

Einhell 1002215

Einhell CE-BC 2 M Battery Charger Instruction Manual

Model: CE-BC 2 M

1. INTRODUCTION

The Einhell CE-BC 2 M battery charger is a microprocessor-controlled device designed for all types of 12V automotive batteries. This intelligent charger is suitable for modern vehicle batteries, offering advanced technical protection and maintenance features. Its design prioritizes gentle and efficient charging to maximize battery life and performance. The detailed LED display simplifies operation, providing clear information on the charging process. This universal Einhell charger is compatible with Gel, AGM, and maintenance-free/low-maintenance lead-acid batteries.

The CE-BC 2 M automatically adapts to the vehicle battery voltage (12 V), and its multi-stage charging cycle is precisely controlled and adjusted by a microprocessor. The intelligent electronic control analyzes the connected battery and initiates the most suitable charging mode based on its condition. A trickle charge function protects and preserves the battery for optimal and long-lasting charge, making it ideal for seasonal vehicles stored for extended periods.

2. SAFETY INSTRUCTIONS

Read all safety warnings and instructions carefully before using the battery charger. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Electrical Safety:** Ensure the charger is connected to a properly grounded outlet. Do not expose the charger to rain or wet conditions.
- **Battery Safety:** Always connect the battery clamps correctly: positive (+) to positive (+) and negative (-) to negative (-). Avoid short-circuiting the clamps.
- **Ventilation:** Charge batteries in a well-ventilated area. Batteries can produce explosive gases during charging.
- **Protection Features:** The CE-BC 2 M includes automatic protection against overcharging, short circuits, and reverse polarity, safeguarding both the charger and the battery.
- **Insulated Clamps:** The fully insulated battery clamps ensure safe and easy connection.
- **IP65 Rating:** The charger meets IP65 protection standards, meaning it is dustproof and protected against water jets. However, avoid submerging the device.

3. PRODUCT OVERVIEW

The Einhell CE-BC 2 M battery charger consists of the main charging unit and two fully insulated battery clamps (red for positive, black for negative).







Figure 3.1: Einhell CE-BC 2 M Battery Charger with its components.

LED Display Indicators

The LED display provides visual feedback on the battery's charge status and the selected operating mode.

