

# CASSETTO DND

[hgsounds.com](http://hgsounds.com)

# Changelog

## 1.01

- Fixed issue with incorrect names appearing on the Wave Display.
- Fixed Oscillator section random not working
- Increased Size of Sample name Display
- Added Clear Sample Buttons for emptying the sample slot.
- Fixed Default Reverb and delay not setting all related Parameters.
- Various other tweaks

## 1.0 – Initial Release

©2019 Homegrown Sounds

MODE Poly PRIORITY Last

VCA ENVELOPE D R OSCILLATORS VIB D R MIXER ENV2 ENV2 PITCH PITCH D R MASTER PORT D R DELAY D R

1 START 0% SEMI DET UNST ENV  
DROP

2 START 0%  
DROP

OSC1 OSC2 NOISE SPR VEL LFO1 LFO2 BOTH  
LIMIT LOFI  
BEND LFO DEL  
0 0  
MW -> CUTOFF  
100 1 2  
PB -> CUTOFF  
100 1 2

SAT BASS PORTA TRANS LEVEL  
TIME AMT

FILTER ENVELOPE D R FILTER SPLIT SWAP D R FILTER MODULATION INV1 INV2 D R LFOS VEL MW SYNC D R CHORUS D R REVERB D R

A D S R CUTOFF RESON 1 MOD LFO1  
Ladder HP4 LFO2  
2 MOD LFO1  
Ladder LP4 LFO2

ENV VEL KEY LFO1 LFO2 RND DCY

FREQ1 SHP1 FREQ2 SHP2 VIB

FREQ AMT

SIZE AMT

ARPEGGIATOR HOLD MAIN ARP SHADE BLUE DRAG n DROP A CASSETTE! GLOBAL D R +ARP R

ENV 3 D R LFO 3 SYNC D R RANDOMIZE

A D S R RES1 RES2 LFO1F LFO3L FREQ SHP CUT1 CUT2 RES1 RES2 PIT1 PIT2 LFO1F

GLOBAL MODE FX PAD 1 MORPH 1 MORPH 3  
PAD 1 LEAD MORPH 2 MORPH %  
100

BROWSER RAND

SAVE LOAD < > SYNTH ARP SAVE DEF

- Cassette 01 > ARP Anarchy.nka
- Cassette 02 > ARP Autobahnish.nka
- MT Scales - 12 Tone > ARP Basio Synth Pulse.nka
- MT Scales - 7 Tones > ARP Bass Plodder 01.nka
- MT Scales - African > ARP Bass Plodder 02.nka
- MT Scales - Assorted > ARP Bass Retention.nka
- MT Scales - Greek > ARP Bass Subdue.nka
- MT Scales - Indian > ARP Born.nka
- MT Scales - Large > ARP Caverns.nka
- MT Scales - Maqam > ARP Collect.nka
- MT Scales - Middle East > ARP Distance Between.nka
- MT Scales - Oriental > ARP Explain.nka

LIMITER D R LOFI D R MODULATOR D R REVERB D R DELAY D R

SAT LIMIT BITS SRATE DPTH PHASE FDBK COLOR

PRE HP LP FBK HPASS LPASS SAT

MOD 10% PING MOD 10%  
MODE STEREO MODE STEREO

MICROTONAL SCALE TOTAL MAP MODE  
01 Equal Temperament 12 Normal D

©2019 Homegrown Sounds

MODE Poly PRIORITY Last

VCA ENVELOPE D R OSCILLATORS VIB D R MIXER ENV2 ENV2 PITCH PITCH D R MASTER PORT D R DELAY D R

1 START 0% SEMI DET UNST ENV  
DROP

2 START 0%  
DROP

OSC1 OSC2 NOISE SPR VEL LFO1 LFO2 BOTH  
LIMIT LOFI  
BEND LFO DEL  
0 0  
MW -> CUTOFF  
100 1 2  
PB -> CUTOFF  
100 1 2

