

**POWERTECH**

**MB3930**

# 10 State Intelligent Lead Acid and Lithium Battery Charger



## Instruction Manual

Please read and save all instructions to ensure safe and effective use of this product.



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## WARNING AND SAFETY INFORMATION

- For indoor use ONLY!
- Do not charge non-rechargeable batteries.
- Please check the battery capacity should not be more than 120Ah.
- During charging the battery must be placed in well ventilated area.
- The battery is to be disposed of safely.
- 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.
- Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Children should be supervised to ensure that they do not play with the appliance.
- Disconnect the supply before making or breaking connections to the battery.
- The battery terminal not connected to the chassis has to be connected first. The other connection is to be made to the chassis, remote from the battery and fuel line. The battery charger is then to be connected to the supply mains.
- After charging, disconnect the battery charger from the supply mains. Then remove the chassis connection and then the battery connection.

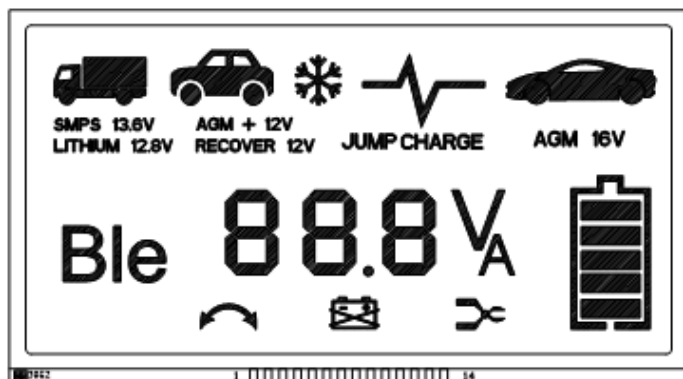
## PRODUCT INFORMATION










This is a mains charger for 12v, 16v or 24v Lead-Acid batteries (Wet, Gel, MF, AGM) and 12.8v or 16v 4-cell LiFePO4 Lithium batteries. The charging process is automatic.





You can monitor the charger on your iOS or Android device using Bluetooth.



## LCD DISPLAY



Item	Indication	LED
Power On Reset	LCD display flash twice for self-check.	Flashing
	Battery not connected	Flashing
	Error: 1. Timer>10hours at step 2 and step 3 "Recovery+Soft" start charge. 2. If 12V recover (+) mode <12V after 4hours 3. Timer>15hours at Lithium Bulk charge. 4. Total Timer>50hours at Pb battery modes. 5. Battery voltage>28V, Vbat=1.0-2.0V	Flashing
	Connected in reverse polarity	Flashing
	Capacity of battery • Flashing with different no. of bars, 5 bars means fully charged. • Steady: Full charged after 3sec.	Flashing for charging; On for fully charged
	Mode selected: 12V Lead acid battery	On
 and 	Mode selected: cold mode 12V Lead acid battery	On
	Mode selected: 12V Lead acid battery for small capacity or charge the battery over-night (Silent Night)	Flash
	Mode selected: 24V Lead acid battery	On

Item	Indication	LED
 and 	Mode selected: cold mode 24V Lead acid battery	On
<b>AGM + 12V</b>	Mode selected: AGM+ battery	On
<b>LITHIUM 12.8V</b>	Mode selected: Lithium iron phosphate battery	On
<b>RECOVER 12V</b>	Mode selected: Recover 12V Lead acid battery	On
 JUMP CHARGE	Mode selected: extra high charging current 30A and charge the battery 5mins	On
	Mode selected: 16V LITHIUM Racing	On
<b>AGM 16V</b>	Mode selected: 16V AGM Racing	On
<b>SMPS 13.6V</b>	13.6V Power supply	On
<b>Ble</b>	Bluetooth APP control function	On

## USAGE INSTRUCTIONS

Mode	Explanation
Standby	In Standby mode, the charger is not charging or providing any power to the battery.
12V Normal	For charging 12-volt Lead-acid batteries only, like Wet Cell, Gel Cell batteries.
12V Cold/AGM	For charging 12-volt AGM batteries, which requires a higher than normal charging voltage.
12V Silent Night	For charging 12-volt Lead-acid batteries only, like Wet Cell, Gel Cell batteries. The charging current is 5A only.
24V Normal	For charging 24-volt Lead-acid batteries only, like Wet Cell, Gel Cell batteries.
24V Cold/AGM	For charging 24-volt AGM batteries, which requires a higher than normal charging voltage.
12V AGM+	For charging 12-volt advanced AGM+ batteries, which requires a higher than normal charging voltage.
16V AGM	For charging 16-volt AGM batteries, which requires a higher than normal charging voltage.
12.8V Lithium	For charging 12-volt Lithium Iron Phosphate (LiFePO4). For use on batteries with Battery Management Systems (BMS) only.

