

ANCEL[®]

AD 530 Pro

USER'S MANUAL



Trademarks

ANCEL is the trademark of OBDSpace Technology Co., Ltd. All other marks are trademarks or registered trademarks of their respective holders.

Disclaimer

The information, specifications and illustrations in this manual are based on the latest information available at the time of printing.

ANCEL reserves the right to make changes at any time without notice.

SAFETY PRECAUTIONS

To prevent personal injury or damage to vehicles and/or the scan tool, read this instruction manual first 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.
- Operate the vehicle in a well ventilated work area: Exhaust gases are Poisonous.
- 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.
- Check the insulation layer of the battery clamps is in normal condition (no damage. Bareness or disconnection), in case of the electric shock.
- 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.

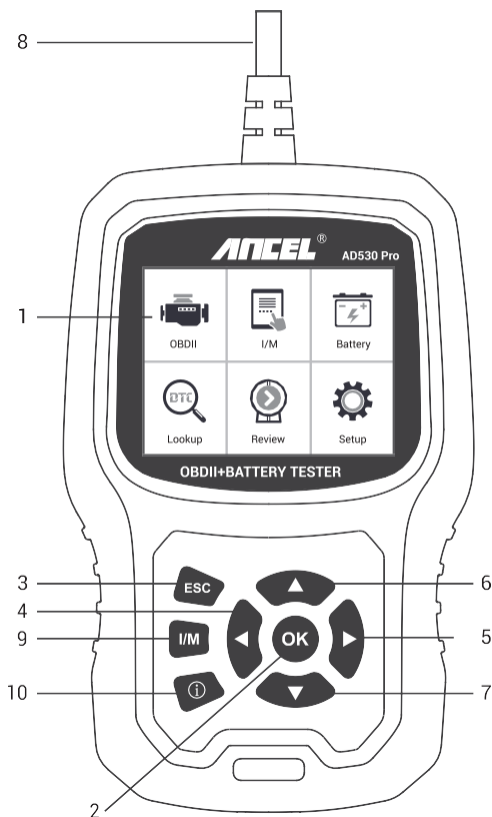
Product Profile

AD530 Pro is a new generation 2-in-1 diagnostic device that can display OBDII functions and battery test data directly on the scanner screen.








Product specification

- Operating Voltage: DC 8-18V.
- Operating Temperature: 0 to 60°C (32 to 140°F)
- Storage Temperature: -20 to 70°C (-4 to 158°F)
- External Power: 8.0 to 18.0V power provided via vehicle battery.

Tool Description - ANCEL AD530 Pro




- 1) LCD DISPLAY - Displays test results. 2.4" TFT 262K true color, 320*240 QVGA LCD display.
- 2) [OK] BUTTON - Confirms a selection (or action) from a menu.
- 3) [ESC] BUTTON - Cancels a selection (or action) from a menu or returns to the menu.
- 4) [LEFT] SCROLL BUTTON - move left through menu and submenu in menu mode, when scrolling in a data interface the left key can be used to move to the last screen.
- 5) [RIGHT] SCROLL BUTTON - in menu mode move through the menu and submenu items to the right, when scrolling in a data interface the right key can be used to move to the next screen.
- 6) [UP] SCROLL BUTTON - in menu mode, move up through the menu and submenu items. When retrieving data for more than one screen, by moving the screen up to the previous screen for more data.
- 7) [DOWN] SCROLL BUTTON - in menu mode, using the menu and submenu items to move down. If retrieving data for more than one screen, move down the screen to the next screen for more data.
- 8) OBD-16PIN CONNECTOR - Connects the scan tool to the vehicle's Data Link Connector (DLC).
- 9) [I/M] BUTTON - Quick State Emissions Readiness Check and Drive Cycle Check.

I/M Readiness			
IGN	Spark		
CtDTC	0	PdDTC	0
MIL		ECAT	
MIS		BP	
FUEL	✓	EGS	✓
CCM	✓	PM	
HCCAT		EGR	

Remarks:

MIL Yellow- Dashboard MIL ON

MIL Gray-Dashboard MIL OFF

 -not support

✓ -complete

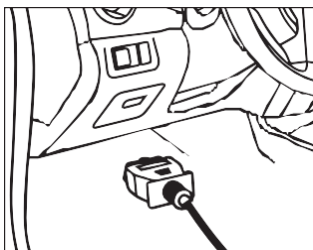
✗ -not complete

- 10) [i] BUTTON - Quick readout of the vehicle's fault code.

