T·B EQ

the valve & Baxandall program equalizer, now it breathes

RTM AUDIO · VERSION 2.0.0 · AU · VST3 · AAX · OWNER'S MANUAL

One plugin, two characters

TxB EQ is **two mastering equalizers in one**. Click the `T ⇄ B` button and the rack turns over to reveal its other face.

T · TUBE

Valve program EQ

A measured model of a classic Class-A tube & transformer EQ. Broad, musical bands plus the **IRON** saturation stage for weight and glow.

B · BAX

Baxandall mastering EQ

Gentle, phase-friendly shelves for the whole mix, the classic "tilt the top and bottom" mastering move, with dual-mono / M-S and a stereo stage.

Every setting on each face is remembered separately, so the flip is also a built-in **A/B**: dial a tube tone, flip, dial a Baxandall tone, and switch between them instantly.

New in 2.0.0: PUSH-PULL makes any band move **with the music**, the headline feature of this manual.

THE TUBE FACE, VALVE PROGRAM EQUALIZER

NEW · 2.0.0

PUSH-PULL, the EQ that breathes

A normal EQ boost stays put. A Push-Pull band leans in when the sound is quiet and eases back when it gets loud, on its own.

That one idea does a lot. A high shelf can add air on the soft verses without turning the loud chorus harsh. A low boost can give weight to gentle passages, then get out of the way when the kick and bass hit. You set the shape once; the music decides how much to apply, moment to moment.

AMOUNT
How much the bands are allowed to move. **0 = a normal, static EQ.** Turn it up for more life.

SPEED
How quickly a band reacts, slow and gentle, or fast and lively.

PIVOT
The balance. **Minus** = mostly calm the loud moments (tame). **Plus** = mostly lift the quiet ones (open up).

The little "PP" knobs under each band set how much **that** band joins in, turn one down to keep a band perfectly still, or up to feature it. Leave them full and the big AMOUNT knob runs the show.

WATCH IT WORK, the solid curve rides the music; the dashed line is where a static EQ would sit

Open the **ANALYSE** deck and you can **see** Push-Pull working: the bright transfer curve lifts and dips in real time around the faint dashed "resting" shape. What you see is exactly what you hear.

The TUBE face

SECTION	CONTROL	WHAT IT DOES
LF	**BOOST**	Adds low-end weight. The number picks the frequency (20-140 Hz).
	CUT	Trims low rumble/mud. Frequency 30-400 Hz.
MID	**BOOST**	A broad musical lift, 200 Hz-3 kHz, presence and body.
	CUT	Scoops boxy mids, 200-700 Hz.
HF	**BOOST**	Air and sheen, 2-16 kHz.
	CUT	Tames harsh top, 1.7-28 kHz.
	Q	How wide or narrow the HF boost is.
IRON	**DRIVE**	The tube/transformer saturation, warmth, weight, harmonic glow. More drive = more colour.
	DYN	Lets the saturation breathe: eases off on transients so it stays clean on peaks.
FILTERS	**LF / HF**	Simple clean-up high-pass and low-pass at the input/output.
OUTPUT	**±12 dB**	Final level. **BYPASS** (top-right jewel) compares against the untouched signal.

Each band shows its FREQUENCY (small) over its GAIN (large), with a "PP" trim beneath.

- **Double-click** any knob to reset it.
- **Mouse-wheel** nudges one step; hold `Shift` for fine control.
- Drag the dots on the curve to shape by eye; `⌥`-hold a dot to solo-listen to that band.

B The BAX face

Gentle Baxandall shelves + a stereo stage, the classic mastering “tilt”.

SECTION	CONTROL	WHAT IT DOES
LOW	CUT	Gentle high-pass to clear sub-rumble (or OUT).
	SHELF	The low-shelf corner frequency.
	LEFT / RIGHT	Low-shelf level, ±5 dB, per channel (or Mid/Side).
	PP	Push-Pull depth for the low shelf.
STEREO	MODE	L/R (dual-mono) or M/S (Mid/Side) processing.
	WIDTH	Stereo width, 0-200%.
	LINK	Ties Left & Right so they move together.
	MONO<	Collapses the lows below the chosen frequency to mono.
HIGH	LEFT / RIGHT	High-shelf level, ±5 dB, per channel (or Mid/Side).
	SHELF	The high-shelf corner frequency.
	CUT	Gentle low-pass to tame the very top (or OUT).
	PP	Push-Pull depth for the high shelf.
MASTER	TILT	One-knob seesaw around 700 Hz, darker one way, brighter the other.
	DYN	Classic dynamic Baxandall: each shelf backs off as its band gets loud.

The deck, presets & tips

The analysis deck

The **ANALYSE** button opens the top deck: a live spectrum, the transfer curve (drag the dots to shape by eye), and the **PROOF** panel, measured true-peak, LUFS and the harmonic colour the tube stage is adding, live while you listen.

Top-bar tools

- **A · B · A→B**, two snapshots to compare; copy one to the other.
- **GAIN**, auto loudness-match, so engage/bypass and the T⇄B flip stay level-fair (judge tone, not volume).
- **MATCH**, capture a reference spectrum and match its tonal balance.
- **HQ**, 2× oversampled saturation for the cleanest top end.

Presets to start from

Open **PRESETS**. The four marked ⇅ show off Push-Pull:

- **Living Tube** ⇅, a warm valve tone that gently breathes.
- **Air Breather** ⇅, lifts quiet detail up top (pivot toward “open up”).
- **Tame Harsh** ⇅, calms loud mid/high moments (pivot toward “tame”).
- **Dynamic BAX** ⇅, a mastering tilt whose shelves move with the mix.

> **Try this:** load **Air Breather** ⇅, open **ANALYSE**, and watch the top of the curve rise and fall with the vocal. Then pull the master **AMOUNT** to 0 to hear the difference a static EQ would make.

Handy moves

- **Double-click** resets a knob · `Shift`-drag = fine · `⌘/Ctrl+Z` = undo.
- Save your own preset with **+ SAVE CURRENT**.

Install & specs

Installing

macOS, run the installer and pick the formats you need (AU, VST3, AAX). It installs to the standard system folders and replaces any earlier version. Restart your DAW so it re-scans.

Windows, run the installer; it places the VST3 in the common VST3 folder.

Formats

- **macOS:** Audio Unit · VST3 · AAX, Universal (Apple Silicon + Intel), notarized.
- **Windows:** VST3 (64-bit).

At a glance

ITEM	DETAIL
Type	Dual-character mastering EQ (valve + Baxandall)
Push-Pull	Per-band bidirectional dynamics, both faces
Processing	Zero added latency · minimum-phase
Stereo	L/R dual-mono & M/S
Metering	True-peak, LUFS-S, harmonic X-ray, live curve
Version	2.0.0

Measured, not marketed,
live figures while you listen.