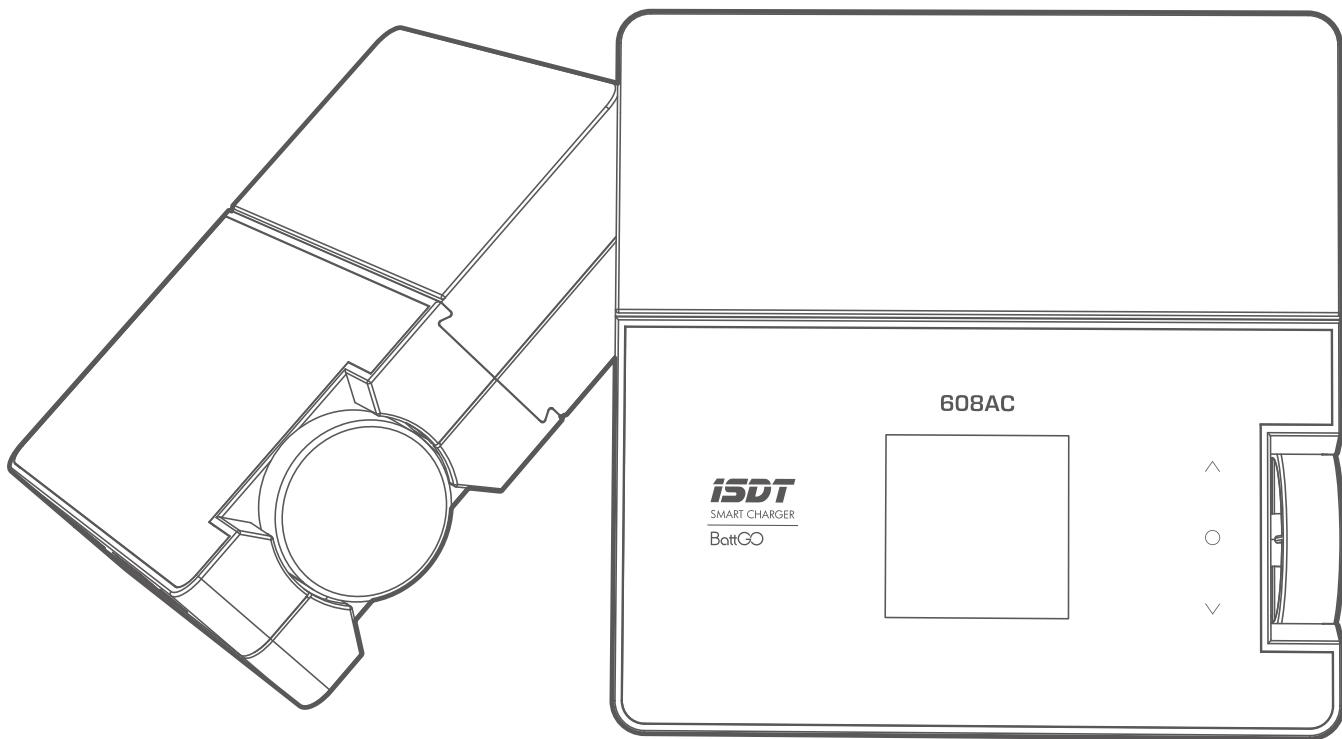


608AC
200W 智能充电器

使用说明



ISDT®

感谢您购买ISDT 608AC 智能平衡充电器。

欢迎您登陆艾斯特官方网站www.isdt.co

了解更多智能平衡充电器功能，购买丰富相关配件。

由于产品功能的不断更新，您手中的说明书可能会与实际操作有所出入。

请以实际智能平衡充电器功能为准。

目录

警告与安全提示

产品规格

功能按键

如何确定充电电流

充电器预设电池类型及任务参数

操作指引

任务设定

工作参数显示

系统设定

*本产品所有图片、声明及文字资料仅供参考，实际信息请参考官方网站 www.isdt.co

深圳市艾斯特创新科技有限公司

对本说明书保留最终解释权和修改权

警告与安全提示

为确保您的安全和良好的用户体验，请在使用本产品前阅读本说明和警告。

- 不要在无人值守的情况下使用充电器，如充电器出现任何功能异常，请立即终止使用并对照说明书查阅原因；
- 确保充电器远离灰尘、潮湿、雨和高温，避免阳光直射及强烈震动；
- 请将充电器放置于耐热、不易燃及绝缘的表面。不要放置在车座、地毯等类似的地方使用。
请确保易燃、易爆炸物品远离充电器的操作区域；
- 确保您已充分了解所使用电池的充放电特性及规格，并在充电器中设置恰当的充电参数。
如参数设定错误，可能对充电器及电池造成损坏，甚至发生火灾、爆炸等灾难性后果。

