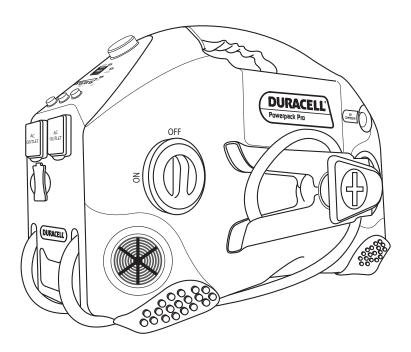
# DURACELL

Powerpack Pro 300 / 600



**Owner's Guide** 

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DR300PWR / DR600PWR

Contact Information Phone: 1 800 842 2127

## **About this guide**

## **Purpose**

The purpose of this Owner's Guide is to provide explanations and procedures for installing, operating, maintaining, and troubleshooting the Duracell® Powerpack Pro.

## Conventions used

The following conventions are used in this guide.



#### WARNING

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



#### WARNING

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

#### **Related Information**

You can find more information about Battery-Biz Inc. as well as its products and services at **www.battery-biz.com** 

## **Important Safety Instructions**

**Important:** Before using your Duracell® Powerpack Pro, be sure to read and save these safety instructions.

## Warnings and Cautions



## WARNING: Shock hazard. Keep away from children.

Do not insert foreign objects into the DC Power Socket, the Jump-Start Cable Port, or the ventilation holes. Do not expose this product to water, rain, snow, or spray. Do not open the Duracell® Powerpack Pro. There are no user serviceable parts inside the unit.



#### CAUTION

The unit will be damaged if connected to any AC load that has its neutral conductor connected to ground. Such loads include AC distribution wiring and house wiring.



#### CAUTION

Do not expose the Duracell® Powerpack Pro to temperatures over 40°C (104°F).



### 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 the Duracell® Powerpack Pro, vent explosive hydrogen gas which can be ignited by sparks from 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 Duracell® Powerpack Pro. During operation, keep away from materials that may be affected by high temperatures such as blankets, pillows and sleeping bags.



#### WARNING: Fire hazard

Jump-start cable clamps must be connected positive to positive (red clamp to battery "+") and negative to negative (black clamp to battery "-"). A reverse polarity connection (positive to negative) may cause damage to the unit and/or create a sparking/explosion hazard.



#### **WARNING:** Fire hazard

Never allow jump-start cables' red and black clamps to touch each other or another common metal conductor. This could cause damage to the unit and/or create a sparking/explosion hazard. Always store the clamps in the appropriate holder on each side ofthe Duracell® Powerpack Pro after use.



### **WARNING: Medical equipment**

This product is NOT tested, designed nor intended to be used with life support systems or any other medical devices.



#### WARNING: Fire hazard

The jump-start feature is designed for short term operation only—less than 4 seconds. Operating the jump-start feature for more than 4 seconds may cause damage to the unit. Allow the Duracell® Powerpack Pro to cool down for at least 3 minutes after each jumpstart.



#### **WARNING: Proper application**

Do not use the appliance for any application except that for which it is intended.



#### **WARNING:** Risk of unsafe operation

When using tools or equipment, basic safety precautions should always be followed to reduce the risk of personal injury. Improper operation, maintenance or modification of equipment could result in serious injury and property damage. We strongly recommend that this product NOT be modified and/or used for any application other than for which it was designed. Read and understand all warnings and operating instructions before using any equipment.

## Precautions when working with batteries



### WARNING: Explosion, fire or burns

Follow all instructions published by the battery manufacturer and the manufacturer of the equipment in which the battery is installed.

- 1. Make sure the area around the battery is well ventilated.
- 2. Never smoke or allow a spark or flame near the engine or batteries.
- Be careful not to drop a metal object on the battery or allow a
  metal tool to simultaneously touch the positive and negative
  cable ends or battery terminals. It might spark or short-circuit
  the battery or other electrical parts and cause an explosion.
- 4. Remove personal metal items such as rings, bracelets, necklaces, and watches when working with a lead-acid battery. A lead-acid battery produces a short-circuit current high enough to weld a ring or other similar objects to metal, causing a severe burn.
- If you need to remove a battery, always remove the positive terminal from the battery first. Make sure all accessories are off so you don't cause an arc.
- Someone should be within range of your voice, or close enough to come to your aid when you work near a lead-acid battery.
- 7. Have plenty of fresh water and soap nearby in case battery acid contacts skin, clothing, and eyes.
- 8. Wear complete eye protection and clothing protection. Avoid touching your eyes while working near batteries.
- If battery acid contacts skin or clothing, wash immediately with soap and water. If acid enters your eyes, immediately flood them with running cold water for at least twenty minutes and get medical attention immediately.
- 10. Keep a supply of baking soda on hand in the area of the batteries. Baking soda neutralizes lead-acid battery electrolyte.

