XANTREX
Smart Choice For Power

Web: www.xantrex.com
Email: CustomerService@xantrex.com
Phone: 1-604-422-8595
Phone: 1-800-670-0707 (toll free in North America)
Fax: 1-604-420-1591
Fax: 1-800-994-7828 (toll free in North America)

Xantrex Inverter 300

Owner's Guide

445-0139-01-01 Printed in China

CE

e13
020791

About Xantrex

Xantrex Technology Inc. is a world-leading supplier of advanced power electronics and controls with products from 50 watt mobile units to 1 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

Xantrex is a registered trademark of Xantrex Technology Inc.

Notice of Copyright

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.While every precaution has been taken to ensure the accuracy of the contents of this guide, Xantrex International assumes no responsibility for errors or omissions. Note as well that specifications and product functionality may change without notice.

Date and Revision

October 2001, Revision 3

Part Number

445-0139-01-01

Contact Information

Web: www.xantrex.com
Email: CustomerService@xantrex.com
Phone: 1-604-422-8595
Phone: 1-800-670-0707 (toll free in North America)
Fax: 1-604-420-1591
Fax: 1-800-994-7828 (toll free in North America)

Contents

1. Introduction 1

2. Important Safety Information 2

Warnings and Cautions 2

3. Xantrex 300 Inverter Features 5

AC Outlets 7

4. Connecting the 300 Inverter 8

Choosing a Location 8

Fastening the Inverter to a Mounting Surface 8

Connecting the 300 Inverter to DC Power 9

Using the Cigarette Plug Wire Assembly 10

Using the Battery Clip Wire Assembly 11

Hardwiring the Inverter to the Battery 13

Disconnecting the Battery 17

Replacing the In-Line Fuse 17

5. Operating the 300 Inverter 18

Operating Statuses 18

Interference With Electronic Equipment 20

6. Battery Operating Time 21

7. Troubleshooting 22

8. Warranty Information 26

Returning a Product 27

To Place of Purchase 27

To Xantrex 27

Out-of-Warranty Service 28

9. Specifications 30

Electrical 30

Physical 31

Regulatory 31

1 Introduction

Thank you for purchasing the Xantrex 300 Inverter. The 300 Inverter is part of a family of advanced, high-performance power inverters from Xantrex, the leader in the field of high-frequency inverter design.

Connected to the 12 volt outlet in your vehicle or boat or directly to your battery for loads over 150 watts, the 300 Inverter efficiently and reliably powers a wide variety of household AC products, such as TVs and VCRs, laptop computers, camcorder and cell phone chargers, compact fluorescent lights, and soldering irons.

The 300 Inverter uses reliable solid state power electronics for years of safe, trouble-free operation and includes automatic safety monitoring circuitry to protect it from inadvertent overload conditions.

Read this guide before connecting or using the 300 Inverter, and save it for future reference. The main topics in the guide are:

- Safety information (page 2)
- 300 Inverter features (page 5)
- Instructions for connecting the inverter (page 8)
- Operating guidelines (page 18)
- Troubleshooting information (page 22)
- Warranty and service information (page 26)
- Specifications (page 30)

2 Important Safety Information

If the 300 Inverter is connected or used incorrectly, hazardous conditions may be created. Read and save this safety information, and pay special attention to all Caution and Warning statements in the guide and on the inverter itself. Warnings and Cautions are indicated by this symbol:

- **Warning** statements identify conditions that could result in personal injury or loss of life.
- **Caution** statements identify conditions or practices that could result in damage to the 300 Inverter or other equipment.

Warnings and Cautions

Warning! Shock hazard.

The 300 Inverter generates the same potentially lethal AC power as a household wall outlet. Do not insert foreign objects in the inverter's AC outlet or any other openings in the inverter. Do not open the inverter. Have a qualified individual complete any service work.

Warning! Shock hazard.

Do not expose the 300 Inverter to water, rain, snow, or spray.

Warning! Risk of fire or explosion.

The 300 Inverter contains components that tend to produce arcs or sparks. To prevent fire or explosion, do not install the inverter in compartments containing batteries or flammable materials or in locations that require ignition-protected equipment.

Warning! Fire hazard.

To reduce the risk of fire, do not cover or obstruct the ventilation openings. Do not install the 300 Inverter in a zero-clearance compartment. Overheating may result.

