

LabVIEW driver history for the R&S® SFU Broadcast Test System Driver Documentation

Products:

| R&S® SFU



| R&S® SFC (compatible functionality)



| R&S® BTC (compatible functionality)



Driver history for LabVIEW

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2 Supported Instruments

In the following table the supported R&S instruments and firmware versions are listed:

Which instruments are supported?		
Current revision of instrument driver supports these instruments and firmware versions:		
Instrument	Supported Firmware	Remarks
SFU	2.90	
SFC	2.90	Compatible functionality
BTC	1.62	Compatible functionality

3 LabVIEW History

rssfu Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
2.80.9	09/2015	<ul style="list-style-type: none"> * Updated: RSSFU_ATTR_FADING_PAR_DEL_SPEED - removed option checking fixed/added some default values in control help and labels
2.80.8	02/2015	<ul style="list-style-type: none"> - Support for R&S BTC Broadcast Test Center 1.62.0 * Updated: RSSFU Configure DVBT Special Carriers.vi - bug fix RSSFU Configure Level.vi - added attribute for voltage units RSSFU Configure Interferer.vi - "Interferer Addition" added control ring values * New: RSSFU_ATTR_TX_VOLTAGE_LEVEL * Deleted: RSSFU_session_data_helper.vi RSSFU_session_global.vi RSSFU Read MediaFLO Measured Data Rate.vi RSSFU Set MediaFLO Channel Bandwidth.vi
2.80.7	01/2015	<ul style="list-style-type: none"> * Support for R&S BTC Broadcast Test Center 1.62.0 * Express VI 3.0.1 with the support for QuickDrop SCPI command searcher * Updated: RSSFU Enable Frequency Sweep.vi RSSFU Configure Level.vi RSSFU Configure Modulation ATV Transmission Standard.vi RSSFU Configure Interferer.vi RSSFU Configure Modulator Level.vi RSSFU Configure ISDBTmm Input Signal.vi RSSFU Configure Directv Phase Noise.vi RSSFU Configure DTMB SFN Settings.vi RSSFU Read CMMB Values.vi RSSFU Configure DVBT2 Input T2 MI SID.vi RSSFU Read DVBC2 Framing OFDM Parameters.vi RSSFU Configure Analog TV Video Input Signal.vi RSSFU Configure Analog TV Audio Input Signal.vi RSSFU Configure Audio BC FM Input Signal.vi RSSFU Configure Audio BC AM Input Signal.vi RSSFU Configure Pulse Noise.vi RSSFU Configure Fading Reference Settings.vi RSSFU Configure BER Inputs.vi RSSFU TSPlayer and Recorder Status.vi RSSFU Select Play File.vi

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		RSSFU Timing Settings.vi RSSFU Interface Settings (GEN).vi RSSFU Calibration Date.vi RSSFU Set User-definable Status Register.vi RSSFU Get User-definable Status Register.vi RSSFU Configure Reference Oscillator.vi RSSFU Configure Analog TV Video Input Signal.vi - attribute corrected RSSFU Configure DTMB Guard Interval PN.vi - attribute corrected * New attribute for R&S BTC compatibility RSSFU_ATTR_FREQ_MODE_BTC RSSFU_ATTR_MOD_MODULATOR_LEVEL_BTC RSSFU_ATTR_BER_SEL_MEAS_BTC RSSFU_ATTR_FADING_REFERENCE_BTC RSSFU_ATTR_IQC_DVBS_ROLL_BTC RSSFU_ATTR_IQC_DVBC_ROLL_BTC RSSFU_ATTR_TSGEN_COMMAND_BTC RSSFU_ATTR_NOISE_FRAME_DURATION_BTC * Deleted: 'Clear output protection' (RSSFU_ATTR_RFOUT_PROTECTION_CLEAR) - duplicated, use 'Tx RF Output Clear' (RSSFU_ATTR_RFOUT_CLEAR) instead 'Protection circuit status' (RSSFU_ATTR_RFOUT_PROTECTION_STATUS) - duplicated, use 'Tx RF Output Protection Tripped' (RSSFU_ATTR_RFOUT_TRIPPED) instead 'Bandwidth occupied by the DVB-T signal' (RSSFU_ATTR_IQC_DVBT_USED) - duplicated, use 'DVBT Coding Used Bandwidth' (RSSFU_ATTR_IQC_DVBT_USED_RESULT) instead 'Noise Impulsive Noise' (RSSFU_ATTR_IMPULSIVE_NOISE) - duplicated, use 'Noise Impulsive' (RSSFU_ATTR_NOISE_IMPULSIVE) instead 'Fading User Defined Insertion Loss' (RSSFU_ATTR_FADING_USER_INSERT_LOSS) - duplicated, use 'Fading Insertion Loss' (RSSFU_ATTR_FADING_INSERT_LOSS) instead
2.80.6	09/2014	* Synchronized version of LabVIEW and VXIppn driver versions, no changes in LabVIEW driver
2.80.5	09/2014	* Updated: Increase the allowed ranges to +/-40 MHz for: RSSFU_ATTR_MOD_DM_INTERFERER_FREQ_OFFSET RSSFU_ATTR_MOD_DM_SIGNAL_FREQ_OFFSET
2.80.4	03/2014	Updated: RSSFU Configure Modulator Level.vi - not support for R&S SFC
2.80.3	08/2013	New: RSSFU_ATTR_ERROR_LIST RSSFU_ATTR_PRESET - Updated: - Support for R&S BTC Broadcast Test Center RSSFU Configure Frequency.vi

