

# Driver history for the R&S® Audio Analyzers UP300 and UP350

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Revision	Date	Note
1.6.3	09/2008	Modifications:  Windows Vista support added in installer
1.6.2	07/2008	Modifications:  Changed functions: rssiup_AnalyzerRMSDCMeasurement (function description modified)
1.6.1	05/2008	Modifications:  Added functions: rssiup_AnalyzerTHDSweepMeasurementResults2 - Changed functions: rssiup_SetGeneratorFunctionRMSSweepAmplitude (recalculation of amplitudes) rssiup_GetGeneratorFunctionRMSSweepAmplitude (recalculation of amplitudes) rssiup_SetGeneratorFunctionRMSSelectiveSweepAmplitude (recalculation of amplitudes) rssiup_GetGeneratorFunctionRMSSelectiveSweepAmplitude (recalculation of amplitudes) rssiup_SetGeneratorAllParamChanRMSSelectiveSweep (recalculation of amplitudes) rssiup_GetGeneratorAllParamChanRMSSelectiveSweep (recalculation of amplitudes) rssiup_SetGeneratorFunctionTHDSweepAmplitude (recalculation of amplitudes) rssiup_GetGeneratorFunctionTHDSweepAmplitude (recalculation of amplitudes) rssiup_AnalyzerRMSSweepMeasurement (recalculation of SweepParam and RMS values) rssiup_AnalyzerRMSSelectiveSweepMeasurement (recalculation of SweepParam)
1.6	03/2008	Modifications:  - Added functions: rssiup_AnalyzerTHDSweepMeasurementResultsExt rssiup_AnalyzerTHDNMeasurementResultsExt
1.5	12/2007	Modifications:  - Added functions: - RMS Sweep: rssiup_SetGeneratorFunctionRMSSweepFrequency rssiup_GetGeneratorFunctionRMSSweepFrequency rssiup_SetGeneratorFunctionRMSSweepAmplitude

## UP300/UP350 driver history

Revision	Date	Note
		<p> rssiup_GetGeneratorFunctionRMSSweepAmplitude  rssiup_AnalyzerRMSSweepMeasurement  - RMS Selective Sweep:  rssiup_GetGeneratorFunctionRMSSelectiveFrequencyLimits  rssiup_SetGeneratorFunctionRMSSelectiveSweepFrequency  rssiup_GetGeneratorFunctionRMSSelectiveSweepFrequency  rssiup_SetGeneratorFunctionRMSSelectiveSweepBandwidth  rssiup_GetGeneratorFunctionRMSSelectiveSweepBandwidth  rssiup_SetGeneratorFunctionRMSSelectiveSweepAmplitude  rssiup_GetGeneratorFunctionRMSSelectiveSweepAmplitude  rssiup_SetGeneratorAllParamChanRMSSelectiveSweep  rssiup_GetGeneratorAllParamChanRMSSelectiveSweep  rssiup_SetGeneratorAllParamRMSSelectiveSweep  rssiup_GetGeneratorAllParamRMSSelectiveSweep  rssiup_SetGeneratorAllParamRMSSelectiveSweepSettings  rssiup_GetGeneratorAllParamRMSSelectiveSweepSettings  rssiup_AnalyzerRMSSelectiveSweepMeasurement  - THD Sweep:  rssiup_SetGeneratorFunctionTHDSweepFrequency  rssiup_GetGeneratorFunctionTHDSweepFrequency  rssiup_SetGeneratorFunctionTHDSweepAmplitude  rssiup_GetGeneratorFunctionTHDSweepAmplitude  rssiup_AnalyzerTHDSweepMeasurement  - New units (dB, %) in THD, DFD and ModDist measurements:  rssiup_AnalyzerTHDSweepMeasurementResults  rssiup_AnalyzerTHDNMeasurementResults  rssiup_AnalyzerDFDMeasurementResults  rssiup_AnalyzerModDistMeasurementResults  - RMS Selective Variable Bandwidth:  rssiup_SetAnalyzerFunctionRMSSelectiveVariableBWSettings  rssiup_GetAnalyzerFunctionRMSSelectiveVariableBWSettings  rssiup_SetAnalyzerFunctionRMSSelVariableBWFFTSettings  rssiup_GetAnalyzerFunctionRMSSelVariableBWFFTSettings  rssiup_SetAnalyzerFunctionRMSSelectiveVariableBWFrequencySettings  rssiup_GetAnalyzerFunctionRMSSelectiveVariableBWFrequencySettings  rssiup_SetAnalyzerFunctionAllParamsRMSSelectiveVariableBWSettings  rssiup_GetAnalyzerFunctionAllParamsRMSSelectiveVariableBWSettings  rssiup_SetAnalyzerFunctionAllParamsRMSSelVariableBWFFTSettings  rssiup_GetAnalyzerFunctionAllParamsRMSSelVariableBWFFTSettings  rssiup_AnalyzerRMSSelectiveVariableBWMainMeasurement  rssiup_AnalyzerRMSSelectiveVariableBWPostFFTMeasurement  - Changed functions:  rssiup_SetAnalyzerFunctionState (added new values to parameters)  rssiup_GetAnalyzerFunctionState (added new values to parameters)  rssiup_GetTriggerState (added new values to parameters)  rssiup_SetTriggerSource (added new values to parameters)  rssiup_SetSweepControl (added new values to parameters)  rssiup_checkStatus (added new error message)  rssiup_parseAnalyzerFunctionData  rssiup_StartMeasurementWaitOPC </p>
1.4.2	06/2007	Modifications: - Added C# wrapper to installer - Bug fixed in function rssiup_AnalyzerPeakResponseData - rssiup_SetGeneratorFunctionState function panel help updated
1.4.1	03/2007	Modifications: - Code performance improvements

