

# Driver history for R&S®SMB100A and R&S®SMC100A Signal Generator Driver Documentation

## Products:

- | R&S®SMB100A
- | R&S®SMC100A

History for LabVIEW, LabWindows/CVI  
and VXIplug&play Instrument Driver for  
C#, C/C++, Visual Basic .NET, VEE, etc.

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# 1 History for LabVIEW driver

History for LabVIEW Driver		
Revision	Date	Note
2.20.0	11/2011	<p>Driver update for Firmware version V2.20.237.31</p> <p>New VIs:</p> <p>Pulse Modulation Train</p> <p>RSSMB Set SYSTem Display Lock.vi</p> <p>RSSMB Get SYSTem Display Lock.vi</p> <p>RSSMB Get Stereo Adjustment.vi</p> <p>RSSMB Set Stereo ARI Type State.vi</p> <p>RSSMB Get Stereo ARI Type State.vi</p> <p>RSSMB Set ROSC External Synchronisation Bandwidth.vi</p> <p>RSSMB Get ROSC External Synchronisation Bandwidth.vi</p> <p>RSSMB Set RF Attenuator Power Search Mode.vi</p> <p>RSSMB Get RF Attenuator Power Search Mode.vi</p> <p>RSSMB Set Frequency Sweep Multiplier.vi</p> <p>RSSMB Get Frequency Sweep Multiplier.vi</p> <p>RSSMB Get LIST Free Space.vi</p> <p>RSSMB Set Power Display Permanent Priority.vi</p> <p>RSSMB Get Power Display Permanent Priority.vi</p> <p>RSSMB TEST All Start.vi</p> <p>RSSMB SYSTem Factory Preset.vi</p> <p>Removed VIs:</p> <p>DNS settings</p> <p>RSSMB Set Keyboard Layout.vi</p> <p>RSSMB Get Keyboard Layout.vi</p> <p>RSSMB Set Keyboard Language.vi</p> <p>RSSMB Get Keyboard Language.vi</p> <p>RSSMB Set Display Blank Mode.vi</p> <p>RSSMB Get Display Blank Mode.vi</p> <p>RSSMB SYSTem Network Common Execute.vi</p>
2.10.2	08/2010	<p>Driver update for Firmware version V2.10.116.18</p> <p>New VIs:</p> <p>RSSMB CALibration Stereo Coder.vi</p> <p>RSSMB Get Automatic File Path.vi</p> <p>RSSMB Get Power Connected Status.vi</p> <p>RSSMB Set Analog Modulations External Input Impedance.vi</p> <p>RSSMB Get Analog Modulations External Input Impedance.vi</p> <p>RSSMB Set LIST Index.vi</p>

History for LabVIEW Driver		
Revision	Date	Note
		RSSMB Get LIST Index.vi RSSMB SYSTem GPIB Resource.vi RSSMB SYSTem Serial Resource.vi RSSMB SYSTem Option User Defined.vi
2.10.0	10/2009	Driver update for Firmware version 2.10.001.22  Initial Release for Linux, support for: - Mandriva Linux 2008 and Mandriva Linux 2009 - openSUSE 10.3 and openSUSE 11.0  New VIs: RSSMB Set PULM Train Repetition.vi RSSMB Get PULM Train Repetition.vi RSSMB Get PULM Train Repetition Points.vi RSSMB Set All RF Outputs State.vi RSSMB Get Output Impedance.vi RSSMB Set ROSC RF Output.vi RSSMB Get ROSC RF Output.vi RSSMB Set Frequency Sweep Voltage Out.vi RSSMB Get Frequency Sweep Voltage Out.vi RSSMB Set Frequency Sweep Start Voltage.vi RSSMB Get Frequency Sweep Start Voltage.vi RSSMB Set Frequency Sweep Stop Voltage.vi RSSMB Get Frequency Sweep Stop Voltage.vi RSSMB Get Level Sweep Spacing.vi RSSMB Reset Level Sweep.vi RSSMB Set LIST Start Index.vi RSSMB Get LIST Start Index.vi RSSMB Set LIST Stop Index.vi RSSMB Get LIST Stop Index.vi RSSMB Learn LIST Mode Data.vi RSSMB Set CALibration Level Adjustment Data.vi RSSMB Get CALibration Level Adjustment Data.vi RSSMB Set Image Size.vi RSSMB Get Image Size.vi RSSMB Set Output Device.vi RSSMB Get Output Device.vi RSSMB Save Hard Copy.vi RSSMB Set Automatic Naming State.vi RSSMB Get Automatic Naming State.vi RSSMB Get Automatic File Name.vi RSSMB Set Automatic Directory.vi

