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OLTEANP UPS-TK2000W

OLTEANP 2000W Sump Pump Battery Backup System Instruction Manual

Model: UPS-TK2000W | Brand: OLTEANP

1. INTRODUCTION

This manual provides comprehensive instructions for the safe installation, efficient operation, and proper maintenance of your OLTEANP 2000W Sump Pump Battery Backup System. This system is designed to provide uninterrupted power to your sump pump during electrical outages, ensuring your basement remains dry. Please read this manual thoroughly before installation and operation to ensure optimal performance and safety.

2. SAFETY INFORMATION

- Always disconnect the system from all power sources before performing any maintenance or installation.
- Ensure proper ventilation around the unit to prevent overheating.
- Do not expose the unit to water, rain, or excessive moisture.
- Use appropriate personal protective equipment (PPE) during installation, especially when handling batteries.
- Connect the system only to compatible battery types as specified in this manual.
- Ensure all wiring connections are secure and correctly polarized to prevent electrical hazards.
- Keep children and unauthorized personnel away from the system.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- OLTEANP 2000W Sump Pump Battery Backup System (Main Unit)
- Battery Cables (Red and Black)

- User Manual (This document)
- Remote Controller with LCD Screen
- Mounting Accessories (screws, anchors)
- Power Cable
- Small Wrench (for terminals)



Figure 3.1: The OLTEANP 2000W Sump Pump Battery Backup System with its remote control, battery cables, power cable, and small wrench.

4. PRODUCT OVERVIEW

The OLTEANP 2000W Sump Pump Battery Backup System integrates a pure sine wave inverter, a 25A battery charger, and an automatic transfer switch into one unit. It features multiple output ports and a remote LCD controller for monitoring.

4.1 Front Panel Features

- **3 AC Outlets:** For connecting your sump pump and other AC devices.
- **USB Port (5V/3.1A):** For charging small electronic devices.
- **Type-C Port (30W):** For faster charging of compatible devices.

- **AC Charge Input:** Connects to grid power for charging the battery and powering loads.
- **Battery Type Selection Switches (DIP Switches):** Allows selection of battery chemistry (GEL, AGM/SLA, Flooded/Wet, LiFePO4).
- **ON/OFF Switch:** Main power switch for the inverter.
- **Fault LED (Red):** Indicates a system fault.
- **Power LED (Green):** Indicates the system is powered on.
- **Charge Full LED (Green):** Indicates the battery is fully charged.
- **Remote Connection Port:** For connecting the LCD remote controller.
- **Fuse:** Overcurrent protection.

