

Explosion Proof Power Plug and Receptacle Class I, II, III - 20A, 440V - Circuit Breaker Switch Instruction Manual

Thank you for your purchase of the Larson Electronics EPPO-ICB-B-440V-3W4P-20A.

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

TO AVOID THE RISK OF FIRE, EXPLOSION OR ELECTRIC SHOCK, THIS PRODUCT SHOULD BE INSTALLED, INSPECTED AND MAINTAINED BY A QUALIFIED ELECTRICIAN ONLY, IN ACCORDANCE WITH ALL APPLICABLE ELECTRICAL CODES.

TO AVOID ELECTRIC SHOCK:

- BE CERTAIN ELECTRICAL POWER IS OFF BEFORE AND DURING INSTALLATION AND MAINTENANCE.
- PRODUCT MUST BE CONNECTED TO A WIRING SYSTEM WITH AN EQUIPMENT-GROUNDING CONDUCTOR.

TO AVOID EXPLOSION:

- MAKE SURE THE SUPPLY VOLTAGE IS WITHIN THE VOLTAGE RATING.
- ENSURE THE MARKED T RATING IS LESS THAN THE IGNITION TEMPERATURE OF THE HAZARDOUS ATMOSPHERE.
- DO NOT OPERATE IN AMBIENT TEMPERATURES ABOVE THOSE INDICATED ON THE PRODUCT NAMEPLATE.
- DO NOT OPERATE IF THE LENS, CORD, SEALS, HOUSING, RECEPTACLES, ETC. IS CRACKED OR DAMAGED. IF SO, DISCONTINUE USE AND CONTACT MANUFACTURER FOR REPLACEMENT PARTS.
- ALL FASTENERS SHOULD BE PROPERLY SEATED.

WARNING:

USER SHOULD BE TRAINED IN THE PROPER USE AND MAINTENANCE OF THIS DEVICE. IF WIRING OR LAMP REPLACEMENT INSTRUCTIONS ARE NOT FOLLOWED EXACTLY, THE HANDLAMP MAY NOT BE SUITABLE FOR THE HAZARDOUS LOCATION INVOLVED. WHEN HANDLAMP IS CONNECTED TO A POWER SOURCE IN HAZARDOUS AREA, PLUG AND MATCHING RECEPTACLE MUST BE SUITABLE FOR HAZARDOUS LOCATION INVOLVED. WHEN HANDLAMP IS CONNECTED TO POWER SOURCES OUTSIDE OF HAZARDOUS AREA, STANDARD DUTY PLUGS AND RECEPTACLES MAY BE USED.

STANDARD PLUG AND TRANSFORMER MUST ONLY BE CONNECTED TO A RECEPTACLE LOCATED OUTSIDE THE HAZARDOUS AREA!

IMPROPER USE OF THIS HANDLAMP, ASSOCIATED PLUG, RECEPTACLE, AND CORD CAN LEAD TO SERIOUS INJURIES OR DEATH TO PERSONNEL.

PERIODIC INSPECTION OF THE HANDLAMP AND CORD IS NECESSARY.

THE CORD MUST BE ROUTINELY CHECKED FOR CUTS, BREAKS, OR ANY SEVERE ABRASIONS, AND IF ANY ARE FOUND, THE CORD MUST BE REPLACED BEFORE RESUMING USE OF THE HANDLAMP.

THE GLOBE IS MADE OF TEMPERED GLASS. IF THIS GLASS BECOMES SCRATCHED OR CHIPPED IT SHOULD BE REPLACED IMMEDIATELY.

The Larson Electronics EPPO-ICB-B-440V-3W4P-20A Explosion Proof Receptacle and Plug is approved for Class I, Division 1 & 2, Class II, Division 1 & 2 and Class III sites and provides a safe and secure power connection for portable or stationary electrical devices and equipment in hazardous locations. This 3-pole, 4-wire unit is constructed of copper-free aluminum and operates with 440V AC. Rated at 20 amps, both devices can be used in Class I, Group B rated locations.

WIRING

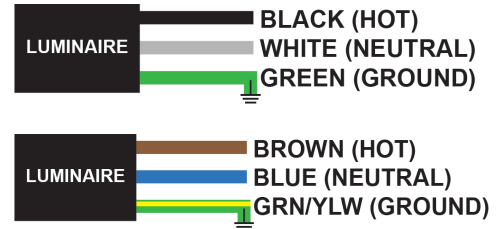
Standard pigtail(flying leads) wiring

We strongly encourage a licensed electrician install this product, in all locations especially in outdoor areas where weatherproofing may be required. Universal voltage driver permits operation at 440V.

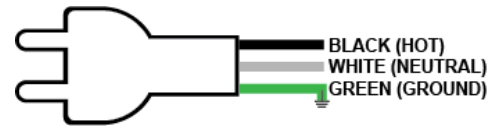
Warning: Check product label for correct input voltage!

