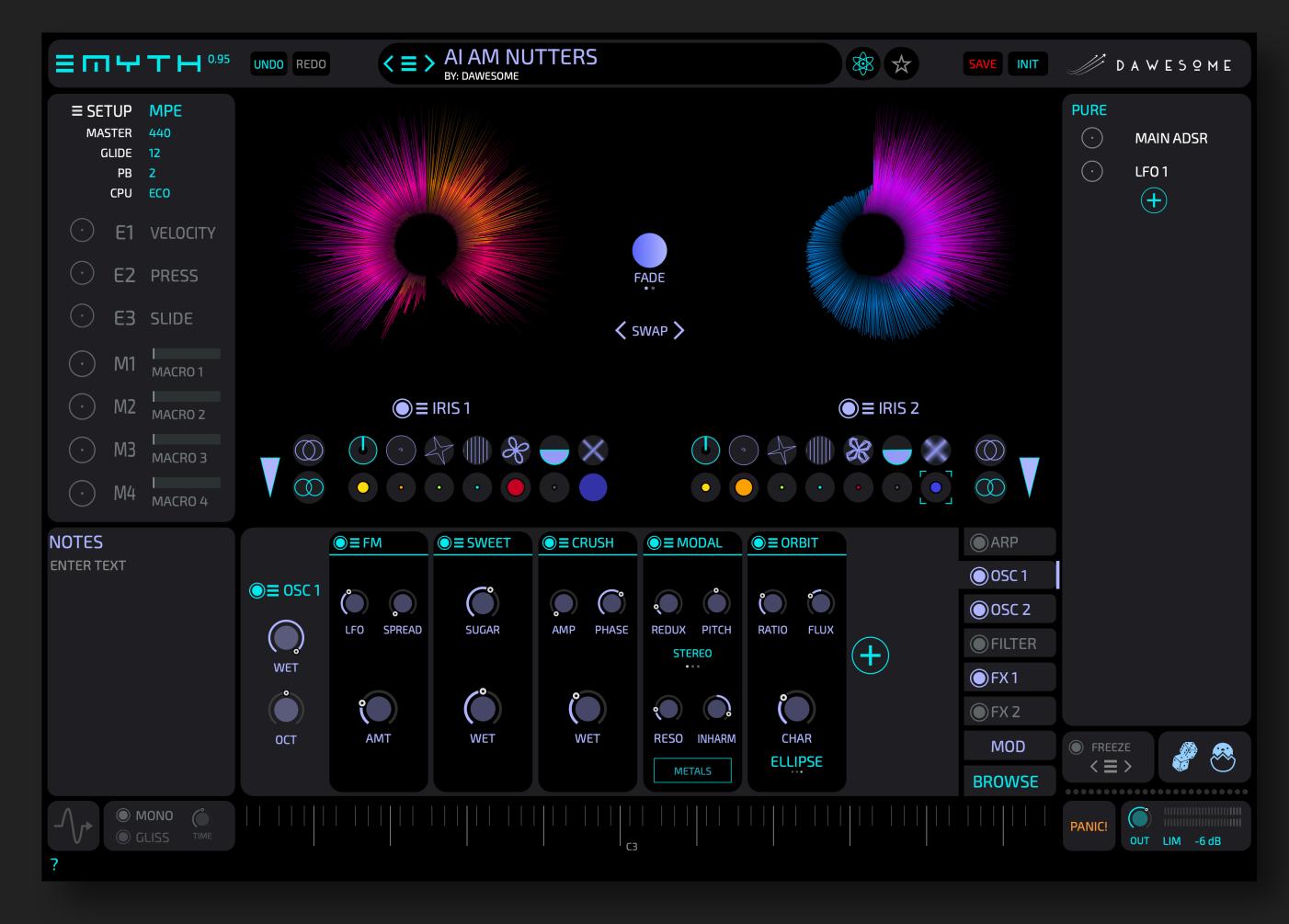




#### THANK YOU



Whether you are a beginner or a seasoned sound designer - with MYTH you can turn your wildest sound fantasies into reality, regardless of your musical style.

The basis of MYTH is a novel Non-Linear-Synthesis engine that offers a paradigm shift: drag and drop audio and it will be re-synthesized as an IRIS. The inherent variations and richness of the sample can now be exploited with the Transformer dials.

MYTH was built to emulate the *joy of playing with hardware*. Forget "programming" sounds - instead you create sounds by *exploration and tweaking* knobs.



I hope you will find lots of fun and inspiration while exploring MYTH's exciting sonic possibilities!

All the best Peter (Dawesome)

MYTH is the new flagship synthesizer by Dawesome.

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Credits / Thank you

**About Dawesome** 

Dawesome Village

### GETTING STARTED

#### This involves two steps:

1 Install the software

This is straight forward: download the right installer for your system: For example: Myth\_1.00.pkg for Mac or Myth\_1.00.exe for Win. You can start the installer with double-click.

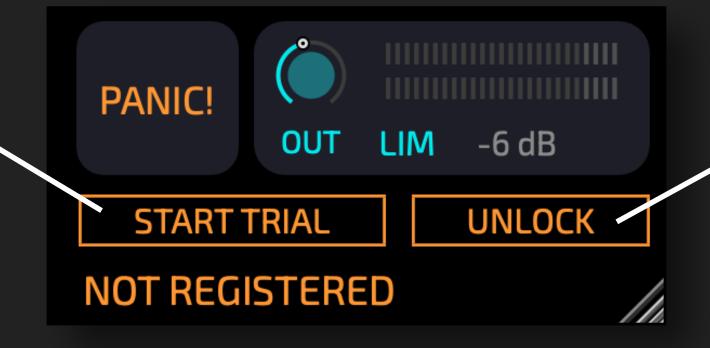
2 Start your free 90 day trial / Unlock your license

Open one instance of MYTH in your DAW and click UNLOCK or START TRIAL

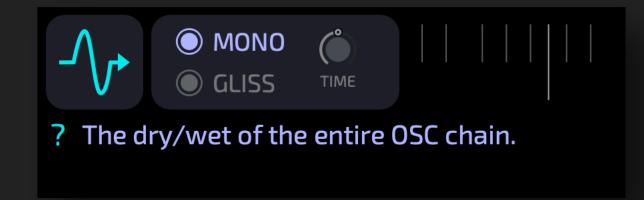
Start the 90 day demo period



You need to START TRIAL or UNLOCK to enjoy MYTH.
Otherwise you will not be able to save presets and you will hear occasional noise.



TIF



MYTH has built-in help. You can de-/activate it with the question mark? in the lower left corner.

When you hover over any element with the mouse you will see a short explanation.

Unlock your license after purchase

### TUTORIALS

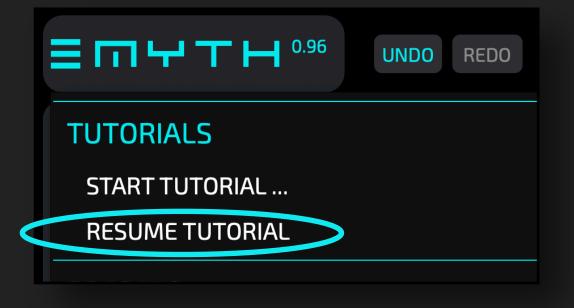
The best way to learn ... is by doing!

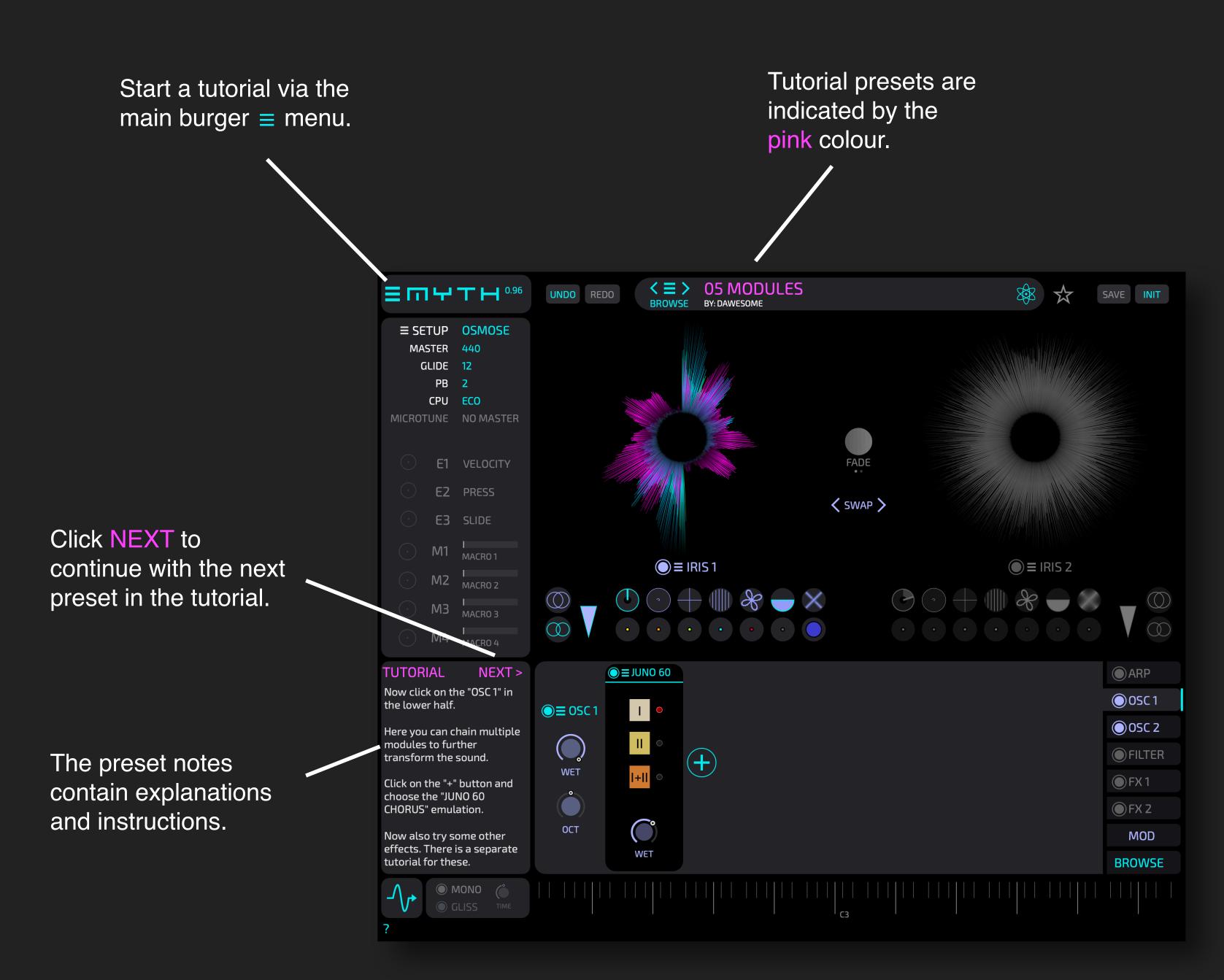
MYTH has built-in tutorials. A tutorial is just a sequence of presets that contain explanations.



You can stop the tutorial mode at any time either by saving your results, or by loading any normal preset.

You can RESUME the tutorial where you left off via the main burger menu =.





#### THE SETUP

The word SETUP may not sound very sexy, but this is really important.

Nowadays there are a variety of midi-controllers to choose from, and these come with different methods for expression, e.g., velocity, mod-wheel, MPE, aftertouch.

This creates a problem: the sound designer who created presets most likely used a different controller than you.

MYTH addresses this via the SETUP. You just need to tell MYTH what kind of expressive midi data is sent by your controller.

# 4 CAUTION 4

Important point: this information is stored for the plugin, not with the preset. Hence you need to choose your SETUP only once, and then you can browse presets and they will always match to your controller. Click the gear symbol to choose a predefined setup.

You can also save the current setup.



MYTH supports the microtuning system MTS-ESP. If you use this, MYTH automatically connects to the master.

• E2 PRESS

• E3 SLIDE

You can also configure freely to your specific needs. Right-click to choose the midi input for the main *expression-inputs* 

You can then give this configuration a name and use the SETUP menu to store it.



There are two different pre-defined setups for the OSMOSE. The first one has E2 = PRESS and E3 = SLIDE. The second one uses an input source called OSMOSE which combines PRESS and SLIDE to one gesture.

## THE SETUP - for Sound Designers

Acoustic music instruments do not simply switch notes on and off - the performer usually plays notes with *expression*.

How this is performed and how this sounds is different from instrument to instrument. On a piano you vary the speed and force when hitting a key, on a wind instrument you control the speed and pressure of the air flow and the size of the oral cavity.

MYTH uses three specific modulation sources for expressive playing:

E1 - for *NOTE-ONSET* expression

E2 - for expression via *INTENSITY* 

E3 - for expressing with *TIMBRE* 

How the musician physically *performs the expression* depends on their midi controller - hence this is configured here in the SETUP. This is the same for all presets.

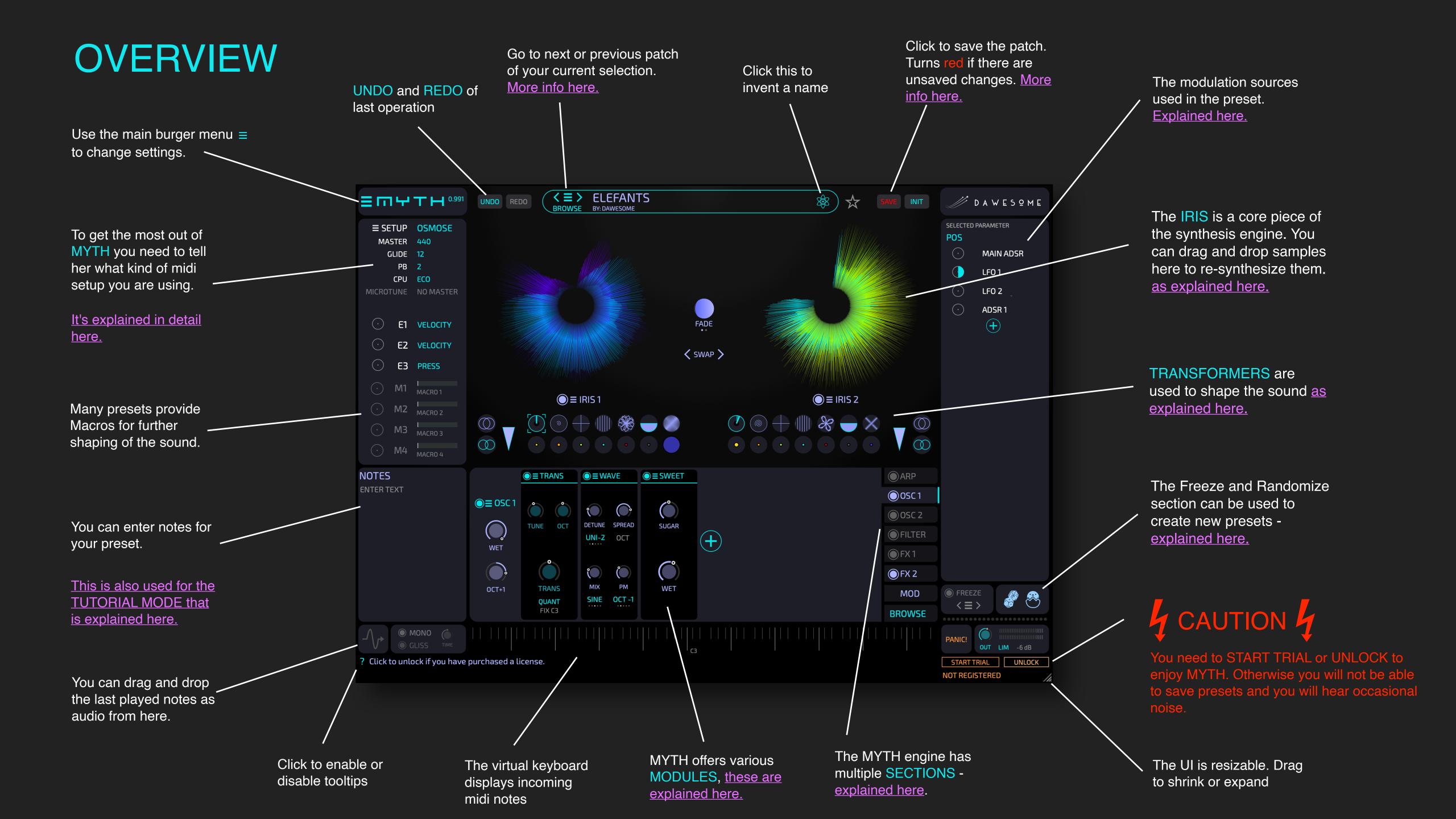
How the preset *reacts to the expressive midi data* and how the sound is affected by it are saved as part of the preset.



- 1. For E1 you should always assume Midi-Velocity
- 2. Increasing E2 should increase the perceived intensity of the sound in most controllers increasing E2 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 E3 increases only once E2 reached its maximum. Hence E2 should not create complete tonal mess if you want to offer E3

Some examples of typical controller setups that you can find in the wild: The SETUP mechanism of MYTH allows you to make sounds that translates from your setup to the users setup.

