Ford CPX-950
Battery & Electrical Diagnostic Analyzer

Quick Reference Card
June 2018
167-000930EN-A

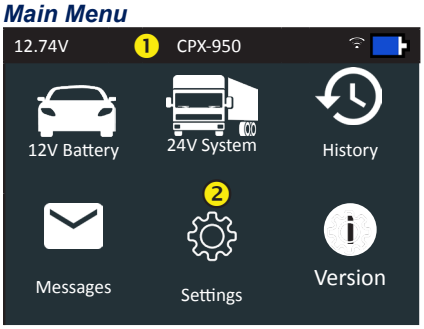
Important - Before You Start

- Before operating the analyzer, refer to Instruction Manual
- Always follow battery manufacturer instructions and BCI (Battery Council International) safety recommendations

Connections And Data Ports

1. Display Screen
2. Cooling Vent
3. Arrow Keys & Power Button
4. Micro-USB Port
5. Temperature Sensor
6. VID Barcode Scanner (optional)
7. Clamp Tabs

Main Menu



1 Menu Bar

12.74V	Battery Voltage (if connected)		WiFi signal strength
	Bluetooth connectivity status		Controller internal battery status

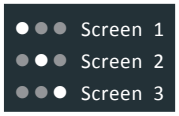
2 Main Menu Selection Area

◄ ►

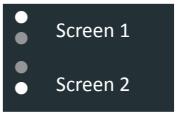
When displayed, the Screen Arrows show which **ARROW** key on the keypad to press to display other icons, screens, or item in a list.

Additional Screens

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



Press ◄ or ►



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 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.

12V Battery Test

1. ***Battery Test Setup*** - Edit the displayed vehicle and battery information.

Battery location	Under Hood	Out of Vehicle	Under Seat
Test location	Battery Post	Jump Start Post	Jump Start Post (BMS)
Predefined rating	A list of known Ford batteries is shown plus a manual battery entery option.		
Battery Type	EFB	AGM	SLI
Battery Units	EN SAE	DIN JIS	EN2 IEC
Battery Rating	Hold down ▲ or ▼ to increase scrolling speed.		
VIN	Insert the last 5 number of the vehicle ID number (VIN). This step is optional.		

Rating	Description	Range
EN	European Norms. The battery is required to meet a voltage of 7.5V after 10 seconds	100 to 3000
SAE	Society of Automotive Engineers norm. The test specifies that the battery at a temperature of –18°C will deliver a current equal to the Cold Cranking Amps for 30 seconds with the voltage staying above 7.2 volts	100 to 3000
IEC	International Electrotechnical Commission norm. The IEC test is performed at -18°C	100 to 1000
DIN	Deutsche Industrie-Norm	100 to 1000
EN2	European Norms 2. Performing a different second discharge than with EN.	100 to 3000
JIS	Japanese Industrial Standard test, carried out at -15°C.	A list is shown

3. ***Temperature*** - Hold the tester temperature sensor over the battery being tested. Select **Capture** to lock in the live temperature reading and begin the battery test.

Midtronics BV. Hoofdveste 6-8 3992 DG Houten Netherlands

24V System Test

Make a selection: Battery Test or Generate Pair

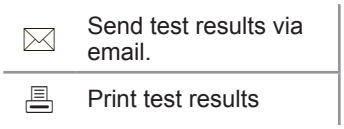
Battery Test

1. Battery Test Setup - Edit the displayed vehicle and battery information.
2. ***Temperature*** - Hold the tester temperature sensor over the battery being tested. Select **Capture** to lock in the live temperature
3. You are requested to connect to the second battery. If there's only 1 battery, this step is automatically skipped.
4. Temperature - you are requested to aim the temperature sensor at the second battery. Then click 'Capture' The test is started.
5. The result is shown, through which you can select 'System Test', 'Send Results' or 'Done' to return to the mainscreen.

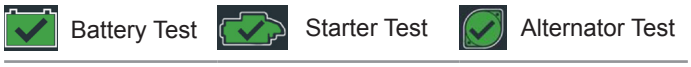
Generate Pair

1. Battery Test Setup - Edit the displayed vehicle and battery information.
2. ***Temperature*** - Hold the tester temperature sensor over the battery being tested. Select **Capture** to lock in the live temperature
3. If the battery is in a good state, you are requested to connect the CPX to the second battery. If the first battery needs a charge a warning is shown, asking the user to connect a different battery to test or charge the battery. A pair cannot be generated with discharged batteries.
4. Temperature - you are requested to aim the temperature sensor at the second battery. Then click 'Capture' The test is started.

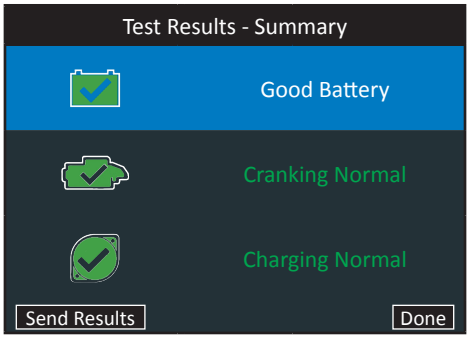
Test Results



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.



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.

MIDTRONICS www.midtronicseurope.com

MIDTRONICS HEADQUARTERS
Willowbrook, IL USA
Phone: 1.630.323.2800

Canadian Inquiries
Toll Free: +1 1 866 592 8052

MIDTRONICS B.V. EMEA
European Headquarters
Houten, The Netherlands
SerVIDg Europe, Africa, the Middle East
Phone: +31 306 868 150

MIDTRONICS CHINA
China Operations
Shenzhen, China
Phone: +86 755 2374 1010

MIDTRONICS INDIA
Navi Mumbai, India
Phone: +91 22 27564103/1513

Asia/Pacific (excluding China)
Contact Corporate Headquarters
Phone: +1.630.323.2800