



XPower Powerpack Sound 400

Owner's Guide

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Date and Revision

March 2007 Revision B

Part Number

975-0315-01-01

Product Number

852-2070

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About This Guide

Purpose

The purpose of this Owner's Guide is to provide explanations and procedures for installing, operating, maintaining, and troubleshooting the XPower Powerpack Sound 400.

Conventions Used

The following conventions are used in this guide.



WARNING

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



CAUTION

Cautions identify conditions or practices that could result in damage to the product or to other equipment.

Important: These notes describe an important action item or an item that you must pay attention to.

Related Information

You can find more information about Xantrex Technology Inc. as well as its products and services at **www.xantrex.com**.

Important Safety Instructions

The XPower Powerpack Sound 400 generates a type of AC power similar to a normal household wall outlet. Operating the Powerpack Sound 400 incorrectly or misusing it may damage the equipment or create hazardous conditions for the user.

Important: Before using your XPower Powerpack Sound 400, be sure to read these safety instructions and the operational procedures in the manual. Retain this manual for future reference.

Warnings and Cautions



WARNING: Limitations on Use

The XPower Powerpack Sound 400 is not intended for use in connection with life support systems or other medical equipment or devices.



WARNING: Shock hazard. Keep away from children.

The Powerpack Sound 400 generates the same potentially lethal AC power as a normal household wall outlet. Do not insert foreign objects into the AC sockets, the DC power socket, USB port, speaker grills, or the ventilation holes. Do not expose this product to water, rain, snow, or spray.

Do not open or disassemble the Powerpack Sound 400.



WARNING: Explosion hazard

Do not use this product where there are flammable fumes or gases, such as in the bilge of a gasoline- powered boat, or near propane tanks. Do not use this product in an enclosure containing automotive-type lead acid batteries. These batteries, unlike the sealed AGM battery in Powerpack Sound 400, vent explosive hydrogen gas which can be ignited by sparks caused when making electrical connections.

When working on electrical equipment, always ensure someone is nearby to help you in an emergency.



WARNING: Heated surface

Ensure at least 2" (5 cm) air space is maintained on all sides of the Powerpack Sound 400. During operation, keep away from materials that may be affected by high temperatures such as blankets, pillows and sleeping bags.



CAUTION

Do not connect any AC appliance with the neutral conductor connected to ground to the Powerpack Sound 400 including AC residential electrical distribution panels.



CAUTION

Do not expose the Powerpack Sound 400 to ambient temperatures over 104 °F (40 °C).

Precautions for Using Rechargeable Appliances



CAUTION

The output of the inverter is non-sinusoidal.

Most rechargeable battery-operated equipment uses a separate charger or transformer that is plugged into an AC receptacle and produces a low voltage charging output.

Some chargers for rechargeable batteries can be damaged if connected to the XPower Powerpack Sound 400.

Do not use the following with the XPower Powerpack Sound 400:

- Small battery-operated appliances like flashlights, razors, and night lights that can be plugged directly into an AC receptacle to recharge.
- Some chargers for battery packs used in hand power tools. These affected chargers display a warning label stating that dangerous voltages are present at the battery terminals.

Important: If you are unsure about using your rechargeable appliance with the Powerpack Sound 400, contact the equipment manufacturer to determine the rechargeable appliance's compatibility with the modified sine wave (non-sinusoidal) AC waveform.

First Aid

The internal battery is a sealed, lead-acid type battery. It is not designed to be user replaceable. However, if a leak is detected, stop operating and handling the Powerpack Sound 400 immediately.

IF BATTERY ACID CONTACTS EYES:

1. Immediately flush with cold running water for at least 15 minutes.
2. Then seek prompt medical attention.

IF BATTERY ACID CONTACTS SKIN:

1. Wash thoroughly with soap and water.
2. If skin irritation persists, obtain medical attention immediately.

Note: Baking soda neutralizes lead-acid battery electrolyte.

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1

Introduction

About the Powerpack Sound 400

Easy-to-use and designed for years of reliable service, the Powerpack Sound 400 is a portable media center with an iPod™ and MP3 player playback zone which enables you to play music from your personal media device on full-sized stereo speakers with a subwoofer. It can also run many AC appliances and 12-volt DC appliances, in addition to a USB charging port.

Powerpack Sound 400:

- Powers 115-volt AC appliances up to 320 W continuous power and 400 W peak power
- Powers 12-volt DC appliances
- Charges small devices via a USB port
- Amplifies sound from audio players on stereo speakers
- Provides lighting for emergency use

Comprehensive Protection

Automatic Overload

The Powerpack Sound 400 has built-in protection against output overload. If you connect an appliance that draws more than 400 Wac from the AC Socket(s), or one which draws excessive surge power up to 600 W, the power to the AC Sockets automatically shut off. The unit will reset automatically after the loads are removed and the unit cools down.

The DC Socket is protected by a thermal switch. If an overload condition ($> 144\text{ W}$) occurs while using the DC Socket, the excessive temperature will cause the switch to open and shut down the power to the socket.

Overheating

The Powerpack Sound 400 is protected from overheating. If the inverter exceeds a safe temperature, power to the unit automatically shuts off. It will reset automatically after the unit cools down.

Low Battery Protection

Low battery protection protects the internal battery from excessive discharge and possible damage. An audible alarm alerts you when the internal battery is nearly discharged at 11.0 Vdc and the unit turns off at 10.5 Vdc .

2 Features

Chapter 2 describes the main features of the Powerpack Sound 400. We recommend that you familiarize yourself with these features before operating the unit.

Contents

Your Powerpack Sound 400 package includes the items shown in Figure 2-1.

If any of these materials are missing or are unsatisfactory in any way, please contact Customer Service, see “Warranty and Return Information” on page 47.

