



User Guide
List Based Testing

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Chapter 1 - Introduction

Please ensure eXport PC software and firmware v7.x and above has been installed into your workstation and WireXpert devices before you proceed further. Please visit <http://itnetworks.softing.com/> to download the latest version.

List-Based Testing (LBT) is the world first to adopt customized hierarchical cable labelling scheme. LBT changes how cable testing is conducted, from entering and saving a label after each test to simply choosing which label from the preloaded list to conduct the test.

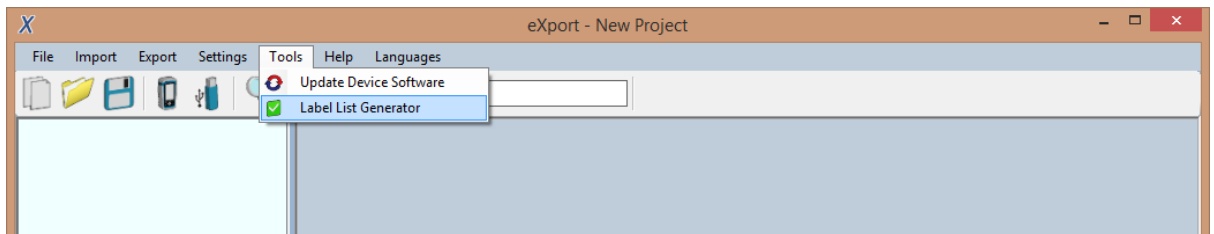
The LBT is ideal for project managers who has preference on how cables should be labelled and creates flexibility for onsite testers to conduct test in non-sequential order by choosing, skipping and returning to the untested points. When the site is completed, the project managers does minimal sorting and searching from his/her preferred list, saving time thus increasing productivity.

This user guide will only contain information and instructions on how to use the List-Based Testing on eXport software and WireXpert. Please refer to User Manual and Guides for WireXpert for device help.

Chapter 2 – Creating the List

Label List Generator

1. Launch eXport software.
2. Go to Tools > Label List Generator



Hierarchy

Besides Building name, each tier of hierarchy labelling can be delimited or text separated with alphanumeric characters such as “-”, “;”, “<>”, etc in the “Delimited With” field. The first unit (floor/room/rack/panel/port) of each tier should be entered in the “Start With” field and the last in the “End With” field. If a certain tier is not applicable, e.g., the building has only one floor, uncheck “Floor” to remove tier from hierarchy.

 A screenshot of the 'Label List Generator' dialog box. The 'Hierarchy' tab is selected. It contains a table with checkboxes for 'Building', 'Floor', 'Telecom Room', 'Rack', 'Panel', and 'Port'. To the right of the table are three input fields labeled 'Delimited With:', 'Start With:', and 'End With:'. On the far right, there are buttons for 'Export to USB', 'Export to CSV', 'Save', 'Load', and 'Exit'. Below these buttons is an information note: 'Information: Maximum 1000 Label List can be generated.'

	Building	Floor	Telecom Room	Rack	Panel	Port
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2						
3						
4						
5						
6						
7						

1. Building – The building name where LBT will be used.
2. Floor – The number of floors the building has.
3. Telecom Room – The number or name the telecom name is called.
4. Rack – The number or name the rack is called.
5. Panel – The number or name the panel is called.
6. Port – The number or name the port is called.

Note: Hierarchical tiers (Floors, Telecom Rooms, Racks, Panels and Ports) must be entered in corresponding formats (e.g. 01 and 10, B1 and B3, -1 and -4, 1# and 5#) to generate labels.

Only alphanumeric and ASCII characters are supported for List-Based Testing.

Scenario 1

Expert Services occupies a single floor in an office building, with only 1 Rack(R) and 3 Panels(P) in 1 Server room. Only 12 ports(p) are used from each panel. They have plans to add another Rack in the near future.

Building	Floor		Telecom Room		Rack		Panel		Port		Labels Generated
E-SVC	n.a	n.a	n.a	n.a	R01	R01	P01	P03	p01	p12	E-SVC-R01-P01-p01 ~ p12 E-SVC-R01-P02-p01 ~ p12 E-SVC-R01-P03-p01 ~ p12
Total number of labels generated											36

Label List Generator

Hierarchy Point to Point

<input checked="" type="checkbox"/> Building		ExpertSVC	
<input type="checkbox"/> Floor			
<input type="checkbox"/> Telecom Room			
<input checked="" type="checkbox"/> Rack	-	R01	R01
<input checked="" type="checkbox"/> Panel	-	P01	P03
<input checked="" type="checkbox"/> Port	-	p01	p12

Export to USB

Export to CSV

Save

Load

Exit

Information:
Maximum 1000 Label List
can be generated.

