

A471 PROJECT 3

POST SESSION DOCUMENTATION

HEOLINY JUNG



JACOBS SCHOOL OF MUSIC
Audio Engineering and Sound Production

INDIANA UNIVERSITY
Bloomington

Session Preparation Form

Engineers: Heoliny Jung Session date: 10/24/2020
 Artist: Sloan and the Right Swipes Song title: I'll Be There
 Instrumentation: Drums, Bass, Guitar, Vocals, Electronic Stems

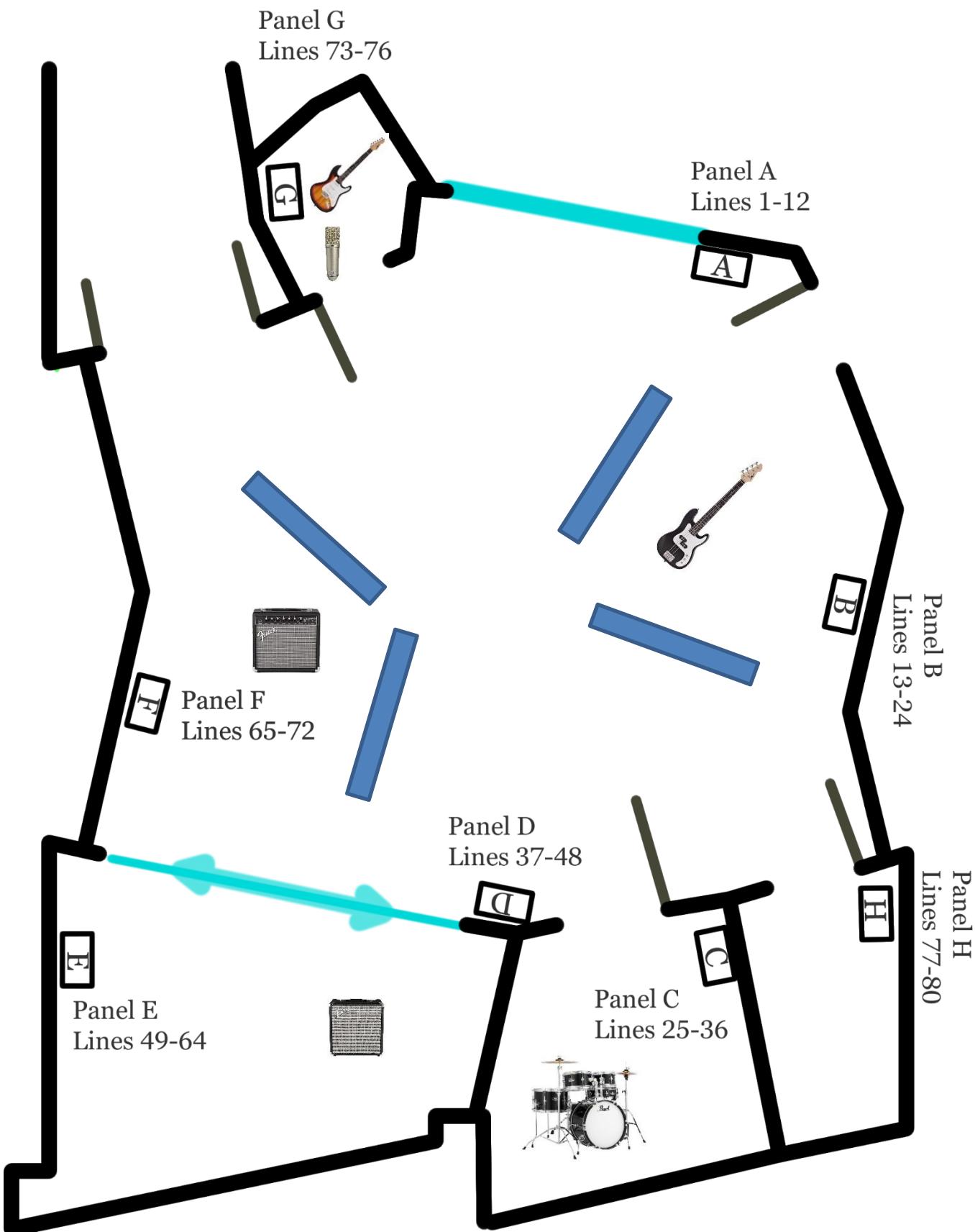
start time		end time	description
12:00 pm	until	1:30 pm	engineers arrive and set up mics/headphones
1:00 pm	until	1:30 pm	band arrives
1:00 pm	until	3:00 pm	get sounds/ set-up headphone mixes
3:00 pm	until	4:00 pm	start recording basic tracks
4:00 pm	until	4:30 pm	overdub
4:30 pm	until	5:00 pm	rough mix/ band tears down and loads out
5:00 pm	until	5:30 pm	studio cleaned and empty/ board cleared

