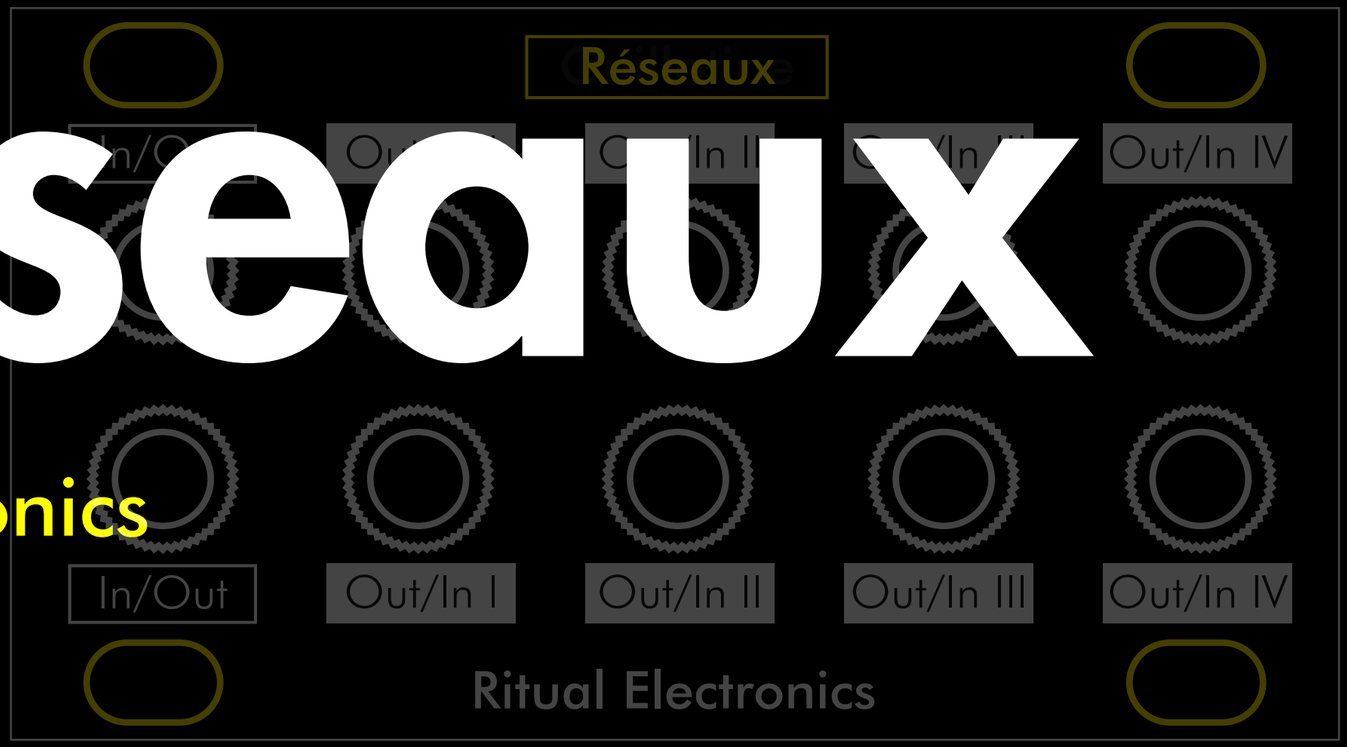
Réseaux



Ritual Electronics

Summary

Réseaux

n.m. /ʻrezo/

"It is essential to strengthen international cooperation in the fight against secret networks"

Réseaux

Thank you for purchasing Ritual Electronics Réseaux.

Your module has been assembled with care in our studio in Marseille, France.

You can find your module on Modulargrid:
https://www.modulargrid.net/e/ritual-electronics-reseaux

For any remarks and informations, contact us at:
contact@ritualelectronics.com

For video demos and patch ideas check:
https://www.youtube.com/ritualelectronics
https://www.instagram.com/ritualelectronics

Limited warranty

Ritual Electronics warrants this product to be free of defects in materials or construction for a period of one year from the date of purchase.

Malfunction resulting from wrong power supply voltages, backwards or reversed eurorack bus board cable connection, abuse of the product or any other causes determined by Ritual Electronics to be the fault of the user are not covered by this warranty, and normal service rates will apply.

During the warranty period, any defective products will be repaired or replaced, at the option of Ritual Electronics, on a return-to-Ritual Electronics basis with the customer paying the transit cost to Ritual Electronics. The return of your module is on us.

