



# **Powerology**

20000mAh Power Bank

Jump Start Air Compressor SKU: PPBCHA43

# Table of Contents

Product Overview	2
Features	2
Schematic View	3
Charging Digital Devices	3
Car Jump Start Instructions	4
Instructions for Operation	5
Air Pressure Guidelines	7
Inflation Controls	8
Specifications	10
Precautions	11
Package Contents	13
Troubleshooting	13
Warranty	14
Contact us	14

# **Product Overview**

Prior to utilizing this product for the initial time, carefully read this manual and retain it for future reference. It serves as a guide for proper usage and highlights important safety measures.

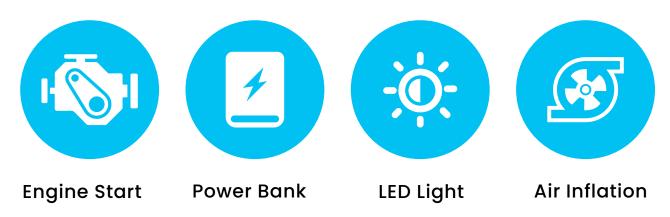
This device combines a portable car jump starter with an air compressor. It's designed to jump-start a car with a depleted 12V battery and is equipped with capabilities to inflate tires on automobiles, motorcycles, bicycles, as well as sports balls.

Additionally, it functions as a portable power bank for charging electronic devices such as mobile phones, tablets, PSP, MP3/ MP4, and cameras. The device also incorporates LED lighting features with various modes including standard illumination, SOS, and hazard warning.

Note: This product is not intended for children's use and should not be treated as a toy.

# Features

- Engine Start: Initiates the engine of a vehicle with a weak or dead battery.
- 2. Power Bank: Provides portable charging for electronic devices.
- **3. LED Light:** Offers illumination with additional emergency signal modes.
- **4. Air Inflation:** Enables the inflating of car, motorcycle, and bicycle tires, as well as sports equipment.











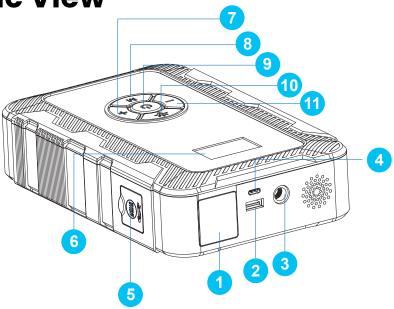
**Car Tires** 

**Motorcycle Tires** 

**Bicycle Tires** 

**Sports Balls** 

**Schematic View** 



- 1. LED Light
- 2. USB Output (5V/9V/12V)
- 3. Interface for Inflatable Tube
- 4. Type-C Charging Port
- 5. Port for Jumper Cable Connection
- 6. Digital Display Screen

- 7. Button to Increase Air Pressure "+"
- 8. Mode/Switch Button "M"
- 9. Power Button
- 10. LED Light Control Button
- Button to Decrease Air Pressure "-"

## **Charging Digital Devices**



 Connect the USB port of the charging cable to the product's USB interface.

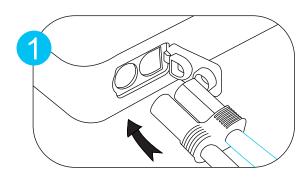


2. Insert the other end of the charging cable into the appropriate port on your mobile phone or digital device.

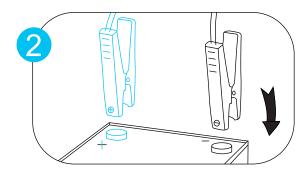


3. To initiate power, press and hold the "Power" button for 2 seconds, activating the USB power supply.

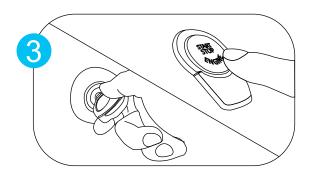
## **Car Jump Start Instructions**



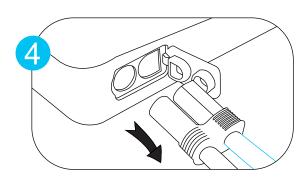
1. Detach the silicone cover and insert the EC5 connector end of the jumper cable into the corresponding port.