SAT BASS PORTA TRANS LEVEL  
TIME AMT

FILTER ENVELOPE D R FILTER SPLIT SWAP D R FILTER MODULATION INV1 INV2 D R LFOS VEL MW SYNC D R CHORUS D R REVERB D R

A D S R CUTOFF RESON 1 MOD LFO1  
Ladder HP4 LFO2  
2 MOD LFO1  
Ladder LP4 LFO2

ENV VEL KEY LFO1 LFO2 RND DCY

FREQ1 SHP1 FREQ2 SHP2 VIB

FREQ AMT

SIZE AMT

ARPEGGIATOR HOLD MAIN ARP SHADE BLUE DRAG n DROP A CASSETTE! GLOBAL D R +ARP R

RESET LENGTH D R > < > > D R VELO 8 RPT O < > > D R LENGTH 8 RPT < > > D R CUT 1 8 RPT < > > D R RESO 1 8 RPT < > > D R

TEMPO MODE OCT REPEAT LEN MOD

WAVES 8 RPT < > > D R PAN 8 RPT < > > D R CUT 2 8 RPT < > > D R RESO 2 8 RPT < > > D R

Mode FORWARD Scale Remap LOCK  
Scale OFF  
Mode Next Up

PITCH 1G RPT O < > > D R OCTAVES 8 RPT < > > D R FDECAY 8 RPT < > > D R RELEASE 8 RPT < > > D R

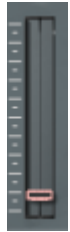
## Notes

- Samples are not saved with the internal Preset system, but are save with projects or when saving the .nki
- Sample Start will not start beyond the embedded sample loop, so if there is sample content after the loop end point, Kontakt ignores it.

## General



Sliders and Knobs are moved by left clicking and dragging up and down, holding the ALT key will allow fine control, using CTRL will set to a default value.



Buttons are simply On or Off.



Value Edits are used by clicking on them and dragging up or down to change the value, you can also click on the up and down arrows which appear when you hover over them.



These are the Global Random and Default Buttons. Global Randomize will randomize most parameters. Default loads the Default file to reset the synth to its default state. You can overwrite the default file with your own by using Save Default in the Browser section.



These are Section Random and Default, Randomize will Randomize a selection of parameters in the section. Default will set the section to the default file.

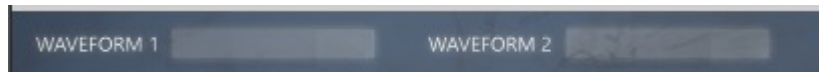
## Oscillators

Cassette DND does not come with any Samples, it supports Drag n Drop instead. Just drop samples on the 2 Drop Slots and set the start position.

Note that Samples are not stored with internal Presets, the only way they are changed is via Drag and Dropping.



## Oscillator Controls



### OSC1/OSC2

Drop Samples to Load into the Oscillator.



Above the Oscillator section are labels displaying the names of the currently loaded Waveforms. You can also use the + buttons to cycle through them.

### SEMI

Offsets the pitch of Oscillator 2 by +/-24 Semitones

### DET

Detunes Oscillator 2 to add movement to the sound.

### UNST

Unstable adds some random pitch fluctuations to add wonky tape characteristics.

### ENV

Assigns the Filter Envelope to the pitch of both Oscillators.

### Vibrato

Enables Vibrato, the amount is controlled by the Modulation Wheel.

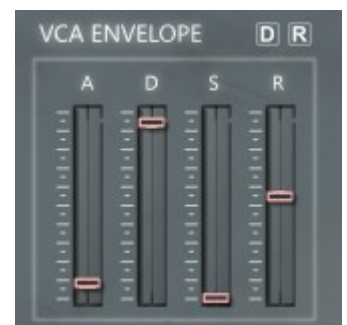
### Randomizers

Each Oscillator has its own Randomizer at the base of the slider for randomizing the Waveform. At the top left is another Randomizer which will randomize both simultaneously.



The VCA Envelope controls the Volume of the Oscillators except when using The Filter Envelope - ENV2 to control the volume of Oscillator 2, however VCA Envelope always controls the volume level of Oscillator 1.

The Envelope is a standard ADSR used by most synths, which has Attack, Decay and Release Times as well as the Sustain Level used after the Decay stage has completed.



## Filters

Cassette has 2 Filters which can either be run in serial (F1 → F2) or can be switched so that Oscillator 1 uses Filter 1 and Oscillator 2 uses Filter 2.

### ■ Cutoff 1/Cutoff 2

The amount of Filter Cutoff for each respective Filter

### ■ Resonance

The amount of Filter Resonance for each Filter

### ■ Filter Type

Select between 39 Different Filter Types for each Filter.

### ■ MOD

Enables Velocity/Filter Envelope and the Random LFO for each filter section.

### ■ LFO1/LFO2

Enables the LFOs for each Filter

### ■ 'R'

Each Filter type has it's own Randomize button

### ■ SPLIT

When SPLIT is enabled Oscillator 1 will use Filter 1 and Oscillator 2 will use Filter 2. When disabled, both Oscillators go through Filter 1 and then Filter 2.

