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Xantrex Technology Inc. is a world-leading supplier of advanced power electronics and controls with products from 50 watt mobile units to one MW utility-scale systems for wind, solar, batteries, fuel cells, microturbines, and backup power applications in both grid-connected and stand-alone systems. Xantrex products include inverters, battery chargers, programmable power supplies, and variable speed drives that convert, supply, control, clean, and distribute electrical power.

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XPower PowerSource Mobile 100 Owner's Guide

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## **Date and Revision**

July 2006 Revision B

## **Part Number**

975-0285-01-01

## **Product Number**

852-0281

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# 1 Introduction

Thank you for purchasing the XPower® PowerSource Mobile 100. This product is part of a family of advanced high-performance power inverters from Xantrex, the leader in high-frequency inverter design. Connected to the 12 V DC outlet in your vehicle, the PowerSource Mobile 100:

- powers 120 Vac loads through its AC outlet
- runs and recharges small consumer electronics through its two 5.0 Vdc USB ports.

When 12 V DC power is not available, the internal lithium ion (Li-Ion) battery provides power to the PowerSource Mobile 100. You can recharge the internal battery using household electricity or 12 V DC power from a vehicle DC outlet.

The XPower PowerSource Mobile 100 uses reliable solid-state power electronics for years of safe, trouble-free operation and includes automatic safety monitoring circuitry to protect it, and your vehicle battery, from overload conditions.

The XPower PowerSource Mobile 100's AC output waveform, called "modified sine wave," is designed to function similarly to the sine wave shape of utility power.

Read this guide before operating or charging the XPower PowerSource Mobile 100, and save it for future reference. The main topics in the guide are:

- Safety information (page 3)
- PowerSource Mobile 100 features (page 9)
- Instructions for operating the inverter (page 10)
- Troubleshooting information (page 26)
- Specifications (page 32)
- Warranty and service information (page 34)

## **Attention: Charge Before Use**

Charge the PowerSource Mobile 100 internal battery immediately after purchase. Recharge after each use and once every three months. See "Recharging the PowerSource Mobile 100" on page 22.

Failure to follow these instructions will void the product warranty.

## 2 Important Safety Information

Failure to follow these safety guidelines may cause personal injury and/or damage to the PowerSource Mobile 100. It may also void your product warranty. Read the following safety instructions and pay special attention to all Caution and Warning statements in the guide.

**Warnings** identify conditions that may result in personal injury or loss of life.

**Cautions** identify conditions or practices that may damage the unit or other equipment.

### Warnings and Cautions

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#### **WARNING**

Keep the PowerSource Mobile 100 out of reach of children and pets. The inverter generates the same potentially lethal AC power as a normal household wall outlet. Treat the outlet with respect!

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## **WARNING: Fire and shock hazard**

Do not insert any object into the PowerSource Mobile 100's ports or openings.

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## **WARNING**

The inverter housing may become uncomfortably warm, reaching 140° F (60° C) under extended high power operation. During operation, keep it away from materials that may be affected by high temperatures.

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## **WARNING: Limitations on use**

The PowerSource Mobile 100 is not intended for use in connection with life support systems or other medical equipment or devices.

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## **WARNING: Shock hazard**

Do not expose the PowerSource Mobile 100 to water, rain, snow, or spray.

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## **WARNING**

Do not use the PowerSource Mobile 100 in the presence of flammable fumes or gases, such as in the bilge of a gasoline-powered boat, or near propane tanks. Do not use the PowerSource Mobile 100 in an enclosure containing automotive-type, lead-acid batteries. These batteries vent explosive hydrogen gas, which can be ignited by sparks from electrical connections.

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## **WARNING: Shock hazard**

- Use caution when inserting an AC plug into the three-prong AC outlet. The prongs of an AC plug can become bent from misuse. If an AC plug is improperly inserted into the AC outlet, a bent prong can slip outside the inverter and become a shock hazard.
  - Grip the inverter carefully when inserting or removing an AC plug. Keep your fingers clear of the AC outlet. Ensure that your fingers do not contact the prongs of an AC plug when the plug is partially inside the inverter.
-



## **WARNING: Fire hazard**

- Never leave the PowerSource Mobile 100 unattended while charging.
- Charge the unit in an isolated area, away from other flammable materials.
- Let the unit cool down to room temperature before charging.
- Storing the unit at temperatures over 170 °F (77 °C) for over two hours may cause damage to the battery and possible fire.



