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MADE IN CHINA

EC REP
Prolinx GmbH
Brehmstr. 56, 40239 Duesseldorf
Germany

TopDiag®

USER' S MANUAL

BT500 upgraded battery tester

12V/24V universal battery

Easy, fast and accurate testing

Multiple test functions, one-click printing of measurement results

SAFETY PRECAUTIONS AND WARNINGS

To prevent personal injury or damage to vehicles and / or the scan tool, read this user's manual first carefully and observe the following safety precautions at a minimum whenever working on a vehicle:

Always perform automotive testing in a safe Environment.

Do not attempt to operate or observe the tool while driving a vehicle, Operating or observing the tool will cause driver distraction and could cause a fatal accident.

Wear safety eye protection that meets ANSI standards.

Keep clothing, hair, hands , tools , test equipment, etc. Away from all moving or hot engine parts.

Operate the vehicle in a well-ventilated work area. Exhaust gases are poisonous.

Put blocks in front of the drive wheels and never leave the vehicle unattended while running tests.

Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.

Put the transmission in P (for A/T) or N(M/T) and make sure the parking brake is engaged.

Keep a fire extinguisher suitable for gasoline /chemical / electrical fires nearby.

Don't connect or disconnect any test equipments while the ignition is ON or the engine is running.

Keep the scan tool dry, clean free from oil/ water or grease. Use a mild detergent on a clean cloth to clean the outside of the scan tool when necessary.

Our company is not responsible for any damage caused by unintentional or deliberate misuse of our products or tools.

CATALOG

Product Description

Testing & Applications

Function Setting

After Sales & Service

Products:

BT500 is a 12V/24V universal battery tester, which can monitor real-time temperature, built-in high-speed intelligent processing chip, automatic identification of battery voltage, the device adopts advanced conductivity testing technology, easy, fast and accurate test battery starting capacity, starting load, maximum load, and charging system , and a key to print test results, the device built-in temperature sensor, can Detect the real-time temperature of the environment, the device will provide more accurate test results according to the current ambient temperature, and support the leakage detection function, you can save the detected current and voltage values, through the playback function to view the data, but also comes with a relay detection function, with the relay test box can be faster and more intuitive to determine the good and bad relays

Product Features:

- Battery Testing
- Leak detection
- Relay Testing
- Charging test
- Load Testing
- Start test
- 3.5 inch TFT display
- Printer Features
- Multilingual switching

Appearance :


Print Port
HD Color Screen
ESC Return button
OK Confirm button
Arrow key
View previous battery test results
Print button
View start-up test results
View charging test results
Battery
AMPS
Relay Test
Load test
Review
Setup
BT500
ESC
OK
F1
F2
F3
F4

Product Parameters :

Operating voltage: 8~30VDC

Leakage current detection range: 15mA ~ 5Amps

Battery CCA detection range: 20 ~ 2000CCA

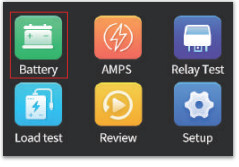
Support multiple specifications：CCA，JIS，、GB、SAE、MCA、CA、DIN、IEC、EN、BCI

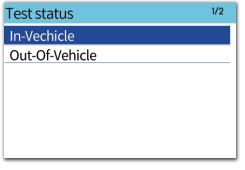
Support 12V and 24V battery measurement

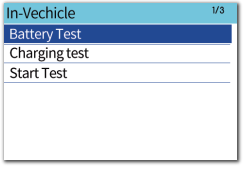
Built-in self-recovery cutoff, cutoff current: 5Amps, internally limited to 5Amps if input current >5Amps

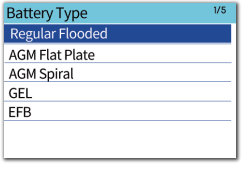
Battery Test

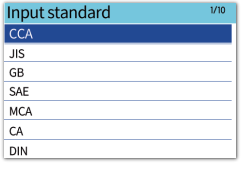
Connect the battery clip to the battery, (red clip into the positive terminal, black clip into the negative terminal) the clip will not light up the device when connected backwards.select [Battery], Press the [OK] key to enter, and select the test state and test mode according to the actual situation;Press [OK] to confirm, including CCA,JIS,GB,SAE,MCA,–CA,DIN,IEC,EN,BCI and other different test standards, andpress [OK]to confirm;Follow the prompts on the screen to check the battery status.

