

Tank B019CT65CG

Tank 6V/12V 3.0A Battery Charger Instruction Manual

Model: B019CT65CG

1. INTRODUCTION

Thank you for choosing the Tank 6V/12V 3.0A Battery Charger. This smart charger is designed to efficiently and safely charge 6-volt and 12-volt lead-acid batteries. It features a 3-stage charging process and LED indicators for easy monitoring. Please read this manual thoroughly before use to ensure proper operation and safety.

2. IMPORTANT SAFETY INSTRUCTIONS

WARNING: Read all safety warnings and instructions before using this product. Failure to follow the warnings and instructions may result in electric shock, fire, and/or serious injury.

- This charger is designed for charging 6V and 12V lead-acid batteries only. Do not use it for other battery types.
- Use the charger in a well-ventilated area. Do not operate in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust.
- Always disconnect the AC power supply before connecting or disconnecting the battery terminals.
- Ensure correct polarity. Connect the red (+) clamp to the positive battery terminal and the black (-) clamp to the negative battery terminal. Reverse polarity protection is built-in, but correct connection is always recommended.
- Do not charge frozen or damaged batteries.
- Keep the charger away from water, rain, or excessive moisture.
- Do not disassemble the charger. Refer all servicing to qualified service personnel.
- Keep out of reach of children.

3. PACKAGE CONTENTS

- Tank 6V/12V 3.0A Battery Charger Unit
- User Manual

4. PRODUCT FEATURES

- **Universal Compatibility:** Charges both 6V and 12V lead-acid batteries.
- **Efficient Charging:** 3.0A charging current for quick and effective charging.
- **Smart 3-Stage Charging:** Automatically switches between Constant Current, Constant Voltage, and Floating Voltage modes for optimal battery health.
- **LED Indicators:** Clear visual feedback on charging status (Red for charging, Green for fully charged).
- **Automatic Shutoff:** Prevents overcharging once the battery is full.
- **Comprehensive Safety Protections:** Includes short-circuit protection, battery polarity error protection, and over-voltage protection.
- **Compact Design:** Dimensions of 120.0 x 60.0 x 38.0mm for easy storage and portability.
- **CE Compliant:** Meets European safety standards.

5. SETUP

Follow these steps to set up your battery charger:

1. **Inspect the Charger:** Before each use, check the charger, cables, and clamps for any damage. Do not use if damaged.
2. **Prepare the Battery:** Ensure the battery terminals are clean and free of corrosion. If charging a wet-cell battery, check the fluid levels and top up with distilled water if necessary (refer to battery manufacturer's instructions).
3. **Connect to Battery:**
 - Connect the **red (+)** charger clamp to the **positive (+)** terminal of the battery.
 - Connect the **black (-)** charger clamp to the **negative (-)** terminal of the battery.

Ensure a secure connection. The charger has polarity error protection, but correct connection is crucial.

4. **Connect to AC Power:** Plug the charger's AC power cord into a standard 100-240V AC, 50/60Hz electrical outlet.



Image 1: Tank 6V/12V 3.0A Battery Charger unit. This image shows the compact design of the charger with its attached battery clamps and AC power cord.

6. OPERATING INSTRUCTIONS

Once the charger is properly connected to the battery and AC power, it will automatically begin the charging process. The charger is fully automatic and requires no further intervention during charging.

Charging Process and LED Indicators

The charger utilizes a 3-stage charging process to optimize battery life and performance. The LED indicator provides real-time status:

- **Red LED:** Indicates that the battery is currently charging.
- **Green LED:** Indicates that the battery is fully charged and the charger has switched to float mode.

3-Stage Charging Mode Explained:

1. **Constant Current (Bulk Charge):** The charger delivers a constant current (3.0A) to the battery until its voltage reaches a predetermined level (14.3-14.7V for 12V batteries, 7.2-7.4V for 6V batteries). This is the fastest stage for charging a depleted battery.
2. **Constant Voltage (Absorption Charge):** Once the battery reaches the target voltage, the charger maintains this voltage while the current gradually decreases. This stage ensures the battery is fully charged without overcharging.
3. **Floating Voltage (Maintenance Charge):** After the battery is fully charged, the charger switches to a lower "float" voltage (13.5-13.8V for 12V, 6.7-6.9V for 6V). This maintains the battery at full charge and compensates for self-discharge, allowing the charger to be connected indefinitely without harming the battery. The Green LED will be illuminated during this stage.

To stop charging, first disconnect the AC power cord from the outlet, then disconnect the battery clamps from the battery terminals.

7. MAINTENANCE

- **Cleaning:** Disconnect the charger from all power sources and batteries before cleaning. Wipe the exterior with a soft, damp cloth. Do not use harsh chemicals or abrasives.
- **Storage:** Store the charger in a cool, dry place when not in use. Keep cables neatly coiled to prevent damage.
- **Inspection:** Regularly inspect the charger, cables, and clamps for any signs of wear, cuts, or damage. Replace if necessary.

8. TROUBLESHOOTING

Problem	Possible Cause	Solution
No LED light when connected to AC power.	No AC power, faulty outlet, or charger issue.	Check AC outlet with another device. Ensure charger is plugged in securely. If problem persists, contact support.
Red LED does not light up when connected to battery.	Poor battery connection, reverse polarity, or battery is already fully charged.	Ensure clamps are securely connected to correct terminals. Check if the battery is already fully charged (Green LED should be on).
Charger gets warm during operation.	Normal operation.	A slight warmth is normal during charging. Ensure adequate ventilation around the charger.
Green LED does not turn on after extended charging.	Battery deeply discharged, faulty battery, or charger issue.	Allow more time for charging. Test the battery condition. If the battery is old or damaged, it may not accept a full charge. Contact support if the charger seems faulty.

9. SPECIFICATIONS

Input Voltage	100-240V AC, 50-60Hz, 1.0A
Output Voltage	6V DC or 12V DC (Automatic Detection)
Charging Current	3,000mA (3.0A)
Charging Modes	3-Stage (Constant Current, Constant Voltage, Floating Voltage)
12V Constant Voltage	14.3V to 14.7V DC
6V Constant Voltage	7.2V to 7.4V DC
12V Floating Voltage	13.5V to 13.8V DC
6V Floating Voltage	6.7V to 6.9V DC
Dimensions	120.0 x 60.0 x 38.0mm
Safety Protections	Short-circuit, Battery Polarity Error, Over-voltage
Certifications	CE Compliant

10. WARRANTY AND SUPPORT

This Tank 6V/12V 3.0A Battery Charger comes with a **2-year warranty** from the date of purchase. This warranty covers manufacturing defects and ensures free replacement if the product fails due to such defects under normal use.

For warranty claims, technical support, or any questions regarding the product, please contact your retailer or the manufacturer directly. Please have your purchase receipt and product model number (B019CT65CG) available when contacting support.

