

## FEATURES

- UL listed for factory and field installation
- Easy wiring: directly connect to AC INPUT OF LED Lights
- Ideal for various kinds 0-10V dimmable indoor LED lights≤100W (Non 0-10V dimmable LED lights≤EM Output Power)
- Constant power output
- Universal Input voltage:100-347Vac,50/60Hz
- Self testing monthly/yearly
- Meets or exceeds all NEC, IBC, and Life Safety Code Emergency Lighting Requirements
- Suitable for dry and damp locations
- RoHS Compliant



## CERTIFICATES



## APPLICATIONS



## DIMENSION

L\*W\*H=12.91"x1.97"x0.94"(328x50x23.8mm)  
(mounting center 12.4")



## PRODUCT ADVANTAGES

### Easy wiring

Directly connect to AC Input of LED Fixtures. Saves Time and Money on the Jobsite

### Certified for CA Title 20

High efficiency performance meet CA Title 20 battery charge efficiency standards

### Constant Power Performance

Constant wattage delivery maintains illumination level for the full emergency runtime with no degradation

### UL Listed

Listed to UL924.  
For Field or Factory Installation (Indoor and Damp)

## SPECIFICATIONS

Model No.	EMA-DH08D-UNV-170	EMA-DH15D-UNV-170	EMA-DH25D-UNV-170
Output Power	8W	15W	25W
Output Voltage	170V DC	170V DC	170V DC
Input Voltage	100-347V AC, 50/60HZ	100-347V AC, 50/60HZ	100-347V AC, 50/60HZ
Input Power	12W Max.	12W Max.	12W Max.
Input Current	≤100mA	≤100mA	≤100mA
Battery Type	Lithium	Lithium	Lithium
Recharge Time	≥24 Hours	≥24 Hours	≥24 Hours
Emergency Time	≥90 minutes	≥90 minutes	≥90 minutes
Ambient Temp.	5°C ~50°C(32°F~122°F)	5°C ~50°C(32°F~122°F)	5°C ~50°C(32°F~122°F)
Luminaire Power	0-10V dim luminaries≤60W Non 0-10V dim luminaries≤8W	0-10V dim luminaries≤100W Non 0-10V dim luminaries≤15W	0-10V dim luminaries≤100W Non 0-10V dim luminaries≤25W

## WIRING DIAGRAM



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

### Model: EMA-DH08D-UNV-170

Input Voltage: 100-347Vac, 50/60Hz  
 Input Current: ≤ 100mA  
 Input Power: 12W Max.  
 Output Voltage: 170V DC  
 Input Current: ≤ 100mA

### EMA-DH15D-UNV-170 EMA-DH25D-UNV-170

Output Power: 8W / 15W / 25W  
 Ambient Temperature: 5°C ~ 50°C (30°F ~ 122°F)  
 Application: (1) ≤ 100W (0-10V dimming luminaire)  
 EMA-DH08D-UNV-170: ≤ 60W (0-10V dimming luminaire)  
 (2) ≤ output power (non-dimming luminaire)  
 Max. Mounting Height: EMA-DH08D-UNV-170 - 15.5ft  
 EMA-DH25D-UNV-170 - 27.2ft



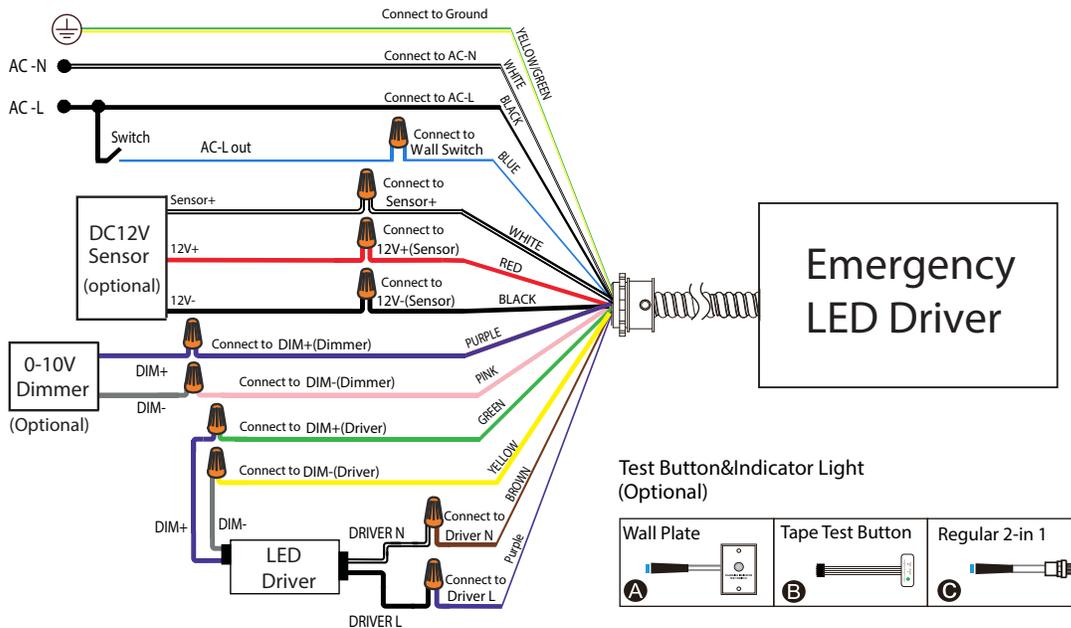
\* During Emergency Mode, Press testing button twice to cut off the emergency output and enter Shipping Mode

