

AREBOS

Jump starter and battery charger

AR-HE-SB800



Follow all safety precautions in this instruction manual to ensure safe use.

CE

Thank you for your trust in AREBOS.

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Thank you for purchasing our product. Please read the instructions for use carefully before using the product for the first time. If you pass the product on to a third party, this instruction manual must also be handed over with the third party.

1. Safety

1.1 Explanation of symbols



The CE marking can be used to indicate that a product complies with the legal provisions of European legal standards and can therefore be traded within the European Community.



This product has been tested and certified by TÜV Süd. Products marked with this mark meet the applicable consumer requirements for safety and quality. The product has been tested for features, performance, ease of use and ergonomics.



Warning! Please read the safety regulations carefully. Failure to follow safety precautions could result in serious injury or damage. Keep the instructions for use in a safe place.



Note: Unplug the power supply!



Use extra caution when using this article.



Voltage warning !



This product must not be disposed of with household waste!

1.2 General Safety Instructions

- This battery charger can only be used by persons 16 years of age or older. An exception is use as a juvenile, if the use is carried out in the course of vocational training to achieve a skill under the supervision of an instructor.
- The charging current supplied to the battery increases according to the characteristic curve W – see DIN 41774.
- The battery case is IP20 rated and protected against indirect touches by a ground cable as intended for Class 1 devices.
- Check that the available mains voltage corresponds to the voltage indicated on the label on the front of the battery charger. Check that the outlet is grounded.
- The battery charger must only be connected to power sources that have a neutral wire with a ground connection.
- While the battery is charging, the device produces explosive gases. Prevent flames and sparks from forming. **NO SMOKING!**
- Only use the battery charger in enclosed spaces and ensure that they are ventilated. **DO NOT EXPOSE IT TO RAIN OR SNOW!**
- Disconnect the power cord before connecting or disconnecting the charging cables from the battery.
- This battery charger contains parts such as switches, etc., that may cause arcing. Therefore, when using the charger in a garage or similar, place it in a suitable enclosure.
- Place the battery charger on a sturdy base. Models with wheels must be installed in an upright position.
Never use the battery charger in a car or under the hood.
- Position the battery charger so that it is always well ventilated. Never cover the device!
- Before using the battery charger, carefully follow the vehicle manufacturer's instructions. To ensure that the indirect contact protection is connected to a suitable grounded plug. Repairs or maintenance of the interior of the battery charger may only be performed by qualified technicians.
Replace the power cord only with the original part.
- Do not use the battery charger for batteries that cannot be recharged.
- Only connect models that are supplied without a plug to an outlet that has an adequate capacity for the fuse rating indicated in the technical data table.
- **Caution:** Operate only with RCD (residual current device)!
- Do not use power tools and machine tools in damp or wet environments. Make sure you have enough lighting. Do not expose power tools to rain or high humidity. Do not operate power tools in environments with highly flammable liquids or gases.
- Do not allow strangers to touch the machine.
- After removing the packaging, check that the device and all its parts are in perfect condition.
- Always disconnect the plug from the wall outlet first before making any adjustments or maintenance. Do not connect the charger to a power source until all settings have been made and the terminals are properly connected.
- Unwind the power cord completely and unfold it so that the terminals cannot touch each other.

- If necessary, extend the power cord with an extension cord, making sure that the cross-section of the cable is the same as that of the power cord; **Do not use cables with a smaller cross-section.**
- The connection pliers, terminals, and the upper surface of the battery must be kept clean; if necessary, clean the battery contacts with a rotating brush; This allows for good electrical contact and better charging efficiency.
- **Never change the polarity of the connection: black (-) and red (+)**
- The charging voltage of the battery charger must be equal to the rated voltage indicated on the battery. Corresponds to the number of battery cells multiplied by two (3 cells = 6 V; 6 cells = 12 V; 12 cells = 24 V)
- Place the device securely for charging and make sure that the airflow is not blocked by the appropriate openings.

