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› BOSCH C3 Fully Automatic 4-Mode 6/12V Smart Battery Charger and Maintainer (3.8 Amps) - Instruction Manual

Bosch C3

BOSCH C3 Fully Automatic 4-Mode 6/12V Smart Battery Charger and Maintainer

Model: C3

1. INTRODUCTION

The Bosch C3 Smart Battery Charger and Maintainer is designed for charging and maintaining 6-volt and 12-volt lead-acid batteries, including AGM, WET, GEL, open, and VRLA types. This device incorporates state-of-the-art charging technology and self-monitoring functions to ensure optimal battery health and extended lifespan. Its user-friendly one-button operation, combined with built-in pulse and trickle charge capabilities, makes it simple and safe to use.

Key features include:

- **SmartAMPs Technology:** Automatically adjusts charge current (0.8 to 3.8 amps) based on battery condition and charging stage for efficient and high-quality charging.
- **Micro Computer Unit (MCU):** Provides intelligent charging to restore sulfated, discharged, and acid-stratified batteries to their original capacity without over or undercharging.
- **One-Touch Smart Charging:** Features automatic voltage detection for straightforward operation.
- **Maintenance Charging Mode:** Automatically activates when battery voltage drops below 12.8V to keep the battery at full charge.
- **Versatile Compatibility:** Suitable for various vehicles including trucks, cars, motorcycles, lawn tractors, and recreational vehicles.
- **Comprehensive Safety Features:** Includes spark, short circuit, and reverse polarity protection for user and battery safety.
- **Durable Design:** Dust and water splash resistant.
- **Included Accessories:** Comes with a charger hook, fused charger cable, and two fully insulated charger clamps.

2. SAFETY INFORMATION

Always prioritize safety when operating the Bosch C3 Battery Charger. This device is designed with multiple safety

features, but proper handling is crucial to prevent accidents and damage.

- **Spark Protection:** Prevents sparks when connecting or disconnecting the charger to the battery.
- **Short Circuit Protection:** Automatically shuts off in case of a short circuit.
- **Reverse Polarity Protection:** Prevents damage if the battery clamps are connected incorrectly. The charger will not operate if polarity is reversed.
- **Overheating Protection:** The unit is designed to prevent overheating during operation.
- **Abnormal Situation Detection:** If an incorrect connection or abnormal charging time is detected, the charger automatically switches to standby mode to protect the battery.
- Ensure adequate ventilation when charging batteries to prevent gas buildup.
- Do not charge frozen or damaged batteries.
- Keep out of reach of children.
- Always disconnect the AC power before disconnecting the battery clamps.

3. PRODUCT OVERVIEW

The Bosch C3 charger is a compact and robust unit designed for ease of use. It features a clear indicator panel and a single mode button for operation.



Figure 3.1: Front view of the Bosch C3 Smart Battery Charger, showing the indicator lights and mode button.

This image displays the main unit of the Bosch C3 charger. It highlights the compact design, the central mode button, and the LED indicators for various charging states and battery types (6V, 12V, AGM, etc.). The robust casing is designed for durability.



Figure 3.2: Bosch C3 Smart Battery Charger with included accessories in its packaging.

This image shows the Bosch C3 charger along with its essential accessories as they appear in the product packaging. Visible components include the charger unit, the battery clamps (red and black), and the ring terminal harness, providing a complete view of what is included with the product.

Included Components:

- Bosch C3 6V and 12V 4-Mode Smart Battery Charger and Maintainer unit
- Charger mounting hook

- Charger cable with built-in fuse
- Two fully insulated charger clamps (red for positive, black for negative)
- Harness with mounting rings for permanent battery connection
- Instruction manual (this document)

4. SETUP

Follow these steps to set up your Bosch C3 Battery Charger:

1. **Prepare the Battery:** Ensure the battery terminals are clean and free of corrosion. If applicable, check the battery fluid levels and top up with distilled water if necessary.
2. **Connect to Battery:** Attach the red (positive) charger clamp to the positive (+) battery terminal and the black (negative) charger clamp to the negative (-) battery terminal. Ensure a secure connection. Alternatively, use the included harness with mounting rings for a more permanent connection.
3. **Connect to Power:** Plug the AC power cord of the charger into a standard 110-volt household outlet.
4. **Select Mode:** Once connected, the charger will automatically detect the battery voltage. Use the 'MODE' button on the charger to select the appropriate charging mode for your battery type (e.g., 6V, 12V Car, 12V Motorcycle, 12V Cold/AGM). The selected mode will be indicated by an illuminated LED.
5. **Begin Charging:** The charging process will begin automatically after mode selection.

