Lore | Experimental Sound Console

User Guide 1.0.24

By Puremagnetik

http://puremagnetik.com/lore
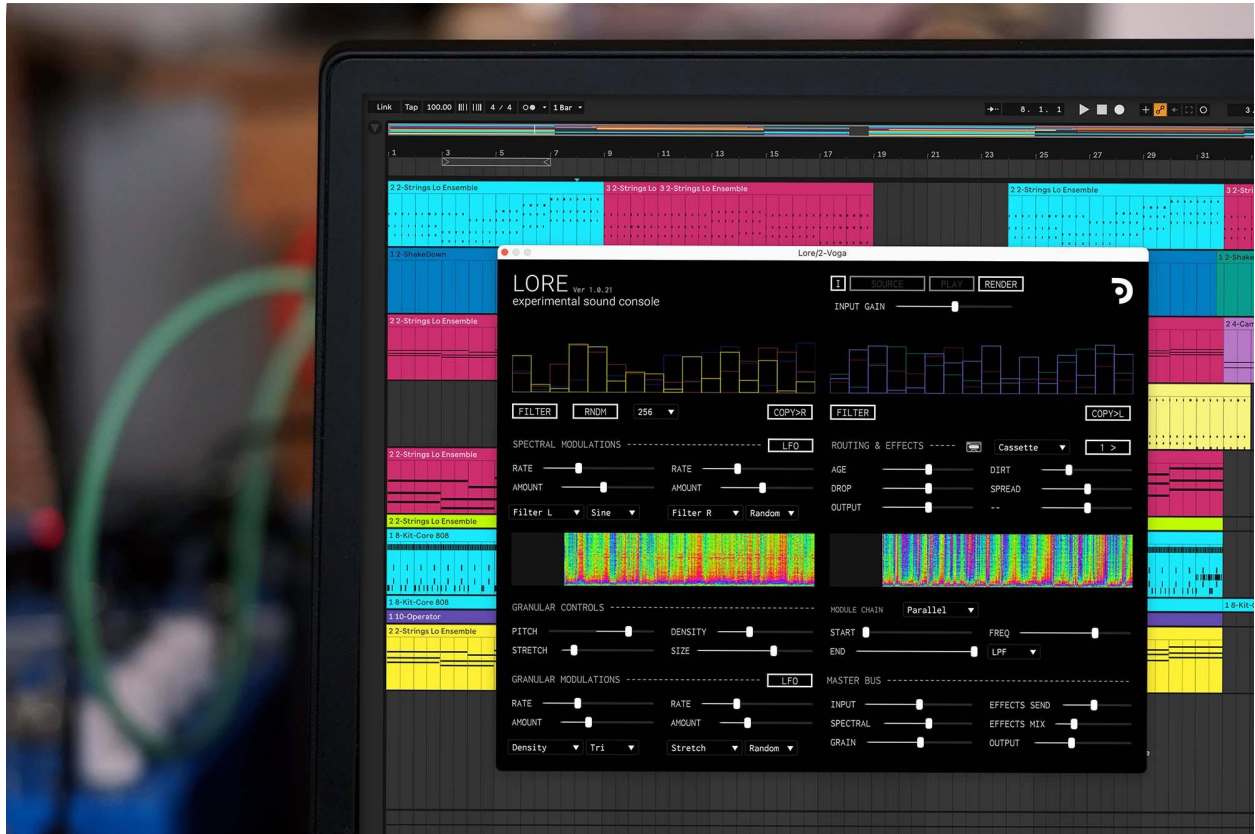
Welcome to the official Lore User Guide. Lore is an advanced experimental electronic music workstation. It employs a series of sophisticated sound processing algorithms and effects that harness the unparalleled power of Csound. Lore has an official distribution as VST, VST3 and Audio Units devices for OSX and Windows. It is also open source (free to compile and edit on your own) and available from the Lore Repository on Github. For Lore video walkthroughs, tips and techniques, please visit the Lore playlist on YouTube.

Lore was inspired by musique concrète, microsound and other pioneering sound technologies of the past several decades. It combines spectral and granular engines along with several other features designed to unleash the power of microsonic resynthesis.

INPUT SECTION

F / I

The File/Input button toggles between a loaded audio file and an input on the channel that Lore is instanced on. This enables you to use Lore as an effect or audio file player.

SOURCE

When in File Mode (F/I button set to F) use the Source button to browse your disk for files. You can also drag + drop files into Lore from your file browser.

