

E.S.L.



EUTERPE SYNTHESIZER LABORATORIES

jtinera

vertice first stage

*In musica resurget*

## Don't read it.

We kindly ask that you ***do not read*** this user's manual. It is an outdated procedure that, besides being risky for your sight and brain, can actually lead to a conscious use of the thing you just bought. This is knowledge you surely don't want in your life ever.

Being unaware of the many practical and mental issues this device can provide – down here accurately uselessly described – will be creatively shocking, dangerous, but shocking.

So please do yourself a favor and throw away this document. The trash bin is the only place where it belongs.

#recycleit #donotreadmanuals #neveragain

*Curiositas ex ignorantia facta est.  
Bellum quoque.*

*La curiosità è fatta di ignoranza.  
Le guerre pure.*

*Curiosity is made of ignorance.  
Wars also.*

**JUST ONE THING YOU NEED TO KNOW: Power Supply**  
RED STRIPE DOWN – ROTER STREIFEN UNTEN – LINEA  
ROSSA SOTTO – RED TRACTUS SUBTUS – RUBAN A  
RAYURES

ROUGES – RAYA ROJA ABAJO – SARKANĀ SVĪTRA UZ LEJU –  
RØDSTRIBET DUN – КРАСНАЯ ПОЛОСА ВНИЗ – 红色条纹 – レ  
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ドストライプダウン – 빨간색 스트라이프 다운 – طيش رمحاً لفسرلاً  
– QAPWI' [KLINGON]

**We don't know how on Andromeda or AlphaCentauri they talks,  
but just keep that RED STRIPE DOWN!**

## Foreword by Stefano Bersanetti

**Itinera** comes from Latin. It means: "to come back multiple times".

This name was born like a joke between me and myself (if you think you're too alone and forgotten, this sentence should make you think): in ten years I came out with Vertice Prima Serie, then after a while the Vertice Seconda. Then nothing at all for the whole time. Of course I invented stuff, and finished also, but never came out to the real world with a new instrument. With a new paid-by-someone instrument, I mean.

And when, after so many years, I finally did it and it was, of course, the same stuff of before. This thing is funny to me, I don't know why, so I've chosen this name which reflects my incredible ability to do and re-do and do again the same stuff even if I hate making two times the same thing.

Yes, it's a complicate inner world here at Euterpe.

Actually it's not exactly the same, but pretty close. Itinera is called "Vertice First Channel" 'cause she takes from his father a lot of circuitry. But in ten years, I mean, if you don't learn anything you're barely dead. So in ten years I learned something and that something is in your modular rack right now. Features like the Notch mode, the two kinds of Iteratio, adapted-to-euro level circuitry without losing the line-level range, the Innesco, all of them are "new" in some senses. You can of course obtain them with Vertice simply using a couple of cables more than the usual basal patch. Here instead we've formalized them in appropriate controls and level-design, and squeezed all the thing in the tiny Euro format.

Naturally having three filterboards, two VCAs and the related EG in the same package, like Vertice does, makes timbres able to go far than one single filter, but there is a simple solution to this problem: you can always buy more modules, don't you?

'Till your wife doesn't realize, of course...

... and never never never tell her how much those things actually costs.

By dint of being honest  
I will end up in jail.

Stè

# jtinera

vertice first stage



Cf



input level



CV level



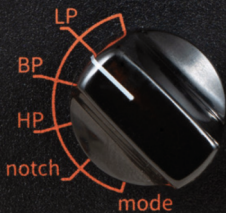
emphasis



iteratio

formant

vindicta



mode



overload



attitude



innesco

audio inputs

CV input flat

CV input

CV formant

CV vindicta

audio out



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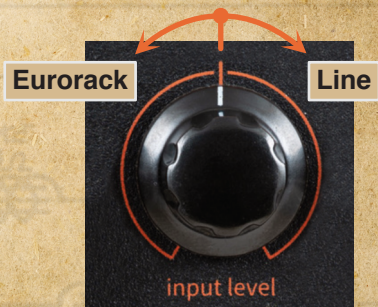
in musica resurget

## 1. Cf, Cutoff Frequency

Sets the -3dB point where the filter starts to cut. It has 0-10V CV range and is centred around 600Hz. The response curve of this filter is nominally 12dB/oct but vary with Emphasis level. The whole range is more than 20-20kHz. It have the bigger knob for a reason: it's the most important control and have – sometimes – tiny little spots where the sound can abruptly change; big knobs helps, under this light.

