



12/24V DIGITAL START/STOP BATTERY & ALTERNATOR/STARTER TESTER

MODEL NO: **BT2011.V2**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear eye protection



Wear protective clothing



Wear protective gloves



Warning!



Warning
corrosive
substance

1. SAFETY

1.1. PERSONAL PRECAUTIONS

- ✓ Ensure that there is another person within hearing range and close enough to come to your aid, should a problem arise when working near a lead-acid battery.
- ✓ Wear safety eye protection and protective clothing. Avoid touching eyes while working near battery.
- ✓ Have fresh water nearby in case battery acid contacts skin, clothing, or eyes.
- ✓ Rinse immediately with water if battery acid contacts skin or clothing. If acid enters eye, flush eye immediately with cool, clean running water for at least 15 minutes and seek immediate medical attention.
- ✓ Remove personal metallic items such as rings, bracelets, necklaces and watches. A lead-acid battery can produce a short-circuit current which is high enough to weld such items to the vehicle and cause severe burns.
- ✓ Ensure that hands, clothing (especially belts) are clear of fan blades and other moving or hot parts of engine. Remove ties and contain long hair.
- ✗ **DO NOT** smoke or allow a spark or flame in the vicinity of the battery or engine.

1.2. GENERAL SAFETY INSTRUCTIONS

- ✓ Familiarise yourself with the application, limitations and potential hazards of the tester. Also refer to the vehicle manufacturer's hand book. IF IN ANY DOUBT CONSULT A QUALIFIED ELECTRICIAN.
- ✓ Ensure that the tester is in good condition before use. If in any doubt **DO NOT** use the unit and contact a qualified electrician.
- ✓ Only use recommended attachments and parts. To use unapproved items may be dangerous and will invalidate your warranty.
- ✓ Keep tools and other items away from the engine and ensure that you can see the battery and working parts of the engine clearly.
- ✓ Determine the system voltage before using the tester.
- ✓ If the tester receives a sharp knock or blow the unit must be checked by a qualified service agent before using.
- ✓ If the battery terminals are corroded or dirty: clean them before using the tester.
- ✓ Keep children and unauthorised persons away from the work area.
- ✗ **DO NOT** dismantle the tester for any reason. The tester must only be checked by qualified service personnel.
- ☐ **WARNING!** To prevent the risk of sparking, short circuit and possible explosion **DO NOT** drop metal tools in the battery area, or allow them to touch the battery terminals.
- ✗ **DO NOT** cross-connect tester to battery. Ensure positive (RED) clamp is to positive terminal and negative (BLACK) clamp is to negative terminal. If battery symbols cannot be distinguished: the negative terminal is the one directly connected to the vehicle bodywork.
- ✗ **DO NOT** place the tester near the engine or exhaust pipe, as high temperatures while the engine is running may cause damage.
- ✗ **DO NOT** remove battery clamps while testing.
- ✗ **DO NOT** use the tester outdoors, or in damp, or wet locations and **DO NOT** use in the vicinity of flammable liquids or gases.
- ✗ Ensure there is effective ventilation to prevent a build-up of explosive gases.
- ✗ **DO NOT** use the tester for a task for which it is not designed.
- ✓ When not in use, store the tester carefully in a safe, dry, childproof location.

2. INTRODUCTION

Professional diagnostic tool supports Lead Acid, GEL, AGM and EFB batteries including Start Stop vehicle applications. Robust and easy to operate design delivers full in vehicle testing of the battery starter motor and alternator within seconds. In vehicle test mode measures battery health state of charge, internal resistance cranking voltage and charging system performance both at rest and under load. Produces no heat no sparks and eliminates the risk of misdiagnosis during testing. Supplied with 850mm test cables for improved access in the engine bay. Battery rating is entered directly from the battery label with results clearly displayed on the TFT 262K true colour screen. Battery rating is entered directly from the battery label with results clearly displayed on the TFT 262K true colour screen.

3. SPECIFICATION

Model No:	BT2011.V2
Battery Ratings:	CCA, BCI, CA, MCA, JIS, DIN, IEC, EN, SAE, GB
Battery Types:	FLOODED, AGM PLATED, AGM SPIRAL, GEL, EFB
Cable Reach:	850mm
Charging System Capability:	12/24V
Display:	2.4" TFT 262K True Colour
Minimum Power Requirement:	12V
Rated Battery Voltage:	12V/24V
Storage Temperature:	-20 ~ 70°C (-4 ~ 158°F)
Voltage Range:	12-24V
Weight:	307g
Working Temperature:	-20 ~ 60°C (-4 ~ 140°F)

Measure Std	Test Range
CCA	100-2000
BCI	100-2000
CA	100-2000
MCA	100-2000
JIS	1-71

Measure Std	Test Range
DIN:	100-1400
IEC:	5-1400
EN:	100-2000
SAE:	100-2000
GB:	30-220Ah

4. PREPARATIONS BEFORE THE TEST

If testing in the vehicle, ensure all accessory loads are turned off, the key is removed from the ignition, and all doors are closed.

