



# No-Sew Christmas Tree Bracelet

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## INTRODUCTION

Make a festive Christmas Bracelet (that requires no sewing) by using ordinary felt with Maker Tape, a jumbo LED, and a CR2032 battery.

### **TOOLS:**

- [Scissors](#) (1)

### **PARTS:**

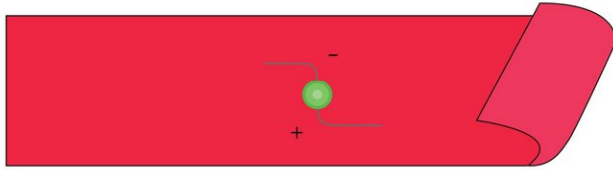
- [Paper Circuits Kit](#) (1)
- [Felt](#) (1)

## Step 1 — Prepare Materials



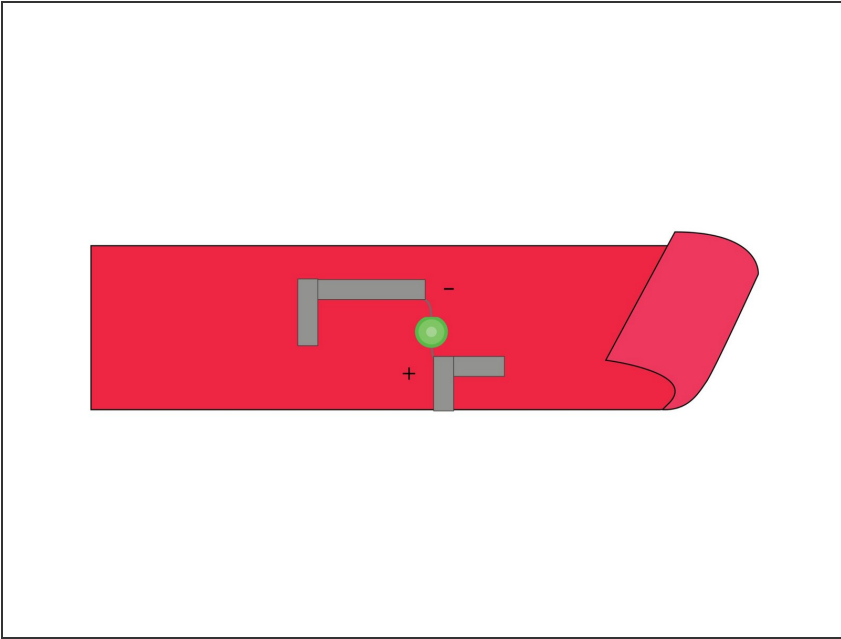
- Wearables are fun, but sometimes sewing is not. Don't get us wrong, sewing is a great skill, and *can* be a lot of fun, but our conductive Maker Tape is great for simple wearable projects since it sticks well to most fabrics.
- For this project we'll be using felt, which is soft, flexible, and (for the kind we have on hand) allows Maker Tape to stick amazingly well. In fact, trying to remove it is difficult, so we do recommend you carefully apply it to get it right the first time.
- Start by cutting a strip of felt about 2" wide and long enough to go around your wrist with about 1" of overlap.

