

YEREADW 8A

YEREADW USB Meter Tester User Manual

Model: 8A

Brand: YEREADW

1. INTRODUCTION

The YEREADW USB Meter Tester is a versatile device designed to monitor and analyze the performance of various USB-powered devices and charging solutions. It provides real-time data on voltage, current, capacity, power, time, temperature, load impedance, and D++/D- voltage for both Type-C and USB-A connections. This manual will guide you through the setup, operation, and maintenance of your tester.

Key Features:

- **Multi-functional USB Voltage Current Checker:** This voltage meter can easily check voltage, current, capacity, power, time, temperature, load impedance, D++/D- voltage of Type-C and USB-A devices. It detects the charging status and process of devices to prevent accidents.
- **Charging Safety Protection:** The USB voltage current checker has protection functions such as over-voltage, under-voltage, and over-current. It can set the power-on time from 1h to 24h, monitor the charging voltage and current of devices, and protect devices from maximum damage.
- **Multi-interface Display:** This Type-C tester displays data on multiple pages. The IPS color screen display is clear and easy to read. Sleep mode can be used at night. The surface of this USB voltage current checker is covered with a transparent protective film that can be optionally removed.
- **Detection of various fast charging protocols:** Supports fast charging detection for QC2.0/3.0, Huawei FCP/SCP, APPLE2.4A/2.1A/1A/0.5A, Android DCP0, Samsung AFC, etc. It can monitor electrical signals during PD3.0/2.0 fast charging protocols.
- **Comes with OTG adapter:** By inserting the OTG adapter, the USB input connection port can be converted to a Micro port. The OTG digital function can be turned on.



Figure 1: The YEREADW USB Meter Tester, showcasing its multiple input/output ports and clear IPS color display.

2. SETUP AND CONNECTIONS

The USB Meter Tester is designed for simple inline connection between your power source and the device being tested. Ensure all connections are secure before powering on.

Basic Connection:

1. Identify the input port on the tester (USB INPUT or Type-C INPUT) and connect it to your power source (e.g., wall charger, power bank, computer USB port).
2. Identify the output port on the tester (USB OUTPUT or Type-C OUTPUT) and connect it to the device you wish to test (e.g., smartphone, tablet, laptop, USB load).
3. The tester's display will automatically light up and show real-time data once a connection is established and power flows through.

Using the OTG Adapter:

The included OTG adapter allows you to convert the USB input port to a Micro USB port, expanding compatibility for older devices or specific testing scenarios. Insert the OTG adapter into the USB INPUT port of the tester, then connect your Micro USB cable to the adapter.



Figure 2: Overview of compatible devices and connection types, including USB chargers, power banks, laptops, and various USB-C and USB-A peripherals.



Figure 3: The tester supports wide compatibility with USB-A, Micro USB (via OTG), and USB-C input/output ports.

3. OPERATING INSTRUCTIONS

The YEREADW USB Meter Tester features an IPS color display that provides clear and detailed information. Use the physical button on the device to navigate through different display modes and settings.

Display Modes and Navigation:

The tester offers multiple display interfaces to show various data points. A short press of the button typically cycles through these screens. A long press may be used to enter settings or reset data.

- **Main Interface:** Displays real-time voltage, current, power, capacity, energy, temperature, and time.
- **Large Display Interfaces (1 & 2):** Provide larger fonts for key metrics like voltage, current, and power for easier reading.
- **USB Four-wire Detection:** Automatically identifies various fast charging protocols such as QC2.0/3.0, Huawei FCP/SCP, APPLE2.4A/2.1A/1A/0.5A, Android DCP0, Samsung AFC, and monitors PD3.0/2.0 signals.
- **Ripple Value of a Charger:** Measures the ripple voltage to assess charger quality.
- **Voltage Current Graph View:** Visualizes voltage and current fluctuations over time.
- **System Settings:** Allows configuration of parameters like over-voltage/under-voltage/over-current warnings, screen rotation, and display off countdown.

