All Things Kenwood

Microphone Connection Basics

Kenwood rigs present relatively few problems in interfacing to Heil products. Kenwood HF transceivers have long been designed for dynamic microphone inputs, so the microphone amplifier stages have plenty of gain to accommodate the wide range of Heil dynamic microphones. These are our recommendations. For best results please consult your owners manual.

Pin Connections

8-pin Round (All Models)
Pin 1: Mic
Pin 2: PTT
Pin 7: Microphone Ground
Pin 8: PTT Ground

4-pin Round (TS-120/130/700/520/530/820/830, TR-2200/7200/7400/7500)
Pin 1: Microphone In
Pin 2: PTT
Pin 3: PTT Ground
Pin 4: Ground

8-pin Modular (TS-480, VHF/UHF Mobiles)
Pin 3: Ground
Pin 4: PTT
Pin 5: Microphone Ground
Pin 6: Microphone In

HT 3-pin 3.5 mm Plug (All VHF/UHF HT except TH-F6/7*)
Tip: +4V
Ring: Microphone In
Shaft: PTT
Note: Ground is sourced from the shaft of the 2.5 mm plug.
Heil Sound is investigating interfacing issues on these models at the present time.

DSP and Microphone Settings

Several Kenwood rigs have DSP and other settings that will allow the operator to adjust the response of the radio to your speech input from the microphone. These are easy to adjust in seconds.

It is impossible for us at Heil Sound to know what settings will sound "best" on your voice, in your station environment, with your microphone, for your interest (DX, Contest work, rag-chewing, or maximum fidelity) The recommendations below are just starting points; listen to yourself in a separate receiver (with its antenna disconnected) to determine what sounds best in your unique situation.

TS-950SDX
Menu 20 (DSP1 HPF): 100
Menu 21 (DSP1 LPF): 3100

TS-570
Menu 13 (Bandwidth): 2.4 kHz
Menu 14 (TX EQ High Boost): H
Microphone Gain: 50 (Default Level)

TS-870
Menu 29 (Bandwidth): 3000 Hz
Menu 30 (Bandshift): 0 or 100
Menu 31 (TX EQ): H or C
Menu 32 (RCV EQ): C or Off
Microphone Gain: 50 (Default Level)
Menu 22 (Mic AGC): 1 (but try 0 and 2)

TS-2000
Menu 22 (Bandwidth): 3000 Hz
Menu 21 (TX EQ): H or C
Menu 20 (RCV EQ): C or Off
Microphone Gain: 50 (Default Level)

Kenwood TS-590 Setup Recommendations

Kenwood's exciting new TS-590S transceiver promises to be popular among active operators throughout the world. We are already getting a lot of questions about the best "settings" for the on-board DSP microphone equalizer.

The TS-590S does have a very sophisticated software-programmable equalizer system, but that's not required in order to get on the air while sounding great.

Menu items 25 and 26 set the transmitter's bandwidth. Leave them at factory defaults to get started; they'll set you up for a low-end cutoff of 300 Hz, and a high-end cutoff of 2700Hz.

Now go to Menu #30, and select "C" ("Conventional"), which will give the audio frequencies above 600Hz a slight (3 dB) boost. That will be good for starters. You may also select "HB2" (High Boost 2) if you're using a wide-range microphone, like the PR 781, on the TS-590. The High Boost 2 selection will suppress the lower frequencies, and give you more "sparkle" on the high side, for good communication-quality audio.

Ultimately, though, much of the fun of acquiring a new radio is the experimentation with its many features. Read the operating manual, especially on page 32, and then try out the many available bandwidths and equalization possibilities. Listen to yourself on a separate receiver, with its antenna disconnected and its noise blanker turned off, to know exactly how you'll sound to others listening to you on the air.

Kenwood TS-990 Equalization Recommendations

Menu 00 : Adjustment Level –21
Menu .3 : Adjustment Level –16
Menu .6 : Adjustment Level –14
Menu .9 : Adjustment Level –7
Menu 1.2 : Adjustment Level –5
Menu 1.5 : Adjustment Level –1
Menu 1.8 : Adjustment Level +1
Menu 2.1 : Adjustment Level +4
Menu 2.4 : Adjustment Level +6
Menu 2.7 : Adjustment Level +6
Menu 3.0 : Adjustment Level +6
Menu 3.3 : Adjustment Level +6
Menu 3.6 : Adjustment Level +6
Menu 3.9 : Adjustment Level +2
Menu 4.2 : Adjustment Level +2
Menu 4.5 : Adjustment Level 0
Menu 4.8 : Adjustment Level 0
Menu 5.0 : Adjustment Level 0