Mic input list

Mic Pocket	Preamp	Room	Mic	Instrument	Outboard	Basic /OD	PT input#
25	API 1	Drum	MD421	Kick In	SSL Comp 1	B	Line 13
26	API 2	Drum	FET47	Kick Out		B	Line 14
27	API 3	Drum	SM7B	Snare Top	SSL Comp 2	B	Line 15
28	API 4	Drum	M130	Snare Bot		B	Line 16
29	API 9	Drum	421	Rack Tom	Brute 1	B	Line 21
30	API 10	Drum	421	Floor Tom	Brute 2	B	Line 22
31	API 5	Drum	414	OH Hat A		B	Line 17
32	API 6	Drum	414	OH Ride A		B	Line 18
33	API 7	Drum	121	OH Hat B	33609 1	B	Line 19
34	API 8	Drum	121	OH Ride B	33609 2	B	Line 20
35	TT 1	Drum	N8	OH Mono	Distressor 1	B	Line 23
25	TT 2	Live	TD-100	Bass DI	LA2A 1	B	Line 24
49	Neve 2	Piano	LCT 640 REX Dyn	Bass Amp A		B	Line 2
50	Neve 3	Piano	LCT 640 REX Cond	Bass Amp B		B	Line 3
65	Neve 7	Live	JDI	Guitar DI		B/OD	Line 7
49	Neve 1	Piano	2247SE	Guitar Amp	1176 2	B/OD	Line 1
74	Neve 5	Vocal	LCT 940	Vox	RND 2	OD	Line 5
Mult	MTX 1	Vocal	LCT 940	Vox Clean		OD	M/L 1

Aviom Assignments

1-2	3-4	5-6	7-8	9	10	11	12	13	14	15	16
Drums	Bass	Gtr	E Stems	Vox						C	TB



1. Overall, how did you feel the session went?

Terrible	Not well	OK	Good	Great!
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2. What was different from what you had planned?

Originally, I thought I would record scratch vocals with bass and drums, then overdub guitar and main vocals. Instead, we recorded guitar in basics with bass and drums and recorded main vocals in overdubs. I also only used the LCT 940 for vocals and switched from tube to FET for the harmonies/backgrounds.

3. What could you have done in planning that would have made the session better?

I think the session went really well, and I don't think I could have done much else in planning to make it go even smoother. In an ideal world, I would say I would have liked to have had a Pro Tools session already constructed before coming in to setup, and had made a vocal lyrics take sheet, but their absence didn't hinder the flow of the session much.

4. Did the band feel good about the session when they left? Have you spoken to them since the session to confirm how they felt it went? What did they feel went well and not so well.

The band was very happy after the session. They were all seasoned studio recording artists, and they felt the tracks sounded good and their performances were good as well. After speaking with the main artists, he said that he had some issues with the mix (of course at that point it was at a very early stage) but that he was confident in his and his group's performance.