## 2. Input Level

Adjust the level of the audio signal. **For most of many Eurorack sources, going beyond the flat position will saturate and choke-off some important internal functions**, but raise the overall level, eventually distorting the signal, naturally. So if you want to explore itinera in the design-desired-ranges try it with half Input Level pot involved. Instead if you're using one line-level signal, which is lower in voltage, simply pump it up. This pot raise up the level of +17dBVu. Using the overload function will raise it of further +40dBVu, which is a lot, trust me, enough to raising up and getting usable all forms of not-euro audio sources, including line-level synthesizers, CD players, tape recorder, electric guitars, piezoelectric microphones, and so forth.

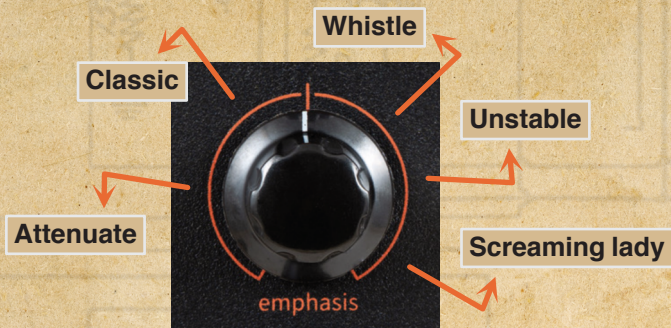


## 3. CV Level

Set the CV level for the CV input socket. Use it to move the Cf automatically. The 0-10V range works well. You can work good also with +/-5V levels, just set the main Cf pot to a different (upper) center point. There are no capacitors in the path so you can bias the frequency as much as you desire.

#### 4. Emphasis

This is the resonance. Depending on which Emphasis setting you choose, it can be (from left to right): attenuating a bit the slope, classic synth, whistling, unstable, crackling (screaming lady), fixed but distorted (dying pig) and even turn it into an "oscillator" (Innesco function). It deforms the cutting slope, more the Emphasis more the gradience. It is strictly related to the Attitude and Innesco switches and its behavior is heavily submitted to those two controls. Commonly more you turn it up more the filter will impact on your timbre. Raising the signal Input Level is useful to drown into the signal one too whistling Emphasis.



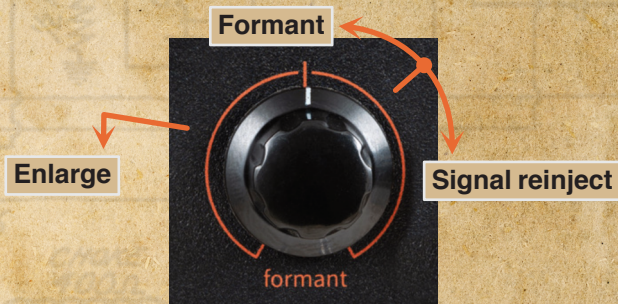
## Iteratios

These functions are the place when you obtain errors and surprises out from your Itinera. Touch them and be aware that your timbre will not be itself anymore. Highly Emphasis-dependent.

They are both CV-controllable. When plugging the right cable in the right port you can use the dedicated knob to attenuate the inputted CV. Only positive CV allowed.

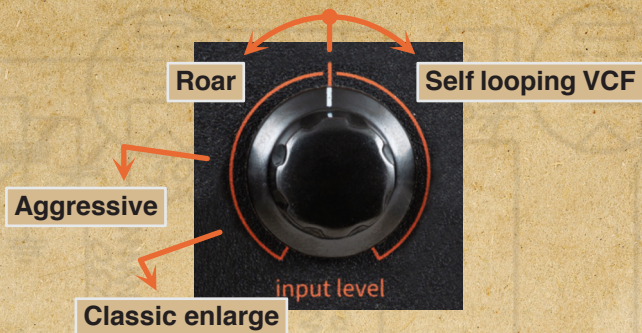
### 5. Formant Iteratio

Made to deform, enlarge and fatten the whole signal. Optimal for getting speech-like tones out of your saw and square. It can reinject the input signal into your timbre, even if you're cutting it away with the Cf. Highly Emphasis dependent, can change the Innesco note, commonly about one semitone.