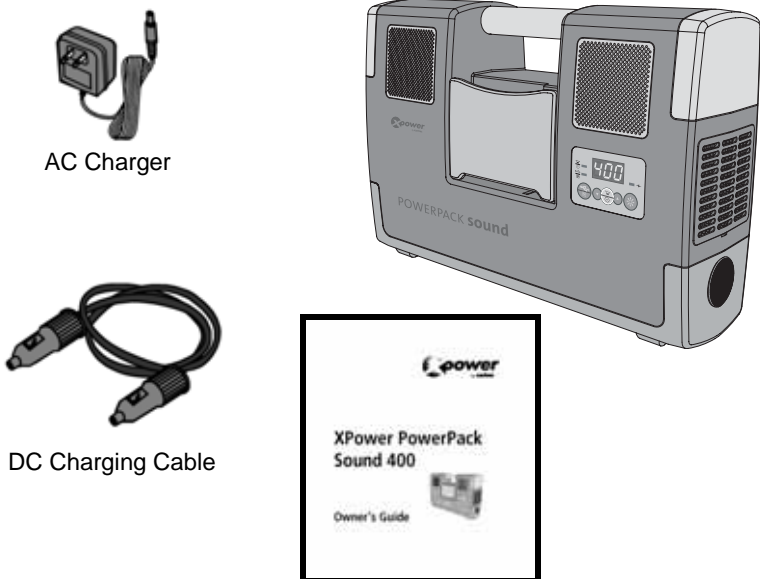


Figure 2-1 Package Contents

Powerpack Sound 400 Features

Front Panel

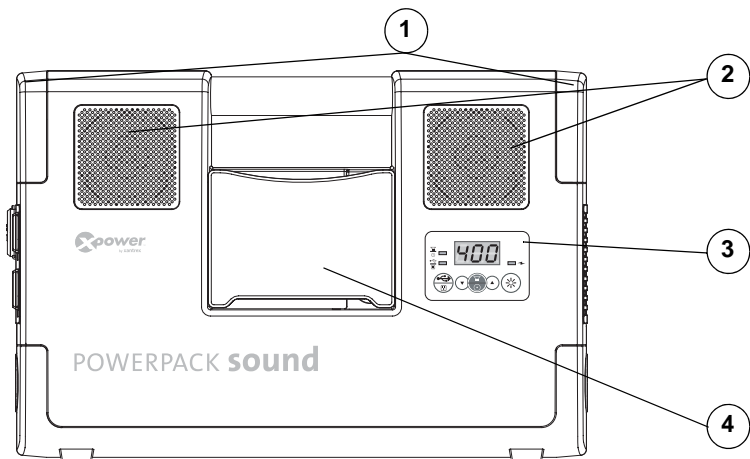


Figure 2-2 Front Panel

Feature	Description
1	Hi-bright LED Lamp (located on each side) Provides ambient light to surrounding area. The button switch is located on the control panel.
2	Full Range Stereo Speakers Provides left and right channel audio sound in conjunction with a subwoofer system located inside the unit.
3	Control Panel and Digital Display see Figure 2-3 on page 5 for more details.
4	Audio Input Port Compartment Contains the USB port and the audio input plug with integral cable for connection with audio devices including iPod™ units and other MP3 players.
Not shown	Audible Alarm (inside the unit) sounds in the event of an overload, over-temperature, or a low battery condition.

Control Panel and Display

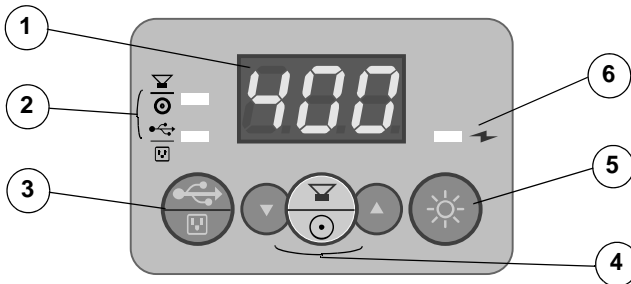


Figure 2-3 Control Panel and Display

Feature	Description
1	<p>The Digital Display flashes intermittently:</p> <ul style="list-style-type: none"> • -P-, then Output power in W (0 to 400) and • -C-, then Battery charge capacity status in % (40 to 100), or • -C-, then Battery charge capacity status as L0, if % is below 40 <p>for 30 seconds before turning off to conserve power.</p> <p>Note: The symbol Ex flashes when the unit alarms and encounters an error. “x” is a numeric error code. See Table 5-2, “Display Error Codes” on page 42.</p>
2	<p>LED Indicator Lights come on when:</p> <ul style="list-style-type: none"> • the DC socket and audio amplifier are turned on and • the AC sockets and USB port are turned on.
3	<p>Press and hold the AC/USB Button for one second to activate the AC sockets and the USB port. Press and hold again to turn power off.</p>
4	<p>Press and hold the DC/Audio Button for one second to activate the DC socket and the audio amplifier. Press and hold again to turn power off.</p> <p>Volume (-/+) Controls adjust the sound level.</p>

Powerpack Sound 400 Features

Feature	Description
5	Press and hold the Lamp Button for one second to turn the hi-bright lamps on. Press and hold again to turn power off.
6	<p>The Charging Status indicator light blinks when charging using the AC Charger. The light stays on when the battery reaches its full charge.</p> <p>Note: Does not work with the DC socket and solar panel.</p>
<p>Note: Pressing any of the buttons abruptly while the Powerpack Sound 400 is turned on will display battery level and output power information for 30 seconds.</p>	

Power Socket Side Panel

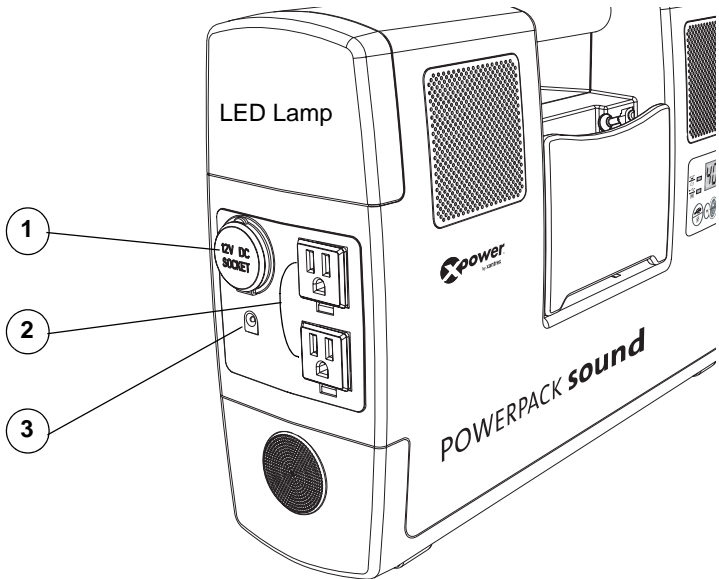


Figure 2-4 Power Sockets

Feature	Description
①	<p>DC Input/Output Power Socket (DC Socket):</p> <ul style="list-style-type: none"> Power 12-volt DC auto, RV, or marine appliances (output). Recharge Powerpack Sound 400 from a 12 V outlet in a vehicle using the DC Charging Cable (input). <p>Note: The DC socket is activated by pressing and holding the DC/Audio button for one second on the control panel.</p>
②	<p>There are two AC Sockets which provide up to 320 W of continuous power and up to 400 W peak power to various household appliances. The two sockets accept standard North American three-prong electrical plugs.</p> <p>Note: The AC sockets are activated by pressing and holding the AC button for one second on the control panel.</p>
③	<p>AC Charging Port allows the unit to be charged using an AC Charger (supplied).</p>

Audio Compartment

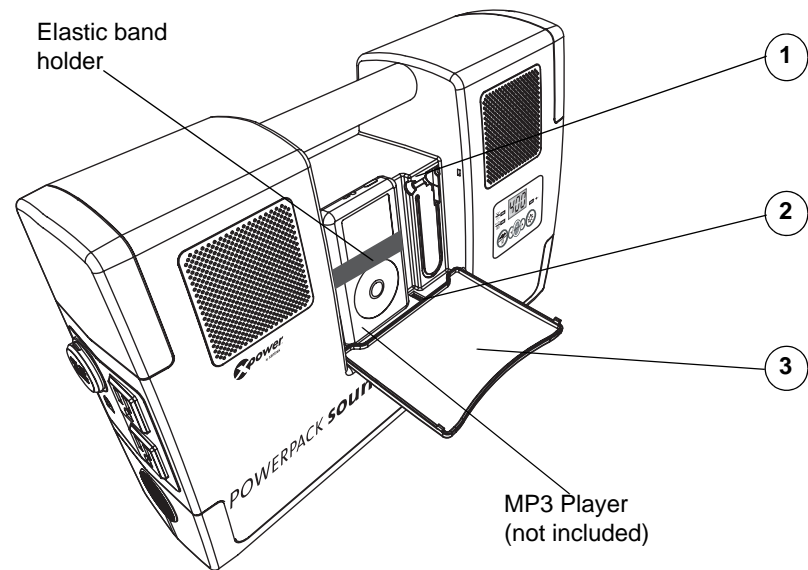


Figure 2-5 Audio Compartment

Feature	Description
1	<p>The Audio Input Plug is a standard 3.5mm stereo plug that attaches to popular MP3 players including the iPod™.</p> <p>Note: Other audio devices can be connected such as tape players, voice recorder/player, CD, and MD (mini-disc) players.</p>
2	<p>The USB Port enables certain MP3 players to be charged or powered while connected to the audio amplifier. Some hand-held PDAs, cellphones, digital cameras, and camcorders may be charged using this port. However, consult the owner's manual or the manufacturer of your device before plugging it to the USB port.</p> <p>Note: Special USB power cables and adapters are required. These cables are not sold by Xantrex. Consult the owner's manual or the manufacturer of your device before plugging it to the USB port.</p>
3	<p>Audio Compartment Cover conceals and protects the audio input plug and the USB port while not in use.</p>

Backside Panel

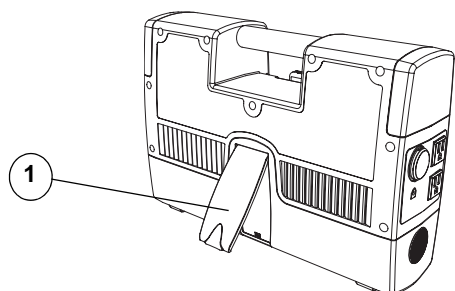


Figure 2-6 Backside Panel

Feature	Description
①	Back Stand provides support to the unit when slightly tilted upward to redirect sound from the front speakers.

