

# Operation Manual

## 6 V/12 V Battery Charger

62971, 62972



Illustration similar, may vary depending on model

Read and follow the operating instructions and safety information before using for the first time.

Technical changes reserved!

Due to further developments, illustrations, functioning steps, and technical data can differ insignificantly.

Updating the documentation

If you have suggestions for improvement or have found any irregularities, please contact us.



The information contained in this document may alter at any time without previous notice. It is prohibited to copy or spread any parts of this document in any way without prior written allowance. All rights reserved.

The WilTec Wildanger Technik GmbH cannot be held accountable for any possible mistakes in this operating manual, nor in the diagrams and figures shown.

Even though, the WilTec Wildanger Technik GmbH has undergone biggest possible efforts to ensure that the operating manual is complete, faultless, and up to date, mistakes cannot be entirely avoided.

If you should find a mistake or wish to make a suggestion for improvement, we look forward to hearing from you.

Send an e-mail to:

[service@wiltec.info](mailto:service@wiltec.info)

or use our contact form:

<https://www.wiltec.de/contacts/>

The most recent version of this manual in various languages can be found in our online shop via:

<https://www.wiltec.de/docsearch>

Our postal address is:

WilTec Wildanger Technik GmbH  
Königsbenden 12  
52249 Eschweiler  
Germany

To return orders for exchange, repair, or other purposes, please use the following address. Attention! To allow for a smooth execution of your complaint or return, it is important to contact our customer service team before returning the goods.

Returns Department  
WilTec Wildanger Technik GmbH  
Königsbenden 28  
52249 Eschweiler

E-mail: **service@wiltec.info**

Tel: +49 2403 55592-0

Fax: +49 2403 55592-15



## Introduction

Thank you for purchasing this quality product. **To minimise the risk of injury we urge that our clients take some basic safety precautions when using this device. Please read the operation instructions carefully and make sure you have understood its content.**

Keep these operation instructions safe.

## Safety instructions

### Caution!

When using the appliance, some safety precautions must be observed to avoid injury and damage. Read the operating instructions and the safety instructions completely and carefully. Keep these instructions in a place where you can access them at any time. If you pass the appliance on to someone else, pass on these operating instructions and the safety regulations as well. We accept no liability for damage or accidents caused by failure to follow these instructions and the safety instructions.

- The series battery chargers are designed for charging lead-acid batteries, gel batteries and AGM batteries. They cannot be used as a DC power source or for any other purpose to prevent accidents such as fire and electric shock.
- The charger is only designed for a suitable power outlet. If the power cable needs to be extended, ensure that the extension cable is of sufficient size to supply power over the required distance.
- If the charger is interrupted while charging or other damage is caused by exposure to a violent impact, discontinue use immediately.
- The charger must not be disassembled. If repairs are necessary, they must be carried out by a qualified electrician. Improper reassembly may result in a fire hazard and/or electric shock.
- Disconnect the charger from all connected batteries and from the mains before cleaning the housing.
- Disconnect the charger from the mains after charging is complete. Then remove the battery connector.
- **Warning!** Explosive gases are produced during charging; therefore, avoid sparks and naked flames or smoking in the vicinity of the unit.
- Only charge the battery in ventilated rooms. It is strictly forbidden to use the unit in a vehicle or under the closed bonnet.
- The battery charger cannot be used for non-rechargeable batteries.
- If the mains cable is damaged, it must be replaced by a qualified electrician to avoid a hazard.
- The battery terminal that is not connected to the vehicle must be connected first. The other connection must be made on the vehicle, at a sufficient distance from the battery and the fuel line. The battery charger must then be connected to the power supply.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory, or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.
- Batteries store a large amount of energy. Be sure to avoid short-circuiting the battery or charger terminals, otherwise the energy stored in the battery will be released immediately. This may result in fire or injury.
- Do not allow children to play with the appliance.
- Cleaning and user maintenance must not be carried out by children without supervision.

**Components and delivery contents**

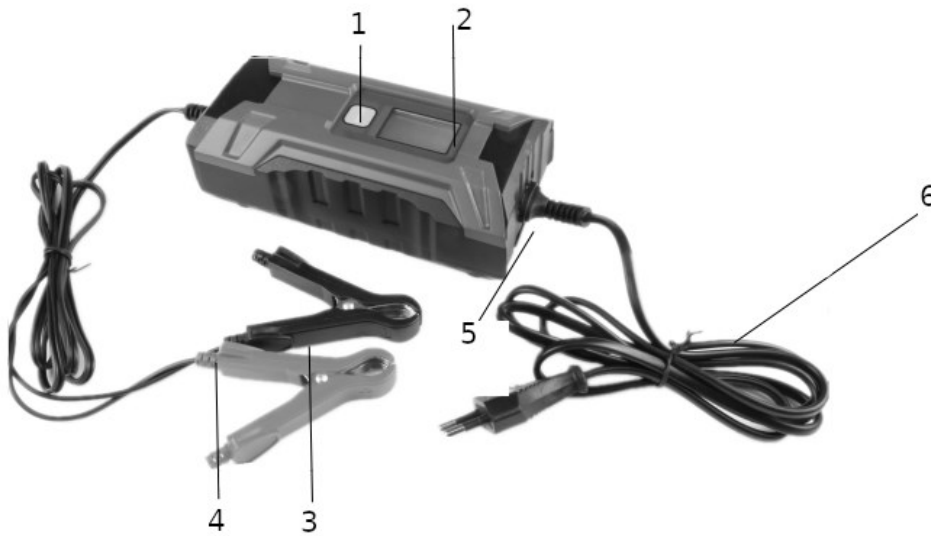


Figure 1

Nº	Name	Nº	Name
1	Function key	4	Charging cable, red (+)
2	LCD display	5	Hanging loop
3	Charging cable, black (-)		Mains connection cable

