



Powerology Portable Power Generator
90000mAh 300W QC with Bluetooth Speaker 85W

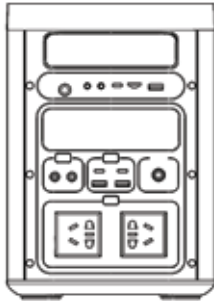
SKU: PPBCHA37

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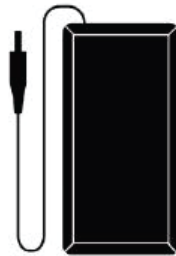
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Before installing and using the product, please carefully read this User Manual to guarantee correct usage and keep it secure for future reference.

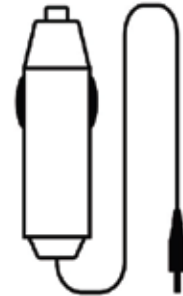
Package Contents



Portable Power
Generator



45W AC
Charger



Car Charger

Charging the Product

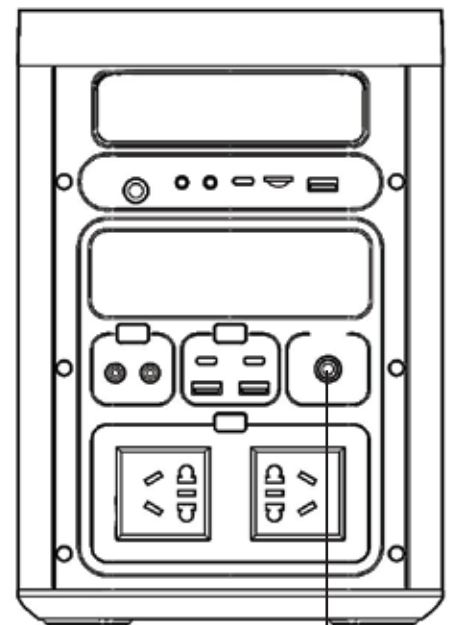
Upon receiving the product, we recommend that the product be fully charged before first use to achieve optimal performance.

1. The device can be operated while it is being charged. It is recommended to switch off the product during its first charge.

2. The AC adapter is provided. The AC adapter plug should be inserted into a wall AC electrical outlet, and the product's DC input should be connected to the adapter's DC head.

3. The product is compatible with DC inputs ranging from 12V to 30V, which includes solar panels and car chargers designed for vehicles. All three types of inputs use the same charging port.

4. When the LCD display indicates 100 %, the product is fully charged.



Charging port

Charging Time



1. AC Adapter

Fully charges in approximately 6 hours

2. Car Charger



12V urban vehicles: Approximately 4.5 hours for a full charge.

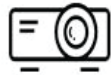
24V recreational vehicle (RV): Approximately 3 hours for a full charge



3. Solar Panel Charging

120W solar panels: Takes about 8–6 hours for a full charge, requiring direct and continuous exposure to strong sunlight

Operating Instructions for AC Output



This product is suitable for use with projectors, cameras, laptops, televisions, UV lamps, fans, etc.

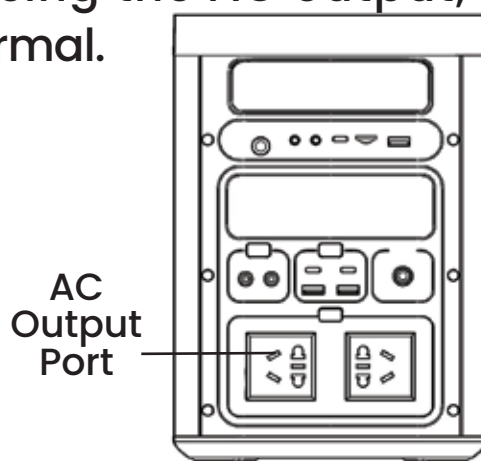
1. Press and hold the AC switch for 3 seconds to turn the AC on or off.

2. If the AC output has been on for one hour continuously without zero load conditions while the portable power generator is not connected to other devices, the product will automatically shut down. This is the default system setting.

3. Plug the power supply cord of your device into the power generator's AC output port. When using the AC output, the product will generate heat, which is normal.

The built-in cooling fan will automatically start to function to prevent the product from overheating.

4. If the load on the product exceeds 300W, the product will automatically activate overload protection after a long period of use and will deactivate the output to prevent damage.



This product is compatible with devices with powers less than 300W.

