

NOCO GEN2

NOCO Genius GEN2 2-Bank 20-Amp Marine Battery Charger User Manual

Model: GEN2 | Brand: NOCO

INTRODUCTION

The NOCO Genius GEN2 is a fully-automatic, smart marine battery charger designed for 12V onboard battery systems. This 2-bank charger provides 10 amps per bank, totaling 20 amps, for charging and maintaining lead-acid batteries. Its rugged, waterproof design (IP68 and NEMA 6P rated) ensures reliable operation in harsh marine environments, capable of submersion up to 3 meters. The GEN2 features advanced charging technology to detect, diagnose, recover, charge, and maintain various lead-acid battery types, including Wet Cell (Flooded), Gel Cell, AGM, and Deep-Cycle batteries, preventing overcharge. It incorporates safety protections against reverse polarity, sparks, short circuits, open circuits, and thermal runaway.

WHAT'S IN THE BOX

- GEN2 On-Board Battery Charger

SETUP

Mounting the Charger

The GEN2 charger is designed for easy installation directly onto your marine vessel or other applications. Ensure the mounting surface is secure and allows for proper cable routing. Use the provided mounting hardware to secure the unit. The charger's compact design allows for flexible placement.



Image: NOCO Genius GEN2 charger with all cables, showing its compact form factor.

Battery Connection

Connect the positive (+) output cable from Bank 1 to the positive terminal of your first 12V battery. Connect the negative (-) output cable from Bank 1 to the negative terminal of the same battery. Repeat this process for Bank 2 and your second 12V battery. Ensure all connections are secure and free from corrosion. The charger is designed to work with two independent 12V batteries.



Image: Top view of the GEN2 charger, illustrating the separate connections for Bank 1 and Bank 2, along with the AC input.

Power Connection

Once batteries are securely connected, plug the AC input cord into a suitable 120V AC power outlet. The charger will automatically begin its charging process.

OPERATING INSTRUCTIONS

Fully Automatic Operation

The GEN2 charger operates automatically. Once connected to batteries and AC power, it will detect the battery condition, diagnose any issues, and begin the appropriate charging cycle without user intervention.

Charging Indicators

The charger features LED indicators for each bank. A red light indicates charging in progress, and a green light indicates the battery is fully charged and in maintenance mode. These indicators provide a clear visual status of each battery's charge state.



Image: Angled view of the GEN2 charger, highlighting the charge status indicators for Bank 1 and Bank 2.



Image: Detailed close-up of the GEN2's charge indicators, showing the 'CHARGE' label and the 12V OUT 10A specification for each bank.

Compatible Battery Types

The charger is compatible with Wet Cell (Flooded), Gel Cell, AGM, and Deep-Cycle 12V lead-acid batteries ranging from 25-230Ah.

Maintenance Mode

After fully charging, the GEN2 automatically transitions to a maintenance mode, continuously monitoring the battery and providing optimal charge to prevent self-discharge without overcharging. This ensures batteries remain fully charged and healthy over extended periods.

MAINTENANCE

Regular Inspection

Periodically inspect all cables and connections for signs of wear, damage, or corrosion. Ensure the charger's housing is clean and free from debris. Damaged cables should be replaced immediately by a qualified

professional.

Cleaning

Clean the exterior of the charger with a damp cloth. Do not use harsh chemicals or abrasive cleaners. Ensure the charger is unplugged from AC power before cleaning.

Waterproof Design

While the charger is waterproof, ensure the AC plug and battery connections are kept dry when not in use or during installation to prevent electrical hazards. The waterproof rating applies to the main unit, not necessarily exposed connections.

TROUBLESHOOTING

Charger Not Activating

- Ensure the AC power cord is securely plugged into a live outlet.
- Verify that battery connections are correct (positive to positive, negative to negative) and secure.
- Check if the battery voltage is extremely low; some chargers may require a minimum voltage to initiate charging. Consult NOCO support for very low voltage battery recovery procedures.

LED Indicator Issues

- If no LEDs illuminate, recheck AC power and battery connections.
- If a fault indicator (e.g., flashing red) appears, refer to the NOCO support website or contact customer service for specific fault code interpretations.

Slow Charging

- Ensure the battery capacity is within the recommended range (25-230Ah).
- Verify that the AC power source is stable.
- Extremely cold temperatures can affect charging performance and duration.

Overheating

- Ensure the charger has adequate ventilation and is not covered.
- If the charger feels excessively hot, disconnect it immediately and contact support. The GEN2 has thermal protection, but persistent overheating indicates an underlying issue.

