POWER INVERTER

PURE SINE WAVE

12V

3000W
4000W

VOLFVERT

AFTER-SALES SERVICE

Dear user:

VOLFVERT adheres to the principle of comprehensive, high quality and fast service. Taking your satisfaction as the highest goal, we provide you with the following services:

1. Free 2-year warranty for the VOLFVERT pure sine wave power inverter.

2. After the delivery of the products, the staff of our after-sales service department will follow up and consult according to the customer's contact information to ensure your satisfaction and proper use.

3. All feedback on the quality and use of the product will be replied to within 24 hours. And we will determine the measures to deal with the actual situation based on your feedback.

4. In the case of quality problems under normal use, please contact us as soon as possible to facilitate the timely repair and replacement of your products.

5. If any problems with products that are out of warranty, please contact us and we will try our best to assist you in solving the problem.

6. The following situations are not covered by the warranty:
   a.Self-disassembly products
   b.Unauthorized repair, misuse and modification.
   c.Damaged by abnormal voltage, fire,liquid and other external causes
   d.Abnormal storage conditions like overheating, humidity.
   e.Damage due to reverse polarity.

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GENERAL INFORMATION

The VOLFVERT Pure Sine Wave Power Inverter delivers outstanding performance for back-up power and off-grid system, which is widely used in emergencies or household. The advanced pure sine wave technology provide cleaner, smoother and more reliable power for sensitive equipment without any interference. Brilliant design using top electronic materials makes it safe,stable with long machine-life.

Key Features

- Compact,lightweight and robust design
- Optimized for 12 VDC system voltage
- Smooth power for safe operation of sensitive electronics
- Leading easy-to-read LCD indicator display
- Integrative safety protection (under-voltage, over-voltage, AC Over-load, Over Heating, Short Circuit and Reverse connect)
- Excellent surge rating : 2 × the power rating
- Ground-fault circuit interrupter(GFCI) protection
- Ultra-silent cooling system
- Ergonomics design wireless remote control
- Build-in 4 × AC sockets, 1 × AC terminal blocks, 2 × 2.4A USB ports, 1× type-C port

Pure Sine Wave

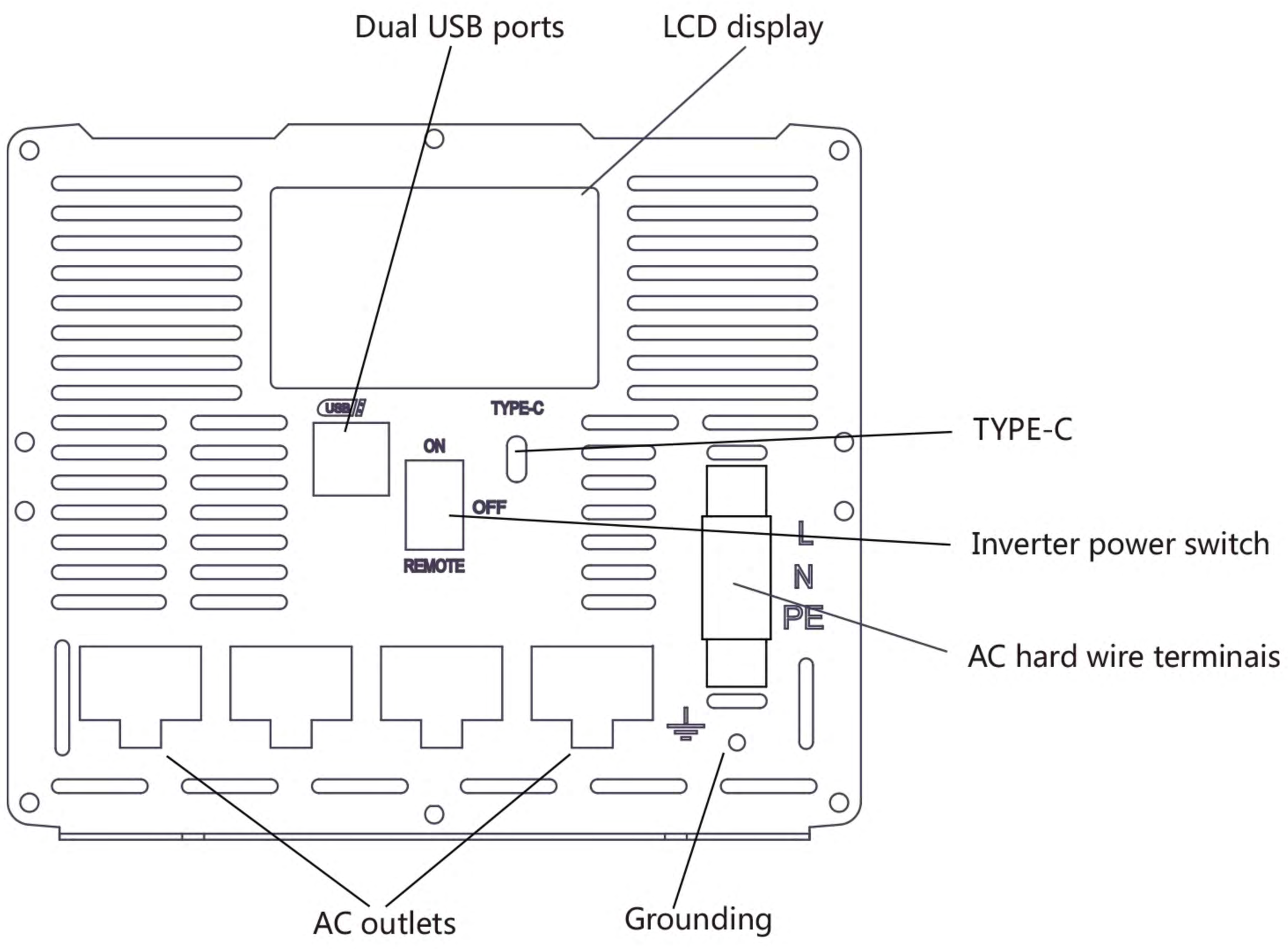
The VOLFVERT power inverter output a pure sine wave waveform, which has the same quality as utility or domestic power. This smooth pure sine wave allows you to operate sensitive electronic devices that require a high quality waveform with little harmonic distortion. Almost any electronic device could be powered using VOLFVERT PURE SINE WAVE INVERTER.

