

# LabWindows/CVI, VXIppnp Driver history for R&S®UPV and R&S®UPP200/400/800 Audio Analyzers

## Products:

- | R&S®UPV
- | R&S®UPP200/400/800

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

# Version History

Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
3.3.4	10/2017	<ul style="list-style-type: none"> <li>* Modified</li> <li>- rsupv_ReadMeasurementResultMinMax - fixed range checking for Modifier</li> </ul>
3.3.3	10/2017	<ul style="list-style-type: none"> <li>* Fixed rsupv_GetAnalyzerChannelInputRangeValue</li> <li>* Removed instrument checking in rsupv_SetAnalyzerChannelInputRangeValue, rsupv_GetAnalyzerChannelInputRangeValue</li> </ul>
3.3.2	06/2013	<ul style="list-style-type: none"> <li>* Modified</li> <li>- rsupv_SetAnalyzerChannelInputImpedance, rsupv_GetAnalyzerChannelInputImpedance removed UPP instrument checking</li> <li>- rsupv_SetAnalyzerTHDNFrequencyLimUpp - changed valid range</li> </ul>
3.3.1	07/2012	<ul style="list-style-type: none"> <li>* Modified</li> <li>- rsupv_ConfigureMeasurementFunctionsSettling - if settling is off, no other parameter is sent to instrument</li> <li>- rsupv_GetDigBitstreamAnalyzerClockFrequency, rsupv_SetDigBitstreamAnalyzerClockFrequency - fixed SCPI command</li> </ul>
3.3.0	01/2012	<p>Modifications:</p> <ul style="list-style-type: none"> <li>* New</li> <li>rsupv_SetDigitalGeneratorChannels</li> <li>rsupv_GetDigitalGeneratorChannels</li> <li>rsupv_SetHDMIGeneratorAudioFormat</li> <li>rsupv_GetHDMIGeneratorAudioFormat</li> <li>rsupv_SetHDMIGeneratorAudioSinkARC</li> <li>rsupv_GetHDMIGeneratorAudioSinkARC</li> <li>rsupv_GetHDMIGeneratorAudioInfoFrame</li> <li>rsupv_SetHDMIGeneratorChannelsMode</li> <li>rsupv_GetHDMIGeneratorChannelsMode</li> <li>rsupv_GetHDMIGeneratorVideoFormatNo</li> <li>rsupv_SetHDMIGeneratorVideoColorDepth</li> <li>rsupv_GetHDMIGeneratorVideoColorDepth</li> <li>rsupv_SetHDMIGeneratorVideoContent</li> <li>rsupv_GetHDMIGeneratorVideoContent</li> <li>rsupv_GetHDMIGeneratorVideoColorString</li> <li>rsupv_GetHDMIGeneratorVideoAVI</li> <li>rsupv_GetHDMIGeneratorVideoSPD</li> <li>rsupv_GetHDMIGeneratorVideoEEDID</li> <li>rsupv_GetHDMIGeneratorVideoCEC</li> <li>rsupv_SetHDMIGeneratorVideoFormatFrequency</li> </ul>

**Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.**

Revision	Date	Note
		rsupv_GetHDMIGeneratorVideoFormatFrequency rsupv_SetHDMIGeneratorVideoFormatResolution rsupv_GetHDMIGeneratorVideoFormatResolution rsupv_SetHDMIGeneratorVideoSource rsupv_GetHDMIGeneratorVideoSource rsupv_SetGeneratorDCOffsetChannelValue rsupv_GetGeneratorDCOffsetChannelValue rsupv_SetGeneratorDCOffsetCoupling rsupv_GetGeneratorDCOffsetCoupling rsupv_SetGeneratorEqualizerCoupling rsupv_GetGeneratorEqualizerCoupling rsupv_SetGeneratorStereoChannelFilterCoupling rsupv_GetGeneratorStereoChannelFilterCoupling rsupv_SetGeneratorStereoChannelFilter rsupv_GetGeneratorStereoChannelFilter rsupv_SetGeneratorStereoEqualizer rsupv_GetGeneratorStereoEqualizer rsupv_SetGeneratorStereoEqualizerFile rsupv_SetGeneratorMultichannelFilter rsupv_GetGeneratorMultichannelFilter rsupv_SetGeneratorMultichannelAllChanSine rsupv_GetGeneratorMultichannelAllChanSine rsupv_SetGeneratorMultichannelGain rsupv_GetGeneratorMultichannelGain rsupv_SetGeneratorMultichannelLimitToFS rsupv_GetGeneratorMultichannelLimitToFS rsupv_SetGeneratorMultichannelTotalGain rsupv_GetGeneratorMultichannelTotalGain rsupv_SetGeneratorMultichannelSine rsupv_GetGeneratorMultichannelSine rsupv_SetGeneratorMultichannelSineFrequency rsupv_GetGeneratorMultichannelSineFrequency rsupv_SetGeneratorMultichannelSinePhase rsupv_GetGeneratorMultichannelSinePhase rsupv_SetGeneratorMultichannelSineVoltage rsupv_GetGeneratorMultichannelSineVoltage rsupv_SetGeneratorMultichannelSineArbitrary rsupv_GetGeneratorMultichannelSineArbitrary rsupv_SetGeneratorMultichannelSineArbitraryFilename rsupv_SetGeneratorMultichannelSineVoltPeak rsupv_GetGeneratorMultichannelSineVoltPeak

**Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.**

Revision	Date	Note
		rsupv_SetGeneratorMultichannelSineEqualizer rsupv_GetGeneratorMultichannelSineEqualizer rsupv_SetGeneratorMultichannelSineEqualizerFilename rsupv_SetGeneratorMultichannelDCOffset rsupv_GetGeneratorMultichannelDCOffset rsupv_SetGeneratorMultichannelDCOffsetValue rsupv_GetGeneratorMultichannelDCOffsetValue rsupv_SetGeneratorSingleChannelTrackToOtherChannel rsupv_GetGeneratorSingleChannelTrackToOtherChannel rsupv_SetGeneratorSingleChannel rsupv_GetGeneratorSingleChannel rsupv_SetGeneratorAllChannelSine rsupv_GetGeneratorAllChannelSine rsupv_SetGeneratorSineFrequency rsupv_GetGeneratorSineFrequency rsupv_SetGeneratorSineVoltage rsupv_GetGeneratorSineVoltage rsupv_SetMultichannelAnalyzerImpedanceChannel rsupv_GetMultichannelAnalyzerImpedanceChannel rsupv_SetMultichannelAnalyzerChannelInputImpedance rsupv_GetMultichannelAnalyzerChannelInputImpedance rsupv_SetHDMIAnalyzerAudioInput rsupv_GetHDMIAnalyzerAudioInput rsupv_SetHDMIAnalyzerAudioFormat rsupv_GetHDMIAnalyzerAudioFormat rsupv_SetHDMIAnalyzerAudioCoding rsupv_GetHDMIAnalyzerAudioCoding rsupv_GetHDMIAnalyzerAudioDetected rsupv_GetHDMIAnalyzerAudioNParameter rsupv_GetHDMIAnalyzerAudioCTSPParameter rsupv_SetHDMIAnalyzerAudioChannel rsupv_GetHDMIAnalyzerAudioChannel rsupv_SetHDMIAnalyzerAudioMeasChannelState rsupv_GetHDMIAnalyzerAudioMeasChannelState rsupv_GetHDMIAnalyzerAudioInfoFrame rsupv_GetHDMIAnalyzerVideoFormatNo rsupv_GetHDMIAnalyzerVideoColorDepth rsupv_GetHDMIAnalyzerVideoHDCPState rsupv_GetHDMIAnalyzerVideoTimings rsupv_GetHDMIAnalyzerVideoAVI rsupv_GetHDMIAnalyzerVideoSPD

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Revision	Date	Note
		rsupv_GetHDMIAnalyzerVideoEEDID rsupv_SetDigBitstreamAnalyzerClockSource rsupv_GetDigBitstreamAnalyzerClockSource rsupv_SetDigBitstreamAnalyzerChannelMode rsupv_GetDigBitstreamAnalyzerChannelMode rsupv_SetDigBitstreamAnalyzerAlignment rsupv_GetDigBitstreamAnalyzerAlignment rsupv_SetDigBitstreamAnalyzerClockFrequency rsupv_GetDigBitstreamAnalyzerClockFrequency rsupv_SetDigBitstreamAnalyzerDutyCycle rsupv_GetDigBitstreamAnalyzerDutyCycle rsupv_SetDigBitstreamAnalyzerDownSamplingFactor rsupv_GetDigBitstreamAnalyzerDownSamplingFactor rsupv_SetAnalyzerRefinement rsupv_GetAnalyzerRefinement rsupv_SetAnalyzerFFTMaxSize rsupv_GetAnalyzerFFTMaxSize rsupv_SetAnalyzerPOLQABand rsupv_GetAnalyzerPOLQABand rsupv_SetAnalyzerPOLQAMeasurementMode rsupv_GetAnalyzerPOLQAMeasurementMode rsupv_SetAnalyzerPOLQAGain rsupv_GetAnalyzerPOLQAGain rsupv_GetAnalyzerPOLQAReferenceLevel rsupv_GetAnalyzerPOLQADegLevel rsupv_GetAnalyzerPOLQAAttenuation rsupv_GetAnalyzerPOLQASNRRef rsupv_GetAnalyzerPOLQASNRDegraded rsupv_GetAnalyzerPOLQARefSpRatio rsupv_GetAnalyzerPOLQADegSpRatio rsupv_GetAnalyzerPOLQAMinDelay rsupv_GetAnalyzerPOLQAMaxDelay rsupv_SetLipSyncAnalysisActiveColorHigh rsupv_GetLipSyncAnalysisActiveColorHigh rsupv_SetLipSyncAnalysisActiveColorLow rsupv_GetLipSyncAnalysisActiveColorLow rsupv_SetLipSyncAnalysisActivePatternColor rsupv_GetLipSyncAnalysisActivePatternColor rsupv_SetLipSyncAnalysisMutePatternColor rsupv_GetLipSyncAnalysisMutePatternColor rsupv_SetLipSyncAnalysisAudioTriggerThreshold

