# DEVELOPMENT OF AUDIO EQUALIZER

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#### SUMMARY

This project deals with the research design, construction and testing of an audio graphic equalizer.

An investigation of the various types of graphic equalizers according to the HIFI standards is carried out in the first chapter including also a gradual presentation of the ideas assigning the selection of the constructed system.

The actual design of the audio equalizer is described in chapter 2. Moreover the designed system specifications are provided in this section

In chapter 3 a description of the way that the graphic equalizer was constructed is given with reference to a computer program called Sm-Artwork.

A description of the components used for the audio equalizer construction, is provided in chapter 4

In the chapter 5 an AC analysis of the graphic equalizer is given with reference to a special computer's program called MICRO-CUP II.

The actual testing is described in chapter 6 including also a reference to the equipment used.

In the last chapter a description of the graphic equalizer applications is provided. Moreover general conclusion about the construction of this equalizer are provided with reference to the any further improvements that could be done at this construction.

Finally seven Appendices are provided, for any further information about this project.

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#### **REFERENCES**

### APPENDIX 1

Detailed information about the available designs of graphic equalizers.

### APPENDIX 2

General information about the computers' software used for this project

### APPENDIX 3

Frequency response curves optained from the computer analysis.

## APPENDIX 4

Frequency response curves optained from the actual testing.

## APPENDIX 5

List of materials - Costing

## <u>APPENDIX 6</u>

Data Sheets

## GLOSSARY