DURACELL®

Powerpack Pro 1100 / Powerpack Pro 1300



About the 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.

B. What's Included



2. AC charging cord 1. Powerpack Pro

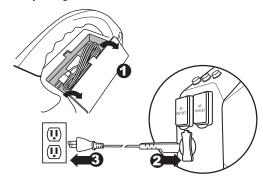
1. Charging/recharging your Powerpack



IMPORTANT - BEFORE YOU START

Please fully charge your Powerpack before using it for the first time. It is also recommended to fully recharge your Powerpack after each use.

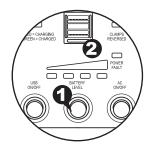
- Locate the AC charging cord stored in the compartment near the Powerpack's handle.
- Plug the cord into the Powerpack's AC charging input.
- Plug the other end of the cord into an AC wall outlet.
- Charging time is approximately 24 hours from a fully discharged battery to a full recharge. The Battery Status LED will turn green when fully
- It is safe to leave the Powerpack plugged into an AC wall outlet so that it is always fully charged and ready when you need it. The charging current will automatically reduce to "maintenance" mode once the Powerpack has been fully charged.



Powerpack Charging: Important Notes

- Do not operate DC appliances with the Duracell® Powerpack Pro while the powerpack 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.
- If you keep the powerpack in storage, the battery will discharge over time. Remember to recharge the battery every three months to keep the powerpack operational.
- If the voltage in your wall outlet is less than 120V AC, it may take more than 24 hours to fully recharge the Powerpack. 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.

2. Checking the battery level



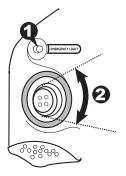
- 1. Push the Battery Level button on the front panel.
- The LED gauge will display the current level of available battery power:
 - Fully charged: All LEDs (one red, one yellow and two green) are illuminated when the battery is full.
 - Completely discharged: Only the red LED is illuminated when the battery is completely empty.



Battery Level: Important Notes

Battery fuel gauge status is only accurate when the Powerpack has been disconnected from all appliances and all charging sources for 15 minutes.

3. Using the LED light

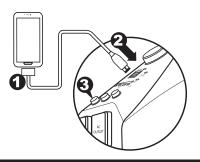


- 1. Push the "Emergency Light" button to turn on the LED light.
- Gently swivel the lens up and down to aim the light beam.
- Push the "Emergency Light" button again to turn off the light.

4. Using the USB ports

The Powerpack's dual USB ports can charge two USB devices at once, supplying up to 2.4 total Amps of current.

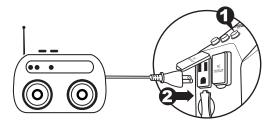
- 1. Connect your USB device (smartphone, tablet, etc.) to your own USB
- Plug the USB cable into the Powerpack's USB port.
- 3. Push the "USB On/Off" button.
- Charging will begin. The Powerpack will adjust the amount of current supplied to each device based on its requirements.
- Push the "USB On/Off" button again when done.



5. Using the AC outlets

The Powerpack's dual AC outlets ports can power two AC appliances at once, up to a total of 240W for Powerpack Pro 1100, or 480W for Powerpack Pro 1300. For best results, ensure that your Powerpack is fully charged before using the AC outlets.

- 1. Press the AC outlet ON/OFF Switch to the ON position.
- Open the protective cover on the AC power outlet and plug the AC
- Fully recharge the Powerpack as soon as possible after each use.
- In the event of an overload, low battery voltage or overheating, the Powerpack automatically shuts down.





AC Appliances: Important Notes

Understanding appliance wattage

AC appliances are rated by how much electrical power (in watts) they consume. The fewer watts an AC appliance uses, the longer the powerpack will operate before recharging is required.

Some appliances may be difficult or impossible to operate from the Powerpack if they have a high surge rating or are not suitable for use with the Powerpack.

Trouble Appliances

To avoid damage to your AC appliance, the Powerpack is not recommended for use with the following:

- Electronics that modulate RF (radio frequency) signals on the AC line.
- Speed controllers found in some fans, power tools, kitchen appliances,
- Some chargers for small rechargeable batteries can be damaged.
- Metal halide arc (MHI) lights can be damaged.

High Surge Appliances

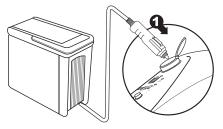
"Surge" power is the initial amount of power required to start an appliance.

Appliances such as televisions and appliances with motors consume much more power than their average (continuous use) rating when they are first switched on. This may exceed the capabilities of the Powerpack and trigger the safety overload shutdown circuit.

6. Using the 12V DC power outlet

The Powerpack can operate 12V DC appliances (such as those that plug into a vehicle's lighter socket) that draw 20 Amps of power or less.

