P200

Manual V1.0
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ToolkitRC

www.toolkitrc.com

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Introduction

Thank you for purchasing the M7 model tool chain product, please read this manual carefully before using it.

Key Points

Tips   Important   Information

Further information

To ensure you have the best experience with this product please scan the QR code below to stay up to date with news, information and firmware updates for your charger. Or visit www.toolkitrc.com.


Applications

Video teaching

Product purchase

WeChat QR Code

⚠️ Safety

1. P200 allows the input voltage of DC 7-28V or AC 100-240V to ensure that the power supply voltage conforms to the power supply. Pay attention to the positive and negative polarity of the power supply when connecting.

2. Do not use this product in the environment of heat source, humidity, flammable and explosive gas.

3. Please use this product when someone is guarded to prevent accidents.

4. When not using this product, please unplug the input power in time.

5. When using the charging function, please set a current that matches the battery. Do not set an excessive current for charging, so as not to damage the battery.

Contents

Product description

P200 is a mini desktop adjustable power supply, with AC or DC two input modes, built-in 100W GaN AC power supply, IPS wide-angle display screen records and curve display voltage and current, and other features.

- Built-in gallium nitride (GaN) small AC power supply.
- AC/DC two input modes.
- The conversion efficiency is as high as 95%.
- AC input: the full output power is up to 100W.
- DC input: the full output power is up to 200W.
- TYPE-C MAX output 65W.
- Fast charge full protocol: PD3.0/PD2.0/PPS/QC4/QC3.0/QC2.0 /AFC/FCP/SCP/PE2.0/PE1.1/SFCP/VOOC.
- 1.0-30.0V adjustable output voltage.
- 1.0-10.0A adjustable constant current。
- Over voltage, over current, over temperature, short circuit, multiple protections.
- Metal dial wheel, feels hard and good.
- IPS 1.54" high-brightness high-definition display.
- The device is simulated as a U disk, and the upgrade file is copied to realize the product firmware upgrade.

P200 Layout

Display

A Wheel
(Current
adjustment)

Power button

Output main port

Type-C
fast charge output

V Wheel
(Voltage adjustment)

Front

AC Input port

Cooling fan

DC Input port
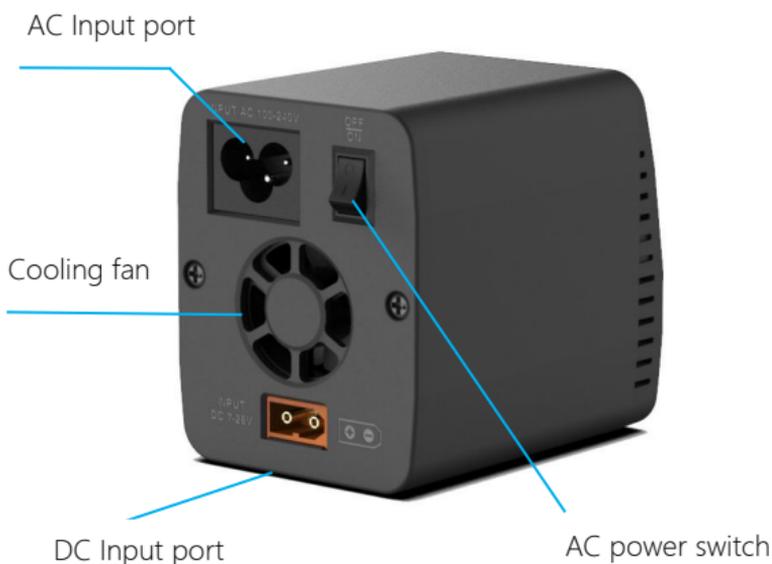
AC power switch

Back

Quick start

1. Connect the 7-28V DC power supply to [DC input port] on the back of the P200 or AC 100-240V to [AC power port], and turn on [AC power switch].

