

3D POV Display

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The purpose of this experiment was to create a fully functional 3D Persistence of Vision display. The goal was to create a 3D POV display capable of displaying anything the user chooses in eight different colors. This was made possible by programming LED strips connected to the axle of a motor. Then rotating the axle fast enough and turning the LED's on at specific time intervals causes an Optical Illusion where your eyes see a constant image. The motor spun at a rate of 1800 revolutions per minute but not accurately. It would vary in its speed within a 4% margin as most motors do. This caused the program to be made to account for any speed of the motor so the LED's turn on according to the speed of the motor and can accurately display what it needs to.

Awards Won:

