



User Manual



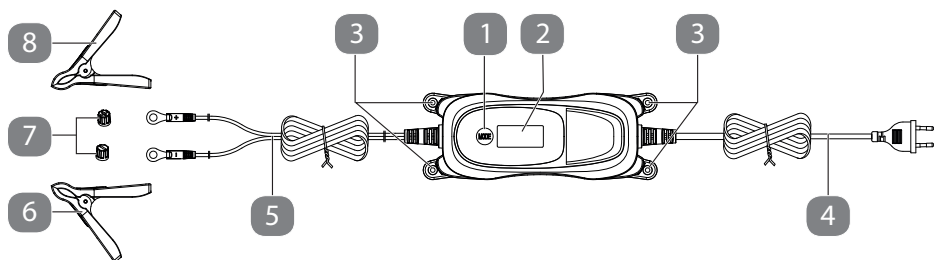
CAR BATTERY CHARGER



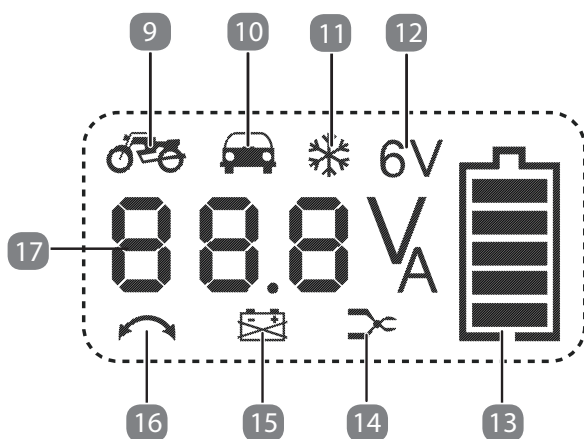
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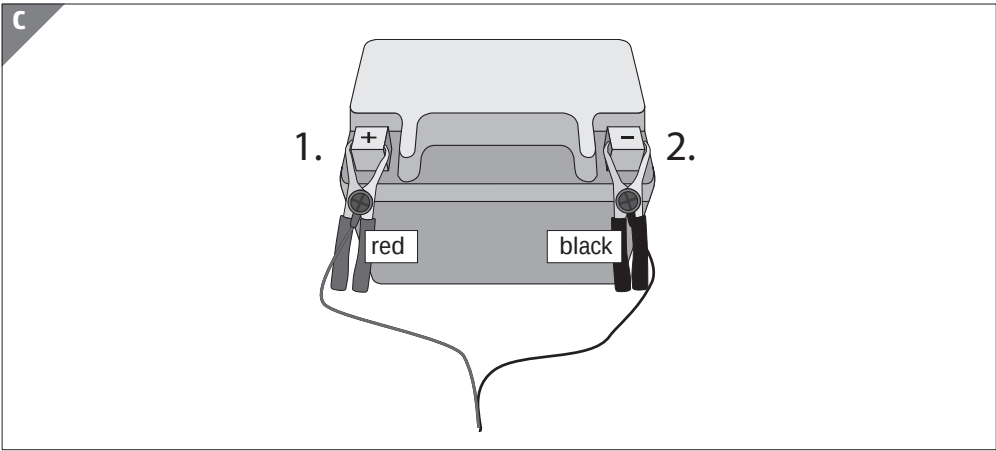
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A



B





Device parts

- 1 **MODE** button
- 2 Display
- 3 Fixing holes
- 4 Mains cable with mains plug
- 5 Connection cable with ring terminals
- 6 Negative terminal clamp (black), with connection cable
- 7 Fixing screws
- 8 Positive terminal clamp (red), with connection cable
- 9 + 10 **12 V / 0.8 A** charging mode active – standard charging
- 9 + 10 + 11 **12 V / 0.8 A / COLD** charging mode active – standard charging at low ambient temperatures
- 10 **12 V / 5 A** charging mode active – rapid charging
- 11 **12 V / 5 A / COLD** charging mode active – rapid charging at low ambient temperatures
- 12 **6 V / 0.8 A** charging mode active – standard charging
- 13 Charge display (see Page <?>)
- 14 Fault display (no battery connected, short circuit)
- 15 Battery defective
- 16 Fault display (incorrectly connected terminals)
- 17 Charging current display/
current battery voltage display

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About this user manual



Thank you for choosing our product. We hope you enjoy using this appliance.

Read the safety instructions carefully before using the appliance for the first time. Note the warnings on the appliance and in the user manual.

