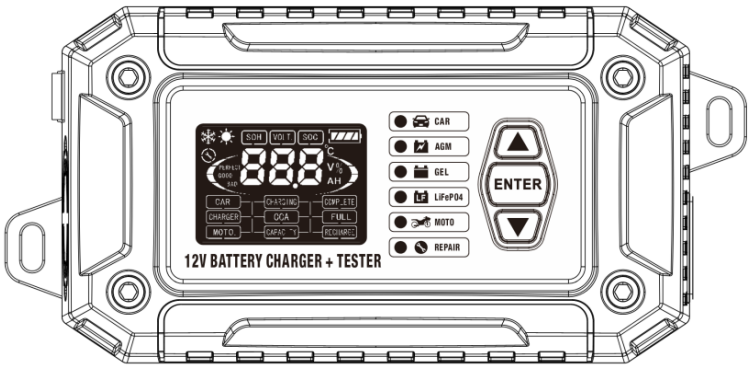
2 IN 1
12V SMART BATTERY CHARGER + TESTER
MODEL: FTC-1206



USER MANUAL

Welcome

Thank you for purchasing Battery Charger + Tester. Please patiently read and understand this use manual before operating this product. if you have any questions or issues, please contact our technical support

About

Battery Charger is designed to charge 12V lead-acid batteries from 4AH-120AH, check battery manufacturer specifications before using this charger. **Battery Tester** adopts the advanced conductance testing Technology in the word to easily, quickly and accurately measure the actual cold cranking amps capability of the vehicle starting battery, healthy state of the battery itself, and common fault of the battery, which can help maintenance personnel to find the find the problem quickly and accurately, thus to achieve quick vehicle repair.

Package Contents

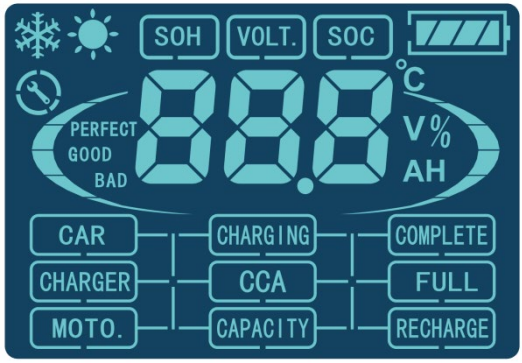
1. Battery Charger + Tester with clips
2. User Manual
3. AC cable

Compatibility

Please be noted that battery type and CCA values(Cold Cranking Amp) marked on the battery label, please refer to it before using.
Tester supports the following types.
1. VRLA/GEL/AGM/EFB/STD
2. Regular Flooded

Important

- Use this tester in accordance with there instructions, taking into account the working conditions and the work to be performed. Use of this tester for operations different from those intended could result in a hazardous situation
- Before testing, make sure the battery terminals are really clean as grease and dust could lead to errors in the test results.
- Wear eye protection when working around batteries.
- Check the insulation layer of the battery clamps is in normal condition(no damage, bareness or disconnection),in case of the electric shock.
- Test in a well-ventilated area. Explosive and toxic gases may be produced during testing
- Keep hair, hands,and clothing as well as tester leads and cords away from moving blades and belts.
- The tester is not a toy. keep it out of the reach of children.
- Do Not place the tester near the engine or exhaust pipe to avoid damaged by high temperatures, when the car engine is running.
- Do not smoke, cause sparks, or strike matches near the battery when testing
- Do not remove battery clamps while testing
- Do not put the tester into a highly humid, dusty environment.
- Do not disassemble the tester, or may cause damage.
- 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.