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Revision	Date	Note
		rsupv_GetLipSyncAnalysisAudioTriggerThreshold rsupv_SetSwitcherConnection rsupv_GetSwitcherConnection rsupv_SetDisplayMaxChannels rsupv_GetDisplayMaxChannels rsupv_ConfigureHDMIGeneratorAudio rsupv_ConfigureHDMIGeneratorVideo rsupv_ConfigureHDMIAnalyzerAudio rsupv_ConfigureDigBitstreamAnalyzer * Updated rsupv_SaveSetup - double quotes added to the file name rsupv_SetAnalyzerFunction rsupv_GetAnalyzerFunction rsupv_SetAnalyzerInstrument rsupv_GetAnalyzerInstrument rsupv_SetGeneratorInstrument rsupv_GetGeneratorInstrument rsupv_ConfigureGeneratorDigital rsupv_SetDigitalGeneratorChannelMode rsupv_GetDigitalGeneratorChannelMode rsupv_SetDigitalGeneratorSyncTo rsupv_GetDigitalGeneratorSyncTo rsupv_SetGeneratorFunction rsupv_GetGeneratorFunction rsupv_SetUSIAnalyzerSyncTo rsupv_GetUSIAnalyzerSyncTo rsupv_SetUSIAnalyzerFirstBit rsupv_GetUSIAnalyzerFirstBit rsupv_SetSwitcherPort rsupv_GetSwitcherPort rsupv_ConfigureAudioMonitoring rsupv_SetAuxSignalSource rsupv_GetAuxSignalSource rsupv_SetProtocolAnalysisDisplayMode rsupv_GetProtocolAnalysisDisplayMode rsupv_SetProtocolAnalysisHighlight rsupv_GetProtocolAnalysisHighlight rsupv_SetProtocolAnalysisPersistence rsupv_GetProtocolAnalysisPersistence rsupv_SetProtocolAnalysisViewMode rsupv_GetProtocolAnalysisViewMode

**Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.**

Revision	Date	Note
3.1.2	12/2010	<p>Modifications:</p> <ul style="list-style-type: none"> <li>* Option query does not fail on UPP without any option. However, if you have UPV without K4, you will no longer get error message. Both UPP with remote-control and without any option and UPV without remote control, return same response for *OPT?</li> <li>* Fixed rsupv.h - added missing visa.h</li> </ul>
3.1.0	08/2010	<p>Driver for UPV firmware version 3.1.0  Added support for R&amp;S@UPP200/400/800 Audio Analyzer</p> <p>Modifications:</p> <ul style="list-style-type: none"> <li>rsupv_ConfigureGeneratorAnalog, rsupv_SetGeneratorImpedance, rsupv_GetGeneratorImpedance - added new impedance value</li> <li>rsupv_SetGeneratorBandwidth, rsupv_GetGeneratorBandwidth - added new bandwidth values</li> <li>rsupv_ConfigureGeneratorDigital, rsupv_SetDigitalGeneratorSyncTo, rsupv_GetDigitalGeneratorSyncTo - added new Sync To options</li> <li>rsupv_SetGeneratorSweepXAxis, rsupv_GetGeneratorSweepXAxis - added new axis options</li> <li>rsupv_SetAnalyzerChannellInputImpedance, rsupv_GetAnalyzerChannellInputImpedance - added new impedance values</li> <li>rsupv_SetDigitalAnalyzerAudioInput, rsupv_GetDigitalAnalyzerAudioInput - added new audio input options</li> <li>rsupv_SetI2SAnalyzerSampleFrequency, rsupv_GetI2SAnalyzerSampleFrequency - new sample frequencies added</li> <li>rsupv_SetAnalyzerLevelMeasTime, rsupv_GetAnalyzerLevelMeasTime - added new measurement time values</li> <li>rsupv_SetAnalyzerLevelDCMeasTime, rsupv_GetAnalyzerLevelDCMeasTime - added new measurement time values</li> <li>rsupv_GetAnalyzerPEAQModel - bugfix</li> <li>rsupv_SetAnalyzerWaveformMonitorTriggerSource, rsupv_GetAnalyzerWaveformMonitorTriggerSource - new trigger sources added</li> <li>rsupv_SetAnalyzerCombinedMeasurement, rsupv_GetAnalyzerCombinedMeasurement - new measurements added</li> <li>rsupv_SetDisplayUnit, rsupv_GetDisplayUnit, rsupv_SetAnalyzerUnit, rsupv_GetAnalyzerUnit, rsupv_SetAnalyzerFrequencyUnit, rsupv_GetAnalyzerFrequencyUnit - new units added</li> <li>rsupv_SetAnalyzerFrequencyPhaseReference, rsupv_GetAnalyzerFrequencyPhaseReference - new reference added</li> </ul> <p>* New functions  Analyzer Trigger Settling</p>

