

YONHAN B0C5Q9ZCDV

YONHAN 12V/24V 0-10A LiFePO4 Lead-Acid Portable Smart Battery Charger

USER MANUAL - MODEL: B0C5Q9ZCDV

1. Introduction

Thank you for choosing the YONHAN 12V/24V 0-10A LiFePO4 Lead-Acid Portable Smart Battery Charger. This intelligent, fully automatic charger is designed to efficiently charge and maintain a wide range of 12V and 24V lead-acid batteries, including LiFePO4, AGM, GEL, and SLA types. It features a large display for clear monitoring, high-efficiency pulse repair mode, and multiple safety protections. Please read this manual thoroughly before use to ensure safe and optimal performance.



Image: YONHAN 12V/24V Portable Smart Battery Charger. This image shows the front view of the charger with its large digital display and the attached red and black battery clamps.

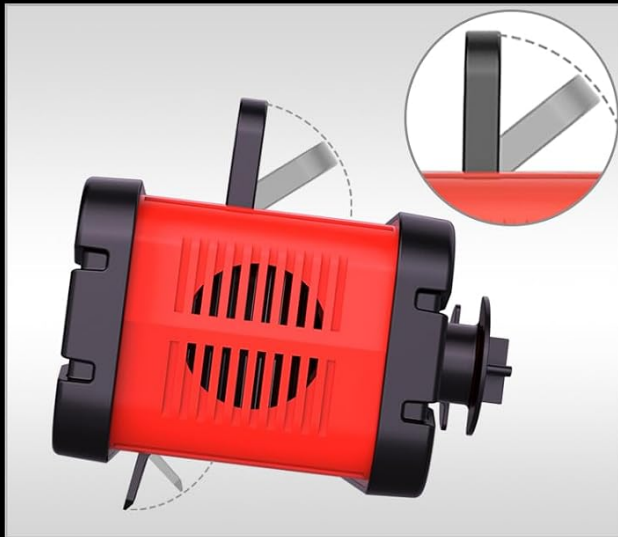
2. Safety Information

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

- Read all instructions before using the charger.
- Do not charge non-rechargeable batteries.
- Do not charge lithium-ion batteries (Li-ion), only LiFePO₄, AGM, GEL, SLA, and flooded lead-acid batteries.
- Ensure proper ventilation during charging.
- Avoid open flames or sparks near the battery.
- Wear eye protection and gloves when working with batteries.
- Keep out of reach of children.
- Do not expose the charger to rain or excessive moisture.
- Disconnect the AC power before connecting or disconnecting battery clamps.
- If the battery is damaged or frozen, do not attempt to charge it.

3. Product Features

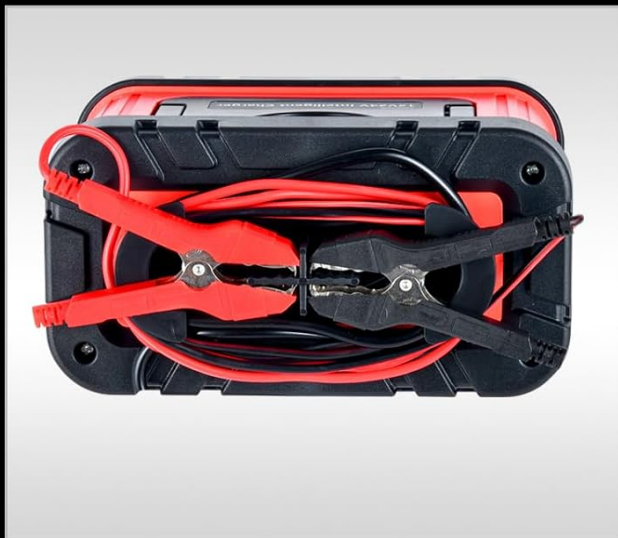
- **Versatile Compatibility:** Charges 12V/10A and 24V/5A lead-acid batteries, including LiFePO4, AGM, GEL, SLA, and flooded types, for cars, trucks, SUVs, motorcycles, lawnmowers, and marine vehicles. (Note: Not for standard Lithium-ion batteries).
- **High-Efficiency Pulse Repair:** Built-in advanced repair mode to help recover old or inactive batteries and extend battery life. Effective for high-frequency and low-frequency pulse technology.
- **Large Visual Display:** Features a super large display showing clear charging status, voltage, current, temperature, full battery indication, summer mode, winter mode, and more.
- **Portable Design:** Innovative design with a foldable handle and integrated cable organizer on both sides for neat storage.
- **Smart Memory Function:** The charger defaults to the last used mode after a power failure.
- **Enhanced Safety:** Includes winter/summer modes for temperature-adjusted charging, reverse polarity protection, overload protection, and short-circuit prevention.



