Alpha 8410 Monitor by AE9K - Program Configuration and Firmware Loading

1) Go to www.rfconcepts.com and go to the Alpha 8410 page under PRODUCTS, AMPLIFIERS

2) Create a new directory on your computer and download and save the following 3 files into that directory from the 8410 web page:

a. the FTDI Virtual COM port (USB) drivers
b. the Alpha (Colt) bootloader
c. the 8410 firmware file

3) Unzip the bootloader file and the firmware file.

4) Install the USB serial driver file – it is a small program and will install very quickly.

5) Download and install the latest version of the 8410 Monitor program from:
http://www.ae9k.com/alpha-8410/alpha-8410-8406-monitor/downloads

6) Change the step-start fuse on rear of chassis to 2 Amp Slow Blow (it may be a 2A Fast Blow on early amps). Connect Alpha 8410 amplifier to AC power BUT leave amp turned off. Connect USB cable from computer to 8410.

7) Start 8410 Monitor software on PC, click CONFIG at top of window.

8) Under BASIC tab, select COM port to use from available ports on pull-down list.

9) Select FIRMWARE tab and click on button at right-hand side of the "LOADER" line. Locate the COLT.EXE file previously installed . Click "Launch Boot Loader". If nothing happens and Colt boot loader does not start, you will need to exit the AE9K program, open Windows Explorer and make the folder with COLT.EXE a shareable folder.

10) In "Alpha Radio Bootloader" window click "LOAD FILE (F2)". Select the saved 8410 firmware file (ends in .HEX) and click OPEN. Select COM port that amplifier is connected to, set baudrate to 115200, and click "PROGRAM(F4)".

11) A blue progress bar will go across the Colt box when it is loading the program. When it is done loading, click the red X to close the bootloader window, then click "SAVE and CLOSE".

12) Click "START" at the top of the main 8410 MONITOR window, a line of the raw telemetry data should be visible near the top. The bandswitch position should indicate correctly and also change when the band is changed on the amplifier, even when it is turned off. When you click "STATIC DATA" the amplifier serial number and firmware version will display.

13) Turn on the 8410 from the front panel switch and note the parameters updating on the Monitor program.   You may need to select the Multimeter function on the 8410 Monitor window, the firmware update sometimes resets the Multimeter.

Alpha 8410/8406 Amplifier, Version 2.02e Firmware (and higher)
1. Soft Start delay increased to 750ms to reduce inrush current stress
2. Fixed bug where efficiency was occasionally being reported as exceeding 100% in telemetry.
3. Added remote OPER/STBY commands for use by AE9K software
4. Blower speed change temperatures lower by 2 degrees