

Digital Mix (Massive Attack - Lately)

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Module CRMT160

Discussion

The track (Blue Lines 1991) uses Mid/Side bus processing. The M/S bus has the vocals reverb is on the side mix (M/S Mastery 2022) . Kick and Snare are at 800 to 4000 kHz. Synth is at 30 to 250 Khz and the female Vocal is at 300 to 1000 Khz.

The synth was a bass heavy synth and the frequencies were mixed in with the kick therefore this was more difficult to extract and does not contain the full frequency spectrum of the synth. The vocal was most problematic as it crossed over multiple instrument frequency ranges.

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Figure 1 - Kick Mid/Side

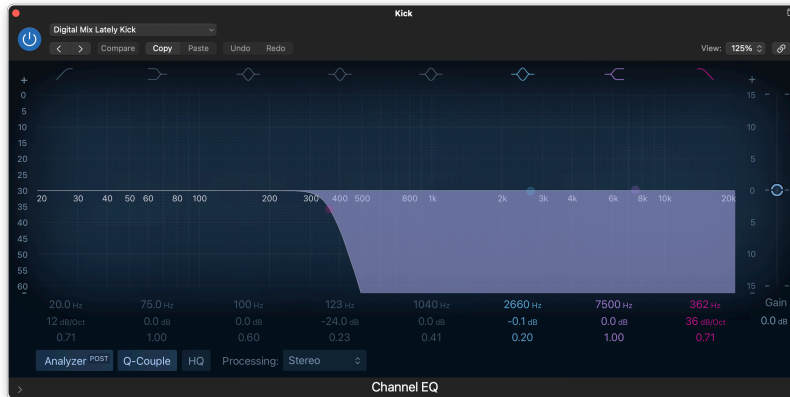


Figure 2 - Kick EQ

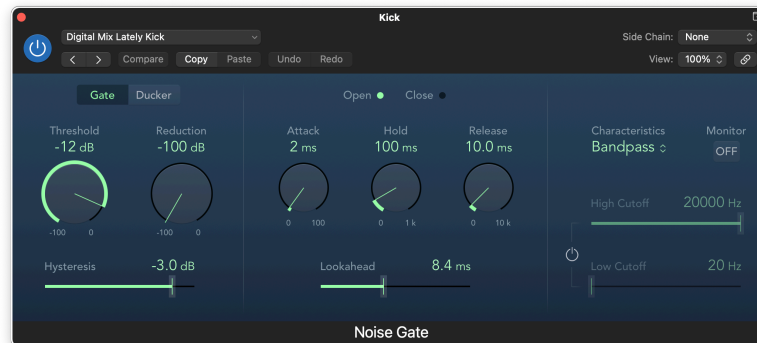


Figure 3 - Kick Gate

A plugin was used to isolate the Kick Drum sound as much as possible as most of it is on the Mid region of the M/S Bus (Figure 1). The higher frequencies were then EQ'ed out as the Kick takes up the lower frequency range below 300 Hz (Figure 2). A Noise Gate was then used to isolate the Kick as much as possible with careful adjustment for the threshold. This included use of Hysteresis to prevent the gate opening and closing too fast (Figure 3).

“The Hysteresis slider provides another option for preventing chattering, without needing to define a minimum Hold time.” (Apple Inc. 2023)



Figure 4 - Snare Mid/Side.



