PerforModule - Tempo Dynamics

When applying dynamic effects, we are rarely going to need the entire timing ranges available, depending on the tempo, right? *Tempo Dynamics* provides go-to racks with minimum and maximum values hard-wired to ranges most potentially useful, given the chosen tempo — avoiding values that are likely too fast or too slow to be helpful.

Want to limit, squish, groovify, level, expand, or gate something? Reach for one of these racks in the nearest available tempo, and with handy knobs available to fine-tune, then dial it in quickly without worrying about the numbers or graphs... all while retaining the human element of your personal touch still in place. The macro knobs are also useful for automating in an arrangement, say to let something breathe more during one section and then clamp down during another.

Contains...

• 23 *Tempo Compressors* ranging from 20 to 240 bpm, in 10bpm increments.

• 15 *Tempo Expanders* ranging from 25 to 235 bpm, in 15bpm increments.

• 8 *Tempo Gates* ranging from 30 to 240 bpm, in 30bpm increments.

• 12 *Tempo Gluers* ranging from 20 to 240 bpm, in 20bpm increments.

• 23 *Tempo Limiters* ranging from 20 to 240 bpm, in 10bpm increments.

Nerdy Junk:
Segmentations of timing ranges for the presets were scaled in a way that made the most of the full available ranges of the native devices. These mathematically-derived scalings were then tested and fine-tuned thoroughly across various sorts of audio material to confirm their musicality and practicality when used at those bpms.

|	A min	A max	R min	R max
Level	1/3x	3/16x	3/8x	x
Groove	3/16x	1/16x	3/16x	3/8x
Squish	3/32x	9/16x	3/32x	3/512x
Expand	1/64x	1/8x	1/32x	3/4x
Limit	-	-	1/200x	1/2x

(x = tempo/60000)

Tip: Double Trouble! Sometimes, a clip might be warped to be shown as half or double the tempo that it actually "feels like" (for example, a dubstep or trap beat with a "double-time" hi-hat pattern).
In a case like this, simply use the rack with double (or half) the clip's shown tempo.

System Requirements:

• Ableton Live Standard+ 9.7.7.

Tempo Compressors
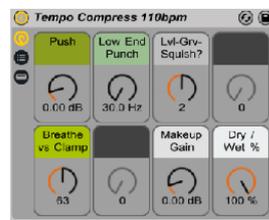
Tempo Compressors
Generally known for decreasing dynamic range, by adjusting the settings carefully, you can also acheive a sort of "reactive dance" feeling, which is more about imparting a sense of groovy movement.

Macros:

Push squeezes the threshold down, increasing potential compression. Adjusting this carefully is paramount.

Low End Punch restores bass that may have been overly squashed, since low frequencies can tend to peak higher and eat up more headroom than others.

Level-Groove-Squish? selects mode:
    "Level" is for overall, gradual smoothing. Might be appropriate for pads, ambient soundscapes, or live broadcast.
    "Groove" is for enhancing a sense of "3D life" by symbiotically responding to the integral vibe.
    "Squish" is for your typical reduction of dynamic range by curtailing too-loud moments.

Breathe vs Clamp is your one-knob timing control, allowing transients to breathe more or less. Adjust it by feel.

Makeup Gain is for adjusting the level of the compressed signal (pre dry-wet).

Dry/Wet% makes it easy to implement in parallel and automate the amount.

To see the compression display, click "Show/Hide Devices" to unfold, then click the "Auto Select" arrow.

Includes...
Tempo Compress 20bpm
Tempo Compress 30bpm
Tempo Compress 40bpm
Tempo Compress 50bpm
Tempo Compress 60bpm
Tempo Compress 70bpm
Tempo Compress 80bpm
Tempo Compress 90bpm
Tempo Compress 100bpm
Tempo Compress 110bpm
Tempo Compress 120bpm
Tempo Compress 130bpm
Tempo Compress 140bpm
Tempo Compress 150bpm
Tempo Compress 160bpm
Tempo Compress 170bpm
Tempo Compress 180bpm
Tempo Compress 190bpm
Tempo Compress 200bpm
Tempo Compress 210bpm
Tempo Compress 220bpm
Tempo Compress 230bpm
Tempo Compress 240bpm

Tempo Expanders

Tempo Expanders
The opposite of a compressor, an expander reacts to the same trigger signal, but instead of squeezing down on material that exceeds the threshold, it boosts those moments even more. Can be useful for re-invigorating overly flattened material, or to boost punchiness with minimal increase to the ambient noise floor.