Product includes the following components:

PARTS	QUANTITY
LED Emergency Inverter	1
Charging Indicator/Testing Button	1
Charging Indicator/Testing Button Wall Cover	1
Instruction Sheet	1

### 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 100W)  
 Note: EMA-DH08D-UNV-170 for 0-10V dimming luminaires ≤ 60W  
 Emergency Driver Dim+ (Green), Dim- (Yellow) has to connect with LED driver DIM+ and DIM- respectively, as shown.

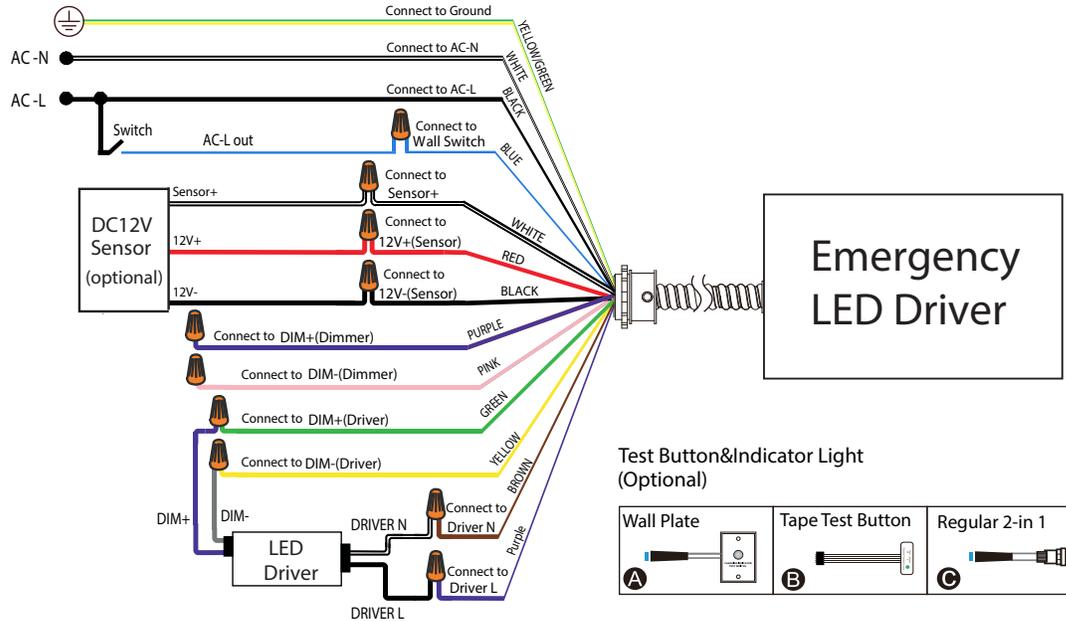


Note:

1. If using sensor, sensor wires must remove from LED Driver and reconnect to Emergency driver DC 12V wires for EM Driver to function properly.
2. Cap off if not using dimmer switch
3. Cap off if not using sensor

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

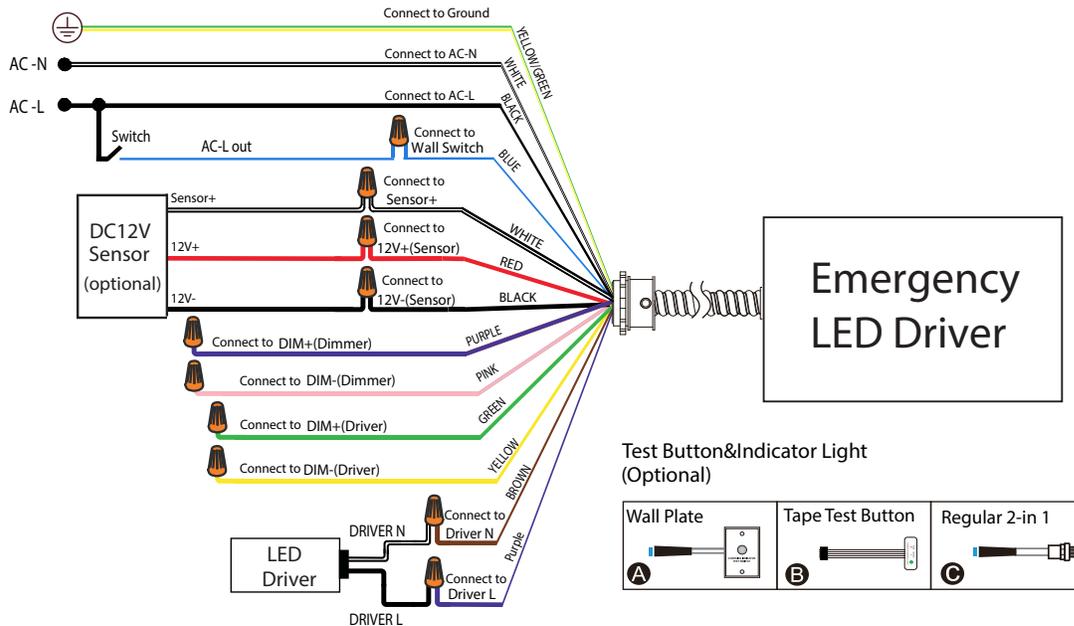
For luminaire with 0-10V LED driver and using 0-10V dimmer (\*LED DRIVER INPUT POWER NOT GREATER THAN 100W)  
 Note: EMA-DH08D-UNV-170 for 0-10V dimming luminaires ≤ 60W  
 Emergency Driver Dim+ (Green), Dim- (Yellow) has to connect with LED driver DIM+ and DIM- respectively, as shown.