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Revision	Date	Note
		Analyzer Function Settling External Sweep FFT Analysis Equalizer FFT Analysis Frequency Limit rsupv_SetDigitalGeneratorBalancedImpedance rsupv_GetDigitalGeneratorBalancedImpedance rsupv_SetDigitalGeneratorUnbalancedImpedance rsupv_GetDigitalGeneratorUnbalancedImpedance rsupv_GetI2SGeneratorBCLKFrequency rsupv_SetGeneratorSweepHalt rsupv_GetGeneratorSweepHalt rsupv_SetGeneratorPlayRestart rsupv_GetGeneratorPlayRestart rsupv_SetAnalyzerSNSequenceState rsupv_GetAnalyzerSNSequenceState rsupv_SetAnalyzerFFTTTriggeredState rsupv_GetAnalyzerFFTTTriggeredState rsupv_SetAuxSpeakerMonitor rsupv_GetAuxSpeakerMonitor rsupv_SetSwitcherPort rsupv_GetSwitcherPort rsupv_SetDisplayInvertEqu rsupv_GetDisplayInvertEqu rsupv_setStatusRegister rsupv_getStatusRegister
2.6.0	08/2009	Driver supports UPV firmware version 2.6  Updated functions rsupv_SetGeneratorFunction, rsupv_GetGeneratorFunction - added new function rsupv_SetAnalyzerFunction, rsupv_GetAnalyzerFunction - added new function rsupv_SetProtocolGeneratorCodingMode, rsupv_GetProtocolGeneratorCodingMode - added new mode  New functions Audio Quality Measurement rsupv_SetProtocolGeneratorCodingFile
2.4.2	11/2008	Modified functions(command removed - SYST:COMM:GPIB:LTER):  rsupv_StoreMemoryDataBinary rsupv_readToFile rsupv_writeHugeFileStart rsupv_contHugeFile



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2.4.1	10/2008	<p>Driver for UPV firmware version 2.4</p> <p>New functions:</p> <ul style="list-style-type: none"> <li>- rsupv_readToFile</li> <li>- rsupv_writeFromFile</li> <li>- rsupv_writeHugeFileStart</li> <li>- rsupv_contHugeFile</li> </ul>
2.4.0	08/2008	<p>Driver update for UPV firmware version 2.4</p> <p>New features:</p> <ul style="list-style-type: none"> <li>- Added Analog 8 Channel option</li> <li>- Added Analog 16 Channel option</li> <li>- Added USI Dual Channel option</li> <li>- Added USI 8 Channel option</li> <li>- Added Speach Quality Measurements (PESQ)</li> </ul> <p>- Modified functions:</p> <ul style="list-style-type: none"> <li>• rsupv_ConfigureGeneratorDigital - removed argument Source Mode</li> <li>• rsupv_SetAnalyzerInstrument, rsupv_GetAnalyzerInstrument - added new instrument types (Analog Multichannel and USI instruments)</li> <li>• rsupv_SetAnalyzerChannellInputRange, rsupv_GetAnalyzerChannellInputRange, rsupv_SetAnalyzerChannellInputRangeValue, rsupv_GetAnalyzerChannellInputRangeValue - range of Channel is now 1 to 16</li> <li>• rsupv_SetAnalyzerFFTAvgCount - changed range</li> <li>• rsupv_SetAnalyzerWaveformMonitorTriggerSource, rsupv_GetAnalyzerWaveformMonitorTriggerSource, rsupv_SetAnalyzerRecordTriggerSource, rsupv_GetAnalyzerRecordTriggerSource - added Gen Burst</li> <li>• rsupv_SetGeneratorFilter, rsupv_GetGeneratorFilter, rsupv_SetAnalyzerPrefilter, rsupv_GetAnalyzerPrefilter, rsupv_SetAnalyzerFilter, rsupv_GetAnalyzerFilter - added AES 17 and C Weighting</li> <li>• rsupv_SetMeasurementMode, rsupv_GetMeasurementMode - added Wait</li> <li>• rsupv_SetGeneratorInstrument, rsupv_GetGeneratorInstrument - added USI Dual Chan instrument</li> </ul> <p>- New functions:</p> <ul style="list-style-type: none"> <li>• rsupv_SetGeneratorOutputState, rsupv_GetGeneratorOutputState</li> <li>• rsupv_SetAnalyzerFFTUndersampleState, rsupv_GetAnalyzerFFTUndersampleState</li> <li>• rsupv_SetAnalyzerFFTCompFactor, rsupv_GetAnalyzerFFTCompFactor</li> <li>• rsupv_SetDisplayNormalization, rsupv_GetDisplayNormalization</li> <li>• rsupv_SetDisplayNormalizeValue, rsupv_GetDisplayNormalizeValue</li> <li>• rsupv_GetProtocolAnalysisError</li> <li>• rsupv_SetDisplayCursorMoveTo</li> <li>• rsupv_SetMeasurementTimeout, rsupv_GetMeasurementTimeout</li> <li>• rsupv_ReadMeasurementResultMinMax</li> </ul>

