SmartSDR™ for Windows v3.10.10 Release Notes

September 3, 2025

SmartSDR™ v3.10.10 is a general release for all FLEX-8000 and FLEX-6000 series software-defined radios, and the Maestro™. This version supersedes all previous versions of SmartSDR v3.x.

This document covers changes to client software (SmartSDR for Windows, SmartSDR for the "M" radios, and Maestro). Changes to clients or utilities produced by 3rd parties are not addressed. Please consult the SmartSDR Software User Guide v3 for details on using features and an optimal operating experience.

Before upgrading, please read all sections marked as IMPORTANT for upgrade prerequisites and other important information. Failure to follow these instructions may create problems requiring FlexRadio support or service staff assistance.

Note: Recent versions of SmartSDR v3 address several critical software defects identified in previous versions of SmartSDR. After upgrading to SmartSDR v3.10.10, downgrading to previous versions of SmartSDR v3 will result in the reoccurrence of critical issues resolved in this software release.

Important Notice: After upgrading the v3.10.10 firmware in all FLEX-8000s and FLEX-6000s, a hardware power cycle, which includes shutting down the radio, cycling the DC power, and restarting the radio, is recommended to ensure the firmware update installs successfully.

New Features in SmartSDR v3.10.10

Multiple SmartSignal (APD) improvements. Incremental improvements on SmartSignal performance consistency and removed RF Gain in Sampler Path to improve SmartSignal performance. SMART-11290

Implemented CWX Remote Sidetone. This feature allows the operator to hear sidetone generated by N1MM and other programs that use the virtual Winkeyer interface.
Note: Sidetone levels can vary depending on the source keying CW and the client in use. Take caution to protect your hearing and familiarize yourself with the audio levels for your particular setup and use case. Sidetone levels will be more balanced in a future release. SMART-11151

WinKeyer Emulation Enhancement. Added spacing character 0x7C hex. SMART-11052

TGXL Meters are now available in Maestro and M-Models. The meters are available when the radio is connected to the TGXL. SMART-11356

Added New Assignable Function Keys to Maestro. The functions added are: (a) Tuner Change State, (b) Tuner Tune, and (c) Amp Change State. SMART-10943

Bug Fix Highlights in SmartSDR v3.10.10

Please refer to the SmartSDR v3 Changelog for a complete listing of changes.

SMART-11569   Updated SmartSDR Installers/Executables with the FlexRadio, Inc. name

SMART-10967   Fixed the inaccurate error message "No TX Slice" when PTT is held during boot up.

SMART-11496   Fixed an issue where a software update failed to start correctly

SMART-11132   Improved reliability of VOX in multiFLEX

SMART-10346   Improved trailing edge of CW waveform envelope

SMART-11403   Analog-style meter now has tick marks to mirror the digital bar meter scale

SMART-10822   Fixed an issue where ATU changes affect the CW delay setting

SMART-10720   Fixed issue with 8000M Models where the front panel and the radio could be powered on out of sync.

SMART-8099   Improved performance when deleting multiple Spots

SMART-11601   Fixed a small memory leak in CW

SMART-11213   Fixed an issue where SmartSDR for Windows didn't allow navigation to the Select Radio screen after setting a fixed IP

SMART-11477   Fixed an SO2R interlock issue with CW and setups with the PGXL

SMART-11267   Fixed TGXL problem that could result in timing errors with SO2R config and intermittent High SWR warnings on PGXL. Also related to SMART-11523

SMART-11272   Fixed an issue with the ATU and ATU LED hanging after TGXL connection dropped

SMART-11422   Changed the Two Tone Test frequency pairing from 1900/700 Hz to 1900/710 Hz for improved performance

SMART-11166   When set to Two Tone mode and a mode that does not support two-tone Tuning, the single tone is now used

SMART-11224   Fixed an issue on Maestro that prevented re-adding meters.

SMART-11365   Fixed an issue with the 6000 series radios that would cause band persistence issues (Slice/Pan off frequency, not present, etc.)

