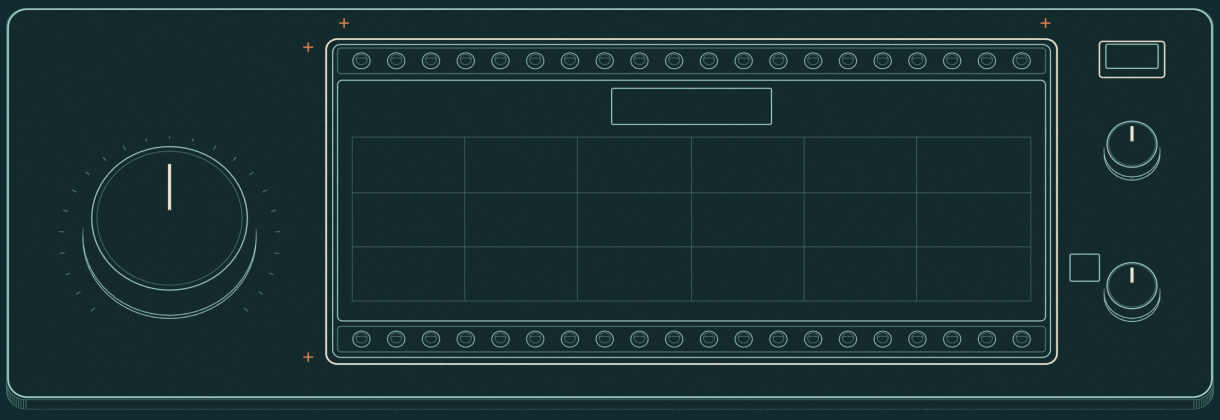
pump 97 PARIS 1997

USER MANUAL

French house compression

Mix-bus pumping, external sidechains and parallel compression.





01 / ABOUT PUMP97

Why we made it

We love the heavy compression on late-1990s French house records: the kick pushing into the mix, samples getting pulled down around it, and the whole balance changing as the compressor recovers.

PUMP97 grew out of modelling a 1990s rack compressor associated with that sound. The attraction was its response when pushed. The model also includes subtle, level-dependent harmonic colour in its amplifier stage; it is part of the processed sound, with no separate drive control.

We wanted that classic response to be easy to work with. Lower Threshold for the pump, click A for a suggested level match, then use Mix to bring some dry signal back. The display keeps the deeper timing and detector controls close without crowding the main panel.

The compression does most of the creative work; the harmonic contribution is deliberately small. This manual covers how we use it and what each control does. Thanks for making music with PUMP97. - ASETA

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02 / QUICK START

Set up the pump

Use a stereo mix or drum bus that includes the kick.



1 **Start with the default modes.**

Leave SIDECHAIN off. Use PEAK, HARD and LINK, Ratio 5:1, and Mix at 100%. Attack and Release start at their minimum panel positions.

2 **Turn Threshold down.**

Play a representative loop. Lower Threshold until the amount of pumping feels right. There is no required kick peak or fixed gain-reduction target.

3 **Click A to match the level.**

Let the loop play for a few seconds, then click the boxed A beside Output. It sets a suggested level once. Compare with bypass at a similar listening level.

4 **Adjust the kick and recovery.**

Open the controls view. Try a slower Attack if you want more of the kick's initial hit to pass. Adjust Release until the return between kicks suits the groove.

5 **Blend and check again.**

Reduce Mix if the full effect is too much. After changing compression or Mix, allow fresh audio and click A again if needed. Check the loudest section and trim Output by ear.

03 / INTERNAL DETECTOR

Mix-bus pumping



The main audio also feeds the detector.

With SIDECHAIN unlit, the main input drives the detector. On a bus containing drums, bass and samples, the kick can make all of them turn down together. Changing the kick level also changes how hard it drives the compression.

Choose what should move together

Put PUMP97 on the full mix for that shared movement, or use a music bus if you want vocals or selected drums to remain outside it. If a final limiter is flattening the effect, compare with PUMP97 earlier in the chain.

Set depth, then timing

Lower Threshold to find the amount of reduction. Start with PEAK and the minimum timing positions. Increase Attack gradually for more initial impact; adjust Release while listening to the space before the next kick. Revisit Threshold after large timing changes.