History for LabVIEW Driver		
Revision	Date	Note
		RSSMB Get Automatic Directory.vi RSSMB Delete Image Files.vi RSSMB Set Automatic File Date State.vi RSSMB Get Automatic File Date State.vi RSSMB Get Automatic File Date.vi RSSMB Set Automatic File Prefix State.vi RSSMB Get Automatic File Prefix State.vi RSSMB Set Automatic File Prefix.vi RSSMB Get Automatic File Prefix.vi RSSMB Get Automatic File Number.vi Modified VIs: RSSMB CALibration All.vi RSSMB CALibration Clock Synthesis.vi RSSMB CALibration FM Offset.vi RSSMB CALibration Frequency.vi RSSMB CALibration Modulation Generators.vi RSSMB CALibration Level.vi RSSMB Revision Query.vi
2.05.2	12/2008	Fixed instrument model checking
2.05.1	11/2008	New features: - Added <b>R&amp;S®SMC100A</b> support - Power Sensor measurement (NRP-Z View) improved  New VIs: RSSMB Reset All Sweeps.vi RSSMB Set LF Sweep Shape.vi RSSMB Get LF Sweep Shape.vi RSSMB Set LF Sweep Source.vi RSSMB Get LF Sweep Source.vi RSSMB Set All Modulations State.vi RSSMB Get FM Sensitivity.vi RSSMB Get PM Sensitivity.vi RSSMB User Correction Fill Data.vi RSSMB Get User Correction Value.vi RSSMB Set Level Sweep Shape.vi RSSMB Get Level Sweep Shape.vi Modified VIs: RSSMB Initiate.vi.vi (SMC support added) RSSMB Configure PM.vi (SMC support added) RSSMB Configure Pulm Trigger.vi (SMC support added) RSSMB Configure RF Level.vi (SMC support added)

History for LabVIEW Driver		
Revision	Date	Note
2.05.00	10/2008	<p>Driver update for Firmware version <b>2.05.200.09</b></p> <p>- New VIs:</p> <ul style="list-style-type: none"> <li>rssmb_confStereoModulation</li> <li>rssmb_StereoDirect</li> <li>rssmb_SetStereoExternalInputImpedance</li> <li>rssmb_GetStereoExternalInputImpedance</li> <li>rssmb_SetStereoMaxModulationFrequency</li> <li>rssmb_GetStereoMaxModulationFrequency</li> <li>rssmb_SetStereoFMDeviation</li> <li>rssmb_GetStereoFMDeviation</li> <li>rssmb_SetStereoSource</li> <li>rssmb_GetStereoSource</li> <li>rssmb_SetStereoState</li> <li>rssmb_GetStereoState</li> <li>rssmb_confStereoARI</li> <li>rssmb_SetStereoARIBKCode</li> <li>rssmb_GetStereoARIBKCode</li> <li>rssmb_SetStereoARIDeviation</li> <li>rssmb_GetStereoARIDeviation</li> <li>rssmb_SetStereoARISState</li> <li>rssmb_GetStereoARISState</li> <li>rssmb_SetStereoARIType</li> <li>rssmb_GetStereoARIType</li> <li>rssmb_confStereoAudio</li> <li>rssmb_SetStereoAudioFrequency</li> <li>rssmb_GetStereoAudioFrequency</li> <li>rssmb_SetStereoAudioMode</li> <li>rssmb_GetStereoAudioMode</li> <li>rssmb_SetStereoAudioPreemphasis</li> <li>rssmb_GetStereoAudioPreemphasis</li> <li>rssmb_SetStereoAudioPreemphasisState</li> <li>rssmb_GetStereoAudioPreemphasisState</li> <li>rssmb_confStereoPilot</li> <li>rssmb_SetStereoPilotState</li> <li>rssmb_GetStereoPilotState</li> <li>rssmb_SetStereoPilotDeviation</li> <li>rssmb_GetStereoPilotDeviation</li> <li>rssmb_SetStereoPilotPhase</li> <li>rssmb_GetStereoPilotPhase</li> </ul>

