

# ZONE

User Manual / by Sharooz Raofi

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Our goal was to create an instrument  
that encourages unique sound design  
in the most musical way we could.  
Your comments & feedback are always  
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## 1. Disclaimer and Legal Notices

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## 2. Minimum System Requirements

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VST3 , AU or AAX compatible host software.

### MAC

- + OS 10.9 or higher. (64 bit only)
- + 2GB RAM (8GB recommended)

### PC

- + Windows 7 or higher.
- + 2GB RAM (8GB recommended)

### 3.

## Installing, Registering & Launching Zone

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Zone uses the iLok system to authorise registration.

Before you're able to launch software protected by iLok, iLok License Manager will need a valid license stored on either your computer, iLok USB Dongle, (if you have one), or an iLok Cloud session.

#### **Downloading and Installing iLok Licence Manager**

You will need to go to the iLok website (ilok.com) and Sign In or create a free account.

When creating your user account, ensure you create a User ID that you can remember, as this is a crucial part of the system and cannot be changed. It is also advised to tick the 'Notify me about important iLok.com updates' box, so you remain up to date.

From the home page of the iLok site, download and run/install the iLok License Manager file.

If you have not yet, plug-in your USB iLok Dongle (if you have one). If you are using a desktop computer, it is best to plug the key in either via a back port (that you rarely use) or a USB multi port extension. Once you have installed the iLok License Manager, load the application and go to Sign In.

You should now see your iLok user account as well as details about your computer and any iLok Dongles you currently have plugged in.

#### **Moving a License onto an iLok Key or Computer**

If you already have licenses within your iLok account, they should now be displayed in the main window.

If you have not yet sent across your iLok license for your product, you will have either had instructions emailed to you or details will be included inside of your User Guide included with your product.

With your license selected in the main window 'Zone', for example, there are several ways to transfer the license (right-click, select 'Activate', or drag & drop onto your desired iLok Dongle).

Firstly, check the Valid Locations section to see what the license can be placed onto (dark grey).

When the license is dropped onto the destination, a Confirm Activation prompt should display, check to confirm that you selected the correct location, and press 'OK'.

### 3. Installing, Registering & Launching Zone

Now if you select your iLok Dongle on the left-hand side, the main window should then display all of the licenses that you specifically have on that key.

You can replace your license from your key back into your main iLok account at any time (as long as you have the relevant iLok key plugged in!) by simply right-clicking the license name and selecting 'Deactivate'. - Deactivate sounds a bit permanent, but it just places the license back to your account!

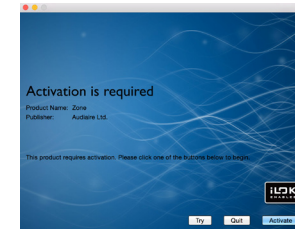
Please ensure you check for frequent application updates for your iLok license manager!

#### Using Zone in Demo Mode

If you wish to use Zone in demo mode, you can do so for 14 days without any restriction. You will still need to have iLok License Manager installed on your computer or an iLok USB Dongle.

Unpack the Zone installer and open it. From the .pkg (Mac) or .msi (PC) files, you will be prompted to pick and choose which components you wish to install.

Zone installs as VST, AU or AAX. On activation click Try and enter your iLok user ID and password.

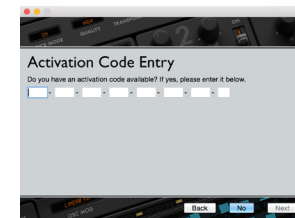


There are no differences between the final version of Zone and the demo. Once the demo times out you will no longer be able to use it and authorisation will fail. You will be given frequent reminders on start-up, outlining how long your trial has left.

#### Registering and Authorising Zone

If you have purchased Zone, you will have been given a unique registration code that enables a full iLok license to be activated for the software. If you authorise the license on your iLok Dongle, you will be able to use Zone on any machine you wish as long as your Dongle is plugged in. If the license is on your computer, you can only use Zone on that machine (with or without Dongle).

Once you have unzipped and installed the required Zone components, you can enter your serial code on first launching Zone, or if you were using a trial, once that trial expires by clicking the Activate box.



## 4. Feature Overview

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Congratulations on purchasing Zone and thank you for choosing Audiaire. Our goal was to create an instrument that encourages unique sound design in a musical way, showcasing the beautiful idiosyncrasies seen in the modular world.

At the heart of Zone's operation is a powerful parameter sequencer that allows virtually every control to be assigned to and modified by its own independent sequencer, with unlimited lanes.

Zone can be played in three distinct modes. In its simplest form, as a feature rich synthesiser with a host of filters, wavetable oscillators with import functionality, extensive multi-effects, powerful modulation matrix and much more. With a 32 step note sequencer - allowing pitch, velocity, gate, probability and +/- swing to be modified at a variety of rates, synced to a DAW host. Or with infinite note and parameter sequencer lanes, each running at its own independent rate and number of steps, with complex tools and presets for modifying lane behaviour.

### Amongst its primary features are:

- + High quality analogue modelled oscillators with unparalleled sound quality.
- + 151 Oscillator types with sub, noise and the ability to load/save unique single-cycle waveforms.
- + More than 400 presets designed by some of the world's leading patch designers.
- + 95 global, unipolar and bipolar parameter sequencer lane presets.
- + Inventive parameter sequencer with unlimited lanes, each running at up to 27 different rates from 8/1 to 1/128.
- + Numerous oscillator modulation modes including Exponential FM (as seen in Roland's Jupiter 8), Ring Modulation, Amplitude Modulation, Distortion Modulation and more.
- + 20 insert FX types, including delay, stereo width, reverb, chorus, flanger, phaser, barber-pole phaser, compression and decimator.
- + Many LFO waveshapes including 'broken saw' and trapezoid, running freely or at 27 different rates.

## 4. Feature Overview

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- + Multiple filter types (comb, notch, phaser, circuit-bent, 'acid') with up to 48dB/octave roll-off.
- + Extensive modulation matrix with 8 slots and numerous sources.
- + Chord, hold note (for easy sound design editing) and unison mode with up to 7 voice spread.
- + Fully assignable macro controls for easy performance control.
- + Clearly laid out, scalable GUI designed for ease-of-use with one page editing.



## 5. Getting to know Zone

The easiest way to get acquainted with Zone is by simply loading up a preset and jamming. After all isn't that how all instruments should be learned?

We have taken great care to ensure all controls remain exposed on one screen.

Below is an overview of Zone's user interface.



**The lettered points show the basic operational features described:**

### a) Playback Modes

Click on the various playback mode LEDs to activate them.

**HOST SYNC** - Synchronises the parameter sequence lanes, LFO speeds and available insert effects types to your host DAW tempo when lit.

**HOLD NOTE** - Applies an infinite sustain to the tone generated for easy, 'hands free' editing. Ideal for complex sound design operation.

**CHORD MODE** - Remembers the currently played or held simultaneous note pattern for storage into chord mode. Play a chord and click the LED to assign that chord to a single lane. Click the LED again to reset the mode to normal.

## 5. Getting to know Zone

### b) Operation Menus



**TEMPO** - When not Host Sync'ed to DAW, will display the tempo in BPM at which Zone's internal clock will run. This value can be adjusted from 20.0 - 999.0. When Sync'ed to your DAW, this value will still display the tempo but not be illuminated.

**SEQ MODE** - Zone operates in four distinct modes. This menu selects those modes as follows:

**OFF** - The note and parameter sequencers are not active. Zone will play as a 'regular' synthesiser, with all controls active but the sequencer window blank.

**PARAM** - The parameter sequencer mode is active, with lanes ready for click-and-drag assignment. If a factory preset is loaded, the assigned parameter sequencer lanes can be activated or deactivated by selecting or deselecting this mode.

