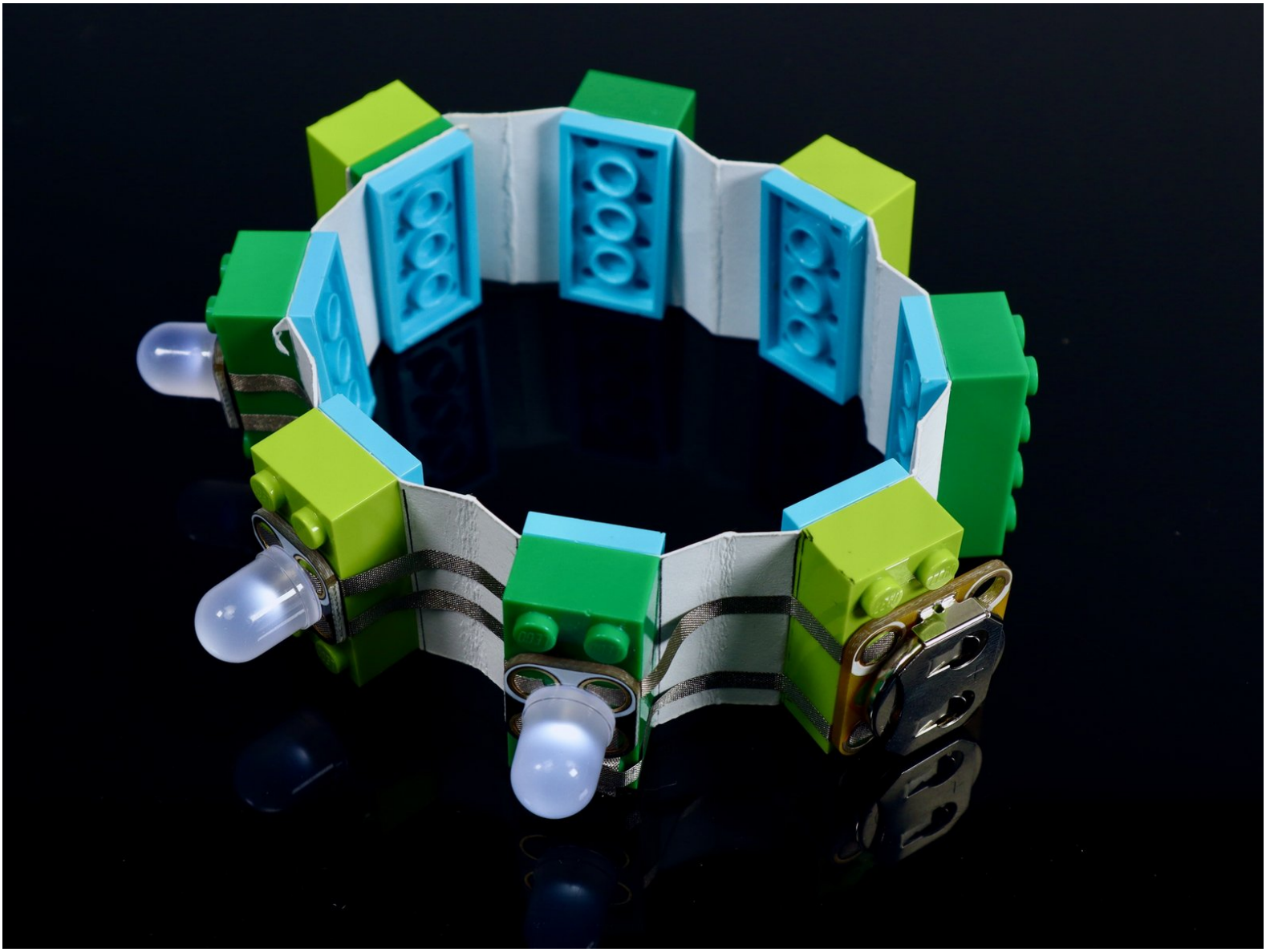
Hole Punch LED Accordion Bracelet

Use this downloadable template, some common LEGO bricks and our Crazy Circuits components to create this fun, light-up paper bracelet. No sewing required!

Written By: Andy Wallus



INTRODUCTION

Use this downloadable template, some common LEGO bricks and our Crazy Circuits components to create this fun, light-up paper bracelet. No sewing required!

