

APPENDIX E: AF-6600 / AF-5000 Software Updates

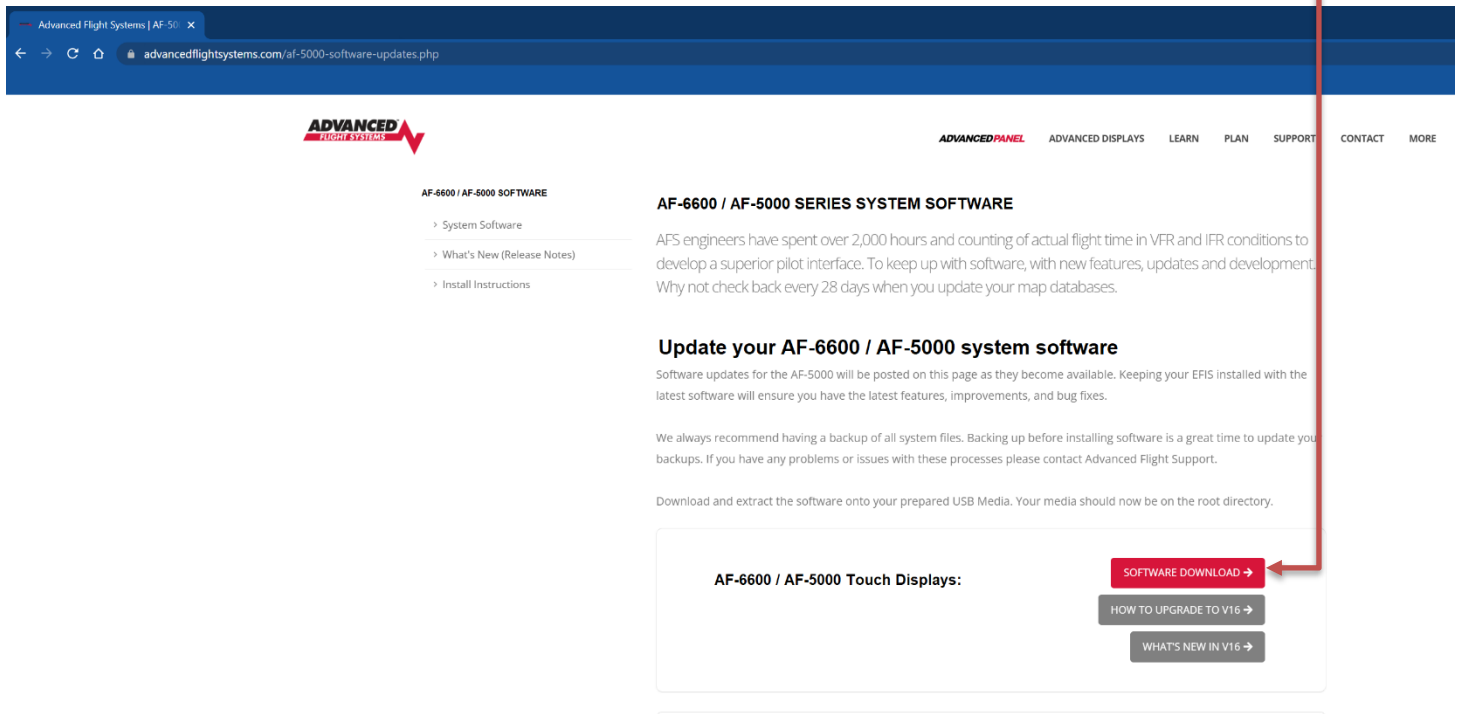
The AF-6600 / AF-5000 series EFIS software can be updated using a USB memory stick plugged into the back of the screen. **The USB Memory stick must have a volume name or the EFIS will not install the software.**

PROCEDURE

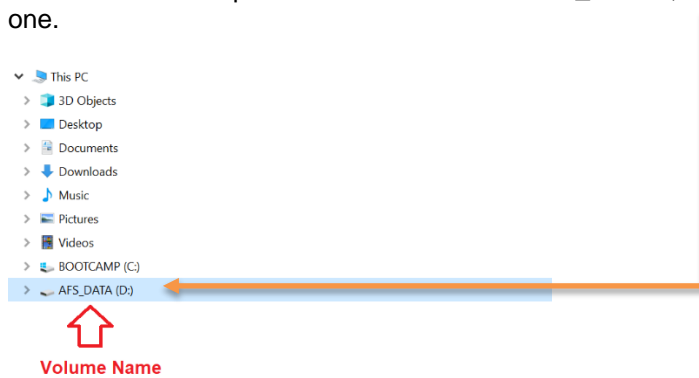
1. Download the software file with the latest version of software from:
<https://www.advancedflightsystems.com>

