

XTAR VC8S

XTAR VC8S 8-Slot Battery Charger Instruction Manual

1. PRODUCT OVERVIEW

The XTAR VC8S is an advanced 8-slot universal battery charger designed for a wide range of rechargeable batteries. It features multiple intelligent modes including real capacity testing, storage mode, internal resistance testing, and adjustable charging currents. This manual provides essential information for safe and efficient operation of your XTAR VC8S charger.



Figure 1: XTAR VC8S Battery Charger with packaging and accessories.

2. SAFETY INFORMATION

- Use only with compatible rechargeable batteries (3.6V/3.7V Li-ion, 1.2V Ni-MH).
- Do not attempt to charge non-rechargeable batteries.
- Ensure correct battery polarity (+/-) when inserting into the charger slots.
- Avoid short-circuiting the battery slots.
- Do not leave charging batteries unattended for extended periods.
- Keep the charger away from water, moisture, and high temperatures.
- Do not disassemble or modify the charger.

3. PACKAGE CONTENTS

- XTAR VC8S Battery Charger
- PD45W US Adapter
- USB-C to USB-C Cable
- User Manual

4. PRODUCT FEATURES

4.1. Compatible Batteries

The XTAR VC8S supports a wide range of 3.6V/3.7V Li-ion (IMR, INR, ICR) and 1.2V Ni-MH batteries. It allows for mixed charging of different battery types and sizes in any slot.

Supported Li-Ion Battery Sizes: 10440, 14500, 14650, 16340, 17500, 17670, 18350, 18490, 18500, 18650, 18700, 20700, 21700, 22650, 25500, 26650.

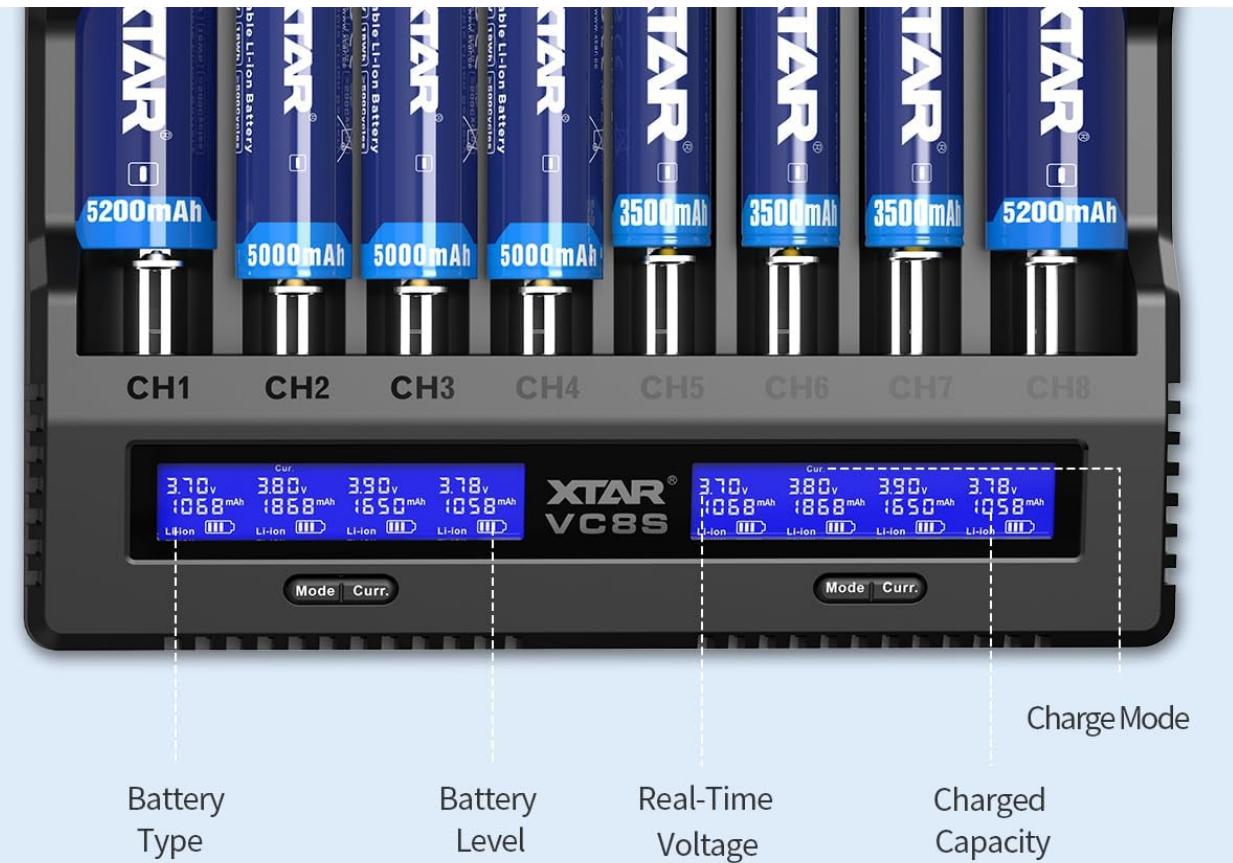
Supported Ni-MH Battery Sizes: AAA, AA, A, SC, C.