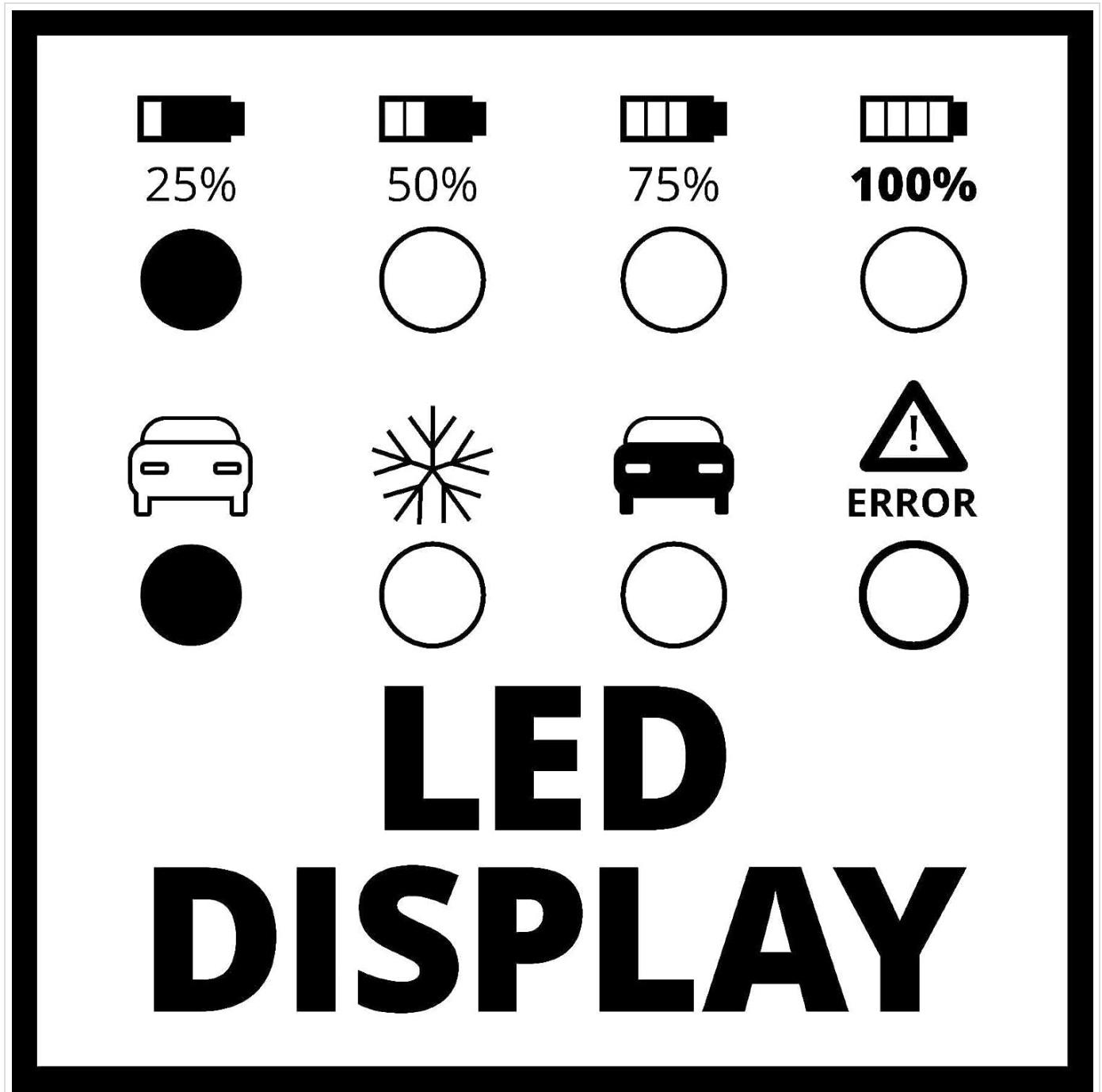


Figure 3.2: LED Display showing various indicators.

- **Charge Level Indicators:** Displays 25%, 50%, 75%, or 100% to show the current charge status of the battery.
- **12V Car Mode:** Indicates that the charger is operating in standard 12V automotive charging mode.
- **Winter Mode:** Indicates that the charger is operating in winter mode, suitable for temperatures below 5°C.

- **Error Indicator:** A warning light illuminates if a problem occurs, such as incorrect connection or a battery fault.

4. SETUP

Follow these steps to set up your Einhell CE-BC 2 M battery charger:

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.
2. **Connect Battery Clamps:**
 - Connect the **red (+)** positive clamp to the positive (+) terminal of the battery.
 - Connect the **black (-)** negative clamp to the negative (-) terminal of the battery.

Ensure a secure connection. Avoid touching the clamps together once connected to the battery.

