



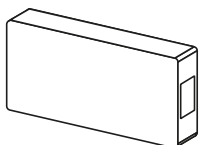
MANUAL / SAFETY NOTES

2 A CAR-CHARGER FOR EBV E-BIKE BATTERY 36 V

Power information

For batteries with charge-end-voltage of 42,0 V with 2 A charge current

Charging method: CC/CV ConstantCurrent- / ConstantVoltage method



125,0 x 62,0 x 36,0 mm

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READ MANUAL CAREFULLY BEFORE USE!

This manual is integral part of the product. It contains important information and safety notes. Keep it in range and give it away with the product to third party.

Introduction

We are glad, that you choose a charger of our product range. Please take some time to read this manual carefully. It contains detailed information about handling of your charger, it's functions and it's care, as well as it's usage. For further questions, do not hesitate to contact your dealer or get in contact with us via our homepage. Enjoy your new EBV E-Bike Battery and thank you for your confidence.

Your Akku Vision Team

Disclaimer

The Akku Vision GmbH assumes no responsibility for any loss, damages or costs arising from incorrect use and operation of the product, or related.

The obligation to pay any compensation, regardless of the legal reason, is limited to the directly involved E-Bike Vision products invoiced value, as far as this is permitted by law. This does not apply, if a liability according to binding legal rules due to intent or gross negligencem has to be respected. Furthermore, the Akku Vision GmbH assumes no responsibility for the completeness and accuracy of the documents that come with the battery, due to its different distribution channels.

Guarantee

For our charger products, we accept the legally applicable guarantee beyond a 24 months warranty. To qualify for the 24 months guarantee, submission of the purchase receipt is required. Please contact your dealer from whom you purchased the product, in guarantee cases.

Excluded from the guarantee are malfunctions caused by:

- improper operations, e.g. overheating, incorrect connection, short-circuit or reverse polarity, immersion in water, cleaning with high pressure or steam cleaners, deep discharge, wrong polarity or drop
- use of non-approved accessories by the Akku Vision GmbH
- accidental or deliberate damages
- defectives due to normal tear
- operation outside the technical specifications
- damages that will not appear directly on the device, for which we assume the guarantee
- grease the contacts with contact spray or similar
- changes / repairs / modifications / installations or upgrades that have not be performed by the Akku Vision service center - use only our service center for repairs
- optical damages that justify no functional damages or which can be remedied by cleaning
- the costs for rental batteries

Removal of the charger's performace label leads to loss of warranty claim.

CE declaration of conformity

The evaluation of the device was carried out by European harmonized directives. You therefore have a product that is related to it's construction meets the safety objectives of the European Community to the safe operation of equipment. The detailed CE declaration of conformity can be obtained from our service center.



Scope of delivery

1. Charger with charge leads
2. DC mains cable

Safety notes for fast-charger

- Fast-charger are no toys. Keep them away from children!
- Don't make any changes on the charger. Especially, consider that you are not allowed to open the charger, or rather modify it, otherwise you loose your warranty claim.
- Read these operating instructions carefully before use! Improper handling of Lithium Batteries may cause fire, explosion or chemical danger. Check battery manufacturer instructions.
- Only charge Li-Ion batteries. Do not charge lead-acid, NiCd, NiMh or primary cells!
- Do not use battery and/or charger for any other purposes.
- Connect the charger to a suitable mains supply, only. Disconnect the charger from mains and the battery pack if it is not in use for a longer time.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children must not play with charger. The appliance cleaning and user maintenance must not be made by children without supervision.
- The charger is designed for usage in a damp-free, dry and ventilated environment. Do not expose the charger to rain or hot conditions. Don't cover the charger. Please keep the charger clean and dry.
- Do not charge overheated battery packs. Battery packs must be at ambient temperature before charging. Stop the charging process if the battery gets to hot during charging (>55- 60°C).
- Do not use the charger if there are any signs of damage. Do not open the charger or carry repairs. Repairs must be carried from the Akku Vision service center, only.
- Do not leave the charger unattended during operation.
- Do not touch the charger and the battery with wet hands.
- Do not connect the charger and battery continuously.
- Lithium batteries must only be charged on a noncombustible underlay. As well as the charger.
- Charge Lithium batteries only under supervision!

Functions

- This charger is suitable to charge a 36.0 up to 37.0 Volt, Li-Ion battery pack, with 10 cells in serial. The max. charge current is 2 A max.
- The charger has an overload, short circuit, overvoltage and wrong polarity protection. Overload protection (cut off if the output current is higher than 2.20A) Short circuit (cut off if there is a short circuit on the DC-side) Overvoltage protection (cut off if the output voltage is higher than 42.2V) Wrong polarity protection (cut off if battery with wrong polarity is connected to the charge cable)
- The charger has an internal temperature control that protects the charger at to high ambient temperature as well as continuous overload.

Operation

1. Before first use please check the parameters of the charger and your battery according the rating label or the provided documentation to ensure the accordance.
2. Check if that the local main AC voltage level is suitable for the charger. InputVoltage: DC 11-16V, 50-60Hz
InputCurrent: max. 6 A
3. Plug in the mains cable into an AC mains socket.
4. Now connect the DC cable to the battery pack.

Completion of the charging

1. If the battery is fully charged, the charger stops.

LED function

LED flashes green, approx. 1 time per second:	Stand by
LED flashes green, approx. 2 times per second:	charging process
LED lights up green continuously:	charging process completed
LED flashes red, approx. 1 time per second:	Battery voltage too high or charging timer expired

Notes

This charger has a wrong polarity protection. The right polarity is the base that the charger generates a charge voltage. Depending on the battery safety board, a battery pack that is discharged under it's nominal discharge voltage can't be charged again. In this case please contact Akku Vision GmbH.

Error through short circuit or wrong polarity will be reset automatically maximum 1min after removing the Problem.

The device has a temperature controll unit which will protect it against overheating and continuous overload. In this case, the ouput will reduced until a stable operating temperature is realized.

Disposal

Electrical equipment marked with the cancelled waste bin symbol must not be discarded in the standard household waste; instead it must be taken to a suitable specialist disposal system.

In the countries of the EU (European Union) electrical equipment must not be discarded via the normal domestic refuse system (WEEE - Waste of Electrical and Electronic Equipment, directive 2012/19/EU). You can take unwanted equipment to your nearest local authority waste collection point or recycling centre.



There the equipment will be disposed off correctly and at no cost to you. By returning your unwanted equipment you can make an important contribution to the protection of the environment.

Datasheet Car-Charger 10S 2 A

for batteries with charge-end-voltage of 42,0 V

Pack-configuration: 10S Li-Ion cells
Charging method: CC/CV - Constant Current / Constant Voltage method

Size

Length: 125 mm
Width: 62 mm
Height: 36 mm
Weight: 375 g

Input voltage range: 11 Vdc bis 16 Vdc
Input current: max. 7,5 A

Output voltage: 42,0 +/- 0,23 V
Output current: max. 2,0 +/- 0,2 A

Efficiency: > 90 %
Temperature range: 0 – 40° C
Humidity: 20 – 85 %
EMC: DIN-EN 55015 CLASS B
Safety-Standards: EN60950 and DIN EN 60335-2-29

Safety-Features

Overload protection: yes
Inverse-polarity protection: yes
Short circuit protection: yes
Timer: max. 16.5 hours

LED Indication

- Stand By: red LED - OFF / green LED - flashing 1 Hz
- Charging: green LED - flashing 2 Hz
- Fully charged: green LED - lighting

Site charge connector

Length: approx. 70 mm
Diameter: approx. 18 mm

Pinning:

