

# **MONOPRICE**

**Power Cache 220 Solar Power Generator**

P/N 15278

**User's Manual**

## SAFETY WARNINGS AND GUIDELINES

- Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet and allow it to fully dry before reapplying power.
- Do not touch the device, the power cord, or any other connected cables with wet hands.
- Do not expose this device to excessively high temperatures. Do not place it in, on, or near heat sources, such as a fireplace, stove, radiator, etc.
- Prior to operation, check the unit and power cord for physical damage. Do not use if physical damage has occurred.
- Before plugging the power adapter into a power outlet, ensure that the outlet provides the same type and level of power required by the device.
- Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords. Ensure that the power cord does not present a tripping hazard.
- Never unplug the unit by pulling on the power cord. Always grasp the connector head or adapter body.
- Clean using a soft, dry cloth only. Do not use chemical cleaners, solvents, or detergents. For stubborn deposits, moisten the cloth with warm water.
- This device has no user serviceable parts. Do not attempt to open, service, or modify this device.
- Before using this device for the first time, charge the battery for at least 6 hours, if using the AC power adapter, or for 12 hours, if using solar panels.
- Recharge the battery at least once every three months to keep the battery fresh and capable of holding the full charge.
- Recharge the battery when the LCD display indicates 20% remaining capacity.
- To prevent battery damage, fully recharge the battery after each use.

- Do not attempt to charge the unit using anything other than the included AC power adapter or compatible solar panels.
- Do not alter or remove the factory identification plates or labels.

## INTRODUCTION

Thank you for purchasing this Power Cache 220 Solar Power Generator!

The Power Cache 220 is a solar power generator and battery storage device. The sealed lead-acid battery has a capacity of 18Ah and can be charged using either the included AC power adapter or compatible solar panels. It features two 120 VAC power outlets, a 12 VDC cigarette lighter receptacle, two proprietary 12 VDC connections for LED bulbs, and four USB charging ports, all of which can be used at the same time. It includes overcurrent, short circuit, under-voltage, and over-voltage protection circuits. It is ideal for camping trips, outdoor events, and for emergency power.

## FEATURES

- Solar power generator converts solar energy into electricity
- Built-in 18Ah sealed lead acid storage battery
- Battery can be charged using included AC power adapter or compatible solar panels (not included)
- Two 120 VAC grounded NEMA 5-15 power outlets
- Produces a pure sine wave AC waveform
- 12 VDC cigarette lighter receptacle
- Two 2A and two 1A USB charging ports
- Two proprietary 12 VDC power jacks for use with optional LED bulbs (not included)
- Overcurrent, short circuit, under-voltage, and over-voltage protection circuits
- Can simultaneously use all outputs
- Can use outputs while charging the battery

## CUSTOMER SERVICE

The Monoprice Customer Service department is dedicated to ensuring that your ordering, purchasing, and delivery experience is second to none. If you have any problem with your order, please give us an opportunity to make it right. You can contact a Monoprice Customer Service representative through the Live Chat link on our website [www.monoprice.com](http://www.monoprice.com) during normal business hours (Mon-Fri: 5am-7pm PT, Sat-Sun: 9am-6pm PT) or via email at [support@monoprice.com](mailto:support@monoprice.com)

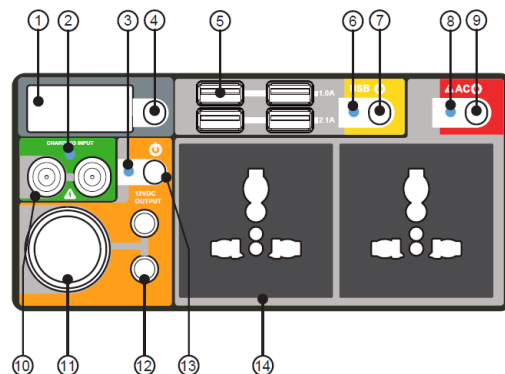
## PACKAGE CONTENTS

Please take an inventory of the package contents to ensure you have all the items listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

- 1x Power Cache 220 solar power generator
- 1x AC power adapter
- 1x AC power cord (NEMA 1-15 to IEC 60320 C7)
- 1x User's manual




## PRODUCT OVERVIEW

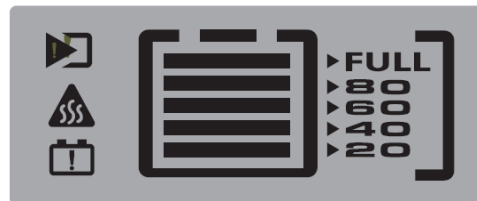
1. LCD Display Panel
2. Charging Input LED Indicator
3. DC Output LED Indicator
4. LCD Display Button
5. USB Charging Output Ports (x4)
6. USB Output LED Indicator
7. USB Power Button
8. AC Output LED Indicator