Foldable Handle



Inclined Screen for Easier Operation



Cable Organizer on the Back



Stronger Alligator Clips

Image: Key design features of the YONHAN charger. This image highlights the foldable handle, the inclined screen for better viewing angles, the cable organizer on the back for tidy storage, and the robust alligator clips.

4. Package Contents

- YONHAN Smart Battery Charger Unit
- Battery Clamps (Red and Black)
- AC Power Cord
- User Manual

5. Setup and Connection

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 (+) clamp to the positive (+) battery terminal.
 - Connect the **BLACK** negative (-) clamp to the negative (-) battery terminal.
3. **Connect to Power:** Plug the AC power cord into a standard wall outlet. The charger will power on and display the current battery voltage.



Image: 12V and 24V Battery Charging Display. This diagram illustrates the correct connection procedure for both 12V and 24V battery systems, including the lengths of the AC and DC cables.

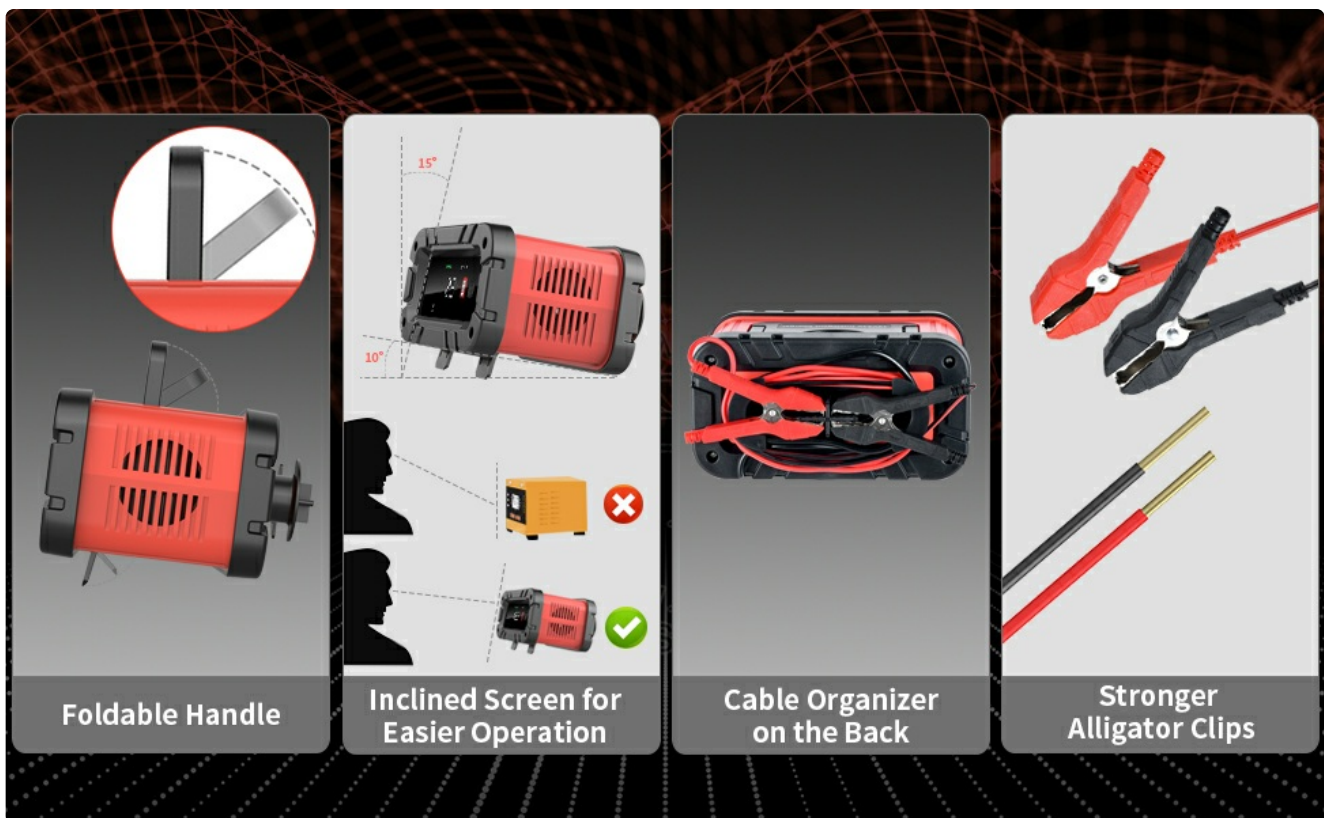


Image: User connecting the charger to a car battery. This image shows a person attaching the battery clamps to a car battery, demonstrating the practical application of the charger.

6. Operating Instructions

6.1. Mode Selection

The charger automatically detects 12V or 24V batteries. Use the 'MODE' button to cycle through the available charging modes:

- **CAR Mode:** For standard 12V/24V lead-acid car batteries.
- **LiFePO4 Mode:** Specifically for 12V/24V LiFePO4 batteries.
- **MOTO Mode:** For 12V/24V motorcycle batteries and smaller capacity batteries.
- **REPAIR Mode:** For desulfating and recovering old or inactive batteries. This process can take several hours.

