Getting Started with TDSCPM2

You can use this side of the Quick Reference to start to take measurements with the Communication Pulse Measurement Application (TDSCPM2). The other side contains a complete menu tree for the TDSCPM2 application.

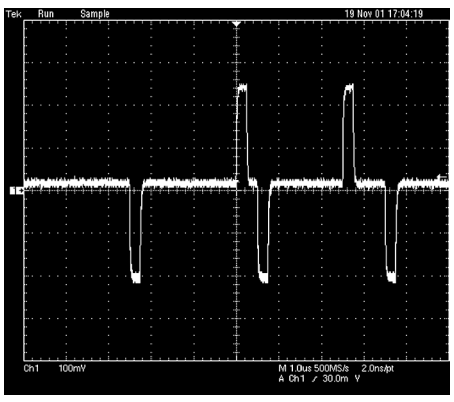
> ***NOTE.*** *For complete operating instructions and General Safety information, refer to the Online Help for the application.*

The TDSCPM2 application is the third generation Digital Interface Test System (DITS) technology from Tektronix.

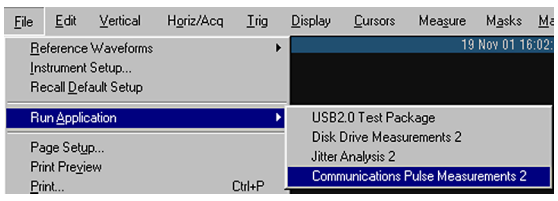
The application helps you to test if your communications signal meets the compliance test requirements of the telecommunications industry for low speed electrical interfaces. The application supports the ITU-T G.703 and ANSI T1.102 standards.

Performing a compliance test

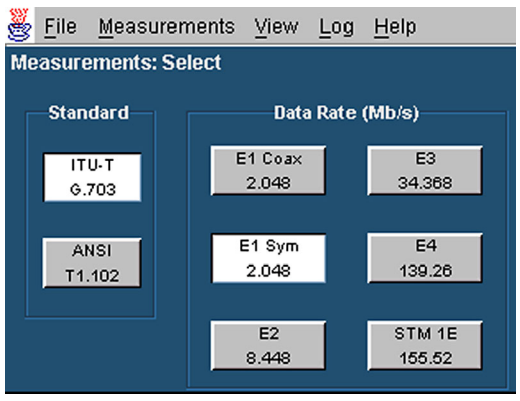
1. Use an AMT75 differential signal or AFTDS 75/50 Ω electrical interface adapter to connect the device under test to Ch1 of your oscilloscope.
2. Push the Autoset button on the front panel of the oscilloscope. The oscilloscope displays the signal to test for compliance.



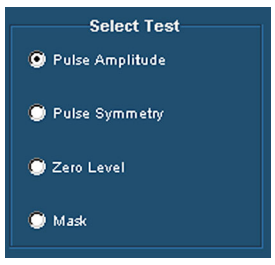
3. Select File> Run Application> Communications Pulse Measurements 2 in the oscilloscope menu bar.



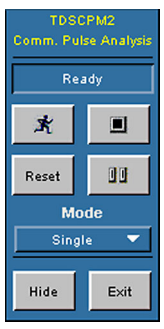
4. Select an Industry Standard and Data Rate.