SMART-11435   Fixed an issue where the SO2R Default profile was not loading correctly after reboot on M Models

SMART-11257   Fixed the Tool Tip wording when hovering over the disabled ATU button with TGXL inline

Important Release Details

There are minimum versions of SmartSDR needed for certain FLEX-6000, FLEX-8000, and Maestro models due to hardware revision levels. The table below indicates the minimum required version of SmartSDR based on hardware ship dates.

Using the latest version of SmartSDR will prevent any issues you may encounter by running firmware below the minimum version for your radio.

Product	Hardware Ship Date	Minimum Version
Maestro C, FLEX-8400M FLEX-8600M	17-February-2025	3.8.23
FLEX-8400M, FLEX-8600M	2-January-2025	3.8.21
FLEX-8400, FLEX-8600	9-October-2024	3.8.19
FLEX-6400, FLEX-6400M, FLEX-6600, FLEX-6600M	24-March-2023	3.4.23

What to do if the SmartSDR software update does not finish or the radio's Power button LED remains illuminated purple after 10 minutes? If ten (10) minutes have elapsed when the software upgrade indicator is no longer moving and the radio has not rebooted to complete the upgrade, power off the radio by pressing the power button. If the radio's power button LED stays illuminated purple or the radio will not shut down when pressing the power button, momentarily remove DC power from the radio to shut it down. The radio should restart using the power button, and the firmware update should have completed successfully.

What to do if the FLEX-8000/6000 fails to boot after upgrading to SmartSDR 3.10.10: If the radio fails to boot after performing a firmware upgrade, please open a [HelpDesk support ticket](#) to get the issue resolved.

Upgrading an M-model Radio Front Panel: If you are upgrading an M-model radio using SmartSDR for Windows, the upgrade will not be applied to the software for the Front Panel (display). Use the information below to upgrade the front panel.

- *The radio must first be connected to your network and can access the Internet to download the necessary software to update the front panel.*
- After the radio firmware updates from your PC, shut down SmartSDR for Windows and connect to your radio using the M-model Front Panel. The Version Select screen should display SmartSDR v3.10.10, showing a download icon. Selecting that version will start the final portion of the upgrade process.

For a detailed description of the SmartSDR for Windows software upgrade process, please refer to the SmartSDR Software Users Guide v3

Upgrading the radio firmware over a SmartLink connection is not supported. Since Internet connections can be inherently unreliable, and it is paramount that the firmware upgrade process proceeds uninterrupted to prevent the FLEX-8000/6000 from becoming inoperable, upgrading the radio firmware is only supported using a LAN or network-connected SmartSDR client.

Best Practices for Installing / Uninstalling SmartSDR
Best Practices for Installing a New Version of SmartSDR for Windows

Always back up your Global, TX (transmit), and Microphone Profiles. For detailed instructions on exporting your profiles to a file on your PC, refer to the SmartSDR for Windows Software User's Guide. It is recommended to export all profiles before upgrading to v3.10.10. Maintaining a good set of profile exports as backups is always a best practice. Moving back and forth between different versions of SmartSDR may result in data loss unless you have a backup (export) of your Profiles.

Power cycle the radio before installing a new version of SmartSDR for Windows. To ensure a seamless upgrade, it is recommended that you power cycle your radio *before* installing the SmartSDR for Windows software on your PC and updating the radio firmware.

Ensure your Windows operating system is up to date before installing SmartSDR for Windows. The proper operation of SmartSDR for Windows and its associated drivers relies on having an up-to-date and supported Windows operating system, including the root security certificates. It is strongly recommended that you run Windows Update and install all mandatory and optional updates before installing SmartSDR for Windows.

Managing SmartSDR installed on other devices. If using Maestro or other PCs running SmartSDR for Windows, update all devices at the same time to ensure a consistent operating experience and to avoid radio firmware upgrade/downgrade delays.

