

History and release notes for the R&S®FSH3/6/18 Handheld Spectrum Analyzers

Note: This driver also supports R&S®FSH4/8 to allow the migration of legacy applications to new R&S®FSH instrument generation.

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FSH driver history		
Revision	Date	Note
2.7.0	02/2014	Added support for R&S FSH4/8 firmware 2.40 - New: RSFSH Set Electrical Cable Time State.vi RSFSH Get Electrical Cable Time State.vi RSFSH Get Electrical Cable Time Length.vi RSFSH Calibration Start.vi RSFSH Calibration Continue.vi RSFSH Calibration Abort.vi RSFSH Set System Time Shift.vi RSFSH Get System Time Shift.vi
2.6.0	10/2013	Added support for R&S FSH4/8 firmware 2.30 - New: RSFSH Set SEM Frequency Carrier Start.vi RSFSH Get SEM Frequency Carrier Start.vi RSFSH Set SEM Frequency Carrier Stop.vi RSFSH Get SEM Frequency Carrier Stop.vi Data Capture Saving Events - Modified RSFSH Set SEM Sweep Mode.vi RSFSH Get SEM Sweep Mode.vi
2.5.0	04/2013	Added support for R&S FSH4/8 firmware 2.20 - New: RSFSH Set Trace Style.vi RSFSH Get Trace Style.vi RSFSH Read SEM Peak List.vi - Modified: RSFSH Set Measurement Mode - new modes RSFSH Define Limit Line - FSH 4 support RSFSH Delete Limit Line.vi - FSH 4 bug fixed
2.4.0	02/2013	Modifications: - New: RSFSH Set VSWR Y Scale Min.vi RSFSH Get VSWR Y Scale Min.vi RSFSH Set VSWR Y Scale Max.vi

FSH driver history

Revision	Date	Note
		RSFSH Get VSWR Y Scale Max.vi RSFSH Set Antenna Direction.vi RSFSH Get Antenna Direction.vi RSFSH Set Channel Table Link Direction.vi RSFSH Get Channel Table Link Direction.vi RSFSH Set Channel Table UL DL Signal.vi RSFSH Get Channel Table UL DL Signal.vi RSFSH Set Ethernet Remote Desktop Port.vi RSFSH Get Ethernet Remote Desktop Port.vi RSFSH Get System Memory Info.vi RSFSH Get Store Memory Info.vi RSFSH System Reboot.vi
2.3.0	04/2012	Modifications: Added support for R&S FSH4/8 option K43 - Receiver Mode - New: RSFSH Read Receiver Trace Data.vi RSFSH Select Transducer Factor.vi RSFSH Get Selected Transducer Factor.vi RSFSH Set Transducer Factor State.vi RSFSH Get Transducer Factor State.vi RSFSH Get Transducer Factor Unit.vi - Modified: RSFSH Set Trace Detector.vi RSFSH Get Trace Detector.vi RSFSH Set Trace Detector Type.vi RSFSH Get Trace Detector Type.vi RSFSH Set Marker Position.vi - help fixed RSFSH Configure Receiver.vi - help fixed RSFSH Set Reference Level Offset.vi - help fixed RSFSH Set Receiver Frequency.vi RSFSH Get Receiver Frequency.vi RSFSH Set Receiver Measurement Time.vi RSFSH Get Receiver Measurement Time.vi RSFSH Set Receiver Channel Mode.vi RSFSH Get Receiver Channel Mode.vi RSFSH Set Receiver Scan Mode.vi RSFSH Get Receiver Scan Mode.vi RSFSH Set Receiver Channel Number.vi RSFSH Get Receiver Channel Number.vi RSFSH Set Receiver Channel Table.vi RSFSH Get Receiver Channel Table.vi RSFSH Set Receiver Freq Scan Start.vi RSFSH Get Receiver Freq Scan Start.vi RSFSH Set Receiver Freq Scan Stop.vi RSFSH Get Receiver Freq Scan Stop.vi RSFSH Set Receiver Freq Scan Step.vi RSFSH Get Receiver Freq Scan Step.vi RSFSH Set CISPR Bandwidth.vi RSFSH Get CISPR Bandwidth.vi RSFSH Set Auto CISPR Bandwidth.vi RSFSH Get Auto CISPR Bandwidth.vi RSFSH Set Measurement Mode.vi - Receiver for FSH4/8 RSFSH Get Measurement Mode.vi RSFSH Set Meas Mode.vi

