Getting Started with TDSHT3

You can use this side of the quick reference card to get started with the Source Clock-Data Tests Select All test procedure. The other side contains a complete menu tree for the TDSHT3 HDMI Compliance Test Software.

NOTE. For additional procedures, refer to the TDSHT3 Quick Start User Manual. For complete operating instructions, refer to the online help.

TDSHT3 HDMI Compliance Test Software enables unprecendented efficiency by providing a comprehensive range of tests, including Jitter Tolerance.

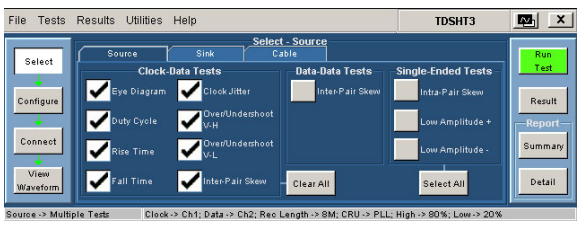
Source Clock-Data Tests Select All

This option enables you to run the Eye Diagram, Duty Cycle, Rise Time, Fall Time, Clock Jitter, Over/Undershoot V-H, Over/Undershoot V-I, and Inter-Pair Skew test simultaneously.

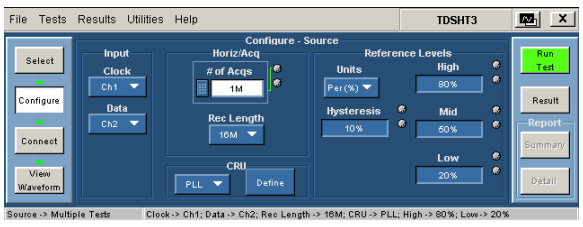
You will need one supported oscilloscope, two differential probes, one DC power supply 3.3 V, one EDID emulator, and one TPA-P-DI fixture.

Follow these steps:

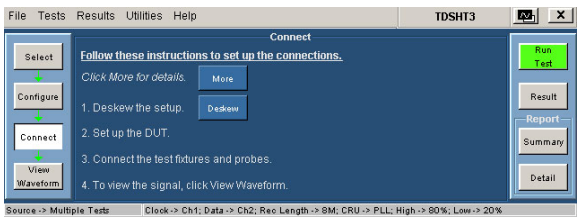
1. On the menu bar, click **Tests > Select > Source**.
2. In the clock-data tests pane, click **Select All**.



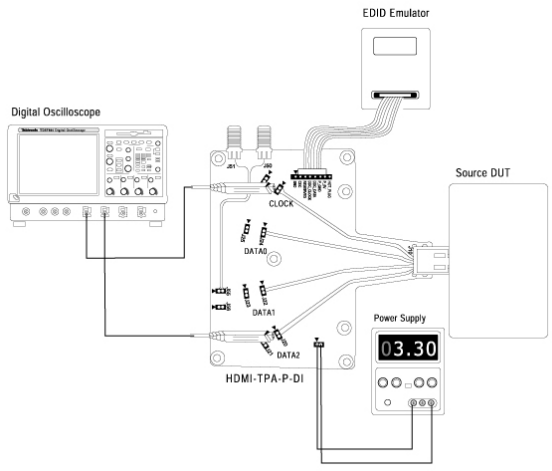
3. To change the configuration settings, click **Tests > Configure**. For most tests, you can use the factory default configuration. However, you can change the values by using the virtual keyboard or the general purpose knob on the oscilloscope front panel. Using the File menu, you can also restore the factory defaults or save and recall your own configuration settings.



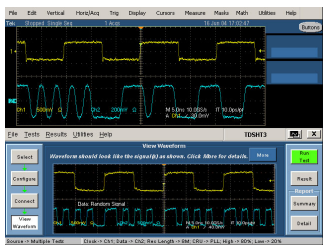
4. To connect the DUT, click **Tests > Connect**.



5. Make the connections as follows:

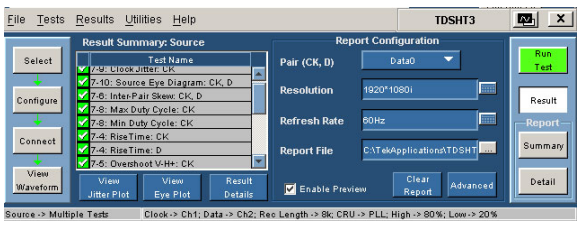


6. Ensure that your signal in the oscilloscope display is similar to the sample signal. Click **View Waveform** to display a sample of the expected signal. If the displays are not similar, go back and check your configuration and connections.

