SUGAR BYTES

Effectrix

User Manual

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What is Effectrix

Effectrix is an effect sequencer which has been made for applying effects using a step sequencer environment.

You can use Effectrix to completely mash up your tracks, turn them into grainclouds or just do some slight alternations to your beats.

Using the 12 subsequences triggered by MIDI notes, you always have some stunning effect performances at your fingertips.

Let's dive a bit deeper into this source of new ideas and styles.

Installation

Download (requires login) the latest version <u>here</u>.

The standalone version and the manual will be installed into
Windows: C:\Program Files\Sugar Bytes\Effectrix
macOS: /Applications/Sugar Bytes/Effectrix

Presets will be installed into Documents\Sugar Bytes\Effectrix.

Do not move the Effectrix presets after installation!

WINDOWS

Default installation paths:

VST2   C:\Program Files\VSTPlugins
VST3   C:\Program Files\Common Files\VST3
AAX   C:\Program Files\Common Files\Avid\Audio\Plug-Ins

macOS

The Audio Unit, the VST and the AAX Plugin will be automatically installed into the correct folders.

Default installation paths:

VST2   /Library/Audio/Plug-Ins/VST/
VST3   /Library/Audio/Plug-Ins/VST3/
AU   /Library/Audio/Plug-Ins/Components/
AAX   /Library/Application Support/Avid/Audio/Plug-Ins

Uninstalling

In order to uninstall Effectrix, please take the following steps:

Windows: Uninstall Effectrix under Control Panel/AddRemove Software.

macOS: Here is the way to delete everything regarding Effectrix

/Applications/Sugar Bytes/Effectrix
/Library/Audio/Plug-Ins/VST/Effectrix.vst
/Library/Audio/Plug-Ins/VST3/Effectrix.vst3
/Library/Audio/Plug-Ins/Components/Effectrix.component
/Library/Application Support/Avid/Audio/Plug-Ins/Effectrix.aaxplugin

~/Documents/Sugar Bytes/Effectrix
~/Library/Preferences/com.sugar-bytes.Effectrix.plist

~ means: /Users/YOURLOGINNAME (your home folder)

(Please note that since OSX 10.7.x the library folder is a hidden folder.
Therefore please use the "Go To Folder" menu and then enter ~/Library.)

Authorization

The serial number is requested for installation.

If the serial number validation fails, the plugin will show that in the Effectrix About Screen.
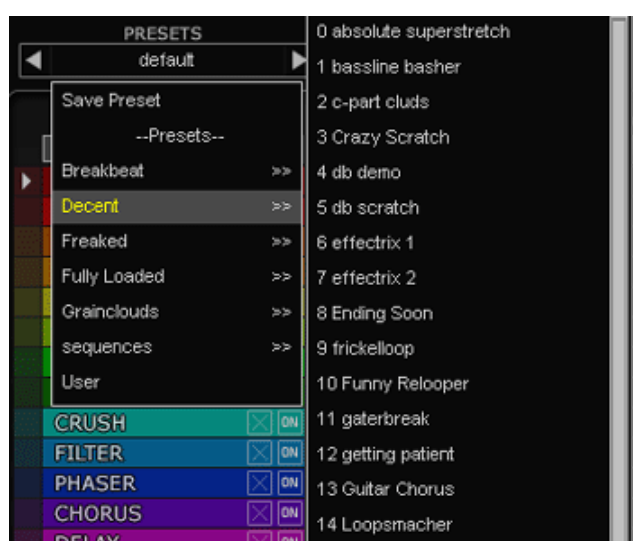
EFFECTRIX Structure

The Header

Global Presets

You will find the Global Presets in the upper left corner of the plugin.

The Global Presets recall all Effectrix settings, including all sequences, subsequences and effect settings.

The top line shows the current preset name and offers different file operations.

You can add your own preset folders, subfolders are not allowed.

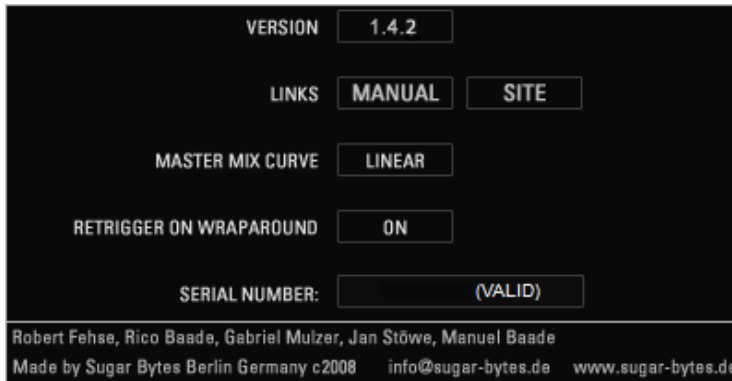Find the Effectrix presets in Documents/Sugar Bytes/Effectrix/Presets.

About Screen

Click on the ABOUT Button to open the About Screen.

In the About Screen you have some useful information and settings as follows:

Version

Current version number.

