

History and release notes for the Rohde&Schwarz TV Test Transmitter SFQ

Contents

Contents.....	1
SFQ driver history	1
LabWindows/CVI	3
Additional Help	3
VXIplug&play Instrument Driver for VEE, C++, C#, Visual Basic, Visual Basic .NET etc.	3
C#	3
Visual Basic .NET	3
Additional Help	3
Additional Information.....	3
LabVIEW.....	4
Getting Started	4
Additional Help for LabVIEW drivers	4
LabVIEW 7.1 driver	4
LabVIEW 8.2 and LabVIEW 8.5 drivers	4

SFQ driver history

Revision	Date	Note
1.2.4	10/2007	New installers Added .NET wrappers
1.2.3	06/2005	Modified functions: Set DVB-T Chan Bandwidth (rssfq_setDVBTChannelBandwidth) Get DVB-T Chan Bandwidth (rssfq_getDVBTChannelBandwidth)
1.2.2	04/2005	Modified functions: Configure DVB-T (rssfq_configureDVBT) Set DVB-T Chan Bandwidth (rssfq_setDVBTChannelBandwidth) Get DVB-T Chan Bandwidth (rssfq_getDVBTChannelBandwidth)
1.2.1	06/2004	This driver supports all options Modifications: Drawback of Agilent VISA is patched by adding extra termination character "\n" to each command Added new Help files for LabVIEW, LabWindows/CVI and VXIPnP
1.2	05/2003	This driver supports all options Modifications: - New functions: Set ISDB-T (rssfq_setISDBT) Configure ISDB-T (rssfq_confISDBT) Configure ISDB-T Special (rssfq_confISDBTSpecial) Configure ISDB-T Carriers (rssfq_confISDBTCarriers) Set ISDB-T Input Select (rssfq_setISDBTInputSelect) Set ISDB-T Output State (rssfq_setISDBTOutputState) Set ISDB-T Mode (rssfq_setISDBTMode) Set ISDB-T FFT Mode (rssfq_setISDBTFFTMMode) Set ISDB-T Constellation (rssfq_setISDBTConstellation) Set ISDB-T Segments (rssfq_setISDBTSegments) Set ISDB-T Segments (rssfq_getISDBTSegments) Set ISDB-T Guard Interval (rssfq_setISDBTGuardInterval)

SFQ driver history

Revision	Date	Note
		Set ISDB-T Code Rate (rssfq_setISDBTCodeRate) Set ISDB-T Time Interleaving (rssfq_setISDBTTimeInterleaving) Get ISDB-T Time Interleaving (rssfq_getISDBTTimeInterleaving) Set ISDB-T Bandwidth (rssfq_setISDBTBandwidth) Get ISDB-T Bandwidth (rssfq_getISDBTBandwidth) Set ISDB-T Scrambling (rssfq_setISDBTScrambling) Set ISDB-T Reed Solomon (rssfq_setISDBTReedSolomon) Set ISDB-T Byte Interleaver (rssfq_setISDBTByteInterleaver) Set ISDB-T Bit Interleaver (rssfq_setISDBTBitInterleaver) Set ISDB-T Freq Interleaver (rssfq_setISDBTFreqInterleaver) Set ISDB-T Alert Broadcasting (rssfq_setISDBTAlertBroadcasting) Set ISDB-T PID (rssfq_setISDBTPID) Set ISDB-T Data (rssfq_setISDBTData) Set ISDB-T SP (rssfq_setISDBTSP) Set ISDB-T CP (rssfq_setISDBTCP) Set ISDB-T TMCC (rssfq_setISDBTTMCC) Set ISDB-T AC (rssfq_setISDBTAC) Set ISDB-T Modulation Data (rssfq_setISDBTModulationData) Set ISDB-T Modulation SP (rssfq_setISDBTModulationSP) Set ISDB-T Modulation CP (rssfq_setISDBTModulationCP) Set ISDB-T Modulation TMCC (rssfq_setISDBTModulationTMCC) Set ISDB-T Modulation AC (rssfq_setISDBTModulationAC) Set ISDB-T Segments State (rssfq_setISDBTSegmentsState) Set ISDB-T AC Data (rssfq_setISDBTACData) Set ISDB-T Noise C/N Shift (rssfq_SetISDBTNoiseCNShift) Read ISDB-T Input Data Rate (rssfq_readISDBTInputDataRate) Read ISDB-T Useful Data Rate (rssfq_readISDBTUsefulDataRate) Read ISDB-T Useful DataRate Max (rssfq_readISDBTUsefulDataRateMax) - Modified functions: Check Coder Locked (rssfq_checkCoderLocked)
1.1	05/2002	Modifications: - Driver update (new functions) Set RF Freq Assign Table Name (setRfFreqAssignTableName) Set RF Freq Assign New Channel (setRfFreqAssignNewChannel) Set RF ALC Search Once (setRfALCSearchOnce) Set Sweep Frequency Resolution (setSweepFrequencyRes) Get Sweep Frequency Resolution (getSweepFrequencyRes) Configure Modulator State (confModulatorState) Set Digital Modulation State (setDModulationState) Set DVB-S PLL (Data) (setDVBSPLLDData) Set DVB-S PLL Int Sig (setDVBSPLLIntSig) Set DVB-S Sync Byte Inv (setDVBSyncByteInv) Set DVB-C PLL (Data) (setDVBCPLLDData) Set DVB-C PLL Int Sig (setDVBCPLLIntSig) Set DVB-C Sync Byte Inv (setDVBCSyncByteInv) Set DVB-T Input Data Rate (setDVBTInputDataRate) Get DVB-T Input Data Rate (getDVBTInputDataRate) Set DVB-T Sync Signal (setDVBTSyncSig) Set DVB-T Cell ID (setDVBTCellId) Set DVB-T HP Input Data Rate (setDVBTHPInputDataRate) Get DVB-T HP Input Data Rate (getDVBTHPInputDataRate) Set ATSC VSB Roll Off Factor (setATSCVSBRollOffFactor) Get ATSC VSB Roll Off Factor (getATSCVSBRollOffFactor) Set ITU-T Roll-off Factor (setITUTJ83BRollOffFactor) Get ITU-T Roll-off Factor (getITUTJ83BRollOffFactor) Read IQ Coder Symbol Rate (rssfq_readIQCSymbolRate) Set Monitor Route (setMonitorRoute) Set Video Sig Route (setVideoSigRoute)

