

# Emergency LED Driver

# EMB Series

## MODEL: EMBXXYY-ZZZ

### For lamp with internal driver



## Features

- UL Listed for us and canada
- Listed to UL924 and tested to CSA C22.2 NO.141 Field or factory installation
- High output voltage
- Low energy consumption CEC compliance
- Constant output power
- Self-testing
- Battery: over temperature protection

## Specifications

- Input Voltage: 100~277Vac/347Vac, 50/60Hz
- Input Current: 100mA max.
- Input Power Rating: 7W max.
- Output Voltage: 25V~230Vdc
- Emergency Power: 30W max.
- Recharge Time: 24Hrs
- Discharge Time:  $\geq 1.5H$
- Warranty: 5 Years
- Ambient Temp: Li-ion: 32~122°F (0~50°C)  
Ni-MH: 41~149°F (5~65°C)
- Weight: 0.908 lbs (0.41kg)
- Surge Protection: Line-Neutral 3KV

## Function

- AC Operation, indicator light will keep on
- Emergency Operation, indicator light flash slowly (light on for 2 seconds, light off for 2 seconds)
- In a failure, indicator light flash quickly (light on for 0.2 seconds, light off for 0.2 seconds)

## Model NO.

| Model NO.   | Output Voltage | Emergency Power | Battery Type     |
|-------------|----------------|-----------------|------------------|
| EMB30YY-050 | 25~50Vdc       | 30W             | Li-ion/<br>Ni-MH |
| EMB20YY-050 |                | 20W             |                  |
| EMB15YY-050 |                | 15W             |                  |
| EMB08YY-050 |                | 8W              |                  |
| EMB30YY-080 | 51~80Vdc       | 30W             |                  |
| EMB20YY-080 |                | 20W             |                  |
| EMB15YY-080 |                | 15W             |                  |
| EMB08YY-080 |                | 8W              |                  |
| EMB30YY-155 | 81~155Vdc      | 30W             |                  |
| EMB20YY-155 |                | 20W             |                  |
| EMB15YY-155 |                | 15W             |                  |
| EMB08YY-155 |                | 8W              |                  |
| EMB30YY-230 | 156~230Vdc     | 30W             |                  |
| EMB20YY-230 |                | 20W             |                  |
| EMB15YY-230 |                | 15W             |                  |
| EMB08YY-230 |                | 8W              |                  |

NOTE: EMBXXYY-ZZZ

XX=Emergency Power; YY=Sales Code;

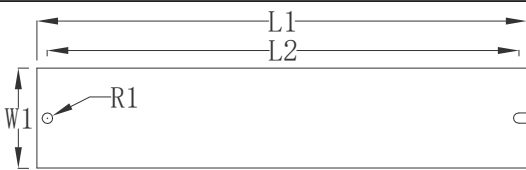
ZZZ=Output Voltage;

### CAUTION:

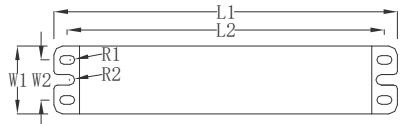
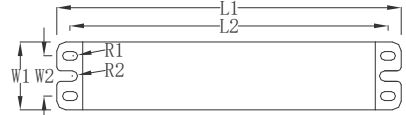
- Before doing high-voltage insulation test, must remove the battery pack first and make sure there is no any contact between the battery pack and the led drivers
- After test, disconnect the unit connector of the battery pack first before shipping and storing
- During storage, the battery pack need 24 hours charge every 3 months

## The size of the control board's and the battery's housing

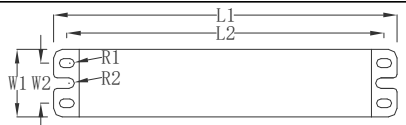
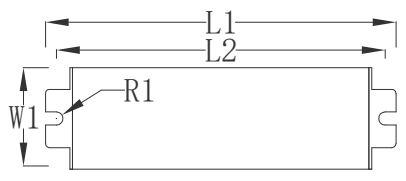
### Size of the EM driver's housing

| Control Board  |  | Size(inch) |       |       |        |        |
|--|--|------------|-------|-------|--------|--------|
|  |  | Length     |       | Width | Height | Radius |
| Picture  |  | L1         | L2    | W1    | /      | R1     |
|  |  | 1.32"      | 7.07" | 1.50" | 1.0"   | 0.08"  |

