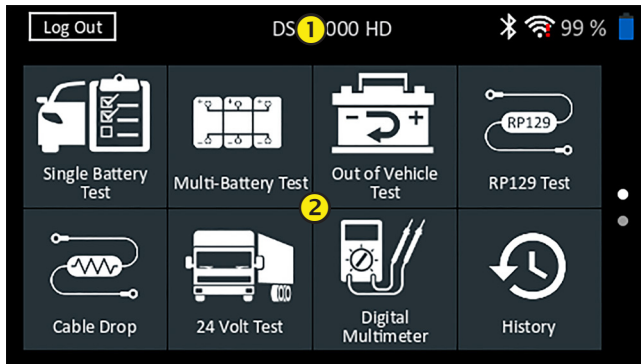


## Main Menu

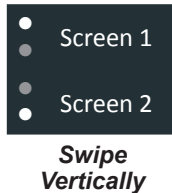
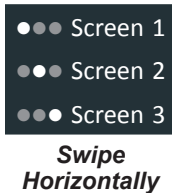


### 1 Menu Bar

Log Out	Log out current user	93%	Controller internal battery level
	Bluetooth connectivity status		
	WiFi signal strength		Controller internal battery status

### 2 Main Menu Selection Area

Dots at the bottom or side of a menu or results screen indicate additional screens are available. Swipe horizontally or vertically across the Controller screen to view all of the results.

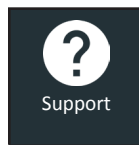


## Main Menu Icons

Icon	Description
	For testing vehicles using a single 12V battery. Includes a full System Test option with or without Amp Clamp.
	For testing vehicles with 2 or more batteries connected in parallel. Includes a full System Test option with or without Amp Clamp.
	For testing out-of-vehicle customer batteries for possible return.

Icon	Description
	Uses RP129 protocol to test each individual battery in a pack. Measures cable voltage drop between the alternator, starter and battery pack during System Test.
	Tests both sides of a circuit simultaneously for voltage drop. Includes three preset and one user-defined test.
	Use to assess battery pack State Of Health and deliverable current potential in applications using two 12 volt batteries connected in series. Includes System Test with or without optional Amp Clamp.
	The Digital Multimeter includes DC Volts, AC Volts, DC Amps, AC Amps, Ohms, Diode Drop, Amps Volts, and battery temperature for troubleshooting low voltage electrical circuits in a vehicle.
	Access archived test histories or search test history by Vehicle ID or by technician.
	Access the analyzer Self-Test and a digitized version of the Instruction Manual.
	Displays alerts and notifications for upcoming tests and activities including scheduled tests, tool software updates and maintenance opportunities.
	Setup/adjust: WiFi, printer setup, email settings, user information, default language, display and sound settings, BMIS information, shop information, and connected devices. Also access to tester software version information.

## Support



Use the Support function to access built-in Self-Testing functions or to view a digitized version of the Instruction Manual.

## User Manual



Tap the icon to view the analyzer's Instruction Manual on the Controller screen.

### Self-Diagnostics



Use to test WiFi network and printer connections, Tester Pod diagnostics, Controller display testing, and Controller touch panel testing.

<b>WiFi Self-Diagnostics</b>	Tests connectivity to the BMIS server via the selected WiFi network
<b>WiFi Printer Self-Diagnostics</b>	Use to configure a WiFi printer
<b>Tester Pod Self-Diagnostics</b>	Check connectivity between the Controller and the Tester Pod
<b>Display Self-Diagnostics</b>	Tests Controller pixel display
<b>Touchscreen Self-Diagnostics</b>	Tests Controller touchscreen responsiveness

### Single Battery Test

1. Connect the Tester Pod test clamps to the battery and remove the Controller.
2. On the Controller at the Main Menu tap **Single Battery Test**. The Vehicle ID screen is displayed.
3. **Vehicle ID:** Use the on-screen keypad to manually type the Vehicle ID number and tap **Next**.

The displayed digit counter will count up the alphanumeric characters as they are being entered on the keypad.

Use Manual Entry if the battery being tested is not listed. Tap > to continue to the Edit Battery Information screen.

4. The Edit Battery Information screen displays vehicle and battery information. If the displayed information is correct, tap **Next** to begin the Battery Test. Tap on the corresponding box to edit the parameter information.



**NOTE:** See Instruction Manual, Appendix B for test parameter descriptions..

5. Align the temperature sensor on the Controller over the battery and tap **Capture**. The test begins when the temperature is successfully captured. The test results are displayed on the Controller screen.



