

Signature® Touch 1™ Ultra



Ultra High Voltage Multi-Point Testing for Cables/Connectors

Multi-point high voltage Cable/Harness and Connector testing is now easier than ever thanks to Cirris' Touch 1 Ultra. It combines the power of Cirris' standard Touch 1 harness tester with a 2-point Hipot tester to give you multi point testing up to 2800VDC/2000VAC. It utilizes the Touch 1's large graphical touch screen display and menu-driven software to provide the ultimate in ease-of-use and capability.

EASY TO USE: With its built-in PC and touch screen display the Touch 1 Ultra

guides the operator through every step of the setup and test process with easy to follow instructions. Whether you're testing connectors, cables, or complex harnesses with various components the Touch 1 Ultra makes the job easy for you.

BUILT FOR THE FACTORY OF THE FUTURE: Touch 1 Ultra, like the standard Touch 1, is truly the tester of the future for today's forward thinking connector and cable assembly manufacturers. It not only tests your parts, it provides statistical analysis, error reporting, networking,

uploading and downloading of files, test point labeling and more.

DURABLE, RELIABLE: Cirris' reputation as the industry leader in low-cost reliable cable/harness testers is well known worldwide. Like all Cirris products the Touch 1 Ultra is built for a high volume production environment. It is backed by our full 1 year warranty, 30 day right of return guarantee, and overnight loaner program.

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CIRRIS®
Cable/Harness Testing Made Easy™

TOUCH 1 ULTRA KEY FEATURES

Built in PC

The Touch 1 Ultra features an integrated PC, complete with floppy and hard disk drives; keyboard, monitor, serial and parallel ports and an optional ethernet port combined with an AR Hypot Ultra III to offer the lowest cost high voltage multi point tester available.

Rack Mounted

The Touch 1 Ultra comes in a 24" wide rack

Cirris HVI Interface

The Touch 1 Ultra features Cirris' HVI interface for ease of fixturing to your device under test.



Touch 1 Ultra's HVI Interface makes adapting easy.

Password Protection

Allows you to create custom access levels for each operator.

Graphical Touch Screen Display

The large (3 1/2" x 4 1/2") graphical touch screen panel provides operator interface to the Touch 1. Simple to follow menu prompt the user through all of the setup functions. From resistance and voltage settings to point labeling and file naming, it's all at your fingertips.

Complete Testing

The Touch 1 performs the most thorough testing possible on your wiring assemblies. It checks for opens, shorts, mis-wires, high resistance connections (due to cold solder joints, mis-crimping, etc), and insulation problems such as leakage, dielectric failures, etc. It can also test resistors, diodes and capacitors.

4-Wire Kelvin Test

When used in the 4-wire mode the Touch 1 nulls out fixture resistance and performs resistance measurements down to .001ohm resolution.

Automatically Calculates Resistance Values

If you're not sure what resistance value you should be testing to, the Touch 1 can help. Simply plug on a sample assembly and it will give you the actual measured resistance values and suggested settings.

Which End Error Detection

The Touch 1 further simplifies your job by identifying which end of an assembly has an open or short.*

*To operate effectively this feature requires that the device under test be at least twice as long as the interface cabling.

Specifications

CAPACITY:

128 to 256 points in 128-point increments

TEST LEVELS:

Low Voltage Tests: 5 volts @ 6mA max current

High Voltage Tests:

DC: 1-2800VDC $\pm 2\%$

AC: 1-2000VAC $\pm 2\%$

SENSITIVITY:

Connection Resistance:

0.3 Ω to 100K Ω $\pm 1\%$ $\pm 0.3\Omega$; also: 500K Ω , 1M Ω , 5M Ω $\pm 10\%$

4-wire Resistance:

0.001 Ω to 10 Ω $\pm 2\%$ $\pm 0.001\Omega$

High Voltage Tests Internal (Touch 1)

Insulation Resistance Test (IR)

50 to 1000VDC in 1 Volt steps $\pm 5\%$

5M Ω to 1000M Ω $\pm 10\%$

Dielectric Withstand Test (DWV)

50 to 1000VDC 0.1mA to 1.5mA leakage current threshold

HV Dwell 10mSec to 120 Sec

High Voltage Tests External (AR Hypot Ultra)

Insulation Resistance Test (IR)

1 to 1000VDC in 1 Volt steps $\pm 2\%$ $\pm 5V$, 0.05M Ω to 50,000M Ω

Dielectric Withstand Test (DWV)

DC: 1 to 2800VDC $\pm 2\%$ $\pm 5V$, 0mA to 10mA leakage current threshold

AC: 1 to 2000VAC $\pm 2\%$ $\pm 5V$, 0mA to 15mA leakage current threshold (Real)

0mA to 30mA leakage current threshold (Total)

Dwell: DWV Ramp: 0.1 to 999.9 sec

DWV Dwell: 10 msec to 120 sec

IR Ramp: 0.1 to 999.9 sec

IR Dwell: 1 to 999.9 sec

CAPACITANCE: 5nF to 100 μ F $\pm 10\%$ ± 0.02 nF (relative measurements to 10pF)

COMPONENTS TESTED: Resistors, diodes, capacitors, wires, 4-wire wire, 4-wire resistor, and custom components

TEST RATE: Connection Test: 128 points/.25 second (typical)

Hipot Test (internal): 10ms to 120 sec dwell per net: High speed hipot test, user selectable on/off

Hipot Test (external): (See Dwell Specs. to calculate test rate for external tests)

MAX CAPACITANCE PER NET:

DC: 215nF @ 500VDC, 54nF @ 1000VDC, 25nF @ 1500VDC, 13nF @

2000VDC, 8nF @ 2500VDC, 6nF @ 2800VDC

AC: 108nF @ 500VAC, 27nF @ 1000VAC, 12nF @ 1500VAC, 6nF @ 2000VAC

CONTROLLER: Built-in Pentium-class PC with 1 floppy and 1 hard drive. Serial, parallel, keyboard, monitor, auxiliary digital I/O ports standard. Ethernet port optional.

POINT LABELING: User-definable labels of up to 30 characters; also custom file names of up to 30 characters

POWER: 105-135VAC 60Hz or 210-260VAC 50Hz - switchable

SIZE: Base Assembly: 26" w x 21" h x 21" d (66cm x 53cm x 53cm)

Scanner Assembly: 26" w x 21" d x 10" h (66cm x 53cm x 26cm)

WEIGHT: Base: 121 lbs. (55kgs)

Scanner: 128 points: 41 lbs. (18.5kgs); 256 points: 54 lbs. (24.5kgs)

DISPLAY: 3 1/2" x 4 1/2" Graphical Touch Screen

WARRANTY: One year parts and labor

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