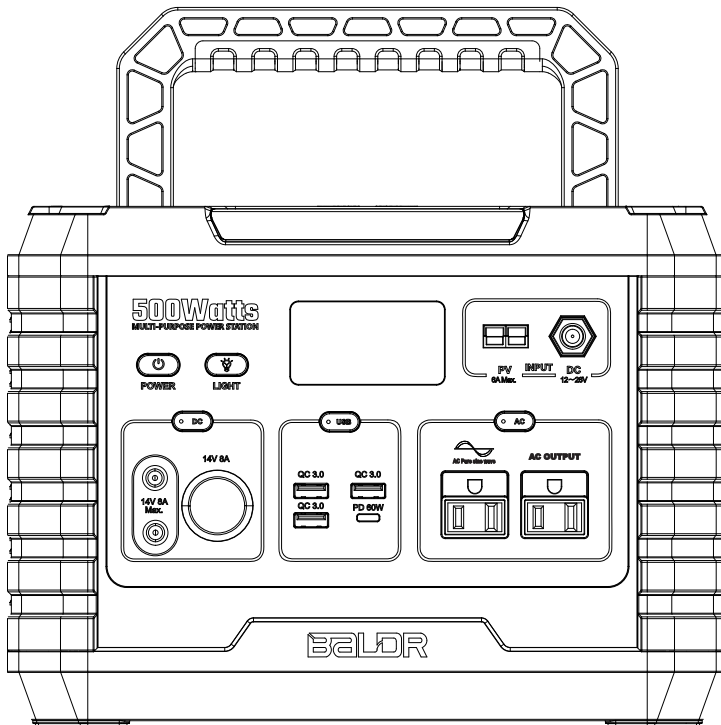# BALDR 500

USER MANUAL

RECOMMENDED TO FULLY CHARGE BALDR 500 BEFORE USE

GENERAL SPECIFICATIONS

The BALDR 500 is a portable battery pack with the ability to supply 500W of pure sine wave AC power via the onboard AC output. Additionally, The BALDR 500 is able to support USB quick charging via the onboard 1 x USB-PD port and 3 x USB-A ports. Overall storage capacity is 519Wh of energy.
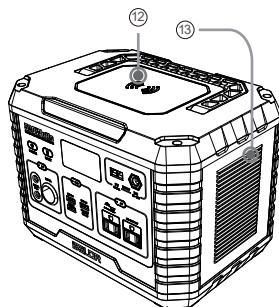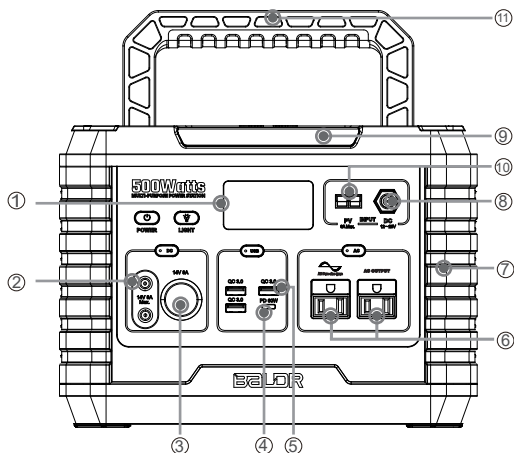
Capacity	519.48Wh
Cell Type	18650
Cell Chemistry	Lithium-ion
Dimensions	L11.5" * W7.9" * H 7.6" (L292* W202 *H194mm)
Weight	14.8lbs（6.7KG)
Life Expectancy	500 cycles to 85% capacity typical (depending on use and care)
Charging Time	Fully charged 6 to 7 hours
Shelf Life	Charge every 3 months (fully charged before storage)
Input, 8mm Charging Port	12-26V, up to 6A (Max 120W)
PV Input	18V, 6A MAX
Output AC(Output, pure sine wave)	110V+/-10%, 60Hz (500W Rated, 1000W Surge)
Output USB-A (x 3)	5V 9V 12V, up to 2.5A, (Max 54W total,with QC3.0 protocol)
Output USB-PD (x 1)	5V 9V 12V 15V 20V, up to 3A (Max 60W , with PD 3.0 protocol)
Output DC (x 2)	5525 type 14V/8A
Output Cigarette lighter	14V/8A
Wireless Charger	10W
LED Light Power	3W
Operating / Storage Altitude	up to 6562 ft. (2000m)
Operating / Storage Maximum Humidity	up to 75% non-condensing
Operating Temp	14 to 104°F (-10 to 40°C)
Charging Temp	32 to 113°F (0 to 45°C)
Storage Temp	-4 to 113°F (-20 to 45°C)

⚠ WARNINGS

To ensure safe operation and service of the meter, follow these instructions. Failure to observe these warnings can result in severe injury or death.

