

B6neo

智能充电器
使用说明书

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介绍

感谢您购买天空创新 B6neo 平衡充电器。

B6neo 体积小巧，个性十足。操作虽然简单，但仍需具备一定的基础知识。该说明书可以帮助用户快速上手，熟悉其操作功能，了解其特色。因此，使用前，请仔细阅读其操作说明，注意警告内容及安全提示。

希望 B6neo 能陪你愉快地度过航模时光。

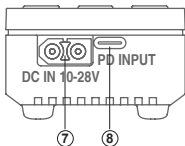
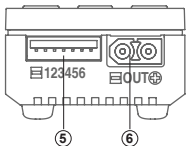
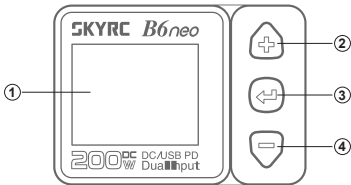
B6neo 是一款直流充电器，最大输出功率为 200W。它不仅能为 LiPo/LiFe/Lilon/LiHV/NiMH/NiCd/Pb 等电池充电并可作为电源使用。电源功能对航模爱好者来说非常友好，可以为他们的直流设备供电。不仅如此，无需开机即可测量电池电压的功能，让测量电池电压变得轻松无障碍。

首次使用前，请务必阅读说明、警告和安全注意事项。

电池容易引起火灾，甚至爆炸，错误处理电池和充电器会很危险。

电池和电池充电器处理不当是危险的，可能会引起火灾，甚至爆炸。

示意图



- ① LCD 显示屏
- ② 菜单浏览，加大数值等
- ③ 确认选择，中止当前程序，进入设置等
- ④ 菜单浏览，减小数值等
- ⑤ 平衡口
- ⑥ 主口，直流输出口
- ⑦ DC 输入，10.0-28.0V/12A
- ⑧ PD 输入，必须符合 PD3.0

包装

1*SkyRC B6neo 充电器

1* 快速入门指南

参数

项目	选项	规格
输入电压	DC	10.0-28.0V
	PD3.0/QC	12.0-20.0V
输入电流	DC	12A
	PD	5A
最大输出功率	DC	200W
	PD	80W
工作模式	LiPo/LiFe/Lilon/LiHV	平衡充、充电、放电、存储
	NiMH/NiCd	充电、放电、循环充-放、循环放-充、重复充电
	Pb	标准充电、低温充电、AGM 充电、放电
	DC power supply	5.0-27.0V, 1.0-10.0A

	LiPo/LiFe/Lilon/LiHV	1S-6S
电池节数及类型	NiMH/NiCd	1S-15S
	Pb	3S/6S
	LiPo/LiFe/Lilon/LiHV	0.2A-10.0A
充电电流	NiMH/NiCd	0.2A-10.0A
	Pb	0.2A-10.0A
放电	电流	0.1A-2A
	功率	最大 24W ($\pm 10\%$) (在 6S 满电 4.2V/s 条件下)
平衡电流	LiPo/LiFe/Lilon/LiHV	最大 500mA
尺寸	70x50x32mm	
重量	82g	

警告及安全提示

没有监护人监督或指导时，本产品不适合身体、感官、精神能力下降，或缺乏经验和知识的人使用。

使用时，不小心或不遵守以下警告，可能会导致产品故障、电气问题、过热、火灾，并最终导致人身伤害和财产损失。

- ▲ 使用期间请将电池置于看管下操作。
- ▲ 请勿通宵充电。
- ▲ 请勿尝试为没电、损坏或潮湿的电池组充电。
- ▲ 请勿尝试为包含不同类型电池的电池组充电。
- ▲ 请勿在极热或极寒的地方或阳光直射的地方给电池充电。
- ▲ 请勿给端子线被挤压或短路的电池充电。
- ▲ 请勿使用被挤压或短路的电源线供电。
- ▲ 请勿尝试拆卸充电器或使用损坏的充电器。
- ▲ 请勿将充电器同时连接到交流和直流电源。
- ▲ 使用时，请选择正确的充放电程序。

