

UHSDR Firmware Version Changes from 2.11.55

UHSDR is a generic version of software (also known as firmware) that was designed for the mcHF HF Software Defined Radio (SDR). It is compatible with the mcHF HF transceiver, and is used in the RS-9x8 HF transceivers (except for the RS-928) and several other transceivers.

The RS-928 does not appear to be able to use the UHSDR version of the software, as it seems to have a different Local Oscillator integrated circuit that is not compatible with the UHSDR software. So the below may not apply to the RS-928.

Below is a list of the latest version numbers of the software, with a summary of the changes since the previous version. I'll try to keep this list updated as new versions are released.

Right now, there appears to be a "feature" of the software somewhere above 2.11.55 in some RS-9x8 systems, in that the Bands go up to 6 meters. From what I've been reading on the UHSDR/mcHF Groups, this is a planned feature, as the software now "tests" the SI570 LO generator (somehow) to see if it can handle 6 meters, and then allows tuning the 6 meters band if it can do so. However, the CMOS version of the SI570 chip used in the RS-9x8 and most mcHF transceivers is only specified to handle frequencies up to 40 MHz. So it is not recommended to use 6 meters in any case.

Version 2.11.55 - May 1, 2019 - Added Dynamic Tuning

Version 2.11.56 - Jul 10, 2019 - Fixed "Hall of Fame" display - No functionality changes

Version 2.11.57 - Jul 14, 2019 - Separated Wattmeter and Bandfilter Control - Fixed initial bandpass filter selection - Added experimental/debug IARU Region selection (IARU Region 2 is the default)

(Use 2.11.59 instead) Version 2.11.58 - Jul 14, 2019 - Fixed compiler build issue - No functionality changes

Version 2.11.59 - July 15, 2019 - Fixed issue introduced in 2.11.58 (do not use 2.11.58)

Version 2.11.60 - July 16, 2019 - Enable bands and transmitting frequency based on VFO hardware - Internal software changes only (called Software Refactoring)

Version 2.11.61 - Jul 18, 2019 - Fixed front panel button pressed detection

Version 2.11.62 - July 29, 2019 - Fixed error messages

(Use 2.11.64 instead) Version 2.11.63 - Aug 11, 2019 - Fix out-of-band power factor

Version 2.11.64 - Aug 12, 2019 - Correction for 2.11.63 (do not use 2.11.63)

Version 2.11.65 - Aug 18, 2019 - Correction for Coupling Frequency Range

Version 2.11.66 - Aug 19, 2019 - Fixed band name display issue

Version 2.11.67 - Aug 27, 2019 - Fixed problem with CW text transmission

Version 2.11.68 - Oct 25, 2019 - Fixed problem allowing transmitting above 32 MHz (6 meters is not supported)

Version 2.11.69 - Oct 26, 2019 - Software Refactoring only - No functionality changes

Version 2.11.70 - Oct 26, 2019 - Added Memory Mode, support for LAPWING transceiver and 10GHz frequency display

Version 2.11.71 - Oct 28, 2019 - Minor fix to VFO A/B startup

Version 2.11.72 - Nov 12, 2019 - Step up did not go to 100kHz digit

Version 2.11.73 - Nov 12, 2019 - Step stuck at 10kHz

Version 2.11.74 - Nov 18, 2019 - EXPERIMENTAL fix for digit flickering of the main display

Version 2.11.75 - Nov 19, 2019 - Fixed the "9" digit display in the frequency

Version 2.11.76 - Dec 9, 2019 - Corrected tuning steps for touchscreen tuning

Version 2.11.77 - Dec 23, 2019 - Fixed some display artifacts - New DF8OE bootloader system for activating special features in firmware

(Version 2.11.77 appears to be a change to allow a special DF8OE test version of the bootloader to be detected, for new bootloader testing. It should have no impact. It also appears there may not have been a firmware release for this version - It would be included in the Version 2.11.78 release)

Version 2.11.78 - Dec 24, 2019 - Fixed some more display artifacts

Version 2.11.79 - Feb 11, 2020 - Moved some Menu items from Debug to dedicated places - Added Mic Type to menu (dynamic/electret)

(Use 2.11.81 instead) Version 2.11.80 - Apr 14, 2020 - Added 11th digit to Transverter frequency display (to 99GHz) - Added separate Transverter TX frequency offset

Version 2.11.81 - Apr 14, 2020 - Corrected Version 2.11.80 to save TX Frequency Offset in EEPROM (do not use 2.11.80)

Version 2.11.82 - May 15, 2020 - Fixed RTTY Macro problem with characters not transmitting

Version 2.11.83 - May 18, 2020 - Additional fix to 2.11.82 for RTTY Macro transmission

Version 2.11.84 - May 18, 2020 - Changed VSWR foldback protection to only occur when enough forward power is available

(Use 2.11.87 instead) Version 2.11.85 - May 19, 2020 - Corrected RTTY character encoding/decoding

(Use 2.11.87 instead) Version 2.11.86 - May 20, 2020 - Additional correction for RTTY encoding/decoding

Version 2.11.87 - May 21, 2020 - Additional correction for RTTY encoding/decoding

Version 2.11.88 - July 9, 2020 - Corrected artefacts on TFT when entering a frequency via Touch

Version 2.11.89 - August 10, 2020 - Changed definitions of "void" functions to allow the compiler to detect invalid calls

(Use 2.11.91 instead) Version 2.11.90 - October 21, 2020 - Changed code to allow transmit out of band - Corrected floating division

Version 2.11.91 - October 22, 2020 - Corrected floating division in a second place

Version 2.11.92 - December 1, 2020 - Corrected saving of the CW Decoder menu items to the EEPROM/flash

(Use 2.11.95 instead) Version 2.11.93 - December 23, 2020 - Band Definitions are not saved to EEPROM

(Use 2.11.95 instead) Version 2.11.94 - December 23, 2020 - Added Region 3 Thailand and the concept of RX Only Ham Bands

Version 2.11.95 - December 26, 2020 - Fixed 2.11.93 and 2.11.94 software crashing

The UHSDR software is being supported by a group of software and ham engineers, mainly led by DF8OE in Germany. The software is being updated by these developers as new errors are discovered and as new features are incorporated. The website for the UHSDR software development and the main entry-point for viewing the documentation is:

<https://github.com/df8oe/UHSDR/wiki>

There is an overview discussion of the active software development that includes discussion of the changes made for each new version (called a build or commit) at:

<https://github.com/df8oe/UHSDR/commits/active-devel>

The latest version of the software that is being updated is always at:

<http://df8oe.github.io/UHSDR/>

Previous versions of the software are available at:

<https://www.amateurfunk-sulingen.de/uhsdr/archive/firmware/>

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