Accessories



Figure 2-7 Accessories

Feature	Description
①	AC Charger (part # 074-1004-01) attaches to the Powerpack Sound 400 via the AC charger socket and lets you recharge from a household AC outlet.
②	DC Charging Cable (part # 449-0187-01-01) lets you recharge the Powerpack Sound 400 from a 12-volt system in a car, SUV, RV, or a boat. One of the plugs of the charging cable is equipped with a single and replaceable 8-amp, 32-volt, time-delayed fuse. Note: Press the DC/Audio button to turn on the DC socket to enable recharging the battery from a vehicle or another DC source.

3

Operation

Chapter 3 explains how to operate the Powerpack Sound 400 efficiently. This chapter covers:

- Choosing a Location (page 12)
- Recharging the Powerpack Sound 400 (page 13)
- Interpreting Display Codes (page 21)
- Operating AC appliances (page 24)
- Operating 12-volt DC appliances (page 27)
- Operating USB Devices (page 29)
- Using the Audio Amplifier (page 31)
- Using the LED Lamp (page 32)
- Using the Back Stand (page 33)

Operating Conditions and Guidelines



CAUTION

Read all safety instructions and the operational procedures in the manual before operating the Powerpack Sound 400. Retain this manual for future reference.



CAUTION

The Powerpack Sound 400 is not intended for use as a UPS (Uninterruptible Power Supply).



WARNING: Limitations on Use

The XPower Powerpack Sound 400 is not intended for use in connection with life support systems or other medical equipment or devices.

Choosing a Location



WARNING: Fire or explosion

The Powerpack Sound 400 contains components that tend to produce arcs or sparks. To prevent fire or explosion, do not operate the Powerpack Sound 400 in compartments containing other exposed batteries, flammable materials, or in locations that require ignition-protected equipment.

The Powerpack Sound 400 should be operated only in locations that meet the following requirements.

Dry	Do not allow water or other liquids to drop or splash on the Powerpack Sound 400.
Cool	Ambient air temperature should be between 32 and 104°F (0 and 40°C) — the cooler the better within this range.
Ventilated	Leave at least 2" (5 cm) clearance around the Powerpack Sound 400 for air flow. Ensure that the ventilation openings are not obstructed.
Safe	Do not operate the unit in the same compartment with other exposed batteries or in any compartment capable of storing flammable liquids like gasoline.
Protected from battery gases	Do not operate the unit where it will be exposed to battery gases. These gases are very corrosive and prolonged exposure will damage the Powerpack Sound 400.

Recharging the Powerpack Sound 400 Battery

Important: Charge Before Use.

Charge the Powerpack Sound 400 for at least 48 hours immediately after purchase. Recharge after each use.

When storing for long periods of time, it is recommended to charge it once every month or at least once every three months. You can also store it with AC power supplied to the unit.

Failure to follow these instructions will void the product warranty.

You can recharge the battery by using:

- the AC Charger (supplied) plugged into a standard 120 Vac household outlet,
- the DC Charging Cable (supplied) to recharge from your vehicle or a generator equipped with a regulated 12-volt battery charging outlet, or
- a 12-volt DC, 1A (or 12 W) solar panel (additional hardware not sold by Xantrex is required for this method). See page 19 for details.



CAUTION

Do not attempt to charge the Powerpack Sound 400 battery if it is frozen. Gradually warm the frozen battery to 32 °F (0 °C) before charging.



CAUTION

Do not operate AC or DC appliances while the Powerpack Sound 400 is being charged. Doing so may damage the charging components of the product and void the warranty.

Charging with the AC Charger

Using the AC Charger is the simplest method for recharging the battery. While charging from an AC source, the Charging Status LED indicator light on the Control Panel will flash intermittently. The indicator light will stay on when the battery has reached capacity.

Charging when the battery is fully discharged takes around 12 to 15 hours. If the wall outlet voltage is less than 120 Vac, it may take more than 20 hours to fully recharge the PowerPack Sound 400.

Note: After taking the unit out of the box and before using it for the first time, charge it for 48 hours to maximize battery life.

Powerpack Sound 400 AC Charging Feature

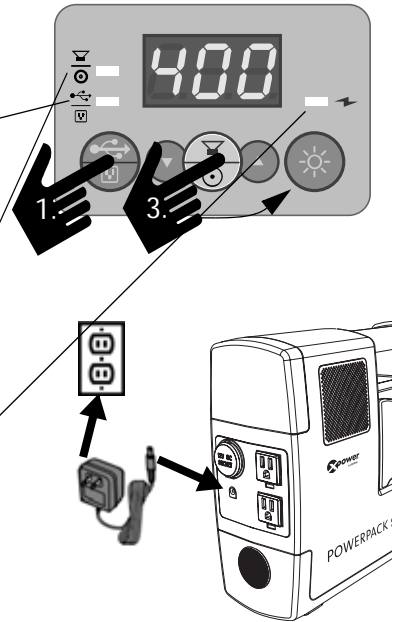
The Powerpack Sound 400 AC charging port has a regulated internal switch that monitors charging to prevent the battery from being overcharged. Once the battery reaches 100% charge level, the switch disconnects the charging source from the unit. The unit goes into a maintenance charge mode and allows the unit to remain connected to the AC Charging source until it's needed to power loads.

Important: Whenever possible, store the Powerpack Sound 400 with AC power supplied to the unit.

When storing without AC power available, charge it once every month or at least once every three months.

Failure to do so may damage the battery, render the unit inoperable, and void the product warranty.

1. Press and hold the AC/USB button for one second to turn off the AC sockets.
2. Check that the indicator light is off.
3. Press and hold the DC/Audio and Lamp buttons for one second to turn the DC socket, amplifier, and the Lamp off.
4. Check that the indicator light is off.
5. Insert the AC Charger plug into the AC charging port.
6. Insert the AC Charger into a household 120 Vac outlet.
7. Check the Charging Status indicator light.



Note: A flashing light indicates that the unit is charging the battery. A solid light indicates that the battery is fully charged and on stand-by.

Figure 3-1 Charging with AC Power

Note: The Battery Charge (%) reading on the digital display is only accurate after the PowerPack Sound 400 has been disconnected from all appliances and all charging sources for 15 minutes.

Charging with the DC-to-DC Accessory Cable



WARNING: Fire and explosion hazard

Do not use this recharging method if your vehicle has abnormally high voltage electrical systems that operate above 15 Vdc. This may lead to accumulations of hydrogen, causing exposure to fire and explosion hazard. This is typically found in marine applications or on portable generators with DC output.

Important: Although the charge regulation circuitry for the AC charging method does not operate with the DC-to-DC charging method, most vehicle voltage regulators will ensure that the PowerPack Sound 400 is not overcharged.

The Powerpack Sound 400 comes with a DC Charging cable to allow the unit to be charged from a DC source such as an automobile, RV, or boat. The labeled and fused plug of the charging cable is equipped with a single and replaceable 8-amp, 32-volt, time-delayed fuse.

The vehicle to be used for charging must have a 12 Vdc power (or accessory) socket and must be running in order to charge the unit.

The DC input/output power socket (DC socket) is found on the side of the unit. Press and hold the DC/Audio button for one second to activate the DC socket.



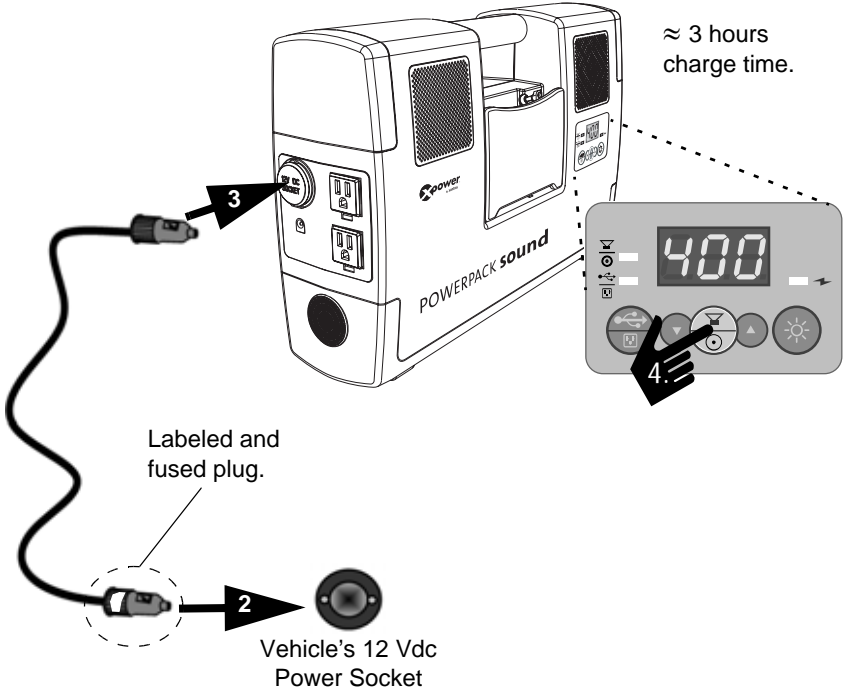
CAUTION

Do not leave the Powerpack Sound 400 permanently connected to the vehicle's 12 V DC power socket. Disconnect the unit from the DC power socket when the vehicle's engine is turned off.

Note: The **Charging Status** indicator light will neither blink nor stay on when the Powerpack Sound 400 is recharged through the DC Charging Cable.

The **Battery Charge (%)** reading on the digital display is only accurate after the Powerpack Sound 400 has been disconnected from all appliances and all charging sources for 15 minutes.

1. Open the plastic cover that protects the DC Socket.
2. Insert the labeled plug of the DC charging cable into the 12 Vdc power socket in the vehicle.



3. Insert the other plug of the DC charging cable into the DC socket on the side of the Powerpack Sound 400.

Note: The vehicle's 12 Vdc power socket must also be on. You have to start the engine and let it run to avoid draining the vehicle's battery.

4. Press and hold the DC/Audio button for one second to activate the DC socket of the unit. This enables charging.
5. Disconnect the DC charging cable from both the unit and the vehicle when the vehicle is not running to avoid draining the vehicle's battery.

Figure 3-2 Charging with DC Power

Recharging with a Generator's Regulated 12 Vdc Outlet



WARNING: Fire and explosion hazard

The generator output must be intended for battery charging and have an output of 15 volts or less. An unregulated output or one that exceeds 15 Vdc can damage the battery.

This may lead to accumulations of hydrogen, causing exposure to fire and explosion hazard.

Refer to the Owner's Guide accompanying your generator for detailed instructions on connecting the generator to a unit like the Powerpack Sound 400.

You can recharge the battery of the Powerpack Sound 400 using a generator in several ways:

- Using the AC Charger to recharge the Powerpack Sound 400 from a generator is possible, but would require extended generator running time.
- Using a generator which has an auxiliary regulated DC output designed for charging 12-volt batteries. Most generators are equipped with them. Use this power source for faster charging.

Most of the Powerpack Sound 400's battery capacity will be recharged in a few hours.

Note: The **Battery Charge (%)** reading on the digital display is only accurate after the Powerpack Sound 400 has been disconnected from all appliances and all charging sources for 15 minutes.

Recharging From a Solar Panel

Small, unregulated 12-volt solar panels can be used to charge the Powerpack Sound 400 through the AC Charger input socket on the side of the unit. The solar panels must be rated to produce a maximum of 1 A (or 12 W).



CAUTION: Battery Damage

Using a solar panel with a rating of more than the maximum may damage the battery and void the warranty.

Some panels may already come with the appropriate hardware. If not, you will need to purchase a connector to mate with the AC Charger input socket.

Standard barrel type DC Coaxial Connector

Size: 2.5mm ID x 5.5mm OD (0.10" x 0.217")

To connect the solar panel to the DC Coaxial Connector:

1. Connect the solar panel's red positive (+) wire to the coaxial plug's inner contact.
2. Connect the solar panel's black negative (–) wire to the plug's outer contact.

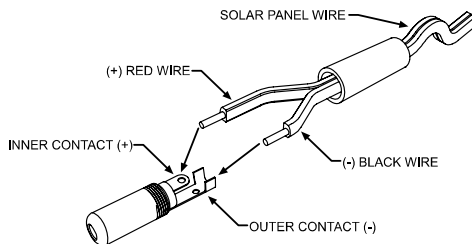


Figure 3-3 Typical DC Coaxial Connector Connection

To recharge with a solar panel:

1. Connect the solar panel to the AC charging port on the side of the unit.
2. Place the solar panel in direct sunlight.

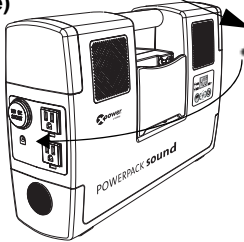
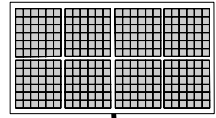
It takes about 20 hours in direct sunlight to recharge the Powerpack Sound 400 from a 1 A solar panel.

Additional Hardware Required*:

(*Might come with PV array. Does not come with Powerpack Sound 400.)

**Standard 2.5mm x 5.5mm
(0.10" x 0.217")
DC Coaxial Connector
(barrel type)**

≈ 10 hours
charge time.



12-volt Solar Panel
(Unregulated)
1 A or 12 W
Maximum

Figure 3-4 Charging with a Solar Panel

Charging via the DC Socket

If you plan to charge the Powerpack Sound 400 with power from solar panels via the DC socket, the solar panel must be regulated.

Solar panels can rest at up to 18 Vdc with full sunlight even when batteries are full. This will cause damage to the battery. This kind of damage is not covered under the warranty.

Interpreting Display Codes

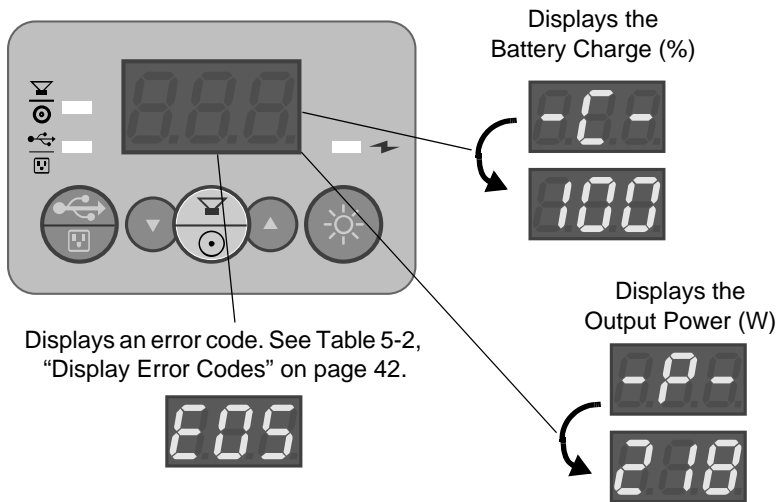


Figure 3-5 Different Display Codes

Checking Battery and AC Status

When the AC/USB button is initially turned on, the digital display window flashes the different states of the battery charge and AC output power. The display automatically shuts off after 30 seconds to conserve energy from the internal battery.

