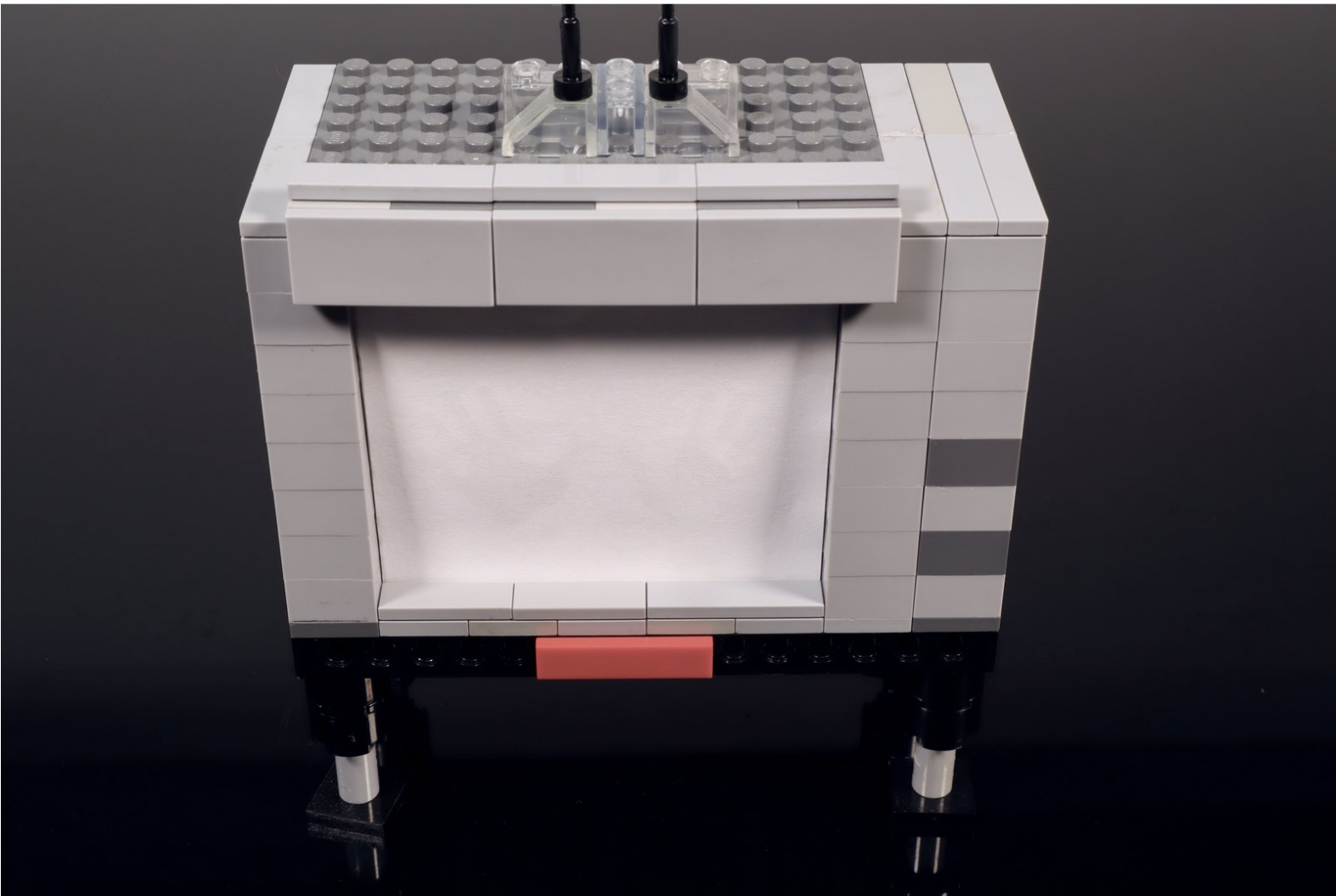




Hole Punch ShadowBox TV

LEGO, Crazy Circuits & backlit silhouettes; what's not to like? Use this guide to create a light-up LEGO build that you can customize again and again!

Written By: Andy Wallus



INTRODUCTION

LEGO, Crazy Circuits & backlit silhouettes; what's not to like? Use this guide to create a light-up LEGO build that you can customize again and again!



