Mixing and mastering cheat sheet

From Bounce Sessions. The full version, with every source: https://bouncesessions.com/learn/mixing-and-mastering-cheat-sheet/

MIX OR MASTER

Fix it in the mix if it names one part: a buried vocal, the kick against the bass, panning, automation, effects timing. Mastering works on the whole stereo file, so a change to one instrument moves everything that shares its frequencies.

Mastering is the last small moves to tone and level, the level and gaps between songs, and the delivery files. Mixing vs mastering

BEFORE YOU BOUNCE

- Peak level: Waves and Sage Audio both publish −6 to −3 dBTP for the loudest peak. Sonarworks says peaks should stay under digital zero and, if possible, above −10 dBFS. Two automated services ask only that nothing clips. There's no official number.
- Nothing clipped, on the master output or in the exported file.
- No limiter on the mix bus just for loudness. If a limiter is part of the sound, Sonarworks suggests printing a version without it too.
- Too hot? Turn the whole mix down rather than limiting it.

How loud should my mix be before mastering?

EXPORT SETTINGS

- WAV, AIFF or FLAC. Avoid MP3 or AAC for the source.
- The session's own sample rate. Don't upsample.
- 32-bit float if your DAW offers it, otherwise 24-bit with its dither on.
- Normalization off.
- One interleaved stereo file, from before the first sound to the end of the last tail. Stems are a different service.
- A clear name: Artist - Song - Mix 04.wav.

How to export a mix for mastering

LOUDNESS

- Spotify ↗ and SoundCloud ↗ both say to master at −14 LUFS integrated, with true peak under −1 dB, or under −2 dB if the master is louder than −14.
- On its Normal setting, Spotify turns a louder master down to −14, with its limiting still in it. Its web player and third-party devices don't adjust loudness.
- Apple Music and YouTube publish no loudness target for a stereo track.
- So −14 is a starting point. The level is yours to choose.

What LUFS should I master to?

MIXING STARTING POINTS

Where published guides start. Treat them as starting points and adjust by ear. Every figure, quoted and linked

- **Low cut.** Guides high-pass a vocal around 80–100 Hz, and range from 50 Hz to 150 Hz or more for a high voice.
- **Kick and bass.** Guides put the clash at about 50–100 Hz. Waves: if the kick takes the lowest end, move the bass up to 100–300 Hz.
- **Mud.** Guides cut around 200–500 Hz. Waves hears a boxy mix up to about 900 Hz.
- **Harshness.** Guides mostly place it at 2–5 kHz, one at 5–8 kHz. They de-ess sibilance at 4–10 kHz.
- **Vocal air and presence.** Guides add air with a high shelf from about 10–12 kHz (8 to 16 kHz across them), and presence at 2–7 kHz, which overlaps the harsh range.
- **Vocal compression.** Guides start between 2:1 and 5:1 (up to 8:1), with a fast attack and a medium or auto release. Sound On Sound: 3–8 dB of gain reduction.
- **Mix bus and limiter.** Guides start the mix bus at 2:1, 30–50 ms attack, 100–300 ms or auto release; Waves: 1–4 dB of gain reduction. They take a limiter off before the bounce, or leave limiting to mastering.
- **One warning.** Louder sounds better, the guides warn, so match the level before you judge any change.

LAST LISTEN

- Play the whole song once without touching anything, and write down every distraction.
- Hear the first transient and the full ending, with every reverb and delay tail.
- On headphones: clicks, count-ins, open mics, cut breaths, noisy gaps.
- In mono and quietly: the lead still clear.
- Against a reference at similar loudness. Compare tone and impact, not meter readings.
- Import the export into a blank session and hear the start, the loudest part and the end.

The final-listen checklist

THEN CHECK IT, AND HEAR IT MASTERED

The mix check reads peaks, clipping and phase in your browser, free, and your audio isn't uploaded. https://bouncesessions.com/mix-check/

The free preview masters the whole song and plays it against your mix. https://app.bouncesessions.com/try