



PWR
automotive specialist

BAT-T

User's Manual

1-92606



Content

1. Welcome	1
2. Preparations before the Test	1
3. Compatibility	1
4. Specifications	2
5. How to Use	2
5.1 Battery Test	2
5.1.1 Before Test	2
5.1.2 Steps	2
5.1.3 Battery Test Results	5
5.2 Cranking Test	6
5.2.1 Before Test	6
5.2.2 Steps	6
5.3 Charging Test	7
5.3.1 Before Test	7
5.3.2 Steps	7
5.4 Review Data	8
6. Battery System Standard Description	9
7. Measuring Range	10
8. Important	11
9. FAQ	12
10. Warranty	13

1. Welcome

Thank you for purchasing C-PWR Battery Tester BAT-T. Please patiently read this User's Manual before operating product.

2. Preparations before the Test

If you are testing in the vehicle, make sure all accessory loads are off, the key is not in the ignition, and the doors are closed.

Connecting the Tester

- 1) Connect the red clamp to the positive (+) terminal and the black clamp to the negative (-) terminal.
- 2) For a proper connection, rock the clamps back and forth. The tester requires that both sides of each clamp be firmly connected before testing. A poor connection will produce a CHECK CONNECTION OR WIGGLE CLAMPS message appears, clean the terminals and reconnect the clamps.
- 3) The preferred test position is at the battery terminals. If the battery is not accessible, you may test at the jumper post; however, the available power measurement may be lower than the actual value.

3. Compatibility

Please be noted that battery type and CCA values (Cold Cranking Amp) marked on the battery label. Please refer to it before using.

BAT-T supports the following types.

1. Regular Flooded
2. AGM/GEL/EFB

4. Specifications

Display: 128*64 pixel display, Backlit LCD 8-line

Cable Reach: 1000 mm (39.37 inches)

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

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

Dimensions(L*W*H): 125*70*22 mm(4.9*2.76*0.87 inches)

Weight: 290g(0.64 lb)

5. How to Use

5.1 Battery Test

C-PWR BAT-T will test each battery according to the selected actual system standard and rating marked on the battery, to get the accurate results.

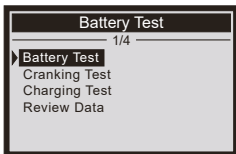
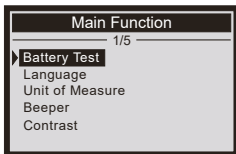
5.1.1 Before Test

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

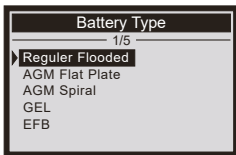
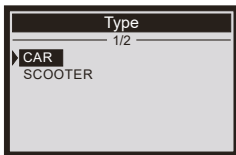
5.1.2 Steps

1) 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.

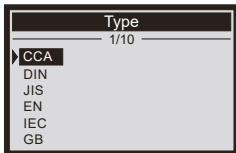
2) Press the "EXIT" key to enter the boot interface, then click "ENTER", and select the "Battery Test":



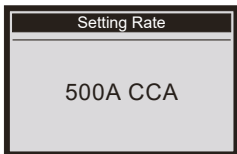
3) Press "up" or "down" to select the "Battery Type" (specified on the battery rating label), then press "ENTER" to continue.



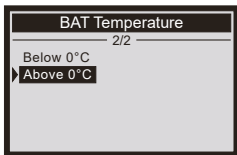
4) Press "up" or "down" to select the correct testing standard (specified on the battery rating label), then press "ENTER" to continue.



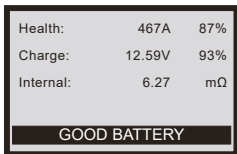
5) Hold "up" or "down" to select the battery rating values (specified on the battery rating label).



6) Press "ENTER" to start the battery test. Pay attention to the environmental selection of battery test.



7) The test result is as follows:



5.1.3 Battery Test Results

Decision	Interpretation
GOOD BATTERY	Return the battery to service
GOOD-RECHARGE	Fully charge the battery and return it to service
CHARGE&RETEST	Fully charge the battery and retest. Failure to fully charge the battery before retesting may cause inaccurate result. If CHARGE&RETEST appears again after you fully charge the battery, replace the battery.
REPLACE BATTERY	Replace the battery and retest.A REPLACE BATTERY result may also mean a poor connection between the battery cables and the battery. After disconnecting the battery cables, retest the battery using the out-of-vehicle test before replacing it.
BAD CELL-REPLACE	Replace the battery and retest.

Note: In the battery Test, select the corresponding data according to the actual situation of the battery, and finally get the health status of the battery.

When selecting the battery current size, press the UP button once to adjust the 5A current upward, and press the down button once to adjust the 5A current downward. You can adjust the current according to the actual situation of the battery.