Scenario 2

Tech Shopping Mall has 2 floors(L) with 2 Telecom Room (TR) on each floor. There are 2 Racks (R), each with 10 Panels (P), using 12 ports (p) on each panel.

Building	Floor		Telecom Room		Rack		Panel		Port		
	L1	L2	TR1	TR2	RA	RB	P01	P10	p01	P12	
Labels Generated											
Level 1, Room 1, Rack A			Level 1, Room 1, Rack B			Level 1, Room 2, Rack A			Level 1, Room 2, Rack B		
TSM-L1-TR1-RA-P01-p01~12			TSM-L1-TR1-RB-P01-p01~12			TSM-L1-TR2-RA-P01-p01~12			TSM-L1-TR2-RB-P01-p01~12		
TSM-L1-TR1-RA-P02-p01~12			TSM-L1-TR1-RB-P02-p01~12			TSM-L1-TR2-RA-P02-p01~12			TSM-L1-TR2-RB-P02-p01~12		
TSM-L1-TR1-RA-P03-p01~12			TSM-L1-TR1-RB-P03-p01~12			TSM-L1-TR2-RA-P03-p01~12			TSM-L1-TR2-RB-P03-p01~12		
TSM-L1-TR1-RA-P04-p01~12			TSM-L1-TR1-RB-P04-p01~12			TSM-L1-TR2-RA-P04-p01~12			TSM-L1-TR2-RB-P04-p01~12		
TSM-L1-TR1-RA-P05-p01~12			TSM-L1-TR1-RB-P05-p01~12			TSM-L1-TR2-RA-P05-p01~12			TSM-L1-TR2-RB-P05-p01~12		
TSM-L1-TR1-RA-P06-p01~12			TSM-L1-TR1-RB-P06-p01~12			TSM-L1-TR2-RA-P06-p01~12			TSM-L1-TR2-RB-P06-p01~12		
TSM-L1-TR1-RA-P07-p01~12			TSM-L1-TR1-RB-P07-p01~12			TSM-L1-TR2-RA-P07-p01~12			TSM-L1-TR2-RB-P07-p01~12		
TSM-L1-TR1-RA-P08-p01~12			TSM-L1-TR1-RB-P08-p01~12			TSM-L1-TR2-RA-P08-p01~12			TSM-L1-TR2-RB-P08-p01~12		
TSM-L1-TR1-RA-P09-p01~12			TSM-L1-TR1-RB-P09-p01~12			TSM-L1-TR2-RA-P09-p01~12			TSM-L1-TR2-RB-P09-p01~12		
TSM-L1-TR1-RA-P10-p01~12			TSM-L1-TR1-RB-P10-p01~12			TSM-L1-TR2-RA-P10-p01~12			TSM-L1-TR2-RB-P10-p01~12		
Level 2, Room 1, Rack A			Level 2, Room 1, Rack B			Level 2, Room 2, Rack A			Level 2, Room 2, Rack B		
TSM-L2-TR1-RA-P01-p01~12			TSM-L2-TR1-RB-P01-p01~12			TSM-L2-TR2-RA-P01-p01~12			TSM-L2-TR2-RB-P01-p01~12		
TSM-L2-TR1-RA-P02-p01~12			TSM-L2-TR1-RB-P02-p01~12			TSM-L2-TR2-RA-P02-p01~12			TSM-L2-TR2-RB-P02-p01~12		
TSM-L2-TR1-RA-P03-p01~12			TSM-L2-TR1-RB-P03-p01~12			TSM-L2-TR2-RA-P03-p01~12			TSM-L2-TR2-RB-P03-p01~12		
TSM-L2-TR1-RA-P04-p01~12			TSM-L2-TR1-RB-P04-p01~12			TSM-L2-TR2-RA-P04-p01~12			TSM-L2-TR2-RB-P04-p01~12		
TSM-L2-TR1-RA-P05-p01~12			TSM-L2-TR1-RB-P05-p01~12			TSM-L2-TR2-RA-P05-p01~12			TSM-L2-TR2-RB-P05-p01~12		
TSM-L2-TR1-RA-P06-p01~12			TSM-L2-TR1-RB-P06-p01~12			TSM-L2-TR2-RA-P06-p01~12			TSM-L2-TR2-RB-P06-p01~12		
TSM-L2-TR1-RA-P07-p01~12			TSM-L2-TR1-RB-P07-p01~12			TSM-L2-TR2-RA-P07-p01~12			TSM-L2-TR2-RB-P07-p01~12		
TSM-L2-TR1-RA-P08-p01~12			TSM-L2-TR1-RB-P08-p01~12			TSM-L2-TR2-RA-P08-p01~12			TSM-L2-TR2-RB-P08-p01~12		
TSM-L2-TR1-RA-P09-p01~12			TSM-L2-TR1-RB-P09-p01~12			TSM-L2-TR2-RA-P09-p01~12			TSM-L2-TR2-RB-P09-p01~12		
TSM-L2-TR1-RA-P10-p01~12			TSM-L2-TR1-RB-P10-p01~12			TSM-L2-TR2-RA-P10-p01~12			TSM-L2-TR2-RB-P10-p01~12		
Total number of labels generated									960		

