

MIXING CHEATSHEET



REFERENCE GUIDE FOR EQ, COMPRESSION, & PRE-EXPORT SETTINGS

| PART | EQ Cuts | EQ Boosts | Compression |
|-------------------------------|--|---|---|
| Kick | <ul style="list-style-type: none">■ Cut below 40Hz for more headroom■ To remove muddiness, cut between 100Hz and 350Hz.■ Cut at 700 to 900Hz to eliminate boxiness or hollow sounds.■ Cut after 6000Hz if your kick sounds <i>thin or papery</i> | <ul style="list-style-type: none">■ Boost between 45-70Hz to increase low-end <i>boom</i>.■ Boost between 2,500Hz and 4,500Hz for a slap/snap sound.■ Boost 8000Hz for attack and/or definition [beater sound]. | <ul style="list-style-type: none">■ Attack: 10-30ms■ Release: 100-200ms■ Threshold: -10 to -20dB■ Ratio: 4:1 to 6:1 |
| Snare | <ul style="list-style-type: none">■ Cut below 100Hz for headroom.■ Cut at 150Hz-300Hz to remove mud.■ Cut at 450Hz-750Hz for hollowness.■ Cut between 2000Hz and 4000Hz if it's too harsh.■ Cut above 6000Hz if you're getting too much <i>sizzle/hiss</i>. | <ul style="list-style-type: none">■ Boost at 8000Hz to give it a crackly sound like lightning.■ Add 2,500Hz for more mid-range attack.■ Increase 200Hz to beef up the low-end and also add warmth. | <ul style="list-style-type: none">■ Attack: 10-30ms■ Release: 100-200ms■ Threshold: -10 to -20dB■ Ratio: 4:1 to 6:1 |
| Overheads | <ul style="list-style-type: none">■ Apply a high-pass filter (HPF) at 200Hz or higher.■ Cut between 400-700Hz to reduce boxiness & hollow sounds.■ Cut between 3000Hz and 6000Hz for too much harshness. | <ul style="list-style-type: none">■ Boost from 6000Hz and up to increase airiness or breathiness.■ Boost from 3000Hz to 6000Hz to help the drums cut through.■ Boost between 1000Hz and 3000Hz to emphasize overheads.■ Boost between 200Hz and 800Hz can add body. | <ul style="list-style-type: none">■ Attack: 30-75ms■ Release: 100-200ms■ Threshold: -15dB to -10dB■ Ratio: 2:1 to 3:1 (suble), 4:1 or above (noticeable) |
| Toms | <ul style="list-style-type: none">■ Cut below 60Hz for headroom.■ Cut between 100Hz and 350Hz for muddiness.■ Cut at 700 to 900Hz to eliminate boxiness or hollow sounds.■ Cut between 2000Hz and 5000Hz for too much attack. | <ul style="list-style-type: none">■ Boost 100Hz-250Hz for the upper tom low-end.■ Boost 70Hz-100Hz for the floor tom■ Enhance the attack by boosting at 4500Hz.■ A boost at 8000Hz can increase attack as well. | <ul style="list-style-type: none">■ Attack: 10-30ms■ Release: 100-200ms■ Threshold: -10 to -20dB■ Ratio: 4:1 to 6:1 |
| Clean Guitars | <ul style="list-style-type: none">■ Cut 80Hz to 100Hz for too much rumble and low-end.■ Cut 200Hz for muddiness & 600Hz for muddiness/hollow sound.■ Cut between 1000Hz and 1500Hz for a nasal sound.■ Cut between 2500Hz and 4000Hz if it's too harsh. | <ul style="list-style-type: none">■ <i>Carefully</i> boost 1500Hz for more prominence.■ Boost at 2500Hz for more bite & aggressiveness.■ Boost between 7000Hz and 11000Hz for brilliance/sparkliness. | <ul style="list-style-type: none">■ Attack: 10-20ms■ Release: 100-150ms■ Threshold: -20dB to -15dB■ Ratio: 2:1 to 3:1 |
| High-Gain & Distorted Guitars | <ul style="list-style-type: none">■ Cut 40Hz to 120Hz for too much rumble■ Cut below 100Hz for more room for bass instruments■ Cut between 200Hz to 400Hz to eliminate muddy frequencies.■ Attenuate 500Hz to 2000Hz for "nasal" or "honky" sounds.■ Cut 9000Hz to 12000Hz for too much sparkle.■ Cut between 2000Hz and 5000Hz for abrasiveness.■ Attenuate after 5000Hz for brittleness | <ul style="list-style-type: none">■ Boost between 50Hz & 85Hz for depth, sub, & lower frequencies.■ Boost from 950Hz to 1050Hz for character & distinction.■ Boost between 2000Hz to 2500Hz for grit & presence. | <ul style="list-style-type: none">■ Attack: 20-40ms■ Release: 100-250ms■ Threshold: -10 to -20dB■ Ratio: 4:1 to 6:1 |
| Bass | <ul style="list-style-type: none">■ Cut before 50Hz if your bass instrument is too boomy and loud.■ Cut between 200Hz and 500Hz to remove muddiness.■ To remove boxy or hollow sounds, cut 350Hz to 700Hz.■ Cut between 500Hz & 2000Hz for sonic space.■ Similarly, cut after 4000Hz to make room for other instruments. | <ul style="list-style-type: none">■ Boost between 20Hz and 60Hz for depth & power.■ <i>Carefully</i> boost between 60Hz and 200Hz for warmth & body.■ <i>Sparingly</i> boost between 200Hz and 500Hz for additional warmth.■ Boost 5000Hz to 8500Hz for presence. | <ul style="list-style-type: none">■ Attack: 20-40ms■ Release: 100-300ms■ Threshold: -6 to -14dB■ Ratio: 3:1 to 5:1 |
| 808s | <ul style="list-style-type: none">■ Reduce muddiness by attenuating 100Hz to 200Hz.■ Cut between 250Hz and 500Hz to reduce muddiness/boxiness.■ Cut 500Hz to 2000Hz to remove competition with other instruments.■ Leave 500Hz and 2000Hz intact for small speaker audibility. | <ul style="list-style-type: none">■ Boost around 60Hz to 100Hz for more body and weight.■ Boost between 500Hz and 2000Hz for more harmonics.■ Boost 2000Hz and above for more <i>click</i> or <i>snap</i>. | <ul style="list-style-type: none">■ Attack: 20-50ms■ Release: 150-200ms■ Threshold: -18dB to -12dB■ Ratio: 4:1 to 6:1 |
| Lead Vocals | <ul style="list-style-type: none">■ Cut below 200Hz because most lead vocals don't sit here anyway.■ Cutting between 200Hz and 500Hz can eliminate muffled sounds.■ Cut between 500Hz and 2000Hz if your vocals are too harsh.■ Cut after 5000Hz if your vocals are too "airy" or "breathy". | <ul style="list-style-type: none">■ Boost between 1000Hz & 2500Hz for more prominence.■ Boost between 1000Hz and 2500Hz for presence.■ Boost at 4500Hz for more definition.■ Boost between 8000-12000Hz for clarity.■ Men often occupy the 100Hz - 200Hz range.■ Women occupy 200Hz - 400Hz range. | <ul style="list-style-type: none">■ Attack: 5-15ms■ Release: 50-150ms■ Threshold: -6 to -14dB■ Ratio: 4:1 to 8:1 |
| Background Vocals | <ul style="list-style-type: none">■ Cut from 1000Hz to 2,500Hz to make space for lead vocals.■ Attenuate below 200Hz low-shelf for muddiness and woofiness.■ Gently cut between 200Hz and 500Hz for more clarity.■ Cut between 4000Hz and 6000Hz to help the background vocals sit with other instruments. | <ul style="list-style-type: none">■ Boost 800Hz for richness and depth.■ Boost between 12000Hz for openness or clarity.■ Boost 3000Hz to 4500Hz for distinction. | <ul style="list-style-type: none">■ Attack: 5-15ms■ Release: 50-150ms■ Threshold: -6 to -14dB■ Ratio: 4:1 to 8:1 |
| Rooms | <ul style="list-style-type: none">■ Cut at 150Hz to 350Hz for muddiness.■ Apply a high-cut filter at 8000Hz to remove abrasiveness.■ Cut below 200Hz if your room is small and has too much bass.■ Cut after 2000Hz if you have too many reflective surfaces (concrete, glass, hardwood, tile, or drywall). | <ul style="list-style-type: none">■ Boost from 70Hz to 90Hz is for low-end.■ Boost from 5000Hz to 8000Hz to add presence.■ Boost 12,000Hz to add brightness to rooms. | <ul style="list-style-type: none">■ Attack: 1-5ms■ Release: 50-100ms■ Threshold: -15 to -30dB■ Ratio: 8:1 to 10:1 |