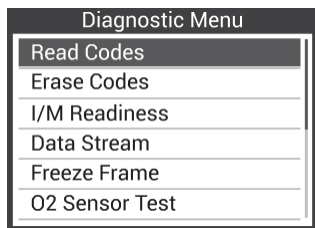
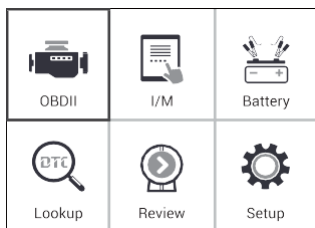
OBDII function + BAT function

OBDII function

Plug the product into the vehicle's OBDII interface.



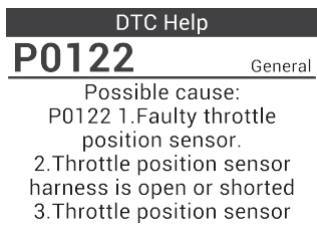
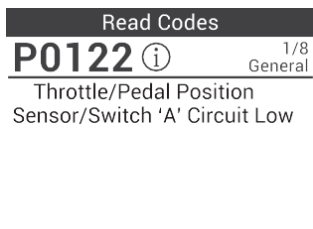
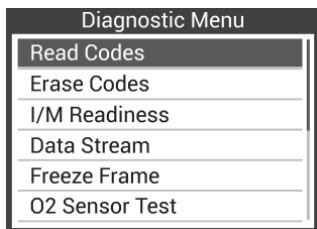
Press OK to enter OBDII menu. Use the UP/DOWN scroll button to select the menu.



1. Read Codes

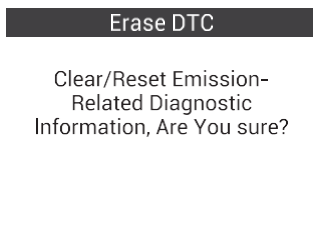
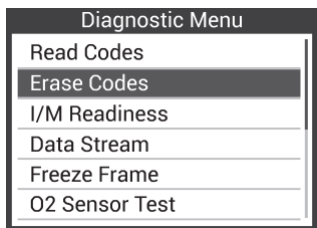
Select [Read Codes] and press OK in the diagnostic menu. If there are some codes, the screen will display the codes as follows.

When this icon "①" appears for a fault code, press the same icon button to read more fault code definitions



2. Erase Codes

Select [Erase Codes], the screen will display the interface shown below. Press OK to delete the DTCs, the screen will display the interface shown below:



Erase DTC

Please Turn Ignition ON with Engine Off, Press OK key to continue

Erase DTC

Emission-Related Diagnostic Information has been Cleared

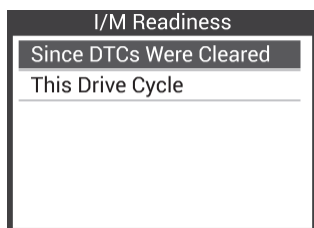
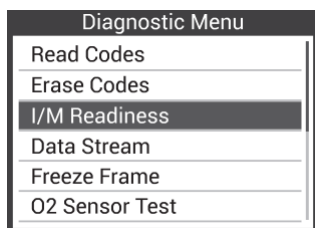
Notes:

Before performing this function, be sure to retrieve and record the error codes.

After clearing, retrieve the error codes again or turn on the ignition and retrieve the codes again. If there are still error codes in the system, please troubleshoot the codes using factory diagnostic guide, clear the codes and check them again.

3. I/M Readiness

Select I/M Readiness and press OK. The screen displays the interface shown below:

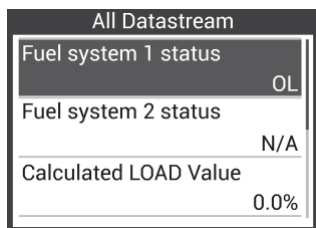
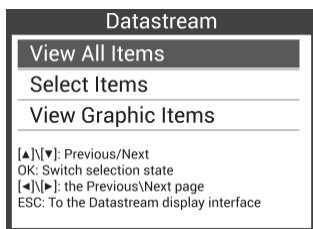
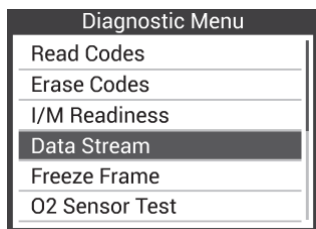