While in use, pressing any of the buttons abruptly will also momentarily flash the different states of the battery charge and AC output power for 30 seconds.

Note: The Digital Display shows battery level and output power information. It flashes for 30 seconds before turning off automatically. It shows:

- the symbol **-P-** before displaying the inverter's Output Power in W (**0** to **400** W) and
- the symbol **-C-** before displaying the Battery Charge capacity status in % (**40** to **100**) or **Lo** when capacity is below 40%.

Error codes are displayed as the error occurs. See Table 5-2, "Display Error Codes" on page 42

How to...	Required Condition	Required Action	Note
Monitor total AC power consumed by appliances connected to the AC sockets.	Inverter's AC sockets are turned ON; AC charger is unplugged from the household AC outlet.	Press any of the control panel buttons abruptly.	The display window flashes battery capacity and power status.
Check Battery capacity status when: - AC is OFF - DC is OFF - Lamp is OFF	The AC charger must be unplugged from the Powerpack Sound 400. Wait 15 minutes or more before proceeding to the required action.	Press and hold for one second either the AC/USB or DC/Audio buttons.	The display window flashes battery capacity and power status.
Check Battery capacity status when: - either AC or DC is ON - Lamp is either ON or OFF	All appliances must be disconnected from the AC and DC power outlets; The AC charger must be unplugged from the Powerpack Sound 400's.	Press any of the control panel buttons abruptly.	The display window flashes battery capacity and power status. Battery Capacity reading is for reference use only. For accurate Battery Capacity reading, allow 15 minutes between charging/use and battery capacity check.

How to...	Required Condition	Required Action	Note
Monitor Battery Charging status	<p>Inverter's AC, DC sockets and USB port are turned OFF;</p> <p>The LED lamp must be turned OFF;</p> <p>All appliances must be disconnected from the AC and DC power outlets;</p> <p>The AC charger must be plugged into the Powerpack Sound 400's AC charging port and also into a household AC outlet.</p>	<p>No action required.</p> <p>A flashing green Charging Status light indicates that AC charger is currently charging the battery.</p> <p>A steady green Charging Status light indicates that the Powerpack Sound 400's battery is fully charged and is ready for use.</p>	<p>Recharging with the supplied AC charger is a true "plug-in-and-forget" charging method.</p> <p>We recommend leaving the AC charger connected when the Powerpack Sound 400 is not in use to permanently maintain the battery in fully charged condition.</p>

AC Appliances

The Powerpack Sound 400 has two AC sockets for use with AC appliances. You can either plug the appliance directly into the AC socket on the Powerpack Sound 400 or you can use an AC power bar to increase the number of outlets available. However, the combined loads cannot exceed 320 W (2.66 A). The less power an appliance uses, the longer the Powerpack Sound 400 will operate before recharging is required.

Some appliances may be difficult or impossible to operate from the Powerpack Sound 400. They may have high surge requirements or may not be compatible with the modified sine wave output of the Powerpack Sound 400. See “High Surge Appliances” on page 26 and “Trouble Appliances” on page 26.

Important: *Know the size of the loads.*

320 watts AC Continuous Load

Amps x Volts = Watts

2.66 amps AC x 120 volts AC = 320 watts AC

Typical AC appliances that can be used on the Powerpack Sound 400 are listed in Table 3-1.

Table 3-1 Typical AC Appliances and Run Times

AC Appliance	Watts ^a	Hours ^b
Cordless telephone (stand by)	5	13.45
Home security system	5	13.45
Fluorescent work light	14	5.5
Fireplace fan	20	3.8
Laptop computer	25	3
Table lamp	40	1.48
Color TV – 13"	45	1.33
3/8" drill	190	17 minutes

a. Represents actual power consumption as measured on sample appliances.

b. Operating times assume a fully charged 10 Ah battery and may vary based on model/brand of appliance.

Operating AC Appliances

1. Press and hold the AC/USB button for one second to activate the AC sockets.
2. Check the state-of-charge to ensure the battery is fully charged.
3. Open the AC socket cover.
4. Plug the appliance into one of the AC sockets and turn the appliance on.
5. Unplug or turn off the appliance when not in use to conserve energy.
6. Press and hold the AC/USB button again to deactivate the AC sockets.

Note: Recharge the Powerpack as soon as battery level dips below normal.

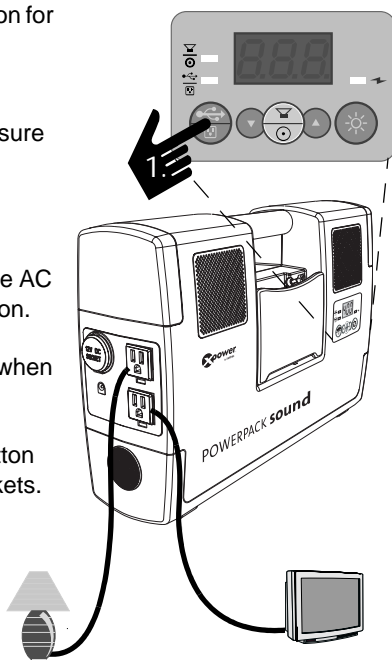


Figure 3-6 Operating AC Appliances

Low-Battery Alarm

While in use, when the battery reaches 11 Vdc, the Low-Battery Alarm will sound and display an error code indicating that battery is low and the unit is about to be shutdown to prevent battery damage.

When the battery reaches 10.5 Vdc, the unit will automatically disconnect power to the AC sockets.

If the alarm sounds, disconnect any loads that may be in use and recharge the unit as soon as possible.

Overload Protection

In the event of an overload ($> 400\text{ W}$) or overheating, the Powerpack Sound 400 automatically sounds an alarm, displays an error code, and shuts down.

When this happens, remove the load immediately. The unit resets automatically after a few seconds.

High Surge Appliances

The wattage rating of AC appliances is the average power used by the appliance. Appliances such as televisions, computer monitors and appliances with motors consume much more power than their average rating when they are first switched on.

Although Powerpack Sound 400 can supply momentary surge power up to 600 W , some appliances may exceed the capabilities of the Powerpack Sound 400 and trigger the inverter's safety overload shutdown circuit.

Important: Do not use sump pumps, coffee makers, hair dryers, flat irons, or electric grills with the Powerpack Sound 400.

Trouble Appliances



CAUTION

The output of the Powerpack Sound 400 inverter is non-sinusoidal. Some equipment may be damaged by the inverter's modified sine wave (non-sinusoidal) output.

Some appliances, including the types listed below, may be damaged if they are connected to the inverter:

- Electronics that modulate RF (radio frequency) signals on the AC line will not work and may be damaged.

- Speed controllers found in some fans, power tools, kitchen appliances, and other loads may be damaged.
- Some chargers for small rechargeable batteries can be damaged. See “Precautions for Using Rechargeable Appliances” on page v for details.
- Metal halide arc (HMI Metallogen®) lamps can be damaged.

Note: If you are unsure about powering any device with the inverter, contact the manufacturer of the device.

12 Vdc Appliances

The Powerpack Sound 400 can operate one 12 Vdc auto, RV, marine, or other portable appliance that draws 12 A or less from a 12 Vdc power outlet or from a vehicle’s 12 Vdc accessory socket. The fewer watts a 12 Vdc appliance draws, the longer the Powerpack Sound 400 will operate before recharging is required.

