



# Waldorf Lector £129

PC MAC

Having reestablished themselves with their Largo virtual synth, Waldorf now tackle the vocoder

> Capturing the essence of a good vocoder and bottling it in plug-in format can be tough. Undeterred, with Lector, Waldorf aim to provide powerful, flexible options in an ergonomic format. With this in mind, the main vocoder aspects (input, onboard carrier synth, vocoder filterbank and output) are supplemented by triple-band EQ and an effects section (overdrive, chorus, delay and reverb). Everything is arranged on one main page, with signal flow running in a logical fashion from left to right across the interface.

Visually, Lector owes plenty to Largo, and you'll also find the famous Waldorf multimode filter on the synth section. The onboard synth is simple but well spec'd. The two oscillators provide six waveforms (including noise as well as sample and hold) and 16 quite varied sample waveforms (strings, choir and so on). You can also load external samples. Further synth options include frequency modulation (oscillator 1), detune (oscillator 2), portamento, syncable LFO and ring modulator. The amplifier envelope is basic (attack and release), but includes monophonic, polyphonic and latch modes.

Lector's input section has compression for both modulator and carrier signal (including the internal synth) and also a selectable unvoiced detector for emphasising non-tonal aspects.

The filterbank is fully selectable between three and 100 bands with adjustable high- and

low-frequency limits on the analysis section. The synthesis section includes selectable bandwidth and resonance plus frequency offsets and modulation (see the *Take that to the bank* box).

## Speech therapy

VST3 and AU users enjoy more flexibility with Lector as it works as a MIDI-controlled effect with direct, easy sidechain access. However, VST 2.4 users do get a separate sidechain plug-in for routing external carrier sounds. In Lector itself, you can route in an external carrier, optionally via the synth oscillator's path (ie, allowing you to also take advantage of the filter section).

Lector ships with simple routing patches (basic, latch, normal, sidechain and single) plus around 60 creative patches. These successfully show off its voice-transforming capabilities, with quality 'robot' sounds in abundance.

For us, the real fun starts with the filterbank. Here, easy access to band number, width and resonance provides excellent flexibility. You can quickly summon up fuzzy undefined retro sounds (few bands), hard metallic clear sounds (many bands with high resonance) and plenty of timbres in between. Factor in some chorus (two-, four- or six-stage) for width, tweak the output EQ and add a little reverb and delay, and Lector produces some very polished sounds indeed.

Using more rhythmic modulator material is also productive, with the three unvoiced detector

options (noise, speech and noise mix) offering slightly different ways to enhance transients.

On the downside, an integrated output limiter would be handy in keeping rampant signal levels under control, and an onboard keyboard would be great for auditioning sounds. Modulation options could also be more extensive.

Even so, the combination of quality sound and ease of use make this an extremely likeable vocoder, and with Waldorf currently offering an unrestricted evaluation license that lasts 100 days/100 hours (ie, whichever comes first), you'd be mad not to give it a try. **cm**

Web [www.waldorfmusic.de](http://www.waldorfmusic.de)

Contact Hand In Hand UK, 01752 696633

## Alternatively

### Image-Line Vocodex

N/A » N/A » €72

A powerful and excellent-sounding plug-in, though it's PC-only

### Prosoniq Orange Vocoder

cm35 » 8/10 » €169

Ancient, with a dated interface, but still one of the best vocoders

## Take that to the bank

If you want to get truly creative, the bandwidth and resonance settings can achieve a wide variety of sounds. Lector's synthesis filterbank also allows you to individually offset from your high and low analysis limits. This means you can both spread and shift your output sound, achieving rather cool formant-shifting effects. You also get a dedicated syncable LFO, which you can apply individually to those output synthesis frequency limits.

In use, this means that you can add subtle or radical frequency movement to a sound. We found the plug-in to be particularly good at generating slowly evolving sounds that subtly shift gender. We also discovered that you can adjust the low and high limits (or handles as Waldorf call them) directly within Lector's filterbank display; and by aiming the cursor between the handles, it's also possible to shift high and low limits together. That's a nice touch.

## Verdict

For Excellent layout

Nice set of presets

CPU efficient even with many bands

External samples option for synth

Against No on-screen synth keyboard

Modulation options limited to frequency

Good vocoders are few and far between, but this is certainly one of them

8/10