

# XTAR VC2



The XTAR VC2 charger for 10440/14500/14650/16340/17500/17670/18350/18500/18650/18700/22650/25500/26650 3.6/3.7V Li-ion batteries.

Features: Compatible with IMR lithium battery, Each channel is independent - Three-stage charge algorithm(TC-CC-CV) - Soft-start function, to avoid damage from large charge current while charging. - Automatically cut off when the battery is charged fully - Precision cut-off voltage at 4.2V - Compatible with small capacity battery - Over heat protection - LCD displays each battery real time statuses - Use high power intelligent step-down DC - DC circuit, greatly reduce the energy loss; - Built-in reverse-polarity and short-circuit protection circuit  
- Use fireproof material for the shell - 0V activation function can wake up the over-discharged/sleeping batteries - 120°angle high definition VA screen to display the charging current ,voltage and power indicator, you can see the charging status from any angle of view. - Certified by CE, RoHS.

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 Temperature: 0-40°C  
Net Weight: 109g  
Dimensions: L131xW66xH33mm

## MANUAL: ENGLISH

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Experience the high tech: Can tell the real capacity of your batteries. Creative LCD screen displays charging current, battery voltage and charging capacity. Intelligently identify input power and automatically adjust suitable charging current from 0.15A to 0.5A to protect your charging device. Three stages of charging (TC-CC-CV) can prolong the lifespan of your batteries. Soft start can avoid sudden high current to prolong battery lifespan  
Worry-free charging: Automatically stop charging when complete and restart charging function, so you can keep the batteries inside the charger overnight. 5V USB voltage, within the safety voltage ensures your safety. Intelligently identify bad/ Ni-MH batteries by showing "Null", and identify short circuit and mis-insertion by showing "Err". ABS durable fireproof shell with perfect heat dissipation and high temperature resistance. Without temperature rising or overheating

Save your money in a long run: Apply to 10440/14500/14650/16340/17500/17670/18350/18490/18500/18650/18700/22650/25500/26650 3.6V/3.7V Li-ion batteries and IMR batteries, no need to buy many chargers for different sizes of batteries. Two independent slots, one VC2 equal to two separate chargers. Compatible with any USB power and wall adaptors, no need to buy extra adaptors. 0V activation function can rescue your over-discharged batteries. Normally you need to throw

away those over-discharged batteries, but with XTAR chargers you can rescue them and reuse them

Save your time: Independent two channels can charge two batteries at the same time. Know how full your batteries are – Each interval of battery voltage is about 10% of the battery capacity and you can clear know when your batteries can be fully charged. Smartly distinguish bad batteries or Ni-MH batteries in 10 minutes by showing "null" – Just spend 10 min to know the status of your batteries. Smartly notify you – The light of screen will flash 3 times in every 10 seconds when your batteries are full.

What's Included: VC2 charger, MicroUSB cable, Micro-fiber carrying pouch, User manual.

How to test your batteries mAh capacity: Step 1: Insert your discharged battery (at a discharge cut-off voltage generally below 3.0V). Step 2: Let the battery charge and notice the 0000mAh displayed on the screen. Do not remove the battery until the charge is complete. Step 3: When the battery is fully charged, the screen will show „FULL“ and the entire screen will flash 3 times every 10 seconds. Step 4: The mAh on the screen should now give you the batteries actual capacity.

Safety: Please keep the charger indoor at dry condition when using. The VC2 has integrated short-circuit protection to protect the charger if a short circuit occurs in a battery. Note that this short-circuit protection protects the charger, it does not prevent batteries from short-circuiting internally. The VC2 is used only for 3.6/3.7V(Nominal voltage) rechargeable Li-ion battery, att emptying to charge other battery types may result in battery explosion, leaking or other damages. Because of different battery types, capacities and over-discharge conditions, the battery revive time may vary. Heavily over-discharged batteries may not be able to be waken up. Keep the VC2 away from water and excessive dust. Children should be supervised by an adult when using the charger. Do not disassemble or modify the charger.

