SmartSDR+ v4.2.18 Release Notes

Version	Release Date	Release Theme/Title
4.2.18	2026-04-28	DAXv2. 64-bit SmartSDR, DAX, and CAT. Band Plan & RX Filter Presets

SmartSDR Basic™ and SmartSDR+™ v4.2.18 is an **Early Access** software and firmware release for Aurora™, FLEX-8000™, and FLEX-6000™ series SDRs, as well as Maestro™. This version supersedes all previous SmartSDR releases and is available to all users. Access to new features introduced in this release is limited to SmartSDR+ Early Access feature license holders unless otherwise noted.

Important Release Information

Before upgrading, please review all sections marked as **IMPORTANT** for upgrade prerequisites and other critical information.

There are multiple important notices associated with SmartSDR v4.2.18. You should understand these changes before upgrading from a previous version of SmartSDR. Please open a HelpDesk support ticket if you have questions.

Important Notice:

It is highly recommended to uninstall all previous versions of SmartSDR before upgrading to SmartSDR v4.2.18. Prior to installing SmartSDR v4.2.18, it is strongly recommended that all previous versions of SmartSDR be completely uninstalled from your PC, including DAX and the FlexVSP driver. SmartSDR v4.2.18 introduces a new software architecture that includes updated DAX and FlexVSP drivers. Retaining older versions on your system may result in installation conflicts or degraded performance. For best results, ensure all earlier SmartSDR versions (v4.1.5 and below) are fully removed before proceeding with the installation. Refer to the HelpDesk article "How to Install SmartSDR v4.2.18" for detailed uninstallation and installation instructions.

Important Notice:

SmartSDR for Windows supports both x64 and ARM processor platforms. We are excited to announce expanded platform support for SmartSDR for Windows, DAX, and CAT, including their respective audio and virtual comm port drivers, with the introduction of native compatibility for both x64 (64-bit) and ARM-based processors. These new features are available for all users. The x64 version of SmartSDR for Windows replaces legacy 32-bit support, aligning with modern Windows standards and improving overall system efficiency. This enhancement ensures that SmartSDR can take full advantage of the evolving Windows hardware ecosystem. When downloading SmartSDR for Windows, make sure that you select the correct installer that aligns with your PC's processor architecture by referring to the HelpDesk article Which SmartSDR Installer Do I Need to Download?

Important Notice:

Upgraded DAX to a completely new audio transfer architecture. Starting with SmartSDR v4.2.18, the DAX functionality has been completely re-architected and is now called **DAXv2**. This update delivers significant architectural improvements, enhanced low-latency performance, and improved compatibility and stability with modern Windows systems. DAXv2 is available for all users. In addition, DAXv2 is available as a native x64 and ARM application. The new DAX driver no longer relies on deferred procedure calls (DPCs) for transferring audio data from the radio to PC applications. For a complete listing of changes, refer to the HelpDesk article DAX Version 2 - Improvements and Updates.

Important Notice:

Updated CAT FlexVSP Driver. Starting with SmartSDR v4.2.18, the FlexVSP driver, used to create virtual comm ports, has been upgraded to be fully compatible with both x64 and ARM versions of Windows 11. As with DAXv2, this update is available for all users.

Important Notice:

SmartSDR for Windows utilizes a Microsoft Installer (MSI)–based installation package. Upgrading to an MSI installer architecture provides a standardized installation environment that can automatically detect and repair missing/corrupted components ("self-healing") if files go missing. It will install any needed .NET and system dependency software often without user interaction.

SmartSDR+ v4.2.18

New SmartSDR+ Early Access Features:

As noted below, radios licensed for **SmartSDR+** will gain access to these new features **approximately 30 days** after this Early Access release with a follow-up release of SmartSDR v4.2.

Feature	Description	Supported Radio Models
SMART-205	**Band Plan/Band Edge Markers**: SmartSDR now includes an integrated band plan display feature that provides a visual, color-coded representation of amateur radio frequency allocations based on IARU regional standards, including detailed sub-band information on the panadapter. This feature gives operators a clear, at-a-glance understanding of band usage recommendations directly within SmartSDR, helping ensure compliant and efficient operation across different international band plans. Band plans for IARU Region 1, Region 2, and Region 3 can be selected from the panadapter display menu, providing an optional context-aware display based on the selected or active region, showing clearly defined sub-band segments within each amateur band. The default IARU region is based on the radio's region setting.	Aurora FLEX-8000 FLEX-6000
SMART-11334	**User Configurable RX Filters:** SmartSDR now includes mode-specific, user configurable receive filters, allowing operators to tailor receiver bandwidth characteristics independently for each operating mode. This enhancement provides greater flexibility and precision in tailoring audio and signal response for different types of operation, such as SSB, CW, AM, FM, and digital modes. Additional benefits include reducing the need to manually reconfigure filters when changing modes and allowing users to fine-tune receive filter characteristics for contesting, DXing, or digital operation.	Aurora FLEX-8000 FLEX-6000
SMART-12046	**Display TX Filter on Panadapter:** SmartSDR now includes an optional feature that displays the transmit filter bandwidth directly on the panadapter, with an additional on-screen overlay indicator. This allows for real-time tracking of transmit filter bandwidth changes as mode or bandwidth settings are adjusted. From an operational standpoint, this feature provides immediate visual confirmation of transmit signal bandwidth, helping operators ensure transmitted energy remains within the ham bands, which is particularly useful when operating near band edges.	Aurora FLEX-8000 FLEX-6000

New SmartSDR Basic Features:

The following features are available to all users regardless of the SmartSDR feature license version installed on the radio hardware.

