

Abstract

The ocean is one of the means of accommodation is growing, economically and in terms of science and technology. The submarine is one of the marine accommodation facilities that can move in the depths of the ocean . The functions contained in the robot submarine is in terms of knowledge and technology , as for other functions , to drill for oil under the ocean and under the ocean just sightseeing can. The submarine was developed into a more sophisticated way.

In this final project will be created prototype a robot submarine that can move up and down by using the remote control in the form of a laptop and set via a microcontroller arduino Mega form. The focus in this study are the control algorithms and the stability of the rate of its submarines. In this study used gyroscope and accelerometer sensor which can keep the pace of the stability of the submarine. Control method used in this system are PID , PID used to control a submarine propeller so that the submarine can maintain its position and maintain its position at the time of submarine robot accelerates up and down.

In the research submarine robot is expected to produce a submarine robot simulator that can regulate the stability of the position on the way up and down. And stability is obtained when the PWM digit number reach 200

Key words: *PID, gyroscope and accelerometer sensors, laptop, arduino MEGA, prototype.*