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> LEICESTERCN Car Battery Charger Maintainer 6V 12 Volt Trickle Charger Smart Automatic Repair Maintenance for Automotive, Motorcycle, Lawn Mower, Boat, AGM, Gel, Detachable O-Rings Alligator Clips

## LEICESTERCN EPA1205A

# LEICESTERCN 6V/12V Car Battery Charger Maintainer User Manual

Model: EPA1205A

Brand: LEICESTERCN

## 1. INTRODUCTION AND PRODUCT OVERVIEW

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The LEICESTERCN Car Battery Charger Maintainer is an advanced smart automatic repair and maintenance device designed for various 6V and 12V lead-acid batteries, including Pb/SLA/VRLA/GEL/AGM types. It is suitable for automotive, motorcycle, lawn mower, tractor, ATV, RVs, boat, marine, and snowmobile batteries. This charger features intelligent detection, multi-stage charging, and comprehensive safety protections to ensure optimal battery health and extended lifespan.



Figure 1.1: LEICESTERCN 6V/12V Car Battery Charger Maintainer with included accessories.



Figure 1.2: The charger is designed to rescue and recover your battery.

## INTELLIGENT DESIGN FOR CHARGING YOUR 6V/12V BATTERY

**FOR OPTIMAL USE:**

1. Do Not Charge Lithium Batteries.
2. When Battery Voltage Under 2V, The Battery Is Basically Damaged And Cannot Be Repaired.
3. Please Select The Charging Mode Before Hooking Leads to Battery, The Charger Automatically Locks The Charging Mode After Connecting The AC Power Supply And The Battery For 5 Seconds.

Figure 1.3: The charger is compatible with a wide range of vehicles and battery types.

The device incorporates a microprocessor-controlled 6-stage automatic charging process, including desulfation, soft start, bulk, absorption, battery test, and trickle charging. This ensures efficient and safe charging, helping to recover and extend battery life.

Your browser does not support the video tag.

Video 1.1: An overview and demonstration of the LEICESTERCN Car Battery Charger's features and capabilities.

## 2. SAFETY INFORMATION

Always prioritize safety when working with electrical devices and batteries. This charger is equipped with multiple protection features to ensure safe operation, but user vigilance is still required.

- **Reverse Polarity Protection:** Prevents damage if the clamps are connected incorrectly to the battery terminals.
- **Short Circuit Protection:** Automatically shuts off if a short circuit is detected.
- **Over Current Protection:** Safeguards against excessive current flow.
- **Over Charge Protection:** Prevents overcharging by automatically switching to float mode when the battery is full.
- **Overload Protection:** Protects the charger from excessive load.
- **Overheat Protection:** Features a reliable cooling fan and internal sensors to prevent overheating.
- **Sparkproof:** Designed to prevent sparks during connection.
- **Over Voltage Protection:** Protects against input voltage surges.
- **Over Discharge Protection:** Prevents damage to deeply discharged batteries.



Figure 2.1: Overview of the multi-level safety features integrated into the charger.

