

ABSTRAK

Smart ceiling or often also called smart ceilings are fields on the inside of a building room. One of the functions of the ceiling which is part of the interior that must be designed so that the room becomes cool, attractive, and pleasing to the eye by using a servo motor and led lights that are controlled by a microcontroller. Microcontroller is a chip that functions as an electronic circuit controller and can store programs. Servo motor is one type of DC motor and is widely applied to the world of robotics and other equipment. Led cube is an arrangement of several LED lights that are formed in such a way as to resemble a cube. In the use of servo motors can move because there are signals that are generated through PWM signals as well as LEDs. The resulting signal will form the angle of the servo motor and the LED will live according to the given frequency value. The results obtained are the servo motor and led will live by detecting the smartphone audio signal from Bluetooth so that it works according to the smartphone audio frequency

Keywords : Smart ceiling, Arduino Mega, Servo Motor, Led, Smartphone Audio