

# R&S®ARB Toolbox

## PC Software

## Release Notes

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

- R&S®ARBTtoolbox PC Software

PAD-T-M: 3576.4620.02/02.00/RL/1/EN



**ROHDE & SCHWARZ**

Release Notes

Version 3.6

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# 1 Information on the Current Version and History

## 1.1 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

## 1.2 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'

## 1.3 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

## 1.4 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

## 1.5 Version 3.1

Released: July 2015

Issues eliminated:

- Fixed broken import from binary data

## 1.6 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 than 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

## 1.7 Version 2.8

Released: February 2014

Issues eliminated:

- Resampler module did not handle very large files correctly
- Fixed erroneous SCPI communication with some instruments

## 1.8 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

## 1.9 Version 2.4

Released: April 2013

Issues eliminated:

- All generated waveforms used invalid data length in WAVEFORM tag

## 1.10 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

## 1.11 Version 2.0

Released: October 2012

Functional improvements:

- Clipping module improved
- User manual updated

## 1.12 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

## 1.13 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

## 1.14 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



## 1.15 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

## 1.16 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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