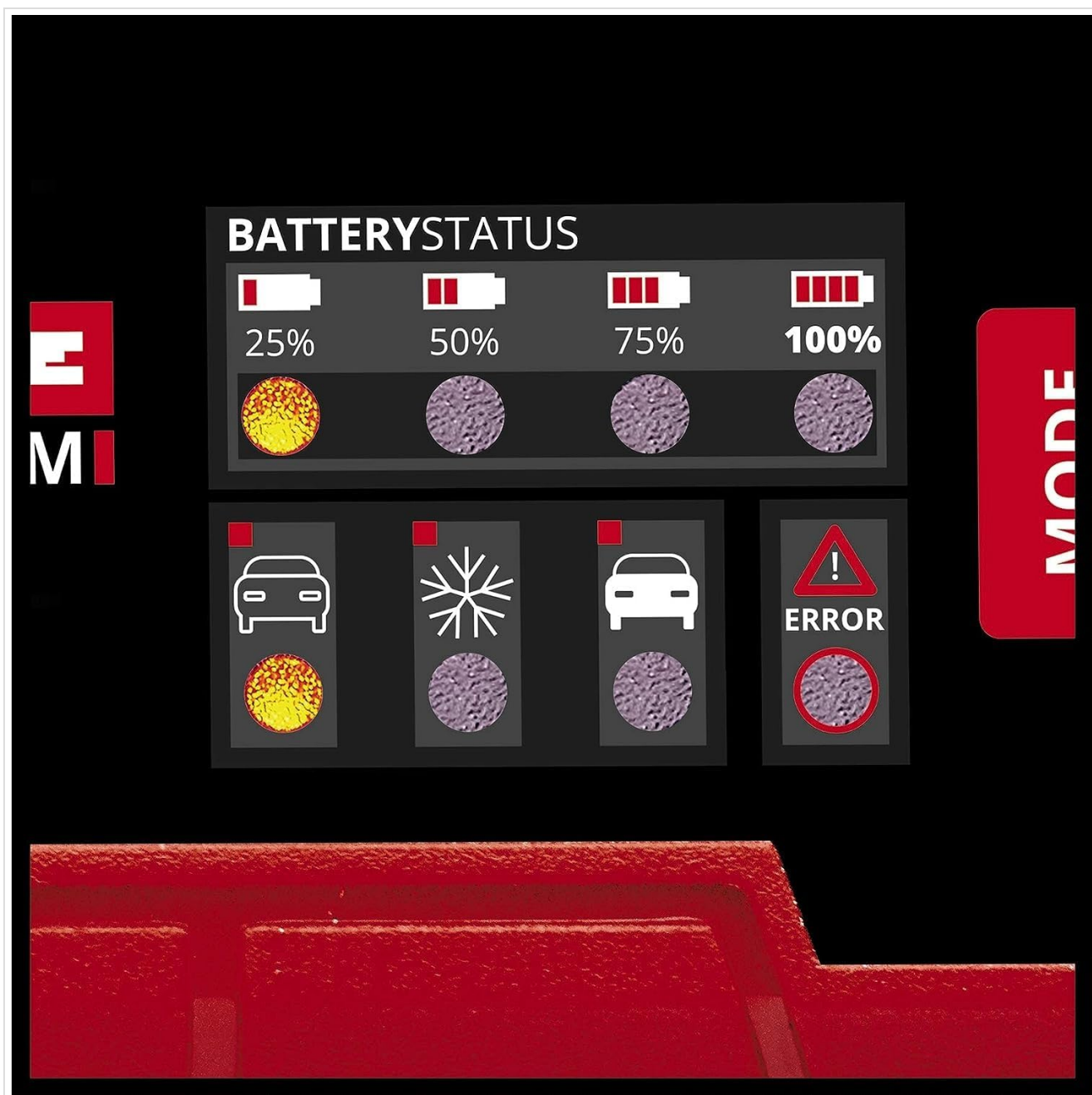


Figure 4.1: Connecting the battery clamps.

3. **Connect to Power:** Plug the charger's power cord into a standard electrical outlet. The charger will automatically begin its diagnostic and charging process.

4. **Wall Mounting (Optional):** The charger housing includes a suspension eyelet for convenient wall mounting.

5. OPERATING INSTRUCTIONS

The Einhell CE-BC 2 M battery charger operates automatically once connected, thanks to its microprocessor control.

