

LabVIEW driver history for the R&S® RTB2000 / RTM3000 / RTA4000 Digital Oscilloscopes Driver Documentation

Products:

| R&S® RTB2000 / RTM3000 / RTA4000



Driver history for LabVIEW

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1 Supported Instruments

In the following table, the supported R&S instruments and firmware versions are listed:

Which instruments are supported?		
Current revision of instrument driver supports these instruments and firmware versions:		
Instrument	Supported Firmware	Remarks
RTB2000	2.000	
RTM2000	6.010	
RTM3000	1.100	First Release
RTA4000	1.100	First Release

2 Installation of the LabVIEW driver

Before you start the installer, please close your LabVIEW application.

2.1 Installation on a Windows machine

The driver is distributed as WinZip self-extracting executable file. Installer supported operation systems: WinXP, Win7, Win8, Win10.

Preconditions:

- LabVIEW 2010 or newer installed
- Any VISA installed – R&S VISA 5.5.4 or newer / NI VISA 10.0 or newer

When you start the driver WinZip installer, it performs the following steps:

1. Unpacking of the driver's **instr.lib** and **user.lib** directories content as well as the **Installer.vi** into a temporary folder: **C:\temp\rsrtx-lv-1.2.0**
The driver is compiled in LabVIEW 2010 32-bit. From there you can copy it to another location or run the **Installer.vi** manually later. The content of the temporary folder is not deleted after the installation is finished. Starting the same installation again will overwrite all the data in that temporary folder.
2. After unpacking, the **Installer.vi** automatically starts in the last opened version of LabVIEW. In case you have more than one version of LabVIEW installed on your machine, make sure that the last opened LabVIEW version is the one in which you want to install the driver. If that is not the case, cancel the installation, open and close your desired LabVIEW version and run the installer again. You can have the driver installed parallel for more LabVIEW versions by repeating the installation process for each desired version.
3. On the installer options page you can change the location of the **instr.lib** part of the driver. **user.lib** part must be placed in the default location, otherwise the Express VI configuration will not properly function.
Hitting **Next** button will first delete the old driver (if it existed), copy the new driver and mass-compile it.
4. If you have an older rsidr_toolbox, the installer updates it to the last version.
5. The LabVIEW is closed and after starting it again, the driver is ready for use.

2.2 Installation on a non-Windows machine

In case you would like to install the driver on a non-Windows machine, use a Windows machine to start the driver's WinZip self-extracting executable file. **This machine does not need to have LabVIEW installed.**

After the **Step 1** (see the chapter 2.1), copy the content of the temporary folder to your target machine and start the **Installer.vi** manually.

From that point onwards, the installation process is the same as described in Steps 2, 3, 4 and 5.

3 LabVIEW driver history

LabVIEW Instrument Driver		
Driver history		
Revision	Date	Note
1.2.0	01/2018	- Added support for RTM3000 and RTA4000 instruments - Initialize.vi, Initialize with Options.vi, Close.vi and Utility VIs have new VI icons
1.1.0	10/2017	* First Official Release Version Exchanged Driver Core 6.8.0 New Subsystem: Configuration >> Digital Channel History >> Logic Search >> Export Protocols >> UART Protocols >> MILSTD Simple Mathematics (RTB) Waveform Acquisition >> Simple Math (RTB) Waveform Acquisition >> Digital Data Waveform Acquisition >> Logic Waveform Export Generator Logic System New: Configure Record Length.vi Configure Acquire Mode.vi Configure Peak Detect.vi Configure High Resolution.vi Number of Averages Reset.vi Configure Waveform Rate Maximum.vi Configure Horizontal Reference.vi Configure Probe CM Offset.vi Configure Trigger Out Mode.vi Runt Trigger Range.vi Configure Runt Trigger Width.vi Configure Runt Trigger Delta.vi Configure Window Trigger Range.vi Configure Window Trigger Width.vi Configure Window Trigger Time Range.vi Configure Timeout Trigger Time.vi Configure Display Language.vi Configure Diagram Annotation State.vi Configure Diagram Annotation Track.vi

LabVIEW Instrument Driver		
Driver history		
Revision	Date	Note
		Display Clear Screen.vi Configure Display Persistence Type.vi Configure Display Segmentation Record Maximum Segments.vi Query History Channel Table Mode.vi History Channel Export Save.vi Digital History Export Save.vi History Math Export Save.vi History Protocol Export Save.vi Configure Cursor Measurement Type.vi Configure Cursor Source.vi Cursor Line Next Peak.vi Cursor Line Previous Peak.vi Configure Quick Measurement State.vi Configure Mask Test Action Screenshot Destination.vi Configure Mask Test Action Saves Waveform Destination.vi Configure Mask Test Action AUX Output State.vi Configure Mask Scaling.vi Configure Search Condition.vi Configure Search Source Configure Search Trigger Window Level.vi Configure Search Trigger Window Delta.vi Configure Search Trigger Window Polarity.vi Configure Search Trigger Window Range.vi Configure Search Trigger Window Time Range.vi Configure Search Trigger Window Width.vi Configure Protocol Display Vertical.vi Configure Protocol SPI CS Polarity.vi Configure SPI Trigger Source.vi Configure Hardcopy Output Format.vi Query Hardcopy Data.vi Configure Hardcopy Page Size.vi Query Hardcopy Page Size.vi Configure Reference Waveform Source.vi Initiate Acquisition And Wait.vi Configure Acquisition State.vi Power Analysis Autoset.vi Power Analysis Autoset Current.vi Power Analysis Autoset Voltage.vi Query Power Current Harmonics Measurement Duration.vi Query Power Current Harmonics Measurement Real Power Current.vi Read Power Safe Operating Area Acquisition Data.vi

LabVIEW Instrument Driver		
Driver history		
Revision	Date	Note
		Fetch Power Safe Operating Area Acquisition Data.vi Fetch Power Safe Operating Area Acquisition Data Header.vi Fetch Power Safe Operating Area Acquisition Conversion Data.vi Configure Spectrum Analysis Mode.vi Configure Spectrum Analysis Frequency Center Span.vi Spectrum Marker Setup Center Screen.vi Spectrum Marker Setup Range To Peak.vi Query Spectrum Reference Marker Results.vi Query Spectrum Marker Results.vi Query Spectrum Marker Delta Results.vi Query Spectrum Marker All Results.vi Query Spectrum Marker All Delta Results.vi Query Counter Frequency.vi Query Counter Period.vi Configure Channel Vertical Scale.vi Configure Waveform Acquisition Type.vi Query Channel Overload.vi Clear Channel Overload.vi Channel All Off.vi Channel All On.vi Modified: Configure Channel.vi - default for coupling changed Configure Trigger.vi - line trigger type added Configure Edge Trigger Filter.vi - HF Reject added, low removed Configure Measurement Source.vi - QMA source added Query Search Result.vi - more result types Query All Search Results.vi - more result types Query Power Consumption Measurement Results.vi - new results Power Safe Operating Area Lin Point Value.vi - Current added Power Safe Operating Area Log Point Value.vi - Current added Configure Spectrum Analysis Frequency.vi removed controls for center and span Configure Counter State.vi - counter range changed Read Main Waveform Measurement.vi - removed some measurement functions Fetch Main Waveform Measurement.vi - removed some measurement functions
1.0.0	04/2017	* First Beta Version created based on the rsrtm20xx driver

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