MIDTRONICS

CPX-900 Nissan/Infiniti
Battery & Electrical Diagnostic Analyzer

Quick Reference Guide
167-001000EN-D
June, 2022

For an online step-by-step guide through the tool's initial setup, please scan the QR code on Page 4:

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 additonal support go to nissancpx900.midtronics.com

Connections And Data Ports

① Display Screen
② Cooling Vent
③ Arrow Keys & Power Button
④ Micro-USB Port
⑤ Thermal Printer
⑥ Temperature Sensor
⑦ VIN Barcode Scanner
⑧ Clamp Tabs
⑨ User-replacable AA batteries
⑩ User-replaceable test clamps

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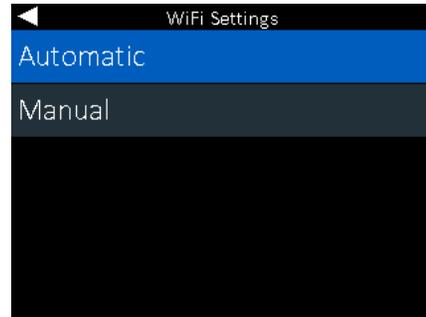
⚠ **IMPORTANT**: Always begin each test by connecting the tester clamps to the battery being tested. The testing process begins as soon as the clamps are connected.

Setup

WiFi Settings

Set up the WiFi connection.

⚠ **IMPORTANT:** The CPX-900 will not connect to an enterprise network with a user login landing page.

Automatic	The tester searches for any detectable WiFi networks. Select a displayed network is then displayed on the tester screen.
Manual	Manually enter Security, SSID, Password, Encryption, and WEP Keys.

BMIS Settings

The BMIS credentials are already entered. If they are not, please enter user credentials shown below, then enter your location ID for verification.
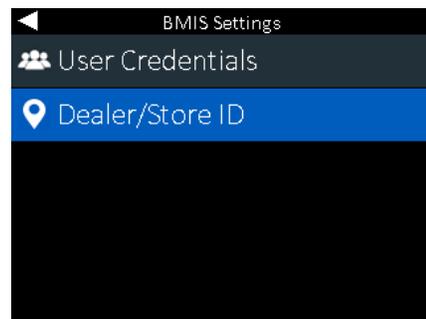
Use ▲▼◄► to highlight the numbers on the displayed keyboard and press ■ to select.

User Credentials	nissan@cpx.com
Password	NissanMdx1!

Location Selection

You will see a prompt asking you for your location/dealer ID. Upon entering, the tool will pull up the corresponding location information and either confirm by pressing the right arrow button, or if you misentered the location ID, press the left button arrow to re-enter.

|	
Shop Name	Country
Shop Address	Phone Number
Shop Address 2	Email Address
City	Website
State	(Blank)
Zipcode	(Blank)
Country	

Users

You will need to establish the Admin User upon initial setup. **The tool will prompt you for a user PIN.** If you wish for everyone to have access to Admin Rights, you can skip entering one by selecting Skip.

> **NOTE:** Admin Rights include the ability to change Shop Settings, Network settings and BMIS Settings..
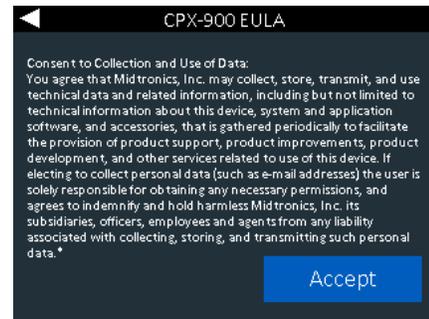

Logo Selection

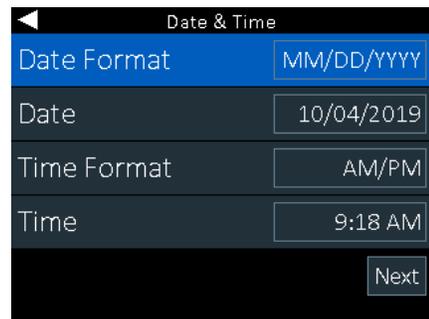Select the correct brand logo: Nissan/Infiniti.
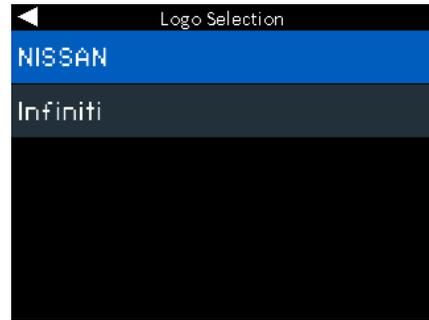
Data Collection Consent

Select **Accept** to Consent to Collection and Use of Test Data.

Date & Time

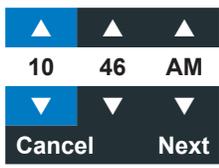Use ◄ to return to the Display menu.