VOLFVERT pure sine wave inverter is more efficient(high efficiency 90%) which able to use less energy and allow more devices to be used.More energy savings from low no-load losses. Superb load shock resistance will not harming your equipment when running.

Soft Start Technology

Thyristor soft start technology included can effectively reduce the starting inrush current of the inverter, reduce the impact on the power grid, improve the quality of power and the appliance life.Overall, it improve the stability and reliability of the system which is especially necessary for equipment that has an inductive load or electrical motor.To better protect the machine, you'd better turn on the switch of the appliance first before starting the inverter.

IDENTIFICATION OF PARTS (AC SIDE)



Key Parts

1. **USB Power Port × 2** — 5V / 2.1A for charging tablets,and other small electronic devices.

2. **Type-C Port × 1 —** Max 18W (5V / 3.1A, 7V / 2.4A, 9V / 2A, 12V / 1.5A)

3. **AC sockets × 4** — Up to 8.3 amps at 115V AC 60 Hz.

4. **High Output AC Terminals —**These terminals are for connecting 115 Volt AC devices that require more than 8.3 amps to operate or for connection to distributed wiring that has multiple AC outlets. Remove the two screws on protective cover to access the terminals. Any AC output wiring that is directly connected must comply with US National Electric Code (NEC) wiring gauge recommendations.

   Facing the front panel, the terminals are:

Up	Middle	Down
Live(L)	Neutral (N)	Ground(G)

NEUTRAL & GROUND are bonded inside the inverter to comply with the National Electric Code (NEC) requirement that any AC source must have aneutral to ground connection.

5. **ON/OFF/REMOTE Switch —** Under proper operation, the indicator will light up red when the ON/OFF button is pressed.

6. **Ground Terminal** —This is for connecting the chassis and insulated safety ground wire of the power inverter.

7. **LCD Display —** While inverter working, the LCD display will show Battery Status Level, Input Voltage , Output Voltage ,Hertz, Load Wattage.In case of a malfunction,it will show Warning Indication.