4.2. 8 Independent Slots

The charger features 8 independent charging slots, allowing simultaneous charging, testing, or storing of various battery types and sizes. Each slot operates independently, providing flexibility and efficiency.

4.3. LCD Display

The dual LCD screens provide clear, real-time information on battery type, battery level, real-time voltage, and charged capacity for each set of four channels (CH1-CH4 and CH5-CH8). This keeps you informed about the charging status.



LCD Clear Readings

Charge Current, Charged Capacity, Battery Voltage... Always keep you well informed of charging status

Figure 2: Detailed view of the Xtar VC8S LCD display providing real-time charging information.

4.4. PD45W Adapter Support

When using a PD45W adapter, the charger can achieve faster charging rates: 3A for two slots (one from CH1-CH4 and one from CH5-CH8), 2A for four slots, or 1A for all eight slots. Without a PD45W adapter, the charger will adapt to the available power supply, potentially resulting in lower charging currents.

5. SETUP

5.1. Connecting the Power Adapter

1. Connect the USB-C to USB-C cable to the charger's input port.
2. Connect the other end of the cable to the PD45W US adapter.
3. Plug the PD45W US adapter into a suitable power outlet.

5.2. Inserting Batteries

1. Carefully insert batteries into the desired charging slots.
2. Ensure the positive (+) and negative (-) terminals of the battery align with the markings on the charger.

3. The spring-loaded contacts will securely hold the battery in place.
4. The LCD screen will automatically detect the battery type and begin the charging process in Standard Charging Mode.

6. OPERATING MODES

The Xtar VC8S offers several operating modes, accessible via the 'Mode' and 'Curr' buttons for each set of four channels (CH1-CH4 and CH5-CH8).

6.1. Standard Charging Mode

Upon inserting a battery, the charger defaults to Standard Charging Mode. It automatically detects the battery type and applies an appropriate charging current. You can manually adjust the charging current (0.25A, 0.5A, 1A, 2A, 3A) using the 'Curr' button. The charger will reduce the current as the battery approaches full charge to prevent overcharging.



Figure 3: The Xtar VC8S supports smart speedy charging with adjustable current options.

6.2. Capacity Test (Grad.Mode)

In Grad.Mode, all 8 slots can test the real capacity of your batteries. This involves a charge-discharge-recharge

cycle to accurately assess the battery's actual capacity. To activate, press and hold the 'Mode' button until 'Grad' appears on the display.



Figure 4: The charger performs a charge-discharge-recharge cycle to determine actual battery capacity.

6.3. Storage Mode & Battery Recovery

The Storage Mode charges or discharges Li-ion or Ni-MH batteries to an optimal voltage for long-term storage, maximizing battery life. To activate, press and hold the 'Mode' button until 'Store' appears on the display. The charger can also activate most over-discharged batteries. If activation fails or an abnormality occurs, the LCD screen will display 'Err'.

