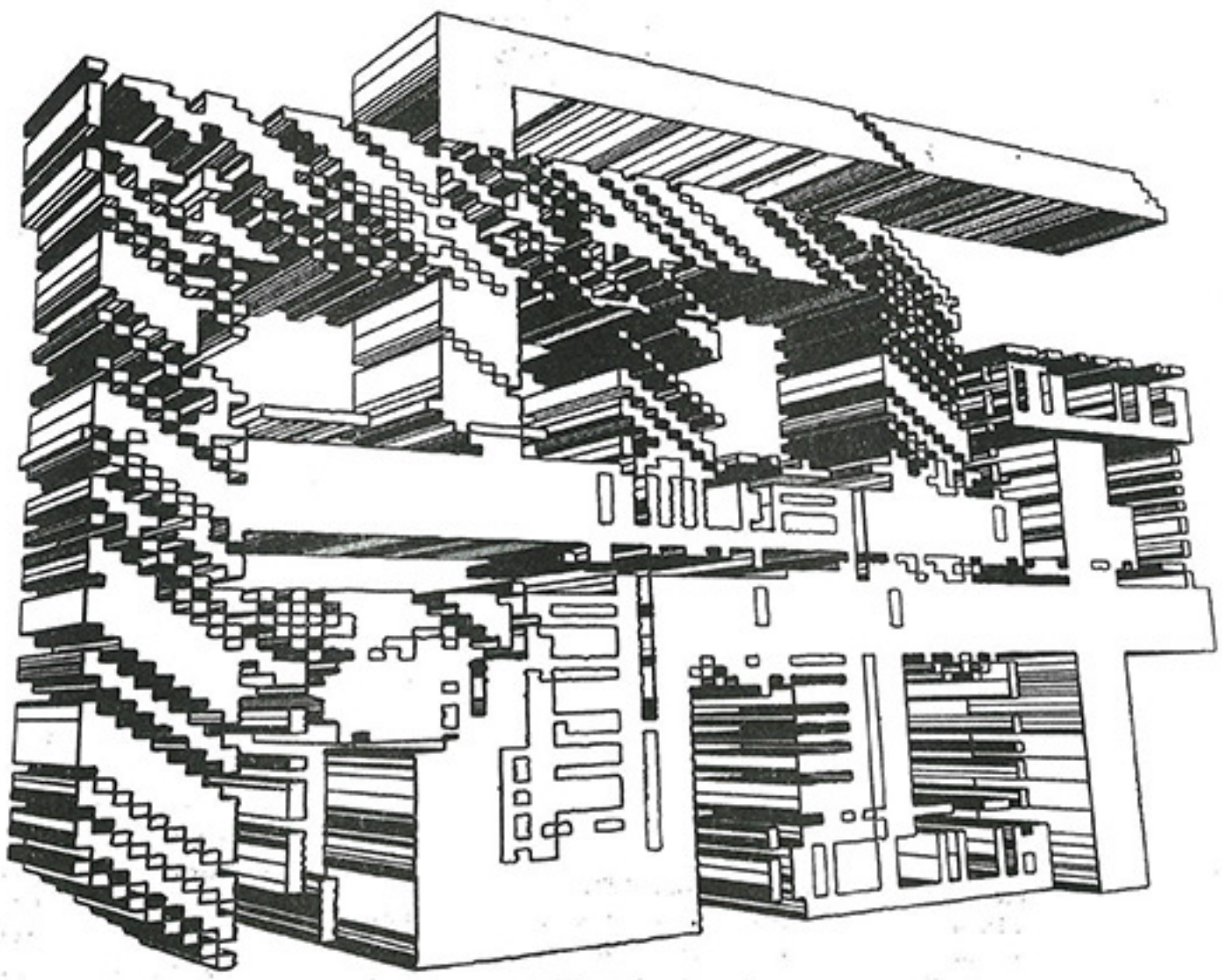
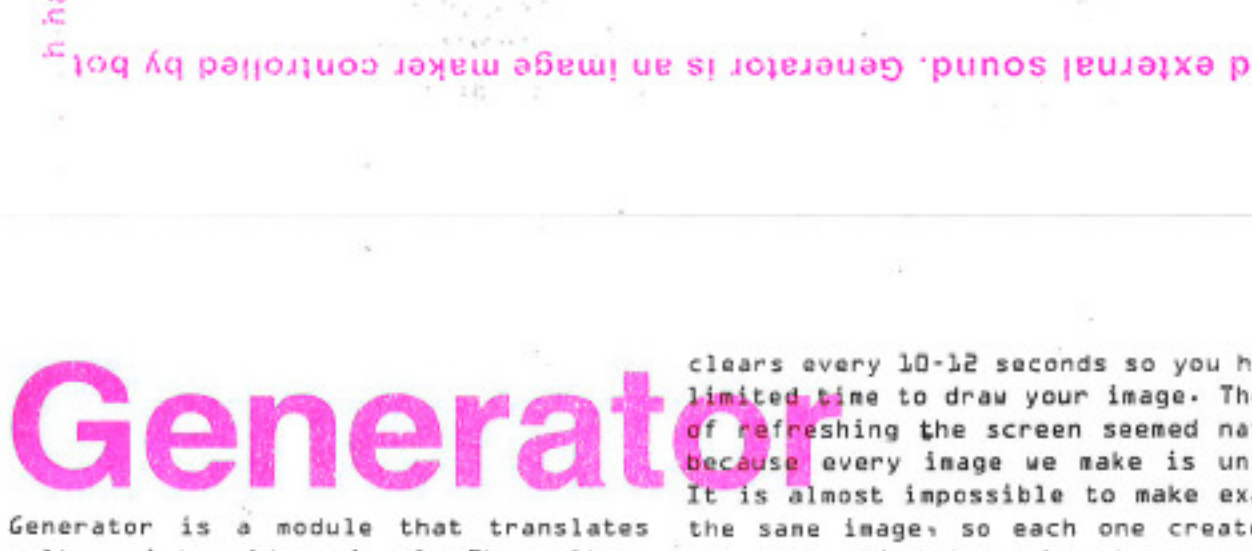


or is an image maker controlled by both hardware and external sound. Generator is an image maker controlled by both hardware and external sound. Generator is an image maker controlled by both