9. AC Power Button
10. Charging Input Ports (x2)
11. 12 VDC Cigarette Lighter Receptacle
12. 12 VDC, 3A Output Jacks (x2) (3A each, 6A total)
13. DC Power Button
14. 120 VAC, 120-watt Power Outlets (x2) (120 watts total)

## LCD DISPLAY PANEL

- Press the LCD Display Button (4) to activate and illuminate the LCD Display Panel (1).
- Once activated, the LCD display will stay active for about 30 seconds, then will automatically turn off.
- The LCD display will stay continuously active as long charging power is applied, even after charging is complete.
- When active, the LCD display shows the current charge level of the internal battery.
- When the charge level shows 20% or less, cease use of the unit and completely recharge the battery.
-  Reverse polarity indicator. This icon appears when a reverse polarity condition exists. Correct the condition to extinguish the icon.
-  Over temperature warning indicator. This icon appears when the internal temperature reaches 90°C and will extinguish when the internal temperature is reduced.
-  Low voltage indicator. This icon appears when the battery voltage is too low. Recharge the Power Cache 220 to extinguish the icon.



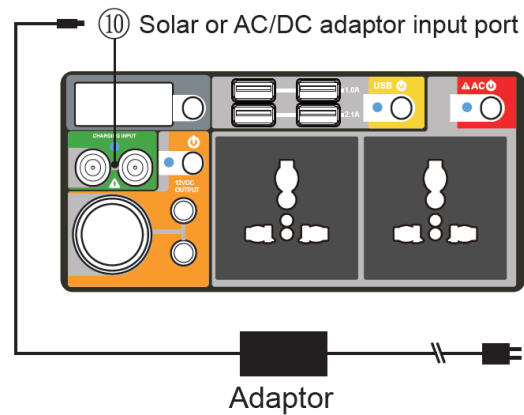
# CHARGING

Prior to first use, the battery should be charged for at least 6 hours using the included AC power adapter. Alternatively, it can be first charged for at least 12 hours using compatible solar panels (not included). Additionally, the battery should be fully charged after each use and at least once every three months to prevent damage to the battery.

## AC Power Adapter

Perform the following steps to charge the battery using the included AC power adapter.

1. Plug the DC barrel connector on the included AC power adapter into one of the Charging Input Ports (10) on the Power Cache 220.
2. Plug one end of the included AC power cord into the AC power adapter, then plug the other end into a nearby AC power outlet. The Charging Input LED Indicator (2) will glow Red and the LCD Display (1) will blink the current charge level.
3. When charging is complete, the LCD Display (1) will show a full charge and the Charging Input LED Indicator (2) will change from Red to Green.
4. Unplug the AC power cord from the AC power outlet, then unplug the AC power adapter from the Charging Input Port (10).

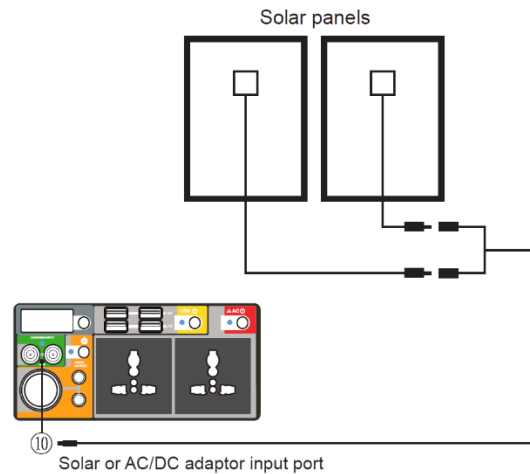


*Note that while charging is in progress, the AC power adapter may become warm to the touch. This is normal.*

## Solar Panel(s)

Perform the following steps to charge the battery using one or two compatible solar panels (not included).

1. Using the instructions that came with your solar panel(s) (not included), place them in position to capture solar energy.
2. Plug the DC barrel connector on a compatible solar panel (not included) into one of the Charging Input Ports (10) on the Power Cache 220. If the solar panel is capturing energy, the Charging Input LED Indicator (2) will glow Red and the LCD Display (1) will blink the current charge level. If using two solar panels, repeat the process to connect the second panel to the Power Cache 220.
3. When charging is complete, the LCD Display (1) will show a full charge and the Charging Input LED Indicator (2) will change from Red to Green.
4. Unplug the solar panel(s) from the Power Cache 220.