Ritual Electronics implies and accepts no responsibility for harm to person or apparatus caused through operation of this product.

Installation

Always turn your eurorack case off before installing a module.

Do not touch any electrical terminals when attaching any Eurorack bus board cable.

Ritual Electronics Réseaux does not require power.

You will need 14HP of free space in your Eurorack case to install Réseaux. The module is 10mm deep.

Réseaux is a 1U module, you will need a 1U rack space - Intellijel format.

Overview

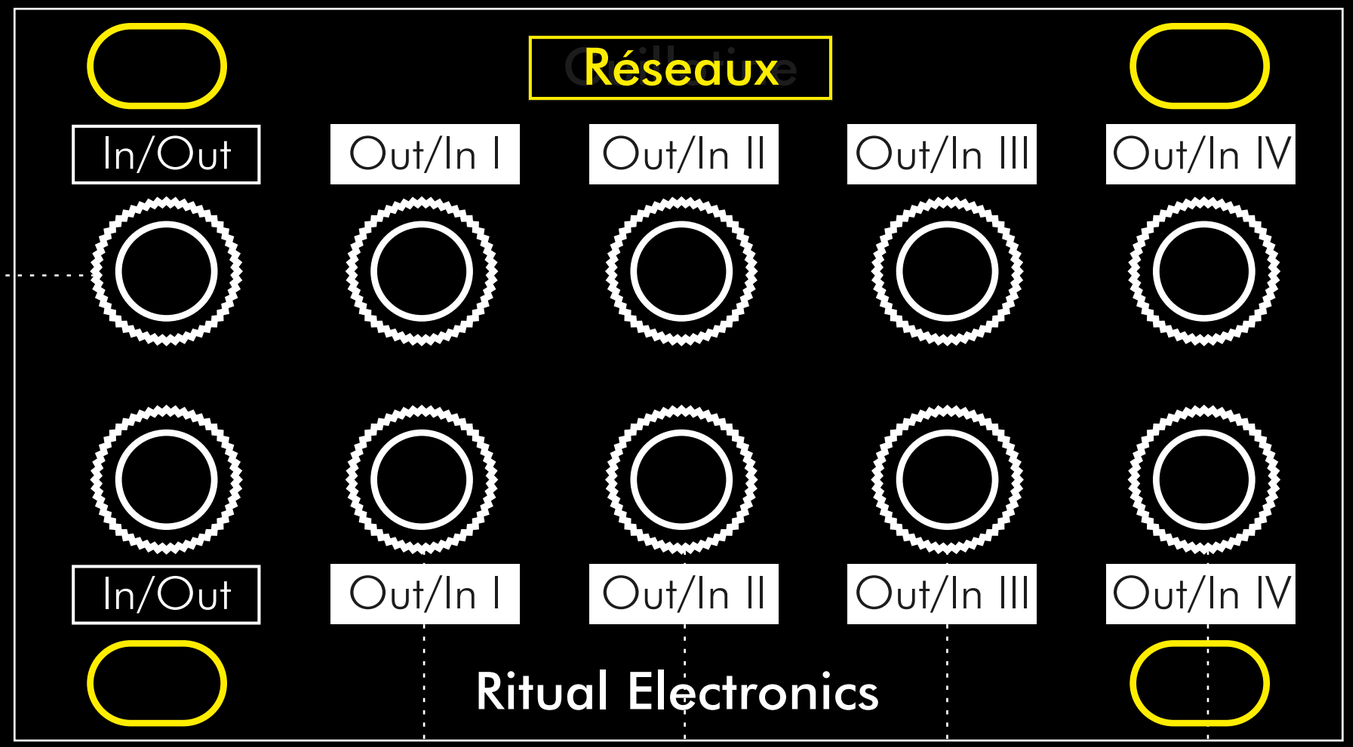
Réseaux is known as an R-2R ladder. It has two identical sections which you can cross patch.

Réseaux is a bidirectional module meaning the inputs can be outputs and vice versa.
It has two main uses depending on the direction you are using the module.

– When using **Réseaux** with one input and multiple outputs you have **attenuated copies** of the input. Great to send a signal around. Specially if you have modules which do not have attenuators built in.

– When using one output and multiple inputs you have a **mixer with set levels**. It can mix both CVs and audio signals.

