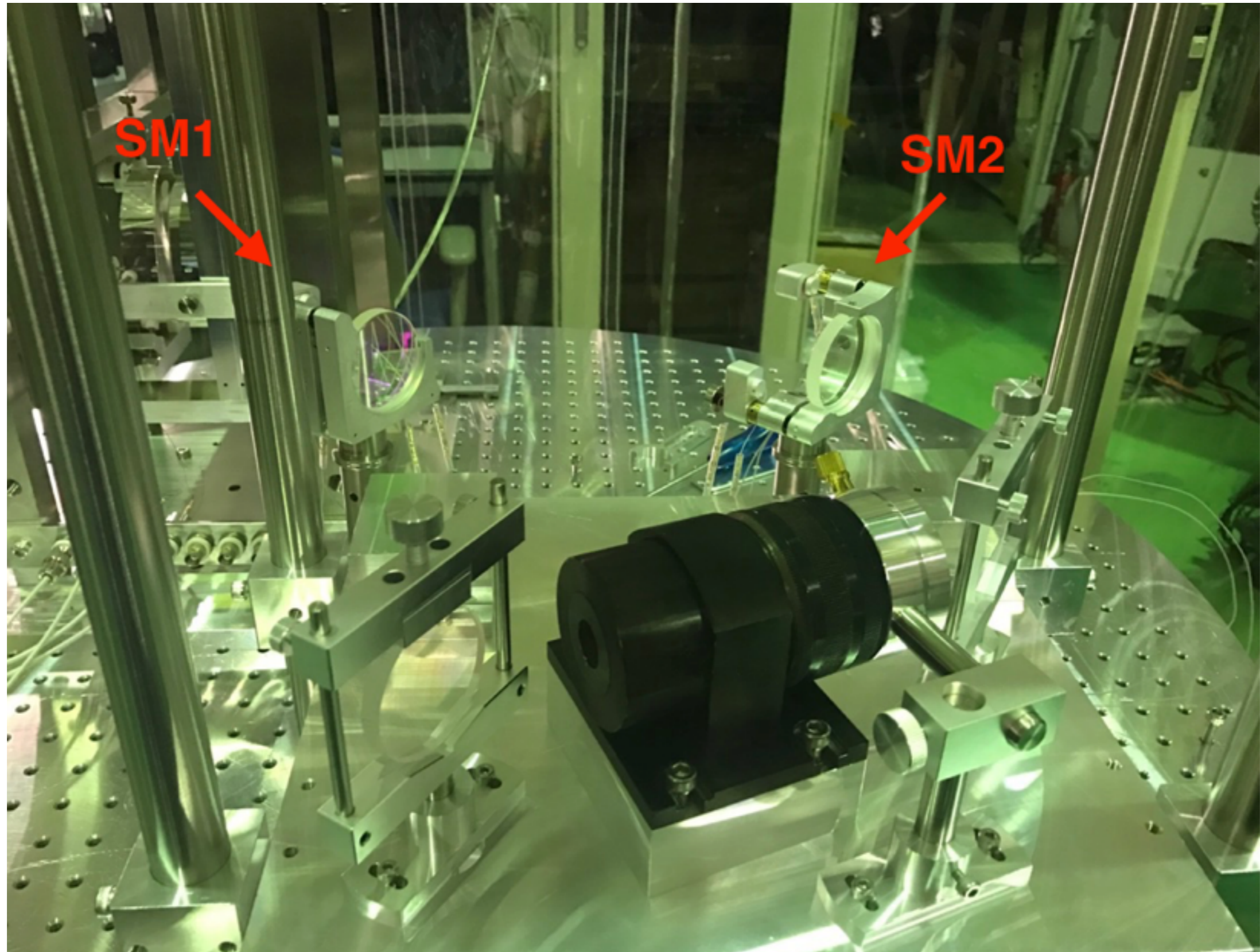