To answer the next questions you need to have listened to your session and created a rough mix AFTER the day of the session. Make sure to do so BEFORE answering these questions.

5. What is the best sounding track you recorded? Describe why in DETAIL!

My overheads came out sounding very good. I used a combination of a spaced pair of LDC's with a Blumlein pair of ribbons and a mono ribbon. I was originally putting them all up just to have options, but in the end I was able to set them up in a way where they sounded great all together. The spaced pair gave a great amount of width and pop since they were close to the cymbals, while the Blumlein helped capture the whole kit (especially the toms) and the mono helped fill out some of the center (with the help of some heavy compression).

6. What is the worst sounding track you recorded? Describe why in DETAIL!

Unfortunately, my judgement on the vocal mic was not great, as I used the tube circuit of the LCT 940. This came out alright, but compared to the background vocals which used the FET circuit of the same mic, it was not the correct choice for the song. It was too warm and fuzzy and lost some of the transients needed for the clarity of the vocal. The FET circuit was much more suited for this type of track, as it was a bit clearer and was able to sit above the other instruments in the mix.

7. What would you do differently for the track above?

I would either use the FET circuit of the LCT 940 or choose a different FET mic, like a U47/P67, or maybe even a TLM170.

8. What did you learn from this session?

Even though I feel like I make more significant decisions every session than the last, I still have a long way to go before I am able to recognize all the problems I have with my sounds in tracking. I learned that I can still spend more time on getting sounds no matter how set I was on the choices I made in planning.



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Project Information Document

(Use Adobe Acrobat to complete)

Artist/Band Name: Sloan and the Right Swipes Band

Producer: Heoliny Jung

Engineer: Heolny Jung

Does this recording contain samples? No Yes (List sample sources in Notes field)

Studio: Joshi 405 Auer Ford Recital Mac Other

Sample Rate: 44.1 48 88.2 96 176.4 192 All sessions must be 24-bit

Song Title	Composer/Lyricist/Arranger
I'll Be There	Corey "Sloan" Welsch

Add Session Details



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Bloomington

Session Details:

Date: 2020-10-24

Start time: 12:00

End time: 17:30

Tracking Overdub Editing Mixing Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- Tracked drums, bass, guitar, and vocals
- Only one vocal mic used, LCT 940, tube for main, FET for harm/BGV
- Distressor used on mono OH



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Bloomington

Session Details:

Date: 2020-10-26

Start time: 12:00

End time: 14:00

Tracking

Overdub

Editing

Mixing

Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- Comped vocal and instrument takes
- Attempted beat detective, decided against it
- Basic level/panning, started work on drums with EQ on OH and toms



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JACOBS SCHOOL OF MUSIC

Bloomington

Session Details:

Date: 2020-11-02

Start time: 12:00

End time: 14:00

Tracking

Overdub

Editing

Mixing

Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- More work on drums, added/adjusted EQ to most tracks and compression on OH's and kick/snare
- Added basic EQ/compression to bass, guitar, and vocal
- Added reverb to drums, guitar, vocals



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JACOBS SCHOOL OF MUSIC
Bloomington

Session Details:

Date: 2020-11-04

Start time: 18:00

End time: 21:00

Tracking Overdub Editing Mixing Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- Adjusted EQ on stems to fit more with lower frequencies of bass and kick, carved out lower frequencies in the main sample
- Added Lo-Air to kicks to add sub-harmonics
- Gated kick and snare
- Tried gating/muting where toms are not playing, decided not to since it created weird interactions when they came in.