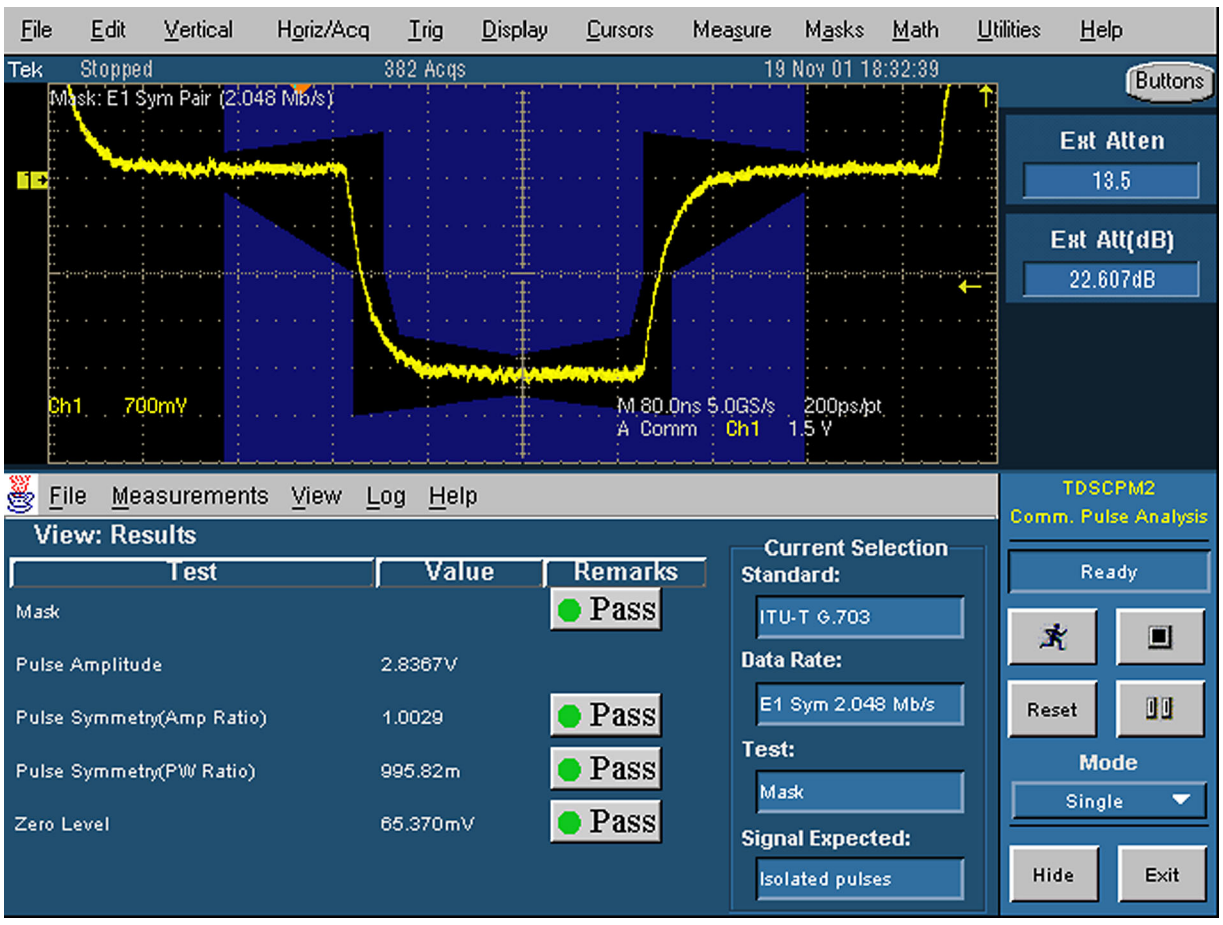
5. Select the Pulse Amplitude test in the Select Test area.



6. Push the "Running Man" button to start taking measurements.



7. To perform a complete suite of compliance tests, repeat steps 5 and 6 for the Pulse Imbalance Variation, Spectral Power, and Mask tests. The figure below shows an example of the final result.



Generating a Compliance Report

To produce a compliance test report, select Log > Statistics.

Automating the Test Process

You can automate Compliance Testing through GPIB control of supported oscilloscopes.

For up-to-date information on Tektronix oscilloscope solutions for communication physical layer testing, access the www.tektronix.com Website.

TDSCPM2 Ordering Information

This application supports TDS5000B, TDS6000B, TDS6000C, TDS7000B, TDS7000, CSA7000B, and CSA7000 series oscilloscopes; refer to the *Optional Applications Software on Windows Based Oscilloscopes Installation Manual* for a list of specific models. The applications CD includes a PDF file of the installation manual.

If you order Option CP2 with a new oscilloscope:

- Communications Pulse Measurements Application is installed and enabled

To order an upgrade for an existing oscilloscope:

- Order the TDS5BUP Option CP2
- Order the TDS6BUP Option CP2
- Order the TDS7UP Option CP2
- Order the CSA7BUP Option CP2
- Order the CSA7UP Option CP2

Option SM, Serial Communication Masks (standard on CSA and optional on TDS) is required.