Feature	Description	Supported Radio Models
SMART-12134	TURF Changes: New 60m allocation for the US. A new US TURF file **is not needed** to utilize the new 60m frequency allocation.	Aurora FLEX-8000 FLEX-6000
SMART-11748	New ARM processor support for SmartSDR for Windows, SmartSDR, CAT, DAX, and FlexVSP drivers	Aurora FLEX-8000 FLEX-6000
SMART-11323	Added support for an external sampler for use with SmartSignal (aka “APD”) when operating with external amplifiers. This enhancement enables the radio to use a real-time RF sample from the amplifier output, allowing it to measure and correct distortion introduced after amplification. The result is improved linearity and cleaner signal performance, particularly at higher power levels.	Aurora FLEX-8000
SMART-12206	Added APD Reset Button - This will clear the current solution and look for another	Aurora FLEX-8000
SMART-12223	Added new Waveform Deployments. You can now utilize our open API and Docker container to deploy waveforms on your radio.	Aurora FLEX-8000

SmartSDR Bug Fix Highlights:

Below are the bug fixes highlights for SmartSDR v4.2.18. Some bug fixes may be specific to radio hardware platforms and SmartSDR+ feature license holders.

Please refer to the SmartSDR v4 Changelog for a complete listing of all SmartSDR v4 software and firmware changes.

Feature/Defect	Description
SMART-7965	DAX Driver Upgrade
SMART-10198	Fixed various DAX Driver installation problems
SMART-10665	Resolved the need to disable Windows Core Isolation to install DAX
SMART-2391	Long-duration DPC "hit" no longer corrupts the DAX driver
SMART-4839	Fixed DAX: Residual or "ghosted" audio ports left in Device Manager after DAX is uninstalled. This could have caused problems during reinstallation.
SMART-8460	Fixed DAX installation issues when Core Isolation Memory Integrity is enabled
SMART-8905	Fixed DAX BSOD in portcls.sys
SMART-9970	Fixed DAX installation conflict issues with Realtek Audio Driver
SMART-12364	Fixed DAX cannot connect to SmartLink radio with Auto-connect Last Radio enabled
SMART-12367	Improved DAX IQ SmartLink restriction messaging and visibility
SMART-12431	DAX TX Mic can now be used as the DVK recording source
SMART-9674	FlexVSP Driver Upgrade
SMART-10306	Fixed corrupt FlexVSP Drivers after Windows 11 updates
SMART-1885	Added the Czech Republic TURF Region
SMART-5318	Added South Africa TURF Region
SMART-6571	Added Portugal TURF Region
SMART-7144	Added India TURF Region
SMART-9719	Added Ireland TURF Region
SMART-12141	Turf Change: Modified Italy ITA for new 160m band allocation
SMART-12220	Fixed ANF for FLEX-6000 series radios
SMART-11729	CAT no longer hangs when autostarted with SmartSDR on a fast PC
SMART-12260	Fixed APD Performance with Tune
SMART-12259	SmartSDR now shows the correct APD status when using Tune
SMART-12277	Fixed an issue where APD stopped working after inactivity

Description of SmartSDR Basic, SmartSDR+, and SmartSDR+ Early Access Feature License Tiers:

SmartSDR v4 Basic is available **free of charge** and includes all bug fixes and select minor feature enhancements for all radio models. **We strongly encourage all customers to upgrade to SmartSDR v4.**

If you are currently running SmartSDR v2 and upgrade to SmartSDR v4 Basic, you will receive all prior bug fixes and minor enhancements from all previous versions. However, please note that multiFlex, the major feature introduced in SmartSDR v3, is not included in SmartSDR v4 Basic for radios licensed for SmartSDR v2. For radios licensed for SmartSDR v1, the SmartLink feature introduced in SmartSDR v2, along with the multiFlex, is not included in SmartSDR v4 Basic.

SmartSDR+ is an **optional one-year new feature license**. When you purchase a SmartSDR+ feature license, you gain or retain access to all prior SmartSDR v2 and v3 major features, as well as all new SmartSDR v4 major features released during your one-year license period. All new SmartSDR v4 features are only available immediately for SmartSDR+ Early Access feature license radios. Radios that have a SmartSDR+ feature license will gain access to the new features *approximately* 30 days later with a follow-up SmartSDR v4 feature access software release. To get the new SmartSDR v4 features immediately, a SmartSDR+ Early Access license is required (see below).