The screenshot shows the 'Label List Generator' window with the 'Point to Point' hierarchy selected. The hierarchy is as follows:

Building	Floor	Telecom Room	Rack	Panel	Port
TSM	L1	TR1	RA	P01	p01
	L2	TR2	RB	P10	p12

Buttons on the right include: Export to USB, Export to CSV, Save, Load, and Exit. Information: Maximum 1000 Label List can be generated.

Point to Point

The Point-to-Point label generator creates labels for straight forward connections from Point A to Point B such as Backbone or connections terminations between two panels.

The screenshot shows the 'Label List Generator' window with the 'Point to Point' hierarchy selected. The diagram illustrates a cable connection between two panels, labeled 'End 1' and 'End 2'. The diagram shows a horizontal line representing the cable, with two vertical lines representing the panels. The 'First' and 'Last' labels are shown on the left side of the diagram. The 'Start With' and 'Start With:' labels are shown above the cable. The diagram is annotated with four red boxes:

1. First End 1 – The end of the first cable in the list.
2. First End 2 – The other end of the first cable.
3. Last End 1 – The end of the last cable in the list.
4. Last End 2 – the other end of the cable in the list.

Buttons on the right include: Export to USB, Export to CSV, Save, Load, and Exit. Information: Maximum 1000 Label List can be generated.

1. First End 1 – The end of the first cable in the list.
2. First End 2 – The other end of the first cable.
3. Last End 1 – The end of the last cable in the list.
4. Last End 2 – the other end of the cable in the list.

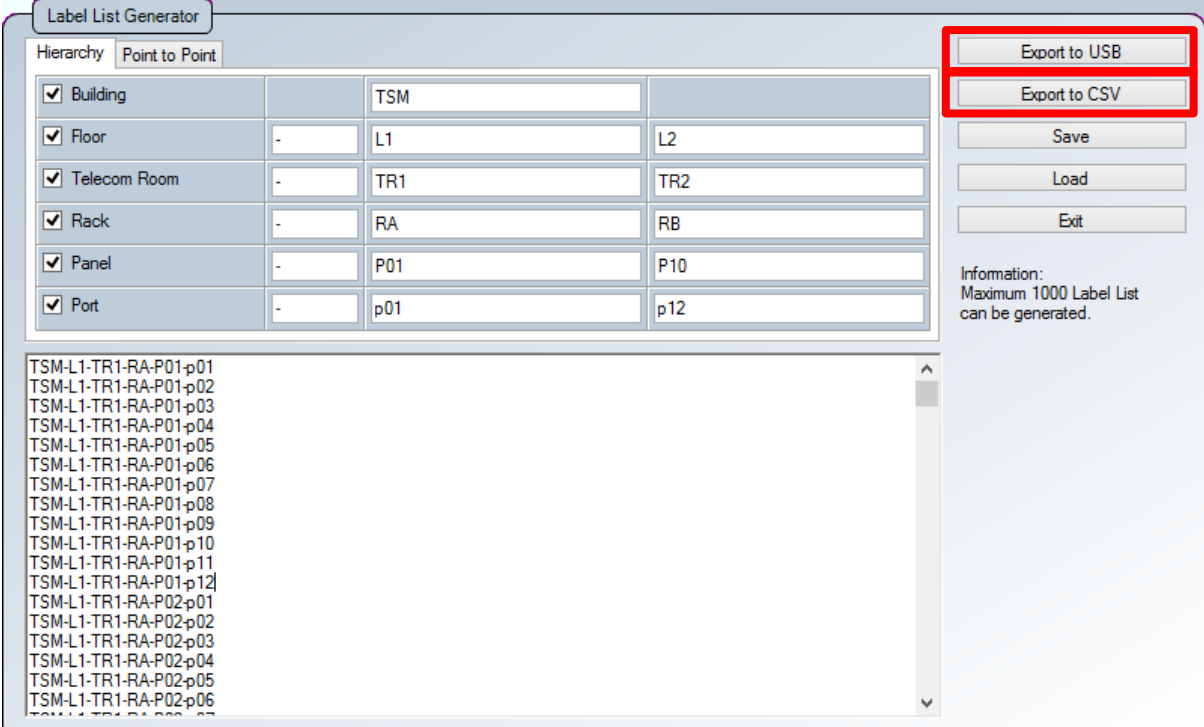
Note: Only alphanumeric and ASCII characters are supported for List-Based Testing.

