

Instructions for Installing FlashUpdate and Downloading Firmware Updates for RFSD-2XA RF Signal Monitor

Revision Date: 28 September 2017

Updates to the Field Guide and to the instrument firmware are available from the Applied Instruments website.

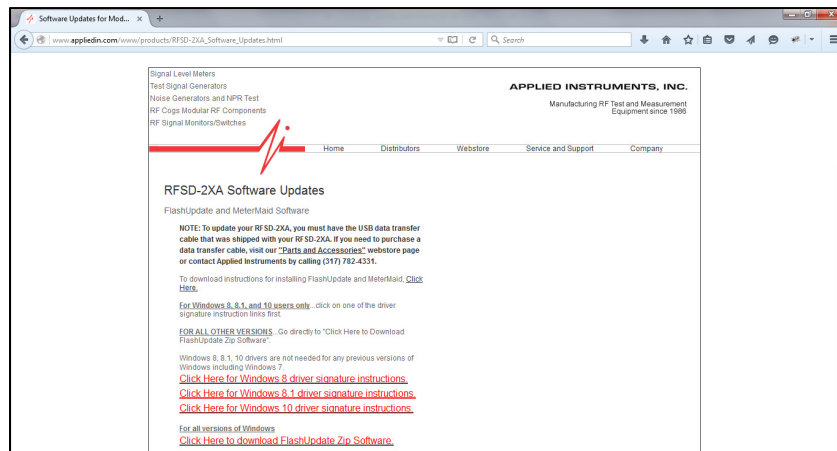
Requirements

- 1) A PC running Microsoft Windows XP, Vista, Windows 7, Windows 8, or Windows 10
- 2) An open USB connection port on your PC
- 3) An internet connection
- 4) USB data transfer cable (USB 2.0 Type A Male to Type B Male)

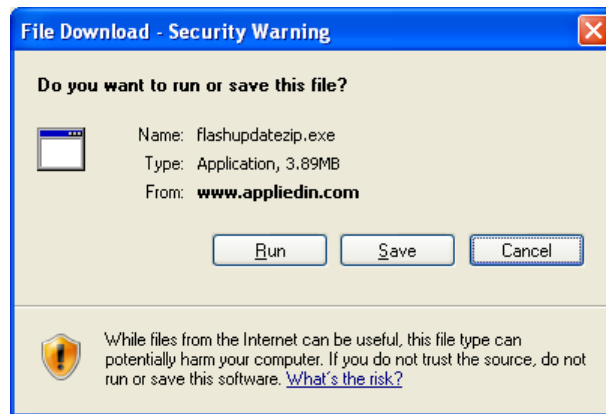
Installation

Before you can update your instrument, you must obtain and install the FlashUpdate software application onto your PC:

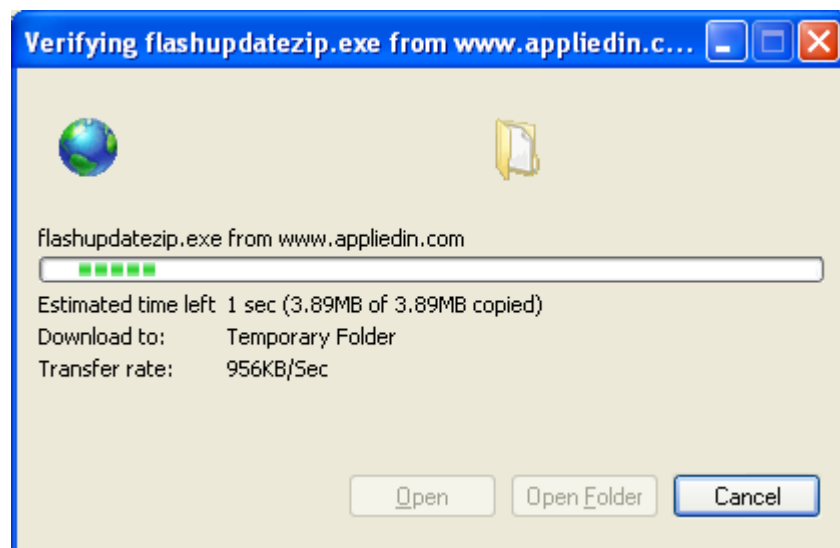
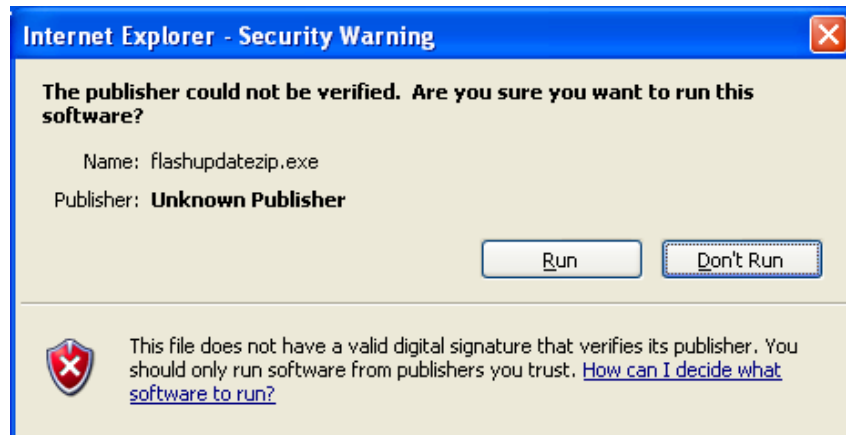
- 1) Ensure that you are signed on as Administrator or have Administrator rights for Microsoft Windows.
- 2) Temporarily disable your computer's anti-virus software and firewall so it doesn't interfere with the installation of the FlashUpdate and MeterMaid programs and the related USB drivers. If you have a hardware firewall, either stand-alone, or in a router, you may have to either modify the settings of the device to permit access to our program or entirely by-pass the router or other inhibiting hardware device.
- 3) Go to the Applied Instruments website www.appliedin.com. With your mouse, move your cursor over Service and Support and click on it, then click Software Updates, then click on 'RFSD-2XA RF Signal Monitor'. Then click on "Click Here to Download FlashUpdate Zip Software" or use the following link directly:
www.appliedin.com/downloads/flashupdatezip.exe



