



USER MANUAL

Cyclop iPad Edition

WHAT IS CYCLOP	4
GETTING STARTED	5
SYNTH ENGINES.....	6
THE ROUTING MODULE & FILTERS	7
MODULATION.....	8
THE SOUND KNOB (...AND RECORDING MOVEMENTS).....	9
THE WOBBLE KNOB & THE A/B CONTROL	10
THE FX SEQUENCER	11
SYNTHESIS	12
SAW REGIMENT & ANALOG SYNC	14
FM & TRANSFORMER.....	15
TRANSFORMER CONTINUED.....	16
SPECTROMAT & PHASE STRESSOR	17
THE ROUTING MODULE	18
MODULATION	20
MODULATOR SETTINGS	22
THE SOUND KNOB.....	24
RECORDING KNOB MOVEMENTS	25
THE WOBBLE KNOB	26
WOBBLE SETTINGS.....	28
WOBBLE AMOUNT	29
MODULATION ASSIGNMENTS.....	30

THE FX SEQUENCER	31
EFFECT LANES.....	32
TOOLS.....	33
LOOP BAR.....	34
THE FX KNOB.....	35
MASTER EFFECTS.....	36
BASS, SUB OSC & STEREO	37
DISTORTION	38
GLOBAL SOUND SETTINGS	39
MASTER ENVELOPE, VELOCITY AND GLIDE.....	40
SETTINGS SCREEN	41
MIDI SETTINGS.....	42
AUDIO SETTINGS.....	43
THE PRESETS.....	44
THE GAME.....	48
CONNECTIVITY	51
ICLOUD SYNCHRONIZATION	52
MIDI.....	53
CYCLOP AS A PLUGIN INSIDE YOUR FAVORITE PORTABLE DAW	54
ABLETON LINK.....	55
SUGAR BYTES.....	56

What is Cyclop

Cyclop is a **monophonic Synthesizer** with a large number of innovative features. The **finest DSP algorithms** give Cyclop an unbelievable direct and powerful sound which is made to fit perfectly into the mix.

Cyclop specializes in **wobble sounds**, which means that rhythmical material is the special power of this synthesizer. Conventional structures have been twisted in a refreshing way to give you **a workflow full of fun and lucky surprises**.

The 4 main controls let you tweak your sound in different ways, which you can move with recordable envelopes, fired up by your MIDI notes.

Vocal sounds are not made by just vowel filters anymore, also the oscillators can **produce humanoid sounds**, especially the Transformer, which is a sophisticated wavetable/granular/pitchformer sampler.

The Effect section was made to impress, being a mixture of Effectrix and Turnado flavors, adding the Gater and recordable knob envelope as special performance features.

We hope you will have lots of fun with **your new bass machine!**

[BACK TO TABLE OF CONTENT](#)



Getting Started

In this chapter, we explain 8 essential workflows in Cyclop - as brief as possible. Most of the chapters have links to short video snippets, where an expert explains the subject. Thanks to Prof. Garbutt at Music Marketing & DJ Vespers.





Synth Engines

Everything in Cyclop starts in the lower left-hand corner. Here you find the main sound generators: **Synth 1 & 2**. Use the switches S1 and S2 to switch the synths on/off.

Tap on the display (ie. „SAW REGIMENT“) to select another engine:

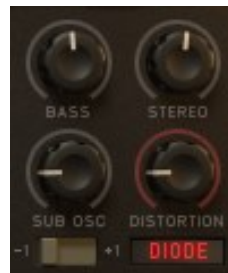
- Saw Regiment
- Analog Sync
- FM
- Transformer
- Spectromat
- Phase Stressor



Each of the six oscillators has three main controls (the knobs on top, different functionality with each synth selected).

 [Synth basics \(DJ Vespers, 4:02\)](#)

There's a third oscillator in Cyclop:



the Sub-Osc in the Master-Effects section, boosting the lower end around 60-80 Hz.

[Back to Table of Content](#)

The Routing Module & Filters

The Routing Module gives you control over the signal flow between the synths and the filter section.

Use the switches at the bottom to choose between **serial**, **parallel** or **split** setups.

The **two filter units** on the right side can also be **switched on/off** by tapping the icons **F1** and **F2**.

There are 10 filter shapes to choose from at the lower end of each filter unit;
Switch on **Vowel** to play around with human vocals and morph between them.



Use the router's mix knobs (shown on the left) to regulate signal flow.
Filter section on the right: switch on Vowel Mode and Cutoff will turn into Morph.

[Back to Table of Content](#)

Modulation

Modulation is the key strength of Cyclop. There are five modulators - all of them equipped with a huge level of flexibility and customisation options:

1. The Wobble Knob
2. Envelope
3. LFO
4. Step Sequencer
5. The Sound Knob

The buttons on the left-hand side of Cyclop's center screen give you the access to the modulators' settings and their assignments (from top to bottom



Wobble

Wobble-Knob Settings



Modulator Settings

Envelope, LFO & Step Sequencer



Modulation Assignments

Assign 5 modulators to 16 targets

The five modulators can be assigned to 16 targets in the assignments screen:



- Cyclop's Pitch and the Master Volume
- The three main controls of Synth 1 & 2
- The two Mix knobs in the routing module
- The three main controls of Filters 1 & 2

The modulation range starts at the current position of target parameter and can either be positive or negative. Knowledgeable Don Garbutt does an excellent job explaining these features:



[Cyclop's modulators \(Prof. Garbutt, 1:07\)](#)



[Assigning Modulators \(Prof. Garbutt, 2:28\)](#)

An external MIDI controller would come in handy here...

[Back to Table of Content](#)



The Sound Knob (...and recording movements)

The Sound Knob

The Sound Knob is the simplest of the modulators. Basically a movement covering a range from zero to full throttle. It can grab up to 16 modulation targets in one move and combine positive and negative modulation on these multiple parameters.

