

major sketch pad manual



ENG

en produktion afkreativt dårhus



The creator of the “major sketch pad” take no responsibility to what it might, or might not, cause to you as a user or your computer.

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contact = www.2storstark.com/afdarhus

If you paid for this software, you were deceived.

Please pardon any potential grammatical errors in this manual.
I haven't written texts in english for a long time.

Even though the major sketch pad is free, donations will be accepted. Gladly. I'm poor and currently unemployed. If you would like to help in other ways the best thing to do is to give/recommend it to your friends. Spread the message. And also, donate money to Dave Haupt, Butch Kratzer, Scoofster Audio, Xoxos.net and the synthedit creators who made the modules which I use in this plugin. Without you this wouldn't have been possible.

I personally accept paypal. Go to my site if you want to donate money, or to just have a look around.

Introduction

The major sketch pad is a software VST based instrument. It does produce sound with its internal soundfont players but is not necessarily intended for music production, it is rather intended for arrangement production.

The major sketch pad is developed for pc and have been tested in Windows XP. I'm not sure about the system recommendations. But I'm sure they aren't too high. You need a host that is compatible with the VST standard in order to use the major sketch pad. You install the plugin by simply putting the "MajorSketchPad.dll" in your VST directory. It is also important to put the folder "MajorSketchPad" in the same directory as the dll file. The folder contains a SF2 file named "library" and without that file in that exact directory you won't be able to use the major sketch pads internal soundfont players.

The major sketch pad is basically a chorder in combination with a step sequencer. The step sequencer gets triggered by ordinary midi notes and each step can contain a different chord. That means that you can play monophonic melodies and turn them into whole, rough, arrangements.

This thing is ideal if you happen to have "writer's block" because all you need is a simple melody and then you are on the go again. This kind of chord sequencer is also a great thing to use if you already have a good melody or arrangement but want to try and improve its quality. Too see how an already good line potentially could sound different or even better with other chords applied to it.

There is also a separate solo section in the major sketch pad. Ideal if you want to play solo or polyphonic along your chords. When I write that the major sketch pad not is intended for music production it is mainly because the chord play is kinda static. Since all the notes occur at the exact same time when you press a key on your keyboard the result will not sound natural, but it could lend itself great for "trance stabs".

The internal soundfont is another reason why this plugin is best used for strict arrangement purposes. The included soundfont is very lofi but serves its purpose, but you could always use your own soundfonts or use the sketch pads midi routing abilities to play from other sound sources. The only reason the soundfonts where included was because many musicians happen to be "knobb twiddlers", instead of working on their arrangements they get lost in shaping their sound with cool effects. I am one of those people and that's why I chose to develop the major sketch pad. So that I could get some things done instead of just twisting knobs for an eternity.

*Best Regards
Af Kreativt Dårhus*

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Parts of the sketch pad explained

The picture below is numbered in certain sections. Go to the numbers in the text below to get an explanation of what that current section does in the major sketch pad.

major sketch pad af kreativt dârhús

chord table if X = C tone
blue tones are "optional" and
only played if X ends with "full"

single = no chord
X = C E G
X2 = C D E G
X5 = C G
X-5 = C E F#
X6 = C E G A
X6/9 = C E g A D
X7 = C E G A#
X11b9 = C e g A# C# F

1

Xsus4 = C F G
X7sus4 = C F G A#
Xsus2sus4 = C D F G
Xdim = C D# F#
Xdim7 = C D# F# A
Xm = C D# G
Xm6 = C D# G A
Xm7 = C D# G A#
Xm7#5 = C D# G# A#
Xm9 = C D# g A# D
Xm11 = C D# g A# d F
Xm13 = C D# g A# d f A

