DEPARTMENT OF ELECTRICAL ENGINEERING UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG

FINAL REPORT PROJECT 2 (KEU 380)

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"60W ACTIVE AMPLIFIER SYSTEM"

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ABSTRACT

The 60W active amplifier is the systems that have two drive units, which is the speaker. The one speaker is for reproduce of the bass frequencies, which we call the woofer and the other one suitable for high frequencies, which we call the tweeter.

The use of IC amplifier TDA2002 is to makes the circuit suitable for fitting into automobiles having a 12V battery.

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CHAPTER 1

INTRODUCTION

1.1 Introduction of the project

In conventional Hi-fi system, the output from the power amplifier drives two or three units. The drive unit, there is the speaker, is the device that actually transforms the electrical signal from the amplifier into sound pressure waves. Ideally we would use a single unit to cover the whole frequency range, but in practice we have to use 2 or 3 unit to cover the desired range of 50Hz to 20 kHz. The project that we are conducting and built is basic type of an amplifier. It contains three major circuitry that is preamplifier, tone control (high pass and low pass) and power-amplifying stage in which will be discussed more in this report.

1.2 Objective

The objective of this project is to construct an electronic project that has not less than two integrated circuits (IC) contain in the all over circuitry. This project give experience, skills and knowledge to solve every problem connected with this electronic project. Since the project requires an integrated circuit to be contained in it, so it important to recognize function for the circuit. Afterward is to analyze the circuit in each stage from the input to output.