ABSTRACT

As technology develops very rapidly, the use of electronic devices also develops. Starting with controlling using buttons, now technology is moving where humans can provide input using gestures. Gesture detection can use Kinect device. Kinect device is equipped with a depth sensor that searches and tracks all parts of the human body. By looking at this situation, then a control of electronic equipment is made using Kinect sensors.

Kinect technology is a technology developed for games. Kinect allows game players to control the game using motion and sound. This is because in Kinect there are 3 hardware that work together. The three hardware are color VGA video camera, depth sensor, and multi array microphones. Therefore, this research tried to develop Kinect Sensors for use as electronic control devices. When a user extends his hand towards the sensor and raises his finger then the program will work.

So by using this system, it is expected that it can simplify the process of controlling on/off electronic equipment automatically and can also help the monitoring process in a room by utilizing the progress of the system and information technology. With the results of the accuracy of light testing and minimum distance to detect hand gestures by the user, obtained from the Sensor Kinect is a minimum distance of 70 cm and the minimum light obtained is 351 Lux during the day and 244 Lux at the afternoon then 132 Lux at the time evening.

Keywords : Electronic Equipment, Kinect Sensor, Raspberry Pi