

# Emergency LED Driver

For wiring to the led driver's output



## MODEL:EMS-04050-YY



### Features

- UL Listed for us and canada
- Listed to UL924 and tested to CSA C22.2 NO.141 Field or factory installation
- Low energy consumption CEC compliance

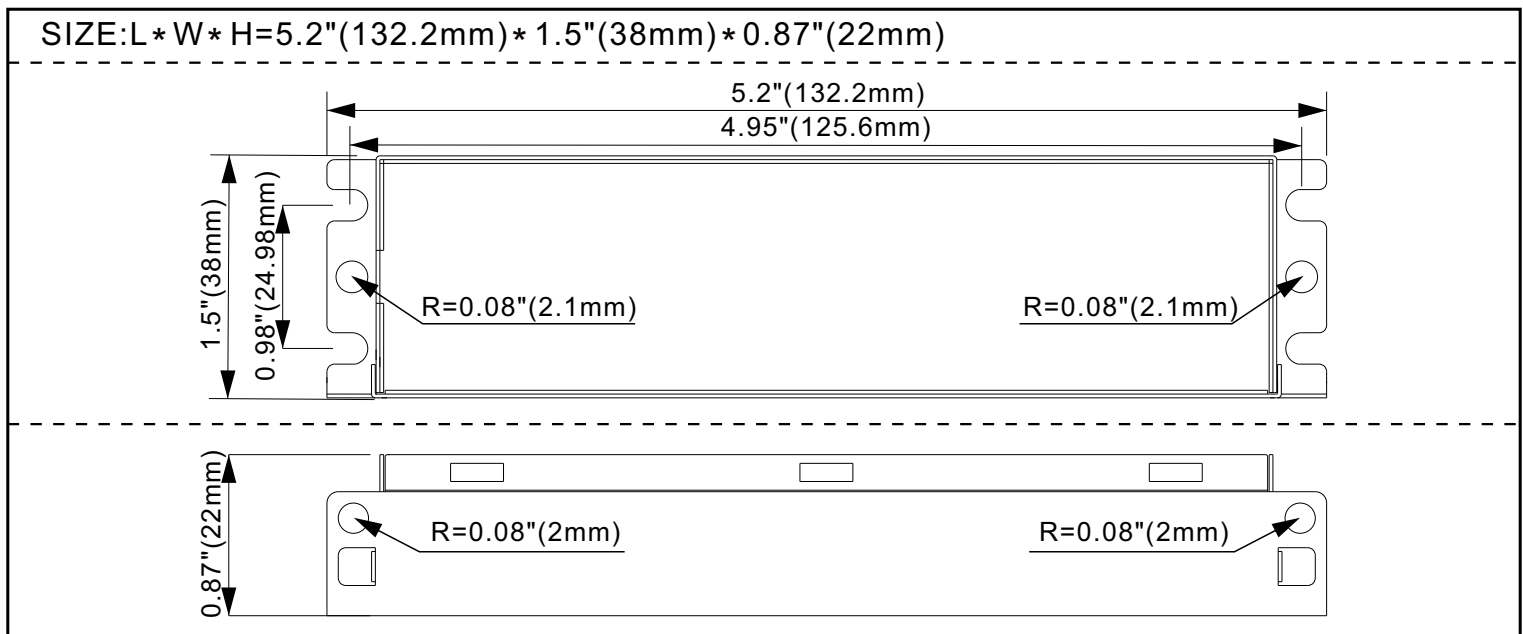
### Specifications

- Input Voltage:100~277Vac, 50/60Hz
- Input Current:100mA max.
- Input Power Rating:5W max.
- Output Voltage:50Vdc max.
- Emergency Power:4W
- Recharge Time:24Hrs
- Discharge Time:1.5H
- Warranty:5 Years
- Ambient Temp : 5~50°C
- Battery:Li-ion
- Weight:0.19kg
- Surge Protection:Line-Neutral 3KV