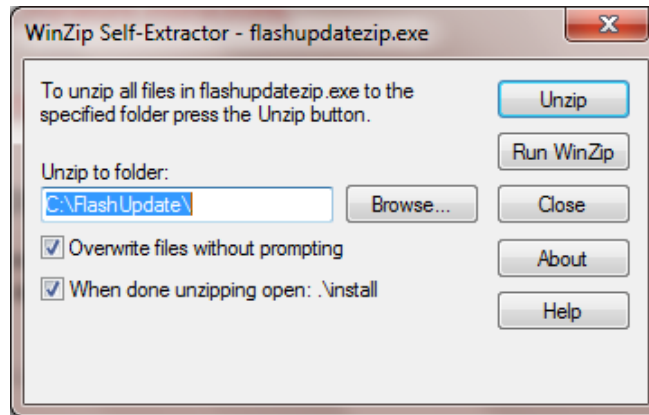
- 4) This is a self-extracting archive file. You may choose to open or run the file directly from the website or may save it to your disk and then open or run it. It is recommended that you run the file. The instructions below assume that you have chosen to run the file.



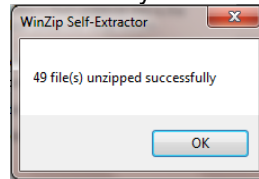
You may receive a warning message. Press Run to continue to open the file.



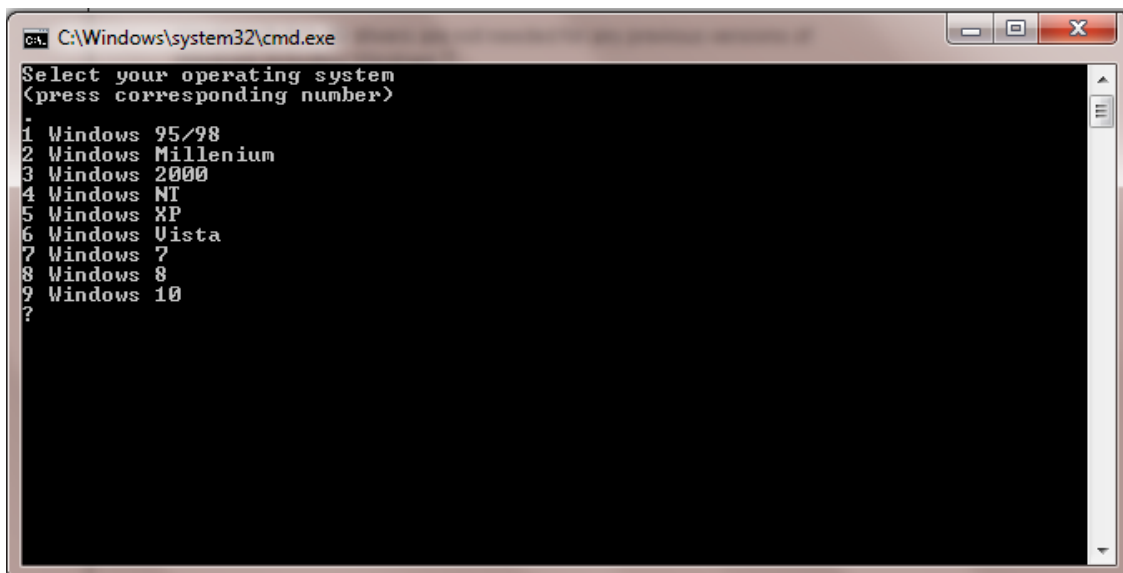
- 5) When you open this self-extracting archive file, the WinZip Self-Extractor program will appear. It is recommended that you press the Unzip button to unzip the files to the default location (c:\FlashUpdate\). If you wish to unzip the files to another location, type that desired destination folder into the field titled 'Unzip to folder' or press the Browse button and then navigate the network to select the desired destination folder.



