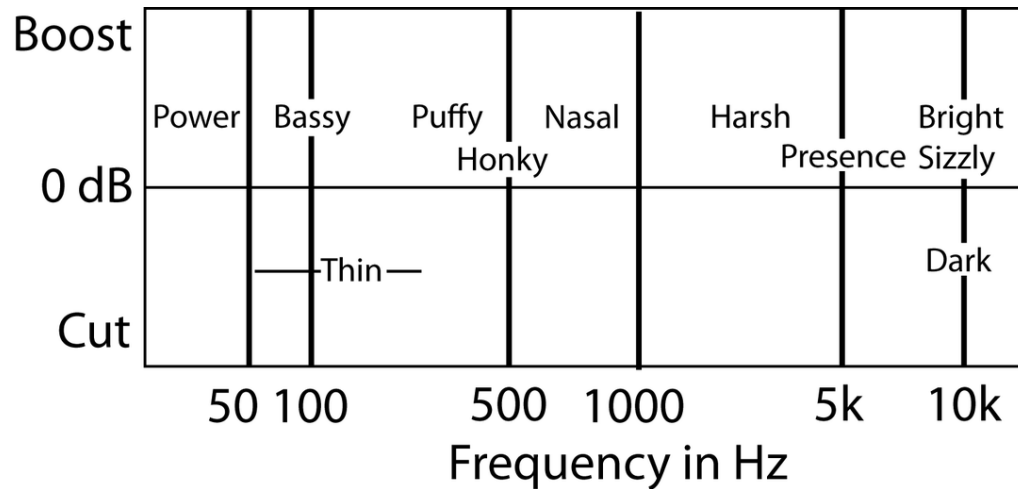


WHY DO MIXER CONTROLS HAVE SUCH WEIRD NAMES? (part 1)

By Bruce Bartlett



For example, "EQ" or "Equalization". It means "tone control", the adjustment of bass, midrange and treble in a mic's sound. EQ lets you boost or cut certain frequency ranges, making the sound bright or dark, bassy or thin, tinny or honky.

The name "equalization" came from Bell Labs. Early in the telephone era, transmitting audio through telephone lines lost high frequencies, giving a muffled sound. High harmonics became low in level compared to the rest of the spectrum. Bell Labs applied filter circuits to the signal to compensate for that loss, making the response at all frequencies equal. Hence the name. If the amplification or "response" at all frequencies is equal, that's called a "flat frequency response". Mixer EQ lets you adjust the frequency response of a mic signal or mix signal, changing its tone quality.

For example, close-miking instruments or vocals with a directional microphone causes a bass boost called "proximity effect". If you don't want to hear that unnatural bassy sound, you can turn down the bass (low-frequency EQ) in your mixer to compensate.