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## 1 • Introduction

## About the Duracell® Powerpack Pro

The Duracell Powerpack Pro is an ideal solution for jumpstarting cars, boats, or other vehicles. It also inflates tires, supplies portable AC, DC and USB power, and provides a bright work light. Its highly visible reflective trim serves as an additional night time safety feature.

#### The Duracell® Powerpack Pro:

- Powers 115 V AC appliances
- Powers 12V DC appliances
- Powers 5 V USB devices
- · Jump starts vehicle engines
- Provides lighting for emergency use
- · Inflates vehicle tires and small sports equipment
- Reflective trim provides high visibility at night

## Comprehensive protection

### Reverse polarity protection

The reverse polarity LED will light up when you connect the wrong terminals. The reverse polarity alarm will also beep.

#### Over current protection

The built in charger protects against over current when it is recharging.

#### Over voltage protection

The built in charger will shut off when the voltage reaches the limit.

## 2 • Features

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

## **Materials list**

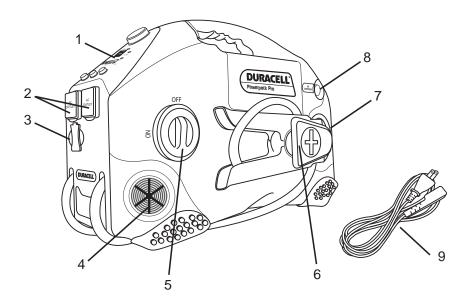
Your Duracell® Powerpack Pro package includes these items:

- Duracell® Powerpack Pro
- Owner's guide
- AC cord
- · Nozzle and needle adapters for the air compressor
- Built-in LED emergency light

If any of these materials are missing or are unsatisfactory in any way, please contact Customer Service at (800) 842-2127.

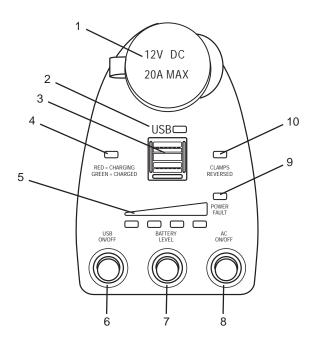
## **Duracell® Powerpack Pro Features**

## Right side detail



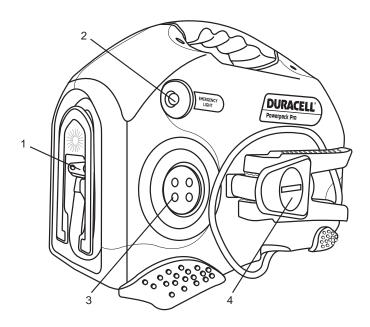
Feature	Description	
1	Front panel (full details on Page 4).	
2	<b>Dual grounded 3-prong AC outlets</b> run mobile devices and small household tools/appliances.	
3	AC charging input connects to the AC cord to recharge the Jumpstarter.	
4	Heat vent allows quick dissipation of excess heat.	
5	Jump starter on/off switch engages the jumpstart functionality.	
6	<b>Positive jump starting clamp</b> connects to the <i>positive</i> battery terminal (see Page 15).	
7	Compressor pressure gauge shows PSI (air pressure) when compressor is in use.	
8	Compressor on/off switch engages the air compressor.	
9	AC cord lets you recharge the Duracell® Powerpack Pro from a standard AC wall outlet and can only be used to recharge the internal battery of the Duracell® Powerpack Pro.	
Not shown	<b>Nozzle packet</b> contains two nozzle adapters and sports needle adapter for inflating tires, sporting equipment and more.	

## Front panel detail



Feature	Description	
1	DC power outlet powers 12V DC appliances.	
2	USB status LED illuminates when the USB ports are turned on.	
3	Dual USB ports charge two USB devices simultaneously.	
4	Battery status LED illuminates when the Duracell® Powerpack Pro is charging (when an AC cord is connected to the Duracell® Powerpack Pro's AC cord input socket and plugged into the household (120 V AC) outlet.	
5	Battery level LEDs illuminate to indicate the Duracell® Powerpack Pro battery charge level:  Fully charged: All LEDs (two green, one yellow and one red) are illuminated when the battery is full  Completely discharged: Only the red LED is illuminated when the battery is completely empty.	
6	USB On/Off switch triggers power to the dual USB ports.	
7	<b>Battery level button</b> triggers the Battery Level Full/Empty LED indicators. Press to view the battery charge status.	
8	AC On/Off switch triggers power to the two AC outlets.	
9	<b>Power fault LED</b> indicates when the Powerpack's internal inverter is not functioning properly.	
10	"Clamps Reversed" LED illuminates when the jump-starting clamps are improperly connected to the vehicle battery.	

## Left side detail



Feature	Description	
1	Air compressor nozzle/hose fills tires, sports equipment, etc.	
2	LED emergency light on/off switch engages the LED light.	
3	Ultra-bright LED work/emergency light provides bright illumination in an emergency.	
4	Negative jump starting clamp connects to metal part of car (engine block, cylinder head, etc) for grounding during jump starting (see Page 15).	