2. Connect the red clamp securely to the car battery's positive terminal (+) and the black clamp to the negative terminal (-).



3. Initiate the ignition process within 30 seconds: Press the vehicle's start button or rotate the ignition switch to the "START" position.



4. Following a successful engine start, carefully disconnect the plug from the jumper cable and then detach the clamps from the positive and negative battery terminals.

Note: Prior to initiating the vehicle's engine, verify that the jump starter's battery charge level exceeds 50 %.

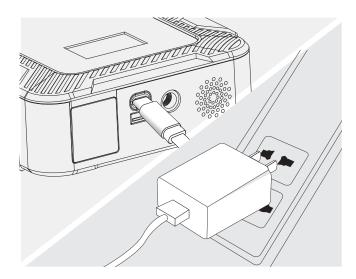
# Instructions for Operation

## 1. Charge the Product

Before initial use, ensure the product is charged to full capacity.

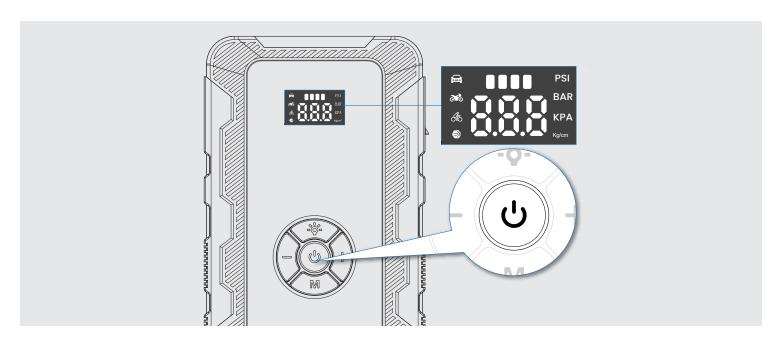
The charging status is indicated by a digital tube symbol that displays four segments that is

Each segment represents a portion of the charge and will sequentially



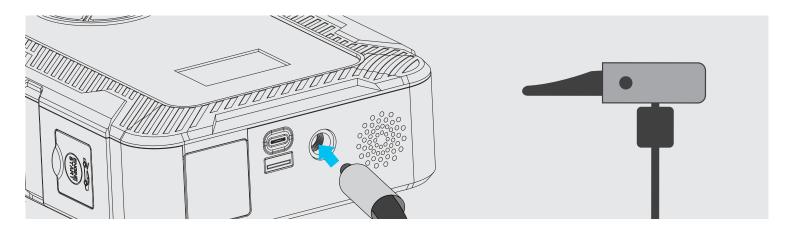
flash (one flash per second) during charging. When the product reaches 100 % charge, the indicator stops flashing. Afterward, if no further activity occurs, the display will shut off and the product will enter a standby mode within 10 seconds.

## 2. Power On/Off



The battery level indicator exhibits the numerical value of the device's power level upon startup. To toggle between on and pause of air inflation, simply press the "Power" button. To turn off the device, press and hold the "Power" button for a duration of 2 seconds. If turned on and not used for 30 seconds, the device shuts down automatically.

## 3. Connecting the Air Inflation Tube

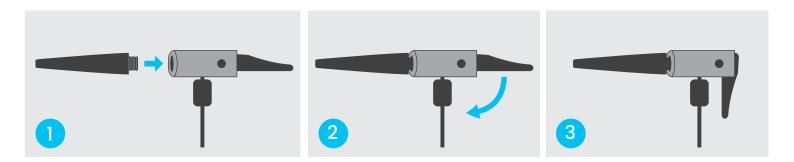


To connect the inflation tube, align its end with the inflation port on the device. This tube is commonly used to inflate bicycles, electric bikes, motorcycles, and car tires directly.