When your one-year feature license expires, you **retain all features** received during that period—**you never lose them**. To gain access to **any new features** introduced after your license period ends, simply **renew your SmartSDR+ license for an additional year.**

SmartSDR+ Early Access is an optional one-year SmartSDR+ feature license that provides all the benefits of SmartSDR+, with the added advantage of early access to new features *approximately* 30 days before they are available for standard SmartSDR+ feature license holders. As part of the Early Access Program, participants are invited to share feedback with the software engineering and product management teams based on their experience with the preview software. This collaboration helps shape and refine future SmartSDR releases.

SmartSDR v4 Best Practices

Best Practices for Installing SmartSDR

A*lways* back up your Global, TX (transmit), and Microphone Profiles. For step-by-step instructions on exporting your profiles to a file on your PC, refer to the SmartSDR for Windows Software User's Guide. It is strongly recommended that you export all profiles before upgrading to version 4.2.18. Maintaining a current set of exported profiles is a best practice and helps protect against unexpected data loss. Switching between different versions of SmartSDR can result in profile incompatibilities or loss of data if backups are not available.

Ensure your Windows operating system is up to date before installing SmartSDR for Windows. Proper operation of SmartSDR and its associated drivers depends on a supported and current Windows environment, including up-to-date root security certificates. It is strongly recommended that you run Windows Update and install all available mandatory and optional updates before installing SmartSDR for Windows to help ensure optimal performance and compatibility.

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

Perform a "Cold Boot" of the radio after upgrading the radio firmware. Using the power button, shut down the radio, then disconnect it from DC power. After approximately 30 seconds, reconnect DC power. After restoring DC power, wait at least two minutes before booting the radio. This process ensures a complete reset and helps promote proper operation.

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

Always perform a Factory Reset of your Radio when Downgrading the Radio Firmware: Downgrading to a previous version of SmartSDR is not recommended, as the internal database used by Aurora, FLEX-8000, and FLEX-6000 radios is not backward compatible. If a downgrade is required, a Factory Reset is necessary to ensure the radio's internal database aligns properly with the installed version of SmartSDR firmware and to prevent potential inconsistencies or operational issues.

Important: If the radio is not operating properly immediately after upgrading, please perform a factory reset and refrain from importing any exported profiles. The database may be inconsistent and require resetting to a default state. In addition, do not import a database using a profile export created with a *newer version* of SmartSDR than the version currently installed on your radio. Profile export filenames include the SmartSDR version used at the time they were created, making it easy to verify compatibility before importing. Using a newer profile with an older firmware version can result in database inconsistencies or operational issues.

The procedure for performing a Radio Cold Boot and Factory Reset is described below.

Best Practices for installing 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 all 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.***

How to Perform a Radio Cold Boot and Factory Reset

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 for all applicable radios with a GPSDO 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 Aurora, FLEX-8x00(M), FLEX-6x00(M), and FLEX-6300:

- 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 finished booting.

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.

Known Issues:

Reverting to previous versions of SmartSDR is not recommended. **However, if you revert from any version of SmartSDR to a previous version, 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.

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.
- **Best Performance with Voice Signals:** The feature achieves the highest success rate when employed with voice transmissions.
- **Challenges with AM Signals:** Similar to the 6M band, creating an equalizer with AM signals is also more challenging**.**

End of Windows 10 Support. Effective October 14, 2025, Microsoft officially ended support for the Windows 10 operating system. As a result, FlexRadio has also discontinued official software updates and technical support for Windows 10 as of this date. Customers who continue to use Windows 10 may encounter compatibility, performance, or security issues.

Please note that our Support Team will no longer provide troubleshooting or technical assistance for Windows-specific issues on systems running Windows 10. Additionally, any software defects or bugs unique to Windows 10 will not be investigated or resolved.

End of 32-bit Windows Support. With the transition in SmartSDR v4.2 to providing support for 64-bit (x64) and ARM 64-bit systems, SmartSDR for Windows will no longer operate on 32-bit versions of Windows.

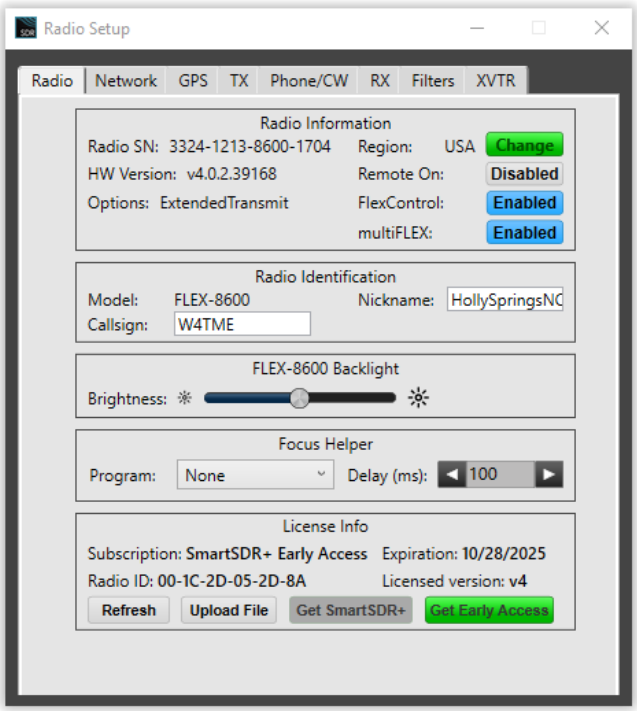
Purchasing SmartSDR+ Feature Licenses:

Starting with SmartSDR v4.0, you can choose to purchase a one-year SmartSDR+ or SmartSDR+ Early Release feature license to access the new SmartSDR v4 features. See Description of SmartSDR Basic, SmartSDR+, and SmartSDR+ Early Access Feature License Tiers section for more information.