Mode	Explanation
16V Lithium	For charging 16-volt Lithium Iron Phosphate (LiFePO4). For use on batteries with Battery Management Systems (BMS) only.
Lithium Recovery Mode	For 12.8V LiFePo4 batteries that are in protection mode and need to be reset. 1. Attach charger to LiFePo4 battery in protection mode 2. Press and hold mode for 3-5 seconds 3. Charger should display lithium on the screen 4. Charger will reset battery and start lithium charging mode
12V Recovery	An advanced battery recovery mode for repairing and restoring, old, idle, damaged, stratified or sulfated batteries.
Jump Charge	High charging current to the battery in short time to boost up the car.
Power supply	Supply Mode converts the charger to a constant voltage DC power supply. It can be used to power 12VDC and devices, tire inflators, seat heaters and more. As a power supply, it can also be used to retain a vehicle's on-board computer settings during battery repair or replacement.

**NOTE:** Lithium 12.8v mode will not be selectable when you connect a 12.8v Lithium battery that is already fully charged (Voltage above 13.8v DC).

## CHARGE A BATTERY

1. Connect the charger clamps to the battery. Red to ( + ) & Black to ( - ).
2. Plug the charger to the wall socket. LCD display flashes twice. If you see a flashing double-ended arrow, check the polarity of the battery clamps.
3. Press the "Mode" button to select the charging program (12V Normal or 12V Cold/AGM or 12V Silent Night; 24V Normal or 24V Cold/AGM).
4. Long press the "Mode" button, charger jumps to special mode. Press the "Mode" button to select the charging program (12V AGM+ ; 16V AGM ; 12V Recover ; 12.8V Lithium ; 16V Lithium).
5. Press the "JUMP START" button, and the charger switches to a high charging current mode suitable for a deeply-discharged battery - only use this for a short time.
6. If the clamps are not connected to battery, long press the "Mode" button, charge goes to "Power supply" mode. Press again jump to standby.

## LITHIUM BATTERY RECOVERY MODE

Lithium Recovery mode : For 12.8V LiFePo4 batteries that are in protection mode and need to be reset.

1. Attach charger to LiFePo4 battery in protection mode
2. Press and hold mode for 3-5 seconds
3. Charger should display lithium on the screen
4. Charger will reset battery and start lithium charging mode

## BLUETOOTH

Download the "BT Charger 2.0" App for your iOS or Android device by scanning the QR code below to use Bluetooth function.



## CLEANING & MAINTENANCE



### CAUTION:

Disconnect from mains prior to carrying out any cleaning work. Danger of electrocution! Never immerse the charger in water as entering water can damage the charger.

When necessary, clean charger with a soft, dry, lint-free cloth. Only when heavily soiled use a damp, well wrung-out cloth and mild, non-abrasive cleaning agent. After cleaning, thoroughly dry charger.

## SPECIFICATIONS

Input:	220-240V~ 50Hz 2.0A
Output:	12Vdc, 26A; 16Vdc, 19.5A; 24Vdc, 13A; 12.8Vdc, 26A; 13.6Vdc, 5A
Battery capacity:	12V 50Ah-500Ah / 16V, 25h-250Ah / 24V, 25Ah-250Ah / 12.8V Lithium (LiFePO4), 30A-200Ah / 16V Lithium (LiFePO4), 24A-250Ah
Operating Temperature:	0°C to +40°C
Dimensions (L x W x H) mm:	320.9*144.5*84.5mm
Battery types:	All types of 12V and 24V Lead-acid batteries (WET, GEL and AGM), 16V Lead-acid battery (AGM+) also 12.8V and 16V Lithium (LiFePO4)
Insulation Class:	IP 65

## WARRANTY INFORMATION

Our product is guaranteed to be free from manufacturing defects for a period of 12 Months.

If your product becomes defective during this period, Electus Distribution will repair, replace, or refund where a product is faulty; or not fit for intended purpose.

This warranty will not cover modified product; misuse or abuse of the product contrary to user instructions or packaging label; change of mind and normal wear and tear.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and failure does not amount to a major failure.

To claim warranty, please contact the place of purchase. You will need to show receipt or other proof of purchase. Additional information may be required to process your claim.

Any expenses relating to the return of your product to the store will normally have to be paid by you.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods or services to which this warranty relates.

This warranty is provided by:

Electus Distribution

Address 46 Eastern Creek Drive, Eastern Creek NSW 2766

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