



Powerology

**16000mAh SOLAR Power Bank
with FM Radio Speaker and Lights**

SKU: PPBCHA49

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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.

Schematic View



Specifications

Product Name	Powerology 16000mAh SOLAR Power Bank with FM Radio Speaker and Lights
SKU	PPBCHA49
Battery Capacity	16000mAh/3.7V/59.2Wh
USB-C Input	DC5V/2.4A 9V/2A 12V/1.5A, 18W
USB-C Output	DC5V/3A 9V/2.22A 12V/1.67A, 20W
Built-in USB-C cable Output	DC5V/3A 9V/2.22A 12V/1.67A, 20W
Built-in Lightning cable Output	5V/2.4A, 12W
Built-in USB-A cable Input	5V/2.4A 9V/2A 12V/1.5A, 18W
USB Output	5V/2.4A, 9V/2A, 12V/1.5A, 18W
Wireless Output	2.5W (Watch Output)
LED light Power	2W
Speaker Power	3W
Headphone Output	25mW (16Ω)
Speaker Parameters	32mm 4Ω
Max Sound Pressure	>80dB 1KHz
Solar panel	DC5V/0.24A (Light Intensity>25000LUX)
Hand Crank Generator	DC5V/0.4A >7200 r/pm
FM Frequency	87.5 to 108MHZ
FM SNR	≥54dB
Weather Band Frequency	162.550/162.525/162.50/162.475/162.450/162.425/162.400MHz
Distortion	THD≤1 %
Bluetooth	V5.3
Bluetooth Name	W29
Bluetooth SNR	≥78dB
Transmission Range	8-10m
Dimension	187×101×37 mm
Net Weight	645g

Features

- 1.** Features an exclusive and stylish design that elegantly blends fashion with visual appeal.
- 2.** Employs original A-grade polymer battery cells to ensure reliable and consistent performance.
- 3.** Includes official magnetic modules for full compatibility with all modern Apple watches.
- 4.** Delivers a high-capacity portable power bank that can charge multiple devices simultaneously.
- 5.** Equipped with solar panel and hand crank generator options for emergency charging in any weather condition.
- 6.** Integrates an LED flashlight to enhance convenience for outdoor activities.
- 7.** Comes with two integrated charging cables for immediate connectivity.
- 8.** Incorporates a high-sensitivity FM radio chip with a WB weather warning band, offering early warnings of severe weather.
- 9.** Enables Bluetooth connectivity for seamless wireless music playback from a mobile phone.
- 10.** Features a headphone jack to facilitate private listening without impacting those around you in public areas.

Instructions for Use

A. Power On/Off

Gently press the power button to activate the device. The LED power indicator will illuminate. If no device is connected for charging, the unit will automatically power off after 30 seconds.

B. Charging the Device

B.1 Solar Charging

Position the device with its solar panel facing directly towards sunlight. This converts solar energy into electrical energy to charge the device, with more effective charging in strong light conditions. During high temperatures, avoid placing the device on heat-retaining surfaces such as concrete or inside vehicles. Cease solar charging if the device's temperature rises above 50°C.

B.2 Power Charging

Insert one end of the cable into the Type-C port and connect the other end to the USB port of your charger. The LED power indicator will blink during the charge process and turn solid once the device is fully charged.

C. Charging Digital Products like Phones

C.1 Cable Charging

Activate the device by pressing the power button; the LED indicator will illuminate. Insert one end of the cable into the USB port at the top of the device and the other end into the charging port of the device you wish to charge. You can also use the built-in cables to charge corresponding devices.

C.2 Wireless Charging

Press the power button to turn on the device; the LED indicator will light up. Position your watch over the wireless charging area for automatic magnetic attachment and begin charging. The wireless symbol ((●)) on the watch's display will light up to indicate active charging.

Button Guide



1. Radio Power Button

1.1 Modes and Settings: Long press to turn on/off. Double click to switch between FM/WB/BT/Clock modes. Quickly press three times to enter clock time adjustment mode. Once in this mode, briefly press to switch between setting hours and minutes.

1.2 Adjustment Controls: Use the previous/next track buttons to increase or decrease the time. After making adjustments, press the power button again to exit adjustment mode and return to the previous state.

1.3 Backlight Management: To conserve battery power, the backlight will automatically turn off after 30 seconds in clock mode. Press any button to re-illuminate the display.

1.4 Flashlight Usage:

1.4.1 Power-Off Mode: Tap the power button to display the flashlight icon, then tap again to activate the flashlight.

1.4.2 Power-On Mode: Press the button to turn on the flashlight. Once on, tap the button to switch to SOS mode, and tap again to turn off the flashlight.

2. Previous Track Button

2.1 Bluetooth Mode: Short press to skip to the previous track.

2.2 FM Mode: Short press for manual station tuning in 100kHz increments; long press to automatically search for the previous radio station.

2.3 WB Mode: Selects the previous frequency reception point.

2.4 Clock Mode: Adds one hour or one minute to the current time.

3. Next Track Button

3.1 Bluetooth Mode: Short press to play the next track.

3.2 FM Mode: Short press for manual station tuning in 100kHz increments; long press to automatically find the next radio station.

