

# PetriPrinter protocol

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## Abstract

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## Materials

 Verbatim PLA Filament 2.85mm 1kg - Silver [55283](#) by [Verbatim](#)

 Greiner cell culture dish, ps, 35/10 mm, vents, cellstar tc, sterile [627160](#) by [greiner bio-one](#)

## Protocol

Prepare the printer

### Step 1.

Turn on the 3D printer

### Step 2.

Calibrate the stage

### Step 3.

Load filament if needed

### Step 4.

Clean nozzle from plastic

### Step 5.

Fill grid with dishes, remove lids

Generate g-code

### Step 6.

Start the PetriPrinter program. [Manual](#)

### Step 7.

Set parameters of the grid. Click on the **Settings** menu and select the **Grid** element.

- **Rows:** Number of rows
- **Columns:** Number of columns
- **Row distance:** Distance between center of two petri dishes in the vertical axis
- **Grid offset X:** X offset of bottom left dish center
- **Grid offset Y:** Y offset of bottom left dish center

### **Step 8.**

Set parameters of the printer. Click on the **Settings** menu and select the **Printer** element.

- **Temperature:** Printing temperature in Celsius degrees
- **Z-offset:** Printing offset on the Z axis (Height of dish spacer).

### **Step 9.**

Click into empty gray dishes where you would like to print. The selected circles become red.

### **Step 10.**

Select the requested model from the combobox

### **Step 11.**

Click the + symbol to set the selected model in the selected petri dishes. After this the color of selected dishes becomes green. Click the - symbol if you would like to clear the selected dishes. After this the color of selected dishes become green again.

If it is necessary you can select new dishes and set new models.

### **Step 12.**

Click the blue tick symbol to generate the g-code file. Save the g-code file.

Print objects

### **Step 13.**

Open the generated g-code file with the controller program of your 3D printer (preview g-code option).

Or

Copy the files on an sd card and insert it into the memory card socket of the 3D printer

Print objects

**Step 14.**

Preheat the heater block of 3D printer. Do not turn on the bed heater!

 TEMPERATURE

230 °C :

Print objects

**Step 15.**

Start 3D printing