## **WARNING: Personal injury**

- The cells inside the PowerSource Mobile 100 contain toxic substances. Do not use the unit if the casing is broken or if it emits an unusual odor, produces excessive heat, or leaks. Avoid contact with any substance that leaks from the unit.
  - Do not attempt to open the unit. Do not insert any object into the unit or use any device to pry at the casing.
-



## **CAUTION: AC output non-sinusoidal**

Some chargers for small nickel-cadmium batteries can be damaged if connected to the PowerSource Mobile 100. Do not use the PowerSource Mobile 100 with the following appliances:

- Small battery-operated appliances like rechargeable flashlights, some rechargeable shavers, and night lights that are plugged directly into an AC receptacle to recharge.
- Battery chargers used in hand power tools that display a warning label stating that dangerous voltages are present at the charger battery terminals.



## **CAUTION**

Do not connect live AC power to the PowerSource Mobile 100's AC outlets. This will damage the inverter, and the damage is not covered by warranty. Do not connect any AC load that has its neutral conductor connected to ground to the PowerSource Mobile 100. Such loads include AC distribution wiring and house wiring.

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## 3 Safety Features

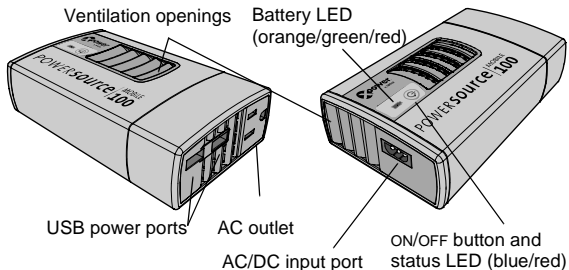
These advanced safety features are built into the XPower PowerSource Mobile 100:

- **Electronic overload protection**—turns off the unit if loads over 100 W are plugged into it.<sup>1</sup>
- **Low battery voltage shutdown**—turns off the unit if the vehicle battery voltage or the unit's internal battery voltage become too low.
- **High-input voltage protection**—turns off the unit if the input voltage from a vehicle battery is too high.
- **Over-temperature protection**—turns off the unit to protect its circuitry and internal battery when its operating temperature is too hot.
- **Battery safety circuit**—prevents the internal Li-Ion battery from being overcharged.
- **Output short circuit protection**—turns off the unit when its output is short-circuited.
- **Internal GFCI**—reduces shock hazard at the AC outlet.

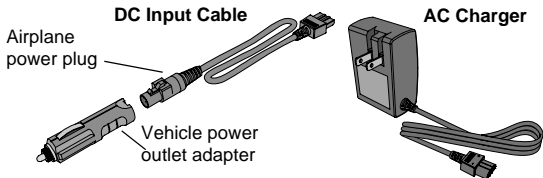
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1.For more information on this and other safety features, see “Specifications”.

## 4 Features and Accessories



**Figure 1** PowerSource Mobile 100 Features



**Figure 2** PowerSource Mobile 100 Accessories

## 5 PowerSource Mobile 100 Operation

The XPower PowerSource Mobile 100 is capable of powering most 120 V AC products that use 80 W or less through its AC outlet. The XPower PowerSource Mobile 100 can also power or charge most consumer electronics that have USB power ports.

### LED Operation

The PowerSource Mobile 100 has two light-emitting diodes (LEDs)—a status LED under the ON/OFF button and a battery LED near the rear of the unit. These LEDs change color and flash to indicate operating status.