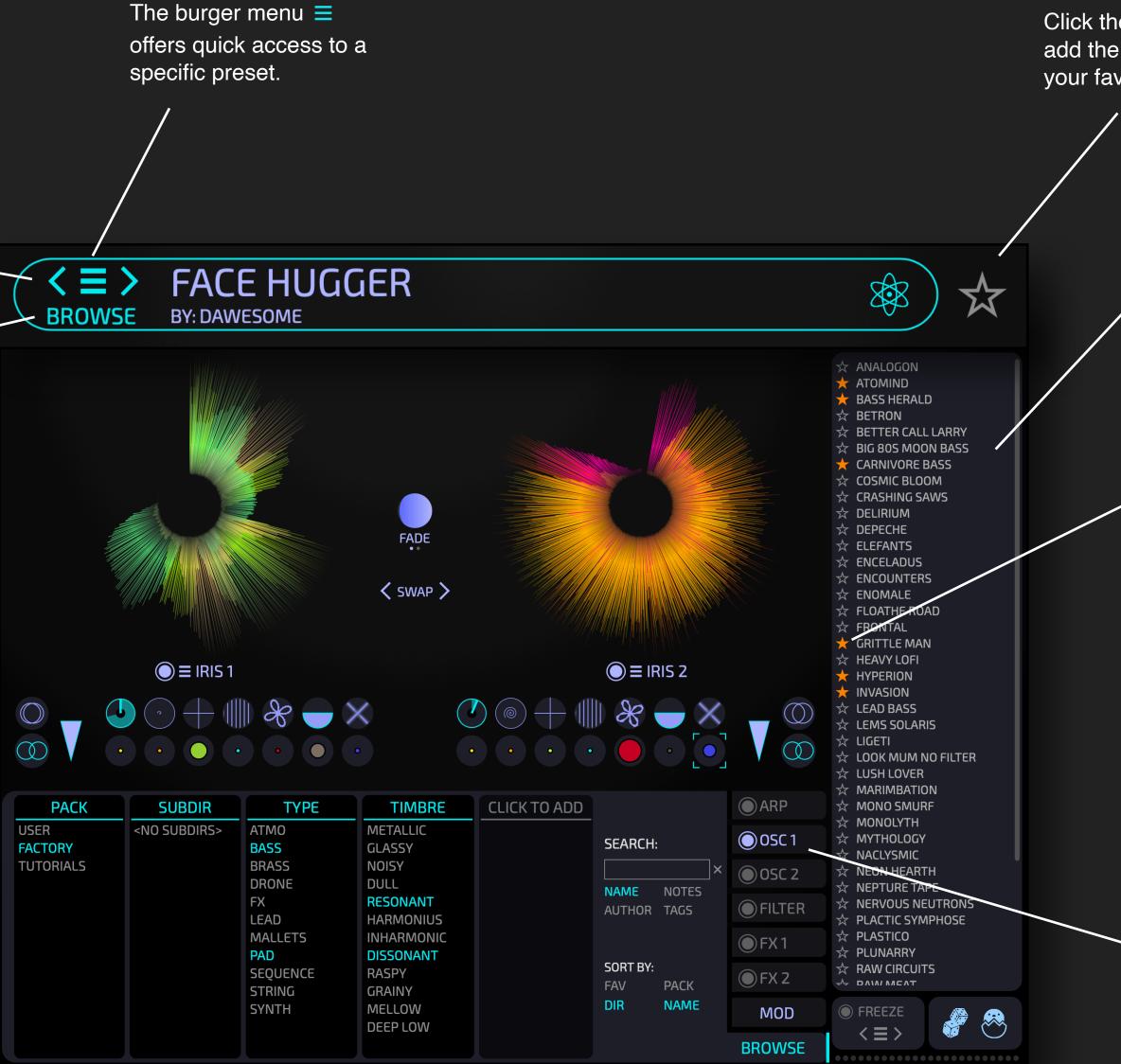
	Midi	MPE	OSMOSE	User A	User B	
E1	Vel	Vel	Vel	ModW	Vel	
E2	ModW	Press	Press	Pedal 1	ModW	
E3	Pedal	Slide	ModW	Pedal 2	PitchBend	



#### **BROWSE & PLAY**

The easiest way to browse presets is to use the < and > buttons. This always refers to the current selection of presets you made on the browse tab.

Click BROWSE to open the browse tab - this can be used to filter for a specific subset of presets as explained on the next page.



Click the star symbol to add the current preset to your favorites.

When you are on the BROWSE tab, presets from the current selection are shown.

Click to switch to a preset.

Click on the star symbol to add a preset to your favorites.

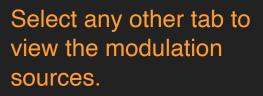
Right-click for a few more options.

LOAD

**REVEAL IN DIR** 

MAKE THIS THE INIT PATCH







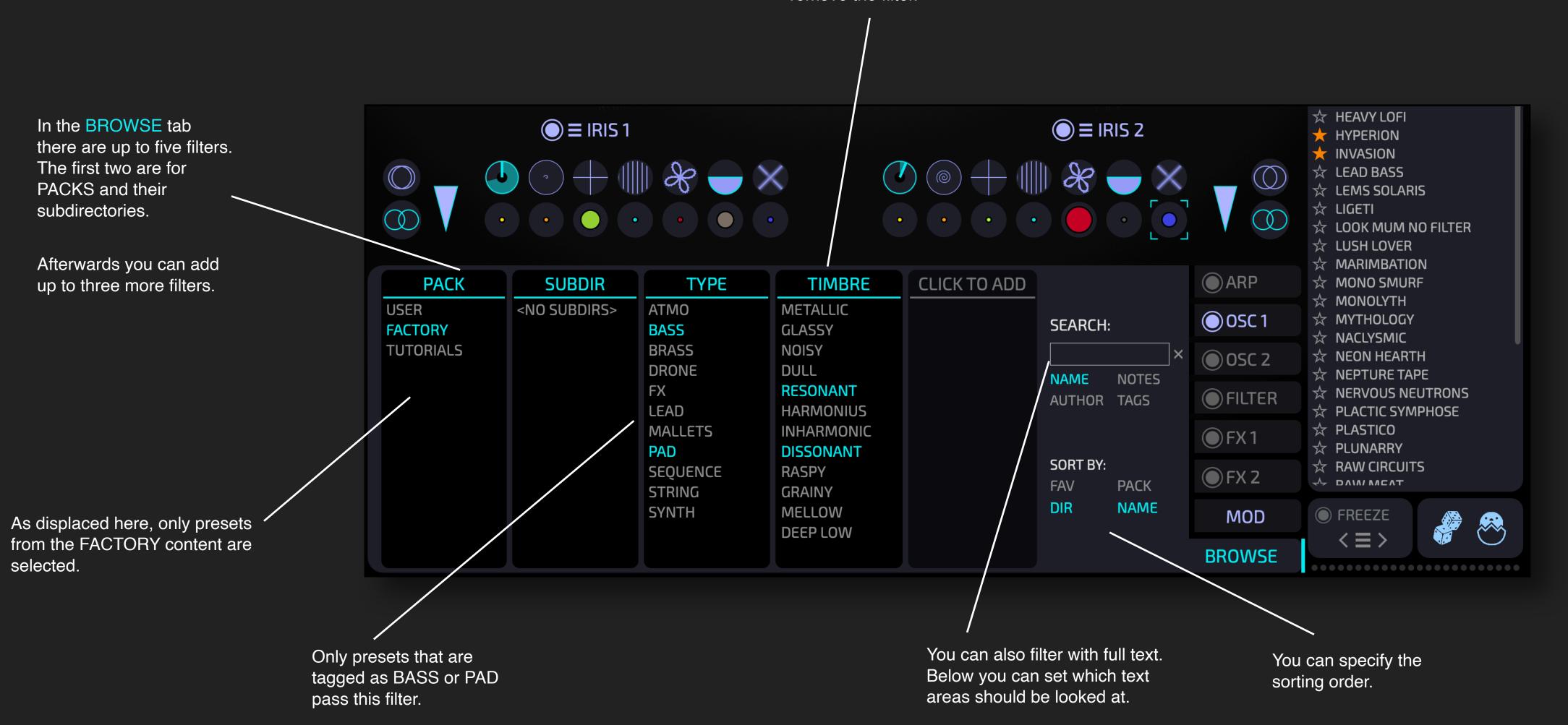
The BREED feature is based on the current selection of presets and is explained here.

#### THE BROWSE TAB



Click on the header name to change or remove the filter.

The first two filters for PACK and for SUBDIR can't be changed or removed.



#### SAVE PRESETS

The SAVE button indicates

colour if there are

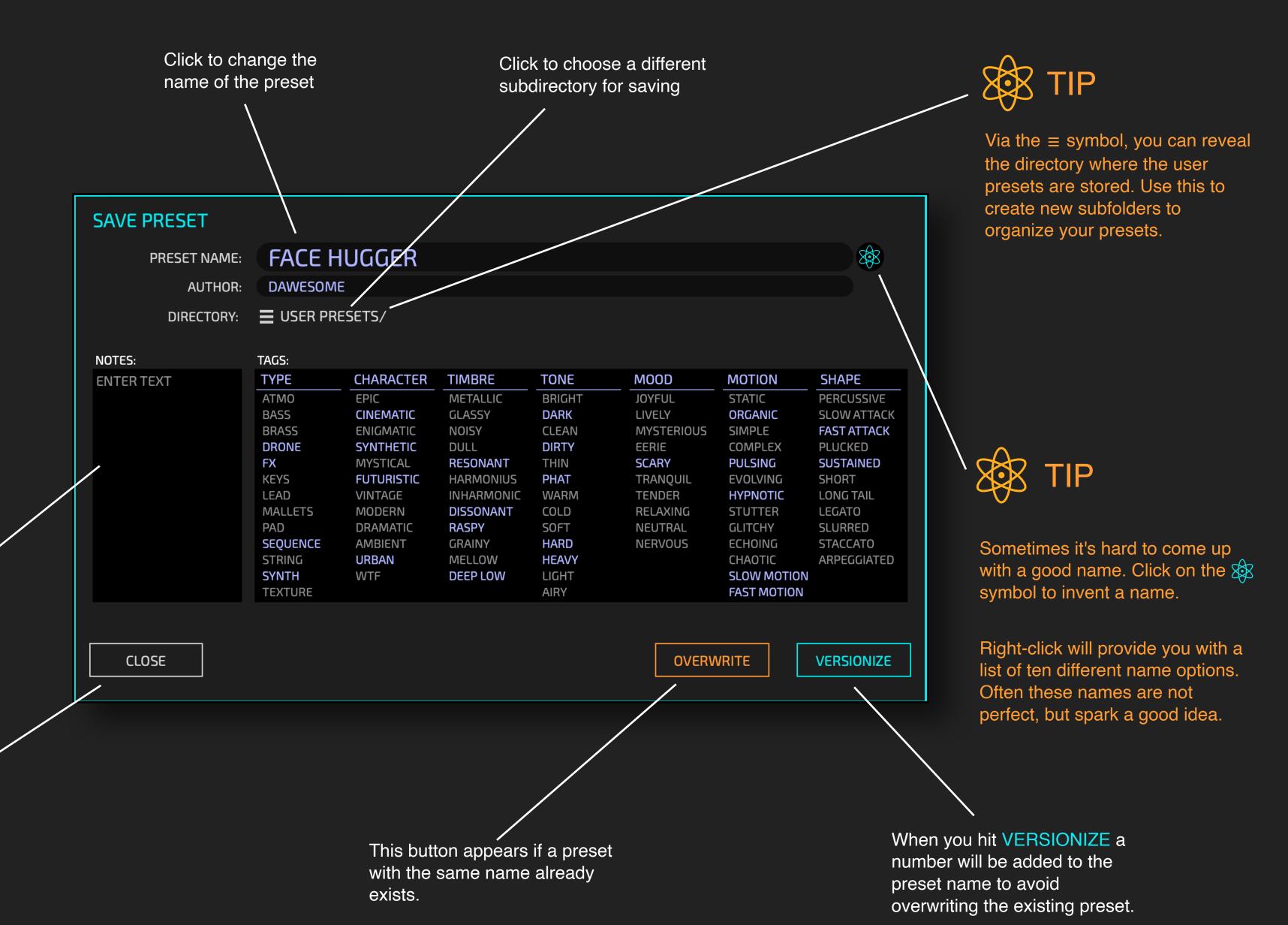
When you click **SAVE** a special window opens.

unsaved changes.

with

Review and/or edit your preset notes.

Close the window without saving the preset. The tags and preset notes are stored internally and are not discarded.



#### THE IRIS

In classical synthesis, oscillator waves are mostly static and you add filters and modulators to "program" variations that make the sound interesting.

MYTH offers a paradigm shift: it uses machine learning to analyse your sound material and approximate it with a *synthesis engine* displayed as an IRIS.

The inherent variations and richness of the sample and its temporal changes can now be exploited and transformed.

Instead of "programming" sounds you create sounds by exploration and tweaking knobs. Of course - you can also add classical LFOs, envelopes or filters as much as you want. Just ... you will rarely feel the need!

XX TIP

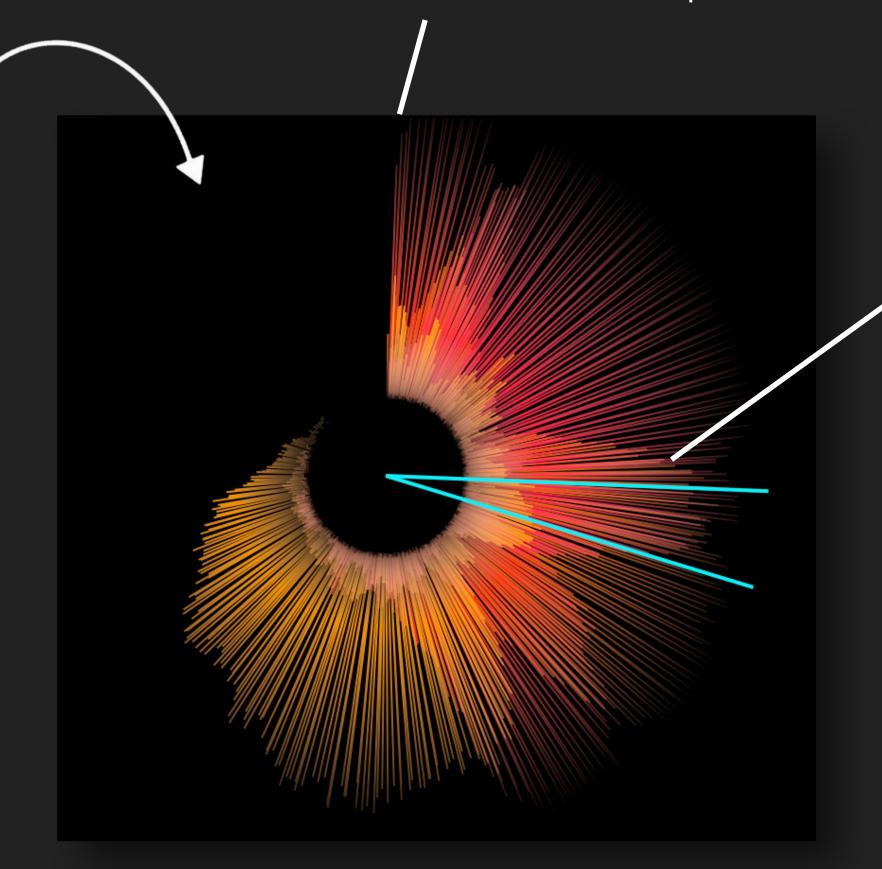
The easiest way to tweak an existing preset: just drop your own samples onto the IRIS!

Drag and drop your own samples onto the IRIS



The IRIS is a representation of a sound source as a loop.

The start and end of the sample are at the 12 o'clock position.



The play position for each note is indicated with a turquoise line.

You can click-and-drag the IRIS while playing to change the position.



**SET AND USE LFO 1** 

#### CREATE AND USE NEW LFO

CHOOSE AUDIO SOURCE ...

#### IRIS

COPY -> OSC 1

**SWAP** 

#### TRANSFORMERS

<u>CO</u>PY -> OSC 1

SWAP

RESET

REMOVE ALL MODS

#### **IRIS & TRANSFORMERS**

COPY -> OSC 1

**SWAP** 

TIF

Often, you'll want to modulate the play position with a ramping LFO. You can right-click the IRIS and choose CREATE AND USE NEW LFO from the context menu.

### TRANSFORMERS

Transformers work as simple as the cutoff dial of a filter - they modify the sound and can be modulated.

The position of the "playhead" on the IRIS. The value range the sound. is two complete turns.