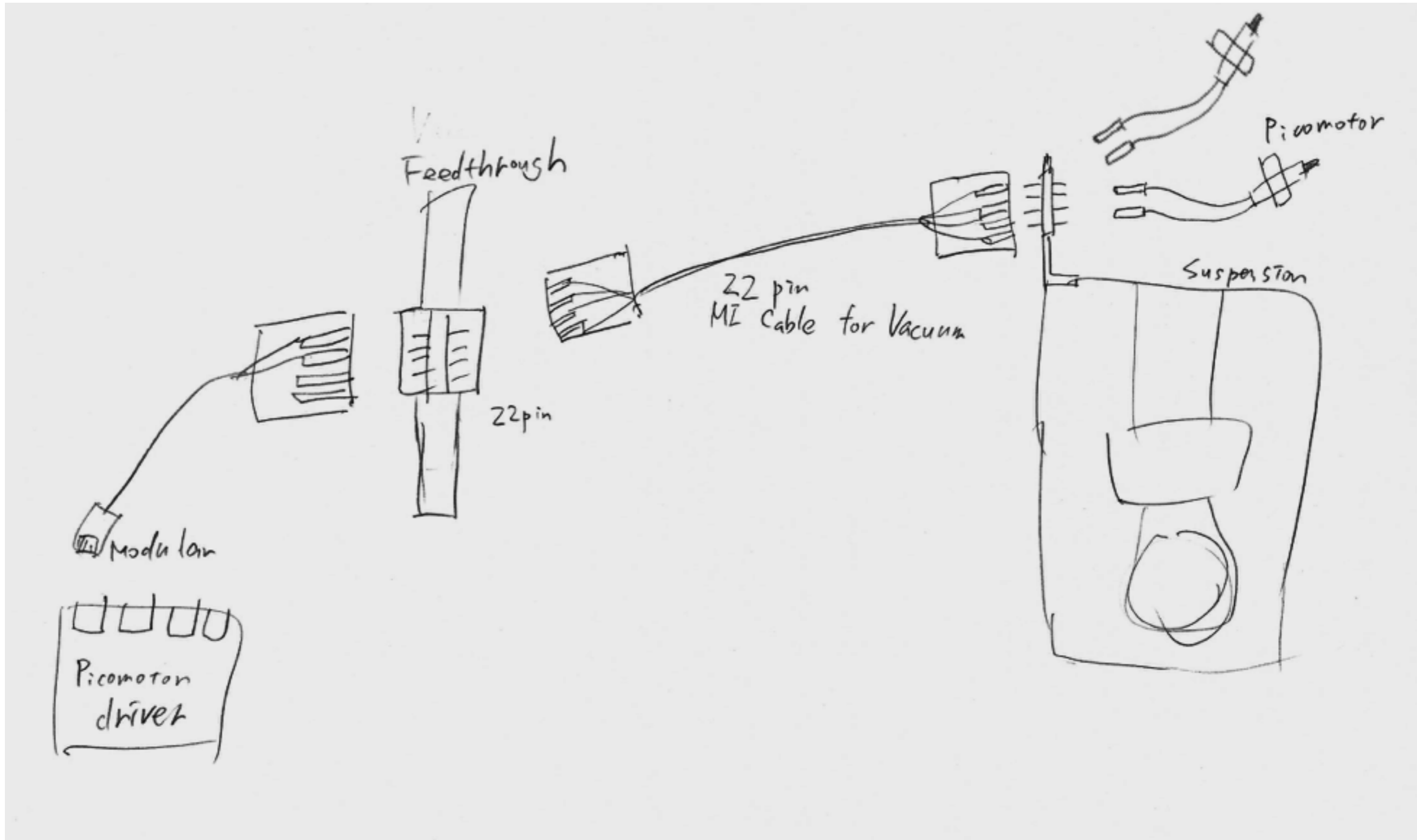


