tahmazo

TL-4
Lithium Polymer charger

TL-4 Instruction Manual

Thank you for purchasing our TL-4 Lithium Polymer battery charger, designed specially for lithium polymer battery packs up to 4-cell pack.

Features

01 Durable and light weight aluminium case
02 Charges the lithium polymer battery pack using its latest Constant Current and Constant Voltage charging technique to optimally charge each cell.
03 Charges each cell of the battery pack independently, eliminating the interference between cells of the battery pack. This will ensure the proper 'balancing' of each pack after charging
04 Load polarity protection
05 Input polarity or reverse polarity protection
06 Built-in fan for maximum heat dissipation
07 Automatically cut-off charging operation when the input power supply voltage falls below 8v.

Safety Precautions

01 Do NOT attempt to charge incompatible types of rechargeable batteries. This charger is designed to only charge Lithium Polymer battery packs.
02 Make sure to place the charger on a firm level surface for charging
03 Do not attempt to charge batteries at excessive fast charge currents above the recommended charging current.
04 Do not leave the charger unattended while charging
05 Do not allow water, moisture or foreign object into the charger
06 Do not place the battery or charger on or near a flammable object while in use.
07 Do not cover the air intake holes or the fan on the charger as this could cause the charger to overheat
08 Connect the input power supply first, then connect the battery.
09 Do not disassemble the charger

Specifications

Input Voltage	9-15vDC
Output Voltage	8.4v for 2-cell lithium battery pack
	12.6v for 3-cell lithium battery pack
	16.8v for 4-cell lithium battery pack
Weight	310g
Dimension	138x89x35mm

Operation of the charger

INPUT POWER

Connect the charger to a 9-15v power source (Power supply must be able to provide at least 2A stable or regulated current). All the LEDs on the charger will light up in green colour, indicating that the charger is in good status and ready for use.

CURRENT SELECTION

Select the appropriate current setting (0.5A, 1.0A, 1.5A, 2.0A) according to the battery pack's recommended charging current.

Tahmazo Products Pte Ltd
w:http://www.tahmazo.com
e:sales@tahmazo.com

TL-4 Instruction Manual

SUGGESTED CURRENT SELECTION

Here are some suggested guidelines are for selecting the appropriate charging current:

a. 0.5A for cells with 340mAH or higher
b. 1.0A for cells with 700mAH or higher
c. 1.5A for cells with 1200mAH or higher
d. 2.0A for cells with 1800mAH or higher

OUTPUT BATTERY CONNECTION

Select the correct charging ports according to the number of cell per pack. For example, a 2-cell pack can be inserted into one of the two(2) 2-cell charging port as labeled on the charger. 2 LEDs on the charger will turn RED indicating that the charger is now charging a 2-cell pack.

LED	Status
GREEN	Upon the connection of the power supply, the green LED indicates that the charge is in good status and ready to charge.
	During the charging process, if one of the LED changes to green, it means the corresponding cell is defective.
	At the end of the charge, all the LED will change to green, indicating that the pack is fully charged.
RED	During the charging process, the RED LED indicates that charging is in progress
	After charging and the battery pack is left connected for 20-30 seconds, if one of the LED changes to red colour, it indicates that one of the corresponding cell is defective and may not be useable anymore.

Special attention

01 In order to charge a lithium polymer safely by way of independent-cell charging using this charger, the battery pack should have an additional connector as shown in the diagram

02 Lithium polymer battery packs should be charged at least once every 3 months even when not in use, so that it does not fall below the fatal 2.4v per cell.

03 If you are using the TL-4 as a 'serial-charging' charger (which will be able to charge the commonly packed batteries with only the 2-pin JST connectors), the charger will no longer charge the cells independently. As such, TL-4 will not be able to ensure that the voltage of each cell does not exceed 4.9v. Lithium batteries will explode and burn if the cell exceeds 4.9v during charging.

The manufacturer shall not be responsible for consequences resulting from the use of the charger in 'serial charging' technique or any other usage not specifically stated in this instruction manual.