



AUTOMATED BANNER ADVERTISEMENT SYSTEM USING IOT

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ABSTRACT

Banner and bunting can be a flag or something that bearing symbol with most of them used as advertisement purposes. With combination of motor movement, it can create an automation in mechanical movement and placement for bunting. In this paper and automated bunting installation is discussed in this paper. A hardware device combined with Near Field Communication (NFC) system and IoT monitoring is established with features that can works as tracker component. A microcontroller, NodeMcu (ESP8266) act as a main controller in this system. The result of this system is based on the ability to lift up and roll down movement of the bunting. Table of data from cloud platform are self-operating in collective format is provided. Future improvements on the design should be focusing on the durability of the mechanical parts.

1. INTRODUCTION

Installation of bunting was common for commercial company or event planner at Kemaman, Terengganu. Most of them must get permission from authority before the bunting been lift up to the city like Bandar Chukai, Kemaman. Without authority permission there no will be bunting that been install at the board or lamp pole. In modern eras, technology has been grown rapidly time by time. One of the developments was Internet of Thing (IOT). It is one of new system that try to be implement for the sake of community. This device can be use in any kind of machines plus with implement of near-field communication system (NFC)[1]. Using this system for this device, the system can become more systematic than before.

2. MATERIAL AND METHODS

2.1. Materials

This research was developed using 2 main segments. The first segment is power window motor[2], this project are going to use one type of motor with several units in order to

move the lift up and down of the mechanical system. For processor segment is using esp8266 and also near field communication.

2.2. Methods

The mechanical system of this device, to lift up and down movement of bunting after been installed. The main part of the mechanical system which threaded rod that been put to smooth the flow of the system. The treaded rod assemble with 2 power window motor to fulfil the movement. After that, for processor system used to monitoring and detect a bunting that been installed. Using near field communication (NFC), can determine the period of bunting before it lift down.

2.3. Characterization

System that use to control lift up and down movement of bunting is including the usage of microcontroller ESP 8266 and NFC to construct the programming.

3. RESULTS AND DISCUSSION

The misfortunes of the people that mostly did not care about lift down their bunting can be affect to city environment. The damage become higher toward people and also to equipment if nature disaster happens. Using this device, that can be avoid and can lower the damage. This device also can be monitoring from authority to monitor the status of bunting. After that, it's can save time toward the people that install their bunting.

Figure 1 showed the automated device that control by using power motor window, microcontroller Esp8266 and also near field communication that experiment for bunting installation.

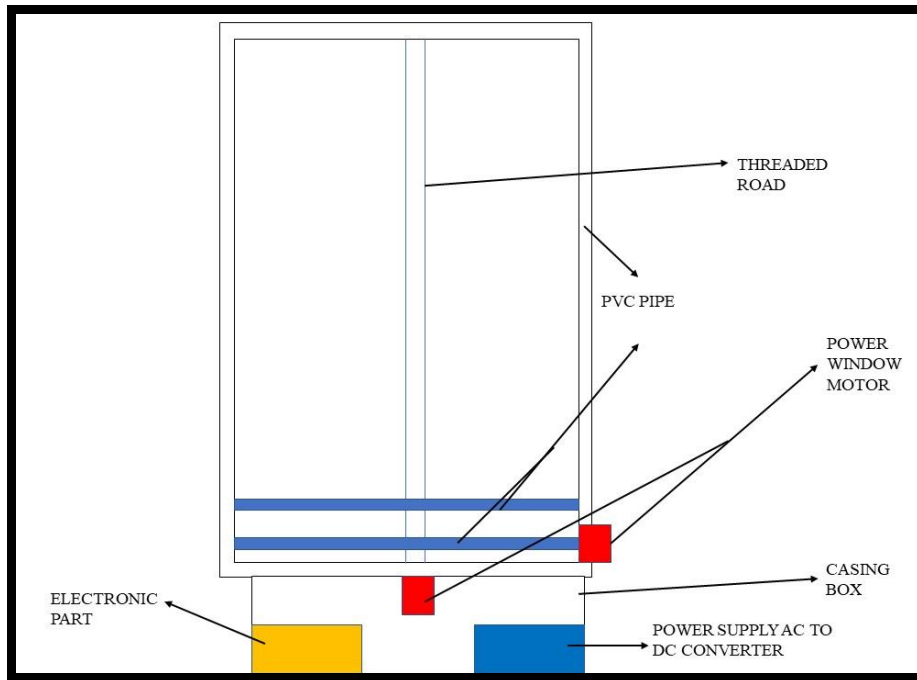


Figure 1. Automated Banner Advertisements

4. CONCLUSIONS

This study successfully provide a method to automatically lift up and down a bunting by using the automated banner advertisements device. The problem that been wonder around so many years can be solve plus can be monitor from the cloud platform. The system that been applied can be efficient and advanced for the authority and also people that want to install a bunting.

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