Always keep the user manual close to hand. If you sell the appliance or give it away, please ensure that you also pass on this user manual. It is an essential component of the product.

Explanation of symbols

If a block of text is marked with one of the warning symbols listed below, the hazard described in that text must be avoided to prevent the potential consequences described there from occurring.



This keyword denotes a high-risk hazard situation which will result in death or serious injury if it is not avoided.



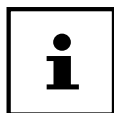
This keyword denotes a medium-risk hazard situation which can result in death or a serious injury if it is not avoided.



This keyword denotes a low-risk hazard situation which can result in moderate or minor injuries if it is not avoided.



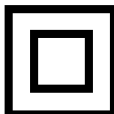
This keyword serves as a warning for possible damage to property.



Additional information on using the appliance!



Read the user manual and observe its instructions.



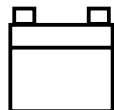
Protection class II

Electrical appliances in protection class II are electrical appliances that permanently have double and/or reinforced insulation and do not have any connection options for a protective earth. The housing of an electrical appliance in protection class II that is enclosed in insulated material can partially or fully act as the additional or reinforced insulation.



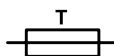
Indoor use

Devices with this symbol are only suitable for use indoors.



Battery symbol

The information next to this symbol defines the maximum and minimum current for the batteries to be charged..



Safety fuse

Appliances with this symbol have a protective fuse that blows when the rated current (2 A) is exceeded and breaks the electrical circuit.



Symbol for direct current



Positive polarity



Negative polarity

IP65

This appliance offers protection class IP65 in compliance with DIN EN 60529. This means:

- The appliance is dust-proof and completely protected against contact.
- The appliance is protected against water jets from any angle.



Declaration of conformity

Products that feature this symbol meet the requirements of the EC directives (see section 'Declaration of conformity')

Proper use

This appliance is a primary-side switched charging appliance with pulse trickle charging. It is suitable for charging and trickle-charging the following rechargeable 6 V or 12 V lead batteries containing an electrolyte solution or gel as well as AGM batteries, which are used in motor vehicles:

- 6 V: Capacity from 1.2 Ah to 14 Ah;
- 12 V: Capacity from 1.2 Ah to 120 Ah;

It can also regenerate fully discharged 12 V batteries (regeneration mode).

The appliance is not suitable for recharging lithium batteries for vehicles, motorcycles or boats.

Use the charger only to charge the battery types specified in these instructions. No other batteries may be charged with the charger.

When using other types of batteries, there is a risk of injury, and the charger could be damaged.

Please note the battery manufacturer's charging recommendations.

The charger charges batteries automatically in several stages and can thus recharge them up to approximately 100% of their capacity.

You can also connect a battery that has not been used for a long time to the charger in order to keep it charged.

The appliance is only intended for private use and not for industrial/commercial use.

Please note that we shall not be liable in cases of improper use:

- Do not modify the appliance without our consent and do not use any auxiliary equipment that we have not approved or supplied.

- Only use replacement parts or accessories that we have supplied or approved.
- Comply with all the information in this user manual, especially the safety information. Any other use is considered improper and can cause personal injury or property damage.
- Do not use the appliance in potentially explosive atmospheres. This includes petrol stations, fuel storage areas and areas where solvents are processed. This appliance must also not be used in areas with particle-laden air (for example, flour or wood dust).
- Do not expose the appliance to extreme conditions. Avoid:
 - high humidity or wet conditions
 - extremely high or low temperatures
 - direct sunlight
 - open flames.

Safety information



Risk of injury!

Risk of injury to persons with limited physical, sensory or mental abilities (for example, partially disabled people or older people with limited physical or mental abilities) or to those without experience and knowledge (such as older children).

- Keep the appliance and its accessories out of the reach of children.

- This appliance may be used by children over the age of 8 and by persons with reduced physical, sensory or mental abilities or by those with limited experience and/or knowledge, provided that they are supervised or have been instructed in the safe use of the appliance and have understood the associated risks.
- Children must not be allowed to play with the appliance.
- Cleaning and user maintenance must not be carried out by children, unless they are aged 8 or over and are supervised.
- Children younger than 8 should be kept away from the appliance and the mains cable.
- Keep all packaging materials used (bags, pieces of polystyrene etc.) out of the reach of children.
- Do not allow children to play with the packaging material.
- Never leave the charger unattended when the appliance is in use.



Risk of electric shock/short circuit!

There is a risk of electric shock/short circuit from live parts.

