**PROFESSIONAL** 

# **POWERSTATION®**

INSTANT JUMPSTARTING POWER



### **USER MANUAL**

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MODEL: PS1100

#### **CONTENTS**

Warning Info 1–2				
Introduction	3			
Features 3				
Getting to know your PS1100	4–5			
Operation	6			
Charging before initial use	6			
Standard recharging of the PS1100	6			
12V DC recharging of the PS1100	7			
Use of the PS1100	8–11			
Jumpstarting precautions	8–9			
Using the jumpstart	9–10			
Using the integrated work lamp	10			
Using the compressor	10–11			
Inflating a tire or object	10			
Inflating other objects	11			
Operating 12V DC appliances	11			
Replacement Parts	12			

#### **NOTICE:**

If you experience any problems with the PS1100, please DO NOT return the unit to the place of purchase. Please call PowerStation, LLC's Technical support staff toll free at 1-800-837-5994.

#### WARNING INFORMATION

This manual contains information regarding safety, operation, maintenance and storage of this product.

Please carefully read and understand this manual before using this product to avoid possible injury or property damage.

Keep this manual for future reference.

A WARNING

**Shock Hazard.** Keep Away from Children. Do not insert foreign objects into the DC power socket or the ventilation slots. Do not expose the unit to water, snow, spray or excessive moisture.

**A** WARNING

**Risk of fire, explosion or burns.** This unit has no userserviceable parts within the housing. Have a qualified technician complete any service work.

**A** WARNING

**Fire Hazard.** Never allow the jumpstart's red and black cable clamps to touch each other or a common metal conductor. Such contact could cause damage to the unit and/or create a sparking/explosion hazard.

**WARNING** 

**Fire Hazard.** Connect red clamp to the positive (+) battery terminal. The black clamp should be attached to the engine block of stalled vehicle. Do not connect black clamp to the negative (-) battery terminal. Doing so could cause damage to the unit and/or create a sparking/explosion hazard.

**WARNING** 

**Fire Hazard.** Do not try to jumpstart a battery for more than six seconds. Allow the unit to cool for three minutes after each jumpstart.

**WARNING** 

**Risk of fire, explosion, or burns.** The jumpstarting cable connection has enough energy to cause a spark, create an explosion hazard or cause burns if a metal object contacts both terminals. Do not turn on the jumpstarting function without having cables properly attached to the vehicle's battery.

#### WARNING INFORMATION continued

	HIN	

**Fire Hazard.** Do not leave the compressor unattended while operating. The compressor must be allowed to cool for ten minutes following each ten minutes of continuous use.

A CAUTION

Do not expose the PS1100 to temperatures greater than 104°F (40°C)

**WARNING** 

**Explosion Hazard:** Do not use this unit where there are combustible fumes or gases. Do not use in an enclosure containing automotive-style lead acid batteries.

**WARNING** 

**Risk of personal injury or death:** Make sure the jumpstart is safely secured when transporting. If the unit is not properly secured during an accident the unit could hit the driver or passengers.

**A** WARNING

**Risk of personal injury or damage to equipment:** Do not exceed recommended air pressure of object being inflated. Do not exceed a pressure of 120 PSI.

A CAUTION

**Caution:** Contains a sealed lead acid battery. Keep dry. Do not drop. Do not charge battery if frozen. See owners guide for proper charging procedures. Dispose of battery according to local regulations.

A CAUTION

To avoid possible damage and/or a shortening of the unit's working life, protect the unit from direct sunlight, direct heat, and/or moisture.

A CAUTION

The jumpstart function is designed to be used only on vehicles or boats with 12V electrical systems.

A CAUTION

This unit is not designed to be used in the place of a vehicle battery.

**A** CAUTION

This unit is not designed to be used as a battery charger.

A CAUTION

Never attempt to jumpstart a frozen battery. Gradually warm the frozen battery to a minimum of 40° (4°C) before jumpstarting.

#### INTRODUCTION

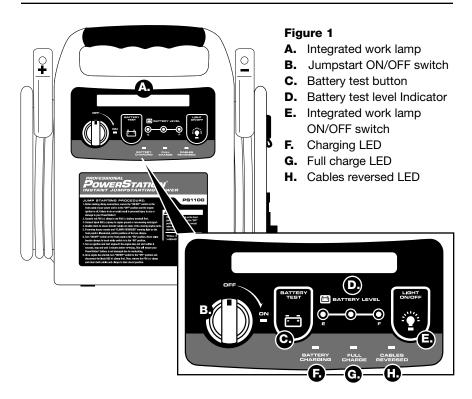
Thank you for purchasing the PowerStation, LLC PS1100. The PS1100 is a user-friendly & versatile product designed to instantly jumpstart vehicles, address inflation needs and provide portable 12V DC power. The PS1100 also brings light to any situation with an integrated work lamp.

