

Before starting this kit, prepare the following tools:

- Soldering iron (15-20W)
- Flush cutters
- n2. hex screwdriver or allen key (enclosed with kit)
- Wrench No. 8
- Protective eyewear

We suggest that you work in a clean and a well lit and ventilated environment to avoid accidents or losing any of the small components.

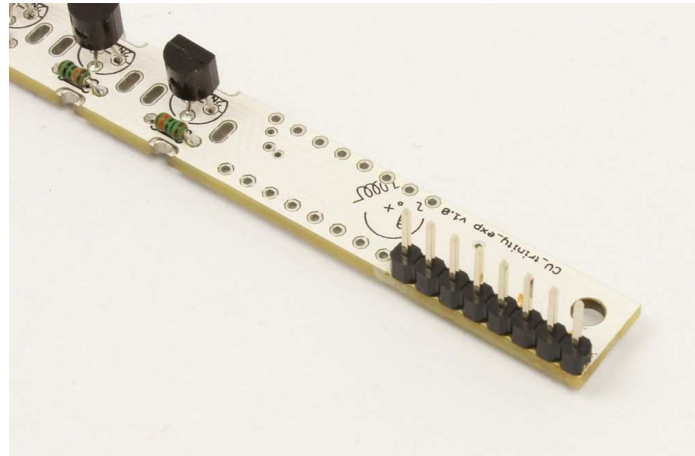
Also briefly go through this guide and make sure that you understand all the steps.

BOTTOM BOARD

Let's start with **resistors**. Insert and solder all of them (6x 100k). Then snip the leads as close to the PCB as you can. Then solder the six 2N3904 **transistors**. The flat side of transistors must match the outline drawn on the PCB. Your board should like this now:



Proceed to solder the **8 pin male header**. Be careful to solder the pinheader straight. You may first solder the middle pin, then take the board in your hand and re-heat that pin while pressing down on the header to align it. Wait for it to cool and solder the rest of the pins.



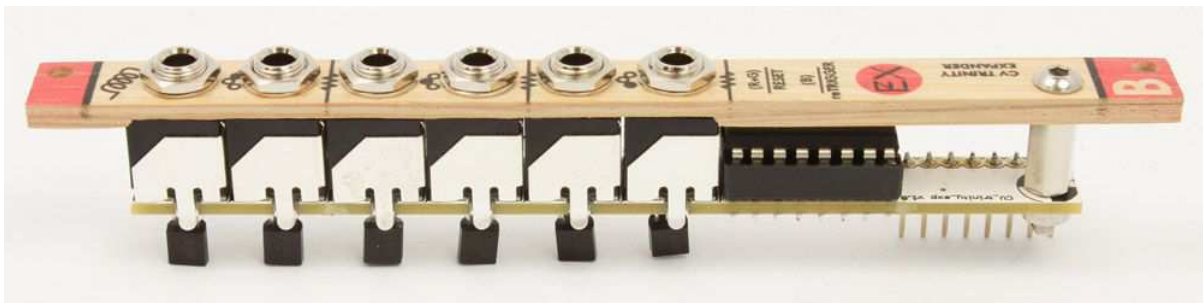
Next place and solder the **IC socket**. Make sure that the notch is in the **same direction** as printed on the circuit board.



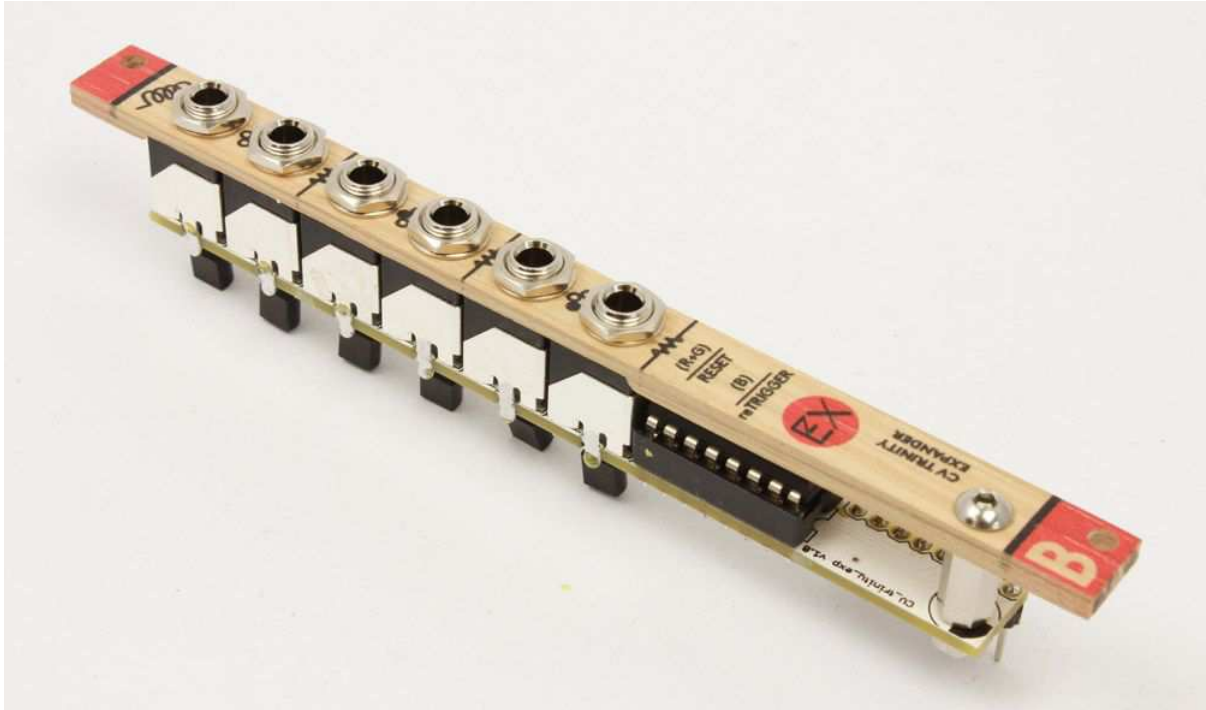
After this insert the **IC** (CD4051BE) into the socket. Again make sure that the notch on the IC is **facing the same direction** as the notch on the socket.



Now place the **mono jacks** on the board but **don't solder them yet**. Also insert the **spacer** into the opening and secure the **front panel** with the **screw** and **nuts** with **washers** (keep in mind not to tighten the jack nuts too much as you may damage the panel!). Secure the spacer from the bottom using the **small nut**. Make sure that the **components are properly aligned** with the front panel. Finally you can solder the mono jacks.



Congratulations! You have made it through, now just connect the expander to the CV Trinity with the provided cable (see the [manual](#)) and you are ready to enjoy your new module.



Before you connect anything, make sure that your system is disconnected from power. Also make sure that cable connections on both modules are in the same side.

TROUBLESHOOTING

First check out the [DIY F.A.Q.](#)

If you are having some more trouble, the best thing is to take a nap! Especially late at night!

If you are still in trouble you can send the detailed description of the problem with enclosed high-resolution photos on diy@bastl-instruments.com.

If you think that you are unable to make the module work on your own, consider our [“Come to Daddy”](#) service.