

**DEPARTMENT OF ELECTRICAL ENGINEERING  
UNIVERSITI TEKNOLOGI MARA  
CAWANGAN PULAU PINANG**

**FINAL REPORT OF DIPLOMA PROJECT**

**ELECTRONIC WEIGHT SCALES**

**Date: February 2004**

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## ACKNOWLEDGEMENT

In the name of Allah, the gracious and merciful, syukur Alhamdulillah, thank to Allah that gave us strength and the opportunity to complete this project, KEU380 on the given time.

We would like to thank those people:

- i. Prof Madya Rosnani – for her willingness to be our supervisor. Special thanks too to her for her taught and advices to us for finishing this paperwork. We are very proud and lucky for her cooperation to spend her time helping and consulting us while we worked on the paper.
- ii. En Mohd Ali – the Technology Engineering lecturer for his helps and ideas on choosing our new project since we had a problem on the first circuit.
- iii. Others supervisors and lecturers – for their support and help, no matter in directly or indirectly. Their understanding on our work gave us spirit to finish our report successfully.
- iv. Our fellow friends – for their cooperation and help in finishing the report. We work together even though we are not in the same group and not doing the same circuit. Ideas, moneys even energies they gave us are very useful to us.

Last but not least, we also like to thank all people around us for helping us in this report either directly or indirectly way.

## **ABSTRACT**

Final paper is a part of a course structure for student in their final year. The project is compulsory to us as a final year student for Diploma In Electrical Engineering. The purpose of doing this project is to produce student main power with a very high skill and able to handle a responsibility that been given like this project. We should prepare to deliver a creativity idea and good interpersonal image to our future employee.

By doing this project it makes student use all their knowledge, capability, creativity and skills to purpose, create and troubleshoot the project. It is because all of the theory and skills that they have learned from the project will be used in the future.

No doubt, everyone is familiar with the kind of scales to be found on Post Office counters. A letter or small parcel is placed on it and the weight and the required postage can be read off it. There is no reason why this cannot be accomplished electronically. Of course, some mechanical ingenuity will be required, as the equipment will include some form of scale or balance mechanism. Moreover, the electronic scales should look similar to the mechanical counterpart. If the latter were not the case, nobody would think of putting a letter on to weight it.

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# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND

#### **Operation of the project.**

We already know the advantages of the circuit. Now we will discuss furthermore on the operation of the circuit.

#### **Operation of the electronics weight scales.**

Electronics weight scales is defined as a device to measure how heavy certain things are when putting on to it. It used to give sign or alarm when a person put something on it. The sensor in it will detect the weight and show the color of the light, which is set earlier at the device. This application is now widely used almost in every post office in the world to avoid people from wasting their times.

This device only used 2 ICs which are 7805 and LM 324 or CA 324. This 2 ICs are the real main component in the weight scales because they operate by determining the weight and sent it to the LED and the LDR.