

SLATE | ACADEMY

PRO VOCAL MIXING

REFERENCE GUIDE

CORRECTIVE EQ

THE VOCAL CHAIN: **STEP 1/6**

Corrective EQ is the process of using an EQ to **fix problems** with your recording, and it is best done before any other processing in your vocal chain. Usually, this just means using a **High Pass Filter** to remove unwanted low frequency rumble.

- A** Vocals are especially susceptible to **low frequency rumble**. Mics get bumped, cars drive by, AC units are running - all of these can cause unwanted low rumble.
- B** A High Pass Filter at anywhere between **40-100Hz** will greatly improve the quality of your vocals. Set the frequency **depending on your particular vocalist** - be careful not to cut into the fundamental frequencies of their vocals, or they may sound too thin.

Use **INF EQ** or the EQ modules in VMR such as **FG-S** to clean up your recordings with Corrective EQ before the Compressor.



COMPRESSION

THE VOCAL CHAIN: **STEP 2/6**

Compression is a key component in creating an up-front, clear, and full vocal mix. These are all tips used by professional vocal engineers to achieve amazing results:

Series Compression is when you use two compressors, one after the other. This allows you to blend tones of multiple styles of compressors (like opto + FET), and also get a more natural sound because each compressor doesn't have to work as hard.

Gain Reduction is a good way to see how much compression you are applying.

- A** **3-5dB** of GR is a good range for lighter compression.
- B** **6-10dB** of GR is a good range for heavier compression.
- C** **Parallel Compression** is very useful for achieving a more natural vocal tone, and it's easily accomplished with the Mix knob.



FG-2A



FG-116



FG-STRESS

tone shaping EQ

THE VOCAL CHAIN: **STEP 3/6**

After your Compression, it's a good idea to apply some Tone Shaping EQ. This EQ is used to apply boosts and cuts that will shape the overall tone and help your vocals sit better in the mix.

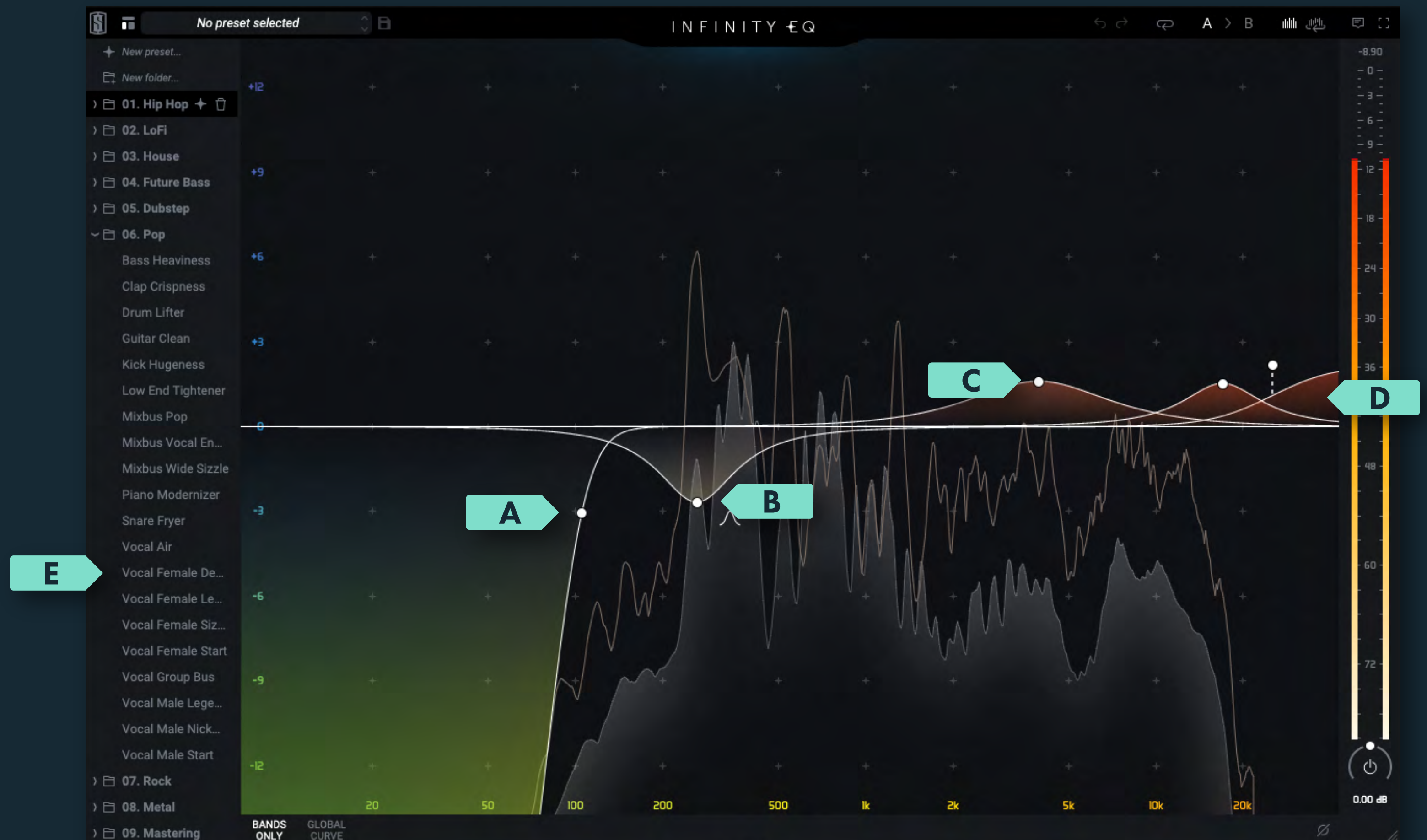
A Remove any unwanted low frequencies with a **High Pass Filter**. (even if you used corrective EQ, this is still helpful since compression can bring out these low frequencies)

