

Mobile Power Distribution Center Instruction Manual

Larson Electronics MDC Series power distribution systems provide operators the ability to safely tap into power from a variety of sources including generators and direct grid power. This portable breaker panel is suitable for outdoor applications. Do not attempt installation or operation until you are familiar with all warnings, precautions, and procedures outlined within this document.

Safety Warnings

For personal safety, always follow the safety instructions in this manual to ensure safe and long-term use. Failing to do so can result in damage to the product or serious bodily injury.

WARNING

- DO NOT** place in a location where the power substation has the potential to roll or tip over.
- DO NOT** perform maintenance while energized.
- DO NOT** stand under power substation while elevated for transport.
- DO NOT** use this product for other than its intended use.
- DO NOT** open or modify power substation.

Always ensure a clear area while maneuvering power substation.



⚠ WARNING:

Electrical potentials hazardous to human life can exist within this equipment when energized. Disconnect all input power before opening case or touching internal parts. Use proper lock-out/tag-out procedures.

The information contained herein may not cover all variations in equipment or provide for all contingencies which might be met in installation, operation and maintenance.

Failure to follow instructions may result in death or serious injury

Inspection upon Receiving

Power distribution should be carefully inspected upon receipt to ensure that no damage has occurred during shipment. Any damage should be reported at once and a claim should be placed against the shipping company.

⚠ WARNING:

Only qualified personnel should install, inspect, or maintain transformers since the normal operating voltages can be hazardous. Do not place combustible materials on or near transformer or mount transformer closer than 6 inches from any adjacent wall. The nameplate rating on the unit should be checked against the job specifications to ensure installation of the correct transformer.

Power distribution substation should never be operated without access covers securely mounted in place. A safety program must be established, verified and followed by all personnel involved with the power distribution unit.

OPERATION:

Place the power substation on a level surface near a power source. The power substation provides multiple options for maneuvering. These vary upon model purchased:

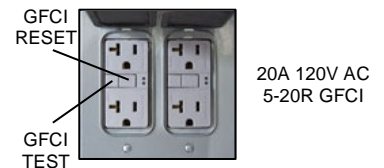
- **Tires** Roll around on ground surface. maneuver like a traditional dolly cart. Tilt cart by handle toward you and roll to the desired location.
- **Center Lift Point** Lift with sling cable via crane or similar. Use equipment capable of lifting 2000lbs. minimum.



RUN FLAT TIRES

Ensure all power is disconnected prior to wiring substation and there is no load on the system. Turn off all disconnect switches and primary panel main circuit breaker before energizing substation.

Feed power substation with the primary voltage. See specifications listed on product nameplate. Power substation is fed via cord whip or direct to primary disconnect depending on model. See wire diagram attached to your power distribution substation. Connection cables must be rated for at least 90°C insulation and 75°C ampacity. Connection cables must meet NEC and local electrical codes. Use appropriate measures and follow all applicable local, state, NEC codes when wiring.



20A 120V AC
5-20R GFCI

Once power is supplied, energize substation. Switch the primary breaker ON or for models with disconnect switch, pull the lever and switch primary disconnect ON. **Note: Disconnect box will lock itself with the lever turned ON and won't unlock until switched OFF.**

Connect equipment to available receptacles.



PANEL

In the event of an overload or power failure, check all breakers. For disconnects, turn off and de-energize prior to servicing. Check to ensure GFCI receptacles are not tripped. If they are, reset them via button on each 5-20R receptacle or by circuit breaker for other receptacles.

*NOTE: PICTURES SHOWN MAY VARY.

THIS SHEET DOES NOT DEPICT ALL COMPATIBLE PANELS, DISCONNECTS, AND RECEPTACLES AVAILABLE ON POWER DISTRIBUTION PANELS. UNIT RECEIVED MAY INCLUDE DEVICE(S) NOT SHOWN HERE. SEE PHYSICAL UNIT AND SPECIFICATION SHEET FOR ADDITIONAL INFORMATION.

Definition of a ground fault:

Instead of following its normal safe path, electricity passes through a person's body to reach the ground. For example, a defective appliance can cause a ground fault.

A GFCI receptacle does NOT protect against circuit overloads, short circuits, or shocks. For example, you can still be shocked if you touch bare wires while standing on a non-conducting surface, such as a wood floor.

NOTE:

GFCI's contain a lockout feature that will prevent RESET if:

- There is no power being supplied to the GFCI.
- The GFCI is mis-wired due to reversal of the LINE and LOAD leads.
- The GFCI cannot pass its internal test, indicating that it may not be able to provide protection in the event of a ground fault.
- GFCI TEST

Plug an electrical device, such as a lamp into the receptacle on which you are working. Turn the lamp or device ON. Then, unplug the power cord or find the breaker or fuse that protects that receptacle. Place the breaker in the OFF position or completely remove the fuse. The lamp or device must turn OFF.

Next, plug in and turn ON the lamp or device at the receptacle's other outlet to make sure the power is OFF at both outlets. If the power is not OFF, stop work and call an electrician

MAINTENANCE

WARNING:

Only qualified personnel should inspect, or maintain transformers and power distribution since the normal operating voltages can be hazardous.

WARNING:

Hazard of electrical shock, explosion or arc flash. Turn off power supplying this equipment before working on it. Discharge all static charges held by coils. Failure to follow these instructions may result in death or serious injury.

Transformers and panels contain no moving parts and require very little maintenance. Periodic inspection and care are recommended practices especially if the unit is operating in a harsh environment.

Inspect for loose connections, condition of terminal board, condition of splices, overheating, rust, paint deterioration and general condition of the unit. Corrective measures should be taken if necessary. Removal of dust, dirt and debris from the external enclosure surfaces is encouraged and may be performed while the transformer is in operation.

If maintenance includes removal of enclosure panels, the transformer must be de-energized. The use of lockout/tag-out practices is required.

Internal maintenance would include:

- Inspection and tightening of bolted connections.
- Inspection of coil ducts. Removal of dirt can be accomplished using a vacuum cleaner or low pressure (<20 psi) dry compressed air.

Save this instruction sheet for future use of the product.

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.