

## Introduction:



Fig1:SW2012A Coaxial Switch Box

LiTek's SW2012A Test System Consist of two parts, Coaxial Switch Box and RF Test Fixtures. Using the Coaxial Switch Box the customers can enhance the performance and reduce the complex of the testing.

The SW2012A Switch Box provides 4 X 1 to 2 switches, mostly working with Network Analyzer and used to expand from 4 Ports to 8 Ports. In other words, it can be used to test 2 pairs of differential signals. Fixture set will be optionally selected based on DUT type.

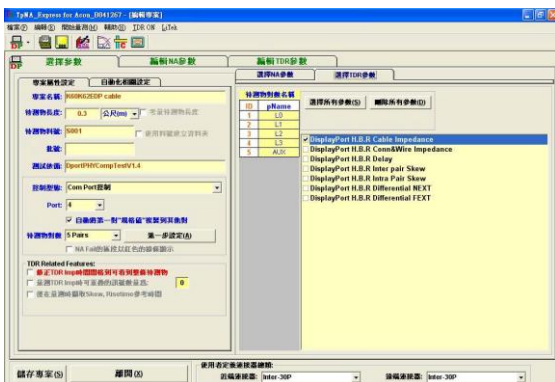


Fig2:TpNA Express Software

LiTek's TpNA\_Express software is well designed to control SW2012A and Network Analyzer. It can be used to build project, recall project, do calibration and output reports.



Fig3: TpNA Express calibration figure

## Features and Specification:

1. Controlled by USB interface.
2. Using TpNA Express GUI easy to test.
3. Isolation:80dB,Insertion Loss 0.2dB
4. Frequency Range: DC~18 GHz.
5. Switch times: 1million times.
6. Support kinds of products by changing the Test Fixture Set.
7. Output Excel and PDF test report.

## Parameters:

### ●S-parameter:

- 1.All S-Parameters
- 2.Attenuation(Insertion Loss/IL)
- 3.Impedance
- 4.Delay
- 5.Return loss
- 6.Delay Skew
- 7.Structure Return Loss(SRL)

### ●Time-Domain Parameter:

- 1.Characteristic Impedance
- 2.Signal Rise-time/Degradation
- 3.Time Delay Skew

### ●Eye Diagram

**Application:**

- USB3.0 Cable Assembly SSTX/SSRX Pairs S-Parameter and Eye Diagram measurements.
- SATA Cable Assembly TX/RX Pairs S-Parameters and Eye Diagram measurement.
- SFP/SFP+ TX/RX Pairs S-Parameters and Eye Diagram measurements.
- Other cables with 2 Differential Pairs.

**What the customers should prepare:**

- PC with Microsoft Windows XP (Service Pack 3 should be updated) or above.
- Monitor, Keyboard and mouse.

**Warranty and Support:**

- SW2012A mainframe would be 1 year warranty in normal use condition.

**Others:**

For others or Customized Fixtures, you can contact LiTek company. We can base on your request to design the suitable Test Fixture for you.

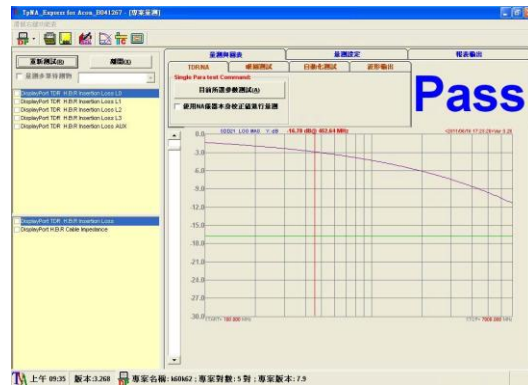


Fig4: TpNA Express testing figure

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