LARIX ELEKTRO

MACRO CONTROLS
concept and explanation

Quid ?

Everyone has certainly faced a problem while using their patch: the small buttons and knobs lost in the middle of a forest of cables.
And then you touch the one you absolutely shouldn't have modified, or you unplug a cable.
In short, a bad experience.
Not to mention those who complain (often rightly) about the small size of the controls, not practical for big fingers!

The idea with this series of modules is to address these problems:
Bigger controls, placed in an easy-to-access location. That's the very simple idea.

A little theory...

If we want to summarize roughly, what kinds of controls exist?
To keep it simple, as a starting point for these explanations, we will divide them into 2 categories:

- **Binary values** (0-1, On/Off, or open/closed, whichever you prefer)
  In modular, these are GATE or TRIG signals:
  Starting modules (sequencers), clocks, triggering something (ADSR envelope)...
- **Continuous values**.
  It's simpler: CV, at audio rate or not.

Alright, we could add discretized values, somewhere in between (think of quantizers), and certainly other types of controls, but we'll stop here.

And in practice?

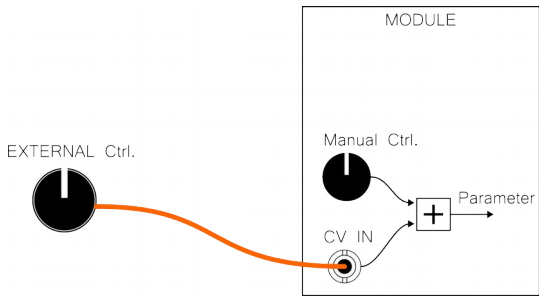
All this is very nice, but what is the point of the game then?
Dismantle the potentiometers and other buttons from your favorite module, and put them in another module?
Not sure everyone will agree to damage their most precious modules!

Theory, again...

It is quite obvious that the functions of your favorite module that are only accessible via a manual command cannot be replaced by an external module.

But all parameters having a CV/GATE input can, by definition, be controlled by another module.

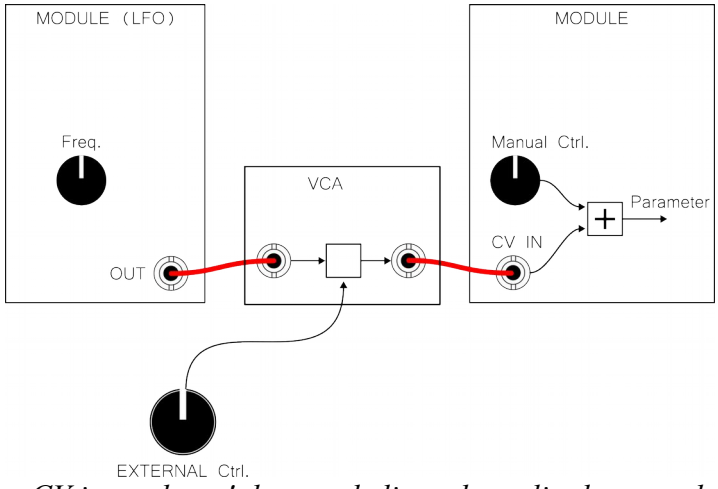
Basic external control



The **EXTERNAL Ctrl.** *Does the same job as the* **Manual Ctrl.**

Likewise, when in your patch, a module sends a signal to another module (a LFO into a filter cutoff, for instance), you can place a module in the circuit to modify its amplitude.
(A VCA, for example, so that the LFO amount sent to this cutoff will be adjustable)
... you can never have enough VCAs...

Control the amplitude of a signal



Some CV input doesn't have a dedicated amplitude control.
You can use a 'mixer' (or the **AttV-4***, for example)*
Or more complexe, a VCA.

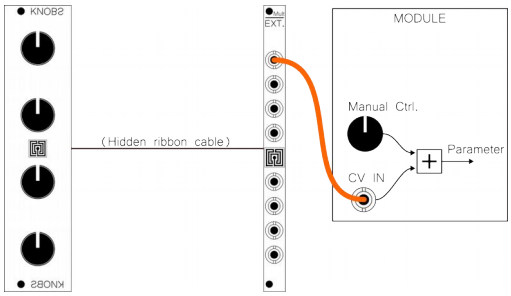
So... what's about this serie of MACRO module ?

The modules of the Marco controls series were designed with the aim of building this kind of patches.

In the first series of modules, there are 2 control modules:
SWITCH: The first one to generate 8 binary signals: buttons... but configurable in many ways.
KNOBS: The second one with 4 large and comfortable rotary potentiometers.

The outputs of these 2 modules are relocated to a small module, thus allowing the cables to be kept away from your fingers!
And on top of that, they are available in 3U and 1U versions.

