

Mastervolt 44010250

Mastervolt ChargeMaster Plus 12/35-3 Battery Charger

User Manual

1. INTRODUCTION

This manual provides essential information for the safe and efficient operation of your Mastervolt ChargeMaster Plus 12/35-3 Battery Charger. Please read this manual thoroughly before installation and use to ensure proper functionality and to prevent damage to the unit or connected systems.

The Mastervolt ChargeMaster Plus 12/35-3 is an advanced automatic battery charger designed for marine and automotive applications, providing optimal charging for various battery types.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions may result in electric shock, fire, or serious injury.

- Always disconnect power before installing or servicing the charger.
- Ensure proper ventilation around the charger to prevent overheating.
- Do not expose the charger to rain, spray, or excessive moisture.
- This device is designed for indoor use in a protected environment.
- Only qualified personnel should perform installation and maintenance.
- Do not operate the charger if it has been damaged in any way.
- Keep flammable materials away from the charger.

For detailed safety guidelines, refer to local electrical codes and marine standards.

3. PACKAGE CONTENTS

Verify that all items are present in the package:

- Mastervolt ChargeMaster Plus 12/35-3 Battery Charger Unit
- Mounting Hardware (screws, washers)
- User Manual (this document)
- Warranty Card

4. SETUP AND INSTALLATION

4.1 Mounting the Charger

The ChargeMaster Plus 12/35-3 should be mounted in a dry, well-ventilated area, away from direct sunlight and heat sources. Ensure sufficient clearance around the unit for airflow.

1. Select a suitable mounting location that can support the weight of the charger.
2. Use the provided mounting template (if applicable) or measure the mounting holes on the back of the unit.
3. Secure the charger firmly to a solid surface using appropriate screws and fasteners.



Figure 1: Rear view of the Mastervolt ChargeMaster Plus 12/35-3, illustrating the integrated mounting brackets for secure installation.

4.2 Electrical Connections

All electrical connections must comply with local regulations and standards. Consult a qualified electrician if unsure.

1. Connect the AC input cable to a grounded power source.
2. Connect the DC output cables to your battery bank(s). Ensure correct polarity (positive to positive, negative to negative). The ChargeMaster Plus 12/35-3 supports multiple battery banks.
3. Verify all connections are secure and free from corrosion.



Figure 2: Front view of the Mastervolt ChargeMaster Plus 12/35-3, showing the control panel and connection points.



Figure 3: Angled top view of the Mastervolt ChargeMaster Plus 12/35-3, highlighting the ventilation grilles and overall compact design.

5. OPERATING INSTRUCTIONS

5.1 Powering On/Off

Once all connections are made, connect the charger to the AC power source. The charger will automatically initiate its startup sequence.

- To power on: Ensure AC power is supplied. The power indicator light will illuminate.
- To power off: Disconnect the AC power source.

5.2 Charging Process

The ChargeMaster Plus 12/35-3 features an intelligent 3-stage+ charging process to optimize battery life and performance:

1. **Bulk Stage:** Delivers maximum current to rapidly charge the battery to approximately 80%.
2. **Absorption Stage:** Charges the battery to 100% at a constant voltage, gradually reducing current.
3. **Float Stage:** Maintains the battery at full charge with a low, constant voltage, preventing overcharging.
4. **Maintenance Stage:** Periodically checks battery voltage and initiates a new charging cycle if needed.

The charger automatically detects the battery type and condition to apply the most suitable charging profile. Refer to the display indicators for charging status.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your Mastervolt ChargeMaster Plus 12/35-3.

- **Cleaning:** Periodically wipe the exterior of the charger with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Ventilation:** Ensure that the ventilation openings are clear of dust and debris. Blocked vents can lead to overheating.
- **Connections:** Annually inspect all electrical connections for tightness and signs of corrosion. Tighten any loose connections and clean corroded terminals.
- **Environment:** Confirm the charger remains in a dry, protected environment.

CAUTION: Do not open the charger casing. There are no user-serviceable parts inside.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your charger. For problems not listed here, contact Mastervolt support.

Problem	Possible Cause	Solution
Charger not powering on	No AC input power; Blown fuse; Faulty connection.	Check AC power source and circuit breaker. Inspect input cable and connections.
Battery not charging	Incorrect battery connection; Battery deeply discharged; Faulty battery.	Verify DC output connections and polarity. Allow time for deeply discharged batteries to recover. Test battery condition.
Overheating / Shutdown	Insufficient ventilation; Overload.	Ensure clear airflow around the unit. Reduce load if possible. Allow unit to cool down.