Tips: Charger will restart charging when fully charged battery voltage falls down to lower than 3.90V because of self discharging, to avoid battery over-discharge when not being taken out from charger for long time. When being inserted over-discharged battery(≤2.0V), the charger will start activation mode to activate the battery. During activation, dial pointer to 0V for voltage, and 0.5A for current, the forth number of charged volume indicator gets flickering. VC2 has powerful 0v activation function to inspire ver-discharged batteries back to life with short time, if battery voltage is lower than 2.0V after 10 min activation, VC2 will stop charging, LCD will show „ null „, and dial pointer change to 0V, meaning that the battery is too over-discharged or bad inside and can not be activated. VC2 has self-protection function to avoid damage when being standby. Both channels of VC2 will not charge if a short-circuit occurs or batteries been inserted reversely, voltage dial pointer to 0V charged capacity reading shows „Err,“; when problems (short-circuit or reverse inserted batteries) corrected, charger will start charging and the

screen will show cumulative charged capacity. When input power not up to 5.0V DC/1.0A, the charger will adjust charging current automatically based on max input.

## MANUAL: Deutsch

Das neue XTAR VC2 Ladegerät für Li-Ion Akkus kombinieren  
XTAR-VC2 Ladegerät für 10400/14500/14650/16340/17500/17670/18350/18500/18650/18700/26650 / Li-Ion Akkus BEDIENUNGSANLEITUNG.  
Lieferumfang: • XTAR-VC2 für 10440/14500/14650/16340/17500/17670/18350/18500/18650/18700 Li-Ion Akkus • Ladekabel USB auf Micro-USB. • Optional: Netzteil 5V • Tragetasche. • Bedienungsanleitung (Deutsch)

SPEZIFIKATIONEN  
• Geeignet für: 10440/14500/14650/16340/17500/17670/18350/18500/18650/18700/26650 3,6/3,7 V Li-Ion Akkus. • Tiefentladungsfunktion zur Reaktivierung tiefentladener Akkus (0 V). • Schutzschaltung für plötzliche Hoch-/Niedrigspannung. • Schutzschaltung für umgekehrte Polung. • zwei unabhängige Ladeschächte. • Spannung- und Kapazitätsanzeige. • Gewicht: 42 g • Abmessungen: L131\*B66\*H33 mm.

Ladevorgang:  
• Eingangsspannung: DC 5 V.  
• Eingangsstrom: 1,0 A.  
• Erhaltungsladespannung: 2,0 – 3,0 V.  
• Konstanter Ladestrom: 500 +/-50 mA.  
• Anschlussspannung: 4.2V +/- 0,05 V. • Autom. Wiederaufnahme d. Ladvorgangs: 3,9+/-0,15 V.  
• Messgenauigkeit: +/-0,03 V  
• Arbeitstemperatur: 0 – 40 °C  
• Lagertemperatur: 0 – 70 °C

BEDIENUNG  
Ladevorgang:  
1. Legen Sie einen für das Ladegerät spezifizierten Akku in den Ladeschacht ein. 2. Achten Sie darauf, die Akkus polrichtig entsprechend der Markierungen an den Ladeschächten (Symbole + / -) einzulegen. 3. Verbinden Sie das Ladekabel mit dem Ladegerät (Micro-USB) und verbinden Sie die USB-Seite des Ladekabels mit einer Stromquelle. 4. Nach ca. 2 Sekunden geht die Digitalanzeige zurück (Kalibrierung). Nach ca. 1-2 weiteren Sekunden zeigt das Ladegerät den Ladezustand (Spannung) und den Ladestrom (in A). 5. In Abständen von ca. 10 Sekunden flackert das Display – dies bedeutet, dass das Ladegerät sich in einem Ladevorgang befindet. 6. Akku ist Voll – die entsprechende Seite des Ladeschachtes zeigt „FULL“. Kapazitätsanzeige – Pro Schacht wird die Kapazität angezeigt, die im Ladevorgang aufgeladen wurde. 8. Err – wenn ein Akku, oder eine Zelle falsch gelegt wird, oder bereits beschädigt ist, wird das Ladegerät das Zeichen „Err“ zeigen – steht für Englisch Error = Fehler. 9. Tiefentladene Akkus – Der VC2 kann bedingt Akkus und Zellen aus der Tiefentladung (unter 2.5V) aufzuladen. In diesem automatischen Ladevorgang werden die Zellen bzw. Akkus über 10 Minuten mit niedrigem Strom aufgeladen, bis

diese über 2.5V erreicht haben.