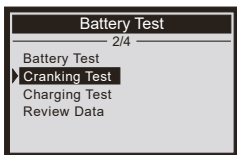
5.2 Cranking Test

5.2.1 Before Test

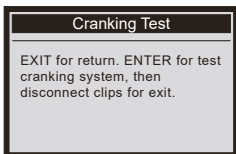
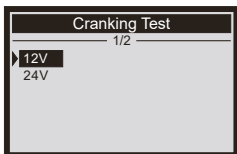
The engine and all other accessory loads must be OFF during test in order to have accurate results.

5.2.2 Steps

- 1) 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.
- 2) Press the "EXIT" key to enter the boot interface, then click "ENTER", and select the "Cranking Test":



- 3) Press "ENTER" into the "Cranking Test" interface:



4) Cranking test result:

Cranking Test	
Time	320ms
Voltage	15.03V
CRANKING NORMAL	

5.3 Charging Test

5.3.1 Before Test

The engine must be ON during test in order to have results. Ensure all electrical accessories and devices remain in the OFF state.

*Turning ON/OFF any electrical accessories in the vehicle during the test will affect the accuracy of the test result.

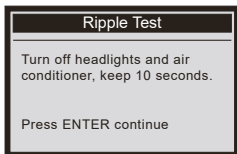
5.3.2 Steps

- 1) 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.
- 2) Press the "EXIT" key to enter the boot interface, then click "ENTER", and select the "Charging Test":

Battery Test	
3/4	
Battery Test	
Cranking Test	
▶ Charging Test	
Review Data	

Charging Test	
1/2	
▶ 12V	
24V	

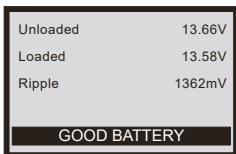
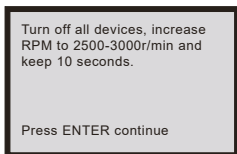
3) Press "ENTER" into the "Ripple Test" interface:



4) Press "ENTER" again, or wait for a few seconds, into the "Charging Test" interface.

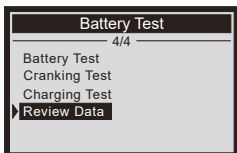
The tester prompts the operator to "Turn off all devices, Increase RPM to 2500-3000r/min and keep 10 seconds".

Press "ENTER" to get the test result



5.4 Review Data

1) Press the EXIT key to enter the boot interface, then click "ENTER", and select the "Review Data";



2) Press "ENTER" into the "Review Data "interface:

Only display the last test performed

Health:	467A	87%
Charge:	12.59V	93%
Internal:	6.27	mΩ
GOOD BATTERY		

6. 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 (-17.8°C)
BCI	Battery Council International standard
CA	Cranking Amps standard, effective starting current value at 0 °C
MCA	Marine Cranking Amps standard, effective starting current value at 0 °C
JIS	Japan Industrial Standard, displayed on the battery as combination of the numbers and letters. e.g.55D23,80D26
DIN	German Auto Industry Committee Standard
IEC	Internal Electro technical Commission Standard
EN	European Automobile Industry Association Standard
SAE	Society of Automotive Engineers Standard
GB	China National Standard

7. Measuring Range

The Battery Tester can perform test on batteries rated
within 100-2000CCA/30Ah-220AH

Measure Standard	Battery Council International standard
CCA	100-2000
BCI	100-2000
CA	100-2000
MCA	100-2000
JIS	26A17-245H52
DIN	100-2000
EN	100-2000
SAE	100-2000

8. 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 damage 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.

9. FAQ

Q: Does this battery tester have power?

A: No, it can only be powered by the tested battery.

Q: Can BAT-T charge the battery?

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

Q: Can BAT-T get the battery life?

A: Yes. It will give you the health of the battery and a charge percentage.

Q: Why is the result of the BAT-T test inaccurate?

A: Maybe the parameter you set is wrong. Please input the correct data from the battery label.

10. Warranty

One Years Limited Warranty

This product has one year (12 kk) warranty. The warranty covers defects in material and workmanship for 12 months from the date of purchase (Warranty Period).

If the product is found to be defective during the warranty period, the product must be returned to the place of purchase.

The warranty does not cover for any incidental or consequential damages arising from the use, misuse, or mounting of the device. Do not try to open, alter or repair the product by yourself. Operate the product with care.

Disposal

- Dispose the electrical devices in an environmentally responsible manner. Do not dispose of electrical devices with household waste.
- According to European Directive 2012/19/EU regarding electrical and electronic equipment, used electrical devices should be collected separately and sent for environmentally friendly recycling.
- For information on recycling options, contact your local authorities.

Importer:

Startax Finland Oy

www.startax.net

Kannistontie 138

33880 Lempäälä

FINLAND