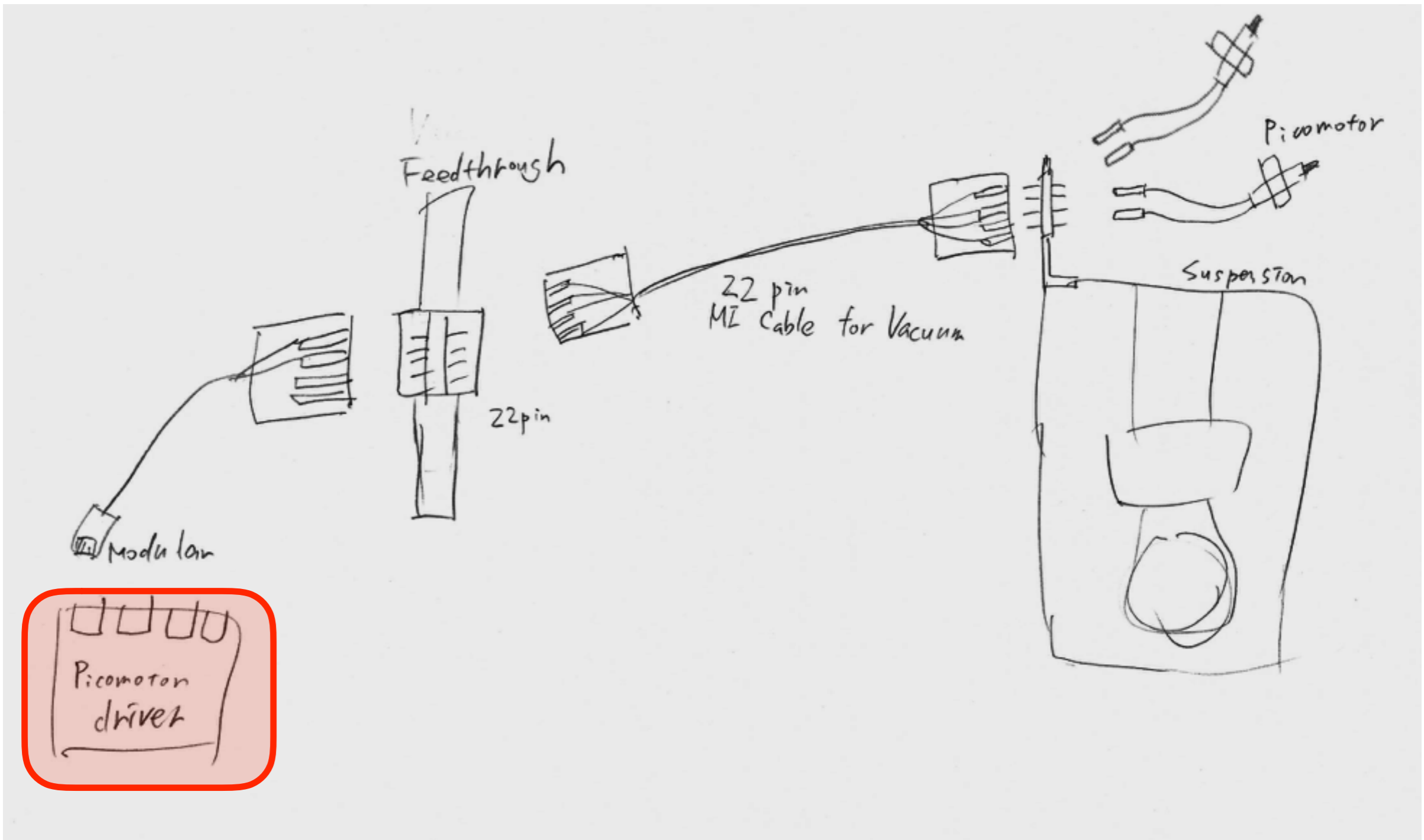
Pitch and yaw of steering mirrors SR 2 in PR chamber works only in one direction



