RF4®
FOCUS DESIGN AND CONCEPT



INSTRUCTION MANUAL

DC POWER SUPPLYCHARGER

多口直流供电站说明书

产品概述 Product Overview

RF-MC09多口直流供电站，具备多路独立输出，可同时给多台设备供电，搭载过压、过流、短路等多重防护，输出稳定安全，机身散热优良，可长时间连续工作。拥有15V3A的可调输出接口，适用于广大电子实验室、院校实训教学、手提电脑维修、电子生产线、维修调试、DIY电子测试等场景，满足研发、教学、电子爱好者多设备同步供电需求。

The RF-MC09 multi-port DC power supply station features multiple independent outputs, allowing simultaneous power supply to several devices. It is equipped with multiple protections such as over-voltage, over-current, and short-circuit, ensuring stable and safe output. With excellent heat dissipation, it supports long-term continuous operation. It includes an adjustable 15V/3A output interface, suitable for electronic laboratories, school training and teaching, laptop repair, production lines, maintenance and debugging, DIY electronic testing, and more. It meets the simultaneous power supply needs of R&D, education, and electronics enthusiasts.

产品参数 Product Specifications

每个充电口的协议说明如下:

The protocol for each charging port is as follows：

WIRELESS CHARGER：支持Qi/MagSafe,最大18W Supports Qi/MagSafe, max 18W

TYPE-C 1/2/3/4（蓝色接口/Blue Ports）

输出协议 / Output Protocol	TYPE-C 1/2	TYPE-C 3/4
PD2.0/PD3.0（支持PPS/supports PPS） 5V/9V/12V/15V/20V,3.3~5.9V/3.3~11V/3.3~16V/3.3~21V	支持 最大输出电流 Supported,max output current 5A	支持 最大输出电流 Supported,max output current 3A
QC5/QC4.0+/QC3.0/QC2.0 5V/9V/12V/20V		
AFC 5V/9V/12V		
FCP 5V/9V/12V		
SCP 5V/9V/12V		
PE2.0/PE1.1 5V~20V		
SFCP 5V/9V/12V		

USB1（橙色接口 / Orange Port）

输出协议 / Output Protocol	输出功率/ Output Power
BC1.2	支持 / Supported 5V/3.4A,9V/2A,12V/1.5A, 最大18W / max 18W
APPLE	
三星 / Samsung	
QC2.0/QC3.0	
FCP	
AFC	

USB2/3/4（绿色接口 / Green Ports）

输出协议 / Output Protocol	输出功率/ Output Power
无快充协议 / No fast-charging protocol	最大 5V/2A / Max 5V/2A

红黑输出接口 / Red-Black Output Terminals
可调直流输出 / Adjustable DC output：15V/3A

功率分配模式 Power Allocation Mode

TYPE-C 1/2 最大 100W，TYPE-C 3/4 最大 65W，USB 1 最大 18W，
USB 2/3/4 最大 10W，根据实际使用接口功率智能分配档位。

TYPE-C 1/2 max 100W, TYPE-C 3/4 max 65W, USB 1 max 18W, USB 2/3/4 max 10W.
Power levels are intelligently allocated according to the actual ports in use.

参数 / Parameter	规格 / Specification
型号/Model	RF-MC09
电压、电流范围/Voltage & Current Range	USB接口视协议而定，可调输出范围为15V/3A USB ports depend on protocol; adjustable output range: 15V/3A
电压、电流负载效应/Load Effect (Voltage & Current)	≤0.01%+500mV ≤0.1%+10mA
电压、电流输出分辨率/Output Resolution(Voltage & Current)	10mV/1mA
电压、电流设置精确度/Setting Accuracy (Voltage & Current)	≤0.5%+500mV ≤0.5%+10mA
配件/Accessories	说明书×1电源线×14MM香蕉插转鳄鱼夹×2 User manual x1,Power cord x1,4mm banana plug to alligator clip x2
尺寸和重是/ Dimensions &Weight	120mmx105mmx123mm,0.58KG
工作电压/Operating Voltage	110V-220V

安全指南 Safety Guidelines

- 不要阻拦和隔离机器的进风口和风扇通风口。
- Do not block or obstruct the air intake and fan vents of the unit.

- 避免严重碰撞或错误的使用，导致机器损坏。
- Avoid severe impact or improper use that may cause damage to the unit.

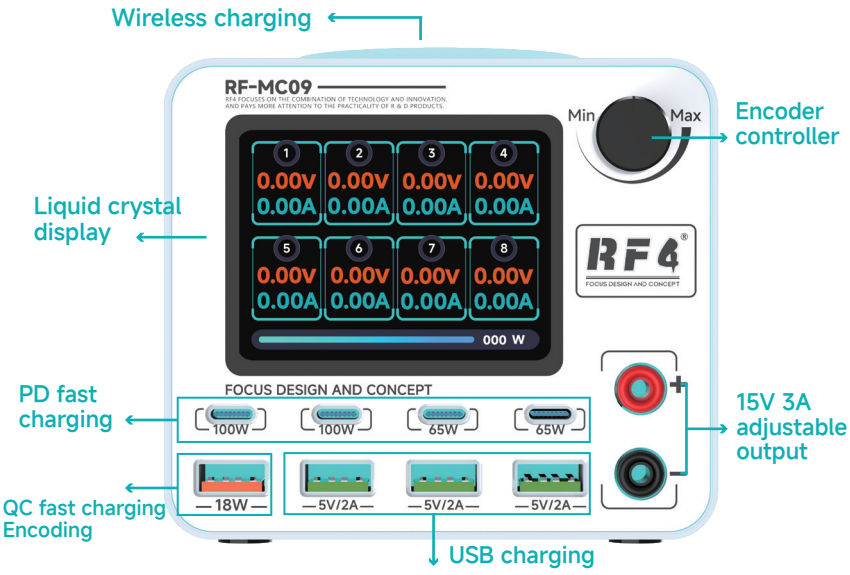
- 机器远离静电。
- Keep the unit away from static electricity.