1.3 Residual Electrical Hazards

Direct electrical contact:

- A faulty cord or plug can lead to electric shock!
Always have defective cords or plugs replaced by a professional. Only use the appliance to connect to a residual current device (RCD).

Indirect electrical contact:

- Injuries caused by live parts in case of open electrical or defective components. Always disconnect the plug from the socket during maintenance. Operate only on a residual current device.

Unsuitable local lighting:

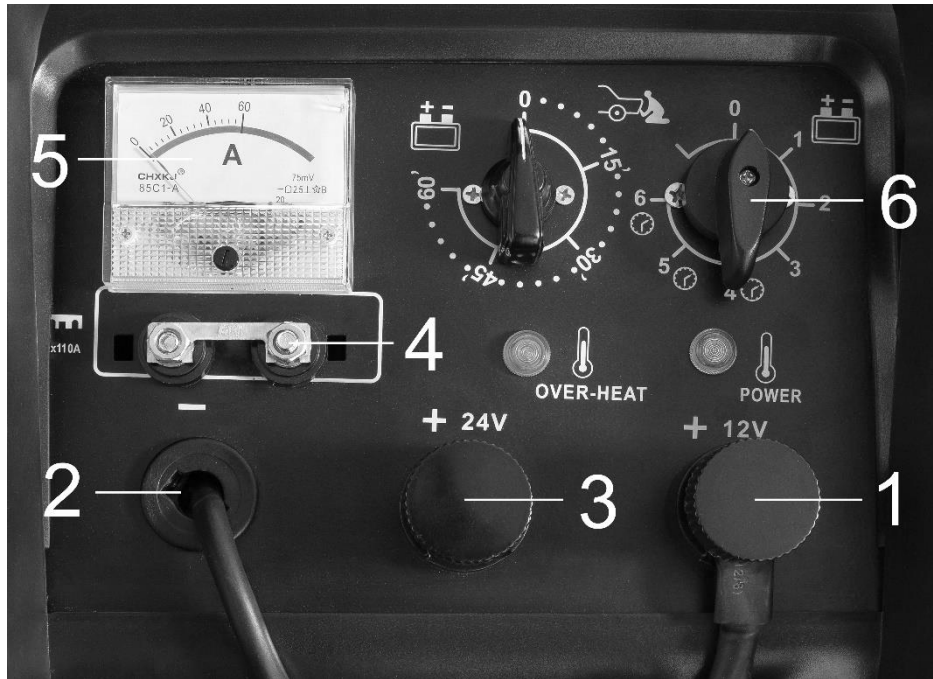
- Insufficient lighting poses a high safety risk. Always provide adequate lighting when operating the device.

2. Specification

Model	AR-HE-SB800
Alternating current	230 V; 50/60 Hz
Charging voltage	12 V/24 V
Effective charging current	50 A
Effective inrush current	300 A
Capacity	40 – 800 Ah
Weight	21.3 kg
Dimensions (L x W x H) in cm	32.5 x 31.5 x 68.5
Class	IP 20
Fuse	1 x 110 A

3. Authority

3.1 Before Loading



Part	Denomination
1	12 V connection
2	Earthing
3	24 V connection
4	Fuse
5	Ammeter
6	Calling/Triggering Tap Changers

