RODIN MBC

SpaceF Devices

2026

https://spacef-devices.com/

RODIN MBC DESIGN INTENT AND FIRST EAR

- **Powerful on single instruments** (which is what it was originally designed for).
- **Mastering:** you will have to know what you are doing because you will want to make your mix shine, and Rodin MBC can do that easily. Rodin MBC is a kind of dynamic equalizer and sits probably best at the beginning of your mastering chain.
- **Sound enhancement (live PA etc) :** yes.

Check the **100+ presets of the "Music" factory bank**, in the factory presets.

and audition them using this YouTube Playlist:
https://www.youtube.com/watch?v=cNRC-ypVMMA&list=PLqC7n1UlDPDKt82SzcLA_kuBV_OGCrYIy

The playlist contains the correct version of each track, in the same order as the preset list.

- Play the playlist with YouTube's volume set to maximum and Rodin MBC input at -6dB Trim (0dB Boost).
- Use the bypass button (top right) to compare the original with the transformed version.

The bypass includes a **level attenuator**, allowing a true comparison between the input ("dry") signal and the processed ("wet") signal. You will also find bypass buttons for each EQ section and for the compressors.

Bypass + level attenuator (-9/-12 is typical):

You will find presets for movies and podcasts (improving dialogues, removing background noise or high level effects dynamically), as well as synths and drums demos (no talk videos!).

(Movie/synth playlist link to be published)

A few tracks made with AI are available to download here to use on the "AI Music" factory presets.

(link to download audio)

For the "Music" presets, set the input Trim at -6dB with 0dB Boost.

The purpose of the "Music" presets is to demonstrate a **shift in focus**—on specific instruments, on the voice, or simply to offer a different tonal character.

Note that some presets may have to be adapted to your own speakers, because they are applied to commercial recordings and so it compensates for my own speakers. Some

presets bring vocals forward, others focus on certain instruments, add clarity to movie soundtracks, or help remove annoying resonances in live recordings.

Always compare the processed signal with the original to clearly understand what has been done (and make your ears understand what is going on), and then adapt the settings to better suit your own speakers and listening environment.

Why Tempered Multiband ?

Because it sounds great, is much easier to use, and does not really restrict you in terms of frequency choices, on the contrary. Everything is harmonically coherent inside the device. The result is a relevant, musical sound with presence and clarity, even when sources or instruments are tuned differently (some presets of the “Music” playlist use quarter tones). You could also say that it is grounded in the real-world listening: listeners unconsciously recognize and relate to these frequency ranges that are present everywhere and in particular in modern recorded music.

Of course, there are other features that take advantage of this design.

Differences between *Rodin Eq* and *Rodin MBC*

Rodin EQ follows a linear signal flow, where multiple EQ stages are applied serially, one after the other. FATs are placed in various places inside the circuit, where they create a specific sound.

Rodin MBC, on the other hand, applies each EQ section to its own frequency band, paired with compression. It is a deep redesign: every section was rethought to provide a more refined sound palette, while remaining faithful to the tonal intentions of the original Rodin EQ.

- The former **double FAT** system has been replaced by **three independent engines**, one for each band (bass, mids, highs). This design saturates less easily and delivers a more sophisticated, less aggressive character. Additional processing has been added to adapt it to each band (different drive, different sound on mids and highs).
- **High-Shelf 2 can now be linked** to the High Trim potentiometer.
- The **High Parametric and Shelf 2 Ratios** now range from **–200% to +200%** (previously limited to ±100% on the High Para, and was not available on Shelf 2).
- The **“Add Pre” Q** is now constrained to 10, 7 or 5 like the other bands, instead of extending up to 20 previously (which is completely useless in real situations).
- The **maximum Q** for all equalizers can be set to **5, 7, or 10**, allowing more precise shaping. This setting is stored in presets.
- The **High Cut** in the *Circuit Damper* is significantly stronger, with a roll-off of **–6 / –9 dB instead of –3 dB**. Its range has been lowered to around **11 kHz**, making its effect more audible on all speaker systems. It can begin to behave like a low-pass filter, but it was not designed to function as a traditional low-pass filter.