- ⚠ 充电前务必检查电池，确保电池为可充电电池。
- ⚠ 请勿在汽车座椅、地毯或类似地面使用充电器。
- ⚠ 请在远离易燃易爆物品的区域操作充电器。

标准电池参数

	LiPo	Lilon	LiFe	LIHV	MIMH	NIcd	Pb
标称电压	3.7V/ 节	3.6V/ 节	3.3V/ 节	3.8V/ 节	1.2V/ 节	1.2V/ 节	2.0V/ 节
最高电压	4.2V/ 节	4.1V/ 节	3.6V/ 节	4.35V/ 节	1.5V/ 节	1.5V/ 节	2.4V/ 节
存储电压	3.8V/ 节	3.7V/ 节	3.3V/ 节	3.85V/ 节	N/A	N/A	N/A
允许快充电流	≤ 1C	≤ 1C	≤ 4C	≤ 1C	1C-2C	1C-2C	≤ 0.4C
最低电压	3.0-3.3V/ 节	2.9-3.2V/ 节	2.6- 2.9V/ 节	3.1-3.4V/ 节	0.1-1.1V/ 节	0.1-1.1V/ 节	1.8V-2.0V/ 节

请根据不同参数的电池选择正确的操作程序。
错误设置可能会导致电池燃烧甚至爆炸。

按键功能



浏览菜单，增加数值等



进入设置、确认选择、终止进度或返回上一屏幕

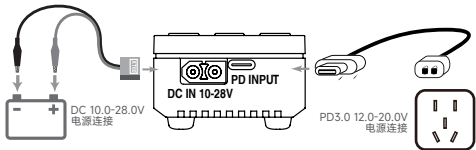


浏览菜单，减少数值等

电源及电池连接

1. 连接电源

SkyRC B6neo 支持直流双输入，输入电压分别是 DC 10.0-28.0V，PD 12.0-20.0V。



2. 连接电池

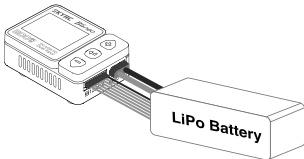


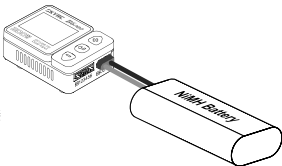
WARNING!

为避免短路，请先将充电线与充电器连接，然后再连接电池。断开时，与之相反。

1) 锂电池连接

为确保安全，建议使用平衡模式给锂电池充电。如果电池不带平衡线，可使用充电模式。电池平衡线中的黑线必须对应平衡口负极标志，然后再进行连接





2) 镍氢 / 镍镉或铅酸电池连接

Specifications

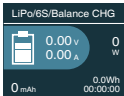
Battery Type	Working Mode	Description
LiPo Lilon LiFe LiHV	Balance CHG	To charge the lithium battery in balance mode so that the voltages of each cell can be well balanced. The balance lead must be connected.
	Charge	To charge the lithium battery without a balance lead connected.
	Storage	By charging or discharging the battery, a specific storage value can be achieved. LiPo: 3.8V, LiFe: 3.3V, Lilon: 3.70V, LiHV: 3.85V
	Discharge	To discharge the lithium battery to a specific value, which can be set before discharging.

NiMH NiCd	Charge	To charge the NiMH/NiCd battery according to user preferences.
	Re-Peak	To charge the battery twice in a row automatically, which is useful for ensuring the battery is fully charged.
	Cycle_C_D	A 1 to 5 cycle charge-discharge process is effective in refreshing NiMH/NiCd batteries and restoring their performance.
	Cycle_D_C	A 1 to 5 cycle discharge-charge process is effective in refreshing NiMH/NiCd batteries and restoring their performance.
	Discharge	To discharge NiMH/NiCd battery to a specific value, which can be set before discharging.
Pb	Normal	To charge the Pb battery according to user preferences.
	AGM Charge	To charge the AGM battery according to user preferences.
	Cold Charge	To charge the Pb battery at a low temperature according to user preferences.
	Discharge	To discharge the Pb battery to a specific value, which can be set before discharging.

In this chart, you can see which operations B6neo is capable of performing based on the type of battery.

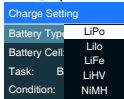
Lithium Battery Program(LiPo/Lilo/LiFe/LiHV)

Here is a flowchart to guide you to set up the program.



Enter charge setting

Press ENTER (↵) to enter Charge Setting;



Battery type select

Press ENTER (↵) to call out the Battery Type menu, and select your preferred lithium battery type.



Charge Setting

Battery Type	1S
Battery Cell	2S
Task:	3S
Condition:	4S
	5S



Charge Setting

Battery	Banlance CHG
Battery (Charge
Task:	Storage
Condition	Discharge



Charge Setting

Condition:	4.18V
Charge Cur	4.19V
Start	♥ 4.20V
Back	4.21V
	4.22V



Battery cell select

Call out the Battery Cell menu, and select the battery cells correspondingly.

Task select

Call out the Task menu, and select your desired working mode.

Condition select

Call out the Condition menu, and adapt the cut-off voltage to the demand.