### Model NO.

Models	Output Power	Output Voltage
EMS-04050-YY	4 Watts	<b>15-50VDC</b>

### Dimensions



## INSTALLATION MANUAL

### ! IMPORTANT SAFEGUARDS !

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

### READ AND FOLLOW ALL SAFETY INSTRUCTION

1. **CAUTION-** This **EMS** provides more than one power supply output source. To reduce the risk of electrical shock, disconnect both normal and emergency source by turning off the A.C. branch circuit and by disconnecting the battery on/off connector.
2. **CAUTION-** Servicing of this equipment should be performed by qualified personnel only.
3. **CAUTION-** Do not attempt to service the battery. A sealed, no-maintenance battery is used that is not field replaceable. Replace the entire unit when necessary.
4. **CAUTION-** The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition, void warranty, and result in non-compliance with UL specifications.
5. **CAUTION-** The **EMS** requires an un-switched AC power source of 100-277VAC, 50/60Hz. Verify the correspondent electrical rating at the LED fixture before servicing. Both of the electrical rating will supply power under an output voltage of 50VDC in emergency mode for 90 minutes. (See individual units for output specifications.)
6. **CAUTION-** Battery pack should be charge for 24 hours every 6 months during storage.
7. **CAUTION-** Disconnect the battery pack before shipping and storing.
8. Battery in this unit may not be fully charged. After electricity is connected to the unit for at least 24 hours, then normal operation of this unit should take effect.
9. For use in 5°C minimum, 50°C maximum ambient temperatures. Suitable for use in damp locations and plenum spaces.
10. Flexible mental conduit is optional.
11. The **EMS** should be mounted in locations and at heights where it will not readily be subjected to tampering by unauthorized personnel.
12. For led fixture power higher than or equal to rating of the **EMS** emergency battery pack.
13. Do not use this equipment for anything other than its intended use. Equipment only use for LED Lighting emergency backup.
14. Do not mount near gas or electric heaters. Do not let power supply cords touch hot surfaces.
15. Do not make or leave any other open holes in the wiring enclosure or electrical component enclosure during installation.
16. This fixture is for use with grounded, UL Listed, damp location rated, indoor fixture. Not for use in heated air outlets or hazardous locations.
17. Do not use outdoor.
18. When use remote test switch, the faceplate shall be fixted on the junction box.
19. When use soft panel test switch with glue on the backside, pls paste on the visible palce with smooth and clean surface.
20. The equipment is intended for ordinary locations and for permanent installation into one or more Listed emergency luminaires.



**CAUTION: Before Installation, Make Certain The A.C. Power is Off.**

### STEP 1: INSTALLING THE EMS

- > Indicator light and test switch should be mounted where can be seen by the maintenance personnel. Determine appropriate location for **EMS** in the fixture. Install the **EMS** to the fixture using existing mounting holes in the fixture. The installation instruction of LED luminaire may provide guidance on mounting location.

### STEP 2: WIRING

- > Make certain the A.C. power is off. The **EMS** and A.C. driver must be on the same branch circuit.
- > Select the appropriate wiring diagram found as reference. For other diagrams, consult the manufacturer. Make sure all connections are accordance with National Electrical Code or any other local regulations. Connect the **EMS** to the A.C. driver and LED load in accordance with manufactures installation instructions.

### STEP 3: MOUNTING THE INDICATOR COMBO TEST SWITCH (ICTS)

- > The **EMS** requires an unswitched A.C. power source of **100-277VAC**, 50/60Hz, Therefore when used with switched fixtures, the **EMS** input must be wire ahead of the test switch.

### STEP 4: TESTING

- > After the A.C. input wiring is complete, switch the A.C. power on. Then the charging indicator light should illuminate, which indicating the battery is charging.
- > **The battery in this unit may not be fully charged.** A short-term discharge test may be conducted after the **EMS** has been charging for 1 hour. Charge for 24 hours before conducting a long-term discharge test.

#### NOTE:

whenthe models provided with ICTS with cover, the ICTS is secured to mounting surface by screws.  
whenthe models provided with ICTS with cover, the model can be only mounted in the luminaire, the lead of ICTS must be in the luminaire and not exposed, only the indictor LED is outside of luminaire and secured to luminaire by a screw.