- Only connect the appliance to a properly installed, earthed and easily accessible socket that is close to where you are using the appliance. The local mains voltage must correspond to the technical specifications for the appliance.
- The power socket must be easily accessible so that you can unplug the appliance from the mains quickly if necessary.
- Switch off the power socket and pull out the plug after each use, before cleaning and during periods when the appliance is left unattended.
- Always hold the plug to pull it out, never pull the cable.
- Do not allow the mains cable to come into contact with hot objects or surfaces (e.g. cooker hob).

- Do not use if the appliance or the mains cable is visibly damaged or if the appliance has been dropped.
- Appliances connected to the mains during a thunderstorm may be damaged by power surges. You should therefore always unplug the plug during thundery conditions.
- Check the appliance and the mains cable for damage before using the appliance for the first time, and after each use.
- Completely unwind the mains cable.
- Do not kink or crush the mains cable.
- Contact the Service Centre without delay if the appliance has been damaged during transport.
- Do not, under any circumstances, make any unauthorised modifications to the appliance or try to open a component and/or repair it yourself.
- The mains cable should only be repaired by an authorised repair workshop. Otherwise, contact our Service Centre, to avoid risks.
- Always unplug the appliance plug from the power socket before cleaning or servicing.
- For a built-in battery in a vehicle, ensure that the vehicle is not running and is located in a protected interior (e.g. garage, carport, dry dock). Switch the ignition off and park the vehicle, e.g. with the handbrake applied (car).

The appliance must not be immersed in water or other liquids, or held under running water, because this could cause an electric shock.

- Unplug the appliance from the socket if:
 - you are cleaning the appliance,
 - the appliance is damp or wet,
 - the appliance is unattended,
 - you are no longer using the appliance.
- Do not let the appliance come into contact with water or other liquids. Keep the appliance, the mains cable and the mains plug away from wash basins, sinks and similar.
- Do not place any objects filled with liquid (e.g. vases or drinks) on or near the appliance.
- Never touch the appliance or the mains cable with wet hands.
- Use the appliance indoors only. Never operate the appliance outdoors.

Setting up the appliance

- The appliance should only be placed on stable, level and well-ventilated surfaces.
- Never place the appliance on the edge of a table – it could tip over and fall.
- Ensure that the mains cable does not become a tripping hazard and do not use an extension cable.
- Use the appliance only at an ambient temperature of 0°C–40°C.
- The appliance must not be exposed to prolonged direct sunlight.
- Do not expose the charger to long-lasting temperature effects above 40°C. The charger's output power falls automatically at higher temperatures.

- Do not cover the charger, otherwise it may overheat and become damaged.

Charging process



Risk of explosion!

Improper handling of the charger can result in sparks and trigger an explosion.

Gaseous hydrogen may flow out of the battery during charging and trickle charging. Contact with an open flame can trigger a highly explosive gas detonation.

- Please note the manufacturer's charging recommendations.
- Observe the battery charging specifications.
- Use only battery types suitable for the charger.
- Ensure that ventilation is adequate.
- Carry out the charge and trickle charge process in a well-ventilated space sheltered from the weather.
- In addition, ensure that there is no open flame (fire, embers or sparks) when charging or trickle charging.
- Do not smoke in the immediate vicinity of the charger.
- Do not store any explosive or combustible materials, e.g. petrol or solvents in the vicinity, as they could ignite while the charger is in use.
- When using cables and electrical appliances, make sure that there are no sparks or electrostatic discharge.

- Avoid the creation of sparks when connecting and disconnecting the charger:
 - Avoid an electrical short circuit when connecting the charger to the battery. Always connect the negative terminal connection cable (black) to the battery's negative terminal. Always connect the positive terminal connection cable (red) to the battery's positive terminal.
 - Connect the mains cable at a distance from the battery and fuel pipe.
 - After charging, disconnect the appliance first from the mains power. Only after that, remove the terminal clamps from the battery.

Handling rechargeable batteries



Risk of chemical burns!

Battery acid can cause strong chemical burns.

- Use acid-resistant protective gloves, clothes and eye protection.
- Do not turn batteries over as acid can leak from the gas release openings.
- If a cell has developed a leak, the liquid must not touch the skin or eyes.
If you do come into contact with the liquid, rinse the affected area with plenty of water. Consult a doctor immediately.

- Remove the leaking battery liquid with a dry, absorbent cloth and avoid contact with skin, for example, by using acid-proof protective gloves.