2. Press the front [Power button] once, the display shows the boot logo and stays for 2 seconds.

3. At the same time, it is accompanied by do-re-mi boot sound.

4. After the boot is completed, the screen enters the main interface and displays as follows::
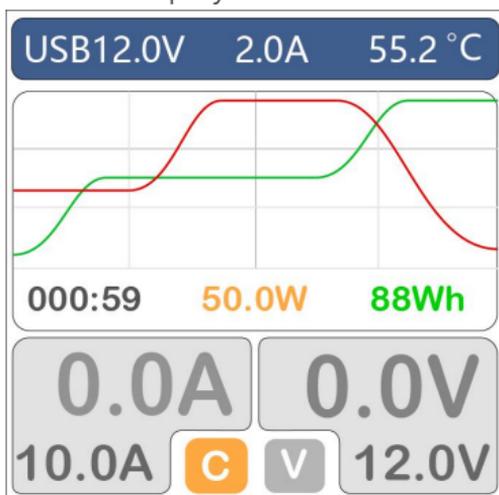
5. Fluctuating [V dial], set the voltage to be output.

6. Fluctuation [A dial], set the output constant current.

7. Short press [V dial] to output the set voltage from the main port.

8. Short press [A dial] to enter the TYPE-C information interface.

9. Long press [V dial] to stop the output and enter the system setting.

10. Long press [A dial], the accumulated capacity and time information will be cleared.

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⚠ Warning:

1. Inputting too high DC voltage may damage the product.

2. Do not connect to the input terminal if the voltage value is not marked.

3. When the output is connected to the lithium battery for charging, pay attention to the full voltage of the battery.

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Output settings and display instructions

Turn the [V dial] on the main interface to set the voltage to follow the adjustment. The step voltage can be adjusted in the system menu. Turn the [V dial] to set the maximum constant current value that requires constant current. After setting the required voltage and current, short press [V dial] once to output the set voltage from the main port. At the same time, the real-time monitoring value will be displayed in color, and the following interface will be displayed:
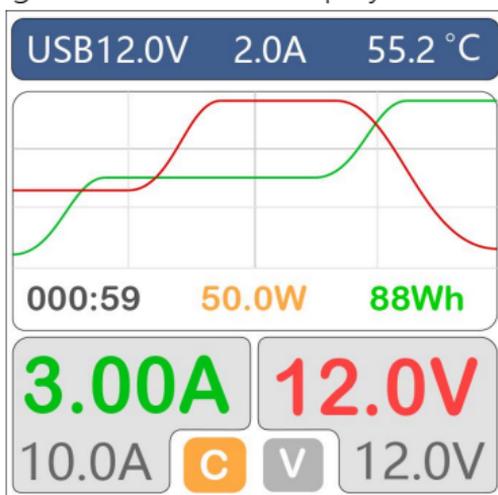
1. The main interface display description

USB 12.0V 2.0A: Output voltage and current of TYPE-C port.

55.2 ℃: Internal real-time monitoring of temperature.

Curve area: Real-time recording of the voltage and current of the output main port.

000:59: The accumulation of the output time of the main port.

50.0W: The current output power of the main port.

88Wh: Main port output power statistics.

3.00A: The real-time current value output by the main port.

12.0V: The real-time voltage value output by the main port.

10.0A: The set maximum constant current value.

12.0V: The set maximum constant voltage value.

2. Description of USB interface display

In the main interface, short press [A dial] once to enter the USB-TYPE-C output monitoring interface, as shown in the figure below:

USB Output	
Voltage:	12.00V
Curretn:	2.00A
Time:	059:59
Capacity:	8888Wh
Protocol:	PD3.0
State:	ON

12.00V: TYPE-C port output voltage real-time value.
2.00A: TYPE-C port output current real-time value.

059:59: Output the accumulated time.

8888Wh: The accumulated value of output electric energy.

PD3.0: The current device fast charging protocol.

ON: TYPE-C output status.

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Tips:
1. Long press [A dial] once to clear the accumulated value.

