EQ starting points

Cheat sheet

For anyone at the church sound desk: where to start the EQ on six common sources, from the EQ cheat sheet in Sanctuary Mix.

High-pass first, then cut before you boost (Chapter 5). Frequencies are approximate: sweep to find the exact spot. Need more than about 6 dB of boost? Look at the mic position or the source instead.

Source	High-pass	Cut if needed	Weight, presence, air	Notes
Lead vocal	80–120 Hz	200–400 Hz mud. 2.5–4 kHz harshness, narrow.	3–5 kHz, gentle and wide. Air shelf from 10 kHz.	Harsh: a narrow cut. Dull: a wide lift. Not both. Make room in the band before you boost the vocal.
Spoken word	100–150 Hz	100–250 Hz boom. The ringing notes found at ring-out.	A gentle lift at 2–4 kHz, only if words are unclear.	Clarity over warmth. No reverb or delay, ever.
Kick	30–40 Hz, or off	250–400 Hz boxiness, wide.	Weight 50–80 Hz. Beater click 3–5 kHz.	Two mics? Inside for click, outside for weight. Usually owns the very bottom (Chapter 5).
Bass (DI)	30–40 Hz; five-string: about 30 Hz	200–300 Hz mud, wide.	Fullness 100–120 Hz (or the very bottom, if the bass owns it). Definition 700 Hz–1.5 kHz.	The definition band keeps the bass audible on small speakers and the stream. On small speakers, a five-string needs its high-pass most.
Acoustic guitar	100–150 Hz	150–250 Hz boom. 1–2 kHz pickup quack.	Sparkle shelf from 5–8 kHz.	In a full band it's rhythm: high-pass it hard. Weak? In order: guitar volume and EQ, battery, guitar EQ flat, phantom for an active DI, pad off.
Keys and piano	60–100 Hz	200–400 Hz mud.	2–5 kHz, only if it disappears.	Raise the high-pass when the bass player covers the low end.

The full sheet, with every other source (backing vocals, snare, toms, overheads, electric guitar, pads and synths, and tracks), is in Sanctuary Mix and in Sanctuary Mix Essentials: sanctuarymix.com

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