

# Magic Castle

## 3D MODEL DESCRIPTION

For tiny little pirates, this baby whale is going to splash some light into your kid's imagination.

- This STL file is recommended for FDM Printers!
- 3D Printing Time Based on **Ender 3**: 1 Day 16 Hours 17 Minutes (**will vary accord to you printer model**)
- Approximately Length: 15 cm
- **In order to assembly this print you will need the materials below:**

[LED Light](#)

[On-Off Switch](#)

[LED Socket](#)

Solder

Soldering Iron

[Electric Wire](#)

[Electrical Plug \(2.1mm DC Jack 12V\)](#)

[Power Supply \(12V 1A\)](#)

Electrical Tape

## 3D PRINT FILE SETTINGS (FOR 0.4 MM NOZZLE)

- **Line Width/ Nozzle:** 0.4 mm
- **First Layer Line Width:** 0.48 mm / 120%
- **Average Speed:** 20mm/s (First Layer) / 50mm/s (All the other layers)
- **Recommended Initial Layer Height:** 0.20 mm
- **Recommended Layer Height:** 0.20 mm
- **Recommended Perimeters/ Walls:** 3.
- **Recommended Top Layer:** 7.
- **Recommended Infill (%):** 10% (Gyroid)
- **Needs Support:** No.
- **Build Plate Adhesion:** Skirt.

The parameters above are recommendations made by our staff; if you prefer, you can adapt them according to your preferences.

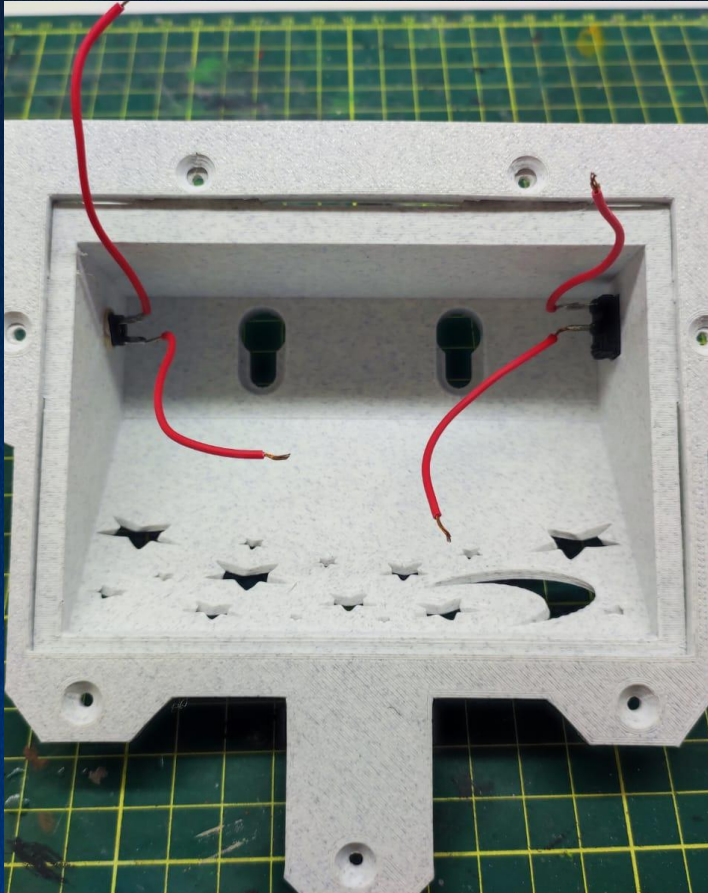
*Happy Printing!*



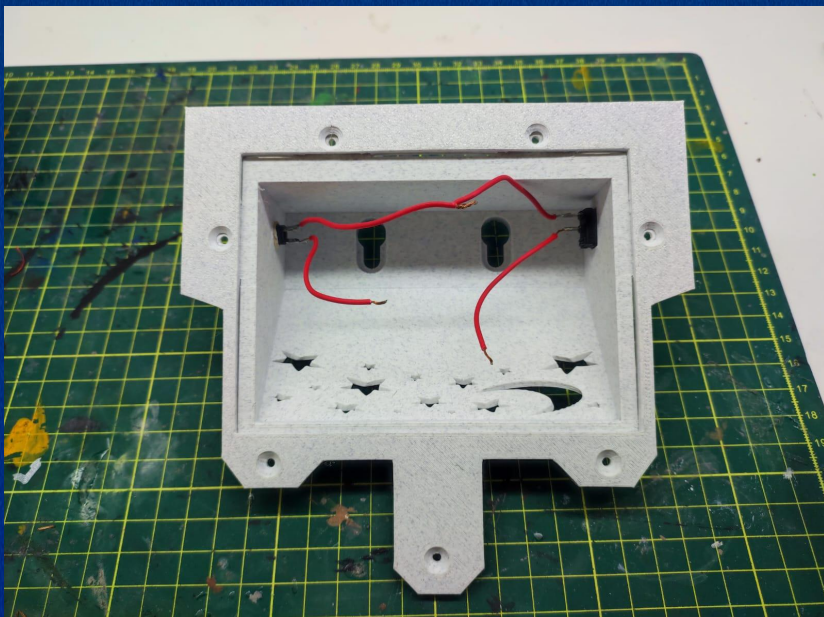
## Assemble

Fit the 12V Jack and the on/off switch onto the base.

