

Introduction

Pianophonic is a multi oscillator wavetable synthesiser that takes its inspiration from the three stringed hammer action of the piano, featuring 3 wavetable oscillators together with a sample playback engine per voice. This hybrid oscillator combination allows you to create harmonically rich sounds together with the added bonus of a percussive hit at the start. Not limited to piano and hammer sounds, the SD card included with the module features many key mapped wavatables derived from a variety of instruments including acoustic pianos, electric pianos, guitars, tuned percussion, and several classic synthesisers as well as useful sets of harmonic waveforms. You can also create your own sounds using our Waveslicer tool, enabling you to upload your own custom sounds for Pianophonic.

Usage:

Connect Pianophonic to a midi keyboard controller or sequencer to play it polyphonically. Alternatively connect it to a CV and Gate source to play single notes monophonically or to transpose massive polyphonic chord stacks.

The 8 chord memories can be selected with another CV input allowing unlimited integration into larger modular systems and opening up new compositional possibilities.

Pianophonic also features 'Mono Mode' where the unit can play single memorised chords over midi, simply press Voice Mode to toggle between Poly mode and Mono mode.

Main Features:

- 3 Wavetable Oscillators per voice.
- 1 Sample playback engine per voice.
- 16 wavetable and sample elements provided on SD card.
- 8 chord memories selectable by cv or midi.
- Detune from unison to 5th to sub-octave.
- Stereo DJ filter.
- Built in high quality 24bit stereo reverb.

SD Card Contents

Selector	Wavetable	Hammer
1	Grand Piano	Grand Piano
2	Upright Piano	Upright Piano
3	Bright Piano	Bright Piano
4	Felt Piano	Felt Piano
5	Toy Piano	Toy Piano
6	Wurlitzer Piano	Wurlitzer Piano
7	DX Piano	DX Piano
8	Tom's Acoustic	Picked Guitar
9	Ingleby Strat	Picked Guitar
10	Glockenspiel	Glockenspiel
11	Vox Humana	Breath
12	Pulse Width Synth	Kickain Bass
13	SynthWave	PluckWave
14	Wavetables A	SH-3 Bass
15	Wavetables B	Xylophone
16	Wavetables C	Organ Percussion

Installation

Pianophonic requires a -12v/+12v eurorack power source and draws 80mA.

Online manual and support

The online manual can be downloaded from our website at <https://www.knobula.com/downloads>.

Support can be found on our website at <https://www.knobula.com/forum>.



Please refer to the online manual for detailed information regarding compliance with EMC directives.



Quick Start Guide

Attack

Sets both the level of the hammer sample and then the wavetable attack time.

Decay | Sustain

Sets the overall decay of the sound whilst a note is held down. Turning the control fully clockwise will not decay at all. Some sounds such as the pianos are internally set to automatically decay faster for higher notes and longer for lower notes.

Release

Sets the release time of the envelope. Turning the control fully clockwise will cause the envelope to drone indefinitely.

Part Selector

Select from 1 of 16 wavetable and hammer sample sets. Use the toggle switch to load a single element -*Hammer* or *Side* oscillators only, or use *All* to load *Hammer*, *Sides* and *Middle* oscillators.

Save Preset. Hold Shift, Select a destination and long press Trigger to save.

Load Preset. Hold Shift while selecting.

Wavetable Mix

Select dominant mixes of the oscillator types. *Sides* or *Middle* make the respective oscillators louder or *Even* sets the volumes equally for all types.

Detune

Change the pitch relationship between all 3 oscillators. Blend smoothly from Unison to 5th to Sub Octave.

Temperament. Hold Shift to adjust the amount of dynamic micro-tuning.

Pitch

Change the pitch of all oscillators up to an octave in intervals of one semitone.

Hold down Shift to fine tune.

Patch Guide

To initialise Pianophonic and to get the most natural piano sound, setup the controls like this.



Start Point

At the centre position the wavetable is played from the very start. Turn the control clockwise to the right to move the start point later, and turn the control to the left of centre to perform the same function only scanning the wavetable in reverse.

Morph Speed

Controls the speed at which the wavetables are scanned. The minimum setting plays a single waveform selected by the Start Point.

Midi Channel

Hold down Shift and turn the Morph speed knob. Values range from Omni mode (all channels) then channels 1 through 16.

Hold Shift and press Trigger briefly to save all the settings to persistent memory.

Trigger

Triggers the last note or chord played over midi. The 8 different chord memories can be selected by setting a midi mod wheel value or by connecting a control voltage to the Chord Select input.

Dynamics

Increase the compression on decaying sounds to make them more constant in volume. Overdrive goes further and distorts the wavetable signal.

Hold Shift to adjust output gain.

Filter

DJ Style stereo filter. High pass to the right, Low pass to the left. Hold Shift to control Resonance.

Reverb

Controls both the level of reverb.

Hold Shift to set reverb decay.

Voice Mode

Toggles between Poly Mod (default) and Mono mode which allows you to play stored chords and note stacks over midi.