> ***NOTE.*** *The CP2 option is not available on TDS5000 or TDS6000 series oscilloscopes.*

Recommended Accessories

AFTDS – Telecom Electrical Interface Differential Signal Adapter

AMT75 – 1 GHz precision 75/50 Ω Adapter (5x)

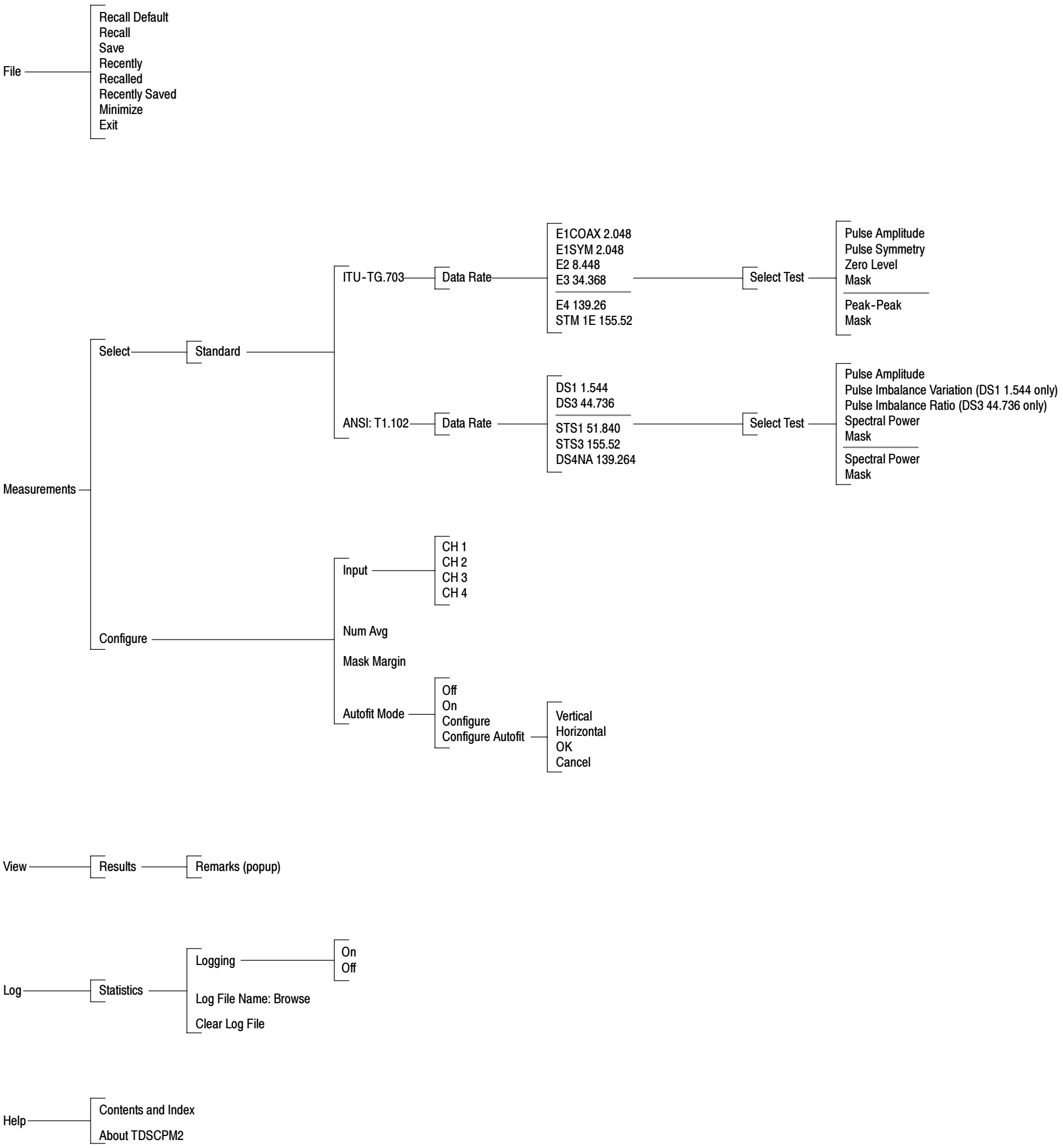
> ***NOTE.*** *To ensure the proper impedance termination for DS1 signals, it is highly recommended that you use ADC, part number CCCBSMB04 (precision 100 Ω bantam cable) with the AFTDS adapter.*

TDSCPM2
Communications Pulse Measurements Application Reference

www.tektronix.com

071-1083-05

TDSCPM2 Menu Tree



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