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		RSSFU Configure Level.vi
		RSSFU Configure ALC.vi
		RSSFU Configure Interferer.vi
		RSSFU Configure Modulation Settings.vi
		RSSFU Modulation Signal Info and Statistics.vi
		RSSFU Modulation IQ Input Refresh.vi
		RSSFU Configure DVBT Input Signal.vi
		RSSFU Configure DVBT Special Settings.vi
		RSSFU Configure DVBT Packets and Payload.vi
		RSSFU Configure DVBC Input Signal.vi
		RSSFU Configure DVBC Special Settings.vi
		RSSFU Configure DVBS Input Signal.vi
		RSSFU Configure DVBS Special Settings.vi
		RSSFU Configure DVBS Settings.vi
		RSSFU Configure 8VSB Input Signal.vi
		RSSFU Configure 8VSB Settings.vi
		RSSFU Configure J83B Input Signal.vi
		RSSFU Configure J83B Special Settings.vi
		RSSFU Configure J83B Settings.vi
		RSSFU Configure ISDBT Input Parameters.vi
		RSSFU Configure ISDBT Coding.vi
		RSSFU Configure ISDBT Settings.vi
		RSSFU Configure DVBS2 Input Signal.vi
		RSSFU Configure DVBS2 Coding.vi
		RSSFU Configure DVBS2 Special Settings.vi
		RSSFU Configure DVBS2 Phase Noise.vi
		RSSFU Configure Directv Input Signal.vi
		RSSFU Configure Directv Special Settings.vi
		RSSFU TDMB Configuration.vi
		RSSFU Configure DTMB Input Signal.vi
		RSSFU Configure DTMB Special Settings.vi
		RSSFU Configure CMMB Input Signal.vi
		RSSFU Configure DVBT2 Input T2 MI Interface.vi
		RSSFU Configure DVBT2 Input Signal.vi
		RSSFU Configure DVBT2 PLP.vi
		RSSFU Configure DVBT2 Settings.vi
		RSSFU Configure DVBC2 Input Signal.vi
		RSSFU Configure DVBC2 Settings.vi
		RSSFU Configure ATSCMH Input Signal.vi
		RSSFU Configure ATSCMH Settings.vi
		RSSFU Configure Audio BC FM Input Signal.vi

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		RSSFU Read Audio BC FM Modulation Values.vi RSSFU Configure Audio BC AM Input Signal.vi RSSFU Configure Baseband Impairments.vi RSSFU Configure Pulse Noise.vi RSSFU Get Level of Phase Noise.vi RSSFU Configure Fading Common Coupled Settings.vi RSSFU Configure Fading Delay Settings.vi RSSFU Configure Fading Reference Settings.vi RSSFU Fading Coupling Settings.vi RSSFU ARB Waveform Samples.vi RSSFU Configure ARB Clock.vi RSSFU Timing Settings.vi RSSFU Interface Settings (GEN).vi RSSFU Run Calibration.vi RSSFU Configure Reference Oscillator.vi * Removed: - RSSFU_ATTR_FADING_HOPPING_MODE
2.80.2	06/2013	- Updated: RSSFU Configure Modulation.vi - removed Internal Source Signal
2.80.1	05/2013	-Added compatible functionality with R&S SFC -New: RSSFU_ATTR_READ_DVBS2_CODING_REQUIRED_SOURCE_DATA_RATE - Updated: - added ASI1, ASI2 Input - Support for R&S SFC Compact Modulator RSSFU Configure Frequency.vi RSSFU Configure Level.vi RSSFU Modulation Signal Info and Statistics.vi RSSFU Modulation IQ Input Refresh.vi RSSFU Configure DVBT Coding.vi RSSFU Configure DVBT Special Settings.vi RSSFU Configure DVBT Packets and Payload.vi RSSFU Configure DVBC Special Settings.vi RSSFU Configure DVBS Special Settings.vi RSSFU Configure DVBC Settings.vi RSSFU Configure DVBS Settings.vi RSSFU Configure 8VSB Settings.vi RSSFU Configure J83B Special Settings.vi RSSFU Configure J83B Settings.vi RSSFU Configure ISDBT Coding.vi RSSFU Configure ISDBT Special Settings.vi

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		RSSFU Configure ISDBT Special Segment Settings.vi RSSFU Configure ISDBT Settings.vi RSSFU Read DVBS2 Values.vi RSSFU Configure DVBS2 Coding.vi RSSFU Configure DVBS2 Settings.vi RSSFU TDMB Configuration.vi RSSFU Read DTMB SFN Values.vi RSSFU Configure DTMB Settings.vi RSSFU Configure DVBT2 Settings.vi RSSFU Configure DVBC2 Settings.vi RSSFU Configure ATSCMH Settings.vi RSSFU Configure Audio BC FM Input Signal.vi RSSFU Configure Audio BC AM Input Signal.vi RSSFU Read Audio BC FM Modulation Values.vi RSSFU Configure Gen Noise.vi RSSFU Get Level of Phase Noise.vi RSSFU Timing Settings.vi RSSFU Interface Settings (GEN).vi RSSFU Run Calibration.vi RSSFU Calibration Date.vi RSSFU Configure Reference Oscillator.vi RSSFU Configure DVBC2 Number Of Notches - Number Of Notches 0 to 4
2.80.0	01/2013	Driver for SFU Broadcast Test System firmware version 2.80 - New: RSSFU Read DVBC2 Data Slice Frequency Values.vi RSSFU Configure DVBC2 Number Of Notches.vi RSSFU Read DVBC2 Notch Type.vi RSSFU Configure DVBC2 Notch Values.vi RSSFU Read DVBC2 Notch Values.vi RSSFU Read DVBC2 Notch Frequency Values.vi RSSFU Configure DVBC2 Framing OFDM C2 Bandwidth.vi - Updated: DVB-C2 (R&S SFU-K17): Notches 1-4 are supported DVB-C2 (R&S SFU-K17): Data Slice 1-4 are supported RSSFU Read DVBC2 Data Slice Values.vi RSSFU Configure DVBC2 Framing OFDM Parameters.vi - control 'Num Bundled CH' not used RSSFU Close.vi - remove GTL - Removed: RSSFU_ATTR_DVBC2_FRAMING_NUM_BUNDLED_CH
2.72.0	11/2012	Driver for SFU Broadcast Test System firmware version 2.72