Select **SUPPORT > SOFTWARE UPDATES > AF-6600 / AF-5000 Series**

CLICK on **SOFTWARE DOWNLOAD**

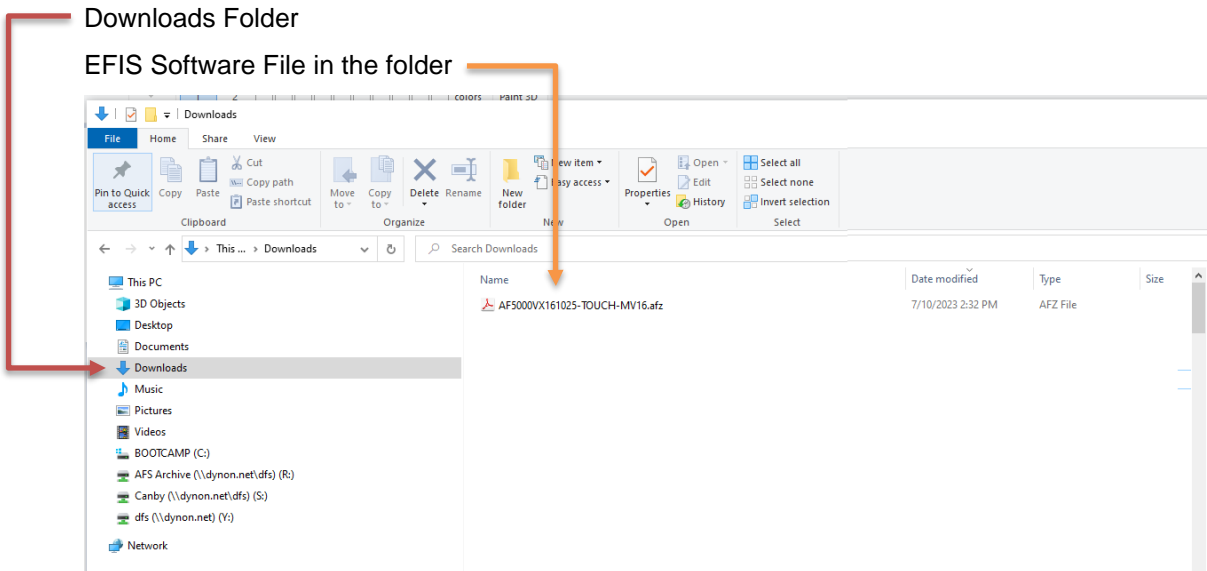


2. Plug the USB memory stick into your computer and verify that the USB memory stick has a volume name. In this example the volume name is "AFS_DATA", the name does not matter it just must have one.



Volume Name

3. Locate the downloaded EFIS software file on your computer, most likely in your Downloads folder.



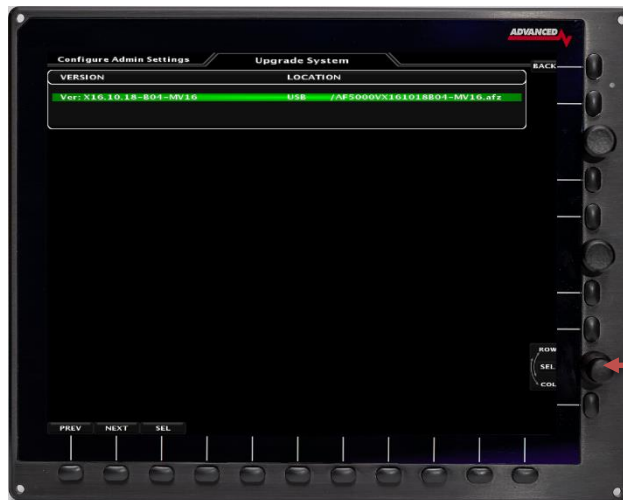
4. Move the EFIS software file from your computer to the USB Memory stick.
 - Right Click on the EFIS software file in your downloads folder and select **Copy**
 - Click on the USB Memory stick icon on your computer, Right Click and then select **Paste**
5. Eject the USB Memory stick from your computer.
6. Place the USB Memory stick in the PFD EFIS USB Socket (back of EFIS or extension cord on the panel). **Make sure you only have a single USB Memory stick plugged into the EFIS.**
7. Power the PFD EFIS screen using Master Power
8. When the EFIS boots you should get a prompt to **UPGRADE SYSTEM SOFTWARE ?**