Warning! Shock and fire hazard.

During installation route all cable/wiring away from sharp edges and hot surfaces of the engine compartment or vehicle.

Caution! Risk of damage to equipment.

The 300 Inverter is designed to be directly connected to standard electrical and electronic equipment in the manner described in this guide. Do not connect it to household or RV AC distribution wiring. Do not connect it to any AC load circuit in which the neutral conductor is connected to ground (earth) or to the negative of the DC (battery) source.

Caution! Risk of damage to the 300 Inverter.

Reverse battery polarity (negative connected to positive; positive connected to negative) will damage the 300 Inverter, and it will require servicing. Damage caused by reverse polarity is not covered by your warranty.

Caution! Risk of damage to rechargeable appliances.

The output of the 300 Inverter is non-sinusoidal. Certain battery chargers can be damaged if they are connected to the 300 Inverter. Two particular types of equipment are prone to this problem:

- Small battery-operated appliances such as rechargeable flashlights, shavers, and night lights that can be plugged directly into an AC receptacle to recharge.
- Certain battery chargers for battery packs used in hand power tools. These chargers have a warning label stating that dangerous voltages are present at the charger battery terminals.

Do not use the 300 Inverter with the type of appliances just described.

Caution! Risk of damage due to high temperatures.

Do not use the 300 Inverter in temperatures over 40° C (105° F). Overheating may result.

3 Xantrex 300 Inverter Features

This section describes the main features of the 300 Inverter.

Figure 1 shows the inverter's AC panel.

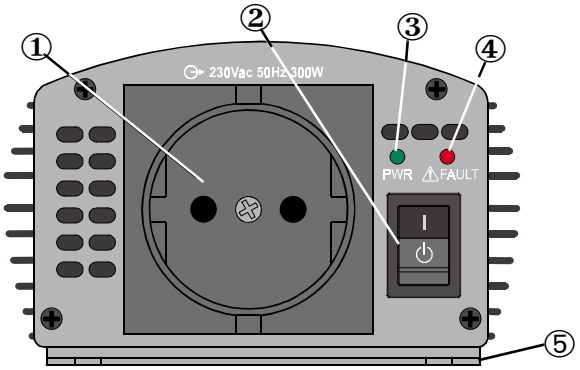

Figure 1 AC Panel on the 300 Inverter (European AC Outlet)

① **AC Outlet** An AC outlet is located on one end of the inverter. It allows you to plug in a 230 volt AC product with a power consumption of 150 watts or less when the inverter is operated from a vehicle lighter socket, or 300 watts or less when it is connected directly to a battery.

The AC outlet on your inverter may be different from the one shown here. For all available outlets, see Figure 2, Figure 3, and Figure 4, on page 7.

② **On/Standby Switch** The two positions on the On/Standby switch are: ⏻ = Standby and I = On.

When the inverter is connected to a DC power source and the On/Standby switch is on, AC power is available at the outlet.

③ **Power Light** The green PWR light is on all the time when the On/Standby switch is on.

④ **Fault Light** The red ⚠FAULT light indicates that the inverter has shut down because of low or high battery voltage, AC overload, or excessively high temperatures.

⑤ **Mounting Flanges** Mounting flanges on the AC and DC ends allow you to mount the inverter permanently. For additional information, see "Fastening the Inverter to a Mounting Surface" on page 8.

Audible Alarm An audible alarm warns you of a high temperature shutdown or of an impending low voltage shutdown.

Fan The fan (see Figure 5) turns on when an AC load of 100 watts or larger is plugged in.

AC Outlets

Depending on your geographic location, your 300 Inverter will have one of the following AC outlets.

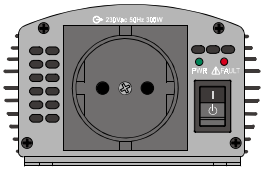

Figure 2 European AC Outlet

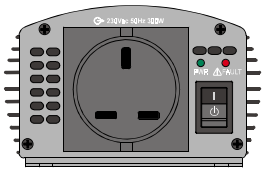

Figure 3 British AC Outlet

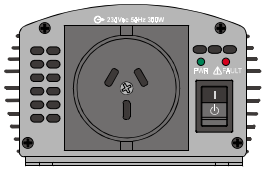

Figure 4 Australian and New Zealand AC Outlet

4 Connecting the 300 Inverter

This section explains how to connect the 300 Inverter.

