608PD

SMART CHARGR

Instruction Manual

ISDT®

Thanks for purchasing the ISDT 608PD Smart Charger.

Please visit: www.isdt.co for more details on the functions of this smart charger, as well as purchase various accessories.Functions of products will be kept on upgrading, the manual in your hand may be different from the actual operation, please refer to the actual functions.

Warnings and Safety Tips

For your safety and a better user experience, please read this manual and follow the instruction before using the new charger.

- Never use the charger without supervision, please stop using the charger and refer to the manual for reasons if any functional abnormity.
- Keep the charger away from dust, humidity, rain and high temperature, as well as avoid direct exposure to the sunlight and intense vibration.
- Place the charger on a heat-resisting, non-flammable and insulating surface. Do not use it on the car's seats, carpet or other similar places. Keep inflammable and explosive objects away from operation areas of the charger.
- Read the instruction manual carefully to be familiar with the features of the charger, and set proper charging parameters before operating. Setting the parameters incorrectly will result in damage to the product, personal property and cause serious injury as well.

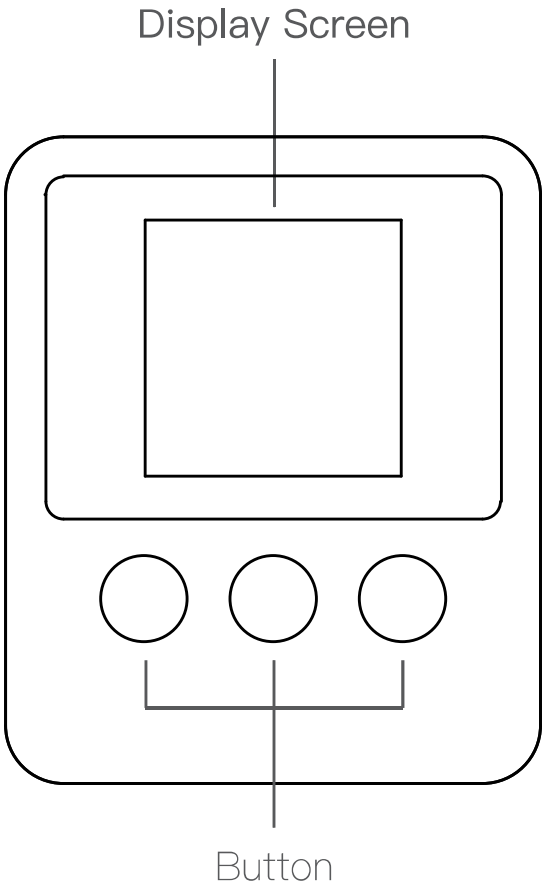
NEVER USE CHARGER UNSUPERVISED

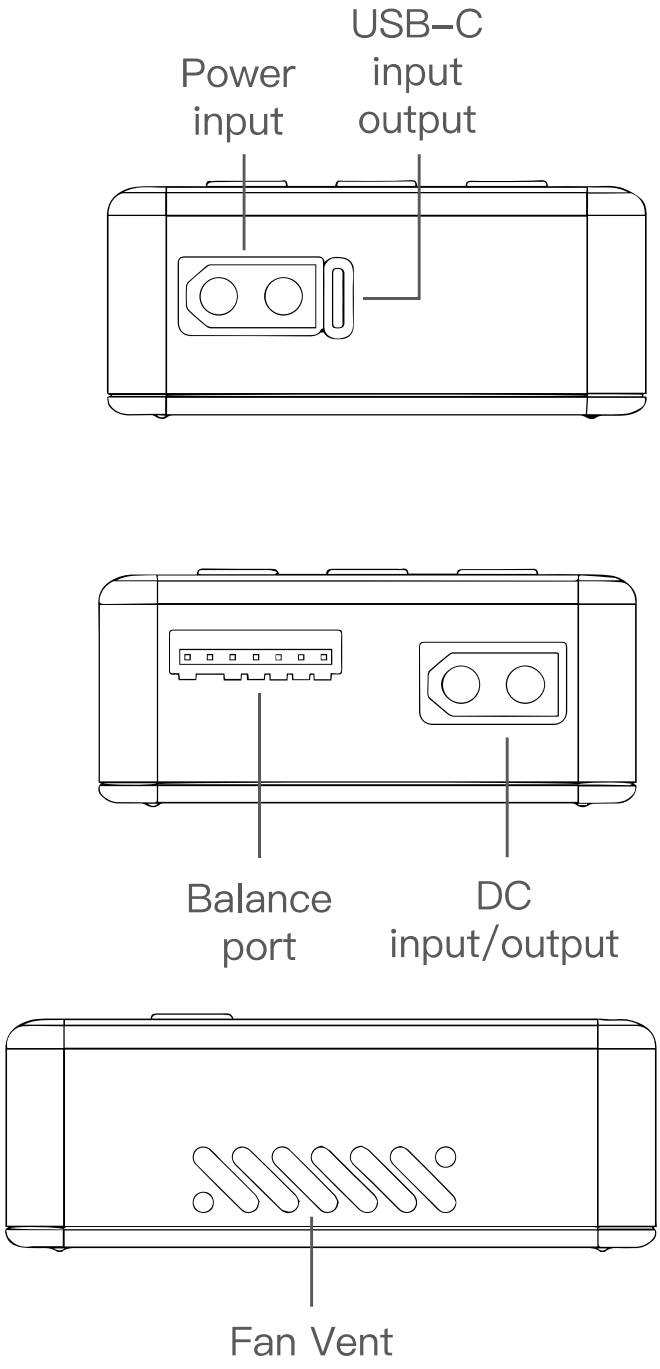
- Never attempt to charge primary (non-rechargeable) batteries.
- Batteries pose a severe risk of fire if not properly handled.
- Read entire operation manual before using charger.
- This unit may emit heat during use.
- Only operate this device in a cool ventilated area away from flammable objects.
- Failure to observe safety procedures may cause damages to property or injury.


WARNING!


FIRE HAZARD!

Function Buttons





Button

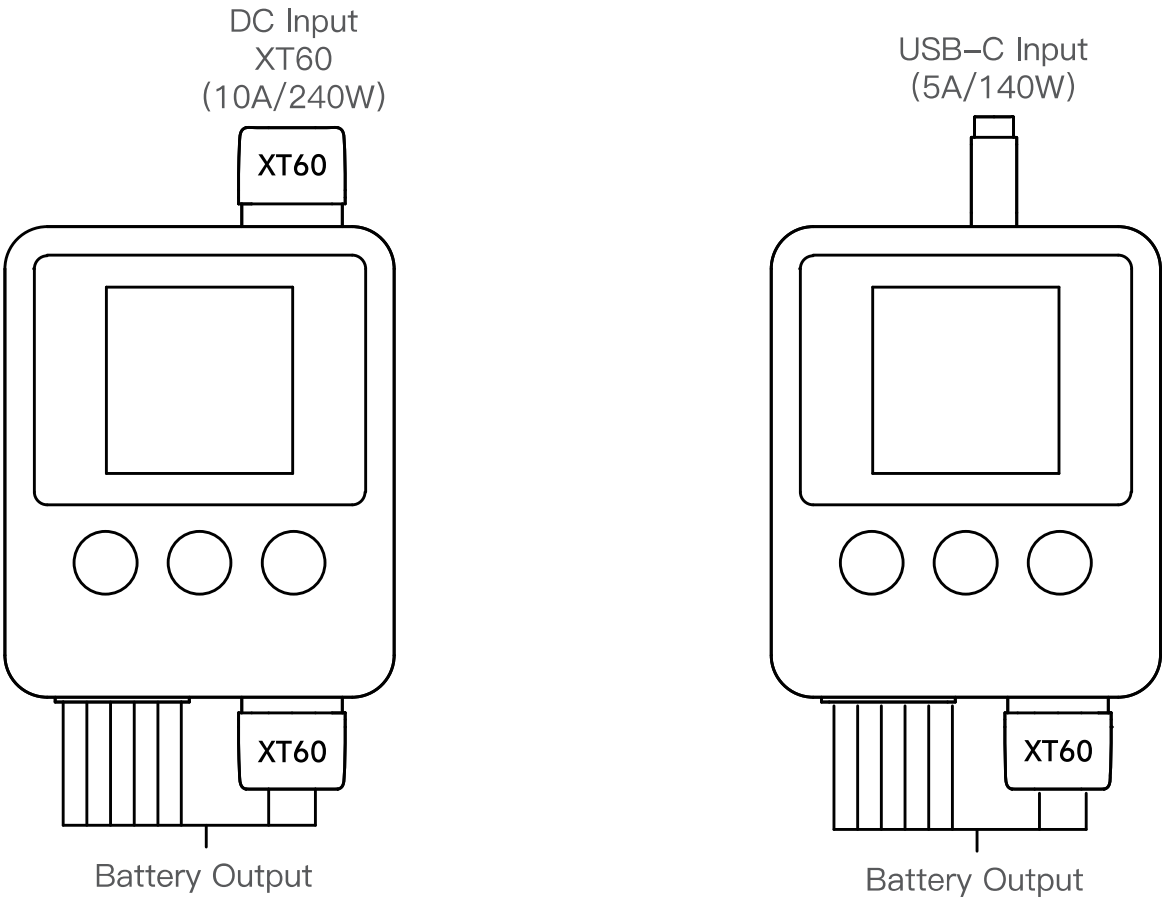
Left button: The screen content scrolls to the left.

