



SmartSDR+ v4.1.5 Release Notes

Version	Release Date	Release Theme/Title
4.1.5	2025-12-16	SmartSDR v4 Bug Fix Release

SmartSDR Basic™ and SmartSDR+™ v4.1.5 is a software and firmware release for Aurora™, FLEX-8000™, and FLEX-6000™ series of software defined radios (SDRs), and the Maestro™. This version supersedes all previous versions of SmartSDR.

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.

Important Release Information

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

Important Notice: Beginning with **SmartSDR v4.0.1**, the **SmartSDR hardware license** installed on your radio must be **revalidated** or **updated** after purchasing a SmartSDR+ Feature License by connecting to the **SmartSDR License Server**. To complete this process, ensure that your radio is connected to a network with **Internet access**. The radio will automatically download any new licenses when it is booted. Once your SmartSDR license has been successfully validated, the radio will **not need to reconnect** to the License Server unless you **purchase a new SmartSDR+ feature license**.

SmartSDR+ v4.1.5

New SmartSDR+ Early Access Features:

There are no SmartSDR+ Early Access Features included in this software release.

New SmartSDR+ Features:

There are no SmartSDR+ Features included in this software release.

New SmartSDR Bug Fixes:

Below are the new minor feature enhancements and bug fixes available to all radios running SmartSDR Basic. Some bug fixes will be specific to SmartSDR+ features and not available to SmartSDR Basic 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-11954	Fixed an issue where toggling ESC would peg the S-meter on FLEX-6000 Series Radios
SMART-12099	Fixed DIV ESC slice audio controls to be consistent with the operation intent (SmartSDR-Win)
SMART-12118	Fixed an issue where profiles with DIV access were restored with DIV ESC enabled
SMART-12129	Fixed multiFLEX DVK playback not properly transitioning from transmit back to receive

SmartSDR v4 Best Practices

Best Practices for Installing SmartSDR

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 v4.1.5. 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.

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.

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.

“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.

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.

Always perform a Factory Reset of your Radio when Downgrading the Radio Firmware: In general, downgrading to a previous version of SmartSDR is not recommended. The database in the Aurora, FLEX-8000, and FLEX-6000 is NOT backwards 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.

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.

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

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.***

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

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 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 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.
- **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.

End of Windows 10 Support. Effective October 14, 2025, Microsoft officially ended support for the Windows 10 operating system. As a result, **FlexRadio has discontinued 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-specific issues for systems running Windows 10, and any software bugs specific to Windows 10 will not be addressed.

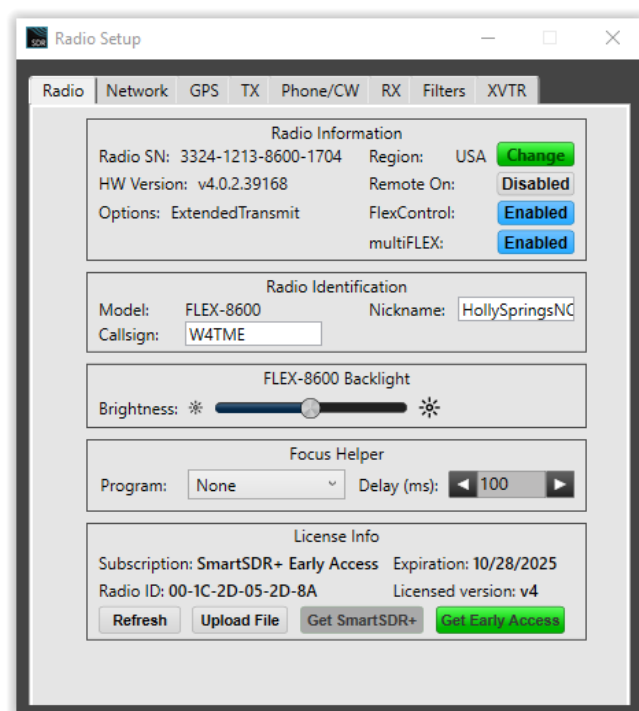
Purchasing SmartSDR+ Feature Licenses:

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. For more information about SmartSDR+ or the SmartSDR+ Early Release licenses, please see page 1 of this document.

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.