## 3 • Operation

## Operating conditions and guidelines



#### CAUTION

Read all operating instructions before operating the Duracell® Powerpack Pro.



#### CAUTION

The Duracell® Powerpack Pro is not intended for use as a UPS (Uninterruptible Power Supply).

**Important:** The Duracell® Powerpack Pro is not suitable for use with certain products and loads. See Precautions on Page 24.

Visit www.DuracellPower.com for higher power solutions.

## Choosing a location



#### **WARNING:** Fire or explosion

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

The Duracell® Powerpack Pro should be operated only in locations that meet these requirements:

**Dry** Do not allow water or other liquids to drop or

splash on the Duracell® Powerpack Pro.

**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 Duracell® Powerpack Pro for air flow. Ensure that the ventilation openings are not

obstructed.

**Safe** Do not operate the unit in the same

compartment as batteries or in any

compartment capable of storing flammable

liquids like gasoline.

Protected from battery gasses

Pro where it will be exposed to battery gases. These gases are very corrosive, and prolonged exposure will damage the

Do not operate the Duracell® Powerpack

Duracell® Powerpack Pro.

## ► Using the Duracell® Powerpack Pro for the first time

**Important:** Prior to operating your 12V DC appliance, ensure that the battery of the Duracell® Powerpack Pro is fully charged. If the battery has been fully discharged, recharging with the AC cord may take up to 24 hours.

Recharging with the AC cord is a true "plug-in-and-forget" charging method. We recommend leaving the AC cord connected when the Duracell® Powerpack Pro is not in use.



#### CAUTION

Do not operate DC appliances with the Duracell® Powerpack Pro while the Duracell® Powerpack Pro is being recharged with the AC cord. The AC cord may be permanently damaged if 12V DC appliances are operated while the AC cord is connected.

## Charging / recharging with the AC cord

- Disconnect any 12V DC appliances from the DC power outlets.
- 2. Insert the AC cord end into the AC cord input socket located below the front panel (see Page 3).
- Plug the AC cord into a standard AC wall outlet. The Battery Status LED changes from red to green when charging is complete (about 24 hours if the battery is completely discharged).

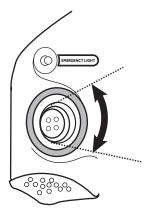
Important: The 24-hour charging time for the Duracell® Powerpack Pro assumes that there is 120 V AC at the AC wall outlet. If the voltage is less than 120 V AC, it may take more than 24 hours to fully recharge the Duracell® Powerpack Pro If, after 24 hours of charging, the Battery Status LED remains red, continue to charge the unit for another 12 hours. The unit will be ready for use even if the Battery Status LED remains red.

**Important:** The Duracell® Powerpack Pro is not suitable for use with certain products and loads. See Precautions on Page 24.

**Important:** If you keep the Duracell® Powerpack Pro in storage, the battery will discharge over time. Remember to recharge the battery every three months to keep the Duracell® Powerpack Pro operational.

**Note:** Once fully charged, the charging current automatically reduces to a maintenance charge mode, and the Duracell® Powerpack Pro may be left permanently connected to the AC cord.

## Using the built-in light



The Duracell® Powerpack Pro has a built-in light to illuminate a room in an emergency, or to provide a safe, bright work light on the roadside and in other outdoor environments. This light can be rotated up and down to focus the illumination where it is needed.

To use the built-in light, first push the "Emergency Light" button to turn on the LED bulb, then gently swivel the lens up and down to aim the light beam. After use, push the "Emergency Light" button again to turn off the light.

## Using the USB ports

The dual USB ports provide up to 2.4 Amps of combined power to charge cell phones, smartphones, iPhones and iPads and other tablets. The ports can charge two devices simultaneously.

#### To charge USB devices:

Connect your USB device (smartphone, tablet, etc.) to a USB port using the USB cable supplied with your device, then push the "USB On/Off" button. Charging will start and up to 2.4 Amps of current can be supplied by the port(s). The USB device controls the amount of current supplied. The Powerpack Pro never "pushes" more than required by the devices. Push the "On/Off" button when done.

**Note:** Please refer to the "User Reference" section on Page 25 for examples of typical USB device charging using the Powerpack Pro.

## **▶** Operating AC Appliances

## **Understanding AC Appliances**

AC appliances are rated by how much electrical power (in watts) they consume. Your Duracell® Powerpack Pro can power most appliances within its continuous power rating (Powerpack Pro 300: 240 W, 2 A / Powerpack Pro 600: 480 W, 2A).

Some appliances may be difficult or impossible to operate from the Duracell® Powerpack Pro. They may have high surge requirements or should not be run from the Duracell® Powerpack Pro. See "High Surge Appliances" and "Trouble Appliances" on page 11.

## Run Time on Typical AC Appliances

**Note:** The fewer watts an AC appliance uses, the longer the Duracell® Powerpack Pro will operate before recharging is required.