History for LabVIEW Driver		
Revision	Date	Note
		rssmb_confStereoRDS rssmb_StereoRDSPrgIdentification rssmb_StereoRDSPrgName rssmb_SetStereoRDSDataSet rssmb_GetStereoRDSDataSet rssmb_SetStereoRDSDeviation rssmb_GetStereoRDSDeviation rssmb_SetStereoRDSState rssmb_GetStereoRDSState rssmb_SetStereoRDSTrafficAnnouncementState rssmb_GetStereoRDSTrafficAnnouncementState rssmb_SetStereoRDSTrafficProgramState rssmb_GetStereoRDSTrafficProgramState rssmb_SetFrequencySweepShape rssmb_GetFrequencySweepShape rssmb_PowerFilter rssmb_SetPowerSenseFilterMode rssmb_GetPowerSenseFilterMode rssmb_SetPowerFilterFixedNoiseContent rssmb_GetPowerFilterFixedNoiseContent rssmb_SetPowerFilterFixedNoiseTimeout rssmb_GetPowerFilterFixedNoiseTimeout rssmb_CALibrationClockSynthesis rssmb_SetImageFileName rssmb_GetImageFileName rssmb_SetImageFormat rssmb_GetImageFormat rssmb_GetImageSnapshot rssmb_PresetSignalPath rssmb_GetSYSTEMStartupStatus rssmb_SetAngleUnits rssmb_GetAngleUnits rssmb_SetPowerUnits rssmb_GetPowerUnits rssmb_SetVelocityUnits rssmb_GetVelocityUnits rssmb_DevicePreset Modified VIs: rssmb_init (USB support added) rssmb_CALibrationLevel rssmb_readToFile rssmb_revision_query

History for LabVIEW Driver		
Revision	Date	Note
2.04.0	07/2007	Driver created

## 2 History for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.

History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
2.20.0	11/2011	<p>Driver update for Firmware version V 2.20.237.31</p> <p>* New:</p> <ul style="list-style-type: none"> <li>- Pulse Modulation Train</li> <li>- rssmb_SetSYSTEMDisplayLock</li> <li>- rssmb_GetSYSTEMDisplayLock</li> <li>- rssmb_GetStereoAdjustment</li> <li>- rssmb_SetStereoARTypeState</li> <li>- rssmb_GetStereoARTypeState</li> <li>- rssmb_SetROSCExternalSynchronisationBandwidth</li> <li>- rssmb_GetROSCExternalSynchronisationBandwidth</li> <li>- rssmb_SetRFAttenuatorPowerSearchMode</li> <li>- rssmb_GetRFAttenuatorPowerSearchMode</li> <li>- rssmb_SetFrequencySweepMultiplier</li> <li>- rssmb_GetFrequencySweepMultiplier</li> <li>- rssmb_GetLISTFreeSpace</li> <li>- rssmb_SetPowerDisplayPermanentPriority</li> <li>- rssmb_GetPowerDisplayPermanentPriority</li> <li>- rssmb_TESTAllStart</li> <li>- rssmb_TESTAllStart</li> <li>- rssmb_SYSTEMFactoryPreset</li> </ul> <p>* Removed:</p> <ul style="list-style-type: none"> <li>- DNS settings</li> <li>- rssmb_SetKeyboardLayout</li> <li>- rssmb_GetKeyboardLayout</li> <li>- rssmb_SetKeyboardLanguage</li> <li>- rssmb_GetKeyboardLanguage</li> <li>- rssmb_SetDisplayBlankMode</li> <li>- rssmb_GetDisplayBlankMode</li> <li>- rssmb_SYSTEMNetworkCommonExecute</li> </ul>
2.10.2	08/2010	<p>Driver update for Firmware version V2.10.116.18</p> <p>* New functions</p> <ul style="list-style-type: none"> <li>- rssmb_CALibrationStereoCoder</li> </ul>