General information

- Do not use the charging and trickle charging process on batteries that cannot be recharged.
- Do not use frozen rechargeable batteries.
- Do not use damaged or corroded rechargeable batteries.
- Never dismantle, open or cut up rechargeable cells or batteries.
- Never expose cells or batteries to strong heat or fire. Avoid storage in direct sunlight.
- Never short-circuit cells or batteries.
- At all times observe the plus (+) and minus (-) signs on the cells, batteries and appliances. Ensure proper use.
- Store cells and batteries out of the reach of children.
- Use the charger only for 6 V or 12 V rechargeable lead batteries containing an electrolyte solution or gel, or AGM batteries.
- Never charge lithium batteries.
- Store the technical documentation on battery charging together with this user manual for future reference.

Package contents



Risk of choking and suffocation!

There is a risk of choking and suffocation due to swallowing or inhaling small parts or plastic wrap.

- Keep the plastic packaging out of the reach of children.
- Do not let children play with the packaging material.
 - Remove the product from the packaging and remove all packaging material.
 - Check your purchase to ensure that all items are included. If anything is missing, please contact our Service team within 14 days of purchase.
 - Before each use, check the car battery charger for any damage.
 - Contact our Service Centre if you find any damage.

The following items are supplied with your product:

- Car battery charger
- User manual and warranty documents

Mounting on the wall

The appliance has fixing holes so that you can attach it to the wall.



Risk of electric shock!

There is a risk of electric shock from live parts of the appliance.

- Before assembly and maintenance work and before cleaning the appliance, always unplug the mains plug **4** from the mains socket.

There is a risk of electric shock from live electric lines.

- Do not drill holes into areas which may contain embedded power, gas or water lines. Use a suitable search tool to locate these lines.
- Select a suitable location on the wall. There must be adequate ventilation.
- Select four rawl plugs and screws that are suitable for the wall and size of the fixing holes **3**.
- Mark the drill holes on the wall.
- Drill the four holes and insert the rawl plugs.
- Screw the appliance tightly.

Operation

- Remove the product from the packaging and remove all the packaging material and the protective film on the display.

Connecting the charger to the battery

The charger will automatically recognise the battery type connected (6 V or 12 V battery).



Risk of electric shock!

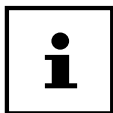
There is a risk of electric shock from live parts of the appliance.

- Always unplug the mains plug **4** from the mains socket before attaching the connection clamps to the terminals on the battery or removing them.



Before disconnecting a car or motorcycle battery, first consult the vehicle's instruction manual on the potential consequences of disconnecting the battery.

- If the battery that you wish to charge is connected in the vehicle, first disconnect the vehicle's negative terminal connection cable (black) **6** from the battery's negative terminal before the charging or trickle charging process. The battery's negative terminal is usually connected to the vehicle's bodywork.
- Then disconnect the vehicle's positive terminal connection cable (red) **8** from the battery's positive terminal.
- Then attach the charger's positive terminal clamp (red) to the battery's positive terminal and then the negative terminal clamp (black) to the battery's negative terminal, at a distance from the battery and the fuel pipe (see **fig. C**).
- Connect the battery charger's mains cable **4** to a mains socket.



You can unscrew the terminal clamps on the battery charger to securely connect it to the battery with the ring terminals, for example, for trickle charging in winter.

Select charging mode

Select a charging mode depending on the battery type and ambient temperature. You can also recharge a completely discharged battery (Page 29).

The charger's electronics start the charging process after connecting the battery in the 6 V or 12 V standard charging mode—depending on the battery type.

- To select a charging mode, press the **MODE** button **1** several times. The symbol of the respective mode and charging current will be shown on the display **2**.
- The charger recognises the standard 6 V or 12 V charging mode suitable for the battery type. Therefore, not every mode can be selected for every battery.
- After selecting a mode, the charger implements it. Now the display indicates the current voltage. If a battery remains attached to the charger once charging is complete, the charger automatically switches to trickle charging. The battery is also trickle charged if another mode is selected.

Status displays

- While the appliance is switched on, the background lighting is blue.
- During charging, the selected charging mode, the current battery voltage and the charge level of the battery are displayed.
- During faulty appliance use (e.g. by short circuit), fault symbols are displayed, and the appliance will switch to standby mode if applicable (see also “Protection against wrong polarity” on page 31.).

