ANCEL BST600

ANCEL BST600 Car Battery Tester with Printer User Manual

Model: BST600 | Brand: ANCEL

Introduction

The ANCEL BST600 is a professional 12V and 24V automotive battery system tester designed to accurately assess the health, cranking, and charging systems of various vehicles. This device features a built-in printer for immediate result documentation and supports multiple battery types and testing standards. This manual provides detailed instructions for its safe and effective use.

Safety Information

Always observe the following safety precautions when operating the ANCEL BST600 battery tester:

- Wear appropriate eye protection and protective clothing.
- Ensure the vehicle is in a well-ventilated area.
- Avoid sparks, flames, and smoking near the battery.
- The BST600 features **spark-proof** and **reverse polarity protection**. However, always connect the red clamp to the positive (+) terminal and the black clamp to the negative (-) terminal.
- Keep the tester and cables away from moving engine parts.
- If battery acid comes into contact with skin or eyes, flush immediately with water and seek medical attention.

Figure 1: The ANCEL BST600 features redesigned clamps with enhanced safety features including reverse polarity, short-circuit, and spark-proof protection.

Product Overview

The ANCEL BST600 is a versatile diagnostic tool for automotive batteries and electrical systems. Key features include:

- **12V & 24V System Compatibility:** Tests both 12V and 24V lead-acid batteries and their associated cranking and charging systems.
- **Wide Battery Type Support:** Compatible with Regular Flooded, AGM Flat Plate, AGM Spiral, EFB, and GEL batteries.
- **Integrated Thermal Printer:** Allows for immediate printing of test results for record-keeping or customer sharing.
- **Comprehensive Battery Analysis:** Measures State of Health (SOH), State of Charge (SOC), Cold Cranking Amps (CCA), voltage, internal resistance, and temperature.
- **Cranking & Charging System Tests:** Evaluates the starter motor's performance and the alternator's charging output.

- **3.2" Color Backlit LCD:** Provides clear and easy-to-read visual data.
- **Multilingual Interface:** Supports 10 languages for global usability.

Figure 2: The ANCEL BST600 battery tester with its integrated printer and connection clamps.

Figure 3: The BST600 provides detailed analysis including State of Health (SOH), State of Charge (SOC), temperature, voltage, ripple analysis, CCA value, resistance, and load test results.

Setup

1. **Prepare the Battery:** Ensure the battery terminals are clean and free of corrosion. If necessary, clean them with a wire brush.
2. **Connect the Clamps:**
    - Connect the **red positive (+) clamp** to the positive (+) terminal of the battery.
    - Connect the **black negative (-) clamp** to the negative (-) terminal of the battery.

    The tester will power on automatically once correctly connected to a battery with sufficient voltage.
3. **Initial Settings:** Upon first use or after a reset, you may need to set the language. Navigate using the arrow buttons and confirm with the 'OK' button.

