EVTSCAN EVTSCAN8gy4b75z9t

EVTSCAN Battery Capacity Meter User Manual

Model: EVTSCAN8gy4b75z9t

Product Overview

The EVTSCAN Battery Capacity Meter is a versatile discharge tester designed to measure the actual capacity of various batteries, including 18650 lithium batteries and lead-acid batteries, ranging from 1.2V to 12V. It operates by controlling the discharge load and integrating the real-time discharge current to provide accurate capacity results.

This single-function tool is ideal for hobbyists, technicians, and anyone needing to verify battery health and capacity. It features a digital display for easy reading of voltage, current, and capacity, along with intuitive control buttons.

Package Contents

- 1 x 1.2 ~ 12V Battery Capacity Tester
- 2 x Load Resistors

Key Features

- Discharge type battery capacity tester for 1.2-12V batteries.
- Measures external load capacity for various battery types, including 18650.
- Single-function tool providing real-time integrated discharge current capacity results.
- Supports maximum discharge of 15V 3A (the unit itself does not discharge).
- Maximum capacity statistics support up to 9999Ah (9999000mAh).
- Automatically identifies and develops appropriate battery termination voltage, with manual adjustment option.

Setup Instructions

Follow these steps to set up your battery capacity meter for testing:

1. Power Supply Connection

Connect the meter to a DC 4.5-6V power source using the Micro USB port. This powers the meter's internal circuitry and display.

2. Battery Connection

Connect the battery to be tested to the blue screw terminals labeled 'IN+' and 'IN-'. Ensure correct polarity: positive to 'IN+' and negative to 'IN-'. The meter supports batteries from 1.2V to 12V.

3. Load Resistor Connection

Connect the provided load resistors (or your own suitable load) to the blue screw terminals labeled 'R+' and 'R-'. These resistors will dissipate the energy from the battery during discharge. Ensure the load is appropriate for the battery's voltage and current capabilities, not exceeding 3A.