Choosing a Location

For the best performance, choose a location that is:

- **Dry** Do not expose the inverter to water drip or spray.
- **Cool** Operate the inverter in ambient temperatures between 0° C and 40° C (32° F and 100° F). Keep it away from heating vents and direct sunlight.
- **Well ventilated** For proper cooling, allow at least 5 cm (2 in.) of clearance around the inverter.
- **Clean and free of dust and dirt** Choose a location that is free of any debris that could get into the inverter.
- **Protected from battery gases** Do not mount the inverter where it will be exposed to battery gases. These are very corrosive and will damage the inverter.

Fastening the Inverter to a Mounting Surface

For temporary or portable use, place the inverter on a flat surface like a table or the floor of your vehicle.

For a permanent installation, use four screws to attach the inverter's mounting flanges to an appropriate surface.

Note: Local and national electrical codes that apply to your installation may require that you permanently mount the inverter if you make permanent electrical connections and may disallow permanent mounting if you make a temporary electrical connection.

Connecting the 300 Inverter to DC Power

Caution! Risk of damage to the 300 Inverter.

The 300 Inverter must only be operated with a nominal 12 volt battery. The inverter will not operate with a lower voltage battery. A higher voltage battery will damage the inverter.

You can connect the inverter to a 12 volt DC power source using:

- The cigarette plug wire assembly (page 10)
- The battery clip wire assembly (page 11)
- A hardwired connection to the battery (page 13)

Your method will depend on the size of the AC loads you want to power. When you connect the inverter, refer to Figure 5 and Figure 6.

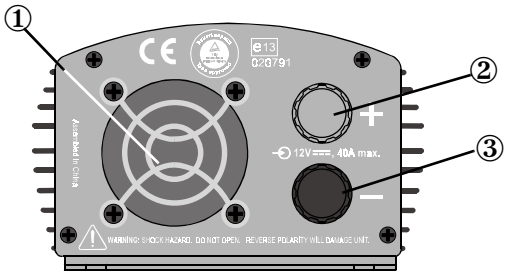

Figure 5 DC Panel on the 300 Inverter

① Fan ② Red (positive +) terminal ③ Black (negative –) terminal

Using the Cigarette Plug Wire Assembly

Caution! Fire hazard.

The wires in most 12 volt sockets or power outlets are not large enough for loads greater than 150 watts: they will overheat and present a fire hazard.

Do not use loads greater than 150 watts with the cigarette plug wire assembly.

Loads under 150 watts When you are going to power loads under 150 watts, use the cigarette plug wire assembly.

To connect the inverter:

1. Remove the nuts from the DC terminals on the inverter.
2. Place the red ring connector on the inverter's red (positive +) DC terminal, and then screw the red nut on until it is snug. Do not over tighten.
3. Place the black ring connector on the inverter's black (negative –) DC terminal, and then screw the black nut on until it is snug. Do not over tighten.

Caution! Damage to the 300 Inverter.

Reversing the positive and negative battery cables will damage the inverter and will void your warranty.

Double check the wiring connections: the red connector must be connected to the red terminal, and the black connector must be connected to the black terminal.

4. Place the lighter plug in the vehicle's cigarette lighter socket or a 12 volt outlet.

5. Turn on the inverter's On/Standby switch. The PWR light comes on, and AC power is available at the outlet.

   Note: You may need to turn the vehicle's ignition key to the accessory position.

6. Plug in the AC load you want to operate.

Using the Battery Clip Wire Assembly

Loads greater than 150 watts When you are going to power loads that are greater than 150 watts (up to 300 watts continuous power), connect the inverter to a 12 volt battery using the battery clip wire assembly.

Warning! Corrosive materials and energy hazard.

To reduce the risk of irritation and burns, wear protective eyewear and clothing when you work with batteries.

Take special care to ensure that metal tools or personal objects like rings or watches do not contact the battery terminals.

Caution! Risk of damage to the 300 Inverter.

Reversing the positive and negative battery cables will damage the inverter and void your warranty.

