

ISDT®

BG-18S

Smart Battery Lipo Cell Checker

USER GUIDE

Thank you for purchasing the ISDT BG-18S Smart Battery Lipo Cell

Checker.

The ISDT BG-18S is specially designed for RC and industrial applications across various fields. We strongly recommend that you read the user guide before using the product. ISDT accepts no liability for any damage, injury, or legal issues arising directly or indirectly from the use of this product.

Functions of products will keep on upgrading; the manual currently may be different as time passes. Please refer to our social media for the latest updates.

Warnings and Safety Tips

To ensure your safety and a good user experience, please read these instructions and warnings before using this product.

- Read the instruction manual carefully to become familiar with the features of the product.
- Do not operate the product in extreme heat, high humidity, flammable, or explosive environments. Improper use in such conditions may result in damage to the product, personal property, and serious injury.
- Never leave the product unattended during operation. If any abnormal function occurs, stop using it immediately and consult the manual to identify the issue.
- Keep the product away from dust, moisture, rain, high temperatures, direct sunlight, and strong vibrations.
- Please ensure that flammable and explosive materials are kept away from the operating area.
- Make sure you have a full understanding of the charging and discharging characteristics and specifications of the battery you are connecting to ensure you know the condition of the battery.
- Before connecting the battery, verify that the battery is not damaged and is within the safe operating range of the product. During operation,

ensure that the number of strings selected matches the number of connected battery strings. Maintain proper ventilation and heat dissipation during use.

- Keep children away from the device to prevent burns or injuries.
- Disconnect and remove the battery as soon as operation is complete.

! NEVER USE DEVICE UNSUPERVISED

- Never attempt to connect primary (non-rechargeable) batteries.
- Batteries pose a severe risk of fire if not properly handled.
- Read entire operation manual before using Device.
- Only operate this device in a cool ventilated area away from flammable objects.



WARNING!



FIRE HAZARD!

Specifications

Model No: BG-18S

Working Voltage: DC 10~90V

Support Working temperature: 0~40°C

Supported battery types:

LiFe, LiPo, LiHv, ULiHv

USB Type-C: For Firmware Update Only

Dimension: 101.8×70×27.3 mm

Weight: Approximately 121g

Balance port measurement voltage range: 1.5V~5V

Voltage Measurement Accuracy:

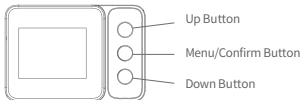
±0.005V @4.2V

Storage temperature: -20~60°C

Display: 2.4-inch 320*240 resolution

260K color IPS LCD display

Buttons

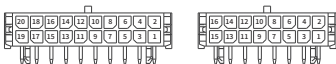


Menu/Confirm Button - Press on the main page to enter the settings menu.

Up/Down Buttons - Use these buttons to scroll up and down, selecting different options.

Guide For the Connection of Balanced Port

- ⓘ The balance port of this product is suitable for connecting lithium batteries with Molex connectors. The cell sequence must be strictly in accordance with the diagram below. Additionally, only one of the Molex 16-pin or 20-pin connectors is allowed to be plugged in. Plugging in both will risk damaging the machine.



Function Setting

Short press menu button to see system function menu below:

☰	Function	
🌐	Language	English
☀️	Backlight	Middle
🔊	Volume	Low
🔔	Alarm Tone	Off
🔋	Battery Type	LiPo
📱	Low Voltage Alarm	30.0V

Language – Support up to 7 languages

Backlight – Features high, medium, and low brightness levels.

Volume – Support high, middle, low and no volume, Alarm sound can not be turned off due to safety.






Low voltage alarm - Set the low voltage alarm. An alarm will be triggered if the voltage drops below the set value.

System Information – Show Firmware Version

Back – Exit Function menu

When Battery Connecting to Balance Port

When the battery is connected to the balance port, the left side displays from top to bottom in order: the total voltage of the battery, the voltage difference between the highest and lowest individual cell, the maximum voltage of a single cell, and the minimum voltage of a single cell. The right side shows the voltage value of each cell.

 67.32V	Cells Voltage	
 0mV	1 3.740V	10 3.740V
 3740mV	2 3.740V	11 3.740V
 3740mV	3 3.740V	12 3.740V
 6%	4 3.740V	13 3.740V
	5 3.740V	14 3.740V
	6 3.740V	15 3.740V
	7 3.740V	16 3.740V
	8 3.740V	17 3.740V
	9 3.740V	18 3.740V

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