LOTUS®

Performance, Delivered.™

Car Battery Charger

LTMT30BCX

Made in China/Fabriqué en Chine
Lotus Tool Group (Philippines)
www.lotustoolworks.com

Instruction Manual

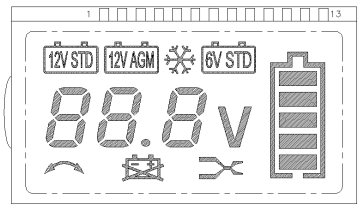
Thank you for purchasing an LTMT30BCX Car Battery Charger Before using the battery charger please read carefully the safety instructions.

Our LTMT30BCX car battery charger is suitable for 6V and 12V lead-acid, gel and agm batteries. Batteries up to 120Ah could be maintenance charged.

Our LTMT30BCX has several diagnose-, protection- and recovery features which are proceed fully automatic if the connected battery requires it. You don't have to take care about anything. These features will elongate your battery life.

Safety Instructions

- The charger is designed for charging 6V / 12V lead acid, gel and agm batteries don't use it for anything else
- Check the cables for damage before you use it
- Never charge a damaged battery
- Don't put the charger on the battery during charging
- Only charge in well vented areas
- Don't cover the battery charger
- There could be explosive gas during charging, you have to avoid sparks
- Battery acid can harm you, if you should have contact with battery acid go immediately to a doctor.
- The charger is not suitable for children or people who can't read and understand the safety instructions. Store it out of the range of those people or children. Don't let children play with the charger.



Technical Details

The lcd display gives you the most important information:
There are several charging mode. You can choose 12V STD for charging 12V lead acid and gel battery, 12V AGM for charging 12V AGM battery and 6V STD for charging 6V lead acid and gel battery. Every mode could be changed into winter mode when you push the mode button another time the snow flake icon appears and the winter mode is on and you can charge batteries in low temperatures.

The voltmeter shows the current charging voltage and the battery symbol the current charging status. There are three icons for malfunctions

Icon left corner shows wrong polarity please change the connection of the clamps
icon in the middle shows defect battery, please let the battery be tested by a mechanic and if necessary change the battery icon right corner shows bad connection please check the connection between the charger and the battery.

You can do the follow test :

Power-on test:

Connect the input power supply and the backlight is on; the clamp is not connected, the clamp is positive, but the terminal voltage of the clamp is lower than 0.5V, and the clamp is flashing.

Reverse connect detection:

when the clamp is reverse connected ,the reverse connect symbol flashes.

Wrong connect detection:

The voltage at both ends of the clip is higher than 0.5V, after selecting ,the voltage gear according to the gear selection key, waiting for 5S, when the positive voltage of the clip is greater than 7.8V (6V mode),15.6V (12V mode), the clip symbol flashes.

Bad battery detection:

charge the 6V battery, if the voltage is less than 5.5V ±0.2v in 4 minutes or the current does not reach 1A after 2 hours of high voltage de-vulcanization, the bad battery symbol flashes. Charge the 12V battery, if the voltage is less than 11V ±0.2v in 4 minutes or the current does not reach 2A after 2 hours of high voltage de-vulcanization, the bad battery symbol flashes.

High voltage de-vulcanization:

1, 6 V: before charging, the voltage is less than 6.2 V and filled within 5 minutes, into high voltage de-vulcanization, 7.9V high voltage charging. When the current is greater than 1A, charge normally.
2, 12V: before charging, the voltage is less than 12.4V and filled within 5 minutes, into high voltage de-vulcanization, at 15.8V high voltage charging. When the current is greater than 2A, charge normally.

Constant current charging:

Battery voltage	Below 6V	6V-6.8V	6.8V-7V	Above 7V
6V mode	1A	1A	1A	Lower than 1A
Battery voltage	Below 12V	12V—13.6V	13.6V—14V	Above 14V
12V mode	1A	1A	1A	Lower than 1A

Full charge detection:

6VSTD, voltage 7.2 ±0.2v, current 0.6±0.3a,stop charge, the Lcd screen show “FUL”。
6VSTDSNOW, voltage 7.4±0.2v, current 0.6±0.3a,stop charge, the lcd screen show “FUL”。
12VSTD, voltage 14.4±0.2v, current 0.6±0.3a,stop charge, the lcd screen show “FUL”。
12VSTDSNOW, voltage 14.9±0.2v, current 0.6±0.3a,stop charge, the lcd screen show “FUL”。
12VAGM, voltage 14.7±0.2, current 0.6±0.3a,stop charge, the lcd screen show “FUL”。
12VAGMSNOW, voltage 15.2±0.2v, current 0.6±0.3a,stop charge, the lcd screen show “FUL”。

Recharge test:

The 6-V battery is charged with a voltage of <6.4 V± 0.3 V after 2 minutes, and the display "FUL" disappears and the state of charge is displayed.
The 12V battery is charged with a voltage of <12.8 V±0.3 V after 2 minutes, and the display "FUL" disappears and the state of charge is displayed.

Pulse repair:

6V mode: when the battery is less than 6.4V within 2 minutes of filling, the charger determines to enter the pulse repair state and charge the battery with 7.9V high voltage pulse for 2 hours, and then enters the full state.

12V mode: When the battery is full of 2 minutes less than 12.8 V, the charger determines that the pulse repair state is charged for 2 hours with a high voltage pulse of 15.8 V and then enters the full state.

Maximum charge time test:

When the charging time is more than 96 hours, the battery is not fully charged, the bad battery is judged, the bad battery symbol is flashing, and the charging is stopped.

Charging

1.Connect the charger to the battery, first the red clamp to plus and then the black clamp to minus
2. Connect the charger to 230V socket
3. Push the mode button to choose the charging mode according to your battery needs
4. The charging will start automatic after a few seconds
5. When the charging is done the display shows FUL and the charger will switch to maintenance mode.

Warranty

We offer you a one year warrant for our chargers , Please contact the dealer where you have bought your LTMT30BCX car battery charger and show him the invoice as a proof of warranty.
Warranty claims without invoices can’t be handled.