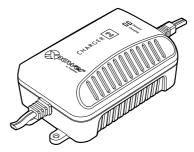


xantrex

- t 1-800-670-0707 (toll free in North America) 1-360-925-5097 (direct)
- f 1-800-994-7828 (toll free in North America) 1-360-925-5143 (direct)
- e CustomerService@xantrex.com

www.xantrex.com

XPower Charger 2



Owner's Guide

975-0135-01-01 REV. B Printed in China



XPower Charger 2

Owner's Guide

About Xantrex

Xantrex Technology Inc. is a world-leading supplier of advanced power electronics and controls with products from 50 watt mobile units to 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.

Trademarks

XPower by Xantrex is a trademark of Xantrex International. Xantrex is a registered trademark of Xantrex International.

Other trademarks, registered trademarks, and product names are the property of their respective owners and are used herein for identification purposes only.

Notice of Copyright

XPower Charger 2 Owner's Guide © July 2004 Xantrex International. All rights reserved.

Disclaimer

UNLESS SPECIFICALLY AGREED TO IN WRITING, XANTREX TECHNOLOGY INC. ("XANTREX")

- (a) MAKES NO WARRANTY AS TO THE ACCURACY, SUFFICIENCY OR SUITABILITY OF ANY TECHNICAL OR OTHER INFORMATION PROVIDED IN ITS MANUALS OR OTHER DOCUMENTATION.
- (b) ASSUMES NO RESPONSIBILITY OR LIABILITY FOR LOSS OR DAMAGE, WHETHER DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL, WHICH MIGHT ARISE OUT OF THE USE OF SUCH INFORMATION. THE USE OF ANY SUCH INFORMATION WILL BE ENTIRELY AT THE USER'S RISK.

Date and Revision

July 2004 Revision B

Part Number

975-0135-01-01

Contact Information

Telephone: 1 800 670 0707 (toll free North America)

1 360 925 5097 (direct)

Fax: 1 800 994 7828 (toll free North America)

1 360 925 5143 (direct)

Email: customerservice@xantrex.com

Web: www.xantrex.com

Contents

1. Introduction	. 1
About the XPower Charger 2	. 1
About This Guide	. 1
2. Important Safety Information	. 2
Warnings and Cautions	. 2
Personal Precautions	. 5
Preparing to Charge	. 7
Charger Location	. 8
DC Connection Precautions	. 8
3. XPower Charger 2 Features	10
Front Panel	10
DC Cable Connections	12
4. Charging a 12 volt Battery	14
Using the Lighter Plug Adapter	
Using the Battery Clip Adapter	16
Using the Ring Terminal Adapter	21
5. Troubleshooting	23
6. Specifications	25
7. Warranty and Return	26
8. Other Xantrex Products	33

1 Introduction

Thank you for purchasing a Xantrex XPower Charger 2. The XPower Charger 2 is part of a family of ultra-compact, light weight and modern power inverters and chargers from Xantrex Technology.

About the XPower Charger 2

The 2 amp XPower Charger 2 is designed to charge 12 volt rechargeable batteries. The XPower Charger 2 regulates the charging process, ensuring the battery is always fully charged, but never overcharged.

About This Guide

To get the best performance from your XPower Charger 2, Xantrex recommends that you read this guide before connecting and using the charger, and then save it for future reference.

This guide contains:

- Important safety information (page 2)
- Features of the XPower Charger 2 (page 10)
- Battery charging instructions (page 14)
- Troubleshooting guidelines (page 23)
- Specifications (page 25)
- Warranty and service information (page 26)

2 Important Safety Information

Misusing or incorrectly connecting the XPower Charger 2 may damage the equipment or create hazardous conditions for users. 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



/N WARNING:

This guide contains important safety and operating instructions in how to use the XPower Charger 2, to recharge 12 volt batteries. Read this guide fully for safe operation of this charger. Save this guide for future reference.



NARNING: Shock and fire hazard

The battery clip adapter, lighter plug adapter, and ring terminal adapter accessories are to be used individually with the XPower Charger 2 as specified in this manual. Connecting adapters together for other, nonspecified use will result in reverse polarity and may result in damaged equipment and personal injury.