Right button: The screen content scrolls to the right.

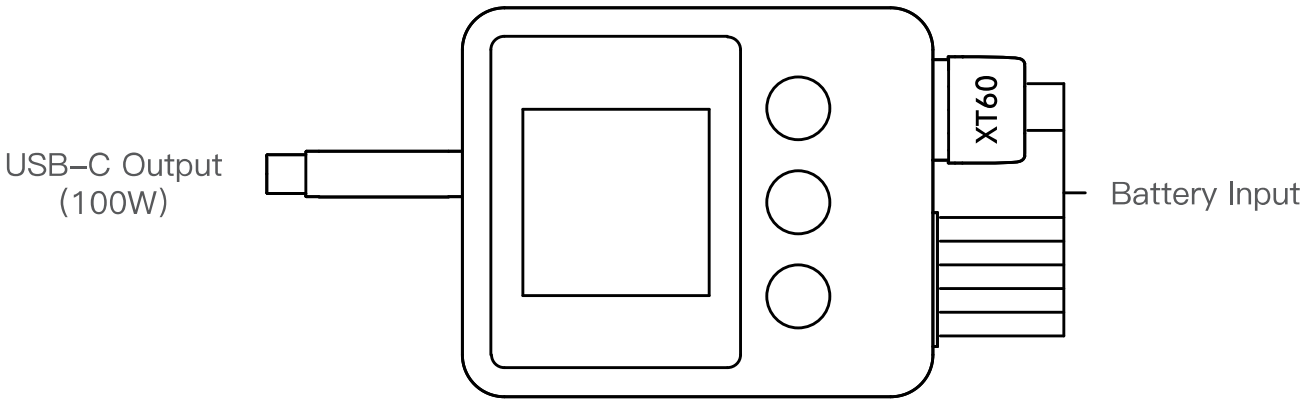
Middle button: Short press to confirm current operation.

Long press to enter the menu.