TOOLS:

- Scissors (1)
- Ruler (1)
- Hole Punch (1)

PARTS:

- Maker Tape (1)
  1/4" Wide
- Crazy Circuits LED Chip (3)
- Crazy Circuits Coin Cell Battery Holder (1)
- CR2032 Battery (1)
- LEGO 2x4 plate (9)
- LEGO 2x4 Brick (8)
- Heavy Cardstock (1)
- Printable Template (1)

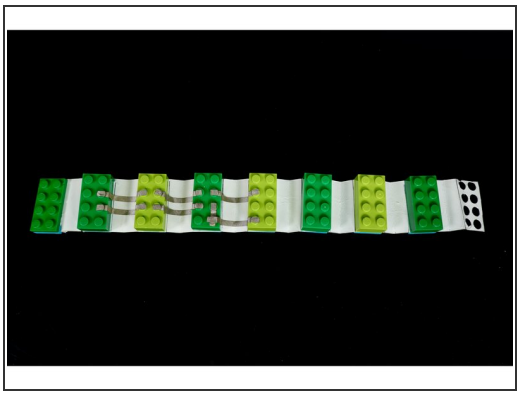
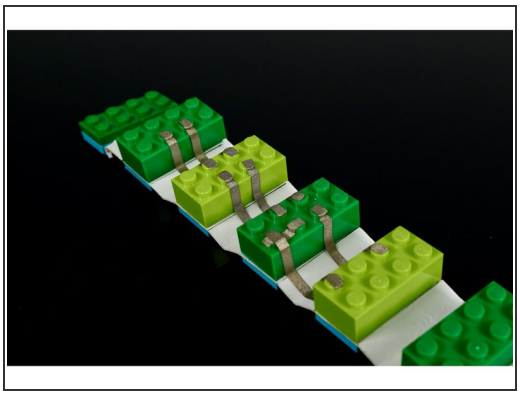
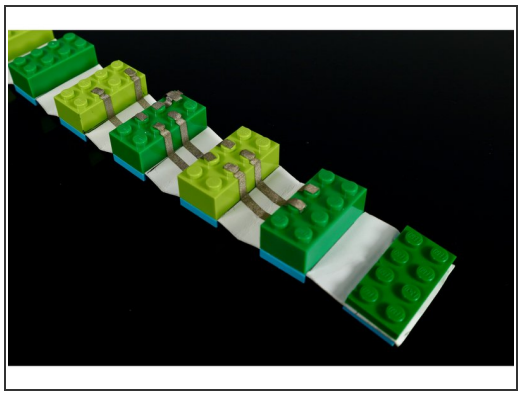
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Step 1 — Prepare bracelet



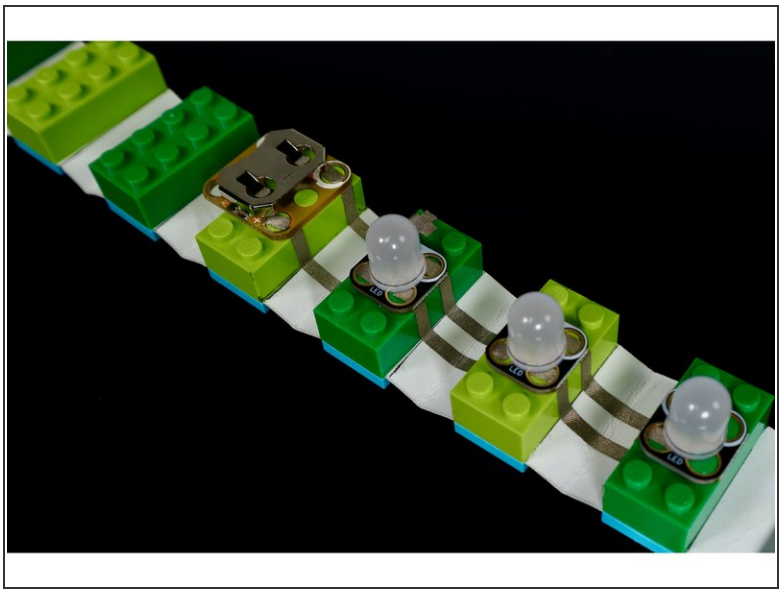
- **Gather materials listed and print out accordion bracelet template on heavy card stock.**
- **Cut template out with a scissors.**
- **Use a ruler to help you fold neatly on ONLY the dotted lines** in the middle of the rectangles that fall between the ones with holes.
- Once cut, **test fit to determine which of the striped rectangles will produce the best fit when wrapped around to meet the opposite end. Then cut away the extras.**
- **Use a hole punch to carefully punch out the holes indicated on the template.** There are many of them and they all need to be done accurately to accommodate the LEGO bricks and plates. **TAKE YOUR TIME!**
- **Press plates and bricks into place for all punched rectangles except for the ones on the two ends.** Each punched rectangle will have a 2x4 plate on the back/wrist side connected to a 2x4 brick on the opposite side so that the studs face outward. The bracelet template will be sandwiched in between.