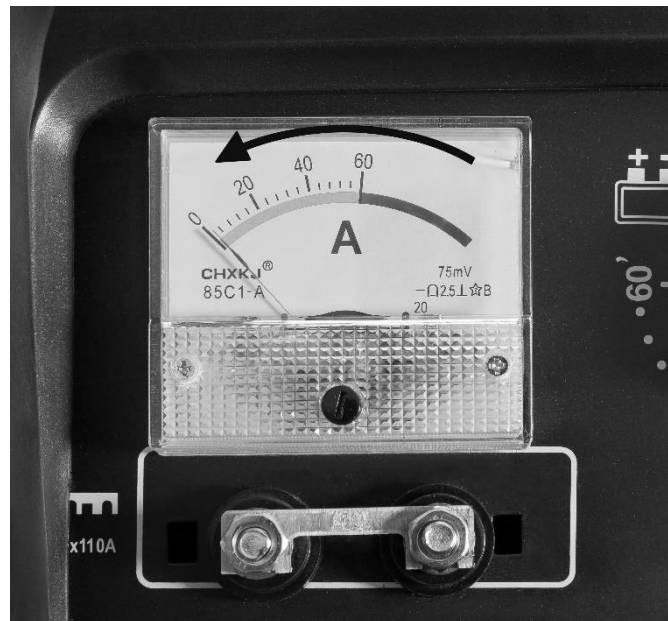
- **CAUTION:** The mains plug must be removed before making any changes and adjustments to the battery charger.
- The battery charger has an overload protection device.
- **IMPORTANT:** Replacing fuses that do not match the device's fuses may cause property damage or personal injury. You must only change the fuses when the power cord is pulled!
- Remove the battery charger caps (if applicable) to allow the gas to escape.
- All safety and protection devices must be properly installed and in place before the machine is turned on.
- Starting tests on vehicles with dead or defective batteries are prohibited, as this would result in damage to the device.
- Attempts to start the battery in the "charging position" instead of the "jump start" may damage the ammeter and trigger overload protection.
- Make sure the charger is properly connected before activating the power switch.
- Do not use the device until you have carefully read the user manual.

- Follow all safety instructions in the instructions.

3.2 Charging Function

- Connect the charger to the battery you want to charge.
- The black pole cable must always be connected to the negative terminal first, only then clamp the positive terminal.
- **Attentiveness! Completely disconnect the battery from the vehicle for charging.**
- Always set the charger to the lowest charging level.
- Now plug in the power plug and adjust the charging levels upwards until the charging current is displayed, which corresponds to approximately 10% of the battery's capacity.
- Charging levels can be increased when the charging current drops.
- Disconnect the battery no later than 3-5 hours after a full charge.
- The charging current indicator will not return to zero when charging is complete.

Note: The ammeter rotates to the left and not to the right during charging. If the indicator is located to the left of the "zero" digit, the charging process is complete.



3.3 Battery Charging Time

- The charging time always depends on the condition of the battery (almost charged, charged or completely discharged)
- 2-4 hours is enough to "refresh" the battery. A full charge takes 8-10 hours.
- **Attentiveness! The maximum charging time of 10 hours should not be exceeded.**

3.4 Fast Charging

- Fast charging is possible at levels 4-6, but must be limited by a timer:
 1. Battery Connection
 2. Set the charge level to 4-6 or read the charging current on the ammeter.
 3. Set the timer for the desired charging time (max. 60 min.)

3.5 Jump start

- **Attentiveness!** During the start-up process, power surges can occur that can damage your vehicle's on-board electronics. Talk to your car specialist about this.
- Connect the battery as described in the Charging chapter and keep it connected to the vehicle!
- The vehicle should always be started with 2 people.
- The first person presses the start switch on the charger. The other person immediately starts the ignition process.
- As soon as the vehicle starts, stop the starting process immediately, max. 9-10 seconds.
- After each failed startup attempt, wait about 5 minutes for the device to cool down.
- **Tip:** If you pre-charge the battery for 10-15 minutes, the battery will require much less starting power.
- **Warning:** If the maximum start time of 10 seconds is exceeded, the fuses may blow or damage the vehicle! In addition, the bar clamps must not touch each other!

4. Intended use

- Jump starter and battery charger for charging, fast charging and starting vehicles. Movable on wheels. Ideal for charging batteries for petrol and diesel engines, motorcycles, boats, etc.


4.1 Beware of Plb Batteries

- Batteries connected to the vehicle damage the on-board electronics if they are started for more than 7-10 seconds. Therefore, use only lead-acid batteries.

4.2 Step-by-step instruction

Trade	1. Connect the battery charger 2. Set the charging function 3. Switch on the battery charger 4. Connect the power cord 5. Battery charging (max. 10 hours)
Begin	1. Connect the battery charger 2. Plug in the power cord 3. Switch on the battery charger and start the vehicle immediately 4. As soon as the vehicle starts, immediately interrupt the starting process and switch off and disconnect the battery charger.