接入电池前请确保电池电压与本产品工作电压范围相符；

工作过程中请确保选择的串数与接入电池串数一致。



警告！

使用过程中确保本产品远离热源及潮湿环境，并注意通风散热；

本产品工作过程中将产生大量热量，切勿让儿童操作，以免烫伤；

使用结束后，应尽快断开及移除电池。



远离火源！

产品规格

型号：608AC

充电电流：0.1A ~ 8.0A

放电电流：0.1A ~ 1.0A

平衡电流：1A

最大充电功率：AC 50W / DC 200W

最大放电功率：10W

输出电压范围：1.0V ~ 30.0V

输入电压范围：AC 100V~240V / DC 10V~30V

支持电池类型及串数：LiFe,Lilon,LiPo,LiHv 1-6S / Pb 1-12S / NiMH 1-16S

电池电压异常报警：支持

串数设定错误报警：支持

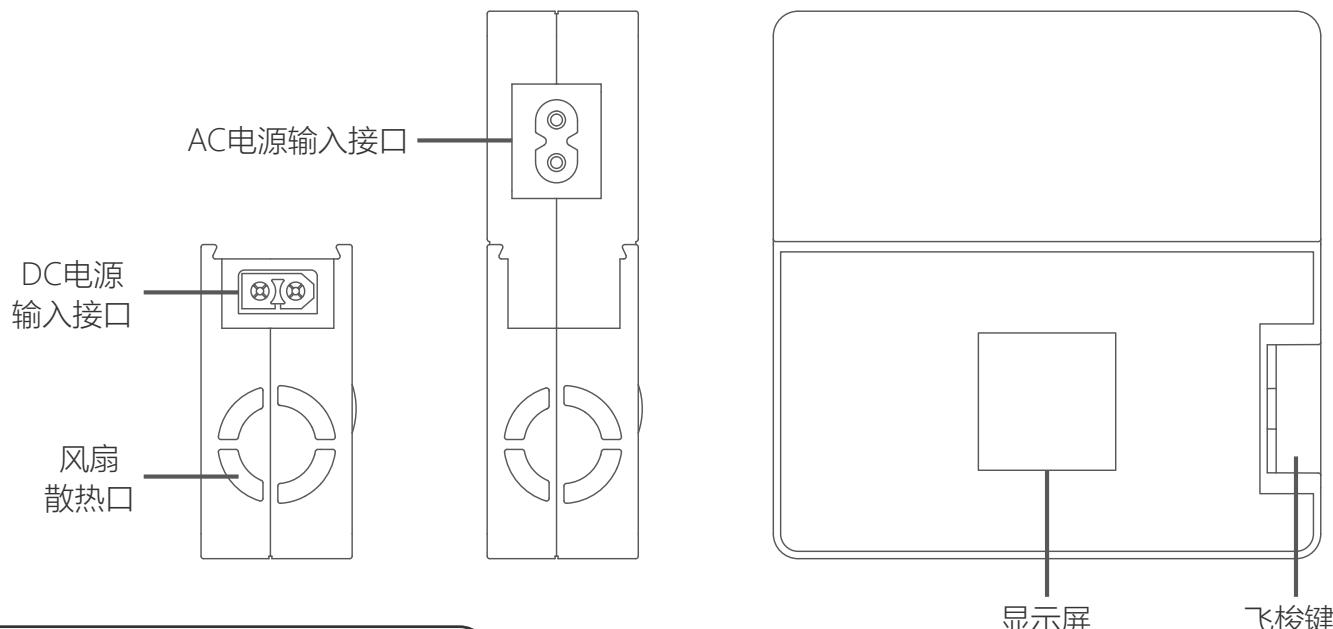
工作温度：0°C~40°C

存储温度：-20°C~60°C

尺寸：110.5×110.5×31 mm

重量：350克

功能按键

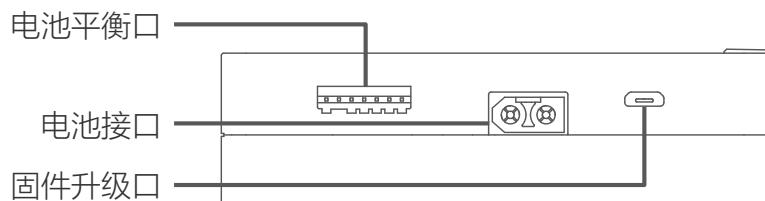


飞梭键功能：

长按：进入系统设置 / 结束当前任务

短按：进入任务设置 / 确认当前任务

上下滚动：选择对应菜单



如何确定充电电流

在充电前必须先了解清楚所用电池允许的最大充电电流，使用过大的电流对电池充电会对电池的寿命造成影响甚至损坏，过大的电流也会造成充电过程中电池发热甚至爆炸。电池充放电能力一般以C数来标识，充电C数乘以电池容量就是电池所支持的最大充电电流，例如1000mAh的电池，标识充电能力是5C，那么最大充电电流为： $1000 \times 5 = 5000 \text{mA} = 5\text{A}$ ，也就是最大支持5A充电。对于锂电池而言，如果无法确定电池充电C数，为了安全起见请将充电电流设定在不大于1C的值。

充电C数与充电时间的参考关系：充电时间 $\geq 60 \text{分钟}/\text{充电C数}$ （例如使用1C充电，充电完成时间大约需要60~70分钟），由于电池转换能效的差异，此时间有可能会有所延长。



充电器预设电池类型及任务参数

	NiCd/MH	Pb	LiFe	Lilon	LiPo	LiHv
额定电压	1.20V	2.00V	3.20V	3.60V	3.70V	3.80V
满充电压	1.40V	2.46V	3.65V	4.10V	4.20V	4.35V
存储电压	不支持	不支持	3.30V	3.70V	3.80V	3.85V
放电电压	1.10V	1.90V	2.90V	3.20V	3.30V	3.40V
预设电压	0.90V	1.80V	2.60V	2.90V	3.00V	3.10V
平衡充	不支持	不支持	支持	支持	支持	支持
非平衡充	支持	支持	支持	支持	支持	支持
支持串数	1~16S	1~12S	1~6S	1~6S	1~6S	1~6S
最大充电电流	8.0A	8.0A	8.0A	8.0A	8.0A	8.0A