Xadd9 = C E G D
Xmadd9 = C D# g D
X6add9 = C E G A D
Xm6add9 = C D# G A D
Xmaj7 = C E G B
Xmaj7b5 = C E F# B
Xmmaj7 = C D# G B
Xmaj9 = C E g B D
Xmaj9#11 = C E G B D F#
Xmmaj9 = C D# g B D
Xmaj13 = C E g B d f A
Xmaj13#11 = C E G B D F# A

steps 4
transpose 0
fundamental -1 + -2

3

keyboard split

high 71 127
low 0 72

4

midi cc

reset none
PANIC! none
prev none
next none

5

1 X
2 Xm
3 Xmaj9 full
4 X6
5 single
6 single
7 single
8 single

9 single
10 single
11 single
12 single
13 single
14 single
15 single
16 single

2

chord 22 - strings synth

freq res env mix
0.00 5.87 4.52 5.00
a d s r amp
5.32 6.30 8.40 8.05 10.00

6

midi channel output

fund 2
chord 3
solo 4

7

2 - piano epiano

freq res env mix
10.00 0.00 0.00 0.00
a d s r amp
0.01 6.90 5.27 7.39 10.00

6

uses modules by Dave Haupt, Butch Kratzer, Scoofster Audio, Xoxos.net and standard SE modules. thank you.

To avoid stuck notes after patch change, release all held notes before you change patch.

1. Chord table

The upper place of the sketch pad is a section that displays all the different chords that is available to assign to the steps. Some chords come in two versions, where the second version (full) includes the “blue tones”.

If you start scrolling between the chords in the step sequencer you will see that for example there are two versions of the “maj9” chord; “Xmaj9” and “Xmaj9 full”.

The letter “X” is placed before the chords because the tone the chords apply to is undefined. You define X by playing the plugin. If you would play a “B” tone and have the “Xm7” chord selected the result would be a Bm7 chord. In other words, this is like a basic “chorder” but with the exception that you can use a new chord up to 16 times each time you press down a key on your keyboard. This way you can by just having a simple monophonic melody, come up with rough sketches of whole arrangements. Or just jam away.

The chord structure for each chord is typed out in the list at the top of the interface. Pretty neat if you want to analyze how a chord work. All the chord structures are made to be correct if the tone is “C”, if you are playing an “E” chord and want to now how it look like, just use the list and transpose all the tones in the chords +4 semitones. You will have to write that part down manually on paper though.

2. Chord sequencer

The sketch pad have a chord sequencer that is 16 steps long. But it is a bit different from ordinary step sequencers and will only step forward if you trigger it with a midi note. You can assign a different chord to each step. This makes it easy to try out new melodies and to come up with new ideas when making music.

Since the chord sequencer steps forwards each time you trigger it with a new note it is best used played monophonic. Some tones in the chords may also go missing if it is being played in a polyhonic fashion and you trigger a new note without lifting your finger from the keyboard, ending the previous one.

3. Settings

Step = Defines how many steps you want to use. After the last step have been triggered the sequence will start over from the beginning.

Transpose = Defines what pitch you will be playing in. You can rise and lower the amount by -24 to +24 semitones. Great if you want to hear how the music you are making will sound a few notes lower or higher without having to play it differently with your hands.

Remember to reset the sequencer manually by pressing the “reset pad”. If you don’t do that after your playing session you may unintentionally play chords many steps from the beginning the next time you start playing.

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Fundamental = The fundamental tone in a chord is the lowest tone. If the chord is Fm7#5, the fundamental would be “F”. In other words, it is the tone you are playing on the keyboard. Here you have an option to leave the fundamental unchanged or to lower it one or two octaves. If you choose “0 (unchanged) + -2 (two octaves down)” some pretty fat bass sounds might be achieved, since both the fundamental and the fundamental two octaves lower will be played at the same time.

4. Keyboard split

There is both a chord sound and a separate sound for solo play in the sketch pad. In this section of the plugin you can define where the chord part ends on the keyboard and where the solo part takes over. You can of course also do the opposite and use the solo part for bass sounds and the chord part for higher melodies.

When you have come up with a bunch of good chords you might want to try out how a solo would sound upon the arrangement.

5. Pads

This sections consists of four pads and a midi controller input that can control the pads from external sources.

Reset pad = When you click this pad the chord sequencer will reset and the next note you play will be from the beginning.

PANIC! pad = Sends out an “all midi notes off” message. Good if you encounter “stuck/ hanging notes”, but there are some occasions when this pad won’t fix the problems with hanging notes so you should read through the troubleshooting text.

Prev pad = By clicking this pad the previous patch in the bank will load. Remember to save your settings.

Next pad = Loads the next patch in the bank.

A note on patch changing

The patch selector in your DAW might be glitchy with the sketch pad so the best way to change patches is by clicking the pads. Or with a midi message assigned to the pads.