- **DO NOT** use BALDR 500 in excess of its output rating. Overload outputs above rating may result in a risk of fire or injury to persons, even though we have built-in overload protection.
- **DO NOT** use BALDR 500 or AC Wall plug power adapter, if it is damaged or has been modified. Damaged or modified batteries may exhibit unpredictable behavior resulting in fire, explosion, or risk of injury.
- **DO NOT** subject to vibration, impacts, or drops. Secure BALDR 500 during transport. The housing may not show signs of damage, but internal components may have been compromised. It is adviseable to replace it if any such severe events occur.
- **DO NOT** expose BALDR 500 to moisture, rain, or snow.
- **DO NOT** charge, use or store BALDR 500 in a bathroom or in an area exposed to rain or moisture.
- **DO NOT** leave children or the persons, who with reduced physical/sensory or mental capabilities/or lack of experience and knowledge, along with BALDR 500 unless they have been given supervision or instruction concerning use of it by a person responsible for their safety.
- **DO NOT** attempt to repair BALDR 500 or AC Wall plug power adapter. There are no user-serviceable components inside.
- **DO NOT** handle BALDR 500 with wet hands.
- **DO NOT** place BALDR 500 on its side or upside down while in use or in storage.
- If rust, odor, overheating, or other abnormal circumstance are observed, stop using and contact **BALDR** customer service.
- Children should be supervised to ensure that they **DO NOT** play with the BALDR 500 alone.
- The BALDR 500 is only used for emergency power station, it cannot replace the standard AC or DC power of household appliances or digital products.
- Keep away from high voltage electrical fields.
- Risk of fire and burns, **DO NOT** open, crush, heat above 113°F (45°C) or incinerate. Follow all instructions.
- Use of a power supply, charger, or cable not recommended or sold by portable battery manufacturer may result in a risk of fire or injury to persons.
- Should fluid from inside of BALDR 500 come in contact with your skin or clothing, wash the affected areas with tap water.
- The accessories included in the box should only be used with the BALDR 500.
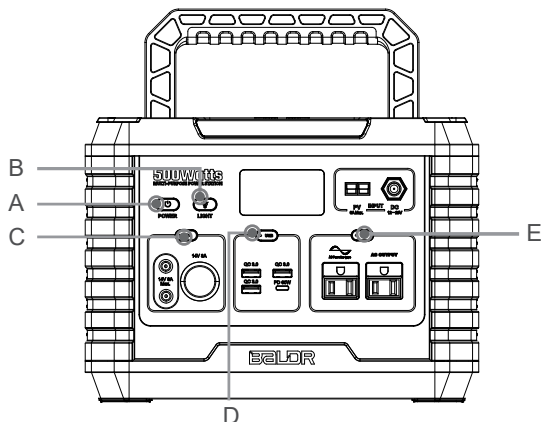- KEEP THIS PRODUCT AWAY FROM PETS.

① LCD Screen Display
② DC Output
③ Cigarette Lighter Output
④ USB-PD Output
⑤ USB-A Output

⑥ 500W Rated AC Outputs
⑦ Anti-collision Strip
⑧ DC Input
⑨ SOS MODE & LED light

⑩ PV Input
⑪ Folding Handle
⑫ Wireless Charger
⑬ Air Intake Vent with Cooling Fan
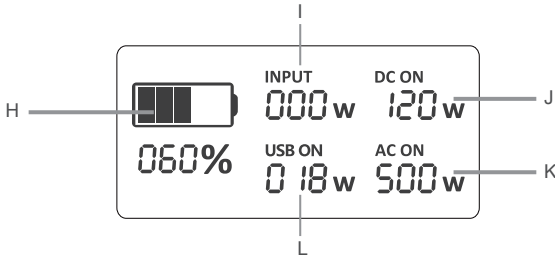
Note: No user-serviceable parts inside.
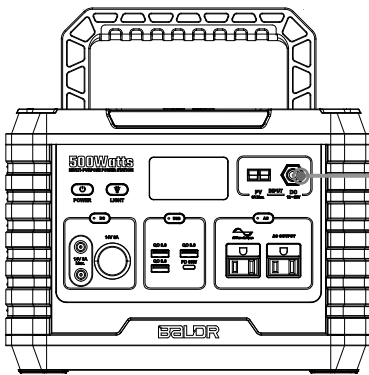**Recommended to fully charge the BALDR 500 before use.**