## UP300/UP350 driver history

Revision	Date	Note
1.4.0	11/2006	<p>Modifications:</p> <ul style="list-style-type: none"> <li>- Added functions: <ul style="list-style-type: none"> <li>rssiup_GetTriggerState</li> <li>rssiup_SetTriggerSource</li> <li>rssiup_GetTriggerSource</li> <li>rssiup_SetSweepControl</li> </ul> </li> <li>- Changed functions: <ul style="list-style-type: none"> <li>rssiup_SetMeasurementMode (trigger system added, added firmware number checking)</li> <li>rssiup_GetMeasurementMode (trigger system added)</li> <li>rssiup_StartMeasurement (trigger system added, added firmware number checking)</li> <li>rssiup_StartMeasurementWaitOPC (OPC checking and caching added)</li> <li>rssiup_checkStatus (three new error messages)</li> <li>rssiup_AbortMeasurement (added checking for CONT MODE, added firmware number checking)</li> <li>rssiup_defaultInstrSetup (added firmware number checking)</li> <li>rssiup_AnalyzerPeakResponseData (cache checking added)</li> <li>rssiup_AnalyzerRMSDCMeasurement (cache checking added)</li> <li>rssiup_AnalyzerQpeakMeasurement (cache checking added)</li> <li>rssiup_AnalyzerRMSSelectiveMeasurement (cache checking added)</li> <li>rssiup_AnalyzerTHDNMainMeasurement (cache checking added)</li> <li>rssiup_AnalyzerTHDNPostFFTMeasurement (cache checking added)</li> <li>rssiup_AnalyzerPhaseMainMeasurement (cache checking added)</li> <li>rssiup_AnalyzerDFDMainMeasurement (cache checking added)</li> <li>rssiup_AnalyzerDFDPostFFTMeasurement (cache checking added)</li> <li>rssiup_AnalyzerModDistMainMeasurement (cache checking added)</li> <li>rssiup_AnalyzerModDistPostFFTMeasurement (cache checking added)</li> <li>rssiup_AnalyzerFFTSpectrumMainMeasurement (cache checking added)</li> <li>rssiup_DigitalAnalyzerSampleRateMeasurement (cache checking added)</li> <li>rssiup_DigitalAnalyzerProtocolMeasurement (cache checking added)</li> <li>rssiup_SetGeneratorFunctionArbitrary (removed - not exported)</li> <li>rssiup_GetGeneratorFunctionArbitrary (removed - not exported)</li> <li>rssiup_SetGeneratorFunctionArbitraryDimension (removed - not exported)</li> <li>rssiup_GetGeneratorFunctionArbitraryDimension (removed - not exported)</li> </ul> </li> </ul>
1.3	05/2006	<p>Modifications:</p> <ul style="list-style-type: none"> <li>- Code maintenance and testing (UP350 functionality - digital analyzer &amp; generator)</li> </ul> <ul style="list-style-type: none"> <li>rssiup_SetGeneratorFunctionSineDimension (value conversion)</li> <li>rssiup_GetGeneratorFunctionSineDimension (value conversion)</li> <li>rssiup_SetGeneratorFunctionNoiseDimension (value conversion)</li> <li>rssiup_GetGeneratorFunctionNoiseDimension (value conversion)</li> <li>rssiup_SetGeneratorFunctionMultisineShape (values recalculated, frequency parameter retyped)</li> <li>rssiup_GetGeneratorFunctionMultisineShape (values recalculated, frequency parameter retyped)</li> <li>rssiup_SetGeneratorFunctionMultisineDimension (values recalculated)</li> <li>rssiup_GetGeneratorFunctionMultisineDimension (values recalculated)</li> <li>rssiup_SetGeneratorFunctionArbitrary (code improvement, predefined FFT noise signals are accessible)</li> <li>rssiup_GetGeneratorFunctionArbitrary (code improvement)</li> <li>rssiup_SetGeneratorFunctionArbitraryDimension (values recalculated)</li> <li>rssiup_GetGeneratorFunctionArbitraryDimension (values recalculated)</li> <li>rssiup_SetGeneratorGlobalDCOffset (support for digital generator)</li> <li>rssiup_GetGeneratorGlobalDCOffset (support for digital generator)</li> <li>rssiup_SetAnalogGeneratorRangeValue (value conversion)</li> </ul>

