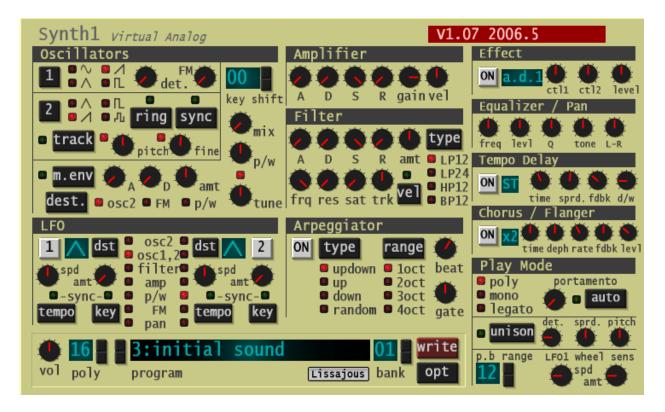
## Adam's Synth Tutorial Series: Part 4

Welcome to the final part in our tutorial series. Here, we will do some excersies based upon our previous lessons, where we will use our knowledge we have learned so far, to make a few sounds from scratch. We will use a simple saw sound as our starting point every time, so please begin by copying these settings from the image. It is a good idea to save this basic patch, so that you can load it up everytime you want to make a new sound.



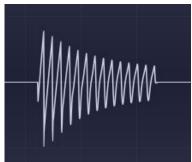
## How to create a Bass sound:

Most bass sounds are usually made of a saw wave, which has a filter envelope enabled on it. So the first thing we need to do is to set up a nice and snappy decay on the filter.

In the filter section set the "amt" to the the maximum, which sets sets the amount of effect you will hear from the envelope settings. You will not hear any difference at this point because we still have the sustain and "frq" (cutoff) on maximum as well. So set the sustain and cutoff to zero.

Since we have the filter decay on zero, the sound will be cut too fast and you won't hear that much, but once you increase the decay knob about half way, you will hear that the sound becomes nice and snappy. If you want, you could increase the sustain and the cutoff a little bit, to add more brightness to our bass.

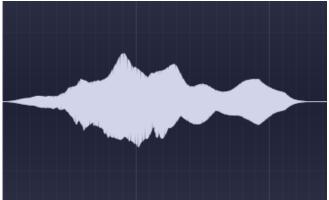
As a final touch lets add just a little bit of delay and we have a classic bass sound.



You can also experiment by changing the saw waveform to a square wave, to make it sound different.

## How to create a Pad sound:

A nice pad sound can be created from multiple saws detuned to each other, and some correct filter envelope configuration. Let's start by opening out initial simple saw setup. Now, in the Oscillator section, turn the "det." (detune) knob to about 30 value. You will hear that the simple saw has more character and more depth. The next thing we need to do, is to set up the volume



and filter envelopes, which will help us achieve the pad sound. Start by setting the cutoff to zero, and the filter "amt" to full. Then, increase the attack on the Amplifier to about 25, and 90 on the Filter section. Make sure that you have the decay on zero, and full sustain on both envelopes. We need to add some release, to let the pad fade out when the key is released. So set both releases to about 100.

At this point we have a basic pad sound, but

to make it more interesting add some unison, and a handful of effects such as delay and chorus.

## How to create a Lead sound:

When creating a lead sound it is important to think about what style of music one is aiming for. A lighter dance tune has only a subtle detuning on the saw lead, where as a harder style, will have more.

As usual, we start by opening our saw patch. Next, set your desired detune amount on the saw. The envelopes are rather straight forward: leave the attack on zero, and set the release to about halfway on both envelopes. Now, we want to hear the whole sound, so leave the sustain on full for the Amplifier envelope, however, set the sustain to about 20 in the Filter section, and the decay to around 60. We



still have to set the "amt" to full, so we can hear the effect of our envelope. Now, if you start playing some notes and turn the cutoff knob down, you will hear that the filter gives a great character to the sound thanks to our envelope settings. To finish up the sound, add some delay and chorus.

This is the end of our synthesizer tutorial series, where we have done some excersises and practiced making a few sounds. Now that you have gotten some overview of the basics, go and experiment yourself because it is ultimately the best way to learn.