

Portable Spider Box Instruction Guide

120/208V 30A L21-30 Input - (2) 30A L6-30R (208V), (2) 30A Breakers

Thank you for your purchase of the Larson Electronics Portable Spider Box. Please follow the steps below in order to operate and maintain this product.

Installation and Operating Instructions

SPECIFICATION

These installation and operation instructions apply to the following temporary power branch distribution system components. Do not discard these instructions, save for future Reference.

PORTABLE POWER DISTRIBUTION UNITS

These units are rated for 30 amps, 120/208 VAC, Single Phase. The max. ampacity for the 30 amp unit is 100A @ 120V. The 30 amp, 208 volt outlets are individually protected by circuit breakers and GFCI circuit modules.

INTRODUCTION

Temporary power distribution units equipped with GFCI products will protect you from electrocution hazards resulting from ground faults. Ground faults are current leaks and can result in electric shock. Currents of only 60/1000 of an ampere can be fatal. The GFCI protection provided by temporary power distribution units significantly minimizes shock hazards. Temporary power distribution units,

which are Class A, Group I interrupters, respond to fault currents as low as 3-6 milliamperes, and will shut off the current within 1/40th of a second. The temporary power distribution unit is designed to provide protection against electrical shock hazards due to line-to-ground faults. Although the GFCI Module does not eliminate the hazard of a shock, it does limit the duration of the shock to a period considered safe for normally healthy persons.

GFCI Modules will provide protection against ground faults only. They will not protect against overloads or short circuits. There is no known device that will guard against the electrical shock hazard resulting from contact with both the "hot" and neutral wires of the electrical circuit.

**ELECTRICITY IS DANGEROUS.
EVEN WHEN SAFETY DEVICES ARE
PRESENT, HANDLE WITH CARE AND USE
REASONABLE CAUTION.**

LET CAUTION PREVAIL

The temporary power distribution unit is designed to be used on a grounded electrical supply system. It will not operate when supplied from a power source which is not grounded. Over-current protection of the proper rating, according to the National Electric Code, Article 240, must be used on the supply circuit feeding the temporary power distribution units.

TEST PROCEDURE

All Models

Connect the temporary power distribution unit to an appropriate power source.

CAUTION

- Power is immediately available at the 30 amp outlet when the source is energized on all models.
1. Verify all circuit breakers are in the “on” position.
 2. Push the test button on the individual GFCI module. The unit should trip.
 3. Push the reset button. The indicator light should come on.
 4. Repeat steps 2 & 3 for the remaining modules.

TROUBLE SHOOTING

The GFCI Modules within the temporary power distribution unit will trip whenever one or more of the following abnormal conditions exist in the line (supply) side circuit:

1. Either line (hot) conductor is transposed with the neutral conductor.
2. Either line (hot) conductor is open (disconnected)
3. There is an excessive voltage imbalance between line 1 and line 2 circuits. This may be the result of an open neutral conductor in the supply circuit.

When the abnormal condition(s) in the supply circuit is corrected, the unit may be reset for normal use by completely removing and then reapplying line power. It is recommended that the GFCI test procedure be repeated at this time. When a GFCI module trips, attempt to reset it by pressing the reset switch, being careful to look for possible danger to personnel. If the module resets, the fault was momentary and has cleared. If it trips again immediately, the fault is still present and the GFCI module is performing its safety function. To locate the fault, disconnect all loads and again try pressing the reset switch. The module should reset. Reconnect the loads one at a time.

The module will trip when the faulted load is reconnected. Inspect all tools, appliances and extension cords in the faulted load circuit, repairing or replacing any that are not in good condition.

NOTE: Tripping of a circuit breaker in these models can only result from an overload or short circuit condition in its individual load circuit. When the fault in the load circuit is corrected or removed, the circuit breaker can be reset for normal use by switching handle to “OFF” position and then to the “ON” position.

NUISANCE TRIPPING

All cables have some capacitive leakage. In a 120 volt system, there is a limit to the length of cable which can be run before sufficient leakage to ground will build up causing a GFI to trip. Individual 120 volt branch circuit load cords should be limited to 250 feet in length.

APPLICATION NOTES

Enclosure is a NEMA Type 3R; enclosures are intended for use outdoors to protect the enclosed equipment against windblown dust and water and to provide for its operation when the enclosure is covered by external ice or sleet.

HIGH VOLTAGE LIGHT

An illuminated high voltage light indicates the input wiring is incorrect; check the power source.

CONTACT MONITOR LIGHT

The red monitor light is a welded contact indicator. If the monitor light is on with the unit tripped, it indicates the contact is welded, and the unit should be replaced immediately -- there is no GFCI protection. When the TEST button is pressed, both the POWER light and MONITOR light should go out, and come back on when the RESET button is pressed.

MAINTENANCE & REPAIR

CAUTION: Electrical power supply MUST BE OFF AND DISCONNECTED before and during any repair or maintenance. Repair and maintenance must be performed by a trained and competent electrician.

WARNING: If any parts or components of this temporary distribution box appear to be missing, broken or show signs of damage, DISCONTINUE USE IMMEDIATELY! Do not modify these devices in any way. Replace worn or damaged components. Failure to do so could cause serious personal injury or death.