- 1. Do not expose the XPower Charger 2 to rain or snow.
- 2. Use of an attachment not recommended may result in a risk of fire, electric shock, or injury to persons.
- 3. To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting the XPower Charger 2.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used, make sure that:
 - pins on plug of the extension cord are the same number, size, and shape as those of plug on the XPower Charger 2;
 - b) the extension cord is properly wired

- and in good electrical condition; and
- c) wire size is No. 18 AWG (minimum) with a maximum length of 50 ft. (15.2 m).
- 5. Do not operate XPower Charger 2 with damaged cord or plug—replace the cord or plug immediately.
- Do not operate XPower Charger 2 if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified service technician.
- Do not disassemble XPower Charger 2; take it to a qualified service technician when service or repair is required. Incorrect re-assembly may result in a risk of electric shock or fire.
- To reduce risk of electric shock, unplug XPower Charger 2 from the electric outlet before attempting any maintenance or cleaning.

NARNING: Risk of explosive

gases

Working in the vicinity of a lead-acid battery is dangerous. Batteries generate explosive gases during normal battery operation. For this reason, it is of utmost importance that each time before using a battery charger, you read this guide and follow the instructions exactly.

To reduce risk of battery explosion, follow these instructions and those published by battery manufacturer and manufacturer of any equipment you intend to use in the vicinity of the battery. Review cautionary marking on these products and on any engine.

Personal Precautions

- Someone should be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.
- Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.
- 3. Wear complete eye protection and clothing protection. Avoid touching eyes while working near battery.
- If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters eye, immediately flood eye

- with running cold water for at least 10 minutes and get medical attention immediately.
- NEVER smoke or allow a spark or flame in the vicinity of battery or engine.
- Be extra cautious to reduce risk of dropping a metal tool onto a battery. It might spark or short-circuit the battery or other electrical part that may cause an explosion.
- Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery. A lead-acid battery can produce a shortcircuit current high enough to weld a ring or the like to metal, causing a severe burn.
- 8. Use XPower Charger 2 for charging a LEAD-ACID battery only. It is only intended to charge lead-acid batteries or batteries, such as those used in specific integrated products. Do not use XPower Charger 2 for charging dry-cell batteries that are commonly used with home appliances. These batteries may burst and cause injury to persons and damage to property.
- 9. NEVER charge a frozen battery.

Preparing to Charge

- If necessary to remove the battery from the vehicle to charge, always remove the grounded terminal from the battery first. Make sure all accessories in the vehicle are off, so to minimize chances of an arc.
- Be sure area around the battery is wellventilated while battery is being charged. Gas can be forcefully blown away by using a piece of cardboard, other nonmetallic material or a fan.
- 3. Clean battery terminals. Be careful to keep corrosion from coming in contact with eyes.
- 4. Add distilled water in each cell until battery acid reaches level specified by the battery manufacturer. This helps purge excessive gas from cells. Do not overfill. For a battery without cell caps, carefully follow manufacturer's recharging instructions.
- Study all battery manufacturer's specific precautions such as removing or not removing cell caps while charging and recommended rates of charge.
- 6. Determine the voltage of battery by referring to the vehicle owner's manual and make sure it matches the output rating of the battery charger.

Charger Location

- Place the battery charger as far away from the battery as the output DC cable permits.
- Never place the battery charger directly above a battery being charged; gases from battery will corrode and damage the charger.
- Never allow battery acid to drip on the charger when reading specific gravity or filling battery.
- Do not operate the charger in an enclosed area. Do not restrict ventilation in any way.
- 5. If the ring terminal adapter accessory is connected permanently to the battery terminals, be sure the safety cap is put on when the adapter is not in use.
- Do not set a battery on top of the charger.

DC Connection Precautions

- Connect and disconnect the DC cable only after removing the AC cord from the electric outlet.
- If the DC cable has the cable adapter accessory clips connected, never allow the clips to touch each other. When attaching the clips to the battery posts, twist or rock back and forth several times to make a connection. This tends

to keep the clips from slipping off the terminals and helps to reduce the risk of sparking.

