

Error mode

This battery charger is protected against short circuit and wrong polarity connection to the battery. In case of short circuit the charge process will not begin. If a battery is connected to the charger with wrong polarity, the 'ERROR' LED (7) will light and the charge process will not be begin.

Contents supplied

1 x battery charger
1x operating instructions

Disclaimer

Information in these operating instructions can be changed without prior notice.
ANSMANN ENERGY cannot accept liability for direct, indirect, accidental or other claims or consequential damages originated by using this charger and information given in these operating instructions.

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Operating instructions ALCT 12-4 Pro

The ANSMANN® **ALCT12-4 PRO** is a microcontroller based battery charger to charge 12V Lead Acid rechargeable batteries. It comes with **IP65 housing** and so its electronics is protected against dust and moisture.

These operating instructions will help you to use the **ALCT12-4 PRO** battery charger. So please read it carefully before use.

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Safety Measures and Precautions

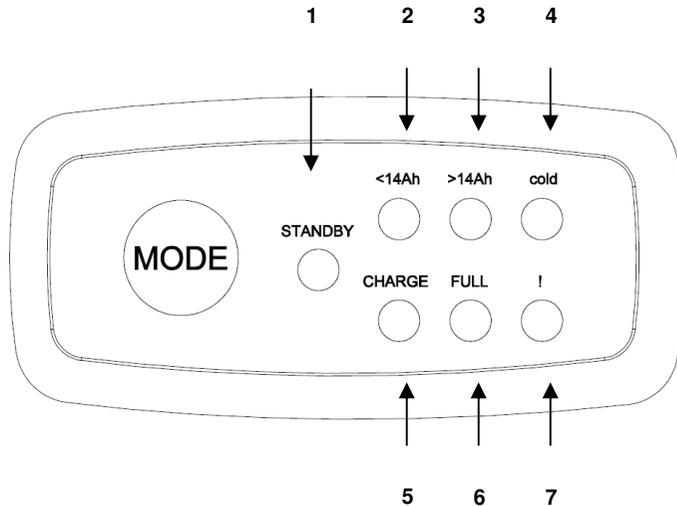
- ! Read the operating instructions carefully before use
- ! Charge only Lead Acid batteries. **DO NOT** charge primary cells, NiMh, NiCd, Lilon or LiPolymer batteries - **Risk of Explosion and chemical danger**
- ! Check the battery manufacturer's instructions. Do not charge batteries with too high charge current. - **Risk of Explosion and chemical danger**
- ! Connect the charger to a suitable mains supply only.
- ! Connect the charger to the battery with correct polarity.
- ! Do not charge hot batteries. Batteries must be at ambient temperature before charging.
- ! Not recommended for use in rain or hot conditions.
- ! Do not leave the charger unattended during operation.
- ! Do not open equipment or carry out repairs. Authorized personnel may only carry out repairs.
- ! Do not cover equipment or obstruct ventilation, otherwise it may over-heat. Do not expose to direct sunlight.
- ! Keep batteries, battery charger and cables away from combustible materials.
- ! Avoid sparking as there maybe gases present from the batteries.
- ! Never place the charger inside the engine compartment. Keep leads away from moving parts.

Technical data

ALCT12-4 Pro	ANSMANN® part no. 9294058/xx
Input voltage:	220-240 V 50/60 Hz
Battery Type:	12V Lead Acid rechargeable batteries with capacity from 1,2Ah-120Ah
Output at charge mode 1	14.4V/0.8A
Output at charge mode 2	14.4V/4A max.
Output at charge mode 3	14.7V/4A max.
Housing protection	IP65, protected against dust and moisture
Output protection	against short circuit and wrong polarity
Dimensions L x W x H in mm:	184 x 62 x 43,5mm

Connectors

- Mains cable with Euro plug**
To connect the charger to a 230V mains socket
- Output plugs (crocodile clips)**
Red = Positive, Black = Negative - to connect the battery
The crocodile clips can also be removed from the charge cable. With the o-ring-connectors the charge cable can be fixed to the battery with screws as well.