# Picomotors cabling scheme



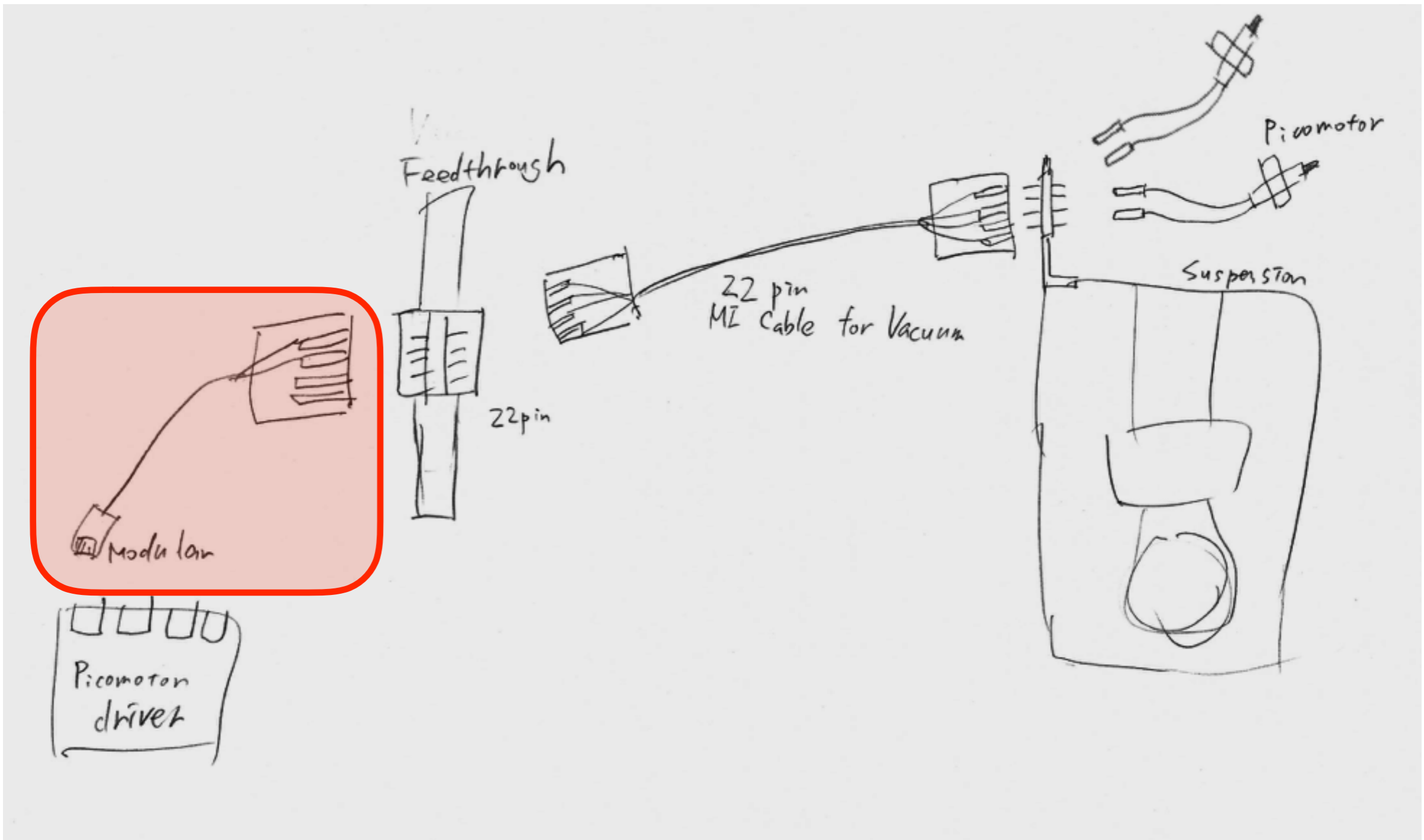
I have checked electrical continuity for all the pins