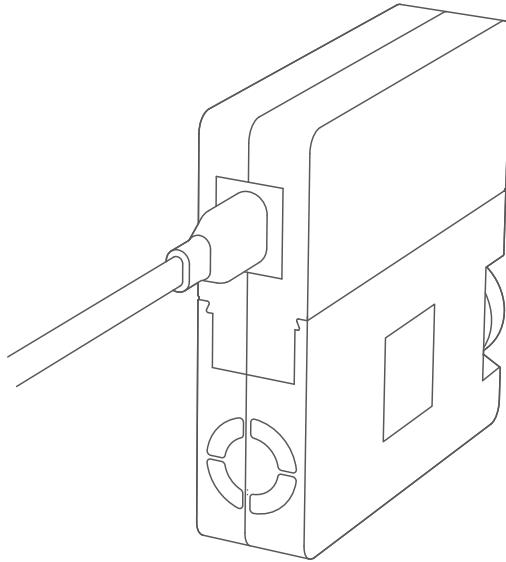


操作指引

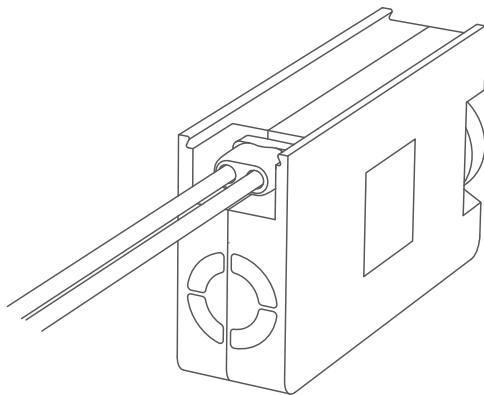
智能平衡充电器支持AC和DC两种供电方式。

AC供电时，充电器部分与配置电源相连接，接入AC电源线使用；

DC供电时仅使用充电器部分，在DC电源接口接入电源。



AC模式



DC模式

任务设定

将608AC 与电源连接上电，连接好电池，短按飞梭键进入任务设定菜单，菜单项如下：

Task	选择任务内容 Charge/充电，Discharge/放电，Destroy/报废 DC Power/DC电源模式，Storage/存储
Battery	电池类型选择
Condition	任务完成的目标截止电压设定
Cells	电池串数选择，如果已插入平衡口此选项为自动检测无需设定
Current	电流选择，充电/存储/报废 0.1-8.0A，放电 0.1-1.0A
Start	开始执行任务
Back	返回

• 报废功能

连接需要报废的电池，在任务选项中选择报废功能，可将电池放电至0V。

• DC电源

选择此功能时，本充电器相当于一个DC电源，输出电压为2~30V之间可调，输出电流为0.2~8A可调。

此项任务菜单中电池的类型、参数和电流都不可选。

• 蜂鸣器音量

当设定为OFF时，将屏蔽操作声提示，但不屏蔽错误提示音。

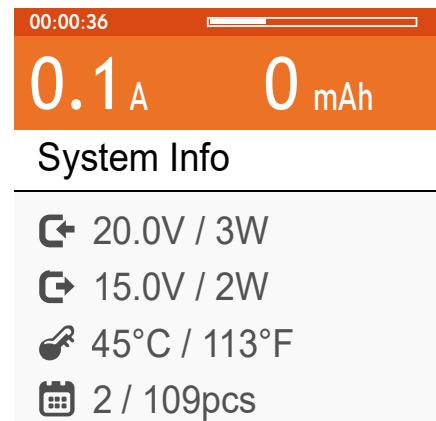
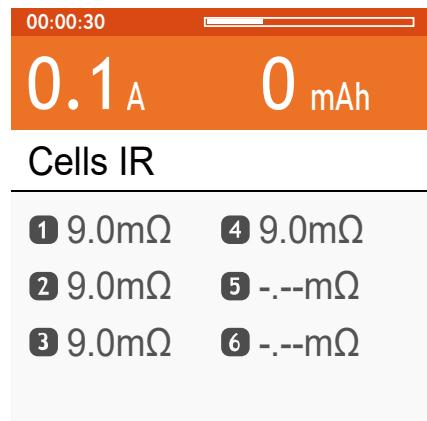
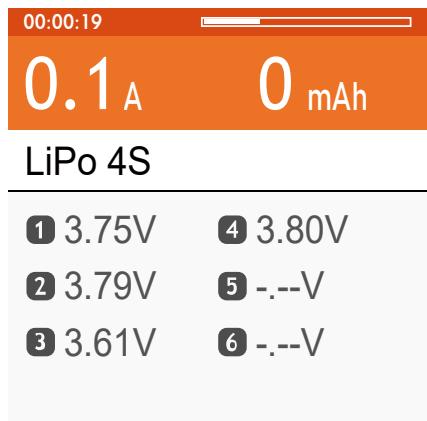
* 对于锂电池，强烈建议连接平衡端口均衡充电，以确保充电器能够准确监测每个电池的电压，并对不一致的电芯进行平衡操作。

