CIRRIS®

Easy-Touch Pro
Getting Started Guide

To download software, the *Easy-Touch Pro User Manual,* and other supporting documentation scan the QR code here or on the tester to visit **downloads.cirris.com.**

Getting Started

The Cirris Easy-Touch Pro combines superior flexibility with the simplicity of a touchscreen user interface. The tester is controlled by the Easy-Wire software running on an integrated PC under the Windows operating system. Test programs and test results are stored in a database. By default, the database is located on the unit's hard drive. However, as an option, multiple testers can share a single, networked database using the Cirris Server Software. See the *Cirris Server Software Install Guide* for more information on this option.

This guide will help the new user set up the tester and become familiar with its operation by working through the process of creating a test program and testing a cable.

For complete operating instructions, see the Easy-Wire Help on the tester and the *Easy-Touch User Manual*.

Symbols

Indicates that high voltage is produced by the tester and, therefore, there is a risk of electric shock if safety warnings are not followed.

Alerts users to a risk of personal injury or damage to the equipment.

Indicates that a person using an electronically-controlled medical device should not be permitted to perform high voltage testing.

Safety

The Easy-Touch Pro tester is capable of performing high voltage Dielectric Withstand (DW) and Insulation Resistance (IR) testing. By design and function, the output of high voltage (hipot) testers presents a risk of electric shock. To mitigate this risk, Easy-Touch testers limit current, high voltage energy and high voltage charge to levels below thresholds that define Hazardous Live or Dangerous in international standards IEC 61010-1 and EN 50191 respectively. However, operators can still receive a painful or startling shock when using any high voltage test equipment. Therefore, it's necessary to protect workers from exposure to high voltage.

Protecting workers begins with training. Operators should understand:

- Basic electricity including the fact that electric current will take any available path to ground, including through a person.

- How to use the test equipment and how to recognize when high voltage testing is being performed.

- Not to not touch the product or test fixture hardware during high voltage testing.

A safe test station is an essential complement to training:

- Use a non-conductive work surface to avoid creating an unintended electrical path between high voltage and workers.

- Verify that the power outlet provides a properly wired, low impedance earth ground. The connection to earth ground is integral to the power cord supplied with the tester.

- Do not allow untrained workers to use high voltage test equipment.

- Isolate high voltage testing from untrained employees and post high voltage warning signs at the test station.

Medical Safety Warning 🚫

An individual using a cardiac pacemaker, an insulin pump, or any electronically-controlled medical device should NOT perform high voltage testing.

Intended Use ⚠️

Cirris Easy-Touch Pro testers are designed for electrical testing and are intended to be used indoors, in a dry environment, at a temperature of 50-104 degrees Fahrenheit (10-40 degrees Celsius). High voltage Insulation Resistance measurements degrade at over 70% relative humidity.

No User-Serviceable Parts ⚠️

The tester includes no user-serviceable parts. Attempting repairs or altering the tester in any way voids the warranty and may lead to an unsafe condition. Contact Cirris Technical Support for assistance if needed.

Unpacking

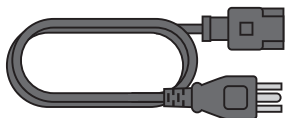The package in which the tester shipped included:

☐ Easy-Touch Pro Tester

☐ Certificate of Calibration

☐ Power Cord

☐ Probe

You may have also received:

- ■ Expansion Scanners
- ■ Cirris Adapters

- ■ Tilt Stand
- ■ Performance Verification Kit

Hardware Setup

The tester includes 128 test points in the base enclosure. It can be expanded to a maximum of 1024 test points using 128-point Expansion Scanners. See the *Easy-Touch Pro User Manual* for Expansion Scanner installation instructions.