Date Format	Select Month/Day/Year (MM/DD/YYYY), or Day/Month/Year DD/MM/YYYY.
Date	Use ▲ or ▼ to advance the month, day, and year. Use ◄ or ► to advance left or right and move to **Cancel** or **Next**. Select **Next** to save the date or **Cancel** to exit without saving.
Time Format	Select 12 or 24 Hour Format.
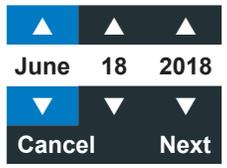
Time	Use ▲ or ▼ to advance the hours, minutes, and AM/PM setting. Use ◄ or ► to advance left or right and move to **Cancel** or **Next**. Select **Next** to save the time or **Cancel** to exit without saving.

▲	▲	▲
10	**46**	**AM**
▼	▼	▼
Cancel		**Next**

Main Menu

12.56V	①	CPX-900	
In Vehicle Test	Check In	History	
	②		
Messages	Settings	Version	

① Menu Bar

12.74V	Battery Voltage: (if connected)	📶	WiFi Signal Strength: Orange when not connected.
✳ (Bluetooth)	Bluetooth Status: Displayed when connected	🔋	Controller Internal Battery Status: Blue indicates amount of charge.
🔷 (BMIS)	BMIS Connectivity "X" indicates no connection		

② 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.

● ● ●	Screen 1
● ● ●	Screen 2
● ● ●	Screen 3

Press ◄ or ►

●	Screen 1
●	
●	Screen 2
●	

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.

⚠ **DANGER**	⚠ **WARNING**
Risk of explosive gases	**Wash hands after handling.**
Batteries generate explosive gases during normal operation, and when discharged or charged. Follow all manufacturers' instructions and BCI (Battery Council International) safety recommendations.	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 Test

1. *Connect* - Tester clamps to battery terminals.

2. *Select* - At the Main Menu select In Vehicle Test.

3. *Temperature* - Hold sensor 6 to 12 inches over battery & select **Capture**.

4. *VIN Capture* - Scan VIN bar code, usually located in the right corner of the vehicle's front windshield or on the driver's side door frame.

⚠ **IMPORTANT:** To capture the VIN, position the tool so the projected green line scans the entire width of the barcode.

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

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

Application	Automotive
Battery Post	Top 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.	✓	Return to Main Menu
🖨	Print test results		

Icons are color-coded to indicate status.

Green:	All test parameters were completed and have passed.	**Red:**	The battery has failed the test.
Yellow:	Some test parameters may require further testing.	**Gray:**	Insufficent data to perform the test.

Refer to decisions table in the online user manual for a complete explanation of all possible test results.

Check In

Use Check In for preliminary battery testing of newly arrived vehicles to ensure it will not sit in a low state of charge for an extended period of time, potentially damaging the battery.

The Check In application will render "Good Battery" or "Charge and Retest" decisions based on measured battery voltage.

Replacement Parts

Part No.	Description
A401	CPX-900 Paper Roll (10 pk)
A683	CPX-900 10' Cable / Clamp
CPX-901	CPX-900 Dock-for overnight updates

Frequently Asked Questions

Powering the CPX-900

Q: What does CPX-900 use for power?
A: CPX-900 has 6 internal AA batteries, accessible through a battery door on the back of the tool. The CPX-900 draws power from the battery under test (unless voltage is too low) when connected.

CPX-901 (Dock)

Q: Does the dock (CPX-901) recharge the AA batteries?
A: No. The AA batteries used in CPX-900 are not rechargeable. The dock only provides power to the CPX-900 for overnight updates.

Q: Does the CPX-901 (dock) come with the CPX-900?

A: Yes, the dock is an accessory which is included. It can also be purchased as a spare in case it is lost.

Q: How is the CPX-901 (dock) used?
A: The dock provides two functions: 1) power to the unit for receiving overnight updates and transmitting data; and 2) a storage "home".

Printer

Q: Is the printer used in CPX-900 shared with other Midtronics products?

A: Yes, the same printer is used on the DSS-5000 platform and is available as a replacement part.

Q: What are the specs for the printer paper?
A: The paper is a 2-¼" wide by 1-⅞" diameter thermal printer paper.

Conductance Profiling™

Q: What is Conductance Profiling™
A: Conductance Profiling is a battery test to analyze the battery's reserve capacity capability, and is a part of the standard test procedure

Q: When does the Conductance Profiling™ test not run
A: The CPX-900 functions the same as DSS-5000. When the following conditions exist, a test will not be performed:
1. Voltage of battery under test is ~< 8.5V
2. Excessive system noise
3. Battery fails to meet minimum industry standards

Additional Information

Scan the QR Code to access the online Nissan CPX-900 Knowledge Base.

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