

XTAR VC2L

XTAR VC2L 2-Slot Universal Battery Charger User Manual

Model: VC2L

1. INTRODUCTION

The XTAR VC2L is an advanced 2-slot universal battery charger designed for a wide range of rechargeable Li-ion and Ni-MH batteries. Featuring a USB-C input, LCD display, and multiple charging current options, it provides efficient and safe charging for your batteries. This manual provides detailed instructions for proper use and maintenance of your VC2L charger.

2. SAFETY INFORMATION

Please read all safety warnings and instructions before using this product. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Use the charger only for rechargeable batteries specified in this manual. Charging other battery types may cause explosion, battery rupture, or leakage, leading to property damage and personal injury.
- Do not disassemble, modify, or repair the charger.
- Do not expose the charger to water, high humidity, or extreme temperatures.
- Keep the charger out of reach of children and pets.
- Ensure proper polarity when inserting batteries. Incorrect insertion can cause damage to the charger and batteries.
- Unplug the charger from the power source when not in use or before cleaning.
- Do not operate the charger if it has been damaged in any way.

3. PRODUCT OVERVIEW

The XTAR VC2L charger offers a compact design with intelligent features for optimal battery charging.

Key Features:

- USB-C Input: Modern and convenient power input.
- Max 2A Charging Current: Fast charging for compatible batteries.
- LCD Display: Real-time display of battery type, charging current, voltage, and charged capacity.

- **Wide Compatibility:** Supports various Li-ion and Ni-MH battery sizes, including protected 21700 batteries.
- **0V Activation Function:** Can revive over-discharged Li-ion batteries.
- **Multiple Protections:** Short circuit, reverse polarity, over-current, overload, over-voltage, and intelligent temperature control.

Package Contents:

- XTAR VC2L Charger
- USB-C Cable
- User Manual



Image: Contents of the XTAR VC2L charger package, including the charger unit, USB-C cable, and user manual.

4. SETUP

1. **Connect Power:** Connect the provided USB-C cable to the charger's USB-C input port. Plug the other end of the USB-C cable into a compatible 5V 2.1A USB power adapter (not included). The LCD display will illuminate.
2. **Initial Display:** Upon connection, the charger's LCD display will show initial information, indicating it is ready for use.



Image: The XTAR VC2L charger shown with its USB-C input port and the included USB-C cable.

5. OPERATING INSTRUCTIONS

Inserting Batteries:

Carefully insert one or two rechargeable batteries into the charging slots, ensuring correct polarity (+ and - ends match the markings on the charger). The charger will automatically detect the battery type and begin charging.

Adjusting Charging Current:

The VC2L allows you to select the charging current. After inserting a battery, press the adjustable button to cycle through available current options: 2A, 1A, and 0.5A. The selected current will be displayed on the LCD. For optimal battery life, it is generally recommended to use a lower charging current when time is not critical.



Image: A finger pressing the adjustable button on the XTAR VC2L charger to change the charging current setting.



Image: The XTAR VC2L charger displaying the available charging current options: 0.5A, 1.0A, and 2.0A.

0V Activation Function:

The charger can attempt to activate over-discharged Li-ion batteries (often referred to as 'sleepy' batteries). If an over-discharged Li-ion battery is inserted, the VC2L will automatically try to activate it. If successful, the battery will begin charging normally.

6. BATTERY COMPATIBILITY

The XTAR VC2L charger is compatible with a wide range of rechargeable batteries:

3.6V/3.7V Li-ion/IMR/INR/ICR Batteries:

- 10440, 14500, 14650, 16340, 16650, 17500, 17670, 18350, 18490, 18500, 18650, 18700, 20700, 21700, 22650, 25500, 26650.
- Supports 21700 batteries with a protective plate.

1.2V Ni-MH/Ni-CD Batteries:

- AAAA, AAA, AA, A, SC, C.

Compatible with Various Rechargeable Batteries

Note: Can Charge protected 20700/21700 batteries



3.6V/3.7V Li-ion/IMR/INR/ICR:

10440 14500 14650 16340 16650 17500 17670
18350 18490 18500 18650 18700 20700 21700
22650 25500 26650

1.2V Ni-MH / Ni-CD:

AAAA / AAA / AA / A / SC / C batteries

Image: The XTAR VC2L charger with various battery types, illustrating its broad compatibility with Li-ion and Ni-MH/Ni-CD cells.

7. DISPLAY INFORMATION

The LCD display provides real-time charging status:

- **Battery Type:** Indicates whether the inserted battery is Li-ion or Ni-MH.
- **Charging Current:** Shows the current charging rate (e.g., 0.5A, 1.0A, 2.0A).
- **Battery Voltage:** Displays the current voltage of the battery.
- **Charged Capacity:** Shows the accumulated capacity charged into the battery in mAh.



Image: Close-up of the XTAR VC2L's LCD display, highlighting indicators for charging current, real-time voltage, and charged capacity.



Image: A detailed view of the XTAR VC2L's LCD screen, specifically showing the charged capacity in mAh for a Li-ion battery.

8. MAINTENANCE

- **Cleaning:** Disconnect the charger from power before cleaning. Use a soft, dry cloth to wipe the surface of the charger. Do not use abrasive cleaners or solvents.
- **Storage:** Store the charger in a cool, dry place away from direct sunlight and extreme temperatures.
- **Avoid Impact:** Protect the charger from drops or heavy impacts, which can damage internal components.

9. TROUBLESHOOTING

- **Charger not turning on:** Ensure the USB-C cable is securely connected to both the charger and a functional USB power adapter. Try a different USB-C cable or power adapter.
- **Battery not charging:**
 - Check battery polarity.
 - Ensure the battery is a compatible rechargeable type.
 - If it's an over-discharged Li-ion battery, allow the 0V activation function to attempt revival.
 - Clean battery contacts and charger contacts with a dry cloth.
- **Inaccurate readings:** While the charger provides real-time data, for highly precise measurements, specialized testing equipment may be required.

10. SPECIFICATIONS



Image: A table detailing the technical specifications of the XTAR VC2L charger.

Specification	Value
Model	VC2L

Specification	Value
Input	5V # 2.1A
Constant Current	4.2V # 2Ax1 / 1Ax2 / 0.5Ax2 1.45V # 2Ax1 / 1Ax2 / 0.5Ax2
Cut-Off Voltage	4.2±0.05V
Cut-Off Current	≤150mA
Operating Temperature	0-40°C
Product Dimensions	4.53 x 5.87 x 1.38 inches (11.5 x 14.9 x 3.5 cm)
Item Weight	7.4 ounces (209.8 g)

11. WARRANTY AND SUPPORT

XTAR provides lifetime technical support for the VC2L charger. For any questions, issues, or technical assistance, please contact XTAR customer service through the official XTAR website or your purchase platform. For more information, visit the official XTAR store:[XTAR Official Store](#)

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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

