

Cherwell Lift

A loudness and density enhancer in the spirit of the classic "inflate" processor, with a Lift curve of its own for the lows, the mids and the highs.

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

Lift raises the low- and mid-level detail of a mix, which makes it sound louder and denser, while a full-scale peak still comes out at full scale. It adds weight without squashing the transients. It is a curve, not a compressor: nothing pumps, and there is no latency at 1x.

The Stable Cherwell Lift can already split the sound into three bands so that a loud low end doesn't push the highs around, but every band gets the same curve. In this Lab version each band has its **own Lift**: you can fatten the lows hard, keep the mids natural and leave the top gentle, or the other way round. The split points move, and SOLO lets you hear each band on its own.

With every band control at its default it sounds exactly like the Stable unit. There is no DRIFT: Lift is a clean digital mastering tool.

Reach for it for

- Mix-bus and mastering density
- A fuller low end that stays tight
- Drums with more weight and no squash
- Bringing a vocal's mids forward
- Adding air and edge to the top only

Controls

The header

PRESETS	Opens the preset list (with "Reset all to defaults" at the end).
◀ / ▶	Steps to the previous or next preset, wrapping round.
Preset display	Shows the preset's name. Click it for the preset list too.
BYPASS	Lit = bypassed. It crossfades in 15 ms to your untouched input, kept in time at every OS setting, so it never clicks (use it in place of REAPER's own on / off).
OS	1x / 2x / 4x oversampling for the curve; click to step through. 1x has no latency, 2x 31 samples, 4x 37 (reported to REAPER).

Main controls

TRANSFER	The curve as it stands: input across, output up, the 0 dBFS lines marked. With BAND SPLIT on it shows one curve per band in that band's colour.
INPUT	-6 to +12 dB into the curve. More input pushes more of the signal into the curve's upper part.
EFFECT	0 to 100 %: how much of the curve you hear. 0 % is untouched.
CURVE	-50 to +50: the curve's shape. Lower values are softer and rounder, higher values lift the quiet parts more (up to twice their level) for a more forward, edgier sound.

CLIP 0 dB	Lit (default): anything over full scale is held at 0 dBFS. With BAND SPLIT on it also holds the summed bands at 0 dBFS. Dark: signal over full scale folds back, as on the original processor.
BAND SPLIT	Splits the sound into LOW, MID and HIGH, each shaped on its own (crossfaded in 15 ms). This opens the BAND CURVES plate.
OUTPUT	-12 to +3 dB fader after the curve.
IN / OUT	Level meters before and after.

BAND CURVES (with BAND SPLIT on)

LIFT	0 to 200 % of EFFECT for that band (default 100 %). 0 % leaves the band untouched; 200 % gives it twice the main EFFECT (up to the full curve).
CURVE	-50 to +50, added to the main CURVE for that band (default 0).
SPLIT (low / mid)	60 to 800 Hz, default 240 Hz, with a readout.
x10	Lit: the mid / high split follows the low / mid split times ten (220 Hz gives 2.2 kHz, 330 Hz gives 3.3 kHz), and its dial greys out. Dark: the two splits are set separately.
SPLIT (mid / high)	1 to 10 kHz, default 2.4 kHz, with a readout.
SOLO	Hear that band alone, shaped; click again to hear them all.
The split	24 dB per octave crossovers with no latency; untouched, the bands add back flat in level. The band colours (brown, blue, red) match the knob caps and the curves in the display.

Knobs and the fader: drag up or down (hold Shift for fine moves); double-click or Ctrl-click returns to the default. Values show while you hover.

Presets

Init	Everything at the default: EFFECT 0, so nothing happens yet.
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Gentle Lift	EFFECT 30 %: a little extra density for any mix.
Transparent Polish	BAND SPLIT, a soft curve, 15 %.
Mix Bus Sheen	BAND SPLIT, 25 %, slightly soft.
Vocal Forward	45 % with a firmer curve.
Drum Density	+3 dB in, 80 %, BAND SPLIT.
Bass Thickener	60 % with a soft curve.
Soft Warmth	The softest curve at 50 %.
Edge and Bite	The hardest curve at 55 %.
Master: Loud	+3 dB in, 70 %.
Master: Hot Clip	+6 dB in, the full curve.
Bands: Weighty Lows	LOW at 160 % with a soft curve, the top held back (40 %), split at 200 Hz.
Bands: Bright Air	HIGH at 180 % with a firmer curve above 5 kHz, the lows almost untouched.
Bands: Dense Mids	MID at 170 %, split at 300 Hz and 3 kHz.
Bands: Master Glue	35 %, a little more on the lows, less on the highs, split at 180 Hz and 3.5 kHz.

Tips

- Set EFFECT first with BAND SPLIT off, then turn BAND SPLIT on and use each band's LIFT to move the effect to where it helps.
- SOLO a band while you move its SPLIT: put the low / mid split just above the kick and bass, then light x10 for a matching upper split.
- Use OUTPUT to match the level when you compare with BYPASS: louder always sounds better.

- For parallel use, BAND SPLIT turns the phase round the split points (as any crossover does); keep it off if you blend Lift with a dry copy.

File: gfx-lab-cherwell-lift.jsfx