When you connect the inverter to the battery, double check the connections. The red wire must be connected to the red (+) terminal on the inverter and the positive (+) terminal on the battery. The black wire must be connected to the black (–) terminal on the inverter and the negative (–) terminal on the battery.

Caution! Fire hazard.

The wires in most 12 volt sockets or power outlets are not large enough for loads greater than 150 watts: they will overheat and present a fire hazard.

For loads greater than 150 watts, connect the inverter directly to the battery and use appropriately sized wires like those in the battery clip wire assembly provided with the inverter.

To connect the inverter:

1. Remove the nuts from the DC terminals on the inverter.
2. Place the red ring connector on the red (positive +) DC terminal, and then screw the red nut on until it is snug. Do not over tighten.
3. Attach the red clip to the red (positive +) battery terminal.
4. Attach the black clip to the black (negative –) battery terminal.

5. Place the black ring connector on the black (negative –) DC terminal, and then screw the black nut on until it is snug. Do not over tighten.

   Note: A spark may occur when you make this connection. This is normal.

6. Check that both clips are securely connected to the battery terminals. A loose connection will cause excessive voltage drop and may cause the cables to overheat. This could result in equipment damage or fire.
7. Turn on the On/Standby switch. The green PWR light comes on, and AC power is available at the outlet.

Hardwiring the Inverter to the Battery

Loads of any size (up to 300 watts continuous power) For a permanent electrical connection, or when you need to power some loads that are greater than 150 watts and some that are less than 150 watts, you can hardwire the inverter to the battery. This eliminates the need to switch between the battery clip wire assembly and the cigarette plug wire assembly. A hardwired installation is illustrated in Figure 6.

Warning! Shock and fire hazard.

Use a qualified installer to perform a hardwired connection.

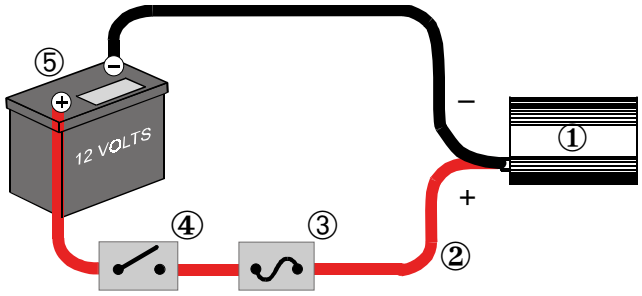

Figure 6 Hardwiring the 300 Inverter to a 12 Volt Battery

① 300 Inverter ② 3.3mm^2 (12 AWG) red wire from the positive inverter terminal to the positive battery terminal (via the fuse and the switch) ③ 40 amp automotive fuse ④ 12 volt, 40 amp disconnect switch ⑤ 12 volt battery 3.3mm^2 (12 AWG) black wire from the negative inverter terminal to the negative battery terminal

Caution! Fire hazard.

The wires in most 12 volt sockets or power outlets are not large enough for loads greater than 150 watts: they will overheat and present a fire hazard.

For loads greater than 150 watts, connect the inverter directly to the battery and use appropriately sized wires like those in the battery clip wire assembly provided with the inverter.

To hardwire the inverter to the battery:

1. Cut the clips off the cable clip wire assembly. (The

wires in this assembly are appropriate for loads over 150 watts. The wires in the cigarette plug wire assembly are too small: do not use them.)

2. Using 3.3mm^2 (12 AWG) wire or heavier, extend the power cord if you need to, to a maximum total length of 2 meters (6.5 feet) including the existing 300 Inverter power cord length. Solder all connections and make sure they are properly insulated by using electrical tape or heat shrinkable tubing.
3. Install a 40 amp automotive fuse and a switch rated at 40 amps in the positive (red) wire, close to the end that will attach to the battery. See Figure 6. The switch lets you disconnect the DC power if you need to replace the in-line fuse. Solder and insulate the connections as detailed in Step 2 above.
4. Turn off the in-line switch.
5. Solder or crimp heavy-duty terminals to the battery end of the positive and negative wires. Use terminals that mate properly with the battery terminals or battery cable clamps.

Warning! Risk of damage to the 300 Inverter.

Reversing the positive and negative battery cables will damage the inverter and will void your warranty.

