ZERO-G

ΞNIGMΛ

R-EVOLUTIONARY SOUND CREATION

VST PLUG-IN & STANDALONE INSTRUMENT

Enigma is a 6-voice sample instrument that is designed to create lush ambient pads/drones and cinematic textures, amongst a variety of other things. - In this manual we will show you how to use this incredible instrument and highlight some of its features.

ENIGMA INSTALL GUIDE

Download and unzip all the files.

Windows:

The VST3 plugin needs to be placed here:
C:/program Files/Common Files/VST3/ZeroG/Enigma.vst3

The StandAlone should go here:
C:/Program Files/ZeroG/Enigma.exe

Mac:

The Mac VST3 needs to be placed here:
Macintosh HD/Library/Audio/Plug-Ins/VST3/Enigma.vst3

AU needs to go:
Macintosh HD/Library/Audio/Plug-Ins/Components/Enigma.component

The StandAlone should go here:
Macintosh HD/Applications/ZeroG/Enigma

Make sure that your DAW can locate the files for the VST. Each DAW is different so check your VST path settings and select the right folder where the VST is.

Once you launch your DAW and load the plugin for the first time. – Enigma will ask you for the HR files (these are the seven sample library files that are named Enigma_1_0_0_Samples.hr1 etc)

Simply follow the on-screen instructions to select the first one (Enigma_1_0_0_Samples.hr1) - it will then ask you for a directory where you wish the samples to be installed.

After a short while the installation will complete. IMPORTANT: at this point, close the plugin and restart the DAW.

On restart, the plugin will load, and you are good to go!

SYSTEM REQUIREMENTS

Windows 7,8,10 or above
4 Gb ram / 7 Gb free space on the sample drive

Mac OS X 10.9.5 or above
4 Gb ram / 7 Gb free space on the sample drive
macOS Catalina / Big Sur Ready
Not Mac M1 Native

THE MAIN WINDOW

This is the default loading window of the instrument, known as "MAIN"

This page features the heart of the plugin - the XY pad. It also contains various macro controls.

The four corners of the XY pad numbered 1-4 represent the four main voices of the currently loaded patch. You can move the gimbal (cursor) to any position inside the yellow cube to create movement between these four voices, from the super-subtle to the ultra-extreme.
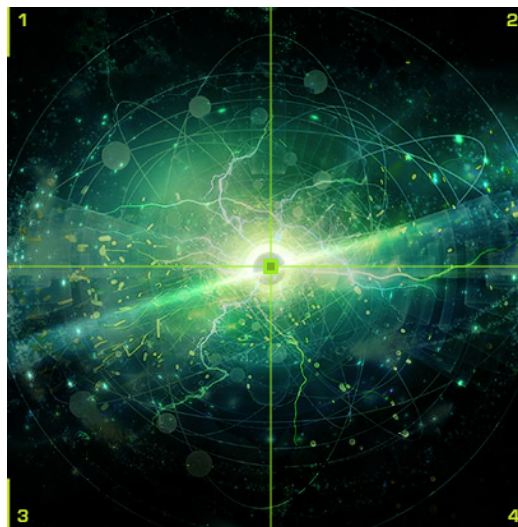
There is also an **Edit** function that lets you record your own gimbal movement pattern using the mouse. Clicking on the "E" symbol to the left of the XY pad unlocks a panel with various self-explanatory record/playback modes.


The **Randomise All** function (top right corner of the XY pad) will do just that. It will randomise the sounds to give you a brand new, mystery sound. **Randomise Group** lets you randomize certain sounds within a bank of sounds.
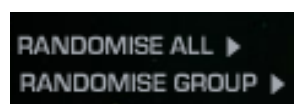

The four **Macro** controls below the XY pad are a final setting for the preset as a whole. Essentially this is a low pass Filter with Resonance and LFO that lets you control the amount of depth and speed. These knobs can be automated inside your DAW or assigned to a controller of your own choice.

