Content

VEEPEAK

Welcome Guide

1220 Battery Tester

Version: V1.20231015

CE FC RoHS UK CA

Scan the QR code or visit
www.veepeak.com to get the
latest FAQ & troubleshooting,
user manual and customer
support.

---

1. Safety Measures and Warnings

Safety precautions and warnings to prevent personal injury or damage to the vehicle and / or battery tester.
When working on the vehicle, first observe this instruction manual and at least observe the following safety precautions.
Failure to follow the instructions in this manual may damage the instrument. This product is designed and manufactured in strict accordance with IEC / EN61010-1 safety standard.
● Test shall be carried out in safe environment.
● Keep clothing, hair, hands, tools and test equipment away from all motor heating parts.
● Lead compounds and chemical substances are contained in the terminals, terminals and related accessories of the battery. Before measuring the data, the insulation layer of the clamp shall be checked and shall not be exposed or disconnected.
● Do not use it without properly covering the back cover, or electric shock may result.
● Do not use or store products in high temperature, high humidity, inflammable, explosive and explosive environment.

> This product is suitable for 12V car start-up battery, the working voltage is DC9~18V, please do not use it to test lithium battery.

---

2. Product Description

2.1 Product description

1220 is a 12V car battery tester, suitable for car owners and car maintenance technicians. The battery tester can quickly read important car battery data, such as voltage, internal resistance, cold cranking current and battery capacity, battery health and state of charge. The ability to provide accurate test results, calculate the battery's cold-cranking capability and age, allows for faster and more precise vehicle repairs.
The 1220 can test ordinary flooded batteries with a capacity of 100-2000 CCA, AGM flat plates, AGM spirals, and GEL batteries.

2.2 Specifications

Display	128*64
Function button	UP, DOWN, OK, ESC
Operating Temperature	-20 to 60 ℃
Storage Temperature	-20 to 70 ℃
External Power	12V
Size	128.5*72.5*22.2
Support Language	
English, German, French, Portuguese, Italian, Russian	

2.3 Include attachments

● User's manual - Tool operating instruction.
● Battery test cable - provides power to the tool and communicates between the tool and the vehicle.


2.4 Standard of optional battery

CAA:100-2000	DIN:100-1400
BCI:100-2000	IEC:100-1400
CA:100-2000	EN:100-2000
MCA:100-2000	SAE:100-2000
JIS:26A17-24SH52	GB:100-1400

3. Battery Test

3.1 Precautions

1) Turn off the engine, connect the red clip of the tester to the positive terminal of the battery and the black clip to the negative terminal of the battery, the device will automatically power up and be ready to test.
2) If you are testing the battery in the car, do not insert the key or keep it in the off position. Make sure all electrical equipment is turned off.
3) If the battery voltage is higher than normal, turn on the headlights for 2 to 3 minutes, and check the battery when the voltage drops to normal.
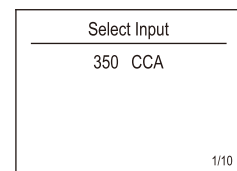
3.2 Battery test function

```
         MAIN MENU
    1.Battery Test
    2.Cranking Test
    3.Charging Test
    4.Review
    5.Setup
```
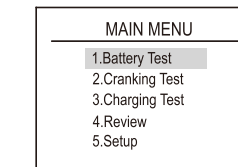
3.2.1 Select the Battery Test, enter the interface, select the battery type, and press the OK button to continue:

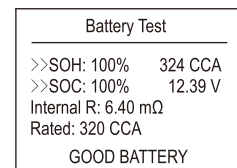3.2.2 Press the OK button to select the correct battery standard:

```
     Battery Type
  1. Regular Flooded
  2. AGM Flat Plate
  3. AGM Spiral
  4. GEL
  5. EFB
```

```
      Select Input
        CCA
                    1/10
```

3.2.3 Press the OK button to continue, for example enter the rated current value: 350 CCA Use the up and down keys to enter the correct CCA value.

```
      Select Input
        350  CCA
                    1/10
```

3.2.4 Press the OK button and wait, the screen will display the test results.

```
      Battery Test
  >>SOH: 100%    324 CCA
  >>SOC: 100%    12.39 V
  Internal R: 6.40 mΩ
  Rated: 320 CCA
      GOOD BATTERY
```
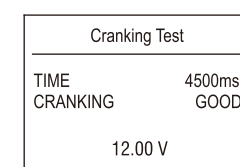
3.2.5 Press the ESC button and wait, the device will return to the main menu.

