# Datasheet of LT-100R-4A (100 Ohms Raw Cable Test Fixture Set)

Version 1.1

# **Introduction:**



Fig 1: LT-100R-4A Raw Cable Test Fixture Set



### Fig 2: LT-100-3C (2X Raw Cable Calibration Kit)

Most of the interfaces are designed by differential 100 ohms system, just like SATA, SAS, Lan, Infiniband, DVI, HDMI, SFP.. etc. The bandwidth of these interfaces is wide up to 10GHz or more. In this way, a good test fixture (Jig) for testing the raw cable with multi-AWG range becomes very important.

LiTek engineering team devoted 2 years and studied the features of raw cable. Now, LT-100R-4A is suitable for this application.

The LT-100R-4A can be used with many instruments as well as TDR, NA and Pulse Generator ..etc. A engineer can easily inspect the cable performance instead of after assembly.

### **S-Parameter Measurements:**

For S-Parameter measurements, one can do the Full 4-Port Calibration in the end of coaxial cables. Get the touch stone files of the LT-100-3C. De-embed it into the calibration. Then the S-Parameters can be performed.

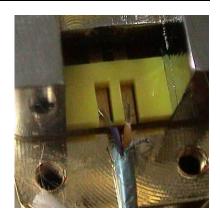
### **TDR Measurements:**

For TDR Parameters, LT-100-3C can be used to remove the electrical length of the fixture set. Clip the raw cable then pressed on the fixture set, one can easily to get the TDR parameters.

## Other Application:

Others like eye diagram measurements can be also performed by ignoring the effect of the fixtures since the calibration of it can not be easily removed.

## **Measurement implementation:**



There is a twin groove for raw cable pressed.

User just need put the conductors of pair contacted with the groove. Put the Yellow-Kit down and press the conductors for the measurements.



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# **Features:**

>>Good impedance control: Differential mode 100 +/- 2.5 Ohms

>>Support both Un-Shielded Twist Pair (UTP) and Shielded Twist Pair (STP) cables.

>>Intra Pair Skew: Less than 2ps for each pair.

>>Inter Pair Skew: Less than 5ps for all pairs.

>>Multi-AWG support: 24AWG ~ 40AWG.

>>Low Loss (2X Kit): Less than -3dB @8GHz. (It means

single pair loss will be less than -1.5dB@ 8GHz.)

>>Used for most of interfaces cable: Lan, HDMI, DVI,

SATA, USB3.0, DisplayPort, SFP, PCI-Express

Cable, ...etc.

### Standard Package:

Product Name	Description	Q'ty
LT-100R-4A set	Each set is with	2 Set
	4 pairs of	
	LT-100R-4A	
	fixture.	
LT-100-3C	2X Traces	1 EA
	Calibration Kit.	

### Warranty:

This set is sold with 1 year warranty. Shipment cost is not included.

## **Sales and Contact Information:**

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