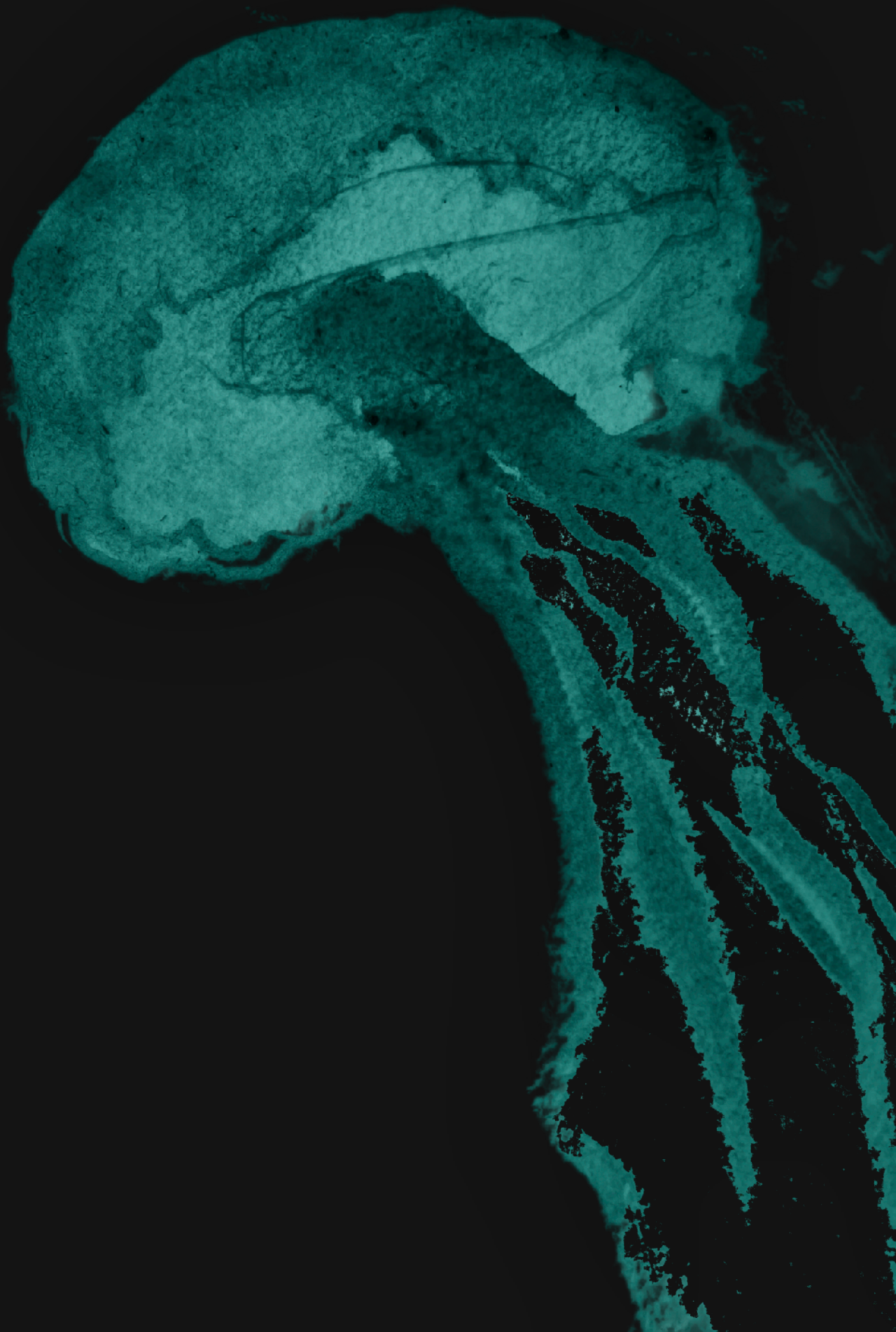
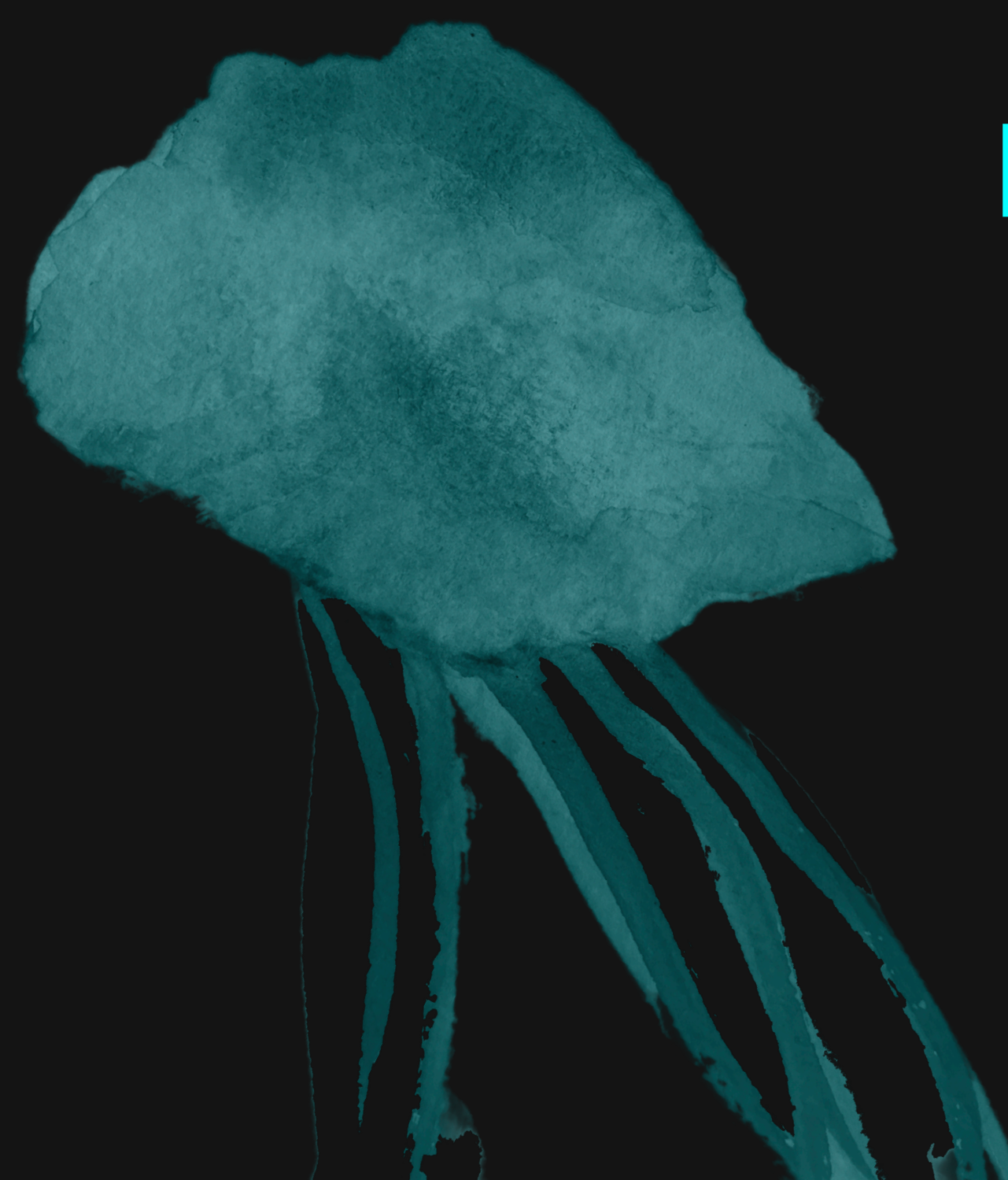




ABYSS II

MANUAL



QUICK START

1 Download & install

Mac https://dawesome.short.gy/abyss2_mac

Win https://dawesome.short.gy/abyss2_win

2 Unlock your license

You can run the plugin in demo mode.
You can purchase a license via
www.dawesomemusic.com

Just click **ACTIVATE** and enter your
SERIAL, done.

For details see [Appendix](#).

3 Play!

To get most out of your midi controller, tell
Abyss which one you use by clicking here.



Abyss II

System Requirements:

Mac:

10.13 (Ventura) or higher
64-bit Apple Silicon / Intel
AU / VST3 / AAX

Windows:

win 10 / 11 (64-bit)
VST3 / AAX



TIP

On Mac sometimes you
may need to copy the
installer to the desktop
and start it from there.
Don't ask me why - I
will ask Steve when my
time has come.

OVERVIEW



1

The Tone Colour [GRADIENT](#) is the core of Abyss. Add and move Tone Colours. Control the position on the Gradient with the POSITION slider.

2

The [SOUND SHAPING](#) Transposition, FM, virtual analog Filter, BRUTE, SYNTIFY, VELVET and more.

3

The [FX SECTION](#) Drag to change order. Drag out to delete. Click gear for more dials.

4

Click here to choose your MIDI controller. See [SETUP](#) for details.

5

Two [ADSR](#) envelopes

6

Three [LFOs](#)

7

To modulate a parameter like CUTOFF:
1. Select the parameter.
2. Set the modulation-depth with the sliders below each modulation source.

There is no need to first connect anything via drag-and-drop! Find out [more](#).

OVERVIEW

Click the main burger menu ≡ to change settings.

Click the preset name to open the [PRESET BROWSER](#).

UNDO and REDO.

Click to visit the [Dawesome website](#).

The Output section.

Click here to choose your MIDI controller. See [SETUP](#) for details.

Generate an audio file of the last played note by dragging from here onto your DAW or desktop.

Click to de-/activate the tooltips.

The activation status of the plugin.

Drag corner to resize the UI.

Restrict Abyss to a scale.

The screenshot displays the Abyss II VST interface, which is a dark-themed digital synthesizer. At the top, the title 'ABYSS II' is shown in a stylized, glowing green font. Below the title are buttons for 'SAVE ...', 'INIT', and 'MANUAL'. To the right of the title are 'UNDO' and 'REDO' buttons. Further right is a 'DA W E S O M E' logo with a 'PANIC!' button and a 'LIM -6 dB' indicator. The main interface is divided into several sections. On the left, there's a 'SETUP' section with a 'MIDI' dropdown and four MIDI channel assignments (X1, X2, X3, X4). Below this is a 'KEYTRACK' section with a 'LIFT' button and a 'KEYTRACK' button. The center section contains various synthesis parameters: 'FM AMT', 'CUTOFF', 'SYNTIFY', 'RATIO', 'RESO', 'BRUTE', 'WAVE', 'DIRT', 'VELVET', 'TRANS', 'TUNE', 'GAIN', 'PAN', and 'EQ'. A large blue horizontal slider is labeled 'POSITION'. Below this is a 'PALETTE' section with three preset cards: 'EQ' (shell), 'TAPE' (coral), and 'OTT' (lobster), each with a 'DEFAULT*' label. The right section contains three waveform displays. At the bottom, there's a 'MONO' and 'GLISS' section, a piano roll keyboard, and a 'TIME' section. The bottom right corner shows 'SELF EXPIRING BETA 2026/9' and a corner handle for resizing the UI.

PLAY PRESETS

Presets can be so inspiring!

Click to show only favorites.

Click to show all presets.



Click outside the preset browser to close it.
Double-click a preset to load it and close the browser.

Choose one or multiple filters.

Click to load a preset.



Right-click on a preset for further options.
User presets have more options than factory presets.



Right-click or shift-click a filter to expand the selection.

DEEP FREEZE

SAVE ... INIT MANUAL

ABYSS II

DAWESOME

PANIC! LIM -6 dB

PACK	TYPE	☆ ONLY	SHOW ALL	SEARCH:	324 PRESETS
ABYSS 2 ABYSS 1	BASS LEAD PAD KEYS ARP/SEQ PERC FX DRONE	☆ 66 MILLION YEARS AGO ☆ 805 ★ ADOLPHE SAX AIR ☆ AHAB ☆ ALARM ☆ ALIEN SEAS ☆ ALORS UN DANSE ☆ AMARYLLAS EYES ☆ AMBER ☆ AMBIE ☆ AMUNDSON ☆ ANCIENT GLACIER ☆ AND THE TAP DRIPS ☆ ANOMOLY ☆ ARCTIC SUMMER ☆ ARCTIC WIND ☆ ATARI ☆ ATTACK ☆ AURORA BOREALIS ☆ AVALON GLOW ☆ BE REWIND ☆ BEAM CANNON ☆ BEFORE THE STORM ☆ BELL ☆ BELLSCAPE	☆ BEND ☆ BETAMAX ★ BETWEEN WORLDS ☆ BIKINI ATOLL ★ BLACK ICE ☆ BLADE SNEAKER ☆ BLOB SCULPIN ★ BLOOD IN THE WATER ☆ BLUE WALES ☆ BOILD ☆ BOREALIS ☆ BOTTLE ☆ BOTTLE 2 ★ BRASS MENAGERIE ☆ BRASS PAD ☆ BRASS PAD 2 ☆ BREAKERS ☆ BUOY ☆ BURNING SWARM ☆ CAMOUFLAGE ☆ CAROUSEL ☆ CASEADRAL ☆ CHAINSAW ☆ CHAMELEON RICOCHET ☆ CHERNOBYL	☆ CHORDAL ☆ CHORDALEZ ☆ CIRCUITRY ☆ COLD SHORES ☆ COLD WIND ☆ COLLISION ☆ COMBED ☆ CORAL ☆ COUSTEAU ☆ CROCKET ☆ CRUSH ☆ CRUSH PAD ☆ CRYPT RESONANCE ☆ CYPHER ★ DANGEROUS MAGIC ☆ DARK BLUE ☆ DARK DIVERSE ☆ DARK GROUNDS ☆ DARK PLUCK ☆ DARK PLUCKS ☆ DARK WATER ★ DEEP FREEZE ☆ DEEP IMPACT ☆ DEEPSPACE ☆ DEEPWATER	
AUTHOR	TIMBRE				
ASTRALABYSSAL DATABROTH DAWESOME PETERVORLAENDER RICH SOUND AUTHOR THE SOUND OF MERL..	SUSTAINED PLUCKY EVOLVING COMPLEX SYNTHETIC ATMOSPHERIC PURE WARM COLD BRIGHT DARK INHARMONIC NOISY				

MONO GLISS TIME

SELF EXPIRING BETA 2026/9

Click to mark preset as favorite.

TRANSFER PRESETS FROM ABYSS 1

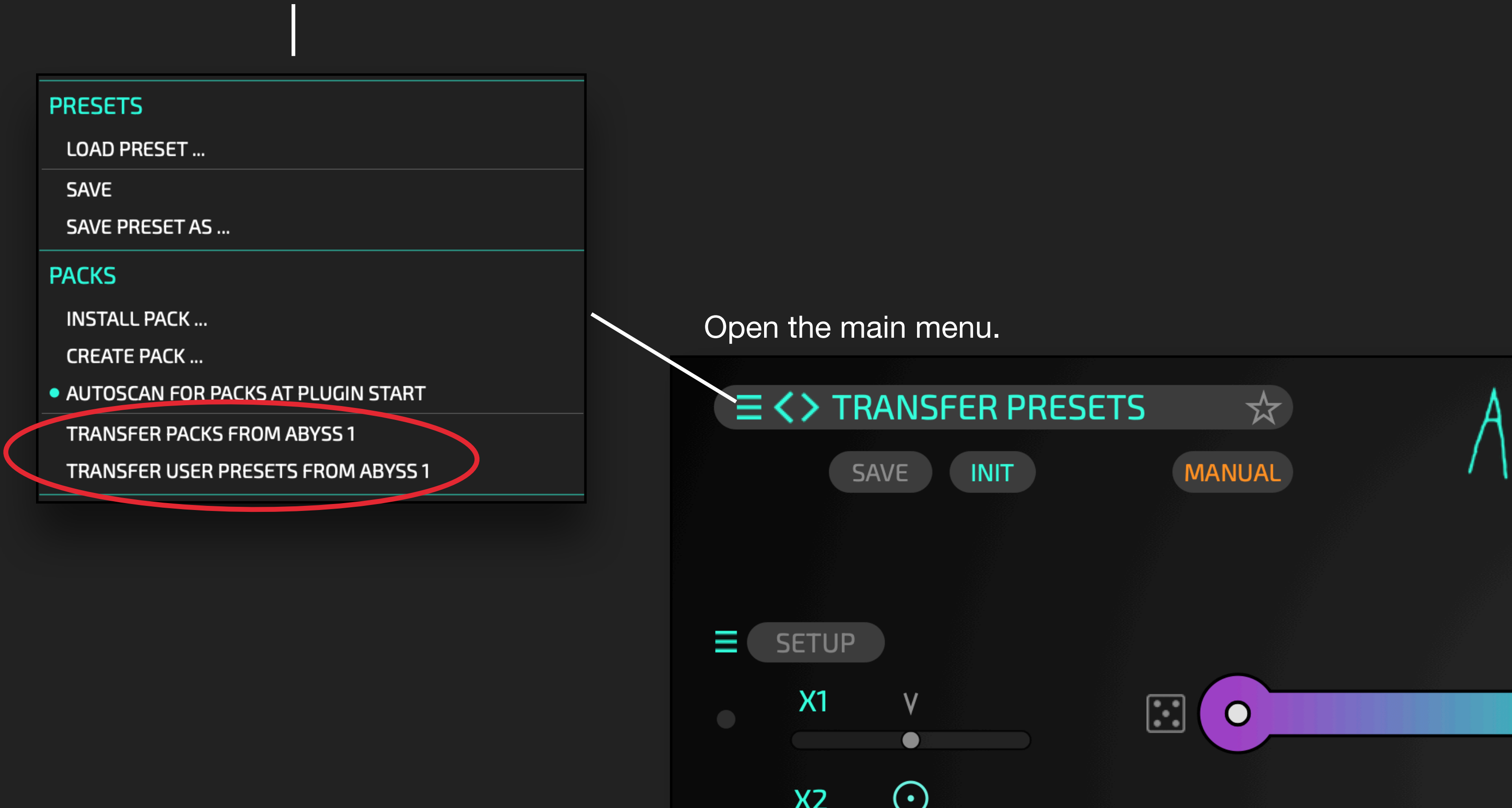
Do you have user presets or packs from the original ABYSS?

You can transfer these with a single click to Abyss 2. The presets will be converted to Abyss 2 format and saved in the right locations.

NOTE: If the number of presets to be converted is large this may take some time!

Choose “TRANSFER PACKS/USER PRESETS FROM ABYSS 1”

These options will only appear if Abyss 2 detected Abyss presets or packs.



SAVE PRESETS

Press this hamburger menu to open user presets directory in explorer/finder.

Choose a name.

Enter your name as author.

No idea for a name?
Click here.

Or right-click to see 10
name suggestions.



TIP

AUTHOR and TAGS
can be used to filter
presets in the preset
browser.

Choose tags that best
describe your sound.

Enter a destination folder.



TIP

When a preset name
already exists, you can
overwrite the preset or
auto-generate a new
version, e.g. MEOWWW (2)

OVERWRITE

VERSIONIZE

SAVE PRESET

PRESET NAME: MEOWWW

AUTHOR: MIZU THE CAT

DIRECTORY: USER PRESETS/MIZUS SECRET PLACE

TAGS:

TYPE

BASS

LEAD

PAD

KEYS

ARP/SEQ

PERC

FX

DRONE

TIMBRE

SUSTAINED

PLUCKY

EVOLVING

COMPLEX

SYNTHETIC

ATMOSPHERIC

PURE

WARM

COLD

BRIGHT

DARK

INHARMONIC

NOISY

CLOSE

SAVE

Close without saving.

Click to save preset.

HIGH CONTRAST MODE

Abyss 2 offers a high contrast color mode as an accessibility feature.

PRESETS

LOAD PRESET ...

SAVE

SAVE PRESET AS ...

PACKS

INSTALL PACK ...

CREATE PACK ...

AUTOSCAN FOR PACKS AT PLUGIN START

TRANSFER PACKS FROM ABYSS 1

TRANSFER USER PRESETS FROM ABYSS 1

USER INTERFACE

SCALE UI ...

SETTINGS ...

REMEMBER UI DIMENSIONS

USE OPENGL

HIGH CONTRAST MODE



NEW IN ABYSS 2

New features in Abyss 2 include the following: the ability to drag+drop samples on the gradient or pallet, FX section can be reordered, 16 new FX modules, sub-presets for modules, SYNTIFY, BRUTE, VELVET, polyrhythmic sequencer, mono mode, undo/redo, preset browser with tags and filters, preset packs, new limiter, modulatable ADSRs, envelope SLOW mode, larger edit area for controllers, SETUP for simple controller mapping, export last-played note, randomization, high contrast mode, hundreds of presets, and more!

PRESET

ON / OFF 16

VEL 16

GATE 16

PITCH 16

OCT 16

RND

RESET

SYNC

120 BPM

1/16

RETRIG

EXPRESSION SETUP

X1

VEL

X2

PRESS

X3

SLIDE

X4

CC 6

TUNING SETUP

MASTER

440

MTS

GLIDE

8

NO MASTER

PB

2

NO SCALE

PRESS/AT

RISE

FALL

J-60

DEFAULT*

..

GRAINS

DEFAULT*

.....

DUAL

DEFAULT*

....

EQ

DEFAULT*

.....

SYNTIFY

BRUTE

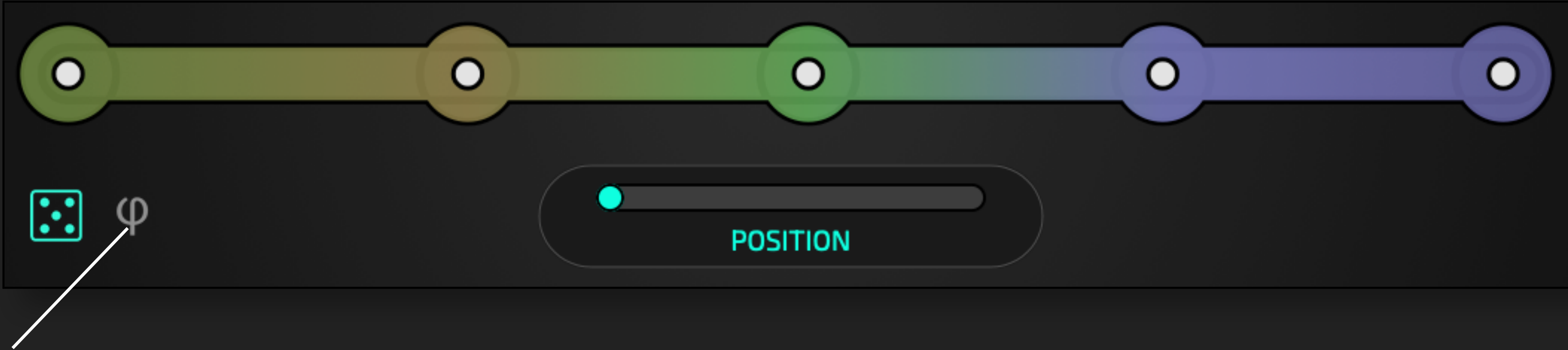
VELVET

THE ABYSS METAPHOR

Paint with sound. Abyss is your art studio. The preset is your canvas. Your sample library contains your oil tubes. Your palette is....well, that's simply called a palette here; it contains the many Tone Colours you will use to create your next masterpiece.



GRADIENT AND TONE COLOURS



Toggle on to reset Tone Colour phase on each note-on.



TIP
Right-click the Gradient for a few more actions.

- CLEAR ALL
- EXTEND TO SIDES
- DISTRIBUTE EVENLY

The **Gradient** can have multiple Tone Colours. Each of these represents a specific sound, and in between them a smooth continuum of timbres is created.

Similar colors correspond to similar timbres.

Click and hold a Tone Colour to hear its sound. Drag to move it around the Gradient. Double click to remove it.

Click or hold the Dice button to populate the Gradient with randomly chosen Tone Colours from the current Palette.



TIP
Drag and Drop an audio file on the Gradient. Abyss 2 will derive Tone Colours from the sample. Note that this is NOT sample playback - it converts the sample into a sequence of Tone Colours.



TIP
To determine a Tone Colour's origin file, click and hold the Tone Colour. When held, the tooltip will show the original file name.

PALETTES



The fastest way to browse timbres is to simply hold the mouse down and move around on the Palette.

Once you have found a Tone Colour you like you can right-click it to drag and drop it onto the Gradient.

Or you can drag it from the Tone Colour symbol above the Tone Colour sliders.



Click here to choose your Palette.

Click here to bring up the Palette view.

Create a new Palette, change its name or move the current Palette to the trash.

NOTE: you can't rename or remove factory Palettes.



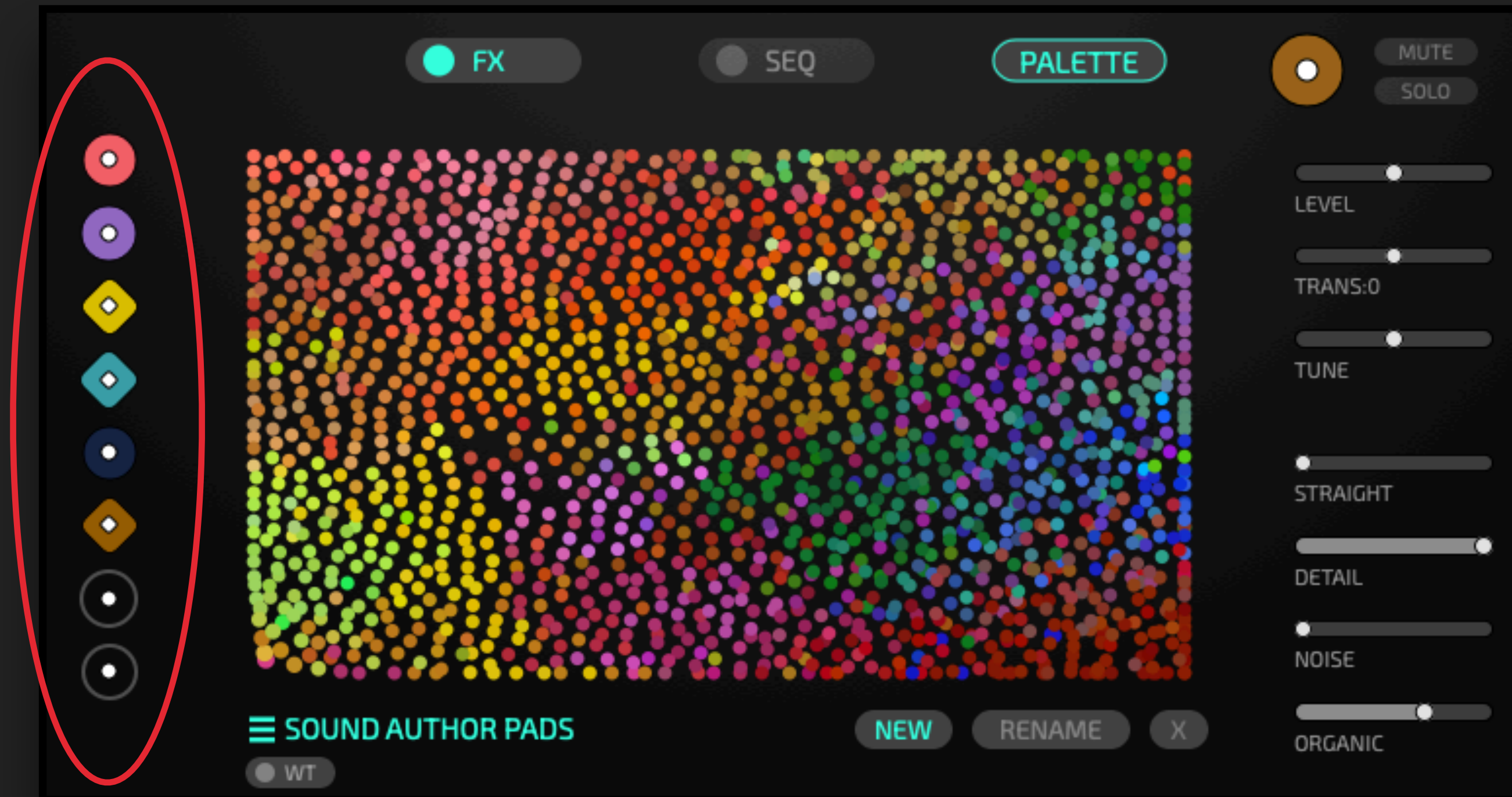
The real fun starts when you make your own Palettes!

Create a new Palette, then drag and drop one or more files on the Palette.

Abyss will analyze the audio and extract Tone Colours. These will then be sorted, such that similar sounding Tone Colours are closer together.

This uses machine learning, the nice and friendly brother of AI. No artists had been ripped of, no billionaires involved.

