

# NI Premium Library

In this fine collection you will find instruments and sounds which were developed for you by brilliant sound-designers from all over the world.

## 3-oSC



*3-Oscillator-Synthesizer for classical analog sounds*

The 3-oSC offers you the straight-forward voice architecture of classical simple analog synthesizers. The production of extraordinarily complex sounds or unique, innovative sound creations is not the main intention here but rather a quick access to typical and very powerful analog sounds.

The sound of the 3-oSC is – as the name already indicates – powered by three separate oscillators which can generate either sawtooth or pulse waves. If the pitch setting is identical and the fine tuning values are different a floating and very tight basic sound is produced which is likewise good for walls of sound as well as for bass- or lead-sounds. In case that the oscillators are tuned in one or more different octaves to each other the results are very powerful and broad sounds with a typical vintage-analog character. As three oscillators are available it is also possible to determine intervals between them which will produce a triad

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when a single note is played. Such sounds are well known, for instance, in the area of house-music but even the forefathers of modern electronic music – the gentlemen with the legendary project name "Kraftwerk" – knew how to use these attractive options.

Although the architecture of the 3-oSC is intentionally kept on a simple level its filter allows various sound shapings: You can switch the filter between a classical low-pass characteristic, band-pass and high-pass as well as a combination of low-pass/band-pass. Regarding the low-pass and the band-pass you can additionally choose between an edge steep of 12 or 24 db – this means you can decide whether the filter works rather soft or "vigorous". The filter has an envelope on its own with both a positive and negative adjustment range for modulation intensity. Negative modulation intensities are particularly interesting with regard to high and band-pass filter modes.

Instrument: NI; Sounds: Sound Burst; Demo: M.S.Zanx

## 6-Pack



*Six special samplers as an ideal tool for studio or live-act*

6-Pack combines sequence-controlled sample playback with loop playback based on Granular Synthesis. These words may sound very technical and rather unspectacular, but the possibilities they describe are astonishing: 6-Pack allows you to combine sample loops which are

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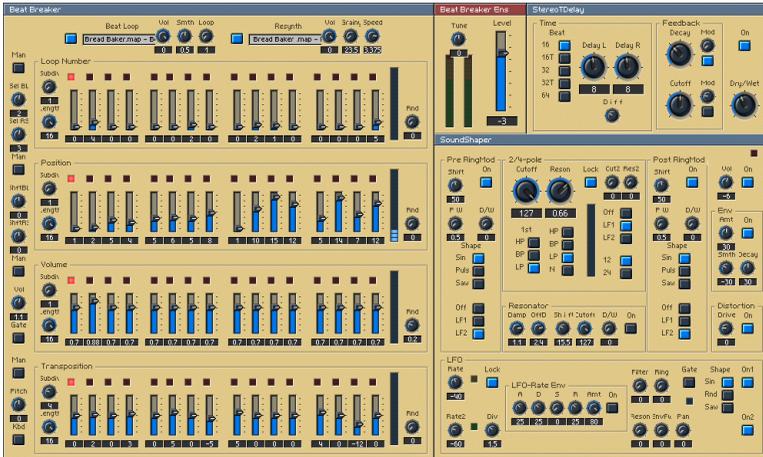
automatically synced - regardless of their original tempo. You can mix, mute and filter these loops, alter their pitch and shift them with beat precision - all in realtime and without affecting their tempo. Two of 6-Pack's samplers are intended to be used with single shot samples. These samplers include a simple 16 step sequencer which allows you to program patterns with the samples being used.

The other four samplers are optimized for loop playback. Precisely edited loops are automatically synced and can be shifted against each other based on a 16th note grid. This works rhythmically correct and absolutely smooth - even under live conditions. In addition, you can alter the pitch of each loop and filter it with separate modulated high-pass and low-passband-pass filters.

Important for live performances: Each of the six samplers has its own presets. This means that you can switch between variations for each sampler while the playback is running. And with the presets of the "6-Pack" module (the one with the scope) you can change the presets of all samplers simultaneously.

Instrument: NI, Monolake; Samples: (c) 2000 Rob Acid; Presets: Rob Acid; Demo: Rob Acid

## Beat Breaker



*Loop-Rearranger with extensive Sound-Shaping-Functions*

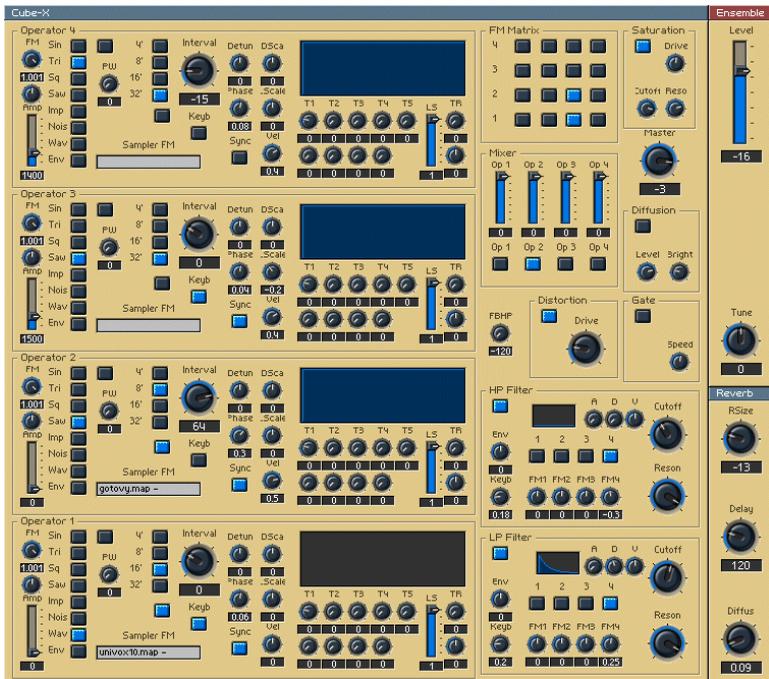
Beat Breaker is a very powerful tool to rearrange existing loops or to create completely new loops. You can load the source material – like drum-sample-loops or any other sample loop you wish – into the two sampler-modules Beat Loop or Resynth. It is important that the loops are quantized to even note values and they are accurately cut so that they can be played in cycles over their entire length.