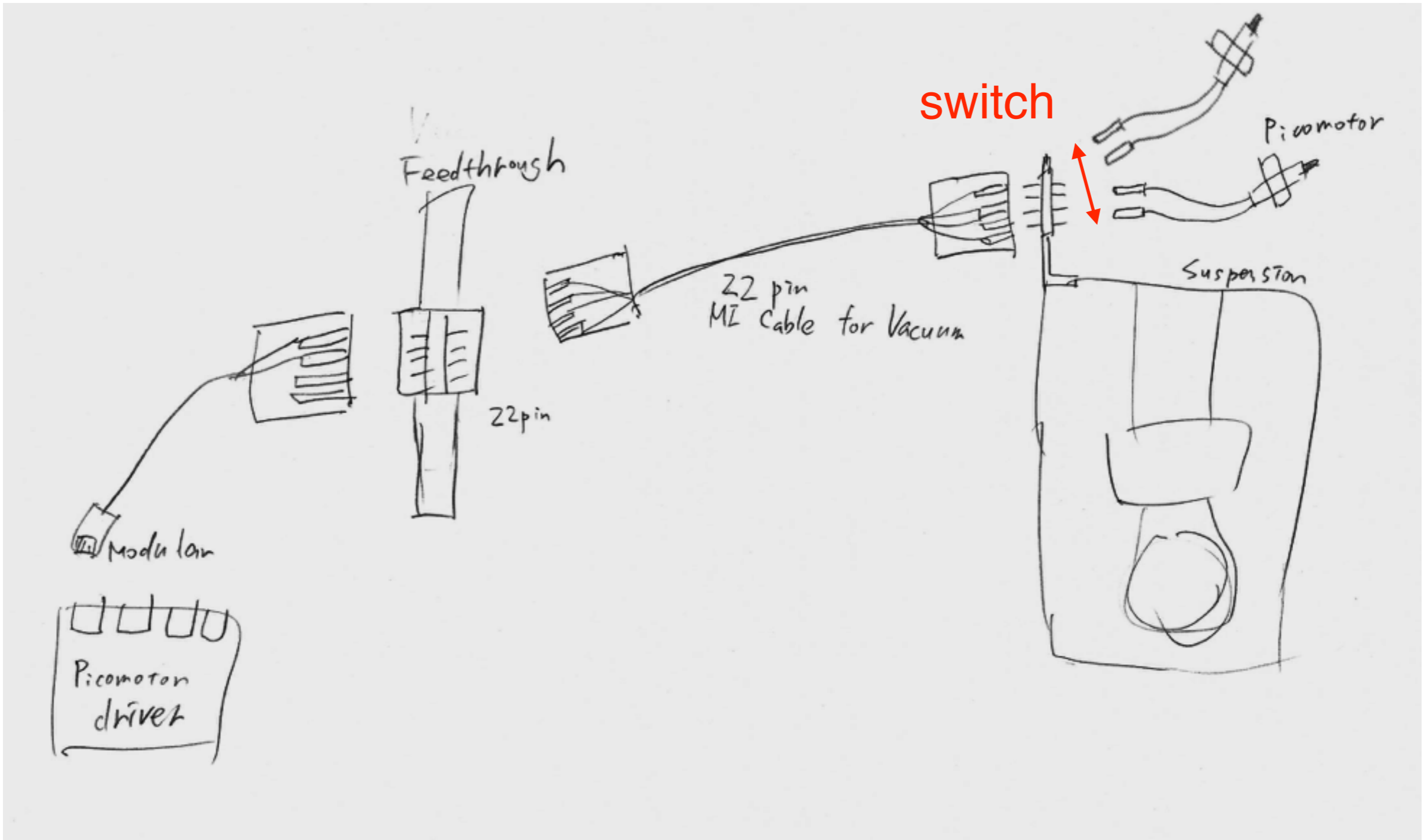
The driver works fine with other cables but if we change driver solves the problem

