# **Extreme Environments**

Extreme Environments is a unique sound design tool that allows you to quickly and easily create dense and complex ambiences, ranging from musical pads through to realistic room tones and extreme sound design to give you almost limitless sound design capabilities.

Extreme Environments (EE) is made up of the following elements.

- Extreme Environments Kontakt Instrument with custom GUI and over 150 presets.
- Audio loops. Available as AIFF Apple Loops or Acidized wav files.
- Impulse responses for use with any convolution reverb.
- Logic EXS24 Instruments and Reason NN-XT Instruments.
- Space Designer Presets.
- Logic Channel Strip Settings.

The Kontakt instrument combines a state-of-the-art user interface with the loops and impulse responses to give you a highly flexible tool for creating a huge variety of beds, drones, pads and FX. It comes with over 150 presets.

The EXS24 instruments, Apple Loops, Space Designer presets and Channel Strip settings give Logic users the option of creating their own combinations of sounds and FX within Logic as well as access to a range of preset options.

You can also use the raw audio loops as building blocks for your own beds and drones, whereas the impulse responses can be loaded into any number of commercially available convolution reverbs to make a large library of extreme reverbs.

As it is the most interesting and easiest way to use EE to its full potential, we'll look at the Kontakt Instrument first.

### **Extreme Environments Kontakt Instrument**

The core of the instrument is the three channels where you can select any one of the 142 loops. The only difference between the three channels is that channel 2 plays all the samples in reverse for added variety.

For each channel you can then control the pitch, time stretch (only works for presets in "Time Machine" mode, more on this later), amplitude / filter envelopes, saturation and reverb send.

All three channels are then mixed together and put through master high pass and low pass filters, then finally a limiter.

The other key part of the instrument is the convolution reverb, which any of the three channels can be sent to. You can choose any one of the 86 bespoke impulse responses, ranging from straightforward to extreme sound design. This adds great depth and atmospheric detail beyond the standard reverbs you might usually come across.

Possibly the easiest way to get a feel for it at first is to browse the many presets and hear what it can do. Then you can start getting to grips with the controls and play around with them.

You will notice that the presets are divided up into two sections. Time Machine Mode and Sampler Mode. The Time Machine Mode presets use the Kontakt Time Machine Engine to time stretch the samples when you play them up and down the keyboard. This means you can use the GUI to control pitch and speed independently giving lots of interesting tonal possibilities. The Sampler Mode presets use the classic sampler mode, which speeds up and slows down the samples. So with presets in this section the Speed control will have no effect.

On loading up a preset you will see a GUI with various controls. We'll go through them here.



## Controls for channels 1, 2 and 3

#### **Channel On/Off**



At the top left of each channel is an on/off toggle to choose whether or not the channel is active. If its not needed you can switch the channel off to save memory and CPU.

### **Sample Select**

Across the top of each channel you will see the name of the sample currently selected. Just click on the name to bring up a pop-up menu and choose any sample you like. The samples are in two groups, Tonal, for all tuned musical sounds and FX, for more abstract sounds.

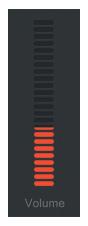
#### **ASDR** and Pan



The ADSR envelope is used for controlling the amplitude of the sample.

The Pan control allows you to place the samples anywhere within the stereo field.

#### Volume



Controls the volume of your selected sample. Note: As we'll see later the reverb send is a "Pre Fader" control so even with volume right down you will still hear any signal sent via the Reverb slider below.

### Pitch On/Off

When on the pitch of the sample will be controlled via keyboard midi information. But when set to off it will be constant. This can be useful, for example, with some FX where you may not want the pitch to change with different notes.



### **Tuning Dial**

Using this dial you can re-tune your sample to plus or minus 36 cents. Note: As previously mentioned, we are using Kontakts time machine engine, so the length and 'speed' of sample will note change, just the pitch information. This can lead to some interesting effects, especially at the higher and lower extremes of pitch.

#### Speed

This controls the speed of the sample independent of pitch, giving "time stretch" style effects. NOTE. This will do nothing when presets from the Standard bank are loaded.

#### **Drive**

Adds saturation to the signal FX chain. As this is the first part of the chain, the distorted signal will then be sent down the Reverb send and through the filters.



#### Reverb

This is a reverb send for the convolution reverb. As noted before its a "pre-fader" style send. So even with the Volume of the sample at zero a signal will still be sent, allowing you to have a completely "wet" reverb signal with none of the original sample heard.



#### LP Filter

Controls the cutoff of the low pass filter.

#### LP Res

Controls the resonance of the low pass filter.

#### **HP Filter**

Controls the cutoff of the high pass filter.

#### **HP Res**

Controls the resonance of the high pass filter.

#### **ADSR Filter**

An ADSR envelope that can be assigned to both the low pass and high pass filters as desired using the controls below.

### LP Env

Determines how much of the ADSR envelope control signal is sent to the low pass filter.

#### **HP Env**

Determines how much of the ADSR envelope control signal is sent to the high pass filter.

## **Master Controls**



### **Impulse Response Select**

Here you will see the name of the current impulse response used for the convolution reverb. Just click on the name to bring up a pop-up menu allowing you to select a new impulse response.

#### **Reverb Size**

This stretches the current impulse response to extend or reduce the length of the reverb.

### **Pre-delay**

This adds a small delay between the direct signal and the output, allowing for simulation of the delay that occurs between hearing a direct sound and the first reflections of a distant wall etc.

### **Damping**

Simulates the hardness of reflecting surfaces, allowing you to 'soften' the environment, making a duller or softer toned reverb.

#### **Master Limiter**

A limiter to control the combined final mix of sounds. This allows you to boost sounds that are getting lost and put a limit to sounds that are too loud.

#### **Master LP Filter**

A final master low pass filter.

#### **Master HP Filter**

A final master high pass filter.

# **Hints and Tips**

Presets using the "Time Machine" mode can be very processor heavy. Due to this, Kontakt has the option of restricting the number of voices available. This cuts down your polyphony but takes the pressure off the CPU. So if you start to experience problems with playback it is certainly worth trying. Go into the Instrument Edit Mode by pressing the spanner icon in the top left. Then choose the Instrument Options button in the top left of the edit window. This will bring up a new window of options. Choose Voice Handling then choose a lower number in the Standard Mode Voice Limit Box until playback problems resolve.

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