After installing any included expansion scanners:

1. Connect the Probe.

2. Connect the Power Cord and plug the power cord into a grounded outlet (surge protector recommended).

3. Press the power switch to turn on the tester.
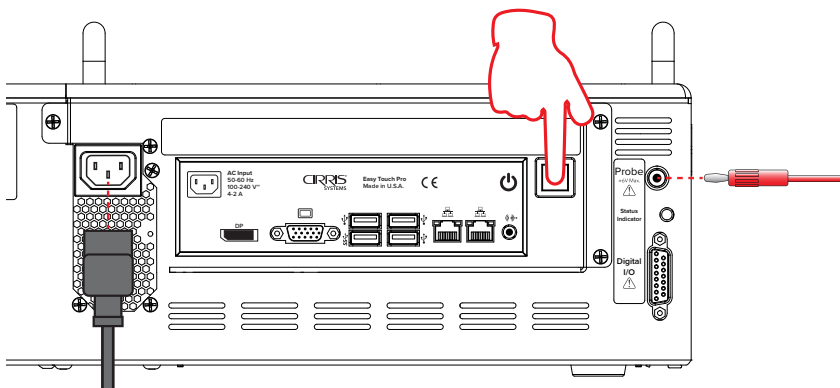
1. After power up, the Easy-Wire software will open to the **User Login** window. Select **Master Login** from the drop down list. Do not enter a password. Click **OK**
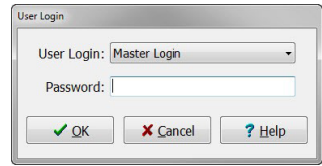
   Passwords and new users can be created from the **Main Menu** > **Utilities** > **Setup Security**. See the Easy-Wire Help.

2. The tester performs a series of self-tests during initialization. These tests ensure that the hardware and software are working properly. When the self-test passes, the **Main Menu** will open with a **Ready** status indicator.

3. The software license purchased with a new Easy-Touch Pro tester includes software upgrades for a period of one year. The **Main Menu** shows a **Licensed** status. Details can be accessed by clicking/tapping **View License**.

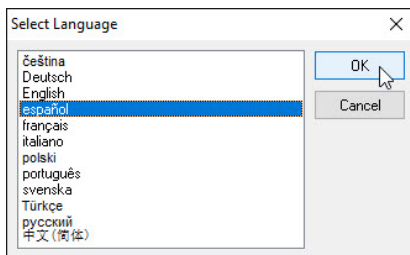4. To turn off the tester, click/tap **Exit** > **Power Off**.
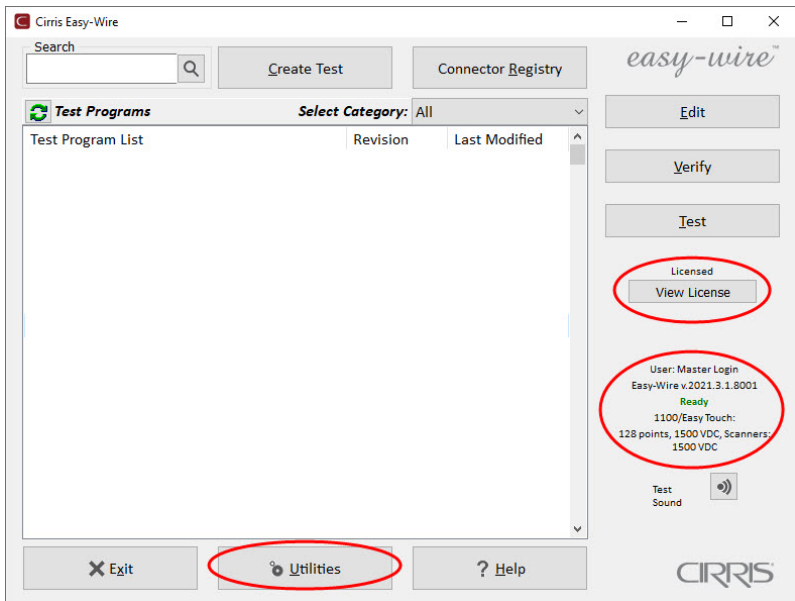
Changing the Interface Language

The language used in the Easy-Wire interface can be changed to one of the available options.