Open Manual

Start the Effectrix manual from here and visit the Sugar Bytes website to look for updates for example.

Master Mix Curve

The Mix control offers two curves in the About Screen. Linear mode for a linear blending between dry and wet signal, in this mode the audio level might be a bit too weak at 50/50. The EPL mode (Equal Power Law) cares for a stronger sound at 50/50 mix. Follows the amplitude of the incoming audio signal to produce a control curve.

Retrigger On Wraparound

If a sequencer step goes over the whole sequence length, the effect will be retriggered at the first step.
Using this feature, internal envelopes, Loop startpoints etc. will be retriggered.

Serial Number

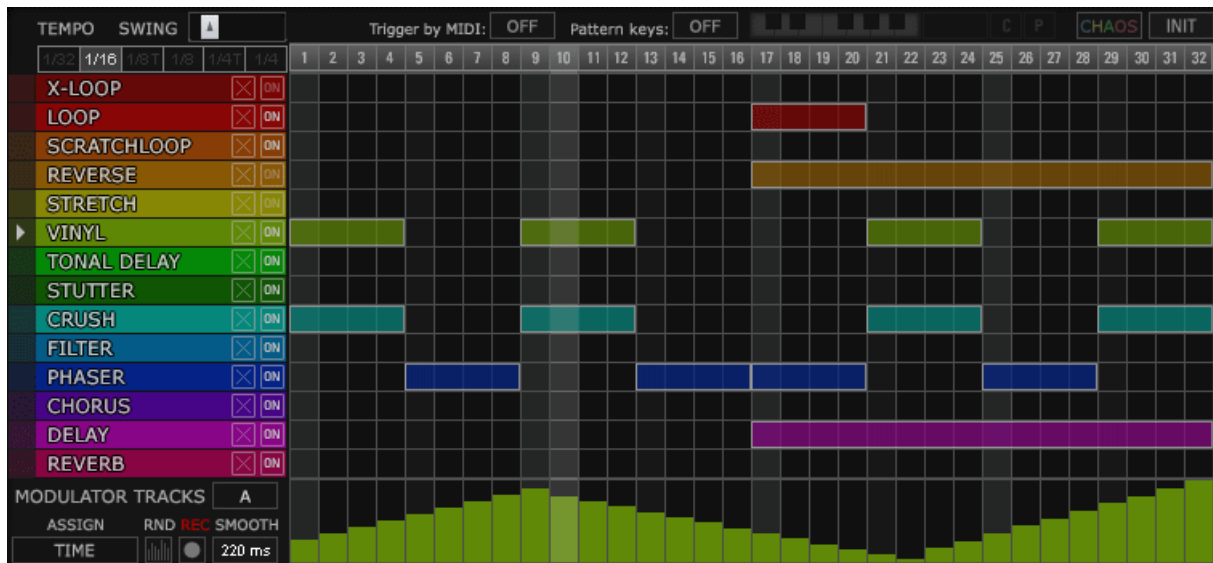Your serial number is shown here, along with its validation status.

Bypass

 The BYPASS button deactivates Effectrix. This button is saved with presets, but cannot be automated.

The Effect Sequencer

Now let´s start with the deeper stuff, the Effectrix sequencer:

Tempo

Effectrix runs at your host bpm, using the Tempo controls you can divide the host tempo, so that Effectrix runs at /32, /16 or even at triplet speed. That way you can determine the actual resolution of the 32step sequencer.

Swing

With the swing control you can let the Effectrix sequencer swing along with your host sequencer. The swing actually delays
each second note, so using swing makes only sense when the Tempo control is set to the resolution of your host sequencer.

Trigger By MIDI

The sequencer has two inbuilt clocks. It can run along your songposition, or it can be fired with a MIDI note, only applying the effect sequence as long as you hold a note. Activate "Midi Trigger" to trigger the sequencer with MIDI notes.

Use Pattern Keys

This setting activates the 12 subpatterns. A little keyboard will appear, it shows the current note and you can use it as well to call a subpattern with the mouse. Right beside the keyboard the current pattern number (1-12) is displayed.
The pattern keyboard can be automated with host automation, so you can call patterns without MIDI as well.

Copy/Paste Buttons

When you work with the subsequences, it's very convenient to use the COPY/PASTE system. Hit the C button to copy the whole sequence. Then choose another sequence (with a MIDI note or just by clicking into the little screen keyboard) and hit P to paste the sequence onto the chosen key. Using COPY/PASTE you can easily create variations from existing material.