Chapter 3: Managing the List

Exporting the List

1. Click the “Export to USB” button to export completed list to USB flash drive.

Click the “Export to CSV” button to export to *.CSV format.

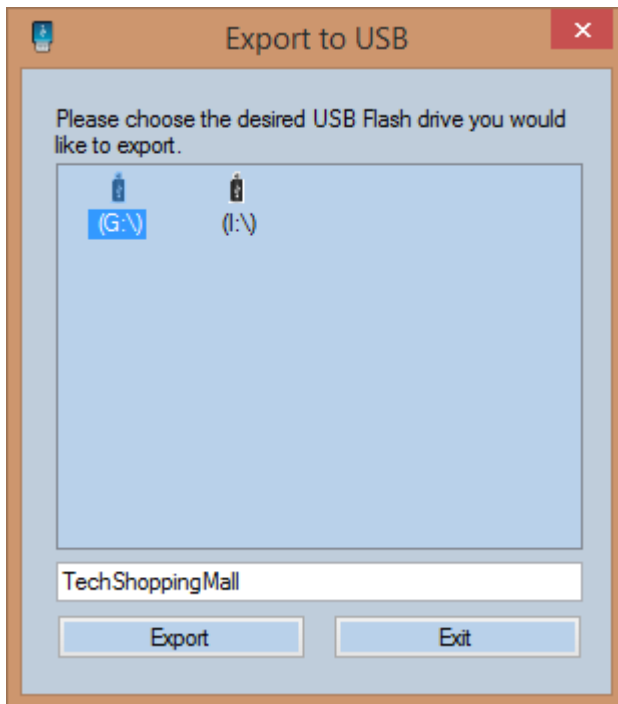


The screenshot shows the 'Label List Generator' application window. It features a 'Hierarchy' tab and a 'Point to Point' sub-tab. A table lists hierarchy levels with checkboxes and input fields. Below the table is a list of generated labels. On the right, there are buttons for 'Export to USB', 'Export to CSV', 'Save', 'Load', and 'Exit'. The 'Export to USB' and 'Export to CSV' buttons are highlighted with a red box. An information note states: 'Information: Maximum 1000 Label List can be generated.'

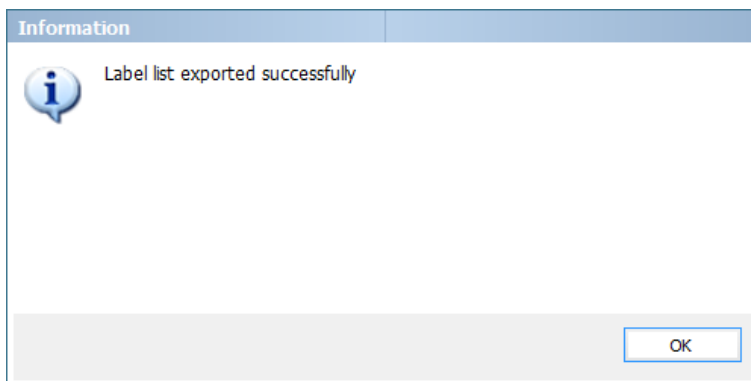
Hierarchy	Point to Point		
<input checked="" type="checkbox"/> Building		TSM	
<input checked="" type="checkbox"/> Floor	-	L1	L2
<input checked="" type="checkbox"/> Telecom Room	-	TR1	TR2
<input checked="" type="checkbox"/> Rack	-	RA	RB
<input checked="" type="checkbox"/> Panel	-	P01	P10
<input checked="" type="checkbox"/> Port	-	p01	p12

TSM-L1-TR1-RA-P01-p01
TSM-L1-TR1-RA-P01-p02
TSM-L1-TR1-RA-P01-p03
TSM-L1-TR1-RA-P01-p04
TSM-L1-TR1-RA-P01-p05
TSM-L1-TR1-RA-P01-p06
TSM-L1-TR1-RA-P01-p07
TSM-L1-TR1-RA-P01-p08
TSM-L1-TR1-RA-P01-p09
TSM-L1-TR1-RA-P01-p10
TSM-L1-TR1-RA-P01-p11
TSM-L1-TR1-RA-P01-p12
TSM-L1-TR1-RA-P02-p01
TSM-L1-TR1-RA-P02-p02
TSM-L1-TR1-RA-P02-p03
TSM-L1-TR1-RA-P02-p04
TSM-L1-TR1-RA-P02-p05
TSM-L1-TR1-RA-P02-p06

2. Enter filename and select the USB flash drive to export LBT file to.
Click the “Export” button to proceed.



3. You will be informed when export is completed.



Note: You are recommended to save your List Based Testing file before exporting.