**NOTE** - The note sequencer mode is active. If a default blank preset is selected - pitch, velocity and gate lanes will appear, ready for programming. If a

factory preset is loaded, the programmed note sequencer lanes can be activated or deactivated by selecting or deselecting this mode.

**PRM&NOTE** - Both parameter sequencer and note lanes are active. Note lanes are coloured orange and parameter lanes blue. All lanes are synced by default.

**VOICE MODE** - Selects Zone's polyphony as follows:

**MONO** - Monophonic operation where pitch glide is performed between all events - envelopes and LFOs are re-triggered for all events.

**LEGATO** - Monophonic operation where pitch glide is performed only between legato notes (where a new note is pressed while previous still held) - envelopes and LFOs are re-triggered only on standalone note events, and not for legato notes.

**POLY 2,6,12,18** - Polyphonic operation with respective maximum number of voices in playback.

## 5. Getting to know Zone

**TRANSPOSE** - Transposes the tone generated by Zone +/- 48 semitones.

**TUNE** - Adjusts the global tuning of the tone generated by Zone in Hz.

**GLIDE** - Adjusts the portamento slide of the tone when in MONO or LEGATO modes.

### c) Unison Mode



**UNISON** - This knob adjusts the relative tuning of the voices played in unison.

**VOICES** - Sets the number of voices to be played, with minor discrepancies in tuning, in unison from 1 - 7.

(Please note when set to 1 voice, the UNISON knob is 'greyed' out and not operational).

**SPREAD** - Adjusts the stereo spread of the voices to be played in unison.

### d) Preset Browser



**RESET** - Clicking the RESET LED initialises the patch worked on by resetting all controls, including the clearing of parameter lanes, to their default position.

**SOUND PRESET** - Clicking inside the SOUND PRESET bar launches the preset browser. Presets are divided by banks on the left and preset selections on the right hand browser. Selections can be browsed using the scrollbar on the right or re-ordered using the white arrow icon at the top of the right hand menu.

To save a new preset click on SAVE AS NEW. The preset will appear in the USER menu and be located at -

#### MAC:

HD/Library/Application Support/Audiaire/Zone/Presets/User

## 5. Getting to know Zone

(Please note Library folder may be hidden. To access, click on Finder and select the Go menu. Hold [alt] and Library location will appear under the Go menu.

### PC:

C:\Users\\AppData\Roaming\Audiaire\Zone\Presets\User

To revert to default preset click on LOAD DEFAULT.

**USER BANK** - Within the USER bank, clicking on the icon below will open a menu allowing OVERWRITE, RENAME, DELETE and SHOW ON DISK options.



**OVERWRITE** - On selecting a patch, clicking the icon will overwrite that patch with the present tone settings.

**RENAME** - Opens a cursor box to rename the patch clicked on.

**DELETE** - Permanently deletes a selected user patch from memory. \*Please note there is currently no UNDO function.

**SHOW ON DISK** - Shows the location of the patch on your local drive. Should you wish to add folders or directories within Zone for easy storage of your

patches, you can simply write new folders by adding to the Presets folder in which User and the other banks are located.

### e) Oscillator Section

This section has two identical oscillators with the following controls:

#### (i) Main Oscillator



**LEVEL** - Adjusts the relative volume of each oscillator. Clicking the LED at the top switches the oscillator on or off.

**TUNE** - Adjusts coarse tuning of the oscillator +/- 24 semitones.

**FINE** - Adjusts fine tuning of the oscillator +/- 50 cents.

## 5. Getting to know Zone

**PAN** - Adjusts the panning of the oscillator from Left to Right.

**WAVEFORM DISPLAY** - Click to select and display the waveform of the current oscillator.

Waveforms can be chosen by:

1. Clicking in the centre of the display to reveal a menu showing all available selections.
2. Clicking and dragging up and down on the display to cycle back and forth through selections.
3. Clicking to the left or right of the display to reveal arrow icons.
4. Using key modifiers -  
[alt and click] to revert to a default SINE waveform  
[cmd and click] to randomise a selection.  
\*CTRL and click on PC

Waveforms are displayed according to the following menus:

**CLASSIC** - Standard analogue modelled waveforms.

The following banks contain single cycle waveforms sampled and processed specifically for Zone:

**BASS, LEAD, SYNTH** - Waveforms created on and sampled from the world's finest analogue synths.

**FX** - Waveforms derived from an expertly recorded foley collection, custom made for Zone.

**INSTRUMENT** - Waveforms sampled from some

of the finest instruments in the world.

**MODULAR** - Waveforms custom created using classic modular synthesisers.

**VOCAL** - Waveforms sampled from speech synthesisers and bespoke vocal recordings.

**USER** - Allows user to import custom made single cycle waveforms\*. Clicking SHOW ON DISK will reveal the directory in which waveforms are to be placed. Clicking RESCAN will reveal the waveforms in the directory.

Waveforms are stored at the following location:

**MAC:**

HD//Library/Application Support/Audiaire/Zone/Wavetables/User

**PC:**

C:\Users\<user>\AppData\Roaming\Audiaire\Zone\Wavetables

\*Zone will read WAV, AIFF, FLAC, OGG files at 44.1kHz and 48kHz at both 16-bit and 24-bit. The waveform should be exactly one 'cycle' in length and should exhibit a clean 'zero crossing'. The original pitch of the waveform is unimportant as this will be scaled accordingly. Using cycles of notes around Middle C tends to give best results. DC offsetting and normalisation are also performed within Zone's engine.

## 5. Getting to know Zone

**SYNC** - Each of Zone's oscillators has an independent built-in 'hidden' master oscillator that it is independently synchronised with when this LED is clicked.

**SHAPE** - Changes the pulse width of the selected waveform, which modifies its harmonic content and timbre.

**AMOUNT** - adjusts the amount of detune between an oscillator and its 'hidden' master oscillator.

### A note on 'Analogue' Oscillators:

Zone's oscillator voices have different phases in respect to each other. For some voices (for example 2 sine waves) voice phases add up perfectly. But for other voices they can cancel out and this may cause audible variations in tone across the same note.

One way to cancel this effect is to reset the voice phases on a key re-trigger. In this way, there is perfect sync when both oscillators have no tuning/detuning differences. The downside is that this will not reflect the state of real analogue synthesiser circuitry. By clicking the ZONE logo and selecting the checkbox next to RESET OSC ON KEY RE-TRIGGER, this action can be toggled.

### (ii) Sub Oscillator and Noise Generator

Zone has a dedicated sub-oscillator (with coarse tuning linked to OSCILLATOR 1) and noise generator.

Clicking the SUB and NOISE LEDs will switch between and display dedicated controls for both as follows:

#### **SUB:**



**LEVEL** - Adjusts the level of the sub-oscillator.

**WAVEFORM** - Select the sub waveform by clicking and dragging (up & down) the display or clicking the display to reveal one of the five oscillator types (SINE, TRIANGLE, SAW, SQUARE, PULSE).

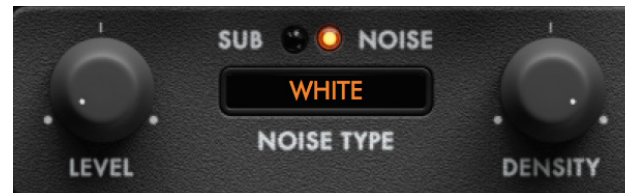
**ON** - Clicking this LED turns the sub-oscillator ON.

**TRANPOSE** - Clicking on or clicking and dragging (up & down) in this box will select the tuning of the sub-oscillator to either -1 OCTAVE or -2 OCTAVE.



