

# History and release notes for the Rohde & Schwarz SMIQ Vector Signal Generators

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### SMIQ driver history

Revision	Date	Note
3.1	05/2004	<p>Modifications</p> <ul style="list-style-type: none"><li>- Implementation of partial SMU support</li><li>- Fully or partially compatible functions: RSSMIQ Initialize.vi RSSMIQ RF Frequency.vi RSSMIQ RF Level.vi RSSMIQ RF Level At Recall.vi RSSMIQ ALC Configuration.vi RSSMIQ User Correction.vi RSSMIQ LF Output.vi RSSMIQ Get Peak Envelope Power.vi RSSMIQ BERT.vi RSSMIQ BERT Additional Parameters.vi RSSMIQ BERT Control.vi RSSMIQ Get BERT Results.vi RSSMIQ Configure BLER.vi RSSMIQ BLER Control.vi RSSMIQ Get BLER Results.vi RSSMIQ Get BLER Type.vi RSSMIQ RF Frequency.vi RSSMIQ RF Level.vi RSSMIQ RF Level Offset.vi RSSMIQ RF Start Stop Frequency.vi RSSMIQ RF Center Span Frequency.vi RSSMIQ RF Sweep Step.vi RSSMIQ LF Frequency.vi RSSMIQ LF Voltage.vi RSSMIQ AM Modulation Depth.vi RSSMIQ Amplitude Modulation.vi RSSMIQ Pulse Modulation.vi RSSMIQ Broadband Amplitude Modulation.vi RSSMIQ RF Sweep.vi RSSMIQ RF Level Sweep.vi RSSMIQ LF Sweep.vi RSSMIQ Freq Level List.vi RSSMIQ Vector Modulation.vi RSSMIQ IQ Modulation Impairment.vi RSSMIQ IQ Modulation Parameters.vi RSSMIQ Digital Modulation.vi RSSMIQ Digital Modulation Lists.vi RSSMIQ Config Digital Mod Std Trigger.vi RSSMIQ Digital Mod Std Power Ramp.vi RSSMIQ Get Digital Modulation Delay.vi RSSMIQ Digital Modulation ASK Depth.vi RSSMIQ Digital Standard PHS.vi</li></ul>

## SMIQ driver history

Revision	Date	Note
		<p>RSSMIQ Noise Dist Simulator.vi      RSSMIQ Set Arb.vi      RSSMIQ Arb Waveform.vi      RSSMIQ Get Arb Data Memory Info.vi      RSSMIQ Arb Trigger.vi      RSSMIQ Arb Trigger Output.vi      RSSMIQ Get Arb Trigger Output Catalog.vi      RSSMIQ Arb Clock.vi      RSSMIQ Trigger Action.vi      RSSMIQ Operation Complete.vi      RSSMIQ Load Waveform.vi      RSSMIQ Load Waveform File.vi      RSSMIQ Write To Instrument.vi      RSSMIQ Read Instrument Data.vi      RSSMIQ Reset.vi      RSSMIQ Self Test.vi      RSSMIQ Error Query.vi      RSSMIQ Error Message.vi      RSSMIQ Revision Query.vi      RSSMIQ Save Recall Setup.vi      RSSMIQ Instrument Options.vi      RSSMIQ Reference Oscillator.vi      RSSMIQ Set Phase Reference.vi      RSSMIQ Beeper.vi      RSSMIQ Calibrate.vi      RSSMIQ Close.vi</p> <p>- Incompatible functions</p> <p>RSSMIQ Modulation State.vi      RSSMIQ FM Deviation.vi      RSSMIQ Phase Mod Deviation.vi      RSSMIQ Frequency Modulation.vi      RSSMIQ Phase Modulation.vi      RSSMIQ RF Sweep Markers.vi      RSSMIQ RF Level Sweep Markers.vi      RSSMIQ LF Sweep Markers.vi      RSSMIQ LF Sweep Marker Polarity.vi      RSSMIQ Switch All Markers Off.vi      RSSMIQ Memory Sequence.vi      RSSMIQ Config List Sweep Trigger.vi      RSSMIQ Get Catalog List.vi      RSSMIQ IQ Modulation Low ACP Filter.vi      RSSMIQ Set High Dynamic.vi      RSSMIQ Digital Modulation Filt Lists.vi      RSSMIQ Digital Modulation Format.vi      RSSMIQ Digital Modulation Clock.vi      RSSMIQ Select Filter From List.vi      RSSMIQ Dig Modulation External Inputs.vi      RSSMIQ Get Digital Mod Filter Info.vi      RSSMIQ Digital Standard IS95.vi      RSSMIQ Digital Standard IS95 RL Coded.vi      RSSMIQ Digital Standard IS95 Filter.vi      RSSMIQ Digital Standard WCDMA.vi      RSSMIQ WCDMA Clock Frequency.vi      RSSMIQ Digital Standard NADC.vi      RSSMIQ Digital Standard PDC.vi      RSSMIQ Digital Standard GSM.vi</p>