FSH driver history		
Revision	Date	Note
2.2.0	12/2011	<p>Modifications: Support for FSH4/8 Firmware V1.21</p> <p>New:</p> <ul style="list-style-type: none"> RSFSH Set Deltamarker Frequency or Time.vi RSFSH Set Marker Center Frequency.vi RSFSH Set Marker Reference Frequency.vi RSFSH Set Isotropic Antenna.vi RSFSH Get Isotropic Antenna.vi RSFSH Set 3GPP Power Mode.vi RSFSH Get 3GPP Power Mode.vi RSFSH Get 3GPP FDD BS WCDP Result.vi RSFSH Set Primary Scrambling Code.vi RSFSH Get Primary Scrambling Code.vi RSFSH Set Secondary Scrambling Code.vi RSFSH Get Secondary Scrambling Code.vi RSFSH Search 3GPP FDD BS Scrambling Code.vi RSFSH Get 3GPP FDD BS CDP Scrambling Code Results.vi RSFSH Set C2K BST Power Mode.vi RSFSH Get C2K BST Power Mode.vi RSFSH Get C2K BST Code Domain Analyzer Result Summary.vi RSFSH Set C2K BST Code Domain Analyzer Results.vi RSFSH Set SEM Sweep Mode.vi RSFSH Get SEM Sweep Mode.vi RSFSH Set SEM Preset Standard.vi RSFSH Set SEM Preset Settings.vi RSFSH Set EV-DO Power Reference.vi RSFSH Get EV-DO Power Reference.vi RSFSH Get EV-DO BST Code Domain Analyzer General Results.vi RSFSH Set EV-DO BST Code Domain Analyzer Results.vi RSFSH Configure External Gate.vi RSFSH Set External Gate.vi RSFSH Get External Gate.vi RSFSH Set External Gate Holdoff.vi RSFSH Get External Gate Holdoff.vi RSFSH Set External Gate Length.vi RSFSH Get External Gate Length.vi RSFSH Set External GateTime.vi RSFSH Get External GateTime.vi RSFSH Get GPS Altitude.vi <p>Modified:</p> <ul style="list-style-type: none"> RSFSH Set 3GPP Antenna Diversion.vi RSFSH Get 3GPP Antenna Diversion.vi RSFSH Set Resolution Bandwidth.vi
2.1.1	02/2010	Driver updated to revision 2.1.1
2.1	01/2010	<p>Modifications: Support for FSH4/8 Firmware V1.21</p> <p>New:</p> <ul style="list-style-type: none"> RSFSH Configure ACP Channels.vi RSFSH Configure ACP Channel Bandwidth.vi RSFSH Configure ACP Spacing.vi RSFSH Set ACP Unit.vi RSFSH Get ACP Unit.vi

FSH driver history

Revision	Date	Note
		RSFSH Set ACP Mode.vi RSFSH Get ACP Mode.vi RSFSH Set ACP Reference Level.vi RSFSH Set ACP Channels Pair.vi RSFSH Get ACP Channels Pair.vi RSFSH Set ACP Channel Bandwidth.vi RSFSH Get ACP Channel Bandwidth.vi RSFSH Set ACP Adjacent Channel Bandwidth.vi RSFSH Get ACP Adjacent Channel Bandwidth.vi RSFSH Set ACP Alternate Channel Bandwidth.vi RSFSH Get ACP Alternate Channel Bandwidth.vi RSFSH Set ACP Automatic Reference Channel Selection.vi RSFSH Get ACP Automatic Reference Channel Selection.vi RSFSH Set ACP Transmission Channel.vi RSFSH Set ACP Reference Transmission Channel.vi RSFSH Get ACP Transmission Channel.vi RSFSH Get ACP Reference Transmission Channel.vi RSFSH Set ACP Limit Line State.vi RSFSH Get ACP Limit Line State.vi RSFSH Set ACP Relative Limit.vi RSFSH Get ACP Relative Limit.vi RSFSH Set ACP Relaitve Limit Line State.vi RSFSH Get ACP Relaitve Limit Line State.vi RSFSH Set ACP Absolute Limit.vi RSFSH Get ACP Absolute Limit.vi RSFSH Set ACP Absolute Limit Line State.vi RSFSH Get ACP Absolute Limit Line State.vi RSFSH Configure ACP Limit.vi RSFSH Configure ACP Limit Alternate.vi RSFSH Get ACP Limit Line Check Result.vi RSFSH Set ACP Relative Limit Alternate.vi RSFSH Get ACP Relative Limit Alternate.vi RSFSH Set ACP Relative Limit Alternate State.vi RSFSH Get ACP Relative Limit Alternate State.vi RSFSH Set ACP Absolute Limit Alternate.vi RSFSH Get ACP Absolute Limit Alternate.vi RSFSH Set ACP Absolute Limit Alternate State.vi RSFSH Get ACP Absolute Limit Alternate State.vi
2.0	09/2009	Modifications: RSFSH Read Spectrum.vi RSFSH Set Serial Baud Rate.vi RSFSH Get Serial Baud Rate.vi RSFSH Get External Reference Status.vi RSFSH Set Remote (Local) Mode.vi RSFSH Set External Input Connector.vi RSFSH Get External Input Connector.vi RSFSH Set Accessory.vi RSFSH Get Accessory.vi RSFSH Set Display.vi RSFSH Get Display.vi RSFSH Set Auto Span Mode.vi RSFSH Get Auto Span Mode.vi RSFSH Set Level Range.vi RSFSH Get Level Range.vi