Saving the List

1. Click the “Save” button to save the completed list. Incomplete list can also be saved for later completion.

The screenshot shows the 'Label List Generator' application window. It features a 'Hierarchy' tab and a 'Point to Point' sub-tab. A table lists various levels of a hierarchy, each with a checked checkbox and input fields for labels. Below the table is a list of generated labels. On the right side, there are buttons for 'Export to USB', 'Export to CSV', 'Save', 'Load', and 'Exit'. The 'Save' button is highlighted with a red rectangle. An information box at the bottom right states: 'Information: Maximum 1000 Label List can be generated.'

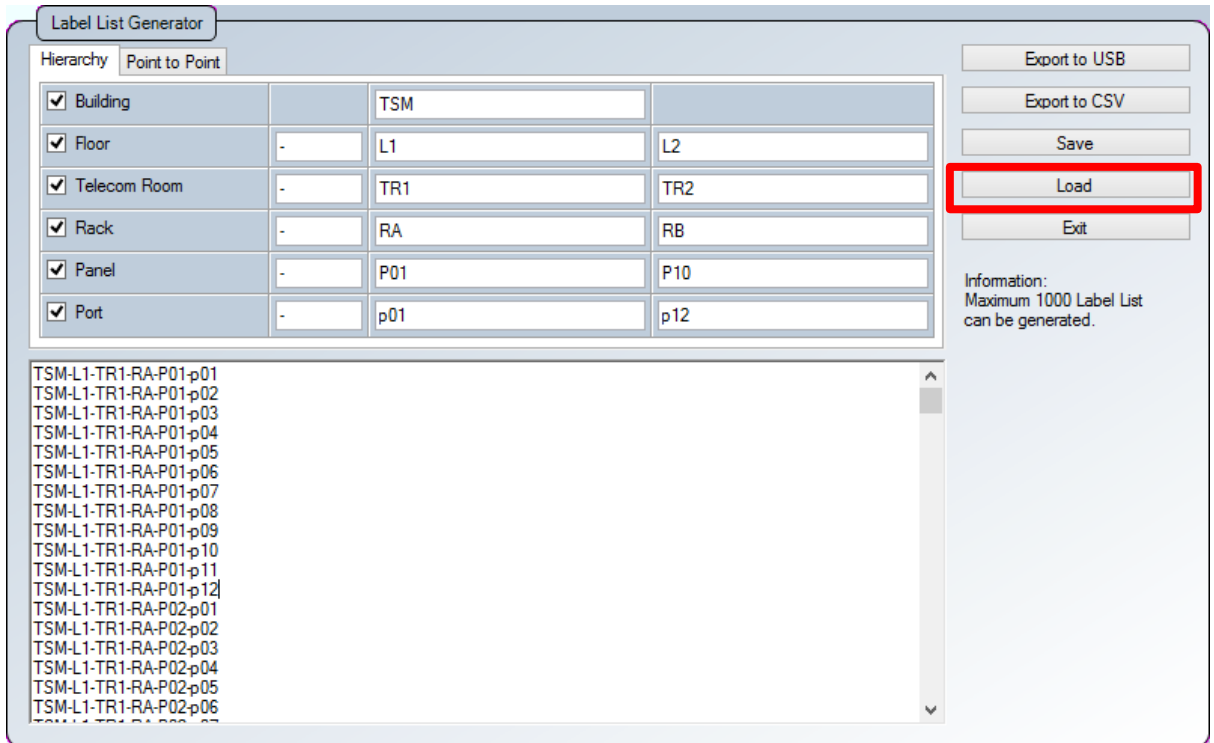
Level	Label 1	Label 2
Building	TSM	
Floor	L1	L2
Telecom Room	TR1	TR2
Rack	RA	RB
Panel	P01	P10
Port	p01	p12

TSM-L1-TR1-RA-P01-p01
TSM-L1-TR1-RA-P01-p02
TSM-L1-TR1-RA-P01-p03
TSM-L1-TR1-RA-P01-p04
TSM-L1-TR1-RA-P01-p05
TSM-L1-TR1-RA-P01-p06
TSM-L1-TR1-RA-P01-p07
TSM-L1-TR1-RA-P01-p08
TSM-L1-TR1-RA-P01-p09
TSM-L1-TR1-RA-P01-p10
TSM-L1-TR1-RA-P01-p11
TSM-L1-TR1-RA-P01-p12
TSM-L1-TR1-RA-P02-p01
TSM-L1-TR1-RA-P02-p02
TSM-L1-TR1-RA-P02-p03
TSM-L1-TR1-RA-P02-p04
TSM-L1-TR1-RA-P02-p05
TSM-L1-TR1-RA-P02-p06

2. Select directory and click the “Save” button to proceed.
Click on the Site name to display test results saved within the site.