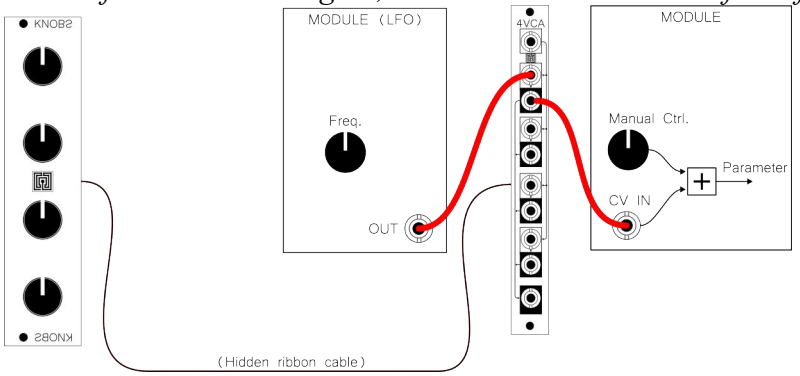
The **Parameter** *control is now available in a better position in your rack*



(This is the same with the **SWITCH** *module, instead of the* **KNOBS** *module)*

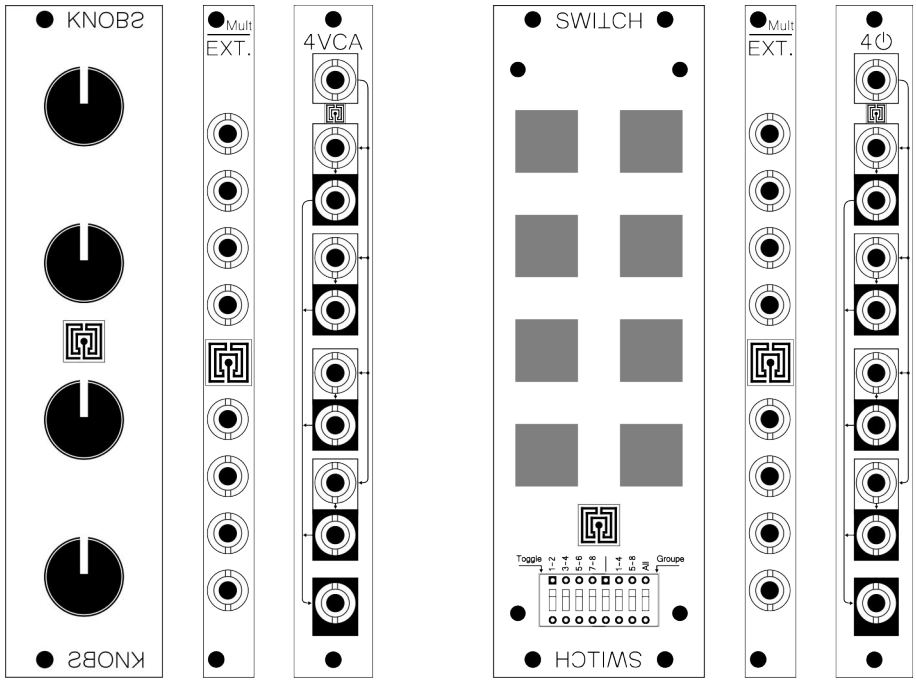
To complete the system, 2 additional modules were developed to meet the need to control the flow of signals
(You know, the example above, of the VCA controlling the amplitude of an LFO).
4VCA: The first contains 4 VCAs acting as a mixer and/or signal dispatcher.
4ONOFF: The second contains 4 voltage-controlled switches, with the same summing and dispatch functions.
(OK, to be complete, the **Shift-R** module, an extension of the **CV Generator** or the **TIME**, can also be used)

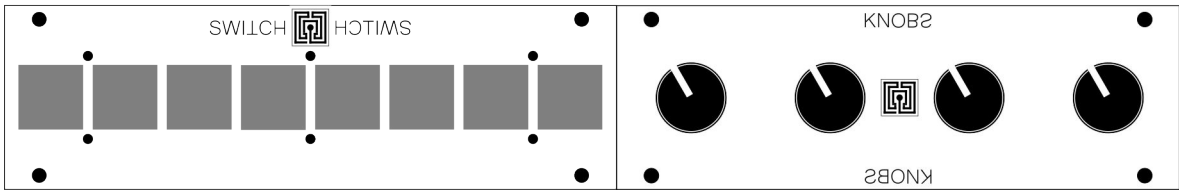
Control the amplitude of a modulation signal, with the **KNOBS** *module free of all the cables.*



(Same concep with the **SWITCH** *module, and the* **4ONOFF** *module : switching or selecting a signal.)*

All modules currently available :





In the future, other modules may be developed. But they could also serve as extensions for new modules.

Contact : larix.elektro@gmail.com
www.larix-elektro.com