Before connecting the inverter to the battery, double check the connections: the red wire must be connected to the red terminal on the inverter and the positive (+) terminal on the battery; the black wire must be connected to the black terminal on the inverter and the negative (–) terminal on the battery.

6. Remove the nuts from the DC terminals of the inverter.
7. Place the red ring connector on the red (positive +) DC terminal on the inverter, and then screw the red nut on until it is snug. Do not over tighten.
8. Fasten the positive terminal (red wire) to the positive battery post.
9. Fasten the negative terminal (black wire) to the negative battery post.
10. Place the black ring connector on the black (negative –) DC terminal on the inverter, and then screw the black nut on until it is snug. Do not over tighten.
11. Turn on the in-line switch.
12. Turn on the inverter's On/Standby switch. The PWR light comes on, and AC power is available at the outlet.

Disconnecting the Battery

- Before you disconnect the battery, turn off the AC load, and then turn off the in-line switch.

Replacing the In-Line Fuse

- If you need to replace the in-line fuse (see Figure 6), turn off the in-line switch to disconnect the DC power.

5 Operating the 300 Inverter

This section describes normal operation as well as several problems that could occur when you use the inverter. If you have a problem, see "Troubleshooting" on page 22.

Operating Statuses

- **Normal Operation** When you connect the inverter to your vehicle's 12 volt source and turn on the On/Standby switch, the green PWR light comes on, and AC power is available at the outlet.

  The inverter shuts down automatically in response to low battery voltage, high battery voltage, AC overload, overheating, or a short in the AC output.
- **Low Battery Voltage Alarm and Shutdown** As the battery discharges, its voltage decreases.

  When the inverter senses that the voltage at its DC input has dropped to 10.7 volts, it sounds an alarm. This gives you time to shut down computers or other sensitive devices. If you ignore the alarm, and the DC input drops to 10.0 volts, the inverter shuts down the AC load being operated. The PWR light stays on, the alarm stays on, and the ⚠FAULT light comes on as well. The low battery voltage shutdown feature is designed to save the battery from excessive discharge, which can prevent you from starting your vehicle, or more seriously, damage the battery.
- **Possible shutdown when the vehicle's engine is started** The 300 Inverter will operate while your vehicle's engine is running, but the normal voltage drop

that occurs when the engine starts may trigger a low voltage shutdown.

- **AC Overload Shutdown** If you connect an AC load rated higher than 300 watts or 1.3 amps or that draws excessive surge power, the 300 Inverter shuts down. The PWR light stays on, and the ⚠FAULT light comes on to indicate that the inverter is overloaded.

  Note: High startup surge requirements The power, or "wattage" rating of an AC load is the average amount of power it uses. When they are first turned on, many AC loads consume more power than their continuous power rating. TVs, monitors, and electric motors are examples of loads that have high surge requirements at start up. Although the 300 Inverter can supply momentary surge power to 600 watts, some products rated less than 300 watts can exceed its surge capabilities and trigger the AC overload shutdown feature. (See page 22 for troubleshooting procedures.)
- **High Battery Voltage Shutdown** If a defective battery charging system causes the battery voltage to rise to dangerously high levels, the inverter shuts down automatically. The PWR light stays on, and the ⚠FAULT light comes on.
- **High Temperature Shutdown** If the inverter exceeds its safe operating temperature because of insufficient ventilation or a high-temperature environment, it sounds an alarm and shuts down automatically. The PWR light stays on, and the ⚠FAULT light comes on. When the inverter has cooled sufficiently, it restarts automatically.

Interference With Electronic Equipment

Most AC products operate with the 300 Inverter as they would with household AC power with the following exceptions.

Buzzing Sound Some inexpensive stereo systems and “boom boxes” have inadequate internal power supply filtering and buzz slightly when powered by the 300 Inverter. The best solution is to have an audio system with a good quality filter.

Television Interference The 300 Inverter is shielded to minimize its interference with TV signals. If TV signals are weak, you may see the interference in the form of lines scrolling across the screen. Try one of these suggestions to minimize or eliminate the problem:

- Use an extension cord to increase the distance between the inverter and the TV, antenna, and cables.
- Adjust the orientation of the inverter, TV, antenna, and cables.
- Maximize TV signal strength by using a better antenna, and use shielded antenna cable where possible.
- Try a different TV. Different models vary considerably in their susceptibility to interference.