BUTTON FEATURE

A: BALDR 500 Power ON/OFF Button
B: SOS mode & LED light Button
C: DC Outputs Power ON/OFF Button
D: USB Outputs Power ON/OFF Button
E: AC Outputs Power ON/OFF Button

LCD FEATURES

```
          I
          |
       INPUT      DC ON
       000 w      120 w  ── J
H ──
       060%    USB ON     AC ON
                0 18 w    500 w  ── K
          |
          L
```

H: Battery Level Indicator
I: Input Status
J: DC Outputs Status
K: AC Outputs Status
L: USB Outputs Status

HOW TO CHARGE

**From Solar Charger
200W 6-9 hours**
depending on solar conditions

**From Car Port 12V
 10-12 hours when car running**

**From Wall Charger 110V
6-7 hours**

⚠ *DO NOT CONNECT DEVICE VIA AC OUTPUT PORT WHILE CHARGE THE BALDR 500.*
RECOMMEND TO DISCONNECT THE BALDR 500 WHEN FULLY CHARGED.

WHAT IT POWERS

Laptops (41.4Wh)
**Around
10 Recharges**

32" TV(60W)
**Around
7 hours**

CPAP without heated
humidifier (15W)
Around 3 nights

Gopro (5.9Wh)
**Around
74 Recharges**

Floodlight(4W)
**Around
110 hours**

Mini Fridge(40W)
Around 11 hours

DJ Drone(89.2Wh)
Around 5 Recharges

Smartphone(10Wh)
**Around
44 Recharges**

Switch(16Wh)
**Around
27 Recharges**

+MORE

BALDR 500 POWER ON/OFF A
Button A is the master switch. Press **Button A** to activate the button C/D.
Press **Button A** to shut down the output(s) When not in use.

SOS MODE & LED LIGHT B
Function available no matter the **Button A** activate or not.
First, press **Button B** to turn on the LED light;
Second, DOUBLE-Press to turn on the SOS mode;
Third, press **Button B** back to LED light, one more time again, will turn off the light.

DC OUTPUTS POWER ON/OFF C
The DC output ports will **NOT** function until the appropriate **Button A** & **C** are both pressed to activate. Press **Button C** to shut down the output(s) When not in use.

USB OUTPUTS POWER ON/OFF D
The USB output ports will **NOT** function until the appropriate **Button A** & **D** are both pressed to activate.
Press **Button D** to shut down the output(s) when not in use.

AC OUTPUTS POWER ON/OFF E
The AC outlets will **NOT** function until the appropriate **Button A** & **E** are both pressed to activate.
Press **Button E** to shut down the output(s) when not in use.

WIRELESS CHARGER ⑫
Press **ON/OFF Button A** before charging. Press ON/OFF Button to shut down the output(s) when not in use.

COOLING FAN ⑬
BALDR 500 utilizes an internal cooling fan to ensure the product is operating within the appropriate temperature range. BALDR 500, when it experiences a higher output load, will automatically turn on the fan. During discharge, and possibly charging, the fan may operate intermittently to keep internal temperature within operating range. The fan will likely start when the AC circuit is activated to ensure proper operation.

DETAILS DISPLAYED ON LCD

BATTERY LEVEL INDICATOR H : The battery level is provided by percentage of battery charge corresponding to the number of bars and percentage displayed. The segments in the battery level correspond to the current state of charge, 1-20% one segment, 21-40% two segments, 41-60% three segments, 61-80% four segments, and all five are lit when charge level is 81-100%.

Provides the user live telemetry data on time to completely charge, or deplete the battery based upon the energy entering or leaving the battery.

Highly recommend to fully charge BALDR 500 when first use. Higher battery level indicator show, more precise the data will indicate.

PLEASE BE AWARE that this value can adjust multiple times as the energy draw changes from the connected devices. This is evident during initial activation of ports with a connected device.