"Cold Boot" the radio after upgrading the radio firmware. Using the power button, shut down the radio, then disconnect it from DC power for approximately 30 seconds. This procedure "*cold boots*" the radio and helps ensure proper operation. Once DC power is restored to the radio, wait 2 minutes to ensure all internal processors have booted up completely before booting your radio.

Always perform a Factory Reset of your Radio when <u>Downgrading</u> the Radio Firmware: In general, downgrading to a previous version of SmartSDR is not recommended. The database in the FLEX-8000/6000 is NOT backward compatible. This means if you downgrade the firmware in your radio, you *must perform a Factory Reset* to ensure the internal database is consistent with the version of SmartSDR firmware that is running on the radio.

The procedure for performing a Factory Reset is described in the **<u>Best Practices for Installing a New Version of SmartSDR for Windows section</u>** below.

In addition to performing a Factory Reset on the radio, you mustn't import a database using a profile export that is greater than the version you are using with the FLEX-6000. In later versions of SmartSDR, the profile export file name contains the version of SmartSDR that was running when the export was saved to your PC for easy version identification.

How to Factory Reset a FLEX-8000/FLEX-6000

There may be situations where a factory reset of the radio is needed to ensure that the radio is working properly. If instructed to perform a Factory Reset of the radio, use the procedure below.

Perform a Comprehensive Cold Boot and Factory Reset of your radio.

NOTE: Before starting, shut down all programs that may interface with the radio, such as loggers, digital mode programs, and NodeRed devices.

NOTE: If you have anything connected to the REM ON connector on the back of the radio, please remove it before running the reset procedure. The REM ON device can be reconnected once the reset procedure is finished.

Before you get started, please note the "wait times" in the steps listed below. These are important to ensure the radio resets properly.

- Power off the radio by pressing and releasing the power button. Allow it to completely power down before continuing by waiting for the power LED to turn off (or amber if an FLEX-6000 GPSDO is installed). If pressing and releasing the power button does not shut down the radio, **press and hold** the power button until the radio shuts down. If this does not work, turn off the DC power supply to shut down the radio.

- Once the radio is powered off, **wait for 2 minutes** to allow all processors to shut down completely.

- Remove the power cable from the radio for **at least 30 seconds** and then reconnect it. It is important to remove the power cable from the radio and not just turn off the power supply.

- After reconnecting the DC power cable, turn the DC power ON and **wait for 2 minutes** to allow the internal PSoC processor to boot up completely before continuing.

For FLEX-6700 and FLEX-6500:
- Press and hold the **OK** button *while simultaneously pressing and releasing* the **Power button**.
- Release the **OK** button once the power LED turns white and allow the radio to continue booting normally. When the Power LED is solid green, the radio has completed the boot-up process.

For FLEX-6300, FLEX-6x00(M), FLEX-8x00(M):
- Press and hold the **Power button** for approximately 5 seconds until the Power button LED turns **white**. *After the power button turns white, release the **Power button*** and allow the radio to continue booting, indicated by a flashing green power button LED. When the Power button LED is solid green, the radio has completed the boot-up process.

  Depending on several factors, it may take a few minutes for the radio to finish booting, so please be patient and allow it to boot up completely.

Best Practices for installing a new version of SmartSDR for an "M" Model or Maestro

The following best practices are applicable only when installing a new version of SmartSDR on a Maestro.

Both the Maestro and "M' Model radios must have network access that allows connectivity to the Internet to download the new SmartSDR software.

Ensure your Maestro has a reliable power source. Make certain the supplied AC adapter is used to power the unit. This prevents the Maestro from losing power during an update.

Ensure your Maestro has a reliable network connection. The Maestro and radio firmware are upgraded entirely through the network connection. When upgrading a Maestro, a wired Ethernet connection is recommended; wired Ethernet connections are faster and more reliable than Wi-Fi.

Uninstalling Previous Versions of SmartSDR for Windows – Is It Necessary?

