
*ADAPTIVE SMART LIGHTING
SYSTEM WITH DAY/NIGHT &
MOTION-BASED INTENSITY CONTROL

OBJECTIVE

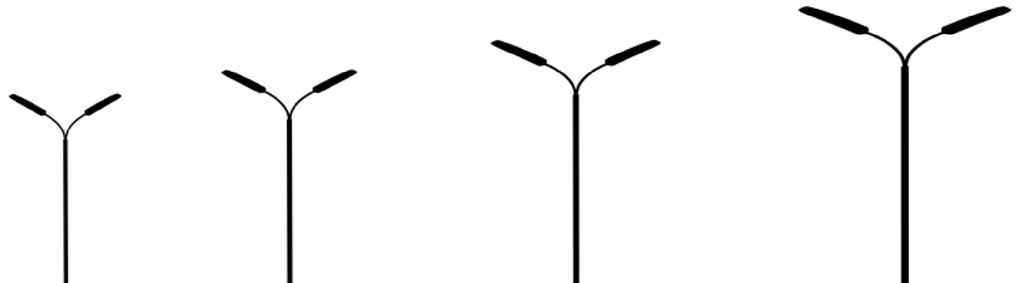
Implementing an energy-efficient lighting strategy by adjusting lighting levels based on ambient light and motion detection to reduce energy consumption effectively.

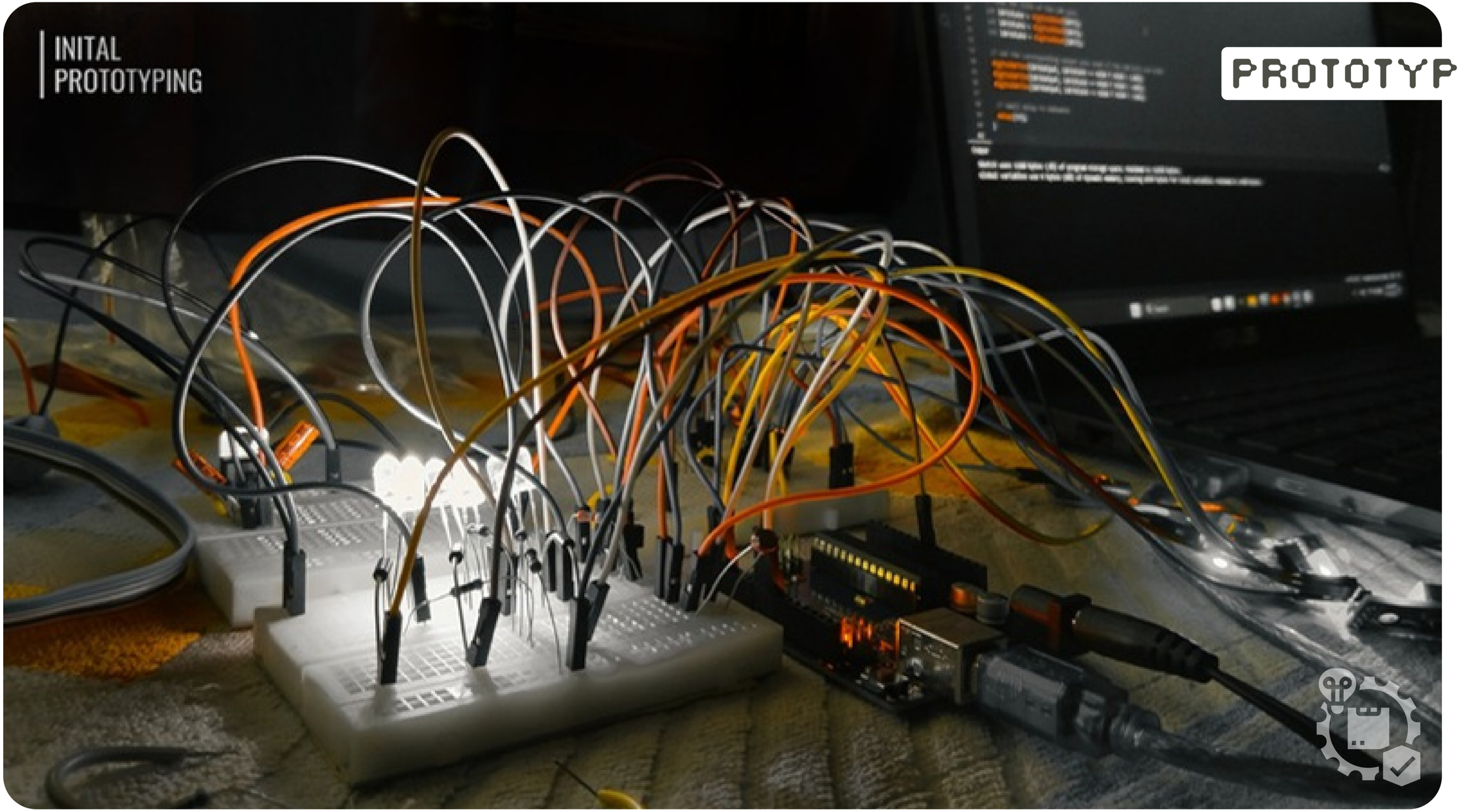
Enhancing safety and security through improved visibility for pedestrians and drivers, thereby reducing accidents and deterring criminal activities.