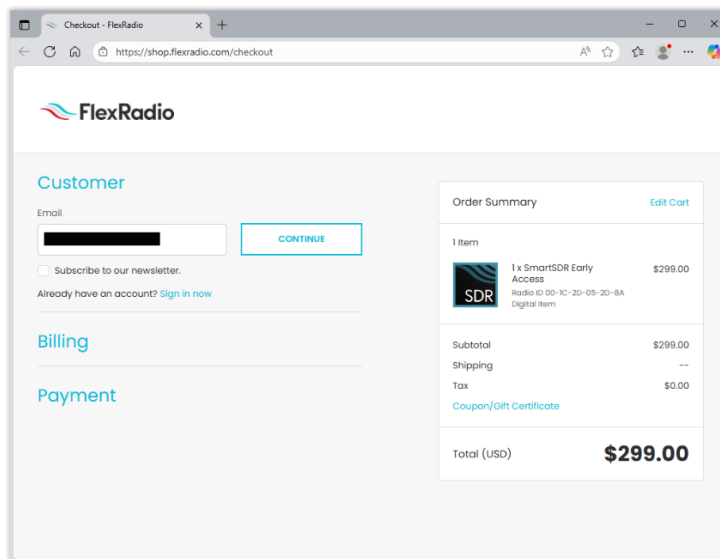
(Note: In this example, even though the radio has a valid SmartSDR+ Early Access feature license that expires on 10/28/2025, the “Get Early Access” button was green because it is within 30 days of the feature license expiring.)

- 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.

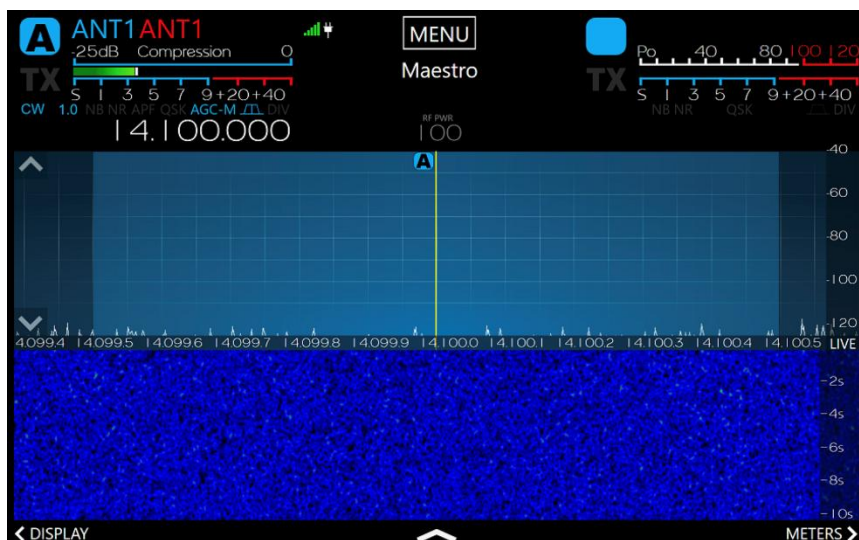
7. The **Payment** web page will appear.

- Enter your **payment method**.
- For the *Require Signature at Delivery* option, select **No**.
- Click **Place Order** to complete your purchase.

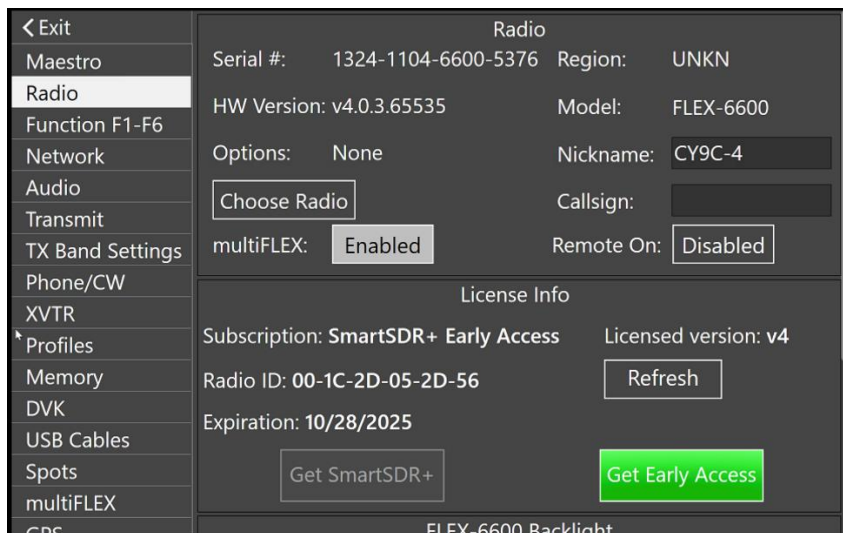
8. Once the license has been purchased, install the newly purchased license by clicking on the Refresh button in the **License Info** section of the **Radio Setup -> Radio** tab.