AFTER MIXING AND BEFORE EXPORTING THE TRACK



- ☐ Export project as an AIFF File;
- ☐ Make plenty of headroom, or in other words, keep the individual VU meters fairly low, ie, between -10dB and -15dB;
- ☐ Turn off all plugins on the master track;
- ☐ Turn off needless compressors on individual instruments;
- ☐ Cut undesirable frequencies in your tracks with EQ;
- ☐ Turn off additional reverbs and echos on the master track;
- ☐ Check the mix in mono first with the Convert to Mono feature of the Gain plug-in;
- ☐ Check for phase issues with the Convert to Mono feature? ie, disappearing instruments and sounds;
- ☐ Pan all your instruments and sounds;
- ☐ Check the volume of bass instruments, ie 808s, bass guitar, bass synths etc? They can be quite noisy (especially the frequencies below 100Hz).

THE MASTERING CHECKLIST



- ☐ Remember that the mix is just as important (and perhaps more) than the master;
- ☐ Use at least a compressor, EQ, and a limiter on your Master Track;
- ☐ Check the volume of the Master Track with the YouLean Loudness Meter. (Aim for -10 to -14dB Integrated LUFS);
- ☐ Make sure you didn't get any nasty hissing sounds as a result of compression? (Use EQ to attenuate the range between 8kHz and 12kHz)
- ☐ Set the Limiter's Output Level to approximately -1dB;
- ☐ Increase the Gain of the Limiter until your project is competitively loud, ie, integrated -9 LUFS to -12 LUFS;
- ☐ If you run into over-compression due to too much limiting, did you spread out the load between two limiters?
- ☐ Use the gain on different processors of the master track signal chain;
- ☐ Use a reference track to ensure your song is actually loud enough;
- ☐ Use the Platinum Analog Tape preset on the master track compressor;
- ☐ Use the mastering EQ preset that matches your genre;
- ☐ Remember that you don't necessarily even need to use EQ for your master;
- ☐ Remember to turn off your loudness meter before exporting your project;