LOAD + PLAY

DUCK HUNT

The kick speaks, everything else makes room.



Ducking without a compressor: one track steps back when another plays, full band, in three bands or frequency by frequency. Driven by sidechain, MIDI or tempo.

USER MANUAL VERSION 1.0.0 FREE AND OPEN SOURCE

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1 Introduction

A free, open-source ducking effect: one track steps back when another plays, like sidechain compression without the compressor. The duck depends only on the reference track, never on the level of the ducked track: no unwanted pumping, no colouration. Full band, in three bands, or only at the frequencies where the reference plays.

A sidechain compressor turns the track down according to its own level: the result changes with the track, colours the sound and sometimes pumps when you don't want it to. Duck Hunt draws the duck curve straight from the reference (or MIDI, or tempo) and applies it as is. What you see on the display is exactly what you hear.

Three ways to trigger

- **Sidechain**: the kick, the vocal or any track sent to the sidechain input ducks the track. Two filters let it react to only part of the reference.
- **MIDI**: each note sent to the plugin fires the curve, velocity can set the depth. Handy for chopping a pad to exactly the rhythm you want.
- **Tempo**: one duck per beat, from whole notes to sixteenths, dotted or triplet, locked to the project position. Nothing to route.

Three ways to duck

- **Full band**: the whole signal goes down, classic ducking.
- **3 bands**: lows, mids and highs each duck from the same band of the reference, with an amount per band. The kick carves the bass lows without touching its attack. With nothing applied, the sound comes out identical, with no latency.
- **Spectral**: the track is carved only at the frequencies where the reference plays. Perfect for making room for a vocal inside guitars or a pad without the whole mix dipping.

And also

- Attack, hold, release envelope with an adjustable curve, from house pump to a discreet dip.
- Lookahead up to 20 ms so the duck lands before the hit, compensated by your host.
- Inverted mode (gate), dry / wet mix, listen to the filtered reference.
- 10 presets: bass under the kick, lows only, room for the vocal, radio voice, pumps, House Rave, MIDI chops, gate.

In your DAW

Insert Duck Hunt on the track to duck, then send the reference track to its sidechain input:

- **Cubase / Nuendo**: in the plugin window, enable *Side-Chain*, then add a send from the reference track to "Duck Hunt – Side-Chain".
- **Logic Pro**: at the top of the plugin window, *Side Chain* menu → pick the reference track.
- **Ableton Live**: unfold the device (triangle), open *Sidechain* and choose the reference track under

Audio From.

- **Studio One**: *Side-Chain* button at the top of the plugin, then a send from the reference track to Duck Hunt.
- **Reaper**: pin connector button (*2 in 2 out*) → inputs 3/4 for the sidechain, then a send from the reference track to channels 3/4.
- **Bitwig**: pick the sidechain source in the device. **FL Studio**: route the reference track to Duck Hunt's track as "sidechain", then select it in the plugin's processing tab.