Audio Flow in Rodin MBC

Input → Add Pre EQ → Band Separation → Bass / Mid / High EQ → Compression → Mix & Output

Each band is processed independently, with its own equalization and compression stage, before being recombined into a stereo signal at the output.

The **Add Pre EQ** operates on the unprocessed (dry) signal *before* multiband separation, allowing tonal shaping ahead of the band-specific processing.

THE TOP BAR (FROM RIGHT TO LEFT)

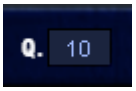
On the far right, you will find the standard **Scope device controls**, including the **Close** button and the **Stay on Top** button.

Next is the **Bypass** control. The bypass includes a **level attenuator**, which is essential for making meaningful comparisons between the dry and wet signals. Note that this input level attenuator is **not stored in presets**, only in projects, as it is highly dependent on the current material. Values between **–9 dB and –12 dB** (or even more) are typical. It also depends on what frequency you have boosted.

This is followed by the **Stereo / Mono input selector**, and the **main preset list**.

The **“F.” preset list** restores **only the equalizer frequencies**, without affecting gain, Q, custom ratios, or any other parameters. This allows you to keep your current settings while auditioning different frequency “tunings.”

The **“Q.” drop-down menu** lets you define a **maximum Q value** for all parametric EQs.



Available options are **10, 7, or 5**. This reflects an open design choice: while a maximum Q of 7 is sufficient for almost all situations, there are cases where values above 7 can be useful.

You may choose to leave it at 10 for maximum range, but in practice such high Q values are rarely used. Lower limits such as 5 or 7 naturally constrain you to values that are genuinely useful **99.9% of the time**.

The selected Q limit is **stored in presets**.

Next, you will find a display for the preset name, the **MIDI channel selector** along with the standard **MIDI activity LED**.

The **“F. Table”** is built directly into the device and provides an overview of the **10 octaves covering the 20 Hz – 20 kHz range**. It is included so you do not need to search online or open external reference documents while working.

THE EQUALIZER SECTIONS

All equalizers are located at the **top of the device**.

Bass Section

The **Bass** section includes:

- **One low shelf**
- **One “Root” section**, containing **three bands,**
- A **“Sculpt” parametric equalizer**, designed for precise refinement of low-frequency or low mediums content

Each section features:

- A **Bypass** button (disables the specific EQ section)
- A **frequency-only preset**, allowing you to save/load frequencies independently (for example, setting the Bass to **A** while tuning the Mids to **D** with presets, without changing your Q and Gain). It can also be interesting to save instrument specific frequencies.

The **Root** section frequencies are **harmonically pre-set**, but also include standard “atonal” values such as **50 Hz** and **60 Hz**. These do not correspond to any musical tuning or temperament, but are reference frequencies that you may choose to use or to ignore.

Mediums and Highs Sections

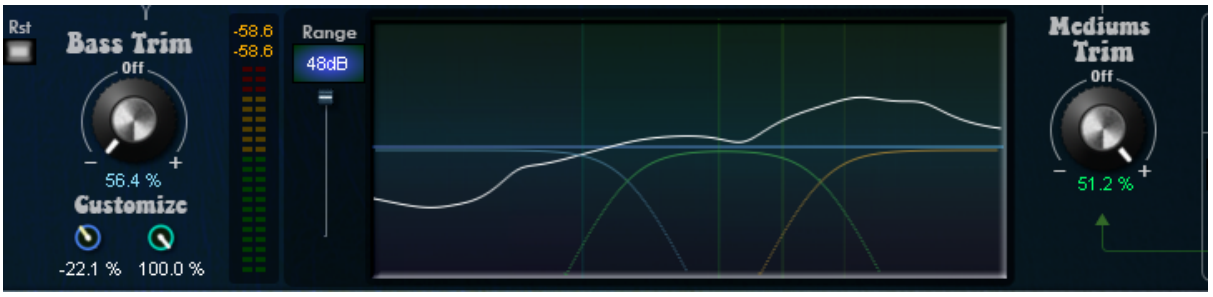
The **Mediums** section consists of **four parametric equalizers**, while the **Highs** section includes **two shelving EQs** and **one parametric equalizer**.