## Status LED

Color	Status
Blue	<b>Steady:</b> Unit is on and power is available at the AC outlet and USB ports. <b>Flashes every two seconds:</b> <ul style="list-style-type: none"><li>• Low voltage warning—vehicle battery or internal battery are running low.</li><li>• Over-temperature warning—unit is running hot and nearing over-temperature shutdown.</li></ul>
Red	<b>Flashes twice:</b> <ul style="list-style-type: none"><li>• Shutdown—low input voltage, AC output overload, input over-voltage, AC output short circuit, or over-temperature. See “Troubleshooting” on page 26.</li></ul>

## Battery LED

Color	Status
Orange	Flashes when the internal battery is charging.
Green	The internal battery is charged.
Red	Flashes when the internal battery is not charging. Internal battery charging is terminated when inverter output power is over 65 W.

## Operation with the DC Input Cable

During operation with the DC input cable, the PowerSource Mobile 100 should only be used to supply AC power to products that require 80 W (about 0.67 A) or less.

1. If using the PowerSource Mobile 100 in a vehicle, attach the vehicle power outlet adapter to the DC input cable. See Figure 3 on page 13.
2. Plug the DC input cable into the AC/DC input port on the PowerSource Mobile 100. Align the plug and port correctly. See Figure 3.



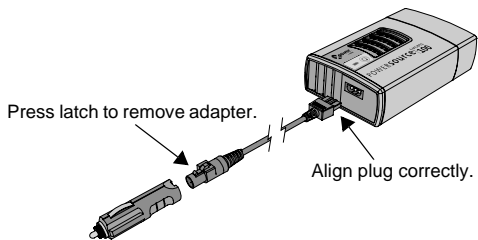
### **CAUTION: Reverse polarity damage**

When plugging in the DC cable, ensure that the plug aligns with the input port. Failure to do so will result in reverse polarity and damage the PowerSource Mobile 100.

- 
3. Insert the vehicle power outlet adapter into the vehicle's 12 V DC outlet.  
-or-  
Insert the airplane power plug into the airplane DC power socket.



4. Turn the unit on by pressing the ON/OFF button for half a second. The status LED glows blue, indicating the unit is on.
5. Plug the product(s) you want to operate into the AC outlet or USB ports and turn them on (if necessary).  
The total power consumption of the products must be less than 80 W.
6. When the PowerSource Mobile 100 is not in use, turn it off and unplug it from the DC outlet to prevent the vehicle battery from being slowly discharged.



**Figure 3** Connecting the adapter and DC input cable

## Airline Compatibility

Table 1 provides a partial list of airlines, aircraft, and passenger classes that have DC power sockets compatible with the PowerSource Mobile 100. An expanded list is part of the Powerpacks FAQ available at [\*\*www.xantrex.com/support\*\*](http://www.xantrex.com/support).

**Table 1** Airline Compatibility

Airline	Aircraft	Passenger Class
Air Canada	A330, A340	Business Class
Air China	747-400	Business Class
Air France	A330-200	1st Class, Business
American	DC-10	1st Class, Business
American	727-200, 737-800, 767-300, MD-80, MD-11	All Classes
Cathay Pacific	747-400, 777-200, A330	All Classes
Continental	767-200, 767-400	Business Class
Delta	737-800, 767-400	All Classes
Qantas	747-400	1st Class, Business
Swiss Air	MD-11	1st Class, Business
United	767-300	1st Class
Virgin	747-200, A340-300	1st Class

## Operating Guidelines

- As the vehicle battery is used, its voltage begins to fall. When the inverter senses that the voltage at its DC input has dropped to the preset warning voltage, the PowerSource Mobile 100 beeps once every two seconds. When the voltage at its DC input has dropped to the preset shutdown voltage, the PowerSource Mobile 100 automatically shuts down. This prevents the vehicle battery from being damaged. After shutdown, the unit beeps twice and the status LED flashes. Unplug any devices from the inverter. For more information on warning and shutdown voltage levels, see “Electrical Specifications” on page 32.

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**Important:** Vehicle batteries are designed to provide brief periods of very high current needed for engine starting. They are not intended for constant deep discharge. Regularly operating the unit from a vehicle battery until low-voltage shutdown occurs will shorten the life of the vehicle battery.