TONE COLOUR FAVORITES

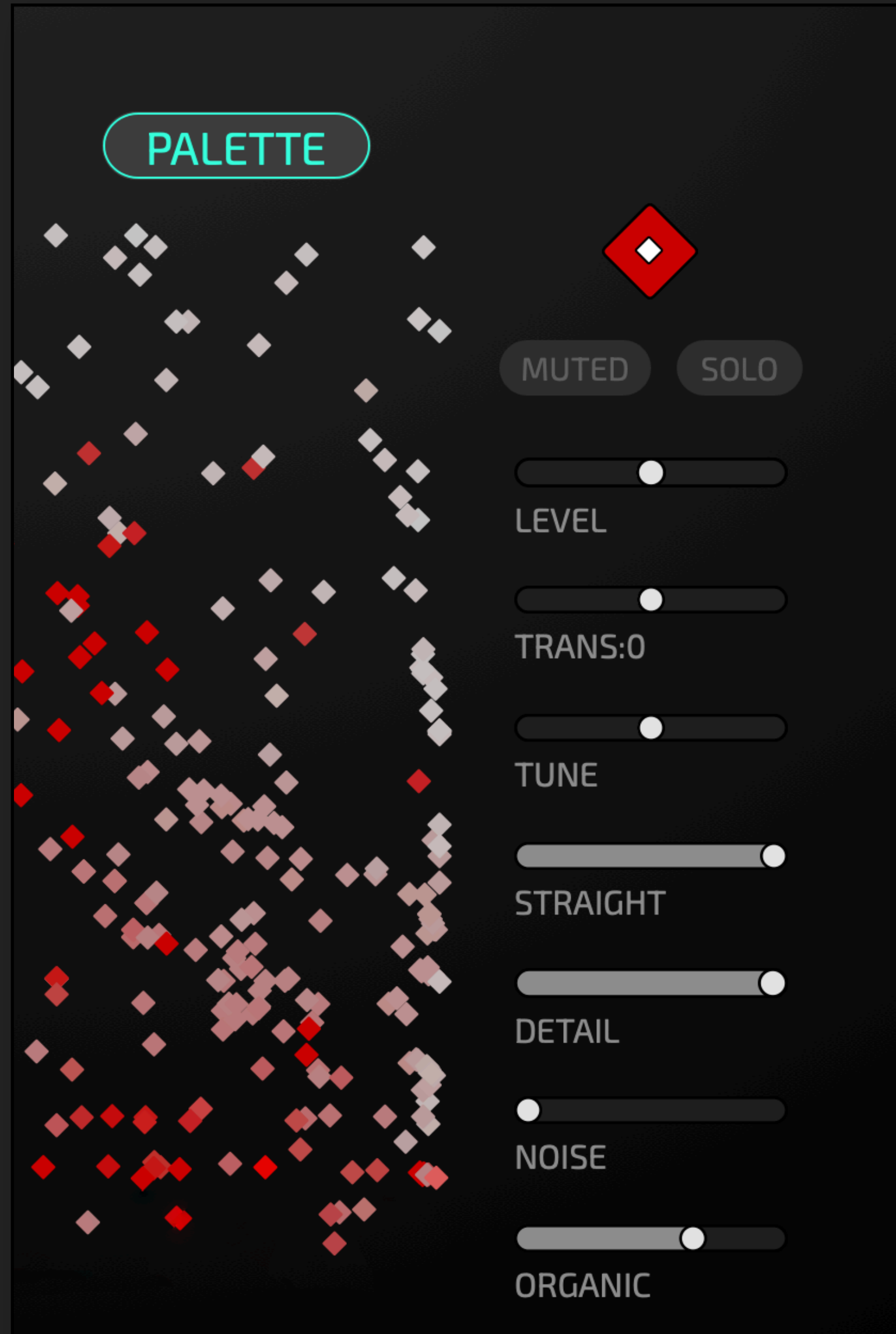


Want to keep track of your favorite and most useful Tone Colours? Simply drag a Tone Colour to the favorites rack. When you're ready to use the Tone Colour again, simply drag it from the rack to your gradient.

The favorites rack is persistent throughout all Abyss 2 instances; you'll have your favorites available in each track of your session!

Additionally, you can transfer favorited Tone Colour's parameters to a new Tone Colour. Create a rack of favorites, preferably with varied Tone Colour parameters for this example. Then search for a new Tone Colour in the Pallet. With the new Tone Colour selected, right click a favorited Tone Colour; the settings of the right-clicked Tone Colour will be applied to your new Tone Colour!

EDIT TONE COLOURS



Between the factory Palettes, and your own samples, Abyss offer an endless source of new Tone Colours. But it does not stop here!

Internally each Tone Colour is a spectral model of a sound. And this means the Tone Colours can be altered.

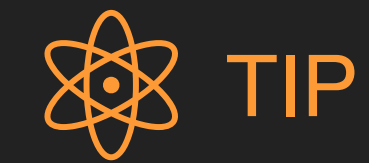
STRAIGHT

When pushed to the right the sound becomes more static, like a classical waveform or a slice of a wavetable.

NOISE

Transforms the Tone Colour to musical noise. The timbre of the noise depends on the Tone Colour!

IMPORTANT NOTE: These sliders can't be modulated, since computing their changes isn't possible in realtime. But a Tone Colour added to the Gradient will retain the current settings. So you could drag up the same point twice, with different settings, and modulate position between them.



If you select a Tone Colour on the Gradient you can MUTE or SOLO it.

This is very useful to see which Tone Colour does what in the context of a more complex preset.

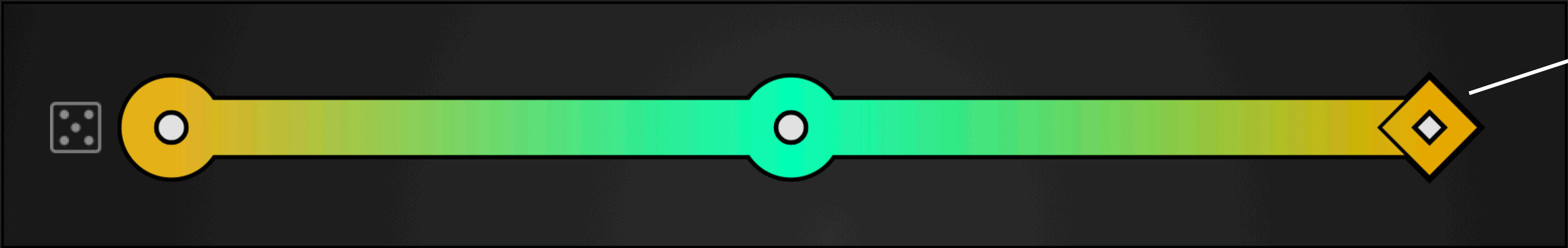
DETAIL

When pushed to the left partials are blended out, leading to a softer, thinner sound that can be very pleasant!

ORGANIC

Higher values create a slightly moving, chorused, and diffuse sound. Lower values may either be static or introduce temporal variations.

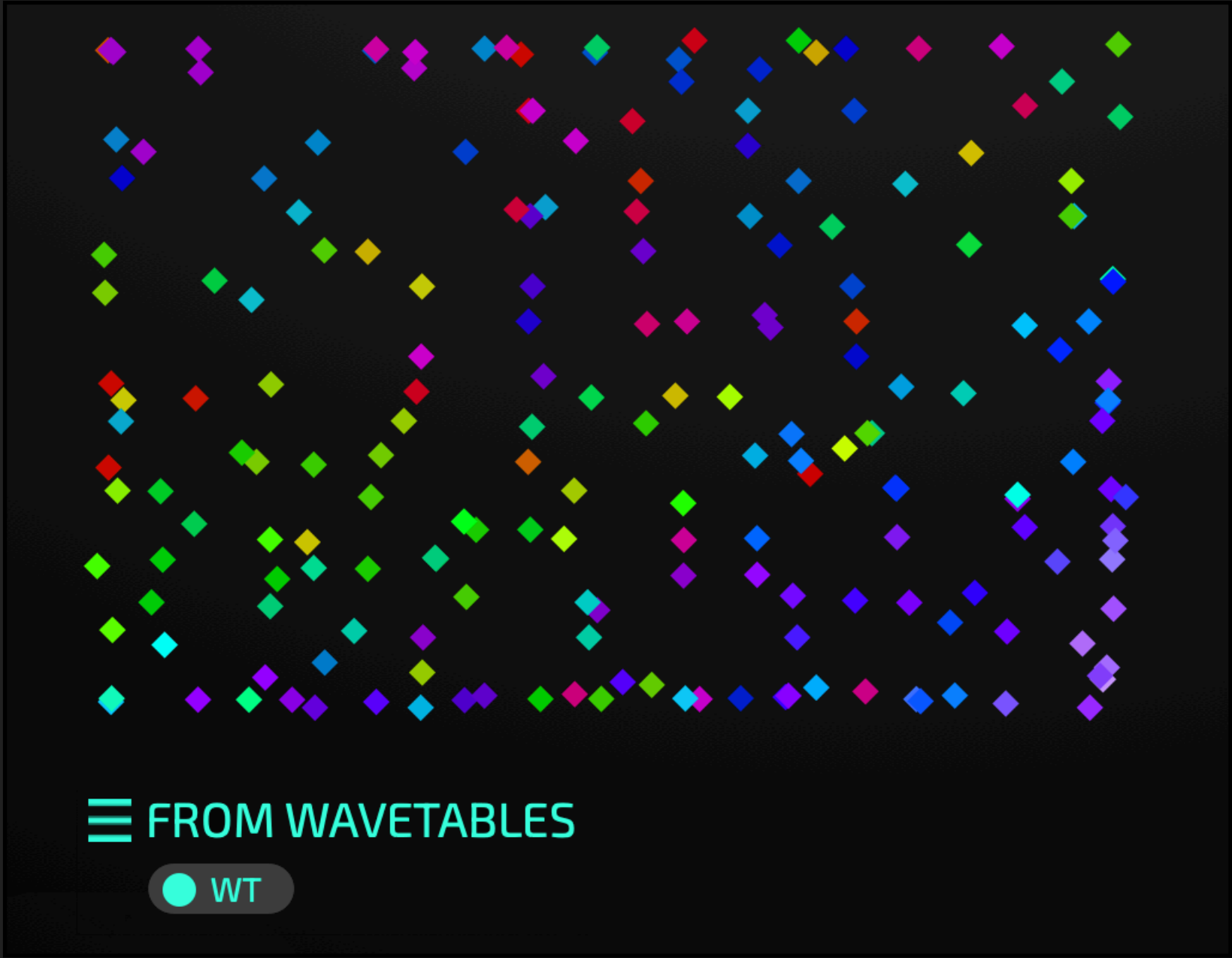
WAVETABLES



A Wavetable Tone Colour!

You can create your own Palettes by dragging and dropping audio samples. If you drop wavetables, these are detected by Abyss.

Abyss then derives special Tone Colours that sound like the slices in the wavetable. These are depicted with a square outline instead of a disc.



The Palette stores the information derived from wavetables. You can turn this off with the switch below the name.

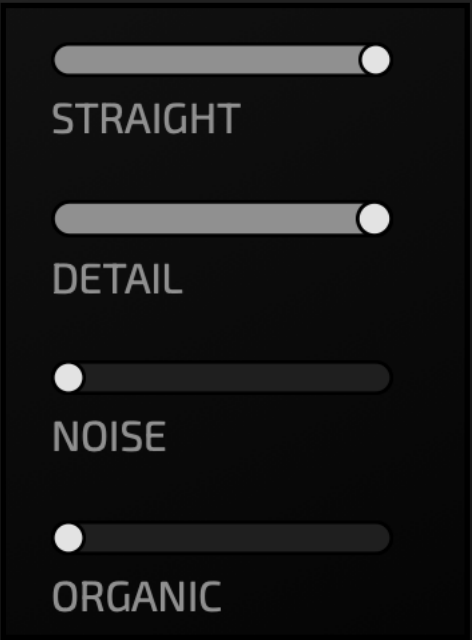


TIP

Being Dawesome we did not stop there!

You can also take your normal Palettes and switch them to wavetable Palettes. Abyss then does the inverse math to transform your acoustic sources to static wavetable sounds.

Or you simply crank up STRAIGHT and reduce NOISE and ORGANIC: in this way you can achieve everything in between wavetable and acoustic sounds.



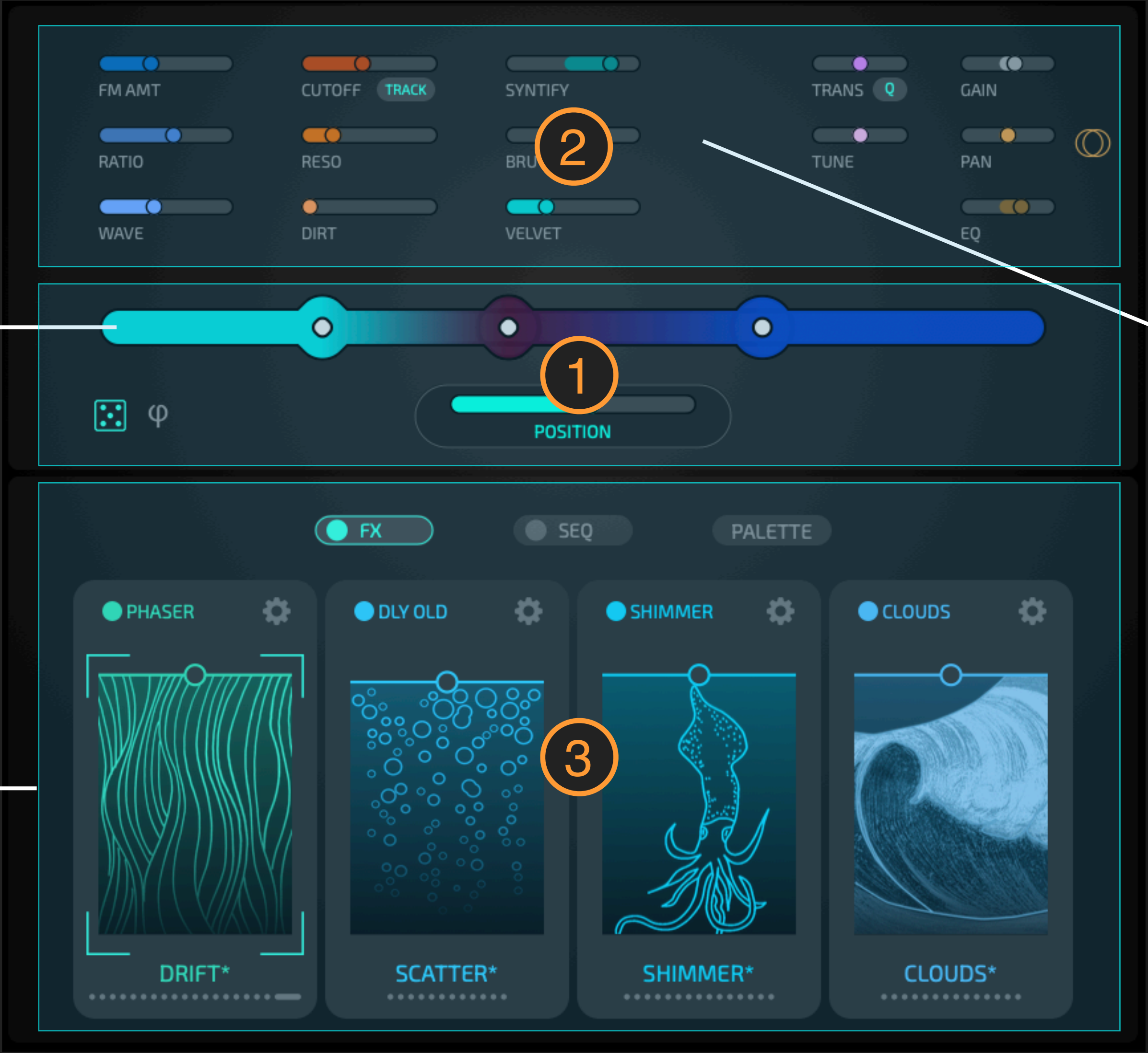
SIGNAL FLOW

First, sound is first generated by the Gradient where each color represents a timbre. The POSITION slider moves each note along the gradient, changing the timbre it creates.

After per-voice effects the signal travels into the FX section. These effects are processed left to right. You can select up to 4 effect modules.

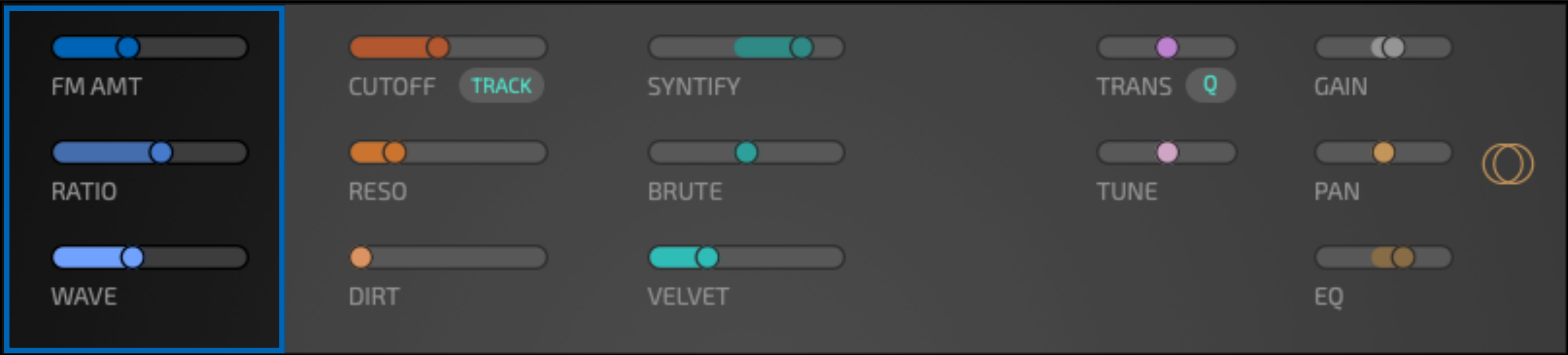
After Gradient signal generation, the sound is modified by per-voice effects. These include frequency modulation, a virtual analog filter, SYNTIFY, and more.

Lastly, the signal can be limited and the output signal level can be modified in the output section at the top-right.



SOUND SHAPING

Frequency modulation offers great sound opportunities with a specific character, pioneered by the Yamaha DX 7 in the 80s. In Abyss you don't need a math phd to have fun with it.



FM - AMT

How much FM do you want? When set to zero the FM section is skipped. With higher values the sound becomes more and more influenced by FM.

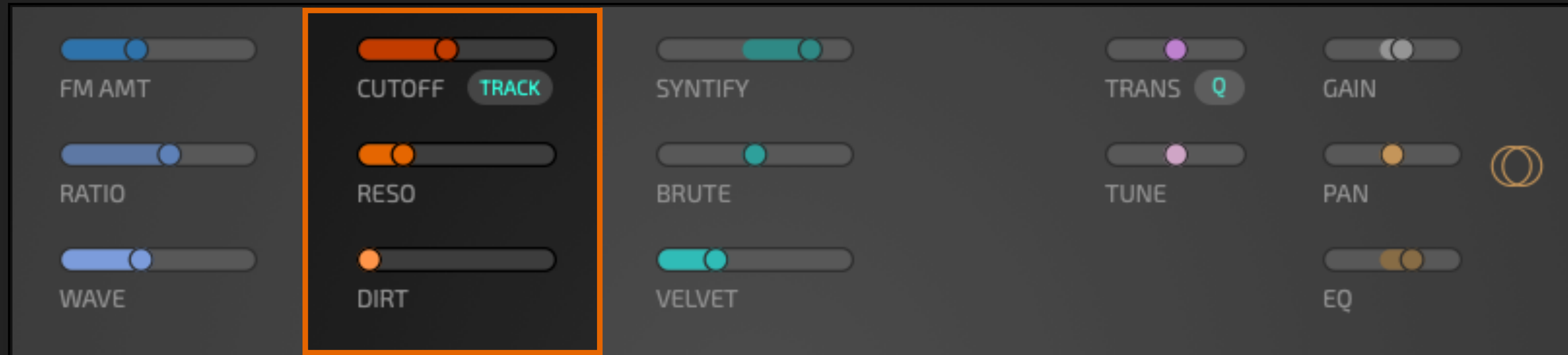
FM - RATIO

This defines the character of the FM sound. Higher values correspond to sharper sounds. Integer numbers create only harmonic overtones, while “fractional” numbers like 1.3271 will create inharmonic overtones - like in bell sounds. You can select integer numbers with right click from a context menu.

FM - WAVE

A second parameter to influence the sound character of the FM. Low values sound like classical FM. Medium values push the timbres more towards saw-like, this can be used for brass or classical synthesizer sounds. High values introduces spiky dirt and crackles.

SOUND SHAPING



A virtual analog Filter.

When TRACK is on the cutoff frequency is adjusted by the pitch of the note played.

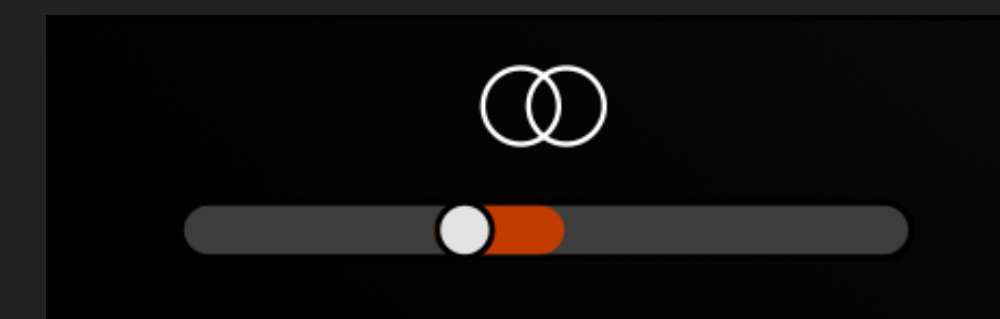
RESO controls the resonance of the filter.

DIRT controls the saturation in the internal feedback path of the filter circuit.

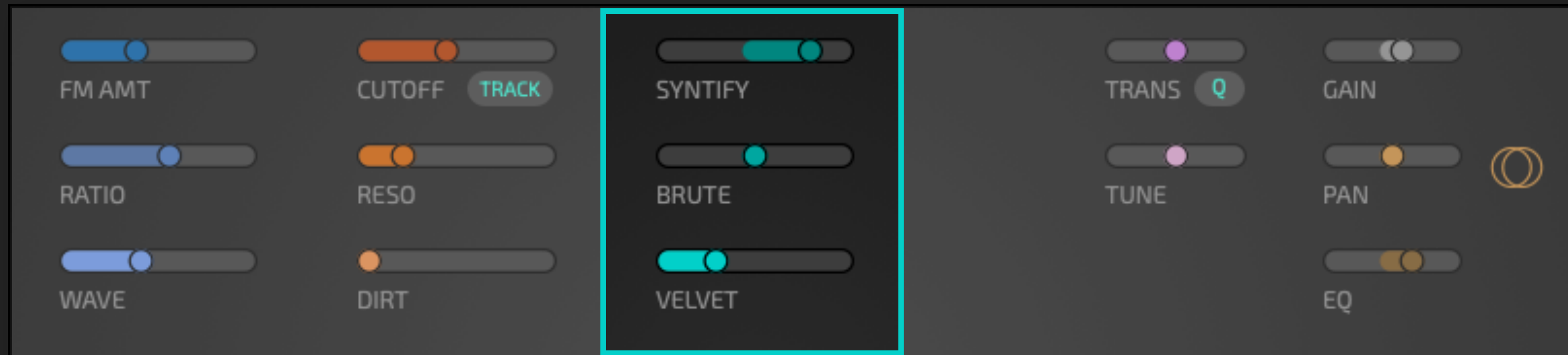


You can apply SPREAD modulation to CUTOFF and RESO. In this way the left and right audio channel get an offset. As the result the stereo width is increased.

Experiment by adjusting spread in one direction on CUTOFF and the opposite direction on RESO.



SOUND SHAPING



SYNTIFY

A normal Filter removes frequencies. SYNTIFY is an anti-filter and does the opposite: it makes the timbre more sharp and synth like.

There are two flavors with one slider: one to the right and one to the left. The center position is neutral.

BRUTE

It does to the signal what the name promises. It's as simple as that.

It was inspired by analyzing the physics of tube distortions and its parallels to "strange attractors" from mathematical chaos theory.

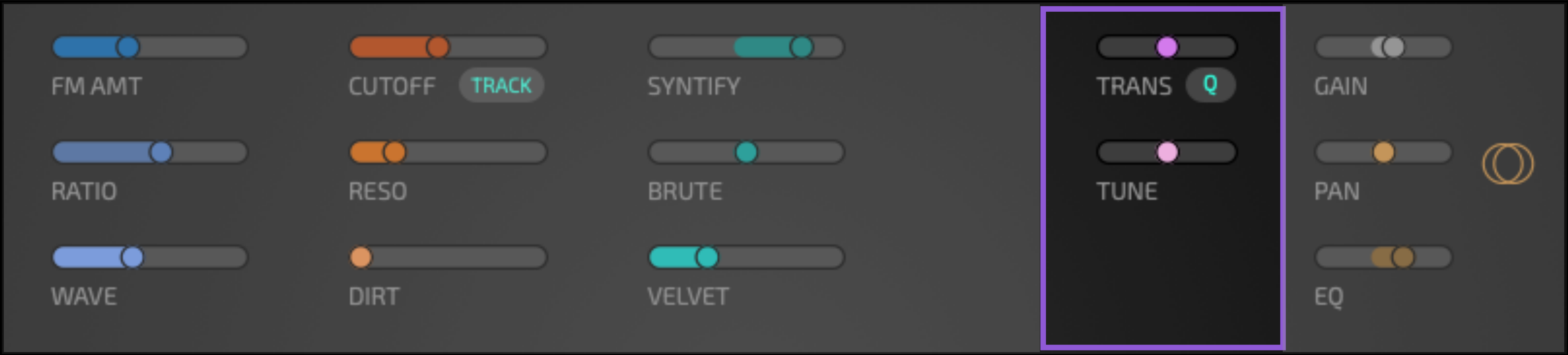
It comes in two flavors: to the right it is like a brutish tube circuit, to the left its grittier in the low end and emphasizes odd partials.

VELVET

This makes the signal sound smoother and softer by diffusion.

While BRUTE is very much in your face, the effect of VELVET is often much more subtle.

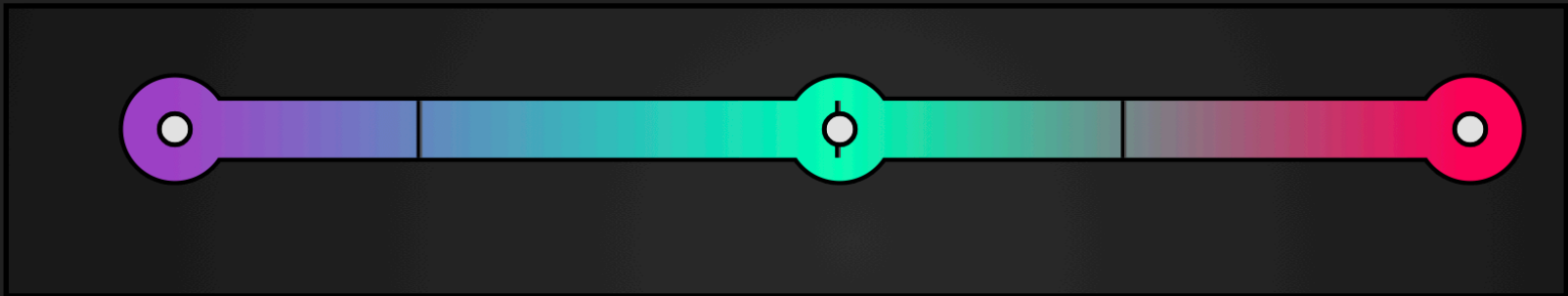
SOUND SHAPING



POS



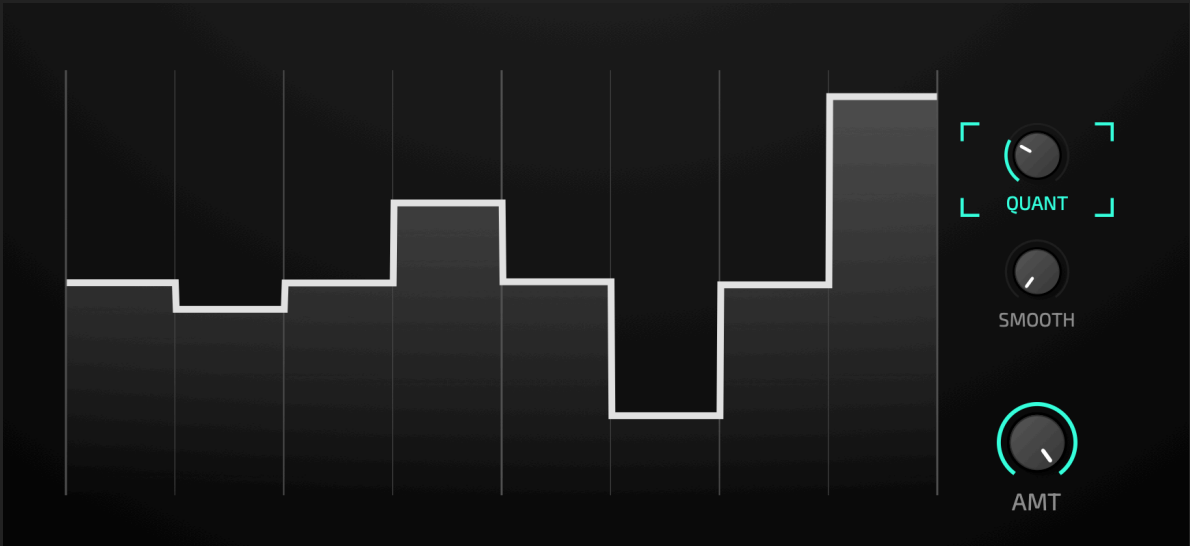
This is probably the most important slider in Abyss: it controls the position on the Gradient.



You can modulate this with one or two LFOs to get ever evolving sound. Or you modulate it by velocity or pressure to create sounds that react nuanced to your expressive play.

TRANS

You can change the tuning in the range of -24 to +24 semitones. Try modulating this with a quantized LFO! Disable Q to prevent semitone quantization.



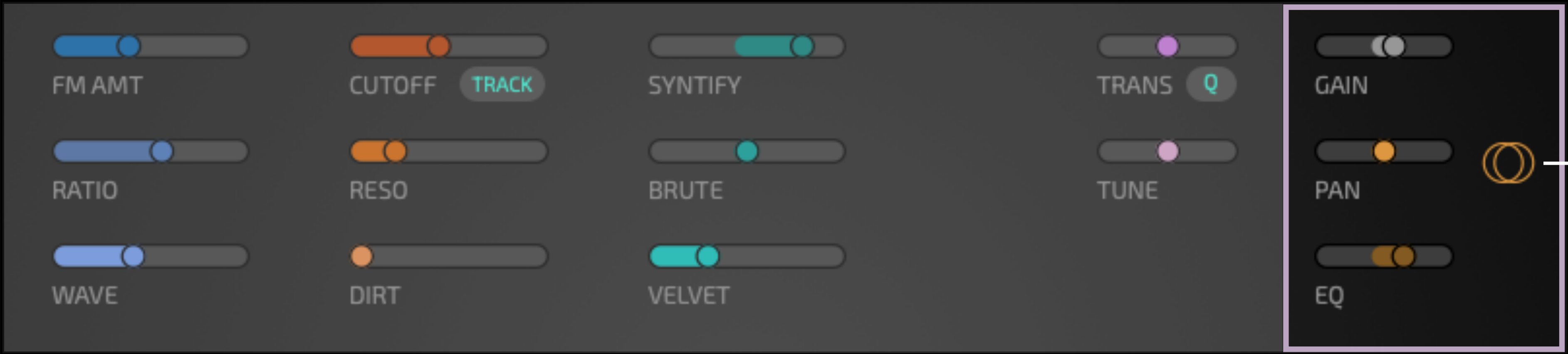
TUNE

For fine-tuning in the range of 100 cents down or up.