History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- rssmb_GetAutomaticFilePath</li> <li>- rssmb_GetPowerConnectedStatus</li> <li>- rssmb_SetAnalogModulationsExternalInputImpedance</li> <li>- rssmb_GetAnalogModulationsExternalInputImpedance</li> <li>- rssmb_SetLISTIndex</li> <li>- rssmb_GetLISTIndex</li> <li>- rssmb_SYSTemGPIBResource</li> <li>- rssmb_SYSTemSerialResource</li> <li>- rssmb_SYSTemOptionUserDefined</li> <li>* Modified functions</li> <li>- rssmb_confPulm</li> </ul>
2.10.1	06/2010	Removed type cast in rssmb_init preventing 64-bit compilation
2.10.0	10/2009	<p>Driver update for Firmware version 2.10.001.22</p> <p>Initial Release for Linux, support for:</p> <ul style="list-style-type: none"> <li>- Mandriva Linux 2008 and Mandriva Linux 2009</li> <li>- openSUSE 10.3 and openSUSE 11.0</li> </ul> <p>* Added functions:</p> <ul style="list-style-type: none"> <li>- rssmb_SetPULMTrainRepetition</li> <li>- rssmb_GetPULMTrainRepetition</li> <li>- rssmb_GetPULMTrainRepetitionPoints</li> <li>- rssmb_SetAllIRFOutputsState</li> <li>- rssmb_GetOutputImpedance</li> <li>- rssmb_SetROSCRFOOutput</li> <li>- rssmb_GetROSCRFOOutput</li> <li>- rssmb_SetFrequencySweepVoltageOut</li> <li>- rssmb_GetFrequencySweepVoltageOut</li> <li>- rssmb_SetFrequencySweepStartVoltage</li> <li>- rssmb_GetFrequencySweepStartVoltage</li> <li>- rssmb_SetFrequencySweepStopVoltage</li> <li>- rssmb_GetFrequencySweepStopVoltage</li> <li>- rssmb_GetLevelSweepSpacing</li> <li>- rssmb_ResetLevelSweep</li> <li>- rssmb_SetLISTStartIndex</li> <li>- rssmb_GetLISTStartIndex</li> <li>- rssmb_SetLISTStopIndex</li> <li>- rssmb_GetLISTStopIndex</li> <li>- rssmb_LearnLISTModeData</li> <li>- rssmb_SetCALibrationLevelAdjustmentData</li> <li>- rssmb_GetCALibrationLevelAdjustmentData</li> </ul>

History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		<ul style="list-style-type: none"> <li>- rssmb_SetImageSize</li> <li>- rssmb_GetImageSize</li> <li>- rssmb_SetOutputDevice</li> <li>- rssmb_GetOutputDevice</li> <li>- rssmb_SaveHardCopy</li> <li>- rssmb_SetAutomaticNamingState</li> <li>- rssmb_GetAutomaticNamingState</li> <li>- rssmb_GetAutomaticFileName</li> <li>- rssmb_SetAutomaticDirectory</li> <li>- rssmb_GetAutomaticDirectory</li> <li>- rssmb_DeletImageFiles</li> <li>- rssmb_SetAutomaticFileDateState</li> <li>- rssmb_GetAutomaticFileDateState</li> <li>- rssmb_GetAutomaticFileDate</li> <li>- rssmb_SetAutomaticFilePrefixState</li> <li>- rssmb_GetAutomaticFilePrefixState</li> <li>- rssmb_SetAutomaticFilePrefix</li> <li>- rssmb_GetAutomaticFilePrefix</li> <li>- rssmb_GetAutomaticFileNumber</li> <li>* Updates and fixes:</li> <li>- rssmb_CALibrationAll</li> <li>- rssmb_CALibrationClockSynthesis</li> <li>- rssmb_CALibrationFMOffset</li> <li>- rssmb_CALibrationFrequency</li> <li>- rssmb_CALibrationModulationGenerators</li> <li>- rssmb_CALibrationLevel</li> <li>- rssmb_revision_query</li> </ul>
2.05.2	12/2008	Modified functions: rssmb_SetRFAttenuatorModerssmb_GetRFAttenuatorMode, rssmb_GetRFAttenuatorLowerRange, rssmb_GetRFAttenuatorUpperRange - fixed instrument model checking
2.05.1	11/2008	New features: - Added <b>R&amp;S®SMC100A</b> support - Power Sensor measurement (NRP-Z View) improved  New functions: rssmb_ResetAllSweeps rssmb_SetLFSweepShape rssmb_GetLFSweepShape rssmb_SetLFSweepSource rssmb_GetLFSweepSource rssmb_SetAllModulationsState

