



## SmartSDR™ for Windows v1.9.13 Release Notes

October 5, 2016

### What's New in SmartSDR for Windows v1.9.13

SmartSDR for Windows v1.9.13 is a maintenance release intended for use with the FLEX-6300™, FLEX-6500™, FLEX-6700R™ and FLEX-6700™ software defined radios that provides new features and addresses software defects identified in previous versions of SmartSDR for Windows. Please consult the [SmartSDR Software Users Guide](#) for details on using the new and updated features of SmartSDR for Windows for the most optimal operating experience.

A cumulative and inclusive **ChangeLog.txt** file listing all of the changes in SmartSDR for Windows, SmartSDR CAT, DAX, the firmware and SmartSDR for Maestro v1.9.13 can be found in the Program Files\FlexRadio Systems\SmartSDR\Documentation folder.

**It highly recommended that you refer to the [Important Release Details](#) section below before upgrading. There are several “best practices” recommendations that will facilitate a smooth transition to the new version of SmartSDR for Windows.**

**Buffered Speed Changes With Winkeyer Emulation Could Leave Radio in Transmit:** When issuing buffered speed changes while in transmit, PTT could remain active on the radio. This issue has been fixed. (Defect #4030)

**N1MM+ F-Key Stacking Bug Corrected:** When using N1MM+, pressing F key macros repeatedly (command stacking) did not send the correct CW. This issue has been fixed. (Defect #3942)

**DAX TX Improvement:** A defect that would result in packet loss when the TX and MIC streams were enabled simultaneously has been corrected. (Defect #3945).

**VOX Fixes:** Fixed intermittent VOX keying issues (Defect #4024).

**Radios Would Fail to Connect if Used on Public IP Network Address Space:** A security feature added to SmartSDR v1.9.7 prevents radio clients from connecting to the FLEX-6000 if both were using public IP address space to prevent unauthorized access to the radio. An option has been added to relax this restriction if the radio and client are on a public, routable IP network. Please see the [Requirements and Best Practices for Installing SmartSDR for Windows 1.9.9](#) section below for more details. (Feature #3996).

## Important Release Details

The following “Best Practices” are highly recommended to ensure a seamless and trouble-free upgrade to SmartSDR for Windows.

### Best Practices for installing a new version of SmartSDR for Windows

**In preparation for the upgrade to SmartSDR for Windows, *always* backup your current Global and TX Profiles.** Please refer to the SmartSDR for Windows Software User’s Guide for detailed instructions related to exporting your profiles to a file on your PC. Whenever you upgrade to a newer version of SmartSDR for Windows, there is a database conversion program that runs automatically to convert an older version of the Profile database to the new format or schema. *However, the reverse is not true.* If you have to revert to a previous version of SmartSDR for Windows, the older version will not be able to downgrade the database schema. In order to recover your previously created profiles after a software version downgrade, an import of profile data created using the version of SmartSDR for Windows you are downgrading to is required for proper operation of your radio.

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

**Shut down all third-party programs running on your PC that utilize a sound card.** If necessary, the SmartSDR for Windows installer may install or upgrade the virtual sound card DAX drivers. As part of this process, it will uninstall the older drivers first. If there is an application open on your PC that is using one of the DAX drivers, uninstalling of the existing DAX driver will fail which may result in issues installing the updated DAX drivers. Examples of these types of programs include, but are not limited to digital mode programs, Windows Media Center, web browsers and audio players.

**Shut down all third-party programs utilizing a virtual com ports.** The installation of SmartSDR CAT may also install new or recreate existing virtual com ports as part of the installation process. Please shut down any program that may use the FlexVSP virtual serial port driver. Examples of these include, but are not limited to any digital mode programs, loggers, spotting programs and hardware devices that interface through a virtual com port

**Managing SmartSDR for Windows installed on other PCs connected to your network.** If you have installed SmartSDR for Windows on other PCs that are connected to the same network as the FLEX-6000, these PCs may be running SmartSDR CAT and DAX since these applications auto-start when the PC is booted. Running these applications while upgrading SmartSDR for Windows may result in installation issues, therefore it is recommended that these PCs be shut down or remove SmartSDR from Windows from the PCs prior to installing a new version of SmartSDR for Windows. In addition, these PCs will need to be upgraded after the FLEX-6000 firmware has been upgraded to ensure a consistent operating experience.

**Power off the FLEX-6000 before installing new SmartSDR for Windows on your PC.** To ensure a seamless upgrade of the entire SmartSDR software ecosystem, it is recommended that you power off your radio before installing the SmartSDR for Windows software on your PC.

**Power Cycle your Radio after upgrading the firmware.** When upgrading the radio firmware, there may be updates to several of the internal subsystems. Powering off the radio, disconnecting it from DC power for several seconds, reconnecting DC power and powering up the radio after updating ensures that all processors reboot properly.