## 5. Getting to know Zone

### NOISE:



**LEVEL** - Adjusts the level of the noise generator.

**NOISE TYPE\*** - Select the noise type by clicking and dragging (up & down) the display or clicking to reveal one of the four noise types (WHITE, PINK, SHOT, VELVET).

**DENSITY** - Adjusts the spectral density of the noise output.

\*Please note noise types are not adjusted according to their relative amplitude and sonic energy, therefore WHITE noise may be perceived as sonically louder than the other noise types.

### (iii) Envelope Generator (AMP ENVELOPE and MOD ENVELOPE)

Each envelope is accessed by clicking its relative (AMP or MOD) LED.



The ATTACK (A), DECAY (D), SUSTAIN (S) and RELEASE (R) portions of the envelopes can be adjusted (in ms) by clicking and dragging the respective knobs. Please note that for shorter ATTACK and DECAY settings, audible clicks may occur in the audio. To eliminate these, click the A or D knob and enter a numerical value a fraction higher than that displayed.

The graphic display will reflect the A/D/S/R settings.

## 5. Getting to know Zone

The MOD ENVELOPE controls are adjusted by exactly the same process as the AMP ENVELOPE controls. Please note that MOD LIN or MOD EXP must be selected as a MODULATION source, as described in (g), in order for the MOD ENVELOPE to function.

### (iv) Oscillator Modulation



Key to Zone's tone generation are its OSC MOD modes.

These can be selected by clicking inside or click and dragging within the OSC MOD box.

The modes are as follows:

**OFF** - No oscillator modulation will occur.

**FM** - Frequency Modulation, where the timbre of a waveform is changed by modulating its frequency with a modulator frequency that is also in the same or similar audio range. Ideal for tonal, classic digital synth sounds.

**FM (EXP)** - Exponential Frequency Modulation, where the modulation happens at exponential values (note frequencies).

**DIST (MOD)** - Both frequencies of both oscillators are combined to produce a new wave. That combined wave is then modulating, via multiplication. In this process, distortion is also added to add extra flavour to it.

\* AMOUNT controls the rate of the modulation

**DIST (EXP)** - Distortion with an exponential curve.

**DIST (SOFT)** - Soft clipping distortion.

**DIST (HARD)** - Hard clipping distortion.

**DIST (TRI)** - Triangular clipping distortion.

**DIST (TRI-FOLD)** - Triangle foldback distortion.

**DIST (FOLD)** - Single foldback distortion.



## 5. Getting to know Zone

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**DIST (MULTI-FOLD)** - Multi-foldback distortion.

**RING MOD** - Ring Modulation - a form of amplitude modulation, where only the sidebands are present and not the original spectrum of frequencies.

**AMP MOD** - Amplitude Modulation, where an initial oscillator (carrier), which is heard, is modulated by the second oscillator (the modulator), which is not directly heard.

**AMOUNT** - The amount by which OSC 2 is modulating OSC 1. The Level of OSC 2 is negligible since the signal is branched to OSC 1 before level control.

## 5. Getting to know Zone

### (f) Filter Section



The filter type can be cycled by click and dragging on or clicking in the box to the top left of the CUTOFF control.

Certain filter types have additional attributes which are present in the box to the top right of the CUTOFF control. These attributes range from the sub-type of filter to its roll-off in dB per octave.

The filter types are as follows:

**SVF LP** - State variable Low Pass Filter with 12/24/48 dB per octave roll-off.

**SVF BP** - State variable Band Pass Filter

with 12/24/48 dB per octave roll-off.

**SVF HP** - State variable High Pass Filter with 12/24/48 dB per octave roll-off.

**SVF PEAK** - State variable Peak Filter, peaking at a specific frequency.

**SVF NOTCH** - State variable Notch Filter, (a band stop filter with narrow stopband).

**LADDER** - Cascaded filter topology of 4 one pole filters in series with a 24 dB per oct roll-off. Can self-oscillate at maximum resonance.

**TYPE 1** - Transparent, no 'flavour'.

**TYPE 2** - Transistor-like distortion character, sounds richer, more powerful and 'fatter'.

**TYPE 3** - A little more damped than TYPE 1 and TYPE 2 but if resonance is increased gains a more squelchy, 'acid' like character with a sharp resonance peak.

**SAL-K HP** - 6 dB/oct - Based on the Sallen-Key topology with a 6dB per octave roll-off. Can self-oscillate at maximum resonance. Similar in character to the SVF filters but with a 'nastier' growl.

**SAL-K LP** - 12 dB/oct - As above but with a 12dB per octave roll-off.

## 5. Getting to know Zone

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### \*Comb filters

These filters consist of the original signal with a very short delayed version of itself added. Opening the cutoff to the right decreases the delay time.

Dependant on the cutoff, some frequencies interfere and cancel out each other.

The resonance determines how much of the delayed signal is added (0 - 1).

**FF COMB** - The input branches to an original signal and the delayed version. Then added to form the output.

**FB COMB** - The input is added to a delayed version of the output to form the new output. This output branches to a delay line to form the delayed version.

**C-BENT** - Circuit-bent filter, modelling a user modified 'mod' producing a screaming bit-degraded distortion effect.

**PHASER** - Feedback all-pass filter with varying stages as below, producing characteristic peaks and notches in the spectrum.

**4 STAGE** - 4 stage filter

**6 STAGE** - 6 stage filter

**8 STAGE** - 8 stage filter

**Q** - Emphasises a narrow resonant band of frequencies around the cutoff frequency.

**CUTOFF** - Adjusts or sweeps the frequency in Hz at which the signal sweeping through the system reduces.

**ENV** - Adjusts the amount of modulation from the filter envelope to the filter's cutoff frequency.

**A/D/S/R** - Adjusts the amount (in seconds) of attack, decay, sustain or release as follows:

**A** - The attack time of the envelope. The higher the setting, the slower the attack time and the longer it takes for the filter to open from the level set with the filter cutoff knob to the level set by the filter envelope amount.

**D** - The decay time of the envelope. After a sound reaches the filter frequency set at its attack stage, decay controls how quickly the filter then transitions to the cutoff frequency set with the sustain knob. The higher the setting, the longer the decay.

**S** - The filter cutoff frequency for the sustained portion of the sound. The sound will stay at this filter frequency for as long as a note is held on the keyboard.

**R** - The release time of the envelope. This controls how quickly the filter closes after a note is released.

## 5. Getting to know Zone

### (g) LFO Section



Zone has two dedicated LFOs both with identical functionality.

When the SYNC LED is clicked it will illuminate and the LFOs will synchronise with the master tempo, running at 27 different speed increments - precisely the same increments as the parameter and note sequencer. At their slowest speed the LFOs will run at (8) bars or an eighth of the DAW synced / master tempo. At their fastest they will run at (1/128), or 128 times the tempo.

When the SYNC LED is not illuminated, the LFOs will run at a free rate, displayed in Hertz (Hz). This range is from 0.1 to 100Hz.

The LFO wave shapes can be selected by clicking on the waveform display and choosing from the drop down menu.

### The shapes are as follows:

#### Basic shapes:

SINE, TRIANGLE, SAW, SQUARE, PULSE, TRAPEZOID.

#### Advanced shapes:

**NOTCH** - A constant output waveform with a narrow triangular dip once per cycle.

**BROKEN TRIANGLE** - Produces an 'M' shaped waveform.

**BROKEN SAW** - The first half of the saw waveform is offset slightly upwards, with the second half period shifted slightly downward.

**STAIRCASE 3x** - This waveform consists of 3 small step changes in level, hence the term staircase. The height of each step will be made constant as is the period of time over which the waveform resides at a given level.

