

USER MANUAL

LEAD ACID BATTERY
CHARGER



IMPORTANT SAFETY INSTRUCTIONS!



TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK:

READ THROUGH THESE INSTRUCTIONS PRIOR TO USING THE PRODUCT.
CAREFULLY FOLLOW THESE INSTRUCTIONS WHEN USING THE PRODUCT.
RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE



This product is designed for indoor use.



At the end of their service life electric and electronic equipment and their accessories shall not be discarded with the municipal waste but be disposed of using separate collection, treatment, recovery/recycling and environmentally sound disposal. This also applies to any potentially bio hazardous parts and accessories. If in doubt; contact your local authorities to determine the proper method

Cautions to observe prior to use

- The intended use for this product is to charge a battery or a battery powered electrical accessory (Lead-Acid) or to be used as a Power Supply to power an electrical accessory. Please see the marking on the product you have to verify the type of product you have and read the applicable instructions and technical specifications included with this manual.
- This product may be used by unskilled operators, under the condition that these instructions are followed
- Unskilled operators may contact the supplier or manufacturer for assistance, if needed, in setting up, using or maintaining this product and to report unexpected operation or events

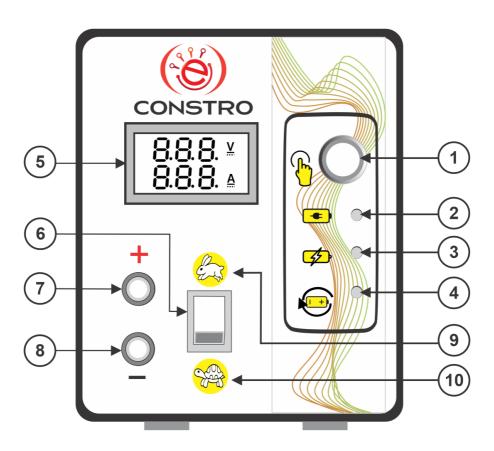
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Do not allow small children to handle this product while unattended as cables may represent a risk for strangulation and small parts may represent a risk for inhalation or swallowing
- Do not allow animals to come into contact with this product. Some animals are known to cause damage to cables etc. which may be a potential for risk of electric shock and excessive temperatures. Also, cables and small parts may represent a strangulation risk for the animal.
- If the product is equipped with a mains cord, please check that the cord is not damaged. If the cord is damaged, the product must not be used until the cord is replaced. Replacement should be carried out by qualified personnel.
- The mains socket outlet used should always be easily accessible to facilitate immediate removal of the products mains supply should an operational error occur during use. If the product has a detachable mains cord the appliance coupler maybe used as a disconnect device.
- Should an operational error or unexpected change in the performance occur during use; disconnect the product from the mains immediately by disconnecting the mains plug from the mains socket and contact the supplier

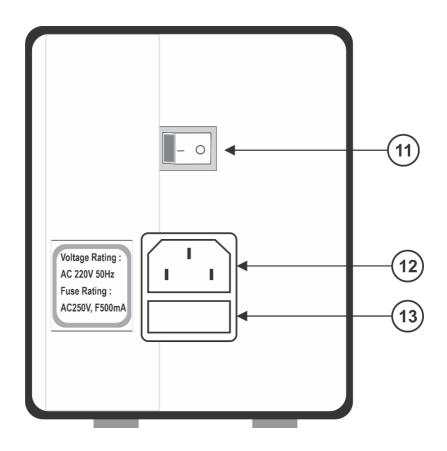
- or manufacturer. (See contact details on the front of this document).
- When not in use please think about disconnecting the product from the mains. This will reduce the risk of hazards, reduce the products environmental impact and save electricity costs.
- To avoid overheating make sure there is sufficient room for the circulation of air around the product when in use. Do not cover it up.
- This product contains hazardous voltages and there are no user replaceable parts inside the product. Never attempt to remove the cover.
- WARNING: No modification of this equipment is allowed. Any repair/service should be carried out by qualified personnel who may get assistance by contacting the manufacturer or the manufacturer's agent.
- Products specified to have automatic polarity protection must be switched off if a battery is connected with reverse polarity. The protection will be automatically reset when the polarity has been corrected.
- In chargers specified to have a replaceable fuse as polarity protection the fuse must be replaced if the battery has been connected with reverse polarity. When replacing the fuse; a fuse of the same type and rating must be used.
- The product must be kept away from sources of heat and may not be used in the vicinity of flammable anesthetic gasses or in other environments with flammable or explosive atmospheres.

