

FREEDOM FR001 & FR002 INSTRUCTION MANUAL

IMPORTANT SAFETY INSTRUCTIONS



CAUTION

This symbol indicates information on how to avoid damaging the unit.



WARNING

This symbol indicates information concerning your personal safety.

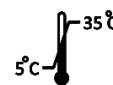


IMPORTANT

This symbol indicates tips and information about setting up FR002 (Charging Base).



CAUTION / WARNING



- Read all instructions before using the product.
- Do not drop, misuse or put excessive force on power bank. Power banks contain batteries and components that can be damaged if misused.
- To reduce risk of injury, close supervision is necessary when the product is used near children.
- Use of an attachment not recommended or sold by power bank manufacturer may result in a risk of fire, electric shock, or injury to persons.
- To reduce risk of damage to the electric plug and cord, pull the plug rather than the cord when disconnecting power pack.
- Do not operate the unit with a damaged cord or plug, or a damaged output cable.
- Do not use if the unit has been damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- Do not disassemble the power bank, take it to a qualified service person when a service or repair is required. Incorrect assembly may result in a risk of fire or electric shock.
- Do not expose to water.
- This unit may become hot when recharging, handle with care.
- Do not leave in hot conditions 60C or above e.g., left sitting in hot car.
- Do not operate unit outside of specified conditions.
- This unit contains Li-ion 18650 or equivalent cells.
- Do not expose to heat or throw in fire.
- Do not attempt to modify.
- Be careful when unpackaging the unit. Do not use sharp objects when removing the packaging as this may cause scratches to the unit.

SAVE THESE INSTRUCTIONS

Contents

Specification.....3

Product Overview

FR001.....3

FR002.....4

Setting up FR0024

Setting up & Recharging4

Using the power bank5

User Maintenance Instructions5

User Do's & Don'ts5

Moving and Storage Instructions5,6

Disposal of Product.....6

Trouble Shooting.....7

Specification FR001

Model: FR001

Battery cells: Li-ion 18650

Battery Capacity: 18900mAh*(+/- 5%)

Input (Power in contacts): DC 20V/1.5A (max)

Type-C output: DC 5V/3A, 9V/3A, 15V/3A, 20V/3A (PD3.0 60W)

Type-A output: DC 5V/3A, 9V/2A, 12V/1.5A (QC3.0 18W)

Total output: 78W (Both ports combined)

Dimensions: 136mm diameter x 33mm tall

Weight: 0.46KG

Operation Temperature: 5~35C

Packaging Content: 1 x FR001

Specification FR002

Model: FR002

Power Input: 20V/7.5A

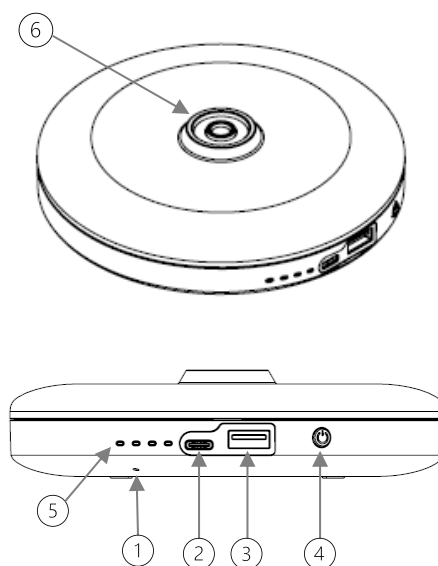
Power output: 20V/7.5A

Dimensions: 145mm diameter x 21.5mm tall

Weight: 0.34KG

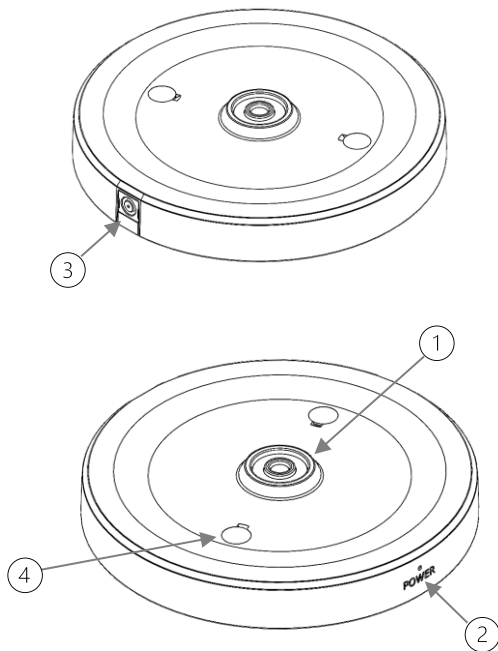
Packaging content: 1 x FR002, 1 x AC Power Cord, 1 x Power Supply (20V/7.5A)