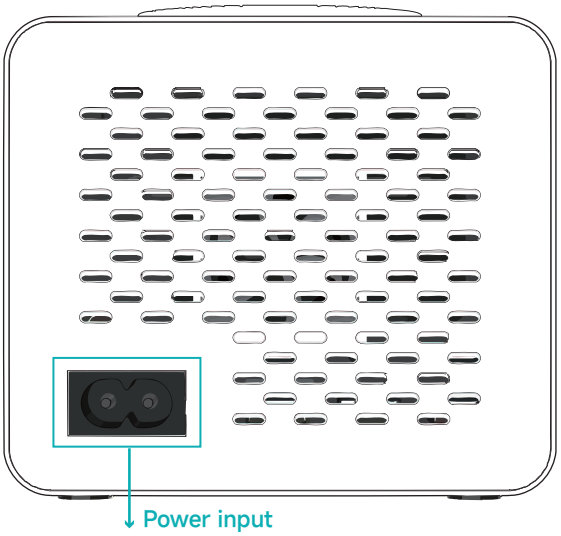
- 非专业人员禁止拆机。
- Unauthorized personnel are prohibited from disassembling the unit.

- 交流电源输入，电压范围：AC220V_50Hz / AC110V_60Hz
- AC power input, voltage range: AC220V_50Hz or AC110V_60Hz

- 连接保护地到大地，避免电击。
- Connect the protective earth to the ground to avoid electric shock.

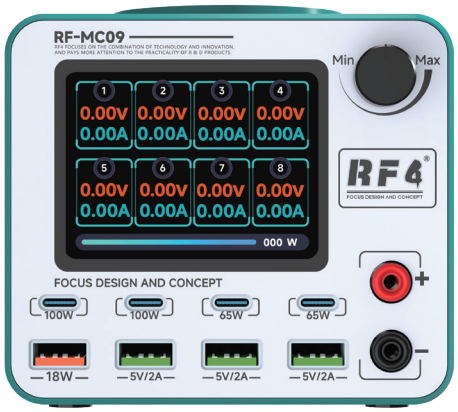
面板功能 Panel Functions





使用说明 Operating Instructions

充电界面/Charging interface



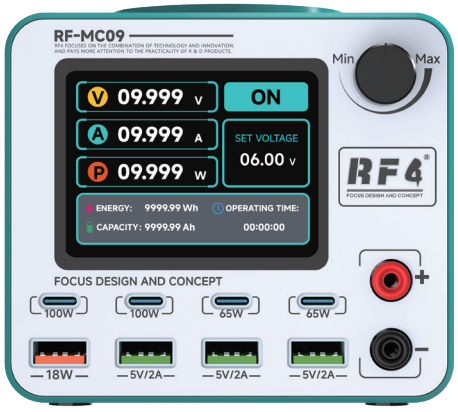
单击/Click:

切换充电口显示
Switch the display of charging ports

双击/Double-click:

切换到可调电压界面
Switch to the adjustable voltage interface

调压输出界面 Regulating output interface



单击/Click:

开后/关闭可调DC口输出
To turn on/off the adjustable DC output port

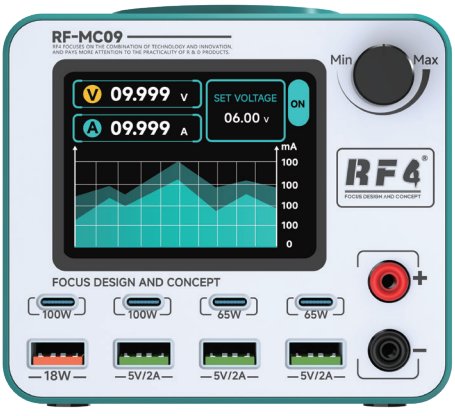
双击/Double-click:

切换到曲线界面
Switch to the curve interface

长按/Long press:

进入电压调节，此时单击可以选择要调节的数位，旋转可以修改数值。
Enter the voltage adjustment mode. At this time, clicking allows you to select the digit to be adjusted, and rotating can modify the value.

调压输出曲线界面 Regulating curve of output interface



单击/Click:

开后/关闭可调DC口输出
To turn on/off the adjustable DC output port

双击/Double-click:

切换到充电界面
Switch to the charging interface

长按/Long press:

进入电压调节，此时单击可以选择要调节的数位，旋转可以修改数值。。
Enter the voltage adjustment mode. At this time, clicking allows you to select the digit to be adjusted, and rotating can modify the value.

常见故障处理 Troubleshooting

按下前面板电源开关显示器黑屏，没有任何显示
Press the front panel power switch, the display is black with no indication.

- 确保电源线是否完好。
- Ensure the power cord is intact.

- 检查电源接头是否接好。
- Check that the power plug is properly connected.

- 检查保险丝是否正确以及是否完好无损。
- Check that the fuse is correctly rated and not blown.

红黑输出接口输出不正常
Red-black output terminals output abnormal

- 检查最大输出功率是否满足负载要求。
- Check whether the maximum output power meets the load requirements.

- 如果满足，请检查：查看电流设定值是否合适，如果过低可适当加大电流设定值。
- If it does, check whether the current setting is appropriate; if too low, increase the current setting accordingly.

- 检查负载和负载连接线是否有短路或断路等问题，查看负载接触点和负载连接线接触是否良好。
- Check the load and its connecting cables for short circuits or open circuits, and verify that the load contact points and cable connections are secure.