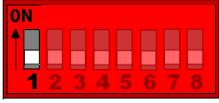
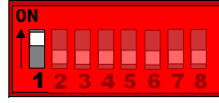
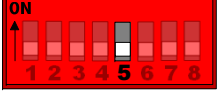
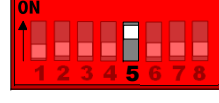
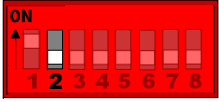
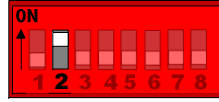

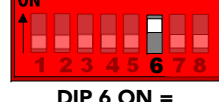

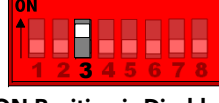


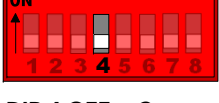
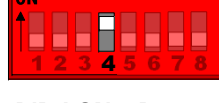




Specifications*:

Rated Power	150 W / 300 W / 700 W	Communication Options	Remote Switch, Bluetooth, EIA-485, MS-CAN
Battery Voltage	12 Vdc, 24 Vdc, or 48 Vdc		
AC Output Voltage (Vac) / Frequency	120 Vac / 60 Hz, 127 Vac / 60 Hz, or 230 Vac / 50 Hz	AC Interface Options	North American Type-B Outlet or UNI Universal AC Outlet

*Partial Specification List only. For the complete list of specifications, see the SureSine Installation and Operation's Manual.

DIP Switch Settings (Default Settings = OFF):


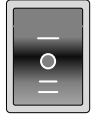

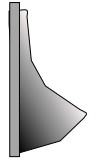

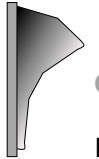
DIP 1: OPERATIONAL CONTROL   DIP 1 OFF = Switch Control DIP 1 ON = Digital Control	DIP 5: LVD PRESETS   • For 12 Vdc Systems: DIP 5 OFF = 10.5 V DIP 5 ON = 11.5 V • For 24 Vdc Systems: DIP 5 OFF = 21.0 V DIP 5 ON = 23.0 V • For 48 Vdc Systems: DIP 5 OFF = 42.0 V DIP 5 ON = 46.0 V
DIP 2: ALARM SOUND   DIP 2 OFF = Alarm is Disabled DIP 2 ON = Alarm is Enabled	DIP 6: STANDBY MODE   DIP 6 OFF = AC Output Always ON DIP 6 ON = AC Output OFF < 8 W
DIP 3: NOT USED   Default is OFF ON Position is Disabled	DIP 7: ETHERNET SECURITY   DIP 7 OFF = Ethernet Write Disabled DIP 7 ON = Ethernet Write Enabled 700 W Models ONLY. NOT USED in 150 W or 300 W Models.
DIP 4: LOW VOLTAGE DISCONNECT (LVD)   DIP 4 OFF = Custom DIP 4 ON = Presets LVD Default Setting (DIP Switch 4 OFF) = 11.8 V, 23.6 V, or 47.2 V	DIP 8: BLUETOOTH COMMUNICATIONS   DIP 8 OFF = Bluetooth Disabled DIP 8 ON = Bluetooth Enabled DIP Switch 8 must be set before connecting DC power. If changed during operation, a power cycle is required.

LED Indications:

STATUS LED ¹	AC Output LED	Operation or State
OFF ●	OFF ●	No power or Battery below 9.5 V
GREEN ●	OFF ●	AC Output OFF
GREEN ●	GREEN ●	AC Output ON
GREEN ●	GREEN (BLINK) ² ●	AC Standby Mode
GREEN ●	RED (BLINK) ² ●	Low Voltage Disconnect (LVD) Warning
GREEN ●	RED ●	Low Voltage Disconnect (LVD)
RED ●	RED (BLINK) ² ●	Recoverable Fault ³
RED ●	RED ●	Critical Fault ³

¹The Status LED flickers ON very briefly when the LED is OFF. The Status LED flickers OFF very briefly when the LED is GREEN or RED solid. The "heartbeat" occurs every 5 seconds.

AC Output Mode Switch:

ON	OFF	REMOTE
 (Front View)	 (Front View)	 (Front View)
Press the	Put the switch in a neutral position	Press the
 (Side View)	 (Side View)	 (Side View)

²0.5 Hz. Rate

³See the SureSine Inverter Installation and Operations Manual for details.