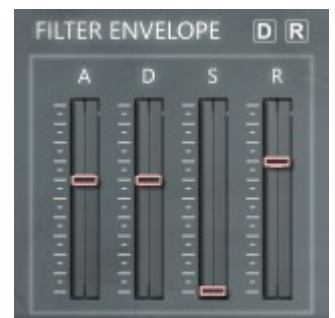
### ■ 'SWAP'

Swap Filters. Moves Filter 1 Settings to Filter 2 and vice versa.



The Filter envelope can be assigned to the Filter but can also be used as an alternative volume envelope for Oscillator 2, as well as used to control the Pitch of the Oscillators.

The Envelope is a standard ADSR used by most synths, which has Attack, Decay and Release Times as well as the Sustain Level used after the Decay stage has completed.





## Filter Types

- Ladder LP4
- Ladder LP1
- Ladder LP2
- Ladder LP3
- Pro 52 LP
- Daft LP
- SV LP1
- SV LP2
- SV LP4
- AR LP2
- AR LP4
- AR LP24
- Phaser
- Vowel A
- Vowel B
- SV HP1
- SV HP2
- SV HP4
- Ladder HP1
- Ladder HP2
- Ladder HP3
- Ladder HP4
- AR HP2
- AR HP4
- AR HP24
- DAFT HP
- SV BP2
- SV BP4
- Ladder BP2
- Ladder BP4
- AR BP2
- AR BP4
- AR BP24
- SV Notch
- Ladder Peak
- Ladder Notch
- SV LPHP
- SV BPBP
- SV LPHP
- OFF

## Filter Modulation

The Filter Modulation Section is used to control the Modulation amounts of all available Modulators that affect the Filter Cutoff.

### ■ ENV

The amount of The Filter Envelope when 'MOD' is enabled on either Filter

### ■ VEL

How much Velocity affects the Filter Cutoff amount when 'MOD' is enabled on either filter.

### ■ KEY

How much the Key number will affect the Filter cutoff. When at 100% it is possible to use a self oscillating filter as a tuned instrument. 'MOD' must be enabled for KEY to work.

### ■ LFO1/LFO2

The amount of each LFO1 sent to the Filter Cutoffs, the LFOs must be enabled for each filter in the Filter section.

### ■ RND

Random Noise Oscillator Amount to affect the Filter Cutoff when 'MOD' is enabled on either Filter.

### ■ DCY

This parameter assign an amount of velocity to the Attack and Decay times of the Filter Envelope. This can make instruments sound more natural and varied. Note that in the Mixer Section this can also be enabled for VCA Envelope too

### ■ INV1/INV2

Inverts the Envelope and LFO for either Filter 1 or/and Filter 2.



## Envelope 3

The 3<sup>rd</sup> Envelope has fixed Modulation assignments in it's section.

The Envelope is a standard ADSR used by most synths, which has Attack, Decay and Release Times as well as the Sustain Level used after the Decay stage has completed.

### ■ RES1

Allows the Envelope to control the Resonance of either/or Filter Resonance 1 & 2.

### ■ LFO1F - Frequency

Allows applying the Envelope Filter Shape to the Frequency of LFO 1.

### ■ LFO3L – Level

This will apply the Envelope Shape to the output level of LFO3. This setting is best used at it's max setting for the full effect. As an example you could assign LFO3 to Filter cutoff 1, on the Envelope have a medium Decay Time and zero Attack/Sustain and so the LFO3 effect on Filter Cutoff 1 would begin strong and then fade with the decay time.



## LFO 3

### ■ FREQ

The Frequency of the LFO

### ■ SHP

The Shape of the LFO.

### ■ CUT1/CUT2

Assigns LFO3 to either/or Filter cutoff 1 & 2.

### ■ RES1/RES2

Assigns LFO3 to either/or Filter Resonance 1 & 2.

### ■ PIT1/PIT2

Assigns LFO3 to either/or Pitch 1 & Pitch 2

### ■ LFO1F – Frequency

Assigns LFO3 to the Frequency of LFO1.



## Mixer

The Mixer section has controls for the volumes of the Oscillators as well as other assignments.

### ■ OSC1/OSC2

Assigns the Volume levels of Oscillators 1 and 2.

### ■ NOISE

The Volume of the Noise Level. Noise is tape sampled noise from the Analog Four.

### ■ SPR

Spread amount sends Oscillator 1 to the left speaker and Oscillator 2 to the right to provide a stereo image.

