LED EMERGENCY DRIVER PS1055CP, PS1555CP, PS1055CP FMC & PS1555CP FMC
INSTALLATION INSTRUCTIONS

READ AND FOLLOW THESE INSTRUCTIONS BEFORE INSTALLATION TO ENSURE PROPER AND SAFE OPERATION

SAVE THESE INSTRUCTIONS

LED EMERGENCY DRIVER COMPATIBLE WITH THE LED LOADS LISTED IN SPECIFICATIONS. FOR OTHER LED LOADS CONTACT THE FACTORY. 1-888-300-7017 www.acuitybrands.com

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

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

⚠ WARNING

- Dual Power Supply - Risk of Shock Hazard Even if AC Power is OFF.
- Disconnect Test Switch / Pilot Light and Battery connector before servicing fixture.
- DO NOT mount near a gas or electric heater.

⚠ CAUTION

- Before wiring to power supply, turn off electricity at fuse panel or circuit breaker.
- Service by Qualified Personnel Only. De-energize before opening.
- DO NOT attempt to service the battery. It is not field replaceable.
- DO NOT use in hazardous locations.
- DO NOT use this product outdoors.
- DO NOT use this product in air handler heated outlets.
- DO NOT use accessory equipment not recommended by the manufacturer.
- DO NOT use this equipment for other than its intended use.

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IMPORTANT SAFEGUARDS

- Consult your local building code for approved wiring or installation.
- The LED Emergency Driver must be connected to an unswitched AC power source of 120 to 277 Vac.
- This product is for use with indoor and damp rated fixtures. Where the ambient temperature is 5°C minimum, +50°C maximum.
- This product is for use with LED load voltage between 15V to 55V for PS1055CP, PS1055 CP FMC & 20V to 55V for PS1555CP, PS1555CP FMC.
- Equipment should be mounted in a location and at heights where it will not readily be subject to tampering by unauthorized personnel.
- Make sure that the branch circuits are derived from a common phase for both normal lighting LED drivers and the LED Emergency Driver prior to installation.
- When used with a switched fixture, it is important that the power to the LED Emergency Driver must be provided by an un-switched circuit.
- LED Emergency Drivers are for factory and field installation . They are not field serviceable.
- Allow LED Emergency Drivers to charge 24 hours before initial and full discharge testing.
- Do not locate the Test Switch / Pilot Light or route cable within 1 inch of the fixture LED Modules.
- Emergency lighting system should be tested per all of the required tests and as often as local codes require or at least monthly to ensure all components are operational.

CONTAINS LIFEPO$_4$ RECHARGEABLE BATTERY. MUST BE RECYCLED OR DISPOSED OF PROPERLY.

LED Emergency Driver Components

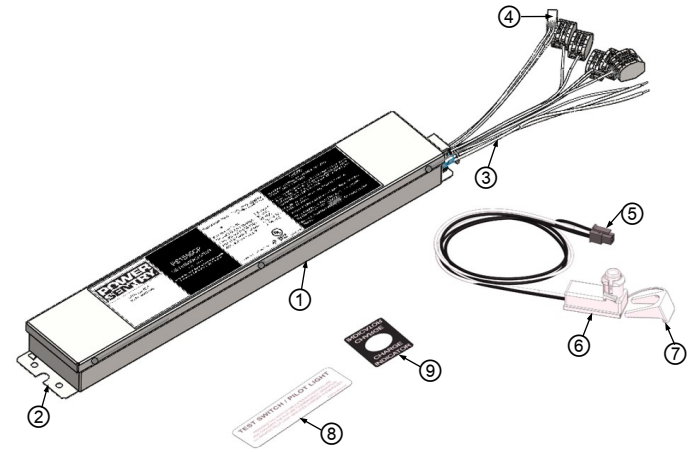

Fig 1

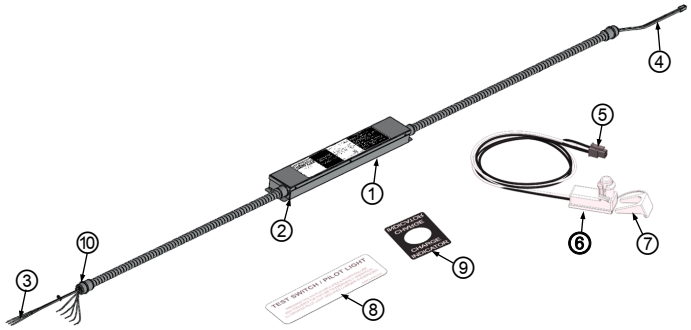

Fig 2

Component Descriptions

① LED Emergency Driver

② Mounting Slots

③ AC Wires

④ (TS/PL) Socket

⑤ (TS/PL) Connector

⑥ Test Switch / Pilot Light (TS/PL)