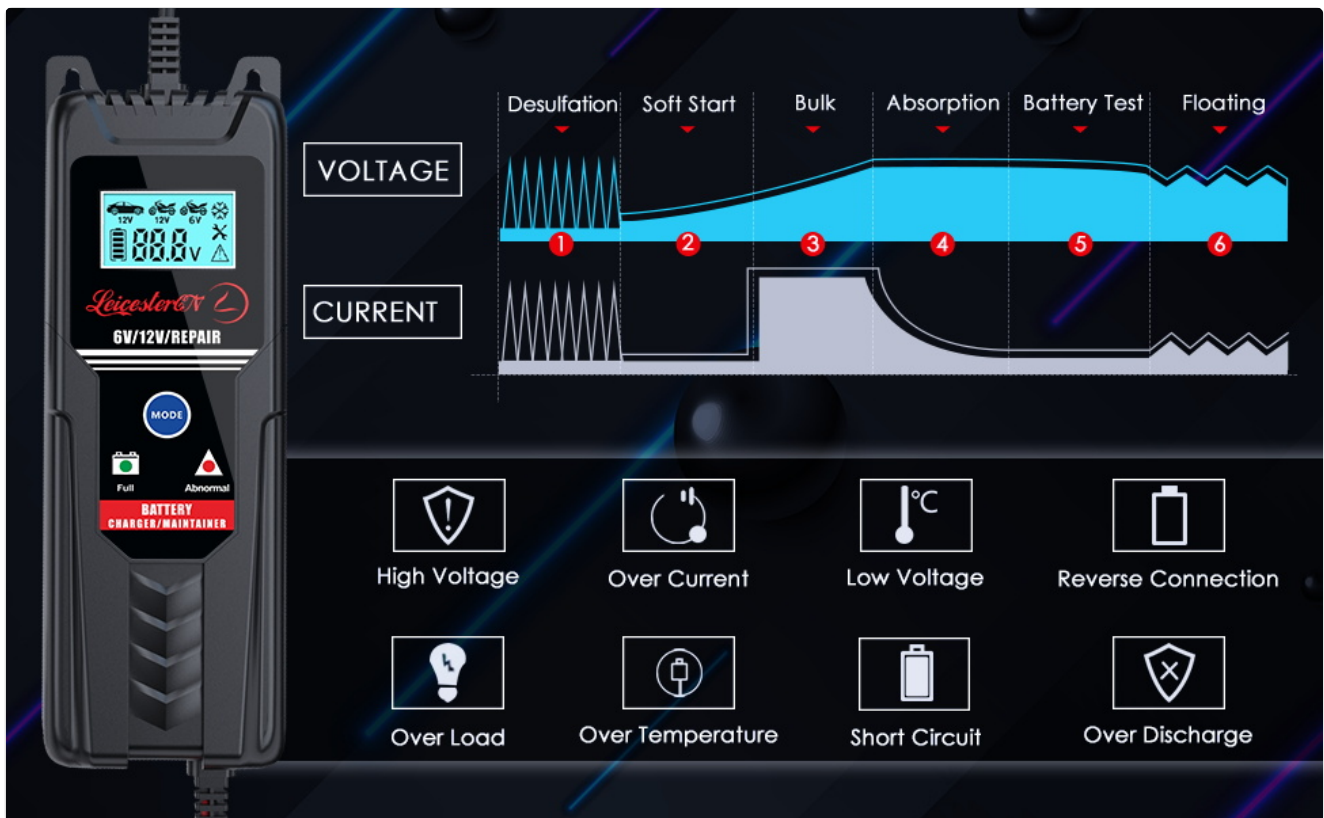


Figure 2.2: Visual representation of the 6-stage charging process and various protection mechanisms.

#### Important Safety Notes:

- Do not charge Lithium Batteries with this device.
- Ensure proper ventilation during charging to prevent gas buildup.
- Keep out of reach of children.
- Always disconnect the charger from the AC power supply before disconnecting from the battery.

### 3. WHAT'S IN THE BOX

Upon opening the package, you will find the following components:

# WHAT'S IN THE BOX

- 1 x Battery Repair Charger
- 1 x Alligator Clips
- 1 x Fused Ring Connectors
- 1 x Instruction Manual



Figure 3.1: Contents of the LEICESTERCN Battery Charger package.

- 1 x Battery Repair Charger Unit
- 1 x Alligator Clips (Detachable)
- 1 x Fused Ring Connectors (Detachable)
- 1 x Instruction Manual

## 4. SETUP

Before connecting the charger to your battery, ensure you select the appropriate charging mode. The charger intelligently identifies 6V and 12V batteries, but manual selection is required for 12V Motorcycle and 12V Car modes.

# APPLY TO 6V & 12V

Press MODE Button To Select Charging Mode  
Before Hooking Leads To Battery

## 6V

2A Slow Charge

## 12V

2A Slow Charge  
4A Quick Charge



Figure 4.1: Instructions for selecting the correct voltage mode (6V or 12V) before connecting.

- 1. Plug in the Charger:** Connect the charger's AC power cord into a standard wall outlet. The LCD screen will light up, displaying "0.0V".
- 2. Select Charging Mode:** Press the **MODE** button to select the appropriate charging mode for your battery. The charger will intelligently identify 6V and 12V batteries. For 12V Motorcycle and 12V Car modes, manual selection is required.
- 3. Connect to Battery:** Clip the red clamp to the positive (+) pole of the battery and the black clamp to the negative (-) pole. Ensure a secure connection.
- 4. Optimal Use Notes:**
  - Do not charge Lithium Batteries.
  - If battery voltage is under 2V, the battery is basically damaged and cannot be repaired.
  - The charger automatically locks the charging mode after connecting the AC power supply and the battery for 5 seconds.