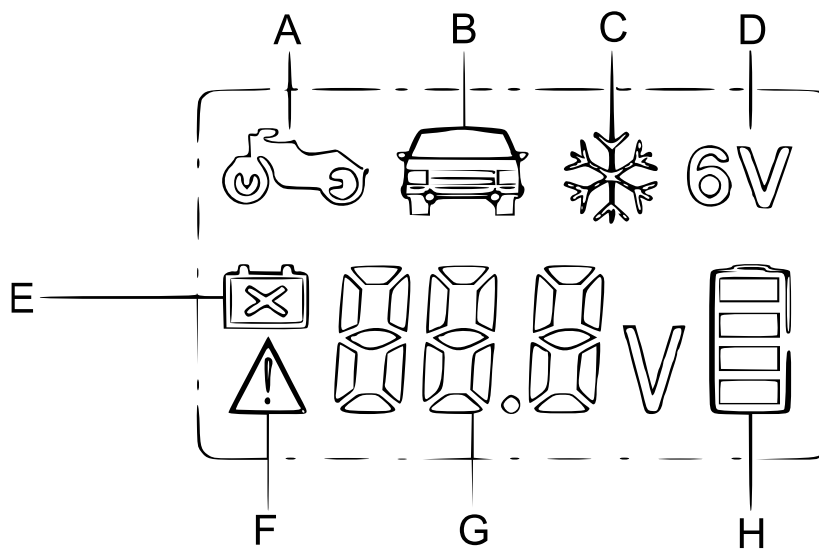


Figure 2

Letter	Explanation of the symbols in the LCD display
<b>A</b>	Charging a 12 V battery (lead-acid, AGM, and gel battery) with 2 A charging current
<b>B</b>	Charging a 12 V battery (lead-acid, AGM, and gel battery) with 4 A charging current
<b>C</b>	Charging a 12 V battery (lead-acid, AGM, and gel battery) in winter operation with 4 A charging current and an ambient temperature of $-20\text{ }^{\circ}\text{C}$ to $+5\text{ }^{\circ}\text{C}$ <b>Attention!</b> Do not charge frozen batteries.



<b>D</b>	Charging a 6 V battery (lead-acid, AGM and gel battery) with 2 A charging current
<b>E</b>	Defective battery
<b>F</b>	Terminals connected incorrectly (reverse polarity) or short circuit
<b>G</b>	Display of the battery voltage in volts
<b>H</b>	State of charge of the battery in percent (1 bar = 25 %) and charging process (Charging bar in the battery symbol flashes = battery is being charged; all charging bars light up = battery is fully charged)

### Notes on automatic charging

The charger is a microprocessor-controlled automatic charger, i.e., it is particularly suitable for charging maintenance-free batteries and for long-term and trickle charging of batteries that are not in constant use, e.g., for vintage cars, motorhomes, lawn tractors and the like. The integrated microprocessor enables charging in several stages. The last charging step, the trickle charge, keeps the battery capacity at 95–100 % and thus the battery always fully charged. The charging process does not need to be monitored. However, do not leave the battery unattended when charging it for a longer period so that you can disconnect it from the mains in case of a malfunction of the charger.

### Charging settings

Press the mode function button (fig. 1, 1) to set the charging functions 12 V/2 A (fig. 2, A), 12 V/4 A (fig. 2, B) and 12 V/4 A winter mode (fig. 2, C).

### Charging the battery

- Loosen or remove the battery plugs (if present) from the battery.
- Check the acid level in the battery. Top up with distilled water if necessary (if possible). **Important!** Battery acid is aggressive. Rinse off any acid splashes thoroughly with plenty of water and consult a doctor if necessary.
- First connect the red charging cable to the positive terminal of the battery.
- Then connect the black charging cable to the body of the vehicle, not to the battery and fuel line.
- **Warning!** Normally, the negative terminal of the battery is connected to the body and you can pass to the next step. In exceptional cases, however, it is possible that the positive terminal of the battery is connected to the body (positive earth). In this case, connect the black charging cable to the negative terminal of the battery. Then connect the red charging cable to a point that is a sufficient distance from the battery and the fuel line.
- After the battery has been connected to the charger, you can connect the charger to a 230 V ~ 50 Hz socket. The unit automatically detects the nominal voltage (6 V or 12 V) of the connected battery. The LCD display lights up green. Do not connect the unit to a socket that supplies a different mains voltage.  
**Important!** Dangerous explosive gases may be produced during charging. Therefore, avoid sparks and open flames during charging. There is a risk of explosion!
- If the battery terminals are connected the wrong way round, the interchange protection ensures that the battery and the charger are not damaged. In this case, disconnect the charger from the battery and the socket. Wait about 3 min and then restart the charging process.



