

**USER MANUAL**

**\_BUS EXCITER-104**

**ARTURIA**

\_The sound explorers

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## USER MANUAL

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**Product version: 1.0.0**

**Revision date: 10 June 2024**

# Thank you for purchasing Bus EXCITER-104!

This manual covers the features and operation of Arturia's **Bus EXCITER-104**, a faithful emulation of the once revered Aphex Aural Exciter type C2, model 104. In its time, the Aural Exciter was perceived to perform miracles, adding air, detail, and definition to audio that may have otherwise sounded muted or lifeless. With a few simple knob twists, it was employed to conduct sonic rescues that might have taken hours of work using tools such as conventional EQ and dynamics processing.

**Be sure to register your software as soon as possible!** When you purchased Bus EXCITER-104, you were sent a serial number and an unlock code by e-mail. These are required during the online registration process.

## Special Messages

### Specifications Subject to Change:

The information contained in this manual is believed to be correct at the time of printing. However, Arturia reserves the right to change or modify any of the specifications without notice or obligation to update the hardware or software that has been purchased.

### IMPORTANT:

The software, when used in combination with an amplifier, headphones or speakers, may be able to produce sound levels that could cause ear damage or even permanent hearing loss. DO NOT operate for long periods of time at a high level or at a level that is uncomfortable.

If you encounter any hearing loss or ringing in the ears, you should consult an audiologist.

### EPILEPSY WARNING – please read before using Bus EXCITER-104

Some people are susceptible to epileptic seizures or loss of consciousness when exposed to certain flashing lights or light patterns in everyday life. This may happen even if the person has no medical history of epilepsy or has never had any epileptic seizures. If you or anyone in your family has ever had symptoms related to epilepsy (seizures or loss of consciousness) when exposed to flashing lights, consult your doctor prior to using this software.

Discontinue use and consult your doctor *immediately* if you experience any of the following symptoms while using this software: dizziness, blurred vision, eye or muscle twitches, loss of consciousness, disorientation, or any involuntary movement or convulsion.

## Precautions to take during use

- Do not stand too close to the screen
- Sit a good distance away from the screen
- Avoid using if you are tired or have not had much sleep
- Make sure that the room is well lit
- Rest for at least 10 to 15 minutes per hour of use

# Introduction

## **Congratulations on your purchase of Arturia Bus EXCITER-104**

As with all of our products, we believe in offering the best of both the software and hardware worlds in a single package and letting you choose how you want to use it. In Bus EXCITER-104, those two worlds are a faithful re-creation of the original hardware on one hand, and on the other, additional sound processing and workflow features in Arturia's inimitable fashion.

We hope Bus EXCITER-104 will give your music that extra special something that makes listeners wonder, "How did they *do* that?"

Peace, love, and music,

### **The Arturia team**

Be sure to visit the [www.arturia.com](http://www.arturia.com) website for information about all of our other great hardware and software instruments. They have become indispensable, inspiring tools for musicians around the world.

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# 1. WELCOME TO BUS EXCITER-104



Bus EXCITER-104 is based upon the most widely used model of the Aphex Aural Exciter, the Type C2, model 104. Introduced in 1993, it built upon the Exciter concept the manufacturer first introduced in 1975 and became the best-selling and most popular model among effects of its type.

We began with an exacting study of the original hardware's behavior down to the circuit level. After modeling this, we added features to increase its flexibility and usefulness in today's digital music production environments. Bus EXCITER-104 takes its place in our FX Collection alongside many other virtual versions of classic hardware effects.

The Aural Exciter was meant to add harmonics, transient detail, and air to recordings – all without affecting the level of the signal from input to output. The “Big Bottom” module in the C2-104 then applied parallel compression to extend bass without increasing gain.

In small doses, the Exciter could impart an “X-factor” to an already good mix. Used more aggressively, it could restore dull and lifeless recordings. These included cassettes that had been played or copied too many times, which would have worn the magnetic particles off of the tape. Some people overused the Exciter, leaning on it as a fix-all for tracks that should have been recorded more carefully to begin with. But those who understood its purpose aimed for moderation and achieved predictably better results. Exciters were employed on the album *Rumours* by Fleetwood Mac and the hit song “Band on the Run” by Paul McCartney and Wings. Artists such as Jackson Browne, The Four Seasons, Neil Diamond, Linda Ronstadt, James Taylor, credited the equipment in their album liner notes.

Notably, the worse the condition of the input signal, the more benefit the Exciter conveyed. Bus EXCITER-104 lets you add this unforgettable piece of recording history to your own toolkit.

## 1.1. The hardware Exciter



The APhex type C2 Aural Exciter, model 104. Image courtesy of Sweetwater.

The Exciter's origin story holds that inventor Kurt Knoppel was assembling a stereo amplifier from Heathkit, a manufacturer of build-it-yourself electronics kits popular with enthusiasts in the 1970s. He wired one of the two channels incorrectly, such that its vacuum tubes received far less than the specified voltage. This created distortion, but when a small amount of this signal was mixed with that from the correctly-built channel, the overall result sounded clearer and livelier.

The next years would involve making that happy accident more intentional and precise, until the first marketable concept debuted in 1975 and company president Marvin Caesar joined the team to develop and market future products. The C2-104 was in fact introduced in the early 1990s; type C2 (as opposed to just C) added the "Big Bottom" bass enhancement. This applied a compressor with a high ratio to bass frequencies, then combined the compressed signal with the original. The intended result was punchier bass with no increase in gain.

The model 104 was an entirely analog effect. It became hugely influential. Today, we take it for granted that you can technically *distort* an audio waveform for purposes other than musical *distortion*, i.e. to make it sound better or interestingly different. This principle shows up in many Arturia effects and instruments in the form of waveshaping, wavefolding, the subtler algorithms in our Dist COLDFIRE plug-in, the Metalizer in our Brute synthesizers, and elsewhere. But when the Aural Exciter was new, this phenomenon truly was a "secret sauce."

## 1.2. Bus EXCITER-104 feature summary

In fact, we encourage you to use Bus EXCITER-104 like a sauce – just the right amount will enhance your musical meal, but too much may mean that sauce is all you taste. Then again, you might be looking to overwhelm or mangle the harmonic profile of a mix or track, and the Exciter process can do that in a way that is different from any other effect. Here is a list of key features.

- Perfectly accurate model of Exciter process of original hardware
- Big Bass enhances low end via parallel compression, as on C2 model 104
- Adjustable low-pass frequency and resonance for Big Bass
- Adjustable high-pass frequency and resonance for Exciter
- Big Bass or all frequencies below low-pass cutoff can be summed to mono for added sonic density
- Big Bass Saturation can add overdriven character if desired
- Output EQ with low and high shelving bands
- Adjustable stereo width of Exciter process
- Interactive Preset browser
- Diverse factory Presets tailored to a broad range of musical applications
- Mix Lock keeps dry/wet mix the same even when changing Presets

Are you excited yet? We are! Let's see how Bus EXCITER-104 works.

## 2. ACTIVATION AND FIRST START

### 2.1. Compatibility

Bus EXCITER-104 works with Windows 10 or later, or macOS 10.13 or later. It is compatible with the latest Apple Silicon M-series processors. You can use it as an Audio Unit, AAX, VST2, or VST3 plug-in within your favorite recording software.



