

Warranty Card

Thank you for choosing Range Storage. To get better services, please read this warranty carefully, fill in the required information and preserve this card in good condition.

This warranty of the Product extends for a period of 12 months commencing from the purchase date. Warranty will be invalid if any defect due to misuse or missing of serial No., invoice & warranty card.

Customer Name: _____

Address: _____

Phone No.: _____ Email: _____

Product Model: _____

Serial No.:

Stick Here.

Purchase Date: _____ Invoice No.: _____

Dealer's Name: _____

Dealer's Address: _____

Dealer's Phone/Email: _____

Preserve Well. No Reissue.

CUSTOMER SERVICE

Range Storage Tech. Co., Ltd

Kecheng Road, SIP, Suzhou, Jiangsu, China

Tel: +86 512 6252 5658

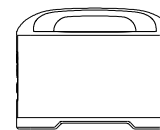
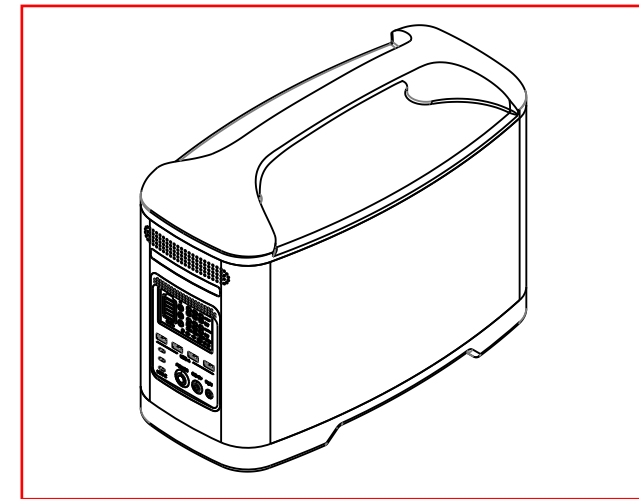
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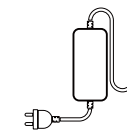
RANGE STORAGE TECH

USER MANUAL FOR PORTABLE POWER BANK FEM-PB800/1600

Ref: RS-Manual-001 Version: 02 Updated on: 2020-11



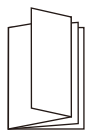
Portable Bank
x1



Wall Charger
x1



Car Charger
x1



Manual & Warranty
x1

What's in Box

ATTENTION



Not permitted on aircrafts.



To preserve the battery lifespan, please use and recharge at least once every 3 months.



Use original or certified charger and cables.



Avoid extreme temperature or direct-sun exposure.



Avoid dropping, puncture, shock, crash or short.



Do not disassemble.



Do not expose to liquids.

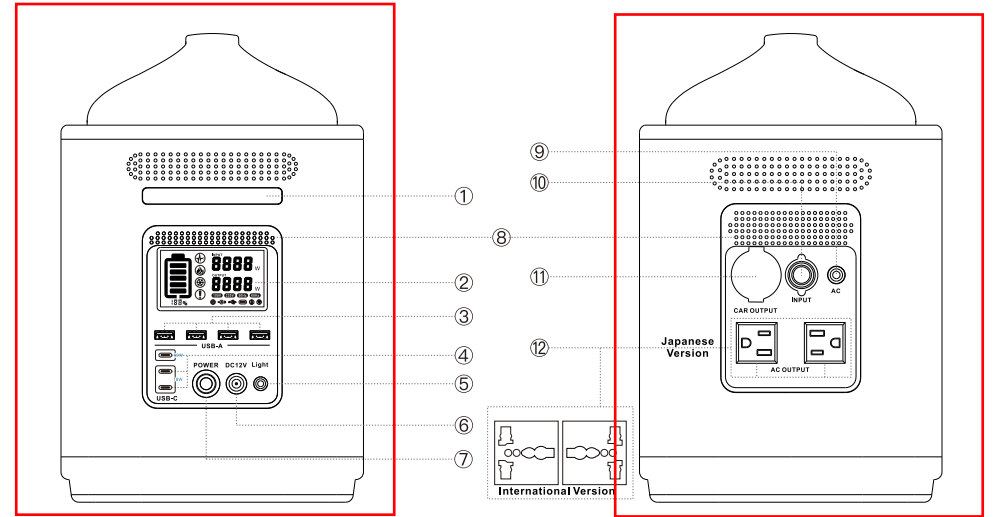


Please dispose in accordance with local regulations.

