Getting Started with TDSPWR3

You can use this side of the Quick Reference to start to take measurements with the Power Measurement and Analysis Software (TDSPWR3). The other side contains a complete menu tree for TDSPWR3 software.

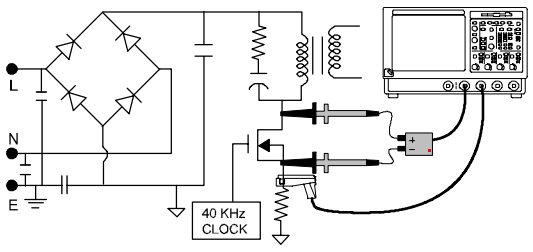
NOTE. For complete operating instructions and General Safety information, refer to the Online Help for the application.

The TDSPWR3 Power Measurements and Analysis software transforms a digital oscilloscope into an analysis tool that measures and analyzes power dissipation in power supply switching devices and magnetic components. It then generates detailed test reports in customizable formats.

Performing a Switching Loss Measurement

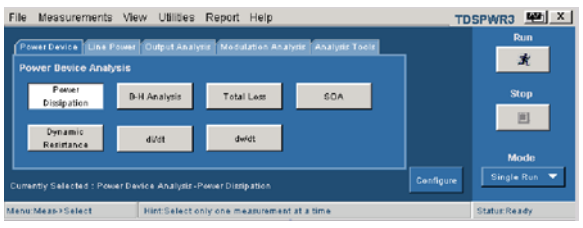
To measure Switching Loss, follow these steps:

1. Select File> Run Application> TDSPWR3 in the oscilloscope menu bar.
2. Connect the probes to the device under test. For example, the test setup for Switching Loss is shown below.

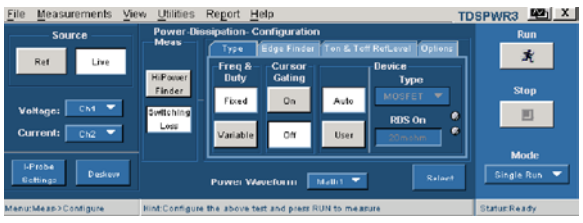


⚠ *WARNING. When connecting to a circuit with hazardous voltages, refer to the warnings for the individual products and verify that the probes and other components are used within their ratings.*

3. In the Power Device tab, select Power Dissipation. Press Configure.

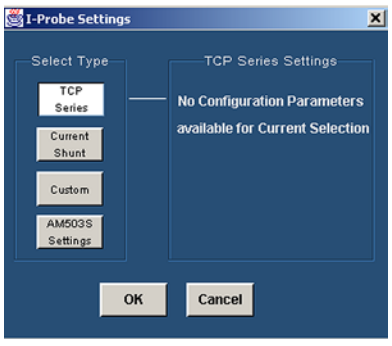


4. Select the Switching Loss option.

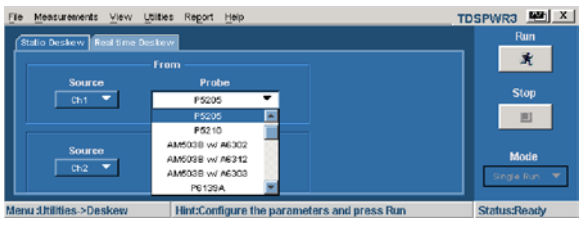


5. Configure the options in the common configuration panel.

6. Select the Source and assign the Voltage and Current channels.
7. Set the appropriate I-Probe settings.

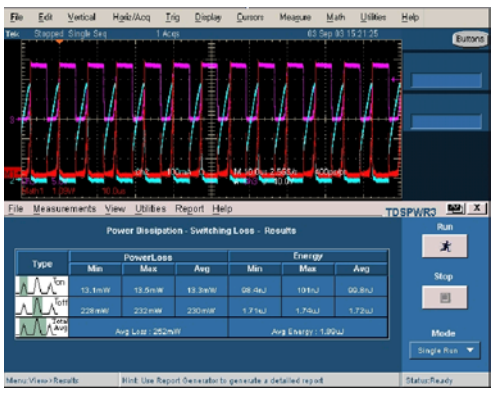


8. Select the Deskew option or select Utilities>Deskew to deskew.

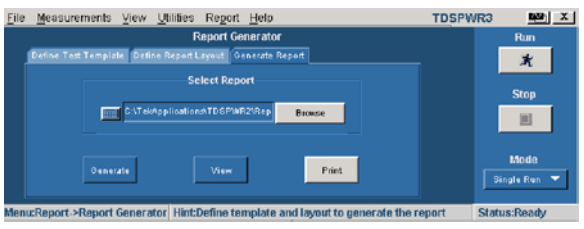


9. Push the "Running Man" button to start taking measurements. If the measurement is successful, the application automatically displays the results. You can also view the results by selecting View> Results from the application menu bar.