Modulate this with S&H to have slight tuning variations per note.

Or modulate this with a noisy slow LFO to get these lovely pitch fluctuations.

SOUND SHAPING



Use this to control the stereo width; simply click and drag.

GAIN / PAN

These just do what they say, no surprises.

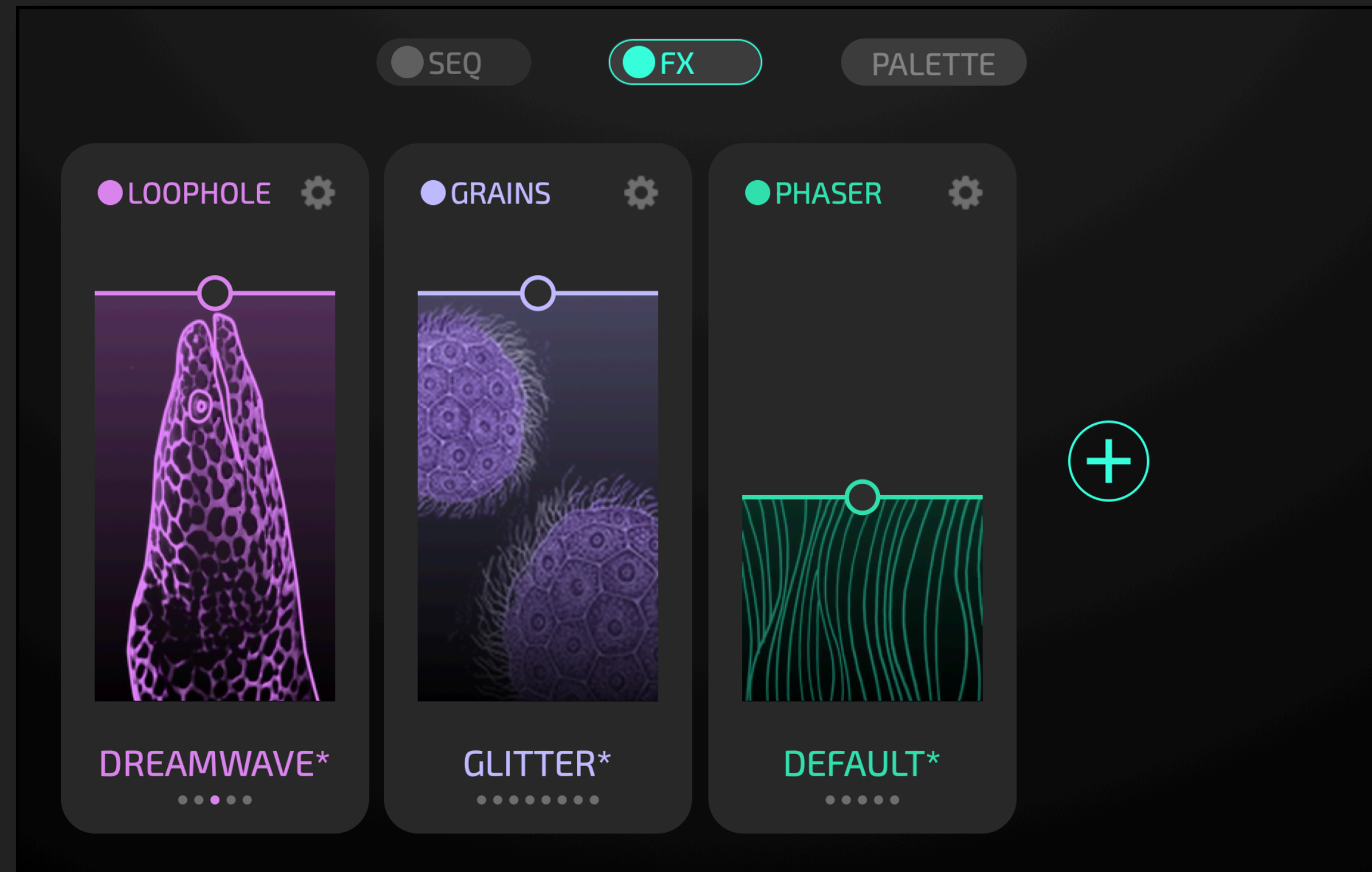
EQ

is a "tilt" EQ.

Turn to the right to emphasize the high frequencies. Turn to the left to emphasis the low end.

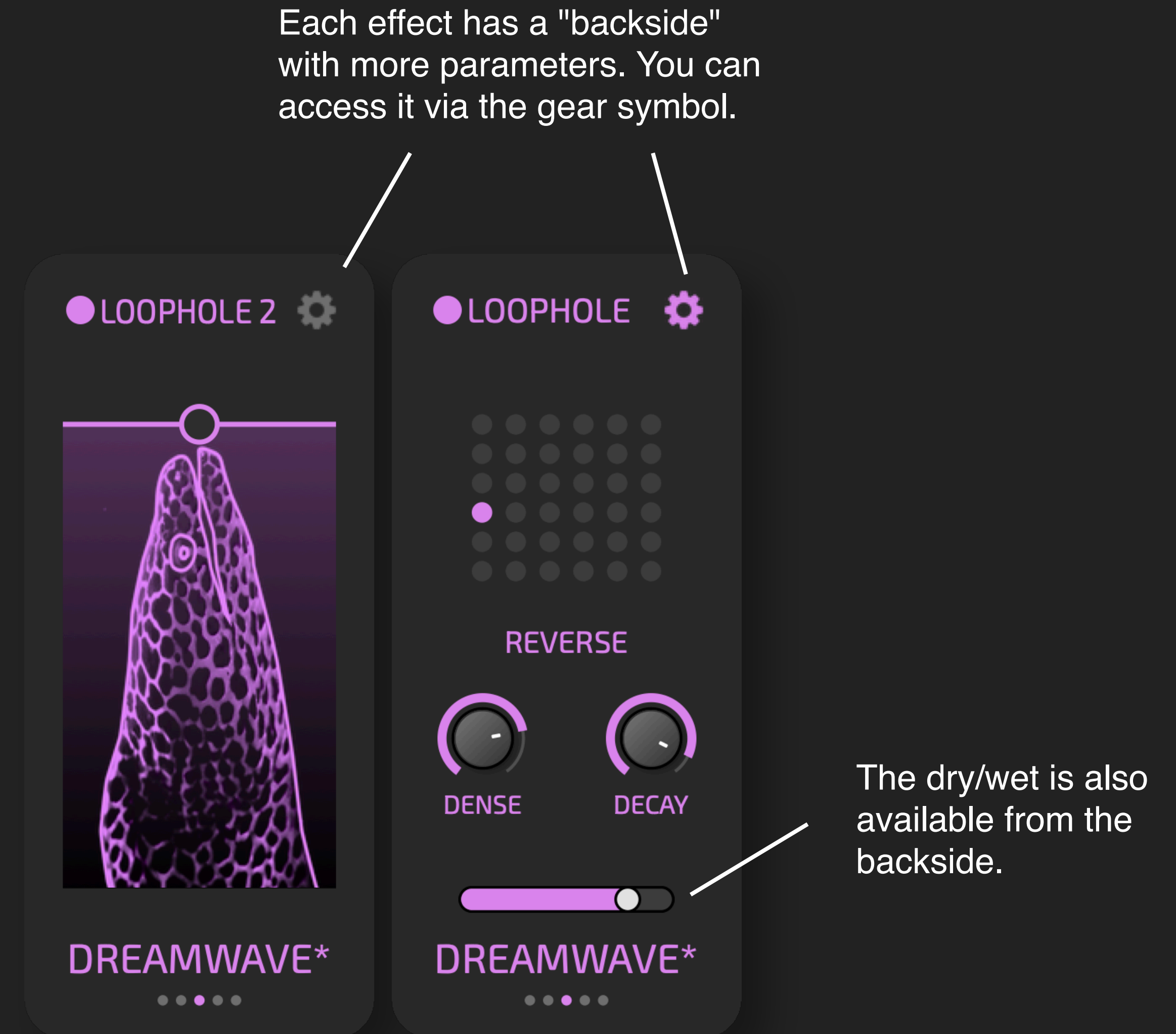
Very simple, very effective.

THE FX SECTION



There are 4 FX slots. The signal flow is from left to right. Click the + button to choose another FX. You can drag the modules to change their order. Drag and drop an effect out of the FX area to remove it.

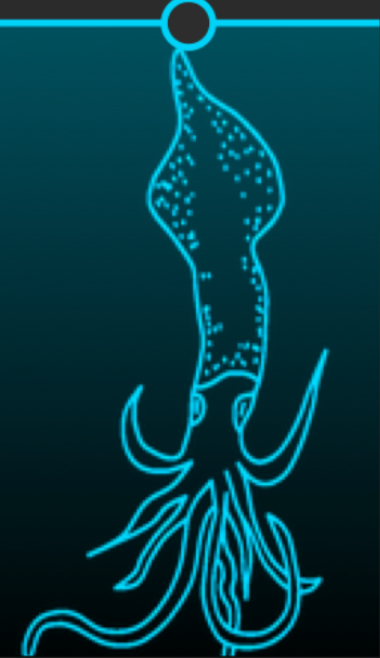
The big visual slider is the dry/wet for the FX. Below you can click through presets for that fx module.



NOTE: all modules are explained in detail in the [appendix](#).

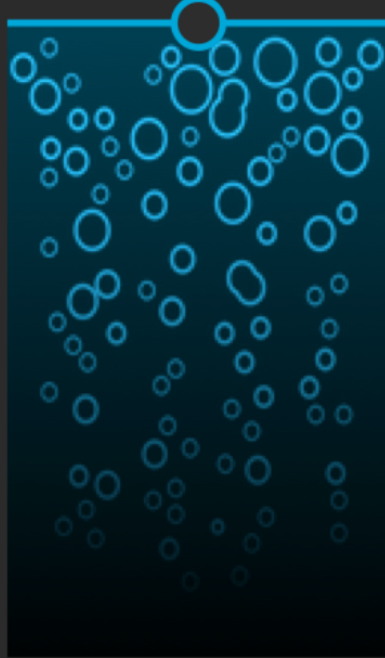
THE FX SECTION

● SHIMMER ⚙️



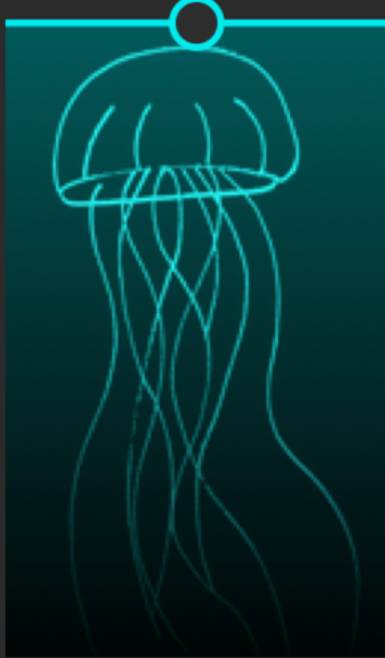
DEFAULT*

● DELAY ⚙️



DEFAULT*

● REVERB ⚙️



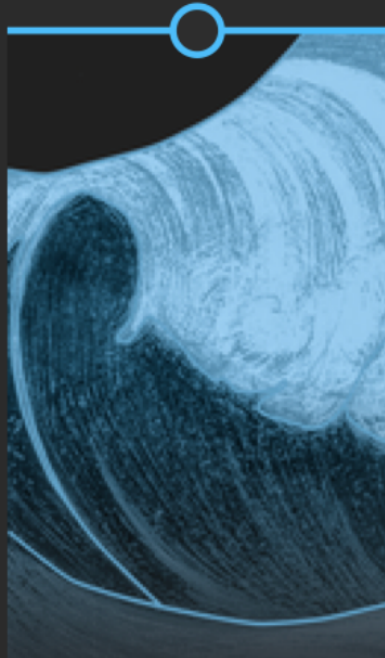
DEFAULT*

● PHASER ⚙️



DEFAULT*

● CLOUDS ⚙️



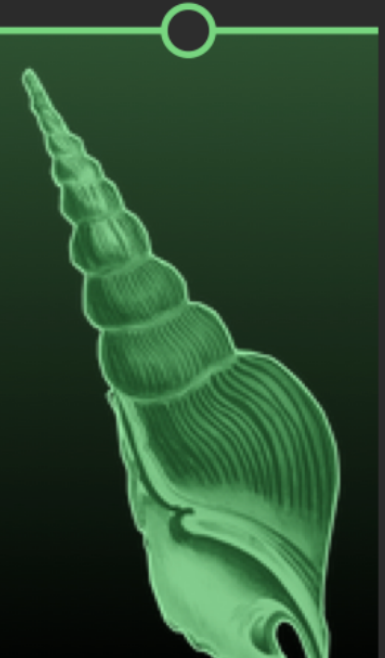
DEFAULT*

● CHORUS ⚙️



DEFAULT*

● J-60 ⚙️



DEFAULT*

● TAPE ⚙️



DEFAULT*

● MAXER ⚙️



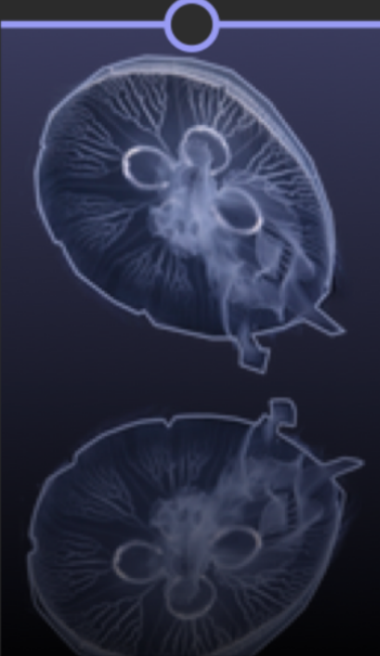
DEFAULT*

● EQ ⚙️



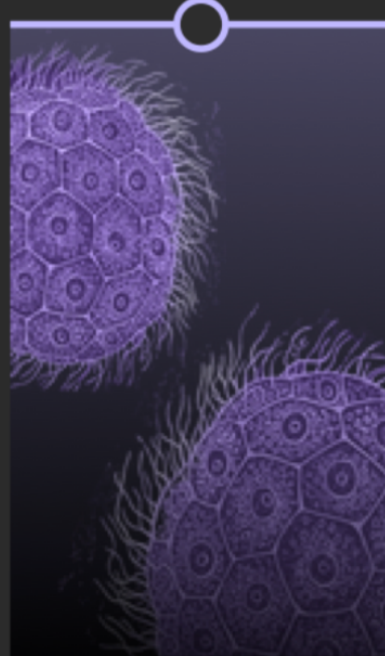
DEFAULT*
.....

● DUAL ⚙️



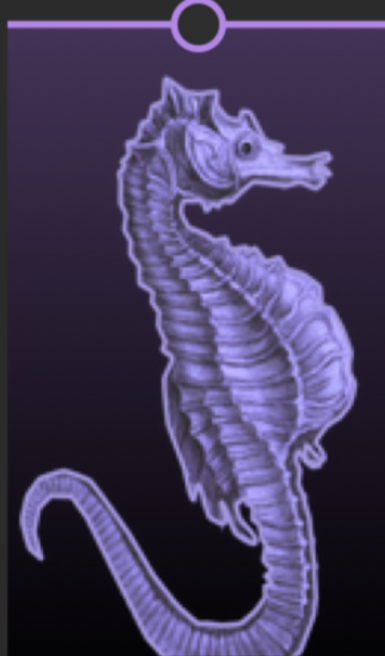
DEFAULT*

● GRAINS ⚙️



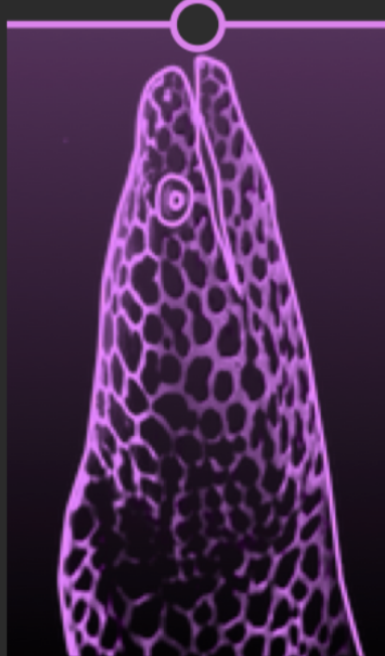
DEFAULT*

● SWEET ⚙️



DEFAULT*

● LOOPHOLE ⚙️



DEFAULT*

● PLATE ⚙️



DEFAULT*
....

● SATURAT ⚙️



DEFAULT*
.....

● OTT ⚙️



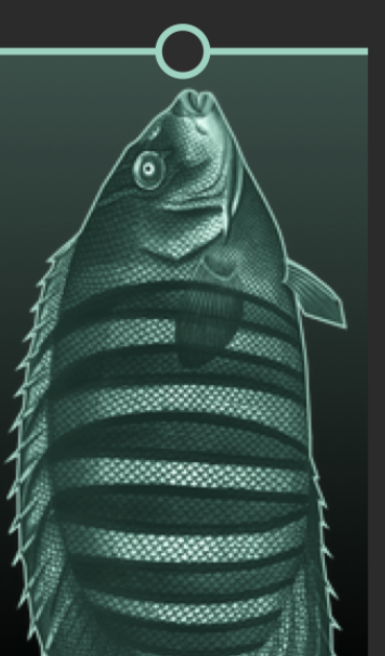
DEFAULT*
....

● GAIN ⚙️



DEFAULT*
..

● PULSE ⚙️



DEFAULT*
.....

+

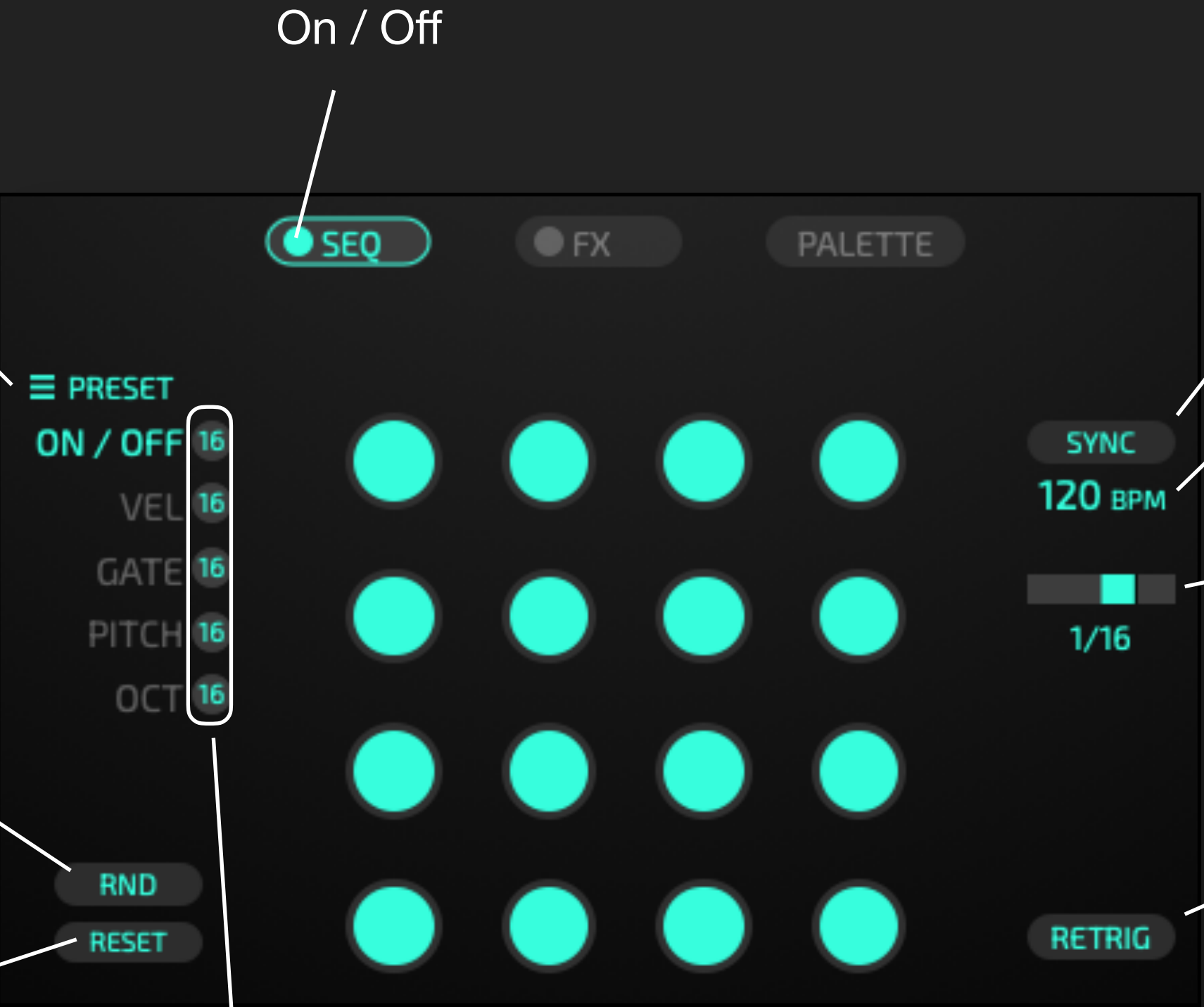
There are many modules to choose from. These modules are explained in detail in the [appendix](#).

THE SEQUENCER

Save or load your sequencer settings.

Randomize current page.
Hold longer for more change.
Hold SHIFT for more subtle changes.
Right-click for more drastic changes.

Reset the current page



SYNC with your DAW's tempo.

Or choose your own tempo by dragging the BPM.

Use RATE for half-time, double-time etc.
Right-click to set integer values, triplets or dotted.

Use RETRIG to start/restart sequencer on any keypress (ON), or unless a note is already held (OFF).

Limit the number of steps for the entire sequencer or single lanes.

NOTE

The LFO only re-triggers on each step when it is set to POLY and the synth is not in MONO mode. Sounds complicated? Well, in this way it simply behaves as you normally would expect.

TIP

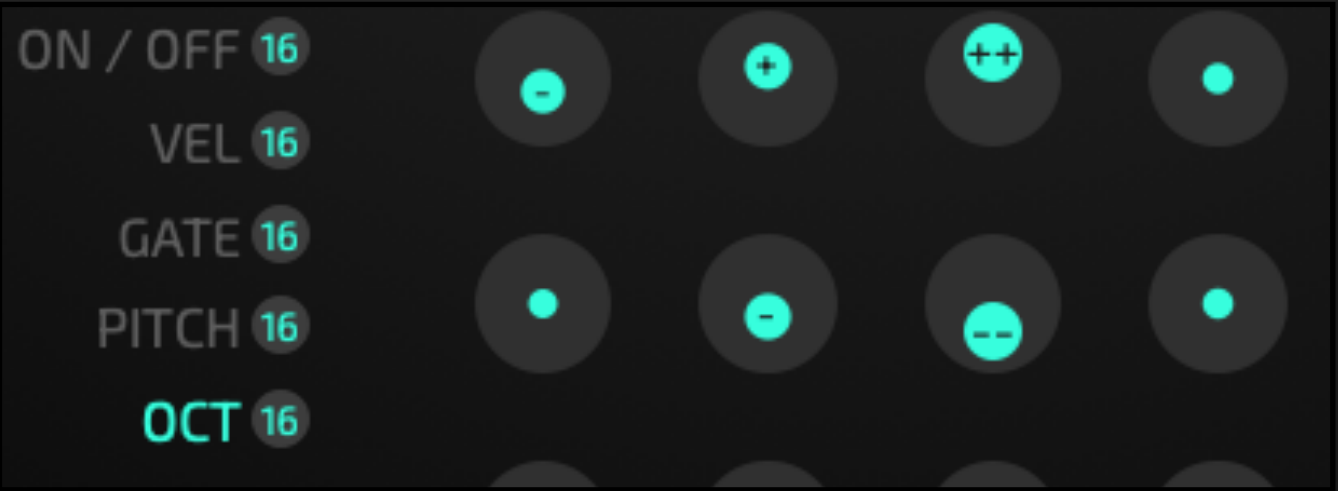
Use independent step numbers per page for polymetric sequences!

TIP

With GATE length above 90% the note is played longer than the step length (legato). The threshold is marked by an appearing L.

TIP

- On each of the pages:
- * enable any step by changing its value
 - * disable any by double-click

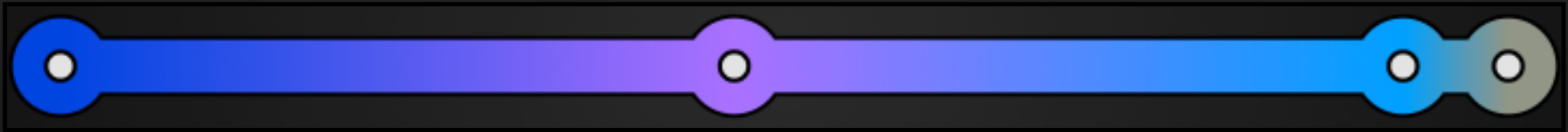


SOUND DESIGN IDEAS

MAKE IT YOURS

Abyss 2 comes with several hundred presets. If you find something that responds in a way that you like but the timbre isn't quite what you're looking for, simply go to the edit view and replace/add Tone Colours to the Gradient.

Here is the gradient of the preset “The Kraken”



I like the movement, but I've changed the Tone Colours



Now I have a patch that has similar behavior, but sounds completely different. No one else is going to have exactly this patch; it's truly mine.

SOUND DESIGN IDEAS

Expressive Tension

By using the Gradient as a ‘tension map’, it’s easy to make very expressive sounds that respond in a very nuanced way to your playing. In this example I have created a simple gradient that starts with a soft and dark tone on the left, a strong tone at two thirds, and a noisier version of the same Tone Colour at the end. By assigning X1 to the Gradient position (POS) the patch reacts to my playing; it is soft when I play lightly progressively more intense and aggressive when the keys are played harder. Additionally, consider adding DIRT to X2 or X3 to give an extra bite to the sound.



SOUND DESIGN IDEAS

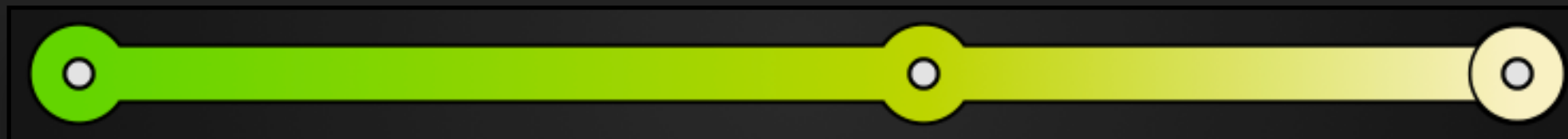


Expressive Tension II

Sometimes you want to have an expressive sound, but you want it to stay in the realm of a certain timbre. In this way you work with shades of the same color. As a starting point you can choose just one timbre and place it at multiple positions on the Gradient.



Now use the timbre modifiers in the EDIT view. In this example I reduced detail to 60% for the center Tone Colour, and to 30% for the Tone Colour on the very left. I increased noise to taste for the Tone Colour on the very right.



In this way the timbral spectrum of the patch is very consistent yet fully nuanced and expressive. To enable fine tuning, you can hold some keys on your controller while adjusting the Tone Colour sliders.

NOTE: changing the DETAIL, NOISE, ORGANIC, or STRAIGHTEN involves a lot of heavy computation. You may notice an increase of CPU usage when moving these sliders. For this reason, these parameters do not support modulation.

SOUND DESIGN IDEAS

Dark Bionics

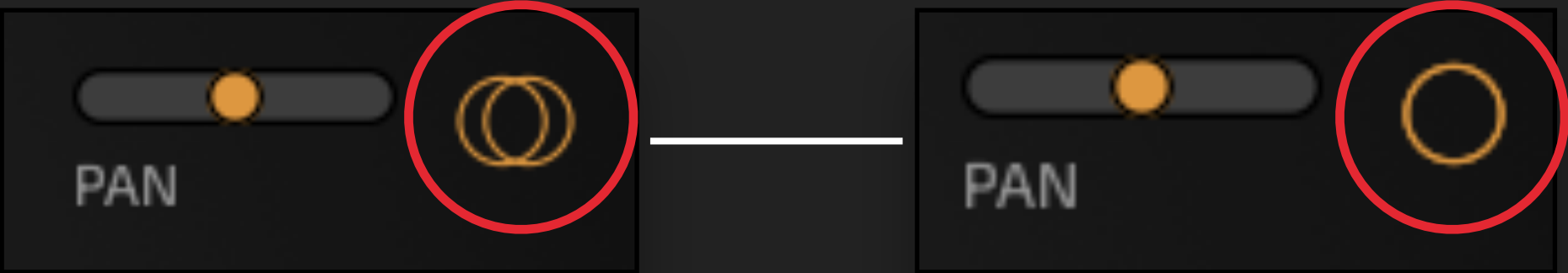
While classical oscillators create periodic waveforms, Abyss 2 has been designed to create waves that are rich in detail, dirt, and motion (much like ‘natural’ sounds). There is a sweet spot that allows for very nuanced sounds when taking any Tone Colour, setting ORGANIC to a high value, STRAIGHTEN to a very low value, and DETAIL somewhere in the mid-range. Especially when adding DIRT, you get a very dark sound that is incredibly rich in variation.

Stereo Field

Apply SPREAD to an available parameter to split right and left channels



Tone Colours are stereo by default. Collapse the stereo icon to mono mode (click + drag) if a stereo signal is not appropriate.