In general, the answer is no, but there are considerations when more than one version of SmartSDR is maintained on your system:

Currently, every version of SmartSDR for Windows is installed independently of each other, permitting the use of previous versions and supporting convenient version switching of both software and radio firmware as long as there are no software or database dependencies that prevent backward compatibility.

SmartSDR for Windows Shared Components:
The SmartSDR software employs shared components used by all versions of the software. When previous versions of SmartSDR for Windows are uninstalled, it may result in the removal of one or more of these shared components, which may make newer versions inoperable.

Therefore, if you desire to uninstall an older version of SmartSDR, we highly recommend uninstalling all previous versions of SmartSDR before installing a new version of SmartSDR for Windows.

Important: Removing the DAX and FlexVSP drivers is not recommended unless explicitly instructed in the Release Notes or by FlexRadio Support.

Caveats, Known Issues, and Other Information

SmartSignal Beta

Important: The following caveats apply to the beta version of SmartSignal.

- **APD Generation:** The Automatic Adaptive Pre-Distortion is generated from the transmitting slice. In a multi-Slice scenario, this can become more complicated, but typically follows the Local PTT TX slice.
- **Internal Sampler Requirement:** Currently, SmartSignal can only be utilized alongside the internal sampler in the FLEX-8000.
- **Best Performance with Voice Signals:** The feature achieves the highest success rate when employed with voice transmissions.
- **Challenges with 6M Band:** Generating an equalizer on the 6-meter band can be more complicated and less reliable.
- **Challenges with AM Signals:** Similar to the 6M band, creating an equalizer with AM signals is also more challenging.
- **Limited Performance in multiFLEX Scenarios:** The feature exhibits quirks in multiFLEX scenarios and may not deliver the desired results.
- **Occasional APD Stuck in "Calibrating Mode":** There are instances where the SmartSignal may become stuck in "calibrating mode." This can happen if it cannot identify a better solution than a previously stored one. If this occurs, rebooting the radio may be necessary to resolve the issue and enable SmartSignal to reattempt the calibration.
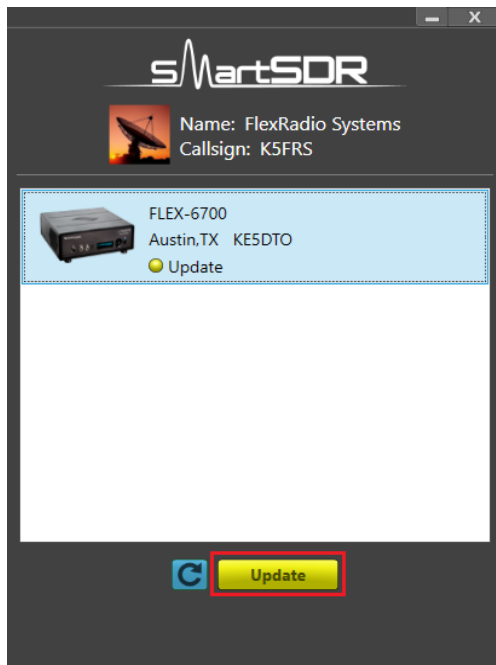
Reverting to previous versions of SmartSDR v3 is not recommended. However, if you revert from any version of SmartSDR v3 to previous versions, you must perform a factory reset of your radio. Database incompatibilities may result in operational anomalies when reverting to previous versions of SmartSDR. It is recommended that a factory reset be performed after downgrading to ensure the database schema is 100% compatible with the version being used.

End of Windows 10 Support. Effective October 14, 2025, Microsoft will officially end support for the Windows 10 operating system.