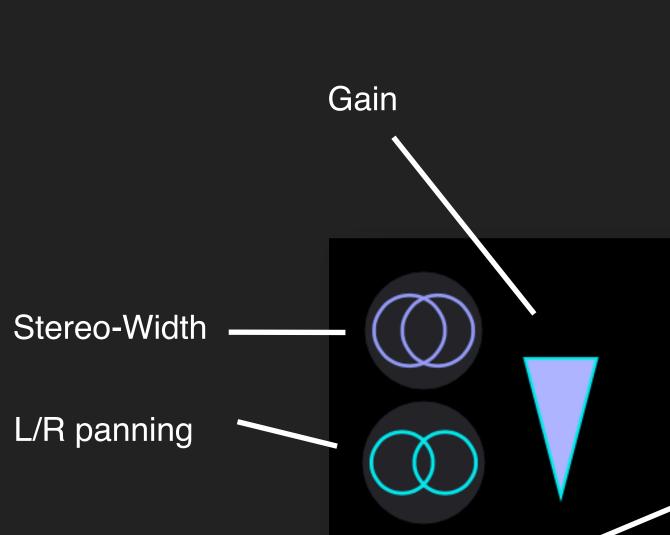
FM Brightness

Animates the sound. Large values detune



FM synthesis sounds great - but "algorithms" and "operators" are not your cup of tea? In MYTH you simply apply FM as you would apply a filter.

FM adds overtones - and this can lead to pretty harsh tones. If you want softer FM you should use a good amount of **PURE** 



SAW

Transforms

the audio as

created with

an analog

SAW wave

oscillator

if it were

**STRING** Transforms the audio as if it were created with the physics of a string ensemble

#### **BRASS**

Transforms the incoming audio as if it were created with the physics of a brass instrument

**FM** Amount

#### SQ

Transforms the incoming audio as if it were the output of a square-wave OSC.

**FM** Inharmonics

Stems from analog synthesis where two oscillators are synced. Here the nonlinearsynthesis engine creates a similar effect.

#### DIRT

Creates *sick* noise from your input. Can be great in itself, or to excite either the combfilter or the modal filter.

#### **PURE**

Spectrally removes partials until only the strongest partials are left.

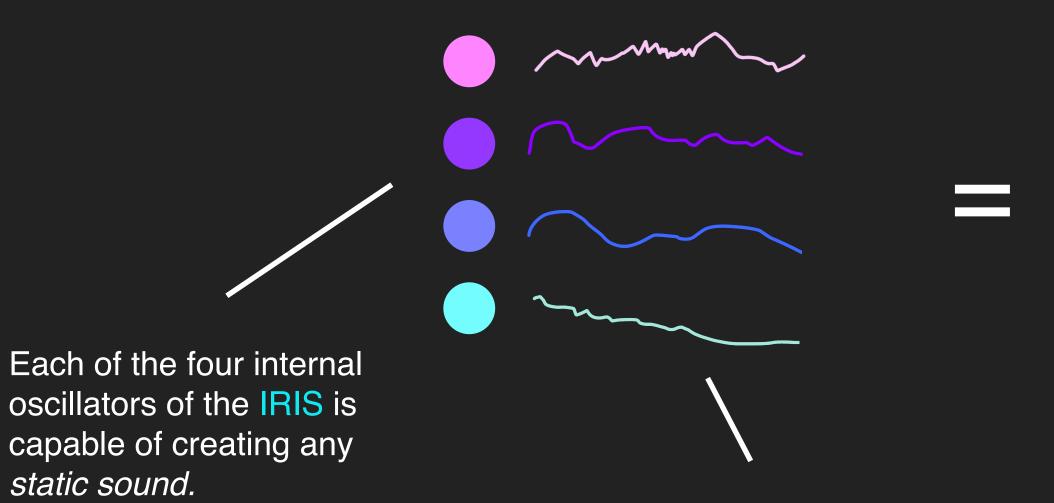
### **RE-SYNTHESIS**

When you drop audio onto the IRIS, machine learning is used to re-synthesize the sample in a special way.

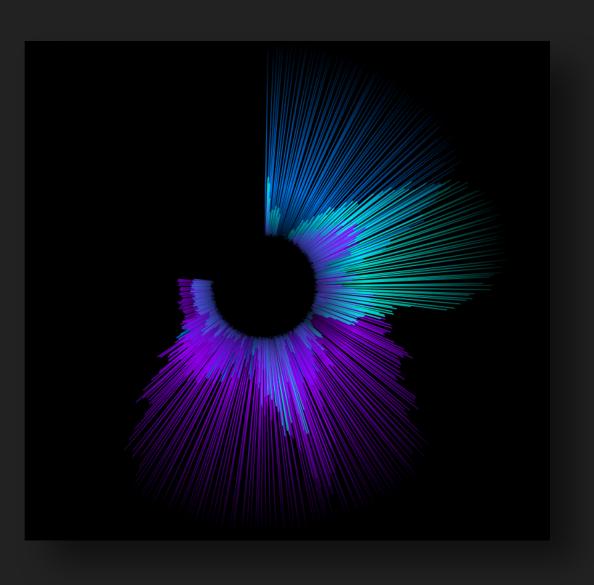
MYTH approximates your sample by finding the optimal combination of four static sounds whose volume is controlled by an envelope curve.

There are two more transformers.

These don't act on the audio stream like the other transformers, instead they change the temporal evolution.



Each of the envelopes is a MSEG with up to 500 segments.



Together these are represented as an IRIS

#### WTF

WTF changes the volume of all four internal oscillators at the same time.

If you turn it left, the brightest oscillators are faded out. If you turn it right, the darkest oscillators are.

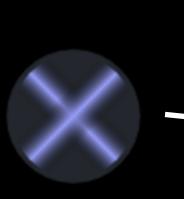


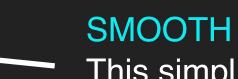
Like all the other transformers - everything can be modulated and automated.





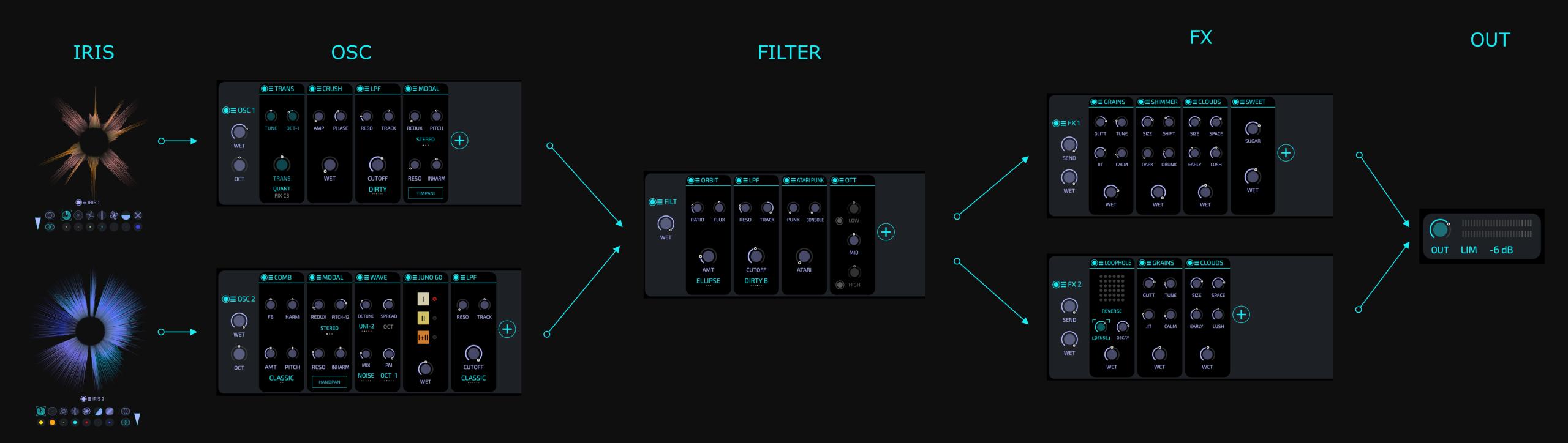






This simplifies the envelope curve, making it smoother.

## SIGNAL FLOW



The IRIS, OSC and FILTER sections are per voice

The voices are summed and feed into the FX

### MODULES

Modular synthesis can be very flexible, but also can get very complex with all the cables.

MYTH offers modules for great flexibility and sound shaping. The system takes inspiration from classical pedal boards - where the effects are simply *chained*.

Enable / disable the entire

The menu  $\equiv$  symbol offers

you can remove all modules

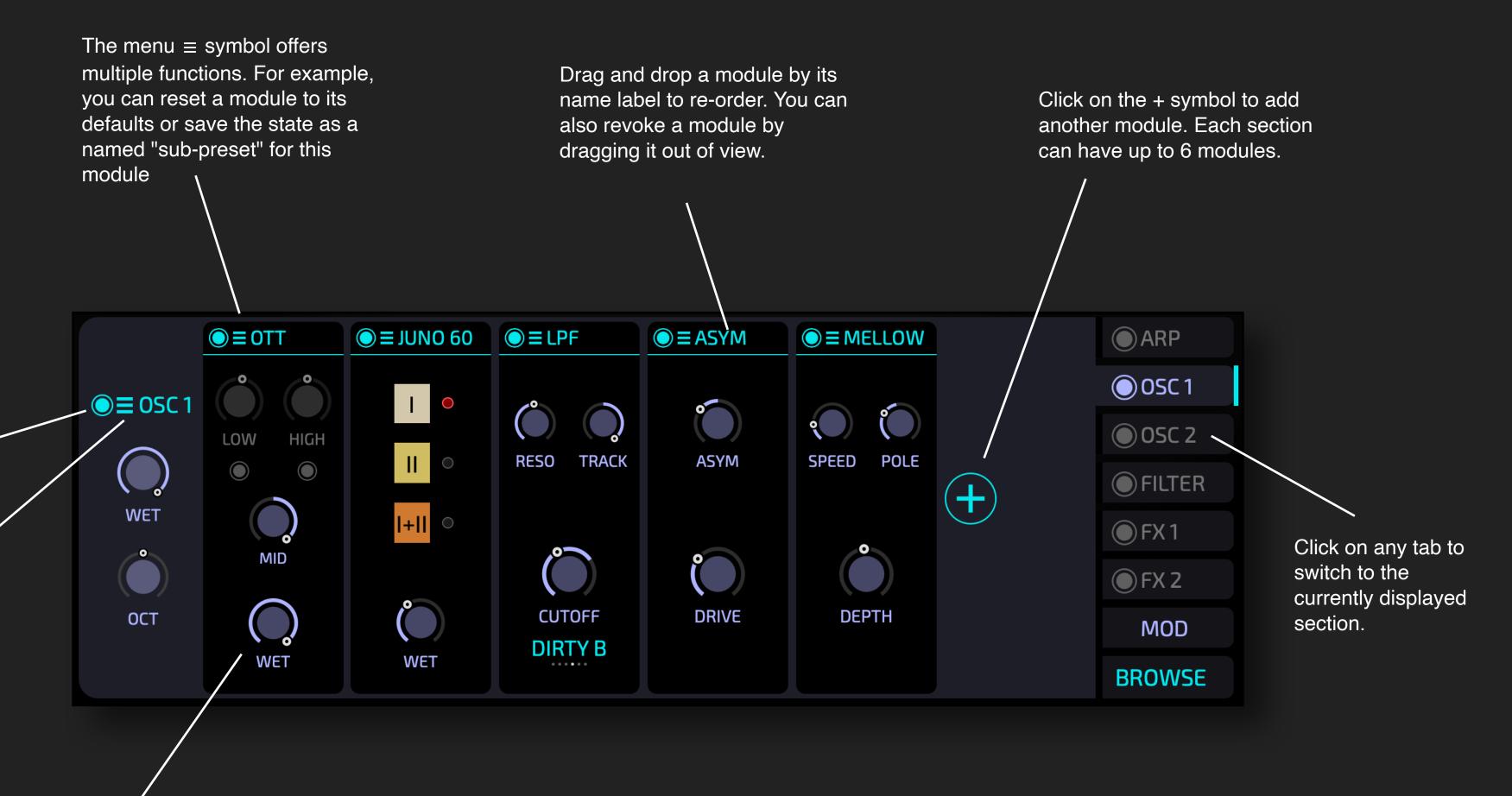
multiple functions. For example,

with one click, or you can save /

restore the entire section as a

"sub-preset".

chain by clicking on (



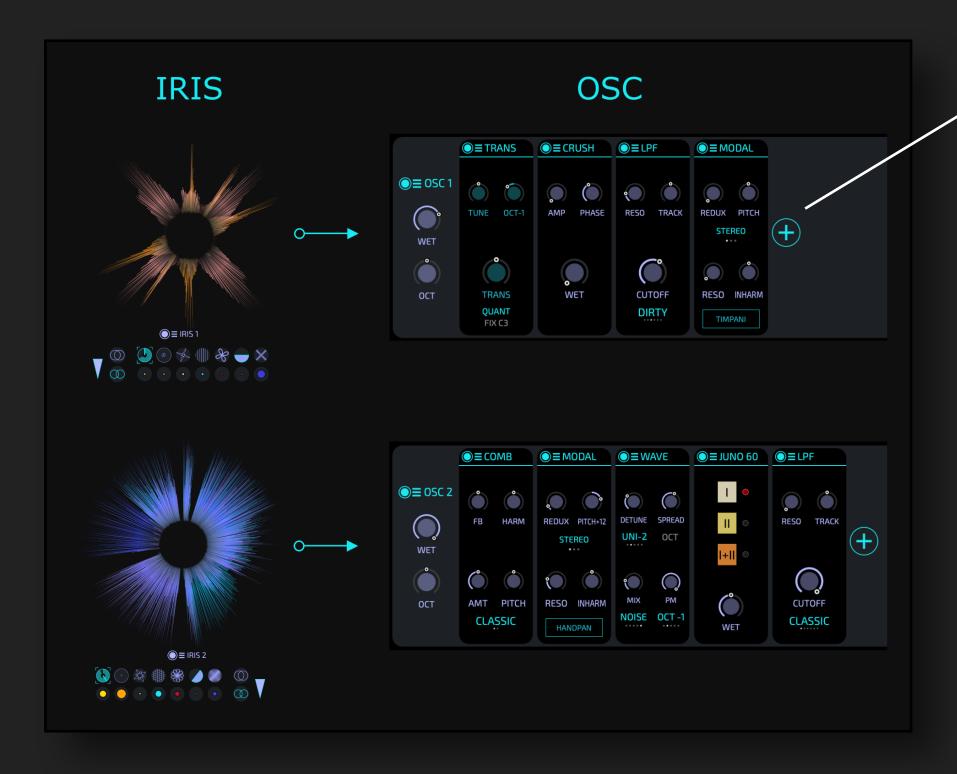
All parameters can be automated in your DAW or modulated within MYTH as explained here.



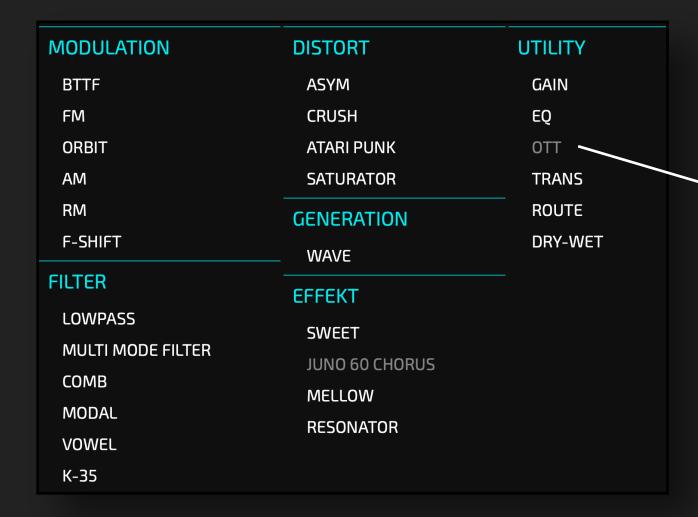
Every section has its own assortment of available modules. Some modules don't make sense for polyphonic material and hence are not available in the FX sections. Some are too CPU expensive to be rendered per voice and hence are not available in the OSC and FILTER sections.

### OSC SECTIONS

Each IRIS has its own section where you can do further sound shaping with modules: OSC1 for IRIS1 and OSC2 for IRIS2



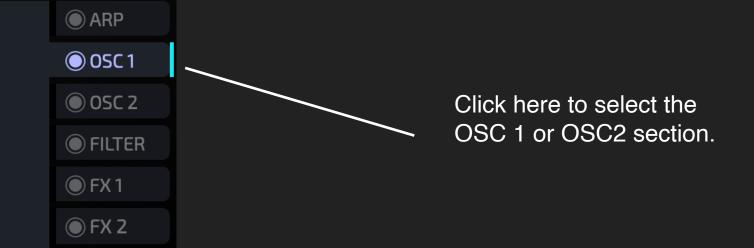
Click on to open the menu of available modules.



If you've already used all available modules of a certain type it is grayed out in the menu.

