



EMGBALL-LED1-LV

INSTRUCTION MANUAL

Replacement Emergency Ballast for EMG Explosion Proof LED Light Fixtures with Low Voltage Bulbs Instruction Manual

Thank you for your purchase of the EMGBALL-LED1-LV from Larson Electronics.

WARNING

Standard Warning (General)

WARNING:

READ CAREFULLY BEFORE INSTALLING FIXTURE. RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE.
CRITICAL SAFETY INSTRUCTIONS:

- INSTALLATION SHOULD ONLY BE CONDUCTED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH NEC AND ANY RELEVANT LOCAL BUILDING CODES.
- RISK OF FIRE OR ELECTRIC SHOCK. FIXTURE INSTALLATION REQUIRES KNOWLEDGE OF FIXTURE'S ELECTRICAL SYSTEMS. IF NOT QUALIFIED, CONTACT A QUALIFIED ELECTRICIAN.
- BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.
- MAKE SURE THE SUPPLY VOLTAGE IS THE SAME AS THE FIXTURE'S RATED VOLTAGE.
- TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR SHARP OBJECTS. SUITABLE FOR DAMP LOCATIONS.



WARNING: MAKE SURE POWER IS TURNED **OFF** BEFORE STARTING THE
INSTALLATION OR PERFORMING ANY MAINTENANCE.

RISK OF FIRE/ELECTRIC SHOCK – DISCONNECT POWER AT BREAKER BEFORE INSTALLING OR SERVICING.

RISK OF PERSONAL INJURY – FIXTURE MAY BECOME UNSTABLE OR DAMAGED IF NOT INSTALLED PROPERLY.

RISK OF BURN – ALLOW FIXTURE TO COOL BEFORE SERVICING.

SAVE THESE INSTRUCTIONS

INSTALLATION

1. Do not join converter connector until installation is complete and AC Power is supplied to the emergency driver.
2. This product is for use with an emergency LED lighting load and supplies nominal 10.0 W of power with a maximum voltage of 50 VDC in emergency mode for a minimum of 90 minutes.
3. Make sure all connections are in accordance with the National Electrical Code or Canadian Electrical Code and any local regulations.
4. To reduce the risk of electric shock, disconnect both normal and emergency power supplies and converter connector of the emergency driver before servicing.
5. This emergency driver is suitable for factory installation only.
6. This product is suitable for use in damp locations where the ambient temperature is 0°C minimum, +55°C maximum. Product is also suitable for installation in sealed and gasketed fixtures. Product is not suitable
7. for heated air outlets and wet or hazardous locations. Maximum allowable case temp is 65°C. See Page 4 for Tcase measurement location.
8. An unswitched AC power source is required (120-277 V AC, 50/60 Hz).
9. Do not install near gas or electric heaters.
10. Do not attempt to service the battery. A sealed, no-maintenance battery is used that is not field replaceable. Contact the manufacturer for information on service.
11. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
12. Do not use this product for other than intended use.
13. Servicing should be performed by qualified service personnel.
14. Equipment should be mounted in locations and at heights where it will not be subjected to tampering by unauthorized personnel.
15. For Canadian application the output terminals should be in compliance with the accessibility requirement of the Canadian Electric Code.
16. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.
17. This product must be grounded. See the wiring diagrams for details.

CAUTION: DO NOT JOIN CONVERTER CONNECTOR UNTIL INSTALLATION IS COMPLETE AND AC POWER IS SUPPLIED TO THE EMERGENCY DRIVER.

NOTE: Make sure the necessary branch circuit wiring is available. An unswitched source of power is required. The emergency driver must be fed from the same branch circuit as the AC driver.

- **Mounting Height:** This product meets or exceeds the NFPA minimum light requirements with all loads, down to the smallest rated lamp load, at heights up to 7.17ft (2.2m). Many factors influence emergency illumination levels, such as the lamp load selected, luminaire design, and environmental factors therefore end use verification is necessary. For field installations, when the attached luminaire is mounted at heights greater than 7.17ft (2.2m), the level of illumination must be measured in the end application to ensure the requirements of NFPA 101 and local codes are satisfied.
- **Remote Mounting:** The emergency LED driver may be remote mounted from the luminaire. If used in conjunction with an AC driver the allowed distance is up to half the distance the AC driver manufacturer recommends remote mounting the AC driver from the LED load. If used without an AC driver, and remote mounting more than 5 feet from the luminaire, please consult the factory to determine the necessary wire gauge.
CAUTION: Remote mounting can result in reduced power output.