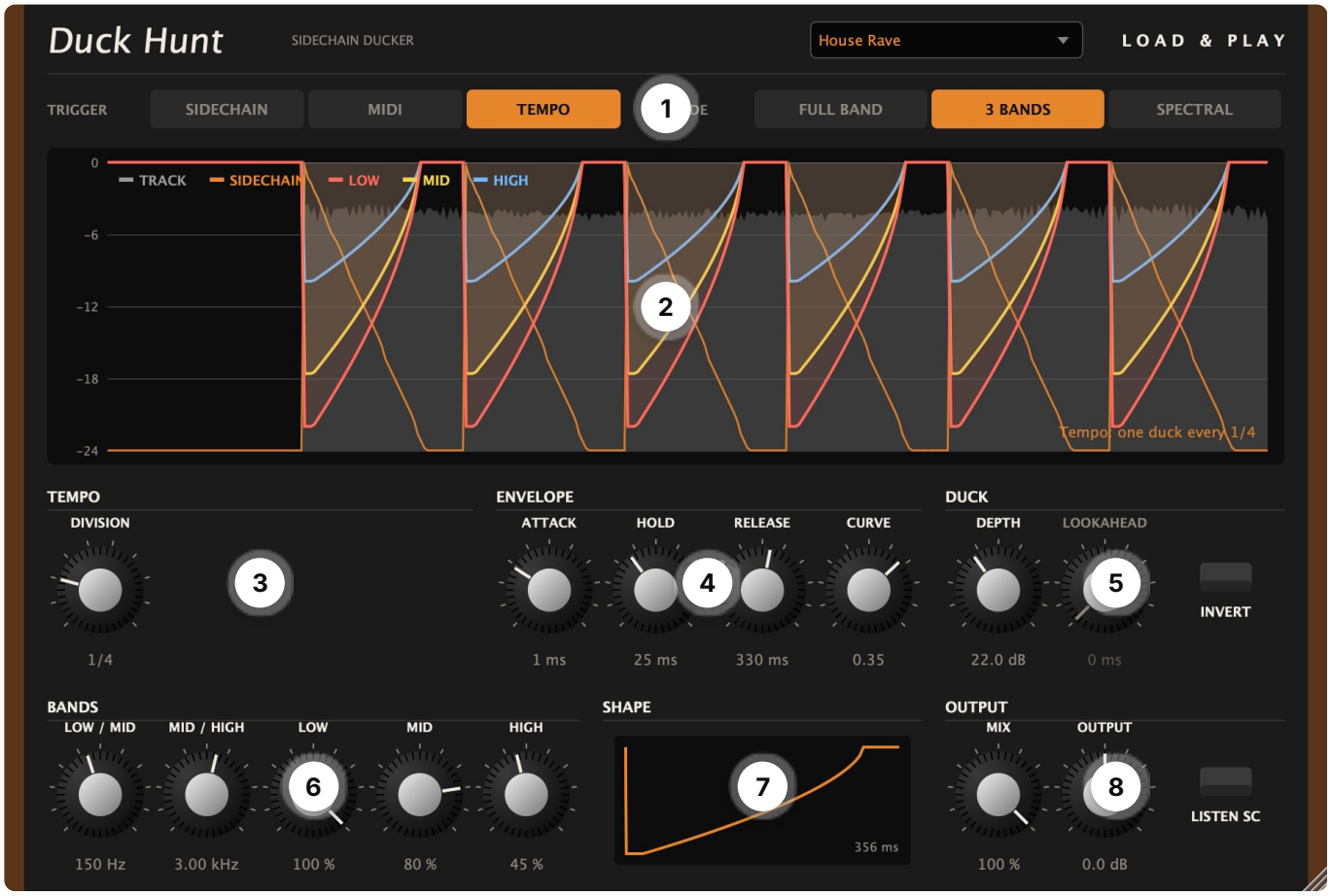
In MIDI mode, send a MIDI track to Duck Hunt. In tempo mode, there is nothing to route.

2 Installation

- **macOS**: copy `Duck Hunt.component`, `.vst3`, `.clap` and `.lv2` into `~/Library/Audio/Plug-Ins/` (Components, VST3, CLAP, LV2 folders). The plugin is not signed with Apple: if macOS blocks it, open System Settings → Privacy & Security → Allow Anyway.
- **Windows**: copy `Duck Hunt.vst3` to `C:\Program Files\Common Files\VST3` and `Duck Hunt.clap` to `C:\Program Files\Common Files\CLAP`.
- **Linux**: copy the plugins to `~/.vst3`, `~/.clap` and `~/.lv2`.

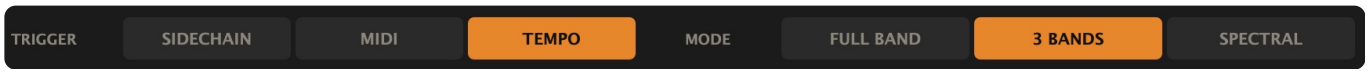
Then restart your music software: Duck Hunt shows up among the effects, under "Load & Play".

3 The interface



At the top, what triggers the duck and how it ducks. In the middle, a live display of everything. Below, the controls for the curve, the bands and the output. Shown here: the House Rave preset, three bands, one duck per beat.