Failure to follow these safety guidelines may cause personal injury and/or damage to the XPower Charger 2. It may also void your product warranty.

3 XPower Charger 2 Features

This section describes the main features of the XPower Charger 2.

Front Panel

Figure 1 shows the XPower Charger 2. Use Table 1 to identify the function of items.

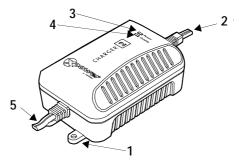


Figure 1 XPower Charger 2 Features

Table 1 XPower Charger 2 Features

Item	Feature
1	Mounting Flanges For permanent charger installation, use the drilling template supplied with the unit.

 Table 1
 XPower Charger 2 Features

Item	Feature
2	DC Cable The DC cable provides 12 volts, 2 amp charging current to the battery being charged. Three types of adapter accessories are provided for specific needs. (See Figure 2.)
3	Power light The green power light indicates that AC power is connected to the unit and 12 volts are available at the output.
4	Charging light The red charging light indicates that charging is in progress. When the battery is fully charged, the red charging light will turn off.
5	AC Cord Connects the XPower Charger 2 to a standard wall outlet

DC Cable Connections

Figure 2 shows the DC cable connections available for the XPower Charger 2. Use Table 2 to identify the usage.

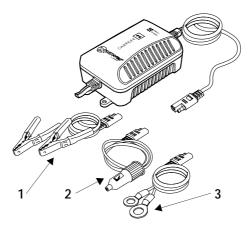


Figure 2 DC Cable Connections

Table 2 DC Cable Connections Usage

Iter	n Function
1	Battery clip adapter
2	Lighter plug adapter
3	Ring terminal adapter



↑ WARNING: Shock and fire hazard

The battery clip adapter, lighter plug adapter, and ring terminal adapter are to be used individually with the XPower Charger 2 as specified in this manual. Connecting adapters together for other, non-specified use will result in reverse polarity and may result in damaged equipment and personal injury.

4 Charging a 12 volt Battery

It is possible to use XPower Charger 2 to charge most engine starting batteries when the battery is installed in a vehicle. Before attempting to charge a vehicle battery, make sure the battery is a 12 volt, lead-acid type.



CAUTION

The XPower Charger 2 is not recommended for charging vehicle batteries over 50 amphours.

Using the Lighter Plug Adapter Follow these steps to recharge a 12 volt battery using the lighter plug adapter:

- Turn off any lights, audio equipment, or other 12 volt accessories that are connected to your vehicle's electrical system. Make sure your vehicle is in the park position and secured by the emergency brake.
- Connect the XPower Charger 2 DC cable to the lighter plug adapter.
- 3. Insert the XPower Charger 2 DC plug into the lighter socket or 12 volt outlet in your vehicle. In some vehicles the lighter socket or 12 volt outlet are controlled by the vehicle's ignition and it

may be necessary to switch the ignition to the accessory setting to allow current to flow from XPower Charger 2 to the vehicle battery.

- Plug the XPower Charger 2 AC cord into 4. a standard 115 volt AC outlet.
- As the battery in your vehicle charges, the green Power light and red Charging light turn on.



CAUTION

If the green Power light turns off and the red Charging light turns on, immediately disconnect it from the lighter socket or outlet. The unit has detected an output short circuit or reverse polarity on the DC connection. Check the connection.

- 6. When fully charged, the red Charging light turns off and the green Power light remains on. The recharge time will vary based on the capacity and discharge state of your vehicle's battery.
- Once the vehicle's battery is fully charged, disconnect XPower Charger 2 from the AC outlet and remove the DC plug from the vehicle's lighter socket or 12 volt outlet.

Using the Battery Clip Adapter Follow these steps to recharge a 12 volt battery using the battery clip adapter:

Turn off any lights, audio equipment, or other 12 volt accessories that are connected to your vehicle's electrical system. Make sure your vehicle is in the park position and secured by the emergency brake.

MARNING: Explosion hazard

A spark near the battery may cause an explosion. Follow instructions carefully to reduce the risk of spark near the battery.