Typical AC appliances that can be used on the Duracell® Powerpack Pro are listed in Table 3-1.

## **High Surge Appliances**

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

Although the Duracell® Powerpack Pro can supply momentary surge power up to 480 W, some appliances may exceed the capabilities of the Duracell® Powerpack Pro and trigger the safety overload shutdown circuit.

**Note:** Please refer to the "User Reference" section on Page 25 for examples of typical AC device charging using the Powerpack Pro.

## **Trouble Appliances**



#### **CAUTION**

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

- 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. Metal halide arc (MHI) lights can be damaged.

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

## **Operating Several Appliances at Once**

You can run several AC appliances if the total rating of all the appliances (in watts) does not exceed 240 W for Powerpack Pro 300, or 480 W for Powerpack Pro 600. Run time, however, will decrease accordingly with the number of appliances being operated and the AC power being consumed.

## Operating an AC Appliance

Before operating your AC appliance, ensure that the battery of the Duracell® Powerpack Pro is fully charged. See "Recharging with the AC Charger" on page 8 for details.

#### To operate an AC appliance:

- 1. Press the AC outlet ON/OFF Switch to the ON position.
- 2. Open the protective cover on the AC power outlets.
- 3. Plug the AC appliance into one of the AC outlets and turn the appliance on. Duracell® Powerpack Pro will operate most devices rated up to 240 W for Powerpack Pro 300, or 480 W for Powerpack Pro 600.
- 4. Fully recharge the Duracell® Powerpack Pro as soon as possible after each use.
- 5. In the event of an overload, low battery voltage or overheating, the Duracell® Powerpack automatically shuts down.

## **▶** Operating 12V DC appliances

The Duracell® Powerpack Pro can operate 12V DC appliances that draw 20 A or less from a 12V DC power outlet or from a vehicle's lighter socket.



## **CAUTION: Equipment damage**

The DC power outlet does not automatically switch off when the internal battery is discharged. Check the battery status periodically to prevent total battery discharge.

## To operate a 12V DC appliance:

- Open the protective cover on the DC power outlet of the Duracell® Powerpack Pro.
- 2. Plug the 12V DC appliance into the DC power outlet on the front panel of the unit (see Page 4), and turn the 12V DC appliance on (if required). If the 12V DC appliance draws more than 20 A, the internal circuit breaker of the Duracell® Powerpack Pro shuts off the power to the 12V DC appliance. If this occurs, unplug the 12V DC appliance. The internal circuit breaker automatically resets after a few seconds.

3. Fully recharge the Duracell® Powerpack Pro as soon as possible after each use.

As the DC power outlet is internally wired directly to the Duracell® Powerpack Pro's battery, extended operation of a 12V DC appliance may result in excessive battery discharge. See "Caution for equipment damage" on this page.

**Note:** Please refer to the "User Reference" section on Page 25 for examples of typical DC device run times using the Powerpack Pro.

## ► Jump-starting a vehicle's engine

You can use the Duracell® Powerpack Pro with the supplied jump-start cables to jump-start a vehicle or boat engine that has a 12V starting battery.



#### **WARNING:** Fire hazard

Never allow jump-start cables' red and black clamps to touch each other or another common metal conductor. This could cause damage to the unit and/or create a sparking/explosion hazard. Always switch OFF the Jump-Start power switch and store the jump-start clamps in the appropriate holder on each side of the Duracell® Powerpack Pro after use.



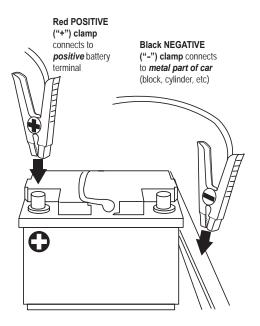
#### **WARNING:** Fire hazard

Jump-start cable clamps' connection to the vehicle's battery terminals must be positive to positive (red clamp to battery "+") and negative to engine block. A reverse polarity connection (positive to negative) may cause damage to the unit and/or create a sparking/explosion hazard.

**Important:** Closely follow these instructions for jumpstarting your vehicle because they may be different from the instructions supplied with other products or jump-start cables.

## To jump-start a vehicle or boat engine:

- 1. Turn OFF the vehicle or boat ignition and all accessories.
- 2. Engage the park or emergency brake and place the transmission in park for an automatic or neutral for a manual.
- 3. If jump-starting a boat engine, purge the engine compartment and bilge of all fumes.
- 4. Position the Duracell® Powerpack Pro on a flat, stable surface near the battery and away from all moving parts of the engine. Ensure that the jump-starting power switch is OFF.
- 5. Connect the red positive (+) clamp of the cables to the positive (+) terminal of the engine battery. The battery's positive terminal is usually larger in diameter than the negative terminal. In most vehicles, the battery's positive terminal has a red wire connected to it.
- 6. Connect the black negative (–) clamp of the cables to the engine block, cylinder head, or other stationary heavy metal part of the motor.
- 7. If the "Clamps Reversed" LED illuminates, then reverse polarity has been detected. Correct polarity must be established before proceeding. Disconnect the jumpstart clamps from the vehicle's battery and redo steps 5 and 6 in this procedure.
- 8. Switch ON the jump-starting power switch. Before starting the engine, make sure the Duracell® Powerpack Pro and the cables are clear of belts and fans.
- 9. Crank the engine for 4 seconds or until it starts, whichever is first.





