

Qoltec[®]

Model: 52486

INSTRUCTION MANUAL

INTELLIGENT BATTERY CHARGER AGM GEL LIFEPO4

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INTRODUCTION

Thank you for your trust and for choosing our battery charger. We are convinced that the product will meet your expectations and will be an indispensable tool in your daily work. This user manual has been prepared to assist you in the installation and use of the device. It includes detailed steps and instructions for the correct use of our product. If you have any questions after reading the manual, please contact the NTEC service department.

ABOUT THE PRODUCT

Microprocessor-controlled pulse charger with easy-to-read LCD display. It uses the latest charging technology for lead-acid, AGM, GEL, WET (wet), deep-cycle calcium and maintenance-free VRLA lead-acid batteries AND LIFEPO4. The product can be used for batteries in cars, motorbikes, yachts, lawnmowers, agricultural vehicles and quad vehicles.

Product features

- 3-stage microprocessor-controlled charging process
- Cell regeneration function: restore the efficiency of deeply discharged or sulphated batteries using pulses
- Automatic switch-off when fully charged
- Short-circuit, overload and overheating protection, reverse polarity protection
- Charging voltage: 14.4V (constant) / 13.8V (sustained)

INSTRUCTIONS FOR SAFE USE

1. The charger is designed to charge 12V lead-acid batteries with capacities from 4Ah to 140Ah.
2. Before using the charger, check the specifications of the battery manufacturer.
3. Explosive gases may escape from the battery during charging. Ensure proper ventilation to prevent flames and sparks.
4. Do not expose the charger to sunlight or high temperatures.
5. Battery acid is corrosive. If acid comes into contact with skin or eyes, flush immediately with water.
6. Do not charge a frozen or damaged battery.
7. Do not charge non-rechargeable batteries.
8. Do not place the charger on the battery while charging.

9. Special care must be taken to reduce the risk of dropping a metal tool on the battery. This could spark or short-circuit the battery or other electrical component, which could cause an explosion.
10. Remove metal personal items such as rings, bracelets, necklaces, watches when working with the lead acid battery.
11. Do not smoke or allow sparks or flames to build up during charging.
12. 12.To reduce the risk of electrical shock, unplug the charger from the AC outlet before performing maintenance or cleaning.
13. The product is not intended for children or persons who are not able to follow the instructions for use.

HOW TO START CHARGING

1. Check the voltage and chemistry of the battery.
2. Make sure the AC power plug is plugged into an electrical outlet.
3. Check that the battery terminals or ring terminals have been connected correctly.
4. Press the mode button to switch to the appropriate charging mode.
5. The LED will illuminate according to the selected charging mode and the charging light will illuminate (depending on the state of the battery), indicating the start of the charging process.
6. The charger can now remain connected to the battery at all times to provide maintenance charging.

Note: for 4Ah-10Ah batteries we suggest using 'Repair' mode as the battery size is too small, using pulse charging is very good for small battery sizes

DESCRIPTION OF DISPLAY FUNCTIONS

<i>Illustration 1</i>	Charging voltage
<i>Illustration 2</i>	Charging current
<i>Illustration 3</i>	Repair mode
<i>Illustration 4</i>	Standby mode
<i>Illustration 5</i>	Battery charged

<i>Figure 6</i>	Charging status
<i>Figure 7</i>	Incorrect connection. Check the connection between the charger and the battery.
CHARGE	Charging indicator
% POWER	Power indicator
FULL	Battery charge indicator

Figure 8

CHARGER MODES

The product has 4 modes: 12V Car, 12V AGM, 12V Motorcycle, REPAIR.

Note : It is important to understand the differences and purpose of each charging mode. Do not use the charger until you have confirmed which charging mode is suitable for your battery. The following is a brief description:

<i>Illustration 9</i>	CAR MODE GEL, SLA, WET, DEEP CYCLE, EFB, calcium Max. 7A
<i>Illustration 10</i>	AGM & LiFePO4 MODE designed for charging AGM and LiFePO4 batteries Max. 7A
<i>Illustration 11</i>	MOTO MODE for small batteries max. 1.5A
<i>Illustration 12</i>	REPAIR MODE (16H) Advanced recovery mode for batteries that are completely discharged or have been idle for a long time. Note : Not all batteries can be reconditioned, only motorbike and car batteries.

<i>Illustration 13</i>	CHARGING SELECTION MODE BUTTON
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PRECISE 3-STAGE CHARGING

Illustration 14

The charger uses intelligent 3-stage charging by adapting the charging voltage and current to the current state of charge of the battery, it consists of 3 stages :

The CC stage is a charge of up to 80% of the battery's capacity, with maximum current kept constant and high voltage,

CV stage The rectifier keeps the charging voltage constant between 14.1VDC and 14.8VDC, reducing the charging current,

The FLOAT stage is the so-called maintenance **stage** in which the battery has already reached 95% capacity and gradually reaches 100%, the charging voltage is reduced to a constant value between 13.0VDC and 13.8 VDC.

