

I m △ G I n e

# imagine user guide

## welcome to imagine

Thank you very much for purchasing Imagine! We hope you will have as much fun as we had while designing it.

## disclaimer

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# system requirements

Configuration	macOS 10.13 and higher Windows 10 64bits hosts only
Minimum Requirements	Intel Core i5-7400 or Ryzen 5 2600, 4GB RAM
Compatibility	VST3/VST/AU only, no standalone version

## installation

On a Mac :

1. Download the ZIP file for macOS from the section 'My Downloads & Serials' inside your Expressive E user account.
2. Extract the ZIP file and run the installer. If you are on macOS Catalina or higher, please right-click on the \*.pkg and choose 'Open' instead of double-clicking the installer.
3. Follow the onscreen instructions.

On a PC:

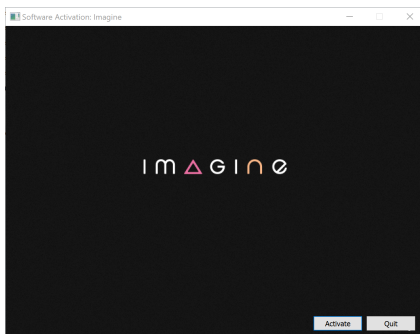
1. Download the ZIP file for Windows from the section 'My Downloads & Serials' inside your Expressive E user account.
2. Extract the ZIP file and run the installer.
3. Follow the onscreen instructions.

# license activation

Our software is protected by [PACE iLok](#). A dongle is not necessary to activate Imagine. We do however recommend creating a free iLok account if you don't have one already. **An iLok account is always needed if you wish to activate the license on more than one computer**, including when upgrading to a newer system in the future.

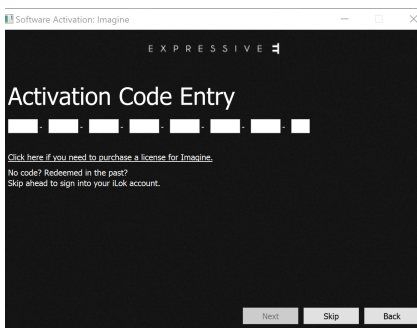
## activating imagine with the inbuilt activation window

1. Launch your DAW. When your DAW recognizes your newly installed plugin for the first time, it should show this activation window. Click on 'Activate'.

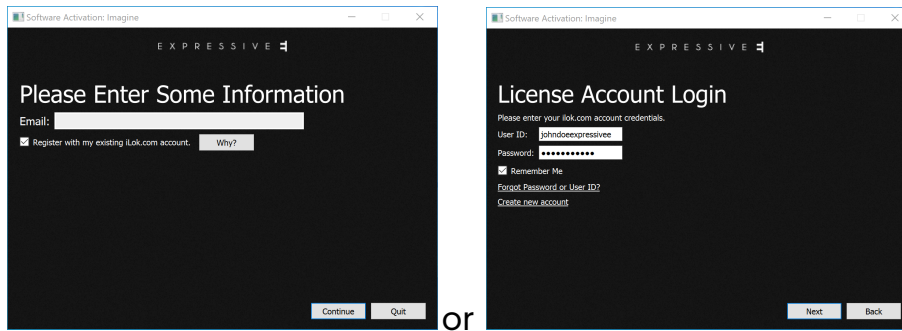


If this window never shows up, please refer to the troubleshooting section below.

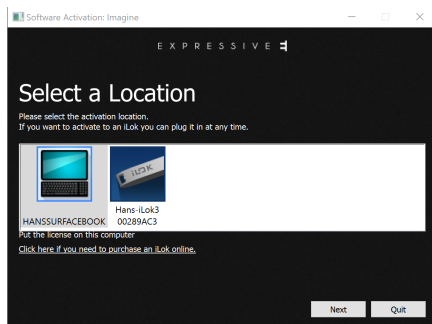
2. Copy the activation code that is listed inside your Expressive E user account and paste it in the activation code entry window to redeem the license.



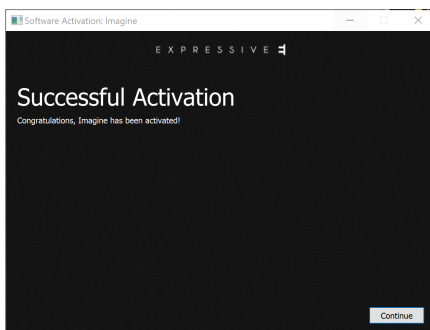
3. Just enter your email address or, if you want to redeem the license to your iLok account (recommended), tick the box “Register with my existing iLok account”. Click continue and enter your iLok account credentials. If you don’t have an iLok account yet, click the link [‘Create new account’](#).



4. Choose the location for your license activation. If you use an iLok account, then you can activate on up to three locations at the same time. This includes iLok dongle(s) if you wish.



5. The license is now activated on the location you had selected, and you can start using Imagine. To manage your license activations in the future, we recommend using [PACE iLok License Manager](#). This application also allows you to link a license to your iLok account in retrospect, should you only have redeemed the license locally during step 3.



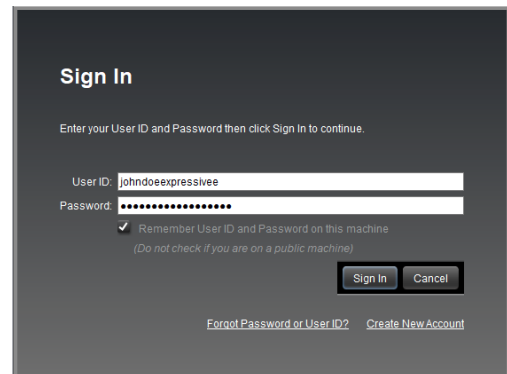
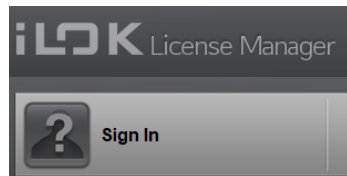
# troubleshooting: activation window never showed up

## Activating with iLok License Manager

If you were never shown the activation window in the first place, then your license hasn't been activated, and Imagine won't be recognized by your DAW. To ensure the correct license activation, follow the steps below:

1. Download iLok License Manager from [www.ilok.com](http://www.ilok.com) and create a free iLok account.

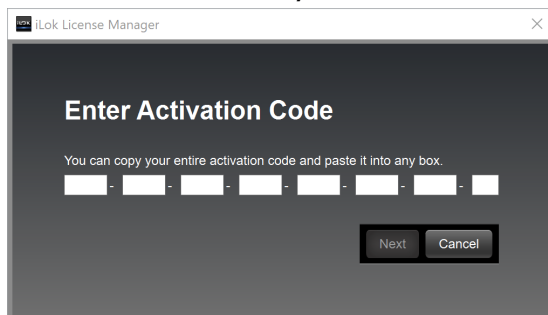
2. Launch iLok License Manager and log into your iLok account there.



3. Click on the 'Redeem activation code' button in the upper right corner (marked green below).



4. It will thus show you the activation window that you didn't have access to until now. Enter your activation code.



After successful activation, launch your DAW again and see if Imagine is recognized. If it still doesn't appear, see below:

## **Force-scan Imagine if it was added to your DAW's blacklist**

It is possible that Imagine has been blacklisted by your DAW when attempting to check its license without success. Imagine might then not show up in your DAW until you reactivate/force-scan Imagine manually.

To learn how to reset the blacklist of your DAW, please refer to your DAW's manual. Find some examples below:

In Ableton Live, go to Preferences -> Plug-ins. Hold the 'Alt' key while clicking on the 'Scan' button.

In Logic Pro, choose 'Reset & Rescan Selection' after selecting the entry in its Plug-in Manager.

In Cubase, select the entry in the blacklist tab of Plugin Manager and choose 'Reactivate' or click the refresh button with the circling arrows.

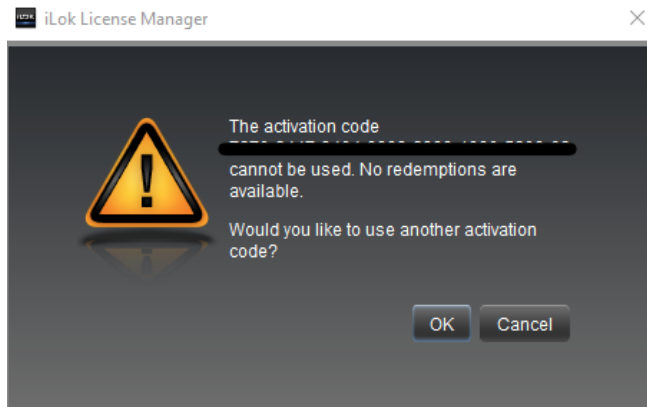
In Reason, go to Windows -> Manage plugins. Choose the entry and select 'enable'. Relaunch Reason after this.

In Bitwig Studio, go to Settings -> Plug-ins -> 'Show plug-in errors'. Choose 'Rescan all' in the window that pops up to give it another try.

In Studio One, go to Options -> Locations -> VST Plug-Ins and click on 'Reset Blocklist'. Make sure 'Scan at startup' is activated. Relaunch Studio One after this.

In Reaper, go to Preferences -> Plug-ins -> VST and click on 'Clear cache/re-scan'.

## troubleshooting: no redemptions are available

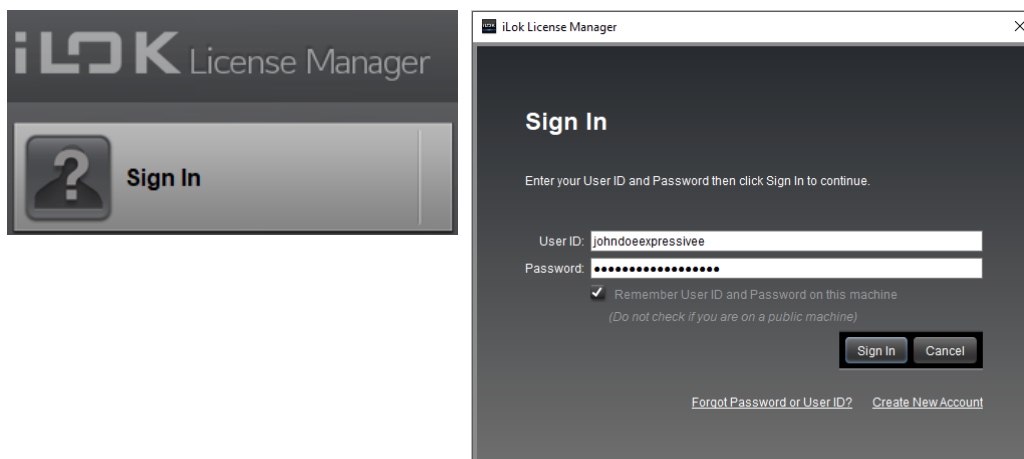


If you receive this error message, then you are probably trying to activate your license on a second or third computer. However, please be aware that you do not need to enter your activation code again. **Redemption of an activation code is only possible and necessary once.**

Instead, please use the application "iLok License Manager" to log into the iLok account that contains your license and activate from there. If you only activated the license locally until now (see last chapter), here is how to link your license with an iLok account after the fact:

### On the machine on which you already activated the license:

1. Create an iLok account on the following website:  
<https://www.ilok.com/#!registration>  
Skip if you already have an iLok account.