## Calculation of the loading time


	80 %
8 Ah	2 h
20 Ah	5 h
40 Ah	10 h
80 Ah	20 h

Figure 3

The charging time depends on the state of charge of the battery. If the battery is completely discharged, the approximate charging time until the battery is approximately 80 % charged can be calculated using the following formula:

$$\text{Battery capacity (Ah)} \div \text{Charging time (h)} = \text{Charging current (A)}.$$

The charging current should be  $\frac{1}{10}$  to  $\frac{1}{6}$  of the battery capacity.

**Note!** Gases are released during the charging process. Make sure that the rooms are well ventilated.

As long as the unit is charging, the LCD display lights up green. When the battery has finished charging, the LCD display lights up blue.

## Stopping the charging of a battery

- Pull the plug out of the socket.
- First detach the black charging cable from the body.
- Then disconnect the red charging cable from the positive terminal of the battery.
- **Important!** In case of positive earth, first disconnect the red charging cable from the body and then the black charging cable from the battery.
- Screw or slide the battery plugs (if present) back into place.

## Testing 12 V batteries

Connect the charger to the battery. The LCD symbol “H” (fig. 2) indicates the state of charge (1 bar = 25 %). The battery voltage is shown on the LCD display.

## Overload switch-off

The charger is equipped with electronic protection against overcharging, short circuit, and reversed poles. In addition, one or more fine-wire fuses are fitted. If a fuse is defective, it must be replaced by a new fuse with the same ampere rating. If necessary, contact a qualified electrician.

## Battery maintenance and care

- Make sure that your battery is always securely fastened.
- A proper connection to the mains supply of the electrical system must be always ensured.
- Keep the battery clean and dry. Apply a thin layer of grease to the terminals with an acid-free and acid-resistant grease (e.g., Vaseline).
- For batteries that are not maintenance-free, check the acid level about every 4 weeks and top up with distilled water if necessary.

**Danger!** Always disconnect the mains plug before starting cleaning work.



## Cleaning

- Keep all safety devices, ventilation openings, and the housing as free of dirt and dust as possible. Wipe the unit with a clean cloth or blow it out with compressed air at low pressure.
- We recommend cleaning the unit immediately after each use.
- Clean the unit regularly with a damp cloth and a little soft soap. Do not use any cleaning agents or solvents; these could attack the plastic parts of the unit. Make sure that no water can penetrate the appliance. The ingress of water into a power tool increases the risk of electric shock.
- The charger should be placed in a dry room for storage. Any corrosion must be removed from the charging terminals.

## Maintenance

There are no parts inside the unit that require additional maintenance.

## Troubleshooting

If the unit is operating properly, you should not have any problems with malfunctions or errors. In case of malfunctions or errors, please check the following before contacting a specialist:

Fault	Possible cause	Possible solution
Unit does not charge	Charger terminals incorrectly connected	Connect the red clamp to the positive terminal and the black clamp to the body.
	Contact between the charger terminals	Prevent contact.
	Battery defective	Have the battery checked by a specialist and replaced if necessary.

## Technical data

<b>Input voltage (V)</b>	220–240
<b>Frequency (Hz)</b>	50
<b>Rated power (W)</b>	max. 70
<b>Rated output voltage (V)</b>	6 / 12 (DC)
<b>Rated output current at 6 V (A)</b>	2
<b>Rated output current at 12 V (A)</b>	2 (slow charging) / 4 (fast charging)
<b>Battery capacity (Ah)</b>	4–120

## Disposal regulations

EU guidelines regarding the disposal of scrap electric appliances (WEEE, 2012/19/EU) were implemented in the law related to electrical and electronic equipment and appliances.

All WiTec electric devices that fall under the WEEE regulations are labelled with the crossed-out wheeled waste bin logo. This logo indicates that this electric equipment must not be disposed with the domestic waste.

The company WiTec Technik GmbH has been registered in the German registry EAR under the WEEE-registration number DE45283704.

Disposal of used electrical and electronic appliances (intended for use in the countries of the European Union and other European countries with a separate collection system for these appliances).

The logo on the article or on its packaging points out that this article must not be treated as normal household waste but must be disposed to a recycling collection point for electronic and electrical waste equipment. By contributing to the correct disposal of this article you protect the environment and the health of your fellow men. Environment and health are threatened by inappropriate disposal.



Material recycling helps reduce the consumption of raw materials.

Additional information on recycling this article can be provided by your local community, municipal waste disposal facilities, or the store where you purchased the article.

Address:  
WiTec Wildanger Technik GmbH  
Königsbenden 12 / 28  
D-52249 Eschweiler

Important notice:

The reprint or reproduction, even of excerpts, and any commercial use, even in part, of this instruction manual require the written permission of WiTec Wildanger Technik GmbH.