Check out DJ Vesper's take on this:

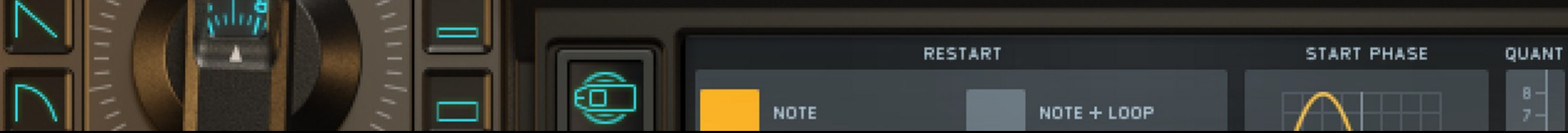
 [The Sound Knob \(DJ Vespers, 1:57\)](#)

Recording Knob Movements

Each of the four main knobs has a little Record button. Once you activate it, the record sequencer will open in the center screen and you can manually record knob movements or draw patterns in the sequencer.

 [Recording Knob Movements \(Prof. Garbutt, 1:49\)](#)

[Back to Table of Content](#)



The Wobble Knob & the A/B control

Wobble Knob

Cyclop's wobbling unit sends a flexible wave to any of the modulation targets.

The wobble knob's micro display shows the LFO frequency as a fraction of a bar. So, a „4“ in the display means the LFO will turn around four times during the length of a bar. So, the higher this value, the higher your frequency.

The ascending frequencies of the wobble knob are combined with twelve slots holding different waveforms. You can tap and slide in each of these boxes to choose from 16 forms.

Use the dice button in the upper right-hand corner for random waveforms across the board or choose one waveform for all boxes down in the middle of the wobble unit.

 [The Wobble Knob \(DJ Vespers, 2:03\)](#)

A/B Control

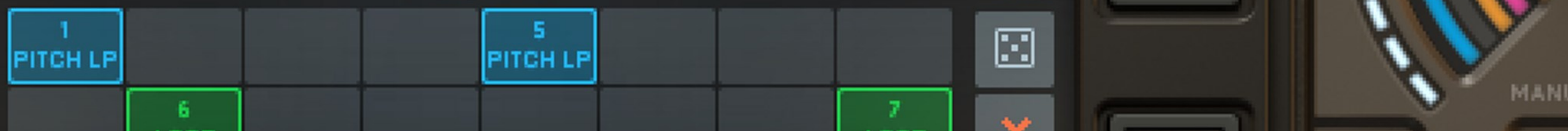
The A/B cross fader doubles up on the potential of the wobble knob.

Go to the Assignments page on Cyclop's center screen and select WBL AMT. Here, Wobble A and B. The A/B knob will crossfade between these two setups.



 [A/B Control \(DJ Vespers, 0:59\)](#)

[Back to Table of Content](#)



The FX Sequencer

Cyclop's effects sequencer is also located in the center screen.

The four sequencer lanes each hold a different group of effects (from top to bottom):

Pitch Looper (4x pitch down, 4x pitch up)

Looper with 8 different loop sizes

Vinyl Effects (Tape Stop, Vinyl, Scratch)

Classic Delays

 [FX Sequencer \(DJ Vespers, 01:52\)](#)

[Back to Table of Content](#)

Synthesis



QUICK WRAPUP

1. Switch Synths 1 & 2 on/off with their icons S1 and S2.
2. Call up the synth drop-down by tapping on the name of the synth currently selected.
3. The three main controls on top of the synth engines can be modulated.
4. Cyclop always produces 4 unison voices. You can offset the pitch of the voices using the Unison Control.
5. Detune the Synthesizers with each other using the Detune and the Octave Control.

The Synthesizers

The main oscillators are fairly complex synthesis units which we call **Synthesizers 1 and 2**.

Each of the two main Synthesizers offers **6 different modes** that have been engineered with a great deal of listening and tweaking, until that special sound was attained that makes Cyclop so impressive.

The three main controls of the Synthesizer units are **modulation targets** that can be assigned in the Assignments Screen.

Cyclop always produces **4 Unison voices**. You can offset the pitch of the voices. You can offset the pitch of the voices using the Unison Control. Detune the Synthesizers with each other using the Detune and the Octave Control.



[Back to Table of Content](#)



SLAVE



RAW

FIXED FREQ

Saw Regiment & Analog Sync

Saw Regiment

This is a special Super-Saw oscillator that generates 7 sawtooth waveforms running at a slight pitch offset.

The four unison voices can be used to stack octaves (Stab).

The Digitize parameter is a frequency-dependent sample rate reducer.

The three main parameters (active modulation targets):

Super. Offsets the pitch for the 7 saw waves.

Stab. Adds up to 3 octaves to the sound.

Digitize. Special pitch dependent sample rate reduction.

Analog Sync

This fat and juicy emulation of two analogue oscillators running in sync gives you some seriously heavy bass sounds. Modulate the sync frequency to let the beast out of the cage.

SyncMix. A cross fader between master and slave osc.

SyncFreq. Sync frequency of the slave oscillator.

PW. Pulse Width of the Pulse and the Double Saw oscillators. Goes from 100% narrow to 100% wide. Center position should be used for an equal pulse wave.

Controls in Display:

RAW. Deactivates anti-aliasing for rougher sound.

Fixed Freq. Unlinks the sync-pitch frequency from the master pitch frequency. If this button is deactivated, the sync frequency will be proportional to the master frequency.

[Back to Table of Content](#)



FM & Transformer

FM

Our idea of easy 3-OP-FM synthesis.

A Modulator Oscillator modulates two Carrier Oscillators. Two FM algorithms provide a variety of FM sounds that fit snugly into the Cyclop concept.

FM1. Determines the impact on Carrier 1.

FM2. Determines the impact on Carrier 2.

Mod. Determines overall linear modulation intensity.

Additional parameters:

M. Frequency ratio of the Modulation oscillator. The heart pops up when a harmonic ratio is chosen.

C1. Frequency Relation Modulator-to-Carrier 1.

C2. Frequency Relation Modulator-to-Carrier 2.

Transformer

Tap the yellow name (ie: „WobbleBass“) of the currently loaded sample to access the LOAD dialogue.

Transformer is a **wavetable synthesizer**: the loaded sample is analyzed and then sliced into waveform-cycles. These cycles can then be addressed by the **Position Knob**. Via modulation, you can read out a sample in many different ways.

The loaded sample will most likely not sound like before though. The Transformer completely destroys and rearranges the sample syncing it to your keyboard's pitch.

Transformer also allows Formant shifting which is one of the key features of Cyclop. **This is the real vocal synthesizer!**

Load any kind of monophonic material for best results!