Product Overview – FR001



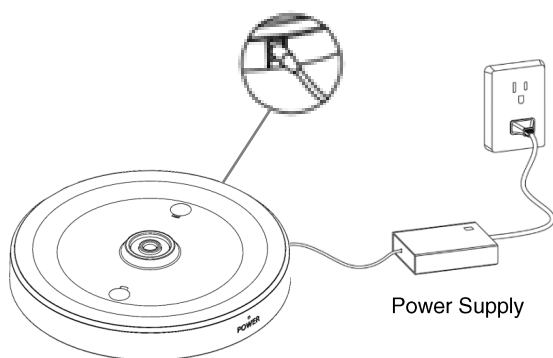
- ① Reset button location
- ② USB C Port
- ③ USB A Port
- ④ Power Button
- ⑤ LED Charge level indicator
- ⑥ Power Contact Rings

Product Overview – FR002



- ① Power Out Contact Rings
- ② Power Indicator
- ③ D.C. Jack – Power In
- ④ 2x Charging Base Fixing locations (2025 models onwards)

Setting Up FR002



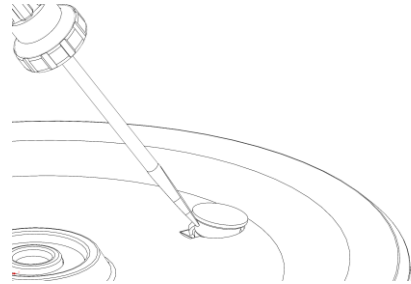
1. Plug the AC cord into the power supply.
2. Plug the AC plug into an outlet.
3. Plug the power out lead from the power supply into the DC jack on at

the back of FR002. Power indicator will illuminate green.



IMPORTANT – Charging Base Fixing Points

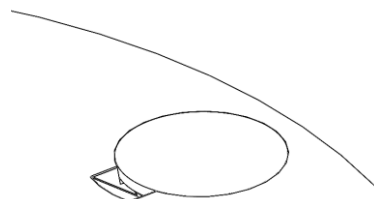
1. Remove the 2x fixing point cover caps as shown below.



2. Position the charging base in the desired location. Once in position use (up to) 2x 4G screw to secure it to the desktop/surface.



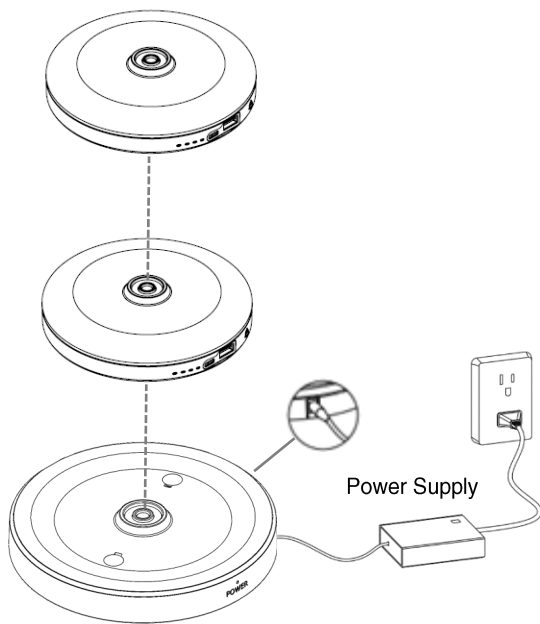
3. Place fixing point cover caps back into position.



Setting Up & Recharging FR001

IMPORTANT

Setting up



To recharge the power bank, place it onto the dedicated charging base (FR002). The power bank will be recharged via the contact pins on the base of each unit. Multiple power banks can be stacked on top of one another when recharging.

The dedicated charge base (FR002) can support 5 units with recharge times around 3.3 hours, or 5 plus units at extended recharge times. *

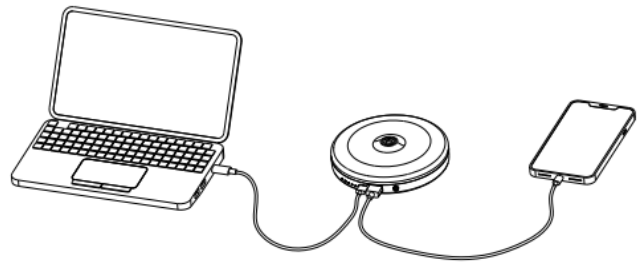
☀ ☀ ☀ ☀	100%
🌑 ☀ ☀ ☀	76% - 99%
● 🌑 ☀ ☀	51% - 75%
● ● 🌑 ☀	26% - 50%
● ● ● 🌑	1% - 25%

🌑 ..FLASH ☀ ..ON ● ..OFF

A white LED will flash to indicate the power bank is recharging. As the unit charges the additional LED(s) will remain on until all four LEDs are on constantly.