The **Patch Browser** is displayed at the top of the window, clicking on here opens the browser window where you can load any of the factory presets. - FB stands for Factory Bank, and PD tells you that the preset is from the 'Pad' category. This will change depending on what type of instrument patch you have loaded.
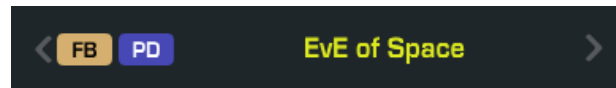
The **Page Switches** - these are used to change between the Main page (the XY pad), the Editor page, where you can edit most of the values for the patch/sounds and the Effects page where you can dial in some effects as you wish.
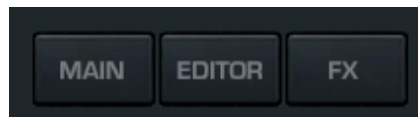
The **Global Controls** in the top right-hand corner of the interface apply to all four voices together:

WIDTH - this will make the stereo spread wider.
SPREAD - this delays the left/right side slightly offering a variation of stereo sound.
VELO - this alters the amount of key velocity – with the knob fully clockwise the harder you hit the note the louder the resulting sound. Fully counter-clockwise the key velocity effect will be minimal.
SAT - this is a pre-built-in saturation on output. It is subtle by design and can offer a slightly harsher sound depending on the patch.
VOL – this is the master volume.

THE EDITOR WINDOW

The Editor Window gives you a whole host of functions to enable you to adapt a sound to your liking. This allows you to modulate and experiment with sound design to your heart's content!

In the Editor Window you will find: 2 Filters and their respective LFOs; a Matrix system that lets you route what you want on each sound; amp & filter envelopes to control the sound input; a dedicated SUB option; a dedicated Sample playback option & tremolo/vibrato & Unison controls. We will now break all these down to fully understand what they can do….

MATRIX & VOICES

Each voice has its own matrix which enables you to be selective on what routing you want each sound to have. In the above example, Voice 1 & 3 have been sent to Filter 2; Voice 2 has been sent Filter 1 and Vibrato: Voice 4 has been reversed. Additionally, Voice1 has been sent to Tremolo.

V1 to V4 - this is the voice select button. When they are coloured green, they are enabled. When grey they are disabled.
VOL - This knob controls the volume of the selected sound
PAN - This knob controls the panning of the sound across the stereo field
OFFSET – this one lets you set the starting point of a sample. Up to 80% of the sound can be selected as the start point. This can yield some great results depending on the sound being used.
F1 - This sends the sound to Filter 1
F2 - This sends the sound to Filter 2
Rev. - This reverses the sample for unique sound effects.
VIB - This sends the sound to the Vibrato
TREM - This sends the sound to the Tremolo

The small knob on the right of the matrix is a Pitch knob. You can change the pitch within a range of -12 to +12 semitones.

If you click on the small piano key to the right of the Pitch knob a pop-up box will appear that will let you change the note range of each Voice. This enables you to split each voice into smaller groups across the keyboard if you so wish. This function could be useful if, for example, you wanted a harsh sound at the lower end of the keyboard, but a light beautiful sound at the higher end of the keyboard and maybe another voice in between that overlaps the other voices.

ENVELOPES
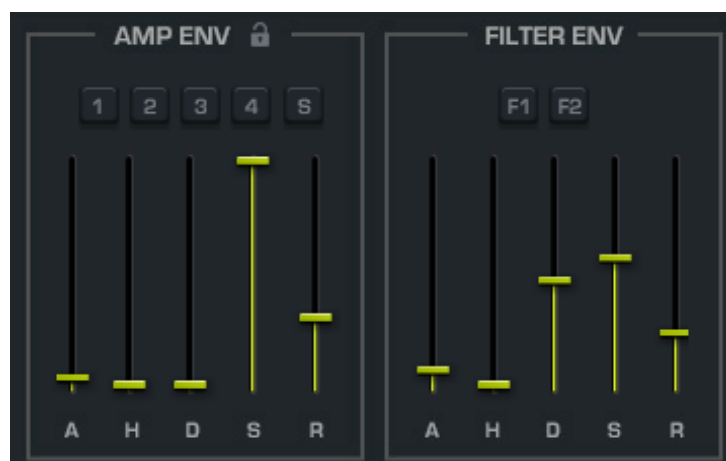
Enigma comes equipped with 2 Envelopes - an Amp envelope, and a Filter envelope. The Amp envelope, as you would expect, controls the loudness of the sound over time. Whilst the Filter envelope controls the level of the filter over time.

