

锂聚合物电池充电器使用说明

Esky®

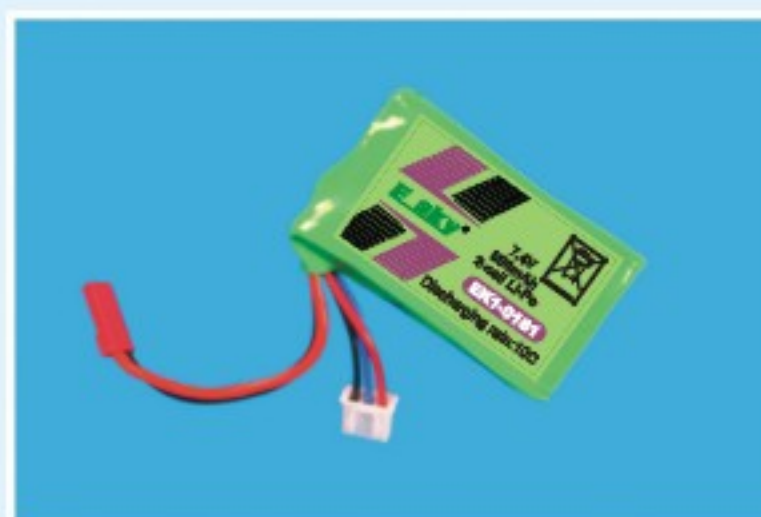
锂聚合物电池 (Li-polymer battery, 又称高分子锂电池)

具有能量密度高、单电池电量高可达2000mAh、轻量化、自放电率低、无记忆效应、再充电性好、寿命长可充入超过1000次, 以及高安全性等多种明显优势, 是一种新型电池。

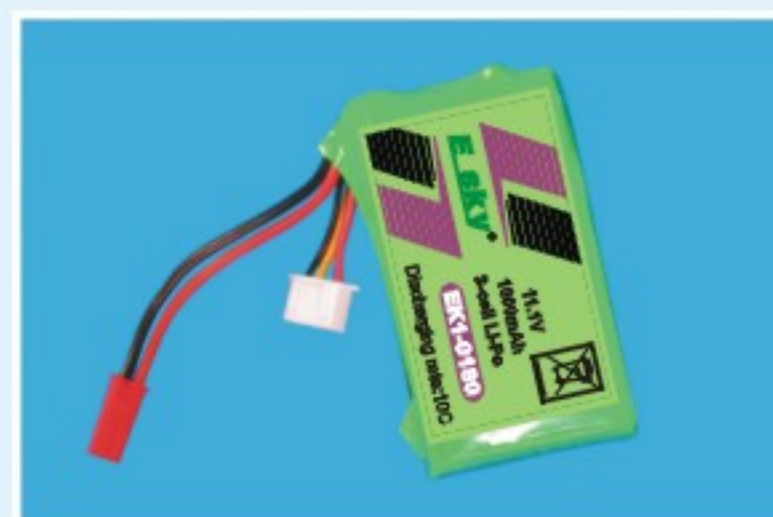
*确保正确设定锂电专用充电器上面的电压或是电池颗数的专用参数, 在此介绍几种简便的输入电源以供参考:

*根据电流源的供给, 选择接入方式。

- 1) 如果使用供电或12V蓄电池供电, 将充电器红、黑鳄鱼夹分别夹住蓄电池正负极。
- 2) 如果使用市电, 请先将电源适配器AC接头接入电源插座, 然后将DC接头插入充电器DC插座。
- 3) 如果在车里, 请先将“雪茄头”插入线, 然后将雪茄头插入汽车雪茄头插座, 然后将DC接头插入充电器DC插座。



2节锂电池组/7.4V/800mAh



3节锂电池组/11.1V/1000mAh

供电



蓄电池



适配器



DC车载(雪茄头)供电电源

注意:

- 1) 充电器通电时, 四个灯显示为黄色。
- 2) 在电池放电完成时, 将电池连接充电器, 充电器显示灯就以红色恒亮显示;(红色灯亮个数为电池组个数)此时为正常状态充电。等到电池充满时, 充电器显示灯为黄色恒亮。充电期间如发现某个红色亮灯转为黄色亮灯, 这表示电池组的某个Cell已充饱。
- 3) 在充电时如有发现, 充电器某个红灯不亮或不停在闪烁, 此时说明待充电池已损坏, 请马上更换电池。
- 4) 断开电源开关

1-4节锂聚合物电池充电器 (EK2-0852)

此锂聚合物电池充电器可以直接对1-4节(串联)锂聚合物电池进行充电, 不仅充电电压控制精度高, 而且操作简单。

技术参数

输入电压: DC11-15V
负载能力: 1-4节(串联)锂聚合物电池
输出电流: 1000mA
终止电压: 4.20±0.005V (1节)
8.40±0.1V (2节)
12.65±0.1V (3节)
16.90±0.1V (4节)



- 1) 充电一节锂聚合物电池, 可选择“A(-)B(+)”端口, 也可以选择“B(-)C(+)”“C(-)D(+)”“D(-)E(+)”端口。

(示例图之一)



- 2) 充二节(串联)锂聚合物电池, 可选择“A(-)C(+)”也可以选择“B(-)D(+)”“C(-)E(+)”端口

(示例图之一)



- 3) 充三节(串联)锂聚合物电池, 既可选择“A(-)D(+)”也可选择“B(-)E(+)”端口。

(示例图之一)

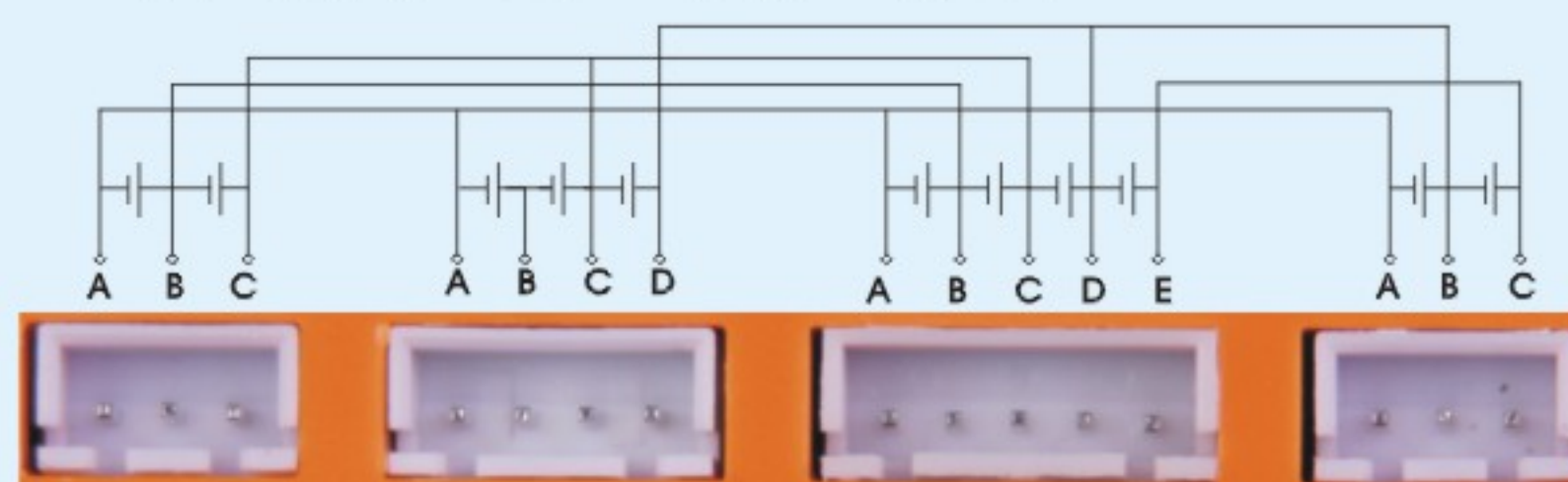


- 4) 充四节(串联)锂聚合物电池, 可接“A(-)E(+)”端口。

(示例图之一)