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		<p>- New:</p> <p>RSSFU Configure DVBC2 Framing OFDM Adjust RF Frequency.vi</p> <p>RSSFU Configure DVBC2 Framing OFDM Baseband Filter.vi</p> <p>RSSFU Configure DVBT2 Input T2 MI SID.vi</p> <p>RSSFU Configure DVBT2 SFN Timestamp Offset.vi</p> <p>RSSFU Configure DVBT2 SFN Update Timestamp.vi</p> <p>RSSFU Configure DVBT2 Transmission Future Extension Payload.vi</p> <p>RSSFU Configure DVBT2 Transmission L Parameters L1T2 Version.vi</p> <p>RSSFU Configure DVBT2 Transmission Profile Mode.vi</p> <p>RSSFU Configure ISDBTmm Input Signal.vi</p> <p>RSSFU Configure ISDBTmm Settings.vi</p> <p>RSSFU Configure ISDBTmm Special Settings.vi</p> <p>RSSFU Configure ISDBTmm Test Signal.vi</p> <p>RSSFU Configure ISDBTmm TMCC Special Settings.vi</p> <p>RSSFU Enable ISDBTmm Special Settings.vi</p> <p>RSSFU Read DVBC2 Framing OFDM Calculate Center Frequency.vi</p> <p>RSSFU Read DVBT2 SFN Timestamp Mode.vi</p> <p>RSSFU Read DVBT2 SFN Timestamp Parameters.vi</p> <p>RSSFU Read DVBT2 T2 System Tx ID Availability.vi</p> <p>RSSFU Read ISDBTmm Input Data Rate.vi</p> <p>RSSFU Read ISDBTmm Values.vi</p> <p>- Updated:</p> <p>RSSFU Configure ISDBTmm Coding Parameters.vi - Added repeated capability</p> <p>RSSFU Configure ISDBTmm Coding Layer Parameters.vi - Changed repeated capability and remote control commands</p> <p>RSSFU Configure DVBT2 BICM Parameters.vi - Added Code Rate values R1_3 R2_5</p> <p>RSSFU Configure DVBT2 Transmission System.vi - Added transmission System parameters: NONT2 T2LS T2LM</p> <p>RSSFU Configure DVBT2 Transmission L1 T2 Version.vi - Added V131 parameter</p> <p>RSSFU Configure DVBT2 Transmission System Identification.vi - Transmitter ID State parameter not used</p>
2.60.0	03/2012	<p>Driver for SFU Broadcast Test System firmware version 2.60</p> <p>* New:</p> <p>Added ISDB-Tmm transmission standard:</p> <p>RSSFU Configure ISDBT Coding Control.vi</p> <p>RSSFU Configure ISDBTmm Coding Parameters.vi</p> <p>RSSFU Configure ISDBTmm Coding Segment Parameters.vi</p> <p>RSSFU Configure ISDBTmm Coding Layer Parameters.vi</p> <p>RSSFU Configure ISDBTmm Coding.vi</p> <p>RSSFU Read ISDBTmm RF Bandwidth.vi</p>

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		RSSFU Configure DVBT2 Transmission MISO Group Mode.vi RSSFU Configure DVBT2 SFN Delay Parametrs.vi RSSFU Configure DVBT2 SFN Mute P1 Symbol.vi RSSFU Read DVBT2 SFN Delay Parameters.vi * Updated: RSSFU Configure Level.vi RSSFU Configure Modulation.vi RSSFU Noise Bandwidth Settings.vi * Removed: AVSB transmission standard DVB-SH transmission standard
2.40.0	03/2011	Driver for SFU Broadcast Test System firmware version 2.40 Modifications: - Added DVB-C2 transmission standard - New VIs: RSSFU Configure ISDBT Channel Bandwidth.vi RSSFU Configure DTMB Guard Interval PN.vi RSSFU Configure DTMB SFN Settings.vi RSSFU Configure DTMB Special Settings.vi RSSFU Configure DVBT2 Input T2 MI PID.vi RSSFU Reset DVBT2 T2 MI Analyzer Log File.vi RSSFU Read DVBT2 T2 MI Analyzer.vi RSSFU Configure DVBT2 Mode Stream Adaptation In Band Signal.vi RSSFU Configure DVBT2 Framing OFDM Bandwidth Variation.vi - Updated: RSSFU Configure Modulation.vi RSSFU Read DTMB SFN Values.vi RSSFU Configure DMBTH Coding.vi RSSFU Configure DTMB Special Settings.vi - Removed: RSSFU Enable DMBH Mode DTMB Special Settings.vi RSSFU Configure DTMBH Coding.vi
2.20.1	02/2011	Modifications: - Default timeout set to 30s
2.20.0	06/2010	Driver for SFU Broadcast Test System firmware version 2.20 - New VIs: RSSFU ARB Memory Size.vi RSSFU ARB Samples Maximum.vi

