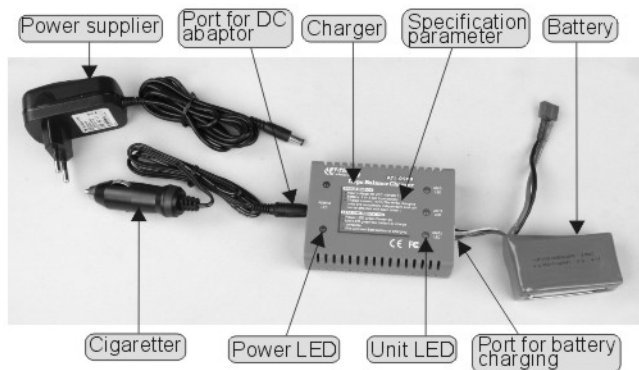


# Instruction of ATI-0909 Balance Charger for li-po battery



## Instruction of ATI-0909 Balance Charger for li-po battery



ATI-0909 balance charger is designed with specialized chip for rechargeable Li-po batteries. It has outstanding characteristics such as high-precision pre-charging, constant current charging, constant voltage charging and battery state inspection. By monitoring the battery voltage,

ATI-0909 can judge the following charging state: Pre-charging, constant current charging or constant voltage charging. When the battery voltage is less than the threshold voltage 2.75 V, the battery is in a pre-charging state and it is being charged with relative small current. When the battery voltage has been raised to 2.75V after pre-charging then it turns to a quick and constant current charging state. At the same time, the constant current makes the battery voltage rise up to 4.2V. Then it comes

to the constant voltage charging state, with a charging voltage accuracy better than  $\pm 1\%$ . The charging current will reduce gradually in this state and the charging process is finished when the charging is reached the threshold value. After charging, the charger will keep on monitoring the battery voltage. When the battery's voltage is less than 4.2V, the battery will be recharged, and then another charging cycle begins.

**Specification parameter:**

Input voltage: 10 VDC-15VDC 1.5A

Battery: Battery: 2 or 3 cell lipo battery with balancer cable

Charge current: 1A\*3 (The three charging units are completely independent and can not be affected with each other.

Cut off voltage: 4.2 VDC (accuracy  $\pm 1\%$ )

LED light indicating:

Power LED green: Power on

Unit LED green: No battery or charged complete

Unit LED red: Bad battery or charging

**Operating:**

- 1、 Connect cigaretter with charger per above image.
- 2、 Then plug cigaretter into its socket in car (Adapter should be connected if charge at home: connect the adapter to home power socket, then plug the adapter' DC end to charger). The LED will turn green indicating it is ready for charging.
- 3、 Connect the battery to charger per its interface mark. The LED becomes red, which means charging is on the way.

4. The LED turns green when battery is fully charged.

5. If the battery still can not be fully charged (the LED is red) after 3 hours charging, the battery is probably damaged. We suggest replacing the battery or checking if there is any other reason.

**Notice:**

1. Do not insert anything conductive into the cooling hole when power is on, or damage will be caused to the charger.

2. Keep the charger and battery away from any flammable materials while charging.

3. It is not allowed to charge 2 cell and 3 cell battery at the same time.

4. Except for Li-po battery; this charger is not allowed for other kinds of batteries..

5. While charging, please keep it out of the reach of children.

6. When this charger is in use, please do not go away and leave it unwatched. If any abnormality occurs (such as the power indicator is off, or the temperature of the battery rises rapidly, etc.) stop charging immediately.

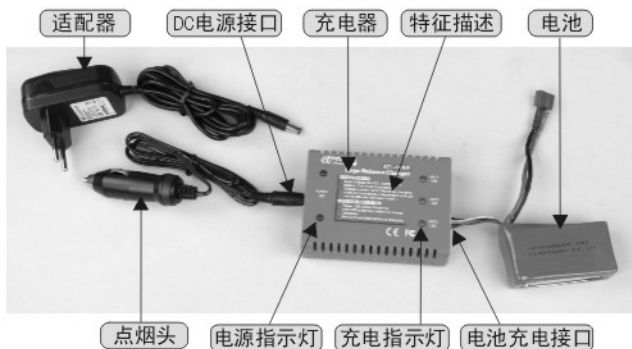
7. Do not use DC power with output voltage higher than 15V.

8. Do not disassemble the charger or its accessories. When the battery is not cool down, do not urge to charge it.

9. When the battery is not cool down, do not charge it right away.

10. Never use the charger around humidity.

# ATI-0909锂电池平衡充电器 使用说明书



ATI-0909锂电池平衡充电器采用锂电池专用充电芯片设计，它集高精度预充电、恒定电流充电、恒定电压充电、电池状态检测于一身。

ATI-0909 通过检测电池电压来决定其充电状态：预充电、恒流充电、恒压充电。当电池电压小于阈值电压 2.75V时，处于预充电状态，以较小的电流对电池进行充电。预充电使电池电压达到2.75V后，进入恒定电流充电的快速充电状态，恒定电流充电使电池电压上升到4.2V。然后进入恒定电压充电状态，充电电压的精度优于 $\pm 1\%$ ，在该状态下，充电电流将逐渐减小，当充电达到阈值后，充电结束。充电结束后，将始终对电池电压进行监控，当电池电压小于4.2V时，对电池进行再充电，进入下一个充电周期。

## 产品特性:

输入电压: 10VDC~15VDC 1.5A

充电电池: 2或3节锂聚合物电池(带平衡充电插头)

充电电流: 1A\*3路 (三路充电单元完全独立, 互不影响)

关断电压: 4.2VDC (精度为±1%)

## 指示灯状态:

电源LED亮: 接通电源

充电LED亮绿色: 没有电池或电池已经充满

充电LED亮红色: 电池坏或电池正在充电

## 使用方法:

1、依照上图将点烟头与充电器主机连接好。

2、将充电器的点烟头插入汽车点烟座中, (若使用市电进行充电时, 需接上电源适配器: 将电源适配器的电源插头接上市电, 再将电源适配器的DC头插入充电器主机的DC座中) 此时电源指示灯亮, 表示充电器正常工作可以给电池充电了。

3、将待充电的电池依照标识插入电池接口, 此时指示灯为红色, 表示充电器正在给电池充电。

4、当电池充饱后指示灯为绿色, 电池随时可以使用。

5、当电池充电三个小时后仍然无法充满时(充电LED亮红色), 可能电池已坏, 建议更换电池或检查其它原因。

## 注意事项:

1、切勿在通电时, 将导电物插入散热孔中, 否则会损坏充电器。

2、当平衡充电器正在使用时，请勿使该充电器和锂电池靠近易燃物品。

3、不允许同时对两节和三节的电池进行充电。

4、除了锂聚合物电池外不允许对其它电池进行充电。

5、当平衡充电器正在使用的时候，请将其远离儿童够得着的地方。

6、当平衡充电器正在使用时，请勿走开让其无人看管，如有发现任何异常（如电源指示灯不亮、电池温度急速上升等）应立刻停止充电。

7、请勿使用输出电压高于15V的DC电源。

8、请勿拆开平衡充电器及附件。

9、当电池还有微热时，请勿急于充电。

10、请勿在潮湿环境下使用该充电器。



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