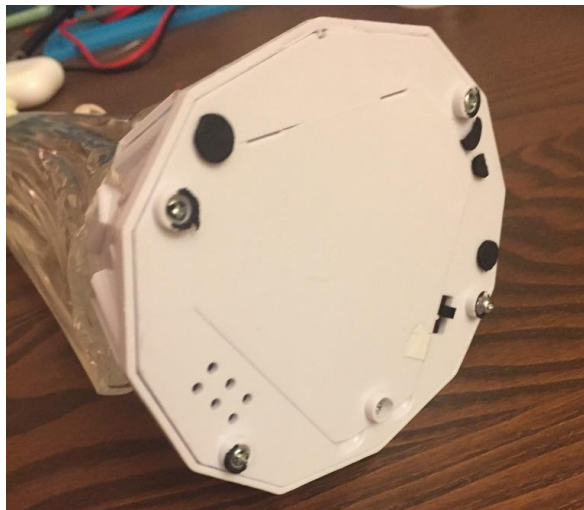


## Light N Sparkle Elsa Instructions

### Prepare the Lamp

1. Open the packaging. Be very careful not to damage it, since you will repackage it at the end for its recipient. Carefully remove the tape, then unfold the box starting at the top and moving down the front tabs. Take her out of the clear plastic casing and set it aside without disturbing the markers, glitter, or stickers.
2. Go to the bottom of the doll. Carefully remove the black pads on the feet of the base. Set them aside for later. Remove the screws underneath them and set them aside. The entire bottom face of the base should now pull out.

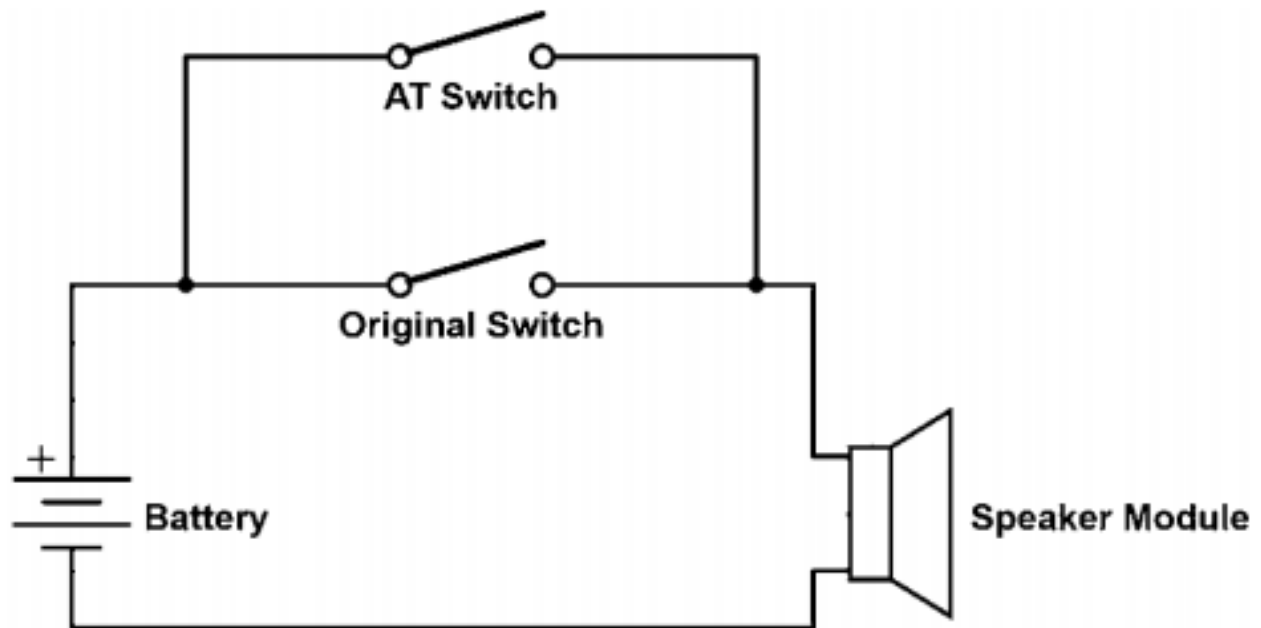


3. With the bottom of the face pulled out, drill a small hole in the back of the base for your wires to pass through.

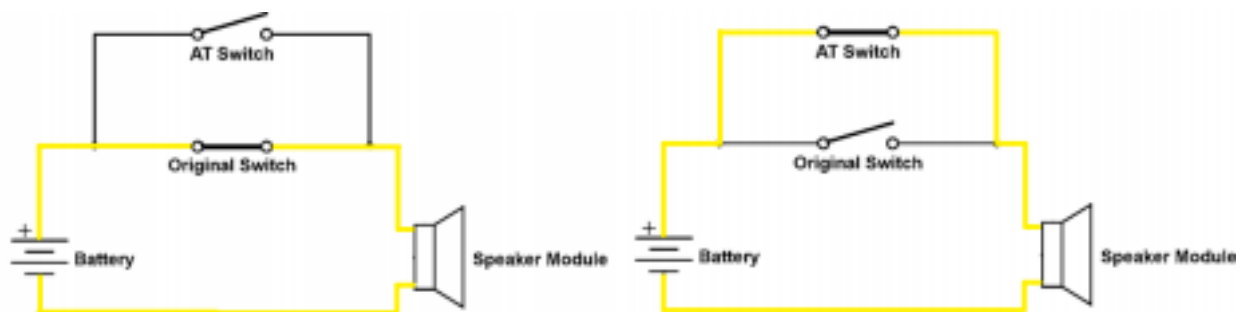


### Switch Adaptation

You will attach each wire from the female audio jack to one of the wires that come from the current switch on the lamp. Our goal is to activate the toy using a new switch, while still allowing the original switch to still work. To accomplish this, we are going to wire our new harness in parallel with the other switch. An electrical schematic of this circuit is depicted below.

