



## Introduction to Loudspeaker Design: Second Edition

By John L. Murphy



### Introduction to Loudspeaker Design: Second Edition By John L. Murphy

Introduction to Loudspeaker Design is written for students, technicians, engineers and hobbyists seeking an overview of the technology of loudspeakers. Starting with a brief history of audio developments the book begins by introducing the concepts of frequency, pitch and loudness and proceeds to develop the idea of a loudspeaker as a system. The book covers such topics as loudspeaker design tradeoffs, spatial loading, diffraction loss, cavity effect and enclosure construction. A complete chapter is devoted to the subject of crossover design including design equations. The second edition adds a new chapter on simulation and analysis which includes design equations for closed and vented type speakers. The appendices contain technical references, design aids, glossaries and a chart depicting 18 different loudspeaker enclosure types.

#### Changes for the Second Edition:

The second edition brings new material and polishes the first edition with many new or improved illustrations. Chapter 2 was expanded with the second half split into a new Chapter 3 titled "Speaker Response Functions". The discussion of Thiele-Small parameters has been expanded and now covers small-signal parameters vs. large-signal parameters as it explores the role of the test signal level in parameter measurement. The crossover design chapter has been expanded to include formulas for calculating component values for the most popular crossover types. Equations have been added for calculating impedance compensation and attenuation networks. The old Chapter 7 FAQ material was integrated into other chapters as appropriate. A new Chapter 8 titled "Loudspeaker Simulation" has been added and introduces loudspeaker equivalent circuit analysis with equations for calculating the magnitude and phase responses of closed and vented loudspeaker systems. Additional design equations are introduced and then examples are given for calculating the responses of a closed box and a vented box loudspeaker. Detailed design equation summaries are given for closed and vented boxes. Appendix C was added to provide a glossary of symbols and a glossary of terms. The box type charts were moved to Appendix D.

 [Download](#) Introduction to Loudspeaker Design: Second Edition ...pdf

 [Read Online](#) Introduction to Loudspeaker Design: Second Editi ...pdf

# Introduction to Loudspeaker Design: Second Edition

By John L. Murphy

## Introduction to Loudspeaker Design: Second Edition By John L. Murphy

Introduction to Loudspeaker Design is written for students, technicians, engineers and hobbyists seeking an overview of the technology of loudspeakers. Starting with a brief history of audio developments the book begins by introducing the concepts of frequency, pitch and loudness and proceeds to develop the idea of a loudspeaker as a system. The book covers such topics as loudspeaker design tradeoffs, spatial loading, diffraction loss, cavity effect and enclosure construction. A complete chapter is devoted to the subject of crossover design including design equations. The second edition adds a new chapter on simulation and analysis which includes design equations for closed and vented type speakers. The appendices contain technical references, design aids, glossaries and a chart depicting 18 different loudspeaker enclosure types.

### Changes for the Second Edition:

The second edition brings new material and polishes the first edition with many new or improved illustrations. Chapter 2 was expanded with the second half split into a new Chapter 3 titled "Speaker Response Functions". The discussion of Thiele-Small parameters has been expanded and now covers small-signal parameters vs. large-signal parameters as it explores the role of the test signal level in parameter measurement. The crossover design chapter has been expanded to include formulas for calculating component values for the most popular crossover types. Equations have been added for calculating impedance compensation and attenuation networks. The old Chapter 7 FAQ material was integrated into other chapters as appropriate. A new Chapter 8 titled "Loudspeaker Simulation" has been added and introduces loudspeaker equivalent circuit analysis with equations for calculating the magnitude and phase responses of closed and vented loudspeaker systems. Additional design equations are introduced and then examples are given for calculating the responses of a closed box and a vented box loudspeaker. Detailed design equation summaries are given for closed and vented boxes. Appendix C was added to provide a glossary of symbols and a glossary of terms. The box type charts were moved to Appendix D.

