FASELUNARE VEGA MANUAL 1.0

Hello!
Thank you for choosing VEGA!

When we started thinking about our first module, we thought about what we wanted to put in our rack. We wanted a rhythmic section that would allow us to have multiple sounds simultaneously.

Another thing we wanted was to save space because the number one enemy of modular systems is the space.

So we started thinking about VEGA. It had to be small and have multiple functions.

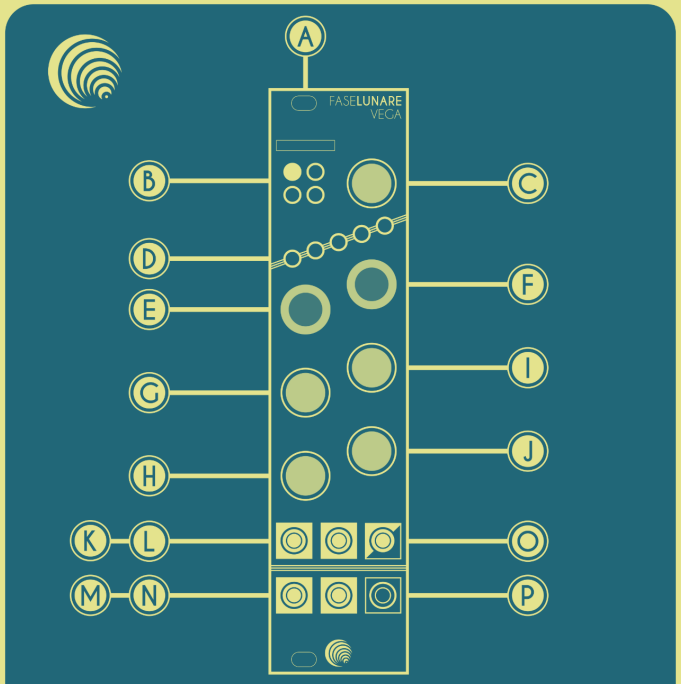
In the end, we came to have a module of only 6HP with 4 voices dedicated to percussive sounds with the possibility of having synthesis and samples as a sound source.

Each voice therefore has 4 samples (stored on SD card) and 1 synth engine dedicated to specific types of sound (Kick, Snare, Hats x 2)

The interface is very simple, 4 voice buttons (amber), 1 function button (amber), 2 RGB encoders and a series of colored LEDs for the pages.

FOR QUESTIONS ABOUT VEGA, PLEASE WRITE TO SUPPORT@FASLEUNARE.COM

USER INTERFACE



A - SD CARD - Used to store samples and preset.
Each voice uses **4 samples in wave format 44100 Mono** and they must be named: A1.wav, A2.wav, A3.wav, A4.wav for the first voice (K), B1.wav, B2.wav, B3.wav, B4.wav for the second voice (L), C1.wav, C2.wav, C3.wav, C4.wav for the third voice (M) and D1.wav, D2.wav, D3.wav, D4.wav for the last voice (N).

B - PAGES - A key point of the vega UI is pagination, the 4 leds (B) indicate the different pages. Each page hosts 2 parameters.

C - FUNCTION - The function button used alone allows you to change the parameters page. When used in tandem with one of the voice buttons, this activates the **MUTE** mode.

D - METER - The 5 LEDs indicate the value of the parameters and, on the first page, indicate the sound source (samples or synthesis).

E - F - ENCODERS - The 2 encoders are **RGB**, which means that different colors correspond to different functions. **GREEN** corresponds to the **PARAMETERS**, **BLUE** corresponds to the **SOURCE** selection and **RED** indicates the selection and storage of the **PRESETS**.

G - H - I - J - VOICE selection buttons. Select the voice to edit by pressing the corresponding button. When a voice is selected, it is brighter. **Pressing the C button** together with one of the voice buttons enters the **MUTE** mode. Pressing **C + VOICE** again exits the MUTE mode. While in MUTE MODE, the button flash with a FADE IN and FADE OUT effects.

K - **L** - **M** - **N** - **VOICE TRIGGERS -** Each VEGA voice has its own trig compatible with the Eurorack standard. Accept trig signals from other modules and external sequencers.

