ABSTRACT

In this thesis, the research emphasis on door control systems remotely. As we know that in general users to control the device 's door in local control. With these results, the user is expected to perform device control door with remote control facility. Thus the distance and time constraints in terms of controlling the device 's door can be resolved. And the remote control facility that will be introduced through the results of this research can provide performance more quickly and efficiently.

Next will try discussed the process of controlling a door in the house is done remotely using the SMS gateway and microcontroller. This remote control system is equipped with a security system passwords and the use of user phone numbers. With the combination of these security systems, is expected to obtain a better security system and accurately.

I am working on a system that is trying to use the SMS gateway and mikrokontrol as the main control, which can translate appropriately existing instructions in the program that will be ordered via SMS. To open the door remotely users can send sms through mobile media that serves as a password to unlock the system work programs on the system microcontroller. If both these conditions are met, namely the introduction of the password and identification number of mobile users, the microcontroller will work to provide access to a further order is by giving feedback to a user's mobile phone close command or command option to open the door . Furthermore, users can perform the desired option by sending SMS commands to close or open command. Microcontroller system will respond to the request and give the command to close or open the solenoid. Solenoid is used to execute commands close and open . If the close and open process is successful, then the system will send a text message to the user status.

In further discussion will be presented based on the system level test accuracy microcontroller action taken against the instructions given by the user. Through the test results obtained, demonstrated that the combined use of security passwords and phone number obtained by parsing system performance is quite safe.

Parsing systems used to differentiate instruction in order to avoid translation errors meaning instruction with the format string. Parsing the system in question is a method where the syntax parse code used to parse ATcommand. So far, from the research that has been done,

the SMS gateway is integrated with mikrokontrol can receive sms from different number other than the number of users. In this study certainly does not ignore the possibility of entry of unwanted sms. Where something like the above can be protected with the application parsing method.

Furthermore, in this study, will look at the ability of the control system in order to control the device by either the security -oriented system. Parsing with the method, the system is expected to translate ATcommand well ,although in this case the process of sending data using Asynchronous serial communication .