PLAY / STOP

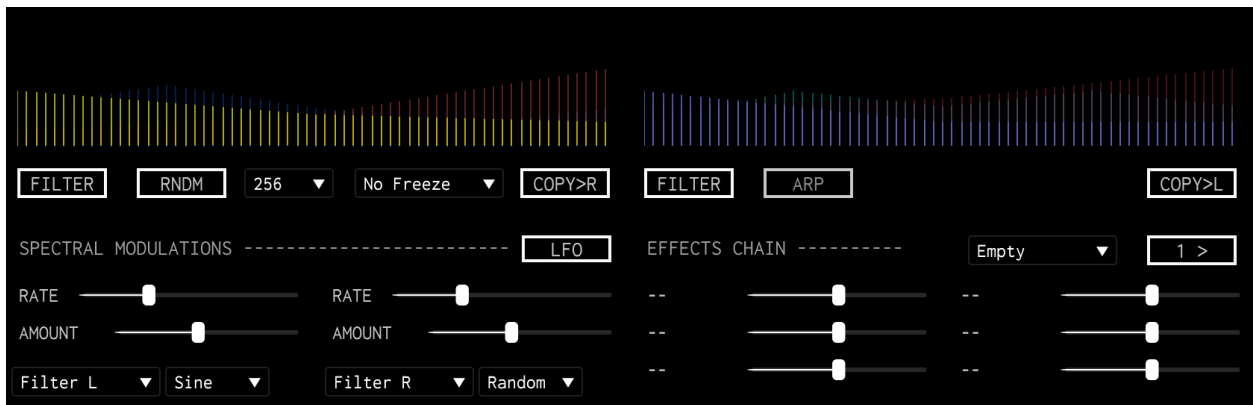This begins file playback when Lore is in File Mode.

RENDER / STOP

Select a directory to render Lore's output to. Select "Stop" to end the file rendering.

INPUT GAIN

A primary gain stage for attenuating the incoming signal or file being processed.

SPECTRAL DELAY PROCESSING

FILTER / TIME / FBACK

This button toggles between three editing modes to adjust

1. The Spectral Filter — Attenuate specific bands
2. Delay Time — Change the delay time on each specific band
3. Feedback — Change the delay feedback on specific bands

RNDM

Randomly change Filter, Time and Feedback tables for both Left and Right channels.

ANALYSIS BANDS

Dynamically change the number of bands used for spectral analysis and resynthesis. There is no definite rule for how many bands to use, and when to use them. However, this setting changes the sound dramatically and we encourage you to experiment with different bands on different content. When using the Spectral Arpeggiator for instance, you will find different bands work well on percussive content while others work well on harmonic content.
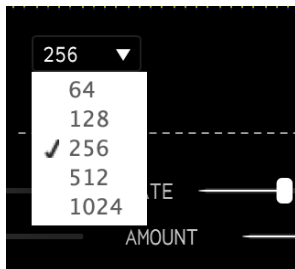

COPY

Copy the *currently* selected editing mode's table to the corresponding table in the *opposite* channel. For instance, when editing the right channel's FBACK table, you can easily copy this table to the Left channel's FBACK table by simply clicking this button. This allows you to keep both channels in parity.

SPECTRAL FREEZE and BLUR

The spectral FREEZE and BLUR dropdown menu allows you to either

a) No Freeze — The signal remains unaffected

b) Freeze Amp — Only freeze the amplitude components of the spectrum

c) Freeze Freq — Only freeze the frequency components of the spectrum

d) Freeze A/F — Freeze both the amplitude and frequency components of the spectrum

