

CPX-900 Battery & Electrical Diagnostic Analyzer

Important - Before You Start

- Before operating the analyzer, refer to Instruction Manual
- Always follow battery manufacturer instructions and BCI (Battery Council International) safety recommendations
- For additional support go to support.cpx900.com

Consent to Collection and Use of Data:

You agree that Midtronics, Inc. may collect, store, transmit, and use technical data and related information, including but not limited to technical information about this device, system and application software, and accessories, that is gathered periodically to facilitate the provision of product support, product improvements, product development, and other services related to use of this device. If electing to collect personal data (such as e-mail addresses) the user is solely responsible for obtaining any necessary permissions, and agrees to indemnify and hold harmless Midtronics, Inc. its subsidiaries, officers, employees and agents from any liability associated with collecting, storing, and transmitting such personal data.

Conductance Profiling

Conductance Profiling[™] technology determines battery cranking capability and identifies batteries with poor Reserve Capacity. This additional battery analysis can take up to 60 seconds to complete.



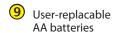
IMPORTANT: Always begin each test by connecting the tester clamps to the battery being tested. The testing process begins as soon as the clamps are connected.

Connections And Data Ports



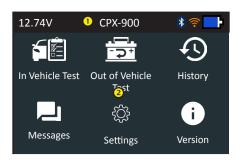
- 1 Display Screen
- Cooling Vent
- 3 Arrow Keys & Power Button
- 4 Micro-USB Port
- 5 Thermal Printer (optional)
- 6 Temperature Sensor
- VIN Barcode Scanner (optional)
- 8 Clamp Tabs





User-replaceable test clamps

Main Menu



1

Menu Bar

12.74V	Battery Voltage (if connected)	<u>্</u>	WiFi signal strength
*	Bluetooth connectivity status	-	Controller internal battery status



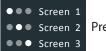
Main Menu Selection Area



When displayed, the Screen Arrows show which **ARROW** key on the keypad to press to display other icons, screens, or item in a list.

Additional Screens

The dots at the bottom or side of a menu or results screen indicate additional screens are available.







Press ▲ or ▼

Test Preparation

Before starting the test visually inspect the battery for:

- Cracked, buckled, or leaking case.
- Corroded, loose, or damaged cables and connections.
- Corrosion, dirt, or acid on the battery terminals or case top.
- Corroded or loose battery tray and hold-down fixture.

A DANGER

WARNING

Risk of explosive gases

Batteries generate explosive gases during normal operation, and when discharged or charged. Follow all manufacturers' instructions and BCI (Battery Council International) safety recommendations.

Wash hands after handling.

REQUIRED BY CALIFORNIA PROP. 65: Battery posts, terminals, and related accessories contain lead and lead compounds, chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

In Vehicle Battery / System Test

- 1. Connect Tester clamps to battery terminals.
- 2. Select At the Main Menu select In Vehicle Test.
- **3.** *Enter Work Order* Use displayed keyboard to Enter Work Order information.

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- Temperature Hold sensor 6 to 12 inches over battery & select Capture.
- 5. VIN Capture (optional) Scan VIN bar code, usually located in the right corner of the vehicle's front windshield or on the driver's side door frame.

<u>Manual Entry</u>: Use the on-screen keypad to manually type the 17-digit VIN and tap **Next**.

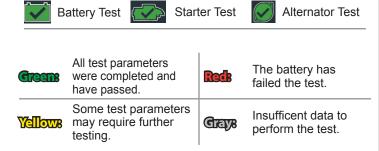
6. Battery Test Setup - Edit vehicle and battery information based on the VIN & select **Start**.

Application	Automotive, 4D/8D, Group 31				
Battery Post	Top Post, Side Post				
Battery Type	Flooded, EFB, AGM Spiral, AGM, Gel				
Battery Units	CCA, MCA, CA, DIN, SAE, EN, EN2				
Battery Rating	Hold ▲ or ▼ to increase scrolling speed.				

Battery Test Results

	Send test results via email.	*	Continue to System Test
	Print test results	✓	Return to Main Menu

Icons are color-coded to indicate status.



Refer to Appendix B: Decision Tables in the User Manual for a complete explaination of all possible test results.

System Test

- 1. Start the vehicle's engine and let it idle.
- Ensure all accessories (High Beam headlights/ventilation blower etc.) are off and select **Next**.

The analyzer tests the alternator output.

3. When prompted, rev and hold the engine to between 2000 to 3000 rpm.

The analyzer tests the alternator output again.

- 4. When prompted Idle the engine and and select **Next**.
- 5. Turn on the high beam headlights and ventilation blower.
- 6. Select Next.

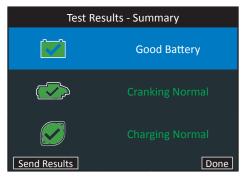
The analyzer tests the alternator output.

7. When prompted, rev and hold the engine to between 2000 to 3000 rpm.

The analyzer tests the alternator output again.

8. When prompted Idle the engine and and select **Next**.

System Test Results



Test Results - Summary

The Test Results-Summary screen is displayed following a System Test. Select the Battery, Cranking, or Alternator Test to view detailed test results for each part of the test.

To send the test results to a configured printer or via email select **Send Results.** To return to the Home Screen, select **Done** to the Main Menu.

Tap the icons at the top of the screen to view specific test results.

Refer to Appendix B: Decision Tables in the User Manual for a complete explaination of all possible test results.



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