

# MULTI-FUNCTION CHARGER

## Automatic Smart Battery Charger With LCD Display 12V 6A

(FOR CHARGE, AGM, GEL, SLA AND WET ... BATTERIES)



## USER MANUAL

THIS MANUAL CONTAINS IMPORTANT SAFETY AND  
OPERATING INSTRUCTIONS

## IMPORTANT SAFETY INSTRUCTIONS

Please read this manual and follow the instructions carefully before using the charger.

### WARNING:

- The BC-1206 charger is designed to charge **12V** lead-acid and LiFePO<sub>4</sub>(with BMS only) batteries from 4AH - 120AH.
- Check battery manufacturer specifications before using this charger.
- Explosive gases may escape from the battery during charging. Provide ventilation to prevent flames and sparks.
- Do not expose charger to sunlight, high temperature environment.
- Battery acid is corrosive. Rinse immediately with water if acid comes into contact with skin or eyes.
- Do not charge a frozen or damaged battery.
- Do not charge non-rechargeable batteries.
- Do not place the charger on the battery while charging.
- Be extra cautious to reduce risk of dropping a metal tool onto battery. It might spark or short-circuit battery or other electrical part that may cause explosion.
- When working with a lead-acid battery, remove personal metal items such as rings, bracelets, necklaces, watch...
- Do not smoke or allow a spark or flame while charging.
- In order to reduce risk of electric shock, unplug charger from AC outlet before doing any maintenance or cleaning.
- Not for use by children or by anyone who is unable to follow instructions of this manual, unless they are supervised by an adult to ensure the proper use of charger.

### Pulse Repair Battery Charger with LCD display

This battery charger utilizes the latest technology in Lead-Acid, AGM, GEL, Flooded(Wet), Calcium type deep cycle, VRLA, maintenance free, lead acid, LiFePo<sub>4</sub>, batteries charging

### BEGIN CHARGING:

- 1.) Verify the voltage and chemistry of the battery.
- 2.) Confirm that you have connected the AC power plug is plugged into an electrical outlet.
- 3.) Confirm that you have connected the battery clamps or eyelet terminal connectors properly
- 4.) Press the mode button to toggle to the appropriate charge mode.
- 5.) The mode LED will illuminate(depending on the health of the battery), LCD indicating the charging process has started.
- 6.) The charger can now be left connected to the battery at all times to provide maintenance charging.

**Remark: for 4Ah-10Ah battery, we suggest use "Repair" mode, because the battery size is too small, use pulse charge is very good for small size battery.**

# 12V SMART BATTERY CHARGER

ИНТЕЛЛЕКТУАЛЬНОЕ ЗАРЯДНОЕ УСТРОЙСТВО 12В



INTELLIGENT  
DETECTION  
Интеллектуальное  
обнаружение



PULSE REPAIR  
Импульсный  
ремонт



WINTER/SUMMER  
зимнее и летнее  
раздельное  
наполнение



MULTIPLE  
PROTECTION  
множественная  
защита



6A



CAR

Автомобиль



AGM

АГМ



MOTO

Мотоцикл














REPAIR

Ремонт



## LCD DISPLAY:






	Charge Voltage
	Charge Current
	Inside Temperature
	Repair Mode
	End Repair
	Standby
	Battery Full
	Bad connection please check the connection between the charger and the battery
	<b>Winter Mode only for Car Mode</b> When the ambient temperature is below +10 °C, Raise the charge voltage

	<p align="center"><b>Summer Mode only for Car Mode</b> When the ambient temperature is above +28 °C, Reduce the charge voltage</p>
	<p align="center">Battery Capacity</p>

## CHARGER MODES:

The BC-1206 has 4 modes: 12V Car, 12V AGM, 12V Motorcycle, REPAIR.

It is important to understand the differences and purpose of each charge mode. Do not operate the charger until you confirm the appropriate charge mode for your battery. Below is a brief description:

 <b>CAR</b> Автомобиль	<p align="center"><b>CAR Batteries Mode</b> For GEL, SLA, WET, DEEP CYCLE, EFB, Calcium Batteries Max. 6A</p>
 <b>AGM</b> АГМ	<p align="center"><b>AGM / LiFePO4 Batteries Mode</b> For AGM and LiFePO4 Batteries Max. 6A</p>
 <b>МОТО</b> Мотоцикл	<p align="center"><b>Motorcycle Batteries Mode</b> For Motorcycle Batteries Max. 1.5A</p>
 <b>REPAIR</b> Ремонт	<p align="center"><b>Repair Mode (16 hours)</b> An advanced battery recovery mode for repairing and storing, old, idle, damaged, stratified or sulfated. <b>Not all batteries can be recovered, only can use on Motorcycle and Car batteries</b></p>
	<p align="center"><b>Charge Mode Select Button</b></p>

## Frequently Asked Questions:

1. The LCD display “FUL”, but the battery is yet fully charged.

Reason: As the Battery inside resistance is too large or the capacity of battery is reduced for Feeder Battery, vulcanized Battery, Low voltage/Long-idle time Battery, the voltage of battery will immediately soar, causing the “FUL” status occurs when the battery is yet fully charged.

Solutions: Use "repair" mode , activate the battery.

2. Battery voltage is normal, however the charger does not work:

Reason: There is no AC power input.

Solutions: Check the AC-power source are working or not, change the socket and re-try it.

3. Unable to reach “FUL” status after charging in long time.

The battery has been vulcanized, or feeder, or water depletion in the battery. The battery voltage will keep low status, causing the battery unable to get fully charged.

Solutions: Stop to charge when the battery is heating, check the battery is in shortage of liquid or Not. please charge cycle 1-2 times (Discharge-Charge, Discharge-Charge).

## Specifications

Model	BC-1206
Input Voltage	100-240VAC 50/60Hz 90W
Charge Voltage	Car mode: 14.8V, AGM / LiFePO4 mode: 14.6V, Motorcycle mode: 14.6V (Measurements allowed tolerance +/-0.3V)
Input Power under No Load	1.3W
Output Voltage	12V
Bulk Charge Current	Max. 6A
Output Volt under No Load	The output voltage is a no-load voltage 17.0-17.5V (current<20mA). When the battery is connected, the charging mode is activated and the charger will use the standard charging voltage
Operate Temperature	-20°C to +45°C
Cooling	Fan
Battery Type	all type of 12V AGM, GEL, Flooded(Wet), Calcium, deep cycle, VRLA, maintenance free, lead acid, EFB, LiFePO4 batteries
Battery Capacity	4Ah - 120Ah
Size	158x90x65mm
Net. Weight	415g
Approval	CE / FCC / RoHS