### 2.2. Download and install

You can download Bus EXCITER-104 directly from the [Arturia Products Page](#) by clicking either the Buy Now or Get Free Demo options. The free demo is limited to 20 minutes of operation.

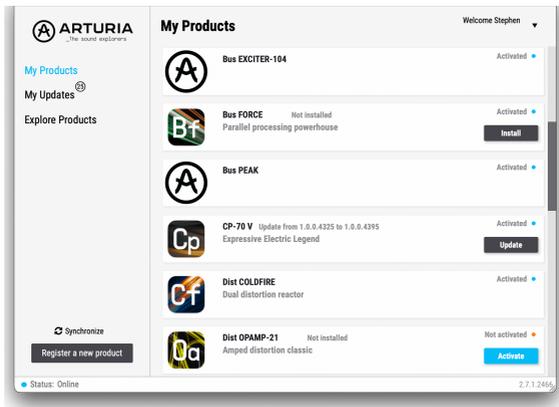
If you have not already done so, now is a good time to create an Arturia account by following the instructions on the [My Arturia webpage](#).

Once you install Bus EXCITER-104, the next step is to register the software. This is a simple process that involves a different software program, the **Arturia Software Center**.

#### 2.2.1. Arturia Software Center (ASC)

If you haven't installed ASC yet, please go to this web page: [Arturia Downloads & Manuals](#).

Look for Arturia Software Center near the top of the page, and then download the installer version for the system you're using (Windows or macOS). ASC is a remote client for your Arturia account, letting you conveniently manage all your licenses, downloads, and updates from one place.



After you complete the installation, do the following:

- Launch the Arturia Software Center (ASC).
- Log into your Arturia account from ASC's interface.
- Scroll down to the 'My Products' section of ASC.
- Click on the 'Activate' button next to the software you want to start using (in this case, Bus EXCITER-104).

It's as simple as that!

## **2.3. Working with Bus EXCITER-104 as a plug-in**

Bus EXCITER-104 can be used as a *plug-in* within all major Digital Audio Workstation (DAW) programs including Cubase, Digital Performer, Live, Logic, Pro Tools, Reaper, Studio One, and more.

Plug-ins have numerous advantages over hardware, including:

- You can use as many instances on different tracks as your computer can handle (though as the name implies, Bus EXCITER-104 is intended for use on master buses and sends).
- You can automate the plug-in's settings via your DAW's automation feature.
- All settings and changes are saved with your DAW project, letting you pick up right where you left off.

### **2.3.1. Audio and MIDI settings**

Since Bus EXCITER-104 is a plug-in, settings for audio and MIDI routing are handled in your recording software or DAW. They are generally located in some type of Preferences menu, either at the global or project level, and each product does things a bit differently. So, consult your recording software's documentation for information on how to select your audio interface, activate outputs, set the sample rate, assign MIDI ports, set project tempo, adjust buffer size, and the like.

## 3. THE BUS EXCITER-104 MAIN PANEL

The interface of Bus EXCITER-104 consists of two halves. The lower half resembles the hardware unit and is all you need for quick operation. The upper half combines a frequency spectrum visualizer with a handful of advanced controls for further sound sculpting. Here is an integrated diagram of both.



| Number | Area  | Description   |
|--------|---|---|
| 1.     | <a href="#">Big Bass [p.7]</a>                          | Controls the low-end harmonic enhancement, impact, and saturation   |
| 2.     | <a href="#">Exciter [p.8]</a>                           | Controls the main harmonic enhancement                              |
| 3.     | <a href="#">Output [p.8]</a>                            | Controls overall wet/dry mix and level                              |
| 4.     | <a href="#">Output EQ [p.9]</a>                         | Two-band high and low shelf EQ for the final output stage           |
| 5.     | <a href="#">Visualizer and advanced controls [p.10]</a> | Spectrum display and fine controls for Big Bass and Exciter modules |

### 3.1. Common behaviors

All Arturia FX Collection plug-ins share some common control behaviors to make editing sounds easier.

#### 3.1.1. Value pop-ups



Move or hover on any control and a pop-up banner or “tool tip” will display its value.

### 3.1.2. Parameter descriptions



Operating or hovering on any control also displays its name and a brief description of its function in the left corner of the [lower toolbar](#) [p.21].

### 3.1.3. Parameter adjustment

Hold the right mouse button or Control key while dragging on either Frequency knob (in the Big Bass or Exciter sections) to adjust it more slowly. This helps when you want to dial in precise values. If your mouse is equipped with a wheel, you can hold the Control key (Windows) or Command key (macOS) and use the wheel to fine-tune as well.

For parameters with linear mapping – such as dB, percentages, or abstract units – one click of the scroll wheel (without holding any key) changes the value in predictable steps: 0.5dB for levels, 2% for percentages, and 0.5 for abstract units.

### 3.1.4. Double-click for default

Double-click on any knob to return it to its factory default setting.

## 3.2. Big Bass



Big Bass replicates the hardware Exciter's "Big Bottom" function, which used parallel compression – meaning it combined a compressed signal with the original – to enhance low frequencies.

Its main controls are:

- **Drive:** Fine-tunes the input signal, which in turn affects the amount of compression applied.
- **Frequency:** Determines the cutoff frequency of the low-pass filter; frequencies below this cutoff are affected by the Big Bass process.
- **Mix:** Adjusts the amount of processed signal fed back into the original signal.

**i** Generally, the **Drive** control should be set so that the adjacent red LED is slightly pulsing along with the loudest bass peaks in your mix or track. If it does not pulse at all, the Big Bass effect isn't working hard enough. If it is mainly steady-on, you're likely overdriving the signal. **Frequency** is a more matter of taste. A good guideline is that you want it high enough to hear above the sub-bass range, but low enough that Big Bass is not capturing low-mid and midrange frequencies more aptly handled by the Exciter. Setting the Frequency too high can cause a muddy sound.

### 3.3. Exciter



Here is the main attraction of Bus EXCITER-104. It adds harmonics and a substantial high-frequency boost to the signal as described in the [introduction \[p.3\]](#) without adding gain to the throughput signal.

- **Harmonics:** Controls the amount of harmonics added to the signal, in terms of both their amplitude and frequency (higher value = higher harmonics).
- **Frequency:** Determines the cutoff frequency of a high-pass filter; frequencies above this cutoff are affected by the Exciter process.
- **Mix:** Adjusts the amount of processed signal fed back into the original signal.

**i** The **Harmonics** knob adds content to the signal even at the lowest setting, which is why its minimum value is 1.0 instead of zero. The original hardware had two settings, normal and high, which correspond to 1.0 and 10.0 values of the knob here.

### 3.4. Output



The primary controls of the Output section are very simple.

- **Wet Mix:** Adds processed signal to the original signal.
- **Level:** Adjusts the final output level of Bus EXCITER-104.

**i** The **Wet Mix** adjusts the level of processed sound from both the Big Bass and Exciter stages, assuming both are turned on. It is different from a standard dry/wet mix because due to the nature of the effect, the dry signal is always at 100% – unless the **Wet Only** [p.22] option is activated in the Lower Toolbar.

### 3.4.1. Mix Lock

Click the padlock icon below the **Wet Mix** knob. When it is in locked position, the Wet Mix setting remains the same even if you change Presets. This is useful for auditioning different Presets without hearing any unnatural jumps in the amount of processing applied.

