

## ExpertSDR2 1.3.0 Beta1 Release Notes

24 April 2019

### Release description

ExpertSDR2 1.3.0 Beta1 for SunSDR2 PRO, SunSDR2 QRP and MB1 transceivers, ColibriDDC and ColibriNANO receivers.

The purpose of **ALPHA/BETA/RC** versions of the software is to collect user's feedback on the new features and to locate possible issues which could be missed while internal testing.

An **ALPHA/BETA/RC** version may have bugs, which will be fixed in further software releases. Nevertheless, we recommend updating to the latest version of the software since it contains not only new features, but also bug fixes and improvements that you most definitely will find useful. If you prefer to skip the software release with possible bugs in it, we respect your decision.

### General changes:

- SPEC mode was removed from TCI
- Waterfall speed was improved
- Switchable spectrum slopes (Options-> Display-> Spectrum-> Hide spectrum slopes)
- Added ability to transfer audio signal via TCI
- Improved MB1 Main knob operation, it's easier to tune with slow Main knob rotation
- The list of commands added to the TCI:
  - Remove all spots (write only): `spot_clear;`
  - Protocol version: `protocol:app_name,tc1_version;` example: `protocol:esdr,1.2;` (sent upon connection)
  - Output power level indication (read only): `tx_power:watt;` example: `tx_power:15.3;`
  - SWR level indication (read only): `tx_swr:value;` example: `tx_swr:2.7;`
  - Volume control: `volume:dB;` example: read/write `volume:-7;` and read only `volume;` [from -60 dB up to 0 dB]
  - ON/OFF SQL: `sql_enable:trx,on/off;` example: read/write `sql_enable:0,true;` read only `sql_enable:1;`
  - Control SQL level: `sql_enable:trx,dB;` example: read/write `sql_enable:0,-70;` read only `ql_enable:1;` [from -140 dB up to 0 dB]
  - Control the tuning frequency `vfo:trx,channel_A/B,Hz;` example: read/write `vfo:0,0,7100000;` read only `vfo:1,0;`

- Status of the main ExpertSDR2 window (in focus or not): `app_focus`; example: read only `app_focus:true`;
- Set the main ExpertSDR2 window in focus: `set_in_focus`; example: write only `set_in_focus`;
- Switchable display of band/mode selection (Options-> Display-> Main-> Compact band/mode panel)
- BIN algorithm was improved for AM/SAM/DSB/NFM
- Bug in SunSDR2 QRP, when it turned to TX ExpertSDR2 may froze.

## Bug fixes:

- White window appears upon software start
- Fixed operation of the Use IF function in the Panel tab
- Mixer bug
- VOX bug
- Pressing TUNE switches transmitter frequency to DDS frequency, when VFOB used for transmission
- SPLIT mode bug
- Mode selection issue, with “jumping” controls
- While you transfer settings, e.g. from `C:\Users\User_Name\ExpertSDR2` in `AppData\Local\Expert Electronics\ExpertSDR2` you copied IQ files
- There was an issue when you changed RX filter bandwidth from E-Coder panel, while transmitting
- Issues with EQ and filter adjustments in PROC menu
- Volume and MON controls display issue
- Audio disappearances
- Incorrect frequency display in memory panel: 80M frequency 3,710,000.0 Hz., displayed as 371,000.0 Hz
- Operation with enabled SQL may result in strong tone signal
- Antenna switch bug, incorrect display of antenna ports
- Artifacts on the horizontal scale, with enabled BandScope
- Incorrect display of RX EQ state in MB1 GUI
- SQL displayed incorrectly in MB1 GUI
- CAT system operation bug

- SWR bug in MB1 GUI
- PTT mic operation with MB1
- Crackling noise with SC enabled
- Mixer window scaled incorrectly
- DSB mode did not use filter bandwidth set in Device-> TX tab
- CTCSS tone generation issue
- There is no spectrum in CW mode while you transmit (MON enabled)
- Incorrect offset operation in DIGU/DIGL modes
- RX filter bandwidth display issue in DIGU/DIGL modes
- Fixed issues in AGC operation
- Player couldn't record or playback TX signal
- Mic gain applied to the signal from VAC
- PROC button wasn't lit, though TX PROC window was open
- Incorrect frequency tuning from MEM panel, CAT and OmniRig.
- Frequency tuning from E-Coder. If the step was 1 Hz and you slowly tune the frequency out of the HAM band, it led to "jumping" of the tuned frequency in a cycle in and out of band.

## Known issues

- Waterfall issue – with high spectrum resolution and squeezed panorama, thin width stations (like CW) might not be displayed
- RX2 BreakIn does not work
- If you detach BandScope from the main software window and then attach it back, text on the panorama becomes unreadable
- Text in the Options window may be squeezed in some menus
- Ext reference cannot be used in MB1, SunSDR2 QRP (firmware issue)
- ColibriDDC cannot operate in DHCP mode (firmware issue)
- ColibriNANO may not operate properly with high sample rate values (mainly on macOS devices) (firmware issue)

## Tips for smooth ExpertSDR2 installation

Before the upgrade of the ExpertSDR2, always backup your current ExpertSDR2 folder (it contains your settings and Profile files), which is placed here  
C:\Users\UserName\AppData\Local\Expert Electronics\ExpertSDR2.

Before installing the ExpertSDR2 shut down all running ExpertSDR2 instances.

You don't have to uninstall the older ExpertSDR2 version before installing the new one.

If you want to downgrade the ExpertSDR2 you need to uninstall the current version and then install the older one.

## Useful documents

[MB1 User Manual v1.2.0](#)

[SunSDR2 PRO User Manual v1.5](#)

[SunSDR2 QRP User Manual v1.1](#)

[ColibriDDC User Manual v1.2](#)

[ColibriNANO User Manual v1.1](#)

[ExpertSDR2 User Manual Addendum, by Erik EI4KF](#)

[Expert Remote User Manual](#)

## Technical Support

If you've experienced any issues using the ExpertSDR2 or need any help, you may ask your question on the [Forum](#) or contact us via the technical support form on our [web-site](#).

Hours of operation: Our technical support engineers are available Monday-Friday from 7:00 – 16:00 UTC. If you need a remote session, we should discuss it beforehand, usual time Monday-Friday from 12:00 – 15:00 UTC.

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