Operating Instructions for DC Output



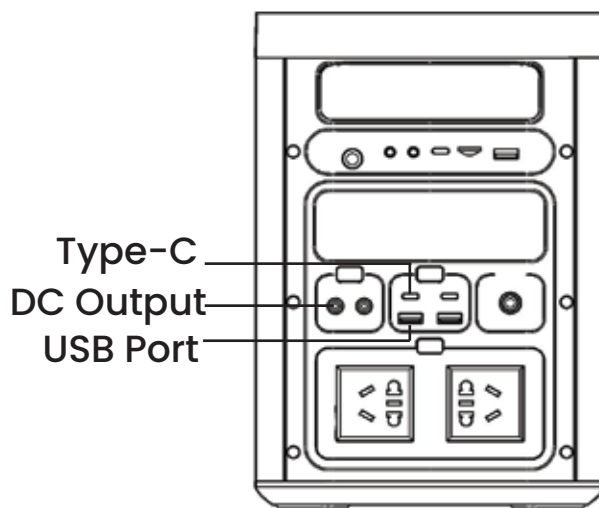
This product is compatible with mobile phones, tablet computers, car refrigerators, LED lamps, etc.

1. To activate or deactivate the DC output, press and hold the DC switch for 3 seconds. When using the DC output, ensure that the external equipment's power supply voltage matches the specified DC12 5521V rating. If the voltage does not match 12V, it may result in damage to the equipment, for which our company assumes no liability.

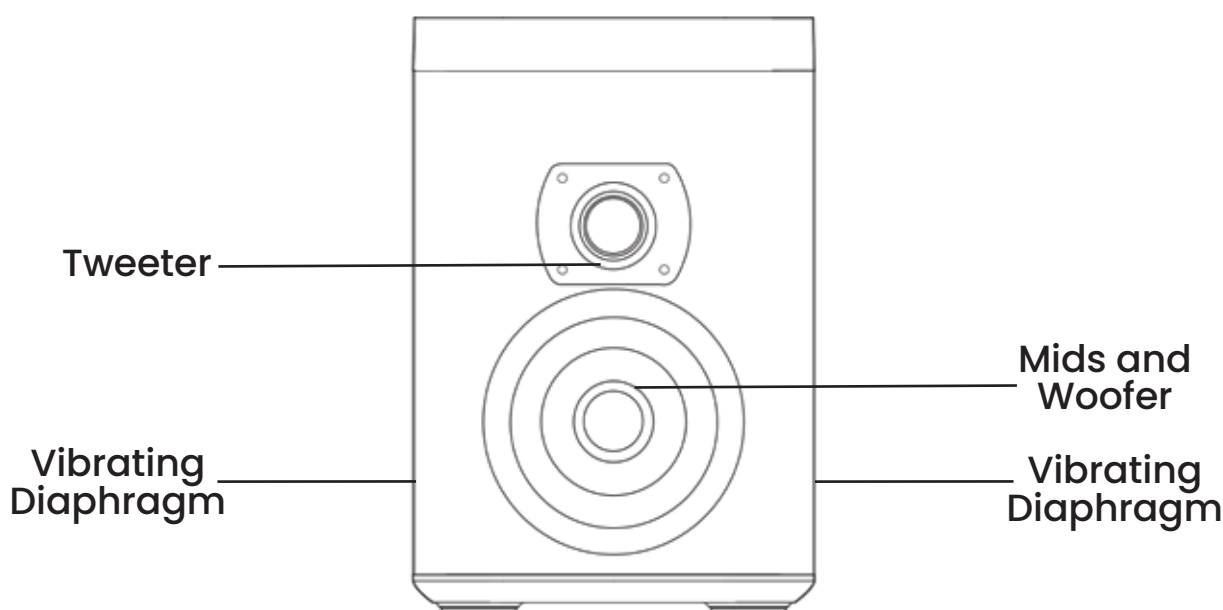
2. To turn the USB power on or off, press and hold the USB switch for 3 seconds.