e) Blur — spectral blur smears the resynthesized signal across the time domain. Once "Blur" is selected, a slider appears allowing you to adjust the Blur Time of the signal from 0 - 2 seconds. Use it to create spectral clouds of sounds, or set the blur for a short period to generate a "smear" effect.
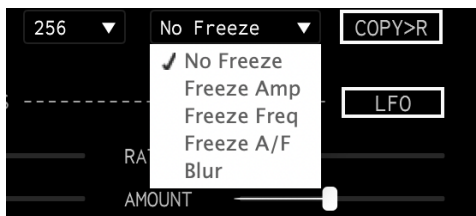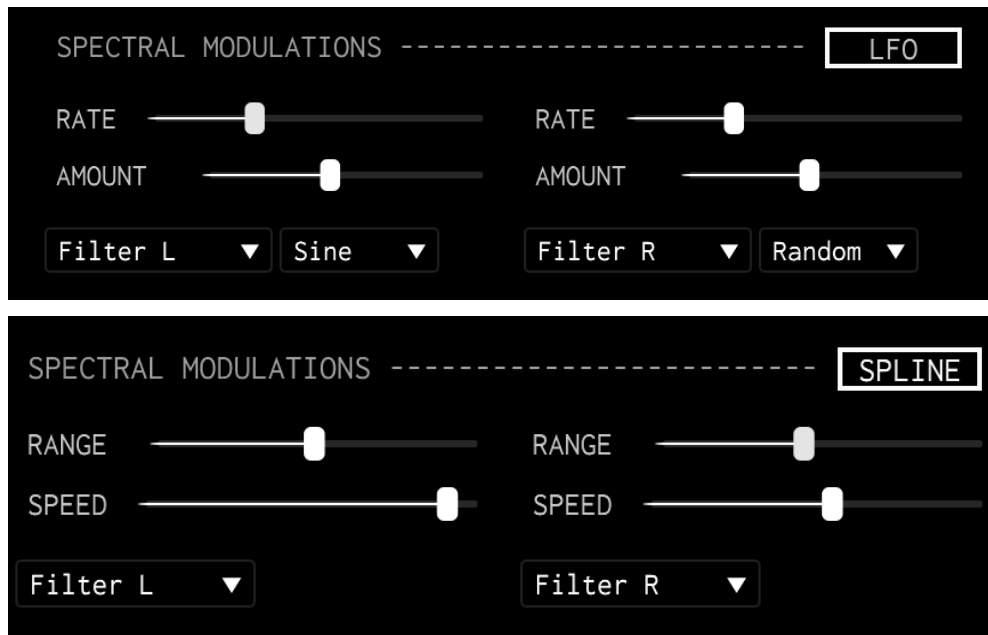
ARP

The Spectral Arpeggiator cycles continuously between bins at a selected speed and depth. The DEPTH and SPEED controls become visible when ARP is activated. Use this to create spectrally animated effects. Use various spectral band settings and band numbers to get dramatically different results.
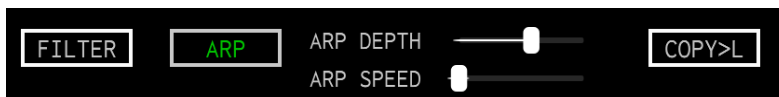
SPECTRAL MODULATIONS

LFO / SPLINE
There are 2 modulation sources that can affect two individual destination parameters. You can choose to make these two sources either a cyclical LFO or a randomly generated spline curve. The cyclical LFO repeats the LFO waveform pattern (unless it is a Random shape). The spline is a more natural generation of random points through time, with a curved line connecting each one.
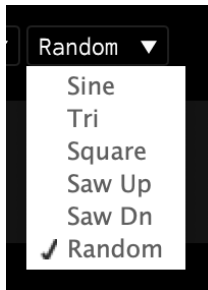
LFO MODE — RATE
Speed of the cyclical LFO in hertz.

LFO MODE — AMOUNT
Amplitude of the LFO. This controls how much the LFO modulates the Destination parameter (see below).

LFO MODE — SHAPE
Choose between various waveform shapes for the LFO.

SPLINE MODE — RANGE
Similar to Amount in LFO mode, Range controls how far the randomly generated points in the spline travel to affect the destination parameter.

SPLINE MODE — SPEED
Frequency of points generated across the spline. The higher the Speed, the more often the spline will modulate the destination parameter.

DESTINATION
Two destination parameters can be selected for the LFO or Spline to control. If both slots are mapped to the same parameter, the results will be combined.

SPECTRAL FREEZE

Lore allows you to spectrally freeze either amplitude bins, frequency bins or both. For instance, if you spectrally freeze the *frequency* bins of a loop that has dynamic changes in volume (e.g. a drum loop), the frequency will stay frozen in time while the rhythmic and *amplitude* fluctuations continue. The reverse is true if you freeze only the amplitude bins — the volume will stay the same while the frequency changes.

GRANULAR CONTROLS

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GRANULAR CONTROLS --------------------------------------   MODULE CHAIN   [ Parallel    ▼ ]

PITCH    ———————●——————      DENSITY  ——●——————————      START  ●————————————————      FREQ  ————————————————●——
STRETCH  ●——————————————      SIZE     —————————————●——      END    ——————————————●————      [ LPF      ▼ ]
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PITCH
Hi resolution granular pitch shifting, plus and minus 2 octaves.

STRETCH
High resolution, granular time stretching. Ranges from nearly frozen to 200% original speed.

DENSITY
Frequency of grain generation, or density, in grains/sec.

SIZE
Grain size in seconds.

START
Point in the audio file or input buffer where the playback will begin.

END
Point in the audio file or input buffer where the playback will end.

