R&S®ARB Toolbox
PC Software
Release Notes

This document is valid for the following Rohde & Schwarz products:

- R&S®ARB Toolbox PC Software

ROHDE & SCHWARZ

Contents

1 Information on the Current Version and History

1.1 Version 4.3

Released: November 2021

Bug fixes:

- Frequency offset in composer worked in wrong direction
- .wvh and .wvd I/Q conversion was limited to 1 G Sample

Functional improvements:

- Remote control added to resampling module
- I/Q data conversion supports .aid and .aif files
- Added new signal generators

1.2 Version 4.0

Released: November 2018

Bug fixes:

- VXI-11 connection test failed on some installation with a system wide proxy configuration

Functional improvements:

- Moved to MinGW 5.3.0 and QT 5.11.0
- I/Q trace supports Y-zoom in voltage mode
- Multiple files and folders can be selected for drag&drop operations
- .ps_def files (extended sequencing) can be started in remote browser
- R&S ARB (.wv) and R&S Extended Sequencing (.ps_def) files can be run in path A or B on the R&S SMW200A
- Increased frequency offset in composer to 1 GHz

1.3 Version 3.7

Released: January 2018

Bug fixes:

- Some links of the task panel were broken

- Fixed bug in FM sweep generation

- Fixed bug in reading and writing 14-bit waveforms (AMIQ)

- Fixed missing sample in output from wrap around analysis

Functional improvements:

- Column separator and decimal character can be specified for text import

- Maximum filter bandwidth increased to 2 GHz in clipping module

- Maximum chirp bandwidth increased to 1 GHz

- Added PDW viewer for R&S .ps_def files

- Added converter from AMMOS IF (.dat) files to R&S ARB waveforms

- Added remote control via XML commands

- Increased FM sweep range to 2 GHz

1.4 Version 3.6

Released: July 2017

Functional improvements:

- Iq.tar file processing added (resampling, waveform viewer, clipping wizard, filter, wraparound analysis, conversion to polar)
- Updated search pattern for LAN scan
- GUI style updated, improvements for use on high-DPI displays
- Import from old AMIQ files can scale out or range samples

1.5 Version 3.4

Released: April 2016

Functional improvements:

- Dialogs redesigned
- Wizards require valid waveform before proceeding to next step
- Filter wizard can apply a frequency shift before running the low pass filter
- FM sweep oversampling reduced from 8x to 4x allows larger frequency range
- Removed libpng related warnings at program startup
- Name changed to 'ARB Toolbox',
  previous product name was 'ARB Toolbox PLUS'

1.6 Version 3.3

Released: August 2015

Functional improvements:

- Message log is located in separate window and pops up in case of errors

- Improved error messages in waveform generation module

- Added command line option --visa for VISA selection

1.7 Version 3.2

Released: July 2015

Functional improvements:

- New task based user interface

- LAN instrument scan improved

Issues eliminated:

- Fixed a crash in the instrument browser that came with the migration to QT5

1.8 Version 3.1

Released: July 2015

Issues eliminated:

- Fixed broken import from binary data

1.9 Version 3.0

Released: June 2015

Functional improvements:

- Import from signed and unsigned integer data in ASCII files

- Pulse signals are leveled to pulse top power and not RMS anymore

- Support for access to FSW C: and D: drive

- Multi-Segment waveform files can now be loaded into the viewer

- Wider limits for capturing from spectrum analyzers

- SGT100A added to LAN search

- New build numbering scheme and new Windows installer

- Updated to QT5 and VS2010 runtime

- Support added for transition and binary marker tags in waveform files

Issues eliminated:

- Fixed problems in waveform import from AMIQ, SMIQ, AM300

- Fixed problem when importing marker data from ASCII file

- I/Q was swapped in some of the generated waveform files

- I/Q was swapped in waveform viewer

- Fixed error caused by waveforms where the marker data was longer that the sample data

- Importing from I/Q text files did not import the very last sample if the line was not terminated by CR/LF

1.10 Version 2.8

Released: February 2014

Issues eliminated:

- Resampler module did not handle very large files correctly

- Fixed errornous SCPI communication with some instruments

1.11 Version 2.7

Released: November 2013

Functional improvements:

- Added new wizard to import from IQR .wvh and .wvd files

- Issues eliminated:

- EMPTYTAG and VECTOR_MAX tag gets removed from R&S waveforms to improve compatibility

- Fixed wrong auto scaling in iq.tar file import

- Fixed bugs in MATLAB file import

- Fixed bug in waveform composer where recalculation of maximum clock rate was not always triggered properly

- Fixed potential deadlock when reading waveform information

1.12 Version 2.4

Released: April 2013

Issues eliminated:

- All generated waveforms used invalid data length in WAVEFORM tag

1.13   Version 2.3

Released: April 2013

Functional improvements:

- Clipping module improved

- Composer recognizes segment frequency shift when set to highest clock mode

- Improved leveling in waveform composer

- Composer omits marker tags in output waveform if no markers are used

- VISA supports raw socket connections

- New optional binary marker tag 'CONTROL LIST WIDTH4' is now supported

- LAN instrument scan for VXI-11 instruments added

Issues eliminated:

- Peak and RMS waveform calculations fixed

- Frequency offset in composer used wrong polarity (e.g. neg. offsets were pos.)

- Fixed multi-segment waveform creation in composer

- Files with sample counts > 32 bit did not show up in remote browser

- Fixed broken icons in remote file system browser

- Column sizes in remote browser were not properly remembered

- Uploading of very large files fixed

1.14   Version 2.0

Released: October 2012

Functional improvements:

- Clipping module improved

- User manual updated

1.15 Version 1.9.0

Released: October 2012

Functional improvements:

- Added waveform clipping module

- Context menus in file browser reorganized

- Raised limits in signal creation module

1.16 Version 1.7.0

Released: July 2012

Issues eliminated:

- Some I/Q preview displays did not show anything

- MATLAB file import did not handle sparse name tags correctly

- VXI-11 instrument connection sometimes timed out

1.17 Version 1.5.0

Released: May 2012

- Functional improvements:

- Signal creation supports multi carrier CW with odd and even carrier counts

Issues eliminated:

- RMS calculation fixed in signal creation, wrap around analysis, composer and filter

1.18 Version 1.4.0

Released: April 2012

Functional improvements:

● Waveform creation by mathematical expressions added

● Level and frequency can be modified by mathematical expression in composer

● Improved all waveform viewing panels and added more view modes

● Added new wizard for waveform conversion from AMIQ/SMIQ to SMU

● Support for R&S® FSW added

● Waveform creation from binary data now also reads optional marker file

● MATLAB import wizard now supports uncompressed data elements

Issues eliminated:

● Waveform creation wizard used wrong time resolution for pulses and chirps

● Fixed false Y scaling in viewer when set to frequency versus time

● Bug fixes in MATLAB data import

● Stability improvements

1.19   Version 1.2.0

Released: July 2011

Functional improvements:

- Fading setting in composer now supports entry as samples and time.

- Function generator does now support sweeps.

- Added support for .iq.tar file format (waveforms saved by some R&S spectrum analyzers)

- Improved all spectrum displays.

- Updated GUI framework to QT 4.7.4.

- Added support for MATLAB .mat data import of data types Nx2 or 2xN double.

- Added browser support for R&S RTO.

Issues eliminated:

- I/Q constellation display did sometimes not properly initialize and display the measurement.

- Graphical views could not be maximized / minimized.

- Changing the target clock rate in the composer output (target) has changed samples and duration.

- Sparse name tags were not supported when importing MATLAB .mat files.

- Fixed erroneous data import from 14-bit I/Q binary files.

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