当使用非平衡模式(不连接到电池平衡口)充电时，充电器在开始任务前会有相应的报警提示。

工作参数显示

工作中旋转飞梭键可以切换屏幕下半部分的信息显示内容，信息内容一次为：

各电芯电压、各电芯内阻、工作参数。其中电芯电压及内阻仅在平衡充电模式下才会显示。



系统设定

待机界面下，长按一下飞梭键弹出系统设定菜单，菜单项如下：

MinVoltage	最低输入电压限制 10~24V
MaxPower	最大输入功率限制 30~230W
Backlight	屏幕背光亮度调节，分为高中低三档
Volume	蜂鸣器音量调节，分别为高中低以及关闭三档
Completion	完成提示声样式设置，分别为单次及重复两档
Language	语言设置
Self-test	进行手动自检
Calibrate	校准充电器的输入电压，输出电压和平衡口电压。
System info	查看系统信息

- **最小输入电压限制：**

当使用电池作为输入电源时，此项设定可以保护电池不会过放。当充电器检测到输入电压低于设定值，将立即停止所有在执行的任务并提示输入电压过低。DC模式供电时，更改范围为10~24V；AC模式供电时，此项不可更改。

- **最大输入功率限制：**

当连接的输入电源达不到充电器的最大工作功率（230W）要求时，为了保护输入电源及使充电器稳定工作，需要根据电源的实际输出能力设定此参数。DC模式供电时，更改范围为30~230W；AC模式供电时，此项不可更改。