You can rearrange the steps of the loops with the integrated 16-step-sequencer, you can change the pitch and volume of individual loop steps, and you can even combine several different loops to create a new one. The individual sequencers can be operated with different subdivisions of the bars (Subdivision) and they can have different lengths in steps (Length). If you wish, you can transpose the pitch-sequencer even via a MIDI-keyboard or MIDI-notes. The Re-Arrange-Area is followed by a Sound-Shape-Block which allows sound manipulation of the created loop: Here you will find a multi-mode resonance filter with pre- and post-positioned ringmodulators, an envelope follower to control the filter, a resonator, a distortion effect and a double LFO with integrated rate-envelope for the modulation of different sound-shaping parameters.

The sound shaping block is followed by a stereo delay which can enhance the sense of space or can lead to a greater rhythmical complexity of the loop. A recorder can be used for an accurate recording of the new loop which then can be exported as an audio-file. Although Beat Breaker appears quite complicated at first sight the handling will be very easy after a short period of getting familiar with it. Learn more about the presets and experiment with the parameters and you will soon have access to its enormous capabilities.

Instrument: Jos van Gemert, NI; Sequences/Sounds: F.X.Randomiz;  
 Demo: F.X.Randomiz

## Cube X



*Hybrid FM synth with four multi-wave operators, samples, filters, distortion and diffusion effect*

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Cube-X gives you a broad spectrum of different sounds and is probably the most flexible FM synth of the NI Premium Library. It features only four operators, but these operators offer outstanding capabilities: You can choose between five waveforms and can even use a sample as a carrier or modulator waveform. Operator synchronisation and pulse width control for the pulse wave is also supported. These features give you the possibility to create very rich and complex FM sounds that have never been heard before.

Each operator includes a 6-stage time/level envelope with a graphic representation of the envelope generator's slope for easy and intuitive programming. Operator routing is controlled with a switching matrix; the operators' out signals are combined in a small mixer. Cube-X also features separate high-pass/low-pass and low-pass filters which can be fed by any combination of the operators and can even be frequency-modulated by the operators. The effects section of Cube-X offers distortion, gate, and a diffuser for reverb effects.

Because of the flexible operators with their different waveforms or even samples as waveforms, you don't need to build up sounds by complex FM oscillator routings and modulations. Instead, new and interesting sounds can even be created with the operators working in parallel and not using FM at all.

Instrument: SolarX, Jörg Holzhamer, NI; Sounds: Jörg Holzhamer, SolarX; Demo: Jörg Holzhamer

# Cyclane



*Eight specialized virtual-analog drum-synthesizers with mixer and distortion*

DRUMATIK emulates the analog sound generation of classical beatboxes and, consequently, allows to emulate lots of the popular beatbox sounds. As a virtual drum synthesizer Drumatik offers specifically and separately programmable instruments for kick-drum and sub-kick-drum, snare, two toms, two hi-hats and clap. The output signals of these instruments are combined in a mixer where they can be distorted in a selectable intensity and where their volume and stereo panorama can be controlled.

Drumatik's range of sounds is not limited to the simulation of typical 808 or 909-sounds. On the contrary: Drumatik uses the various options of DYNAMO to create the optimal prerequisites for the programming of synth-percussion full of nuances and variety. These are known from hardware-modular-systems, for example, on the recordings of Vince Clark or Kraftwerk.

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44 bass-drums cover the analog spectrum from the classical 909 to "Hard Noiz". They are complemented by 22 snare drums, among them not only soft 808-sounds or typical bend-sounds but also hard flanger-snare. The sub-kick-drums deliver the necessary pressure in the low frequencies. Brilliant high frequencies, dirty electro-variations and even reverse-effects are delivered by the two hi-hat-modules with 11 or 15 presets. The 18 presets in the two tom-instruments cover the complete range from clicking percussion-variants to the legendary Simmons-sound. And, last but not least, the claps deserve special attention – they comprise the styles of old drum-machines as well as wild variations of the "industrial" kind.

You can play Drumatik like any other drum-expander: The MIDI-notes are assigned according to the General MIDI-standard. For example, the bass-drum is assigned to key C1 (MIDI-note number 36). Thereby sequencer drum tracks which you created with another GM-standard sound-generator can also be performed by Drumatik at any time.

Instrument: Siegmar Kreie; Sequences/Sounds: Rob Acid; Demo: NI

# Drumatik



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Drumatik's range of sounds is not limited to the simulation of typical 808 or 909 sounds. On the contrary: Drumatik uses REAKTOR's many possibilities to create the optimum raw material for the programming of synth percussion full of nuances and variety. Previously, this kind of sound required hardware modular systems, as used on the recordings of Vince Clark or Kraftwerk.

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## Native Instruments – REAKTOR SERIES

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Instrument: SolarX, NI; Sounds: ear2ear; Demo: Nerk

## DSQ-32



*32-step-sequencer with seven drum-synthesizers, morphing function and delay*

DSQ-32 is a virtual drum-computer with seven instruments: Bass drum, snare, closed and open hi-hat, tom 1 and 2 as well as crash-cymbals. The sequencer of the DSQ-32 uses the popular sequencer grid programming, the sound generation of the instruments is orientated to the classical analog beatboxes.

As the name already indicates the DSQ-32 offers a maximum pattern-length of 32 steps. The length of a pattern can be determined with the controllers St (starting point) and End (ending point). The buttons on the seven tracks allow to switch the individual beats of the instruments on or off. Track eight is available for an accent (an accentuation for all instruments of a step). With the two controllers lo and hi one can set the volume for the not accentuated or accentuated steps.

As a special feature of the DSQ-32 each step provides an adjustable morph-value. This value becomes important when parameters exist twice in an instrument and are marked "0" and "1": In this case an intermediate value between the marks "0" and "1" is used which is dependent on the morph-value. For example, if P0 and P1 (pitch) have different values a sequence of notes can be programmed for the respective instrument – with the help of different morph-values. To exclude a certain parameter from the morphing process the "0" and "1" values of the respective parameters must be the same. By activating the man button of the sequencer the morph-value can be manually set with the morph-controller.

Another component of the DSQ-32 is a simple delay which automatically synchronizes with the actually used tempo. Moreover, the delay time can be set in steps. The programmed beats can be saved with the integrated recorder and can be exported as audio-files.