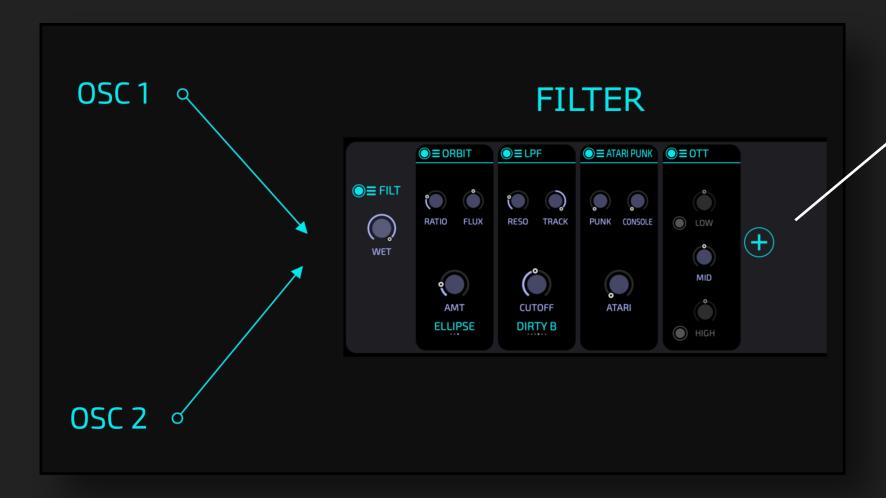


You can also add Filters to the OSC section - there is no need to put them into the dedicated FILTER section.



### FILTER

The two OSC sections are combined and feed into the FILTER section. Here you can place modules that shall be applied on the combined signal of OSC1 and OSC2.



Click on to open the menu of available modules.

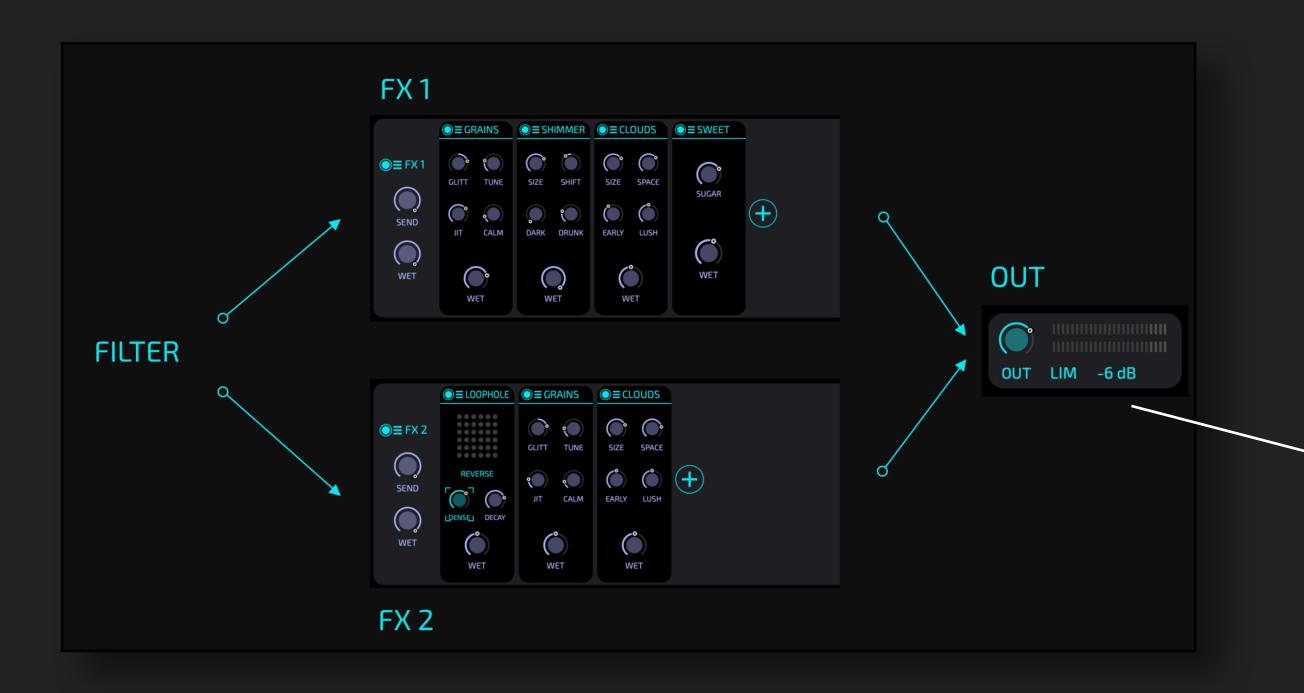
FILTER	DISTORT			
LOWPASS	ASYM			
MULTI MODE FILTER	ATARI PUNK			
СОМВ	CRUSH			
MODAL	SATURATOR			
VOWEL	EFFECT			
K-35	SWEET			
MODULATION	JUNO 60 CHORUS			
BTTF	MELLOW			
FM	RESONATOR			
ORBIT	OTHER			
AM				
RM	GAIN			
F-SHIFT	EQ			
	OTT			
	ROUTE			
	DRY-WET			



Even though it is called FILTER section you can actually do much more!

### **FX SECTION**

The IRIS, OSC and FILTER sections are per voice. After the filter section the output of all voices gets summed and fed into two parallel FX sections.



The SEND parameter determines how much of the signal is fed into the FX section.



The SEND dials are PER VOICE. You can use this for example to modulate this parameter with an ADSR, such that the note onset is not sent into the FX to stay sharp and dry.



The OUT section has a LIMITER that can also be used for sound shaping.

The -6dB switch reduces the outgoing signal by -6dB.



You should ALWAYS put a fast brick-wall limiter behind your synth when you are doing sound design to protect your ears!

#### ARP SECTION

The ARP section processes the incoming mididata and offers a couple of midi-modules.

The CHORD module takes one input note and creates multiple transposed notes from it. For example, here the CHORD will produce the original incoming note T, one note 3 semi-tones above, one note 7 semi-tones above and one note that is one octave below the incoming note.

In this way you can play entire chords with one finger.

menu ≡. You can define your own scales The ARP module takes all notes by clicking on the circles. that are currently played (either on the keyboard or through the CHORD module) as an input for an arpeggio. GATE specifies the duration of the notes. OCT adds octavated copies. There are multiple modes to choose when the ARP should re-trigger. The TRANS module can be used to transpose the midi-notes either by octaves or by semitones. ● ■ ARP SCALE **● =** TRANS ARP BPM120 SYNC OSC 1 ● ARP 1/4 OSC 2 T+3 OCT +1 FILTER (+)LDOWN OCT 1 FX 1 FX 2 GATE STEPS 8 TRANS -8 MOD **NOTE-ON BROWSE**  $\bullet \bullet \bullet \bullet$ 

The SCALE device allows you to choose

which pitch classes are part of the scale.

defined scales by clicking on the burger

You can choose from plenty of pre-

### MODULATE PARAMETERS

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

Once a parameter is selected its name shows up on top of the modulators.

Now you can choose the depth of

In this example LFO 1 has a positive influence on CUTOFF. The KEYTRACK has no influence, and high values of MAIN ADSR will reduce

modulation for the selected parameter by dragging the circle next to the modulator.

the CUTOFF. REMOVE SELECT OSC1WAVE1MIX SELECT FX1PHASER1FREQ

SELECT OSC1 POS

The modulation sources are listed in the right and left sidebar of MYTH.

**SELECTED PARAMETER** 

MAIN ADSR

**KEYTRACK 1** 

LF01

(+)

**CUTOFF** 

You can click + to add a new modulator.

You can RIGHT-CLICK on a modulator to remove it and to show all parameters that are modulated by this modulator.



Click and drag a DIAL or SLIDER to change the value. You can drag horizontally or vertically.

When a parameter is modulated the coloured ring indicates the current value. Every parameter can have as many modulations as you want. The modulations are added together.



When holding SHIFT you can finetune values.

Double click resets the parameter to its default value.

### MODULATION SOURCES



RIGHT-CLICK.

You can create and edit steps based

on the grid with SHIFT-CLICK or

With a few modulations you can turn any boring sound into something that sounds alive and interesting. Almost any parameter in MYTH can be modulated.

You can also modulate the parameters of the Modulators. For example, you can modulate the rate of one LFO with another LFO. This allows you to setup complex, chaotic movements in your sound.

For special purposes you can add modules here. This works exactly like the "normal" modules - they modify the incoming modulation signal.

Click to select a modulation source. You can now edit the settings in the detail page.

KEYTRACK 1

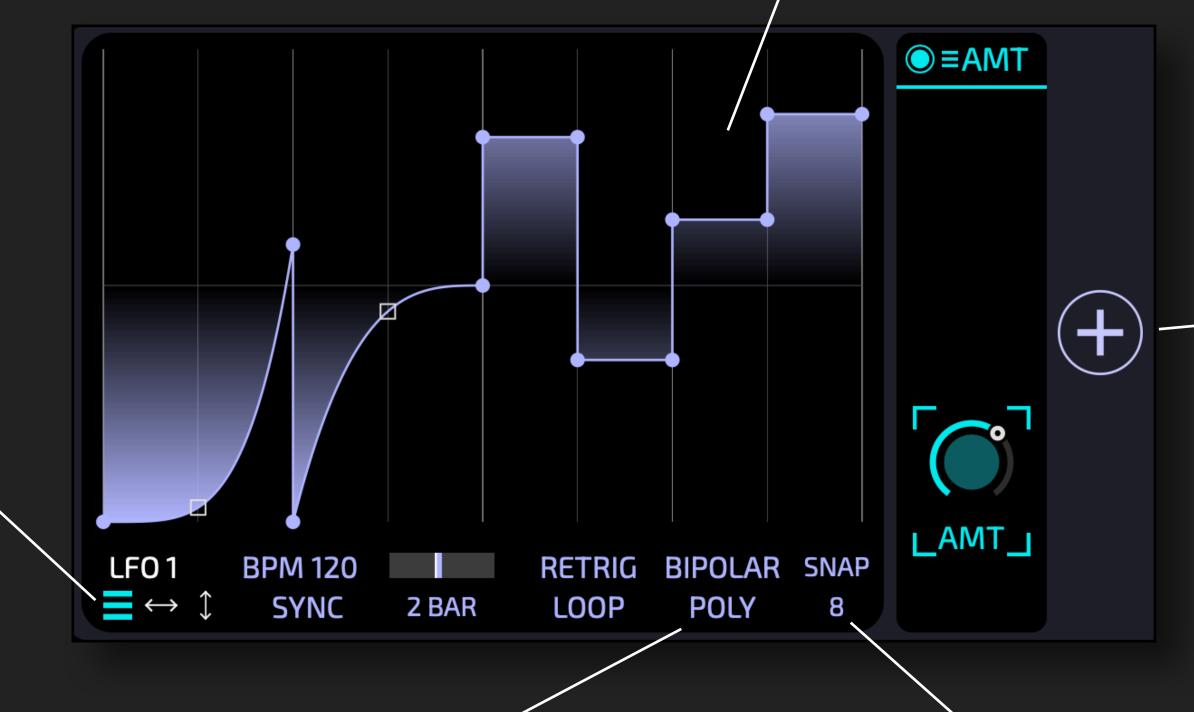
LFO 1

Click to choose from multiple predefined waveforms for the LFO.

+



You can also save and restore your LFO curves here as a "subpreset".



In POLY mode each note played has its own LFO. Otherwise there is one shared LFO for all notes.

Click here to choose a different grid for snapping.

### MODULATION MODULES

You can shape the modulation sources with these little modules. This can be very powerful - this is like CV modules in modular synthesizers.

With SOFT you can apply smoothing of the signal. You can set the time it takes to RISE the signal, and the time it takes to adopt to a FALL of the incoming signal. **CURVE** allows you to shape



You can chain multiple JIT modules with different settings to create unique random patterns.

JIT adds random fluctuations to the signal. You can set the **RATE** of how often the random value changes and the AMT of randomness added to the incoming signal.

**NOTE-RANDOM** creates a

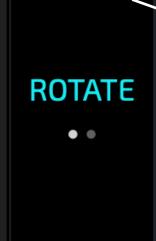
new random value at note-on

and holds it for the entire note.

**PERLIN** noise works similar to JIT, but it creates very smooth noise, while JIT creates random jumps.

VISU is a visualizer for the modulation signal. Each note's signal is represented with a dot.

● = CRVE ● = SOFT ● = JIT ●≡RND ●≡PRLN ■VISU ● = AMT \_RATE\_ RISE **RATE** (+)**AMT FALL AMT AMT** LAMT\_ **CURVE** 



● = POS

**OFFSET** 

POS is an "extension" module for the LFO. It allows you to add an offset to the LFO position. Of course, this OFFSET can be modulated, e.g. by the LFO itself ... there are no limits.

the signals characteristic from

linear to exponential or

logarithmic.

MATH modulation source to accomplish this.

The KEYTRACK and ADSR

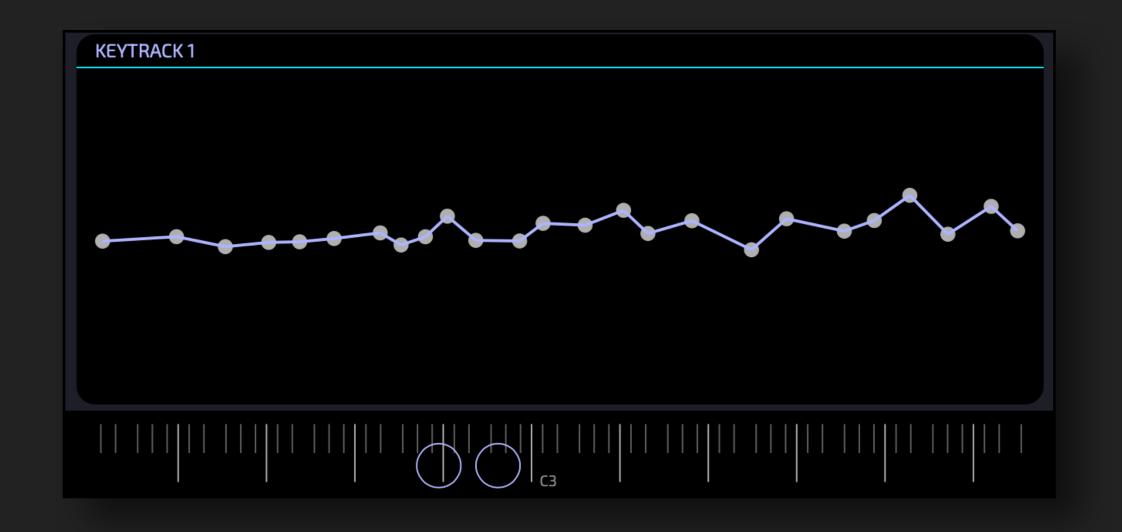
modulation sources do not have

you can feed their output into a

their own modulation section. But

**AMT** simply scales the amplitude of the signal.

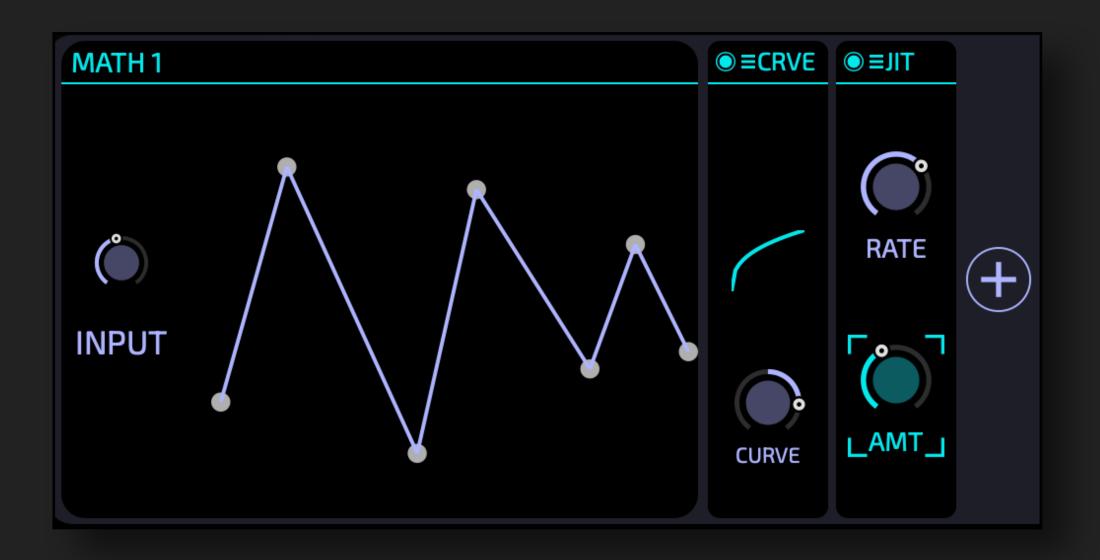
#### MODULATION: MATH and KEYTRACK



KEYTRACK takes the note input and uses a curve to determine the output signal.



In the example I draw a random curve around center. This can now be used to modulate DETUNE of the OSC - in this way every note has its own slight imperfections. Techniques like this can breathe a lot of life into your sounds.



MATH has one input dial. Its value is then mapped with a curve and afterwards you can add modulation effects.