[Back to Table of Content](#)



Transformer continued

Parameters:

Formant. Formant shifting. Doubletap for center position.

Pos. Determines the wavetable that you selected within the sample. In order to read a loop so that it runs along with your song, modulate the position control with an upward saw LFO. Put the LFO's speed to 1 bar.

Grain. This control allows fine tuning of the grain size that actually defines the size of the wavetable. Double tap for center position.

Modulating the Position knob:

Use the Envelope to read the sample exactly as you desire.

Use the Step Sequencer to modulate the position control for skipping effects.

[Back to Table of Content](#)



Spectromat & Phase Stressor

Spectromat

The Spectromat works with 32 internal oscillators to generate very complex soundscapes.

Each vertical band offers an individual on/off button: you can use the small ribbon below the x/y coordinates or zoom in by tapping the two-arrow icon.

The 32 spectral bands enable unlimited tweaking. Spread, shift, shape them, or deactivate individual bands.

Main Parameters:

Spec. Spectral frequency offset. Spectral bands are offset by up to 5 semitones with relations to each other. Double-tap for center position (2 semi notes spread).

Shape. Select the amplitude curve which is applied to the spectrum.

Shift. The whole spectral curve can be shifted within the frequency domain.

Phase Stressor

A Phase Distortion oscillator. In essence, this is a sine wave modulated in different ways, including self modulation.

The display shows the phase distortion of a sine wave in a spheric coordinate system.

Main Parameters:

Mod. Intensity of waveform modulation.

SelfMod. Intensity of self-modulation. Includes some sonic surprises along the way.

Sym. Defines the phase symmetry of the waveform.

[Back to Table of Content](#)



The Routing Module

There are 4 routings available, controlled by the switches at the bottom end of the routing unit. The parallel and serial setups define the wirings of the filters before reaching output.

Serial 1 & 2

Serial 1 goes through filter 1 first, then filter 2, serial 2 through filter 2 first, then filter 1.

In serial mode, the filter mix knob turns into a **small distortion unit** with eight modes, that can be picked by tapping the red dial next to the speaker icon. The options for distorting the output are identical to the Distortion unit in Cyclop's [Master FX section](#).

Parallel

Parallel routing wires the two synths and both filters through the mixing module. Control signal flow with the two big mix knobs.

Split

Split sends synth 1 to filter 1 and synth 2 to filter 2. You can still mix both outputs.

[Back to Table of Content](#)



The Filters

The Filters

Cyclop offers two identical Filter units each containing ten unique creations from our DSP nerds.

Most of the filters are saturated in a way that preserves a strong sound - especially a strong bass - even at high resonance settings.

Four different lowpass flavors cover the sound palette from aggressive (MS-20-style LP 2-Pole) to fat (Moog-style Ladder LP 4-Pole).

The filters also contain a **vowel mode**. Activate it to use any filter model in Vowel Mode.

Main Parameters:

Cutoff. Working frequency.

Resonance. filter resonance/sharpness.

Mix. Mixes the input signal with the output signal of the filter.

Filter Types

The **12dB HighPass** is a special MS-20 style algorithm delivering a strong bass and a very rich/colorful attitude. Perfect for using in Vowel mode.

12dB Band Pass.

A Moog style **Band Pass/LowPass** combination.

A **12dB Low Pass (2-pole)** for a juicy and overdriven filter sound or a **24dB Low Pass (4-pole)** with a darker sound.

4 Pole Low Pass Ladder with a Moog Ladder Filter flavor -> fat sound and a sharp resonance.

MidBoost. A mixture of low pass and band pass filters. Sounds pretty fat putting out a good deal of uncommon filter sound.

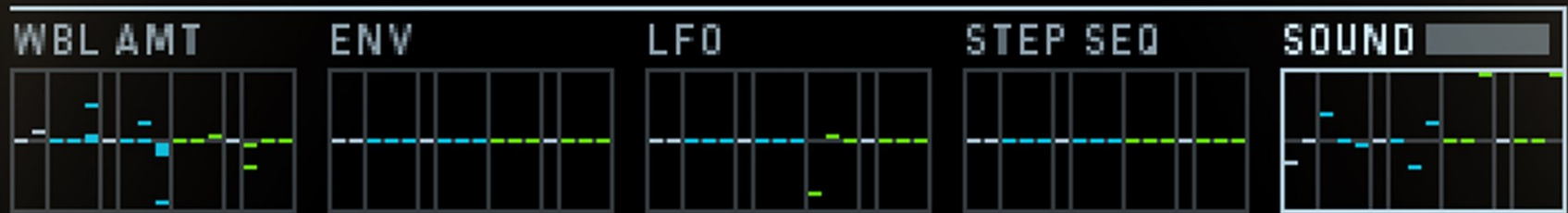
A **Bandstop**: inverse band pass filter with a U-shaped curve.

The spectral **Ripple** filter: 4 bands shifted in the frequency range.

Comb filter with short delay times. This one is good for vowels and resonating sounds.

[Back to Table of Content](#)

Modulation



Summary

QUICK WRAP-UP

1. The main modulators are:

Wobble Knob
Envelope
LFO
Step Sequencer
Sound Knob

2. Modulation targets are:

Cyclop's Pitch & Master Volume
the three main controls of the synth engines & the filters
both Mix faders in the routing module

3. Assign modulations in the center screen (lowest button on the left-hand side)

4. Find Modulator Settings also in Cyclop's center screen (the other two buttons on the center screen's left-hand side)

We made Cyclop to join first-class DSP with modulation madness for otherworldly bass sounds.

Cyclop's **main modulators** are (1) the Wobble knob, (2) an Envelope, (3) an LFO, (4) a Step Sequencer and (5) the Sound Knob.

The five modulators can be assigned to **16 targets** in the assignments screen:



- Cyclop's **Pitch** and the **Master Volume**
- The three main controls of **Synth 1 & 2**
- The three main controls of **Filters 1 & 2**
- The two **MIX knobs** in the routing module

The Modulation targets of the five main modulators can be assigned in the center screen. Just tap this button:



[Back to Table of Content](#)

Modulator Settings

The Standard Modulators Page

Envelope
An AHDSR Envelope which can be restarted with each MIDI note (Multi) or with each first MIDI note (Single).