### **WARNING: Fire hazard**

Do not crank the engine for more than 4 seconds. The jump-start feature is designed for short term operation only. Operating the jump-start feature for more than 4 seconds may cause damage to the unit. Allow the Duracell® Powerpack Pro to cool down for at least 3 minutes after each jump-start.

- 10. Switch OFF the jump-starting power switch.
- 11. Remove the red positive (+) clamp and then the black negative (-) clamp from the vehicle.
- 12. Store the jump-start clamps in the appropriate holder on each side of the Duracell® Powerpack Pro.

**Important:** Recharge the Duracell® Powerpack Pro as soon as possible after each use. See "Recharging the Duracell Powerpack Pro Battery" on page 20.

## **▶** Using the air compressor



#### **WARNING:** Fire hazard

The compressor is designed for short term operation only. Operating the compressor over an extended period of time will cause the compressor unit to overheat which could lead to fire. Allow the compressor to cool down for 10 minutes after each 10 minutes of continuous operation.



## WARNING: Risk of personal injury or damage to equipment

Never leave the compressor unattended while in operation. Keep out of reach of children. The compressor is capable of inflating to 150 PSI. Do not exceed the recommended pressure of either the compressor or the object being inflated. If either recommended pressure is exceeded, an explosion may result.

## Inflating tires



#### CAUTION

If the pressure gauge on the compressor indicates more than twice the recommended pressure for the object you are inflating, and you have only started to inflate the object, the valve connector is incorrectly connected to the valve stem. This may damage the Duracell® Powerpack Pro. Remove and reattach the valve connector to the valve stem.

### To inflate your vehicle, motorcycle, or bicycle tires:

- Place the valve connector securely on the tire valve stem, push it as far as possible to allow normal airflow, and close the thumb latch. If necessary, use a supplied nozzle adapter.
- 2. Turn the compressor on, and inflate your tire to the recommended pressure. Use Table 3-3 as a guide only.
- Turn the compressor off after appropriate pressure is reached.

- 4. Open the thumb latch and remove the valve connector from the valve stem.
- 5. Check the air pressure of the tire with a pressure gauge.

## Inflating small sports equipment

You can use the compressor to inflate small sports equipment such as soccer balls and footballs.



#### CAUTION

The Duracell® Powerpack Pro cannot be used to inflate large capacity inflatables such as float tubes, large air mattresses, and inflatable boats. These types of products require extended inflating times that may damage the compressor.

**Note:** Please refer to the "User Reference" section on Page 25 for examples of typical tire air pressures.

### To inflate small sports equipment:

- 1. Place the valve connector fully on or into the valve receptacle on the item.
- 2. Turn the compressor on and inflate to appropriate pressure.

You may also use a supplied nozzle adapter:

- Choose the appropriate nozzle adapter, insert the nozzle adapter into the valve stem and close the thumb latch.
- 2. Insert nozzle adapter into the valve receptacle of the item.
- 3. Turn the compressor off before removing nozzle adapter from valve stem.

4. Remove nozzle adapter from valve connector and store in storage compartments.



#### WARNING: Fire hazard

Allow the compressor to cool down for 10 minutes after each 10 minutes of continuous operation.

**Note:** Please refer to the "User Reference" section on Page 25 for examples of typical sports equipment air pressures.

## ► Connecting to an external battery

You can extend battery operating times by connecting the Duracell® Powerpack Pro to a larger external battery.

For example, an external 54 Ah battery gives approximately three times the operating time of the Duracell® Powerpack Pro internal 18 Ah or 15 Ah battery.



#### **WARNING: Fire hazard**

Never allow jump-start cables' red and black clamps to touch each other or another common metal conductor. This could cause damage to the unit and/or create a sparking/explosion hazard.



#### **WARNING: Fire hazard**

Jump-start cable clamps must be connected positive to positive (red clamp to battery "+") and negative to negative (black clamp to battery "-"). A reverse polarity connection (positive to negative) may cause damage to the unit and/or create a sparking/explosion hazard.



#### **WARNING: Acid spills**

Use a sealed, non-spillable battery for indoor use. Common auto and marine batteries are not suitable for indoor use unless their fumes are vented outdoors. Common auto and marine batteries contain acid, which is hazardous if spilled. Wear eye protection and protective clothing when connecting the Duracell® Powerpack Pro to an external battery.

