

## Strongway SB20331

# Strongway 6/12 Volt Battery Maintainer User Manual

Model: SB20331

## 1. PRODUCT OVERVIEW

This Strongway 6/12 Volt Battery Maintainer is designed to maintain the charge of various lead-acid batteries, including AGM, standard (STD), and gel types. It is suitable for vehicles, motorcycles, ATVs, and boats. The unit features intelligent charging technology that adjusts its 2A output based on the battery's status, ensuring optimal safety and efficiency. Its 7-stage charging process provides deep and consistent charging, with float maintenance for long-term battery health.

### Key Features:

- **Compatible with Most Lead-Acid Batteries:** Safely maintains AGM, standard (STD), and GEL lead-acid batteries.
- **Dual Voltage Maintenance Output:** Provides automatic 6V or 12V at 2A to maintain and extend battery life.
- **Intelligent Automatic Charging:** High-frequency smart charging technology adjusts output based on battery status.
- **7-Stage Charging Process:** Ensures deep, consistent charging with float maintenance.
- **Quick-Connect Design:** Includes both clamp and O-ring terminals for versatile setup.



Figure 1: Strongway 6/12 Volt Battery Maintainer and Included Accessories.

## 2. SAFETY INFORMATION

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**WARNING:** Always read and understand all safety instructions before operating this battery maintainer. Failure to follow these instructions may result in electric shock, fire, or serious injury.

- **Risk of Explosive Gas Mixture:** Batteries can produce explosive gases. Ensure adequate ventilation during charging.
- **Prevent Flames and Sparks:** Do not smoke or allow open flames or sparks in the vicinity of the battery or charger.
- **Indoor Use Only:** This device is designed for indoor use. Do not expose it to rain or moisture.
- **Damaged Cords:** Immediately replace any defective cords or wires. Do not use the maintainer if cords are compromised.
- **Connection/Disconnection:** Always connect and disconnect battery leads only when the AC supply cord is disconnected from the power outlet.

- **Eye Protection:** Always wear appropriate eye protection when working with batteries.
- **Children and Pets:** Keep the battery maintainer and batteries out of reach of children and pets.



Figure 2: Rear view of the unit displaying safety warnings and electrical specifications.

### 3. SETUP

1. **Prepare the Battery:** Ensure the battery terminals are clean and free of corrosion. If necessary, clean them with a wire brush.
2. **Select Terminal Type:** Choose between the clamp terminals or the O-ring terminals based on your application.
  - **Clamp Terminals:** Ideal for temporary connections or batteries not easily accessible for O-ring installation.
  - **O-Ring Terminals:** Suitable for semi-permanent installations, often bolted directly to battery posts.
3. **Connect to Battery (Maintainer Disconnected from AC Power):**
  - Connect the **RED (+)** terminal (clamp or O-ring) to the **POSITIVE (+)** battery post.
  - Connect the **BLACK (-)** terminal (clamp or O-ring) to the **NEGATIVE (-)** battery post.

*Ensure connections are secure and make good contact.*

4. **Connect to AC Power:** Once the battery connections are secure, plug the maintainer's AC power cord into a standard 120V AC electrical outlet.







Figure 3: Examples of connecting the maintainer using clamp terminals (left) and O-ring terminals (right).

## 4. OPERATING INSTRUCTIONS

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The Strongway Battery Maintainer features intelligent automatic charging and a simple interface.

1. **Initial Power On:** Once plugged into AC power and connected to the battery, the maintainer will automatically detect the battery voltage (6V or 12V).
2. **Voltage Selection:**
  - The corresponding 6V or 12V LED indicator on the unit will illuminate.
  - If the detected voltage is incorrect, press the "SELECT VOLTAGE" button (power symbol) to toggle between 6V and 12V modes. The active voltage will be indicated by the illuminated LED.

3. **Charging Process:** The maintainer will begin its 7-stage charging process. This process automatically adjusts the charging current and voltage to optimize battery health and prevent overcharging. The LEDs will indicate the current status:
  - **6V/12V LED (Green):** Solid green indicates the selected voltage and that charging is active or the battery is being maintained.
  - **Error LED (Red):** If this LED illuminates, refer to the Troubleshooting section.
4. **Float Maintenance:** Once the battery is fully charged, the maintainer will automatically switch to float maintenance mode. In this mode, it provides a small, continuous current to keep the battery at optimal charge without overcharging, making it safe for long-term connection.
5. **Disconnecting:** To disconnect the maintainer, first unplug the AC power cord from the wall outlet, then disconnect the battery leads (black negative first, then red positive).



Figure 4: Control panel with voltage selection and status indicators.

## 5. MAINTENANCE

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Regular maintenance ensures the longevity and safe operation of your Strongway Battery Maintainer.

- **Cleaning:** Periodically wipe the exterior of the maintainer with a soft, dry cloth. Do not use harsh chemicals or abrasive cleaners.
- **Connections:** Regularly inspect the battery terminals and quick-connect cables for any signs of corrosion, damage, or loose connections. Ensure they are clean and secure.
- **Storage:** When not in use, store the maintainer in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Cable Inspection:** Check the AC power cord and battery cables for cuts, fraying, or damage. Do not use the unit if any cables are compromised.

## 6. TROUBLESHOOTING

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Problem	Possible Cause	Solution
Maintainer not turning on / No LEDs illuminated.	No AC power; Loose connection to battery.	Check AC outlet and power cord connection. Ensure battery leads are securely connected to battery terminals.
"Error" LED is illuminated.	Reverse polarity connection; Short circuit; Battery fault.	<ul style="list-style-type: none"> <li>• Disconnect from AC power, then check battery lead connections for correct polarity (Red to +, Black to -).</li> <li>• Inspect cables and terminals for any short circuits.</li> <li>• If the error persists, the battery may be severely discharged or faulty. Consult a battery professional.</li> </ul>
Battery not charging or maintaining.	Incorrect voltage selected; Battery severely discharged or damaged.	<ul style="list-style-type: none"> <li>• Ensure the correct 6V or 12V mode is selected using the "SELECT VOLTAGE" button.</li> <li>• For deeply discharged batteries, a standard battery charger may be needed first before using the maintainer.</li> <li>• If the battery is damaged, it may not accept a charge.</li> </ul>

## 7. SPECIFICATIONS

Attribute	Value
Model Number	SB20331
Input Voltage	120 Volts AC, 60Hz, 0.6A
Output Voltage	6V / 12V DC
Output Current	2 Amps
Product Dimensions (D x W x H)	3.8" x 2.9" x 3.6"
Item Weight	1 Pound
Compatible Battery Types	Lead-Acid (AGM, STD, GEL)
UPC	840321758620

## 8. WARRANTY AND SUPPORT

For warranty information or technical support regarding your Strongway 6/12 Volt Battery Maintainer, please contact the manufacturer or the retailer from whom you purchased the product.

**Manufacturer:** Strongway

For further assistance, you may visit the official Strongway store on Amazon: [Strongway Store](#)

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