### 6. Vindicta Iteratio

The most disturbing function here, named Vindicta (Vengeance) for a reson. It fattens, squeezes, roars and abruptly 'turns off' the filter, creating interesting automatic loops. Highly Emphasis dependent, if too much Input Level is used the Vindicta can suffocate. If using Vindicta the filter "shut down" for a while, then come to life again then die again etcetera, creating a sort of percussive pattern, that's exactly the design-wanted feature. I told you it's a pretty complex inner world here at Euterpe... Use low Emphasis to moderate the nastiness of both Iteratio controls, knowing that the contrary is true also.



## 7. Mode

Select the mode of the filter. LP, BP, HP and Notch are available. Notch usually boosts more than cut, depending on the Emphasis setup, and is useful when you need to emphasize and deform one already made timbre coming from your Vst or Akay something. For harder transformations instead just use the other 3 classic modes.

## 8. Overdrive

+40dB of flat-flattening hating-humankind pure silicon-transistor distortion, useful for destroying loud signals or simply boosting low level sources. Overdrive is circuitally placed just after the InputLev control and so works in harmony with it.

When a too loud signal is boosted it will lose a part of its low frequency and of course dynamics but, you know, that's distorting, bitch.

So passive electric guitars, piezoelectric and such tiny voltage sources are welcome in Itinera without the needs of a DI. From a common Ibanez, for example, you can obtain, balancing Input Level and Overdrive, those range of scenarios: nothing, clean, clean in face, tender "tube like" fuzzy. Turning up the Overload can produce instead round low freq emphasize, slight flat odd transistor distortion finishing with a good Pennywise no-dynamics punk-like tones just raising up the Input Level.

## 9. Emphasis Attitude

As with its father, the Vertice, you can choose to use the Diode, the original Steiner resonance path, which acts classically at the



beginning but becomes very unstable at the end. The alternative is my design, labelled Transistor, which distorts and reduces the dynamic range, making the whole filter more stable but distorted. Useful for mono leaders, basses, retro sweeps and simple techno sweep-kicks. Too whistle when encountering soft and low-level tones. Use Input Level and Overdrive if a good drown into the signal is needed.

## **10. Innesco**

In Transistor mode (only) you can push the circuit further. I decided to stop myself when the Oscillating Filter practically behaved like a Filtering Oscillator for all the whole Cf pot excursion. I know "Filtering Oscillators" are not a thing, but in this case I don't know what else to call it. It has a consistent low end, responds well to V/oct in at least 3 octaves and can still filter. Useful for aggressive leaders, distorted basslines and free hard techno kicks in the face. Exactly in the middle of your face, I mean, right there. Also, just make it HP and put some female voices into it and you have a low note drone with the voices disturbing and being modified by it. A filtering oscillator, like said.

## **11 and 12. Audio inputs**

They accept all kinds of oscillating voltages between 1mV and 15V (audio-line-level 1V circa, euro-line-level 8-10V circa). From 18V to infinity the ICs starts to fry and you will feel the typical burnt circuit taste everywhere. Ventilate the room before staying. Extinguishing eventual small fires is also strongly recommended. Euterpe cannot be held responsible for the use of gamma ray burst, radioactive stuff, russian-american private military lines as a signal to be processed by Itinera, as this is beyond the scope of its functionality. However, it can be said that this could result in an interesting audio phenomenon. If you manage to get some of them right, just drop a mail to [euterpesynth@gmail.com](mailto:euterpesynth@gmail.com), we'll be pleased to know you need one new Itinera module.

## **13 and 14. Flat Cf CV input and Attenuated Cf CV input**

Ports to controls the Cf. Accepts both positive and negative CVs. The Attenuated one is related to the CV Level control.

## **15 and 16. CV Formant and CV Vindicta**

Moves the Formant or the Vindicta Iteratio control. When a cable is plugged the dedicated Formant or Vindicta potentiometer becomes a level active attenuator (not attenuverter) for the input CV signal. Accepts and reacts at any range of positive CV (up to 15V).

## 17. Audio output

And finally you can use the output cable. Coming out with Euro level, so quite hot. Attenuate on your line-level mixer and don't use microphone input plugs (usually XLR. In a combo plug, use the TRS connector). Attenuating pads on the mixer are welcome. For Eurorack-level mixers (and any other EU-module), just let yourself go until you see the hot bloodstream coming out the sockets. When it happens and you still playing you know is not so normal, isn't it?

