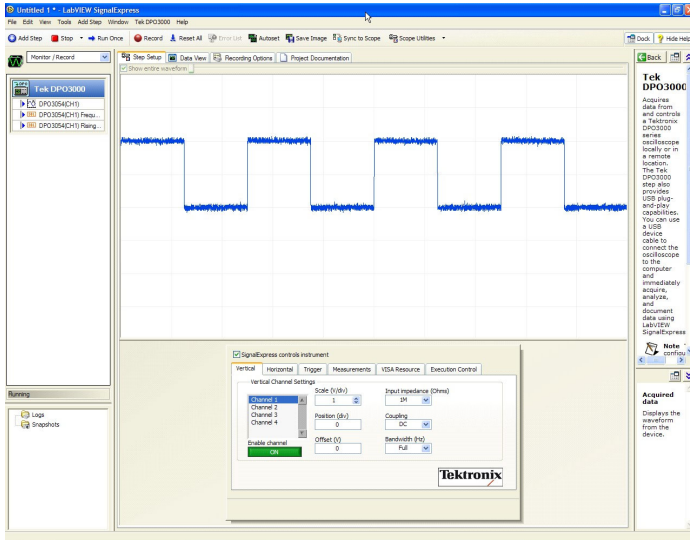# Tektronix Edition of NI LabVIEW SignalExpress™

SIGEXPTE Data Sheet

Features & Benefits

- Provides Instrument Control for the MSO/DPO4000, MSO/DPO3000, MSO/DPO2000, TDS3000C, TDS2000B, and TDS1000B Series Oscilloscopes, AFG3000 Series Arbitrary/Function Generators, and DMM4000 Series Multimeters

- Quickly Start Measuring with an Intuitive Drag-and-Drop Interface that Does Not Require Any Programming

- Measurement Trending

- Data Logging

- Advanced Analysis and Documentation Capabilities

- Quickly and Easily Import Simulated Results and Compare against Actual Measured Results Live on the Screen

- Automatic Frequency Sweeping

- Limit Testing

- Connect and Control Multiple Instruments from within One Software Environment

Tektronix

Industry's first true USB plug-and-play connectivity for oscilloscopes.

Increase Your Productivity with the Industry's Most Seamless Instrument-to-PC Connectivity Solution

Configuring test instruments to connect with PC-based software is often a difficult and frustrating challenge. That's why Tektronix and National Instruments have partnered together to create the Tektronix Edition of National Instruments LabVIEW SignalExpress™ – interactive measurement and analysis software designed for design and test engineers who need to quickly acquire, analyze, and document measurements without the added complication of programming.

USB Plug-and-Play

With USB plug-and-play support, NI LabVIEW SignalExpress TE immediately detects and configures Tektronix instruments when connected to a PC[*1], providing a live view of the data acquisition and immediate control of the instrument.

Import and Compare

Integrate measurements with simulated results from popular design software tools such as PSpice, SPICE, and Multisim. This enables quick and easy importing and comparing of simulated results – saving time and improving design accuracy.

Capture and Document

Quickly capture and document measurements by simply dragging-and-dropping acquired data and waveform captures directly into Microsoft Excel, Word, Outlook, PowerPoint, and WordPad. Or annotate waveforms and measurements in the interactive project documentation tool.

Advanced Analysis

NI LabVIEW SignalExpress TE contains more than 200 different measurement, processing, analysis, and reporting capabilities that can be applied to data being acquired from Tektronix instruments.

Measurement Trending – Automated measurements from the oscilloscope or multimeter are graphed over time to provide a simple indication of trends in the measurement parameters.

Data Logging – Waveform data and measurements can be automatically logged to the PC's disk drive for unattended and long-term monitoring applications.

Automated Measurements

Take advantage of several major time-saving features, including automated measurement sweeping and limit testing. These features provide relief from a traditionally manual and time-intensive process.

Connect and Control

Remove the guesswork when connecting the test instrument to a PC by connecting and controlling multiple instruments from one software environment, all within a single drag-and-drop user interface.

SIGEXPTE

The LE version of NI LabVIEW SignalExpress TE comes standard with the MSO/DPO4000, MSO/DPO3000, MSO/DPO2000, TDS3000C, TDS2000B, and TDS1000B Series oscilloscopes, and the DMM4000 Series multimeters. SIGEXPTE adds extended analysis capabilities.

[*1] Compatible with the MSO/DPO4000, MSO/DPO3000, MSO/DPO2000, TDS2000B, and TDS1000B Series oscilloscopes and the AFG3000 Series Arbitrary/Function Generator. Requires Microsoft Windows XP/2K or newer operating system.

NI LabVIEW SignalExpress TE Features - LE Version and SIGEXPTE Version

Features	LE Version	SIGEXPTE Version
Instrument Control*2 (Horz Vert Trig Pos)	X	X
Customizable Graphs and Interactive Cursors	X	X
Tektronix Instrument Support through USB	MSO/DPO4000 MSO/DPO3000 MSO/DPO2000 TDS2000B TDS1000B AFG3000 DMM4050 DMM4040 DMM4020	
Tektronix Instrument Support through Ethernet	MSO/DPO4000 MSO/DPO3000 MSO/DPO2000 TDS3000B TDS3000C AFG3000 DMM4050 DMM4040	
Tektronix Instrument Support through GPIB	DMM4050, DMM4040	
	TDS3000/TDS3000B/TDS3000C Series with TDS3GV module	
	TDS2000/TDS1000 Series with TDS2CMA module	
	MSO/DPO4000, MSO/DPO3000, MSO/DPO2000, TDS2000B, TDS1000B, and AFG3000 Series with TEK-USB-488 adapter	
Generic IVI Support for Hundreds of Common Benchtop Instruments	X	X
pSpice, SPICE File Conversion from EDA Tools	−	X
Save Signals to File	X	X
Basic Logging to Disk	X	X
Advanced Data Logging (including alarms and events)	−	X
Drag and Drop Data into Microsoft Excel and Word	X	X
Interactive Reporting	−	X
Measurement Trending	X	X
Advanced Analysis	−	Amplitude and Level Timing and Transition Histograms Power Spectrum Frequency Response Distortion Tone Extraction
Signal Processing	−	Software Filtering Scalar/Waveform Math Analog/Digital Conversion Windowing Scaling and Conversion
Automated Sweeping and Limit Testing	−	X
NI LabVIEW Integration	−	X

*2 Controls only analog channels on MSO4000, MSO3000, MSO2000.

Characteristics

System Requirements

Characteristic	Minimum	Recommended
Operating System	Windows XP/2000	Windows XP/2000/Vista
RAM	512 MB	>512 MB
Processor	Pentium III or later or Celeron 600 MHz or equivalent	Pentium 4 or equivalent

Ordering Information

SIGEXPTE
National Instruments LabVIEW SignalExpress Tektronix Edition Software.

CE

ISO 9001 — Product(s) are manufactured in ISO registered facilities.

GPIB IEEE-488 — Product(s) complies with IEEE Standard 488.1-1987, RS-232-C, and with Tektronix Standard Codes and Formats.

For Further Information. Tektronix maintains a comprehensive, constantly expanding collection of application notes, technical briefs and other resources to help engineers working on the cutting edge of technology. Please visit **www.tektronix.com**

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