reaktion

Hypnosium

Additive Morphing Oscillator

Quick Guide

Version 1.0

Contents

1. Welcome to **Hypnosium** Block 2
2. System Requirements 3
3. Getting started 3
   3.1 Info Hints 3
4. The HYPNOSIUM interface 4
5. Credits 7

1. Welcome to Hypnosium Block

This guide will show you a quick tour of the **Hypnosium** Block.

Hypnosium – Additive Morphing Oscillator is a sound module that implements Additive Synthesis to create a wide range of timbres. Shape the sound at your taste by manually drawing the harmonic content, refine it with additional features and morphing through different waveform banks**.**

Six waveform banks are available and storable in Snapshots – one of them with a special random mode.

- Waveform Sequencing with external gate signals
- Waveform Scanning with Morph control
- Automatic random waveform generator
- Smooth change of harmonics number
- Stereo width&panning
- FM-like inharmonic timbres
- Output waveform display
- Anti-aliasing generation

Shape the sound at your taste, modulate and experiment with the Blocks Framework to reach new horizons in sound design.

We'd like to thank you for choosing our products and we hope you will enjoy **Hypnosium**.

Reaktion Sound.

2. System Requirements

- PC/MAC running the full version of **REAKTOR 6.0.3** or higher.

  Reaktor Player is not supported.

For more information about Reaktor please visit the Native Instruments website:

http://www.native-instruments.com/en/products/komplete/synths/reaktor-6/

3. Getting started

The **Hypnosium** Block comes as Reaktor Instrument file.
Load it with other Blocks found in the Reaktor Factory Library and feel free to experiment.

Our Blocks are perfectly compatible with the Reaktor 6 Blocks Framework and use the same concept and building, so you can modulate the main parameters with the A and B modulation routing system.

3.1 Info Hints

Activate the **Info Hints** feature in Reaktor (click on "**i**" symbol or use the keyboard shortcut "**Alt+i**") to show under the mouse cursor a text with useful information regarding the purpose or function of each panel control.

4. The HYPNOSIUM interface

The **Hypnosium Block** interface

- **Key Tracking** button:

  When key tracking is enabled, you can control the frequency of the oscillator via the Pitch input. Additional tuning in semitones is available via the Coarse control. When key tracking is disabled, the oscillator runs at a fixed rate, which can be adjusted in Hz via the Frequency control.

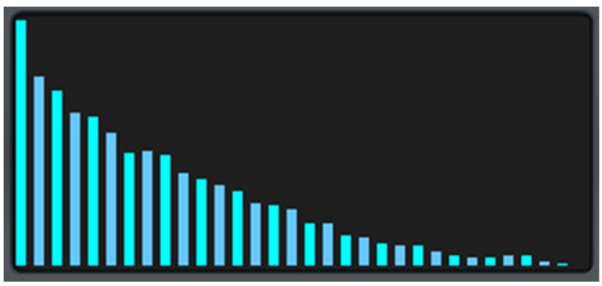
- **COARSE/FREQ**: drag up and down inside the box to change the value.

  When Keyboard tracking is enabled:
  - coarse tuning control in semitones

  When Keyboard tracking is disabled:
  - adjusts the base frequency of the oscillator.

- **ADDITTIVE PAD CONTROLLER**: use this pad to draw the harmonic content of the signal of the selected bank. The X axis controls the harmonics and the Y axis their respective amplitudes.



- **BANK:** selects the stored waveform that will be sent to the output from one of the 6 available slots labeled from A to F.

  - ✓ **NOTE:** the bank selection is active only when Morph mode is turned OFF.
  - ✓ **NOTE:** a gate signal received at the module's Gate input will step through the available banks. Combining this to the Pitch control it's possible to change the waveform for every played note. When the gate signal is received, the LED near BANK label will blink.

The F bank has a special random mode: in addition to drawable waveform, a random generator is used to change the harmonic's amplitudes in an unpredictable way.

Three controls are available to adjust the random behaviour.

- **Random switch**: turns on/off the internal random generator.

- **RATE**: controls the frequency of the random generator in the bank F from 0.1Hz to 10Hz.
- **PROB**: controls the randomness of the events from regularly timed to fully random.

- **HRM**: selects the number of active partials (harmonics) from a minimum of 4 partials to a maximum of 32 partials. The control has a smooth transition through the steps so it can mimic a simple low pass filter.
  - ✓ **NOTE:** the total number of active partials will also depend on the played note. An anti-aliasing algorithm is provided and always active to change the maximum partial number allowed before aliasing occurs.
- **SHIFT:** controls the frequency ratio of harmonics over the fundamental frequency with random values to change the timbre into inharmonic spectrum similar to that of exponential FM.
- **BALANCE:** controls the amplitude balance between odd and even harmonics. Together with the Width parameter it's possible to control also the stereo panning.
- **WIDTH:** controls the stereo spread of the output signal by alternating each harmonic between left and right outputs. Together with Balance parameter it's possible to control also the stereo panning.

- **Morph Source**: each of these controls selects one of the three banks the morph control will scan through.

- **MORPH:** when the Morph mode is active, it controls the smooth fade through three different selected waveform banks.
- **MORPH mode switch**: when turned on, the Morphing mode will be active and the output waveform will be the one selected with Morph control, smoothly fading from one bank to another.

- **OUTPUT MONITOR:** this will display the output of the additive spectrum with all the controls or modulations applied to it to better visualize the overall changes in the spectrum.

5. Credits

Instrument Design, programming, GUI, presets and User Manual:

Michele Laneve - Reaktion Sound Founder&Developer

Reaktion - Sound Tools

info@reaktion-sound.com
support@reaktion-sound.com
press@reaktion-sound.com

www.reaktion-sound.com