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.



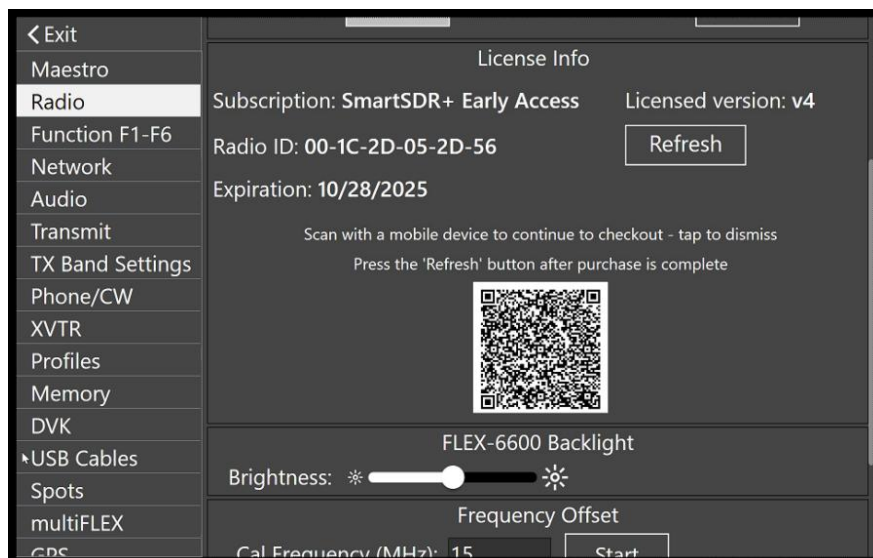
3. In the **License Information** area:

- 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.)

The screenshot shows a web browser window with the URL <https://shop.flexradio.com/checkout>. The page features the FlexRadio logo at the top left. Below the logo, there are three main sections: 'Customer', 'Billing', and 'Payment'. The 'Customer' section includes an email input field with a redacted email address, a 'CONTINUE' button, a checkbox for 'Subscribe to our newsletter', and a link for 'Already have an account? Sign in now'. The 'Billing' and 'Payment' sections are currently inactive. On the right side of the page, there is an 'Order Summary' box. It lists '1 Item' as '1 x SmartSDR Early Access' with a price of '\$299.00'. Below this, it shows 'Subtotal' as '\$299.00', 'Shipping' as '\$0.00', and 'Tax' as '\$0.00'. The 'Total (USD)' is displayed as '\$299.00'. There is also a link to 'Edit Cart'.

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

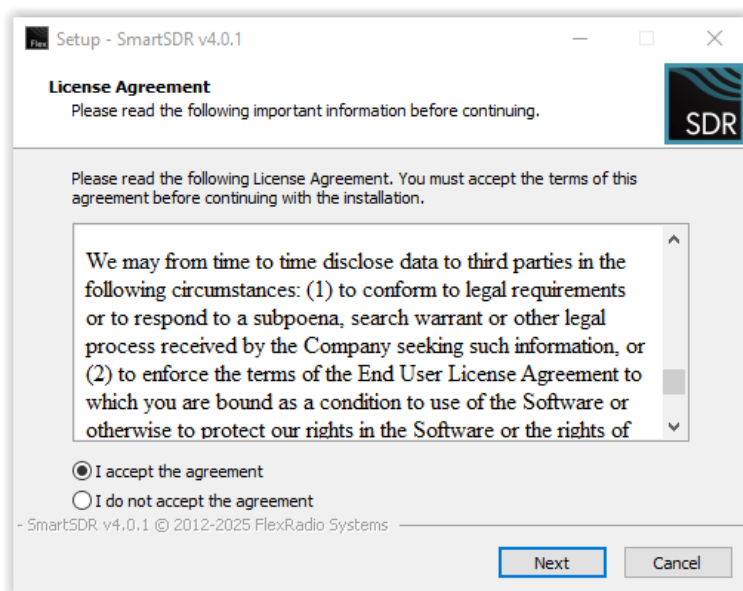
- Open a web browser and navigate to the **FlexRadio website**.
- Locate the latest version of **SmartSDR for Windows** on the [Newest Releases](#) webpage.
- Download the installer file to your PC.

