

## Loboo CB20

# Loboo CB20 Smart Battery Charger and Protector User Manual

Model: CB20 | Brand: Loboo

## 1. INTRODUCTION

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The Loboo CB20 Smart Battery Charger and Protector is designed to manage and protect your motorcycle's 12V battery system. It features intelligent voltage detection, multiple safety protection mechanisms, and three-way power output, allowing for the safe integration of additional electronic devices. This device is compatible with both 12V lead-acid batteries (including maintenance-free, AGM) and 12V lithium iron phosphate batteries.

## 2. PRODUCT PARAMETERS

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**Three-way output  
with a total power of  
up to 480W**

Can load more modified electronic devices.



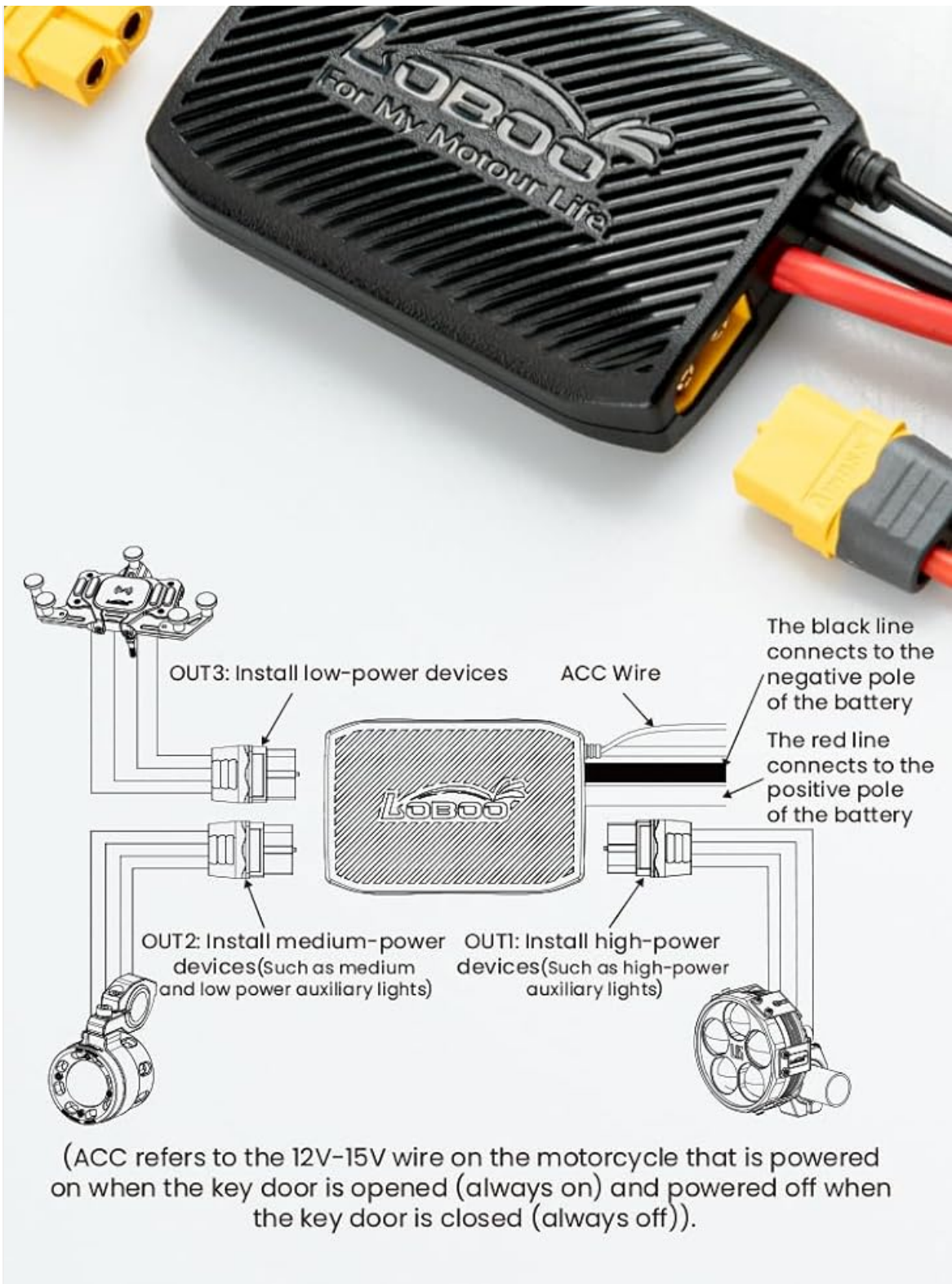


Image: Detailed product parameters for the Lobo CB20, including model, working voltage, dimensions, weight, dustproof/waterproof grade, maximum output power, and applicable battery types.

#### Lobo CB20 Specifications

Parameter	Value
Model	CB20
Working Voltage	12 - 15V
Dimensions	72.8mm x 50.4mm x 16.9mm
Weight	127g

Parameter	Value
Dustproof & Waterproof Grade	IP65
Maximum Output Power & Current	OUT 1: 240W/20A (MAX) OUT 2: 180W/15A (MAX) OUT 3: 120W/10A (MAX)
Applicable Battery	12V Lead-acid battery (including maintenance-free, AGM) 12V Lithium iron phosphate battery

### 3. SAFETY INFORMATION

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Always ensure proper installation and handling of the device to prevent damage to the product, battery, or vehicle. Disconnect the battery before installation. Do not attempt to open or modify the device. Ensure all connections are secure and insulated. The device is designed with multiple protection mechanisms, but proper installation is crucial for optimal safety and performance.

#### **Built-in Protection Mechanisms:**

# Suitable for 12V lead-acid batteries and lithium iron phosphate batteries

Suitable for 12V lead-acid batteries (Including maintenance-free batteries, AGM, etc.) and 12V lithium iron phosphate batteries, charging battery capacity 4-35Ah.