2. Download and install the application iLok License Manager. This enables iLok to verify that you are the owner of the license.

<https://www.ilok.com/#!license-manager>

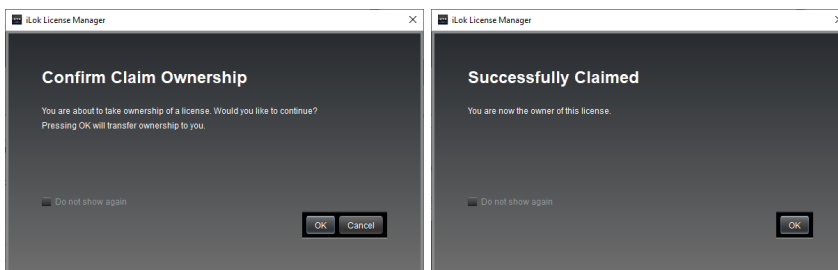
Launch iLok License Manager and log into your iLok account.

3. Find your local license activation and take ownership of it.  
You will find your license when opening your local computer by clicking on it on the left-hand side. Imagine will be displayed as "unregistered" because you haven't taken ownership of the license yet. To do so, right-click the license and choose "Take ownership".



Alternatively, you could just drag & drop the license to your account on the left (blue person symbol).

4. Confirm your ownership claim.

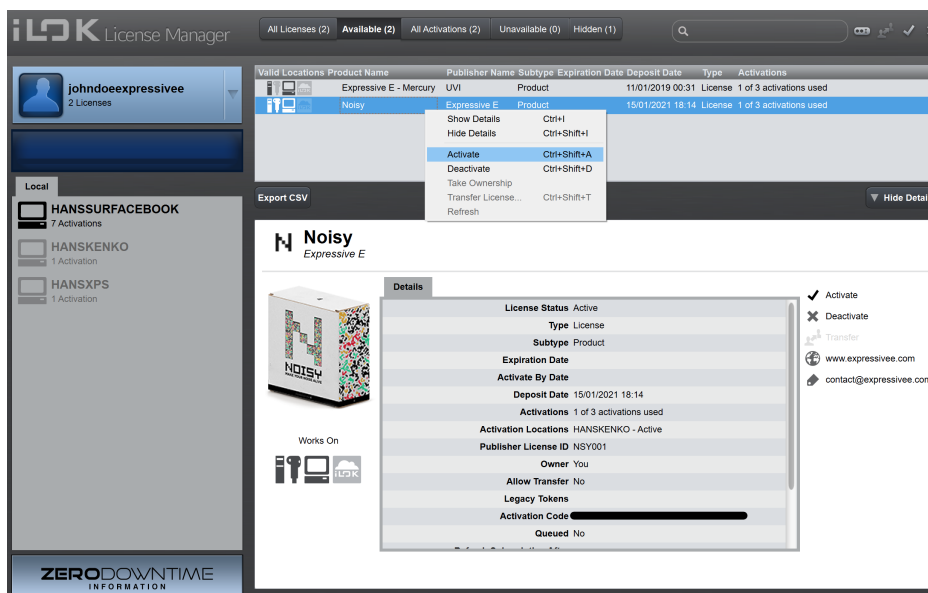


Now that the license is linked to your iLok account, the license can be seen from any computer that you install iLok License Manager on after logging into

your iLok account there. Now move to the computer that still lacks the product activation.

### On your new machine which still lacks the product activation:

1. Download and install the application iLok License Manager.  
<https://www.ilok.com/#!license-manager>
2. Launch iLok License Manager and log into your iLok account.
3. Activate the license by selecting it and clicking the "activate" button. Alternatively, you could just drag & drop the license to your local computer.



4. iLok will ask you for the location you want to place the activation during the procedure. Select your local computer to activate the license on it. If you have an actual iLok USB dongle, you could also store one of the three activations to a dongle.

If you move to a newer system, please always make sure to deactivate the license from your old machine before selling or disposing of the machine. This way, you can reserve all three activations for computers that you actually use.

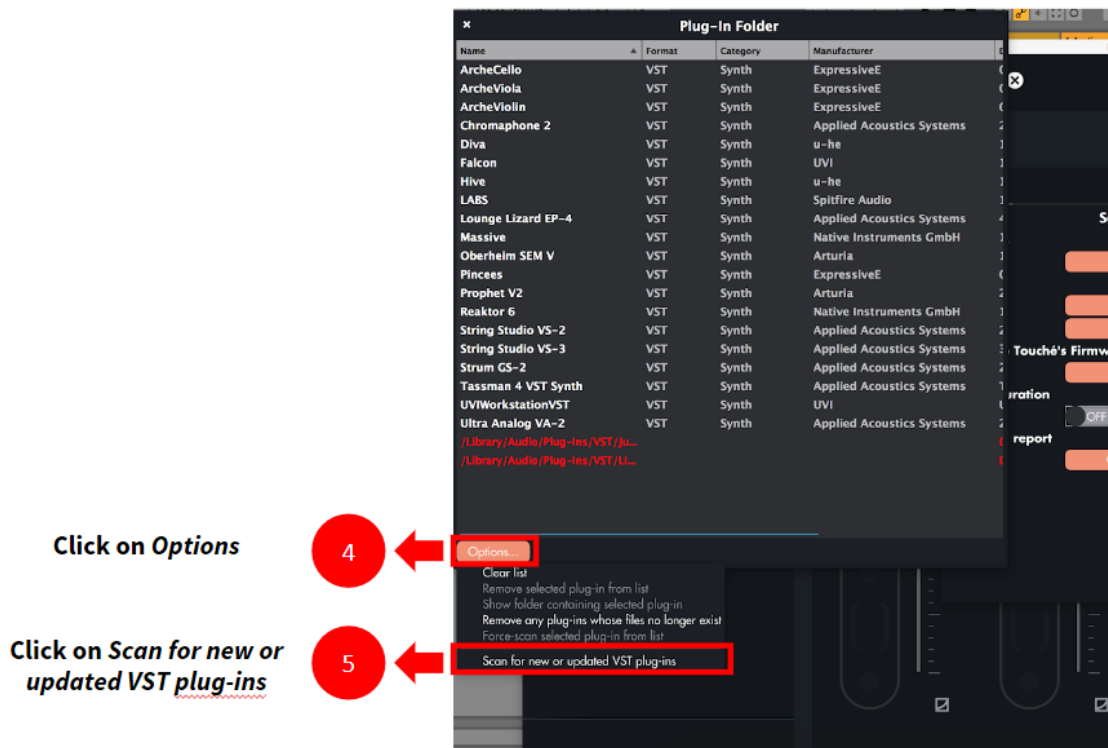
# setting up imagine for touché / lié

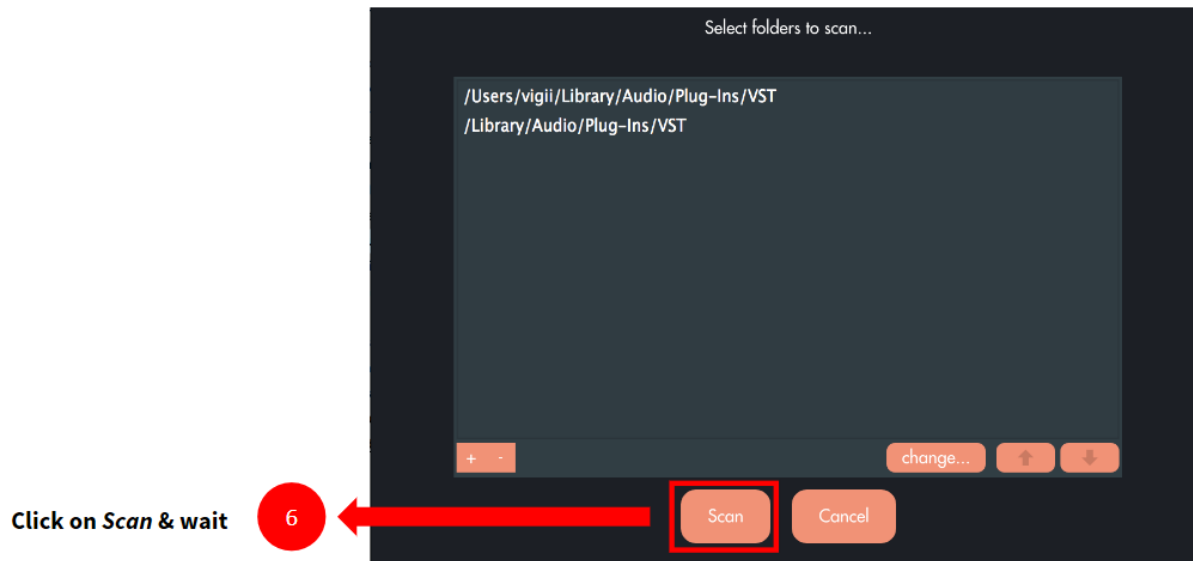
If you are a Touché owner, this section explains the necessary steps to make Imagine work inside Touché's companion app Lié. Please disregard if using Imagine without Touché.

## scan for the new plugin in lié

When you open Lié for the first time after the installation of Imagine, you will have to perform a new plugin scan in order to detect your new plugin. Please follow the steps below:

1. Launch Lié as a standalone application without a DAW opened in the background.
2. Go to Menu and click on 'Plugin Manager'.
3. You will see a list of all the VST instrument plug-ins currently detected by Lié.





Imagine should now appear as white entry in the list of plugins and is ready to be used inside Lié.

## using the imagine presets for lié



The Lié presets for Imagine were added during Imagine's installation.

Search for 'Imagine' in the search bar, or use the instrument tag to show only Imagine presets.

Double-click on the preset and play.

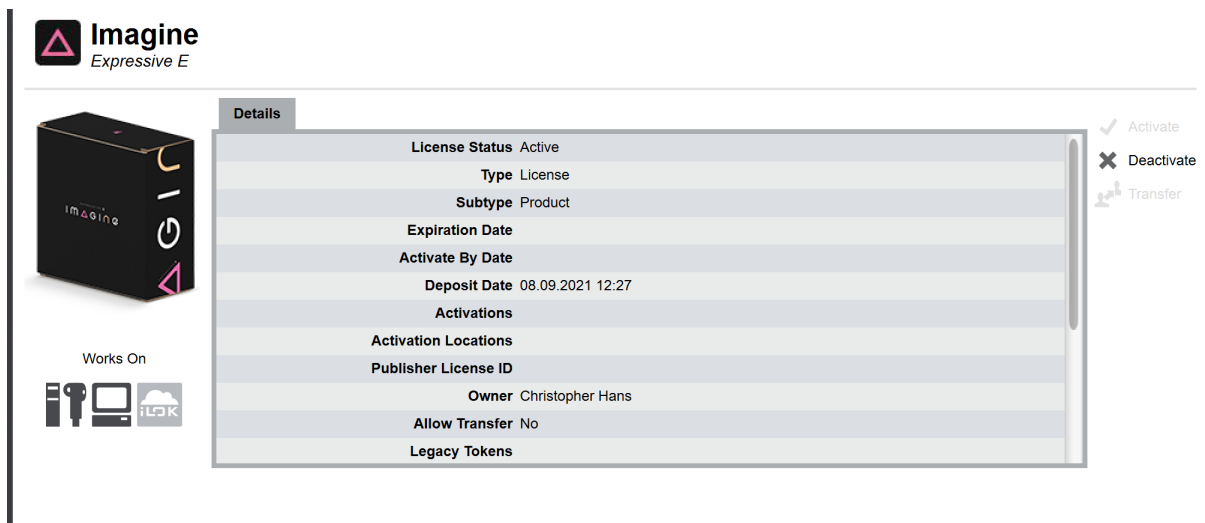
Generally, the four macros from the bottom bar of Imagine are mapped to the four axes on Touché. This way, compared to the original Imagine presets, MSEGs are often replaced by manual control via Touché. It might also be that the MSEG is still active, and a Touché axis steers its minimum value in order to have both the complex movement from the MSEG as well as an additional means to control its intensity.