Attach supply line wires to the appropriate light fixture wires as shown in the diagram →

Secure each pair of wires according to the diagram. Utilize a junction box or similar device and take precautionary steps for weatherproofing all connections if installed in a location where water may come in contact with the unit. Ensure the unit is properly grounded and that wiring is done according to all local and national electrical/building codes.



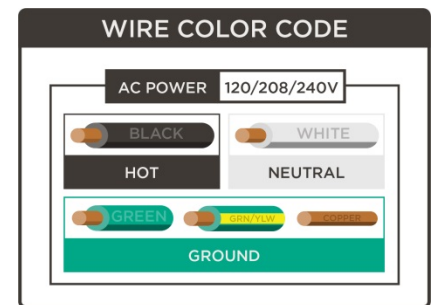
Position device near work area for operation. Run cable to nearby power source. Insert and twist-lock explosion-proof plug into a compatible receptacle within the hazardous environment. See *plug operation* below.



PLUG OPERATION

Electrical connection between plug and compatible receptacle is accomplished after plug fully inserts into receptacle and rotated clockwise.

1. Lift receptacle door and locate polarization on mating plug pin and receptacle face. Insert plug straight all the way into receptacle until it cannot go further.
2. Rotate plug clockwise limit (37°), this closes internal contacts and completes circuit. This also mechanically locks plug into receptacle so it cannot be pulled out.
3. To remove plug, push plug inward and turn to counterclockwise, pull plug straight out.



INTEGRAL CIRCUIT PROTECTION

This unit contains a circuit breaker to allow safe, 20 Amp at 440V AC max operation. The circuit breaker also gives protection against short circuits and provides added thermal time delay overload protection. The plug and receptacle contacts cannot be made or broken under load. When the plug is inserted, the plug and receptacle contacts engage before the switch closes. When the plug is withdrawn, the switch opens before the plug and receptacle contacts disengage. This provides the maximum safety of a dead front receptacle. Arcing is isolated in a flame and dust-tight chamber. No special interlock device or manual switch, operators simply pull the plug straight out.

INTERCHANGEABILITY

The receptacle and plug are fully interchangeable with configured and certified to UL1686 devices, such as Crouse-Hinds® Arktite® or Appleton® Powertite®. Standard location receptacle bolt hole patterns match competitive back boxes so users can perform upgrades without changing back boxes in instances where changing the conduit system is difficult.

RECEPTACLE INSTALLATION

Receptacle assembly must be mounted securely onto a column, wall, or other structure that is able to support the device and the associated conduit system. The structure is to be prepared for use of four (4) 3/8" steel bolts (furnished by others) using the lugs on the housing. The spacings are as shown in Fig. 1. The device is equipped with factory installed hinges. It must be mounted with the hinges on the left and the receptacle in the downward direction.

CONDUIT INSTALLATION

1. 1" NPT conduit entries are provided on the top and bottom of the housing.
2. All conduit entries must be sealed within 18" of the enclosure as per National Electrical Code.
3. Make sure conduit entries are clean before installing conduit, close-up plugs, reducers, etc. Thread lubricant is recommended for this application.

OPERATION

- Caution: The switch cannot be turned ON without fully inserting an approved plug. A plug cannot be inserted or withdrawn unless the switch is OFF. To remove the plug turn the switch to the OFF position and pull back on the locking pin knob while pulling on the plug.
- Note: Switch cannot be operated until the locking pin has fully engaged the plug.

ROUTINE INTERLOCK VERIFICATION

- Warning: Perform this test before energizing the receptacle.
- Before inserting the plug verify that the switch can not be turned to the ON position.
- Insert the plug, turn the switch to the ON position, pull on the locking pin knob and verify that the plug can not be withdrawn without turning the switch to the OFF position.
- If the receptacle does not perform properly discontinue use immediately!

MAINTENANCE

- Electrical and mechanical inspection of all components must be performed regularly. It is recommended that an inspection be performed a minimum of once a year.
- Inspect all terminals for tightness (Retorque). Discoloration due to excessive heat is an indicator of possible problems and should be thoroughly investigated and repaired as necessary.
- Inspect grounding and bonding for correct installation and secure connection (Retorque).
- Warning: Do not modify these devices in any way. Replace with proper replacement part(s) before continuing service. Failure to do so could cause serious or fatal personal injury and/or equipment damage.
- Inspect gaskets for deterioration and replace if necessary.
- Clean exterior surfaces making sure nameplates remain legible.
- Torque all bolts and screws as described in the instructions before reusing the device.
- Inspect receptacle thread used for plug locking ring for proper lubrication. Apply lubricant to thread surfaces as required to prevent galling between the receptacle and locking ring threads.
- In addition to these required maintenance procedures, we recommend an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B.

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 EPPO-ICB-B-440V-3W4P-20A 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 1-800-369-6671 FOR FURTHER ASSISTANCE.

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