Loading the List

1. Click the “Load” button to load a previously saved LBT file.



The screenshot shows the 'Label List Generator' window. It has two tabs: 'Hierarchy' and 'Point to Point'. The 'Hierarchy' tab is active. Below the tabs is a table with columns for hierarchy levels and their corresponding values. The 'Load' button on the right is highlighted with a red rectangle. Below the table is a list of generated labels, and at the bottom right, there is an 'Information' section stating 'Maximum 1000 Label List can be generated.'

Building	Floor	Telecom Room	Rack	Panel	Port
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
TSM	L1	TR1	RA	P01	p01
	L2	TR2	RB	P10	p12

TSM-L1-TR1-RA-P01-p01
TSM-L1-TR1-RA-P01-p02
TSM-L1-TR1-RA-P01-p03
TSM-L1-TR1-RA-P01-p04
TSM-L1-TR1-RA-P01-p05
TSM-L1-TR1-RA-P01-p06
TSM-L1-TR1-RA-P01-p07
TSM-L1-TR1-RA-P01-p08
TSM-L1-TR1-RA-P01-p09
TSM-L1-TR1-RA-P01-p10
TSM-L1-TR1-RA-P01-p11
TSM-L1-TR1-RA-P01-p12
TSM-L1-TR1-RA-P02-p01
TSM-L1-TR1-RA-P02-p02
TSM-L1-TR1-RA-P02-p03
TSM-L1-TR1-RA-P02-p04
TSM-L1-TR1-RA-P02-p05
TSM-L1-TR1-RA-P02-p06

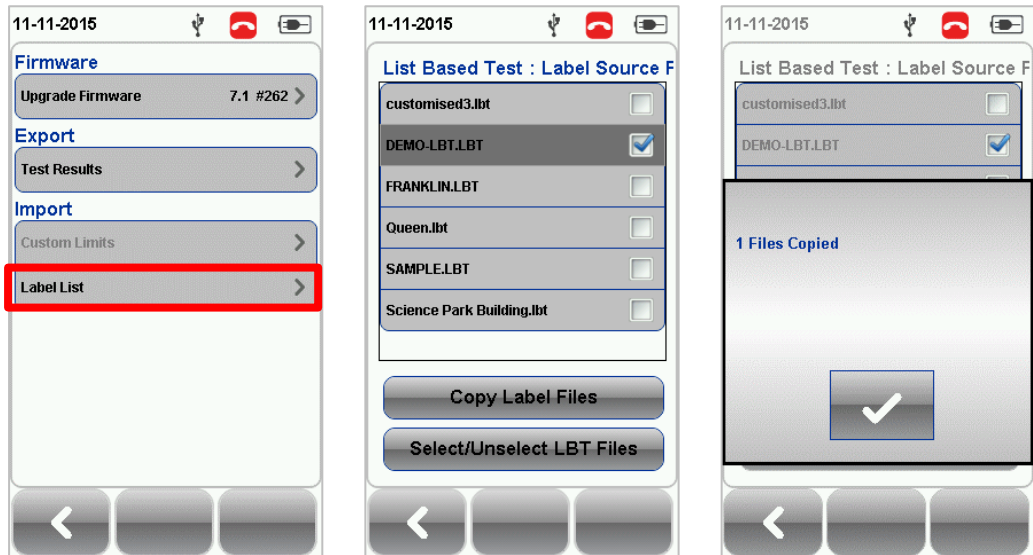
Export to USB
Export to CSV
Save
Load
Exit

Information:
Maximum 1000 Label List
can be generated.

