

## Introduction

Thank you for purchasing a Duracell® 12 AMP Battery Charger. The 12 AMP Battery Charger is part of a family of ultra-compact, light weight and modern power inverters and chargers from Xantrex Technology.

### About the 12 AMP Battery Charger

The 12 AMP Battery Charger (part number: 804-0012) is designed to charge 12 volt rechargeable lead-acid batteries. The 12 AMP Battery Charger regulates the three-stage charging process, ensuring the battery is always fully charged, but never overcharged.

### About This Guide

To get the best performance from your 12 AMP Battery Charger, we recommend that you read this guide before connecting and using the charger, and then save it for future reference.

#### This guide contains:

- Important safety information
- Features of the 12 AMP Battery Charger
- Three-stage charging process
- Battery charging instructions
- Troubleshooting guidelines
- Specifications
- Warranty and service information

### FCC Information to the User

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction guide, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

## Important Safety Information

**SAVE THESE INSTRUCTIONS**—this manual contains safety and operating instructions for the 12 AMP Battery Charger.

Misusing or incorrectly connecting the 12 AMP Battery Charger 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.

### WARNING

This guide contains important safety and operating instructions in how to use the 12 AMP Battery Charger to recharge 12 volt batteries. Read this guide fully for safe operation of this charger.

1. Do not expose the 12 AMP Battery Charger to moisture, rain, or snow.
2. Use of an attachment not recommended by the battery charger manufacturer 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 12 AMP Battery Charger.
4. 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 the plug on the 12 AMP Battery Charger;
  - the extension cord is properly wired and in good electrical condition; and

- wire size is No. 18 AWG (minimum) with a maximum length of 50 ft. (15.2 m).
5. Do not operate 12 AMP Battery Charger with damaged cord or plug—have the cord or plug replaced.
  6. Do not operate 12 AMP Battery Charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; contact the manufacturer for repair or replacement.
  7. Do not disassemble the 12 AMP Battery Charger. Incorrect reassembly may result in shock or fire hazard
  8. To reduce risk of electric shock, unplug 12 AMP Battery Charger from the electric outlet before attempting any maintenance or cleaning. Simply turning off controls will not reduce this risk.

### WARNING: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

1. Someone should be within range of your voice or close enough to come to your aid when you work near a lead-acid battery.
2. 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.
4. 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.
5. NEVER smoke or allow a spark or flame in the vicinity of battery or engine.
6. 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.
7. 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 short-circuit current high enough to weld a ring or the like to metal, causing a severe burn.
8. Use 12 AMP Battery Charger for charging a 12 V LEAD-ACID battery only. It is not intended to supply power to a low voltage electrical system. Do not use 12 AMP Battery Charger 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

1. 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.
2. Be sure the area around the battery is well-ventilated while the 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. Study all battery manufacturer’s specific precautions such as removing or not removing cell caps while charging and recommended rates of charge.
5. 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.
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. If the charger has a variable rate of charge, begin charge at lowest rate initially.

### Charger Location

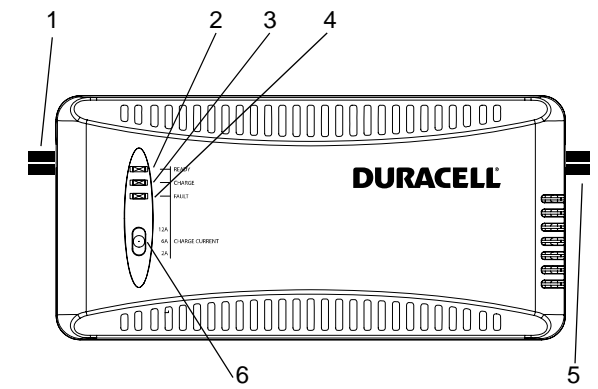
1. Place the battery charger as far away from the battery as the output DC cable permits.
2. Never place the battery charger directly above a battery being charged; gases from battery will corrode and damage the charger.
3. Never allow battery acid to drip on the charger when reading specific gravity or filling battery.
4. Do not operate the charger in an enclosed area. Do not restrict ventilation in any way.
5. Do not set a battery on top of the charger.

### DC Connection Precautions

1. Connect and disconnect the DC cable only after removing the AC cord from the electric outlet.
2. 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 12 AMP Battery Charger. It may also void your product warranty.