**STAIRCASE 4x** - As above but with 4 small step changes.

**S&H (SAMPLE & HOLD)** - Produces a randomly generated value and holds it constant for the duration of the cycle.

## 5. Getting to know Zone

### KEY TRIG LED

Clicking the KEY TRIG LED will synchronise the LFO function re-starting with each key press.

When KEY TRIG is on, clicking and dragging up/down in the waveform display adjusts its phase offset position to vary the start position of the waveform, creating unique variations on its original shape.

Using the key modifier [alt and click] returns the waveform to its default position.

### CHAOS



The LFO CHAOS amount is displayed in %. Clicking and dragging this value adjusts the amount of random variations in the wave shape amplitude with each cycle of the LFO. When the S&H waveform is selected, the value adjusts the probability of the next step not being a new value but a retained previous value, thus extending the time length to an extra cycle. When set at 100% the S&H waveform will effectively 'freeze' at the last generated value perpetually until the amount is decreased.

### (h) Modulation Matrix



Zone allows up to eight different modulation matrices to be assigned and routed simultaneously.



Clicking on a tab lights it underneath, selecting it. Clicking the left and right cursor arrows toggles between matrices 1 to 4 and 5 to 8.

## 5. Getting to know Zone

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### SOURCE

Clicking in the MODULATION SOURCE tab selects from the following sources:

LFO 1, LFO 2, AMP ENV, (Amplitude Envelope), FLT ENV (Filter Envelope), MOD LIN (Linear Mod Envelope) MOD EXP (Exponential Mod Envelope), KEY, (Key position) VELOCITY, (Key velocity levelled from 0 -127) RANDOM (Random assignment).

### DESTINATION

Clicking in the DESTINATION\* box selects the function to be controlled by the sources above as follows:

OSC 1 SHAPE, OSC 1 SYNC (Sync amount), OSC 1 TUNE (Coarse tuning), OSC 1 FINE (Fine tuning), OSC 1 LEVEL, OSC 1 PAN, SUB LVL (Sub Oscillator level), OSC 2 SHAPE, OSC 2 SYNC (Sync amount), OSC 2 TUNE (Coarse tuning), OSC 2 FINE (Fine tuning), OSC 2 LEVEL, OSC 2 PAN, OSC MOD AMNT (Oscillator Modulation amount), NOISE LVL, NOISE DENSITY, FILTER CUTOFF, FILTER Q, FILTER DEPTH. \*If there are 2 Mod Matrices with the same DESTINATION, the Matrix with the lower number will take exclusive control over that destination. For example, Mod 1 has LFO

1 targeted at OSC 1 Tune. Mod 2 has LFO 2 targeted at OSC1 Tune at different Rate. Mod 1 cancels out Mod 2 and is the only modulation applied to OSC 1 Tune instead of both Mods being applied.

### CONTROLLER

Clicking or click and dragging in the CONTROLLER box sets the MIDI CC assignment number (from 0 -127) whose behaviour controls the MODULATION matrix.

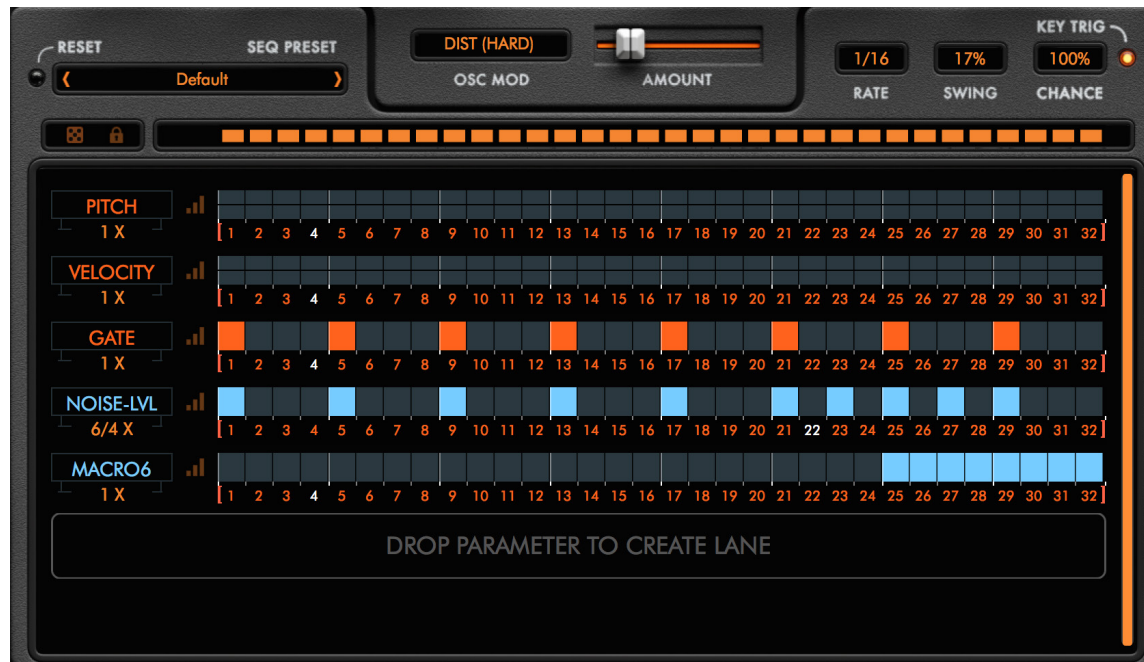
### AMOUNT

Dragging the AMOUNT slider adjusts the degree to which the SOURCE controls the DESTINATION both positively (to the right) and negatively (to the left), effectively inverting the LFO position if that is selected as the SOURCE.

## 5. Getting to know Zone

### (i) Sequencer Grid

#### INTRODUCTION

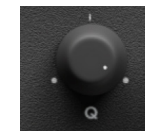


Key to Zone’s operation is its unique parameter sequencer grid. Almost every synth control can be dragged and dropped into its own sequencer lane and edited by writing lane data into that lane. The number of sequence lanes is limited only by CPU performance. In theory an infinite number of

lanes can be assigned with a vertical scrollbar to navigate them up or down. Each lane can run at its own unique rate and number of steps with a maximum of 32 steps per lane. Depending on the state of the parameter assigned, Zone will automatically assign either a unipolar or bipolar lane. For example Tuning would be a unipolar lane, where Filter Cutoff would be a bipolar lane.

Once a lane assignment has been made, the lane data will override manual operation of that control. So for example if Filter Cutoff is assigned to a lane, the Cutoff knob cannot be manually tweaked or otherwise automated in your host DAW. Please be aware of this, if for example a control may appear unresponsive - always check it hasn’t been assigned to the grid!

### (i) Assigning A Control



Clicking on a control label name will bring up a ‘hand’ icon and a blue box appears around that label. This marks the control ready for click and drag assignment into a new sequencer lane.

## 5. Getting to know Zone

If a blue box does not appear around a label, that control is not assignable. There are only a few rare exceptions where a control cannot be assigned. Even controls such as Transpose can be sequenced. The assignment parameter is then displayed in the lane text field in blue.

Knob, slider or fader positions do not move in response to lane data. To do so would cause unnecessary CPU load. Zone will instead show a white rectangular box around an assigned control label name as shown overleaf:



### (ii) Mode Selection

Arming or assigning the note sequencer requires SEQ MODE to be set to PARAM, NOTE or PRM&NOTE mode.



Upon selection of NOTE mode, three lanes will appear, labelled as PITCH, VELOCITY and GATE. A series of orange numbers across the bottom of the lane display the number of sequence steps. A 'playhead' denotes the current step playback position by colouring it white.

