Mixing Drums

Over Heads

I usually find that **a linear phase EQ is usually a good choice** for this process.

- Anything below **40Hz** is usually rumble
- The area between **250-500Hz** can often be muddy
- In the midrange around **800Hz-1kHz**, you may find honky frequencies
- Harshness can be found between **2-6kHz** (create a couple of narrow cuts [not too many though] in this area if you're going for a smoother sound)

Those are normally the problematic frequencies on overheads. You don't need to cut these frequencies all the time, only when it's necessary.

Now let's look at some good frequencies that you can boost to enhance the sound of the overheads.

- A shelf boost around **60-100Hz** can add some weight to the entire drum kit.

- Boosting around **3-5kHz** can add presence to a dull and muddy overheads track(s).
- If the OH track needs shimmer and sheen then a boost around **8kHz** should do the job.
- To add more air and sparkle (brightness) you can use a shelf boost at around **8kHz**
- Start with your compressor set at a **4:1 ratio** with a relatively fast attack, and time your release so that it blends musically with the rest of your mix. Next, adjust the threshold until your overheads' peaks begin to tickle the gain reduction meter. Try not to exceed 1dB–3dB of gain reduction

HH

200 Low Cut

Boost 3000-4000

Boost 8000-12000

Cut 5000-7000

BD

A) 20-50Hz – This area is mostly useless for most kick drum recordings, unless a sub bass mic has been used. Here you'll find rumble and floor noise that you'll almost always want to get rid of. Nothing interesting down here!

B) 50-80Hz – Words associated with this area are; boomy, fat, and thud. If you want to achieve more or less of this, this range is usually where you'll find the majority of it.

C) 80-200Hz – The kick drum isn't just made up of low lows. As we creep up past 120Hz you can add plenty more power and impact by boosting around here.

D) 200Hz-1kHz – As I mentioned earlier, to get rid of any boxiness and cheapness, the middle of this area at around 500Hz is usually the sweet spot. Admittedly, you will be mostly cutting frequencies in this area, doing so will normally help you achieve a more rounded and clear sound.

Here are some suggested bass drum compression settings[12345]:

- Set your ratio between 3:1 – 4:1.

- Set your attack very slow (100ms) and your release very fast (25ms).
- Decrease the threshold until you are getting 5-10dB’s of compression.
- Threshold of the compressor at zero decibels, Ratio – 5:1, Attack – 100 ms, Release – 1 ms.
- Attack: 2-8ms, Release: 0.4s/Auto, Ratio: 7 – 12:1, Knee: Hard, Gain red: 5-13dB.
- Use two compressors, each applying 2-4dBs of gain reduction with a ratio between 3:1 - 5:1, and medium attack and release times.

Here are some EQ settings for snare drums[1234]:

1. **High pass around 70Hz** to remove unwanted frequencies while keeping body.
2. **Boost or cut at 150-200Hz** to add body or clarity, respectively.
3. **Cut around 400Hz** to remove boxiness.
4. **Roll off the extreme lows around 80Hz** to avoid interference with kick and sub bass.
5. **Add a gentle boost around 7kHz** and a high shelf around 12kHz to let the snare cut through.
6. **Boost the highs around 2-3 kHz** and cut the lows around 80 Hz for metal music.
7. **Add compression with a ratio of 4:1 and a threshold of -20 dB**.

Double Bass

The upright bass covers a wide frequency range, typically from around **40 Hz to 2 kHz.**

The fundamental frequencies of the upright bass strings lie between **40 Hz (E1) and 247 Hz (B2).**

Key frequencies to focus on for EQ adjustments include the following

Frequency Range	Description
60-80 Hz	The low-end thump and weight of the bass.
200-400 Hz	The body and warmth of the instrument.
800 Hz-1 kHz	The attack and string noise.
1-2 kHz	The presence and articulation of the notes.

2. Low-End Management

High-Pass Filter (HPF): Apply a high-pass filter to remove unnecessary sub-bass frequencies. Set the HPF around 60 Hz to 80 Hz to clean up the low-end rumble without affecting the fundamental frequencies of the bass.