### Size of Li-ion battery's housing

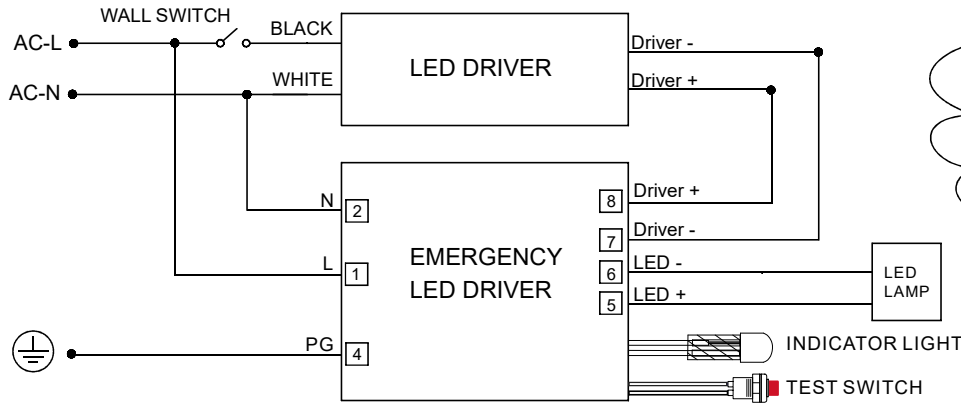
| Battery          |   |        | Size(inch) |       |       |       |        |        |       |
|------------------|---|--------|------------|-------|-------|-------|--------|--------|-------|
| Li-ion Battery   |   |        | Length     |       | Width |       | Height | Radius |       |
| Housing Material | Picture   | Power  | L1         | L2    | W1    | W2    | /      | R1     | R2    |
| Iron             |  | 8W-20W | 7.03"      | 6.43" | 1.61" | 0.91" | 0.98"  | 0.1"   | 0.1"  |
|                  |   | 30W    | 7.03"      | 6.43" | 1.61" | 0.91" | 1.73"  | 0.1"   | 0.1"  |
| Aluminum         |  | 4W-8W  | 4.02"      | 3.58" | 1.69" | 0.67" | 1.22"  | 0.08"  | 0.08" |

### Size of Ni-MH battery's housing

| Battery          |   |        | Size(inch) |        |       |       |        |        |       |
|------------------|---|--------|------------|--------|-------|-------|--------|--------|-------|
| Ni-MH Battery    |   |        | Length     |        | Width |       | Height | Radius |       |
| Housing Material | Picture   | Power  | L1         | L2     | W1    | W2    | /      | R1     | R2    |
| Iron             |  | 8W-20W | 7.03"      | 6.43"  | 1.61" | 0.91" | 1.73"  | 0.1"   | 0.1"  |
| Aluminum         |  | 4W-8W  | 8.86"      | 8.41"  | 1.38" | /     | 0.98"  | 0.09"  | /     |
|                  |   |        | 7.32"      | 7.09"  | 1.69" | 0.67" | 1.22"  | 0.08"  | 0.08" |
|                  |   | 15W    | 12.01"     | 11.81" | 1.54" | /     | 0.93"  | 0.09"  | /     |
|                  |   | 30W    | 7.09"      | 6.38"  | 2.83" | /     | 1.77"  | 0.1"   | /     |

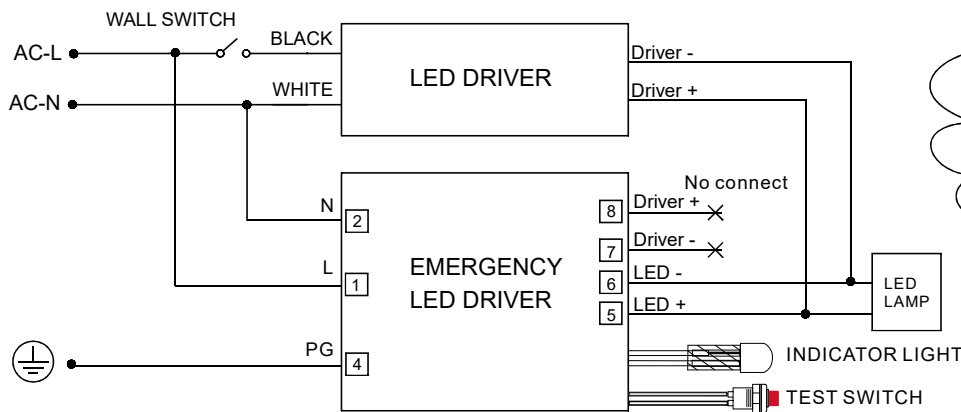
## Wiring Diagram

### WIRING DIAGRAM 1



(This wiring diagram is suitable for LED lamps with power less than 120W and the output current of the lamp's driver does not exceed 3A)  
 \*This wiring diagram also can work for LED lamp with power less than 250W and the output current of the lamp's driver does not exceed 5A, for detailed information, pls consult the manufacturer

### WIRING DIAGRAM 2



(This wiring diagram is suitable for LED lamps with power less than 300W and turn off wall switch before testing)

## SELF-TEST

- The emergency LED driver contains a control/monitor circuit which will perform a 30-second discharge test once a month and a fully discharge test once a year. At this time, the unit simulate an AC power failure and automatically switch to emergency mode. During routine testing, the unit will monitor the operation of the LED load, battery voltage, and emergency duration, if the unit detect any problems, the indicator will flash quickly.