

Qoltec®



USER MANUAL

SMART 12V 6A CHARGER for AGM, GEL and
LiFePO4 batteries

Model: 52494

Introduction

Thank you for choosing a Qoltec product. Qoltec battery chargers are designed to ensure safe, reliable and convenient charging of batteries that meet the specifications of the specific model. Before use, please read this user manual carefully, as it contains important information regarding safe connection, correct operation, maintenance and safety precautions. Using the charger in accordance with the instructions helps to minimise the risk of damage to the battery or device and ensures its correct and long-lasting operation. If you have any questions or require technical support, please contact our customer service department.

About the product

This microprocessor-controlled smart charger for 12V batteries, featuring an LCD display, is a microprocessor-powered marvel in energy management. Ideal for LiFePO₄, AGM, GEL, SLA and WET batteries in various types of vehicles, e.g. cars, motorbikes, lorries, motorhomes and boats. It features 5 operating modes, tailored to each type of battery (CAR, MOTO, AGM, LiFePO₄ Repair). A 9-stage automatic charging mode with an integrated desulphation and maintenance stage ensures exceptional battery protection and enables optimum performance.

LCD display

The charger is fitted with a clear LCD display, which makes it easy to monitor the charging process and select the appropriate operating mode. On the screen, the user can check current charging parameters, such as voltage, current and battery charge level.

Using the 'MODE' button, you can switch between the available operating modes, tailored to different battery types and applications:

CAR – mode for standard car batteries, agricultural vehicles, lorries and various types of 12 V lead-acid batteries.

AGM – mode for AGM batteries,

MOTO – mode for motorcycle batteries and 12V lead-acid batteries.

LiFePO₄ – a mode for lithium iron phosphate batteries, with a charging voltage of 14.6 V.

REPAIR – a pulsed battery regeneration mode, recommended for batteries that have not been used for a long time, older batteries, or those that do not accept a charge.

Figure 1 in the appendix

Repair mode (REPAIR)

1. Connect the battery to the charger, then connect the charger to the mains supply. Press the 'MODE' button five times to activate repair mode. The message 'PUL' will flash on the display.
2. The recommended operating time in repair mode is approximately 4 hours for car batteries and approximately 2 hours for motorbike batteries and wet-cell batteries. If the battery does not overheat, the repair time can be extended.
3. In repair mode, the charger continues to supply current to the battery. After prolonged operation in this mode, the battery may become fully charged. Once the repair process is complete, the charge indicator on the display will show 100%, and the message 'FUL' will appear on the screen. The charger will then automatically switch to trickle charge mode. The message 'OFF' indicates that the process has finished.
4. To stop the repair or charging process early, disconnect the charger from the battery and then disconnect it from the mains supply.

TIP: If the battery overheats during the repair process, stop using the device immediately to avoid any danger. Overheating may indicate severe sulphation of the battery, an electrolyte level that is too low, or damage to the battery. In this case, the battery may need to be replaced with a new one.

Mode Change Lock

The mode change lock prevents accidental errors. Once charging has started, after approximately 25 seconds, the touch button is automatically locked and cannot be activated.

To change the operating mode:

1. Disconnect the clamps from the battery or disconnect the charger from the mains supply.
2. Once you have carried out one of these actions, the lock will be released, allowing you to select the mode again.

Smart Memory Function

The charger features a smart memory function. Once charging is complete and the device is restarted, the charger will automatically return to the last operating mode used. This function simplifies operation and ensures user convenience.

Note: Repair mode does not support the memory function and must always be selected manually.

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1. Connection:

- 1) Connect the red terminal to the positive (+) terminal of the battery.
- 2) Connect the black terminal to the negative (-) terminal of the battery.
- 3) Make sure the clamps are securely attached.

2. Switching on the charger:

- 1) Plug the charger into a mains socket.
- 2) The display will light up, showing the battery voltage and the selected operating mode.

3. Selecting a mode:

- 1) Use the MODE button to change the mode.

4. Charging process:

- 1) The display shows the current charging status (voltage, current and charge level).
- 2) Once fully charged, the display will show '100%' or 'FULL'.

5. Switching off and unplugging the charger:

- 1) Unplug the charger from the mains socket.
- 2) First remove the black terminal, then the red terminal.

9-stage battery charging mode

This comprises the following stages:

1. Battery detection
2. Desulphation
3. Charging with half-power constant current
4. Full-power constant-current charging
5. Constant-voltage charging
6. Pulse repair
7. Trickle charging
8. Energy maintenance
9. Shutdown

The charging curve is as follows: *Figure 2 in the appendix to the manual*

Technical Specifications

Model	52494
Input voltage	220–240 V
Output voltage	12V
Battery voltage	12V
DC current	6A
Charging type	9-stage charging mode
Charging voltage	13.8–15.5V
Battery capacity	4Ah–100Ah
Charging time	Depends on battery capacity
Battery type	AGM, GEL, LiFePO ₄ , SLA
Cooling	1x fan
Length	Cable: 0.51m; power cable: 0.59m

Maintenance, disposal and servicing

1. Before cleaning or maintenance, disconnect the charger from the mains and from the battery.
2. Use a dry cloth for cleaning; do not use solvents, detergents or corrosive substances.
3. If you notice a burning smell, smoke, unusual noises or deformation of the casing, immediately disconnect the power supply and stop using the device.
4. Repairs to the device may only be carried out by a qualified service centre.
5. The device must be taken to an appropriate collection point for waste electrical and electronic equipment (WEEE Directive 2012/19/EU). Batteries used with the charger must also be taken to designated collection points.

Warranty

The device is covered by a 24-month manufacturer's warranty. In the event of any issues with the charger's operation, please contact an authorised service centre or point of sale.

Attachment

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