RECOMMENDED back to charge the BALDR 500 when battery indicates less than 20%.
Note that when you first plug in a power source, whether it's a solar panel or a wall charger, the BALDR 500 may take a minute to detect and adjust its charge circuitry before it starts drawing power from the source.

INPUT Status I: The BALDR 500 is capable of providing input energy in watts.

DC Outputs Status J: The display will provide output watts of the **DC ports** ②③ .
AC Outputs Status K: The display will provide output watts of the **AC Outlets** ⑥ .
USB Outputs Status L: The display will provide output watts of the **USB Outputs** ④⑤ .

LCD Screen ① will enter sleep mode after **20 seconds** of inactivity (no new output load detected), and will "wake up" when inputting a charging cord or when any button is pressed.

OPERATING INSTRUCTIONS

CHARGING BALDR 500

Connect the provided AC Wall power adapter to **Input** ⑧, and allow BALDR 500 to fully charge prior to use, approx. 6-7 hours.

Connect the Anderson plug to the **Input** ⑩, and allow BALDER 500 to fully charge prior to use, approx. 6-9 hours with the Solar Panel. Noted that the red part of the Anderson plug is positive, and the black part is negative. Please connect positive to positive and negative to negative to ensure using correctly.

When charging, the **LCD Screen** ① will be illuminated, and the LCD display will provide **Battery level Indicator H**, BALDR 500 is fully charged when the level is 100%. It is recommended to fully charge BALDR every 3 months to maintain the health of the battery pack.

POWERING / CHARGING DEVICES WITH BALDR 500

Select the type of outlet required by pressing the **Output ON/OFF Button C/D/E**. The output port will NOT function until the appropriate button is pressed to activate the port. When activated, the indicator on the button will illuminate green, indicating that the output(s) are active, and the LCD display will turn on and provide details on the charging output. The LCD Screen will automatically shut down when no outputs are activated.

BALDR 500 will enter sleep mode after **20 seconds** of inactivity (no new output load detected), and will "wake up" when inputting a charging cord or when any button is pressed.

Press the ON/OFF button(s) to shut down the output(s) when not in use.

PASS-THROUGH CHARGING
The advanced battery management system of the BALDR 500 allows it to charge a connected device via **DC outputs & USB outputs** while charge the BALDR 500.

⚠ **DO NOT CONNECTED DEVICE VIA AC OUTPUTS WHILE CHARGE THE BALDR 500.**
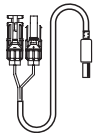
OVERLOAD CONDITION
If an overload condition occurs on the OUTPUT ports, BALDR 500 will:
• Automatically turn off **AC Outlets ⑥** power.
• The blue indicator light of **LCD Screen ①** still illuminated.
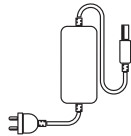• **DC Outputs Status J** still the same status as usual.

Do following:
• Check the input charge cable. The port will be efficient when the input charge cable meets the specification outlined in the GENERAL SPECIFICATIONS section.
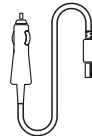• Only charge BALDR 500 with provided AC wall power adapter.
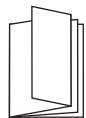
BALDR 500 ACCESSORY LIST

• 18V with MC4 connector cable

• 110V AC wall plug power adapter

• 12V Car Charger cable

• User Manual

Recommend to use 200W Solar panel (not included).

CLEANING

Be sure that BALDR 500 is disconnected from all input power sources and output devices. Use a clean, dry, soft-lint-free cloth to wipe down it. Remove any debris, dirt, or other blockages on both side vents. When cleaning debris from the side vents, do not allow the debris, dirt, or other blockages to enter the body of BALDR 500.

DO NOT use abrasive cleaners or solvents.
DO NOT use compressed air to clean side cooling vents, as this will force foreign particles into the internal circuitry.
⚠ *To avoid the risk of electrical shock, DO NOT use metal objects to clean ports.*

STORAGE

If storing for more than 1 month, charge completely before storage and recharge approximately every 3 months to avoid full discharge and possible damage.

Store indoors, in cool temperatures, mild humidity, and away from direct sunlight (See GENERAL SPECIFICATIONS section). Leaving in a vehicle or other confined spaces in extreme hot temperatures can lead to decreased service life, overheating, and fire. Extreme cold conditions below specific storage range can also harm BALDR 500 performance and service life.

Keep away from corrosion chemicals and gases.