TOOLS:

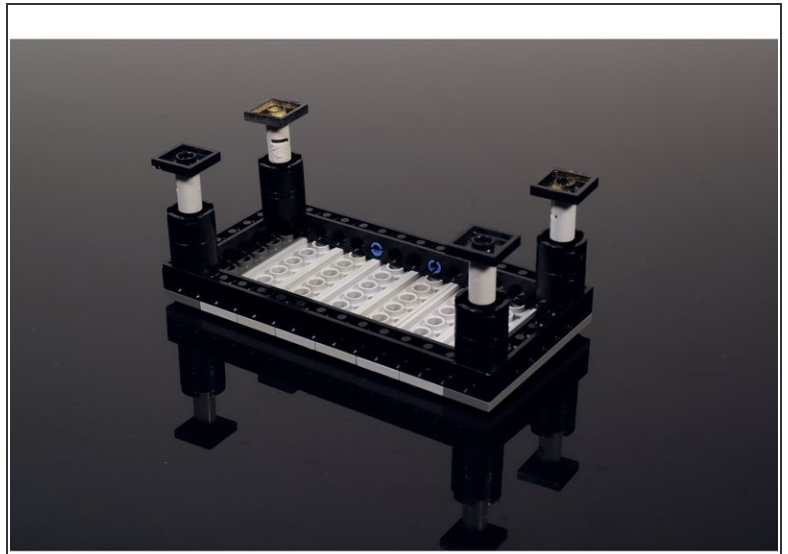
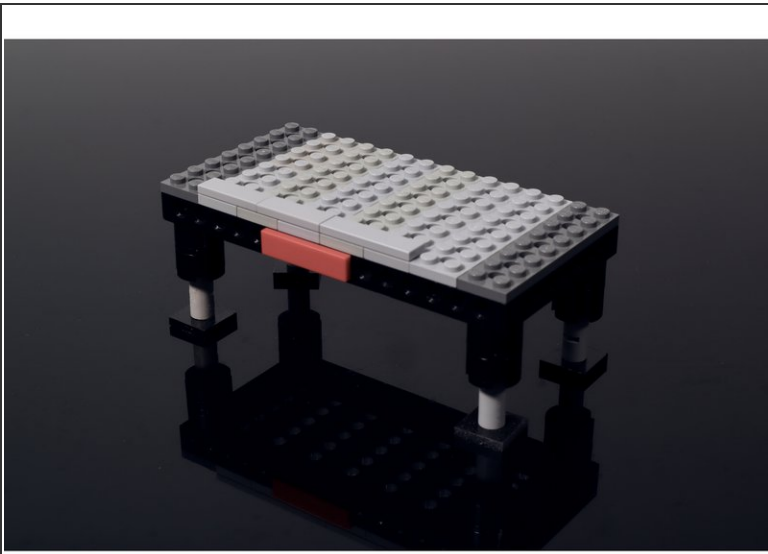
- [Hole Punch](#) (1)
- [X-ACTO Knife](#) (1)
- [Scissors](#) (1)
- [Glue](#) (1)
- [Tape](#) (1)



PARTS:

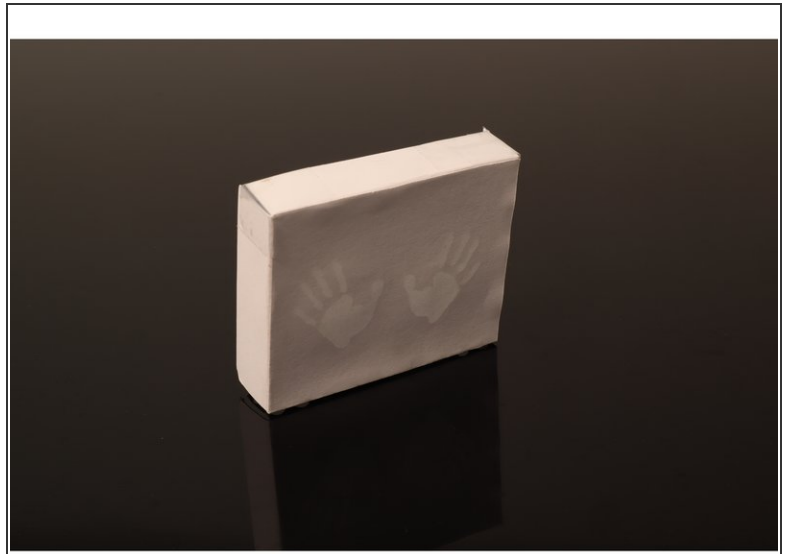
- [Misc LEGO Parts](#) (1)
See Build Documents
- [Crazy Circuits Coin Cell Battery Holder](#) (1)
- [Crazy Circuits LED Chip](#) (1)
- [Crazy Circuits Slide Switch Chip](#) (1)
- [Maker Tape 1/8th inch](#) (1)
- [Printable Template](#) (1)
- [Copy Paper](#) (1)
- [Heavy Cardstock](#) (1)