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- If an AC product rated higher than the rated output power of the inverter is plugged into the PowerSource Mobile 100, the PowerSource

Mobile 100 automatically shuts down. After shutdown, the unit beeps twice and the status LED flashes twice.

- Appliances such as televisions and devices with motors consume much more power than their average rating when they are turned on. Although the PowerSource Mobile 100 can briefly supply surge power of up to 160 W, some devices may exceed its surge capability and shut down the inverter.
- If the PowerSource Mobile 100 exceeds a safe operating temperature due to insufficient ventilation or a high-temperature environment, the PowerSource Mobile 100 beeps and the status LED flashes every two seconds as a warning. If the temperature continues to climb, the PowerSource Mobile 100 automatically shuts down. After shutdown, the unit beeps twice and the status LED flashes twice.
- If a defective battery charging system causes the battery voltage to rise to dangerously high levels, the PowerSource Mobile 100 automatically shuts down. After shutdown, the unit beeps twice and the status LED flashes twice.

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**Note:** After the PowerSource Mobile 100 shuts down because of a fault, the status LED and alarm do not continue to indicate that the unit has shut down.

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## **CAUTION**

Although the PowerSource Mobile 100 incorporates protection against over-voltage, it may still be damaged if the input voltage exceeds 16 Vdc.

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## **Vehicle Battery Operating Time**

Operating time will vary depending on the charge level of the vehicle battery, its capacity and the power level drawn by the particular AC load, USB load, or combination of both. With a typical vehicle battery and an 80 W load, an operating time of 4 to 5 hours or more can be expected.

When using a vehicle battery as a power source, it is strongly recommended to start the vehicle every hour or two to recharge the battery before its capacity drops too low. The PowerSource Mobile 100 can operate while the engine is running, but the normal voltage drop that occurs during starting of the engine may trigger the unit's low-voltage shutdown feature.

## Operation with the Internal Battery

When not connected to DC power, the PowerSource Mobile 100 uses its internal battery to operate or charge devices that consume 65 W or less.

### **To power devices from the internal battery:**

1. Press the ON/OFF button to turn the unit on. The status LED glows blue, indicating the unit is ready.
2. Plug the product(s) you want to operate into the PowerSource Mobile 100 AC outlet or USB ports and turn them on (if necessary).

The total power consumption of the products must be less than 65 W.

3. When not in use, press the ON/OFF button to turn the unit off.

When the internal battery has discharged to 9.5 V, the status LED flashes and the alarm beeps once every two seconds, indicating that the battery needs to be recharged. See “Recharging the PowerSource Mobile 100” on page 22.

When the internal battery has discharged below 9.0 V, the PowerSource Mobile 100 automatically shuts down. After shutdown, the unit beeps twice and the status LED flashes twice.

## Device Runtimes

Typical portable devices that can be used with the PowerSource Mobile 100 are listed in Table 2.

**Table 2** Device Runtimes

Device	Watts	Runtime (hours)
Laptop computer	25–65 <sup>a</sup>	2 <sup>b</sup>
Handheld game console	25	1.5
Portable cooler	36	1

a. Computer power consumption varies with the state of discharge of the laptop internal battery. A laptop computer with a fully discharged internal battery may consume approximately 65 W until the laptop battery becomes nearly fully charged. When nearly fully charged, laptop power consumption may decrease to approximately 25 W.

b. A laptop computer with a discharged battery runs for about 0.5 hours from the PowerSource Mobile 100 before the inverter shuts down. While operating from the PowerSource Mobile 100 internal battery, the laptop battery recharges sufficiently to power the computer for another 1.5 hours.

## **Interference with Electronic Equipment**

Generally, most AC products operate with the PowerSource Mobile 100 just as they would with household AC power. Two possible exceptions exist when operating radios and televisions with the PowerSource Mobile 100.

### **Buzzing Sound in Audio Systems and Radios**

Some inexpensive stereo systems and AM-FM radios have inadequate internal power supply filtering and “buzz” slightly when powered by the PowerSource Mobile 100. Generally, the only solution is an audio product with a higher quality filter.