I/M Readiness	
Misfire Monitor	OK
Fuel system monitor	OK
Comprehensive component monitor	OK
Catalyst monitor	INC
Heated catalyst monitor	N/A
Evaporative system monitor	INC
Secondary air system monitor	N/A
Oxygen sensor monitor	INC
Oxygen sensor heater monitor	INC
EGR and/or VVT system monitor	INC

N/A means not available for this vehicle, INC means incomplete or not ready, OK means completed or monitor is ready.

4. Data stream

Press the UP or DOWN key to select Data Stream from the main menu, then press OK to confirm. The screen will display the interface shown below:

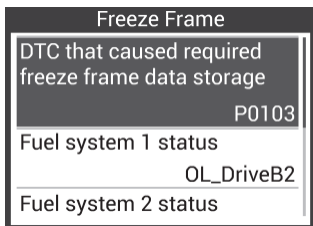
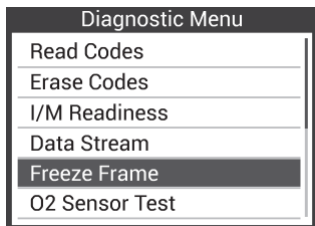


5. Display Freeze Frame

When an emission-related error occurs, a snapshot of the current vehicle parameters is recorded by ECU.

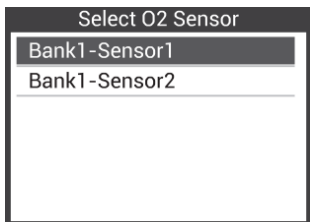
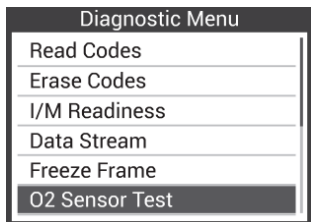
Note: If the DTCs have been deleted, the freeze data may not be stored in the vehicle.

From the main menu, select Freeze Frame. The screen will display the interface shown below:



6. O2 sensor test

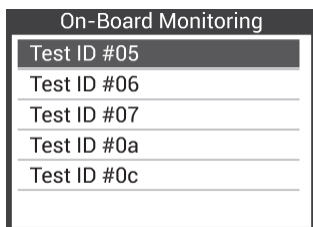
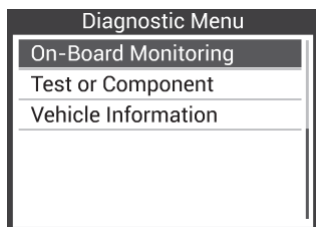
Select O2 Sensor Test from the Diagnostic Menu and press OK. The screen will be displayed as shown below(different data will be displayed for different vehicles):



The vehicle does not support.

7. On-board monitor test

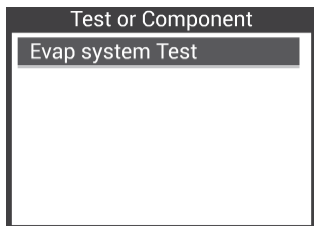
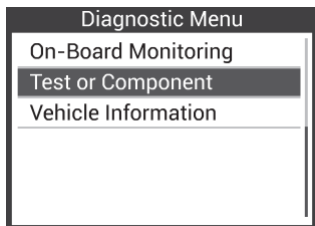
Select On-Board Monitoring from the Diagnostics menu and press OK. The screen is displayed as shown below (the data is different each time):



Test ID	
Component ID	#01
Limit Type	Max
Test Value	0
Minimum Limit	----
Maximum Limit	65535
Status	Pass

8. Test or Component (Evap System Test)

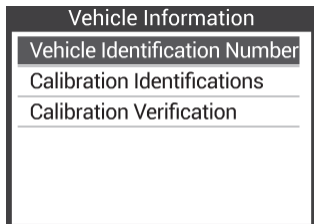
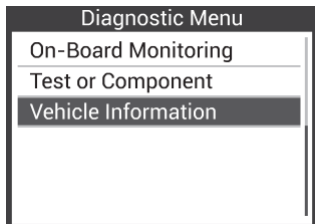
Select Test or Component from the Diagnostics menu and press OK. The screen is displayed as shown below(different data will be displayed for different vehicles):



