

Unique



User Manual

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About

Unique is a pretty versatile virtual instrument.

It is a well-crafted emulation of synthesizers from the golden age of analogue keyboard sounds, delivering a wide spectrum of sound-design options: from dark basses and strong leads to warm pads.

Unique comes with a state-of-the-art vowel filter. The engine of this filter is the result of years of development here at Sugar Bytes in Berlin and it's fair to say that it shaped the sound and workflow of many high-profile electronic musicians since its release.

Unique also includes two effect sections with Sugar Bytes' arsenal of signature effects to pimp your productions.

The sound and the functionality of Unique have been designed together with musicians and sound designers in order to cover a wide range of sounds and possibilities. The user interface is simple but powerful. With Unique you will explore a new world of amazing sounds.

Basic Structure

On top of the screen, you find the <u>Preset System</u>, you can open the menu to choose a preset from a certain category or you can simply step through the presets via the <> buttons.

The <u>Arpeggiator section</u> (top-left) also contains some general settings regarding the MIDI input.

Right beside is the OSCILLATOR SECTION and the MIX SECTION (mix and panning).

On the bottom there's the <u>FILTER SECTION</u> (left), the <u>EFFECT SECTION</u> (middle) and the Master section (right).

THE CONTROLLERS SECTIONS contains 4 freely assignable modulators.

Right beside the Controller section you find the <u>SETTINGS SCREEN</u> which offers additional settings and functions and a link to the manual.

Connectivity

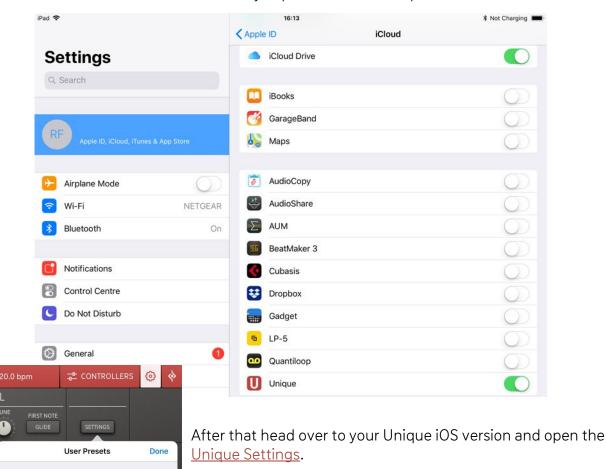
SETTINGS

iCloud Sync

ICLOUD SYNCHRONIZATION
MIDI
USING UNIQUE AS AN AU INSTUMNENT
ABLETON LINK

iCloud Synchronization

Through iCloud, you'll be able to share your saved presets across multiple devices including your desktop computer. This feature is disabled by default. To sync Unique across your devices, launch Settings. Then tap your Apple ID banner, tap iCloud and ensure iCloud Drive as well as iCloud sync permission for Unique is enabled.



There choose iCloud, tap iCloud and set iCloud to On.

are synced automatically to your iCloudDrive.

Once activated, presets you save in the Unique iOS version

To share a preset from your **Unique iOS version to your computer**, you'll need to drag and drop or copy/paste the preset from iCloudDrive/Unique/Presets/User into ~/Documents/Sugar Bytes/Unique/Presets/User

To share a preset from your **computer to your Unique iOS version**, you'll need to drag and drop or copy/paste the preset from ~/Documents/Sugar Bytes/Unique/Presets/User into iCloudDrive/Unique/Presets/User

The presets will then automatically appear in the User folder of Unique's preset browser.

Please note that creating and then reading out a subfolder is technically not possible.

MIDI

Unique can receive MIDI from any source (incl. virtual MIDI).

MIDI LEARN



Long-press any control button to assign incoming MIDI CCs (MIDI clear to delete the assignment). MIDI-CC assignments will not be saved or changed with he presets.

Unique as a plugin inside your favorite portable DAW

Unique supports the Audio Unit V3 standard making it possible to load multiple instances into any DAW that supports AUv3. It will be up to the host app on how it implements the AUs menu, but in most host apps you'll find the menu where other effects, instruments, or editing tools can be applied. Just select Unique from the list of available AU Instrument apps in eg. Cubasis.



Audio and MIDI connections are now made between Cubasis and Unique and you can now control it using Cubasis virtual keyboard or Performance view.

