

**SETUP INFO FOR W2IHY 8 BAND EQ, EQ PLUS, and Flex 6500/6700**  
**By Dave De Coons, WO2X**  
**wo2x@arri.net**

This setup is for the Flex 6500/6700 with W2IHY 8 band EQ and EQ Plus using the balanced line in cable.

**Setting radio TX Bandwidth**

For rag chewing set radio TX filter bandwidth from 50 to 3500 Hz. If the bands are crowded then set bandwidth from 100 to 3000 Hz. (SmartSDR Setup/Voice tab)

Set the SmartSDR TX EQ to OFF

Set SmartSDR +20 dB mic boost to OFF (SmartSDR Setup/Voice tab)

Set SmartSDR PROC to ON and set to Normal position

Set SmartSDR input to BAL

Set BAL level to approximately 32%

**W2IHY 8 Band EQ**

50 Hz	+8
100 Hz	+4
200 Hz	-4
400 Hz	0
800 Hz	+4
1600 Hz	0
2400 Hz	+4
3200 Hz	+8

Noise Gate off

Mic impedance 600 Ohms (on bottom)

Turn switch on right to ON position to enable EQ.

NOTE – The MIC IN and MIC OUT adjustments on bottom of 8 band EQ should be preset. Only adjust them if necessary.

**To adjust MIC IN and MIC OUT**

Use a good pair of headphones and plug into the monitor on 8 band EQ. Turn monitor volume up  
Turn MIC IN fully counterclockwise. Adjust MIC IN (on bottom) to the point where the audio level comes back up but don't go too far, otherwise your mic will pick up excessive background noise.

The RED LED above the on/off switch should NOT blink. If it does, turn the MIC IN counterclockwise to reduce mic input level.

I'll cover the setting of the MIC OUT under the EQ PLUS setup.

**EQ PLUS**

Set the following:

Equalizer switch off

Bass - approx 2:30 o'clock (See picture below)

Treble - approx 3:00 o'clock (See picture below)  
 Mic impedance 600  
 Mic power off  
 Gain 11:00 (see picture below)  
 Comp approx 8:45 (see picture below)  
 Delay 10:00  
 Level 12:00  
 Effects 2  
 DE Level - Fully CCW  
 Expander Switch - leave off for initial settings, then turn on when you adjust DE Level  
 Output level. Fully clockwise. (see picture below)

Talk into the mic and watch the limiter meter on the EQ Plus. You should be lighting up three to four green segments on the limiter meter. If necessary, adjust **8 band EQ MIC OUT** (located on bottom of 8 band EQ). Make sure the INPUT GAIN knob on EQ Plus is at 11:00.

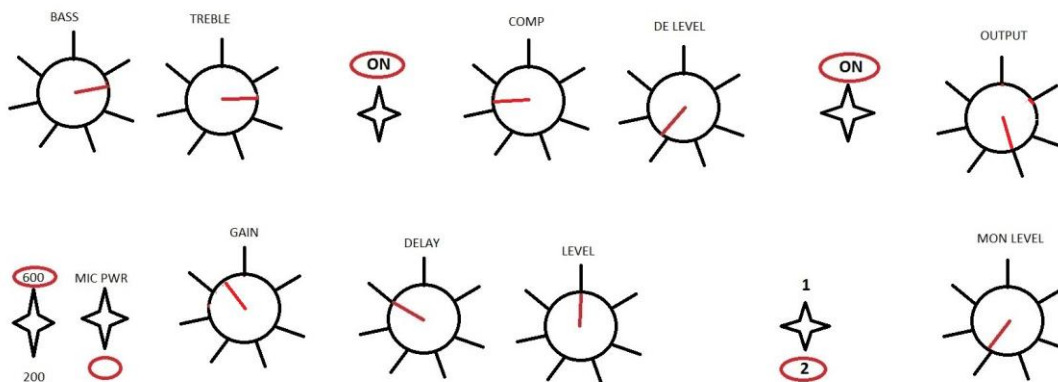
Turn on the EQ and DOWNWARD EXPANDER switches on EQ PLUS. Key radio and talk into the mic. Adjust **Balanced Audio** level in SmartSDR so you just get 0 dB on level meter in SmartSDR on voice peaks. (The peak indicator will go from yellow to red when you get to zero)

Turn downward expander switch on EQ Plus on. Plug headphones into the Flex. Turn on the monitor in SmartSDR. Key radio and adjust monitor level in SmartSDR to comfortable level. If you hear background noise turn DE LEVEL on EQ Plus clockwise until background audio starts to mute. Do not adjust too far or the audio will get choppy. On my EQ Plus I leave the DE level fully CCW.

**NOTE** – My EQ Plus is a newer version where the DE Level knob was changed from a 500K Ohm pot to a 100K Ohm pot. This change has a little bit of downward expansion enabled when fully CCW and makes the adjustment much smoother.

That's it! This should get you close. Now you can tweak to get the settings that are right for your voice. The Heil PR-40 matches up VERY well with the W2IHY equipment.

**NOTE** – The PR-40 and other dynamic mics can suffer from proximity effect. I find staying about 5 to 6 inches from the mic is the sweet spot.



EQ PLUS SETTINGS