Evaporative system leak
test passed

9. Vehicle Information

Select [Vehicle Information] and press OK. The screen is displayed as shown below(different data will be displayed for different vehicles):



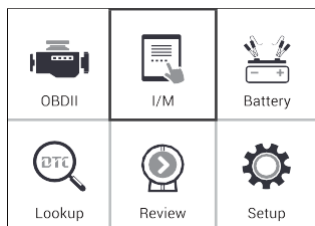
Vehicle Identification Number(

1G2HY54K224137557

10. Other function

10.1 I/M

It is a function of OBDII that can be read out quickly from the main menu.



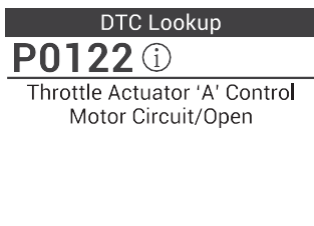
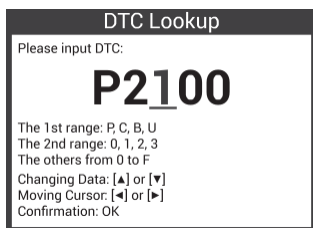
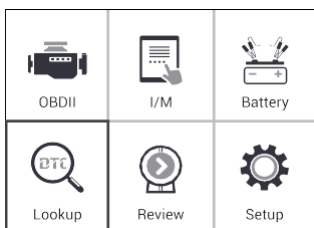
I/M Readiness			
IGN	Compression		
CtDTC	6	PdDTC	4
MIL		ECAT	X
MIS	Ø	BP	Ø
FUEL	Ø	EGS	✓
CCM	Ø	PM	Ø
HCCAT	✓	EGR	Ø

If you press OK, you can read the definition of the menu name.

About I/M
>>About background color: >blue: normal background >Green: monitor complete >Orange: monitor not complete >Gray: monitor not applicable >>About short name: >MIL: Malfunction Indicator

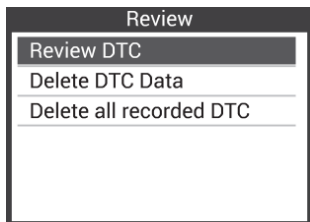
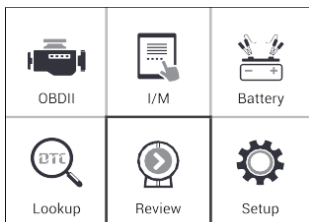
10.2 Lookup

The DTC Lookup function allows you to search for definitions of codes stored in the integrated code library.



10.3 Review

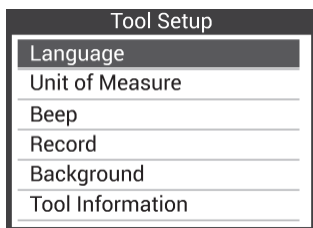
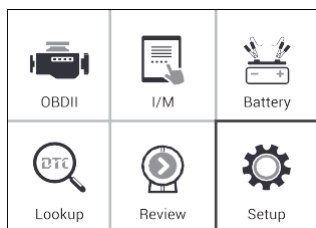
This function allows you to review the recorded DTCs. If the vehicle has engine faults codes, turn on the record and return the menu, select the code reading function in OBDII to read the fault code, and finally you can view the recorded fault code in the review menu.



There's no recorded data!

10.4 Setup

Language\Unit of measure \Beep\Record\Background \Tool Information menu.



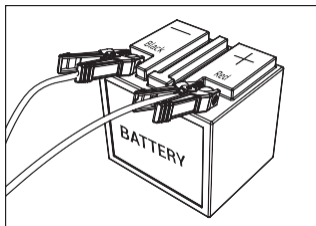
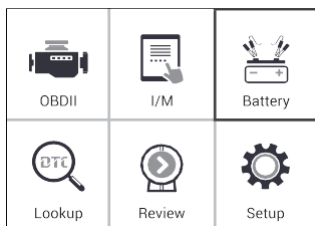
OBDII function

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.