Important: *Know the size of the loads.*

$$\begin{aligned} &144 \text{ watts DC Maximum Load} \\ &\text{Amps} \times \text{Volts} = \text{Watts} \\ &12 \text{ amps DC} \times 12 \text{ volts DC} = 144 \text{ watts DC} \end{aligned}$$

Typical 12 Vdc appliances that can be used on the Powerpack Sound 400 are listed in Table 3-2.

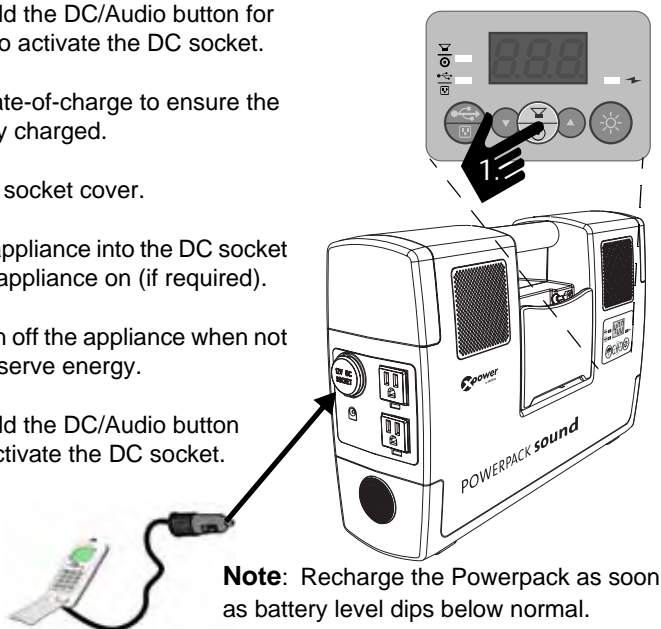
Table 3-2 Typical 12 V DC Appliances and Run Times

12 Vdc Appliance	Amps (A)	Hours ^a
LED light (built into the unit)	120 mA	45
Cellular telephone	0.5	15
Portable Cooler	5	1.8

a. Operating times assume a fully charged 10 Ah battery and may vary based on model or brand of appliance.

Operating DC Appliances

1. Press and hold the DC/Audio button for one second to activate the DC socket.
2. Check the state-of-charge to ensure the battery is fully charged.
3. Open the DC socket cover.
4. Plug the DC appliance into the DC socket and turn the appliance on (if required).
5. Unplug or turn off the appliance when not in use to conserve energy.
6. Press and hold the DC/Audio button again to deactivate the DC socket.



Note: Recharge the Powerpack as soon as battery level dips below normal.

Figure 3-7 Operating DC Appliances

Low-Battery Alarm

While in use, when the battery reaches 11 Vdc, the Low-Battery Alarm will sound and display an error code indicating that battery is low and the unit is about to be shutdown to prevent battery damage.

When the battery reaches 10.5 Vdc, the unit will automatically disconnect power to the DC socket.

If the alarm sounds, disconnect any loads that may be in use and recharge the unit as soon as possible.

Overload Protection

The internal thermal protector will trip if the 12 Vdc appliance draws more than 12 A (or has a short-circuit defect).

If this occurs, unplug the 12 Vdc appliance. The internal thermal protector automatically resets after a few seconds.

USB Devices

The Powerpack Sound 400 can charge one USB-chargeable device through its USB port found in the audio compartment. Compatible devices include most MP3 players, PDAs, digital cameras, and camcorders that have internal batteries which can be charged via the USB port of a desktop/laptop computer.

USB-chargeable devices usually include a special USB cable (not supplied) that attaches one end to the USB port and the other end to the device.

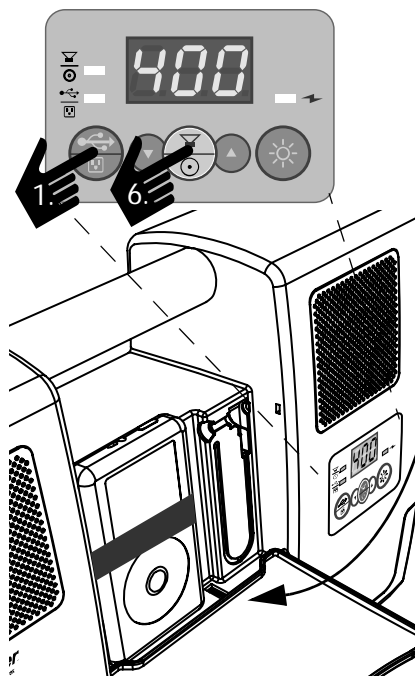
Table 3-3 Typical USB Devices and Charge Times

USB Device	Battery Capacity (Ah)	Hours
iPod™ nano	0.75	2.7
Blackberry™	0.9	2.6

Important: Connect your USB device to the USB port and turn the AC/USB button on to begin charging your audio device.

Note: Some USB devices allow simultaneous charging and usage. Some have to be turned off to enable charging. Consult your device's operating manual to find out.

Operating USB Devices



Note: Recharge the Powerpack as soon as battery level dips below normal.

1. Press and hold the DC/USB button for one second to activate the USB port.
2. Check the state-of-charge to ensure the battery is fully charged.
3. Plug the unit's audio input cable into the audio out of the audio device.
4. Plug the USB device using a USB cable (not supplied) to the USB port on the audio compartment.
5. Turn on the audio device, if you plan to play audio.
6. Turn on the amplifier.
7. Adjust the amplifier's volume using the up/down volume control buttons on the control panel.
8. Unplug the USB device when not in use.
9. Press and hold the DC/Audio button again to deactivate the DC socket.

Figure 3-8 Operating USB Devices

Low Battery Alarm

While in use, when the battery reaches 11 Vdc, the Low-Battery Alarm will sound and display an error code indicating that battery is low and the unit is about to be shutdown to prevent battery damage.

When the battery reaches 10.5 Vdc, the unit will automatically disconnect power to the USB outlet.

If the alarm sounds, disconnect any loads that may be in use and recharge the unit as soon as possible.

Using the Audio Amplifier

The Powerpack Sound 400 houses a 2-watt RMS per channel Hi-Fi stereo sound system with right and left loudspeakers and a subwoofer.

Audio input from an external source is routed through a sound Input Cable with a standard stereo plug.

Power Draw

The audio amplifier is powered from the same battery as the inverter/charger.

When an external audio device is attached to the unit via the audio input cable, there is minimal power drain from the battery. However, when power is drawn from the unit to run the audio device via the AC socket, DC socket, or USB port significant power drain is to be expected. Refer to the following tables of appliances and corresponding use times to determine which appliances or devices draw a lot of power.

- Table 3-1, “Typical AC Appliances and Run Times” on page 24
- Table 3-2, “Typical 12 V DC Appliances and Run Times” on page 27
- Table 3-3, “Typical USB Devices and Charge Times” on page 29

Audio Settings

The audio amplifier settings are simple to change. There is the DC/Audio button and there are -/+ volume controls to change the volume. See Figure 3-9 on page 32.

The DC/Audio button is found on the main Powerpack Sound 400 front control panel. When you have connected your audio device via the input cable, turn on the amplifier and start listening to your music.

Control the sound output by adjusting the volume of the amplifier. To minimize sound, press the (-) button. Press the (+) button to turn up the sound.