Instrument: Martin Brinkmann; Sequences/Sounds: Rob Acid; Demo:  
NI

## Formantor



*Granular-sampler with separate control of replay speed, pitch and formant shift*

Formantor is a sampler of the special kind because it gives you the option to control pitch, replay speed and even formant shift of any sample independently of each other. Going to the extreme you can even "freeze" the replay at a freely selectable position of the sample. This is made possible by the granular-synthesis which enables you to loop very short sequences of a sample, to repeat them as often as you like, to shift them and to fade them softly into each other at the same time.

With Formantor you can use samples in a totally new way. Extremely useful for creating special effects. However, Formantor also enables you to play a polyphonic rhythm loop with your keyboard without the effect that the higher notes replay the loop faster. Why not take a section of any playback you like and play chords with it?

If you load several samples into the Pitch Former module you can select each one for editing with the Sound controller. In case the Gated switch is activated the replay of the sample is started again as soon as you strike a note. With the Start controller you can set the starting point of the sample's replay. Loop Start and Loop Length define where a loop starts and how long it is supposed to be. Speed regulates the replay speed. To "freeze" replay you only have to set the loop length to zero and to go manually to the sample's position you like with the Loop Start controller. Noise generates accidental deviations from the exact replay position and with Smooth you can smooth out the generated sound.

The formants can be controlled with the Base controller. Furthermore, they can be influenced via the note velocity and by an own AD-envelope.

Instrument: NI; Sounds: Danny Zelonky/Crank; Demo: Danny Zelonky/Crank

## FritzFM



*FM-synthesizer with six operators, overdrive, phaser, rotary speaker and delay*

Fritz FM generates its sounds based on FM-synthesis (frequency modulation). Six "operators" produce sine- and parabolic wave forms and mutually modulate each other's frequencies. Fritz FM is good for typical FM-sounds like e-pianos, bass, bell-sounds, walls of digital sounds and organ sounds.

The result of the FM-synthesis depends on which operators are modulated by which operators and on the intensity and the frequency of the modulation. Each operator can modulate any other operator except for itself. Besides that all operators are structured identical. Each operator has its own volume envelope and parameters for pitch (Ratio and Fine). An operator can either follow the played pitch or generate a fixed frequency.

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With the Out switch you can decide whether an operator becomes audible or only modulates other operators. With the Level controller you can set both the intensity of modulation and/or the volume of the operator. The FM controller allows simultaneous decrease or increase of all modulations that are affecting an operator. The keytrack parameters LoScl, Break and HiScl allow to influence the modulation intensity by the played pitch: Break defines a specific note, the other two parameters define the decrease or increase of the modulation intensity below (LoScl) or above (HiScl) this note. With these parameters you can, for example, avoid that the FM sounds too sharp in at higher frequencies.

Fritz FM features a sine LFO for vibrato which is controlled by the modulation wheel and can be activated separately for each operator. For the effect processing of the FM sounds, Fritz FM offers you overdrive, chorus, phaser, rotary speaker and delay. All effects can be activated separately.

Instrument: Fritz Hildebrandt; Sounds: Fritz Hildebrandt; Demo: M.S.Zanx

## GeekFX



*Multi-effect processor with multiple routing options*

Geek-FX provides a wide variety of partly exceptional effects for the flexible effect processing of audio inputs or samples. Apart from an input and output section, three banks with effect processors as well as a flexible routing system for triggering the effects are at your disposal. In order to eliminate unwanted noise in the source sample, the input section is equipped with an expander.

The effects offered in Geek-FX are subdivided into distortion, filter and delay banks. Each bank features several effect processors with individual presets. All three banks can be used simultaneously, one effect processor per bank can be activated. Each bank provides a separate LFO and envelope follower for the modulation of central effect parameters.

The routing system allows to feed each effect bank with the 'dry' original signal and the output signals of the other banks. With this feature you can create manifold effect chains which can result in extremely interesting types of effect processing. You can mix down the source signal and the output signals of the three banks in the output section and edit the result with a sum equalizer.

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The distortion effect bank offers some highlights as the simulation of a defective cable with a loose connection or a classical distortion which provides the option of a very nuanced setting, quantization distortion in two variations, simulation of radio distortions and a ring modulator. The filter effect bank features the Vowel Morph Filter which allows to simulate the human vocal organs and, furthermore, an 8-pole-band-passhigh- pass filter, a filter bank with 12 bands and a resonator. Finally the delay effect bank is equipped with a phaser, a flanger, a 2-tap-delay, a 4-tap-delay as well as a granular pitch delay which produces extraordinary delay effects.

Instrument: NI; Presets: NI; Demo: NI

## Gonzzo



*Features eight drum sample players with different sound parameters and effects*

Gonzzo fulfills quite an unspectacular but nevertheless very useful task: With Gonzzo you can assign different playback parameters to eight samples which you can trigger with different MIDI notes. Therefore it is a superior drum sample player but, of course, you can load other kinds of samples likewise.

Gonzzo provides eight separate similarly structured sample "slots" which are triggered by different MIDI notes. The respective MIDI note of each slot can be seen at the top of its frame. A number of samples can be loaded into a slot; a particular sample can be selected with the Sample controller.

With the Start controller you can shift the starting point within a sample; the controllers D, S and R represent attack, decay and release – the volume envelope of the sample. To achieve typical compressor effects you should choose quite a short decay time and a sustain level of about 50 % or less. You can set the pitch of a sample with Pitch, the volume of the respective samples with Level and its stereo position with the Pan controller. Each sample slot can be deactivated with the button in the top left corner. The trigger LED indicates whether a MIDI note command is being received. With the Send controller you can define how much reverberation or delay a sample is supposed to have.

The frames in the bottom half of the Gonzzo window contain multiple effects which are valid for all samples: Here you will find the parameters of the reverb – which is regulated by the Send controller – and delay which can be used parallel or as an alternative to reverb. The rest of the effects work as sum effects: A three-band EQ with full-parametric midrange and shelf characteristic for low and high frequencies, a resonance filter which allows fading between low-pass/band-pass and band-pass, and a compressor.