SOUND DESIGN IDEAS

Rhythmic Textures

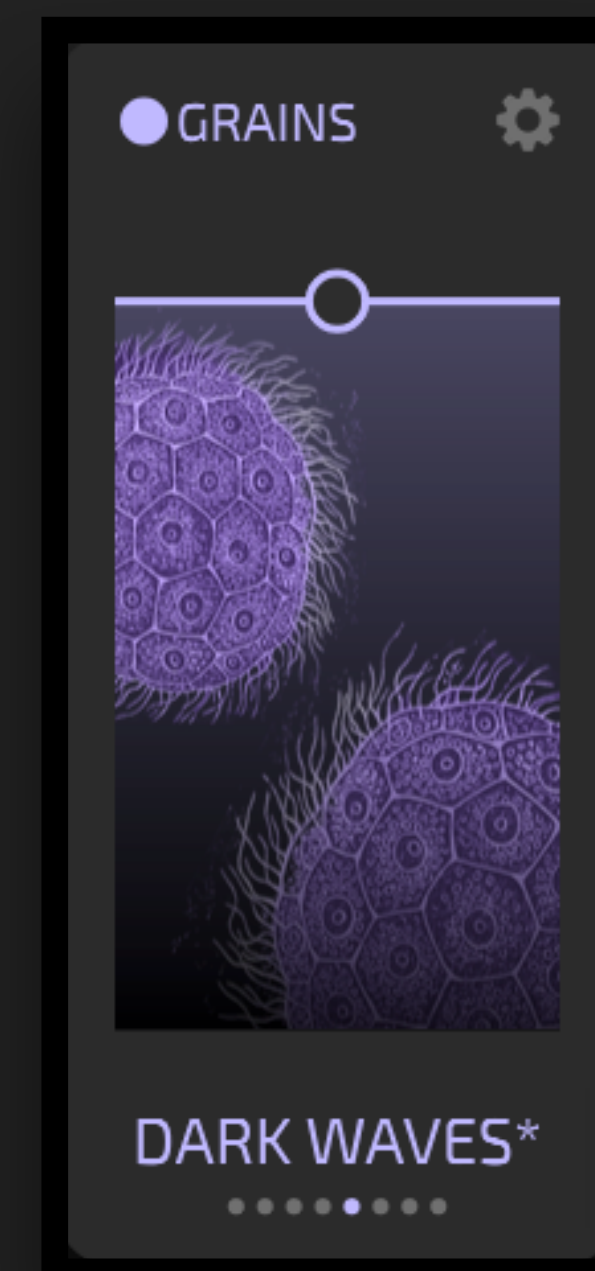
Synchronicity: When setting the LFOs to SYNC their RATE can be set relative to your DAW's tempo. With SYNC enabled, the LFO will modulate any target parameter with synchronization to your music.

Asynchronicity: For arrhythmic sounds you can use two or more LFOs and modulate their RATES by something else (or even multiple other sources). When you modulate the RATE of LFO 1 by LFO 2, you are doing FM on the LFO. If you then modulate the rate of LFO 2 by LFO 1 you have created a chaotic dynamic system...Enjoy! (But don't try to predict the results without a team of mathematicians.)

Beyond Rhythm: Abyss 2 has two modules that apply rhythmic variation in different ways: GRAINS and PULSE.

As well as a few other tricks, GRAINS chops your signal into thousands of pieces and scatters them throughout time. The CALM parameter determines how these pieces of audio are spaced.

PULSE will provide a rhythmic overlay onto your signal. If synchronized this can be a straight predictable rhythmic pulse. If not synchronized with an extreme rate you can achieve granular synthesis. In this mode, parameter A:R and parameter HOLD control timbre.

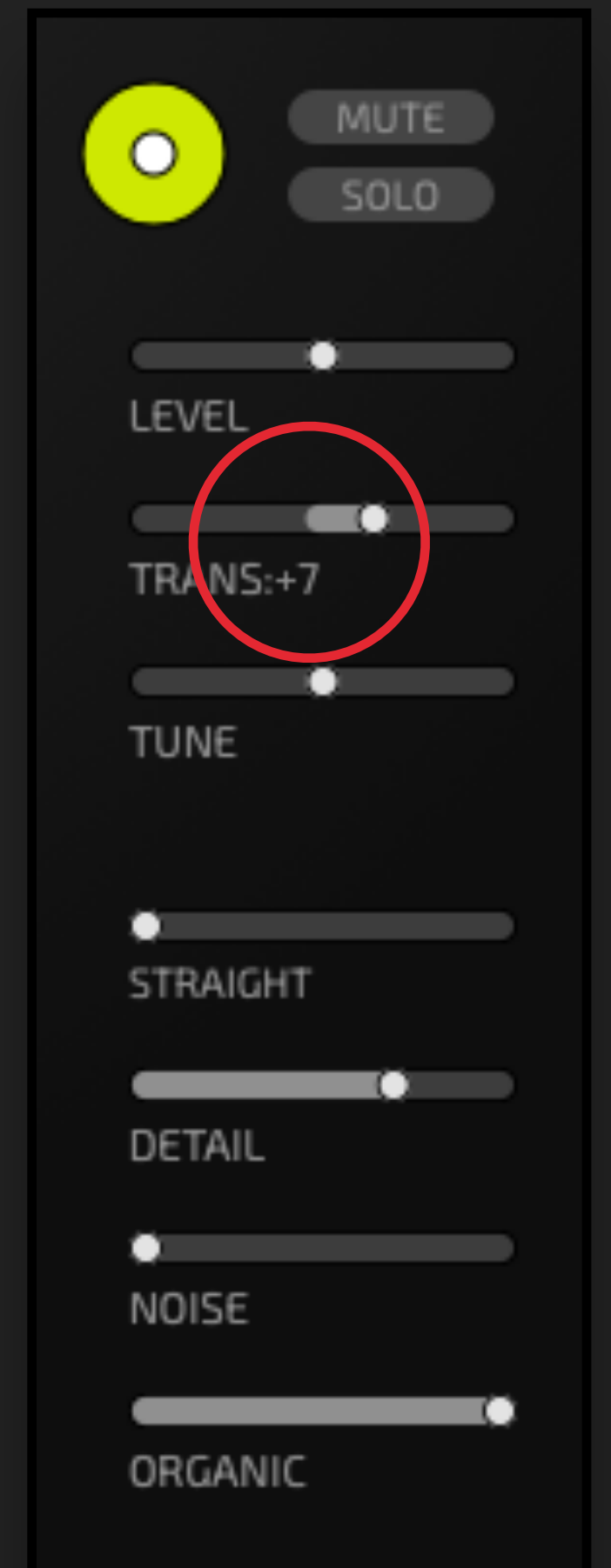


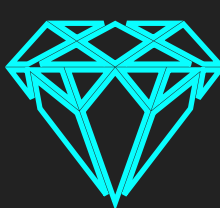
SOUND DESIGN IDEAS

Pitch Variations

Each Tone Colour that you place on the Gradient can have its own PITCH and DETUNE values. By detuning the Tone Colours on the Gradient, you gain another dimension of variation to your sound that changes with the Position (POS). This works great to add slight or rich inharmonics. For example, nuanced bell sounds.

A variation of this technique is to have different PITCH values for the Tone Colours on the Gradient. For example, you can have PITCH in the center position for the Tone Colour on the very left, and PITCH at a perfect fifth (7 semitones above) for the Tone Colour on the very right. By doing so, the POS changes the sound from the tonic to the fifth, creating a shifting ‘power-chord’.

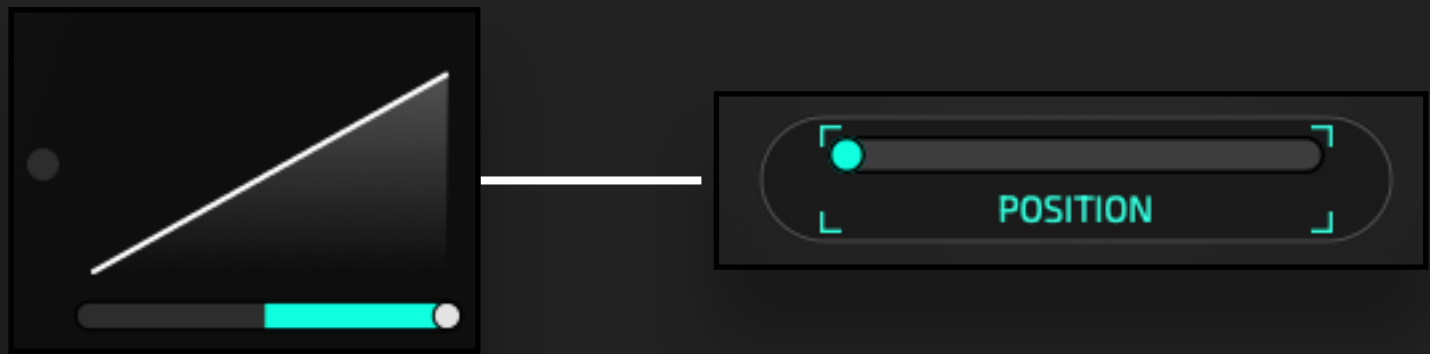




Gradient Looping

There are many options for modulating Gradient position (POS). Sound designer Databroth conceived a new approach that allows for the Gradient to be looped (left to right or right to left) without creating an abrupt timbral shift between the last and first Tone Colours.

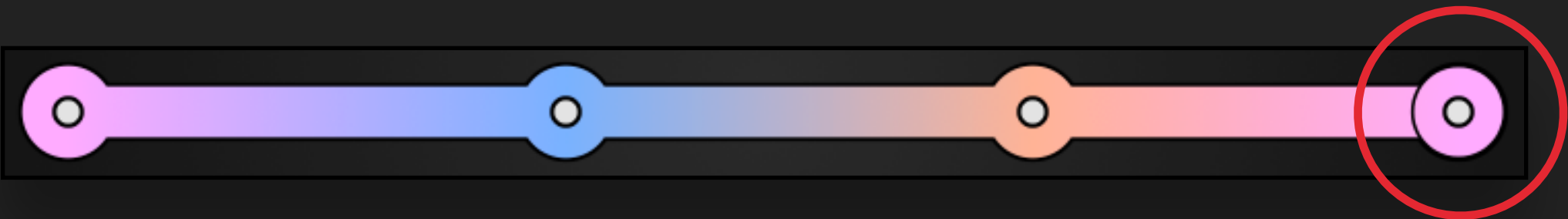
First apply a ramp LFO to POS.



Then create a Gradient.



Finally, apply a copy of the left-most Tone Colour to the apposing end of the Gradient.



Now when the POS jumps from the right side to the left side, there will be a smooth timbral transition.

SOUND DESIGN IDEAS

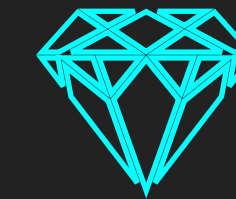


Amplitude Control

Have you ever wanted a filter that doesn't get quieter when removing higher frequencies? With Abyss 2 this is possible! Simply add MAXIMIZER as the first module in the FX rack and increase DRIVE to about 18dB. This increases the amplitude of your signal, but has the benefit of never exceeding the determined OUT level. As a result, filtered signals will receive more amplification than the unfiltered signal. Now when the filter FREQ is modulated, the amplitude will remain at the MAXIMIZER OUT level.



SOUND DESIGN IDEAS



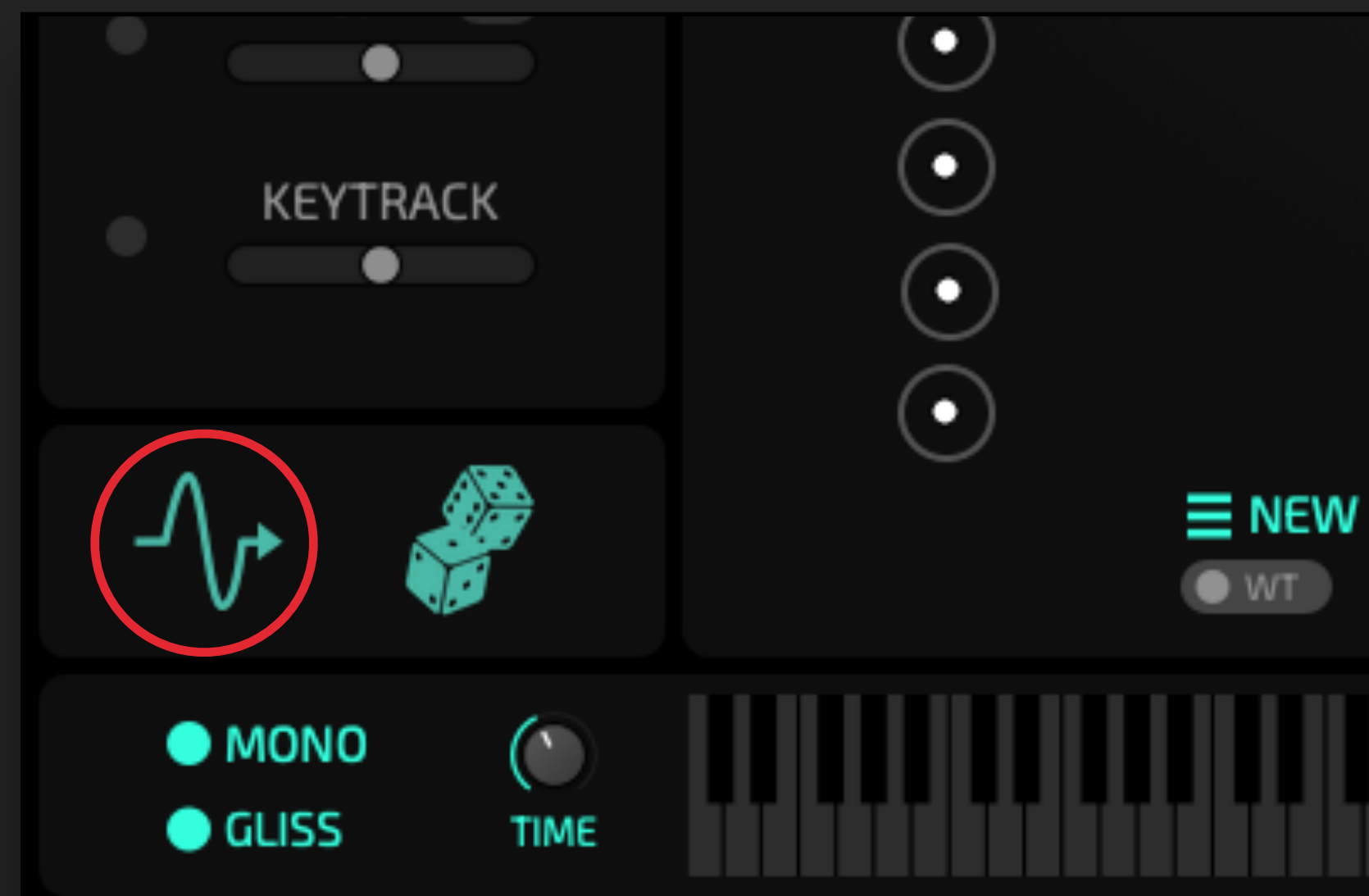
This idea was shared by
sound designer
[sadà\exposadà.](#)



An Abyss Within An Abyss

You can easily use a note or chord to create new Tone Colours! Start with a preset that you are already in love with. Play a note or chord, then simply click+drag from the circled icon (bottom left of the plugin window) to obtain the last-played note or chord. Drop this either on the Palette or on the Gradient to generate new Tone Colours. Now the previous sound you were making becomes material for new sound! These newly generated Tone Colours will carry the sonic thumbprint of the note/chord that you played.

Why stop there? Repeat the process indefinitely to embark on a sonic journey.



SOUND DESIGN IDEAS

Make It “Synthy”

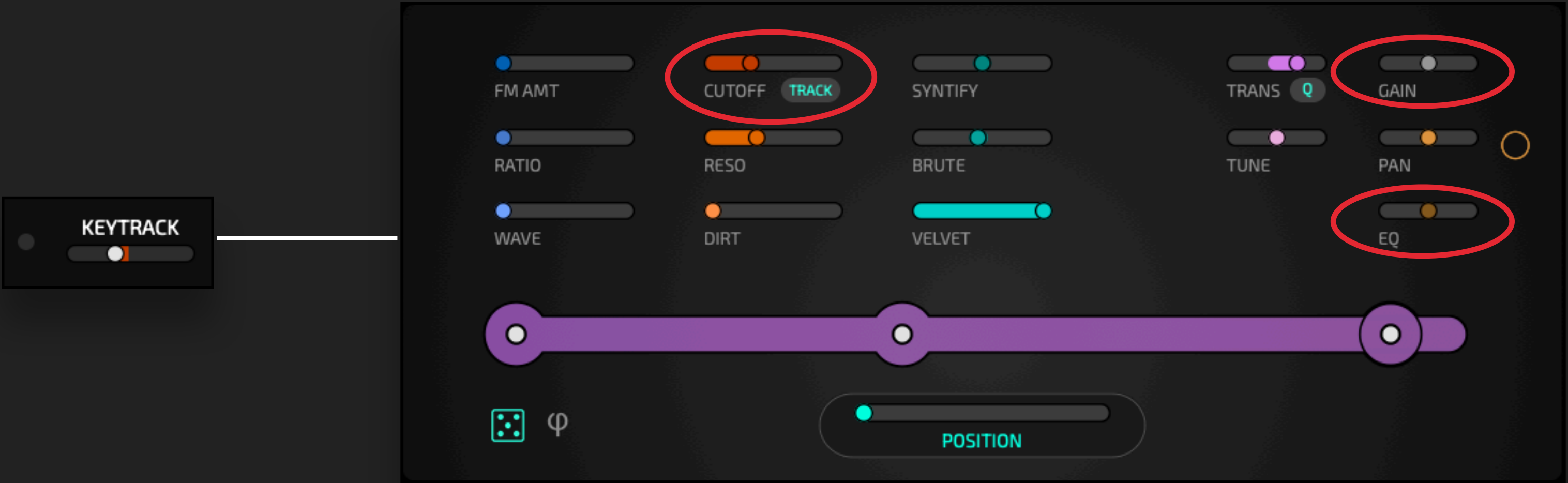
For more “synth” sounds increasing the amount of “STRAIGHTEN” (in the Tone Colour settings) will get you closer to something that sounds “electronic”. This can help iron out tones that are a bit *too* organic. Straightened Tone Colours play more nicely with chorus effects and avoid things sounding a bit muddled.



This idea was shared by sound designer [Sound Author](#)

Taming High Frequencies

At times the Tone Colours might create overly bright timbres when playing in the upper register of your keyboard. There are several useful methods in Abyss 2 to soften higher notes: GAIN, EQ, and CUTOFF. Apply negative keyboard mapping to any combination of these three parameters.



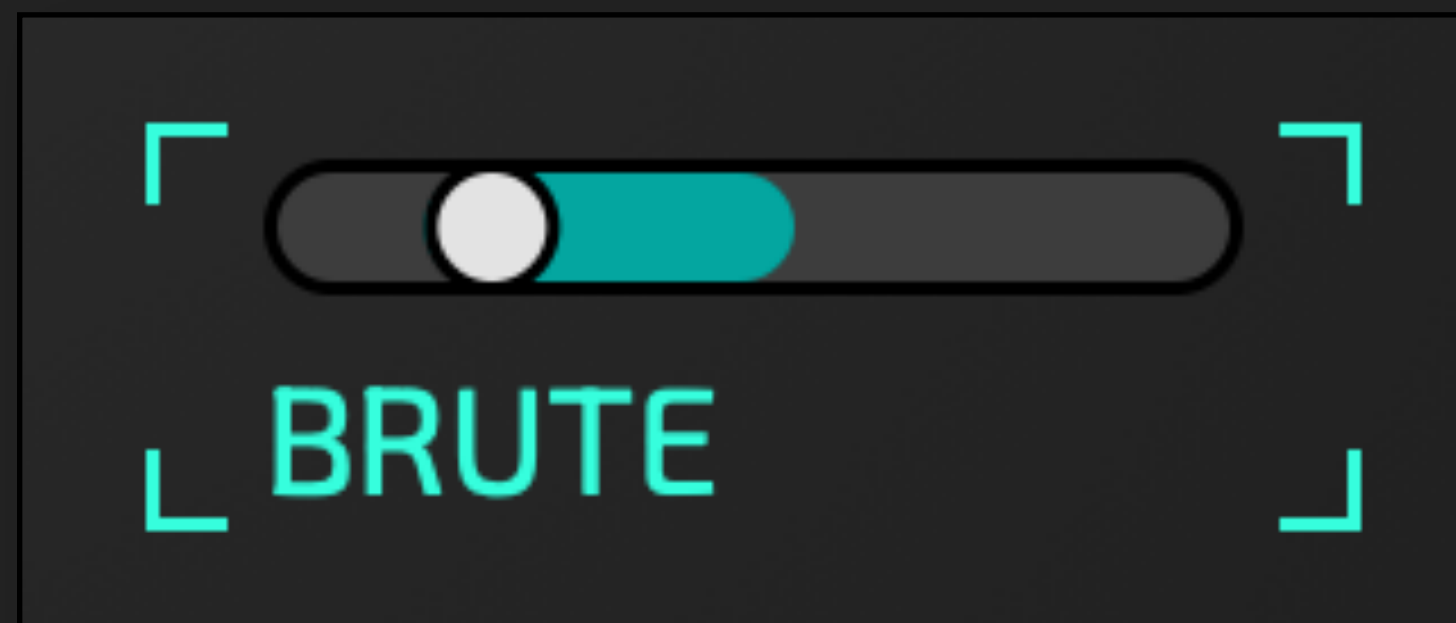
This idea was shared by sound designer [Jacky Ligon](#)

PARAMETERS AND MODULATIONS

With a few modulations you can turn any boring sound into something that sounds alive and interesting.

Click and drag a **DIAL** or **SLIDER** to change the value.

You can drag horizontally or vertically.



Hold SHIFT to fine tune the value.

Double-click to reset to default.

Modulating a parameter is really simple: click on the parameter to select it. The corners show that this parameter is selected.



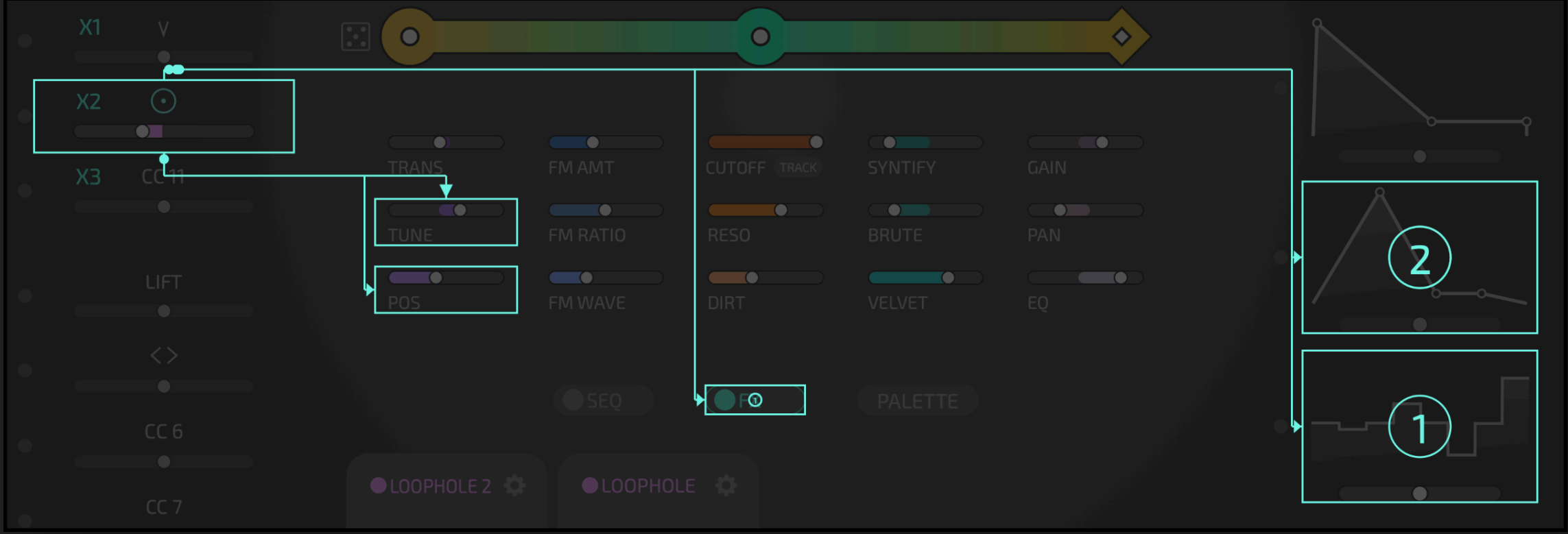
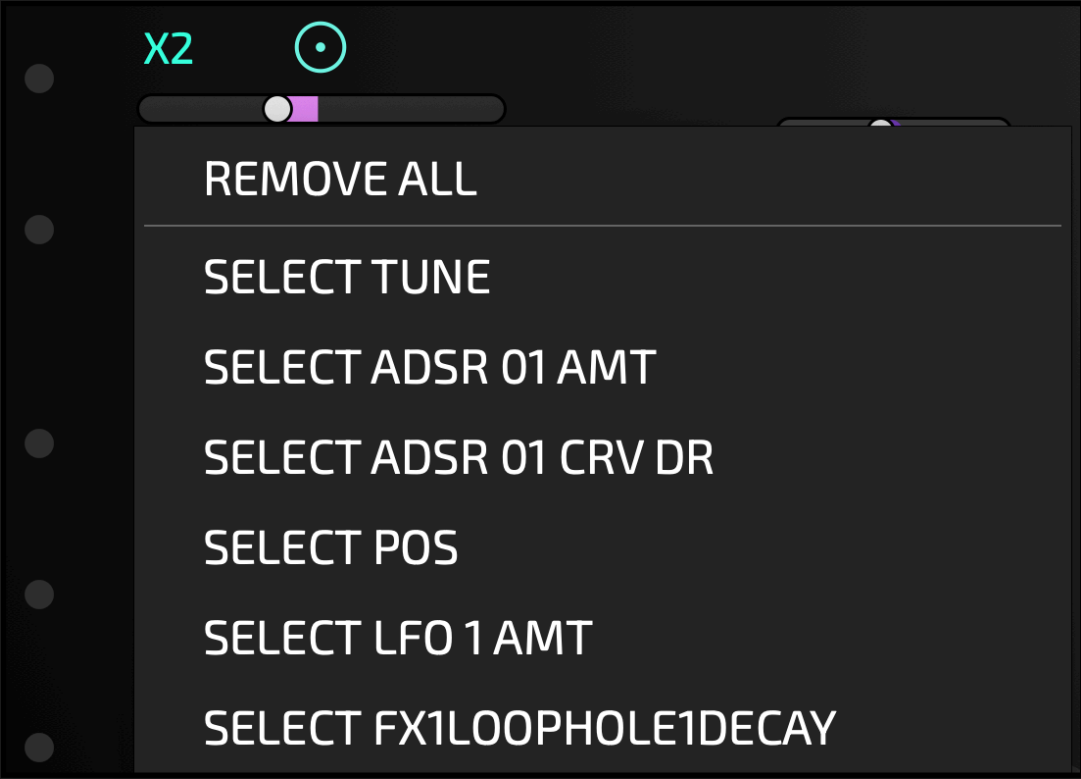
Below each Modulation source you find a slider. Once a parameter is selected you can adjust the modulation depth: how much should this modulation source influence the parameter?

Unlike in other synths you don't need to drag and drop anything to establish the connection.



To remove a modulation, select the parameter and double-click the depth dial of the modulation source.

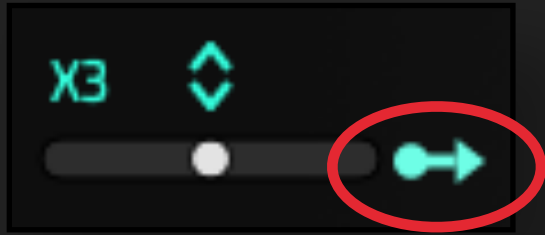
MODULATION



TIP

Modulation targets that are invisible on hidden tabs are indicated by numbers on the tabs.

Right-click a modulation source so see all parameters listed that are modulated by this modulation source.

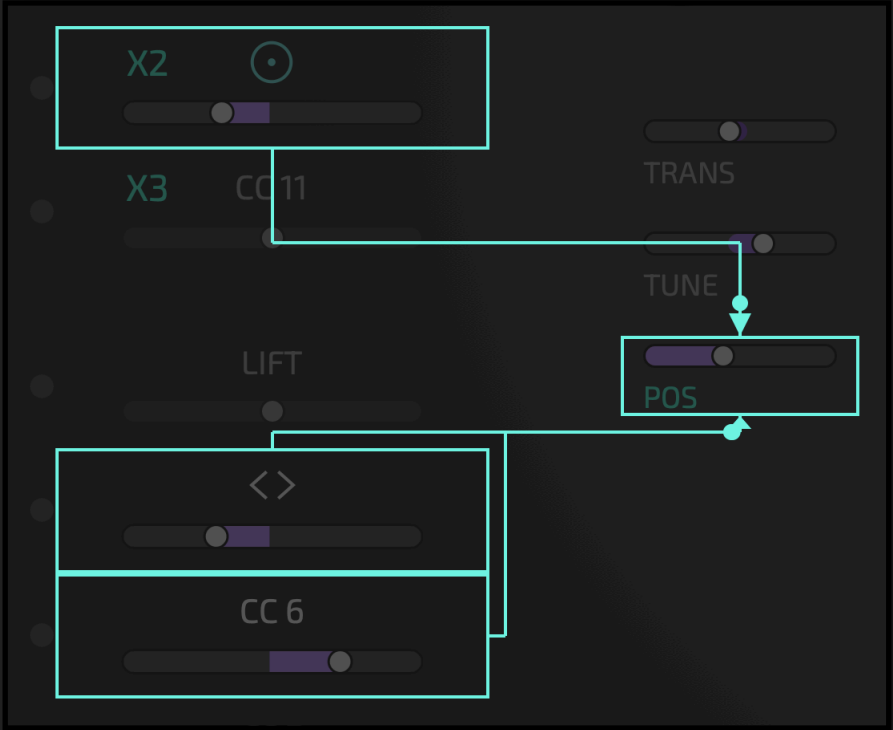


Click the modulation tracer next to a modulation source to see a visualization of the modulation destinations.