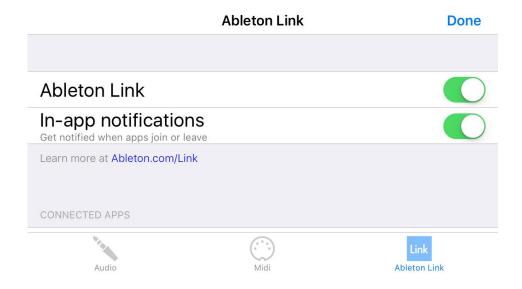
Parameters and presets are automatically saved within Cubasis sessions and banks.

Ableton Link

Hop on to the same network and jam with others using multiple devices running Linkenabled software. Anyone can start and stop their part while others keep playing. And anyone can adjust the tempo and the rest will follow.

You can activate Link via **Unique's Settings**.

When activated, Link will sync tempo across apps.



Find out more about Link here.

The User Interface

Unique's user interface has 5 main elements

<u>Oscillators</u>

Unique's oscillators (upper third of the GUI) are specially designed to cover a **wide spectrum** of sounds: from dark basses and strong leads to very warm pad sounds. There are 5 generator setups in total:

Saw Tooth Triple Saw Pulse Triple FM Noise (white-noise generator)

Each oscillator can produce **8 voices** in full stereo. The oscillators are **anti-aliased** for clearer sound at high frequencies.

Filters

The Filter section (middle on the left side of the GUI) offers 5 filter types:

High Pass (2-Pole) Band Pass (2-Pole) Band Pass (4-Pole) Low Pass (4-Pole) Comb Filter

Each of these five filter types can also be used in **Vowel Mode**, where two filters concentrating on vowels can be used in interaction with each other. This little miracle engine makes it easy to create humanoid line sensations in your setup.

Controllers

If you tap the red Controllers icon, the upper third of Unique's GUI will change and show the four modulators:

LFO Envelope Sequencer Motion (an x/y pad)

Each and every parameter in Unique can be **modulated**, **automated** or controlled via **MIDI**.

The assignment process is easy and simple: **long press** any knob to open the modulation assignment screen.

Effects

Unique comes with a line up of Sugar Bytes' signature effects. There are 2 effect sections with a total of 6 effects:

Delay Reverb Phaser

LoFi

Filter on effect 1 / Chorus on effect 2

Arpeggiator

Unique has a built-in arpeggiator in the MIDI-IN section in the top-left corner. The arpeggiator can be applied independently to the oscillator, letting you explore interesting sounds and melodies. There is an intelligent **double voice mode**.

Oscillator section

Unique has two main oscillators with five generator options each.

Sawtooth Triple Saw Pulse Triple FM Noise



Both oscillators offer typical ADSR parameter:

Attack: adjust the attack time of the amplitude envelope

Decay: the time after the attack phase until sustain

Sustain: adjust the amplitude level after the decay

Release: adjust the release time of the envelope

The **Octave** knob (attenuated) sets the rootnote. The five positions allow for adding/subtracting one or two octaves.

Detune will detune the voices slightly. Usually a good way to add some analogue and warm impression.

Sawtooth



The Sawtooth is the most basic oscillator and contains the spectral content of all natural sounds. The anti-aliased algorithm produces a crystal clear sound even in high frequency ranges. This oscillator is very efficient regarding CPU consumption.

Triple Saw



Triple Saw uses 3 hard synced Sawtooth oscillators to produce a very rich frequency spectrum. **Spread**, a pitch offset between the 3 oscillators, results in a fatter sound. With this oscillator you can create string- and organ sounds, as well as sharp sync leads.

Pulse



The Pulse oscillator can create very dominant and analogue sounding signals.

Modulate pulse width to get a wide range of sounds out of this oscillator.

PW: the pulse width of the pulse waveform **PWM RATE:** speed of pw modulation (bpm-synced)

Triple FM



Triple FM is based on frequency modulation of three oscillators. This oscillator provides classic FM sounds, but also unheard-of and inspiring material, from thin and piano-like to fat, detuned and distorted.

FM: intensity of internal frequency modulation. **SHAPE:** amount of the shape algorithm.

Noise



The Noise oscillator offers an intelligent noise-generator. It contains a **multimode filter** that can be linked to the current pitch. At high resonance values, the noise oscillator can produce weird sounds close to voices, choir or monster sounds.