O - RANDOM TRIGGER - This additional input allows you to trigger all 4 voices randomly. If used alone, a trig signal (an LFO for example) will suffice to have random rhythmic sequences, if used together with the other 4 triggers, it will add unpredictability to a programmed sequence.

P - AUDIO OUTPUT - All the 4 voices are internally summed and sent to the **AUDIO OUTPUT**.

STORE AND LOAD PRESETS

VEGA can save up to 5 PRESETS each of which contains the information of all parameters and sound sources, **the presets are stored on the SD card** along with the samples.

NOTE: The first time you turn on your **VEGA**, the presets will all be the same.

STORE A PRESET

When you are satisfied with your sound design, you can save your sound simply by **holding down the FUNCTION key and pressing the F encoder** (the one on the right). At this point the encoder changes color and becomes **RED**, by turning the encoder you can **select the position where to store the sound** (indicated by the **METER'S LEDS**), press the encoder again and **it will start flashing**. At this point, **VEGA is waiting for your confirmation**. By pressing again, confirm and save.

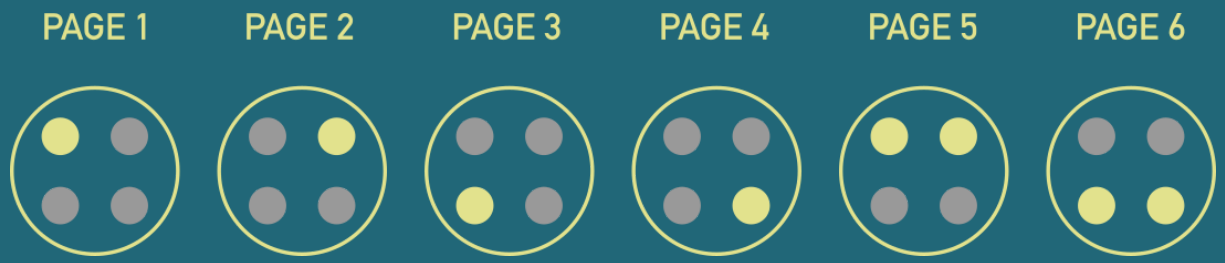
LOAD A PRESET

You can recall your saved sound simply by **holding down the FUNCTION key and pressing the G encoder** (the one on the left). At this point the encoder changes color and becomes **RED**, by turning the encoder you can select the preset to load (indicated by the **METER'S LEDS**), press the encoder again and **it will start flashing**. **VEGA is waiting for your confirmation**, by pressing again, confirm and load.

THE PAGES PARAMETERS

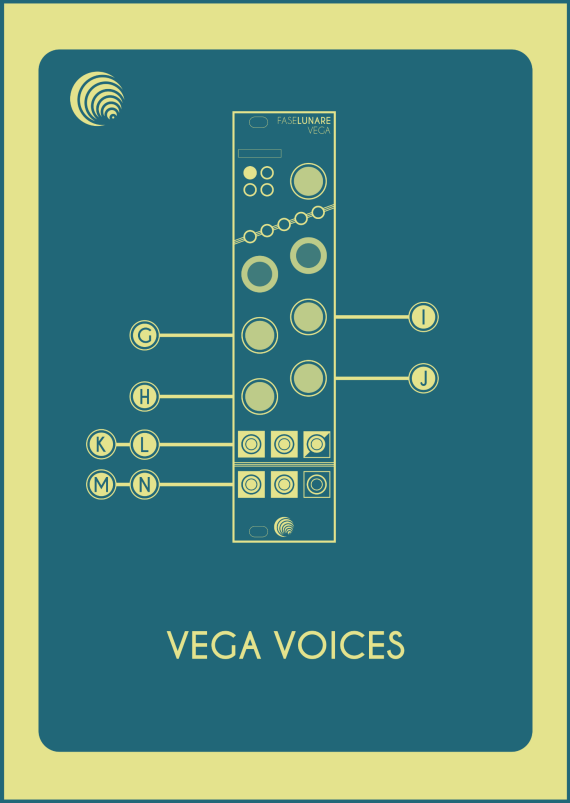
The Vega's parameters are divided into **PAGES**. Each page has **2 parameters** that can be modified with the respective encoders. The value of the parameter that we are modifying, or that we have selected by pressing the corresponding encoder, is indicated by the 5 LEDS.

