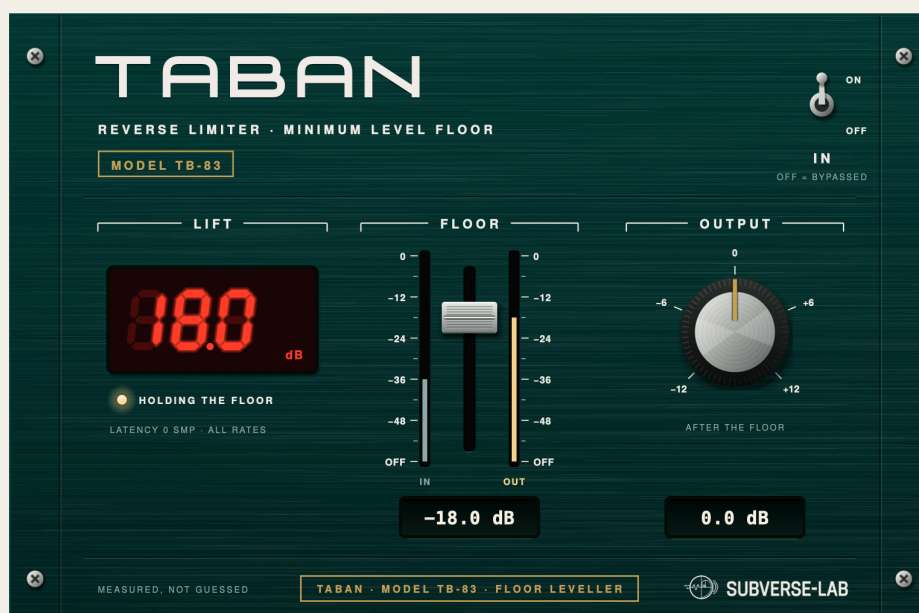


TABAN

REVERSE LIMITER · MINIMUM LEVEL FLOOR



MODEL TB-83

OWNER'S MANUAL

FREE, FOREVER

SUBVERSE-LAB

1. WHAT TABAN IS

TB-83

A limiter sets a ceiling the signal cannot rise above. TABAN sets a floor it cannot fall below. Anything under the FLOOR is lifted to it; anything at or above the FLOOR is left exactly as it was. “Taban” is Turkish for floor.

ONE JOB

Put TABAN on a track and raise one fader. Quiet syllables, soft notes, the end of a phrase and the gaps between hits come up to the level you set. Loud parts are not touched at all: above the floor the gain is exactly 1, and the output is the input bit for bit.

IT NEVER PUSHES A PEAK OVER THE FLOOR

The lift is worked out from the level of the very sample it is applied to, and that level never reads lower than the sample itself. So when a loud sound arrives straight after a quiet one, it is not boosted on its way in: the output is never louder than the input or the floor, whichever is higher. TABAN does not need lookahead for this, so it has no latency.

SILENCE STAYS SILENCE

TABAN lifts by at most 24 dB. Near silence it lets go: the lift fades out between –80 and –96 dBFS, so room tone, dither and the last tail of a reverb are not dragged up to the floor. Digital silence comes out as digital silence.