TECHNICAL SPECIFICATIONS

MODEL	52486
INPUT VOLTAGE	100-240VAC 50/60Hz 90W
INPUT CURRENT	0.4A/230VAC, 0.8A/110VAC
CHARGING VOLTAGE	Automotive mode: 14.8V, AGM mode : 14.6V, Motorbike mode : 14.6V (Measurement tolerance +/-0.3V)
NO-LOAD INPUT POWER	2.5W
OUTPUT VOLTAGE	12V
BULK CHARGING CURRENT	Max. 7A
OPERATING TEMPERATURE	-20°C to +45°C
COOLING	Fan

BATTERY TYPE	Battery 12V : AGM, GEL, Flooded (Wet), Calcium, deep cycle, VRLA, maintenance-free , lead acid
BATTERY CAPACITY	4Ah - 140Ah
DIMENSIONS	158 x 85 x 63mm
NET WEIGHT	440g
CERTIFICATES	CE / FCC / RoHS

BATTERY CHARGING TIME

BATTERY CAPACITY (AH)	CHARGING TIME (H)
4	
20	
60	10
80	15
120	20

PROBLEM SOLVING

PROBLEM	POSSIBLE REASON	SOLUTION
The LED display shows "FUL", but the battery is not yet fully charged.	The internal resistance of the battery is too high or the capacity of the battery is reduced in the case of a battery with a long idle time, a vulcanised battery, a low-voltage battery/long idle time battery, then the battery voltage will immediately increase, causing a "FUL" state when the battery is not yet fully charged.	Use the "repair" mode, activate the battery.
The battery voltage is normal, but the charger does not work.	No AC power input	Check whether the AC power source works or not, change the socket and try again.
The "FUL"	The battery has been vulcanised or	Stop charging when the

state cannot be reached after a long charging time.	has run out of water. The battery voltage will remain low, preventing it from being fully charged.	battery heats up, check the battery for missing fluid or not. perform a charge cycle 1-2 times (discharge-charge, discharge-charge).
Why can't the repair mode be selected?	It is likely that the battery and power supply are not connected to the charger.	Connect the battery and power supply to the charger.

CONSERVATION

1. Keep the charger clean by using a soft, dry cloth to remove dust and dirt. Do not use chemicals.
2. Regularly check power cables and connectors for damage such as abrasion, cracks or loose connections.
3. Ensure that the vents are clean and not blocked to ensure adequate cooling of the charger.
4. Store the charger in a dry, cool place, away from direct sunlight, moisture and heat sources.
5. Avoid contact of the charger with water or other liquids to prevent electrical damage.

UTILISATION

This product is subject to the regulations for the disposal of electrical and electronic equipment (WEEE). It must not be disposed of with municipal waste. Take the charger to an electro-waste collection point that provides safe recycling in accordance with GPSR standards. Check where the nearest electro-waste collection points are located.

If you have any questions about disposal, contact the manufacturer or an authorised service centre.

INFORMATION ON WARRANTY AND SERVICING

The product is covered by a 24-month manufacturer's warranty from the date of purchase. The warranty covers any defects in materials and workmanship.

Please contact our service department if you have any problems with your device to ensure prompt and professional service. The warranty does not cover damage resulting from misuse, falls, mechanical damage, unauthorised repairs or attempts at disassembly. The warranty is invalid if the housing has been opened or the warranty seal has been removed.

ATTACHMENT

1

12.3^V

2

6.3^A

3

PUL

4

OFF

5

FUL

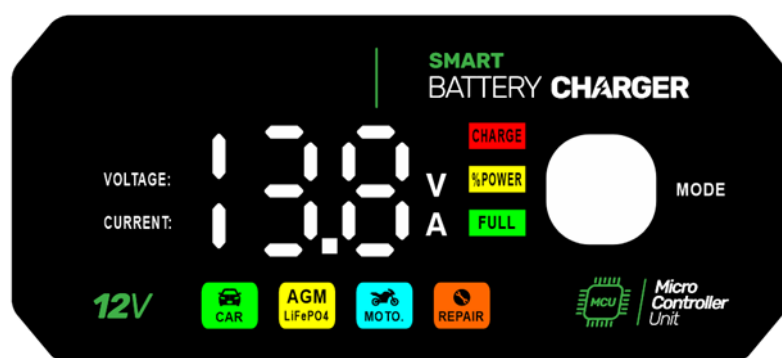
6

93

7

270

8



9



CAR

10



11



MOTO.

12



REPAIR

13



14