Instrument: Uwe G. Hoenig; Sounds: Tok Tok; Demo: Tok Tok

# InHumanLogic



*FM-synthesizer with six operators, extreme modulation options and multi-mode filters*

InHumanLogic features another very interesting variation of FM-synthesis: Different to Fritz FM this synthesizer is less vintage-model-oriented but rather offers an innovative hybrid-concept which combines the advantages of both the FM-Synthesis and the Subtractive Synthesis. This concept introduces sounds which are audibly more modern and more "evil" than a classical FM-architecture – not least because of the manifold interactions of the operators.

InHumanLogic is also based on six operators: Four of them are identical and deliver parabolic- and sawtooth-waveforms. The two remaining operators are a bit different as they can additionally generate a pulse wave with an adjustable pulse width. The frequency modulation of

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waveforms with many overtones like sawtooth or pulse automatically results in sounds that are more complex and more aggressive than sounds based on the classical sine wave. Again all operators provide pitch parameters and a volume envelope.

There is another difference of InHumanLogic to the classical FM: The wiring of the operators – the way they modulate each other – is carried out via a switching matrix which is based on several presets. Moreover, the signals of the modulating operators may be processed by addition, multiplication or division.

A four-pole resonant filter – with the modes low-pass, band-pass and a combination of low-pass/band-pass – forges the link to Subtractive Synthesis and is very useful to control the sometimes very aggressive FM sounds of InHumanLogic. Other ingredients are two LFOs with a rich variety of waveforms which can modulate the filter and/or the pitch of selectable operators.

Instrument: InHumanLogic; Sounds: InHumanLogic; Demo: InHumanLogic, NI

## Junatik



*Authentic recreation of a popular synthesizer from the early 80's with eq, distortion and delay*

1982, about one year before the era of FM Synthesis began, polyphonic analogous synthesizers finally became (more) affordable. This was mainly due to a Japanese company bringing an attractively priced synthesizer to market which offered six voices and was named after a very important Roman goddess. Although the first version of that synth had no memory locations, it convinced with its charismatic and full sound. In fact, the synthesizer was not complicated at all and sounds could be set up very easily and quickly, therefore the absence of memory locations (which were rather expensive at that time) wasn't very tragic. The fat sound of the synth did not come from its oscillator/sub oscillator combination, but rather from a good sounding lowpass filter and especially an integrated chorus effect. Unfortunately the chorus was very noisy, but it broadened the somehow sterile sound of the oscillator/sub oscillator significantly and made a big contribution to the popularity of the synth.

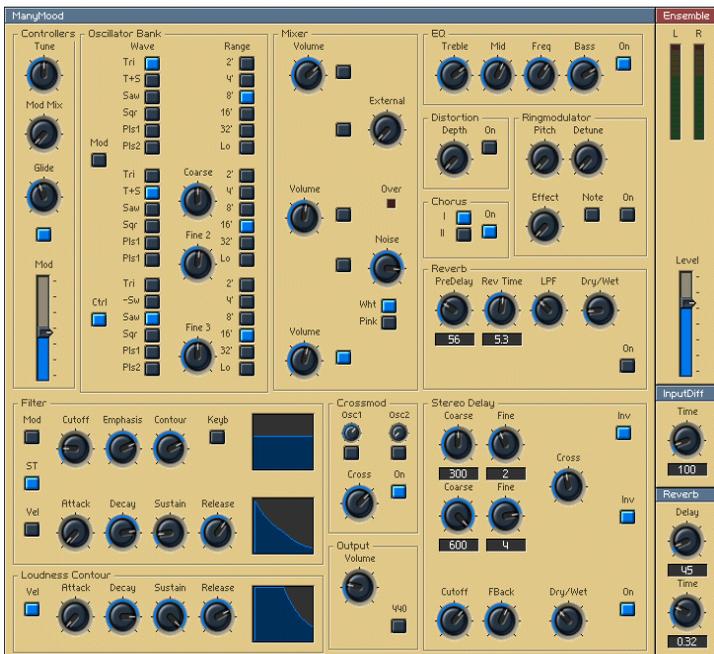
Junatik offers a surprisingly authentic recreation of the still very popular synth. The sympathically straight sound architecture of Junatik was modelled on the original and carefully supplemented with some important functions. Besides an authentic sounding filter, Junatik

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therefore offers an improved oscillator section. With its threefold and detunable saw wave it is now even capable of producing detuned and very fat sounds. An optional velocity sensitivity, which was not available in the original, has also been implemented. Additionally, the sound generation has been supplemented by a 3-band EQ with a semiparametric middle band, a very good sounding distortion unit and a tempo based stereo delay with filter – effects which perfectly complement the strong sound of Junatik. It goes without saying that the unrenounceable chorus effect of the original has also been implemented – yet without the noise.

Instrument: NI, Joerg Holzamer; Sounds: Easy Sounds, Joerg Holzamer, ear2ear, Uwe G. Hoenig; Demo: Joerg Holzamer

## ManyMood



*The emulation of a legendary classic with additional distortion, chorus and ring modulator*

The ManyMood emulates one of the most successful and legendary synthesizers of all times: The Minimoog. This charming instrument with its hinged lid, wooden sides and bulky controllers has embossed the history of synthesizers as well as the history of electronic music.

Although the mentioned physical attributes differ from the genuine model - the ManyMood emulates the generating and character of the Minimoog sound and, moreover, offers some additional effects. The basis of the ManyMood sound are three oscillators: The first and the third of them can be used as LFO when needed. The signals of the oscillators are gathered in a mixer where you can add white or pink noise.

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The best known and most decisive component of Minimoog and ManyMood is the filter: The famous cascade circuit of the minimoog produced a lot of distortions which caused the warm and pleasant sound of the instrument. Of course, ManyMood also simulates this feature of the classic, of course. Apart from that the filter is equipped with the usual parameters as cut-off, emphasis (which is nothing more than resonance) and contour (the intensity of filter envelope modulation). The filter has a separate envelope which can be velocity dependent. It can be used either in single trigger mode or in multi trigger mode.

Complementing the Minimoog architecture the ManyMood provides the option of a cross modulation of the first two oscillators, EQ, distortion, chorus, ring modulator, reverb and a stereo delay. By the way: The button marked "440" - in the output section - delivers a "tuning fork" which was quite useful in the minimoog as the instrument had the tendency to get out of tune easily; the "440" button of the ManyMood, however, was implemented for nostalgic reasons only...

