



## AFS “s” CPU Software Installation Instructions

<u>Product</u>	<u>S/N</u>	<u>Version</u>	<u>Release Date</u>
AF-3400s, 3500s, 4500s “s” CPU	(S/N: 61,000 +)	8.3.28-MV15	4/13/2011
Map Database	(ALL with MV15)	MV15	

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**NOTE: This software update requires you download map data of a newer version with hi-res terrain. The name of the new map files are AF2MAPUS.AFM, AF2TERUS.AFM & AF2VEC.AFM.**

## New Features

### 8.3.28 Updated Features & Bug Fixes

- Increased size of VSPD and G-METER displays.
- Added periodic hwclock sync to reduce clock drift.
- Increased filtering for turn coordinator.
- Fixed problem in reactivation of deactivated XM receivers.
- Fixed ABOUT page showing more than 8 characters for XM receiver ID.
- Fixed AOA Audio disable problem.
- Added AUDIO ON/OFF button to AOA menu to allow in flight enable/disable of audio.
- Updated Weight and Balance default files.
- Fixed Peak Detect delta value when running in Celsius.
- Added vertical speed setting on six pack display.
- Fixed Problem in Weight and Balance that caused density to save wrong value.
- Changed Flap indicator to grow from top to improve visibility.
- Fixed WINDS knob function selection quirks.
- Fixed OAT and Winds local settings being overwritten by airdata master.
- Signal Traffic not being drawn for high zoom levels by using YELLOW background.
- Added NEXRAD colors legend just below the time.
- Fixed XM weather not showing status for non activated receivers.
- Restrict lateral ARM to NAV transition on the ground.
- Improved feedback on autopilot knob interface with a CONFIRMED message.
- Added hold-to-set feature to autopilot knob interface.
- Added TAS and ground speed to Six-Pack display.
- Removed dual position vertical speed and g-meter digital displays; now fixed at top.
- Moved AGL display below altitude tape.
- Added FIS-B weather support for ADS-B.
- Improved WX status in ABOUT page.
- Forced North-Up in high zoom levels.
- Fixed XM Winds orientation problem.
- Converted XM Server to distribute validated WX files instead of raw XM packets to eliminate data sensitivity in main process.

## Version 8 Software

### New Features & Bug Fixes

- Map file fix for Jeppesen to allow AFSMAPXX.AFM in place of AF2MAPXX.AFM.
- Fixed SD card support issues. Driver now supports high speed and SDHC cards.
- Fixes to prevent SVN from going below ground level.
- Fixes for Sport configuration.
- Added NMEA GPS raw message to Check->About page for G3X debugging.
- Reduced number of points used for drawing obstacles and traffic on SVN.
- Changed the traffic to have a more 3d look.
- Fixes to the ARINC\_TCAS serial parser.
- Changes for loading software to the ARINC\_TCAS module.
- Fixes for VP-X including Latest Version 2.1 software for VP-X.

- Fixed traffic elevation problem on SVN.
- Flattened terrain elevation immediately surrounding around airports to help prevent being underground when sitting on the runway.
- Fixed MAP and SVN jumping and flashing when crossing 5 degree LAT/LON boundaries.
- Fixed Weather "SEARCHING FOR MASTER" problem introduced in last release.
- Fixed Hobbs and Tach timer values overlapping when values exceed 1000 hours.
- Added an activation speed setting for the TAWS colors on the SVN. Default will be 100KTS and is adjustable in the SVN Configuration section of Calibration.
- Added an arming mechanism for TAWS colors on the SVN that prevents early activation on climb-out. TAWS will not arm until 1200' agl. Once armed it will remain until airspeed drops to zero.
- Increased the ocean color brightness to improve island and coastline contrast.
- Changed white traffic diamonds on SVN to flashing yellow diamonds
- Increased flashing rate of obstacles and traffic on SVN
- Added support for Type 2 AHRS
- Added bug sync mechanism at boot up. IP 175 is considered master source.
- Speed up for page transitions involving map.
- Fix for ARINC\_TCAS adapter not coming out of boot-loader
- Fixed DTW incorrectly displaying NM when unit was configured for SM

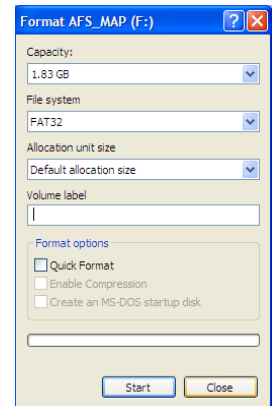
## AF-3400s, AF-3500s, AF-4500s “S” CPU Software Installation Instructions (S/N: 61,000 +)

Advanced Flight Software update 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. This software version requires V15 map data available from the AFS web store. All "S" CPU systems in the aircraft must have the same software.