4 MODES SELECTION

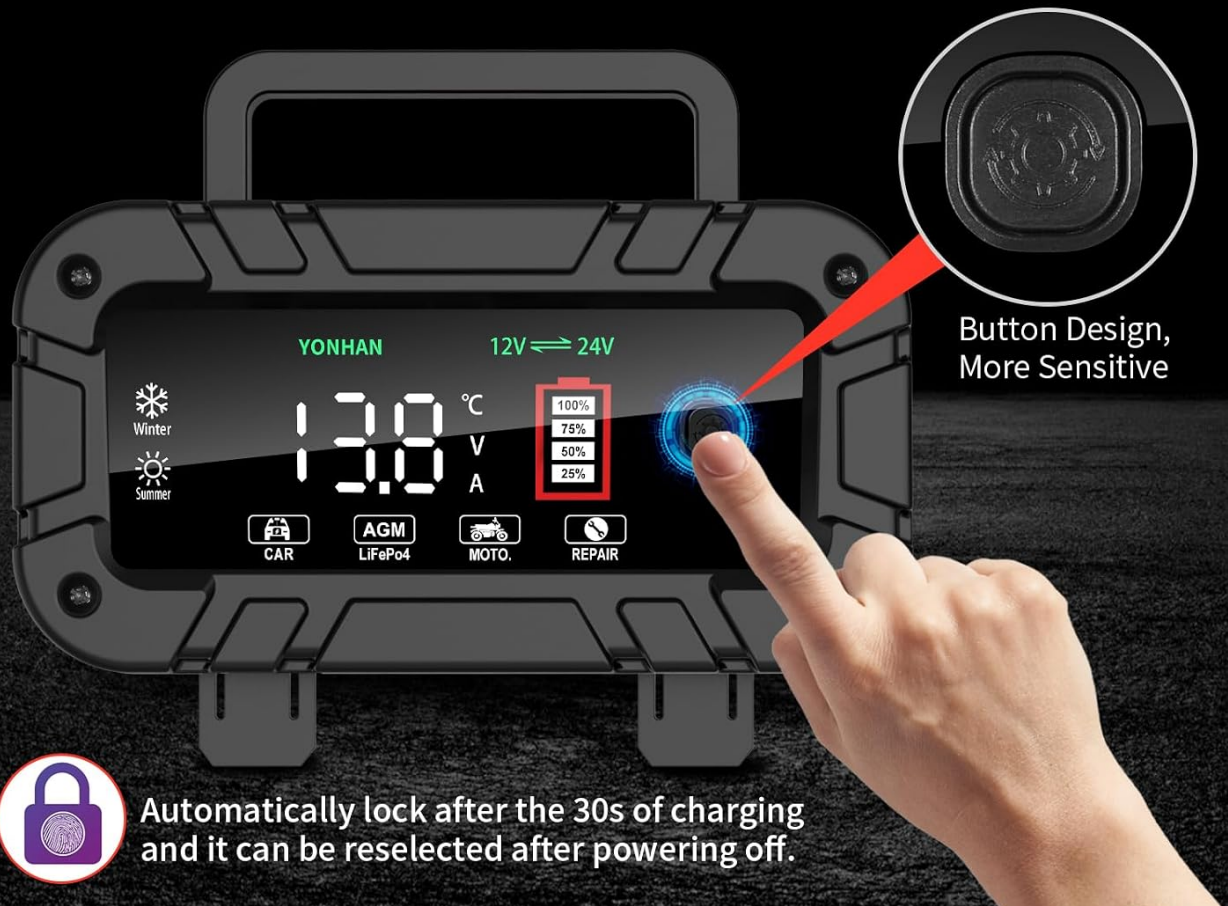


Image: 4 Modes Selection. This close-up shows the charger's display with the four selectable charging modes: CAR, LiFePO4, MOTO, and REPAIR, along with the mode selection button.

6.2. Charging Process

Once a mode is selected, the charger will begin the 7-stage charging process automatically. The display will show real-time charging information.