Instrument: NI, Easy Sounds; Sounds: Easy Sounds; Demo: M.S.Zanx

## Matrix Modular



*Extremely flexible synthesizer with an integrated sequencer and a 16x16 modulation matrix*

The Matrix Modular combines the flexibility of a completely modular concept with the clarity of a compact synthesizer. All modules can be linked freely via the matrix buttons. Thus, totally new sounds can be created in very short time. The operation is as easy as it can be and reminiscent of legends like the EMS Synthie A.

The Matrix Modular is the perfect tool for creating wild and experimental sounds. Amongst others a ring modulator, distortion, delay and the step sequencers - which can be linked without limitations - produce vivid analog sounds. In case you think that two oscillators are not enough you can feed the sampler and modulate the samples with LFO, oscillators or sequencers. A special feature of the sampler is the option to switch between a 'normal' sample player and a re-synthesis unit. With this concept the entire spectrum of sampling technology can be used fast and playfully. Try it out and load the same sample in both sampler modules and compare what you will hear...

The Matrix Modular can be controlled internally via the step sequencers but also externally with keyboard and software sequencer. The Matrix Modular is superb in creating complex sequencer structures. For this purpose the sequencer lines 1 - 3 can be connected - via the matrix - with different targets. Below this section four lines of gate sequencers are positioned which deliver trigger signals. The first line sends to envelope 1, the second line to envelope 2, the third line sends to the sampler and the last line synchronizes the LFO.

The routing is always carried out via the button matrix, the level controllers of the individual modules are used for the mix. For your own experiments get inspired by the delivered presets: You will find everything from soft to hard, from "spine-chilling" beautiful piano sequences and hard machine beats to the SID charm of the legendary C64.

Instrument: ear2ear, NI; Sequences/Sounds: ear2ear; Demo: NI

## Me2SaEM



*Two classical analog synthesizer modules with mutual modulation and feedback via external inputs*

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Like ManyMood the Me2SaEM emulates - even twice - a legend in the history of synthesizers: the famous SEM synthesizer module of the Oberheim company. Each of the two identical synthesizer modules is equipped with two oscillators that can be synchronized, a flexible filter, a simple LFO and, furthermore, two envelopes which can control the filters, volume, frequency and/or pulse width.

The special feature of Me2SaEM is the option of a mutual influence of both synthesizer modules via the "FB Mixer" (feedback mixer). The feedback mixer provides a high-pass filter which is useful to reduce the feedback audio signals if necessary. Effect editing can be carried out with a stereo delay which works tempo-related and can be set in selectable note values.

The oscillators of both synthesizer modules provide parameters for rough and fine tuning. The waveform can be faded between pulse and sawtooth. Both, frequency and pulse width can be modulated by a freely selectable source of modulation. If the switch for selecting the modulation source is set to "Ext" the audio signal coming from the feedback mixer serves as the modulation source. The frequency of the filters can also be modulated.

The filter of both modules can be switched between band-pass mode and a combination of high-pass/low-pass mode in which you can smoothly fade between the two modes with the "LP/HP" controller. Although the architecture of the Me2SaEM synthesizer seems to be quite simple you can achieve complex sounds as well, particularly due to the mutual modulations with frequencies in the audio range. Not only the oscillator modulation is attractive but also the filter modulation, especially at high resonance values.

Instrument: Josue Arias, NI, John Bowen; Sounds: John Bowen; Demo:  
NI

# NanoWave



*WaveSet synthesizer for vivid digital sounds*

NanoWave is an homage to the legendary WaveTable synthesizers of PPG and Waldorf. The sound generation - called "WaveSet" synthesis here - is structured similarly to the classical subtractive synthesis of analog synthesizers but it has some special features on the oscillator level which result in a significantly wider variety of sounds.

The WaveSet oscillators of Nanowave do not base on one of the common waveforms like sawtooth or square. They use one of 43 so-called "WaveSets" in which many different waveforms are stored. Within a WaveSet a particular waveform can be chosen manually but the really striking feature of the WaveSet synthesis is the option to "travel", to dynamically switch between the waveforms of a WaveSet.

Both of the NanoWave oscillators have an identical structure: Each of them gives you the option to select the WaveSet, the octave and the pitch tuning in semitones. With the slide switch you can manually move through the WaveSet, alternatively the waveform position can be modulated by a separate wave envelope, by attack, keytracking or by the LFO. Additionally frequency modulation is possible. As further sound sources are available: A simple sine oscillator, a noise generator with selectable tone colour and the ring-modulated signal of wave 1 and 2.

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The multi-mode filter of NanoWave works with a slope of 12 db per octave and can be modulated in various ways. The LFO starts with note onset and, consequently, allows envelope-like modulations; it also has an individual envelope for the amplitude.

The three envelopes of the NanoWave can be modulated by the attack and have a special parameter which enhances the exponential characteristic of this process - very good for extremely percussive sounds.

Instrument: Uwe G. Hoenig; Sounds: Sound Burst; Demo: Sound Burst

## New Primitive



*Sampler and synthesizer based rhythm-machine*

New Primitive features a rhythm-machine which is controlled by 16-step sequencers that run in parallel. A sampler and a little synthesizer with typical "analog" waveforms are used to generate the sound.

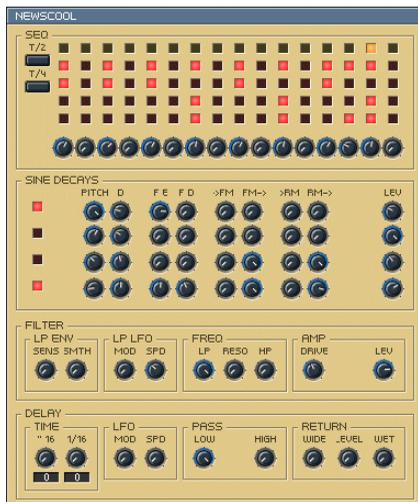
Each of the sequencers in the first row sends the trigger signal and controls the velocity. Rhythm breaks can be created by setting the velocity value to zero. The sequencers in the second row modulate different targets like, for example, filter cut-off and release, sampler pitch or the parameters of distortion. The targets of modulation can be selected by the routing controllers positioned below the second line of sequencers.

With the routing panels the New Primitive provides extensive control options. This variety is - beside the possibility of a fast comparison and the vast number of resulting combinations - the special feature of this machine. It does not take long until you can create an almost infinite number of different rhythms. All 32 presets were derived from only five short samples which were combined with the sounds of the synthesizer. Obviously you can load your own samples into New Primitive. The samples do not even need an accurate cut - the smart triggering of the samples by the step-sequencers of the New Primitive makes meticulous editing history.