Charge Setting	
Condition:	9.6A
Charge Current:	9.7A
	9.8A
Start	9.9A
Back	10.0A



Charge Setting	
Condition:	4.20V
Charge Current:	10.0A
Start	
Back	



Charge Setting	
Condition:	4.20V
Charge Current:	10.0A
Start	
Back	



Charge/Discharge current select

Call out the Charge/Discharge Current menu, and adapt the charge/discharge current to the demand.

Start


Confirm to initiate the program.

Back

Confirm to step back to the main interface.



Stop

To terminate the current program, press ENTER  button once.


Do not connect the battery before turning on the charger!

NiMH/NiCd Battery Program

Here is a flowchart to guide you to set up the program.



Enter charge setting

Press ENTER  to enter Charge Setting;



Charge Setting

Battery Type	LiFe
Battery Cell	LiHV
Task:	NiMH
Condition:	NiCd
	PB



Charge Setting

Battery Type	1S
Battery Cell	2S
Task:	3S
Condition:	4S
	5S



Charge Setting

Battery	Charge
Battery	Re-Peak
Task:	CYCLE_C_D
Condition:	CYCLE_D_C
	Discharge



Battery type select

Press ENTER (↵) to call out the Battery Type menu, and select NiMH or NiCd.

Battery cell select

Call out the Battery Cell menu, and select the battery cells correspondingly.

Task select

Call out the Task menu, and select your desired working mode.

Charge Setting	
Condition:	-4 Δ mV
	-5 Δ mV
Charge Cur	♥-6 Δ mV
Start	-7 Δ mV
Back	-8 Δ mV



Charge Setting	
Condition:	9.6A
Charge Cur	9.7A
	9.8A
Start	9.9A
Back	10.0A



Charge Setting	
Condition:	4.20V
Charge Current:	10.0A
Start	
Back	



Condition select

Call out the Condition menu, and adapt the cut-off voltage to the demand.

Charge/Discharge current select

Call out the Charge/Discharge Current menu, and adapt the working current to the demand.

For Re-Peak, Cycle_C_D, and Cycle_D_C, you must set the cycles and rest times appropriately.

Start

Confirm to initiate the program.

Charge Setting

Condition: 4.20V

Charge Current: 10.0A

Start

Back



LiPo/6S/Balance CHG

22.96 V 200 W
8.73 A

2235 mAh 50Wh
00:15:08

Back

Confirm to initiate the program.

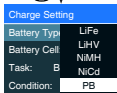
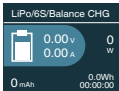
Stop

To terminate the current program, press ENTER button once.

Do not connect the battery before turning on the charger!

Pb Lead-Acid Battery Program

Here is a flowchart to guide you to set up the program.



Enter charge setting

Press ENTER (↵) to enter Charge Setting;

Battery type select

Press ENTER (↵) to call out the Battery Type menu, and select Pb.

Charge Setting	
Battery Type	
Battery Cell	3S
Task: B	6S
Condition:	



Charge Setting	
Battery	Normal
Battery	AGM Charge
Task:	Cold Charge
	Discharge
Condition	



Charge Setting	
Condition:	
Charge Cur	1.80V
	♥ 1.90V
Start	2.00V
Back	



Battery cell select

Call out the Battery Cell menu, and select the battery cells correspondingly.

Task select

Scroll to Task, call out the menu and scroll to select the working mode.

Condition select

Discharge mode is the only mode that can allow you to edit in the Condition.

There is no option to change it for other working modes.

Charge Setting

Condition:	9.6A
Charge Current:	9.7A
	9.8A
Start	9.9A
Back	10.0A



Charge Setting

Condition:	4.20V
Charge Current:	10.0A
Start	
Back	



Charge Setting

Condition:	4.20V
Charge Current:	10.0A
Start	
Back	



Charge/Discharge current select

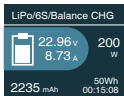
Call out the Charge/Discharge Current menu, and adapt the working current to the demand.

Start

Confirm to initiate the program.

Back

Confirm to initiate the program.

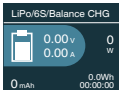



Stop

To terminate the current program, press ENTER button once.

Do not connect the battery before turning on the charger!

DC Power



On the main interface, hold the ENTER  button for seconds to enter the system setting.



Charge Setting

Task Parameters >

System Setting >

DC Power >

Battery Meter >



>DC Power

Voltage: 12.0V

Current: 4.2V

Start

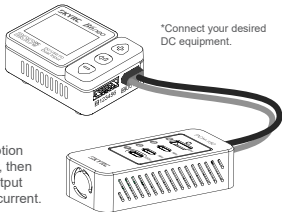
Back



DC Power

11.86 A 46 W
4.89 V

Set: 12.00V 5.00A



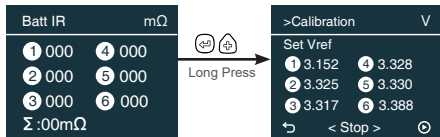
*Connect your desired DC equipment.