Chaos Button

Press this button to create chaos in the pattern sequencer. Random steps will be created every time you hit this button.
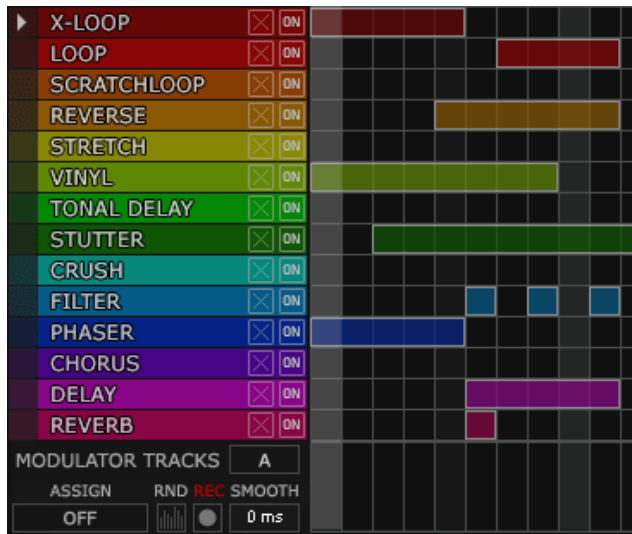
Init Button

This button completely erases all sequences, also the subpatterns, so you can create new sequences from scratch.

Loop Bar

Use the Loopbar on the top of the sequencer to define your own playback loop. Pick it on the edges to resize it, pick it in the middle to move it.

Tracks

Each effect has its own sequencer track. The little cross-button erases the sequence on this track. The little ON-button can bypass the effect.

Step Handling

Draw sequence steps into the sequencer matrix with left click/drag.

Erase steps with a double-click on the step.

Move a step by grabbing it's center. You can then move the step anywhere within its effect track. Steps cannot be moved between different effect tracks.

Resize a step by grabbing it's ends. The red part of Effectrix includes the actual filter section.

Modulation Sequencer

Each effect has two modulation sequencers (A and B).

These can be assigned to all effect parameters giving you another dimension for creating life within your effect sequences. You can also record knob movements to it, turning the knob with the mouse or via MIDI / automation.

A/B

Use the A/B button to select one of the two sequencers.

ASSIGN

The ASSIGN menu is used to assign a knob for being modulated or recorded with the selected modulation track (A or B).

SMOOTH

The SMOOTH control will turn the stepped modulation into a smooth modulation curve with a lag time up to one second.

REC

The REC button activates recording for the assigned knob.
While REC is enabled, the assigned knob will not receive modulations until REC is disabled.

RND

The RND button creates a random sequence.

Effect Controls

Below the sequencer you find the Effects section.
Each effect has it´s own color and it´s own page.

The effect page is called with a click into it´s track, also when editing it´s sequence it will be called, so you always see the effect which is currently edited in the sequencer.

Nearly all effects have the same **DRY/WET** mix system, using
an envelope (triggered by the sequencer step) which gives you the possibility to fade in and out effects using the **ATTACK** and **RELEASE** controls. So when a sequencer step is reached, it fades in according to the Attack time, then stays at the **MIX** level. When the step has ended, the effect fades out according to it´s release time.

Delay and Reverb have a slightly different system. Here you have no DRY/WET mix but individual **DRY Level** and **WET Level** controls which results in ideal control of the audio level.
The effects are running in series, from top to bottom, so first the XLOOP works your audio, feeding it´s output signal into the LOOP, which feeds it´s output into the Scratchloop.This gives you crazy possibilities from relooping looped stuff up to creating complex grainclouds which leave no clue what the initial material sounded like.

Effect Presets

Each single effect has it′s own preset system, so its very easy to store and recall your favorite settings.

MASTER

In the **MASTER** section you can set the **Master Level** and the **Master Mix** which blends the incoming clean signal with the Effectrix output signal. The Mix control offers two curves in the About Screen. Linear mode for a linear blending between dry and wet signal, in this mode the audio level might be a bit too weak at 50/50. The EPL mode (Equal Power Law) cares for a stronger sound at 50/50 mix.

EFFECTS

X-Loop

For Effectrix we developed a more advanced looptool called XLoop. It changes loopsize and pitch over time and includes an envelope for shortening the loop.

SIZE

Defines the size of the looping buffer. It works in tempo values, so you can easily decide how long the loop will be.

ENVELOPE

Cuts the loop short, so that only the beginning of the loop remains and silence takes over.

SIZE CHANGE

A bipolar control. Negative settings make the loop size getting smaller over time. Positive settings let the size grow over time.

PITCH CHANGE

A bipolar control which drops or rises the loop pitch according to its positive or negative position.

Loop

A usual looper which repeats it´s buffer according to it´s loop size.

SIZE

Defines the size of the looping buffer. It works in tempo values, so you can easily decide how long the loop will be.

XFADE

Fades the loop ends to create smooth loops, higher settings mix so much material that the sound becomes weird and supersmooth.

DECAY

Fades out the loop at the given time. Using this feature you can make the sound vanish before the step end is reached, giving you the possibility to create stuttering loops using several short steps.

Scratchloop

Another innovative looper developed especially for Effectrix.

It plays the loop forward and backward like scratching a vinyl record. You can have different speeds for fwd and bwd spin and individual slopes for the spinning change between fwd and bwd and vice versa. This a very complex effect where all parameters interact with each other, opening new worlds of scratching your audio signals.

SIZE

Defines the size of the looping buffer. It works in tempo values, so you can easily decide how long the loop will be.

FWD SPIN

Controls the FWD playback speed.

FWD SLOPE

Controls the FWD playback speed curve. Actually this setting emulates the different acceleration styles of the scratching hand.

