MIXING "I HAVE A NAME"

by Chris Harris

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This document explains how I mixed @sapient and @leslie's song for FAWM 2016, "I Have A Name." You can hear my remixed version here:

http://files.fawmers.com/FAWM_16/headfirstonly/sapient_leslie_IHaveAName_HFO_remix.mp3

The Vocals

Before importing into Live, I took Leslie's vocals and ran them through Melodyne Assistant for a very basic pitch correction pass. No individual note editing, just running the "pitch correction" and "pitch drift" macros at 50% or so. You can barely hear a difference. Then I imported into Ableton as shown here.
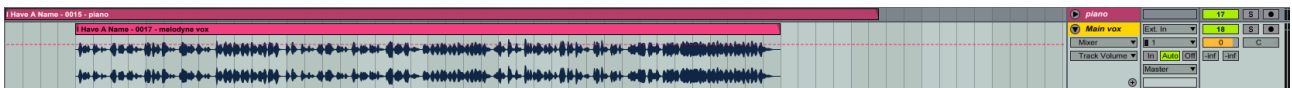
As you can see, there's no editing or other jiggery pokery. The effects chain for this track is as follows:

A bit of eq to cut the low end, a notch for the guitars & other stuff, and a bit of a lift for the high end...

...but Ableton's standard de-esser compressor to take the edge of the sibilance.

What really changes the vocals is that Loud-Kneeless compressor on the right. I pulled the threshold slider (the vertical scale to the left of the transfer function graphical display) way, way down so that the quiet vocals are really brought up. I also switched the compressor's mode from "peak" to RMS (at the right of the transfer function). This means that the compressor won't engage when it hears rapid peaks in the signal. Set to "peak" it can trigger when you don't want it to. Using RMS mode slows down the response, and tends to let the dynamics of the vocals come through more. End result: vocals sound more natural and I bring up all the great expressivity in the nearly-whispered sections of her performance without having to ride the faders.

Then I insert a fresh audio track, set it to "on" so I can hear it, and set its input as the main vocal track, after the compression has kicked in but before I play with the volume.

This track is nudged slightly to the right so separate it from the main vocal a bit and give a roomier sound. I set the volume on this track is around 5 db lower, as it gets heavily compressed with the "Brick Wall" compressor preset before I add Ableton's "Vocal Hall" reverb preset (which I tend to do on all my vocal these days). I don't want the reverb too loud; the maxim that if you notice the reverb's there you've used too much isn't too far off the truth, unless you're making a dramatic statement. We are, here, so it should be noticeable.
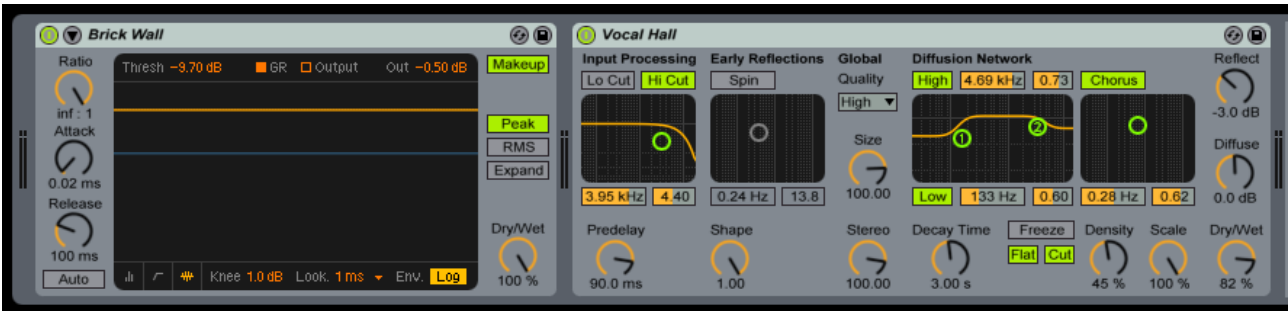

I nudged the high cut back a bit in the diffusion network so that Leslie's vocals sparkle a bit more. And I left the chorus on to spread out the sound a bit.

Finally, I add a third vocal track. Same approach as above, feeding in the main vocals post effects, but this one is even further back in the mix. And where the hall reverb was nudged to the right, this one goes the same distance to the left.

