Adding a CV input
.Example with the TIME-SHIFTER.

The **MAIN-SHIFT** parameter does not have its CV input.
But compared to the electronic schematic of the module, with some modifications, it would be possible to add this CV input.

The module adds this input while keeping the original potentiometer's functionality.

This is a preliminary document. It is intended for people who know what they are doing.
If you have doubts, get a knowledgeable friend to help.

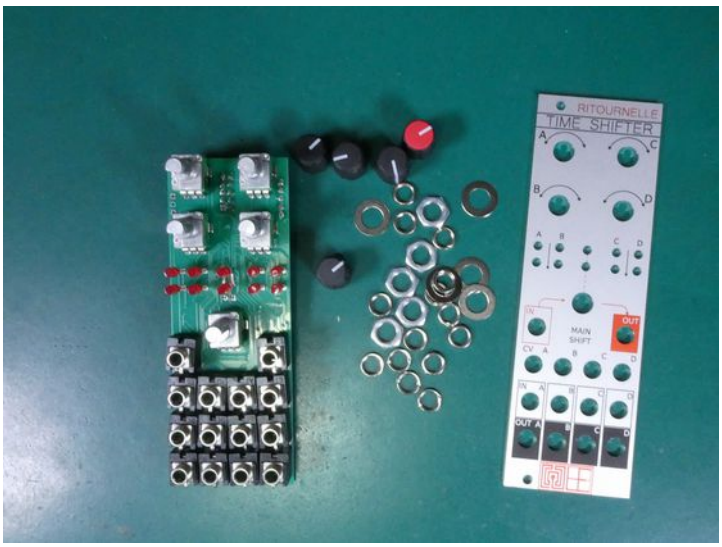
What do you need :

TIME SHIFTER module (of course)
The small PCB circuit to add the CV input
A module to add the CV input (a jack, in fact):

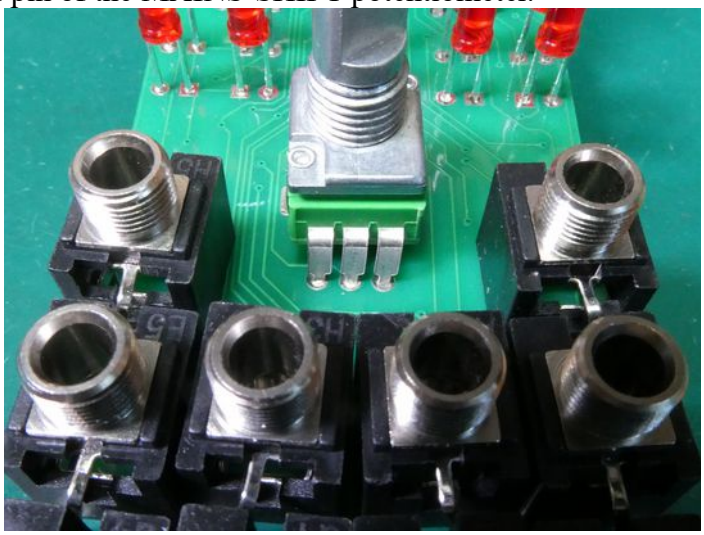
- **AttV4**
- **Mult.**

A bit of cable
Soldering tools, And all usual tools like cutting pliers or wire stripper.

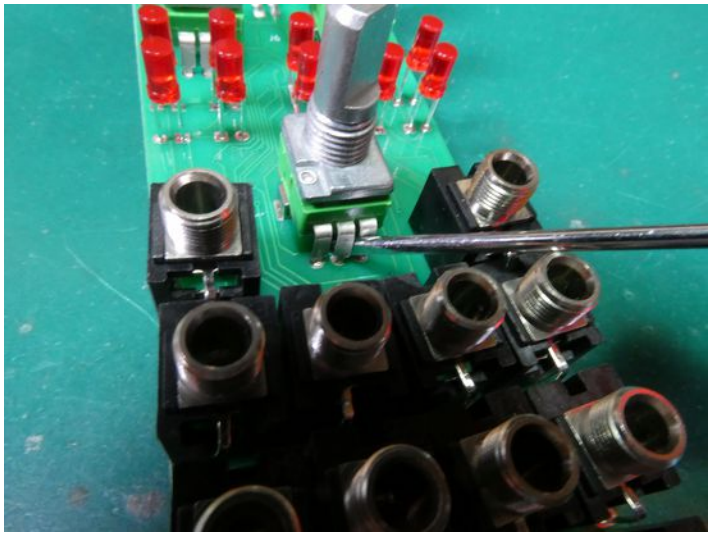
1- Remove the front face of the TIME-SHIFTER.