Select **YES**

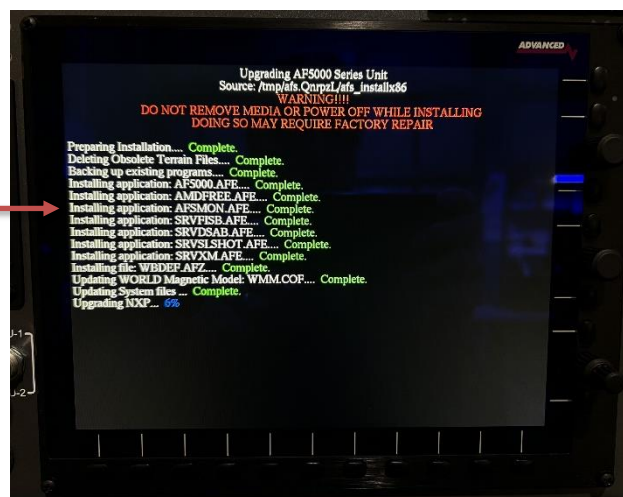


If you did not get the **UPGRADE SYSTEM SOFTWARE** prompt you can force a software load from the **SET > CAL > ADMIN Settings > 26. Upgrade System** Menu

- Use the lower right knob to select the EFIS software



- You should get a screen that looks like this as the system software is installed.



- After the software installs you will get a warning message and the EFIS should reboot.
- Repeat steps 6 – 11 for all EFIS screens in the aircraft.

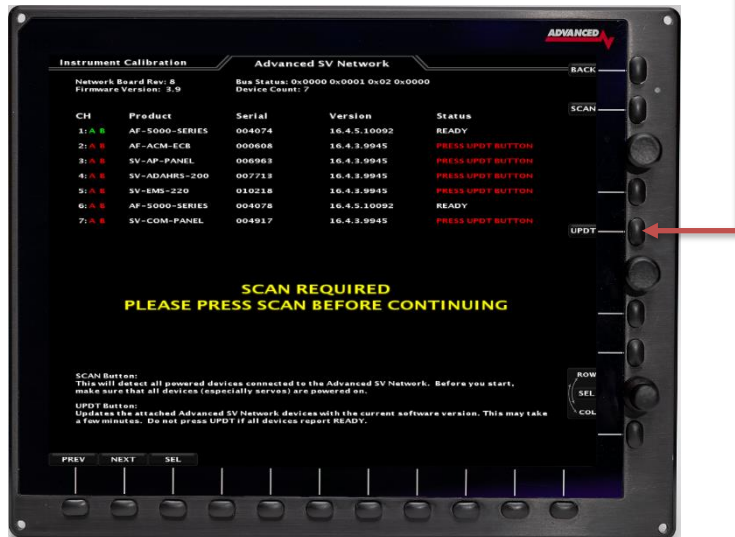
- If after installing the new software you get a **RED X** over the airspeed and altimeter and a **Network Needs Updating** message you will need to update the software on the connected Dynon devices.

- Touch the **Network Needs Updating** message on the **PFD EFIS** or select the following menu:

SET > CAL > 2. Advanced SV-Network



15. Press the **UPDT** button on the PFD EFIS



16. After the software is finished loading on all the connected SV-Network devices you will be instructed to power down the system.

17. Once all the EFIS screens have tuned off you can repower the system and verify that all the EFIS screens are running the latest software from the CHECK > ABOUT > SYSTEM menu.

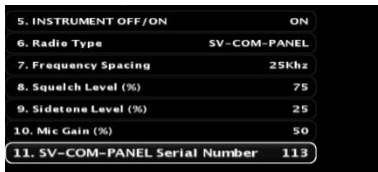
Upgrading to AF-6600/AF-5000 Version 16.10.25 Software (High Speed ARINC and Dual COM Radio Support)

The new Version 16.10.25 software has several improvements and changes that make the installation more complicated when upgrading:

- If you are using our **Advanced Control Module (ACM) or Dynon SV-ARINC-429** module to interface to a GPS Navigator you will need to change the **ARINC-429 OUT speed to HIGH SPEED** for any attached GPS Navigator (GTN, IFD, GNS, GPS175) before flying with this software. The **ARINC IN speed will stay set to LOW.**
- **If you are using our older serial RS-232 AF-ARINC module DO NOT change the ARINC 429 speed in any attached GPS Navigator (GTN, IFD, GNS, GPS175).** The AF-ARINC module only works in Low Speed.
- You will need to reconfigure the EFIS COM radio settings to support the new EFIS Dual COM radio tuning. You should configure the COM1 and COM2 radio settings to match how the radios are wired to your Audio Panel.