## To connect the Duracell<sup>®</sup> Powerpack Pro to an external battery using the jump-start cables:

- 1. Ensure that the jump-start power switch is OFF.
- Connect the red positive (+) clamp of the cables to the positive (+) terminal of the external battery.
- Connect the black negative (–) clamp of the cables to the negative (–) terminal of the external battery If the "Clamps Reversed LED" illuminates and the alarm sounds, then reverse polarity has been detected. Correct polarity must be established before proceeding.

Disconnect the jump-start clamps from the battery and redo steps 2 and 3 in this procedure.

Switch ON the jump-start power switch.

## To disconnect the cables from an external battery:

- 1. Ensure that the jump-start power switch is OFF.
- 2. Remove the red positive (+) clamp, and then remove the black negative (–) clamp from the external battery terminals.
- 3. Store the jump-start clamps in the appropriate holder on each side of the Duracell® Powerpack Pro.
- 4. Recharge the Duracell® Powerpack Pro as soon as possible after use.

## 4 • Maintenance

Chapter 4 provides information on maintaining your internal battery, recharging options for the internal battery, and replacing user-replaceable parts.

Routine maintenance is required to keep your Duracell® Powerpack Pro 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 you need to recharge them periodically to maintain maximum battery capacity. The charger within the Duracell® Powerpack Pro 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 Duracell® Powerpack Pro only with the supplied charger or approved battery chargers.



#### **CAUTION**

Due to inherent self-discharge, lead acid batteries must be charged at least every 3 months, especially in a warm environment. Leaving a battery in a discharged state, or not recharging every 3 months, may result in permanent battery damage and poor jump-starting performance.



#### CAUTION

Do not attempt to recharge the Duracell® Powerpack Pro battery if it is frozen. Gradually warm the frozen battery to 32 °F (0 °C) before recharging.

## Recharging the Duracell® Powerpack Pro battery

To check the battery's charge level, press the Battery Level button

**Note:** Battery fuel gauge status is only accurate when the Duracell® Powerpack Pro has been disconnected from all appliances and all charging sources for 15 minutes. You can recharge the battery using:

- The fully automatic "plug-in-and-forget" AC cord;
- The DC charging cable to recharge from your vehicle as you drive;
- A generator equipped with a regulated 12V battery charging outlet;
- A solar panel.

## Recharging with the AC cord

Recharging with the AC cord is a true "plug-in-and-forget" charging method.



#### CAUTION

Do not operate DC appliances while the Duracell® Powerpack Pro is being recharged with the AC cord. The AC cord may be permanently damaged if AC appliances or 12V DC appliances are operated while the AC cord is connected.

#### To recharge with the AC cord:

- 1. Disconnect any 12V DC appliance and turn the light switch to OFF.
- 2. Insert the AC cord end into the AC cord input socket located below the front panel (see Page 3).
- 3. Plug the AC cord into a standard AC wall outlet.
- 4. While the Duracell® Powerpack Pro is recharging, the Battery Status LED is red. If the Duracell® Powerpack

Pro is completely discharged, a typical recharge may take up to 24 hours. When fully charged, the Battery Status LED changes to green and the Duracell® Powerpack Pro is ready to use.

Important: The 24-hour charging time for the Duracell® Powerpack Pro assumes that there is 120 V at the AC wall outlet. If the voltage is less than 120 V AC, it may take more than 24 hours to fully recharge the Duracell® Powerpack Pro. If, after 24 hours of charging, the Battery Status LED is still red, continue to charge the unit for another 12 hours. The Duracell® Powerpack Pro will be ready for use even if the Battery Status LED remains red.

Once the Duracell® Powerpack Pro is fully charged, the charging voltage and current automatically reduces to a maintenance level and the Duracell® Powerpack Pro may be left permanently connected to the AC cord. If your utility power is interrupted, the charging process automatically restarts when power returns.

## Recycling

If it's rechargeable, it's recyclable!

Battery-Biz is committed to environmental responsibility and has established a program for recycling Duracell rechargeable batteryrelated products.

For instructions on how to recycle this product visit http://www.call2recycle.org.

## 5 • Troubleshooting

Troubleshooting will help you identify the common problems that can occur with the Duracell® Powerpack Pro. If you cannot solve the problem with the Duracell® Powerpack Pro, contact your dealer or Duracell Customer Service at (800) 842-2127.

## **►** Troubleshooting reference



#### WARNING: Electric shock hazard

Do not remove the cover of the Duracell® Powerpack Pro or disassemble the Duracell® Powerpack Pro except to replace the internal battery. The Duracell® Powerpack Pro 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
AC appliance will not operate	AC appliance rated more than 300 W (Powerpack Pro 300) or 600 W (Powerpack Pro 600): the safety overload has tripped.	Use an AC appliance with a power rating less than 300 W.
	AC appliance is rated less than 300 W (Powerpack Pro 300) or 600 W (Powerpack Pro 600): high starting surge has tripped the safety overload.	AC appliance may exceed the Duracell® Powerpack Pro's surge capability. Use an AC appliance with a starting surge within the Duracell® Powerpack surge rating.
	Battery has discharged to 10.5 V.	Turn OFF the AC Power ON/OFF switch and recharge the Duracell® Powerpack.
	Duracell® Powerpack Pro has overheated due to poor ventilation or excessively warm environmental conditions.	Turn the AC Power ON/OFF switch OFF and allow the Duracell® Powerpack Pro to cool for 15 minutes or more. Clear blocked openings or remove objects covering the unit, then restart the Duracell® Powerpack and move it to a cooler environment.