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		<p>RSSFU Configure DVBT2 Input T2 MI Interface.vi</p> <p>RSSFU Configure DVBT2 Mode Stream Adaptation CM.vi</p> <p>RSSFU Configure DVBT2 Transmission Future Extension Frames.vi</p> <p>RSSFU Configure DVBT2 Transmission L1 T2 Version.vi</p> <p>RSSFU Configure DVBT2 Transmission System MISO.vi</p> <p>RSSFU Configure DVBT2 Transmission System Network.vi</p> <p>RSSFU Configure MediaFLO Coding Parameters.vi</p> <p>RSSFU Configure MediaFLO Coding.vi</p> <p>RSSFU Configure MediaFLO Input Signal.vi</p> <p>RSSFU Configure MediaFLO Local OIS System Settings.vi</p> <p>RSSFU Configure MediaFLO PID Settings.vi</p> <p>RSSFU Configure MediaFLO Position Pilot Settings.vi</p> <p>RSSFU Configure MediaFLO Special Settings.vi</p> <p>RSSFU Configure MediaFLO TX Settings.vi</p> <p>RSSFU DVBT2 Framing OFDM Data Symbols.vi</p> <p>RSSFU Enable MediaFLO Special Settings.vi</p> <p>RSSFU Enable MediaFLO TX Position Settings.vi</p> <p>RSSFU Read DVBT2 BICM Maximum FEC Blocks Per IF.vi</p> <p>RSSFU Read DVBT2 Mode Stream Adaptation Values.vi</p> <p>RSSFU Read DVBT2 T2 System L1 Signalling Frequency.vi</p> <p>RSSFU Read MediaFLO Values.vi</p> <p>RSSFU Read Status MediaFLO Count Parameters.vi</p> <p>RSSFU Read Status MediaFLO Delay Parameters.vi</p> <p>- Modified VIs:</p> <p>RSSFU Configure DVBT2 BICM Parameters.vi</p> <p>RSSFU Configure DVBT2 Mode Stream Adaptation.vi</p> <p>RSSFU Configure DVBT2 Input Signal.vi</p> <p>RSSFU Configure DVBT2 PLP.vi</p> <p>RSSFU Configure DVBT2 Framing OFDM.vi</p> <p>RSSFU Configure DVBT2 Transmission System.vi</p> <p>RSSFU Configure DVBT2 Transmission L1 Parameters.vi</p> <p>RSSFU Configure DVBS2 Coding.vi</p> <p>RSSFU Configure Analog TV Special VSB Characteristic.vi</p> <p>RSSFU Configure Audio BC Open Format Group A.vi</p> <p>RSSFU Audio BC Open Format Group Data Transfer Status.vi</p> <p>RSSFU Configure Fading Standard Set.vi</p> <p>RSSFU Configure BER Inputs.vi</p> <p>RSSFU Store and Load Fading Profile.vi</p> <p>- Removed function/attributes:</p> <p>- MediaFLO modulation standard completely redesigned</p> <p>RSSFU_ATTR_DVBT2_INPUT_SIGNAL_CM_TYPE</p>

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		RSSFU_ATTR_IQC_MFLO_WIDE_PID_DATA_RATE RSSFU_ATTR_IQC_MFLO_LOCAL_PID_DATA_RATE RSSFU_ATTR_IQC_MFLO_SSF_ARRIVAL_TIME RSSFU_ATTR_IQC_MFLO_FRAME_LENGTH RSSFU_ATTR_IQC_MFLO_WIDE_AREA_LENGTH RSSFU_ATTR_IQC_MFLO_POSITION_PILOT_LENGTH RSSFU_ATTR_IQC_MFLO_GAIN RSSFU_ATTR_IQC_MFLO_SINUSOID_TEST RSSFU_ATTR_IQC_MFLO_SINUSOID_TEST_FREQ
2.10.2	10/2009	Modifications: - New VIs: RSSFU Configure Fading Common Coupled Settings.vi - Modified VIs: RSSFU Configure ISDBT Input Signal.vi RSSFU Noise Bandwidth Settings.vi RSSFU Configure Fading Common Settings.vi - Removed attributes: RSSFU_ATTR_NOISE_CN_OFFSET RSSFU_ATTR_NOISE_MODE
2.10.1	08/2009	Modifications: - rssfu Store and Load Application.vi - added wait for *OPC
2.10.0	07/2009	Driver for SFU Broadcast Test System firmware version 2.10 Initial Release for Linux, support for: - Mandriva Linux 2008 and Mandriva Linux 2009 - openSUSE 10.3 and openSUSE 11.0 - New VIs: RSSFU Store and Load DVBT Carriers.vi RSSFU Configure ISDBT TMCC Special Settings.vi RSSFU Configure ISDBT Payload Test Stuff.vi RSSFU Configure CMMB Test Signal.vi RSSFU Read Noise Eb N0.vi RSSFU Set TS Byte Rate.vi RSSFU TSGen Nullpacket Stuffing.vi RSSFU Interface Settings Stop Data.vi RSSFU Configure TSGEN Packet Settings.vi RSSFU Configure TSGen Seamless Loop.vi RSSFU Read Power Sensor Type.vi RSSFU Configure DVBT2 Input Signal.vi

