- **Open Circuit:** If the Surge Protector unit detects an open hot condition, no lights will turn on. This is a condition where the hot wire is either disconnected or broken somewhere along its path, and every device connected to the wire after the break will lose power. An open hot condition could harm you and/ or your RV electrical system and electrical equipment. If this indication occurs, disconnect power to the AC power source and report the open neutral wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.

- **If Surge Protector Indicator light is off:** the surge protection module is depleted and is no longer providing surge protection to your RV. It is recommended that you replace the surge protector.

- **If OVER HEAT WHEN ON red light is on:** the surge protector is overheating.

1. If the Surge Protector indicates correct wiring, disconnect power at the AC power source. Plug the cable from your RV into the Surge Protector receptacle. Verify that the plug connection between the AC power source, the Surge Protector, and the RV cable are secure and fully inserted.

2. Re-apply power to the AC power source. Power will now pass through the Surge Protector to the RV.

NOTE: Provided you have the proper adapter, the Dicor Surge Protector may be used with 15A, 20A, 30A or 50A service and will provide full protection.

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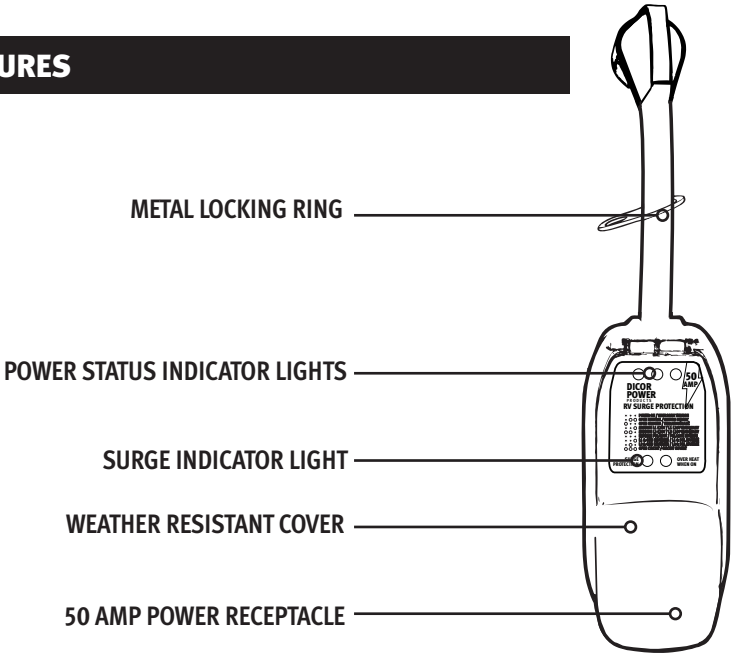
Dicor Power Surge Protection
DP-SP50A-P

INSTRUCTION MANUAL

FEATURES



5-Mode Surge Protection: This feature provides five modes of surge protection. Line 1 to neutral (L1-N), line 2 to neutral (L2-N), neutral to ground (N-G), line 1 to line 2 (L1-L2) and line to ground (L-G). The total joule rating is 5000 J. Response time is less than 1 ns (nanosecond).

Auto ON/OFF : If input voltage drops below the set voltage range or exceeds the set voltage range, the circuit will be disconnected to protect the electronic equipment within a few milliseconds. Once voltage stabilizes and returns to normal, the circuit will restore power.

Surge Indicator: The Green Surge Protection light on the bottom left of your Dicor Surge Protector device indicates that your surge protector is functioning correctly and is providing protection to the devices you have connected to it.

This light should remain ON as long as the surge protector is plugged into an outlet and power is ON. If this light goes out at any time, it means that your surge protector has served its purpose on protecting your equipment against damaging voltage fluctuations, surges, or spikes. If this happens, your surge protector is no longer providing surge protection to your RV and should be replaced.

NOTE: Provided you have the proper adapter, the Dicor Surge Protector may be used with 15A, 20A, 30A or 50A service and will provide full protection.

WARNINGS

- RV wiring is different than house wiring. In an RV, neutral and ground conductors are isolated whereas in a house they are bonded at the service panel. Therefore; never connect neutral and ground as this can result in a ground fault condition, electric shock, and/or a fire hazard.
- The Dicor Surge Protector can be used with a generator. A bonded neutral generator is recommended. If your generator is not neutral grounded you can find articles on multiple websites detailing ways to properly bond a generator.
- Do not exceed the electrical rating on the Dicor Surge Protector for any reason.
- Do not modify the Dicor Surge Protector in any way as this will void the warranty, could harm you and/or your RV electrical system and electrical equipment or compromise protection.
- When running an extension cord from the RV to the AC power source always use a 6/4 AWG or 6/3 + 8/1 AWG cable for your 240 Volt, 50Amp device or a 10/3 AWG cable for your 120 Volt, 30Amp device. Ensure your cable is rated for outdoor use and we recommend the length not to exceed 25'. Taking these preventative measures can help to reduce the risk of electrical shock and/or fire.
- NEVER plug the Dicor Surge Protector into an inverter. Dicor Surge Protector units can be used with inverter-generators.