B Cut in the **low mids** (150hz-500hz) to remove muddiness.

C Boost in the **high mids** (1khz-6khz) to add clarity.

D Add **air** to your vocals with a High Shelf and Bell Curves above 10khz.

E There are amazing vocal presets designed by legendary producer **Oak Felder** in **Infinity EQ**.



DeESSING

THE VOCAL CHAIN: **STEP 4/6**

A DeEsser is a special type of processor that reduces the harsh sibilant sounds of a vocalist. (like “s”, “sh”, “t”, etc.)

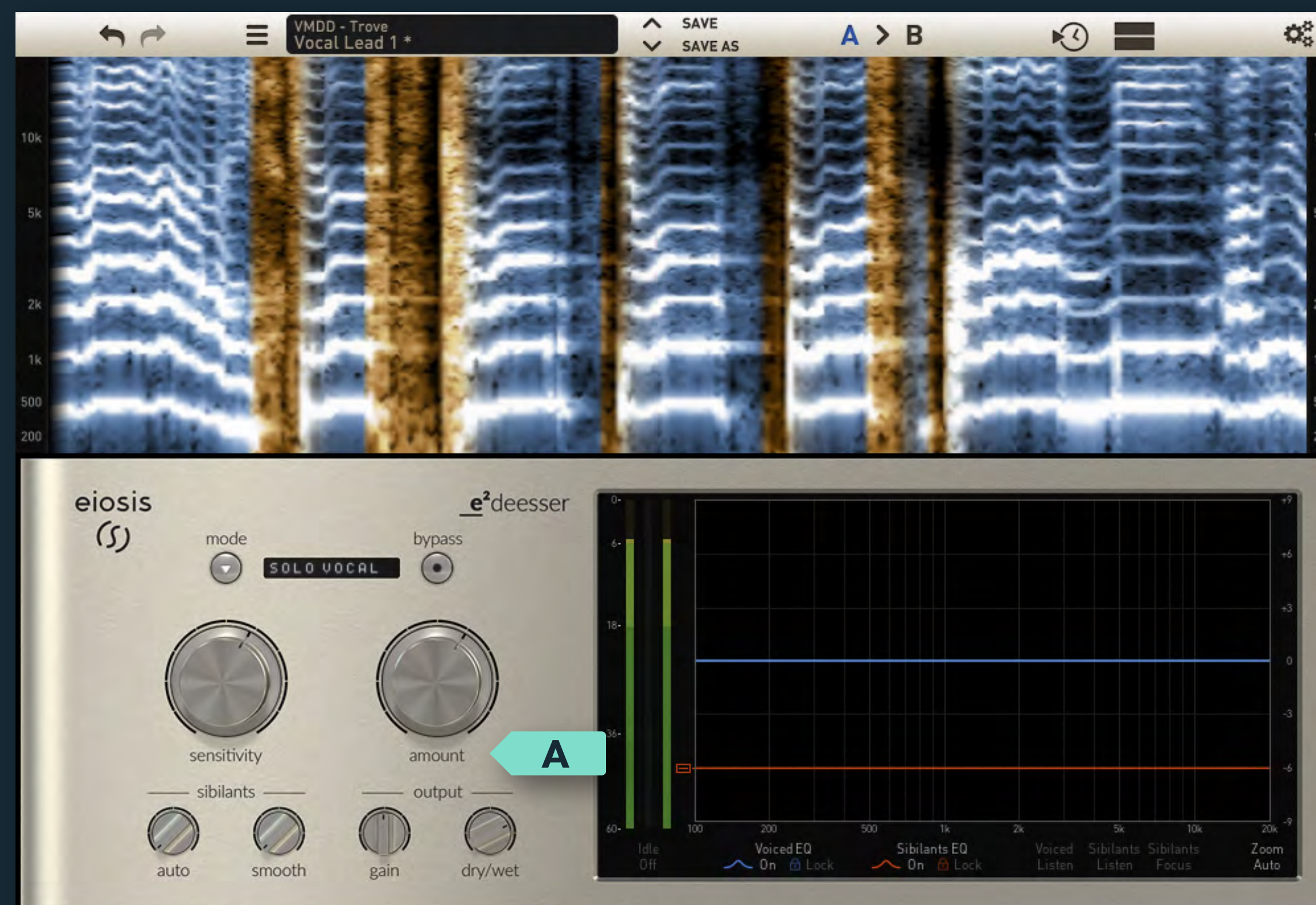
Place the DeEsser **after** Compression & EQ.