Achieving cost efficiency by lowering electricity and maintenance expenses through controlled illumination and extended fixture lifespan.

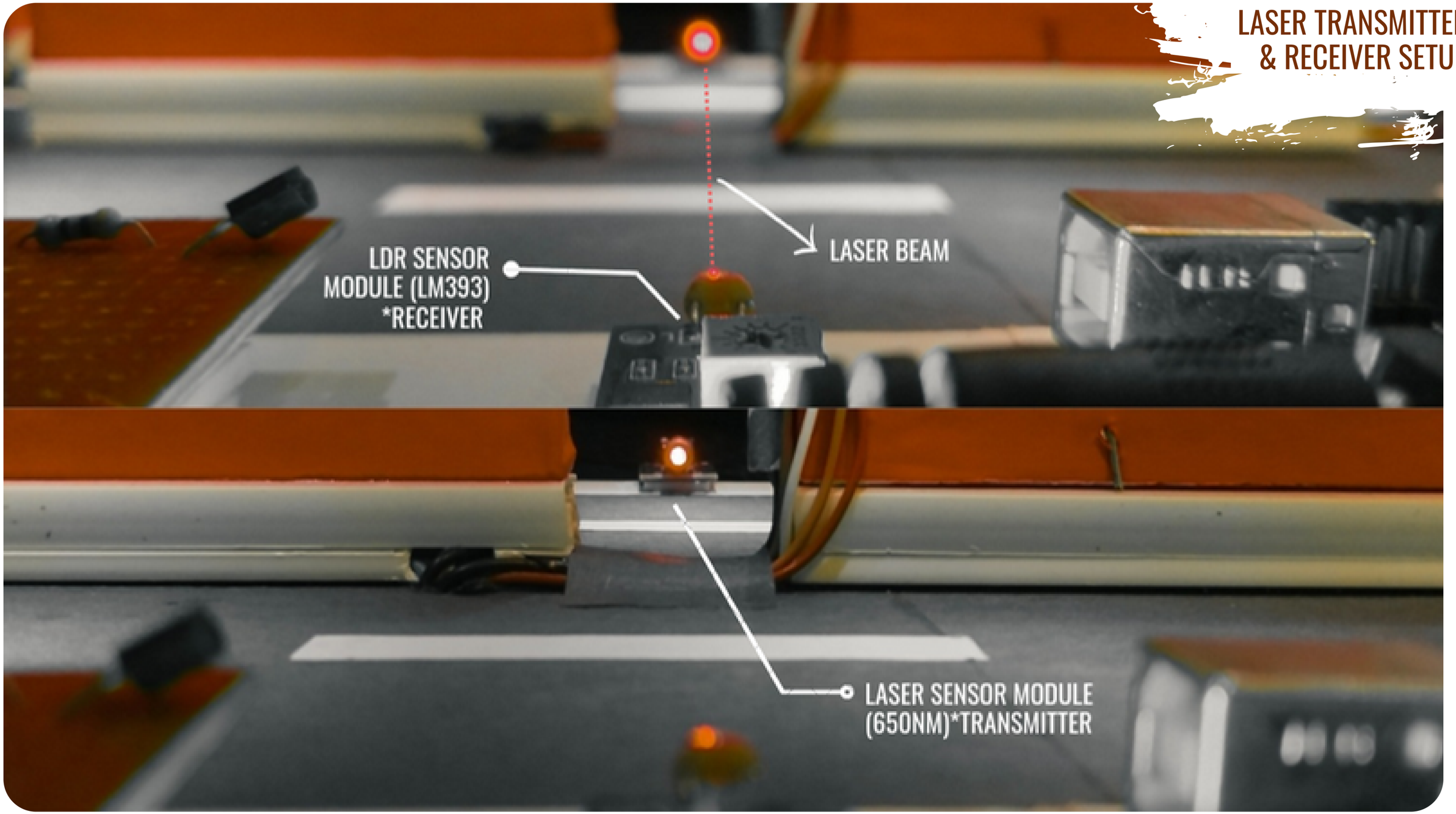
Contributing to environmental sustainability by decreasing the carbon footprint with reduced energy use and the adoption of energy-efficient LED lighting technologies.

