TSOVu™ Customer Release Notes

Version: 1.4
Last Revised: November 10, 2023
Product: This software supports TSO 8 Series products

Description

TSOVu is a PC software application for operating a TSO820 equivalent time oscilloscope mainframe. This release supports a mainframe with any of the following modules installed:

- TSO8C17
- TSO8C18

TSOVu can also be run without a mainframe; In the offline mode, TSOVu can be used to support reading and processing of saved waveforms.

Version Release Description

V1.4

This release has the following updates:

- Multi-mode dispersion filter in Math.
- RLM Measurement according to Clause 94.3.12.5.1
- PAM4 TPE Measurement.
- Performance Improvements in TDECQ Measurement.
- Perform FFE as part of TDECQ Measurement.
- Performance Improvements in TSOVu.
- Math Delete All UI implementation.

V1.3

This release has the following updates:

- External Attenuation - attenuation factor of the external attenuator.
- MATH feature which supports FFE, Resample, FOLD functions along with standard arithmetic operators (+, -, *, /).
- Screen Capture - Users can save screen capture image files in any location of their choice on the system.
- BW Electrical drop down with an option called "User Defined".
- Measurement Wait Indicator.
- Progress bar to show the instrument disconnection.

V1.2

This release has the following updates:

- New NRZ eye measurement plugin V1.3
- PAM4 measurement plugin V1.3 updates
    - Added units support (signal ordinate and dBm) for OMAouter
    - Added units support (W and dBm) for AOP in PAM4 Summary results
    - Added dB unit support for Ceq present in TDECQ results
- TSOVu V1.2 updates
    - Vertical Autoset
    - Horizontal Eye Auto Position
    - Mask test
    - Vertical thumbnail displays the vertical digitizing range and offset relative to the signal

○ User-defined wavelengths ○ Measurement report generation ○ Histogram result table ○ Support for remote oscilloscope mainframe firmware upgrade
V1.1
This release has the following updates: • PAM4 measurement plugin V1.2 ○ Added PAM4 Summary measurement ○ Improved TDECQ measurement speed • TSOVu updates for measurement speed improvement

PC System Requirements

Install TSOVu on a PC with the following specifications.

Item	Requirement
Operating System	Microsoft® Windows 10, 64-bit
CPU	Recommended: AMD Ryzen 7 or Intel i7 class CPU with 4 core / 8 thread. Minimum: AMD Ryzen 5 or Intel i5 w/ hyperthreading
Memory	16 GB recommended
Disk	256 GB SSD or more
Networking	1 Gigabit Ethernet wired

Other Software Requirements

You must install MATLAB® Compiler Runtime version 9.3 on to the host PC. Go to MathWorks (www.mathworks.com/products/compiler/matlab-runtime.html) to download and install it.

Product Upgrades

From time to time Tektronix releases new versions of the product software or optional application software. Customers can download these from the Tektronix web site at www.tek.com/oscilloscope.

Contacting Tektronix

One method to receive timely information on new software updates, new products from Tektronix and other useful information is through a MyTek account. To join MyTek, please visit www.tek.com/mytek.

For application-oriented questions about Tektronix measurement products, please call Product Support. In North America call 1-800-833-9200 option 3, Monday-Friday, 6:00AM - 5:00PM Pacific Time or contact us by email at techsupport@tektronix.com.

For service support call 1-800-833-9200 option 2, Monday-Friday, 5:00AM-5:00PM Pacific Time or contact us by email at meas-svc-feedback@tektronix.com

Outside of North America: please contact your local Tektronix Sales or Distributor office. Refer to our web site at www.tek.com for listings of those offices.

For all other information call 1-800-833-9200, visit our web site at www.tek.com, or write to us at:

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Resolved Issues

The following issues were resolved in V1.3:

Identifier	AP-9640
Headline	TDECQ: Value changes seconds after initial return
Description	Measurement on TDECQ following default setup will return one result, then after a handful of seconds return a slightly different result.
Status	Fixed in V1.3 release.

Identifier	AP-9648
Headline	PI - SAVE REPORT - Can't Open the pdf file when filename is uppercase *.PDF
Description	Save Full/summary report with extension of file name as “.PDF” (pdf in upper case) through PI does not save the report.
Status	Fixed in V1.3 release.

Identifier	AP-9856
Headline	Histogram #wfms are wrong when Vertical parameters are changed while acquisitions are running.
Description	Histogram waveform count does not match with the acquisition count.
Status	Fixed in V1.3 release.

Identifier	AP-10142
Headline	Time for *RST can take too long
Description	Adding some measurements and perform the 'default Setup' or process the PI '*RST', it would takes more than 1 minute.
Status	Fixed in V1.3 release.

Identifier	AP-9996
Headline	Applying BWE filter affects the hits of the histogram
Description	Applying BWE shows only single hit on the histogram.
Status	Fixed in V1.3 release.

Known Issues

The following list contains information on the functions associated with this software release. The current version has the following known issues and workarounds:

Identifier	AP-7443
Headline	Histogram don't work with persistence turned off
Description	Histograms don’t work when Pattern Sync is OFF with data persistence turned off.
Workaround	Work around is to enable data persistence. The problem will be addressed in the next release.

Identifier	AP-8782
Headline	Disconnect from the mainframe sometimes cause PI to become unresponsive
Description	This problem happens only over PI. Set stop condition and start acquisition. Add and run measurements and then disconnect from the mainframe. *opc? times out and PI becomes unresponsive.
Workaround	Work around is to do a RST before the Disconnect command. The problem will be addressed in the next release.

Identifier	AP-8941
Headline	Adding TDECQ eye plots during acquisition results in empty plots sometimes
Description	This problem occurs when adding TDECQ measurements on all four channels and enable eye plots immediately while acquisition is running.
Workaround	Work around is to set up measurements and plots before starting acquisition or remove the empty plot and re-add it. The problem will be addressed in the next release.

Identifier	AP-9260
Headline	When Pattern Sync is disabled with acquisitions off, changing vertical scale does not update the waveform in the display
Description	This works well when Pattern Sync is enabled. However, when Pattern Sync is disabled with acquisition off and data shown in the waveform display, the waveform is unaffected by changes to the vertical scale until acquisitions are run again.
Workaround	Work around is to start the acquisition for vertical scale change to take effect. The problem will be addressed in the next release.