1-4节锂聚合物电池充电器接口对应图



- 5) 假如有两组二节(串联)锂聚合物电池, 方可分别接入“A(-)C(+)”“C(-)E(+)”端口同时充电, 当然, 如果有一节和三节(串联)电池组也可分别接入“A(-)B(+)(一节)”“B(-)E(+)(三节)”或“A(-)D(+)(三节)”“D(-)E(+)(一节)”端口同时充电。

注: 因端子组为并联关系, 电池组不能同时接一个端口(比如“A(-)A(+)”); 以免因短路而烧毁造成危险。当接入正确后, 对应端子LED(且只能是对应LED)就由绿色变成红色(比如二节(串联)电池接入“A(-)C(+)”端口, 则LED1, LED2亮红色, LED3, LED4亮绿色)充电开始, 否则为不正常, 需断电核对, 当红色LED转为绿色, 则表示电池充电结束。

注: 当电池(组)电压单节高于4.2V或低于3.0V时, 也就是说电池(组)出现过充或过放时, 充电器则会启动自动保护功能, 不予充电。

2-3节锂聚合物电池充电器 (EK2-0851)

EK2-0851 (EC103A) 既可以直接对2节锂聚合物电池组进行充电, 又可以对3节锂聚合物电池组进行充电。

技术参数:

输入电压: DC10-15V
负载能力: 2节锂聚合物电池组 (7.4V)
或3节锂聚合物电池组 (11.1V)
输出电流: 0.8A (恒流)
终止电压: 8.40±0.1V(2节锂聚合物电池组);
12.6±0.15V(3节锂聚合物电池组)



1. 锂聚合物电池在充电的时候应有人看护
2. 充电时应注意旁边有没有易燃物品

为使您充电的安全与方便, 请使用TWF原厂的锂聚合物电池, 我们对使用非TWF原厂的锂聚合物电池充电所带来的损失不负任何责任。

对锂聚合物电池充电时请注意确认充电器设定正确的充电电压或正确电池颗数(否则易燃易爆)请放在通风的地方进行锂聚合物电池的充电。

SPECIFICATION FOR LI-POLYMER BATTERY CHARGER

E_sky®

Li-polymer battery (also called macromolecule Li battery)

Li-polymer battery (also called macromolecule Li battery) is a new type of battery which has the advantage of high energy density, good rechargeable feature, low automatic discharge rate, high safety and long life, the voltage of the single battery can reach at 2000mAh. It can charge or discharge more than 1000 times.

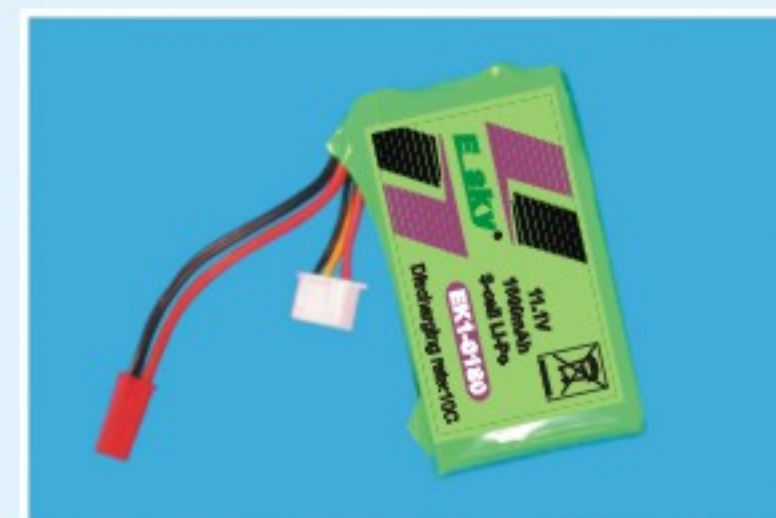
Make sure to set the special voltage and battery parameter used for the special charger

Choose the input way according to the supply of the power.