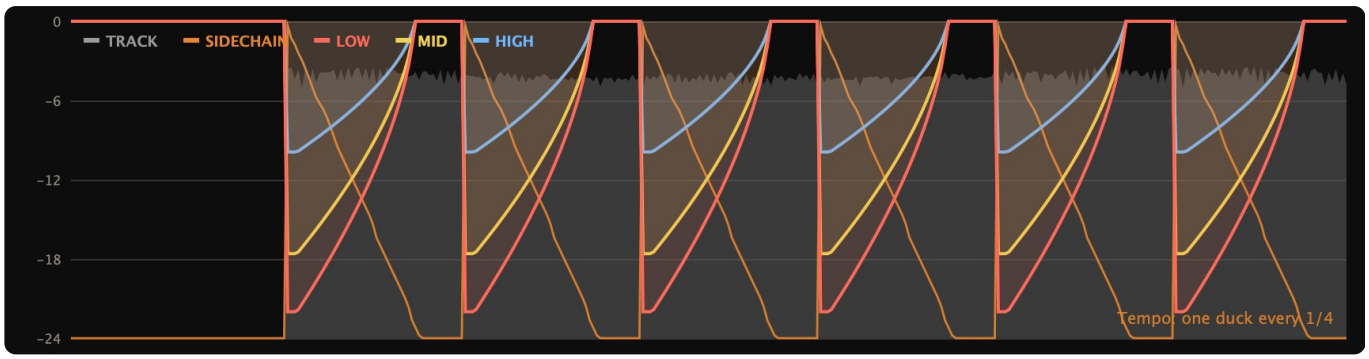
1 Trigger and mode



SIDECHAIN: another track ducks this one. MIDI: every note fires the duck. TEMPO: one duck per beat, locked to your host. Then the mode: the whole signal, three frequency bands, or spectral (only where the reference plays).

CONTROL (AUTOMATION)	RANGE	DEFAULT
Trigger	Sidechain / MIDI / Tempo	Sidechain
Mode	Full band / 3 bands / Spectral	Full band

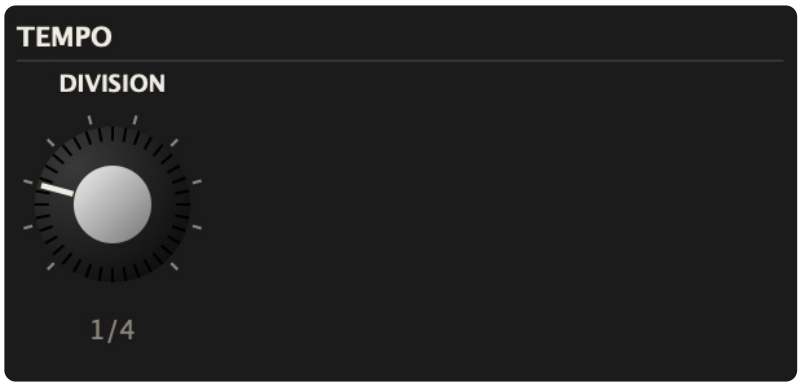
2 The display



The track in grey, the reference in orange, the duck in white, or one colour per band in 3 BANDS mode. In spectral mode, both spectra and the duck frequency by frequency. You see at a glance whether the curve drops at the right time.

Nothing to set here: this part shows what the plugin is doing.

3 Detection, MIDI or tempo



This section follows the trigger. SIDECHAIN: THRESHOLD (where ducking starts), RANGE (how far above it the reference must go for a full duck), and two filters to react only to the kick, for example. MIDI: velocity sets the depth. TEMPO: the division, from 1/1 to 1/16, dotted or triplet.

CONTROL (AUTOMATION)	RANGE	DEFAULT
Threshold	-60.0 dB ... 0.0 dB	-30.0 dB
Range	1.0 dB ... 40.0 dB	12.0 dB
SC Low Cut	20 Hz ... 2.00 kHz	20 Hz
SC High Cut	200 Hz ... 20.0 kHz	20.0 kHz
Division	1/1 / 1/2 / 1/4 / 1/8 / 1/16 / 1/4. / 1/8. / 1/4T / 1/8T / 1/16T	1/4
Velocity	Off / On	On

4 Envelope



ATTACK: how fast it goes down. HOLD: how long the track stays down. RELEASE: the way back up. CURVE: to the right, the track stays low then snaps back (the house pump); to the left, it rises fast then lingers.

