### Nemesis 3 - The Future of FM Synthesis

Nemesis 3 masters not only classic digital synthesis methods but also a technology called 'NeoFM'. It is more intuitive and sounds better than classic FM.

Traditional 'FM synthesizers' technically actually use phase modulation to generate sound - but they are advertised as 'FM synthesizers' for historical marketing reasons. However, the traditional method is limited to bell-like sounds and often produces an unpleasant, metallic sound. Some analog synthesizers are capable of true FM. However, this suffers from the lack of precision of the oscillators, producing a discordant sound that is not particularly useful musically.

The innovative NeoFM approach combines the advantages of both worlds without taking on their respective weaknesses. It makes it very easy to achieve fantastic sounding results.

Nemesis comes with a huge and inspiring sound library. All sounds were created by professional designers. Nemesis's engine produces a silky signature sound that is full of character, combining crystal clear sound quality with capabilities that go far beyond conventional digital synthesis.  The synthesizer is capable of producing warm and creamy sounds as well as the classic metallic and cold sounds of FM synthesis.

**Nemesis holds a gigantic spectrum of sounds, as it masters a large number of digital synthesis methods:**

* Neo-FM (an innovative approach exclusive to Nemesis)
* "FM-synthesis" (known from the phase-modulation in the Yamaha DX series)
* True FM-synthesis (known from analog synths)
* PM (true alias-free phase-modulation)
* Waveshaping (known from the Korg 01/W)
* Additive synthesis (known from the Kawai K1)
* Phase-Distortion (known from the Casio CZ)
* Formant-Synthesis (known from the Yamaha FS1R)
* Crossblending Waveforms (known from the Waldorf Microwave)
* PWM (unlike conventional synths Nemesis can do PWM with any Waveform, not just Squarewaves)
* Ring-Modulation
* Resynthesis of Waveforms
* Resonance (exclusive to Nemesis)

The combination of the different synthesis methods and the possibility to import your own content open up unimagined possibilities. Various play modes such as Polyphony, Mono & Legato, True 4x Stereo Unison complement the wide range of synthesis methods and waveforms. Your possibilities are literally unlimited.

* **Effects** - There are 48 high-quality effects available that can be combined with each other. Flexible routing options complete the extensive effects section. The innovative ducking-module makes your mix more transparent and rich by dynamically fading out reverb-tails. Nemesis offers smart-micro-tuning, which automatically analyzes the notes played to improve the sound of chords. It 'just works' - you do not need to take care of anything. An optional psychoacoustic module gives your tracks more kick and volume. Nemesis has a gate section for creating rhythmic patterns. Extended functions such as contour, fading, swing and shuffle allow you to fine-tune the sounds perfectly.
* **Arpeggiator** - The arpeggiator in Nemesis is inspiring, powerful and easy to use. Just select your notes inside the note sequencer as you normally would and choose the play direction. The arpeggiator also supports optional advanced features such as auto-chords, polyphonic playback, glides, swing or matrix integration.
* **Modulation** - By using drag & drop or the matrix, Nemesis allows you to connect dozens of modulation sources to sound parameters. Modulate almost any parameter up into the audio-rate speed, from internal modulation sources like the LFOs, to a wide variety of MIDI messages. We've also included midi-learn, so assigning CC's is as simple as a right-click.

#### Overview

* Can do all important digital synthesis methods + NeoFM
* Huge sonic range: Warm, cold, metallic, silky or creamy
* Can create unique sounds that are not possible with other synths
* NeoFM is an exclusive and improved approach to FM synthesis
* Unique signature-sound
* Contains 1165 inspiring patches from professional designers
* High-end sound quality with low demands on your CPU
* User-friendly interface with 22 different sizes (with and without keys)
* Extremely versatile
* Many high-end quality effects
* Wave import and re-synthesis for unlimited sonic possibilities
* Additive spectrum editor
* True 4x stereo unison
* Expandability
* Trancegate
* Powerful, easy-to-use arpeggiator
* Native support for WQHD, 4K, 5K and 8K UHD displays