Using the Power Bank

FR001 can recharge any USB C or USB A compatible device(s). Simply plug in the device and press the power button on freedom to turn it on. Four white LED's will illuminate.



As FR001 discharges your device each LED will go out systematically until the unit is depleted.

☀ ☀ ☀ ☀	100% - 75%
● ☀ ☀ ☀	74% - 50%
● ● ☀ ☀	49% - 25%
● ● ● ☀	24% - 1%
● ● ● 🌑	1 - 0%

🌑 ..FLASH ☀ ..ON ● ..OFF

User Maintenance Instructions





Important – Cleaning

When cleaning FR001 do not spray cleaner directly onto unit. Spray onto cloth and wipe down the unit. Only spray enough cleaner that the cloth is just damp to the touch.

When cleaning FR002 disconnect from mains power before wiping down. Do not spray cleaner directly onto unit. Spray onto cloth and wipe down the unit. Only spray enough cleaner that the cloth is just damp to the touch.

User Do's & Don'ts

- Don't expose to water or high humidity environment.
- Don't leave outdoors or expose to weather.
- Don't leave sitting in or exposed to direct sunlight.
- Don't operate in hot environment exceeding product operating range.
- Do allow time for FR001 to cool down before recharging if a large load has been applied to the unit (rapidly discharging) to maintain battery health.

Moving & Storage

Instructions



CAUTION – Storage Temperature

As FR001 contain Lithium-ion batteries; exposure to extreme temperatures, both high and low, can negatively impact their performance and compromise their safety. High temperatures accelerate the aging process and can cause thermal instability, leading to thermal runaway.

Freezing temperatures can cause irreversible damage to the battery's chemistry, reducing its capacity and overall lifespan.

Therefore, storing the Power Bank(s) in a cool and dry environment, away from direct sunlight and heat sources, is vital to maintain their integrity and performance.

Try to store them at a temperature range of between (10~30°C) and humidity of (30~70%).



CAUTION – Physical Damage

Avoid physical damage or stress to the Power Bank(s). Crushing or puncturing the Power Bank(s) can result in internal short circuits, leading to thermal runaway. Store in a safe location away from any risk of being crushed or punctured.



IMPORTANT - Long Term Storage & Maintaining Battery Health

Maintaining an appropriate state of charge during storage is crucial to maintaining battery health. When left in storage the power bank(s) will have a small discharge rate of 0.25mA, over time this will deplete the power bank(s).

Discharge Rate:

-Total Capacity: 3000mAh

-PCB Self-discharge current: 0.25mA MAX

As a result, the power bank(s) MUST be recharged every 6 months to maintain cell health.

Disposal of Product



CAUTION

This product contains Lithium-Iron batteries, Do not dispose of FR001 in general waste.

CMS guarantees to receive these batteries back at the end of its in-use phase for

recycling. The service is free and the used batteries need to be delivered by the client to our CMS offices. Otherwise at the end of the product life cycle the freedom unit must be disposed off at an appropriate waste facility.



Troubleshooting

Issue	Cause	Solution
All four LEDs flashing simultaneous	The over-current protection is activated during discharging.	Remove the over-loading device
	The over-temperature protection is activated during charging.	The Unit stopped charging as the device operating temperature has been exceeded. The unit will resume function after returning to operating temperature range.
The power bank cannot be charged.	The firmware is shutdown.	press the reset button.
	Contact pins are not making good contact with the charging plates.	Check that no debris is impeding recharging via the contact rings/pins and try again
your plugged-in device(s) are not charging.	There is no capacity left.	Re-charge the power bank.
	The firmware is shutdown.	Press the reset button.
	The power bank isn't turned on.	Press the power button
	The connection cable is not good.	Make sure the cable is in good condition and undamaged. You may need to try with another cable.
Unit run time is low	The capacity left is low	Re-charge the power bank.
	The working current of devices is larger.	Battery degradation over time/usage
	Battery is close to end of life	Battery degradation over time/usage
Unit is Unresponsive	The Unit software is frozen/unresponsive	Press and hold RESET button for 10 seconds (Rest Button located on the underside of the unit).