

Mastervolt 44310755

Mastervolt ChargeMaster Plus 12/75-3 Czone User Manual

Model: 44310755

1. PRODUCT OVERVIEW

The Mastervolt ChargeMaster Plus is an advanced battery charger designed to integrate multiple functions into a single device. It replaces auxiliary chargers, battery isolators, and Voltage Sensitive Relays (VSRs), aiming to reduce system complexity and overall cost. This versatile unit is engineered to charge various combinations of two or three batteries quickly and safely, functioning reliably across different global power standards.

Utilizing the "Battery's Best Friend" architecture, the ChargeMaster Plus supports a wide range of battery chemistries, sizes, and voltages. All connected batteries are charged using a fast and secure 3-step+ charging method, optimizing battery health and longevity.

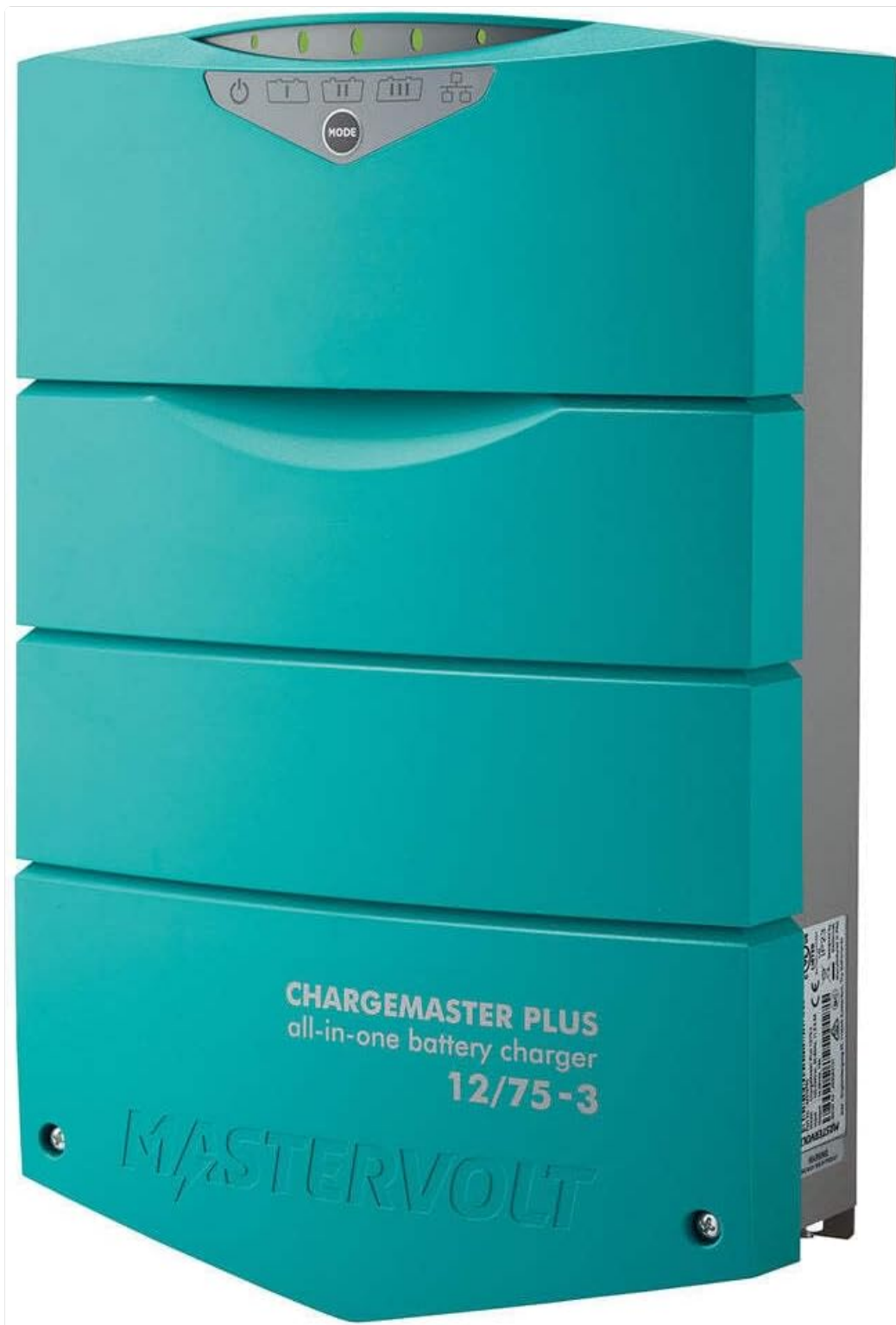


Figure 1: Front view of the Mastervolt ChargeMaster Plus 12/75-3 Czone battery charger.

2. SETUP AND INSTALLATION

Proper installation is crucial for the safe and efficient operation of your ChargeMaster Plus. It is recommended that installation be performed by a qualified professional.

2.1 Unpacking and Inspection

Carefully unpack the ChargeMaster Plus and inspect it for any signs of damage during transit. Report any

damage to your supplier immediately.

2.2 Mounting Location

Select a mounting location that is:

- Dry and well-ventilated.
- Protected from direct sunlight and excessive heat.
- Accessible for wiring and maintenance.
- Secure enough to support the unit's weight (approximately 13 pounds).

