

4/23/10

PEP9000

This procedure is used to update Main CPU Ver. **0519** and EDSP Ver. **11.54** flash programming for **FTDX9000** Transceivers that have already been updated to **PEP9000**.

IMPORTANT: This procedure is only needed under the below conditions:

- Must have the PEP9000 logo sticker on the radio below the serial number label.



PEP9000 Logo Sticker

- Must have MAIN CUP Version 0505 or higher or EDSP Version 11.24. While holding the three buttons [GEN]+[50]+[ENT] turn the radio on and read the 7 digits on the top line of the LED display. See page (6) for more detail instructions. If the software version is not immediately displayed, your radio has not been updated to PEP9000; you must have the radio updated. Please contact Vertex Standard, Amateur Tech Support.

If your radio meets the above conditions you may proceed to update the Main CPU to V0519 programming and EDSP to V11.54.

We recommend installing the Flash Programming Software on a PC computer with Windows 2000, XP or Vista Operating System; and use the CT-119 programming cable or 8-pin mini-DIN PGM-SW (P0091526) and serial cable RS-232C, DB9F to DB9F straight cable.

NOTE: There are many USB adapters available; however some may not function with this software. We recommend using the latest USB adapter driver software when available.

The update software is available from our website at <http://www.yaesu.com>. The CT-119 programming cable is available from your authorized Vertex Standard dealer. You may also order by email to Vertex Standard parts department,

The software versions can be displayed on the radio

While holding the three buttons [GEN]+[50]+[ENT] turn the radio on. The software version will be displayed in the VFO-A window for 5 seconds then the radio will start up in normal operation.

See below: Example EDSP V11.53 and MAIN V 0158 software version.



*If you already have EDSP **V11.54** and MAIN **V0159** software versions, it is not necessary to update the FTDX9000 again.

Ver. 0519 MAIN implements improvements (also includes all previous updates):

- KEYER: The extraneous “dot” memory is eliminated during rapid keying when the dash output starts.
- CAT: Correct the 1.5 kHz shift when the CAT “FA” command is used to change the frequency on the 5MHz band.
- SCOPE: The right edge signal position on the display is corrected.
- SCOPE: The left edge signal is corrected when the frequency is changed on the display.
- SCOPE: The 1.5 kHz SSB shift in DUAL MODE is corrected.

Ver. 11.54 EDSP implements improvements (also includes all previous updates):

- Corrected FM TX for a slight frequency offset.

*When menu settings are saved on the DMU-9000 CF card and transferred to the new version, some previous versions may not transfer correctly. Please check your menu, update the settings, and then save the new settings to the CF card.

Install the data file to PC

*Before you install this software make sure that you delete all of the old update files AH010 and FWS002 that are saved on your computer. Do not keep any of the old files or folders on your computer. (The old files are not compatible with the PEP9000 updated radio).

1. Down load the FTDX9000 data file [FTdx9000_PEP9000_4-23-10.zip] from the following website:
<http://www.yaesu.com/indexVS.cfm?cmd=DisplayProducts&ProdCatID=102&encProdID=34B0B268F77981D7E72CF66FC1930880&DivisionID=65&isArchived=0>
2. Save the FTDX9000 data file [FTdx9000_PEP9000_4-23-10.zip] to the desktop on your computer.
3. Unzip and Extract the contents of [FTdx9000_PEP9000_4-23-10.zip] to the desktop of your computer.
4. You will find the **PEP9000_EDSP** and **PEP9000_MAIN** folders on your desktop.