SPECIFICATIONS

Feature	Specification
Brand	NOCO
Model	GEN2
Amperage	20 Amps (10 Amps per bank)
Voltage	12 Volts

Item Weight	9.06 Pounds
Product Dimensions	9.37"D x 11.02"W x 6.3"H
Waterproof Rating	IP68, NEMA 6P (Submersible up to 3 meters)
Compatible Battery Types	Wet Cell (Flooded), Gel Cell, AGM, Deep-Cycle 12V Lead-Acid
Compatible Battery Capacity	25-230Ah
Safety Certifications	UL1236, ISO 8846 Marine Standards, Ignition Protection US Coast Guard 33 CFR 183.410

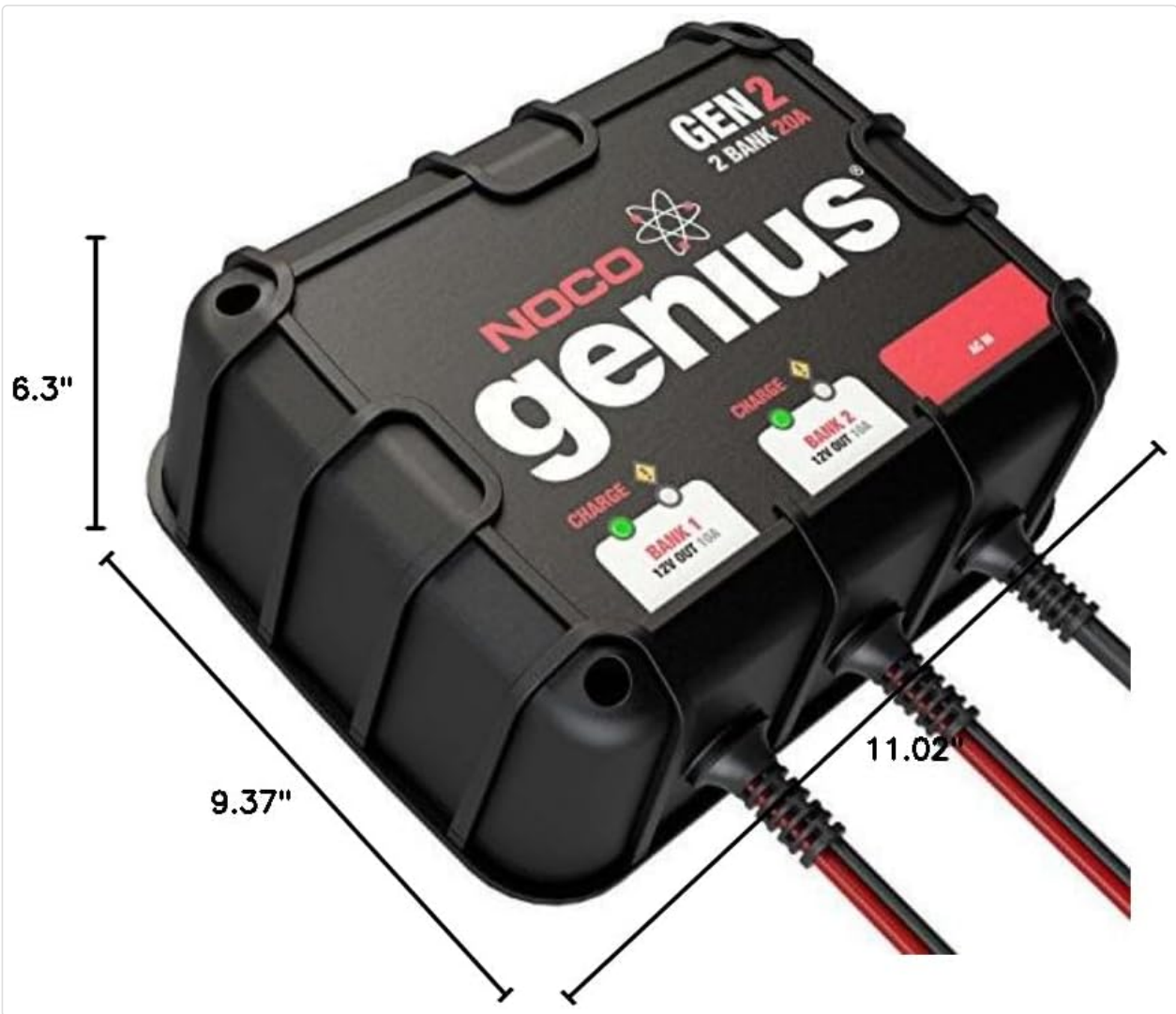


Image: Dimensions of the NOCO Genius GEN2 charger.

WARRANTY AND SUPPORT

Warranty

The NOCO Genius GEN2 On-Board Battery Charger is backed by a 5-Year Limited Warranty. Please retain your proof of purchase for all warranty claims. The warranty covers defects in material and workmanship under normal use.

Support

For technical assistance, troubleshooting, or warranty inquiries, please visit the official NOCO website or contact their customer support directly. You can find the most current contact information and detailed support resources on the [NOCO Store](#) or their official product support pages.