# Monopolyphonix

## Installation Guide & User Manual

D.A.Wilson, Hideaway Studio, April 2013

**HS-K4L-A005**

**Hideaway Studio Presents Monopolyphonix….**



Monopolyphonix was in many ways a celebration of another successful resurrection of an old classic saved from the grave. Much like the Minimoog, ARP Omni-2 and Novachord left their sonic fingerprints on S-VX and The Orbitone Collection, a Farfisa Syntorchestra manufactured in 1974, gave its all to the creation of Monopolyphonix…

Why the name? Well the Syntorchestra comes from a strange era quite early on in the history of affordable portable synthesizers where manufacturers were quite experimental and tended to do their own thing. This was especially the case with early polyphonics. The net result is that weird and wacky user interfaces and synth architectures were quite the norm in those days!

What makes the Syntorchestra quite unusual is that it features a complete polyphonic divide down section running in complete isolation in parallel with a basic monosynth each of which capable of producing similar timbres. This is quite unlike the paraphonic synth sections of the ARP Omni for example. The result is a rather odd combination of the perfect pitch characteristics of a polyphonic divide down synth beating, phasing and interacting with the far from perfect pitch tracking of a monophonic synth. With some careful front panel tweaking the two sections can be brought together to produce a

surprisingly big sound. It also boasts one of the warmest polyphonic synth pianos I think I've ever heard. It's a very basic sound but really quite beautiful through reverb. The monophonic section can produce an array of chime, twang and almost Theremin type timbres too.

I was very keen from the start not to let this library turn into yet another virtual offering of an old classic and therefore treated the instrument more as the raw material for an array of new sounds that reached beyond the original.

## Equipment Used:

*All sample material captured from a recently restored 1974 Farfisa Syntorchestra. Analog Chorus Unit, RME Fireface.*

## Installation

Installation is straightforward. Monopolyphonix requires Kontakt version 4.2.4 or higher and around 250Mb of free hard disk space. Once the .zip file has been downloaded unzip the archive making sure the original directory structure is retained.

This should result in a folder called Monopolyphonix containing the following folders:
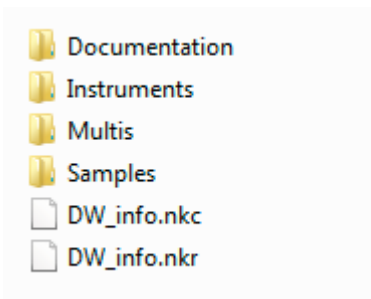


To run the library simply load up one of the 34 example .nki files in the Instruments folder. There are also 12 example layered instruments in the Multis folder.

## Instant Gratification

You can easily run through each of the example instruments (.nki) in the instruments folder by clicking on the small arrows to the right of the instrument name.
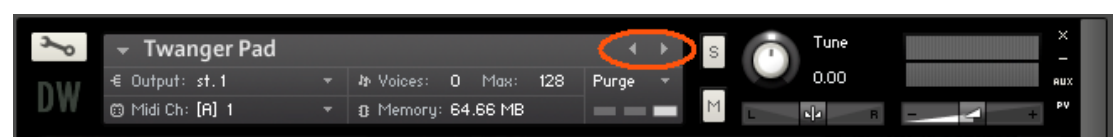
The example multi instruments (.nkm) in the Multis folder can also be cycled through by clicking on the arrows to the right of the multi rack window.
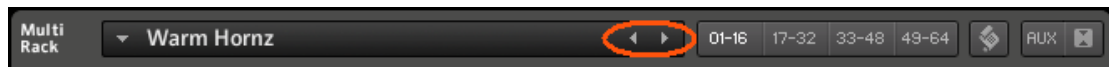


Hopefully by loading up the examples you will be able to see how they have been constructed in the layering engine and can be used as starting points for new sounds which can be saved under new file names.

## Using the Layering Engine



Naturally the example instruments packed with the library can be used as is but where the fun starts is having a go dialling in your own sounds using the intuitive layering engine. This permits up to four sounds to be blended together with a number of basic synthesis parameters at hand such as pitch and envelope control.

The layering engine consists of four identical programming panels and an effects section.

## Voice Selection



Above each of the four voice panels there is a green LCD display showing the selected voice. By clicking on each of the displays a pull down menu appears allowing one of 16 voices/partials to be selected.