Proper Storage Voltage to Max Up Battery Life



Charge or Discharge to A Proper Voltage



Safer for Transportation



Longer Storage, Extended Life

Figure 5: Storage mode ensures batteries are at an ideal voltage for extended storage.

Higher Battery Recovery Rate

XTAR's newest technology to recover over-discharged batteries at higher rates. Beneficial to you and our mother nature.

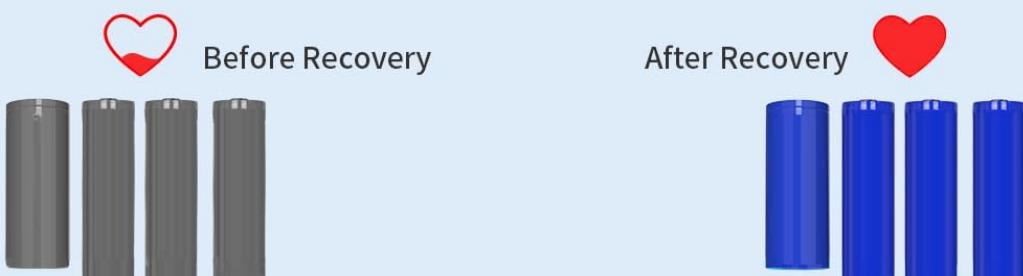
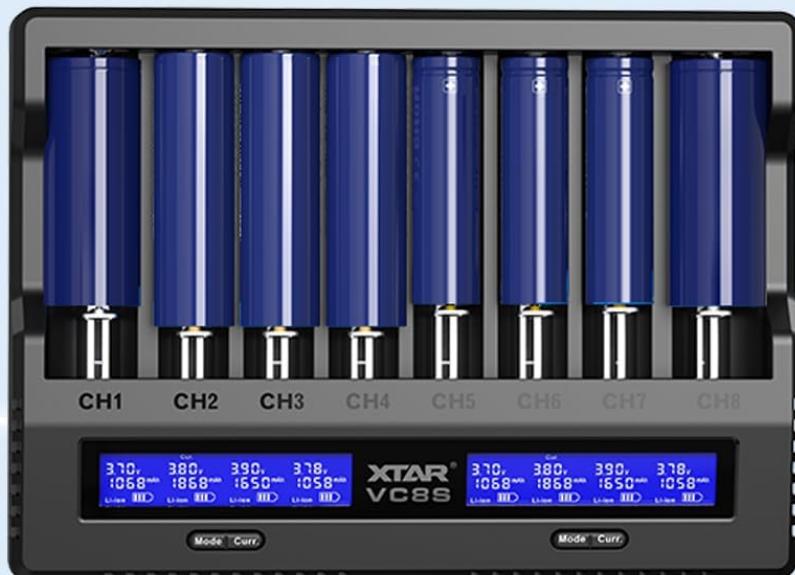


Figure 6: The charger's technology can recover over-discharged batteries.

6.4. Internal Resistance (IR) Test

The VC8S automatically detects the internal resistance (IR) of your battery before charging begins. This feature helps assess the health and performance of your batteries. A lower IR generally indicates a healthier battery. To view IR, cycle through modes using the 'Mode' button until 'IR' is displayed.

7. IMPORTANT CONSIDERATIONS

7.1. Power Adapter for Max Speed

To achieve the maximum charging speeds (e.g., 3A for two cells, 2A for four cells), a 45W PD (Power Delivery) adapter is required. If a lower wattage adapter is used, the charger will automatically adapt, and charging currents may be reduced across the slots.

7.2. Physical Size

The XTAR VC8S is designed to accommodate up to eight batteries, including larger sizes like 26650 and 21700. Its physical dimensions are 8.26 x 5.98 x 1.53 inches, making it larger than some smaller capacity chargers. Consider its size for your intended use and storage.

7.3. Battery Safety

The XTAR VC8S incorporates multiple safety features to protect against overcharging, short-circuiting, and reverse polarity. The detailed LCD display provides transparency on battery status, which is crucial for safe battery management. Always prioritize battery safety and use the charger as instructed.

