Noise Engineering Ampla Versio ADSR Controlled Stereo VCA or MMF Gate and Chorus Instruction Manual

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Contents

Introduction

Ampla Versio is an ADSR-controlled VCA and resonant multimode-filter gate, with a stereo bypassable chorus on top. The firmware offers a number of different dynamic and tone-shaping options: the Blend control fades between a pure VCA and a VCA/filter combo, behaving similarly to a traditional lowpass gate, but with lowpass, bandpass, and highpass filter settings. The ADSR envelope is fully voltage controllable and also features a dynamic curve control, creating an expressive envelope you can shape to your liking.

Etymology

- Ampla — from Latin: "Amplify"
- Versio — from Latin: "Versatile"
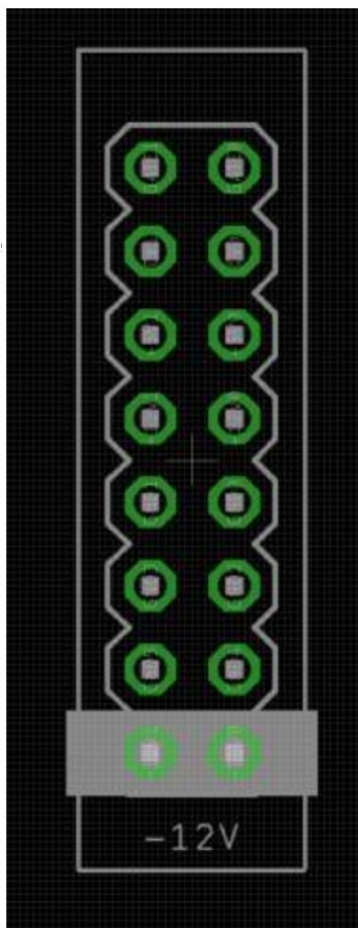- "Versatile amplification"

Color code
On boot, the IV's LEDs will shine with this color pattern to indicate that it is running the current IV firmware:

⬤ 🔵 🔵 ⚪
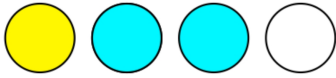
Overview

- **Type:** Envelope/VCA/ MMFgate/chorus
- **Size:** 10 HP
- **Depth:** 1.5 inches

Installation

To power your Noise Engineering module, turn off your case. Plug one end of your ribbon cable into your power board so that the red stripe on the ribbon cable is aligned to the side that says -12v and each pin on the power header is plugged into the connector on the ribbon. Make sure no pins are overhanging the connector! If they are, unplug it and realign.

Line up the red stripe on the ribbon cable so that it matches the white stripe and/or -12v indication on the board

and plug in the connector.

Screw your module into your case BEFORE powering on the module. You risk bumping the module's PCB against something metallic and damaging it if it's not properly secured when powered on.

You should be good to go if you followed these instructions. Now go make some noise!

A final note. Some modules have other headers — they may have a different number of pins or may say NOT POWER. In general, unless a manual tells you otherwise, DO NOT CONNECT THOSE TO POWER.

Power

If your Versio looks like the left picture, it requires 70mA +12v and 70mA -12v. If it looks like the right picture, it requires 125mA +12v and 10mA -12v. Versio does not use the +5v rail.
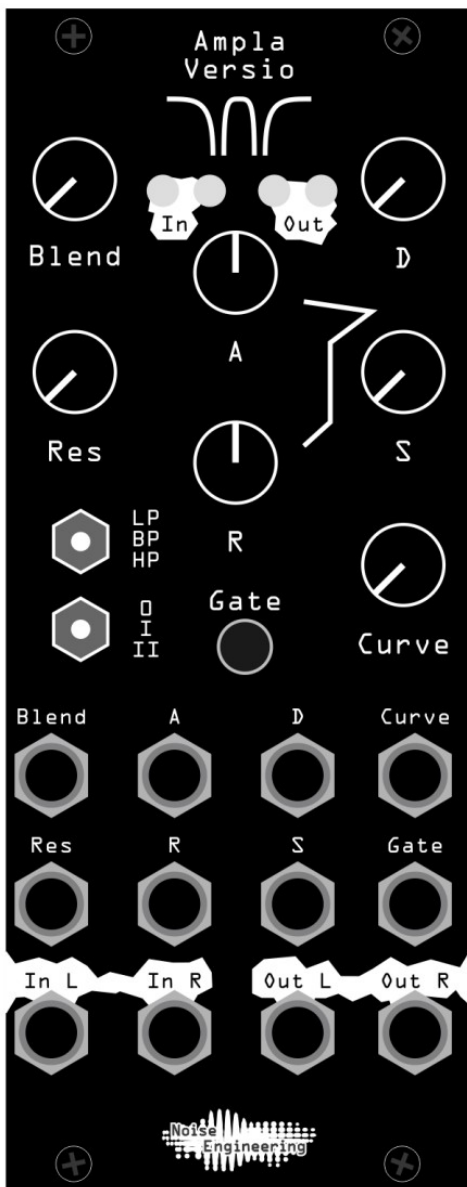

Input and output voltages

All CV inputs expect 0-5 V. All pots act as offsets and sum with the input CV. The Gate input responds to signals above +2 V. The audio inputs clip around 16 V peak to peak.