- 6) It will unzip several files onto your PC to the location you indicated. Press OK.



- 7) A Command Prompt screen will appear. Using your computer's keyboard, type the number that corresponds to your computer's operating system. If you aren't sure of which Operating System you are running, please proceed to step 10. If you already know your Operating System, please proceed to step 11.



```
C:\Windows\system32\cmd.exe

Select your operating system
<press corresponding number>

.
1 Windows 95/98
2 Windows Millenium
3 Windows 2000
4 Windows NT
5 Windows XP
6 Windows Vista
7 Windows 7
8 Windows 8
9 Windows 10
??
AiiVirCom4.inf
AiiVirCom5.inf
iarvircomport.inf
      3 file(s) copied.
Which version of Windows ??
<press corresponding number>

.
1 Windows 7 32Bit
2 Windows 7 64Bit <most newer machines>
3 Windows 7 Intel Itanium Only
?
```

```
C:\WINDOWS\system32\cmd.exe

Select your operating system
<press corresponding number>

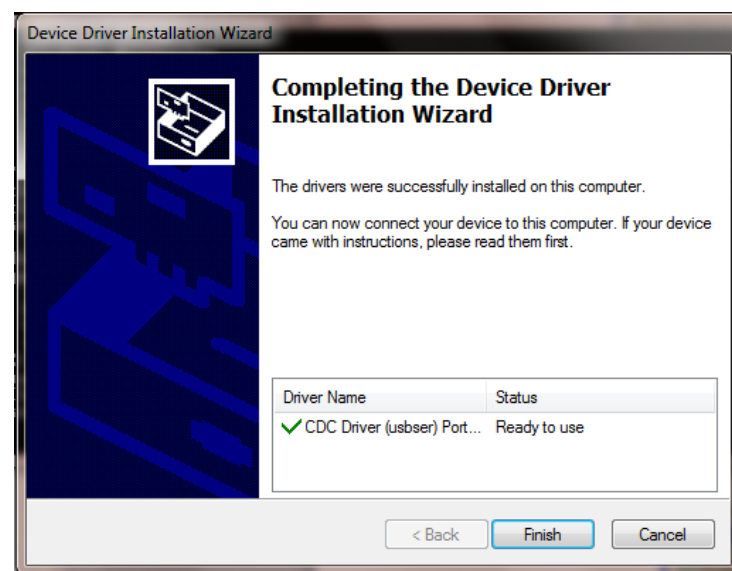
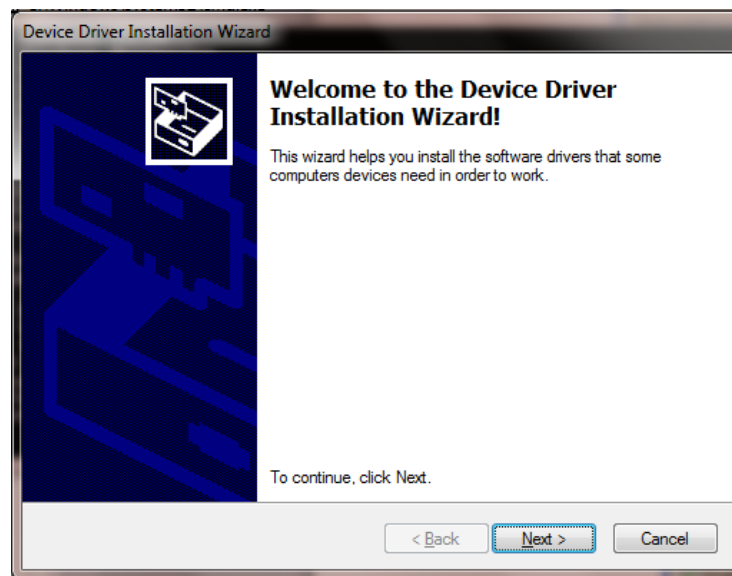
.
1 Windows 95/98
2 Windows Millenium
3 Windows 2000
4 Windows NT
5 Windows XP
6 Windows Vista
7 Windows 7 32Bit
8 Windows 7 64Bit <most newer machines>
9 Windows 7 Intel Itanium Only
?5
iarvircomport.inf
      1 file(s) copied.
Copying shortcut to desktop.
FlashUpdate.lnk
SatTransfer.lnk
      2 file(s) copied.
Starting USB driver installation.
```

- 8) To find out which Operating System you're running on your PC, using your mouse, right click on the My Computer icon. Scroll to Properties and left click on it. On the General tab, underneath System, it will tell you which Operating System is installed on your PC (i.e. Microsoft Windows XP).