機能インターフェースの詳細な説明

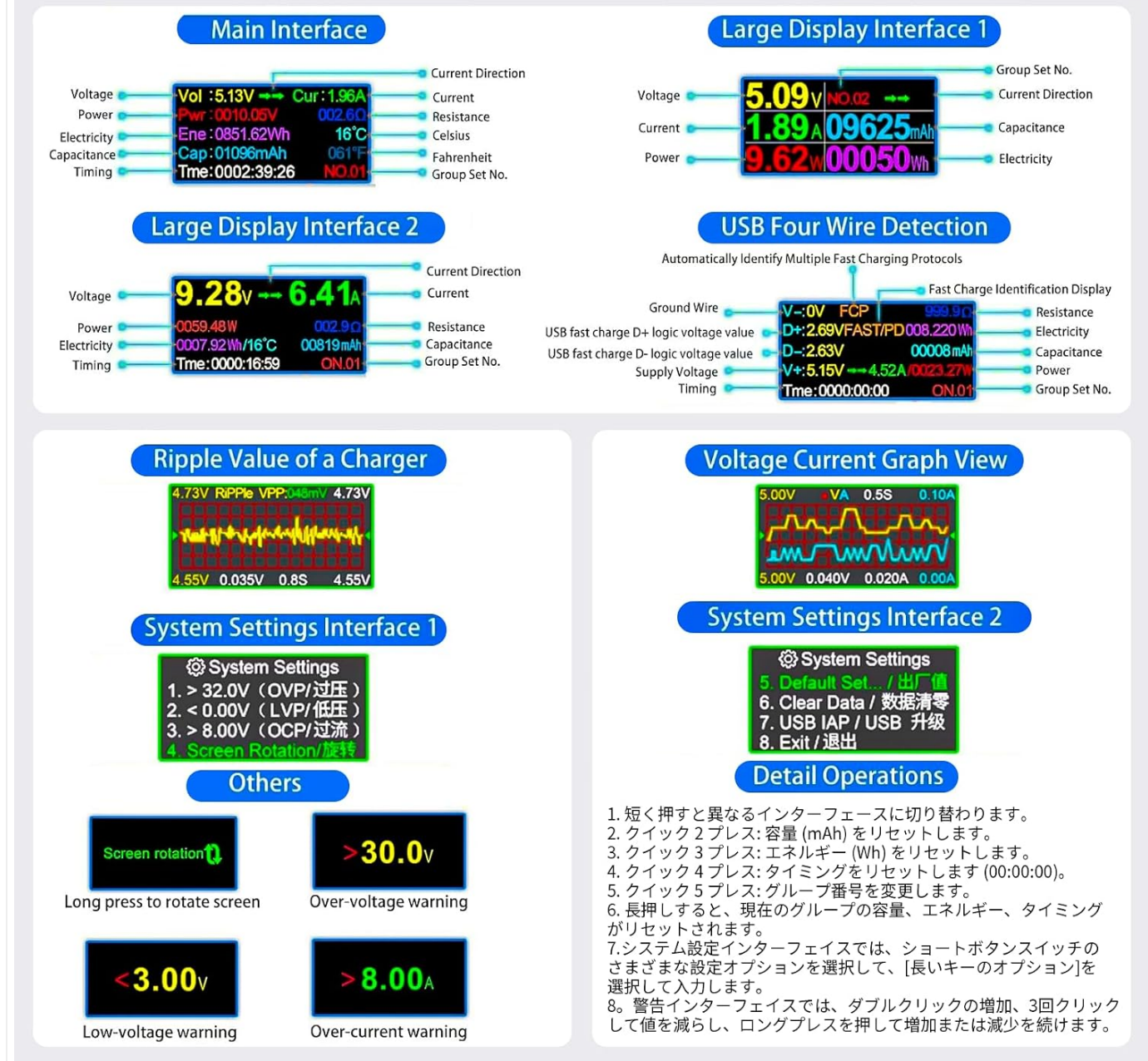


Figure 4: A comprehensive guide to the various display interfaces and system settings available on the tester.



Figure 5: The multi-interface LCD display allows users to switch between various screens by clicking the button.