## Step 2 — Add an LED



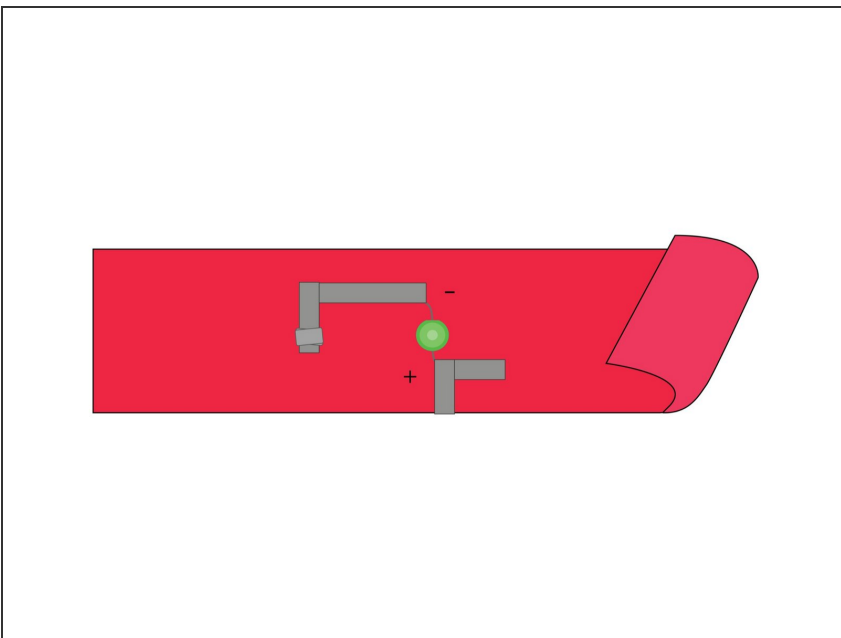
- Place your LED in the center of the bracelet. Bend the legs as shown so it will stand up on its own.
  - Make note of the position of the negative and positive legs. We want the negative leg on the left and the positive on the right.
- Remember, every LED has a positive leg and a negative leg. The positive leg is the longer one. If you connect it backwards it will not light up.

### Step 3 — Tape Down the LED



- Add a few pieces of Maker Tape to hold the LED in place.
- Maker Tape is conductive on both sides and all the way through, so overlapping it works great!

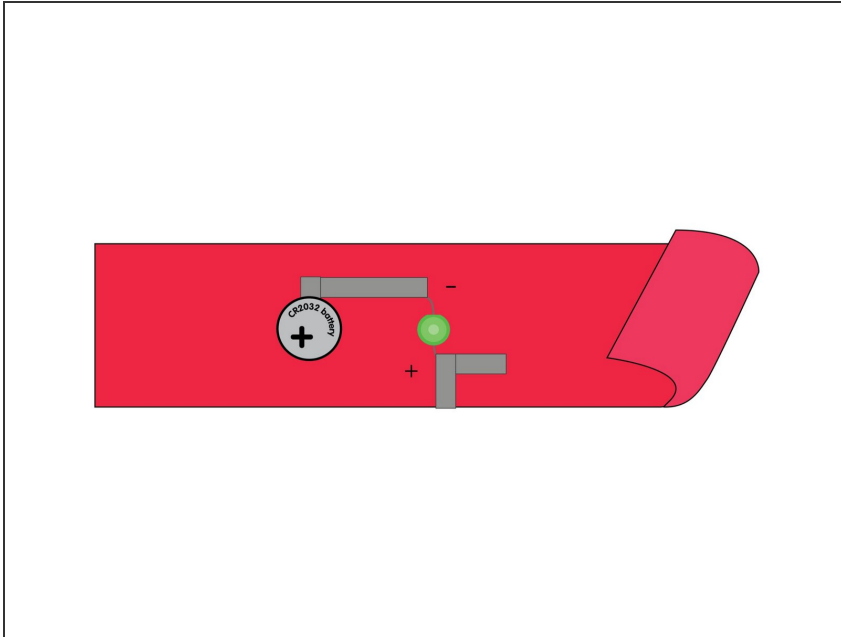
### Step 4 — Add a Tape Loop



- Since Maker Tape is conductive all the way through we can use a loop of tape to hold the battery in place