8. SPECIFICATIONS

Feature	Detail
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Feature	Detail
Brand	Mastervolt
Model Name	ChargeMaster Plus 12/35-3 (Model Number: 44010250)
Nominal Output Voltage	12 Volts DC (Requires AC input power, not specified in data)
Max Output Current	25 Amps
Item Weight	5.5 Pounds (approx. 2.5 kg)
Item Dimensions (LxWxH)	5.2 x 2.36 x 9.21 inches (approx. 13.2 x 6 x 23.4 cm)
Material	Plastic
Color	No Color (referring to the product's primary color, which is teal/green)
First Available Date	February 14, 2015



9. WARRANTY AND SUPPORT





The Mastervolt ChargeMaster Plus 12/35-3 comes with a manufacturer's warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Mastervolt website. For technical support, service, or spare parts, please contact Mastervolt customer service or your authorized dealer. Have your product model number (44010250) and serial number ready when contacting support.

Mastervolt Support: www.mastervolt.com/support

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Related Documents - 44010250

<div><p>ChargeMaster 12/50-3</p><p>Mastervolt</p></div>	<p>Mastervolt ChargeMaster 12/50-3 Battery Charger - Technical Overview</p> <p>Comprehensive details on the Mastervolt ChargeMaster 12/50-3 automatic battery charger, highlighting its 3-step+ charging technology, robust design, multi-bank charging capabilities, and technical specifications for recreational and semi-professional use.</p>
<div><p>"Quick Start Guide"</p><p>Mastervolt</p></div>	<p>CZONE App Quick Start Guide - Mastervolt Marine Electronics</p> <p>This guide provides instructions for downloading, installing, and using the CZONE App with your Mastervolt Wireless Interface. Learn how to connect your iPad, configure server settings, and manage your boat's electrical systems through the intuitive CZONE interface.</p>

 <p>MASTERVOLT THE POWER TO BE INDEPENDENT</p> <p>CHARGE MASTER PLUS 12/35-3, 12/50-3, 24/20-3, 24/30-3</p> <p>ACCUMULATOR CHARGER</p> <p>GEbruikers- en installatiehandleiding</p> <p>© CZONE CE</p>	<p>Mastervolt ChargeMaster Plus Acculader Gebruikers- en Installatiehandleiding</p> <p>Gedetailleerde gebruikers- en installatiehandleiding voor de Mastervolt ChargeMaster Plus automatische acculader modellen 12/35-3, 12/50-3, 24/20-3, en 24/30-3. Bevat informatie over installatie, instellingen, bediening, probleemoplossing en technische specificaties.</p>
 <p>ChargeMaster 24/100-3</p> <p>MASTERVOLT</p>	<p>Mastervolt ChargeMaster 24/100-3: Advanced Automatic Battery Charger</p> <p>Comprehensive details on the Mastervolt ChargeMaster 24/100-3 automatic battery charger, highlighting its 3-step+ charging technology, universal voltage input, MasterBus compatibility, and robust specifications for marine and recreational applications.</p>
 <p>MASTERVOLT THE POWER TO BE INDEPENDENT</p> <p>CHARGE MASTER PLUS 12/75-3, 12/100-3, 24/40-3, 24/60-3</p> <p>ALL-IN-ONE ACCULADER</p> <p>GEbruikers- en installatiehandleiding</p> <p>© CZONE CE</p>	<p>Mastervolt ChargeMaster Plus Gebruikers- en Installatiehandleiding</p> <p>Gedetailleerde gebruikers- en installatiehandleiding voor de Mastervolt ChargeMaster Plus serie acculaders, inclusief installatie-instructies, bediening, instellingen en technische specificaties voor modellen zoals 12/75-3, 12/100-3, 24/40-3, en 24/60-3.</p>
 <p>MASTERVOLT THE POWER TO BE INDEPENDENT</p> <p>CHARGE MASTER PLUS 12/75-3, 12/100-3, 24/40-3, 24/60-3</p> <p>ALL-IN-ONE BATTERIELADER</p> <p>BEdienungs- und installationsanleitung</p> <p>© CZONE CE</p>	<p>Mastervolt ChargeMaster Plus Ladegerät Handbuch - Bedienungs- und Installationsanleitung</p> <p>Umfassendes Bedienungs- und Installationshandbuch für die Mastervolt ChargeMaster Plus Serie Batterieladegeräte (12/75-3, 12/100-3, 24/40-3, 24/60-3). Beinhaltet Sicherheit, Installation, Konfiguration, Bedienung, Fehlerbehebung und technische Daten.</p>