Testing Power Bank Capacity:

To accurately test the capacity of a power bank, follow these steps:

1. Ensure the power bank is fully discharged before starting the test.
2. Insert the USB tester into the power bank's output port.
3. Long press the button on the tester to reset the capacity (mAh) and energy (Wh) readings.
4. Connect a mobile phone or a suitable load to the tester's output port.
5. Allow the power bank to discharge completely through the connected load.
6. Read the final capacity and energy values displayed on the tester.

Note: The power bank battery capacity (mAh) can be estimated using the formula: $Wh / 3.75V \times 1000 \times 90\%$ (where 3.75V is the default battery voltage).



Figure 6: Testing power bank capacity by connecting a load and discharging the power bank through the tester.

Testing Charger Performance (Ripple):

The tester can help evaluate the quality of a charger by measuring its ripple voltage.

1. Connect the charger to the tester's input.
2. Connect a suitable load to the tester's output.
3. Navigate to the 'Ripple Value of a Charger' display mode.
4. Observe the ripple voltage (VPP) and compare it to the following guidelines:
 - Ripple < 30 mV: Excellent
 - 30-120 mV: Normal
 - 120-200 mV: Slightly Poor
 - Ripple > 200 mV: Poor

スマートチップとTFTカラーディスプレイ

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Figure 7: The tester displaying ripple voltage to assess charger quality, with a fan-equipped load connected.

Testing USB Cable Quality:

Under a constant power supply and load, the voltage drop detected by the USB tester across a cable indicates its quality. A larger voltage drop implies poorer cable quality.

USB ケーブルの充電速度と品質をテストする

一定の電源供給と持続的な負荷の状況下では、このUSBテスターによって検出されたUSBケーブルの電圧が大きく、電圧降下が低いほど、USBケーブルの品質が優れていることを意味します。



Figure 8: The tester can be used to evaluate the charging speed and quality of Micro-USB, USB-A to USB-C, and USB-C to USB-C cables.

4. MAINTENANCE

To ensure the longevity and accuracy of your YEREADW USB Meter Tester, follow these simple maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the device. Avoid using abrasive cleaners or solvents, which can damage the screen or casing.
- **Protective Film:** The display surface is covered with a transparent protective film. You may choose to remove it for clearer viewing, or keep it on for added scratch protection.
- **Storage:** Store the tester in a cool, dry place away from direct sunlight and extreme temperatures.
- **Handling:** Handle the device with care to avoid physical damage to the ports or screen.

