

FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITY TEKNOLOGI MARA

FINAL REPORT OF DIPLOMA PROJECT

DIGITAL VOLUME

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ABSTRACT

Project 2 (KEU 380) is a subject that must be taken by the student while in semester 6 of Diploma in Electrical Engineering. This subject has 3 credits hour-non-core. The project needs 2 members for each group.

For our project, the name is 'Digital volume'. The function of this project is to display the numerical number (0 to 9) using the 7-LED segment display. The number can be adjusting by rotating the rotary encoder.

In this thesis, this project can be combine to other application such as controlling circuit, selector circuit, and in dialing the phone number. Here we have make for the output of this circuit to be connected with another circuits.

The proposed project will provide a more reliable and more precession when the range of displaying numerical number is added to higher digit. The generated clock will be change from its own created by rotary encoder to a continuous signal with the IC timer (555).

CHAPTER 1

INTRODUCTION

1.1 Introduction

In today's world, the term digital has become part of our everyday vocabulary. It because of the dramatic way that digital circuits and digital techniques have become so widely used in almost all areas of life such computers, automation, robots, entertainments and others. For our project it's called the 'Digital volume'. Base from digital circuits or logic circuits which designed to produce output voltages that fall within the prescribed 0 and 1, the idea's come up to created this circuit (digital volume).

This project used for wide application especially in displaying of controlling or selecting the devices. The digital type was chosen because for the precession. Or in another aspect this circuit can display the extract value, which needed. The number is display by the 7-segment LED. For this project we just to show the concept or basic of the construction. So the range of the numerical number can be display just in 0 to 9 only. This circuit can be operating from 7V to 12V dc. The number can be count up or count down by adjusting the rotary encoder.