- **蜂鸣器音量：**

当设定为OFF时，将屏蔽操作声提示，但不屏蔽错误提示音。

- **自检：**

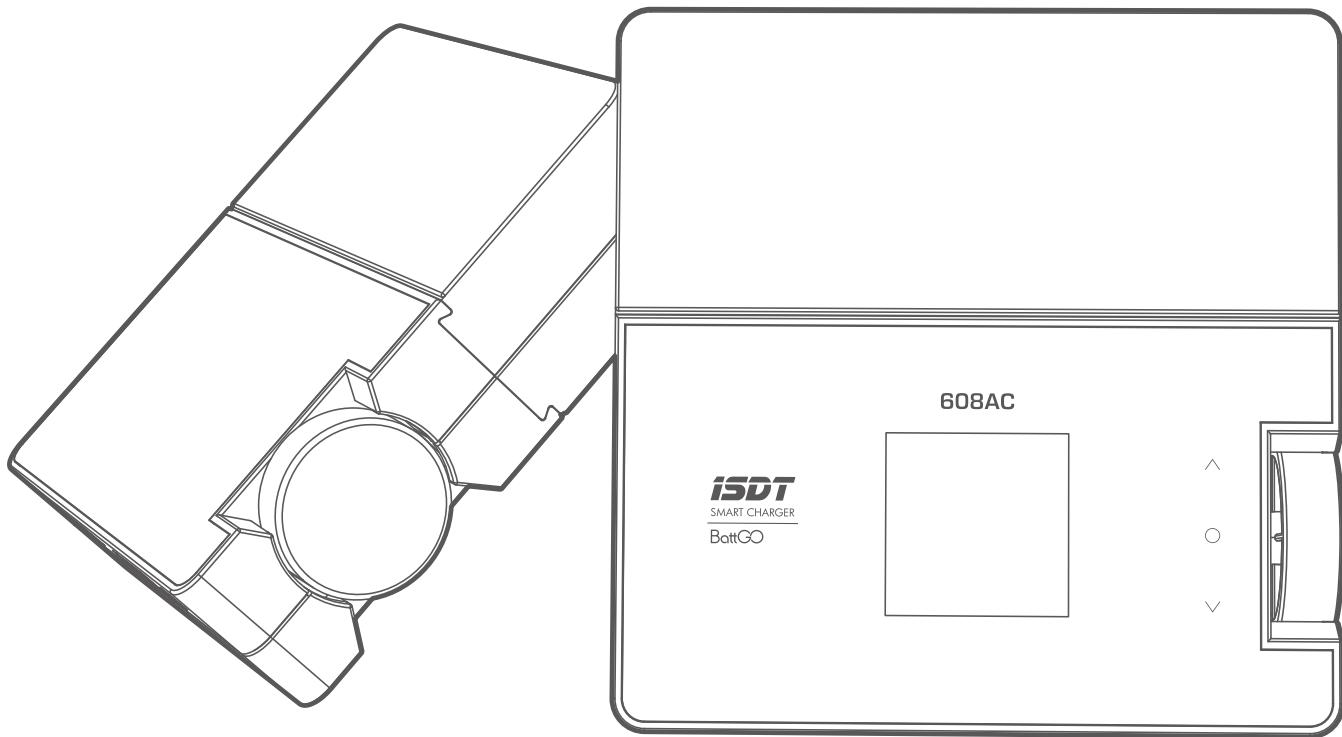
选择该项时可以进行手动自检操作。

- **校准：**

该项可以校准充电器的输入电压，输出电压和平衡口电压。

608AC
200W Smart Charger

Instruction Manual



isdt®

Thanks for purchasing the ISDT 608AC 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.

Table of Contents

Warnings and Safety Tips

Product Specifications

Function Buttons

How to Confirm Charging Current

Defalut battery type of charger and task parameters

Navigating the Charger

Operating the Charger

Charge Screen

System Setting Menu



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 abnormality.
- 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.



