

# KZO-LINA

DECENT SAMPLER LIBRARY

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<h2>KZO-LINA</h2>				
A D S R				
				
 EXPRESSION				
CUTOFF RES				
				
LPF HPF HI-RES LO-RES				
 DUAL FILTER				



BY GOURLIE

## Thanks for downloading KZO-LINA!

*I am so appreciative for your support. It blows my mind that people even have an interest in the noises I make. It means more than you'll ever know!*

### To Install:

Ensure you have the most recent Decent Sampler VST installed on your computer and that it is up to date. **This instrument was designed on DS V1.6.9 and utilizes new features so ensure you're up to date!** If you don't have DS or need to update, you can download it for free from [decentsamples.com](http://decentsamples.com)

- Open up an instance of Decent Sampler either as standalone or within your DAW.
- Drag the file named "KZO-LINA by Gourlie.dslibrary" from your file browser and onto Decent Sampler, a prompt should appear asking if you want to install the library. Press Yes to install, and it should load.

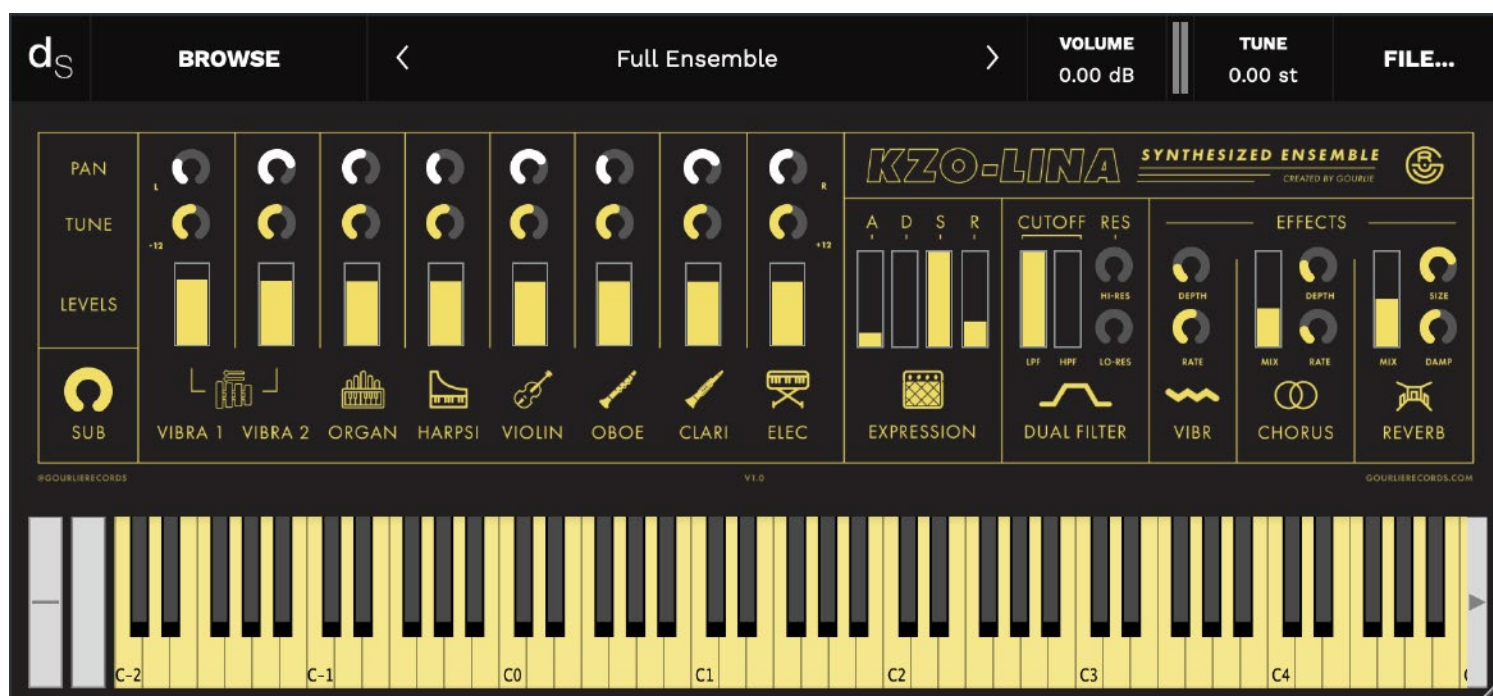
*(Alternatively you can also press "File" in Decent Sampler then "Load" and click the same file)*

### Use of KZO-LINA is bound by the following license terms:

- All the sounds/samples in this instrument are royalty-free and there is no need to credit Gourlie Records (I do love a good shoutout though).
- Only the purchaser of this instrument is granted rights to use it.
- You may not redistribute the instrument or samples. If you wish to share this instrument then please direct people to my website. Redistributing this on your own is basically pirating, and pirates get scurvy and lose legs and eyeballs... don't be a pirate!