BWD SPIN

Controls the BWD playback speed.

BWD SLOPE

Controls the BWD playback speed curve. Actually this setting emulates the different acceleration styles of the scratching hand.

Reverse

A looper that plays always backward. It's very simple, your audio will play backward as long as a Reverse step is active.

SIZE

Defines the size of the looping buffer. It works in tempo values, so you can easily decide how long the loop will be.

FADE

Fades the loop ends to create smooth loops, higher settings mix so much material that the sound becomes weird and supersmooth.

DECAY

Fades out the loop at the given time. Using this feature you can make the sound vanish before the step end is reached, giving you the possibility to create stuttering loops.

Stretch

A classical timestretcher which can slow down the audiosignal without changing it's pitch. Due to the fact that we work with realtime audio, it's not possible to speed up the audio signal because we don't know the audio material of the future.

SPEED

Turn down the control to turn down the speed.

TEMPO-RELATIVE

Introduces a stepped speed mode where the
stretching always uses values relative to your bpm. That way your stretched beats will always be in sync.

GRAINSIZE

Defines the size of a time window used for granulizing the audio signal. This control provides you with different granular flavors.

FADE

Smoothes the granulizing of your audio material and gives you a choice between a rather harsh or rather soft sound.

Vinyl

Another Scratching tool but with a different method. This effect gives you the sound of scratching or stopping a record with your hands. You get that classical chicky-wicky sound immediately.

TEMPO

The actual scratching speed / the time needed for slowing down the record until it stops.

SIZE

Determines how much room is taken for scratching. Smaller settings just scratch a small range of the audio material, larger settings scratch more contents, resulting in a more aggressive scratch sound.

STOP MODE

Changes the VINYL Effect so that it stops the record. The SIZE parameter is not required here and so it´s greyed out.

Since no looping is used here, always the current audiosignal becomes scratched and is not repeated.

Tonal Delay

One of the most innovative effects created by Sugar Bytes.
A short delay is used to tonalize/synthesize anything fed into it.

You can make your drums play melodies, repitch harmonic signals and create stunning mutations out of anything that makes sound in any way.

TUNE

Determines the note applied to your signal. It really makes sense to remote this knob with the internal modulation sequencer or via MIDI/automation.

FEEDBACK

Controls the intensity and sustain of tonalisation. Higher settings give you a clearer tone and a stronger signal.

WIDTH

Introduces stereo imaging for a larger sound.

HIGHPASS

Cuts off lower frequencies to avoid rumble and create a rather light tone.

LEVEL

Higher feedback settings raise the output level, so this control can be used to adjust the output level.

Stutter

An amplification effect, useful for enveloping, gating and panning effects.

Two sequencers are running along your clock. The upper one starts an envelope at the given amplitude, the lower one controls the stereo pan.

TEMPO

Determines the playback speed of LEVEL and PAN sequencer.

ATTACK

Belongs to the amplitude envelope, triggered by the Level sequencer and controls the level-fade-in-time when a sequencer step starts the envelope.

DECAY

Belongs to the amplitude envelope, triggered by the Level sequencer and controls the level-fade-out-time of the step.

Crush

Made to destroy. A first class sounding bitcrusher, sample rate reducer and distortion effect.

BITCRUSH

Reduces the bitdepth and so introduces silver rain and crushed ice.

SAMPLERATE

Reduces the sample rate using an advanced technique which introduces new flavors and octaving effects.

DISTORTION

Warm and deep, strong and wild.

Filter

The essence of Sugar Bytes´filter technology.
Contains 4 Filter Types known from our WOW Filterbox,
including the famous Vowel Mode which makes your audio talk. Also an AR envelope and envelope follower are included for classic filter sweeps.

CUTOFF

Determines the filter frequency. In Vowel Mode this control selects vowels (A, A:, AE, E, I, O, OE, UE, U).

RESO

Controls the Filter resonance, in Vowel Mode higher settings give you a clearer vocal sound.

ENV PEAK

Determines the target-value of cutoff-modulation introduced by the internal envelope and envelope follower. Modulation starts at the Cutoff frequency, reaches the Env Peak value and goes back to the Cutoff frequency.

ATTACK

Fade-in-time of the envelope/envelope follower.

RELEASE

Fade-out-time of the envelope/envelope follower.

FILTERTYP

Choose from 4 filtertypes. The classic HP/BP/LP are included in 24db depth. Also a strong COMB filter is included for stunning vowel- and micodelay sounds.

VOWEL MODE

Use that mode to make your audio talk. The cutoff control is then used to select the vowel frequencies.

ENV TYPE

Select the envelope used for modulating the cutoff frequency according to Env-Peak, Attack and Release settings. Envelope is a classic AR envelope started when a sequencer step is reached. Env Follow creates an envelope from the transients of your audio signal.

Phaser

The good old 70ies sound, deep and wide phasing at it's best.

RATE

Phasing speed, always in sync to your song tempo.

STAGES

Number of Phaser stages, running in series.

DEPTH

Intensity of the actual phasing sound.

