On Air Sign

Create a light-up "On Air" sign to let someone know when you are videoconferencing with the crew back at the office.

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INTRODUCTION

Build a paper circuit with an LED, battery, and some Maker Tape™ that will light up an "On Air" sign made from a single piece of paper.

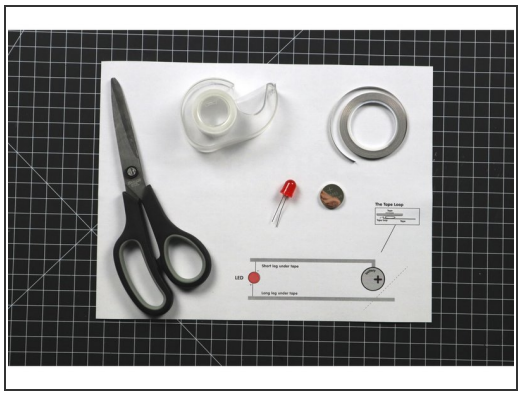
TOOLS:

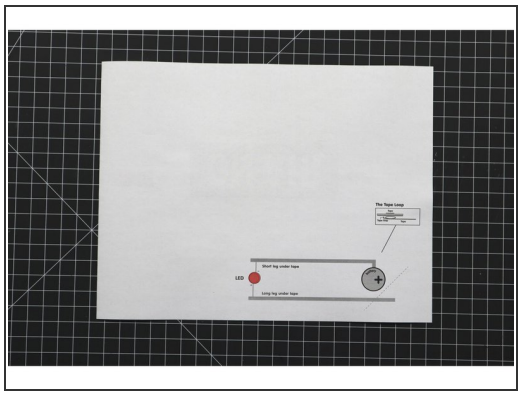
- Scissors (1)

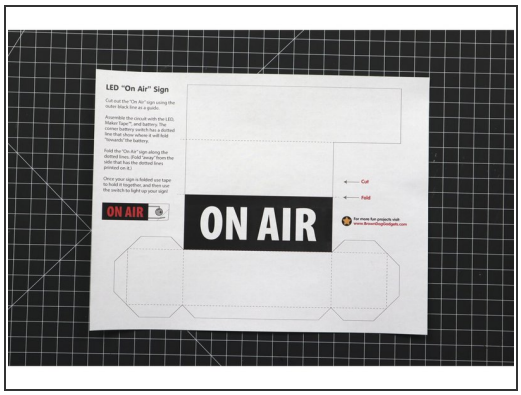
PARTS:

- Maker Tape (1)
  1/8"
- Jumbo 10mm Diffused LED (1)
  Red
- CR2032 Battery (1)
- Clear Tape (1)
  (Any)