Step 1 — The Base



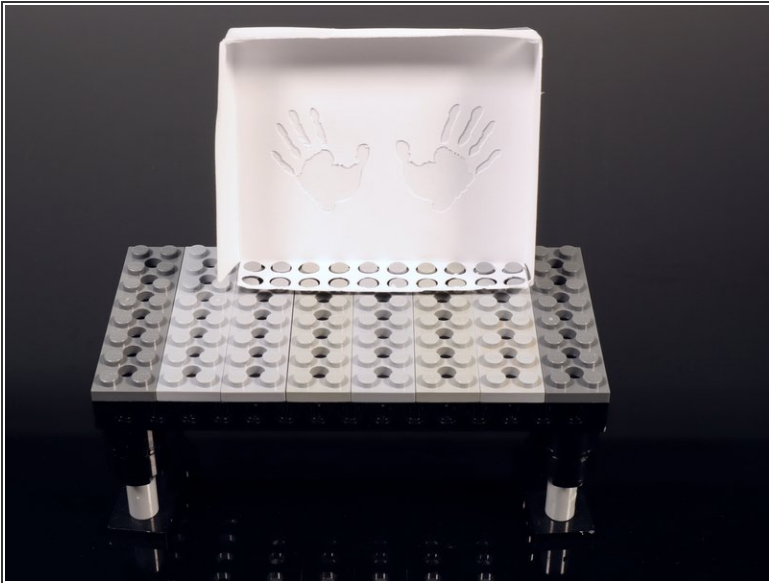
- **Follow** the downloadable build instructions **from the document above or improvise** your own base build as long as it maintains the dimensions shown (**16x8 LEGO studs**).

Step 2 — The Shadowbox



- **Print** out the LEGO hole punch template as well as the shadowbox template you want to use on heavy cardstock. **NOTE:** There are blank templates as well as ones with pre outlined silhouettes. **Choose which one you want!**
- **Cut out the shadowbox template** with a scissors and **the silhouette you chose with an Xacto knife.**
- **Use the hole punch template to help you mark a (2x10) row of holes** on the long panel below the silhouette. Then, **use a hole punch to punch the holes out.**
- **Fold the edges** to form the shape pictured and use transparent tape to **secure the corners.**
- **Cut a small rectangle out of copy paper** to match the silhouette panel and **glue it over the top of the outside of the shadowbox** (covering the cut out silhouette).

Step 3 — Securing the Shadowbox



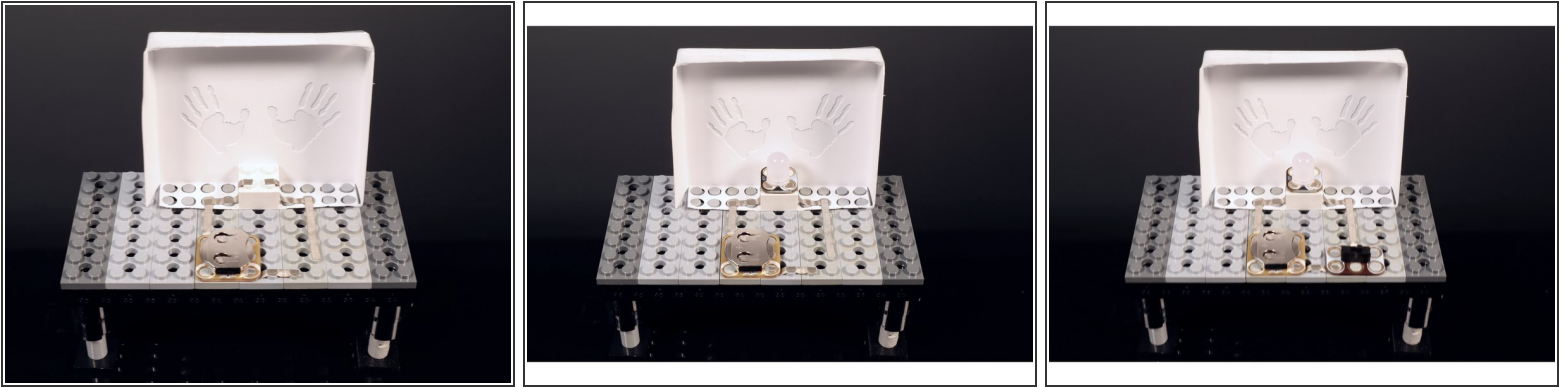
- **Place the completed shadowbox where shown on the instruction sheet.** Remember to leave a single row of LEGO studs in front of the shadowbox.
- **Use a single 2x2 LEGO brick to secure the shadowbox in place.**