#### SICHERHEITSHINWEISE

- Aufgrund verschiedener Akku-Typen kann eine Abweichung zwischen angezeigter und tatsächlicher Spannung bestehen. Die angezeigte Spannung bezieht sich auf die Ladespannung (Zellinterner Widerstand inbegriffen).
- Verwenden Sie nur für das Ladegerät spezifizierte Akkus.
- Achten Sie auf die korrekte Einstellung des Ladestroms, um einen fehlerhaften Ladevorgang zu vermeiden!
- Bitte niemals das Ladegerät modifizieren oder auseinander bauen! Laden Sie ausschließlich Akkus der angegebenen Technologie mit diesem Ladegerät.
- Der Einsatz falscher Akkus kann zu Explosionen, Personen- und Sachschäden führen.
- Nur für den Gebrauch in geschlossenen Räumen geeignet.
- Halten Sie das Ladegerät von Hitze fern.
- Schützen Sie das Gerät vor Feuchtigkeit – Wasser oder andere Flüssigkeiten dürfen niemals in das Gerät gelangen, da dies zu Bränden oder Stromschlägen führen kann.
- Nicht im Zugriffsbereich von Kindern aufbewahren oder betreiben.
- Möglicherweise kann das Gerät Akkus, die längere Zeit nicht genutzt wurden, nicht laden. Mehrere Lade- und Entladezyklen können die Leistungsfähigkeit älterer Akkus wieder verbessern.

Dieses Produkt entspricht folgenden EG-Richtlinien:  
2001/95/EG RICHTLINIE FÜR DIE ALLGEMEINE PRODUKTSICHERHEIT. 2004/108/EG RICHTLINIE FÜR DIE ELEKTROMAGNETISCHE VERTRÄGLICHKEIT. 2006/95/EG NIEDERSPANNUNGS-RICHTLINIE.  
Angewandte Normen:  
EN 55014-1:2006, EN 61000-3-2: 2000 +A2: 2005, EN 61000-3-3: 1995 +A1: 2001 +A2: 2005, EN 55014-2: 1997 +A1: 2001, EN 60335-1: 2002 +A 1: 2004 +A 11: 2004 +A 12: 2006 +A2: 2006, EN 60335-2-29: 2004.

#### Manuale: Italiano

Il caricabatterie XTAR VC2 per batterie Li-ion 10440/14500/14650/16340/17500/17670/18350/18500/18650/18700/ 22650/25500/26650 3,6 / 3.7V.

Caratteristiche: Compatibile con batterie al litio IMR. Ogni slot è indipendente, algoritmo a tre fasi di carica (TC-CC-CV) - funzione soft-start, per evitare danni per troppa corrente di carica. Termina la carica automaticamente quando la batteria è completamente carica - Tensione cut-off a 4.2V - Compatibile con piccole batterie a bassa capacità - display LCD: visualizza ogni batteria in tempo reale - Utilizzo intelligente DC step-down ad alta potenza - circuito DC, riduce notevolmente la perdita di energia; Protezione Built-in contro l'inversione di polarità ed ha il circuito di protezione contro il corto circuito. Usa dei materiali a prova di fuoco- la funzione di attivazione 0V può riattivare le batterie eccessivamente scaricate. Alta definizione dello schermo. - Certificato da CE, RoHS.

#### Specifiche:

Potenza di ingresso: DC 5.0V 1.0A  
Max. Corrente di carica Costante: 500 ± 50mA  
Min. Off Voltage (tensione di uscita): 4.20V ± 0.05V  
Auto ricarica Valore soglia di tensione: 3.9V ± 0.15V  
Cut-off di corrente: ≤80mA  
Temperatura di funzionamento: ° 0-40C  
Peso netto: 109g

Dimensioni: 131 mmx 66mm x 33mm.