Note:  
 1. If using sensor, sensor wires must remove from LED Driver and reconnect to Emergency driver DC 12V wires for EM Driver to function properly.  
 2. Cap off if not using sensor

### 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 OUTPUT POWER)



Note:  
 1. If using sensor, sensor wires must remove from LED Driver and reconnect to Emergency driver DC 12V wires for EM Driver to function properly.  
 2. Cap off if not using sensor

**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 switches 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.

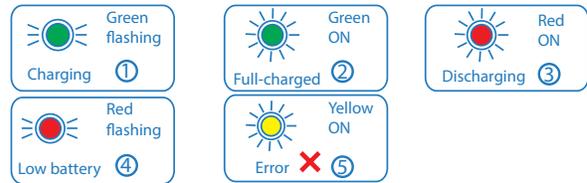
**Malfunction Operation:**

When the emergency LED driver faults, the yellow LED on



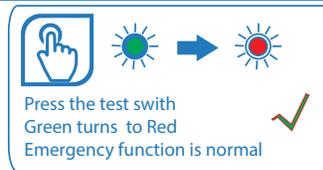
**Indicator Light Introduction**

- ① Green/Flashing: Charging
- ② Green/ON: Full-charged
- ③ Red/ON: Discharging(emergency mode)
- ④ Red/Flashing: Low battery
- ⑤ Yellow: Error



**Test Switch Introduction**

- ① Press the test switch to confirm whether emergency function is normal
- ② During Emergency Mode, Press test switch twice to cut off the emergency output and enter Shipping Mode



## IMPORTANT SAFEGUARDS

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

### READ AND FOLLOW ALL SAFETY INSTRUCTIONS

**IMPORTANT:** Before installing, make certain the AC Power to the fixture is off to avoid electric shock.

**IMPORTANT:** An un-switched AC power source of 100~347VAC is required.

**IMPORTANT:** Verify that all replacement lamp types marked on the installed luminaire are also identified as suitable for use with this emergency battery pack.

**IMPORTANT:** It is recommended to charge the battery every 6 months to prevent over-discharge

**CAUTION:** Make sure all electrical connections conform to the National Electrical Code and all applicable local regulations. Proper grounding is required for safety.

**CAUTION:** RISK OF SHOCK — DISCONNECT EMERGENCY AND NORMAL INPUT POWER SOURCES BEFORE SERVICING.

**CAUTION:** Risk of fire or electric shock. Luminaire wiring and electrical parts may be damaged when drilling for installation of LED Emergency Backup. Check for enclosed wiring and components.

**CAUTION:** Risk of fire or electric shock. This LED Emergency Backup installation requires knowledge of luminaire electrical systems. If not qualified, do not attempt installation. Contact a qualified electrician.

**CAUTION:** To prevent wiring damage or abrasion, do not expose wiring to edges of sheet metal or other sharp objects.

**CAUTION:** Do not handle energized fixture when hands are wet, when standing on wet or damp surfaces, or in water.

**CAUTION:** The electrical rating of this product is 100-347V AC. Installer must confirm that there is 100-347VAC to the fixture before installation.

**CAUTION:** This is a sealed unit. Components are not replaceable. Replace the entire LED Emergency Backup unit when necessary.

**CAUTION:** 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 5 °C minimum, +50 °C maximum.

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:** 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 driver 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 requires a charge minimum of one (1) hour before testing the circuit. A full charge requires twenty four(24) hours.



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

### SAVE THESE INSTRUCTIONS

Installation videos / Giveaways:

 [www.linkedin.com/company/spring-lighting-group](https://www.linkedin.com/company/spring-lighting-group)

 [www.youtube.com/@SLGLighting](https://www.youtube.com/@SLGLighting)