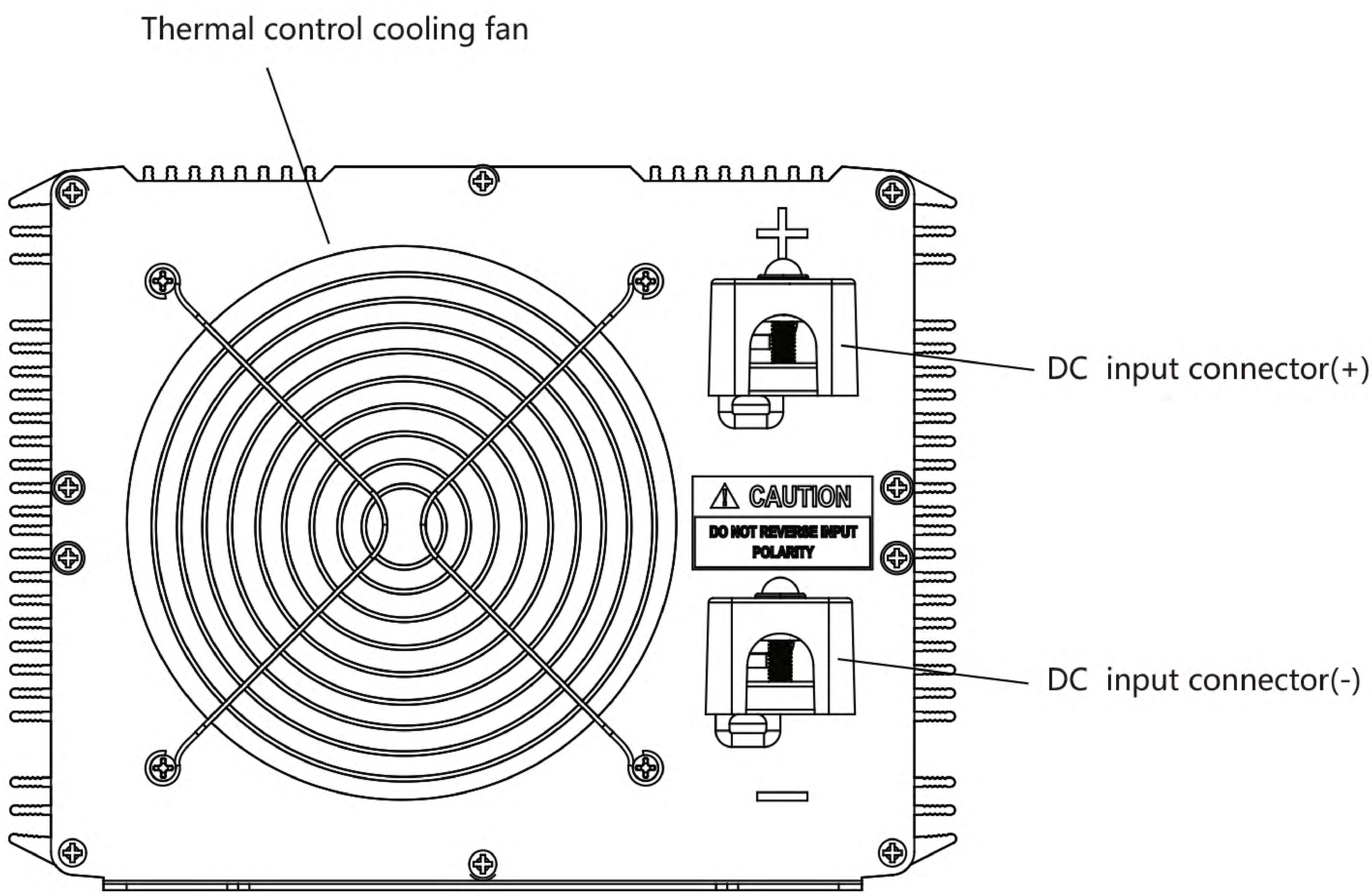
   Once the inverter is on protection mode, the following codes will shown:

   a. UNDERVOLTAGE: Under-voltage Protection

   b. OVERVOLTAGE: Over-voltage Protection

   c. OVERLOAD: Over-load or Short-circuit Protection

IDENTIFICATION OF PARTS (DC SIDE)



Key Parts

1.**Negative Terminal —** Negative (-) DC Input (Black)
Positive Terminal — Positive (+) DC Input (Red)