FSH driver history

Revision	Date	Note
		RSFSH Set Dynamic Range.vi RSFSH Get Dynamic Range.vi RSFSH Set Level Units.vi RSFSH Get Level Units.vi RSFSH Set RF Input Impedance.vi RSFSH Get RF Input Impedance.vi RSFSH Set CISPR Bandwidth.vi RSFSH Get CISPR Bandwidth.vi RSFSH Set Auto CISPR Bandwidth.vi RSFSH Get Auto CISPR Bandwidth.vi RSFSH Set Sweep Mode.vi RSFSH Get Sweep Mode.vi RSFSH Set Trigger Delay.vi RSFSH Get Trigger Delay.vi RSFSH Send Trigger.vi - moved from general settings RSFSH Send Trigger and Wait for OPC.vi - moved from general settings RSFSH Configure Trace.vi RSFSH Trace To Memory.vi RSFSH Set Trace Average.vi RSFSH Get Trace Average.vi RSFSH Read Trace Data.vi RSFSH Read Trace Data (ASCII).vi RSFSH Read Complex Trace Data.vi RSFSH Read Complex Trace Data (ASCII).vi RSFSH Read Trace Data From Saved Data Set.vi RSFSH Read Trace Data From Saved Data Set (ASCII).vi RSFSH Read Complex Corrected Trace Data.vi RSFSH Read Complex Corrected Trace Data (ASCII).vi RSFSH Set Trace Math Mode.vi RSFSH Get Trace Math Mode.vi RSFSH Configure Attenuation.vi RSFSH Configure Marker.vi RSFSH Set Active Marker.vi RSFSH Get Active Marker.vi RSFSH Set Marker State.vi RSFSH Get Marker State.vi RSFSH Set Marker Position.vi RSFSH Get Marker Value.vi RSFSH Set Active Delta Marker.vi RSFSH Get Active Delta Marker.vi RSFSH Set Deltamarker State.vi RSFSH Get Deltamarker State.vi RSFSH Set Deltamarker Position.vi RSFSH Get Deltamarker Value.vi RSFSH Set Marker To.vi RSFSH Set Marker Mode.vi RSFSH Get Marker Mode.vi RSFSH Set Marker Demodulation Mode.vi RSFSH Get Marker Demodulation Mode.vi RSFSH Set Marker Demodulation Time.vi RSFSH Set Marker Demodulation AF Output Volume.vi RSFSH Set Marker Impedance Reference.vi RSFSH Get Marker Impedance Reference.vi RSFSH Set Marker Measurement Mode.vi RSFSH Get Marker Measurement Mode.vi RSFSH Configure Transducer.vi

FSH driver history

Revision	Date	Note
		RSFSH Configure Direction Transducer.vi RSFSH Configure Limit Lines.vi - moved from Limit Lines, updated for FSH8 RSFSH Set Measurement Mode.vi RSFSH Set Transducer.vi RSFSH Get Transducer.vi RSFSH Set X Transducer.vi RSFSH Get X Transducer.vi RSFSH Set Y Transducer.vi RSFSH Get Y Transducer.vi RSFSH Set Z Transducer.vi RSFSH Get Z Transducer.vi RSFSH Set Transducer dB.vi RSFSH Get Transducer dB.vi RSFSH Set Lower Limit Line.vi RSFSH Get Lower Limit Line.vi RSFSH Set Upper Limit Line.vi RSFSH Get Upper Limit Line.vi RSFSH Get Limit Check Status.vi RSFSH Set Lower Threshold Line.vi RSFSH Get Lower Threshold Line.vi RSFSH Set Upper Threshold Line.vi RSFSH Get Upper Threshold Line.vi RSFSH Get Threshold Line Check Status.vi RSFSH Set Threshold Off.vi RSFSH Define Limit Line.vi RSFSH Delete Limit Line.vi RSFSH Available Limit Lines List.vi RSFSH Get Power Level.vi RSFSH Get Reflection.vi RSFSH Power Sensor Zeroing.vi RSFSH Power To Reference.vi RSFSH Set Measurement Time.vi RSFSH Get Measurement Time.vi RSFSH Set Reflection Unit.vi RSFSH Get Reflection Unit.vi RSFSH Set Power Sensor Standard.vi RSFSH Get Power Sensor Standard.vi RSFSH Channel Table.vi RSFSH Configure Occupied Bandwidth.vi RSFSH Get Occupied Bandwidth.vi RSFSH Set Occupied Bandwidth Standard.vi RSFSH Get Occupied Bandwidth Standard.vi RSFSH Set Occupied Bandwidth Customized Standard.vi RSFSH Get Occupied Bandwidth Customized Standard.vi RSFSH Set Occupied Bandwidth Ch BW.vi RSFSH Get Occupied Bandwidth Ch BW.vi RSFSH Occupied Bandwidth Level Adjust.vi RSFSH Configure TDMA Power.vi RSFSH Get TDMA Power.vi RSFSH Set TDMA Power Standard.vi RSFSH Get TDMA Power Standard.vi RSFSH Set TDMA Power Customized Standard.vi RSFSH Get TDMA Power Customized Standard.vi RSFSH Set TDMA Power Measurement Time.vi RSFSH Get TDMA Power Measurement Time.vi