Generator

Generator is a module that translates voltage into video signal. The voltage can come both from the power source of the module and the outputs of other modules that can connect to it. It is both self-controlled and sound-controlled so it can be a stand alone object or part of a bigger constellation. It is an image maker that explores the visual possibilities within the limitations of the harduare and the code. Coding was a substantial part of this process - sometimes pointing me in the right direction, sometime presenting setbacks and frustrations and and at other times creating unexpected outcomes. The goal at first was unknown and mysterious and I came to realised that I will discover it as I go. Once I got the module to work with the LCD screen, it became my canvas. As I progressed, I realised I wanted the user of the module to be able to generate images and examine the possibilities of this medium. I created this version of the "etch a sketch", in which the user alternates between the sense of control and randomness. On the one hand the rules of the modules are mostly clear - there are 5 brushes, you can determine their size, and you can draw across the X and the Y axis. On the other hand it takes some time to learn how to control it, there are many options to discover and it can be influenced by other modules' outputs that cannot be controlled directly. Finally, the screen clears every 10-12 seconds so you have a limited time to draw your image. The act of refreshing the screen seemed natural because every image we make is unique. It is almost impossible to make exactly the same image, so each one created is one of a kind but also temporary and fleeting, soon to be replaced by another image. All of these combined reference the experience of creative coding. There is a magic in randomness, producing while exploring and getting unexpected outcomes. My wish was to embed a personal perspective- happy "mistakes", making adjustments while working and viewing the tools that we use as partners of the process and not just a means to an end. I encourage whoever builds this module to explore the coding and try to see where she/he can take it, what can happen while playing with code.

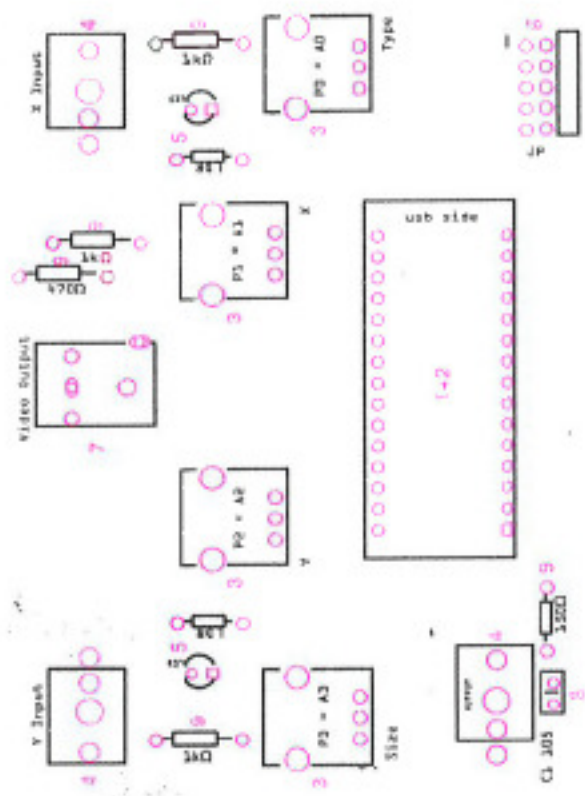


How to generate

1. Upload the code to the Arduino.
2. Connect the video output to the AV video input of the screen (yellow).
2. Make an image on the screens using the knobs:

Type- Choos your brush (5 types)
Size- Change size/shape of the brush
X- Draw across the X axis
Y- Draw Across the Y axis

3. Using the X and the Y knobs simultaneously will create diagonals.
4. The screen will clear every 10-12 second.
5. To save the images use a VCR or film the screen with a camera



Parts

1 PCB, **1** Arduino Nano+ 2 Male Header, **2** Female Header, **4** Potentiometer 10kΩ, **3** Mono Jack Input 3.5mm, **1** 2x5 Male Header (JP), **2** LED, **2** LDR, **2** Heat shrink tube, **1** Ceramic Capacitor, **3** 1kΩ Resistor, **1** 470Ω Resistor, **1** 150Ω Resistor, **1** RCA output, **1** mini USB cable, **1** RCA cable

Built

1. Solder the **female header** to the back of the PCB.
2. Solder the **male header** to the **Arduino Nano** (google "how to solder an Arduino Nano"). Now you can attach the Arduino to the board inserting it to the female header.
3. Solder **potentiomiters** to P0, P1, P2, P3.
4. Solder **3.5mm jack** to output and Y+X output.
5. Make a Vactrol= **LED+LDR** (google "how to make a vactrol", that is what the shrinking tubes are for) Insert the vactrols through the back. First bend the LEDs legs (the thicker ones) flat towards the LDRs legs. NOTE the polarity of the LEDS: long leg is positive, should go in the SQUARE silver hole! This is also important for the direction in which you bend the legs! Make sure the LDR legs don't touch each other.
6. Solder the **JP** so the "long" legs goes at the back of the PCB. Make a "Bridge" between the 7th and the 8th pin with a trimmed leg.
7. Solder the **RCA output** (video output).
8. Solder the **capasitator**.
9. Solder the **resistors** according to the value on the PCB.

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