Again, there's heavy use of compression here, with the same setting as above. I want the reverb to respond to all of the track, although it's the held notes that really make this one ring. And the reverb is Ableton's crazy "Sixty Second" reverb preset, which I bloody love.
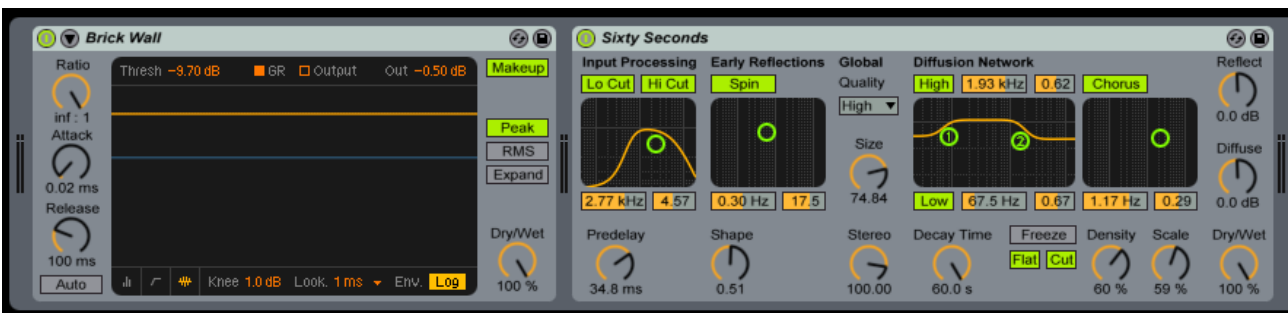

Normally I'd have a reverb like this down in the weeds at about -20dB below the main vocals. It's for atmosphere more than anything else, but on this track you wouldn't hear it at all because of the nature of the backing, so it stays quite loud.

And that's it for the vocals. As a quick mix I let the compressors do all the work rather than riding the faders. With more time I'd start fine tuning things and start using sidechaining so that the vocals make other tracks duck down slightly when they come in. But job's a good 'un for the moment, so let's move on to the piano.

The Piano

A quick look at the track reveals I did ride the faders slightly on this one. I started off with it nudged down by 0.7 dB and then in the final section I bring it up to 0.5 dB, because it's got a lot to compete with!
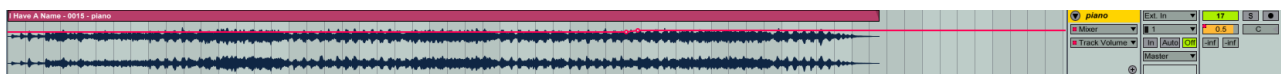
Effects wise, I wanted to take off most of the low end because that's where the grunt of the bass (and much of the guitars) is going to live. As you can see, I was pretty aggressive in the eq – listening back to it now, maybe a bit *too* aggressive.

Once again, I add compression – this time I'm interested in evening out the dynamics of the performance a bit, which is when I tend to use Ableton's "Mildly Aggresive (sic)" preset. Finally, I add a bit of special sauce in the form of Elogoxa's "X-cita" VST plugin to add a bit of warmth and make the higher frequencies stand out. It's a free download; you can get it here:
https://www.kvraudio.com/product/x_cita_by_elogoxa

That's Leslie's original elements sorted – a quick run through listening to them on their own and I'm happy with the sound, so on to the drums.

The Drums

As you can see, I eased off on the main drum track by -4.5 dB. You'll see why in a minute. Effectswise, I wanted the main drums to be about the snare and the cymbals, so the track is eq'd to bring them up in the mix.


There's a bit of compression, but not very much – and as you can see I dialled the dry/wet mix back to 75% so I could let the dynamics come through. Quick listen and they sound okay, so now it's time for some parallel compression.