Upon selection of PARAM mode, four empty lanes will appear ready for assignment. While the source assignment box is empty, the lane data will be defaulted to rise to a crescendo\* and will display in blue.

\*This action can be toggled on/off by clicking the Zone logo in the top left of the GUI and de-selecting the check box DEFAULT PARAMETER LANE RAMP. When the checkbox is empty, new parameter lane assignments will display no preset lane data.

Upon selection of PRM&NOTE mode, both parameter and note lanes as described above will appear, with note data displayed in orange.

A new lane can also be assigned irrespective of playback mode if a control label is dragged into an empty lane slot as illustrated below

DROP PARAMETER TO CREATE LANE



## 5. Getting to know Zone

### (iii) Global Lane



The global lane menu sits at the top of the sequencer grid. Here individual sequence steps can be muted and un-muted by clicking to illuminate or disarm them.

Clicking the dice icon next to the global lane steps will randomise all lane data in every lane on each click of the icon.



Clicking the lock icon will retain all lane data and parameter assignments irrespective of the preset selected, so the synthesiser section will change but not the sequencer grid.

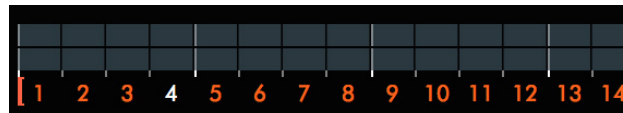
[cmd] clicking on any of the steps will randomise all values. \*CTRL and click for PC users.

[alt] clicking on any of the steps will default them to a fully illuminated state.

## 5. Getting to know Zone

### (iv) Note And Parameter Lanes

Note and parameter lanes display sequence numbers at the bottom.

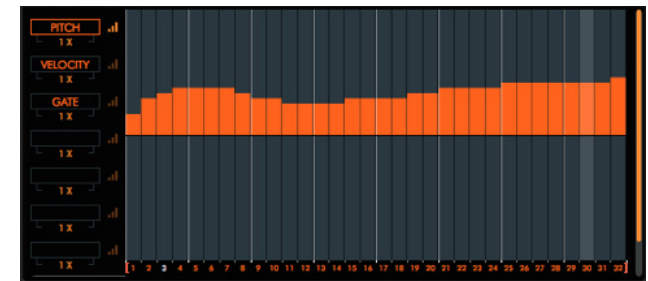


There are square brackets to either side of the numbers, which when hovered over will display an arrow icon. Each bracket can then be adjusted left or right to select the number of sequence steps that lane will play across. The sequence numbers that fall outside the brackets will grey out. Note lane steps are linked, where parameter lanes can each be assigned a unique set of left and right markers.

Clicking the numbers will grey them out rendering them inactive in sequence playback.\*

\*This action can be toggled on/off by clicking the Zone logo in the top left of the GUI and de-selecting the check box CLICK STEP NUMBERS MUTES STEPS

### (v) Writing Lane Data



Lane data can be written by clicking or click and dragging anywhere within a lane on either of its axes (if a unipolar lane), whether zoomed or not.

Right clicking in a lane will introduce a linear write tool, enabling upward and downward fades.

Lane data is written in 0.1 to 100.0 % increments.

Where coarse pitch data is present for example in a note sequencer lane, data moves in semitone increments.

[cmd and] clicking in a lane will randomise its values (within both axes if unipolar).

[alt and] clicking in a lane will clear it.

\*CTRL and click on PC

## 5. Getting to know Zone

### (vi) Lane Tools

To the left of the note and parameter lanes are lane tools. Clicking on any of these icons will select that lane. They function as follows:



**Zoom Icon:** Clicking this icon zooms into the lane, enabling it to utilise the full size of the sequencer window. This is ideal for fine editing.

[cmd and] clicking this icon will randomise the lane preset. \*CTRL and click for PC users.

[alt and] clicking this icon will clear the lane data.

[shift] clicking this icon will advance through available lane presets sequentially.



**Lane Preset Icon:** Will allow selection of any of 35 unique unipolar and 35 bipolar lane presets. There is a basic graphic representation of each lane. These are described in detail in (vii) LANE PRESET LIST.



**Options Icon:** Clicking this will bring up the Lane Options menu with the following options:

**ASSIGN PARAMETER** - Assign any parameter to a parameter lane from a list.

**UN-ASSIGN PARAMETER** - Un-assign any parameter from a parameter lane.

**COPY** - Copy lane data.

**PASTE** - Paste lane data.

**RANDOMISE** - Randomise individual lane data with each click.

**FLIP HORIZONTALLY** - Rotate lane data horizontally.

**FLIP VERTICALLY** - Flip lane data vertically.

**CLEAR STEPS** - Clear lane data but not parameter assignment.

**DESTROY LANE** - The entire lane is cleared. (Only available for parameter lanes, since note sequencer lanes are linked).

## 5. Getting to know Zone



**Erase Icon:** Clicking this will erase the lane data but retain its parameter assignment. This tool is not available in note lanes since they have a common assignment.



**Un-assign Icon:** Clicking this will un-assign the lane parameter but retain its data.



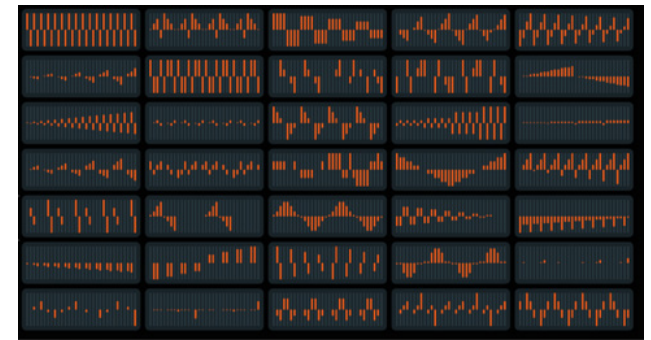
**Lane speed:** Each lane will run at up to 27 different rates (from 8X to 1/128th speed) relative to the global RATE, which itself is a division of the master tempo. If the global RATE is set at 1/16, each of the 32 steps will represent a 16th note value. A lane speed selection of 1X will play that speed within a lane. A lane selection of 2X will play twice as fast and so on.

\*Adjusting lane speed on the fly can sometimes cause lane step playback to un-sync. In this

instance, please re-trigger MIDI data or repress a key.

### (vii) Lane Preset List

#### Bipolar Lane Presets - (TUNE, PAN etc)



Lanes are described from left to right, top to bottom, in numeric order as follows:

- 1.** 'Alternating Sixteenths' - All steps are filled to their maximum range, with the axis alternating at every step.
- 2.** 'Pyramid Notch' - A rise and fall pattern with every eighth step starting at step four, falling into the negative axis.
- 3.** 'Descending Axis' - Alternating sets of four steps, gradually fading.

## 5. Getting to know Zone

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**4.** 'Contrary Pan' - Varying gradients of rising and falling steps across both axes. Great for panning!

**5.** 'Jagged Fall' - Rapid rises and falls across two steps with a short fade.

**6.** 'Subtle Crescendo' - A subtle rise, with gradients gradually getting steeper toward the end of the pattern.

**7.** 'Imperfect Harmony' - All steps at maximum and minimum values, alternating and mirroring the behaviour of their preceding steps.

**8.** 'Doodle' - With interesting shifts between axes, no pattern is presented, but a creative preset for pitch control.

**9.** 'Bounce to the Ounce' - Shifting from alternate positions on both axes, revealing an interesting pattern, repeated twice in the phrase.

**10.** 'Mirrored Crescendo' - A subtle upward fade in the positive axis, mirrored in the opposite axis in the second half of the pattern.