4.1. CONNECTING THE TESTER

1. Connect the red clamp to the positive (+) battery terminal and the black clamp to the negative (-) terminal.
2. For a proper connection, gently rock the clamps back and forth to ensure firm contact. The tester requires both sides of each clamp to be securely connected before testing. A poor connection may result in incorrect readings, as shown below.

The positive (red) test clip is not making proper contact. Please use alligator clips or ensure a secure connection to both the positive and negative battery terminals before testing.

The negative (black) test clip is not making proper contact. Please use alligator clips or ensure a secure connection to both the positive and negative battery terminals before testing.

Clean the terminals if necessary, then reconnect the clamps.

The preferred test location is directly on the battery terminals. If the battery is not accessible, you may test at the jump-start posts; however, the measured power may be lower than the actual battery value.

4.2. COMPATIBILITY

NOTE: The battery type and CCA (Cold Cranking Amps) value are marked on the battery label. Refer to this information before use. The BT2011.V2 supports the following battery types:

Regular Flooded
AGM / GEL / EFB

5. OPERATION

5.1. BATTERY TEST:

- 5.1.1. The BT2011.V2 tests each battery according to the selected system standard and the battery rating marked on the label, ensuring accurate results.

5.2. BEFORE TEST

The engine and all accessory loads must be OFF during testing to ensure accurate results. If the battery has just been fully charged, turn on the vehicle headlights for 2–3 minutes to allow the battery voltage to return to its normal level.

5.3. STEPS

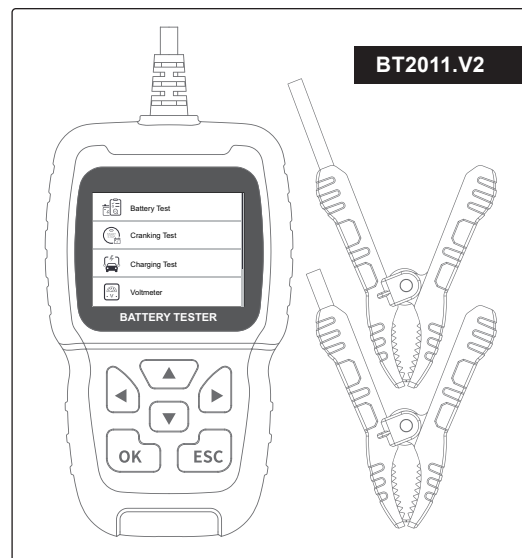
1. Connect the red (+) battery clamp to the positive (+) battery terminal, and the black (-) battery clamp to the negative (-) terminal. Ensure both clamps are firmly and securely attached to the battery terminals to obtain accurate results.

NOTE: If the positive and negative battery terminals are not properly connected, the following warning message will be displayed.

The positive (red) test clip has a poor connection. Please check the clip and ensure it is securely attached.

The negative (black) test clip has a poor connection. Please check the clip and ensure it is securely attached.

2. Press the "OK" button to enter the startup screen, then press "OK" again and select "Battery Test".



	Battery Test
	Cranking Test
	Charging Test
	Voltmeter

3. Select the battery type (as specified on the battery label), then press the "OK" button to continue.

Type
Car
Motorcycle
Others

Battery Type
Regular Flooded
AGM Flat Plate
AGM Spiral
GEL
EFB

4. Select the test standard (as specified on the battery label), then press the "OK" button to continue.

Battery Standard
CCA
EN
SAE
CA
DIN
JIS

Battery Standard
IEC
GB
MCA
BCI

5. Press and hold the "UP" or "DOWN" button to adjust the battery rating value (as specified on the battery label).

Setting Rate
500A CCA
[▲] \ [▼]: Adjust battery rating Long press [▲] \ [▼] to adjust continuously Press [OK] to start the test

6. Press the "OK" button to start the battery test. Select the correct test environment before testing.

BAT Temperature
Below 0°C
Above 0°C

7. The test results are displayed as follows:

Battery Test
TESTING...