## troubleshooting: imagine red-listed in lié

If Imagine appears in red color, it probably has to do with a license activation issue during the scan.

### Ensuring the activation has worked fine

First, make sure that your license was activated correctly. Have a look at the last chapter and confirm that everything is alright inside iLok License Manager. When selecting your local computer on the left, you should find your license with status 'activated' on the right:



### Force-scanning inside Lié

Once you know that there is no problem with the license, open Lié's Plugin Manager from the menu.

Select the red-listed entry and choose Options -> 'Force-scan selected plug-in from list'.

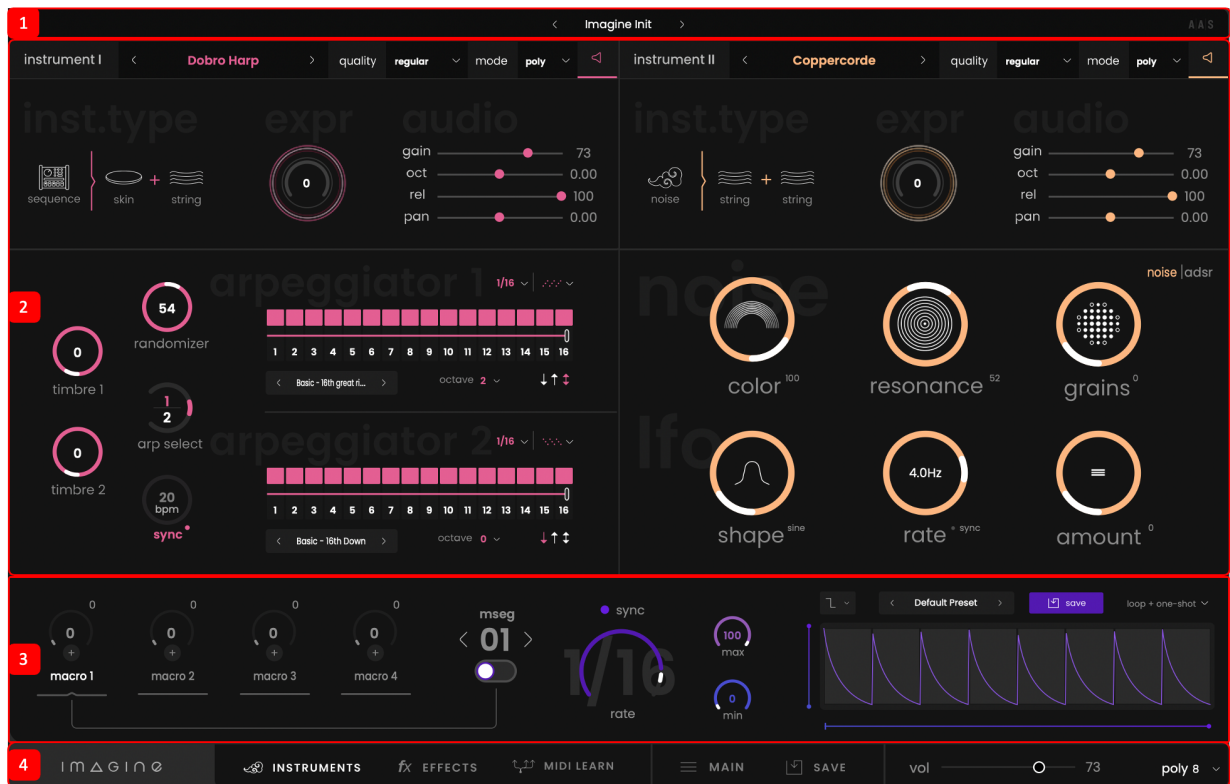
Imagine should then appear as a normal item in the list, and you will be able to load the Lié presets made for it.

Please get in touch with our technical support if nothing helps:

<https://expressivee.happyfox.com/new>

# general overview

## gui overview



### 1. header

Scroll through folders of main presets with the arrows or click on the drop-down menu to target a specific preset.

### 2. module editor

The module editor gives access to all the modules needed for sound design (instrument layer 1, instrument layer 2, and FX page).

### **3. modulation module**

The modulation module gives you instant access to the macro and MSEG system, whatever page you are currently on, allowing you to map almost any parameter of the synth.

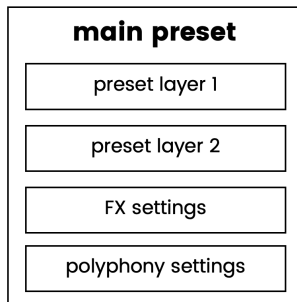
### **4. bottom bar**

Select which page is shown in the module editor. Navigate through the different pages and overlays:

- Instrument: main page where the instruments of the two layers can be edited
- Effects: Secondary page where all the signal effect processing is made
- MIDI learn : overlay of the current selected page
- Main menu: opens the menu window
- Save: opens a popup to save the main preset
- Volume: sets the output volume of the plugin
- Poly: sets the number of polyphony voices

# layer system

## main presets



Each main preset within Imagine is made of two different sound layers, an effects page common for both layers, and the polyphony settings.

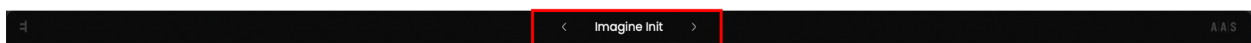
The two layers offer specific parameters for sound design depending on the family of the hosted instruments on the layer.

## layer instruments

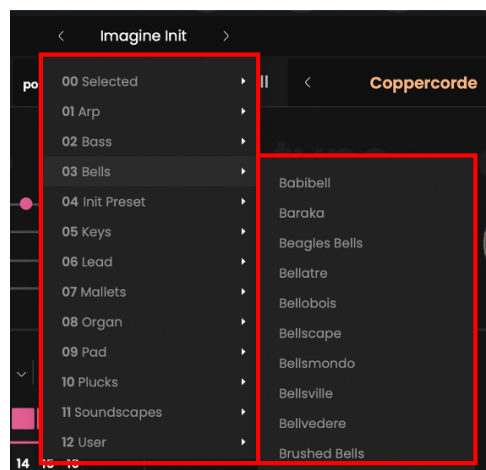
Each sound from the Factory main presets contains two instrument layers, which are directly available from the two layer preset browsers. An easy way to create unique new sounds is to combine any two layer presets from the layer preset browsers

# main preset browser

To open the Main Preset Browser, click on the current preset name:



The Main Preset Browser gives access to the complete main preset library. You will find the included Factory presets alongside your personal User presets, once you created some.



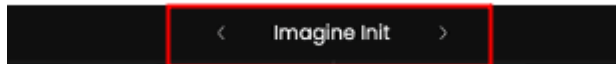
## categories

The Factory Preset Library is sorted in different categories based on the preset type and playing style. You will find an additional User category gathering your own custom creations.

## presets

Shows all presets from the selected category. Presets within a category are sorted alphabetically.

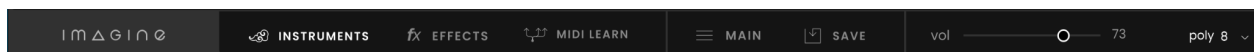
## loading a preset



To load a preset:

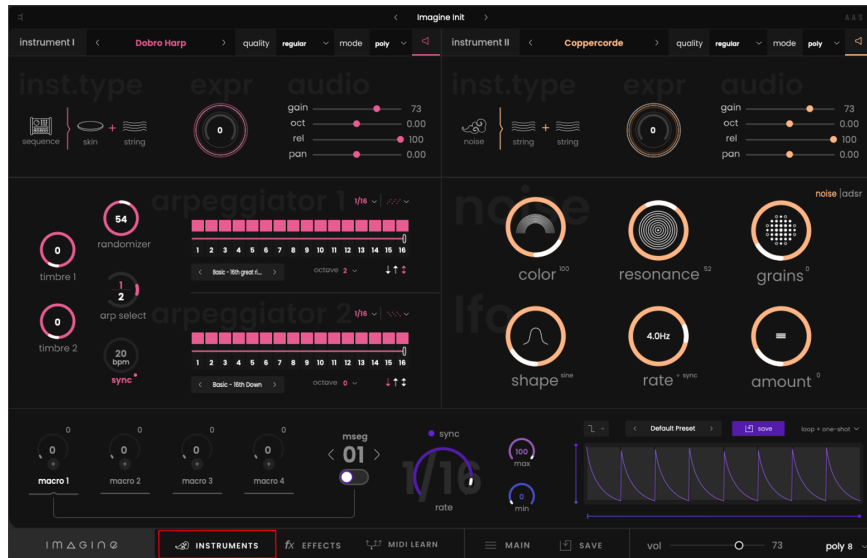
1. click on the current preset's name
2. select a category
3. select a preset by clicking on its name

## bottom bar



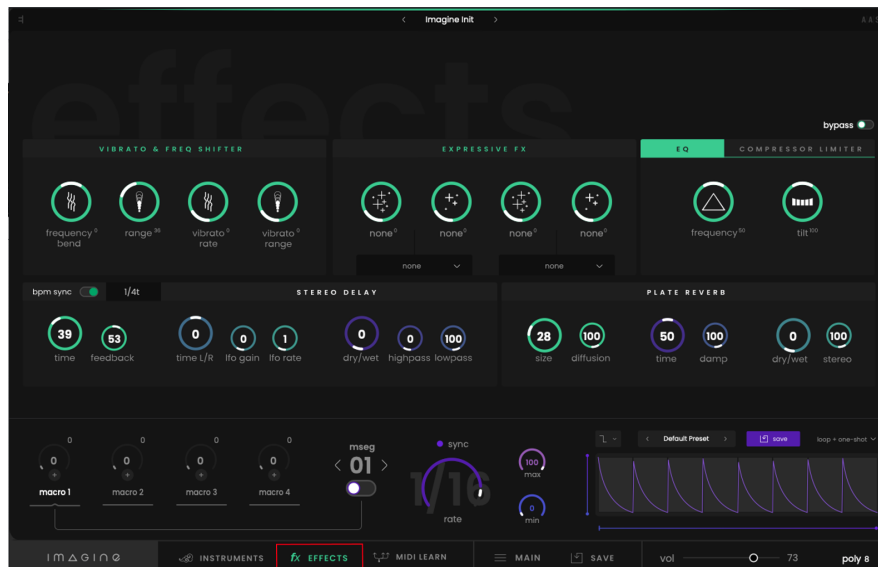
The bottom bar allows you to navigate through all the different parts of the plugin.