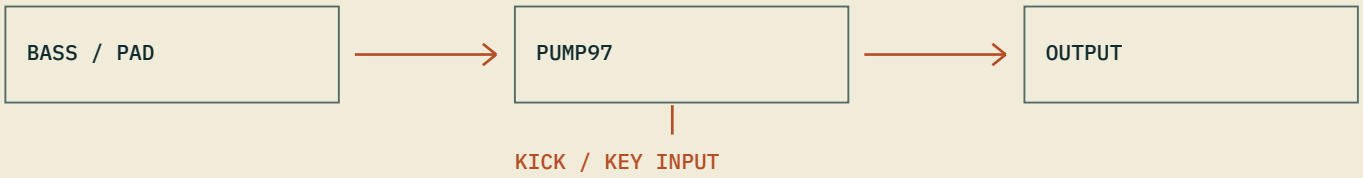
Kick loses too much impact	Try a slower Attack or less reduction. Mix can bring back some dry attack.
Music stays down too long	Shorten Release and listen again. A long bass or kick tail may still hold the detector up.
The dip is too brief	Lengthen Release, or use a longer key signal if working externally.
Bass or snare changes the pump	This is expected with a shared detector. Try a different bus balance or an external kick if you want more separation.

Input level is part of the sound

You do not need to force a kick sample to 0 dBFS. Use a sensible bus level, then lower Threshold to suit it. The printed Threshold scale and your DAW's dBFS meter are different references.

04 / EXTERNAL KEY

Duck a part from the kick



1 **Put PUMP97 on the part that should duck.**

This might be a bass, pad, sample, reverb return or music bus. The separate kick can remain outside that processed path.

2 **Route the key in your DAW.**

Send the kick to PUMP97's external sidechain input, then turn its SIDECHAIN button on. Lower Threshold until the dip is deep enough.

3 **Tune the onset and return.**

In PEAK mode, Attack controls how quickly the ducking develops. Release controls its recovery. The kick's level and decay also affect the result.

4 **Match the level in context.**

Allow a few seconds of representative audio and click A. Listen with the audible kick playing. Recheck the bass or pad's peaks after changing timing.

Attack acts on the track being compressed

When the kick is only an external key, slowing Attack lets more of the bass or pad's onset through. It does not change the separate audible kick.

Ableton Live 10.1 and later

In Live's PUMP97 device, enable Sidechain and choose the kick in Audio From. Also enable SIDECHAIN inside PUMP97. The IN lamps show the main audio, so they are not proof that the external route is working. Official Live routing guide.

An absent or silent external key does not fall back to the main input. Existing reduction may take a moment to release after switching sources.

05 / AUDIO-RESPONSIVE DUCKING

Replacing a repeated volume curve

If a repeating volume curve feels too uniform in a track, try letting the audio drive the reduction. PUMP97 reacts to the key's envelope and level, together with its own detector and recovery behaviour. A shorter, softer or missing kick can produce a different result.



Conceptual envelopes: repeated shape above; changing key response below.

1 **Compare the two methods separately.**

Disable the existing volume envelope for the comparison. Put PUMP97 on the same part and route the real kick to its external sidechain.

2 **Set depth with Threshold.**

Turn SIDECHAIN on, lower Threshold and choose the amount of ducking. In PEAK, use Attack and Release to tune how the part sits around the kick.

3 **Listen to the variations.**

Compare strong hits, softer hits, fills and breaks. Try altering the key's decay or send level. Match the output with A after the new settings have played for a few seconds.