Réseaux controls



In/Out
Main input or output depending on usage

Out/In I
95% of the incoming signal

Out/In II
80% of the incoming signal

Out/In III
60% of the incoming signal

Out/In IV
40% of the incoming signal

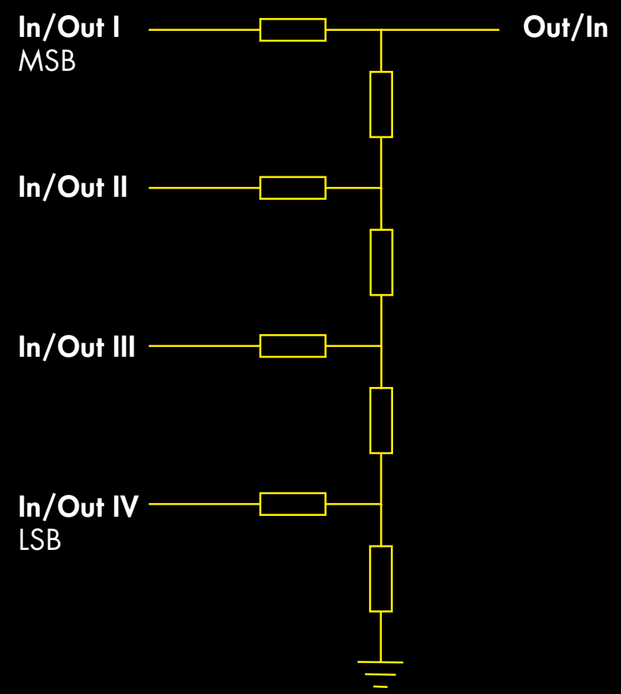
Operations

R-2R?

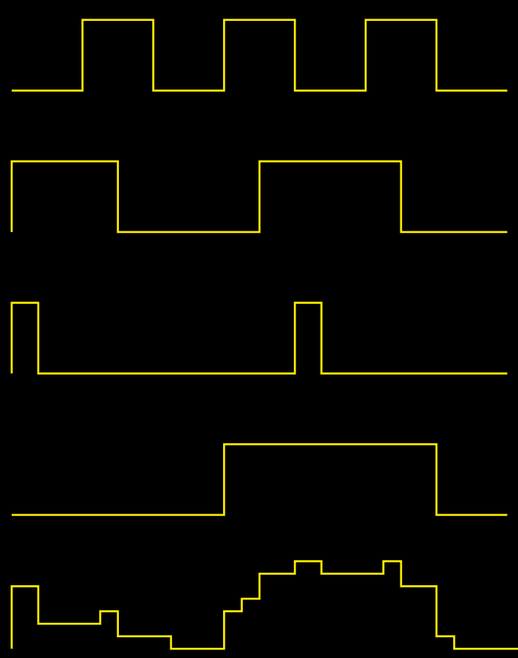
The resistor ladder is a primitive form of digital to analog conversion using only a resistors string.
This process itself is interesting in the context of modular synthesis. Take four gates from different sources and plug them into the 4 out/ins to give them a “weight”. It results in a stepped sequences useful for modulations or pitch sequences.

On the other hand we can benefit from the resistor ladder in the opposite way. When using one signal input to four different outputs the resistor string acts as a series of voltage dividers.

Please note you can safely use three of the Out/Ins as inputs and one as an output or vice-versa, it will give you different weights and attenuations.



