

QS1RServer Supported Remote Commands

Command	Description	Notes
A:		
AgcMode	Gets/Sets the AGC mode.	See QSAGCMODE in qs_defines.h below
AgcFixedGain	Gets/Sets the AGC fixed gain when AGC is OFF.	Valid value are -180.0 to +50.0 dBm
AgcThreshold	Gets/Sets the AGC threshold value when AGC is on.	Valid value are -180.0 to +50.0 dBm
AgcAttack	Gets/Sets the AGC attack value.	Valid values are 0.0 to 5.0
AgcSlope	Gets/Sets the AGC slope value.	Valid values are 0.0 to 5.0
AnbSwitch	Gets/Sets the NB1 on or off.	0 = OFF, 1 = ON
AnbThreshold	Gets/Sets the NB1 threshold.	Valid values are 0.0 through 10.0
AutoNotchSwitch	Gets/Sets the automatic notch filter (ANF) on or off.	0 = OFF, 1 = ON
AutoNotchRate	Gets/Sets the automatic notch filter rate value.	Valid values are 0.0 to 1.0
B:		
BinauralSwitch	Gets/Sets the binaural audio switch on or off.	0 = OFF, 1 = ON
BnbSwitch	Gets/Sets the block noise blanker on or off.	0 = OFF, 1 = ON
BnbThreshold	Gets/Sets the block noise blanker threshold.	Valid values are 0.0 to 10.0
C:		
CpuType	Gets the CPU type that the QS1RServer is running on.	Get only.
D:		
DitherSwitch	Sets the Dither switch on or off.	0 = OFF, 1 = ON
DacOutputDisable	Disables the DAC output.	0 = OFF, 1 = ON
DisplayFreqOffset	Gets/Sets the display frequency offset value.	Valid values are any number that can be represented with typr double.
E:		
Exit	Shuts own the server.	This is a single word command.
EncodeClockCorrection	Gets/Sets the encode clock correction value.	Valid range is +/- 1 MHz

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F:		
Freq	Gets/Sets the tuned frequency in Hz.	
fHz	Gets/Sets the tuned frequency in Hz.	
fkHz	Gets/Sets the tuned frequency in kHz.	
fMHz	Gets/Sets the tuned frequency in MHz.	
FilterLow	Gets/Sets the filter Low value.	
fl	Gets/Sets the filter Low value.	
FilterHigh	Gets/Sets the filter High value.	
fh	Gets/Sets the filter High value.	
Filter	Gets/Sets the filter value (lo/hi)	
FilterTaps	Gets/Sets the number of filter taps.	
FirmwareID	Gets the firmware ID.	
FpgaConfigID	Gets the FPGA configuration file ID.	
H:		
Hide	Hides the server window.	This is a single word command.
I:		
InitHardware	Initializes the QS1R hardware.	This is a single word command.
M:		
Mode	Gets/Sets the current demodulation mode.	See QSDMODMODE in qs_defines.h below.
N:		
NoiseReductionSwitch	Gets/Sets the noise reduction (NR) switch on or off.	0 = OFF, 1 = ON
NoiseReductionRate	Gets/Sets the noise reduction rate value.	Valid values are 0.0 to 1.0
O:		
OffsetGenFreq	Gets/Sets the CW offset generator frequency.	
ogf	Gets/Sets the CW offset generator frequency.	
P:		

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PgaSwitch	Sets the PGA switch on or off.	0 = OFF, 1 = ON
PsCorrection	Gets/Sets the Power Spectrum correction value.	
PostPsCorrection	Gets/Sets the Post Power Spectrum correction value.	
PsBlockSize	Gets/Sets the Power Spectrum block size.	Valid values are 64 to 65535.
PostPsBlockSize	Gets/Sets the Post Power Spectrum block size.	Valid values are 64 to 65535.
R:		
RandSwitch	Sets the Random switch on or off.	0 = OFF, 1 = ON
S:		
Start	Starts the DSP processing.	This is a single word command.
StartWavRecord	Starts the wav file record feature.	
StartWavInput	Starts the wav file input feature.	
Stop	Stops the DSP processing.	This is a single word command.
SampleRate	Gets/Sets the current sample rate.	
SupportedSampleRates	Gets the supported sample rates.	
SquelchSwitch	Gets/Sets the squelch switch on or off.	
SquelchThreshold	Gets/Sets the squelch threshold value.	
SmeterCorrection	Gets/Sets the S Meter correction value.	
SmeterValue	Gets the current S Meter reading.	
Show	Shows the server window.	This is a single word command.
T:		
ToneFrequency	Gets/Sets the local oscillator frequency.	
tf	Gets/Sets the local oscillator frequency.	
U:		
UpdateRxFreq	Forces an update of the Rx frequency.	
V:		
Version	Gets the server version.	
Vol	Gets/Sets the volume.	