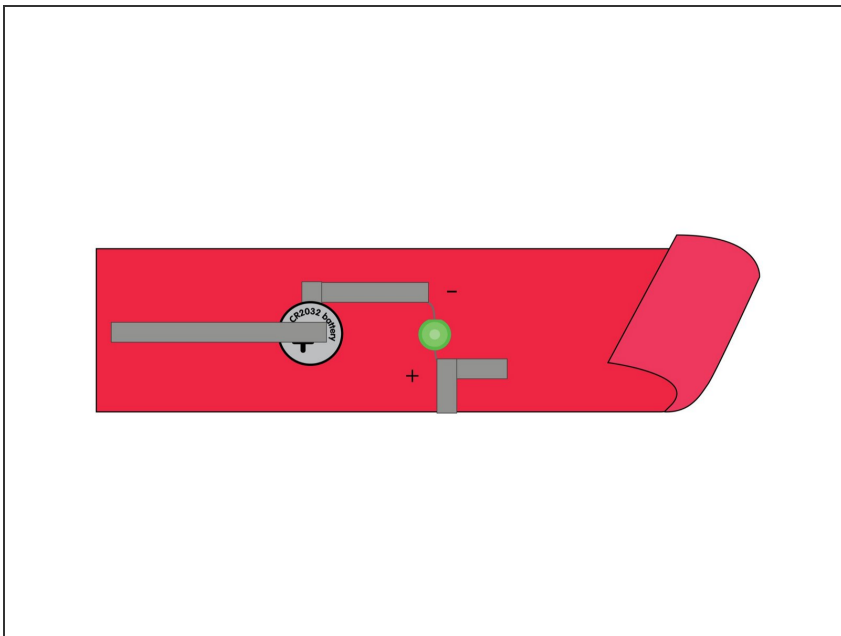
and work as a conductor to provide power to the circuit.

## Step 5 — Add a Battery



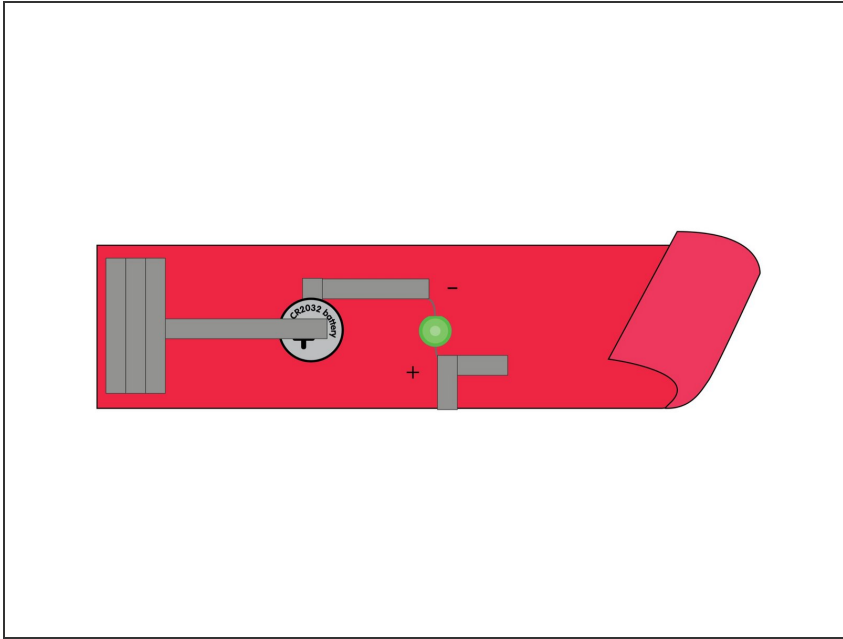
- Stick the battery negative side down to the tape loop. You should see the + sign on the battery (which is the positive side) facing up.