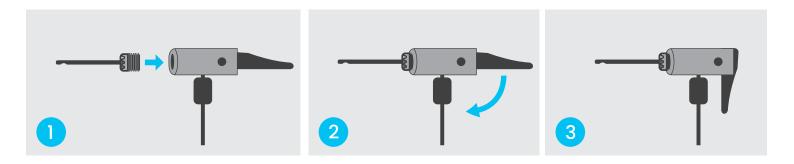
## 4. Gas Nozzle / Gas Needle Mounting Method

Nozzle/Needle Installation Steps:

- 1. Select the correct air nozzle for the object to be inflated.
- 2. Attach the air nozzle to the inflation tube.
- Secure the nozzle to ensure a tight fit, confirming the connection is locked in place.



4.1 To inflate items like air beds and swimming rings, select an appropriate air nozzle. Attach the air nozzle to the inflation tube before commencing the air inflation process.



4.2 To inflate basketballs, footballs, and similar types of sports balls, an air needle is required. Ensure to attach the air needle securely to the inflation tube prior to commencing inflation.

## **Air Pressure Guidelines**

To ensure safety, before employing this device for air inflation purposes, ascertain the air pressure value recommended for the item being inflated. This information can typically be found on the item's surface or by consulting its instruction manual. Being aware of the correct air pressure is crucial in order to prevent personal injury that could result from over-inflation.

Recommended Air Pressure Guide for Common Inflatables		
Item	Types	Recommended air pressure range
Car	Car tires	2.2–2.8 Bar (32–40psi)
Motorcycle	Conventional and Electric motorcycle tires	1.8–3.0 Bar (26–44psi)
Bicycle	Folding bicycle tires 12 ", 14 ", 16" 20 ", 22 ", 24" 26 ", 27.5 ", 29"	45–50psi 30–50psi 40–50psi 45–65psi
Ball	Sports balls: Basketball, Football, Volleyball, Rugby	7–9psi 8–16psi 4–5psi 12–14psi

### Note:

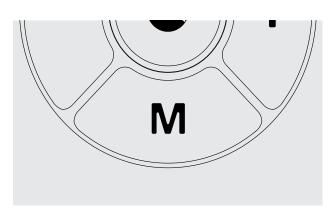
- 1. This product is not suitable for truck tires or road bicycle tires.
- 2. The data of the recommended inflation air pressure range is for reference only. Please refer to the instruction manual of each item provided by the manufacturer. (The data provided originates from laboratory conditions)



## **Inflation Controls**

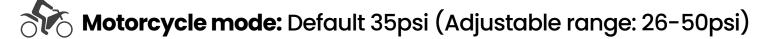
### 1. Mode Selection

Short press the "M" button to select the inflation mode. Each time you press this button, you can switch between the five inflation modes: "car," "motorcycle," "bicycle," "ball,"



and "Freedom Mode." Long press this key to switch between four air pressure units: PSI, BAR, KPA, Kg/cm². After selecting the appropriate inflation mode, the screen displays the default setting value and flashes three times at a frequency of once per second. It then enters the air pressure detection state to measure the current air pressure of the inflated object. If the object is not connected, the air pressure value will display "0".

Car mode: Default 36psi (Adjustable range: 26-50psi)



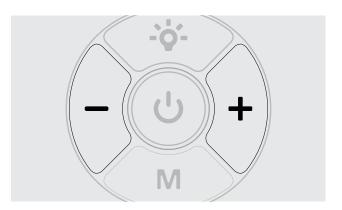
Bicycle mode: Default 45psi (Adjustable range: 30-145psi)

Ball mode: Default 8psi (Adjustable range: 4-16psi)

Freedom Mode: Activates without selecting any mode. The factory default preset pressure value is 35psi. The preset pressure can be freely adjusted before operation (pre-set values can be saved). Adjustable range: 3-160psi.