- **Boost Low Frequencies**: If the bass lacks body, you can boost around 80 Hz to 200 Hz to add fullness and depth. Be cautious not to overdo it, as too much boost can make the sound muddy.

3. Midrange Adjustments

- **Cut Muddiness**: The 200 Hz to 300 Hz range can often introduce muddiness. Apply a gentle cut in this range to clear up the sound. This helps in making the bass more articulate and less boomy.
- **Enhance Punch**: For more punch and presence, consider boosting around 500 Hz to 1000 Hz. This range adds definition and helps the bass cut through the mix.

4. High-End Clarity

- **Boost High-Mids**: To add clarity and definition, especially to the attack of the notes, boost around 2.5 kHz to 5 kHz. This can help the bass stand out without sounding harsh.
- **Low-Pass Filter (LPF)**: Apply a low-pass filter to roll off unnecessary high frequencies above 5 kHz. This helps in placing the bass in its own space within the mix and avoids competition with other midrange instruments.

5. Compression

- **Light Compression**: Use a compressor with a slow attack and moderate release to even out the dynamics without squashing the natural sound of the upright bass. Aim for around 4 dB of gain reduction.

- Double Bass
- Explanation of Different Settings in EQ
- Okay, enough blabbering. Let’s understand the settings that will come handy and be useful for you.

- You are ready to get equipped with this new weapon in your musical arsenal.
- Before we take a step any further, you should be familiar with the different frequency ranges and what exactly they are used for.
- Now that we know the two extreme frequencies that equalizers have (i.e. 20Hz-20kHz), we have a whole new range to play in between these two boundaries.
- Every frequency that falls in this range is used to enhance the sound quality of the music to make it sound melodious.
  All these frequencies are broadly divided into 6 main categories:
- **1. Sub-Bass**
- It usually consists of frequencies ranging from 20Hz to 60Hz. In order to hear that, you need a good music system or a good pair of headphones.
- **2. Bass**
- Moving on to bass, it consists of a frequency range between 60Hz to 200Hz.
- So bass lovers, today you have finally found your frequency range.
- **3. Low Mids**

- This plays a significant role in mixing up music and ranges from 200Hz to 600Hz.
- **4. Mids**
- This is the range that human hearing mainly focuses on. That is, the range of
- 600Hz to 3KHz. So, getting it right here can do wonders.
- **5. Upper Mids**
- Things start to get a bit crispy in this 3KHz to 8KHz range. You all have heard about infamous EDM. Be careful with this range of frequency spectrum. If it can make you dance to your favourite song, it can also make your ears bleed (if you didn't mix it up properly).
- **6. Highs**

All the frequencies above 8KHz fall in this range. Here we get our treble as well as "air" frequencies. These frequencies are often more felt than heard like in case of sub-bass, but it makes quite an impact.

Bass And Treble

The music we hear is composed of many different frequencies merged together. Out of all the frequencies, the lower ones collectively

form the bass for the musical harmony while the higher ones contribute to the treble. The treble, bass and volume (how could we forget this!) are adjusted to hit a sweet spot so that the music sounds even better (and finer). The adjustments, however, vary according to the audience and music.

The bass has proven to be a personal favourite of many. The charm in parties and long drives too. Bass has an ever-growing “FAN-BASS”.

So let’s learn to make the perfect adjustments for more enhanced and clearer bass!

Using EQ Settings For Better Bass In PC

What could be better than sitting at home and tuning to your favourite track?

If you don’t have a home theatre system in your home, don’t worry; your pc will get the job done with a few variations.

Windows includes a basic sound equalizer that can be adjusted.

1. You need to reach out for the “**Volume Control**” icon in the tray in the bottom

right corner. Right click and select "**Playback Devices**".

2. Open the speaker properties by right clicking on the speaker icon.
3. Look through all the sections of "**properties**" that allows you to adjust the bass. It can be displayed under the name of "**bass boost**", "**bass balance**" or "**enhancement**".
4. There you will see a bunch of options including "**equalizer**". Click on "equalizer" and several options such as pop, jazz, classical, bass will be available.
5. Click on "**bass**".