## Television Interference

The XPower PowerSource Mobile 100 is shielded to minimize its interference with TV signals. However, with weak TV signals interference may be visible in the form of lines scrolling across the screen. The following should minimize or eliminate the problem:

- Increase the distance between the PowerSource Mobile 100 and the TV, antenna and cables.
- Adjust the orientation of the PowerSource Mobile 100, television, antenna and cables.
- Maximize TV signal strength by using a better antenna and use shielded antenna cable where possible.

# Recharging the PowerSource Mobile 100

When household AC power is available, the unit can be recharged using the AC charger.

You can also charge the unit using the DC input cable while you drive your vehicle. The unit also charges when operating with the DC input cable and powering products that consume less than 65 W.

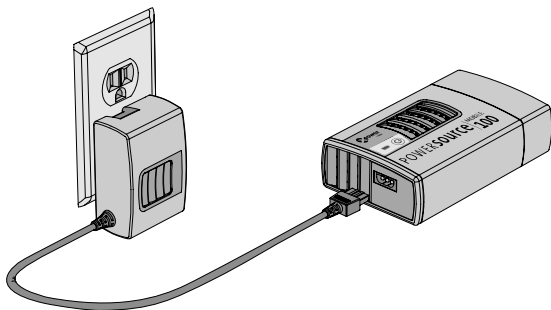
## **To recharge the unit using household power:**

1. Unplug any devices from the PowerSource Mobile 100.
2. Plug the AC charger into the PowerSource Mobile 100 AC/DC input port.
3. Plug the AC charger into a standard AC wall outlet. See Figure 4.
4. While the PowerSource Mobile 100 is recharging, the battery LED flashes orange. When the unit is fully charged, the alarm beeps once and the LED glows green steadily. A typical recharge may take up to 6 hours.

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**Important:** You cannot power loads from the PowerSource Mobile 100 while it is being charged with the AC charger. When using the AC charger, the ON/OFF button is disabled and no power is available at the AC outlet or USB ports.

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**Figure 4** Charging the unit with AC power

## **To recharge the PowerSource Mobile 100 from a DC outlet:**

1. Disconnect any devices plugged into the PowerSource Mobile 100.
2. If necessary, attach the vehicle power outlet adapter to the DC input cable. See Figure 3 on page 13.
3. Plug the DC input cable into the AC/DC input port on the PowerSource Mobile 100. Align the plug and port correctly. See Figure 3.



### **CAUTION: Reverse polarity damage**

When plugging in the DC cable, ensure that the plug aligns with the input port. Failure to do so will result in reverse polarity and damage the PowerSource Mobile 100.

- 
4. Insert the DC input cable into the vehicle or airplane DC outlet.  
While the PowerSource Mobile 100 is recharging, the battery LED flashes orange. When the unit is fully charged, the alarm beeps once and the LED glows green steadily. If the DC

input cable is plugged in but the PowerSource Mobile 100 is not charging, the LED flashes red (internal battery charging is terminated when inverter output power is over 65 W).

A typical recharge may take up to 4 hours.

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**Important:** When charging the unit with the DC input cable, you can turn the PowerSource Mobile 100 on and operate devices that consume less than 65 W from the AC outlet or USB ports. Any power not consumed by the devices will charge the PowerSource Mobile 100. However, operating devices from the PowerSource Mobile 100 while it is being charged with the DC input cable will lengthen the internal battery recharge time.

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# 6 Troubleshooting

## General

**PROBLEM:** Measured PowerSource Mobile 100 output is too low.

Possible cause	Remedy
Standard “average-reading” AC voltmeter used to measure output voltage, resulting in an apparent reading 5 to 15 V too low.	PowerSource Mobile 100’s modified sine wave output requires “true RMS” voltmeter for accurate measurements.
Vehicle battery or PowerSource Mobile 100 voltage is too low.	Recharge vehicle battery or PowerSource Mobile 100.