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Bloomington

Session Details:

Date: 2020-11-07

Start time: 18:00

End time: 21:00

Tracking

Overdub

Editing

Mixing

Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- Worked on vocal, added three-track clean/heavy compression/heavy distortion processing and an additional compression track (Later removed)
- Adjusted guitar reverb and EQ to make it sound more distant
- Balanced BGV and Vox harmonies



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JACOBS SCHOOL OF MUSIC

Bloomington

Session Details:

Date: 2020-11-09 Start time: 12:00 End time: 14:00

Tracking Overdub Editing Mixing Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- Added some mastering processing (Later removed)
- Rebalanced and changed panning on keys stems
- Worked further on vocals



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JACOBS SCHOOL OF MUSIC
Bloomington

Session Details:

Date: 2020-11-18

Start time: 18:00

End time: 21:00

Tracking Overdub Editing Mixing Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- Made revisions to mix with mentoring session feedback
 - Switched to clean vocal and added less processing
 - Worked on bass track: slower attack on compressor, cut out more low freq from main sample, adjusted EQ on bass
 - Blended aux perc in more with EQ and levels
 - Removed mastering chain while mixing
- Started automation runs
- Altered reverbs on stems, vox, and guitars



INDIANA UNIVERSITY

JACOBS SCHOOL OF MUSIC

Bloomington

Session Details:

Date: 2020-11-20

Start time: 09:30

End time: 11:30

Tracking

Overdub

Editing

Mixing

Mastering

Notes:

Update this field with additional info. from each session including what was recorded/mixed, additional musicians, artist comments and all pertinent information about the session. Add new pages as needed.

- Finalized automation
- Added mastering back in

SESSION PICTURES



Here you can clearly see the drum set up. On the far right was the OH A hat and far left is the OH A ride, in the middle above is the blumlein pair of R121's, and second from the left is the Mono OH N8.

I used the SM7B on snare because I wanted a dynamic but I didn't want it to be too muddy like how a SM57 can be. The final position was angled a bit higher than I would usually think to but I had my assistant adjust it while I listened blindly in the control room and ended up picking that position as my favorite.





The bass amp mic was simple enough, but I did the same as I did with the snare by having my assistant move the mic around until I liked the tone and ended up in this position.

I had to do a bit more work to get the guitar tone I liked out of the cab with the Peluso 2247SE, but this position off the floor facing away from the rocky wall enclosed in gobos in the live room worked out very well, especially since there wasn't any other sound sources in the live room. I even liked the sound of the omni talkback I put up in the live room as it got the reverb from the live room and guitar amp. I didn't place it in a very useable spot though, so I didn't use it in the mix, but I would definitely try that again on a future session.





The vocal mic was a bit higher than pictured here, but its orientation was basically the same. I think this is partly what contributed to the more nasally sound of the vocals that gave me some trouble in mixing. I think I could have benefitted from having a break between basics and vocals so I could focus more closely on the sounds. However, at the time of tracking vocals I didn't think they sounded that bad so I also have some ways to go in my ear training as well.

I had all my drum tracks besides the subkick and OH mono on the API preamps, using some EQ on most of the tracks going into Pro Tools.





Unlabeled on the left is the main vocal going into Neve 5. You can see that I used the output attenuation knob on the far right for that vocal channel so that I could increase the input gain and get more saturation out of the pre-amp.

I experimented with different impedance settings on both of these tracks, but I had a hard time hearing too much of a difference on either. I had to fiddle with the Bass DI a bit, as there was a gain knob turned down somewhere in the signal chain from the DI to the pre-amp. Fortunately, I was able to troubleshoot it and get it working for tracking.





Unlabeled here is the main vocal going into the RND 2. After the mentoring session, we determined that either my settings or the compressor itself did not interact very well with the vocal, and I decided to use the clean signal from the Neve pre-amp instead.



I put the Blumlein R121 pair through the 33609, aiming for around -3 or -6dB of GR.



SESSION SCREENSHOTS

Stems



At first, processing on the stems was minimal. However as I mixed and got feedback from the mentoring session, I ended up doing more work than I thought I had to in order to get everything mixed and cohesive.

