

ELECTRONIC LETTER BOX USING PIC MICROCONTROLLER

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A project report submitted to the Faculty of Electrical Engineering,
Universiti Teknologi MARA in partial fulfillment of the requirements for the award
of Diploma of Electrical Engineering.

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SEPTEMBER 2015

ACKNOWLEDGEMENT

“In the Name of ALLAH, the Most Gracious and the Most Merciful”

Alhamdulillah for the health, patience and endless courage that has been given to us from The Most Gracious that finally we are successfully finished our final year project. First and foremost, we would like to convey my sincere gratitude to the people that has been supporting us all this while from the start to finish, overcoming every various moment, good or bad over the past two semesters.

Much thanks to my supervisor, Puan Yusrina binti Yusof for her invaluable guidance and suggestion throughout the process of completing this project. The calmness and faith of her to us has given us the strength and believe that completing this project was never impossible. Besides that, we also want to thank to other lecture, Encik Ezril, Puan Farah Yasmin and Encik Rozi for helped us on our project.

Our appreciation also goes to our family especially our parents who has been so tolerant and supports us all these years. Thank for their encouragement, love and emotional supports that they had given to us.

Lastly but not least, we would also like to extend our sincere appreciation to our fellow friends those whom involve directly or indirectly with this project who always willingly to give their time and effort when we need most. There is no much meaningful word that may repay their supportive and creative idea for this project.

ABSTRACT

This system is designed for house application. This project is focus on the area such as residential area and officers. This system is provided with battery storage backup in order to operate blinking light and LCD (Liquid Crystal Display) for twelve hours for a day. The project is using green LED (Light Emitting Diode), LCD (Liquid Crystal Display) and LDR (Light Dependent Resistor). The green LED is used to let the user know there is a letter. When there is a letter, the LED will turn green colour wheares when there is no letter, the LED will turn red colour. Meanwhile, the system is also use LCD that will display “You got a letter” on the screen when there is a letter. When there is no letter, it will display “No letter”. A LCD is the technology used for displays in notebook and other smaller computers. The process of blinking LED and LCD display will control by PIC microcontroller. The PIC microcontroller that this project used to make the green LED blinking and for display using LCD is PIC16F877A. By using this method, it can save time as people no need to check the letter box every time for the letters. Through this project, we can make our life easier.

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CHAPTER 1

INTRODUCTION

1.1 Background Study

Electronic letter box is very useful gadget for homes and offices. When letter drop by someone into the letter box then the LED attached at the output will be turn green color to remind the user to take their letter. Then, a LCD will be functioning to display “You got a letter” to indicates the user that the letter is in the letter box. With this electronic letter box, the user easily to know that there is a letter without opening the box. The user also does not need to come out to look after the letter. Besides that, they are not wasting their time because when they see “You got a letter” at the display then the user will know and come out to take the letter. Besides, they also know when there is no letter by looking the LCD displays “No letter”. Thus, the electronic letter box is a simple gadget that can turn out to be very helpful for the people especially in this hectic world.