ABSTRACT

Along the development of a variety of technology tools that work in automatic control, it also develops robotics technology that can facilitate human work in the field of industry, besides that its development as a robot is also now growing in the world of education as an educative. One of these various types of mobile robot have now been developed. Mobile robot navigation are in need of direction, to determine which direction to go through a mobile robot.

Here the author will try to compare between the program loop with a digital compass sensor type HM55B how much error is obtained, how close to the actual angle to determine the direction of the PWM and compass sensors. This is to make the research underlying the thesis entitled "Design of Mobile Robot Navigation Using a Compass HM55B". Results to be achieved is the author himself wanted to know how much error is obtained with a digital compass sensor by comparing with using PWM teloransi still within the limits of 0-5 degrees, which the authors used a digital compass type HM55B. Analog compass as a reference to get an error from the actual corner that read analog compass, if more precision using a digital compass or the use of PWM in determining the direction of the reading corner.

Keywords: Navigation, HM55B, Mobile Robot