As a result, **FlexRadio will discontinue official software and technical support for Windows 10 after this date**. Customers who continue to use Windows 10 may experience compatibility, performance, or security issues. Our Support Team will no longer provide troubleshooting or technical assistance related to Windows issues for systems running Windows 10, and any software bugs specific to Windows 10 will not be addressed.
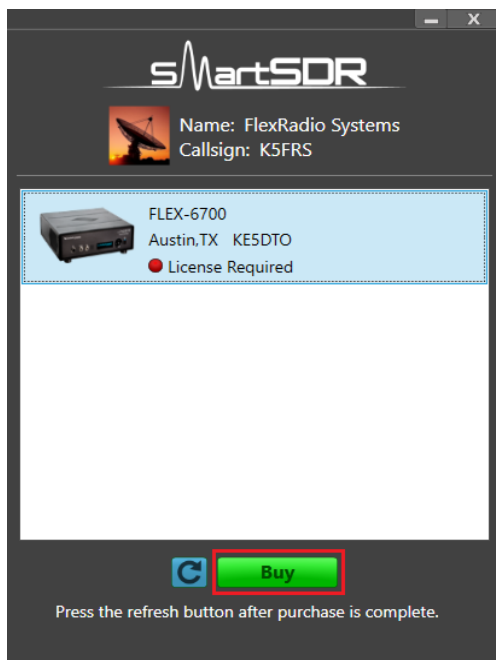
Purchasing a SmartSDR Software License for your FLEX-6000 using SmartSDR for Windows

Obtaining a SmartSDR software license using SmartSDR for Windows is easy and convenient. Download the latest software installer for SmartSDR and run it to install the software on your PC. Using the new software, update the radio with the new firmware. Start SmartSDR, select the radio in the radio chooser window, and click the yellow Update button.

Once the update completes, if the radio you are upgrading requires a license, the radio status will show "License Required", and you will be presented with a Buy button. Clicking on the Buy button launches a web browser, which will walk you through the steps to purchase the license.

Note: New radios purchased include a SmartSDR license for the current major version and will not display the "License Required" indicator.
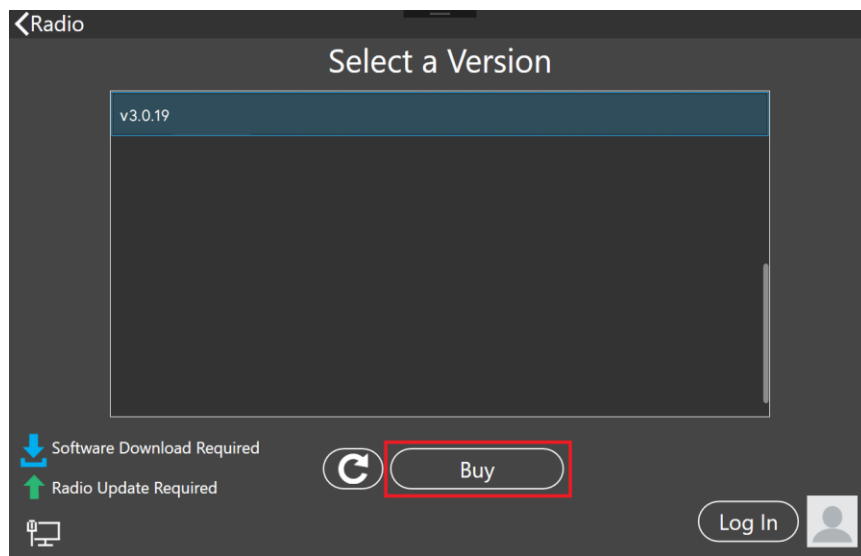

Once you have purchased a SmartSDR license for your radio, click the blue circular refresh button in the radio chooser window to download the license information for the radio. It may take up to a minute after the purchase before the radio acquires its license, and cycling the power on the radio may be required.

Note: The radio (not just the computer) will need internet access to obtain the newly acquired license. Please ensure that the radio is plugged into a network with internet access.

Purchasing a SmartSDR Software License for your FLEX-6000 using an "M" Model FLEX-6000 or a Maestro

Obtaining a SmartSDR software license using an M-model radio or a Maestro is easy and convenient. After downloading and installing the latest SmartSDR software version. At the Select a Version screen, choose the version of the software just installed. If you need to purchase a license to run the software, the Buy button will appear as shown below.