Type: filter type (LP, HP, BP)

Color: adjust the cutoff frequency of internal filter

Reso: resonance of the internal filter

Track: connect voice pitch to filter frequency.

In Track mode, the Color control is used to detune the

oscillator

Filter section

Unique's Filter section is an outstanding creative tool. Its expressive potential should not be underestimated.



The 5 Filter Types

Highpass 2 Pole:

Only frequencies **above cutoff** are passed. A two-pole has a slope of 12 dB/oct.

Bandpass 2 Pole:

Only signals around cutoff are passed. Fits perfectly into the Vowel Mode.

Bandpass 4 Pole:

The 4-pole BP has a **smaller bandwidth** than the 2 Pole. Good fit for the vowel mode. A four-pole has a slope of 24 dB/oct.

Lowpass 4 Pole:

Only frequencies below cutoff are heard.

Comb Filter:

This Filter is based on a feedback algorithm with delay times that correspond to filter frequencies. In Vowel Mode, this filter mutates to a **monster mouth**, providing strong, scary and weird sounds.

Standard Filter Controls

These controls are identical across all filter types:

Reso: adjusts the resonance of the filter

Drive: adds overdrive to the filter

Mix: mixes the dry with the filtered signal

Modulation of Filter Parameters

There are five modulation sources:

Envelope

LFO

Four Step

Pitchbend

Modwheel

Envelope



In this mode there is an ADSR envelope, which modulates the cutoff frequency.

Cutoff and Peak

Use the cutoff and peak knobs to set the start and end of envelope modulation.

During the attack phase, the cutoff frequency moves from its starting point to the defined peak frequency. In the release phase, the cutoff will move from the peak back to the cutoff frequency.

Trigger

Trigger determines on which particular event the envelope is restarted.

Each: each new note retriggers

Lowest: triggers, if a note played is lower than the notes played before (in Legato only)

Loudest: will only retrigger if a note played has a higher velocity than before

First: triggers on the first note played

Arp: the arpeggiator's tempo sets the trigger interval

LFO



LFO lets you modulate between 2 filter frequencies or 2 vowels in Vowel Mode.

Like with the envelope you select a start frequency (Cutoff) and a destination frequency (Peak).

Rate: the frequency rate of the LFO (synced to the host BPM)

Fade: fades in the LFO rate

Fade In: time until the full LFO amount is reached

Note: The LFO has one more retrigger option than the envelope. This is the **Clock Start** trigger mode. In this mode the LFO is retriggered when you hit play in your host.

4 Step



4 Step lets you setup 4 different frequencies (or vowels) to be played in series.

These steps can be played back at a **defined speed** and **different directions**.

Tempo: the playback speed of the 4-Step sequencer

Glide: time to fade from one step to the next

C1-C4/V1-V4: frequency/vowel values of the steps

Direction Modes



Forward mode Backward mode Ping-Pong Inverse Ping-Pong Random

Note that these directions modes are also used in the modulation sequencer and arpeggiator section described later.

Pitchbend



Morph between two frequencies with the Pitchwheel.

These 2 frequencies are once again defined by the **Cutoff** and the **Peak** parameter.

With the Slope parameter you can define the fading curve.

If the parameter is in middle position you have a linear fading between the frequencies.

A higher Slope value results in a larger controlling range for the Cutoff parameter while a lower value does the opposite.

Modwheel



The Modwheel mode works in the same way as the Pitchbend mode, except that it assigns the MIDI modulation wheel to fade between 2 frequencies (or vowels).

Vowel mode



The Vowel Mode emulates the human mouth, opening possibilities that you know from a talk box or a vocoder.

Beside the classic vocals A-E-I-O-U we also added mutated vowels like AE and German *Umlauts*.

The vowel mode is the main feature of Unique and the result of years of hard work at Sugar Bytes. It offers new sound dimensions. When the vowel mode is powered on, the cutoff parameters are changing to vowel parameters.

You can use a vowel parameter in the same way as the cutoff knob, just press and drag to select different vowels.

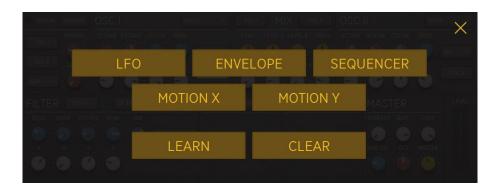
Controllers

This section gives you access to the control panel for 4 powerful modulators:

LFO Envelope Sequencer Motion Pad (x + y axis)



To assign them to a parameter, just long press the destination parameter and choose from the available modulators.