Battery Test		
Health:	160A	10%
Charge:	12.22V	34%
Internal R=	18.31	mΩ
Rated:	500A	
REPLACE		

5.4. BATTERY TEST

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 results. If "CHARGE & RETEST" appears again after the battery has been fully charged, replace the battery.
REPLACE BATTERY	Replace the battery and retest. A REPLACEMENT BATTERY result may also indicate a poor connection between the battery cables and the battery. After disconnecting the battery cables, perform an out-of-vehicle test before replacing the battery.
BAD CELL-REPLACE	Replace the battery and retest.

NOTE: In the battery test, select the corresponding data according to the actual condition of the battery to obtain its health status. When selecting the battery current, press the UP button once to increase the current by 5A, and press the DOWN button once to decrease the current by 5A. You can adjust the current according to the actual condition of the battery.

5.5. CRANKING TEST

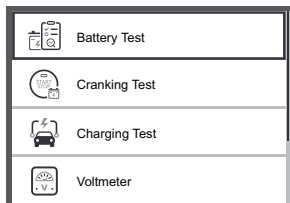
5.5.1. Before the Test

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

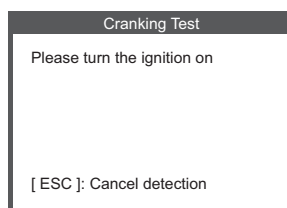
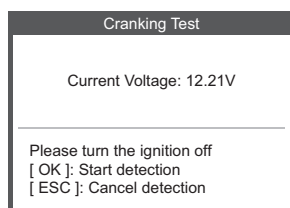
5.5.2. Steps

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.

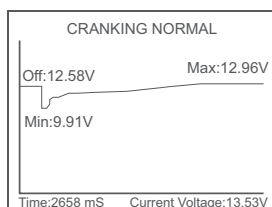
2. Enter the boot interface and select "Cranking Test", then click "OK".



3. Press "OK" into the "Cranking Test" interface:



4. Cranking test result:



5.6. CHARGING TEST

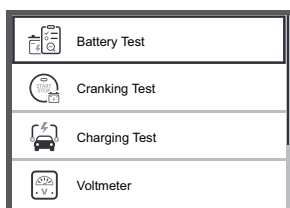
5.6.1. Before the test

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

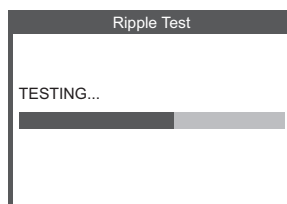
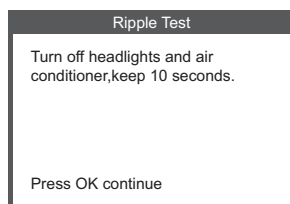
5.6.2. Steps

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.

Enter the boot interface and select "Charging Test", then click "OK".

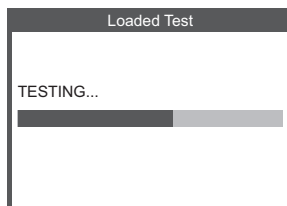
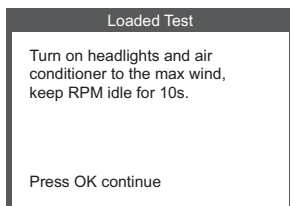
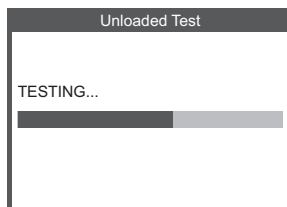
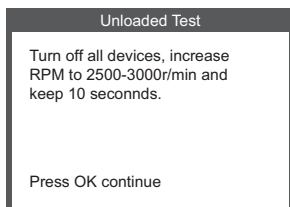


Press "OK" into the "Ripple Test" interface:

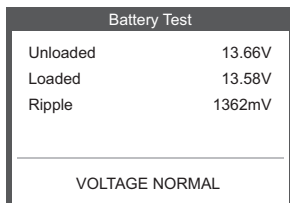


Press "OK" again, or wait for a few seconds, the tester prompts the operator to "Turn off all devices, increase RPM to 2500-3000r/min and keep 10 seconds".

Press "OK" to get the test result.