If you don’t release all the held notes on your keyboard before a patch change you may end up getting stuck notes. This is because the previous patch didn’t receive any “note off” messages. This is currently a bug I haven’t been able to solve and the PANIC! pad wont fix this problem either. Please read the troubleshooting for more information.

Do you own a midi keyboard with knobs and/or buttons on that can transmit midi? Assign those knobs to the pads on the sketch pad to avoid unnecessary mouse clicks.

6. Soundfont players

There are two soundfont players available in the sketch pad. One for the chord part and the other one is for the solo part.

The soundfonts in the sketch pad are very lofi and aren't really intended to be used in music production. The whole idea with the sketch pad in general is "arrangement sketches" and not music production. You can of course turn off the soundfont players and use external instruments instead if you want to.

Instrument selector = Selects which of the instruments you will be using. There are 42 different instruments to choose from, ranging from violins to digital synth waves. Mostly bread and butter sounds that should suit the most common occasions.

On/Off switch = If you don't intend to use the soundfont player you got the option to turn it off and save some CPU power.

Freq = Filter frequency. Defines where the filter cuts, cancelling out parts of the sound depending on what kind of filter that is being used. I am not going into detail explaining how a filter works in this manual. Please check out some free synths (there are crawling all over the internet) and learn the basic theory of synths. I can guarantee it will be a good lesson.

Res = Resonance. The resonance settings in the sketch pad can become quite extreme if turned up all the way. Be careful.

Env = Defines how much of the amplitude envelopes shape you want to apply to the filter frequency. A negative value will invert the envelope, a value of zero will bypass the filter envelope.

Mix = A mixer that mixes the dry soundfont signal with the filtered soundfont signal. If this knob is turned all the way to the left only the clean signal will pass through. If turned all the way to the right, only the filtered signal will pass through.

Filter Shape = You can select one of five different filter shapes per soundfont player. The shapes are LP (low pass), HP (high pass), BP1 (band pass1), BP2 (band pass2) and N (notch).

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a = Attack

The attack phase of a sound determines how fast or slow the transients in the sound will be. The time it takes for a sound to reach its full volume. If the knob is turned all the way to the left the sound will come instantly to full level, suitable for percussive sounds. A setting of the knob turned all the way to the right means that the volume slowly will rise to max level, good for slow strings and ambient sounds.

d = Decay

After the attack phase of the envelope is completed the sound goes into the “decay phase” which is the complete opposite to the attack phase. The decay knob determines how fast a sounds max volume will drop to the “sustain” value, defined by the next phase in the envelope.

s = Sustain

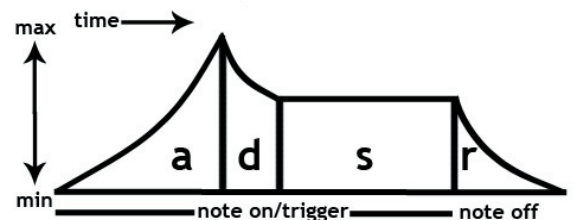
After the attack and the decay phases of the envelope is completed, the envelope will reach its sustain phase. This is a static value that determines the volume of a sound as long as it is being held by a pressed down key on your keyboard.

r = Release

Upon releasing a key on the keyboard and thereby ending a sound the release phase in the envelope initiates. A small value will cut the sound in an instant while a big value will make the sound slowly drop in volume and fade out over time.

amp = Amplitude

A knob that adjusts the overall volume of a sound.



Using your own soundfonts in the major sketch pad

Inside the directory where you installed the major sketch pad (folder that contains the “MajorSketchPad.dll” file) you will also have a folder named “MajorSketchPad”. Inside this folder you will find a file called “library.sf2”. This file contains all sounds that are available in the sketch pads internal soundfont players. If this file is moved or removed you will end up not being able to play sounds internally with the sketch pad.

By renaming one of your own SF2 files to “library” and placing it in this folder you can use your own soundfonts instead of the one that comes bundled with the sketch pad.

WARNING! Be shure to backup the original “library.sf2” before doing anything or else it will end up being lost!

The litte servant at the bottom of the sketch pad is not nearly as innocent as he looks.

7. Midi channel output

In this section you can choose what midi channel you want to output the fundamental, the chord and the solo notes to. Ideal if you want to use the sketch pad with external instruments or if you want to record its midi to different tracks.