# EASY OPERATION

6-Stages Charging Process By Microprocessor Controlled

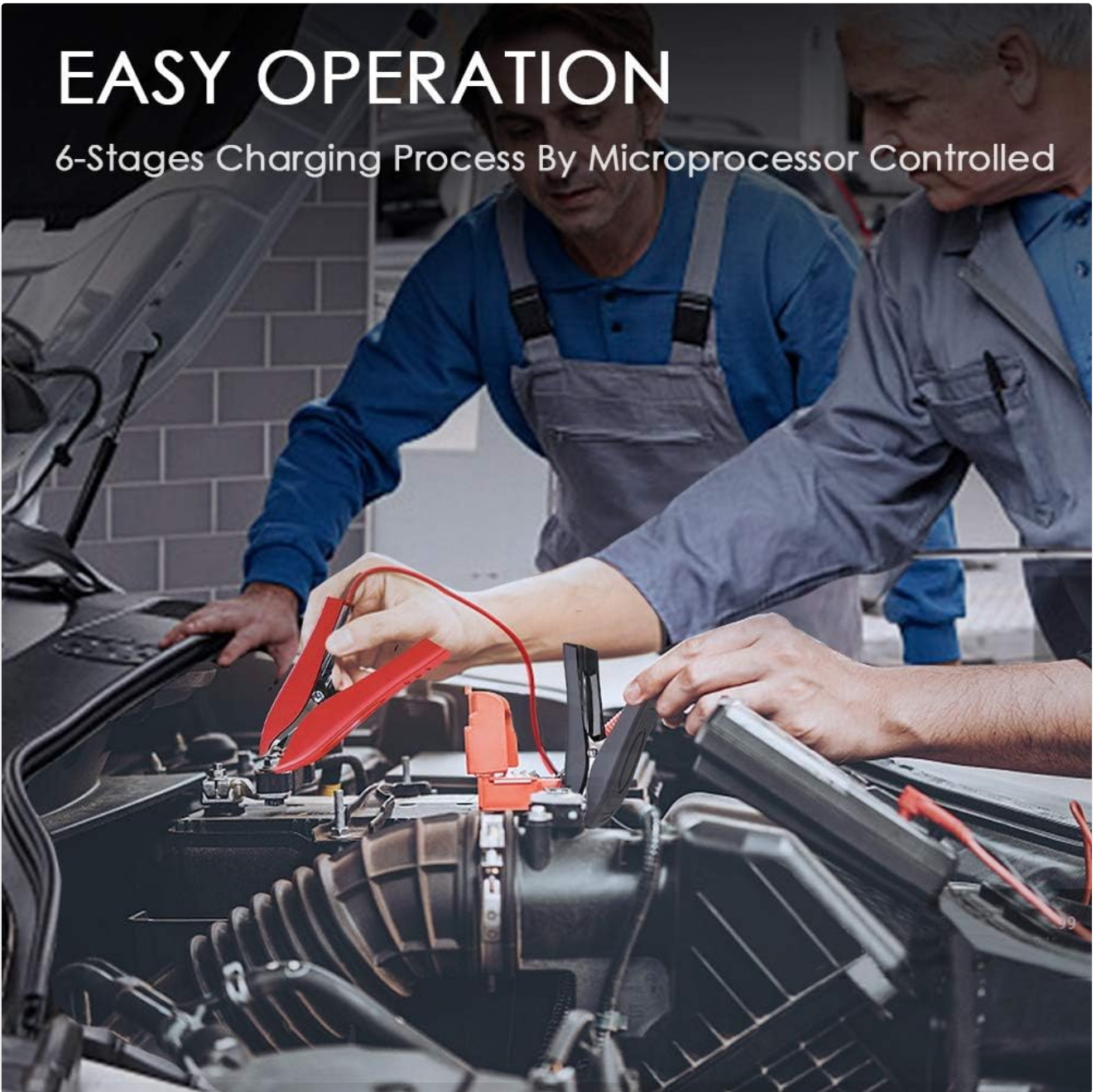


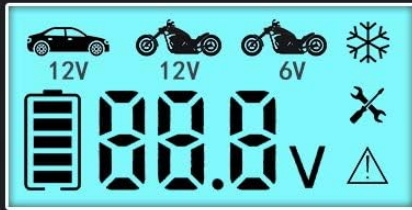
Figure 4.2: Demonstrates the ease of connecting the charger to a car battery.

## 5. OPERATING INSTRUCTIONS

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The LEICESTERCN charger features an intuitive LCD screen and a single MODE button for straightforward operation.