LED-indicators

- LED 'Standby'**
 - lights when charger is connected to the mains and in stand by mode
 - switches off during charge process
- LED '<14Ah'**
 - charge indicator for charge mode 1 (14.4V/0.8A), lights during the charge process and stays lit after charge end
- LED '>14Ah'**
 - charge indicator for charge mode 2 (14.4V/4A max), lights during the charge process and stays lit after charge end
- LED 'cold'**
 - charge indicator for charge mode 3 (14.7V/4A max), lights during the charge process and stays lit after charge end
- LED- 'Charge'**
 - charge indicator, lights during charge process and switches off after charge end
- LED- 'Full'**
 - charge end indicator, lights when battery is fully charged
- LED ' ! '**
 - lights in cases of wrong polarity

Product Description

The ANSMANN® **ALCT12-4 PRO** battery charger is suitable to charge 12V rechargeable Lead Acid batteries with a capacity of 1,2Ah - 120Ah. The output is protected against short circuit and wrong polarity.

Operation

- Please choose an appropriate area to charge the battery.
- Connect the charger to a 230V 50Hz mains socket.
- Stand by LED (1) lights
- Connect the output clips to the battery (red clip to Positive) before selecting the charge mode. If no battery is connected the charger will remain in 'STANDBY' by mode.
- To select the desired charge mode, as described below, press the 'MODE' button several times. The charger will begin the selected charging process immediately. The related charge mode LED (2-4) and the 'CHARGE' LED (5) will illuminate.
- You can change the charge mode at any time by pressing the 'MODE' button again and selecting another charge mode.
- The charge process can be stopped at any time by pressing the 'MODE' button several times until the 'STANDBY' LED (1) is lit.

Charge mode 1 (14.4V/0.8A)

Please select this charge mode if the capacity of the battery to be charged is below 14Ah. The battery will be charged with a maximum charge current of 800mA. During the charge process LED's 2 and 5 will light. Charging time depends on the battery capacity. The battery will be charged to a charge end voltage of 14.4V. After charge end, the 'CHARGE' LED (5) will switch off and the 'FULL' LED (6) will switch on. The charger automatically switches to a trickle charge mode and will restart charging with a max. charge current of 800mA if the battery is discharged by a load.

Charge mode 2 (14.4V/4A max.)

Please select this charge mode if the capacity of the battery to be charged is higher than 14Ah. The battery will be charged with a maximum charge current of 4A. During the charge process LED's 3 and 5 will light. Charging time depends on the battery capacity. The battery will be charged to a charge end voltage of 14.4V. After charge end the 'CHARGE' LED (5) will switch off and the 'FULL' LED (6) will switch on. The charger automatically switches to a trickle charge mode and will restart charging with a max. charge current of 800mA if the battery discharged by a load.

Charge mode 3 (14.7V/4A max.)

Please select this charge mode if the capacity of the battery to be charged is higher than 14Ah and if the battery is to be charged in cold ambient conditions (below 0°C). The battery will be charged with a maximum charge current of 4A. During the charge process LED's 4 and 5 will light. Charging time depends on the battery capacity. The battery will be charged to a charge end voltage of 14.7V. After charge end the 'CHARGE' LED (5) will switch off and the 'FULL' LED (6) will switch on. The charger automatically switches to a trickle charge mode and will restart charging with a max. charge current of 800mA if the battery discharged by a load.

Recharging of deeply discharged batteries

If a deeply discharged battery with less than 10.5V is connected to the charger, after selecting the charge mode, the battery will be charged with a reduced and pulsed charge current. Once the battery voltage reaches more than 10.5V the charge process continues with the normal charge process. This rescue program for dead batteries work automatically if a dead battery is detected. There is no special LED-indication for this.