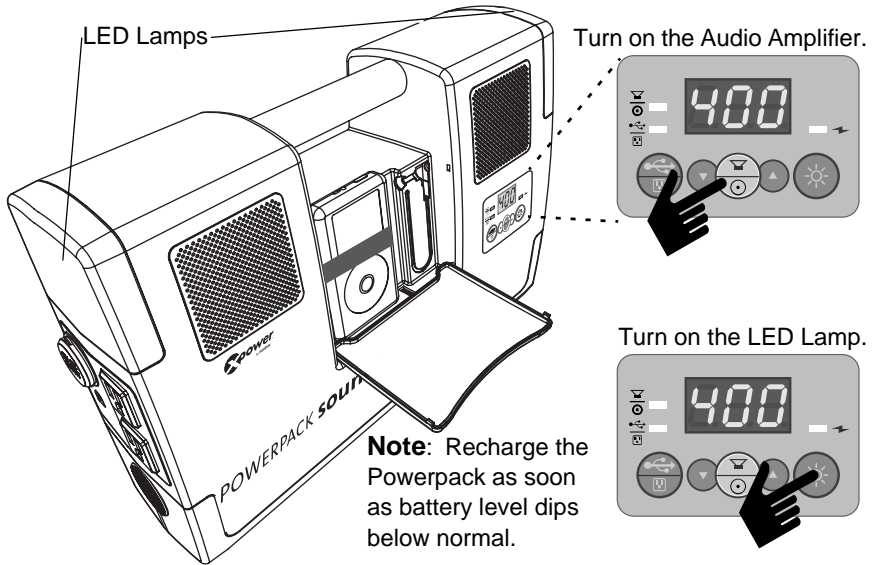


Figure 3-9 Audio Amplifier and LED Lamp Controls

Using the LED Lamps

The Powerpack Sound 400 includes emergency lighting that provides a flood-light effect to surrounding area.

The lamps are located on each side of the unit. Each lamp has six hi-bright LEDs that provide illumination.

Low Battery Alarm

While in use, when the battery reaches 11 Vdc, the Low-Battery Alarm will sound indicating that battery is low and the unit is about to be shutdown to prevent battery damage.

When the battery reaches 10.5 Vdc, the unit will automatically disconnect power to the lamps.

If the alarm sounds, recharge the unit as soon as possible.

Using the Back Stand

The Powerpack Sound 400 unit is equipped with a back stand located in the middle of the backside panel.

You can use the stand to position the unit to face slightly upward especially when you place it on the floor during operation.

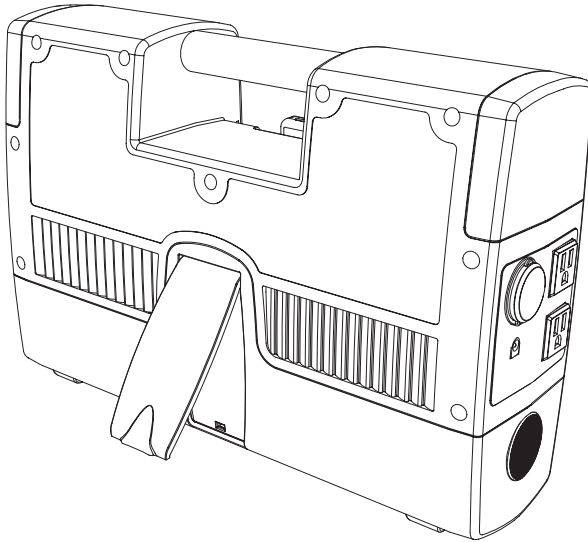


Figure 3-10 Back Stand

4 Maintenance

Chapter 4 provides information on maintaining your internal battery and recharging options for the internal battery.

Routine maintenance is required to keep your Powerpack Sound 400 operating properly. Occasionally clean the exterior of the unit with a damp cloth to remove the accumulated dust and dirt.



WARNING: Shock hazard

Disconnect all sources of AC power and DC power before performing any type of maintenance.

Battery Maintenance

All rechargeable batteries gradually discharge when left standing and need to be recharged periodically to maintain maximum battery capacity. The AC Charger supplied with the Powerpack Sound 400 is designed to regulate the charging process, ensuring that the battery is always fully charged but never overcharged. To ensure safe recharging and maximum battery life, recharge the Powerpack Sound 400 only with the supplied AC charger and DC-to-DC cable.



CAUTION

Due to inherent self-discharge, lead acid batteries must be charged at least every 3 months (once a month is recommended), especially in a warm environment. Leaving a battery in a discharged state, or not recharging regularly, may result in permanent battery damage. ***Damage to the battery caused by neglect is not covered by the product warranty.***

Battery Life

The high quality battery used in the Powerpack Sound 400 will serve as a reliable power source for years when properly maintained.

To maximize battery life, it is important to recharge the Powerpack Sound 400 battery after each use.

Important: Recharge the Powerpack Sound 400 fully at least every three months (once a month is recommended) if it is placed in storage or in a vehicle trunk. Store in a location that maintains a temperature range between 32 and 86 °F (0 and 30 °C).



CAUTION

Discharging the internal battery below 10.0 V will damage the battery and shorten its life.

Recycling

The Powerpack Sound 400 is designed to provide years of service. However, when the internal battery reaches the end of its service life, the Powerpack Sound 400 itself is no longer of use. The internal battery is not designed to be user replaceable.

Because the internal battery contains lead, which can be hazardous to the environment, the Powerpack Sound 400 should be recycled or safely disposed of at your local recycling depot.

Do not dispose of the Powerpack Sound 400 with common household waste. Please ask your local authorities about recycling services that are available in your area.

The following website provides additional recycling information:

<http://www.earth911.org/master.asp>

5

Troubleshooting

Troubleshooting will help you identify the common problems than can occur with the Powerpack Sound 400.

Read this chapter before calling Customer Service.

If you cannot solve the problem with the Powerpack Sound 400, record the information asked for on “Information About Your System” on page 51 and then contact your dealer.

Common Problems

Buzz in Audio Equipment

Some inexpensive stereo systems have inadequate internal power-supply filtering and may buzz slightly when powered by the Powerpack Sound 400. The best solution to eliminate the buzzing is to use an audio system with a good quality filter.

Television Interference

The Powerpack Sound 400 is shielded to minimize interference with TV signals. If TV signals are weak, you may see interference in the form of lines scrolling across the TV screen. Try one of the following suggestions to minimize or eliminate the interference:

- Use an extension cord to increase the distance between the Powerpack Sound 400 and the TV, antenna, and cables.

- Adjust the orientation of the Powerpack Sound 400, television, antenna, and cables.
- Maximize TV signal strength by using a better antenna. Use a shielded antenna cable where possible.
- Try a different TV. Different models vary considerably in their susceptibility to interference.

