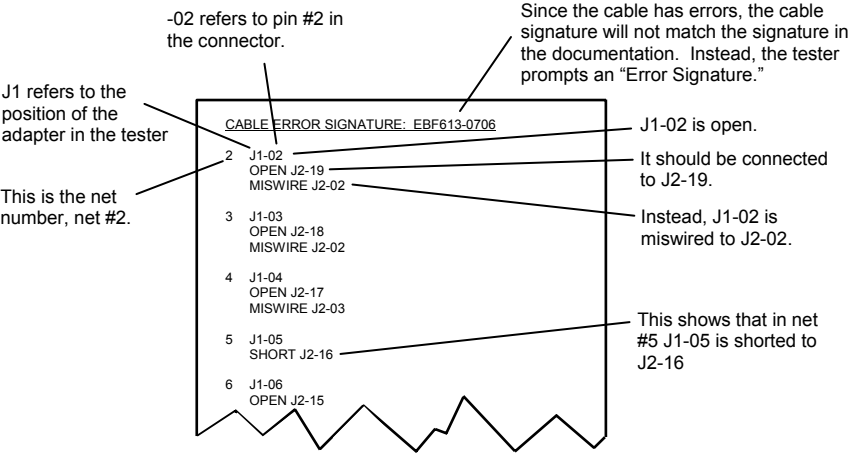


Component Errors

Bad Resistor Bad Capacitor	The tester senses that the measured component is outside the 10% tolerance programmed in the cable test.
Missing Resistor Missing Capacitor Missing Diode	The tester does <i>not</i> sense a component where it should be in the cable.
Leaky Diode	The tester senses a greater than normal current flow through the diode's reverse bias.
Reversed Diode	The senses a diode's orientation is reversed.

Example of an error printout



Getting More Help

Your 1100R+ Users Manual contains a more detailed explanation of this product. In addition a Cirris customer support representative is always ready to assist you. For Customer Support in the USA call 1-800-441-9910. Outside the USA locate the closest Cirris Sales Office by entering the URL www.cirris.com/contact.html.



Quick Reference Guide

Version 4.5d

Basic Operation

Back Button
Returns to the previous menu or to the main menu.

Up/Down Buttons
Scroll menu options and settings.

Selection Buttons
Select menu options.

Available Directional Buttons
Displayed on top line may include:
◀ Top of list; more below
▶ Scroll either up or down
◀ ▶ Scroll up or go back

Menu Title
Always on the top line in capital letters.

Creating a Test from a Cable

STEP 1: Attach the cable to be learned.

1. Install the correct adapters.

2. Replace the cover plate.

3. Connect a sample cable.

STEP 2: Learn the sample cable.

1. Press *Set Up Test Program*.

2. Press *Create New Test*.*

3. Press *LEARN*.

* During this process, you can change the learn settings for your cable specifications. See *Changing Setting for Learning and Testing*.

STEP 3: Verify the learned cable is correct.

1. Press *Verify Test*.*

2. Use the down button ▼ to check that the cable signature, settings, and connections are correct.

3. Use the back button ◀ to return to the CABLE LEARNED menu.

* If you have a connected printer, you may want to verify by printing. For more information see the *Documenting a Cable* section.

You're ready to save the learned test in memory*

OR

start testing.

* For more information on saving and retrieving a cable in memory, see the sections: *Saving a Test to Memory* and *Retrieving a Test From Memory*.

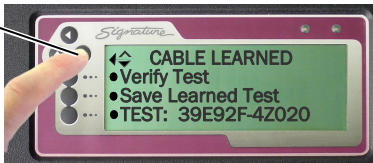
Documenting a Cable

Step 1: Create a test from a sample cable as in the previous section.



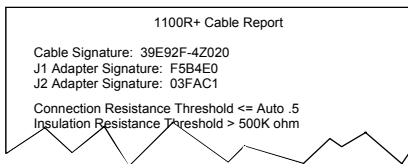
Step 2: *If you have a printer connected:*

1. Press down ▼ to view the print option.



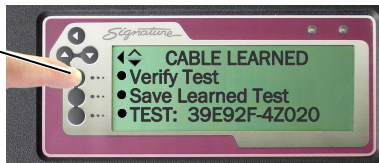
2. Press *Print*.

The document is printed.

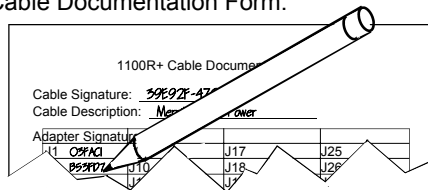


If you don't have a printer connected:

1. Press *Verify Test*.



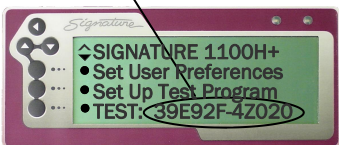
2. Scroll down ▼, recording the information on a 1100R+ Cable Documentation Form.