Use the following procedures to purchase a feature license for your radio. Once purchased, the SmartSDR+ or the SmartSDR+ Early Release feature license is installed on the radio used to purchase the feature license. If you own multiple Aurora, FLEX-8000, or FLEX-6000 radios, each radio will need its own feature license.

SmartSDR for Windows

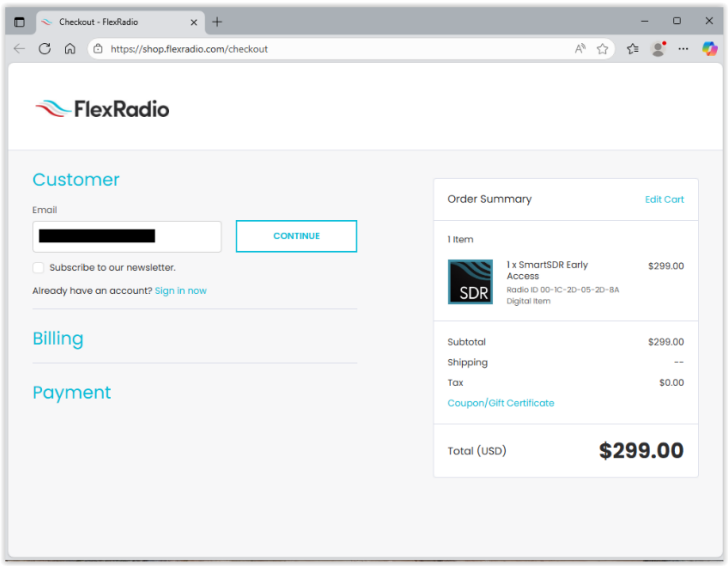
1. **Open SmartSDR v4 for Windows** on your PC.
2. **Connect to the radio** for which you want to install the feature license. *This step is mandatory before proceeding.*
3. From the **menu bar**, select the **Settings → Radio Setup → Radio** tab.
   The **Radio Setup** window will appear.



4. In the **License Information** area:
   - If the **Get SmartSDR+** or **Get Early Access** buttons are *grayed out*, the radio already has the corresponding feature license installed. The option(s) in green are available for purchase.

     (Note: In this example, even though the radio has a valid SmartSDR+ Early Access feature license that expires on 10/28/2025, the "Get Early Access" button was green because it is within 30 days of the feature license expiring.)
   - To **purchase a feature license**, click the appropriate button:
     - **Get SmartSDR+** – for a standard SmartSDR+ license.
     - **Get Early Access** – for the SmartSDR+ Early Access option.

5. The **Purchase** web page will appear.
    - Enter your **email address**.
    - Click **Continue**.
    (Note: the email address in the example image is redacted.)



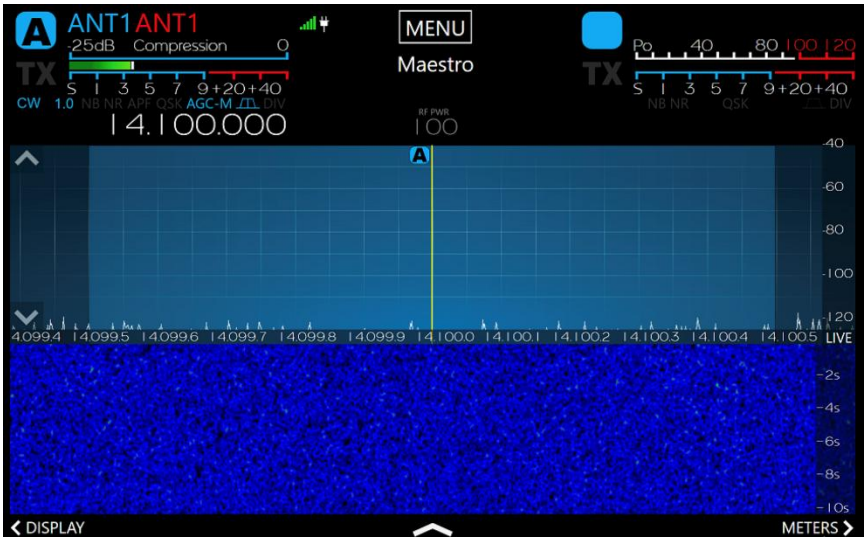
6. The **Billing** web page will appear.
    - Enter your **billing information**.
    - Click **Continue** when finished.