### ■ Velocity

Volume Velocity sensitivity

### ■ LFO1/LFO2/BOTH

If 'BOTH' is disabled, LFO1 will be applied to Oscillator 1 Volume Level and LFO2 applied to Oscillator 2. If 'BOTH' is enabled, both LFOs will be applied to both Oscillators.

### ■ ENV2

These 2 buttons are to swap control of the VCA Envelope to the Filter Envelope for the volume of Oscillator 2 and/or Noise.

### ■ DCY

Enables using the Velocity to Attack/Decay times for the VCA Envelope (The amount is shared with the 'DCY' Slider in the Filter Modulation Section).

### ■ ANA

Analog, adds a small random amount of pitch to each new note.

### ■ PHASE

Each Oscillator Waveform will start at a random position.

### ■ PITCH

These buttons allow assigning LFO1/LFO2 to Pitch instead of Volume. If Both is ON then both Oscillators will be affected by both LFOs, otherwise LFO1 will target Oscillator 1 and LFO2 will target Oscillator 2.



## LFOs

Cassetto has 3 LFOs with different assignable shapes as well as a dedicated Vibrato LFO and finally a random LFO. LFO1 and LFO3 restart with each new Note, LFO2 is free running.

### ■ **FREQ1/FREQ2**

The Frequency/Speed of each LFO.

### ■ **SHP1/SHP2**

Selects between each LFOs Shape.

### ■ **VIB**

The Vibrato Speed.

### ■ **VEL/MW**

These 2 buttons set either Velocity or/and the Mod Wheel to LFO Speeds.

### ■ **SYNC**

When Enabled this will sync the LFOs to the current tempo.



## LFO Shapes

- Sine
- Cosine
- Square
- Square Inv
- Triangle
- Inverse Triangle
- Saw
- Ramp
- Random
- CUSTOM 1-30 (Blended LFO shapes)

## Chorus/Flanger/Phaser/Delay/Reverb

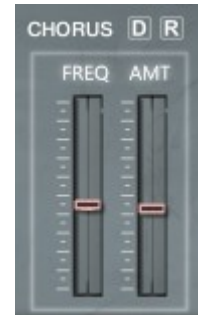
Chorus can be switched between Chorus, Flanger or Phaser by Clicking on it's name which produces a menu. The FX Order is Modulator→Delay→Reverb.

### ■ **FREQ**

The Frequency of the Modulators LFO

### ■ **AMT**

The Amount of Chorus between 100% dry and 100% Wet.



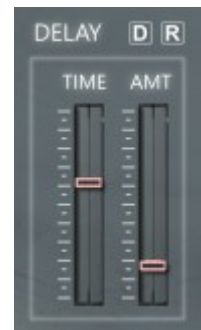
The Delay is Tempo locked.

### ■ **TIME**

The Delay Time

### ■ **AMT**

The Amount of Delay between 100% dry and 100% Wet.



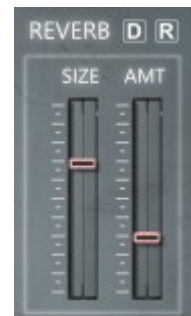
In the K5 Version the Reverb Uses the Convolution Engine, in the K6 version it uses the new Room/Hall Reverb Engine.

### ■ **SIZE**

The Size of the Reverb Decay

### ■ **AMT**

The Amount of Reverb between 100% dry and 100% Wet.



## Reverb Impulses (K5 Version)

- Assembly
- Bright 1
- Bright 2"
- Cathedral
- Cavern 1
- Cavern 2
- Cavern 3
- Cavern 4
- Cavern 5
- Chamber 1
- Chamber 2
- Chamber 3
- Chorus
- Church
- Concert Hall
- Concrete
- Early Reflect
- Echo Room
- Echoes 1
- Echoes 2
- Hall 1
- Hall 2
- Hall 3
- Hall 4
- Hall 5
- Hall 6
- Hall 7
- Hall 8
- Hall 9
- Large Church
- Long Hall
- Piano Hall
- Plate 1
- Plate 2
- Plate 3
- Plate 4
- Plate 5
- Reflection
- Rich Verb
- Ringer
- Room 1
- Room 2
- Room 3
- Room 4
- Small Hall 1
- Small Hall 2
- Spring
- Stage

- Subdue
- Universe
- Wide

## Advanced – Reverb (K5)

The Reverb in K5 uses Impulse Responses from a selection of 51 using the menu. You can use the +/- buttons and the randomize button.