3. The Type-C port is designed for charging mobile phones, tablet computers, and laptops.

4. The USB port is specifically for charging mobile phones.

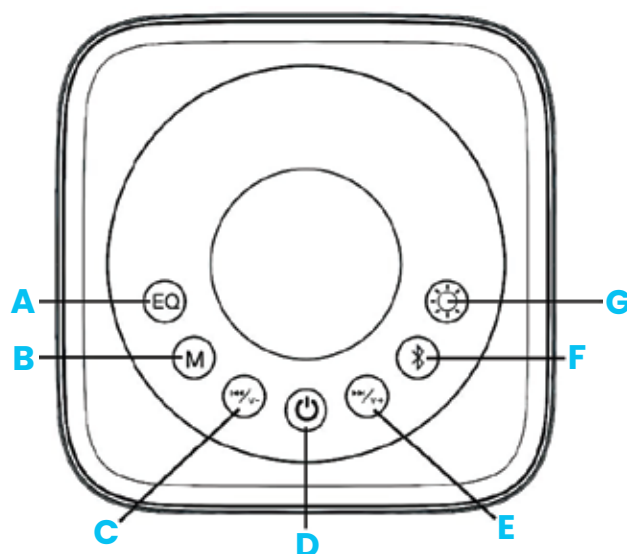


Schematic View of the Power Generator



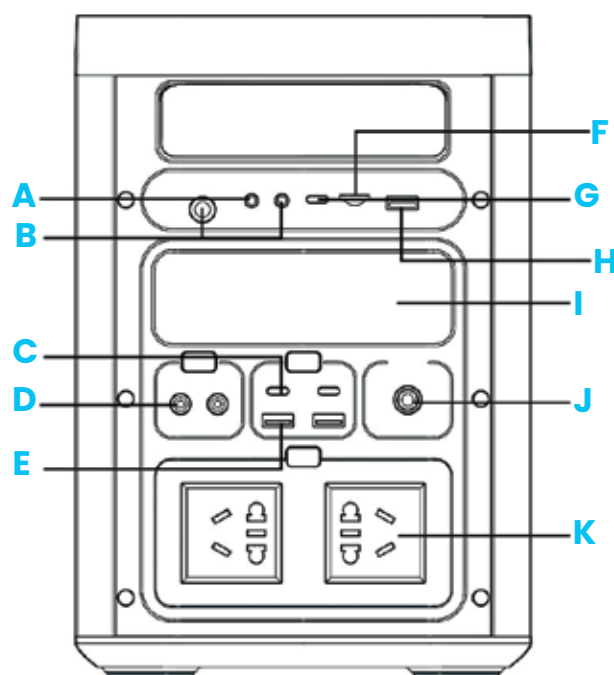
Button Operation Guide

A. Sound Effect Mode Button
Activate or deactivate by long pressing the switch.
B. Microphone Control Button
C. Play Previous Track / Volume Down Button
D. Power Button
E. Play Next Track / Volume Up Button
F. Bluetooth button
G. Light Color / Mode Switch



Interface Operation Guide

A. Earphone Input
B. Instrument Audio Input
C. Type-C Fast Charge Output
D. Stabilized DC Output (12V)
E. USB Fast Charge Output
F. TF Card (Music Player Feature)
G. Internal Recording of OTG
H. USB (Music Player Feature)
I. Display Screen
J. Charging Port 1. Solar panel cable charging 2. Vehicle cable charging.
K. AC Output (Max. 300W)



Usage Instructions

1. Instructions for Button Functions

EQ: Short-press the button to switch sound effect modes., press the EQ button briefly. Long-press to turn on or off the external resonance horn.

M: Short-press to turn on/off the microphone on or off with a short press. Double-press to switch modes; switch modes with a double click. Long-press to enable noise cancellation.

⏮/V- : Short-press to decrease the volume. Long-press to play the previous track.

⏻ : Short-press to Play/Pause. Long-press to turn the device on/off.

⏭/V+ : Short-press to increase the volume. Long-press to play the next track.

✂: Single-press to switch between indoor/outdoor sound effects. Double-press to enable True Wireless Stereo (TWS) feature and pair audio devices. Long-press to disconnect Bluetooth feature.

☀ : Short-press to switch between light color modes.

2. Operating Instructions of Interface

MIC IN + AUX IN

Use for instrument audio input such as guitar, saxophone, erhu, flute, etc

AUX OUT

Insert earphones to listen to the sound while live-streaming and playing the connected instrument.

OTG

Record audio directly to a connected USB storage device, essentially using the speaker as a recording interface. Additionally, play music from external devices, such as USB drives, or connect the speaker to a smartphone or tablet for direct digital audio transfer.

TF CARD

Slot for playing music from a microSD card.

USB

Port for USB drive music playback.

DC Output (12V)

Output interface for powering devices rated below 1260W, such as 12V LED lights, car refrigerators, etc.

Type-C1 and C2

Outputs for fast charging mobile phones, laptops, and tablet computers.

USB-A1 and A2

Ports for super-fast charging of mobile phones.

Charging port

Use with the provided charger, vehicle charging cable, or solar panel charging.

AC Output

The AC 220V output delivers a pure sine wave for powering devices under 300W, such as projectors, televisions, electric fans, computers, etc.

Audio Playback Instructions

1. Bluetooth Connection:

1.1 Upon startup, the Bluetooth is enabled by default. In case the Bluetooth is not enabled, activate it by pressing the "M" button. Should the connection attempt fail, the Bluetooth indicator blinks. A steady indicator light signals a successful connection.

1.2 Pair your mobile device by enabling Bluetooth and selecting “**Pow-SoundGen**” from the available devices, then confirm the pairing. A prompt sound is emitted signaling that the connection is successful.