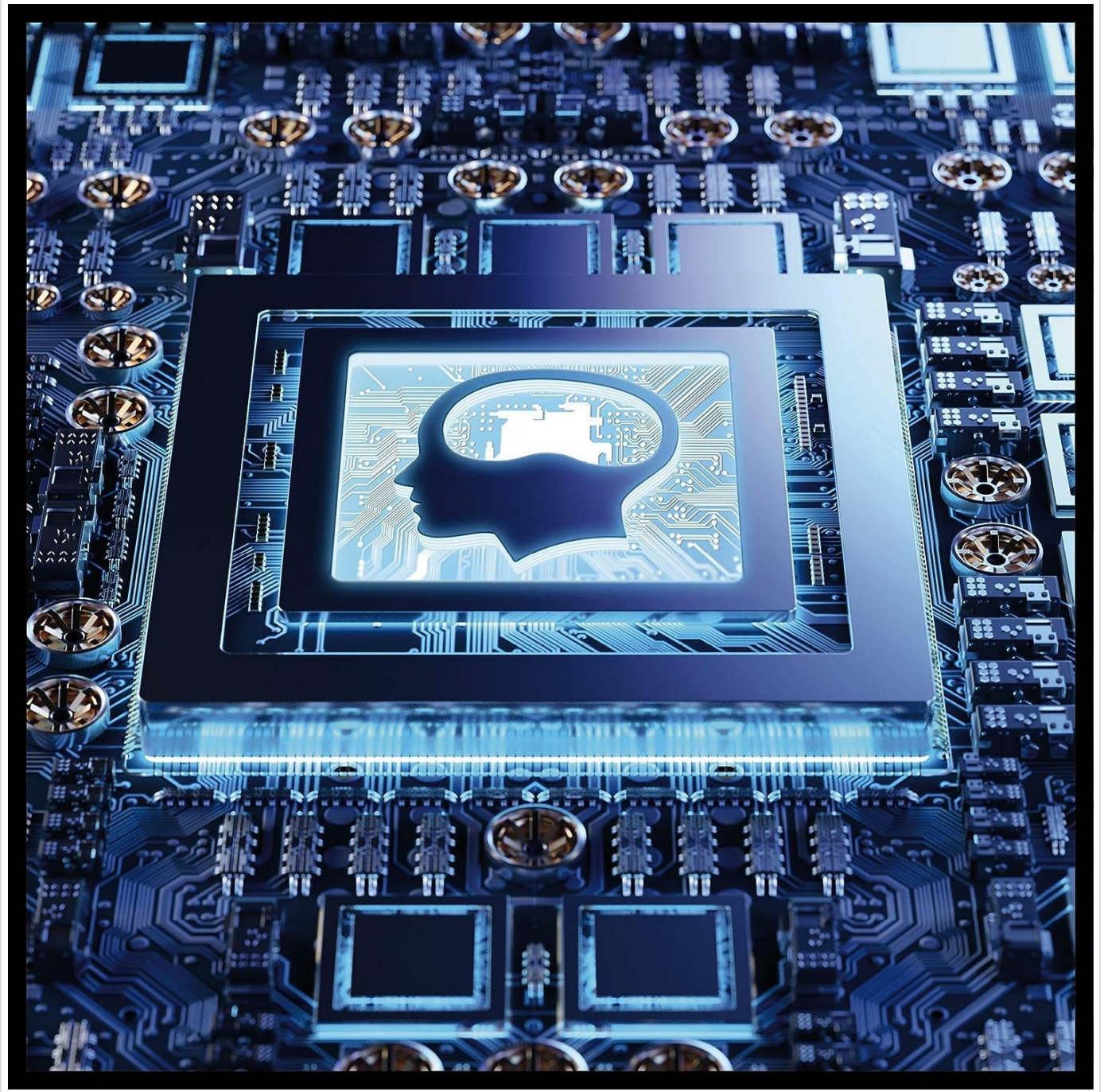


Figure 5.1: Microprocessor-controlled intelligent charging.

