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› LEICESTERCN Car Battery Charger Instruction Manual

LEICESTERCN EPA1205A

LEICESTERCN Car Battery Charger Instruction Manual

Model: EPA1205A
Brand: LEICESTERCN

INTRODUCTION

This instruction manual provides detailed information on the operation, maintenance, and safety precautions for your LEICESTERCN 6V/12V Car Battery Charger. This intelligent trickle charger and maintainer is designed for a wide range of lead-acid batteries, including Pb/SLA/VRLA/GEL/AGM types, commonly found in cars, motorcycles, boats, and other vehicles. It features an LCD screen for clear status display, multiple protection systems, and smart charging/repair functions to optimize battery life and performance.

SAFETY INFORMATION

Please read and understand all safety instructions before operating the charger. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- Always wear eye protection and protective clothing when working with batteries.
- Ensure adequate ventilation when charging batteries to prevent the accumulation of explosive gases.
- Do not charge frozen or damaged batteries.
- Keep the charger away from water, rain, and excessive moisture.
- Disconnect the power supply before making or breaking connections to the battery.
- This charger is equipped with multiple protection features including over-heat, over-voltage, short-circuit, over-load, over-discharge, low voltage, and reverse connection protection. However, always ensure correct polarity before connecting.
- Do not attempt to disassemble or modify the charger. Refer all servicing to qualified personnel.

PACKAGE CONTENTS

Verify that all items are present in the package:

- LEICESTERCN Car Battery Charger Unit

- Alligator Clip Connectors (Red and Black)
- O-Ring Terminal Connectors with 10A Fuse
- User Manual



Image: The LEICESTERCN battery charger unit shown with its detachable alligator clip and O-ring terminal cables.

PRODUCT OVERVIEW

The LEICESTERCN battery charger features an intuitive LCD display and a mode button for easy operation.

APPLY TO 6V&12V



: Battery Power



: Warning



: Winter Mode



: Repair



Image: A detailed view of the charger's LCD screen, displaying battery power, warning, winter mode, and repair icons. The "MODE" button is also visible.

LCD Display Indicators:

- **Battery Power Icon:** Indicates the current charge level of the battery.
- **Warning Icon:** Alerts to potential issues or errors during charging.
- **Winter Mode Icon:** Activates automatically or can be selected for charging in cold conditions (below 10°C / 50°F).
- **Repair Icon:** Indicates the battery repair function is active.
- **Voltage/Current Display:** Shows real-time battery voltage and charging current.
- **Battery Type/Voltage Selection:** Icons for 6V, 12V Car, and 12V Motorcycle, allowing manual selection.

INTUITIVE LED DISPLAY

one-click repair activating battery



unbenutzte
Autobatterie



Alte und
Sulfidbatterien



Niederspannungsbatterie
Langfristige

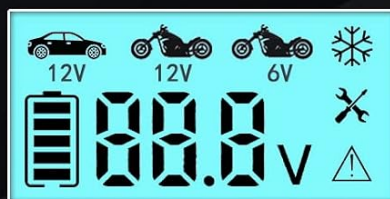


Image: A diagram highlighting the charger's safety features, including protection against over-load, over-temperature, short circuit, over-discharge, high voltage, over-current, low voltage, and reverse connection.

SETUP

- 1. Prepare the Battery:** Ensure the battery terminals are clean and free of corrosion. If the battery is in a vehicle, ensure the vehicle's ignition is off and all accessories are disconnected.
- 2. Connect to Battery:**
 - Connect the RED (+) positive clamp/terminal to the RED (+) positive battery terminal.
 - Connect the BLACK (-) negative clamp/terminal to the BLACK (-) negative battery terminal.
 - For in-vehicle charging, if the battery is not grounded to the chassis, connect the black clamp to the vehicle chassis away from the battery and fuel line.
- 3. Select Battery Type/Voltage:** The charger intelligently identifies 6V and 12V batteries. For 12V Motorcycle and 12V Car batteries, manual selection may be required using the "MODE" button.

4. **Connect to Power:** Plug the charger's AC power cord into a standard electrical outlet (240 Volts).



Image: The battery charger connected to a car battery with alligator clips, ready for charging.

