ABSTRACT

The world of robotics is growing rapidly, many robots are made by humans according to the purpose of making robots themselves. But in general, robots have a function to make human work easier. The robot itself has various types ranging from mobile robots, manipulator robots, humanoid, flying robots, network robots, and so on. One type of robot that is often made by humans today is a mobile robot. A mobile robot, aka a moving robot, is a type of robot that is capable of moving from one place to another. Usually this type of robot uses wheel-shaped drive. Therefore, many parties are developing as a tool for human work.

To research a field that is difficult to reach by humans, it takes a robot that can move outside the room and pass through all fields. This robot can move according to the commands given by the controller from the starting point to the destination point. For sensing, this car robot is paired with two cameras so that the robot can find out which area it is currently in.

In this research, it will be limited by space and distance of motion. In this experiment, a stereo camera was tested with a maximum distance of 150 cm. In the distance assessment using three colors, namely red, green, and blue, the comparison value between the real value and the program value is quite small. The comparison of the errors obtained in red in each condition has an average value of 15.28%. The green color has an average comparison value of 18.7%. The blue color has an average comparison value of 16.89%

Keyword : *Robot Mobile, Sensing Camera, Stereo Camera*.