

LITETRONICS®

LED Emergency Battery Backup Installation Instructions

Ordering Code: EB10

WHAT COMES IN THE BOX

- (1) EB10 unit
- (1) Installation instructions
- (8) Wire nuts

TOOLS NEEDED

- Wire Stripper
- Wire Cutter
- Phillips Screwdriver
- Step Ladder



OVERVIEW

Litetronics Emergency Battery Backup unit (EB10) delivers 90-minutes of power to fixtures in the event of a power outage. When the normal power supply is present, the unit will fully charge and remain in stand-by mode. When a power outage occurs, the unit will switch to emergency mode and deliver 10W power for a minimum of 90-minutes. When power is restored, the unit will switch back to stand-by mode and begin recharging.

The EB10 is the main component to the backup system, but must be accompanied by one of two indicator modules, which provide a set of visible indicator lights that signify the status of operation for the EB10. Each option offers a different approach to mounting/installation based on the application.

- EBCM (Emergency Backup Ceiling-mounted Indicator Module) - This option connects to the EB10 and can be mounted in a grid panel adjacent to the fixture.
- EBAM (Emergency Backup Adhesive-mounted Indicator Module) - This option applies to any non-grid ceiling application. It includes an adhesive strip that will affix to the surface of a fixture or nearby structural element.

SAFETY WARNING AND INSTRUCTIONS

When using electrical equipment, basic safety precautions should always be observed. Read and follow all safety instructions.

- 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.
- Risk of fire or electric shock. This LED Emergency Backup installation requires knowledge of luminaire and electrical systems. If not qualified, do not attempt to install. Contact a qualified electrician.
- Before installation, make certain the AC power to the fixture is off.
- The electrical rating of this product is 100-277 Vac. Installer must confirm that there is 100-277 Vac to the fixture before installation.
- To prevent electrical shock, only mate unit connector after installation is complete and before the AC power to the fixture is back on.
- Do not use outdoors.
- This LED Emergency Backup unit requires an un-switched AC power source of 100-277 Vac, 50/60Hz.
- Do not let power supply cords touch hot surfaces.
- Do not mount near gas or electric heaters.
- Equipment should be mounted in locations and at heights where it is not subjected to tampering by unauthorized personnel. The use of accessory equipment is not recommended by the manufacturer and may cause an unsafe condition.
- Do not use this equipment for other than its intended use.
- Use with grounded, UL/ETL listed, dry or damp location rated fixtures.

COMPATIBILITY

The EB10 is compatible with the following Litetronics products and part numbers.

GARAGE LIGHT	LIGHT PANEL	VAPOR TIGHT
GL39URXXDLP	PT1XX	VTCS4XX
GL59URXXDLP	PT2XX	VTCS8XX
LIGHT PANEL RETROFIT C-SERIES	PT4XX	VT30US4XXP
PRCT1XX	PT44070	VT55US8XXP
PRCT2XX	STRIP FIXTURE	VIVID FRAME
PRCT4XX	SF40S4XX	VLFT2XX
LIGHT PANEL RETROFIT	SF60S8XX	VLFT4XX
PRT1XX	SELECTABLE STRIP FIXTURE	VOLUMETRIC TROFFER
PRT2XX	SFS2XX	VLT1XX
PRT4XX	SFS4XX	VLT2XX
PRT4XXW	SFS8XX	VLT4XX
MAGNETIC RETROFIT	LED STRIP FIXTURE (C-SERIES)	VOLUMETRIC RETROFIT
RFM3T2XXA	SFCS4XX	VRT1XX
RFM2T4XXA	SFCS8XX	VRT2XX
RFM3T4XXB	STRIP RETROFIT C-SERIES	VRT4XX
RFM2T4XXEW	SRCs4XX	VRT2XXW
RFM3T4XXDW	SRCs8XX	VRT4XXW
STAIRWELL FIXTURE	WRAP FIXTURE	
SWFSX	WFSX	

COMPATIBILITY - (CONTINUED)

UL924 STATEMENT OF COMPLIANCE AND COMPATIBILITY

PLEASE NOTE: When used with a sensor-equipped fixture from the Approved List of Litetronics fixtures above, the sensor will be bypassed and disabled by the EB10 when wired correctly per the installation instructions and cause the fixture to remain illuminated during periods of vacancy when the compatible fixture is powered by the EB10 power source. As such, EB10 is UL924 compliant.