- Position the AC and DC cords to reduce the risk of damage by a hood, door, or moving engine part.
- Stay clear of fan blades, belts, pulleys, 3. and other parts that can cause injury to persons.
- 4. Connect the XPower Charger 2 DC cable to the battery clip adapter.
- 5. Check the polarity of the battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, -) post.

- 6. Determine which battery post is grounded (connected) to the chassis. If the negative post is grounded to chassis (as in most vehicles), see (7) below. If the positive post is grounded to the chassis, see (8) below.
- 7. For a negative-grounded vehicle, connect the POSITIVE (RED) clip from the battery charger to the POSITIVE (POS, P, +) ungrounded post of battery. Connect the NEGATIVE (BLACK) clip to a heavy-gauge metal part of the frame or to the engine block away from the battery. Do not connect the clip to the carburetor, fuel lines, or sheet-metal body parts.
- 8. For a positive-grounded vehicle, connect the NEGATIVE (BLACK) clip from the battery charger to the NEGATIVE (NEG, N, –) ungrounded post of battery. Connect the POSITIVE (RED) clip to a heavy-gauge metal part of the frame or to the engine block. Do not connect clip to carburetor, fuel lines, or sheet-metal body parts.
- 9. Plug the XPower Charger 2 AC cord into a standard 115 volt AC outlet.
- As the battery in your vehicle charges, the green Power light and red Charging light turn on.

CAUTION

If the green Power light turns off and the red Charging light turns on, immediately disconnect the battery clips from the battery terminals.

The unit has detected an output short circuit or reverse polarity on the DC connection. Check the connection.

- 11. When fully charged, the red Charging light turns off and the green Power ON light remains on. The recharge time will vary based on the capacity and discharge state of your vehicle's battery.
- 12. Once the vehicle's battery is fully charged, disconnect the AC cord, remove the clip from the vehicle's chassis and then remove the clip from the battery terminal.

Follow these steps to recharge a 12 volt battery outside a vehicle with the battery clip adapter:

MARNING: Explosion hazard

A spark near the battery may cause an explosion. Follow instructions carefully to reduce the risk of spark near the battery.

- Check polarity of battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, –) post.
- Attach an insulated battery cable, at least 24-inches long, 6 gauge (AWG) to the NEGATIVE (NEG, N, –) battery post.
- Connect the XPower Charger 2 DC cable to the battery clips adapter.
- Connect the POSITIVE (RED) charge 4. clip to the POSITIVE (POS, P, +) battery post.
- Position yourself and the free end of the 5. cable as far away from the battery as possible, then connect the NEGATIVE (BLACK) charger clip to the free end of the cable (referenced in step 2).



↑ WARNING: Explosion hazard

Do not face the battery when making the final connection.

- 6. Plug the XPower Charger 2 cord into a standard 115 volt AC outlet.
- As the battery charges, the green Power light and red Charging light turn on.

CAUTION

If the green Power light turns off and the red Charging light turns on, immediately disconnect the clips from the battery terminals.

The unit has detected an output short circuit or reverse polarity on the DC connection. Check the connection.

- 8. When fully charged, the red Charging light turns off and the green Power light remains on. The recharge time will vary based on the capacity and discharge state of your battery.
- 9. Once the battery is fully charged, disconnect the AC cord, remove the NEGATIVE (BLACK) charger clip from the cable, and then remove the POSITIVE (RED) clip from the battery terminal.

Using the Ring Terminal Adapter Follow these steps to install the ring terminal adapter:



CAUTION

Be sure the safety cap on the ring terminal adapter is put on before installing the adapter to the battery terminal.

- The ring terminal adapter's leads have crimped, color-coded ring terminals (RED - POSITIVE and BLACK -NEGATIVE). These lugs connect directly to the corresponding connectors on the battery posts.
- Remove the nuts from the bolts of the battery post's connectors.
- 3. Position the RED terminal on the bolt of the POSITIVE battery post connector.
- Position the BLACK terminal on the 4. bolt of the NEGATIVE battery post connector.
- Replace the nuts.
- If there is any problem connecting the output leads, check with a reputable auto supply store or contact Customer Service for assistance in finding an appropriate connection device for your particular application.