Solder one of the wires on the positive end of the 12V Jack, and the other on the negative end.



Solder the positive wire on one of the on/off switch's end.

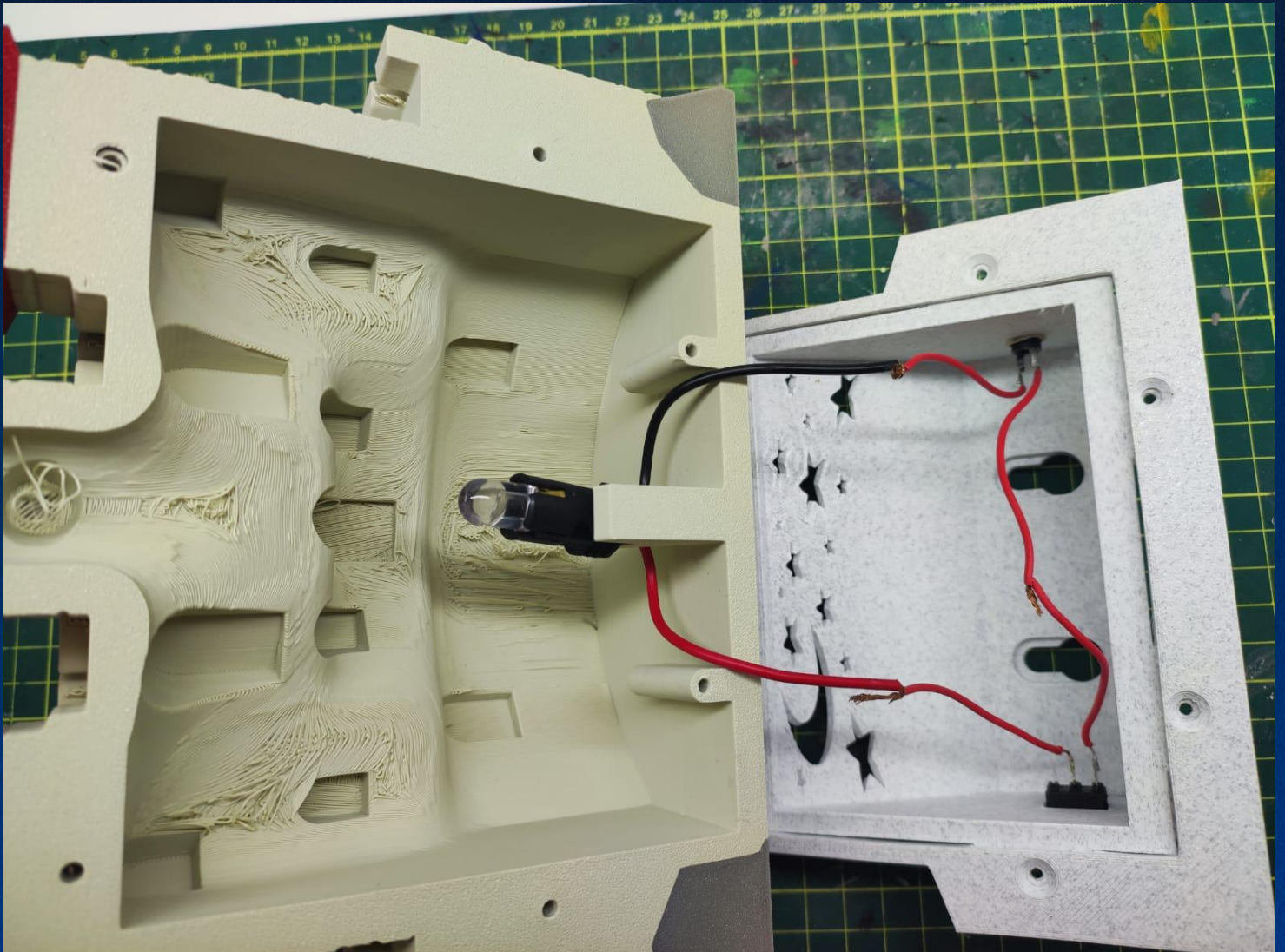




## Assemble

On the other end of the on/off switch, solder the positive wire of the LED module.

Solder the negative wire of the 12V Jack to the negative wire of the LED module.



Put all the layers and the light body on the base and if need you can use screws to fix it all.