Image: Visual representation of the CB20's multiple protection features, including low voltage, overload, short circuit, over-

voltage, reverse connection, and over-current protection.

- **Low Voltage Protection:** Prevents battery over-discharge.
- **Overload Protection:** Safeguards against excessive current draw.
- **Short Circuit Protection:** Protects the system from short-circuit events.
- **Over-voltage Protection:** Shields against voltage spikes.
- **Reverse Connection Protection:** Prevents damage from incorrect polarity.
- **Over-current Protection:** Limits current to safe levels.

## 4. SETUP AND INSTALLATION

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The Loooboo CB20 is designed for straightforward installation. Follow these steps carefully:

### 4.1 Connecting the Main Unit to the Battery

1. Locate your motorcycle's 12V battery. Ensure the motorcycle is turned off and the ignition key is removed.
2. Connect the positive (+) wire (red) of the CB20 to the positive terminal of your battery.
3. Connect the negative (-) wire (black) of the CB20 to the negative terminal of your battery.
4. Secure all connections firmly.

Smart Batter Charger

# Multiple protection chip Intelligent detection of battery voltage

Three-way output, with a total power of up to 480W,  
can load more modified electronic devices.



Image: The Lobo CB20 unit installed and connected to a motorcycle battery, showing the main power leads.

## 4.2 Connecting Electronic Devices to Outputs

The CB20 features three independent outputs (OUT 1, OUT 2, OUT 3) for connecting various electronic accessories. Each output has a different maximum power rating:

- **OUT 1:** Up to 240W/20A (MAX) - Suitable for high-power devices.
- **OUT 2:** Up to 180W/15A (MAX) - Suitable for medium-power devices.
- **OUT 3:** Up to 120W/10A (MAX) - Suitable for low-power devices.

Connect your electronic devices to the appropriate output ports using compatible connectors. The ACC wire ensures that the outputs are powered only when the motorcycle's ignition is on, preventing battery drain when the vehicle is off.