7. The **Payment** web page will appear.
    - Enter your **payment method**.
    - For the *Require Signature at Delivery* option, select **No**.
    - Click **Place Order** to complete your purchase.

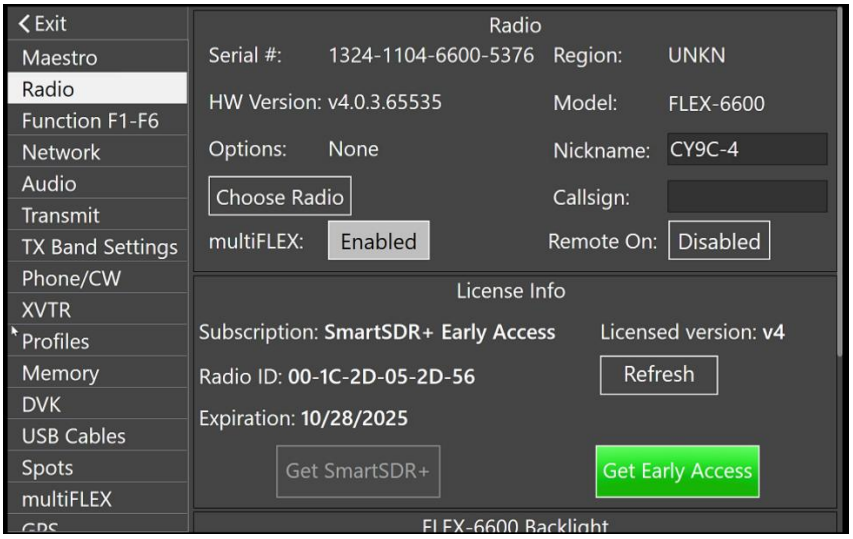
8. Once the license has been purchased, install the newly purchased license by clicking on the Refresh button in the **License Info** section of the **Radio Setup -> Radio** tab.

