

# Channel to Channel Skew Measurements

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# Components of Skew

## ◆ Electrical Skew

- You must use the same electrical cables for all channels to get an accurate measurement

## ◆ Optical Skew

- You must use a short fiber ribbon so not to introduce any optical skew



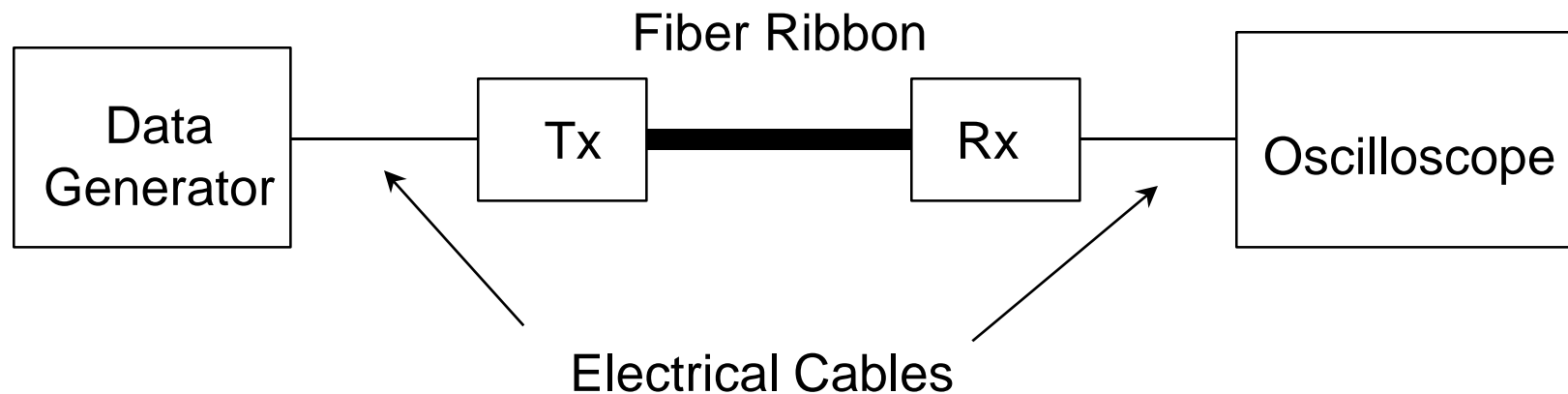
# Test Set Up

Equipment Needed:

Data Generator with minimum data rate of 500Mb/s

1 meter 12 ribbon fiber

Digital Oscilloscope



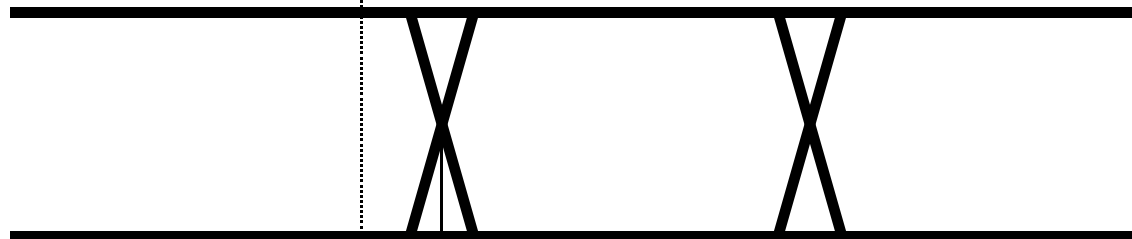
# Measurement

Reference Channel (Channel 0)



Marker

Measured Channel (Channel 1)

