



WHAT IS IT?

A multi-band vocoder driven by Waldorf's engine

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HIGHLIGHTS

- 1 Thorough parameter set equals wide range of textures
- 2 Ring modulator is wild!
- 3 Up to 100 bands of signal analysis



Waldorf Lector | €169

Waldorf's in-demand synth engine allied to a multi-band vocoder? If it sounds like the stuff of dreams, let **Jono Buchanan** be your sandman guide...

Waldorf have enjoyed a fruitful few years, with their Blofeld synthesizer an FM favourite and the

software equivalent, Largo, providing similar features in DAW-hosted form. Its latest product takes a sideways step, offering comprehensive vocoding with the Waldorf synth engine at the heart of the carrier signal. Available for Mac and PC, Lector is its name, authorisation being carried out via a license transfer to eLicenser USB, or through the 'soft' eLicenser option. Thereafter, you'll find yourself with both 32- and 64-bit versions of the plug-in at your fingertips.

There are a number of ways in which Lector can work, depending on the plug-in type and DAW you're using. I tested

in Logic, and here Lector is run most effectively as an AU MIDI-controlled effect with the vocoder signal routed in via the sidechain input.

Even then, it's worth selecting 'Normal' mode from the preset drop-down menu to provide a good starting point.

Getting analytical

Lector's GUI is divided into four main sections, with input signal analysis covered by the grey panel in the top left-hand corner. This enables you to choose settings for the Speech signal to be vocoded, with an additional Unvoiced Detector available to add three variations of noise to the analysis signal. A built-in compressor allows for

dynamic reduction of the input signal, with a Ratio control to select compression amount and Gain to tailor output volume.

Underneath is the main Synthesizer section, or carrier source, which features two oscillators with variable waveforms and PWM. There's a dedicated Legato mode with a glide control, an LFO with syncable clock speeds and rich, mind-bending ring modulation, a multi-mode resonant filter plus three brands of emulated tube 'Drive' and envelope control over the tone and amplifier settings.

In 'Normal' mode with no sidechain signal set, it's perfectly possible to use Lector as a synthesizer alone, and exploring the synth options before applying your findings to Modulator sources often leads to better sounding results than diving straight into full-blown vocoding. My only gripe is that the GUI's choice of colours and text shading make it less than easy to read and until you're familiar with where things are, expect to do some squinting.

A century of bands

Up to 100 analysis bands are available to Lector, with more bands equating to a greater resolution of signal analysis and therefore, more transparent results, unless you choose to warp this transparency with more extreme synth settings. Above the real-time readout,

you can tailor the vocoder's response via dials controlling Low and High levels, Attack and Release times and Bands. Beneath the read-out you'll find the Synthesis Filter Bank, providing Low and High offset dial controls, plus those for global resonance and bandwidth.

One of my favourite features with all vocoders is the ability to 'squeeze' the analysis signal's frequency response into a narrower, vocoded one, yet Lector does this better than most vocoders I've tried, providing rich, crunchy results simply by moving the red 'L' and 'R' tags below the analysis signal inside the range of the white ones above. This is particularly effective if you want biting synths or drum parts and, combined with the Tube overdrive options, enables Lector to stop sounding like a vocoder altogether, instead coming across rather like an unusual, but welcome, set of effects plug-ins.

Beneath these controls are modulation and EQ sections for the Filter Bank, the latter of which is very welcome. Vocoders are often resonance-rich, which works wonderfully on vowel-like sounds in the upper-mid range, but can lead to overloading of analysed bass content, with kick drums often overloading vocoders dramatically. If you're working on a beat loop and

Output Controls = Musical Options

One thing I particularly like about Lector is rather an understated feature. In the top right-hand corner, as well as the main 'Vocoder' output, you'll find additional controls for Speech and Carrier. When vocoding in the 'traditional' way, you won't need either of these to have an active level, as

the Speech knob controls the source file being vocoded, while the 'Carrier' is the synth engine manipulating this source. However, by turning these dials up, you can hear the 'dry' sources and as they can be automated, some great things can be achieved. For instance, if you want

to experiment with adding clear voice harmonies under a vocal part, you can balance the harmonies you program with the original lead vocal simply by turning up the Speech dial. Equally, if you want to add more 'rasp' and power to the vocoded synth signal, turn up the Carrier.



parameter sets, with the Overdrive section delivering three 'types' plus Drive, Post Gain and Tone dials, Chorus offering two-, four- or six-stage options with Speed, Depth and Feedback controls and Delay providing syncable or free operation, with Time, Mix, Feedback, Spread and EQ dials.

breadth of sounds is as you'd expect from such a feature-rich control set. Needless to say, it does classic vocoding beautifully, turning drum loops into pulsating pads and dreamy atmospheres while also offering robot voices aplenty for those of a sci-fi vocal processing bent. However, it also goes further,

taking almost any file you can imagine and doing something useful to it, with clanging, bell-like overtones a particular forte. The ring modulator

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want to tailor bass response, Lector enables you to, adding further control with a sweepable 'mid' EQ control.

Built-in effects processing goes much further though, with dedicated Overdrive, Chorus, Delay and Reverb sections occupying the panel on the right. These offer surprisingly detailed

Vocode verdict

The Reverb section doesn't offer multiple types but does provide Size, Mix, Diffusion, Decay plus EQ Cut and Damp options, so again, it's easy to match spatial characteristics to the sound you're building. All in all, Lector is a comprehensive vocoder whose

is wild, with total mayhem just a few knob-turns away, though more subtle treatments are also perfectly possible.

All of which means that Lector comes highly recommended, not only for those needing a quality vocoder but for producers with an ear for specialist sound design. **FM**



Round off your vocoded effect with some spatial treatment

FutureMusic VERDICT

STABILITY	■■■■■■■■■■
VALUE	■■■■■■■■■■
EASE OF USE	■■■■■■■■■■
VERSATILITY	■■■■■■■■■■
RESULTS	■■■■■■■■■■

Rich vocoding, instant-harmonising and true sci-fi mayhem all await your command.

SPECS

System Requirements:

PC: Windows XP or newer, Intel Pentium 3, 1GHz or better, AMD Athlon, 800 MHz or better, 100 MB HDD, VST 2.0 compatible host software that support virtual instruments, such as Cubase VST 5.0 or higher, Cubase SX/SL, Nuendo 1.5 or better, Internet connection for license activation (license can be transferred to a USB-eLicenser)

Mac: OS X 10.4 or newer, Intel processor, 100 MB HDD, VST 2.0 compatible host application, such as Cubase 4, Nuendo 4 or better, AudioUnit 2.0 compatible host application with sidechain support, such as Apple Logic, Internet connection for license activation (license can be transferred to a USB-eLicenser)

ALTERNATIVES



ImageLine Vocodex
\$99

This PC-only plug-in also features 100 bands of signal processing but features a slightly less fully-spec'd synth engine.

image-line.com



Eiosis ELS Vocoder
\$220

This Mac and PC-compatible vocoder is also comprehensively spec'd and sounds great but will set you back more dough.

eiosis.com/elsvocoder