FSH driver history

Revision	Date	Note
		RSFSH TDMA Power Level Adjust.vi RSFSH Configure Receiver.vi RSFSH Set Receiver Frequency.vi RSFSH Get Receiver Frequency.vi RSFSH Set Receiver Channel Mode.vi RSFSH Get Receiver Channel Mode.vi RSFSH Set Receiver Channel Number.vi RSFSH Get Receiver Channel Number.vi RSFSH Set Receiver Channel Table.vi RSFSH Get Receiver Channel Table.vi RSFSH Get Receiver Signal Level.vi RSFSH Set Receiver Measurement Time.vi RSFSH Get Receiver Measurement Time.vi RSFSH Set Receiver Scan Mode.vi RSFSH Get Receiver Scan Mode.vi RSFSH Set Receiver Freq Scan Start.vi RSFSH Get Receiver Freq Scan Start.vi RSFSH Set Receiver Freq Scan Stop.vi RSFSH Get Receiver Freq Scan Stop.vi RSFSH Set Receiver Freq Scan Step.vi RSFSH Get Receiver Freq Scan Step.vi RSFSH Set Receiver Channel Scan Start.vi RSFSH Get Receiver Channel Scan Start.vi RSFSH Set Receiver Channel Scan Stop.vi RSFSH Get Receiver Channel Scan Stop.vi RSFSH Configure Carrier Noise.vi RSFSH Set Carrier Noise Channel Bandwidth.vi RSFSH Get Carrier Noise Channel Bandwidth.vi RSFSH Set Carrier Noise Manual Ref Power Active.vi RSFSH Get Carrier Noise Manual Ref Power Active.vi RSFSH Set Carrier Noise Measurement Mode.vi RSFSH Get Carrier Noise Measurement Mode.vi RSFSH Set Carrier Noise Norm.vi RSFSH Get Carrier Noise Norm.vi RSFSH Set Carrier Noise Pilot Frequency.vi RSFSH Get Carrier Noise Pilot Frequency.vi RSFSH Set Carrier Noise Power Display.vi RSFSH Get Carrier Noise Power Display.vi RSFSH Set Carrier Noise Ref Power.vi RSFSH Get Carrier Noise Ref Power.vi RSFSH Set Carrier Noise Unit.vi RSFSH Get Carrier Noise Unit.vi RSFSH Set Carrier Noise Vision Frequency.vi RSFSH Get Carrier Noise Vision Frequency.vi RSFSH Get Carrier Noise Measurement Value.vi RSFSH Level Adjustment.vi RSFSH Get Marker List.vi RSFSH Get Delta Marker List.vi RSFSH Configure Distance to Fault Measurement.vi RSFSH Set Cable Model.vi RSFSH Get Cable Model.vi RSFSH Set Cable Length.vi RSFSH Get Cable Length.vi RSFSH Set Cable Length Unit.vi RSFSH Get Cable Length Unit.vi RSFSH Set Distance to Fault Measurement Mode.vi

FSH driver history

Revision	Date	Note
		<p> RSFSH Get Distance to Fault Measurement Mode.vi RSFSH Calibrate Distance to Fault.vi RSFSH Save Dataset.vi - moved from general settings RSFSH Recall Dataset.vi - moved from general settings RSFSH Configure Channel Power.vi - moved from channel power RSFSH Get Channel Power.vi RSFSH Set Channel Power Standard.vi RSFSH Get Channel Power Standard.vi RSFSH Set Channel Power Customized Standard.vi RSFSH Get Channel Power Customized Standard.vi RSFSH Set Channel Power Unit.vi RSFSH Get Channel Power Unit.vi RSFSH Set Channel Power Bandwidth.vi RSFSH Get Channel Power Bandwidth.vi RSFSH Channel Power Level Adjust.vi RSFSH Configure Distance to Fault Measurement.vi RSFSH Set Cable Model.vi RSFSH Get Cable Model.vi RSFSH Set Cable Length.vi RSFSH Get Cable Length.vi RSFSH Set Cable Length Unit.vi RSFSH Get Cable Length Unit.vi RSFSH Set 3GPP Antenna Diversion.vi RSFSH Get 3GPP Antenna Diversion.vi RSFSH Set 3GPP Scrambling Code.vi RSFSH Get 3GPP Scrambling Code.vi RSFSH Get 3GPP Measurement.vi RSFSH Get 3GPP Synchronization Result.vi </p> <p>- Added:</p> <ul style="list-style-type: none"> - Tracking Generator - Network Analyzer Measurement - Instrument Settings <p> RSFSH Set Measurement Mode.vi RSFSH Configure Display Line.vi RSFSH Get Measurement Mode.vi RSFSH Disable All Markers.vi RSFSH Display Screenshot.vi RSFSH Set Step Link.vi RSFSH Get Step Link.vi RSFSH Set Frequency Input Mode.vi RSFSH Get Frequency Input Mode.vi RSFSH Get Marker Position.vi RSFSH Get Deltamarker Position RSFSH Get Deltamarker Frequency or Time.vi RSFSH Marker Search.vi RSFSH Set Marker Frequency Counter.vi RSFSH Get Marker Frequency Counter.vi RSFSH Get Marker Frequency Counter Result.vi RSFSH Set Marker Display Mode.vi RSFSH Get Marker Display Mode.vi RSFSH Set Marker Output Format.vi RSFSH Get Marker Output Format.vi RSFSH Get Marker Y.vi RSFSH Set Marker Reference Level to Marker.vi RSFSH Set Marker Zoom State.vi RSFSH Get Marker Zoom State.vi </p>