Its power starts as soon as you modulate the INPUT dial!



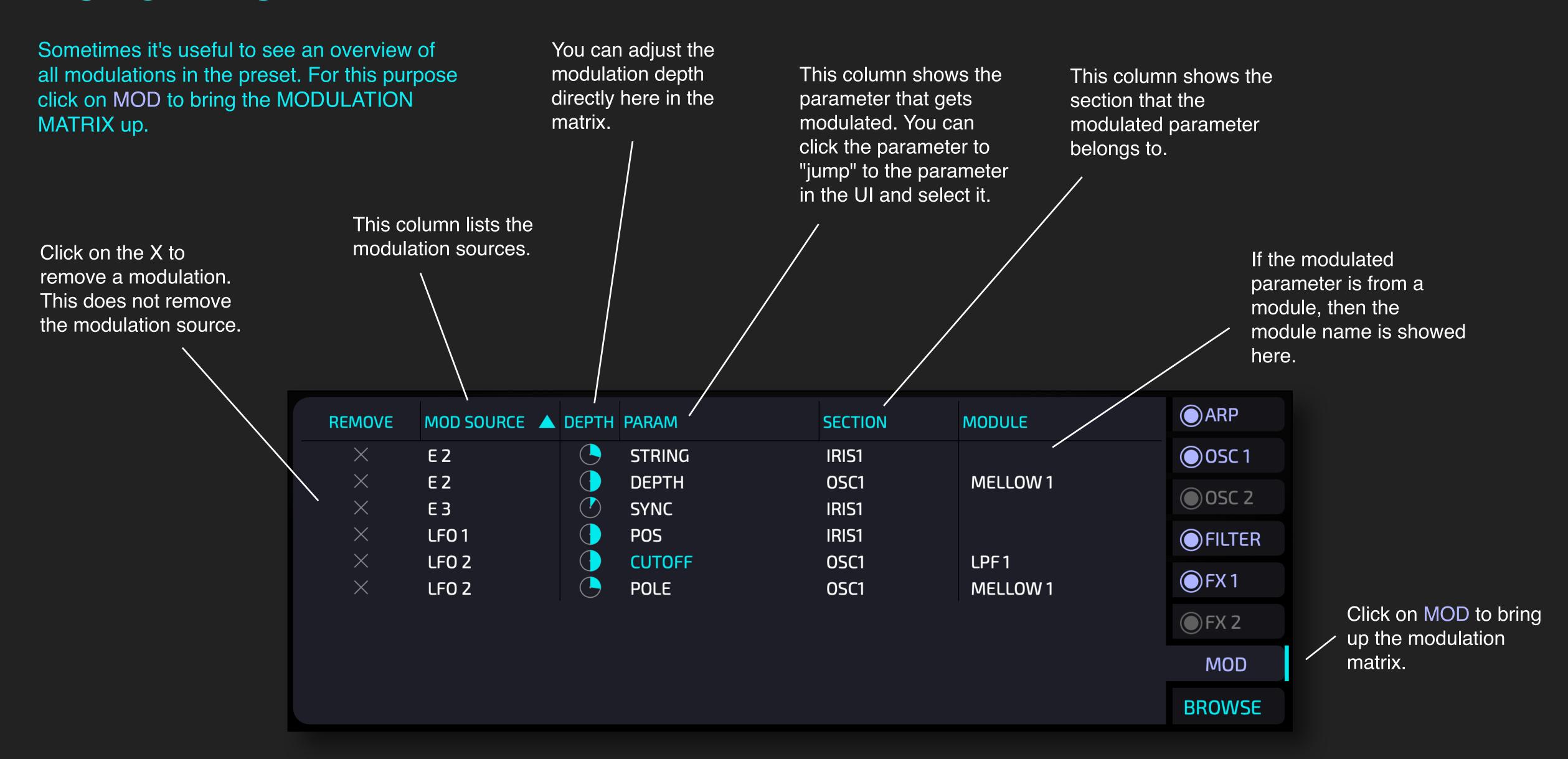
MATH opens a plethora of possibilities! For example, you can modulate its input with an LFO or ADSR and use the CURVE and modules to create a second modulation signal - that is still linked to the LFO / ADSR.

The KEYTRACK and ADSR modulation sources do not have their own modulation section. But you can feed their output into a MATH modulation source to accomplish this.



Like every parameter you can modulate INPUT
by more than one
modulation source ... in
this way you can create a
summed signal and then
process this further.

### MODULATION MATRIX



### MODULE: ANALOG FILTERS

There are multiple filters that use virtual analog modeling.

#### The LPF (LOWPASS)

module has multiple classical low pass modules with very different sound characteristics ranging from clean to dirty and screaming.

TRACK turned fully right shifts the CUTOFF frequency with the note you play.



Put the filter into self-oscillating mode by using high resonance to use it as a generator. Turn TRACK fully right. To tune, add a sine generator after the filter (WAVES module) and tune the CUTOFF by ear. This is a virtual analog highpass with lots of character. Its design is inspired by the KORG-35 filter that was used in their iconic MS-10 and MS-20 synths.





A lowpass filter that is inspired by the KORG-35 can be found in the lowpass module and is called "CREAM"

This is a classical 4-pole ladder design that can be configured to work as a lowpass, highpass, bandpass or bandstop (notch) filter.

It can be run in a dual configuration with two filters either parallel or serial. The OFFSET parameter determines the difference between the two CUTOFF values.

#### MODULE: MODAL and RESONATOR

The MODAL and the RESONATOR modules are twins. Both use a so called "modal filterbank" - 32 bandpass filters in parallel. This filterbank can be "trained" by any sample via drag-and-drop.

MODAL is always tuned to the pitch of the incoming notes so it can be used to create the pitched part of your sound.

REDUX damps more and more of the resonators until only the strongest resonance is left.

RESO controls how easily the resonators respond and how long they "ring".

INHARM can be used to add inharmonics to the sound.



**RESO** is a resonator with a *fixed* pitch. This is great to add character to a sound

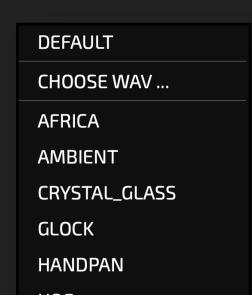


The fun starts when you use your own samples to train the modal filter bank - you can simply drag-and-drop a sample. MYTH will derive a "fingerprint" that is saved with the preset, access to the source sample is not needed.



MODAL has no DRY/WET. If you need this: use a RESO instead with TRACK turned fully right.

Click here to train the filterbank to a specific sample.



#### MODULE: WAVE

The WAVE module generates classic "vintage" synth waveforms with up to 5x unison. It acts like an analog oscillator

You can DETUNE the unison voices. For example you can use this to create super-saws.

UNI chooses the amount of unison voices.

MIX blends in the generated wave with the original signal. For example you can chain 2 WAVE modules for 10x unison.

You can choose the waveform: SAW, SQUARE, TRI, SINE and NOISE.

You can SPREAD the unison voices in the stereo panorama.

OCT transposes some of the unison voices by octave(s)

■ WAVE

DETUNE

UNI-3

....

MIX

SINE

**SPREAD** 

OCT

**RAND** 

 $\mathsf{PM}$ 

OCT +1

RAND randomizes the phase at note-on.
Activate this to avoid a "zip" like start of the wave.

PM is pulse-width modulation for the SQUARE wave. For TRI and SINE it distorts the phase to make the waveform more sawlike. For NOISE it is a temporal bitcrushing effect.

You can transpose the oscillator by +-2 octaves.

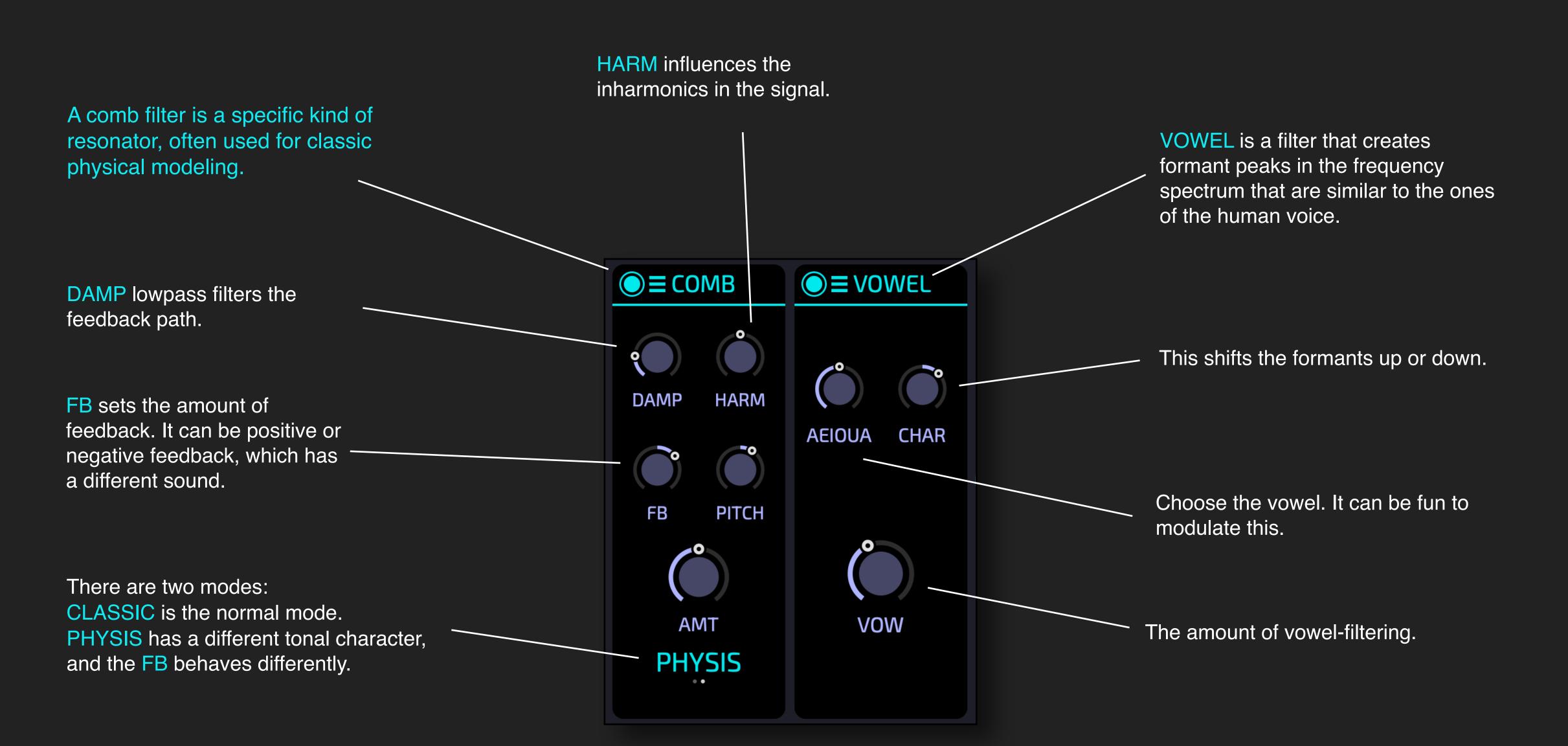


Use two WAVE modules and one LPF module, and you have a two-OSC analog modeled synth.

You can use the IRIS to add dirt and grit to make the sound more organic.

You can also create your own supersaw by using one or two WAVE modules and high unison.

#### MODULES: COMB and VOWEL



### MODULE: SWEET / J-60 / MELLOW

These modules can be used to add a subtle or not so subtle chorus effect.

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

It is a cheat-code, as it can make almost everything sound better.

SWEET will make most sounds just ... sweeter. Used with subtle amount it can give a very modern and velvety sound.

High values of SUGAR create Ligeti-like detunings for an eerie or\_ haunting sound character.

Simply the amount of the effect applied.



MELLOW uses a barber-pole flanger that creates movement for the sound and also adds a velvety character.

This works on a broad range of source material, provided that it contains at least some overtones.

It does not wash away transients, hence it's also great for leads and basses, where it can add movement or create a very modern sound.

### MODULE: CLOUDS + REVERB + SHIMMER

There are three different types of REVERB modules available.

CLOUDS is inspired by a reverb plugin called *CLOUDSEED* by <u>Valdemar Erlingsson</u>
It's great for epic ambient reverbs with long or even endless tails.



If you find a nice setting you can save / restore it via the burger menu ≡

REVERB is a simple vintage reverb inspired by the 80s algorithmic reverbs.



SHIMMER is a shimmer effect. It uses a pitch shifter within a feedback loop and can create angel-like clouds of sound, but also dark or dissonant textures.

### MODULE: LOOPHOLE

LOOPHOLE consists of six parallel microloopers with incommensurable delay times.

It's very much 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.

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



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



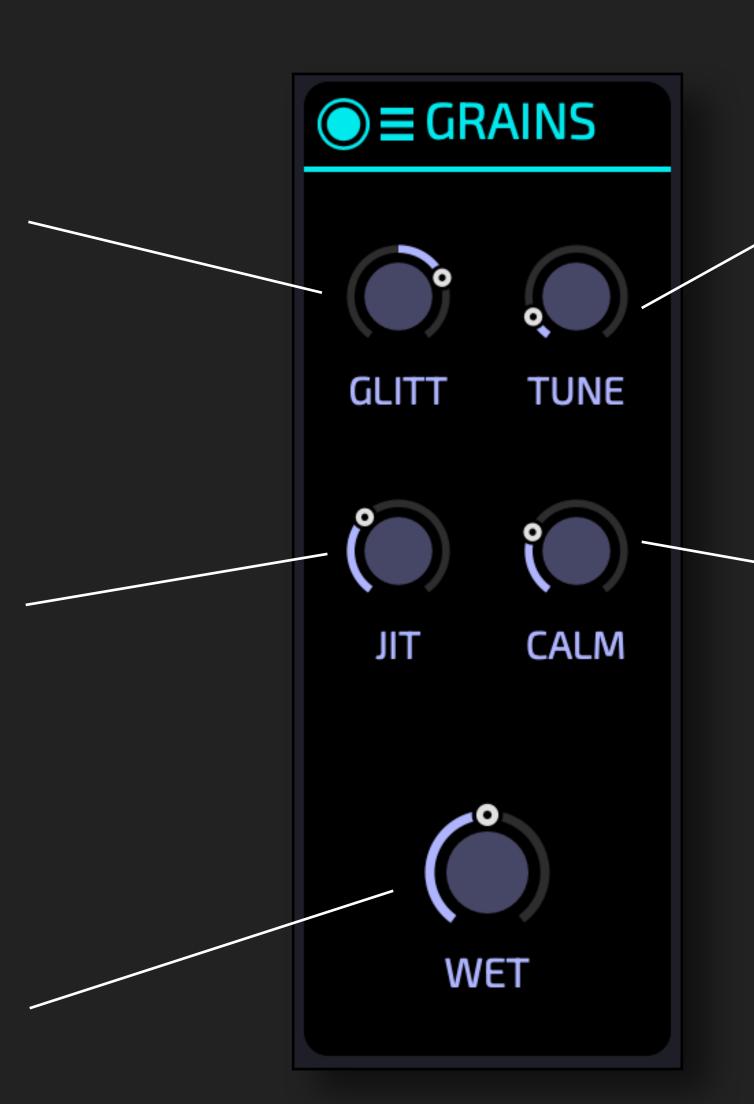
#### MODULE: GRAINS

This is basically the *SWARM* mode of the plugin LOVE as a module.

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.

Simply the amount of the effect applied.



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 fully right for smooth sound and long tail.

### MODULE: ORBIT

ORBIT is a new type of modulation effect. It shares similarity with (analog) ring modulation and frequency modulation, but has its own unique character.

Sonically behaves in a similar way as the RATIO of classical FM.

Technically it controls the ratio between the frequency of the moon orbits to the frequency of the planet orbiting the sun (see explanation to the right)

FLUX can be used to add inharmonics to the sound.

Technically this works by adding a fixed frequency to the moon's orbiting speed - this desynchronizes the orbits of the celestial bodies.

CHAR - the ORBIT effect is most pronounced in center position. There are two different ways to tone down the effect by either turning right or left.

Technically this influences the ratio between the sunplanet distance and the planet-moon distance.



If you happen to own the KULT synthesizer you can use a sine OSC and then apply FM or AM. You will see that this transforms the signal trajectory by adding curves and spirals.

The orbit modulation interprets the incoming signal as a planet orbiting the sun. It then adds a moon to this planet and follows the moons trajectory. This new trajectory is then transformed back to sound.

Like a real moon, its orbits around the planet can be circular or elliptical, as well as centered or off-center. This can be chosen with the modes.



There are three different modes - each with its own sonic character. You don't need to understand the theory behind this, but it's explained here.



### MODULE: OTT

OTT stands for Over-The-Top and has become a standard technique in modern electronic music.

This module is a multiband-compressor and can be used to add texture, punch or saturation to a signal.

Its available in the OSC and FILTER section - hence you can use this per voice.

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.





MAIN/MID applies to the entire frequency range.