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Revision	Date	Note
		<ul style="list-style-type: none"> <li>• rsupv_ReadAxisData</li> <li>• rsupv_ReadAxisDataCount</li> <li>• rsupv_SetHardcopySize, rsupv_GetHardcopySize</li> <li>• rsupv_SetWindowState, rsupv_GetWindowState</li> </ul>
1.4.0	03/2007	<p>Driver update for UPV firmware version 1.4</p> <p>Added support for USB interface</p> <p>New Functions:</p> <ul style="list-style-type: none"> <li>rsupv_SetDigitalGeneratorAddImpairment</li> <li>rsupv_GetDigitalGeneratorAddImpairment</li> <li>rsupv_ConfigureGeneratorI2S</li> <li>rsupv_SetI2SGeneratorSyncTo</li> <li>rsupv_GetI2SGeneratorSyncTo</li> <li>rsupv_SetI2SGeneratorWordLength</li> <li>rsupv_GetI2SGeneratorWordLength</li> <li>rsupv_SetI2SGeneratorSampleFrequency</li> <li>rsupv_GetI2SGeneratorSampleFrequency</li> <li>rsupv_SetI2SGeneratorMCIkRatio</li> <li>rsupv_GetI2SGeneratorMCIkRatio</li> <li>rsupv_SetI2SGeneratorAudioBits</li> <li>rsupv_GetI2SGeneratorAudioBits</li> <li>rsupv_SetI2SGeneratorFormat</li> <li>rsupv_GetI2SGeneratorFormat</li> <li>rsupv_SetI2SGeneratorFsyncShape</li> <li>rsupv_GetI2SGeneratorFsyncShape</li> <li>rsupv_SetI2SGeneratorFsyncPolarity</li> <li>rsupv_GetI2SGeneratorFsyncPolarity</li> <li>rsupv_SetI2SGeneratorWordOffset</li> <li>rsupv_GetI2SGeneratorWordOffset</li> <li>rsupv_SetGeneratorPhaseFile</li> <li>rsupv_SetGeneratorPlayScalePkToFS</li> <li>rsupv_GetGeneratorPlayScalePkToFS</li> <li>rsupv_SetGeneratorPlayChannel</li> <li>rsupv_GetGeneratorPlayChannel</li> <li>rsupv_SetGeneratorPlayMode</li> <li>rsupv_GetGeneratorPlayMode</li> <li>rsupv_SetGeneratorPlayTime</li> <li>rsupv_GetGeneratorPlayTime</li> <li>rsupv_SetGeneratorPlayShapeFile</li> <li>rsupv_SetGeneratorPlayAnalyzerLoopChannel</li> <li>rsupv_GetGeneratorPlayAnalyzerLoopChannel</li> </ul>

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Revision	Date	Note
		rsupv_SetGeneratorPlayAnalyzerLoopGain rsupv_GetGeneratorPlayAnalyzerLoopGain rsupv_SetGeneratorAmplitudeVariation rsupv_GetGeneratorAmplitudeVariation rsupv_SetGeneratorAVModulationFrequency rsupv_GetGeneratorAVModulationFrequency rsupv_SetGeneratorVariation rsupv_GetGeneratorVariation rsupv_SetI2SAnalyzerWordLength rsupv_GetI2SAnalyzerWordLength rsupv_SetI2SAnalyzerFormat rsupv_GetI2SAnalyzerFormat rsupv_SetI2SAnalyzerFsyncSlope rsupv_GetI2SAnalyzerFsyncSlope rsupv_SetI2SAnalyzerWordOffset rsupv_GetI2SAnalyzerWordOffset rsupv_SetI2SAnalyzerInput rsupv_GetI2SAnalyzerInput rsupv_SetI2SAnalyzerChannelMode rsupv_GetI2SAnalyzerChannelMode rsupv_SetI2SAnalyzerSampleFrequency rsupv_GetI2SAnalyzerSampleFrequency rsupv_SetAnalyzerLevelMeasBandwidth rsupv_GetAnalyzerLevelMeasBandwidth rsupv_SetAnalyzerLevelMeasBandwidthValue rsupv_GetAnalyzerLevelMeasBandwidthValue rsupv_SetAnalyzerLevelMeasFrequencyMode rsupv_GetAnalyzerLevelMeasFrequencyMode rsupv_SetAnalyzerLevelMeasFrequencyValue rsupv_GetAnalyzerLevelMeasFrequencyValue rsupv_SetAnalyzerLevelMeasFrequencyFactor rsupv_GetAnalyzerLevelMeasFrequencyFactor rsupv_SetAnalyzerLevelMeasFrequencyStart rsupv_GetAnalyzerLevelMeasFrequencyStart rsupv_SetAnalyzerLevelMeasFrequencyStop rsupv_GetAnalyzerLevelMeasFrequencyStop rsupv_SetAnalyzerLevelDCMeasTime rsupv_GetAnalyzerLevelDCMeasTime rsupv_SetAnalyzerBargraphState rsupv_GetAnalyzerBargraphState rsupv_SetAnalyzerWaveformMonitorMeasMode