---

4. Cranking Test

4.1 Select the cranking test function, press the OK button to enter the test interface, start the engine at the same time, and follow the instructions on the screen.

```
      MAIN MENU
  1.Battery Test
  2.Cranking Test
  3.Charging Test
  4.Review
  5.Setup
```

```
     Cranking Test
      START ENGINE
```

4.2 The test results will be displayed on the screen later.

```
      Cranking Test
  TIME          4500ms
  CRANKING       GOOD
        12.00 V
```
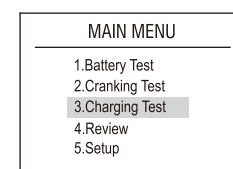
4.3 Press the ESC button and wait, the device will return to the main menu.
4.4 Cranking Test result instruction (For 12V battery)

Cranking voltage	Discharge performance
>10.5V	Good
10-10.5V	Normal
5-10V	Bad
<9.5V	Very Bad

---

5. Charging Test

```
      MAIN MENU
  1.Battery Test
  2.Cranking Test
  3.Charging Test
  4.Review
  5.Setup
```

5.1 Start the engine and turn on all electrical equipment, select the charging test function, and press the OK button to enter the voltage ripple test interface.

```
      RIPPLE TEST

   ╱╲╱╲╱╲╱╲
  19mv    12.39V
```
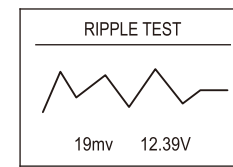
5.2 Turn off all powered devices and press the OK button to continue. Follow the screen prompts, step on the vehicle accelerator pedal, increase the RPM to 2500r/min and hold for 5 seconds.
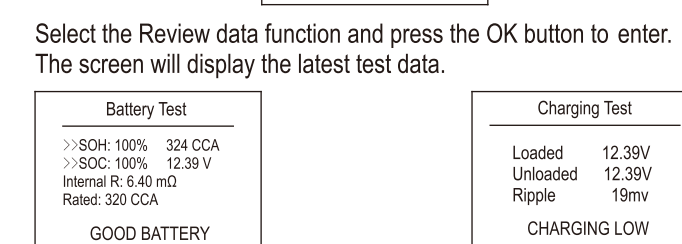
```
     Charging Test
  Increase RPM to 2500
  r/min and keep it 5
  seconds.
  Press OK to
  continue.
```
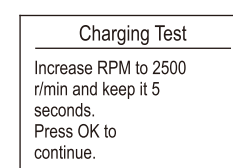
5.3 Press the OK key and the test results will be displayed on the screen. Press the ESC key to return to the main menu.

```
      Charging Test
  Loaded      12.39V
  Unloaded    12.39V
  Ripple      19mv
      CHARGING LOW
```

5.4 Charging Test result instruction（For 12V battery）

Status	Battery Voltage	Engine Performance
All Electric System Off	>13.5V	Normal
	13.2-13.5V	General
	13.0-13.2V	Attention
	<13.0V	Inspection
All Electric System On	13.4-14.6V	Normal
	13.2-13.4V	Attention
	<13.2V	Inspection

6. Review

```
      MAIN MENU
  1.Battery Test
  2.Cranking Test
  3.Charging Test
  4.Review
  5.Setup
```

Select the Review data function and press the OK button to enter. The screen will display the latest test data.

```
      Battery Test
  >>SOH: 100%    324 CCA
  >>SOC: 100%    12.39 V
  Internal R: 6.40 mΩ
  Rated: 320 CCA
      GOOD BATTERY
```

```
     Charging Test
  Loaded      12.39V
  Unloaded    12.39V
  Ripple      19mv
      CHARGING LOW
```

Press the ESC key to return to the main menu.

---

7. Setup

7.1 Select the setting function and press the OK button to enter the language setting interface.

```
      MAIN MENU
  1.Battery Test
  2.Cranking Test
  3.Charging Test
  4.Review
  5.Setup
```

```
      Language
  1. English
  2. French
  3. German
  4. Portugal
  5. Italian
  6. Russian
```

7.2 Select the language, press OK to confirm, and jump to the main menu after completion.

8. Support and Warranty

For technical support or warranty service, please contact us via one of the following ways:
• Email: support@veepeak.com
• Visit **www.veepeak.com** to submit a contact form.
Please describe your issue in as many details as possible and include a screenshot if you get any error message. Emails usually be answered in 24 hours.
Products are covered by one-year hassle-free replacement warranty against defect.