Attack sets the fade in time (from zero to full value) until the hold/decay/sustain is reached.

Hold determines how long the maximum value is held before decay is started.

Decay is the fade time to the sustain value.

Sustain is the value that remains constant as long as the note is held.

Release is the fade out time after the note is released.

LFO

The LFO generates a specific waveform which modulates parameters. Nine different LFO waveforms are available. These are the same waveforms as in the wobble generator, except for the freeze and the fixed values.

LFO Rate and LFO amount can be faded in and out with the Envelope. Use the exponential and logarithmic waveforms to produce percussive sounds.

Rate. The LFO rate, always in sync with your song tempo.

Waveform. The LFO Waveform.

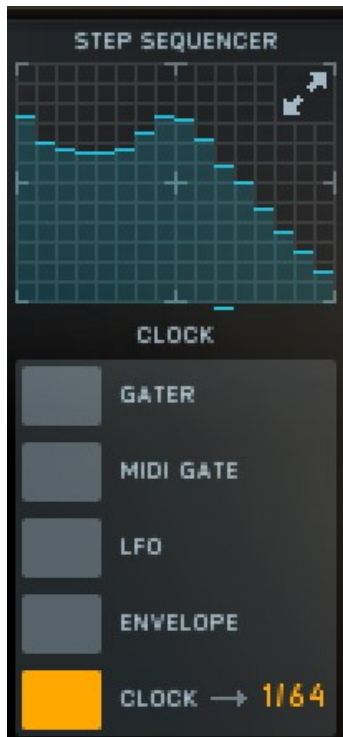
Env->Amt. Envelope controls LFO amount.

Env->Rate. Envelope controls LFO Rate

Scope. Shows you the current LFO signal.

[Back to Table of Content](#)

Modulator Settings



Step Sequencer

The 16-Step Sequencer delivers a sequence of 16 values.

You can read the sequencer in different ways to achieve the craziest modulations. Usually a clock is used to read a sequencer, so the clock menu gives you choice about the available read modes:

Gater. The FX Gater clock controls the sequencer.

MIDI Gate. Each MIDI note reads the next step.

LFO. LFO controls the step sequencer.

ENV. Envelope controls the step sequencer.

Clock. The step sequencer's own clock speed.

[Back to Table of Content](#)



The Sound Knob



The Sound Knob is the simplest of the modulators.

Basically a movement covering a range from zero to full throttle. It can grab up to 16 modulation targets in one move and combine positive and negative modulation on these multiple parameters.

[Back to Table of Content](#)

Recording Knob Movements

Each of the four main knobs has a little Record button.

Once you activate it, the record sequencer will open in the center screen and you can manually record knob movements or draw patterns in the sequencer.

To start the recorder (and keep it running), hit a key on Cyclop's keyboard.



You can loop record and play by setting on of the buttons on top of the recorder page in the center screen.



[Back to Table of Content](#)

The Wobble Knob

The Wobble Generator

The Wobble Generator is an advanced LFO that is built of the 3 main units (1) Wobble Knob, (2) Wobble Amount and (3) Wobble Settings.

The **Wobble Knob** lets you choose from 12 LFO Speeds and Waveforms, while the **Wobble Amount Knob** morphs between 2 Wobble Parameter assignments.

The **Wobble Settings** Page lets you do some deeper tweaking of the wobbler's performance, like phase offset, restart options, wave quantizer and different ways to control the knob.

The Wobble Knob

Cyclop's wobbling unit sends a flexible wave to any of the modulation targets.



The wobble knob's micro display shows the **LFO frequency** as a fraction of a bar. So, a „4“ in the display means the LFO will turn around four times during the length of a bar. So, the higher this value, the higher your frequency.

The ascending frequencies of the wobble knob are combined with twelve slots holding **diferent waveforms**. You can tap and slide in each of these boxes to choose from 16 forms.

Use the **dice button** in the upper right-hand corner for random waveforms across the board or choose **one waveform for all** boxes down in the middle of the wobble unit.

[Back to Table of Content](#)



The Wobble Knob

Freeze Mode (Snow Flake)

The snowflake indicates a Freeze mode. Similar to a sample and hold module,

The Freeze will maintain the last active value as long as it is selected.

If the Wobble Knob turns from a sine wave to the snowflake, the last value of the sine wave will be held until another wave form is selected.

Fixed Values

Furthermore, there are 5 fixed values available. These values are 0%, 25%, 50%, 75% and 100% and are displayed by squares of different heights. These values make it possible to use the Wobble Generator like a step sequencer.

The central wave form control sets all wave forms at once. The Random Button sets a random wave form setup across the board.

Record Knob Movements

Like all of Cyclop's four main knobs, the Wobble Knob can be controlled via recorded movements.

Just tap the record button to arm for envelope recording and directly open the Envelope Recorder Screen in the center.

Press and hold a key on Cyclop's keyboard to start recording in time sync.

[Back to Table of Content](#)

Wobble Settings

The Wobble Generator has its own **settings screen** where you can make even deeper adjustments. The following options are available:



Start Phase. Here you can set the starting phase of the wobble LFO. This determines if the modulation will go upwards or downwards after you hit a note.

Quantize. The LFO signal is quantized to stepped values.

Restart. This control determines when the wobble LFO will restart. You can restart it with a MIDI note, but also when the Wobble Recorder Envelope wraps around or with several beat divisions.

Interpolate. This button determines if the LFO Speeds are switched or faded.

Velocity. This controls the Wobble Knob by MIDI velocity values.

Single vs. Multi.

The Single/Multi button defines how the sequencer will restart.

If Single is selected, the sequencer will restart with each first note.

If Multi is selected, the sequencer will restart with each note.

[Back to Table of Content](#)

Wobble Amount

Out of Cyclop's modulators, the Wobble unit is unique in yet another way:

The Wobble Generator creates a unique modulation curve that you can apply to the synthesizer's parameters — that's what the Assignment Screen is all about.

If you call the Wobble Assignment Page, you can see that it has A and B pages.



These pages are morphed by the **Wobble Amount Knob** or the **A/B control**. Hit the A Button to setup the Wobble for the lowest position of the Wobble Amount Knob. Then hit the B button and create the Wobble for the highest knob position. Now use the Wobble Amount knob to morph between the wobbles.