OPERATING INSTRUCTIONS

Intelligent Detection and Charging Process:

The charger automatically detects the battery's condition and initiates a multi-stage charging process. If a low-voltage, vulcanized, or capacity loss battery is detected, the charger will prompt the user to repair or indicate if the battery has lost its value. The LCD screen provides real-time feedback on charging status, voltage, current, and battery health.

6-CHARGING MODES

Match Battery Specifics for
Batter Maintenance

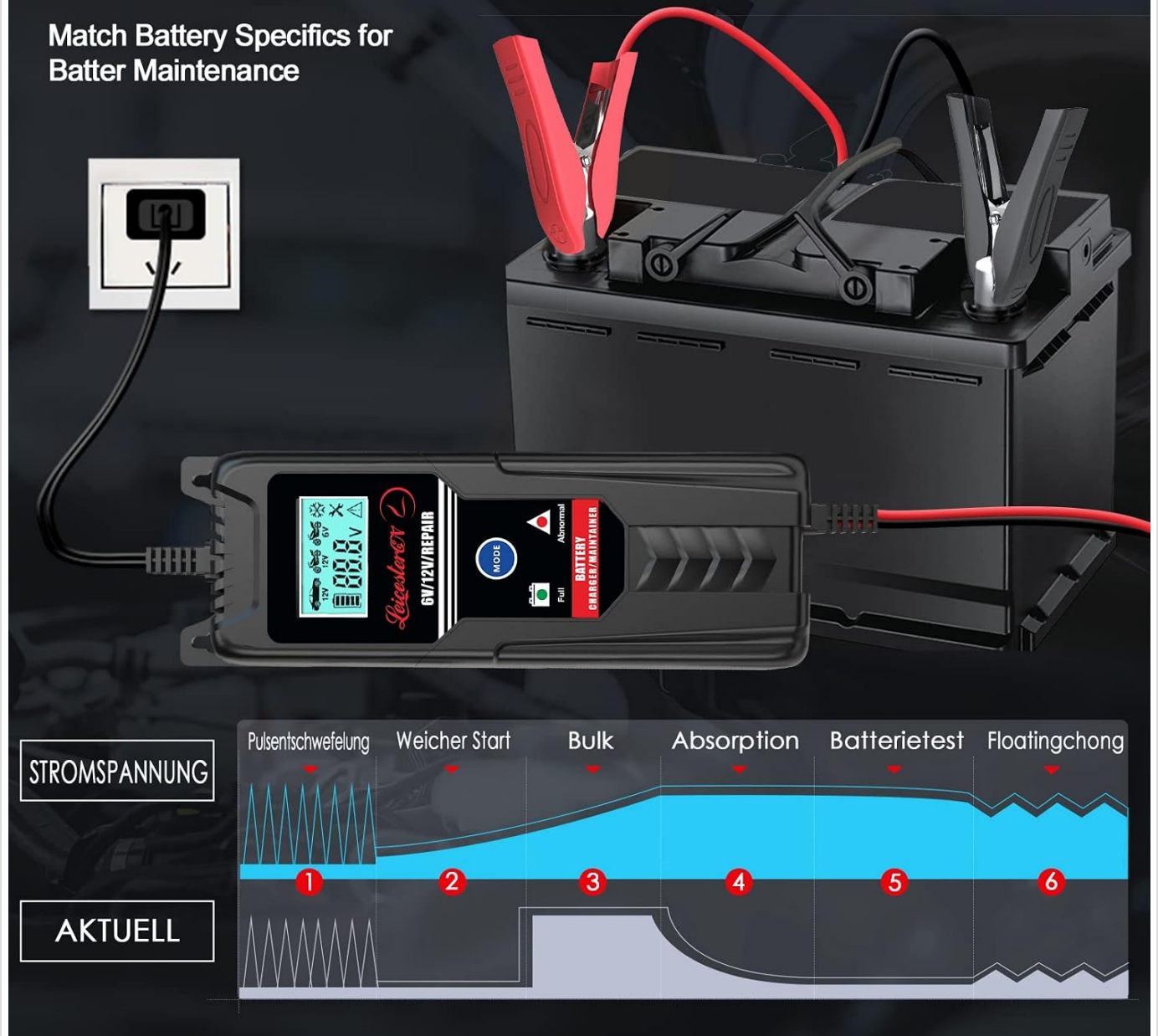


Image: A graphical representation of the 6-stage charging process: Desulfation, Soft Start, Bulk, Absorption, Battery Test, and Trickle/Floating.