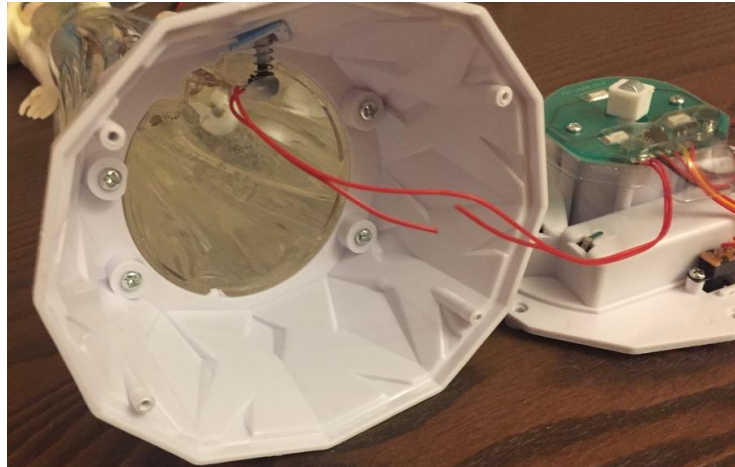


Regardless of which switch is pressed, electricity (yellow) can flow through the circuit, causing the toy to activate.

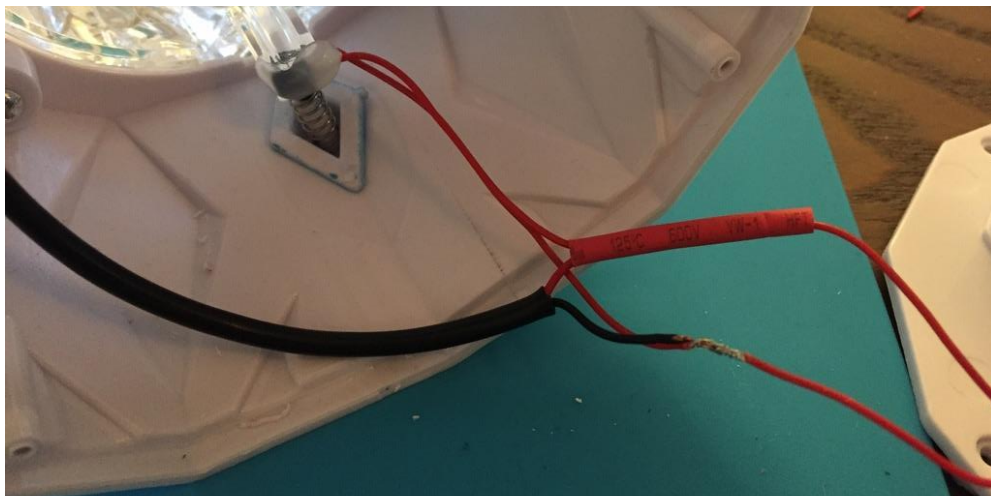


1. String the wires from the female audio jack through hole that you drilled in the back of the base.
2. Slip a piece of heat shrink on each of the wires.

3. The switch has two wires that are glued together. Use your nail or a small flathead screwdriver to separate them for a bit in the middle. Take one of the wires and cut it a few inches away from the switch.
4. Strip both ends ~ 1 cm. It's very easy to accidentally yank the switch out of place while trying to strip these little wires. Luckily, it is easy to put it back. If you do this, use hot glue to glue it back in place after you complete step 5.



5. Twist these two wires together along with one of the wires from the audio jack harness (female audio jack) that was prepared earlier. It does not matter which wire you choose. Solder all three wires together and insulate it using heat shrink. The helping hands will be really...well...helpful to hold all the wires in place as you solder them together. Repeat this for the other wire going to the toy's switch. See the below image for how the wiring of the toy should look.



6. To test, simply plug a compatible AT switch (depicted below) into the audio jack, turn the toy on, and press the button. Note: Plugging and unplugging the toy into an AT switch while it is turned on may cause the toy to activate, this is normal.



<https://www.amazon.com/>

7. Plug a working button switch into the female audio jack. Test that the original switch and the new button switch both work to turn the lamp off and on.
8. Pull the wires from the audio jack through the hole until they are about even on the outside of the base. Wrap a zip tie around the two wires on the inside of the hole. This way, if the audio jack gets yanked, the zip ties will stop the wires from pulling on your freshly soldered joints.
9. Put the doll back together. Don't forget the foam stickers on the screws.
10. Put the packaging back together. Carefully refold the cardboard as it was and tape it back together.