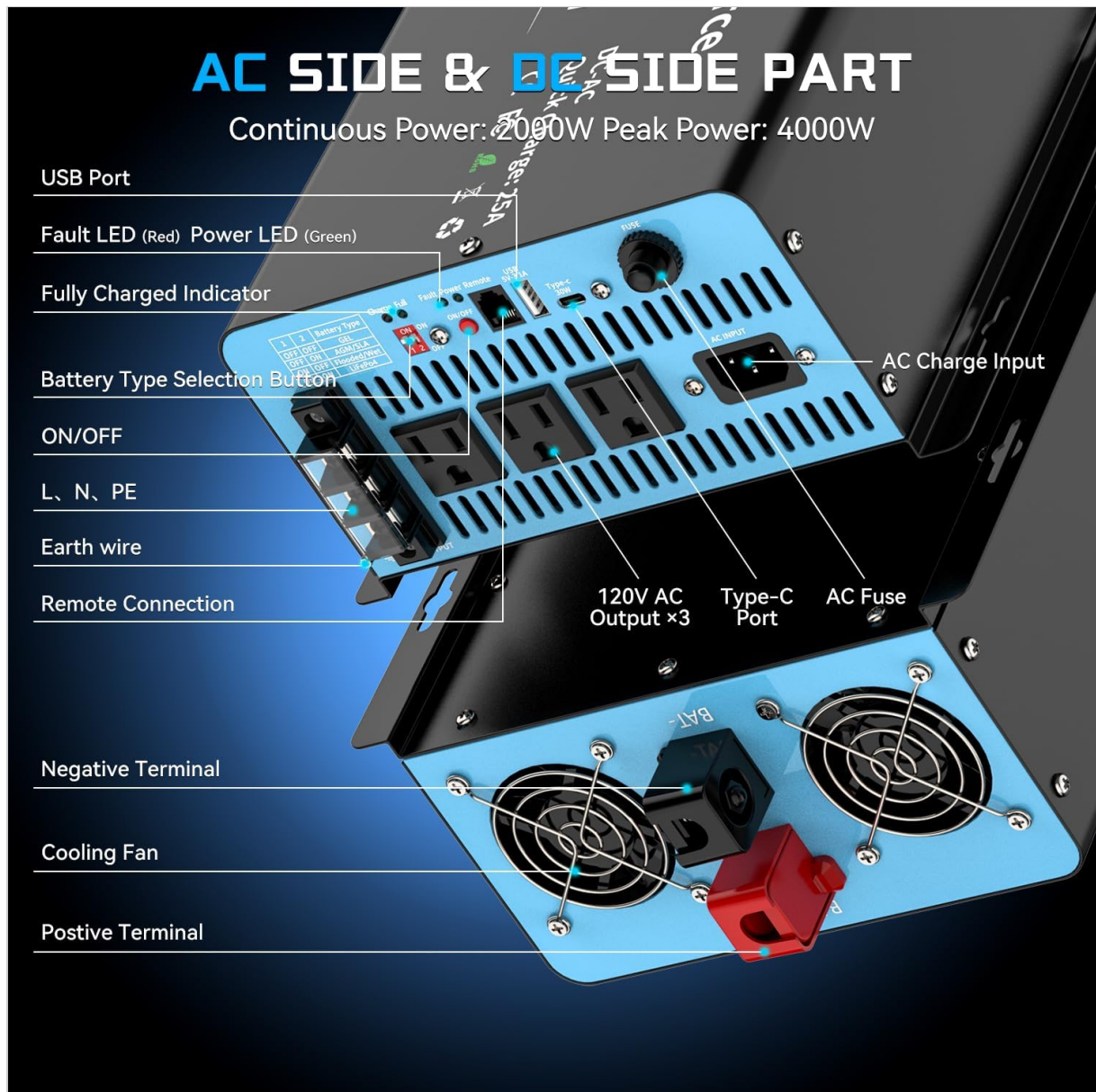


Figure 4.1: Front and rear panel connections and indicators.

4.2 Remote Controller with LCD Screen

The remote controller provides real-time monitoring of the system's status, including battery voltage, AC output voltage, power consumption, and fault indicators. This allows for convenient monitoring without direct access to the main unit.

REMOTE CONTROLLER WITH LCD SCREEN

This remote controller panel will display trouble alarms and help you troubleshoot



NOTE: The corresponding symbol on the screen flashes to remind you of the fault



Figure 4.2: The remote controller's LCD screen displaying operational parameters.

5. SETUP & INSTALLATION

The OLTEANP Sump Pump Battery Backup System is designed for easy installation with minimal wiring. Follow these steps carefully.

5.1 Mounting the Unit

The unit can be placed flat on a stable surface or wall-mounted using the fixed holes on the side. Ensure the mounting location is dry, well-ventilated, and away from flammable materials. Use appropriate screws and anchors for your wall type.

5.2 Battery Connection

1. Ensure the main unit is OFF before connecting batteries.
2. Connect the **red** battery cable to the **positive (+)** terminal of the battery and the **positive (+)** terminal on the inverter.
3. Connect the **black** battery cable to the **negative (-)** terminal of the battery and the **negative (-)** terminal on the inverter.
4. Tighten all connections securely using the provided wrench.

- Important:** The system requires a 12V deep-cycle battery (Lithium, AGM, Flooded/Wet). Do not use non-deep-cycle batteries.


5.3 Battery Type Selection

Before turning on the inverter, set the DIP switches on the unit to match your battery type. Refer to the table below:

SELECTABLE BATTERY TYPE

Tuned and optimized for 12V DC systems and compatible with various popular types of batteries to protect and extend the battery's working life.