Problem	Possible Cause	Solution
Overload shutdown	Appliance power requirements exceed the capability of the Duracell® Powerpack Pro.	Unplug the appliance and confirm that the appliance's power requirement is 300 W (Powerpack Pro 300) / 600 W (Powerpack Pro 600) or less before attempting to restart the appliance.
Measured AC output voltage is too low.  Using an average-reading AC voltmeter to read output voltage.		The modified sine wave output of the Duracell® Powerpack requires a true RMS reading meter, such as the Fluke 87 series, for accurate measurement.
	Duracell® Powerpack Pro battery is almost fully discharged.	Press Battery Level button to verify battery status and recharge the Duracell® Powerpack Pro as necessary. Battery Level LEDs are only accurate when the unit has been disconnected from all appliances and all charging sources for 15 minutes.
Battery Status LED is red and has not changed to green after 24 hours of charging.	The voltage at the AC wall outlet is less than 120 VAC.  Use AC wall outlet that supplies 120 VAC.	Continue to charge the unit for another 12 hours; the unit will be ready to use even if the Battery Status light remains red.
The engine being jumpstarted will not	Duracell® Powerpack Pro battery is not fully charged.	Recharge the Duracell® Powerpack Pro battery.
start.	The engine condition is poor.	Have the engine serviced.
	The engine start capacity exceeds the Duracell® hPowerpack Pro jump-start capability.	Use a higher power Duracell® Powerpack Pro.
The jump-start clamps measure zero volts.	Jump-start power switch is OFF.	Turn the jump-start power switch ON.
	Duracell® Powerpack Pro battery needs to be recharged.	Recharge the battery.
The compressor runs, but won't inflate.	The valve connector may not be securely placed on the valve stem.	Make sure the valve connector is securely placed on the valve stem before closing the thumb latch.
	The item being inflated may have a leak.	Make sure the item being inflated doesn't have a leak.Check the compressor hose for any breaks or leaks.
The compressor runs slowly	The compressor may have overheated from excessive use.	Turn off the compressor and let it cool down.
	Battery voltage is too low.	Check the condition of the internal battery. The battery may need to be recharged or replaced.

## A • User Reference

## **Charging/Operating devices with Powerpack Pro**

**Table A-1:** Typical charges/run times for common electronic devices and appliances

Device / Appliance	Port	Charges/run time (DR300PWR) <sup>a, b</sup>	Charges/run time (DR600PWR) <sup>a, b</sup>
Smartphone	USB	16 Charges	19 Charges
Action Camera	USB	26 Charges	32 Charges
Tablet	USB	6 Charges	7 Charges
Digital Camera	AC	13 Charges	15 Charges
Laptop	AC	1-2 Charges	1-3 Charges
Portable Cooler	12V	4 hrs	4.5 hrs

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

## Inflating tires

**Table A-2:** Pressure specifications for common Items

Automotive tires	PSI
520-13	26
A-78-14	26
E78-14	30
H-78-14	24
HR-78-15	28
Bicycle tires	PSI
27 x 1 ¼	85
20 x 1 ½	40
Other Inflatables	PSI
Football	13
Basketball	9
Volleyball	5
Lawn tractor tire	22

**Note:** The information in the table is for reference only. For precise pressure specifications, refer to the information supplied with the item to be inflated.

Number of charges/operating times assume a fully charged 18 Ah battery and may vary based on model \
or brand of device/appliance used.

## **B** • Specifications

## **Electrical specifications**

12V DC section	
Internal battery type	Sealed/non-spillable, AGM (Absorbed Glass Mat) lead-acid
Internal battery voltage (nominal)	12V DC
Internal battery capacity (minimum)	DR300PWR15 Ah DR600PWR18 Ah
DC power socket (maximum continuous load)	20 A with automatic reset

AC power section	
Output power	
Continuous output power	DR300PWR240 W DR600PWR480 W
Output power (5 minutes)	DR300PWR300 W DR600PWR600 W
Peak AC output surge capacity	DR300PWR480 W DR600PWR750 W
Output voltage	115V AC (RMS)
Output frequency	60Hz
Output wave form	Modified sine wave
No load current draw	<0.5 A DC
Input voltage range	10V to 15V DC
Low battery alarm	10.5V DC
Low battery shutdown	10.0V DC
High battery voltage shutdown	16V DC
Over temperature shutdown	<194° F (90° C)
Overload shutdown	Yes, automatic reset
AC output short circuit protection	Yes, automatic reset
Fuse (Internal)	DR300PWR40A x 1 (MAX), DR600PWR35A x 2 (MAX)
Operating temperature range	32°-104 °F (0°-40 °C)
Storage temperature range	68°-122° F (-20° C50°C)