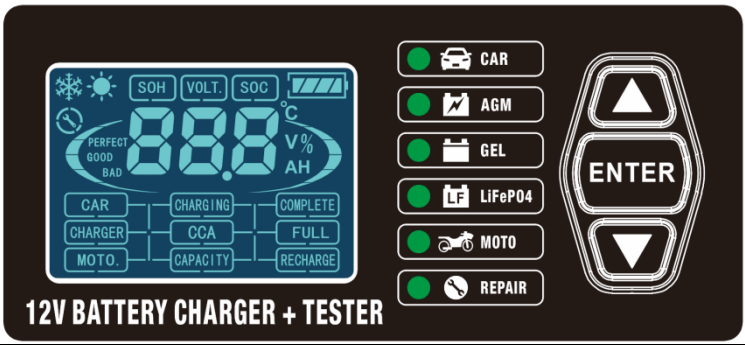


CHARGER DISPLAY:

	Charger Inside Temperature
	Charge Voltage
	Charge Current
	Repair Mode
	Standby
	Battery Full
	Winter Mode When the ambient temperature is below +10 ‘C, Raise the charge voltage
	Summer Mode When the ambient temperature is above +28 ‘C, Reduce the charge voltage
	Charging process Icon
	Charger mode

TESTER DISPLAY:

	SOH: State of Health
	VOLT: Battery Voltage
	SOC: State of Charge
PERFECT	Battery Life Perfect, SOH ≥ 85%
GOOD	Battery Life Good, SOH ≥ 60%
BAD	The battery has been scrapped, SOH < 60%
	Car battery test mode
	Motorcycle battery test mode
	Cold Cranking Amps, specified by SAE & BCI, most frequently used value for starting battery at 0'F (-18'C)
	Battery Size
	Test Complete
	Re-test the battery after charging



NO	Battery Type	Description
1	CAR	**CAR Batteries Mode** For SLA, WET, DEEP CYCLE, Calcium Batteries
2	AGM	**AGM Batteries Mode** For AGM / EFB Batteries
3	GEL	**GEL Batteries Mode** For GEL Batteries
4	LiFePO4	**LiFePo4 Batteries Mode** For LiFePo4 Batteries
5	MOTO	**Motorcycle Batteries Mode** For Motorcycle Batteries
6	REPAIR	**Repair Mode (16 hours)** An advanced battery recovery mode for repairing and storing, old, idle, damaged, stratified or sulfated. **Not all batteries can be recovered, only can use on Motorcycle and Car batteries**

NO	Button	Operation
1	▲	Previous item, or increase the battery rating values
2	ENTER	Confirm; Enter and proceed
3	▼	Next item, or decrease the battery rating values

How to Use the battery tester

Tester will test each battery according to the selected actual system standard and rating marked on the battery, to get the accurate results.

1. Before Test

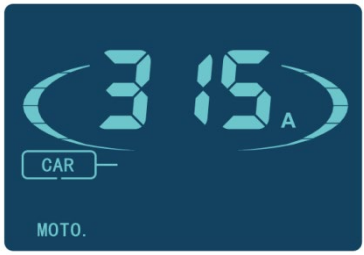
the engine and all other accessory loads must be OFF during test in order to have accurate results, Turn on the vehicle headlamps for 2-3 minutes until the battery voltage drops back to normal value if the battery is just fully charged.

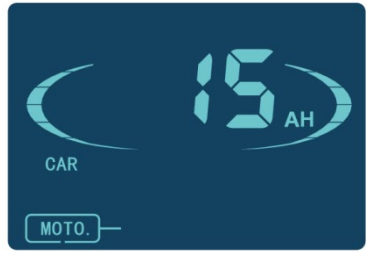
2. Steps

A. Do not connect to AC power supply.

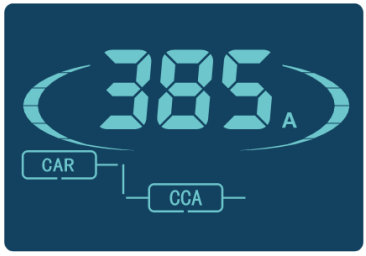
B. The Red(+) Positive Battery clamp is connected to the (+)positive battery terminal, and the BLACK(-) Negative Battery Clamp is connected to the (-) negative battery terminal. Ensure that the clamps have a firm, secure grip on the battery terminals for accurate results.

