

SETUP INFO FOR W2IHY 8 BAND EQ, EQ PLUS, and Kenwood TS-990.
By Dave De Coons, WO2X
wo2x@arrl.net

Setting radio TX Bandwidth

For rag chewing set radio TX filter bandwidth from 10 to 3500 Hz. If the bands are crowded then set bandwidth from 10 to 3000 Hz.

Leave radio TX EQ flat (off)

8 Band EQ

50 Hz +8
100 Hz +4
200 Hz 0
400 Hz 0
800 Hz 0
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.

W2ihyTo 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 o'clock (See pic at bottom)

Treble - approx 1 o'clock (See picture at bottom)

Mic impedance 600

Mic power off

Gain 12:00

Comp approx 9:30

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. Leave at 12:00 for now.

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 12:00.

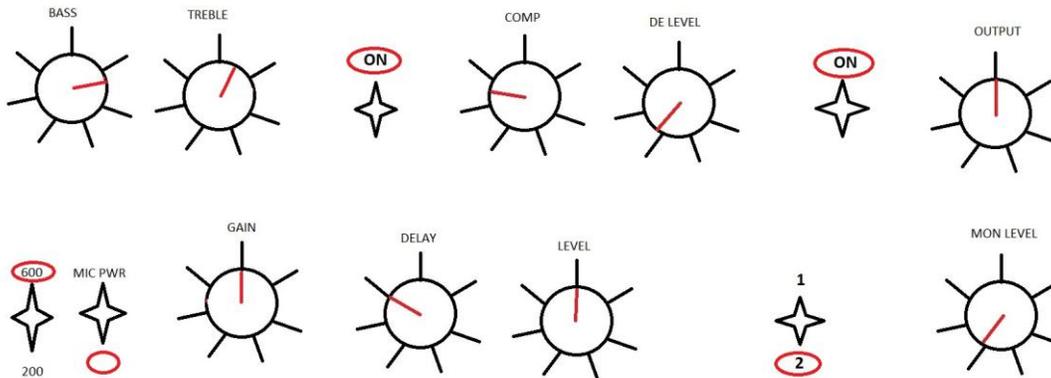
Turn on the EQ and DOWNWARD EXPANDER switches on EQ PLUS. Set radio TX meter to show ALC. Key radio and talk into the mic. Adjust OUTPUT LEVEL in upper left corner of EQ PLUS so you get about 90% of ALC range on voice peaks.

Turn downward expander switch on EQ Plus on. Plug headphones into the TS-990. Turn on the monitor on the TS-990. Key radio and adjust monitor level on TS-990 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