### 2. Adjust Presets

After selecting the inflation mode, short press the "+" key or "-" key to adjust the preset air pressure value. For quick adjustments, long press these keys. Once the setting is



complete, the air pressure value will flash three times at a frequency of once per second, and the setting is automatically confirmed.

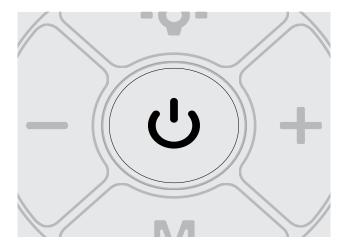
### **Caution:**

- 1. When adjusting the preset air pressure value, the display will flash to indicate the target air pressure adjustment status. The display remains constantly on to show the real-time air pressure.
- 2. The default value will be restored after the mode is switched or the device is restarted.
- 3. When inflating the swimming ring and air bed, simply adjust to "ball mode."

### 3. Power Operations

Turn on inflation:

After the air pressure setting is completed, short press the "Power" button to start inflation. The screen will display real-time air pressure changes during inflation.



### **Stop inflation:**

When the air pressure reaches the preset value, the air pump will automatically stop inflation. You can also pause the inflation by short pressing the "Power" button during the process.

### **Shut down:**

In the power-on state, press and hold the "Power" button for 2 seconds to shut down. To prevent accidental activation, the device will automatically shut down if no operation is detected within 30 seconds of being turned on.

## 4. LED Light

After the device is turned on, press the "LED light" button to activate the lighting mode. Short press the



button sequentially to cycle through the SOS distress light mode, warning light mode, and then turn off.



## **Specifications**

Product Name	Powerology 20000mAh Power Bank Jump Start Air Compressor
SKU	PPBCHA43
Size	193×110×53mm
Inflation Pressure Range	0.2-8bar / 3-120psi
Operating Temperature	0°C to 45°C -10°C to 45°C
Storage Temperature	-10°C to 50°C
Inflatable Tube Length	435mm (Including gas nozzle)
Battery Capacity	20000mAh (74Wh)
Working Noise	Less than 80dB at 1 meter
Charging Input/Type-C Input & Output	PD45W / 5V 3A, 9V 3A, 12V 3A, 15V 3A, 20V 2.25A
Charging Time	About 3.5 hours
USB Output	18W, 5V 3A, 9V 2A, 12V 1.5A
Air Pressure Sensor Accuracy	±1 psi
Start Car Voltage	12V
Start Car Current	1500A (3000A Peak)

# Precautions

### A. Usage Safety Notice

- 1. This product is not a toy and is not suitable for children. It is recommended for users over 16 years of age.
- 2. When using the product for the first time, charge it for more than 3 hours.
- 3. This product contains a built-in non-removable lithium battery. Do not dispose of the product in a fire or discard it carelessly. Lithium batteries may catch fire, ignite spontaneously, or explode due to overheating, impact, or water exposure. Avoid leaving the product in a car exposed to sunlight or in high-temperature environments.
- 4. If the product appears swollen, leaks, or emits an unusual odor, cease use immediately.
- 5. If the product produces abnormal noise or excessive heat during use, stop using it and shut it down immediately.
- 6. Please store or use this product in a dry and clean environment. Avoid dampness, heavy falls, water immersion, and the intrusion of sand and dust, which may cause damage. This product is not waterproof and should not be washed in water.
- 7. Store this product away from corrosive materials. The storage temperature should not be lower than -10°C or higher than 50°C. Extreme temperatures can shorten the life of the product and damage the built-in battery.
- 8. Keep this product charged at least once every 3 months.
- 9. Do not disassemble the machine yourself, as it may cause a safety accident.