# INTUITIVE LED DISPLAY




00.0V : Battery Voltage

 : Battery Power

 : Warning

 : Winter Mode

 : Repair



LED Display

Mode

Abnormal

Full Charge

Figure 5.1: Detailed view of the intuitive LED display and its indicators.

- **LCD Display:** Shows battery voltage, battery power level, warning indicators, Winter Mode, and Repair status.
- **MODE Button:** Used to cycle through different charging modes (Car, Motorcycle, Winter, Repair).
- **Full Indicator:** Illuminates when the battery is fully charged.
- **Abnormal Indicator:** Flashes to indicate an issue with the battery or connection.

Once connected and the mode is selected, the charger will automatically begin the 6-stage charging process. It will monitor the battery's state and adjust the charging current and voltage accordingly. When the battery is fully charged, the display will show "FUL" and the charger will automatically switch to float mode to maintain the battery.

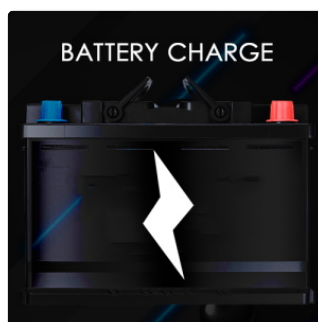


Figure 5.2: The charger intelligently manages the battery charging process.

For optimal performance in cold weather, select the "Winter Mode" (indicated by a snowflake icon) to ensure efficient charging at low temperatures.



Figure 5.3: Smart Winter Mode ensures effective charging in cold environments.

## 6. MAINTENANCE

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The LEICESTERCN charger is designed for long-term battery maintenance, acting as a trickle charger to keep your battery in optimal condition. It also features a pulse repair technology to address common battery issues.

- **Trickle Charging:** Once fully charged, the device automatically switches to a low-current trickle charge to maintain the battery's full capacity without overcharging. This is ideal for vehicles stored for extended periods.
- **Pulse Repair Technology:** This feature helps to remove vulcanization (sulfation) and repair slightly damaged batteries, reducing water loss and extending battery life.

# EXTEND YOUR BATTERY LIFE

When battery voltage under 2V, the battery is basically damaged and cannot be repaired.

