VISION // FORK

Build Guide

All of the SMD components on the PCB have already been assembled. So, this is a real quick and easy build.

- 1. Start by placing the 2x5 power header. The placement of the power header is on the downside of the main PCB (where the SPCTRL and WGD lettering is). The header should be soldered from the SMD component side. Solder one pin first and check if the header sits flush with the PCB. If so, you could solder the other pins. If not, reheat the solder joint and adjust the header.
- 2. Solder the header pins to your Arduino Nano. Therefore, I would recommend using a breadboard for holding the pins in place, so that they stay perfectly straight. The short pins need to be sold onto the Arduino. Take care of the orientation on the Arduino.
- 3. Place the pin headers onto the Arduino header pins and stick them through the main PCB. Again, from the side with the lettering. Mind the orientation! It is marked with the USB port on the PCB. Turn the PCB carefully over and solder the pins from the SMD component side. Take care that the pin headers are also perfectly straight. Afterwards remove the Arduino Nano carefully from the pin headers.
- 4. Now it is time to prepare the OLED screen. Therefore, you need to adjust the little black plastic on the legs. I like to use tweezers for this task. Place it on the long side of the legs between them and use a little pressure to adjust the black plastic till the small side of the legs is just a little survived when you put it through the OLED PCB. Now place the legs onto the OLED PCB and solder them carefully from the top.
- 5. Place the two jacks, the potentiometer, the encoder and the screen from the SMD component side. The placement of each component is marked on the PCB. Place but do not solder yet!
- 6. Screw one hex nut onto the encoder shaft and adjust the height so that it is align with the potentiometer and jack sockets.
- 7. Adjust the OLED screen height. The screen should end at the same height as the other components. You may want to place the Frontpanel for this adjustment.
- 8. Tighten the knurled nuts from the jacks and the hex nuts from the potentiometer and encoder. Have a look if everything is aligned.
- 9. Now turn the module over and solder the components from the lettering side.
- 10. Replace the Arduino Nano, connect it via USB with your computer and install the firmware.

Congratulations, your build is done!

11. Additionally, you could install the four provided standoffs and the bottom PCB. Then it is possible to place the module as a table top and power it via USB.