Another method to find out which Operating System you're running is by using Windows Explorer.
Path: Windows Explorer → Help → About.

- 9) Another Command Prompt screen appears to let you know that USB drivers are being installed. After the USB driver installation is complete, you will receive a message advising you to press Enter. Pressing Enter will complete the software application installation process and the "DOS looking" screen disappears.

```
C:\Users\admin\AppData\Local\Temp\ckz_P0A\DPInst_Monx86.exe
32-bit OS detected
"C:\Users\admin\AppData\Local\Temp\ckz_P0A\DPInstx86.exe"
Installing driver.
```



10) Close your internet browser window if you still have it open and view your desktop screen.

- 11) You will notice that two new shortcut icons have been installed on your desktop. If the icons do not appear on your desktop, you can use "My Computer" or Windows Explorer to navigate to the C:\FlashUpdate\ folder and open FlashUpdate.exe from there and you can also copy and paste shortcut icons from the folder to your Desktop. If you're running Windows Vista or Windows 7 and the shortcut icons do not appear on the desktop after downloading, please right click with your mouse on the Desktop and select Refresh and then the shortcuts should appear. If you choose an installation location other than the default folder, then the shortcuts won't work.

FlashUpdate is the program used to download the latest firmware updates to the RFSD-2XA instrument.
Application filename: FlashUpdate.exe



FlashUpdate

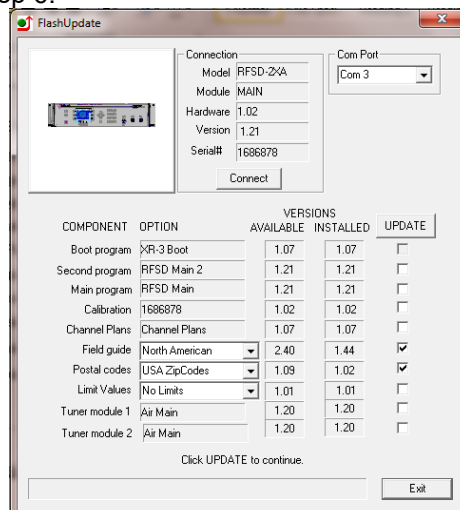
MeterMaid is the program used for transferring custom Channel Plans, Limits files, and Monitoring Scripts between the PC and RFSD-2XA. When the RFSD-2XA has been used in Signal Meter mode, MeterMaid can also be used to upload stored Channel Scans, Favorites, Spectrum Scans, Constellation Scans, Limits files, Channel Plans, Proof of Performance Scans, and Limit Scans from your RFSD-2XA instrument to the PC.
Application filename: MeterMaid.exe