### 3.4.2. Output EQ

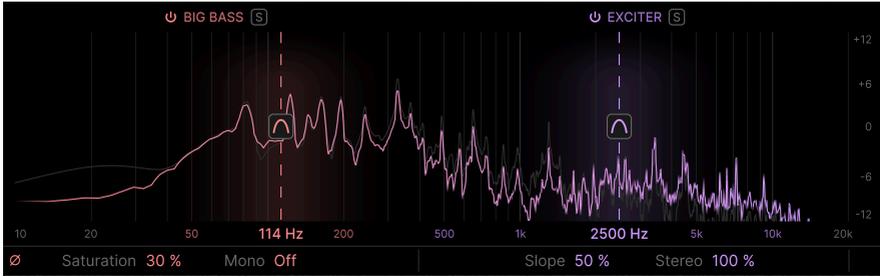


*This screenshot exaggerates the low and high settings so the color bands are fully visible.*

Bus EXCITER-104 includes an Output Equalizer, which consists of high and low shelves with ranges of +/- 12dB. This EQ is downstream of the Wet Mix control, meaning it affects the processed and unprocessed signals. However, the frequency of each shelf (where it begins to boost or cut material) is the same as the Big Bass section's **Frequency** for the low shelf, and the Exciter's **Frequency** control for the high shelf.

**i** The low and high EQ shelves are synchronized to the Big Bass and Exciter frequency values, respectively. This lets you exaggerate or balance the tonal content. For example, you could use the high shelf to "overcook" an already harmonically rich post-Exciter sound, or bring it down to rebalance the highs without removing all the new harmonics.

### 3.5. Visualizer and advanced controls



The upper area of Bus EXCITER-104 contains a frequency spectrum visualizer and a handful of controls that, while numbering just a few, allow significantly more precise control over the processing than on the original hardware.

#### 3.5.1. On/Off and Solo



Both the Big Bass and Exciter sections have On/Off toggles as well as Solo buttons.

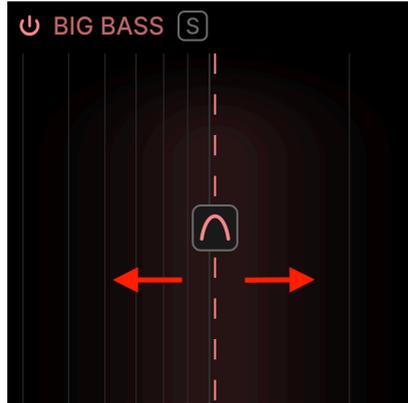
- **On/Off:** Simply turns either section on or off while retaining all its other settings.
- **Solo:** Lets you listen to only the parallel signal added by either section.

The two controls are interrelated. You can turn either or both modules on and off, but you cannot solo a module that has been turned off. On the other hand, soloing a module automatically turns the other off, and you cannot turn it back on until you un-solo the active module. Each module's Solo is also affected by its Mix setting; for example, if a module's Mix is at minimum, soloing it will produce silence.

### 3.5.2. Big Bass advanced controls

Advanced controls for the Big Bass module reside in the Visualizer above its main controls. Red is the signature color of the Big Bass section.

#### 3.5.2.1. Frequency



Slide the dotted red vertical line left or right. This duplicates the function of the Big Bass **Frequency** knob, but you may find this movement more precise. It sets the cutoff frequency of a low-pass filter. Material below the cutoff gets processed by the Big Bass, with the dry signal retained in parallel.

#### 3.5.2.2. Resonance



*Hover over the Big Bass section's Resonance to see the value displayed to the right.*

The arch-shaped icon in the middle of the frequency bar is the Resonance control for the Big Bass low-pass filter. Drag up or down on it to adjust the value, and the shape of the arch will change to reflect the bandwidth of the resonance peak. A narrower arch also means a higher amplitude in the emphasis range.

**i** Just as a resonant filter in a synthesizer emphasizes frequencies close to the cutoff, the Resonance here emphasizes Big Bass processing at the cutoff. So, in addition to the overall Big Bass process, you could use Resonance to accentuate a bass frequency you think is too faint or upstaged in your mix.

### 3.5.2.3. Polarity



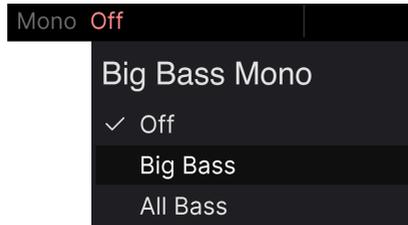
Clicking the **Polarity** icon reverses the polarity of the processed Big Bass signal relative to the parallel dry signal. Depending on the mix or track, you may find this increases the desired effects of Big Bass.

### 3.5.2.4. Saturation

Saturation 30 %

Where the **Drive** [p.7] knob is meant to optimize the input to fully use the Big Bass process, **Saturation** is more for creating an intentionally overdriven sound. It does not reach anything close to fuzz-pedal levels, however. Under the hood, it works similarly to the drive of the op-amp (operational amplifier) circuit in the hardware, but at an increased level so that desired overdrive is heard more readily.

### 3.5.2.5. Mono



This drop-down menu gives you the option to sum either all bass (below the **Frequency** setting) to mono, or just the results of the Big Bass effect. This is provided because bass frequencies in mono often lends a sense of grounding and solidity to a mix – and can be useful for club sound and vinyl cutting.

- **Off:** No frequencies are summed to mono.
- **Big Bass:** Big Bass signal is summed to mono.
- **All Bass:** In addition to the Big Bass summing, the stereo sides are high-pass (low cut) filtered, placing all bass frequencies in the center.

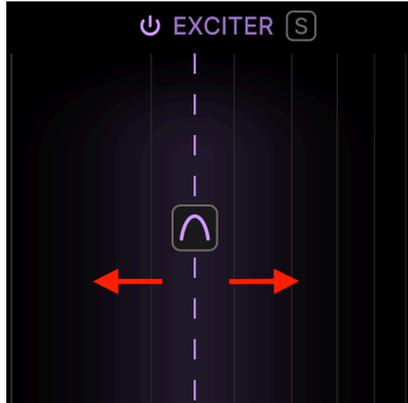


If Bus EXCITER-104 is used on a mono track (as a mono or mono-to-stereo plug-in), this option is not present. Since the signal originates as mono, there is nothing to sum to mono in the first place.

### 3.5.3. Exciter advanced controls

Advanced controls for the Big Bass module reside in the Visualizer above its main controls. Violet is the signature color of the Big Bass section.

#### 3.5.3.1. Frequency



Slide the dotted violet vertical line left or right. This duplicates the function of the Exciter module's **Frequency** knob, but you may find this movement more precise. It sets the cutoff frequency of a high-pass filter. Material above the cutoff gets processed by the Exciter, with the dry signal retained in parallel.

#### 3.5.3.2. Resonance



*Hover over the Exciter section's Resonance to see the value displayed to the right.*

The arch-shaped icon in the middle of the frequency bar is the Resonance control for the Exciter's high-pass filter. Drag up or down on it to adjust the value, and the shape of the arch will change to reflect the bandwidth of the resonance peak. A narrower arch also means a higher amplitude in the emphasis range.