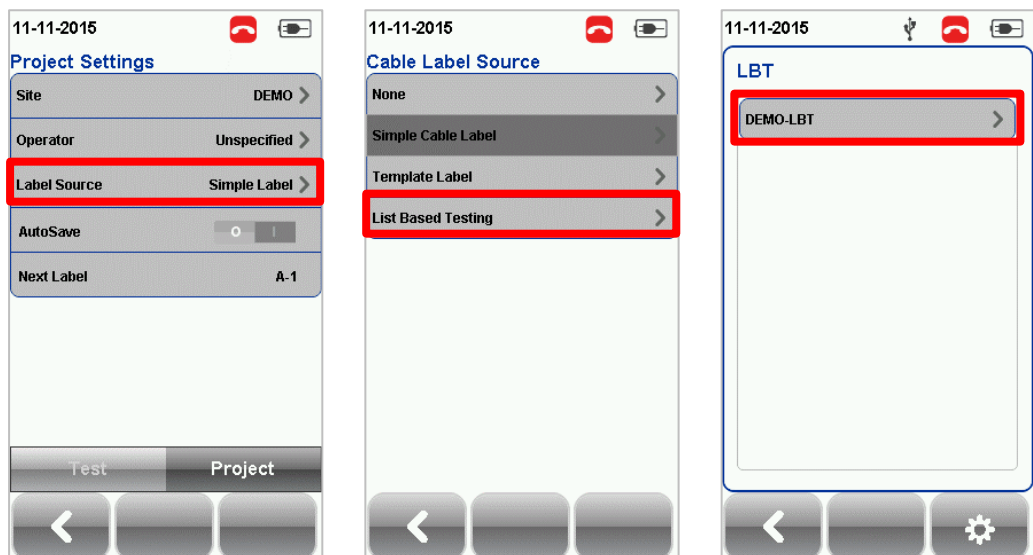
2. Loading a saved LBT file enables amendment or completion to the list.
3. Click the “Save” button to save the updated file.

Importing the List

1. Power on WireXpert.
2. Insert the USB flash drive the LBT file is exported to onto the Local unit of WireXpert.
3. WireXpert will automatically detect the USB flash drive.
4. Select “Label List” and the respective lists you want to import.
5. Select “Copy Label Files”



6. Press the SETUP button > Project Settings > Label Source
7. Select “List Based Testing” and select the LBT file that has just been imported.

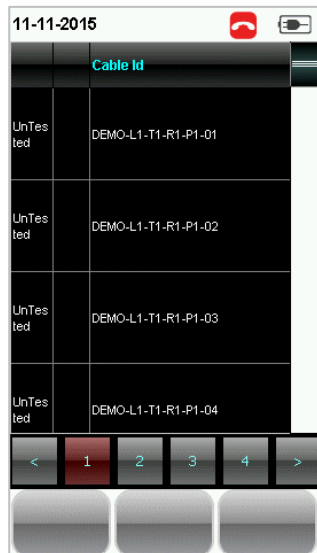


Note: Please ensure you have selected the Site to apply LBT before importing.

Chapter 4: List-Based Testing

Performing the Test

1. Press the AUTOTEST button to load the list. WireXpert will display the labels in hierarchical order per page.



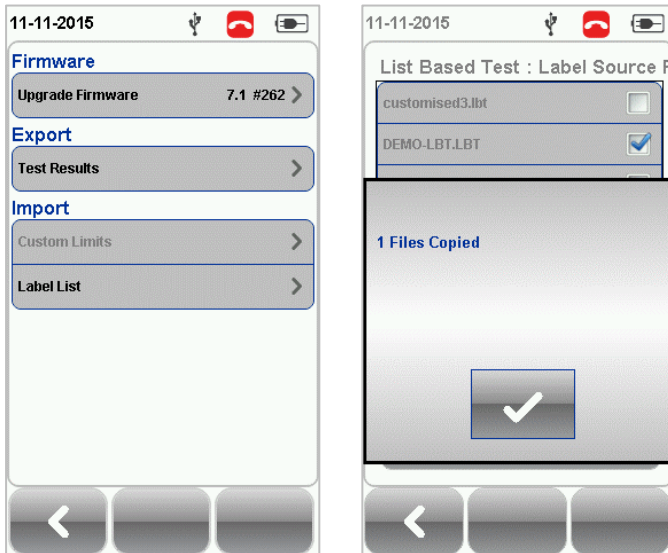
2. Select label from list to perform AUTOTEST.
3. WireXpert will automatically save a PASS result and return to the list, or allows you to save or conduct a re-test for a FAIL result manually.
4. Press the AUTOTEST button to return to the label list.
5. Select a tested label to view the results. A **PASS** and a **FAIL** would be indicated accordingly. A re-test for a failed result can be conducted by pressing retest button.




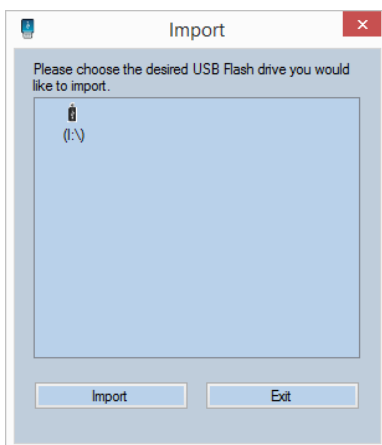
6. Press the AUTOTEST button to return to the label list.