The selected sounds can be used in any combination including multiple instances of the same sound.

## The Programming Panels



Each of the four voice programming panels features 10 basic controls to shape each sound in the layered instrument. Each control is altered by moving the mouse whilst clicking on it.

The **LEVEL** control sets the level of the voice in the layer
The **PAN** control sets the position of the voice in the stereo mix
The **SEMI** control sets a fixed pitch offset above or below the key played
The **FINE** control sets the fine pitch of the voice
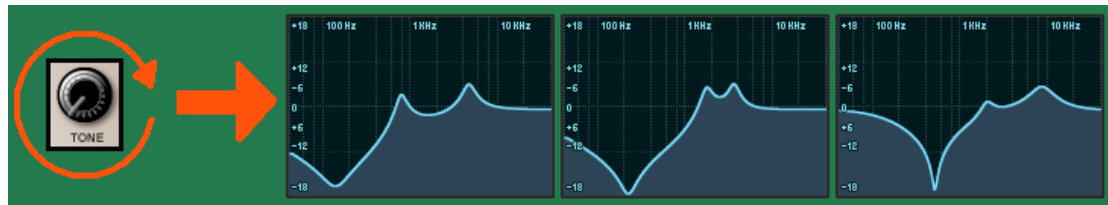
The **TONE** control is a deceptively powerful feature.  In the fully counter clockwise the signal is unaffected.  As the control is rotated a continuously evolving complex EQ curve is applied.   With some experimentation this feature can be used for embellishing formants within each voice and helping to sit each of the layered voices together in the mix.

The **LAYER ON/OFF** enables each of the four voices in the instrument.  By clicking on the button the layer toggles on and off.  It is often useful to use this feature whilst creating new sounds to determine how each voice is contributing to the overall sound.

**The Envelope Controls**

The **ATTACK** and **RELEASE** controls offer basic envelope control. The further the attack control is rotated clock wise the more gradually the sound builds up. The more the release control is rotated clockwise the longer it takes for the sound to decay after the note is released.

*NB*: S*everal of the programs in this library make use of **velocity controlled attack modulation**. The use of **velocity sensitive** keyboards will therefore really bring out this feature. This means that the attack parameter is lowered the harder the note is played. This is a means of improving the playability and expression of a sound especially in a live performance. It can be used to good effect by setting the attack a little more clockwise than first expected.*

**The LFO Controls**

Each voice features it's own pitch LFO. This permits everything from a gentle vibrato to a dramatic plunging effect.  Both the **RATE** and the **DEPTH** of the LFO can be altered. To disable the LFO simply set the depth control to the centre position.   The depth control is bi-polar which is not something you can hear in isolation but can become a very powerful effect when LFOs of opposite polarity are used on adjacent voices. A typical gentle vibrato is created by setting the depth control just slightly to one side of the centre position with the rate control somewhere around half way.

## Mixing it all up

Although the layering engine is basic, it is can be used to great effect. With experimentation a multitude of sounds can be created.

As well as the more obvious layers consisting of four different voices all tuned to the same pitch it is also possible to create other effects:

### Making it Fat

Try selecting four instances of the same voice and then slightly detuning them using the **FINE** pitch controls and even setting different **LFO** parameters.

### Expression

Setting a different **ATTACK** level for each voice can often help to make an instrument more responsive to changes in velocity and through sustain.

Please note that most voice/partial sounds in this library are designed to react in a number of ways to velocity (volume, VCA and VCF attack phase, filter cutoff and pitch). With this in mind it is highly recommended that a velocity sensitive keyboard is used and that many featured sounds often benefit from a very gentle and sustained playing style thus adding to the dynamic effect when more strident notes are subsequently played.

### Making it Wide

Try setting the **PAN** controls for each voice to wildly different settings for each voice for a more spatial effect.

### Intervals

Some interesting and sometimes quite beautiful effects can be created by setting one or more of the **SEMI** controls to something other than a simple octave. This can used to create partials on organ voices in conjunction with careful adjustment of the level controls.

### Phasey

When using two or more of the same voices setting the **FINE** tune controls to very similar but not identical settings can result in some interesting phasing effects.

### Wobbly

Using relatively deep **LFO**s of slightly different speeds across all four voices, especially in conjunction with a suitably timed delay can be quite effective.

