SINGULARITY MANUAL

Changelog

V1.1
- 100 new presets with many bread and butter sounds useful for loading into Destiny Layers.
- Random Wave was not working in Singularity full version
- Filter display was not updated after Randomizing

v1.0

- Initial Release

Introduction

Singularity is a Fully Featured Synthesizer with 2 LFOs, 2 ADSR Envelopes and a Sequencer. It is actually a single Synth Layer from 'Destiny' which uses 11 Layers for Multi Layer Sounds as well as Multi-Timbral Operation. Singularity still uses 11 Layers to form the sound although it uses them to create Unison using identical Voices which can be detuned with the Detune Parameter for the Unison Effect.

Presets created with Singularity can be loaded into Destiny and vice-versa, however Layer 1 will be used when loading Destiny Presets into Singularity. A Load Layer option is available however with will can load any of the 11 Layers into Singularity by using 'Layer only' and selecting the 'Layer' number.

Singularity includes Delay, reverb and an assignable Modulator which can be either Chorus, Flanger or Phaser. The Reverb comes with a large selection of Impulse responses for different Reverb Flavours.

The 2 LFOs can be synced to the BPM and come with a large selection of shapes and are assigned via the extensive Modulation Matrix.

The Synth Section

This Section contains the main Synth Parameters.

- **DELAY/REVERB/MOD Sends**
  Decides how much will be sent to each of the Effects.
- **CUT**
  This Sets the Cutoff Frequency of the Filter.
- **RESO**
  The Resonance of the Filter.
- **BIT DEPTH**
  When Lofi is Enabled this sets the Bit Depth of the sound Pre-Filter.
- **TUNE**
  This Tunes the synth in -+ 24 semitones.
- **DRIVE**
  When Drive is enabled, this will set the drive Amount.
- **SAMPLE RATE**
  When Lofi is enabled this sets the Sample rate of the Sound Pre-Filter
- **PAN**
  Sets where the sound will sit in the Stereo Field. Depending on Pan Modulations used in the Mod Matrix, this may need to be adjusted.
- **VELOCITY > CUTOFF**
  Determines how much Velocity will open up the Filter.
- **MOD WHEEL/AFTERTOUCH**
  The Mod Wheel is always assigned to Cutoff Frequency and the Aftertouch is always assigned to Resonance. This knob has no effect when centred, a positive amount will add to the Cutoff/Resonance whereas a Negative amount will remove from them.
- **VOLUME**
  Level of the Synth
- **WAVEFORM**
  Select which Waveform will be used by the Synthesizer either using the drop down menu, the increment/decrement buttons or the W Button which will select one randomly.
- **FILTER**
  Chooses the Filter used by the Synth Section.

- **LOFI**
Enables the Bit Depth and Sample rate reduction Knobs.
- **DRIVE**
Enables Drive for this synth.
- **KEY > FILTER**
Enables Key tracking for the Filter, when uses most Filters this is tuned so that when Self Resonating it will follow pitch chromatically.
- **F**
Randomize the Filter Type
- **W**
Randomize the Waveform used.
- **D**
Sets the section to it's default state.
- **R**
Randomizes the Section.

The Sequencer – General

There is a general purpose Sequencer which can be assigned to various destination via the Modulation Matrix. It also has a direct Pitch button which will quantize the output to Semitones as well as a Gater which will mute the sound for steps set to zero. If using both Pitch and Gater and you want to have a step play at the base frequency instead of Gating the signal, set the step to slightly above zero and this will then play the step at the base Frequency.

The Tempo Up Down buttons to the right of the Panel Selectors will half or double the Sequencers Tempo as well as the LFO Frequencies. If the Tempo is already at either end of the available choices it will not be changed.

Each Sequencer has:

- **Frequency**
  The amount of 32nd steps used for the tempo, 1 being the fastest. So to stay in tight sync with a 4/4 tempo, choose 1,2,4,8,16 etc…
- **Steps**
  The Sequencer can use between a selection of 1 and 128 steps, when the sequencer reaches the last step it will repeat.
- **RETRIG**
  Determines whether the Sequencer should Reset on each New Notes or only with the 1st Note Played.
- **PITCH**
  Enables Direct Pitch Sequencing, the Sequence output is quantized to Semitones. For loose Pitch tuning you can use the Mod Matrix assignment. When using the direct pitch the output is quantized and then sent through the Scale Remapper which will automatically quantize to Scale Locked pitches. This is useful when randomizing because you can lock to the specific scale you are using in your project.
- **X**
  This will double the size of the Sequence and duplicate the steps. This is very

useful for creating a riff and then duplication to change a couple of steps to add variation on a longer sequence for example.