And here you are, free to do all the magic with your fingertips.

On the horizontal axis, you will see the frequency ranges in hertz(Hz) and on the vertical axis, there is sound in decibel(dB). Divided into two sections by 0dB. Above 0db is +6db and +12db and below it is -6db and -12db.

Set your sub-bass to +6db, your bass to slightly below +6db. Set low mids to 0db and set your mids to the range exactly as your

bass. And your upper mids and highs slightly below mids.

Now put on your dancing shoes and enjoy!

Using EQ Settings For Better Bass In Headphones

We are all guilty of travelling with headphones on and shutting the world down, who doesn’t love that! But to add to this wonderful experience; you need to adjust the bass settings in your headphones.

Simply open the equalizer settings on your phone and

1. Set sub-bass slightly above +6db.
2. Bass to exactly in between 0db and +6db
3. Set low-mids at slightly below 0db.
4. Set mids and upper mids exactly where the bass adjusted to.
5. Finally, your highs must be adjusted slightly lower than upper mids.
6. Reverb & Delay. Makes the vocals wider. It’s about taste.
7. Compress. Use 2 Compressors. One with big release and the attack somewhere in the middle and the other with fast attack and release.

Moving up to the mid-range, from 350 Hz to about 1.5 kHz, you find the core of the violin's

sound, **the part that makes it instantly recognizable**.

As you venture into the higher frequencies, those above 1.5 kHz, you start to encounter the brightness and brilliance that add character to the violin's timbre.

This understanding of the violin's frequency range is crucial when it comes to equalizing it effectively, whether you want to emphasize its warmth, clarity, or brilliance.

- Rumble: 0 - 100 Hz
- Warmth: 200 - 350 Hz
- Mud: 100 - 250 Hz
- Presence: 2.4 - 7 kHz

Template for Rock Mix

Equalizer

A. Drums

1. BD

250 έως 900 ψάχνω και κόβω συχνότητες

8K (κόπανος) / 4.5k (παρουσία)/ 2.5k (Δέρμα) / 60 Δίνω (όγκος)

2. SD

600 έως 900 ψάχνω και κόβω συχνότητες

8K (παρουσία) / 2.5k (Δέρμα - Ατάκα) / 200 Δίνω (Όγκος - Σώμα)

3. Tom + FT

8K (Παρουσία - Δέρμα) / 4.5k (παρουσία - Δέρμα) / 200 Δίνω (Σώμα) / 80 (Όγκος)

4. OH + HH

Low Pass έως 600 / 2K Κόβω / 6k και πάνω εξαρτάται την ηχογράφηση

B. Bass

4.5 K & 100 έως 300 Κόβω

1K / 1.5k /70 Δίνω

C. EL.GTR

Low & Hi Cut Filter

Cut 5K-6k / 3K-4K (Muddy around 5300 & 3100)

D. AC.GTR

Low & Hi Cut Filter

Cut 5K / 200-300 / 150-200 (Muddy around 170 & 280)

Boost70

Group Channels

We make group Channels for OH, Rack, & Drums, El Guitars, Ac Guitars

We can make Low & Hi Cut Filters by ear to develop more the sound of the mix.

Gate

Kick & SD need gate especially with a lot of attack and threshold. The release it deepened the recording

Toms

Toms are a bit tricky. We can use 3 plug-in with the exact order

- Equalizer. We cut 4k and above to clean the muddy sound of trembles
- Reverb. O.80 reverb Time & around 37 oms Preedelay
- Chorus or Pitch Sifter. Make them bigger inside the mix. Use them by ear and be careful with the depth.

Effect Channels

Usually we make Reverb & Delay Channels for Each group Channel. We peak different effects for each instrument and send them in the effect channels

Vox

- Equalizer. Boost 8K, 4.5K, 1-15.K and low Mids

Best EQ Settings for a Piano

When it comes to the "best" EQ settings for a piano, it really depends on the recording and the sound you're trying to achieve.