CONTROL (AUTOMATION)	RANGE	DEFAULT
Attack	0.10 ms … 500 ms	5 ms
Hold	0 ms … 1.00 s	20 ms
Release	5 ms … 3.00 s	200 ms
Curve	-1.00 … 1.00	0.00

5 Duck



DEPTH: the maximum reduction, up to 60 dB. LOOKAHEAD: ducks up to 20 ms ahead of the hit so no transient slips through (your host compensates the delay). INVERT: the track only plays when the reference does, like a gate.

CONTROL (AUTOMATION)	RANGE	DEFAULT
Depth	0.0 dB … 60.0 dB	12.0 dB
Lookahead	0 ms … 20 ms	0 ms
Invert	Off / On	Off

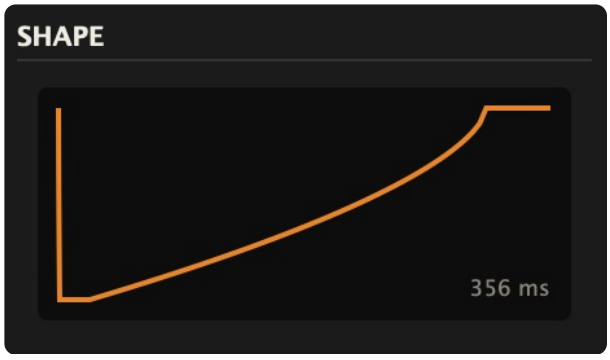
6 Bands or spectral



In 3 BANDS: two crossover frequencies and an amount per band. The kick can carve 100 % of the bass lows and leave its highs alone. In SPECTRAL: FOCUS LOW and HIGH limit the carved range, SMOOTHING softens the duck.

CONTROL (AUTOMATION)	RANGE	DEFAULT
Low Crossover	40 Hz … 1.00 kHz	200 Hz
High Crossover	800 Hz … 12.0 kHz	2.50 kHz
Low Band	0 % … 100 %	100 %
Mid Band	0 % … 100 %	100 %
High Band	0 % … 100 %	100 %
Focus Low	20 Hz … 20.0 kHz	20 Hz
Focus High	20 Hz … 20.0 kHz	20.0 kHz
Smoothing	0 % … 100 %	50 %

7 Shape



The duck curve drawn from the envelope settings, with its total length. Handy for dialling in a tempo pump without listening ten times.

Nothing to set here: this part shows what the plugin is doing.

8 Output



MIX: blend between the dry and processed sound. OUTPUT: the output level. LISTEN SC: hear the reference the way the plugin hears it, filters included.

CONTROL (AUTOMATION)	RANGE	DEFAULT
Mix	0 % … 100 %	100 %
Output	-24.0 dB … 24.0 dB	0.0 dB
Listen Sidechain	Off / On	Off

4 Presets

Pick them from the menu at the top of the window, or from your host's preset menu.

1. Init
2. Basse sous le kick
3. Kick : graves seulement
4. Place pour la voix
5. Voix sur la musique (radio)
6. Pompe 1/4
7. Pompe 1/8 graves
8. House Rave
9. Hachures MIDI
10. Gate par la référence

5 Specifications

Version	1.0.0
Price	Free
License	GNU AGPL v3 (open source)
Type	Ducking effect, triggered by sidechain, MIDI or tempo
Formats	AU, VST3, CLAP, LV2
macOS	10.13 or later, Apple Silicon and Intel
Windows	10 / 11, 64-bit (VST3, CLAP, LV2)
Linux	x86-64 and ARM64, including Raspberry Pi 4/5
Inputs	Stereo + stereo sidechain, MIDI
Latency	None in full band and 3 bands; + the chosen lookahead (≤ 20 ms); 1024 samples in spectral at 44.1 / 48 kHz. Always compensated by the host.
Automatable parameters	26
Presets	10

6 License and notices

Duck Hunt is free software, distributed at no cost under the GNU AGPL v3 license: you can use it in your tracks, commercial ones included, without owing anything. The full source code is published on GitHub; if you modify and redistribute it, your changes must stay under the same license. The software is provided as is, without warranty.

Website: https://alexlexlexlexlexlex.github.io/load-and-play/
Source code: https://github.com/alexlexlexlexlexlex/load-and-play