DISCLAIMER

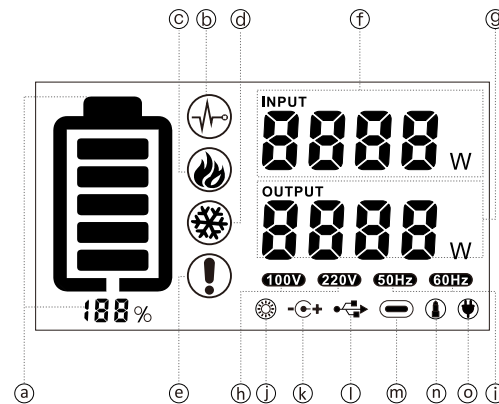
- Our company cannot be held liable for damages caused by fire, earthquake, use by a third party, other accidents, intentional misconduct on the part of the customer, abuse or other abnormal conditions.
- Do not repair any damage to the AC plug or power supply on your own.
- The warranty covers all terms and conditions of the warranty. Contents that are not specified in the warranty terms and conditions are beyond our responsibility.
- Our company assumes no liability for damages caused by incorrect use or non-compliance with this instruction manual.

FEATURES



- ① LED, emergent lighting.
- ② LCD Display, status of FEM-PB.
- ③ USB-A Port, 18W max.
- ④ USB-C Port, 60W max.
- ⑤ LED Switch, press & hold to turn on/off LED.
- ⑥ DC Port, 12V & 8A max.
- ⑦ Main Switch, press & hold to switch on/off the bank.

- ⑧ Vent, for ventilation.
- ⑨ AC Switch, press & hold to switch on/off AC output, press 3 times quickly to switch the frequency.
- ⑩ Input Port, for PV, car or AC charge.
- ⑪ Car Port, output for Car socket. 12V & 8A max.
- ⑫ AC Port, for AC output. 2pcs for PB800 (1kVA) & 4pcs for PB1600 (1.5kVA).



For **Japanese** version, ⑧ as 100V only.
For **international** version, ⑧ as 110V (110~130V) & 220V (220~240V)

- a Battery Level : Remaining percentage.
- b Overload: Show up if overload
- c High Temp.: Show up if temp. is too high
- d Low Temp.: Show up if temp. is too low
- e Error: Show up if other faults.
- f Input Status: Show the input power.
- g Output Status: Show the output power.
- h V Status: Show the AC output voltage.
- i F Status: Show the AC output frequency.
- j LED Indicator: Show up if LED is on.
- k DC Indicator: Show up if DC Port is on.
- l USB-A Indicator: Show up if USB-A is on.
- m USB-C Indicator: Show up if USB-C is on.
- n Car Indicator: Show up if car port is on.
- o AC Indicator: Show up if AC port is on.

SAFETY GUIDE

1. Keep FEM-PB out of the reach of children and pets.
2. DO NOT touch the metal shell or wall charger during FEM-PB working, charging and/or under direct-sun.
3. DO NOT allow the batteries to come into contact with any kind of liquid. DO NOT leave the batteries out in the rain or near a source of moisture.
4. Never use or charge swollen, leaky, or damaged FEM-PB. If your FEM-PB is abnormal, contact Range Storage or authorized dealer for further assistance.
5. FEM-PB should be used at temperatures between -20 and 60°C. Use in extreme temperature may severely reduce the performances, reliability and/or safety.
6. DO NOT leave FEM-PB under charging without supervision during long-term. Disconnect FEM-PB from the power source within 2 hours after fully charged.
7. DO NOT use FEM-PB in strong electrostatic or electromagnetic environments.
8. Never disassemble or pierce FEM-PB in any way.
9. If any electrolytes contact your skin or eyes, immediately wash the contacted area with fresh running water, and then see a doctor immediately.
10. DO NOT use FEM-PB if it was involved in a crash or a heavy bump.
11. If FEM-PB falls into water during use, take it out immediately and put it in a safe and open area. Maintain a safe distance from it until it is completely dry.
12. DO NOT put FEM-PB in a microwave oven or in a pressurized container.
13. DO NOT place heavy objects on FEM-PB.
14. Clean FEM-PB terminals with a clean, dry cloth.
15. DO NOT reversely connect the positive and negative terminals of the FEM-PB. Any abnormal charging of FEM-PB may cause overheating, explosion, or fire.