2.**Cooling Fan —**Thermally controlled

INCLUDED COMPONENTS

The VOLFVERT pure sine wave inverter will come with :

Inverter Cable × 2

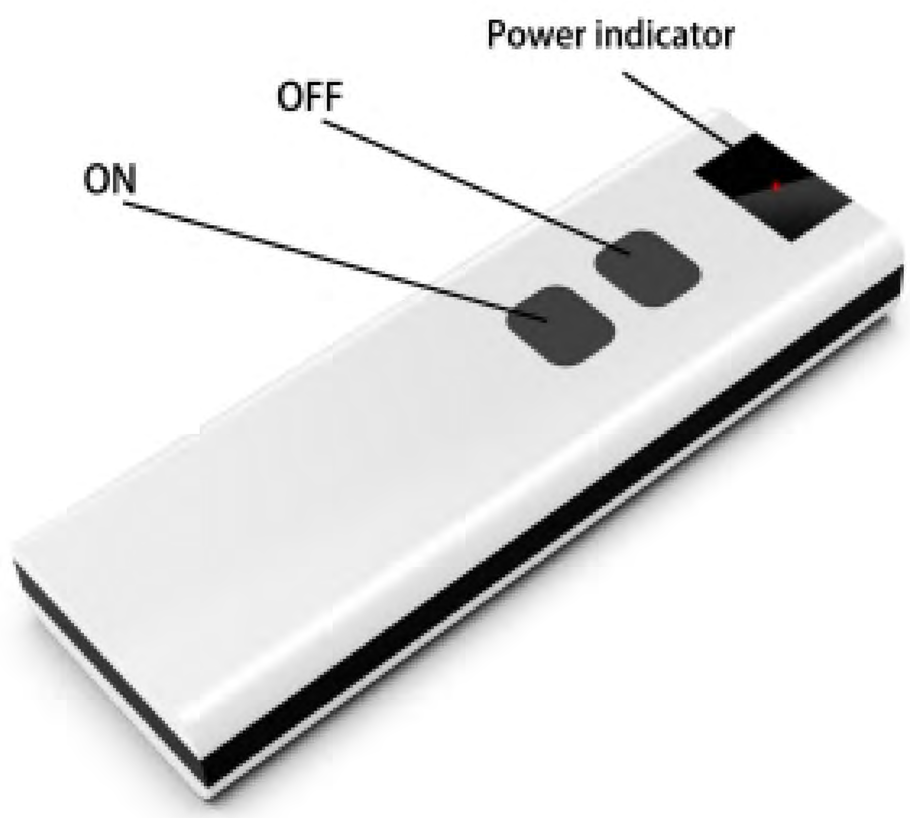
Wrench × 1

Earth wire × 1

Fuses × 4

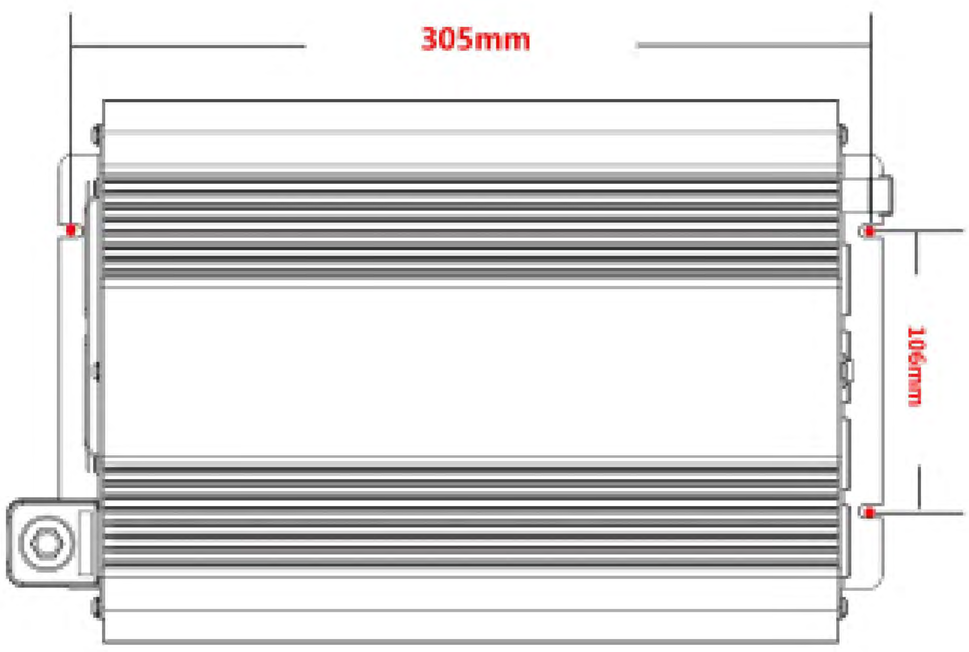
Wireless Remote Control × 1

Wireless Remote Control



As the package comes without battery, you have to prepare 23A battery for the use of the Remote. It has 3 ares from top to bottom, which are power indicator,OFF button, and ON button.

Pre-designed 4 Screw Hole Locations



IMPORTANT SAFETY INSTRUCTIONS

Please read these instructions carefully.

In order that you can better use this inverter and prevent accidents of personal injury and object damage, please focus on the contents of the safety precautionary points and use common sense in life to operate the inverter carefully.

This manual contains important safety, installation and operating instructions for the inverter. Please be sure to read and comply with the following symbols in this manual：

Indicates what must be performed

Indicates prohibited operations

Indicates the possibility of fire

General Safety Information

NEVER disassemble or attempt to repair the inverter without the guidance of a professional VOLFVERT service team staff.

Installation and wiring must comply with the Local and National Electric Codes (NEC) and must be done by a certified technician.

Read all of the instructions and cautions in the manual before beginning the installation.

Make sure all connections going into and from the inverter are tight. There may be sparks when making connections, therefore, make sure there are not flammable materials or gases near installation.

Electric Safety

WARNING

NEVER connect the AC output of the unit directly to an Electrical Breaker Panel/ Load Centre which is also fed from the utility power / generator.

NEVER use with positive ground electrical systems.The unit is designed to be used with a negative ground electrical system!

The inverters are suitable for 12V Battery Banks ONLY.

Make sure the inverter is off before connecting anything.

When connecting battery terminals, ensure the polarity of the battery connections is correct. Incorrect polarity may cause permanent damage to the unit.

ALWAYS make sure inverter is in OFF position and disconnect all AC and DC connecting when working on any circuit associated with the inverter.

