

Illumination

Project Overview: In this project, we will explore how a robot can mimic eye movements and change eye color.



Prerequisite

- Light
- Luminance
- Intensity/ luminance intensity
- Basic knowledge of color

Learning Outcomes

We Will Learn About-

- Waves, wavelength, Intensity, luminance, luminous intensity.
- Color mixing theory
- RGB color model
- RGB LEDs, and its applications

Ask About....

1. How is intensity different from brightness?

STEAM

SCIENCE: Waves, wavelength, Light, luminous, luminous intensity, color mixing theory.

ARTs: Shape and designs, color combination

Technology/Engineering: Introduction to microcontrollers and coding, Sequential programming for LED operation.

Mathematics: Calculate color using color mixing theory. Color intensity level = 0 to 255.
If $R=255, G=255, B=255$ it produces white color.