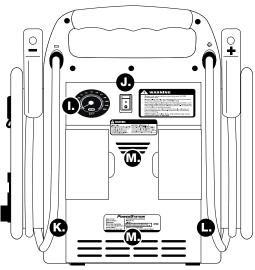
The PS1100 is an ideal companion to accompany all your jumpstarting, inflation and 12V charging needs.

#### **FEATURES**

- High current EHP battery provides 1,110 Amps peak power, 425 Amps starting power.
- Starts cars, trucks, recreational vehicles, and boats without the need of a host vehicle or an AC power source.
- 12V DC power socket provides power for appliances designed to plug into a vehicle or boat 12V cigarette lighter socket.
- Solid-state, integrated charger allows for re-charging of the PS1100 battery from any 110V power source. The PS1100 integrated charger automatically stops charging when the battery has acquired a full charge and keeps your PS1100 battery in peak condition.
- Sealed, maintenance-free heavy duty battery is safe to use, transport, and store.
- Yes 46 Heavy-duty, 4 gauge industrial grade welding cables carry more amperage for maximum starting power.
- LED battery gauge for quick assessment of PS1100 battery state of charge.
- > High-impact molded case provides durability and convenient transport.
- Integrated light for roadside repairs or emergency situations.
- 120 PSI air compressor and air inlet adaptors can address a wide range of inflating needs.
- Pressure gauge displays actual air pressure in PSI similar to a tire pressure gauge.

#### **GETTING TO KNOW YOUR PS1100**





#### Figure 2

- I. Air compressor gauge
- J. Air compressor ON/OFF switch
- **K.** Negative cable and clamp
- L. Positive cable and clamp
- M. Compressor cooling vents

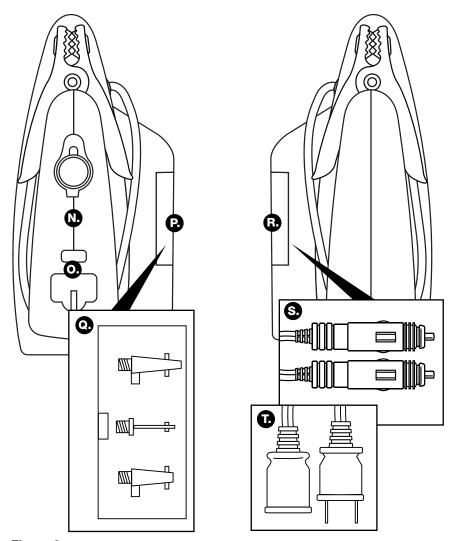


Figure 3

- N. 12V DC power socket
- O. Solid-state, integrated charger port
- P. Compressor hose and air inlet adaptor storage
- Q. Air inlet adaptors
- R. 12V DC power cable and integrated charger cable storage
- S. 12V DC power cable
- T. 120V AC charger cable

#### **OPERATION**

A CAUTION

Read all operating instructions before using your PS1100.

#### This section will guide you through:

- Charging the PS1100 before initial use
- Standard recharging of the PS1100
- Jumpstarting a vehicle
- Using the integrated work lamp
- Using the compressor
- Operating 12V DC outlet

#### Charging the PS1100 before initial use

Your PS1100 will need to be charged until the Green Full Charge LED illuminates before initial use. The initial charge could take up to 72 hours.

A CAUTION

Do not use the PS1100 as a power source while recharging.

Use the following step-by step guide to recharging your unit.

#### Standard Recharging of the PS1100

We recommend leaving the AC charger connected to a 120V AC outlet when the PS1100 is not in use to obtain maximum battery life.

#### To recharge the PowerStation internal battery using AC power:

- 1. Ensure that all elements of the unit are off and that nothing is connected to the 12V DC outlet.
- 2. Plug the AC charger cable into a standard wall AC outlet.
- 3. Plug the AC charger cable into the AC charger access point on the unit.

  At this time the red "Battery Charging" indicator will illuminate.
- 4. Allow unit to charge until the red "Battery Charging" indicator turns off and the green "Full Charge" indicator is illuminated.
- 5.The charge level can be checked by first disconnecting the AC charger cable from the wall outlet and pressing the battery test button. Charge your PS1100 after each use.

Note: If the battery is fully discharged, up to 72 hours may be needed to completely recharge. If you store your PS1100 for extended periods of time without use, completely recharge at least once every three months. The PS1100 is equipped with a sensor that prevents overcharging. Additionally, the unit can remain connected to 110V power. The internal battery charger monitors the level of charge and automatically provides maintenance charges as needed.