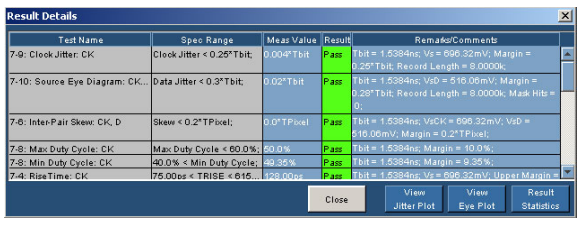


7. Click **Run Test** to perform the test. The TDSHT3 HDMI Compliance Test Software sets up the oscilloscope and the test runs displaying a progress indicator.

8. If you have run the tests successfully, the software makes **Result** available automatically and displays the eye diagram plot and the clock jitter plot. You can also view both the result summary of the test and the report configuration in the result pane.



9. In the result summary pane, click **Result Details** to display the results of the tests.



10. In the **Result Details** dialog box, click **Result Statistics** to display statistics based on the tests.

The software calculates statistics for each selected test, and logs the statistics on a cycle-by-cycle basis in a fairly large waveform. The standard statistics are for the Maximum, Minimum, Mean, Standard Deviation, and Population.

For up-to-date information on Tektronix oscilloscope solutions for HDMI Compliance Test Software, access the www.tektronix.com Web page.

TDSHT3 Ordering Information

This software supports the TDS6000B, TDS6000C, TDS7254/B, TDS7404/B, CSA7404/B, TDS7704B, and DPO/DSA70000 series of 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 online help.

To order along with oscilloscope:

- Opt. HT3 - HDMI Compliance Test Software

To order an upgrade for an existing oscilloscope:

- TDS6000B - Order TDS6BUP - Opt. HT3
- TDS7000/B - Order TDS7UP/7BUP - Opt. HT3
- CSA7000/B - Order TDS7UP/7BUP - Opt. HT3

Recommended Accessories

Oscilloscopes

- 16M Record Length/Ch - Opt. 4M or more (for Eye Diagram and Jitter tests)
- Serial Trigger - Opt. ST (for Inter-pair Skew tests)

HDMI Pattern Sources

- Jitter Generation - AWG710B (for Sink tests)
- Test Pattern Generation - DTG5274 and DTGM30 for Sink Tests (three required)

TDR Tests

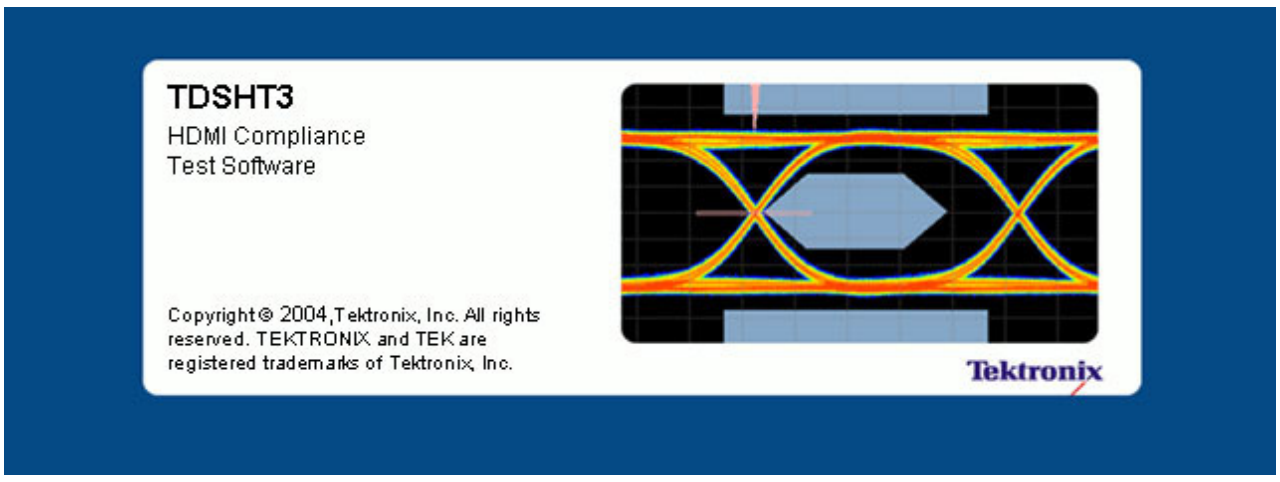
- Oscilloscope - TDS8000B with 80E03 and 80E04 modules