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## About KZO-LINA

This instrument is a fusion of 2 inspirations. The first being the quirky synthesizing engine of the Casio SK-1 (**KZO**) and the second is the ever-popular and emulated Solina String synth (**LINA**).

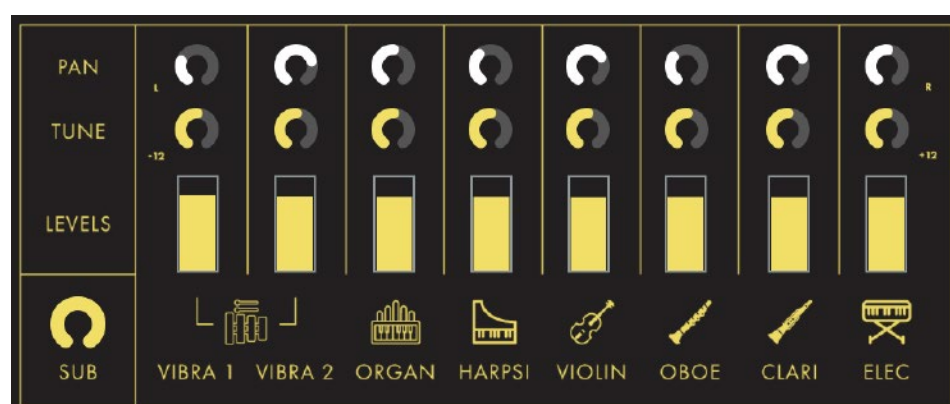
The Casio SK-1 is a really unique sampling keyboard from the mid 80s. A common application today for the SK-1 has been to convert samples into lo-fi using it's on-board 8-bit sampler engine (8-bit DS instruments soon inbound) but a commonly overlooked feature is the synthesizer function which allows you to apply harmonics to a basic tone and apply some really unique filters to the synthesized sound. This opens the doors for some really interesting sonic noise. I've applied this feature to make abstract, synthesized versions of instruments which is what I have done to construct the tones of the KZO-LINA synthesized ensemble.

In the latter inspiration, the Solina is a very simple synthesizer from the 70s which emulates an orchestral section (a lot of you might be familiar with Arturia's Solina V emulation or Behringer's clone). However given that it was designed in the 70s, there wasn't much control over the sounds outside of switches to turn the different voices on and off. I wanted to build on this concept while maintaining its spirit of simplicity, so I've given a little bit more control on the mixing of the sounds by adding in fine-tuning, panning, and volume control for each sound along with a bunch of other features not on the Solina.

**This KZO line of instruments is something I will be building out in the near future so be on the lookout for future instruments and samples!**

## PARAMETERS

On the startup of KZO-LINA you might notice that the interface is pretty small. You can scale the window to make it larger by clicking and dragging the 3 lines on the bottom right of your DS window to make it any size you wish.



## STONE BANK

There are 9 sounds on board that all play in unison: 8 ensemble components and a Sub. Each ensemble component has 3 controls. From top-to-bottom they are:

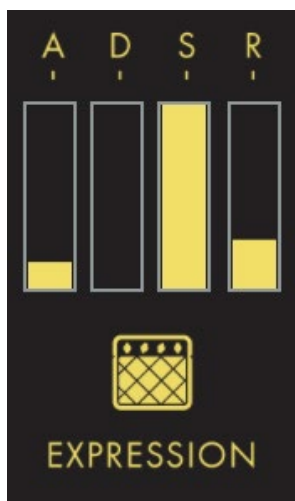
**PAN** - Let's you move the signal to the left or right side of the stereo field.

**TUNE** - This gives you very fine tuning control over each sound. This ranges from -12.08 semitones to +12.08. The reason each end goes +/- 0.08 semitones past an octave is for the same reason the knobs don't lock to set semitones; so you can detune each section ever-so-slightly from the others. This creates a very interesting and almost more natural sound. It also allows you to program each sound to play a different note so if you want your organ to be the root note, your violin tuned to fifths, and an oboe tuned sevenths, you can.

**LEVELS** - Volume slider for each sound. (Tip: Having all volume sliders at max will cause distortion. It's best to have only one or two at max volume at a time and mix the rest to add some flavor. If you plan on having all tones at equal volume, have none exceed 75-80%.)

