Vertex Standard

7/23/09

PEP950

This procedure is used to update Main CPU Ver. 0111 and EDSP Ver. 11.53 the flash programming for the FT-950 Transceivers.
*If you already have software Ver. 11.53 it is not necessary to update the FT-950 EDSP again.

We recommend installing the Flash Programming Software on a PC computer with Windows 2000, XP or Vista Operating System; and use the 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.

Install the data file to PC

1. Down load the FT-950 data file [**FT-950_PEP950_7-23-09.zip**] from the following website:
   http://www.yaesu.com/indexVS.cfm?cmd=DisplayProducts&ProdCatID=102&encProdID=292E02F4E4D00EC99887A63E7B8ECD1B&DivisionID=65&isArchived=0

2. Save the FT-950 data file [**FT-950_PEP950_7-23-09.zip**] to the desktop on your computer.
3. Unzip and Extract the contents of [**FT-950_PEP950_7-23-09.zip**] to the desktop of your computer.
4. You will find the **PEP950_EDSP3** and **PEP950_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 FT-950 Transceiver.

* The PEP_950 MAIN folder includes the new software writer FWS005 **V2.01**. We recommend not using the earlier version software and writer. .

* The PEP_950 EDSP folder includes a new software writer **V3.01;** it no longer requires the four DLL files that were needed by V1.03. We recommend you use the **V3.01** writer and remove V1.03 and the four DLL files from you PC.

The software updates will work with all versions (AF, AS, EU, NA, OC, SA or all Countries) of the FT-950.

Ver. 0111 MAIN CPU implements improvements (also includes all previous updates):

- In the QMB-MT mode, when the VFO frequency is moved, the memory channel indication is cleared to 0.000.
- Holding of the [▽]F6 or [△]F7 keys will permit scrolling through the DMU Memory Channel List, when the DMU-2000 is installed.
- The FH-2 [▽] [△] keys are made the same function as the MIC-UP/DN keys.
- Corrected the CW FULL BKIN keying when used with the VL-1000 Quadra Amplifier System.
- Corrected the RX in CW FULL BKIN 30wpm.

Ver. 11.53 EDSP implements improvements (also includes all previous updates):

- The DNR algorithm is not reset between TX/RX, to eliminate the increased receive noise after a transmission.
- Increase the response of the compression level meter in conjunction with the PROC knob. (Max up to 12dB).
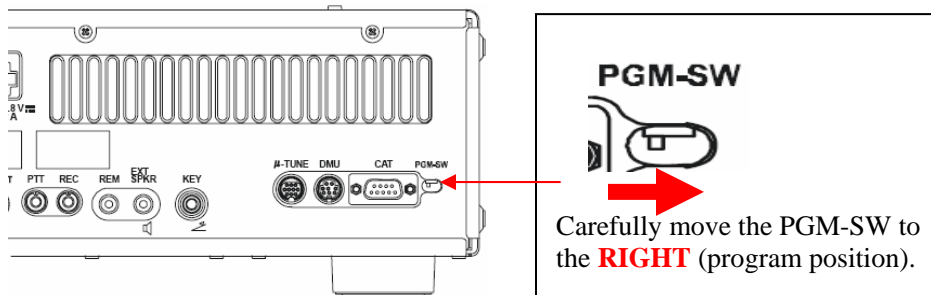
NOTES:
*Rotate the [METER] switch to select "COM" (Compression). We recommend setting the PROC level within the 5dB to 10dB range.
*When menu settings are saved on the DMU-2000 CF card and transferred to the new version, some previous versions may not transfer correctly. Please check your menu, update the settings, and then save the new settings to the CF card.
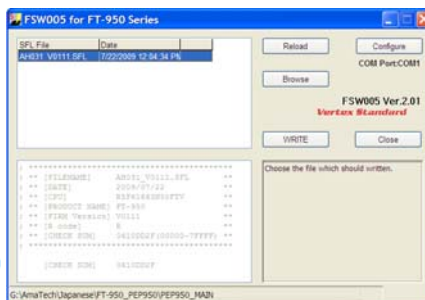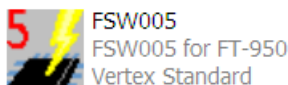
MAIN CPU

*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 DMU-2000 Data Management Operation Manual for the procedure to save your settings to a CF card.

1. Turn the FT‑950 OFF and disconnect the DC power cable (or turn OFF the power supply for FT‑950 and wait a minute, until the capacitors discharge).
2. Locate the program switch thru the access hole on the back at the rear right corner of the radio. Carefully move the **PGM-SW** to the **RIGHT** (program position).

