

The 8410/8406 communicates using USB over a "virtual comm port" (VCP). The controller in the amplifier uses an FTDI FT232 chip, and the VCP driver for the appropriate operating system must be installed on computer to which the amp is connected. The VCP must be set for 115,200 baud, 8 data bits, 1 stop bit, no parity, no flow control.

Your PC may already have the VCP driver installed as part of the operating system. Connect a USB cable from the USB port of the 8406 amplifier to a USB port of the computer.

Right click on My Computer, select (left click) Properties, then Hardware, then Device Manager, then Ports, then right click on the USB port to set baud rate (115,200 baud) and COM port number. Windows will automatically assign a COM port number to the amplifier, you can use this number, make a note of it.

Open a new connection with RealTerm or Hyperterminal set to parameters above (make sure Com port is the same number)

Command "#1," login, password is 123456

Command "#3,X X = minimum fan speed

Command "p" Reads InputW, OutputW, Gain

Command "S" (shift-s) Shut off amp

=====

Alpha 8406 - Adjusting G1 and G2 bias levels

(this refers to Tube Bias Levels G1 and G2, not tube grids G1 and G2)

Connect USB port of PC to USB jack on rear of amp.

Plug in amp, turn on and WAIT FOR IT TO COMPLETE WARMUP DELAY before proceeding.

1. Open RealTerm (or Hyperterm) on computer, set to 115200, no parity, 8 bits, 1 stop bit, no flow control.

Enter password #1,123456 (be sure to type the pound and also comma)

2. Type "M" to enter Maintenance functions.

3. Cycle through parameters using "," and "." keys to find "G1"

4. Put amp in Operate and key radio in SSB mode, mic gain all the way down (close PTT switch but no RF drive). Using "<" and ">" keys adjust until **reported G1 reading is about 70ma, the last number on each line of text.** Type / to read the bias without adjusting it. UNkey radio when G1 reads 70ma.

NOTE: Many radios can be keyed into transmit with no RF out by selecting CW mode and closing the PTT on microphone, use this method if possible to ensure there is no RF output.

5. Type "Z" to save to EEPROM

6. Cycle to next parameter using "." key to "G2"

7. Again key radio in SSB mode, mic gain all the way down. Type "<" and ">" keys each once to turn on G2 bias level. Using "<" and ">" keys adjust until **reported G2 reading is about 250ma, the last number on each line of text.** Type / to read the bias without adjusting it.

UNkey radio when G2 reads 250ma.

8. Type "Z" to save to EEPROM

The adjustment is finished, turn off amplifier, unplug, and restore to normal conditions.