Both envelopes are AHDSR, these are the classic Attack, Hold, Decay, Sustain & Release and are self-explanatory

Above the Amp Envelope AHDSR sliders are 5 buttons numbered 1-4 and S. These represent the four voices plus the Sub (S) voice. Clicking on one of these buttons enables you to adjust the envelope for that particular voice.

Above the Filter Envelope AHDSR controls are 2 buttons named F1 and F2. These represent the two filters. Clicking on one of these buttons enables you to adjust the envelope for that particular filter.

The amount of Filter envelope is controlled by the ENV knob in the Filter section (see below). The ENV knob can be used like a wet/dry knob for the amount of envelope - you can have it fully engaged, fully off, or use just a small amount of envelope if you so wish.

FILTERS
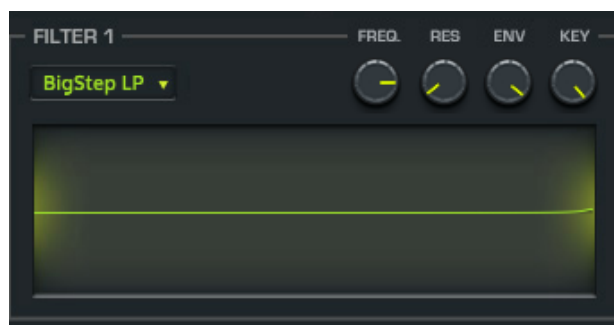
Enigma comes with several filter types. Once one of the Voices has selected either F1 or F2, then that filter is engaged. The use the drop-down box to select your desired filter.

FREQ- This controls the frequency range of the filter.
RES - This controls the resonance of the filter.
ENV - This controls the filter envelope amount.
KEY- This controls how much the keyboard velocity controls the filter.

Filter types included: Vibe LP, Vibe HP, Cream LP, Milky HP, Sour N, Sugar BP, Alien Rez, Big Step and Resistor

LFO

The LFO is a Low Frequency Oscillator that controls or modulates the filter that it is attached to (ie LFO 1 controls Filter 1 etc. Each LFO has several controls:

First, the LFO has a SPEED knob that can be set to increments of time based on the tempo of your host DAW (when set to SYNC). If SYNC is disengaged, then the LFO rate will be freeform.
The DEPTH knob controls the amount of LFO applied to the filter.
The FADE knob determines how soon the LFO reaches its full depth – if the knob is fully clockwise there will be a few seconds before the LFO reaches its peak whereas counter-clockwise, the LFO will be instant.
If the RETRIG button is engaged, then every time a key is pressed the LFO will start from the beginning. If not, then it will be on its own continuous cycle.
As mentioned above, the SYNC button will synchronise the LFO to the host BPM of your DAW.
The 1 SHOT mode lets you play the sound and trigger the LFO just once at its start, or until the next keypress.

The drop-down menu has various LFO shapes including sine, triangle, saw, square and random. CUSTOM lets you draw your own LFO so you can create your own custom LFO shape. The small arrow to the right of the graphic opens up a larger window so that you can draw in the shape you wish with greater accuracy. You add points by clicking on the line and remove points by double-clicking on a point. You can also add curves by using the mouse wheel or right-clicking on a line and moving it.
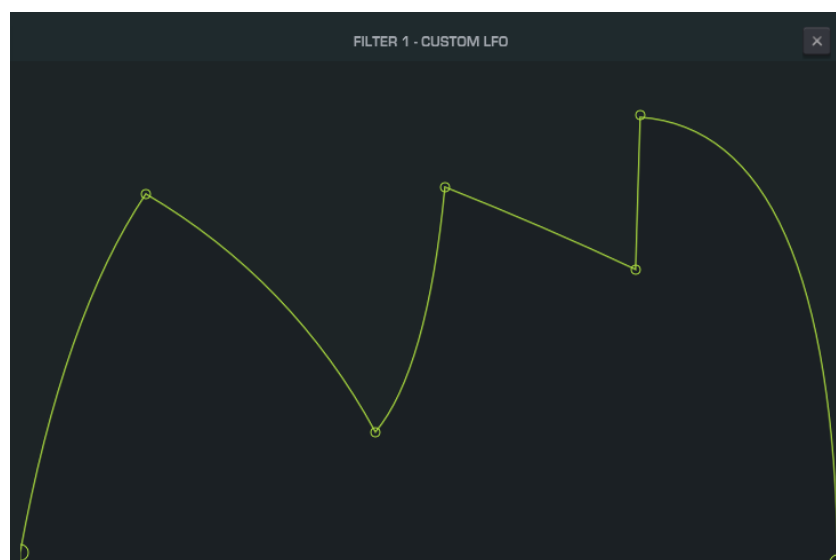
SUB

