



2000W PURE SINE WAVE INVERTER



INSTRUCTION MANUAL

ATTENTION:

In order to ensure reliable performance and safety please read and review the installation instructions and safety guidelines before using the inverter.



AVOID FLAMMABLE GAS

Do not connect the inverter to the battery in the vicinity of flammable gas in case of sparking during the connection process.



DO NOT CONNECT IN PARALLEL WITH MUNICIPAL ELECTRICITY

The inverter will be damaged when the output is connected in parallel with municipal electricity.



KEEP OUT OF REACH OF CHILDREN

Do not use or store around unsupervised children.



DO NOT MODIFY THE INVERTER

Do not modify or take apart the inverter.



BE CAREFUL USING METAL TOOLS AROUND THE INVERTER

Using metal tools around the inverter could lead to electric shock and damage to the inverter.



DO NOT USE WET HANDS WHEN TOUCHING THE INVERTER

Using wet hands around the inverter could lead to electric shock and damage to the inverter.



AVOID OPEN FLAMES OR HIGH TEMP ENVIRONMENTS

Avoid using the inverter close to open flames or extreme temperature environments.



AVOID CRUSHING OR BANGING THE INVERTER

Abuse of your inverter will lead to damage and safety issues.



NOT RECOMMENDED FOR USE WITH MEDICAL DEVICES

We do not recommend using the inverter for medical devices
We are not responsible for any harm caused by use of the inverter by the owner if they choose to use it to power a medical device.



CONNECT GROUND WIRE

Please connect the ground wire for safe inverter usage.



AVOID EXPOSURE TO WATER

Exposure to water may short circuit and damage the inverter.



FULLY INSERT THE PLUG FROM THE DEVICE BEING USED

Make sure that the plug is fully inserted into the receptacle or port to avoid shock or damage to the inverter or device.

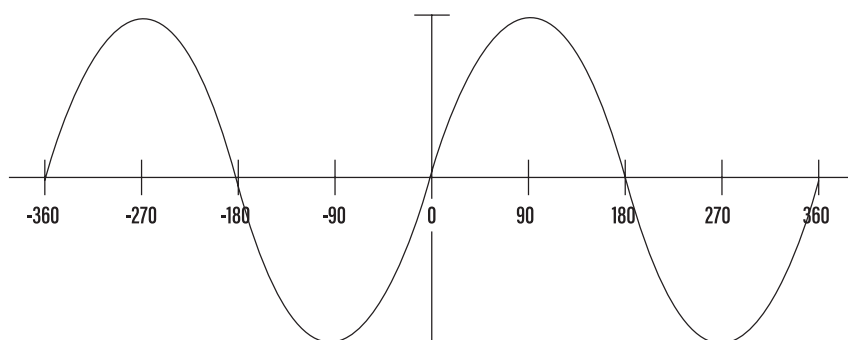
OPERATION:

Always check the power specifications for each item plugged into the inverter.
The inverter may not be able to handle items that require large loads of power.

SPECIFICATIONS:

RATED POWER:	2000W
SURGE:	4000W
INPUT VOLTAGE:	12VDC
OUTPUT VOLTAGE:	110VAC
USB Port (QC3.0)*2:	QC 18W(5V3.4A,9V2A,12V1.5A)
Type-C *2	PD 60W(5V3A,9V3A,12V3A,15V3A,20V3A)
OUTPUT WAVE:	PURE SINE WAVE
SOFT START:	YES
AC REGULATION:	THD 3% (LINEAR LOAD)
EFFICIENCY:	94% MAX
COOLING:	INTELLIGENT COOLING FAN
PROTECTION:	BATTERY VOLTAGE OVER VOLTAGE OVER LOAD OVER TEMPERATURE SHORT CIRCUIT
TEMPERATURE:	-10°C TO 50°C

PURE SINE WAVE FORM:



INTRODUCTION:

The Dakota Lithium 2000W inverter changes the DIRECT CURRENT (DC) from your battery to ALTERNATING CURRENT (AC) required by electronics, tools or appliances. The output wave form is a pure sine wave similar to the power that comes from your house outlets.