10. The application displays results for the measurement.



11. To generate a report, select Report> Report Generator.
12. Select the template in the Generate Report tab.
13. Select the Generate button to post the test data to the template.



For up-to-date information on Tektronix oscilloscope solutions for Power Measurement, access the www.tektronix.com/Measurement/scopes/ web page.

TDSPWR3 Ordering Information

This application supports the TDS5000B, TDS5000, TDS6000C[1],TDS6000B[1], TDS6000[1], TDS7000B[1], TDS7000[1], CSA7000B[1], and CSA7000[1] series oscilloscopes; refer to the *Optional Applications Software on Windows Based Oscilloscopes Installation Manual* for a complete list of supported models. The applications CD includes a PDF file of the installation manual.

If you order Option PW3 with a new oscillscope:

- Power Analysis and Measurements Software is installed and enabled

To order an upgrade for an existing oscilloscope:

- Order the TDS5BUP Option PW3
- Order the TDS5UP Option PW3
- Order the TDS6BUP Option PW3
- Order the TDS6UP Option PW3
- Order the TDS7BUP Option PW3
- Order the TDS7UP Option PW3
- Order the CSA7BUP Option PW3
- Order the CSA7UP Option PW3

Recommended Accessories

Opt. 3M for TDS5000B series

Opt. 2M for TDS5000 series

Opt 2M or 3M for TDS6000B series

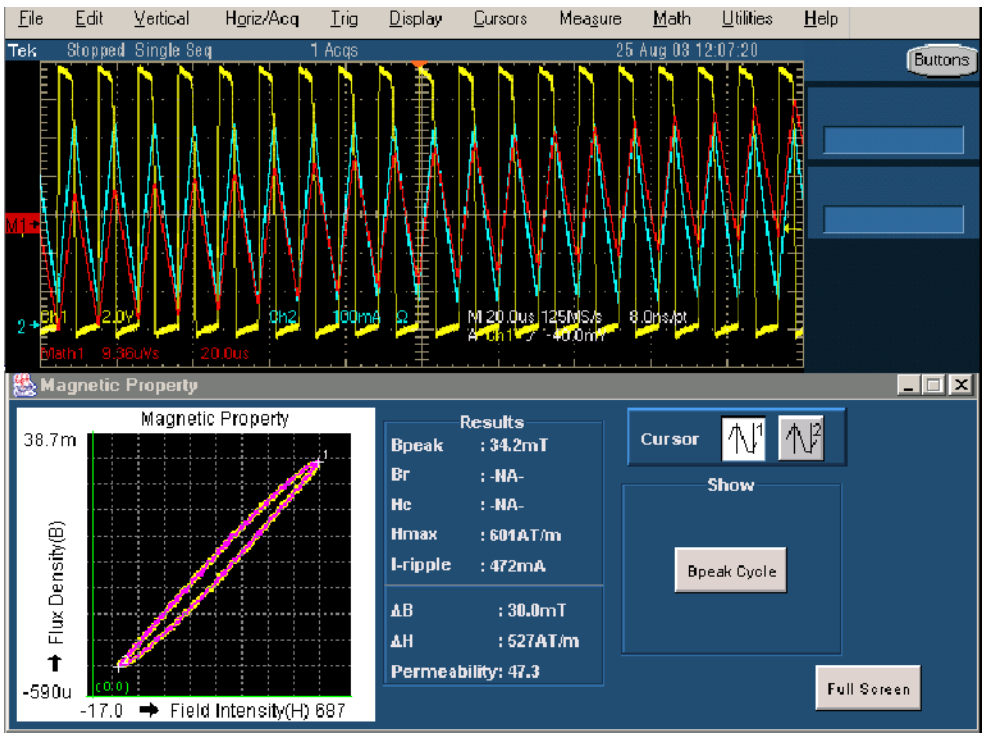
Opt 2M, 3M, or 4M for TDS7000B or CSA7000B series

Deskew Fixture – 067-1478-00

Current Probe – Order TCP202, TCPA300, TCPA400 or AM503B with A63XX probes

Differential Probe – Order P5205, P5210, P5200 and ADA400A

[1]Probe adapter – TCA–1 MEG, while using 1 MΩ voltage probes with a TekScope and TekConnect devices.