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		RSSFU Configure DVBT2 PLP.vi RSSFU Read DVBT2 Values.vi RSSFU Configure DVBT2 Test Signal.vi RSSFU Configure DVBT2 Mode Stream Adaptation.vi RSSFU Configure DVBT2 BICM Parameters.vi RSSFU Configure DVBT2 BICM Time Interleaver Parameters.vi RSSFU Read DVBT2 BICM FEC Blocks Per IF.vi RSSFU Configure DVBT2 Framing OFDM Parameters.vi RSSFU Read DVBT2 Framing OFDM Used Bandwidth.vi RSSFU Configure DVBT2 Framing OFDM.vi RSSFU Read DVBT2 Framing OFDM Data Symbols.vi RSSFU Configure DVBT2 Transmission System.vi RSSFU Configure DVBT2 Transmission L1 Parameters.vi RSSFU Configure DVBT2 Transmission System Identification.vi RSSFU Configure DVBT2 Settings.vi RSSFU Configure ATSCMH Input Signal.vi RSSFU Configure ATSCMH Test Signal.vi RSSFU Read ATSCMH Packed Length.vi RSSFU Read ATSCMH Values.vi RSSFU Configure ATSCMH Coding Parameters.vi RSSFU Read ATSCMH Constellation.vi RSSFU Read ATSCMH Roll Off RSSFU Enable ATSCMH Special Settings.vi RSSFU Configure ATSCMH Special Settings.vi RSSFU Set ATSCMH MHE PID.vi RSSFU Configure ATSCMH RF Watermark Settings.vi RSSFU Configure ATSCMH MTXID Transmission.vi RSSFU Configure ATSCMH Settings.vi - Updated VI: RSSFU Configure Modulation Settings.vi RSSFU Configure Modulation.vi RSSFU Interface Settings (REC).vi RSSFU Read Info STC SSTC.vi RSSFU Configure AVSB RF Watermark Settings.vi RSSFU Configure CMMB Input Signal.vi RSSFU Configure Fading Path Profile Table Numeric.vi RSSFU Configure Fading Path Profile Resulting Doppler Frequency.vi RSSFU Configure Fading Insertion Loss Settings.vi
2.002	04/2009	Updated VIs: - RSSFU Configure Analog TV NICAM Signal.vi - RSSFU_ATTR_IQC_DVBS2_AMC - added *OPC

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2.00.1	04/2009	Updated VIs: RSSFU Configure Analog TV Video Vision Picture.vi - added parameters FMSK and FMDK
2.00	03/2009	<p>Driver for SFU Broadcast Test System firmware version 2.00</p> <p>Modifications:</p> <ul style="list-style-type: none"> RSSFU Configure Modulation.vi RSSFU Configure Modulation ATV Transmission Standard.vi RSSFU Configure Interferer ATV Predefined Standard.vi RSSFU Load Analog TV Video Library.vi RSSFU Configure Analog TV Audio Input Signal.vi RSSFU Configure Fading Common Settings.vi RSSFU Configure ISDBT Layer Coding.vi RSSFU Fading Catalog.vi RSSFU Close.vi <p>- New VIs:</p> <ul style="list-style-type: none"> RSSFU Load Analog TV Audio Library.vi RSSFU Analog TV Audio Library Catalog.vi RSSFU Analog TV Audio Library Catalog Length.vi RSSFU Configure CMMB Input Signal.vi RSSFU Read CMMB Values.vi RSSFU Set CMMB Number Of Services.vi RSSFU Configure CMMB Coding.vi RSSFU Read CMMB OFDM Mode.vi RSSFU Configure CMMB PLCH Table.vi RSSFU Enable CMMB Special Settings.vi RSSFU Configure CMMB Special Settings.vi RSSFU Configure CMMB Settings.vi RSSFU Configure DVBSH Input Signal.vi RSSFU Configure DVBSH Test Signal.vi RSSFU Read DVBSH Packed Length.vi RSSFU Read DVBSH Values.vi RSSFU Configure DVBSH Mode.vi RSSFU Set DVBSH Channel Bandwidth.vi RSSFU Read DVBSH Used Bandwidth.vi RSSFU Configure DVBSH Coding.vi RSSFU Configure DVBSH Time Interleaver.vi RSSFU Configure DVBSH Settings.vi RSSFU Configure Audio BC FM RDS RBDS.vi RSSFU Read Audio BC FM RDS RBDS Radio Text Status.vi RSSFU Configure Audio BC FM RDS RBDS Decoder Identification.vi RSSFU Set Audio BC FM AF A Number Of Freq.vi

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		RSSFU Configure Audio BC FM AF A Frequency.vi RSSFU Set Audio BC FM AF B Number Of Lists.vi RSSFU Set Audio BC FM AF B Number Of Freq.vi RSSFU Configure Audio BC FM AF B Frequency.vi RSSFU Configure Audio BC FM EON Parameters.vi RSSFU Set Audio BC FM EON AF A Number Of Freq.vi RSSFU Configure Audio BC FM EON AF A Frequency.vi RSSFU Set Audio BC FM EON AF Mapped Freq Number Of Freq.vi RSSFU Configure Audio BC FM EON AF Mapped Frequency RSSFU Enable Audio BC FM TMC.vi RSSFU Audio BC FM TMC Send Data.vi RSSFU Set Audio BC TMC Group 3A VAR Parameters.vi RSSFU Set Audio BC TMC Number Of 8A Groups.vi RSSFU Configure Audio BC FM TMC 8A Block.vi RSSFU Enable Audio BC FM Open Format.vi RSSFU Audio BC FM Open Format Send Data.vi RSSFU Configure Audio BC Open Format Group A.vi RSSFU Configure Audio BC Open Format Group B.vi RSSFU Audio BC Open Format Group Data Transfer Status.vi RSSFU Configure Fading Signal Delay Shift.vi
1.90	11/2008	Driver for SFU Broadcast Test System firmware version 1.90 - new VIs: RSSFU Audio Transmission Standard.vi RSSFU Read Digital IQ Symbol Rate.vi RSSFU Configure Audio BC FM Input Signal.vi RSSFU Configure Audio BC FM Source.vi RSSFU Read Audio BC FM External Source.vi RSSFU Configure Audio BC FM Audio Modulation.vi RSSFU Configure Audio BC FM Modulation RDS.vi RSSFU Configure Audio BC FM MPX Freq Deviation.vi RSSFU Read Audio BC FM Modulation Values.vi RSSFU Enable Audio BC FM Special Settings.vi RSSFU Configure Audio BC FM Special Settings.vi RSSFU Configure Audio BC AM Input Signal.vi RSSFU Configure Audio BC AM Source.vi RSSFU Read Audio BC AM External Source.vi RSSFU Configure Audio BC AM Modulation Depth.vi RSSFU Read Audio BC AM Mode Depth.vi RSSFU Configure Fading Source.vi RSSFU Configure BER Gating Time.vi

