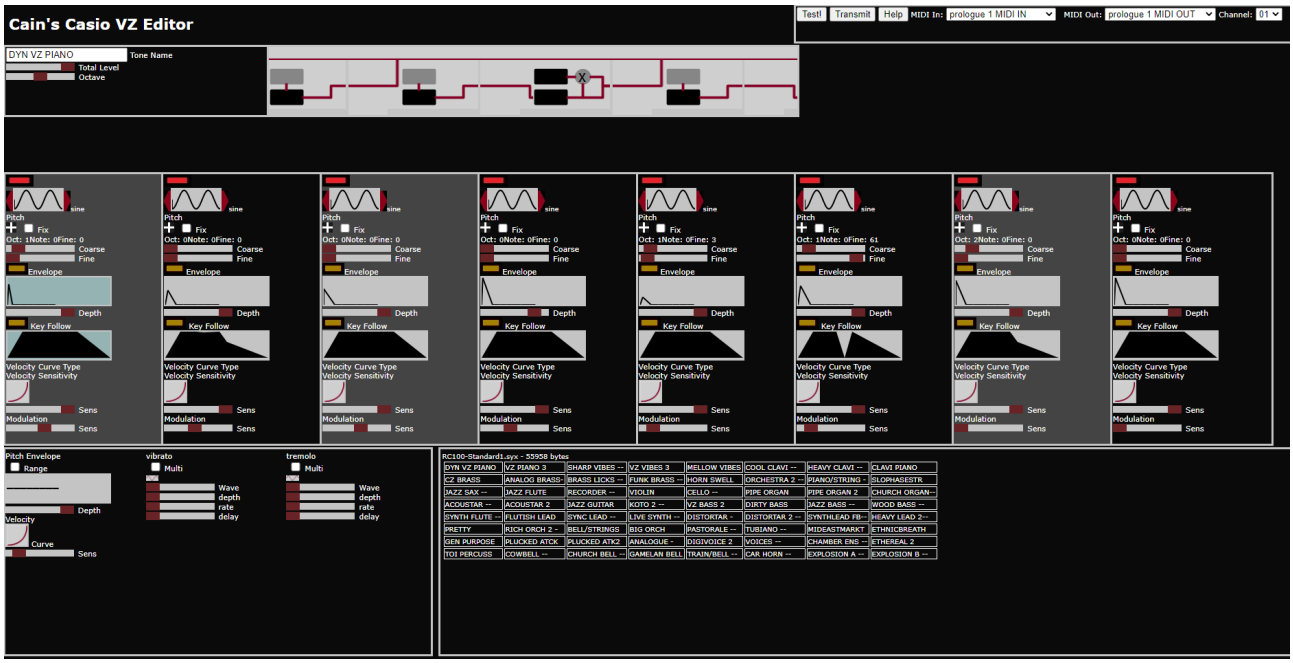
Cain’s VZEdit

Content

Intro



The VZ Editor is a browser based tone editor for the Casio VZ 1, VZ 10m, and the Hohner HS/2. It is capable of editing and uploading tone data to a connected VZ/HS synth. Also you are able to load a VZ SysEx library into the editor and select a tone for transmitting or editing. Even though it is a web-based editor, none of your data is stored or copied to anywhere else.

If you come up with new sounds I'd be more than happy if you are willing to share them with the community, a good starting point would be the VZ user group on facebook.

If you are happy with the work and would like to show your appreciation, then please feel free to do so by going to my project page at cain-synthesizer.com and pressing the donate button. If you are using a Korg synth with the User Engine, then make sure to look around ;)

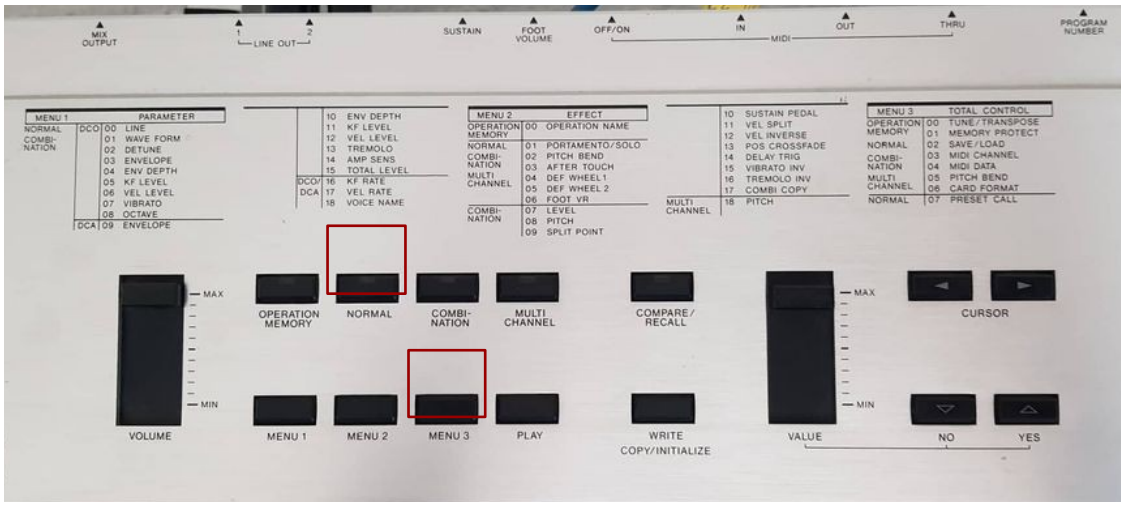
If you find bugs, please report them here.