MAIN/MID applies to the low end and mid range.
Separate dial for high range.



MAIN/MID applies to the high end and mid range. Separate dial for low range.



Separate dials for each of the bands.

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

# 4 CAUTION 4

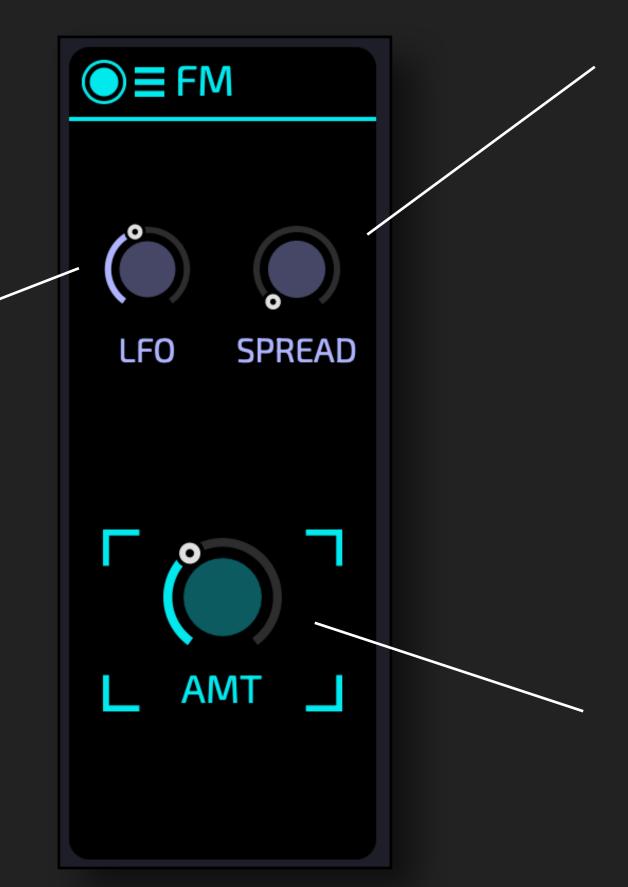
When you turn a dial to the left it is doing upwards compression. That is: silent signals get dramatic amplification. Be careful with very silent tails when you put the OTT in the FX section.

## MODULE: FM

FM uses the incoming signal to modulate a low frequency sine wave. This can be used to create metallic and inharmonic tones, to add sharp overtones, or to animate a static signal.

The incoming signal modulates a low frequency sine wave. The frequency of this sine wave can be chosen here with a wide range from ultra-slow to far into the audio range.

Low values animate the signal. Higher values create inharmonics.



SPREAD can be used to treat the LEFT and RIGHT channels differently. This can range from subtle to wild.

The amount of frequency modulation that is applied to the incoming signal.



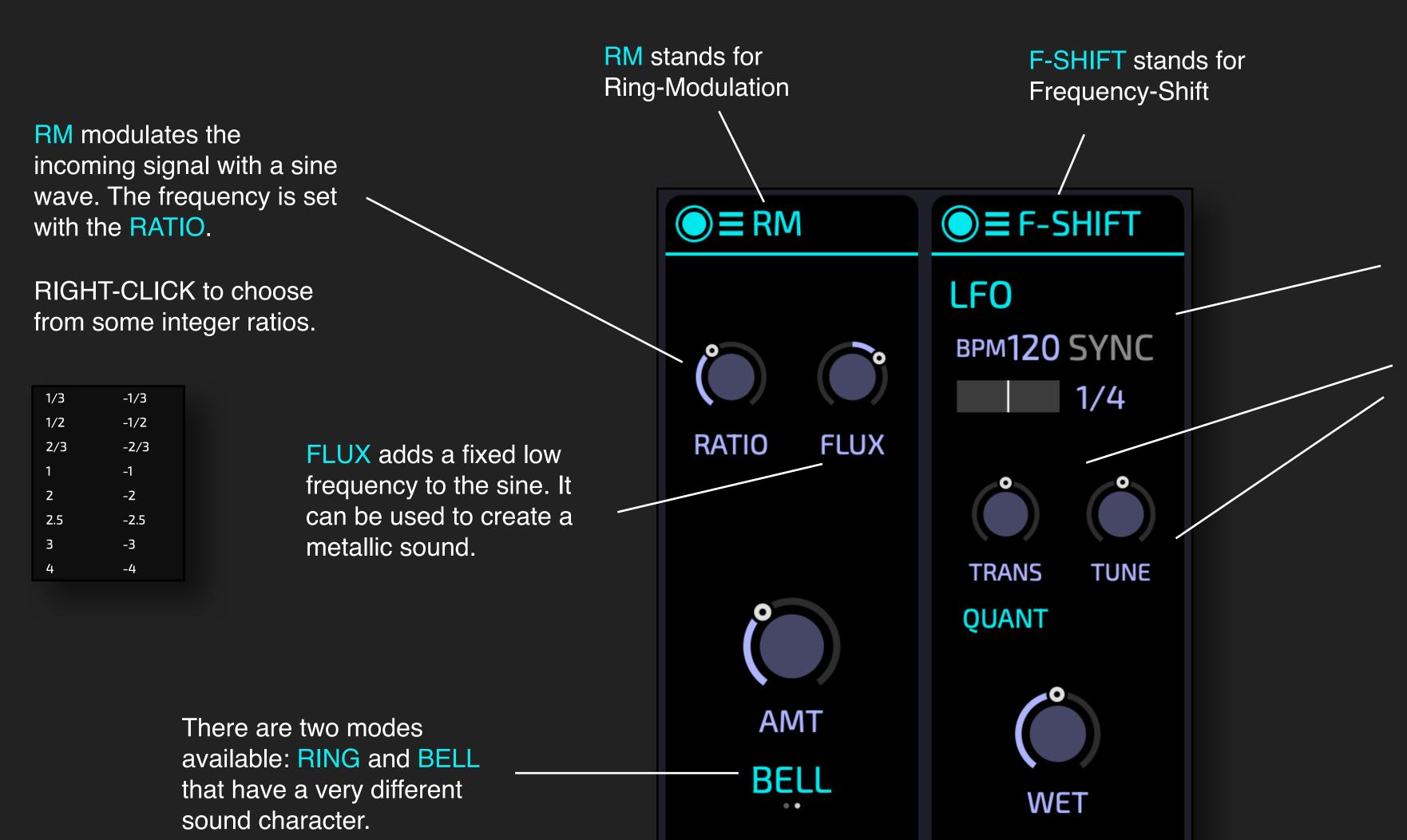
To best understand this module feed it with something simple, e.g. a sine wave. You can use the INIT preset for this.



Unless you are seeking a rough and sharp sound chaining a J-60 chorus or a SWEET module can work wonders!

## MODULES: RM and F-SHIFT

The modules RM and F-SHIFT can be used to create inharmonic, metallic sounds, or to add motion to a sound.





To best understand this module feed it with something simple, e.g. a sine wave. You can use the INIT preset for this.

A frequency shifter adds the same fixed frequency to all the partials of the incoming signal.

This added frequency can be set via the LFO, or via the TRANS / TUNE dials.



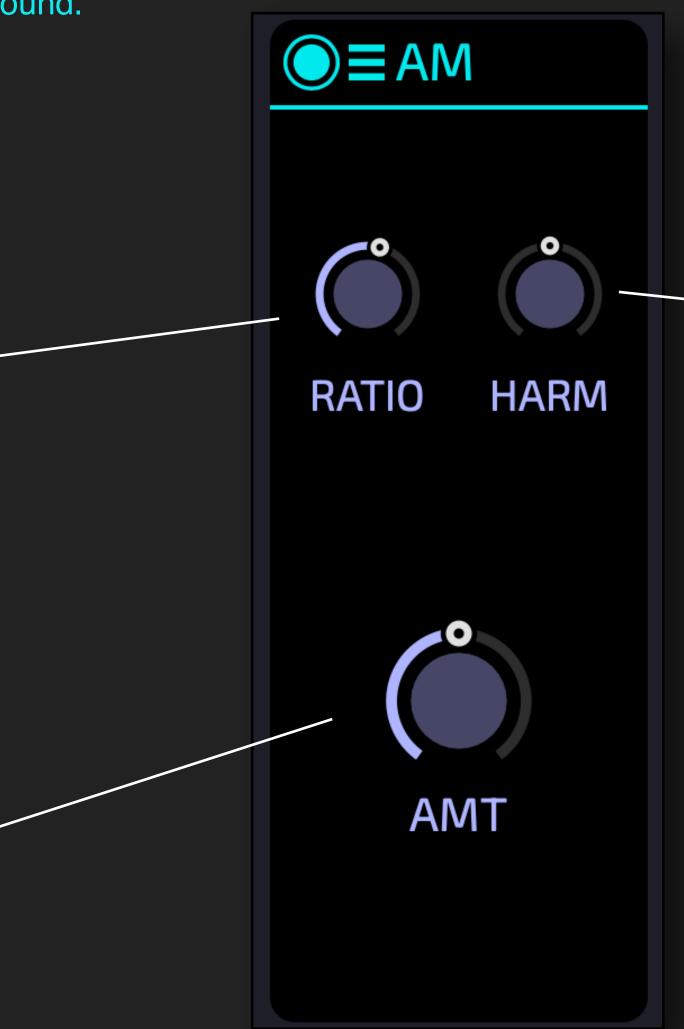
Set WET to 50% and use small values of TUNE to add motion to your sound.

## MODULE: AM

This offers amplitude modulation. It can be used to add inharmonic character or animation to a sound.

The AM is tuned to the incoming signal. With RATIO you can choose the frequency ratio between the incoming signal and the signal used for modulation.

The amount of the amplitude modulation.



Normally the RATIO of an amplitude modulation creates harmonic tones for integer ratios, and inharmonic values in between. Hence sweeping the RATIO gives a pretty wild journey through all kind of inharmonics and is often of limited musical use.

This module uses the underlying technique of shepard tones
(Wikipedia) to allow for a separation: with RATIO you determine how high or low the modulation sounds, with HARM you control the specific timbral character of the in-harmonics.



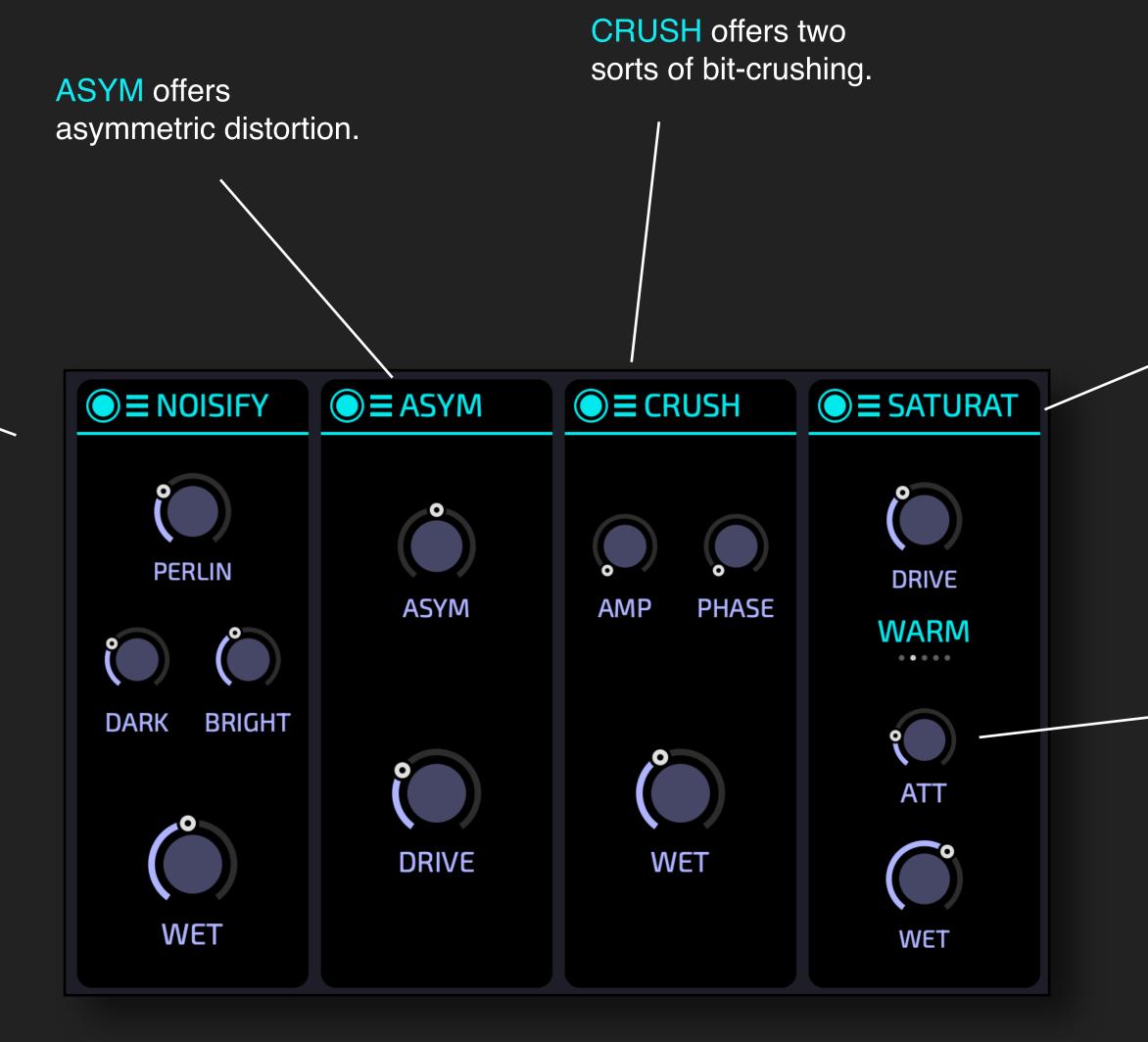
To make yourself familiar with this module start with the INIT sound, or keep all the TRANSFORMERS to their defaults and dial up BLUE to the max.

Once you have an idea how RATIO and HARM influence the sound start experimenting with the colour-transformers.

## **MODULES for Saturation / Distortion**

These modules can be used to distort and shape the sound.

NOISIFY adds different types of noise to your signal.





These modules can be used to shape the sound, add punch, or more overtones. All parameters can be modulated. Often these create interesting effects if used in conjunction with other modules.

SATURATOR has multiple different distortion types. You can set the DRIVE.

Use ATT to attenuate the saturated signal, before the DRY / WET.

## MODULE: ATARI PUNK

You can build DIY-synths with CMOS chips - this is fun and has a specific adorable lo-fi sound. This module takes whatever input and creates a noisy mess that sounds as if it were created with a wild CMOS circuit.

If you are looking for something subtle, you better to look elsewhere.

This drives the signal depending on its phase. The effect is a bit hard to explain and depends on the other knobs.

Choose how wild you want to go.



This exaggerates the SLEW of the signals, forcing it to look more and more like a square signal (just with wild frequencies).

Like all the other knobs ... a bit hard to explain and the result also depends on the other settings.

This adds crude subfrequencies as if you were feeding your signal into a CMOS based clock divider at audio rates.



The Atari Punk Console, shortened to APC, is a popular DIY-synth circuit that uses two 555 timer ICs as an astable square wave oscillator. It is cheap, easy to build, wild fun and sounds extremely lo-fi, or in other words: you just need to experience this.

You can build entire modular synths based on this philosophy, google "lunetta DIY".

A great tutorial is <u>here</u>. And one of the most interesting and entertaining YT series is Kristof Blåsols <u>Modular-In-A-Week</u>

Ah, and in case you don't know what ATARI means: go and ask your parents or grandparents.

# MODULE: TRANS

This module is only available for sections OSC1 and OSC2. It can be used for tuning the IRIS and the modules in the OSC section.



This module also affects the IRIS, hence it will always be in the left-most position of the section.



In many cases you just want to put the IRIS up or down in octaves. You don't need the TRANS module for this - just use this dial.

Tune the oscillator up or down in cents of a semitone.

Modulate this with a PERLIN noise modulation source for sweet detuning.



Tune the oscillator up or down by octaves. It's fun to modulate this, eg with an LFO.

Transpose the oscillator up or down in semi-tones.

If active the TRANSPOSE snaps to integer semi-tones.

If active the oscillator always plays note C3, regardless of the note you play. You can use the TRANS + OCT to change this note.

# MODULE: BTTF

BTTF is a very odd and rare module. It uses FM with feedback to bring you crazy and unusual sounds.

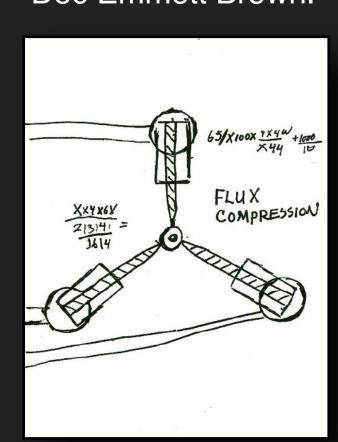


BIFF controls the amount of feedback-FM ... it can sound warm and brass like if used sparingly on very simple inputs, it can easily get harsh and brutal.

