# 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

Advanced Flight Systems   AF-50 ×		
$\leftrightarrow$ $\rightarrow$ C $\Delta$ <b>advancedflightsystems.com</b> /af-5000-software-updates.php		
ADVANCED NUCHT SYSTEMS	ADVAN	<b>VCED PANEL</b> ADVANCED DISPLAYS LEARN PLAN SUPPORT CONTACT MORI
AF-8600 / AF-5	AF-6600 / AF-5000 SERIES SYSTEM SOFT	WARE
> System	are	subting of actual flight time in VED and JED conditions to
> What's I	Release Notes) AFS engineers have spenic over 2,000 hours and co develop a superior pilot interface. To keep up with :	software, with new features, updates and development.
> Install in	tions Why not check back every 28 days when you upda	te your map databases.
	Update your AF-6600 / AF-5000 s	system software
	Software updates for the AF-5000 will be posted on this pag latest software will ensure you have the latest features, imp	e as they become available. Keeping your EFIS installed with the irovements, and bug fixes.
	We always recommend having a backup of all system files. backups. If you have any problems or issues with these pror	Backing up before installing software is a great time to update you cesses please contact Advanced Flight Support.
	Download and extract the software onto your prepared USE	3 Media. Your media should now be on the root directory.
	AF-6600 / AF-5000 Touch Displays:	SOFTWARE DOWNLOAD → HOW TO UPGRADE TO V16 → WHAT'S NEW IN V16 →

 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.



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

9. Use the lower right knob to select the EFIS software =



- 11. After the software installs you will get a warning message and the EFIS should reboot.
- 12. Repeat steps 6 11 for all EFIS screens in the aircraft.
- 13. 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





- 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

O. Mic Gain (%)	50
8. Squeich Level (%) 9. Sidetone Level (%)	25
7. Frequency Spacing	25Khz
6. Radio Type	SV-COM-PANEL
S. INSTRUMENT OFF/ON	ON

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.
- 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 Op	tions	Configure Admin Sett	ings // Seria	al Port 3
D COM	Avidyne IFD440, IFD540, IFD550	1. Function Select	GPS	
TN COM	Garmin GTN-650, GTN-750		ADS-B COM/AUDIO	
IG TY91 COM	Dynon Remote Trig Radio			IFD COM GTN COM
GNC-2xx	GTR, GNC			TRIG TY91 COM GTR/GNC-2xx
450EX	PS Engineering PMA450EX Audio Panel			PMA450EX PDA360EX SL-30/40
360EX	PS Engineering PMA360EX Audio Panel			VAL COM 2KR ATS COM
)/SL40	Garmin SL30 or SL40	Ę	NAV/VOR	PAC15EX
OM2KR	VAL Radio		AHRS	
COM	ATS COM	F	FADEC/EMS IN FADEC/EMS OUT	
15EX	PS Engineering PAC15 Audio Panel		DYNON SERIAL OUT MISC NONE	

- 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			
<ul> <li>INSTRUMENT OFF/ON</li> </ul>	Turns ON or OFF the EFIS COM Radio 1 display tab		
Radio Type	Select the Radio to tune as COM 1		
<ul> <li>Frequency Spacing</li> </ul>	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			
<ul> <li>INSTRUMENT OFF/ON</li> </ul>	Turns ON or OFF the EFIS COM Radio 2 display tab		
Radio Type	Select the Radio to tune as COM 2		
<ul> <li>Frequency Spacing</li> </ul>	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		
•	ABVANOD		
Listrument Calibration COM Radio Setup			



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 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 vhfcntrl 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