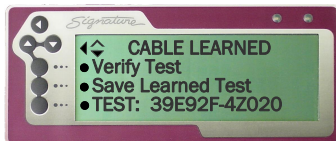
Testing a Cable

Step 1: Make sure the test program you want to use is loaded.

The loaded test is always displayed on the main menu.



You can load a new test program by:
creating a test from a cable



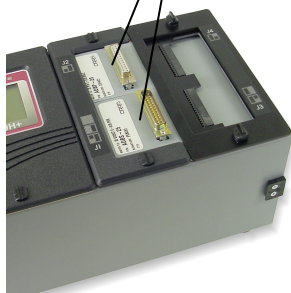
retrieving a test from memory.



OR

Step 2: Duplicate the adapter setup you had in the original test.

Original adapter positions

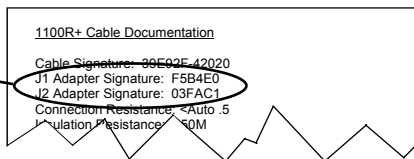


To remember the correct adapter positions in the tester:

Refer to the documentation you created for the test.

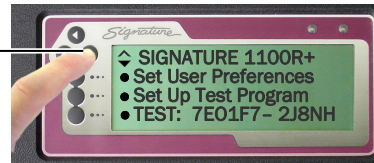
OR

1. Press *Test* for the loaded test.
2. Press *Show Required List*.
3. After installing the correct adapters, press *RETRY* to check the setup.



Deleting a Test from Memory

Step 1: From the main menu
Scroll down ▼.



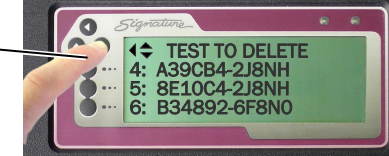
Step 2: Press Do File Management.



Step 3: Press Delete a Test.



Step 4: Scroll down ▼ to the memory location. Then press the button for the test to delete.



Interpreting Error Messages

To See a Detailed Error Messages:

Press *View Errors*

OR

Press *Print Errors*



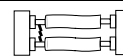
In this example we view the first detailed error and see NET 1 has a SHORT.

To see other detailed errors, we can scroll down ▼.



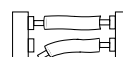
If *Fault Location* is ON, asterisks show the short is closest to these two pins.

Low Voltage Errors



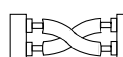
SHORT

The tester senses an interconnection that should *not* exist in the cable.



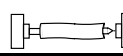
OPEN

The tester does *not* sense an interconnection that should exist in the cable.



MISWIRE

The tester senses that a contact that should have a valid connection is instead connected to a wrong contact.



HIGH RESISTANCE

The tester senses a cable interconnection that has too much resistance.

Intermittent Errors

GOOD



BAD

GOOD

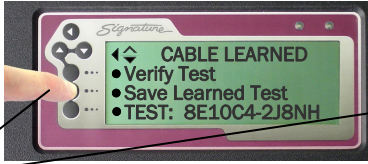


BAD

To be an Intermittent error the cable must be good, then go bad, then go good again. Intermittent errors may be shorts, opens, miswires, and high resistance — just like the Low Voltage errors above.

Saving a Test to Memory

Step 1: After learning from a sample cable...



or editing a test...



press the save option.

If at any other time you need to save a test: (1) from the main menu, scroll down once, (2) press *Do File Management*, and then (3) press *Save Current Test*.

Step 2: Scroll $\updownarrow$ to the desired memory location, then press the button to save to that location.



Note: You can either select an empty location or overwrite an existing cable test.

Step 3: If desired, record the location of the test on the *Memory Location Listing* for the tester.

Mem. Loc.	Cable Description	Cable Signature
1	EEC Lever Arm p/n: 28-LV298	2833B6-6F8N0
2	Evans Air Simulator IV p/n: 398793-4	3967B9-9G6BF
3	Evans Night Shield p/n: 368494-3	F40963-9G6BF
4	Merrit Dialise Power Cable p/n: 00560894	A39CB4-2J8NH
5	Merrit Display panel Cable p/n: 00678904	8E10C4-2J8NH
6	Dynonet add-on Cable p/n: E674-24	B34892-6F8N0

Retrieving a Test from Memory

Step 1: From the main menu press *Set Up Test Program*.



Step 2: Press *Load Test*.



Step 3: Scroll $\updownarrow$ to the test's memory location and press the button to retrieve it.

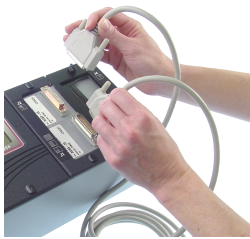


You may find the *Memory Location Listing* helpful to recall a cable test from memory.

