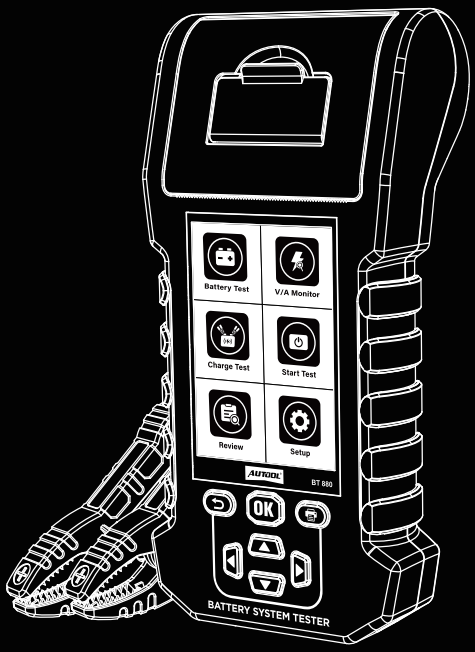
AUTOOL BT880

Battery System Tester

User Manual
用户手册



www.autooltech.com

AUTOOL®

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PRODUCT INTRODUCTION

Overview

The built-in temperature sensor of the AUTOOL BT880 battery system tester can avoid the impact of external ambient temperature, making the battery test results are more accurate. The built-in thermal printer of the instrument can conveniently and quickly print out the results. It also has the function of leakage current recording and voltage recording, which can be used to detect vehicle leakage faults. It supports recording the previous battery voltage values, which is convenient for users to replay and view. The AUTOOL BT880 helps eliminate vehicle faults and is conducive to the rapid maintenance of vehicles by maintenance personnel.

Technical data

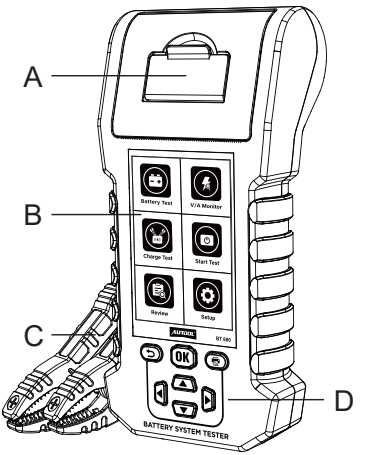
Working voltage	**8~30V DC**
Detection range of leakage current	**15mA~5Amps**
Detection range of battery CCA	**20~2000CCA**
Support various specifications	**CCA, JIS, GB, SAE, MCA, CA, DIN, IEC, EN, BCI**

PRODUCT LIST

Item	Quantity	Item	Quantity
Host	1	Power Line	1
Manual	1	Warranty Card	1

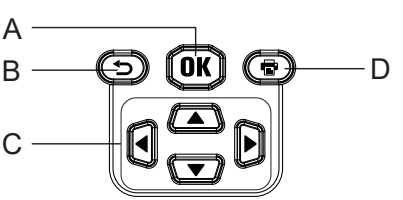
PRODUCT STRUCTURE

Structure diagram



A	Print Port	**B**	HD Color Screen
C	Electric Clamps	**D**	Function Button

Button description



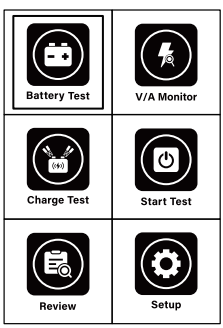
A	OK	**B**	ESC
C	Up / Down / Left / Right	**D**	Print

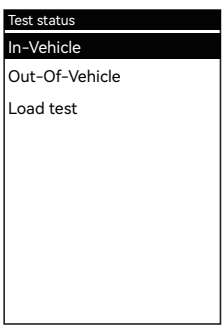
- Remarks: The leakage current can be recorded continuously for 30min (+/-10min). The current value and waveform recorded can be replayed by the instrument, and the instrument can store 10 records of voltage and current values.

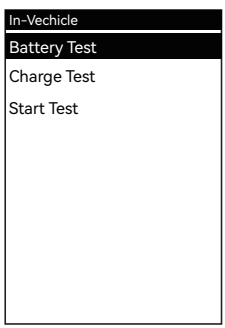
OPERATING INSTRUCTIONS

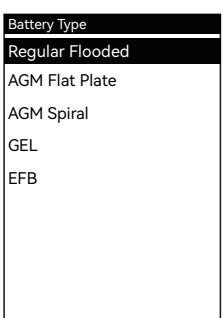
Battery test

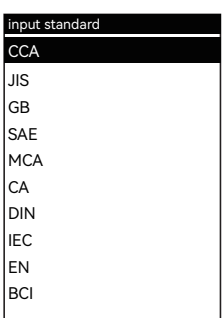
- Press **[Up / Down / Left / Right]** to select **[Battery test]** ;
- Press the **[OK]** key to enter, and select the test state and test mode according to the actual situation;
- Press **[OK]** to confirm, including CCA, JIS, GB, SAE, MCA, CA, DIN, IEC, EN, BCI and other different test standards, and press **[OK]** to confirm;
- Follow the prompts on the screen to check the battery status.