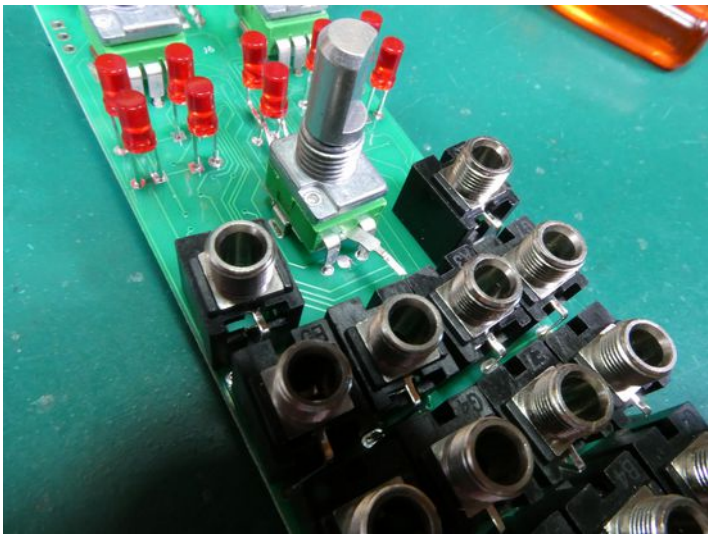


2- Desolder the central pin of the MAINS-SHIFT potentiometer.



TIP: insert a small screwdriver between the pins to help with its removal without having to take out the entire potentiometer.





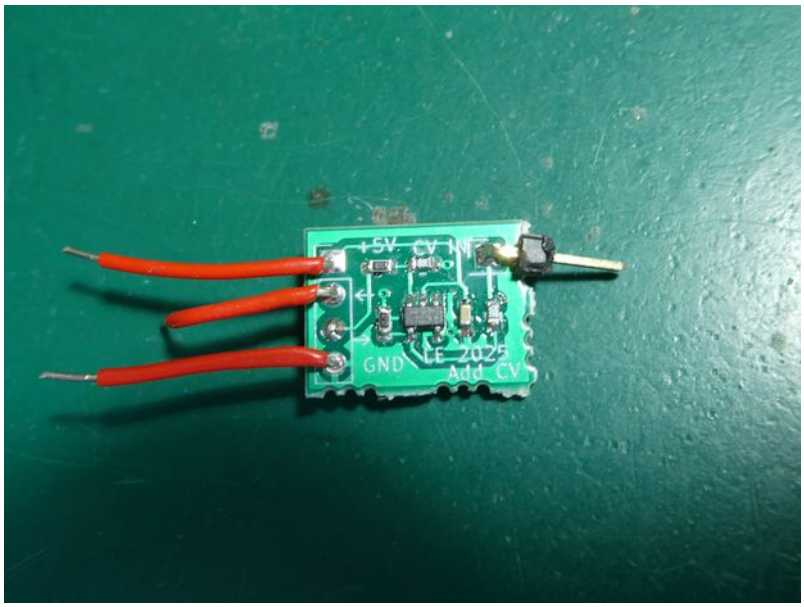
The pin, unsoldered

3- Solder the small cables
Cut 4 cables :

1 cable of 6cm (or more)

3 cables of about 2cm (or more)

Solder the small cables onto the small PCB.



Take care : soler in to the holes :