LFO

The LFO Modulator has a BPM synced **Rate** parameter. This **Rate** can be faded in, using the **Fade Rate** knob.

The classic LFO waveforms (sine, saw, square, tri) can be morphed using the **Wave** parameter. Just press and drag the **Wave** view.



You also can fade in the LFO intensity by using the Fade parameter.

Trigger:

trigger determines on which particular event the envelope is restarted

Each: each new note retriggers

Lowest: triggers, if a note played is lower than the notes played before (in Legato only)

Loudest: will only retrigger if a note played has a higher velocity than before

First: triggers on the first note played

Arp: the arpeggiator's tempo sets the trigger interval

Via the **Range** parameter you can adjust the minimum and the maximum value of the LFO.

Envelope



A classic ADSR envelope.

Use **Range** to limit min/max amount.

Sequencer

Eight steps to create individual modulation sequences.

The speed can be adjusted by the **Tempo** (synced to your host BPM).

Glide defines a fading time between the steps to smooth step transitions.

The sequencer features different **Direction** modes:

Direction Modes



Forward mode Backward mode Ping-Pong Inverse Ping-Pong Random

And finally the **Range** parameter for calibrating the working range.

Motion



Use the **Motion Pad** with your finger to record movements. Each modulation target can then read out the current x and the y value.

To do so, just turn on **Record** and press and move the red circle. With the **Smooth** parameter you can smooth the movements.

Again there are the different **Trigger** modes for restarting the motion. (See Filter/Envelope/Trigger)

Trigger determines on which particular event the envelope is restarted.

Each: each new note retriggers

Lowest: triggers, if a note played is lower than the notes played before (in Legato only)

Loudest: will only retrigger if a note played has a higher velocity than before

First: triggers on the first note played

Arp: the arpeggiator's tempo sets the trigger interval

Pitch and Modwheel



Assign a Pitch LFO to the MIDI modulation wheel (CC 1).

Just press the **LFO** button in the <u>Settings Screen</u> of Unique and adjust the **Speed** of the LFO.

There you can also define the pitchbend range of the MIDI - pitchbend wheel.

Main Controls

The main controls in Unique are knobs. Just press them and drag your finger up or down to turn them. While moving them, a display appears showing the value and unit of the parameter.



The knobs have different colors, which reflect certain functionalities.

White: are modulation-related parameters

Red: are midi-related parameters

Blue: are general sound design parameters

Yellow: are amplification parameters



All knobs can be modulated with internal modulators or controlled by MIDI or Host Automation. Just long press on a parameter and a menu with certain modulation sources comes up. The first 5 entries assign a modulator to the knob you just pressed on.

The entry 'MIDI LEARN' puts the knob into MIDI learn mode. Then the next MIDI-CC message you send to Unique will control this knob.

To clear any assignment, just hit the entry 'CLEAR'.

Note: If you assigned a knob to a modulator or to a MIDI-CC you should not use Host Automation for this knob. Otherwise the parameter will receive multiple values at the same time, which might cause unpredictable behaviors.

Arpeggiator section



In this section you can control how your incoming MIDI signals are processed (see **MIDI IN** indicator).

In the right upper corner is a menu to switch between Poly and Unison. **Poly** is a classic 8-voice polyphonic mode. **Unison** turns Unique into a monophonic synthesizer with 8 voices playing simultaneously.

Spread adjusts a pitch offset of the eight voices.

Glide sets the time to move from the previous note pitch to the currently pressed note pitch. In Poly mode, Unique offers a polyphonic glide, where a glide happens from the last voice to all new voices.

The **Arpeggiator** can be turned on independently for each oscillator with the **OSC1** and **OSC2** buttons. Tapping the ARP button will open the arpeggiator's menu.

The arpeggiator has 5 playing **Styles.** Up, Down, Up and Down, Down and Up and Random.

Tempo sets the speed of the arpeggio (synced to your host).



Arp Trigger Settings:

ClockStart: Clock triggers Arp

Each Note: new note played retriggers Arp

First Note: Arp starts on first note pressed

Lowest: if a note sets a new low - triggers arp (Legato)

Highest: if a note sets a new high - triggers arp (Legato)

MIX section



Right between the two oscillators is Unique's Mix section. Here you can adjust level and pan for each oscillator.

