

EIMTO BUILD

Welcome to the short but conclusive build manual for the EIMTO, ett instrument med två oscilatorer.

First there are two things to cover.

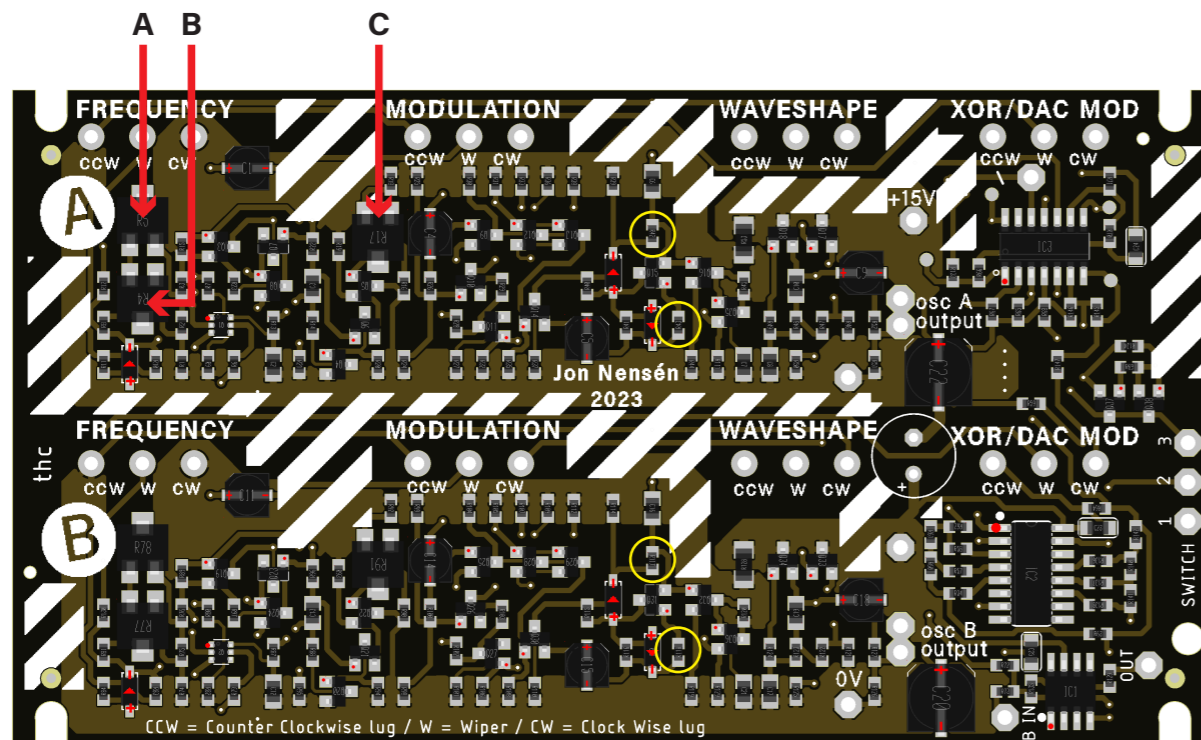
1, The holes for mounting the panel to the AC-408 case is slightly miss aligned. This can either be solved by enlarging the holes, or by using the supplied self threading screws. If using the screws tighten them carefully by just twisting them a bit each before moving to the next, this to prevent the box from becoming janky.

2, The output of the sinewave is dependant on the IDss of the JFET transistor. Since this is mounted in production it's sort of random. Either you'll have perfect sines, or you'll have one (or two) that's a bit more triangular. No worries, just replace the two resistors circled bellow with a lower value (Start with 470Ω) and things should improve.

Wiring is depicted on the next side and should be fairly straight forward.

You'll have to do some drilling to be able to mount the jacks in the case. Suggested drill placement is middle of box (1.5") and then 1.5" in for each hole. Two holes are needed, one 8mm and one 10mm.

Trimming. A sets the upper frequency and B sets the lower frequency. But they depend on each other, so turning one will change the range of the other. Set it to 5Hz and 15-20kHz. C adjusts sine wave pureness and will most likley be needed to set fully clockwise.