Charge Mode



Discharge Mode



Product Specifications

Max input current: DC 10A, USB–C 5A
Input voltage: DC 5–30V, USB–C 5–28V
Output voltage: DC 3.0~30V
Balance current: 0.8A/Cell Max
Working temperature: 0~40℃
Storage temperature: –20~60℃
Abnormal voltage alarm: Support
Incorrect cell count setting alarm: Support
Supported battery types and cell: LiFe, LiPo,
LiHv (4.35V~4.50V) 1–6S/ Pb 1–12S/
NiMH 1–16S

Charging current: 0.5~10.0A
Max. charging power: 240W/10A
Max discharging power: USB–C 100W/5A
Dimension: 72.5×60×26.6mm
Weight: 85g (±10%)

How to Confirm Charging Current

Make sure to know the maximum charging current of the battery before charging, never use excessive current to charge to damage your battery, which will result in over heat even explosion during the charging process.The charging and discharging capacity of battery is usually marked with C value. Multiplying the charging C value and battery capacity equals to the maximum charging current supported by the battery. For example, for a 1000 mAh battery with a charging capacity of 5C, the maximum charging current would be 1000*5=5000mA; therefore, the maximum charging current is 5A. For a lithium battery, if it is impossible to confirm the supported charging C value, please set the charging current below 1C, for the sake of its (lithium battery) safety. The reference relation between C value and charging time: charging time ⩾60 minutes/ charging C value (e.g. it needs around 60–70 minutes to complete charging with 1C). Due to differences in battery conversion efficiency, the time to complete the charging might be extended.

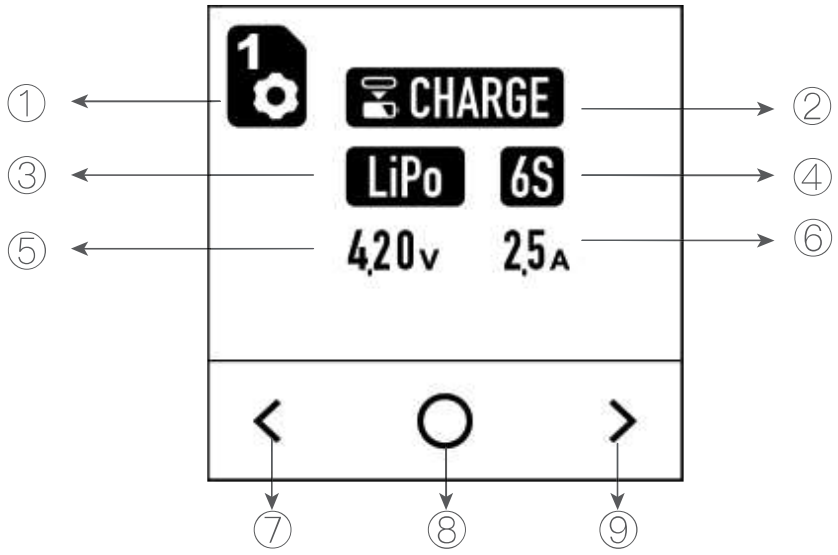
For safety reasons, when using DC power supply and battery power supply will prompt and set a minimum limit value of input voltage, when the voltage is detected to be lower than this value will stop working and report an error.
In addition to the normal charging function, this product also supports the connection of a separate battery charging cable and balancing cable to determine the battery voltage.

Preset Battery Type of Charger and Task Parameters

	NiCd/MH	Pb	LiFe	LiPo	LiHv
Rated voltage	1.20V	2.00V	3.20V	3.70V	3.80V
Full charge voltage	1.40V	2.40V	3.65V	4.20V	4.35V–4.50V
Balance charge	✗	✗	✓	✓	✓
Unbalanced charge	✓	✓	✓	✓	✓
Supported cell count	1~16S	1~12S	1~6S	1~6S	1~6S
Max. charging current	10.0A	10.0A	10.0A	10.0A	10.0A

Operating the Charger

Connect the 608PD to the power supply, connect the battery, short/long press the center button to enter the charging parameter selection interface:



①: Preset task sequence number (Up to five preset charging parameters);

②: Mission Sign; ③: Battery Type; ④: Battery String Number;