1.3 The device has a memory function and will automatically reconnect with paired devices upon powering up.

1.4 If disconnection occurs, you can either manually reconnect through your mobile device's Bluetooth settings or press and hold the Bluetooth button on the sound system for 3 seconds to connect.

Music Playback:

To play music, pair your mobile phone or other Bluetooth -enabled devices and stream your desired tracks.

2. USB/TF Card Mode

When a USB drive or TF card is inserted, audio playback will commence automatically, prioritizing the most recently added media. A confirmation tone will be emitted upon successful detection of the device. To switch the function, briefly press the “**M**” button. The system is capable of decoding and playing MP3 audio formats.

3. AUX IN Mode (External audio input)

When the AUX input external audio cable is connected, the speaker will automatically initiate playback following the 'last -connected priority' principle and emit a confirmation tone. If an AUX input, USB drive, and TF card are all connected simultaneously, switch between them by briefly pressing the “**M**” key.

4. Live-streaming Function

Plug your earphones into the earphone jack before wearing them. Connect your mobile phone or device to the OTG live-streaming data cable, and activate your live-streaming application or video recording software. For audio accompaniment, insert a 3.5mm 3-

section AUX cable to your playback equipment, or pair another mobile phone for Bluetooth audio playback. Additionally, you can use a USB drive or TF card for accompaniment. Turn on your wireless microphone and adjust the volume to suit your needs for karaoke or live-streaming.

Specifications

1. Speaker Parameters

Distortion Degree	$\leq 1\%$
Separation Degree	$\geq 60\text{dB}$
Signal-Noise Ratio	$\geq 70\text{dB}$
Speaker Impedance	4Ω
Volume Adjustment Mode	Key Adjustment
Bluetooth Version	5.3
Bluetooth Receiving Distance	$\geq 10\text{M}$
Frequency Response Range	160Hz-20kHz
Woofer Power	60W
Tweeter Power	25W
Audio Input Modes	USB, AUX, TF Card, OTG, Microphone, Accompaniment, Bluetooth Playback

2. Microphone Parameters

Output Impedance	$600\Omega \pm 15\%$
Battery Voltage	3.7V
Directional Feature	Unidirectional
Transmission Frequency	630MHz - 665MHz
Frequency Response Range	60Hz - 15kHz
Sensitivity	$-49 \pm 3\text{dB}(\text{at } 1\text{kHz})$ 0dB=1MV/Pa

3. Operational Parameters

Model	PPBCHA37
Battery Type	Lithium Iron Phosphate
Battery Pack Energy	15Ah/19.2VDC (288Wh)
AC Output	220V-50Hz, Continuous 300W, Peak Value 600W
Type-C Output (*2)	5V=3A, 9V=3A, 12V=2.5A, 15V=2A, 20V=1.5A, Max. 30W
USB Output (*2)	5V=3A, 9V=2.5A, 12V=2A, Max. 24W
DC 12V Output (*2)	12V=5A, Max. 60W
Battery Capacity	288Wh (90000mAh*3.2V)
Cycle Life	>2500 Times
Adapter Charging	15V=3A, Max. 45W
Vehicle-Mounted Charging	12V / 24V DC, Max. 100W
PV Solar Charging	12V / 30V DC, Max. 100W
Operating Temperature	-10°C to 40°C
Charging Temperature	0°C to 40°C
Dimensions	190x190x272mm
Weight	5.5kg
Shell Material	PC Flame Retardant + Steel Mesh

Precautions

Please carefully read the operating manual before use and follow the instructions provided.

1. The product contains electronic components at high voltage. Ensure to meticulously follow safety protocols and handle equipment with care to avoid short circuits and accidents during operation.
2. Do not transport the product on an airplane.
3. Only use the original adapter and accessories provided when charging or discharging the product.
4. Keep the product away from fire, liquids, and flammable materials.

5. Avoid prolonged exposure to sunlight.
6. Prevent short circuits that may occur from contact with small metal objects, such as hardware or coins.
7. The product may become warm during operation.
8. This product contains lithium-ion batteries; store at a temperature range of 0°C to 45°C.
9. Do not disassemble the device.
10. If the product is not in use for an extended period, please ensure to turn off all switches and initiate a recharge cycle every 3 to 5 months.
11. The disposal of the product should comply with the applicable local laws and regulations.

Warranty

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

The 24 months 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 12 months warranty. To extend your product's warranty, visit our website **powerology.me/warranty** and fill 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 24 months of 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](https://www.instagram.com/powerology_official)**

Facebook: **[powerology.ME](https://www.facebook.com/powerology.ME)**