

Manuals+

[Q & A](#) | [Deep Search](#) | [Upload](#)

manuals.plus /

› [YONHAN](#) /

› [YONHAN Battery Charger 10 Amp, Upgraded 12V/24V Car Battery Charger with Super Large Display Screen, Fully-Automatic Smart Trickle Charger Automotive, Battery Maintainer User Manual](#)

YONHAN B0CBTKDMVZ

YONHAN Battery Charger 10 Amp User Manual

Model: B0CBTKDMVZ | Brand: YONHAN

1. INTRODUCTION

This manual provides detailed instructions for the safe and efficient operation of your YONHAN Battery Charger. This powerful and versatile 10 Amp charging solution is designed for 12V and 24V lead-acid batteries, including AGM, GEL, SLA, and Flooded types, used in various vehicles such as cars, trucks, SUVs, motorcycles, lawnmowers, and boats. Please read this manual thoroughly before first use and retain it for future reference.

Key features include:

- Fully-automatic smart charging and maintenance.
- Intuitive backlit LCD screen displaying charging and battery status.
- Integrated thermal sensor for temperature-adaptive charging.
- Advanced battery repair mode for old or idle batteries.
- 8 charging protection features for safety (overcharge, overvoltage, overcurrent, short circuit, reverse connection, overheat, overvoltage, undervoltage).
- Intelligent memory function for last used mode.



Figure 1.1: YONHAN 10 Amp Battery Charger with its charging clamps.

2. IMPORTANT SAFETY INFORMATION

Always observe the following safety precautions to prevent injury or damage to the charger or battery:

- **Read all instructions:** Before using the charger, read all instructions and cautionary markings on the charger, the battery, and the product using the battery.
- **Ventilation:** Ensure the charging area is well-ventilated. Batteries can produce explosive gases.
- **Eye Protection:** Always wear eye protection (safety glasses) when working with batteries.
- **Skin Protection:** Avoid contact with battery acid. If contact occurs, flush immediately with water.
- **No Smoking/Sparks:** Do not smoke or allow a spark or flame in the vicinity of the battery or engine.

- **Disconnect Power:** Always disconnect the charger from the AC power outlet before making or breaking the connections to the battery.
- **Correct Polarity:** Connect the positive (red) clamp to the positive (+) battery terminal and the negative (black) clamp to the negative (-) battery terminal. Reverse connection protection is built-in, but correct connection is always recommended.
- **Indoor Use:** This charger is designed for indoor use. Do not expose it to rain or snow.
- **Not a Jump Starter:** This device is a battery charger and maintainer, not a jump starter. It requires a power connection to operate and cannot start a vehicle with a dead battery directly.
- **Battery Types:** This charger is suitable for 12V/24V lead-acid batteries (AGM, GEL, SLA, Flooded). **DO NOT use with Lithium batteries.**

3. PRODUCT OVERVIEW AND COMPONENTS

Familiarize yourself with the main components of your YONHAN Battery Charger:

- **Main Unit:** The charger body containing the electronics and display.
- **LCD Display Screen:** Shows charging status, battery voltage, current, temperature, and selected mode.
- **Mode Selection Button:** Used to cycle through different charging modes.
- **Positive (+) Charging Clamp (Red):** Connects to the positive terminal of the battery.
- **Negative (-) Charging Clamp (Black):** Connects to the negative terminal of the battery.
- **AC Power Cord:** Connects the charger to a standard wall outlet.



Figure 3.1: Detailed view of the charger's LCD display and controls.



Figure 3.2: Mode selection button and available charging modes.

4. SETUP AND INITIAL CONNECTION

Follow these steps to set up your battery charger:

1. **Prepare the Battery:** Ensure the battery terminals are clean and free of corrosion. If necessary, clean them with a wire brush.
2. **Connect Clamps:**
 - Connect the **RED** positive (+) charging clamp to the positive (+) terminal of the battery.
 - Connect the **BLACK** negative (-) charging clamp to the negative (-) terminal of the battery.

Note: Ensure a secure connection. The charger has reverse connection protection, but always double-check polarity.

3. **Connect to Power:** Plug the AC power cord of the charger into a standard 120V AC wall outlet. The charger will power on, and the LCD screen will illuminate.
4. **Initial Display:** The LCD screen will display the current battery voltage and other relevant information.



Figure 4.1: Proper connection of the charger to a battery and power source.

5. OPERATING INSTRUCTIONS

The YONHAN Battery Charger features intelligent, fully-automatic operation. Once connected, it will automatically detect the battery type and condition. You can also manually select modes.