Lets say you have set “fund” to channel 1, chord to channel 2 and solo to channel 3. Now you can route channel 1 to an acoustic bass sample library, channel 2 to a cello and channel 3 to a piano for example.

Troubleshooting

1. It is recommended that you save your patches and banks as FXB or FXP files, By doing this the sketch pad will remember all settings in your patches.

2. Q = “Why do I experience hanging notes during patch change?”

A = If you don’t release all held keys on the keyboard before patch change there will be no “note off” messages transmitted to the previous patch and the notes will therefore end up being constantly held. One way to solve this problem with stuck notes is to retrigger them once again. This is a frustrating bug in the sketch pad I haven’t been able to solve yet.

3. Q = “When I play the sketch pad some notes in the chord sometimes go missing. Why does that happen?”

A = The chord section is meant to be played monophonic. If you press down a key on your keyboard while not having released the previous one some interference may happen which result in this.

There are unfortunately some issues with the midi channel output in some DAW’s.

4. When recording chords to external instruments in Cubase SX3 all midi seem to respond to external instruments even though the track is set to only respond from individual channels. It work well if the external instrument itself contain a midi channel filter so that you can filter out the fund and chord channel if you for example only intend to use the solo midi.

5. When you use the sketch pads midi out in Cockos Reaper to control other instruments, never transmit with the midi channel out set to “1” or “all”. This goes both for the settings inside of the sketch pad and the settings inside the track routings send/receive page.

If the midi is set to “1” or “all” you may experience stuck or hanging notes.

9

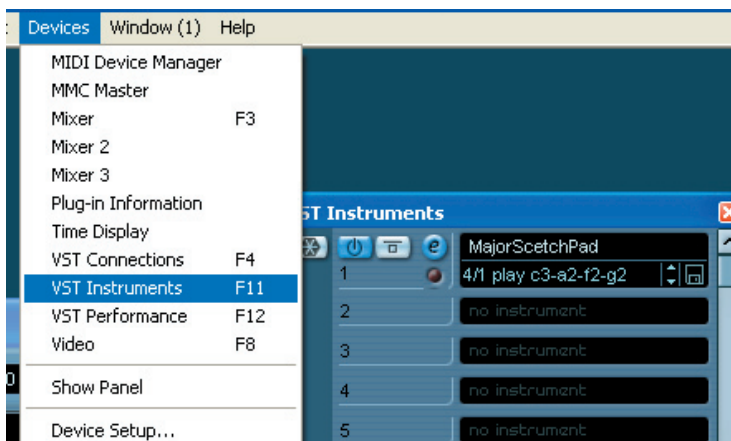
How to use the sketch pad in Cubase SX

This guide covers the use of the major sketch pad in Steinberg Cubase SX3. It is recommended that you own a midi keyboard when following this guide.

If Cockos Reaper or Steinberg Cubase isn't the DAW you happen to be using the principle should still be similar. So if you are uncertain on how to use the sketch pad in the DAW you are using, feel free to read through these pages for conclusions.

1. place the "MajorSketchPad.dll" and the folder named "MajorSketchPad" in your VST directory to get it installed. It is important that the file "library.sf2" remains in the MajorSketchPad folder.

2. Start Cubase SX and go to "file", "new project" and save it to a place you like.



3. Press "F11" or go to the menu, devices, click on vst instruments.

4. Assign an instance of the major sketch pad.

5. At the empty grey border to the left on the cubase interface, right click and add a midi track. Then select that track, rename it to "sketch pad" and set its midi in to your midi keyboard ("All MIDI Inputs" should usually work). Also set the "out" to MajorSketchPad.



6. With the track selected, you should now be able to play and hear sounds coming from the sketch pad. If you want to be able to control other external instruments with the sketch pad, please proceed with this tutorial.

7. It is easy to control other instruments with the cubase midi abilities, but there is also unfortunately an issue doing so in this version of Cubase SX3. If the instrument you are going to control lacks the ability to select which midi channel it should

Recording midi with the sketch pad is easy in Cubase. However, recording the different fundamental, chord and solo part to different tracks seem to not work.

