Elecraft® MH4 Microphone

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The MH4 microphone is designed for use with the Elecraft K3, K3S and K2 transceivers. It contains a high-performance condenser microphone element optimized for SSB, AM and FM use, a push-to-talk button and two function buttons to control the transceiver from the microphone.

Use with K3 or K3S

Enable the microphone functions and set levels as follows using the K3 or K3S MENU entries. While adjusting the gain (3), compression (5) and equalization (6), hold the microphone and speak as you would in normal use.
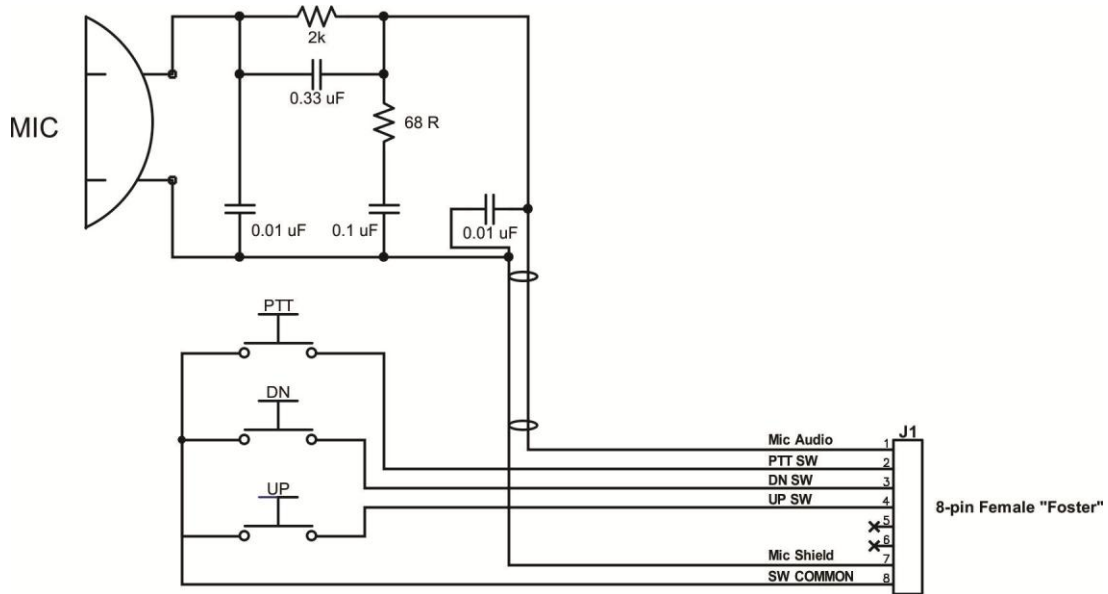
1. Turn microphone bias ON (*MENU:FP.L BIAS*).
2. Enable the UP and DN function buttons (*MENU:MIC BTN*).
3. Set the microphone gain level (rotate SPEED/MIC control) for 5 to 7 bars with Compression at zero.
4. Set the audio monitor level (hold *MON* knob in and rotate it).
5. Set the audio compression level (rotate the *CMP* knob).
6. Adjust the equalization (*MENU:TX EQ)* for the best voice quality. Typically, a male voice sounds best with 2.4 kHz boosted by 3 to 6 dB and 200 Hz and below rolled off by 3 to 5 dB.
7. To use VOX, hold the VOX switch; set up *MENU:VOX GN* (VOX gain) for the required sensitivity. When using a speaker, set up *MENU ANTIVOX:I* (VOX inhibit or anti-VOX) to avoid having speaker audio trigger the mic.
8. In addition to using the microphone PTT button or VOX, you can also tap the XMIT switch to transmit.

Note: A non-zero setting of *MON* (3, above) is needed to hear your transmitted speech. This is especially useful when setting up speech compression (CMP), since high settings can create more distortion. Avoid setting the monitor level too high, even while wearing headphones, to avoid audio feedback.

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Use with K2

The MH4 uses the same configuration as the Elecraft MH2 microphone. See *Microphone Configuration* in your KSB2 Manual for details.

Schematic Diagram

Elecraft MH4 Microphone Schematic

The push to talk (PTT), down (DN) and up (UP) buttons all connect their respective lines to the switch common.

The components associated with the microphone provide filtering.