## CHARGING TIMES

The Power Cache can be charged using the included AC adapter or using compatible solar panels (not included). Approximate charge times are as follows.

Charging Source	Approx. Charge Time
AC Power Adapter (15.3 VDC, 3A, included)	6 hours
Compatible 37.5-watt Solar Panel (not included)	6 hours
Compatible 25-watt Solar Panel (not included)	7 hours
Compatible 20-watt Solar Panel (not included)	11 hours

# OPERATION

## AC Power

- The AC section can provide power to one or two AC-powered devices with up to 120 watts total power consumption.
- To use these outputs, simply plug your AC-powered device(s) into the AC outlet(s), then press the AC Power Button (9) to turn on the AC power section. The AC Output LED Indicator (8) will glow Green.
- When you are finished using AC power, press the AC Power Button (9). The AC Output LED Indicator (9) will turn off. Next, unplug your AC-powered devices.

*Note: Ensure that the AC Output LED Indicator (9) is off when AC power is not being used to prevent battery self-consumption.*

## 12 VDC Cigarette Lighter Power

- The 12 VDC Cigarette Lighter Receptacle (11) can provide up to 10 amps of DC power.
- To use this output, plug your device into the cigarette lighter receptacle, then press the DC Power Button (13). The DC Output LED Indicator (3) will glow Green.
- When you are finished using the cigarette lighter power, press the DC Power Button (13). The DC Output LED Indicator (11) will turn off. Next, unplug your cigarette lighter receptacle powered device.

*Note: Ensure that the DC Output LED Indicator (13) is off when DC power is not being used to prevent battery self-consumption.*

## 12 VDC, 3A Power

- The two 12 VDC, 3A Output Jacks (12) can be used to power up to four 12V, 3A LED bulbs (not included).
- To use these outputs, plug one or more LED bulbs into the 12 VDC, 3A Output Jacks (12), then press the DC Power Button (13). The DC Output LED Indicator (11) will glow Green.



- Use a 2-to-1 power cable adapter (not included) to connect up to two lights to each output jack.
- When you are finished using the LED bulbs, press the DC Power Button (13). The DC Output LED Indicator (11) will turn off. Next, unplug your LED bulbs.

*Note: Ensure that the DC Output LED Indicator (13) is off when DC power is not being used to prevent battery self-consumption.*

## USB Power

- The USB power section features four USB charging ports, divided into two USB power sections, each of which is capable of delivering a full 3A of charging power, 1A to one port and up to 2A to the other.
- To use these ports, plug in your USB powered device(s), then press the USB Power Button (7). The USB Output LED Indicator (6) will glow Green.
- When you are finished using USB power, press the USB Power Button (7). The USB Output LED Indicator (6) will turn off. Next, unplug your USB-powered device(s).

*Note: Ensure that the LED Output LED Indicator (13) is off when LED power is not being used to prevent battery self-consumption.*

## TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website [www.monoprice.com](http://www.monoprice.com) during regular business hours, 7 days a week. You can also get assistance through email by sending a message to [tech@monoprice.com](mailto:tech@monoprice.com)

## SPECIFICATIONS

Model	15278
Battery Type	Sealed lead-acid
Battery Power Level	12 VDC
Battery Capacity	18Ah
Outputs	2x 120 VAC, 60Hz, AC outlets (NEMA 5-15) (120-watts total) 1x 12 VDC, 10A cigarette lighter receptacle 2x 5.5mm 12 VDC, 3A jacks (6A total) 2x 5 VDC, 2A USB charging ports 2x 5 VDC, 1A USB charging ports
Protection Circuits	Over current, Short circuit, Under-voltage, Over-voltage
AC Adapter Input Power	100 ~ 240 VAC, 50/60 Hz, 2A
AC Adapter Output Power	15.3 VDC, 3A
Solar Panel Input Power Range	16 ~ 32 VDC
Maximum Input Current	3A
Minimum Charging Voltage	6 VDC
Maximum Charging Voltage	14.4 VDC
Low Battery Protection Voltage	10.5 VDC
Battery Recovery Voltage	12.6 VDC
Standby Current	1A
Dimensions (LxWxH)	8.9" x 6.3" x 14.2" (227 x 159 x 360 mm)
Weight	18.1 lbs. (8.2kg)

# REGULATORY COMPLIANCE

## Notice for FCC



This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Modifying the equipment without Monoprice's authorization may result in the equipment no longer complying with FCC requirements for Class B digital devices. In that event, your right to use the equipment may be limited by FCC regulations, and you may be required to correct any interference to radio or television communications at your own expense.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## Notice for Industry Canada

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.