Instructions on how to use 3D ChocoPrinter

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1 Setup

1.1 Download

The following software is needed:

- Repetier-Host, `https://www.repetier.com/download-now`

- Slicer configurations, `https://3dprint.elettronicain.it/wp-content/uploads/2015/10/Configurazio`
`zip`

To update the printer firmware (optional):

- Arduino IDE 1.0.6, `https://www.arduino.cc/en/Main/OldSoftwareReleases`

- Printer firmware, `TODO`

1.2 Configuration

Install the Repetier-Host software on your machine and start it. Click on the tab `Slicer` and then on the button `Configure`. Click on `Cancel` to close the wizard and the menu `File` to choose `Load Config`. Choose the file `Slic3r_config_bundle.ini` under `Configurazione-Repetier/3DRAG Choco/Config Slic3r_CHOCO` from the downloaded configuration package.
Click on the gear next to the field `Print settings`, then on the save icon next to the profile name, save it with a suitable name (eg "ChocoPrinter") and confirm with `Ok`. Close the tab and repeat the operation with the fields `Filament` is `Printer`.
When finished, close the window `Slicer` and choose the new profiles just created from the panel `Slic3r` by Repetier-Host.

//TODO config stampante?

2 Steps involved in 3D Printing

1) Start the SW Repetier-Host

2) Turn on the printer

3) Connect to the printer (configure it if not already done)

4) Insert the chocolate into the syringe

5) Insert the needle into the syringe and then insert the syringe into the aluminum rod

6) Insert the syringe with the needle into the aluminum rod and place the syringe with the rod in

the cylinder of the printer

7) If necessary, lift the holder, by clicking on Retract, to correctly insert the syringe

8) Heat the chocolate to 30 ° C. At first, if the temperature exceeds 33 ° C, turn off the heating. Keep the temperature between 30 and 33 degrees

9) Wait for the chocolate to come out of the syringe

10) Click on Print Panel and place the printer in "Home All"

11) Click on Object Placement and choose the object (* .stl file) to print

12) Change the size of the object if necessary, changing the number of the "Scale" field

13) Click on Slicer and select "Slice with Slic3r"

14) To print click on Run

3   Firmware update

Note: this procedure requires a version 1.0.x of Arduino IDE, which is not compatible with MacOS from High Sierra 10.13.4 onwards.

Download the appropriate firmware (3Drag Choco - LCD xxx version, green or black controller) from the website indicated in the section 1.1.

IMPORTANT: choose the correct version! Loading the wrong firmware may make the printer unusable!

Extract the firmware package and open the file `Marlin.ino` in the folder `Marlin`. From menu `Sketch > Import Library...` choose `Add Library...` and select the folder `libraries/U8glib` in the previously downloaded folder. from menu `Tools > Board` to select `Arduino Mega 2560 or Mega ADK` and from menu `Tools > Serial Port` select the COM port associated with the printer. Check on the printer board that the JPROG jumper is inserted. Click on the second button from the left (`Upload`) and wait for the procedure to complete. At the end of the procedure, disconnect the printer power supply or press the reset button on the card itself.