

## Basic Use of the SPC Feature on 1100R+/H+ Testers

(Note: SPC data collection is an optional feature only available on 1100R+/H+ testers that are equipped with USB ports. For the feature to be available it must be enabled on the tester at an additional charge.)

SPC Data Collection allows the tester to store test results data in a file for archive purposes and/or analysis. If SPC Data is enabled on a test program, the stored data always includes:

- Run Number
- Analyzer Serial Number
- Cable Description (if defined)
- Cable File Name
- Operator Name (if defined)
- Date and Time of Test

In addition to the default data, the “Summary” data includes:

- Total Number of Product Tested
- Total Good Product Tested
- Total Bad Product Tested
- Error Type Summary

In addition to the default data, also included if “Values” is turned on as part of SPC Data:

- Net or Instruction Label
- Net or Instruction Measurement

In addition to the default data, also stored if “Error Text” is turned on as part of SPC Data:

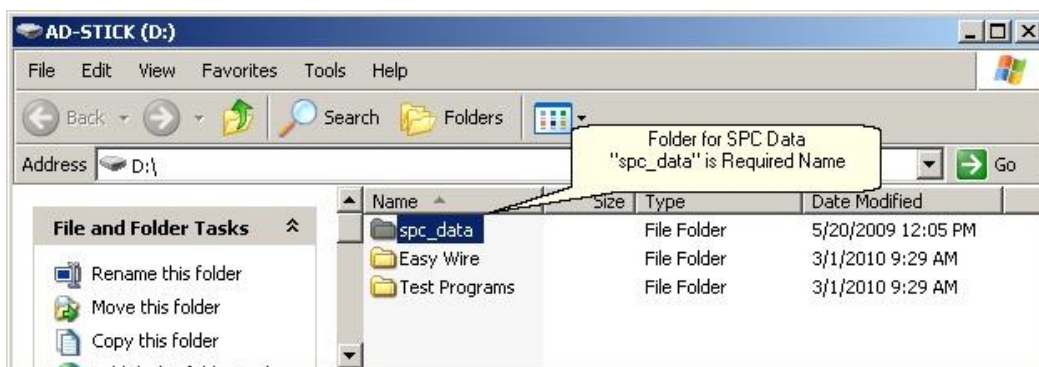
- Error Number
- Error Code
- Error Type
- Error Text

Additional data, such as the product serial number, can be stored using capabilities of the Scripting option in combination with SPC Data Collection.

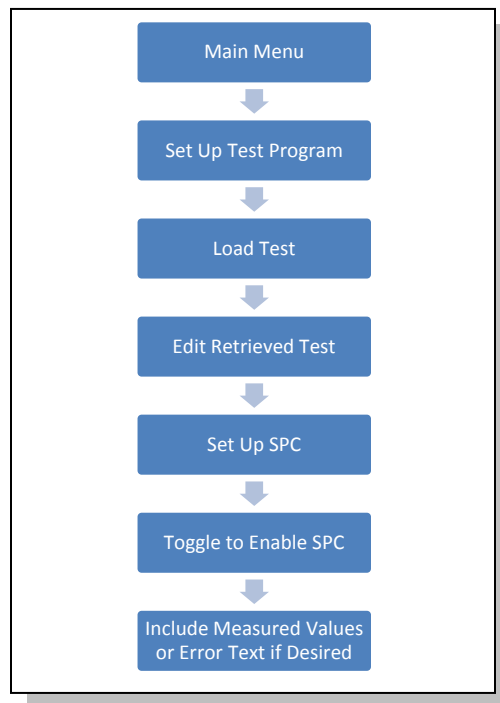
### Using the SPC Feature

(Note: The following process describes saving SPC data to a USB memory stick. SPC data can also be saved to a network drive using a similar process if the tester is equipped with the optional networking feature.)

1. Install the SPC Link software on a PC running the Microsoft Windows XP (Home or Professional), Vista (Business or Ultimate) or Windows7 32-bit operating systems.
2. Using the PC, create a folder named “spc\_data” on the root directory of the USB memory stick.



3. Plug the memory stick into one of the USB ports on the back of the tester.
4. Enable SPC data collection in the test program by following the menu selections on the tester.