# Instruments



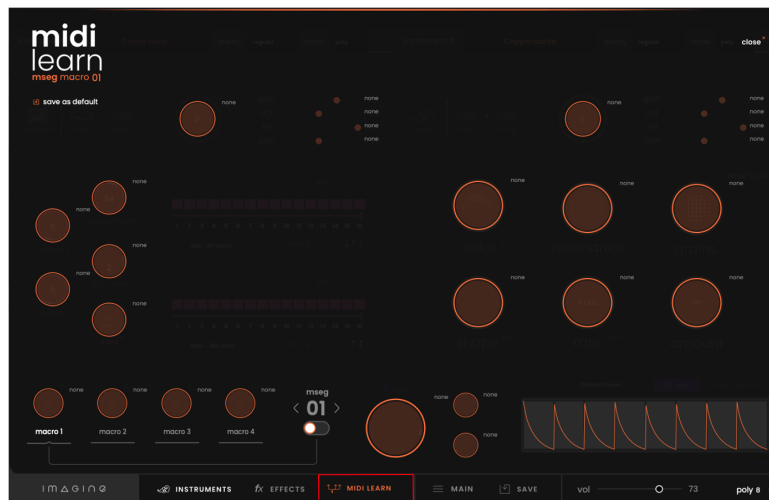
The Instruments tab allows you to display the UI of your two instrument layers in the module editor. For more information go to page 24 .

# FX page



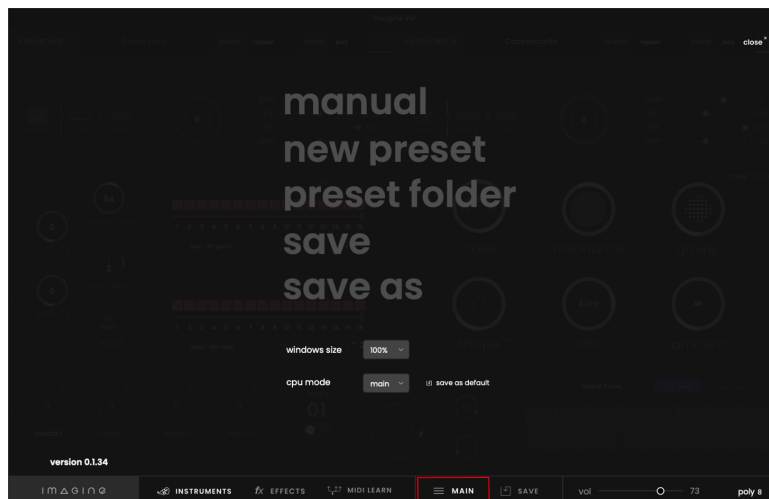
The Instruments tab allows you to display the UI of the FX section in the module editor. For more information go to page 32.

## Midi learn



The Midi learn tab allows you to activate the midi learn overlay on both Instruments and FX sections. This overlay allows you to assign midi control to all the displayed parameters. For more information go to page 48 .

## Main menu



The Main tab gives you access to the main menu of the plugin. You can consult the manual, create a new preset, have access to the preset folders,

save and save as your preset, set up the size of the window and select the cpu mode (more information page 50).

Regarding the saving options, all your saved presets will be automatically placed as individual \*.impakt files in the user folder. The user preset folder can be managed manually with macOS Finder or Windows Explorer by navigating to the following directory:

macOS:

*HD/Library/Audio/Presets/ExpressiveE/Imagine/Presets/Main/User*

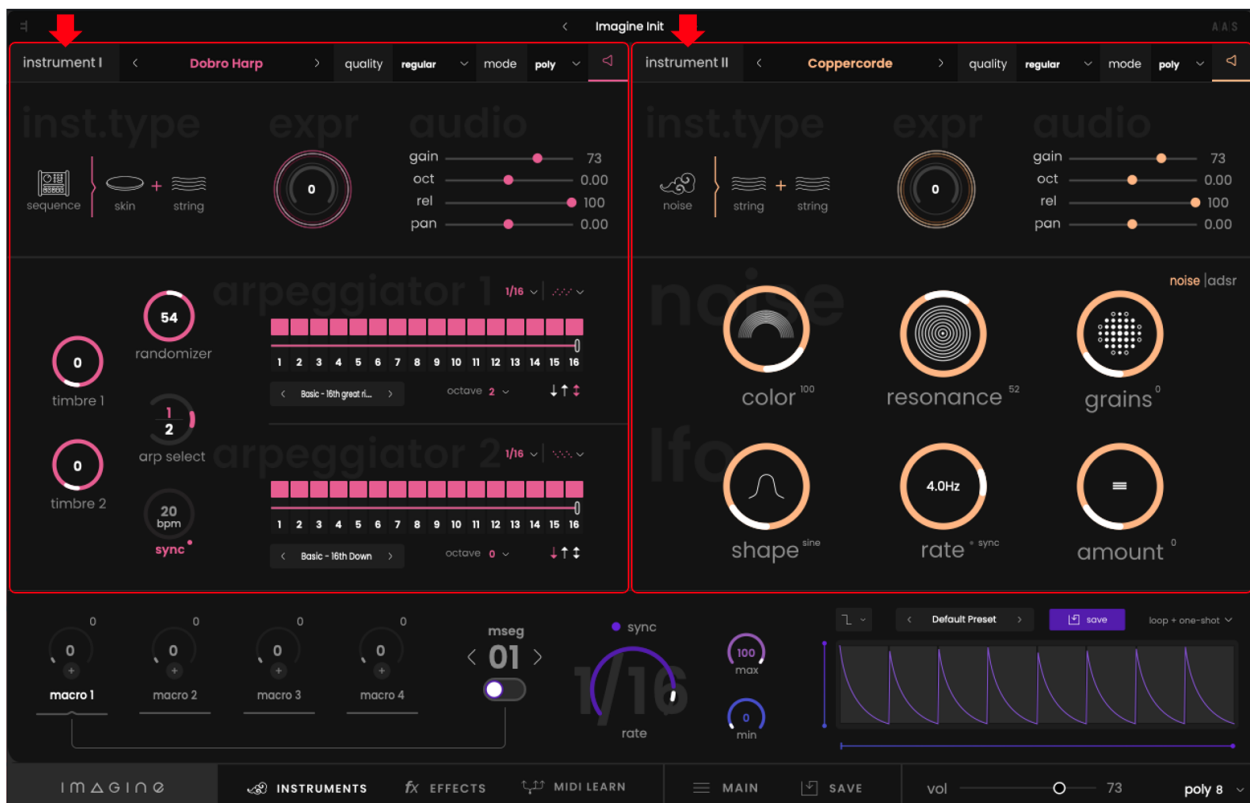
Windows 10:

*This PC\Documents\ExpressiveE\Imagine\Presets\Main\User*

# module editor

## instruments Layers

### the concept



Each main preset is composed of two instrument layers that can be swapped out easily for hundreds of alternative layers to quickly create new sounds.

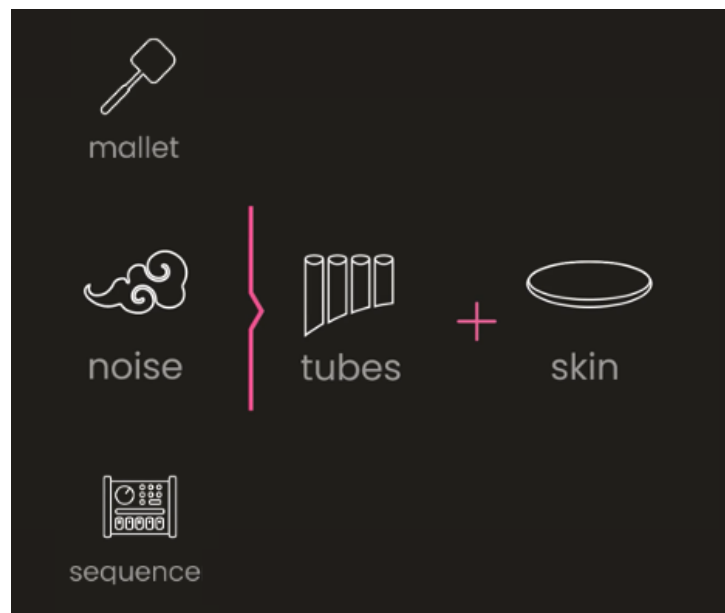
Each instrument layer has his very own sonic character which can be adjusted with a great flexibility thanks to the physical modeling technologies used to modelise them.

These technologies model the resonant bodies of acoustic instruments such as tubes, bars, skins and strings.



*Acoustic bodies used to modelize instrument layers*

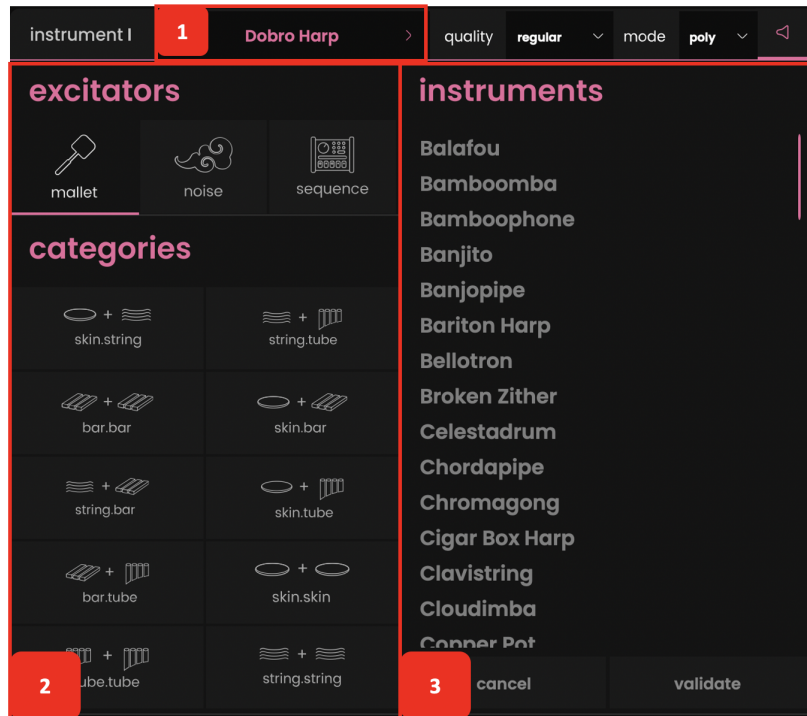
Each instrument is the outcome of transforming and coupling two acoustic bodies in a specific way. As with real instruments, you will need some element that brings them to life: the excitator. It can either be a mallet, noise, or a sequence.



*Each instrument combines two acoustic bodies and an excitator*

## layer preset browser

Open the layer preset browser by clicking on the dedicated list (1).



Use the Tag system (2) use two levels of filtering (the excitator and the couples of acoustic bodies) to give you access to specific instrument layers.

Then you can try each instrument layer in the list (3) by clicking on it. After that, you click on “validate” to definitively change the instrument or return to the previously selected instrument by clicking on “cancel”.

## instrument controls

Each Instrument layer can be adjusted in a specific manner with specific parameters depending on its excitator.

## Instruments excited by a mallet



With the instrument layers excited by a mallet, the first two controls are affecting the body of the instrument:

The **shine** knob lets you balance the amount of filter applied by the resonator. It goes from a dark muffled sound to a bright razor sharp noise.

The **mute** knob lets you stop the vibration of the resonator, a bit like palm muting would do on a guitar except it works on all types of materials.

**Position** lets you change the point where the hammer hits the resonator, introducing those subtle changes in the timbre that bring the instrument to life.