**11.** 'Contrary Crescendo' 1' - A crescendo with alternate steps rising across both axes.

**12.** 'Lemmings' - Repeating every eight steps, a pattern that mirrors itself in the opposite axis every four steps.

**13.** 'Saw Mirror' - Basic saw shapes mirrored in each axis, repeating every eight steps.

**14.** 'Square Riser' - A crescendo characterised by the uniform shifting of axis every eight steps.

**15.** 'Crescendo Dip' - Gradually rising every eight steps, the first step dips into the opposite axis every eight steps.

**16.** 'Contrary Crescendo' 2' - A crescendo with alternate steps rising across both axes.

**17.** 'Pitch Pong' - A varied pattern dipping into both axes, repeating twice.

**18.** 'Puddles' - Making use of the full range of both axes, an interesting linear pattern.

**19.** 'Sine Waves' - A digitised sine wave, starting in the middle of a cycle.

**20.** 'Contrary Sidechain' - A 'sidechain' pattern with the first step of every four dipping into the opposing axis, and gradually decreasing in value.

## 5. Getting to know Zone

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**21.** 'Big Dipper' - Repeating every eight steps, this pattern reaches the mid point and maximum /minimum value of each axis.

**22.** 'To and Fro' - Rising and falling over eight steps, then breaking for another eight steps and repeating again.

**23.** 'Fast Sine' - A digitised sine wave that rises and falls twice.

**24.** 'Arrowhead' - A long fade alternating across both axes.

**25.** 'Negative Riser' - A crescendo across the negative axis with a dip on alternate steps.

**26.** 'Negative Fade' - A fade across the negative axis with a break on alternate steps.

**27.** 'Binary Wave' - Rising from the minimum value of the negative axis to the maximum value of the positive axis with breaks on the first and fourth of every four steps.

**28.** 'Speaker Freaker' - With steps mirrored in alternate axes, a falling pattern across sixteen steps, with a mirrored sequence across the remaining sixteen steps.

**29.** 'Sine Distortion' - A popular digitised waveform with 'background noise' steps.

**30.** 'Blips 1' - Minor 'disturbances' across the positive axis, repeating every sixteen steps. Great for pitch lanes.

**31.** 'Blips 2' - Minor 'disturbances' across the positive and negative axes.

**32.** 'Melody Maker' - A minor leaning pattern which works well for pitch and tuning lanes.

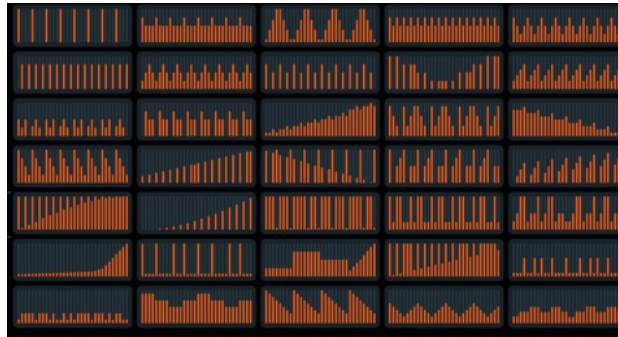
**33.** 'Crab Feet' - An eight step pattern which rises and falls across both axes.

**34.** 'Top and Tail' - Rising to the top of the positive axis and dipping into the negative, repeating every sixteen steps.

**35.** 'Broken Waves' - A 'broken' saw wave pattern repeating every eight steps across both axes.

## 5. Getting to know Zone

### Unipolar Lane Presets (CUTOFF, LEVEL, etc)



- 1.** 'Four to the floor' - Every fourth step is filled to its maximum range starting on step 1.
- 2.** 'Accented Sixteenths 1' - Every fourth step is filled to 75% of its maximum range starting on step 1, with the remaining steps filled to half of their maximum range.
- 3.** 'Up & Down 1' - Rising every four steps and falling uniformly on the following four steps. Repeating to the end of the pattern.
- 4.** 'Accented Sixteenths 2' - Every odd step is filled to 75% of its maximum range starting with step one, with every even step filled to 50% of its maximum range.
- 5.** 'Down & Up' - A fall and rise by 25% every four steps.
- 6.** 'Eighths' - Every other step is filled to 75% of its maximum range starting on step two.
- 7.** 'Up & Down 2' - Rising every two steps and falling on the following two steps. Repeating to the end of the pattern.
- 8.** 'Eighths 2' - Every other step is filled alternately to 75% and 50% of its maximum range starting on step one.
- 9.** 'Symmetry-X' - A sixteen step symmetrical pattern where values gradually rise and fall.
- 10.** 'Sawtooth' - A rising pattern every four steps.
- 11.** 'Teeth' - Repeating every eight steps, a sequence resembling teeth, with a break every three steps.
- 12.** 'Frontchain' - Repeating every four steps with a rest every first step, steps three and four are at a 25% lower data value than step two.
- 13.** 'Analogue Riser' - An upward crescendo with a peak every third step.
- 14.** 'Fall & Rise' - A falling and rising sequence repeating every eight steps.

## 5. Getting to know Zone

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- 15.** 'Shaky Fade' - A gradual fade with a peak on every fourth step.
- 16.** 'Downchain' - A falling pattern, repeating every four steps.
- 17.** 'Altered Rise' - A crescendo on alternate steps with an added step on every sixteenth.
- 18.** '4x4 Fade' - A fade with full values on every fourth step and a skipped value on every step starting from step two.
- 19.** 'Second Step Shuffle' - An upward fade on the first four steps, with second step at minimum value a 'sidechain' pattern on the second set of four steps. Pattern repeats twice.
- 20.** 'Sidechain Crescendo' - A gradual crescendo, with every four steps rising, and a minimum value on every four steps starting at step one.
- 21.** 'Eighths Crescendo' - A steady crescendo with every other step at full value starting at step one.
- 22.** 'Alternate Exponential' - An exponential crescendo with alternate steps at minimum value.
- 23.** 'Full House' - All steps at maximum value with a dip every fourth step.
- 24.** 'The Gap' - An eight step repeating pattern with maximum values dotted with smaller values around 22.5%.
- 25.** 'Skyscrapers' - A sixteen step recurring pattern shaped like a city skyline.
- 26.** 'Sudden crescendo' - A crescendo peaking in the final steps of the pattern.
- 27.** 'Shuffle' - Maximum values perpetuated by drops in level every four, three and two steps.
- 28.** 'Waveshapes' - Various popular waveforms, changing every eight steps.
- 29.** 'Tall Trees' - A crescendo peppered with maximum value steps.
- 30.** 'Uneven Flow' - Lower value steps mixed with higher value steps at odd and even intervals, repeating twice.
- 31.** 'Pitter Patter' - Lower value steps at 10% interspersed with higher value steps at 30%, in a complex pattern that repeats twice.
- 32.** 'Cityscape' - A sixteen step recurring pattern shaped like a city skyline.



## 5.

### Getting to know Zone

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**33.** 'Inverted Saw' - An inverted saw pattern repeating every eight steps.

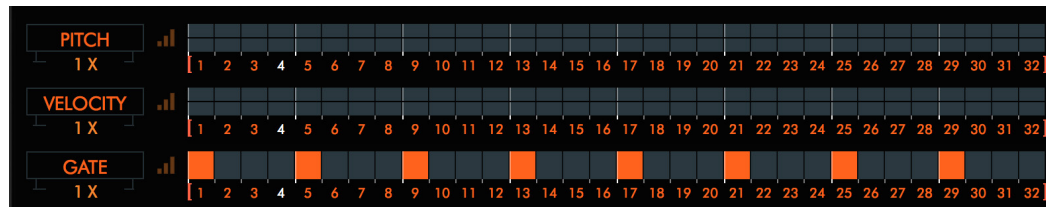
**34.** 'Digi-sine' - A digitised sine wave starting in the middle of a period.

