

Xantrex Freedom XC PRO 2000W

Xantrex Freedom XC PRO 2000W Marine Inverter/Charger Instruction Manual

MODEL: FREEDOM XC PRO 2000W | BRAND: XANTREX

1. Introduction

The Xantrex Freedom XC PRO 2000W Marine Inverter/Charger is an advanced all-in-one power solution designed for marine applications. It functions as a true sine wave inverter, a powerful battery charger, and a reliable transfer switch. This unit is engineered to provide seamless and efficient power management for various onboard electrical needs, ensuring a stable and clean power supply for sensitive electronics.

2. Key Features

- **All-in-One Solution:** Integrates a true sine wave inverter, a 100 amp (2000W model) battery charger, and a transfer switch.
- **Seamless Integration:** Features a Micro-C NMEA 2000 connector for integration with third-party monitoring and control systems, eliminating the need for multiple display panels.
- **Bluetooth App Control:** Configure and monitor system performance conveniently via the FXC Control Bluetooth app (available on Android & iOS).
- **Powerful Output:** Industry-leading Power Boost provides 2X continuous output for 5 seconds or more, ideal for motor loads like microwaves, cooktops, CPAP machines, air compressors, and fridges.
- **Effective Battery Charging:** The 100 amp battery charger is designed to charge deeply discharged batteries, including those drained to 0 Vdc. It operates efficiently even with weak shore or generator power and supports a wide DC input voltage range.
- **Compact & Lightweight Design:** Efficiently designed to fit in tight spaces, making it easy to handle and install in various marine applications.

3. Setup & Installation

Proper installation is crucial for the safe and efficient operation of your Xantrex Freedom XC PRO inverter/charger. It is recommended that installation be performed by a qualified marine electrician.

3.1. Mounting the Unit

The compact and lightweight design allows for flexible mounting options. Ensure the unit is mounted in a dry,

well-ventilated area, away from flammable materials and direct sunlight. Allow adequate clearance around the unit for proper airflow and cooling.



Figure 1: Front view of the Xantrex Freedom XC PRO Inverter/Charger.

3.2. DC Wiring (Battery Connections)

Connect the inverter/charger directly to your battery bank using appropriately sized cables and fuses. Ensure all connections are secure and corrosion-free. The unit supports various battery types, including lithium-ion, with configurable charging profiles.



Figure 2: Rear view showing DC and AC connection ports.

3.3. AC Wiring (Input/Output)

Connect the AC input from shore power or a generator, and the AC output to your boat's electrical panel. The built-in transfer switch will automatically manage the power source. Use appropriate circuit breakers for all AC circuits.

3.4. NMEA 2000 & Remote Panel Connections

Connect the Micro-C NMEA 2000 connector to your marine network for integrated monitoring. If using an optional remote panel, connect it via the designated port for convenient control and status updates.

4. Operating Instructions

The Freedom XC PRO offers intuitive operation through its integrated display and optional remote panel or Bluetooth app.

4.1. Powering On/Off

To power the unit on or off, simply press and hold the power button on the front display panel or the remote panel. The display will illuminate, indicating operational status.

4.2. Monitoring System Status

The integrated display provides real-time information on battery voltage, charging status, AC input/output, and load. Use the navigation buttons to cycle through different screens and view detailed parameters.



Figure 3: Integrated display panel for monitoring and control.

4.3. Bluetooth App Control (FXC Control)

Download the FXC Control app from your device's app store (Android & iOS). Connect to your inverter/charger via Bluetooth to easily monitor system status, view alerts, and change settings conveniently from your smartphone or tablet. This provides a user-friendly interface for advanced configuration.



Figure 4: Xantrex FXC Control app interface on a smartphone.

4.4. Power Boost Feature

The Power Boost feature allows the inverter to provide up to 2X its continuous output for short durations (5 seconds or more) to handle high surge loads from appliances like microwaves or air conditioners. This feature activates automatically when a high load is detected.

5. Maintenance

Regular maintenance ensures the longevity and reliable performance of your inverter/charger.

- **Inspect Connections:** Periodically check all DC and AC wiring connections for tightness and corrosion. Loose connections can lead to overheating and poor performance.
- **Clean Ventilation Openings:** Ensure that the ventilation openings on the unit are free from dust, debris, or obstructions. Proper airflow is essential for cooling.
- **Battery Maintenance:** Follow the manufacturer's recommendations for your specific battery type (e.g., checking water levels for flooded batteries, monitoring voltage for lithium-ion).
- **Software Updates:** Check for firmware updates via the Bluetooth app or Xantrex website to ensure your unit has the latest features and performance enhancements.

6. Troubleshooting

If you encounter issues with your inverter/charger, refer to the following basic troubleshooting steps:

- **No Power/No Output:** Check all battery and AC connections. Verify that the unit is powered on and that the battery voltage is within the operational range.
- **No Charging:** Ensure shore power or generator input is active and properly connected. Check the charging profile settings via the display or app to ensure they match your battery type.
- **Error Codes/Alerts:** The display panel and Bluetooth app will show specific error codes or alerts. Consult the full user manual for a detailed explanation of these codes and recommended actions.
- **Overload/Over-temperature:** If the unit shuts down due to overload or over-temperature, reduce the load or allow the unit to cool down. Check for blocked ventilation.

If problems persist, contact Xantrex customer support for assistance.

7. Specifications

Feature	Specification
Model Name	Inv/Chgr, Freedom XC PRO, 2000W, Marine
Part Number	818-2015
Continuous Output Power	2000W (True Sine Wave)
Battery Charger Current	100 Amp
Item Dimensions (LxWxH)	19 x 15 x 8 inches
Item Weight	19 Pounds
Material	Plastic
Color	Multicoloured

8. Warranty & Support

The Xantrex Freedom XC PRO 2000W Marine Inverter/Charger comes with a manufacturer's warranty. For detailed information regarding warranty terms, coverage, and how to make a claim, please refer to the official Xantrex warranty documentation included with your product or visit the Xantrex website.

For technical support, troubleshooting assistance, or service inquiries, please contact Xantrex customer support. Have your model number (Freedom XC PRO 2000W) and part number (818-2015) ready when contacting support.