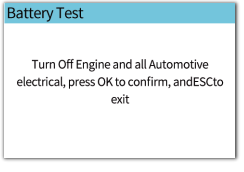


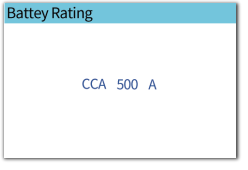


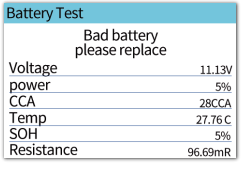








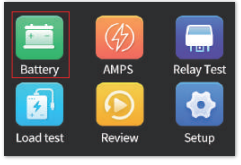


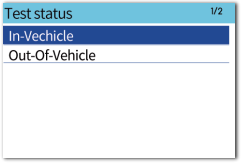


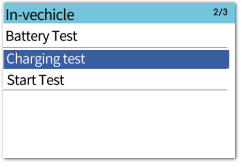
Charging Test

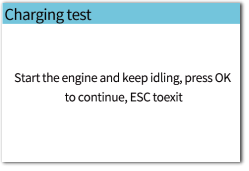
Connect the battery clip on the battery, (red clip into the positive terminal, black clip into the negative terminal)

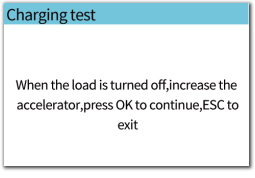
Select “ battery test” function, press [OK] to enter, according to the actual situation, select the test state, press [OK] to confirm, select “Charging test ” and press [OK] to confirm. And operate according to the screen prompt information to detect the battery status.

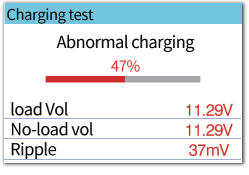






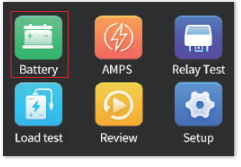


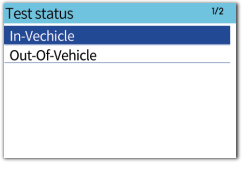


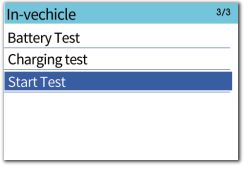


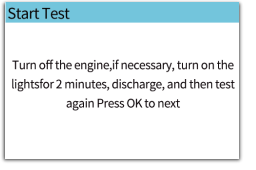
Start Test

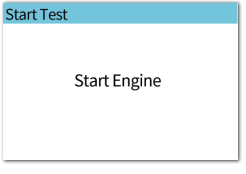
Connect the battery clip on the battery, (red clip into the positive terminal, black clip into the negative terminal)
Select “Battery Test” function, press [OK] to enter, select the test status according to the actual situation, press [OK] to confirm, select “Start Test” and press [OK] to confirm. And operate according to the screen prompt information to detect the battery status.

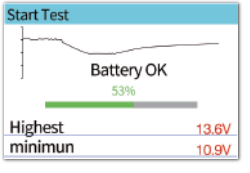






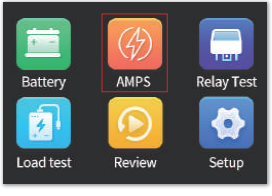


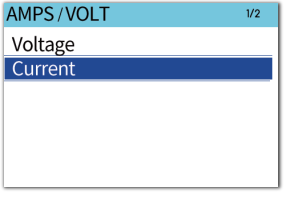


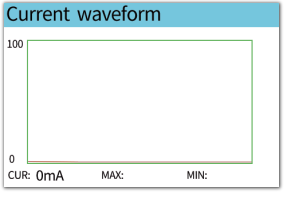


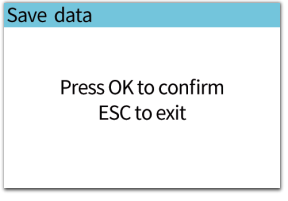
Leakage test

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 negative terminal of the car connected to the battery, use the special clip for leakage test, connect to the negative battery of the car, enter “leakage test”, choose (voltage/current) and press [OK] button to choose “current” and press [OK] button, then you can monitor and record in real time The leakage current of the car can be monitored and recorded 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.







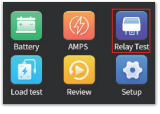


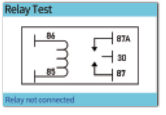
Remarks: Current Current Value, MAX: maximum value, MIN: minimum value, press OK to save after exit ESC key to exit directly.

Relay Test

Select the “Relay Test” function, press [OK] to enter, and connect the main unit to the relay test box via Type-c. The Relay Box can be used with 5-terminal relays or 4-terminal relays.