**i** Similarly to the Big Bass module, you would increase the resonance to focus extra attention from the Exciter on a particular frequency band you find lacking in clarity or detail. Since Resonance is located at the input of the Exciter signal, it will emphasize harmonic generation around the set Frequency.

### 3.5.3.3. Slope

Slope 50 %

There are two things going on in the Exciter section: The signal's high-frequency content is spotlighted by the high-pass filtering, and harmonics are added via a *rectifier*. These are actually two parallel signals that the Exciter then mixes back together. **Slope** adjusts the rectifier behavior from half-wave (as on the hardware) to full-wave, at values from 50% to 100%, respectively. Drag up or down on the number to adjust the value.

**i** A *rectifier* is a type of distortion circuit. It takes a waveform that is symmetrical in its positive and negative cycles, then makes it asymmetrical by shaving off all or part of either the positive or negative cycles (but not both). Increasing the Slope past 50% will exceed the behavior of the model 104 hardware, adding even more harmonics. Full-wave rectifiers sound more aggressive than half-wave, and are ideal for adding air or grunge to atonal transients such as snare hits. For pitched or melodic sources, half-wave generally sounds better, though full-wave can produce interesting results on simple monophonic lines.

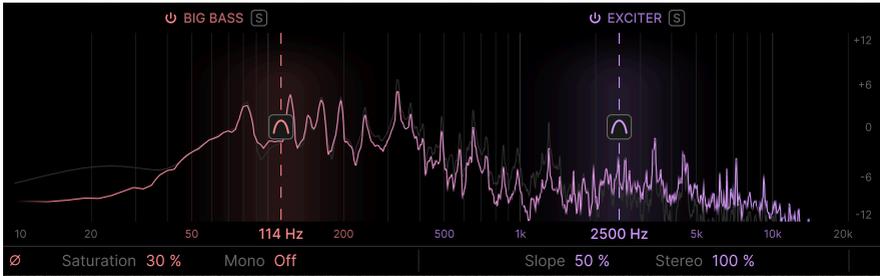
### 3.5.3.4. Stereo

Stereo 100 %

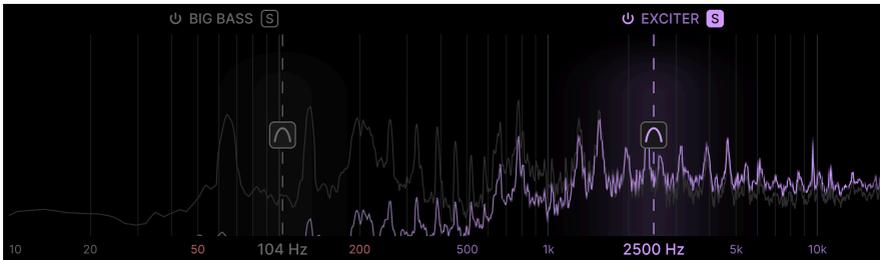
Drag up or down on the **Stereo** value to adjust the stereo width. A value of zero is monaural, 100% is the default, and 200% represents an exaggerated stereo spread. This only affects the processed portion of the signal output by the Exciter module.

**i** If Bus EXCITER-104 is used on a mono track (as a mono or mono-to-stereo plug-in), the Stereo parameter is not present.

### 3.5.4. Interpreting the Visualizer



When Bus EXCITER-104 is actively processing signal, the Visualizer shows an animated spectrum display of dancing peaks, representing the real-time frequency content of the signal. The faint grey outline represents the pre-processing input signal. The colored line, morphing from red to violet as frequency ascends, represents the results of *all* active processes at once, including the [Output EQ \[p.9\]](#) shelves.



*The Visualizer with the Big Bass module turned off*

If you turn either the Big Bass or Exciter module off (or solo the opposite module), its entire spectrum range turns grey. In the above screenshot, though, notice that the action of the Exciter extends well into the bass range.

## 4. THE TOOLBARS



The toolbars above and below the main control area of Bus EXCITER-104 contain a number of important functions for Preset selection, housekeeping, and other utility settings.

The Upper Toolbar includes:

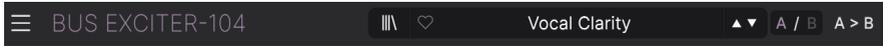
- The [Main Menu \[p.17\]](#)
- The Preset Name Pane and [Preset Browser \[p.27\]](#) access button
- Switching and copy options for [A and B settings \[p.21\]](#)

The Lower Toolbar includes:

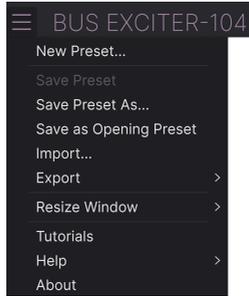
- The [parameter description area \[p.21\]](#)
- A button to select the [Oversampling Quality \[p.22\]](#) of the plug-in's processing engine
- The [Wet Only \[p.22\]](#) button to isolate the processed signal
- A [Bypass button \[p.22\]](#)
- [Undo, Redo, and History \[p.23\]](#)
- The [CPU Meter \[p.24\]](#) and [Panic \[p.24\]](#) functions
- A [corner grab handle \[p.24\]](#) for resizing the Bus EXCITER-104 window

## 4.1. Upper Toolbar

Let's start with the Upper Toolbar, covering its functions from left to right.



### 4.1.1. Main Menu



Clicking the “hamburger” icon (three horizontal lines) in the top left corner of the upper toolbar opens the Main Menu, a drop-down menu that lets you access a number of useful functions related to Preset management and more.

#### 4.1.1.1. New Preset

Creates a new Default Preset with initialized settings for all parameters.

#### 4.1.1.2. Save Preset

Overwrites the current Preset with any changes you have made. This applies only to user presets, so this option is greyed out for factory presets.

#### 4.1.1.3. Save Preset As...

This option saves the current settings of Bus EXCITER-104 under a new Preset name in the User bank. (Factory Presets cannot be overwritten or lost.) Clicking this option reveals a window where you can name your Preset and enter more detailed information about it:

↓ Save As

|               |                 |
|---------------|-----------------|
| NAME          | AUTHOR          |
| My New Preset | Stephen Fortner |
| BANK          | TYPE            |
| User          | Sci-Fi          |

Cancel Save

Information entered for the Bank, Author, and Type fields are all useful when searching for Presets in the [Preset Browser \[p.27\]](#). You can also type a name into the Bank field, which will create a new user bank that will then be available in subsequent Save As operations. You can't write into the Factory bank, but you can create multiple user banks!

#### 4.1.1.4. Save as Opening Preset

ⓘ Default Preset

Are you sure you want to change the opening preset ?

Cancel Overwrite

This option specifies the current Preset (Factory or User) as the one that will open when Bus EXCITER-104 is first placed on a track or bus in your DAW project. If you choose a factory Preset, it will open with factory settings.

#### 4.1.1.5. Import . . .

This command lets you import a Preset file or entire Bank stored on your computer. It opens a navigation window in your computer's OS to find the proper files.

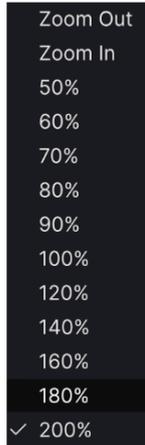
#### 4.1.1.6. Export . . .