Step 1 — Print and Prepare

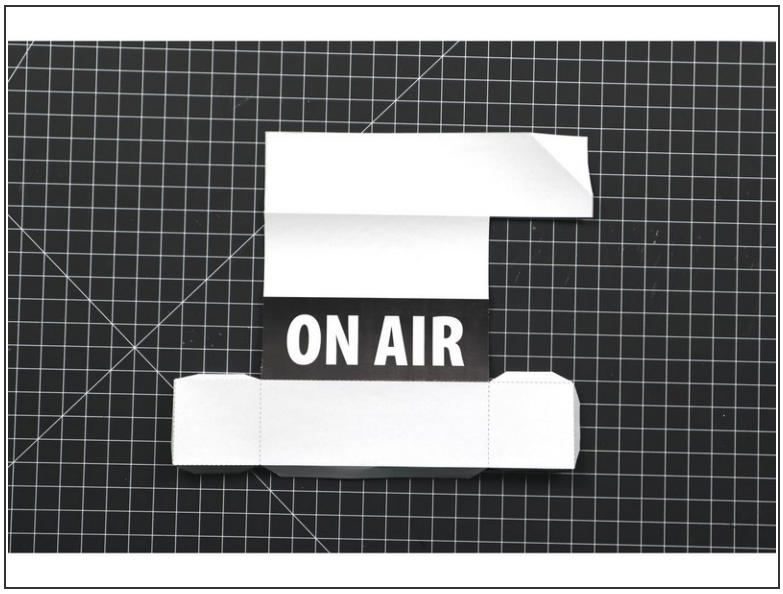


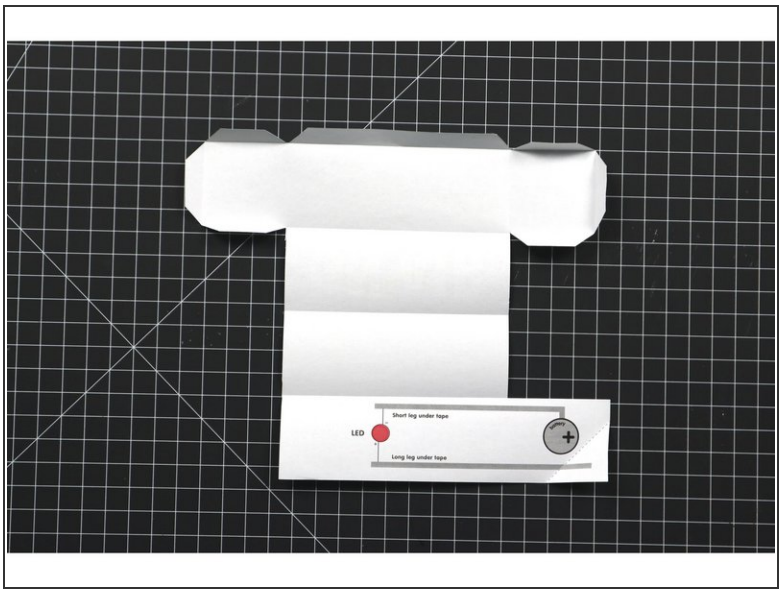




- Print the PDF file on both sides of a single sheet of paper.
- Prepare all of your tools and supplies.

Step 2 — Cut & Fold Paper





- Cut your sign around the outer perimeter using the sold black line as a guide.

ⓘ If you prefer, you can use an X-ACTO knife, straight edge ruler, and a cutting mat instead of scissors.

- Once you've cut out the shape of the sign you can fold along the dotted lines.

ⓘ The dotted line for the battery folds "towards" the dotted line, all other dotted lines fold "away" from the dotted line.

ⓘ If you use an XACTO-knife and straight edge ruler instead of scissors you can use it to score the dotted lines to make folding a bit easier.

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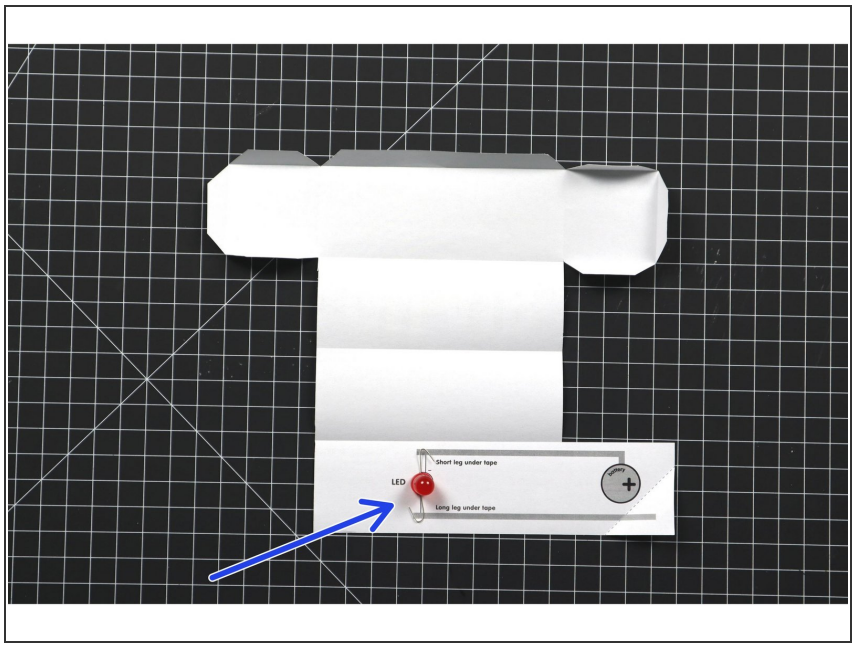
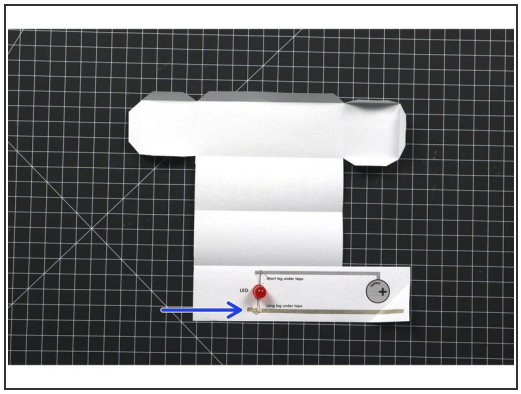
Step 3 — Add the LED

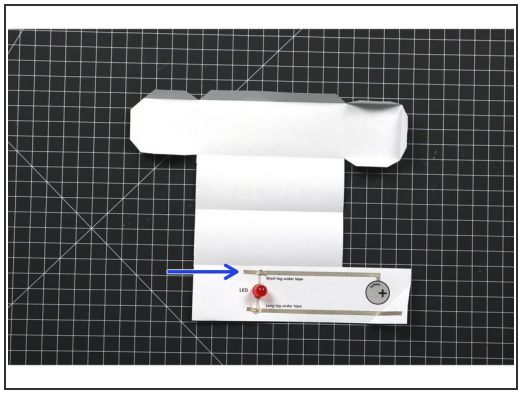


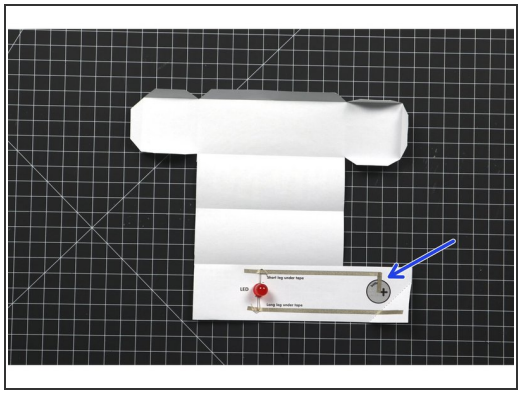
- Prepare and place the 10mm red LED to its position in the circuit.
- Make sure you've got the longer leg going to positive and the shorter leg going to negative.