# To Recharge using a 12V DC power supply: (Do not exceed 2 hours)

Note: Recharging with this method will not charge your jumpstart battery to its maximum capacity as when using the AC power cord.

- 1. Insert the DC charging cord into the Cigarette Lighter Receptacle on the boat or vehicle.
- 2. Insert the other end of the DC charging cord into the 12V DC power socket on the the side of the unit.

Note: The jumpstart on/off switch can be left in the off position.



It is possible to over charge the battery when re-charging using the DC outlet. Over charging the battery can cause permanent damage and decrease battery performance. Only charge using DC supply if a 120V AC outlet is not available.

#### USE OF THE PS1100

## The following section will guide you through the use of your PS1100.

Please note that while using various features of the PS1100 simultaneously is permissible, this will increase the load on the battery, thereby reducing run-time before recharging is necessary.

#### Jumpstarting precautions

**WARNING** 

Risk of Fire, explosion, or burns. Electrolyte inside lead acid batteries contains sulfuric acid which can burn skin and harm or destroy clothing. Wear eye protection any time you are jumpstarting a battery and keep baking soda mixed with water available to neutralize acid. Make sure that long hair is put up securely, do not wear loose fitting clothing or jewelry, these could become caught in moving engine parts or create a short circuit resulting in personal injury or loss of life.

**A** WARNING

**Fire Hazard.** Never allow the jumpstart's red and black cable clamps to touch each other or a common metal conductor. Such contact could cause damage to the unit and/or create a sparking/explosion hazard.

**WARNING** 

**Fire Hazard.** Connect red clamp to the positive (+) battery terminal. The black clamp should be attached to the engine block or other non-moving metal part of stalled vehicle. Do not connect black clamp to the negative (-) battery terminal. Doing so could cause damage to the unit and/or create a sparking/explosion hazard.

**A** WARNING

**Fire Hazard.** Do not try to jumpstart a battery for more than six seconds. Allow the unit to cool for three minutes after each six second jumpstart.

**WARNING** 

Risk of Fire, explosion, or burns. The jumpstarting cable connection has enough energy to cause a spark, create an explosion hazard, or cause burns if a metal object contacts both terminals. Keep the jumpstart switch in the OFF position, except when executing the jump start procedure. Do not turn on the jumpstarting function without having cables securely attached.

A CAUTION

Before connecting the jumpstart cables check the iumper cables power switch to confirm that it is in the OFF position. The reverse polarity warning function does not protect the PS1100 from damage if the cables are not correctly connected and the jumper cables power switch is in the ON position. If the red "cables reversed" LED illuminates and the warning buzzer sounds when the cables are attached to the vehicle battery, STOP! Make certain the Red positive clamp on the jump start is connected to the Positive battery terminal in the vehicle and the Black negative clamp is grounded to the vehicle.

#### Using the Jumpstart

The PS1100 can be used to jumpstart any standard size vehicle or boat with a single 12V starting battery.

The following steps should be read completely before starting this procedure and then carefully followed throughout the procedure:



Be sure that the PS1100 jumpstart power switch is in the OFF position.

- 1. Ensure safety of immediate area. See warnings at the beginning of this manual for further details.
- Turn off the vehicle or boat, as well as all attached accessories such 2. as lights, radios, et cetera.
- 3. Be sure that the emergency brake is engaged. Manual transmission vehicles should be in neutral. Automatic transmission vehicles should be in park.
- 4. If jumpstarting a boat engine, purge the engine compartment and vent fumes per boat manufacturer instructions before proceeding.
- 5. Position the PS1100 on a secure, level surface in reach of the battery but away from all electrical and moving parts of the engine. Please note, some engine components may be hot enough to cause severe burns or damage the PS1100.
- 6. Connect the red positive (+) clamp of the PS1100 to the positive (+) terminal of the battery. (Never lean over the battery when making connections to jumpstart)
- 7. Connect the black negative (-) clamp of the PS1100 to the engine block, cylinder head, or other heavy yet stationary metal engine part.

#### USE OF THE PS1100 continued

**A** WARNING

If cables are attached to the incorrect battery terminal the Cables Reversed LED will switch on and a warning tone will sound. If this occurs, correct the connection before proceeding to the next step. Failure to do so may cause sparking, personal injury and/or harm to the vehicle or jumpstart unit. Check to be sure that the cables are clear of all moving engine parts.

