

SMART WALKING STICK

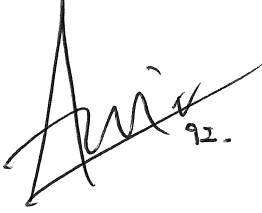
WAN AMIR FARHAN BIN WAN KHAIRUL FAIZI
SHAHIBU AMMAR BIN HASSAN


A project report submitted in partial fulfillment of the requirements for the award of the
degree of Diploma of Electrical Engineering Electronics.

FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA (TERENGGANU)

APRIL 2015

“I declare that this report entitled “SMART WALKING STICK” is the result of my own group research except as cited in the reference. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.”

Signature : 
Name : WAN AMIR FARHAN BIN WAN KHAIRUL FAIZI
Date : 15 MARCH 2015

Signature : 
Name : SHAHIBU AMMAR BIN HASSAN
Date : 15 MARCH 2015

ACKNOWLEDGEMENT

In the name of ALLAH S.W.T The Most Gracious and Most Merciful – peace and blessing of ALLAH be on his last messenger, Prophet Muhammad S.A.W. who has shown us the right way through the darkness of ignorance. Alhamdulillah and thankful to ALLAH S.W.T for give us strength and enough time to overcome the problem that we faced during this final year project. Firstly we felt very grateful because at last we successfully completed this project until this stage. We would like to say a big thanks to those people that involved in helping us to complete this project. Special thanks to our supervisor, Madam Norwahidah Binti Misran of her kindness, support and concern towards us. Without her our project would not be finish and thank you also for her willingness to lend us some of her time to help us with the progress of our work. Special thanks to our Coordinator Final Year Project (II) EEE368, Madam Siti Aishah Binti Che Kar and Madam Nazuha Binti Fadzal for giving us many chances to complete this project at this stage successfully even after having to endure so many obstacles. Besides that, we also like to show our appreciation to all lecturers and staffs from Faculty of Electrical Engineering for all of their cooperation, encouragement and sharing the knowledge in order to complete this project. Another special thanks to our friends who are willing to help us during the process to finish this project and their support. In completing this project, we have learned the value of cooperation, toleration and patient in order to complete this project. Lastly, we would also like to thank everyone that makes it possible for us to complete this project.

ABSTRACT

Most experienced traveler, there are certain things which cannot be determined by sound, such as whether a median or turning island exists. Having full access to all information about intersection geometry and traffic control lowers the risk of making an inaccurate judgment. These obstacle such as human, drain and wall which can progress the passage of them. Important element in this device is ultrasonic sensor where can detect the object in distance 2 meters. The output from buzzer and the vibrate motor can discharge signal to the blind people if has obstacle in front of them and the blind people can change to the safety place.

TABLE OF CONTENT

DECLARATION.....	1-3
ACKNOWLEDGMENTS.....	4
ABSTRACT.....	5-6
TABLE OF CONTENT.....	7-8
LIST OF SYMBOLS.....	9
LIST OF ABBREVIATIONS.....	10
LIST OF APPENDICES.....	11
CHAPTER 1 INTRODUCTION	
○ Introduction.....	12
○ Problem Statement.....	13
○ Objective.....	14
CHAPTER 2 LITERATURE REVIEW	
○ Components used.....	15-20
CHAPTER 3 METHODOLOGY	
○ Flowchart Diagram.....	21
○ Block Diagram.....	22
CHAPTER 4 RESULT AND DATA ANALYSIS	
○ Circuit Design.....	23
○ Circuit tested on breadboard.....	24
○ PCB Layout.....	25-27
○ Prototype / Hardware.....	28