# IP65 Dustproof and waterproof

Effectively prevents dust, rain and other foreign objects from invading and damaging the motorcycle battery intelligent protector.



Image: A detailed diagram showing the main unit with its ACC wire, negative wire, positive wire, and three output ports (OUT 1, OUT 2, OUT 3) for connecting various electronic devices.

## [4.3 Installation Video Guide](#)

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Video: This video demonstrates the installation process of the Lobo CB20 Electronics Manager on a motorcycle, showing how to connect it to the battery and integrate electronic upgrades.

## 5. OPERATING INSTRUCTIONS

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The CB20 is designed for plug-and-use operation, requiring no complex settings. Once properly installed, its intelligent features activate automatically.

### 5.1 Indicator Lights

The device features three indicator lights that correspond to the three outputs, providing a clear visual status of their operation.



Image: A close-up view of the Lobo CB20's indicator lights, showing their status for each output.

When the motorcycle ignition is on, and the outputs are active, the corresponding indicator lights will illuminate. If a protection mechanism is triggered (e.g., overload, short circuit), the relevant indicator might change color or flash to signal an issue.

### 5.2 Battery Compatibility



# Plug and use No need for settings.

Get rid of setting troubles, easy to operate.



The three indicator lights correspond to the three outputs, and the working status is clear at a glance.



Image: The Loooboo CB20 unit shown near a motorcycle battery, highlighting its compatibility with both 12V lead-acid and lithium iron phosphate battery types.

The CB20 is suitable for 12V lead-acid batteries (including maintenance-free batteries, AGM, etc.) and 12V lithium iron phosphate batteries, with a charging battery capacity of 4-35Ah.

## 6. MAINTENANCE

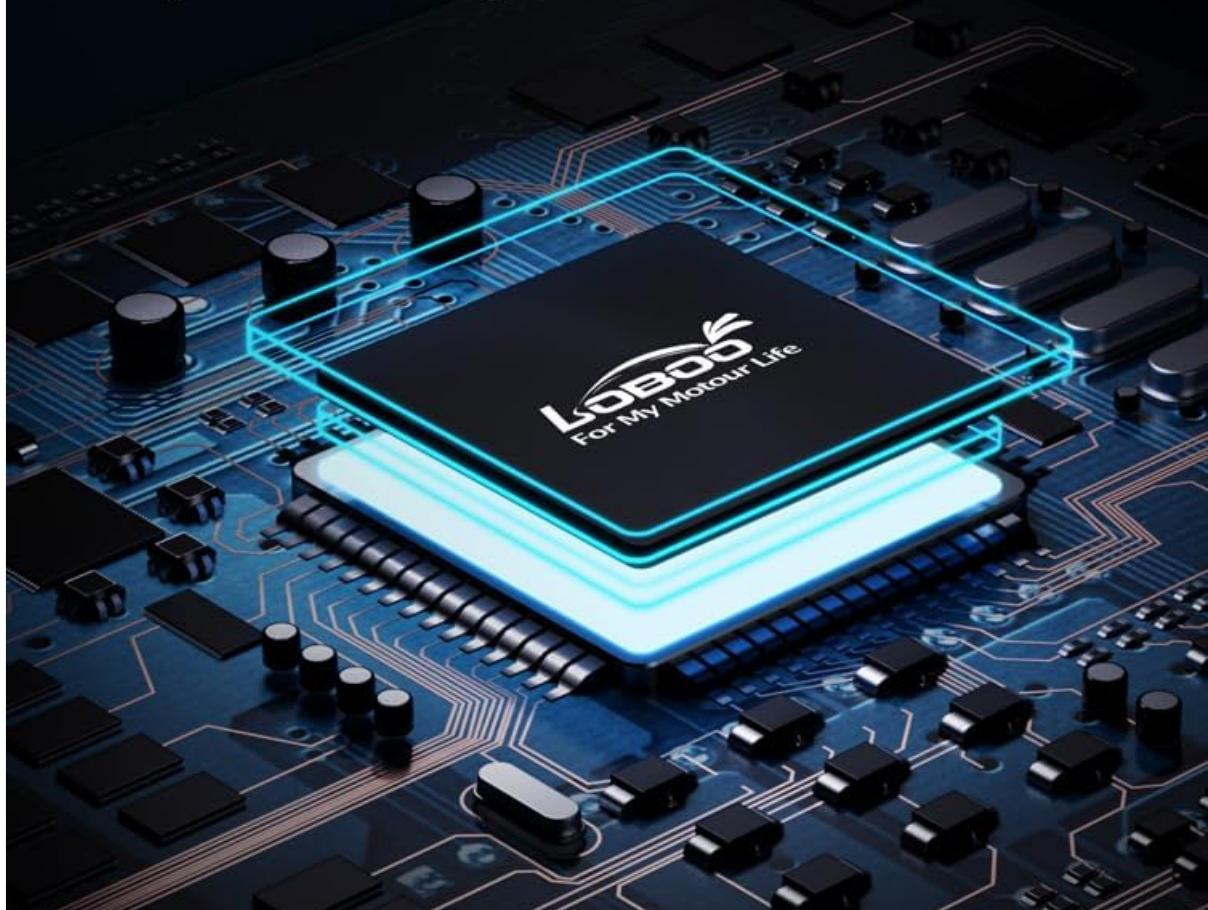
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The Loooboo CB20 is designed for durability and minimal maintenance. Its IP65 rating ensures protection against dust and water splashes.

