

ACC24

An auto compressor with a peak limiter, in the spirit of the mid-1980s British rackmount auto-compressors, with one CHARACTER dial that turns it from PUNCH to GLUE.

A Lab plug-in. The Lab is where new GFX plug-ins are built in the open: they may change sound or controls between versions.



Overview

ACC24 is a transparent workhorse: a compressor whose attack and release follow the music (AUTO), then make-up gain, a fast peak limiter to catch stray transients and a clean output transformer that only colours when pushed hard. It has no latency.

This Lab version adds CHARACTER, one dial that changes how the compressor listens and moves. In the centre it is the Stable ACC24 exactly. Turn it towards PUNCH and the front of each hit gets through while the body is held, then the gain comes back quickly before the next hit. Turn it towards GLUE and the compressor eases in gently, ignores the deep bass and makes small, slow, steady moves that hold a bus or a mix together. The level stays within about 1 dB across the dial, so you hear the change in feel, not in volume.

Reach for it for

- Drum buses: towards PUNCH for snap with control
- The mix bus: towards GLUE for gentle, even glue

- Vocals and acoustic instruments: AUTO and leave it
- Bass: steady level with THICK for weight
- Catching stray peaks with the LIMIT dial

Controls

The header

PRESETS	Opens the preset list.
◀ / ▶	Steps to the previous or next preset, wrapping round.
Preset display	Shows the preset's name. Click it for the preset list too.
BYPASS	Crossfades (15 ms) to the untouched input. Lit = bypassed.

COMPRESSOR

THRESHOLD	-20 to +20 dBu (0 dBu = -18 dBFS).
RATIO	1:1 to 20:1, then INF (infinity) at the end of the dial. A soft knee.
ATTACK	0.5 to 50 ms. Greyed while AUTO is lit.
RELEASE	0.05 to 5 s. Greyed while AUTO is lit.
MAKE-UP	0 to 20 dB after the compressor.
AUTO	One key for attack and release (lit by default). The harder the signal overshoots, the faster it is caught (about 12 ms for a gentle push, under 1 ms for a sudden jump). Short peaks recover fast, while long, steady compression lets go slowly, so the sound breathes without pumping.
IN	The compressor in or out (crossfaded).
INPUT LEVEL	LEDs from -20 to +15 dB (0 = 0 VU = -18 dBFS): blue, green, yellow, orange, red.

CHARACTER

PUNCH / GLUE dial	Centre = the Stable ACC24. PUNCH: a slower attack (up to 4 times), a quicker release, a harder knee, and a detector that hears the body of the sound, not its peaks. Each hit's front gets through, about 3 dB more against the body. GLUE: a much wider knee (it eases in long before THRESHOLD), a longer, smoother detector that ignores the lows below about 90 Hz (so the bass doesn't pump the mix), and a longer release. Moves glide, so it can be turned while playing.
THICK	The house THICK circuit after the make-up gain: low-mid weight, iron saturation below 500 Hz and a rounded front. The compressor also forgives fast peaks a little and holds the body slightly longer. Switching it fades in and out.

LIMITER

LIMIT	-10 to +15 dBu: the ceiling of the peak limiter after MAKE-UP. Instant attack, 60 ms release, no look-ahead.
OVER	Lights when the limiter is working.

OUTPUT

OUTPUT LEVEL	LEDs from -20 to +15 dB, coloured like the input row. Choose what it reads with OUT (the output level) or GR (the gain reduction).
DRIFT	Lit = 33 % (the standard amount, default), dark = 5 %. The gain cell warms under long compression (its gain creeps and the release slows a little), its offset and threshold wander slowly, and the timing and knee parts sit slightly off nominal.
MIX	DRY to WET: parallel compression, the untouched input against the compressed and limited sound.
LEVEL	-18 to +6 dB, after the output transformer.

Knobs: drag up or down (hold Shift for fine moves) or use the mouse wheel; double-click or Ctrl-click returns to the default. Values show while you hover. S / M / L set the panel size; ? shows the credits and this manual's address.

Presets

Each preset is level-matched to the input on programme with MAKE-UP and LEVEL, except Init. The first twelve are the Stable ACC24 set, with CHARACTER in the centre.

Init	The defaults: AUTO, 2:1, threshold 0 dBu.
Vocal Glue	3:1, AUTO: steady vocals.
Drum Bus Control	4:1 with THICK, manual 10 ms attack and 300 ms release.
Gentle Master Bus	1.5:1, AUTO: a light hand on the mix.
Acoustic Levelling	2.5:1 from a low threshold: even acoustic parts.
Bass Anchor	5:1 with THICK, 20 ms attack and 400 ms release.
Heavy Squash	10:1, fast, MIX 50 %: parallel squash.
Broadcast Voice	6:1 with THICK and the limiter low: a dense, upfront voice.
Dynamic Limiter	INF : 1 with a fast attack: a limiter with a little give.
Drum Crunch	8:1, very fast, THICK, MIX 45 %: parallel crunch.
Piano Glue	2:1, 30 ms attack: holds a piano without dulling the hammers.
Subtle Mix Polish	1.5:1 with THICK, just under the surface.
Drum Bus Punch	4:1 with THICK and CHARACTER at PUNCH 70: snap through, body held.
Mix Bus Glue	2:1 with CHARACTER at GLUE 80: slow, round mix-bus glue.

Tips

- Set the amount with THRESHOLD and RATIO first, then turn CHARACTER to taste: PUNCH for anything with a sharp front, GLUE for buses and the mix.
- Watch the GR reading while you turn CHARACTER: PUNCH shows quick dips that recover between hits, GLUE a smaller, steadier reading.

- For parallel compression, push the compressor hard and bring MIX down until the dynamics come back.
- Set LIMIT a few dB above where the music sits so it only catches stray peaks (the OVER lamp should flicker, not stay lit).

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