Add Pre EQ

The **“Add Pre” EQ** operates in **full-range mode** and is positioned at the **input**, allowing it to affect all frequency bands before multiband processing.

EQ Trims

You can adjust the overall level of each EQ group using the **Bass, Mid, and High Trim controls**. These controls are both enjoyable to use and highly effective for fine-tuning the tonal balance. All Trim functions are explained in detail later in this manual.



THE COMPRESSOR & CROSSOVER & MIXER SECTION

This section provides control over the **compressors**, **crossover frequencies**, and **band mixing**. It includes **VU meters** at key input and output points to detect clipping, as well as access to internal **Trims and Levels**, allowing precise control and a clear understanding of what is happening inside the device.

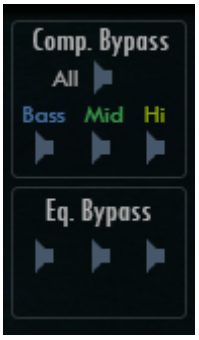
CONTROLLING LEVELS & COMPARING SIGNALS

Rodin MBC includes numerous **VU meters** and **level controls** to help you manage signal levels throughout the processing chain.

Each **EQ section** and **compressor** can be bypassed independently, allowing precise **A/B comparisons** between processing stages.

- **EQ section bypass buttons** are available at the top of the device.

- **Compressor and EQ bypass buttons** are also available near the multiband mixer.



For a clean signal, the **Input** and **Bass** levels should not reach the red LEDs. A **white LED** indicates the recommended maximum peak level.

Output Level

When recording into a DAW, aim for an output peak around **–6 dB**. When used inside an effects chain (e.g. mastering), follow the peak level recommended by the next processor.

When the **main Bypass** button (top right) is engaged, the **final output gain is also bypassed**, allowing a true comparison between dry and wet signals—*provided the bypass attenuation is set so that levels closely match*.

Comparing the processed and original signals is the best way to identify mistakes. When something feels wrong, bypassing immediately reveals problematic frequencies.

Vu meters

Main VU Meters

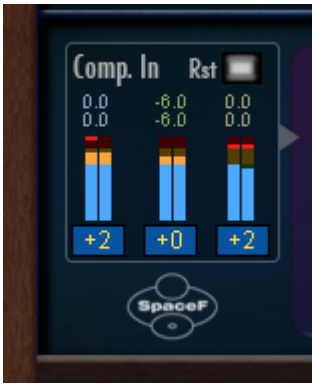
- **Orange LEDs**: –12 to –6 dB
- **White LED**: –3 / –2 dB
- **Red LEDs**: above –2 dB (avoid)

If the **Bass VU meter** is too loud, you can:

- Lower the **Input Trim**
- Reduce the **Bass Trim**
- Adjust **Customize ratios**
- Lower individual **Bass EQ gains**

The **orange LED** at the top of the *Input* section mirrors the **Bass FAT clipping LED**.
In most cases, it is preferable to lower the **Input Trim** rather than limiting the Bass Trim range.

Comp. In VUs



Located at the bottom left, the **Comp. In VU meters** display the signal entering each compressor (i.e. EQ + FAT output). They indicate whether a band is clipping *before* compression. Avoid red LEDs whenever possible.

Below each VU, a **gain correction selector** allows preset gain adjustments:

- **–9 to 0 dB** in 3 dB steps
- **0 to +6 dB** in 1 dB steps

These 3 gain controls are stored in presets, and are designed for **coarse level correction**. Fine tuning should be done with the compressor gain of each compressor.

Note that compression may sometimes *mask* clipping by pushing energy into other frequency ranges (i.e., the level is lower and the sound is less detailed due to the level of other bands).

Tip: When you don”t hear your modifications on the Eqs, it is probably because the sound is so compressed that those frequencies “vanish”. Change the threshold value to compress less.