- **Automatic Mode Selection:** The intelligent electronic control analyzes the connected battery's condition and automatically selects the most appropriate multi-stage charging mode.
- **Charge Progress:** Monitor the charge level indicators (25%, 50%, 75%, 100%) on the LED display to track the charging progress.
- **Maintenance Charging:** For vehicles stored for extended periods (e.g., seasonal vehicles), the trickle charge function will gently maintain the battery at its optimal level, preventing deep discharge and extending battery life.
- **Winter Mode:** If outdoor temperatures are below 5°C, the charger will automatically activate the Winter charging mode to optimize charging performance in cold conditions.



Figure 5.2: Winter charging mode for vehicles in cold conditions.

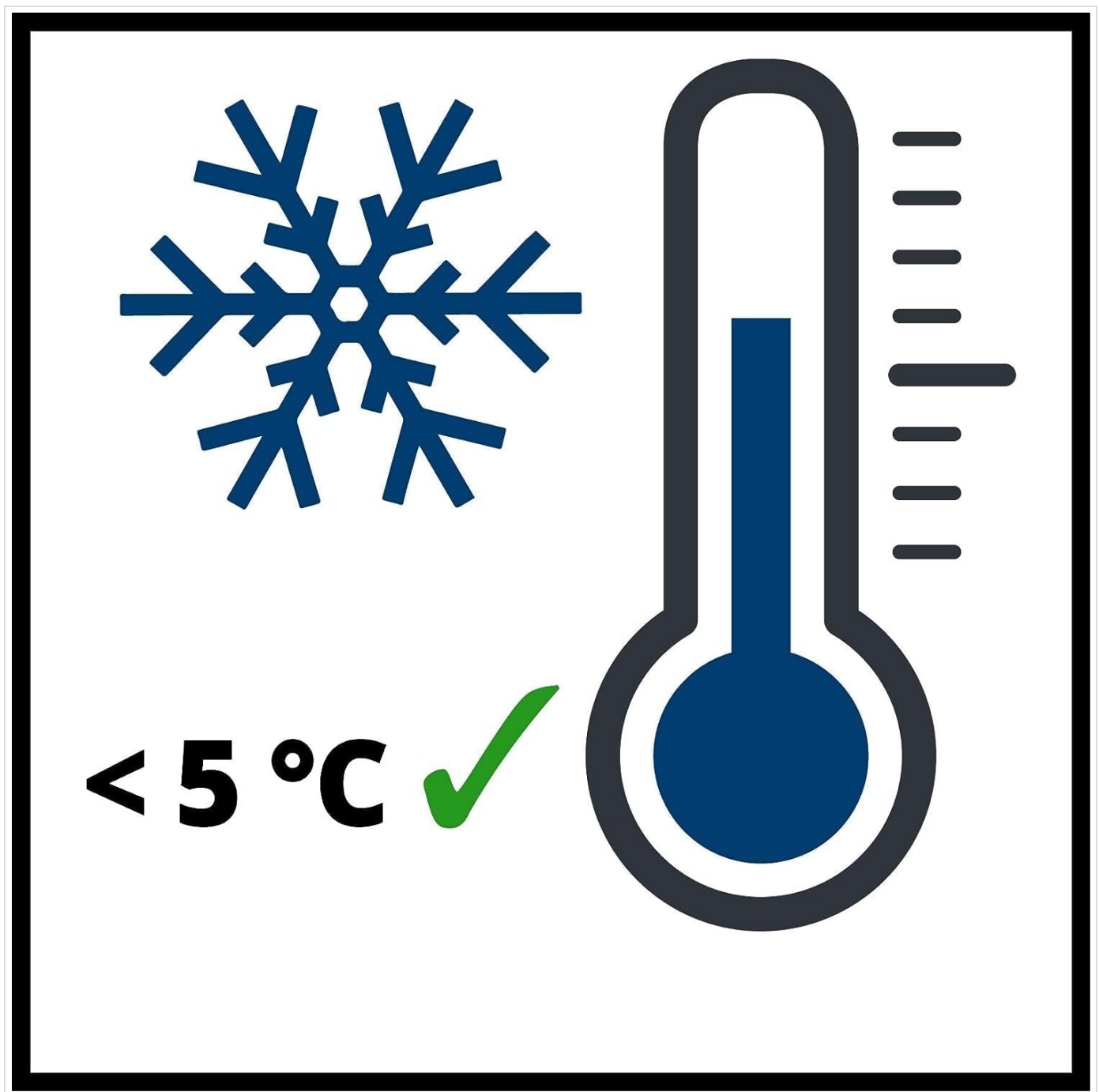
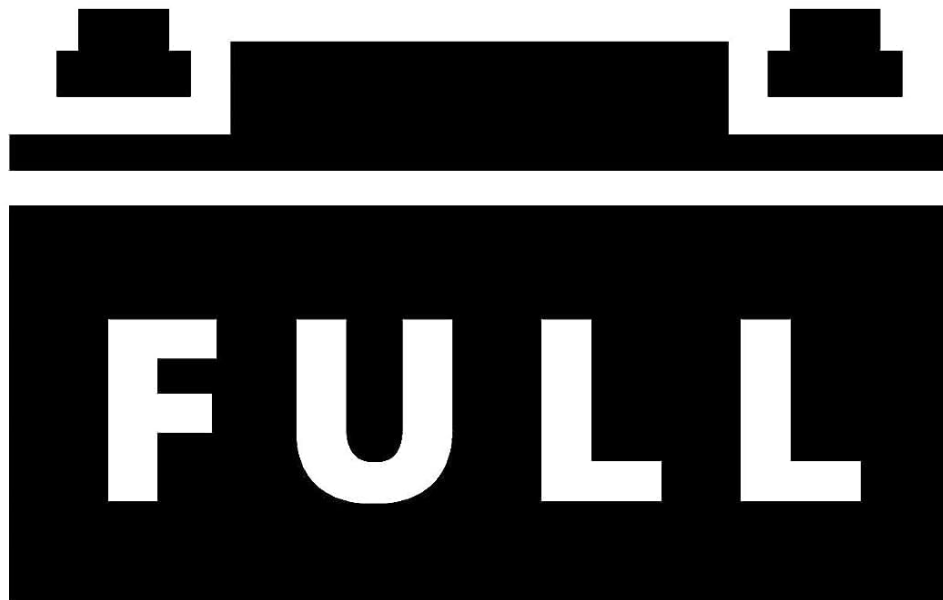


