# LASER SHOOTING GUN TRAINING

# AMIRRUN NAIM BIN NASARUDIN SITI SUHAIRAH BT HUSSAIN TENGKU NUR SHAHIRA BT TENGKU RAZALI

A project report submitted in partial fulfillment of the requirements for the award of the degree of Diploma of Electrical Engineering (Electronics / Telecommunications / Instrumentations / Computer)

Faculty of Electrical Engineering UniversitiTeknologi MARA

#### MARCH 2014

"I declare that this report entitled "LASER SHOOTING GUN TRAINING" is the result of my own group research except as cited in the references. The report has not been accepted for any degree and is not concurrently submitted in candidature of any other degree."

Signature . . . AMIRRUN NAIM BIN NASARUDIN Name : Date : 30/03/2014 SAM Signature ... Name • SITI SUHAIRAH BT HUSSAIN 3010312014 Date : Signature :. Name : TENGKU NUR SHAHIRA BT TENGKU RAZALI

Date	¢ *	20/03/2014
------	--------	------------

#### ACKNOWLEDGEMENT

In the name of God, most merciful, Alhamdulillah that we can complete the task until now. This task would not complete without the help and support of many individuals. I would like to thank to them for their help.

We are highly indebted to Mr. Mohamad Taib Bin Miskon for his guidance and providing information regarding our project and also for his support in completing this project.

Other than that, we also like to express our gratitude towards our parents. Without their support, we cannot do this project until now because this project need a lots of money. Also special thanks to this group member.

#### ABSTRACT

Nowadays, shooting game is one of the popular sports in the world especially around Europe. The use of bullets for such game can be dangerous and not suitable for child . Thus, this project is developed to allow user to shoot their target using low intensity laser gun so any laser gun shooter can practice their skill and improved it at home.Base on our research we found that this kind of game also involve in Summer Youth Olympics in Singapore.Futhermore,this game also suitable for any type of age. The system consists of transmitter, which is the laser gun and a few receivers located at the target zone. Light dependent resistor (LDR) is used as the receiver that will sense the laser beam transmitted from the gun. A PIC microcontroller is used to analyze the signal received and display marks depending on the received location on the target zone. The PIC control the process of the receiver system base on our program. The marks varies from 1 to 4 , the greater the target position, the higher the mark would be displayed.Buzzer also is used to alert the shooter that the laser ray already hitting the target. This kind of game can be wether indoor and outdoor games.

#### **TABLE OF CONTENTS**

CHAPTER	CONTENTS	PAGE
	DECLARATION	3
	DEDICATION	4
	ACKNOWLEDGEMENTS	5
	ABSTRACT	6
	ABSTRAK	7
	TABLE OF CONTENTS	8

# 1INTRODUCTION91.1Introduction91.2Objectives101.3Scope of project10

# 2 LITERATURE REVIEW

- 2.1 Literature review
- 2.2 Homebuilt LaserTAG

### **3 METHODOLOGY**

- 3.1 Flow chart
- 3.2 Basic component