FEEDBACK

Introduces a stronger sweeping.

WIDTH

Stereo widening and left/right phasing offset.

Chorus

The classical detuning effect, makes it all bigger and wider.

RATE

Chorus speed, always in sync to your song tempo.

DEPTH

Chorus intensity, goes from slight widening to extreme detuning.

FEEDBACK

Introduces a flanger sound.

WIDTH

Stereo widening and left/right sweeping offset.

Delay

A usual Delay effect with synced delaytimes.

TIME

The delaytime, always in sync with your host tempo.

FEEDBACK

Determines how long the delayed signal will decay until it ends.

DIFFUSION

Introduces a slight mixup between left and right channel, for creating the impression of a room.

WIDTH

Stereo imaging for a wider sound.

DRY LEVEL

Here you can control the level of the dry signal.

WET LEVEL

Here you can control the level of the wet signal.

Reverb

A usual Reverb effect.

ROOM

The roomsize, for bigger or smaller reverbs.

DECAY

Determines how long the reverb signal will last.

WIDTH

Stereo imaging for a wider sound.

HIGHPASS

Cuts off low frequencies to avoid rumble.

DRY LEVEL

Here you can control the level of the dry signal.

WET LEVEL

Here you can control the level of the wet signal.

Host Integration

Logic

Use Effectrix as MIDI Controlled FX. Pick it up on an Instrument Track and choose it from the MIDI Controlled FX list in the Plugins menu.
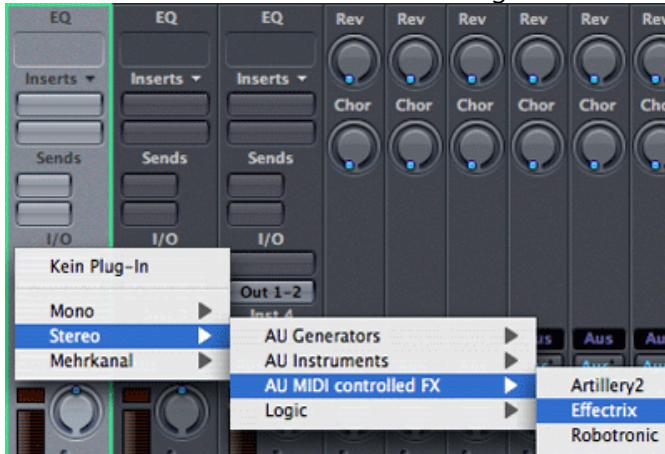
Then, in the Sidechain menu in the upper right corner, select the Audio track or Bus that you want to use with Effectrix. Then, in the Logic mixer, turn down the level of the audio track that you selected in the Effectrix Sidechain menu.

Live

Basically there are to 2 ways to work with Effectrix.
First way is to activate the 'trigger by MIDI' option.
Then Effectrix will run if you trigger it via a MIDI note.
If 'trigger by MIDI' is off, it will always run along with the host clock
but to trigger Effectrix via MIDI should give you the best timing.