FSH driver history

Revision	Date	Note
		RSFSH Set Marker Zoom Factor.vi RSFSH Get Marker Zoom Factor.vi RSFSH Set Marker Zoom X.vi RSFSH Get Marker Zoom X.vi RSFSH Set Marker Zoom Y.vi RSFSH Get Marker Zoom Y.vi RSFSH Set Marker Search Limit State.vi RSFSH Get Marker Search Limit State.vi RSFSH Set Marker Search Limit Left.vi RSFSH Get Marker Search Limit Left.vi RSFSH Set Marker Search Limit Right.vi RSFSH Get Marker Search Limit Right.vi RSFSH Set Marker Demodulation State.vi RSFSH Get Marker Demodulation State.vi RSFSH Set Marker Demodulation Hold Time.vi RSFSH Get Marker Demodulation Hold Time.vi RSFSH Set Marker Demodulation Type.vi RSFSH Get Marker Demodulation Type.vi RSFSH Set Marker Noise State.vi RSFSH Get Marker Noise State.vi RSFSH Get Marker Noise Result.vi RSFSH Configre Trace Math.vi RSFSH Set Trace Math State.vi RSFSH Get Trace Math State.vi RSFSH Set Trace Math Expression.vi RSFSH Get Trace Math Expression.vi RSFSH Copy Trace To Memory.vi RSFSH Set Input Impedance.vi RSFSH Set Input Impedance Pad.vi RSFSH Get Input Impedance Pad.vi RSFSH Set Attenuation Mode.vi RSFSH Get Attenuation Mode.vi RSFSH Configure Marker Search Limit.vi RSFSH Configure Marker Zoom.vi RSFSH Configure Marker Demodulation.vi RSFSH Set Limit Line Audio Beep.vi RSFSH Get Limit Line Audio Beep.vi RSFSH Get Limit Line Description.vi RSFSH Get Limit Line Check Result.vi RSFSH Select Limit Line Upper.vi RSFSH Select Limit Line Lower.vi RSFSH Set Limit Line State.vi RSFSH Get Limit Line State.vi RSFSH Get Limit Line Unit X.vi RSFSH Get Limit Line Unit Y.vi RSFSH Set Occupied Bandwidth Channel Bandwidth Percentage.vi RSFSH Get Occupied Bandwidth Channel Bandwidth Percentage.vi RSFSH Set Carrier Noise Mode.vi RSFSH Get Carrier Noise Mode.vi RSFSH Set Group Delay Aperture Steps.vi RSFSH Get Group Delay Aperture Steps.vi RSFSH Set Group Delay Reference Level.vi RSFSH Get Group Delay Reference Level.vi RSFSH Set Group Delay Reference Position.vi RSFSH Get Group Delay Reference Position.vi RSFSH Set Group Delay Y Scale.vi

FSH driver history

Revision	Date	Note
		<p> RSFSH Get Group Delay Y Scale.vi RSFSH Set Vector Voltmeter Reference State.vi RSFSH Get Vector Voltmeter Magnitude Reference Values.vi RSFSH Get Vector Voltmeter Magnitude Values.vi RSFSH Get Vector Voltmeter Phase Reference Values.vi RSFSH Get Vector Voltmeter Phase Values.vi RSFSH Set Power State.vi RSFSH Load Power Standard.vi RSFSH Power Standard Check.vi RSFSH Power Standard Result.vi RSFSH Set Power Measurement Type.vi RSFSH Get Power Measurement Type.vi RSFSH Set Channel Power Mode.vi RSFSH Get Channel Power Mode.vi RSFSH File Directories Catalog.vi RSFSH File Directory.vi RSFSH File Manager Operations.vi RSFSH File Create.vi RSFSH Set File Date.vi RSFSH Get File Date.vi RSFSH Set File Time.vi RSFSH Get File Time.vi RSFSH Set Status Register.vi RSFSH Get Status Register.vi RSFSH Set Marker Distance to Fault Threshold.vi RSFSH Get Marker Distance to Fault Result.vi RSFSH Select Distance to Fault Cable Model.vi RSFSH Set Distance to Fault Measurement Format.vi RSFSH Get Distance to Fault Measurement Format.vi RSFSH Read To File From Instrument.vi RSFSH Write From File To Instrument.vi </p> <p> RSFSH Configure n dB Down Value.vi RSFSH Query n dB Down Result.vi RSFSH Get n dB Down Value.vi RSFSH Set Tracking Generator Offset Length.vi RSFSH Get Tracking Generator Offset Length RSFSH Set Receiver Coupled To Reference Channel State.vi RSFSH Get Receiver Coupled To Reference Channel State.vi RSFSH Set Receiver Coupled To Reference Channel.vi RSFSH Get Receiver Coupled To Reference Channel.vi RSFSH Set Carrier Noise Customized Standard.vi RSFSH Set Carrier Noise Noise Correction.vi RSFSH Get Carrier Noise Noise Correction.vi RSFSH Set Carrier Noise Ratio Channel Bandwidth.vi RSFSH Get Carrier Noise Ratio Channel Bandwidth.vi RSFSH Get Carrier Noise Reference Measurement Mode.vi RSFSH Get Vector Voltmeter Reference Values.vi RSFSH Set Carrier Noise Reference Measurement Mode.vi RSFSH Get Vector Voltmeter Voltage.vi RSFSH Set 3GPP Auto Scrambling Detection.vi RSFSH Preset Settings.vi RSFSH Temperature.vi </p>
1.9.1	07/2009	Updated decimal separators in float values.

