

### **Required Components**



#### **Required Tools**

- Soldering iron and Solder
- Philips Head screwdriver
- Flush Cutters
- Wire Strippers

### Required Personal Protective Equipment (PPE)

Safety glasses



### **Assembly Instructions**

#### Step 1: Prepare the Night Light

Carefully remove the butterfly nightlight from the box. Check the bottom of the nightlight to check that the batteries are removed.







Step 2: Disassemble the toy:

Remove the top layers of the night light.



First, remove the screws indicated in red.



Take the white layer of and remove the screws indicated in red on the second layer.





Note: There are three bearings indicated in blue. These help the nightlight rotate. These bearings fall out easily, so make sure you carefully remove them before unscrewing this layer.

#### Step 3: Remove The Button Panel

Remove the button panel from the toy so you can comfortably operate on it. Locate the button panel inside the night light. It should look like this:





#### Step 4: Prepare the Mono Jacks.

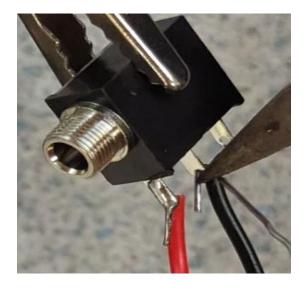
Cut 6 pieces of wire and strip about 0.5cm of insulation off each end. For this project we used three red wires and three black wires to differentiate between positive and negative.





Solder two wires to the mono jack as indicated below. Repeat for the other two mono jacks.







Step 5: Solder the mono jacks.

Solder the positive wire (indicated in red) and the negative wire (indicated in white) to the buttons as indicated below.







#### Step 6: Remove the Previous Buttons

Remove the plastic button plates (this will not be needed) and trim the edge of the plastic lip (this will allow the mono jacks to sit in the previous buttonholes).







#### Step 7: Substitute the Buttons

When each mono jack is connected, feed each jack into the corresponding marked buttonhole. If needed, hot glue the mono jack to the outer casing of the night light.



Step 8: Reassemble the orb.

Follow step two in reverse to rebuild the orb. Please make sure to work carefully, making sure not to disrupt the wires. Test that your assistive switch is working while assembling.

Note: remember to add the ball bearings on the second layer.



Step 9: Test the Projector

Plug the adaptive switch to the mono jacks and test all three functions of night light: power, light on / off, and rotate.