Installation Procedure

1. If you have a Dynon SV-COM Radio record your current Squelch, Sidetone and Mic Gain settings. From the SET>CAL>COM Radio Menu



Squelch Level _____
Sidetone Level _____
Mic Gain _____

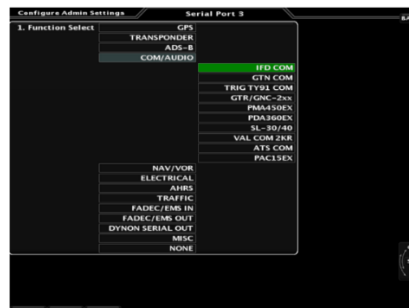
2. Download the new EFIS software onto your existing EFIS USB memory stick.
3. Install the new Software on all EFIS screens in the aircraft.
4. Update the SV-Network from the Pilot EFIS (PFD)
SET > CAL > 2. Advanced SV Network menu, press **UPDT** button
5. Power down and restart the system when instructed.
6. Reconfigure any RS-232 serial port that is wired to a COM radio.

If you have an Avidyne IFD radio connected to our Advanced Control Module the PFD EFIS serial port #3 is wired to the IFD serial port #3. This connection can be used to supply ADS-b data to the Avidyne or used to support EFIS COM radio tuning on the IFD.

For EFIS IFD Radio tuning configure the PFD EFIS serial port #3 to IFD COM

COM/AUDIO Options

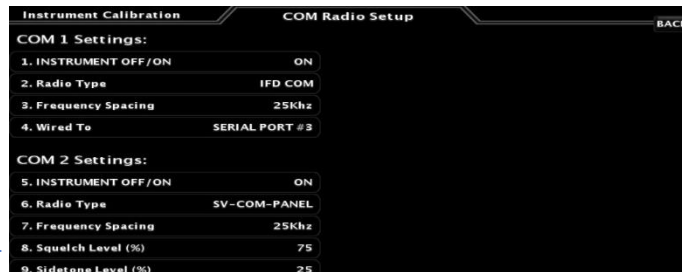
IFD COM	Avidyne IFD440, IFD540, IFD550
GTN COM	Garmin GTN-650, GTN-750
TRIG TY91 COM	Dynon Remote Trig Radio
GTR/GNC-2xx	GTR, GNC
PMA450EX	PS Engineering PMA450EX Audio Panel
PMA360EX	PS Engineering PMA360EX Audio Panel
SL30/SL40	Garmin SL30 or SL40
VAL COM2KR	VAL Radio
ATS COM	ATS COM
PAC15EX	PS Engineering PAC15 Audio Panel



7. Configure the COM Radio Menu on the PFD for COM 1 and COM 2

If you have a Dynon SV-COM Radio enter the settings for Squelch, Sidetone and Mic Gain.

If you have an IFD COM Radio connected to our Advanced Control Module configure COM 1 to IFD COM and the Wired to setting to SERIAL PORT #3.



COM Radio

The EFIS can display and tune the primary and standby frequencies for up to two connected COM Radios. The following radios support remote frequency control: Dynon SV-COM, Trig TY91 Remote COM, Avidyne IFD, Garmin GTN-650xi/750xi, GTR-200, GTR-225, GNC-255, SL30, SL40, VAL 2KR. The Dynon SV-COM interfaces with the EFIS on the SV-NETWORK, the other COM radios will need to be connected to an EFIS RS-232 serial port.

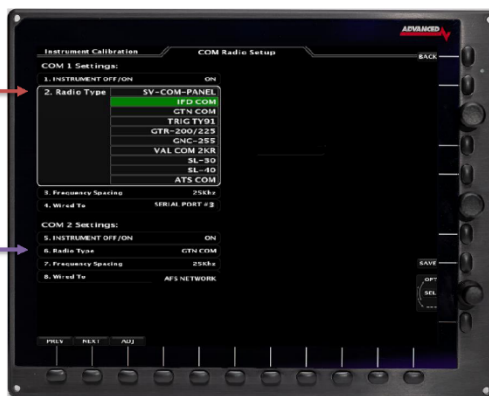
⚠ Some of the setting options will change based on the selected radio type.

COM 1 SETTINGS

- INSTRUMENT OFF/ON Turns ON or OFF the EFIS COM Radio 1 display tab
- Radio Type Select the Radio to tune as COM 1
- Frequency Spacing North America 25khz, Europe 8.33khz
- Wired To Select the Serial Port # if radio is wired to this EFIS screen
AFS NETWORK if radio is wired to a Remote EFIS serial port.