This is also a further sound source - a SUB voice. This was designed for one reason only - to offer low end substance to the sound that you are working on (especially for Pads, Atmospheres and Drones). This is usually a Sine wave and most presets have this set only to the lower part of the keyboard so that it does not get in the way of the higher end material of the patch (you can of course change the SUB note range if you wish using the keyboard icon as with the other voices).

The Sub contains the same matrix as the normal voices, so you can still route this as you wish.

TREM / VIB
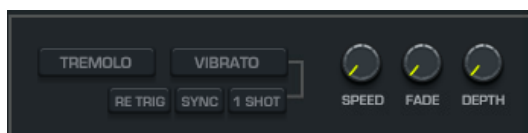
The Tremolo/Vibrato can be used as freely as you wish. Just remember to make sure that the sound source is selected on the matrix.

Tremolo will change the volume of the sound, while vibrato will change the pitch of the sound.

You can set the SPEED of either (again with sync on or off), the fade in with the FADE knob and the DEPTH of each as you wish using the appropriate knob.
The FADE is useful on things such a vibrato, where you may want a lead sound to perhaps start to oscillate like a vocal after a few seconds. You could also assign your controller to the speed knob for interesting sounds using the Assign and Learn MIDI CC (right mouse click on the knob in question).

UNISON
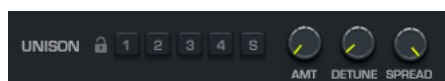
Unison engine allows you to multiply the voice, detune it and then spread it across the stereo field. Depending on the sound source this can make the sound richer or add a chorus/flange-like effect. The numbers represent the sound source (voices 1-4 plus sub), - so if you want unison on Voice 1, then press the icon for 1.

AMOUNT - how many unison voices you want, from 1 up to 8 voices.
DETUNE - the amount of detune, from 0 to 6 semitones.
SPREAD - the amount of stereo spread the resulting sound has (unison spread).

CONTROL SECTION
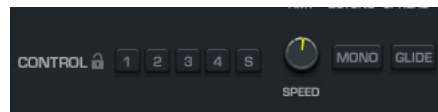
The Control Section allows you to add a GLIDE to each of the 5 voices. The SPEED control lets you dictate how fast that glide takes between one note and the next. Depending on your own performance/sound you may want to change this to your liking. While MONO, simply makes that particular voice monophonic only. (This can be good for basses and leads, etc)

WAVE PLAYER
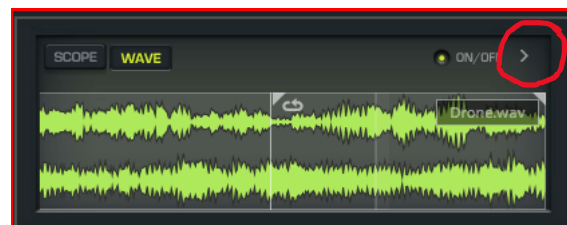
This is a special feature of Enigma. in that it is a loop player that can enhance a sound by adding ambience to it in various forms. You can also drag and drop any sound sample on this to it to create your own loops.

There are 2 displays: SCOPE and WAVE. Scope shows a real-time display of the sound being played by Enigma. It is simply a utility device to show you the sound being played.

WAVE, however, displays the selected sample (from the selection dropdown) or that you have drag and dropped from your own library. Click on the arrow in the top right of the box (circled in red in the above picture) to enter the Wave Player Edit screen.

