

# Mini CNC foam cutting

## ABSTRACT

This DIY Arduino CNC Machine can draw most of the basic shapes, and even cut the foam into shape required, shape can be designed in any 3d modelling software and gcode generated can be feed to system to start cutting

## Working

Machine will be coded to read the gcode, gcode will be send from PC or any other serial gcode sender device

Machine will perform the task according to the gcode received

Machine will be using hot wire to cut the foam block in shape.

Main controller board will understand the gcode and send will drive stepper motor accordingly

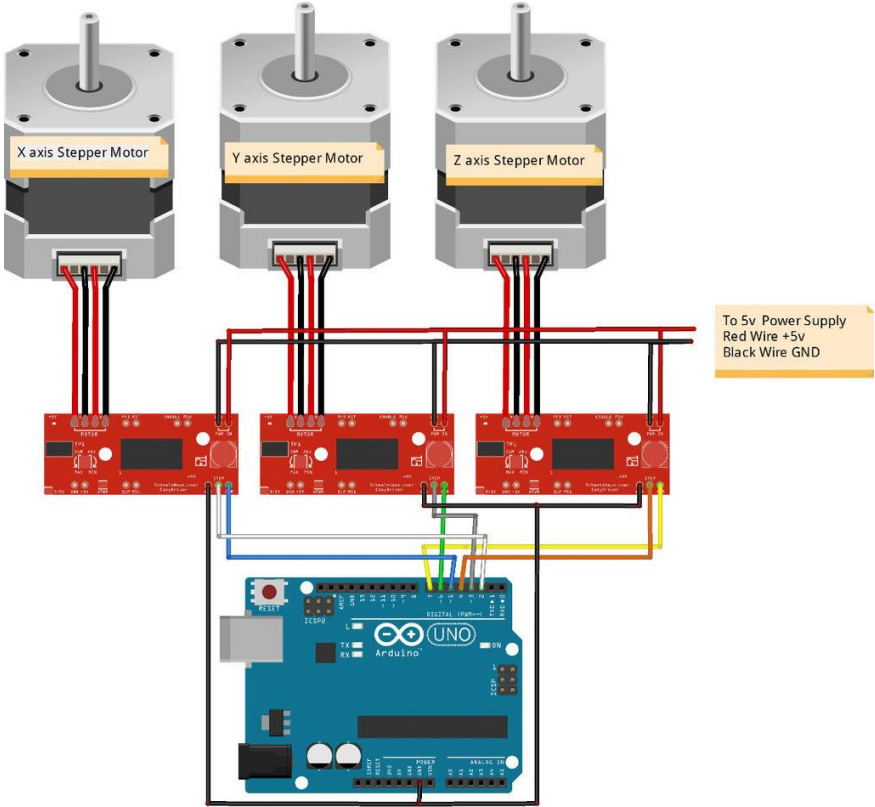
Speed and steps of motor are calculated and synchronised to move particular distance in particular steps

There are also limit switches present to know when machine reach limit position or when restart to initiate position.

## Components

- Arduino Uno
- Stepper motors
- Drivers
- Arduino CNC Shield
- 3d printed part

# Circuit Diagram



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