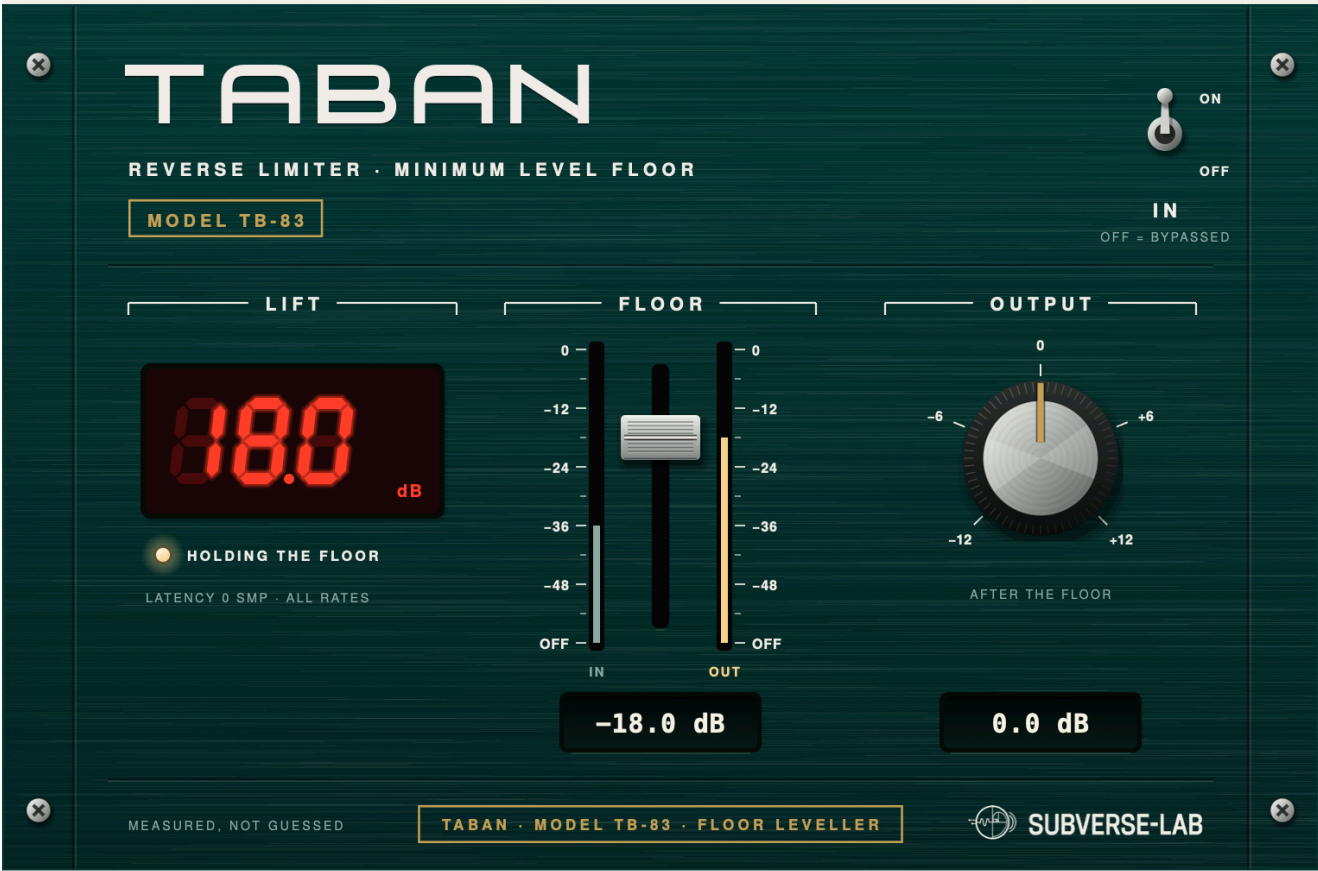
2. QUICK START

ONE MINUTE

- 1 Put TABAN on the track.** It opens with FLOOR at OFF: it does nothing yet.
- 2 Play the track and raise FLOOR** until the quiet parts you want to hear sit where you want them. Watch the OUT bar: it stops at the fader cap.
- 3 Read LIFT.** It shows how many dB TABAN is adding right now. If it keeps showing a lot of lift, the floor may be higher than the track needs.
- 4 Trim with OUTPUT** if the track now feels louder in the mix.
- 5 Flip IN** to compare with the untouched track. The switch crossfades, so there is no click.