8. SPECIFICATIONS

Specification	Value
Product Dimensions	8.26 x 5.98 x 1.53 inches
Item Weight	1.79 pounds
Item Model Number	VC8S
Input Voltage	15 Volts
Output Voltage	12 Volts (DC)
Safety Certifications	UL, CE, FCC

9. TROUBLESHOOTING

If you encounter any issues with your XTAR VC8S charger, please refer to the following general troubleshooting tips:

- **Charger not powering on:** Ensure the power adapter is securely connected to both the charger and the power outlet. Try a different power outlet.
- **Battery not charging:** Check that the battery is inserted with correct polarity. Ensure the battery is compatible with the charger. Clean battery contacts if necessary.
- **'Err' displayed on LCD:** This indicates an activation failure or abnormality. The battery might be severely over-discharged or damaged. Attempt recovery in Storage Mode or discontinue use if the error persists.
- **Slow charging:** Ensure you are using a PD45W adapter for optimal charging speeds. If using a lower wattage adapter, charging speeds will be reduced, especially with multiple batteries.

10. OFFICIAL PRODUCT VIDEO

For a detailed review and comparison of the XTAR VC8S, please watch the official product video below. This video provides visual demonstrations of the charger's features and operation.

Video 1: XTAR VC8S Review and Comparison. This video demonstrates various features and compares the VC8S with its predecessor.

11. WARRANTY AND SUPPORT

For any questions, concerns, or support regarding your XTAR VC8S Battery Charger, please do not hesitate to contact XTAR customer service. Refer to the contact information provided in your product packaging or visit the official XTAR website for assistance.

Related Documents - VC8S

 <p>XTAR SC1 Plus Speedy Li-ion/Ni-MH Battery Charger</p> <p>Shenzhen XTAR Electronics Co., Ltd. Address: Shenzhen, China Registration No.: 440301150000000 Phone: +86 13926000000 Email: info@xtar.com Website: www.xtar.com</p>	<p>XTAR SC1 Plus Battery Charger: Speedy Li-ion & Ni-MH Charging and Power Bank Functionality</p> <p>The XTAR SC1 Plus is a versatile and speedy charger for Li-ion and Ni-MH batteries, also serving as a portable power bank. Featuring Type-C input, it supports various battery sizes including protected 26800 cells, and offers LED indicators for status, a 12-month warranty, and anti-fake verification.</p>
	<p>XTAR C4-EVO Battery Charger User Guide</p> <p>Comprehensive user guide for the XTAR C4-EVO battery charger, detailing its features, operation, and specifications for various battery types.</p>
	<p>XTAR MC2 Portable Li-ion Battery Charger - User Manual & Specifications</p> <p>Comprehensive guide to the XTAR MC2 portable Li-ion battery charger, covering features, technical specifications, operation, supported batteries, LED indicators, customer service, and safety notices.</p>
	<p>XTAR MC2 Portable Li-ion Battery Charger User Manual</p> <p>Comprehensive user manual for the XTAR MC2 portable two-slot Li-ion battery charger. Includes specifications, operation instructions, charging tips, customer service information, warranty details, and safety notices.</p>
	<p>Xtar VC2 USB Battery Charger Review: Features, Performance, and Specifications</p> <p>A comprehensive review of the Xtar VC2 dual-channel USB battery charger, detailing its features, supported battery types, charging performance, and technical specifications.</p>
 <p>XTAR BC4 Type-C 1.5V Li-ion/1.2V Ni-MH Battery Charger</p> <p>English Français Español Português Deutsch Italiano Polski</p> <p>Shenzhen XTAR Electronics Co., Ltd. Address: Shenzhen, China Registration No.: 440301150000000 Phone: +86 13926000000 Email: info@xtar.com Website: www.xtar.com</p> <p>Facebook YouTube QR Code</p>	<p>XTAR BC4 Type-C Battery Charger User Manual</p> <p>Comprehensive user guide for the XTAR BC4 Type-C battery charger, covering its features, specifications, operation for 1.5V Li-ion and 1.2V Ni-MH batteries, LED indicators, warranty information, and important safety warnings.</p>