

Welcome to

KLANGHAUS BIOMACHINE

KLANGHAUS BIO MACHINE is the next great addition to the original Klanghaus 2 Library, produced, composed and recorded by German musician, sound artist and instrument designer **Ferdinand Försch** & realized by **Best Service**.

With BIO MACHINE you have access to a big collection of unique rhythms and loops, played and programmed by Ferdinand Försch. This library provides a unique collection of Försch's self-created sound universe, still unmatched in inspiration and creativity.

New tones, grooves and small loopable fragments as well as the intuitive userinterface, give you a variety of sound design possibilities.



THE INTERFACE:

The BIO MACHINE interface is designed to be clear and intuitive. You will find basics like volume, pan, and ADSR-curve, but also a variety of effects like reverb, delay, phaser, bit-crusher and many more. And with 8 arpeggiators/step-sequencers and 17 step-modulators per patch you can go pretty wild! Almost every function can be quickly modulated with the custom-designed modulator presets, which gives you endless possibilities of sound-design in no-time!

Pages

MAIN SETUP ARP/STEP/FX+ LIJLI LIJLI LIJLI

Every Patch consists of 5 pages:

- Main setup: The master-section of every patch
- Arp/Step/FX+: Advanced functions of the master-section & master effects
- Part 1 3: Setup that affects only the white, green or brown key-group.

Main Setup:

	CREVERB Level ER-L. dry/wet MOD	
	DELAY dry/wet Feedback-MOD L/R filterlay 1	A D Sus-Vol
PAN PAN PAN	PILTER Freq. Res. F-MOD R-MOD	
Vel. to F.Freq dyn. range		

The main setup is the "command center" of every patch. Although divided into 3 different groups (white/green/brown keys), everything you do here affects the sound of the entire key range.

You can quickly access all FX & modulator presets from the white boxes. While effects have on/off switches (red lights), modulators can be deactivated simply by selecting the "OFF" preset.

 Some effects have only limited access to their controls, inviting you to experiment more with the modulation, rather than having "static" knob settings. But you can set your FX anytime on ENGINE's Pro Edit Page and even saving your own presets!

Vel. To F.Freq: The velocity to filter frequency gives you the option to filter the sound depending on played velocity. **Important note for patches with Part 1-3:** Although the option is in the MAIN SETUP, Velocity will react on the filter-settings of Part 1-3, not the MAIN-filter. (More infos below)

Compressor/Limiter: the compressor & limiter module is always at the end of the effect chain. The limiter features only an on/off switch, but can be adjusted in ENGINE's Pro Edit.

Arp/Step/FX+

ARP/STEP						MAIN FX-			
ARPEC	GIAT	OR	🐑 PHASER	speed	start freq	range	feedback	dry/wet	
PRESET	l.offset	shuffle	ph aan	1	OFF	OFF	OFF	OFF	
UD1 slow	\mathbb{O}	\odot	C RING-M	freqency	🕑 BIT-R	drive	bit mod	sample mod	
STE	P SEC	2	square	Θ	Cruch 1	Ð	FS 020	F5 014	
PRESET	rate	shuffle	S ROTOR	depth dry	/wet delay	U TUBE-D	output	drive mod	
BStep 003	1	29	Str DD1	6) (\mathbf{O}	Tube 001	\odot	OFF	

The Arp/Step/FX+ page adds more effects to the master-chain and also gives you access to the master arpeggiator & step sequencer.

Arpeggiator/Step Seq.: These two guys come with a big preset library and are affecting the whole key-range. They also give you more options than the versions of the 3 Key-groups:

Arpeggiator:

Vel.offset: While all notes of the Arp are played with the same velocity, you can alter it with this knob. This works best by assigning it to a dedicated midi-cc (see below)

Shuffle: This can be useful to add more "swing" to your arps. This works best with Klanghaus's multisampled instruments - try to use this with percussive patches!

Step Seq:

Rate: Every Step Seq preset has its own rate. By changing it, you could slow down or increase the speed of the steps, even take it to the extreme. And by assigning it to a midi-CC, you can create interesting effects with this control!

Steps: You can alter the played steps from 1 to 32. Keep in mind that some presets features less than 32 steps – selecting more will result in silence for the extra steps.

Arp + Step Seq: Although not intended, you could activate both the Arp and the Step Seq together! By experimenting with different presets and some midi-cc automation to can archive pure weirdness right out of the box!

