



## SDRuno Release Notes



### Overview

This document provides an overview of the modifications, changes and enhancements made to the SDRuno Application Software.

Version 1.1 and upward will only be developed for the RSP. The EXTIO version V1.05 is based on V1.04 and will not be developed further.

## Version 1.24 (21<sup>st</sup> August 2018)

### Changed

- No functionality changes, improved interoperability with other software using the service API

## Version 1.23 (19<sup>th</sup> June 2018)

### Fixed

- No change to SDRuno. The installer includes an update to the service API which fixes the 10 MHz operation in single tuner mode on tuner 2 of the RSPduo

## Version 1.23 (18<sup>th</sup> May 2018)

### Added

- Support for service-based API
- Support for RSPduo (single tuner and dual tuner modes)
- Band framing now works in Low IF mode ( $\leq 2$  MHz sample rate) as well as Zero IF mode
- “Auto Layouts” for RSPduo master/slave (can also be used for other RSPs)
- Blacklist of serial numbers of stolen RSP devices

Note: The software will not work with these devices until the user contacts SDRplay.

### Changed

- Main Window resized to accommodate RSPduo controls
- Gain Reduction to Attenuation
- Low IF mode now only 6 MHz (normal mode) or 8 MHz (ADS-B compatible mode)
- SDRuno and API optimisation. Improvement in performance
- SNR measurement shows – when less than 6dB
- Unframing the band
- Clicking on a FM frequency in the memory panel will unframe the band (if framed)
- Removed ExtIO version from installation (not compatible with service API)

### Fixed

- Settings panels now behave as intended on minimize/restore
- Memory panel columns can now be resized
- Improved error handling
- Step size drop down menu not identifying which step size has been applied
- IF gain “bounce” and issues switching ports fixed in gain mode

### Known Issues

- SP2 CWAFC drift issue (Zoom/window size/freq display)
- IF output mode disabled SP1 spectrum mouse clicks

## Version 1.22 (13<sup>th</sup> January 2018)

### Added

- Support for 1366x768 default layout
- ADC overload detection in AGC off mode
- ADC overload acknowledgment system to avoid lockout condition
- Custom step size for each mode
- Band Button Groups (Ham Lower, Ham Upper, Broadcast)
- Two additional SP1 width presets (2560 and 3840)
- Additional menu option in memory panel to reset column widths (helps when upgrading)
- Scheduled Recording
- Auto update

### Changed

- Registry reset now only clears 1.2+ entries
- SP1 Window max size supports 4K displays (3840x2160)
- Small improvements to the memory panel (panel width and field width changes)
- Improvements to the IF output mode
- UTC time fixed to 24 hour format
- Play!/Stop button colour co-ordinated
- Move MUTE button to make way for VOLUME label
- Moved Squelch value display to the right

### Fixed

- Log10 SING error
- Aero support detection to try to prevent rendering issues
- Freezing when switching to HiZ port in gain mode
- Gain "pumping" issue when in gain mode
- Settings panels not displaying properly when "un-minimised"
- Zoomed in frequency scale drag out of bounds bug
- Noise floor measurement bug
- Improved RSP error handling
- Sample rate change causing spectrum display issues
- Device selection bug

### Known Issues

- SP2 CWAFC drift issue (Zoom/window size/freq display)
- IF output mode disabled SP1 spectrum mouse clicks

## Version 1.21 (13<sup>th</sup> November 2017)

### Added

- Ham band framing buttons can now toggle on or off
- Restored VFO button for centring of the VFO on the SP1 display

### Changed

- Changes to the default settings of the SP1 waterfall display
  - Waterfall averaging (WF avg) now set to 'off' by default
  - Tweaks to the default waterfall gain and contrast settings
- Changed the default step size for USB and LSB to 500 Hz
- Recalling stations from the memory panel automatically unlocks the LO if necessary
- Auto calibration system now selects DAB sub mode if not already selected
- Memory panel now responds to Ctrl+W

### Fixed

- Bug fixes associated with the redrawing of the SP1 display
- Bug fix affecting the storing of the calibration values for the RSP2
- Bug fix affecting CW Zap and CW AFC if the SP2 display FFT is not a 2<sup>n</sup> size
- Fixed missing Main Window Instance value
- Fixed Windows XP support

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## Version 1.2 (27<sup>th</sup> October 2017)

### Added

- IQ Wav file custom encoding
- LO LOCK toggle hotkey - 'K'
- Support for MHz frequency input using the M key
- Support for MHz frequency input using the new . (DOT) and MHz keypad buttons
- IF output frequency and enable state stored
- Auto swap I/Q when in IF output mode
- Facility to save Power and SNR measurements to a CSV file
- Changing modes now changes the default step size
- MCTR / TCTR / RSYN buttons state stored

