

## Manual - LIPO battery charger (in series) (LPC1610)

Thank you for purchasing our battery charger for LiPo (in series). Please read the manual carefully before using the product.

### Introduction

This product is designed for fast charging of LiPo, A123 batteries and other new rechargeable batteries (CC/CV charging method).

This charger is user friendly and easy to carry. It has a very good display panel which can show real-time charging status with clear data. Its maximum charge current is 10A. In view of the above, it can meet the requirements on model enthusiastic amateurs and even the professional.

For best performance, we recommend using our LiPo balancer as well.

For further information on ETTI products, please visit [www.etti.com.hk](http://www.etti.com.hk).

### Specifications

Voltage input: 12~17V

Maximum electric current output: 10A

Maximum power output: 120W

Maximum voltage output: 29V

### Battery types and numbers

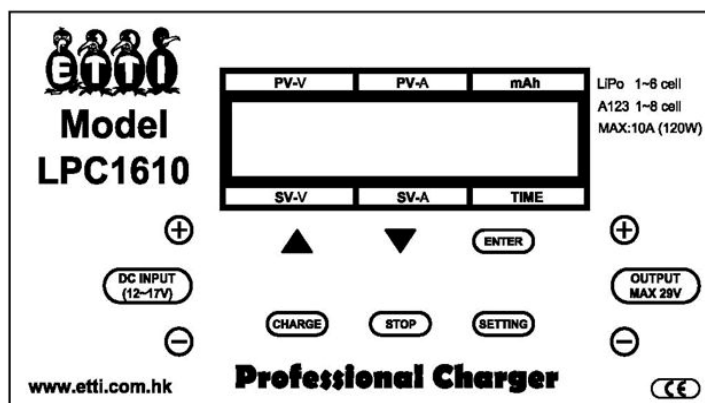
1. LiPo (1~6 CELLS)

2. A123 (1~8 CELLS)

*\*Note: Never use this charger with other types of batteries (non-CC/CV rechargeable batteries such as ....), otherwise it will damage the battery as well as the charger*

Case size 70 x 50 x 130mm

Case Weight About 450g



**PV-V:** Exact voltage of the cell

**SV-V:** Target voltage

**PV-A:** Charge current

**SV-A:** Charge current setting

**TIME:** Time elapsed

**mAh:** Battery capacity filled

## **Charging modes**

1. LiPo Charge Mode
2. LiPo Storage Mode (to charge the battery for storing state)
3. A123 Charge Mode
4. A123 Storage Mode (to charge the battery for storing state)

*\* Note: It will reduce battery life and affect performance if the battery is fully charged or less than 10 per cent capacity for long-term storage.*

## **Charger Setup**

### **I. Key features**

**No. of Cells:** — to set number of cells to be charged

**Voltage per Cell:** — to set the target voltage of each cell to be charged

**Charge Current:** — to set the charge current

**Completed Signal** (the buzzer will sound after charging is finished):—Choose " YES "to enable buzzer, or" NO "to disable the buzzer notice.

*\* Note: For safety, charger malfunction alerts cannot be closed.*

### **II. Procedure**

1. To connect the output and input leads of the charger according to their colours;
2. To connect the 20A fuse to the “20A FUSE” port of the charger;
3. To plug the charger into appropriate power supply (the power supply requirements: Input voltage: 12V ~ 17V Maximum current: 15A or above). Having power, the screen will show the information regarding the charger after boot-up. Wait about 8 seconds ; and
4. To press "▲" and "▼" key simultaneously to enter into the battery type selection mode;
5. To Press "▲" and "▼" key to select the battery type and press ENTER to confirm. (Selected type of battery charging mode must exactly match your batteries);
6. To set “**No. of Cells**” by inputting number of cells to be charged and press ENTER to confirm. (Set value must be the same as the number of cells to be charged.);
7. To set “**Voltage per Cell**” by inputting the target voltage for each cell to be charged and press ENTER to confirm;
8. To set “**Charge Current**” by inputting target current and press ENTER to confirm; and
9. To set the “**Completed signal**” (the buzzer will sound after charging is finished) by choosing “**Yes**” to enable the buzzer or “**No**” to disable the buzzer notice) and press ENTER to confirm.

## **Charging**

When all settings have been entered, connect the charger OUTPUT to the batteries and press “**CHARGE**” to start.

“ ← ” symbol indicates the batteries is being charged;

“**PV-V**” displays the actual voltage of the batteries;

“**PV-A**” shows the charge current;

“**mAh**” displays battery capacity has been filled;

“**SV-V**” shows the target charging voltage;

“**SV-A**” displays the charge current setting; and

“**TIME**” Time elapsed.

If you have set the Completed Signal, you will be alerted by a “beep” sound when the charging process is approaching complete. User can press “STOP” and remove the batteries. When the “PV-A” appear a “END” signal with three “beep” sounds, which means the batteries have reached the target voltage. The charging process will stop.

***\*Note: The buzzer will have a “beep” sound when the batteries are removed. The PV-V will take 2 seconds to reset the voltage. Never attempt to charge batteries during the voltage reset.***

### **Error indications**

If following errors are found, please press the “STOP” key and refer to the corresponding solution.

<b>Error</b>	<b>Details</b>	<b>Solution</b>
NO Batt	Cell and the charger are disconnected for no reason	Check the connection of cell and charger and make sure the cell and the charger are connected properly
FULL	The battery voltage is higher than the target voltage	Check whether the cell voltage setting is in order and set the target voltage to be higher than the actual voltage
Input power err	The input voltage is not in the range of 12-17V	Check whether the power supply is normal
Reverse polarity	cell +/- polarity is reversed	Check the cell +/- polarity
Higher than the selected cells	The number of cells to be charged more than the value set	Check whether setting of No. of Cells is in order
Lower than the selected cells	The number of cells to be charged less than the value set	Check whether setting of No. of Cells is in order
Temperature over	Temperature is too high	Ensure good ventilation and appropriate temperature

### ***\*Warning:***

***1. During charging, please always keep the charger and other devices well out of the reach of children. Please keep the built-in cooling fan clean and running smoothly with good ventilation.***

***2. This device is tailor-made for LiPo cells (CC/CV mode of charging). Never use this charger for other types of batteries (e.g. Ni-MH battery). Otherwise, the user is responsible for misuse of the products.***

***3. A highly sensitive voltage testing system is installed in the device. To keep system functioning well, please keep the input/output plugs and the clips clean and tidy.***