ABSTRACT

The internet is one of the basic needs of this modern era. Internet becomes familiar for everyone like children, adolescents, and even for the elderly. the Internet (interconnection networking) is the entire communication network that is using electronic media. It's connected to the entire network with the transmission line. Communication between these devices requires transmitter (signal transmitter) and receiver (signal receiver). This transmitter can in the form of a device that transmits data. It's received by a receiver and it's usually called antenna. The receiver is one of the important things in the communication field. It's because when the receiver gets interrupted with data, it creates an unwanted output of the data received. Many factors can be influenced by the occurrence. One of the factors that might influence is the position of the antenna, which has functioned as a receiver. The researcher needs a tool that can reduce or even eliminate these two factors.

Angle position control is a process that can determine the right angle position and calibrate the best positions for the antenna to receive the signal. the Control of the angel position is needed to reduce the externality factors above. This process uses the PID method, a method that uses 3 controllers such as proportional, integral, and derivative. The use of this method in position control is very helpful because It speeds up the response and correcting error value.

From the results of tests that have been done, it can be concluded that the sensor output value has an accuracy of 98.905%. When a response system PID controller is needed when reaching the set point becomes faster, the time required to reach a stable state is also faster, and can reduce oscillation in the response system. The average time needed for the system to reach a stable condition is 7.25 seconds.

keywords : *control, antenna, PID.*