Ways to Control Levels at this Stage (before compressors)

- **Input Trim**: lowers all bands equally (best if you don’t want to change EQ balance)
- **Bass / Mid / High Trims**: affect individual bands proportionally. You keep inter-band balance but change the amount of Eq applied.
- **Individual EQ gains.**
- **Bass and Mid FAT processing (lots of Drive or Bite amount, or too loud input gain).**

MultiBand Mixer VUs.

Located at the bottom right, these VUs monitor levels **before all bands are summed into the final stereo output**.

- A faint horizontal line marks the recommended maximum (**–6 dB**)
- A yellow LED appears at –6 dB
- Red LEDs indicate levels above –5 dB

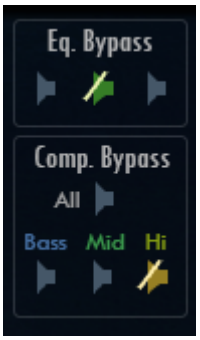
The **Mix Trim** (left of the three VUs) attenuates all bands equally **after compression**, preserving compression behavior and band balance.

The **Mute buttons** can be used for A/B comparison or for cutting lows or highs instead of using filters.

Eq and Comp Bypass

The **EQ and Compressor Bypass** section (bottom right) allows quick comparison of each band.

- You can bypass **all compressors at once** using “All” (compressor only)
- When “All” is pressed, individual bypass buttons have no effect (all compressors are bypassed).
- Note that the gain of the compressor is bypassed too, allowing you to notice level differences.



Finding the right balance between EQ and compression is key. For example, if highs seem insufficient even with maximum EQ boost, too much compression on the High band may be attenuating them. In that case, raising the **threshold** will restore high-frequency presence. This attenuation is of course crucial when equalizing some sounds.

Because compression follows EQ, it is normal for some EQ adjustments to become less audible (frequency masking).

FAT 6

SpaceF FAT is a vintage-inspired algorithm using frequency modulation, clipping, and subtle saturation. It dates back to the middle 2000s and is still available as a standalone effect on the Sonic Core webshop.

This **FAT 6** version is a refinement of the multiband FAT implementation of the *Neodyne* synth (BlackBox III) and has been refined specifically for multiband processing in mixing and mastering situations.

FAT can be applied independently to **Bass, Mid, and High** bands.

- **Mid and High FAT** include a **Drive amplifier** with four modes: *Off, Soft, Mild, Hard* ("Hard" intentionally pushes clipping)
- **Bite** attenuates the FAT effect if needed
- FAT is not present on Bass Bite, as bass clips more easily
- High-frequency clipping is generally more pleasant than bass or mids

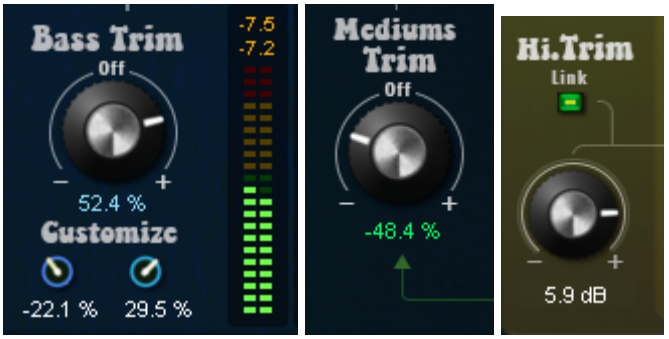
The **2× button** is typically left on. Disabling it lets you hear FAT at half intensity, which is sometimes the right amount.

Some level compensation is applied internally, but full gain compensation is intentionally avoided to preserve DSP resources.

Note that you can bypass each FAT, and that you can bypass them all at once using the "Bypass All" button next to the FAt 6 label.

USING THE EQUALIZER "TRIMS"

The **EQ Trims** adjusts all gains within an EQ section simultaneously in relation to a Ratio.The High Trim has two modes (linked/un-linked) which makes it different from the other Trims.



They all enable:

- "Negative gain" comparisons,
- Rapid detection of frequencies that build up too quickly or remain insufficient, and easy fine-tuning.