⑦ (TS/PL) Mounting Clip

⑧ (TS/PL) Label

⑨ SD Status Indicator Sticker

⑩ Flex Conduit Connector

Installation

Step 1 - Install LED Emergency Driver

1. Turn off all external power to the luminaire.
2. Inspect LED Emergency Driver ① and make sure the TS/PL ⑥ is **not** connected. If so, disconnect it before installation of the LED Emergency Driver.
3. Place the unit on the mounting surface and fasten through the mounting slots ② using sheet metal screws.
4. Refer to the wiring diagram. Connect Input/Output wires to the AC input power and LED module as indicated in the wiring diagram. For FMC products, secure flex conduit connectors ⑩ to junction boxes. Make sure all connections are in accordance with NEC and any other local requirements. Secure

Step 2 - Install Test Switch / Pilot Light (TS/PL)

1. Identify a suitable location for the TS/PL ⑥ and cable that is at least 1 inch from the fixture LED Module and is visible outside the fixture lens.
2. Drill or punch a ½ inch diameter hole in the fixture wall or use a Remote TS/PL (ELA TSPLP SD) for location up to 25 feet away.
3. Insert one side of TS/PL ⑥ into the hole from the inside of the fixture housing until it snaps in place.
4. Slide TS/PL Mounting Clip ⑦ firmly to lock and secure the TS/PL assembly.
5. Mark the TS/PL location on the fixture with the TS/PL Label ⑧ and apply the SD status Indicator Sticker ⑨ to the TS/PL location.
6. Connect and fully engage the TS/PL Connector ⑤ to the TS/PL Socket ④. Ensure the TS/PL Connector is properly seated in the TS/PL Socket.

Step 3 - Installation Inspection

Apply continuous AC power to LED Emergency Driver. Prior to operation of the LED Emergency Driver in normal service perform the following installation inspections. **Charge LED Emergency Driver at least 1 hour before doing a functional test. Allow 24 hours for full rated performance of the LED Emergency Driver.**

1. Check the equipment rating to be sure the LED Emergency Driver will receive the proper line voltage.
2. Be sure the TS/PL pilot lamp is on. The lamp will show Red for low battery, Green for sufficient battery charge. If not see Troubleshooting Section.
3. Press TS/PL test button for two seconds. The pilot light will blink. Within 5 seconds, the LED Module should then be operating at a reduced light output.
4. The test mode runs for 30 seconds. To exit test mode earlier, press the TS/PL for two seconds.
5. If the LED Module in the fixture returns to normal operation, the fixture is ready for normal and emergency service. If not, see Troubleshooting Section.

Normal and Emergency Operation

During normal operation AC power is applied and the charging indicator light is illuminated indicating the battery is charging. When the power fails, the LED Emergency Driver automatically switches to emergency power from the $LiFePO_4$ battery that will operate the LED Module for a minimum of 90 minutes. When the AC power is restored, the LED Emergency Driver switches the fixture back to the normal mode within 10 seconds.

Troubleshooting

Problem	Possible Cause
Emergency LED Module does not operate when TS/PL Button is pressed	1. Incorrect wiring of the LED Emergency Driver and/or LED Driver 2. Use of a LED Module not listed as compatible with the LED Emergency Driver 3. Battery not charged at least 1 hour 4. TS/PL not inserted properly to the LED Emergency Driver socket 5. Wrong TS/PL
TS/PL Charging LED not on	1. AC Power is Off 2. TS/PL not inserted properly to LED Emergency Driver socket 3. Wrong TS/PL
Fixture does not operate in the Normal mode	1. Incorrect wiring of the LED Emergency Driver and/or LED Driver 2. AC power off to the LED Driver
LED Emergency Driver does not operate LED Module in the emergency mode for at least 90 minutes	1. Battery not fully charged 2. LED module not within LED Emergency Driver specifications. 3. Battery at end of life

SPECIFICATIONS

NORMAL OPERATION				EMERGENCY OPERATION		
	INPUT AMPS		MAX. CHARGE AMPS	MINIMUM VOLTS	MAXIMUM VOLTS (OC)	BATTERY AMPS, MAX
MODEL NO.	120 Vac	277 Vac				
PS1055CP	0.053	0.049	0.209	15	55	1.20
PS1055CP FMC	0.052	0.049	0.209	15	55	1.20
PS1555CP	0.065	0.056	0.213	20	55	1.04
PS1555CP FMC	0.065	0.054	0.211	20	55	1.04

SELF-DIAGNOSTIC MODULE SPECIFICATIONS

Designed to perform self-diagnostics testing for five minutes every month, and ninety minutes every 12 months. Testing includes AC to DC transfer evaluation, battery condition and emergency load operation. Self-diagnostics work in conjunction with Test Switch/ Pilot Light (TS/PL) assembly. Any detected failures will be indicated by flashing of the bi-color LED. See Diagnostic key for additional details.

