

VOCAL EQ FREQUENCY GUIDE

mixdown.online

If you want to know how to **EQ VOCALS**, then the most important thing to know when when mixing with EQ, is to know the full Frequency Range and what to expect when working boosting or cutting a band of frequencies.

Before you start mixing a vocal, take the time to listen closely to the RAW Vocal in the context of the mix to evaluate what frequency problems the vocal might have or frequencies that are lacking to make your vocal sit well in the mix.

Here's a **VOCAL EQ FREQUENCY CHART** that will show you what to expect when boosting (**Additive EQ**) or attenuating (**Subtractive EQ**) some key frequencies. Note that these numbers can vary from a male vocalist to a female vocalist.



VOCAL EQ FREQUENCY GUIDE

mixdown.online

Low-End (<85 Hz): Use a high-pass filter between 50Hz to 85 Hz and even bit higher with a 12 or 24 dB per octave slope to clean up many problem frequencies like mic stand rumble, air popping, and unwanted low-frequency noises.

Body (100–400 Hz): is where the fundamentals of vocal lives (Intimacy, Warmth, Proximity Effect and Mud)

If the vocal sound too boomy, muddy or too thick, Cut here with a medium bandwidth parametric EQ to thin the vocal a bit. On a thin vocal recording, boost to give the vocal some body and warmth.

If you hear the fundamentals of the vocal clearly, you will have the warmth



VOCAL EQ FREQUENCY GUIDE

mixdown.online

Boxiness (450–800 Hz): Room tones to build up and Boxyness.

Be gentle here cause this is the Fullness of the Vocal Sound.

Mid Range (800Hz to 4k): Bite, Presence and Harshness.

1 to 2.5k is the sensitive range for humans.

1K will sound Telephonic if adding too much and Hollow if cutting too much.

800Hz to 1.5k is the nasal region.

You can also boost a bit of 1-1.5k to bring your vocal up front in a dense mix, if needed.

To Smooth out harsh vocals, cut between 2.5 KHz to 4KHz range.



VOCAL EQ FREQUENCY GUIDE

mixdown.online

Brightness & Presence: (5–8 kHz): Adding Brightness by boosting 5 to 9k, but this range can also create Sibilance. This is where the "S" and "T" sound of a vocal performance can sound aggressive and annoying. Using a De-Esser or Dynamic EQ will keep the Sibilances under control.

Air (12> kHz): Give your vocal some “air” or “space” by boosting from 12 kHz and up using a shelving EQ with a medium bandwidth of 12dB/octave. The use of a vintage type EQ like the Pultech EQ does the job pretty well.

Don't forget that these numbers are guidelines. Not all vocal recordings will need the same EQ treatment. So it's important to adjust yourself with the vocal you're working with. It's like anything else... **USE YOUR EARS** ;-)



VOCAL EQ FREQUENCY GUIDE

mixdown.online

VOCAL EQ FREQUENCY CHART

Boost