Contact Information:

Technical Support: morningstarcorp.com/support
Phone: 1-215-321-4457



SureSine

SINE WAVE INVERTER

Quick Start Guide



SureSine Inverter Models:

**150 W, 300 W & 700 W Models
(Factory-wired Versions ONLY)**

For use with 12 Vdc, 24 Vdc,
or 48 Vdc Systems



IMPORTANT:

The SureSine Inverter is designed for converting DC power to AC power only. It will not charge batteries.



WARNING: Hazardous Voltage

The SureSine Inverter must be installed by a qualified technician in accordance with the electrical regulations of the country of installation.



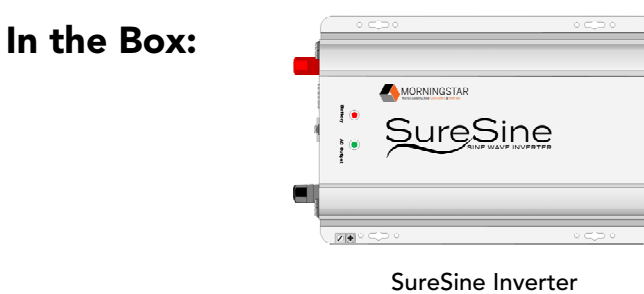
CAUTION: This guide must be used with the full product manual that includes important information. Carefully read the SureSine Inverter product manual for all specifications, safety, regulatory and warranty information, and for all required instructions on installation procedures, configuration, and operation.

Scan QR Code to go directly to the SureSine Inverter Installation Manual and warranty information online.



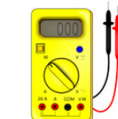
Warranty Registration: <https://www.morningstarcorp.com/product-registration/>

In the Box:

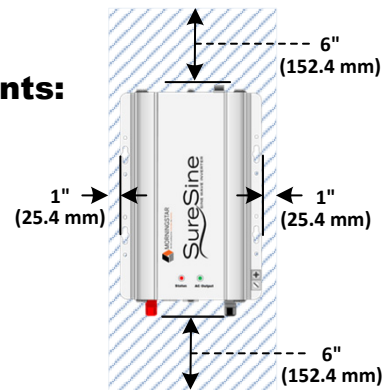


Tools Required:

- #2 Philips Screwdriver
- 3/16 (5 mm) & 1/8" (3.8 mm) Flathead Screwdriver
- Drill with a 1/8" (3.8 mm) bit
- Multimeter
- Crimping Tool
- Wrench



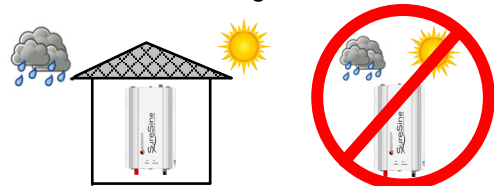
Minimum Clearance Requirements:



WARNING: Risk of Fire
Do not install over an easily combustible surface, since the heat sink may get hot under certain operating conditions.

CAUTION: Burn Hazard
Place in a location to avoid direct contact.

CAUTION: Equipment Damage
Do not expose the SureSine to weather. Locate in a dry, protected area to prevent equipment damage.
Ensure the minimum clearance requirements are followed to provide adequate ventilation and prevent the unit from overheating.



WARNING: Risk of Fire
All over-current protection devices and wiring must be sized properly, in accordance with US National Electric Code (NEC) or the country of installation's local regulations.

WARNING: Explosion Hazard
Never install the SureSine in an enclosure with vented/flooded batteries. Battery fumes are flammable and will corrode and destroy the SureSine circuits. Ensure sufficient ventilation.

WARNING: Shock Hazard
Fuses, single-pole circuit breakers or single-pole disconnect switches should **NEVER** open grounded system conductors. This could create a shock hazard that could be fatal to personnel and/or damage the equipment.

IMPORTANT: Neutral-Ground Bond
The AC Neutral of the 120 Vac/ 60 Hz models is bonded to the inverter frame internally from the factory as required for UL safety requirements.

The AC Neutral of the 127 V, 230 V, and 240 V models is floating (not bonded to the inverter frame). If a neutral-ground bond is required an internal neutral-ground jumper wire (included) can be used to connect the neutral terminal to the grounded chassis.

CAUTION: Equipment Damage
Ensure the AC loads do not exceed the continuous and surge power ratings.

Mounting:

Step 1: Choose mounting location

- Determine how and where the inverter will be mounted.
- Ensure the inverter is protected from sun, rain, and dust.

Step 2: Wiring accessibility and air flow clearance

- Plan and confirm wire routing-access.
- Verify that the mounting screws will not penetrate wires or other objects located on the opposite side of the surface.
- Verify that there is at least 6" of space around the unit.