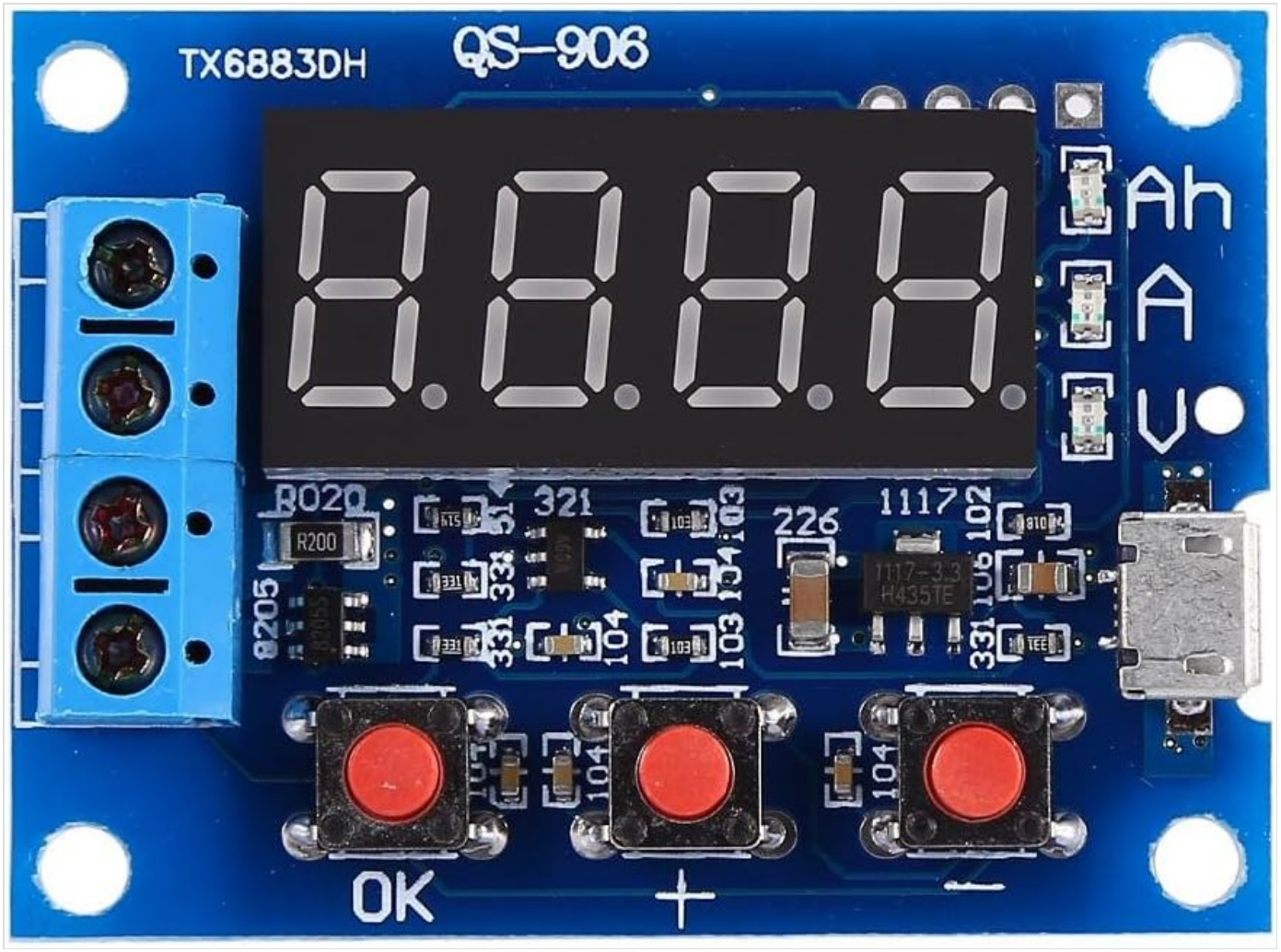

Image: Top-down view of the EVTSCAN Battery Capacity Meter, showing the digital display, three control buttons (OK, +, -), Micro USB port, and blue screw terminals for battery and load connections.