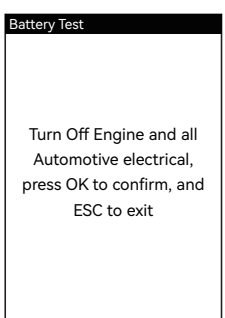






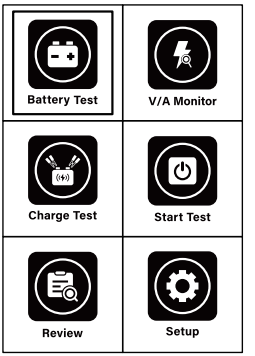


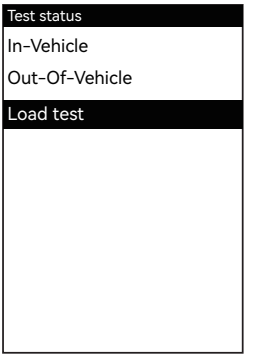


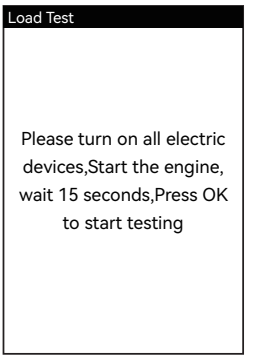


Load test

- Press **[Up / Down / Left / Right]** to select **[Battery test]** ;
- Press the **[OK]** key to enter. After entering this function, follow the on-screen instructions for the next step.

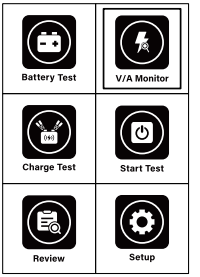


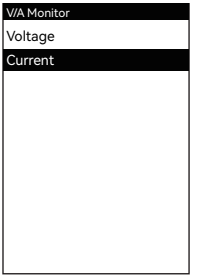


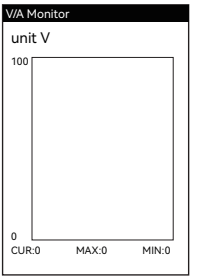


Leakage test

- **Step 1:** Connect the power clamp of the instrument to the standby battery (the red power clamp is connected to the positive pole, and the black power clamp is connected to the negative pole). If the clamp is connected reversely, the instrument will not light up.
- **Step 2:** Disconnect the battery negative pole connected to the car, use the special clamp for leakage test of AUTOOL to connect to the negative pole bus of the car, enter **[Waveform]**, press **[Up / Down / Left / Right]** to select **[V/A Monitor]**, press **[OK]** to select **[Current]**, and press **[OK]** to monitor and record the leakage current of the car in real time.
- **Step 3:** Unplug the fuses of the car fuse box one by one in order, and then observe the current change. If the current suddenly decreases, it proves that there is a possibility of current leakage in the circuit of the fuse, and then find the circuit or electrical appliance connected to the fuse according to the car circuit diagram to find leakage. Besides, the instrument can record the leakage current for about 30min. It can be selected through the **[playback]** icon.



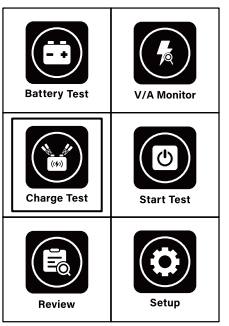


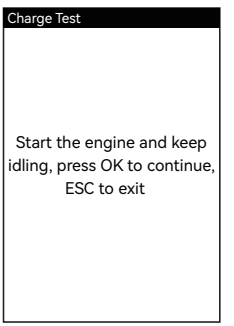


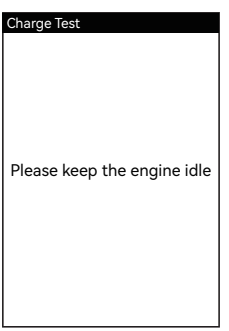


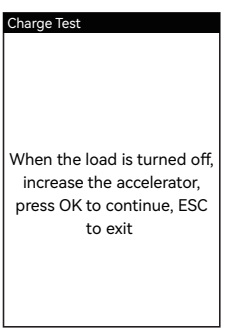
Charge test

- Press **[Up / Down / Left / Right]** to select **[Charge Test]**, press **[OK]** to enter, and follow the instructions displayed on the screen to proceed to the next step after entering this function.