Operation

LED	Modus
6V	6 V / 0.8 A standard charging mode: Charging a 6 V battery Recommended battery capacity 1.2–14 Ah, 0.8 A charging current
 	12 V / 0.8 A standard charging mode: Charging a 12 V motorcycle battery or 12 V car battery Recommended battery capacity 1.2–120 Ah, 0.8 A charging current
  	12 V / 0.8 A / COLD standard charging mode: Charging process for a 12 V motorcycle battery or 12 V car battery at low ambient temperatures Recommended battery capacity 1.2–120 Ah, 0.8 A charging current
	12 V / 5 A rapid charging mode: Rapid charging 12 V car battery Recommended battery capacity 1.2–120 Ah, 5 A charging current
	12 V / 5 A / COLD rapid charging mode: Rapid charging at low ambient temperature only for suitable 12 V batteries Recommended battery capacity 1.2–120 Ah, 5 A charging current
	Charge level: Frame flashing, 1 to 5 bars are displayed: Charging process active
	Charge level: 5 bars are displayed, frame is displayed continuously: The battery is fully charged. Trickle charging for a fully charged battery.
	Fault: Battery defective
	Fault: reversed terminal clamps
	Fault: no battery connected, short circuit

Display	Battery	Charging current	Final charge voltage	Suitable for battery type
			Attention! Observe the battery manufacturer's charging recommendations.	Charging lithium batteries is prohibited!
 	DC 12 V motorcycle and DC 12 V car	0.8 A	14.3 V	1.2 Ah–120 Ah Lead acid; lead; AGM, GEL; EFB; wet
  	DC 12 V motorcycle and DC 12 V car	0.8 A	14.8 V	1.2 Ah–120 Ah Lead acid; lead; AGM, GEL; EFB; wet
	DC 12 V car	5 A	15.1 V	1.2 Ah–120 Ah Lead; AGM, GEL; EFB
	DC 12 V car	5 A	15.5 V	1.2 Ah–120 Ah AGM, GEL
6V	DC 6 V Motorcycle and boat	0.8 A	7.6 V	1.2 Ah–14 Ah Lead, AGM; GEL; EFB
			Attention! Observe the battery manufacturer's charging recommendations.	Charging lithium batteries is prohibited!

6 V / 0.8 A charging mode (6 V batteries up to max. 14 Ah)



You can identify the battery type from the type plate on your battery. Observe the battery charging recommendations.

The charger will normally recognise the 6 V standard charging mode suitable for the battery type. If the battery is not recognised, proceed as follows:

- Set this mode to charge 6 V batteries with a capacity under 14 Ah.
- Press the **MODE** (1) button several times to select **6 V / 0.8**.

The **6V** (12) symbol is shown on the display (2).

If you do not then set another mode, the electronics automatically start the charging process with a charging current of around 0.8 A.

Once the battery is fully charged, the frame around the battery icon (13) stops flashing and the entire battery symbol lights up continuously. Trickle charging takes place in this state.

12 V / 0.8 A charging mode (12 V batteries up to max. 120 Ah)



You can identify the battery type from the type plate on your battery. Observe the battery charging recommendations.

The charger will normally recognise the 12 V standard charging mode suitable for the battery type. If the battery is not recognised, proceed as follows:

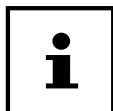
- Set this mode to charge batteries with a capacity under 120 Ah.
- Press the **MODE** button (1) several times to select 12 V / 0.8 A.

The  (9) and  (10) symbols are shown on the display (2).

If you do not then set another mode, the electronics automatically start the charging process with a charging current of around 0.8 A.

Once the battery is fully charged, the frame around the battery icon (13) stops flashing and the entire battery symbol lights up continuously. Trickle charging takes place in this state.

12 V / 0.8 A charging mode (12 V batteries up to max. 120 Ah, at low temperatures)



You can identify the battery type from the type plate on your battery. Observe the battery charging recommendations.

The charger will normally recognise the 12 V standard charging mode suitable for the battery type. If the battery is not recognised, proceed as follows:

- Set this mode to charge batteries with a capacity of less than 120 Ah and low ambient temperatures. Set this mode also to charge suitable gel and AGM batteries (absorbent glass mat: batteries in which the electrolyte is held in glass fibre mats) with a capacity of up to 1.2 Ah.
- Press the **MODE** button **1** several times to select **12 V / 0.8 A / COLD**.

The  **9**,  **10** and  **11** symbols are shown on the display **2**.

If you do not then set another mode, the electronics automatically start the charging process with a charging current of around 0.8 A.

Once the battery is fully charged, the frame around the battery icon **13** stops flashing and the entire battery symbol lights up continuously. Trickle charging takes place in this state.