### Collecting Data

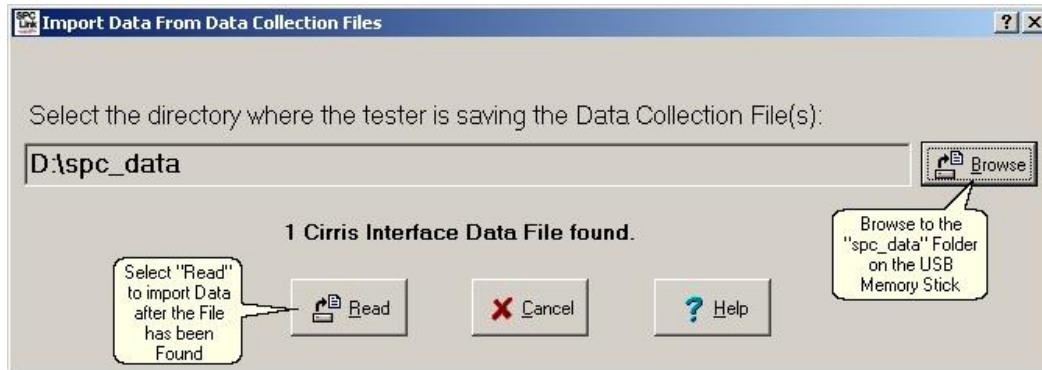
When SPC Data Collection is enabled on a test program, test results are saved to a temporary file during the test run. When the test run is completed and the tester is returned to its Main Menu, the collected data is written to a file in the "spc\_data" folder on the memory stick. The file is named with the serial number of the tester and the extension ".C\_D." This file is appended with new results until the data in the file is transferred from the memory stick to a PC using the SPC Link software. After the data is transferred using the SPC Link software, the \*.C\_D file will automatically be deleted from the memory stick in order to avoid duplication.

### Transferring Data from the Memory Stick

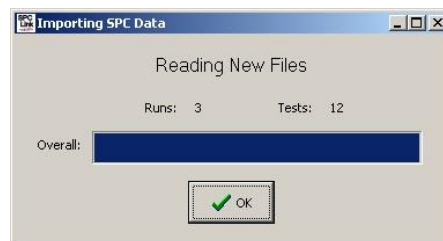
To transfer SPC data from the memory stick, plug the device into an available USB port on your PC, open the SPC Link software and select "Import from Data Collection Files."



On the Import window, use the “Browse” button to navigate to the location of the USB memory stick and select the “spc\_data” folder. Once the software finds the data file, select the “Read” button to import the data.



The status bar will progress until all the data has been imported. After the process is complete, select “OK.”

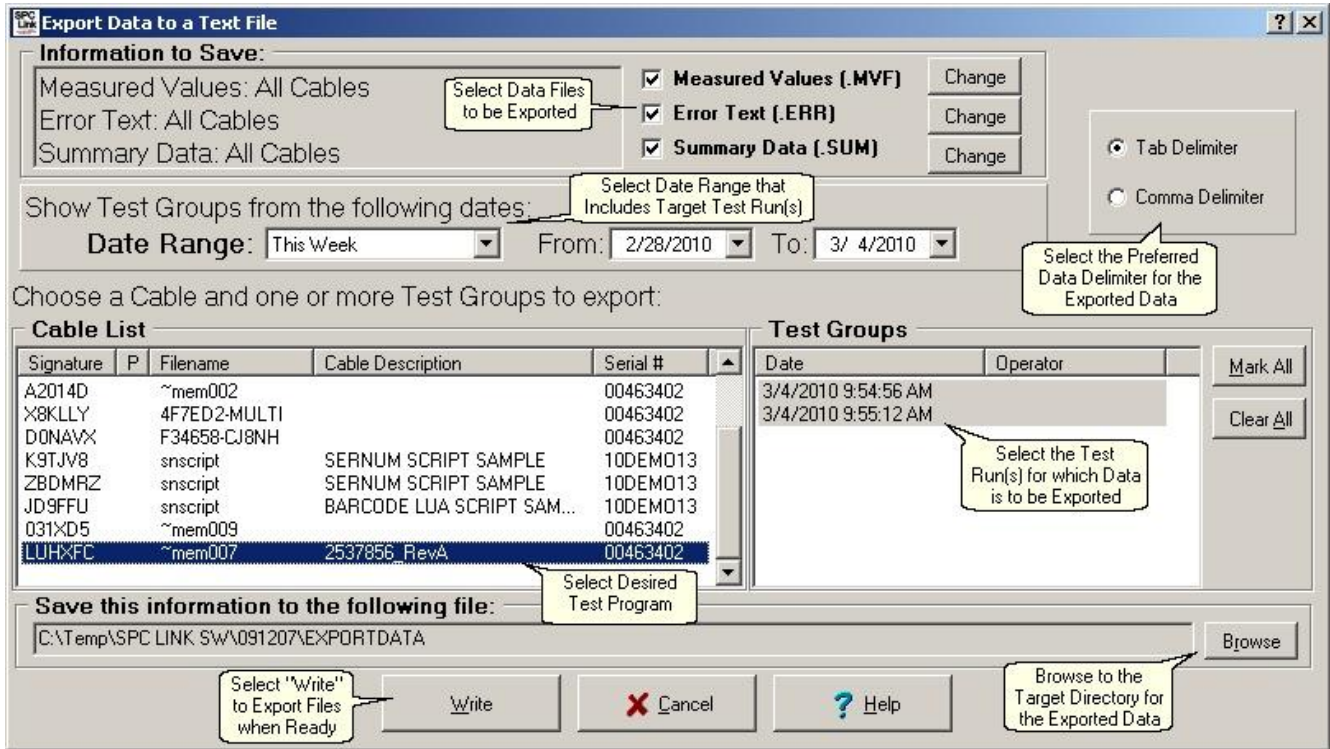


### Exporting Data to a Text File

After the data has been imported, it can then be exported to a text file so that it can then be viewed or imported into another application such as Microsoft Excel. From the SPC Link Main Menu, select “Export to a Text File.”