Top left and top right you find the **Poly** Buttons, which decide if the panning is handled monophonic or polyphonic. In **Single** mode, the pan is monophonic, like you know it from a classical pan control. In **Poly** mode, each voice has its own position in the stereo field.

Pan defines the width of the stereo effect for each oscillator.

Level controls volume for each oscillator.

Autopan: LFO-controlled Panning

There's an individual auto-pan for each oscillator; also the auto- pan can work monophonic or polyphonic, like the Pan control mentioned above. So in polyphonic mode, each voice will be auto-panned individually. So if you play 2 oscillators with 8 voices using auto-pan, you can have 16 sounds moving around in the stereo field.

Rate sets the frequency of the LFO controlling auto-pan.

Effects



Two multieffect units running in series.

Each unit contains 5 effects. They basically offer the same effects with the exception that Effect 1 offers a **Filter** where Effect 2 has a **Chorus** instead.



Delay

Time: adjusts delay time (synced to Host-BPM)

Feedback: intensity of internal feedback

Cutoff: controls the cutoff of the built in low-pass filter

Reso: controls the resonance of the built in filter

Mix: controls the dry/wet mix of the signal



Reverb

Room: size of the reverberation room

Damp: adjust damping properties of the room

Width: controls the stereo widening

Hipass: controls the cutoff of the internal hi-pass filter

Mix: controls the dry/wet mix of the signal



Phaser

Rate: phasing speed synced to host-BPM

Feedback: internal feedback level

Width: controls the stereo widening

Stages: number of stacked phasing stages **Mix:** controls the dry/wet mix of the signal



Lofi

Crush: bit-crushing intensity

S-Rate: amount of sample-rate reduction **Mix:** controls the dry/wet mix of the signal



Filter

Cutoff: the filter cutoff frequency

Reso: resonance of the filter

Type: 5 filter-types (LP, LPBP, BP, BPHP, HP) **Mix:** controls the dry/wet mix of the signal



Chorus

Rate: chorus speed synced to host-BPM

Feedback: internal feedback level

Depth: intensity of the chorus

Width: controls the stereo widening

Mix: controls the dry/wet mix of the signal

Master section

The master section gives you all tools to finally shape the sound.



Of course there is the **Master volume** control to adjust the overall volume.

A special feature of the Master Section is the **Sub Oscillator**, which uses a Sine waveform.

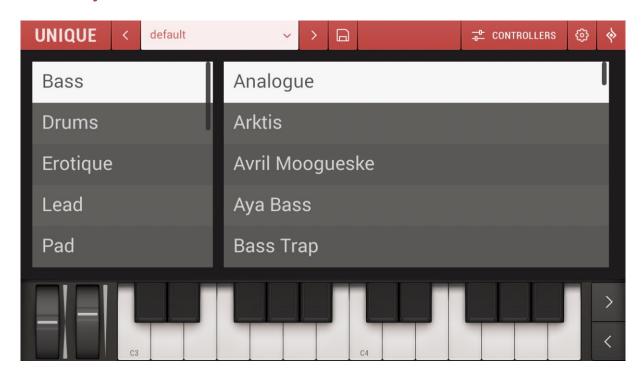
It is connected with Oscillator 1, so it uses the amp-envelope and the arpeggiator assignment of Oscillator 1.

The **Sub- Osc** parameter adjusts its volume. The sub oscillator is very handy if you want to add bass to your sound, but also if you want to add another sound dimension on top. Define its pitch octave via the **Oct** knob.

The Master section also contains a Tremolo effect which modulates the final volume with an internal LFO.

Tremolo controls its intensity, the **Rate** defines the speed (BPM-synced) and the **Fade** parameter defines a fade in time for the tremolo. Note that the tremolo fade time is triggered by the first note you press.

Preset System



Unique's presets are accessible via the preset menu in the top area of the interface.

You can easily step through the presets with the arrow buttons on the left and right side. When the preset name is clicked from the top area of Unique, a menu will come up showing all preset categories.

A special folder is the **User folder**. This folder is empty and is meant to store the presets you created.

The little disc icon opens the 'Save Preset' entry and is for saving presets. It should automatically save the preset into the User folder.