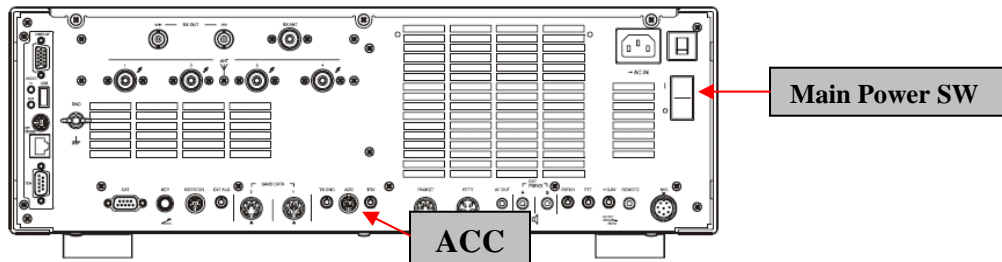
The programmer and software are now stored on your computer on the desktop. The files designated in the last step above are ready to update your FTDX9000 Transceiver.

MAIN Software Update

This procedure is used for uploading new Software into the FTDX9000 Amateur Transceivers using the CT-119 program cable. If you have the 8-pin mini-DIN PGM-SW (P0091526) refer to the page 4.

*Don't forget to write down (or save to a CF Card) any personal menu settings you have changed from the default before you start. Please see the Data Management Operation Manual for the procedure to save your settings to a CF card.

- (1) Turn off the main power switch located on the back of the FTDX9000 (or turn off the power supply for FTDX9000MP and wait a minute, until the capacitors discharge) and remove the AC power cord.
- (2) Connect the CT-119 cable's DB-9F connector to the serial port **COM1** in the back of your computer. Plug the mini-DIN connector of the CT-119 into the **ACC** jack connector on the rear of the transceiver. Be sure that the **arrow** indicator on the mini-DIN plug is **down**. If you use a USB to serial adapter, you might need to change the COM-Port number.



- (3) Connect the AC power cord (in the case of the FTDX9000MP connect the power supply cables).
- (4) Turn on the main power switch located on the rear panel of the FTDX9000 (or on the top of the power supply for the FTDX9000MP). [NOTE: The radio will not show a display now.]
- (5) Now go to the desktop and find the **FSW004** as shown below. Double-click the FSW004 icon, displayed on the Program Screen.



- (6) When the program opens, confirm that the file AH010N_V0519.SFL is highlighted; if not, click on it to highlight it.
- (7) Click on [WRITE] in the program window. A green status bar should appear below the [WRITE] button to show the progress of the download. Do not interrupt the process until it completes.
- (8) When the loading process is complete, an [OK?] box will appear. Click [OK?].
- (9) Turn off the main power switch. Located on the rear panel of the FTDX9000 (or on the top of the power supply for the FTDX9000MP). Remove the CT-119 cable from the DB-9F connector of your computer and the ACC connector on the rear of the transceiver.
- (10) Turn on the main power switch located on the back of the FTDX9000 (or on the top of the power supply for FTDX9000MP).

- (11) Press and hold in the [FAST] and [LOCK] keys while turning the radio back on. This resets the radio and locks in the new software. Turn the radio off. The updating process is now complete. Follow the instructions below to update the EDSP.

8-pin mini-DIN PGM-SW

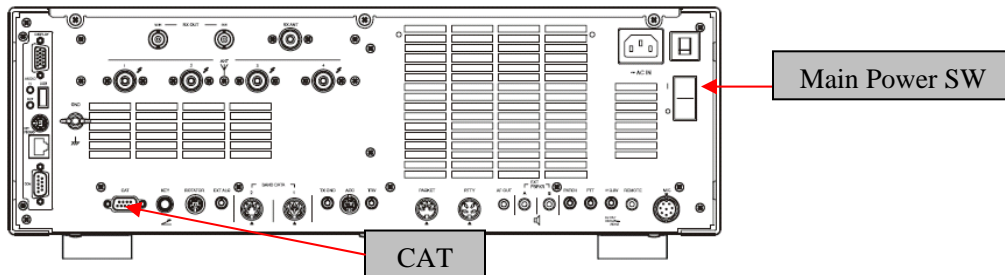
1. Turn the main REAR power switch OFF.
2. Connect a RS-232C straight cable to the CAT connector.
3. Open the file FSW004.
4. Insert the 8-pin mini-DIN PMG-SW connector to FTdx9000 (ACC) jack.
5. Turn on the REAR Main power switch.
6. I choose the .sfl file of the version 0519 to write in and push WRITE of the screen.
7. When complete appears, click OK. Turn the REAR power switch OFF.
8. Remove the 8-pin mini-DIN PMG-SW and the RS-232C cable.
9. Turn on REAR power switch.
10. Reset the radio to default.

NOTE: for a more detailed description see the Main CPU programming.

EDSP Software Update

This procedure is used for uploading new EDSP Software into the FTDX9000 Amateur Transceivers, from your personal computer, using the RS-232C, DB9F to DB9F straight cable.

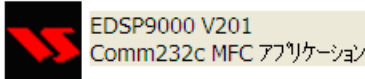
1. Turn off the main power switch located on the back of the FTDX9000 (or turn off the power supply for FTDX9000MP and wait a minute, until the capacitors discharge) and remove the AC power cord.
2. Connect a serial RS-232C, DB9F to DB9F straight cable to the COM1 connector of your computer and the 9-pin CAT connector on the rear of the transceiver. If you use a USB to serial adapter, you might need to change the COM-Port number.



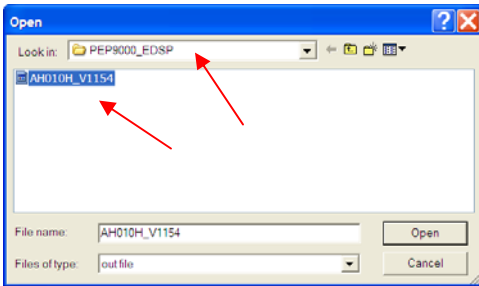
3. Reconnect the power cable and turn ON the main power switch located on the back of the FTDX9000 (or turn ON the power supply for FTDX9000MP).
4. While holding the [DNR]+[CONT] for the **D** or [NR]+[CONT] buttons for the **Contest** and **MP**, press the front main power switch to turn the radio on. You will see [dSP Prg] on the radio display.



- On your computer desk top open PEP9000_EDSP folder and find the **EDSP9000 V201** icon as shown below. Double-click the EDSP9000 V201 icon, displayed on the Program Screen.



- Click the Update button. You will see AH010H_V1154 out file displayed. If you do not see AH010H_V1154 (as in the screen below), then open the “Look in:” window and go to the desktop and find **PEP9000_EDSP**. Open the folder and **AH010H_V1154** will be displayed in the window. Click AH010H_V1154 out file to **highlight** it. Then click the Open button and wait until the program is loaded, and 100% is indicated on the bar graph, [Completion!!!] will be displayed.



NOTE: If you receive a “Communications Error” message on your screen you should check the COM port number and speed under Device Manager. The writing speed **38.4kbps** is fixed in the download algorithm of the EDSP board so you may need to set the port speed close to 38.4kbps. Click on the **COM Select** box arrow and choose a different COM port from the drop down menu in the EDSP9000 writer.

- Turn the front Power Switch and the Main Power Switch in the back OFF (or turn off the power supply for FTDX9000MP and wait a minute, until the capacitors discharge) and remove the AC power cord. This resets the radio and locks in the new software. Remove the DB9F to DB9F cable. The updating process is now complete

It is important to reset the FTDX9000. Plug the radio back in. Press and hold in the [FAST] and [LOCK] keys; while holding them in, turn the radio back on (this resets the radio and locks in the new software).

NOTE: We recommend trying the new factory default settings rather than transferring your old ones, because of the changes in the EDSP and the Main CPU, you may wish to make new settings.

We hope this new software will increase your enjoyment of your FTDX9000. Thank you for choosing Yaesu radios. If you have any problems or questions please contact Vertex Standard, Amateur Tech Support. amateurtech@vxstdusa.com

Best regards,

Mikio Maruya, WA6F
Executive Vice President
Engineering & Customer Service
Vertex Standard USA, Inc.