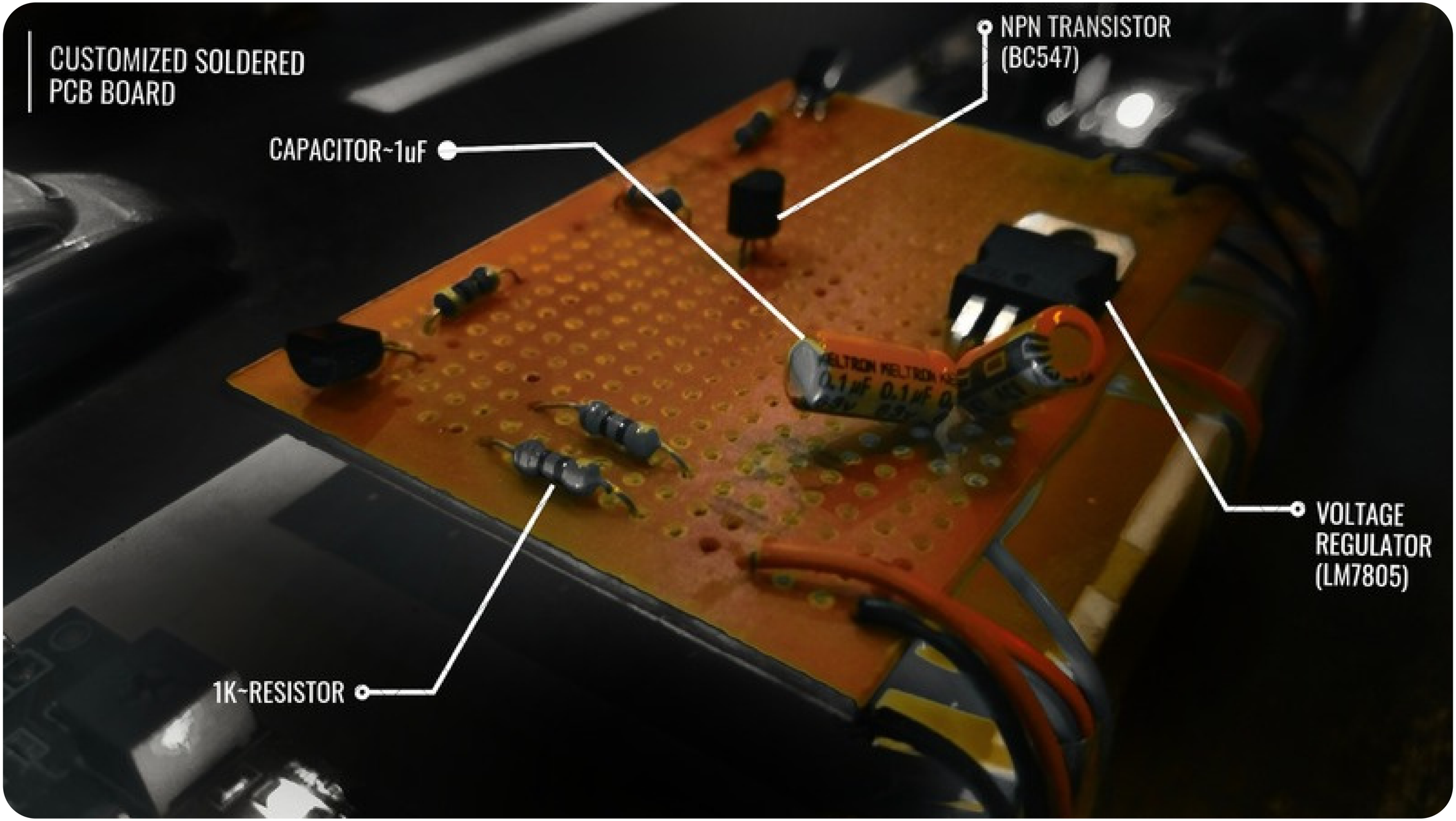
Incorporating automation and smart control systems to monitor ambient light and motion for real-time adjustments, eliminating the need for manual intervention.