The main sample was a lo-fi guitar and bass riff with a bit of cymbal-like percussion hits mixed in. On its own, it sounded reasonably good, however after recording all the other instruments and comments from mentoring, it was clear that it took up too

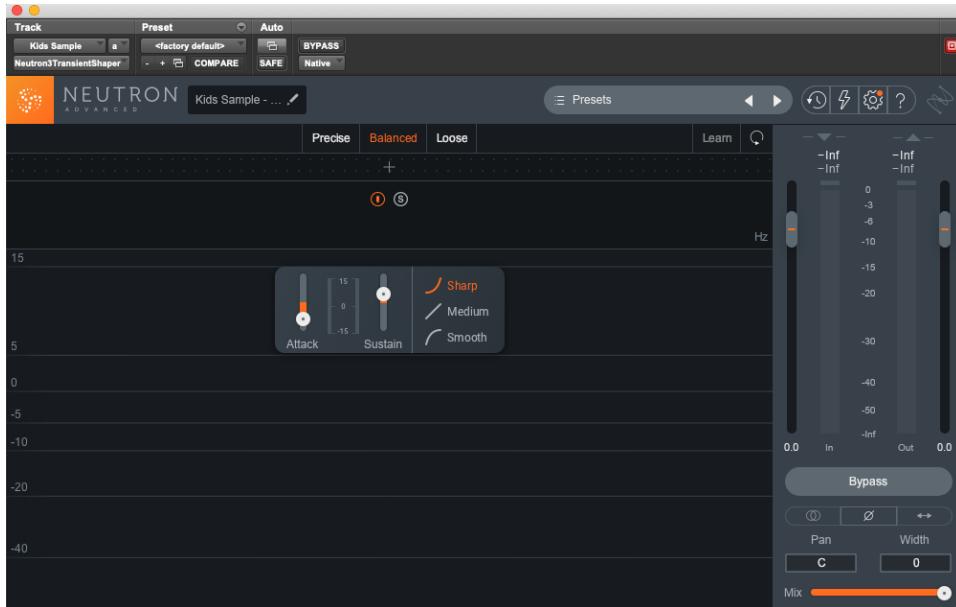


much space in the mix, especially in the low frequencies. I used channel strip to filter out a lot of the low-end and did the same for the high-end. There was a percussion hit in the high end that did not mesh well with the recorded drums.

I also used the sidechain on the channel strip compressor to key it to the kick drum track



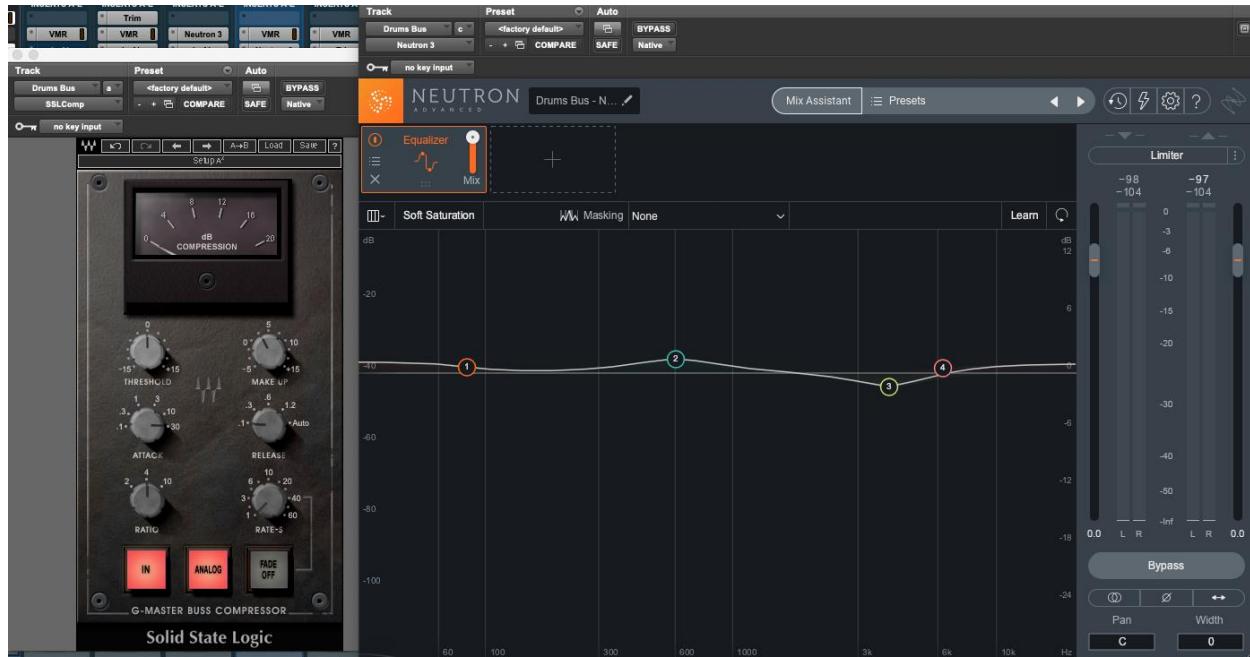
I used some medium-Q bands and low-pass filtering on the MusicBox, ToyPiano, Recorder, and KidSynth tracks to carve out more space for the vocals and drums and fit the stems together a bit more.



