

# Installation Instructions

**THE FOLLOWING INSTRUCTIONS ARE FOR THE FOLLOWING EMERGENCY LIGHTING PRODUCTS. IF YOUR MODEL NUMBER IS NOT LISTED BELOW, CONTACT THE MANUFACTURER TO GET A COPY OF THE PROPER INSTRUCTIONS.**  
MC24BK-1000-25, MC36BST-500-18, MC48BST-500-25, M24BK-1000-25, M24BK-1500-36, M12BST-1000-24, M36BST-500-20, M36BST-700-25, M48BST-550-25, M55BST-500-28, M55BST-350-25, M36BST-1000-40, M48BST-750-40, M55BST-750-40

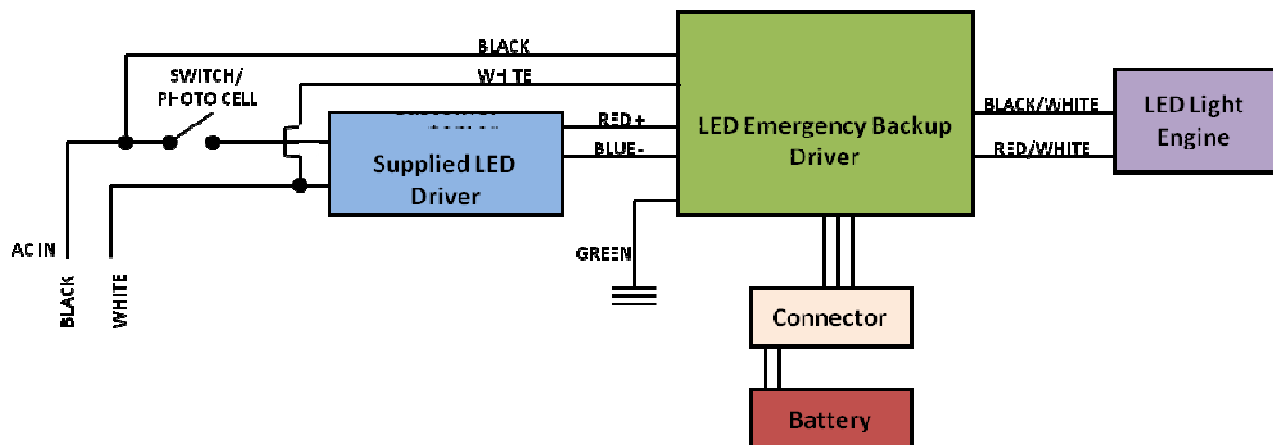
## READ AND FOLLOW ALL SAFETY INSTRUCTIONS

1. Disconnect all AC power before installation.
2. This product is intended for use with an LED lighting only. It is not intended to drive an AC load.
3. The internal driver, in combination with the proper batteries and proper load will supply a minimum of 90 minutes of light in the emergency backup mode.
4. Install wiring in accordance with the National Electrical Code and any local regulations.
5. Disconnect both normal and emergency power drivers before servicing light fixture.
6. This product is suitable for damp locations. Product is not suitable for wet or hazardous locations.
7. The driver case temperature is rated from -20°C minimum, +50°C maximum.
8. An unswitched AC power source is required (120 through 277 VAC, 50 or 60 Hz).
9. Do not install where temperature will exceed 60°C.
10. Be sure and use the recommended battery type and amp hour rating for your particular unit and fixture.
11. Do not use this product for other than intended use.
12. The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
13. Servicing should be performed by qualified service personnel.
14. Product contains no Cadmium.