For convenience, the included charger mounting hook allows you to hang the charger upright, keeping it off the ground and in a suitable position between the battery and the AC power source.

5. OPERATING THE CHARGER

The Bosch C3 charger utilizes an intelligent Micro Computer Unit (MCU) to manage the charging process, adapting to the battery's condition for optimal results.

Charging Process:

- The charger will automatically detect the battery's voltage (6V or 12V) upon connection.
- Press the 'MODE' button to cycle through the available charging programs. Refer to the charger's indicator panel for the specific modes.
- The charger employs SmartAMPS Technology, which adjusts the charge current (from 0.8 to 3.8 amps) based on the battery's condition and the current charging stage. This ensures a fast, high-quality charge that maximizes battery life.
- The intelligent system can restore sulfated and discharged batteries to their original capacity without overcharging.
- Once the battery is fully charged, the charger automatically switches to a maintenance charging mode. This float and maintenance cycle repeats indefinitely to keep the battery at full charge without overcharging.

Important Notes:

- The charger requires a minimum residual voltage in the battery to initiate charging. It may not charge a completely dead battery (e.g., 0V). In such cases, a brief jump start from another battery might be needed to raise the voltage sufficiently for the C3 to detect and begin charging.
- If AC power is interrupted, the charger will typically return to a standby state. You may need to press the 'MODE' button again to restart the charging process.

6. MAINTENANCE

The Bosch C3 Battery Charger is designed for minimal maintenance. However, proper care of your batteries and the charger will ensure long-term performance.

- **Charger Care:** Keep the charger clean and dry. Wipe down the casing with a soft, damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Cable and Clamp Inspection:** Regularly inspect the charger cables, clamps, and connectors for any signs of damage, fraying, or corrosion. Replace if necessary.
- **Battery Maintenance:** For conventional lead-acid batteries, periodically check the electrolyte levels and top up with distilled water as needed. Keep battery terminals clean and free of corrosion.
- Store the charger in a cool, dry place when not in use.

7. TROUBLESHOOTING

If you encounter issues with your Bosch C3 Battery Charger, refer to the following common troubleshooting tips:

Problem	Possible Cause	Solution
Charger does not turn on or charge.	No AC power; Incorrect battery connection; Battery voltage too low.	Check AC outlet and power cord. Ensure clamps are correctly connected (positive to positive, negative to negative). If battery is completely dead (below minimum voltage), it may need a brief jump start to raise its voltage.
Charger enters standby mode unexpectedly.	Abnormal charging condition (e.g., short circuit, reverse polarity, internal fault).	Disconnect from power and battery. Recheck connections. If the issue persists, the charger may have detected an internal fault or a problem with the battery.
Mode button is unresponsive or requires multiple presses.	Button malfunction or internal connection issue.	Ensure the button is pressed firmly. If the issue persists, contact Bosch customer support for assistance.
Charger gets hot during operation.	Normal operation (some heat is expected); Poor ventilation; Overload.	Ensure the charger is in a well-ventilated area. If it becomes excessively hot or emits smoke/odor, disconnect immediately and contact support.

If the problem persists after attempting these solutions, please contact Bosch customer support.

8. SPECIFICATIONS

Specification	Detail
Brand	Bosch
Model Number	C3
Manufacturer	Bosch Automotive
Input Voltage	230 Volts (AC)
Output Voltage	6 Volts (DC), 12 Volts (DC)
Charging Current	0.8 to 3.8 Amps (SmartAMPS Technology)
Compatible Battery Types	AGM, WET, GEL, Open, VRLA Lead-Acid Batteries
Item Weight	2.27 pounds (approx. 1030 Grams)
Color	Grey
Safety Certifications	CE, UL, FCC
First Available Date	March 24, 2011

9. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included in your product packaging or visit the official Bosch Automotive website. Warranty terms and conditions may vary by region and purchase date.

If you require technical assistance, have questions about product operation, or need to report a defect, please contact Bosch customer service. Contact details can typically be found on the Bosch Automotive website or in your product documentation.

No official product videos from the seller were found for this model.