

ABSTRACT

Today the fish keeping hobby more widespread among the public. Fish keeping seems to be easy but of course is not as easy as imagined in the implementation. Obviously this treatment process starts from fish feeding, replace the aquarium water, keeping the temperature of the water, keeping the water remains clear. These process spend much time, especially for people who work and hobbies to keep the fish. Therefore, the method of fish keeping in the aquarium that can be controlled via SMS from mobile phone is developed. This system provides benefits for those who are busy at work but still happy in keeping fish.

The equipment the placed in the tank which can be controlled is the heater, the water drain pump, water pump charger, lights, and there is a device that can be used in fish feeding. The tools are connected with microcontroller AT89S52 as a data processor which is also connected with mobile phone SMS recipients. Here the mobile phone that used to receive SMS is a phone that support AT Commands used to capture SMS.

Successfully indicator based on SMS and execute by microcontroller concerning to device which is controlled such as turn on and off the lamp, switch on and off heater, take the data of water temperature, drain the water, and giving food. The result of that is 90% in whole system that work together based on SMS. See the constraint on this equipment is the delay that happened because on communication traffic. It can affect the fluency of command data transmission that must be executed by microcontroller disturbed. So, the command must be sending again by user. Besides that, power output from power supply series is 5 volt which is handled activity of mobile-phone and also microcontroller in order to accept the command and execute it.

Keywords: SMS, Mobile phone, Temperature Sensor, AT Commands