12 V / 5 A charging mode (rapid charging for 12 V batteries from 1.2 Ah to 120 Ah)



You can identify the battery type from the type plate on your battery. Observe the battery charging recommendations.

Proceed as follows:

- Set this mode to charge batteries with a capacity of 1.2 Ah and over and normal ambient temperatures.
- Press the **MODE** button **1** several times to select 12 V / 5 A mode.

The  **10** symbol is shown on the display **2**.

If you do not then set another mode, the electronics automatically start the charging process with a charging current of around 5 A.

Once the battery is fully charged, the frame around the battery icon **13** stops flashing and the entire battery symbol lights up continuously. Trickle charging takes place in this state.

12 V / 5 A / Cold (charging process for 12 V batteries, from 1.2 Ah to 120 Ah, at low temperatures)



You can identify the battery type from the type plate on your battery. Observe the battery charging recommendations.

Proceed as follows:

- Set this mode to charge batteries with a capacity of 1.2 Ah and over and low ambient temperatures. Set this mode also to charge suitable gel and AGM batteries (absorbent glass mat: batteries in which the electrolyte is held in glass fibre mats) with a capacity of 1.2 Ah and over.
- Press the **MODE** button **1** several times to select **12 V / 5 A / COLD** mode.

The  **11** symbol is displayed.

If you do not then set another mode, the electronics automatically start the charging process with a charging current of around 5 A.

Once the battery is fully charged, the frame around the battery icon **13** stops flashing and the entire battery symbol lights up continuously. Trickle charging takes place in this state.

Regenerating/recharging fully discharged 12 V batteries (regeneration mode)

- Connect the fully discharged battery to the charger and start the charging process.

In this regeneration mode, the battery is charged until the charger measures a terminal voltage that is high enough for a regular charging mode. The appliance then switches automatically to an appropriate charging mode and continues charging.

Description of the charging cycle

Charging mode	Charging step	Battery voltage
6 V / 0.8 A 6V	Fully charged	At a battery voltage from 3.7 to 7.6 V, the charging process takes place with a charging current of 0.8 A
	Changeover to trickle charging	At a battery voltage ≥ 6.4 V, the battery is kept at the fully charged level with a trickle charging current of 50–150 mA (0.05–0.15 A).
	Continuation of the charging process	At a battery voltage of < 6.4 V, the charging process continues with a charging current of 0.8 A.
12 V / 0.8 A 	Fully charged	At a battery voltage from 7.5 to 14.3 V, the charging process takes place with a charging current of 0.8 A
	Changeover to trickle charging	At a battery voltage ≥ 12.8 V, the battery is kept at the fully charged level with a trickle charging current of 50–150 mA (0.05–0.15 A).
	Continuation of the charging process	At a battery voltage of < 12.8 V, the charging process continues with a charging current of 0.8 A.
12 V / 0.8 A / COLD 	Fully charged	At a battery voltage from 7.5 to 14.3 V, the charging process takes place with a charging current of 0.8 A
	Changeover to trickle charging	At a battery voltage ≥ 12.8 V, the battery is kept at the fully charged level with a trickle charging current of 50–150 mA (0.05–0.15 A).

Description of the charging cycle

Charging mode	Charging step	Battery voltage
	Continuation of the charging process	At a battery voltage of < 12.8 V, the charging process continues with a charging current of 0.8 A.
12 V / 5 A 	Impulse charging (reactivation of the battery)	At a battery voltage from 7.5 to 10.5 V, the charging process takes place with a charging current of 0.8 A.
	Continuous charging	At a battery voltage of 10.5 V to 14.1 V, the charging process continues with a charging current of 5 A.
12 V / 5 A 	Continuous charging	At a battery voltage of 14.1 V to 14.8 V, the charging process continues with a charging current of 3.0 A.
		At a battery voltage of 14.8 V to 15.1 V, the charging process continues with a charging current of 0.8 A.
	Changeover to trickle charging	At a battery voltage of ≥ 12.8 V, the battery is kept at the fully charged level with a trickle charging current of 50–150 mA (0.05–0.15 A).
	Continuation of the charging process	At a battery voltage of < 12.8 V, the charging process continues with a charging current of 0.8 A.
Reactivation for 12 V batteries	Impulse charging for reactivation	During the 90-second measurement at a battery voltage of 7.5 V to 10.5 V, the charging process takes place with an impulse charging current of 0.8 A.
	Continuous charging	At a battery voltage of ≥ 10.5 V, the charging process continues with a charging current of 5 A.
12 V / 5 A / COLD 	Impulse charging (reactivation of the battery)	At a battery voltage from 7.5 to 10.5 V, the charging process takes place with a charging current of 0.8 A.
	Continuous charging	At a battery voltage of 10.5 V to 14.1 V, the charging process continues with a charging current of 5 A.