Operations



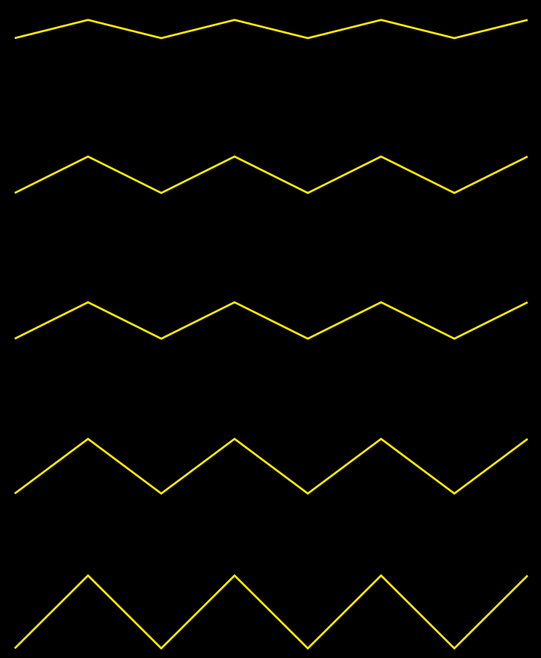
In/Out IV
LSB

In/Out III

In/Out II

In/Out I
MSB

Out/In



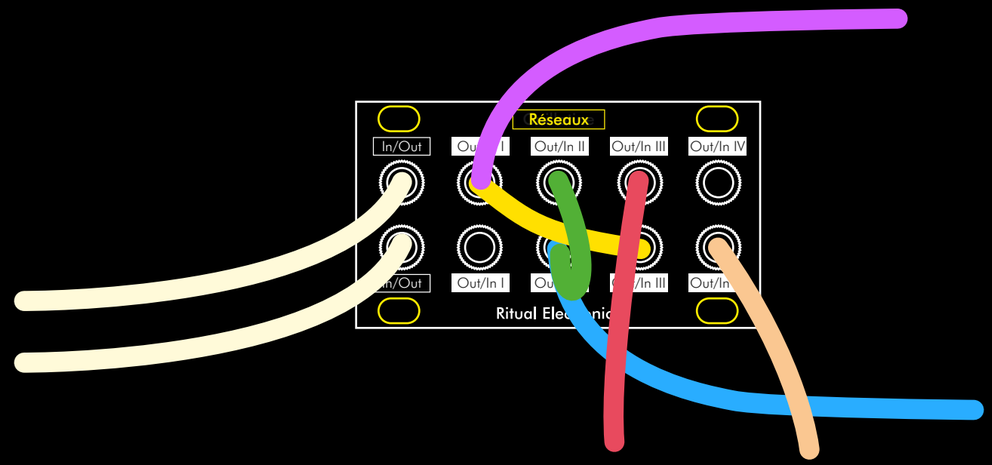
Mixing (4x Ins 1x Out)

4 different signals are scaled and mixed together.
Here shown with 4 gate streams and the resulting CV output

Attenuating (1x In 4x Outs)

One signal gets attenuated in four different versions to send around your system.

Patch ideas



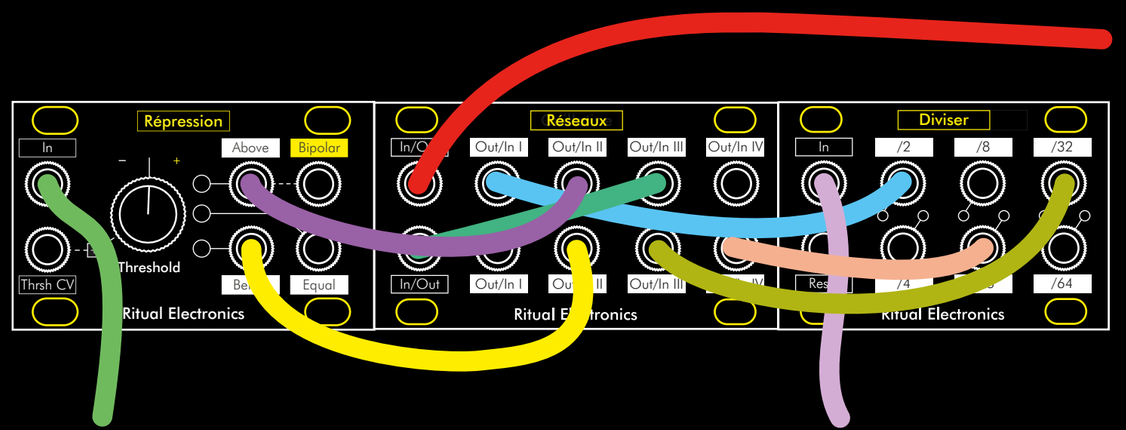
Patch #1 - Stereo mix

Think of the two separate channels as your left and right channel mixers.
Depending on where you plug in the Out/Ins you will end up with a different volume. Use a mult or a stackable to set the level on the other channel.

Patch notes

End of signal chain I ——— Réseaux, Out/In n, channel I
End of signal chain I ——— Réseaux, Out/In n, channel II
End of signal chain II ——— Réseaux, Out/In n, channel I
...
In/Out, channel I ——— Mixer L input
In/Out, channel II ——— Mixer R input

Patch ideas



Patch #2 - Gates to melodies

With the help of an unused clock divider and/or a gate sequencer and logic modules you can create great evolving melodies.
Use both channels to tap different melodies from different point in the circuit.
Plug them in a reliable quantizer and pick the right scale!

Patch notes

Krach, Noise out ——— Répression, In
Répression, Bipolar out ——— Audio / Gates
LFO, out ——— Comparator, CV

Patch #3 - More bits

Plug the weakest input/output of your first channel insto the strongest output/input of the second channel to extend the number of channels of the module.