The Kids Sample had a piercing attack on it that was sticking through the mix a bit too much, so I used the Neutron Transient Shaper to shave that off and create a smoother sounding sample.

I sent all the stems to this echo/delay processor and the below reverb processor to push them back a little more in the mix and make space for the vocal and drums to be more forward in the mix.





Finally, all the stems were sent to this Stems Bus folder where I did some bus compression and very small amounts of EQ.

Drums



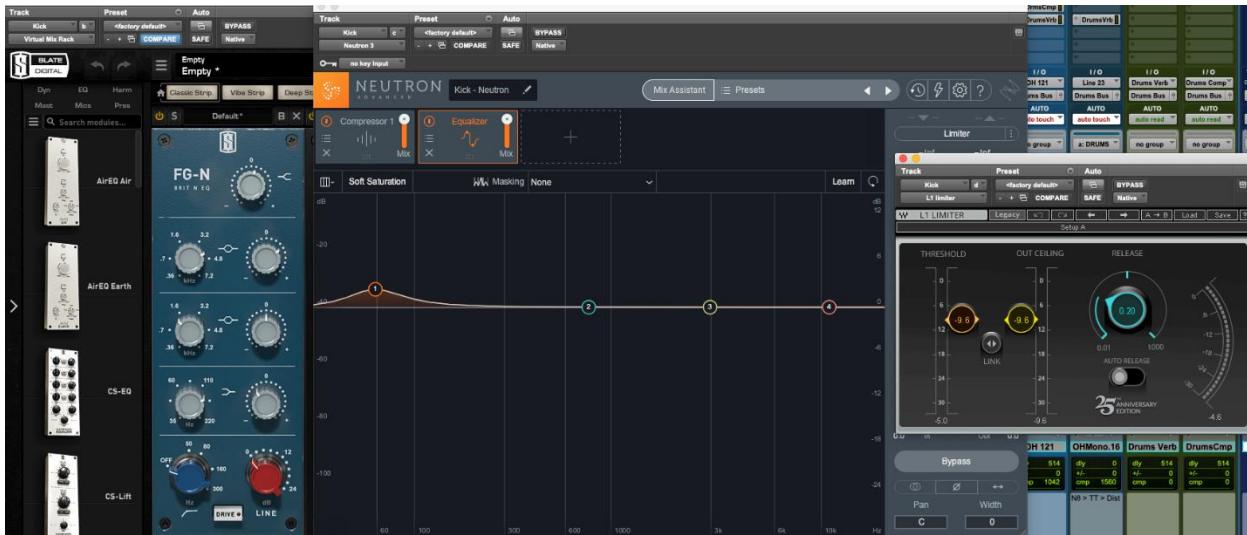
I decided to gate and compress the Kick In as I wanted to accentuate the punch and snap of the kick without bringing in more bleed. I got settings on the gate that I liked after lots of tweaking.