Indica la reale capacità delle batterie. Visualizza tensione della batteria carica e la capacità di carica. Intelligentemente individuare potenza in ingresso e regolare automaticamente la corrente di carica adatta (da 0.15A a 0,5) per proteggere il dispositivo di ricarica. Tre fasi di ricarica (TC-CC-CV) può prolungare la durata delle batterie. Il Soft Start può evitare danni dovuti ad un'improvvisa corrente elevata per prolungare la durata della vita della batteria

Il Worry-Free di ricarica: ferma automaticamente la ricarica quando completata e riavvia la funzione di carica, in modo da poter mantenere le batterie all'interno del caricatore durante la notte. Tensione nell'USB a 5V all'interno della tensione di sicurezza. Intelligentemente identifica batterie di cattiva qualità e Ni-MH, mostrando „Null“. E individua cortocircuiti e mis-inserimento mostrando „Err“. Guscio ABS ignifugo con perfetta dissipazione del calore e resistenza alle alte temperature.

Compatibile con batterie Li-ion 3.6V / 3.7V, e batterie IMR 10440/14500/14650/16340/17500/17670/18350/18490/18500/18650 / 18700/22650/25500/26650: non c'è bisogno di comprare molti caricatori per diverse dimensioni di batterie. Due slot indipendenti, compatibile con tutti gli adattatori di alimentazione USB e da parete, non è necessario acquistare adattatori supplementari. Funzione di attivazione 0V può salvare le batterie completamente scariche.

Risparmia tempo: i due canali indipendenti possono caricare due batterie allo stesso tempo. Sapere quanto sono cariche le batterie. Elegantemente distingue le batterie difettose o batterie Ni-MH in 10 minuti, mostrando „null“ - Basta aspettare 10 minuti per conoscere lo stato delle batterie. La luce dello schermo lampeggia 3 volte ogni 10 secondi quando le batterie sono piene. Cosa è incluso : VC2 charger/ MicroUSB cable/ Tasca microfibra /Manuale d'utilizzazione. Come testare la capacità delle batterie: Fase 1: Inserire la batteria scarica (ad una tensione di scarico cut-off in genere sotto 3.0V). Fase 2: Lasciate che la carica della batteria sia completa e notate che la capacità della batteria è visualizzata sullo schermo. Non rimuovere la batteria fino a quando la carica è completa. Passo 3: Quando la batteria è completamente carica, lo schermo mostrerà „FULL“ e l'intero schermo lampeggerà 3 volte ogni 10 secondi.

Sicurezza: Si prega di tenere il caricatore in luoghi asciutti. Il VC2 ha integrata un protezione contro il cortocircuito per proteggere il charger se si verifica un cortocircuito in una batteria. Si noti che questa protezione da corto circuito protegge il caricabatterie, non impedisce le batterie da corto circuito interno. Il VC2 viene utilizzato solo per la batteria Li-ion 3,6 V/ 3.7V (Nominal voltage) ricaricabile, il tentativo di caricare altri tipi di batterie può provocare esplosioni, perdite o altri danni. Batterie fortemente sopra-scaricate potrebbero non essere in grado di essere riattivate. Tenere il VC2 lontano da acqua e polvere. I bambini devono essere sorvegliati da un adulto durante l'utilizzo del caricabatterie. Non smontare o modificare il caricabatterie.

#### Guide d'utilisation: Français

Le chargeur XTAR VC2. Chimie : Li-ion. Compatible avec les tailles : 10440/14500/14650/16340/17500/17670/18350/18500/18650/ 18700/ 22650/25500/26650.

Charge des piles intelligente : TC (trickle current) : une

charge très fine pour débiter. CC (constant current) : une charge à 0.5A. V (constant voltage) : une charge à 4.2V (<80mA) pour finir.