To switch between pages, simply press the **FUNCTION** button.



THE 4 VOICES

Each of the VEGA voices has **2 AUDIO ENGINES**, one that works with **SAMPLES** and one totally **SYHNTHESIZED**.



BASIC OPERATIONS

- To **EDIT** a voice, simply press the corresponding **VOICE BUTTON**
- To **TRIG** a voice, using the corrisponding **TRIG IN JACK**
- To **MUTE** a voice, press the **FUNCTION BUTTON + THE VOICE BUTTON**
- To **UNMUTE** a voice, press the **FUNCTION BUTTON + THE VOICE BUTTON**
- By pressing all the voice buttons at the same time, you enter in a special **PANIC MODE**. Press the left encoder to load the **DEFAULT PRESET** or the **FUNCTION BUTTON** to exit the **PANIC MODE**.

VOICE SOURCE

The very first parameter on every **VEGA's** voice is the **SOURCE** in the **PAGE 1**
In this page, the **LEFT ENCODER** is **BLUE**.

By rotating this encoder you can select one of the 4 SAMPLES (the first 4 green leds) or the synth engine (the red one). Once in position, the blue encoder BLINKS, to make the change effective, you must confirm by pressing the encoder.

SAMPLES

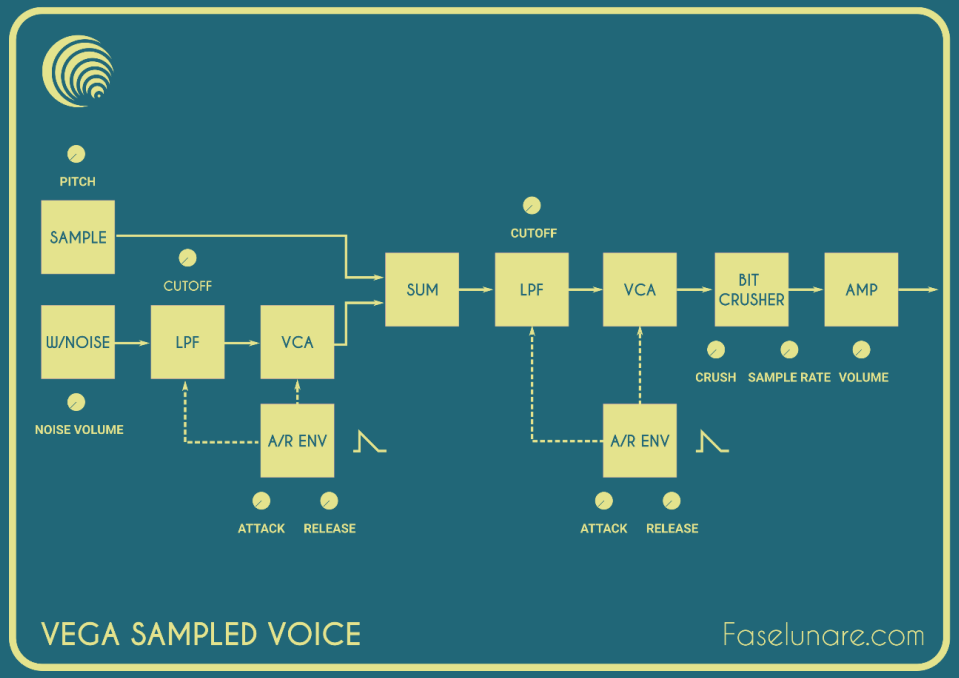
The samples must be loaded on the Micro SD Card. There are 4 per voice and must be named in this way: A1.wav, A2.wav, A3.wav, A4.wav for the first voice (G/K), B1.wav, B2.wav, B3.wav, B4.wav for the second voice (H/M), C1.wav, C2.wav, C3.wav, C4.wav for the third voice (I/L) and D1.wav, D2.wav, D3.wav, D4.wav for the last voice (J/N).