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3. Connect the serial straight through programming cable, DB9F to DB9F, connector to the serial port COM1 in the back of your computer. Plug the DB9F connector to the CAT connector on the FT‑950. If you use a USB to serial adapter, you might need to change the COM Port number.

4. Leave the FT‑950 turned OFF and connect the DC power cable (or turn ON the power supply for FT‑950).
5. Now go to the desktop open PEP950_MAIN folder and find the **FSW005** icon as shown below. Double-click the FSW005 icon, displayed on the Program Screen.

FSW005
FSW005 for FT-950
Vertex Standard

6. When the program opens, confirm that the file AH031_V0111.SFL is highlighted; if not, click on it to highlight it.
7. Click "Configure" if necessary, to change the COM Port.
8. Click **WRITE.** The onscreen progress bar will indicate programming activity.
9. When programming has completed, "Confirm" will be displayed.
10. Disconnect the DC power cable (or turn OFF the power supply for FT-950 and wait a minute, until the capacitors discharge) and then remove the DB9 serial programming cable.
11. Thru the access hole on the back of the radio, move the **PGM-SW** to the **LEFT**, (operate position).
12. Reconnect the DC power cable (or turn ON the power supply for FT-950).
13. 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.
14. Turn the radio off. The main CPU updating process is now complete. Follow the instructions below to update the EDSP.
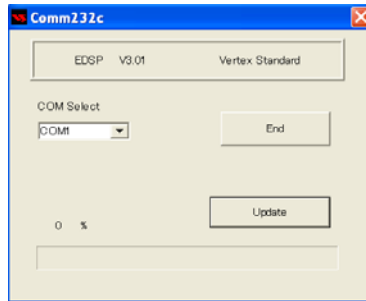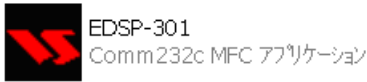
EDSP

This procedure is used for uploading new EDSP Software into the FT-950 Amateur Transceivers, from your personal computer, using the RS-232C, DB9F to DB9F straight cable.
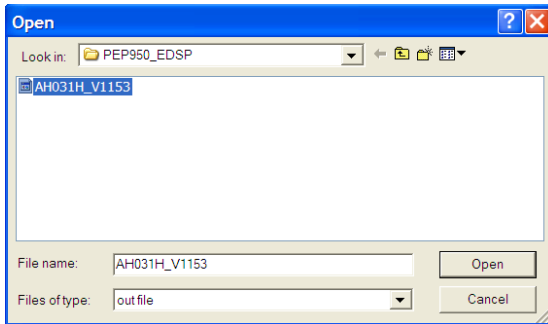
1. Turn the FT-950 OFF and disconnect the DC power cable (or turn OFF the power supply for FT-950 and wait a minute, until the capacitors discharge).
2. Connect a serial RS-232C, DB9F to DB9F straight cable to the COM1 connector of your computer and the 9-pin CAT connector on the rear of the transceiver. If you use a USB to serial adapter, you might need to change the COM Port number.
3. Reconnect the DC power cable (or turn ON the power supply for FT-950).

4. While holding the [SHIFT] + [WIDTH] + [CONT] buttons, press the front main power switch to turn the radio on. You will see [DSP PRG] on the radio display.

5. On your computer desk top open PEP950_EDSP folder and find the **EDSP-301** icon as shown below. Double-click the EDSP-301 icon, displayed on the Program Screen.

6. Click the Update button. You will see AH031_V1153 out file displayed. If you do not see AH031_V1153 (as in the screen below), then open the "Look in:" window and go to the desktop and find PEP950_EDSP. Open the folder and AH031_V1153 will be displayed in the window. Click AH031_V1153 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, click on the **COM Select** box arrow and choose a different COM port from the drop down menu. Then click the Update button and Open button again.
EDSP-301 download software writer works only in **38.4kbps**. The writing speed is fixed in the download algorithm of the EDSP board.

7. Turn OFF the front Power Switch and disconnect the DC power cable (or turn OFF the power supply for FT-950 and wait a minute, until the capacitors discharge). This resets the radio and locks in the new software. Remove the DB9F to DB9F cable. The updating process is now complete.

After the update, it is important to reset the FT-950. 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.

The software versions can be displayed on the radio

While holding the three buttons [GEN]＋[50]＋[ENT] [GEN] [50] [ENT] turn the radio on. The new software versions **11.53 1.11** will be displayed in the VFO-A window for 5 seconds, and then the radio will start up in normal operation.

EDSP:
Software version **11.53**

Main CPU:
Software version **0111**

We hope this new software will increase your enjoyment of your FT-950. 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,

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Executive Vice President
Engineering & Customer Service

Vertex Standard USA, Inc.