- 1. Open the protective cover on the DC power outlet and plug your appliance into the port.
- 2. Turn the appliance on (if required). The Powerpack will automatically supply power to your appliance.



3. Fully recharge the Powerpack as soon as possible after use.



✓! 12V DC Outlet: Important Notes

Battery power drain

- As the DC power outlet is internally wired directly to the Powerpack's battery, it does not automatically switch off. Check the battery status periodically to prevent total battery discharge.
- Extended operation of a 12V DC appliance may result in excessive battery discharge.

High-consumption DC appliances

If your 12V DC appliance draws more than 20 Amps, the Powerpack's internal circuit breaker shuts off the power to your appliance. You will not be able to use this appliance with the Powerpack. If shutoff occurs, unplug your appliance. The Powerpack's internal circuit breaker automatically resets after a few seconds.

7. Jump-starting your vehicle



IMPORTANT - BEFORE YOU START

Please read these critical safety instructions carefully before jump-starting a car with the Powerpack.

Fire Safety

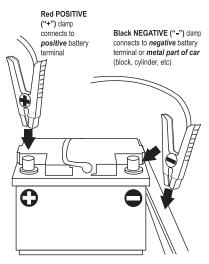
- Never allow jump-start cables' red and black clamps to touch each other or another common metal conductor. This could damage the Powerpack and/or create a sparking/explosion hazard. Always switch OFF the Jump-Start power switch and store the jump-start clamps in the appropriate holder on each side of the Powerpack after use.
- Do not crank your vehicle's 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 damage the Powernack
- Always allow the Powerpack to cool down for at least 3 minutes after each jump-start.

Personal Safety

- Always turn OFF the vehicle or boat ignition and all accessories.
- Engage the park or emergency brake and place the transmission in park for an automatic or neutral for a manual.
- If jump-starting a boat engine, purge the engine compartment and bilge of all fumes.
- 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.

Jump-starting your vehicle

- 1. Remove the clamps from the holsters on each side of the Powerpack.
- 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.
- Connect the black negative (–) clamp of the cables to the engine block, cylinder head, or other stationary heavy metal part of the motor.



- 4. If the "Clamps Reversed" LED illuminates, then reverse polarity has been detected. Disconnect the jump-start clamps from the vehicle's battery and redo steps 1 and 2.
- 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.
- 6. Crank the engine for 4 seconds or until it starts, whichever is first.

8. Using the air compressor



IMPORTANT - BEFORE YOU START

Please read these critical safety instructions carefully before using the Powerpack's air compressor.

Fire Safety

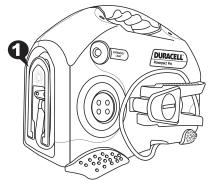
- The compressor is designed for short term operation only. Operating the compressor over an extended period of time will cause the compressor unit to overheat which could lead to fire.
- The powerpack cannot be used to inflate large capacity inflatables such as float tubes, large air mattresses, and inflatable boats. These types of products require extended inflating times that may damage the compressor.
- Always allow the compressor to cool down for 10 minutes after each 10 minutes of continuous operation.

Personal Safety

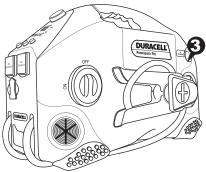
- Never leave the compressor unattended while in operation. Keep out of reach of children.
- The compressor is capable of inflating to 150 PSI. Do not exceed the recommended pressure of either the compressor or the object being inflated. If either recommended pressure is exceeded, an explosion may result.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

Inflating tires (car, motorcycle, bicycle)

1. Remove the air compressor hose from the rear of the Powerpack.



- 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.
- Press the Air Compressor switch to turn the compressor on, and inflate your tire to its recommended pressure.



- 4. Switch the compressor off after appropriate pressure is reached.
- Open the thumb latch and remove the valve connector from the valve stem.
- 6. Check the air pressure of the tire with a pressure gauge.

Inflating tires (car, motorcycle, bicycle)

- 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:

 Locate proper nozzle adapter stored in the compartment near the Powerpack's handle.



- 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 return it to the storage compartment.

9. Connecting to an external battery

You can extend battery operating times by connecting the Powerpack to a larger external battery. For example, an external 54Ah battery gives approximately three times the operating time of the Powerpack's own internal 18Ah or 15Ah battery.



IMPORTANT - BEFORE YOU START

Please read these critical safety instructions carefully before connecting the Powerpack to an external battery for the first time.

Fire Safety

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

Personal Safety

- Use a sealed, non-spillable external 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 powerpack to an external battery.

