

XTAR VC2

XTAR VC2 Universal USB Smart Battery Charger User Manual

Model: VC2

Brand: XTAR

INTRODUCTION

The XTAR VC2 is a universal USB-powered smart battery charger designed for various Li-ion and IMR battery types. It features an intelligent LCD screen that displays real-time charging information, including current, voltage, and capacity. The charger incorporates advanced safety features and a multi-stage charging process to optimize battery lifespan and performance.

This manual provides detailed instructions for the safe and efficient use of your XTAR VC2 charger. Please read it thoroughly before operation.

PACKAGE CONTENTS

- XTAR VC2 Charger
- USB Cable
- EdisonBright Brand USB Power Adapter
- Hop-Pocket (Storage Pouch)
- User Manual
- Warranty Card



Image: Contents of the XTAR VC2 charger package, including the charger, USB cable, power adapter, pouch, manual, and warranty card.

SETUP

1. **Connect Power:** Connect the provided USB cable to the XTAR VC2 charger. Plug the other end of the USB cable into the EdisonBright brand USB power adapter, and then plug the adapter into a standard wall outlet. Alternatively, you can connect the USB cable to any compatible 5V USB power source, such as a computer USB port or a power bank.
2. **Initial Display:** Upon successful power connection, the LCD screen will illuminate, indicating the charger is ready for use.



Image: The XTAR VC2 charger demonstrating compatibility with various 5V USB power sources, including wall adaptors, computers, and power banks.

OPERATING INSTRUCTIONS

Battery Insertion

- The XTAR VC2 features two independent charging slots.
- Insert compatible 3.6V/3.7V Li-ion or IMR batteries (e.g., 10440, 14500, 14650, 16340, 17500, 17670, 18350, 18490, 18500, 18650, 18700, 22650, 25500, 26650) into the charging slots, ensuring correct polarity. The charger is designed with polarity-reverse protection.

Charging Process

- The charger will automatically detect the battery type and begin charging using a three-stage (TC-CC-CV) method to prolong battery lifespan.
- The LCD screen will display the charging current, battery voltage, and accumulated charging capacity (mAh).
- The charger intelligently identifies input power and adjusts the charging current from 0.15A to 0.5A to protect your device.

- Charging automatically stops when complete. The charger also has a restart charging function, allowing batteries to be left in overnight.



VC2

Charger Series

**USB Li-ion Charger
With LCD Screen**

Specification:

Input Power	DC 5.0V 1.0A
Max Constant Charging Current	500 ± 50mA
Min Constant charging current	150 ± 50mA
Cut-off Voltage(Output Voltage)	4.20V ± 0.05V
Auto Recharging Threshold Value Voltage	3.9V ± 0.15V
Cut-off Current	≤80mA
Working Temp	0-40 °c
Net Weight	109g
Dimensions	L131*W66*H33mm

Compatible With
IMR lithium Batteries & Small Capacity Batteries
 Apply to Two 10440/14500/14650/16340/17500/17670/18350/18490/
 18500/18650/18700/22650/25500/26650 3.6/3.7V Li-ion batteries



► ADVANCED TECHNOLOGY



0V Activation Function
can rescue your dead batteries



Three-stage charge algorithm (TC-CC-CV)
Ensure your safety and batteries are fully charged



Automatically change the input power
to the suitable charging current

► BABYSITTING



Soft start technology avoid sudden change high current
Prolongs the lifespan of batteries



Automatically cut off charging
When finished and recharge when voltage drops

► SAFETY



Protected from damage of
mis-insertion of battery



Using ABS durable fireproof material
Perfect heat dissipation & Low heat



Within 5V USB voltage
the safety voltage ensures your safety





[Click here for more info ►►](#)

Image: The XTAR VC2 charger with two batteries inserted, displaying real-time charging information on its LCD screen.

LCD Display Information

- The LCD screen provides real-time status for each battery.
- Each interval of battery voltage displayed corresponds to approximately 10% of the battery's capacity, allowing you to monitor how full your batteries are.
- When batteries are fully charged, the screen light will flash 3 times every 10 seconds as a smart notification.



Image: A close-up of the XTAR VC2 LCD display, illustrating the voltage instrument and how it indicates battery capacity levels.



