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# ILB

'A' MOUNTING DESIGN  
EMERGENCY  
LIGHTING EQUIPMENT  
FOR LED

## 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 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**. De-energize before opening.
5. **DO NOT USE OUTDOORS**. The **ILB** is for use with grounded, UL Listed, damp location rated, indoor fixtures. Not for use in heated air outlets or hazardous locations.
6. The **ILB** requires an unswitched A.C. power source of either 120 or 277 volts. Properly cap the unused A.C. lead.
7. The **ILB** and A.C. driver **must** be on the same branch circuit.
8. Do not mount near gas or electric heaters.
9. The **ILB** should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
10. The **ILB** will supply 24VDC or 12VDC output at the individual rated specification for 90 minutes. See individual units for output specifications.
11. Suitable for use in damp locations.
12. For use in 0° C minimum, 50° C maximum ambient temperatures.
13. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
14. Do not use this equipment for other than intended use.
15. Install in accordance with the National Electrical Code and local regulations.
16. Lighting fixture manufacturers, electricians, and end-users need to ensure product system compatibility before final installation.

### 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 unit connector is disconnected.

## 1. LED LIGHT

The **ILB** can be used with most LED loads that operate at 24VDC or 12VDC. See **ILB Model Specification Chart** for output specifications of the unit being installed.

ILB MODEL SPECIFICATION CHART

MODEL #	VOLTAGE*	MAX LOAD (WATTS)*
ILB-1207	12VDC	7
ILB-1212	12VDC	12
ILB-2407	24VDC	7
ILB-2412	24VDC	12

\*ALL VOLTAGES AND WATTAGES ARE NOMINAL

## 2. MOUNTING THE ILB

The **ILB** should be mounted on or nearby the fixture above the ceiling. The flex conduit marked "A" should be wired into the driver/lamp compartment or to an electrical junction box on the fixture which allows access to the fixture connections. Refer to *Illustration 1* for typical mounting.

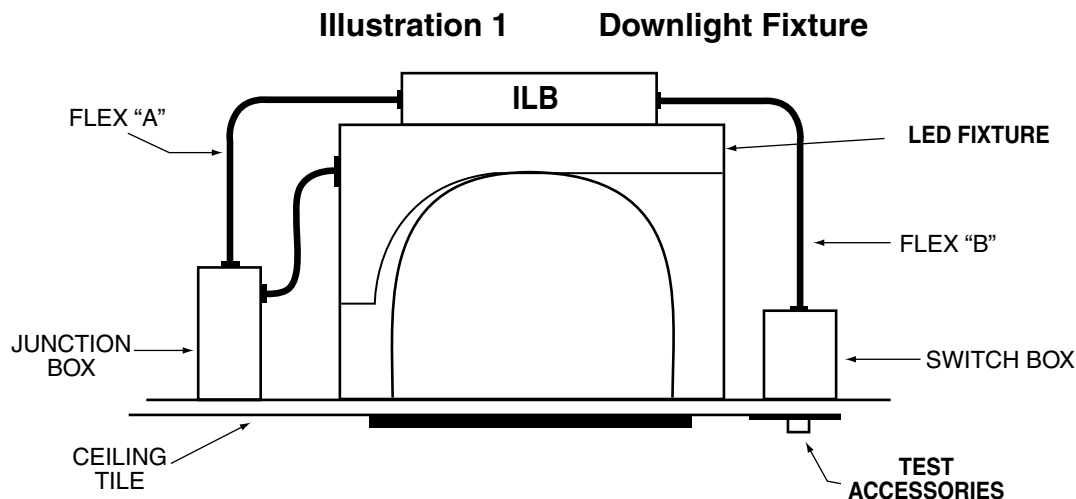
When battery packs are remote mounted, the remote distance can not exceed 1/2 of the distance from driver to lamp specified by the A.C. driver manufacturer. Under no circumstances should the battery pack exceed a distance of 50' from the lamp.

## 3. WIRING

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

## 4. MOUNTING THE TEST ACCESSORIES

Cut a single gang switch box into the ceiling tile adjacent to the fixture within reach of the **ILB** flex. After mounting the switch box, connect flex to the box and route all leads inside the box. Note proper polarity of the charge indicator light prior to removal from harness.



## 5. LABELS

Attach the appropriate labels adjacent to the **TBTS**. 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.

## 6. WIRING THE A.C. INPUT

- A. The **ILB** and A.C. driver **MUST** be on the same branch circuit.
- B. The **ILB** requires an **unswitched** A.C. power source of either 120 or 277 volts; therefore when used with switched fixtures, the ILB input must be wired ahead of the switch. Select the proper voltage lead and cap the unused lead.
- C. Refer to the wiring diagrams on the back page for the proper wiring. For wiring diagrams not shown, consult our customer service.

## 7. COMPLETING INSTALLATION

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

## OPERATION

**Normal Mode** – A.C. power is present. The A.C. driver operates the LED load as intended. The **ILB** 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** senses the A.C. power failure and automatically switches to the *Emergency Mode*. One or multiple LEDs are illuminated, for a minimum of 90 minutes. When the A.C. power is restored, the **ILB** 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 A.C. driver. The LED load is now being lit by the **ILB** 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 short discharge test. Allow a 24 hour charge before conducting a one hour test.

The **ILB** 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 should operate at reduced output.

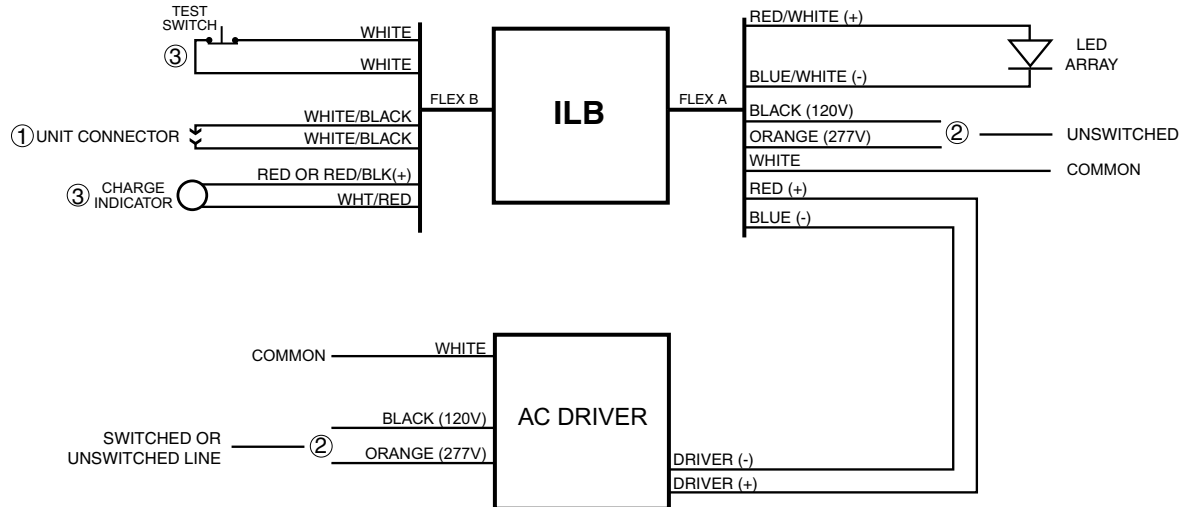
**Annually** – Insure that the **Charge Indicator** is illuminated. Conduct a full 90 minute discharge test. The unit should operate as intended for the duration of the test.

“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](http://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. CAP UNUSED LEADS.
- ③ TEST ACCESSORY LEADS-OBSERVE PROPER POLARITY WIRING.