Viewing the List Based Testing Results

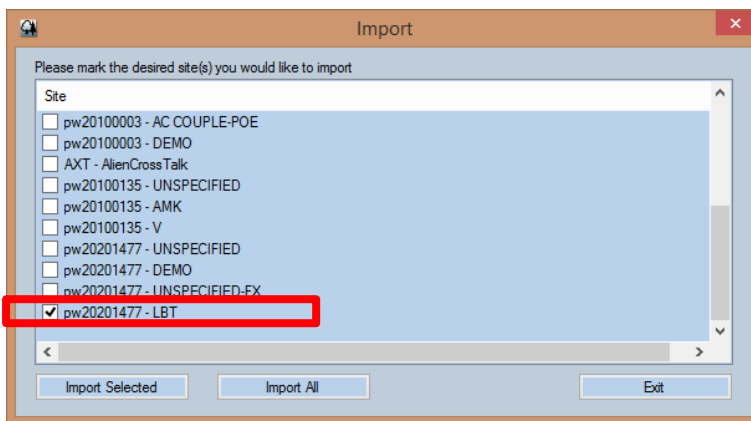
1. Insert the USB flash drive onto the Local unit of WireXpert.
2. WireXpert will automatically detect the USB flash drive.
3. Select Export > Test Results.



1. Insert the same USB flash drive to your workstation and launch eXport software.
2. Go to Import > Device or click the  "USB Flash Drive" icon.
4. Select the Drive you wish to import the Test Result from. Click "Import" to proceed.



- Select the site with the save LBT data and click “Import Selected”.



- Status bar will indicate “Transferring” during the import.



- eXport will load the imported LBT file in hierarchical order once completed.

	Test Type	Device Type	Cable Label	Overall Result	Limit Type	Overall Length (m)	NEXT (dB)
10	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-07	✓	TIA - Cat 6A Channel	2	10.9
11	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-01	✓	TIA - Cat 6A Channel	2	10.6
12	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-02	✓	TIA - Cat 6A Channel	2	11.1
13	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-03	✓	TIA - Cat 6A Channel	2	10.6
14	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-04	✓	TIA - Cat 6A Channel	2	11.0
15	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-05	✓	TIA - Cat 6A Channel	2	11.1
16	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-06	✓	TIA - Cat 6A Channel	2	11.0
17	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-07	✓	TIA - Cat 6A Channel	2	10.7
18	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-08	✓	TIA - Cat 6A Channel	2	10.5
19	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-09	✓	TIA - Cat 6A Channel	2	10.8
20	Copper	Wx4500	FRANKLIN-#01-TEL01-RA-P01-10	✓	TIA - Cat 6A Channel	2	10.9

Summary		Overall Result	
Local Ser. No.	pw20100003	Measurement	Value/Margin
Remote Ser. No.	pw20100004	Length (m)	1.9
Cable Manufacturer	Generic UTP	Delay (ns)	11.0
Cable Name	CAT 6A UTP	Cable NVP (%)	68
Cable Type	UTP	Resistance (Ohms)	2.3
Connector Manufacturer	Un-Shielded Connector	Insertion Loss (dB)	1.4
Connector Name	UTP Mod Jack 6A	Return Loss (dB)	0.7
Connector Type	UnShielded	NEXT (dB)	13.3
Limit	ISO - Class II Draft Channel	PS-NEXT (dB)	15.3
None phase		ACR-F (dB)	20.2
		PS-ACRF (dB)	22.3

Technical Support

Worldwide Offices

Softing's global presence ensures our customers receives sales and technical support anywhere around the world. For more information : <http://itnetworks.softing.com>

North America

Softing Inc.

7209 Chapman Highway

Knoxville, TN 37920

Phone: +1 865 251 5250

E-mail: info@softing.us

Asia / Pacific

Softing Singapore Pte. Ltd.

3 Science Park Drive

#03-09, The Franklin

Singapore Science Park 1

Singapore 118223

Phone: +65-6569-6019 ext. 105

E-mail: asia-sales.itnetwork@softing.com

Softing Shanghai

Room 208, Building 1, No 388, Tianlin Road

Xuhui District, 200233

Shanghai, China

Phone: +86-21-54133123

E-mail: china-sales.itnetwork@softing.com

Europe/Middle East/Africa

Softing IT Networks GmbH

Richard-Reitzner-Alle 6

D-85540 Haar, Munich

Phone: +49 89 45 656 660

E-mail: info.itnetworks@softing.com

Softing SRL

87 Rue du Général Leclerc

Creteil, Île-de-France

94000 (Paris)

Phone: +33 1451 72805

E-mail: info.france@softing.com

Softing Italia Srl.

Via M. Kolbe, 6

20090 Cesano Boscone (MI)

Phone: +39 02 4505171

E-mail: info@softingitalia.it