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		RSSFU TSGen Seek Position.vi - modified VIs RSSFU Configure Modulation.vi RSSFU Configure DTMB Test Signal.vi RSSFU Configure BER Inputs.vi
1.80.1	08/2008	Driver for SFU Broadcast Test System firmware version 1.80 - modified VIs/attributes: - added *OPC RSSFU Configure Modulation.vi, RSSFU_ATTR_MOD_DM_SPECTRUM RSSFU Configure Modulation.vi, RSSFU_ATTR_MOD_DM_TRANSMISSION_STANDARD - added rangetable: RSSFU Read DVBC Values.vi, RSSFU_ATTR_IQC_DVBC_PACKET_LENGTH RSSFU Read DVBS Values.vi, RSSFU_ATTR_IQC_DVBS_PACKET_LENGTH RSSFU Read DMBT Values.vi, RSSFU_ATTR_IQC_DMBT_PACKET_LENGTH RSSFU Read DVBT Values.vi, RSSFU_ATTR_IQC_DVBT_PACKET_LENGTH RSSFU Read DVBT Values.vi, RSSFU_ATTR_IQC_DVBT_PACKET_LENGTH_LOW RSSFU Read DTMB Values.vi, RSSFU_ATTR_IQC_DTMB_CODING_PACKED_LENGTH
1.80.0	06/2008	Driver for SFU Broadcast Test System firmware version 1.80 Modifications: - new VIs: RSSFU Configure Interferer Signal.vi RSSFU Modulation IQ Input Refresh.vi RSSFU Configure DTMB Dual Pilot Tone.vi RSSFU Configure DVBS2 ACM Mode.vi RSSFU Configure DVBS2 FEC Frame.vi RSSFU Configure Directv Phase Noise.vi RSSFU Read AVSB Coder Status.vi RSSFU Configure AVSB Input Signal.vi RSSFU Configure AVSB Test Signal.vi RSSFU Read AVSB Packed Length.vi RSSFU Read AVSB Values.vi RSSFU Set AVSB Symbol Rate.vi RSSFU Read AVSB Constellation.vi RSSFU Read AVSB Roll Off.vi RSSFU Configure AVSB Coding VSB State.vi RSSFU Enable AVSB Special Settings.vi RSSFU Configure AVSB Special Settings.vi

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		RSSFU Configure AVSB RF Watermark Settings.vi RSSFU Configure AVSB SRS Settings.vi RSSFU Configure AVSB Settings.vi RSSFU Set Impairments Optimization Mode.vi RSSFU Configure Fading Max Paths.vi RSSFU Fading Coupling Settings.vi RSSFU Enable Power Meter.vi RSSFU Power Meter Configuration.vi RSSFU Configure Power Meter Frequency.vi RSSFU Relative Power State.vi RSSFU Read Absolute Output Power.vi RSSFU Power Meter M2Ref.vi RSSFU Power Meter Zero.vi RSSFU Configure Average Filter.vi RSSFU Average Auto Once.vi - modified: RSSFU Configure DVBC Coding.vi - Roll Off - changed data type RSSFU Configure Modulation.vi RSSFU Configure DTMBH Coding.vi RSSFU Configure DTMB Coding.vi RSSFU Configure DTMB Settings.vi RSSFU Configure Fading Path Profile.vi RSSFU Configure Fading Delay Settings.vi
1.70.01	03/2008	Driver for SFU Broadcast Test System firmware version 1.70 Modifications: RSSFU Configure Modulation.vi - fixed attenuation range
1.70.0	02/2008	Driver update for SFU Broadcast Test System firmware version 1.70 Modifications: - Driver converted to the attribute style. - new VIs: RSSFU Configure ISDBT System.vi RSSFU Configure ISDBT Sub Channel.vi RSSFU Read DTMB Coder Status.vi RSSFU Configure DTMB Input Signal.vi RSSFU Configure DTMB Test Signal.vi RSSFU Read DTMB Values.vi RSSFU Configure DTMB Network Mode.vi RSSFU Configure DTMB Channel Bandwidth.vi RSSFU Configure DTMBH Coding.vi

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		RSSFU Configure DTMB Coding.vi RSSFU Read DTMB SFN Values.vi RSSFU Enable DTMB Special Settings.vi RSSFU Enable DMBH Mode DTMB Special Settings.vi RSSFU Configure DTMB Special Settings.vi RSSFU Configure DTMB Settings.vi RSSFU Configure Fading Path Profile Resulting Doppler Frequency.vi RSSFU Configure Fading Birth Death Doppler Frequency.vi RSSFU Configure Fading 2 Path Dynamic Delay Doppler Shift.vi - modified: RSSFU Configure Modulation.vi RSSFU Configure TDMB Input Signal.vi RSSFU Configure DVBS Test Signal.vi RSSFU Configure DMBT Test Signal.vi RSSFU Configure DVBS2 Test Signal.vi RSSFU Configure DVBS2 Special Settings.vi RSSFU Configure Analog TV Audio.vi RSSFU Read Player Parameters.vi - removed obsolete VIs: RSSFU Configure Noise.vi RSSFU Configure Noise Parameters.vi RSSFU Configure Pulse Noise.vi RSSFU T-DMB Settings.vi RSSFU Configure DMBT Network.vi RSSFU Read DMBTH Coder Status.vi RSSFU Configure DMBTH Input Signal.vi RSSFU Configure DMBTH Test Signal.vi RSSFU Read DMBTH Packed Length.vi RSSFU Read DMBTH Values.vi RSSFU Configure DMBTH Network.vi RSSFU Configure DMBTH Control.vi RSSFU Configure DMBTH Coding.vi RSSFU Configure DMBTH Coding Handheld.vi RSSFU Read DMBTH SFN Values.vi RSSFU Enable DMBTH Special Settings.vi RSSFU Configure DMBTH Special Settings.vi RSSFU Set DMBTH Special Single Carrier.vi RSSFU Configure DMBTH Settings.vi
1.60.2	11/2007	Modifications: Added wait for OPC when loading/storing fading profile Fixed RSSFU Configure DMBTH Coding.vi