2. Start the Installer

- Double-click the downloaded **SmartSDR Installer** program to begin the installation.
- 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 is **SmartSDR Setup** and click **Yes**.

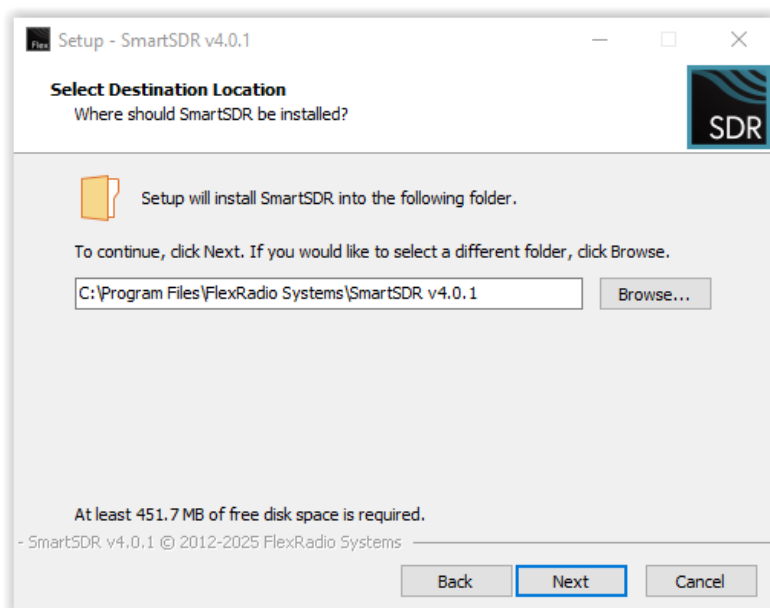
3. Accept the License Agreement

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



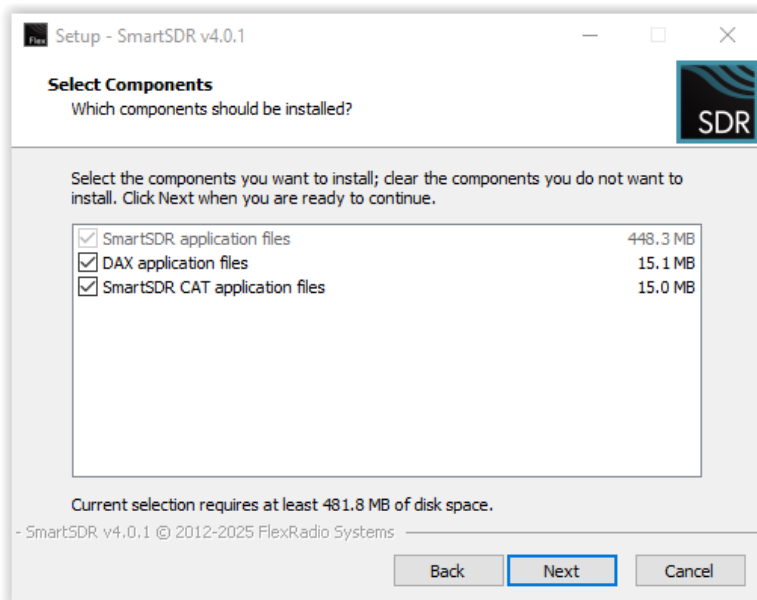
4. Select Destination Location

- On the **Select Destination Location** screen, keep the **default installation path**.
- Click **Next** to continue.