透明の保護シール

表示画面の表面は、選択的に除去できる透明な保護フィルムで覆われています

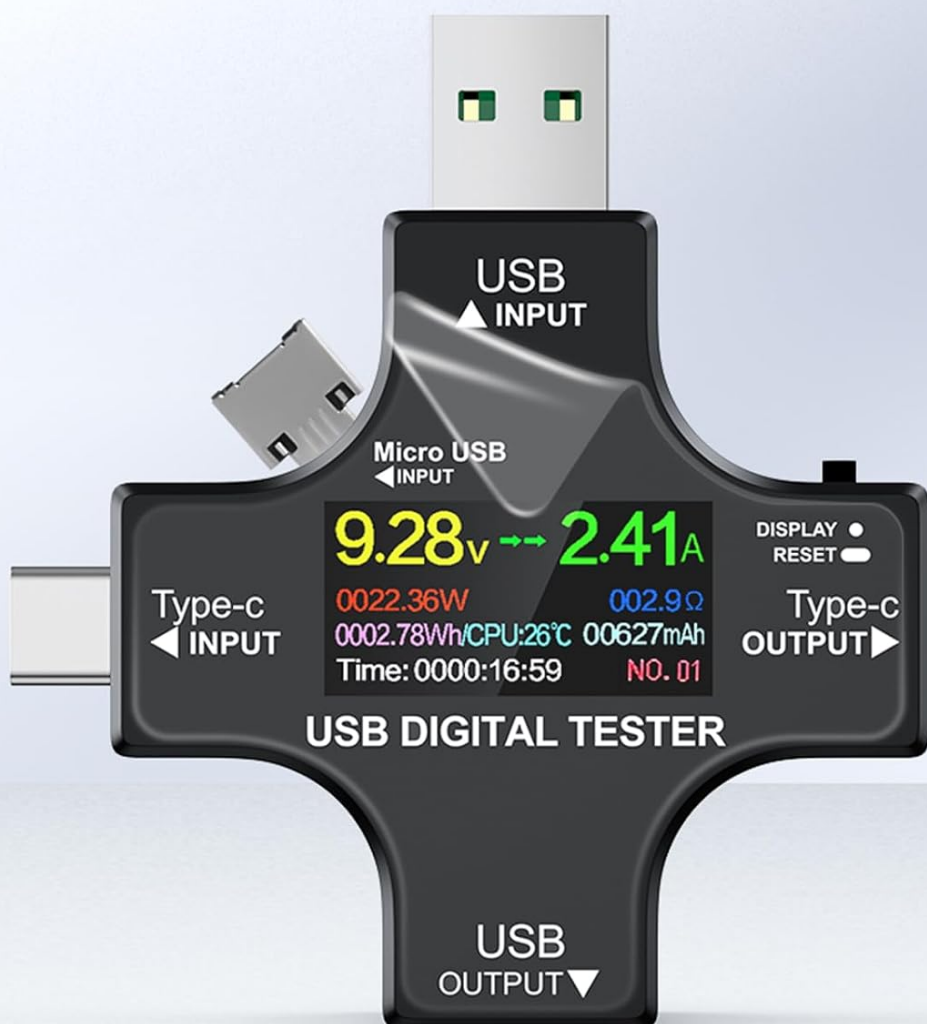


Figure 9: The transparent protective film can be optionally removed from the display for enhanced clarity.

5. TROUBLESHOOTING

If you encounter issues with your USB Meter Tester, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
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Problem	Possible Cause	Solution
No display / Device not recognized	• Incorrect connection. • No power from source. • Device being tested is not drawing power. • Incompatibility with certain advanced protocols (e.g., Thunderbolt 4/USB4).	• Ensure all connections are secure and correctly oriented (input to source, output to device). • Verify the power source is active. • Connect a device that is actively drawing power. • Note that some advanced protocols like Thunderbolt 4/USB4 may not be fully supported, leading to non-recognition.
Display reverts to default screen	Automatic screen timeout feature.	This is a normal function. Short press the button to cycle back to your desired screen. Check system settings for any options to extend display time or fix a specific screen.
Physical fit issues (too large)	Tester's physical size obstructs adjacent ports.	Consider using a short USB extension cable if the space around the port is narrow.
Unstable MicroB readings	Connection instability or specific MicroB cable/device characteristics.	Ensure the MicroB connection (via OTG adapter) is firm. Try a different MicroB cable or device to isolate the issue.
Inaccurate readings	Faulty cable, power source, or device.	Test with known good cables, power sources, and devices to verify the tester's accuracy. If issues persist, contact support.



Figure 10: Examples of correct (green check) and incorrect (red X) connection methods, highlighting scenarios where the display may not light up due to lack of output or protocol issues.

6. SPECIFICATIONS

Below are the technical specifications for the YEREADW USB Meter Tester (8A model):

Feature	Specification
Brand	YEREADW
Model	8A
Manufacturer	YEREADW
Product Weight	50 g

Feature	Specification
Package Dimensions	8.4 x 7.5 x 1.9 cm
Color	Black
Minimum Operating Voltage	3.6 Volts
Battery Usage	No
ASIN	B0DBVXGCWF
First Available Date	August 1, 2024

7. WARRANTY AND SUPPORT

YEREADW is committed to providing high-quality products and excellent customer service. If you encounter any issues or have questions regarding your USB Meter Tester, please do not hesitate to contact us.

- **After-sales Service:** If you encounter any problems with the product during use, please feel free to contact us. This product is constantly being updated, so if you have any questions during use, please contact us. We will send you the latest electronic manual.
- **Contact Information:** Please refer to the seller's contact information on the product purchase page or your order details for direct support.

We appreciate your purchase and are here to assist you with any concerns.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question