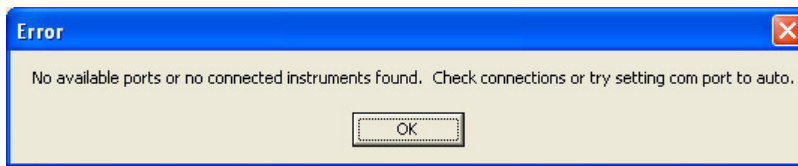
MeterMaid

Updating

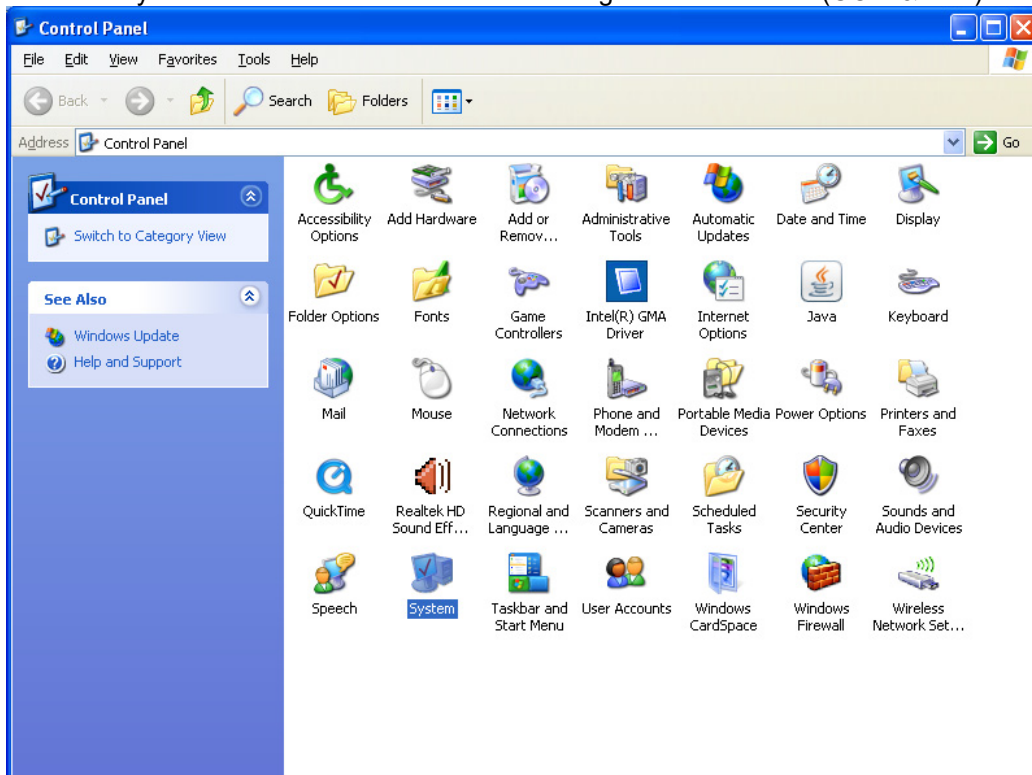
- 1) Ensure you have an active internet connection.
- 2) Plug your RFSD-2XA into an AC outlet.
- 3) Connect the RFSD-2XA to your PC using the supplied USB data transfer cable and turn the instrument on.
- 4) Double click the FlashUpdate shortcut icon or start the application from wherever you saved it (i.e. your C drive).
- 5) If connection is established, a picture of the RFSD-2XA will appear in the top left corner of the FlashUpdate program and the top center portion of the program will be filled in with data obtained from the instrument (i.e. serial number, loaded software version, etc.). If the connection is working, proceed to Step 7. If connection is not established, proceed to Step 6.

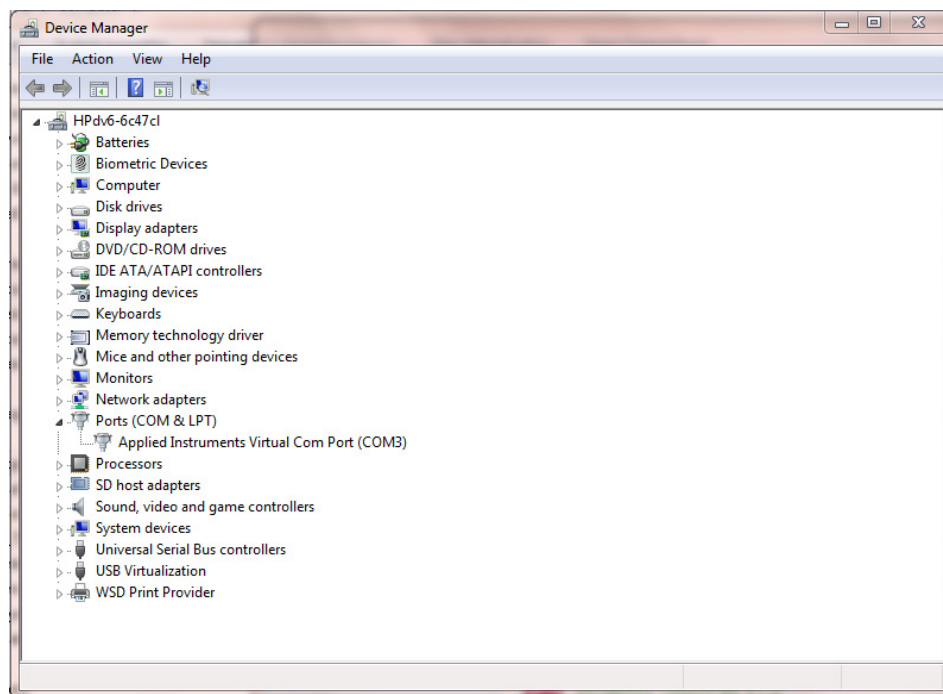
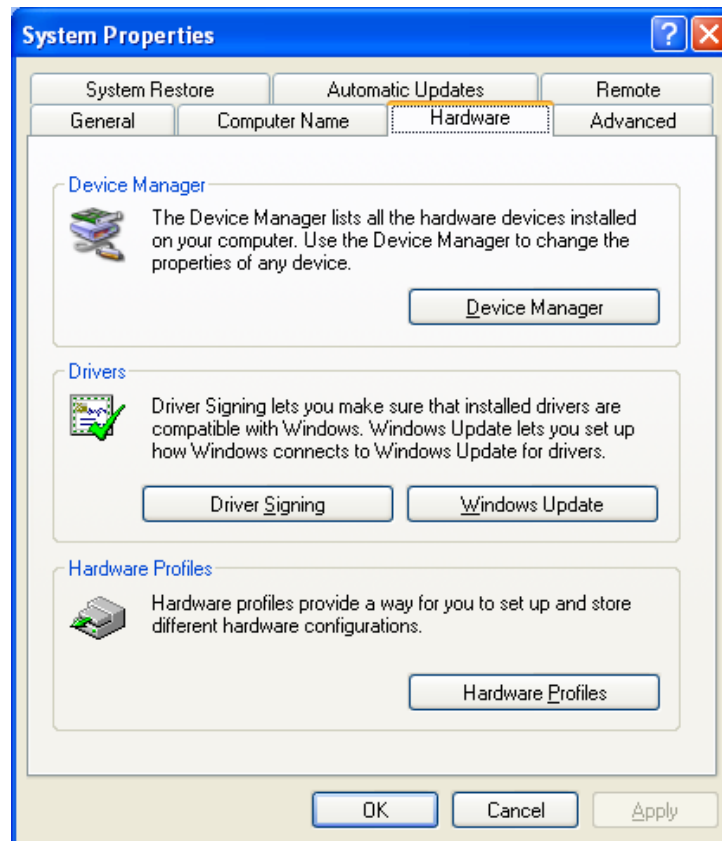