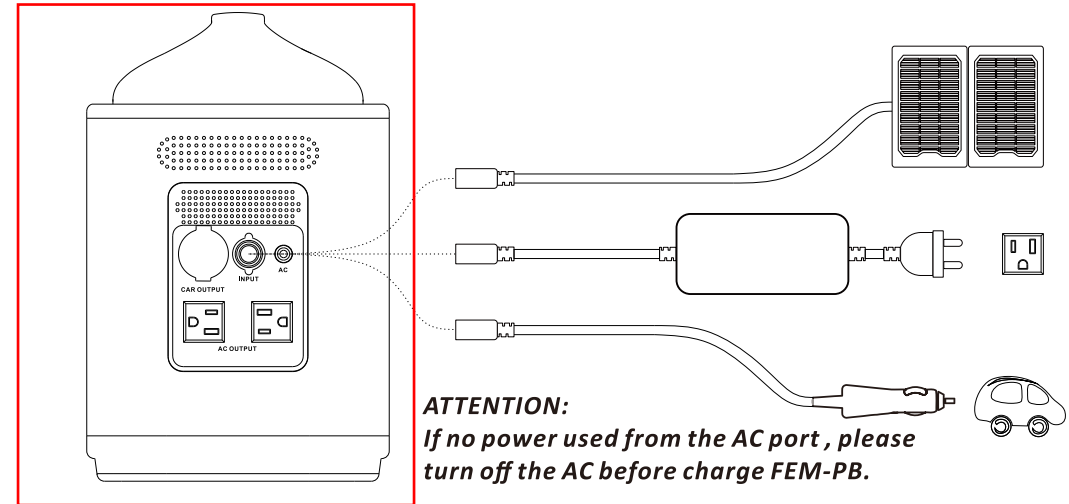
STORAGE

1. Keep FEM-PB out of the reach of children and pets.
2. If a low-battery warning appears, charge FEM-PB for long-term storage.
3. DO NOT leave a battery near heat sources such as a furnace or heater.
4. Keep FEM-PB in dry and well-ventilated environment (-20 ~ 45°C & 10% ~ 90%RH) and 0 ~ 40°C & 10% ~ 60%RH as optimal.
5. Keep FEM-PB away from metal objects.
6. Please fully charge FEM-PB before storage and recharge at least once every 3 months.

DISPOSAL

1. Dispose of FEM-PB in specific recycling boxes only after a complete discharge. Strictly follow local regulations regarding the disposal and recycling of batteries.
2. Dispose of a battery immediately if it cannot be powered on after over-discharging.

HOW TO RECHARGE



ATTENTION:
If no power used from the AC port, please turn off the AC before charge FEM-PB.

● PV Charge

It's recommended to use panel provided from Range Storage to charge FEM-PB (FEPM-160NP/CV for PB800 & FEPM-320NP/CV for PB1600). Users can buy universal solar panels of MC4 connection standard on their own to power FEM-PB, as long as the voltage and current (17V/10A for PB800 & 33.6V/10A for PB1600) comply with the specifications of FEM-PB. The panel shall be able to recharge FEM-PB through the MC4 conversion cable. However, Range Storage will not be responsible for providing free repair services for any damage to the product caused by the quality issue or improper operation of the third party solar panels, even during the warranty period.