Prerequisites and Getting Started

Start your Casio VZ or Hohner HS/2 and go to menu 3, page 04 MIDI Data and set ‘EXCLUSIVE=ENA’.

If you want to save your work on your synth, then also turn internal memory protection off in menu 3 page 01 MEMORY PROTECT.

This needs to be done on every startup of your synthesizer!



Once you have adjusted you settings make sure that you press the ‘NORMAL’ button before you continue.

Features

- Load voice banks from your computer to the editor via drag & drop
- Edit a voice in the UI
  - Edit the used algorithm
  - Draw envelopes and key follow
  - Copy module settings to another
- Transmit the voice to your synthesizer (given that you have followed the prerequisites above)
- Play a test tone to make sure your synthesizer is connected

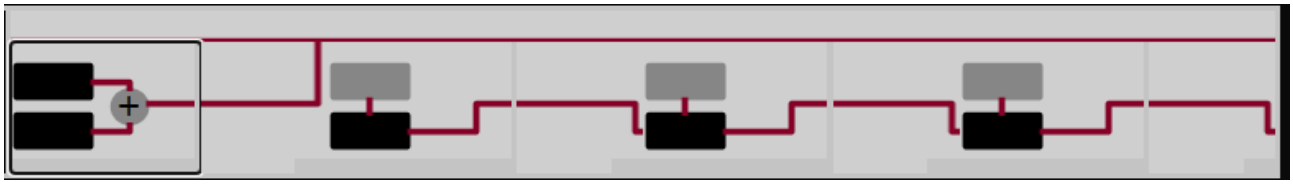
Algorithm

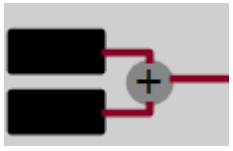
The iPD synthesis consists of a total of eight modules arranged in four lines as pairs.

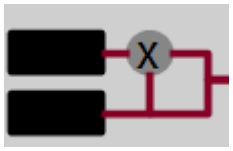
Within a line you can combine the two modules either as a sum, as a modulator/carrier pair or as a sum plus ring modulation.

The lines again can either be send to the output directly or the previous line can act as a modulator of one of the modules of the next line and will as such not be routed to the output.

Create the algorithm by clicking on the different lines.



 Summing module A and module B

 Ring modulation of module A and module B

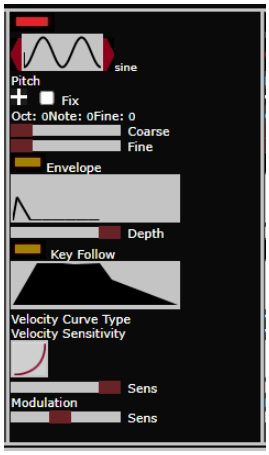
 Use module A as modulator for module B

And change the routing by clicking on the connectors.

 Send the module pair to the sum

 Use the module pair to act as a modulator for module B of the next part

Moduls



A module basically is an oscillator with a DCA (digitally controlled amplifier) that has its own dedicated 8 step envelope generator. In addition a module accepts a number of modulation sources, such as key follow and velocity for the DCA and further.

Module on/off

A module can be turned on or off by clicking at the red ‘LED’ at the top left of each module.

Wave Forms

You can step through the oscillators seven wave forms by pressing on the wave representation or by clicking on the triangles to the left and right to move forward or backward. There are five stages of a morph from sine wave to a sawtooth available, as well as two noise wave forms.

Pitch

An oscillator can either have a fixed pitch or a pitch, which is determined by the played key. If the checkbox ‘Fix’ is checked then it will play the same frequency independent of the pressed key, else it will follow the note on the keyboard.

A coarse and fine pitch can be applied to the oscillator to either offset it to the played key or to create a defined frequency. There is doubt, that this goal has been reached with the project so far.

The frequency offset can be positive or negative. You can change that by pressing at the plus or minus button. The button will not react, if the values for ‘Coarse’ and ‘Fine’ are 0.

Functions to be descibed...

1. select the mix/modulation type of the modules
2. select the external phase for the lines
3. activate/de-activate a module and copy a module's settings to another via drag & drop
4. Click on the envelope to edit it

5. set end and sustain points by clicking on the nodes (yellow = sustain / red = end)
6. set the rate velocity by clicking on the line (red indicates, it is activated
7. edit the values using the text boxes beneath the editor
8. to minimize the editor click on the '-' on the far right (the key follow might overlay the envelope... just kill them and open them again … it's on my to do list.
9. Click on the key follow curve to edit it
10. The global pitch cure is hidden here
11. to 'lock' envelopes or key follow curves click one or more of the yellow 'LEDs' the curves will change simultaneously