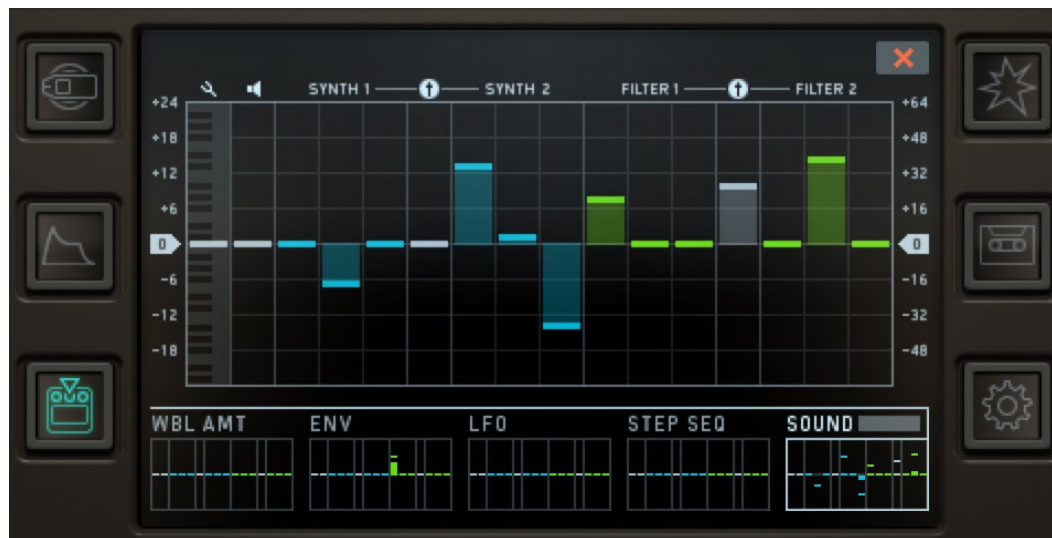


Like with all of Cyclop's main knobs, you can record knob movements.

[Back to Table of Content](#)

Modulation Assignments

Cyclop's five modulators can be routed to up to 16 modulation targets in the **Modulation Assignments** screen.



Switch between the five modulators at the bottom of the assignments screen.

The 16 targets are represented by the columns in the grid. Negative Modulation under the x-axis, positive above.

Check the headlines above the grid:

Synth 1 & 2, filter 1 & 2 each have three columns. These are the main controls (the big knobs on top) of the respective units from left to right.

The modulation range starts at the current position of the target and can either be positive or negative.

When being modulated, the 3 main controls of synthesizers and filter will indicate negative modulation with a red light, positive with a blue.

Inbetween the synths' and filters' columns, the controls for modulating the mix faders in the routing module can be found.

[Back to Table of Content](#)

ACLOP

FX

The FX Sequencer





Effect Lanes

QUICK WRAP UP

1. Access the sequencer by pressing the star-shaped explosive symbol next to Cyclop's center screen.

2. The 4 lanes each hold a different group of effects (top to bottom):

Pitch Looper Effects,
Loopers,
Vinyl Effects &
Classic Send FX

Find the dry/wet dials for each lane below sequencer.

3. On top of the FX Sequencer page you find the Gater which works like a trance gate: it interrupts the audio signal with a groovy pattern.

The **Pitch Looper** repeats the audio signal for a certain amount of time. With each repetition, the pitch becomes higher or lower. The Pitch Looper provides 4 different settings for "Pitch Up" and 4 different settings for "Pitch Down".

The simple **Looper** effect repeats the audio material at a certain rate. The 8 settings of the Loop FX lane offer 8 different loop sizes.

There's also a collection of several **Vinyl** Effects.

1. Tape Stop fast
2. Tape Stop slow
3. Vinyl slow
4. Vinyl med slow
5. Vinyl med fast
6. Vinyl fast
7. Scratch slow
8. Scratch fast

The Send FX are all delay-based effects. There are 2 settings available for **Phaser**, **Chorus**, **Delay** and **Reverb**.

[Back to Table of Content](#)

Tools

Gater

On top of the FX Sequencer page you find the Gater which works like a trance gate: it interrupts the audio signal with a groovy pattern.

In addition, the Master Amp Envelope is triggered. Usually you would not notice, until you use Release or Delay in the Amp Envelope.

Then you can let the Gater step have decay or release curves. Use 12 different FX/Gater sequences by activating the hot keys. An empty Gater will mute all audio!!!

Tools

The Effect Sequencer can be filled with effects randomly. (**Dice Button**)

The **X Button** deletes the sequence.

The **Clock** determines the read speed of the sequencer, in relation to the song bpm.

The **Swing** function plays each second step a bit later.



[Back to Table of Content](#)



1/16

Loop Bar

The FX Sequencer has a **loop bar** which determines where the sequencer starts and how many steps it will play in loop.

Grab the loop bar ends to resize the loop.

Grab the loop bar middle to move the loop.



Single vs. Multi

The Single/Multi button defines how the sequencer will restart.

If Single is selected, the sequencer will restart with each first note.

If Multi is selected, the sequencer will restart with each note.

[Back to Table of Content](#)



The FX Knob



The FX Knob helps you reading out the effect sequencer.

There are three ways to get it moving:

Manual or MIDI Learn:

You can MIDI-learn the knob after a long tap - this obviously requires an external hardware.

via the Sequencer clock:

When you tap the „Sequencer“ Play Button, the customisable clock will step through the FX sequencer.

via recorded Knob movements:

After hitting the „Record“ Button, you can draw a 16-step sequence in Cyclop’s center screen.

[Back to Table of Content](#)

ACLOP

FX

Master Effects





Bass, Sub Osc & Stereo

The Master Effects section contains final insert effects and the sub oscillator.

Sub Oscillator

The Sub Oscillator provides a clean bass fundamental. It ensures that you can use the synthesizers for any sounds without having to pay attention on the bass provided by the synthesizers 1 and 2.

The Sub Osc is a high quality Sine Osc that plays along with your MIDI notes. You can set it 1 or 2 octaves below original pitch to have the bass where you want it.

The Sub Osc is not sent through any filters or effects, just the pure sine is delivered directly to the output.