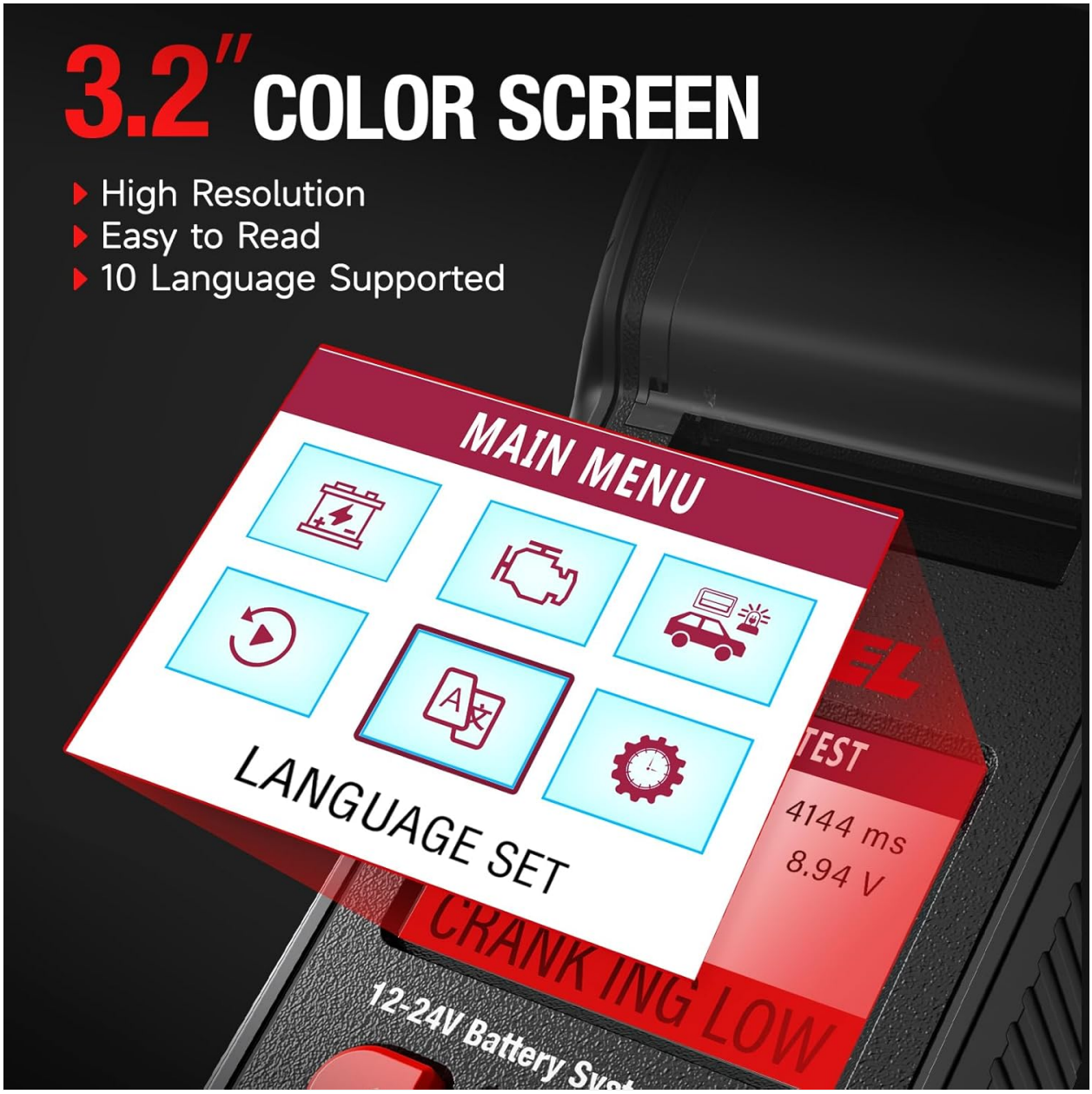


Figure 4: The 3.2-inch color screen allows for easy navigation and language selection.

Operating Instructions

After connecting the tester, the main menu will appear. Use the arrow buttons to navigate and the 'OK' button to select an option.

Figure 5: Main menu showing options for Battery Capacity Test, Cranking Test, and Charging Test.

1. Battery Test

This test evaluates the overall health and charge level of the battery.

1. From the main menu, select **"Battery Test"**.
2. Select the battery type (e.g., Regular Flooded, AGM Flat Plate, GEL).
3. Enter the battery's rated CCA (Cold Cranking Amps) or other standard (e.g., JIS, DIN, EN). This information is usually found on the battery label.
4. The tester will perform the analysis and display results including SOH, SOC, Voltage, Internal Resistance, and a general status (e.g., "GOOD", "REPLACE").

2. Cranking System Test

This test assesses the starter motor's ability to draw current and maintain voltage during engine start-up.

1. From the main menu, select **"Cranking Test"**.
2. Follow the on-screen prompts to start the vehicle's engine.

3. The tester will record the cranking voltage and time, then display the results, indicating if the cranking system is performing adequately.

3. Charging System Test

This test evaluates the alternator's ability to charge the battery and maintain stable voltage under various loads.