5.1 Automatic Charging

After connecting the charger to the battery and power, the charger will automatically begin the charging process. It will detect the battery's voltage (12V or 24V) and the ambient temperature to adjust the charging current and voltage accordingly. The LCD screen will show the charging progress.



Figure 5.1: Visual display of battery information during charging.

5.2 Mode Selection

Press the "MODE SELECTION" button to cycle through the available charging modes. The charger has an intelligent memory function that defaults to the last used mode after a power cycle.

- **Car Mode (Standard):** For standard 12V/24V lead-acid batteries in cars, trucks, SUVs.
- **AGM/GEL Mode:** Specifically optimized for AGM and GEL batteries.
- **Motorcycle Mode (Moto):** For smaller 12V batteries found in motorcycles, lawnmowers, etc.
- **Repair Mode:** An advanced mode designed to help recover old, idle, or sulfated batteries and extend their life. This mode uses high-frequency and low-frequency pulse technology.

Note: Repair mode cannot activate a completely dead battery or repair a physically damaged battery. It is not for Lithium batteries.

5.3 Temperature Adaptive Charging

The integrated thermal sensor detects the ambient temperature and automatically adjusts the charging voltage and current. This prevents over-charging in hot climates and under-charging in cold climates, ensuring optimal battery health and charging efficiency.



Figure 5.2: Temperature adaptive charging for all seasons.

5.4 Charging Completion

Once the battery is fully charged, the charger will automatically switch to maintenance (trickle charge) mode to prevent overcharging and keep the battery at optimal capacity. The LCD display will indicate "FUL" or a full battery icon.

5.5 Disconnecting the Charger

To disconnect the charger:

1. Unplug the AC power cord from the wall outlet first.
2. Remove the negative (black) clamp from the battery terminal.
3. Remove the positive (red) clamp from the battery terminal.

6. MAINTENANCE

Proper maintenance ensures the longevity and optimal performance of your YONHAN Battery Charger:

- **Cleaning:** Disconnect the charger from power before cleaning. Wipe the exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Cable Inspection:** Regularly inspect the charging cables and clamps for any signs of damage, fraying, or corrosion. Do not use the charger if cables are damaged.
- **Storage:** Store the charger in a cool, dry place when not in use. Keep it away from direct sunlight, moisture, and extreme temperatures.
- **Battery Terminals:** Keep battery terminals clean to ensure good electrical contact.

7. TROUBLESHOOTING

If you encounter issues with your YONHAN Battery Charger, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Charger does not turn on.	No power from outlet; loose connection; internal fault.	Check wall outlet with another device. Ensure AC cord is securely plugged in. If problem persists, contact support.
Charger not charging battery.	Incorrect battery connection (reverse polarity); battery is severely damaged/dead; wrong mode selected; battery type incompatible.	<ul style="list-style-type: none">◦ Check clamp connections for correct polarity (+ to +, - to -).◦ Try "Repair Mode" for old/idle batteries (Note: cannot activate completely dead batteries).◦ Ensure battery is a compatible 12V/24V lead-acid type.
LCD shows error message (e.g., "EH", "ERO").	Reverse connection; battery disconnection; internal error.	<ul style="list-style-type: none">◦ "EH" or similar often indicates reverse connection. Disconnect and reconnect correctly.◦ "ERO" or similar might indicate a disconnection or internal fault. Recheck connections. If persistent, contact support.
Charger gets warm during operation.	Normal operation; poor ventilation.	It is normal for the charger to get warm during charging. Ensure adequate ventilation around the unit. If it becomes excessively hot or emits smoke/odor, disconnect immediately and contact support.

If the problem persists after trying these solutions, please contact YONHAN customer support.

8. SPECIFICATIONS

Feature	Detail
Brand	YONHAN
Model (ASIN)	B0CBTKDMVZ
Input Voltage	24 Volts (AC)
Output Voltage	12V / 24V (DC)
Output Current	10 Amp (Max)
Compatible Battery Types	Lead-acid (AGM, GEL, SLA, Flooded)
Safety Certification	UL (Specification Met)
Color	Red
First Available Date	July 14, 2023

9. WARRANTY AND SUPPORT

YONHAN products are manufactured to high-quality standards. For warranty information or technical support, please refer to the contact details provided with your product packaging or visit the official YONHAN website. You can also visit the YONHAN store on Amazon for more information:[YONHAN Amazon Store](#)
When contacting support, please have your product model (B0CBTKDMVZ) and purchase date available.