

Adam's Synth Tutorial Series: Part 3

Almost every synth has built in effect nowadays, and they are an essential part of any sound design process. Many prefer external effects, but the theory is the same for all of them. We shall look through the most common ones, and discuss what they are, and when to be used.

Delay

Perhaps the most common effect is the delay. What this does is that it takes the sound, and repeats it one after another. Basically an echo. We all have heard this sound when one stands at the end of a long tunnel and shouts. The sound will bounce along the walls before reaching the other end, fading away. When used on a synth sound, it can make it sound very natural, but with the help of today's technology, one can go beyond natural and create a variety of interesting unnatural sounds, like reverse delay, or just simply filling in gaps if the sound is a little thin.



Reverb

The reverb is a very natural sounding effect. Every sound you make, bounces off different surfaces before they make it to your ears, and we are so used to them that we don't even realise that they are there. It becomes instantly unnatural to us when a sound doesn't have reverb, like the sound of a synth



for example.

Reverb can be used to create different spaces, and one can place the listener into different locations, for example a hallway, a cathedral, or even a bathroom! Since it sounds very unnatural without reverb, it is best to apply it to all synth sounds, to push them into their own space and depth. Make sure that you use it gently because too much can just blur the sound. The best balance makes a nice clear sound which will be pleasing to the ear.

Chorus

Chorus is a very interesting effect because it works similarly like a delay: it takes the sound and delays it. However, the delay is so small that it sounds as if it would be playing at the same time, and the pitch is slightly shifted of each delay or voice. This gives the sensation that the sound is bigger, fatter and thicker. Use this on pads to give them more depth, or on any instrument that you would like to make wider in the stereo field.

Eq

Not all synths have an equaliser but if it has feel free to use it. An equaliser is basically a filter which cuts or adds away frequency. It is generally a good rule to always cut a little bit of low frequencies because it's usually there where the unwanted and unheard sounds pile up, and can destroy a



nice mix. If a delay or reverb have their own filter, cut a little bit from the lows there as well since we don't want any effects on them.

Distortion/Overdrive

This effect originated with the electric guitars, where they increase the amplification on purpose to create a clipped and distorted sound which can be quite pleasant if used correctly.

Try using this on basses to add some grittiness, or different plucks to get a guitar-ish sound.

In this part we have looked at some effects, which modify the sound in interesting ways. Of course, not all effects suit every sound, so experiment, and in the end, let your ears decide what sounds good and what doesn't.