That's how it works:
Please activate the 'use pattern key' option in Effectrix.
Set up an audio track and use Effectrix as effect.
Send MIDI to it using a MIDI track.
Select the Audio track which has got Effectrix on it in the MIDI TO dialogue of the MIDI track.
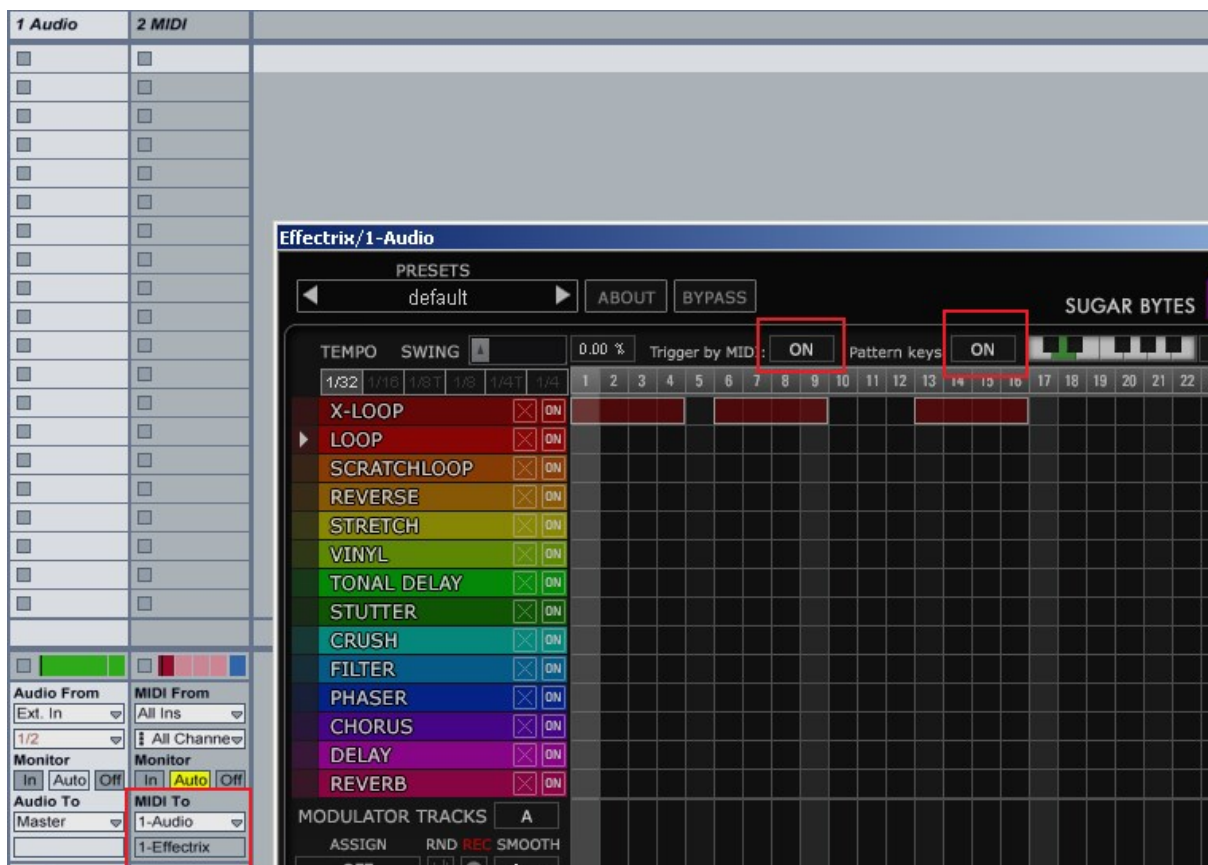
Then switch to arrangement view and set MIDI Note events to trigger and select certain Effectrix Pattern.
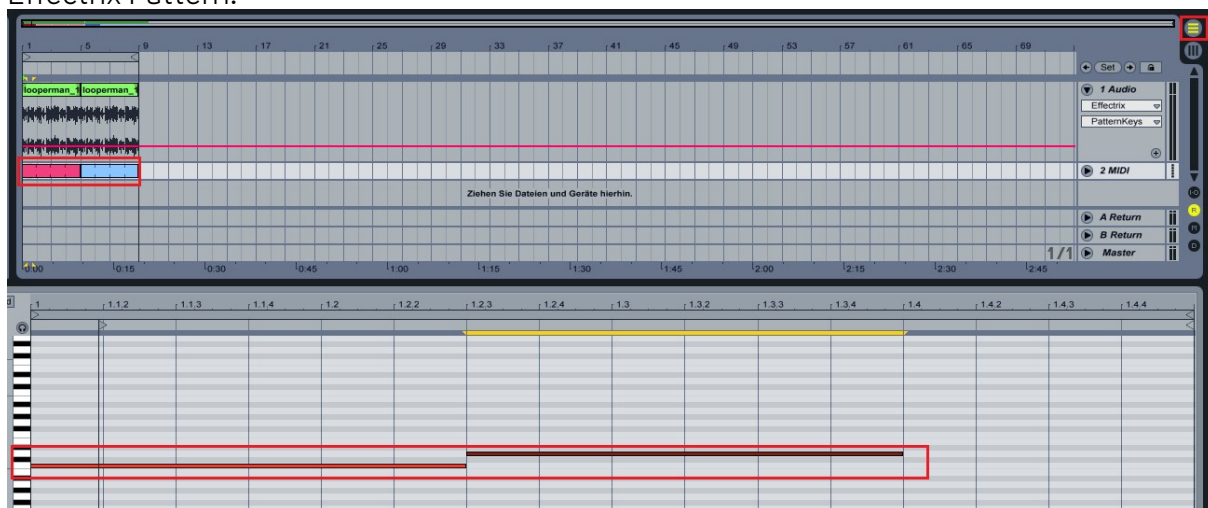
So you can trigger the related key at the exact location you want.
*Effectrix is an audio effect, only!
 You can send MIDI TO Effectrix, but Effectrix will only produce audio not MIDI.

Cubase

Make sure that the Effectrix.dll/Effectrix.vst3 (Win) or Effectrix.vst/Effectrix.vst3 (macOS) file is contained in Cubase's assigned VST Plugins folder. Load Effectrix as an insert effect on an audio track or instrument track. Now create a MIDI track and choose Effectrix as target for the MIDI track. This way you can trigger Effectrix with your MIDI knobs and record controller movements in the MIDI track.