**NOTE:** See Instruction Manual, Appendix A for possible test result descriptions.

To print, email, or send the test results to a configured printer tap **Send Results**. To return to the Home Screen, tap **Done** or **System Test** to continue with the System Test.

### Multi-Battery Test



**IMPORTANT:** For accurate testing, split battery packs must be electrically isolated to a maximum of four batteries per pack.

1. Connect the Tester Pod test clamps to the battery and remove the Controller.
2. On the Controller at the Main Menu tap **Multi-Battery Test**. The Acquire Vehicle ID screen is displayed.
3. **Vehicle ID:** Use the on-screen keypad to manually type the Vehicle ID number and tap **Next**.  
The displayed digit counter will count up the alphanumeric characters as they are being entered on the keypad.  
Use Manual Entry if the battery being tested is not listed. Tap > to continue to the Edit Battery Information screen.
4. The Edit Battery Information screen displays vehicle and battery information based on the Vehicle ID. If the displayed information is correct, tap **Continue** to begin the Battery Test. Tap on the corresponding box to edit the parameter information.



**NOTE:** If no Reserve Capacity/Amp Hours value is entered, the analyzer will use the average RC rating for a flooded Group 31 battery (180 minutes).



**NOTE:** See Instruction Manual, Appendix B manual for test parameter descriptions.

5. Connect the clamps to the positive (+) and negative (-) cables that lead to the starter and chassis ground. If there are multiple cables, re-test for each cable connection.
6. Tap **OK** to continue.
7. Align the temperature sensor on the Controller over the battery and tap **Capture**. The test begins when the temperature is successfully captured. The test results are displayed on the Controller screen.
8. Tap **Send Results** to print, email, or send the test results to a configured printer. To return to the Home Screen, tap **Done** or **Next** to continue.
9. For a Check Battery Pack result, the option is given to break the pack and test each battery individually. When testing individual batteries, the tester uses the parameters from the Multi-Battery Test and prompts the user through the steps of disconnecting the pack, testing each battery, and reconnecting.

### Break Pack

1. Disconnect all the batteries in the pack and tap **Next**.
2. Connect the clamps from the Tester Pod to the first battery in the pack.
3. Tap **OK** to test the battery.

4. Repeat the process until all of the batteries in the pack have been tested.
5. After the last battery in the pack has been tested, the results of the individual battery tests are displayed.
6. Tap the individual battery icons to view the specific result for each battery.
7. Tap **Send Results** to print, email, or send the test results to a configured printer. To return to the Home Screen, tap **Done** or reconnect the pack and tap **System Test** to continue.

### RP129 Test



**IMPORTANT:** For accurate testing, split battery packs must be electrically isolated to a maximum of four batteries per pack.



**IMPORTANT:** Any batteries in the pack that are below 12.4 volts must be charged before the RP129 test can be performed.

1. Connect the Tester Pod test clamps to the battery and remove the Controller.
2. On the Controller at the Main Menu tap **RP129 Test**. The RP129 Starter/Controller screen is displayed. Tap **Next**.
3. **Vehicle ID:** Use the on-screen keypad to manually type the Vehicle ID number and tap **Next**.  
The displayed digit counter will count up the alphanumeric characters as they are being entered on the keypad.  
Use Manual Entry if the battery being tested is not listed. Tap **>** to continue to the Edit Battery Information screen.
4. The Edit Battery Information screen displays vehicle and battery information. If the displayed information is correct, tap **Continue** to begin the Battery Test. Tap on the corresponding box to edit the parameter information.



**NOTE:** If no Reserve Capacity/Amp Hours value is entered, the analyzer will use the average RC rating for a flooded Group 31 battery (180 minutes).



**NOTE:** See Instruction Manual, Appendix B for test parameter descriptions.

5. Connect the clamps from the Tester Pod to the first battery in the pack.
6. Align the temperature sensor on the Controller over the battery and tap **Capture**. The test begins when the temperature is successfully captured.
7. Tap **OK** to test the battery.
8. Repeat Steps 5-7 for each individual battery.

9. Repeat the testing process until all batteries in the pack have been tested.

After the last battery in the pack has been tested, the results of the individual battery tests are displayed.

### Check Battery Pack

Following a Check Battery Pack decision, the option is given to break the pack apart and test each individual battery.



