

# LED-90 Series

Installation Instructions



## IMPORTANT SAFEGUARDS READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

When using electrical equipment, basic safety precautions should always be followed including the following:

- **DISCONNECT AC POWER SUPPLY BEFORE SERVICING.**
- Installation and servicing of this equipment should be performed by qualified service personnel only.
- Ensure that the electrical wiring conforms to the National Electrical Code NEC® and local regulations, if applicable.
- Do not mount near gas or electrical heaters.
- Do not use outdoors.
- Equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Any modification or use of non-original components will void the warranty and product liability.
- Do not use this equipment for other than intended use.
- Allow battery to charge for 24 hours before first use.

## SAVE THESE INSTRUCTIONS!

Technical Support ■ (623) 580-8943 ■ [technicalsupport@barrontg.com](mailto:technicalsupport@barrontg.com)

### Wall/Ceiling Mount - Back Power Feed

1. Insert a flat screwdriver underneath both of the locking tabs on the bottom of the fixture to loosen and separate the enclosure from the backplate. (Fig. 1)
2. Punch out the center knockout and any desired knockouts for mounting to the J-box located in the backplate.
3. Route wires out through the center hole of the backplate.
4. Make electrical connections; see **Electrical Connections** section.
5. Secure the backplate to the J-box using appropriate hardware (provided by others).
6. Connect the battery to the PCB. (Fig. 2)
7. Snap the front cover back onto the backplate.

### Wall/Ceiling Mount - Top Power Feed

1. Insert a flat screwdriver underneath both of the locking tabs on the bottom of the fixture to loosen and separate the enclosure from the backplate. (Fig. 1)
2. Punch out the conduit entry knockout from the top flange and any desired knockouts for securing to the mounting surface located in the backplate.
3. Secure the backplate to the mounting surface using appropriate hardware (provided by others).
4. Secure flexible conduit (not provided) to the access hole and route wires through the conduit to the J-box.
5. Make electrical connections; see **Electrical Connections** section.
6. Connect the battery to the PCB. (Fig. 2)
7. Punch out the conduit entry knockout from the top of the enclosure.
8. Snap the front cover back onto the backplate.

Fig. 1

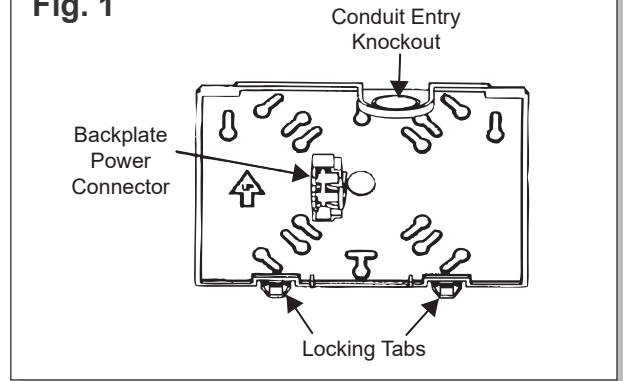
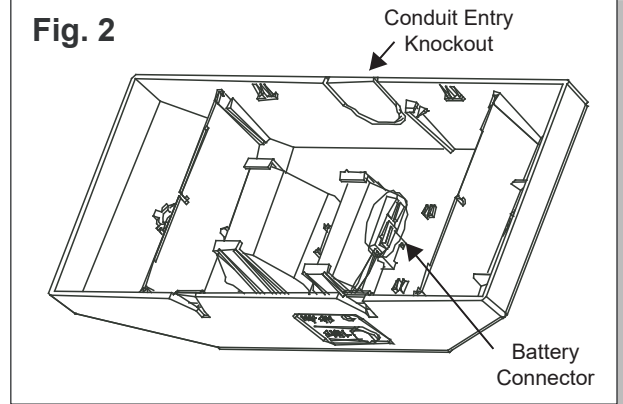
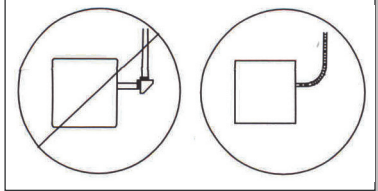


Fig. 2



### Use Flexible Conduit Only.



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### Electrical Connections

All electrical connections should be made inside the J-box. Make electrical connection as follows:

#### 120VAC

White - Common  
Black - 120VAC  
Green - Ground

#### 277VAC

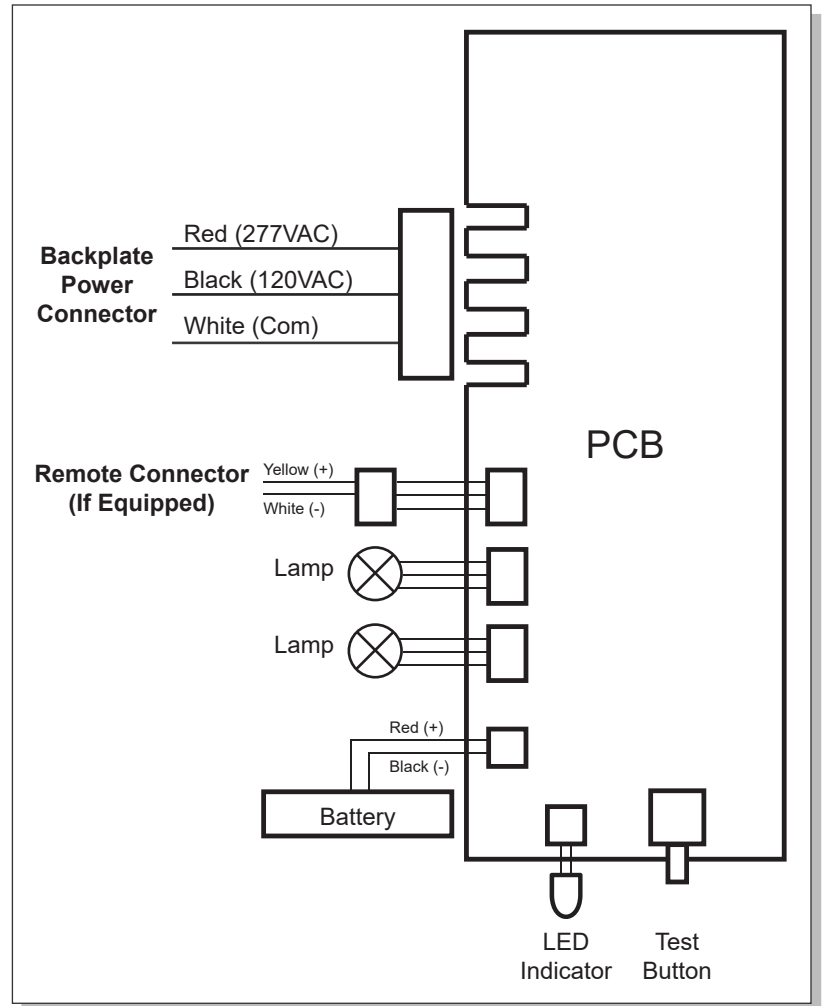
White - Common  
Orange - 277VAC  
Green - Ground

**Note:** Cap unused leads to prevent shorting.

### Remote Lamp Connection - 3.6V, 3W Max (Option)

If the fixture is equipped with remote capability, remove the jumper from the remote wire coming from the PCB and replace it with the remote wire adapter (included). All electrical connections should be made inside the J-box. Make remote connections as follows:

Yellow - Positive (+)  
White - Negative (-)



### Self-Test/Self-Diagnostics (G2)

#### Operation

The purpose of this option is to provide Self-testing and Self-diagnostic capabilities to the emergency unit. At predetermined intervals, the emergency unit will automatically switch into battery mode. Refer to the **Self-Test Feature** section below for timing details. The emergency unit will also perform various Self-diagnostic tests to determine if there are any faults. Visual signaling will alert maintenance personnel to a fault of the emergency unit electronics, battery, and/or battery charger. The circuitry continuously monitors the operating condition of the emergency unit and battery charging circuit/battery supply voltage. Refer to the **LED Indicator** section below for fault reporting details.

#### Self-Test Feature

- The emergency unit will automatically switch to battery mode every 30 days for a period of 30 seconds.
- The emergency unit will automatically switch to battery mode every 180 days for a period of 30 minutes.
- The emergency unit will automatically switch to battery mode every 365 days for a period of 90 minutes.

#### LED Indicator

Once the unit is properly installed according to the installation instruction sheet and AC power is supplied, the unit will turn on and the Self-diagnostic test function will initiate. After this, the bi-color LED will indicate the status of the unit.

- A steady green LED indicates that normal AC power is being supplied to the emergency unit and the battery is charged.
- A blinking green LED indicates that the unit is in battery mode. Refer to the **Test Button Feature** section below for manual test details.
- A red/green flashing LED indicates that the battery is charging.
- A red LED indicates whenever the Self-diagnostic system has detected a fault condition. Refer to the chart below to determine the fault condition:

Red LED Indication	Unit Fault	Corrective Action
Steady Red	Battery is Disconnected	Check Battery Connection
Blinking 1 Time	Electronics Failure	Check Battery Then Consult Factory
Blinking 2 Times	Battery Failure	Check Battery Then Consult Factory
Blinking 3 Times	N/A	N/A
Blinking 4 Times	Emergency Lamp	Check Lamp Connections Then Consult Factory
Blinking 5 Times	Remote Lamp (If Equipped)	Check Remote Lamp Connections Then Consult Factory

#### Test Button Feature

**MANUAL TEST** – Pressing the test button will switch the unit into battery mode for a set amount of time. The desired length of the test is determined by the number of times the test button is pressed.

- Pressing the test button once will switch the unit into battery mode for a period of 30 seconds. The LED indicator will continuously blink green 1 time during this period.
- Pressing the test button twice within 2 seconds will switch the unit into battery mode for a period of 30 minutes. The LED indicator will continuously blink green 2 time during this period.
- Pressing the test button 3 times within 2 seconds will switch the unit into battery mode for a period of 90 minutes. The LED indicator will continuously blink green 3 time during this period.

**RESET** – Pressing and holding the test button for 3 seconds will cancel a test. Pressing and holding the test button for 6 seconds will reset the LED to a steady green. If multiple faults are present, it may be necessary to repeat this procedure for each remaining fault indicated by the blinking red LED.

Use in accordance with local building codes.