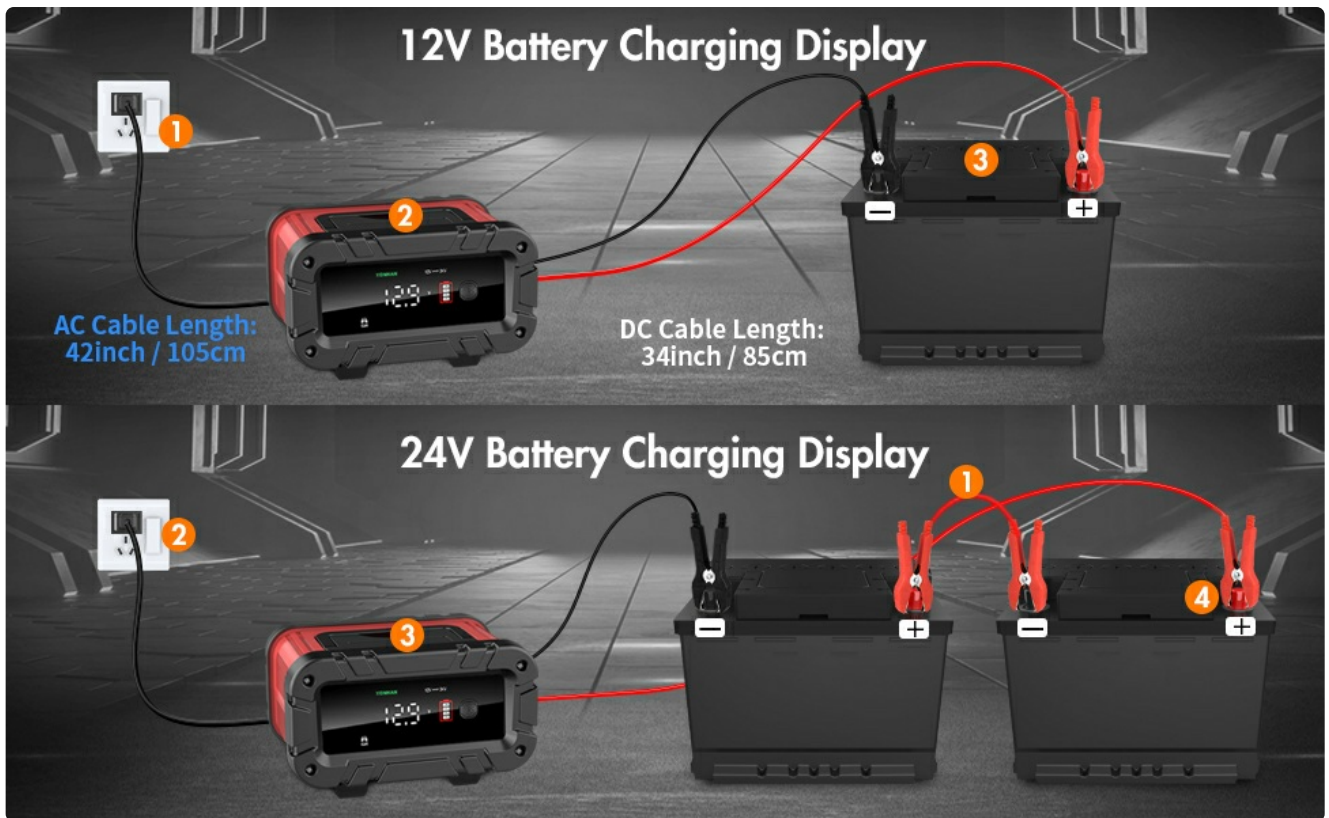


Image: 7-Stage Charging Process. This diagram visually explains each of the seven stages of the intelligent charging process, from desulfurization to floating charge.

6.3. Display Information

The large display provides comprehensive information:

- **Charge Voltage (V):** Current voltage of the battery.
- **Charge Current (A):** Current flowing into the battery.
- **Temperature (0C):** Ambient temperature, influencing charging mode (Winter/Summer).
- **Battery Full:** Indication when charging is complete.
- **Repair Mode:** Indication when the repair function is active.
- **Disconnection:** Alerts if clamps are not properly connected.

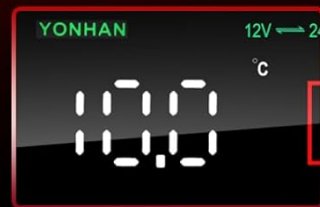
VISUAL DISPLAY OF BATTERY INFORMATION



Charge Voltage



Charge Current



Temperature



Finish



Repair Mode



Misconnection

Image: Visual Display of Battery Information. This composite image shows various screens from the charger's display, detailing the information provided during operation, such as voltage, current, temperature, and status messages.

6.4. Disconnecting the Charger

Once charging is complete, or if you need to disconnect:

1. Unplug the AC power cord from the wall outlet.
2. Remove the BLACK negative (-) clamp from the battery terminal.
3. Remove the RED positive (+) clamp from the battery terminal.

7. Maintenance

- Clean the charger casing with a soft, dry cloth. Do not use harsh chemicals or abrasives.
- Regularly inspect the battery clamps and cables for any signs of damage or wear.

- Store the charger in a cool, dry place when not in use, utilizing the integrated cable organizer.

8. Troubleshooting

Problem	Possible Cause	Solution