VOLUME – adjusts the volume of the Wave in relation to the other sound sources (V1-4).
ATTACK and RELEASE have the same functions as on the AHSDR envelope.
You can engage a FILTER of your choice by clicking on the filter light if you wish to darken or brighten the sound or anything in between.
The FREQ and RES controls have the same function as Filter 1 and 2.
PITCH lets you set the pitch of the sample to +12 or -12 semitones.
LOOP enables loop playback of the sample.
You can also drag the loop bars left/right on your own sample to set your start/end time or loop points.
(Note: If a sample is already pre-looped it will display the loop points automatically and cannot be adjusted).

To use your own sample, simply drag & drop it onto the WAVE Window.
Or you can select any of the provided samples from the drop-down list in the centre of the screen.

The WAVE voice is not key tracked and was designed for ambient drones or to add to a background sound, atmosphere or effect. It is useful for things such as nature sounds, traffic, cityscapes and rumbles, etc.

FX PAGE

Enigma comes with a complete FX Section which includes 20 convolution reverbs. The FX Rack page contains our advanced, flexible FX Rack. The following section describes all of the available effects. The FX Rack is accessible by clicking on the second FX button at the top left of the Main or Editor Page.

FX included are:

CONVOLUTION - this is a pre-baked reverb effect that can do anything from small reverbs to large dense chambers.
PHASER – a classic retro phaser vibe that mixes frequencies together for a self-modulation effect.
DELAY – a standard stereo delay.
REVERB - different from the convolution reverb, it has controls for level, damping, width, and size.
UGLY BETTY - this is a compressor at heart, but if set correctly it can really dirty the sound!

EQ - this is an advanced EQ that can really shape your sound. If you click on the small arrow to the right of the display you can access a larger window view of the EQ graphic where you are able draw the EQ curves in greater detail for incredible sound sculpture possibilities.
CHORUS – a classic chorus effect
WAVE SHAPER - This is a complex distortion effect with lo-pass, hi-pass, gain and bit reduction controls. It can really dirty the sound if you desire.

All these effects are set up in parallel to each other. This means that order is not important, and you can of course, use more than one instance of the same FX type.

All controls are fully midi controllable by right-clicking on the control and assigning it to a MIDI cc.

SETTINGS
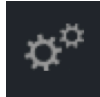
By clicking on the cog icon on the upper right of the interface you can access the SETTTINGS page.

This page is mostly concerned with Audio Driver, Output and Sample Rate settings that are for use in standalone mode version and not so important for the plug-in version itself.

The important things to note here are the PITCH WHEEL AMOUNT settings, where you can set the amount that the pitch wheel changes the pitch of the sound. Moreover, you can set this differently for each voice for a rather unique twist!

The INFINITE ROUND ROBIN (IRR) is global, and thus emulates that found in older analogue synths.
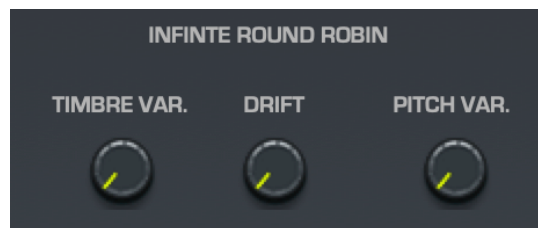
TIMBRE VARIATION - will alter the start point on every note press.
DRIFT - will pitch the sound very slightly.
PITCH VARIATION - will allow the note to be pitched ever so slightly on each key press.