- **Pre Delay**  
Sets the Pre Delay time of the Impulse Response.
- **HP**  
The Reverb High Pass Filter
- **LP**  
The Reverb Low Pass Filter
- **REVERB MODE**  
Selects the Impulse Response used by the Reverb.



## Advanced – Reverb (K6)

K6 uses the new Room/Hall Reverb algorithms included in Kontakt 6

- **Pre Delay**  
Sets the Pre Delay time of the Impulse Response.
- **HP**  
The Reverb High Pass Filter
- **LP**  
The Reverb Low Pass Filter
- **MOD**  
Modulation applied to the reverb
- **MODE**  
Select between Room and Hall Models
- **STEREO**  
How wide the Stereo field of the Reverb is.





## Advanced – Delay (K5)

- **DMP**  
Damp Amount dampens the delay feedback Path
- **PAN**  
Fades between Mono and full L/R Separation.
- **FDBK**  
The Feedback Level of the Delay



## Advanced – Delay (K6)

The K6 version uses the new Replika Delay engine.

- **FDBK**  
The Feedback Level of the Delay
- **HPASS**  
High Pass Filter
- **LPASS**  
Low Pass Filter
- **SATURATION**  
Amount of Saturation used.
- **PING**  
Use Ping Pong Mode
- **MOD**  
Amount of Modulation used for the Delay Feedback.
- **MODE**  
Selects between Modern, Tape, Vintage, Diffusion and Analogue Modes.
- **STEREO**  
How wide the Stereo field of the Reverb is.

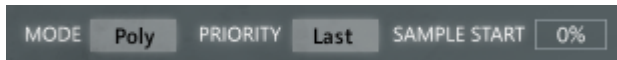


## Advanced – Modulator

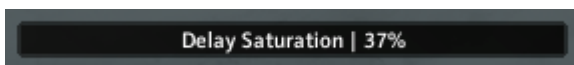
- **DPTH**  
The depth of the Modulation
- **PHASE**  
Stereo Phase Offset of the effect
- **FDBK**  
The Feedback Level of the Flanger and Phaser.
- **COLOR**  
The Central Delay time of the Flanger.



# Master



- **MODE**  
Switches between Poly and Mono Modes
- **PRIORITY**  
In Mono mode which held note takes priority.



The Info Display provides information on control values when they are clicked or moved.

- **PORTA / PORT**  
Amount of Portamento applied to note changes, the 'PORT' button switches between relative and time based.
- **TRANS**  
Global Transpose of the Synth.
- **LEVEL**  
Master Volume Level.



- **SAT**  
Mild Saturation applied to the output signal.
- **BASS**  
Adds Bass Boost.
- **LIMIT**  
Limits the output to prevent volume spikes. The oscillator will make a difference to the limited output, it's useful to compare the sound without to see what difference it is making.
- **LOFI**  
Adds digital grit to the sound. This is located between Filter 1 and 2 which gives the option of using a HP filter for a noisy output or tamed with a LP.
- **BEND**  
Amount of semitones assigned to the Pitch Bender.
- **LFO DELAY**  
Assigns a Delay to the LFOs

■ **MW → CUTOFF**

The Amount the Mod Wheel affects the Filter Cutoff and using buttons '1' and '2' determines which Filters it sends to.

■ **PB → CUTOFF**

The Amount the Pitch Bender affects the Filter Cutoff and using buttons '1' and '2' determines which Filters it sends to.

■ **Aftertouch**

Channel Pressure/Aftertouch is always assigned to Filter Resonance 2.

## Advanced - Lofi

■ **BITS**

Sets the Bit-rate of the Lofi Effect.

■ **SRATE**

sets the Samplerate of the Lofi Effect



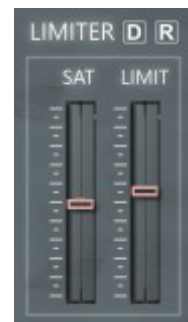
## Advanced – Limiter/Saturation

■ **SAT**

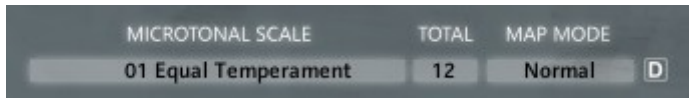
The Level of Saturation, below centre has a limiter effect and above centre has a compression type effect.

■ **LIMIT**

The Release Time of the Limiter.



# Microtuner



Cassetto v1.4 introduces a fully fledged Microtonal engine with an [online web page](#) to convert Scala files to Cassetto Format. The system supports the standard x notes over a single octave as well as x notes over multiple octaves. If you don't know anything about Microtonal Scales I suggest you [read this](#) as a primer which provides a good background.