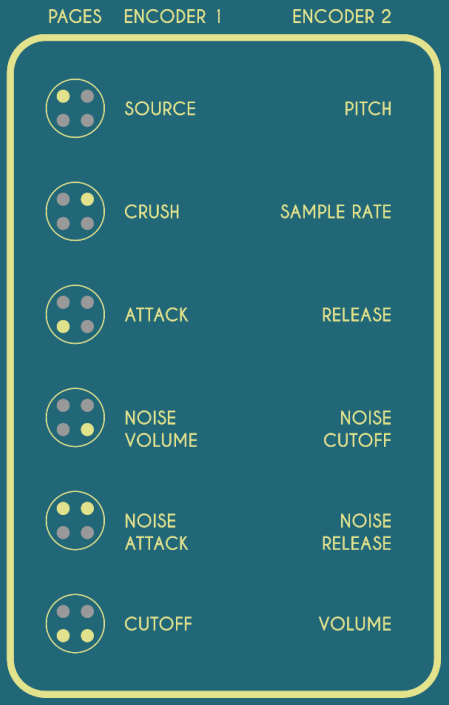
NOTE: Samples must be MONO / 44.100Hz / 16Bit / maximum 4 seconds in length and in Wav format. We recommend using a C10 SD card to avoid sample loading problems.

THE SAMPLED VOICE

Common to all voices when a sample is selected as a source.
The Samples are loaded from the SD card and stored in memory while using the VEGA to optimize the reading speed and limit the usage of the SD Card.

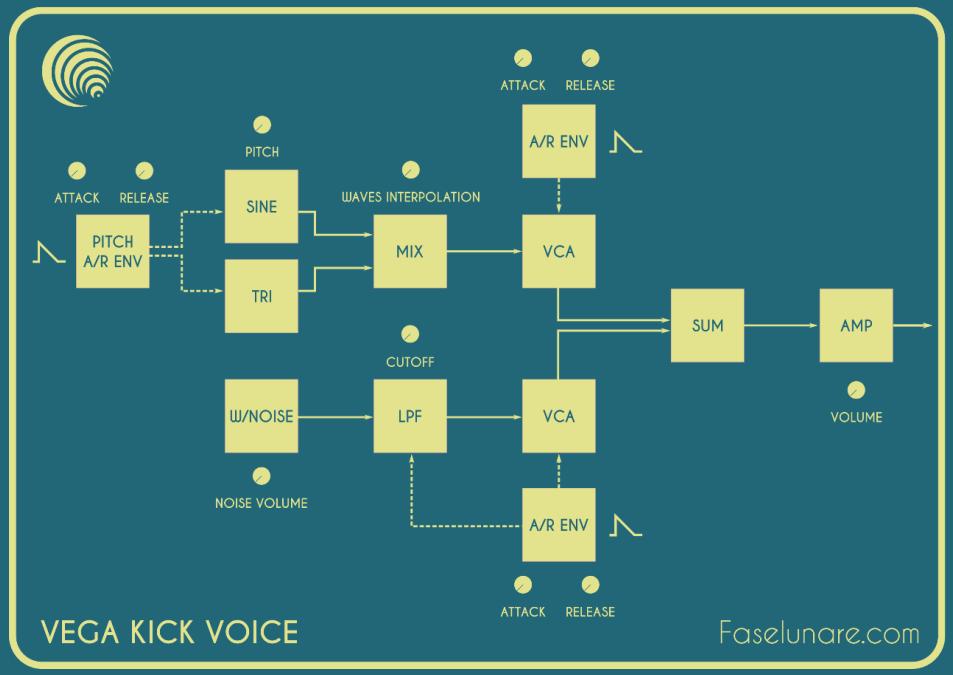
You can control the **PITCH** of the **SAMPLE** that can be mixed with a **WHITE NOISE** which has its own **FILTER** and **ENVELOPE**. The signal then passes through a **LOW PASS FILTER** and a **VCA** controlled by an **A/R ENVELOPE,** the last element of the **DSP** is a **BITCRUSHER** for sonic destruction.