Finally, **impact** will affect the material of the hammer, interpolating from a hard head to soft felt and metal brush.

## Instruments excited by noise



The instrument layers excited by Noise have six instrument control parameters.

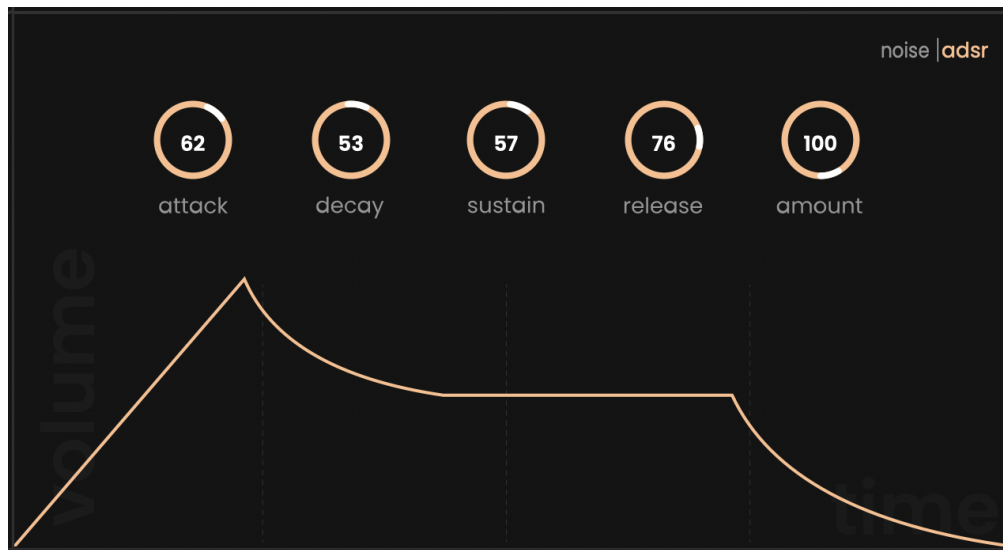
The first three shape the timbre of the noise going through the resonators:

**Color** is similar to Shine and **Resonance** to mute, except that on this one, the more you turn the knob the more you dial in resonances. **Grain** has the effect of turning the noise into tiny particles that will hit randomly, bringing a huge range of sonic possibilities with a very organic touch.

The bottom row shows the **LFO parameters** that bring movement into the harmonic content of the exciter. Choose between a large selection of waveforms and dial in the effect at your desired clock speed.

In addition to that, you can switch from the noise main parameter's panel to the **ADSR control** via the top right-hand corner. It contains the classic attack, decay, sustain and release parameters that you could find on any envelope of this type, plus an amount knob that lets you choose the maximal gain of the ADSR.

Please note that the more continuous excitation you add with the Expression knob of the instrument layer, the less you will be able to hear the effect of the ADSR.



Instruments excited by sequence

The screenshot shows two arpeggiator instances, 'arpeggiator 1' and 'arpeggiator 2'. Arpeggiator 1 has a randomizer knob at 52, a timbre 1 knob at 0, an arp select knob at 1/2, and a sync knob at 20 bpm. Arpeggiator 2 has a timbre 2 knob at 100. Both arpeggiators have a 1/16 note value and a 'Basic - 16th great ri...' preset. The interface includes a 16-step sequencer for each arpeggiator and an octave selector.

The instrument layers excited by sequence have slightly more parameters you can access from the GUI. Let's first focus on the timbre and the randomizer knobs.

**Timbre 1** and **Timbre 2** are affecting the brightness, the shape, the excitor material, and the decay of the sound in a very organic and fluid way. The **randomizer** creates some variations on the hit position and the velocity applied to the mallet, bringing lively variations that will get a natural touch to your sequence.

Every instrument played by a sequence comes with a **doubled arpeggiator** to automatically add an exciting rhythmic dimension. This lets you write two different sequences and jump from one to another instantly with the **arp select** knob. Let's review the different parameters.

On top of each arpeggiator, you will find the usual **time division** that will change the duration of one step proportionally to the master tempo of your DAW, assuming the sync is ON.

On the top right corner you will find the **play mode** of the arp. This tells the arp in which order he must play the note :

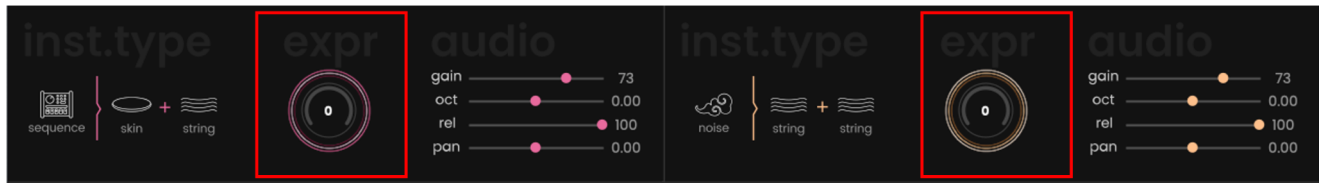
- up (from lowest to highest note)
- down (form highest to lowest note)
- up&down1 (up movement followed by down without repeating the highest and the lowest note)
- up&down2 (up movement followed by down with repetition of the highest and the lowest note)
- chords (all notes at the same time)

The sixteen-**step grid** lets you turn on and off the steps to create rhythms. The length of the loop can be changed with the **horizontal slider**.

**Octave** parameters tell the arp to repeat the play mode pattern up to three octaves lower, higher, or both, depending on the direction selected with the arrow on its right.

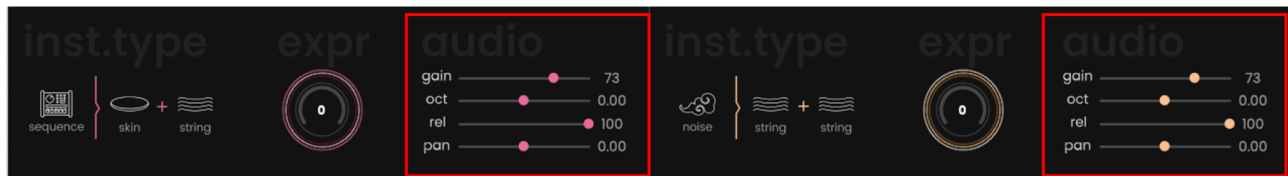
You can change the arpeggiators manually or choose between a large collection of presets, from basic beats to crazy complex grooves and odd time signatures.

## expression



Each layer has its own expression knob, letting you continuously shape the overall intensity of the sound's excitation. It adds a constant noise signal as an excitation source, giving additional textures for a thicker, more sustained sound. Note that depending on the initial excitation type, the expression may have slightly different effects.

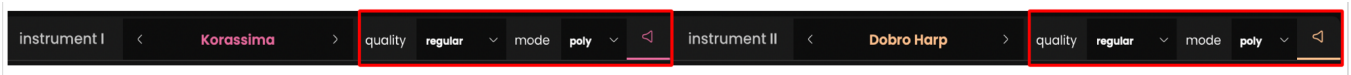
## audio settings



On the top right corner of each layer, you will find four horizontal sliders, letting you adjust certain parameters of the instrument.

- **Gain** : Let you control the volume of the instrument before it goes to the FX section. This can help you balance the volume of the two layers to make them blend together as you wish them to do.
- **Octave** : Let you tune the instrument root note. Use the dot to jump semitones and drag vertically from the digits to finetune to the cent.
- **Release** : Let you choose how long the sound lasts when you release a key. The longer the release the more acoustic and natural the sound will be.
- **Panoramic** : let you balance the sound from the right to the left channel.

## layer settings



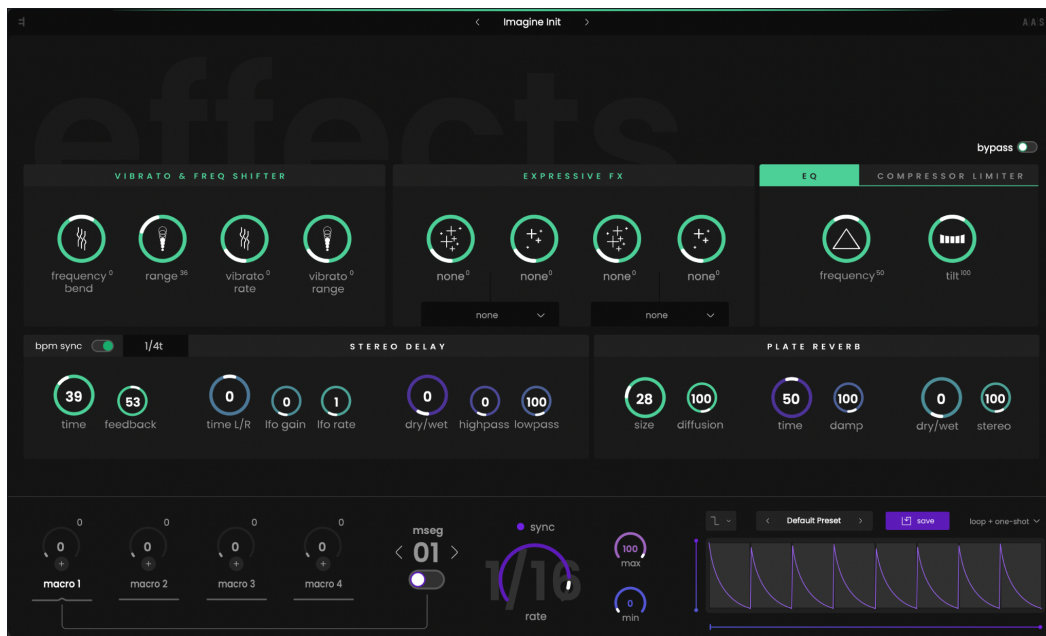
On the right of the layer preset browser, two drop menu let you set the layer:

- Quality: You can select a higher quality for the layer. It will add more definition in the high-end frequencies like oversampling would do. **Note that superior quality requires more CPU calculation.**
- Mode: You can choose your layer to be either monophonic or polyphonic. Imagine has eight voices of polyphony. Monophonic priority is on the last note played.

Finally, a little speaker icon lets you activate or deactivate the layer.

## FX page

Imagine provides a high-quality, modular effects page shared by both Instrument layers.



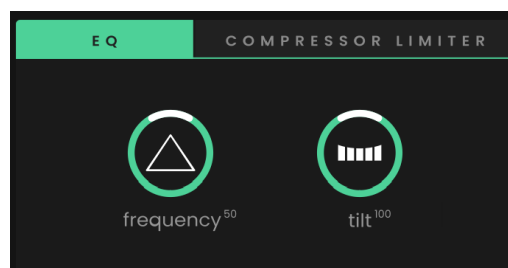
## vibrato / frequency shifter



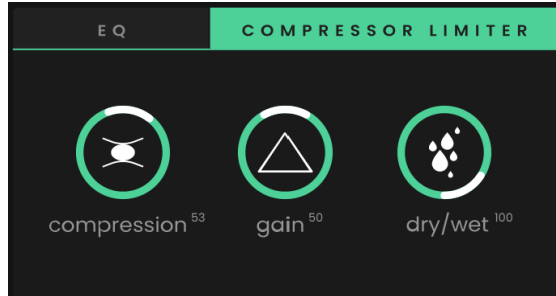
Imagine has an onboard Frequency shifter that can have more than one function. The first one is to simulate a vibrato effect. Simply dial in some range and adjust the rate as desired.

The Frequency shifter can also perform as a pitch bend. That is the reason why the frequency bend is assigned by default to the pitch bend (cf Midi learn). The maximal range and the actual frequency bend can be done using the left side knobs.

## equalizer / compressor



A tilt EQ can be used to adjust the timbre of the sound, which can sometimes be a little out of balance due to the organic feel of the physical modeling synthesis. Simply set a frequency that will divide the spectrum into two parts. Increasing the tilt will boost frequency above and proportionally lower frequencies under the selected split. Decreasing the tilt will have the opposite effect.



Because physical modeling synthesis plays with powerful transient and subtle releases, a compressor may be used to bring more balance in the different volumes the a which the synth produces sound. Because compression can be intimidating, we simplified it into a one-knob control effect: just dial in some compression to your liking without having to care about ratio and envelopes.

For a proper gain staging, the volume knob can be tweaked to increase or decrease the volume coming out of the expressive FX and before it is injected into the stereo delay and the reverb (complete signal path schematics can be found at the end of this manual). Please note that the gain knob is going through a soft clipper. It can therefore be used to thicken the sound with subtle distortion.

## expressive fx I & II



This module offers instant access to a panel of different effects designed to enhance expressive performances.

Two independent FX units which both contain an array of efficient and easy-to-use effects, customizable by 2 macro parameters. The Expressive FX I output is routed to the Expressive FX II module's input.

#### tremolo

Modulation of the amplitude of the signal applied by a triangle LFO.

- amount: The depth of the modulation, with no amount corresponding to no modulation at all and full amount corresponding to an amplitude variation between 0% and 100%.
- rate: Frequency of the LFO (ranging from 0.1Hz to 10Hz)

#### resonant lowpass

A low pass filter that only allows low frequencies to pass by attenuating high frequencies.

- frequency: The cutoff frequency at which attenuation of the higher frequencies begins.
- q: Resonance of the filter that allows to accentuate the frequencies at the cutoff point.

#### resonant highpass

A high pass filter that only allows high frequencies to pass by attenuating low frequencies.

- frequency: The cutoff frequency at which attenuation of the lower frequencies begins.
- q: Resonance of the filter that allows to accentuate the frequencies at the cutoff point.

## autopan

Panning effect where a sinusoidal LFO modulates the left and right channel volume to add movement to your sounds.

- amount: The depth of the modulation, with no amount corresponding to no modulation and panning, and full amount corresponding to opposite amplitude variation between 0% and 100% between left and right channels.
- rate: Frequency of the left/right modulation, ranging from 0 Hz to 10Hz.

## distortion

Non-linear cubic distortion that alters the frequency spectrum by adding harmonics to the signal, producing an effect similar to amplifier distortion.

- amount: Crossfade between the input signal and the distorted signal.
- drive: Controls the intensity of the distortion, ranging from subtle saturation to heavy "fuzz"-like distortion.

## noisifier

Adds noise grains that respond to the amplitude of the incoming signal.

- amount: Crossfade between the input signal and the noise grains signal.
- Tone: Controls the grain density while shifting the frequency band of the noise. Shifting the parameter from left to right will shift the noise frequency band from low to high while decreasing noise grains density.

## ring modulation

Metallic effect that adds harmonics by modulating the original signal with an extra oscillator.

- amount: Crossfade between the incoming signal and processed signal.

- frequency: Adjust the frequency of the oscillator.

#### phaser filter

Phaser effect with no internal modulations that acts as a regular filter. Add peaks and notches to the signal.

- amount: Control the intensity of the peaks and notches of the filter as well as their spacing.
- frequency: Adjust the cutoff frequency of the filter.

#### phaser negative

Phasing effect with inverted polarity that is controlled and modulated by an internal LFO. Add notches sweeps to the incoming frequency signal.

- intensity: Increases the overall strength of the effect, by increasing depth, notches width, frequency band and feedback gain of the phaser internally.
- frequency: Controls the frequency rate of the internal LFO which modulates the notches sweeps of the phaser.

#### phaser positive

Phasing effect that is controlled and modulated by an internal LFO. Add notches sweeps to the incoming frequency signal.

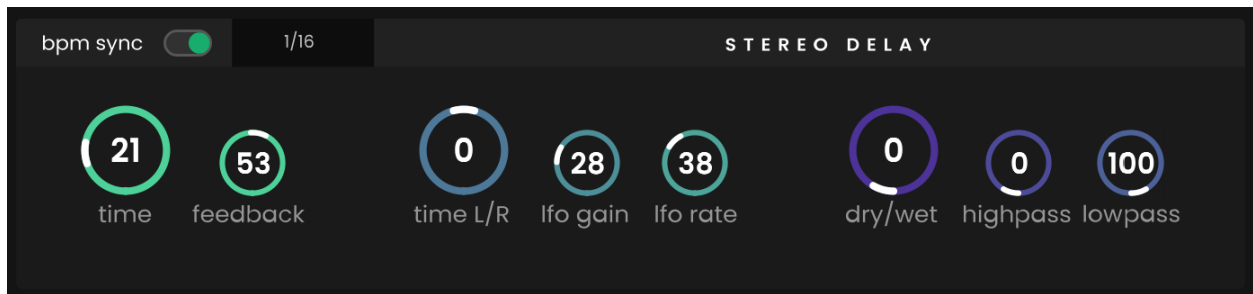
- intensity: Increase the overall strength of the effect, by increasing depth, notches width, frequency band and feedback gain of the phaser internally.
- frequency: Controls the frequency rate of the internal LFO modulating the notches sweeps of the phaser.

## chorus

Ensemble effect that add thickness and stereo movement to your sounds. The chorus is controlled and modulated by an internal LFO.

- intensity: Increase chorus depth and time.
- frequency: Controls the frequency rate of the internal LFO responsible for the chorus movements.

## stereo delay



Versatile effects that offer individual time controls over right and left channels.

A stereo delay with two independent delay lines per channel and inner LFO controlling the delay times of both lines. The delays' lines then go to a stereo lowpass-highpass filter chain.

## delays

- Time: Set the global time for the two delay lines, in milliseconds or bpm divisions.
- BPM Sync: Switch the delay time from milliseconds to BPM divisions. When activated, the delay time will be dependent on the host tempo.

- Feedback: Amount of feedback applied to the delay line. Increasing the amount will increase the number of repetitions of the incoming signal, until it gradually fades out.

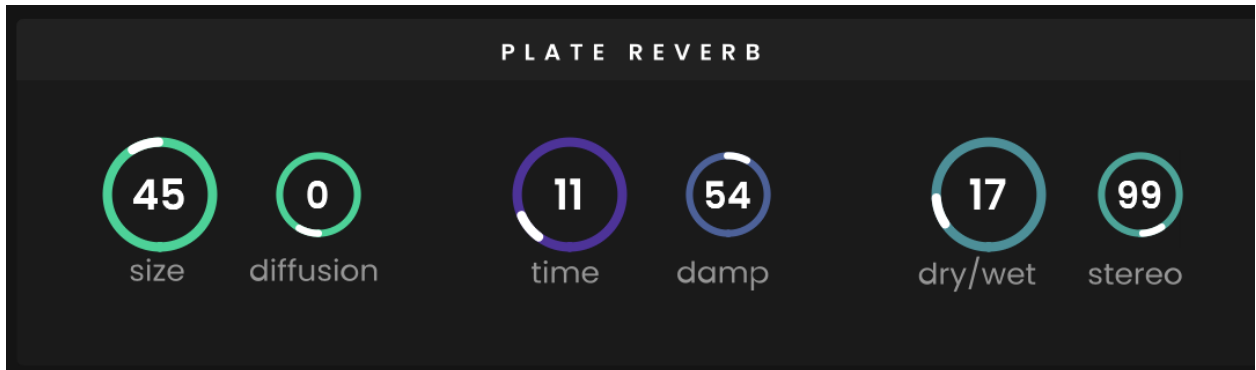
#### time mod

- LFO Gain: Apply LFO that modulates the time of the delay lines over time. When set to 0, no modulations will be applied.
- LFO Rate: Set the frequency at which the LFO is cycling.
- Time L/R: Attenuator and stereo effect for the independent delay lines. When set to 0, the time of each delay line will be equal according to the value set by the Time parameter. Increasing the knob will produce a stereo effect and gradually reduce the right channel delay time until it reaches 0, leaving the left channel delay time unchanged. Decreasing the knob will produce a similar stereo effect by gradually reducing the left channel delay time until it reaches 0, leaving the right channel delay line unchanged.

#### mixer

- Dry/Wet: Blend between the incoming dry signal and the delay effect signal.
- Highpass: Apply high pass filtering to the delayed signal in both left and right channels by setting the cutoff frequency.
- Lowpass: Apply low pass filtering to the delayed signal in both left and right channels.

## plate reverb



Add dimension to your sounds with this customizable plate reverb model.

### overview

Fully flexible plate-style reverb. All parameters can be automated for real-time smooth manipulation.

### mixer

- Size: Shift the size of the modeled plate surface.
- Diffusion: Controls density and spreading of the reverb reflections.

### decay

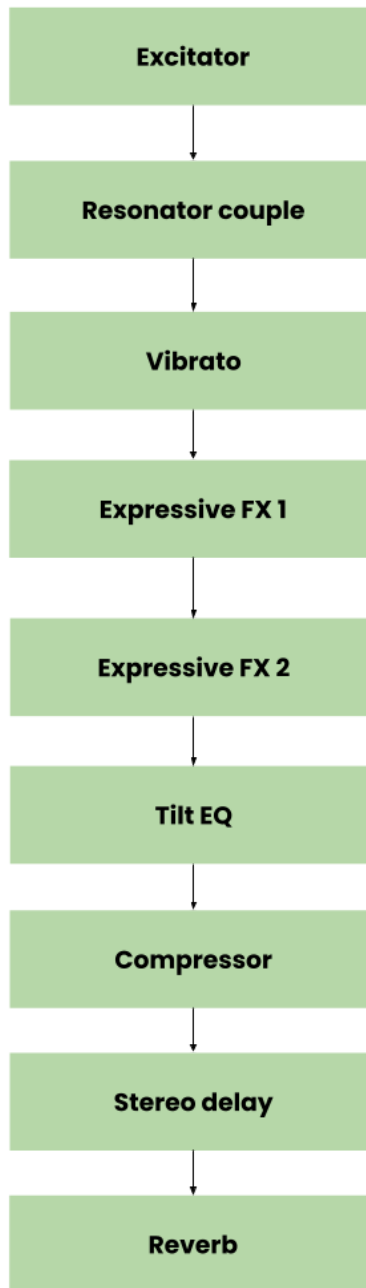
- Time: Duration of the persistence of the reverb signal
- Damping: Attenuates high frequencies from the reverb reflections.

### plate

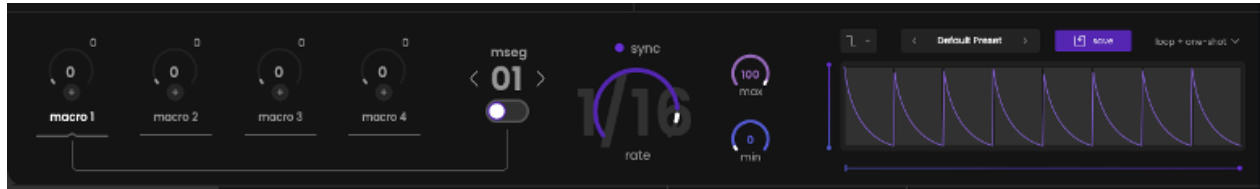
- Dry/Wet: Crossfade between the input signal and reverb signal.
- Stereo Spread: Controls the stereo width of the reverb signal, from strictly mono when set to the left to a full wide stereo when set to the right.