TIP

Any parameter can be modulated by more than one modulation source.



Similarly you can hold SHIFT and right-click a slider for a visualization of its modulation sources.

Note: you can see this also by selecting the slider. All modulation sources now show the modulation depth for this selected slider.

MODULATION SOURCES



Abyss has a lot of different Modulation sources:

1

X1, X2 and X3 are for musical expression. Usually they are listening to Velocity, Modwheel, Expression Pedal, Aftertouch or MPE.

See [SETUP](#) for details.

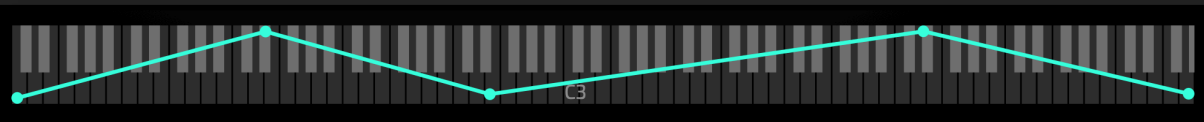
2

Here there are more midi sources. You can right-click to choose a different midi input. This assignment is stored with each preset.

[S&H](#) crates a new random value for every new note.

[SPREAD](#) can be used to offset the right and left audio channel differently. Try it on CUTOFF, RESO, BRUTE. (not all parameters can use SPREAD modulation)

[KEYTRACK](#) can be used to modulate notes by the pitch. Hover the midi keyboard to draw a curve for KEYTRACK



3

Two [ADSR](#) envelopes

4

Three [LFOs](#)

ADSR ENVELOPES



Click here to edit the ADSR.

The first ADSR always controls the loudness of the preset over time.

Click and drag to change the ADSR.

You can edit the ADSR also with the parameters.



TIP
Abyss 2 allows the modulation of ADSR parameters.

For example you can shorten the **ATTACK** time when the note was played with higher velocity.



TIP
When **SLOW** is active the ADSR is 10x slower. Great for evolving sounds and a secret weapon for ambient music.

LFOS

SAVE AS ...

DAWESOME

SINE

COS

CURVE

TRI

BEND TRI

RAMP

UP1

UP2

UP3

SQUARE

ACC 1

ACC 2

ACC 3

ACC 4

PULSE

FM 1

FM 2

FM 3

FM 4

FM 5

Click to choose or save an LFO shape.

LFO 1

120 BPM

FLIP!

POLY

RETRIG

SYNC

RATE

FLOP!

UNI

LOOP

QUANT

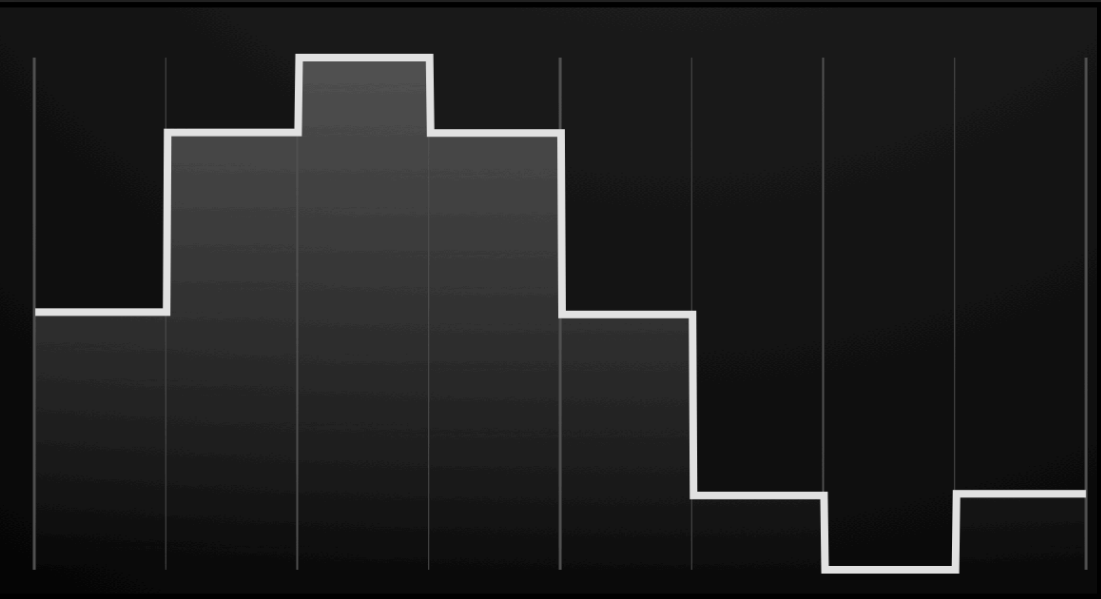
SMOOTH

AMT

Click the LFO to edit it.

You can edit the LFO curve simply by drawing. Hold SHIFT to draw straight lines.

Use **QUANT** to quantize the LFO shape to fixed number of values. For example set QUANT to 8 to turn the LFO into a step sequencer.



SYNC if active the BPM tempo is synced to your host.

RATE use this for half-time, double-time etc. Right-click to set integer values, triplets or dotted.



TIP: You can also modulate the RATE!

POLY when active each note has its own instance of the LFO. If off, there is one global LFO for all voices.

RETRIG when active the LFO starts again with every new note

UNI when on the LFO output is always positive. If this is off the LFO creates bi-polar output.

LOOP when on the LFO will jump to the beginning once it reaches the end. If this is off the LFO will stop at the right side.

With **SMOOTH** you can control the reaction time of the LFO. When set to zero changes are immediate and values can jump. The higher you SMOOTH, the slower the LFO will adjust its output value.

MONOPHONIC MODE

The MONO MODE can be used for basses and leads that have similar behavior to monophonic analog synths.



You can drag and drop the last played notes as audio (.wav) from here.



TIP

You can play a note and then drag this as audio from here.

You can even drag and drop it to the Gradient - to get the sound re-interpreted as a Tone Colour!

Normally Abyss is a polyphonic synth. By activating MONO you can make it a monophonic synth with legato function.

With TIME you can control the legato speed. When GLISS is active you will also have a glissando between two notes if you play legato.

Incoming notes are displayed on the virtual MPE keyboard display.

The size of the outer circle line indicates (polyphonic) PRESSURE or AFTERTOUCH.

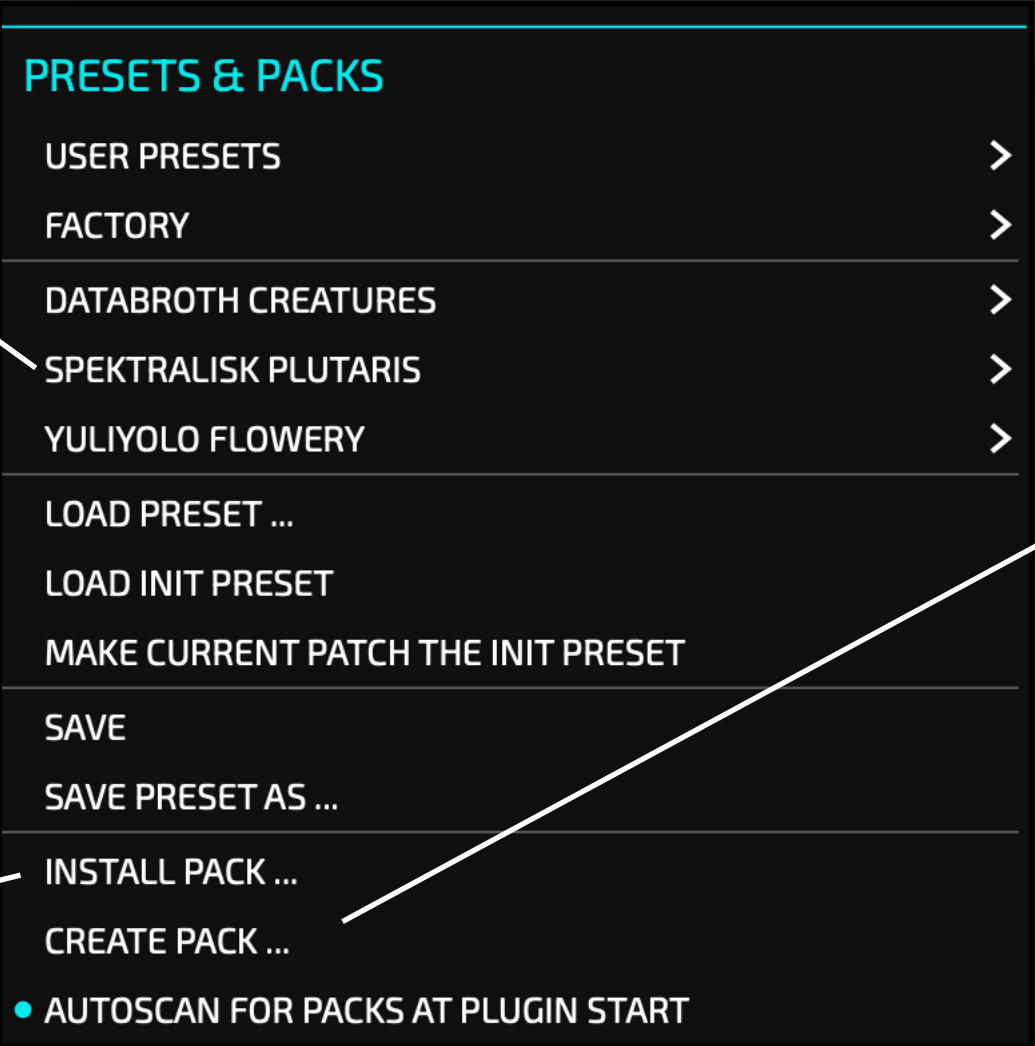
The filled circle area indicates the VELOCITY.

PRESET PACKS

You can create PACKS from your presets and other users of **Abyss** can install these.

PACKS are a great way to extend the sonic capabilities of your instrument.

Installed packs shows up here



TIP

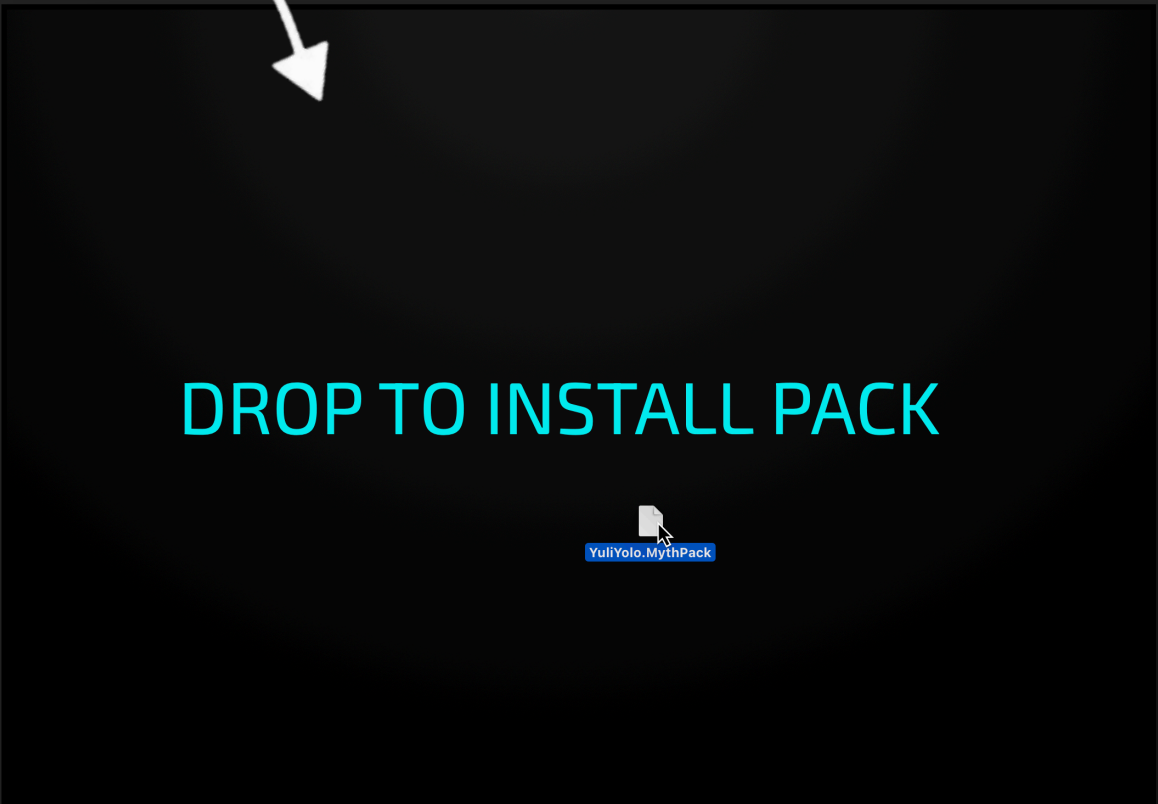
It is easy to create your own packs. Simply use the file system and create a folder that contains Abyss presets. You can organize these in a single level of sub-folders. Deeper nesting is ignored.

Choose **CREATE PACK ...** from the main menu. You will only need to locate the folder with your presets and a name to save the pack.

You can simply drag any **AbyssPack** to the **Abyss** user interface to install the pack, or choose **INSTALL PACK** from the main menu.



.KontrastPack



TIP

You can also activate **AUTOSCAN FOR PACKS AT STARTUP** via the main menu. When you open an instance of Abyss it scans your download folder - if it finds a pack for Abyss it will be automatically installed.



CAUTION

If you handle preset files, you should **ALWAYS** make a copy beforehand.

Better safe than sorry!

FAQ / TROUBLESHOOTING

Q: I installed Abyss 2, but it does not show up in my DAW?

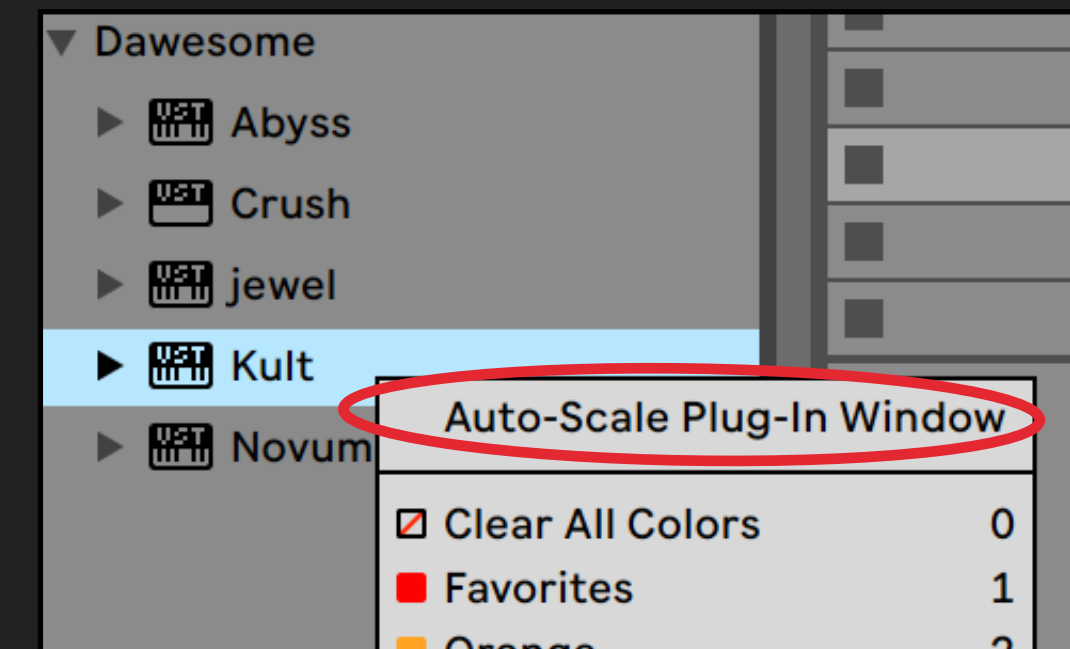
A: In most DAWs plugins are listed by manufacturer name. You find Abyss 2 listed under **DAWESOME**. If this does not help - please make sure that VST3 (or AU) is activated in your DAW.

Q: I am experiencing audio drop outs - what a lousy plugin!

A: I can understand your frustration! Rest assured that I spend an insane amount of work to make the underlying technology CPU efficient and to support aged hardware and OS versions. [Please drop me a short description to peter@dawesomemusic.com](mailto:peter@dawesomemusic.com) - ideally with the information of your computer, your DAW, your OS and the specific patch that causes the issue.

Q: The UI looks pixelated / distorted in Ableton

A: If you are using Ableton LIVE on Windows: make sure, that Auto-Scale Plug-In Window is **NOT ACTIVATED**.



Q: I can't hear anything!

A: First make sure that the plugin receives midi data - you can see incoming midi in the keyboard display.

FAQ / TROUBLESHOOTING

Q: Why are all your plugins so expensive - you are ripping me off!

Q: Why are all your plugins so cheap - this is too good to be true?

A: Dawesome is a tiny indie developer, founded by Peter. Mainly he follows his heart and creates the instruments he'd like to use on his own as a musician. He does not aspire to get rich in money with it, he aspires to get rich in contentment and fulfilment. However, we also need to pay our bills, and we also want to pay sound designers fairly for their work. We are trying to give the products the lowest prices possible to make a living, and we are not going to be a millionaire anytime soon (well, ever).

Q: I have a question / feedback - where can I leave it?

Q: I have a cool idea for a great feature!

A: Just drop me an email to peter@dawesomemusic.com - I appreciate any kind of constructive feedback and I am trying my best to have any user satisfied, regardless whether you purchased or not. Usually I try to answer within a few days.

If you want to share any idea with me please drop me an email to peter@dawesomemusic.com. Please note that I may have had the idea before and hence I won't pay you license fees if I choose to implement this idea or a related idea in one of my plugins. If you believe your idea has tremendous commercial potential make sure to get a signed agreement *before* sharing the idea with me / anyone.

Q: I like your work - how can I support you?

A: Thank you - this is my real reward for the work we are doing! We hope you will find lots of fun and inspiration with Abyss 2. If you want to support Dawesome: spread the word!

CREDITS - THANK YOU!

- [ABYSS 2](#) is implemented in C++ using the [Juce Framework](#).
- [Valdemar Erlingsson](#) is the creator of the gorgeous free reverb plugin called [Cloud Seed](#). I took inspiration from his work for the CLOUDS FX.
- [Nigel Redmon](#) has published an intriguing [series](#) about analog ADSRs. I took inspiration and design choices from his series.
- [Abyss 2](#) uses the awesome AVIR image resizing algorithm designed by [Aleksey Vaneev](#) of Voxengo.
- Sample rate converter designed by [Aleksey Vaneev](#) of Voxengo.
- LOOPHOLE is inspired by a plugin called [Weeping Wall](#) by [Aqeel Adam](#).
- [Sound Author](#) for the original [Nouveau](#) plate reverb plugin. This algorithm is used in the PLATE module.
- [Chad Altemose](#) has organized and clarified feature requests and tips.
- [Jacky Ligon](#) validated the MTS-ESP implementation.
- [Yuli Yolo](#) / [Expressive E](#) tested and provided feedback.
- Rich Whitfield, [Andreya](#), [DATABROTH](#), [NGC 224 | Ravetracer](#), [adrenakrohm](#) did proof reading for this user guide.
- [The Sound Of Merlin](#), [Sound Author](#), [Astralabyssal](#) created Palettes for Abyss II.
- [Spektralisk](#), [The Sound Of Merlin](#), Rich, [Sound Author](#), [DATABROTH](#), [Astralabyssal](#), Aaron Anderson, [Tomavatars](#), [sadà\exposadà](#) created presets for Abyss II.
- [Aaron Anderson](#) upgraded 200+ classic presets from the original Abyss.
- Rich made a demo track for Abyss II.
- [Joel Hurley](#) for consultation on tape effects.

Dawesome is blessed with an awesome group of [Beta Heroes](#) who tested everything, provided ideas, and have become kind of a family.

Rich Whitfield	DATABROTH	Spektralisk	Sound Author	Frank Gesang aka SiL3NC3
Cool WAV	Andreya	Squaremoons	HiEnergy	David Lilja (PaleSkinnySwede)
Tomavatars	Milisonics	Chaos Doll	Philip Rampi	Sabastian Weaver aka Azure Eyes
sadà\exposadà	Sound For Affect	Tj Shredder	Jacky Ligon	Trajectoire aka philippe
Chad Altemose	Chris I S1gns Of L1fe	adrenakrohm	NGC 224 Ravetracer	
HydraTek	Astralabyssal	The Sound Of Merlin	Fritz	

Hey, I'm Peter.



I'm the friendly synth guy from next door. The one with the contra-bassoon. I am on a mission: to help you find your signature sound; with ease, and with joy.



I started Dawesome because I got tired of plugins that feel like engineering tools. So I built the instruments I wished existed: simple, intuitive, musical.

Over time we grew to a tiny, but mighty team of three: a handful of musicians, coders and curious minds who care deeply about sound. Think of us as an indie-band of the digital world.



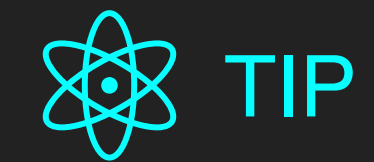
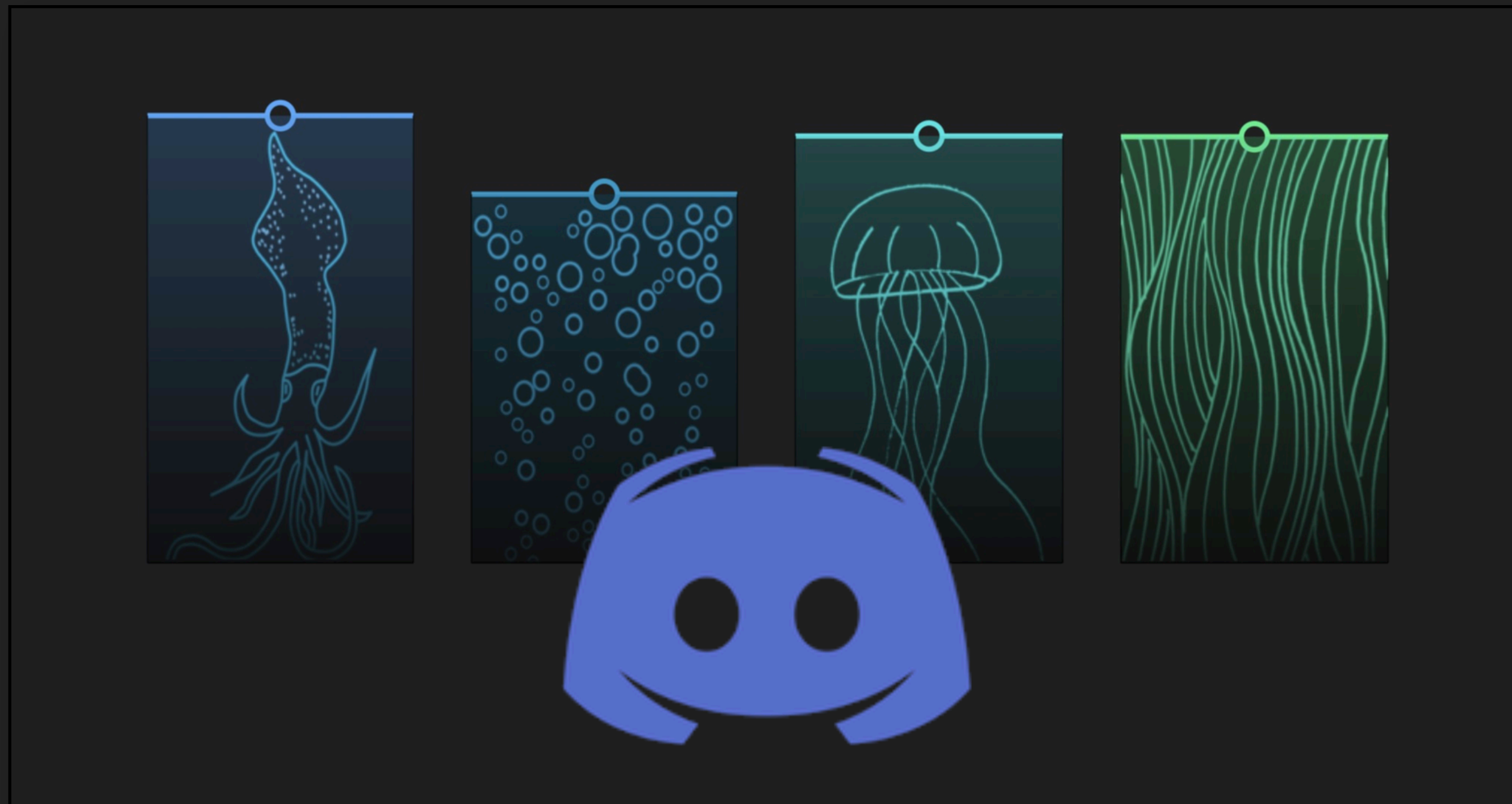
Karsten



Aaron

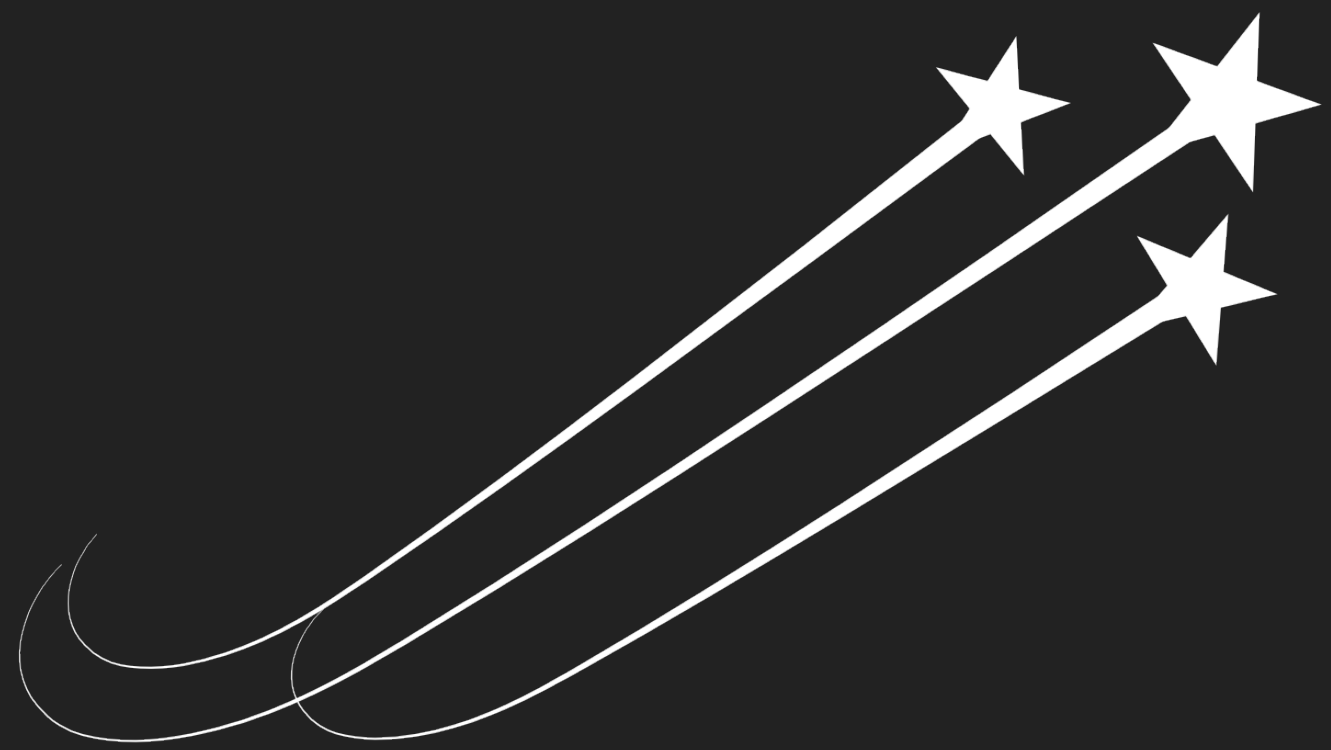
DAWESOME Village

... is the friendly community for sound lovers on Discord!



The village is not the normal company discord: it's a place to connect with sound lovers, share the latest news, and simply be in company with others who share your passion!