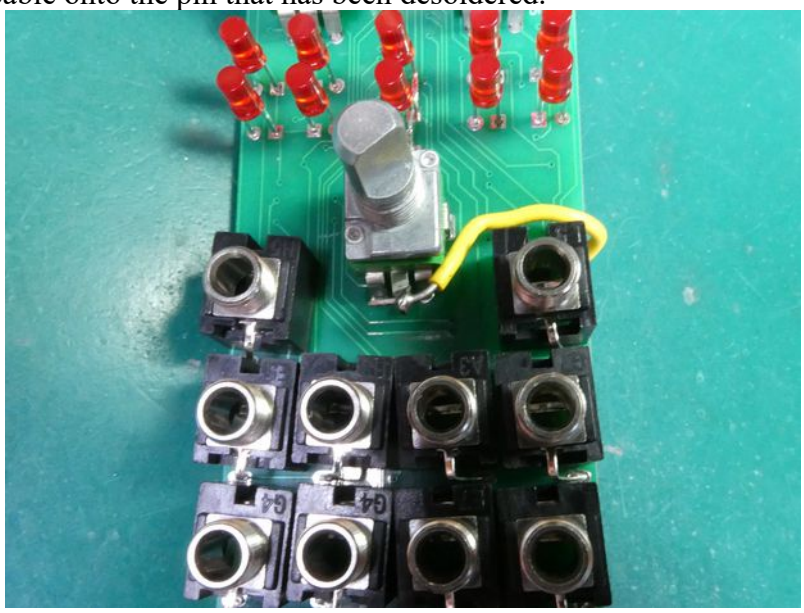
+5V

with the '←' mark

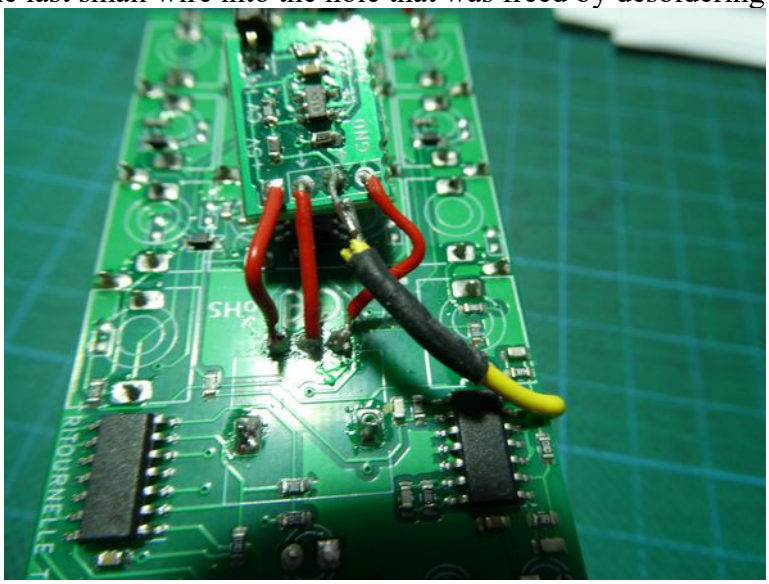
GND

(Let the '→' free for this moment)

Solder the longer cable onto the pin that has been desoldered.



4- Solder the PCB: Solder the GND and +5V using the 2 external pins of the potentiometer.
Solder the output, the last small wire into the hole that was freed by desoldering the pin.

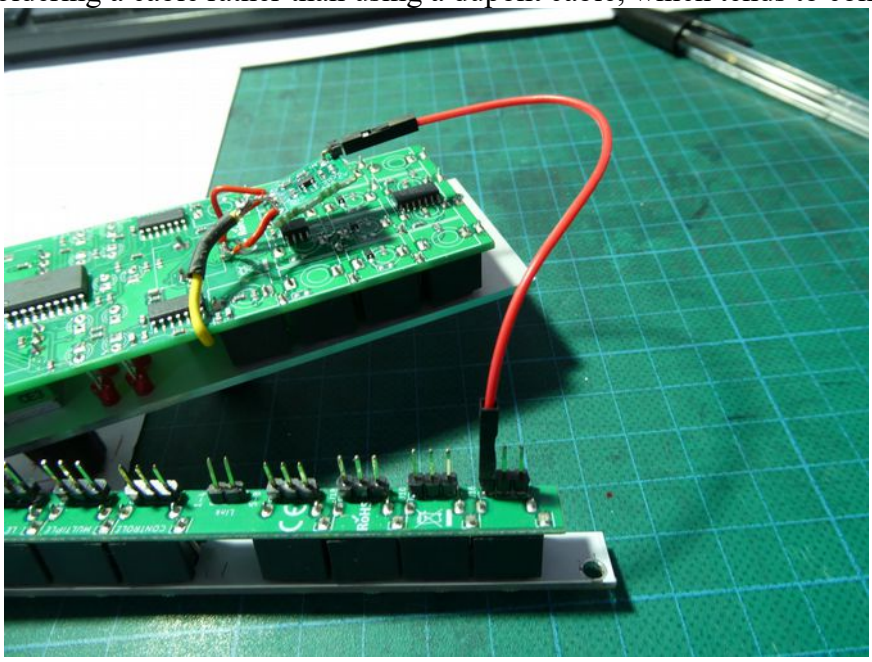


It simle : the wire are on the same order as the pin of the potentiometer.

Solder the large wire onto the input.
(The yellow wire on the photo)

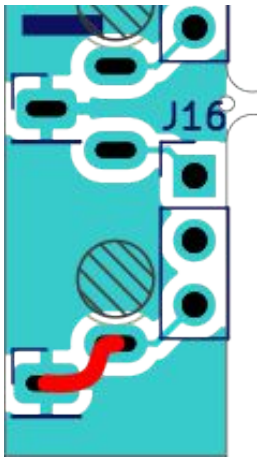
5- reassemble the front panel.

6- Insert the dupont cable and the chosen module to add the Jack.
(I recommend soldering a cable rather than using a dupont cable, which tends to come loose...)



To avoid short circuits, surround the small PCB with either heat shrink tubing or electrical tape.
(Others option are possible, if you have better idea)
The goal is to prevent the small PCB from touching the PCB. This could permanently damage the module.

NOTE:
The jack output must be connected to something: If we use the MULT, it is also necessary to solder a small piece of wire between the "NORM" pin and ground.
Otherwise, everything works, but the operating range of the potentiometer is different as long as something is not plugged into the jack.



Exemple : connecting the GND to the correct pin of the jack.