## signal path

To conclude the chapter of the module editor, let's check the signal path of the plugin:



# modulation system



Imagine has been created with this multidimensional approach which allows producing vivid and evolving textures and offers several dimensions of sonic exploration within every single preset. It is around this vision that the modulation system has been created. Imagine offers four fully mappable macros entirely dedicated to expressivity, each of those possibly controlled manually, by a multi-segment envelope or by an external MIDI controller.

## macros and mapping

Each macro can be mapped to almost any parameter of Imagine. To do so, click on the “+” symbol under the macro you want to map.



As you enter the “add to macro” mode, the interface simplifies, showing you all the parameters where you can map your macro. Knobs and sliders are now surrounded by a gray gauge.



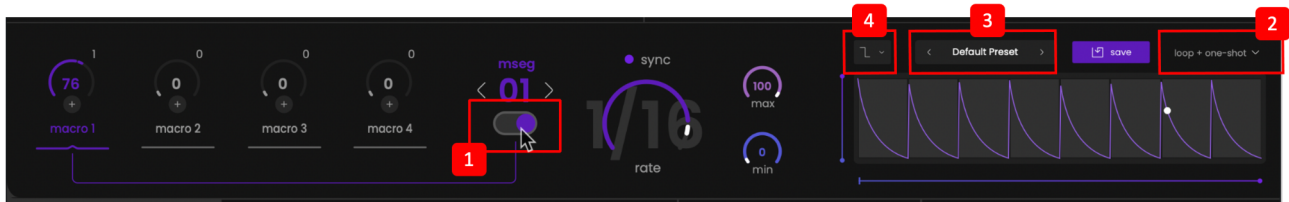
Just click and drag to fill that gauge as much as wanted. The maximal amplitude is shown by a purple circle and the actual position of the parameter, once modulation applied, is indicated by a white dot (both remaining visible once out of the “add to macro” mode).



To quickly change the macro you want to map without exiting the “add to macro” mode, you can click on another “+” icon or navigate using the arrows surrounding the number of the currently selected macro.

To exit the “add to macro” mode, simply click again on the “+” icon or hit close on the top right corner of the interface.

## multi-stage envelope generators (MSEGs)



Each macro is linked to a dedicated MSEG capable of automatically controlling its values. To activate MSEG, you just have to click on the dedicated switch (1). Within a few clicks, you are able to change the behaviour of the expressivity of the sound, leading to a vast territory of sonic exploration and experimentation within every single preset.

MSEGs have four play modes (2) :

- **Manual:** The MSEG acts like a sophisticated curve response editor. The main knob controls the X position, which modulates the knob depending on the waveform selected.
- **Loop:** The MSEG acts as a never-ending cycle, the waveform is played in loop without taking notice of any key pressed or released.
- **Loop + One-Shot:** The MSEG starts cycling once a note is played and restarts from the beginning when all notes are released a new one is pressed.
- **One-Shot:** The MSEG plays only one time when a key is pressed and holds the last value of the waveform until all notes are released.

## loading an MSEG

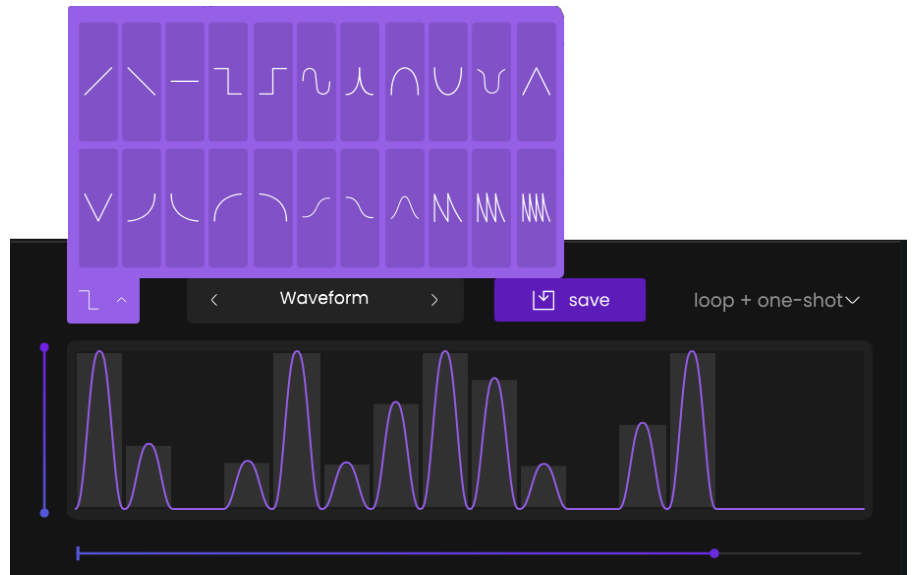
To load an MSEG preset, simply click on the box (3) with the preset name to open the menu, or use the arrows to quickly navigate through a folder.

Presets are categorized into ten folders :

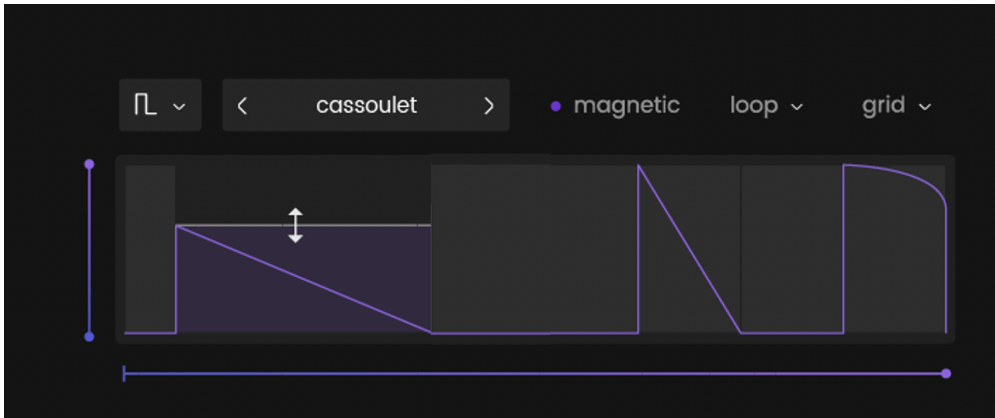
- Basic: Most basic forms repeating in a 1/16th pattern
- Complex: Complicated patterns with multiple waveforms
- Envelopes: One-shot curves with attack and decay
- Gates: Square waveforms with a constant value per step
- LFO: Stretched basic waveforms for ample and slow variations
- Odd: Patterns with non-conventional lengths
- Rises And Falls: Various shapes of increasing and decreasing curves
- Rhythm: Pattern shaped to create rhythmic grooves
- Tri: triplets based patterns
- Wobbles: sine and triangle waveforms

## editing MSEGs

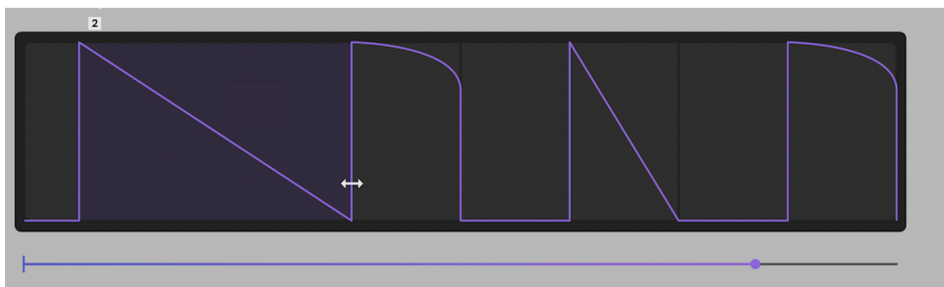
To edit the waveform, open the edit menu (4). It consists of a popup containing all the available curves. Select one curve and click on a step to apply the curve.



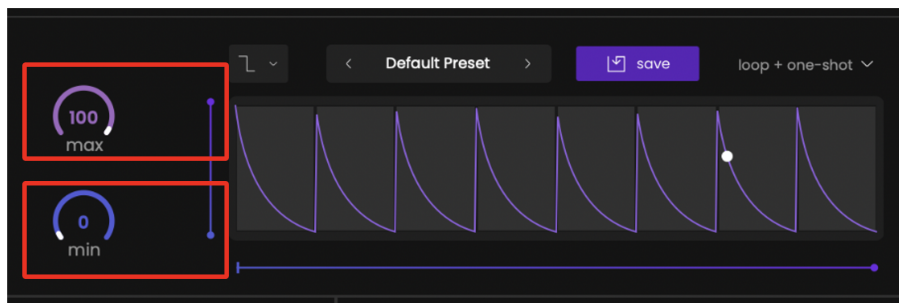
If you click and drag across several steps, the curve will apply on all of them. Once released, the curve is automatically deselected. Choose another one and repeat the process.



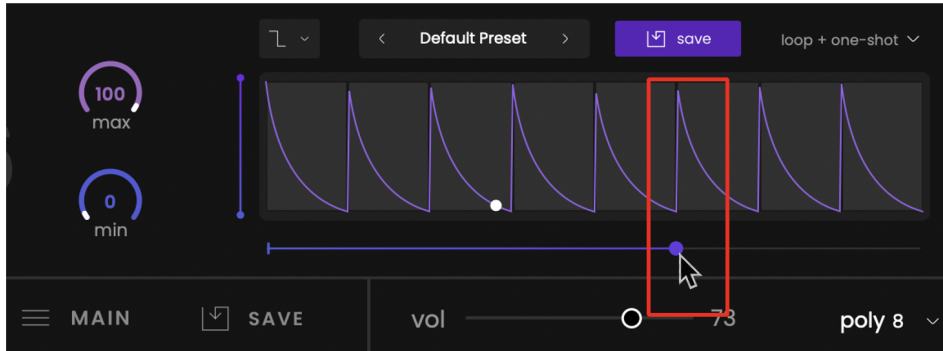
When clicking on a step, you can edit the maximal value of the step. Use it to create more complex curves.



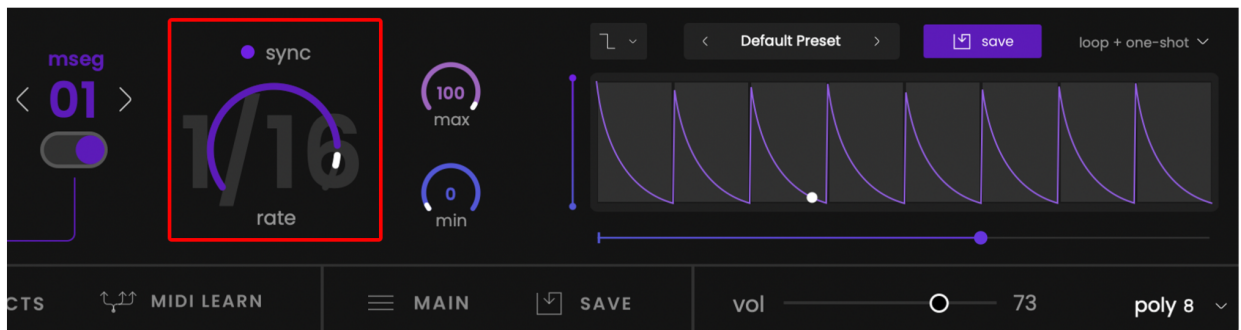
The size of a step can be adjusted by dragging its right side. Note that the size of a step will always match the grid.