You can export Presets to your computer in two ways: as a single Preset, or as a Bank. In either case, an OS-level navigation window lets you specify where to save the file(s). Both individual Presets and Banks have the filename extension .104x. By default, filenames include a time and date stamp.



- **Export Preset...:** Exporting a single Preset is handy for sharing a preset with someone else. The saved preset can be reloaded using the **Import** menu option.
- **Export Bank:** This option exports an entire Bank of Presets, which is useful for backing up or sharing many Presets at once. Saved Banks can be reloaded using the **Import** menu option.

#### 4.1.1.7. Resize Window

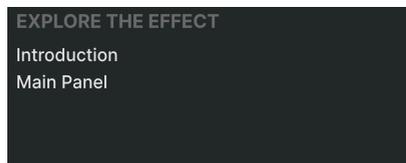


Bus EXCITER-104 can be resized from 50% to 200% of its default size (100%) without any visual artifacts. On a smaller screen, such as a laptop, you may want to reduce the interface size so it doesn't dominate the display. On a larger screen or a second monitor, you can increase the size to get a better view of the controls and graphics.

You can also perform this operation using keyboard shortcuts: every time you press CTRL- (Windows) or CMD- (macOS), the window will shrink by one size increment, and every time you press CTRL+ (Windows) or CMD+ (macOS), the window will grow by one size increment.

In addition, you can click-drag the [resize handle \[p.24\]](#) at the right of the lower toolbar to make the Bus EXCITER-104 window any size in the menu.

#### 4.1.1.8. Tutorials



Bus EXCITER-104 comes with interactive tutorials that walk you through different features of the plug-in. Clicking this option opens a pane on the right side of the window where the tutorials appear. Select one to access step-by-step descriptions that highlight the relevant controls and walk you through the process. Click "Exit Tutorials" at the bottom of this pane to end the tutorial and collapse the plug-in window to its previous size.

#### 4.1.1.9. Help

Get more help by visiting links to this user manual and Frequently Asked Questions pages on Arturia's website. You will need an internet connection to access these pages.

#### 4.1.1.10. About

Here you can view the software version and developer credits. Click again anywhere on the screen (outside the About window but inside the plug-in) to make this pop-up window disappear.

#### 4.1.2. Preset Browser access and Name Pane



*The Preset Name Pane*

Clicking the “books on a shelf” button opens the [Preset Browser \[p.27\]](#), which offers a myriad of ways to browse, sort, and organize Presets in Bus EXCITER-104.



Clicking on the Preset name also opens up a quick drop-down menu for selecting Presets outside of the Browser, as shown above. You can select a category to look at lists of Presets organized by purpose, as shown above, or look at *All Presets* at once.

**i** The categories/purposes on the left of the drop-down correspond to [Subtypes \[p.28\]](#), a specific level of Tag found in the Preset Browser.

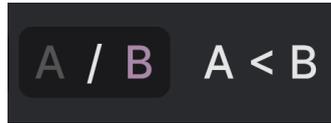
Everything you need to know about managing Presets, is covered in detail in [the next chapter \[p.27\]](#). This includes working with Favorites, which are tagged by clicking the heart icon you can see to the left of the Preset name.

**i** Note: An asterisk just after the name in the Preset Name Pane (\*) indicates that you’ve made changes to that Preset, even if you haven’t saved them. If you want to keep them, be sure to do a *Save Preset As* operation and name your Preset.

### 4.1.3. Dual settings and copy



*Preset state A active with the option to copy settings to B*



*Preset state B active with the option to copy settings to A*

Each Preset is actually two Presets in one! Using the A and B buttons, you can switch between two completely different sets of control settings. These are saved within each Preset.

When A is active, clicking **A > B** will copy the A settings to B. When B is active, clicking **A < B** will copy the B settings to A.



When you edit settings in a Preset and close your DAW project without saving the Preset, the changes will be remembered when you reopen it - but they will be recalled in Slot A. That means that editing settings in Slot B and closing your DAW without saving them will move those settings over to Slot A when you reopen the project - and Slot B will be blank. Save often!

## 4.2. Lower Toolbar

The Lower Toolbar of the Bus EXCITER-104 interface can be thought of in terms of left and right halves. On the left is the parameter description display, and on the right are buttons for several useful utility functions.

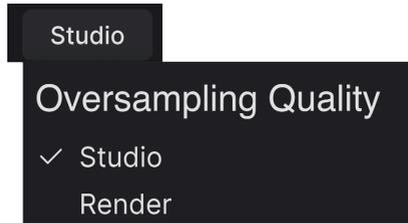
### 4.2.1. Parameter Descriptions



*Control description shown for the Big Bass filter frequency*

Operate or hover on any knob, button, icon, or other control, and a brief description of what it does appear in the lower left-hand corner.

## 4.2.2. Oversampling Quality



*Select studio or render quality  
oversampling in this menu*

This button in the Lower Toolbar helps you balance audio quality and CPU resources.

- **Studio:** Ideal for tracking, mixing, and working with Bus EXCITER-104 alongside other plug-ins such as virtual instruments.
- **Render:** Ideal for final mixdown.

This is a good-better difference. Studio quality is more than enough for composing and mixing; Render quality is ideal for printing or bouncing your final mix.

## 4.2.3. Wet Only



*Click this button to hear only the  
processed signal.*

For a quick way to listen to all the processing Bus EXCITER-104 is performing with none of the input signal, click **Wet Only**. Note that this is interdependent with the [Wet Mix \[p.8\]](#) knob; the drier the mix is set, the less volume you will hear in the wet-only sound. If the mix is turned all the way dry, clicking **Wet Only** will cause silence.



Importantly, the **Wet Only** setting should be activated when Bus EXCITER-104 is used on a send bus, as you can then adjust its overall amount using send-and-return controls in your DAW.

## 4.2.4. Bypass

The **Bypass** button bypasses the Bus EXCITER-104 plug-in entirely. Among its uses are doing a quick comparison of dry versus processed signal without having to bypass the plug-in at the DAW level.

## 4.2.5. Undo, Redo, and History



When editing a plug-in, it's all too easy to overshoot the sweet spot for one or more controls, and then wonder how to get back to where you were. Like all Arturia plug-ins, Bus EXCITER-104 offers comprehensive Undo, Redo, and History functions so that you always have a safe way back.

Use the arrows to go back and forward one control movement at a time.

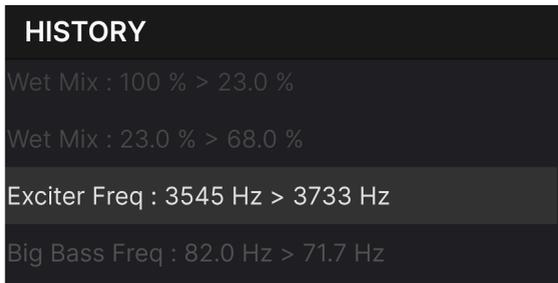
### 4.2.5.1. Undo

Click the left arrow to revert to the state before the most recent edit you made. You may click repeatedly to undo several edits in reverse time order.

### 4.2.5.2. Redo

Click the right arrow to redo the most recent edit you undid. If you have undone several, you may click repeatedly to redo them in forward time order.

### 4.2.5.3. History



Click the center "hamburger" (three lines) button to open the History window, as shown above. This provides a step-by-step account of every move you have made in Bus EXCITER-104. Clicking on an item in the list not only re-executes that move – it returns the plug-in to the overall state it was in when you first made that move.