Interface

Presented here are the parameter names followed (in parentheses) by the names of those parameters on DV for easy tweaking.

- **Blend (Blend):** Mixes between a pure VCA and a VCA/filter combo.
- **Res (Speed):** Filter resonance
- **A (Tone):** Attack time
- **D (Regen):** Decay time
- **S (Size):** Sustain level
- **R (Index):** Release time
- **Curve (Dense):** Envelope curve control, curving the envelope from llogarithmic to linear to exponential
- **Gate (FSU):** Gate input (button functions as manual gate)
- **LP/BP/HP (LIM/DST/SHM):** Changes the filter type of the MMFgate side between lowpass, bandpass, and highpass
- **0/I/II (BND/LRP/JMP):** Chorus control (none, some, max)
- **In L/In R:** Audio input. If R is not patched, the signal from L is normaled to both inputs
- **Out L/Out R:** Stereo output pair

Patch Tutorial
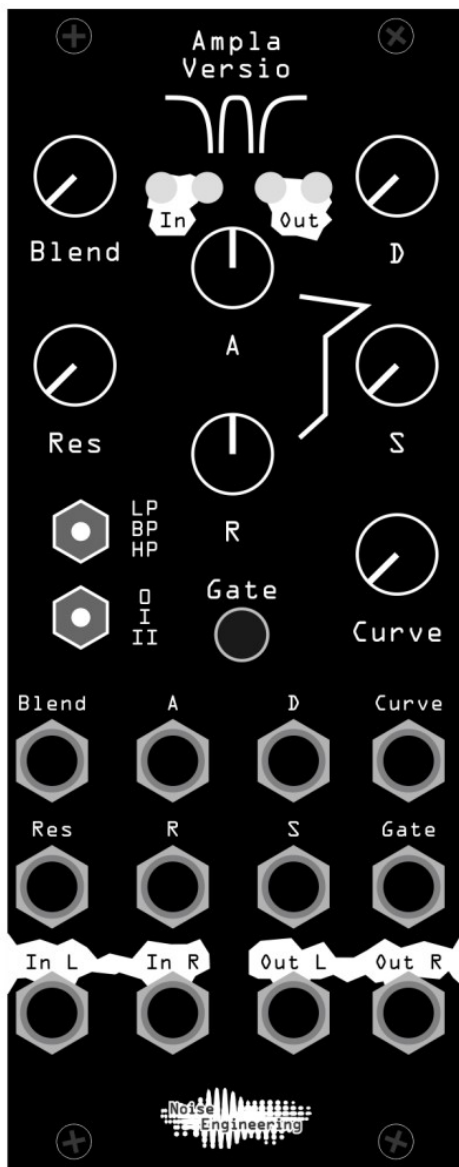
Start with the Blend parameter fully counterclockwise, and the 0/I/II switch in the left position. Patch an audio source to the L input (if your source is stereo patch to the R input as well). Patch the L/R outputs to your mixer. Patch a gate sequencer or keyboard gate output to the Gate input and tweak the A/D/S/R parameters to create an envelope shape that suits your style.

Next, turn Blend fully clockwise and try out the LP/BP/HP filter settings to shape your sound harmonically as well as dynamically.

Finally, flip the 0/I/II switch to the I or II position to add some chorus and width to your sound.

As on the DV, all non-switch parameters are CV controllable. Try mapping a CV channel of your sequencer,or a velocity or mod wheel output from a controller to the Blend parameter to give your sound an extra layer of tonal variation.

Firmware updating

The Ampla Versio firmware can be loaded to the Versio hardware by the user via our firmware webapp. In the unlikely event that the need arises, firmware patches will also be available on that site.
The Versio hardware can be flashed back to the Desmodus Versio firmware or any other available firmware at any time.

Webapp link: portal.noiseengineering.us

To update the firmware on your Ampla Versio:

1. Turn off the power to your case and unscrew AV.
2. Remove the power connector on the back of AV.
3. Plug a micro USB connector into the port on the pack of the module, and the other end into your computer.
4. Follow the instructions in the webapp.