Click the invitation link: [Dawesome Village](#)



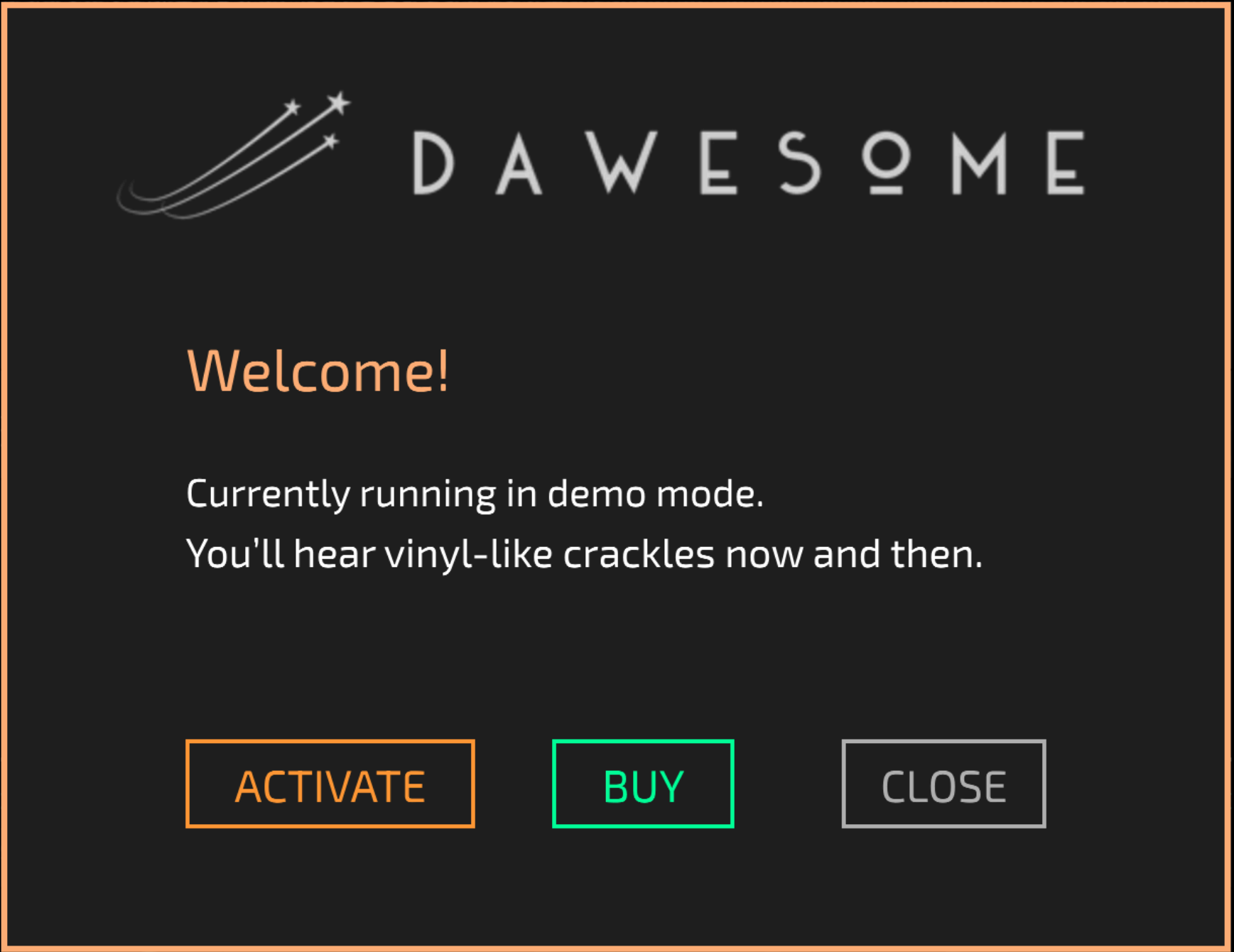
DAWESOME

DEMO MODE

To try the plugin simply download and run the installer via dawsomemusic.com (we don't ask you for email, registration etc.)

After installation the plugin runs in **DEMO MODE**: a mild vinyl-like crackle now and then - this is the only restriction. (and even this crackle will start only after 2-3 days)

The plugin runs in almost every DAW:
Windows 10 / 11
MacOs 13 (Ventura) onwards
VST3 AU AAX



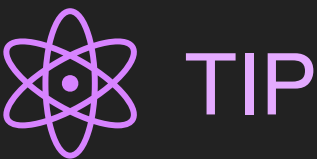
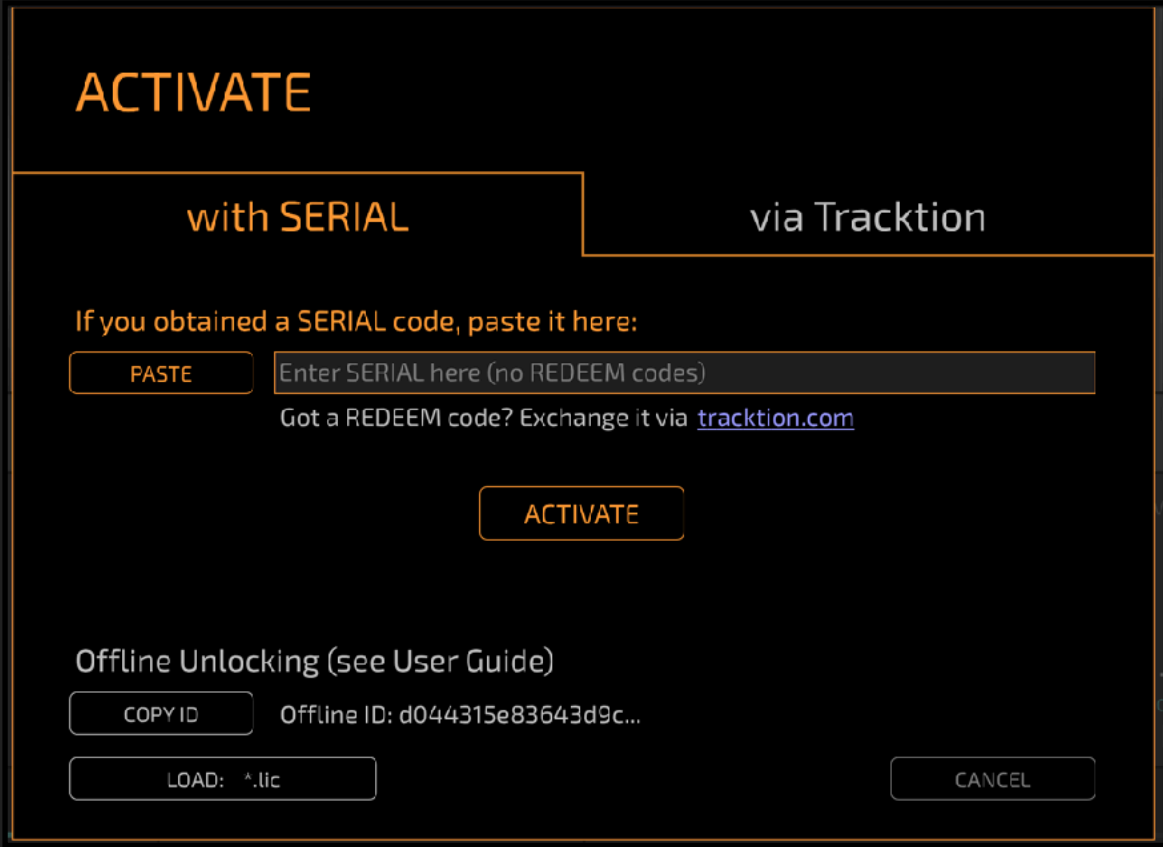
ACTIVATION

Activating the plugin is dead simple:

- 1. Open the plugin in your favorite DAW
- 2. In the bottom right corner click **ACTIVATE**:



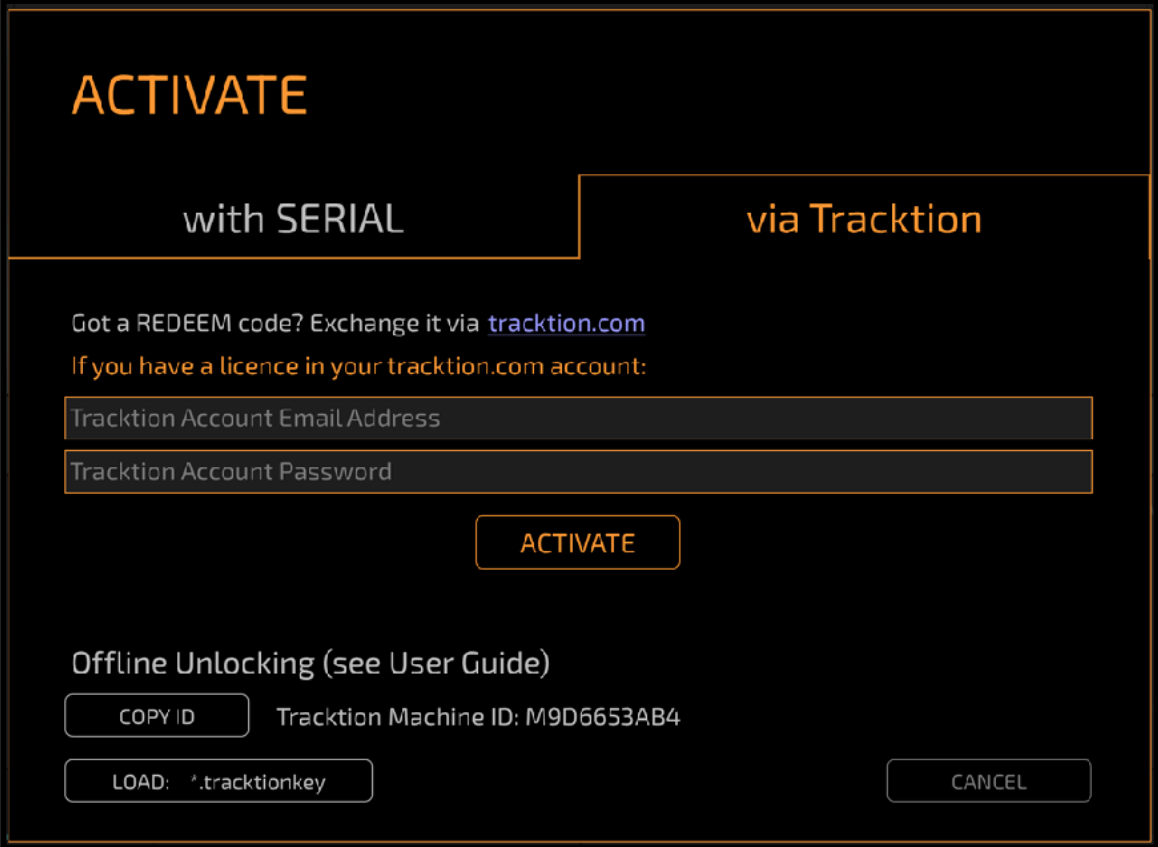
- 3a. If you obtained a **SERIAL** code (eg. via dawesomemusic.com) just paste the SERIAL and click ACTIVATE



TIP

You don't need to re-install the plugin.
There is no separate demo-plugin - it is the same installer.

- 3b. If you purchased via tracktion.com you simply activate the plugin with your tracktion account email and password.



REDEEM CODES

If you purchased via a re-seller like Plugin Boutique you may have received a so called **REDEEM** code.

You first need to go to tracktion.com to redeem this code. You may need to create a tracktion account.
Afterwards you activate "**via tracktion**".

OFFLINE ACTIVATION

The normal activation needs a connection to the internet. It will then download a Keyfile that is tied to your individual machine.

(Other than that the plugin never contacts any server.)

Sometimes your studio computer is not connected to the internet - in this case you can do an OFFLINE activation. This is done in 3 simple steps.

1. copy the OFFLINE ID of your offline computer

NOTE:
please take care to choose "with SERIAL" or "via Tracktion" **correctly**,
as these use different machine IDs



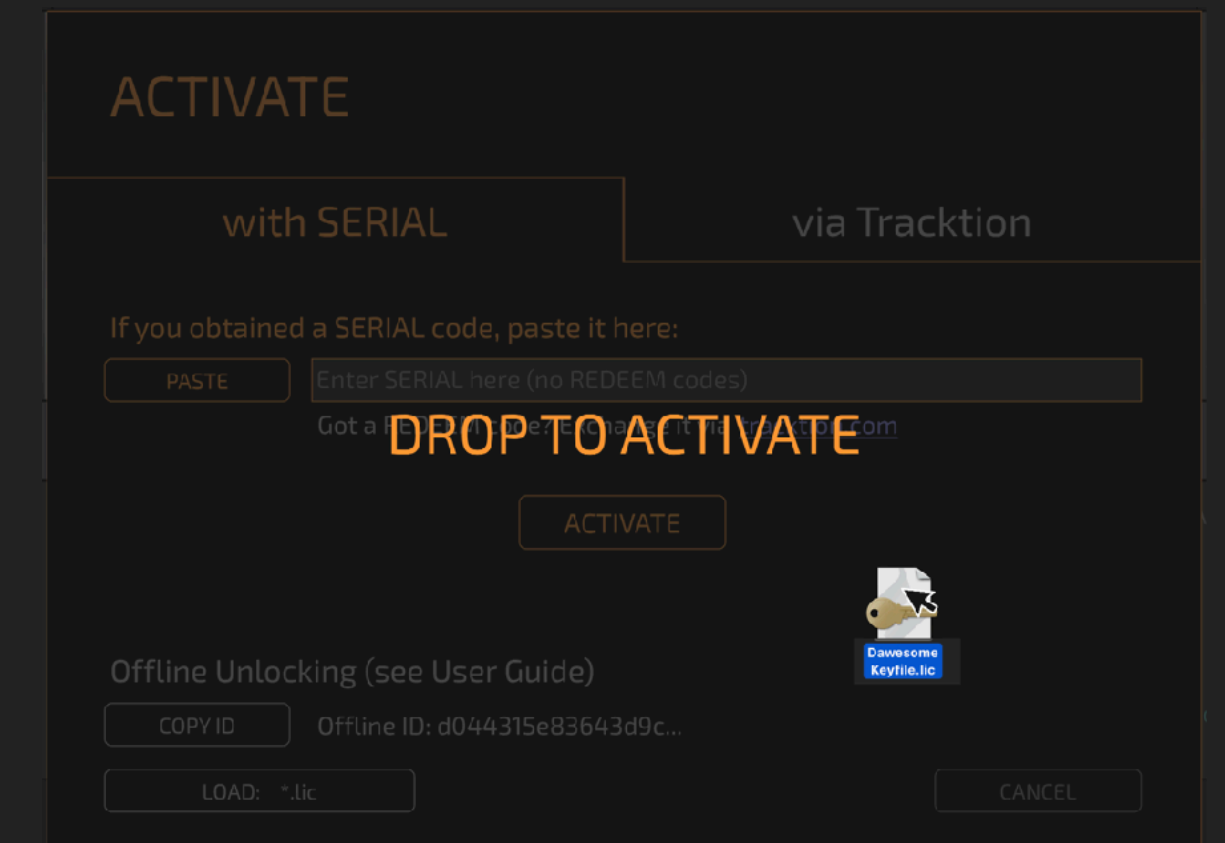
2. Download a Keyfile

If you have a SERIAL:
simply go to [OFFLINE ACTIVATION](#)
enter your SERIAL and the machine
ID, then DOWNLOAD instantly.

If you have a license via [tracktion.com](#):
Make sure you used the "Tracktion
Machine ID", not the "OFFLINE ID".
You need to submit a service ticket [here](#).
Provide your email address, the name of
the product and the machine ID. Within a
few days they will send you the Keyfile
via mail.

(Note: This is a manual process handled by
Tracktion and can take several business days)

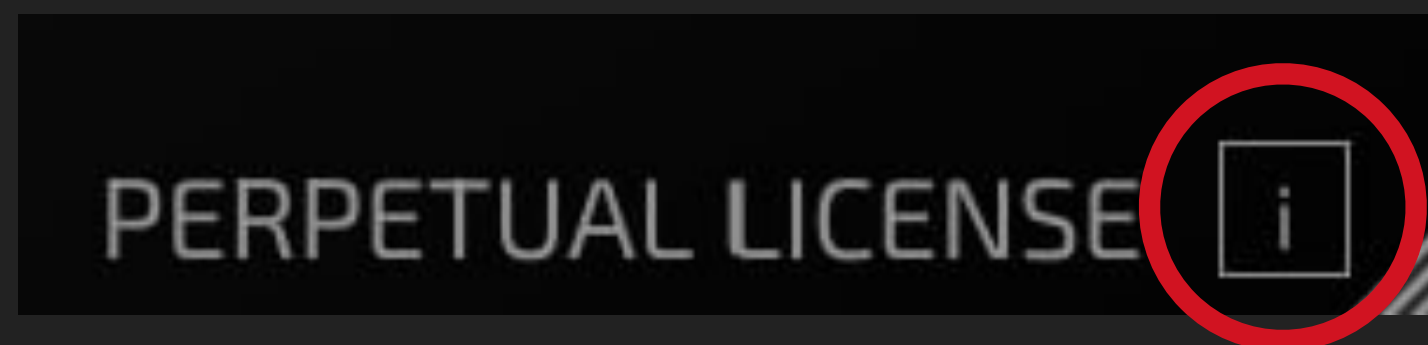
3. Drag and drop that file on the plugin



(or you click ACTIVATE and then the LOAD
button and choose the Keyfile)

CHECK ACTIVATION STATUS

Activation status can be checked by clicking the ‘i’ button at the bottom right of the plugin UI. This will open a window showing the status of activation. If activated, the window will show if the activation was through serial number or via Tracttion. If you’ve lost your serial number, you may find it here!

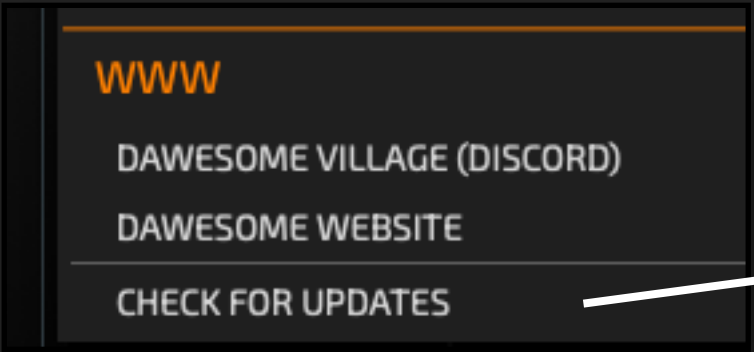


CHECK FOR UPDATES

There are two easy ways to check for new versions!

- 1

Choose CHECK FOR UPDATES from main menu.
And jump directly to download page if an update is available.



- 2

Open download page <https://www.dawesomemusic.com/downloads> in browser.
And look for the desired plugin - where you find the latest version.

You find the current version number at the top next to the plain name.



Works only when computer
is online ;-)

SETUP YOUR MIDI

Click here and choose your midi controller, so that Abyss is best tailored to your setup.

If your controller is not listed: choose MIDI AT for a normal midi controller or MPE if your controller supports MPE.

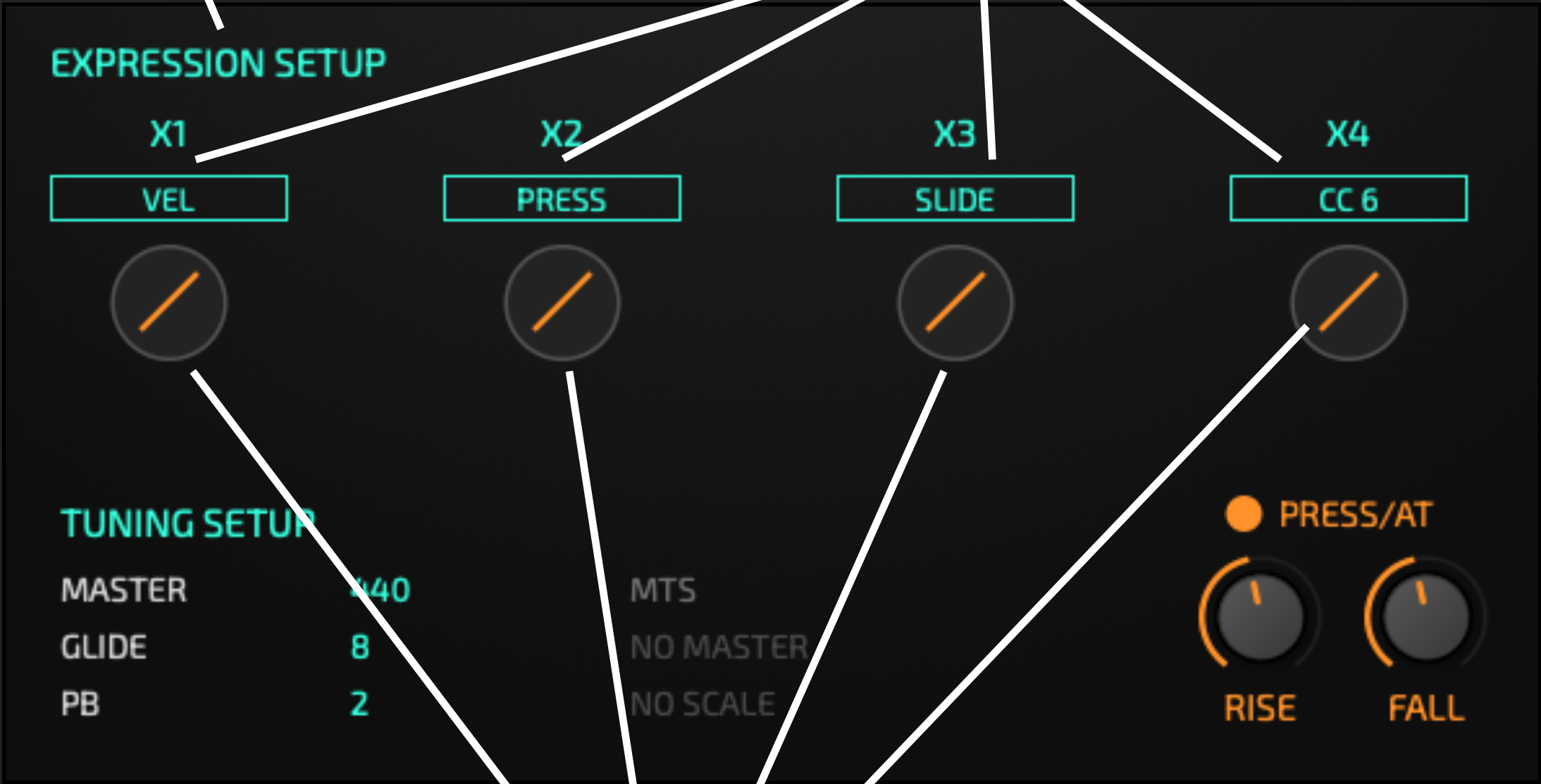
- AKAI MPK
- ARTURIA
- DEFAULT
- ERAE 2
- EXQUIS
- LAUNCHKEY MINI
- LAUNCHKEY MK 4
- LINNSTRUMENT
- MIDI AT
- MIDI CC11
- MIDI PB
- MPE
- NI S MK1
- NI S MK2
- NI S MK3
- OSMOSE
- OSMOSE 2
- PUSH 3
- ROLI
- SEABOARD



Click here to bring up the SETUP menu.

You can configure the inputs X1, X2, X3, and X4 freely to the midi information sent by your controller.

This is stored for the instance of your plugin, so it remains unchanged when you switch presets.



You can adjust the sensitivity curve for each input.

This setting is stored as part of the preset. If you want your controller to behave different in general you better do this in the settings app of your controller.

SETUP YOUR MIDI

X1-4 are polyphonic macros. These may be assigned to parameters in the same manner as LFOs and envelopes. These may be monophonic or polyphonic depending on the physical input set for X.



Abyss supports the microtuning system [MTS-ESP](#). The synth connects to the master automatically.

If a master is connected, MTS will light up, letting you select note-on or continuous retuning, and also displaying the current scale name.

This is optional smoothing for both pressure and aftertouch. RISE is the amount of time taken for the resulting pressure/aftertouch (PRESS/AT) to reach the real-time value the controller is providing for increasing values. FALL is the amount of time to reach a decreasing value.

THE SETUP - for Sound Designers

With the advent of MPE, there is also a new problem: there are more and more controllers, each sends different midi data, with different gestures to use it.

The Sound Designer of a preset may use an Osmose, but the user does not have an MPE controller, and uses a traditional midi controller with modwheel and monophonic aftertouch.

Yet all users want to play the preset as designed, with expression. Abyss provides a solution:

ABYSS has 4 specific modulation sources for expressive playing:

X1 - for NOTE-ONSET expression

X2 - for expressing INTENSITY

X3 - for expressing TIMBRE

X4 - for expressing MODULATION

Modulations are assigned to these modulation sources as part of the preset.

The midi input these sources listen is set only once by the user to match their available controller.



1. For X1 you should always assume MIDI-Velocity.
2. Increasing X2 should increase the perceived intensity of the sound - in most controllers increasing X2 means that you apply more force. It feels very unnatural if applying more physical force leads to a softer tone.
3. On the OSMOSE the SLIDE is activated by pressing the key further down. That means that X3 increases only once X2 reached its maximum. Hence X2 should not create complete tonal mess if you want to offer X3.

Some typical controller setups that you can find in the wild:

	MIDI	MPE	OSMOSE	User A	User B
X1	Vel	Vel	Vel	ModW	Vel
X2	ModW	Press	Press	Pedal 1	ModW
X3	CC11	Slide	Slide	Pedal 2	PitchBend
X4	CC7	ModW	ModW	CC6	CC6

MICROTONALITY

ABYSS supports two methods of retuning: MTS-ESP and MPE pitch bend.

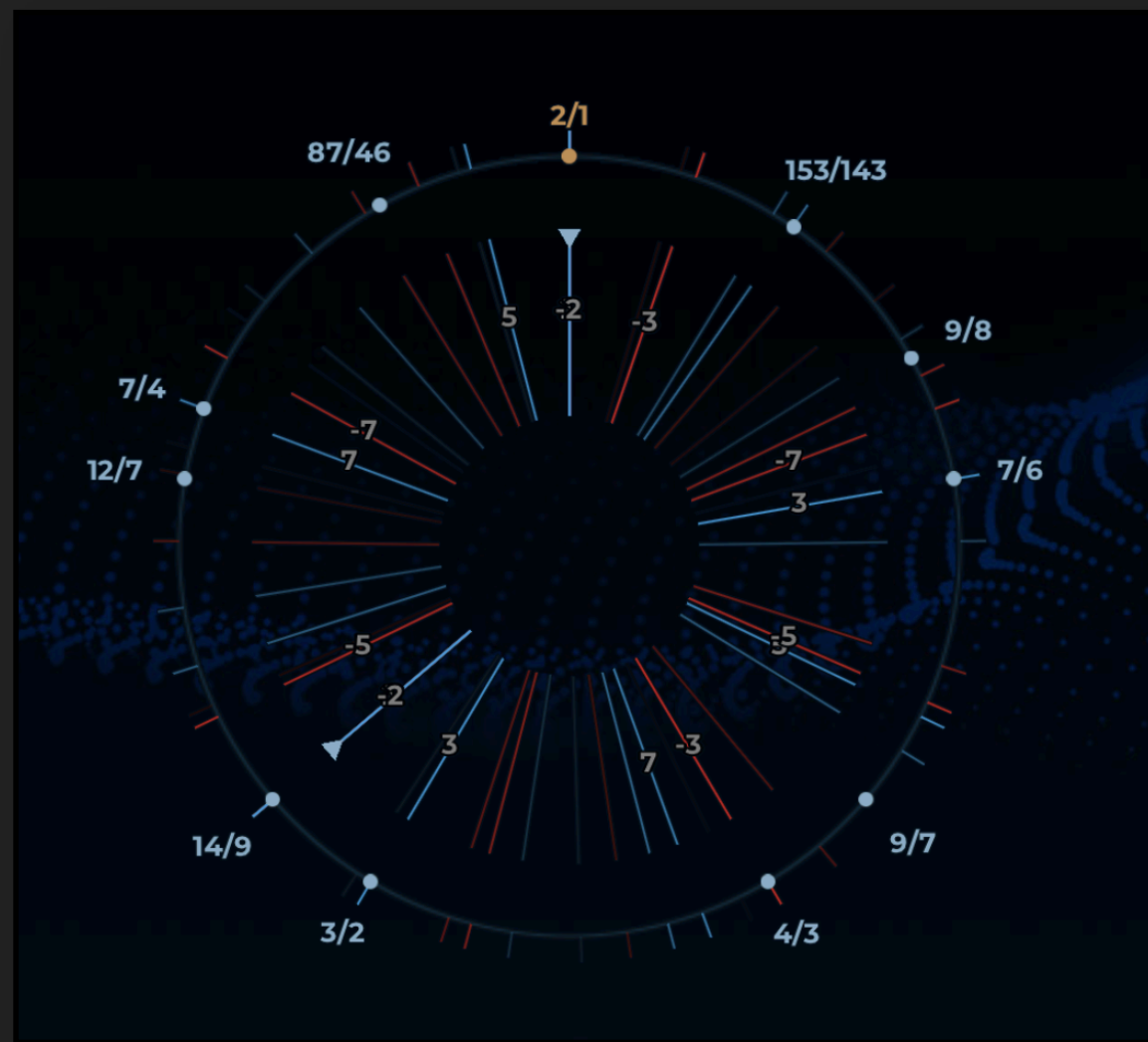


Microtonality means tuning notes differently than the 12 equal divisions of an octave, which is the modern standard.

Many kinds of music make use of alternative tunings, but software instruments have usually been written to play in 12 equal notes. This has changed in recent times. More and more instruments allow the musician to decide how the notes should be tuned.

There are many possibilities. Some tunings differ only slightly from 12-TET, while others sound radically different. Happy exploring!

ABYSS supports the MTS-ESP standard created by [ODDSOUND](#).



MTS-ESP

ABYSS supports MTS-ESP, which allows you to easily explore tunings other than the standard 12-TET. You'll need an MTS-ESP source to set the tuning. For the following example, we'll use the (free) MTS-ESP Mini.

1 INSTALL / PREPARE

Install the [free MTS-ESP MINI](#) from ODDSOUND

Download some scales:

- the Surge Synth Team collection of Scala SCL and KBM files
- the [Sevish Tuning Pack \(v1.1\)](#) contains another small curated collection of tunings for intonation explorers
- The [Scala Scale Archive](#) is a large collection of over 5100 scale files

This should be sufficient to get us started and last through several music making lifetimes!

2 HAVE FUN

In your DAW, create one track and add one instance of MTS-ESP Mini. This track does not need to be armed for recording.

Load an instance of **ABYSS** on any adjacent track. Arm it to receive MIDI input from your controller.

Now extract some of the above SCL-KBM files on your computer and arrange them so they are easy to drag-and-drop into your DAW.

Drag-and-drop "HD2 06-12.scl" from the Surge XT Tuning Library onto the UI of MTS-ESP Mini to get a feel for how it works. This should instantly tune **ABYSS** to the scale.

Now play across the range to hear the new intonation.



Working in 12-equal, no extra effort is needed to make each software instrument play the same tuning; they (almost) all play 12-equal by default. Working in other tunings however... until recently working in other tunings required us to manage the tuning of each instrument individually.