Figure 5.3: Winter mode activates below 5°C.

AUTOMATIC CHARGING



MICROPROCESSOR CONTROLLED

Figure 5.4: Automatic charging process.

6. MAINTENANCE

Proper maintenance ensures the longevity and reliable operation of your battery charger.

- **Cleaning:** Disconnect the charger from the power supply and the battery before cleaning. Wipe the exterior with a dry or slightly damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Storage:** Store the charger in a dry, cool place when not in use. Ensure the cables are neatly coiled and not kinked.
- **Cable and Clamp Inspection:** Regularly inspect the power cord, battery cables, and clamps for any signs of damage, wear, or corrosion. Replace damaged components immediately.

7. TROUBLESHOOTING

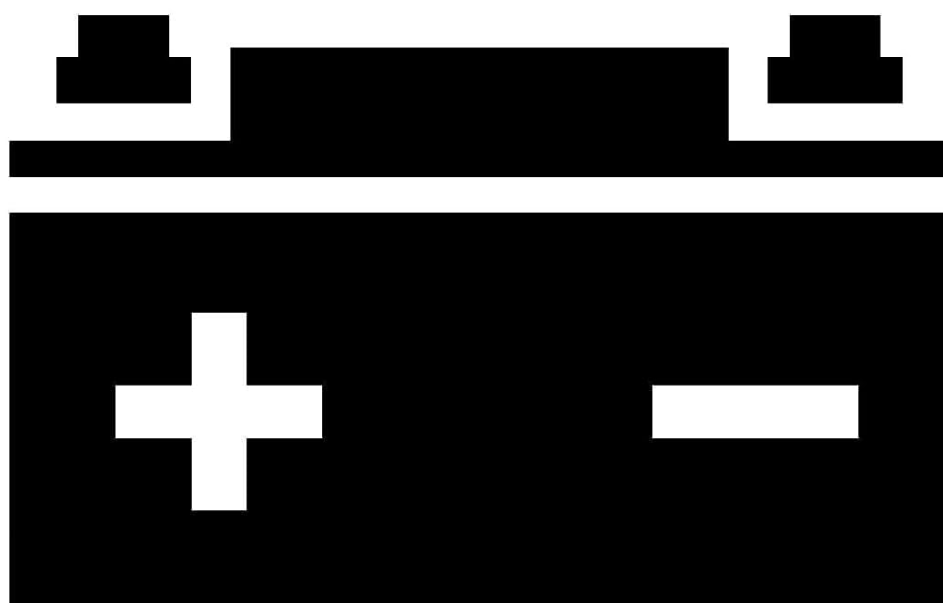
If you encounter issues with your Einhell CE-BC 2 M charger, refer to the LED error indicator and the following common troubleshooting steps:

Problem	Possible Cause	Solution
Error indicator light is on.	Reverse polarity connection.	Disconnect from power and battery. Reconnect clamps correctly (red to +, black to -).
Error indicator light is on.	Short circuit detected.	Ensure battery clamps are not touching each other or other metal parts. Check for damaged cables.
Charger not starting/no display.	No power supply.	Check power outlet and charger plug connection.
Charger not starting/no display.	Battery not connected or severely discharged.	Ensure clamps are securely connected. Some deeply discharged batteries may not be recognized.

8. SPECIFICATIONS

Technical data for the Einhell CE-BC 2 M Battery Charger:

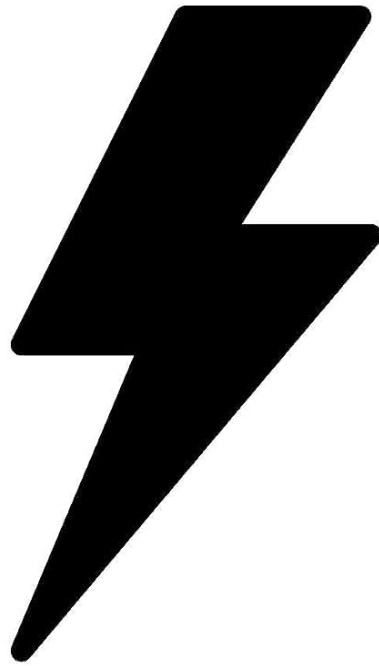
Feature	Specification
Model Number	1002215
Input Voltage	12 Volts
Rated Current	2 A (Max)
Compatible Battery Types	Gel, AGM, Lead-Acid (maintenance-free and low-maintenance)
Compatible Battery Capacity	3 - 60 Ah
Protection Class	IP65
Product Dimensions (D x W x H)	28P x 15l x 7H centimeters
Country of Origin	China



12 V

3 - 60 Ah

Figure 8.1: Compatible battery specifications.



**2 AMP.
MAX.**

Figure 8.2: Maximum charging current.