**PROBLEM: PowerSource Mobile 100 beeps and the status LED flashes once every two seconds**

Possible cause	Remedy
Low battery warning. The PowerSource Mobile 100 internal battery capacity is running low.	Unplug products from unit and recharge the PowerSource Mobile 100.
Low battery warning. Vehicle battery is becoming discharged.	Unplug products from unit and recharge the vehicle battery.
Over-temperature warning. The PowerSource Mobile 100 is becoming overheated due to poor ventilation.	Unplug products from unit. Remove objects covering unit. Move the unit to a cooler place. Reduce load if continuous operation is required.

**PROBLEM: AC product will not operate; status LED flashes red twice.**

Possible cause	Remedy
AC product(s) connected are rated at more than the PowerSource Mobile 100's continuous power rating; overload shutdown has occurred.	Use a product with a power rating less than the unit's continuous power rating.
AC product is rated less than the PowerSource Mobile 100's continuous power rating; high starting surge has caused overload shutdown.	Product exceeds PowerSource Mobile 100's surge capability. Use a product with starting surge power within the unit's capability.
Internal battery capacity is low.	Recharge the PowerSource Mobile 100.
Vehicle battery is discharged.	Recharge battery.



Possible cause	Remedy
The PowerSource Mobile 100 has overheated due to poor ventilation and has shut down.	<p><b>DC cable operation:</b> Unplug DC cable and allow PowerSource Mobile 100 to cool 15 minutes.</p> <p><b>Internal battery operation:</b> Unplug products from unit and allow the unit to cool 15 minutes. Remove objects covering unit. Move the unit to a cooler place. Reduce load if continuous operation is required.</p>
GFCI has tripped.	Reset GFCI by turning the unit on.
Short-circuit protection has tripped.	Reset the unit by turning the unit on.

**PROBLEM: AC product will not operate; LED is off.**

Possible cause	Remedy
PowerSource Mobile 100 is turned off.	Turn the unit on.
Vehicle battery is defective.	Check battery and replace if required.
Loose connections.	Check connections.
PowerSource Mobile 100 has failed internally.	Return to dealer.

**PROBLEM: Internal battery not charging; battery LED flashes red.**

Possible cause	Remedy
PowerSource Mobile 100 stops charging the internal battery when a connected load consumes 65 W or more.	Reduce load.

## Internal Battery Operation

**PROBLEM:** AC product will not operate; LED is OFF.

Possible cause	Remedy
PowerSource Mobile 100 is discharged.	Recharge the unit.

## Battery Recycling

At the end of the PowerSource Mobile 100's useful life, you should dispose of the unit's Li-Ion batteries through an approved recycling program. You can return the unit to your dealer if they offer a battery recycling service or to an authorized collection site in your area.

For more information, see the Powerpacks FAQ available at **[www.xantrex.com/support](http://www.xantrex.com/support)**.

# 7 Specifications

Specifications are subject to change without notice.

## Electrical Specifications

### AC Power Output

AC output voltage (nominal)	120 Vac
Continuous AC output power	80 W
Maximum AC output surge power	160 W (for 0.1 second)
AC output frequency	60 Hz
AC output waveform	Modified sine wave

### USB Power Output

DC output voltage	5 Vdc
DC output current (max.)	0.5 Adc

### DC Power

DC input voltage range	11.0–15.0 Vdc 9.0–12.45 Vdc
<ul style="list-style-type: none"><li>• DC input cable operation</li><li>• Internal battery operation</li></ul>	
Battery drain with no AC load (at 12 V input)	< 0.35 Adc

Efficiency (maximum)	88%
Low battery alarm point <ul style="list-style-type: none"> <li>• DC input cable operation</li> <li>• Internal battery operation</li> </ul>	11.0 Vdc (AC output > 20 W) 11.5 Vdc (AC output < 20 W) 9.5 Vdc
Low battery shutdown point (nominal) <ul style="list-style-type: none"> <li>• DC input cable operation</li> <li>• Internal battery operation</li> </ul>	10.5 Vdc (AC output > 20 W) 11.0 Vdc (AC output < 20 W) 9.0 Vdc
High battery shutdown point (nominal)	15.7 Vdc
Internal battery capacity	4 Ah/12.3 Vdc