1. From the main menu, select **"Charging Test"**.
2. Follow the on-screen instructions, which may include revving the engine to a specific RPM and turning on electrical accessories (e.g., headlights, fan).
3. The tester will measure ripple voltage, loaded voltage, and unloaded voltage, providing a status of the charging system (e.g., "CHARGING GOOD", "GENERAL", "CAUTION").

4. Printing Test Results

After any test, the device will typically prompt you to print the results. Select **"Yes"** to print the report immediately.

Figure 6: The integrated thermal printer provides instant hard copies of test results.

Maintenance

- **Cleaning:** Wipe the tester with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a dry, cool place, away from direct sunlight and extreme temperatures.
- **Thermal Paper Replacement:** When the printer runs out of paper, open the printer cover, remove the old roll, and insert a new standard thermal paper roll (2 1/4" W (57mm W) * 1 1/5" D (30mm D)), ensuring the paper feeds correctly.
- **Internal Battery (for Date/Time):** The device may require a CR2032 coin cell battery to maintain date and time settings when disconnected from a power source. Refer to the device's internal compartment for replacement if necessary.

Troubleshooting

Problem	Possible Cause	Solution
Tester does not power on.	Incorrect clamp connection; battery voltage too low.	Ensure red clamp is on positive (+), black on negative (-). Check battery voltage; if below minimum operating voltage, charge the battery.
Inaccurate test results.	Loose connections; dirty battery terminals; incorrect battery type/CCA input.	Ensure clamps are securely attached. Clean battery terminals. Verify correct battery type and CCA rating entered.
Printer not printing or paper not advancing.	Out of thermal paper; paper incorrectly loaded; printer jam.	Replace thermal paper roll, ensuring it is loaded correctly. Check for any paper jams and clear them carefully.
Date/Time settings are lost.	Internal CR2032 battery needs replacement.	Replace the internal CR2032 coin cell battery. Refer to the device's internal compartment for access.

Specifications

- **Brand:** ANCEL
- **Model:** BST600
- **Voltage Range:** 12V / 24V
- **CCA Range:** 100-2000 CCA
- **Supported Battery Types:** Regular Flooded, AGM Flat Plate, AGM Spiral, EFB, GEL
- **Display:** 3.2" Color Backlit LCD
- **Printer:** Built-in Thermal Printer
- **Power Source:** Battery Powered (from vehicle battery)
- **Item Weight:** 1 Pound
- **Product Dimensions:** 12.8 x 7.87 x 3.35 inches
- **Safety Features:** Spark-proof, Reverse Polarity Protection, Short-circuit Protection, Overload Protection
- **Measurement Type:** Voltmeter, Ohmmeter

What's in the Box

- 1 x ANCEL BST600 Battery Tester
- 1 x User Manual
- 1 x Thermal Print Paper Roll

Figure 7: Contents included with the ANCEL BST600 Battery Tester.

Warranty and Support

ANCEL provides the following support for the BST600 Battery Tester:

- **1-Year Replacement:** For manufacturing defects.
- **30-Day Free Returns:** For eligible purchases.
- **Lifetime Technical Support:** Available for product assistance.

For further assistance, please contact ANCEL customer service.