Step 3: Mark and drill holes

- Place the inverter on the wall where the unit will be mounted.
- With a pencil or pen, mark the center of each keyhole slot; two (2) on top and two (2) on the bottom.
- Remove the inverter and drill four (4) 1/8" (3.175 mm) holes where the marks were made.

Step 4: Secure the inverter

- Place the SureSine onto the surface and align the keyhole slots with the four (4) pilot holes.
- Use the four (4) #10 screws (included) to secure the SureSine to the surface.

For optimal ventilation and cooling, mount in portrait style orientation.

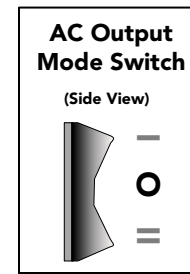
Portrait Orientation



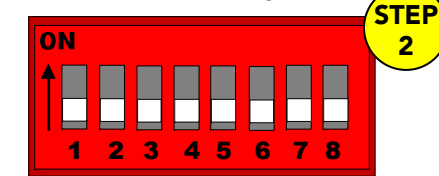
STEP 1a Ensure circuit breakers are open, disconnect switches are open, and fuses are removed from fuse holders.

AND

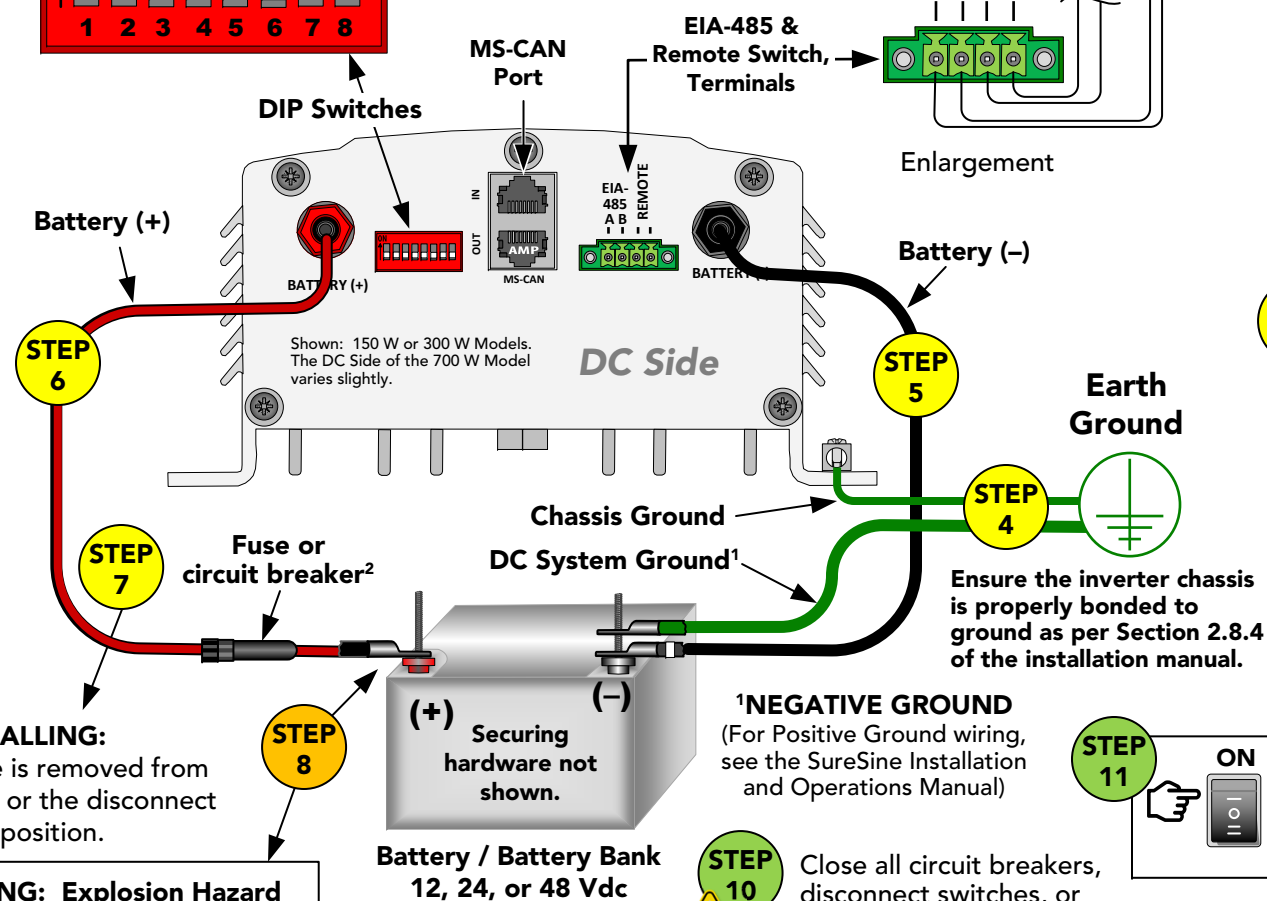
STEP 1b Ensure the AC Output Mode Switch is in the OFF position.



