HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DEVELOPMENT OF AN AUDIO PREAMPLIFIER

BY
NEOCLEOUS KYRIACOS
3E1

E.1257

JUNE 2001



ABSTRACT

<u>CHAPTER 1:</u> In this chapter the terms used in the audio amplifiers, preamplifiers and the HI-FI standards are explained.

<u>CHAPTER 2:</u> In this chapter we analyse the classification of audio amplifiers and study the various types of audio amplifiers and preamplifiers.

<u>CHAPTER 3:</u> In this chapter we have few preamplifier circuits of various types, describing the circuit operation, circuit design, specifications and components list.

<u>CHAPTER 4:</u> In this chapter we select one preamplifier circuit which we will construct.

<u>CHAPTER 5:</u> It describes the suggested power supply for the selected preamplifier circuit

CHAPTER 6: Describes the construction of the circuit

<u>CHAPTER 7:</u> Describes the methods of testing of the preamplifier (frequency response, total harmonic distortion).

CHAPTER 8: Conclusions drawn from the project.

CHAPTER 9: Appendices, References

CONTENTS

ACKNOWLEDGEMEN 15
TITLE-OBJECTIVES
ABSTRACT
<u>CHAPTER 1</u>
Terminology2
HI-FI Standards6
<u>CHAPTER 2</u> 8
Classification of Audio Amplifiers9
Audio Preamplifiers17
<u>CHAPTER 3</u>
Suggested Circuits
Circuit 123
Circuit 227
Circuit 330
<u>CHAPTER 4</u> 34
Selection of Audio Preamplifier Circuit35
<u>CHAPTER 5</u> 36
Suggested Power Supply37
<u>CHAPTER 6</u>
Construction of the selected circuit40
<u>CHAPTER 7</u> 41
Testing and results
Frequency Response42
Total Harmonic Distortion43

<u>CHAPTER 8</u>	45
Conclusions	46
CHAPTER 9	47
References & Appendices	

Š