6) If the connection is not working, you will get an error message after a delay.



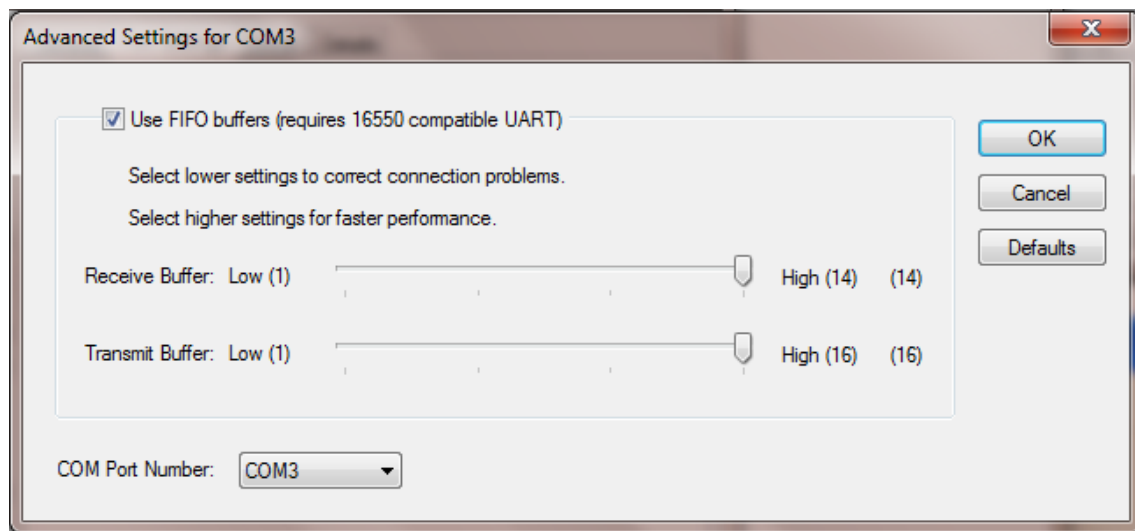
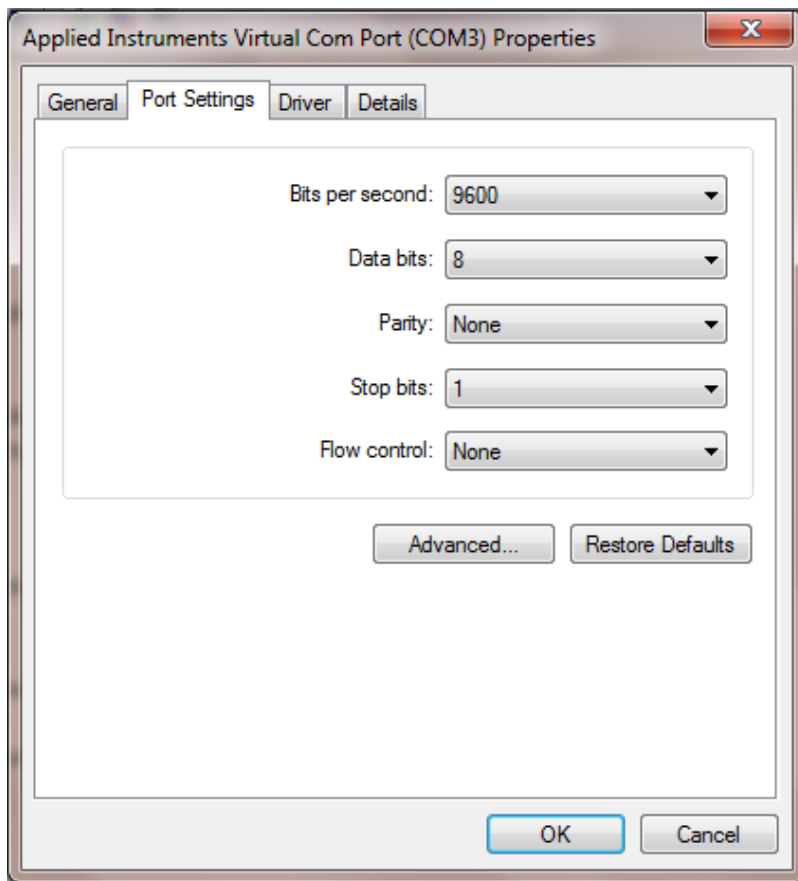
In this case, check to be sure the instrument is on and the USB data transfer cable is fully seated. Click "Connect" to retry the connection. With the USB connection, the computer should automatically establish connection with the instrument. If you don't know the com port number, you can choose Auto or try all available ports or you can check your COM port assignments in the Device Manager section of the Windows Control Panel. Path: Control Panel-->System-->Hardware Tab-->Device Manager button-->Ports (COM & LPT)