2.3 Electrical Connections

Ensure all power sources are disconnected before making any electrical connections. Refer to the wiring diagram provided in the full product manual for detailed connection instructions. The unit supports 12 Volts (DC) output.



Figure 2: Rear view of the Mastervolt ChargeMaster Plus 12/75-3 Czone, highlighting connection points.

The ChargeMaster Plus is designed for global use, supporting various input frequencies (50 or 60 Hz) to accommodate different shore power systems.

3. OPERATING INSTRUCTIONS

Once properly installed and connected, the ChargeMaster Plus operates largely automatically. The 3-step+ charging method ensures optimal charging for your batteries.

3.1 Powering On

Connect the AC input power to the ChargeMaster Plus. The unit will initiate its startup sequence and begin assessing the connected batteries.

3.2 Charging Process

The 3-step+ charging method consists of:

1. **Bulk Phase:** Charges the battery with maximum current until the voltage reaches a preset level.
2. **Absorption Phase:** Charges the battery with constant voltage, gradually reducing current as the battery approaches full charge.
3. **Float Phase:** Maintains the battery at a safe voltage, compensating for self-discharge and ensuring the battery remains fully charged.
4. **Plus Phase (Maintenance):** Periodically re-activates the absorption phase to prevent sulfation and equalize cells, extending battery life.

The unit automatically detects the battery type and adjusts charging parameters accordingly. For advanced configuration, such as specific battery types or charging profiles, a MasterBus USB interface and Windows computer may be required. This interface is not included with the product.

4. MAINTENANCE

The Mastervolt ChargeMaster Plus is designed for minimal maintenance. However, regular checks can ensure its longevity and optimal performance.

- **Cleaning:** Keep the unit clean and free from dust and debris. Use a dry, soft cloth for cleaning. Do not use abrasive cleaners or solvents.
- **Ventilation:** Ensure that the ventilation openings are not obstructed. Adequate airflow is essential to prevent overheating.
- **Connections:** Periodically check all electrical connections to ensure they are secure and free from corrosion.
- **Environment:** Ensure the operating environment remains within the specified temperature and humidity ranges.

5. TROUBLESHOOTING

This section provides solutions to common issues you might encounter with your ChargeMaster Plus. For more complex problems, consult a qualified technician or Mastervolt support.

Problem	Possible Cause	Solution
Charger not turning on.	No AC input power; Blown fuse/breaker; Loose connections.	Check AC power source; Inspect fuses/breakers; Verify all connections are secure.
Batteries not charging.	Incorrect battery connection; Battery fault; Charger in fault mode.	Ensure correct polarity and secure connections; Test batteries; Check charger status indicators for fault codes.
Overheating.	Obstructed ventilation; Excessive ambient temperature; Overload.	Clear ventilation openings; Ensure adequate airflow; Reduce load if possible.

6. SPECIFICATIONS

Feature	Detail
Brand	Mastervolt
Model Name	44310755
Color	Teal
Material	Plastic
Item Dimensions (LxWxH)	15.1 x 9.8 x 5 inches
Item Weight	13 Pounds
Output Voltage	12 Volts (DC)
Certifications	CE, UL, CEC, RCM
First Available Date	January 16, 2020

7. WARRANTY AND SUPPORT







The Mastervolt ChargeMaster Plus is covered by a manufacturer's warranty. For specific details regarding warranty terms and conditions, please refer to the warranty documentation included with your product or visit the official Mastervolt website.

For technical support, service, or inquiries about replacement parts, please contact Mastervolt customer service or an authorized service center. Contact information can typically be found on the manufacturer's website or in the product packaging.

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This manual is for informational purposes only. Specifications are subject to change without notice.

Related Documents - 44310755

 <p>MASTERVOLT THE POWER TO BE INDEPENDENT</p> <p>COMBIMASTER Serie 230 V COMBINAZIONE INVERTER/ACCUMULATORI CON SUPPORTO INGRESSO AC</p> <p>MANUALE D'USO E MANUTENZIONE</p> <p>CE</p> <p>CZONE</p>	<p>Mastervolt CombiMaster Serie 230 V - Manuale d'Uso e Manutenzione</p> <p>Manuale completo per il Mastervolt CombiMaster Serie 230 V, che copre installazione, funzionamento, manutenzione, specifiche tecniche e risoluzione dei problemi per inverter/caricabatterie con supporto ingresso AC.</p>
<p>ChargeMaster 12/50-3</p>  <p>MASTERVOLT</p>	<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>
 <p>MASTERVOLT</p>	<p>Guida Rapida App CZONE Mastervolt: Controllo e Monitoraggio Imbarcazioni</p> <p>Scopri come utilizzare l'app CZONE di Mastervolt per controllare e monitorare i sistemi elettrici della tua imbarcazione tramite iPad. Guida rapida completa per la gestione dei circuiti, monitoraggio e allarmi.</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>CHARGEMASTER PLUS 12/75-3, 12/100-3, 24/40-3, 24/60-3 ALLES IN EEN 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>CHARGEMASTER PLUS 12/75-3, 12/100-3, 24/40-3, 24/60-3 ALLES IN EEN ACCULADER</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>