3. THE FRONT PANEL

THREE CONTROLS

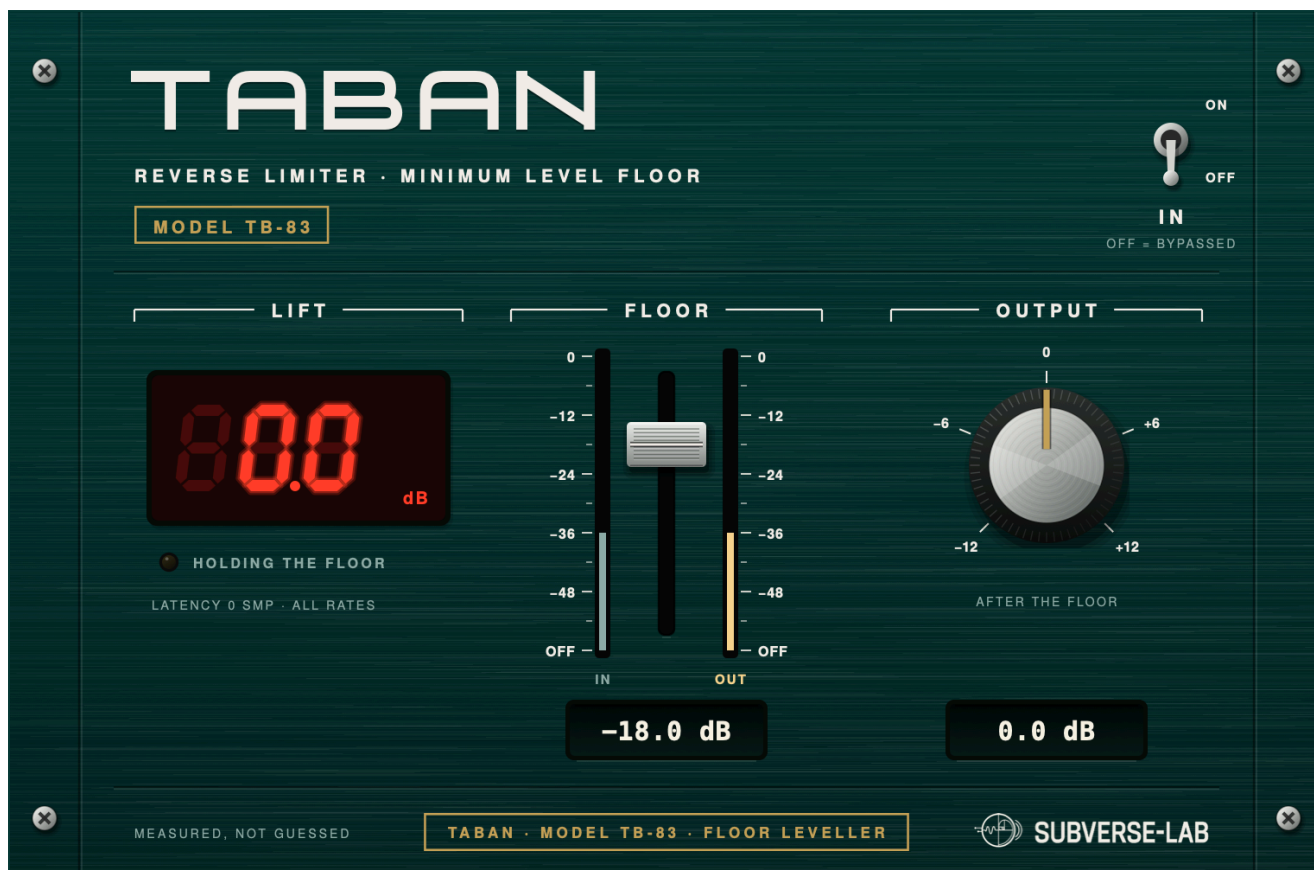


A -36 dBFS tone with FLOOR at -18 dB. The IN bar sits at -36, the OUT bar stops at the fader cap (-18), and LIFT reads 18.0 dB.

CONTROL	RANGE · DEFAULT	WHAT IT DOES
FLOOR	OFF (-60) to 0 dBFS · OFF	The floor. Audio under it is lifted to it, by up to 24 dB; audio above it is left alone. The fader is linear in dB: every 6 dB is the same length of travel. At OFF TABAN does nothing. Double-click resets to OFF.
OUTPUT	-12 to +12 dB · 0 dB	Level after the floor. Double-click resets to 0 dB.
IN	On / off · on	Off bypasses TABAN: the output is the input, bit for bit, OUTPUT included. Switching crossfades over 10 ms.

READING THE FACE

- **LIFT:** the most TABAN lifted during the last moment, in dB. It holds a peak for 0.4 s so it can be read. 0.0 means nothing is being lifted.
- **HOLDING THE FLOOR:** the lamp lights while TABAN is lifting.
- **IN and OUT bars:** the level going in and coming out, drawn on the same scale as the FLOOR fader. While TABAN works, the OUT bar stops at the fader cap. With OUTPUT away from 0 dB, the OUT bar moves by that amount.
- **Value windows:** the FLOOR and OUTPUT settings in numbers.



The same tone with IN off: LIFT 0.0, the lamp is dark and the OUT bar follows the IN bar.

4. WHERE TO USE IT

RECIPES

VOCAL: KEEP THE QUIET WORDS

FLOOR about 18 dB under the loud words · OUTPUT 0

Put TABAN after your compressor. Breathy endings and soft words come up to the floor; the loud lines go through untouched. Breaths come up too: if they get loud, lower FLOOR a little or edit them out first.

