illegalMachine 1.2.1

Setup and Usage Manual

Installation

Windows

Double click on **Setup illegalMachine 1.2.1.exe** and follow the on-screen instructions.
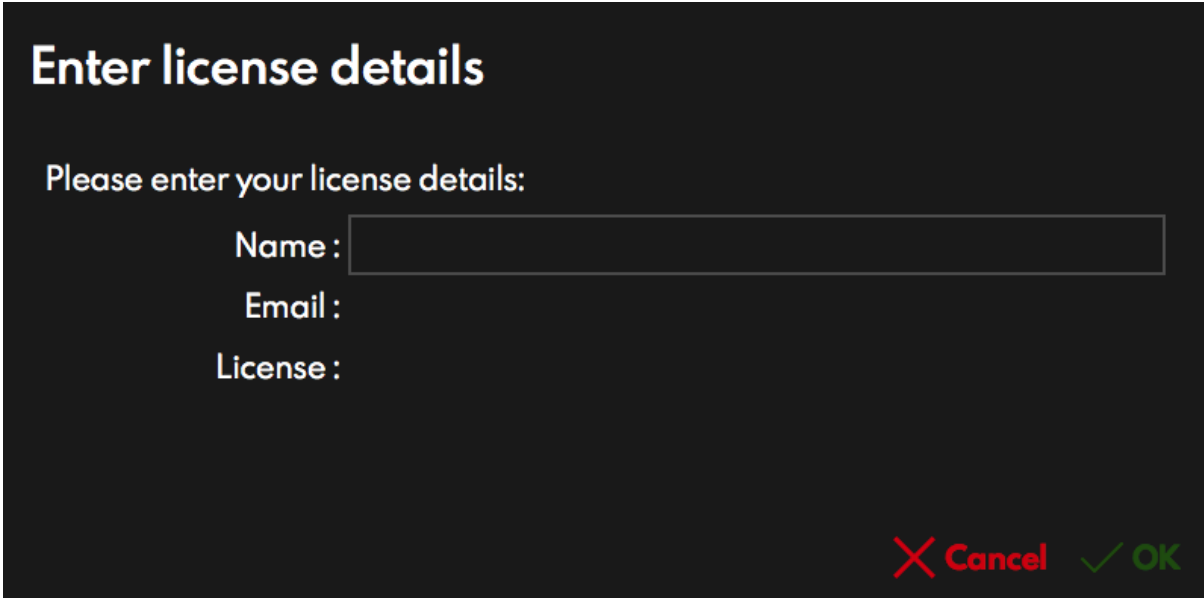
macOS

Double click on **Setup illegalMachine 1.2.1.pkg** and follow the on-screen instructions. After clicking Install you will be prompted for your user password to complete the installation.

Linux

Follow the instructions in README.txt

Registration

After purchasing a license for illegalMachine or the Everything Bundle, please check your email for the registration keys (the email will be from FastSpring if you purchased from bomshankamachin.es, please check in your Spam folder if you cannot immediately find it), you can also find your license details from the user account area of our website. After opening the plugin in your DAW, click on the Options menu and choose Registration.

Now enter the Name, Email and License fields exactly as shown in the email you received, finally click OK. Upon successful registration you will be shown a confirmation message, and the plugin will show "Registered to <your name>" on the user interface.

About illegalMachine

illegalMachine is a unique sample playback device, inspired by the "follow rule" technique for creating random leads, "grids" and effects, but taken to the next level.

- Separate lanes for sample / amplitude / pitch / filter / effects: reach near-infinite variety in your sounds by utilising the independent lengths of each lane.
- Extensive Modulation Matrix: enjoy unparalleled control over your sound with an extensive modulation matrix, allowing you to shape and evolve your audio precisely.
- Five LFOs: take your modulation to the next level with five LFOs, some of which are capable of operating at audio rate, adding intricate movement to your sounds.
- Insert Effects for Samples: elevate your sample manipulation with insert effects that can be applied directly to your source sounds, giving you greater sonic versatility.
- Advanced Sample Playback: forward and reverse playback, time-stretching, and looping capabilities, expanding your creative potential.
- Macro Controls: streamline your workflow by automating multiple parameters simultaneously using macro controls, empowering you to experiment and evolve your sound.

Philosophy of illegalMachine

The illegalMachine was created in order to bring the Ableton Live "follow rule" technique to all DAWs. This is a technique demonstrated in depth by Tristan in his _Futurephonic Masterclass, if you would like to learn more you can watch him go into the details of the technique on Facebook here, skip to 18 minutes and 38 seconds for the relevant part.