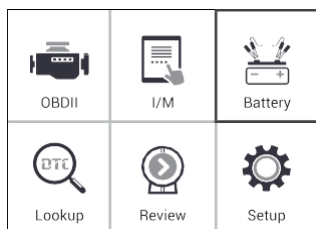
2) For a proper connection, rock the clamps back and forth. The tester requires that both sides of each clamp be firmly connected before testing.

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.

Battery Test

From the main menu, use the navigation keys LEAF / RIGHT to select the menu Battery and press the key OK. The screen will display the interface shown below:

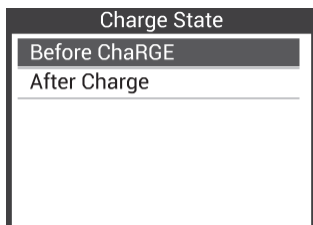
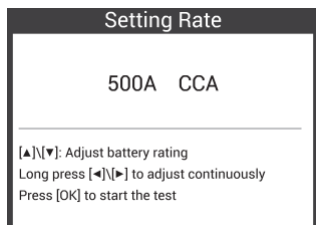
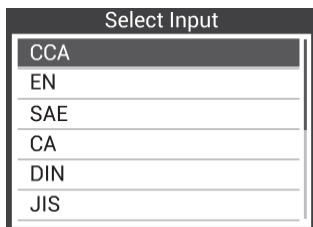
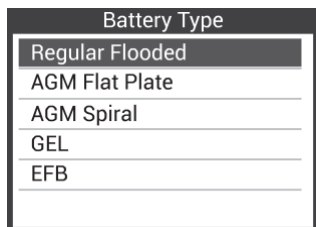
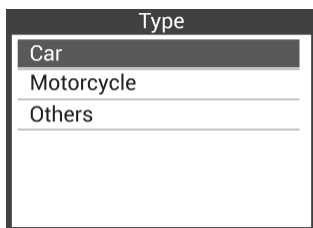
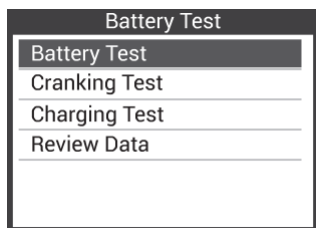


Voltmeter



11.74V

Press OK continue



Battery Test

Health:	63A	1%
charge:	11.67V	0%
Internal R=	46.53	mΩ
Rated:	500A	CCA

CHARGE & RETEST

It tests each battery according to the selected actual system standard and rating marked on the battery, to get the accurate results.

Standard	Description	Range
CCA	Cold Cranking Amps, as specified by SAE. The most common rating for cranking batteries at 0°F (-17.8°C).	100-2000
DIN	German industrial standard.	100-1400
JIS	Japanese Industrial Standard, shown on a battery as a combination of numbers and letters.	26A17-N200Z
EN	Europa-Norm	100-2000
IEC	International Electrotechnical Commission.	100-1400
SAE	Society of Automotive Engineers Standard.	100-2000
MCA	Marine Cranking Amps standard, effective starting current value at 0°C.	100-2000
BCI	Battery Council International standard.	100-2000

CA	Cranking Amps standard, effective starting current value at 0°C.	100-2000
GB	China National Standard.	30-220Ah

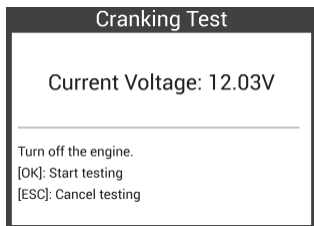
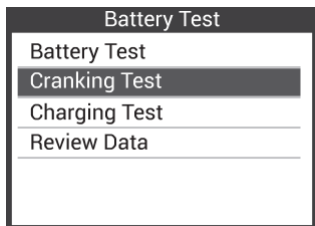
Battery Type: Scroll to and select Regular Flooded, AGM Flat Plate or AGM Spiral, if applicable.

Battery Test Results

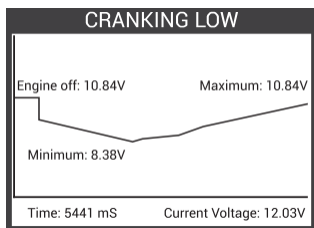
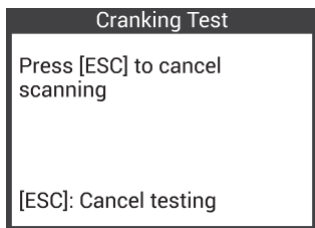
Decision	Interpretation
GOOD BATTERY	Return the battery to use.
GOOD-RECHARGE	Fully charge the battery and return it to use.
CHARGE&RETEST	Fully charge the battery and retest. Failure to fully charge the battery before retesting may cause inaccurate result. If CHARGE&RETEST appears again after you fully 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

Crank test

With this function you can read the battery voltage in real time.