Pro Tools

Use Effectrix as effect.
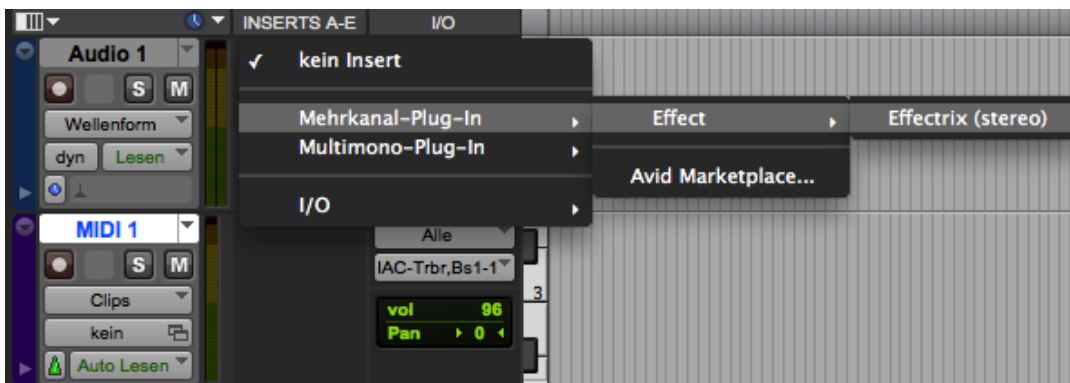
Send MIDI to it using a MIDI track. Select the Audio track which has got Effectrix on it in the MIDI I/O menu of the mixer.

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Sonar

Depending on how you want to use Effectrix you have to configure it as 'soft synth' or tempobased effect.

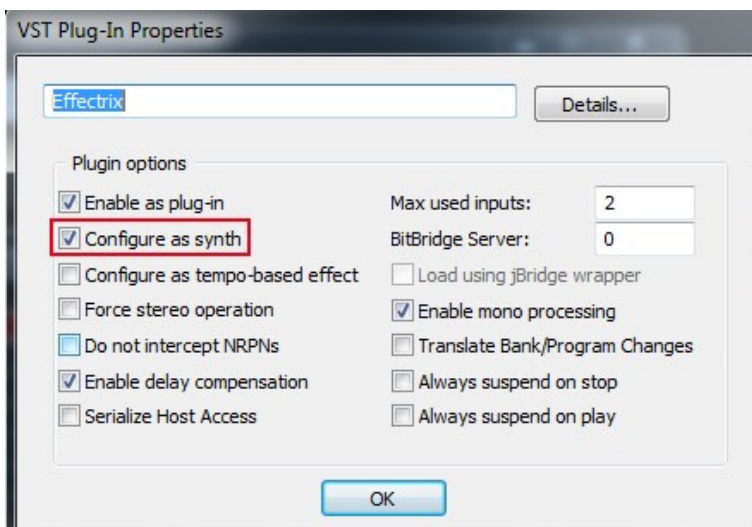If you want to trigger it via MIDI first plugin Effectrix as an effect
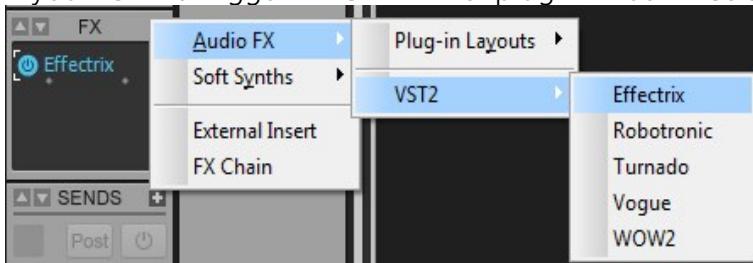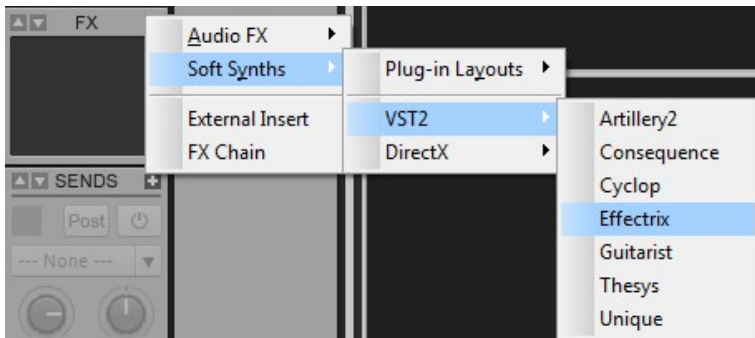
and open the plugin settings
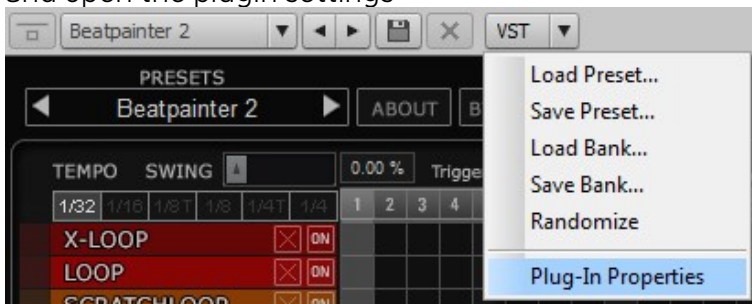
Then configure it as synth
If you just want to let it run along with Sonar choose 'tempo based effect'