Troubleshooting Reference



WARNING: Electric shock hazard

Do not remove the cover of the Powerpack Sound 400 or disassemble the Powerpack Sound 400. The Powerpack Sound 400 does not contain any internal user-serviceable parts and attempting to service the unit yourself could result in electrical shock or burn.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
Digital display shows ED 1 and alarm sounds.	Battery capacity is low.	Unplug all appliances and start recharging the Powerpack Sound 400.
Digital display shows ED 2 and alarm sounds.	Battery voltage is too high.	Check the battery charging system. For example, if you are charging using an AC charger, make sure that you are using the AC charger that came with the Powerpack Sound 400.
Digital display shows ED 3 and alarm sounds.	The inverter has overheated due to improper ventilation or excessively warm conditions.	Unplug all appliances and allow the Powerpack Sound 400 to cool down for 15 minutes or more. Clear the ventilation grill of accumulated dust, dirt, or other debris. Remove objects covering the unit, then restart the Powerpack Sound 400. Move to a cooler environment.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
Digital display shows E04 and alarm sounds.	The appliance connected to the AC socket (or DC socket) exceeds the capability of the Powerpack Sound 400.	Unplug the appliance and confirm that the appliance's power requirement is 320 W or less (144 W or less) before attempting to restart the appliance.
Digital display shows E05 and alarm sounds.	The appliance connected to the AC socket has a short circuit.	Unplug and check the appliance.
Digital display shows E07 and alarm sounds.	Internal battery voltage falls below the operational voltage capacity.	Unplug all appliances and start recharging the Powerpack Sound 400.
Measured AC output voltage is too low.	Use of an average-reading AC voltmeter to read output voltage.	The modified sine wave (MSW) output of the Powerpack Sound 400 requires a true RMS reading meter, such as the Fluke 87 series, for accurate measurement. A typical reading on a non-true RMS meter should show between 98 Vac to 120 Vac.
	Internal battery is almost fully discharged.	Verify battery status and recharge the Powerpack Sound 400 as necessary. "Battery Charge %" reading on the digital display is only accurate when the Powerpack Sound 400 has been disconnected from all appliances and all charging sources for 15 minutes.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
Run time is less than expected.	<p>Internal battery is not fully charged.</p> <p>AC appliance power consumption is higher than expected.</p>	<p>Recharge using the AC Charger, until Charging Status light is steady.</p> <p>Check AC appliance power or wattage rating (or current draw for 12 Vdc appliances) and compare with Table 3-1 on page 24 and Table 3-2 on page 27.</p> <p><i>For additional information on battery run times, see the Battery App Note under the Support Section at www.xantrex.com.</i></p>
Charging Status light is OFF when AC Charger is connected.	<p>No AC power at the AC wall outlet.</p> <p>AC Charger is faulty.</p>	<p>Ensure power is available at the AC wall outlet.</p> <p>Replace the AC Charger.</p>
Charging Status light is still flashing and hasn't changed to steady after 50 hours of charging.	<p>The voltage at the AC wall outlet is less than 120 Vac.</p> <p>Internal battery is permanently damaged.</p>	<p>Use AC wall outlet that supplies 120 Vac.</p> <p>Contact your dealer for support.</p>
USB port not charging external device.	<p>Powerpack Sound 400 is turned off.</p> <p>Internal battery is discharged.</p>	<p>Turn on the AC/USB button.</p> <p>Recharge the Powerpack Sound 400.</p>
LED Lamps not lighting.	Internal battery is discharged.	Recharge the Powerpack Sound 400.

Table 5-1 Troubleshooting reference

Problem	Possible Cause	Solution
Powerpack Sound 400 does not recharge using the supplied DC-to-DC charging cable.	The fuse at the end of the charging cable has blown.	<p>Check the fuse and replace, if blown, with a similar 8-amp, 32-volt time-delayed fuse.</p> <p>Check the DC power source and make sure that it is rated at 12 V.</p> <p>Check the DC socket of the vehicle and make sure it has the correct polarity before plugging the charging cable.</p>
	DC socket is turned off.	Press and hold the DC/Audio button to activate the DC socket.
No sound.	External device's own volume control is set to minimum.	Turn up the external device's volume control to medium or maximum setting.
	Powerpack Sound 400's volume control is set to minimum.	Turn up Powerpack Sound 400's volume control to desired setting.
	Powerpack Sound 400's audio input plug is not plugged firmly into the external device's audio input socket.	Make sure that the audio input plug is inserted firmly into the external device's audio output socket.
	The Powerpack Sound 400's audio input cable is damaged or wire exposed.	Check that the cable is not damaged nor wire exposed.

Table 5-2 Display Error Codes

Display Code	Meaning
<i>E01</i>	Under voltage alarm (internal battery)
<i>E02</i>	Over voltage alarm (internal battery)
<i>E03</i>	Over temperature alarm
<i>E04</i>	Overload alarm (from AC power draw)
<i>E05</i>	Short circuit alarm (from AC power draw)
<i>E06</i>	Not-in-use
<i>E07</i>	Under voltage shut down (internal battery)

A Specifications

Chapter A, “Specifications” includes the electrical, mechanical, and environmental specifications for the Powerpack Sound 400.

Electrical Specifications

AC Power Section	
Output power <ul style="list-style-type: none">• Continuous output power• Peak AC output power• AC output surge capacity	320 W 400 W 600 W
Output voltage	115 ± 10 Vac RMS
Output frequency	60 Hz ± 1 Hz
Output wave form	modified sine wave (non-sinusoidal)
Total Harmonic Distortion (THD)	32.7%
Maximum Single Harmonic	30%
No load current draw	<0.40 Adc
Input voltage range	10.5 to 15.0 Vdc
Low battery alarm	11.0 Vdc
Low battery shutdown	10.5 Vdc
High battery voltage shutdown	15.5 Vdc
Over temperature shutdown feature	Yes, automatic reset
Overload shutdown feature	Yes, automatic reset
AC output short circuit protection feature	Yes, automatic reset

Specifications

Fuse (internal, non-replaceable)	$2 \times 25 \text{ A}$ or $1 \times 50 \text{ A}$
Normal operating temperature	77 °F (25 °C)
Operating temperature range	32 – 104 °F (0 – 40 °C)
Storage temperature range	-4 – 140 °F (-20 – 60 °C)

12 V DC Section	
Internal battery type	sealed, AGM (Absorbed Glass Mat) lead acid
Internal battery voltage (nominal)	12 Vdc
Internal battery capacity (minimum)	10 Ah
DC Power Socket (maximum continuous load)	12 A with overload protection and automatic reset
Built-in ambient LED light	12 hi-bright white LEDs with diffuser

USB Section	
Output Voltage (No Load)	5 Vdc
Output Voltage current	500mA _{dc}

Internal Battery Charging Controller System	
AC Charger bulk charging current	1 A
Peak charging voltage (nominal)	14.8 V
Charge restart voltage (nominal)	12.8 V
AC Charger input socket maximum current	1 A

Audio Amplifier	
Frequency Response	20 Hz - 20,000 Hz \pm 3 dB
Total Harmonic Distortion	< 2%
Left and Right Speaker Frequency Range	110 Hz - 20,000 Hz
Subwoofer Frequency Range	30 Hz - 150 Hz
Audio Input Plug	Standard 1/8" stereo plug

Accessories	
DC-to-DC charge cable (replacement part # 449-0187-01-01)	39" (1 m) 18 AWG with male-to-male lighter plugs. One plug is equipped with an 8-amp, 32-volt time-delayed fuse.
AC Charger (replacement part # 074-1004-01)	Input: 120 \pm 10 Vac, 60 Hz Output: 13.5Vdc, 1 A

Physical Specifications

Height	10 ¼" (26 cm)
Width	15" (38 cm)
Depth	4 ½" (11.5 cm)
Weight (net)	12.3 lb. (5.6 kg)

Important: All specifications are subject to change without notice.

Warranty and Return Information

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 Powerpack Sound 400. This warranty period lasts for 6 months from the date of purchase at the point of sale to you, the original end user customer. 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? 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: 1 888 291 3544 (toll free North America)

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

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.

Warranty and Return

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

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

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

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

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

Disclaimer

Product

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

IN NO EVENT WILL XANTREX BE LIABLE FOR ANY SPECIAL, 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.

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

Record these details in "Information About Your System" on page 51.

Return Procedure

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

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

If you are returning a product to a Xantrex Authorized Service Center (ASC) A Xantrex 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 XPower Powerpack Sound 400 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 XPower Powerpack Sound 400 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 49.

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 XPower Powerpack Sound 400 package, record the following information and be sure to keep your proof of purchase.

- p Serial Number _____
- p Product Number 852-2070
- p Purchased From _____
- p 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.

- p Type of installation [e.g.
RV, truck, vehicle, home] _____
- p Length of time inverter has
been installed _____
- p Battery/battery bank size _____
- p DC wiring size and length _____
- p Warning, Error or Panel
Fault Message _____
- p Appliances operating when
problem occurred _____
- p Description of problem _____
- _____
- _____