- 8. Turn the jumper cables power switch to the "ON" position (see Figure 1 on page 4 for location B). A green LED will indicate power is on. Crank the engine. Do not crank for more than six seconds. Allow the PS1100 to cool for at least 3 minutes between six second jumpstart cycles.
- 9. After successful cranking, turn the jumper cables power switch back to the "OFF" position.
- 10. Remove the black negative (-) clamp.
- 11. Remove the red positive (+) clamp from the battery.

#### Using the integrated work lamp

To use the integrated work lamp, simply press the work lamp power button on the front of the unit (see Figure 1 on page 4 for location E).

#### **Using the compressor**

The air compressor in the PS1100 is designed as a convenient portable inflation device. After ten minutes of continuous use, turn off the compressor and allow it to cool for ten minutes. Continue use, if necessary, following this ten minutes on / ten minutes off cycle (see Figure 2 on page 4 for location J).

**WARNING** 

Allowing the compressor to run in excess of 10 minutes can result in permanent damage to the compressor, jump start unit, property or personal injury. Make sure the compressor ventilation slots are free of debris and air can circulate around the compressor motor while in use.

#### Inflating a tire or object using the compressor

- 1. Turn the valve connector clockwise to secure on the valve stem
- Switch on the compressor via the switch on the top of the compressor.
- 3. Check the pressure gauge on top of the compressor, once desired psi is reached remove the valve connector by turning counter clockwise.
- 4. Turn off compressor via the switch on the top of the compressor

#### USE OF THE PS1100 continued

#### Inflating other objects

- Place the appropriate inflation accessory nozzle on the valve connector and turn clockwise to secure.
- 2. Insert the accessory into the deflated object.
- Turn on compressor via the switch on the top of the compressor, once desired psi is reached remove the valve connector by turning counter clockwise.
- 4. Turn off compressor via the switch on the top of the compressor.

**Note:** If the maximum pressure of the item being inflated is not known, then allow the compressor to run until the desired fullness is reached. Overinflating an item could result in damage to the PS1100 or the item being inflated. Never leave the compressor running unattended.

#### Operating 12V DC appliances

To power a 12V DC appliance with your PS1100 please follow these steps:

- 1. Plug in appliance to the 12V outlet
- 2. Turn on appliance
- After use is completed, turn off appliance, unplug appliance from the unit
- 4. Re-charge the PS1100 as soon after use as possible

Note: The 12V DC outlet is always hot. No other switches need to be on to use this outlet. The PS1100 will NOT automatically turn off power to the DC outlet. Continuing to use 12V DC appliances after the battery has been depleted can permanently damage the unit.

Do not operate 12V DC appliances while charging your PS1100. Doing so may damage the unit and/or your DC appliance.

12V DC appliances vary greatly according to the amount of power they consume. The wattage consumed by a 12V DC appliance will impact the length of time the PS1100 will operate the appliance before the need to recharge the PS1100. The greater the wattage consumed, the lesser the duration of the PS1100 battery charge. The 12V DC outlet is equipped with an internal circuit breaker which will automatically cut power to the outlet if the DC appliance causes a direct short or if the appliance draws excessive amperage. This circuit breaker is designed to automatically reset once the fault has been corrected and the breaker has cooled to a normal operating temperature.

#### REPLACEMENT PARTS

The following replacement parts are available for the PS1100:

PART NUMBER	DESCRIPTION
RSPS151	110V AC power cord
RSPS152	12V DC power cord
RSPS155	Inflation accessories

Only parts identified by part number are available for purchase.

If you experience any problems with the PS1100, please DO NOT return the unit to the place of purchase. Please call PowerStation, LLC's Technical support staff toll free at 1-800-837-5994.

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### **QUICK SETUP GUIDE**



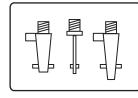
#### UNPACK THE JUMPSTART.

Check for the components pictured below as well as the user manual.

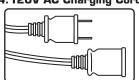


2.12V DC Charging Cord





4.120V AC Charging Cord

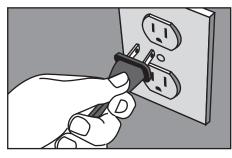




**NOTE: IF ANY COMPONENTS ARE MISSING PLEASE CONTACT THE MANUFACTURER DIRECTLY AT (800) 837-5994. DO NOT** RETURN TO THE RETAILER.

#### CHARGE THE JUMPSTART.

Plug the jumpstart into a 120V AC outlet and let charge until the green "Full Charge" LED is lit. This could take up to 72 hours.



After the initial charge, charge for 24 to 48 hours or until the green "Full Charge" LED is lit. Leaving the jumpstart plugged in when it is not in use is safe and recommended to ensure long battery life.

#### **READ AND UNDERSTAND** THE USER MANUAL

To avoid injury or damage to personal property, please read through the user manual before using the jumpstart.



PS1100