



## 20 Second Light Timer



LoboCNC

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updated 12. 4. 2022 | published 11. 2. 2022

### Summary

When my sister was a little kid, she was scared of vampires. Her nightly routine consisted of pushing the bi-fold...

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When my sister was a little kid, she was scared of vampires. Her nightly routine consisted of pushing the bi-fold closet doors all the way open so no one could hide behind them, hopping into bed and pulling the covers up so they wrapped tightly around her neck, and then she'd stare intently into the closet to make sure no one had snuck in there while she was fussing with the covers. And then she'd beg for one of us to turn out the light. This took about 20 seconds.

So if you or someone you know is scared of vampires, or maybe you just need some time to get across the room, this thing's for you. It uses a steel ball that rolls back & forth down a track and then falls in a scoop attached to the light switch lever, turning it off.

Oh, and it's also got a bit of interesting physics in getting a ball to roll really slowly.

Watch it go at:

Requires a 5/8" diameter steel ball and three 6-32 screws.

## **ASSEMBLY**

To complete the assembly, you will need:

1 5/8" diameter steel ball

3 6-32 x 3/8" long socket cap screws

a few drops of superglue

First fit the two halves of the ball track together, and temporarily tape them in place. Place the box on a completely level surface and drop your ball in to test that it runs the entire circuit.

Next screw the box to the mounting plate with two of the screws. Leave the screw in the slotted hole kind of loose. Screw the mounting plate over the top of your existing light switch plate. Then slide the little scoop onto the lever and secure using the last 6-32 screw as a set screw.

Test your ball in the track again, and adjust the angle of the track to be perfectly level so that the ball rolls reliably in both directions. Tighten the screw to lock it in place.

Once you've tested everything, put a few drops of superglue along the seams between the two track halves to glue them together and remove the tape when dry.

## **Print Settings**

### **Printer Brand:**

MakerGear

### **Printer:**

MakerGear M2

### **Rafts:**

No

### **Supports:**

No

### **Resolution:**

0.2mm

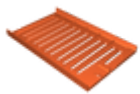
**Infill:**

20%

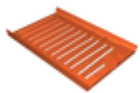
**Filament:** Inland PLA

Category: Interactive Art

## Model files



**track\_l.stl**



**track\_r.stl**



**track\_mount.stl**



**scoop2.stl**

[Find source .stl files on Thingiverse.com](#)

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