Product Specifications

Model : 608AC

Input voltage : AC 110V~220V

DC : 10V~30V

Output voltage : 1.0V ~ 30.0V

Charge current : 0.1A ~ 8.0A

Discharge current : 0.1A ~ 1.0A

Max charge power : AC 50W / DC 200W

Max discharge power : 10W

Balance current : 1A

Supported battery types : LiFe,Lilon,LiPo,LiHv 1-6S / Pb 1-12S / NiMH 1-16S

Abnormal voltage alarm : Support

Incorrect cell count setting alarm : Support

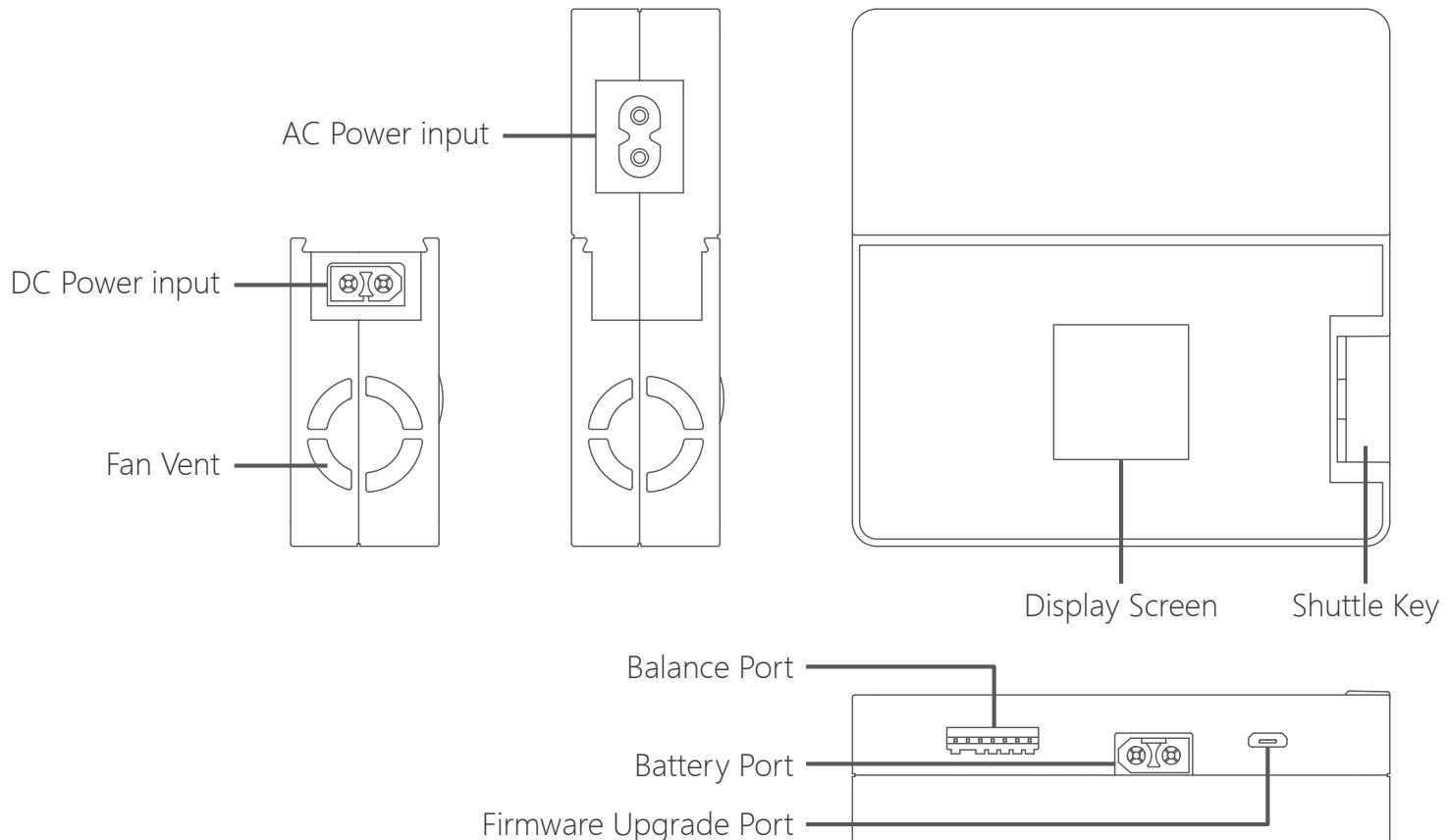
Working temperature : 0°C~40°C

Storage temperature : -20°C~60°C

Dimension : 110.5×110.5×31 mm

Weight : 350g

Function Buttons



Functions of the shuttle key:

- Long press: enter the system setting/ Terminate current task
- Short press: enter the task setting/ Confirm current task
- Scroll: select the corresponding menu