1. From the **Main Menu** > **Utilities** > **Setup System Options**.

2. Under the **Software Settings** tab, select **Change**.
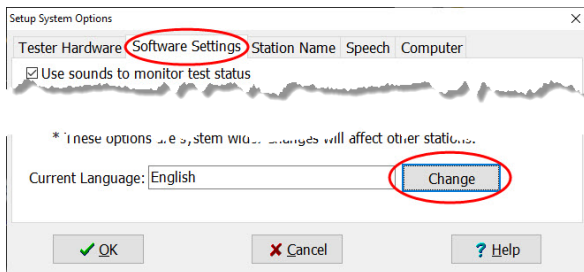
3. Select a language from the list of options and click **OK**.

4. Click **OK** on the **Setup System Options** window to return to the **Main Menu**.

The Easy-Wire Help

The Easy-Wire software includes a contextual Help system accessed by clicking/tapping the Help button available on most Easy-Wire windows. The Help can be browsed using its Table of Contents or searched by keywords.
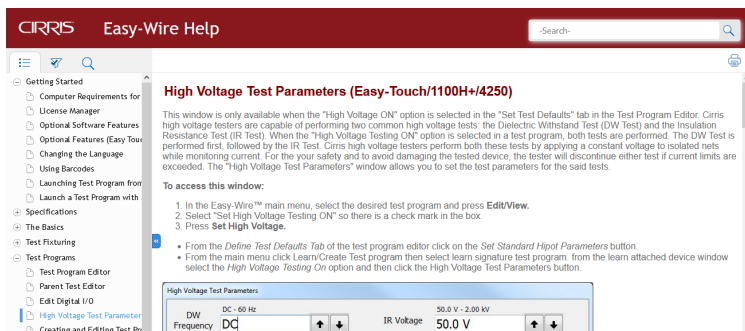
Fixturing

Easy-Touch Pro testers use interchangeable adapters as the interface for connecting the tester to the Device Under Test (DUT). Standard adapters are available with a wide variety of connector types (a complete list can be found on the Cirris web site). However, if the DUT includes connectors that have no direct adapter mates, test cables can be used to connect the connector on a standard Cirris adapter to the DUT connector. Your Cirris sales representative can also provide pricing for custom adapters.

Adapters are available in three sizes. Single-high adapters plug into one receptacle on the tester (e.g. J1). Double-high adapters plug into two vertically-adjacent receptacles (e.g. J1 & J2). Quad-high adapters plug into all four receptacles on the tester base or on an expansion scanner.

Adapter Installation

1. Push the slidelocks to the outward positions.

2. Set an adapter in one or more of the J1-J4 slots. Align the adapter properly to avoid damage and push it to the left (toward the tester's screen) with steady, even pressure.

3. The adapter is fully seated when the slidelocks can be moved inward to hold the adapter in place.
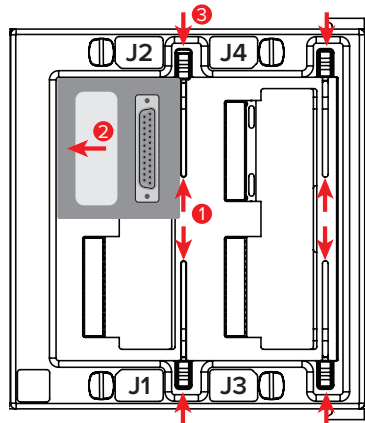
Adapter Maintenance

● Premium gold plating provides 500 or more mating cycles. A very low contact resistance of 10mΩ will likely be maintained during this time. Contact resistance gradually increases with additional cycles, therefore, application requirements will determine when adapters should be replaced.

● Always use slidelocks to reduce the stress on the adapter pins and on the tester's receptacles increasing the lifespan of both.

● Visually inspect right-angle adapter pins before each use. Bent pins can damage the tester's receptacles.

● Never straighten pins using serrated pliers as this produces a saw-like profile that will damage the tester receptacles.

● Store adapters properly to reduce the possibility of damage. Cirris offers ARAC-SS and ARAC-SD adapter trays for this purpose.

Create a New Test Program

Before a device can be tested, a test program must be created. This is most often accomplished by using the tester's capability to "learn" a sample product. Once a test program has been created, it can be saved and then loaded as needed to test subsequent batches of the same product.