SmartSDR for Maestro and M Model Radios

1. From the main screen, tap the **MENU** button located at the top center of the screen.

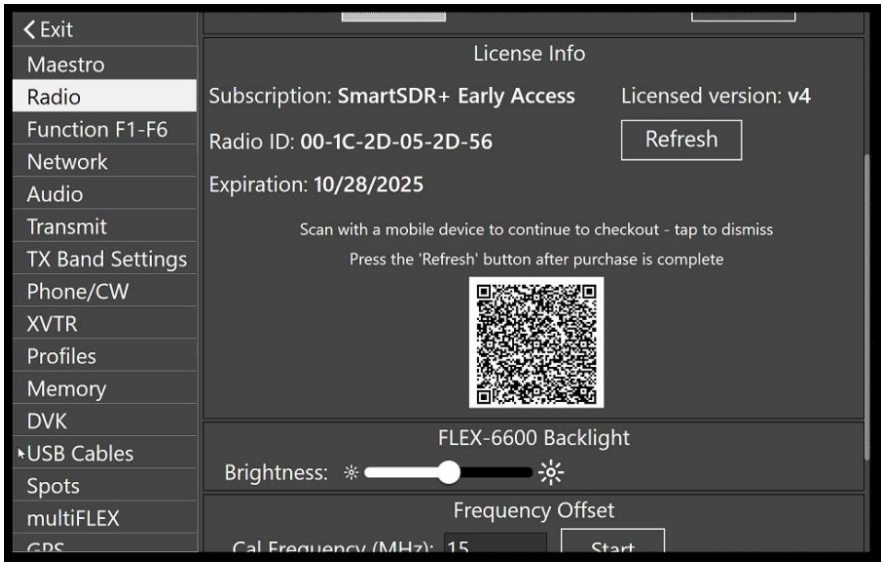


2. Select the **Radio** submenu located on the left-hand side bar, as shown below.

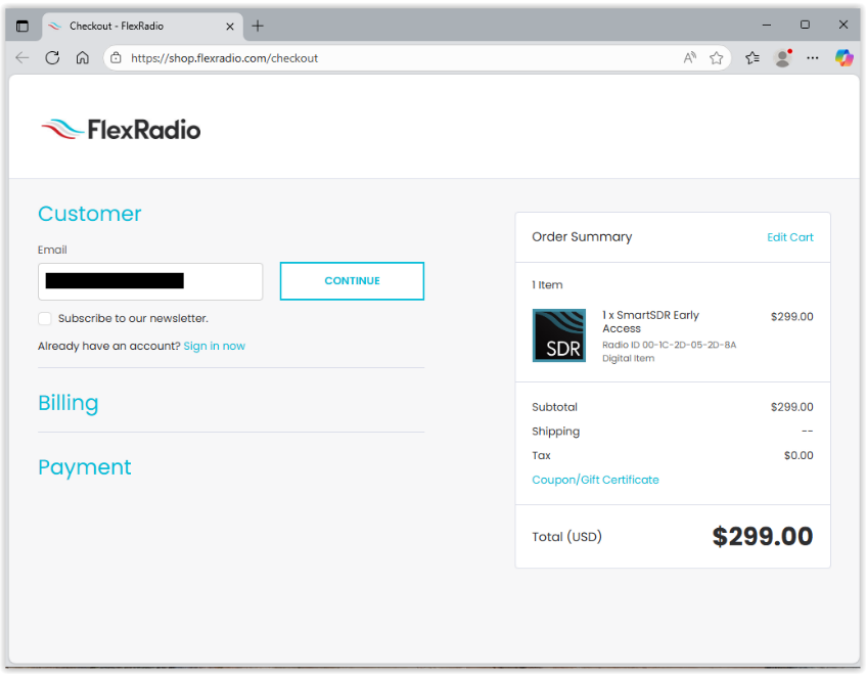


3. In the **License Information** area:
    - If the **Get SmartSDR+** or **Get Early Access** buttons are *grayed out*, the radio already has the corresponding feature license installed. The option(s) in green are available for purchase.
    - To **purchase a feature license**, click the appropriate button:
        - **Get SmartSDR+** – for a standard SmartSDR+ license.
        - **Get Early Access** – for the SmartSDR+ Early Access option.

      (In this example, "Get Early Access" was selected.)
4. The **Purchase** QR Code screen will appear.
    - Using a Smartphone or tablet, scan the QR Code. This presents a link (URL) that must be opened in a web browser to access the web page used to purchase the SmartSDR feature license, as shown below.



5. The **Purchase** web page will appear.
    - Enter your **email address**.
    - Click **Continue**.
    (Note: the email address in the example image is redacted.)



6. The **Billing** web page will appear.
    - Enter your **billing information**.
    - Click **Continue** when finished.

7. The **Payment** web page will appear.
    - Enter your **payment method**.
    - For the *Require Signature at Delivery* option, select **No**.
    - Click **Place Order** to complete your purchase.

8. Once the license has been purchased, install the newly purchased license by clicking on the **Refresh** button in the **License Info** section of the **Radio** submenu screen.

Installing SmartSDR and Updating the Radio Firmware:

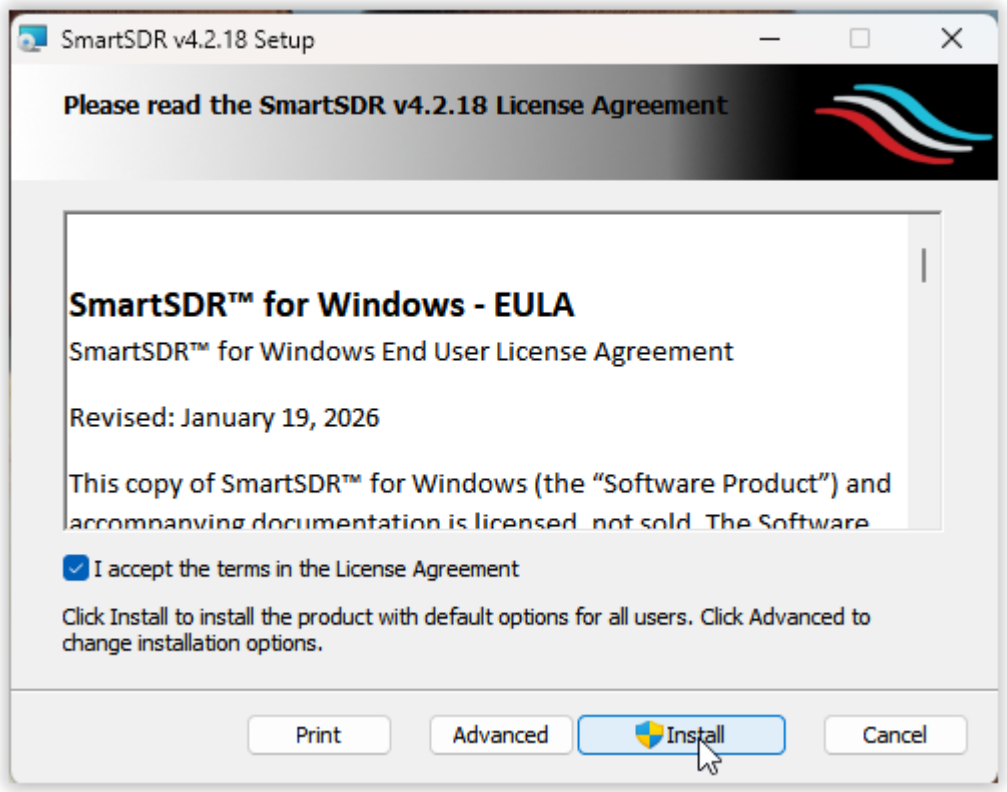
Installing SmartSDR for Windows on a PC

1. **Download SmartSDR for Windows**
   - Open a web browser and navigate to the **FlexRadio website**.
   - Locate the latest version of **SmartSDR for Windows** on the *Newest Releases* webpage.
   - Download the correct installer for your PC's processor architecture.