HEAVY controls the amount of FM-modulation of the incoming signal. Low values sound like a vibrato.



The FLUX capacitor controls a delay that is in the FM-feedback path. It's faithfully modeled after the original schematics by Doc Emmett Brown.



McFLY works like the ratio in classical FM, but it does not create irrational frequencies in-between, giving a more musical sweep. Works great when modulated, for example with a fast ADSR.



To acquaint yourself with this module you should start with feeding something really simple. Start with the INIT patch or feed in a sine.

Start with individual parameters first, and then explore combinations.

Afterwards you can use the TRANSFORMERS to change the sine wave you are feeding into BTTF.

# MODULE: GLURP

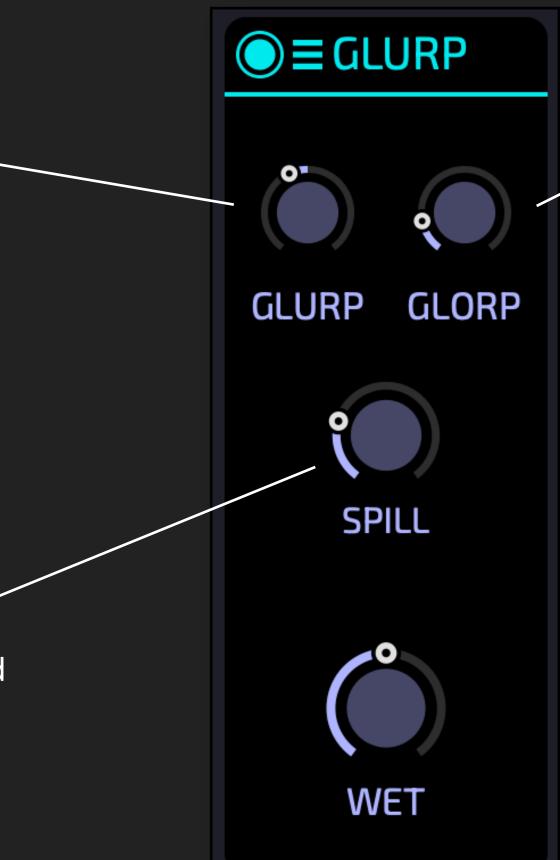
GLURP is an extension of the original GLURPY-GLORP.

It features the original "GLURP" and "GLORP" parameters, but on top it has an additional "SPILL" parameter for even more variations.

GLURP is carefully modeled to reproduce the original tonal character.

It can be used to add almost arbitrary amounts of glurpidity to your sound.

Set SPILL to the 12 o'clock position to have the original sound of the GLURPY-GLORP.



GLORP is to the GLURP what Yin is to the Yang.

The two influence each other in sometimes unpredictable ways, which is one of the reasons why it has become so popular amongst musicians.



The GLURPY-GLORP was one of the first electronic music instruments, invented in the late 1920s, but it took another 30 years before the one and only prototype was built.



The GLURPY-GLORP is now meticulously modelled after the original and available in MYTH as the GLURP module. This module can be used in the OSC and FIL sections.

Alas, the wait is over and this important iconic instrument is now available for everyone!

## MODULE: ROUTE

TIP

Forget about the signal flow,

just remember: the ROUTE

simply "splits" the processing

Normally the signal flow in a section is serial from left to right. But in a few cases, you want to have parallel module chains - this can be achieved with the ROUTE module.

The ROUTE module takes the output from the previous module and directs it to the output of the SECTION.

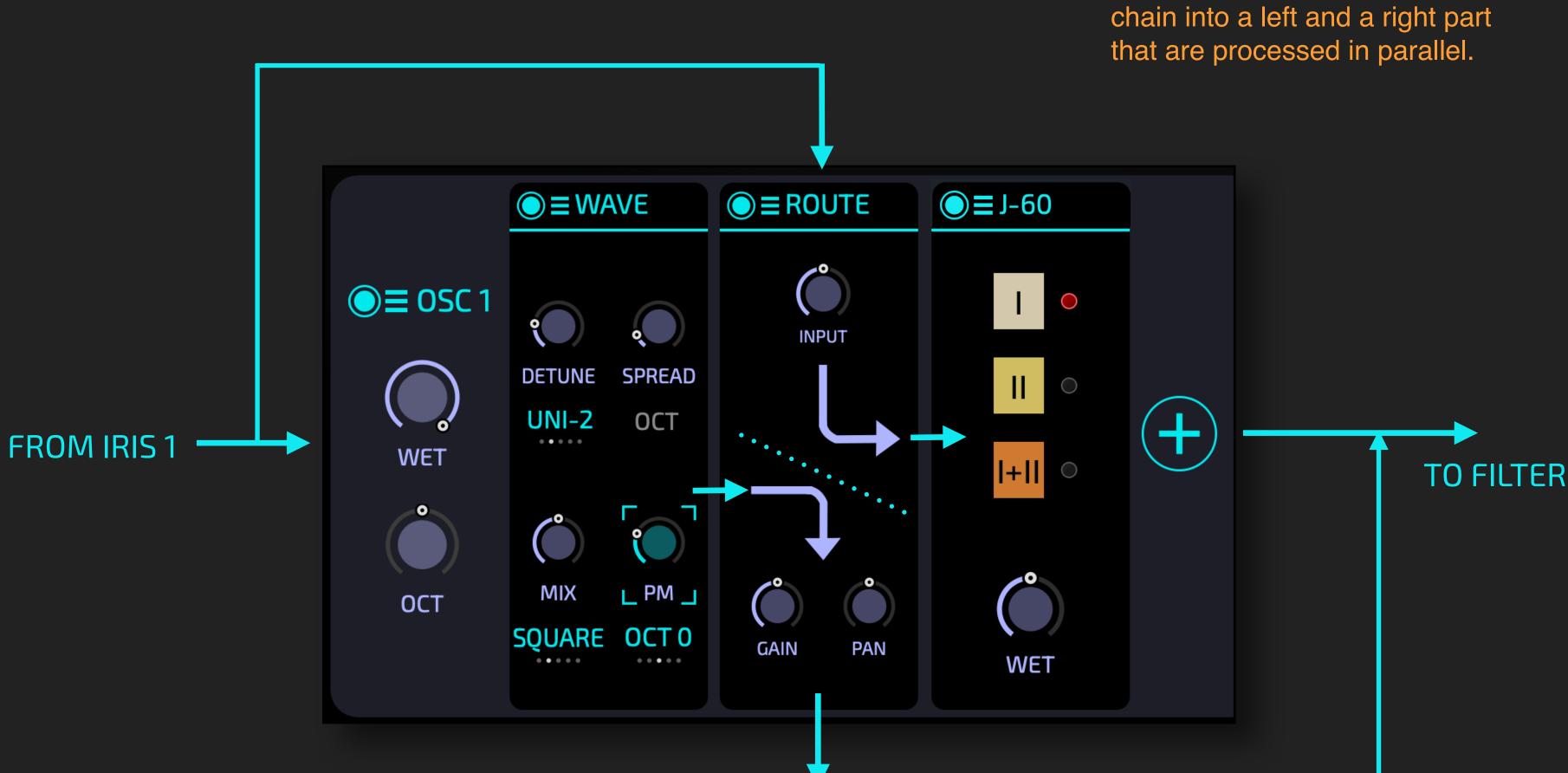
Also, it takes the input of the SECTION and feeds this into the next module.

### In the example:

The WAVE module goes into the ROUTE, from there the signal is directed to the output.

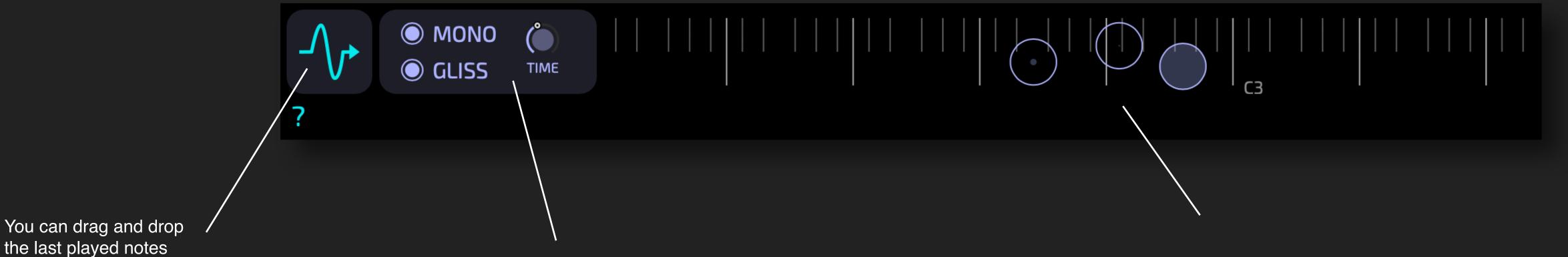
A fresh copy of the same signal that feeds into the WAVE now goes through the ROUTE into the J-60.

In other words: the WAVE is now parallel to the J-60 module.



# MONO MODE

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



TIF

as audio from here.

You can play a note and then drag this as audio from here to the IRIS - to get the sound re-synthesized!

Normally MYTH 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.

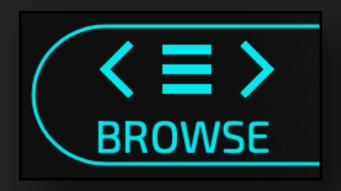
## FREEZE & RANDOMIZE

MYTH has a powerful system to create new presets from existing ones.

When FREEZE is activated, each section shows a snowflake. With this snowflake you can FREEZE the section. In this example OSC1 and FX1 are frozen. That means: if you now click on or these sections are not changed!



When you switch to a preset with the normal buttons the freeze state is ignored - this simply restores the preset as it was saved.





When the FREEZE mode is active you can use < and ≡ and > to load a new preset, but keep the frozen sections untouched. For example, freeze the IRIS, OSC and FILTER sections. Now skip through presets to try different FX sections.

Click on the symbol to BREED a new preset:

This takes the current selection of presets that you have filtered in the BROWSE tab (see here) and creates a new "Frankenstein" preset by randomly replacing entire sections in the current preset.

For example, you can create a selection of DARK, MYSTERIOUS PADS on the BROWSE tab and then use BREED to create more similar sounds.

Click on the symbol to randomize the parameters of your preset. This may enable / disable modules, but it will not add / remove modules.



The longer you hold the DICE symbol down, the more deviation you will get.

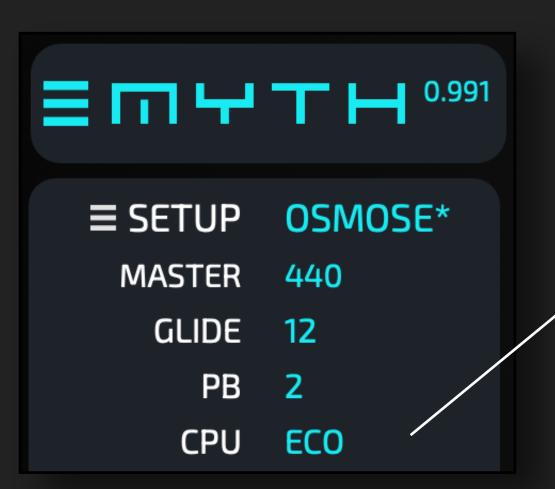
## CPU Performance

MYTH has been designed and optimized with great care for CPU efficiency.

On the other hand, a single preset can have:

- 2 IRIS with 20 transformers
- 18 modules which are per voice
- 6 midi effects
- 12 audio effects
- 25 modulation sources
- ...

It should not come as a surprise that this gives you ample possibilities to strain your system.



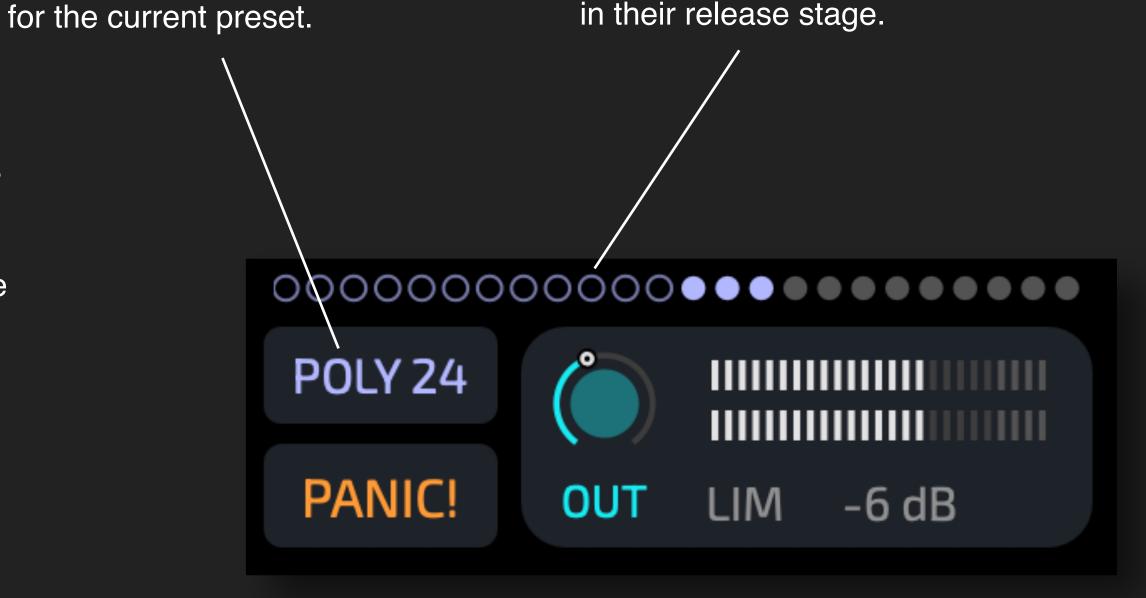
You can set the CPU mode here. This affects a lot of internal settings, but in most of the cases the effect will be subtle. ECO and SMART mode will be sufficient for almost all cases.



When the CPU usage is problematic always check the voice indicator first.

Long, exponentially shaped release tails are a recipe for high CPU strain.

MYTH offers up to 24 voice polyphony. Each voice is represented with a DOT. It's gray if the voice is not sounding, a coloured disc while the key is pressed and a coloured outline for notes that are in their release stage.



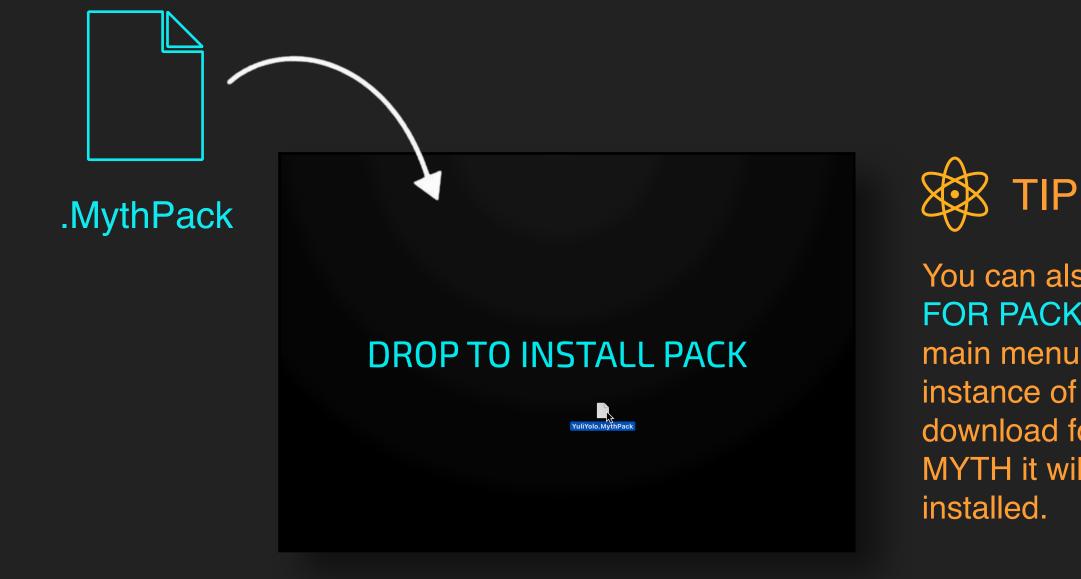
Click to change the polyphony

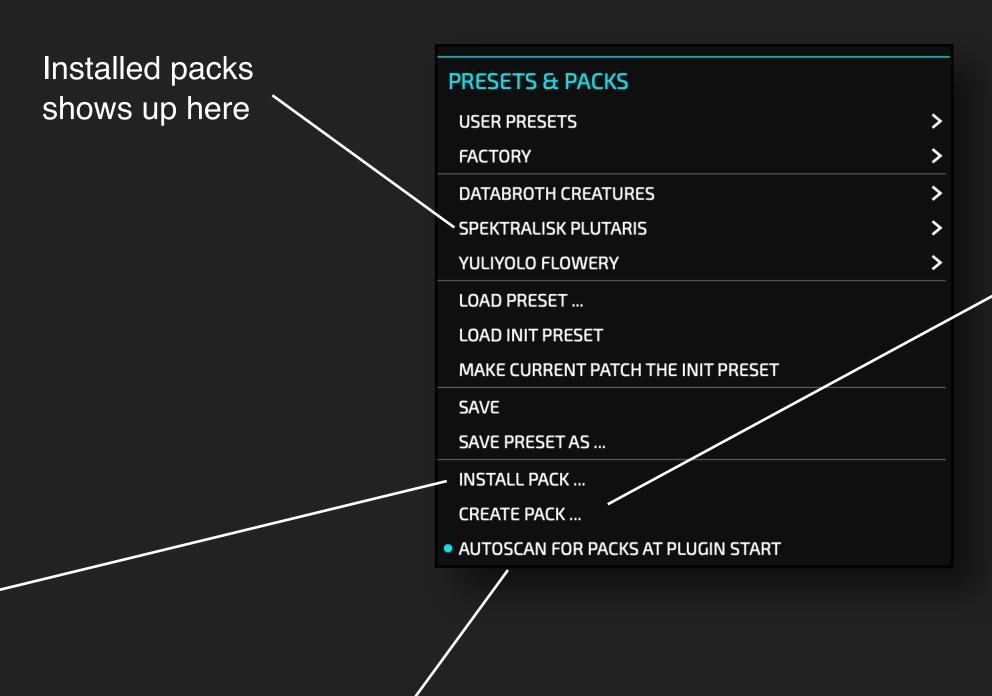
## PRESET PACKS

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

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

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







It is easy to create your own packs. Simply use the file system and create a folder that contains MYTH 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.