4.3 Operation

 Unplug before any adjustment and set up.


Charging (Fig.3)

Connect the charger to the battery to be recharged

- Always connect the black cable first, to the negative pole.
- Connect the red pole cable to the positive pole.

 The battery should be completely disconnected from the vehicle before getting down to charging.

- Always set the charger at the lowest charging degree (min/1).
- Now, plug in and control the charging degrees upwards until charging current equal to ca 10% of the battery capacity is displayed.
- Charging degrees may be increased by falling charging current.
- Do not disconnect the battery from terminals later than 3-5 hours after charging is finished.

 **Notice.** The charging current indicator will not come back to zero after charging is finished.

Charging Time

- The charging time always depends on the battery status (nearly charged, half-charged or completely discharged)
- To recover a battery that is normally in use 2-4 hrs are sufficient, while for full recharging 8-10 hrs are needed.

Charging time should not be exceeded (10 hrs max.).

4.4 High-rate charging

4-6 levels allow high-rate charging that must in any case be limited by a timer.

- Connect the battery (see the "Handling" chapter).
- Set the charging level optionally to 4-6 and read the charging current on the ammeter.
- Set the timer to the required charging time (max. 60 minutes).

5. Storage and maintenance

- **Caution:** Unplug the appliance before working on the device!
- In case of prolonged storage, the machine should be thoroughly cleaned
- Protect the device from the weather with a plastic tarpaulin, cardboard, or similar
- Use a damp cloth to clean the plastic parts. Do not use detergents, solvents, or sharp objects.
- After each use, remove stuck-on dust from the air vent and moving parts with a soft brush or brush.
- Lubricate your wheels regularly!
- **After each use:** Remove dust from air vents and moving parts
- **Regular:** Oil the moving metal parts (multi-purpose oil), check the tightness of all screws.

6. Problem Solving

Problem	Troubleshooting
	<ul style="list-style-type: none">- Connect the red pole to the positive terminal and the black terminal to the negative terminal.- Remove the contact and review the backups.

7. Disposal Instructions

7.1 Disposal and Packaging

- Make sure that the packaging is disposed of properly in accordance with the guidelines and standards applicable in your region. Some packaging may consist of plastic bags - take special care to keep them out of the reach of children. There is a risk of suffocation!

7.2 Disposal of old equipment

- Waste equipment must be disposed of in accordance with local waste disposal guidelines and regulations.

7.3 Meaning of the "garbage can" symbol



Protect our environment, electrical appliances do not belong in household waste. Use the collection points designated for the disposal of electrical appliances and hand over your electrical appliances that you will no longer use. In this way, they help prevent the potential effects of improper disposal on the environment and human health. In this way, you contribute to the reuse, recycling and other forms of recovery of waste electrical and electronic equipment. For information on where to dispose of the device, please contact your municipality or municipal authorities.

Our Customer Service Number: +49 (0) 931-45232700

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EU Declaration of Conformity

We

Canbolat Vertriebs GmbH, Gneisenaustraße 10-11, 97074 Würzburg, Germany

We hereby declare that the devices listed below meet the relevant essential health and safety requirements of EU directives due to their design and construction, as well as the design we place on the market.

Product Name: Jump Starter & Battery Charger

Item number: 4260551589850

Model Number: AR-HE-SB800

If the device is modified without our consent, this declaration of conformity becomes invalid.

Tested for:

EU standard:

EN 55014-1 :2006/A2 :2011

EN 55014-2 :1997/A2 :2008

EN 61000-3-2 :2014

EN 61000-3-11 :2000

EN 60335-2-29 :2004/A2 :2010

EN 60335-1 :2012/A11 :2014

EN 62233 :2008

Date/Signature Manufacturer/Location: Würzburg, 26.07.2019



Signature:

Dipl.-Inform. (Univ.) Korhan Canbolat, jednatel

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