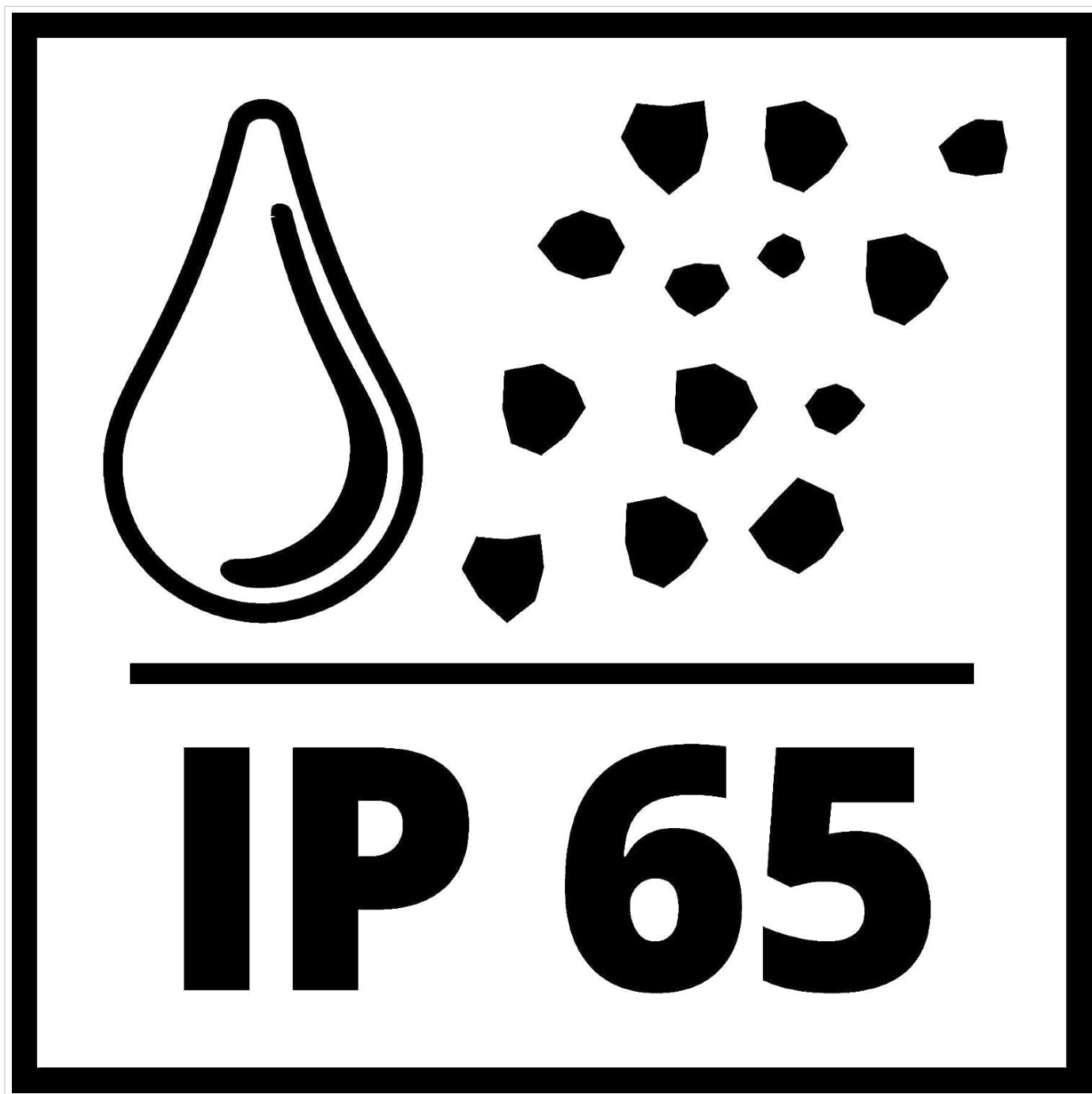


Figure 8.3: IP65 protection rating.

9. WARRANTY AND SUPPORT

For warranty information, technical support, or service inquiries, please refer to the official Einhell website or contact your authorized dealer. Keep your purchase receipt as proof of purchase.

Online Resources: Visit the [Einhell Brand Store](#) for additional product information and support.

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ASK A QUESTION ABOUT THIS MANUAL

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

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

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