- Important note: Because the Step Seqencers of the three key groups are turned on by default, using the arpeggiator at the same time could cause artifacts - in this case, simply turn off the step seqencers!
- Every knob or control (except preset menus) can be controlled by midi-CC, by simply right-clicking the knob & selecting the midi-ctrl# you want, or clicking on midi-learn and moving the control on your midi-device.

Key-Groups

Every patch of the new content is divided into 3 different Key-Groups: Part 1-3.



The color of the interface reflects the key color

The Key-groups give you similar options as the MAIN SETUP with a few differences:

- Vel. To F.Freq. is "master-only" when active in the Main Menu, the filter frequency of the PART's will work only based on played velocity
- Each PART has a dedicated Arpeggiator and Step Sequencer. This allows you to have different rhythms for each Key-group to create complex and varied grooves.
- Each PART also has a dedicated Reverb, Delay, Filter & Eq.
- The Parts also offer a pitch modulator, which can be fed with the many existing modulator presets.

Presets & Patches

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		2321		
	PART 2 REVERB Level 8	R-L. dry/wet	MOD	
	OFF OFF	\sim	DFF	
	Basic	> dbac	k-MOD L/R	\otimes
	Fast Staccato & Swells (Bipolar)	>	FSB 001	D Š
	Fast Staccato & Swells (Unipolar)	>	FSB 002	
	Fixed Value	>	FSB 003	
	Hard Steps (Bipolar)	>	FSB 004	
	Hard Steps (Unipolar)	>	FSB 005	
	Long	>	FSB 006	1
	Mixed (Bipolar)	>	FSB 007	LILL
,	Odd Rhythms (Unipolar)	>	FSB 008	
111	Pitch Steps	>	FSB 009	1111
	Smooth Grooves	>	FSB 010	
		9919	**	

 Effect & modulator presets can be selected within the white boxes in the interface.

Modulator Presets

BIO MACHINE features a range of ready-made mod-presets, which can be used for any modulator in the interface. Quickly change the sound by adding some movement to a filter, create rhythmic elements with the volume modulator, or create never heard before sound effects by modulating all effects in the FX+ page!

The Mod. presets are categorized in logical themes, that are waiting to be discovered – While "Basic" gives you simple modulation (1/8, 1/16, ect.), Hard Steps features more complex rhythms with hard peaks, ect.

Many themes come in bipolar (good for Pan or dry/wet settings) and unipolar versions (good for volume, filter frequence, ect.)



Pro Edit:

You can always look into modulation & effects, change it or even save you very own presets in ENGINE's Pro Edit!

	select layer		2
	select alternate	Þ	State Street, or
	select section	+	brown_part3
Select layer volume panorama 12.0 dB < C >	select all alternates select all sections select all free sections select all sections in alternate	Þ	white_part1 green_part2 xx1 xx2 xx3

All modulators and effects can be viewed by selecting the layer (Main setup & Arp/Step/FX+) or the 3 different sections (white, green, brown)



Modulators, arpeggiators and step sequencers can be found in the **Modifier section**. Just click on the desired Mod. to see the associated steps in the right window. There you will have the ultimate freedom to change everything as you wish and even save the new modulation as a new preset! (For more infos about ENGINE'S Modifier & FX, please look into the ENGINE Manual)

By design of ENGINE's Pro Edit, arpeggiators and step sequencers of **ALL** sections (Main Arp/Step, white, green, brown) can be only found in the Modifier section of the **layer**



Solo View	Insert FX
也 ᆕ add insert fx ⇒ insert fx bank	remove
frequency frequency frequency 60 Hz 4500 Hz 12100 Hz	
₹ 🖲 PHRSER	⇒ presets
Speed Start F Range Feedback	Spread
dry/wet (2002 %) (2002 %)	sync
₹ 🖲 RING MODULATOR	⇒ presets
Shape sinus Freq 10 Hz	
₹ Ü BIT REDUCTION	⇒ presets
Bit R. Sample R. 24.0 bit 44100 Hz	Drive a.a dB
	0

Just as with the modulators you can look into the fx settings or change the effects of the respective section and save new presets here.

 Please keep in mind that all parameters with green text are linked to the user interface.

With "add insert", you can also insert new effects of ENGINE's great collection. By changing the order of the FX-chain (simply "grab" the effect with the mouse and drag it up or down) you can also change the overall sound - there are no limits!

Patches:

All BIO MACHINE Instruments are organized in Subfolders, which consist of several patches/versions. The Bonus Patches folder contains some examples, which make use of the given possibilities of modulation and fx, ready for you to explore & play.

You can also create and save your very own versions too!



In order to have your own patches show up in the Klanghaus 2 Library, you have to save them as new patches in the correct library folder.

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