Charger does not turn on.	No power from outlet; faulty power cord.	Check wall outlet; inspect power cord for damage.
"Disconnection" error on display.	Clamps not properly connected; poor contact.	Ensure clamps are securely attached to battery terminals. Clean terminals if corroded.
Battery not charging.	Incorrect mode selected; battery severely damaged/dead.	Select appropriate mode. Try REPAIR mode. Note: Charger cannot revive completely dead or severely damaged batteries.
Charger gets warm.	Normal operation during charging.	Ensure adequate ventilation. If excessively hot, disconnect and allow to cool.

9. Specifications

- **Brand:** YONHAN
- **Model:** B0C5Q9ZCDV
- **Input Voltage:** AC 100-240V, 50/60Hz
- **Output Voltage:** 12V / 24V Auto
- **Output Current:** 12V 10A, 24V 5A
- **Battery Types:** LiFePO4, Lead-Acid (AGM, GEL, SLA, Flooded)
- **Battery Capacity:** 6Ah - 180Ah
- **Dimensions:** Approximately 7.5 x 4.9 x 3.7 inches (190 x 125 x 95 mm)
- **Weight:** Approximately 2.14 lbs (0.97 kg)
- **Safety Features:** Reverse Polarity Protection, Overload Protection, Short Circuit Protection, Over-temperature Protection

Image: Product Dimensions. This image provides a clear visual representation of the charger's dimensions in both inches and millimeters.

10. Warranty and Support

YONHAN products are manufactured to high-quality standards. For warranty information or technical support, please refer to the product packaging or contact your retailer. Keep your purchase receipt as proof of purchase.

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Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page’s manual context to help answer it.

Name

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Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question