Compression & EQ may cause sibilance to be **even more harsh**, which necessitates a DeEsser.

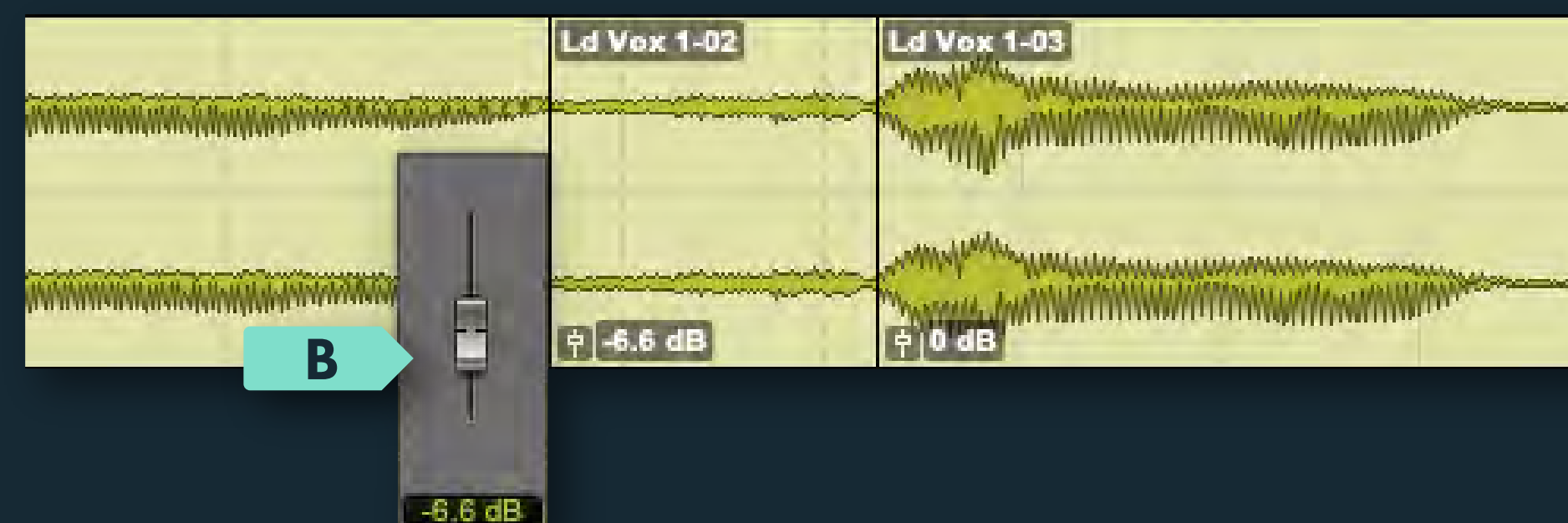
A Start at 0 and slowly bring up the DeEsser Amount, **until it sounds natural**. Be careful not to apply too much DeEssing, or it may sound like the vocalist has a lisp.

B For especially bad sibilance, manually edit the harsh sounds using **clip gain**.

Even if you don't think you need a DeEsser, it's generally recommended to still use one because the limiting that occurs in Mastering can bring up sibilance even more if it is not DeEssed in the mix.



EIOSIS E2 DeESSER



FRESH AIR

THE VOCAL CHAIN: **STEP 5/6**

Fresh Air is a specialized high frequency processor that works incredibly well on vocals.