INITAL
PROTOTYPING
PROTOTYPE

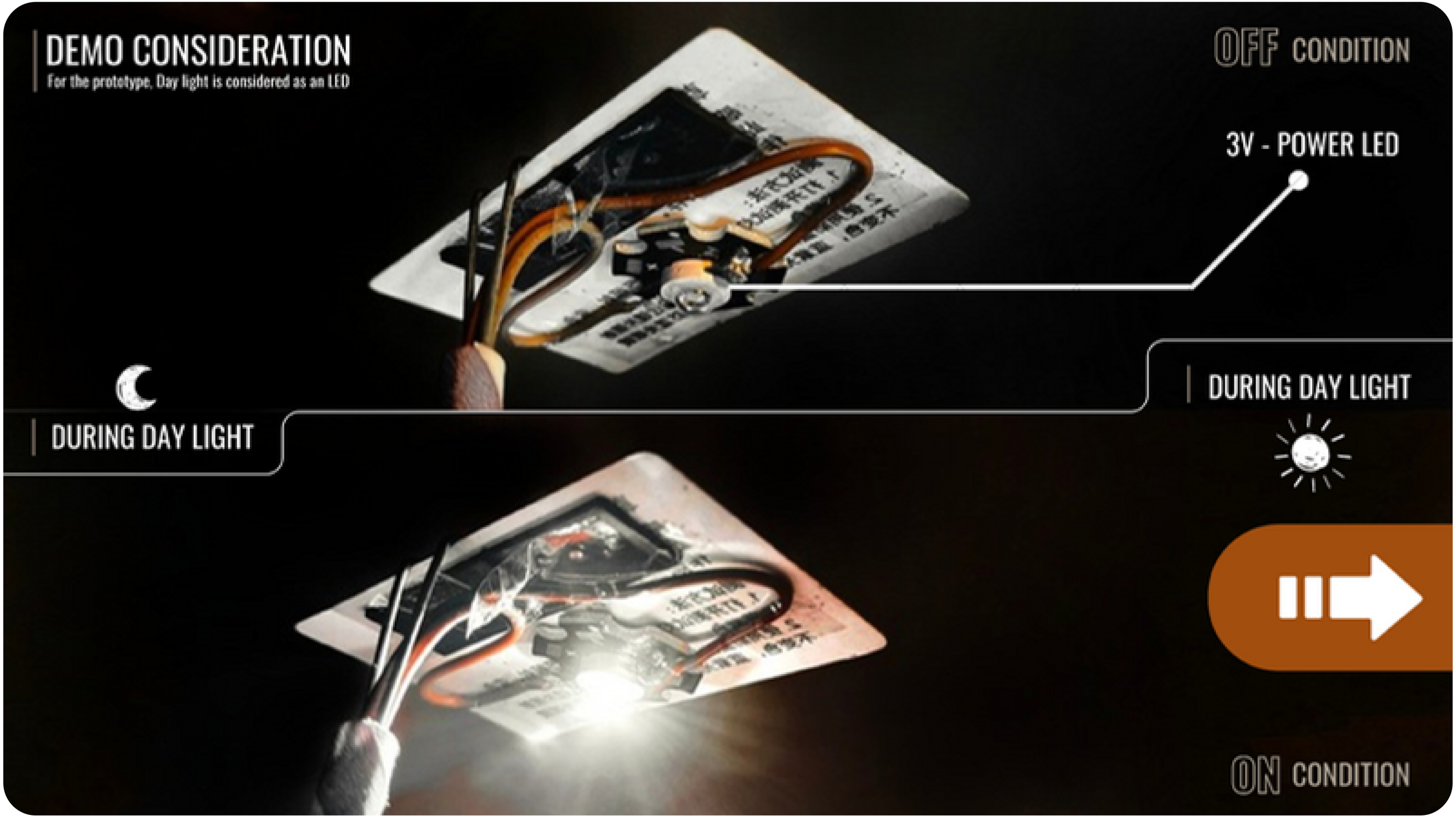
LASER TRANSMITTER & RECEIVER SETUP

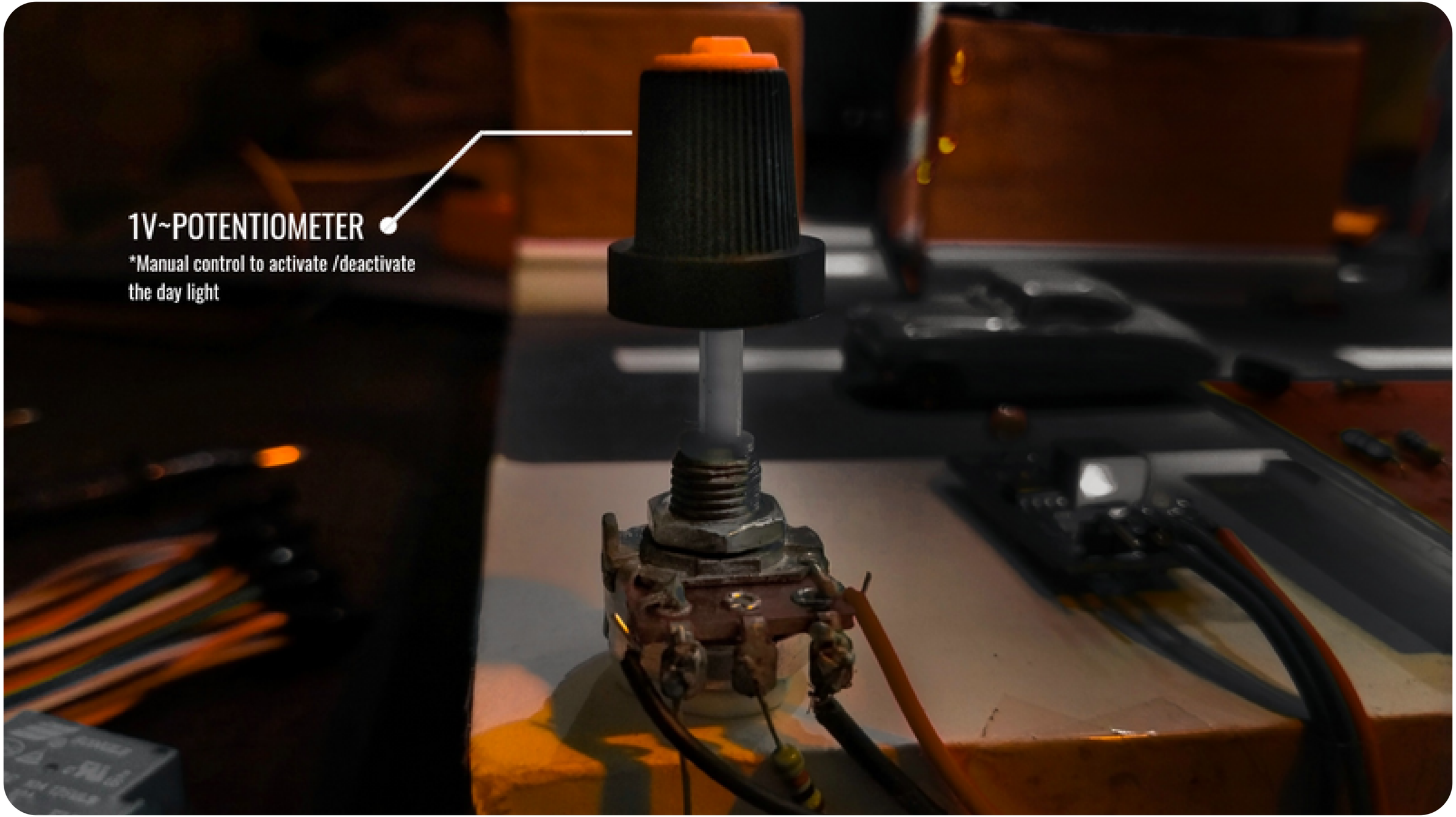



CUSTOMIZED SOLDERED
PCB BOARD
NPN TRANSISTOR
(BC547)
CAPACITOR~1uF
VOLTAGE
REGULATOR
(LM7805)
1K~RESISTOR

DEMO CONSIDERATION

For the prototype, Day light is considered as an LED




1V~POTENTIOMETER
*Manual control to activate /deactivate
the day light

THANK YOU