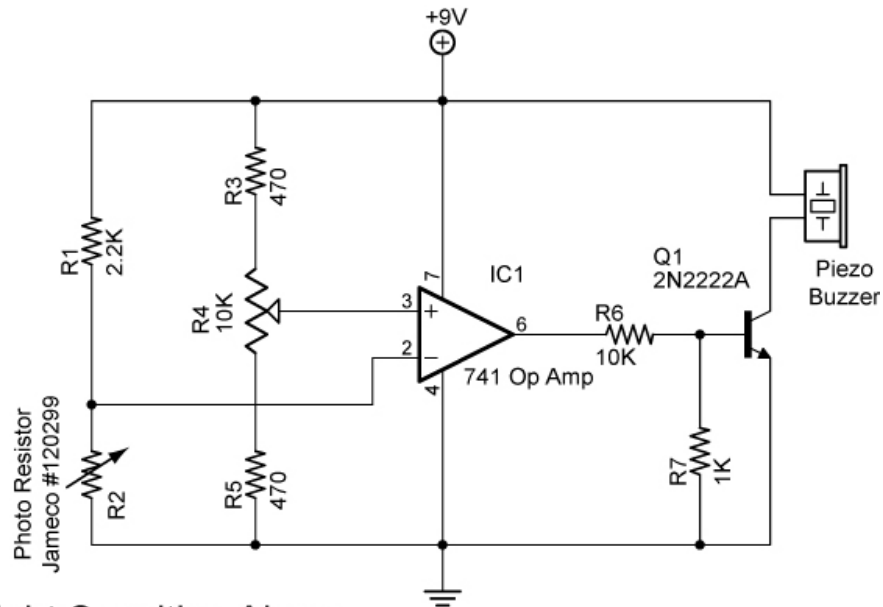
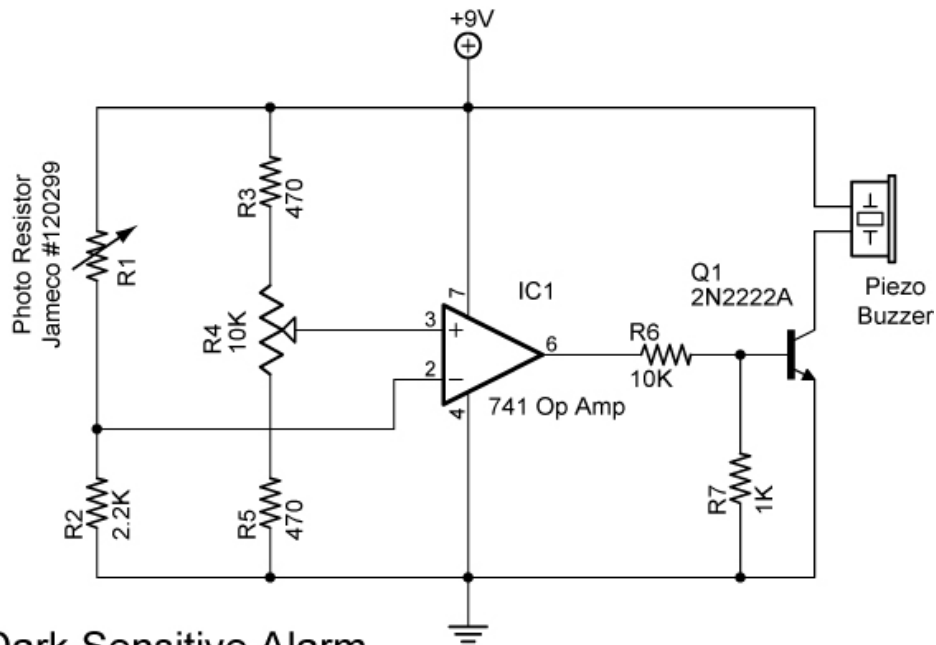


# 741 Light and Dark Sensitive Alarms



Light Sensitive Alarm

**Explanation:** The circuit uses the 741 op amp as a voltage comparator. The potentiometer R4 adjusts the light level threshold. Fine-tune R4 so the buzzer will just turn on and then block the light with your hand. The buzzer should turn off when the hand is blocking the light.



Dark Sensitive Alarm

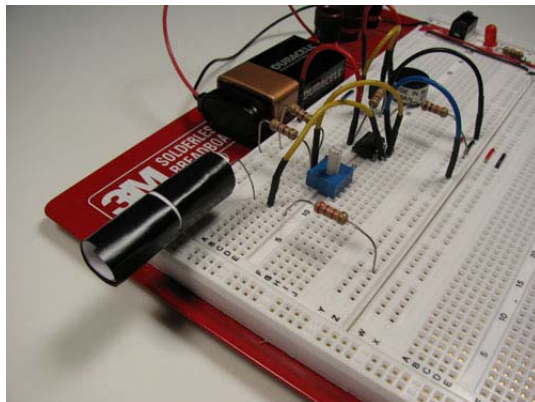
**Explanation:** By switching the R1 and R2, the circuit will become sensitive to darkness, that is, the buzzer will sound when light is blocked from the photoresistor. Adjust R4 for light levels. Adding a paper tube around the photoresistor and pointing it at a light source creates an entry alarm. See photos below.



**Paper Tube Ready for Photoresistor**



**Photoresistor Inserted into Tube**



**Photoresistor Pointed at Light Source**