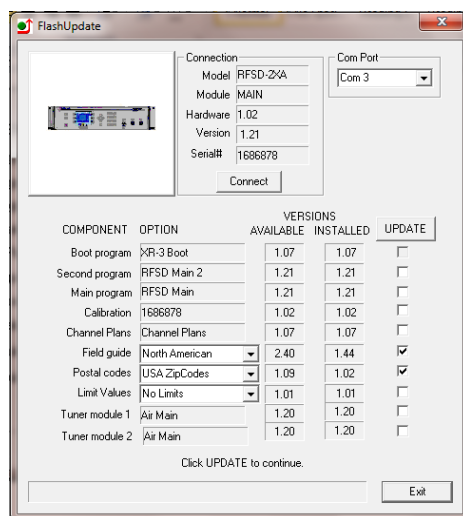
If you see that your Communications Port is set to something other than COM ports 1 through 12, you will need to reassign the COM port. To reassign the COM port, right click with your mouse on the desired COM port and

select Properties. Then click on the Port Settings tab. Then click on the Advanced button. Using the drop down menu at the bottom of the Advanced Settings screen, reassign the COM port to an open (unused) port to any COM port from COM1 to COM12. Then press OK twice and exit out of the Device Manager and exit out of the Control Panel.



- 7) As soon as the connection is established, the application will access the website and obtain the latest available versions for the various software components. These will be compared with the versions installed

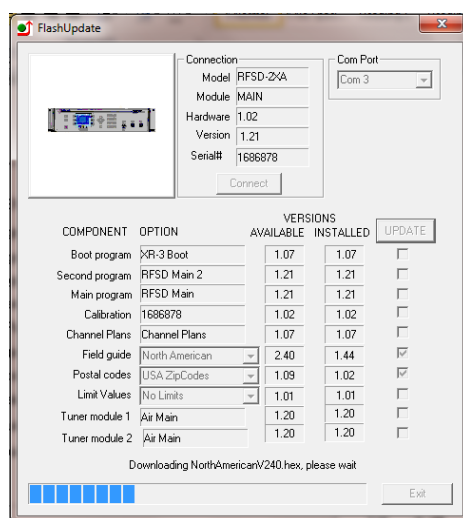
on your instrument. Any component with a newer version available will be checked. Normally, there is no need to check anything that isn't already checked and we don't recommend manually check marking the boxes.



- 8) For satellite module applications, select your desired Limit Values file: Dish Corp, Dish RSP, or No Limits. See Limit Values section below for more details.
- 9) For satellite module applications, select your postal code region: USA ZipCodes, Canadian Postal, or No Postal Code (if located outside of North America).

Click "UPDATE" to start updating the instrument. The progress bar at the bottom will show the installation progress of each component. In the screenshot from the example shown below, the program has detected that one component needs to be updated (it automatically placed one check mark next to the item that needs updated). The blue status bar at the bottom of the program will reset itself after each component is downloaded.