#### Description du chargeur Xtar VC2 USB:

Entrée: Micro USB DC 5V 1A  
Tension de sortie: 4.2V ± 0.5V  
Courant de sortie maxi: 500mA ± 50mA  
Courant de sortie mini: 150mA ± 50mA  
Température de fonctionnement: 0 - 40°C  
Dimensions: 131.3mm x 66.5mm x 32.1mm  
Poids: 108.3g  
Contenu de la livraison : 1x Chargeur Xtar VC2, 1x Câble USB, 1x Housse de transport, 1x Notice multilingue.

#### Fonctionnalités du chargeur Xtar VC2 :

Charge des piles indépendante. Affichage en temps réel de la progression de charge (en mAh), tension (en V) puis courant de charge (en A). Détection de la puissance d'alimentation, choix automatique du courant de charge. Détection de la capacité réelle des piles. Sécurité contre les court-circuits et piles non compatibles. Activation des piles déchargées à 0V. „Soft Start“ - début de charge progressif. Arrêt de charge automatique lorsque les piles est pleinement chargé. Matière ABS résistante aux flammes. Conception optimisée afin de dissiper la chaleur. Certifié par RoHS, CE, FCC et CEC. Affiche la capacité réelle des piles. Montre la tension de la charge de les piles et la capacité de charge. Identifie la puissance d'entrée Intelligemment et ajuste automatiquement les combinaisons de charge (de 0.15A à 0,5) pour protéger le dispositif. Trois étapes de charge (TC-CC-CV) peuvent prolonger la vie des piles. Le Soft Start peut éviter les dommages dus à courant élevé soudain pour prolonger la vie des piles.

La charge „Worry-Free“: le VC2 s'arrête automatiquement lorsque la charge est terminée et redémarre la fonction de charge, de sorte que vous pouvez garder les piles dans le chargeur la nuit. Tension de sécurité en USB à 5V. Identifie intelligemment les piles de mauvaise qualité et Ni-MH, affichant „Null“. Il identifie les courts-circuits et une mauvaise insertion montrant „Err“. Coque ABS ignifuge avec une parfaite dissipation de la chaleur et de résistance à haute température. Pas besoin d'acheter de nombreux chargeurs pour différentes tailles de piles. Deux emplacements indépendants, compatibles avec tous les adaptateurs d'alimentation USB et muraux, vous ne avez pas besoin d'acheter des adaptateurs supplémentaires. La fonction d'activation 0V peut réactiver les batteries complètement déchargées. Gagnez du temps: les deux slot indépendants peuvent charger deux différentes piles en même temps. Il distingue élégamment batteries défectueuses ou des piles Ni-MH en 10 minutes, montrant „null“ - Attendez 10 minutes pour connaître l'état des batteries. L'écran lumineux clignote trois fois toutes les 10 secondes lorsque les piles sont pleines.

Sécurité: Si il vous plaît, gardez le chargeur dans un endroit sec. Le VC2 a une protection intégrée contre les courts-circuits pour protéger le chargeur si un court-circuit se produit dans une pile. Notez que cette protection court-circuit protège le chargeur, ne empêche pas les piles d'un court-circuit interne. Le VC2 est utilisé seulement pour la batterie Li-ion 3.6V / 3.7V (tension nominale), la tentative de charger d'autres types de piles peut provoquer une explosion, de fuite ou d'autres dommages. Garder le VC2 loin de l'eau et la poussière. Les enfants doivent être supervisés par un adulte lors de l'utilisation du chargeur. Ne pas démonter ni modifier le chargeur.

# XTAR VC2



This product complies with the following EU directives:  
2001/95 / EC DIRECTIVE FOR GENERAL PRODUCT SAFETY  
2004/108 / EC DIRECTIVE FOR ELECTROMAGNETIC COMPATIBILITY 2006/95 / EC LOW VOLTAGE DIRECTIVE.

Applicable standards:

EN 55014-1:2006 .EN 61000-3-2: 2000 +A2: 2005. EN 61000-3-3: 1995 +A1: 2001 +A2: 2005. EN 55014-2: 1997 +A1: 2001 EN 60335-1: 2002 +A 1: 2004 +A 11: 2004 +A 12: 2006 +A2: 2006. EN 60335-2-29: 2004