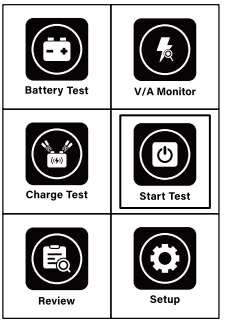


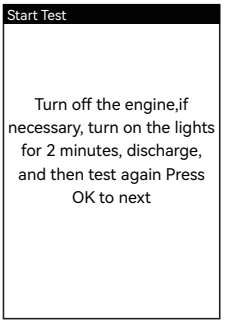




Start-up test

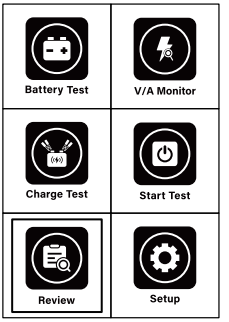
- Press **[Up / Down / Left / Right]** to select **[Start Test]**, press **[OK]** to enter, and follow the instructions displayed on the screen to proceed to the next step after entering this function.

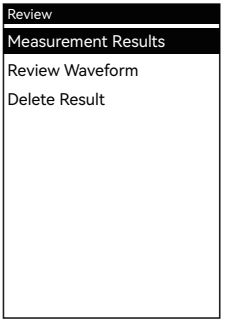




Playback

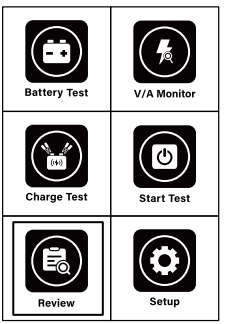
- Press **[Up / Down / Left / Right]** to select **[Review]**, press **[OK]** to enter, select **[Measurement results]** mode, you can view the last test result of the battery.

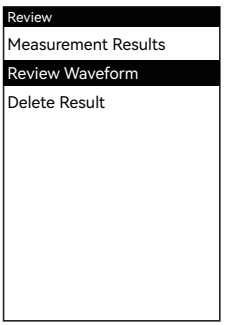


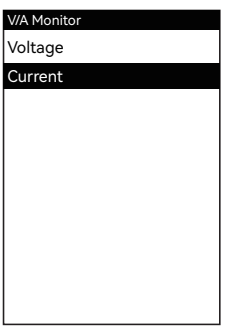


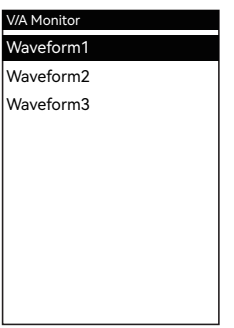
Playback waveform

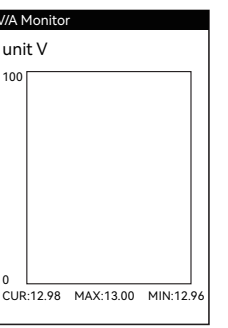
- Press **[Up / Down / Left / Right]** to select **[Review]**, press **[OK]** to enter, select **[Review Waveform]** mode, you can choose **[Voltage]** or **[Current]** playback to view data. Up to 10 waveforms can be recorded, each record is 30 minutes, and data is recorded every 100ms.





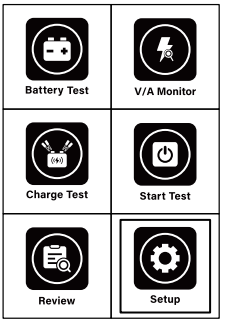


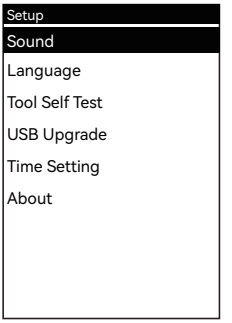


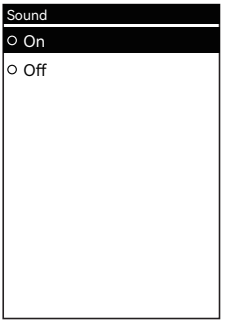


Voice

- Press **[Up / Down / Left / Right]** to select **[Setup]**, press **[OK]** to enter, select **[Sound]** mode, and set the voice as required.