### Changed

- Keypad Ham band button functionality
  - Set and lock LO to centre of the band
  - Set SP1 display to show the entire selected band using appropriate sample rate and decimation factor
  - Ham band selection indicated by depressed keypad button
  - Default demodulation mode automatically selected for major Ham and broadcast bands
- Zoom automatically zooms to the VFO
- Workspaces now saved using CTRL+W
- Default workspace opens windows to try to fill the screen
- MA button default state is enabled
- RBW slider used to define SP1 FFT size and display quality
- Improved zoom functionality
- Improved SP1 and SP2 settings defaults
- Decimation filter improved for reduced spurious aliasing
- Decimation values optimised for performance and usability

### Fixed

- LSB/USB filter bandwidths all have same 100Hz offset from centre frequency
- MA button now supports minimise/restore
- Corrected error reporting
- CAT control now supports ID; command
- Improved the ADC Overload messaging functionality. Message colour now more suitable for colour blind people.

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## Version 1.13 (15<sup>th</sup> March 2017)

### Bug Fixes

- Fixed RSP2 IF AGC/gain slider display issues

### Updates

- Added IF Output mode for transceivers
- Added 250 Hz to frequency step size list
- Default page in the settings panels is now the left most page each time SDRuno is started
- Added RSP2 IF GR/Gain value
- Added Factory Reset in the Main Window OPT menu (1<sup>st</sup> Instance only)
- Improved power function error handling
- Added support for Sub Modes, Filter BW and Port Selction in the Memory Panel
- Changed RDS window colour scheme to match other windows
- Added new hotkeys 'v', '-' and '+' which are for VFO, Out and In zoom buttons in the SP1 window
- Hotkey 'b' now opens AND closes the memory panel
- Changed the default sync Rig->VRX setting to true
- API – RefClk o/p no longer stops when the master RSP2 stops streaming

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## Version 1.12 (23<sup>rd</sup> December 2016)

### Bug Fixes

- Various in API and SDRuno including > 1GHz operation

### Updates

- API improvements including AGC and gain measurement (see API release notes)

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## Version 1.11 (21<sup>st</sup> November 2016)

### Bug Fixes

- Windows XP start up issue and some others from 1.1

### Updates

- ADC overload notification
- Added 24k to digital filter presets

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## Version 1.1 (11<sup>th</sup> November 2016)

### Bug Fixes

- **1.04.1** – fixed issue where highlighted filter wasn't always the one loaded.
- Waterfall in combo mode now flows the same direction as other modes

### Updates (RSP only V1.1)

- Tighter integration of RSP controls
- Calibrated power measurement
- Automatic S-Meter calibration
- SNR meter
- dBm scale for both SP1 and SP2 windows
- Automatic frequency calibration
- Support for IARU S-Meter standard
- Zoom to VFO button in SP1 window
- More improvements to AGC scheme
- More improvements to DC offset compensation scheme
- Reversed default mouse wheel scroll direction
- Waterfall in combo mode direction can be reversed in the same way as other modes
- Added extra frequency step sizes
- LSB / USB filter presets back to being the same
- USER filter preset renamed to DIGITAL
- Support for both gain and gain reduction displays
- Updated hardware driver – now reports as SDRplay device

### Updates (EXTIO only V1.05)

- maximum bandwidth changed to 2.5MHz

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## Version 1.04 (22<sup>nd</sup> September 2016)

### Bug Fixes

- Recording directory not able to be changed/stored
- Switching to/from Wav file input causing RSP streaming issues

### Known Issues

- **1.04.1** – Selectable filter presets – functional but can be unclear what is set when switching modes

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## Version 1.03 (18<sup>th</sup> September 2016)

### Bug Fixes

- High DPI resolution issue.
- Various minor bug fixes and typos

### Updates

- Reworked filter cutoffs
- Separate out EXTIO functionality
- RSP Ready indicator in Main Window/SETT/Input
- Rename FM Stereo Noise Reduction button and slider to FMS-NR to avoid confusion with SNR (Signal Noise Ratio)
- Improvements to tuner AGC scheme
- Improvements to DC offset scheme
- Removed unused buttons in SP1/SP2 windows
- LO display in RSP advanced window and the SP1 window
- Change defaults (LNA OFF / AGC ON)
- Added RDS PTY support

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## Version 1.02 (23<sup>rd</sup> June 2016)

### Bug Fixes

- Fixed VLF tuning issue.

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## Version 1.01 (22<sup>nd</sup> June 2016)

### Bug Fixes

- **1.00.1** – Default save directory for memory banks and wav files is now My Documents
- Memory call caused SDRuno not to start on Windows XP and Windows Vista
- CPU load hint showed Studio1 instead of SDRuno
- Fixed some references in user manual along with updated directory save details.

### Updates

- Changed registry location to [HKCU\Software\SDRplay\SDRuno\1.01] to enforce directory fix.

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## Version 1.00 (19<sup>th</sup> June 2016)

### Known Issues

- 1.00.1 – When saving memory banks, saving to the Program Files area can cause an error/crash.

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For more information go to <https://www.sdrplay.com>

For support go to <https://www.sdrplay.com/support>

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