

8100 Migration Guide

Transitioning from the CR to the 8100 Tester

The CR tester has been a mainstay of the low-voltage harness testing industry. The Cirris 8100 tester is the next-generation Cirris harness tester that is replacing the CR tester. There are several improvements shown below; other improvements are forthcoming.

8100 Improvements

Increased Measurement Range	CR	8100
Insulation Resistance Max	500 ΚΩ	to 3 $M\Omega$
Resistors	1 Ω to 1 M Ω	0.1 Ω to 3 M Ω

Additional Test Instructions

Twisted Pair	No	Yes
Grounded Point	No	Yes
Advanced (optional)	No	Yes

Enhanced Capability

Base Unit can be used as Expansion	No	Yes
USB Powered	No	Yes
4-Wire Kelvin Pair Offset	32 points only	32 points or adjacent
Enhanced ESD Protected Test Points	Optional	Yes
Probe Resistance Measurement	No	Yes*
Digital IO	Yes [†]	Optional

^{*} To be included in a future software release.

[†] Required an auxiliary PLC.

Test Program Compatibility

Test Programs created on the CR and 8100 testers are visible together on the Easy-Wire Main Menu. This allows both testers to access the same Test Programs

Using CR Test Programs on the 8100

Almost all CR Test Programs can be run on an 8100 tester. A minor exception is Test Programs that use the legacy Easy-Wire adapters, which have been rarely used, and largely replaced by Smart-Light adapters. Exported CR Test Programs can be imported on an 8100 test system without any issue. When using a network database to access the same Test Programs, CR Test Programs can be run on the 8100 tester.

Using 8100 Test Programs on the CR

In most cases 8100 Test Programs should be compatible to run on the CR tester. There are a few exceptions since the 8100 has greater measurement range and has other functionality. If an 8100 Test Program has an incompatibility with a CR tester, the user is notified of the incompatibility issue when attempting to run the test.

On the present Easy-Wire Release Version (2023.2.1.8020), the INDUCTANCE and INDUCTANCE_TOL parameters must be deleted to import an 8100 Test Program on a CR Test System.

Test Setup Compatibility

You can use the same interface wiring or adapter cables to your device under test. The connector interface on the 8100 is identical to that on the CR. Both testers support either traditional or Smart-Light test fixturing. In addition, the process for setting up a Test Program in the Easy-Wire software user interface is identical.

Hardware Incompatibility

Do not attempt to use an expansion box-to-box cable to connect 8100 and CR units. The tester units are not compatible. Both 8100 and CR tester units are similar in size but have slightly different dimensions. The Cirris 8100 measures 3.3" H \times 5.6" W \times 7.5" L (8.3 cm \times 14.3 cm \times 7.5 cm).

Tester Setup Differences

Both the CR and 8100 testers require you to connect a USB cable from the controlling PC to the Base unit. However, unlike the CR, the 8100 Base requires no power cord since it receives its power through the USB cable. Likewise, large CR test systems required a cord to each Booster unit. Large multiple box 8100 systems require simply require a USB cable connection to supply power to approximately every third unit. The extra USB cable can be from other USB ports on the controlling PC, a USB wall adapter, or a USB active hub. Additionally, uniquely different from the CR, the 8100 test system requires no terminators on the unit-to-unit connections.