## Introduction to Loudspeaker Design: Second Edition By John L. Murphy Bibliography

- Sales Rank: #464901 in Books
- Published on: 2014-03-04
- Original language: English
- Number of items: 1
- Dimensions: 9.00" h x .50" w x 6.00" l, .67 pounds
- Binding: Paperback
- 222 pages



[Download Introduction to Loudspeaker Design: Second Edition ...pdf](#)



[Read Online Introduction to Loudspeaker Design: Second Editi ...pdf](#)



## **Download and Read Free Online Introduction to Loudspeaker Design: Second Edition By John L. Murphy**

---

### **Editorial Review**

#### **About the Author**

The author is a physicist/audio design engineer with over 35 years experience in the research and development of audio products spanning both hardware and software. His WinSpeakerz, TrueRTA and DATS software applications are widely used throughout the audio industry as tools for simulating and measuring loudspeaker performance. Captain Murphy served as a space systems analyst for NORAD during his military career.

### **Users Review**

#### **From reader reviews:**

##### **Carmen Jensen:**

Do you have favorite book? If you have, what is your favorite's book? Publication is very important thing for us to understand everything in the world. Each book has different aim or even goal; it means that book has different type. Some people really feel enjoy to spend their time for you to read a book. These are reading whatever they have because their hobby is usually reading a book. Think about the person who don't like reading a book? Sometime, man or woman feel need book once they found difficult problem or maybe exercise. Well, probably you will want this Introduction to Loudspeaker Design: Second Edition.

##### **Michael Stricklin:**

Often the book Introduction to Loudspeaker Design: Second Edition will bring you to definitely the new experience of reading the book. The author style to spell out the idea is very unique. In case you try to find new book to read, this book very ideal to you. The book Introduction to Loudspeaker Design: Second Edition is much recommended to you to learn. You can also get the e-book from your official web site, so you can more readily to read the book.

##### **Mary Infante:**

People live in this new day of lifestyle always try to and must have the free time or they will get wide range of stress from both lifestyle and work. So , if we ask do people have extra time, we will say absolutely indeed. People is human not really a huge robot. Then we ask again, what kind of activity have you got when the spare time coming to an individual of course your answer will probably unlimited right. Then do you ever try this one, reading ebooks. It can be your alternative in spending your spare time, often the book you have read is Introduction to Loudspeaker Design: Second Edition.

**Scott Manuel:**

This Introduction to Loudspeaker Design: Second Edition is great e-book for you because the content which is full of information for you who also always deal with world and possess to make decision every minute. This particular book reveal it info accurately using great organize word or we can claim no rambling sentences within it. So if you are read that hurriedly you can have whole information in it. Doesn't mean it only gives you straight forward sentences but challenging core information with splendid delivering sentences. Having Introduction to Loudspeaker Design: Second Edition in your hand like having the world in your arm, data in it is not ridiculous just one. We can say that no e-book that offer you world with ten or fifteen small right but this book already do that. So , this is good reading book. Hey Mr. and Mrs. hectic do you still doubt this?

**Download and Read Online Introduction to Loudspeaker Design:  
Second Edition By John L. Murphy #C0UNY2W3Q9A**

# **Read Introduction to Loudspeaker Design: Second Edition By John L. Murphy for online ebook**

Introduction to Loudspeaker Design: Second Edition By John L. Murphy Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Introduction to Loudspeaker Design: Second Edition By John L. Murphy books to read online.

## **Online Introduction to Loudspeaker Design: Second Edition By John L. Murphy ebook PDF download**

**Introduction to Loudspeaker Design: Second Edition By John L. Murphy Doc**

**Introduction to Loudspeaker Design: Second Edition By John L. Murphy MobiPocket**

**Introduction to Loudspeaker Design: Second Edition By John L. Murphy EPub**

**C0UNY2W3Q9A: Introduction to Loudspeaker Design: Second Edition By John L. Murphy**