FEATURES:

The Dakota Lithium 2000W inverter has many protection safeguards including high temperature, over-voltage, low-voltage, short-circuit, overload, and other functions to prevent damage to your inverter.

Other features include:

Advanced circuit design, high conversion efficiency, rich interface, and stable output voltage. A metal casing that provides heat dissipation.

Advanced anti-jamming technology, function protection circuit and soft start circuit*, and convenient operation mode.

Drop-down and fast recovery function to reduce the load on the instant overload.

* The soft-start circuit has the ability to raise the output voltage step by step during startup to eliminate the cold start failure, and at the same time, it has instantaneous output voltage.

INVERTER INSTALLATION:

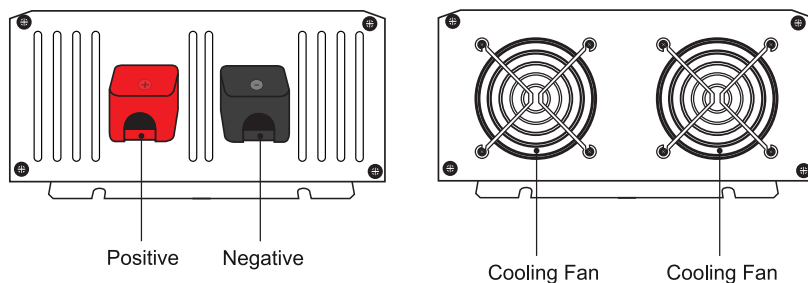
In order to get the best results, install the inverter on a flat surface.

It should be installed:

1. In a dry place, Water or other liquids should not come in close contact with the inverter.
2. In a cool environment, Keep the temperature between 0°C and 40°C
3. Away from heating vents, other devices that produce heat, and out of direct sunlight.
4. In a well ventilated area. Do not block the flow of air around the inverter.
5. Without anything on top of the inverter.

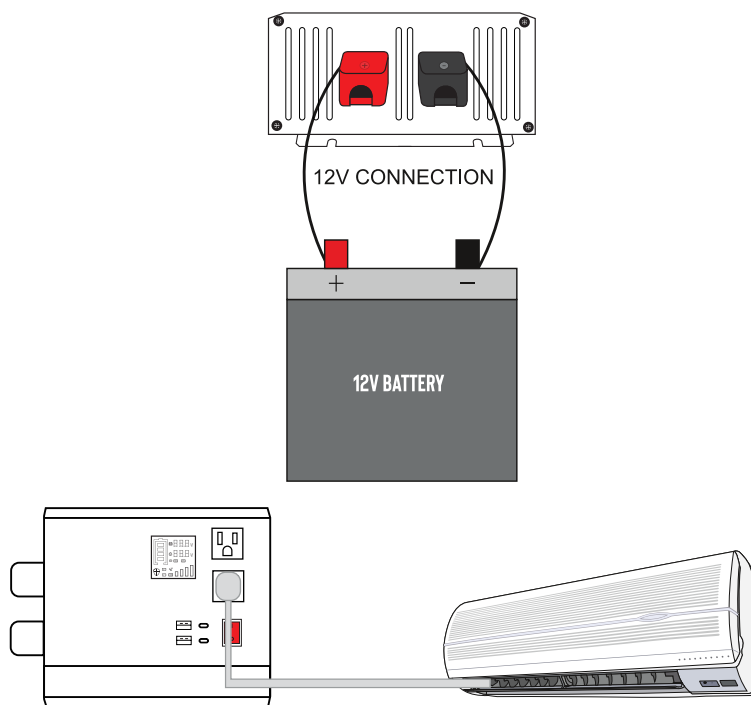
NOTE: FOR USE WITH 135Ah BATTERIES OR LARGER