1. Download and read the latest manual from [www.advanced-flight-systems.com](http://www.advanced-flight-systems.com)
2. Backup your EFIS settings to your Map SD card.
  - a) With the EFIS powered on, enter Instrument Calibration by pressing CHECK -> MAINT -> ADMIN -> CALIB.
  - b) Highlight ADMIN SETTINGS, press SELECT
  - c) Highlight TRANSFER FILES TO/FROM SD Card
  - d) Highlight ALL USER LEVEL RANGE AND DATA FILES
  - e) Rotate the right knob so it says BACKUP, press START. It will copy all of your files to the SD Card.
  - f) Press RETURN four times to exit Instrument Calibration, shut-down the unit and remove the card.

### 3. Download and install the latest EFIS system software.

- a) Using a computer go to [www.advanced-flight-systems.com](http://www.advanced-flight-systems.com)
- b) Select Support >> AF-4500s/3500s/3400s from the drop down menu.
- c) Download the latest software zip file from the System Software section by clicking on the AF4000V08.03.28-MV15-AV40.zip software file and select save to save the file to your computer. Take note on the file location for later reference.
- d) Format a separate (do not use map data card) 1 gig to 2 gig SD card using FAT32. **The card must be FAT32**, FAT will not work. Do not use QUICK FORMAT option.
- e) Locate the AF4000V08.03.28-MV15-AV40.zip file on your computer and right click on the file.
- f) Select Extract All from the list and then select your computers SD card slot using the browse button.
- g) Verify that the SD card contains an afs\_install folder.
- h) Remove the EFIS SD card from your PC and identify the SD card as Software so that you don't confuse it with the MAP SD card.
- i) VERIFY that your SD card is not LOCKED; small slider on side of card.
- j) Place the Software SD card in the EFIS card slot with the EFIS power turned OFF.
- k) Turn on the Screen with the SD card installed using the aircraft Master Switch, **do not use the internal backup battery or remove the SD card until Screen is completely running and you have the "I AGREE" message. This step could take up to 12 minutes DO NOT REMOVE THE CARD OR TURN OFF THE POWER!**
- l) Verify the software version matches the intended version (ex. AF4000 Version: 8.03.28-MV15).
- m) Turn off the aircraft Master Switch and let the display power down.
- n) Remove SD card after the screen has shut down and replace with MAP card.
- o) Repeat for other screens in the aircraft.



## Map Data Version 15 Installation Instructions

(S/N: ALL)

4. **Download and install the current AF2 V15 Map Data** (Only if you have the optional map software)
  - a) Using a computer go to [www.advanced-flight-systems.com/webstore](http://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) Locate the AF2 Map Data (Version 8 only)
  - e) Select **ADD TO CART** below the [Map data file](#)
  - f) Select **Checkout >>** on the top of the page
  - g) Under Payment method select the check box to accept the terms and conditions.
  - h) Select **Place Order**
  - i) Select [Download] under the Product [Map data file](#)
  - j) Click on the [AF2MAPV15\\_10xx.zip](#) file and select save to save the file to your computer.
  - k) 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.
  - l) Locate the AFSMAPV15\_10xx.zip file on your computer and right click on the file.
  - m) Select Extract All from the list and then select your computers SD card slot using the browse button. If asked select Replace Existing files.

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.



***Some very early systems may require a new Mapping and Synthetic Vision key be entered after the software is updated. After installing the new software and Map database verify that you have a valid SVN and Mapping Key from the following menu:***

CHECK -> MAINT. -> ADMIN -> CALIBRATION

1. Admin Settings (press select)
  21. System Maintenance (press select)
    4. Manage Keys
      1. Mapping Key: VALID
      2. AOA Key: VALID
      3. SVN Key: VALID

***If after installing the new software any of the purchased features show INVALID you will need to email [info@advanced-flight-systems.com](mailto:info@advanced-flight-systems.com) with your unit's serial number for a valid key.***