Step 2 — Create Tape Paths

- **Use the tape paths portion of the circuit diagram to guide you as you measure, cut, peel and stick the needed tape paths atop your project.**
- **Take care to press a given tape path leading from a LEGO stud down the side wall of that LEGO brick, then to the felt and up the next sidewall of the neighboring brick** when completing each path segment. This will ensure that the Maker Tape doesn't pull up when the flat bracelet is wrapped around wrist into its circular shape.

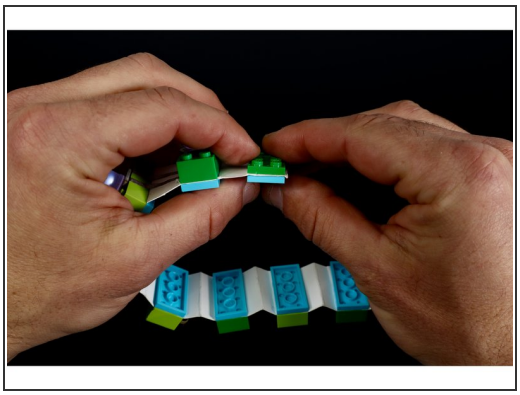
Step 3 — Add Crazy Circuits Components

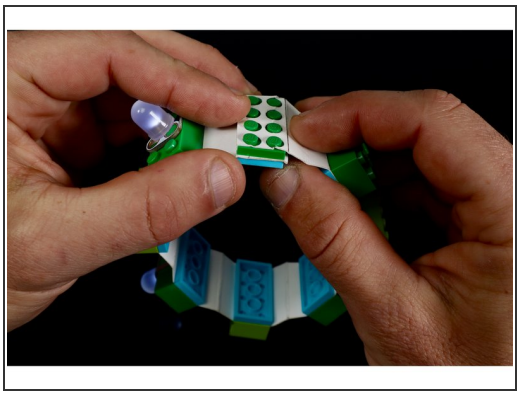


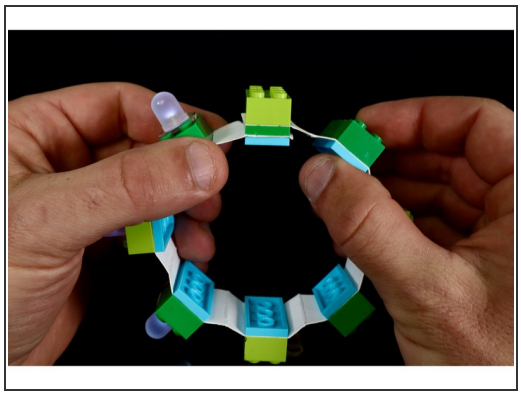


- Using the circuit diagram as reference, **press the Crazy Circuits components into place atop the bricks as shown**.
- **Take care to orient the white and black holes of each part exactly as pictured.**

Step 4 — Create Closure System







- To create the LEGO clasp/closure. **You will need to focus attention on those last two punched rectangles at the opposite ends of your bracelet.**
- Pick one of the two remaining ends that you have punched and sandwich it between two 2x4 PLATES (same stud orientation as all the rest).
- When you wish to wear your bracelet, simply **bring the remaining punched end around and lay those holes atop the studs from the 2 plate sandwich and press your remaining 2x4 brick on top to secure it into the bracelet shape.**
- **NOTE:** It may seem redundant to use TWO 2x4 plates below the final brick of this closure system. Remember: this project is both made out of paper AND intended for the wearer to be able to wear and remove and wear again... **The double plate will increase longevity and durability when pulling the closure system apart.**

Your new wearable is ready and sure to get noticed...especially in the dark!