This is incredibly subtle, however if pushed all clockwise you can get some interesting lo-fi sounds!
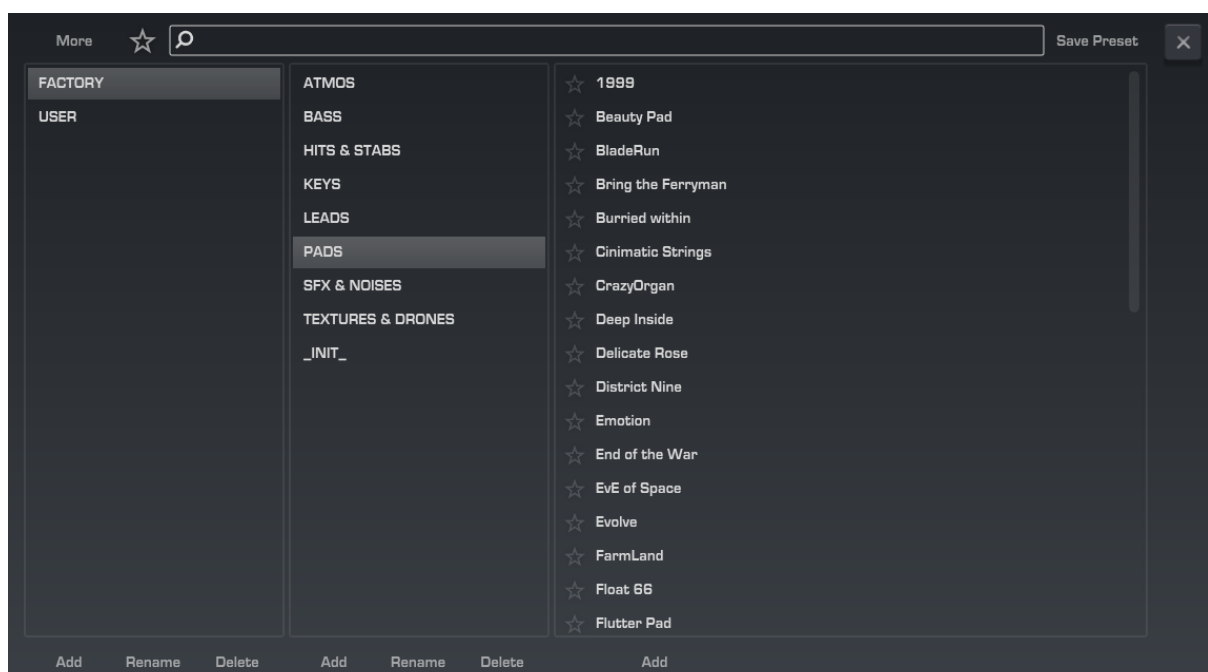

X AND Y CONTROLLERS.

This relates to the XY pad on the MAIN page. You can assign a midi number to the X and Y controllers (click the LEARN button) and then automate their movement in your DAW.
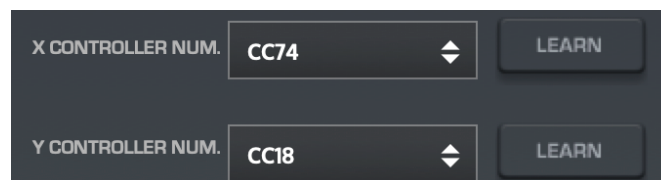
BROWSER

The BROWSER window is accessed by clicking on the Patch name in the centre of the screen. Here you can scroll through all factory presets. Click on FACTORY then chose an instrument type from the sub-menu. Then click on a patch name and it will load into Enigma. Click on the X button to close the browser. If you would like to import or export your presets then click on the More button on the top left of the screen. This will offer you variation options in this respect.

To add your own sounds to Enigma once you have created something you like that you would like to keep. Click on the Folder name that you would like to save it to then click the 'Add' button, name your new preset and press OK. You have now created the first of many amazing and unique sounds that you can create with ENIGMA!

ENIGMA UNINSTALL GUIDE

If for some reason you need to uninstall all the Enigma Files here are the instructions.

Windows:

The VST3 plugin needs to be removed from here:
C:/program Files/Common Files/VST3/ZeroG/Enigma.vst3

The StandAlone should be removed from the Program Files folder.

You need to delete the configuration files from here:
C:/Users/<user name>/AppData/Roaming/The Synth Factory/Enigma

-- You can safely delete the Enigma folder

Mac:

The Mac VST3 needs to be removed from here:
Macintosh HD/Library/Audio/Plug-Ins/VST3/Enigma.vst3

AU needs to be removed from here:
Macintosh HD/Library/Audio/Plug-Ins/Components/Enigma.component

The StandAlone should be removed from your Applications folder

You need to delete the sample files from here:
Macintosh HD/Music/The Synth Factory/Enigma/Samples

SUPPORT

We are here to assist you if you should ever run into any problems. - feel free to email
andy@thesynthfactory.com or support@zero-g.co.uk