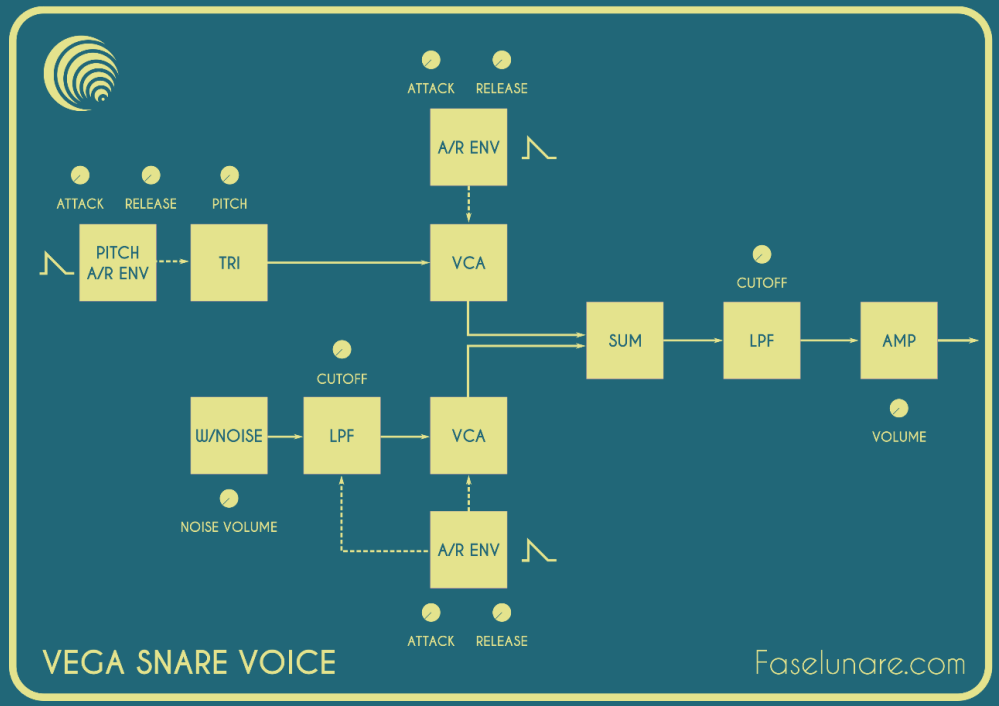
THE KICK VOICE

The first synthesized voice is the **COMPLEX KICK TONE GENERATOR**. Inspired by the analog kicks of the past, it consists of two generative parts: two oscillators **SINE** and **TRI** that can be interpolated to create new harmonics and a **WHITE NOISE** which has its own **FILTER** and **ENVELOPE**. In total the kick has 3 **ENVELOPE GENERATORS.**



THE SNARE VOICE

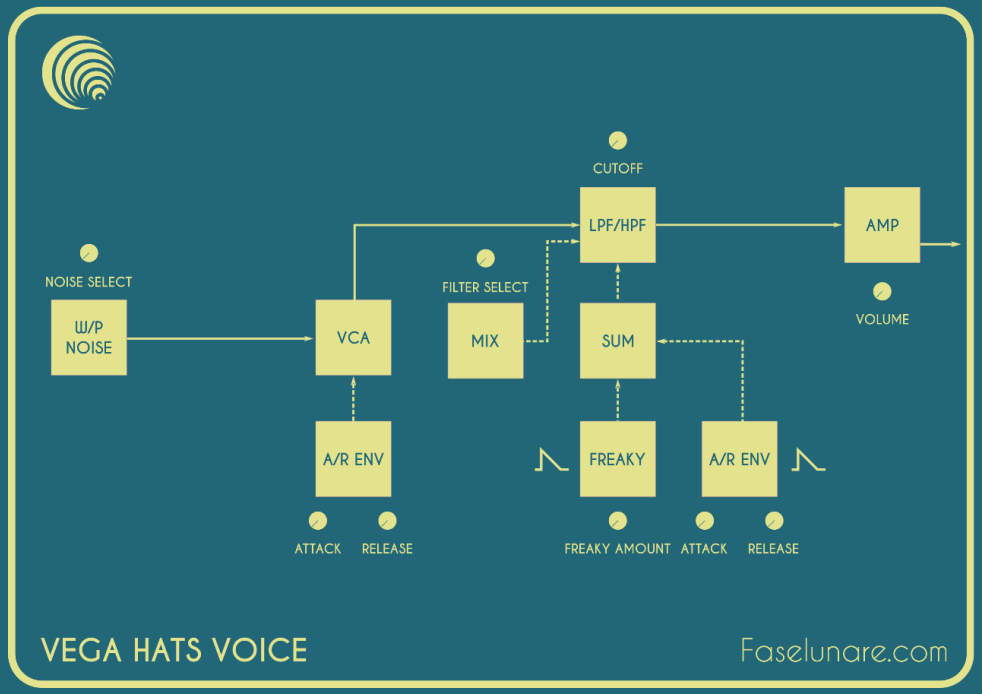
Very similar to the Kick but with a Triangular wave to give the right punch and to support the Noise generator, the **SNARE** has its power in the speed of the **3 ENVELOPES**, with a very fast attack on the **NOISE** and the ability of tuning the sound through the **PITCH** parameter with his envelope to add dynamism.