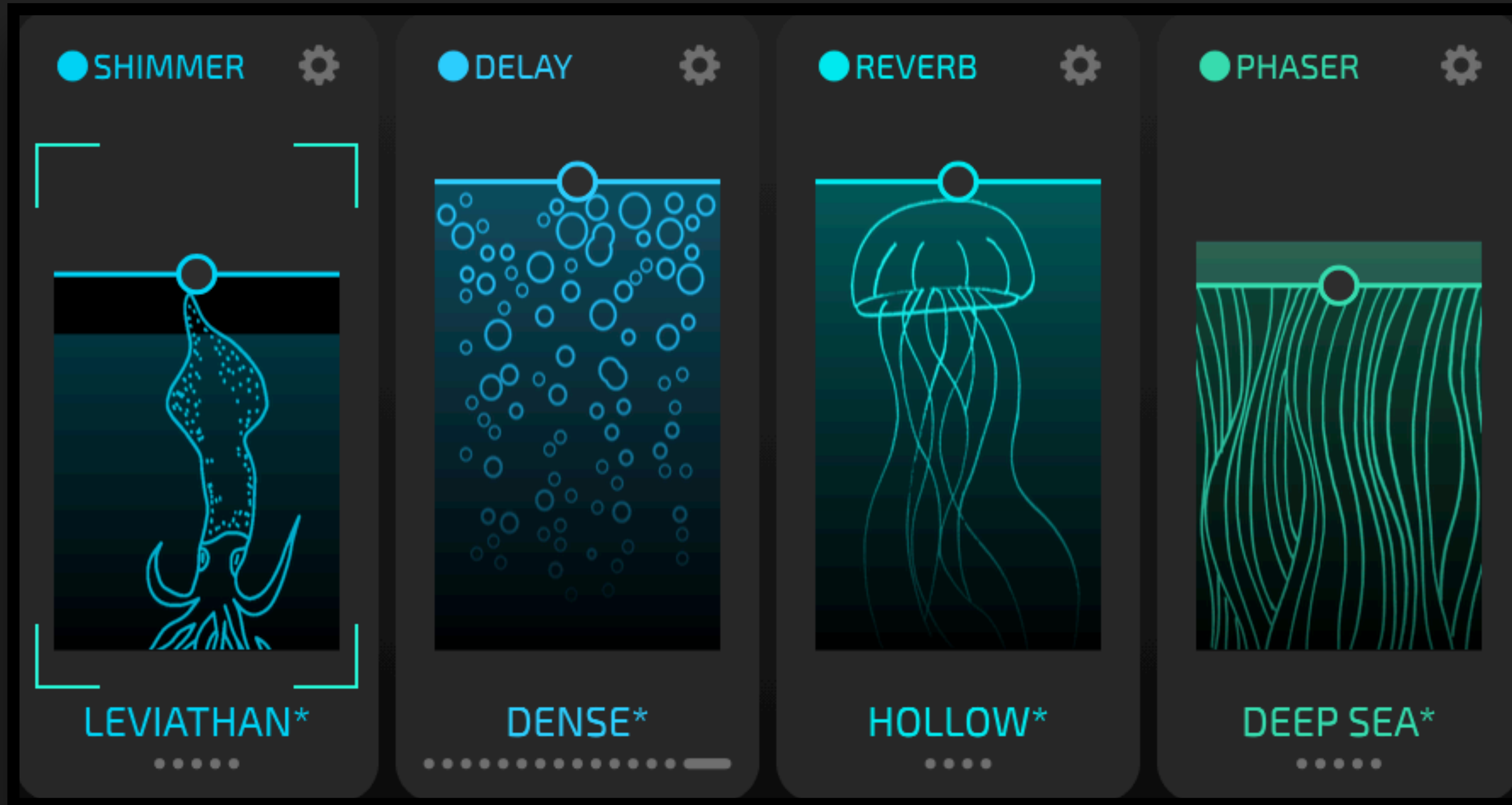
When the goal is for all instruments to play in the same tuning, this gets very repetitive, albeit doable. MTS-ESP fixes that. It's the closest thing today to a central DAW-integrated tuning feature: set the tuning in one place, and all the instruments follow suit. Just like setting the tempo and time signature.

If the MTS-ESP source supports it, you can also change the tuning on the fly (with automation or MIDI). For example, slowly changing key from G to Bb over the course of 6 minutes.



I recommend the [Surge Synth Team tuning Guide](#), which lists all MTS-ESP plugins.

THE MODULES



THE MODULES

● EQ ⚙️

●

LOW

●

MID

●

HIGH

●

LOW X

●

HIGH X

12dB
...

DEFAULT*
.....

● MAXER ⚙️

●

DRIVE

●

OUT

DEFAULT*
.....

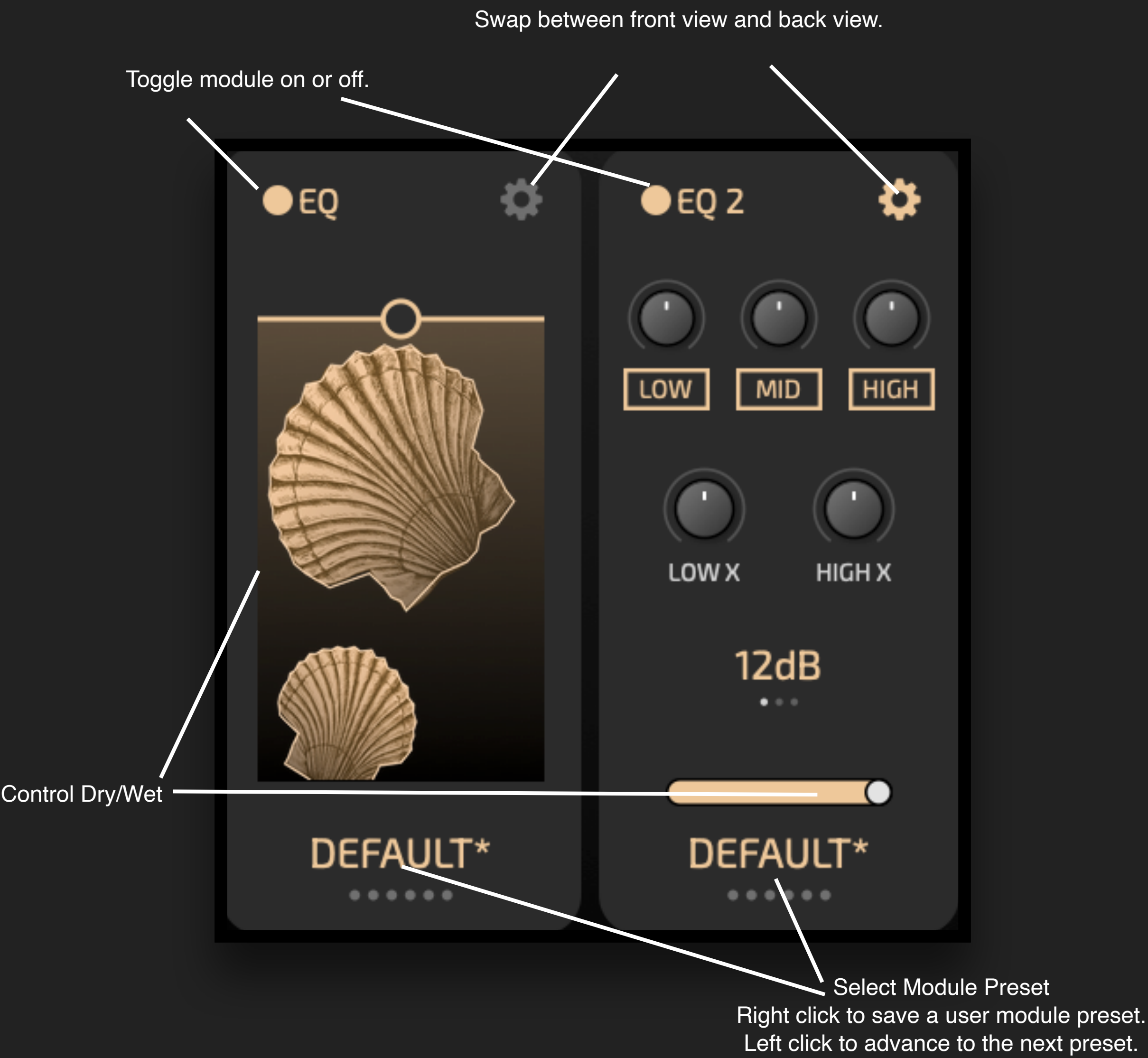
+

Choose from a large list of modules.

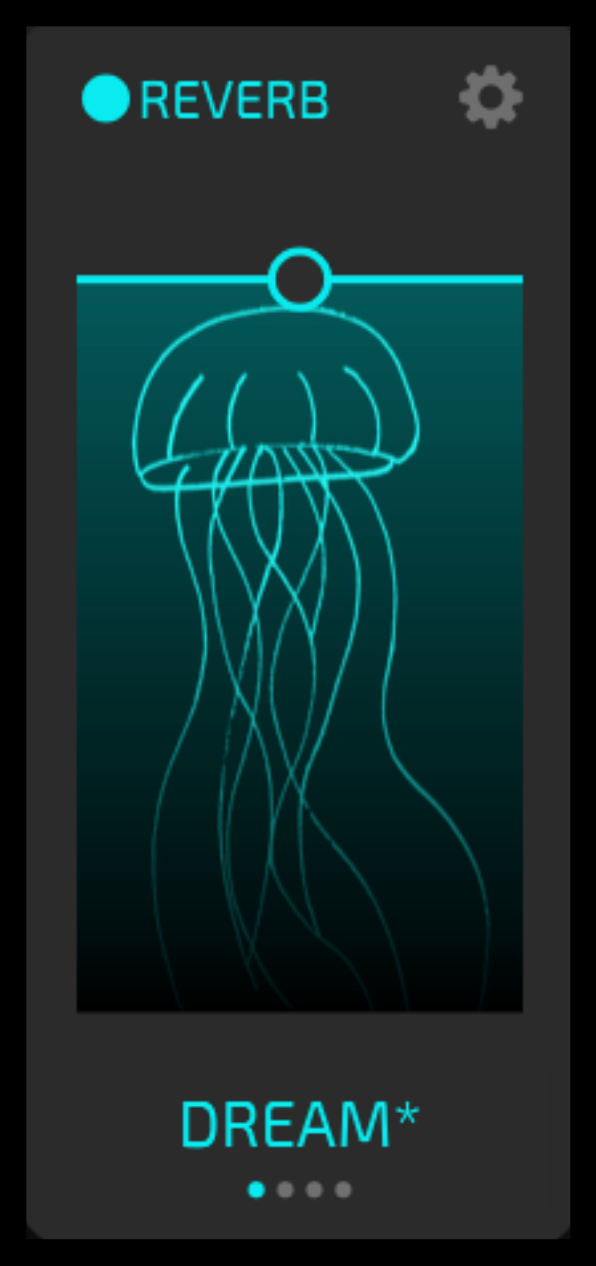
REVERB	DISTORT
REVERB	SATURATOR
CLOUDS	UTILS
PLATE	OTT
SHIMMER	GAIN
DELAY	MAXIMIZER
GRAINS	EQ
DUAL DELAY	
LOOPHOLE	
DELAY	
MOD FX	
SWEET	
CHORUS	
TAPE	
PHASER	
J-60 CHORUS	
PULSE GATE	

THE MODULES

Modules have these features in common.



REVERB



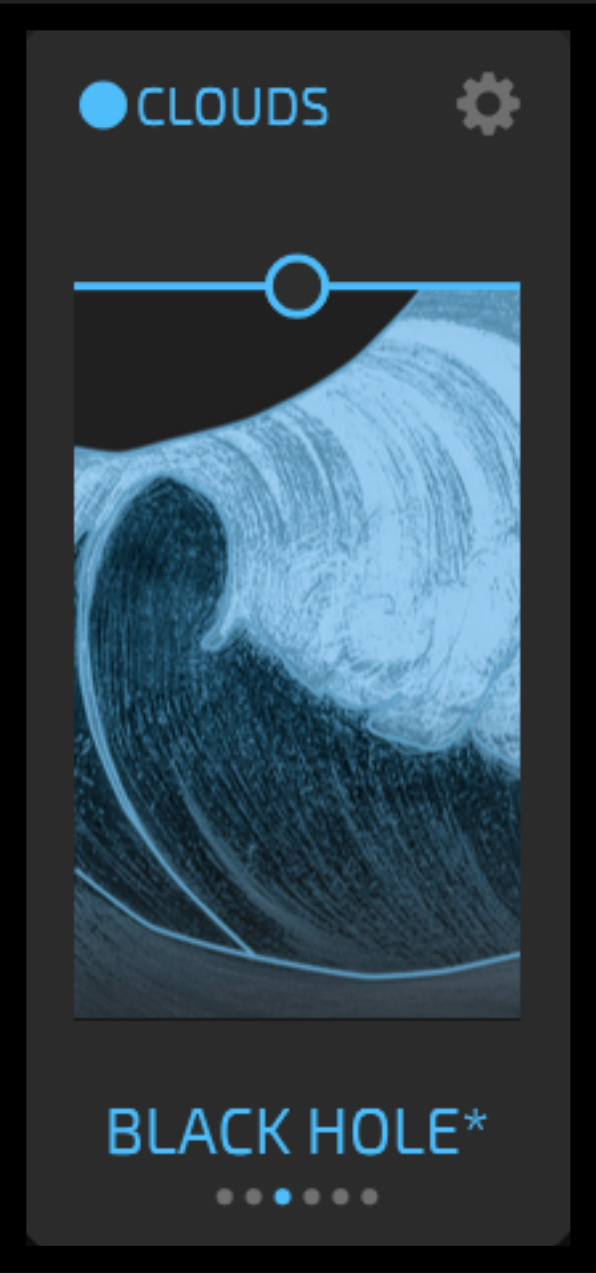
Control the size of the reverberant space. High values lead to long reverb tails.



Control how wide (stereo width) the reverberation is.

The higher DAMPING is, the more high frequency content is attenuated on each reflection. Low values resemble very reflective surfaces, such as concrete. High values behave like absorptive surfaces, like heavy curtains.

CLOUDS



The CLOUDS effect is a special "tonal" reverb. It does not aim to replicate natural spaces but to give you a creative tool for everything BIG, LUSH and EPIC.

The amount of EARLY reflections. This is especially important for signals that have lots of transients and attacks. When using "soft" materials, high values of EARLY create more dense reverb tails.



TIP

You can use the CLOUDS effect as a standalone EPIC reverb.

You can add a touch of big space by turning the DRY/WET to almost zero while using big values for SIZE and SPACE. This is like a secret sauce if you want to pimp simple stock synths to modern sound.

PLATE



Delay the onset of reverberation by this amount. This is useful for maintaining clarity of a signal's transient.

Determine the coloration of the reverb.

MOD controls the depth of internal modulators. Low values produce a natural depth/lushness while extreme values create other-worldly textures.

FB controls the feedback within the system. Higher values lead to longer reverb tails.

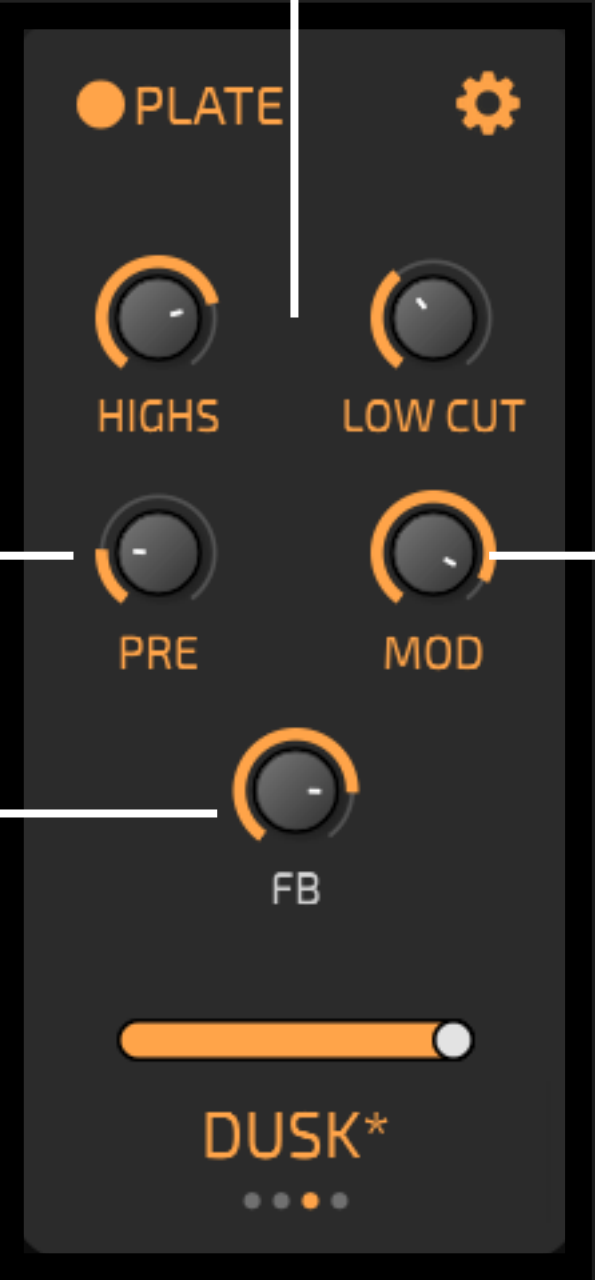
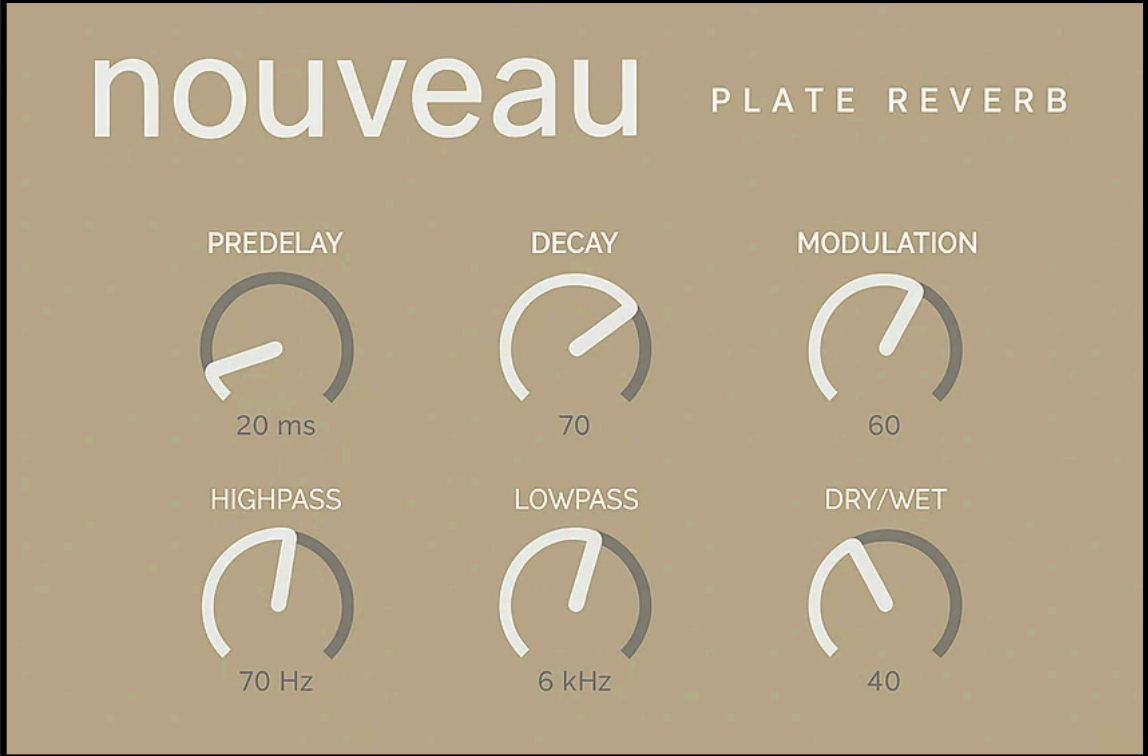
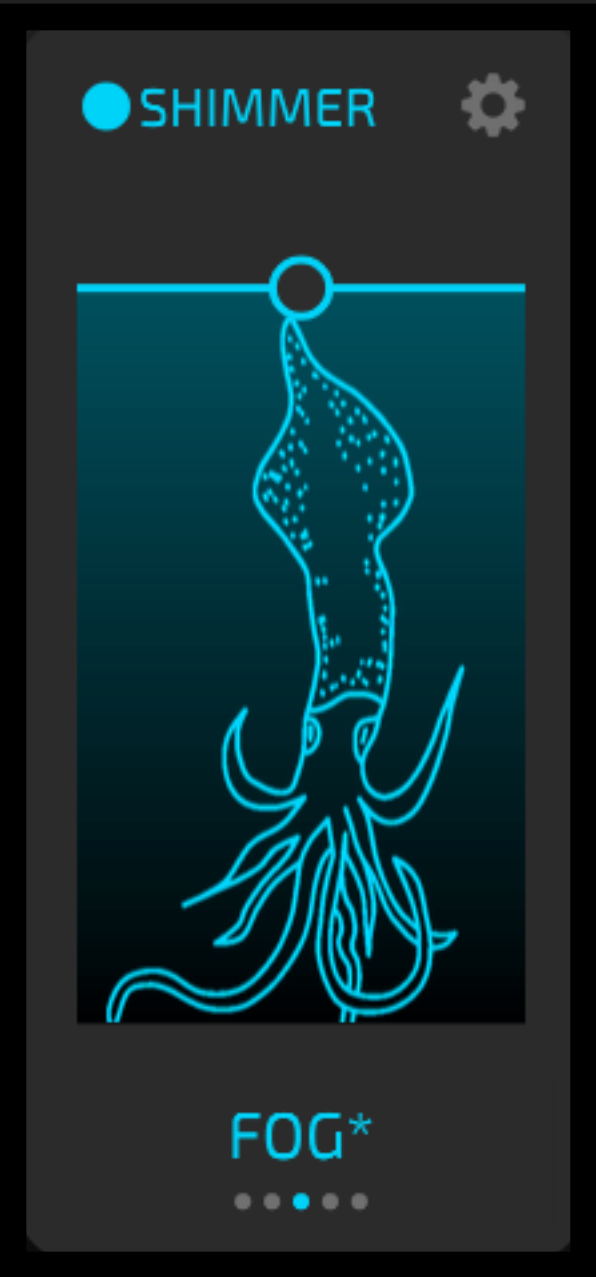


PLATE was modeled after [Sound Author's](#) open-source Nouveau plugin.



SHIMMER



The size of the reverb used within the SHIMMER effect.

The SHIMMER effect works like a big reverb with a pitch shifter in the feedback path. You can set the transposition here.

Use values like +12 or +7 for the classical Brian Eno style shimmer effect. Use uneven values to create scary or muddy sounds.

Positive values brighten the sound, while negative values darken the sound.

Right click for a list of integer values.

-12	-7	-2	3	8
-11	-6	-1	4	9
-10	-5	0	5	10
-9	-4	1	6	11
-8	-3	2	7	12



HALO controls the cutoff frequency of an internal analog modeled lowpass filter.



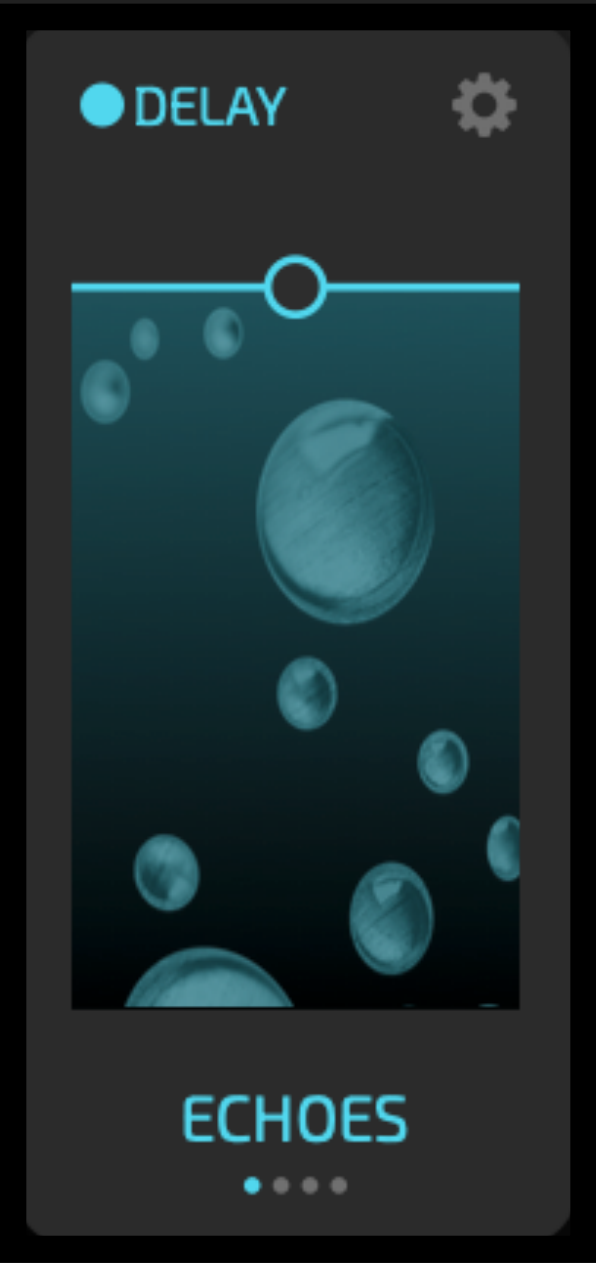
TIP

You can use the SHIMMER Filter as its own effect.

You can use it to add lush, spacey reverb tails to any sound. With the mix cranked up to full WET, you can turn every sound into a slowly evolving ambient drone.

You can add DELAY and CLOUDS to make it even bigger. Or use the GRAIN engine to add texture.

DELAY



If not synchronized, click and drag the BPM value to adjust.

This slider sets the duration between the original signal and the first echo. Right click for a list of options.



SYNC will synchronize the delay module with your DAW tempo.

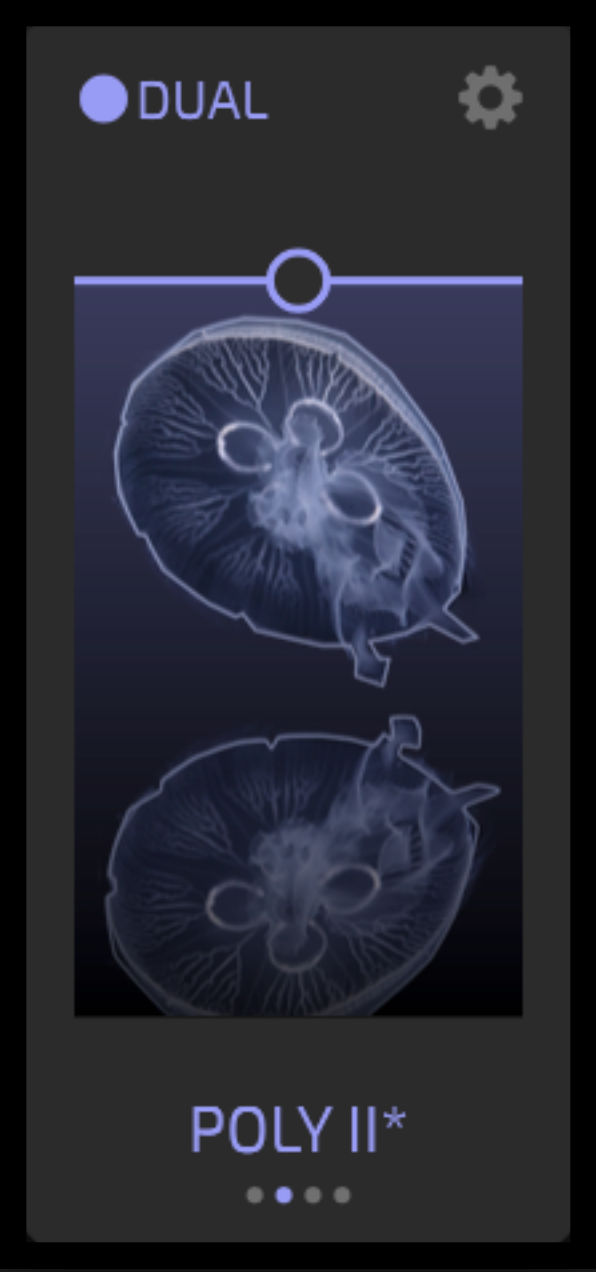
Click the text to open a list of duration options/

1 bar	1/2	1/2d	1/2t
1.5 bars	1/4	1/4d	1/4t
2 bar	1/8	1/8d	1/8t
3 bars	1/16	1/16d	1/16t
4 bars	1/32	1/32d	1/32t

Ping Pong mode. Echoes will bounce between left and right channels.

Ping Pong SYMmetry mode. In this mode, each left PING will be exactly the loudness of the proceeding PONG.

DUAL



The TIME parameter sets the duration between the original signal and the first echo.

SPILL signal from the left feedback loop to the right, and vice versa.

Link left and right feedback knobs

SYNC will synchronize the delay module with your DAW tempo.