Bass

The Bass processor provides a defined bass boost are 60 and 80 Hz while it cuts down the 225Hz a bit. This will put the bass where you need it.

If the synthesized sound contains no low frequency, there is nothing to amplify. In such a situation, it is better to use the Sub Oscillator to add some decent bass.

Stereo

The Stereo Processor spreads the audio signal in the stereo field.

No delays are used to avoid any phase problems. The Signal becomes split into 8 frequency bands between 250Hz and 4000Hz which become sent to the left and right speaker, while frequencies below 250Hz and above 4000Hz remain in the middle. This M/S Stereo processing is quite unique and will make your bass fill the room.

[Back to Table of Content](#)



Distortion

The 9 available Distortion units give the final synth signal some roughness and dirt. Nice flavors are available to add some beef to your sound. The same Distortions can be found in the Routing Unit, where distortions are used between the filters when they run in series.

Amp

Amp/Speaker simulation with lots of warmth.

Drive

Nice and angry overdrive with a special top end.

Dist

Intensive distortion that turns the sound into something new. Diode. The distortion core from the MS-20 filters is used here to provide some mojo.

Clip

The audio will be boosted until it clips. Use this unit to just boost your level or to add some really evil distortion.

Sine

The audio signal is boosted and then runs through a sine algorithm.

1-Bit

The audio signal must decide 1 or 0? The hardest digital method.

Crush

Nice bit crusher that basically adds some silver to the sound.

Digitize

This pitch-dependent sample rate reducer is always good for some digital vocal sounds.

[Back to Table of Content](#)

Global Sound Settings



Master Envelope, Velocity and Glide

The **Master Envelope** defines the overall Level performance. It can fade the audio signal in and out while a note is pressed and can let the synth fade out slowly after a Note has been released.

The **Attack** control lets the sound fade in for up to 4 sec.

The **Decay/Release** control is special: If the knob is below 50%, it is decay and the sound will fade out while you hold the note.

If the knob is at 50%, it is just sustains and the sound will be heard as long as you hold the note.

If the knob is above 50%, it is release. Now the sound fades out after you release a note.

The **Velocity** button determines whether or not MIDI velocity is used to define the Level.

The **Glide** processor fades from one note to the next and can take from 0ms to 2000ms until the next note is reached.

The Glide offers two modes:

One Finger: Glide is performed always.

Two Fingers: Glide is only performed when two or more notes are played.

[Back to Table of Content](#)

HIGHSCORE : 51



Settings Screen

MIDI

CC PRESET ISOLATE

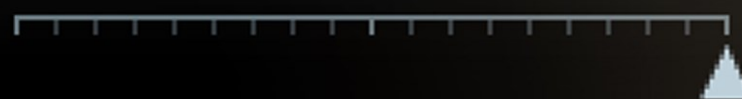
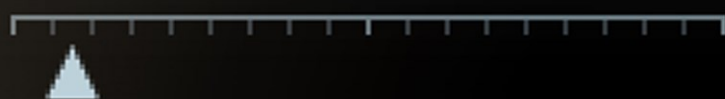
PITCH BEND RANGE 1

MOD WHEEL TO PITCH LFO . .

MASTER TUNE 0.00

LFO AMP

LFO RATE



iOS

TEMPO (BPM) 120.0

SETTINGS



MIDI Settings

All MIDI-related settings are made here. Additionally, here you find the pitch LFO that you would expect when using the modulation wheel.

CC Preset Isolate

MIDI-CC assignments (MIDI Learn) will not be saved or changed with the presets.

Pitch Bend Range

Intensity of the pitch bend wheel in semi notes.

Master Tune

Makes the overall tune fit to your “out of tune” song.

Modwheel to Pitch LFO

You expect a slight pitch LFO when using the modwheel. Set this up here.

Settings

Adjust the way Cyclop operates in certain MIDI and Audio connections, enable or disable [Ableton link](#) as well as preset file sharing between Cyclop iOS and your computer via [iCloud synchronization](#).

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

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

[Back to Table of Content](#)

Audio Settings

Output

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 Cyclop.
If you experience crackles in the audio signal, increase your buffer size.

Run Audio in Background

Switch ON to keep Cyclop playing when you’re working in other apps.

[Back to Table of Content](#)

TRACE

RESULTS

MIDI PRG LIST ▶▶

NOISY ATONAL SHARP CHORD WARM BELL

NAME	AUTHOR	RATING
ANIMATOR KATZ	SUGARBYTES	+

The Presets

BRIGHT **PUNCHY** LFO

DIGITAL FX PITCHING PERCUSSIVE

STRONG ARP SWEEP LAYERED

NAME	AUTHOR	RATING
DJ STOP CO	MONKY SOUNDSET	+
FM_AIR	DAVIDF	+
FUNK	ABSTRACT CATS	+
FUNKATRON	ABSTRACT CATS	+
HIGH HIT C5	MONKY SOUNDSET	+
MASTEROR	ABSTRACT CATS	+
MOOMBAHBLIP	PLAEGROUND	+
NEW FRONTIER	ABSTRACT CATS	+
PHASERBASS	XENON	+
PLAYER1	FRAGMENT MACHIN..	+
PLAYER3	FRAGMENT MACHIN..	+
PLAYER4	FRAGMENT MACHIN..	+
PLAYER5	FRAGMENT MACHIN..	+
REIBUNG	SUGARBYTES	+
SID ARPS	XS	+
SPAYZLAZUH	BILLY GRAZIADEI	+

EDIT

MUSIK

AUTHOR SIRIUSMO

RATING + + + + +

TAG 1 EVOLVING

TAG 2 FX

TAG 3 VOCAL

TAG 4 DIGITAL



NAME	AUTHOR	RATING
ANIMATORKATZ	SUGARBYTES	+++++

The Preset Handler

Click a preset name from the top area of Cyclop and the Preset Handler will offer you convenient ways to quickly find the sound you're looking for.

A special folder is the **User folder** which is meant to store the presets you created. The little disc icon opens the 'Save Preset' entry and is for saving presets.

If you want to share your saved presets across multiple devices activate [iCloud Synchronization](#).



You can assign four tags, a rating and an author name to the selected preset. Presets can then be filtered using these tags. Furthermore, you can create your own program change lists and load/save them.

The Trace Window

Here you can filter presets depending on their tags or other preferences.