6 Battery Operating Time

The battery operating time of the 300 Inverter depends on the charge level of the battery, battery capacity, and the amount of power drawn by the particular AC load. With a typical vehicle battery and a 300 watt load, you can expect one or more hours of operating time.

To preserve the battery:

- Do not allow your vehicle battery to become deeply discharged. A vehicle battery (starting battery) is not designed to be deeply discharged, and repeated deep discharge/charge cycles will shorten its life.

  When you use a vehicle battery as a power source, start the vehicle every hour or two and run it until you have partially recharged the battery.
- Do not leave the 300 Inverter on for more than a week if you do not have an AC load connected to it.

  The inverter draws less than 0.2 amps with the On/Standby switch on and no load connected, but that will eventually discharge the battery.
- When the 300 Inverter is not in use, do one of the following:
  - Unplug it from the 12 volt outlet.
  - Disconnect the DC cable clips from the battery.
  - Turn off the in-line switch if the inverter is hardwired to the battery.

7 Troubleshooting

Warning! Shock Hazard.

Do not open the inverter or attempt to service it yourself. Refer all service to qualified personnel.

This section describes problems you may encounter, the symptoms of each problem, possible causes, and various remedies.

The AC load will not operate; the red ⚠FAULT light is on.

Symptom An AC load is plugged in or turned on, operates for one to ten seconds, and then shuts down.

Possible cause	Suggested remedy
The AC load is rated at more than 300 watts; an overload shutdown has occurred.	Use an AC load with a power rating less than 300 watts (1.3 amps).
The AC load is rated at less than 300 watts, but a high starting surge has caused an overload shutdown.	The AC load exceeds the inverter's surge capability. Use a load with a starting surge power within its capability.

Symptom The AC load does not operate. The ⚠FAULT light comes on when the inverter is turned on or when the AC load is turned on or plugged in. The alarm may sound.

Possible cause	Suggested remedy
The battery is discharged.	Recharge the battery.
The battery voltage is excessive.	Check the charging system.
The AC load exceeds the 150 watt rating for the lighter socket.	Connect the inverter directly to the battery. See “Using the Battery Clip Wire Assembly” on page 11 or “Hardwiring the Inverter to the Battery” on page 13.

Symptom The AC load runs for more than one minute, the alarm sounds, and the ⚠FAULT light comes on. The inverter is warm or hot to touch. The alarm may sound.

Possible cause	Suggested remedy
Poor ventilation or a high-temperature environment has caused the inverter to overheat.	Ensure that ventilation is not restricted around the inverter. The inverter will turn on again automatically when it has cooled sufficiently.

The AC load will not operate; no inverter lights are on.

Symptom The cigarette lighter works in the lighter socket, but the inverter does not.

Possible cause	Suggested remedy
The contact between the plug and the lighter socket or the 12 volt outlet is poor.	Press the plug firmly into the socket. Clean the plug or socket if necessary.
The inverter has been connected with reverse DC input polarity.	The inverter has probably been damaged. Have it repaired. Damage caused by reverse polarity is not covered by the warranty. Instructions for returning the inverter are on page 28.

Symptom The cigarette lighter does not work in the lighter socket.

Possible cause	Suggested remedy
The lighter socket or the 12 volt outlet may require that the ignition be switched on.	Turn the key to the accessory position.
The cigarette lighter fuse or the 12 volt outlet fuse is blown.	Check the vehicle fuses, and replace the blown fuse with the correct type and size.

Measured inverter output voltage is too low.

Symptom The AC voltmeter reading is 5 to 15 volts too low.

Possible cause	Suggested remedy
A standard “average-reading” AC voltmeter has been used to measure output voltage.	For accuracy, the 300 Inverter modified sine wave output needs to be measured with a “true RMS” voltmeter, like a Fluke 87 series multimeter.
The battery voltage is too low.	Recharge the battery.

Battery operating time is less than expected.

Symptom The inverter runs for a while, and then the ⚠FAULT light comes on. The inverter is cool or warm to touch.

Possible cause	Suggested remedy
The battery is old or defective.	Replace the battery.
The battery is not being charged properly.	Have a qualified technician check the vehicle’s electrical system.