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

Better safe than sorry!



MYTH it will be automatically installed.

## MICROTONALITY

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

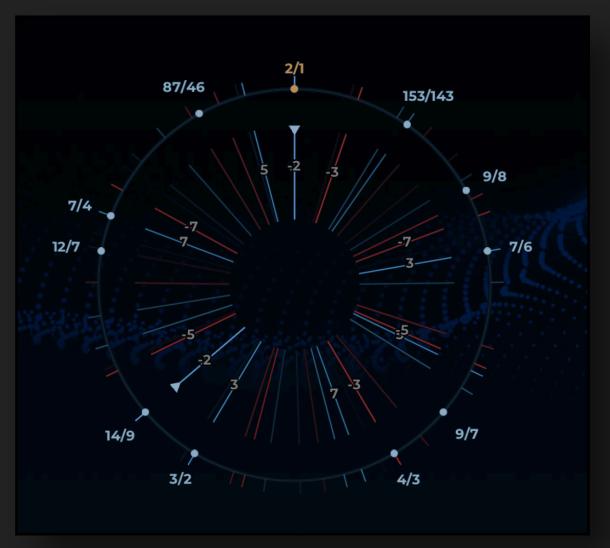


Microtonality means tuning notes differently than the 12 equal divisions of an octave, which is the modern standard.

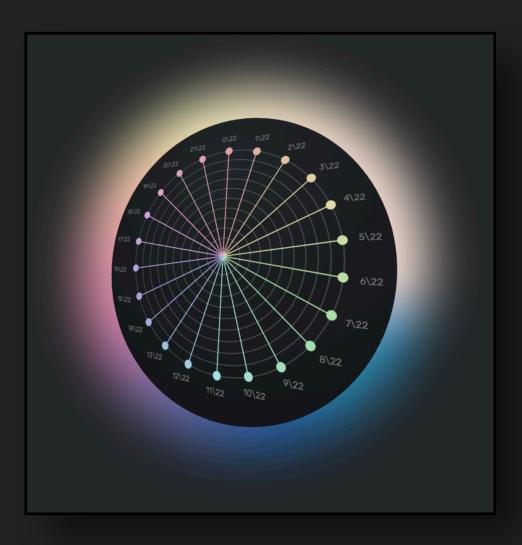
Many kinds of music make use of alternative tunings, but software instruments have usually been written to only play in 12-equal. In recent times this is changing, more and more instruments allow the musician to decide how the notes should be tuned.

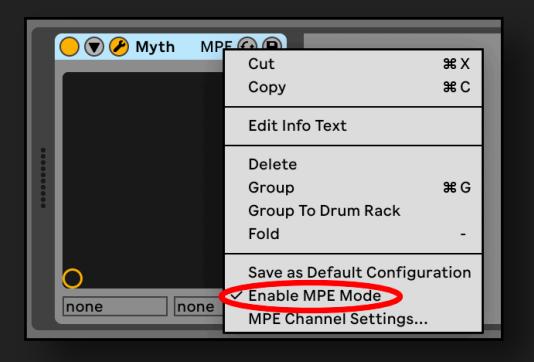
There are many possibilities. Some only subtly different from 12-equal, some very drastically so. Happy exploring!

MYTH supports the MTS-ESP standard created by ODDSOUND.



You can also retune MYTH with MPE pitch bend, typically generated by a plugin like Entonal Studio or Abletons Microtuner. Make sure to load MYTH as an MPE instrument.





# Explore different tunings with MTS-ESP

MYTH 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.



# INSTALL / PREPARE

Install the <u>free MTS-ESP MINI</u> from ODDSOUND

#### **Download some scales:**

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

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



## 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 Myth 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 MYTH 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, up until now we've had 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, 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.

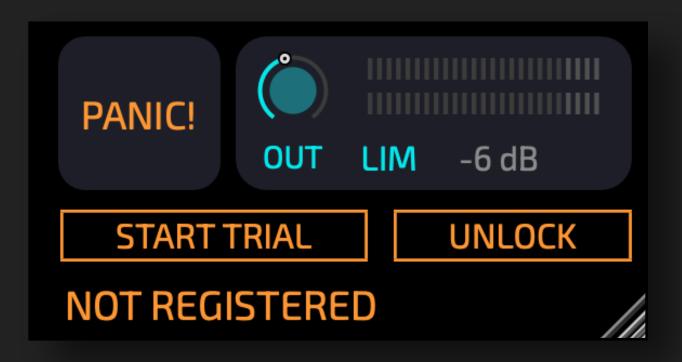


I recommend the <u>Surge Synth Team tuning</u> <u>Guide</u>, which lists all MTS-ESP plugins.

# FAQ / Troubleshooting

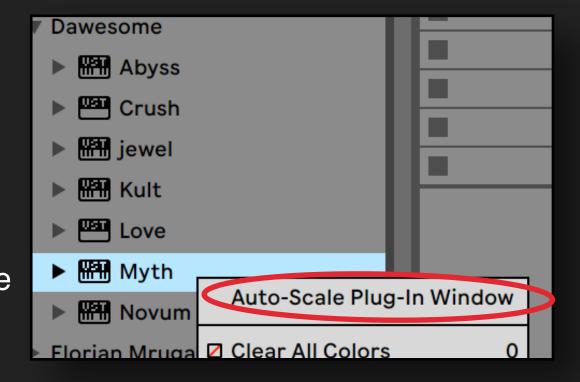
Q: Every few minutes there is annoying noise - I thought this had a 90 day unconstrained demo period?

A: You need to start your 90 day trial period. To do so, just click on START TRIAL and enter your tracktion.com user credentials. The free trial is unconstrained for the entire 90 days - no one should purchase MYTH without being convinced about it!



### Q: The UI looks pixelated / distorted

A: In the main burger menu in the upper left there is an entry to DISABLE OPEN GL. Please try to activate this setting, then reload your project - the plugin needs to be reloaded to make this change active. If you are using Ableton LIVE: make sure that "Auto-Scale Plug-In Window" is NOT ACTIVATED.



## Q: I can't hear anything!

A: First make sure that MYTH receives midi data - you can see incoming midi on the virtual keyboard. Make sure that the OUT is not set to zero.

# FAQ / Troubleshooting

### Q: I installed MYTH, but it does not show up in my DAW?

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

For Pro Tools users: plugins come in various formats; the most common are VST, VST3 (and AU on Mac) - these are the industry standard. Pro Tools has a proprietary plugin format and is not able to host VST or AU plugins. MYTH is available only as VST3 and AU. But there is a workaround: you can use a wrapper plugin. There are two that I can recommend:

- KushView Element this one is even free
- BlueCatAudio Patchwork

You load the wrapper Plugin in Pro Tools, and then you insert MYTH in the wrapper - it is simple and works as if you had opened MYTH in Pro Tools itself. The advantage is: there are many plugins on the market that are available only as VST or AU - with this wrapper you can use them all in Pro Tools.

### 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 <a href="mailto:peter@dawesomemusic.com">peter@dawesomemusic.com</a> - ideally with the information of your computer, your DAW, your OS and the specific preset that causes the issue.

# 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: I am a single person indie developer. Mainly I follow my heart and create the instruments I'd like to use on my own as a musician. I do not aspire to get rich in money with it, I aspire to get rich in contentment and fulfillment. However, I also need to pay my bills, and I also want to pay sound designers fairly for their work. I am trying to give my products the lowest prices possible to make a living, and I am not going to be a millionaire anytime soon (well, ever).

There is a 90 day free trial. During this time there is an almost 100% chance that there will be a SALE with massive discount.

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 <a href="mailto:peter@dawesomemusic.com">peter@dawesomemusic.com</a>. 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 I am doing! I hope you will find lots of fun and inspiration with MYTH or any other of my plugins. If you want to support me: spread the word - many (most?) people simply have not heard about DAWESOME.

Or send me a brief message via mail to <a href="mailto:peter@dawesomemusic.com">peter@dawesomemusic.com</a> - this will certainly cheer me up!

## **CREDITS - THANK YOU!**

- MYTH is implemented in C++ using the <u>Juce Framework</u>. I am grateful for its existence and for the community of JUCE developers.
- 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.
- MYTH uses the awesome AVIR image resizing algorithm designed by <u>Aleksey Vaneev</u>
- The lava image in this manual on page 2 is from **Brent Keane**
- consilience provided feedback on early version and some samples
- Rich Whitfield and Frank Gesang aka SiL3NC3 and Saf Ro and DATABROTH painstakingly proof read this user guide
- DATABROTH + Spektralisk + HydraTek + Rich Whitfield have provided extensive feedback / discussion of various features over a long time
- Sound Author + Sabastian Weaver aka Azure Eyes gave feedback to improve features and had some very cool feature requests
- BIIANSU created the official trailer track for MYTH
- Jacky Ligon convinced me to add MTS-ESP support and provided tons of inspirational use cases and validated the MTS-ESP implementation
- Oli Cash from OddSound provided the lib for MTS-ESP and answered all my questions
- Jacky Ligon and Andreya provided the Microtuning and MTS-ESP explanation in this user guide
- Jacky Ligon and Sound Author have provided samples for the modal filter / resonator

I am blessed with an awesome group of Beta Heroes who found bugs and provided many ideas:

Rich Whitfield **DATABROTH Spektralisk** HydraTek Alessandro Cardinale **Sound Author Cool WAV EI°HYM** Saf Ro Florian Mrugalla HiEnergy Frank Gesang aka SiL3NC3 Squaremoons David Lilja (PaleSkinnySwede) **Tomavatars Andreya** Mathias Brüssel Philip Rampi sadà\exposadà lab by the sea **David Henkel Jacky Ligon** Sabastian Weaver aka Azure Eyes **BIIANSU** dreamerOnGo **Astralmuse** 

## ABOUT DAWESOME



My name is Peter and I am the creator behind all Dawesome plugins.

I am a musician at heart, playing the bassoon and contrabassoon in multiple ensembles and I have a lifelong passion for synthesisers.

With a PhD in maths I can proudly call myself a professional nerd.

### A few core principles that drive my work:

- Creativity can and should be fun
- Sense and Simplicity (is the outcome of hard and complex work)
- **Exploration is the royal road**

PS: you can always contact me via <a href="mailto:peter@dawesomemusic.com">peter@dawesomemusic.com</a>







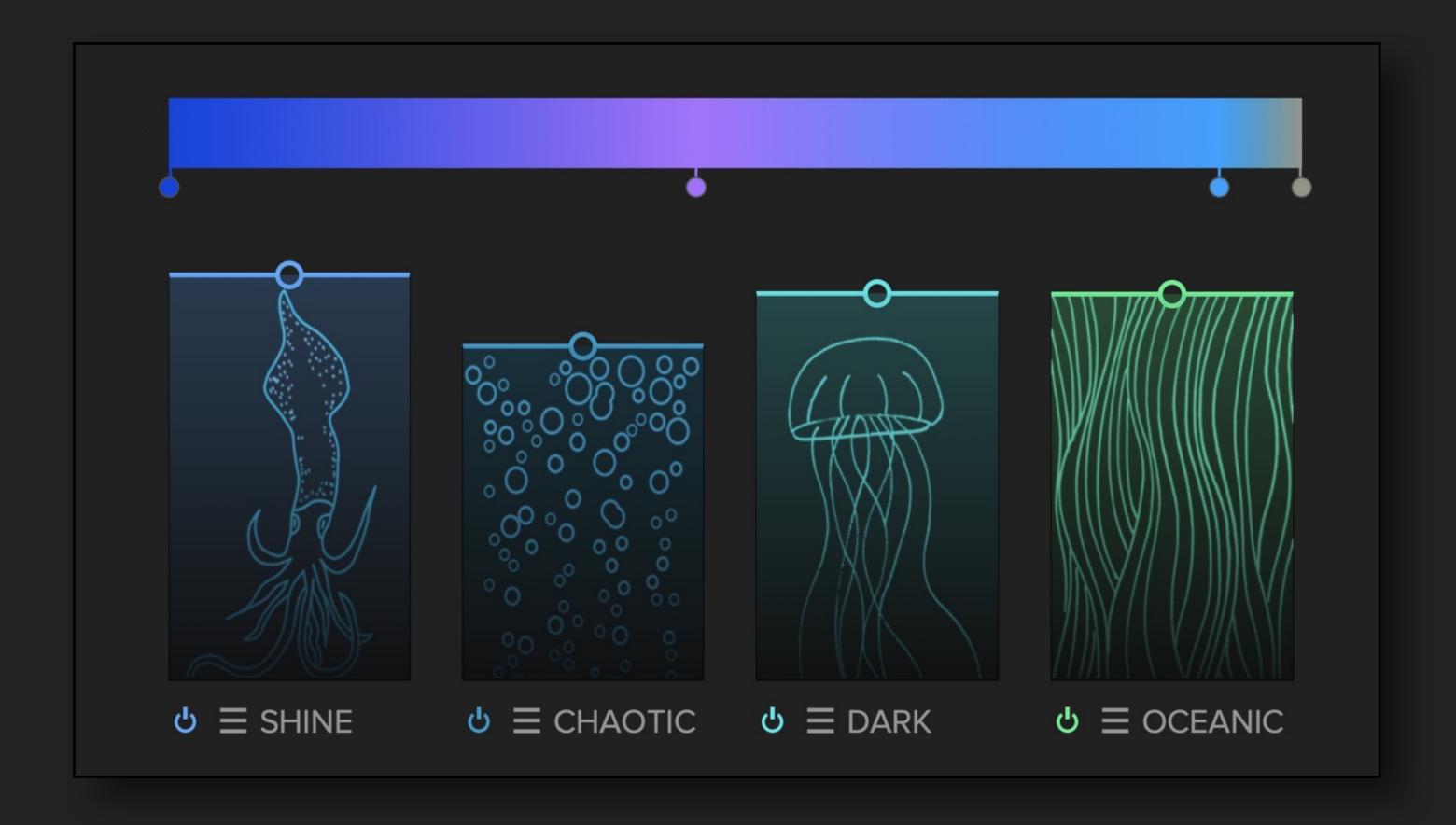
Spending my time on creating plugins instead of running marketing campaigns and spamming your inbox is more fun ... for me and probably also for you.

Please support my work by spreading the word!

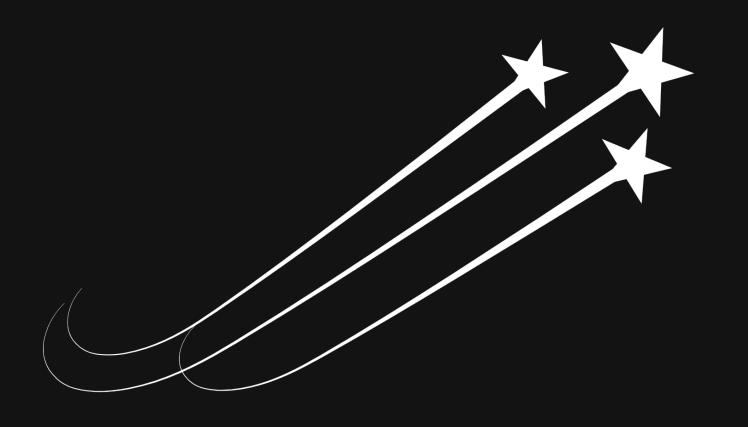
# Dawesome Village

... is the **friendly and supportive community for sound lovers** on Discord!

You can join by clicking on the invitation link below. You will find many interesting people, tons of information, many freebies like sample packs and presets and much more...



Invitation Link: <u>Dawesome Village</u>



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