1	2	Battery Type	Bulk/Absorption	Float
OFF	OFF	GEL	14.2V	13.6V
OFF	ON	AGM/SLA	14.4V	13.6V
ON	OFF	Flooded/Wet	14.7V	13.6V
ON	ON	LiFePO4	14.6V	14.6V



NOTE: Please select the input voltage before turning on the inverter

Figure 5.1: DIP switch settings for various battery chemistries.

5.4 AC Input and Output Connections

- Plug the provided power cable into the AC Charge Input port on the inverter.
- Plug the other end of the power cable into a standard 120V AC wall outlet.
- Plug your sump pump and other desired AC devices into the 3 AC Outlets on the inverter.
- For permanent installations, the L, N, PE terminals can be used for direct wiring to a breaker panel by a qualified electrician.

2 MODES - INVERTER WITH CHARGER

A rapid conversion time of 12ms enables instant switching from charging mode to inverter mode, which is crucial for devices and systems requiring continuous and stable power supply.

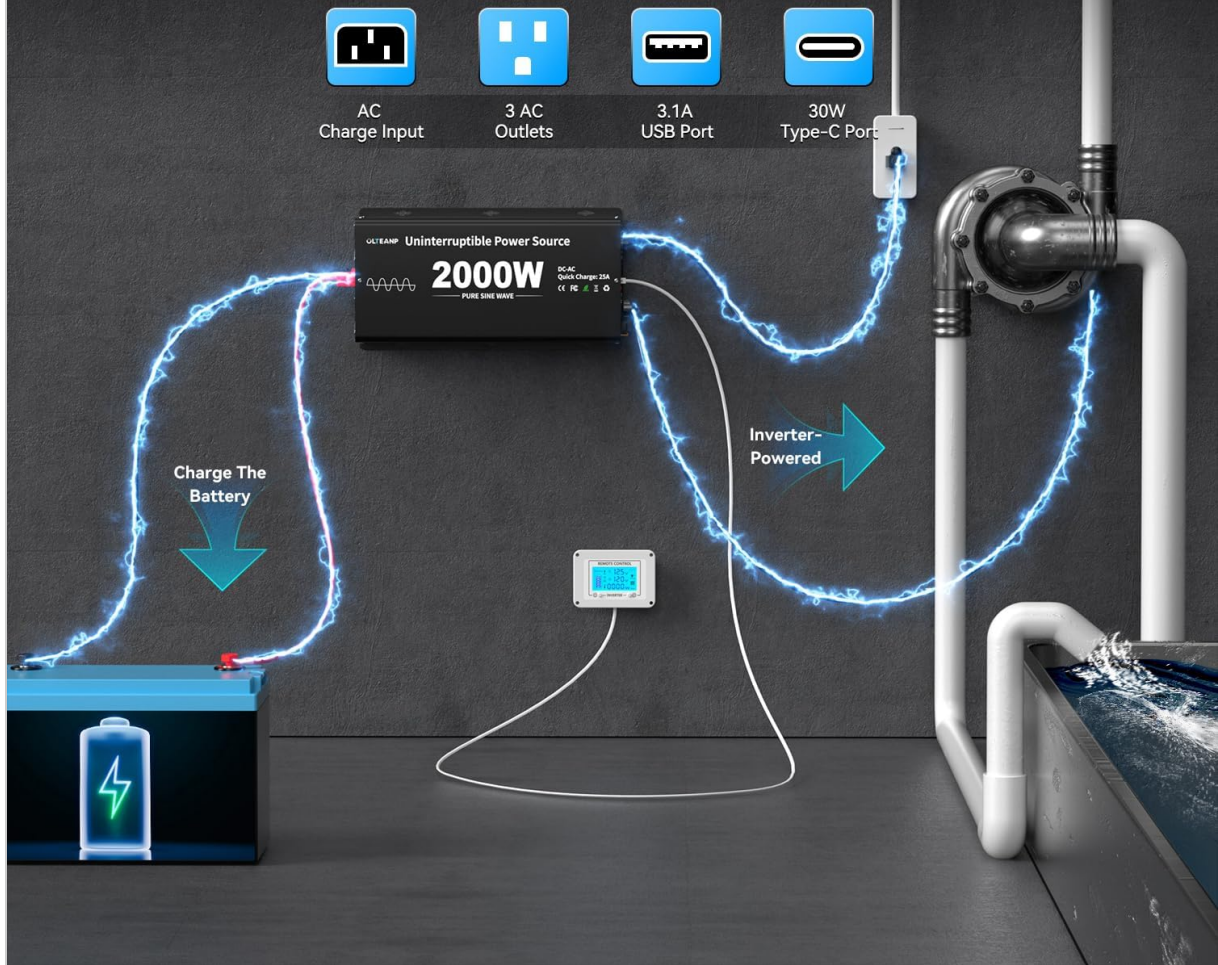


Figure 5.2: System diagram showing AC input, battery charging, and inverter output to a sump pump.