END PANELS



*Digital display and remote switch are optional * 300W panel can not install digital display

CONNECTING DIAGRAM



FAULT INFORMATION GUIDE

SCREEN DISPLAY	FAULT CODE	FAULT INFO.	FAULT REASON	SOLUTION	WARNING BUZZER
	F01	Parameter fault	Configure the parameter and restart	Restart the power	Ring 7 continuous cycle
	F02	Sampling circuit fault	Self-check after power the machine under static operating point, voltage standard is 2.5v when the input current is zero	Check and fix the current sampling circuit, repower	
	F03	Generatrix low-volt	1)DC generatrix is lower 8V after opening 2)DC generatrix can't reach the lowest generatrix working voltage after a period of time of delayed startup	1)Check if the power tube of the rear stage is short circuit 2)Check the boosted circuit of front stage or DC generatrix component	
	F04	Other power source on output line	Output terminal connects equipment with power supply by mistake	Check if the output line has other power supply	long middle short continuous cycle
	F05	Output short circuit	Output short circuit	Check output line and loads	Ring 6 continuous cycle
	F06	Output over current	Output current is too large, instantaneous protection	Reduce loads	Ring 5 continuous cycle
	F07	Output overload	Output current is too large, time-delay protection		
	F08	high-temp protection	Temperature is too high	Check fan and ventilation, reduce the ambient temperature	Ring 4 continuous cycle
	F10	Battery high-volt	Battery input, voltage too high	Check if input power supply or charger work	Ring 3 continuous cycle
	F11	DC generatrix over-volt	Voltage of DC generatrix too high	1)Check input power supply 2)Internal damage of the vehicle	
	F12	Battery low-volt	Battery input, voltage too low	Charging the battery or change the battery	Ring 2 continuous cycle
	F13	Data read error	1) During manufacturing, the silicon chip data area is empty, not initialized 2) Show after configuring the parameter, need to repower	Repower	Ring 7 continuous cycle

TO CONNECT:

1. Make sure the inverter power switch is off.
2. Connect the NEGATIVE BATTERY CABLE(BLACK) to the NEGATIVE TERMINAL(BLACK) of the inverter.
3. Connect the POSITIVE BATTERY CABLE(RED) to the POSITIVE TERMINAL(RED) of the inverter.
4. When you power on the inverter the STATUS INDICATOR will be BLUE indicating it is working properly.

When first switching on the inverter, the LED indicator should be BLUE meaning the inverter is in good working condition. If the LED is RED, this means there is an error in the system (i.e. battery voltage is too high or low, inverter output is overloaded, short circuit, etc).

TO DISCONNECT:

1. Make sure the inverter power switch is off and any appliances are unplugged from the inverter.
2. Disconnect the POSITIVE BATTERY CABLE (RED) from the POSITIVE TERMINAL (RED) of the inverter.
3. Disconnect the NEGATIVE BATTERY CABLE(BLACK) from the NEGATIVE TERMINAL (BLACK) of the inverter.

NOTE: The diagram is just for reference. Please contact support@dakotalithium.com with any further technical questions.

ATTENTION:

Take care to use a proper gauge cable from the battery to the inverter so as to avoid any issues. If the cables are too long or too small cross-sectional(gauge), you may encounter issues such as high heat, power loss, voltage loss, and general low inverter performance. If the inverter cannot perform, it will sound an alarm. Make sure that the cables also fit your environment, consider if they need to be waterproof, and that they are insulated properly.

Additionally, if the cable or extension cord for the AC output is too long you may notice reduced power resulting in lower amps and/or voltage.

POWER YOUR PASSION

At **Dakota Lithium**, we design tools
that empower you to
Go Further, Last Longer, and Play Harder.

Our products can double your runtime, offering 2X the usable power compared to traditional batteries. You can move faster with up to 75% less weight. Dakota's tough engineering means they're built to withstand cold temperatures and extreme environments.

**Live a life without limits when you are
powered by Dakota Lithium.**



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