Tip: Before testing the relay we first see whether the relay is 12V or 24V, if it is 12V relay we should use 12V battery for power supply test, 24V relay please use 24V battery for power supply test for the equipment





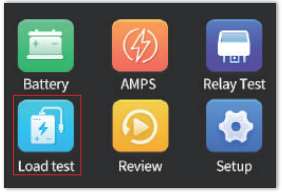
1, connect the relay test box with the device via USB-C
2, Find the right hole to enter the relay
3, Press OK button to start the test.

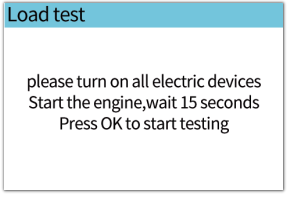
(5-terminal relay)

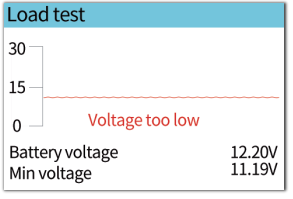
(4-terminal relay)

load test

Connect the battery clip to the battery, select “Load Test” function and press [OK] to enter, follow the screen instructions after entering the function,Display the test result

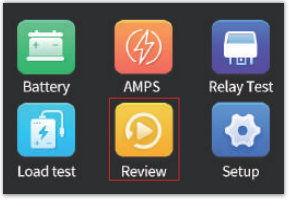


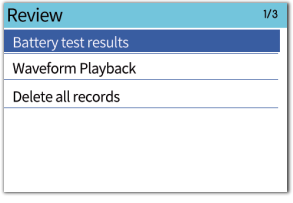


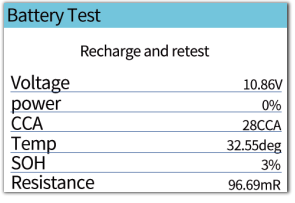


Playback

Select “Review” function, press [OK] to enter, select “Battery Test Results” mode, you can view the last battery measurement results.

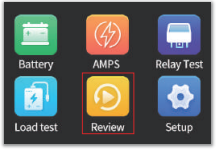


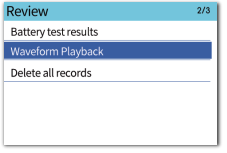


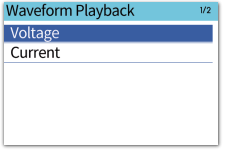


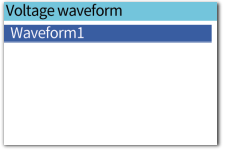
Waveform Playback

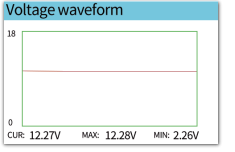
Select “Review” function, press [OK] to enter, select “Waveform playback” mode, you can choose to play back “voltage” or “current ”Press OK to select the waveform you want.Then you can view the battery test results and voltage waveform in the same way





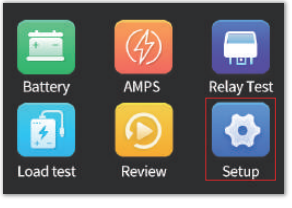


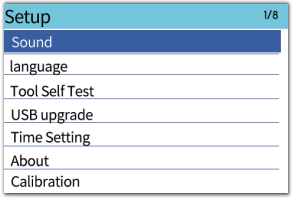


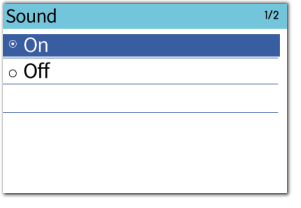


Sound

Select “Setup” function, press [OK] to enter, and follow the on-screen prompts for the next step after entering the function

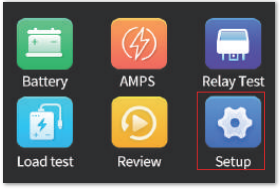


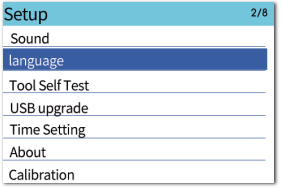


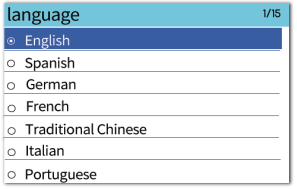


Language

Select “ Setup ” function, Press [OK] to enter, select “Language” mode, select the desired language and press [OK] to confirm.