Using illegalMachine

The first step you will need to do when creating a new patch is to add some samples. You can either use the "Add Sample" button towards the top of the plugin, either choosing samples from the included factory presets (which includes a useful "Silence" sound) or from disk, however you may only add one sound at a time using this method. More often that not you will want to add multiple sounds in one go, and this can be achieved by simply dragging one or more files onto the plugin window, at which point the plugin will show:
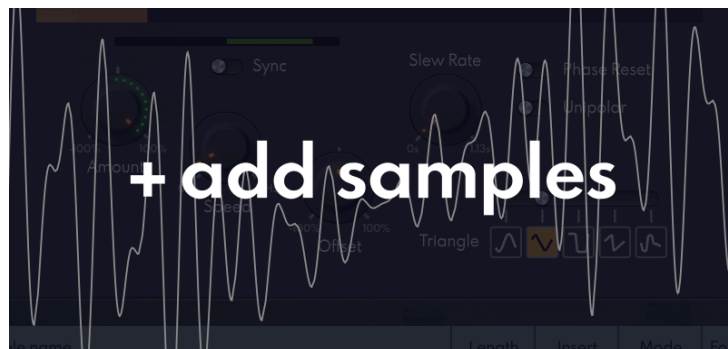
After adding sounds to illegalMachine you can now start to play MIDI notes into it. If the "Auto-Machine" is engaged then whilst a note is held down it will play a sample and then play another sample based on the follow-rule for the first.
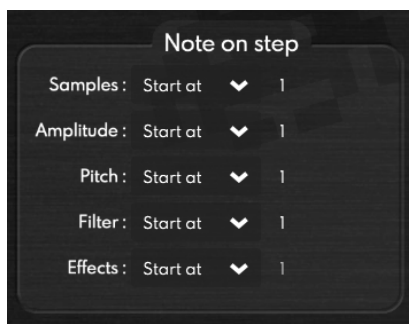
You can choose the "rules" for each of the "lanes" to decide which step is played when illegalMachine first receives a MIDI note message, either starting at a specific step, playing the next step after whichever was played last at MIDI Note Off, or a random step, either from a range of steps, or a choice of steps.

Samples list

Clicking on a sample step, such that it becomes highlighted will select that sample and allow you make changes to the length of the step, the playback method, direction, tuning, follow rule and also the insert effects that can be applied to a sample. There is a "Preview step" tick box that overrides the follow rule and allows you to keep hearing the same step repeated. The Options menu has an entry for clearing this setting from every list.

#	Sample name	Use	BPM	Length	Insert	Mode	Gain	Follow rule	
1	3 FM Tings	-	145.0	1/16 ∨	-	⇌ PingPong L.	+0.0dB	Random ∨	2, 3, 4, 5
2	3 FM Tings	-	145.0	1/16 ∨	-	◯ Loop Leg.	+0.0dB	Random ∨	3, 4, 5
3	3 FM Tings	-	145.0	1/16 ∨	-	◯ Loop Leg.	+0.0dB	Random ∨	2, 5
4	3 FM Tings	-	145.0	1/16 ∨	-	◯ Loop Leg.	+0.0dB	Random ∨	2, 3, 5
5	3 FM Tings	-	145.0	1/16 ∨	-	◯ Loop Leg.	+0.0dB	Random ∨	1, 2, 3

You may also edit the "use BPM" setting, BPM of the source, length, playback mode, gain and follow rule directly from the sample list.

When editing a sample you can drag the little "flags" in order to set the start and end points in the source sample.

You can also do this by just clicking and dragging on the sample itself.
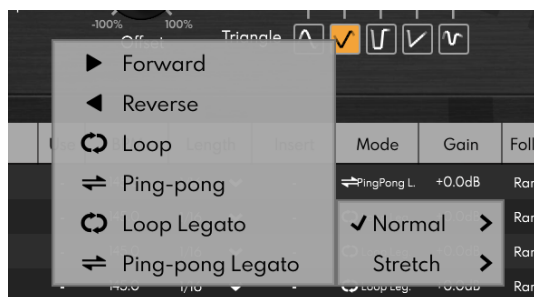
There are "Normal" and "Stretch" versions of the playback engine available for use. The stretch is a naïve stretcher that will introduce artefacts, but this can be a pleasant effect when tuned correctly.

The legato modes start playback according to either time or beat when **Use BPM** is enabled and the correct source **BPM** is selected. "Normal Loop Legato" can optionally have its loop setting enabled, so picking this setting when your source sample has any kind of rhythmic element should enable it to stay in time when picking a new piece of audio to play back.
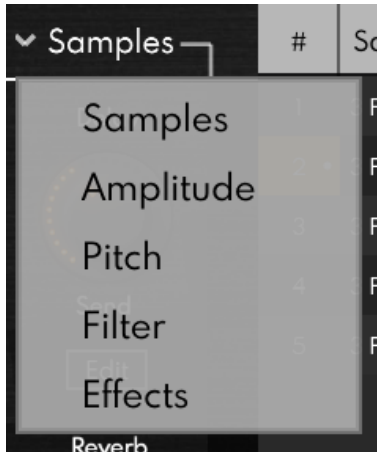
By clicking on "Samples" you can choose which of the "lanes" (or lists) you can make further changes to. You may also click and drag this control to the left or right to switch between lanes.