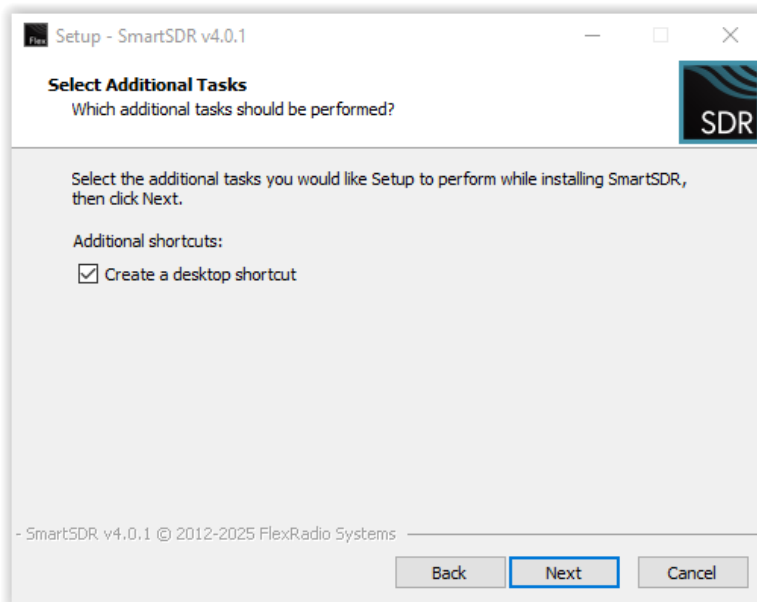
5. Select Components

- On the **Select Components** screen, keep the **default options** selected.
- This ensures that the latest versions of **DAX** and the **FlexVSP driver** are installed.
- Click **Next** to continue.



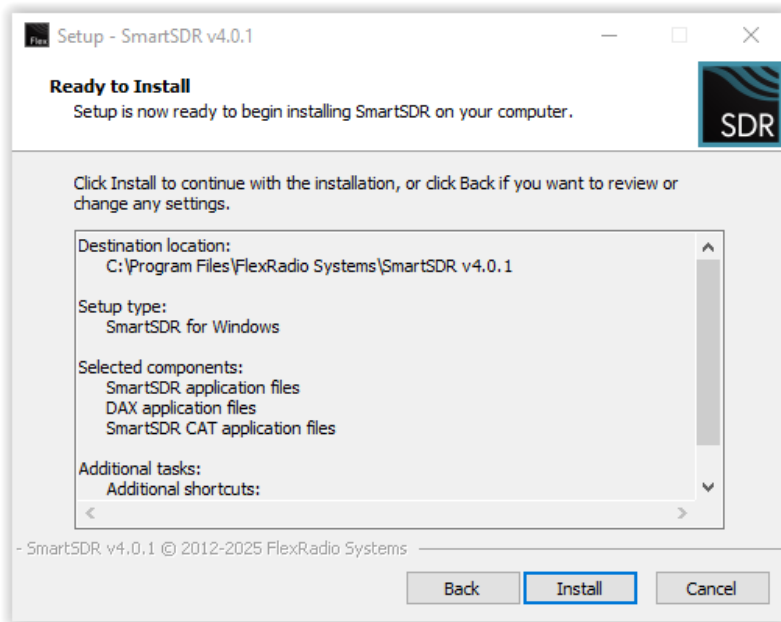
6. Select Additional Tasks

- On the **Select Additional Tasks** screen, leave **Create a desktop shortcut** checked.
- Click **Next** to continue.