POWER CONNECTION & DISCONNECTION

WARNING: To minimize shock hazard, follow these instructions:

1. Turn off power to the RV before connecting or disconnecting power cable.
2. When connecting power, connect the power cable at the RV first before plugging into the AC power source.
3. When disconnecting power, disconnect power cable at the AC power source first
4. Close inlet cover tightly.

MAINTENANCE WARNING

- Before each use, examine the plug and receptacle of the Surge Protector, the male plug of the RV power cord, and the receptacle on the AC power source. Look for signs of discoloration which indicates overheating.
- If any connection shows signs of overheating, replace both mating parts immediately.
- Use brass wire brush provided to remove any dirt or carbon build-up from brass prongs on your surge protector or extension cord."
- Carefully follow the wiring instructions supplied with all replacement devices to insure proper operation.

OPERATING INSTRUCTIONS

WARNING: DO NOT plug your RV power cord into the receptacle of the Dicor Surge Protector at this time.

1. Be sure that power is disconnected at the AC power source. Plug the Surge Protector unit into the appropriate receptacle.

2. Re-apply power to the AC power source and monitor the Surge Protector unit. Verify that all top three LED indicator lights are ON and Green. If any of the top three LED indicator lights are NOT ON or Red, refer to the LED light indicator breakdown on following page. If a fault condition is indicated, there may be a problem with the pedestal wiring or with the power at your location. Consult a licensed electrician to correct the fault condition or move your RV and connect to a different pedestal.

Ⓖ Ⓖ Ⓖ • **Correct Wiring:** If the Surge Protector unit detects a correct wiring condition, the surge protection light will turn on and the three green lights will turn on. If this condition occurs, please proceed to Step 3 on reverse side of page.

Ⓖ ◯ ◯ • **Open Neutral:** If the Surge Protector unit detects an open neutral condition, the first green light will turn on. This is a condition where the neutral wire is disconnected and could pose a shock hazard. An open neutral condition could harm you and/ or your RV electrical system and electrical equipment. If this indication occurs, disconnect power to the AC power source and report the open neutral wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.

◯ Ⓖ Ⓖ • **Open Ground:** If the Surge Protector unit detects an open ground condition the last two green lights will turn on. Open ground is a condition where the three-prong receptacle is not connected to an equipment grounding conductor or the neutral and ground wires are not bonded together creating an electrical safety hazard. An open ground condition could harm you and/or your RV electrical system and electrical equipment. If this indication occurs, disconnect power to the AC power source and report the open ground wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.

Ⓖ Ⓖ ◯ • **Missing L1 120V:** If the Surge Protector unit detects a missing line 1 condition the first two green lights will turn on. This condition could be due to a faulty or loose connection or a fault with the pedestal receptacle not supplying power. A missing line could harm you and/or your RV electrical system and electrical equipment. If this indication occurs, disconnect power to the AC power source and report the open ground wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.

◯ ◯ Ⓖ • **Missing L2 120V:** If the Surge Protector unit detects a missing line 1 condition the first two green lights will turn on. This condition could be due to a faulty or loose connection or a fault with the pedestal receptacle not supplying power. A missing line could harm you and/or your RV electrical system and electrical equipment. If this indication occurs, disconnect power to the AC power source and report the open ground wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.

Ⓡ Ⓖ Ⓖ • **Reverse Polarity:** If the Surge Protector unit detects a reverse polarity condition, the first light will turn red and last two lights will turn green. A reverse polarity condition could harm you and/ or your RV electrical system and electrical equipment. If this indication occurs, disconnect power to the AC power source and report the reverse polarity wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.

Ⓡ Ⓖ ◯ • **L1 & Ground Reverse:** If the Surge Protector unit detects a hot/ground reverse, the first light will turn red and second light will turn green. Hot/ground reverse simply means the hot wire and the ground wire have not been installed properly. If this indication occurs, disconnect power to the AC power source and report the open neutral wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.

Ⓡ ◯ Ⓖ • **L2 & Ground Reverse:** If the Surge Protector unit detects a hot/ground reverse, the first light will turn red and third light will turn green. Hot/ground reverse simply means the hot wire and the ground wire have not been installed properly. If this indication occurs, disconnect power to the AC power source and report the open neutral wiring condition to the park manager or a qualified electrician before plugging your RV power cord into the receptacle of the Surge Protector.