Be careful when touching bare terminals of capacitors as they may retain high lethal voltages even after power is removed.

Installation Safety

1. Placement Requirements

Make sure there is enough space and that the installation is done according to the guidelines

WARNING

⊘ NEVER install the inverter in a sealed enclosure with flooded batteries. Gas can accumulate and there is a risk of explosion.

⊘ NEVER mount the inverter vertically on a vertical surface since it would present a hazard for the fan opening which will affect your inverter's life and even causing other dangers.

⊘ NEVER mount the inverter upside down.

ⓘ VOLFVERT Inverter should be placed in a horizontal position.

ⓘ **Well-ventilated area —** Allow at least 12 inches of clearance around the inverter to keep objects from blocking the vents and to provide adequate air circulation.

ⓘ **Dry —** No liquids are allowed near the inverter. It should be in a place where there is no moisture of any kind.

ⓘ **Cool —** Inverters must be in an area where the fans are not blocked.Do not put the inverter under direct sun light or near a heating source.The ambient temperature should be controlled from 32 to 104°F (preferred temperature of 50- 77°F).

ⓘ **Less dust area —** Do not install the inverter in an environment with high dust, saw dust residue or other particles that may get sucked into the inverter increasing internal temperature.

ⓘ **Close proximity to battery bank —** prevent excessive voltage drop by keeping the unit close to the battery bank and having a properly sized wire going from the battery bank to the inverter.

Protection against fire hazard — There will be some electrical arcing or spark when the inverter connects with the battery.The unit should be away from any flammable material, liquids,gas or any other combustible material.Otherwise it may cause severe consequences.

Separate compartment from battery — Do not install the inverter in the same compartment as the battery bank because it could serve as a potential fire hazard.

CAUTION

ⓘ Cockroaches or other insects may cause damage to the machine, so please take care to keep the machine and the surrounding environment hygienic.

RECOMMENDATION

We recommend mounting the inverter on something stable such as floor, table or stable support to prevent it from bouncing. Mount in a location that can support the weight of the inverters. It is better to fix the product with four screws.