FSH driver history

Revision	Date	Note
1.9	02/2009	<p>Modifications:</p> <p>Support for FSH4/8 Firmware V1.0</p> <p>- Added:</p> <ul style="list-style-type: none"> RSFSH Set Display Line Position.vi RSFSH Get Display Line Position.vi RSFSH Set Display Line State.vi RSFSH Get Display Line State.vi RSFSH Set Display Log Range.vi RSFSH Get Display Log Range.vi RSFSH Configure Frequency Start Stop.vi RSFSH Configure Frequency Span Full.vi RSFSH Set Step Size Frequency.vi RSFSH Get Step Size Frequency.vi RSFSH Set Frequency Mode.vi RSFSH Get Frequency Mode.vi RSFSH Set Vertical Scale.vi RSFSH Get Vertical Scale.vi RSFSH Set Amplitude Units.vi RSFSH Get Amplitude Units.vi RSFSH Configure Trigger.vi RSFSH Configure Sweep Coupling Auto.vi RSFSH Configure Sweep Coupling.vi RSFSH Configure Acquisition.vi RSFSH Set Auto Sweep Time.vi RSFSH Set Number Of Sweeps.vi RSFSH Get Number Of Sweeps.vi RSFSH Set Sweep Mode Continuous.vi RSFSH Get Sweep Mode Continuous.vi RSFSH Set Trigger Polarity.vi RSFSH Get Trigger Polarity.vi RSFSH Set Trigger Video Level.vi RSFSH Get Trigger Video Level.vi RSFSH Configure Trace Detector.vi RSFSH Set Trace State.vi RSFSH Get Trace State.vi RSFSH Set Trace Detector Auto.vi RSFSH Get Trace Detector Auto.vi RSFSH Set Trace Detector Type.vi RSFSH Get Trace Detector Type.vi <p>Input Settings</p> <ul style="list-style-type: none"> RSFSH Disable All Delta Markers.vi RSFSH Delta Marker Search.vi RSFSH Get All Errors.vi RSFSH System Version.vi RSFSH Preset Factory.vi <p>- Modified:</p> <ul style="list-style-type: none"> RSFSH Set Center Frequency.vi RSFSH Get Center Frequency.vi RSFSH Set Frequency Span.vi RSFSH Get Frequency Span.vi RSFSH Set Frequency Offset.vi RSFSH Get Frequency Offset.vi RSFSH Set Start Frequency.vi

FSH driver history

Revision	Date	Note
		RSFSH Get Start Frequency.vi RSFSH Set Stop Frequency.vi RSFSH Get Stop Frequency.vi RSFSH Set Reference Level.vi RSFSH Get Reference Level.vi RSFSH Set Reference Level Offset.vi RSFSH Get Reference Level Offset.vi RSFSH Set Preamplifier State.vi RSFSH Get Preamplifier State.vi RSFSH Set Resolution Bandwidth.vi RSFSH Get Resolution Bandwidth.vi RSFSH Set Auto Resolution Bandwidth.vi RSFSH Get Auto Resolution Bandwidth.vi RSFSH Set Video Bandwidth.vi RSFSH Get Video Bandwidth.vi RSFSH Set Auto Video Bandwidth.vi RSFSH Get Auto Video Bandwidth.vi RSFSH Set Sweep Time.vi RSFSH Get Sweep Time.vi RSFSH Get Auto Sweep Time.vi RSFSH Set Trigger Source.vi RSFSH Get Trigger Source.vi RSFSH Set Trace Mode.vi RSFSH Get Trace Mode.vi RSFSH Set Trace Detector.vi RSFSH Get Trace Detector.vi RSFSH Set Deltamarker State.vi RSFSH Get Deltamarker State.vi RSFSH Set Deltamarker Position.vi RSFSH Get Deltamarker Value.vi RSFSH Set Measurement Mode.vi RSFSH Get Measurement Mode.vi
1.8	01/2007	Update for Firmware 11.20 Support for FSH3/FSH6 and FSH18 - Added: RSFSH Configure Direction Transducer.vi RSFSH Get Display.vi RSFSH Get Electrical Cable Length.vi RSFSH Get Marker Impedance Reference.vi RSFSH Get Marker Measurement Mode.vi RSFSH Get X Transducer.vi RSFSH Get Y Transducer.vi RSFSH Get Z Transducer.vi RSFSH Read Complex Corrected Trace Data (ASCII).vi RSFSH Read Complex Corrected Trace Data.vi RSFSH Set Display.vi RSFSH Set Marker Impedance Reference.vi RSFSH Set Marker Measurement Mode.vi RSFSH Set X Transducer.vi RSFSH Set Y Transducer.vi RSFSH Set Z Transducer.vi - Modified: RSFSH Set Level Range.vi RSFSH Get Level Range.vi RSFSH Define Limit Line.vi

