**INSTALL INSTRUCTIONS (MODEL# PQL-EMP-XX)** 

PLEASE FIND A QUALIFIED ELECTRICIAN FOR INSTALLATION. Please read and follow the instructions before installation.

IMPORTANT SAFEGUARDS: When using electrical equipment, basic safety precautions should always be followed.

#### **CAUTION**

- Make sure all electrical connections conform to the National Electrical Code and all applicable local regulations. Proper grounding is required for safety.
- Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged if drilling for installation of LED Emergency Backup. Check for enclosed wiring and components.
- Risk of fire or electric shock. This LED Emergency Pack installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.
- To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- Do not handle energized fixture when hands are wet, when standing on wet or damp surfaces, or in water.
- The electrical rating of this product is 100-347V AC. Installer must confirm that there is 100-347Vac to the fixture before installation.
- This is a sealed unit. Components are not replaceable. Replace the entire LED Emergency Backup unit when necessary.
- Equipment should be mounted in locations and at heights where it is not be subjected to tampering by unauthorized personnel.
- Suitable for use in damp locations and dry locations where the ambient temperature is 41° F minimum, 122°F maximum. (5°C ~ 50°C)
- Not for use in heated air outlets or hazardous locations.
- Do not use outdoors.
- Do not let power supply cords touch hot surfaces.
- Do not mount near gas or electric heaters.
- · Do not use this equipment for other than its intended use.
- · The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
- Use with grounded, UL Listed, dry or damp location rated fixtures.

#### **IMPORTANT**

- Before installing, make certain the AC Power to the fixture is off to avoid electric shock.
- An un-switched AC power source of 100~347VAC is required.
- Verify that all fixture lamp types marked on the installed luminaire are also identified as suitable for use with this emergency battery pack. To prevent
  wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.
- It is recommended to charge the battery every 6 months to prevent over-discharge.

**NOTE:** Indicator (LED light) illuminated indicates battery in charge mode when AC power is applied. It is recommended and required by applicable code to test emergency function to ensure proper operation of the system; push the test switch for thirty (30) seconds every 30 days to ensure the emergency pack is functioning as LED light source illuminated. Conduct a ninety minute (90) discharge test one time (1) per year; LED light source should be illuminated for a minimum of ninety minutes (90).

**TESTING SYSTEM:** The emergency battery pack requires a charge minimum of one (1) hour before testing the circuit. A full charge and a 90-minute test requires twenty-four (24) hours of charging.



#### THIS PRODUCT CONTAINS A RECHARGEABLE LITHIUM BATTERY. THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY.

Battery is rechargeable Li-ion type and must be recycled or disposed of properly. Do not use this emergency driver with accessory equipment other than recommended by the manufacturer. Failure to follow this may cause an unsafe condition and will void warranty. Servicing of this equipment should be performed by qualified personnel only.

KIT INCLUDES	QTY
LED Emergency Pack	1
Charging Indicator/Testing Button	1
Charging Indicator/Testing Button Wall Cover	1
Instruction Sheet	1

#### **SAVE THESE INSTRUCTIONS**

INSTALL INSTRUCTIONS (MODEL# PQL-EMP-XX)



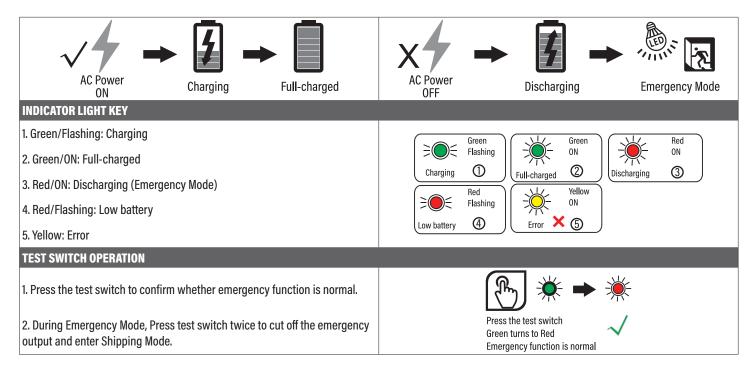
WARNING DISCONNECT POWER BEFORE INSTALLING OR SERVICING.

#### **OPERATION**

**AC Operation:** AC power is present. The AC driver operates the LED load as designed. The emergency driver is charging in a standby mode. The charging indicator will be lit, showing that the battery is charging.

**Emergency Operation:** When the AC power goes out. The emergency driver detects the AC power outage and automatically switch to the working emergency mode. The red LED light on indicates that it is discharging, the red LED flashes to indicate low battery power. The red LED light off indicates that the discharge is complete. When the AC power is restored, The emergency driver backs to AC power working and starts recharging.

Malfunction Operation: When the emergency LED driver malfunctions, the yellow LED will be on.



### **TESTING AND MAINTENANCE**

Press the test button to cut the power to the AC driver and switch the system to emergency mode. Release the test button to return to normal mode. Switch off the circuit breaker to simulate a full power outage.

**INITIAL TESTING** – Allow the unit to charge approximately 1 hour, then conduct a short discharge test. Allow a 24 hour charge before conducting a 90 minute test.