Note that the A and B controls settings within a Preset have separate Undo histories.

## 4.2.6. CPU Meter

At far right is the **CPU Meter**, which displays the overall load Bus EXCITER-104 is placing in your computer CPU. Since it deals only with this plug-in, it is not a substitute for the resource metering tools in your DAW.

### 4.2.6.1. Panic



*Mousing over the CPU Meter accesses the Panic button.*

Mouse over the CPU Meter, and it will display the word PANIC. Click to send an all-sounds-off command that silences any sound processed through Bus EXCITER-104. This is a momentary command, so sound will resume if your DAW is still playing.

In the event of serious runaway audio (say, from an unrelated delay effect that has gone into a feedback loop), stop your DAW playback and disable the plug-in causing the problem.

## 4.2.7. Resize handle



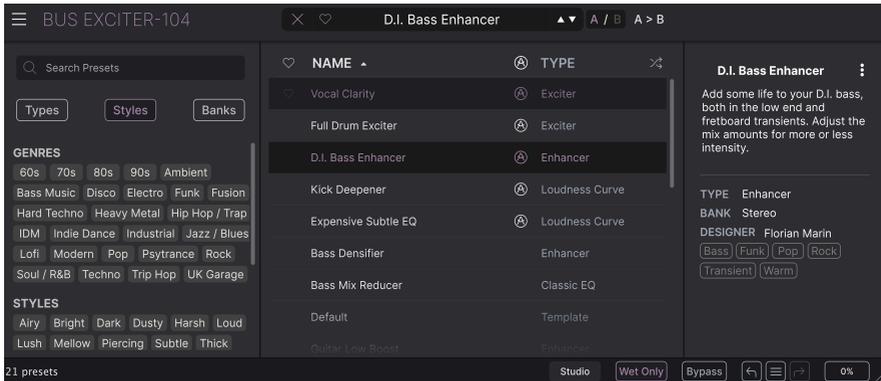
Grab and drag the diagonal lines to the right of the CPU meter to resize the plug-in window. When you release the mouse button, the window will snap to the nearest increment available in the [Resize Window \[p.19\]](#).

### 4.2.7.1. Max View button



Sometimes, you may see the above button with two diagonal arrows appear over the resize handle. This happens when, for some reason, the window size is not displaying all of the controls of Bus EXCITER-104. Click it to restore a full view of the open controls.

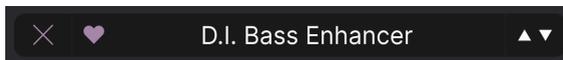
## 5. SELECTING PRESETS



Bus EXCITER-104 lets you browse, search, and select Presets from a browser-like interface inside the plug-in. You can also create and save your own Presets in the User Bank. Of course, the state of any instance of the plug-in – including the current Preset – is automatically saved when you save your DAW project, so you can always pick up where you left off.

First, we will cover Preset functions from the Upper Toolbar in more depth.

### 5.1. Preset Name Pane



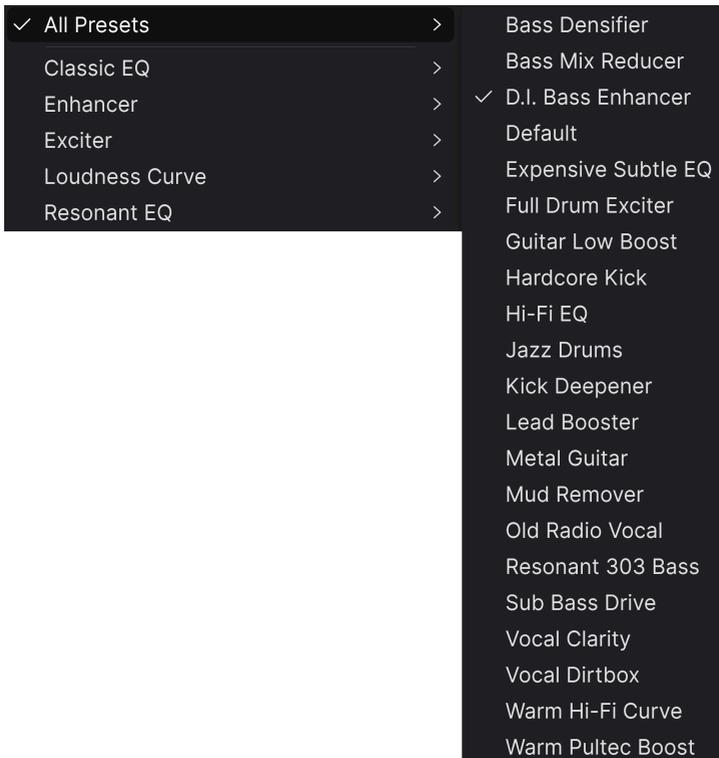
The name pane at top center is always displayed whether you're in the main controls view or the Preset Browser. It reads out the name of the current Preset, obviously, but also offers further ways to browse and load Presets. A filled-in heart icon indicates a liked Preset.

#### 5.1.1. The Arrows

The up and down arrows to the right of the Preset name step serially through Presets. This is limited by the results of any currently active search, i.e. the arrows will only step through the search results. So, make sure any searches are cleared if you simply want to step through all available Presets until you find something you like.

### 5.1.2. Preset quick access

As mentioned briefly in the previous chapter, you can click on the Preset name in the center of the upper tool bar to bring up a drop-down Quick Browser for Presets. The first option in this menu is called *All Presets*, and it brings up a submenu of literally every Preset in the current Bank:



#### *All presets*

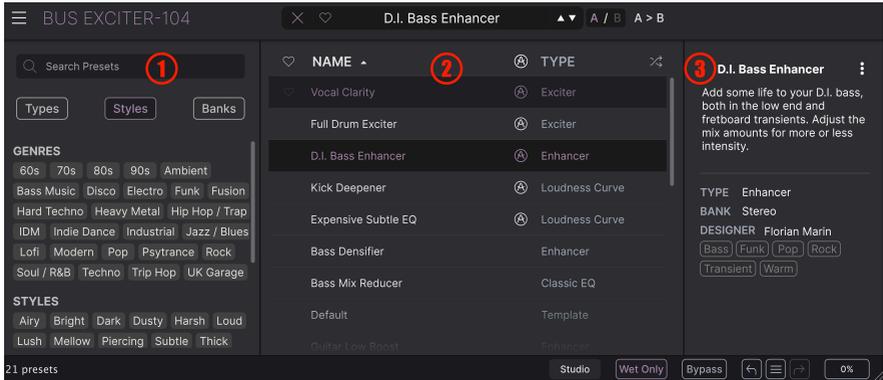
Below “All Presets” are category options for different applications: classic EQ, enhancer, etc. These correspond to the [Subtypes \[p.28\]](#) in the plug-in’s library of Tags. Each of these brings up a submenu of Presets that are appropriate for the specified purpose. One useful aspect is that in the [Tags area \[p.28\]](#), which Subtypes are visible depends upon the parent Type selected. But in the above menu, all Subtypes are always displayed.

Unlike the up and down arrows, the “All Presets” submenu is independent of search criteria – it simply shows you every Preset available. Likewise for the choices below the line, which always include all Presets within that Type.