For the Kick Out, I did basically the same thing, however I had to be much more careful with the gate and compression as the bleed was more present than in the Kick In. I also added LoAir to this track to give a nice sub-harmonic distortion for a bit more boom.



I did not have to gate the subkick, but I did filter out everything above about 200Hz and use LoAir again for even more boom.



I bussed all my kick tracks to a kick bus and processed them with a bit of EQ and a limiter to catch some of the heavy hits and peaks.



I tried gating my Snare Top, but there was enough HiHat bleed that I couldn't get it sounding clean enough to be useable, so I just opted for some EQ>COMP>EQ signal chain, trying to shape how the compressor worked with the EQ to get the snare sounding big and thick but not too long.

My Snare Bot was isolated enough to use gating, so I used the Slate drum gate again.



Both snare tracks were then bussed to an aux where I did some minor EQ and compression.

I added an extra reverb to the snare specifically because I wanted it to feel more spacious without making the rest of the kit boomy or washed.



This extra reverb aux track was labeled “Snare Spread”.



The tom tracks were very standard. Since I used the Brutes going in, all I really wanted to fix up was taking out a bit of the overheads and kick in both tracks.



I liked my OH 414 sounds, however I wanted a bit more grit and splash on them and they were a bit too bright. I experimented with a few compressors to get that nice splash I wanted,

including the API 2500 and Impact plug-ins, but I ended up liking the Fairchild the best. I also experimented with the different time constants on the Fairchild, and ended up liking number 1 the best, which makes since it has the fastest attack and release.

I essentially did the same thing on the OH 121's, however they were already compressed by the 33609 coming into Pro Tools, so overall they had a much crunchier sound and were very splashy.



I did end up using the API 2500 on the OH Mono, as I liked how it was more aggressive and could compress faster.



Most of the drums were aux'ed to both the drums reverb (left) and drums compressor (right). I only sent the Kick In to the

Drums compressor because I didn't want to push the compressor with a lot of low-end, and both he Kick Out and SubKick had LoAir plugins on them.

Tambourine, Bass, and Guitar





The Tambourine track was treated with a clean but severe compressor and some EQ to take out a bit of high-mid harshness.

The bass tracks were bussed into these two plugins. The Smack was the main compressor, evening out the signal but leaving a bit of attack in there, while the channel strip compressor just caught some of the stray peaks left over from the Smack.

The Channel Strip EQ brought out some of the sub-100 frequencies and the higher snap of the bass, while taking out the ultra high-end and some of the frequencies around 200 Hz to keep the bass from sounding too muddy.





The Guitar DI track was put into this amp emulation and mixed in with the Amp mic track.

These both were bussed to the Neutron and RAxx. I liked the RAxx as it accentuated the twangy guitar a bit more.



I sent the guitar to this reverb because I wanted it to sit back pretty far in the mix and take up a lot of space without being stereo. When both the vocal and guitar play at the same time, they don't fight each other as much.

Vocals & Master



My Lead Vocal had a lot of nasal sounds and harsh esses that were accentuated when compressed that I had a hard time EQ'ing out. I tried many different methods to counteract this: de-essers, harmonic distortion, and layering duplicates with different processing. Most of these attempts were not done very carefully, so before mentoring, I ended up with an overcompressed, ineffective jumble of ideas.

After mentoring, I took the advice of everyone to revert to my clean vocal (that did not get put through the RND on the way in) and work hard on getting some very careful and precise EQ cuts and more gentle compression. I ended on some nice settings with my Q8 shown far left, however I am not fully convinced of the sound and would be very interested to see how a more experienced engineer would handle this track.