However, here are some general EQ settings that you can use as a starting point:

Getting Rid of Resonance

Resonant frequencies on a piano can cause certain notes to ring out longer or louder than others, which can make the overall sound feel uneven or unbalanced.

Start by identifying the frequency that's causing the resonance.

You can do this by using a narrow-band EQ to sweep through the frequencies while playing the piano, **listening for any notes that ring out longer or louder than others**.

Once you've identified the resonant frequency,

you can use a notch filter to cut that frequency.

A notch filter is a narrow-band EQ that reduces the level of a specific frequency without affecting the surrounding frequencies.

Set the notch filter to the frequency you've identified, and **adjust the Q-factor to match the width of the resonant peak**.

A dynamic EQ can be a useful tool for reducing resonance on a piano.

By using a dynamic EQ to target the resonant peak, **you can reduce its level only when it becomes too loud**, which can help preserve the natural sound of the piano.

Remember, removing resonant frequencies from a piano is a subtle process that requires careful listening and experimentation.

Use your ears and take your time to find the best solution for your specific situation.

If you find yourself making more than three notches, then you might want to re-record, or

else you risk making the piano sound unnatural.

Remove Rumble & Boom

Rumble and boominess are low-end frequencies that can make the sound of a piano feel too thick or unclear.

Here are some techniques you can use to get rid of rumble and boominess on a piano:

Cut the low frequencies with a high-pass filter - Cut the frequencies below 50-100 Hz, to remove any rumble or noise from the piano recording.

This should make the sound of the piano feel cleaner and more focused.

Use a dynamic EQ to control dynamic low end - A dynamic EQ allows you to reduce any boominess without affecting the rest of the frequency spectrum.

This can be especially helpful if you're dealing with a recording that has dynamic low-end

information that's difficult to control with a static EQ.

You can locate these frequencies around 80 Hz to 200Hz.

It's important to consider the context of the music and make sure that any adjustments you make are helping to serve the overall sound of the mix.

How to Reduce Muddiness on a Piano

Muddiness on a piano is frequently caused by an excess of midrange frequencies, which can make the sound cluttered or unclear.

Start by finding the frequencies that are causing the piano to sound muddy.

You can **locate these frequencies between 200 Hz and 400 Hz**. Use a broad Q-factor so that you can affect all the notes that are causing the problem.

Be careful with this, because this is usually where you find the fullness and warmth of a piano.

So cutting too much can make the piano sound thin in the mix.

It's best to **make this cut while listening to the entire mix**, not in solo.

Fixing Harshness

Although this is a rare situation, you could find yourself working on a harsh piano sound. This usually happens if you're mixing a piano solo.

In that case, you can **find these problematic frequencies around 2 kHz to 5 kHz**.

When cutting harsh frequencies, it's generally a good idea to use a small wide Q-factor to make broad cuts.

This will help you reduce the harshness without making the piano sound too dull or hollow.

If you're having trouble finding the exact frequencies that are causing the harshness, you can use a dynamic EQ to target them.

A dynamic EQ will usually reduce the harshness without affecting the rest of the frequency spectrum.

Make sure to listen to the piano in context with the rest of the mix and adjust the EQ settings as needed.

Fullness and Warmth

Adding fullness to a piano can help give it more body and depth in the mix.

One of the easiest ways to add fullness to a piano is by boosting the lower midrange frequencies.

By **boosting frequencies in the 80–120 Hz range**, you can add warmth and depth to the sound of the piano, which can make it sound fuller and more resonant.

Depending on how the piano was recorded, **you can also find fullness around 180–300 Hz**.

Remember to use a broad Q-factor to bring up

all the necessary notes since a piano is usually dynamic (the notes keep changing).

Another way to boost thickness is by using a low-shelf filter. Boosting the low frequencies around 120 Hz with a shelf filter can add more fullness to the sound.

You also need to **apply a high-pass filter around 80 Hz before doing that** to make sure that you don’t bring up the rumble or boominess.

Increasing Clarity and Definition

Increasing the definition of a piano can help it stand out in a mix and make it sound clearer and more articulate.

This boost is really useful if the piano is not audible during the loudest parts of the song.

