ABSTRACT

The lack of knowledge and skills of driver are the main factors causing traffic accidents. One solution to reduce the risk of accident during driving practice is to use a simulator. Simulation tools generally consist of computers, visual systems, motion systems, sound systems, and interface systems. This research discusses about Visual System driving simulator.

Visual System simulator show the driving conditions to user, both conditions inside the car and outside the car so that users can feel the driving experience. The car that was exhibited in this driving simulator is an automatic car. The available shifter modes are N (Neutral), D (drive), R (Reverse), and P (Parking).

This Visual System driving simulator uses UART for communication. Reception and transmission of data are processed in different threads with the main program. Transfer speed 1560 bit/s. Accuracy of speed ratio with distance traveled is 89%.

Keywords: Driving Simulation, Simulator, Visual System