Probes

- Differential Probes - P6330, P7330, P7350 (two probes required), and P7380
- Active Probes - P7240 and above (two probes required)
- Probe Positioner - PPM100 Flexible Arm Probe Positioner

Test Fixtures

- Plug type - HDMI TPA-P adapter set - 013-A013-50
- Receptacle type - HDMI TPA-R adapter set - 013-A012-50

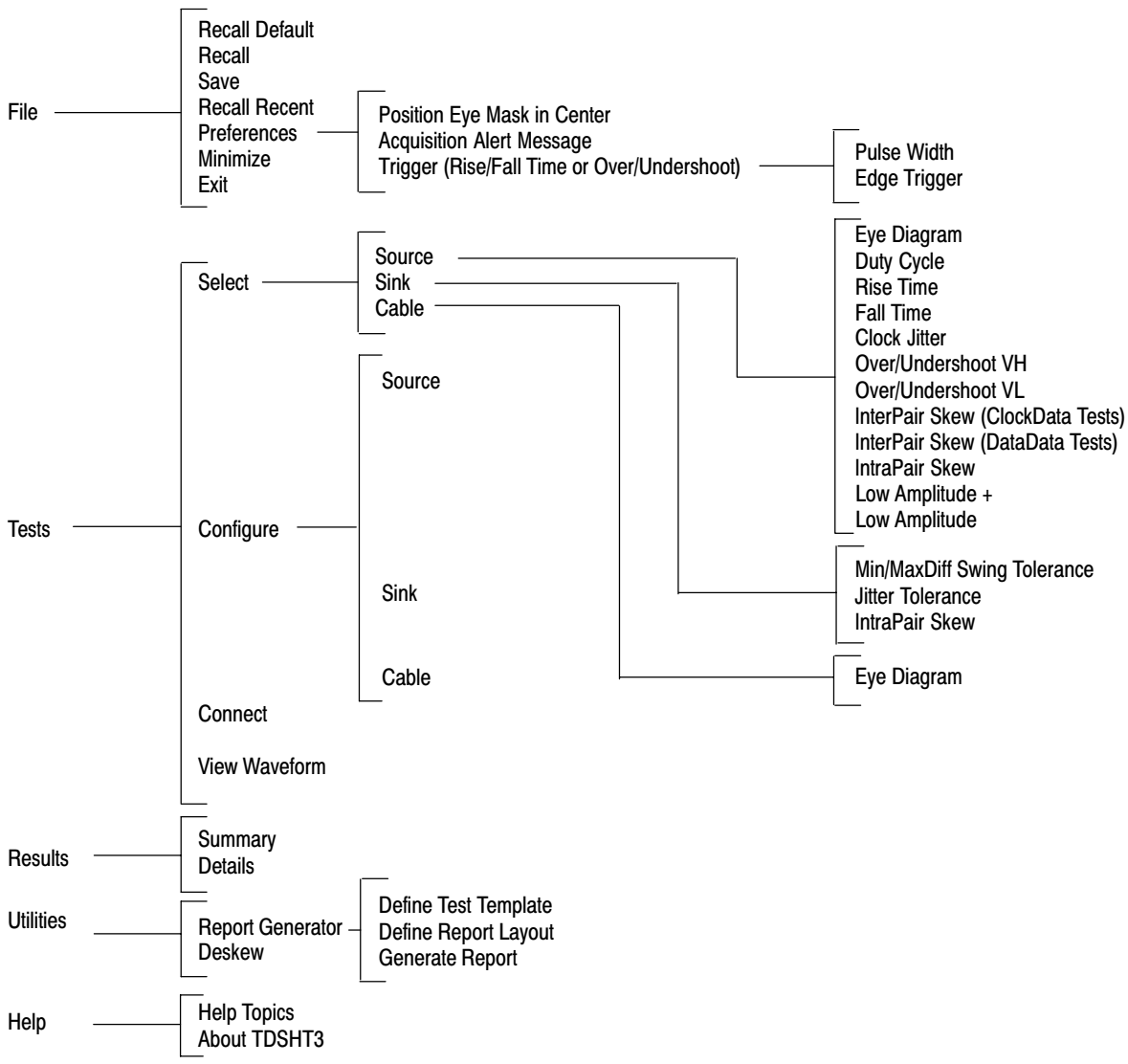


TDSHT3
HDMI Compliance Test Software
Reference
Source Test

www.tektronix.com

071-1959-01

TDSHT3 Menu Tree



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