**35.** 'Rise and Fall' - A pattern that rises and falls in even and uneven sets of steps repeating twice.

## 5. Getting to know Zone

### (viii) Note Sequencer Lanes

The note sequencer lanes have permanent assignments. Step sequence L&R locators and lane speeds are also linked.



These lanes function as follows:

#### PITCH

Displays pitch data across two axes in +/- 24 semitone increments.

#### VELOCITY

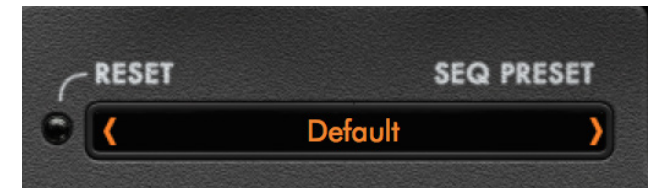
Displays velocity data across two axes in +/- 127 increments.

#### GATE

Displays data in a unipolar lane from 0 -101% where lower values are shorter notes and higher values longer notes.

These lanes have only some of the LANE TOOLS options of parameter lanes.

### (ix) Global Lane Presets



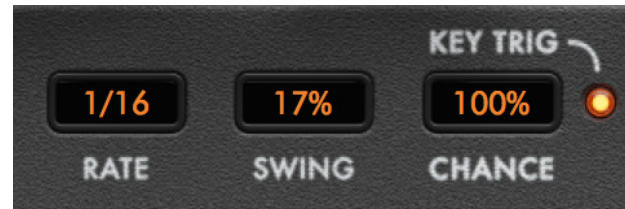
25 global lane presets are provided, which give a range of data values across multiple lanes.

Some presets have parameter assignments while others simply provide data for control assignment, for example alternating steps on/off across empty lanes.

Clicking the RESET LED will clear ALL lane and parameter assignments without warning!

## 5. Getting to know Zone

### (x) Master Grid Controls



The sequencer grid has the following master controls:

**RATE** Sets the rate to which all lane speeds are relative. This rate is a division of the timing of the Zone global master tempo. This value can be click and dragged giving up to 27 different speeds.

**SWING** Adjusts the sequencer rate swing +/- 100%. A negative swing plays 'behind' the beat, while a positive swing plays ahead of the beat.

**CHANCE** Adjusts the probability of note lane sequence step playback. A high probability plays all steps, while a low probability plays no steps.

### (j) FX Section



Zone has a comprehensive FX section with every parameter knob of each of the 20 available FX types sequence-able on grid.

There are four insert FX types, which can be selected by clicking on the relevant tab. There is a MIX slider below which adjusts the dry/wet balance.

When an FX type is selected, Zone will automatically move the MIX slider to a preset position in order for the effect type to be heard.

The FX can be ordered before or after the EQ section by clicking the Zone logo and checking the box next to 'EQ BEFORE FX'

## 5. Getting to know Zone

Each FX type has three knobs CTRL 1, CTRL 2 and CTRL 3 to control its parameters.

parameter of the new FX type selected. If a CTRL knob is unused in an FX type it is 'greyed' out.

Once an FX CTRL knob is assigned to the sequencer grid and that FX type is changed, the assignment CTRL knob will change to control the

The FX types are as follows and the CTRL knobs take the following functions:

<b>Modulation Delay (MOD DELAY)</b>				
Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Delay Time (bar fraction)	1/128	2	3/16	1
Feedback (%)	0.0	100	50	2
Modulation (%)	0.0	100	50	3

<b>Stereo Delay, Ping-Pong L-R, Ping-Pong R-L</b>				
Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Delay Time L (bar fraction)	1/128	2	3/16	1
Delay Time R (bar fraction)	1/128	2	3/16	2
Feedback (%)	0.0	100	50	3

## 5. Getting to know Zone

### Bouncing-Ball Delay Up, (BALL UP) Bouncing-Ball Delay Down (BALL DOWN)

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Delay Time (bar fraction)	1/16	2	1/2	1
Feedback (%)	0.0	100	50	2
Bounces	1	16	8	3

### Raindrop Delay (RAIN DROP)

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Delay Time (seconds)	0.025	0.100	0.050	1
Feedback (%)	0.0	100	50	2
-	-	-	-	

## 5. Getting to know Zone

### Stereo Width Enhancer (STEREO WIDTH)

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Width (%)	0.0	100	50	1
-	-	-	-	
-	-	-	-	

### Small Reverb, (REV SMALL) Medium Reverb, (REV MEDIUM) Large Reverb (REV LARGE)

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Pre-Delay Time (seconds)	0.0	0.250	0.05	1
Decay (%)	0.0	100	50	2
Damping (%)	-100	+100	0.0	3

## 5. Getting to know Zone

<b>Chorus</b>				
Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Voices	1	6	2	1
Frequency (Hz)	0.25	5.0	1.0	2
Depth (%)	0.0	100	25	3

<b>Flanger</b>				
Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Range (%)	0.0	100	50	1
Frequency (Hz)	0.05	5.0	0.5	2
Feedback (%)	-100	+100	+50	3

## 5. Getting to know Zone

### 4/6/8/12 Pole Phaser (PHASER 4/6/8/12)

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Depth	0.0	1.0	0.5	1
Frequency (Hz)	0.05	5.0	0.5	2
Feedback	0.0	100	50	3

### Barber-Pole Phaser (BARBER POLE)

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Frequency (Hz)	- 5.0	+ 5.0	+ 0.25	1
Feedback (%)	0.0	100	50	2
-	-	-	-	



## 5. Getting to know Zone

### Compressor

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Attack (seconds)	0.001	0.250	0.125	1
Threshold (dB)	-48	0	-24	2
Makeup (dB)	0	+ 12	+ 6	3

### Decimator

Parameter	Min. Value	Max. Value	Default Value	CTRL Knob
Sample Rate (Hz)	100	22000	10000	1
Bit Depth (bits)	1	12	8	2
-	-	-	-	

## 5. Getting to know Zone

### (k) Macros Section



Zone allows up to ten individual controls to be assigned to each of its Macros to be controlled by one knob.

The Macro knobs take on MIDI CC Values 2 - 7 ( CC 1 is reserved for Modulation Wheel assignment) where Macro 1 is CC value 2, Macro 2 is CC 3 and so on.

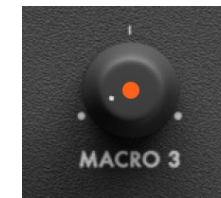
A Macro can be assigned either by dragging an object label onto a Macro knob (a blue box will appear around the Macro marking it ready for assignment) or by right clicking on the knob and manually selecting the assignment from a list in the

ATTACH menu. Please note some assignments such as LFO Freq.\* can only be assigned from menus.

\*LFO Freq. can only be assigned if the value is un-synced to tempo.

Values can be unassigned individually by right clicking a knob and selecting the parameter under the DETACH menu, or outright by clicking DETACH ALL.

Please note that when Macros are assigned to the parameter sequence grid they will automatically be assigned to a unipolar lane, regardless of the parameters assigned to them.



## 5. Getting to know Zone

When a Macro has a valid assignment, a white rectangular box will appear around its label name. Macros can also be assigned to the parameter sequence grid. When this is the case, an orange dot appears in the middle of the Macro knob as shown.

When a Macro has an assignment, moving the Macro knob will take priority over the original parameter control. So for example, if CUTOFF is assigned to a Macro, the CUTOFF knob will no longer function unless that value is detached. If the same parameter is attached to two different Macros, the Macro with the higher number takes exclusive control of that parameter. For instance: OSC 1 Shape is assigned to Macro 1 & 3. Only Macro 3 will be able to control it.