By duplicating and compressing the vocal with the Fairchild, I wanted to increase the intelligibility a bit and try to bring a bit more body to the vocal overall. It was even harder to find good EQ cuts on this track because I had to deal with a compressed version of the vocal. In the end I got something that I liked reasonably enough, but again it was very hard to judge.



I sent both lead vocal tracks to this Ultratap to give a short sense of space and density. I tried other delays/spatializers, but I landed on this one as my favorite for this track.



The vocal harmony and double tracks were treated very simply, since I liked how they sounded as they were.

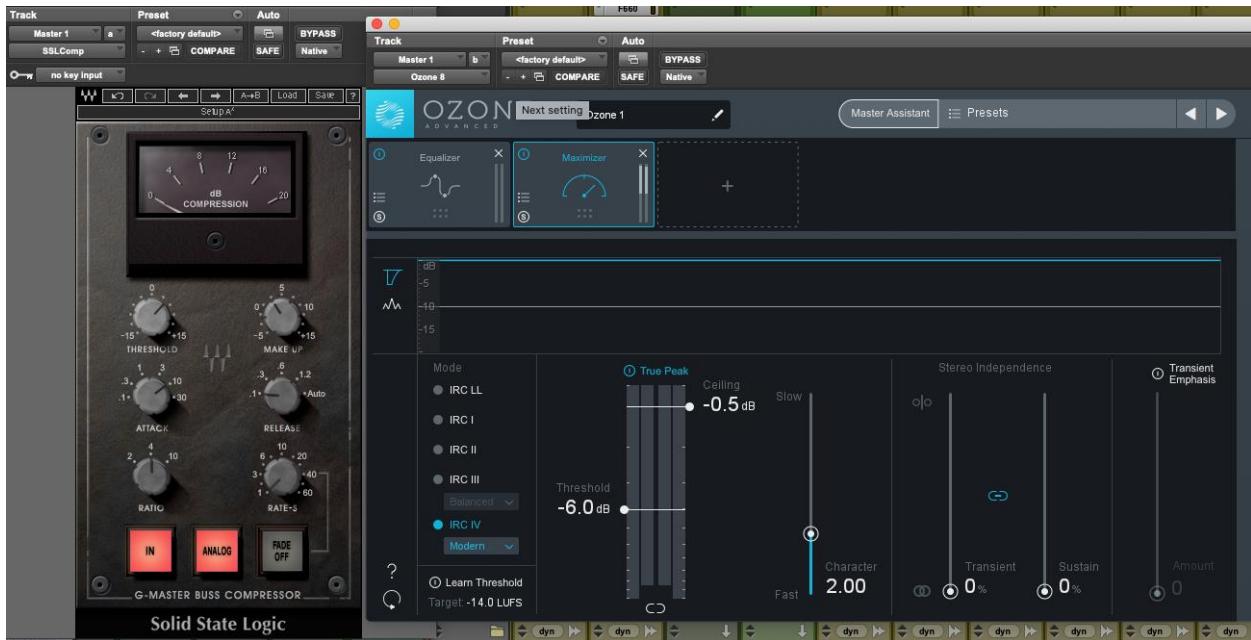


I did buss the two harm tracks to this bus to add a bit more precise EQing and some harmonics with the Neve distortion plug-in.

I sent all the vocals in some degree to this reverb.



I also used this Repeater a small amount for a bit of delay/echo sync'd to the tempo at the $\frac{1}{4}$ note.



Finally my master processing, which was the SSL Bus Compressor hitting at around -3dB and Ozone maximizer.

Automation

I worked on automation mostly for the bass, drums, and lead vocal. I wanted to bring out the drums at the fills and tom hits, so I did some smaller rides on that. I also wanted to have the bass to drive the song a bit more so I used some small, gradual adjustments on that as well.

Vocals were mostly just riding to make sure that the clarity was there the whole time. The vocal was a more whiny style, so the dynamic differences weren't super large.