BOM

Included —

- 2 x PCB
- 1 x Panel
- 4 x 50kA potentiometer
- 4 x 10kB potentiometer
- 4 x self threading screws

From mouser —

- 2 x SW3002A switches
- 1 x AC-408 case
- 8 x 1600BM knobs
- 1 x KLDPLX-0202-B DC jack
- 1 x 112APCSX jack

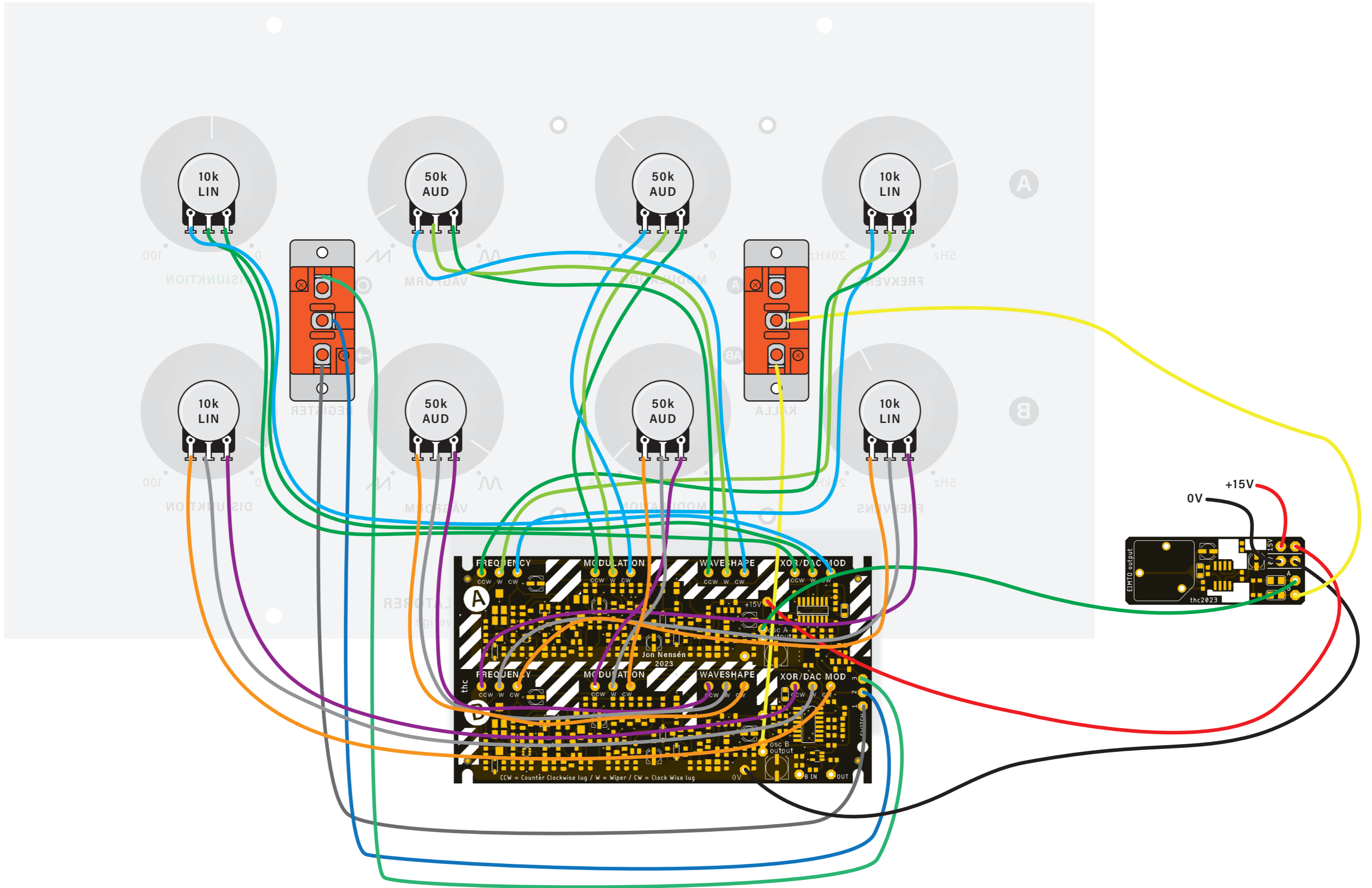
<https://www.mouser.com/ProjectManager/ProjectDetail.aspx?AccessID=f88f549ee1>