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v	Gets/Sets the volume.	
W:		
WBCorrection	Gets/Sets the wide band spectrum correction value.	
WavRecord	Starts wav file recording.	
WavContinuous	Sets the wav file recording to continuous mode.	
WavPreBuffering	Gets/Sets the wav file buffering switch on or off.	
WavPreBufferTime	Gets/Sets the wav file pre buffering time.	
WavRecordPath	Gets/Sets the wav file recording path.	
WavInLoop	Gets/Sets the wav file loop switch on or off.	
WavInFileName	Gets/Sets the wav file in name.	
WavInRewind	Rewinds the wav in file.	
WavInPosition	Gets/Sets the wav file in position.	
WavInPositionPercent	Gets/Sets the wav file in position in percent.	
WavInLoopStartPosition	Gets/Sets the wav file in loop start position.	
WavInLoopStartPosPercent	Gets/Sets the wav file in loop end position in percent.	
WavInLoopEndPosition	Gets/Sets the wav file in loop start position.	
WavInLoopEndPosPercent	Gets/Sets the wav file in loop end position in percent.	
WavInLength	Gets the wav file in length.	
WavInCenterFrequency	Gets the wav file in center frequency.	
WavInSampleRate	Gets the wav file in sample rate.	
WavInStartTime	Gets the wav file in start time.	

Notes:

- The get command format is: ?**command_name**<enter>
- The set command format is: >**command_name**<space>**value**<enter>
- Commands are case insensitive.

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- Any remote server command is also valid in the server command line. For example, the server start command can be entered as '>start' on the command line. See the documentation for the remote server commands.

"qs_defines.h"

```
/*
 * Copyright (C) 2011, Philip A Covington, N8VB
 *
 */

class QString;

enum QSDMODMODE {
    dmAM = 0,
    dmSAM = 1,
    dmFMN = 2,
    dmFMW = 3,
    dmDSB = 4,
    dmLSB = 5,
    dmUSB = 6,
    dmCWL = 7,
    dmCWU = 8,
    dmDIGL = 9,
    dmDIGU = 10
};

extern QString modeIntToString( int mode );
extern int modeStringToInt( QString mode );

enum QSAGCMODE {
    agcOFF = 0,
    agcLONG = 1,
    agcSLOW = 2,
    agcMED = 3,
    agcFAST = 4
};

extern QString agcmodeIntToString( int mode );
extern int agcmodeStringToInt( QString mode );

#define NUMBER_OF_RECEIVERS 1

#define RX1_CMD_PORT 43065
#define RX2_CMD_PORT 43066
#define RX1_DATA_TCP_PORT 43069
#define RX2_DATA_TCP_PORT 43070

#define WB_DATA_TCP_PORT 43071
```

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```
#define SPECTRUM_INET_PACKET_MARKER_VER1 0x8ef3b285
#define SPECTRUM_LOCAL_PACKET_MARKER_VER1 0x20B4D33D
#define SPECTRUM_INET_EXTENDED_PACKET_MARKER_VER1 0x5ef3b978
#define SPECTRUM_LOCAL_EXTENDED_PACKET_MARKER_VER1 0x15B4D32D

#define WBDATA_INET_PACKET_MARKER_VER1 0x9ec3b27C
#define WBDATA_LOCAL_PACKET_MARKER_VER1 0x41B4E33A

#define SERVER_VERSION "4.0.0.9 Beta 1"

#define SPEC_OFFSET_VALUE 200.0

#define RT_AUDIO_RING_SIZE 32
#define RT_AUDIO_BUF_LOWER_LIMIT 30
#define RT_AUDIO_BUF_UPPER_LIMIT 33
```
