

Software Version 7.1.4 Installation Steps

AF-3400 & AF-3500 non "S" CPU Software Installation Instructions (S/N: 60,000 – 60,999)

Advanced Flight Software update Version 7.01.04 should be considered a mandatory release as it fixes several known issues and will be considered the first course of action in the event of a service call. **If you are currently running version 7.1.3 OR using our XM Weather interface you must install this version of software before your next flight.** This software version requires the new V12 map data available from the AFS web store. The AF3000V70104-MV12-AV40.zip file also contains the new ARINC Version 4.0 software for the AF-ARINC module.

1. All AF-3400 and AF-3500 non "S" CPU screens in the aircraft must be running the same software version.
2. Download and read the latest manual from www.advanced-flight-systems.com
3. **Download and install the current V12 Map Data** (Only if you have the optional map software)
 - a) Using a computer go to www.advanced-flight-systems.com/webstore
 - b) Sign Into your web store account (if you don't have one you will need to create one)
 - c) Under **Categories** select **Map data**
 - d) Select **ADD TO CART** below the [Map data file](#)
 - e) Select **Checkout >>** on the top of the page
 - f) Under Payment method select the check box to accept the terms and conditions.
 - g) Select **Place Order**
 - h) Select [Download] under the Product [Map data file](#)
 - i) Click on the [AFSMAPV12_10xx.zip](#) file and select save to save the file to your computer.
 - j) Insert your EFIS Map SD card into your computers SD card slot. If your computer does not have an SD card slot you can get a USB to SD reader at most computer stores.
 - k) Locate the AFSMAPV12_10xx.zip file on your computer and right click on the file.
 - l) Select Extract All from the list and then select your computers SD card slot using the browse button. If asked select Replace Existing files.
 - m) Remove the EFIS SD card from your PC and use a permanent marker to identify the SD card as MAP so that you don't confuse it with the software install SD card.
4. **Download and install the latest EFIS system software.**
 - a) Using a computer go to www.advanced-flight-systems.com
 - b) Select Support >> AF-3400/3500 from the drop down menu.
 - c) Download the latest AF3000V70104-MV12-AV40.zip software zip file.
 - d) Click on the [AF3000V70104-MV12-AV40.zip](#) software file and select save to save the file to your computer.
 - e) Reformat using FAT 32 a separate (do not use map data card) 256meg to 2 gig SD card on your computer. The installation files must be located at the beginning of the SD card and the only way to do this it to reformat it.
 - f) Locate the AF3000V70104-MV12-AV40.zip file on your computer and right click on the file.
 - g) Select Extract All from the list and then select your computers SD card slot using the browse button.
 - h) Remove the EFIS SD card from your PC and use a permanent marker to identify the SD card as Software so that you don't confuse it with the MAP SD card.
 - i) Place the Software SD card in the EFIS card slot with the EFIS power turned OFF.

- j) Turn on Screen with the SD card installed, **do not remove card when prompted, wait until Screen is completely running so that it can update the new sound files.**

5. Install any new EFIS sound files (only needed if you do not have ALTITUDE or MINIMUMS)

- a) Verify that you still have the software update SD card in the screen.
- b) Enter the EFIS calibration menu using the new shortcut: [CHECK] -> [MAINT] -> [ADMIN] -> then hold [CALIBRATION] button for 2 seconds.
- c) Select Menu:
 - 1. Admin Settings
 - 1. Transfer Files
 - 14. All Sound Files
- d) Use the knob to select **RESTORE**
- e) Press **START** ; The system will test each sound file and only load the new files.