## 5.2. The Preset Browser

Click the “books on a shelf” icon (four vertical and tilted lines) in the Upper Toolbar to access the Preset Browser. When the Preset Browser is open, the icon becomes a large X, and is used to close the Browser when you’re done.

The three main areas of the Preset Browser are as follows:

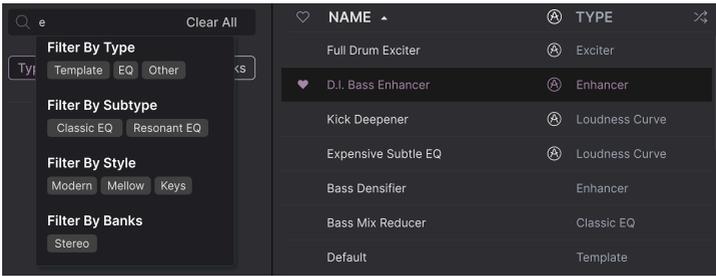


| Number | Area                                | Description   |
|--------|-------------------------------------|---|
| 1.     | <a href="#">Search [p.27]</a>       | Searches for Presets by text entry with tag-based filters for Type, Style, and Bank |
| 2.     | <a href="#">Results Pane [p.30]</a> | Displays search results, or all Presets if no search criteria are active            |
| 3.     | <a href="#">Preset Info [p.32]</a>  | Displays Preset Details; can edit details for Presets in User Bank                  |

## 5.3. Searching Presets

Click on the Search field at the top left and enter any search term. The browser will filter your search in two ways: First, simply by matching letters in the Preset name. Second, If your search term is close to that of a [Type or Style \[p.28\]](#) it will include results fitting those tags as well.

The Results Pane will show all Presets that fit your search. Click the **Clear All** text to clear your search terms along with all tags



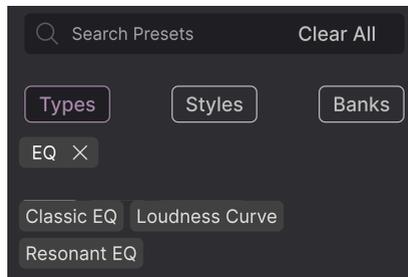
*Some of the results that appear upon simply typing the letter E*

Notice the pop-up at left, which has appeared in response to beginning to type only the letter E in the search bar. This offers the options to filter results not just by the text but also by tags (see below) and banks. This box will offer fewer options, or disappear altogether, as you type more into your search phrase.

### 5.3.1. Using Tags as a filter

You can narrow (and sometimes expand) your search using different *tags*. There are two broad kinds of tags: **Types** and **Styles**. You can filter by one, the other, or both.

#### 5.3.1.1. Types and Subtypes



*The main type, EQ, is in the upper row of tags; its subtypes are in the second row*

Types in Bus EXCITER-104 are tags that correspond to applications: EQ, Template, and Other. With a clear search bar, click the **Types** drop-down to bring up the list of types. Types sometimes include Subtypes. In the above example, EQ is the main Type, and the second row of subtypes is Classic EQ, Loudness Curve, and Resonant EQ.

**i** You can specify the Type and Subtype when [saving a Preset \[p.17\]](#), using the contextual Type menu. That Preset will then show up in searches where you've selected that Type. The categories of Presets in the quick [drop-down menu \[p.26\]](#) correspond to Subtypes, i.e. specific purposes or musical goals for the plug-in's processing.

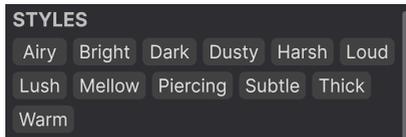
### 5.3.1.2. Styles

Styles are, well ... exactly that. Accessed by the **Styles** button, this area has three further subdivisions:

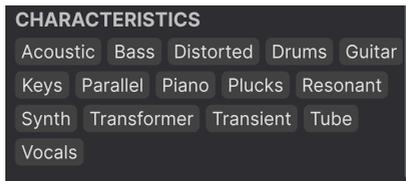
- *Genres*: Identifiable musical genres such as 80s, Ambient, Bass Music, Industrial, etc.:



- *Styles*: More accurately called substyles in this context, these represent general "vibe" such as Airy, Bright, Dark, etc.:



- *Characteristics*: Even more detailed audio qualities. In Bus EXCITER-104, these are either intended material on which to use the plug-in (Drums, Piano, etc.) or targeted sonic traits (Resonant, Transformer, etc.).



Click any tag in any of these categories, and the results will show only Presets that match that tag. Notice that when you select any tag, several other tags usually grey out and become unavailable. This is because the browser is *narrowing* your search by a process of elimination.

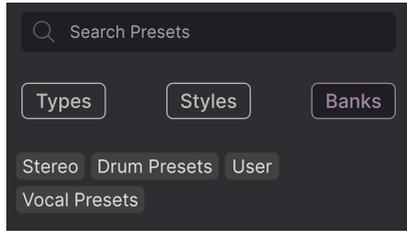


Note that this is the opposite of how selecting multiple Types *broadens* your search.

Deselect any tag to remove it and widen the search without having to start all over again. You can also clear the tag by clicking the X to the right of its text, which appears at the top.

Note that you can search by a string of text, Types and Styles, or both, with the search becoming narrower as you enter more criteria. Clicking **Clear All** in the search bar will remove all Type and Style filters as well as any text entry.

### 5.3.2. Banks



*Four banks are shown: the factory bank (Stereo), plus three user-created banks: User, Drum Presets, and Vocal Presets*

To the right of the **Types** and **Styles** drop-downs is the **Banks** drop-down, which lets you do your search (using all the methods above) within the Factory or User Banks. When you perform a *Save Preset As* operation, you can type in a custom name in the Bank field. This will create a new User bank that will then be available in the menu the next time you *Save Preset As*. So you're not confined to a single, boringly named "user" bank.

### 5.4. The Results Pane

A screenshot of a results pane showing a list of presets. The list has two columns: "NAME" and "TYPE". The "NAME" column has a heart icon on the left and a small triangle on the right. The "TYPE" column has a circular icon with an 'A' on the left and a refresh icon on the right. The list contains the following items:

| NAME                | TYPE           |
|---------------------|----------------|
| Full Drum Exciter   | Exciter        |
| D.I. Bass Enhancer  | Enhancer       |
| Kick Deepener       | Loudness Curve |
| Expensive Subtle EQ | Loudness Curve |
| Bass Densifier      | Enhancer       |
| Bass Mix Reducer    | Classic EQ     |

The central area of the browser shows search results, or simply a list of all Presets in the Bank if no search criteria are active. Simply click on a Preset name to load it.

#### 5.4.1. Sorting Presets

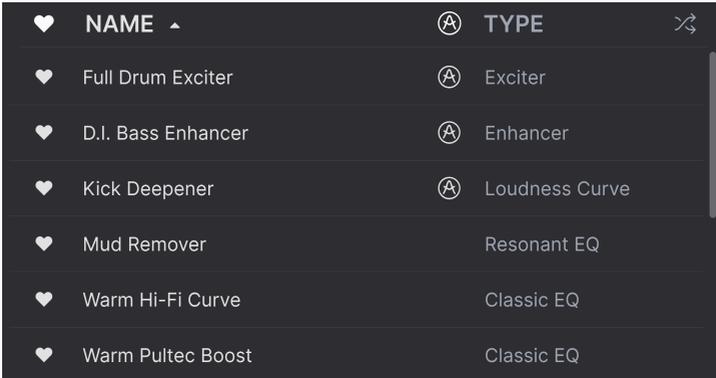
Click the **NAME** header in first column of the Results list to sort the results list of Presets in ascending or descending alphabetical order.