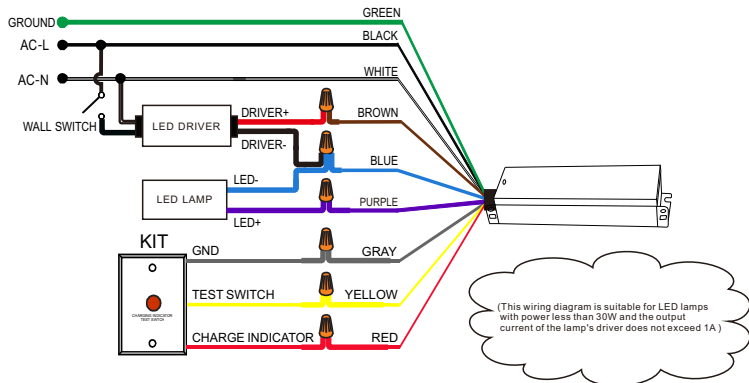
### SAVE THESE INSTRUCTIONS



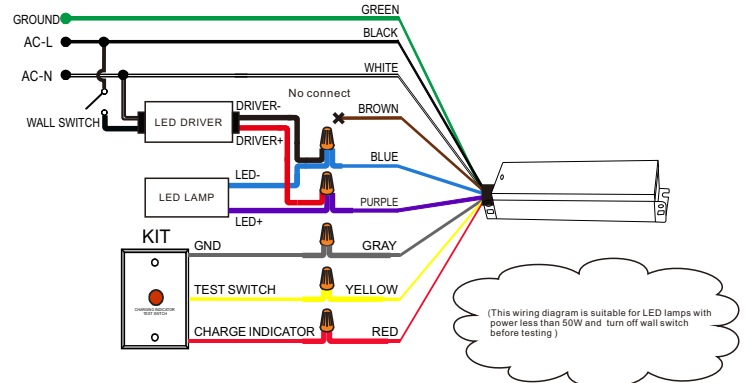
THIS PRODUCT CONTAINS A RECHARGEABLE LITHIUM-ION BATTERY. THE BATTERY MUST BE RECYCLED OR DISPOSED OF PROPERLY TO PREVENT FIRE.

## Wiring Diagram

### WIRING DIAGRAM 1



### WIRING DIAGRAM 2

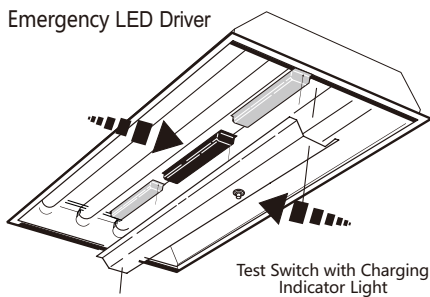


### CAUTION:

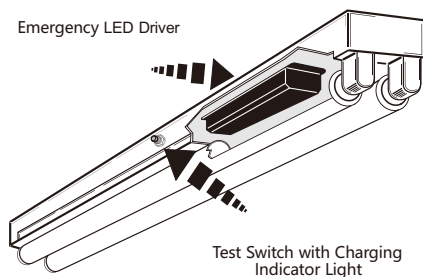
- The emergency driver have battery inside, forbidden for insulation voltage (I/P-O/P) test
- During storage, the battery pack need 24 hours charge every 6 months
- For use with a metal grounded enclosed wiring system” or equivalent
- Read and follow all safety instructions
- Do not use outdoors

