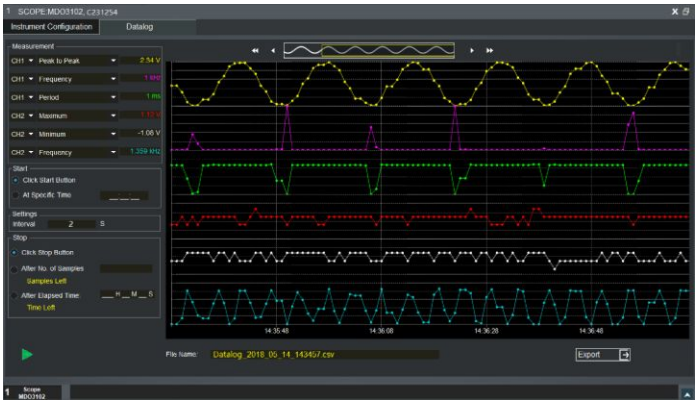
Control Software For Oscilloscopes

TekBench™ Software Datasheet



TekBench™ is PC software that controls Tektronix oscilloscopes. It offers intuitive instrument control, automated measurement data logging, and easy waveform exporting with required format to eliminate extra time and effort. It allow users to focus on their experiment rather than learning the instrument.

Key features

- Simple connection to instruments
- Intuitive interface to control and monitor instruments
- Easily capture and export results in required formats
- Automated measurement data logging

Application

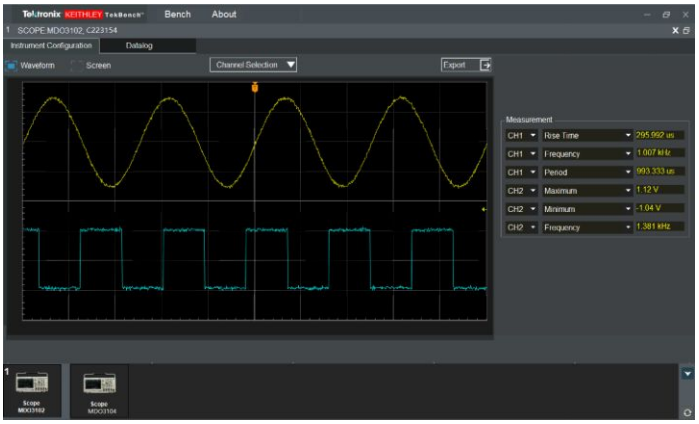
- Project laboratories and senior design laboratories

Simple connection to instruments

Because of the plug and play USB interface, only a USB cable is needed to connect the instrument to the computer. Without any configuration, the instrument is detected by the software within seconds.

The instrument connected to a computer through the USB interface

Once connected, double click the instrument icon and the selected instrument will be loaded into the software automatically.



The selected oscilloscope loaded into the software

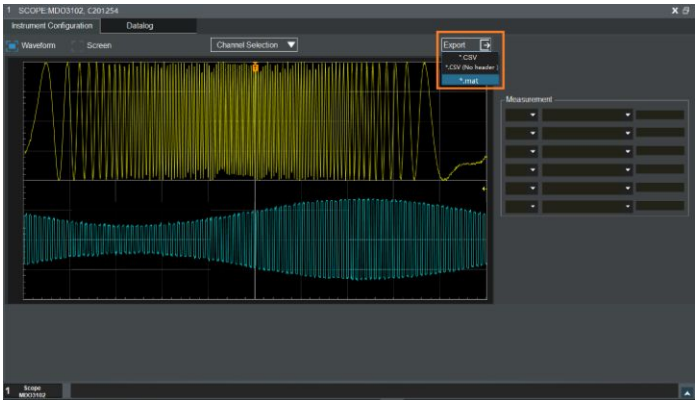
Intuitive interface to control and monitor instruments

When loaded into the software, the instrument has a full screen interface with automatically updated waveform data. Instead of spending time studying the user manual, users can find and change parameters at a glance. The following example shows how easy it is to select different measurements on each channel of the oscilloscope in the full screen interface.

Oscilloscope full screen interface

Easily capture and export results in required formats

Oscilloscope waveform data is one of the most important test results. TekBench™ supports exporting the waveform data into *.csv format, which can be recalled by the oscilloscope directly. [1] It also supports *.csv data with no header for easier analysis in other applications.



The oscilloscope waveform exporting interface

Also, the results can be exported into *.MAT format, which can be opened in MATLAB directly.

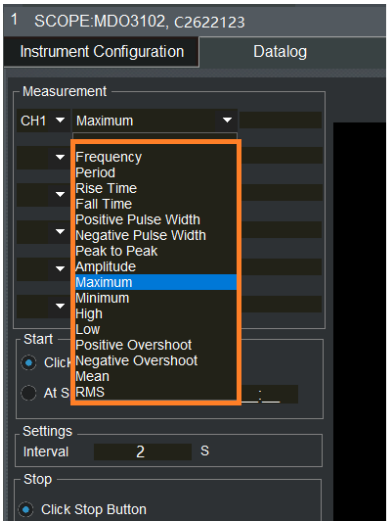
A screenshot of the oscilloscope can be saved to your computer with just a few clicks. When auto update is enabled in the software, the screenshot of the oscilloscope can be updated about every second. [2] This allows you to monitor the instrument remotely. The updating screenshot can also be projected in a lab to assist the instructor.

Oscilloscope screenshot auto updating

Automated measurement data logging

Instead of performing a single measurement, use measurement data logging to track the change of the measurement results for more insight into the design.