By **boosting frequencies in the 1–5 kHz range**, you can add clarity, which can help the piano cut through the mix.

When adding definition and clarity to a piano with EQ, it's important to use a gentle touch.

Too much EQ can make the piano sound harsh or unnatural.

Make small adjustments to find the sweet spot where the piano sounds clear but not harsh or piercing.

Adding Presence & Air

Adding sparkle and clarity to a piano can make it sound more bright and lively in the mix.

Boosting frequencies in the 5–12 kHz range can add brightness and air to the sound of the piano, which can make it sound more lively and clear.

This is useful if the piano is sounding too dull and boring. Increasing these frequencies will add some excitement.

Remember, adding presence and air to a piano with EQ requires careful listening because too much can bring up high-end hiss and noise.

How to EQ Piano for Worship

By using EQ correctly, you can achieve a beautiful, full-bodied piano sound that complements and supports the other instruments and vocals in your worship music mix.

However, there are a few specific considerations to keep in mind.

Here are some tips and techniques for achieving a great piano sound for worship songs:

Cut the Low Frequencies - The bass and drums often carry the low end, so you don't want the piano to compete with those instruments.

Use a high-pass filter to cut the frequencies below 80-100 Hz. This will help clean up the sound and make room for the other instruments in the mix.

Boost the Mid-Range Frequencies - Since the piano often plays a supportive role, you need to provide a rich and full-bodied

foundation for the other instruments and vocals.

To achieve this sound, boost the mid-range frequencies using a parametric EQ. Start with a boost around 1-5 kHz and adjust to taste.

This will add warmth and presence to the sound of the piano and help it cut through the mix.

Add Some Sparkle with High Frequencies - In worship music, the vocals often take center stage, so you want the piano to provide a supportive and complementary sound.

Boosting the high frequencies can add some sparkle and brilliance, making it stand out in the mix without overpowering the vocals.

Use a high-shelf EQ to boost the frequencies around 5-10 kHz to add sparkle.

Adjust the Balance - Finally, adjust the balance of the different frequency ranges to achieve a balanced and full-bodied sound.

Use your ears and experiment with different EQ settings until you find a balance that works

well in the context of your worship music.

Use these settings as a starting point.

Trust your instincts when it comes to EQing the piano, and don't be afraid to try new things until you find the perfect sound.

Piano EQ Cheat Sheet

Here's a handy cheat sheet that you can use as a quick reference when EQing a piano.

Let’s start with one for surgical EQ.

- Rumble: 20 Hz - 80 Hz
- Boominess: 80 Hz - 180 Hz
- Muddiness: 180 Hz - 300 Hz
- Boxiness (hollowness): 400 Hz - 1 kHz
- Harshness: 2kHz - 5kHz
- Hiss & Noise: +12 kHz

Remember, you don’t always have to cut those frequencies; only cut when it’s necessary.

Here’s one for tonal EQ. You can use this cheat sheet when boosting frequencies to enhance your piano.

- Warmth & Fullness: 80 Hz - 300 Hz
- Depth: 400 Hz - 1 kHz
- Definition & Clarity: 1 kHz - 2.5 kHz
- Presence: 2 kHz - 5 kHz
- Hammer Attack: 7 kHz - 8 kHz
- Air & Brilliance: 8 kHz - 12 kHz

Remember, this cheat sheet is just a starting point, and you should use your ears and experiment with different EQ settings to find the perfect sound for your piano recording.

How to EQ Strings

Violins

Violins produce a broad range of frequencies, **typically spanning from around 196 Hz (G3) to as high as 4.18 kHz (B7)**.

The lower frequencies, roughly between 196 Hz and 350 Hz, give the violin its warm and full tone.

How to EQ Cello

Cellos have a lower frequency range compared to violins, **generally from about 65 Hz (C2) to 987 Hz (B5)**.

The lower frequencies, approximately from 65 Hz to 200 Hz, create the deep and resonant low-end of the cello.

Moving up into the mid-range, from 196 Hz to 783 Hz, **you encounter the core of the cello's tone**, giving it richness and warmth.