GL39S, GL59**S with Sensor:** Not compliant with UL 924. Sensor access unavailable.

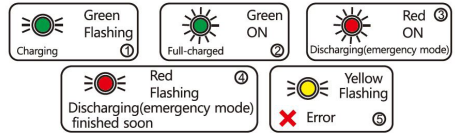
SWFS4 with Sensor: Compliant with UL 924 if Sensor is rewired to EB10 per Installation Wiring Diagram.

EB10 OPERATING INSTRUCTIONS

- Make sure that installation of the EB10 includes one of the two indicator modules.
- Once installed and powered on, the battery will begin to charge. The green, flashing indicator light will remain on until fully charged, which takes approximately 24 hours.
- Once fully charged, the green indicator light will illuminate and remain on as long as the battery remains full.
- If yellow light is flashing, a problem has been detected. Contact Litetronics for troubleshooting.
- In the event of a power failure, the fixture delivers 90 minutes of emergency light, during which the red light will remain on, then flash on/off when battery is low.

INDICATOR MODULE LIGHT REFERENCE GUIDE

1. Green/flashing = Charging
2. Green/solid on = Fully charged
3. Red/solid on = Discharging/emergency mode
4. Red/flashing = Discharging with limited battery life remaining
5. Yellow/flashing on = Error. Contact Litetronics for troubleshooting



TESTING

- The fixture includes an automatic monthly self-testing function, which operates at 30-day intervals for 5 minutes and 360-day intervals for 90 minutes. During testing, the red indicator light will remain on.
- Additional testing and demo functionality is available via remote control, part # TR01 (sold separately).

MAINTENANCE

Although no routine maintenance is required to keep the emergency battery backup functional, it should be checked periodically to ensure that it is working. The following schedule is recommended:

- Visually inspect the charge indicator light monthly. It should be illuminated.
- Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds.
- Conduct a 90-minute discharge test once a year. LED tubes should operate at up to 10W for at least 90 minutes.

SERVICE

Should be performed as indicated above by qualified personnel.

INSTALLATION - CEILING MOUNTED

BEFORE BEGINNING INSTALLATION, TURN OFF POWER AT THE CIRCUIT BREAKER.

1. Choose a location for the Emergency Battery Backup unit and indicator module. We recommend placing the unit close to the luminaire input power wires while also making sure the indicator module will reach it's desired location. See figure A for reference.
2. Once the EBB unit is secured in place, make wiring connections based on the wiring diagrams found on pages 6-7.
3. Mark the desired location for the indicator module on the adjacent ceiling panel. Drill a hole for the indicator to pass through that as is 1.75" in diameter.
4. Compress the spring clamps and pass the indicator module, wiring first, up through the panel until it sits flush with the bottom side. Release the spring clamps and they will hold the module in place. See figure B.
5. Connect the indicator module and unit via the quick connector.
6. Restore power to the fixture. When power is received, the green flashing light should appear, indicating that the unit is charging. An initial full charge could take up to 24 hours.

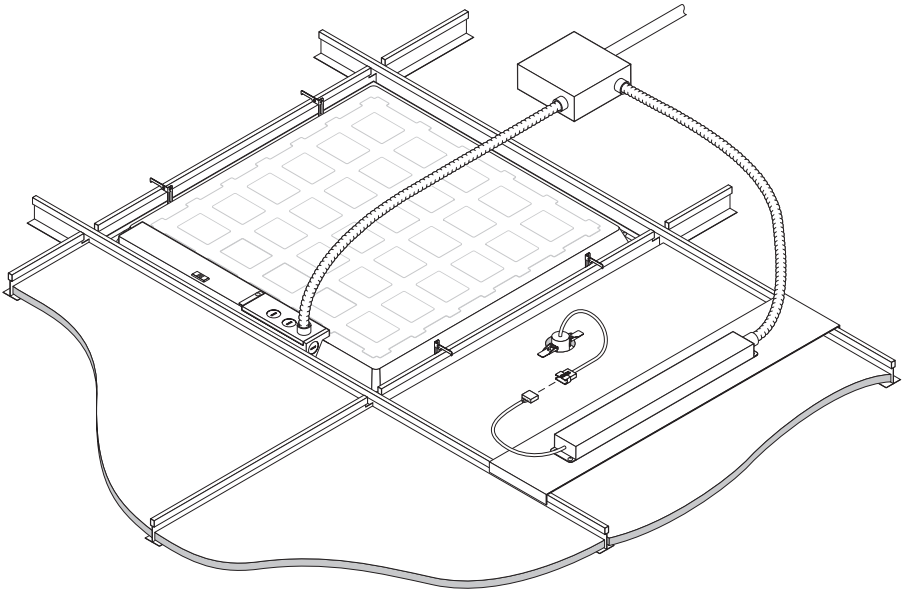


Figure A

Note: Grid tray not Litetronics product but for illustration only.