PADS AND TEXTURES: A STEADY BED

FLOOR just under the pad's average level

A pad that swells and dips holds a steady minimum, so it never disappears behind the drums.

BASS: NOTES THAT DO NOT DROP OUT

FLOOR 6 to 12 dB under the loudest notes

Soft notes and long decays stay present. A steady note sees a constant gain, so TABAN adds no distortion to it.

ROOM AND AMBIENCE TRACKS

FLOOR where you want the room to sit

The tail of the room is held up to the floor until it falls below about -80 dBFS, then it is let go smoothly.

WHAT TABAN IS NOT

It is not a compressor: it does not turn loud parts down. If a track has both peaks that are too loud and quiet parts that are too quiet, use a compressor or limiter for the peaks and TABAN for the floor.

5. HOW IT WORKS

THE ENGINE

A peak detector follows the level of the track: it rises with the signal at once, holds for 20 ms, and then falls with a 60 ms release. Left and right are linked, so the stereo image never moves. The 20 ms hold is longer than half a period of a 25 Hz tone, which is why a steady note gets a steady gain and is not distorted.

Where the detector reads under the floor, the gain is the floor divided by that level, capped at 24 dB and faded out near silence. When the track gets quiet again after a loud passage, TABAN takes about a quarter of a second to bring it back up to the floor. FLOOR and OUTPUT are smoothed over 20 ms so automation does not click.

6. INSTALLATION

MACOS AND WINDOWS

MACOS

Open Taban-1.0.0-macOS.pkg and follow the installer. It puts TABAN.vst3 in /Library/Audio/Plug-Ins/VST3 and TABAN.component (Audio Unit) in /Library/Audio/Plug-Ins/Components. The installer is signed and notarized by Apple. Rescan plug-ins in your DAW if TABAN does not appear.

WINDOWS

Unzip Taban-1.0.0-Windows-VST3.zip and copy the TABAN.vst3 folder to C:\Program Files\Common Files\VST3\. Rescan plug-ins in your DAW. Windows may warn that the publisher is unrecognised the first time; choose "More info", then "Run anyway".

GETTING TABAN

TABAN is free. Get it at subverselab.com/plugins/tabane: the checkout takes an e-mail address and no card. The download then appears on your account page.

7. SPECIFICATIONS

TECHNICAL

ITEM	VALUE
Formats / platform	macOS 11 or later (Apple Silicon and Intel): VST3, AU · Windows 10 or later (64-bit): VST3
Channels	Mono or stereo; stereo is linked
Latency	0 samples at every sample rate
Most lift	24 dB; faded out between -80 and -96 dBFS

Detector	Sample peak, instant attack, 20 ms hold, 60 ms release
Bypass	IN off: bit-identical to the input; 10 ms crossfade when switching
Undo / redo	Cmd+Z / Cmd+Shift+Z (macOS); Ctrl+Z / Ctrl+Shift+Z or Ctrl+Y (Windows)
State	Saved with the DAW project; every control can be automated
Price	Free, forever

8. MEASURED, NOT GUESSED

THE NUMBERS

Every TABAN build runs the same self-test on macOS and on Windows. The numbers below are from that test at 48 kHz.

- **Lift:** a -36 dBFS tone with FLOOR at -18 comes out at -18.00 dBFS at 40 Hz, 100 Hz, 1 kHz and 10 kHz; the distortion added is below -150 dB.
- **Never over the floor:** over six seconds of loud bursts after quiet passages, sweeps and noise, at five floor settings, no output sample is louder than the input or the floor, whichever is higher (worst case +0.0000 dB).
- **Untouched:** with FLOOR at OFF, with IN off, and wherever the signal is above the floor, the output is bit-identical to the input.
- **Cap and gate:** a -70 dBFS tone with FLOOR at 0 is lifted by exactly 24 dB; at -88 dBFS it is lifted by 12 dB; at -100 dBFS not at all. Silence stays zero.
- **Recovery:** after half a second at -6 dBFS, a -40 dBFS passage is back within 1 dB of a -20 dB floor after 249 ms.
- **No clicks:** moving FLOOR from OFF to -10, OUTPUT to +12 and IN on all at once produces no step larger than the tone itself.