DIP Switch Enlargement

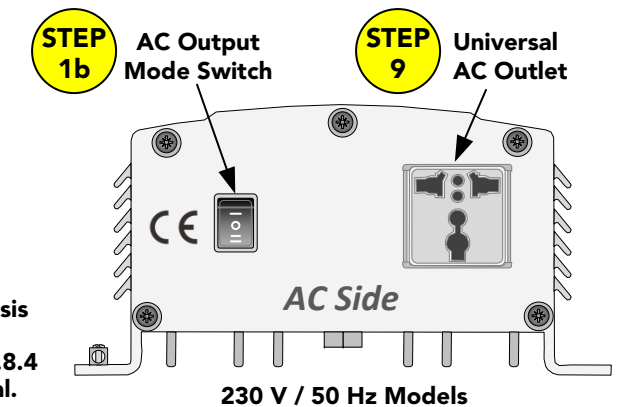
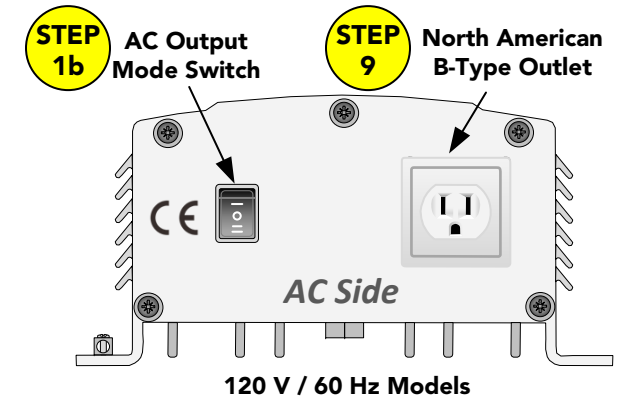


For DIP Switch settings, see page 4 of this guide.



IMPORTANT: Example only. Actual wiring may vary. READ the SureSine Installation and Operations Manual for mandatory safety requirements. All configurations must comply with local and national electric codes. Consult the local electric authority to ensure compliance.

See the SureSine Installation and Operation's Manual for information on communication options.



BEFORE INSTALLING:
Ensure the fuse is removed from the fuse holder or the disconnect is in the OPEN position.

WARNING: Explosion Hazard
STEP 8 can produce a spark if the fuse is inserted or the disconnect is in the CLOSED position.

STEP 10 Close all circuit breakers, disconnect switches, or insert the fuse into fuse holder.

TERMINAL TORQUE REQUIREMENTS

Terminal	Terminal Size or Wire Size*	Torque to:	
		In-lbs.	Nm
DC (+) (-) Input Bolt Terminals (150 - 300 Watt)	M8 (~5/16")	20	2.3
DC (+) (-) Input Bolt Terminals (700 Watt)	M6 (~1/4")	35	4
AC Output Neutral, Line and Ground Terminals	M6 (~1/4")	20	2.3
Chassis Ground Lug	14 - 2 AWG (2.5 - 10.0 mm ²)	35	4
Modbus, Remote Switch, Auxiliary Power Terminals	16 - 28 AWG (1.0 - 0.1 mm ²)	5	0.57

*For recommended/minimum wire sizes and disconnect/fuse sizes per application, and terminal block installation for the remote switch or communications options, see the SureSine Installation and Operations Manual.

Power UP Sequence:

1. Connect Battery/Battery Bank. (STEP 8)
2. Connect AC loads. (STEP 9)
3. Close all circuit breakers, disconnect switches, or insert fuse into fuse holder. (STEP 10)
4. Put the AC Output Mode Switch in the ON (or REMOTE) position. (STEP 11)

Power DOWN Sequence:

1. Put the AC Output Mode Switch in the OFF position.
2. Disconnect AC loads.
3. Open all circuit breakers, disconnect switches, remove fuses from fuse holders.
4. Disconnect Battery/Battery Bank.