25A QUICK CHARGE - 2500W SUMP PUMP BACKUP SYSTEM

Power 3 sump pumps with max combined under 2000 watts

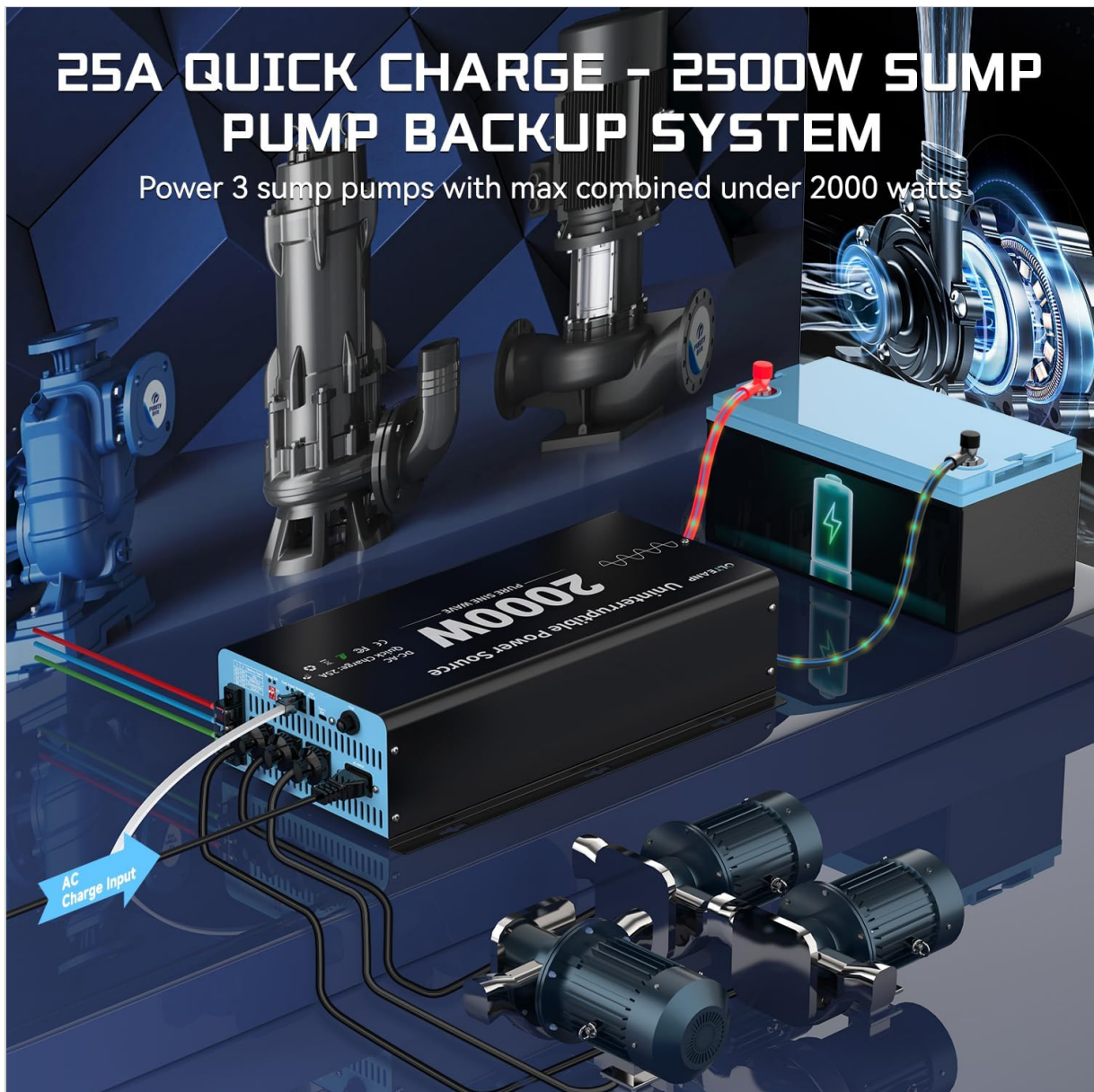


Figure 5.3: The 2000W system can power multiple sump pumps with a combined wattage under 2000W.