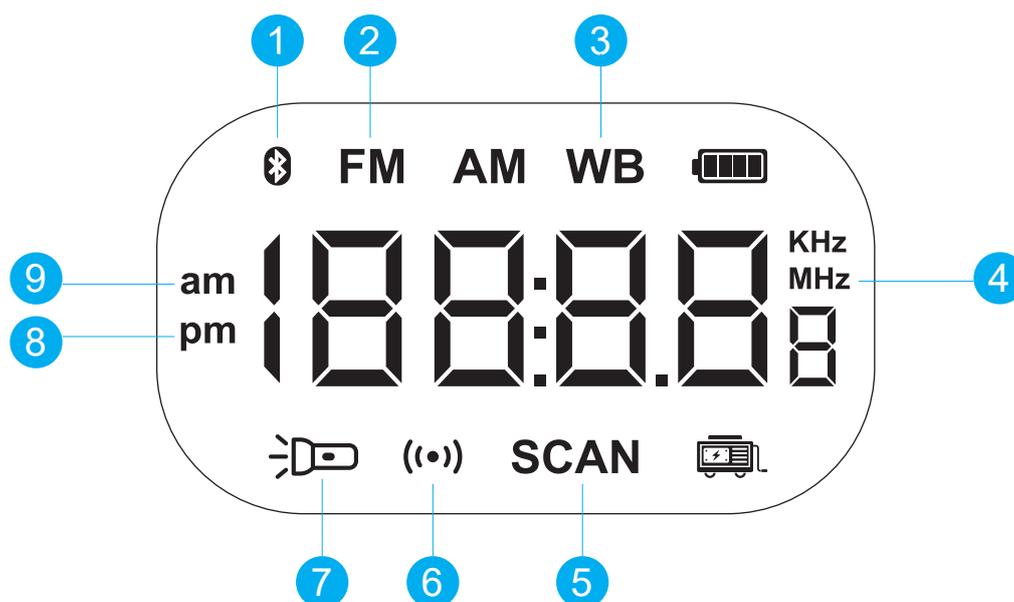
3.3 WB Mode: Selects the next frequency reception point.

3.4 Clock Mode: Subtracts one hour or one minute from the current time.

4. Volume Knob

Adjusts the speaker's volume.

Display Guide



1. Bluetooth Indicator: Blinks when not connected and remains solid once successfully connected.

2. FM Radio Status Display: Stays solid in FM radio mode.

3. WB Weather Status Display: Remains solid in WB weather mode.

4. Frequency Display: Shows the current frequency unit in FM/WB modes.

5. SCAN Auto Search Display: Stays solid during automatic searching for radio stations.

6. **Wireless Charging Status Display:** Remains solid while wireless charging an Apple Watch.
7. **Flashlight Status Display:** Stays solid when the flashlight or SOS mode is activated.
8. **Afternoon Indicator:** Displays when the current time is in the afternoon.
9. **Morning Indicator:** Displays when the current time is in the morning.

Instructions for Using the Radio

When using the radio to listen to programs, please note that using the power bank function (either wired or wireless charging) may impact FM signal clarity. If you notice a degradation in signal quality while listening to FM radio, check whether the power bank is activated. Turning on the power bank can interfere with radio stations that have weak transmission signals, especially during charging.

Bluetooth Function

1. To activate the Bluetooth mode, long press the radio button, and then double-click it to switch to Bluetooth mode.
2. The display will show the blue state indicating the speaker is searching for Bluetooth connections.
3. Enable the Bluetooth function on your smartphone or another Bluetooth-compatible device, and search for the device named "W29". If a password is required, enter "0000".
4. You will receive a "Bluetooth Connected" notification once pairing is successful.
5. For a new device, a manual connection to Bluetooth is necessary.
6. The product will automatically reconnect to the last connected Bluetooth device upon powering on.

7. Once connected, you can select and play your music through the Bluetooth device once the connection is established.

Accessories

1. Charging Cable
2. Lanyard

Maintenance

To ensure optimal efficiency of this product, please adhere to the following guidelines:

1. Keep the product away from moisture and corrosive substances.
2. Avoid using chemicals to clean the product.
3. If the mobile power supply is not used for an extended period, it may experience over-discharge.
4. To maintain optimal performance, please fully charge and discharge the mobile power supply at least once every six months.

Warning

1. Do not disassemble or modify this product.
2. Be vigilant about fire safety, moisture control, and prevention to avoid malfunctions.
3. Avoid using this product in high-temperature environments $>45^{\circ}\text{C}$.
4. Ensure that connected devices are compatible with this product's output specifications.
5. If the battery bulges, leaks, or emits an unusual odor, discontinue use immediately.

Troubleshooting

- 1. Low Battery Indicator:** When the power switch is activated, if only one blue LED battery indicator light is flashing, it indicates low battery. Please charge this product immediately.
- 2. Charging Issues:** If you are unable to charge this device, replace the charger and charging cable and attempt to charge again.
- 3. Charging Mobile Phones or Digital Products:**
 - 3.1** Reconnect the charging cable to both the phone and this device.
 - 3.2** Use the cable provided with this device along with a charger that supports an output of 5V/3A or higher.
 - 3.3** Check for the elasticity of the buttons.
 - 3.4** Ensure the charging indicator functions normally during the charging process.
 - 3.5** Verify the condition of the USB input cable for any abnormalities after connecting to this device.
 - 3.6** Ensure the USB output cable is in good condition and check for any abnormalities when connecting to the device that needs charging.
 - 3.7** Listen for any abnormal sounds or detect unusual odors emanating from the product.
- 4. Maintenance:** Do not attempt to dismantle or privately maintain the product.

Note: If the product malfunction cannot be resolved following the above steps, please contact the authorized service professionals.

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**

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