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		New rsidr_core
1.60	03/2007.	<p>Modifications:</p> <p>- new VIs:</p> <p>RSSFU Analog TV Video Library Catalog Length.vi RSSFU Analog TV Video Library Catalog.vi RSSFU ARB Waveform File Tag.vi RSSFU Configure Analog TV Audio AF.vi RSSFU Configure Analog TV Audio Input Signal.vi RSSFU Configure Analog TV Impedance.vi RSSFU Configure Analog TV NICAM Signal.vi RSSFU Configure Analog TV Special Video and Carrier.vi RSSFU Configure Analog TV Special VSB Characteristic.vi RSSFU Configure Analog TV Video Input Signal.vi RSSFU Configure DVBS2 Pilots.vi RSSFU Configure Fading Reference Settings.vi RSSFU Configure Fading.vi RSSFU Fading Catalog.vi RSSFU Get Status Register.vi RSSFU Get User-definable Status Register.vi RSSFU Load Analog TV Video Library.vi RSSFU Noise File Operations.vi RSSFU Read External Audio Input Level.vi RSSFU Read Peak Envelope Power.vi RSSFU Set Analog TV Special AM Modulation Depth.vi RSSFU Set DMBTH Special Single Carrier.vi RSSFU Set MediaFLO Channel Bandwidth.vi RSSFU Set Status Register.vi RSSFU Set User-definable Status Register.vi RSSFU Store and Load Application.vi RSSFU Store and Load Fading Profile.vi RSSFU Store and Load Instrument Data.vi</p> <p>- modified VIs:</p> <p>RSSFU Configure Analog TV Video Vision Picture.vi RSSFU Configure Analog TV Video.vi RSSFU Configure DVBS2 Coding.vi RSSFU Configure Fading Standard Set.vi RSSFU Configure ISDBT Special Segment Settings RSSFU ARB Waveform Catalog.vi RSSFU ARB Waveform Catalog Length.vi RSSFU ARB Waveform Samples.vi RSSFU TDMB Configuration.vi</p>

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		- removed: RSSFU Configure DVBS2 H8PSK Settings.vi
1.50.0	11/2006	<p>Modifications:</p> <p>- modified VIs:</p> <p>RSSFU Configure J83B Test Signal.vi RSSFU Configure Directv Input Signal.vi RSSFU Configure Modulation.vi RSSFU Configure Fading Path Profile.vi RSSFU Fading Configuration.vi RSSFU Configure Interferer ATV Predefined Standard.vi RSSFU Configure Fading Standard Set.vi RSSFU Read DMBT SFN Values.vi RSSFU Configure Fading Birth Death Path Profile.vi</p> <p>- added new VIs:</p> <p>RSSFU ARB Trigger Execute.vi RSSFU ARB Trigger Status.vi RSSFU ARB Waveform Catalog Length.vi RSSFU ARB Waveform Catalog.vi RSSFU ARB Waveform Samples.vi RSSFU Configure Analog TV Audio.vi RSSFU Configure Analog TV Pilot.vi RSSFU Configure Analog TV Preemphasis.vi RSSFU Configure Analog TV Special Settings.vi RSSFU Configure Analog TV Subcarrier Settings.vi RSSFU Configure Analog TV Video Vision Picture.vi RSSFU Configure Analog TV Video.vi RSSFU Configure ARB External Clock.vi RSSFU Configure ARB Marker.vi RSSFU Configure ARB Trigger.vi RSSFU Configure Channel Table Frequency.vi RSSFU Configure DMBT Network Mode.vi RSSFU Configure DMBTH Coding Handheld.vi RSSFU Configure DMBTH Coding.vi RSSFU Configure DMBTH Control.vi RSSFU Configure DMBTH Input Signal.vi RSSFU Configure DMBTH Network.vi RSSFU Configure DMBTH Settings.vi RSSFU Configure DMBTH Special Settings.vi RSSFU Configure DMBTH Test Signal.vi RSSFU Configure Fading 2 Path Dynamic Delay Path.vi RSSFU Configure Fading 2 Path Dynamic Delay.vi</p>

rssf Instrument Driver		
Driver history for LabVIEW		
Revision	Date	Note
		RSSFU Configure ISDBT Coding.vi RSSFU Configure ISDBT Input Signal.vi RSSFU Configure ISDBT Layer Coding.vi RSSFU Configure ISDBT Segments.vi RSSFU Configure ISDBT Settings.vi RSSFU Configure ISDBT Special AC Data Settings.vi RSSFU Configure ISDBT Special Guard Insertion Settings.vi RSSFU Configure ISDBT Special Pilot Modulation Settings.vi RSSFU Configure ISDBT Special Pilots Settings.vi RSSFU Configure ISDBT Special Segment Settings.vi RSSFU Configure ISDBT Special Settings.vi RSSFU Configure ISDBT Test Signal.vi RSSFU Configure Reference Oscillator.vi RSSFU Configure Trigger IO.vi RSSFU Delete ARB Waveform.vi RSSFU Enable Analog TV Special Settings.vi RSSFU Enable DMBTH Special Settings.vi RSSFU Enable ISDBT Special Settings.vi RSSFU Frequency Channel Table Operations.vi RSSFU Get Level of Phase Noise.vi RSSFU Read Analog TV Values.vi RSSFU Read ARB External Clock Frequency.vi RSSFU Read DMBTH Coder Status.vi RSSFU Read DMBTH Packed Length.vi RSSFU Read DMBTH SFN Values.vi RSSFU Read DMBTH Values.vi RSSFU Read Fading 2 Path Dynamic Delay Doppler Shift.vi RSSFU Read ISDBT Bandwidth.vi RSSFU Read ISDBT Coder Status.vi RSSFU Read ISDBT Input Data Rate.vi RSSFU Read ISDBT Values.vi RSSFU Read TSPlayer and Recorder Status.vi RSSFU Record Progress.vi RSSFU Set Frequency VSB Reference Point.vi RSSFU Set Tx Actual Center Frequency.vi RSSFU Set Tx Frequency Channel.vi RSSFU TDMB Configuration.vi RSSFU TX RF Output Clear.vi RSSFU TX RF Output Protection Tripped.vi RSSFU System Display Update.vi RSSFU System Keypad Lock.vi