After taking out of storage, visually inspect to make sure BALDR 500 and all accessories look satisfactory. This increase review the intake and exhaust side vents to ensure they are clear of debris. Allow BALDR 500 to return to ambient conditions before recharging, or charging other devices.

ATTENTION

Transportation:BALDR 500 complies with all legal requirements for transport of dangerous goods. The capacity of the lithium battery pack exceeds 100Wh. Based on international standards, if BALDR 500 is transported by airplane, it must be transported in accordance with IATA standard packaging. IATA instructions and labeling requirements and the relevant declarations must be completed.

✈⊗	Not permitted on aircrafts	⚡	Avoid dropping
	To preserve the battery lifespans, please use and recharge at least once every 3 months	⊗	Do not disassemble
	Use original or cerified charger and cables	⊗	It's not waterproof,do not expose to liquids
⊗	Avoid extreme temperature		Please dispose of batteries and electronic goods in accordance with local regulations

TROUBLESHOOTING

BALDR 500 WILL NOT CHARGE OR OPERATE connected devices:
• Ensure that the **DC/USB/AC Output Ports**②/③/④/⑤/⑥ are activated by pressing the
  Button(s) A & C/D/E for the port(s) in use.
• Confirm the connected device is suitable for the BALDR 500 by reviewing the output
  specifications provided in the GENERAL SPECIFICATIONS section.
• Confirm BALDR 500 is charged by reviewing the **Battery Level Indicator H**.
• Verify the watt data displayed on the **Status Indicator I/J/K/L** of **LCD Screen ①** for overload
  condition.

BALDR 500 WILL NOT CHARGE:
• Confirm that the wall plug power adapter's cord is inserted fully into the **DC Input ⑧** .
• Confirm that the AC wall plug power adapter is the charger provided with BALDR 500.
• If the input does not comply with the requirements located in the GENERAL
  SPECIFICATIONS section, the Low Watt range 0 to 10 may be displayed on
  Input Status I of **LCD screen ①** .

MAINTENANCE

Recharge as needed. There are no pre-designated intervals at which to recharge as long as the
BALDR 500 is being used regularly. Avoid discharging completed on a regular basis, as this can
impact overall life.
Regularly inspect all ports and wall charger for any debris, dirt, damage and corrosion.
DO NOT attempt to fix.
DO NOT cover the BALDR 500 with towels, clothing or other items.
Regularly observe if the side vents are collecting dirt or dust, and clean following cleaning
procedures noted in manual.

DISPOSAL/RECYCLE

Do not place equipment and its accessories in the trash. Items must be properly disposed
of in accordance with local regulations. See **www.epa.gov** for additional information.

STATEMENT

WARRANTY

Limited Warranty
BALDR Warrants to the original consumer purchaser that the BALDR will be free from defects in workmanship and material under normal consumer use during the applicable warranty period identified in the "Warranty Period" section below, subject to the exclusions set forth below. This warranty statement sets forth BALDR's total and exclusive warranty obligation. We will not assume, nor authorize any person to assume for us, any other liability in connection with the sale of our products.

Warranty Period
The warranty period is 12 months. In each case, the warranty period is measured starting on the date of purchase by the original consumer purchaser. The sales receipt from the first consumer purchase, or other reasonable documentary proof, is required in order to establish the start date of the warranty period.

The warranty can be extended to TWO TOTAL years if you registered via www.togopower.com or contact support@togopower.com.

Remedy
BALDR will repair or replace(at BALDR's option) any BALDR product that fails to operate during the applicable warranty period due to defect in workmanship or material. If a valid claim is made during the applicable period, BALDR, at its option, will either (1) replace the product, or (2) exchange the product with a product that is of equal value. A replacement product assumes the remaining warranty of the original product or ninety (90) days from the date of replacement, whichever is greater. Customer is responsible for the return shipping costs.

Limited to Original Consumer Buyer
The warranty on BALDR's product is limited to the original consumer purchaser and to any subsequent owner.

Exclusions
BALDR's warranty does not apply to (i) any product that is misused, abused, modified, damaged by accident, or used for anything other than normal consumer use as authorized in BALDR's current product literature, or (ii) any product purchased through an online auction house. BALDR's warranty does not apply to the battery cell unless the battery cell is fully charged by you within seven days after you purchase the product and at least every 3 months thereafter.

How to Receive Service
To obtain warranty service, contact our customer service team at support@togopower.com.

NOTES

BALDR