   For more information regarding which version of SmartSDR to download, please refer to the HelpDesk article Which SmartSDR Installer Do I Need to Download?

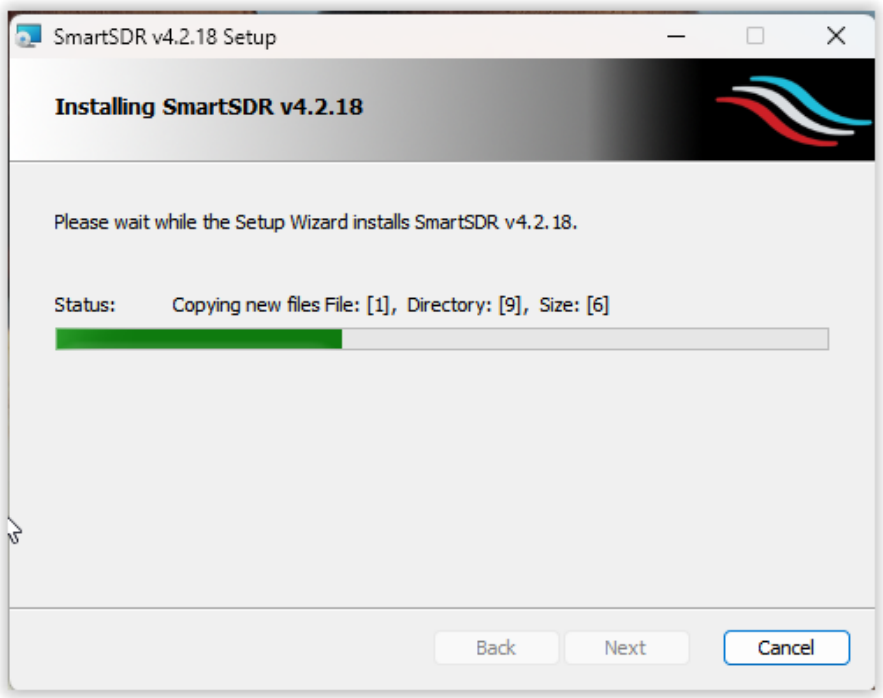
2. **Start the Installer**
   - Double-click the downloaded **SmartSDR Installer** program to begin the installation.

3. **Accept the License Agreement**
   - When the **License Agreement** screen appears, select **I accept the agreement**, then click **INSTALL**.

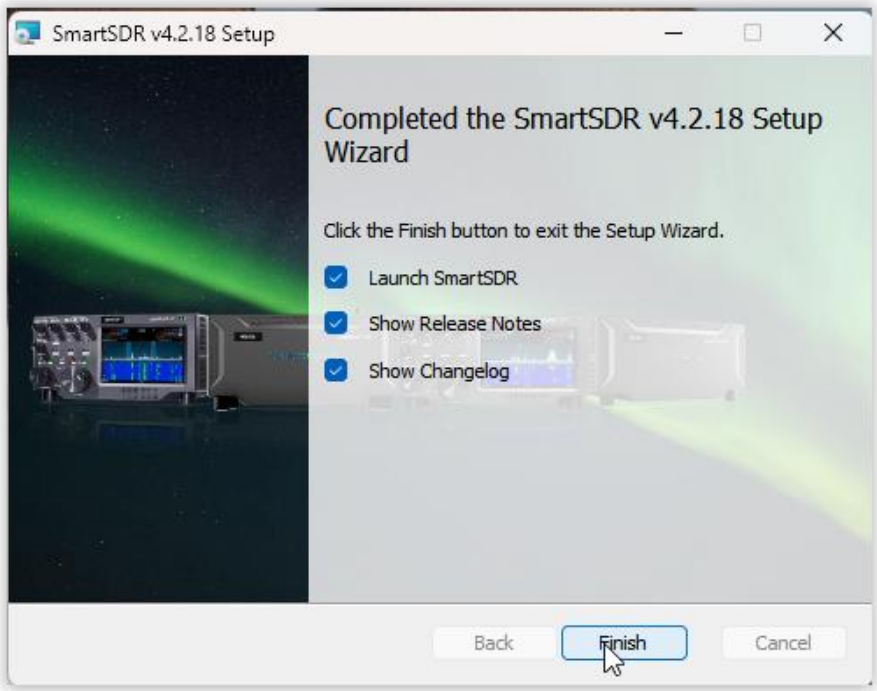


4. **Confirm the UAC prompt.**
   - If the **User Account Control** prompt appears asking, *"Do you want to allow this app to make changes to your device?"* confirm that the app name has the file extension of **MSI**, something similar to *34e7a4.msi,* and click **Yes**. Please note that the file name will change with each new installation of SmartSDR for Windows.

5. **Installation Progress**
    - The **Installing SmartSDR vA.B.C** screen will display progress.