## Features



Feature	Description
1	<b>DC cable</b> The DC cable provides charging power to the battery being charged.
2	<b>READY light</b> Indicates that the battery is fully charged and ready for use.
3	<b>CHARGE light</b> Indicates that charging is in progress. When the battery reaches a full charge, the amber light turns off.
4	<b>REVERSE POLARITY light</b> Indicates a reverse polarity connection condition.
5	<b>AC cord</b> Connects the 12 AMP Battery Charger to a standard AC wall outlet.
6	<b>Charge rate selector</b> Provides three charge current rates that will charge different battery capacities. See the table below.

Charge Rate (A)	Battery Capacity (Ah)
2	6–20 <sup>a</sup>
6	16–60 <sup>b</sup>
12	36–120 <sup>c</sup>

a. lawn tractor, snow mobile, motorcycle battery  
b. car batteries  
c. trucks

## Three-stage Battery Charging

### Three-stage Charging Process

Multi-stage charging ensures batteries receive optimum charging, but with minimal wear and tear, regulating the voltage and current delivered to the batteries in three automatic stages.

**Bulk:** Replaces 70-80% of the battery’s state of charge at the fastest possible rate.

**Absorption:** Replenishes the remaining 20-30% of charge, bringing the battery to a full charge at a slow, safe rate.

**Float:** Voltage is reduced and held constant in order to prevent damage and keep batteries at a full charge.

### Calculating Charging Time

NOTE: The formula described below is an approximation of the charging time based on several variables.

$$\text{Charging time} = (\text{CAP} \times \text{DOD}) / (\text{CC} \times 80\%)$$

CAP is battery capacity in amp-hours.

DOD is depth of discharge as a percentage. A fully discharged battery is 100%.

CC is the charge current in amps.

80% is the typical charging efficiency for lead-acid batteries.

### Estimating Battery State-of-Charge

For batteries in vehicular engine starting applications, turn off the engine ignition switch and all lights and accessories. Wait more than 2 hours, and measure the resting voltage on the battery. If the voltage is less than approximately 12.3 V, then the battery is less than 50% state-of-charge. Most typical lead acid batteries are about 0% if the resting voltage is approximately 11.8 V, and about 100% if greater than 12.8 V.

## 12 AMP Battery Charger Operating Instructions

It is possible to use the 12 AMP Battery Charger 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.

### Follow these steps to recharge a 12 volt battery installed in the vehicle:

1. 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.

### WARNING:EXPLOSION HAZARD

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

2. Position the AC and DC cords to reduce the risk of damage by a hood, door, or moving engine part.
3. Stay clear of fan blades, belts, pulleys, and other parts that can cause injury to persons.
4. Check the polarity of the battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, –) post.
5. Determine which battery post is grounded (connected) to the chassis. If the negative post is grounded to chassis (as in most vehicles), see (6) below. If the positive post is grounded to the chassis, see (7) below.
6. 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.
7. 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.
8. Plug the 12 AMP Battery Charger AC cord into a standard AC wall outlet.

NOTE: The charger is equipped with a relay that turns the charge current on and off to the battery. It is normal to hear a clicking sound when the relay is turned on and off during charging.

9. As the battery in your vehicle charges, the green READY light turns off and the amber CHARGE light turns on.

### CAUTION:EQUIPMENT DAMAGE

If the red REVERSE POLARITY light comes on, immediately disconnect the battery clips from the battery terminals.

The unit has detected a reverse polarity on the DC connection. Check the connection.

NOTE: The battery voltage must be greater than 4 V to enable the charger to begin charging the battery.

10. When fully charged, the amber CHARGE light turns off and the green READY light turns on. The recharge time will vary based on the capacity and discharge state of your vehicle’s battery.
11. 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.

### CAUTION:EQUIPMENT DAMAGE

Do not start the vehicle’s engine while the charger is still connected to the battery. This will damage the charger and void the warranty.

### Follow these steps to recharge a 12 volt battery NOT installed in a vehicle:

### WARNING:EXPLOSION HAZARD

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

1. Check polarity of battery posts. The POSITIVE (POS, P, +) battery post usually has a larger diameter than the NEGATIVE (NEG, N, –) post.
2. Attach an insulated battery cable, at least 24-inches long, 6 gauge (AWG) to the NEGATIVE (NEG, N, –) battery post.
3. Connect the POSITIVE (RED) charge clip to the POSITIVE (POS, P, +) battery post.
4. Position yourself and the free end of the 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.

5. Plug the 12 AMP Battery Charger cord into a standard AC wall outlet.
 

NOTE: The charger is equipped with a relay that turns the charge current on and off to the battery. It is normal to hear a clicking sound when the relay is turned on and off during charging.
6. As the battery charges, the green READY light turns off and the amber CHARGE light turns on.

