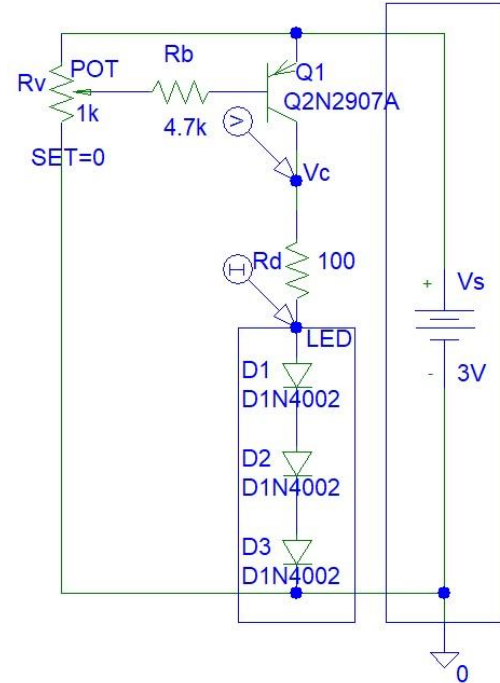

High School Sustainable Lights 2

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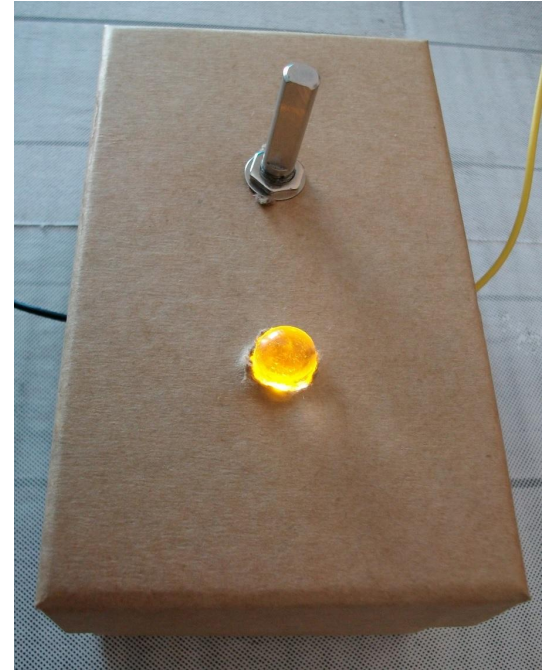
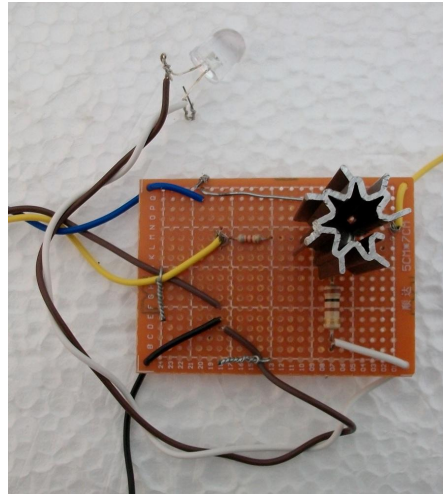
Transistor LED Dimmer

- You will not need a transistor if use a typical low current LED.
- Transistors can used to drive multiple LEDs.



Transistor LED Dimmer

- Photos:



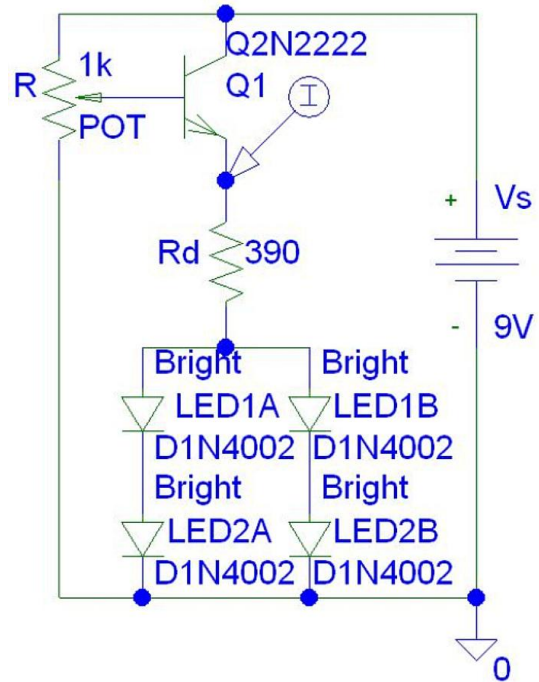
Transistor LED Dimmer

- Video:

<https://www.youtube.com/shorts/RbYCCmnZXSM>

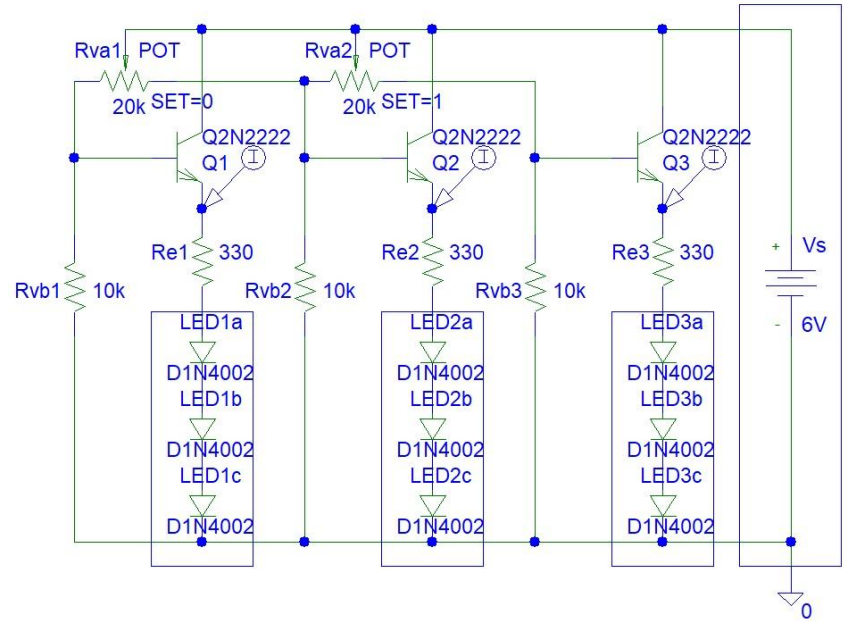
Transistor Light Dimmer

- The LEDs might appear a bit dim unless you use a 5 mA LED.
- $(9\text{ V} - 0.7\text{ V} - 4\text{ V}) / 390\text{ ohms} = 11.02564102\text{ mA}$
(5.51282051 mA per LED)



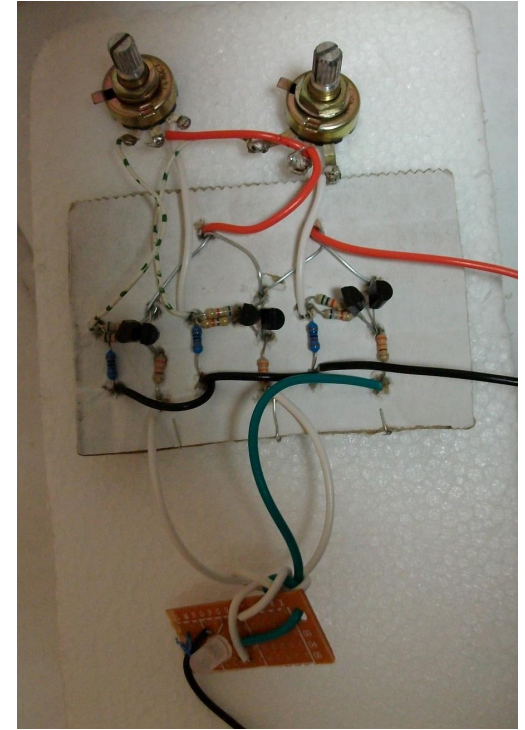
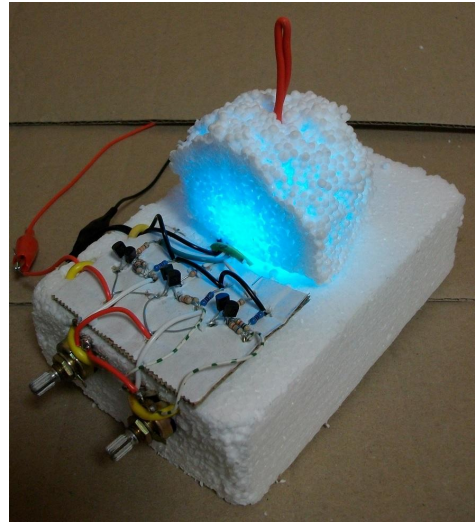
Transistor Lights

- You only need transistors if you are using high current LEDs.



Transistor Lights Photos

- Photo:



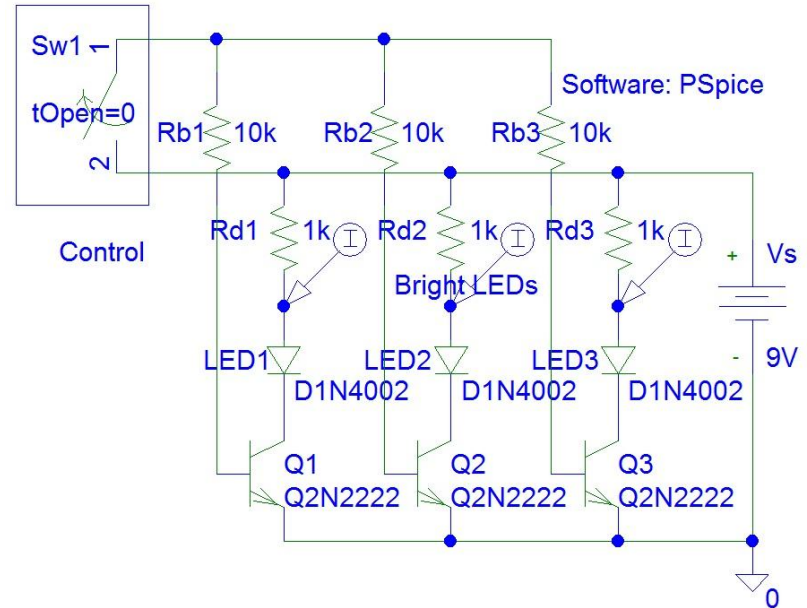
Transistor Lights Video

- You can watch this video:



Transistor LED Driver

- Circuit design:



References

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