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		rsupv_GetAnalyzerWaveformMonitorMeasMode rsupv_SetAnalyzerWaveformMonitorCompressionFactor rsupv_GetAnalyzerWaveformMonitorCompressionFactor rsupv_SetAnalyzerWaveformMonitorTraceLength rsupv_GetAnalyzerWaveformMonitorTraceLength rsupv_SetAnalyzerWaveformMonitorTriggerSource rsupv_GetAnalyzerWaveformMonitorTriggerSource rsupv_SetAnalyzerWaveformMonitorTriggerLevel rsupv_GetAnalyzerWaveformMonitorTriggerLevel rsupv_SetAnalyzerWaveformMonitorTriggerSlope rsupv_GetAnalyzerWaveformMonitorTriggerSlope rsupv_SetAnalyzerWaveformMonitorPretrigger rsupv_GetAnalyzerWaveformMonitorPretrigger rsupv_SetAnalyzerWaveformMonitorAutotrigger rsupv_GetAnalyzerWaveformMonitorAutotrigger rsupv_SetAnalyzerSNMeasMode rsupv_GetAnalyzerSNMeasMode rsupv_SetAnalyzerSNMeasTime rsupv_GetAnalyzerSNMeasTime rsupv_SetAnalyzerNOCTMeasMode rsupv_GetAnalyzerNOCTMeasMode rsupv_SetAnalyzerRecordFile rsupv_SetAnalyzerRecordLength rsupv_GetAnalyzerRecordLength rsupv_GetAnalyzerRecordFileLength rsupv_SetAnalyzerRecordTriggerSource rsupv_GetAnalyzerRecordTriggerSource rsupv_SetAnalyzerRecordTriggerLevel rsupv_GetAnalyzerRecordTriggerLevel rsupv_SetAnalyzerRecordTriggerSlope rsupv_GetAnalyzerRecordTriggerSlope rsupv_SetAnalyzerRecordPretrigger rsupv_GetAnalyzerRecordPretrigger rsupv_SetProtocolAnalysisState rsupv_GetProtocolAnalysisState rsupv_SetProtocolAnalysisDisplayState rsupv_GetProtocolAnalysisDisplayState rsupv_SetProtocolAnalysisDisplayMode rsupv_GetProtocolAnalysisDisplayMode rsupv_SetProtocolAnalysisHighlight rsupv_GetProtocolAnalysisHighlight

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		rsupv_SetProtocolAnalysisPersistence rsupv_GetProtocolAnalysisPersistence rsupv_SetProtocolAnalysisViewMode rsupv_GetProtocolAnalysisViewMode rsupv_GetProtocolAnalysisChannelByte rsupv_SetAuxAudioMonitor rsupv_GetAuxAudioMonitor rsupv_SetAuxPhoneState rsupv_GetAuxPhoneState rsupv_SetAuxPhonePermanentState rsupv_GetAuxPhonePermanentState rsupv_SetAuxTriggerInputEnable rsupv_GetAuxTriggerInputEnable rsupv_SetAuxTriggerInputMode rsupv_GetAuxTriggerInputMode rsupv_SetAuxTriggerInputEdge rsupv_GetAuxTriggerInputEdge rsupv_SetAuxTriggerOutputEnable rsupv_GetAuxTriggerOutputEnable rsupv_SetAuxTriggerOutputMode rsupv_GetAuxTriggerOutputMode rsupv_SetAuxTriggerOutputFrequency rsupv_GetAuxTriggerOutputFrequency rsupv_SetAuxTriggerOutputEdge rsupv_GetAuxTriggerOutputEdge rsupv_SetSwitcherState rsupv_GetSwitcherState rsupv_SetSwitcherTracking rsupv_GetSwitcherTracking rsupv_SetSwitcherOffset rsupv_GetSwitcherOffset rsupv_SetSwitcherInput rsupv_GetSwitcherInput rsupv_SetSwitcherOutput rsupv_GetSwitcherOutput rsupv_SetProtocolGeneratorCodingMode rsupv_GetProtocolGeneratorCodingMode rsupv_SetProtocolGeneratorCRC rsupv_GetProtocolGeneratorCRC rsupv_SetProtocolGeneratorValidity rsupv_GetProtocolGeneratorValidity