## Step 6 — Add Positive Tape



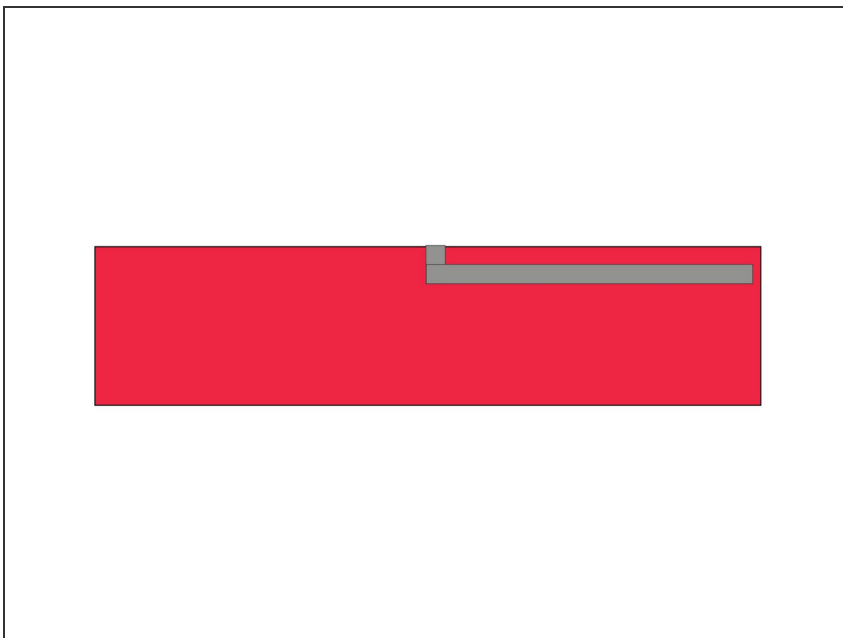
- Run a piece of Maker Tape from the top of the battery (the positive side) to the end of the bracelet.
- We now have our battery connections complete.

## Step 7 — Add Positive Strips



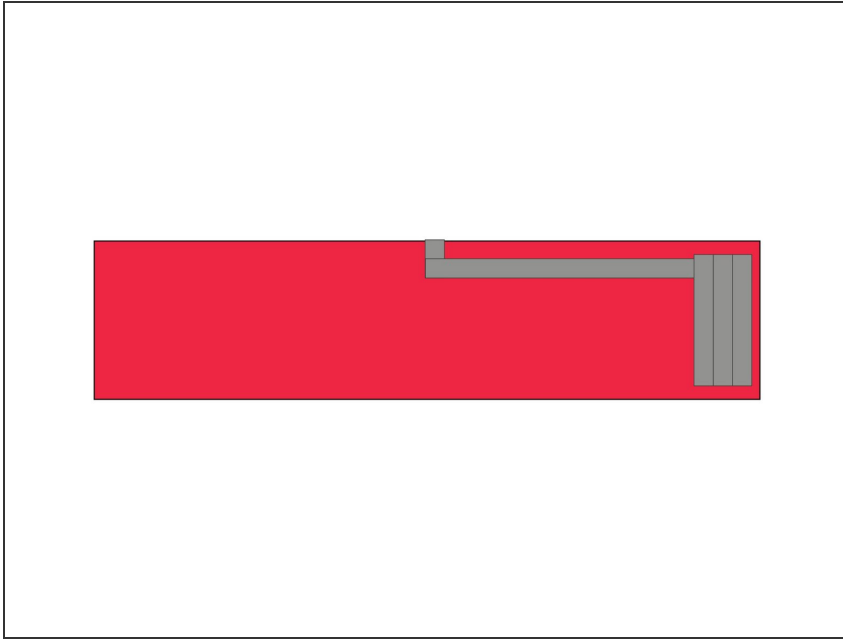
- Run a few pieces of Maker Tape over the strip of positive tape that we ran from the top of the battery. This will be our positive connection point for the circuit.

## Step 8 — Add Negative Tape



- Turn your bracelet over so we can extend the tape that connects to the positive LED leg.