In a nutshell, western music is based on 12 semitones = 1 Octave, a microtuner allows breaking away from this and having different intervals for each note, for example Well Temperament which is a slight modification of Equal Temperament to give a more natural/less sterile sound. Beyond that is the ability to have other tunings for example the Indian Shruti which is 22 notes over 1 Octave. Equal Temperament dominates popular music but there are endless musical scales which exist throughout the musical world.

Cassetto includes a selection of 300+ Scales which are loaded through the preset browser. To add your own, use the web page to convert the .scl file and put it in the preset folder and the next time you load Cassetto it will be visible (Note you can also use the load Button if you want access without reloading).

All Scales are loaded with Middle C (midi Note 60) being the 1<sup>st</sup> Note of the Scale, and in Normal Mode they will progress chromatically up the keyboard.

One issue with using scale sizes other than 12 notes, means it can be difficult to know where the 1<sup>st</sup> note of the scale is because keyboards/Midi Controllers are based on the 12 Note Scale. To help with this Cassetto includes a Mapped mode which will remap scales so that the 1<sup>st</sup> note will always be on a 'C' key, and as a result some keys will not make any sound, as an example for a 7 Note scale only the white notes are used, so black notes will produce no sound. You can see on the Kontakt GUI Keyboard which Notes are being used when in Mapped Mode, they are highlighted in RED. The map mode only works with Scales up to 24 notes in length.

NOTE – when using the online converter, the scales will be stored locally and may be added to the Cassetto collection in future releases. At the time of writing, the Converter is working for about 95% of .scl files, if you find one that doesn't work please email me the Scala file so I can take a look.

# Arpeggiator



Cassette includes a very powerful Arpeggiator, which has a lot of flexibility for experimentation however it can still easily be used as a standard ARP ignoring the additional sequencers.

The ARP works like any standard ARP cycling through all held notes and cycling through the Octave slider setting.

The Sequencers run independently of the ARP. running in the selected Mode Sliders direction and can be up to 64 steps.

The Shift Buttons allow moving each sequence left or right, the global Shift (top right) allow shifting all sequences together. Useful for the times you have a great sequence but it doesn't start on the right step. Additionally if CTRL is held whilst clicking on Right Shift, it will duplicate the sequence making it twice as long. This can be repeated. CTRL Clicking on the Shift Left Button will half the sequence.

The Default and Randomize buttons either the sequence to flat and randomize the sequencer.

## ■ Tempo

Sets the Tempo Locked Division of the Clock

## ■ Mode

Selects the Mode of the ARP between Forwards, Reverse, Played, Played reverse, Alternative Modes, Chord or Random. More Below:

Note that Chord only works in Poly Mode, and when selected will also select it.

## ■ Octave

How many Octaves the ARP will cycle through. This is cycled by running through the held notes at each octave.

## ■ Repeat

How many Repeats are used on any sequencers that have 'RPT' enabled. This basically slows down the Sequencer by this sliders value.

## ■ Length

How long each sequenced note is held for between 1 and 300%. The Length sequencer will add or remove from this value. Also making notes overlap will cause the Portamento to trigger for Acid type sequences.

## ■ MOD

The Total Percentage of the Modulation Sequencers output, useful for Automating.

## ■ HOLD

When enabled Notes are held until a new selection are played or Hold is disabled. Note that Hold will also work with the ARP disabled.

## ■ RESET

The normal behavior of the ARP is to restart all sequences only when the first held note is played, enabling this will restart with every key held.

## ■ LENGTH MODE

When Disabled before each note is triggered any old ones that are the same note number will be stopped.

When enabled, each time a Note is played, if that some note number is already playing it will not play. It's a very simple thing but can lead to some very interesting rhythmic possibilities. Anything that affects the note length; Length Slider, Length Sequencer and Volume release will affect the output. Also it relies on repeated note numbers and so with a busy pitch filled sequence less notes will be skipped. It's primarily useful for CHORD Modes with a short Volume Release Time, then using the Length Sequencer to produce some interesting Choppy rhythms. You can also automate the Length Slider as a performance control.



## ARP Modes

### ■ **Forwards**

The sequencers run Forwards and the held notes cycle forwards.

### ■ **Reverse**

The Sequencers Run Reverse and the held notes cycle in Reverse.

### ■ **As Played**

The held notes cycle in the order they were Played, the sequencers run Forwards.

### ■ **As Played Reverse**

The held notes cycle in the reverse order they were played, the sequencers run in Reverse.