- **1234**
  These are randomizers which use algorithms to make rhythmic patterns
  - 1 – This uses just downward Ramps
  - 2 – This uses downward and upward ramps
  - 3 – This uses downward and upward ramps plus flat sections
  - 4 – This is the same as 3 but also uses zero based sections.
- **< >**
  These are used to Shift the Sequence steps Left and Right
- **D**
  This sets the Sequencer to the Default settings saved in the Default File.
- **R**
  This will Randomize the Sequence using one of the many included Sequences from the Database. Not this works best when the steps are 128 or 64. Holding SHIFT whilst clicking will Randomize the Frequency , Step Amount and Amount. Holding CTRL will create a true Random Sequence.

Envelopes

There are 2 Envelopes, the 1st is used to control the volume of the Synth, and the 2nd is used via the Modulation Matrix to assign to Destinations.

- **ATTACK**
  The Attack time of the Envelope
- **DECAY**
  The decay time of the Envelope
- **SUSTAIN**
  The Sustain Level of the Envelope
- **RELEASE**
  The release time of the Envelope
- **VELO T**
  When enabled this will enable changing the time of the Attack and Decay sections of the Envelopes depending on the Velocity. When using this the Envelope Time set becomes the Maximum Time triggered at Full Velocity.
- **LFO 2**
  Envelope 2 can be used to change the speed of LFO 2 in a postive or Negative way. Note that this will only work when Sync is disabled for LFO 2.

LFOs

There are 2 Low Frequency Oscillators which can be used to Modulate Parameters via the Modulation Matrix. The Can be Synchronized to the Tempo of the Host or unsynchronized. Both LFOs will Restart with each new Note.

- **FREQUENCY**
  The Speed at which the Envelope runs. When Sync is enabled you can see the current speed when clicking or moving the knob in the Information Display Box.
- **SHAPE**
  Decides the Waveform of the LFO, when clicking or changing the Knob, the shape name can be seen in the Information Box. All of the Usual shapes are there; Sine, Saw, Ramp, Random etc.. as well as a collection of Custom complex shapes.
- **FADE**
  When a note is triggered, the amount of time it will take for the LFO to fade to full Level.
- **SYNC**
  Tempo Synchronize the LFO, full, dotted and triplet options are available.
- **LFO 2**
  LFO 1 can be used to change the speed of LFO 2 in a postive or Negative way. Note that this will only work when Sync is disabled for LFO 2.

Modulation Matrix

The Modulation Matrix is used to assign Modulator Amounts to Destinations. There are 4 Modulators available; Envelope 2, LFO 1, LFO 2 and the Sequencer. Centred Knobs mean no effect, left of centre has a negative impact and right of centre has a positive impact.

The possible Destinations are Filter Cutoff, Filter Resonance, Drive, Raw Pitch, Bit Depth, Sample Rate, Pan and Volume.

Master Section

The Master Section contains controls which affect the entire instrument.

- **PITCH BEND**
  How many semitones are used by the Pitch Bend Wheel, up to 24 semitones
- **TRANSPOSE**
  Transposes the entire instrument in semitones
- **CUTOFF**
  Master Cutoff Offset, this offsets the filter in a positive or Negative way.
- **RESONANCE**
  Master Resonance Offset, this offsets the filter Resonance in a positive or Negative way.
- **BASS**
  The Bass Amount has no effect at centre value and can be used to add or remove Bass from the output.
- **VELOCITY**
  How Velocity Sensitive the Instrument is.
- **DETUNE**
  When Unison is enabled this offsets the pitch of each layer to create a classic Unison Sound.
- **UNSTABLE**
  Adds a slight random pitch variation to the sound to achieve a slightly broken Oscillator sound.
- **FX**
  The Master FX Level – Fades between 100% Dry to 100% Wet.
- **MASTER**
  This controls the Master Volume Level of the Instrument.
- **QUANT**
  When the host is running, this will force played notes to be quantized to the bar which is useful when using Sequences and synced LFOs.
- **HOLD**
  Will play Notes until Hold is disabled, each time new notes are played whilst Hold is enabled the will replace the existing playing notes if no keyboard keys are in use, if any keys are in use then each note will be added to the Held playing notes.
- **LIMIT**
  Enables the Limiter on the Dry Output
- PURGE
  When enabled only used WAVs will be loaded into memory.

