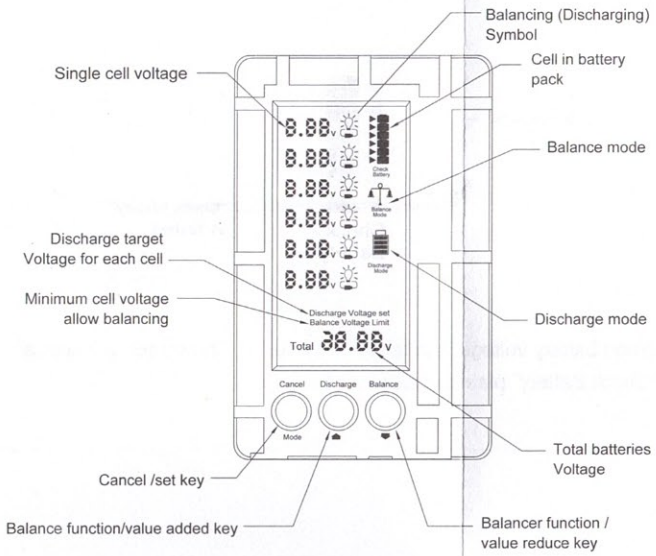
Li-Polymer/Li-Fe Battery Balancer



Balancer screen and key position drawing

Product instruction:

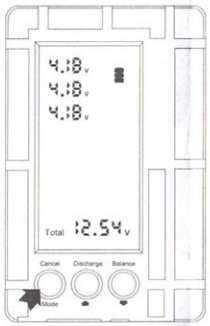
The Balancer / Discharge is designed for Li- Polymer and Li-Fe battery, it can measure battery voltage precisely and balance cell voltage in battery pack, or discharging battery for long time storage.

The balance function can be executed before / after battery charged. It also can be done during battery charging process. It makes sure battery pack keeping in excellent condition.

User could observe all cell voltage in whole battery pack at once. It helps user to find out which cell is abnormal during charging or discharging process.

Due to Li- Polymer and Li-Fe battery are high energy density and high discharge ability storage, before using this equipment, you must be patient to study this instruction to keep from wrong operation or setting making battery damaged or other danger.

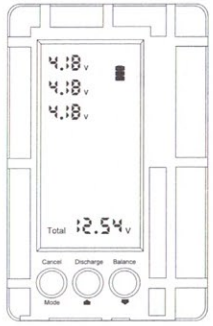
Balance / Discharge voltage setting method:



1. Under standard mode, Push Mode key to start setting mode.

2. First setting balance the lowest permitted voltage, battery must above the voltage, so it can execute balance function.
Push ▲ or ▼ key ,it can change voltage setting, after setting then push Mode key into discharge voltage setting (pre-setting value 3.3V, it just only fit for general Li-Polymer battery, about Li-Fe battery please inquiry battery supplier!)

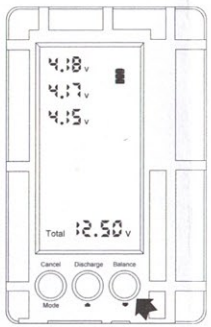
3. While discharging the permitted lowest voltage generally be set to battery stored voltage, the voltage value, please inquiry battery supplier. Pre-setting is 3.9V (it only fit for general Li-Polymer battery, about Li-Fe battery please inquiry battery supplier.)
Push ▲ or ▼ key, it can change voltage setting, after setting push Mode key and return standard mode.



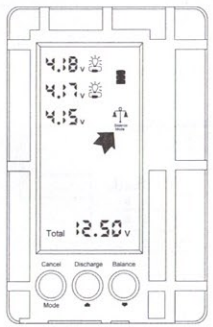
4. Return to standard mode.

P.S. During the setting procedure, if don't want to change the setting value, you can continue to push "Mode" Key to go on next setting mode or return standard mode. While setting the balance voltage or discharge voltage, please be aware not to set the voltage below the permitted lowest voltage, or you may damage the battery due to over-discharge. Please inquire the discharge cut-off voltage from battery supplier.

How start to balance battery?

