



TRIO AUTO AQUARIUM

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ABSTRACT

Trio Auto is a project designed to provide convenience and advantage to those who use it. The goal of this project is to assist and develop the system of human life to the fans of fish reared in the aquarium. In this project, is expected to earn a place in the market based on the method used. Not only that, this project is expected to be environmentally friendly and user friendly. The calculated value can be obtained using the simulation software proteus 8.0. The simulation software can be used to obtain and examine the components corresponding to the circuit used in this project. In addition, this project is use a PIC16F628A. This PIC is coding by using the micro C Pro software. This coding purposes is to program the timer relay circuit. The timer can be run after the PIC is coding and use a PIC boot loader as a link from software to hardware. This project have use a 2 timer which is for lighting system and feeding system. The timer of lighting system is set 10 hours every day from 8 p.m. until 6 a.m. The timer of feeding system is set to 10 second every 6 hours every day. Besides that, the function of voltage regulator as a voltage controller coordinated circuit. This circuit is used as a connector from the AC power supply 240V and going through DC adapter 12V and the output is 5V. Then, the cleaning process of aquarium is take a 3 minute to clean the water. This time will be reduce if the foulness in the water is clean faster than the time expected. This process is easy because it is have a piping system and just use the concept of pressure only to clean the aquarium water. It is observe that the process of timer and cleaning process will operate when the motor will be functional very well.

CHAPTER 1

INTRODUCTION

1.1 Background of Study

Today, the uses of the aquarium has been increasingly used no matter whether to keep fish or other animals. Importance of an aquarium has a long history of marine animals such as fish have been stored in an aquarium for utilization in imperial times in the past Rom [1].

Besides that, the Chinese also have a belief that the koi and goldfish bring good luck to them if they keep the fish in the house. They even make carp as food and forming the symbol of carp with a very beautiful manifestations. Most of Chinese people in todays have practice, such as maintaining the trust of these fish use in home aquariums [2].

Additionally, in the past of Victoria era, e, their activities to fill free time has been highlighted and introduced at that time. The Researchers at that time had been studying and researching the aquarium and try to apply nature as a source of energy. At the beginning of their study at that time, they have found various ways of reaction of photosynthesis of plants with plants in the aquarium. These findings have highlighted that this study has brought to Great Britain for a more detailed study as an example of the study was that aquatic life can be lived in a container that is designed with specific rules [3].