COM 2 SETTINGS

- INSTRUMENT OFF/ON Turns ON or OFF the EFIS COM Radio 2 display tab
- Radio Type Select the Radio to tune as COM 2
- Frequency Spacing North America 25khz, Europe 8.33khz
- Wired To Select the Serial Port # if radio is wired to this EFIS screen
AFS NETWORK if radio is wired to a Remote EFIS serial port.
- Squelch Level (%) Radio Squelch Setting
- Sidetone Level (%) Radio Sidetone Setting
- Mic Gain (%) Radio Mic Gain
- SV-COM-PANEL Serial Number SV-COM Panel display serial number to control



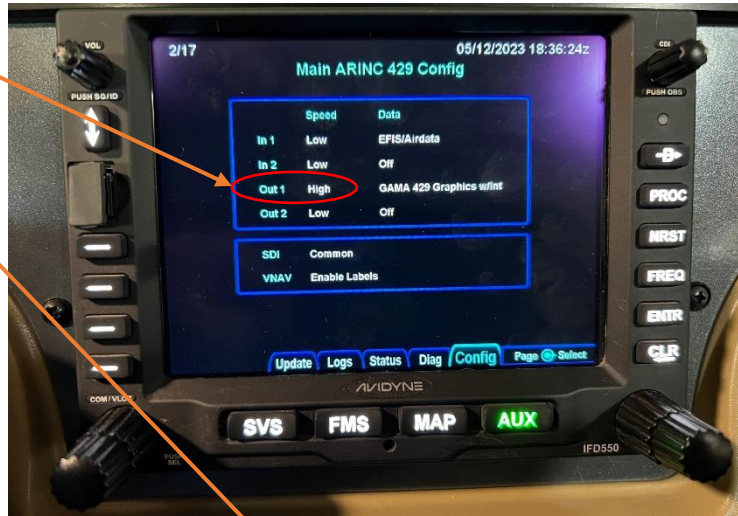
8. Configure the COM Radio Menu on the MFD EFIS for COM 1 and COM 2.

If you have an IFD COM Radio wired to PFD Serial Port #3 you should configure the **COM 1 Wired To** setting to **AFS NETWORK**

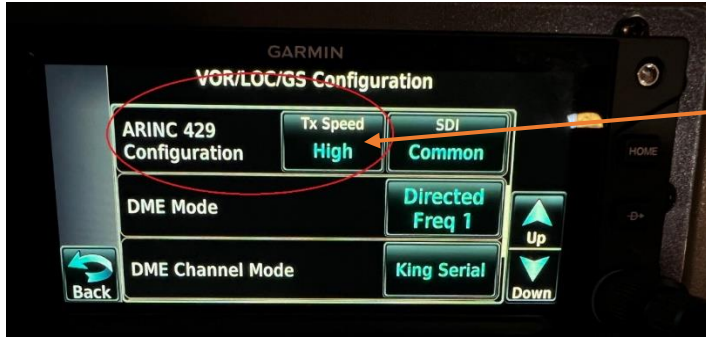
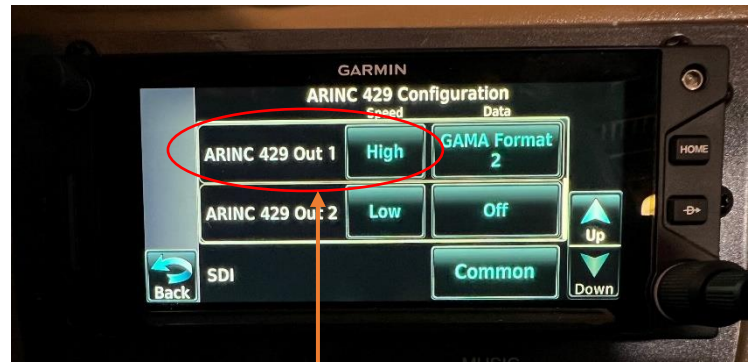
- 9. Change the IFD Serial Port 3 setting to vhfctrl to enable COM radio tuning.
- 10. Update the ARINC OUT Speed on the GPS Navigator using these settings:

Avidyne IFD Settings

Only change Main ARINC 429 Config Out 1 and VOR/LOC/GS ARINC 429 TX to High Speed



Garmin GTN xi Settings



Only Change the ARINC 429 Out 1 and VOR/LOC/GS Tx Speed to High