## The Effects Section

To the right of the layering engine is the effects section.



The effects section comprises of four basic effects. Each of the four effects are chained in series and can be disabled by turning their respective **AMOUNT** control fully anti-clockwise.

### Reverb

The reverb utilises the latest convolution technology to digitally simulate the reverberation of a physical or simulated acoustic space.

Click on the blue LCD display to select the type of room simulation required and then use the **SIZE** control to set the size of the space and the **AMOUNT** control to set the amount of the effect to be mixed with the dry signal.

### Echo

The echo section is a delay with feedback and damping. The **TIME** control sets the delay whereby turning the control clockwise increases the delay time. The **FEEDBACK** control sets the amount of the signal from the delay that is fed back to the input. The further this control is turned clockwise the more the input signal is recycled thus creating dramatic repeating and sustain effects. The **DAMPING** control determines how the delay decays with time. The **AMOUNT** control determines how much of the effect is mixed in with the dry signal.
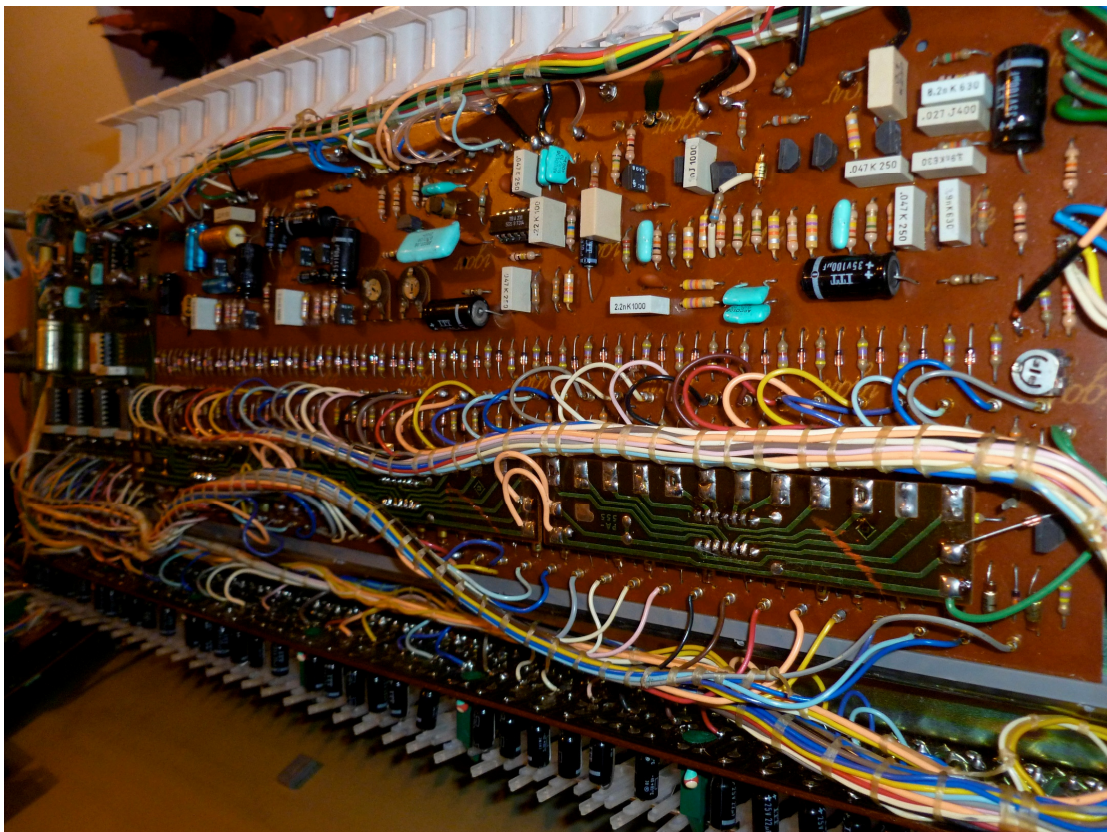
# Credits

**Dani Wilson (Hideaway Studio)**
Equipment Restoration, Sound Design, Sample Set & Example Instruments

**Stephen Howell (Hollow Sun)**
Layering Engine Concept, GUI Design & Graphics

**Mario Krušelj**
Layering Engine Script

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