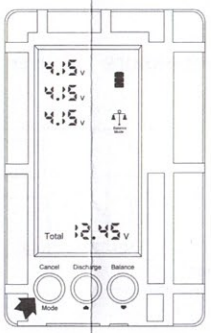


1. Push Balance key.



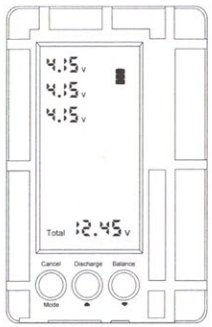
2. Balance will take the present lowest voltage battery as a benchmark, start to balance action to battery cell.

They will shoe flash ☼ signal when battery cell working.



3. After balancing, ☼ symbol will disappear, then you can push Cancel key to quit balance mode.

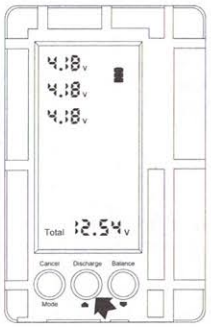
P.S. In balancing, you can push Cancel key anytime to break and back to standard mode.



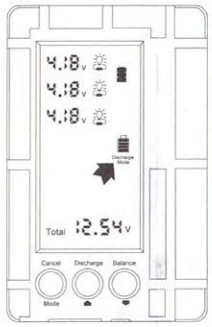
4. Return to standard mode.

P.S.: After push Balance key, balancer will automatically catch the lowest single battery voltage as standard among battery cell and start to execute balance function. Until all battery cell voltage value are equal. (voltage tolerance ±0.01V is equal, for example standard voltage 4.15V, after balancing the voltage maybe 4.14V or 4.16V)
The balancer can be used together with serial while charging ,However, for safety reason, Please watch voltage condition in screen, if the voltage variation looks abnormal or "Check Battery" is appeared, please stop charging immediately in order to avoid danger !!!

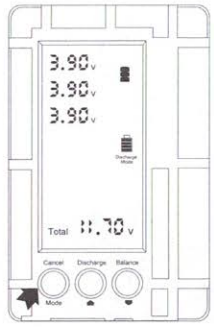
How to start battery discharge?



1. Push Discharge key.

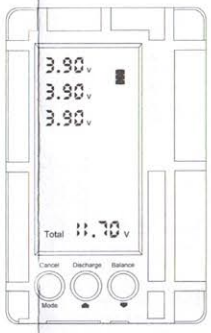


2. Discharge Mode show, symbol start flash, it means start discharge mode.



3. When battery voltage down to above setting value, signal will disappear, It means discharge is finished, push Cancel key to quit discharge mode.

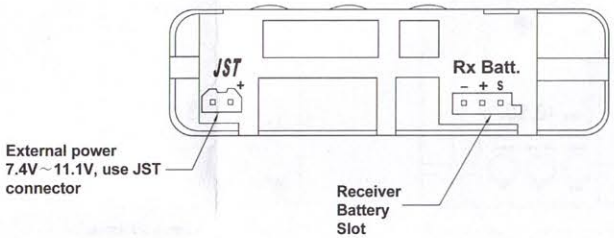
P.S. You can push Cancel key to stop discharge in anytime.



4. Return to standard mode.

P.S. The default setting for discharge cut-off voltage is 3.9V (single Li-Polymer battery).You may adjust the cut-off voltage by yourself. Please inquiry Battery supplier for storage voltage, if you use Li-Fe battery please inquiry supplier and then setting.

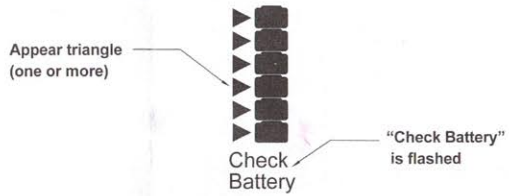
How to measure receiver battery??



Balancer can measure voltage of receiver battery (not limit battery type), but have to use external power source!!!

P.S. Using slot of receiver battery, no balance and discharge function.

When screen appears below:



When battery voltage is different above 0.2V, The screen will appear "Check Battery" please check your battery!!!

Product specification:

Outline Dimension: 93.5 X 60 X 17 mm

Measureable battery type and amount:

Li-Polymer/Li-Fe 2~6 cell
(standard voltage 7.4V~22.2V using divided voltage connector)

Receiver battery 1.2V~8.5V DC

(Not limit battery type, but need external power 7.4V~11.1V,use JST connector)

Balance voltage setting range (lower limit):

2.0V~4.2V (per-setting value 3.3V)

Discharge voltage setting range (lower limit):

2.0V~4.2V (per-setting value 3.9V)