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## Requirements and Best Practices for Installing SmartSDR for Windows 1.9.9

If your FLEX-6000 utilizes public IP address space, you will need to **directly connect your PC running SmartSDR to the radio** before installing SmartSDR for Windows v1.9.13. After you have successfully installed the software, disable the Enforce Private IP Connections in the Settings->Radio Setup->Network tab under the Advanced Settings (See section 30.5 in the SmartSDR for Windows Software Users Guide. See section 25.5 in the SmartSDR for Maestro User Guide). After this setting has been changed, you can reconnect the PC and the radio to your LAN.

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

This is a frequently asked question that does not have a simple “yes/no” answer. **In general, the answer is no, but there are special considerations to consider.**

Each version of SmartSDR for Windows is installed in such a manner that running a previous version is a simple matter of running an older version of SmartSDR for Windows and allow the radio firmware to downgrade automatically. This method of installing unique versions of software on your PC rather than upgrading over a previous version allows for an easy and convenient way to switch to a previous version if you so desire.

Unfortunately, there are exceptions that result in release specific caveats. In the case of SmartSDR for Windows v1.9.13, there are **no** release specific caveats that require removing previous versions of SmartSDR for Windows.

In addition to any release specific caveats, there are shared components of the SmartSDR ecosystem used by multiple versions of SmartSDR for Windows. Operationally this typically does not result in any issues, but if a previous version of SmartSDR for Windows is uninstalled while there is a newer version installed, the possible removal of one of more of these shared components may make newer versions of SmartSDR for Windows inoperable. **Therefore if you desire to uninstall older versions of SmartSDR for Windows, it is highly recommended that you uninstall all older versions of SmartSDR for Windows before installing a new version of SmartSDR for Windows. Removing the DAX and FlexVSP drivers is not recommended unless explicitly instructed to do so.**

If you chose to uninstall several previous versions of SmartSDR for Windows prior to installing a new version, you may want to perform a comprehensive removal of the SmartSDR ecosystem from your PC. This will ensure that all SmartSDR for Windows applications and hardware drivers have been removed.

This is a multi-step process that is outlined in the HelpDesk article [How to do a Complete uninstall of SmartSDR for Windows from your PC.](#)

## Known Issues

1. In some situations, the FlexControl will choose a COM port that has already been assigned to a virtual COM port or another device. It may be necessary to move the FlexControl to a different COM port and disconnect/reconnect the FlexControl to resolve this issue. Follow these instructions: <https://helpdesk.flexradio.com/hc/en-us/articles/202479329-How-to-Change-the-Com-Port-Assignment-for-a-FlexControl>
2. FLEX-6700 only: There is a known issue (#280, #1527) where changing bands on one panadapter may change the frequency of another panadapter when going to or from 2m (or a XVTR using 2m as an IF). This happens due to hardware constraints that require each Antenna to be on only one of 2 possible Nyquist zones (below or above 122.88 MHz) and an interaction with persistence when recalling the antenna selection of the selected band. One way to work around this issue is to use the Band buttons instead of setting the Antenna on the Panadapter or Slice, and then entering the desired frequency into the Slice in order to tune into (or out of) the 2m band (or a XVTR using 2m as an IF).
3. There is a known issue where the ATU can fail to tune if TX Delay is set longer than 30 ms. (#926)

## SmartSDR Documentation Available at [www.flexradio.com](http://www.flexradio.com)

SmartSDR for Windows Software User's Guide

<http://www.flexradio.com/downloads/smartsdr-software-users-guide-pdf/>

FLEX-6000 Signature Series Hardware Reference Manual

<http://www.flexradio.com/downloads/flex-6000-hardware-reference-manual-pdf/>

FLEX-6000 Signature Series Quick Start Guide

<http://www.flexradio.com/downloads/flex-6000-family-qsg-single-page-pdf/>

SmartSDR CAT User Guide

<http://www.flexradio.com/downloads/smartsdr-cat-user-guide-pdf/>

D-STAR Waveform How to Guide

<http://www.flexradio.com/downloads/d-star-waveform-how-to-guide-pdf/>

FreeDV Waveform How to Guide

<http://www.flexradio.com/downloads/freedv-waveform-how-to-guide-pdf/>

## Obtaining Technical Support

If you encounter any issues installing or operating SmartSDR for Windows with FlexRadio Systems' Signature Series software defined radios, please use our on-line Community (<https://community.flexradio.com/>) to query for information about SmartSDR for Windows and the FLEX-6000. If you need assistance using the Community, please refer to the community topic "[How to use the FlexRadio Systems Support Community](#)".

If you are unable to find an existing answer to your issue on the Community, please contact FlexRadio Systems technical support by opening a HelpDesk support ticket on-line at <https://helpdesk.flexradio.com/>

For details on how to submit a HelpDesk support ticket, please refer to the following URL: <https://helpdesk.flexradio.com/hc/en-us/articles/202118688-How-to-Submit-a-Request-for-Technical-Support>.

**Hours of Operation:** Our Technical Support engineers are available Monday-Friday from 9:00am-5:30pm Central Time. If you contact Support 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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