- 1) Connect the anode and cathode of the battery with the red and black clip individually if using a power supplier or 12V storage battery.
- 2) Please connect the AC tie-in of the adapter with the power jack and connect the DC tie-in with the DC jack of the charger when using electric supply.
- 3) When in a car, first plug the cigar plug wire into the jack of the car then plug the DC jack into the DC Jack of the charger



2-cell Li-battery pack/7.4v/800mAh



3-cell Li-battery pack/11.1v/1000mAh

POWER SUPPLIER



STORAGE BATTERY



EK2-0903

ADAPTER



EK2-0904

DC POWER SUPPLIER FOR CAR



Note:

1. When electrify the charger, the four lamps are all yellow.
2. Connect the battery with the charger after discharge the battery, all the display lamps on the charger are bright red, it indicate normal charge. When the batteries are fully charged, all the lamps would turn to bright yellow. So when some red lamp turns into yellow, it shows some of the cell in the battery pack is fully charged.
3. If you find the lamps is black out or flash ceaselessly when you charge it, it means that the charger is broken, and you have to change the charger.
4. Turn off the power switch.

1-4 CELL LI-POLYMER BATTERY CHARGER (EK2-0852)

This charger can charge for the 1-4 cell (in series) directly with high control and easy operation.

Technology parameter:

Input voltage: DC11-15V

Load capability: 1-4 cells Li-polymer battery

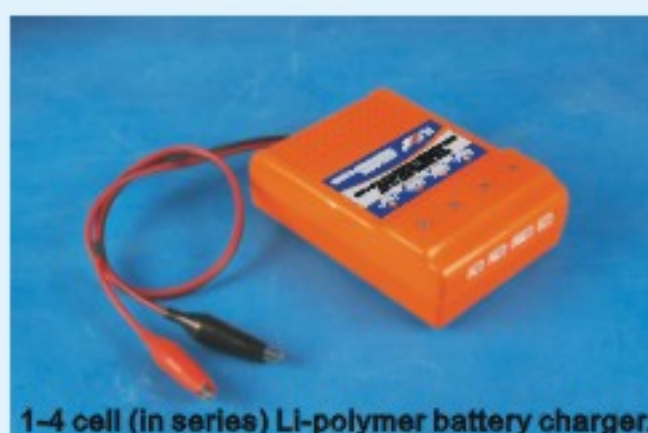
Input current: 1000MA

Cutout voltage: $4.20 \pm 0.005V$ 1 cell

$8.40 \pm 0.1V$ 2 cell

$12.65 \pm 0.1V$ 3 cell

$16.90 \pm 0.1V$ 4 cell



1-4 cell (in series) Li-polymer battery charger.

- 1) You can choose the port of "A(-)B(+)", or "B(-)C(+)", or "C(-)D(+)", or "D(-)E(+)" when charging one cell of the Li-polymer battery (in series).

(Example Picture)



- 2) You can choose the port of "A(-)C(+)", or "B(-)D(+)", or "C(-)E(+)" when charging two cells of the Li-polymer battery (in series).

(Example Picture)



- 3) Choose the port of "A(-)D(+)" or "B(-)E(+)" when charging three cells of the Li-polymer battery (in series).

(Example Picture)

