

Synclavier Regen Specifications

Form

Synclavier Regen is a desktop unit measuring 310mm wide by 260mm tall and 42mm deep. Housed in aluminum, finished with a sand-textured black and Synclavier red surround. It has rubberized plinths.

User interface consists of many silicone buttons with multi-colour backlighting, a virtual knob capacitive-touch slider with epoxy-coating. A VK display is included as well as a main modal display that shows current parameters, user settings, timbre library, etc.

Over 40 years of synth design has led to this product. It's a sound-designer's dream in a timeless desktop package.

Sound-design Capabilities

- Advanced DSP synth engine, as used on Synclavier II, has been extended for Regen.
- 12 separate tracks of multi-timbrality, assignable to MIDI tracks and keyboard ranges.
- Up to 98 simultaneous voices. Voice count is dependent on system load and is likely to be much higher in typical scenarios.
- 12 partials per timbre. Each partial can be 1 of 3 oscillator synth modes: additive, subtractive, or samples.
 - Additive mode supports coefficient and phase control of 24 harmonics.
 - In samples mode, up to 128 samples can be placed on the partial's patchlist.
 - Subtractive can have a noise generator or up to 9 de-tunable continuous sawtooth waveforms.
 - Hybrid (resynthesized samples)
- Timbre-level effects, including:
 - Stereo reverb algorithm with pre-delay and library of presets.
 - Highly-optimised multi-mode filter with sophisticated filter envelope.
 - Bit-crusher (for use with additive, sample, and hybrid modes).
- Frequency modulation (FM) controllable per partial (all modes) with envelope.
- Sophisticated modulation system that allows many Regen parameters to be controlled via MIDI, LFOs (24 per timbre), or driven by envelopes (24 per timbre).
- Approx 300MB of sample space in memory = 100 mins @ 48Khz 24-bit mono shared across all active tracks and partials.

Hardware

- Balanced stereo output through XLR connections at pro-level 4dBu. Designed for studio and home use. These are DC-coupled for maximum bass impact.
- Single-ended TS stereo outputs, also DC-coupled.

- Convenient headphones TRS jack for monitoring master audio with independent volume control. For headphones in range 32Ω – 300Ω .
 - DAC circuit is designed for ultra-low noise floor. 11dB of headroom over nominal level. A measured 130dB of dynamic range. 24-bit, 50kHz sample rate, as per Synclavier II.
 - Hybrid sound design engine: original Synclavier II hardware is modelled in software.
 - High quality audio components throughout, including a precision temperature-compensated crystal oscillator for jitter-free digital audio.
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- Two glorious full-colour sunken displays.
 - Responsive silicon back-lit parameter buttons.
 - The vertical value swiper is touch accurate to 128 levels of resolution for precise control of every parameter.
 - 12 selector buttons are touch-sensitive and can handle gestures to quickly select multiple partials or tracks.
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- SD Card reader for unlimited user timbre and sample libraries.
 - 4 USB accessory ports for MIDI keyboards, sequencers, and audio interfaces. Plus 1 USB Host port for connecting to a computer for MIDI input from a DAW.
 - Take it on the road. Rugged, full metal enclosure. Designed to fit in a back-pack.

Features

- Over 500 preset timbres categorised by instrument and tags. Including 64 of Anthony Marinelli's hand-picked timbres from his film composing career (Blue Thunder, War Games, Heart like a Wheel, Stakeout).
- Over 2000 royalty-free samples, including over 350 selected original NED samples, and 195 commissioned for Regen by sound pioneers, Jamie Lidell and Leith Fleming Smith.
- Polyphonic aftertouch and MPE are supported and many presets are optimised for MPE expression.
- Built-in help pages, comprehensive operators manual available replete with sound design tutorials.