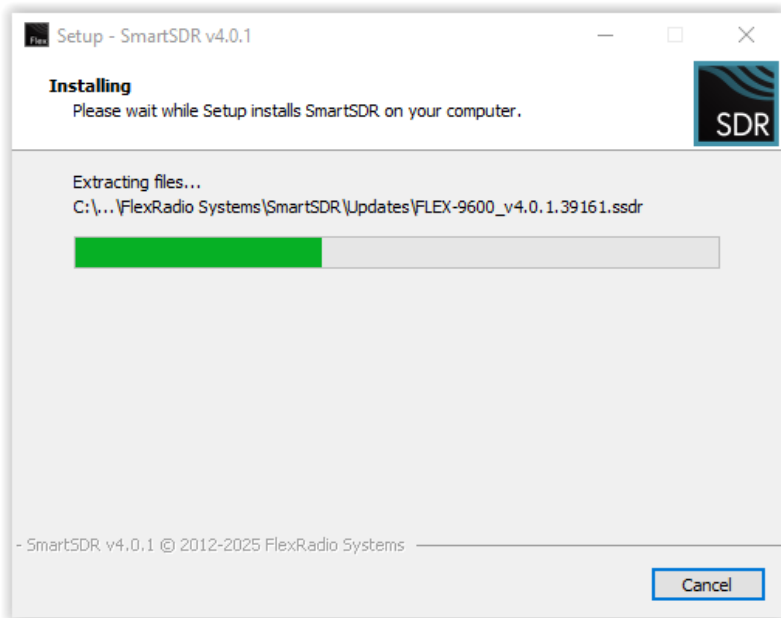
7. Ready to Install

- Review your selections, then click **Install** to begin installation.



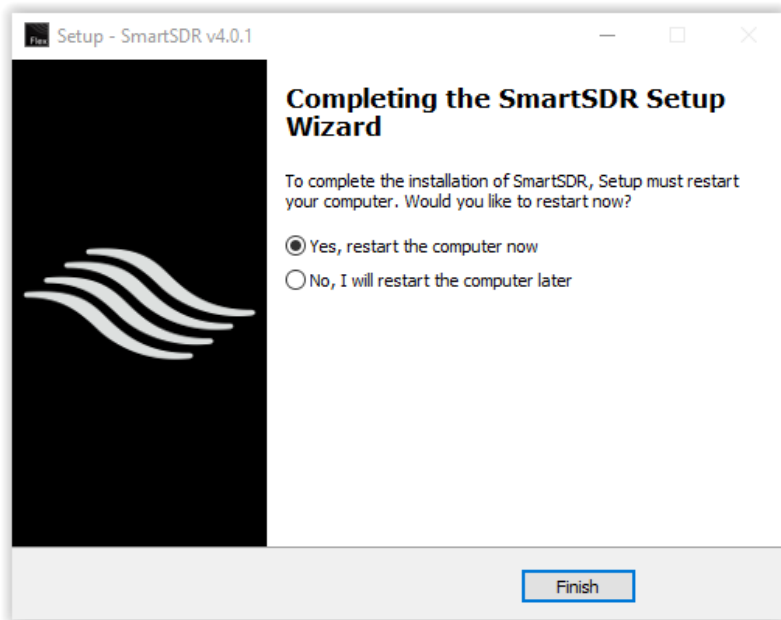
8. Installation Progress

- The **Install** screen will display progress.
- During this process, you may briefly see Windows Command Prompt windows appear while drivers are being installed.



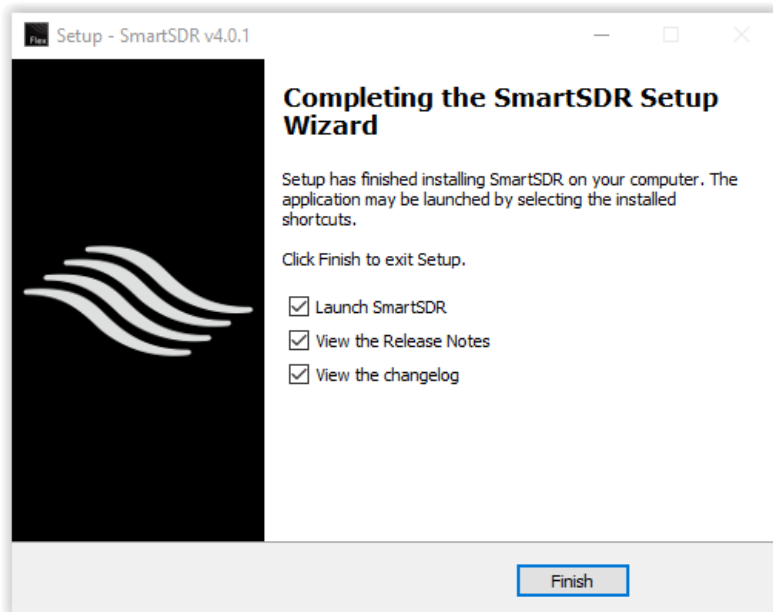
9. Restart Your Computer (if required)

- When installation finishes, if new drivers were installed, you will be prompted to restart your PC.
- Leave **Yes, restart the computer** selected, and click **Finish**.
- The PC will reboot after the installer closes.