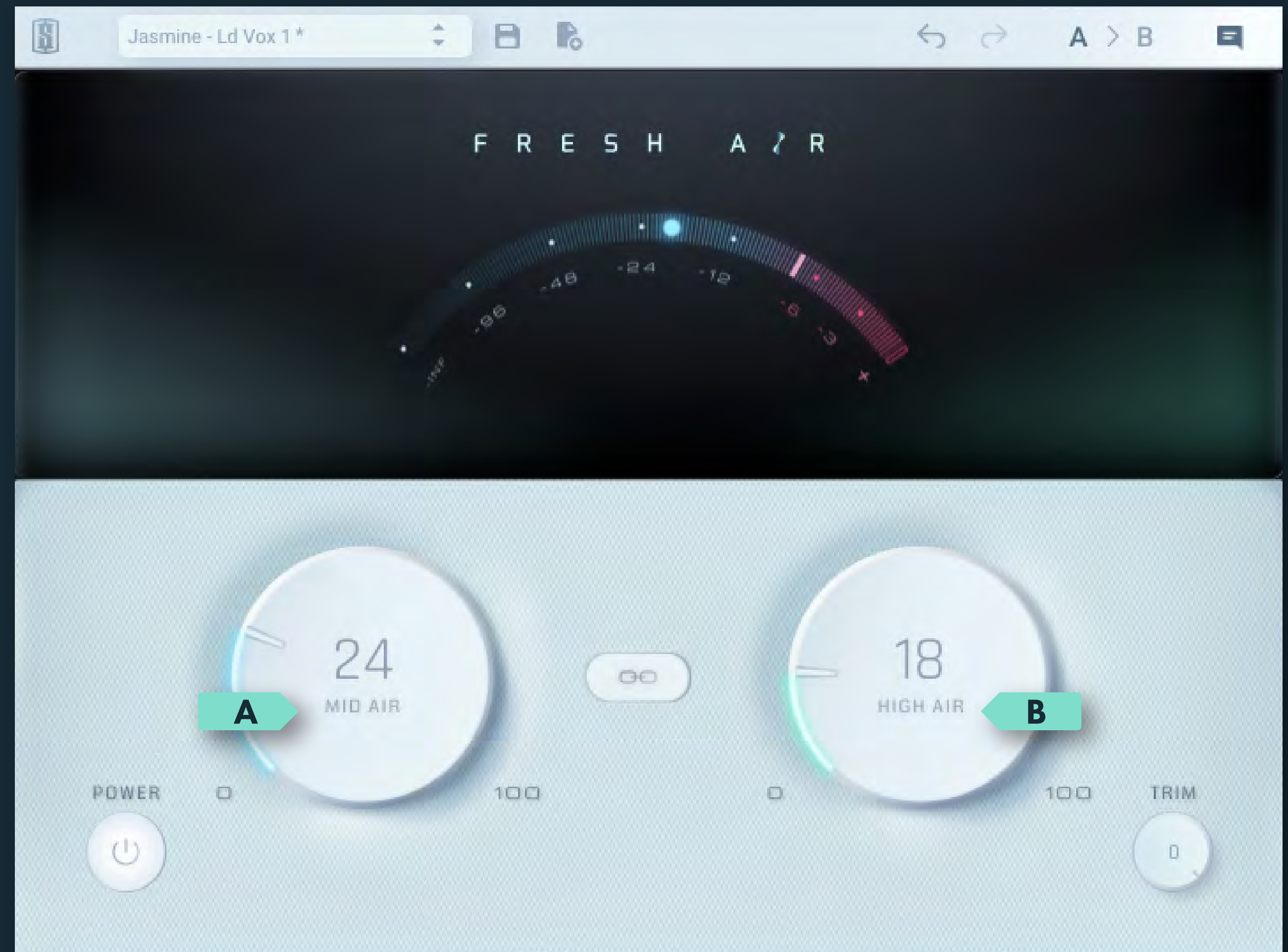
Boosting high frequencies with **EQ** can sometimes add harshness.

Fresh Air adds smooth air without any harshness.

A **Mid Air** boosts presence & clarity.

B **High Air** boosts sizzle & crispness.

Use directly on individual vocal tracks or on a vocal bus.



FRESH AIR

REVERB & DELAY

THE VOCAL CHAIN: **STEP 6/6**

Reverb & Delay are a critical factor in giving your vocal space and depth in the mix.

Typically used as **Send FX**.

- A** Can also be used on individual vocal tracks as **Inserts**, utilizing the **Mix Knob** to adjust the amount of reverb/delay signal.
- B** Increase the **Predelay** on Reverbs for more clarity, 10ms - 20ms is a great starting point.
- C** Dial in the **Feedback** according to the pacing and tempo of the song.
- D** Make your vocal bigger and wider by using a **Ping-Pong Delay**.
- E** Shape your Reverb & Delay with **EQ** and **Filters**.



REPEATER



VERBSUITE CLASSICS