If you want to make your Unique presets available on multiple devices activate iCloud Synchronization.

Settings Screen



In the settings screen you find some global settings and functions.

Pitch LFO

Here you can define the amount of pitch modulation caused by the Pitch LFO in the **Modwheel** section and adjust the Speed of the LFO.

Pitch Bend

The Range parameter defines the pitchbend range of the MIDI - pitchbend wheel.

Global

Velocity

Adjusts the velocity behavior of your incoming MIDI notes.

Glide On First Note

When activated Glide will work on the first note.

Tune

With the Global Tune parameter you can change the overall tuning of Unique in order to adapt it to other sound sources.

Settings

Adjust the way Unique operates in certain MIDI and Audio connections, enable or disable <u>Ableton link</u> as well as preset file sharing between Unique iOS and your computer via <u>iCloud synchronization</u>.

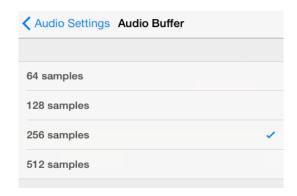
Audio Settings



<u>Output</u>

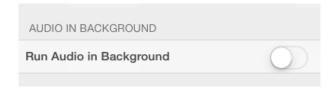
If a multichannel sound card is connected, you can choose all available in and out ports here.

LATENCY



The "Audio Buffer" allows you to change the audio latency of Unique. If you experience crackles in the audio signal, increase your buffer size.

RUN AUDIO IN BACKGROUND



Switch ON to keep Unique playing when you're working in other apps.

MIDI Settings



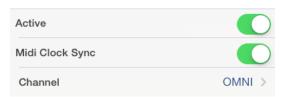
This list shows all MIDI devices currently connected to your iPad.

Supported MIDI Types:

- CoreMIDI virtual ports (to/from other apps)
- CoreMIDI network (as a session originator or receiver to/from Mac or PC)
- CoreMIDI physical devices (USB MIDI Controller)
- Bluetooth MIDI

Unique can receive MIDI from other apps via Virtual Input. Switch on Virtual Input and select Unique in the sending app.

The following MIDI input settings are available:



CC Recall Lock

When active MIDI Learn Settings will be kept and not be changed when selecting a different preset.

Videos

Here are some links to youtube videos with short tutorials on Unique.

They are using the desktop version so the GUI design is different and the layout differs here and there, but they are very useful understanding some concepts.

OVERVIEW 01:34 (NO VOICEOVER)

MAKING MINIMAL PADS 10:01 (DAN-D, PART 1)

MODULATION & CONTROLLERS 06:58 (DAN-D, PART 2)

A 70's Bass 05:15

DEMO 03:09 - HAVE A LOOK AT THIS TO SEE HOW MUCH FUN UNIQUE IS

Contact

Sugar Bytes GmbH | Made of passion Greifswalder Str. 29 | 10405 Berlin, Germany phone:+493060920395 info@sugar-bytes.de www.sugar-bytes.com

App Store



WOW FILTER BOX

Need some state-of-the-art filtering on your iPad? Go for WOW2. Use 3-finger XY pads to control filters, distortions and modulations. With audio recorder, AudioBus and Auria Plugin, ready for each and every situation.



TURNADO

We crafted Turnado for massive real-time audio manipulation. It combines unique and dynamic effects with a most intuitive and immediate control. Just turn it on and crank it up.



THESYS

Thesys is a MIDI stepsequencer plugin, giving you control over just about all aspects of your favorite MIDI devices. Use Thesys to create varied and organic bass lines, screaming leads, pulsating chords, and organic pad sounds in the studio or on stage.



EFFECTRIX

Effectrix is a multi-effect sequencer featuring 13 effects and a 32-step sequencer with 12 sub-patterns. Effectrix is the ideal tool for grooving sound mutations and exciting breakbeat effects.



EGOIST

Egoist is a groove instrument. Load any audio file and squeeze the groove out of it! Try your mp3 library and use it as a sound source! The additional onboard bass, beat and fx units make Egoist the perfect track sketch tool in the studio and on the road.



CYCLOP

Bass Synth with 6 oscillators and 10 filter modules. Cyclop's monophonic setup means synthesis in its purest form - sonically tweaked to highest standards. The complex signal flow and the versatile modulation can be controlled easily and are organised in an intuitive way.