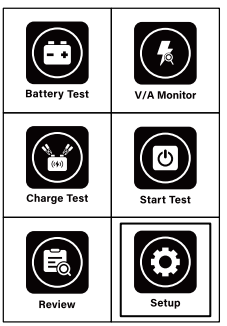


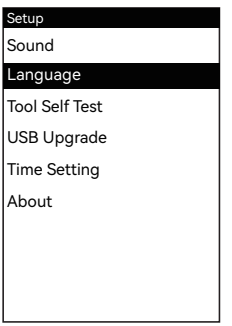




Language

- Press **[Up / Down / Left / Right]** to select **[Setup]**, press **[OK]** to enter, select **[Language]** mode, select the desired language, and press **[OK]** to confirm.

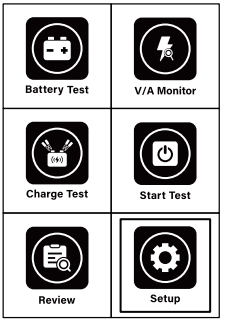


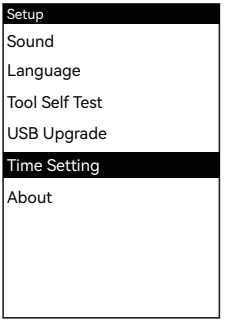


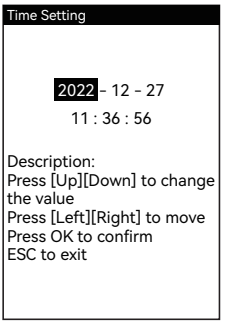


Time settings

- Press **[Up / Down / Left / Right]** to select **[Setup]**, press **[OK]** to enter, select **[Time Setting]** mode, press **[Up / Down / Left / Right]** to set the number, and press **[OK]** to confirm.

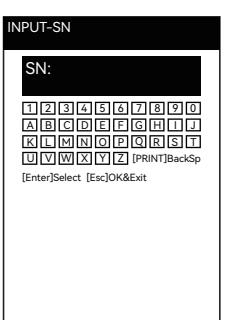


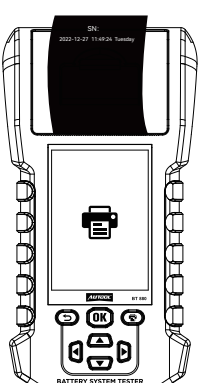




Print

- **Step 1:** Press **[Print]** in the main menu or the menu of test results to enter the print setting.
- **Step 2:** Press the direction key and **[OK]** to input the vehicle SN number.
- **Step 3:** Press **[ESC]** to print the battery test data.



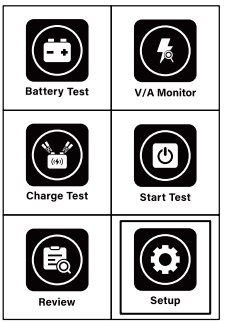


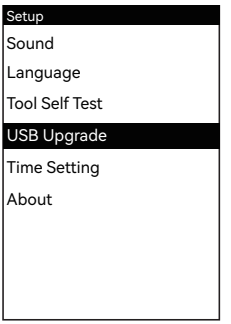
Current calibration

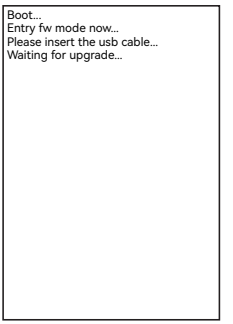
- The first step is to enter the leakage current detection mode.
- The second step is to make a standard current of 20ma flowing through the instrument.
- The third step is to check the current value showed by the instrument at this time and subtract 20ma value, and then record it.
- The fourth step is to enter Settings -> Current Calibration, use the UP and DOWN buttons to input the value recorded just now, and it will be automatically saved to the instrument after exiting,and the value will be automatically increased for the next leakage current detection,so that the current reading results will be more precise.

Firmware upgrade

- Enter Settings ->USB Upgrade, restart the instrument and enter the boot mode. At this time, connect the USB cable to the instrument to upgrade through the software on the computer.







MAINTENANCE SERVICE

Our products are made of long-lasting and durable materials, and we insist on perfect production process. Each product leaves the factory after 35 procedures and 12 times of testing and inspection work, which ensures that each product has excellent quality and performance.

Maintenance

To maintain the performance and appearance of the product, it is recommended that the following product care guidelines be read carefully:

- Be careful not to rub the product against rough surfaces or wear the product, especially the sheet metal housing.
- Please regularly check the product parts that need to be tightened and connected. If found loose, please tighten it in time to ensure the safe operation of the equipment. The external and internal parts of the equipment in contact with various chemical media should be frequently treated with anti-corrosion treatment such as rust removal and painting to improve the corrosion resistance of the equipment and extend its service life.
- Comply with the safe operating procedures and do not overload the equipment. The safety guards of the products are complete and reliable.
- Unsafe factors are to be eliminated in time. The circuit part should be checked thoroughly and the aging wires should be replaced in time.
- Adjust the clearance of various parts and replace worn (broken) parts. Avoid contact with corrosive liquids.
- When not in use, please store the product in a dry place. Do not store the product in hot, humid, or non-ventilated places.