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 $1000 \times 5 = 5000$ mA; 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.



Defalut battery type of charger and task parameters

	NiCd/MH	Pb	LiFe	Lilon	LiPo	LiHv
Rated voltage	1.20V	2.00V	3.20V	3.60V	3.70V	3.80V
Full charge voltage	1.40V	2.46V	3.65V	4.10V	4.20V	4.35V
Storage voltage	✗	✗	3.30V	3.70V	3.80V	3.85V
Discharge voltage	1.10V	1.90V	2.90V	3.20V	3.30V	3.40V
Pre-charge voltage	0.90V	1.80V	2.60V	2.90V	3.00V	3.10V
Balance charge	✗	✗	✓	✓	✓	✓
Unbalanced charge	✓	✓	✓	✓	✓	✓
Supported cell count	1~16S	1~12S	1~6S	1~6S	1~6S	1~6S
Max. charging current	8.0A	8.0A	8.0A	8.0A	8.0A	8.0A

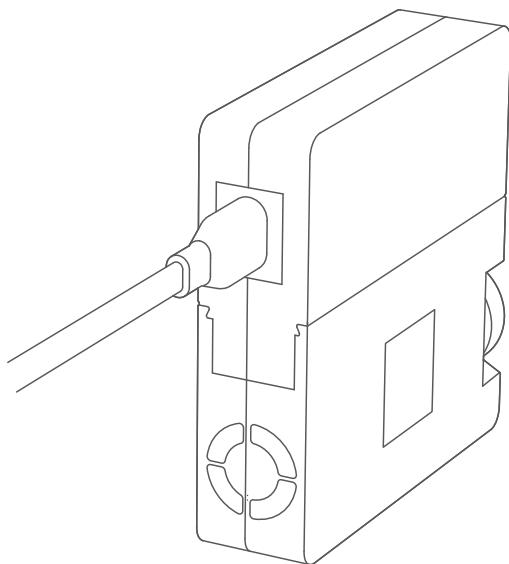


Navigating the Charger

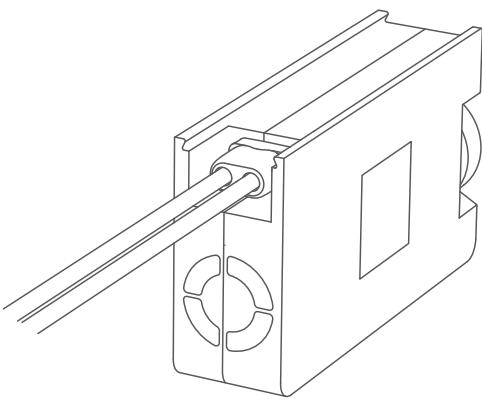
AC&DC dual input.

