

UNIVERSAL INPUT, AC OUTPUT, BATTERY PACK INSTALLATION INSTRUCTIONS

! IMPORTANT SAFEGUARDS!

WHEN USING ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

- 1. To prevent high voltage from being present on the orange/black and yellow/black output leads prior to installation, battery connection must be open. Install battery connector after the battery pack has been installed and before the AC power is supplied.
- 2. For use with fluorescent, incandescent or LED fixtures up to 25 W (20°C to 40°C including driver/ballast) at unity power factor.
- 3. Make sure all connections are in accordance with the National Electrical Code and any local regulations.
- 4. To reduce the risk of electric shock, disconnect both normal and auxiliary power supplies and battery connector of the battery pack before servicing.
- 5. This battery pack is suitable for factory or field installation.
- An AC power source (120, or 277 VAC, 60 Hz) ahead of any wall switch is required to provide battery charging current.
- 7. Do not install near gas or electric heaters.
- 8. This product is for use with indoor or damp locations where ambient temperature is 20°C to 40°C. Not suitable for wet or hazardous locations.
- 9. This is a sealed unit. Integral battery is not replaceable. Replace entire unit when necessary.
- 10. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- 11. Do not use this product for other than intended use.
- 12. Servicing should be performed by qualified service personnel.
- 13. Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.

SAVE THESE INSTRUCTIONS

WARNING – This product contains chemicals known to the State of California to cause cancer, birth defects and/or other reproductive harm. Thoroughly wash hands after installing, handling, cleaning, or otherwise touching this product.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

INSTALLER:

SEE UNIT LABEL FOR ADDITIONAL MODEL SPECIFICATIONS SAVE THESE INSTRUCTIONS FOR USE BY OWNER/OCCUPANT



CAUTION: DISCONNECT POWER DURING INSTALLATION AND BEFORE SERVICING. READ ALL INSTRUCTIONS COMPLETELY BEFORE STARTING INSTALLATION.

INSTALLATION



WARNING: TO PREVENT HIGH VOLTAGE FROM BEING PRESENT ON ORANGE/BLACK AND YELLOW/BLACK OUTPUT LEADS PRIOR TO INSTALLATION, BATTERY CONNECTOR MUST BE OPEN. INSTALL BATTERY CONNECTOR AFTER INSTALLATION IS COMPLETE AND BEFORE AC POWER IS SUPPLIED.

NOTE: Make sure that the necessary branch circuit wiring is available. An unswitched source of power is required. The unswitched and switched power source must be fed from the same branch circuit.

INSTALLING THE BATTERY PACK

The battery pack will be located between the AC power sources and the AC ballast/driver as shown in wiring diagram section of instructions.

NOTE: The battery pack may be installed in close proximity to the fixture or remote from the fixture.

The maximum remote distance using 16 AWG wire is 250 ft. Contact the factory for more information.

The AC power is fed to the battery pack.

The AC ballast/driver receives power from the battery pack. The output wires of the battery pack are the orange/black and yellow/black leads .

STEP 1 - DISCONNECT AC POWER FROM FIXTURE

Disconnect all power sources from lighting fixture and ensure they are locked out during installation or maintenance.

Disconnect power leads from the AC ballast/driver.

Select a suitable location for the battery pack and install such that its output leads can connect to the input leads of the AC ballast/driver.

See Illustration 1, for typical installation and select appropriate mounting method.

STEP 2 - WIRING THE BATTERY PACK

Use the wiring diagram found on page 4 as reference.

Connect the AC power source leads to the input of the battery pack.

Connect the output leads of battery pack to the AC ballast/driver.

Wire the AC ballast/driver with the lamp in accordance with manufactures installation instructions. No ballast/driver is necessary for incandescent lamp application.

Make sure all connections are in accordance with the National Electrical Code and any local regulations.

Connect the indicator LED by matching violet and brown leads.

In a readily visible location, attach the label "CAUTION-This Unit Has More Than One Power Connection Point. To Reduce The Risk Of Electric Shock, Disconnect Both The Branch Circuit-Breakers Or Fuses And DC Power Supply (Battery Connector) Before Servicing."