Follow these steps to recharge a battery using the ring terminal adapter:

- Disconnect the DC safety cap on the ring terminal adapter.
- 2. Insert the XPower Charger 2's DC cable to ring terminal adapter connector.
- Plug the XPower Charger 2's AC cord 3. into a standard 115 volt AC outlet.
- As the battery charges, the green Power light and red Charging light turn on.



CAUTION

If the green Power light turns off and the red Charging light turns on, immediately disconnect the ring terminal adapter from the DC cable.

The unit has detected an output short circuit or reverse polarity on the DC connection. Check the connection.

- 5. When fully charged, the red Charging light turns off and the green Power ON light remains on. The recharge time will vary based on the capacity and discharge state of your battery.
- Once the battery is fully charged, disconnect XPower Charger 2 from the AC outlet and remove the DC cable from the ring terminal adapter.
- Reconnect the DC connector cover cap to the ring terminal adapter.

5 Troubleshooting

This section will help you identify the source of most problems that can occur with the XPower Charger 2.

If you have a problem with the charger, please review this section before contacting Xantrex Customer Service. If you are unable to solve a problem and need to contact Xantrex, please prepare for the call by writing down the following details:

- Charger's serial number
- How long the charger has been in use
- A brief description of the problem

PROBLEM: Green Power light is off when XPower Charger 2 is connected to AC power.

Possible cause	Solution
No AC power at outlet.	Ensure power is present at outlet.

PROBLEM: Green Power light is off and red Charging light is on.

Possible cause	Solution
Short circuit or reverse polarity is detected at the DC output cable.	Check cable connections.

Possible cause	Solution
High charging current is detected. The battery being charged requires higher charging current.	Use a higher charging current charger (such as XPower Charger 15).
A heavy load is connected to the battery being charged.	Remove the load from the battery.

6 Specifications

Specifications are subject to change without notice.

Table 3 Specifications

Bulk charging current	2 amps
Bulk charge to float charge transition voltage (peak charging voltage)	14.3 volts
Float charge to bulk charge transition voltage (charge restart voltage)	13.0 volts

7 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 Charger 2. This warranty period lasts for 12 months 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: 1 800 670 0707 (toll free N. A.)

1 360 925 5097 (direct)

Fax: 1 800 994 7828 (toll free N. A.)

1 360 925 5143 (direct)

Email: 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:

- 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:
- 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;
- the product if repairs have been done to it other than by Xantrex or its authorized service centers (hereafter "ASCs");
- the product if it is used as a component part of a product expressly warranted by another manufacturer;
- the product if its original identification (trademark, 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, 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 OUALITY, 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 IN NO EVENT WILL XANTREX BE LIABLE FOR ANY SPECIAL, DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, LOSSES, COSTS OR 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.

Warning: Limitations On Use

Please refer to your product manual for limitations on uses of the product.

SPECIFICALLY, PLEASE NOTE THAT THE XPOWER CHARGER 2 SHOULD NOT BE USED IN CONNECTION WITH LIFE SUPPORT SYSTEMS OR OTHER MEDICAL EQUIPMENT OR DEVICES. WITHOUT LIMITING THE GENERALITY OF THE FOREGOING, XANTREX MAKES NO REPRESENTATIONS OR WARRANTIES REGARDING

THE USE OF THE XANTREX XPOWER CHARGER 2 IN CONNECTION WITH LIFE SUPPORT SYSTEMS OR OTHER MEDICAL EOUIPMENT OR DEVICES.

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

- 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.
- 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 return material authorization (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 XPower Charger 2 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 product may be serviced or replaced for a flat fee. To return your XPower Charger 2 for out of warranty service, contact Xantrex Customer Service for a Return Material Authorization (RMA) number and follow the other steps outlined in "Return Procedure" on page 31. 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.

8 Other Xantrex Products

To see the range of inverters and chargers offered by Xantrex, visit our web site at: http://www.xantrex.com.