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 EPO-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.

IMPORTANT

READ CAREFULLY BEFORE INSTALLING THIS FIXTURE. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE. THE EPO-20A MUST BE WIRED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES. PROPER GROUNDING IS REQUIRED FOR SAFETY.

WE STRONGLY ENCOURAGE ONLY A LICENSED ELECTRICIAN INSTALL, OPERATE AND MAINTAIN THIS PRODUCT. IF YOU ARE NOT QUALIFIED OR UNFAMILIAR WITH ANY ASPECT OF THIS INSTRUCTION SHEET, CONSULT AN ELECTRICIAN. THERE ARE NO SERVICEABLE PARTS INSIDE.

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.

WARNING:

USER SHOULD BE TRAINED IN THE PROPER USE AND MAINTENANCE OF THIS DEVICE. THIS LINE CORD IS INTENDED TO ALLOW OPERATORS TO EXTEND POWER TO EQUIPMENT WHEN STATIONARY OUTLETS ARE NOT READILY AVAILABLE.

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

PERIODIC INSPECTION OF THE 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.

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. WHEN EXTENSION CORD IS CONNECTED TO A POWER SOURCE IN HAZARDOUS AREA, PLUG AND MATCHING RECEPTACLE MUST BE SUITABLE FOR HAZARDOUS LOCATION INVOLVED. IMPROPER USE OF THIS DEVICE, ASSOCIATED PLUG, RECEPTACLE, AND CORD CAN LEAD TO SERIOUS INJURIES OR DEATH TO PERSONNEL.

PERIODIC INSPECTION OF THE RECEPTACLE 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 UNIT.

ELECTRICAL POWER SUPPLY MUST BE “OFF” BEFORE AND DURING INSTALLATION AND MAINTENANCE. INSTALLATION AND MAINTENANCE PROCEDURE MUST BE PERFORMED BY A TRAINED AND COMPETENT ELECTRICIAN.

IF ANY PARTS OF THE RECEPTACLE OR PLUG APPEAR TO BE MISSING, BROKEN, OR SHOW SIGNS OR DAMAGE, DISCONTINUE USE IMMEDIATELY. REPLACE WITH THE PROPER REPLACEMENT PART(S) BEFORE CONTINUING SERVICE.

The Larson Electronics EPO-20A Explosion Proof Outlet is designed for power connections in combustible facilities and hazardous locations. This receptacle is rated at 20 amps and operates with 125V AC or 250V AC. Constructed of copper-free aluminum with an electrostatically applied baked powder epoxy/polyester finish, the NEMA rated outlet is protected by a heavy-duty cover.

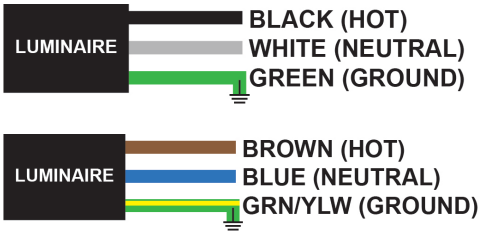
WIRING

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 125V or 250V.

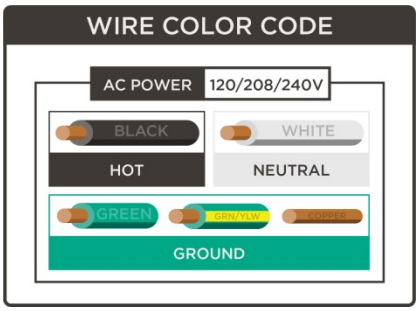
Warning: *Check product label for correct input voltage!*

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.

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 (37º), 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.

MOUNTING

The explosion proof receptacle features four, 1/4" mounting holes at every corner of the unit for permanent mounting installations.

INSTALLATION

1. Mount back box in desired position following methods that comply with NEC and any local codes.
   CAUTION: Conduit sealing fittings MUST BE installed in Class 1, Group B locations to comply with the requirements in the latest edition of the NEC, Section 501-5 and/or 502-5 plus any other applicable standards. Sealing fittings must be close-nippled to the enclosure.
2. Pull all power source wiring into back box. Be sure wires are long enough to make proper connections.
   CAUTION: Use only copper or copper-clad wire with this receptacle.
3. Attach power source conductors to receptacle terminals in an approved manner. Black conductor is attached to bronze screw; white conductor is attached to silver cadmium screw; and green grounding conductor is attached to the green screw.
4. Push wiring into back box and attach receptacle using the four screws provided. The preferred arrangement for the receptacle is with the door hinge on top. Tighten screws to 30 inch-pounds torque.

OPERATION

1. Insert plug into receptacle as far as it will go.
2. Turn clockwise as far as it can go. Internal contacts of the receptacle are closed by this action and complete the electrical circuit.
3. Release plug allowing it to move outwardly slightly, into a locking detent position. Check by trying to turn and/or pull out without any inward pressure. Plug should not pull out.
4. To remove plug, press inward, turn counterclockwise and pull straight out.

QW WIRING (See Figure 1) :

NOTE: Use **only** copper wire with this device (10, 12 or 14 AWG).
Recommended wire strip length – ½ inch nominal (wire strip gauge also available on the QW terminal cover). Loosen all (3) Terminal Contact Screws and insert wire through the Wiring Entrance holes, into proper terminals:
Green lead (Ground)
to terminal with ground mark & Green screw head; White (Neutral) lead to terminal with Silver screw head (125V. only); Black and/or Red [Line lead(s)] to terminal(s) with Brass screw head. Hand tighten terminal screws (recommended torque 8 in.-lbs.

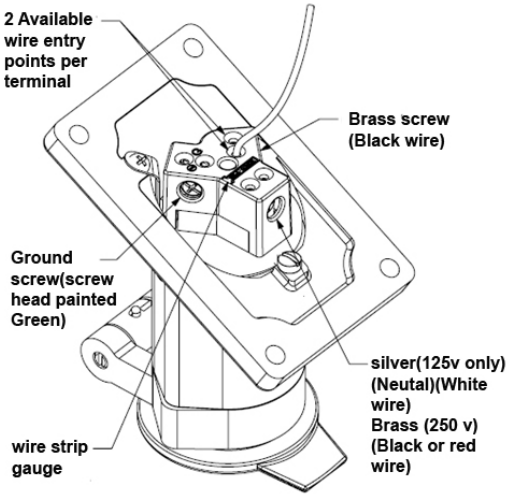


Figure 1
"QW" TERMINAL CONNECTIONS

MAINTENANCE

Perform visual, electrical and mechanical checks of all components on a regular schedule. This should be determined by the environment and frequency of use, but it is recommended that it should be at least once a year.

1. Make sure screws holding receptacle to back box are tight.
2. Clean receptacle face thoroughly
3. Make sure screws holding insulator in plug body are tight.
4. Clean all exterior parts of plug thoroughly.

WARNING: If any part of the receptacle appear to be broken or shows signs of any damage – DISCONTINUE ISE IMMEDIATELY. Replace, or properly repair the item before continuing service.

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 EPO-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.