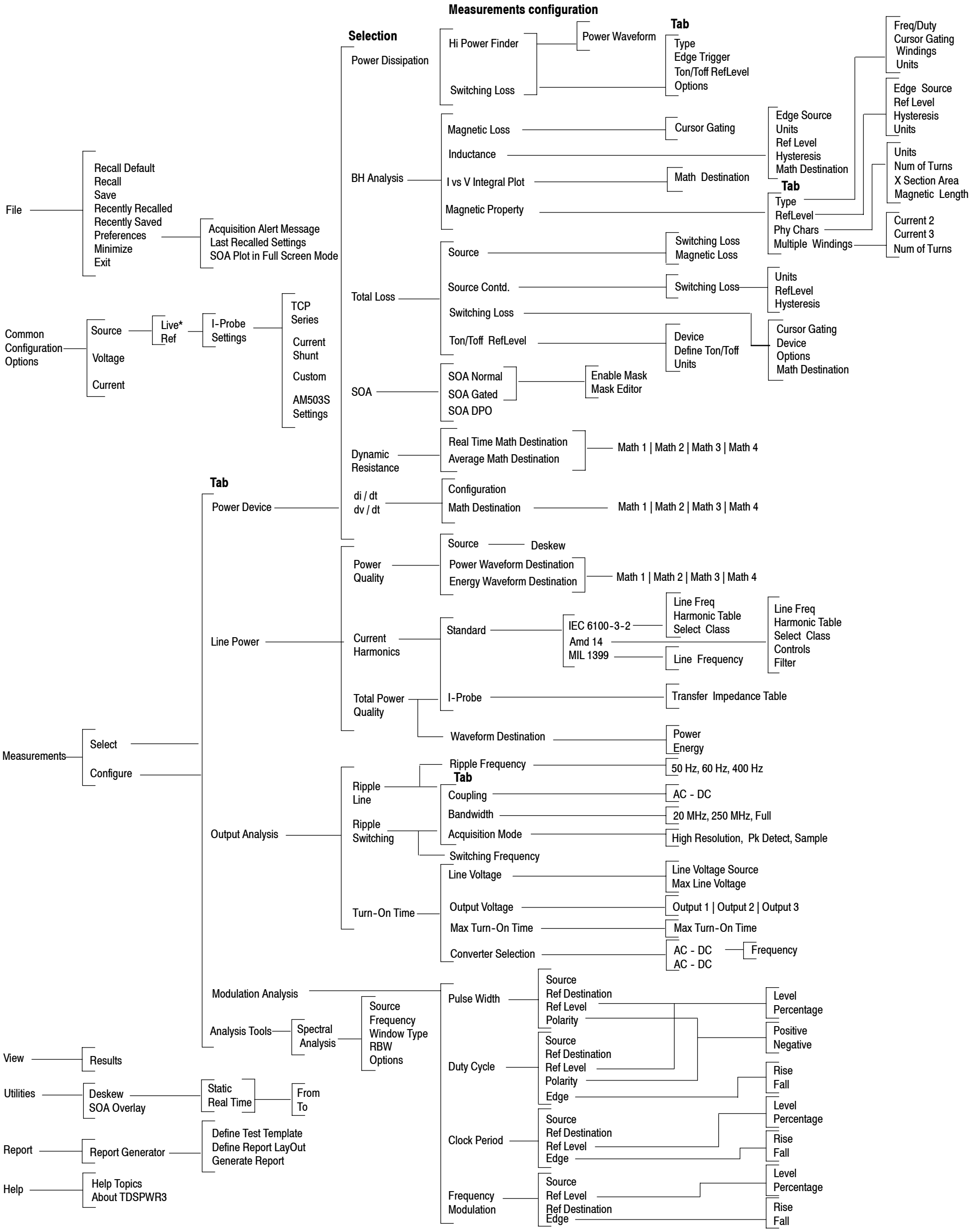


TDSPWR3
Power Measurement and Analysis Reference

www.tektronix.com

071-1397-04

TDSPWR3 Menu Tree



* You can also select Math channels with Live signals.

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