6. Install new ARINC software (if you do not have an ARINC adaptor you can skip this step)

- a) If you have an ARINC adapter check the software version using [CHECK] -> [MAINT] -> [ABOUT] selection. Verify that your ARINC adaptor is running version 4.0 software, if it is already running version 4.0 you can skip the following steps.
- b) Enter the EFIS calibration menu using the new shortcut: [CHECK] -> [MAINT] -> [ADMIN] -> then hold [CALIBRATION] button for 2 seconds.
- c) Cycle power to the ARINC adaptor using the aircraft Master Switch. If the ARINC module is powered on the same source as the EFIS the internal EFIS battery should keep the EFIS running during the power cycle.
- d) Select the following menu:
 - 1. Admin Settings
 - 21. System Maintenance
 - 4. Upgrade ARINC Software
- e) Press the start button to begin loading the new code. The screen will say, "Loading....xxx". Where xxx is the number of bytes transferred.
- f) When the screen prints "Done.", you can remove the card and reboot the EFIS and ARINC Module by cycling the power to both units.

7. Remove the Software card from the EFIS and install the new MAP data card in the EFIS slot.

8. Verify that the new EFIS and ARINC software installed



The following menu will display the current software versions: [CHECK] -> [MAINT.] -> [ABOUT]
AF-3000 Software Version: 7.1.4 MV-12
ARINC Software Version: 4.0

9. Configure the New Screen Settings

- a) Configure the new Knob list selection: [EFIS]-> [SETTINGS] -> [MORE] -> [PAGE LIST] -> [KNOB LIST]. We recommend turning DIM and Zoom to DISABLED; you will still have the DIM option from the CHECK List page and Zoom if a map is displayed. If you want to enable HDG, SPD or ALT bugs you will need to have them turned ON before you can configure them for the Knob list. **You can now select if you want the knob pop up selection be controlled by pushing the knob (PUSH SEL) or turning the knob (TURN SEL) from the knob list menu.**
- b) If you have a dual AHRS system (EF and EE) you will need to setup the Dual AHRS Configuration for AHRS crosschecking to work.



For Dual AHRS cross checking to work you should always set the **AHRS Module Config** to TXD and the **Network IP Number Other screen** to the address of the remote AHRS screen. This should be done from the EFIS calibration menu on each screen.
[Example Dual AHRS System](#)

AF-3000EF EFIS Screen #1

- 1. Admin Settings

15. Engine Module Config	HW:OFF, NET:RXD
16. Air Module Config	HW:INT, NET:TXD
17. AHRS Module Config	HW:INT, NET:TXD
19. Network IP Number this screen	175
20. Network IP Number Other screen	176

AF-3000EE EFIS-Engine Monitor Screen #2

1. Admin Settings

15. Engine Module Config	HW:INT, NET:TXD
16. Air Module Config	HW:INT, NET:OFF
17. AHRS Module Config	HW:INT, NET:TXD
19. Network IP Number this screen	176
20. Network IP Number Other screen	175

- c) **Configure the %Power settings for your engine** (if you already had %Power installed you can skip this step). You will need to configure the power settings for your engine in the Calibration mode, menu item 22. Horsepower

The following data is supplied only as a reference; you should use your Lycoming engine graphs to verify the accuracy of the display.

Engine	O-360				
Rated HP	180				
RPM	55% MAP	75% MAP		Altitude	Delta HP
2000	21.6	26.7		2000	2.3
2100	21	26		4000	4.6
2200	20.3	25.2		6000	6.9
2300	19.8	24.6		8000	9.1
2400	19.2	23.9		10000	11.4
2500	19.9	23.5		12000	13.7
2600	18.6	23.2		14000	16
2700	18.2	22.7			

Engine	O-320				
Rated HP	160				
RPM	55% MAP	75% MAP		Altitude	Delta HP
2000	21.6	26.7		2000	2.3
2100	21	26		4000	4.6
2200	20.3	25.2		6000	6.9
2300	19.8	24.6		8000	9.1
2400	19.2	23.9		10000	11.4
2500	19.9	23.5		12000	13.7
2600	18.6	23.2		14000	16
2700	18.2	22.7			

Engine	IO-540				
Rated HP	260				
RPM	55% MAP	75% MAP		Altitude	Delta HP
2000	23.2	29.4		2000	5
2100	22.4	28.1		4000	9
2200	21.5	26.8		6000	13
2300	20.7	25.7		8000	17
2400	19.8	24.7		10000	21
2500	19.3	24		12000	25
2600	18.8	23.3		14000	29
2700	18.5	22.5			