DIAGNOSTIC KEY

CONDITION		STATUS INDICATION
Normal Mode		Steady green or Steady red
Self-testing		Flashing green
Emergency mode		Off
Insufficient charge	=	Flashing red/green
Battery pack failure		*Single-flash red*
Emergency lamp failure		*Double-flash red*
Fixture diagnostic failure detected		*Triple-flash red*
Temperature out of range		*Quadruple - flash red*

PERIODIC MAINTENANCE

If the automated compliance testing function is disabled, Emergency lighting system should be manually tested as required by NEC and local code.

1. Periodically test the emergency lighting system by pressing the TS/PL test button.
2. Check the system LED Module to ensure that it operates in both the normal AC and emergency modes.
3. Ensure the Green LED charging light is on when the AC power is on. The lamp will show Red for low battery, Green for sufficient battery charge.

LED EMERGENCY DRIVER SHIPPING / POWERING DOWN

The LED Emergency Driver may be completely powered down by removing AC power AND performing one of the following steps:

- Press and hold the TS/PL for approximately five seconds until LED Module shuts off. This function can only be performed during the first thirty seconds of Emergency mode.

OR

- Unplug TS/PL in emergency mode.

Wiring Diagram

READ ALL SAFETY INSTRUCTIONS AND IMPORTANT SAFEGUARDS PRIOR TO WIRING AND INSTALLATION

SINGLE CHANNEL LED DRIVER - ONE LED MODULE

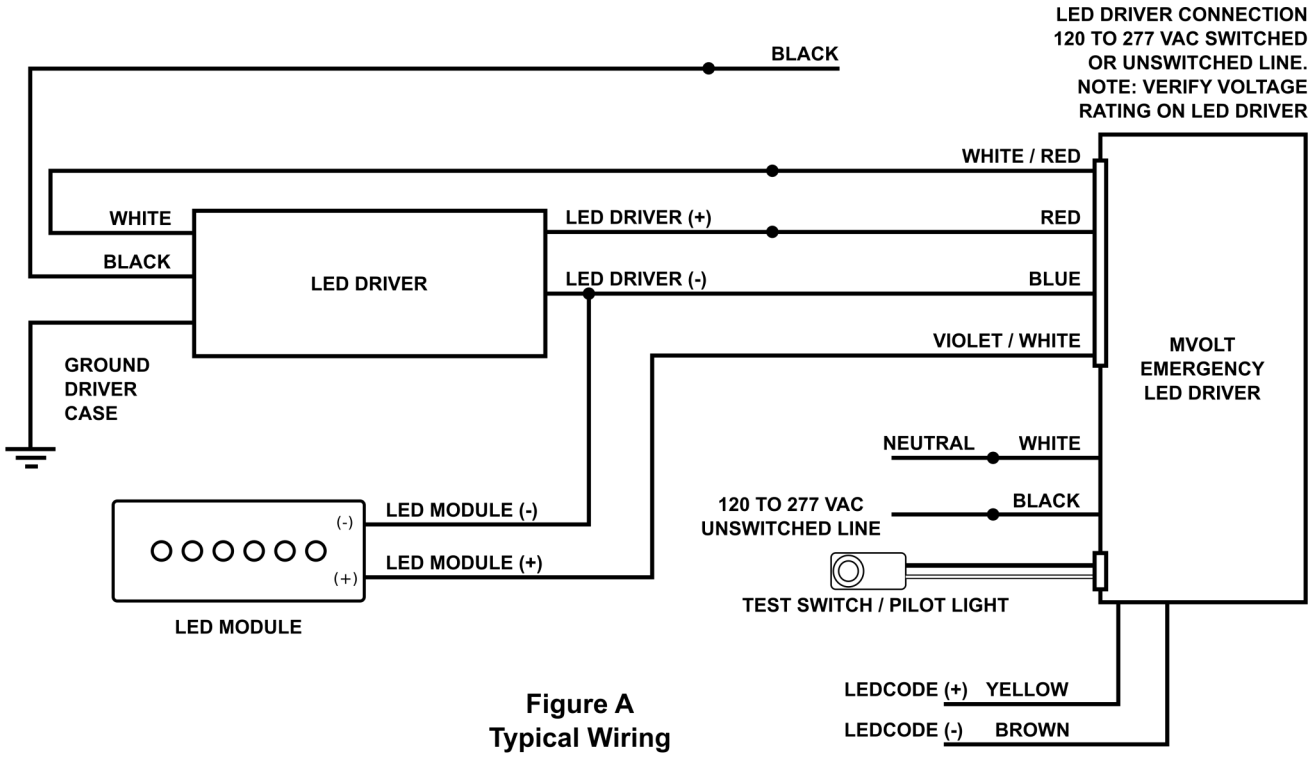

Figure A
Typical Wiring

MOUNTING HEIGHT

The maximum luminaire mounting height is 8 feet unless otherwise determined by the end product or validated at the installation site to meet national and local electric codes.