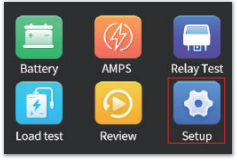


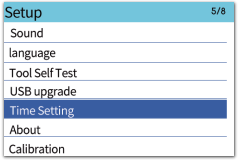


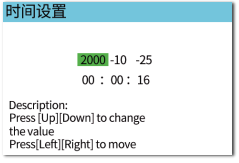


Time settings

Select “Setup” function, press [OK] to enter, select “Time Setting” mode, press the arrow keys to set the number, press [OK] to confirm.







Calibration

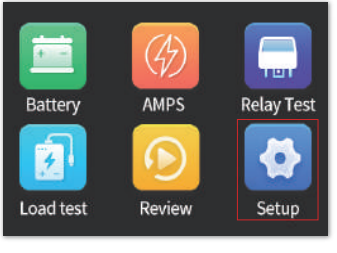
Step 1: The first step is to enter the leakage current detection mode.

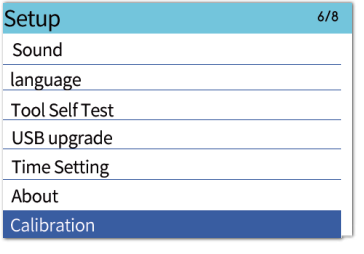
Step 2: Create a standard current of 20ma flowing through the device。

Step 3: Check the current value displayed by the device at this time minus 20ma and record this value.

Step 4: Go to Settings–>Current Calibration, use UP and DOWN buttons to input the difference value just recorded, it will be automatically saved to the device after exiting, and the next leakage current detection will automatically add this offset value to make the current reading of the device more accurate.

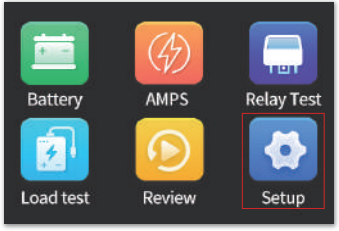
Quick access to the current calibration: the device has been calibrated in the factory, and hidden calibration function, if you want to enter the calibration interface for calibration, please quickly press “left, right, right, up and down OK” in the settings to display the calibration interface

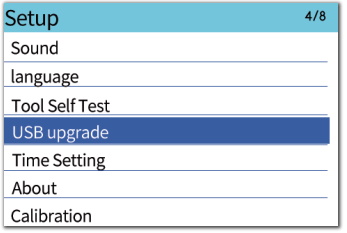


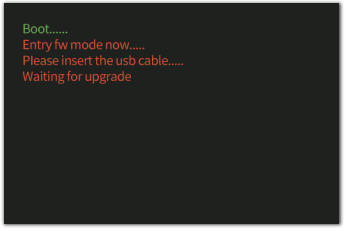


Firmware upgrade

Go to Settings–>USB Upgrade The device reboots into boot mode (you can also press LEFT and UP at the same time and then power up the device to force it into upgrade mode), then connect the USB cable to the device to upgrade the operation through the software of the computer section.(To obtain the latest upgraded firmware, please go to the official website www.jdiagtool.com download).

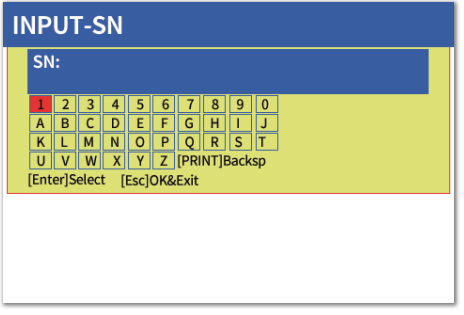






Print function

In the main menu or the menu of test results, press “F4” print key to enter the print setting (the main menu interface press “F4” to enter the print interface to print the last battery test data by default), press the direction key and [OK] key to enter the vehicle SN number, press [ESC] key to print the data.



WARRANTY AND SERVICE

One year warranty

JDiag Technology promises to provide warranty service for 1 year from the date of original purchase, if this product is pur–chased from an official channel, which must meet the following conditions:

1) The warranty are limited to repairing or replacing new equipment, without additional cost, but need to mention for regular sales invoices or copies of invoices.

2) The warranty does not cover the unauthorized disassembly of this product due to flooding, lightning strikes, or outside repair shops not authorized by the company ,The personnel have repaired it and considered damage caused by improper use.

3) JDiag Technology is not responsible for any damages caused by use, misuse or installation and testing. Some countries limitations on the duration of implied warranties are not allowed, so the above limitations may not apply to you.

4) All information in this manual is based on the latest and effective information at the time of publication, and there is no guarantee of its accuracy or completeness. JDiag Technology reserves the right to make changes at any time without notice.

Service Process

If you have any questions in the process of using this product, please contact your local authorized dealer directly, or visit our official website for consultation.