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Revision	Date	Note
		<p> rssiup_GetAnalogGeneratorRange (value conversion)  rssiup_SetDigitalGeneratorSamplingFrequencyOffset (description changed)  rssiup_GetDigitalGeneratorSamplingFrequencyOffset (description changed)  rssiup_SetGeneratorDeviceSelector (all running functions are stopped before device change)  rssiup_AnalyzerFFTSpectrumMainMeasurement (post processing of results, reads also reduced FFT due to MMI)  rssiup_SetAnalyzerFunctionFFTSettings (limited to RSSIUP_CHAB only)  rssiup_GetAnalyzerFunctionFFTSettings (limited to RSSIUP_CHAB only)  rssiup_SetAnalyzerFunctionFFTAveraging (limited to RSSIUP_CHAB only)  rssiup_GetAnalyzerFunctionFFTAveraging (limited to RSSIUP_CHAB only)  rssiup_GetAnalyzerDigitalFilter (device data structure changed)  rssiup_SetAnalyzerFunctionPeakSettings (valid range changed)  rssiup_AnalyzerPeakResponseData (values recalculated)  rssiup_AnalyzerRMSDCMeasurement (values recalculated)  rssiup_AnalyzerQpeakMeasurement (values recalculated)  rssiup_AnalyzerRMSSelectiveMeasurement (values recalculated)  rssiup_AnalyzerTHDNMainMeasurement (values recalculated)  rssiup_AnalyzerDFDMainMeasurement (values recalculated) </p>
1.2	03/2006	<p> Modifications:  - Added support for UP350, description changed  - Code maintenance  - Post processing of measurement results (recalculation)  - Name(s) of function groups changed when the functions apply for either analog or also digital analyzer mode  - Changed functions:  rssiup_SetAnalogAnalyzerRangeNumber (removed - not exported)  rssiup_GetAnalogAnalyzerRangeNumber (removed - not exported)  rssiup_SetAnalogGeneratorRangeNumber (removed - not exported)  rssiup_GetAnalogGeneratorRangeNumber (removed - not exported) </p>
1.1	01/2006	<p> Modifications:  - Instrument driver structure modification and code maintenance  - Changed functions:  rssiup_AnalyzerDFDDDataReductionFFTMeasurement (removed - not exported)  rssiup_AnalyzerDFDMainMeasurement (parameters changed)  rssiup_AnalyzerDFDPostFFTMeasurement (parameter values changed)  rssiup_AnalyzerFFTSpectrumDataReductionMeasurement (removed – not exported)  rssiup_AnalyzerFFTSpectrumMainMeasurement (parameters changed)  rssiup_AnalyzerFunctionQpeakReset (removed - not exported)  rssiup_AnalyzerModDistDataReductionFFTMeasurement (removed – not exported)  rssiup_AnalyzerModDistMainMeasurement (parameters changed)  rssiup_AnalyzerModDistPostFFTMeasurement (parameter values changed)  rssiup_AnalyzerPeakResponseData (description changed)  rssiup_AnalyzerPhaseDataReductionFFTMeasurement (removed – not exported)  rssiup_AnalyzerPhaseMainMeasurement (parameters changed)  rssiup_AnalyzerPhasePostFFTMeasurement (removed - not exported)  rssiup_AnalyzerQpeakMeasurement (description changed)  rssiup_AnalyzerRMSDCMeasurement (parameters changed)  rssiup_AnalyzerRMSSelectiveMeasurement (parameters changed)  rssiup_AnalyzerTHDNDataReductionFFTMeasurement (removed - not exported) </p>