## 18. Power Supply

RED STRIPE DOWN – ROTER STREIFEN UNTEN – LINEA ROSSA SOTTO – RED TRACTUS SUBTUS – RUBAN À RAYURES ROUGES – RAYA ROJA ABAJO – SARKANĀ SVĪTRA UZ LEJU – RØDSTRIBET DUN – КРАСНАЯ ПОЛОСА ВНИЗ – 红色条纹 – レッドストライプダウン – 빨간색 스트라이프 다운 – طيرش رمح الفسلسا – QAPWI' [KLINGON].

We don't know how on Andromeda or AlphaCentauri they talks, but **just keep that RED STRIPE DOWN!**

If you reached this part of the manual you're not so obedient. In this moment you surely had your intellect damaged by all this words all together. Man, people get crazy with this, they have to be interned in psychiatric hospital. Stop reading now and forever. Reading is evil.

For clarifications feel free to mail to: [euterpesynt@gmail.com](mailto:euterpesynt@gmail.com) I'll be happy to answer with another tons of unhealthy words ;)

## Tech Stuff

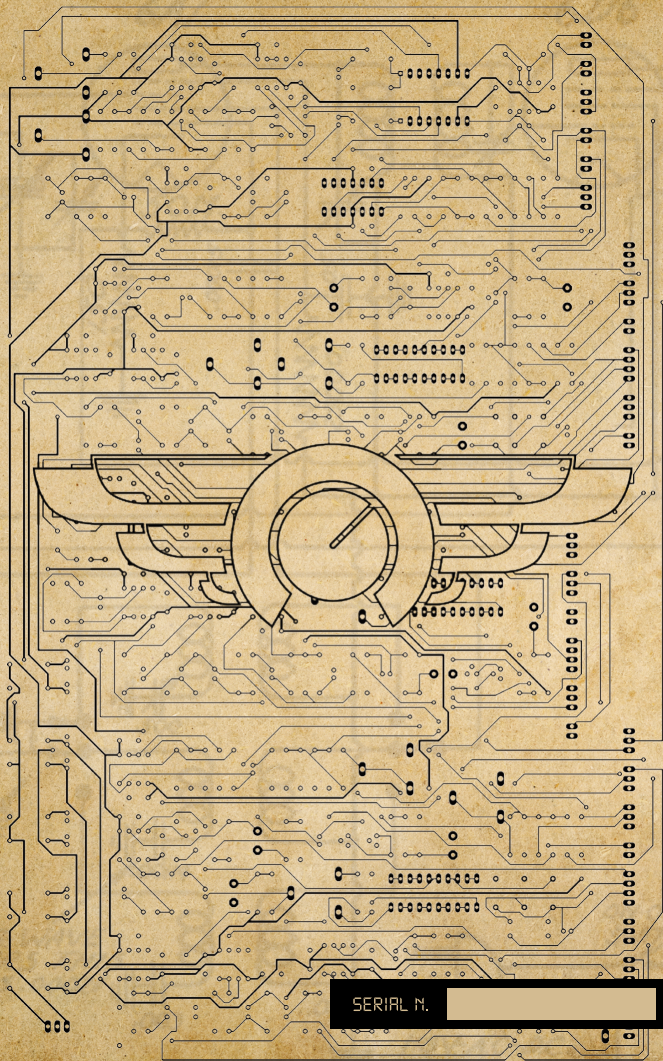
- total weight: 260g
- faceplate dimesions: 3U x 18hp
- deep: 22mm
- power consumption: 10mA @ 12V, 0mA @ 5V
- pwr supply range: +/-12V standard Eurorack - RED STRIPE DOWN

## Special Thanks to:

Euterpe, Bruno & Lorenzina, Walt, Enrique de la Peña Lopez, Patti, Ruggi & Seppi & Bauletto, Malista Jo, Giudi & Marcomarzocca, l'Ostudracunis, Jacopollo, Dani e Samu, Marculin Gianfra e il Dott. Cops, Tito, Steceschi, Mirè, Jackieboy & Mikey, Lou Carnuccio, Caezar, il Bupropione, Nicco Caldini, Andrereali, Difilippo, Gianni, Simo&Angelo@enjoyelectronics, AndreKauffman@SB, Tony@SG, RoryDow@SOS, Cato, SimonGrab, RichFeedback, Valentin, Niko Tesson, Pier Duca del Bardo, la Fantasia, il Risveglio, Antonio Vivaldi, Dia.

*Thank you all for patience, wisdom, inspirations and smiles, there are still humans alive on the planet, after all...*

Stefano Bersanetti  
EUTERPE SYNTHESIZER LABORATORIES  
Vintage Synthesizer Since 2014



SERIAL N.