

Flat Cartesian 3D printer operating instructions

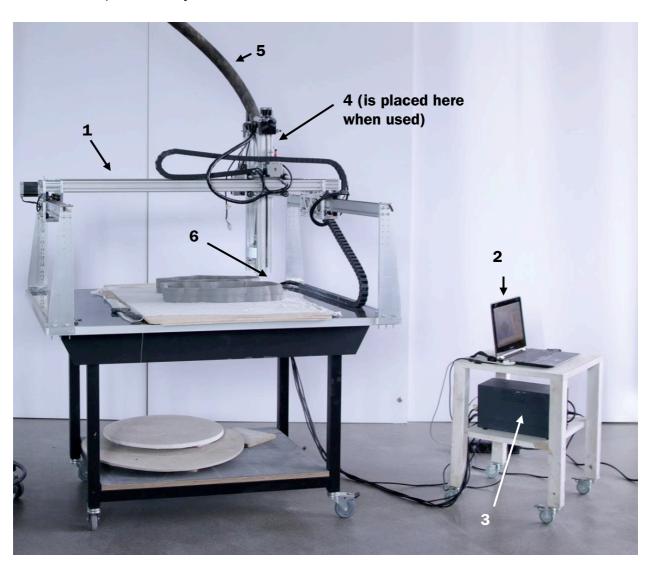
Flat Cartesian 3D printer

Specifications

Printer type: Cartesian

Print area: x-axis 500 mm, y-axis 600 mm, z-axis 320 mm Clay container: 7 kg (or connected to Moineau smart pump)

Start and stop function: yes



Key elements:

- 1. Printer
- 2. Computer
- 3. Controller box (Arduino)

- **4.** Tube (7 kg) or start and stop system
- **5.** Hose (when smart pump is used)
- **6.** Nozzle

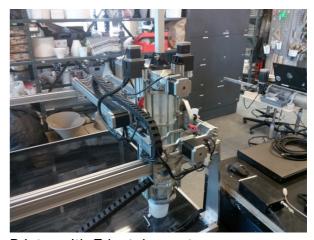
Cartesian printer parts



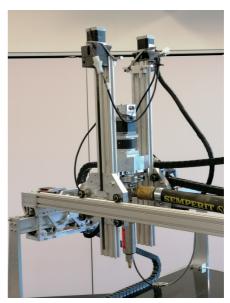
Printer controller



Extruder components



Printer with 7 kg tube system



Printer with extruder and smart pump

Setting up the printer

- **1.** Connect printer to controller (Arduino) box. Plug it in and turn it on.
- 2. Connect computer to controller (Arduino) box using USB cable
- **3.** Launch Simplify3D
- **4.** Insert 7 kg tube into the printer tube holder or use Moineau smart pump and extruder
- **5.** Option 1: To print with continuous extruder flow, connect the extruder socket to the smart pump (extruder will rotate at constant revolutions; Bluetooth control)
- **6.** Option 2: To print with start-stop system extruder flow, connect the extruder socket to the printer controller (extruder will start and stop clay flow to make more complex shapes)

With the support of HITSA IT Academy programme.



Licensed under a Creative Commons
Attribution-Noncommercial-Share Alike 4.0 License
http://creativecommons.org/licenses/by-nc-sa/4.0/



Compiled by Madis Kaasik and Lauri Kilusk, Estonian Academy of Arts, January 2021