Bass and Medium Trim

These act as **global gain controls** for their respective EQ sections. A good starting position is around **75%**, leaving headroom for boosts after shaping individual bands. The percentage shown is a percentage of the dB Value of each equalizer Gain. For example, 50% of 12dB is 6dB. If your Eq gains are loud, but do not seem to have much effect, it is generally because the Trim is set at low values. The negative values will reverse the Equalizer gains.

The **Bass Trim** also controls the **Root frequency ensemble**, representing harmonically related frequencies (5ths, 7ths, octaves).

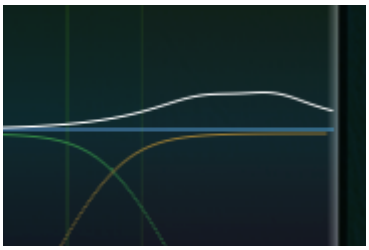
- Blue value = reference frequency
- White values = relative frequencies
- The fader allows you to disable the second or third frequency without using the “customize” values (allows quick comparisons).
- “Customize Ratio” affects secondary Root frequencies gain in relation to the reference.
- A ratio of 0% disables that frequency
- If both Customize Ratios are 0%, and only the reference can be heard).

High Trim (Shelf 1)

Shelf 1 is called the “**High Trim” because** it is typically set lower than other high-frequencies and influences them continuously, because it is a shelf equalizer that boosts/attenuates everything above its frequency.

Example:

- A Shelf 1 at +3 dB does boost the **High Para** and **Shelf 2** by +3 dB (when they are above Shelf 1 frequency) in a constant way.



    - When the High Para and Shelf 2 are linked, they will be boosted in relation to the link Ratio.The gain is not constant anymore and the sound is very different.

Shelf 2 is often used as a corrective EQ like a subtle lowpass filter, but can also be used to boost the curve. It can be linked to the High Trim.

High Para Ratio

When linked, the **High Para Ratio** ranges from **–200% to +200%**. Examples:

- +200%: Shelf 1 +3 dB → Para +6 dB
- –200%: Shelf 1 +6 dB → Para –12 dB
- +200%: Shelf 1 +12dB → Para +12dB (maximum effective gain is ±12 dB.)

See by yourself:

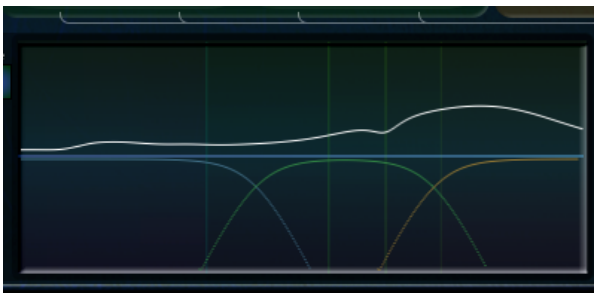
- Activate the Link button and set the High Para Ratio to -120%
- On the High Para, enable *Add* and set interval to **12th** (green button “On”) and Q ≥ 4 so the 2 frequencies appear on the display.
- Now adjust **High Trim** and observe how the curve moves above and below 0 dB across roughly one octave.
- The two peaks of the High Para are above zero, because we used a Ratio above +/- 100%. As we used -120%, the peaks will be +2.4 dB (-20% of -12dB).

If you love mixing, it is fascinating to try to create the perfect “High Eq Curve”, but remember that the “non linked mode” is the easiest, even though both modes are great to use and give different results.

Shelf 2 Link

Shelf 2 can also be linked (±200%) in Rodin MBC. It is also relative to the gain of the Shelf 1. Unlinked use is more predictable, but linked mode can be very expressive too.

A typical use is to set it to a negative ratio to remove high frequencies in proportion to the High Trim (a low pass that is proportional to the gain of the Highs).



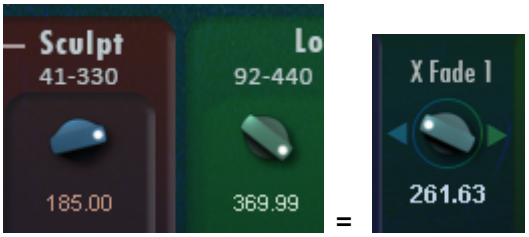
Tip : The Eq Display shows the curve of the equalizer to show you what you have boosted/removed, but the final gain of these frequencies is controlled by the gain of the compressor.