To create a test program using the Learn feature:

1. Install the appropriate adapters.

2. Connect the sample product to the tester.

3. From the **Main Menu** > **Create Test**.
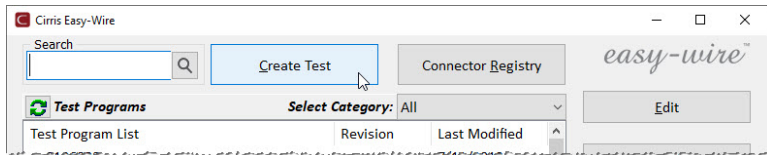
4. On the window that opens, select **Learn Signature Test Program**.
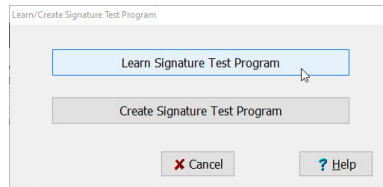
5. Set the learn parameters.

   - Set the maximum acceptable **Connection Resistance** and the minimum acceptable **LV (low voltage) Insulation Resistance**.

   - Check **High Voltage Testing ON** to include it in the resulting program (high voltage is not used during the learn process). Click **Set High Voltage Parameters** to edit the test criteria.

   - Check any components included in the product.

   - Click/tap **Learn Attached Device** to begin the learn process.
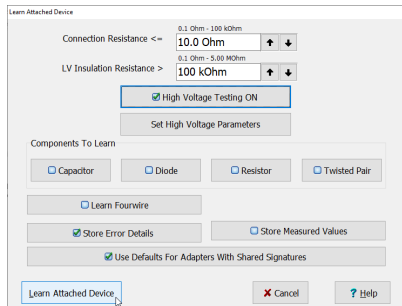
Verify and Edit the Test Program

When the learn process is complete, the test program will open in the Test Program Editor to the **Define Instructions** tab. Verify that the learned instructions match the product's documentation. Click/tap **Help** on any screen for guidance.
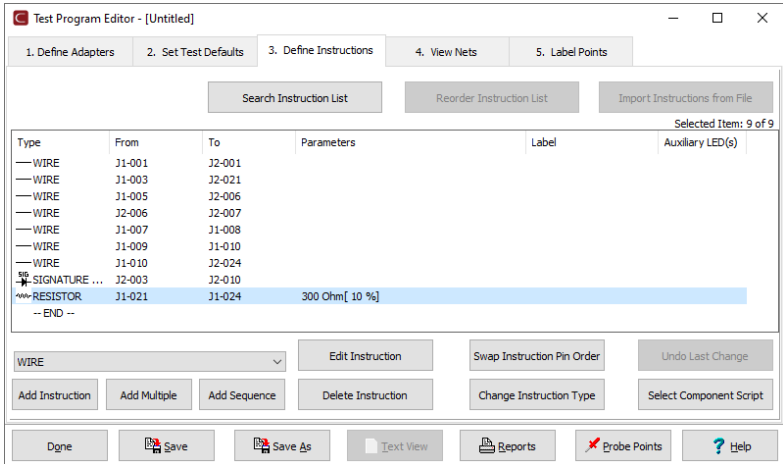
Define Instructions Tab

- To edit an instruction, select it > **Edit Instruction**.

- To delete an instruction, select it > **Delete Instruction**.

- To add an instruction, select the appropriate instruction type from the drop down list > **Add Instruction** and complete the form that opens.

Set Test Defaults Tab

- To edit the Connection Resistance and/or LV Insulation Resistance, click/tap **Set Low Voltage**

- Select the **Start Condition** and the **Test Method**.

View Nets Tab

View Nets, Nets Joined by Components, and Single Points. Turn High Voltage off for specified nets and customize High Voltage parameters by net, if required.