Please keep in mind: The sound of New Primitive does not necessarily have to be loud or primitive! Every user can very easily create his own sound basis. Everything is possible: Individual waveforms, effect sounds, short rhythmical sequences, noises or vocal samples. The direct access to the loaded samples via the select controller allows intuitive working and the effect of a chosen sample on the result in sound can be easily checked by comparison.

Instrument: ear2ear, NI; Sequences/Sounds: ear2ear; Demo: NI

## NewsCool



*Innovative beatbox - four bass/drum synthesizers cross-modulate each other*

Newscool is a rhythm machine with an innovative and very effective concept: A simple 16-step sequencer triggers - in an intelligent way - four drum synthesizers with only a few parameters; nonetheless they can mutually frequency and ring-modulate each other. Despite the few parameters you can create complex sounds and sound sequences.

The triggering of the four drum synthesizers by the sequencer follows the binary principle: In its minimum position the controller of a step does not trigger a synthesizer; by turning the knob slowly towards "maximum" the first synthesizer is triggered first, then the second synthesizer is triggered, after that the first and second synthesizers, then the first, the second and third one etc. are triggered - i.e. only one controller is necessary to trigger any combination of the synthesizers. This concept implies an important advantage to four lines of buttons: It is easy to control via a fader-box and, consequently, it is a device you can use live on stage.

The drum synthesizers of Newscool are based on sine oscillators. Each of the four sounds is equipped with a parameter for pitch, a decay parameter for the volume, a parameter for the intensity of a pitch sweep and a decay parameter for the duration of this sweep. Furthermore, there are two controllers for each sound defining to which extent the sound is frequency-modulated by the other sounds and, vice versa, to which extent that particular sound is supposed to frequency-modulate the other sounds. There are to similar controllers for ring modulation.

The signals of all four sounds can be processed together by a filter section, an amplifier with a saturator and a delay. The filter can be modulated via an envelope follower and an LFO and features high and low-pass paths with separately selectable frequency. The duration of the delay can be set in notes values; it is equipped with a separate LFO and high- and low-pass filters in the feedback path.

Instrument: laZyfiSh; Sounds: laZyfiSh; Demo: laZyfiSh

## Plasma



*Granular sampler for the creation of pads and atmospheric sounds*

## **Native Instruments – REAKTOR SERIES**

Plasma uses the extraordinary potentials of Granular Synthesis to change almost any sample into tight and atmospheric sounds. This is the idea: The natural development of the sound is "frozen" - instead you "travel through" the sample manually. Thus Plasma works similar to Formantor, but it is specialized in certain sounds and therefore has a different sound characteristic than the very neutral Formantor.

The basis of the editing can be any sample which has been loaded to the "Sample / Map" module. If several samples are loaded you can select the one you want to edit with the "Sample" controller. Plasma can be triggered either via MIDI notes or can be set to continuous operation with the "Note" switch. In both cases the attack and release time of the sound can be controlled by the "A" and "R" controllers.

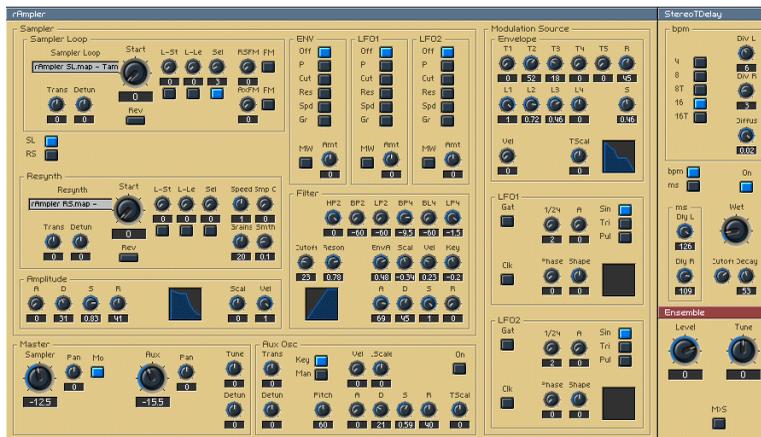
With the "Position" fader you can move to any position inside the sample; this position will then be repeated continuously. "Inertia" defines how fast the position in the sample follows the movement of the controller. "Random" varies the position randomly and consequently makes the sounds more vivid.

The parameters in the Re-Synthesis frame influence important parameters of the granular sound editing: The frequency or "granularity" of this process and accidental variations of this granularity, the smoothing of the generated sound and an artificial broadening of the stereo panorama. Of course, the pitch can be adjusted here, random pitch oscillations are also possible.

You can choose whether the resonance filter of Plasma is supposed to serve as a low-pass or band-pass - and it features two variants of "dirtying" the sound. Moreover, with the diffusion effect Plasma provides a simple reverb which enhances the space and depth of the sounds. Volume and the amount of high frequencies of the reverb effect are adjustable.

Instrument: NI; Sounds: Danny Zelonky/Crank; Demo: Danny Zelonky/Crank

## rAmplifier



*Multi-purpose sampler with extensive sound shaping and modulation possibilities*

rAmplifier is the native answer to high-end hardware samplers: It has a transparent design and is easy to use, has a brilliant sound, great filters, FM and many modulation routings. rAmplifier additionally sports special granular functions that allow you, for example, to alter a sample's length without affecting its frequency.

rAmplifier is a true stereo sampler. It can load single or multi samples in a normal sample playback module, or in a special sample module based on Granular Synthesis. The normal sampler module is well suited for bread-and-butter sample playback, whereas the granular module allows for more complex sample treatment and special effects. With this sampler module you can play loops at different pitches while preserving their length, for example. This allows for smaller and less RAM-consuming multi samples - to mention just one advantage.

rAmplifier offers you parameters and functions you would expect to find in a full-blown professional sampler: amongst others a great sounding and extensively modulatable resonance filter with different modes, slopes and a separate envelope generator as well as two LFOs and a time/level envelope with extensive routing capabilities.

