

1.1 a) Applying a compressor with Threshold -12dB, Noise floor -40dB, ratio 2:1, attack time 0.2s, and release time 1.0s makes the track a lot louder. It sounds a little bit distorted when compared to the original. The waveform on the screen is a lot bigger than the original track.

1.1 b) Applying a compressor with Threshold -30dB, Noise floor -40dB, ratio 8:1, attack time 0.2s, and release time 1.0s makes the track louder, but not as much as the compressor with threshold -12dB and ratio 2:1. The waveform on the screen is visibly smaller than the first compression but it is still about twice as big as the waveform of the original track.

1.2 a) Applying a compressor with Threshold -36dB, Noise floor -40dB, ratio 10:1, attack time 1.0s, and release time 1.0s makes the track a lot louder, but otherwise identical to the original track. The waveform on the screen is about three times as big as the original track.

1.2 b) Applying a compressor with Threshold -36dB, Noise floor -40dB, ratio 10:1, attack time 1.0s, and release time 20.0s makes the track louder and it sounds like less clean. The waveform on the screen is about twice as big as the original track.

Part 3

For a dynamic range compressor with threshold -12dB and 3:1 ratio, the output at

Input of -15dB gives output of -15dB, since -15dB is below the threshold, so it simply gets a gain of 0dB

- Input of -12dB gives output of -12dB since it is at the threshold, but not above it so it still gets a gain of 0dB

Input of -9dB gives output of -9 dB, since -9dB is 3 dB above -12dB and for every 3dB increase in input above -12dB, the output increased by one dB. $3\text{dB}/3 = 1\text{dB}$, so the output is $-12\text{dB} + 3\text{dB} = -9\text{dB}$.