8 Warranty Information

What Does This Warranty Cover? Xantrex manufactures its products from parts and components that are new or equivalent to new, in accordance with industry standard practices. This warranty covers any defects in workmanship or materials.

How Long Does The Coverage Last? This warranty lasts for two (2) years from the date of purchase. Implied warranties of merchantability and fitness for a particular purpose are limited to two (2) years from the date of purchase. Some jurisdictions do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

What Does This Warranty Not Cover? This warranty will not apply where the product 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. Xantrex does not warrant uninterrupted operations of its products. Xantrex shall not be liable for damages, whether direct, incidental, special, or consequential, or economic loss even though caused by the negligence or fault of Xantrex. Some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

What Will Xantrex Do? At its option, Xantrex will repair or replace the defective product free of charge. Xantrex will, also at its option, use new and/or reconditioned parts made by various manufacturers in performing warranty repair and

building replacement products. If Xantrex repairs or replaces a product, its warranty term is not extended. Xantrex owns all parts removed from repaired products.

Service During Warranty In order to qualify for the warranty, dated proof of purchase must be provided and the product must not be disassembled or modified without prior authorization by Xantrex. If your product requires warranty service, please return it to the place of purchase along with a copy of your dated proof of purchase. If you are unable to contact your merchant, or the merchant is unable to provide service, contact Xantrex directly:

Phone: 1-604-422-8595

Phone: 1-800-670-0707 (toll free in North America)

Fax: 1-604-420-1591

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

Email: CustomerService@xantrex.com

Returning a Product

You can return a product to the place of purchase or to Xantrex.

To Place of Purchase

If your product requires service, return it to the place of purchase along with a copy of your dated proof of purchase.

To Xantrex

If you are unable to contact your merchant, or the merchant is unable to provide service, contact Xantrex directly.

You must obtain a Return Material Authorization (RMA) number from Xantrex before returning a product directly to Xantrex. Do not return a product to Xantrex without first obtaining an RMA number. When you contact Xantrex to obtain service, be prepared to supply the serial number of your product and its date of purchase as well as information about the installation or use of the inverter.

If you are returning an inverter directly to Xantrex:

1. Obtain an RMA number and a shipping address from Xantrex. Product(s) returned without an RMA number or shipped collect, will be refused.
2. Package the inverter safely, preferably using the original packing materials. Include the RMA number, a copy of your dated proof of purchase, a return address where the repaired inverter can be shipped, a contact telephone number, and a brief description of the problem.
3. Ship the inverter to the address provided in Step 1, freight prepaid. Obtaining proof of delivery is recommended.

How Other Laws Apply: This warranty gives you specific legal rights, and you may also have other rights which vary from jurisdiction to jurisdiction.

Out-of-Warranty Service

If the warranty period for your 300 Inverter has expired, if the inverter was damaged due to 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 300 Inverter for out-of-warranty service, contact Xantrex customer service for a Return Material Authorization (RMA) number, and follow the other steps outlined in “To Xantrex” on page 27. Options for payment, 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 inverters or inverters with excessive damage, an additional fee will be charged. If applicable, you will be contacted by customer service once your inverter has been received.

9 Specifications

Specifications may change without notice.

Electrical

AC receptacles	1
AC output voltage	230 volts AC RMS ± 5%
AC output frequency	50 ± 3 Hz
AC output waveform	Modified Sine Wave
Maximum continuous AC output power	300 watts
Maximum AC output surge power	600 watts
DC input voltage range	10–15 volts DC
Battery drain with no AC load (at 12V input) and inverter switch on	0.20 amps
Efficiency (optimal)	90%
Ambient operating temperature range	0° C–40° C (32° F–105° F)
Low battery voltage alarm	10.7 volts DC
Low battery voltage shutdown	10.0 volts DC
High battery voltage shutdown	15.0 volts DC
Over-temperature shutdown	Automatic shutdown and automatic restart
Overload shutdown	Automatic shutdown and automatic restart
Internal fuse	40 amps

Physical

Dimensions (L x W x H)	200mm x 103mm x 66mm (7.9 in. x 4.1 in. x 2.6 in.)
Weight	0.79 Kg (1.74 lb.)

Regulatory

CE Mark	Low Voltage Directive EMC Directive
e Mark	Automotive EMC Directive
TUV/Type approved	Certified to EN60950