● Wall Charge

User can use wall charger provided by Range Storage to recharge FEM-PB. It's forbidden to use any other wall charger to recharge FEM-PB. Range Storage will not be responsible for providing free repair services for any damage to the product caused by the quality issue or improper operation of the third party wall chargers, even during the warranty period.

● Car Charge

User can use car charger provided by Range Storage to recharge FEM-PB. It's forbidden to use any other car charger to recharge FEM-PB. Range Storage will not be responsible for providing free repair services for any damage to the product caused by the quality issue or improper operation of the third party wall chargers, even during the warranty period.

HOW TO USE

Turn on/off FEM-PB

Press and hold the Main Switch for 3~5 seconds to turn on/off FEM-PB. If no output in 30 minutes, FEM-PB would turn off automatically.

Turn on/off LED

Press and hold the LED Switch for 3~5 seconds to turn on/off the LED light.

Turn on/off AC Output

Press and hold the AC Switch for 3~5 seconds to turn on/off the AC output.



Switch Frequency

Turn off the AC. Quickly press the AC Switch 3 times and hold for 3~5 seconds after the 3rd press to switch the AC output frequency. 60Hz as default.

DC/USB-A/USB-C/Car Port

Those ports could be use directly by using corresponding cables to connect.

OL Fault

If  comes out, FE-PB would be in OL lock (cannot output). Please check if any leakage or the load power/start-up power exceeds. Remove any leakage or over-power load and then reboot FEM-PB. If  still shows up, please connect the AC wall charger to disable OL lock.

Notice:

Before turn on FEM-PB, please make sure no load connected to FEM-PB.

FAQ

1. May I know the input or output power?

Please find corresponding indicator in LCD display. Those indicators shows current input and output power. Besides those, you can find relevant AC output status.





2. May I use FEM-PB during it's recharged?

Of course, you can. You can use any DC or AC port during FEM-PB is charged by PV, Wall charger or Car Charger provided by us.

3. How do I know if my device works with FEM-PB?

The max. output power is 1kW (peak 2kW for PB800) and 1.5kW (peak 3kW for Pb1600). And the power would be limited to 500W when rest energy as 15%.

4. What should I do if FEM-PB does not work?

Please check if any warning indicators show up. If  or  indicator shows up, please remove all the loads and reboot FEM-PB. If  shows up, please turn off FEM-PB and wait for a while to cool down FEM-PB. If  shows up, please place FEM-PB in warm environment for warming up FEM-PB.

SPECIFICATION

Pattern	FEM-PB800	FEM-PB1600
Dimension	400×200×310 mm	400×200×380 mm
Weight	11.5 kg	17.1 kg
Operation Temp.	Charge: 0~45°C Discharge: -20~60°C	Charge: 0~45°C Discharge: -20~60°C
Storage Temp.	-20~45°C	-20~45°C
Input Port	17V/10A	34V/10A
AC Port	2PCS, 1kW (Surge 2kW) 100/110/220/240V, 50/60Hz	4PCS, 1.5kW (Surge 3kW) 100/110/220/240V, 50/60Hz
USB-A * 4	5/9/12V, 3A (18W max.)	5/9/12V, 3A (18W max.)
USB-C * 3	5/9/12/20V, 3A (60W max.)	5/9/12/20V, 3A (60W max.)
Car Port * 1	12V, 8A	12V, 8A
DC Port * 1	12V, 8A	12V, 8A
Lamp	2W LED	5W LED
Adapter	AC in @ 100~240V, 50/60Hz, DC out @ 16.8V/10A	AC in @ 100~240V, 50/60Hz, DC out @ 33.6V/5A
PV Option	FEPM-160NP/CV	FEPM-320NP/CV
Cell	Li-ion	Li-ion
Capacity	835Wh (58Ah @ 14.4V)	1670Wh (58Ah @ 28.8V)
Lifespan	500 cycles (80%)	500 cycles (80%)
Shelf Life	1 year (fully charged)	1 year (fully charged)