5.5 Installation Video

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Video 5.1: Official OLTEANP video demonstrating the Sump Pump Battery Backup System installation and operation.

6. OPERATING INSTRUCTIONS

Once installed, the system operates largely automatically. Here's how to use and monitor it.

6.1 Powering On/Off

- To power on the system, press the ON/OFF switch on the main unit. The green Power LED will illuminate.
- To power off, press the ON/OFF switch again.

6.2 Automatic Switching (UPS Function)

When grid power is available, the system charges the connected battery and passes AC power directly to your connected devices. In the event of a power outage, the system automatically switches to battery power within 12 milliseconds, ensuring continuous operation of your sump pump. When grid power is

restored, it automatically switches back to grid power and resumes charging the battery.

6.3 Monitoring with Remote Controller

The remote LCD controller provides essential information:

- **Battery Level:** Displays the current charge level of the connected battery.
- **DC Input Voltage:** Shows the battery voltage.
- **AC Output Voltage:** Displays the output voltage supplied to your devices.
- **Wattage:** Indicates the current power consumption of connected devices.
- **Fault Alarms:** The screen will flash and display relevant fault codes if an issue occurs.

6.4 Operational Modes

- **Charging Mode:** When grid power is present, the internal 25A charger replenishes the battery.
- **Inverter Mode:** During a power outage, the system converts DC battery power to AC power for your devices.

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Video 6.1: Official OLTEANP video demonstrating the Pure Sine Wave Power Inverter with Charger in operation.

7. MAINTENANCE

Regular maintenance ensures the longevity and reliable operation of your system.

- **Cleaning:** Periodically clean the exterior of the unit with a dry cloth. Ensure ventilation openings are free from dust and debris.
- **Battery Inspection:** Regularly check battery terminals for corrosion and ensure connections are tight. For lead-acid batteries, check electrolyte levels if applicable.
- **Testing:** Periodically test the system by temporarily disconnecting grid power to ensure the automatic switching function operates correctly.
- **Storage:** If storing the unit for an extended period, ensure the battery is fully charged and disconnect it from the inverter. Store in a cool, dry place.

8. TROUBLESHOOTING

If you encounter issues, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
No power output from AC outlets.	Unit is off, low battery, overload, fault condition.	Ensure unit is ON. Check battery charge. Reduce load. Check remote controller for fault codes.
Battery not charging.	AC input disconnected, incorrect battery type setting, faulty battery.	Verify AC input connection. Check DIP switch settings for battery type. Test battery.
Remote controller not displaying.	Loose connection, unit is off.	Ensure remote cable is securely connected. Verify main unit is powered on.
System shuts down unexpectedly.	Overload, overheating, low battery voltage, short circuit.	Reduce connected load. Ensure adequate ventilation. Recharge battery. Check for short circuits in wiring.

For persistent issues not covered here, please contact OLTEANP customer support.

9. SPECIFICATIONS

Feature	Detail
Model Number	UPS-TK2000W
Wattage	2000 Watts
Input Voltage (DC)	12 Volts
AC Output	Pure Sine Wave, 120V AC
Battery Charger	25A (DC-AC Quick Charge)
Material	Stainless Steel
Item Weight	15.47 pounds
Package Dimensions	20.2 x 12.9 x 6.6 inches
Display Style	LCD (Remote Controller)
Included Components	2000W Sump Pump Battery Backup System, Battery Cables, User Manual, Remote Controller
Batteries Included	No
Batteries Required	Yes

10. WARRANTY AND SUPPORT

For warranty information and customer support, please refer to the documentation included with your purchase or visit the official OLTEANP website. Keep your purchase receipt for warranty claims.