CROSSOVERS (XFADE 1 & 2)

These define where each band starts and ends. Although controls are placed between compressors for comfort, band separation happens before each EQ section. Typical crossover placement lies between adjacent EQ frequencies.

If both crossovers are set to the same frequency, a band will still exist but will require significant gain to be audible. It is also possible to overlap the crossovers and make the Mids almost disappear.

In general the chosen frequency is set between the frequencies of the equalizers. For example, if 185 is the highest frequency of the bass section , and 369 the lowest of the medium sections. A crossfade around 261 makes sense. It could also be the exact frequencies of the section (185 and 369.99 in our example)



but it could also be 185, or 369 or anything in between.

In the picture below, the high and low crossover are both set to 933.33 Hz. You will still hear the Mids, but will have to boost the levels a lot, with the compressor gain or the medium equalization Gains and Trims, or the FAT Drive and Bite.

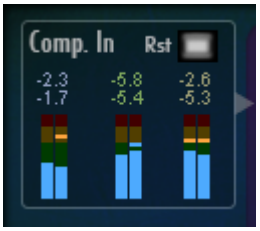
Important:
Frequencies outside a band's crossover range are attenuated or muted. Since EQs operate *after* band separation, they cannot boost frequencies that no longer exist in that band.

Manual crossover control was chosen over auto-modes for flexibility and ease of use. It is not often desired to follow exactly the cross-over frequencies.

Tip : trust ***what you hear rather than what you see.***

COMPRESSORS

Each band has its own compressor placed **after each EQ section**. Compression response depends heavily on its **input level**, not just threshold and ratio. That's why there are Vu-meters at the "pre-compressor" stage ("Comp. In").



The "Comp. In" Vu show the signal just before the compressors, after the Eqs and FATs. The Threshold and the Ratio of each compressor have an effect on the output sound of course,

but the level of audio at the input of the compressors will change how each compressor responds for the same settings.

Compressor “Dual”

The Dual button will compress the Left and Right channels independently (dual mono). When “Off”, a sum of the left and right sidechain will be used to compress both channels the same (linked L/R mode, but with the sum of both channels rather than either left or right).

With a stereo source like a mix, you may use mono (off) on the Bass channel, while activating “Dual” on the Mids and Highs, to keep more stereo feel on the mids and highs.

Typical use for centered bass:

- Bass: Dual Off
- Mids & Highs: Dual On

The Compressor Sidechain

The “sidechain” designates the signal that modulates the compressor. The most desired value is “Self”, i.e. the signal is modulated/compressed by itself, as expected.

You can also use the other bands as a sidechain source, as well as the full dry Input, or the Audio In. For example, by using the Mids to compress the Highs, you make the Mids more apparent when there are more Mids (a kind of expander). This is because the Mids will lower the highs. It can be used to focus on the voice in a documentary, by lowering other bands when someone is speaking.

> ⚠ Changing sidechain routing creates new DSP connections and may trigger DSP allocation warnings. If so, assign Rodin MBC to a dedicated unused DSP, save the project as default, then quit and reload Scope.

In other situations, it is more a special effect that gives good and bad results. For example, you can remove the mids and highs with the bass frequencies. This creates a rhythmic effect when the bass of the track is a kick drum (of course, this is a special effect).

You can use a source connected to the " A.in “ inputs (audio in) to modulate one or all bands in relation to an external signal (for example, pumping only the highs of a rich pad with a kick drum). It makes EDM pumping pads sound very easy and sounds very professional.

Tips: a Compression Ratio of 1.8 or 2 is a good start for compression. The compression “feel” will be a balance between the Threshold and Ratio, and incoming levels. Also, fast Attack and Release give more compression. Everything plays a role, but some parameters have more effect than others.

For the Attack time, fast values are between 10 and 30 ms approximately while slower values are between 60 and 150 or more. Very fast values (2 to 10 ms) are perfectly usable too and do not cause clicks or noise.