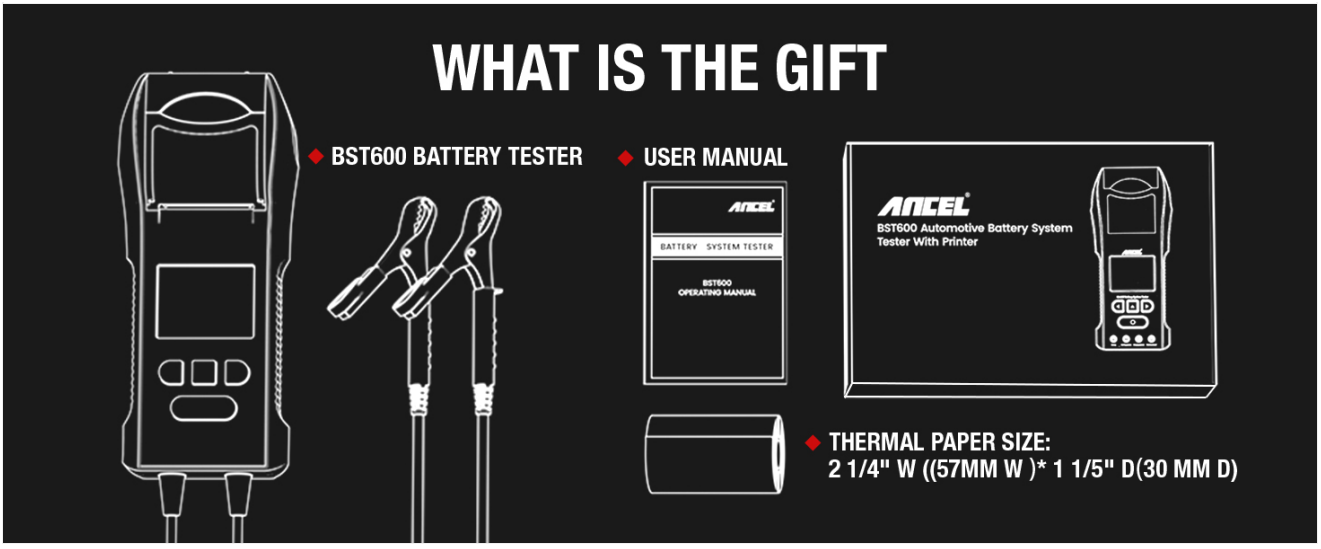
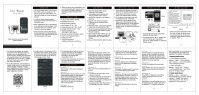
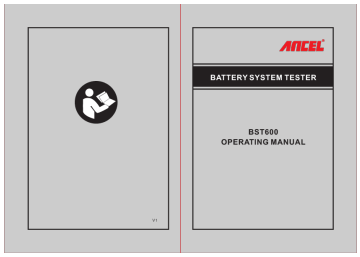


Figure 8: ANCEL's commitment to customer satisfaction and support.

Related Documents - BST600

	[ANCEL BA101 Car Battery Tester: User Guide and Specifications] Comprehensive guide for the ANCEL BA101 Car Battery Tester, covering important warnings, quick start guide, technical specifications, error code explanations, and tips for accurate results. Designed for 12V automotive batteries.
	[ANCEL BA101 Car Battery Tester User's Manual] The ANCEL BA101 Car Battery Tester is a professional diagnostic tool designed for quick and accurate assessment of vehicle battery health, cranking system, and charging system. It supports various battery types and testing standards, providing reliable data for automotive maintenance and repair.
	[ANCEL BM200 Battery Monitor User Manual] User manual for the ancel BM200 Battery Monitor, a Bluetooth 4.2 automotive battery monitor that tests 12V lead-acid and LiFePO4 batteries. Includes specifications, main functions, installation, app setup, and troubleshooting.
	[ANCEL BA101 Car Battery Tester User Manual - Automotive Battery Diagnostic Tool] The ANCEL BA101 Car Battery Tester is an advanced diagnostic tool designed to quickly and accurately assess the health of vehicle starting batteries, including lead-acid, AGM, Gel, and EFB types. It performs battery tests, cranking tests, and charging system analyses to identify issues like aging, low current, bad cells, or charging system faults, ensuring quick vehicle repair and proactive battery replacement. Supports multiple testing standards and languages.
	[ANCEL BA101 Car Battery Tester User's Manual] The ANCEL BA101 Car Battery Tester User's Manual provides comprehensive instructions for operating the BA101, a professional automotive diagnostic tool designed to accurately test 12V vehicle batteries, including lead-acid, AGM, Gel, and EFB types. This guide covers battery health analysis, cranking system evaluation, and charging system diagnostics, offering detailed steps for quick tests, in-vehicle and out-of-vehicle testing, data review, and printing. Learn how to assess battery status, identify issues like low voltage or bad cells, and understand various battery standards like CCA, BCI, and SAE for effective vehicle maintenance.
	[Ancel BA101 Battery Tester: Understanding Test Results] A guide to understanding inconsistent battery test results with the Ancel BA101 Battery Tester, covering common usage mistakes and their impact on accuracy.



