secure all connections. Ensure all connections are tight and properly insulated.
5. **Battery Connection:** If the battery is not pre-connected, connect the battery pack to the circuit board. Ensure correct polarity.
6. **Secure Fixture:** Carefully tuck all wires into the junction box or fixture housing. Secure the emergency light fixture to the mounting plate or wall according to the specific design of the unit.
7. **Restore Power:** Once the installation is complete and all connections are secure, restore power to the circuit. The CHARGE INDICATOR light on the unit should illuminate, indicating that the battery is charging.
8. **Initial Charge:** Allow the battery to charge for a minimum of 24 hours before performing the first test.

6. OPERATION

The BEST LEDR-1 Emergency Light operates automatically:

- **AC Power On:** When AC power is supplied to the unit, the charge indicator light will be ON, and the battery will be charging. The LED lamp heads will remain OFF.
- **Power Outage:** In the event of an AC power failure, the emergency light will automatically switch to battery backup mode, and the LED lamp heads will illuminate. The unit will provide emergency lighting for approximately 90 minutes.
- **AC Power Restored:** When AC power is restored, the LED lamp heads will turn OFF, and the unit will revert to charging the battery.
- **Test Button:** A test button is located on the unit. Pressing this button simulates an AC power failure, allowing you to verify that the emergency lights function correctly. Release the button to return to normal operation.

- **Adjustable Lamp Heads:** The two LED lamp heads can be manually adjusted to direct light to desired areas.

7. MAINTENANCE

Regular maintenance ensures the longevity and reliability of your emergency light.

Battery Testing:

Perform the following tests according to local codes and regulations (typically monthly and annually):

- **Monthly Test:** Press and hold the test button for at least 30 seconds. The LED lamp heads should illuminate. Release the button; the lights should turn off, and the charge indicator should be ON.
- **Annual Test:** Disconnect AC power to the unit for a full 90 minutes. The LED lamp heads should remain illuminated for the entire duration. Reconnect AC power; the lights should turn off, and the charge indicator should be ON. If the unit fails to operate for the full 90 minutes, the battery may need replacement.

Cleaning:

Clean the exterior of the unit and lamp heads periodically with a soft, damp cloth. Do not use abrasive cleaners or solvents.

Battery Replacement:

The NiCAD battery has a limited lifespan. If the unit fails the annual 90-minute test, the battery likely needs replacement. Contact a qualified electrician or the manufacturer for battery replacement instructions and compatible battery types.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
Emergency lights do not turn ON during power outage or when test button is pressed.	No AC power to the unit. Battery not connected or faulty. Battery not fully charged. Faulty LED lamp heads.	Check circuit breaker and wiring connections. Ensure battery is properly connected. Allow 24 hours for initial charge. Perform a 90-minute discharge test after 24-hour charge. Replace battery if necessary. Contact qualified service personnel.
Charge indicator light is OFF when AC power is present.	No AC power to the unit. Faulty charge indicator LED. Internal circuit fault.	Check circuit breaker and wiring connections. Contact qualified service personnel.

Problem	Possible Cause	Solution
Emergency lights do not stay ON for 90 minutes during annual test.	Battery has reached end of life. Battery not fully charged.	Replace the battery. Ensure unit has been connected to AC power for at least 24 hours prior to test.

9. SPECIFICATIONS

Feature	Detail
Model Number	LEDR-1
Brand	BEST
Housing Material	White Thermoplastic
Light Source Type	LED (2 heads)
Voltage	120 Volts AC
Wattage	2 watts
Brightness	98 Lumens
Efficiency	49 lumen/watt
Color Temperature	5000 Kelvin
Battery Type	NiCAD (1 AA battery required, included)
Average Battery Life (Emergency Mode)	90 minutes
Installation Type	Flush Wall Mount
Indoor/Outdoor Usage	Indoor only
Product Dimensions (L x W x H)	14.75" x 3.75" x 3.75"
Item Weight	0.01 Ounces
Control Method	Remote (Test Button)

10. WARRANTY AND SUPPORT

The BEST LEDR-1 LED Emergency Light comes with a full manufacturer warranty. For specific warranty details, claims, or technical support, please refer to the warranty card included with your product or contact Best Lighting Products directly. Keep your purchase receipt as proof of purchase. For assistance, please contact Best Lighting Products customer service.