When you reach the upper mid-range, from 783 Hz to 1.5 kHz, clarity and definition come into play.

Finally, beyond 2 kHz, the high frequencies add sparkle and presence to the cello's sound.

- Rumble: 0 - 60 Hz
- Mud: 200 - 300 Hz
- Warmth: 400 - 600 Hz
- Presence: 1.5 - 4 kHz

How to EQ Double Bass

Double basses produce a deep and resonant sound with **frequencies ranging from roughly 41 Hz (E1) to 587 Hz (D5)**.

The extremely low-end frequencies, from around 41 Hz to 98 Hz, establish the foundation and rumble of the double bass's tone.

Moving up into the low frequencies, approximately 98 Hz to 196 Hz, you **add warmth and fullness to the sound**.

As you progress into the mid-range frequencies, from 196 Hz to 783 Hz, you define the double bass's character and clarity.

Understanding how these frequency bands interact is essential when equalizing a double bass to achieve the desired tonal qualities.

How to EQ Viola

Violas typically occupy a **frequency range that spans from approximately G3 (196 Hz) to B6 (1.9 kHz)**.

To understand how to equalize a viola effectively, it's essential to recognize these divisions in the frequency spectrum.

The low-end, generally spanning from around 200 Hz to 300 Hz, impart warmth and depth to the viola's sound.

As you move into the mid-range frequencies, which range from approximately 300 Hz to 1.5 kHz, you encounter the heart of the viola's tone, **giving it its unique character and resonance**.

Venturing into the higher frequencies, those above 1.5 kHz, you find the brilliance and clarity that add sparkle and definition to the viola's timbre.

- Rumble: 0 - 100 Hz
- Warmth: 150 - 300 Hz
- Mud: 150 - 250 Hz
- Attack: 500 - 1kHz

- Presence: 2.4 - 4 kHz

How to EQ Banjo

Banjos cover a distinctive frequency range, **spanning from approximately 196 Hz (G3) to 3.52 kHz (E7)**.

The low frequencies, roughly between 196 Hz and 293 Hz, contribute to the banjo's depth and thump.

As you move into the mid-range, from 293 Hz to around 1.5 kHz, **you encounter the heart of the banjo's twang and character**.

Beyond that, in the higher frequencies, those above 2 kHz, you find the brightness and articulation that make the banjo stand out in a mix.

How to EQ Mandolin

Mandolins cover a **frequency range extending from approximately 196 Hz (G3) to 2.48 kHz (B6)**.

The lower frequencies, roughly from 196 Hz to 293 Hz, contribute to the mandolin's body and resonance.

As you move into the mid-range, from 293 Hz to around 1.5 kHz, **you encounter the core of the mandolin's sound**, providing warmth and character.

Beyond 1.5 kHz, in the higher frequencies, you discover the brightness and articulation that add life and definition to the mandolin's timbre.

Tips for Mixing Multiple String Instruments

Mixing multiple string instruments can be a delightful but challenging task.

To ensure they harmonize seamlessly in your mix, here are some practical tips.

First, **establish a clear hierarchy**.

Decide which instrument should take the lead, providing the main melody or emotional center.

The others should complement and support this lead instrument.

Next, **consider panning**.

Spread the instruments across the stereo field to create space and depth.

The lead instrument can stay centered, while the others can be panned left and right, depending on their roles.

When it comes to EQ, **make room for each instrument**. Use EQ to carve out their unique frequency ranges.

For example, the cello's warmth can sit in the lower midrange, while the violin's brilliance can shine in the upper frequencies.

Pay attention to the dynamics.

Ensure that each instrument's volume level suits the context.

Use automation to control the volume, making adjustments as needed to maintain balance.

Reverb and delay can add depth and dimension.

Apply these effects sparingly, considering the acoustic environment you want to simulate.

A hall reverb can make it sound like the instruments are in a large space, while a plate reverb can provide a more intimate feel.

Don't forget about compression.

Use it to even out the dynamics within each instrument, **ensuring they sit well together**.

Be gentle with the settings, avoiding excessive compression that can squash the life out of the performance.