WARRANTY

From the date of receipt, we provide a three-year warranty for the main unit and all the accessories included are covered by a one-year warranty.

Warranty access

- The repair or replacement of products is determined by the actual breakdown situation of product.
- It is guaranteed that AUTOOL will use brand new component, accessory or device in terms of repair or replacement.
- If the product fails within 90 days after the customer receives it, the buyer should provide both video and picture, and we will bear the shipping cost and provide the accessories for the customer to replace it free of charge. While the product is received for more than 90 days, the customer will bear the appropriate cost and we will provide the parts to the customer for replacement free of charge.

These conditions below shall not be in warranty range

- The product is not purchased through official or authorized channels.
- The product breakdown because the user does not follow product instructions to use or maintain the product.

We AUTOOL pride ourselves on superb design and excellent service. It would be our pleasure to provide you with any further support or services.

Disclaimer

All information, illustrations, and specifications contained in this manual, AUTOOL resumes the right of modify this manual and the machine itself with no prior notice. The physical appearance and color may differ from what is shown in the manual, please refer to the actual product. Every effort has been made to make all descriptions in the book accurate, but inevitably there are still inaccuracies, if in doubt, please contact your dealer or AUTOOL after-service centre, we are not responsible for any consequences arising from misunderstandings.

RETURN & EXCHANGE SERVICE

Return & Exchange

- If you are an AUTOOL user and are not satisfied with the AUTOOL products purchased from the online authorized shopping platform and offline authorized dealers, you can return the products within seven days from the date of receipt; or you may exchange it for another product of the same value within 30 days from the date of delivery.
- Returned and exchanged products must be in fully saleable condition with documentation of the relevant bill of sale, all relevant accessories and original packaging.
- AUTOOL will inspect the returned items to ensure that they are in good condition and eligible. Any item that does not pass inspection will be returned to you and you will not receive a refund for the item.
- You can exchange the product through the customer service center or AUTOOL authorized distributors; the policy of return and exchange is to return the product from where it was purchased. If there are difficulties or problems with your return or exchange, please contact AUTOOL Customer Service.

China	400-032-0988
Oversea Zone	+86 0755 23304822
E-mail	aftersale@autooltech.com
Facebook	https://www.facebook.com/autool.vip
YouTube	https://www.youtube.com/c/autooltech

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版权

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- 本设备供专业技术人员或维修人员使用。

注册商标

偶然公司已在中国及海外若干国家进行了商标注册，其标志为AUTOOL®。本手册所提及之偶然公司其它商标、服务标志、域名、图标、公司名称均属偶然及其下属公司之产权。在偶然公司之商标、服务标志、域名、图标、公司名称还未注册之国家，偶然公司声明其对未注册商标、服务标志、域名、图标、公司名称之所有权。本手册所提及之其它产品及公司名称的商标仍属于原注册公司所有。在未得到拥有人的书面同意之前，任何人不得使用偶然公司或所提及的其它公司之商标、服务标志、域名、图标、公司名称。

您可以访问偶然网址:www.autooltech.com，或发送邮件至:aftersale@autooltech.com，与偶然公司进行联系，征得其手册使用权之书面同意。

产品简介

概述

- AUTOOL BT880汽车蓄电池检测仪内置温度传感器，可以避免受到外部环境温度的影响，使得测试的蓄电池结果更加精确。仪器自带的热敏打印机可以方便快速地打印出蓄电池的测量结果。同时还拥有漏电电流记录仪和监控蓄电池电压记录的功能，可用于测量汽车漏电故障，支持将历史监控的蓄电池电压数值记录在测试设备中，方便用户进行回放查看，AUTOOL BT880 汽车蓄电池检测仪助力于排除汽车故障，有利于维修人员对汽车的快速维修。

产品参数

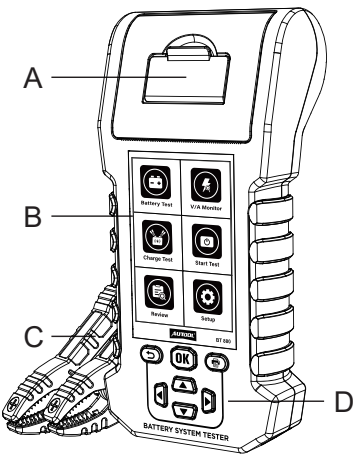
工作电压	8~30V DC
漏电电流检测范围	15mA~5Amps
电池CCA检测范围	20~2000CCA
支持多种规格	CCA、JIS、GB、SAE、MCA、CA、DIN、IEC、EN、BCI