Image: The XTAR VC2 charger's LCD screen displaying the notification for fully charged batteries, indicated by a flashing light.

Special Features

- **0V Activation Function:** This feature can rescue over-discharged batteries, allowing them to be reused instead of discarded.
- **Real Capacity Detection:** The charger can detect the real capacity (mAh rating) of your batteries. To determine actual mAh, fully discharge the battery before charging it with the VC2. The display will show the accumulated mAh charged.



Image: The XTAR VC2 LCD display illustrating how it identifies real battery capacity and shows error messages for problematic batteries.

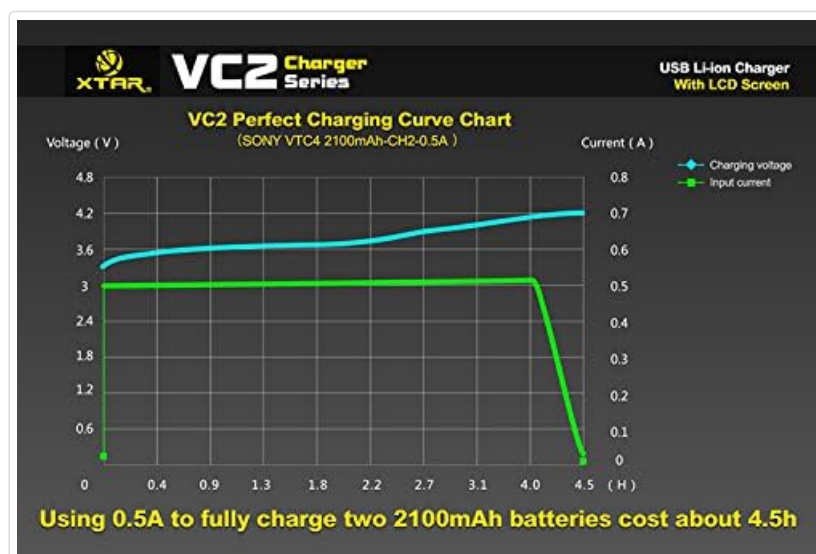


Image: A chart illustrating the XTAR VC2's charging curve, showing voltage and current over time for a typical charging cycle.

- Keep the charger clean and dry. Use a soft, dry cloth to wipe the surface.
- Avoid exposing the charger to extreme temperatures, direct sunlight, or high humidity.
- Do not disassemble the charger. This will void the warranty and may cause damage.
- Store the charger and accessories in the provided hop-pocket when not in use or during travel.

TROUBLESHOOTING

- **Charger not turning on:** Ensure the USB cable is securely connected to both the charger and the power source, and that the power source is active. Try a different USB port or wall adapter if available.
- **LCD displays "Null":** This indicates a bad battery or a Ni-MH battery. The VC2 is designed for Li-ion/IMR batteries only. Remove the battery and replace it with a compatible one if necessary.
- **LCD displays "Err":** This indicates a short circuit or incorrect battery insertion (reverse polarity). Remove the battery, check its condition, and reinsert it with correct polarity. If the error persists, the battery may be faulty.
- **Slow charging:** The charger automatically adjusts current based on input power. Ensure you are using a reliable 5V USB power source with sufficient current output (e.g., 1A or higher for faster charging, though the charger will draw up to 0.5A per slot).
- **Power Adapter Issues:** If the included EdisonBright USB power adapter appears faulty or has loose components, discontinue use immediately and contact customer support.

SPECIFICATIONS

Feature	Specification
Input Voltage	5 Volts (USB)
Output Voltage	5 Volts (DC)
Current Rating	0.5 Amps
Amperage	0.5 Amps
Number of Ports	2
Compatible Battery Types	3.6V/3.7V Li-ion/IMR (10440, 14500, 14650, 16340, 17500, 17670, 18350, 18490, 18500, 18650, 18700, 22650, 25500, 26650)
Connector Type	USB
Item Model Number	VC2
Manufacturer	XTAR
Package Dimensions	6.1 x 3.3 x 1.4 inches
Weight	0.35 ounces
Safety Certifications	CE, FCC, UL

WARRANTY AND SUPPORT

For warranty information, please refer to the Warranty Card included in your package. If you encounter any issues or require technical assistance, please contact XTAR customer support through their official website or the retailer where the product was purchased.