



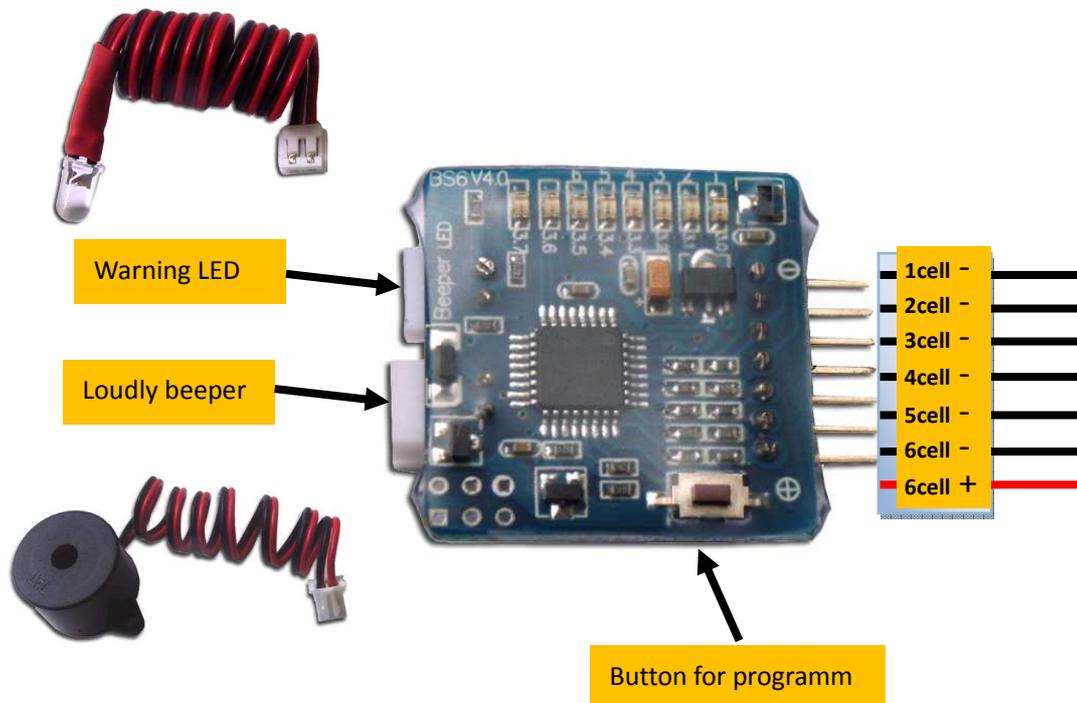
CHARGER BS6 v4.0

2S – 6S LiPo Battery Saver manual

Version: 4.0
Date of Release: 2010/8/20
Owner: Chargery

New Features:

1. Add 3.7V warning voltage setup.
2. Add delay time setup when start to warning.
3. Add warning time setup



Any questions, feel free to jasonwang3a@163.com
Or Visit www.chargery.com

Enjoy the saver.

The Chargery Battery Saver BS6-V3.0 is updated based on BS6, more functions and easy to use. the unit can detect each cell voltage in 2S-6S LiPo battery pack, during battery discharge, it can sound warning or LED warning while any cell voltage under setup value, and prevent any cell from over discharged.

Specifications:

- Battery range: 2S-6S LiPo battery pack
- Over discharge warning cell voltage: **3.0~3.7V** for LiPo battery
- Delay time when start to warn: 0s, 0.5s, 1s, 1.5s, 2s, 2.5s, 3s, 3.5s
- Warning time range: 1s, 2s, 3s, 4s, 5s, 10s, 15s, 20s
- accurate scope of the warning voltage: -10mV/+10mV
- Pins distance: 2.54mm
- Size: 33*33*10 (L*W*T, mm)
- Weight: 10g
- Warning LED: 11000mCd, @ 2.0V, 20mA
- Warning beeper: 95dB @ 12V, 25mA
- Beeper wire: 300mm, beeper is welded on the saver directly for another version.
- LED wire: 300mm, LED is welded on the saver directly for another version.
- Package: transparent heat shrink tube

Program setup

Before flight, you can set up warning voltage, delay time and warning time. The large LED must be connected to the unit, if the beeper is also connected to the saver, it will sound in different setup mode.

1. Press button for 3 seconds, when the small LED flash, you can press the button shortly set up the warning cell voltage range from 3.0V-3.7V. For example, if the 3.2V LED flash, it means the warning voltage is 3.2V. **Default value is 3.5V**
2. Pressing the button for 3 seconds again confirm and enter into the delay time setup mode.
3. When large red LED flash, press the button shortly set up the delay time for warning, when any cell voltage under the value (set up in step 1), BS6 will wait for a delay time and then beeper. The delay time range from 0s(3.0V LED), 0.5s(3.1V LED), 1s(3.2V LED), 1.5s(3.3V LED), 2s(3.4V LED), 2.5s(3.5V LED), 3s(3.6V LED), 3.5s(3.7V LED). **Default value is 0.5s.**
4. Pressing the button for 3 seconds again confirm and enter into warning time set up mode.
5. When large red LED ON, press the button shortly set up the warning time range from 1s(3.0V LED), 2s(3.1V LED), 3s(3.2V LED), 4s(3.3V LED), 5s(3.4V LED), 10s(3.5V LED), 15s(3.6V LED), 20s(3.7V LED). **Default value is 10s.** Press the button for 3 Seconds to confirm.

Set up mode	8pcs small LED								Small LED	Large LED
	3.0v	3.1v	3.2v	3.3v	3.4v	3.5v	3.6v	3.7v		
Warning voltage	3.0v	3.1v	3.2v	3.3v	3.4v	3.5v	3.6v	3.7v	flash	OFF
Delay time	0.0s	0.5s	1.0s	1.5s	2.0s	2.5s	3.0s	3.5s	flash	flash
Warning time	1.0s	2.0s	3.0s	4.0s	5.0s	10s	15s	20s	flash	ON

Within the warning time, the saver will beep and the large red LED will flash till the cell voltage under warning voltage again, the saver will start a new warning time.

If the cell voltage is still under warning voltage, the saver will beep and flash repeat for the warning time.

Anytime press the button stopping warning.

When finish setup, the unit will remember till change the value next time.

The unit includes reverse polarity detection, and 2.54mm pin distance balance connector for all kinds of battery.

Operating guideline

1. Connect the battery balance connector to BS6
2. The saver will initialize the beeper and all LEDs, beeper sounds once time, warning LED flash once time, and cell indicator (6 **RED** LEDs) will ON and then OFF, the number of "ON" LED indicates the cell number. For example there will be 4 LEDs ON for 4S battery.
3. 1 second later, only one LED is ON, the LED indicates the lowest voltage cell. For example, if third LED is ON, it means the third cell voltage is lowest in battery pack.

In flight, BS6 can alarm loudly and a large WANING RED LED flash when any cell voltage under setup value.