产品清单

名称	数量	名称	数量
主机	1	电源线	1
说明书	1	保修卡	1

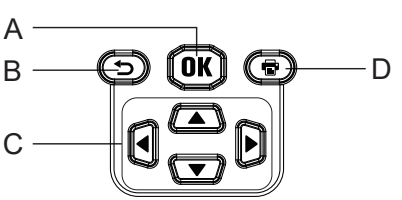
产品结构

结构图



A	打印端口	**B**	高清彩屏
C	电夹	**D**	功能按键

按键说明



A	OK键	**B**	ESC键
C	上下左右键	**D**	打印键

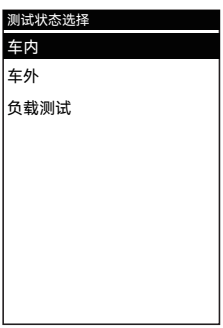
- 备注: 可连续30min(+/-10min)记录漏电电流，通过设备进行回放记录的电流值和波形，设备可保存10条电压、电流数值记录。

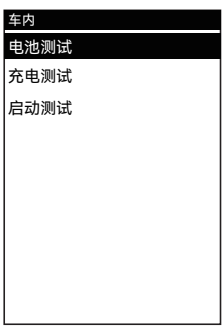
操作说明

电池测试

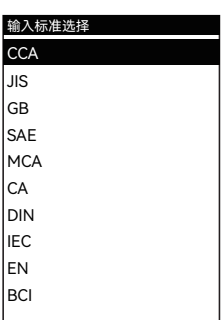
- 按[**上下左右**]键选择[**电池测试**]功能;
- 按[**OK**]键进入，根据实际情况选择测试状态和测试模式;
- 按[**OK**]键确定，有CCA、JIS、GB、SAE、MCA、CA、DIN、IEC、EN、BCI等不同的测试标准，并按[**OK**]键确认;
- 按照屏幕提示信息进行操作，检测电池状态。

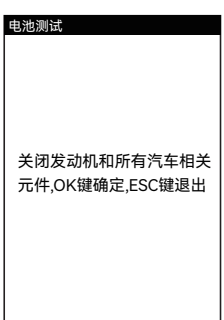






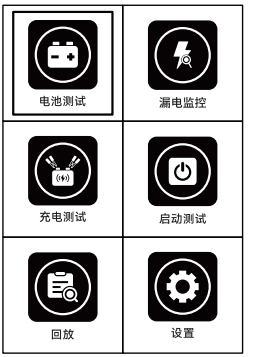


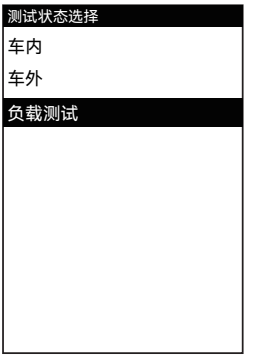


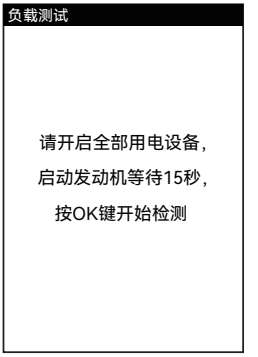


负载测试

- 按[**上下左右**]键选择[**电池测试**]功能;
- 按[**OK**]键进入，进入该功能后按照屏幕显示指引进行下一步操作。

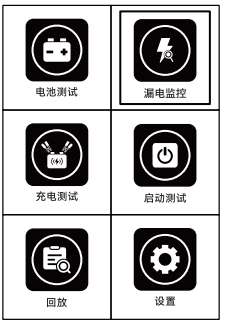


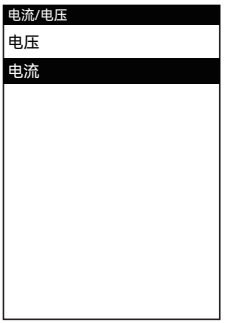


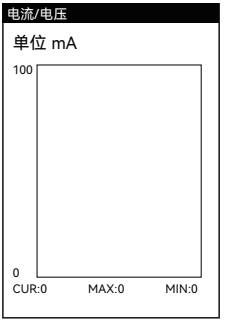


漏电监控

- **第一步：**将设备电源夹连接在备用蓄电池上(红色电源夹接正极，黑色电源夹接负极)，夹子接反不会点亮设备。
- **第二步：**将汽车连接蓄电池的负极断开，使用AUTOOL的漏电测试专用夹子接入汽车的负极总线，进入波形功能，按**[上下左右]**键选择**[漏电监控]**，按**[OK]**键进入选择**[电流]**，按**[OK]**键后，便可以实时监控和记录汽车的漏电电流。
- **第三步：**按顺序逐个拔下汽车保险盒的保险片，然后观察电流变化，若电流突然变小，证明该保险片电路存在漏电的可能，再对照汽车电路图找到该保险片连接的电路或者用电器，便可以排除出漏电。同时设备可以进行30min左右的漏电电流保存。可通过**[回放]**图标进行选择。