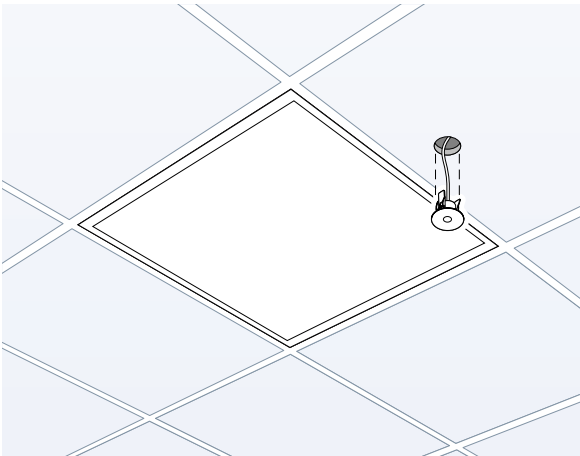


Figure B

INSTALLATION - ADHESIVE MOUNTED

BEFORE BEGINNING INSTALLATION, TURN OFF POWER AT THE CIRCUIT BREAKER.

1. Choose a location for the Emergency Battery Backup unit and indicator module. We recommend placing the unit close to the luminaire input power wires while also making sure the indicator module will reach it's desired location. See figure C for reference.
2. Once the EBB unit is secured in place, make wiring connections based on the wiring diagrams found on pages 6-7.
3. Find the desired location for the indicator module on the side of the fixture or a nearby structural element, making sure that the indicator lights will be visible from below. Peel off the outside strip from the tape and apply the module to the desired location. Hold for 30 seconds.
4. Connect the indicator module and unit via the quick connector.
5. Restore power to the fixture. When power is received, the green flashing light should appear, indicating that the unit is charging. An initial full charge could take up to 24 hours.

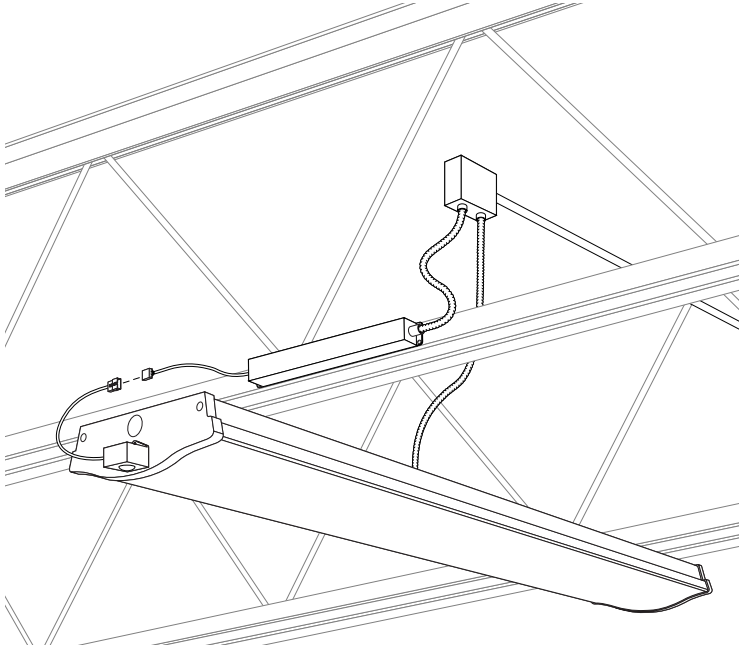
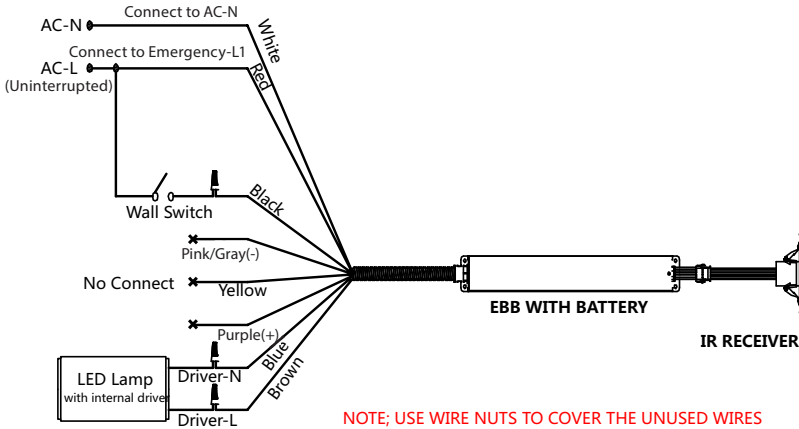