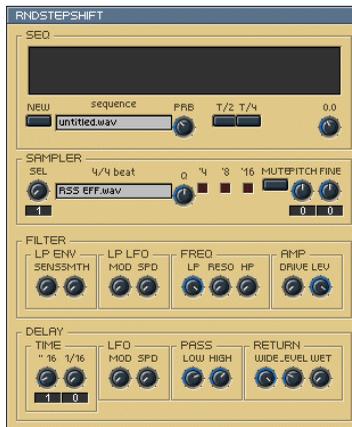
## Native Instruments – REAKTOR SERIES

rAmpler offers even more: For example an additional oscillator with a separate volume envelope for "pumping up" the sound or frequency-modulating the sample. By the way: You can even frequency-modulate the normal sample module by the granular sample module.

Last, but not least, a stereo delay is included with rAmpler. It can be synced to the song's tempo and can be adjusted in note values or in milliseconds.

Instrument: NI; Sounds: Fritz Hildebrandt; Demo: Fritz Hildebrandt

### Random Step Shifter



*A tool for the randomly controlled generation of new sample loops from existing sample loops*

Apart from the effect section the Random Step Shifter is by far the most simple instrument of this library because it has one and only one (!) parameter. Nevertheless, it has some potential: The Random Step Shifter rearranges the sixteenth notes of loaded sample loops according to an intelligent random principle and thus creates new loops in no time. You only have to turn the knob of the already mentioned parameter and you will be surprised... By the way - the blue bars indicate which sixteenth note of the source sample is replayed at a distinctive position of the loop. You can load any one-bar loops into Random Step Shifter. However,

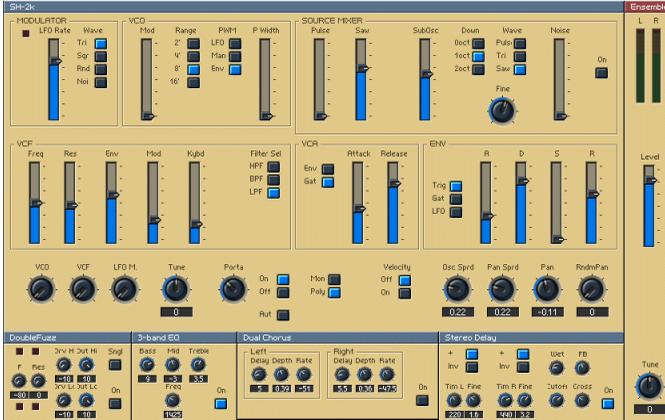
please keep in mind to cut the loops accurately i. e. that they play correctly when they are looped over their entire length. This is an important prerequisite for Random Step Shifter's proper rearrangement of the sixteenth notes.

To edit the sound of the new loops Random Step Shifter provides a filter section with high and low-pass filter. The frequency and resonance of both filters can be adjusted individually and independently of each other. Moreover, a simple LFO is available which modulates the frequency with a selectable intensity and speed.

The delay of the Random Step Shifter (which is adjustable in note values) is, likewise, equipped with an LFO that modulates the delay time if you want. With this feature one cannot only generate crazy echoes but also chorus effects when a short delay time is defined. Thanks to the separate high- and low-pass filters in the feedback route you can achieve wild delay effects - especially in the context of delay-time modulation. Last but not least: As the delay is a so-called "diffusor" delay one can also achieve simple reverb effects with it. For this purpose the individual delays will be "smeared" according to the diffusion parameters ("Diffs").

Instrument: laZyfiSh; Sounds: laZyfiSh; Demo: NI

## SH-2k



*The authentic emulation of a famous analog Techno/House synth*

Pulsing basses, screaming hooks and hard noises are essential when it comes to making Techno and House music. The SH-2K emulates one of the most famous synths for such music styles. It also adds some new usefull functions and a Twin Fuzz, a 3 band EQ, a Dual Chorus and a Stereo Delay to the original's architecture.

The oscillator's puls width can be controlled manually, by the LFO, or by the envelope generator. Puls wave and sawtooth wave can be mixed in the Source Mixer. The sub oscillator generates puls, triangle, or sawtooth wave. It has the same pitch as the main oscillator or a frequency of one or two octaves below, respectively. The sawtooth wave of the sub oscillator can be fine-tuned - this is especially usefull when the sub oscillator has the same frequency as the main oscillator, because it makes the sound fatter and warmer.

SH-2K's filter works in low-pass, band-pass, or high-pass mode and can be modulated by the envelope, the LFO, or keytracking. The amp is controlled by the ADSR envelope or by its own AR envelope. The ADSR envelope can be used in single or multi trigger mode, or can be triggered by the LFO.

The knobs below the main modules control how much the pitch bend wheel affects the oscillator's pitch ("VCO"), the cutoff frequency of the filter ("VCF"), and how much the modulation wheel affects vibrato amount ("LFO M."). Portamento can be activated only for legato notes or can be switched off completely. The influence of velocity can be switched off globally. "Osc Sprd" adds an a unison effect to the sound; "PanSprd" broadens the stereo image. "RndmPan" adds random variations to the pan position controlled by "Pan".

Instrument: NI, Easy Sounds; Sounds: Easy Sounds; Demo: Easy Sounds, NI

## SineBeats



*Sine wave beats with additional noise-generator, multiple sound parameters, distortion, modulated filters and delays*

## **Native Instruments – REAKTOR SERIES**

Sine Beats is a beatbox - based on three sine oscillators and a noise generator - which can generate a variety of classical sounds but likewise totally new beatbox sounds. Each of the four instruments features a sequencer and individual sound parameters. Two flexible filters and two delays add even more motion to the generated beats, four distortion effects create the rougher sounds.

Each of the four instruments is equipped with its own 16-step sequencer with 2 tracks. The first track controls the volume. In case you want to program a break - simply set the volume of the respective step to zero and the instrument will not be triggered. The second track sends modulation data which can vary different sound parameters of the instrument. The two adjustable sequencer tracks per instrument allow a significantly more vivid rhythm programming than simple buttons.

The noise instrument features a DBR envelope (decay, breakpoint, release) which controls the volume and, if you wish, the filter of the noise instrument. You can add up the several outputs of the filter which also features the parameters cut-off, resonance and modulation intensity of the envelope. Release and cut-off can be modulated via the second sequencer track.