Connecting DC power port with DC power supply, for DC input mode.

Connecting the AC power cord for AC input mode.



AC mode



DC mode

Operating the Charger

Power on 608AC smart charger, connect the battery, and short press the shuttle key to enter the task setting menu as follows :

- **Scrapped function**

Connect the battery to be scrapped, select the scrapped function in the task options, able to discharge the battery to 0V.

- **DC Power**

The charger is equivalent to a DC power in this function, with adjustable output voltage 2-30V, output current 0.2-0.8V. No options for the battery type, parameters and current in this menu.

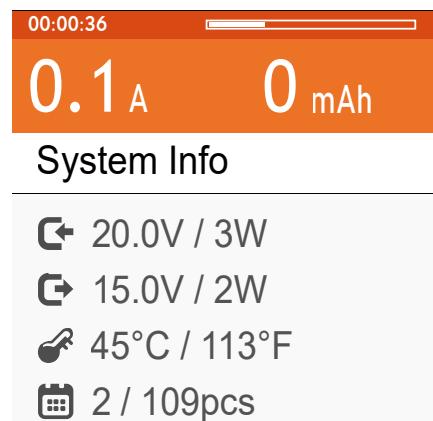
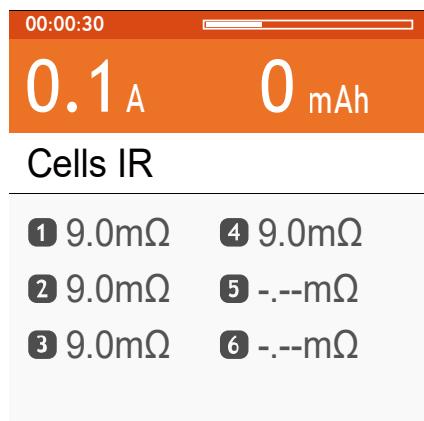
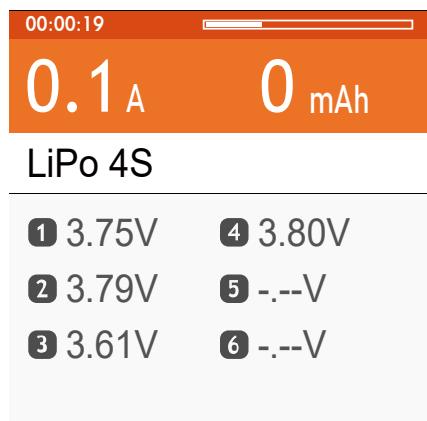
- **Buzzer volume:**

When off the volume, the operation sound will be blocked, except the warning error beep.

- * For the lithium battery, it's strongly recommended to charge connecting with balance port, to supervise the voltage of every battery accurately, and balancing operation for the battery cell. While charge in the unbalanced mode(unconnected to the battery balance port), the charger will alarm before operation.

Charging Screen

Scrolling the shuttle key to shift the charging information, as cell voltages, cell internal resistance and working parameter. The cell voltage and internal resistance only on display in balancing charging mode.



System Setting Menu

Under the standby interface, long press the shuttle key to enter the system setting menu :

- **Min. input voltage protection : 10-24V**

all tasks in operation will be stopped at once and hint warning of low voltage, when the input voltage is lower than the input voltage as set up. It will protect the battery from being discharged when using battery pack as power supply. It's not adjustable in AC mode.

- **Max. input power setting : 30-230W**

In DC mode, if the input power is smaller than the max working power(230W), please set up the parameter as the actual output power as max input, to protect the input power and enable the charger to work stable.

In DC mode, change the range to 30-230W. It's not adjustable in AC mode.

- **Buzzer volume:**

The operation sound will be shielded when the volume is off, except the warning error beep.

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!