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		rsupv_SetProtocolGeneratorAllBitsToZero rsupv_SetProtocolGeneratorChannelByte rsupv_GetProtocolGeneratorChannelByte rsupv_SetProtocolGeneratorChannels rsupv_GetProtocolGeneratorChannels rsupv_SetDisplayDataListFilter rsupv_GetDisplayDataListFilter rsupv_SetDisplayScanOffset rsupv_GetDisplayScanOffset rsupv_SetDisplaySweepYSource rsupv_GetDisplaySweepYSource rsupv_SetDisplayFFTGraphYSource rsupv_GetDisplayFFTGraphYSource rsupv_SetDisplayWaveformYSource rsupv_GetDisplayWaveformYSource rsupv_SetDisplayBargraphYSource rsupv_GetDisplayBargraphYSource rsupv_SetDisplayYSourceFile rsupv_SetDisplayTraceUpdate rsupv_GetDisplayTraceUpdate rsupv_SetDisplayReference rsupv_GetDisplayReference rsupv_SetDisplayReferenceValue rsupv_GetDisplayReferenceValue rsupv_SetDisplayReferenceFile rsupv_SetDisplayCopyReferenceSettings rsupv_GetDisplayCopyReferenceSettings rsupv_SetDisplayCopyScalingSettings rsupv_GetDisplayCopyScalingSettings rsupv_SetDisplayUnitFunctionTrack rsupv_GetDisplayUnitFunctionTrack rsupv_SetDisplayUnit rsupv_GetDisplayUnit rsupv_SetDisplayUnitAuto rsupv_GetDisplayUnitAuto rsupv_SetDisplayUnitUserString rsupv_GetDisplayUnitUserString rsupv_SetDisplayYAxisSpacing rsupv_GetDisplayYAxisSpacing rsupv_SetDisplayYAxisTop rsupv_GetDisplayYAxisTop

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Revision	Date	Note
		rsupv_SetDisplayYAxisBottom rsupv_GetDisplayYAxisBottom rsupv_SetDisplayCopyLimitSettings rsupv_GetDisplayCopyLimitSettings rsupv_SetDisplayLimitState rsupv_GetDisplayLimitState rsupv_SetDisplayLimitSource rsupv_GetDisplayLimitSource rsupv_SetDisplayLimitSourceValue rsupv_GetDisplayLimitSourceValue rsupv_SetDisplayLimitSourceFilename rsupv_GetDisplayLimitSourceFilename rsupv_SetDisplayLimitShift rsupv_GetDisplayLimitShift rsupv_SetDisplayLimitShiftParallel rsupv_GetDisplayLimitShiftParallel rsupv_SetDisplayLimitShiftSymmetrical rsupv_GetDisplayLimitShiftSymmetrical rsupv_SetDisplaySweepGraphXSource rsupv_GetDisplaySweepGraphXSource rsupv_SetDisplaySweepGraphXAxis rsupv_GetDisplaySweepGraphXAxis rsupv_SetDisplayXAxisReferenceValue rsupv_GetDisplayXAxisReferenceValue rsupv_SetDisplayXAxisScaling rsupv_GetDisplayXAxisScaling rsupv_SetDisplayXAxisSpacing rsupv_GetDisplayXAxisSpacing rsupv_SetDisplayXAxisLeft rsupv_GetDisplayXAxisLeft rsupv_SetDisplayXAxisRight rsupv_GetDisplayXAxisRight rsupv_SetDisplayCursorState rsupv_GetDisplayCursorState rsupv_SetDisplayCursorMode rsupv_GetDisplayCursorMode rsupv_GetDisplayCursorAmplitude rsupv_SetDisplayCursorMoveTo rsupv_SetDisplayCursorXPosition rsupv_GetDisplayCursorXPosition rsupv_SetDisplayCursorYPosition

**Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.**

Revision	Date	Note
		rsupv_GetDisplayCursorYPosition rsupv_SetDisplayCursorMovement rsupv_GetDisplayCursorMovement rsupv_SetDisplayMarkerMode rsupv_GetDisplayMarkerMode rsupv_SetDisplayMarkerHarmonics rsupv_GetDisplayMarkerHarmonics rsupv_SetDisplayMarkerMoveTo rsupv_SetDisplayMarkerXPosition rsupv_GetDisplayMarkerXPosition rsupv_SetDisplayStoreTraceAs rsupv_GetDisplayStoreTraceAs rsupv_SetDisplayTraceSelect rsupv_GetDisplayTraceSelect rsupv_SetDisplayNormalizationFrequency rsupv_GetDisplayNormalizationFrequency rsupv_SetDisplayModifyEqu rsupv_GetDisplayModifyEqu rsupv_SetDisplayLimitOffset rsupv_GetDisplayLimitOffset rsupv_SetDisplayLimitOffsetValue rsupv_GetDisplayLimitOffsetValue rsupv_SetDisplayStoreTraceToFile rsupv_GetDisplayStoreTraceToFile rsupv_MeasurementControl rsupv_ReadTraceDataSets rsupv_WriteTraceDataSets rsupv_ReadTraceDataSetCount rsupv_ReadTraceDataList rsupv_ReadTraceDataListCount rsupv_SetHardcopySource rsupv_GetHardcopySource rsupv_SetHardcopyDestination rsupv_GetHardcopyDestination rsupv_SetHardcopyOrientation rsupv_GetHardcopyOrientation rsupv_SetHardcopyStoreMode rsupv_GetHardcopyStoreMode rsupv_SetHardcopyFileName rsupv_GetHardcopyFileName rsupv_SetHardcopyHeaderFooterState



**Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.**

Revision	Date	Note
		<p>rsupv_GetHardcopyHeaderFooterState  rsupv_SetHardcopyDefineHeader  rsupv_GetHardcopyDefineHeader  rsupv_SetHardcopyDefineFooter  rsupv_GetHardcopyDefineFooter  rsupv_HardcopyImmediate  rsupv_SetMemoryString  rsupv_GetMemoryString  rsupv_StoreMemoryDataNumeric  rsupv_StoreMemoryDataBinary  rsupv_ResetMemoryBuffers  rsupv_SystemShutdown</p> <p>Modified Functions:</p> rsupv_SetGeneratorInstrument rsupv_GetGeneratorInstrument rsupv_ConfigureGeneratorAnalog rsupv_SetGeneratorOutputType rsupv_GetGeneratorOutputType rsupv_SetGeneratorBandwidth rsupv_GetGeneratorBandwidth rsupv_SetGeneratorVoltageRange rsupv_SetGeneratorCrestFactor rsupv_GetGeneratorCrestFactor rsupv_SetGeneratorCrestFactorValue rsupv_GetGeneratorCrestFactorValue rsupv_SetGeneratorSweepXAxis rsupv_GetGeneratorSweepXAxis rsupv_SetGeneratorSweepZAxis rsupv_GetGeneratorSweepZAxis rsupv_SetGeneratorSweepSpacing rsupv_GetGeneratorSweepSpacing rsupv_SetGeneratorSweepStart rsupv_GetGeneratorSweepStart rsupv_SetGeneratorSweepStop rsupv_GetGeneratorSweepStop rsupv_SetGeneratorSweepPoints rsupv_GetGeneratorSweepPoints rsupv_SetGeneratorSweepSteps rsupv_GetGeneratorSweepSteps rsupv_SetGeneratorFilter

**Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.**

Revision	Date	Note
		rsupv_GetGeneratorFilter rsupv_SetGeneratorEqualizerFile rsupv_SetGeneratorFunction rsupv_GetGeneratorFunction rsupv_SetGeneratorRandomShape rsupv_GetGeneratorRandomShape rsupv_SetAnalyzerInstrument rsupv_GetAnalyzerInstrument rsupv_SetAnalyzerChannelInputRange rsupv_GetAnalyzerChannelInputRange rsupv_GetAnalyzerChannelInputRangeValue rsupv_SetDigitalAnalyzerAudioInput rsupv_SetAnalyzerSampleFrequency rsupv_GetAnalyzerSampleFrequency rsupv_SetAnalyzerStartCondition rsupv_GetAnalyzerStartCondition rsupv_SetAnalyzerFunction rsupv_GetAnalyzerFunction rsupv_ConfigureAnalyzerSweep rsupv_SetAnalyzerLevelMeasTime rsupv_GetAnalyzerLevelMeasTime rsupv_ConfigureAnalyzerPeakMeasurement rsupv_SetAnalyzerPeakMeasIntervalTime rsupv_GetAnalyzerPeakMeasIntervalTime rsupv_ConfigureAnalyzerFundamental rsupv_SetAnalyzerTHDFundamental rsupv_SetAnalyzerTHDNFrequencyLimUpp rsupv_SetAnalyzerLevelMonitor rsupv_SetAnalyzerPrefilter rsupv_GetAnalyzerPrefilter rsupv_SetAnalyzerFilter rsupv_GetAnalyzerFilter rsupv_SetAnalyzerNotchFrequency rsupv_ConfigureAudioMonitoring rsupv_SetAuxSpeaker rsupv_GetAuxSpeaker rsupv_SetAuxPhoneOutput rsupv_GetAuxPhoneOutput rsupv_SetAuxAnalogOutput rsupv_GetAuxAnalogOutput rsupv_SetAnalyzerFrequencyPhaseReferenceValue

Driver history for LabWindows/CVI and VXIplug&play driver for C#, C/C++, Visual Basic .NET, VEE, etc.		
Revision	Date	Note
		rsupv_ReadMeasurementResult rsupv_SetDigitalGeneratorSampleFrequency rsupv_GetDigitalGeneratorSampleFrequency rsupv_SetAnalyzerPhaseUnit rsupv_GetAnalyzerPhaseUnit rsupv_error_query - SENS:DATA? sent prior to SYST:ERR? to switch to other parser - fixes the error read out bug rsupv_StartMeasurementWaitOPC
1.0.2	02/2006	Modifications - Changed help of rsupv_init() for LAN Interface
1.0.1	04/2005	Modifications - I/O conversion specification fixed: Input: "%le" Output: "%.12f" - System locale are set to default "C"
1.0	01/2005	Created.

### **About Rohde & Schwarz**

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