Periodic tests are recommended to ensure the system is functioning normally:

- 1. Visually inspect the test switch monthly. It should be illuminated when AC power is applied.
- 2. Monthly Conduct a 30 second discharge test by depressing the test button or by switching off the mains power every month.
- 3. Yearly Conduct a 90 minutes discharge test once per year. The unit should operate as intended for the duration of the test.

#### **SELF-DIAGNOSTIC**

The integrated Self- Diagnostic circuitry will automatically conduct 1 monthly 30-second and annual 90-minute tests to verify proper emergency capability:

- 1. Monthly self test is executed 30 seconds self-discharge test every 30 days. The system will transfer from normal lighting to emergency mode, and the reverse.
- 2. **Annual** self test is executed 90 minutes self-discharge test every 365 days. The system will transfer from normal lighting to emergency mode, and the reverse.

Written Records of the Testing should be kept by the owner for inspection by the authority having jurisdiction.

**INSTALL INSTRUCTIONS (MODEL# PQL-EMP-XX)** 



WARNING DISCONNECT POWER BEFORE INSTALLING OR SERVICING.

### **WIRING DIAGRAMS**



**CAUTION:** The Emergency LED Pack must connect to 0-10V dimming wires(DIM +, DIM -) of the luminaire if the LED luminaire power exceeds the emergency LED driver power.

**MODEL: PQL-EMP-08, PQL-EMP-15** 

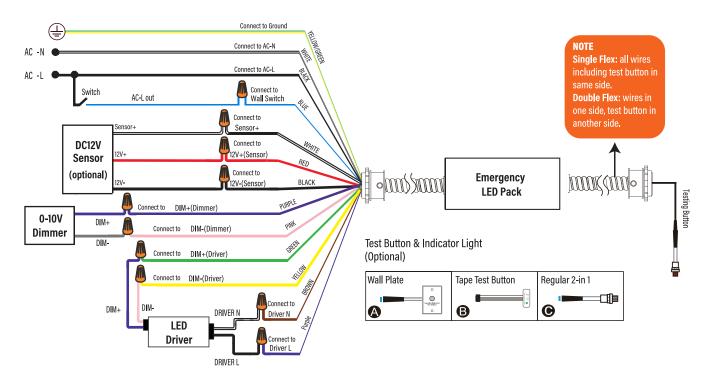
SPECIFICATIONS				
Input Voltage:	100-347Vac, 50/60Hz	Ambient Temperature:	41°F ~ 122°F	
Input Current:	≤ 100mA	Max. Mounting Height:	15.5ft, recommended	
Input Power:	12W Max.	Application:	<b>55700:</b> ≤ 60W (0-10V dimming luminaire)	
Output Voltage:	≤ 170V DC		<b>55702:</b> ≤ 100W (0-10V dimming luminaire)	
Input Current:	≤ 100mA		55700 / 55702: ≤ output power (non 0-10V dimming luminaire)	
Output Power:	55700: 8W / 55702: 15W			



During Emergency Mode, Press testing button twice to cut off the emergency output and enter Shipping Mode.

### WIRING DIAGRAM 1: With 0-10V LED Driver and 0-10V Dimmer

For luminaire with 0-10V LED driver and using 0-10V dimmer (\*LED DRIVER INPUT POWER NOT GREATER THAN 60W FOR 55700 / 100W FOR 55702) Emergency Pack Dim+ (Green), Dim- (Yellow) has to connect with LED driver DIM+ and DIM- respectively, as shown.



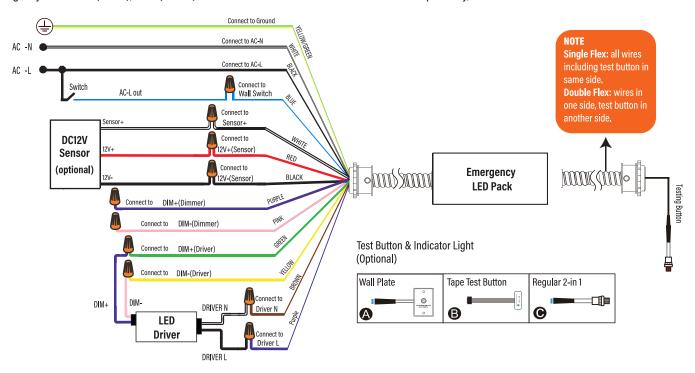
**INSTALL INSTRUCTIONS (MODEL# PQL-EMP-XX)** 



WARNING DISCONNECT POWER BEFORE INSTALLING OR SERVICING.

## WIRING DIAGRAM 2: With 0-10V LED Driver, without using 0-10V Dimmer

For luminaire with 0-10V LED driver, without using 0-10V dimmer (\*LED DRIVER INPUT POWER NOT GREATER THAN 60W FOR 55700 / 100W FOR 55702) Emergency Pack Dim+ (Green), Dim- (Yellow) has to connect with LED driver DIM+ and DIM- respectively, as shown.



### **WIRING DIAGRAM 3: With non 0-10V dimming LED Driver**

For luminaire with non 0-10V dimming LED driver (\*LED DRIVER INPUT POWER NOT GREATER THAN EMERGENCY PACK OUTPUT POWER).