### CAUTION:EQUIPMENT DAMAGE

If the red REVERSE POLARITY light comes on, immediately disconnect the battery clips from the battery terminals. The unit has detected reverse polarity on the DC connection. Check the connection.

NOTE: The battery voltage must be greater than 4 V to enable the charger to begin charging the battery.

7. When fully charged, the amber CHARGE light turns off and the green READY light turns on. The recharge time will vary based on the capacity and discharge state of your battery.

- 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.

### WARNING:SHOCK AND FIRE HAZARD

A boat (marine) battery must be removed and charged on shore. To charge it on board requires equipment specially designed for marine use.

## Troubleshooting

This section will help you identify the source of most problems that can occur with the 12 AMP Battery Charger. If you have a problem with the charger, please review this section before contacting your dealer. If you are unable to solve a problem and need to contact your dealer, 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: Both the green READY and amber CHARGE lights are off when the 12 AMP Battery Charger is connected to AC power.**

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

**PROBLEM: Red REVERSE POLARITY light is on.**

Possible cause	Remedy
Reverse polarity is detected at the DC output cable.	Check cable connections.

**PROBLEM: The green READY light stays on even when batteries are not full.**

Possible cause	Remedy
The battery voltage is lower than 4 V.	Check the battery voltage with a multimeter. Recycle the battery if the battery voltage is too low.
The battery clips are not connected properly to the battery terminals.	Check the connection and re-attach the clips to the terminals.

## Recycling

If it’s rechargeable, it’s recyclable!

Xantrex recognizes its responsibility as a global citizen and is continually striving to reduce the environmental impact of the work we do and the products we create. We have taken a step forward to limit our impact on the natural environment by initiating a battery recycling program. Xantrex is a licensee of the Rechargeable Battery Recycling Corporation (“RBRC”), a non-profit public service organization dedicated to recycling used rechargeable batteries. Through RBRC’s national program and the availability of recycling depots for Pb batteries, Xantrex customers can recycle rechargeable batteries in a convenient and environmentally friendly way. If one of your Xantrex battery-integrated products has reached the end of its useful life, we urge you to dispose of the product correctly and safely. Xantrex recommends taking the following steps to recycle your product depending on battery chemistry and size.

Ni-MH, Li-ion or small Pb Batteries (up to 2 lbs. or 1 kg) If you are recycling a product that contains a Ni-MH, Li-ion or small Pb battery (up to 2 lbs. or 1 kg) then you can simply drop it off at the battery drop-box located at any one of the following major retailers.

***In Canada:*** Battery Experts, Battery Plus, Bell World, FIDO, Future Shop, The Home Depot, Home Hardware, London Drugs, Makita Factory Service Centers, Personal Edge, Revy, Sears, The Sony Store, The Source by Circuit City, TELUS Mobility and Zellers

***In the USA:*** Alltel, Batteries Plus, Black & Decker, Cingular Wireless, Circuit City, The Home Depot, Lowe’s, Milwaukee Electric Tool, Office Depot, Orchard Supply, Porter Cable Service Centers, RadioShack, Remington Product Company, Sears, Staples, Target, US Cellular and Verizon Wireless

If you are not sure of the drop-box nearest you, simply call 1-877-2-RECYCLE to find the retail collection nearest you.

Pb Batteries (larger than 2 lbs. or 1 kg)

If you need to recycle a Pb battery that is larger than 2lbs. (1kg) then you may take one of the following three steps to recycle your battery:

- dispose of your battery product 'as is' at a battery disposal location or waste disposal location nearest you.
- visit [www.xantrex.com](http://www.xantrex.com) and search for "Recycling" to find out shipping instructions and the current ship-to address of a Xantrex battery recovery depot.
- dispose of the battery inside your product, by first removing it (simple disassembly may be required) and then taking it to a Sears Automotive Facility in your area where it can be dropped off for proper recycling.

\* If you are not sure of a Sears Automotive Facility nearest you simply go to [www.Sears.com](http://www.Sears.com) and select store locator.

## Specifications

NOTE: Specifications are subject to change without notice.

DC Output Specifications	
Output charging current	variable <sup>a</sup>
Operating output range (nominal)	13.5–14.4 Vdc
Absorption voltage	14.4 Vdc
Float output voltage (no load)	13.5 Vdc
Charging type	3-stage
Charging efficiency	>70%

a.See Charge Rate (A) table under the Features section.