## **B.** Inflation Safety Notice

1. The product contains a built-in DC motor, which may generate

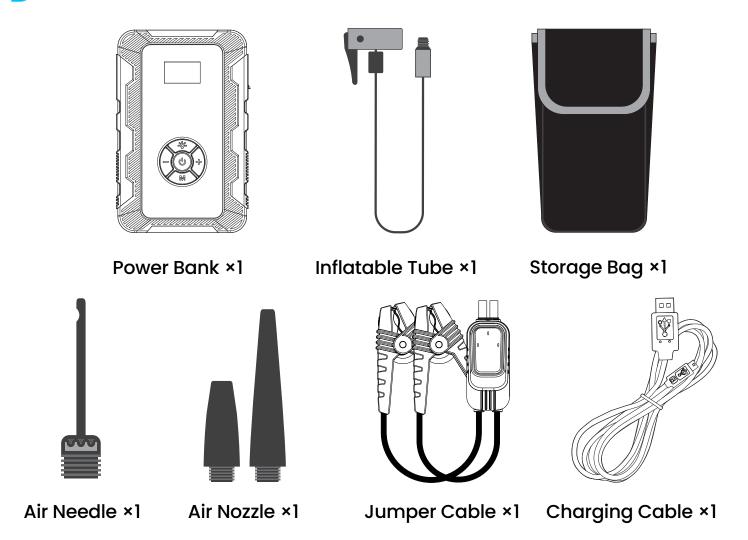
electric sparks during operation. Avoid using it in flammable or explosive environments.

- Before inflating, confirm the required air pressure value for the item to prevent personal injury from over-inflation.
- 3. Ensure the correct measurement unit is selected when setting the inflation air pressure value to avoid accidents such as tire bursts. Common unit conversions: 1 bar = 14.5 psi, 1 bar = 100 kPa.
- 4. Keep the product at a safe distance from children during inflation.
- 5. Do not bend or step on the inflation tube, and ensure the airflow is unobstructed.
- 6. Operators must not leave the inflation area unattended. Continuously monitor the inflation process to prevent excessive air pressure.

## C. Jump Start Safety Notice

- This product is suitable for starting 12V battery engines only and cannot be used to start 24V battery engines.
- 2. Always use the cord clamp provided with the product to initiate the vehicle.
- 3. Do not attempt to start the vehicle if the product's power level is below 50 %, as it can damage the product.
- 4. Avoid clamping the battery clamps at both ends simultaneously, as this could lead to safety incidents.
- 5. If an initial startup attempt fails, wait at least 1 minute before trying again to avoid damaging the product.
- 6. After successfully starting the vehicle, wait at least 30 minutes before recharging the product.

## **Package Contents**



## **Troubleshooting**

Problem	Solution
Slow Inflation	1. Ensure the battery power is sufficient.
	2. Check for air leaks in the hose.
	3. Ensure that the hose connections at both
	ends are securely fitted.
	4.Verify if the tires are flat.
Device is turned on but fails to inflate	1. Ensure the battery power is sufficient.
	2. Check if the air pressure of the inflated item
	exceeds the preset value.

Normal inflation, but the	Low-pressure items like balloons are beyond
display shows zero pressure	this device's measurable range.
Power automatically shuts off	The device will automatically shut down if not
after securing the air nozzle	operated within 30 seconds; simply restart it.
Air leakage when connecting the hose	Securely install the hose.



## Warranty

Products that you buy directly from our **Powerology** website or shop come with a 24-month warranty.

The 24-month warranty applies to products purchased directly from our **Powerology** website or store. If **Powerology** products are bought from any of our verified retailers, then the product is eligible for only a 12-month warranty. To extend your product's warranty, visit our website **powerology.me/warranty** and fill in your details in the provided form along with an uploaded picture of the product to process your request. Once approved, you will receive a confirmation email of the extended product warranty. Upload the required information within 48 hours of purchase to be eligible for a 24-month warranty period.

For more info, please check: powerology.me/warranty



## **Contact Us**

If you have any questions about this Privacy Policy, please contact

us at: hey@powerology.me

Website: powerology.me

Instagram: powerology\_official

Facebook: powerology.ME