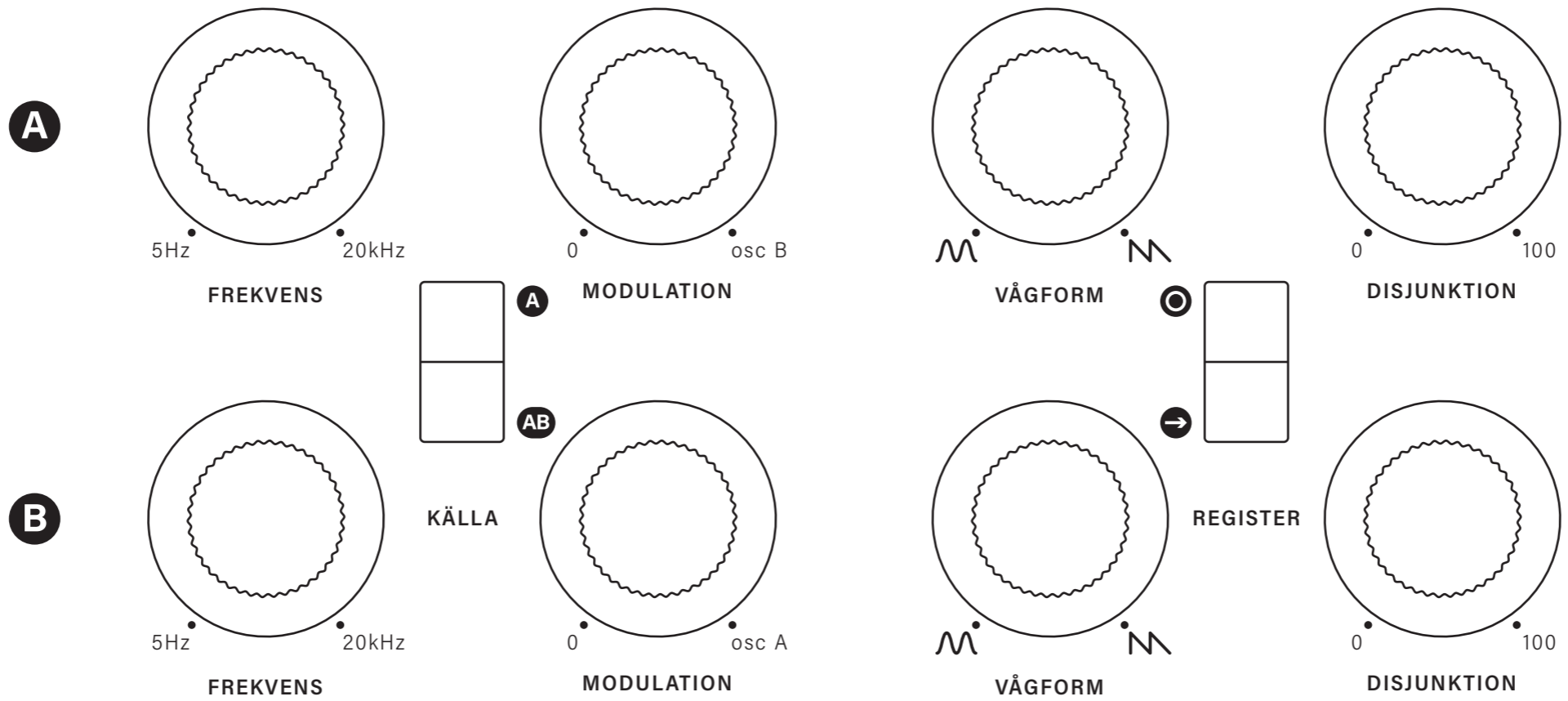
Stuff to get —

- 4 x M3 standoffs, about 30mm long.
- 12 x M3 screws

NOTES

If the "Disjunkiton" section is bleeding into the rest of the machine try adding a fairly large cap in the middle, 220-1000u. This seems to be highly dependant on the PSU used to power the EIMTO. Adding extra decoupling caps can also mitigate.





ETT INSTRUMENT MED TVÅ OSCILLATORER
 the human comparator • stockholm • sverige