For the release time, a value around 20/30 ms (0.031) is fast enough to avoid pumping in most cases. It is also perfectly possible to use very fast values below 10ms.

If it pumps too much, check the Threshold first, then the Attack and Release, and then the Ratio.

THE “ADD PRE” PARAMETRIC EQUALIZER.

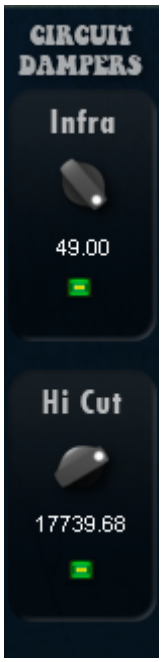
Although placed at the input (before multiband split), **Add Pre** is shown at the end of the equalizer sections because it is usually used last.

It is ideal for sweeping the whole spectrum and making final tonal refinements on any band.

Try using it only after the other equalizer. If you still feel something is missing, Add Pre is usually the answer.

Use the “on/off” button to Bypass the Add Pre equalizer and compare the sound with and without it.

THE CIRCUIT DAMPERS



Circuit Dampers are not shown in the EQ display because they are circuit-level “safeguards”, not creative EQs. Low end speakers will not really let you hear those frequencies.

- **High Cut** simulates vintage roll-off (Rodin MBC: up to ~9 dB, down to ~11 kHz)
- **Infra Cut** removes subsonic energy

If unsure:

- High Cut: leave between **14–20 kHz**
- Infra: **~24.5 Hz** is a personal favorite value (below 30 Hz is often cited as a standard mastering practice for tracks that will be played in powerful club sound systems). I find that 24.5 gives the best basses on my system.

Cutting infra-bass protects speakers and improves headroom without affecting perceived bass.

In Rodin MBC, the High Cut is much more obvious than on Rodin Eq. Rodin Eq simulates a vintage roll-off of 3dB, while Rodin MBC is around 9dB max approximately. It goes as low as 11KhZ, and begins to have an effect on the hearable sound. If you do not hear anything, just leave it somewhere between 14 080 Hz and 19 912 Hz, or switch the Circuit Dampers off for a more “transparent” sound.

Is that all folks ?

For any further question, please refer to the SpaceF support forums on planetz :
https://forums.scopeusers.com/viewforum.php?f=44

Recap “Music” Presets

Note that those presets are various proposals that focus on various elements of the track, rather than trying to remaster them, which is not the aim.

As your speakers are different and probably newer than mine, you may need to adjust the high compressor gain, as the presets probably compensate for my own speakers curve for a better listening experience.

World / Acoustic
==========
Anna RF-Aji - Istanbul
AnnaRF-Days and Nights
Anna RF-Saga
Anna RF-Weeping Eyes
Anouar Brahem - Astrakan Café
Anouar Brahem & Jan Garbarek - Sebika
Loreena Mckennitt - Marco Polo
Youthie - Inna Ud
Youthie - Makam Dub
Folk - Lomo lomo Lomo

Soundtracks
==========
Ennio Morricone - Ecstasy Of Gold
Henry Mancini - Moon River
John Barry - Midnight Cow Boy
John Barry - Girl with Sun in her Hair
John Barry - Goldfinger
John Barry - Lullabying
Mantovani - Exodus
Maurice Jarre - Lawrence d'Arabie
Philippe Sarde - Quest for Fire

Live/Semi-live latin
==========
LA LOM - Cumbia Arabe
LA LOM - Alacran
Los Angeles Azules - Cumbia Coqueta
Los Mirlos - Lamentos en la Silva

Rock / classics:
==========
ACDC - Thunder strike
Bashung - Osez Joséphine
The Cure- A forest
The Doors - Riders on the Storm

The Doors - Love me two times
The doors - Love her Madly
Heart - Barracuda
Noir Désir - Un Homme Pressé
Noir Désir - Aux Sombres Héros de l'Amer
Morcheeba - The Sea
Pink Floyd - Shine on You
Runaways - Cherry Bomb
U2 - Magnificent