Charging mode	Charging step	Battery voltage
12 V / 5 A / COLD 	Continuous charging	At a battery voltage of 14.1 V to 14.8 V, the charging process continues with a charging current of 3.0 A.
		At a battery voltage of 14.8 V to 15.5 V, the charging process continues with a charging current of 0.8 A.
	Changeover to trickle charging	At a battery voltage of ≥ 12.8 V, the battery is kept at the fully charged level with a trickle charging current of 50–150 mA (0.05–0.15 A).
	Continuation of the charging process	At a battery voltage of < 12.8 V, the charging process continues with a charging current of 0.8 A.

Protection against wrong polarity

The appliance is protected against improper start-up. In case of a faulty connection or if the battery voltage falls below 7.5 V for 12 V batteries and below 3.7 V for 6 V batteries, the appliance remains in standby mode.

- In the event that the terminals have the wrong polarity (are connected incorrectly),  **16** is displayed.
- If the terminal clamps are incorrectly connected and the electric circuit is not closed, the display **2** shows  **14**.
- If the battery itself is faulty,  **15** lights up on the display.

You cannot operate the appliance.

Overheating cut-out

If the appliance temperature exceeds 115°C, the overheating cut-out is triggered, and the charging process is interrupted until the appliance has cooled off. The display continues to show the charge level.

Disconnecting the battery



Risk of explosion!

Improper handling of the charger can result in sparks and trigger an explosion.

Gaseous hydrogen may flow out of the battery during charging and trickle charging. Contact with an open flame can trigger a highly explosive gas detonation.

- Disconnect the appliance from the mains before disconnecting the terminal clamps on the battery.
- Observe the correct sequence when disconnecting the battery terminal clamps.

When disconnecting the battery from the charger, proceed in the following order:

- After charging, disconnect the appliance from the mains power.
- Detach the negative terminal clamp (black) from the battery's negative terminal.
- Detach the positive terminal clamp (red) from the battery's positive terminal.
- Reconnect the vehicle's positive terminal connection cable to the battery's positive terminal.
- Reconnect the vehicle's negative terminal connection cable to the battery's negative terminal.

Switching off

- Switch the charger off by pulling out the mains plug.

Cleaning and care



Risk of electric shock!

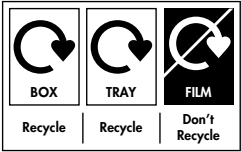
There is a risk of electric shock from live parts of the appliance.

- Before assembly and maintenance work and before cleaning the appliance, always unplug the mains plug from the mains power supply.
- Before cleaning, pull the mains plug **4** out of the socket. Use a soft, dry cloth to clean the appliance. Avoid the use of chemical solutions and cleaning products because these may damage the appliance surface and/or markings.
- After longer periods of use, also clean the terminal clamps **6**/**8** with a dry cloth to maintain optimum contact with the terminals.

Storing/transporting

- When you are not using the appliance, unplug the mains plug **4** and store the appliance at between –20°C and 60°C in a dry, dust-free environment that is not exposed to direct sunlight.
- Do not store the appliance within the reach of children.
- To avoid damage during transport, we recommend that you use the original packaging.

Disposal



PACKAGING

The product has been packaged to protect it from damage in transit. The packaging is made of materials that can be recycled in an environmentally friendly manner.



DEVICE

All old appliances marked with the symbol illustrated must not be disposed of in normal household waste. If you can no longer use your electrical device, dispose of it in accordance with the legal provisions applicable in your area. This involves separating the materials in the device for the purpose of recycling and minimising the environmental impact.

Take old devices to a collection point for electrical scrap or a recycling centre.

Contact your local waste disposal company or your local authority for more information on this subject.



BATTERIES

Do not dispose of used batteries/rechargeable batteries with household waste. Batteries/rechargeable batteries must be disposed of correctly. Retailers that sell batteries and local collection points provide containers in which you can dispose of them.

Contact your local waste disposal company or your local authority for more information on this subject.

