

History and release notes for the Rohde&Schwarz Signal Generator R&S® SML

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SML driver history		
Revision	Date	Note
1.2.5	02/2008	Modifications: - new functions rssml_setSweepBlankTime rssml_getFreqCorrPoints rssml_setAllModulationState rssml_utilSystemKeylock
1.2.4	10/2007	Modifications: New VXI Plug&Play driver installer Added .NET wrappers
1.2.3	11/2005	Modifications: Fixed rssml_setPulseTrigSource
1.2.2	04/2004	Modifications: - Added CHM Help file. - Fixed floating point precision problem
1.2.1	01/2004	Modifications: For Agilent VISA (Ver. M01.01) and Serial Interface only - changed rssml_init
1.2	12/2002	Modifications: New functions: - Get Ref Osc Calib Value (rssml_getRefOscCalVal) - Store Ref Osc Calib Value (rssml_storeRefOscCalVal) - Set RF Extended Divider Range (rssml_setRFExtDividerRange) - Reference Oscillator group has extended, new group of functions Low-Level Phase Adjustment: Set Ref Phase State (rssml_setRefPhaseState) Set Ref Phase (rssml_setRefPhase) Zero Ref Phase (rssml_zeroRefPhase) - Set Display Update (rssml_utilSetDisplayUpdate) - Set Pulse Trigger Polarity (rssml_setPulseTrigPolarity) - Configure Stereo Modulation (rssml_configStereoModulation) - New Low-Level Stereo Modulation subsystem: Set Stereo State (rssml_setStereoState) Set Stereo Deviation (rssml_setStereoDeviation) Set Stereo Source (rssml_setStereoSource)

SML driver history

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		<p>Set Stereo Mode (rssml_setStereoMode) Set Stereo LF Gen Frequency (rssml_setStereoLFGenFrequency) Set Stereo Ext Impedance (rssml_setStereoExtImpedance) Set Stereo Preemphasis (rssml_setStereoPreemphasis) Set Stereo Pilot State (rssml_setStereoPilotState) Set Stereo Pilot Deviation (rssml_setStereoPilotDeviation) Set Stereo Pilot Phase (rssml_setStereoPilotPhase) Set Stereo ARI State (rssml_setStereoARISState) Set Stereo ARI Deviation (rssml_setStereoARIDeviation) Set Stereo ARI Identification (rssml_setStereoARIIdentification) Set Stereo ARI BK Code (rssml_setStereoARIBKCode) Set Stereo RDS State (rssml_setStereoRDSState) Set Stereo RDS Deviation (rssml_setStereoRDSDeviation) Set Stereo RDS Data Set (rssml_setStereoRDSDataSet) Set Stereo RDS Traffic Program (rssml_setStereoRDSTrafficProgram) Set Stereo RDS Traffic Announcement (rssml_setStereoRDSTrafficAnnouncement) Write RDS Command (rssml_writeRDSCommand) Read RDS Response (rssml_readRDSResponse) - Set RF Frequency Multiplier (rssml_setRFFreqMultiplier)</p> <p>Modifications:</p> <ul style="list-style-type: none"> - Calibration (rssml_utilCalibration): New items To Calibrate I/Q modulator (8) and ALC Table (9) - Get List Of Correction Lists (rssml_getListOfCorrLists): Description changed - Configure Ref Oscillator (rssml_configureRefOscillator): Misspelled function label and description (Oscilator <-> Oscillator), function name is not changed. - Set Ref Oscillator State (rssml_setRFOscState): Description changed (spelling mistake) - Level range changed to -140.0 ... 25.5 dBm - Configure RS232 (rssml_utilConfigureRS232) Added possibility to skip HW handshake settings - Configure RF Frequency (rssml_configRFFreq) - Configure RF Level (rssml_configRFLevel) - Configure RF Frequency Sweep (rssml_configRFFreqSweep) range checked against the current MIN and MAX values - Configure RF Level Sweep (rssml_configRFLevelSweep) range checked against the current MIN and MAX values Range checking for low level RF Frequency and RF Level functions is not provided due to instrument specific dependencies. <p>Drawback of Agilent VISA is patched by adding extra termination character "\n" to each command</p>
1.1	3/2002	<p>Modifications:</p> <p>Additions: - rssml_setRFLevelReset</p> <p>changed::</p> <ul style="list-style-type: none"> - in rssml_init now sending linefeed before first command is sent to the instrument - RF Frequency range is now checked against a maximum of 1.1 GHz for SML01, 2.2 GHz for SML02, 3.3 GHz for SML03, - Level range changed to -130.0 ... 25.5 dBm - RF step width for the frequency setting is now checked against a maximum of 1.0 GHz for SML01,

SML driver history		
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		2.0 GHz for SML02, 3.0 GHz for SML03, - Level range changed to -130.0 ... 25.5 dBm

Compatibility

For compatibility it's possible, but not recommendable, to use the SMT driver, Revision 2.2 03/2000, for SML too

LabWindows/CVI

CVI Version

Use National Instruments LabWindows/CVI 5.5 or later.

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.

VEE Version

Use VEE 6 or later.

C#

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

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

See the Visual Basic .NET examples.

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\rssml directory.

Additional Information

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