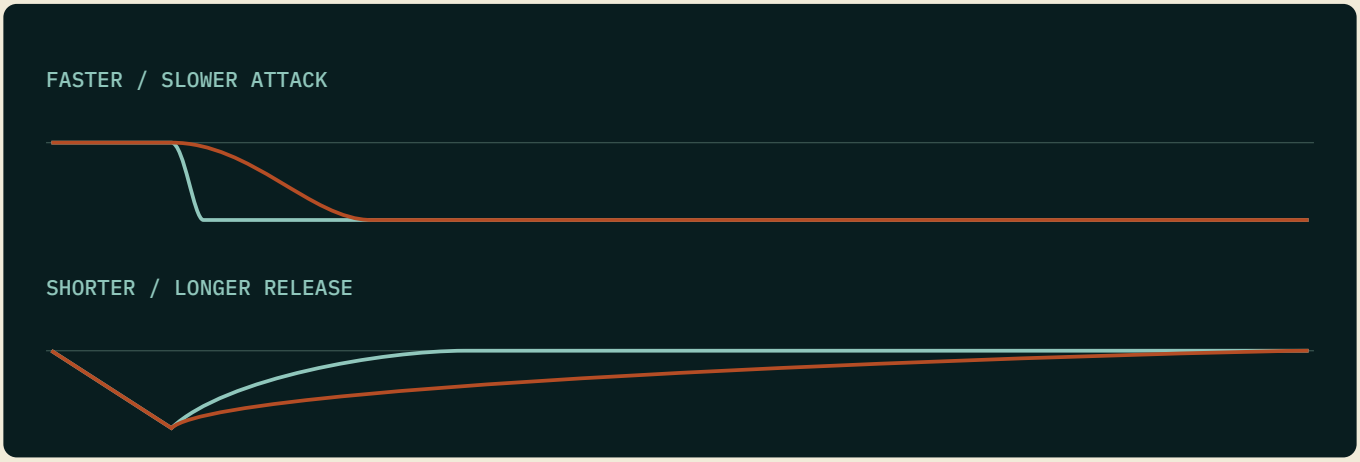
It responds to what you send it

Identical repeated keys can produce very similar ducks. This is not a random humanisation effect. A programmed curve remains useful when you need a precisely repeated contour, including shapes a compressor cannot create.

06 / TIMING

Adjusting Attack and Release

Use PEAK when you want to set the timing yourself. In RMS, the model uses its fixed timing response and both controls remain visible but inactive.



Timing illustrations only. Sea glass: faster/shorter. Copper: slower/longer.

Attack: how the reduction develops

On a bus that contains the kick, a faster setting catches more of its onset. A slower setting can let more of the first hit pass before the gain reduction builds. Start at minimum and raise it gradually while listening to the kick against the rest of the track.

Release: how the gain comes back

Shorter settings recover sooner. Longer settings can keep the music down further into the space between kicks. Release is not a delay that waits and then switches the volume back up; the recovery has a curve, and the key may still be holding the detector up.

Adjust one, then check the other

Try a slower Attack if the kick feels flattened. If the music returns too late, shorten Release. If the dip is too brief, lengthen it. Revisit Threshold and Output when you have the movement you want.

The displayed times follow the modelled panel markings. They are useful reference points, but the calibrated response is not a literal delay equal to the printed number. Settings can also change the amount of reduction.

07 / OTHER USES

Parallel compression and returns

A drum loop with more compression underneath

Start with Mix at 100% and compress more firmly than you would normally use on the insert. Set the timing so the compressed loop has the sustain and movement you want. Then reduce Mix until enough dry attack returns. Allow fresh audio, click A and compare in the track.

A sample or chord bus

Use internal detection when you want the part's own accents to drive the compression. Use an external kick when you want the groove tied to the drums. Try both with the same musical passage; changes in the sample's level will matter more to the internal detector.

A reverb or delay return

Place PUMP97 after the ambience effect and feed the kick or lead into its external key. Lower Threshold so the return gets out of the way during the key signal. Adjust Release for the way the tail comes back. Auto gain may not be desirable here: turn Output up only as far as the return needs.

How Mix and Output interact

Output changes the gain of the compressed branch before it is blended with the dry branch. At 100% Mix, you hear only that processed branch. At a lower Mix setting, increasing Output changes its contribution relative to the dry signal.

Finish the blend before the final level comparison

Auto gain accounts for the current Mix setting. If you change Mix or the compression substantially, let the new sound play and match again. The useful amount is the amount that works with the rest of the track.

08 / CONTROLS

Control reference



Threshold / Mix / Output

Threshold sets where the model starts to respond. Mix blends dry and compressed audio. Output adjusts the compressed branch. The Threshold value appears while adjusting and fades after release.

Ratio

Higher positions generally give firmer compression. The model has a nonlinear response, so the printed ratio is a reference rather than one constant slope at every level.

Attack / Release

Control the onset and recovery in PEAK mode. RMS uses fixed timing; your PEAK settings are retained when you switch back.

PEAK / RMS

PEAK gives access to the timing controls. RMS follows the model's averaging response. Compare the modes by ear and recheck the output level.

HARD / SOFT

HARD makes the transition into compression more abrupt. SOFT spreads it across a wider region around Threshold.

DUAL / LINK

LINK applies a shared gain reduction to left and right. DUAL lets them respond independently, which can change the stereo balance. LINK is the default.