## Physical Specifications

Ambient operating temperature range	0 °C–40 °C (32 °F–104 °F)
Dimensions (L × W × H)	5 3/8 × 3 1/4 × 1 9/16" (137 × 82 × 40 mm)
Weight	1.05 lb. (480 g)

## Accessories

AC charger (1000 mA)	Part # 808-0113
DC Cable with vehicle/plane connector	Part # 808-0114

# 8 Warranty and Return

## Warranty

**What does this warranty cover?** This Limited Warranty is provided by Xantrex Technology, Inc. (“Xantrex”) and covers defects in workmanship and materials in your XPower PowerSource Mobile 100. This warranty period lasts for 1 year from the date of purchase at the point of sale to you, the original end user customer. You require proof of purchase to make warranty claims.

**What will Xantrex do?** Xantrex will, at its option, repair or replace the defective product free of charge, provided that you notify Xantrex of the product defect within the Warranty Period, and provided that Xantrex through inspection establishes the existence of such a defect and that it is covered by this Limited Warranty.

Xantrex will, at its option, use new and/or reconditioned parts in performing warranty repair and building replacement products. Xantrex reserves the right to use parts or products of original or improved design in the repair or replacement. If Xantrex repairs or replaces a product, its warranty continues for the remaining portion of the original Warranty Period or 90 days from the date of the return

shipment to the customer, whichever is greater. All replaced products and all parts removed from repaired products become the property of Xantrex.

Xantrex covers both parts and labor necessary to repair the product, and return shipment to the customer via a Xantrex-selected non-expedited surface freight within the contiguous United States and Canada. Alaska and Hawaii are excluded. Contact Xantrex Customer Service for details on freight policy for return shipments outside of the contiguous United States and Canada.

**How do you get service?** If your product requires troubleshooting or warranty service, contact your merchant. If you are unable to contact your merchant, or the merchant is unable to provide service, contact Xantrex directly at:

Telephone: 1 360 925 5059 (direct)

Fax: 1 360 925 5143 (direct)

Email: [customerservice@xantrex.com](mailto:customerservice@xantrex.com)

Direct returns may be performed according to the Xantrex Return Material Authorization Policy described in your product manual. For some products, Xantrex maintains a network of regional Authorized Service Centers. Call Xantrex or check our website to see if your product can be repaired at one of these facilities.

**What proof of purchase is required?** In any warranty claim, dated proof of purchase must accompany the product and the product must not have been disassembled or modified without prior written authorization by Xantrex.

Proof of purchase may be in any one of the following forms:

- The dated purchase receipt from the original purchase of the product at point of sale to the end user, or
- The dated dealer invoice or purchase receipt showing original equipment manufacturer (OEM) status, or
- The dated invoice or purchase receipt showing the product exchanged under warranty



**What does this warranty not cover?** This Limited Warranty does not cover normal wear and tear of the product or costs related to the removal, installation, or troubleshooting of the customer's electrical systems. This warranty does not apply to and Xantrex will not be responsible for any defect in or damage to:

- a) the product if it has been misused, neglected, improperly installed, physically damaged or altered, either internally or externally, or damaged from improper use or use in an unsuitable environment;
- b) the product if it has been subjected to fire, water, generalized corrosion, biological infestations, or input voltage that creates operating conditions beyond the maximum or minimum limits listed in the Xantrex product specifications including high input voltage from generators and lightning strikes;
- c) the product if repairs have been done to it other than by Xantrex or its authorized service centers (hereafter "ASCs");
- d) the product if it is used as a component part of a product expressly warranted by another manufacturer;
- e) the product if its original identification (trade-mark, serial number) markings have been defaced, altered, or removed.