## SMIQ driver history

Revision	Date	Note
		<p>RSSMIQ Digital Standard GSM Filt Type.vi      RSSMIQ Digital Standard DECT.vi      RSSMIQ Digital Stand DECT User Filter.vi      RSSMIQ Digital Standard GPS.vi      RSSMIQ GPS Preset RF.vi      RSSMIQ Get GPS Frequency.vi      RSSMIQ Get GPS Current Symbol Rate.vi      RSSMIQ PHS Slot.vi      RSSMIQ WCDMA Channels.vi      RSSMIQ IS95 Channels.vi      RSSMIQ NADC Slot.vi      RSSMIQ PDC Slot.vi      RSSMIQ GSM Slot.vi      RSSMIQ DECT Slot.vi      RSSMIQ Get IS95 Power.vi      RSSMIQ IS95 Adjust Power.vi      RSSMIQ Get WCDMA Power.vi      RSSMIQ WCDMA Adjust Power.vi      RSSMIQ W3GPP State.vi      RSSMIQ W3GPP Setup.vi      RSSMIQ W3GPP Setup Catalog.vi      RSSMIQ W3GPP Test Model.vi      RSSMIQ W3GPP Test Model Catalog.vi      RSSMIQ W3GPP Link.vi      RSSMIQ W3GPP Parametrization.vi      RSSMIQ W3GPP Copy Settings.vi      RSSMIQ W3GPP Base Station.vi      RSSMIQ W3GPP Adjust Power.vi      RSSMIQ W3GPP Get Power.vi      RSSMIQ W3GPP Multi Channel.vi      RSSMIQ W3GPP Multichannel Execute.vi      RSSMIQ W3GPP Base Station Channel.vi      RSSMIQ W3GPP Get Domain Error.vi      RSSMIQ W3GPP Mobile Station.vi      RSSMIQ W3GPP Mobile Station PRACH Channel.vi      RSSMIQ W3GPP Mobile Station PCPCH Channel.vi      RSSMIQ W3GPP Mobile Station DPCCH Channel.vi      RSSMIQ W3GPP Get MStation DPCCH Time Offset.vi      RSSMIQ W3GPP Mobile Station DPDCH.vi      RSSMIQ W3GPP Mobile Station DPDCH Channel.vi      RSSMIQ W3GPP Get Mobile Station DPDCH Param.vi      RSSMIQ W3GPP Base Station Enhanced Overall.vi      RSSMIQ W3GPP Base Station Enhanced Channel.vi      RSSMIQ W3GPP Mobile Station Enhanced Overall.vi      RSSMIQ W3GPP Mobile Station Enhanced Channel.vi      RSSMIQ W3GPP Configure Enhanced Channel.vi      RSSMIQ W3GPP Get Mobile Station Enhanced Param      RSSMIQ W3GPP Get Free Frame Memory.vi      RSSMIQ W3GPP Get Actual BER.vi      RSSMIQ W3GPP Base Station OCNS State.vi      RSSMIQ W3GPP Base Station OCNS.vi      RSSMIQ W3GPP Mobile Station Additional.vi      RSSMIQ W3GPP Get GPP3 Version.vi      RSSMIQ W3GPP Get Chip Rate.vi      RSSMIQ W3GPP Get PCCP Length.vi      RSSMIQ W3GPP Configure Bit_Block Errors.vi      RSSMIQ W3GPP Get Resulting BER.vi   </p>