**SUB** - The Sub knob can be used to add low-end to the mix. Given the main ensemble is sampled from a portable keyboard, there wasn't much low-end so you can use this knob to taste. The sub sound comes from a simple sawtooth oscillator recorded from a Behringer Pro-1 and the SUB knob just simply controls its volume.

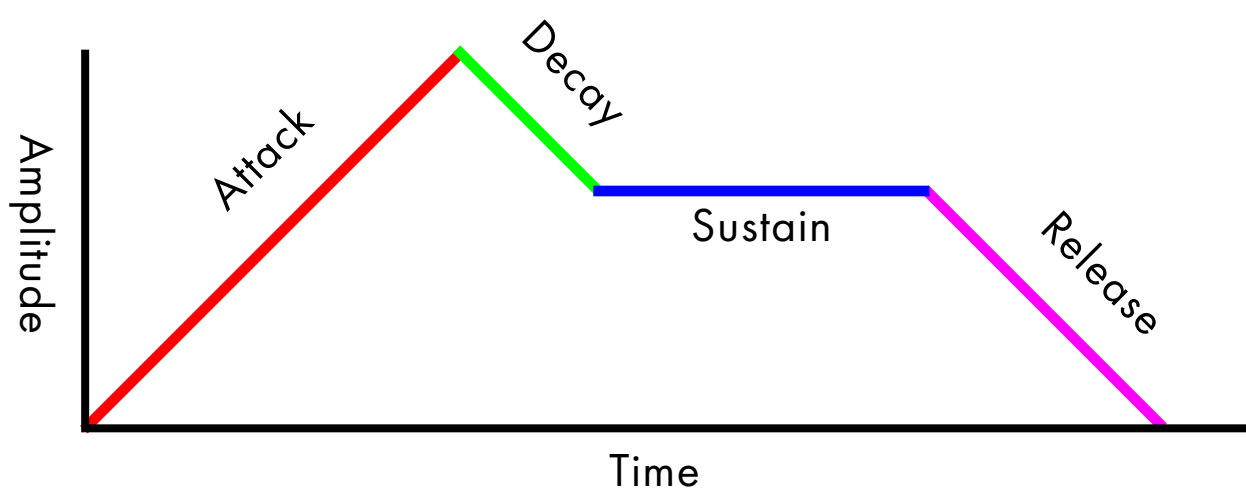
*Also noteworthy here is that the Vibra 1+2 and Harpsichord are just one-shots so they don't have sustains, just like their physical counterparts. When you press and hold a note, their full note will play out then be quiet.*



## EXPRESSION (ADSR AMP ENVELOPE)

ADSR (Attack, Decay, Sustain, Release) is a way to control the amplitude envelope of KZO-LINA. You'll see these types of envelopes on most synths so it's an important, universal concept to learn.

There are 2 axis which make up an ADSR envelope:  
**Amplitude & Time**

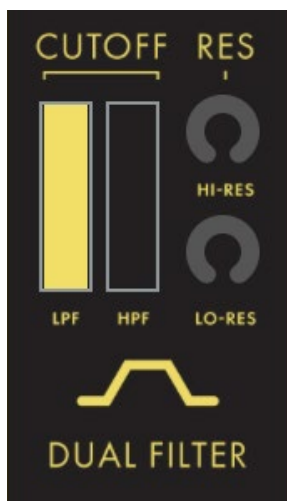


**A (Attack)** - This is the time it takes for the amp to get to full volume. With the attack time set at 0, full amplitude is achieved right away. Turn it all the way up and it takes longer to go from no sound to full sound.

**D (Decay)** - Another time measurement which controls how long it takes for the signal to transition (decay) from full volume into the Sustained level.

**S (Sustain)** - This is not a measurement of time, but rather how loud your note will be once the Attack and Decay times have passed. Turning Sustain all the way down means once A/D times have resolved there will be no more sound as the sustain volume is set to 0. Turn it all the way up and it will sustain the note at full amplitude. Note that if you turn Sustain all the way up then Decay has basically no audible effect because there is no lower volume to "decay" the signal into.

**R (Release)** - This is the time it takes for the sound to fade to quiet after you release your notes. Turned all the way down, the sound will cease as soon as you lift your fingers (reverb signals will still be audible). Turned all the way up and the sound will slowly fade over time letting the note gradually ring until it's muted.