10. Complete the Installation (no restart required)

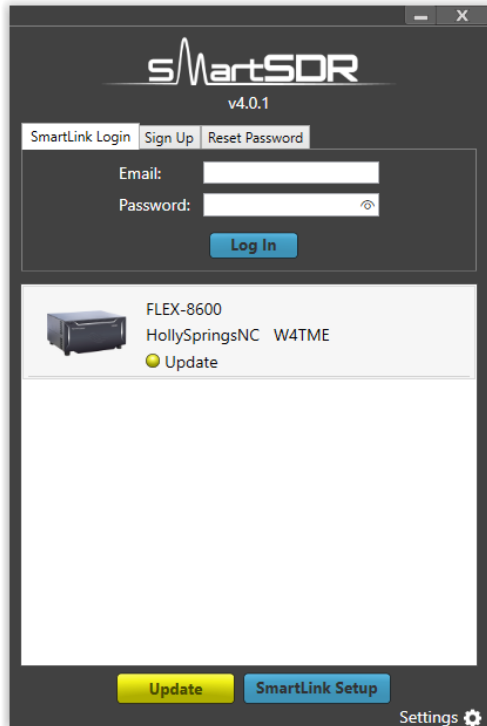
- If no drivers were installed or updated, the **Completing the SmartSDR Setup Wizard** screen will appear.
- Leave all options checked.
- It is recommended to review the **Release Notes** and **Changelog** for information about new features and bug fixes.
- Click **Finish** to complete setup.



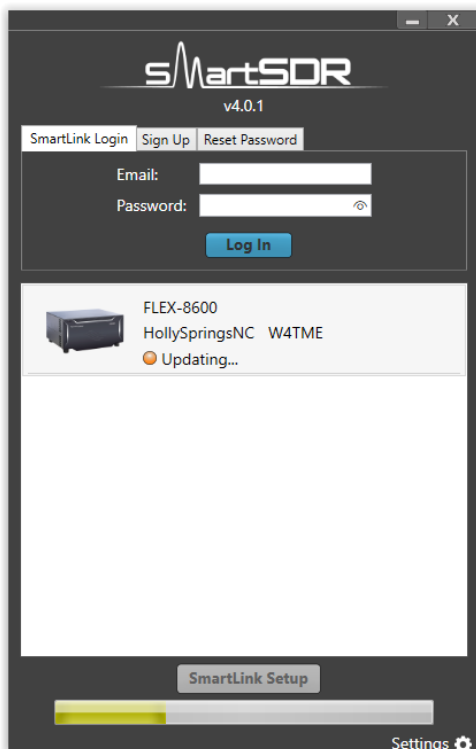
Updating the Radio Firmware

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

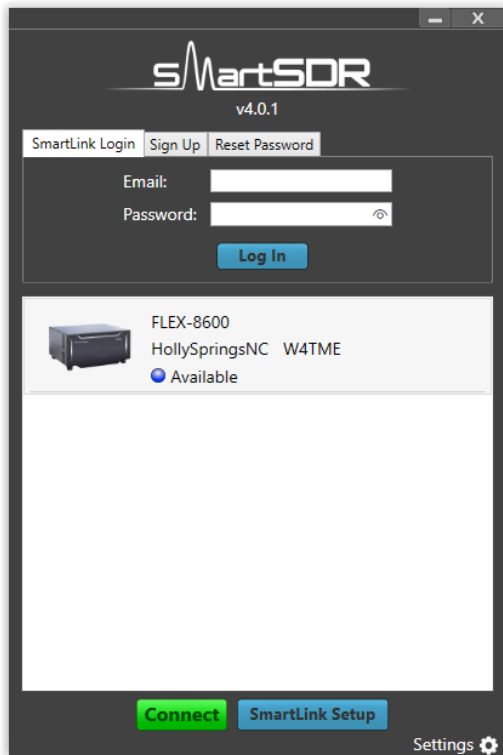
1. Launch **SmartSDR for Windows**.
2. In the **Radio Chooser** screen, highlight the desired radio showing the **Update** status indicator.



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 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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