ⓘ Bend the legs around so that the LED stands up straight.

Step 4 — Add the Tape

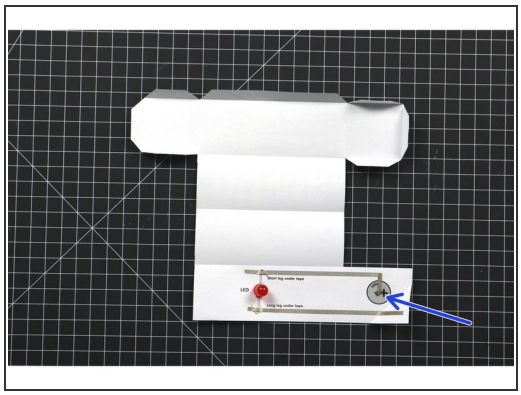
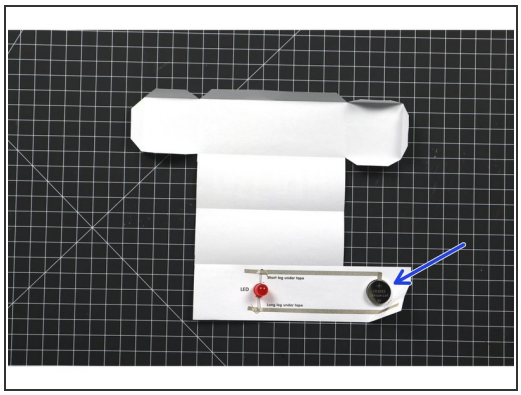
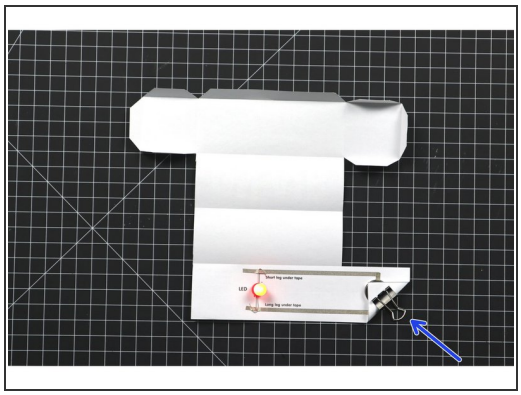






- Cut three strips of Maker Tape to build the circuit.
- The tape will hold the LED legs in place and then connect to the battery to complete the circuit.

Step 5 — Add the Battery

- Add a tape loop using the Maker Tape to secure the battery down to the circuit.
- Stick the battery in place (negative side down).
- Fold the "switch" corner down on top of the battery so the positive side of the circuit is complete.

ⓘ Your LED should light up!

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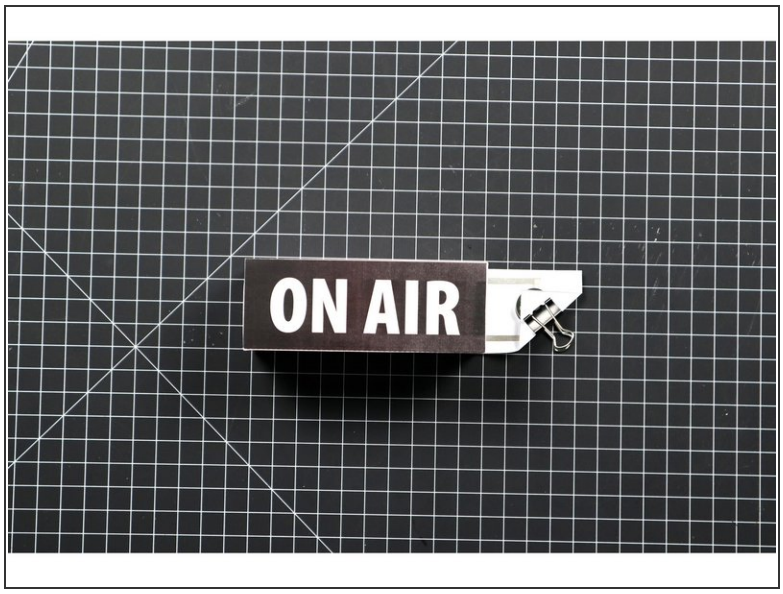
Step 6 — Complete!



- Fold the paper together into a box and tape it shut so it does not unroll.
- Add a binder clip to turn on the circuit and it should light up.
- For the best result, turn down the lights and see your new "On Air" sign glow red.

ⓘ If you want a brighter sign you can add a second LED in parallel with the first one.

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