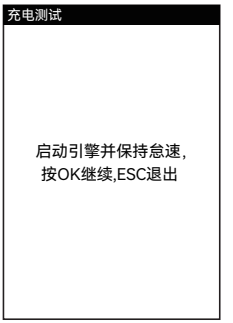




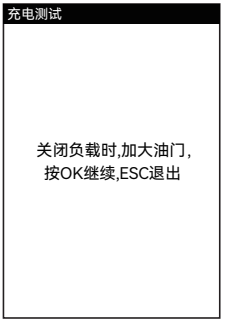
充电测试

- 按**[上下左右]**键选择**[充电测试]**功能，按**[OK]**键进入，进入该功能后按照屏幕显示指引进行下一步操作。





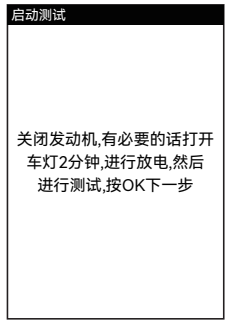




启动测试

- 按[**上下左右**]键选择[**启动测试**]功能，按[**OK**]键进入，进入该功能后按照屏幕显示指引进行下一步操作。

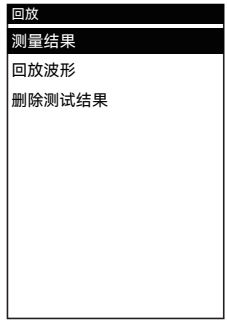




回放

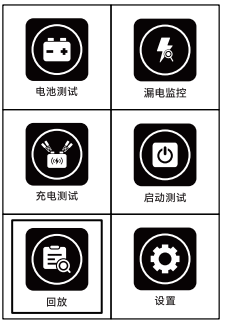
- 按[**上下左右**]键选择[**回放**]功能，按[**OK**]键进入，选择[**测量结果**]模式，可查看电池最后一次的测量结果。

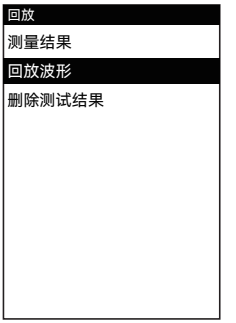


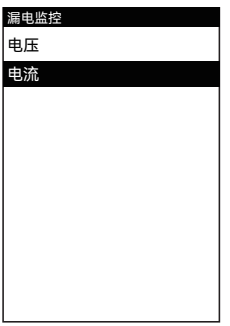


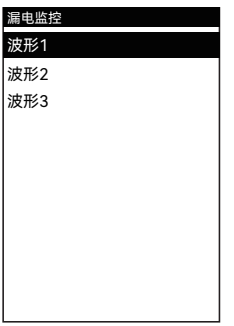
回放波形

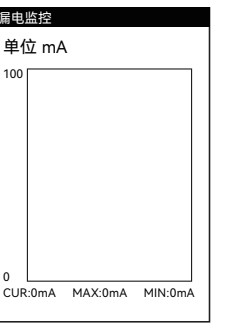
- 按[**上下左右**]键选择[**回放**]功能，按[**OK**]键进入，选择[**回放波形**]模式，可选择回放[**电压**]或[**电流**]，查看数据最多记录10条回放记录，每条记录30分钟，每100ms记录一次数据。