- **Cleaning:** Wipe the unit with a dry or slightly damp cloth. Do not use harsh chemicals or abrasive cleaners.
- **Connection Check:** Periodically inspect all wire connections to ensure they remain secure and free from corrosion.
- **Environmental Protection:** While IP65 rated, avoid prolonged submersion in water or exposure to extreme temperatures.

# Built-in multiple protection mechanisms

High-quality safety chip control, multiple circuit optimization design.



## Multiple Protections



Low voltage protection



Overload protection



Short circuit protection



Over-voltage protection



Reverse connection protection



Over-current protection

Image: The Loboob CB20 unit being splashed with water, illustrating its IP65 dustproof and waterproof rating, which protects it from environmental elements.

## 6.1 Battery Charging and Maintenance with SAE Cable

For convenient battery charging and maintenance, especially when the motorcycle is not ridden for extended periods, the SAE quick connection cable can be used. This allows for direct connection to a battery charger or a power bank for recharging.

Your browser does not support the video tag.

Video: This video demonstrates the use of an SAE quick connection cable for convenient battery charging and maintenance, including connecting to a charger or power bank, and powering an air pump.

## 7. TROUBLESHOOTING

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If you encounter issues with your Loboob CB20, refer to the following common problems and solutions:

- **No Power to Devices:**

- Check if the motorcycle ignition is on (ACC wire requires ignition).
- Verify main battery connections are secure.
- Ensure the device connected is within the power limits of the output port.
- Check the indicator lights for any fault signals (e.g., flashing for overload).

- **Indicator Light Flashing/Off Unexpectedly:**

- This may indicate a triggered protection mechanism (low voltage, overload, short circuit, over-voltage, reverse connection, over-current).
- Disconnect all devices from the CB20.
- Check the battery voltage.
- Inspect wiring for any shorts or damage.
- Reconnect devices one by one to identify the faulty accessory.

- **Battery Draining Quickly:**

- Ensure the ACC wire is correctly connected and the device powers off with the ignition.
- Verify no devices are drawing power when the motorcycle is off.
- Check the overall health of your motorcycle battery.

If problems persist, consult a qualified technician or contact customer support.

## 8. WARRANTY AND SUPPORT

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For warranty information and customer support, please refer to the documentation provided with your purchase or contact the seller directly. Keep your proof of purchase for warranty claims.

You can also visit the official Loboob store for more information: [Loboob Store on Amazon](#)