Lastly, listen critically.

A/B test your mix against reference tracks to fine-tune the balance and overall sound.

Experiment and make adjustments until all the string instruments blend harmoniously, creating a captivating musical landscape in your mix.

Woodwinds

Flute

Because the frequencies of the flute lie between 300Hz and 5000Hz, it's best to increase the frequencies around 500Hz to add warmth, attenuate the frequencies at 3000Hz to decrease the amount of breathiness, and increase the frequency range between 4000Hz to 5000Hz to adjust the brightness.

With that said, how you apply EQ to the flute depends on what notes you're actually playing.

EQing a flute is a practice where there are many ways of going about it simply on account of the various kinds of flutes. You have the concert flute, the piccolo flute, the bass flute, the alto flute, soprano flute, tenor flute, and the treble flute, just to name a few.

While everyone has their own way, the setting shown above is what I found to work the best.

For instance, if you've recorded a track using notes around the C1 octave (middle C), it's

going to sound quite a bit different frequency-wise than at C3 (get PianoForAll – the best way to learn piano for music production – if these terms aren't clear to you).

Additionally, how the flute sounds in your recording depends a lot on the type of microphone you've used as well as from what distance the player was positioned from the actual microphone (the AT2035 on my Product Page is a great mic for this).

With all that in mind, this article is going to offer somewhat of a guideline, or rather, a starting off point from which you can figure out your own EQ

Clarinet

Boost for clarity and presence, cut to reduce harshness or to make room for other elements. HIGH MIDS – **2-6KHZ:** High mids add definition and attack to instruments and vocals. Boost to make elements cut through the mix, cut to reduce sharpness or to create space for other sounds. HIGHS – 6-8KHZ: The high frequencies provide brilliance and sparkle.

Trumpet

- **Low frequencies (below 250 Hz)** – Responsible for the warmth and body of the trumpet sound.
- **Mid frequencies (250 Hz to 2 kHz)** – Contains the core of the trumpet's character and can affect its perceived "honkiness" or "brassiness."
- **High frequencies (above 2 kHz)** – Contributes to the brightness, clarity, and articulation of the trumpet sound.
- Gently boost low-mid frequencies around 200-400 Hz to add warmth and body.

- Cut mid frequencies around 800 Hz to 1.2 kHz to reduce any harshness or excessive “honk.”
- Boost high frequencies around 4-8 kHz to add a subtle sparkle and enhance the trumpet’s natural overtones.

In classical music, the trumpet often needs to sound clear, precise, and well-defined to cut through orchestral textures.

Consider these EQ techniques:

- Cut low frequencies below 200 Hz to minimize any boominess or muddiness.
- Boost mid frequencies around 1-2 kHz to enhance clarity and definition.
- Gently boost high frequencies around 6-10 kHz to add a touch of brilliance without sounding harsh.

The following settings are common and versatile:

- Threshold: –4dB
- Ratio: 4:1–6:1
- Attack: 5–10 ms
- Release: 125–175 ms
- Gain: Adjust so that the output level matches the input level. You don’t need much added gain.

Clarinet

Rumble: 0 - 100 Hz Warmth: 150 - 300 Hz

Mud: 150 - 250 Hz Attack: 500 - 1kHz

Presence: 2.4 - 4 kHz

Compression

Fet Compressor (CLA-76) gives color and adding tone and punch to. They also have very fast attack and release. Good choice for Drum Kit, Ac Gtr

Tube Compressor (H- Comp, Kramer PIE) used to sub groups. Good choice for classical instruments. You can use them to vocals after a fast compression or limiter to smooth out the average of the signal and make the vocals a little bit warmer.

Slow attack and release. Tube compression can glue al mix together. Smooth compression but very obvious saturation. They adds warm low ends and brightness.

Optical Compressor (CLA 3A) put precision to the words. Good choice for vocals and guitar.

Vca Compressor (SSl, API, NEVE, DPX, DISTRESSOR)

Controls the dynamics without put much tone. You can use them to master the mix or individual to channels.

DPX is for drums