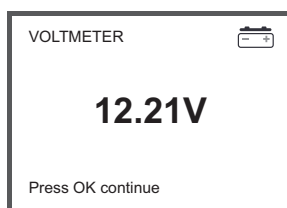
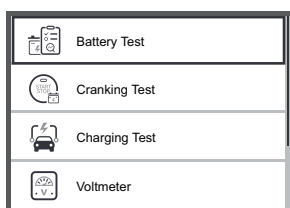


The test result:



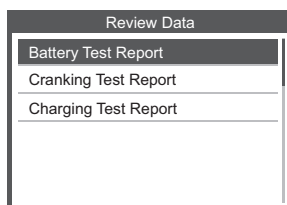
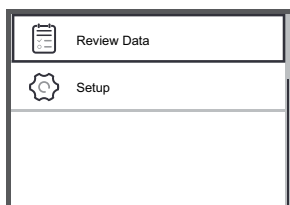
5.7. VOLTMETER

By detecting real-time battery voltage and the change in voltage over a certain period of time, you can determine the condition of the battery from the test results.



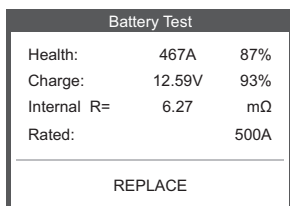
5.8. REVIEW DATA

Enter the boot interface and select "Review Data", then click "OK".



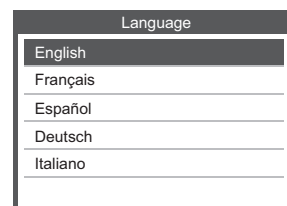
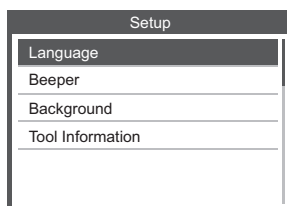
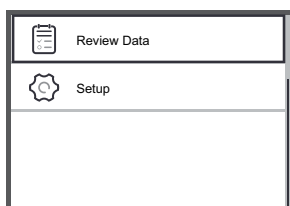
Press "OK" in the "Review Data" interface.

Only the most recent test result will be displayed.

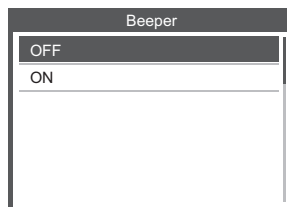
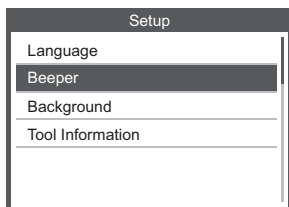


5.9. SETUP

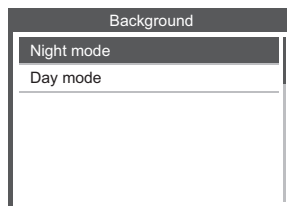
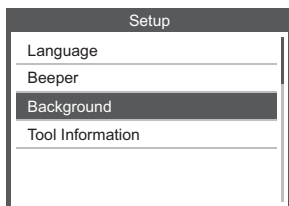
Enter the boot interface, and select the "Setup", then click "OK".



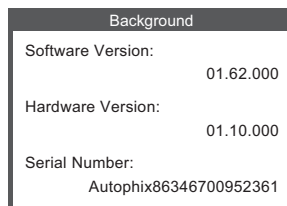
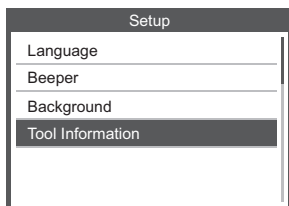
Enter the boot interface and select "Setup", then select "Beeper", and click "OK".



Enter the boot interface, select "Setup", then select "Background", and click "OK".



Enter the boot interface, go to "Setup", select "Tool Information", and then click 'OK'.



6. MAINTENANCE

- 6.9.1. To keep your 12/24V Digital Start/Stop Battery & Alternator/Starter Tester in good working condition, disconnect it from the battery before cleaning and wipe the housing, display, and test leads with a soft, dry, or slightly damp cloth. **DO NOT** use solvents, abrasive cleaners, or immerse the tester in water, as these may damage the unit. Regularly inspect the test leads and clamps for signs of wear, damage, corrosion, or loose connections, and ensure the clamp contact surfaces remain clean to maintain accurate test results. Store the tester in a clean, dry place away from excessive heat, moisture, and direct sunlight, and avoid dropping or exposing it to strong impacts. With proper cleaning, careful handling, and routine inspections, the tester will continue to provide reliable battery, starter, and alternator diagnostics.

7. END OF LIFE

At the end of its service life, **DO NOT** dispose of this tester with household waste. Dispose of the product in accordance with local regulations for electrical and electronic equipment recycling. Where applicable, remove and recycle any internal batteries separately according to local requirements. Proper disposal helps conserve natural resources and reduces the environmental impact of electronic waste.



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



REGISTER YOUR PURCHASE HERE



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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