Click the **TYPE** header in the second column to do the same thing by Type.

### 5.4.2. Liking Presets

As you explore and create Presets you can mark them as Liked by clicking the heart icon next to their names. This icon also appears in the Upper Toolbar's [Preset Name Pane \[p.25\]](#).

Clicking on the heart icon makes all of your liked Presets show up at the top of the results list, as shown here:



A filled-in heart icon indicates a Liked Preset. An outline indicates a Preset that has not yet been Liked. Click the heart at the top of the list again to return the list to its previous state.

### 5.4.3. Shuffle button



This button randomly reorders the Preset list. Sometimes it can help you find the sound you're looking for more quickly than scrolling through the entire list.

### 5.4.4. Featured factory Presets

Presets accompanied by the Arturia logo are factory creations we think really showcase the capabilities of Bus EXCITER-104.

| NAME                | TYPE           |
|---------------------|----------------|
| Full Drum Exciter   | Exciter        |
| D.I. Bass Enhancer  | Enhancer       |
| Kick Deepener       | Loudness Curve |
| Expensive Subtle EQ | Loudness Curve |
| Bass Densifier      | Enhancer       |
| Bass Mix Reducer    | Classic EQ     |

Clicking the Arturia logo icon at the top of the Results pane sorts all featured Presets to appear at the top of the list.

Sorting by Liked presets takes priority over sorting by factory-featured ones. So, if the top heart icon is engaged, the results will show all liked Presets first, but the first among these will be featured Presets. Non-liked featured Presets may appear lower on the list.

### 5.5. Preset Info Section

The right side of the browser window shows specific information about each Preset.

**D.I. Bass Enhancer** ⋮

Add some life to your D.I. bass, both in the low end and fretboard transients. Adjust the mix amounts for more or less intensity.

---

**TYPE** Enhancer

**BANK** Stereo

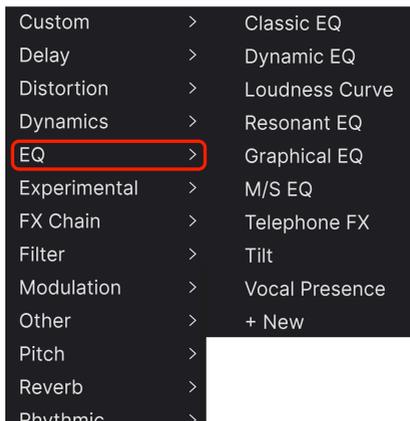
**DESIGNER** Florian Marin

Bass
Funk
Pop
Rock

Transient
Warm

For Presets in a User bank (as the result of a *Save Preset As* operation), you can enter and edit the information in the Preset Info Section and it will update in real time. This includes the Bank, designer, Type, all Style tags, and even a custom text description at the top.

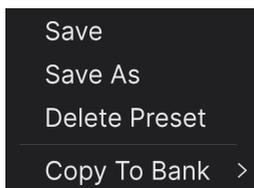
To make the desired changes, you can type directly in the text fields or use one of the pull-down menus to change the Bank or Type. As shown here, you can also use a hierarchical menu to select the Type or even create a new Type or Subtype.



**i** Types and Styles changes you make here are reflected in searches. If you remove a given Style tag from a Preset and then save that Preset, it will not show up in future searches for Presets bearing that tag. Note that we provide a huge range of Types and Subtypes meant to work across the entire FX Collection. Not all of these apply straightforwardly to Bus EXCITER-104.

### 5.5.1. Preset Info quick menu

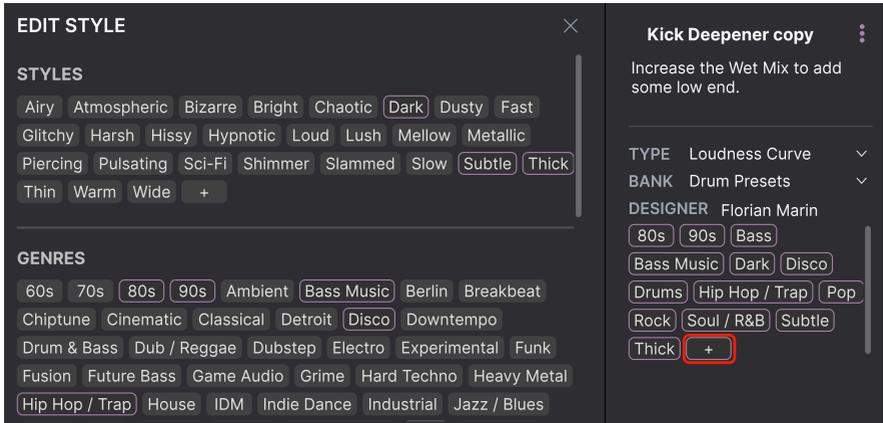
Clicking the icon with three vertical dots brings up a quick menu for Save, Save As, and Delete Preset operations:



For sounds in Factory banks, only **Save As** and **Copy To Bank** are available. If you're working with a user Preset and "Save" is greyed-out, it means you haven't yet changed anything about the Preset.

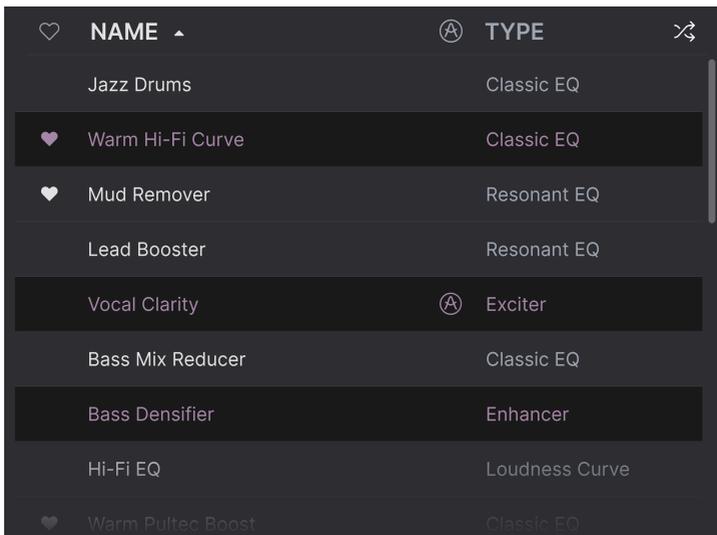
### 5.5.2. Edit Style

You can also create your own Style tags to help refine searches according to criteria that matter most to you. Clicking on the + icon in the list in the Preset Info pane opens the Edit Style pane, where you can create as many new tags as you'll ever need:



### 5.5.3. Editing info for multiple Presets

It's easy to edit information such as Types, Styles, designer name, and text description for several presets at the same time. Simply hold CMD (macOS) or CTRL (Windows) and click the names of the Presets you want to change in the Results list. Then enter the comments, change the Bank or Type, etc., and save. You can also hold SHIFT to select a contiguous range of Presets.



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