I add another audio track and feed the drums audio in, pre-fx, so I will be working with the original sound, not the processed version

Note this is much quieter. This is because I use eq to scoop out pretty much everything except the snare, the kick and the cymbals and then boost the *shit* out of them before whacking a brick wall compressor on the track.
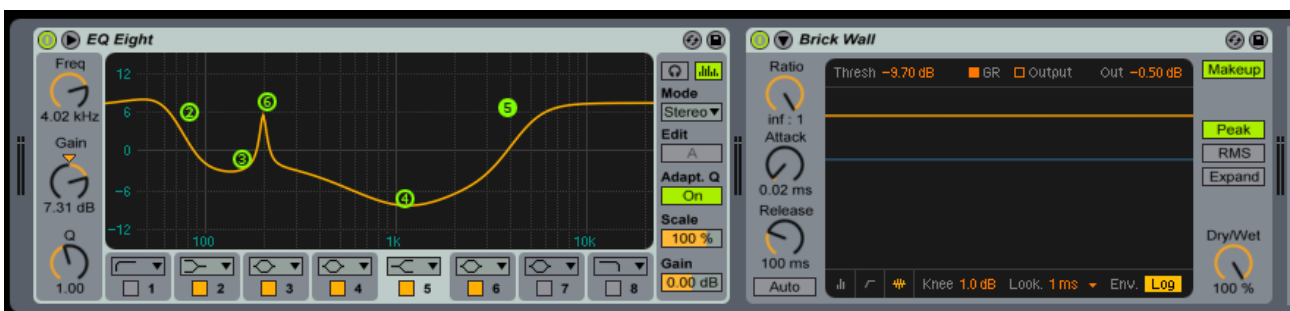
Mixed in underneath the main drum track, the drums suddenly become much punchier and there's more of a sizzle to the cymbals. I want this to be subtle, the sort of effect that you miss when it's not there, so muting and unmuting the track while I play with the relative volume levels of the two parallel tracks helps me to figure out a reasonable balance.
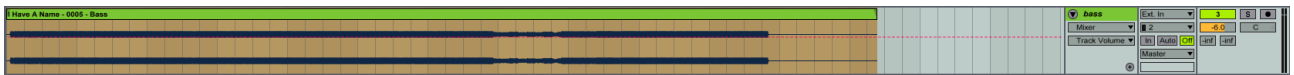
Next it's on to the bass.

Bass Guitar

The original track was **really** quiet, so I used Ableton's clip properties dialog box and brought it up by 8 dB.

When I added it to the track, I then cut the volume again – because I'm going to be using parallel compression on the drums, too. So this was a step that I didn't actually need to take. Ah well.


The bass has its own set of frequencies to play in, but it needs to leave room for everything else, so I eq it accordingly, add a compressor to even things out, and then add a subtle bit of flanger, because it's the bass, right?

Then we do the parallel compression thing again. New audio track, fed with the pre-fx bass sound:


Notice the bass builds at the same point as the piano. But again, notice that this is almost down in the weeds as far as volume goes. I boost the low end and add a bit of distortion around 1.5k to put a bit more grit in – it helps the ear to pick out what's going on. Listening back now, I should probably have added compression here as well and come back when I'd added the guitars to make sure the bass wasn't fighting the rest of the mix (see my note at the end).
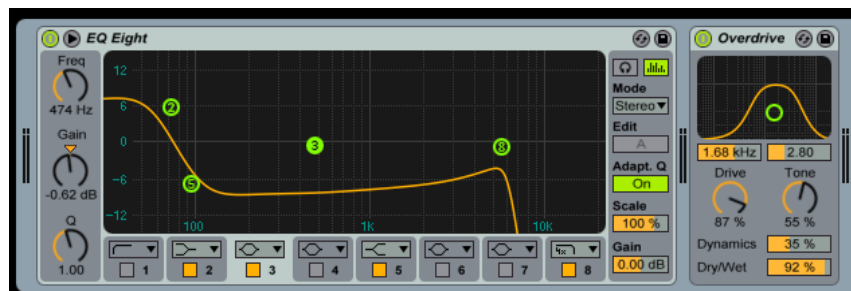
Now we can start on the guitars.