Introduction

Thank you for choosing our 12V Lead Acid Battery Charger. This device is designed to provide safe and efficient charging with features like reverse polarity protection, short circuit protection, and automatic cutoff when the battery is fully charged.

Appearance





- 1) Charging Start Button
- **2)** Battery Connected LED (Amber)
- 3) Charging Status LED(Red) Charging(Green) Charging Completed
- **4)** Reverse Polarity detection LED (Red)
- **5)** Voltage & Current Display
- **6)** Charging Mode Selection Switch
- **7)** Battery Positive (+) Connector

- 8) Battery Negative (-) Connector
- 9) Fast Charging Mode
- **10)** Slow Charging Mode
- **11)** Power Switch
- 12) Power Input
- **13)** Fuse (500mA)

Package Contents

The package includes the following items;

• Power Cable × 1



• Pair of Battery Leads × 1



• Lead Acid Battery Charger × 1



Features

Slow and Fast Charging Modes



Select between two charging modes based on your charging needs.

Push Button Start



Start the charging process with a simple push of a button.

Reverse Polarity Protection



Protects the charger and battery if the connections are reversed. A buzzer will sound to alert the user of incorrect polarity.

Short Circuit Protection



Ensures safe operation by preventing potential damage due to short circuits.

Automatic Charging Cutoff



Stops charging once the battery reaches the preset charge level.

LED Indicators



Charging - Indicates the battery is currently charging.

Charge Complete - Indicates the battery is fully charged.

Reverse Polarity - Lights up if the battery is connected incorrectly.

Digital Voltmeter and Ammeter Displays



Real-time display of the battery's current voltage and the charging current for easy monitoring.

Specification

Input Voltage	250VAC, 50-60Hz
Input Current	500 mA
Charge voltage Rating	14V
Charge current	1.5A (Slow Mode) / 3A (Fast Mode)
Operate Temperature	0°C - 40°C
Cooling	Natural convection. Do not cover the charger.
Battery type	All types of 12V lead-acid batteries.
Battery capacity	2-90Ah
Size	180*100* 130 (L*W*H)
Enclosure	Acrylic Plastic
Weight	400g

Instructions for Charging

1

Connect the Battery: Attach the positive (red) and negative (black) terminals to the corresponding battery terminals. Ensure correct polarity. If the battery is successfully connected, the Amber Led will light up.

- If the connections are reversed, a buzzer will sound, and the **Reverse Polarity** LED will light up. Disconnect the battery, correct
- 2

Select Charging Mode: Choose between Slow and Fast charging modes, depending on your requirements.

3

Start Charging: Press the push button to initiate the charging process.

4

Monitor the Charging Process:

- **Voltmeter Display** shows the battery's current voltage.
- Ammeter Display shows the charging current.
- LED Indicators:
 - Red LED: Lights up when the battery is charging.
 - Green LED: Lights up when the battery is fully charged.
 At this point, disconnect the battery from the charger.
 - Reverse Polarity LED (Red): If the battery is connected incorrectly this lights up and at the same time buzzer starts ringing. Disconnect the battery immediately, correct the polarity, and reconnect

5

Disconnect Charger: Once charging is complete, disconnect the battery and unplug the charger from the power source.

Warning!

Don't press the Charging Start Button when the buzzer beeps (Incorrect Battery connection of Negative & Positive clips)

Troubleshooting

FAULT	SOLUTION
Either the LEDs or Display not	Ensure the supply power cord
lights up	connected and the power switch at the
	rear side is turned on
Reverse Polarity LED is on and the	Disconnect the battery, correct the
Buzzer beeps	polarity, and reconnect.
Battery is not charging	Ensure the battery is properly
	connected and make sure to press the
	charging start button to start charging
	process
Charge Complete LED doesn't	Check if the battery is compatible (12V
light up after a long time.	lead acid only). Also,
No voltage present on the	Check whether the battery is properly
voltmeter when the battery is	connected or the battery is dead.
connected	