



for PCB V2.6

It is easy... so, let's start building!

First of all get your desk ready and make sure you have the necessary tools:

- soldering iron
- soldering tin
- cutter (the ones like in the picture are the best but a small nail clipper will do the job too)



Follow the next steps in the order it is written down.

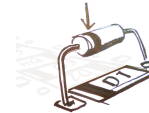
After each step flip the board and clip off the wires.

Diodes

D1/D2/D3/D4/D5/D6 BAT43 (Blue with black stripe)

D7 1N4001 (black with white stripe)

Make sure you solder them in the right direction! There is a black marker on one side which should correspond with the marker on the PCB like on the drawing.



Resistors

R8 150R (brown – green – brown)

R5/R6/R7 3K6 (Orange – blue – red)

R9 10K (brown – black – orange)

Capacitors 1

Start with the 7 yellow ones, these are marked with 104 (100nF):

C1/C2/C3/C5/C7/C8/C9 104 (100nF)

(C4 and C6 will be soldered later)

78L05

This is the black thing with 3 feet which looks like a transistor. Mind the direction drawn on the PCB!

Power header

It should be placed on the back

Potentiometers and jack sockets

(Don't solder the potentiometers and the jack sockets yet!)

Place the jack sockets and the potentiometers.

Now place the panel and tighten it with the nuts.

Solder the potentiometers and jack sockets.

Remove the frontpanel again as it will make it easier to solder the caps and arduino headers.

Capacitors 2

The two bigger caps will be soldered on the back side of the PCB after you soldered the potentiometers.

Mind that these caps have two sides (a + and – side) so it is important to check the direction before you solder them! The – side is marked on the PCB with a small “-” and has a square pad.

Arduino: The Arduino goes on the back with the USB connector heading in the direction of the jack sockets. In the package you will find 2 female headers. Place the headers on the arduino and then solder the Arduino including the headers onto the PCB.

Upload a code: The arduino is not programmed yet but uploading the code of your taste is very easy, just follow the steps on my website: www.ginkosynthese.com. As the arduino nano has the CH340 chip to communicate with your computer you need to install the driver for it. You can find the link for this on my site. It seems installing the driver on a MAC seems to be not too easy but it is proven to work, uploading from a pc is more straight forward.

Place the powercable with the red line facing “-”.

The output is less loud than a standard modular oscillator. The overall point to point output voltage can simply not exceed 5Vpp the way it is designed, the “mix” is finetuned to boost the “grains” to modular level.

Enjoy!

The code is highly customizable and there are severall alternative codes on my website, www.ginkosynthese.com. (if you like, share your own customized code with me via email: info@ginkosynthese.com)