The Guitars

The clean guitar takes are all stereo files, but with audio only on one channel, so they're panned left and right (though not drastically so, as they're not a principal feature of the mix) and sent to their own submix, a separate audio track which is where I can control all the volumes in one go and add a single set of effects.
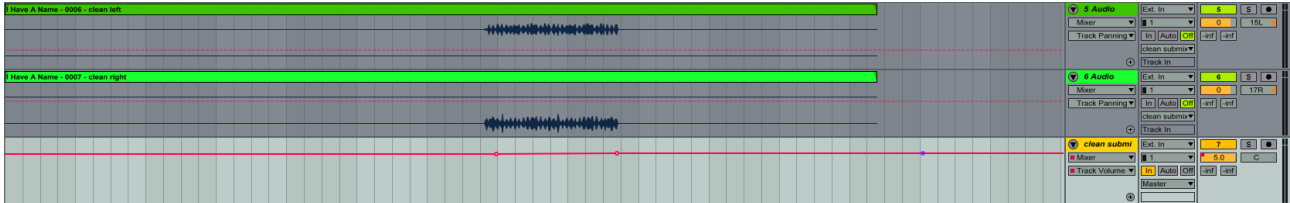
I want the cleans to ring, I want them to linger a bit, and I don't want them to get mixed in with the main guitars, so some fairly drastic eq, compression and MOAR REVERB help that to happen.

Same sort of story for the rhythm guitars. Separate submix, this time each guitar track panned hard left or right, as far as they'll go.

I mute everything else and just listen to this submix so that internally the relative levels of the guitars sound okay.

As you can see here there's also a little bit of riding the faders; I bring the guitars down a bit when Leslie's vocals come in. This was a very rough mix, and I would probably spend more time adjusting the guitars to get the proper "wall of sound" effect without trampling over everything else. The eq here is a very rough first go. With more time, I'd give the bass and the different guitars sharper slots of frequencies so that they don't collapse into a muddy mess. The sound of the rhythm guitars is already heavily processed, so eq is all they need:

If you look at the eq settings for the other tracks, you'll notice that it's the guitars that get the lion's share of what's going on around 00 Hz. That gives them a nice rumble. There's a slight dip just above 1 kHz because that's where Leslie's voice needs to be strongest. A listen through again with everything else back on lets me balance the relative volumes. This is where using a submix comes into its own, as it drastically reduces the amount of control twiddling to do. And that's where the fader automation gets figured out.

Finally, I do a very similar thing with the leads. They're not panned so hard left and right, because we want them to be more of a focus. They get their own submix, and I listen to them together without anything else to make sure the relative volumes work.

Once again, the guitar sound is already heavily processed so I don't mess around with it too much. I ended up not eq-ing the lead guitars at all – they get all the bandwidth they need.
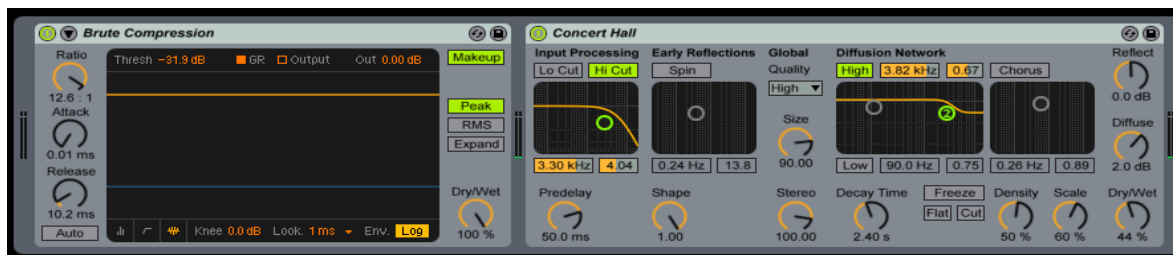
Ableton's "brute compression" has become a habit with me on lead guitar. It just seems to lift things and gives playing much more force. I used the "concert hall" reverb preset to give the leads a bit more presence in a physical space to help the listener distinguish them from the totally dry rhythm guitars, did a bit of fader-riding to balance things out, and that was it. Whole process took a couple of hours, if I remember correctly.   The master track just has the EZMix "Master2" preset applied, which is primarily a bass and high boost with a limiter.

Listening to the track again, I definitely need to sort out the separation between the bass and the rhythm guitar mix – the bass takes too much of the total audio energy available, and it's fighting the rhythm guitars all the way. I'd be lighter on the vocal reverb, too. I'd also bring the piano down a couple of dB. I've just had a quick go at doing all of that, and it's surprising how it lets the guitars stand out much more.

Moral of story: every time I do something like this, I learn something new.