

MIC AUDIO FEEDTHROUGH IN RX

There is mic audio feed through. But,,,, it is a characteristic of the design. The first stage of the mic amp is operational at all time. If this first stage is over driven an audible tone can be heard in the speaker. Crystal, ceramic or amplified microphones will over drive the mic amp.

The max input to the mic amp is spec'ed at 0.01v rms, or 0.028v peak to peak.

The max input to produce min spec power out is 0.005v rms or 0.014v peak to peak.

The max audio feed through at the level to produce full power out no greater than 0.000225 watts or 0.03v peak to peak.

In short the mic circuits were designed around a nominal 0.005vrms input level. There are feed-through paths through the VOX circuitry to the audio output. These paths are active in STANDBY, MOX and VOX. There are two ways around this characteristic.

First; use a mic the system was designed to operate with. That would be a dynamic mic with an output level spec'd at -50 to -53db into a 100k load.

Second; use the MOX function with a mic that opens the voice line when the mic is unkeyed. If you use VOX with a mic that over drives the mic amp you will always have some feedthrough. The feedthrough does not affect the operation it is just somewhat annoying. Generally speaking though, if you overdrive the mic amps you will be introducing some level of distortion into your transmission.