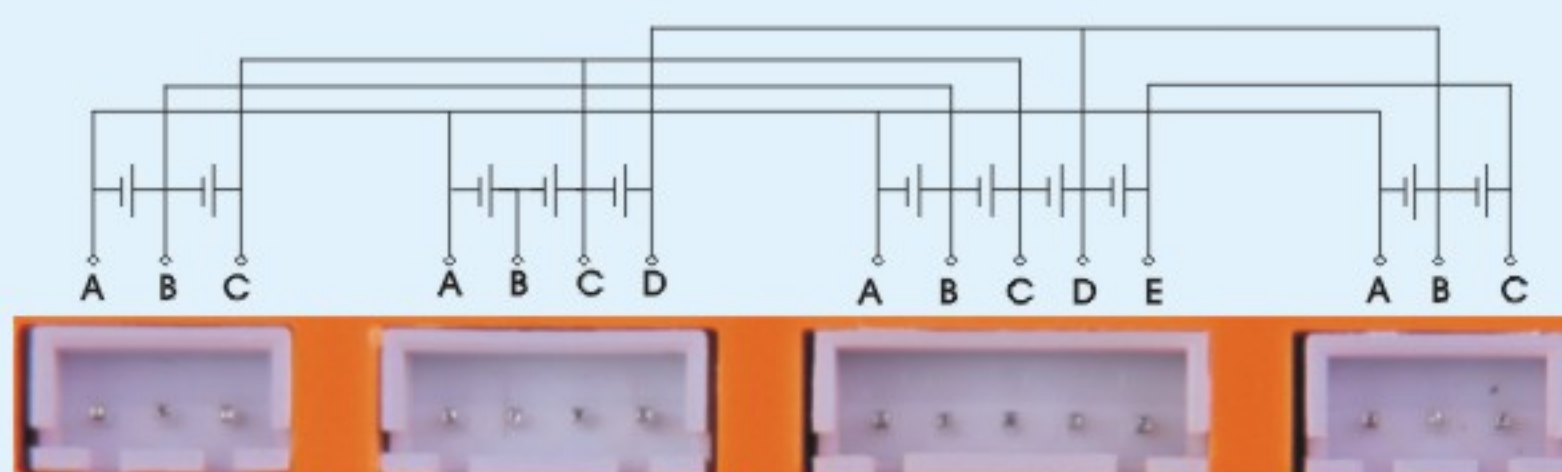


- 4) Connect the port of "A(-)E(+)" when charging four cells of the Li-polymer battery (in series).

(Example Picture)



INTERFACE CORRESPONDING MAP FOR 1-4 CELLS LI-POLYMER BATTERY CHARGER



- 5) You can charge two groups of 2 cells battery at the same time by connecting port "A(-)C(+)" and "C(-)E(+)" separately, connect the port of "A(-)B(+)" (1cell) "B(-)E(+)" (3 cells) or "A(-)D(+)" (3 cells) "D(-)E(+)" (1cell) separately when charging a battery group of 1cell and 3 cells.

NOTE: Cannot connect the battery group at the same port (such as "A(-)A(+)") for the port are parallel connection, otherwise may cause damage because of short circuit or dangerous. LED will turn from green to red when starting charging after you connect it correctly. (Eg. Connect two cells battery to "A(-)C(+)", LED1, LED2 turn red, LED3, LED4 turn green.) otherwise it is abnormal, you should check it. When LED turned from red to green, it shows charge completed.

NOTE: When the voltage of each battery (battery pack) is higher than 4.2v or lower than 3.0v (over charging or over discharging), the charger would not charge and the function of self-protection works.

2-3 CELL LI-POLYMER BATTERY CHARGER (EK2-0851)

Ek2-0851(EK103A) can both charge 2 cells Li-polymer battery pack and 3 cells Li-polymer battery pack directly.

Technology parameter:

Input voltage: DC11-15V

Load capability: 2 cells Li-polymer battery pack (7.4V)

Or 3 cells Li-polymer battery pack (11.1V)

Output current: 0.8A(constant current)

Cutout voltage: $8.40 \pm 0.1V$ (2 cells Li-polymer battery pack)

$12.6 \pm 0.15V$ (3 cells Li-polymer battery pack)



EK2-0851

1. Fire and/or serious injury can result under certain conditions. follow all instructions for use. Never leave equipment unattended while charging.
2. Please keep away from the combustibles.

⚠ WARNING: For the safety and convenience of charging, please use TWF manufactured Li-polymer battery. We don't take any responsibility for the damage caused by not using TWF original battery.

⚠ WARNING: Please make sure to set correct voltage for the charger and the quantity of the battery (otherwise may cause explosion or fire). Please put it at the breezy place while charging.