



RSSI BASED TRACKER SYSTEM

AHMAD KAMARUL ARIFIN BIN ZULKIFLI

2012407748

MOHD HAZIQ IQMAN BIN HAMSAH

2012205422

AMIRAH BINTI SALIMUN

2012670158

**FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA TERENGGANU**

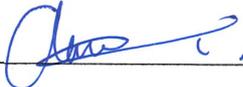
MARCH 2015

“We declare that this report entitled “RSSI Based Tracker System” is the result of my own group research except as cited in the references. The report has not been accepted previously and not concurrently submitted for any other diploma at UITM or other institutions.

Signature :  _____

Name : AHMAD KAMARUL ARIFIN BIN ZULKIFLI

Date : 11/4/2015

Signature :  _____

Name : AMIRAH BINTI SALIMUN

Date : 11/4/2015

Signature :  _____

Name : MOHD HAZIQ IQMAN BIN HAMSAH

Date : 11/4/2015

ACKNOWLEDGEMENT

All praises for Allah S.W.T the Lord Almighty and Salam to Nabi Muhammad S.A.W.

This research project would not have been possible without the support of many people. We would like to express our gratitude to our supervisor En.Mohd Saiful Najib Bin Ismail@Marzuki for the useful comments, remarks and advices. He inspired us greatly to work in this project .His willingness to motivate us contributed tremendously to our project. Furthermore, we would like to thank En.Mohd Saiful Najib Bin Ismail@Marzuki for introducing us all to the topic as well for the support on the way. Special thanks to our teamwork to assemble the parts and gave suggestions about the project ideas. Finally, thanks to our coordinator Madam Aishah Cik Kar for assisting us and involved her directly toward this project. Finally, an honorable mention goes to our families and friends for their understandings and supports on us in completing this project. Without helps of the particular that mentioned above, we would face many difficulties while doing this.

ABSTRACT

Tracking a lost object is very common problems that are experienced by everyone. It will very hard when the object we are searching is small in size. The aim of this project is to implement a tracking system that is able to locate an item anywhere. The RSSI (Received Signal Strength Indicator) based tracker that we build uses two receiver attached with antenna that will receive the signal from the transmitter and compare the signal strength either it stronger at the right antenna or at the left antenna. The signal strength value is obtained at two of the receiver pin, which is RSSI pin. The comparison of the RSSI value made by the Arduino and it will be used to determine the location of the transmitter by providing the output in form of the LCD.

TABLE OF CONTENTS

ITEM	PAGE
DECLARATION	1
DEDICATION	4
ACKNOWLEDGEMENTS	5
ABSTRACT	6
ABSTRAK	7
TABLE OF CONTENTS	8
LIST OF TABLES	10
LIST OF FIGURES	10
LIST OF SYMBOLS/ ABBREVIATIONS	11
LIST OF APPENDICES	12
CHAPTER ONE: INTRODUCTION	PAGE
1.1 Background of study	13
1.2 Problem Statement	14
1.3 Objective of project	14
1.4 Scope and limitation of project	15
CHAPTER TWO: LITERATURE REVIEW	PAGE
2.1 Introduction	16
2.2 Component and Description	16
2.2.1 Component for receiver	16
2.2.1.1 Arduino UNO	16
2.2.1.2 Receiver	20
2.2.1.3 Header	21
2.2.1.4 Resistor	22
2.2.1.5 Antenna	24
2.2.1.6 SMA	25
2.2.1.7 LCD	26