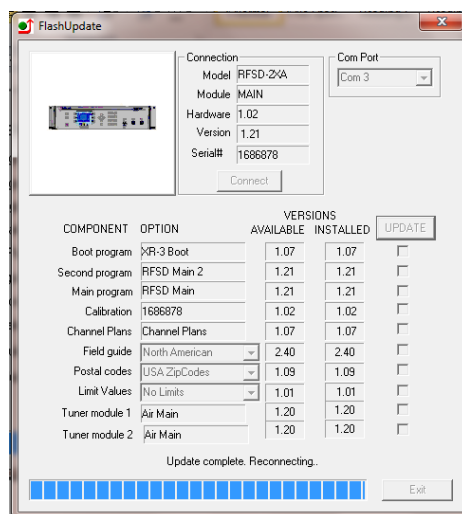
The download process can take up to approximately 5 minutes to complete, depending on the number of components that need to be updated.



The word "REMOTE" should appear on the LCD screen of the RFSD-2XA to indicate that the instrument is being programmed and controlled remotely. Standby while the instrument is updated. Do NOT press any

buttons on the RFSD-2XA instrument while the update is in progress. Do NOT bump or unplug the USB data transfer cable from the instrument while the update is in progress.

- 10) When finished, the program will display “Update Complete. Reconnecting”. If the update was successful, FlashUpdate will then display "All components up to date, restart instrument before use." Click “Exit”. You may now disconnect the RFSD-2XA instrument from the computer. Power the instrument off and back on again and then the instrument will be ready to use.



Channel Plans (applies to CATV / Off-Air module only)

Standard Channel Plans for the CATV / Off-Air module are available. These may be revised or added to in the future. The standard channel plans include:

Standard Cable Plans	Plan Descriptions
EIASTD	N.Am EIA analog & digital
EIASTD QAM	N.Am EIA digital
EIASTD ANLG	N.Am EIA analog
HRC	HRC analog
IRC	IRC analog
PAL BG	PAL B-G analog
PAL I	PAL I analog
SECAM	SECAM analog

Standard Off-Air Plans	Plan Descriptions
NTSC ATSC	VHF/UHF analog & 8VSB
OTA DIGITAL	VHF/UHF 8VSB
OTA ANALOG	VHF/UHF analog
FM N. Am	FM N.America

Field Guides (applies to satellite modules only)

There are several global Field Guides (satellite transponder databases) available now and more may be added in the future. You can select the Field Guide you need using the pull down list. The different Field Guides cover different regions of the world:

- North American Field Guide (for the continental United States and Canada)
- Alaska-Hawaii Field Guide
- Carib-CentralAm Field Guide (for Caribbean, Central America, and Mexico)
- South American Field Guide

European Field Guide
African Field Guide
Middle East Field Guide
Asian Field Guide
South Pacific Field Guide

If you simply want to change Field Guides even though no new versions are available, you may need to also put a check in the box before clicking "UPDATE". Only components that are checked will be updated.

Limit Values (currently applies to satellite modules only)

For technicians that will be using the instrument for Dish Network related work, there are two Limit Value databases available, 'Dish Corp' and 'Dish RSP'. If you work in an area that is served by Dish Corporate, select 'Dish Corp'. If you work in an area that is served by a Dish RSP, select 'Dish RSP'. If you won't be using the RFSD-2XA for Dish Network applications, select 'No Limits'. You can select the Limit Values you need using the pull down list.

If you simply want to change Limit Values even though no new versions are available, you may need to also put a check in the box before clicking "UPDATE". Only components that are checked will be updated.

Postal Codes (applies to satellite modules only)

Postal Code files provide look-up of latitude and longitude based on the postal code. Postal code files for the United States and Canada are available now and more may be added in the future. You can select the Postal Code file you need using the pull down list.

If you simply want to change your Postal Code file, even though no new versions are available, you may need to also put a check in the box before clicking "UPDATE". Only components that are checked will be updated.

If you are using the instrument outside of the United States and Canada, then choose "No Postal Codes." This allows you to type in and save your latitude and longitude coordinates for your location. Based on the lat/long coordinates provided, the instrument can still calculate the azimuth, elevation, and skew settings of the dish antenna as it relates to each satellite.

Future Updates

You may check for an update by connecting your RFSD-2XA to your computer and performing steps 1 through 7 in the Updating section. Make sure your Internet connection is active (if you have a dial-up connection to the Internet.) It is recommended you check for updates regularly (i.e. monthly), for satellite work anyway.

If you have any problems or questions about the FlashUpdate program, call Applied Instruments' Tech Support team at +1 (317) 782-4331 from Monday through Friday, 8AM to 6PM USA Eastern Time Zone (UTC-5) or email us at info@appliedin.com.