Step 4 — Making Circuit Pathways



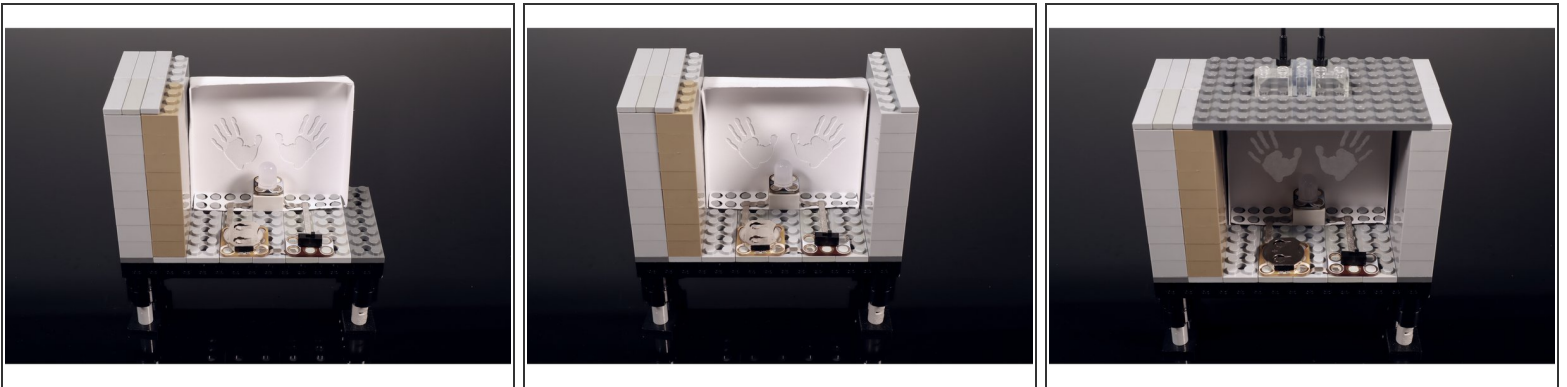
- **Create the conductive Maker Tape paths** shown both here and on the instruction sheet.

Step 5



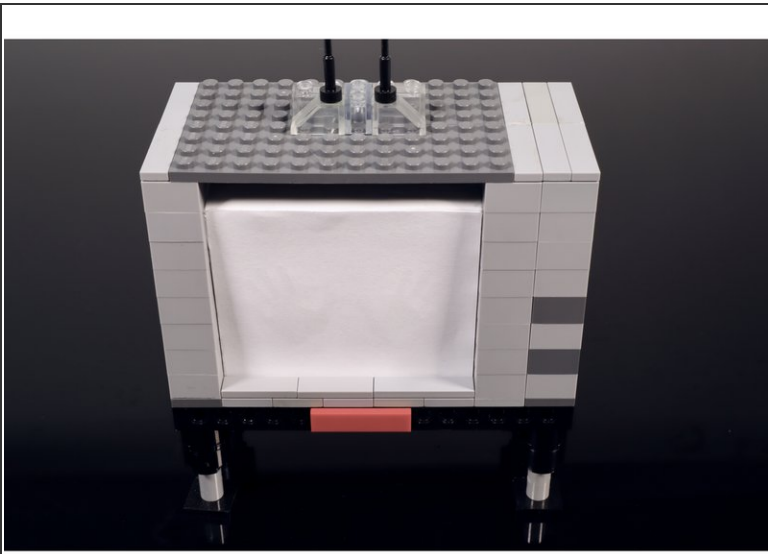
- **Place a single Crazy Circuits battery holder as shown. Take care to** orient the part so that the white holes are where they are pictured in the circuit diagram sheet.
- **Now, press a single Crazy Circuits color-cycling LED into place** atop the 2x2 LEGO brick. Again, take care to orient the part so that it matches the circuit diagram.
- **To finish the circuit, press a single Crazy Circuits slide switch into place where shown.** Again, take care to orient the part so that it matches the circuit diagram.

Step 6 — Finish The TV Build



- **Build the two side walls of the TV and add a top and an antenna.** You can always use the same parts that are shown but you can also improvise a different build if you don't have these same LEGOS.

Step 7



- **Add some tiles to seal the deal** (we used some 2x2 90 degree plates with flat tiles on them) **OR make the walls one layer shorter** so there is no gap between the top of the TV build and the top of the shadowbox.