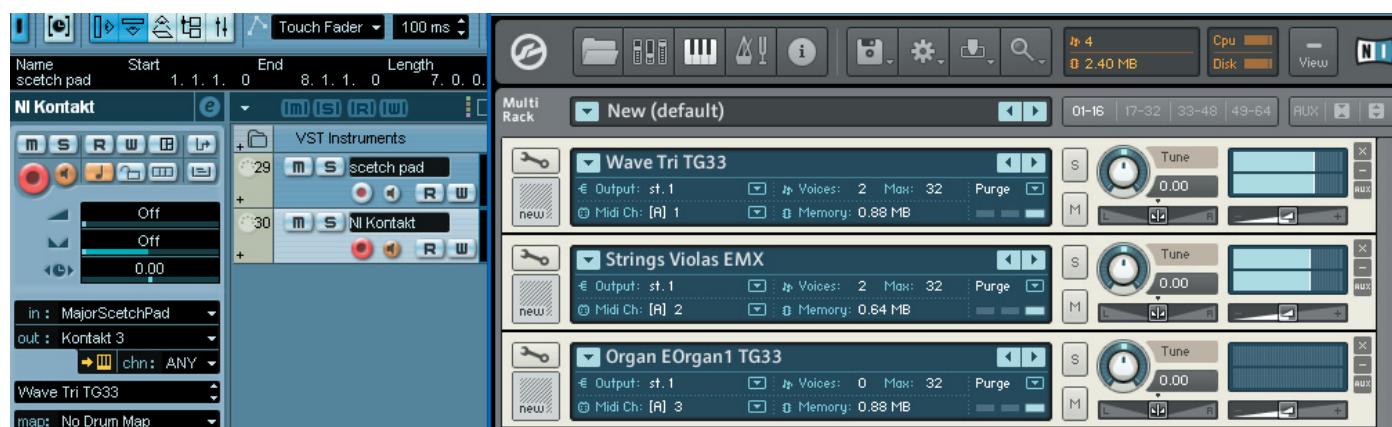
receive midi from, it will end up responding to all midi messages coming from the sketch pad. Even if you set the midi channel out for fund, chord and solo differently in the sketch pad it won't solve the problem. The instrument you are transmitting to from the sketch pad will receive every message from all channels anyway. Maybe there is some kind of "midi channel filter" available that solves this problem but I am not aware of such thing. I think this is an issue inside the host rather than in the sketch pad, because it all work fine in Cockos Reaper.

To demonstrate the sctech pad in use with external instruments I have chosen Native Instruments Kontakt, since you can choose which midi channel its instruments receive midi from.

8. Open up the sketch pads interface by clicking the "e" symbol found on its midi track surface. When you see the sketch pads interface, set its midi channel out to 1 for fund, 2 for chord and lastly 3 for solo. Now the sketch pad will transmit midi to channel 1, 2 and 3.



9. Go to the vst instruments menu as you did on tutorial step 3 and assign an instance of Kontakt. Load up 3 different instruments inside Kontakt and set their individual midi to 1, 2 and 3. By doing this the "fund midi out" in the sketch pad will control one of the instruments while the other midi outs (chord, solo) will control the other two instruments in Kontakt.



10. Make a new midi track the same way you did in tutorial step 5. Set its in to MajorSketchPad and its out to Kontakt. Set "chn" to any and activate the tracks midi monitoring by clicking the symbol named "Monitor" that looks like a bullhorn.

Lastly, select the sketch pad track and play.

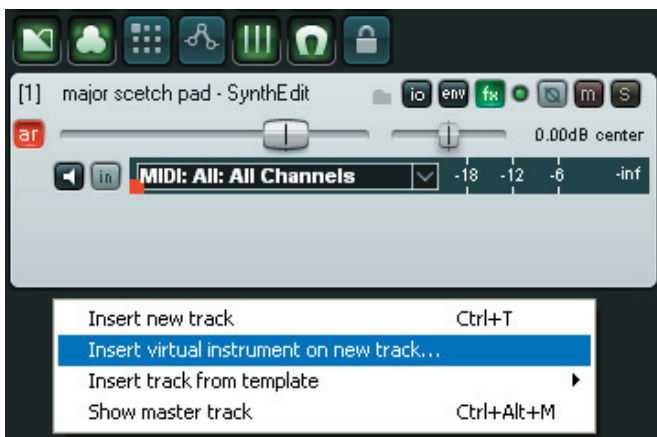
After you have made an arrangement that sounds good with the sketch pad, print it out and try it in a different way. I am a lousy guitar player but I get many new ideas from trying out things I've written on a piano but now played on a guitar that never crossed my mind before.