For each of the lists (except the effects) there is a similar concept of clicking the step in the list in order to access the parameters for that step. In all the lists you may double click in empty space at the bottom of the list in order to add a new step, however in the Samples list this creates a duplicate of the last step.

You can create duplicates of steps by dragging a step and holding the shift key.

Right clicking a row gives a menu that allows you to add/remove rows, or assign a colour to the row (this can help you stay more organised in complex patches), except in the Samples list where there is a Duplicate row option, and also a handy "Split" function. This allows you to take a longer sound and split it into equal smaller sounds.

Amplitude list

The amplitude list is where you can apply an envelope to the volume of the sample. There are two choices, "Free (ms)" and "Fixed (%)". The fixed envelope is constrained to the length of the sample step, the free envelope is like any other AHDSR envelope. The free envelope in conjunction with switching off "Auto-Machine" allows the illegalMachine to behave like a standard sampler, sounding from MIDI Note On until receiving a MIDI Note Off. Utilising the stretch modes here can give some fantastic results.

Pitch list

The pitch list is where you can apply an envelope to the pitch of the sample, it is very similar in use to the Amplitude list.

Filter list

The filter list is where you can apply either a Low Pass, Band Pass or High Pass 12db/octave State Variable Filter with an envelope much like the previous lists.
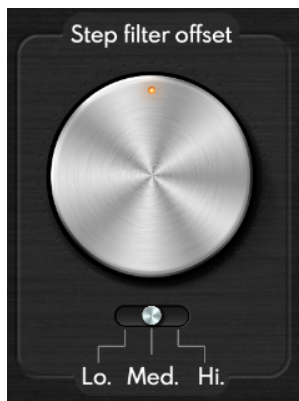
The step filter offset control can be used to simultaneously affect all the cutoff frequencies of every step in the list, either with a Low, Medium or High range of effect.

Effects list

The effects list is the simplest of all the lists, clicking a step does not give any further options. This is where you can set a Delay or Reverb send amount.
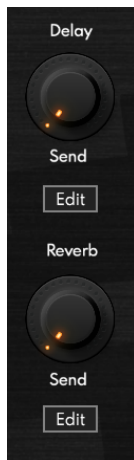
These steps work in addition to any send amount set here.

In order to make changes to the Delay or Reverb effect parameters, clicking the Edit button beneath each will open a small popup with their respective controls. You can dismiss these pop-ups by either clicking the small X in the corner of the popup, or by clicking anywhere else on the plugin.

Global Filter

Unlike the Filter list where each step has its own parameters, the Global Filter applies to the final output. This is a Ladder Filter with Drive that can be either 12db/octave or 24db/octave Low, Band or High pass filter. You can assign one of the lanes to be the envelope source for this filter. For instance you could use the Pitch lane and leave all the envelope amounts for on the lane to 0%:

#	Pitch	Env.	Follow rule	
1	0.00	0%	Next	⌄

And then the envelope is available to be used by the Global Filter without affecting the pitch of sample playback.

LFOs & Modulation Matrix

There are five LFOs available, with increasingly larger maximum rates, ranging from 15Hz maximum for LFO1, all the way up to audio-rate 900Hz in LFO5.
The controls for the LFOs are fairly self explanatory, and don't differ from any other LFO.

You may add up to 10 rows to the Mod Matrix, either by double clicking on empty space at the bottom of the list, or by clicking the small + icon at the bottom right.

After picking a modulation source you can then choose a destination and amount. Modulation destinations can be either Global, in so much as they affect every step, or can be made to only affect a specific step.

Macro Controls

The macro controls can be used in conjunction with the Mod Matrix to control one or more parameters as you so desire. Double clicking on the name (by default a hyphen) allows you to edit the name of that control so you can more easily tell what parameters it will affect at a glance.

Arpeggiator

The arpeggiator comes into effect when selected and illegalMachine receives more than one MIDI Note On at a time.

Safety Limiter

illegalMachine incorporates a "safety limiter" that is enabled by default to prevent any excessive output levels. It's designed to be transparent when not limiting and to introduce as little distortion as possible when doing its job. You can disengage it entirely or adjust the hold time (how long it will maintain the gain reduction when first triggered by an amplitude over 0dBFS) and the release time (how long it takes to return to unity gain) to your particular taste if you wish to leave it engaged.

Accessing Triplet/Dotted timing

If you wish to use Triplet or Dotted note timing, use the Timing control:

Options menu

From the options menu you can choose a theme, change the size of the plugin and enter registration details.

Presets control

The presets control gives you access to the factory presets by clicking the "burger" menu on the left. You can also load a preset from disk, save or export. Saving the preset will put it in the user presets folder on your disk, and will then also be available from the burger menu. Exporting a preset will collect all the samples together into one folder, and allow you to share your patches with other illegalMachine users. Clicking the Dice icon at the top left will generate a random name if you're struggling and need some inspiration to name your latest amazing patch! We take no responsibility for the hilarity or offence that may ensue.