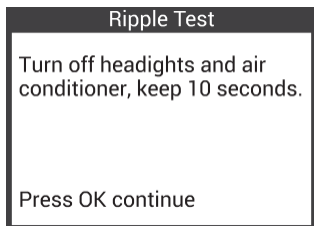
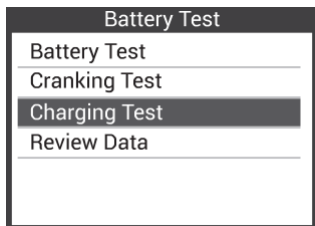


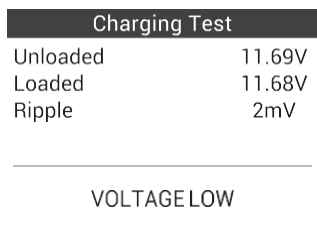
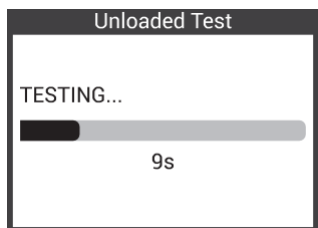
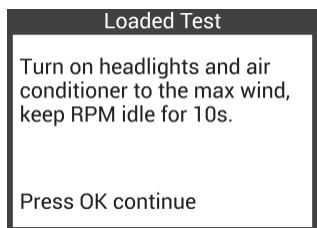
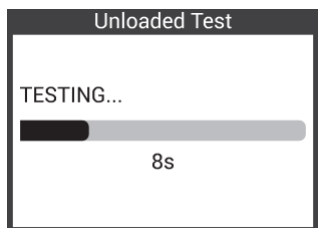
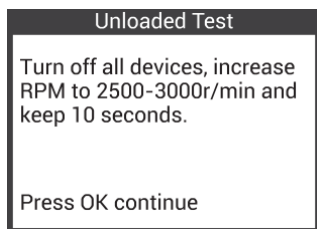
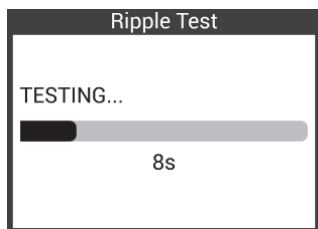
If you press [OK] and start detection, the interface will be displayed:



Crank test

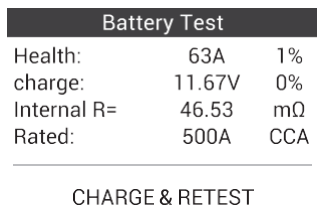
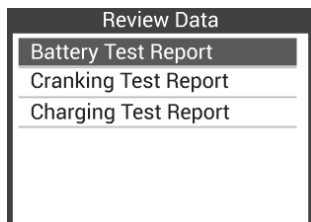
With this function you can read the battery voltage in real time.

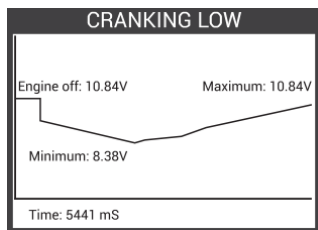




Review Data

When you press Check data, the data of the last battery test is displayed as follows:





Charging Test	
Unloaded	11.69V
Loaded	11.68V
Ripple	2mV
VOLTAGE LOW	

Update

- 1) Download the update software on website: www.ancelttech.com and unzip the file.
- 2) Connect the device to the computer with a USB cable.
- 3) Software updates only support Windows systems: 7/8/10/11. Under the Windows 7, the driver needs to be installed first. Under the Windows 8/10/11, no driver is required and the upgrade software can be run directly.

Note: Windows XP and MacBook series computers are not supported.

Warranty

- 1) This warranty is limited to the person who purchased ANCEL products.
- 2) ANCEL products are warranted against defects in materials and workmanship for a period of one year (12 months) from the date of shipment to the user.