OPERATION

During normal operation AC power is applied, the charging indicator light is illuminated, indicating that the battery is being charged. When power fails, the emergency LED driver automatically switches to emergency power (internal battery), operating the LED load for a minimum of 90 minutes. When AC power is restored, the emergency driver returns to the charging mode.

MAINTENANCE

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

1. Visually inspect the charging indicator light monthly. It should be illuminated. If the charging indicator is flashing. Contact tech support.
2. Test the emergency operation of the fixture at 30-day intervals for a minimum of 30 seconds. The LED load should operate at reduced illumination.
3. Conduct a 90-minute discharge test once a year. The LED load should operate at reduced illumination for at least 90 minutes.

! REFER ANY SERVICING INDICATED BY THESE CHECKS TO QUALIFIED PERSONNEL !

USE AND CARE

Unauthorized modification may impair the function and/or safety of this device and could affect the life of the equipment. Always check for damaged or worn out parts before using the device. Store it in a secure place out of the reach of children when not in use. Inspect for good working condition prior to storage and before re-use.

REPLACEMENT PARTS

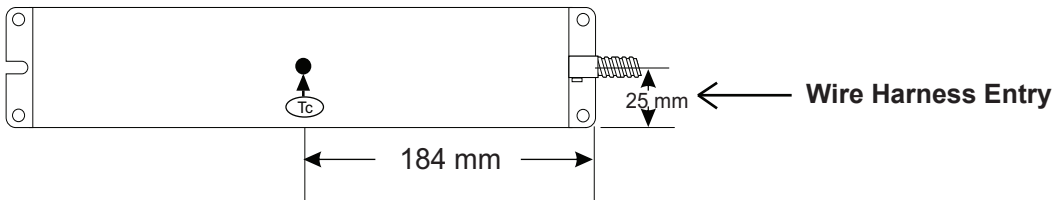
The EMGBALL-LED1-LV is designed to provide years of reliable performance. Should the need for replacement parts arise, please contact Larson Electronics.

THESE INSTRUCTIONS MAY NOT COVER ALL DETAILS OR VARIATIONS OF THIS PRODUCT FOR YOUR EQUIPMENT OR INSTALLATION REQUIREMENTS. SHOULD FURTHER INFORMATION NOT COVERED BY THESE INSTRUCTIONS BE REQUIRED, PLEASE CONTACT LARSON ELECTRONICS BY EMAIL AT SALES@LARSONELECTRONICS.COM OR BY PHONE AT 1-877-348-9680 FOR FURTHER ASSISTANCE.

PLEASE VISIT LARSONELECTRONICS.COM FOR **WARRANTY** AND **RETURN** INFORMATION.

DIAGRAMS

TCASE TEST POINT LOCATION



EMERGENCY DRIVER AND AC DRIVER MUST BE FED FROM THE SAME BRANCH CIRCUIT
TYPICAL SCHEMATICS ONLY. MAY BE USED WITH OTHER DRIVERS. CONSULT THE FACTORY FOR OTHER WIRING DIAGRAMS.

WIRING DIAGRAMS

FIG A TWO (2) WIRE INTEGRATED TEST SWITCH

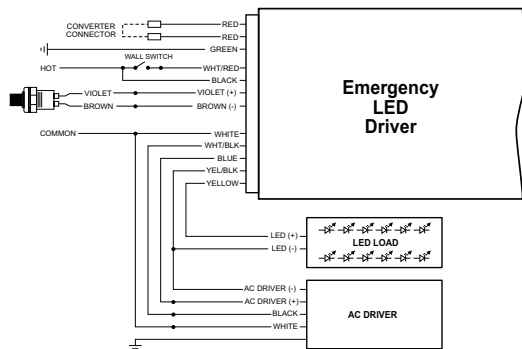
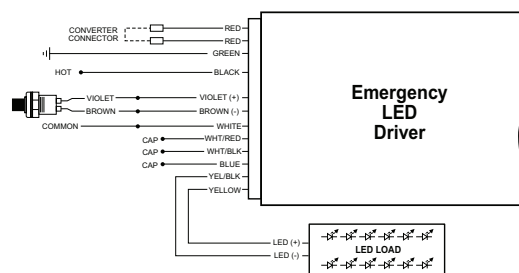


FIG B EMERGENCY ONLY



NOTE: For short-term testing of the emergency function, the battery must be charged for at least one hour. The emergency driver must be charged for at least 24 hours before conducting a long-term test.