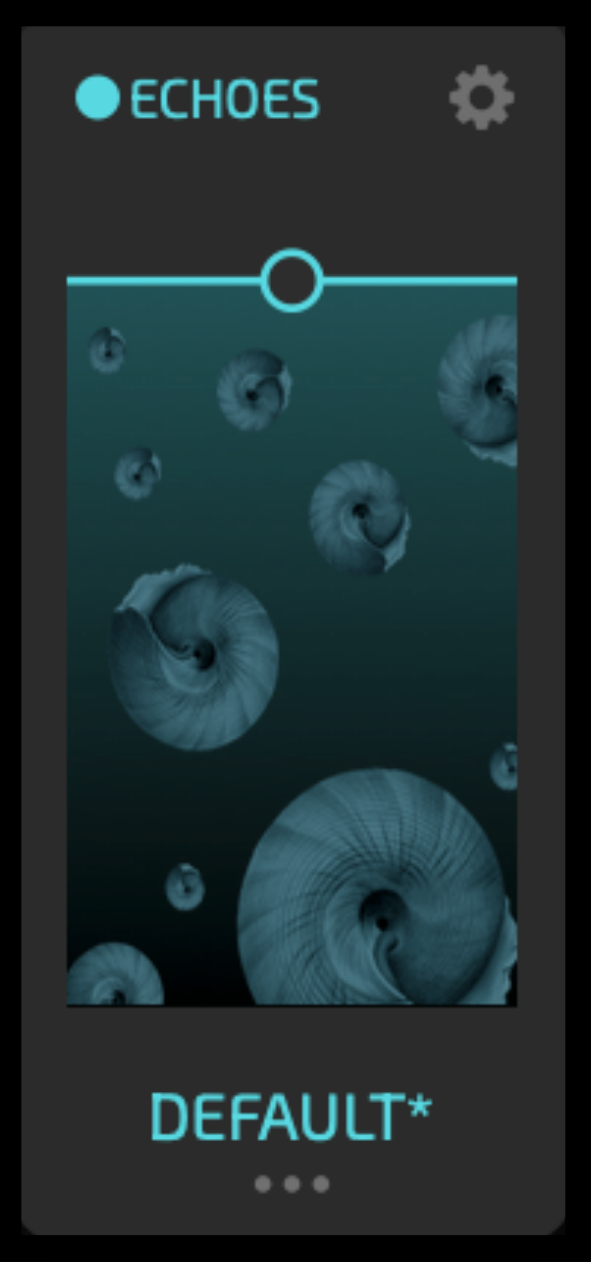
click the text to open a list of duration options.

1 bar	1/2	1/2d	1/2t
1.5 bars	1/4	1/4d	1/4t
2 bar	1/8	1/8d	1/8t
3 bars	1/16	1/16d	1/16t
4 bars	1/32	1/32d	1/32t

Turn left to attenuate high frequencies. Turn right to attenuate low frequencies.



ECHOES



If not synchronized, click and drag the BPM value to adjust.

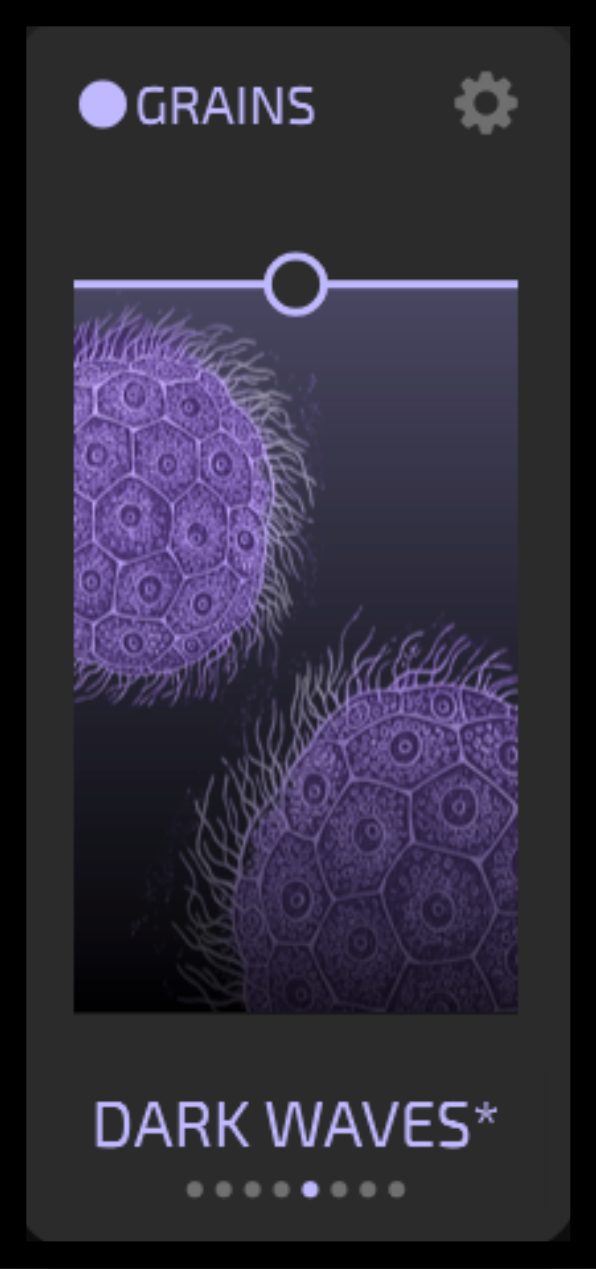
This slider sets the duration between the original signal and the first echo. Right click for a list of options.



Click the text to open a list of duration options.

1 bar	1/2	1/2d	1/2t
1.5 bars	1/4	1/4d	1/4t
2 bar	1/8	1/8d	1/8t
3 bars	1/16	1/16d	1/16t
4 bars	1/32	1/32d	1/32t

GRAINS



GLITT sets the probability that a grain is pitched an octave up (turn right) or down (turn left). In center position all grains are played back at their original octave.

JIT adds randomness to the grain creation. With low values the grains play at a steady rate, with high values it is chaotic.



Each grain gets its own tuning. This parameter controls how much the tuning is offset. High values create Ligeti-like clouds of dissonances.

CALM controls the grain duration from very short to very long and also the grain density. Turn full right for smooth sound and long tail.

LOOPHOLE

LOOPHOLE consists of six parallel micro-loopers with incommensurable delay times.

It's very fun... you can take something plain (like a sine), and use a LOOPHOLE module. Just by playing a few notes and tweaking some transformers with the mouse you will get interesting sound textures.



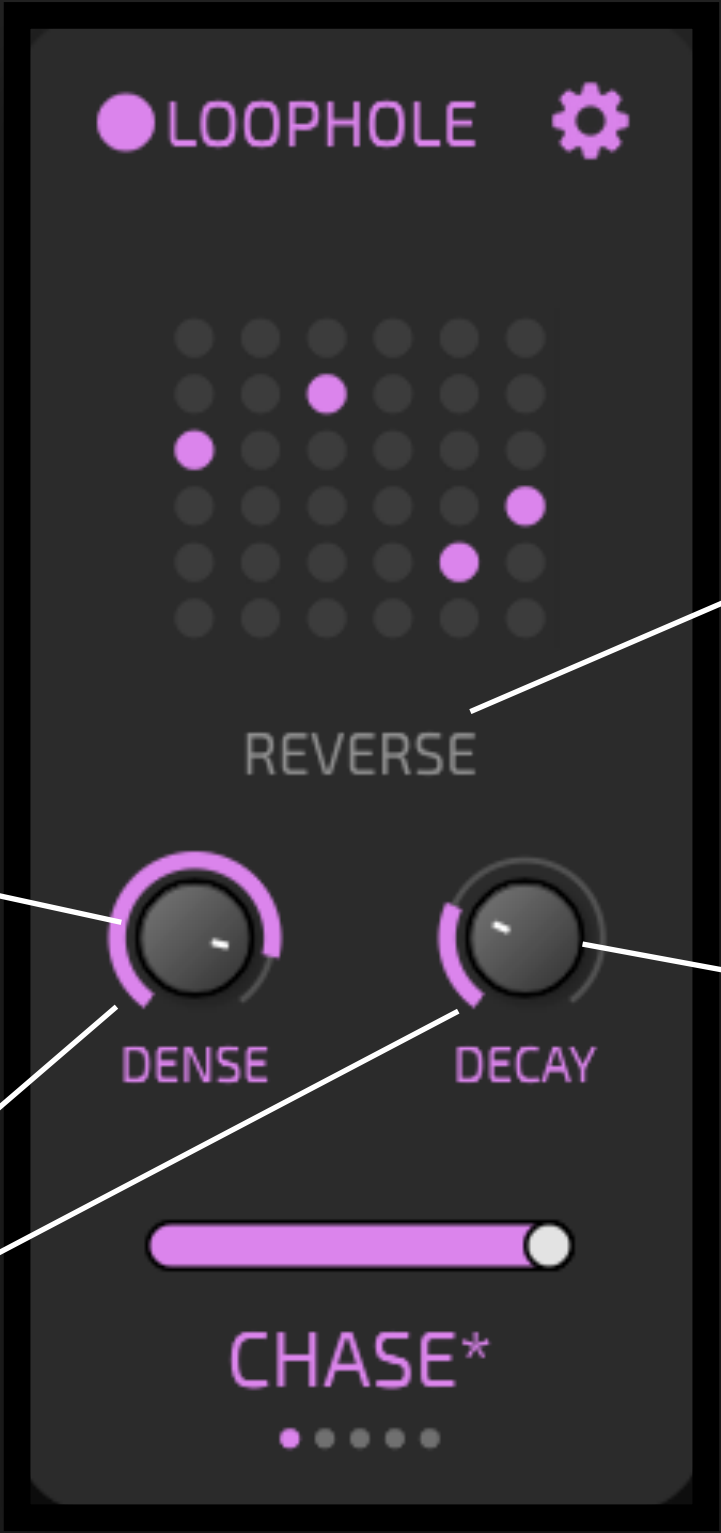
TIP

LOOPHOLE is inspired by a plugin called [Weeping Wall](#) by Aqeel Adam, which has much more functionality and works great on synths and keys as well as other acoustic instruments like guitar.



With low DENSE you get stuttering echoes.

With high DENSE and DECAY you create very organic “freezes”



Activate for REVERSE playback

DECAY on full will loop forever, but new audio material is also slowly fed into it

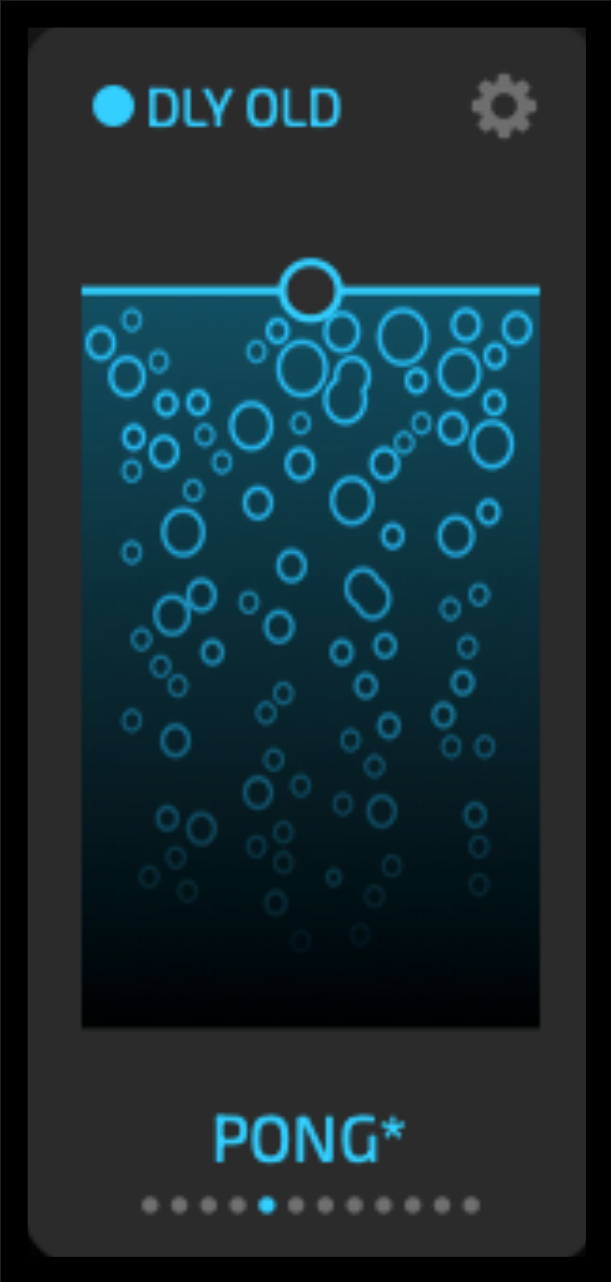
DELAY OLD

This is a legacy module from the original Abyss. The primary reason for inclusion of this module is backwards compatibility. While this module can still produce unique delay effects, the [DELAY](#) and [DUAL DELAY](#) modules offer greater control and flexibility.



TIP

Add SPREAD modulation to TIME to achieve independent repeats between the left and right channels.



The TIME between delayed signals. This is available for SPREAD modulation!

The amount of repeats of the delayed signal you desire. This is available for SPREAD modulation!



This menu allows you to select from distinct reconfigurations of the Delay system.

SWEET



SWEET will make most sounds... sweeter.

Used in subtle amounts it can give a very modern and velvety sound.

Go wild for aleatoric detuning.

CHORUS



The RATE of the pitch variations.

FEEDBACK sets the amount of feedback in each individual element.



DEPTH controls the amount of pitch variations in the individual elements.

THICK sets the number of elements that are used in the CHORUS. A higher number of elements lead to a smoother sound.

TAPE



Make your signal feel torn and deteriorated.

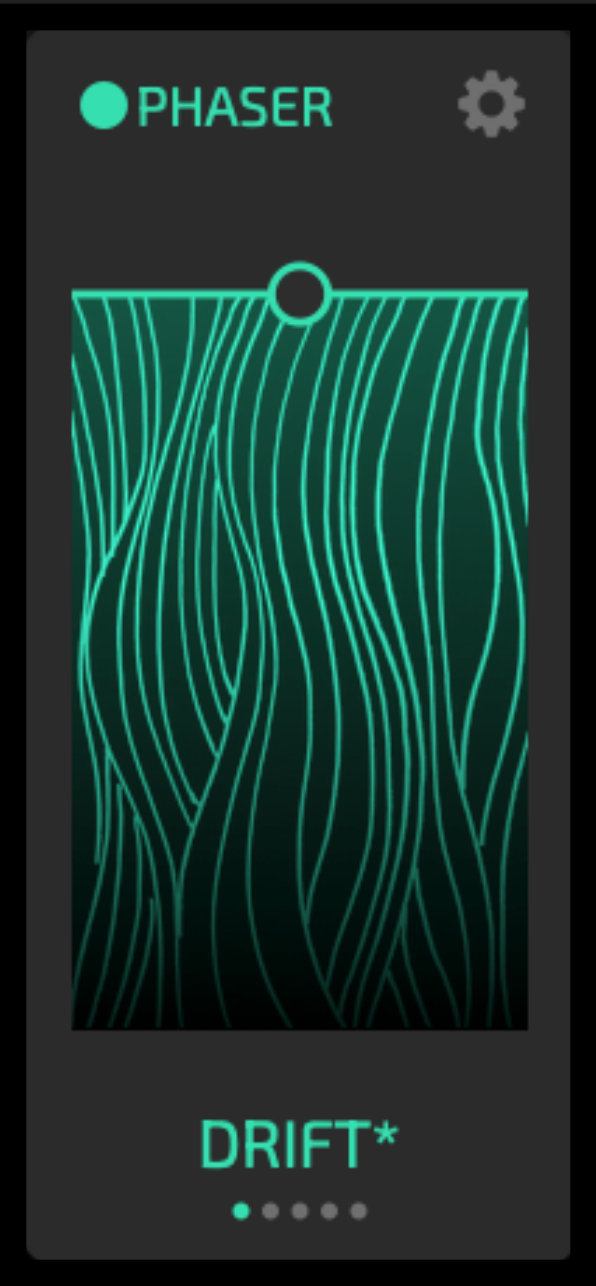
Control the depth of a slow speed modulations.



Add a rich evolving saturation.

Control the depth of jittery speed modulations.

PHASER



The classical application of a PHASER are slowly moving, evolving sounds. This works best with a slow LFO RATE, and medium levels of FREQ and either positive or negative FEEDBACK.

You can also use the LFO to create strange chopping effects: use a medium RATE of a few Hz, high DEPTH, adjust the FREQ to your material (midrange value will work most of the time) and then experiment with FEEDBACK.

The RATE of the LFO that modulates the center frequency.

The center FREQUENCY of the PHASER

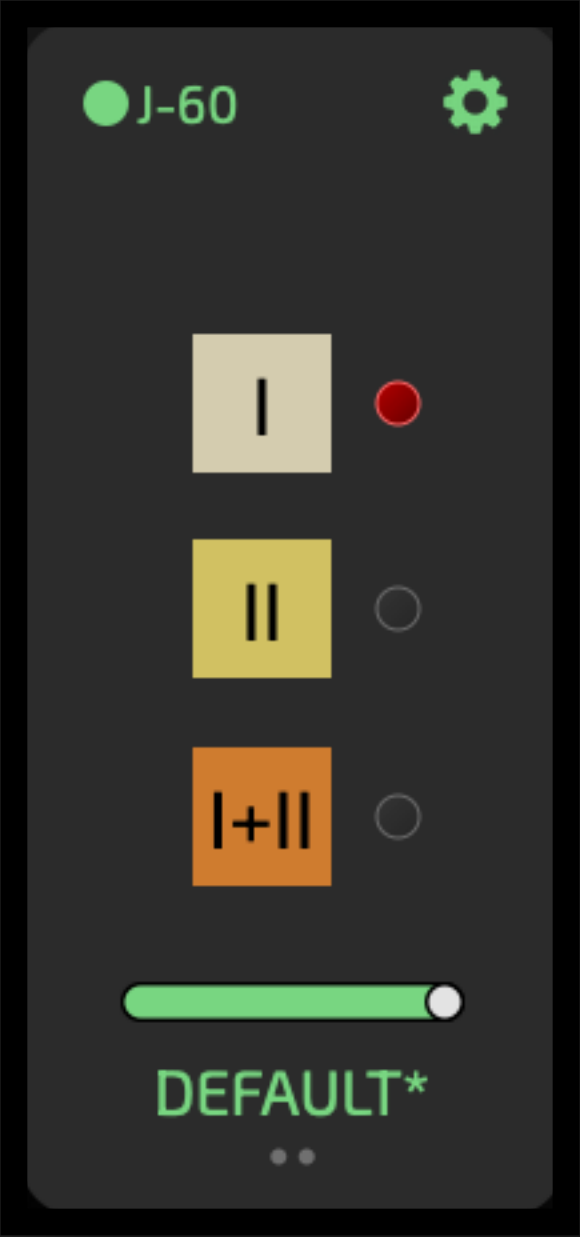
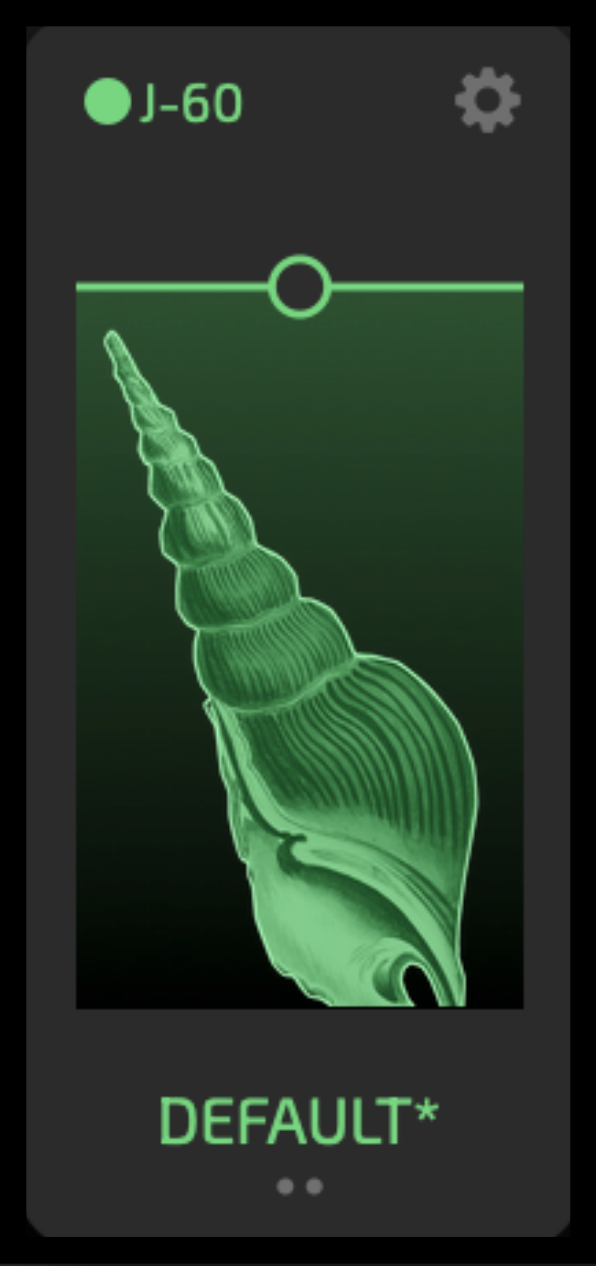


The PHASER is based on feedback. It allows positive and negative feedback which both sound quite different.

CAUTION: Be careful with extreme values - it is feedback and can lead to very loud resonances.

The stereo spread of the PHASER effect.

J-60



The JUNO 60 is an iconic vintage synth from Roland. It contained a special chorus effect which became its signature sound. The J-60 module is a virtual analog model inspired by this chorus.

PULSE



TIP

Turn SYNC off to control BPM independently of DAW tempo. Decrease the beat duration until the envelope is incredibly brief. This creates granular textures. With these extreme settings in place, A:R and HOLD now control the timbre of granular texture.

If SYNC is not on, click and drag the BPM value to manually adjust.

A:R controls the ratio of ATTACK to RELEASE. Fully left is the sharpest possible attack timing.

The higher the MISS value, the more likely an envelope will fail to trigger. MISS is determined independently for LEFT and RIGHT channels, creating a stereo effect.



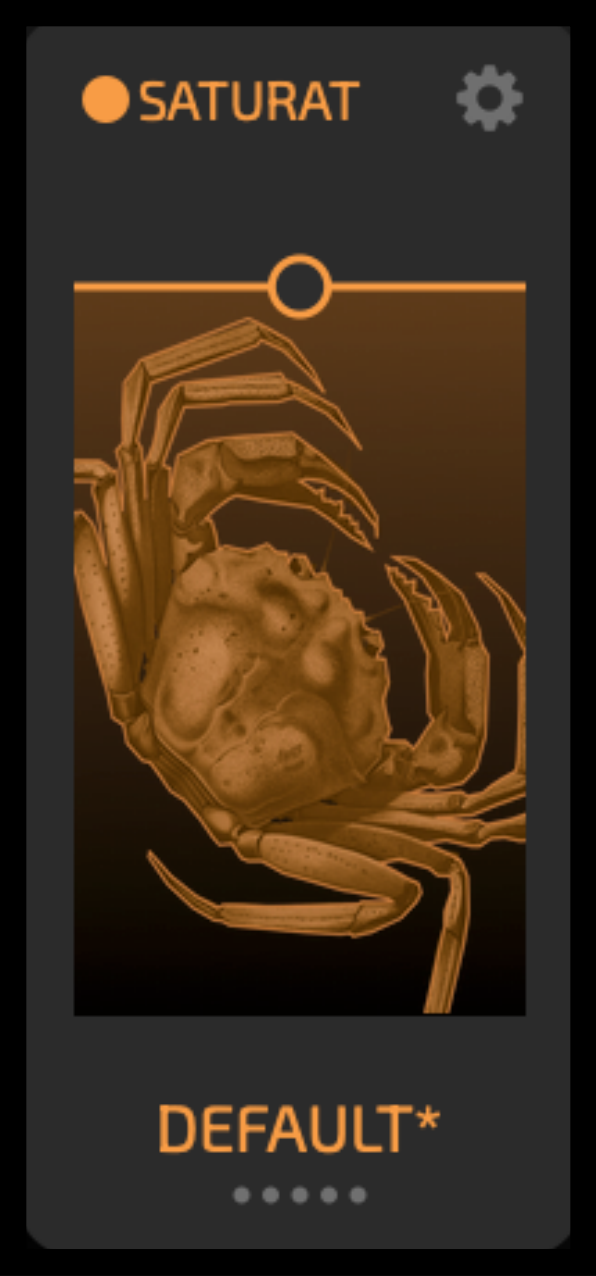
Click the meter label to open a menu of timings.

1 bar	1/2	1/2d	1/2t
1.5 bars	1/4	1/4d	1/4t
2 bar	1/8	1/8d	1/8t
3 bars	1/16	1/16d	1/16t
4 bars	1/32	1/32d	1/32t

The HOLD duration of the AHR envelope.

JITT controls timing offsets of AHR envelope triggers. The LEFT and RIGHT envelopes are offset independently. Turn slightly to the right for increased stereo separation, and further right to shift timings off of the beat stochastically.

SATURAT



Choose your saturation mode



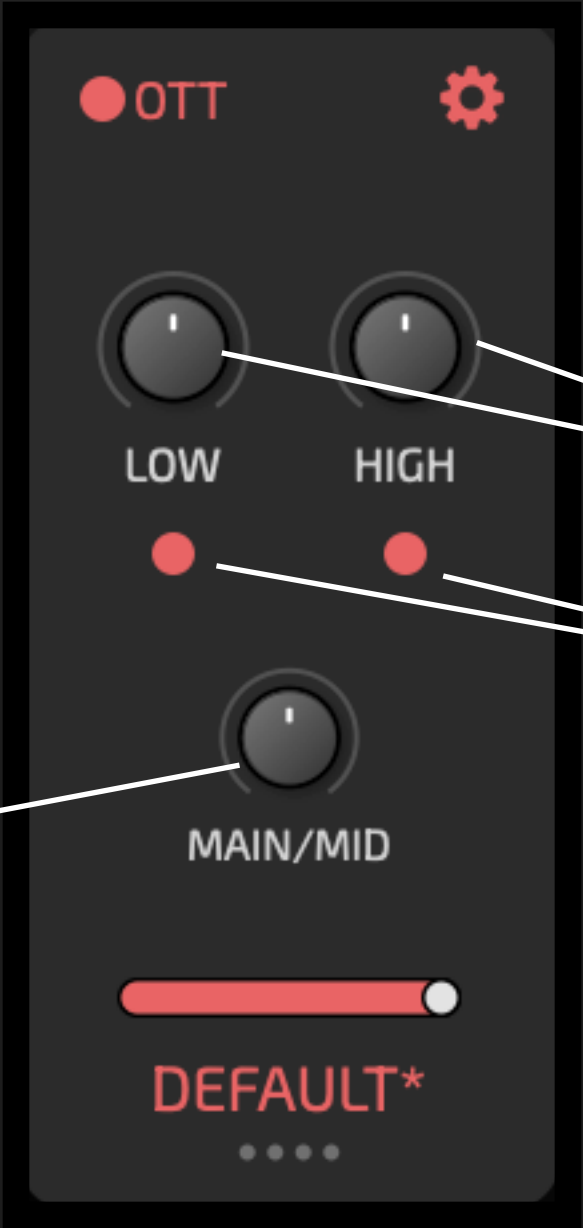
Hot drive can raise your peaks!
Use this to compensate.

OTT



Turned to the LEFT this is (aggressive) upwards compression: silent signals are made louder. This can be used to bring up texture in the sound or bring out silent parts like tails.

Turned to the RIGHT this is “normal” downwards compression: loud signals are reduced to compress the signal. Gives punch.



Control Upwards or Downwards compression for low and/or high bands (if enabled).

Toggle either band on or off.

CAUTION: When you turn the MAIN/MID dial to the left it is doing upwards compression. That is: silent signals get dramatic amplification. Be careful with very silent tails when you put the OTT in the module rack.

GAIN



Attach an LFO for a quick auto-panner



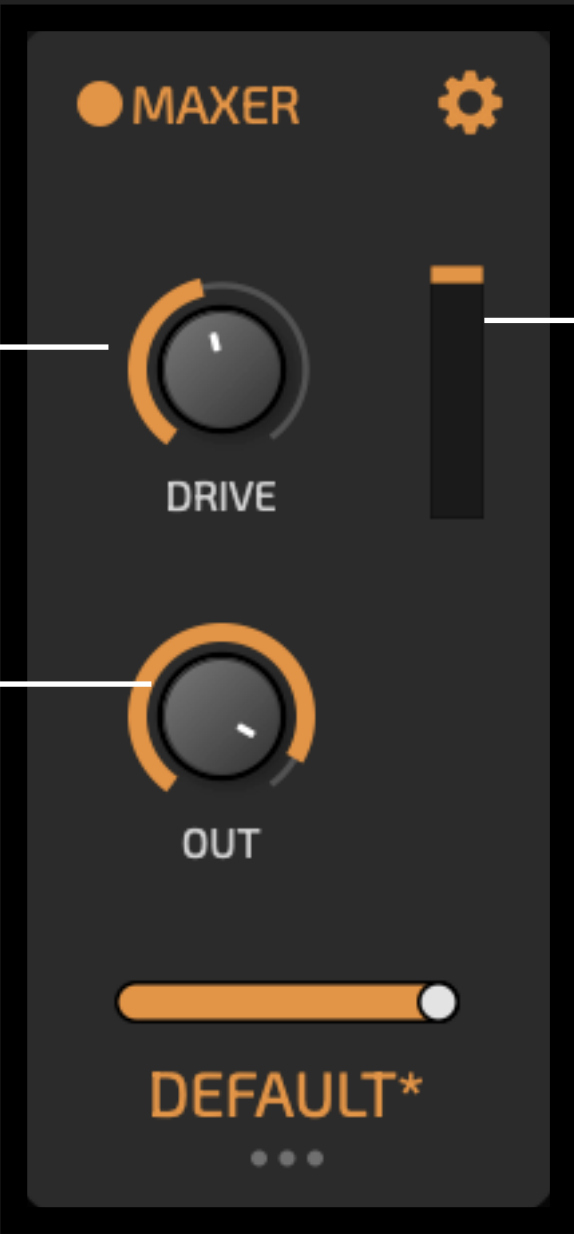
Making heavy bass lines? Reduce the width here.

MAXER



How much clean application to
apply to your signal

Set the output ceiling in dB



This reduction meter shows how
much the internal limiter is acting.

EQ



Choose between 12dB, 24dB, and 48dB slopes.
Choose lower values for subtle EQ adjustments and
high values for extreme adjustments.

Amplify up to 18dB, or attenuate down to
-60dB. Center position is unity gain (0dB).



Toggle band on or off.

Adjust the frequency crossovers.



In order to make tuning easier for EQ,
switch to 48dB mode and bypass the low
and high bands. This will allow you to more
easily hear the crossover frequencies and
adjust as needed. After tuning LOW X and
HIGH X, switch back to a less steep slope
(if desired) and reenale low and high
bands. *Then* make band gain adjustments.