- **F**
  Randomizes bothe Synth Filters
- **W**
  Randomizes the Waveforms used by both Synths.
- **L – S - < - >**
  These are shortcuts to Load, Save, Increment or Decrement Presets – See the Browser section for more info.
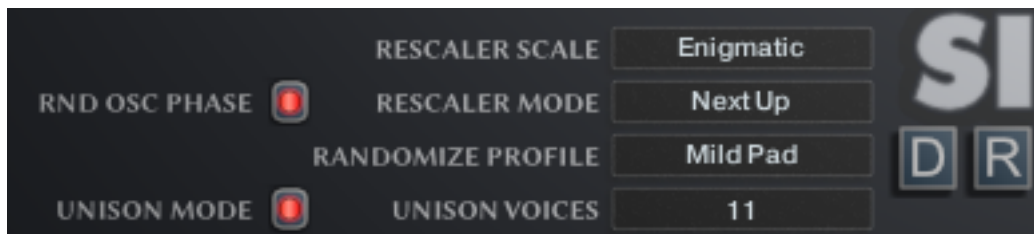
- **RND OSC PHASE**
  Uses a random start position for each sample played, this is essential when using unison to prevent the flanging problem you get with phase cancellation, unless that it the sound you desire.
- **RESCALER SCALE**
  Decides which Scale should be used when using Direct Pitch on the Sequencer.
- **RESCALER MODE**
  Determines whether the Rescaler should choose the next Highest or Lowest note when forcing to the Scale.
- **RANDOMIZE PROFILE**
  Chooses a Profile for all the Section and Global Randomizers to use. If you have Destiny you can change these using the Save Row on the sophisticated Random Profiler. This is basically a single Row from that Profile.
- **UNISON MODE**
  When enabled up to 11 Voices can be used as Unison. Use the Detune knob to alter the pitch differential.
- **UNISON VOICES**
  Decides how many voices should be used by Unison.
- **D**
  Global Default – Restores the Synth to the state saved by the SAVE DEFAULT button in the Browser Section.
- **R**
  Global Randomize – A general Randomizer, this one is general purpose, there are more Global Randomizers which are more targeted to specifics – see the XY Section for details.

Reverb

The Reverb uses Impulse Responses to generate the Reverb. It is a Send Effect which means that the signal is sent to it via the dedicated Sequencer which controls the amount sent. The overall Volume of the output is controlled by the FX knob in the Master section.

- **Size**
  This is the Time of the Reverb Tail in a percentage of the original IR Time.
- **LP**
  Low Pass Filter
- **HP**
  High Pass Filter
- **PRE**
  Pre-Delay of the Reverb
- **Impulse**
  Selects which Impulse Response is used from a selection of 50

Delay

The Delay is a Send Effect which means that the signal is sent to it via the dedicated Sequencer which controls the amount sent. The overall Volume of the output is controlled by the FX knob in the Master section.

- **Time**
  Tempo Locked Time of the Delay
- **Damp**
  How much the signal is dampened.
- **Pan**
  Width of the Delay Pan
- **Feedback**
  How much Feedback the Delay uses to generate repeats.

Chorus/Flanger/Phaser

Multi Purpose Modulator which can be used as a Chorus, Flnager of Phaser. Click on it's name to select which it will use from the popup menu.

- **LEVEL**
  The Mix Level between Dry and Wet.
- **FREQ**
  The Frequency of the Modulators LFO
- **AMT**
  The Amount of Chorus between 100% dry and
  100% Wet.
- **DEPTH**
  The depth of the Modulation
- **PHASE**
  Stereo Phase Offset of the effect
- **FDBK**
  The Feedback Level of the Flanger and Phaser
- **COLOR**
  The Central Delay time of the Flanger.

Browser

Singularity uses it's own Preset System and Presets can be loaded or Saved using the Preset Browser. The Preset Folder is called 'Destiny Presets' (or 'Singularity Presets' for Singularity Lite).

- **SAVE PRESET**
  When you save a Preset, unfortunately Kontakt always opens the File Browser showing the data folder which stores all the configuration files for the Synth, so you must select the Preset Folder and save your preset there so it will be visible next time you load the synth. You can create sub folders in this directory if you wish, they will be listed on the Left hand side.
- **LOAD PRESET**
  This is only needed to load a preset which isn't visible in the File Browser. Useful because Kontakt script provides no way of refreshing the browser except by reloading the Instrument. This provides a way of loading a preset in that situation.
- **LAYER ONLY**
  This allows loading specific layers from Destiny Presets. If you own Destiny it means that every Destiny Preset basically has 11 Singularity Presets within it! Note that Destiny Presets can also be loaded into Singularity with this option disabled, however layer 1 will be used by default.
- **LAYER**
  When using Layer only, this determines which Layer of the Destiny Preset will be loaded.
- **LOFI**
  When enabled this will automatically disable Lofi on any preset loaded. Lofi can give a nice crunchy and atmospheric sound, however it is not always suitable or to everyone's taste and so this option allows bypassing it when loading.
- **SAVE DEFAULT**
  All Homegrown Sounds Kontakt Instruments use a Default File for referencing when

using any section or Global Default button. This Button will allow you to overwrite the file with the current state of the instrument, which will be used from then onwards.