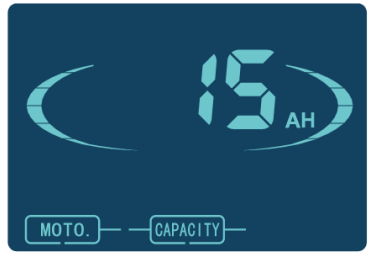
C. Press the ⌃ or ⌄ to select the "Battery Type" (CAR battery or MOTORCYCLE battery), then press "ENTER" to continue.





D. Press the ⌃ or ⌄ to select the Correct testing parameter (specified on the battery rating label), then Press "ENTER" to continue.





CAR BATTERY TYPE: select the testing standard CCA
MOTO BATTERY TYPE: select the correct battery capacity(AH)

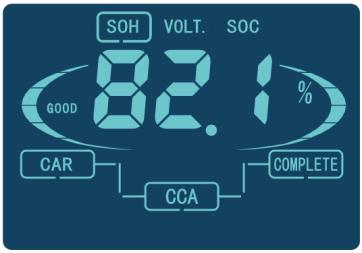
E. Hold the ⌃ or ⌄ to select the battery EDC/CCA values(specified on the battery rating label or Refer to the EDC/CCA Parameters Table)

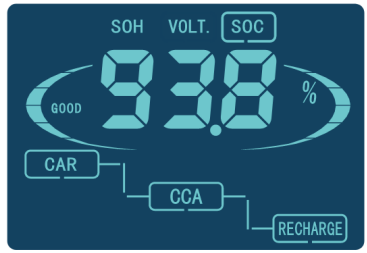
EDC/CCA Parameters Table

BATTERY SIZE	EDC VALUE
3AH	40A
4AH	50A
5AH	60A
6AH	80A
7AH	120A
8AH	130A
9AH	140A
10AH	150A
12AH	210A
14AH	215A
15AH	220A
17AH	225A
18AH	230A
20AH	235A
24AH	290A
25AH	295A
26AH	300A
28AH	310A
31AH	320A

BATTERY SIZE	EDC VALUE
33AH	330A
38AH	340A
40AH	350A
42AH	390A
44AH	410A
45AH	415A
48AH	430A
50AH	440A
55AH	450A
60AH	470A
65AH	500A
75AH	535A
80AH	570A
85AH	600A
100AH	670A
120AH	700A
150AH	750A
200AH	950A

F. Press "ENTER" to start the battery test.





Battery Tester FAQ

Q: Does this battery tester have power?
A: No, it can only be powered by the tested battery.

Q: Can Tester Charge the Battery?
A: Yes, 2 in 1Product (Charger + Tester) .

Q: Can Tester get the battery life?
A: Yes, it will give you the health of the battery and a charge percentage.

Q: What batteries can the Tester be used on?
A: it can be used on 12V batteries.

Q: Why is the result of the Tester test inaccurate?
A: Maybe the parameter you set is wrong. Please input the correct data from the battery label.

Q: Why nothing is displayed?
A: Please make sure your battery voltage is higher than 8V and The positive and negative clamp are connected correctly

Battery Charger FAQ

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: Select "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).

How to Use the battery Charger

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.) Press the button to toggle to the appropriate charge mode.
4.) Confirm that you have connected the battery clamps or eyelet terminal connectors properly
5.) The mode LED will illuminate the selected charge mode and the Charge Icon will illuminate (depending on the health of the battery) indicating the charging process has started.

6.) The charger can now be left connected to the battery at all times to provide maintenance charging.

Auto-Memory: The charger has built in auto-memory and will return to the last charge mode when connected.

TECHNICAL SPECIFICATIONS:

Model	**FTC-1206**
Type	Smart & Automatic
AC Input	100 - 240V 50/60Hz
Output Voltage	12V
Output 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
Minimum Start Volt	>5.0V
Input Power With Load	Max. 90W
Input Power under No Load	3W
Cooling	Cooling fan
Size (L*W*H)	177*86*57mm
Weight	465g
Approval	CE / FCC / RoHS