# ABSTRACT

The development of technology in the automotive world is very rapid, especially in electric cars. In electric cars developed with autonomous car technology that functions to move and run without being driven by humans. Autonomous car technology has five levels in its autonomous system. The thing that must be considered in autonomous car technology is the throttle system or speed control. This speed control system will affect the speed of the vehicle. If the speed control system is not controlled, it will result in the vehicle not moving and even causing a traffic accident.

In this study, the author will design a speed control system based on a remote control. The speed of the electric car will be controlled remotely using a remote control with data that has been processed by the microcontroller using the PID method to regulate the linear motor movement. Electric car speed control system based on PID remote control with PID control parameter values $Kp = 18$, $Ki = 0.18$, $Kd = 0.06$. These parameters are obtained from the PID control method which is designed using Matlab.

**Keyword :** Vehicle Throttle, System, Remote, Control