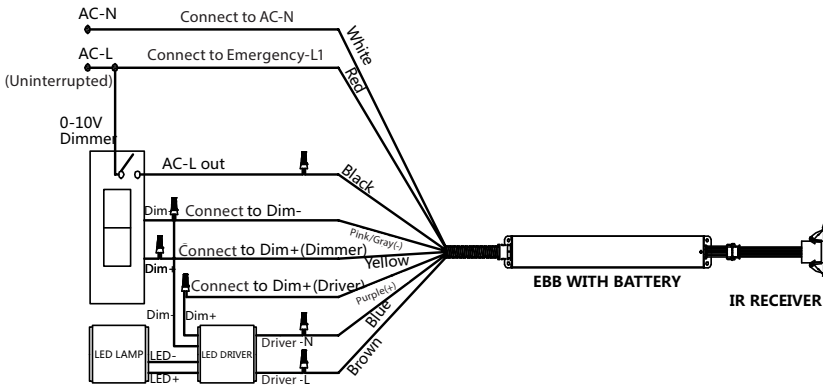
Figure C

WIRING DIAGRAMS

A WHEN THE LED DRIVER POWER IS LESS THAN 10W



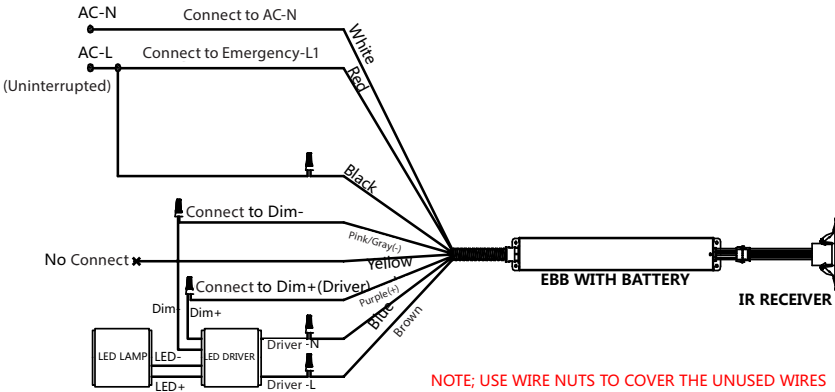
B WHEN THE LED DRIVER POWER IS GREATER THAN 10W AND USED WITH A DIMMER



IMPORTANT: The purple and gray dimming wires must be connected to Luminaire or driver dimming wires

CAUTION: For Diagrams B, C, D, Gray & Purple Dimming leads from EB10 Must Be Connected to Driver Dim +/- leads / terminal Blocks. If connection is not made, the LED Array will flicker and shut down after 10 seconds in 99% of the cases while in emergency mode. In some cases, the EB10 will fail as it will overheat. Dimming circuit helps to limit higher driver load to 10W.

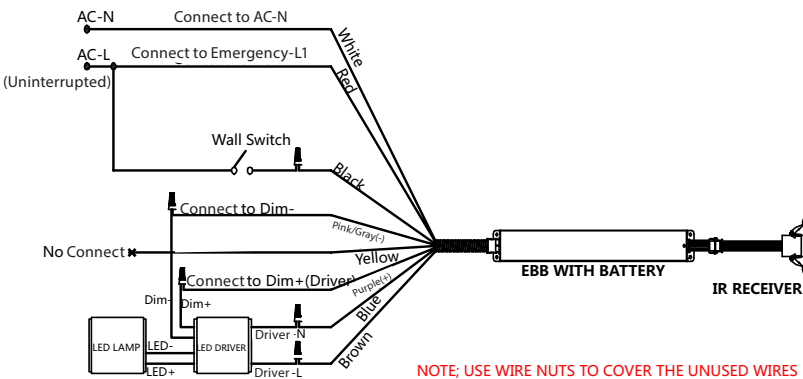
C WHEN LED DRIVER POWER IS GREATER THAN 10W USED WITHOUT SWITCH AND WITHOUT DIMMER