Navigation and editing

SIDECHAIN selects the external key when lit. The icon beside the gear switches history/controls; the gear opens Settings. Click HQ for oversampling. Drag to adjust; double-click editable readouts for typed entry. Shift-drag gives finer changes on the digital controls.

09 / METERING & LEVEL

Metering and Auto gain

Gain-reduction history

The sea-glass line shows reduction over the last 2.5 seconds, on a fixed 0-12 dB scale. The muted line follows the selected detector signal. Deeper reduction remains visible in the GR number and red lamps.

Input and reduction lamps

IN reads the main input before processing. Twenty lamps fill left to right, from green through amber to red. The twenty red GR lamps fill right to left and reach 16 dB. The GR number can show more, and holds a new peak for about 350 ms before falling away.

A: one-click level matching

Play a representative section, then click the boxed A beside Output. It estimates a comparable level from recent input and compressed audio, including the current Mix setting, and sets Output once. It does not keep riding the gain.

Level matching, not exact peak matching

The estimate uses frequency-weighted audio energy and a recent sample-peak safeguard. Peaks are allowed to differ: compression changes the relationship between peaks and average level. A does not guarantee a particular peak or integrated loudness target.

When to click it

Allow at least a second of audible processing after a settings change; a few seconds gives it more representative material. The analysis window is about three seconds. Click again after substantial changes to Threshold, timing or Mix, then compare by ear.

When it is unavailable

Silence, bypass, fully dry Mix or insufficient fresh audio prevent a useful match. Let the track play. If the chosen section is unusually quiet or loud, repeat the match on a more representative section.

Automatic boost is capped at 18 dB and may be reduced by the peak safeguard. It is not a limiter or a true-peak ceiling. Check the next loud section and adjust Output as needed.

10 / SETUP

Installation, Settings and defaults

Install the VST3

Follow the instructions supplied with the download. For a manual macOS installation, place PUMP97.vst3 in:

`~/Library/Audio/Plug-Ins/VST3/`

Rescan plugins in your DAW and find PUMP97 under ASETA. Restart the host when replacing a version already loaded in a session.

Finish / size	Plastic or metal; 80%, 85%, 90%, 100% or 120%. Appearance changes do not alter the audio.
Release to tempo	Sets Release once from host tempo and model calibration. It does not keep following tempo. Available in PEAK.
HQ / power	HQ oversampling reports latency to the host. Power bypasses processing and greys the UI; input and history stay live.
Activation	Open from Settings. Follow the instructions supplied with your purchase.

Fresh-instance defaults

Threshold / Ratio	+20 on the printed dBu scale (fully clockwise); 5:1.
Timing / levels	Attack 0.10 ms; Release 50 ms; Mix 100%; Output 0 dB.
Modes	PEAK / HARD / LINK; internal detector; HQ on.
Appearance	Petrol / Sea glass; plastic; 100% (740 x 260 logical pixels).

Your DAW saves audio parameters, finish, scale and the selected screen view with the instance. Audio controls support normal host automation.

11 / REFERENCE

Troubleshooting and compatibility

No compression

Check power, Mix and Threshold. If SIDECHAIN is lit, confirm that the host is supplying the key; the input lamps show the main audio, not the external key. Check activation if processing is unavailable.

Attack and Release will not change

RMS is selected. Switch to PEAK to use the timing controls. The previous PEAK settings are retained.

The pump changes with the song

The detector is responding to the audio. With internal detection, the bass, snare and other parts can affect it. For more control, use a dedicated external key and check its routing, level and decay.

The level jumps after matching

A sets a suggestion based on recent audio. A quiet passage may not represent the next chorus. Match on a representative loop, compare with bypass and trim Output. It does not catch future peaks.

The host cannot find it

Check the VST3 folder, rescan and restart the host. This build needs a host that supports VST3; it cannot load as an Audio Unit.

Platform	64-bit macOS; universal Apple Silicon / Intel.
Formats	VST3 effect and standalone application. No AU, AAX or Windows format in this version.
Routing	Stereo main input/output; optional mono or stereo external key.
System support	Use the supported OS/host list supplied with the final download. CPU load depends on host, sample rate, buffer size and HQ.

For a repeatable problem, note your macOS and DAW versions, sample rate, buffer size, HQ state and the steps that reproduce it. Include the settings and routing when contacting the support channel supplied with your purchase.