### (l) EQ Section



Zone has a 3-band parametric EQ with independent Q controls for each band. The EQ section can be configured to appear after or before the FX section in the signal chain.

The knobs control gain (-10dB to +10dB) per band. The EQ bands\* are broken down as follows:  
 Low shelf at 250 Hz  
 Bell or Peak filter at 750 Hz  
 High shelf at 4kHz

\*The Bell filter is a constant Q filter

### (m) Master section



The MASTER section contains the master pan and gain controls.

Zone's effective gain range is from -80dB to +10dB.

## 6. Control Behaviour and Key Commands



On hovering a mouse cursor over any of Zone's knobs, faders or sliders, the current control value and parameter type will display.

Double clicking a knob, fader, slider or text box allows a value to be entered numerically.

As a general rule, every device in Zone behaves in a default fashion as follows:

[alt] clicking a value will return it to its default or reset position.

[cmd] clicking a value will affect its click and drag value to shift in shorter increments.

\*[CTRL] and click for PC users.

## 7. Presets

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In Zone, presets are ordered by their category type as follows:

**Arp** - Arpeggios - usually sounds that have parameter and note sequence lanes assigned and are designed to be played in sync with a beat.

**Bass** - Bass sounds, some of which also make good lead tones.

**Best Of** - A selection of our personal favourite presets within Zone. These presets can also be found in their relevant category folders.

**Drum & Beats** - Individual drum hits and beats generated using parameter or note sequencer lanes.

**FX** - Presets intended to be used as atmospheric effects or drones, usually with no identifiable pitch or tone character.

**Lead** - A selection of synth lead sounds, some of which also double as bass sounds.

**Pads** - Synth pads and strings, designed to be played polyphonically.

**Synth** - Workhorse synthesiser sounds, spanning a range of classic tones to more unusual textures using parameter data.

Each preset name carries the initials of the sound design who created it, as follows

**SR** - Sharooz Raoofi - A producer, sound designer, inventor of Zone and founder of Sample Magic.

**AH** - Andreas Håberlin - Pianist, composer and music technologist with numerous sound design credits.

**CD** - Crystal Distortion - Founding member of legendary international rave crew Spiral Tribe.

**MVM** - Milan Van Der Meer - A core member of the Zone coding team, Moditone.

**LLR** - Louis La Roche - DJ/producer with illustrious remix and production career.

**RS** - Rob Sparx - A seasoned sound design veteran and bass music producer.

**DC** - Dean Coleman -DJ/producer with numerous plaudits including remixes and productions for Deep Dish, Roger Sanchez and numerous others.

**AP** - Artemiy Pavlov - Founder of Sinevibes, the providers of DSP for Zone, and a former member of the Roland sound design team.

**NH** - Niall Hoban - A sound designer and core team member at Sample Magic.

## 7. Presets

Zone presets store all possible data - synth settings, Macros, parameter /note lanes, FX settings etc, but NOT user wavetables. These must be kept in their assigned location in order for Zone to read them. If removed, Zone will not be able to search for them.

If a preset is removed from its location, you will have to re-launch Zone in order for the change to display in the preset browser. If a preset is deleted, Zone will play a default patch in place of that sound, until re-launch is initiated.

### Creating Unique Presets

The key to creating unique sounds in Zone is by assigned and writing parameter data that is not normally practical or possible using standard DAW automation lanes or LFOs. Try the following to create interesting presets:

- 1.** Run all lanes at different speeds and numbers of steps to create 'polyrhythms' across parameters.
- 2.** Try negative swing settings to play sequences behind the beat.
- 3.** Toggle sequence grid key trigger on/off to further randomise synth settings.

**4.** Assign all Macros to parameter lanes and randomise the sequencer grid to flip a tone beyond recognition.

**5.** Experiment with OSC MOD modes, particularly Exponential FM settings, which when adjusted even slightly can significantly alter tones.

**6.** Sequence NOISE values from minimum to maximum on the sequencer grid to create drum loops and hits.

**7.** Experiment with all available FILTER types. Particularly those with a 48dB/octave slope. On vocal waveforms, robotic speech synth sounds can easily be created.

**8.** Lock the sequence grid and flip presets to get a unique take on the sounds already contained within Zone!

## 8. Troubleshooting / FAQ

### Q. Why are knobs and sliders unresponsive to click?

**A.** Please check knobs and sliders have not been assigned to a Macro or to the sequencer grid. If they have they will not respond to movement or automation.

### Q. Why is my CPU higher on some presets?

**A.** The Zone unison mode is a 'true' unison voice generator in the sense that extra voices are just that. There is no phantom replication of additional voices to save on CPU. Try reducing the number of unison VOICES, or adjusting your audio buffer setting to around 256 or 512. Reducing the number of voices under VOICE MODE or keeping audio QUALITY to NORMAL will also reduce CPU values.

### Q. My loaded wavetable has disappeared!

**A.** Please ensure you are keeping your User wavetables in the same location and file path if you switch machine or hard drive, otherwise Zone has no mechanism to find them. Clicking USER/RESCAN on the waveform selection menu will cause Zone to rescan your drive, so custom tables appear in the dropdown menu.

The location for user wavetables is at:

#### **MAC:**

HD//Library/Application Support/Audiaire/Zone/Wavetables/User

#### **PC:**

C:\Users\\AppData\Roaming\Audiaire\Zone\Wavetables

### Q. Zone's audio output is clicking with each key press. Why?

**A.** Check the ATTACK and DECAY settings on both the AMP ADSR and FILTER ADSR. Move the ATTACK knob a few increments until the clicking stops.

### Q. The Zone internal sequencer is not starting in time with my DAW. Why?

**A.** Ensure you have written MIDI note data and that you are activating that data on MIDI note 'on' in order to start the Zone internal sequencer. The easiest way to do this is to restart playback from the beginning of an audio loop or section.

## 8. Troubleshooting / FAQ

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### **Q. Zone sequencer lanes are going out of time with each other. Why?**

**A.** Sometimes when lane speeds are changed on the fly while a sequence is playing and lanes are running at a series of different rates, lanes can fall out of time. Restart playback to remedy this issue.

### **Q. I can hear audible noise or unwanted distortion on voices. Why?**

**A.** Check the FX settings if using Decimator or Filter Q settings if using the Phaser or Bandpass Filters. Sometimes when set at high Q values, these can self-oscillate and cause wild distortion!

### **Q. LFO Sync amount is not assignable. Why?**

**A.** LFO sync amount is only assignable if it is not synced to tempo.

### **Q. The chorus effect clicks when adjusted. Why?**

**A.** The chorus VOICES knob will cause audible clicking as it is switching modes and to do so needs unique DSP to be loaded per step. Think of it as a mode switch rather than a knob control.

### **Q. I'm bored. What should I do!?**

**A.** Click the sequencer dice icon to randomise all lane presets. Even the most vanilla sounds can usually be skewed beyond belief.

### **Q. When clicking the Lock icon in the Sequencer Grid, why do some presets do not display any lane data?**

**A.** This will indeed be the case if the playback mode setting for that preset is not set to PARAMETR or PRM & NOTE.

### **Q. My presets clip easily. Why!?**

**A.** Because there is so much modulation and variation happening in the sounds, particularly with filter Q, it is very hard to set the ideal desired preset gain for sounds without them appearing too quiet compared with other sound sources. Experimentation is key!

### **Q. The note sequencer won't play. Why?**

**A.** Please make sure VOICE MODE is not set to mono!




## 9. Credits

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Click the ZONE logo to access full credits

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