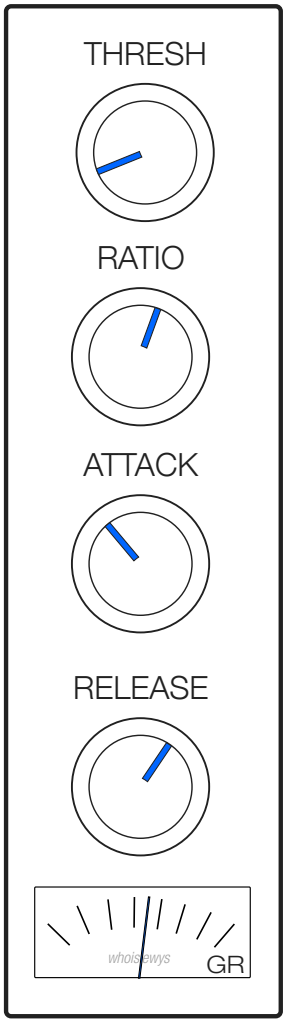
Compressor Cheatsheet



Do you have out of control vocals? Lifeless, stale drums? Is an important instrument coming in and out of focus? Compression is the answer to all of these problems!

The two most common uses of compression are to

1. add punchiness (aka emphasize transients)
2. reduce dynamic range (aka even out, thicken, control)

A compressor works by reducing volume. You can see how much volume is being reduced with the gain reduction (GR) meter. In addition to a GR meter, most compressors also have these controls:

Controls	Definition	Setting Ranges
Threshold	The level where the compressor starts reducing volume	Dependent on input
Ratio	The strength of volume reduction	Light [1:1 - 4:1] Med. [4:1 - 8:1] High [8:1 - 20:1]
Attack	How long the compressor takes to reach full gain reduction after audio crosses threshold Fast attacks push down peaks Slow attacks push down tails	Fast [0ms - 15ms] Med. [15ms - 50ms] Slow [50ms - 200ms]
Release	How long the compressor takes to let go of the compression A fast release allows audio to recover quickly A slow release makes audio recover slowly	Fast [0ms - 15ms] Med. [15ms - 50ms] Slow [50ms - 200ms]
Knee	Smooths out the transition from no compression being applied to full compression being applied Soft knees are often used on vocals or pianos to make compression sound natural Hard knees can make compression sound more intense	Hard [0dB - 2dB] Med. [2dB - 5dB] Soft [5dB - 25dB]