# Disclaimer

## Product

THIS LIMITED WARRANTY IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY XANTREX IN CONNECTION WITH YOUR XANTREX PRODUCT AND IS, WHERE PERMITTED BY LAW, IN LIEU OF ALL OTHER WARRANTIES, CONDITIONS, GUARANTEES, REPRESENTATIONS, OBLIGATIONS AND LIABILITIES, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE IN CONNECTION WITH THE PRODUCT, HOWEVER ARISING (WHETHER BY CONTRACT, TORT, NEGLIGENCE, PRINCIPLES OF MANUFACTURER'S LIABILITY, OPERATION OF LAW, CONDUCT, STATEMENT OR OTHERWISE), INCLUDING WITHOUT RESTRICTION ANY IMPLIED WARRANTY OR CONDITION OF QUALITY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT REQUIRED UNDER APPLICABLE LAW TO APPLY TO THE PRODUCT SHALL BE LIMITED IN DURATION TO THE PERIOD STIPULATED UNDER THIS LIMITED WARRANTY.

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EXPENSES HOWEVER ARISING WHETHER IN CONTRACT OR TORT INCLUDING WITHOUT RESTRICTION ANY ECONOMIC LOSSES OF ANY KIND, ANY LOSS OR DAMAGE TO PROPERTY, ANY PERSONAL INJURY, ANY DAMAGE OR INJURY ARISING FROM OR AS A RESULT OF MISUSE OR ABUSE, OR THE INCORRECT INSTALLATION, INTEGRATION OR OPERATION OF THE PRODUCT.

## Exclusions

If this product is a consumer product, federal law does not allow an exclusion of implied warranties. To the extent you are entitled to implied warranties under federal law, to the extent permitted by applicable law they are limited to the duration of this Limited Warranty. Some states and provinces do not allow limitations or exclusions on implied warranties or on the duration of an implied warranty or on the limitation or exclusion of incidental or consequential damages, so the above limitation(s) or exclusion(s) may not apply to you. This Limited Warranty gives you specific legal rights. You may have other rights which may vary from state to state or province to province.

# Return Material Authorization Policy

Before returning a product directly to Xantrex you must obtain a Return Material Authorization (RMA) number and the correct factory “Ship To” address. Products must also be shipped prepaid. Product shipments will be refused and returned at your expense if they are unauthorized, returned without an RMA number clearly marked on the outside of the shipping box, if they are shipped collect, or if they are shipped to the wrong location.

When you contact Xantrex to obtain service, please have your instruction manual ready for reference and be prepared to supply:

- The serial number of your product
- Information about the installation and use of the unit
- Information about the failure and/or reason for the return
- A copy of your dated proof of purchase.

# Return Procedure

1. Package the unit safely, preferably using the original box and packing materials. Please ensure that your product is shipped fully insured in the original packaging or equivalent. This warranty will not apply where the product is damaged due to improper packaging.
2. Include the following:
  - The RMA number supplied by Xantrex Technology, Inc. clearly marked on the outside of the box.
  - A return address where the unit can be shipped. Post office boxes are not acceptable.
  - A contact telephone number where you can be reached during work hours.
  - A brief description of the problem.
3. Ship the unit prepaid to the address provided by your Xantrex customer service representative.

**If you are returning a product from outside of the USA or Canada** In addition to the above, you **MUST** include return freight funds and are fully responsible for all documents, duties, tariffs, and deposits.

**If you are returning a product to a Xantrex Authorized Service Center (ASC)** A Xantrex RMA number is not required. However, you must contact the ASC prior to returning the product or presenting the unit to verify any return procedures that may apply to that particular facility.

## **Out of Warranty Service**

If the warranty period for your PowerSource Mobile 100 has expired, if the unit was damaged by misuse or incorrect installation, if other conditions of the warranty have not been met, or if no dated proof of purchase is available, your inverter may be serviced or replaced for a flat fee.

To return your PowerSource Mobile 100 for out of warranty service, contact Xantrex Customer Service for an RMA number and follow the other steps outlined in “Return Procedure” on page 41.

Payment options such as credit card or money order will be explained by the Customer Service Representative. In cases where the minimum flat fee does not apply, as with incomplete units or units with excessive damage, an additional fee will be charged. If applicable, you will be contacted by Customer Service once your unit has been received.