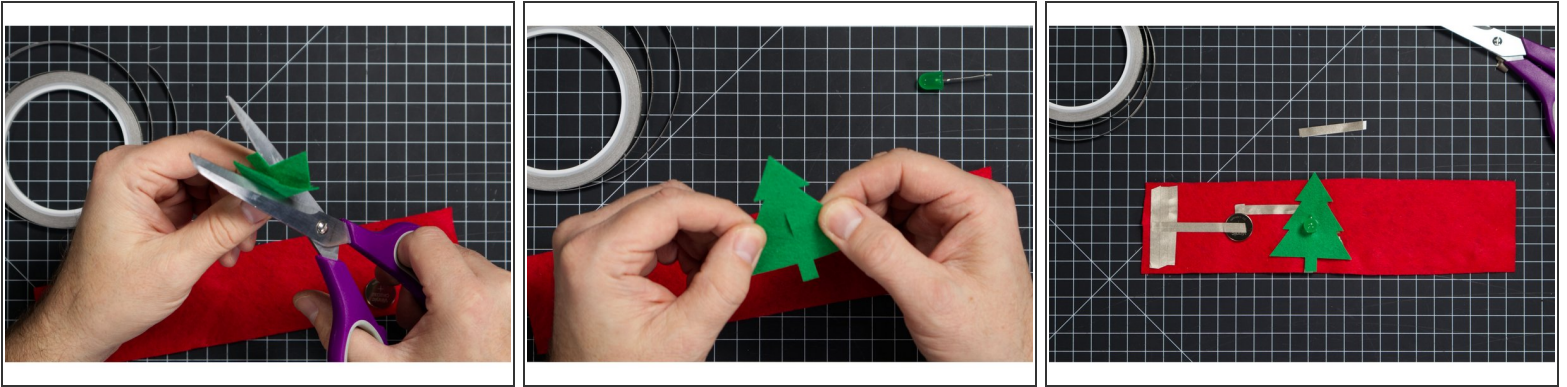
## Step 9 — Add Negative Strips



- Run a few pieces of Maker Tape over the strip on the back. This part will serve as our “switch” when we connect it to the top with a loop of Maker Tape.

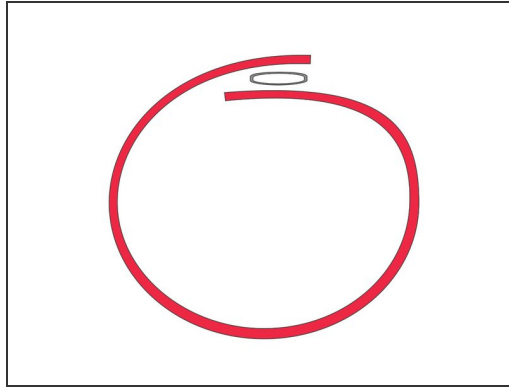
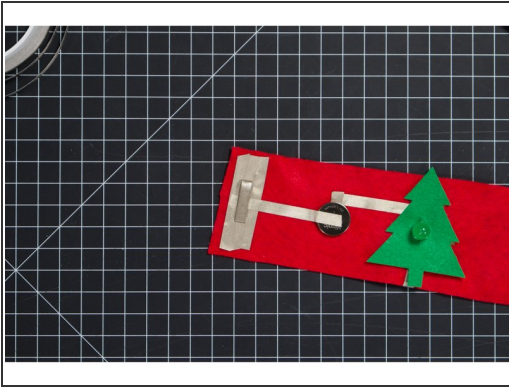


## Step 10 — Add Your Christmas Tree



- Cut out your Christmas Tree (or any shape you want) and cut a slit in the center just long enough to fit over the LED.
- You can easily cut the slit with scissors by folding your shape in half then making a short cut. Start small and test it out, then make it longer if needed.
- With the slit over the LED, press the Christmas Tree in place. It should fit over the LED and be held in place right behind the plastic housing of the LED.
- ⓘ If your Christmas Tree doesn't stay in place you can add a bit of hot glue or other suitable fabric glue, or some Maker Tape.

## Step 11 — Try it On!



- Finally, add a loop of Maker Tape as shown and then wrap the bracelet around your wrist connecting the ends together.
- The tape loop will connect the circuit and the LED will light up!
- When you take the bracelet off the "switch" will disconnect the circuit so your battery does not run down.
- If you need to replace the battery just pull up the top piece of tape and pull it loose from the tape loop below it, then add a fresh battery.