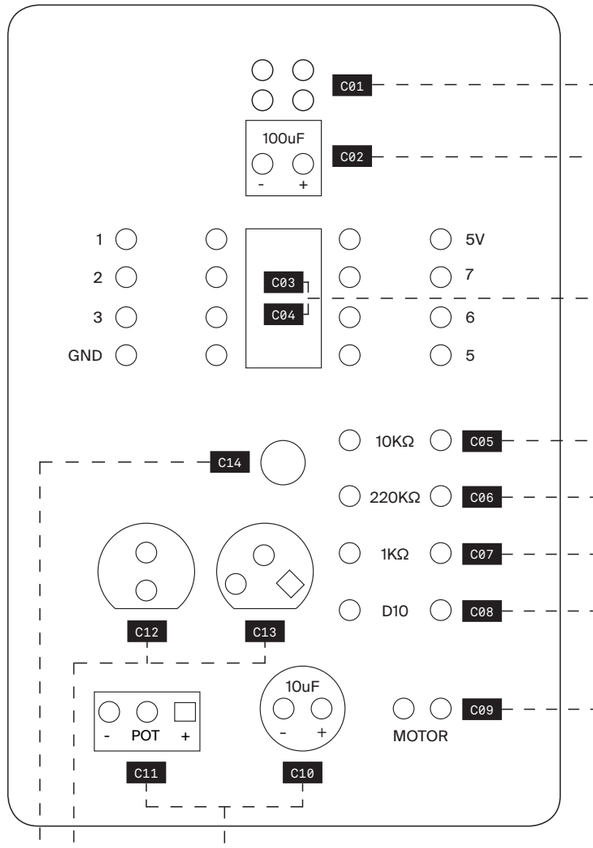
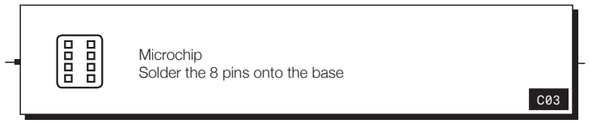
MONOCONO



USB port
Solder the four connectors and bend the hooks

C01

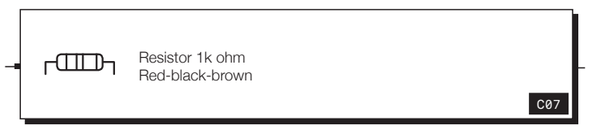


Microchip
Solder the 8 pins onto the base

C03

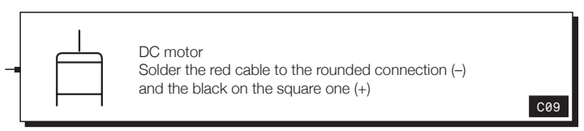
Resistor 10k ohm
Orange-black-brown

C05



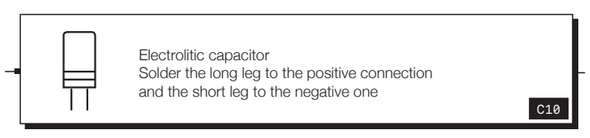
Resistor 1k ohm
Red-black-brown

C07



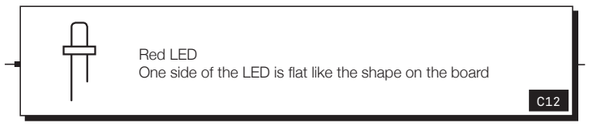
DC motor
Solder the red cable to the rounded connection (–)
and the black on the square one (+)

C09



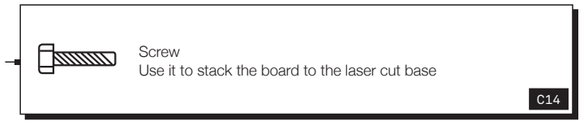
Electrolitic capacitor
Solder the long leg to the positive connection
and the short leg to the negative one

C10



Red LED
One side of the LED is flat like the shape on the board

C12

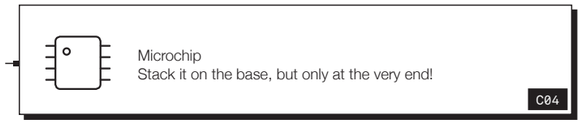


Screw
Use it to stack the board to the laser cut base

C14

Ceramic capacitor
It does not have a polarity

C02

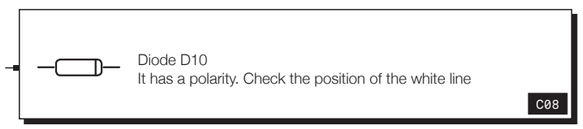


Microchip
Stack it on the base, but only at the very end!