How to use the sketch pad in Reaper

This guide covers the use of the major sketch pad in Cockos Reaper. It is recommended that you own a midi keyboard when following this guide.

If Cockos Reaper or Steinberg Cubase isn't the DAW you happen to be using the principle should still be similar. So if you are uncertain on how to use the sketch pad in the DAW you are using, feel free to read through these pages for conclusions.

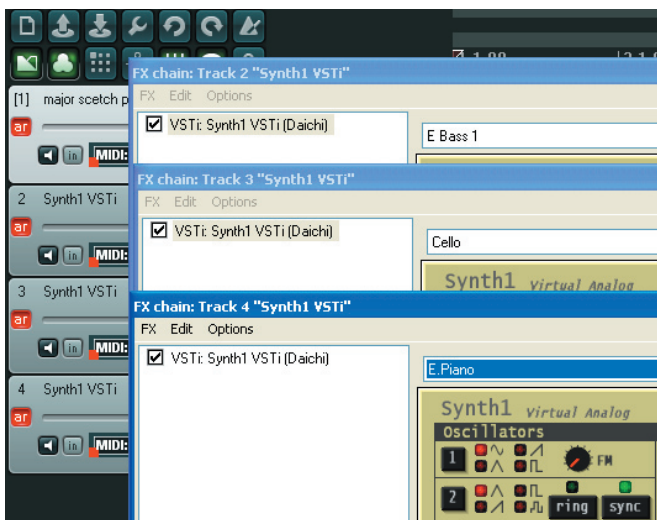
1. place the "MajorSketchPad.dll" and the folder named "MajorSketchPad" in your VST directory to get it installed. It is important that the file "library.sf2" remains in the MajorSketchPad folder.



2. Start Reaper and go to "file", "new project" and save it to a place you like.

3. Right-click at the border to the left and choose "insert virtual instrument on new track...". Insert an instance of the major sketch pad.

4. You should now be able to play the sketch pad successfully. If not, you may have to configure your midi settings in Reapers preferences page, and that is something this tutorial will not cover.



5. If you want to control other external instruments from the sketch pad, please proceed in this tutorial. The instrument I have chosen to demonstrate this with is called "Synth1" and is available to download for free on the internet.

6. Create three more tracks the same way you did in tutorial step 3, but insert Synth1 on them instead of the sketch pad.

I did choose the following presets for this demonstration: E Bass 1, Cello and E.Piano. Feel free to choose which ever preset you want and then close down all the synth interfaces.

You may experience stuck notes if you output midi through channel "1" or "all" in Reaper. Use midi channel 2 to 16 instead.

7. Now open up the sketch pad by clicking the “fx” button on the track it is assigned to. Make sure you turn off its internal soundfont players and that the midi channel output is 2 for fund, 3 for chord and 4 for solo. Do not set the midi channel out to 1 or “all”, because that may leave stuck/hanging notes when controlling external instruments in Reaper. I think this issue comes from a bug in Reaper since it works fine in Cubase.



8. Press the “io” button found on the sketch pad track. This opens up a menu for how you can route audio and midi for this track.