On the “Export Data” window:

- Select the data files to be exported. Choices are Measured Values, Error Text and Summary Data. Measured Values and Error Text data are only available if these options were selected when enabling SPC data collection in the test program. Any of the file types or all three file types can be selected.
- Select whether to have the data exported in a tab delimited or comma delimited format. Both file types can be imported into Excel.
- Select the appropriate date range of the test runs for which data is to be exported.
- Select the target test program from the “Cable List.”
- Select the target test run(s) from the “Test Groups” list.
- Use the “Browse” button to select the directory to which the exported data file(s) will be written.
- Select the “Write” button to export the data.



The following images are examples of the three file types, Measured Values, Error Text and Summary Data, that can be exported from the SPC Link software. In the examples, the data has been imported into Microsoft Excel.

Measured Vales Data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Run Number	Serial No	Cable Description	Cable Filename	Operator	Start Date	Start Time	Cable Number	Cable Serial Number	Final Status	WIRE J1-001 J1-013 < 5 OHM	WIRE J1-018 J1-006 < 5 OHM	WIRE J1-020 J1-008 < 5 OHM	WIRE J1-025 J2-
2	1	463402	2537856_RevA	~mem007.wir		3/4/2010	9:54:56 AM	1	1	Passed	0.001	0.001	0.001	0.001
3	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:12 AM	1	1	Passed	0.01242	0.001	0.001	0.007826
4	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:46 AM	2	2	Passed	0.001	0.001	0.001	0.007142
5	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:02 AM	3	3	Passed	0.001	0.001	0.001	0.001
6	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:14 AM	4	4	Failed				
7	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:44 AM	5	5	Failed				
8	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:14 AM	6	6	Passed	0.001	0.001		0.004415
9	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:44 AM	7	7	Failed				
10	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:12 AM	8	8	Failed				
11	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:32 AM	9	9	Failed				
12	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:52 AM	10	10	Passed	0.001	0.001		0.001

Error Test Data

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Run Number	Serial No	Cable Description	Cable Filename	Operator	Start Date	Start Time	Cable Number	Cable Serial Number	Final Status	Error Number	Error Code	Error Type	Error Text
2	1	463402	2537856_RevA	~mem007.wir		3/4/2010	9:54:56 AM	1	1	Passed				
3	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:12 AM	1	1	Passed				
4	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:46 AM	2	2	Passed				
5	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:02 AM	3	3	Passed				
6	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:14 AM	4	4	Failed	1	3	Short	Net 4: SHORTIn J1-025 J2-014 to J2-010
7	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:56:44 AM	5	5	Failed	1	3	Short	Net NC: SHORTIn J2-003 to J2-024
8	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:14 AM	6	6	Passed				
9	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:44 AM	7	7	Failed	1	3	Short	Net NC: SHORTIn J1-003 to J1-025
10	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:57:44 AM	7	7	Failed	2	71	T1 Open Error	Net 4: OPENIn J1-025 to J2-014
11	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:12 AM	8	8	Failed	1	71	T1 Open Error	Net 4: OPENIn J1-025 to J2-014
12	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:32 AM	9	9	Failed	1	71	T1 Open Error	Net 4: OPENIn J1-025 to J2-014
13	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:58:52 AM	10	10	Passed				

Summary Data

	A	B	C	D	E	F	G	H	I	J	K	L
1	Run Number	Serial No	Cable Description	Cable Filename	Operator	Start Date	Start Time	Cables Tested	Number Good	Number Bad	Short	T1 Open Error
2	1	463402	2537856_RevA	~mem007.wir		3/4/2010	9:54:56 AM	1	1	0	0	0
3	2	463402	2537856_RevA	~mem007.wir		3/4/2010	9:55:12 AM	10	5	5	3	3

**FAQ's / Troubleshooting**

**Q:** What do I do if the test run(s) I want to export from SPC Link aren't listed under "Test Groups" after I've selected the proper test program from the "Cable List?"

**A:** First, make sure you've selected an appropriate date range in the SPC Link Export window. If you've selected an appropriate date range and the test run(s) still aren't listed, check the current date on your 1100 tester to see if it's accurate. You can do this by selecting "Set Preferences" from the tester's Main Menu and then "Set Date." If the tester's current date is not accurate, it will be recording the wrong test date in the SPC data. In that case, the test run(s) you're looking for may not be dated within the date range you expect.