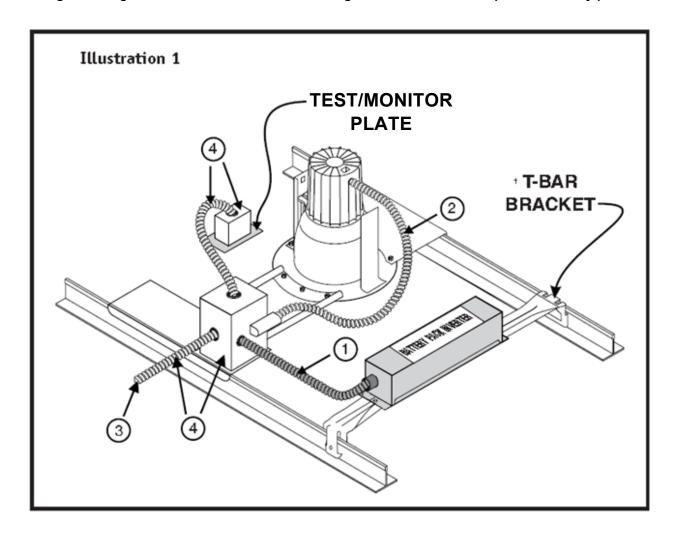
STEP 3 - INSTALL BATTERY CONNECTOR & APPLY POWER

After installation is complete, join the battery connector and apply AC power.

Power should now be connected to both the AC ballast and the battery pack, and the Charging Indicator Light should illuminate indicating the battery is charging.

A short-term discharge test may be conducted by pressing the test switch after the battery pack has been charging for 1 hour. The battery should be fully charged in 32 hours and ready for a long term discharge test.

NOTE: This connector/jumper is polarized, so use caution as not to damage it when inserting into housing. A damaged connector can result in discharged batteries and/or inoperative battery pack.



1 – Flexible conduit (supplied) to connect ballast wires.

Battery Pack

- 2 Existing conduit to run existing wires to lamp holder.
- 3 AC line in.
- 4 Conduit and junction box (not supplied).

No Shading - Equipment supplied by others

OPERATION

During normal operation, AC power is supplied to the AC ballast/driver through the battery pack as it charges the battery. Installing the battery connector enables the emergency circuit and supplies power to the control/monitor circuit. The battery pack detects AC input line voltage (120 or 277 Volts) and automatically sets the output voltage during emergency mode.

When AC power fails, the battery pack automatically switches to emergency mode, keeping the load illuminated for a minimum of 90 minutes. When AC power is restored, the battery pack returns to charging mode. The battery pack detects normal and fault conditions and signals those conditions through the Red LED as follows:

LED OPERATION:

Steady on: normal charging

Single blink:

- 1. Test switch pressed before completing one hour charging.
- 2. Battery voltage less than or equal to 6 volts.
- 3. Battery voltage less than 12 volts after charging for 32 hours.

Double blink:

- 1. Load current too high.
- 2. Charge current too low.

NOTE: Press test switch to clear error, stop blinking and restart

- MAINTENANCE

Although no routine maintenance is required to keep the battery pack functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

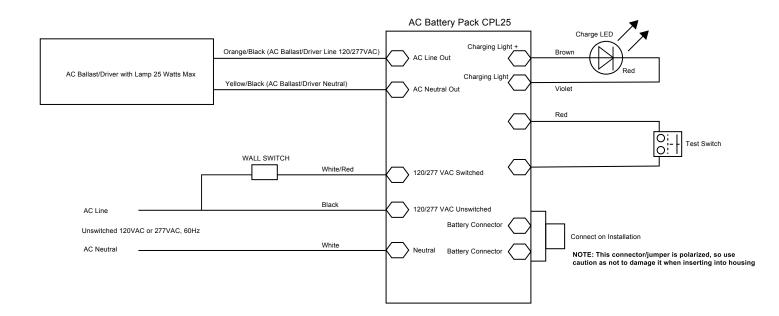
- 1. Visually inspect the charging indicator light monthly. It should be illuminated.
- 2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. The lamp should operate at full illumination.
- 3. Conduct a 90-minute discharge test once a year. The lamp should operate at full illumination for at least 90 minutes.

REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL.

BATTERY PACK AND AC BALLAST/DRIVER MUST BE FED FROM THE SAME BRANCH CIRCUIT

TYPICAL SCHEMATICS ONLY. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

INSTALLATION WIRING DIAGRAM



REMOVAL INSTRUCTIONS

To avoid a shock hazard, the following steps must be done in the order shown:

- a. Turn-off AC power to the battery pack by disconnecting the AC Branch Circuit Breakers or Fuses.
- b. Disconnect the battery connector of the battery pack.
- c. All wiring may then be disconnected as needed to remove the battery pack.

