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PROJECT TITLE:

RUNNING MESSAGE DISPLAY

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ABSTRACT

This report was written for our project 1 subject, one of the subjects that every student must pass before graduating in Diploma University Technology Mara. This project, *Running Message Display* is included in our semester 5 subjects, Digital System 1 (KEE 222). This is because one of the components is a decade counter. Therefore, for this project, we will cover thoroughly the function and preface of the *Running Message Display* at the same time as possible.

We hope this report will be attractive to those who are interested in creating an electronic project by their own hand. Due to its popularity today, decade counter mostly uses in electronic technology as we see in digital clock and other applications.

Overall, our project will operate with nine different steps. For example, at first decode output number 1 will turn on before decode output number 2 and decode number 3 turn on and so on until decode number 9 as last counter before it will be reset. Otherwise, this project includes a lot of electronic components such as capacitor, resistance, IC's, diode and others. Therefore, it is necessary for us to discuss a little bit about every component, which is included in this project.

A special effort has been made to include a number of problems with realistic element values. Network scaling also presented in this report. Under the chapter of the element function, we will discuss mostly everything about the element such as presenting what is timer IC's, how it is function, how many types that it has, who and how many manufacturers involved in creating the component and many more.

Lastly, at the end of the report we will set together the data sheets. It can be easier for the reader who is interested to know detail about the components included in this project.

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1. INTRODUCTION.

This *Running Light Message* is a combination between timer and counter integrated circuit (I C's), which is presenting by CD 4017BC and NE 555. Maybe it looks simple but it needs a lot of concentration to do successfully. This project is all about using a simple component and circuit.

Again, this project can be an accessory in all houses because the circuit-using small value of current and can save a lot of money. The circuit also can be a massager or and with some creativity from user it can be build such as a picture of animal or anything else, it is depend on the level creativity of the owner. This running message display circuit is very versatile and can be wired with a large number of LEDs to make an LED fashion jewellery of any design. With two circuits connected in a similar fashion, multiplexing of LEDs can be done to give a moving display effect to attract on observers.

Otherwise, you should focus on basic operation of the circuit (we will explain the operation circuit in chapter *about the project*) in order to create another kind of application in the same of operation.

Believe or not, the project having a lot of component and it is more complicated than we thought. Therefore, we do believe that this project will help us when we were in '*working world*' because electronic sector is asking for brilliance and creative person to carry out the marvelous product. Entering the new millenium in the year 2000 electronic sector a day-by-day advance than before. Therefore, so we hope with this basic project will help us to know better with new creation even our project look simple but remember "*Don't charge the book by it's cover*".