FSH driver history

Revision	Date	Note
		RSFSH Set Tracking Generator Mode.vi RSFSH Get Tracking Generator Mode.vi RSFSH Read Trace Data.vi RSFSH Read Trace Data From Saved Data Set.vi
1.7	03/2006	Release for FSH firmware version 10.0 Modifications: - Added functions: rsfsh_setTraceToMemory rsfsh_trackingGeneratorScalarTransmissionCalibration rsfsh_trackingGeneratorInitiateCalibration rsfsh_trackingGeneratorNextPhaseCalibration rsfsh_defineLimitLine rsfsh_deleteLimitLine rsfsh_limitLinesList rsfsh_getExternalReferenceStatus rsfsh_setTraceMathMode rsfsh_getTraceMathMode rsfsh_calibrateDistanceToFault rsfsh_set3GPPAntennaDiversion rsfsh_get3GPPAntennaDiversion rsfsh_set3GPPScramblingCode rsfsh_get3GPPScramblingCode rsfsh_get3GPPMeasurement rsfsh_get3GPPSynchronizationResult - Modified functions: rsfsh_setMeasurementMode rsfsh_getMeasurementMode
1.6	08/2005	Modifications: - Added functions: rsfsh_setAccessory rsfsh_getAccessory - Modified functions: rsfsh_setMeasurementMode rsfsh_getMeasurementMode
1.5	02/2005	- Release for FSH firmware version 8.0 Modifications: - Added carrier / noise subsystem - Modified functions: setSerialBaudRate getSerialBaudRate setLevelUnits getLevelUnits setResolutionBandwidth getResolutionBandwidth setSweepTime setMarkerState getMarkerState setMarkerPosition getMarkerValue setDeltamarkerState getDeltamarkerState setDeltamarkerPosition getDeltamarkerValue setMarkerTo

FSH driver history

Revision	Date	Note
		setMarkerMode getMarkerMode setMeasurementMode getMeasurementMode - Added functions: setExternalInputConnector getExternalInputConnector setAutoSpanMode getAutoSpanMode setDynamicRange getDynamicRange getAutoSweepTime setTriggerLevel getTriggerLevel setTraceAverage getTraceAverage readTraceDataFromSavedDataSet readTraceDataFromSavedDataSet (ASCII) setActiveMarker getActiveMarker setActiveDeltaMarker getActiveDeltaMarker setMarkerDemodulationMode getMarkerDemodulationMode setMarkerDemodulationTime setMarkerDemodulationAFOutputVolume getMarkerList getDeltaMarkerList setTrackingGeneratorLevelAttenuation getTrackingGeneratorLevelAttenuation getReflection setReflectionUnit getReflectionUnit setPowerSensorStandard getPowerSensorStandard setChannelPowerCustomizedStandard getChannelPowerCustomizedStandard setOccupiedBandwidthCustomizedStandard getOccupiedBandwidthCustomizedStandard setTDMAPowerCustomizedStandard getTDMAPowerCustomizedStandard
1.4	09/2004	Modifications: - Added receiver subsystem - Modified functions: rsfsh_setMeasurementMode rsfsh_getMeasurementMode rsfsh_setTraceDetector rsfsh_getTraceDetector - Added functions: rsfsh_setLowerThresholdLine rsfsh_getLowerThresholdLine rsfsh_setUpperThresholdLine rsfsh_getUpperThresholdLine rsfsh_setThresholdOff
1.3	04/2004	Modifications: - Added support for FSH6 (max frequency range up to 6 GHz)

FSH driver history

Revision	Date	Note
		- Problem with precision of values fixed (loss of digits) Formatting functions uses for double values "%Lf" Scanning functions uses for double values "%Le"
1.2	01/2004	Release for FSH3 firmware version 6.0 Modifications: Added VIs Get Measured Cable Loss.vi Set Tracking Generator Mode.vi Get Tracking Generator Mode.vi Modified VIs: Set Level Range.vi Set Resolution Bandwidth.vi Set Frequency Offset.vi
1.1	11/2003	Release for FSH3 firmware version 5.0 Modifications: Set Auto Resolution Bandwidth.vi Get Auto Resolution Bandwidth.vi Set Auto Video Bandwidth.vi Get Auto Video Bandwidth.vi Read Complex Trace Data.vi Read Complex Trace Data (ASCII).vi
1.0	06/2003	Created

Getting Started with FSH3/6/18

Interface Configuration of the FSH

To set up the connection successfully, the interface parameters of the instrument and the computer must correspond to each other. The interface is set as follows:

Parity: none

Data bits: 8

Stop bits: 1

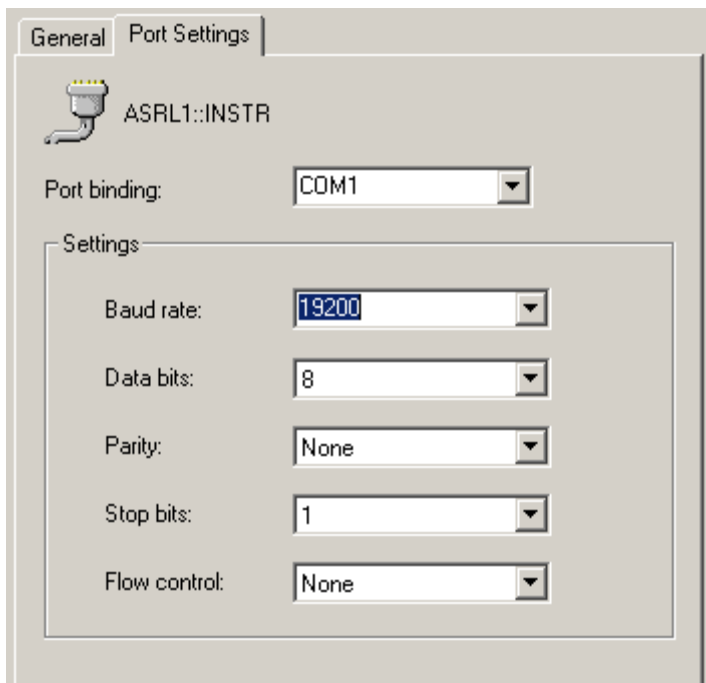
Start bits: 1

Protocol: None

The above settings are fixed except for the baud rate. The default baud rate setting is 19200 baud.

