ABSTRACT

Mobile Robot was identified as arobot which moves from one place to another. Mobile Robot was divided into several kinds, one of that is Object Follower Robots. The ability to detect an object by preinstalled camera based on its color and follows it are what made this kind of robot an ideal helper of today's industry. However, object first needs to be defined as an introductory for the robot to detect and follow. Robot's body and camera alignment is also important for the Robot to work properly. By installing compass to both components, it is possible for the robot to follow object on the right track, making it essential to robot's acquisition. This underlies the making of a system that controls both compasses as the main objective of this research. Control systems contains Proportional Control Systems (Kp = 0.24) and Derivative Control Systems (Kd = 0.012).

Keywords: Mobile Robot, compasses alignment, PID, moving object.