6/11/10

VERY IMPORTANT NOTICE:
This update procedure is for the FT-950 lot numbers **01 to 42**. Please verify the version of the radio by the serial number. The third and fourth digits indicate the lot number, example xx**42**xxxx. You may also verify the current EDSP level of your radio (refer to page 1 of this instruction). If the first digit of the number is **2** (example **2**0.45 1.13) Do not install this update EDSP software, It is not compatible with EDSP level 2 radios. Radios with lot numbers **43** and above, cannot operate with EDSP Ver. **11.54** software. At this time (6/12/2010) there are no updates for EDSP level 2 radios.

PEP950

This procedure is used to update Main CPU Ver. 0113 and EDSP Ver. 11.54 the flash programming for the FT-950 Transceivers.

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.

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 V1.12 software version.

EDSP:
Software version **11.XX**
(This image & version is for illustration only)

Main CPU:
Software version **01XX**
(This image & version is for illustration only)

*If you already have EDSP **V11.54** and MAIN **V0113** software versions, it is not necessary to update the FT‑950 again.

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

<u>**Ver. 0113 MAIN CPU implements improvements (also includes all previous updates):**</u>

- AGC: Corrected the AGC in the "OFF" position; if an AGC MENU SET item was changed, the AGC would sometimes turn "ON".
- KEYER: The extraneous "dot" memory is eliminated during rapid keying when the dash output starts.
- CAT: Corrected 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.

<u>**Ver. 11.54 EDSP implements improvements (also includes all previous updates):**</u>

- Corrected FM TX for a slight frequency offset.

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.

Install the data file to PC

1. Down load the FT-950 data file [**FT-950_PEP950_4-23-10.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_4-23-10.zip]** to the desktop on your computer.
3. Unzip and Extract the contents of **[FT-950_PEP950_4-23-10.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.
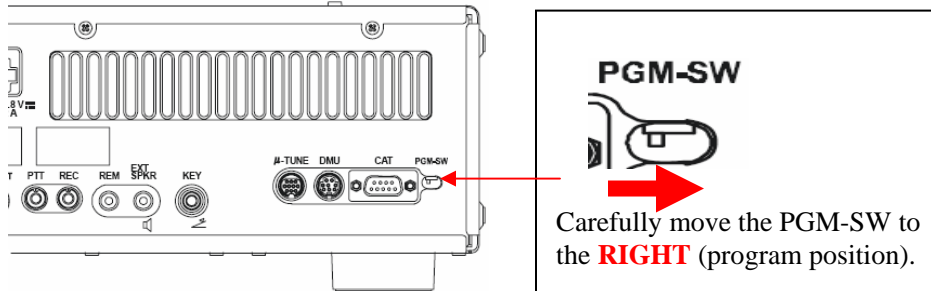

<u>IMPORTANT NOTE:</u>
While using any update software, if you receive a "Communications Error !!!" message on your computer screen, follow the below procedure.

When a **Communication Error !!!** occurs, the Main Power must be turned off or the power cable removed, and the programming software closed to reset the procedure. If the reset is not done the communication will never be successful. Make sure the cable is connected correctly, the COM port selection is correct, and the Bits per second default is set to 9600, (it is not necessary to change to another Bits rate) before trying again. If you continue to receive **Communication Error !!!**, you may need to try another USB adapter cable or another computer.

MAIN Software Update

*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).

Carefully move the PGM-SW to the **RIGHT** (program position).

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.

NOTE: If you receive a "communications error" message on your screen, click on the **Configure** box and choose a different COM port from the drop down menu. Then click the WRITE button again. Please refer to page 2 for additional details.

6. When the program opens, confirm that the file AH031_V0113.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.
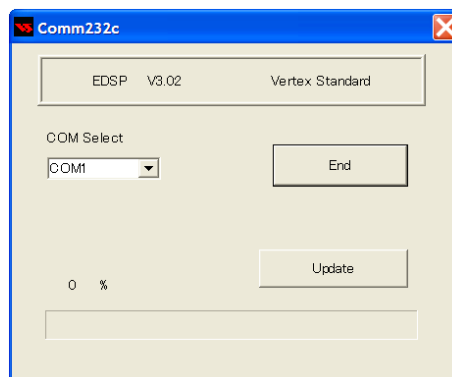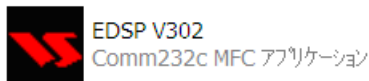
EDSP Software Update

This update procedure is only for the FT-950 lot numbers 01 to 42. Radios lot numbers 43 and above, cannot operate with this update EDSP software.

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.
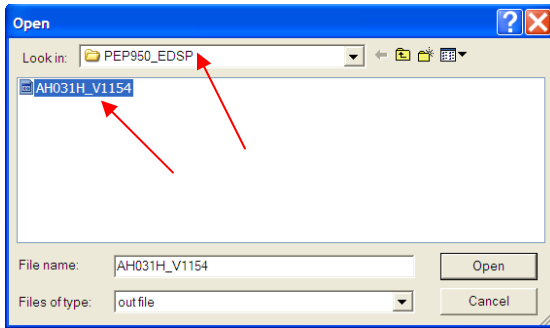
1. Turn the FT-950 OFF and disconnect the DC power cable (or turn OFF the power supply for FT-950 and wait a minute, until the capacitors discharge).
2. Connect a serial RS-232C, DB9F to DB9F straight cable to the COM1 connector of your computer and the 9-pin CAT connector on the rear of the transceiver. 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-V302** icon as shown below. Double-click the EDSP-V302 icon, displayed on the Program Screen.

6. Click the Update button. You will see AH031H_V1154 out file displayed. If you do not see AH031H_V1154 (as in the screen below), then open the "Look in:" window and go to the desktop and find **PEP950_EDSP**. Open the folder and **AH031H_V1154** will be displayed in the window. Click AH031H_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 EDSP-301 writer. Please refer to page 2 for additional details.

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.

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,

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