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ILB-1826

LED
EMERGENCY
LIGHTING EQUIPMENT

INSTRUCTION MANUAL

IMPORTANT SAFEGUARDS

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. **CAUTION** – To prevent electrical shock, do not mate unit connector until full installation is complete and A.C. power is supplied to the unit.
2. **CAUTION** – This fixture provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency sources by turning off the A.C. branch circuit and by disconnecting the unit connector.
3. **CAUTION** – This is a sealed unit. Components are not replaceable. Replace the entire unit when necessary.
4. **CAUTION** – Installation and servicing should be performed by **qualified personnel only**. Do not open this unit.
5. **DO NOT USE OUTDOORS**. The **ILB-1826** is for use with grounded, UL Listed, damp location rated fixtures. Not for use in heated air outlets or hazardous locations.
6. The **ILB-1826** requires an unswitched A.C. power source of either 120 or 277 volts. Properly cap the unused A.C. lead.
7. The **ILB-1826** and LED driver **must** be on the same branch circuit.
8. Do not mount near gas or electric heaters.
9. The **ILB-1826** should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
10. The **ILB-1826** will supply up to 24 Watts for 90 minutes. Output current may vary depending on the ILB model. Refer to model specifications for output current ratings.
11. The **ILB-1826** is supplied with a 16.8VDC @ 2500mAh nominal battery (14 C cells of 2.5 Ahs).
12. Suitable for use in damp locations.
13. Acceptable operating temperatures are as follows:
Non-Cold Weather Battery Pack - For use in 32° F minimum, 131° F maximum ambient temperatures.
Cold Weather Battery Pack - For use in -4° F minimum, 131° F maximum ambient temperatures.
14. The **ILB-1826** is compatible with most appropriately rated LED drivers, including LED drivers with multiple LED arrays, with one LED array operating in the emergency mode.
15. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
16. Do not use this equipment for other than intended use.
17. Install in accordance with the National Electrical Code and local regulations.
18. Lighting fixture manufacturers, electricians, and end-users need to ensure product system compatibility before final installation.
19. Do not disconnect DC power with AC power supplied. Always disconnect AC power first.

SAVE THESE INSTRUCTIONS



THIS UNIT CONTAINS A
RECHARGEABLE NICKEL-CADMIUM BATTERY.
PLEASE RECYCLE OR DISPOSE OF PROPERLY.

INSTALLATION INSTRUCTIONS

CAUTION: Before installing, make certain the A.C. power is off and the ILB-1826 unit connector is disconnected.

1. LED LIGHT

The **ILB-1826** is designed for use with LED arrays that operate up to 24 Watts.

2. MOUNTING THE ILB-1826

Remove the ballast/driver channel cover. Mount the **ILB-1826** in the ballast/driver channel at least ½" away from the LED driver. The **ILB-1826** may also be mounted on top of the fixture. The optional top mounting kit (Catalog No. TMK-32) may be ordered separately from Customer Service.

When the **ILB-1826** is remote mounted, consult Customer Service for the maximum allowable distance between the **ILB-1826** and the LED load. The maximum allowable distance of the **ILB-1826 battery** from the **ILB-1826 electronics** is 2 feet.

NOTE: The **ILB-1826** is suitable for use in cold-weather applications only when connected to a cold-weather battery pack.

3. WIRING

Refer to the wiring diagram on the back page for the appropriate wiring of the LED array and driver. Install in accordance with the National Electrical Code and local regulations. For additional wiring diagrams consult Customer Service.

4. INSTALLING THE CHARGE INDICATOR

Recessed Fixture – Select a convenient location with proper clearance in the ballast/driver channel or access cover and drill or punch a 7/8" hole (½" knockout). Insert the 7/8" bushing into the hole. Push the plastic tube through the bushing. Disconnect the leads from the **Charge Indicator** housing and route the leads down the plastic tube. Reconnect the leads to the housing, observing the proper polarity (Red/Black or Red lead w/connector to positive (+) red tab). Push the entire assembly back into the tube until the lens collar rests against the plastic tube. The plastic tube should be adjusted so that the **Charge Indicator** is within ¼" of the fixture lens. The **Charge Indicator** must be visible after installation. Refer to *Illustration 1*.