THE HATS VOICES

Voices 3 and 4 are identical, we have decided to include two synthesis engines dedicated to the sounds of **HATS / CYMBALS** with extremely versatile parameters to be able to create almost any sound in that range.

In this case the sound generation is entrusted to **WHITE NOISE** and **PINK NOISE** which can also be interpolated between them. The signal then passes through an **A/R ENVELOPE** controlled **VCA,** then passes into a **FILTER** which can be **LOW PASS** or **HIGH PASS**, also in this case the two can be interpolated giving life to intermediate filtering positions. The filter's **CUTOFF** parameter is controlled by another **A/R ENVELOPE** mixed to a special **FREAKY PARAMETER**. Each **VEGA** has an onboard **CHIP** that generate an **unique 128bit encrypted key**, this number is used to generate the **FREAKYNESS** for the **FREAKY PARAMETER** and this gives to each **VEGA** a subtly different sound.



CONNECTING VEGA - FIRST TIME OPERATIONS

Connecting the **VEGA** to your system is very simple, first of all **TURN OFF** your Rack. Now connect the **VEGA** power cable to the BUSBOARD of your rack.

NOTE: The VEGA needs 12V and 5V dual power supply otherwise IT DOESN'T WORK!

Prepare the SD CARD!

The **VEGA** can also work without **SD CARD** but if you bought it, we suspect you want to use your own samples. Copy your samples on the SD card making sure to rename them as indicated on page 6 of this manual or download some test samples from our website (https://sndmt.link/faselunare-vega). You should have 16 samples on your card.

Connect the CABLES!

The VEGA has **4 INPUT TRIGGERS**, one for each voice and one special **INPUT TRIGGER** which is used for **RANDOM SEQUENCE** (try feeding it with a square wave of an lfo for example). **TRIGS** need to be **POSITIVE in a range from 2 to 15VOLTS min. impulse 5ms**

The last connection on the bottom right of the panel is the **MONO AUDIO OUTPUT max +/- 10V p.p. 96KHz Sampling Rate**.

CHECK IGNITION and may God's love be with you!

Turn on your rack and wait for the **VEGA** to turn on (it takes a couple of seconds), at the end of the light sequence, your **VEGA** is ready to be used.

UPDATING THE FIRMWARE

VEGA is based on the popular **TEENSY 4.1** board, to update your **VEGA**, download the update file (if present) from our website (https://sndmt.link/faselunare-vega) and download this small application https://sndmt.link/vegaloader.

Disconnect your VEGA from the rack (this is very important !!) connect it to your computer with a USB cable and **launch the application you just downloaded**. **Select the firmware downloaded from our site** (you should have a .hex file) and **click on the green arrow**.

Sometimes it may be necessary to press the white button located on the back of **VEGA** in order to start the update process.

When the vega is updated (this takes about 10 seconds) **WAIT FOR THE REBOOT OF THE MODULE DON'T DISCONNECT THE USB CABLE! At the end of the light sequence**, unplug the USB cable and put the VEGA back into your rack.

SUPPORT and SUGGESTION

For any further information, suggestions or bug reports, please contact us at this address **SUPPORT@FASELUNARE.COM**

TAG US!

If you make a **VIDEO**, a **REVIEW** or an **ALBUM** using our **VEGA**, we will be happy to know and to help you with the promotion. Tag us on social networks with these tags: **#faselunare #vega #soundmit** and send us a message!