



## LiPo Battery Cell Voltage Meter and Balancer Instructions

Covers Part #2968, 2968X



### WARNING: FIRE HAZARD!

The Traxxas LiPo Battery Cell Voltage Meter and Balancer can only be used with Lithium Polymer (LiPo) battery packs up to 6 cells. It is not designed to function with batteries of other cell sizes and types. Before use, read and follow all manufacturer's instructions, warnings, and precautions. In addition, LiPo batteries pose a SEVERE risk of fire if not properly handled per the instructions and require special care and handling procedures for long life and safe operation. LiPo batteries are intended only for advanced users that are educated on the risks associated with LiPo battery use. Traxxas does not recommend that anyone under the age of 14 use or handle LiPo battery packs without the supervision of a knowledgeable and responsible adult. Dispose of used batteries according to the instructions.

#### Important Warnings:

- This device has a balancing function intended for field use only. Use a Traxxas iD charger for balancing with greater than a 0.5 volts difference in cell voltage.
- Connect the battery to the device as instructed to prevent damage to the device and/or the battery.
- Do not expose the device to water or moisture.
- Remove flammable items and combustible materials from the area.
- Do not pinch the battery wires, which may cause the battery to short circuit and create the risk of fire.
- To preserve battery charge, do not leave the device connected to a battery for more than 3 hours.
- Always disconnect the battery pack from the device when not in use.

#### Specifications:

Applicable Battery Packs	2s - 6s LiPo
Case Size	1.5" (38mm) W x 2.76" (70mm) L x 0.43" (11mm) H
Weight	0.8 ounces (23 grams)
Voltage Display Tolerance	+/- 1.5%
Voltage Display Resolution	0.01 volts
Voltage Display Range	0-5 volts
Balancing Current	50 mA
Operating Temperature	50°F/10°C - 113°F/45°C
Storage Temperature	-4°F/-20°C - 140°F/60°C

Thank you for purchasing the Traxxas LiPo Battery Cell Voltage Meter and Balancer. The Traxxas LiPo Battery Cell Voltage Meter and Balancer is a very sophisticated electronic device that is controlled by a high performance microprocessor and precise resistors. Please read the entire instructions completely and attentively for important safety information and proper use of the device.

#### Important Precautions

During the balance process, the voltage of each cell may change from time to time due to the battery itself, the ambient temperature, etc. The remaining capacity (**Battery Capacity Gauge**) display is based on voltage at no load. Since it may differ largely from actual remaining capacity, use it as a reference only. For safety, the device will enter sleep mode (SLP) after 3 hours even if the cell voltages of the LiPo battery pack are not balanced. To protect the battery from being over-discharged, there are minimum cell voltages to be balanced. If any individual cell voltage is lower than 3.2 volts, the balance operation will not start; if any individual cell voltage is lower than 2.8 volts, the error message (Err) will be displayed on the LCD screen.

#### Operation

There are two basic functions of the Traxxas LiPo Battery Cell Voltage Meter and Balancer:

##### 1. Voltage Meter

This function can check the voltage of each cell of a Lithium Polymer (LiPo) battery pack and display the remaining capacity in percentage (%).

##### 2. Voltage Balancer

This function can equalize the individual voltages of each cell to their lowest one. Balance operation automatically starts about 5 seconds after the battery pack is connected to the device. When the voltage difference between cells is over 0.02 volts, the balancer will start to work. The corresponding "V" will blink when it is balancing. When the voltage difference between cells reaches 0.01 volts or less, balance operation ends and the device enters the sleep mode (SLP will be displayed on the LCD screen). **Note:** This function is intended for field use only. Use a Traxxas iD charger for balancing with greater than a 0.5 volts difference in cell voltage. To preserve battery charge, do not leave the device connected to a battery for more than 3 hours.

Simply connect the battery's balance plug to the battery connector (7 pins; XH type). **Note:** The negative lead or pin of the balance plug should match the "Negative" indicator (⊖) on the casing of the Traxxas LiPo Battery Cell Voltage Meter and Balancer.

After the LiPo battery is connected, the LCD screen will display the voltage of each cell and the built-in balancer will check the voltage. If the pack is not balanced, the balancer will start working automatically.

**Use the Traxxas iD LiPo balance adapter (part #2938X) to connect Traxxas iD LiPo batteries to the battery connector on the device.**

#### Warranty Information

Traxxas electronic components are warranted to be free from defects in materials and workmanship for a period of 30 days from the date of purchase.

**Limitations:** Any and all warranty coverage does not cover replacement of parts and components damaged by abuse, neglect, improper or unreasonable use, crash damage, water or excessive moisture, chemical damage, improper or infrequent maintenance, accident, unauthorized alteration or modification or items that are considered consumable. Traxxas will not pay for the cost of shipping or transportation of a defective component to us. This warranty is limited to the device only and does not cover batteries and other accessories used in conjunction with the device.

#### Traxxas Lifetime Electronics Warranty

After the expiration date of the warranty period, Traxxas will repair electronic components for a flat rate. Please visit [Traxxas.com/support](http://Traxxas.com/support) for a current schedule of warranty costs and fees. The covered repairs are limited to non-mechanical components that have NOT been subjected to abuse, misuse, or neglect.

Products damaged by intentional abuse, misuse, or neglect may be subject to additional charges.

#### Declaration of Conformity for EMC Directive

Traxxas LP hereby declares that this product is in compliance with Directive 2014/30/EU.

The full text of the EU Declaration of Conformity is available online at: <https://traxxas.com/compliance>

Signed:  Date: **September 7, 2018**