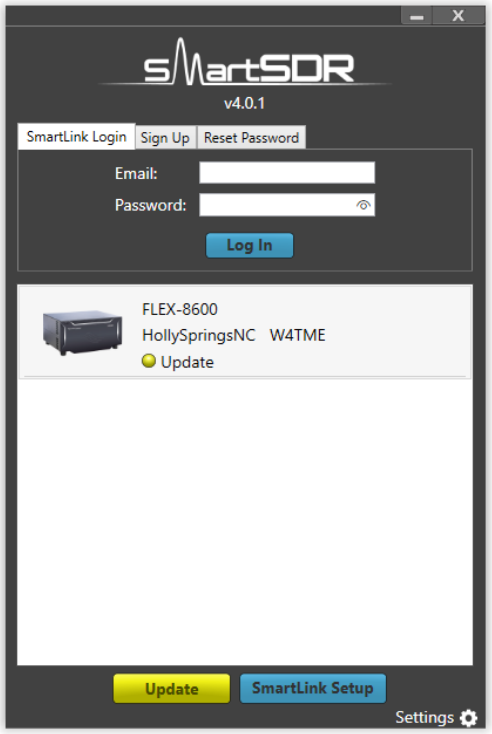
6. **Complete the Installation (no restart required)**
    - The **Completed SmartSDR v A.B.C Setup Wizard** screen will appear.
    - Leave all options checked.
    - It is recommended to review the **Release Notes** and **Changelog** for information about new features and bug fixes.
    - Click **Finish** to complete setup.



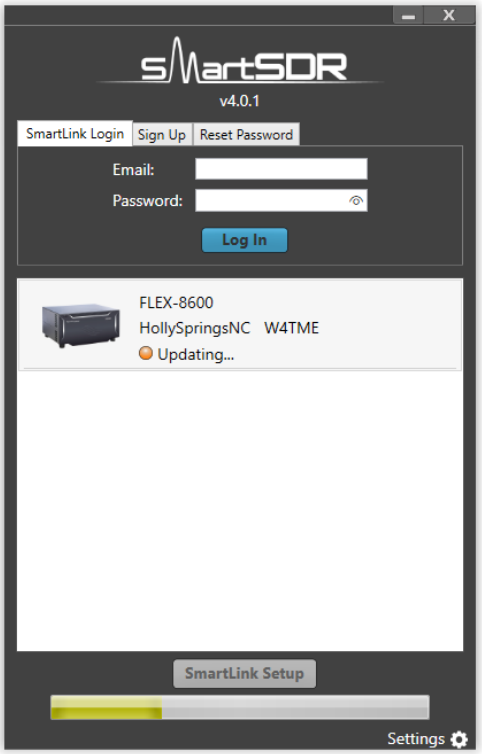
Updating the Radio Firmware

Once SmartSDR for Windows is installed, follow these steps to update your radio's firmware:

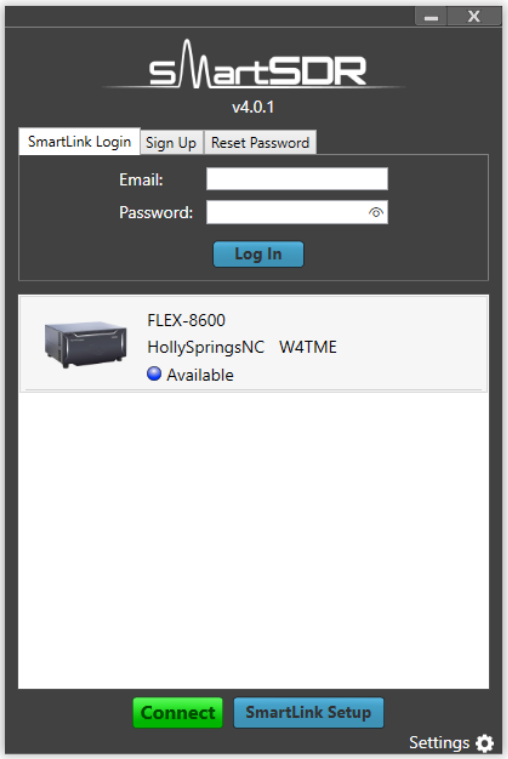
1. Launch **SmartSDR for Windows**.
2. In the **Radio Chooser** screen, highlight the desired radio showing the **Update** status indicator.



3. Click **Update** to begin the firmware update process.
    - The radio status will change to Updating…, and a progress indicator bar will be displayed.
    - The radio's **power button LED** will turn **purple** while the firmware update is in progress.



4. When the update completes, the radio will **automatically reboot**.
5. After rebooting, return to the **Radio Chooser** screen.
    - Highlight the radio with a status of **Available**, and click **Connect** to begin operation.



Documentation:

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

- SmartSDR v4 Changelog
- SmartSDR for Windows Software User's Guide
- SmartSDR CAT User Guide
- FLEX-8000 Hardware Reference Manual
- FLEX-6400M and FLEX-6600M User's Guide
- FLEX-6000 Signature Series Hardware Reference Manual
- FLEX-6400 and FLEX-6600 Hardware Reference Manual
- SmartLink for SmartSDR Quick Start Guide
- USB Cable Interface Guide

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 Aurora, FLEX-8000, and 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 on a 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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