[pdf] User Manual Guide Test Report

ANCEL BST600 Administrator OPERATING MANUAL BST600 2 1 0 m 148 5 mm anceltech 7 giorni fa — 6 4 Is the CCA value tested by this tester correct is considered as a control standard with produce of battery 3 Press O to Charging Test interface Start engine guide displayed in screen result will be below and auto saved for reviewing print report Please refer TEST REPORT PRINTING return main menu 64f6f92406231 Public Uploads filetxt 20230905 |||

BATTERY SYSTEM TESTER **BST600** OPERATING MANUAL V1 resistance. But it can be predicted the life of the battery will be over soon from the sudden increase of it s internal resistance and decrease of it s conductance. 6-4 Is the CCA value tested by this tester correct CCA is considered as a control ...

lang:en score:22 filesize: 1.93 M page_count: 8 document date: 2021-04-30

[pdf]

9313597352195 BST600 TESTER SYSTEMU AKUMULATORÓW Max ElektroBST600 jest używany do testowania akumulatorów kwasowo ołowiowych sprawdzając następujące warunki akumulatora systemu rozruchowego i f098da6f8e70765e62fabb62d5a1daf3maxelektro pl storage file pimcore import 2024 11 7 f098da6f8e70765e62fabb62d5a1daf3 instrukcja tester z drukarka ancel bst600 |||

TESTER SYSTEMU AKUMULATORW INSTRUKCJA OBSLUGI Zawarto 1. Krtkie Wprowadzenie 2. Zasady Bezpieczest ... 3. SYSTEM LADOWANIA 5-4 . DRUKOWANIE RAPORTU TESTOWEGO 5-5. PRZEGLD DANYCH 1. Krtkie Wprowadzenie **BST600** jest uywany do testowania akumulatorw kwasowo-olowiowych, sprawdzajc nastpujce warunki akumul...

lang:pl score:22 filesize: 5.48 M page_count: 15 document date: 2024-07-31

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TEST REPORT
FCC PART 15.247

Report Reference No.	CTL2202221012-WF
Compiled by: (position+printed name+signature)	Happy Guo (File administrators)
Tested by: (position+printed name+signature)	Gray Gao (Test Engineer)
Approved by: (position+printed name+signature)	Ivan Xie (Manager)
Product Name	Bluetooth Scan Tool
Model/Type reference	BD310
List Model(s)	See the next page
Trade Mark	ANCEL
FCC ID	2ASCTBD310
Applicant's name	OBDSPACE TECHNOLOGY CO., LTD
Address of applicant	Room D03, Building A, No.973, MinZhi Avenue LongHua district, Shenzhen City, China
Test Firm	Shenzhen CTL Testing Technology Co., Ltd.
Address of Test Firm	Floor 1-A, Baisha Technology Park, No.3011, Shahexi Road, Nanshan District, Shenzhen, China 518055
Test specification Standard	FCC Part 15.247: Operation within the bands 902-928 MHz, 2400-2483.5 MHz and 5725-5850 MHz.
TRF Originator	Shenzhen CTL Testing Technology Co., Ltd.
Master TRF	Dated 2011-01
Date of receipt of test item	Mar. 16, 2022
Date of Test Date	Mar. 16, 2022-Apr. 01, 2022
Date of issue	Apr. 02, 2022
Result	Pass

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ANCEL BD310 Bluetooth Scan Tool FCC Part 15.247 Test Report

Official FCC Part 15.247 test report for the ANCEL BD310 Bluetooth Scan Tool, detailing compliance testing for conducted and radiated emissions, maximum conducted output power, power spectral density, 6dB bandwidth, out-of-band emissions, and antenna requirements.

lang:en score:14 filesize: 1.29 M page_count: 32 document date: 2022-04-06