4 modes are available:



Cloud

The beautiful way to find nice sounds. The Cloud shows all tags, with different size, according to their population.

Tap on a tag to show all presets with that tag in the 'Result List'. Tap on another tag to sharpen the search. Tap the Reset button to reset the search.



Tag List

All tags are shown in a list. Works exactly like the cloud.



Author List

Here you can find presets according to their authors.



Folder List

Here all preset folders are shown and presets can be filtered according to the folder they are in.

[Back to Table of Content](#)

Results & MIDI PRG

The Result-List

Here all found presets are listed.



NAME	AUTHOR	RATING
ANIMATORKATZ	SUGARBYTES	+
BASSEAGE	ABSTRACTCATS	+
BEAUTIFUL BEAST	TORLEY	+
DINOSTOMP	SUGARBYTES	+
DJ STOP CO	MONKY SOUNDSET	+

Double tap a preset to load it - you can always give the current preset a quick check by tapping the keyboard.

Tap on NAME, AUTHOR or RATING to sort the presets.

MIDI Program List

The MIDI program list can be expanded from the result list. When the MIDI Program List is shown, MIDI Program Changes can be executed.

Drag & drop presets from the Result list into the MIDI program list in order to build your own MIDI Program List.

Don't forget to save the list when you are done. If you only want to use one list regardless which preset you load, you should save your list as 'Default'.

If you want to connect a certain list with a certain preset you have to load a preset. Then load or save a MIDI PRG LIST and then save your preset.

So in general one could say: a preset always loads the MIDI PRG LIST it had chosen when the preset was saved. You can also copy the whole result list to the program change list using a button.

Program lists can be saved and loaded. The presets contained in a program list cannot be edited anymore.

[Back to Table of Content](#)



NAME	AUTHOR	RATING
ANIMATORKATZ	SUGARBYTES	++++

The Edit Field

In this field, tags are assigned to the selected preset.

Author, Rating and 4 tags can be assigned.

All changes are executed immediately.

The Robot shows which tags are assigned.

For each assigned tag, one of his parts will lighten up.

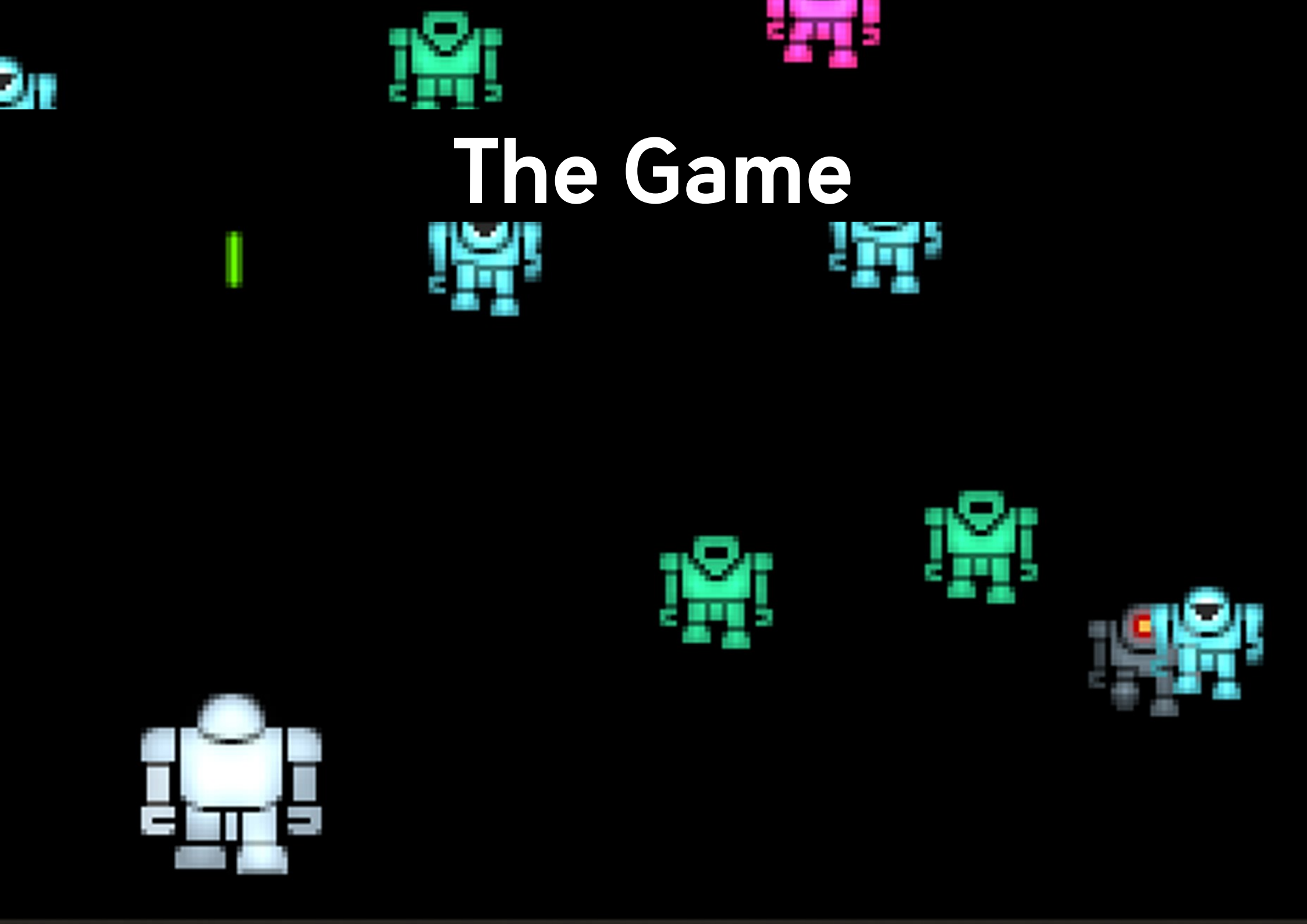


Working with Tags

A tag can be chosen from the tag list. To create your own tags, just write your tag into the tag list. In order to delete a tag, just make sure it is not assigned to any preset.

[Back to Table of Content](#)

The Game





The Game

While we created the Cyclop Robot logo, lots of funny little bots were drafted. So the idea to a little shooting game came up, here you can see how it turned out.

