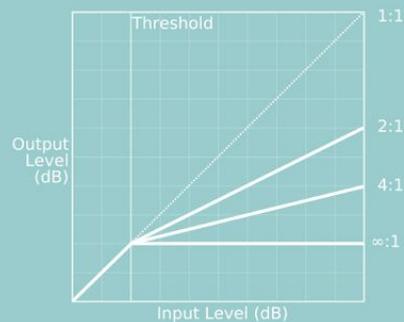


Ratio

The ratio determines how much the volume is reduced by

Threshold

This is the level at which the compressor kicks in

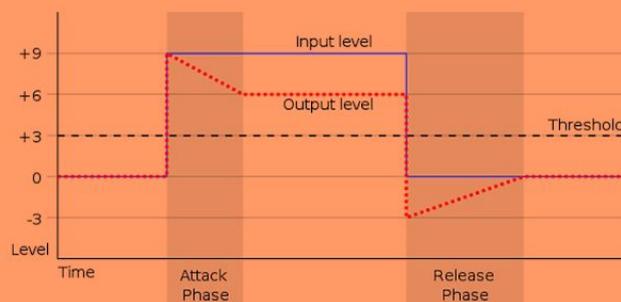


Attack Time

How quickly the compressor engages and reduces the volume of the audio

Release Time

How long it takes the compressor to dis-engage and return the audio to it's normal level



Gain

Increases the output level to compensate for loss in volume due to compression

10 TOP COMPRESSION TIPS

1. Start with an attack time of roughly 40ms and a release time of 60ms for instruments (but this is a HUGE generalization)
2. Start with a medium-fast attack time (around 10ms) for vocals
3. You don't always have to use compression - don't just do it for the sake of it
4. Have an intention
5. Stack compressors for more control
6. Parallel compression on drums or vocals (lighter genres) is more subtle
7. Plugin order doesn't matter much - don't obsess
8. Pick a compressor plugin a stick with it, learn it
9. Keep an eye on the gain reduction meter
10. Adjust the output gain to volume match the plugin (same volume going out)

ATTACK TIME

- Think of it as attack amount
- Two main settings (forget everything else for now)...
- Slow attack time = lots of transient, lots of attack, lots of aggression
- Fast attack time = less transient, less attack, more thickness
- Make sure you know how your plugin works (analogue modelling is backwards)
- Always err towards slower attack times, otherwise you can ruin transients and dynamics (2ms or more in general)
- Normally, if something sounds over-compressed, it's due to fast attack times
- Only use fast attack for a particular reason (e.g. snare or kick might require 1ms or less)
- Start slow, make faster until start to lose aggression, then back off

RELEASE TIME

- How long it takes the compressor to disengage after the audio drops back below the threshold
- Could be on a small scale (ms) or even seconds (unlike attack time)
- Fast release times can cause distortion, pumping, and a range of other issues
- Don't be afraid of auto-release, works well in most cases
- Err towards slower times (40ms or more)
- Adjust to be as slow as possible while breathing in time with the music
- Compressor should drop to around 0-1dB of gain reduction every few beats, otherwise release time potentially too slow
- There are some exceptions where really slow release times work (2 seconds plus), so remember that these are just guidelines
- Fast release better for more apparent volume, but be very careful as can lead to distortion

DIFFERENT GENRES

- Pop - focus more on dynamic control and constant compression than tonal shaping
- Rock - lots of compression, be bold, use slow attack times to add aggression
- Hip-Hop - older hip-hop is more like Rock (adding aggression), modern Hip-Hop is more like Pop (controlling dynamics)
- Electronic - focus on the vocals, as samples and virtual instruments don't need compression for dynamic control
- Acoustic - lighter genres (acoustic, jazz etc.) require little or no compression

KEY USE CASES

- Vocals
 - They need to be incredibly consistent, so combine compression with automation
 - Opt for slower attack times (5-20ms) to maintain aggression and keep the vocal upfront
 - Lower ratios are normally sufficient, around 2:1
- Drums
 - Kick and snare should be super consistent, compress individually
 - Can rely solely on compression in most cases (no need for excessive automation as with vocals)
 - Will need a fast attack time to catch the drum hit - spend plenty of time tuning this parameter
 - Will probably need a higher ratio, like 4:1
 - If compressing the entire drum buss, use parallel compression to avoid audible pumping on the cymbals
- Bass
 - As with drums, needs to be consistent and provide a solid foundation
 - Similar process to drums, but more care with release time (tune to the tempo)
- Group busses
 - Backing vocals buss, guitars buss, keys buss etc.
 - Compress lightly (if needed) to add more control, 2:1 ratio, 2-5dB of gain reduction
- Guitars
 - For a crunchy, hard rock sound, sometimes heavy compression is needed
- Samples
 - Make samples more interesting by using slow attack times and adding aggression
 - But, no need for dynamic control here, as samples are all the same volume already