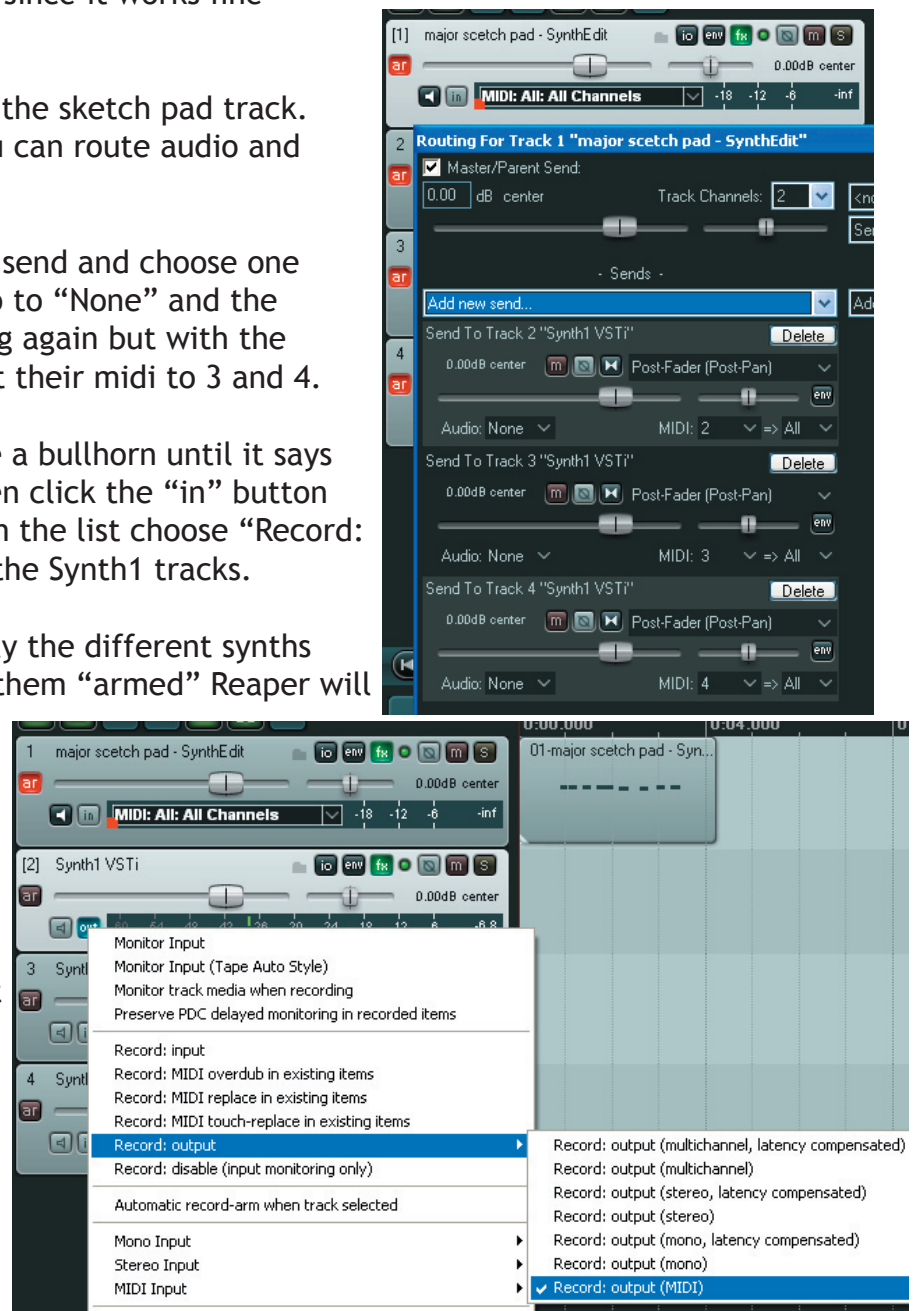
In the sends menu, click add new send and choose one of the Synth1 instances. Set Audio to “None” and the midi to 2 => All. Do the same thing again but with the other two instances of Synth1, set their midi to 3 and 4.

9. Click the symbol that looks like a bullhorn until it says “Record Monitoring: OFF” and then click the “in” button choose “Record: output” and from the list choose “Record: output (MIDI)”. Do that for all of the Synth1 tracks.

10. Now you should be able to play the different synths from the sketch pad. If you have them “armed” Reaper will also record the midi individually from the sketch pad. Pretty neat!

Attention

For your own sake, remember to not output midi with the channel set to “1” or “all” in Reaper. That may leave stuck/hanging notes.



Since all the notes in a chord occur at the same time when you use the sketch pad it is more useful as a strict arrangement utility rather than a music production tool. That is if you aren't into trance stabs, just like everyone were back in 1994.

**Här slutar
manualen.**

Thanks to Trent Reznor, Kevin Shields, Richard D James, Mike Jones, Turk Dietrich, John Balance (rip), Peter Christopherson, Lisa Gerrard, Brendan Perry, Justin Broadrick, Nick Cave, Karin and Olof Dreijer, Pink Floyd, Radiohead, Silverbullit. For making music that makes me want to make music. ...And for keeping me sane.