Macros:

Pull stretches the threshold down, increasing potential expansion. Increase loudness without boosting the ambient noise floor.

Attack v Sustain is your one-knob timing control, allowing to focus more or less on enhancing either the intial sharp transient, or the sustain that happens immediately thereafter.

Makeup Gain in this case, you'll generally be pulling it DOWN to level-match to the dry signal, rather than up.

Dry/Wet% does that. Y'know.

Includes...
Tempo Expand 25bpm
Tempo Expand 40bpm
Tempo Expand 55bpm
Tempo Expand 70bpm
Tempo Expand 85bpm
Tempo Expand 100bpm
Tempo Expand 115bpm
Tempo Expand 130bpm
Tempo Expand 145bpm
Tempo Expand 160bpm
Tempo Expand 175bpm
Tempo Expand 190bpm
Tempo Expand 205bpm
Tempo Expand 235bpm

Tempo Gates
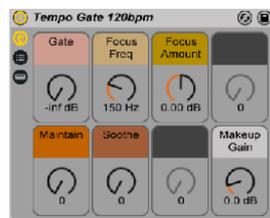
Tempo Gates
That annoying noise in-between note hits, where it's supposed to be silent. Pretend it doesn't exist. Gate it.

Macros:

Gate does that thing. The higher you lift it, the more stuff won't be able make it through the gate.

Maintain allows more material to get through a triggered gate.

Soothe rounds off the behavior of the gating action, making it less choppy and more soft overall.

Makeup Gain is not usually necessary when using gates, but if you're chopping out a lot of energy you might want to boost the average up a little to make up for it.

Includes...
Tempo Gate 30bpm
Tempo Gate 60bpm
Tempo Gate 90bpm
Tempo Gate 120bpm
Tempo Gate 150bpm
Tempo Gate 180bpm
Tempo Gate 210bpm
Tempo Gate 240bpm

Tempo Gluers

Tempo Gluers

"Pick, Drop, Push, & Blend"
Despite its distinction as classic "buss" style compressor, they are used on individual tracks all the time, due to their ease-of-implementation thanks to the stepped controls and generally tasteful, refined sound. You don't even have to think about the timing controls for these. Just pick a tempo, drop the rack in, push it, gainstage it, and blend it. Done.

Macros:

Push squeezes the threshold, increasing potential compression.

SoftClip Output? to more aggressively limit the output, if desired or needed.

Makeup Gain you know what that is for. At least you should by now.

Dry/Wet% yep mmhmmm.

Includes...
Tempo Glue 20bpm
Tempo Glue 40bpm
Tempo Glue 60bpm
Tempo Glue 80bpm
Tempo Glue 100bpm
Tempo Glue 120bpm
Tempo Glue 140bpm
Tempo Glue 160bpm
Tempo Glue 180bpm
Tempo Glue 200bpm
Tempo Glue 220bpm
Tempo Glue 240bpm

Tempo Limiters

Tempo Limiters
For these, the lookahead is based on the tempo, but the release is highly adjustable. Fairly fast default release times are given, but the adjustable range for each is quite versatile. Slower release times can lead to a cleaner (but not as loud) end result.

Macros:

Push increases maximum potential limiting.

Recover determines how soon limiting stops after being engaged. A longer recovery time will result in a cleaner, more polite sound; a shorter recovery will result in a louder, more aggressive sound.

Stereo Link? can be turned off if desired, but that can result in some unnatural streo fluttering when wide-panned transients are mixed with sustained sounds. When to unlink? Probably not on busses or the master channel, but perhaps for certain types of stereo recordings, for instance an L-R mic pair that is somewhat dynamically off-balance.

Makeup Gain do i need to say it?

Includes...
Tempo Limiter 20bpm
Tempo Limiter 30bpm
Tempo Limiter 40bpm
Tempo Limiter 50bpm
Tempo Limiter 60bpm
Tempo Limiter 70bpm
Tempo Limiter 80bpm
Tempo Limiter 90bpm
Tempo Limiter 100bpm
Tempo Limiter 110bpm
Tempo Limiter 120bpm
Tempo Limiter 130bpm
Tempo Limiter 140bpm
Tempo Limiter 150bpm
Tempo Limiter 160bpm
Tempo Limiter 170bpm
Tempo Limiter 180bpm
Tempo Limiter 190bpm
Tempo Limiter 200bpm
Tempo Limiter 210bpm
Tempo Limiter 220bpm
Tempo Limiter 230bpm
Tempo Limiter 240bpm