

12V 24V

SMART BATTERY TESTER

MODEL: FBT-300



USER MANUAL

Welcome

Thank you for purchasing Battery 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

Applying the most advanced conductance testing technology, and the reverse polarity protection etc., FBT-300 server as a 12V-24V battery tester to provide technicians with critical information about battery health status, to find battery and charging problems quickly, easily and accurately.

Package Contents

1. Battery Tester
2. User Manual

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

Specifications

Display: 2.7" LCD

Cable reach: 650mm (25.6 inches)

Storage Temperature: -20°C to +70°C (-4°F to 158°F)

Working Temperature: -20°C to +60°C (-4°F to 140°F)

Dimensions(L*W*H): 170*90*35mm(6.7*3.54*1.38 inch)





Weight: 355g(0.78lb)

Important

- Use this tester in accordance with these 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.

Operation Introduction



NO	Buttons	Operation
1	LCD	Display the battery information
2		Previous item, or increase the battery rating values
3		Reset / Restart
4		Confirm; Enter and proceed
5		Next item, or decrease the battery rating values
6	Red Clamp	Positive battery test clamp
7	Black Clamp	Negative battery test clamp

How to Use



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

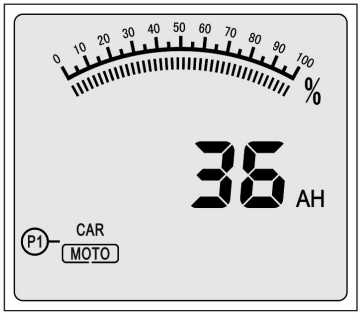
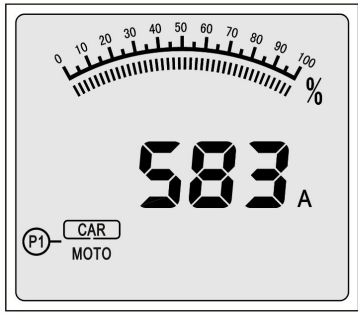
1. Before Test



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.

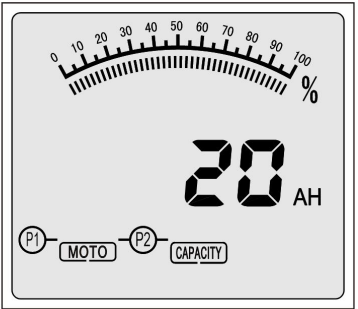
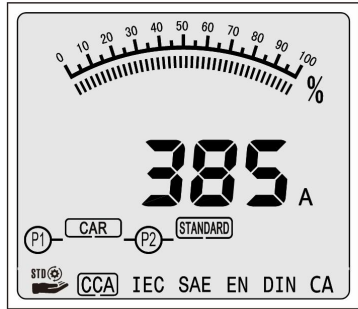
2. Steps

a. 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.

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





c. Press the  or  to select the Correct testing standard (specified on the battery rating label), then Press "ENTER" to continue.



CAR BATTERY TYPE: select the testing standard(CCA,IEC,EN,DIN,CA)

MOTO BATTERY TYPE: select the correct battery capacity(AH)

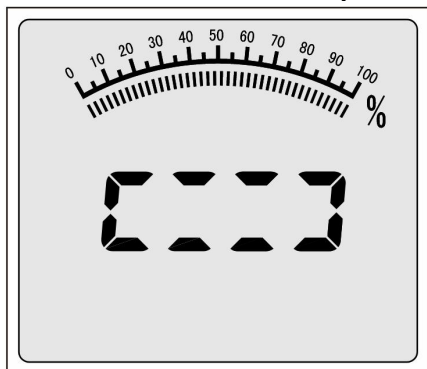
D. Hold the  or  to select the battery EDC/CCA values(specified on the battery rating label or Refer to the EDC/CCA Parameters Table)

EDC/CCA Parameters Table

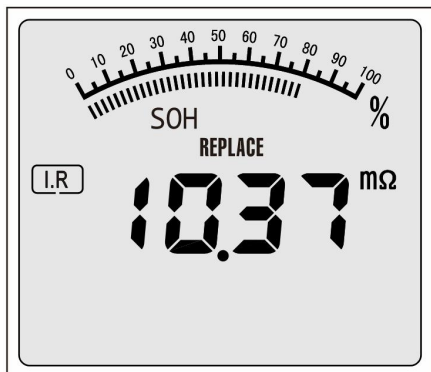
BATTERY SIZE	EDC VALUE
3AH	40A
4AH	50A
5AH	60A
6AH	80A
7AH	120A
8AH	130A
9AH	140A
10AH	150A
12AH	210A
14AH	215A
15AH	220A
17AH	225A
18AH	230A
20AH	235A
24AH	290A
25AH	295A
26AH	300A
28AH	310A
31AH	320A

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

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

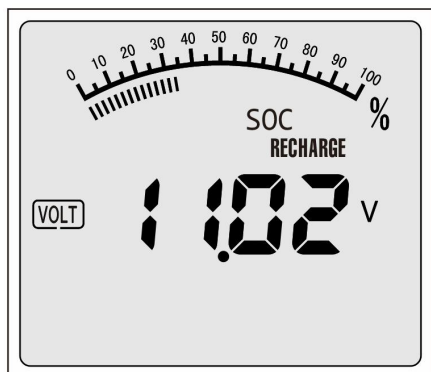


F. The test results is as Follows:



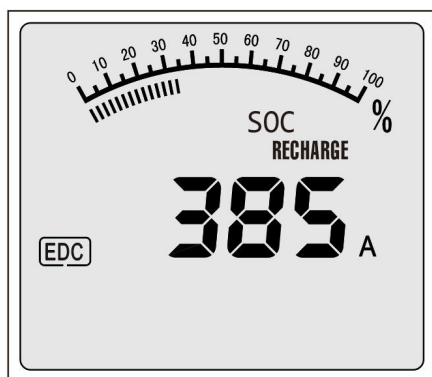
SOH: State of Health

I.R: Internal Resistance




SOC: State of Charge

VOLT: Battery Voltage



EDC/CCA: Estimated Discharge Current

Test Results Description

PERFECT	Battery Life Perfect, $SOH \geq 85\%$
GOOD	Battery Life Good, $SOH \geq 60\%$
REPLACE	The battery has been scrapped, $SOH < 60\%$
RECHARGE	Re-test the battery after charging
	The clamp is not well connected to the battery pole

Battery System Standard Description

The battery tester analyzer will test each battery according to the selected system and rating.

CCA:	Cold Cranking Amps, specified by SAE & BCI, most frequently used value for starting battery at 0°F (-18°C)
IEC:	Internal Electro Technical Commission Standard
SAE:	Society of Automotive Engineers Standard
EN:	European Automobile Industry Association Standard
DIN:	German Auto Industry Committee Standard
CA:	Cranking Amps Standard, effective starting current value at 0°C

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: No, it will not charge any batteries, But it can detect the battery.

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 and 24V 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