AC Input Specifications	
AC input range, frequency	120 Vac, 60 Hz
Typical AC input current at 120 Vac	3.5 A RMS
AC power draw (no load)	<2 W
Power factor rated load	0.60

Protection Features	
Battery reverse polarity	REVERSE POLARITY indicator light
Output current limit	
2 A selection	2.2 A
6 A selection	6.6 A
12 A selection	13.2 A

Approvals	
Product Certifications	ETL approved to CSA 22.2 No. 107.2 and UL1236 standards
Product Safety	Output short-circuit shutdown Over-temperature shutdown Output over-voltage shutdown Output under-voltage shutdown
EMC (electromagnetic compatibility)	Complies with FCC part 15B, Class B

Physical Specifications	
Dimensions (L × W × H)	8.3×3.9×2.2 in. (21×10.1×5.5 cm)
Weight	5 lb (2.2 kg)

## Warranty and Return Information

### Warranty

**What does this warranty cover and how long does it last?** This Limited Warranty is provided by Xantrex Technology Inc. ("Xantrex") and covers defects in workmanship and materials in your Duracell® 12 AMP Battery Charger. This Warranty Period lasts for 12 months from the date of purchase at the point of sale to you, the original end user customer, unless otherwise agreed in writing. You will be required to demonstrate proof of purchase to make warranty claims.

This Limited Warranty is transferable to subsequent owners but only for the unexpired portion of the Warranty Period. Subsequent owners also require original proof of purchase as described in "What proof of purchase is required?" **What will Xantrex do?** During the Warranty Period Xantrex will, at its option, repair the product (if economically feasible) 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, Hawaii and outside of the United States and Canada are excluded. Contact Xantrex Customer Service for details on freight policy for return shipments from excluded areas.

**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:

Phone:	1 408 987 6359
Web:	<a href="http://www.xantrex.com/support">www.xantrex.com/support</a>

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?** Claims are limited to repair and replacement, or if in Xantrex's discretion that is not possible, reimbursement up to the purchase price paid for the product. Xantrex will be liable to you only for direct damages suffered by you and only up to a maximum amount equal to the purchase price of the product.

This Limited Warranty does not warrant uninterrupted or error-free operation of the product or 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 but not limited to 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;
- component parts or monitoring systems supplied by you or purchased by Xantrex at your direction for incorporation into the product;
- the product if its original identification (trade-mark, serial number) markings have been defaced, altered, or removed;
- the product if it is located outside of the country where it was purchased; and
- any consequential losses that are attributable to the product losing power whether by product malfunction, installation error or misuse.

### 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. IN NO EVENT WILL XANTREX BE LIABLE FOR: (a)ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS, LOST REVENUES, FAILURE TO REALIZE EXPECTED SAVINGS, OR OTHER COMMERCIAL OR ECONOMIC LOSSES OF ANY KIND, EVEN IF XANTREX HAS BEEN ADVISED, OR HAD REASON TO KNOW, OF THE POSSIBILITY OF SUCH DAMAGE, (b) ANY LIABILITY ARISING IN TORT, WHETHER OR NOT ARISING OUT OF XANTREX'S NEGLIGENCE, AND ALL LOSSES OR DAMAGES TO ANY PROPERTY OR FOR ANY PERSONAL INJURY OR ECONOMIC LOSS OR DAMAGE CAUSED BY THE CONNECTION OF A PRODUCT TO ANY OTHER DEVICE OR SYSTEM, AND (c), 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, provinces and jurisdictions 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, province to province or jurisdiction to jurisdiction.

### Return Material Authorization Policy

For those products that are not being repaired in the field and are being returned to Xantrex, 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

Record these details on "Information About Your System" section below.

### 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.

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 and that the ASC repairs this particular Xantrex product.

### Out of Warranty Service

If the warranty period for your product 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 unit may be serviced or replaced for a flat fee.

To return your product 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" section above. 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.

### Information About Your System

As soon as you open your Duracell® 12 AMP Battery Charger package, record the following information and be sure to keep your proof of purchase.

Serial Number	_____
Product Number	804-0012
Purchased From	_____
Purchase Date	_____

If you need to contact Customer Service, please record the following details before calling. This information will help our representatives give you better service.

Type of installation (e.g. RV, truck)	_____
Length of time charger has been installed	_____
Battery/battery bank size	_____
Battery type (e.g. flooded, sealed gel cell, AGM)	_____
DC wiring size and length	_____
Alarm sounding?	_____
Description of indicators on front panel	_____
Appliances operating when problem occurred	_____
Description of problem	_____
	_____
	_____