Just tap the Cyclop robot logo to start the game. You can still play MIDI notes while the game is running.

The Game offers nice methods to just check random presets which are called when you shoot the little tank, and to create nice sounds by shooting enemies or letting them break through to create funny melodies according to the selected major/minor scale.

Tapping into the game sets the Hero (your white bot) position. As long as you hold your finger down, the robot will keep on shooting.

Pull your finger down to increase the shooting rate. The Game triggers MIDI notes whenever you shoot, when you hit an enemy, when enemy hits you or when enemy breaks through.

The game offers various controls to get the best out of it. Basically the knobs decide how the game works together with the Cyclop synthesizer.

Spawn

This control determines how many enemies are created and how fast they are. With higher high score, the spawn will raise internally as well.

Gun Pitch

This control determines the pitch envelope amount for the note triggered by your shooting.

Kill Pitch

This control determines the pitch envelope applied to the note that is generated when you kill an enemy. The pitch can go up or down, depending on the position of the knob. When the knob is set to its middle position, the pitch is not changed.

Root Note

The Key that the scale is based on.

[Back to Table of Content](#)



The Game

Scale

Determines if enemies that break through create pitches in a major or minor scale.

Gate Time

Overall length of a note, generated by the game.

High Score

The highest high score is generally saved.

Your ranking is displayed in the game screen, the high score points are displayed above the wobble wave display.

Points

Erase Enemy: 1

Erase Shooting Enemy: 20

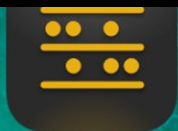
Being Shot: -1

Enemy Breakthrough: -1

[Back to Table of Content](#)



Connectivity



BeatMaker 3



Cubasis



GarageBand



Effectrix



WOW



AUM



Auria Pro



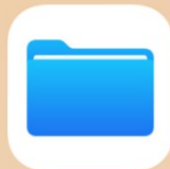
Audiobus 3



Unique



Turnado





iCloud Synchronization

Through iCloud, you'll be able to share your saved presets across multiple devices including your desktop computer.

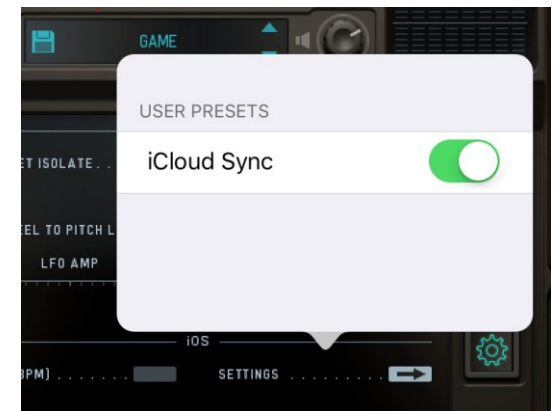
This feature is disabled by default. To sync Cyclop across your devices, launch the [Cyclop Settings](#). There choose iCloud, tap iCloud and set iCloud to On.

Once activated, presets you save in the Cyclop iOS version are synced automatically to your iCloudDrive.

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

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

The presets will then automatically appear in the User folder of Cyclop's preset browser. Please note that creating and then reading out a subfolder is technically not possible.



[Back to Table of Content](#)



MIDI

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

MIDI LEARN

Long-press any control to assign incoming MIDI CCs.

Tap Clear to delete the assignment.

Within an iHost Cyclop MIDI Learn settings will be saved with the song.

When using the Standalone version of Cyclop:

If CC Preset Isolate is enabled in the MIDI Settings of Cyclop MIDI Learn settings won't change when loading presets.

If CC Preset Isolate is unchecked the CC Map will be recalled with the related preset.

[Back to Table of Content](#)

Cyclop as a plugin inside your favorite portable DAW

Cyclop 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 AU's menu, but in most host apps you'll find the menu where other effects, instruments, or editing tools can be applied.

Just select Cyclop from the list of available AU Instrument apps in eg. Cubasis.



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

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

[Back to Table of Content](#)

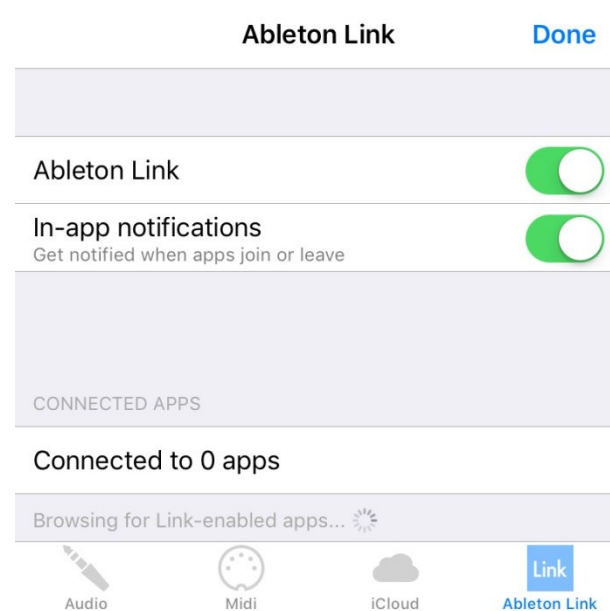
Ableton Link

Hop on to the same network and jam with others using multiple devices running Link-enabled 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 [Cyclop's Settings](#).

When activated, Link will sync tempo across apps.

Find out more about Link [here](#).



[Back to Table of Content](#)



SUGAR BYTES



RICO BAUDE



ROBERT FEHSE



VINCENT MIETHE



GABRIEL MULZER



PHILIPP ROLLER

VERSION : 1.

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.

UNIQUE



Unique specializes in state-of-the-art vowel sounds and mighty, mighty analogue sounds from the Golden Age of synthesizers. Her assertive sound should not be missing in your mobile studio.

[Back to Table of Content](#)

Contact

Sugar Bytes GmbH | Made of passion

Greifswalder Str. 29 | 10405 Berlin, Germany
phone:+493060920395



Sugar Bytes are:

Rico Baade & Robert Fehse
Vincent Miethe
Nadine Purrmann

Thanks go out to:

Philipp Roller
Gabriel Mulzer
DJ Vespers
Prof. Don Garbutt
Dan-D

[Back to Table of Content](#)