Internal battery charging controller system		
AC input voltage range	100-240V AC	
AC input frequency	50/60Hz	
Output voltage	15V DC	
Rated voltage in floating charge	13.2Vdc@30mA	
Empty load power	< 0.5W	
Safety standards	ETL	
Efficiency standards	BC, CEC V	

Air compressor	
Pressure	160 PSI (lb/inz)

Accessories	
AC cord	52.4 in. (133cm)
Compressor nozzles	Red air nozzle, blue air nozzle, inflator needle

## **Physical specifications**

Length	15.2 in. / 38.5 cm
Width	9.3 in. / 23.7 cm
Height	10.7 in. / 27.2 cm
Weight	22.0 lbs. / 10 kg

**Important:** All specifications are subject to change without notice.

## C • Warranty and Return Information

## **Quality guarantee**

Battery-Biz guarantees the Duracell® Powerpack Pro to be free of defects due to faulty materials or workmanship. This Duracell® Powerpack Pro carries a 2-year limited warranty from the date of purchase.

If found to be defective, this Duracell® Powerpack Pro will be replaced without charge when returned to Battery-Biz. This guarantee does not apply to damage from misuse or abuse beyond normal usage. This guarantee gives you specific legal rights, and you may also have other rights which vary from state to state. Should any device be damaged by the Duracell® Powerpack Pro due to defects in the product arising from faulty materials or workmanship, Battery-Biz will repair or replace (at our option) the Duracell® Powerpack Pro, provided both device and product usage instructions have been followed.

Send device with the Duracell® Powerpack Pro to: Battery-Biz Inc.

1380 Flynn Road, Camarillo, CA 93012 Attention: Duracell Product Returns

If you would like additional information on Duracell products call 1-800-842-2127.

## **Contacting customer support**

If you experience any problems or have any questions regarding your Duracell® Powerpack Pro, free technical support is available. Prior to calling, please review the technical support tips below.

- Call from a phone where you have access to your mobile device
- Be prepared to provide the following information:
  - Name, address and telephone number
  - Name of the DURACELL® product
  - · Make and model of your device
  - Symptoms of the problem(s) and what led to them

Technical Support is available by telephone:

- U.S. and Canada (800) 842- 2127
- Outside of the US/Canada: (805) 437-7765

Written inquires should be directed to:

Battery-Biz Inc.
 DURACELL Product Inquiry
 1380 Flynn Road, Camarillo, CA 93012, USA

## Two year limited warranty

The Duracell® Powerpack Pro carries a limited warranty against defects in material and workmanship under normal use and service for two years from the original date of purchase. The battery inside the product carries a limited one year warranty, from the date of purchase, against defects in material and workmanship under normal use and service. Battery-Biz, at its option, shall repair or replace the defective unit covered by this warranty. Please retain the dated sales receipt as evidence of the date of purchase as it will be required for any warranty service. In order to keep the warranty in effect, the product must have been handled and used as described in the instructions accompanying this warranty. This warranty does not cover any damage due to accident, misuse, abuse or negligence. If maintained properly the Duracell Powerpack Pro will provide years of dependable service.

To return a defective product, receive technical support or request additional information please call: 1-800-842-2127 or 1-805-437-7765 Monday through Friday, 7:30AM to 4:30PM PST.

You will be provided with a Return Merchandise Authorization (RMA) Number and return instructions. Send the Duracell® Powerpack Pro to:

Battery-Biz Inc. 1380 Flynn Road Camarillo, CA 93012

Attention: Duracell Product Returns, RMA# [insert your RMA number here]

Please include the RMA number prominently displayed on the shipping box and include your name, phone number and address with the product inside the box.

## Disclaimer of warranty

The limited warranty described herein is your sole remedy. To the extent permitted by law, the manufacturer and distributor disclaim all other implied or express warranties including all warranties of merchantability and/or fitness for any particular purpose.

## Limitation of liability

Except to the extent of repairing or replacing this product as expressly stated in the limited warranty described herein, the manufacturer and distributor shall not be liable for any damages, whether direct, indirect, incidental, special, consequential, exemplary, or otherwise, including lost revenues, lost profits, loss of use of software, loss or recovery of data, rental of replacement equipment, downtime, damage to property, and third-party claims. arising out of any theory of recovery, including statutory, contract or tort. Notwithstanding the term of any limited or implied warranty, or in the event that any limited warranty fails of its essential purpose, in no event will the manufacturer's and distributor's entire liability exceed the purchase price of this product. Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages so the above limitations or exclusions may not apply to you. This limited warranty gives you specific legal rights. You may have other rights which vary from state to state and province to province.

