

# Dumpster Fire, Garbage Light

Dumpster Fire episodes may only air one time, but garbage is forever. For every episode this season, we will have code to the companion light show. All you have to do is build the light.

\*Disclaimer: light requires access to the internet, and some purchased materials.\*

## Materials:

- 1) One ArduinoNano ESP32
- 2) One Neopixel strip
- 3) Aluminum foil
- 4) Plastic water bottles
- 5) Scissors

Bonus Materials: Any garbage that will refract light. For example: old cds, packaging with lots of ridges, holographic wrappings.

## Instructions:

Step One: Gather your materials, and make sure to wash your recycled goods.

Step Two: Fold your aluminum foil into the dumpster. The template below will show you how to do it without needing to use scissors or glue. Make sure to save your scraps.

Step Three: Situate your Arduino inside the dumpster, on the bottom. If you need to run power for your arduino to an outlet, use a pencil or a pen to make a hole in the side of the dumpster to run your cable through.

Step Four: Take your aluminum foil scraps from cutting out the dumpster pattern. Crumple them up and add them to your arrangement. It is suggested to add them to the bottom of your dumpster, without covering up your neopixel strip.

Step Five: Look at your garbage. Analyze your garbage. Find the parts that have ridges and curves as these will be your sculpting blocks. Begin to arrange and stack them into your dumpster. If you are using anything opaque, be sure to keep it to the edges so it doesn't block your LED strip. If you are using clear plastic pieces with the same pattern and you plan on stacking them, be sure to rotate each piece as you stack it.

Example: If you are stacking two of the same part of a water bottle, rotate the top piece 90 degrees. This allows for more variation in the light refraction.

Step 6: When you are satisfied with your garbage arrangement, set your dumpster next to a wall.

Step 7: You can go to [dumpsterfire.com/garbage](https://dumpsterfire.com/garbage) light to request a test signal be sent to your garbage.

Step 8: When showtime comes, make sure your arduino is on, and request the code be sent. Code will be available five minutes before the show begins.

Step 9: Enjoy the episode.