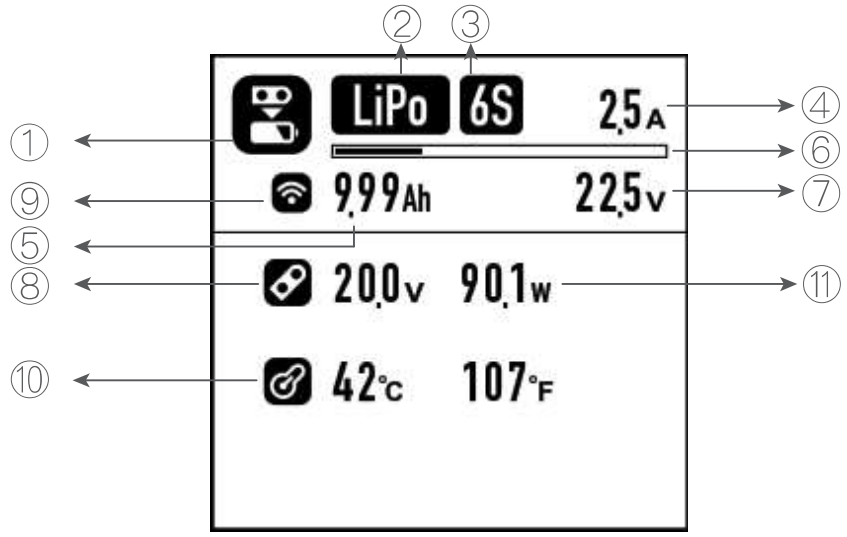
⑤: Conditions for the end of charging (Battery Full Charge Voltage);

⑥: Charging Current; ⑦: Left Button Indication; ⑧: Menu Key Indication;

⑨: Right Button Indication

Operating mode

In the task selection interface, long press the center key to enter the parameter modification mode, the modifiable parameters will flash; Short/long press the left/right key to modify the parameter value, short press the center key to switch to the next parameter for modification; Long press the center key to save and exit parameter modification mode; In the task selection interface short press the center key to start the current task, long press the left/right key to return to the main page; During the charging task, the charging current can be adjusted by long pressing the center key, and short pressing the center key ends the current task.



①: Charging Sign； ②: Battery Type； ③: Battery String Number；

④: Charging Current； ⑤: Battery Charged Capacity； ⑥: Percentage of power；

⑦: Current Battery Voltage； ⑧: Input Voltage Sign； ⑨: Wireless Connection Sign；

⑩: Temperature； ⑪: Input Current；

Note: ① Standby mode: ; When powered by DC power supply and start charging: ; When powered by PD protocol and start charging: ; The status indicator will turn green upon the completion of the task;

⑧ When powered by DC power supply: ; When powered by TYPE-C power supply: ; The following two numbers are the input voltage and input power;

If the PD protocol is used, the amount of power supplied can be displayed.

⑩ Celsius and Fahrenheit.

When it is ncessary, you could use a battery to connect 608PD to charge the electric device which with PD protocol or USB–C.
Steps: First, connect the charging cable and the balance cable,
short press the center key to enter the interface of modifying the minimum voltage limit of the battery, please see the following picture (The left is with balancing cable connected, the right is without balancing cable connected), short press OK to save and start the task, long press to cancel the save and return to the main page.
Please connect the USB power device after the task starts.

While the charger is working, the display can be switched using the left and right keys. The voltage per cell of the battery can only be displayed when the balance cable is connected; The internal resistance screen can only be displayed when the charging constant current stage is in progress.

This product supports PD2.0/3.0/3.1 input and output, and can be used to charge phones and other electrical devices with a RC battery;
It can also be charged for the RC battery by ordinary adapter;
or charged through DC power and batteries.

Note:
In order to ensure the normal use of the equipment and the personal safety of the user, the Do not access the XT60 and USB Type-C ports on the top of the machine at the same time.

When using DC or battery power, one minute without the system will enter the hibernation state. Click any key to reawaken.

APP Connection

Scan the QR code on the end page or search to download and install ISD Link APP, please turn on wireless communication before open the APP. Click the ”+” sign at the top right corner of the APP, and bring your phone close to the running device.
After clicking on the device option to be connected and confirming on the device, wait for the device to be added before starting to use.

Download ISD Link