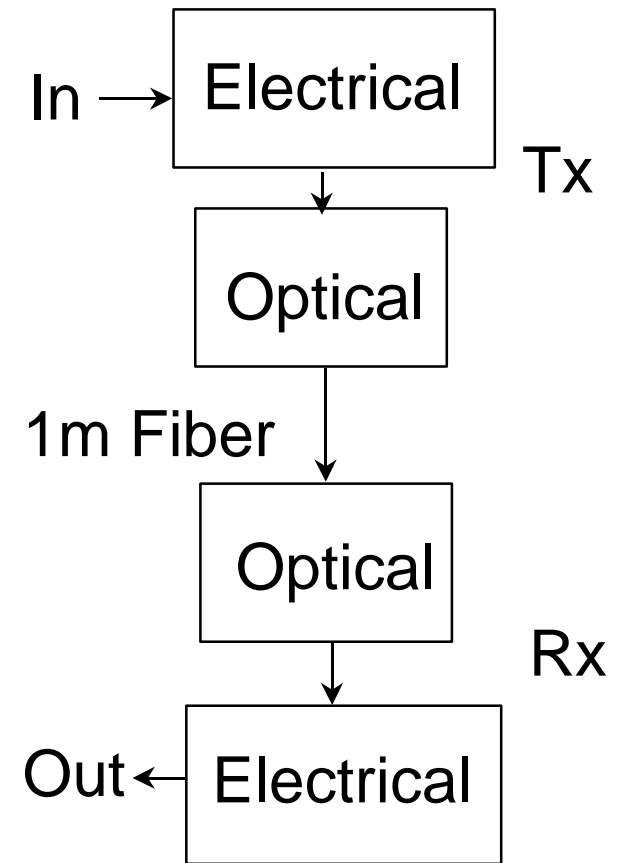
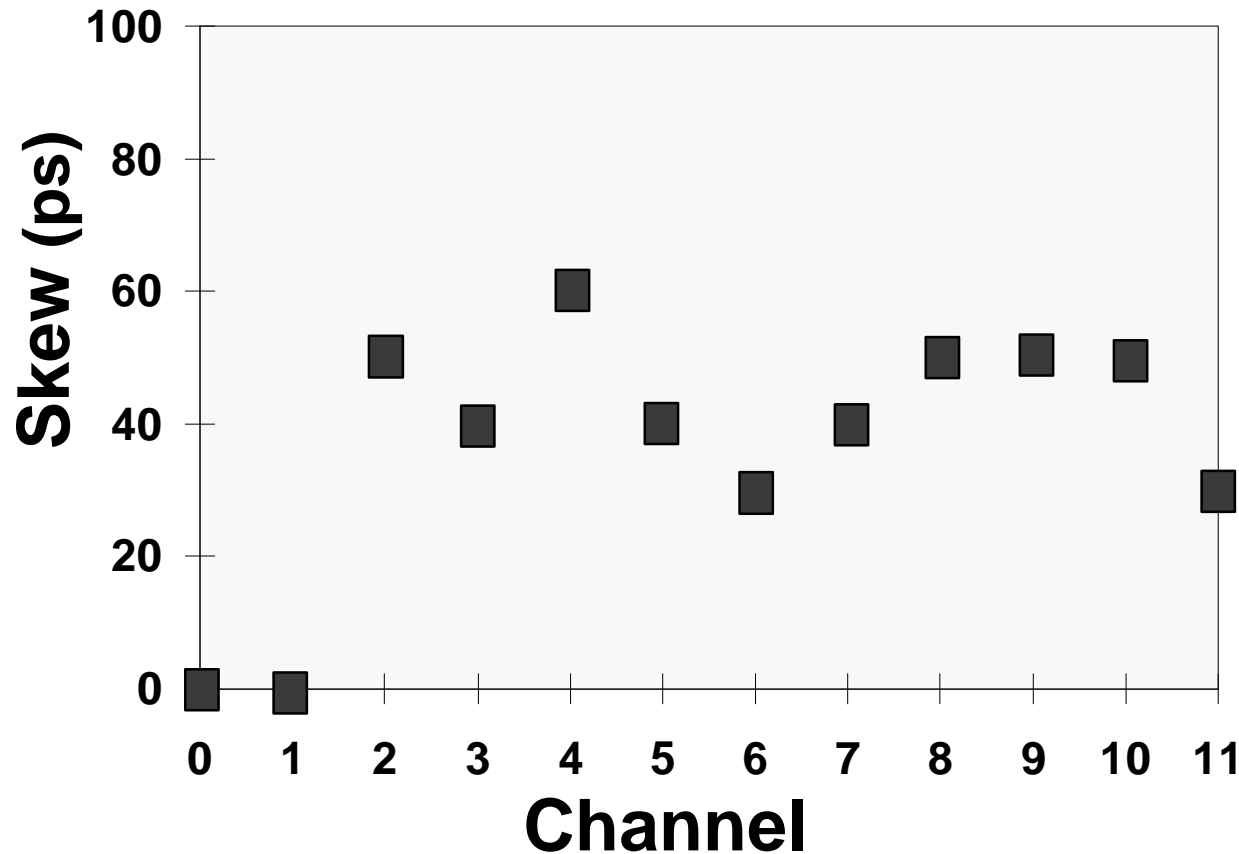


Skew (ps)



# Back to Back Skew Property

12 Channels



# Fiber Skew Measurements

- ◆ Once you know the module skew, you can measure the skew for fiber ribbons.
- ◆ Fiber vendors can use low skew modules to measure skew in Skew Matched cables.