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Revision	Date	Note
		rssiup_AnalyzerTHDNMainMeasurement (parameters changed) rssiup_configureRefOscillator (parameter values changed) rssiup_GetAnalogAnalyzerCoupling (channel removed) rssiup_GetAnalogAnalyzerFloatGround (FW version checking) rssiup_GetAnalogAnalyzerHighPassFilter (removed - not exported) rssiup_GetAnalogAnalyzerInput (description changed) rssiup_GetAnalogAnalyzerRange (parameters changed) rssiup_GetAnalogGeneratorRangeNumber (parameter values changed) rssiup_GetAnalogGeneratorRange (parameters changed) rssiup_GetAnalyzerDigitalFilter (parameters changed) rssiup_GetAnalyzerFunctionDFDFFTSettings (parameters changed) rssiup_GetAnalyzerFunctionDistFFTSettings (parameters changed) rssiup_GetAnalyzerFunctionFFTSettings (parameters changed) rssiup_GetAnalyzerFunctionPeakAveraging (removed - not exported) rssiup_GetAnalyzerFunctionPhaseFFTSettings (removed - not exported) rssiup_GetAnalyzerFunctionQpeakSettings (parameter changed) rssiup_GetAnalyzerFunctionRMSDCSettings (parameters changed) rssiup_GetAnalyzerFunctionRMSSelectiveAveraging (parameter values changed) rssiup_GetAnalyzerFunctionTHDNFFTSettings (parameters changed) rssiup_GetAnalyzerFunctionTHDNSettings (parameters changed) rssiup_GetAnalyzerUserFilter (removed - not exported) rssiup_GetAudioMonitorAttenuation (not changed) rssiup_GetDigitalAnalyzerInput (description changed) rssiup_GetDigitalAnalyzerSampleRateAveraging (parameter values changed) rssiup_GetDigitalGeneratorNoofBits (channel removed) rssiup_GetDigitalGeneratorProtocol (description changed) rssiup_GetGeneratorGlobalDCOffset (description changed) rssiup_GetRefOscillatorParameters (parameter values changed) rssiup_SetAnalogAnalyzerCoupling (channel removed) rssiup_SetAnalogAnalyzerFloatGround (FW version checking) rssiup_SetAnalogAnalyzerHighPassFilter (removed - not exported) rssiup_SetAnalogAnalyzerInput (description changed) rssiup_SetAnalogAnalyzerRangeNumber (description changed) rssiup_SetAnalogAnalyzerRangeValue (parameter changed) rssiup_SetAnalogGeneratorRangeDependency (description changed) rssiup_SetAnalogGeneratorRangeNumber (parameter values changed) rssiup_SetAnalogGeneratorRangeValue (description changed) rssiup_SetAnalyzerDigitalFilter (parameter values changed) rssiup_SetAnalyzerFunctionDFDFFTSettings (parameters changed) rssiup_SetAnalyzerFunctionModDistFFTSettings (parameters changed) rssiup_SetAnalyzerFunctionFFTSettings (parameters changed) rssiup_SetAnalyzerFunctionPeakAveraging (removed - not exported) rssiup_SetAnalyzerFunctionPhaseFFTSettings (removed - not exported) rssiup_SetAnalyzerFunctionQpeakSettings (parameter changed) rssiup_SetAnalyzerFunctionRMSDCSettings (parameters changed) rssiup_SetAnalyzerFunctionRMSSelectiveAveraging (parameter values changed) rssiup_SetAnalyzerFunctionRMSSelectiveSettings (parameters changed) rssiup_SetAnalyzerFunctionState (function changed) rssiup_SetAnalyzerFunctionTHDNFFTSettings (parameters changed) rssiup_SetAnalyzerFunctionTHDNSettings (parameter changed) rssiup_SetAnalyzerUserFilter (removed - not exported) rssiup_SetAudioMonitorAttenuation (not changed) rssiup_SetAudioMonitorSource (description changed) rssiup_SetDigitalAnalyzerInput (parameter value changed)

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Revision	Date	Note
		<p>rssiup_SetDigitalAnalyzerSampleRateAveraging (parameter value changed)</p> <p>rssiup_SetDigitalGeneratorNoofBits (channel removed)</p> <p>rssiup_SetDigitalGeneratorProtocol (channel removed)</p> <p>rssiup_SetGeneratorGlobalDCOffset (description changed)</p> <p>rssiup_SetGeneratorFunctionState (function code fixed)</p> <p>- For all functions where units applies is fixed description to present the only basic and/or desired units. These functions need not to be listed here. Current revision supports only basic units anyway.</p> <p>- Included additional support files for SiControl Library (Lite)</p>