Technical specifications

Model	MD 19787
Input	220–240 V ~ 50 Hz, 0.8 A
Output during standby	< 0.8 W
Electrical protection class	II
Voltage tolerance	± 0.3 V
Current tolerance	± 10% (± 15% for 0.8 A)
Trickle charge current	50–150 mA
Cut-off voltage	approx. 7.6 V (6 V / 0.8 A charging mode) approx. 14.3 V (12 V / 0.8 A charging mode) approx. 14.8 V (12 V / 0.8 A / Cold charging mode) approx. 15.1 V (12 V / 5 A charging mode) approx. 15.5 V (12 V / 5 A / Cold charging mode)
Output for batteries with rated voltages of	6 V or 12 V
Charging current	approx. 0.8 A / 5 A (12 V batteries) approx. 0.8 A (6 V batteries)
Suitable for battery type	12 V: 1.2 Ah–120 Ah 6 V: 1.2 Ah–14 Ah
Protection class	IP65
Cable length (mains cable with mains plug)	1.80 m
Cable length (charging cable with battery terminals)	1.90 m
Operating temperature	0°C to +40°C
Storage temperature	–20°C to +60°C

EU Declaration of conformity



MEDION AG hereby declares that this product conforms with the essential requirements and the remaining relevant regulations:

- EMC Directive 2014/30/EU
- Low Voltage Directive 2014/35/EU
- Ecodesign Directive 2009/125/EC (and Ecodesign Regulation 2019/1782)
- RoHS Directive 2011/65/EU

Service information

Please contact our Customer Service team if your device ever stops working the way you want or expect it to. There are several ways for you to contact us:

- In our Service Community, you can meet other users, as well as our staff, and you can exchange your experiences and pass on your knowledge there. You will find our Service Community at community.medion.com.
- Alternatively, use our contact form at www.medion.com/contact.
- You can also contact our Service team via our hotline or by post.

Opening times	Hotline number UK
Mon – Fri: 08.00 – 20.00	① 0333 3213106
Sat – Sun: 10.00 – 16.00	Hotline number Ireland
	① 1 800 992508
Service address	
MEDION Electronics Ltd. 120 Faraday Park, Faraday Road, Dorcan Swindon SN3 5JF, Wiltshire United Kingdom	



You can download this and many other sets of operating instructions from our service portal at www.medion.com/gb/service/start/.

You will also find drivers and other software for a wide range of devices there.

You can also scan the QR code on the side of the screen, to download the operating instructions onto your mobile device from the service portal.

Legal Notice

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Date: 19.06.2020

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MEDION AG

Am Zehnthof 77

45307 Essen

Germany

Please note that you cannot use the address above for returns. Please always contact our Customer Service team first.

Privacy statement

Dear customer,

We wish to inform you that we, MEDION AG, Am Zehnthof 77, 45307 Essen, Germany process your personal data as a data controller.

For matters regarding data protection, we are supported by our company data protection officer who can be contacted at MEDION AG, Datenschutz, Am Zehnthof 77, D – 45307 Essen; datenschutz@medion.com. We process your data for the purpose of warranty processing and associated processes (e.g. repairs) and therefore rely on processing your data for the sales contract concluded with us.

Your data will be provided to repairers contracted to us for the purpose of warranty processing and associated processes. We generally store your personal data for a period of three years in order to fulfil your legal warranty rights.

You have the right to be informed of the personal data concerned as well as the right to rectification, deletion, restriction of processing, the right to object to processing, as well as the right to data portability.

In case of access and cancellation rights, restrictions apply according to S 34 and S 35 of BDSG (Federal Data Protection Act) (Art. 23 GDPR). In addition, there is a right of appeal to a competent data protection supervisory authority (Article 77 GDPR in conjunction with S 19 BDSG). The state official for data protection and freedom of information for MEDION AG is Nordrhein Westfalen, P box 200444, 40212 Düsseldorf, Germany.

www.ldi.nrw.de.

The processing of your data is necessary for warranty processing: it is not possible to process the warranty without the provision of the required data.



Great care has gone into the manufacture of this product and it should therefore provide you with years of good service when used properly. In the event of product failure within its intended use over the course of the first 3 years after date of purchase, we will remedy the problem as quickly as possible once it has been brought to our attention. In the unlikely event of such an occurrence, or if you require any information about the product, please contact us via our helpline support services, details of which are to be found both in this manual and on the product itself.



PRODUCED IN CHINA FOR:

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WARWICKSHIRE, CV9 2SH.

ALDI STORES (IRELAND) LTD.
PO BOX 726, NAAS, CO. KILDARE.
VISIT US AT WWW.ALDI.COM

AFTER SALES SUPPORT

802686



0333 3213106

Standard local land-
line call rate



1 800 992508

Free hotline



www.medion.co.uk

MODEL:

MD 19787

10/2020

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**YEAR
WARRANTY**