History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		rssmb_GetFMSensitivity rssmb_GetPMSensitivity rssmb_UserCorrectionFillData rssmb_GetUserCorrectionValue rssmb_SetLevelSweepShape rssmb_GetLevelSweepShape Modified functions: rssmb_init (SMC support added) rssmb_confPM (SMC support added) rssmb_confPulmTrigger (SMC support added) rssmb_confRFLevel (SMC support added)
2.05.0	10/2008	Driver update for Firmware version <b>2.05.200.09</b>  New functions: rssmb_confStereoModulation rssmb_StereoDirect rssmb_SetStereoExternalInputImpedance rssmb_GetStereoExternalInputImpedance rssmb_SetStereoMaxModulationFrequency rssmb_GetStereoMaxModulationFrequency rssmb_SetStereoFMDeviation rssmb_GetStereoFMDeviation rssmb_SetStereoSource rssmb_GetStereoSource rssmb_SetStereoState rssmb_GetStereoState rssmb_confStereoARI rssmb_SetStereoARIBKCode rssmb_GetStereoARIBKCode rssmb_SetStereoARIDeviation rssmb_GetStereoARIDeviation rssmb_SetStereoARISState rssmb_GetStereoARISState rssmb_SetStereoARIType rssmb_GetStereoARIType rssmb_confStereoAudio rssmb_SetStereoAudioFrequency rssmb_GetStereoAudioFrequency rssmb_SetStereoAudioMode rssmb_GetStereoAudioMode

History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		rssmb_SetStereoAudioPreemphasis rssmb_GetStereoAudioPreemphasis rssmb_SetStereoAudioPreemphasisState rssmb_GetStereoAudioPreemphasisState rssmb_confStereoPilot rssmb_SetStereoPilotState rssmb_GetStereoPilotState rssmb_SetStereoPilotDeviation rssmb_GetStereoPilotDeviation rssmb_SetStereoPilotPhase rssmb_GetStereoPilotPhase rssmb_confStereoRDS rssmb_StereoRDSPrpIdentification rssmb_StereoRDSPrpName rssmb_SetStereoRDSDataSet rssmb_GetStereoRDSDataSet rssmb_SetStereoRDSDeviation rssmb_GetStereoRDSDeviation rssmb_SetStereoRDSState rssmb_GetStereoRDSState rssmb_SetStereoRDSTrafficAnnouncementState rssmb_GetStereoRDSTrafficAnnouncementState rssmb_SetStereoRDSTrafficProgramState rssmb_GetStereoRDSTrafficProgramState rssmb_SetFrequencySweepShape rssmb_GetFrequencySweepShape rssmb_PowerFilter rssmb_SetPowerSenseFilterMode rssmb_GetPowerSenseFilterMode rssmb_SetPowerFilterFixedNoiseContent rssmb_GetPowerFilterFixedNoiseContent rssmb_SetPowerFilterFixedNoiseTimeout rssmb_GetPowerFilterFixedNoiseTimeout rssmb_CALibrationClockSynthesis rssmb_SetImageFileName rssmb_GetImageFileName rssmb_SetImageFormat rssmb_GetImageFormat rssmb_GetImageSnapshot rssmb_PresetSignalPath rssmb_GetSYSTEMStartupStatus

History for LabWindows/CVI and VXIplug&play Instrument Driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		rssmb_SetAngleUnits rssmb_GetAngleUnits rssmb_SetPowerUnits rssmb_GetPowerUnits rssmb_SetVelocityUnits rssmb_GetVelocityUnits rssmb_DevicePreset Modified functions: rssmb_init (USB support added) rssmb_CALibrationLevel rssmb_readToFile rssmb_revision_query
2.04.0	07/2007	Driver created

### **About Rohde & Schwarz**

Rohde & Schwarz is an independent group of companies specializing in electronics. It is a leading supplier of solutions in the fields of test and measurement, broadcasting, radiomonitoring and radiolocation, as well as secure communications. Established 75 years ago, Rohde & Schwarz has a global presence and a dedicated service network in over 70 countries. Company headquarters are in Munich, Germany.

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