To connect the 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.
- 3. Connect the black negative (–) clamp of the cables to the negative (–) terminal of the external battery
- If the "Clamps Reversed" LED illuminates, then reverse polarity has been detected. Disconnect the jump-start clamps from the vehicle's battery and redo steps 1 and 2
- 5. Disconnect the jump-start clamps from the battery and redo steps 2 and 3 in this procedure.
- 6. Switch ON the jump-start power switch.

To disconnect:

7. Ensure that the jump-start power switch is OFF.

- 3. Remove the red positive (+) clamp, and then remove the black negative (–) clamp from the external battery terminals.
- Store the jump-start clamps in the appropriate holder on each side of the Powerpack.
- 10. Recharge the powerpack as soon as possible after use.

10. Powerpack maintenance

Battery charging

All rechargeable batteries gradually discharge when left standing, and you need to recharge them periodically to maintain maximum battery capacity. The charger within the Powerpack 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 only with the supplied charger.



Battery charging: Important notes

Please be sure to fully recharge your Powerpack every three months. This is important to maintain maximum life and usability of your Powerpack's battery.

Leaving a battery in a discharged state may result in permanent battery damage and poor jump-starting performance.

Personal Safety

- Disconnect all sources of AC power and DC power before performing any type of maintenance to prevent accidental shock.
- 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.
- Please see Section 1: "Charging/Recharging your Powerpack" for full instructions.
- Please also refer to Section 2: "Checking the battery level" for additional information.
- 3. In addition to recharging the Powerpack's battery, it is recommended to periodically clean the outside of the Powerpack with a damp cloth to remove the accumulated dust and dirt.

11. Recycling

If it's rechargeable, it's recyclable! Battery-Biz is committed to environmental responsibility and has established a program for recycling Duracel® rechargeable battery-related products.

Problem: AC appliance will not operate.

Possible Cause	Solution
AC appliance rated more than 300 W (Powerpack Pro 1100) or 600 W (Powerpack Pro 1300): the safety overload has tripped.	Use an AC appliance with a lower power rating.
AC appliance is rated less than 300 W (Powerpack Pro 1100) or 600 W (Powerpack Pro 1300): 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: Overload shutdown.

Possible Cause	Solution
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 1100) / 600 W (Powerpack Pro 1300) or less before attempting to restart the appliance.

Problem: Measured AC output voltage is too low.

Toblem: Measured Ao Output Voltage is too low.	
Possible Cause	Solution
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.

Problem: Battery Status LED is red and has not changed to green after 24 hours of charging.

Possible Cause	Solution
The voltage at the AC wall outlet is less than 120VAC.	Continue to charge the unit for another 12 hours; the unit will be ready to use
Use AC wall outlet that supplies 120VAC.	even if the Battery Status light remains red.

Problem: The engine being jump-started will not start.

Problem: The engine being jump-started will not start.	
Possible Cause	Solution
Duracell® Powerpack Pro battery is not fully charged.	Recharge the Duracell® Powerpack Pro battery.
The engine condition is poor.	Have the engine serviced.
The engine start capacity exceeds the Duracell® Powerpack Pro jump-start capability.	Use a higher power Duracell® Powerpack Pro.

Problem: The jump-start clamps measure zero volts.

Possible Cause	Solution
Jump-start power switch is OFF.	Turn the jump-start power switch ON.
Duracell® Powerpack Pro battery needs to be recharged.	Recharge the battery.

Problem: The compressor runs, but won't inflate.

Possible Cause	Solution
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.

Problem: The compressor runs slowly.

Possible Cause	Solution
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.

13. User reference: Tire inflation

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

Type of tire	Typical pressure specifications (PSI)
	tions (F3I)
Automotive tires	
520-13	26
A-78-14	26
E78-14	30
H-78-14	24
HR-78-15	28
Bicycle tires	
27 x 1 ¼	85
20 x 1 ½	40
Other Inflatables	
Football	13
Basketball	9
Volleyball	5
Lawn tractor tire	22

14. Specifications



All specifications are subject to change without notice.

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)	DR300PWR12Ah DR600PWR18Ah
DC power socket (maximum continuous load)	20 A with automatic reset

AC power section	
Output power	
Continuous output power	DR300PWR240W DR600PWR480W
Output power (5 minutes)	DR300PWR300W DR600PWR600W
Peak AC output surge capacity	DR300PWR480W DR600PWR750W
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 (for the charger)
Efficiency standards	BC

Air compressor	
Pressure	160 PSI (lb/in)

Physical specifications

	Length	15.2 in. / 38.5 cm
	Width	9.3 in. / 23.7 cm
	Height	10.7 in. / 27.2 cm
	Weight	DR300PWR 16.8 lbs. / 7.6 kg DR600PWR 20.9 lbs. / 9.5 kg

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

MARNING

Pursuant to California Proposition 65, this product contains chemical(s) known to the State of California to cause cancer, birth defects, or other reproductive harm.