Label Points Tab

The location of the adapters (J1, J2, J3 etc.) and the positions within their connectors (001, 002, 003 etc.) are used to identify test points, for example J1-001. Product-specific nomenclature can be used instead by adding point Labels.
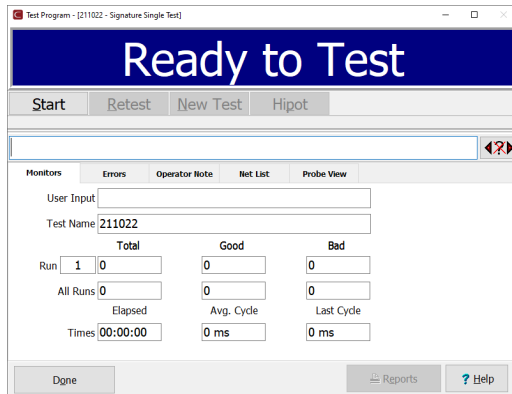
Save the Test Program

After verifying that the test program is accurate, click/tap **Save** to assign the test program a name and to save the program. A program revision and comment can be added whenever saving a new or revised version.
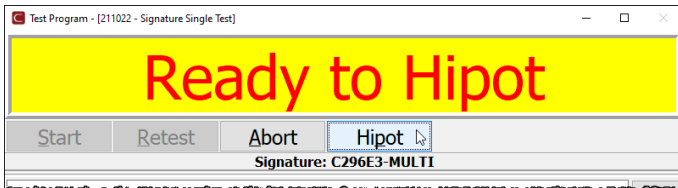
Test

To load a test program for a test session, from the **Main Menu**, click/tap a test program name to highlight it > **Test**.

1. Depending on the **Start Condition**, either attach a cable to start the test automatically or attach a cable and click/tap **Start**.

2. Low voltage testing is performed first and may take less than a second to complete. If the low voltage portion of the test fails, the test will terminate. If the low voltage portion of the test passes, and the program includes high voltage (Hipot) testing, the tester will be ready to continue. Depending on the **Automatic Hipot** setting, the tester will either automatically proceed with the high voltage testing or it will pause and wait for the operator to click/tap **Hipot**.

3. If an intermittents test was programmed, it will begin after the initial test cycle passes. Flex the cable to check for intermittent errors. The test will end depending on the **Test Method** settings.

4. If the test passed, the header will turn green and display **Good**. If the test failed, the header will turn red and display **Bad** and the error details will appear in the test window. For more information on errors, refer to the *Easy-Touch Pro User Manual*.

5. When the test is complete, disconnect the DUT from the tester. The test screen will reset and be ready for the operator to connect another cable, or press **Done** to return to the **Main Menu**. If an auto-print report was included in the program, it will print when the DUT is disconnected from the tester.

Calibration

New Cirris testers ship with a Certificate of Calibration valid for one year. Cirris recommends that the calibration be validated annually at a minimum thereafter. The validation can be performed by Cirris or by the end user or a calibration service provider using an Easy-Touch Performance Verification Kit. Contact your Cirris sales representative for more information.

Documentation

In addition to this Getting Started Guide, there are several resources that provide important information about the test system and its operation. The Easy-Wire Help is installed with the software. Software, manuals, and other documentation can be downloaded from the Cirris web site at **downloads.cirris.com** or by scanning the QR code on the tester.

- **Easy-Touch Pro User Manual** - Provides important additional information about building test fixtures and developing test programs.
- **Easy-Wire Help** - The Easy-Wire software includes an integrated Help system that provides contextual assistance accessible throughout the application.
- **Cirris Server Software Install Guide** - Describes the Cirris Server Software installation and how to connect a test station to the server.

Help / Support

For assistance with your Cirris tester:

- Visit www.cirris.com/learning-center to read articles on Cirris products and other testing subjects.

- Visit the Cirris YouTube channel to find instructive videos.

- In the United States, contact our technical support team at techsupport@ cirris.com or by phone at 801-973-4600, ext. 666 (or ask for Tech Support).

- Outside the United States, visit the contact page of the Cirris web site at cirris.com to find your local representative.

Warranty

Cirris Inc. warrants new products manufactured by Cirris Inc. to be free from defects in material and workmanship for a period of twelve months. Products not manufactured by Cirris Inc. are warranted by their manufacturer. Cirris Inc. at its option will repair or replace faulty goods and is not responsible for any consequential loss incurred due to faulty goods. This warranty does not cover normal wear, misuse or consumable items. The warranty does not include modifications or damages due to abuse by the user.

NO WARRANTY AGAINST INFRINGEMENT: Cirris Inc. makes no warranty whatsoever that the goods are delivered free of any rightful claim of any third person for infringement of patent.

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