## INSTALLING THE EMERGENCY LED DRIVER

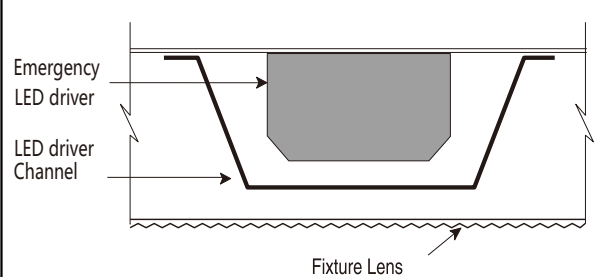
### INSIDE LED DRIVER CHANNEL



### INSIDE LED STRIP FIXTURE



### TROFFER STYLE FIXTURE

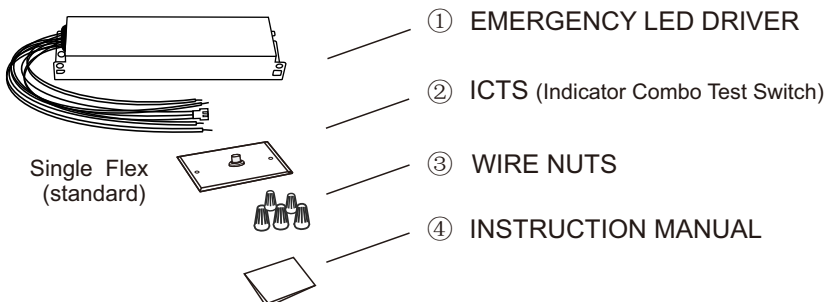


## LUMEN OUTPUT DURING EMERGENCY OPERATION

The luminaire rated data and maximum mounting height can be found as follows:

1. Determine the fixture efficacy under normal AC operation, based on fixture manufacturer published data in lumens per watt (LM/W).
2. Reference DLC QPL ([www.designlights.org](http://www.designlights.org)) and Energy Star QPL ([www.energystar.gov](http://www.energystar.gov)) for rated data on fixture efficacy. If fixture is not found on DLC or Energy Star Qualified Product List, contact fixture manufacturer.
3. Multiply **fixture LM/W** by **rated output power of emergency pack** ( Example 'model EMS-04050-YY' is  $\_\_W \times \_\_ LM/W = \_\_ Lumens$  )

## PRODUCT COMPONENTS



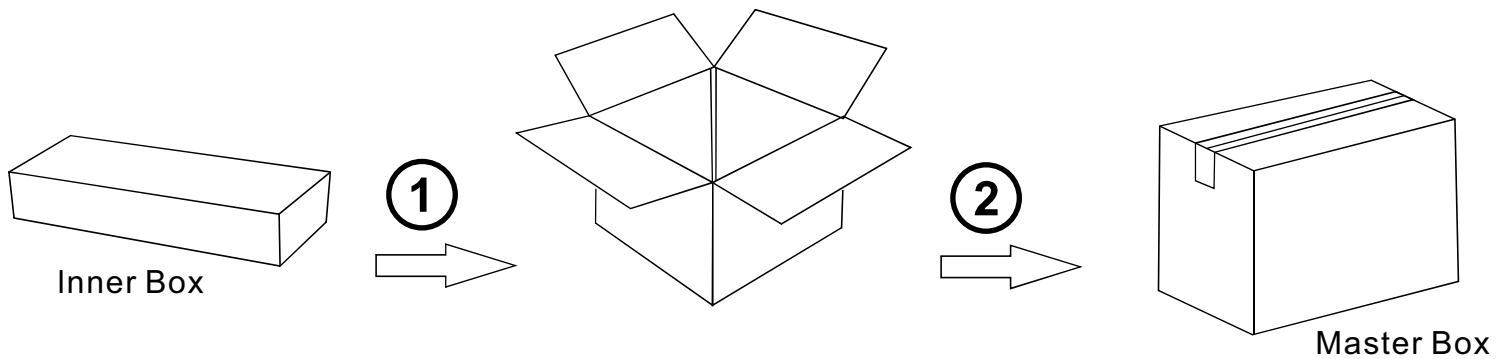
## OPERATION(INDICATOR STATUS)

Mode	Test Switch	Indicator Status	Comment & Solutions
AC MODE (1)	NO Pressed	ON(no flashing)	Emergency Driver is charging
AC MODE (2)	Holding Pressed	ON(no flashing)	Emergency Driver is conducting a emergency test, once release the test button, emergency led driver restore to normal charging mode.
EMERGENCY MODE (1)	NO Pressed	OFF	Emergency Driver is conducting a long-term emergency test until battery is fully discharged
EMERGENCY MODE (2)	Pressed once	OFF	Emergency Driver is turned off

## Max mounting height

Model	Associated Target Luminaire	Max. mounting height
EMS-04050-YY	PLUSRITE ELECTRIC (CHINA)CO LTD (E464523), CAT. No.LED-FXFDL29/XXK/XX-KNC	22 feet

## Package



## Package information are as following forms

Power	Length(inch)	Width(inch)	Height(inch)	G.W(kg)	N.W(kg)	QTY(pcs)
4W						