

## Synthesizer Fundamentals: Classic 80's Brass

Pop music is often described in cycles: retro music becomes cool, then gets reprocessed and digested by listeners, until the next big thing comes along. While the 80's are (some would say thankfully) long behind us, the sounds from classic records from the era have likewise experienced a reincarnation. The second installment in this series aims to show how to most easily recreate a classic sound heard on many famous songs from the 80's through today: the unmistakable sound of analog brass. While a sample-based approach is often most useful for some applications, there are times when you need that ambiance that can only be achieved through using traditional subtractive methods. Let's go step by step through the programming process. First, let's establish default settings: Lowpass filter all the way open (100%), envelopes off, and whatever waveform is selected by default. By the way, these sounds should all be achievable on a modern softsynth or any piece of polyphonic hardware (although for a monosynth lead brass sound the same settings will apply. As far as the oscillators are concerned, a rich waveform is best. Start with a sawtooth waveform, and if one (or more) oscillators is available, set them also to this waveform. It should sound nice and bright. For a two-plus oscillator synth, detuning each oscillator by a few cents (5-10 maximum) will make a bigger, denser sound. This is because the oscillators will now be beating against each other, which our ears interpret as adding harmonic content. Remember to detune one oscillator up and the other down (or in a similar fashion for more oscillators) in order to make the mixed oscillators sound in tune! Now for the filter. This is the most critical part of the classic 80's brass sounds, as the harmonic content tends to be an important aural "cue" for a listener that makes a sound more readily identifiable. Set the cutoff at about 50%, with a mild (10-20% maximum) amount of resonance. These parameters, and those which follow, are all subject to taste, of course. Use the keyboard tracking parameter in moderation, as you only want the filter to open up some as you play higher up the keyboard. This is designed to emulate the characteristic muted sound as you play higher notes on many brass instruments. Other parameters related to the filter will be discussed below, so ignore any other filter modulation parameters (envelope, LFO, etc.) for now. If there is a highpass filter, pull it up in moderation to thin out the brass some. This is optional, but often makes a big patch sit better in a mix. On to the envelopes. If you are using a two-envelope machine, so much the better, but really only one envelope is necessary to achieve many of these sounds. As technology has progressed further, often times one is tempted to use more oscillators, more filters, effects, etc. to make synthesizer-based music. However, working within the limitations offered by some of this now-ancient equipment can still result in very satisfying sounds, if a bit simple by modern standards. With this in mind, set your filter envelope to have the following parameters: medium attack (about 35-50%), a fairly quick decay (around 15-20%), sustain at half, and a moderate release (depending on your playing style and needs, adjust this to quicker values for a more percussive, horn stab-type sound). Play around with the attack and decay settings to optimize your envelopes (which vary in terms of speed) to get a sound with a quick swell in brightness, followed by a more muted sustaining sound. Now, for LFO modulation (may also be called Vibrato), you may want to use a small amount of modulation on the oscillator pitch. If a delay parameter is available for the LFO, pull it back to about 50%, so as to smoothly transition from an initially in tune sound, to a progressively more quavery sound as you continue to hold notes down. This can add a bit of 80's cheese, so use it tastefully. Also, if a chorus is available, brass sounds can benefit greatly. Enjoy, and hopefully these instructions will put you on the right track to achieving some great 80's brass.

### About the Author

Ki Gray lives and works in Austin Texas. Working as a realtor in the Austin Texas Real Estate market. Escapeso Austin Texas Real Estate <http://www.escapesomewhere.com/> is dedicated to providing its clients with honest and experienced advice when they are looking to purchase in the Austin market.

Source: <http://americanahost.com>