### ■ **Alternate 1**

Forwards then Reverse – Adds a note to make up 4/4 repeat.

### ■ **Alternate 2**

Reverse then Forwards - Adds a note to make up 4/4 repeat.

### ■ **Alternate 3**

Forwards then Reverse

### ■ **Alternate 4**

Reverse then Forwards

### ■ **Chord**

Plays all held notes simultaneously whilst cycling forwards though the sequencers.

### ■ **Low & Chord**

The Lowest Note plays the Pitch Sequencer, all higher Notes do not.

### ■ **High & Chord**

The Highest Note plays the Pitch Sequencer, the lower notes do not.

### ■ **Root Re-scale 1/2/3**

The Root Re-scalers use the Lowest Note to govern the key and scale output of all other Notes. This has an Omnichord like effect so that changing the low note will retune all other Notes to the Root Key and Scale. Note that a Scale must be enabled for the Root Re-scalers to work, otherwise the Pitch sequencer will be ignored.

### ■ **Root Re-scale 1** – All Held Notes use the Pitch Sequencer, however they are re-scaled based on their own Root Note.



- **Root Re-scale 2** – Only the Lowest Note uses the Pitch Sequencer
- **Root Re-scale 3** - All Held Notes use the Pitch Sequencer, however they are re-scaled based on the Lowest Root Note. This is probably the most musically useful mode and the most like an Omnichord.
- **ARP Rescale**  
This uses the same Root Note Principle but works with the basic Forward Arpeggiator (Mode 1). So The low Note will dictate the Key and Scale of all Notes.
- **MOD SEQUENCER MODES**  
These Modes do not re-trigger notes, they only use the Pitch/Cutoff/Resonance/Decay and Release sequencers. See the Mod Sequencer section for more info.
- **MSEQ FWD/REV/ALT/ALT2**  
These 4 modes apply pitch equally to all playing voices as you would expect.
- **MSEQ ROOT FWD/REV/ALT/ALT2**  
Like the Chord Mode, the Lowest Note will define the how the Scale Remapper remaps all higher Notes for an Omnichord type effect. In other words all Notes are mapped to the scale of the Root Note.
- **MSEQ LOW FWD/REV/ALT/ALT2**  
Only the Lowest Note will use the Pitch Sequencer, all higher notes will just use the other Sequencers.
- **MSEQ HIGH FWD/REV/ALT/ALT2**  
Only the Highest Note will use the Pitch sequencer, all lower notes will only use the other sequencers.



The Pitch Sequencer is locked at a fixed size of 16 steps unlike the other sequencers, however you can set the length between 1 and 16.

- **'O'**  
Randomizes the sequence using Octaves only.
- **'<' '>'**  
Shifts the Sequence Left or Right.

## **Velocity Sequencer**

The Velocity Sequencer allows creating a sequence of velocity levels to affect the playing notes. Interesting when Velocity is assigned to the Filter Cutoff. If the slider is at zero no note will play on that step.

## **Length Sequencer**

The Length Sequencer offset the Length Slider setting by a positive or negative amount for each step.

## **Waves Sequencers**

The waves sequencer allows Sequencing either Osc1, Osc2 or Both with Noise per step. Up will only play Osc1, Middle will play both and Noise and Down will play Osc2 only.

## **Pan Sequencer**

The Pan Sequencer allows setting a different Pan position for each step.

## **Cutoff Sequencers**

There are 2 sequencers each dedicated to each Cutoff Filter. Note that these Sequencers Add to the amount of cutoff and so set the Cutoff Knob to the required baseline.

## **Resonance Sequencers**

These 2 sequencers affect Resonance 1 & 2 and as with the Cutoff Sequencers they Add to the amount of the Resonance Knobs.

## **Filter Decay/Sample Start Sequencer**

This Sequencer affects the Filter Envelope Decay time. It works a little differently to the other Sequencers as a higher Value will Reduce the Decay Time and so the Decay Slider should be set to the Maximum Amount you require.

## **Release sequencer**

This Sequencer affects the Volume Envelope Release time. Like the Filter Decay Sequencer, higher Values will shorten the Release time.

## **Octaves Sequencer**

The Octaves sequencer allows selecting a higher or lower Octave for each step.