Charging Modes:

- **Desulfation:** Applies high-frequency pulse charges to break down lead sulfate crystals in deeply discharged or sulfated batteries.
- **Soft Start:** Gently introduces current to the battery to prevent damage, especially for deeply discharged batteries.
- **Bulk Charge:** Charges the battery at its maximum current capacity until it reaches approximately 80% of its charge.
- **Absorption Charge:** Reduces the charging current as the battery approaches full charge, ensuring it reaches 100% without overcharging.
- **Battery Test:** Assesses the battery's condition and capacity.
- **Trickle/Float Charge:** Maintains the battery at full charge by providing a small, constant current, preventing self-discharge and extending battery life. The charger automatically switches to this mode when the battery is fully charged.

Repair Function:

The strong pulse repair technology helps remove vulcanization and can repair slightly damaged batteries, reducing water loss and potentially extending the battery's lifespan. This function is automatically engaged when needed or can be activated via the mode button.

Automatic Temperature Detection:

The charger automatically adjusts charging parameters based on ambient temperature. It enters "Winter Mode" for optimal charging in cold environments (e.g., -20°C / -4°F) and "Summer Mode" for warmer conditions (e.g., 50°C / 122°F), ensuring efficient and safe charging year-round.

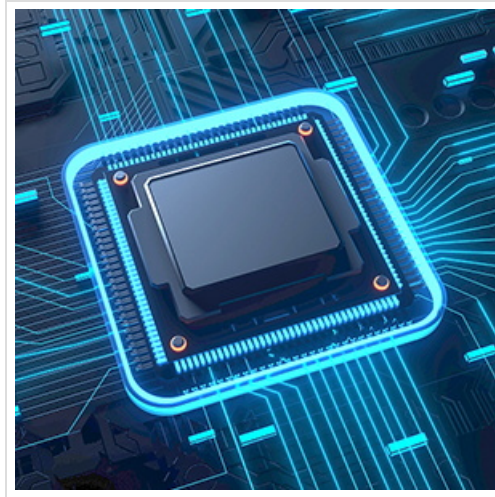


Image: The charger illustrating its automatic temperature detection feature, showing optimal operation in both winter (-20°C) and summer (50°C) conditions.

MAINTENANCE

- **Cleaning:** Disconnect the charger from power and battery before cleaning. Wipe the exterior with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the charger in a cool, dry place when not in use. Ensure cables are neatly coiled and not kinked.
- **Cable Inspection:** Periodically inspect the charging cables and connectors for any signs of damage, fraying, or corrosion. Replace if necessary.
- **Cooling Fan:** Ensure the cooling fan vents are not obstructed to allow proper heat dissipation.



Image: A comprehensive diagram illustrating both the voltage and current curves during the charging process, alongside icons representing various safety protections.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Charger not turning on/LCD blank.	No power from outlet; loose connection; internal fault.	Check power outlet; ensure all connections are secure.
Charger displays "Abnormal" or warning icon.	Incorrect battery connection (reverse polarity); battery fault (short circuit, deeply discharged, damaged); over-temperature.	Verify correct polarity (+ to +, - to -); check battery condition; allow charger to cool down if hot.
Battery not charging or charging slowly.	Battery is sulfated or severely damaged; incorrect mode selected; very low ambient temperature.	Try the repair function; ensure correct 6V/12V mode is selected; charger automatically adjusts for temperature, but extreme cold can slow charging.
Charger gets hot during operation.	Normal operation during bulk charging; obstructed ventilation.	Ensure proper ventilation around the charger. The built-in cooling fan helps manage temperature.

SPECIFICATIONS

Feature	Detail
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Feature	Detail
Model Number	EPA1205A
Input Voltage	240 Volts
Output Voltage	6 Volts, 12 Volts
Product Dimensions	17.02 x 6.35 x 5.08 cm
Weight	720 g
Color	Black, Red
Certification	CE
Compatible Battery Types	Pb/SLA/VRLA/GEL/AGM Lead-Acid Batteries

WARRANTY AND SUPPORT

LEICESTERCN offers a **3-Year quality assurance** for this product, along with a **12-Month refund policy**. For any inquiries, technical assistance, or warranty claims, please contact LEICESTERCN customer service. We provide **24/7 after-sale services** to ensure your satisfaction.

Please refer to your purchase documentation or the official LEICESTERCN website for specific contact details.