FREQ
Filter Frequency

FILTER TYPE
Select between a 2-pole lowpass or highpass

MODULE CHAIN
A small control that can dramatically affect the entire sound!
Parallel Mode — The spectral and granular engines are processed on different branches and summed together.
Spec > Grain — The spectral engine is fed into the granular engine.
Grain > Spec — The granular engine is fed into the spectral engine.
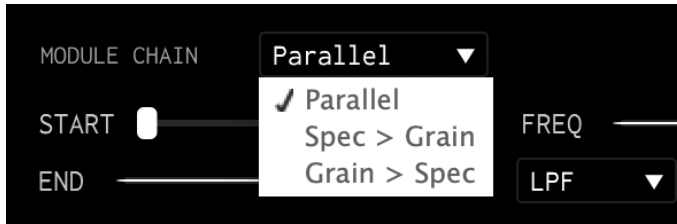
GRANULAR MODULATIONS

See Spectral Modulations (above). The controls are identical in function.

MASTER BUS

INPUT / SPECTRAL / GRAIN
Mixing section for the original input signal, the Spectral and Granular signals.

EFFECTS SEND
Send the output of the mixing section to the modular effects section

EFFECTS MIX
Mix of dry and effects signals.
Completely Reft = only the dry signal from the INPUT / SPECTRAL / GRAIN mixing section
Completely Right = only the modular effects return signal

OUTPUT
Final gain stage output from Lore.

EFFECTS CHAIN

Lore's effects section allows you to process the spectral and granular engines through a series (up to 4) of effects. We are constantly adding new effects and encourage you to experiment with them as they — like Lore — are rather unconventional and can yield some very interesting, unexpected results.

You can envision the effects section as a rack of effects tacked on to the end of the spectral and granular chains. They are the last section the audio runs through before hitting the master

outs. You can toggle between each of the 4 effects (chained together serially) with the number button on the upper-right of the effects section.

 A description of each included effect is below.

CASSETTE — Vintage cassette tape emulator
Age — Wow and flutter amount
Dirt — Adds noise and pops
Drop — Volume dropout rate
Spread — Introduces a slight amount of stereo feedback
Output — Overall volume level

FILTERVERB — an animated, filtered algorithmic reverb
Freq — Moog-style diode ladder filter
Q — Filter resonance
Depth — Depth of space
Space — Space dampening
Motion — Amount of random-walk filter modulation
Blend — Mix of dry (input) and wet (reverb) signals

GHOSTECHO — a modulating waveshaper and delay effect
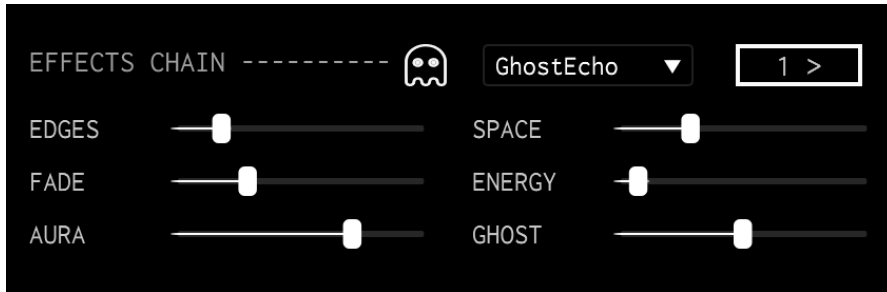
Edges — Controls waveshaper amount

Space — Sends signal to delay

Fade — Adjusts delay Feedback amount

Energy — Sets the waveshaper modulator speed

Aura — Sets the modulator shape

Ghost — Controls the modulator depth

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EFFECTS CHAIN ----------  👻    [ GhostEcho    ▼ ]   [   1 >  ]

EDGES    ──█────────        SPACE    ──────█──────
FADE     ────█──────        ENERGY   ─█──────────
AURA     ──────────█──      GHOST    ──────────█──
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IMPULSEVERB — a convolution reverb unit

Impulses — Sselects a space from Lore's IR library

Size — Adjusts the overall depth of the space

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EFFECTS CHAIN ----------  ⊙    [ ImpulseVerb ▼ ]   [   1 >  ]

[ R1 Nuclear Reactor ▼ ]          --    ──────────█──

                                  --    ──────────█──

--    ──────────█──               SIZE  ──────────█──
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PARTICLE — a granular delay inspired by the Red Panda Particle pedal

Chop — Adjusts grain size

Stretch — Controls grain time

Density — Attenuates grain propagation (amount of grains created)

Time — Delay time in hz

Feedback — Adjusts level of feedback matrix

Blend — Mixes between dry and wet signals

SCRAMBLER — A buffer animator and randomizer

Filt Type — Morphs between low, high and bandpass filters

Filt Freq — Sets the filter frequency

Placement— Adjusts the buffer minimum position

Window — Adjusts the buffer maximum position

Speed — Controls buffer animation speed

Amount — Buffer animation amount between start and end positions (Placement & Window)