## **Modulation Sequencer only ARP Modes**

These Modes do not trigger Notes, but only use the Pitch, Cutoff, Resonance, Decay and Release Envelopes and apply them to held notes. This is really good for creating rhythmic Sequences using the Cutoff. There are some things to bear in mind:

- The Mod Sequencer Modes do not work with ARP Hold.
- Pitch does not use the Microtonal Tuner as it has already been applied when the note was played and in this scenario the pitch sequencer is adding/subtracting to/from the current already processed Note pitch.
- By Default, the played notes are quantized so that they begin on the nearest step of the current tempo division. You can disable this by enabling the Length Mode which doubles up for this purpose.

# Scale Remap

A Scale Re-mapper was introduced with v1.3 of Cassetto which is designed to force the output of the Arpeggiator to a specific Scale from a choice of 78.



The pitch from the ARP Sequencer is sent through the selected Scale and Notes are re-mapped according to which Mode is selected. Currently the Modes are:

- **Next Up**  
This will find the next highest applicable note in the scale.
- **Next Down**  
This will find the next Lower applicable note.
- **Alternate**  
This will alternate between Next Up and Next Down with each request.

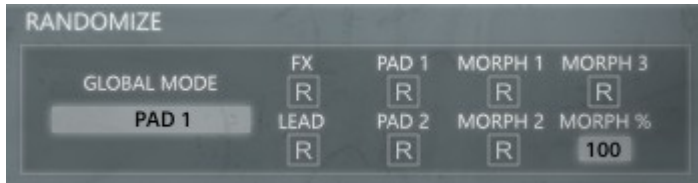
If you are new to this sort of Scale Re-Mapping I suggest you load the Major Triad Scale which is a basic 3 Note Major Chord. That way you can easily hear the results and it will always sound in key.

OFF	Octatonic 2	Jewish
Major Scale	Dorian	Kumoi
Natural Minor	Phrygian	Neopolitan
Harmonic minor	Lydian	Quertone
Pentatonic Maj	Mixolydian	Pelog
Pentatonic Min	Aeolian	Persian
Pentatonic Blues	Locrian	Prometheus
Pentatonic Neutral	Algerian	Purui Theta
Augmented	Arabian 2	6 Tone
Blues	Arabian 3	Bhairavi
Fifths	Augmented 2	Marua
Sevenths	Balinese	Ritusen
Acoustic	Byzantine	Egyptian Sus
Altered	Chinese	1
Arabian	Mongolian	2
Hungarian Minor	Egyptian	3
Whole Tone	Spanish 8	4
Maj7 + 5	Enigmatic	5
Minor 6	Asavari	6
Minor 7	Major Triad	7
Diminished	Minor Triad	8
Dimished 7	Hindu	9
Augmented Triad	Hirajoshi	10
Sus 2	Hungarian Major	11
Sus 4	Hungarian Minor	12
7 Sus 4	Japanese 1	
Octatonic 1	Japanese 2	
	Javanese	

# Global Randomizer



The Global Randomizers (Mid Right) will Randomize a selected array of Parameters, the Second one (+ARP) will also Randomize the ARP. You can choose the mode used by the Global Randomizer. Each mode also has it's own trigger so that it can be used anytime.



- **Random Mode**

Use this menu to select the Mode used by the Global Randomizer

- **FX**

This is the Randomize Mode that has always been there, great for wild effects.

- **PAD1,PAD2**

These 2 modes are tuned to provide presets more suitable to Pads. They have a few differences, but PAD2 will Randomize the Effect Levels as well as using a completely different method for the Envelopes.

- **LEAD**

This will Randomize a Mono or Legato sound which is appropriate for a Lead preset.

- **MORPH 1, MORPH 2, MORPH 3**

These Morph Modes use the current setting as the starting point and gradually randomize the sound. Menus are incremented or decremented by 1 and will warp around. MO3 does not change the current Oscillator Waveforms.

## Browser



The File Browser is for selecting and loading Presets for Cassetto, to load a preset double click it. Once a preset has been loaded you can use the '<' and '>' to cycle through the presets.

### ■ Load

This can be used to open a browser to load a preset that is stored outside of the Instrument folder.

### ■ Save

Used for saving new presets, you must select the preset folder for the presets to be visible in the browser. They will also not be visible until the next time Cassetto is loaded.

### ■ Save Default

This will save the current Preset as the Default Preset which will be restored when using the Default buttons.

### ■ Synth/ARP

These buttons are Filters. When Synth is enabled the Synth section will load from the loaded presets. When ARP is enabled the ARP section will load from the selected preset.

### ■ RAND

This special feature was added to v1.4, and allows randomizing the Oscillator Waves when loading a preset through the browser. For example if you like a certain preset, you can keep reloading it to get some interesting variations with the different waveforms.