IMPORTANT: The purple and gray dimming wires must be connected to Luminaire or driver dimming wires

CAUTION: For Diagrams B, C, D, Gray & Purple Dimming leads from EB10 Must Be Connected to Driver Dim +/- leads / terminal Blocks. If connection is not made, the LED Array will flicker and shut down after 10 seconds in 99% of the cases while in emergency mode. In some cases, the EB10 will fail as it will overheat. Dimming circuit helps to limit higher driver load to 10W.

D WHEN LED DRIVER POWER IS GREATER THAN 10W USED WITHOUT DIMMER



IMPORTANT: The purple and gray dimming wires must be connected to Luminaire or driver dimming wires

CAUTION: For Diagrams B, C, D, Gray & Purple Dimming leads from EB10 Must Be Connected to Driver Dim +/- leads / terminal Blocks. If connection is not made, the LED Array will flicker and shut down after 10 seconds in 99% of the cases while in emergency mode. In some cases, the EB10 will fail as it will overheat. Dimming circuit helps to limit higher driver load to 10W.

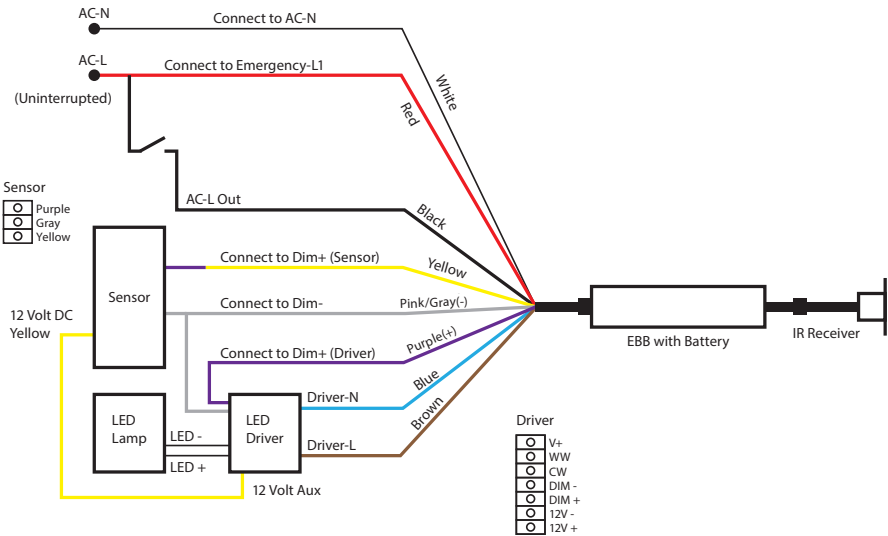
WIRING INSTRUCTIONS FOR LED STAIRWELL FIXTURE WITH EMERGENCY BATTERY BACKUP

Stairwell Fixture Ordering Codes: SWFS4

INSTRUCTIONS

1. Remove the purple sensor dimming wire (Dim+) from the driver's terminal block and connect it to the yellow emergency dimming wire (Dim+) using a wire nut.
2. Connect the purple emergency dimming wire (Dim+) to the driver's Dim+ terminal block.
3. Connect the gray emergency dimming wire (Dim-) and gray sensor dimming wire (Dim-) into the driver's Dim- terminal block.
4. Connect the brown and blue emergency output wires to the black and white driver input wires.
5. Connect the white, red and black emergency input wires in accordance with the following wiring diagram.

WIRING DIAGRAM



IMPORTANT: The purple and gray dimming wires must be connected to Luminaire or driver dimming wires

Thank you for choosing

LITETRONICS®

6969 W. 73rd Street
Bedford Park, IL 60638

www.Litetronics.com

CustomerService@Litetronics.com or 1-800-860-3392



The information and product specifications contained in these instructions are based upon data believed to be accurate at the time of printing. This information is subject to change without notice and without incurring liability. If you have questions regarding specific product details, please contact us at 800-860-3392 or via email at customerservice@litetronics.com.

To check for an updated version of these instructions, please visit www.litetronics.com.

3/9/23-V2.4