**NOTE:** If the message "Pack is discharged below voltage necessary for proper diagnosis" is displayed, the pack voltage is below 12.4 V and the RP129 test is aborted. Break the pack and individually test or charge each battery before retesting.

Follow the on-screen prompts when breaking the pack and testing each individual battery.

Tap **Next** following each step.

1. Disconnect all of the batteries in the battery pack.
2. Connect the clamps to the first battery in the pack.
3. Once the test on the first battery is complete, remove the clamps and connect them to the second battery.
4. Repeat the process for each battery in the pack. As each battery is tested, the numbered icons on the Tablet Controller will display white and display a checkmark.  
Test results are displayed when all of the batteries in the pack have been individually tested.
5. Tap a numbered battery icon on the screen to see the specific results for that battery.

To print, email, or send the test results to a configured printer tap **Send Results**. To return to the Home Screen, tap **Done** or **System Test** to continue with the System Test. The test results are displayed on the Controller screen.



**NOTE:** See Instruction Manual, Appendix A for possible test result descriptions.

1. Tap **Send Results** to print or send the test results to a configured printer or **Next** to continue.
2. Edit the displayed vehicle information and tap **Next**.
3. Connect the positive (+) main clamp from the Tester Pod to the alternator output stud (B+) and the negative (-) clamp to the alternator ground.  
Connect the positive (+) DMM clamp from the Tester Pod to the positive battery terminal and the negative (-) DMM clamp to the negative battery terminal.
4. Edit the displayed vehicle information and tap **Next** to begin the System Test.

## 24 Volt Test

1. Connect the Tester Pod test clamps to the first battery and remove the Controller.
2. On the Controller at the Main Menu tap **24 Volt Test**. The Acquire Vehicle ID screen is displayed.
3. **Vehicle ID:** Use the on-screen keypad to manually type the Vehicle ID number and tap **Next**.

The displayed digit counter will count up the alphanumeric characters as they are being entered on the keypad.

Use Manual Entry if the battery being tested is not listed. Tap **>** to continue to the Edit Battery Information screen.

4. The Edit Battery Information screen displays vehicle and battery information based on the Vehicle ID.

If the displayed information is correct, tap **Continue** to begin the Battery Test. Tap on the corresponding box to edit the parameter information.



**NOTE:** If no Reserve Capacity/Amp Hours value is entered, the analyzer will use the average RC rating for a flooded Group 31 battery (180 minutes).



**NOTE:** See Instruction Manual, Appendix B for test parameter descriptions.

5. Connect the clamps from the Tester Pod to the first battery in the pack.
6. Tap **OK**.
7. Align the temperature sensor on the Controller over the battery and tap **Capture**. The test begins when the temperature is successfully captured.
8. Repeat until both batteries in the pack have been tested.
9. After the last battery in the pack has been tested, the results of the individual battery tests are displayed.
10. Tap the individual battery icons to view the specific result for each battery.



**NOTE:** See Instruction Manual, Appendix A for possible test result descriptions.

11. Tap **Send Results** to print, email, or send the test results to a configured printer. To return to the Home Screen, tap **Done** or reconnect the pack and tap **System Test** to continue.

## System Test

1. If available, connect the optional Amp Clamp to the Tester Pod and hold the clamp away from any cables with the jaws closed (Amp Clamp option not available for RP129).



**NOTE:** If the Amp Clamp is not being used, begin the System Test at Step 4.

2. Tap **Next** to zero out the clamp or **Skip** if the Amp Clamp is not being used.
3. With the engine and electrical loads off, place the Amp Clamp around the negative (-) battery pack cable and tap **Next**.
4. Start the engine and let it idle.
5. Turn off all accessory loads such as the headlight high beams and ventilation blower fan.
6. Tap **Next**. The analyzer tests the alternator output.
7. When prompted, rev the engine to between 1000 to 1250 rpm and hold it there while the analyzer tests the alternator output again.
8. Tap **Next**.
9. When prompted Idle the engine.
10. Turn on the high beam headlights and ventilation blower motor.
11. When prompted, rev the engine to between 1000 to 1250 rpm and hold it there while the analyzer tests the alternator output again.
12. Tap **Next**.
13. Turn off the high beam headlights and ventilation blower motor.
14. Return the engine to idle, then shut it off.
15. Tap **Next** to display the test results.

## Test Results-Summary

A Test Results - Summary screen is displayed following a System Test. Tap **>** to view detailed test results for each part of the test.