Jellyfish LED Light (diffuser) - for standard LED string

Wim V

VIEW IN BROWSER

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Summary

Simply slide it over an existing LED of the Christmas lights or use a self-soldered LED and seperate power supply.

Seasonal designs > Winter & Christmas & New Year's

Tags: led colorchange funny ledlight christmasdecoration christmastree jellyfish

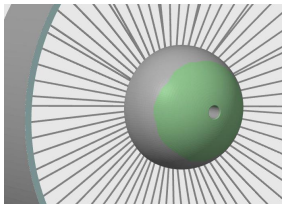
Meet Scyphozoa belonging to the kingdom Animalia and phylum Cnidaria and give him a warm welcome in your Christmas decorations.

A completely different Christmas decoration this year! Simply slide it over an existing LED of the Christmas lights or create your own effects with a self-soldered (color changing / programmable) LED.

Video:

Printing:

Printing:



Use paint on support only to support the body part (see image), and prevent support creation under the tentacles! Make sure you don't use support in the hole, to prevent the hole from clogging.

Model is optimized for use with nozzle 0.4 and layer height 0.2. Other are possible, but the scale options may then be limited*.

The 2 diffent models:

There's a ring version (tentacles made by bridging) and a loops version (tentacles made as loops).

Advantages of the ring version:

- Thicker tentacles.
- The tentacles are a bit more irregular due to bridging, which improves the natural look.
- The tentacles are a bit longer and straighter because there is no curved end like the loop version.
- The tentacles are easier to straighten with the described method because they are not curled when printing.

Advantages of the loops version:

- Faster printing and less material use.
- The tentacles can be made double in length by cutting them off on one side (it does however take a lot of extra work).
- Double the number of tentacles by cutting the loops in half.

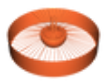
My personal preference is the ring version.

Determining the correct scale for printing:

The hole in the jellyfish to place the LED has a standard diameter of Ø6.2mm. This fits a Ø5mm LED (with Ø6mm ring) or the LED placement socket.
To place the jellyfish directly on your existing Christmas lights, first measure the diameter of the LED. Divide this on the Ø6.2 to obtain the correct scale.
Example: LED = Ø4.5mm. 4.5/6.2 = 0.726, so set the scale to 73 or 72.6%.
Please note: scaling is possible down to a minimum value of 55%. (min. LED diameter = 3.5mm) Scaling lower than this value will result in the slicer no longer printing the tentacles! To be able to print lower than 55%, you will have to use a smaller nozzle and the associated layer thickness.

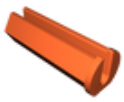
Watch the video for all the details how to make this cute little one so you can give your Christmas decoration a special atmosphere, different from all the usual decorations.

Model files



jellyfishledlight-ring-version.stl

jellyfishledlight-loops-version.stl



jellyfishledlight-led-placement-socket.stl

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