Design Notes
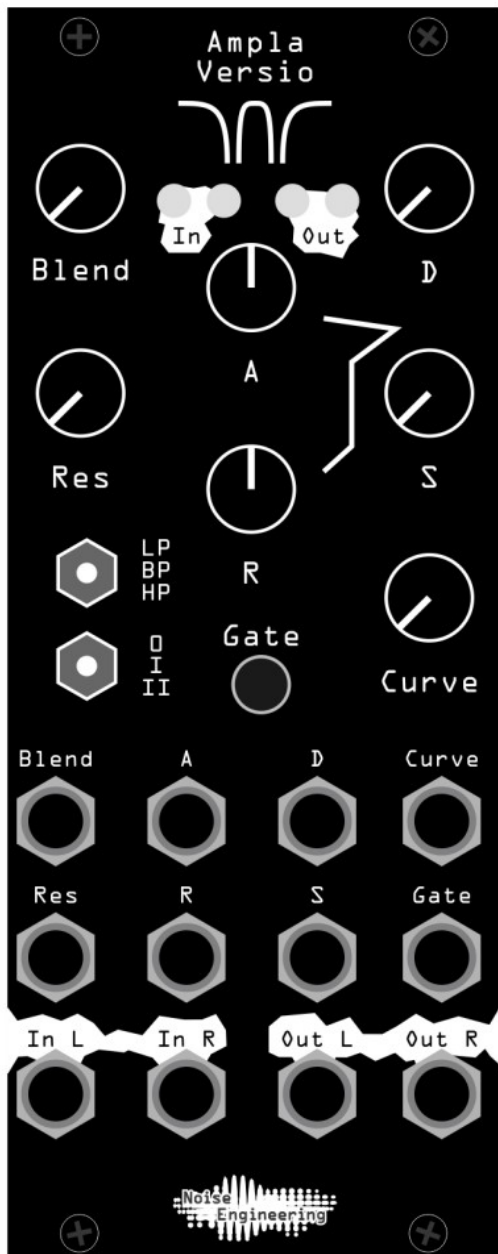
The allure of being able to do alternate firmwares when we designed the Desmodus was strong. At writing, we have a firmware for almost every letter of the alphabet (we refer to things internally by their initials). The VCA/x-pass gate was something we were interested in but we didn't know how much development we wanted to put into it as hardware. Once we agreed that it could work as an alt firmware, it was a no-brainer.

The firmware started budding during NAMM 2020 when Stephen stayed home for a few days and, with zero interruptions except the dogs (don't underestimate how disruptive they can be), he got a first pass on three or four

firmwares. They had a long way to go (and some still do…, but some are coming soon!). With everything that is 2020, a lot was delayed this year and so the initial release of the Desmodus took a lot longer than we'd hoped. But that's well covered territory. We finished this firmware and considered releasing it but then thought it seemed like a nice present for our customers.

We don't plan to print a panel for this one, but if you're interested in trying out all the firmwares and want a blank panel we'll have those available (as replacement panels or as an option when you purchase). International friends, we'll make them available to retailers too so it's easier for you to pick them up. Want to just print the overlays? Grab the files on our site here. Want to create your own? The panel file is available on our website here if you want to make your own, too.

Warranty

Noise Engineering backs all our products with a product warranty: we guarantee our products to be free from manufacturing defects (materials or workmanship) for one year from the date a new module is pu.rchased from Noise Engineering or an authorized retailer (receipt or invoice required). The cost of shipping to Noise Engineering is paid by the user. Modules requiring warranty repair will either be repaired or replaced at Noise Engineering's discretion. If you believe you have a product that has a defect that is out of warranty, please contact us and we will work with you.
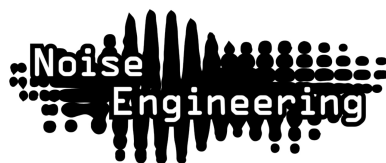
This warranty does not cover damage due to improper handling, storage, use, or abuse, modifications, or improper power or other voltage application.

All returns must be coordinated through Noise Engineering; returns without a Return Authorization will be refused and returned to sender.
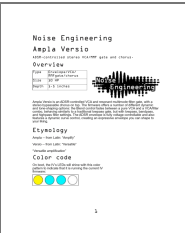
Please contact us for the current rate and more information for repairs for modules that are not covered by our warranty.

Special Thanks

- René Boscio
- Erwin Coumans
- Rob Vonderheide

Documents / Resources

[Noise Engineering Ampla Versio ADSR Controlled Stereo VCA or MMF Gate and Chorus](#) [pdf] Instruction Manual
AV HW 9-2-2022, Ampla Versio, ADSR Controlled Stereo VCA or MMF Gate and Chorus, Ampl a Versio ADSR Controlled Stereo VCA or MMF Gate and Chorus

References

- **NE** [Noise Engineering Customer Portal](#)

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