## SMIQ driver history

Revision	Date	Note
		<p>RSSMIQ Recalculating Fading Signal.vi      RSSMIQ Fading Get Extern Crest Factor.vi      RSSMIQ Fading Default.vi      RSSMIQ Fading Fine Delay Default.vi      RSSMIQ Fading Fine Delay.vi      RSSMIQ Fading Fine Delay Path.vi      RSSMIQ Fading Moving Delay Default.vi      RSSMIQ Fading Moving Delay.vi      RSSMIQ Fading Birth Death Default.vi      RSSMIQ Fading Birth Death.vi      RSSMIQ Fading Birth Death Delay Path.vi      RSSMIQ Fading.vi      RSSMIQ Fading Path.vi      RSSMIQ Fading Phase for CPHAS.vi      RSSMIQ Distortion Characteristics.vi      RSSMIQ Distortion Catalog.vi      RSSMIQ Get Distortion Data Memory Info.vi      RSSMIQ Distortion Mode.vi      RSSMIQ Distortion Polynomial Coef.vi      RSSMIQ Distortion Recalculate.vi      RSSMIQ Distortion Level Correction.vi      RSSMIQ Distortion Inversion Function.vi      RSSMIQ Arb Automatic Setting.vi      RSSMIQ Arb IQ Level.vi      RSSMIQ Auxiliary IO.vi      - fixed connector:      RSSMIQ BERT.vi      RSSMIQ Fading Paths.vi      RSSMIQ GSM Slot.vi      RSSMIQ LF Sweep Markers.vi      RSSMIQ W3GPP Parametrization.vi   </p>
3.01	10/2002	<p>Modifications      Bug fixed:      - The different behaviour of function Format &amp; Append in higher version of LabVIEW (5.x and higher) fixed in VIs:      - RSSMIQ Config Dig Mod Std Trigger. vi      - RSSMIQ Dig Mod Std Power Ramp. vi</p>
3.0	04/2002	<p>Modifications      - fixed RSSMIQ Instrument Options.vi</p> <p>April 2002, Revision 3.0, 04/2002</p> <ul style="list-style-type: none"> <li>- IMPORTANT!! The type of connectors was changed in vi Amplitude modulation. The boolean type was replaced by INT32.</li> <li>- list of options added to user data attribute in VISA session (24 lowest bits)</li> <li>- the VI (Static Arrays) returned the array of descriptions of options added</li> <li>- the models for mobile station and TEST_4 for base station and options checking were added into W3GPP Test Model.vi</li> <li>- the parameter ALL added into Calibrate.vi</li> <li>- the value 7.5MHz and 10MHz are added into function IQ Modulation Low ACP Filter.vi</li> <li>- the value User added into filter in function Digital Modulation.vi</li> <li>- the configuration of GPS standard, GSM Output1 (Slot/Frame), Output1/2 polarity and PHS Output1 (Slot/Frame) added into Config Dig Mod Std Trigger.vi</li> <li>- in the Config Dig Mod Std Trigger.vi were the enum changed to rings.</li> <li>- trigger BERT added to vi Trigger Action</li> <li>- no exported new vi Get DM Format.vi created.</li> </ul>

## SMIQ driver history

Revision	Date	Note
		<ul style="list-style-type: none"> <li>- new utility function Utility Check Options.vi was added.</li> <li>- the parameter CPHAS added to Profile in Fading Path.</li> <li>- the User added to filter types in Digital Standard IS95.</li> <li>- new VIs: <ul style="list-style-type: none"> <li>- Configure BLER.vi, BLER Control.vi, BERT Control.vi,</li> <li>Get BLER Results.vi, Get BLER Type.vi,</li> <li>BERT Additional Parameters.vi, Digital Standard GPS.vi,</li> <li>GPS Preset RF.vi, Get GPS Frequency.vi,</li> <li>Get GPS Current Symbol Rate.vi, Get Catalog List.vi,</li> <li>W3GPP Test Model Catalog.vi, W3GPP Get GPP3 Version.vi</li> <li>W3GPP Get Chip Rate.vi,</li> <li>W3GPP Get Mobile Station DPDCH Param.vi</li> <li>W3GPP Get PCCP Length.vi, W3GPP Get Resulting BER.vi</li> <li>W3GPP Configure Bit_Block Errors.vi,</li> <li>W3GPP Configure Enhanced Channel.vi,</li> <li>W3GPP Base Station OCNS State.vi,</li> <li>W3GPP Get Mobile Station Enhanced Param.vi,</li> <li>Get RF Level Limit.vi, Standard DECT User Filter.vi,</li> <li>IQ Modulation Parameters.vi, Digital Modulation Filter Lists.vi,</li> <li>Get Digital Modulation Filter Info.vi,</li> <li>Get Digital Modulation Delay.vi, Digital Modulation ASK Depth.vi</li> <li>Recalculating Fading Signal.vi, Get Extern Crest Factor.vi,</li> <li>Fading Default.vi, Fading Phase For CPHAS.vi,</li> <li>Fading Fine Delay.vi, Fading Fine Delay Default.vi,</li> <li>Fading Fine Delay Path.vi, Fading Moving Default.vi</li> <li>Fading Moving Delay.vi, Fading Birth Death Default.vi,</li> <li>Fading Birth Death Delay.vi,</li> <li>Fading Birth Death Delay Path.vi, Standard GSM Filter Type.vi,</li> <li>Digital Standard IS95 Filters.vi, Get IS95 Power.vi,</li> <li>IS95 Adjust Power.vi, Switch All Markers Off.vi,</li> <li>Modulation State.vi, Select Filter From List.vi,</li> <li>Set Phase Reference.vi, RF Level At Recall.vi,</li> <li>Get Peak Envelope Power.vi , WCDMA Clock Frequency.vi,</li> <li>Get WCDMA Power.vi, WCDMA Adjust Power.vi,</li> <li>LF Sweep Marker Polarity.vi,</li> <li>Digital Modulation Set High Dynamic.vi</li> </ul> </li> </ul>

## **Additional Help for LabVIEW drivers**

The LabVIEW instrument driver consists of a ZIP archive containing the driver sources (LLB and MNU files). In addition, the instrument driver documentation is included in compressed HTML format (Windows CHM help file) stored together with the LV driver sources.

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

- For **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.
- For **LabVIEW 5** it is necessary to start the rssmiq.chm file separately.

## **LabVIEW 5.1 driver**

For new driver revisions please contact [Rohde & Schwarz Customer Support Center](#)