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		- obsolete: RSSFU Configure Noise.vi RSSFU Configure Pulse Noise.vi RSSFU Configure Noise Parameters.vi RSSFU T-DMB Settings.vi RSSFU Configure DMBT Network.vi
1.45.0	07/2006	- added new VIs: RSSFU Configure 8VSB Input Signal.vi RSSFU Configure 8VSB Settings.vi RSSFU Configure 8VSB Special Settings.vi RSSFU Configure 8VSB Test Signal.vi RSSFU Configure J83B Coding.vi RSSFU Configure J83B Input Signal.vi RSSFU Configure J83B Settings.vi RSSFU Configure J83B Special Settings.vi RSSFU Configure J83B Test Signal.vi RSSFU Enable 8VSB Special Settings.vi RSSFU Enable J83B Special Settings.vi RSSFU Read 8VSB Coder Status.vi RSSFU Read 8VSB Constellation.vi RSSFU Read 8VSB Packed Length.vi RSSFU Read 8VSB Roll Off.vi RSSFU Read 8VSB Values.vi RSSFU Read J83B Coder Status.vi RSSFU Read J83B Packed Length.vi RSSFU Read J83B Roll Off.vi RSSFU Read J83B Values.vi RSSFU Set 8VSB Symbol Rate.vi
1.44.0	05/2006	Modifications: - added new VIs: RSSFU Configure Directv Coding.vi RSSFU Configure Directv Input Signal.vi RSSFU Configure Directv Settings.vi RSSFU Configure Directv Special Settings.vi RSSFU Configure Gen Noise.vi RSSFU Configure Interferer ATV Predefined Standard.vi RSSFU Configure MediaFLO Area Settings.vi RSSFU Configure MediaFLO Delay Settings.vi RSSFU Configure MediaFLO ID Settings.vi RSSFU Configure MediaFLO Input Signal.vi RSSFU Configure MediaFLO Special Settings.vi

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		RSSFU Configure Modulation ATV Transmission Standard.vi RSSFU Configure Modulator Level.vi RSSFU Configure Noise CN.vi RSSFU Configure Pulse Noise.vi RSSFU Enable Directv Special Settings.vi RSSFU Enable MediaFLO Special Settings.vi RSSFU Modulation Signal Info and Statistics.vi RSSFU Noise Bandwidth Settings.vi RSSFU Read Directv Packed Length.vi RSSFU Read Directv Values.vi RSSFU Read MediaFLO Coder Status.vi RSSFU Read MediaFLO Delay SSF Arrival Time.vi RSSFU Read MediaFLO Length Settings.vi RSSFU Read MediaFLO Measured Data Rate.vi RSSFU Catalog Length.vi RSSFU File Directory Path.vi RSSFU Read To File From Instrument.vi RSSFU Write From File To Instrument.vi - modified VIs: RSSFU Configure Modulation.vi RSSFU Configure Interferer.vi RSSFU Configure DVBT Coding.vi RSSFU Read Gen Noise State.vi RSSFU Reset.vi - timeout set to 30s
1.40.0	03/2006	Driver update for SFU Broadcast Test System firmware version 1.40 - modified VIs: RSSFU Configure Interferer.vi RSSFU Configure Modulation Settings.vi - added new VIs: RSSFU Configure Fading Birth Death Path Loss.vi RSSFU Configure Fading Birth Death Path Profile.vi RSSFU Configure Fading Movi RSSFU Configure Fading Movi RSSFU Configure TDMB Input Signal.vi RSSFU Configure TDMB Special Settings.vi RSSFU Configure Tsgen PCR Jitter.vi RSSFU Enable TDMB Special Settings.vi RSSFU Fading Configuration.vi RSSFU File Operations.vi RSSFU Interface Settings (GEN).vi RSSFU Interface Settings (REC).vi

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		RSSFU New Record Stream.vi RSSFU Read Fading Birth Death Path Profile Results.vi RSSFU Read Fading Birth Death Path Profile.vi RSSFU Read Info STC SSTC.vi RSSFU Read Player Parameters.vi RSSFU Read Recorder Parameters.vi RSSFU Read TDMB Coder Status.vi RSSFU Read TDMB ETI Input.vi RSSFU Read TDMB Values.vi RSSFU Select Application.vi RSSFU Select Play File.vi RSSFU T-DMB Settings.vi RSSFU Timing Settings.vi RSSFU TSPlayer and Recorder Status.vi
1.22.1	01/2006	Driver for SFU Firmware 1.22 Modifications: - Minor changes in range checking - fixed RSSFU Configure DVBT Coding.vi - added attribute help
1.22	10/2005	Driver for SFU Firmware 1.22 - Initial Release

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