NI VISA

Use the National Instruments Measurement & Automation Explorer to set the parameters.

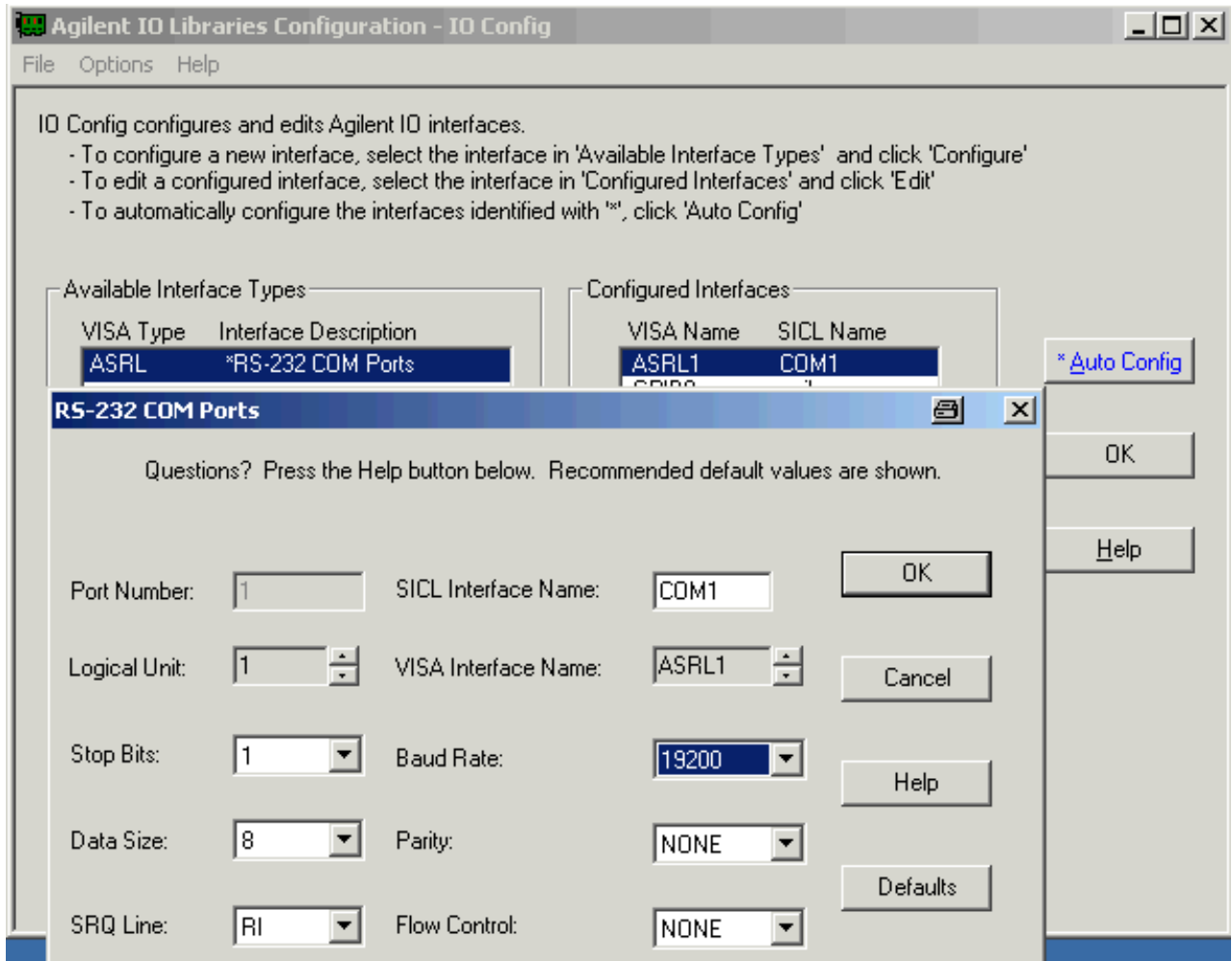


It is also possible to set the values with the viSetAttribute function.

Agilent VISA

The IO Library M01.01 or higher is required.

Use the IO library to set the parameters.



It is also possible to set the values with the viSetAttribute function.

Additional Help for LabVIEW drivers

In addition, the instrument driver documentation is included in compressed HTML format (Windows CHM help file) stored together with the LabVIEW driver sources.

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

- **LabVIEW 2009 and higher** an additional help topic can be accessed directly by pressing "[Click here for more help](#)" in the Context Help