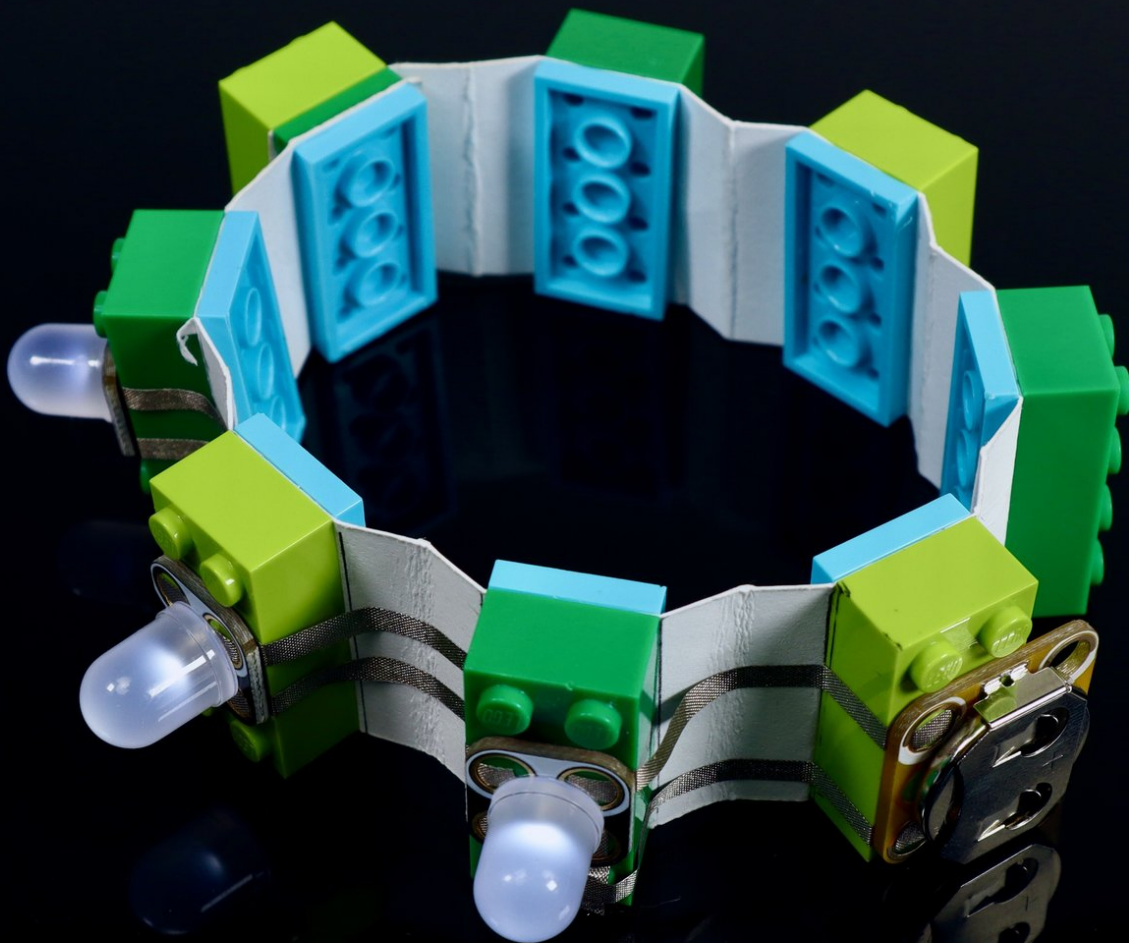




Hole Punch LED Accordion Bracelet

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:

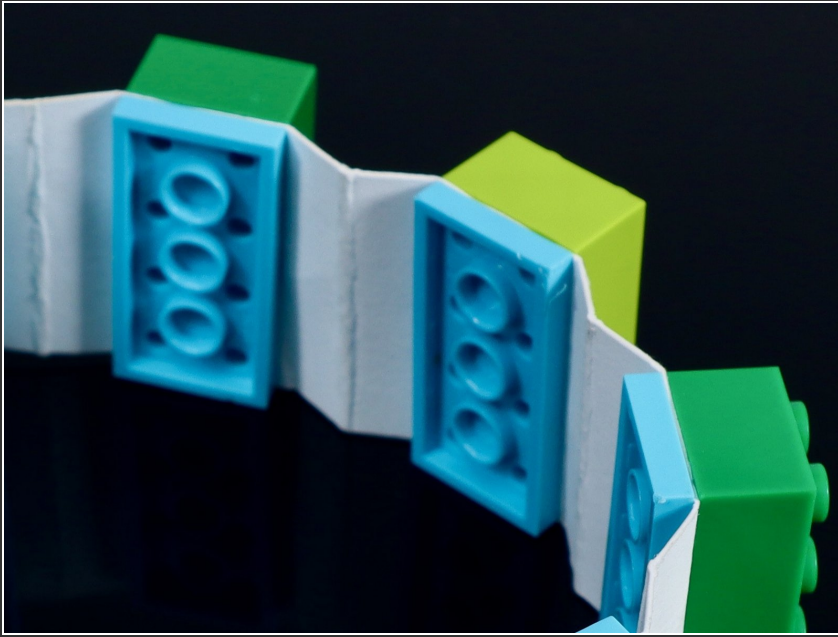
- [Scissors](#) (1)
- [Ruler](#) (1)
- [Hole Punch](#) (1)



PARTS:

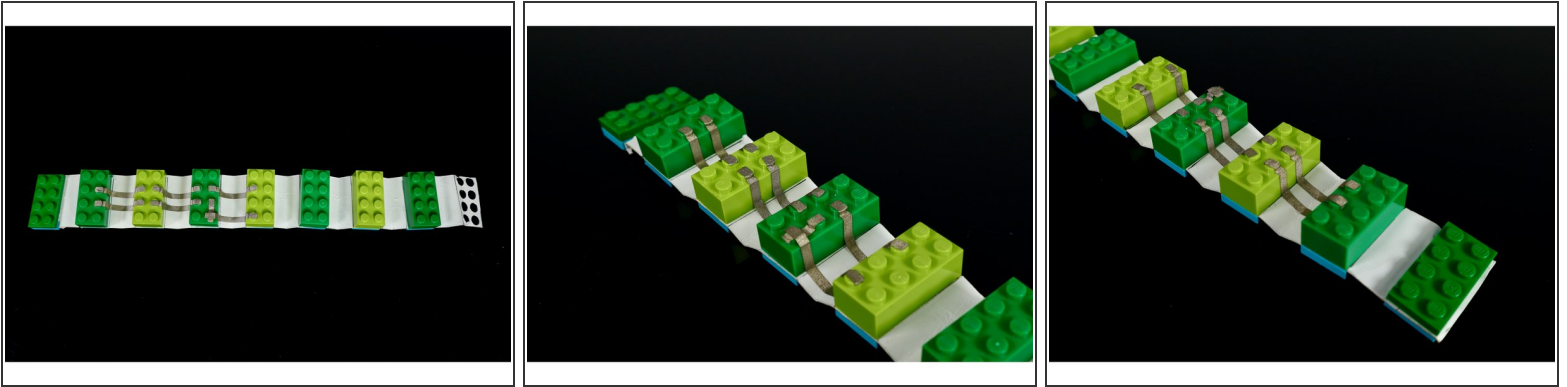
- [Printable Template](#) (1)
- [Maker Tape, 1/4" Wide](#) (1)
- [Crazy Circuits LED Chip](#) (3)
- [Crazy Circuits Coin Cell Battery Holder](#) (1)
- [CR2032 Battery](#) (1)
- [LEGO 2x4 plate](#) (9)
- [LEGO 2x4 Brick](#) (8)
- [Heavy Cardstock](#) (1)