If you see a Run button, tap on the Radio link at the top left of the screen to return to the Select Radio to upgrade the radio's firmware.
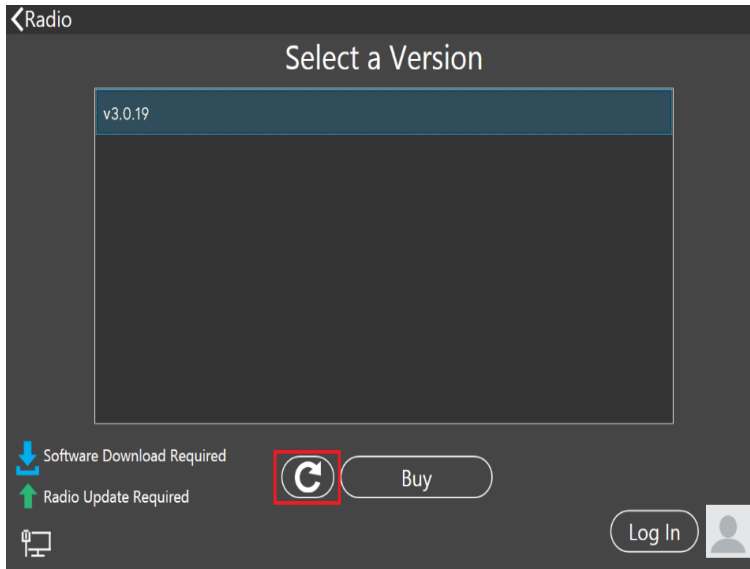
Tapping the Buy button will display a radio-specific QR code.

- Open the camera app on your phone or tablet.
- Point the camera at the QR code and center it in the frame.
- Wait for a notification or banner to appear.
- Tap the notification or banner to open the link associated with the QR code.
- Follow the instructions to purchase a SmartSDR license upgrade.

When the license purchase is complete, tap the Version link at the top left corner of the screen to go back to the Select a Version screen.

At the Select a Version screen, tap the refresh button (circular icon) to download the license information for the radio. It may take up to a minute after the purchase before the radio acquires its license, and cycling the power on the radio may be required.

After the license is updated, the refresh button will disappear, and the Buy button will change to a Run button. Tap the Run button to connect to your radio.

SmartSDR Documentation Available from www.flexradio.com

The following documentation and how-to guides for SmartSDR v3 are available as a convenient download from the FlexRadio website.

SmartSDR for Windows Software User's Guide
FLEX-6400M and FLEX-6600M User's Guide
SmartSDR CAT User Guide
FLEX-6000 Signature Series Hardware Reference Manual
FLEX-6400 and FLEX-6600 Hardware Reference Manual
FLEX-6000 Signature Series Quick Start Guide
SmartLink for SmartSDR Quick Start Guide
USB Cable Interface Guide
SmartSDR v3 with multiFLEX Installation Video
SmartSDR v3 Changelog

Obtaining Technical Support

If you encounter any issues installing or operating SmartSDR for Windows with your FlexRadio Signature Series software defined radio, please use our online Community to search for information about SmartSDR and the FLEX-8000/FLEX-6000. Refer to the Community Message Board for assistance using the Community.

If you are unable to find an existing answer to your issue via the Community, please contact FlexRadio Technical Support by opening a HelpDesk support ticket online. Refer to the HelpDesk article How to Submit a Request for Technical Support for details on how to submit a HelpDesk support ticket.

Hours of Operation: Our Technical Support engineers are available Monday through Friday from 7:00 AM to 4:00 PM Central Time. If you open a HelpDesk ticket after business hours, on a holiday, or weekend, we will respond to your request for assistance during regular business hours in the order your HelpDesk ticket was received.

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FlexRadio, Inc.
4616 W. Howard Lane
Suite 8-860
Austin, TX USA 78728
+1 (512) 535-4713
www.flexradio.com