Ender 3/2020 Extrusion Light Bar

LTM LilTrublMakr

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Summary

I liked the idea of the LED Light Bar by SmokyJoe but found that the adhesive on the LED lights would not stick and...

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I liked the idea of the LED Light Bar by SmokyJoe but found that the adhesive on the LED lights would not stick and the lights would fall down. I decided to take SmokyJoe's original idea and expand on it by adding a sliding profile to hold the LEDs in. I did design this from scratch using Fusion360.

There are 2 parts for each width, A strip that goes all the way across and one with "_Wire" at the end. The one with 'wire' has a small indentation for the wires that connect to the end to power the LEDs. Therefore, I recommend that you print one of each if you are using and Ender 3.

I have a download for each 8mm wide LED strips and 10mm wide with each length being 165.1mm (6.5in). If you need a different width or length,

don't hesitate to ask in the comments. I learned about perimeters in F360 and it literally takes me 4 clicks and 2 keystrokes to change them.

EDIT 12/13/18: I added end caps that hook in to the 2020 extrusion to help hide the wires going to the back of the extrusion.

EDIT 2/18/19: I added 'secure' end caps. My end cap was continuously falling off because I took it off so much. It simply extends out a bit so that you can use the screw that holds the frame together.

EDIT 3/11/19: Finally figured out how to fix the orientation and added the left sides of each cap so you can choose what side (or use both sides to make things look even) you want to run your wires.

EDIT 12/8/19: Fixed the 8mm left wire being the wrong size.

These are the LEDs I used with the 8mm profile: (Amazon associates link) LED Lights - 6k Cool white, non-waterproof, 2835

This is a guide of how I added LEDs to my Ender 3: Adding LED Lights to my Ender 3

Print Settings

Resolution:

0.2

Infill:

15% or above

Notes:

I printed mine vertically on a raft with no supports. Risky, I know.

I have had a couple of people tell me that vase mode works well.

If you want to print them horizontal, you will need supports. I would print it with the part that goes in to the 2020 extrusion touching the build plate.

Category: 3D Printer Parts

Model files

large_display_2020_led_light_bar_-_8mm_strip_wire.stl

large_display_2020_led_light_bar_-_8mm_strip_wire.stl

endcap_10mm_right.stl

secureendcap_8mm_right.stl

2020_led_light_bar_-_8mm_strip.stl

secureendcap_10mm_right.stl

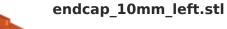2020_led_light_bar_-_10mm_strip_wire.stl

2020_led_light_bar_-_10mm_strip.stl

secureendcap_8mm_left.stl

endcap_10mm_left.stl

endcap_8mm_left.stl

endcap_8mm_right.stl

2020_led_light_bar_-_10mm_strip_wire_left.stl

secureendcap_10mm_left.stl

2020_led_light_bar_-_8mm_strip_wire.stl

2020_led_light_bar_-_8mm_strip_wire_left.stl

Find source .stl files on Thingiverse.com

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