Figure 5 - Snare EQ

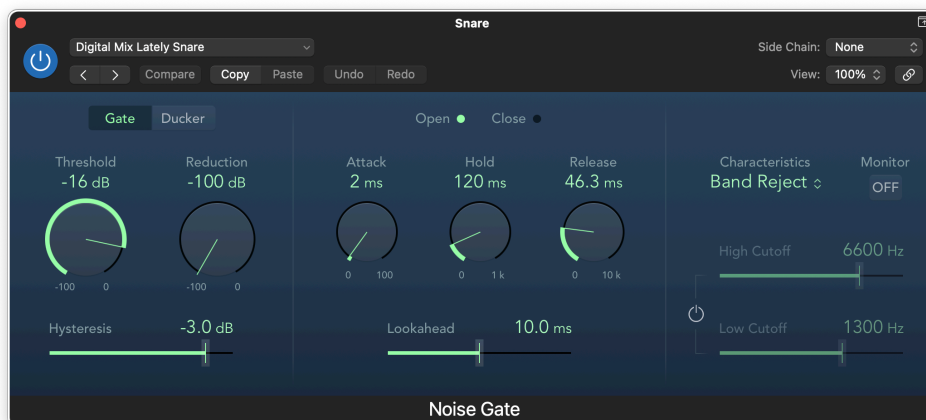


Figure 6 - Snare Gate

With the Snare the mid range of the M/S bus was isolated again (Figure 4). The EQ range of the Snare was also isolated in order to remove the other instruments frequency ranges as much as possible (Figure 5). The Noise Gate was also inserted with similar settings apart from a little more hold and release to capture the longer fall off time of the Snare (Figure 6).



Figure 7 - Vocal Reverb Mid/Side



Figure 8 - Vocal Reverb EQ

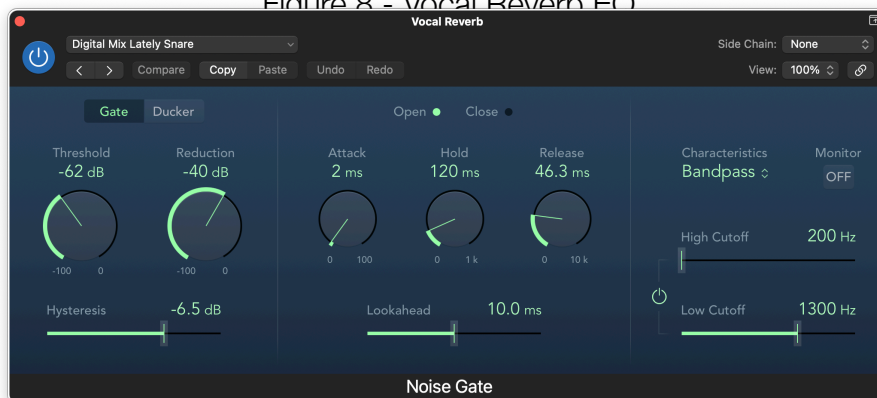


Figure 9 - Vocal Reverb Gate

Reverb FX on the vocal were isolated by this time isolating the Side of the M/S Bus as this is where most of the reverb is (Figure 7). EQ was used to further isolate the frequency range of the reverb (Figure 8). The Noise Gate then further isolated the reverb (Figure 9).



Figure 10 - Synth Mid/Side



Figure 11 - Synth EQ



Figure 12 - Synth EQ

In the original mix the vocal frequency range was merged with the upper range of the synth. I eventually adjusted the EQ range to be lower down to compensate although this left the synth missing some of its higher frequencies (Figure 10 and 11). Using the side of the M/S bus as side chain input also helped screen out some of the vocals that were also triggering the gate (Figure 12).



Figure 13 - Vocal Mid/Side



Figure 14 - Vocal EQ



Figure 15 - Vocal Gate Side-chain

There was a lot of cross over of frequencies with the Snare and Synth which I tried to mitigate by side-chaining the already processed busses for those instruments. This allowed a little more isolation of the vocal (Figure 15) after applying equalisation (Figure 13 and 14).

The final recombined mix retains a recognisable version of the original track. However the extra processing required to isolate instruments and vocals has removed many frequency ranges from the original track.

Conclusion

I was successful in isolating the frequency ranges prior to the use of gating. Even though I used side chaining to augment the gating process this was not as successful as I hoped in further isolating the vocals. The project gave me a better understanding of how a mix is constructed however my unfamiliarity with using side chaining would improve with further study.

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References

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