The maximal and minimal value can be adjusted with the two knobs, or with the vertical slider on the left of the MSEG window.



The Length can be set by using the horizontal slider underneath the MSEG window.



The rate can be adjusted with the main knob. Please note that in "manual mode", the rate knob turns into a position dial.

## saving MSEG presets

You can save your own custom MSEG preset by clicking on the save button. Simply enter a name in the popup and press OK. You can access your own preset in the user folder.

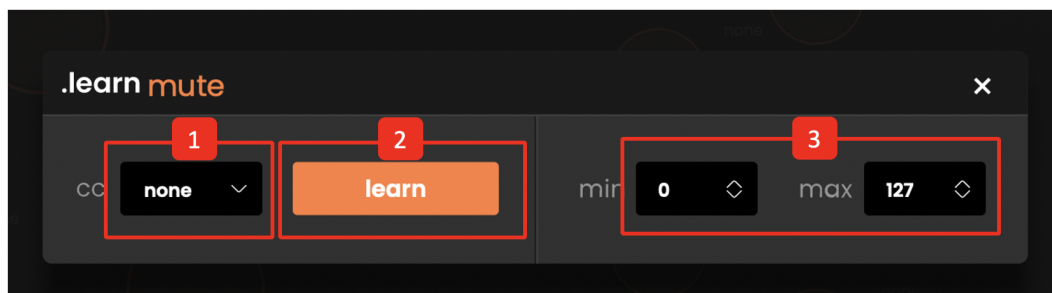
# midi learn

By clicking on the midi learn tab located in the bottom bar, you activate the midi learn mode which appears as an overlay over the instrument or the FX page.



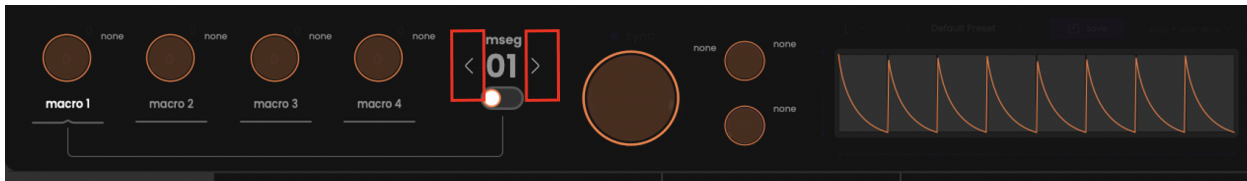
## assign a parameter

To assign a parameter to a control of an external midi controller, you just have to click on the parameter you want to control. A popup is going to appear.



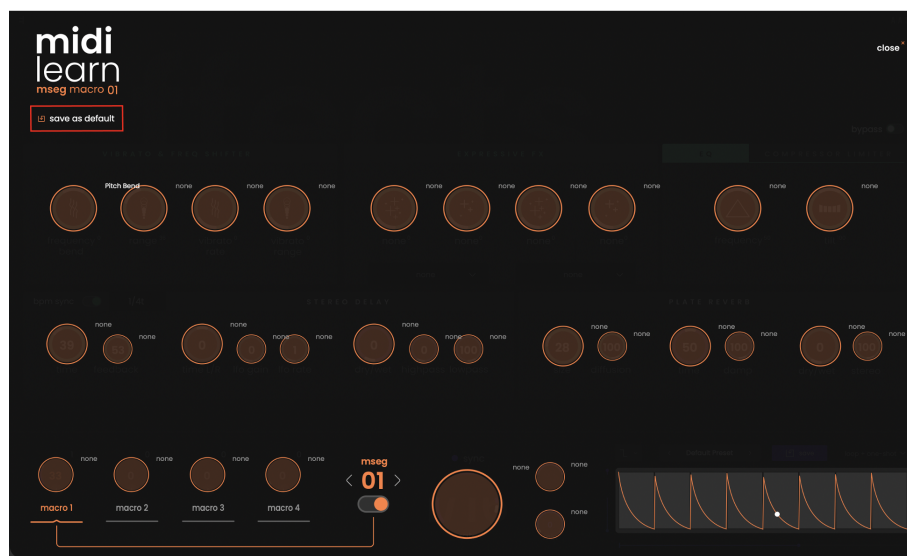
Then, you just have to select (1) the CC you want to use. You can also use the midi learn function (2). Finally you can adjust the range of control (3).

## assign MSEG parameters



The parameters of MSEG can also be controlled by an external midi controller. This use case is very nice when you want to use both MSEG and expressive controllers. To have access to the parameters of the other MSEGs, you just have to use the navigation arrows.

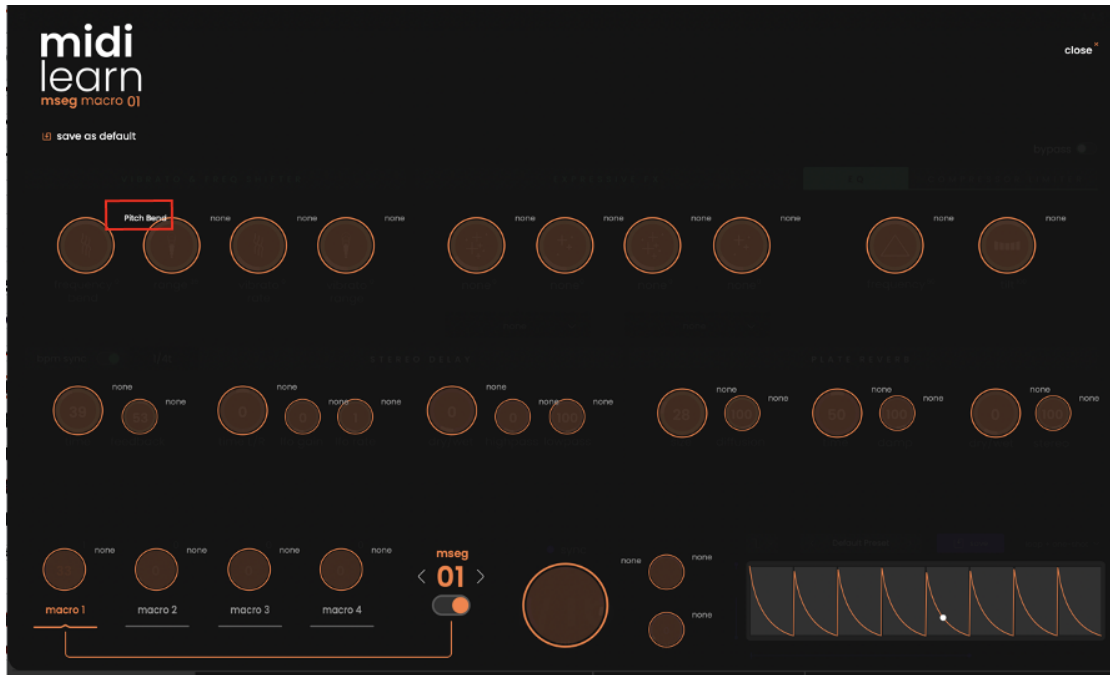
## save a midi configuration as default



If you have a midi configuration you want to keep each time you open your plugin, you just have to click on "save as default".

## pitch bend assignment

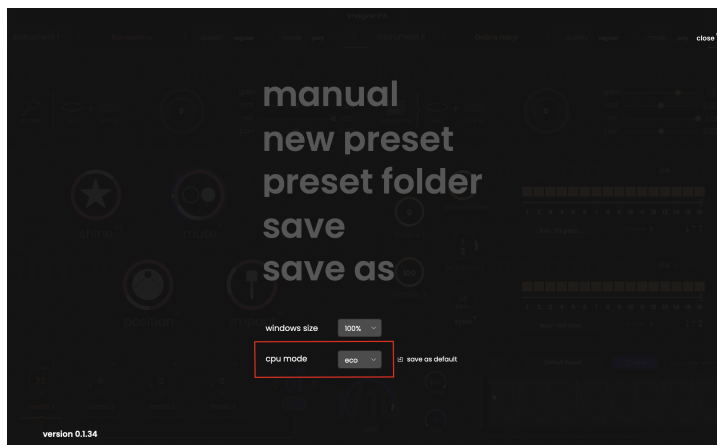
When you use physical models, the pitch-bending functions can cause a high level of CPU consumption. To avoid this situation, the pitch bend function is allowed thanks to the vibrato/frequency shifter of the fx page. That is the reason why the parameter “frequency bend” is assigned by default to the pitch bend.



# cpu optimizations

Physical modeling can sometimes cause high levels of CPU consumption, especially when parameters are modulated in real-time. A huge amount of work has been done to reduce the CPU consumption for each parameter. However, in certain circumstances, it is not enough, here is some advice to reduce the problem.

## activate eco mode

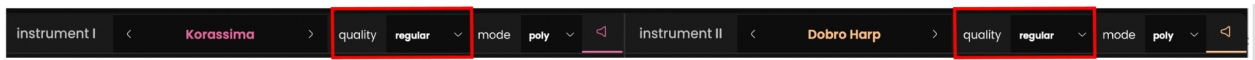


The first thing you can do is to select the “eco mode” in the main menu. This eco mode will offer you an alternative and optimized version of the main presets.

## other tips to reduce cpu consumption

In certain cases, you may look to optimize the CPU consumption of your preset. Here are some tips to do so:

- Reduce the quality of your instrument layers.



- Reduce the number of polyphonic voices.



- Try to stop modulate some parameters (certain may be especially greedy depending on the instrument).

# Thanks everybody

First of all, a big thank you to the customers who have chosen to trust us. We hope you enjoy the product and wish you great musical experiences with Imagine.

We would also like to thank the Applied Acoustic Systems team for the trust they have placed in us, for their kindness and professionalism. A big thank you to Marc-Pierre, Philippe, Alexandre, and all the technical teams of AAS.

We would then like to thank everyone who is a member of Expressive E, or who revolves around the company, for making this adventure possible. A big thank you to Julien for your vision, your high standards, and your creativity, to the technical teams, Fabien, Xavier, Gabriel, Benjamin N, and Benjamin R, Pierre M, Pierre H, and Sébastien D who all contributed to making this product a success. . Thanks to Mathieu L, Adrien V and Sébastien G for the tests, the sound design. Thanks to Adrien for infusing this ergonomics and this aesthetic into our products and our marketing content. Thanks to Roméo, Christopher, Louis, and Arthur for allowing us to have great marketing and sales launches. Thank you to Guillaume, who by his high standards, his talent and his dedication contributed to the success of this product. Thank you to the artists who were kind enough to give us feedback on the product: Olivier Arson, Cyrille Marchesseau, Ozes, Paul, Will, and the Mad Hatter. Your feedback is precious to us, a big thank you for that.

Expressive E was built through this great team which continues to grow together and improve each year.

Alone we go faster, together we go further.

Thanks everyone,

Expressive E team

E X P R E S S I V E 