C04

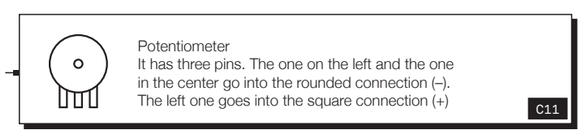
Resistor 220 ohm
Brown-red-red

C06



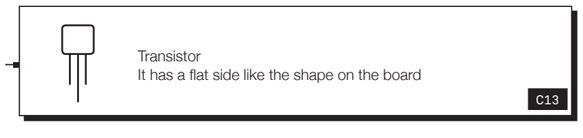
Diode D10
It has a polarity. Check the position of the white line

C08



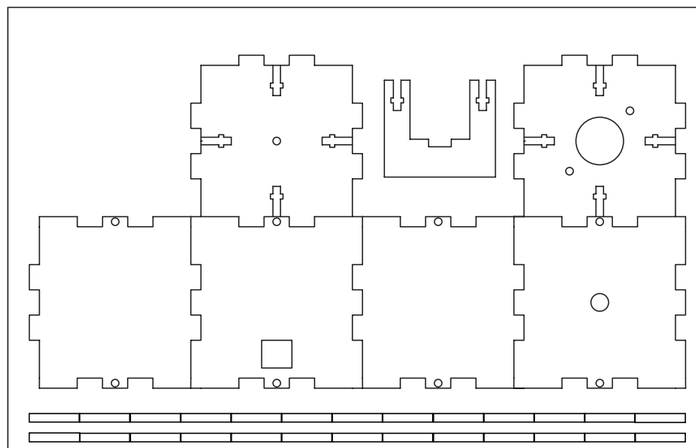
Potentiometer
It has three pins. The one on the left and the one
in the center go into the rounded connection (–).
The left one goes into the square connection (+)

C11



Transistor
It has a flat side like the shape on the board

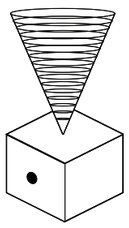
C13



After you finish soldering, start assembling
the lasercut shell.

Push gently the bolts in the holes of each
laser cut part and then use the screws to
assemble them together.

S01



Monocono is a do-it-yourself kinetic and programmed artwork. It is a USB powered electronic kit featuring digitally fabricated parts and a programmable board. A potentiometer controls the speed of a small motor that drives two rods and creates the effect of a virtual conic volume. *Monocono* is a derivative kinetic artwork inspired to *Esacono*, a translation of the concept that generated the series *Strutturazioni cilindriche virtuali* by Giovanni Anceschi (1963–1966). The *Esacono* concept is described in issue no. 22 of the magazine *il verri*, but it was never produced due to the constraints of technology of the period. It is a cube suspended by one corner which has six motors embedded into each side.
The motors drive two rotating rods that draw six truncated cone shapes in space, creating virtual volumes. The speed varies from motor to motor, and as a consequence so does the effect of the six shapes drawn in the air at the sides of the hanging cube.
In 2015, *Esacono* has been realized within the project *Re-programmed art*, a research-action aiming at open sourcing and rediscovering kinetic and programmed art today.

Credits
The kit has been conceived and designed by Lorenzo Romagnoli, Federico Vanzati and Alessandro Gueli for Officine Arduino
www.arduino.cc

To make your own *Monocono*, visit www.github.com/casajasmina/monocono
If you want to lean more about open source kinetic and programmed art visit www.reprogrammed-art.cc

Graphic design
Leonardo Angelucci

100uF

- +

1

2

3

GND

Attiny45

5V

7

6

5

10kΩ

O

220Ω

1KΩ

D10

10uF

- +

- POT +

MOTOR

Design: Leonardo Angelucci