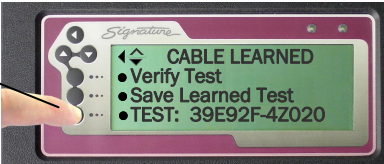
1100R+ Memory Location Listing			
1100H+ Serial Number: 56832-11H			
Mem. Loc.	Part Number	Cable Description	Cable Signature
1	28-LV298	EEC Lever Arm	2833B6-6F8N0
2	398793-4	Evans Air Simulator IV	3967B9-9G6BF
3	368494-3	Evans Night Shield	F40963-9G6BF
4	00560894	Merrit Dialise Power Cable	A39CB4-2J8NH
5	00678904	Merrit Display panel Cable	8E10C4-2J8NH
6	E674-24	Dynonet add-on Cable	B34892-6F8N0

Step 3: Attach the cable to be tested and start the cable test.

1. Attach the cable to be tested.



2. If you haven't already, press *Test* for the loaded test.



Note: If the User Preference *Test Mode* is set to CONTINUOUS the test will start automatically. If *Test Mode* is set to SINGLE TEST, press *START TEST* to start the test.

If the cable passes:



The tester sounds Tick Tick Tick ...

The green LED lights.

The screen displays, PASSED ALL TESTS.

signifying the tester is performing continuous scans checking for intermittent errors.

If the cable fails:



The red LED lights.

The screen displays the type of error.

To get the detailed error information press *View Errors* or *Print Errors*.

The tester sounds Beep ...

1 beep = opens
2 beep = short
3 beeps = miswire

STEP 5: Remove the cable and connect the next one to the tester.

When you remove the cable the display tells you to attach the next cable.



Changing User Preferences

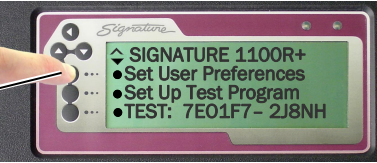
User Preferences affect the way the tester performs and interacts with the operator.

User Preferences do not affect the critical characteristics of the cable test.



To change the *User Preferences*:

1. Press *Set User Preferences*.



2. Use selection and arrow buttons to change User Preferences.

Common User Preferences

Preference Name	Description	Factory Default
Test Mode	CONTINUOUS: Starts the cable test as soon as a connection is sensed. At the end of the cable test, the cable is scanned for intermittents until removed. SINGLE TEST: Tester waits to start the test until the TEST is pressed.	CONTINUOUS
Fault Location	ON: The tester displays an asterisk next to the pin(s) closest to an open, short or miswire. OFF: No fault location information will be displayed.	OFF
Auto Start	ON: The tester will automatically start testing using the loaded test. OFF: Normal tester operation	OFF
Test Count	ALL CABLES: The test summary includes three counts: total cables tested, cables tested good, and cables tested bad. GOOD CABLES ONLY: The test summary includes only the count for good cables.	ALL CABLES
Auto Print	ON: Allows you to select a report that will automatically print while testing. Report formats vary and will print after each cable, passing cable, or failing cable. OFF: Operator must press PRINT to print test results.	OFF
Volume	OFF, LOW, MEDIUM, HIGH: Allows you to adjust the tester sound volume. See manual if more volume is needed.	MEDIUM

To restore all Preferences and Settings to Factory Defaults:

To restore User Preferences and Learn settings.

- 1. From the main menu press *Set User Preferences*.
- 2. Scroll down ▼ once and press *Set Factory Defaults*.
- 3. Press *RESET*.

Changing Settings for Learning and Testing

Learn Settings affect how a cable is learned.

After a cable is learned these settings become the *Test Parameter Settings* for that cable.



Test Parameter Settings affect how a cable is tested.

The *Test Parameter Settings* determine the *Parameter Signature*.

7E10F7-2J8NH

To change the *Learn Settings*:

- 1. From the main menu press *Set Up Test Program*.
- 2. Press *Create a New Test*.
- 3. Press *Set Learn Settings*.

To change the *Test Settings* for the loaded test:

- 1. If the test you want to change is not loaded, make it the loaded test by learning a sample cable or retrieving a cable from memory.
- 2. From the main menu, press *Set Up Test Program*.
- 3. Press *Edit XXXXXX-XXXXX*.

Where XXXXXX-XXXXX is the signature of the cable to edit.

Remember, if editing a test program retrieved from memory: The test program in a particular memory location is not changed until the edited loaded test is saved back to the test's memory location.

Learn/ Test Settings

Setting Name	Description	Factory Default
Conn Res (Connection Resistance)	Cable connections must be lower than this resistance to be learned and to pass the test.	10.0Ω
LV Insul Res (LV Insulation Resistance)	Unintended connections are considered shorts if under this resistance value. Also, intended connections are considered opens as opposed to having high resistance if over this resistance.	100KΩ
Component Resistance	Automatically set when learning components if setting <i>Learn Components</i> is turned on. Components are recognized as components if above this setting value.	NONE
Learn Components	Only in learn settings. Allows the tester to recognize passive components such as capacitors, diodes, and resistors.	OFF