2. Connect to the USB-C charging device, and the USB port will output the corresponding voltage and current according to the protocol.

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System settings

After selecting and long-pressing [V dial] on the main interface, you will enter the system setting interface, as shown in the figure below:

Back: Back to the main interface.

Step voltage: The step value of adding or subtracting the output voltage by turning the voltage dial, the setting range is 0.05-0.5V.

Step current: The current dial turns the step value of the output current plus or minus one grid, the setting range is 0.05-0.5A.

Curve Time: Record the curve period, you can set 0.1S-10S to record once.

Lowest input : When the DC input voltage is below this value, the output will stop.

Safe temp.: The internal temperature protection value, when the internal temperature is higher than this value, the output will stop.

Settings	
☀ Backlight	10
🔊 Beep	OFF
🌐 Language	ENG
Aa Theme style	WHT
🏠 Factor setings	OK
🔢 ID:FF3005D3　H1.1-F1.00	
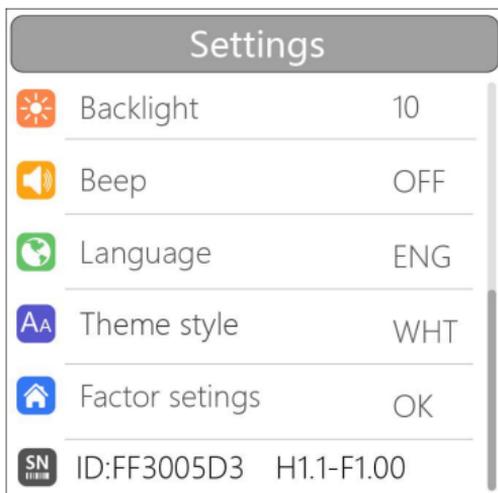
Backlight: Display backlight brightness value, can be set to 1-10 levels.

Beep: The tone of the buzzer, which can be set to off.

Language: System display language. You can choose English, Chinese, etc.

Theme style: Two themes of bright and dark colors can be selected.

Factor settings: Restore all setting items to factory values.

ID: An independent ID for each device.

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other functions

1. Firmware upgrade

   After connecting the P200 to the computer with the USB data cable in the box, the computer will recognize a U disk named Toolkit. Download the upgrade file app.upg on the official website to overwrite the files in the U disk to upgrade the firmware.

2. Fan level

   When the internal temperature of the device exceeds 45°C, the fan turns on half-speed air volume to reduce noise. When the internal temperature exceeds 53°C, the fan turns on full-speed air volume to enhance heat dissipation.

3. Manually calibrate voltage and current

   Press the power button, within 1 second, simultaneously press and hold [A dial] + [V dial] without releasing, the system will enter the manual voltage calibration function. Use a voltmeter to measure the actual input and output voltage, move the cursor to the corresponding voltage value, modify the voltage value to be consistent with the voltmeter value, and achieve calibration. After the calibration is completed, move the cursor to save, short press once, the buzzer will beep for a long time, and the save is successful. Just exit or shut down.

Specifications

Electric	Input voltage	AC 100-240V@MAX 100W
		DC 7-28V@MAX 10A 200W
	Main output	1.0-10.0A @MAX AC 100W / DC 200W
		1.0-30.0V @MAX AC 100W / DC 200W
	TYPE-C output	5.0-20.0V @MAX 65W
	TYPE-C protocol	PD3.0/PD2.0/PPS/QC4/QC3.0/QC2.0/AFC/FCP/SCP/PE2.0/PE1.1/SFCP/VOOC
	Protection response	<1ms (Short circuit, over current, over voltage)
	Adjustment period	8ms
Interface	Main port	4.0mm Banana female
	USB	TYPE-C Fast charge Firmware upgrade
Display	LCD	IPS 1.54" 240*240 resolution
Product	Size	84*63*78 mm
	Weight	360g
Individual packing	Size	160*150*73 mm
	Weight	670g

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