

OPERATING INSTRUCTIONS

Automatic Charger for Lead Acid Batteries

CE

24 V 5 A

Dear Customer,

Thank you for buying our product. You have bought one of the most powerful and reliable Automatic Charger of its class.

Please read the operating instructions carefully before use.

Warning!!! Safety Instructions!

- **This device operates at 230 V alternating voltage and must be kept out of reach of children!**
- The switch (6) on the rear does not disconnect all poles from the mains. For this reason the mains plug of the device must be accessible during operation.
- The air vents must not be obstructed during operation.
- No liquid of any kind may be allowed penetrate the device.
- The device may only be cleaned with a dry cloth.
- The device may only be connected to 230 V / 50/60 Hz.
- Under no circumstances should the device be used under adverse ambient conditions. Adverse ambient conditions are: ambient temperatures over 50°C, flammable gases, solvents, vapours, dust, relative humidity over 80% and moisture.
- The device may only be operated in dry, indoor conditions.
- If there is reason to believe that safe operation is no longer possible, the device must be shut down immediately and secured against unintentional operation. There is reason to believe that safe operation is no longer possible if the device is not functioning or is visibly damaged, if the mains line is damaged, in the case of transport damage and after storage in unfavourable conditions.
- Service and repair
Service work and repairs may only be carried out by authorised personnel. Only spare parts with the specified values may be used.

Warning! The Charger operates on the constant charging voltage principle.

Before recharging make sure that:

- the rechargeable batteries are suitable for constant voltage charging
 - the manufacturer's specs for rechargeable batteries allow for a max. charge current of 5A
- Afore mentioned conditions are the inherent properties of lead based rechargeable batteries.

Warning! Strictly follow the manufactures instructions on recharging.

Description of Product

The Charger delivers a stable DC voltage of 27,6 V and a max. charge current of 5A.

Driven by it's switch mode power supply (switching frequency approx. 70 kHz), this technology does away with bulky linear transformers. The result is a 70% reduction in size and weight; a notable difference in comparison to chargers of conventional construction.

Charging

The Charger operates on the constant charging voltage principle. As soon as the end-of-charge voltage (27,6V) has been reached the device will stop charging. It will resume charging automatically once the battery voltage has dropped below 27V. This will ensure an always ready battery, with it's useful operating life greatly extended.

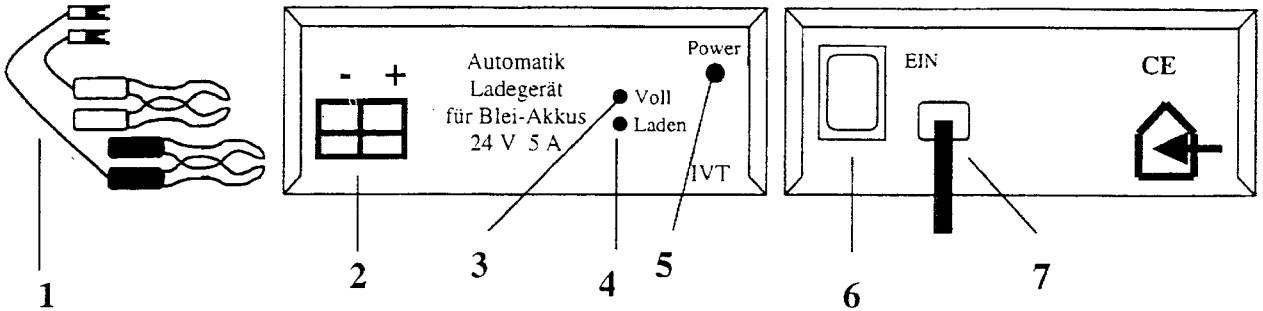
Use only:

- Rechargeable batteries that are suitable for constant voltage charging
- Rechargeable batteries with manufacturer's specs permitting the max. charge current of 5 A

Warning! Follow the battery manufacturers instructions carefully.

Equipment and control elements

1. Charging cable
2. Connection + – via charging cable
3. LED battery full indicator
4. LED charge level indicator
5. LED operating voltage 230 V~
6. On/Off switch
7. Mains cable 230 V~



Connection and Use

Check the Charger and wiring for visible damage before putting into use. Plug into the mains socket. As soon as the device is switched on at the mains switch, the red power LED lights up.

Charging

As soon as the battery is connected, the yellow LED charge level indicator lights up. When the end-of-charge voltage is reached, the yellow LED goes off and the green „full“ indicator lights up. Note: The device may remain connected to the battery.

Charger fails to function:

Check whether LED signal lamp illuminates

Warning: Unplug from mains socket and submit device for repair to authorised personnel only.

Specifications

Input Voltage:	230 V +/- 6% 50/60 Hz
Power on:	max. 50 A
Output Voltage:	27,6 V +/- 5%
Output and charging current:	5 A continuous
Efficiency:	approx. 85%
Short-circuit protection:	Pulsing cut-out
Safety Standard:	EN 60335
Insulation Voltage:	4,1 kV _{eff} 50 Hz/1 Min.
Interference Suppression:	EN/CE Standard
Measurements:	175 x 110 x 45 mm
Weight:	700 g

This pack includes: Charger with mains cord, charging cable and instructions

Subjekt to technical alteration. No liability assumed for typographical errors. 08/2001

IVT Innovative Versorgungs-Technik GmbH, Dienhof 14, D-92242 Hirschau
Tel. 0 96 22/7 12 21 or 7 12 22, Fax 0 96 22/7 12 20, www.IVT-Hirschau.de, eMail: Info@IVT-Hirschau.de