Strip Fixture – Select a convenient location on the side of the fixture so the **Charge Indicator** can be seen after installation. Allow for proper clearance inside the fixture and drill or punch a ½" hole. Disconnect the leads from the **Charge Indicator** housing. Push the **Charge Indicator** housing into the ½" hole until it is firmly locked in place. Reconnect the leads, observing proper polarity (Red/Black or Red lead w/connector to positive (+) red tab). Refer to *Illustration 2*.

5. INSTALLING THE TEST SWITCH

The **Test Switch** should be mounted on the ballast/driver channel cover of a recessed troffer, or on the side of a strip fixture, preferably adjacent to the **Charge Indicator**. Drill or punch a ½" mounting hole.

Illustration 1: Recessed Troffer Fixture

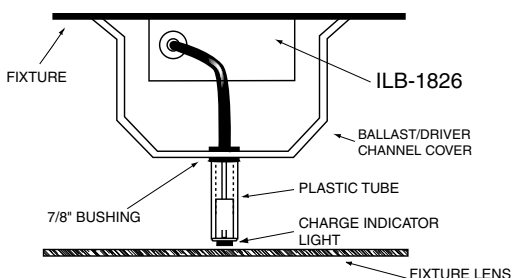
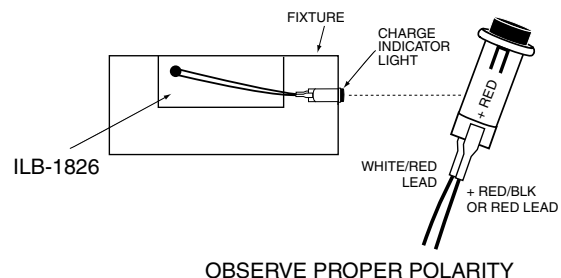


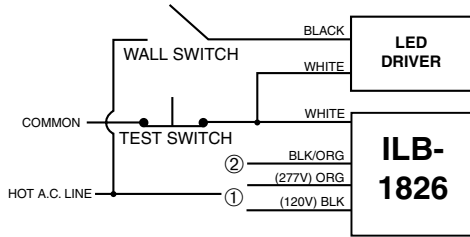
Illustration 2: Strip Fixture



6. WIRING THE A.C. INPUT

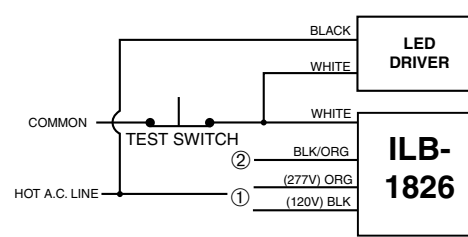
- A. The **ILB-1826** and LED driver **must** be on the same branch circuit.
- B. The **ILB-1826** requires an **unswitched** A.C. power source of either 120 or 277 volts. Select the proper voltage lead and cap the unused lead.
- C. When the **ILB-1826** is used with a switched fixture, the A.C. input to the **ILB-1826** must be connected ahead of the fixture switch. Refer to *Illustration 3* for switched and unswitched fixture wiring diagrams.

Illustration 3: Switched Fixture



- ① Select proper voltage lead. Cap unused lead.
- ② BLK/ORG lead for Cold-Weather Unit only.
For non-Cold Weather Units, cap BLK/ORG lead.
For Cold-Weather Unit 120V installation, connect BLK/ORG to BLK.
For Cold-Weather Unit 277V installation, cap BLK/ORG and BLK separately.

Unswitched Fixture



- ① Select proper voltage lead. Cap unused lead.
- ② BLK/ORG lead for Cold-Weather Unit only.
For non-Cold Weather Units, cap BLK/ORG lead.
For Cold-Weather Unit 120V installation, connect BLK/ORG to BLK.
For Cold-Weather Unit 277V installation, cap BLK/ORG and BLK separately.

7. LABELS

Attach the appropriate labels adjacent to the **Test Switch** and **Charge Indicator**. Annotate Replacement Label with identical manufacturer part number(s). The Caution and the Replacement labels must be on the fixture in a readily visible location to anyone attempting to service the fixture.

8. COMPLETING INSTALLATION

When the installation is complete, switch the A.C. power on and join the **ILB-1826** unit connector.

OPERATION

Normal Mode – A.C. power is present. The LED driver operates the LED light array(s) as intended. The **ILB-1826** is in the standby charging mode. The **Charge Indicator** will be lit providing a visual indication that the battery is being charged.

Emergency Mode – The A.C. power fails. The **ILB-1826** senses the A.C. power failure and automatically switches to the *Emergency Mode*. One or multiple LED arrays are illuminated, for a minimum of 90 minutes. When the A.C. power is restored, the **ILB-1826** switches the system back to the *Normal Mode* and resumes battery charging. See page 1 of the Instruction Manual.

TESTING & MAINTENANCE

Pressing the **Test Switch** turns off the light on the **Charge Indicator** and forces the unit into emergency mode, interrupting power to the designated LED driver. The LED array is now being lit by the **ILB-1826** unit. After releasing the **Test Switch**, the fixture returns to normal operation after a momentary delay. To simulate a “BLACK OUT” use the circuit breaker to turn off A.C. power.

Initial Testing – Allow the unit to charge approximately 1 hour, then conduct a 30-second discharge test. Allow a 24 hour charge before conducting a 90 minute test.

The **ILB-1826** is a maintenance free unit, however, periodic inspection and testing is required. NFPA 101, Life Safety Code, outlines the following schedule:

Monthly – Insure that the **Charge Indicator** light is illuminated. Conduct a 30 second discharge test by depressing the **Test Switch**. At least one LED array should operate at reduced output.

Annually – Insure that the **Charge Indicator** is illuminated. Conduct a full 90 minute discharge test. The unit should operate as intended for the duration of the test.

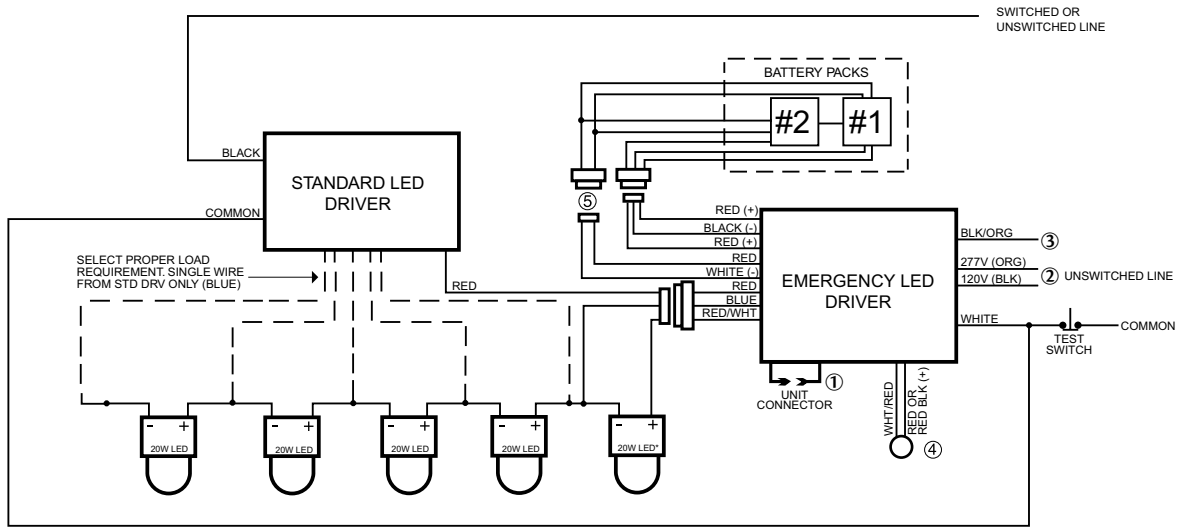
“Written records of testing shall be kept by the owner for inspection by the authority having jurisdiction.”

SERVICING SHOULD BE PERFORMED BY QUALIFIED PERSONNEL.

Consult Customer Service or visit www.iotaengineering.com for current warranty information.

TYPICAL WIRING DIAGRAM

For other diagrams, consult our Customer Service.



- ① DO NOT MATE CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED.
- ② SELECT PROPER VOLTAGE LEAD. CAP UNUSED LEAD.
- ③ BLK/ORG LEAD FOR COLD-WEATHER UNIT ONLY. FOR NON-COLD WEATHER UNITS, CAP BLK/ORG LEAD. FOR COLD-WEATHER UNIT 120V INSTALLATION, CONNECT BLK/ORG TO BLK. FOR COLD-WEATHER UNIT 277V INSTALLATION, CAP BLK/ORG AND BLK SEPARATELY.
- ④ TEST ACCESSORY LEADS-OBSERVE PROPER POLARITY WIRING.
- ⑤ OPTIONAL CONNECTOR FOR COLD-WEATHER HEATING BLANKET ONLY. FOR NON-COLD-WEATHER UNITS, LEAVE DISCONNECTED.