

Getting Started

1. Determine and enter the battery's CCA (Cold Cranking Amps) and Reserve Capacity (RC) in minutes. This information is often printed on top of the battery.
Important: CCA values of SAE, EN, JIS and other standards vary. Assume that the correct values are entered. A wrong entry will result in inaccurate readings.
2. When testing the battery in-vehicle, turn off any vehicle loads such as heaters, lights, audio or video equipment and ensure that the vehicle ignition is in the OFF position.
3. Clean the battery terminals with a wire brush. Dirty or worn contacts may result in false readings.
4. When connecting the battery tester clamps to the battery, rock the clamps back and forth to ensure a secure connection. For best results, connect the clamps directly to the battery terminals.

Note: Do NOT attach clamps to a battery bus bar. This may result in inaccurate readings.

Testing the Battery

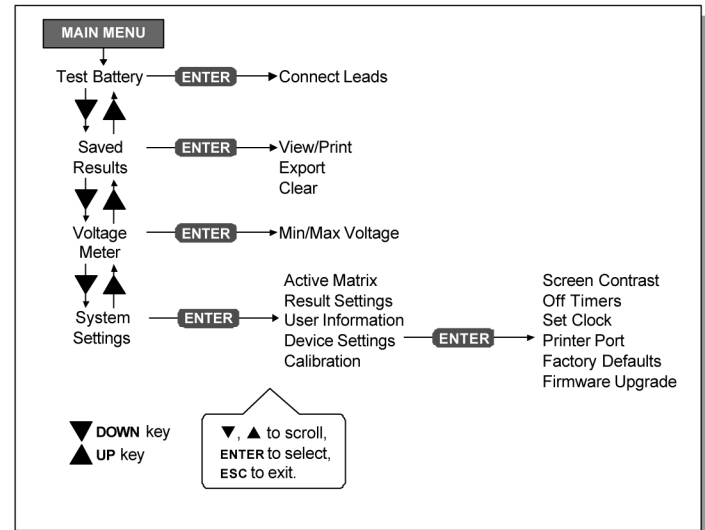
1. Turn on the Spectro CA-12
2. Use ? ? to select **Test Battery**. Press **Enter**.
3. Firmly connect the red clamp to the positive terminal (+) of the battery.
4. Firmly connect the black clamp to the negative terminal (-) of the battery.
5. Use ? ? to select the CCA Rating for the battery. Press **Enter**. If the CCA rating is not available on the CA-12, use the next highest setting. For example, if the CCA on the battery is 638, choose 650.
6. Use ? ? to select the Reserve Capacity for the battery.
7. Press **Enter** to start the battery test.

Test Results

After the battery test completes, the test result appears with the overall battery condition, CCA, RC and SoC:

1. The main screen displays the CCA, RC (Reserve Capacity) and SOC (State-of-Charge). The overall battery condition is displayed on the top.
2. Press ? to display the CCA, Voltage and Temperature in graphics mode:

Menu



Standards

North America, Europe and Japan rate their batteries differently. The largest variations are in the CCA readings. The table below shows how the different CCA values are derived. The right column provides the conversion factors. These figures are not official and may vary between manufacturers. Consult with the battery manufacturer for the correct CCA value.

Note: The CCA of the battery must harmonize with the standard setting of the Spectro CA-12.

CCA Standard	Discharge time	End Voltage	Test Temp.	Conversion
SAE	30s	1.20V/cell (7.20V)	-18°C (0°F)	1
DIN *	30s	1.50V/cell (9.00V)	-18°C (0°F)	0.56
EN	10s	1.25V/cell (7.50V)	-18°C (0°F)	0.94
JIS	60s	1.40V/cell (8.40V)	-18°C (0°F)	N/A

* The DIN standard is superceded by EN

For best results, use battery-specific matrices. Contact Cadex for information or visit http://www.cadex.com/prod_rapid/available_matrices.asp