Step 1 — Prepare bracelet



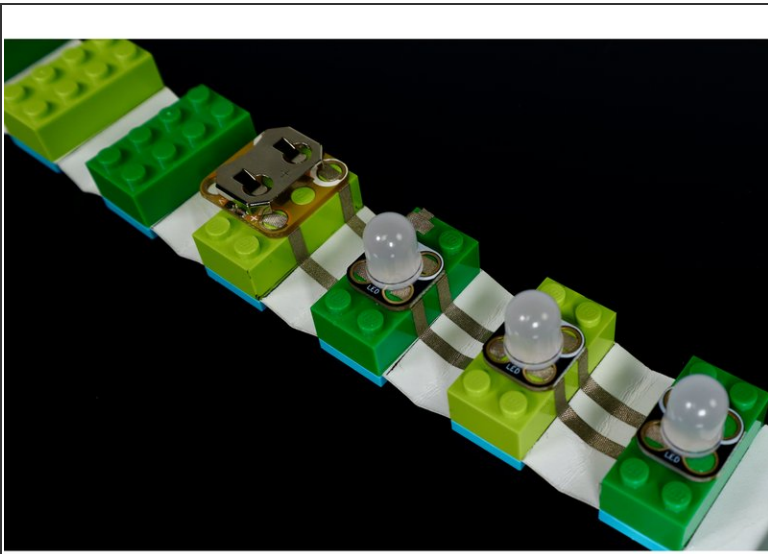
- **Gather materials listed and print out accordion bracelet template on heavy card stock.**
- **Cut template out with a scissors.**
- **Use a ruler to help you fold neatly on ONLY the dotted lines** in the middle of the rectangles that fall between the ones with holes.
- Once cut, **test fit to determine 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



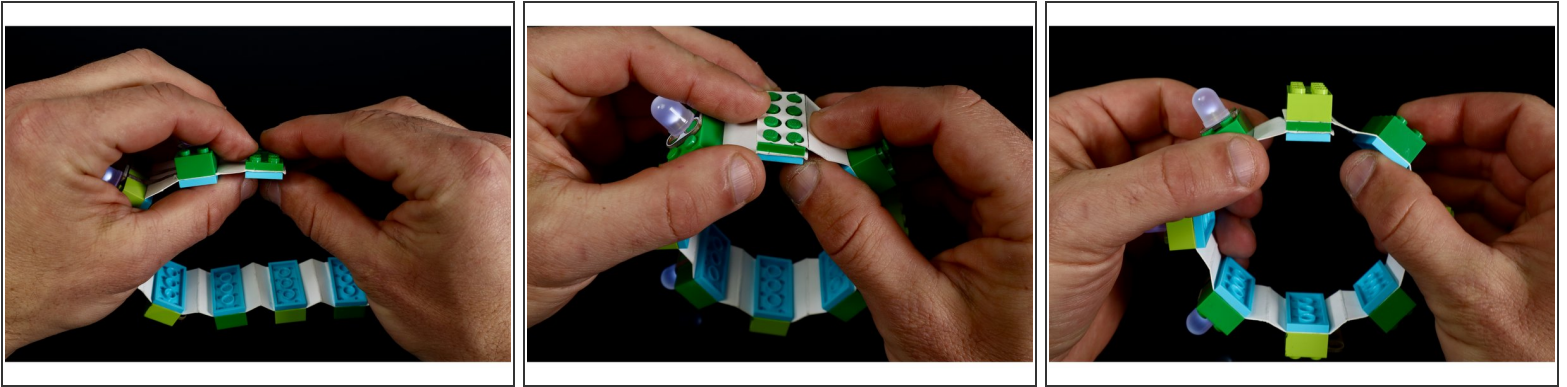
- Use the tape paths portion of the circuit diagram to guide you as you measure, cut, peel and stick the needed tape paths atop your project.
- Take care to press a given tape path leading from a LEGO stud down the side wall of that LEGO brick, then to the felt and up the next sidewall of the neighboring 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!