FACULTY OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA TERENGGANU

FINAL REPORT OF DIPLOMA PROJECT

CLAP SWITCH

MAC 2013

KHAIRUL NAZRIN BIN LAILY@RAMLEY 2010260736

HAMDAN BIN YAHAYA 2010671836

HAZZUL HAQQI BIN AZAHAR 2010832082

CIK NURUL HUDA BINTI MAT TAHIR

"I declare that this report entitled "CLAP SWITCH" is the result of my own group research accepts as cited in the references. The report has not been accepted for any degree and is not concurrently in candidature of any other degree."

| · · | | | |
|-----|-------|------|----|
| NIS | ₹na | TIII | -Α |
| ٠,٢ | J' '' | | _ |

Name

:KHAIRUL NAZRIN BIN LAILY@RAMLEY

Date

:MAC 2013

Signature :

Name

:HAMDAN BIN YAHAYA

Date

:MAC 2013

Signature:

Name

:HAZZUL HAQQI BIN AZAHAR

Date

:MAC 2013

ACKNOWLEDGEMENT

Alhamdulillah, thank to Allah with His blessing we were able to complete this final year project at last. We had gone through many obstacles and frustration as well as joy along we doing this project. With Allah always by our side, we were finish this project.

A very special thanks to our supervisor, Miss IdawatiBtMdEnzai for our first final year project and to Miss Nurul Huda Bt Mat Tahir that guide us a lot in order to make this project came to true. Miss Nurul Huda always gives her commitment and full of support to us. We had own her so much. Although we always seek them if we have any problem regarding this project, she always gives her hand without any problems.

Last but not least, we would like to dedicate our thanks to our beloved parents and all of our family that also contribute to the success of this project. They had given us moral support as well as their money to help us to accomplish this project. We also would like to say thank to our friends that also help us and to our group members that's had given full of commitments and dedication to this project.

ABSTRACT

In our final year project, we choose clap switch. This project brought us many benefits in our daily life. For example, older people who has problem in their health, they only move in a limited move. So, they must have problems to switch on lamp in their bedroom, kitchen or so on. So, with our clap switch project, they just need to clap twice within 2 seconds to switch on it. These will help them to reduce their load. Besides that, our project also can save a cost of electric bill. These project not only help older people, its suitable for everyone that want to use it. Wehope, with our project, its can help and reduces burden in daily life.

TABLE OF CONTENTS

| CHAPTERS | CONTENTS | PAGE |
|----------|---------------------------------------|------|
| | DECLARATION | |
| | DEDICATION | |
| | ACKNOWLEDGEMENTS | 7 |
| | ABSTRACT | 8 |
| | ABSTRAK | 9 |
| 1 | INTRODUCTION | |
| | 1.1 Problem Statement | 10 |
| | 1.2 Objectives | |
| | 1.3 Scope of Work | 11 |
| 2 | 2.1 Literature Review | 12 |
| | 2.2 Discovery | |
| | 2.3 Condenser Microphone | 13 |
| | 2.4 Ic 555 (timer) | 10 |
| | 2.5 Ic 4017(time sequence) | 14 |
| | 2.6 Transistor | |
| | 2.7 Resistor | 15 |
| | 2.8 Relay | |
| 3 | 3 Mathadalagy | 16 |
| 3 | 3. Methodology | 10 |
| 3.1 Pr | oteus Software | |
| | 3.2 PCB Wizard 3.50 Pro Unlimited. | |
| | 3.3 Circuit Simulation (Full Circuit) | 17 |
| | 3.4 How to make PCB Board. | 18 |