NB: the driver that works fine doesn't have enough output

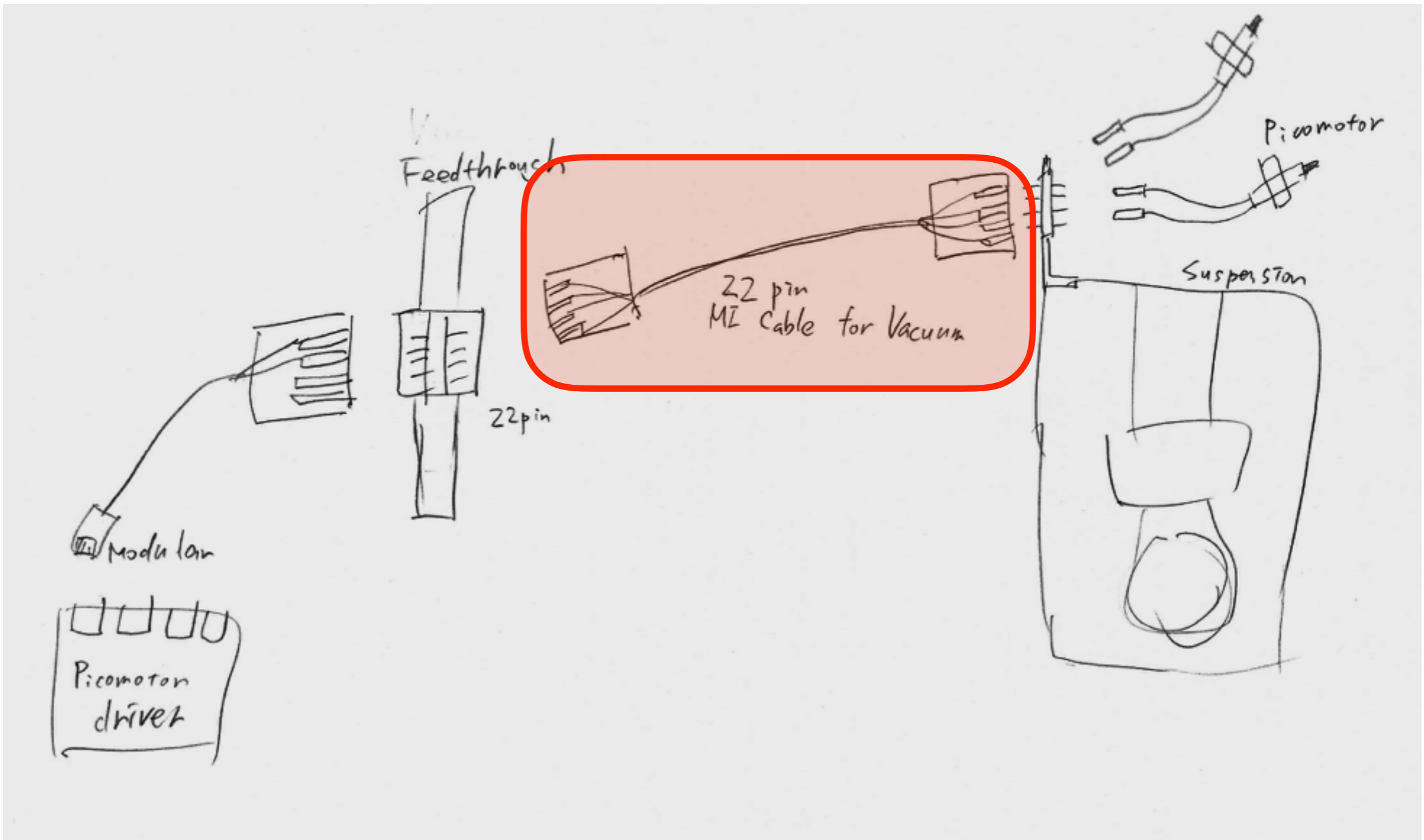




Change of the cable from driver to vacuum feedthrough doesn't solve the problem but it solved the problem in a precedent case (2" telescope picomotors)



Switching the picomotor connections, the problem switch: it is not a problem of picomotor



It is not possible to change the in vacuum cable without removing the lower part of the chamber.

Since there are 22 connections I switched the pin in order to use different wires (among the 22 available) but it didn't solve the problem

# Why I suspect the driver

- It shows some strange behaviour: today for two times as soon as I switched it on, a picomotor started to move continuously. It did it also 2 weeks ago where I was working with Matteo. We can not risk to have this problem in the future.
- Today at some point I have noticed that the problem is the same for the 2 cables (picomotors in channel B cannot rotate in CW). **I have tried with the pitch and yaw of the PR suspension and it showed the same problem (channel B doesn't work in one direction)**

# General remarks

- I'm very confused!
- Some behaviour are not repeatable: sometimes after I do a change; problem seems to be solved at a first, but then it shows up again

## Possible next steps

- Change out-of-vacuum cables again. We need female pins to make new ones
- Open the lower part of the chamber to check/change in vacuum cable
- Use the only driver that works and add extra-board (check if it is possible)
- Since new drivers will be needed for controlling picomotors in the end room, we can hand off the control of some picomotors to the new driver hoping they can work with it