SFQ driver history		
Revision	Date	Note
		Set Reference Clock Route (setRefClockRoute) Get Reference Clock State (getRefClockState) - Driver Update (existing functions) Set Sweep Sweep Frequency (setSweepFrequency) Configure DVB-C (confDVBC) Calibrate (Calibrate) Check Coder Locked (checkCoderLocked) Read BER All (readBERAll) State Checking (errorCheckState)
1.0	07/2001	Driver created

LabWindows/CVI

Additional Help

The LabWindows/CVI instrument driver consists of a ZIP archive containing the driver sources. In addition, the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources.

VXIplug&play Instrument Driver for VEE, C++, C#, Visual Basic, Visual Basic .NET etc.

C#

A wrapper is necessary to enable a direct access to the driver DLL.

The rssfq.cs wrapper for C# is automatically installed in the ~\VXI\pnp\WinNt\include directory.

Visual Basic .NET

A wrapper is necessary to enable a direct access to the driver DLL.

The rssfq.vb wrapper for .NET is automatically installed in the ~\VXI\pnp\WinNt\include directory.

Additional Help

In addition, the instrument driver documentation is also included in compressed HTML format (Windows CHM help file) and stored together with the driver sources in the ~\VXI\pnp\WinNT\rssfq directory.

Additional Information

For more information regarding the VXI\pnp instrument drivers, please read the readme.txt file that comes with each driver.

LabVIEW

Getting Started

In order to use this driver as a standard LabVIEW driver, please copy the contents of ~\X\pnp\GWinNt\rssfq directory into your LabVIEW directory (~\LabVIEW\instr.lib\rssfq\). The driver will then be directly accessible from the LabVIEW Instrument Driver function palette menu.

Additional Help for LabVIEW drivers

In addition, the instrument driver documentation is included in compressed HTML format (Windows CHM help file) stored together with the LabVIEW driver sources.

Each VI's help is linked to the section in the "CHM" file that describes all the features of the VI.

- **LabVIEW 6.1 and higher** an additional help topic can be accessed directly by pressing "[Click here for more help](#)" in the Context Help
- For **LabVIEW 6.0** an additional help topic can also be accessed by pressing "[Click here for more help](#)" in the Context Help which opens the additional help start page.

LabVIEW 7.1 driver

Please use the LabVIEW 7 driver.

LabVIEW 8.2 and LabVIEW 8.5 drivers

Please use the LabVIEW 8 driver.