TekBench™ gives you the option to select 16 of the most common measurements. Data logging can be performed for up to six measurements at the same time. The interval between each measurement result can be set to as low as 2 seconds with a testing time up to 5 days. [3]



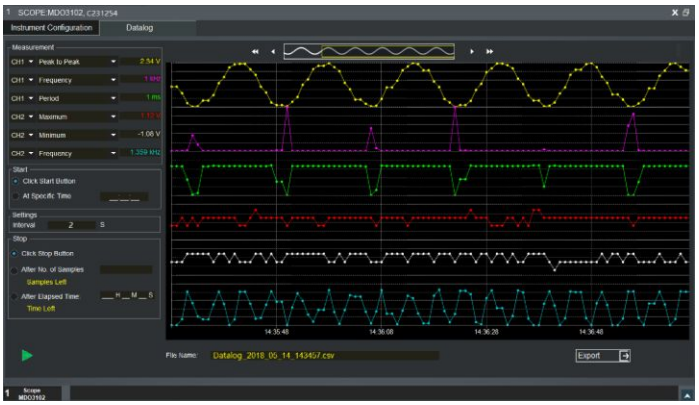
Measurement selection

1 This function is only supported by MDO3000 series oscilloscopes.

2 Screenshot updating speed is dependent on the instrument. The MDO3000 series oscilloscope had a one second updating speed during testing.

3 TekBench™ free version supports a testing time of up to 30 minutes. Option TEKBENCHFL-BAS is needed for testing time up to 5 days.

The results can be displayed in trend plot mode with each measurement color coded. It can also be displayed in list or histogram mode, which can provide more insight into the results.



Measurement data logging displayed in trend plot mode

Each of the measurement data logging results are saved automatically in a *.csv file. This file can be exported and imported into the software so previous test results can be accessed for future analysis.

Specifications

Supported instruments [4]

Oscilloscope models	Tektronix TBS2000 series
	Tektronix DPO/MSO2000B series (oscilloscope function only)
	Tektronix MDO3000 series (oscilloscope function only)
Oscilloscope function	
Waveform data exporting format	*.csv (MDO3000 series only), *.csv (no header), *.mat
Snapshot exporting format	*.png, *.bmp, *.jpg, *.tif
Oscilloscope measurement data logging	
Supported measurements	Frequency, Period, Rise time, Fall Time, Positive Pulse Width, Negative Pulse Width, Peak to Peak, Amplitude, Maximum, Minimum, High, Low, Positive Overshot, Negative Overshot, Mean, RMS
Maximum simultaneous measurements	6 (MDO3000 and TBS2000 series)
	3 (DPO2000B and MSO2000B series)
Minimal time Interval	2 seconds (MDO3000 and TBS2000 series)
	5 seconds (DPO2000B and MSO2000B series)
Result display mode	Trend plot, List, Histogram

System requirements

Operating system	Windows 7, Windows 10 32-bit and Windows 7, Windows 10 64-bit
CPU	Dual core 2 GHz or above
RAM	4 GB DDR3 or above
Hard disk	1 GB free disk space (recommended)
Screen resolution	1366 × 768 or above
Instrument communication interface	USB

4 More instruments will be supported in future releases. For a list of the supported instruments and the latest software go to www.tek.com/tekbench

Ordering information

Models

TekBench™	TekBench™ is a free software available at www.tek.com/tekbench with the following features: — Oscilloscope waveform data and screen snapshot export in required formats — Oscilloscope measurement data logging with a testing time of up to 30 minutes

Options

TEKBENCHFL-BAS	TekBench™ software, floating license, supports oscilloscope measurement data logging testing time up to 1 day for the DPO2000B and MSO2000B series, and up to 5 days for the MDO3000 and TBS2000 series

Tektronix is registered to ISO 9001 and ISO 14001 by SRI Quality System Registrar.

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

Product Area Assessed: The planning, design/development and manufacture of electronic Test and Measurement instruments.

ASEAN / Australasia (65) 6356 3900
Belgium 00800 2255 4835*
Central East Europe and the Baltics +41 52 675 3777
Finland +41 52 675 3777
Hong Kong 400 820 5835
Japan 81 (3) 6714 3086
Middle East, Asia, and North Africa +41 52 675 3777
People's Republic of China 400 820 5835
Republic of Korea +822 6917 5084, 822 6917 5080
Spain 00800 2255 4835*
Taiwan 886 (2) 2656 6688

Austria 00800 2255 4835*
Brazil +55 (11) 3759 7627
Central Europe & Greece +41 52 675 3777
France 00800 2255 4835*
India 000 800 650 1835
Luxembourg +41 52 675 3777
The Netherlands 00800 2255 4835*
Poland +41 52 675 3777
Russia & CIS +7 (495) 6647564
Sweden 00800 2255 4835*
United Kingdom & Ireland 00800 2255 4835*

Balkans, Israel, South Africa and other ISE Countries +41 52 675 3777
Canada 1 800 833 9200
Denmark +45 80 88 1401
Germany 00800 2255 4835*
Italy 00800 2255 4835*
Mexico, Central/South America & Caribbean 52 (55) 56 04 50 90
Norway 800 16098
Portugal 80 08 12370
South Africa +41 52 675 3777
Switzerland 00800 2255 4835*
USA 1 800 833 9200

* European toll-free number. If not accessible, call: +41 52 675 3777

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.tek.com.

18 Jul 2018 61W-61432-0

www.tek.com

Tektronix®