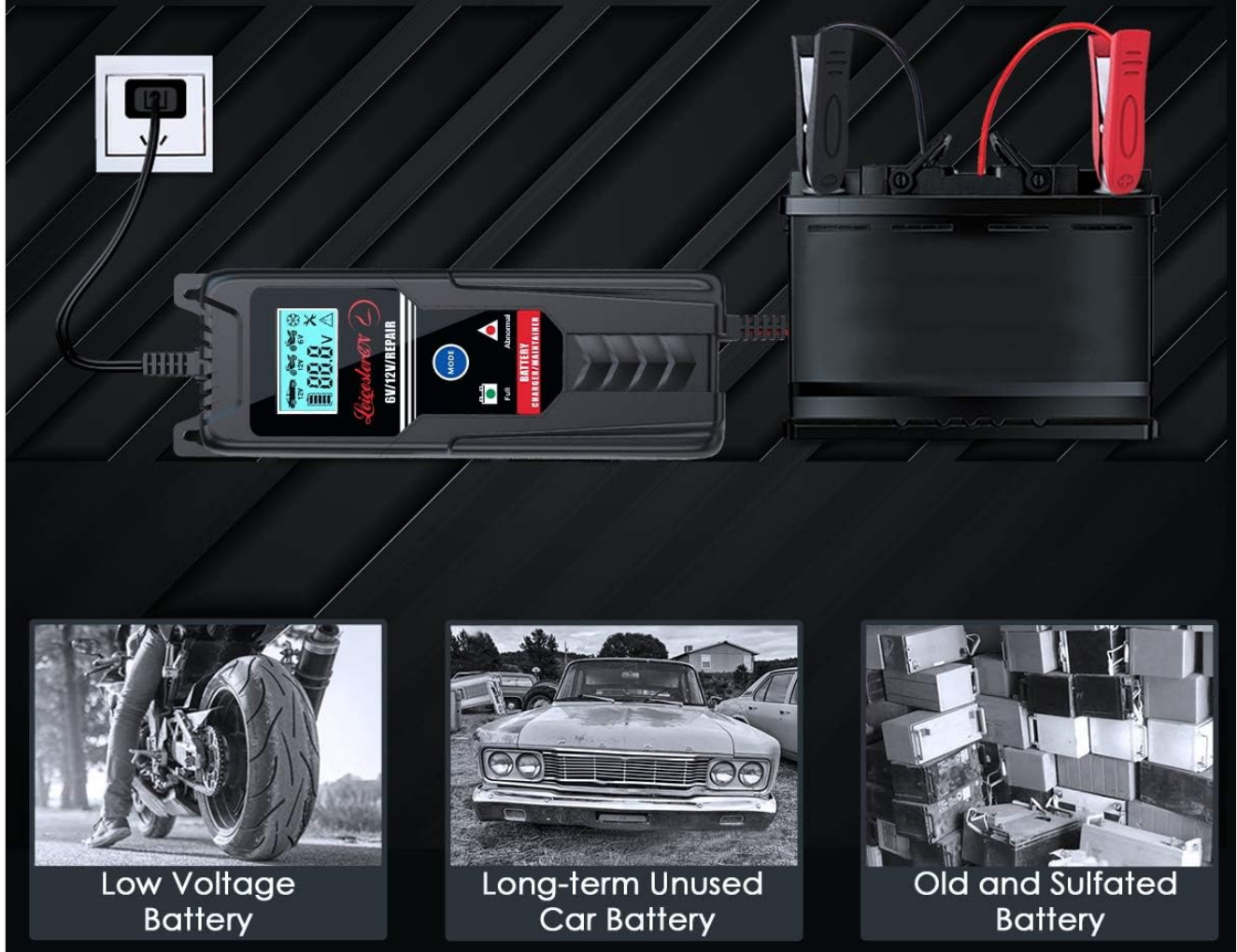


Figure 6.1: The charger helps extend battery life by addressing common issues like low voltage, long-term disuse, and sulfation.



Figure 6.2: The automatic recovery function helps restore battery performance.



Figure 6.3: Continuous maintenance helps preserve battery health.

## 7. TROUBLESHOOTING

The charger provides diagnostic information through its intuitive LCD screen. If an issue occurs, the "Abnormal" indicator will flash.

- **"Abnormal" Indicator Flashing:** This indicates a problem with the battery or connection.
- **Low-Voltage/Vulcanized/Capacity Loss Detection:** When the charger detects these conditions, it will prompt the user to repair and charge the battery. If the battery is severely damaged (e.g., voltage under 2V), it may indicate that the battery has lost its value and cannot be repaired.
- **Reverse Connection:** If the clamps are connected to the wrong terminals, the charger will not spark and will indicate an abnormal connection, protecting both the charger and the battery.



Figure 7.1: The charger's intelligent detection system identifies battery issues.

If the repair symbol (screwdriver and wrench) flashes on the display screen, it means there is vulcanization inside the battery. To initiate regular repair charging, press and hold the **MODE** button for 3 seconds. The charger will then attempt to repair the battery.

## 8. SPECIFICATIONS

Key technical specifications for the LEICESTERCN Car Battery Charger Maintainer:

Feature	Specification
Brand	LEICESTERCN
Model Number	EPA1205A (Manufacturer Part Number: DC200)
Input Voltage	Standard AC (plugs into any standard wall outlet)
Output Voltage	6 Volts (DC), 12 Volts (DC)

Feature	Specification
Amperage	4 Amps
Charging Stages	6-Stage Automatic (Desulfation, Soft start, Bulk, Absorption, Battery test, Trickle)
Battery Types Supported	Pb/SLA/VRLA/GEL/AGM lead-acid batteries
Item Weight	1.37 pounds (0.62 Kilograms)
Product Dimensions	6.7 x 2.5 x 2 inches (2.5"D x 6.7"W x 2"H)
Special Features	Quick Disconnect Harness, Reversed Hook-Up Protection, Smart Micro Controller, Over Heat Protection, Reverse Polarity Protection, Over Current Protection, Sparkproof, Over Load Protection, Over Voltage Protection, Over Charge/Discharge Protection, Over Temperature Protection, Connect and Forget It



Figure 8.1: The charger is equipped with an intelligent controller for efficient operation.



Figure 8.2: A reliable cooling fan ensures the charger operates within safe temperature limits.

## 9. WARRANTY AND SUPPORT

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LEICESTERCN offers comprehensive support for this product:

- **Quality Assurance:** 3-Year quality assurance.
- **Refund Policy:** 12-Month refund period.
- **After-Sale Services:** 24/7 customer support is available for any inquiries or assistance needed.

For support, please refer to the contact information provided with your product packaging or visit the official LEICESTERCN store on Amazon.