## DUAL FILTER

The dual filter allows you to cutoff both high and low frequencies. The most common filter type you see on synths is just a Lowpass Filter, which cuts off high frequencies. However DS also supports Highpass filters to cut out low frequency content as well. Using these filters simultaneously create a “bandpass” filter where only frequencies left to pass through are audible. This allows for more sonic creativity than a standard Lowpass filter..

**LPF (Lowpass Filter)** - This cuts off high frequencies. With the bar all the way full, no cutoff occurs. When the bar is pulled down, high frequencies are removed and only lower frequencies pass through.

**HPF Highpass Filter** - This cuts off low frequencies. With the bar all the way down, no cutoff occurs. When the bar is pulled up, low frequencies are removed and only higher frequencies pass through.

**LO/HI-RES (Resonance)** - This gives a boost to the frequencies at the cutoff points. **LO-RES** boost the cutoff frequency to the Lowpass Filter. **HI-RES** boosts the cutoff frequency to the Highpass Filter.

*Tip 1: The Hi-Res knob actually can serve as a great tool for boosting low-end. If you find the Sub knob isn't adding the kind of low-end boost you need, then try messing with the Hi-Res knob. Even with the HPF set to zero this knob still has a significant audible effect on the low-end.*

*Tip 2: Note that Decent Sampler currently has no functionality for a limiter and that increasing resonance can lead to some MEGA loud sounds. Be very safe and careful when increasing the RES knobs. (Adding a limiter to the end of your signal chain is always a good way to protect your ears and equipment when working with any type of audio)*

*Tip 3: If you start to hear clipping/distortion when adjusting Resonance, then you've gone too far.*



## FX

The effects section for KZO-LINA. Using external effects is also groovy, but I've thrown some simple ones into this instrument since Decent Sampler supports it.

### VIBR (Vibrato)

Adds vibrato to all instruments. The SK-1 has a vibrato button on it which I initially thought about using then just having this section be a dry/wet knob, but the vibrato generated on the SK-1 was too subtle and lacked rate control. Plus Decent Sampler now supports LFOs so this is just a simple sine wave which modulates pitch.

**DEPTH** - The depth of the Vibrato. With a higher depth the pitch is shifted up and down more drastically. I allowed you to turn this knob up pretty high but for most instances 25% or less will do just fine. With the depth at 0, the vibrato is inaudible.

**RATE** - The speed at which the vibrato moves up and down.

### CHORUS

As if panning each tone and having 9 wasn't enough, you can also add a chorus effect. Depending on how you have your tones panned and vibrato set, this might not even be super noticeable but is very useful for patches using fewer tones.

**MIX** - The dry/wet of the chorus. With the slider down, it's inaudible.

**DEPTH** - The modulation depth of the Chorus.

**RATE** - The speed at which the signal is modulated.

### REVERB

If you're bad at playing just add more reverb and play slower (half-joking)

**MIX** - The dry/wet of the reverb. With the slider down, it's inaudible.

**SIZE** - The room size of the reverb.

**DAMP** - This dampens the reverb signal the more you turn it up. This can be useful to tame harsh frequencies that are emphasized by the reverb.

## 9 Samples, 1 Synth

KZO-LINA really is maxing out the capabilities of Decent Sampler so I just want to address 2 things as a bit of “troubleshooting,” if you will.

**CPU** - I haven't encountered any problems yet, but I know that having 9 samples loaded into one sampler can sometimes be a bit much on the CPU. I've optimized the samples as much as possible to reduce CPU load but on some machines, unwanted artifacts might appear during live playback. If this occurs, increasing your buffer size will most likely fix the problem.

**Distortion** - It's very easy to make this synth loud enough to cause some distortion within Decent Sampler itself. Even though the meter at the top of the plugin might not be peaking, you still may hear distortion. In some instances it might sound nice, but not all the time. If you find you're making a patch that is leading to distortion, either turn down the master volume at the top of DS, reduce resonances, or turn down the mix sliders for each sound. If this results in the patch being too quiet you can always boost the signal with gain adjustment applied to your signal chain after Decent Sampler.

## Have fun!

Enjoy the sounds of the KZO-LINA and let me know of any feedback you might have.

As with all of my products there will be free updates so if errors are pointed out then I will fix them in future updates! (Version number can be found at the bottom of the interface above the keyboard)

Also expect more Decent Sampler instruments going forward. (Signing up to my email list is the best way to be notified of new releases)

When you make a track with this instrument, feel free to share it with me as I would love to hear what you've created!

## Shout out to my testers (give 'em a follow):

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Robert 'BADCOMBINA'

[instagram.com/badcombina](https://www.instagram.com/badcombina)