Select the option of DC Power, then adjust the output voltage and current.

Start to activate the power function after setting up.

Voltage Calibration

1. On the main interface, press + twice to enter the interface of battery resistance.
2. Connect the 6S battery to B6neo.
3. Hold the ENTER and + buttons together to enter the calibration interface.
4. Press + button to go through the voltage of each cell.
5. Press ENTER button to choose the voltage, the value of which will turn blue.
6. Press + or - to adjust the values.



Errors and Warnings

In the event of a fault, B6neo will display an error message.

Error Message	Explanation
DC In Too Low!	DC input voltage is lower than preset!
DC In Too High!	DC input voltage is higher than preset!
Connection Break!	The battery may be broken!
Cell Error	The cells do not match.
Battery Type!	The battery type is wrong!
Overcharge Capacity Limit!	The charged capacity reaches the preset capacity limit.
Over Time Limit!	The program is timed out!
Int.Temp.Too High!	The internal temperature is high!
Over Load!	The charger is overloaded!
Reversed Polarity	The battery connection is reversed.
Fully Charged	The battery is fully charged already!
Outlet Volt. Too Low!	The DC output voltage is too low.
Outlet Overload!	The DC output is overloaded.
Balance Connection Error!	The balance connection is interrupted.
Cell Volt Diff.	The voltage difference between each cell is high.
Set Power Error	There is an error in setting the DC power.

System Setting

On the main interface, hold the Start button for seconds to enter the system setting.

Menu	Option	Definition
Task Parameters	Safety Timer	Customize a period for program protection.
	Max.Capacity	Customize the protection of capacity.
	Trickle Charge	Enable/disable trickle charge.
	Holding Voltage	
	Back	Back to the previous interface.
System Settings	Language	Select your desired system language.
	Min.Input Voltage	Set the minimum voltage for input protection.
	LCD BackLight	Adjust the brightness of the screen.
	Volume	Adjust the volume of the key and beep.
	Completion Signal	Choose the way you'd like to be reminded when the program completes.
	Back	Back to the previous interface.

DC Power	Voltage	Set the output voltage. (5.0-27.0V)
	Current	Set the output current. (1.0-15.0A)
	Start	Enable DC power output and return to the main interface.
	Back	Back to the previous interface.
Battery Meter	N/A	Measure the battery voltage and internal resistance. Press - to return to the system setting.
Factory Settings	N/A	Restore to the factory settings.
System Info	N/A	Check the current system information Press ENTER to return to the system setting.
System Upgrade	N/A	Upgrade the charger.
Back	N/A	Back to the previous interface.

Conformity Declaration

SkyRC B6neo satisfies all relevant and mandatory CE directives and FCC Part 15 Subpart B.



Warranty and Service

Liability Exclusion

This charger is designed and approved exclusively for use with the types of battery stated in this Instruction Manual. SkyRC accepts no liability of any kind if the charger is used for any purpose other than that stated. We are unable to ensure that you follow the instructions supplied with the charger, and we have no control over the methods you employ for using, operating, and maintaining the device. For this reason, we are obliged to deny all liability for loss, damage, or costs that are incurred due to the incompetent or incorrect use and operation of our products, or which are connected with such operation in any way. Unless otherwise prescribed by law, our obligation to pay compensation, regardless of the legal argument employed, is limited to the invoice value of those SkyRC products which were immediately and directly involved in the event in which the damage occurred.

Warranty and Service

We guarantee this product to be free of manufacturing and assembly defects for a period of one year from the time of purchase. The warranty only applies to material or operational defects, which are present at the time of purchase. During that period, we

will repair or replace free of service charge for products deemed defective due to those causes.

This warranty is not valid for any damage or subsequent damage arising as a result of misuse, modification, or as a result of failure to observe the procedures outlined in this manual.

Note:

1. The warranty service is valid in China only.
2. If you need warranty service overseas, please contact your dealer in the first instance, who is responsible for processing guarantee claims overseas. Due to high shipping costs, and complicated custom clearance procedures to send back to China, please understand that SkyRC can't provide warranty service to overseas end users directly.
3. If you have any questions which are not mentioned in the manual, please feel free to send an email to info@skyrc.com

B6neo

Smart Charger DC/USB PD
Dual Input

Manufactured by
SKYRC TECHNOLOGY CO., LTD.

The manual is subject to change without notice;
please refer to our website for the latest version!



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