**SAVE THESE INSTRUCTIONS – THIS MANUAL CONTAINS  
IMPORTANT SAFETY INSTRUCTIONS  
CONSERVER CES INSTRUCTIONS. CETTE NOTICE CONTIENT DES  
INSTRUCTIONS IMPORTANTES CONCERNANT LA SECURITE**

## Installing the Emergency Driver

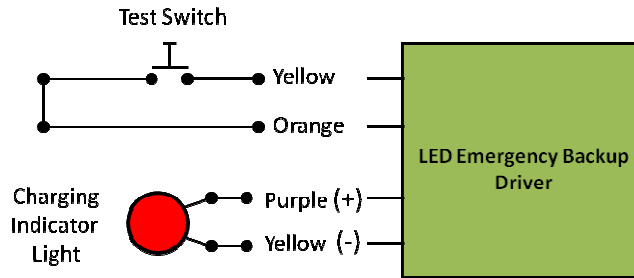
1. Disconnect all AC power from the fixture.
2. Refer to Illustration below to install the emergency driver and batteries. Make sure to use only the recommended batteries (type and rating). Make electrical connections in accordance with the National Electrical Code and any local regulations. Note: This is only an example of one possible installation. Contact factory for other installation configurations.
3. The emergency driver is attached using the 2 tabs on the end of the unit. Screws or rivets are recommended to secure the unit.



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## Installing A Test Switch And Charging Indicator Light

Refer to the illustration to install a typical illuminated test switch. Illustrations below show the test switch and charging indicator light installed separately, as well as a typical wiring schematic of a test switch and charging indicator light.



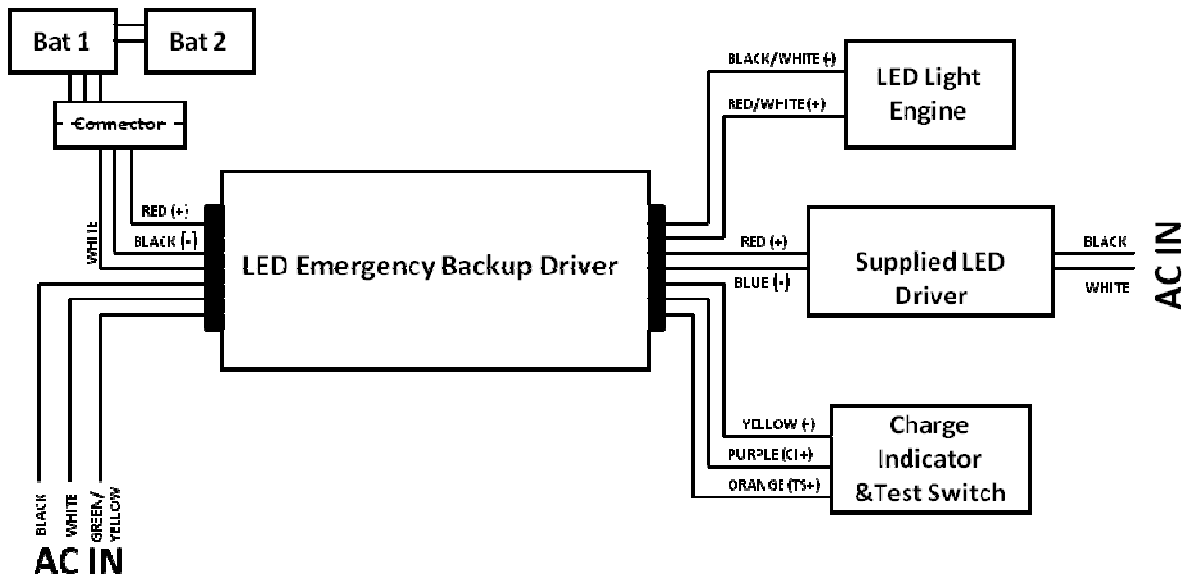
*Note: The AC Emergency LED Driver will work with any normally open or normally closed mechanical or solid state switch. The Emergency LED Driver will automatically detect the type of the switch and activate the emergency test mode when the switch is depressed.*

## Wiring The Emergency Driver

**CAUTION: This unit has more than one power supply connection point. To reduce the risk of electric shock, disconnect both the branch circuit-breakers or fuses and emergency power supplies before installing or servicing.**

**ATTENTION: Cet appareil a plus d'un point de connexion d'alimentation. Pour réduire le risque de choc électrique, débranchez les deux branches des disjoncteurs ou des fusibles et des alimentations de secours avant d'installer ou de réparer.**

Refer to wiring diagram below:



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1. Do not connect A/C power or connect the battery prior to connecting ALL other wires. Failure to follow this procedure may result in damage to the unit.
2. Connect the test switch to the Emergency Driver wire #3 (Orange) "Test Switch " and "Test Switch/LED return "Wire #4 (Yellow).
3. Connect the charging indicator light to the Emergency Driver wires #5 (Violet) "LED Drive +" and "Charging Indicator Light – Wire #3 (Yellow) to Test Switch/LED return".
4. Connect Emergency Driver Black (line voltage) Wire # 7, White (AC Return) wire #6, safety ground Wire #9 (Green) to 120-277 VAC. (Do not use switched power.)
5. Disconnect the AC LED Driver from the LED light board.
6. Connect AC Driver to Emergency Driver wire #10 (Red) "LED Driver +" and Wire #11 (Blue) "LED Driver –".
7. Connect the LED light board to the Emergency Driver wire #12 (Red/White) "LED + Out" and wire #13 "LED – Out".
8. Connect battery pack to backup unit only after A/C power has been applied. Use only battery packs with correct, pre-wired connectors.

## Emergency Driver Quick Check And Labeling

- For any testing of the emergency function, the batteries must be fully charged. Applicable batteries are listed below:

Tenergy cell #

700mah	HFR-AAA700
1800mah	HFR-AA1800
2000mah	HFR-AA2000
3300mah	HFR-17670-3300
3800mah	HFR-18650-3700

## Operation

- When AC power is on and the charger is charging the batteries, the charging indicator light will blink slowly, indicating the batteries are charging. When the charging indicator light stays lit continuously, the batteries are fully charged. If a problem is detected with the batteries, the charging indicator light will flash rapidly. If this happens, service or replace the batteries. When power fails, the emergency driver automatically switches to emergency power, operating the LED light board for a minimum of 90 minutes. During the 90 minutes the unit will monitor the line voltage and once AC power is restored, there will be a 90 second time delay, and then the emergency driver will return to normal operation and begin to charge the batteries. The 90 second time delay will protect the LEDs from power fluctuations once power is restored.

## Testing

- Visually inspect the charging indicator light monthly. It will blink slowly when the batteries are being charged and stay continuously once the batteries are fully charged. These are normal operations. If a problem is detected with the batteries, the charge indicator light will flash rapidly. If this happens, service or replace the batteries.
- Test the emergency operation of the light fixture by pressing and releasing the "push to test" switch. Light fixture will switch to the batteries and illuminate at the emergency level for 90 seconds, and then return to normal operation. Testing should be performed every 30 days.
- Once a year the fixture should be tested for 90 minutes. The emergency driver should provide illumination at the emergency level for a minimum of 90 minutes.
- To test the 90 minute emergency operation of the light fixture, press and hold the "push to test" switch for longer than 5 seconds. The fixture will switch to the batteries and illuminate at the emergency level for 90 minutes, and then return to normal operation. This testing should be performed once a year.

**CAUTION: A BATTERY CAN PRESENT A RISK OF ELECTRICAL SHOCK, BURN FROM HIGH SHORT CIRCUIT CURRENT, FIRE OR EXPLOSION FROM VENTED GASES. OBSERVE PROPER PRECAUTIONS.**

**ATTENTION: UNE BATTERIE PEUT PRÉSENTER UN RISQUE DE CHOC ÉLECTRIQUE, DE BRÛLURE PAR TRANSFERT D'ÉNERGIE, D'INCENDIE OU D'EXPLOSION DES GAZ DÉGAGÉS. SUIVRE LES PRÉCAUTIONS QUI S'IMPOSENT WHEN REPLACING BATTERIES USE THE SAME NUMBER AND THE FOLLOWING TYPE BATTERIES POUR LE REMPLACEMENT, UTILISER LE MÊME NOMBRE DE BATTERIES DU MODÈLE SUIVANT**  
**PROPER DISPOSAL OF BATTERIES IS REQUIRED. REFER TO YOUR LOCAL CODES FOR DISPOSAL REQUIREMENTS L'ÉLIMINATION DES BATTERIES EST RÈGLEMENTÉE. CONSULTER LES CODES LOCAUX À CET EFFET"**

## Maintenance

- No maintenance is required to keep the Emergency Driver functional. It is fully automated.