Plug it out. Plug it in an fx slot again but from the synthmenu

Then you will have a MIDI track assigned to it and from now on you can route a MIDI track to Effectrix so that Effectrix can receive MIDI via this track.
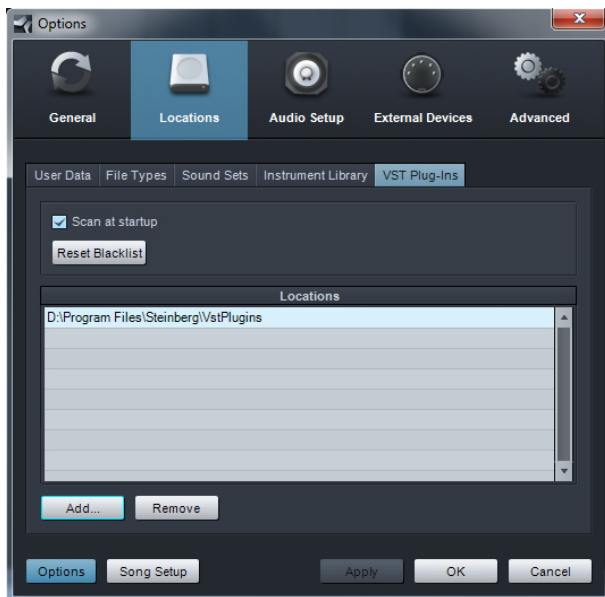

Activate "Trigger by MIDI" to trigger the sequencer with MIDI notes.
To trigger the Patters with MIDI notes activate "Pattern Keys"

(If you should try to trigger a note which is out of the keys or haven't drawn a MIDI note inthe Key Editor there might be no sound.)

Studio One

Go to the Studio One menu and choose Options, click on Locations, then VST Plug-Ins.

Click the Add button and select your VST Plugin folder. Press OK then close and re-open Studio One. If you still don't see your plugin, go back into that screen and click the "reset blacklist" button, then close and open Studio One again.
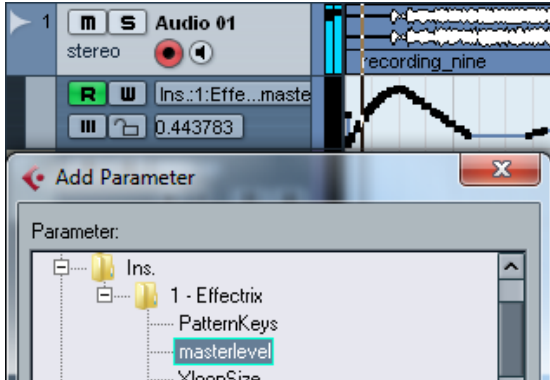
Pick it up from the VST Effects list.
Create an instrument track and choose Effectrix as MIDI out target for that track.

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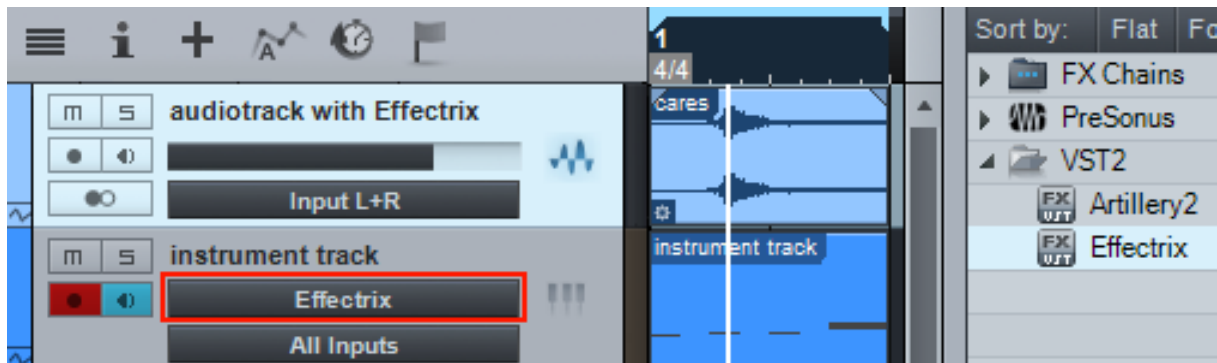
MIDI Remote

All relevant Effectrix parameters can be controlled via Host Automation.

All relevant Effectrix controls can be remoted via MIDI controllers.

You find the MIDI Learn function when you right click a control.

MIDI Program Change

Create a Folder called 'Midi Programs' beside the Factory Preset folder.

Path should be like this:
Documents/Sugar Bytes/Effectrix/Presets/Midi Programs/

Put the preset you want to call in that folder.
You have to restart Effectrix after copying files into that folder in order to reflect the changes.

All presets in the Midi Programs Folder can be called with MIDI Program Change messages now.

Questions?

EFFECTRIX makes no sound

Are the level meters showing an Audio Signal?
If Audio In works, but Audio Out is silent, your filter setting might be filtering out all audible frequencies (HP too high?, LP too Low?).

The Demo could be timed out or the serial number could be wrong. Both issues will be displayed in the interface, left beside the Effectrix logo.

The Direction control of the Loop effect is set to zero. At zero speed, the audiowave stands still and so will not move your speakers.

Have I found a bug?

Please write to support@sugar-bytes.de

Impressum

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