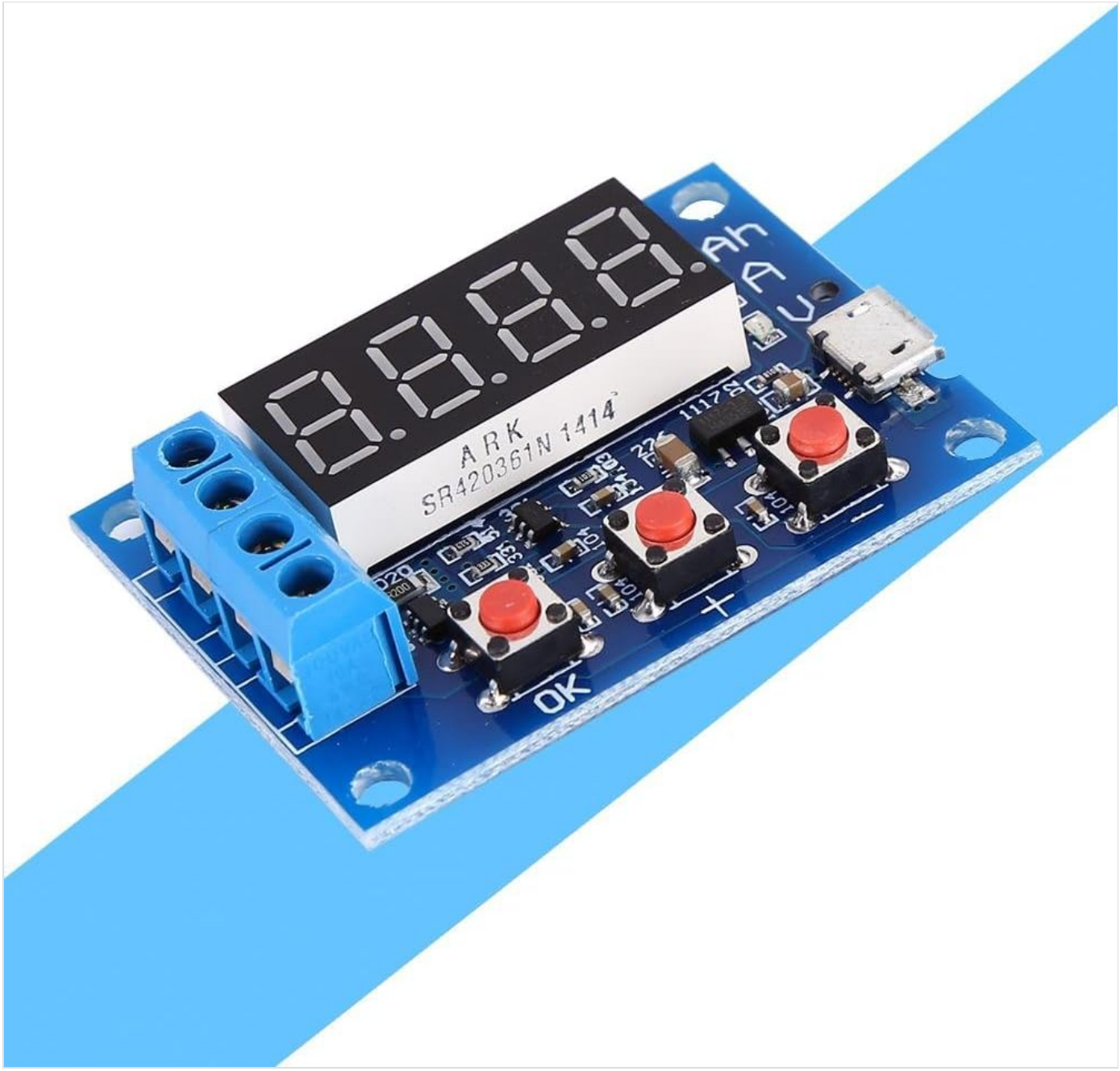

Image: Angled view of the EVTSCAN Battery Capacity Meter, highlighting the digital display, control buttons, and the blue screw terminals for input and load connections.

Operating Instructions

Once the meter is set up, you can begin testing your batteries:

1. Starting a Discharge Test

After connecting the battery and load, the meter will display the current battery voltage. Press the "OK" button to start the discharge test. The display will cycle through voltage (V), current (A), and accumulated capacity (Ah/mAh) during the test.

2. Reading Results

The test automatically stops when the battery voltage drops to the set termination voltage. The final accumulated capacity (Ah or mAh) will be displayed. You can press the "+" or "-" buttons to cycle through the final voltage, current, and capacity readings after the test is complete.

3. Adjusting Termination Voltage

Before starting a test, you can adjust the termination voltage. With the battery connected and the meter displaying voltage,

use the "+" and "-" buttons to set the desired cut-off voltage. The meter will automatically save this setting for future tests. The termination voltage range is 0.5V to 11.0V.

Image: Close-up view of the EVTSCAN Battery Capacity Meter's digital display and the three red control buttons (OK, +, -) used for operation and setting adjustments.

Specifications

Parameter	Value
Power Supply Voltage	DC 4.5-6V (Micro USB)
Operating Current	Less than 70mA
Discharge Voltage Range	1.00V-15.00V (0.01V resolution)
Termination Voltage Range	0.5V-11.0V
Supported Current	Up to 3.000A (0.001A resolution)

Parameter	Value
Max Voltage Measurement Error	1% + 0.02V
Max Current Measurement Error	1.5% + 0.008A
Max Battery Capacity Range	9999Ah (1Ah = 1000mAh)
Board Size	50mm x 37mm
Finished Size	50mm x 37mm x 17mm (L x W x H, includes copper foot height)
Item Weight	1.06 ounces (approx. 0.03 kg)

Troubleshooting: Error Codes

If you encounter an error during operation, the meter may display one of the following error codes:

- **Err1:** Battery voltage is above 15V.
  Solution: Ensure the connected battery's voltage is within the supported range (1.2V-12V).
- **Err2:** Battery voltage is lower than the termination voltage.
  Solution: Check the initial battery charge or adjust the termination voltage setting to be lower than the current battery voltage.
- **Err3:** Battery cannot afford to load or discharge current line has too much resistance.
  Solution: Verify battery health, check connections for looseness or corrosion, and ensure the load resistor is correctly connected and has appropriate resistance.
- **Err4:** Overcurrent (current exceeds 3.1A).
  Solution: Reduce the load resistance or ensure the connected load does not draw more than 3A.

Maintenance and Safety

Maintenance

- Keep the device clean and dry. Avoid exposure to moisture or extreme temperatures.
- Store in a cool, dry place when not in use.
- Do not attempt to disassemble or modify the device, as this will void any warranty and may cause damage or injury.

Safety Warning

Important: During the discharge process, the resistive load will generate significant heat. Please exercise extreme caution and ensure adequate ventilation to prevent burns or fire hazards. Do not touch the load resistors during or immediately after a discharge test. Keep away from flammable materials.

For support, please visit the EVTSCAN Store on Amazon.