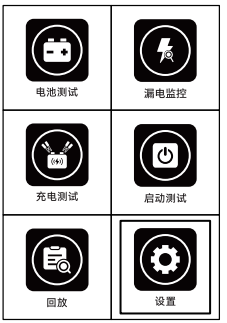


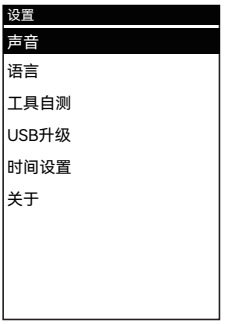


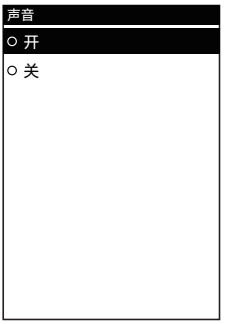


声音

- 按[**上下左右**]键选择[**设置**]功能，按[**OK**]键进入，选择[**声音**]模式，按需要设定声音开关。



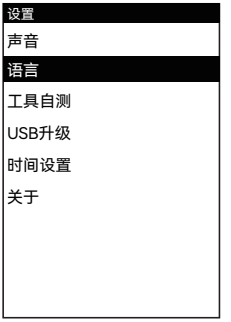


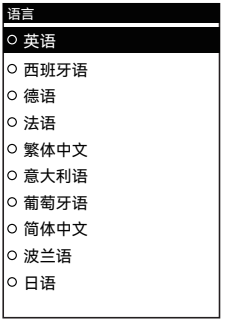


语言

- 按[**上下左右**]键选择[**设置**]功能，按[**OK**]键进入，选择[**语言**]模式，选择需要的语言，按[**OK**]键确定。



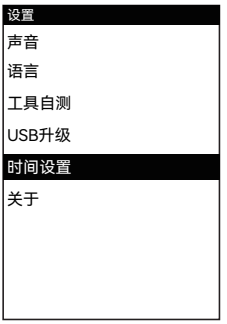


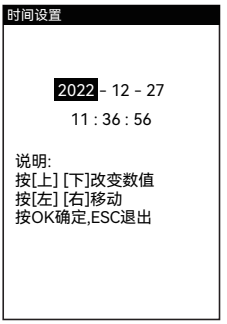


时间设置

- 按[**上下左右**]键选择[**设置**]功能，按[**OK**]键进入，选择[**时间设置**]模式，按[**上下左右**]键设置数字，按[**OK**]键确定。

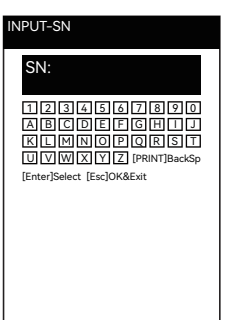


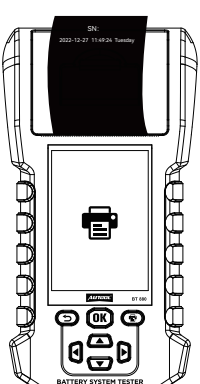




打印

- 第一步：在主菜单或者是测试结果的菜单中按[**打印**]键，进入打印设置。
- 第二步：按[**上下左右**]键和[**OK**]键可以输入车辆SN号。
- 第三步：按[**ESC**]键，就可以打印出电池检测数据。





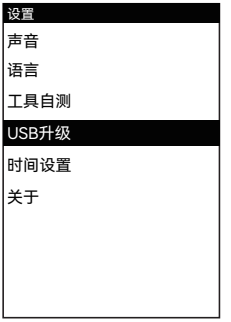
校准电流检测

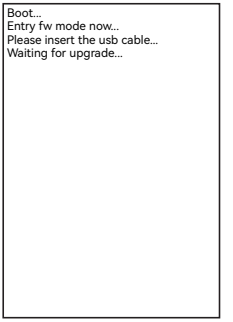
- 第一步，设备进入漏电电流检测模式。
- 第二步，制造20ma的标准电流流过设备。
- 第三步，查看此时设备显示的电流值减去20ma，并记录这个值。
- 第四步，进入设置->电流校准，使用**[上下]**键输入刚才记录的差值，退出后会自动保存到设备中，下一次漏电电流的检测会自动加上该偏移值，使设备的电流读取的结果更加精密。

固件升级

- 进入设置->USB升级设备重启进入boot模式，此时连接USB线到设备通过电脑端的软件进行升级操作。







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- 对产品中需要紧固和连接的部位经常进行检查，如发现松动应及时紧固，以保证产品的安全运行。对与各种化学介质接触的产品外部和内部零件要经常进行除锈、喷漆等防腐处理，以提高产品的抗腐蚀能力，延长产品的使用寿命。
- 遵守安全操作规程，不超负荷使用产品。产品的安全防护装置齐全可靠，及时消除不安全因素。电路部分彻底检查，老化电线要及时更换。
- 定期清洗和更换易耗部件；调整各部位配合间隙和更换磨损（已坏）部件清洁时，避免产品接触带腐蚀性的液态物品。
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- 您可以通过客户服务中心或AUTOOL授权经销商调换产品；退换货原则为从哪里购买，就从哪里退换货。如果您退换货遇见困难或者阻碍，请联系AUTOOL客户服务中心。通过客户服务中心退换货时，我们建议您通过下面的方式进行：

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