

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DEVELOPMENT OF POWER AUDIO AMPLIFIER
AND MIXER / SYSTEM

E.1268

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JUNE 2001

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| HIGHER TECHNICAL INSTITUTE | PROJECT NO. 3262 |
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SUMMARY

Title : Development of Audio Amplifier and Mixer/System
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This project deals with the development of an Audio System (an amplifier, a five band equalizer and a 3-channel audio mixer) suitable for musical instruments. A number of different circuits were carefully studied and considering their specifications and some modifications made. Some circuits were selected with some criteria. After the selection, the +ve film and the p.c.b were developed, the components were located in the appropriate locations and a test was followed to carry out all the different response of the circuits. A +40V/-40V and +15V/-15V supplies is also constructed and tested in order to complete the needs of the project.

The characteristics of the circuits used are:

- a. An Audio Amplifier 50 Watts
- b. A five band graphic Audio Equalizer
- c. A 3-input Audio Mixer

The project also includes :

- The appropriate explanations and specifications of each the different circuits of the audio system.
- A briefly explanation for the components used in the circuits, considering their use and their characteristics.
- The characteristics of the ICs used, their internal circuits, and some other applications that are given by the manufacturer.
- A complete testing of each of the three circuits

It is almost certain that if someone reads this project will gain a lot of experience and information that are good to know.

CONTENTS

ACKNOWLEDGMENT

SUMMARY

INTRODUCTION

CHAPTER 1

1.0 VARIOUS TYPES OF AUDIO AMPLIFIERS

CHAPTER 2

2.0 SELECTION OF THE CIRCUIT AND SPECIFICATIONS

2.1 SELECTION OF THE AMPLIFIER CIRCUIT

2.2 SELECTED POWER AMPLIFIER SCHEMATIC CIRCUIT

2.3 TECHNICAL SPECIFICATIONS

2.4 THE IC

2.5 CIRCUIT OPERATION

2.6 POWER AMPLIFIER CIRCUIT DESIGN

2.7 CIRCUIT CONSTRUCTION

CHAPTER 3

3.0 TESTING OF THE POWER AUDIO AMPLIFIER

3.1 FREQUENCY RESPONSE CHARACTERISTICS

3.2 FREQUENCY RESPONSE CURVE

3.3 TROUBLE SHOOTING THE AUDIO AMPLIFIER CIRCUIT

3.4 LIST OF COMPONENTS

3.5 COSTING

3.6 SUMMARY

3.7 CONCLUSION

CHAPTER 4

4.0 VARIOUS TYPES OF AUDIO EQUALIZERS

CHAPTER 5

5.0 SELECTION OF THE AUDIO EQUALIZER CIRCUIT

5.1 SELECTED AUDIO EQUALIZER SCHEMATIC CIRCUIT

5.2 TECHNICAL SPECIFICATIONS

5.3 CIRCUIT OPERATION AND SPECIFICATIONS

5.4 AUDIO EQUALISER CIRCUIT DESIGN

5.5 CIRCUIT CONSTRUCTION

CHAPTER 6

6.0 TESTING OF THE AUDIO EQUALIZER

6.1 FREQUENCY RESPONSE CHARACTERISTICS

6.2 FREQUENCY RESPONSE CURVES

6.3 TROUBLE SHOOTING THE AUDIO EQUALIZER CIRCUIT

6.4 LIST OF COMPONENTS

6.5 COSTING

6.6 SUMMARY

6.7 CONCLUSION

CHAPTER 7

7.0 VARIOUS TYPES OF AUDIO MIXERS

CHAPTER 8

8.0 SELECTION OF THE CIRCUIT AND SPECIFICATIONS

8.1 SELECTION OF THE AUDIO MIXER

8.2 SELECTED AUDIO MIXER SCHEMATIC CIRCUIT

8.3 THE DESIGN OF THE AUDIO MIXER

8.4 THE CONSTRUCTION

CHAPTER 9

9.0 TESTING OF THE AUDIO MIXER

9.1 FREQUENCY RESPONSE CHARACTERISTICS

9.2 FREQUENCY RESPONSE CURVES

9.3 TROUBLE SHOOTING THE AUDIO MIXER CIRCUIT

9.4 LIST OF COMPONENTS

9.5 COSTING

9.6 SUMMARY

CHAPTER 10

10.0 POWER SUPPLY

10.1 POWER SUPPLY CIRCUITS

10.2 AUDIO AMPLIFIER POWER SUPPLY CIRCUIT

10.3 AUDIO EQUALIZER AND AUDIO MIXER COMMON POWER SUPPLY

10.4 LIST OF COMPONENTS

10.5 COST (FOR THE TWO POWER SUPPLIES)

10.6 CONCLUSION

CHAPTER 11

11.0 LOUDSPEAKER

11.1 VARIOUS TYPES OF LOUDSPEAKERS

11.2 SELECTION OF THE LOUDSPEAKER AND SPECIFICATIONS

11.3 SELECTED LOUDSPEAKER

11.4 CONCLUSION

CHAPTER 12

12.0 USES OF THE SYSTEM AND FUTURE MODIFICATIONS

12.1 USES OF THE SYSTEM

12.2 FUTURE MODIFICATIONS

CONCLUSIONS

REFERENCES

APPENDICES