The three sine instruments are structured identically. Each of them features a release parameter for the decay time, a pitch parameter and a simple pitch envelope with an intensity and a release parameter. Here you can modulate the intensity of the pitch envelope and the decay time. With a little mixer you can adjust the four instruments' position in the stereo panorama and you can mix them proportionally to the two filters. Behind every filter a delay is positioned, both filters provide a modulation LFO.

Instrument: Mole, NI; Sounds: NI; Demo: NI

## Triptonizer



*Granular synthesizer which can bend samples beyond recognition*

Triptonizer uses the specific potentials of the granular synthesis for extraordinary tone colours of instruments. This synthesizer is not only made to generate spectacular effects but it is also very well suited to generate new, striking and expressive playable synthesizer sounds.

Any given sample which can be loaded into the "sample map" module serves as an "oscillator". In case several samples are loaded you can select the particular one you want to use via the "sample" controller. The main parameters of granular synthesis - position in the sample, formant shift and volume can be controlled via envelopes and/or LFOs. Additionally available are LFOs for vibrato and stereo position, a saturation/distortion component, an extensive modulation delay for echo- and chorus-effects and finally a reverb. Moreover, the tone colour of a sound can be varied via the parameters "hi boost" and "body".

The behaviour of the sound in the granular synthesis can be influenced with "noise" (accidental variation of the replay position) and "smooth" (smoothing of the generated sound). With the "keytrack" controller formants can be shifted depending on the played note.

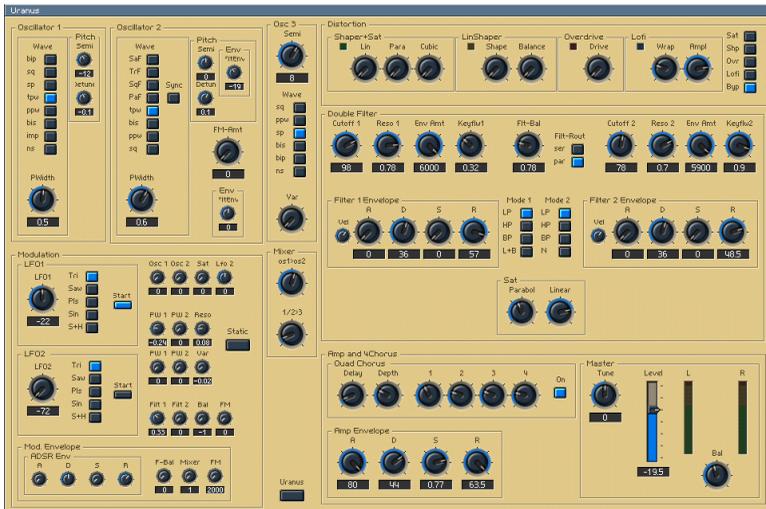
In the Triptonizer the loaded sample will principally lose its natural sound - the replay is generally "frozen" at a position of the sample which can be defined with the "wave" slide-controller. You can re-establish the natural sound via the wave envelope or the wave LFO.

## Native Instruments – REAKTOR SERIES

With the "vel" parameter you can scale - depending on the played velocity values - all envelopes which allows very dynamic modulations and therefore a nuanced and expressive way of playing the generated sounds.

Instrument: Uwe G. Hoenig; Sounds: Danny Zelonky/Crank; Demo: Danny Zelonky/Crank

## Uranus



### *High-end virtual analog synth*

Uranus offers an extensive voice architecture with three oscillators, a shaping/distortion unit, two multimode filter, four envelope generators, two LFOs, and a very "expensive" sounding chorus effect. Uranus is well suited for the whole range of analog sounds: basses, leads, effects, and especially pads. Many useful presets give you a good demonstration of Uranus' flexibility.

Each of the two main oscillators of Uranus offers eight waveforms; the third oscillator offers five waves and noise. Oscillator 2 can be frequency-modulated by oscillator 1. Before being fed to the filters, the oscillator mix can be tweaked with one of four different effects in the distortion unit.

The filter section of Uranus offers two multimode resonance filters that can be used in parallel or serial configuration. Each filter has its own set of parameters and a separate envelope generator. In serial mode, a saturation effect for emulating Moog-like filter distortion is located between the two filters.

The modulation section of Uranus features two LFOs and another envelope with flexible routing capabilities. All envelopes work as classic ADSR types. The chorus effect is mainly responsible for Uranus' elegant and "expensive" sound. It offers four separate delay lines, each with an independently controllable modulation rate.

Instrument: Olivier Gerber; Sounds: Olivier Gerber; Demo: M.S.Zanx

## Weedwacker



*Feedback oscillator capable of seriously chaotic behaviour with filter, distortion and delay*

## **Native Instruments – REAKTOR SERIES**

Like many other synthesizers, Weedwacker offers oscillator, filter, envelopes, and LFOs. Nevertheless, Weedwacker is very special, and this is mainly due to its oscillator working with an audio feedback loop. The oscillator generates a pulse wave; the steepness of the rising and falling slopes can be adjusted separately, therefore the pulse wave can be modified to look and sound more like a sawtooth or triangle wave. Next, this signal is fed into a peak filter which is tunable in semitones and used to boost the selected frequency band extremely. The next stage in the signal flow is a module for amplitude mirroring. After passing this module, the signal is sent to the oscillator's output and also back to the pulse wave oscillator's input for controlling the pulse width of the waveform. Additionally, the pulse wave can be frequency modulated by a noise generator. This sounds complicated, and it is hard to imagine what happens here exactly, but it delivers very organic and powerful sounds. Similar to Physical Modelling synthesizers, the oscillator signal of Weedwacker is very lively. With the parameters of the oscillator set to certain values, it can become unstable and even completely chaotic. These instabilities can sound very interesting and are, for example, useful for atmospheric pads and many other, lively, organic and fascinating sounds and textures.

Weedwacker can be played polyphonically and offers a monophonic multimode filter with resonance and overdrive. All important parameters can be modulated, the modulation sources include velocity, three LFOs and two envelope generators. The delay times of the integrated stereo delay effect and also the rates of the LFOs and the times of the envelopes are set according to a certain song tempo. This makes it possible to put the liveliness of Weedwacker's sounds into a rhythmic context and to use Weedwacker as some kind of rhythm machine.

Instrument: Siegmur Kreie, Sounds: Siegmur Kreie, Vladislav Delay, Uwe G. Hoenig, Demo: Uwe G. Hoenig