

*high-  
fidelity  
circuit design*

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# introduction

**M**any books have been published on the various aspects of audio that can broadly be divided into two groups: the "theoretical" group, which undoubtedly give all the theory anyone needs, *provided* he has sufficient knowledge of advanced mathematics to be able to apply it; and the "practical" group, which tell the reader, step by step, how to make some particular piece of equipment. What has been lacking in the literature is some information in a form that will enable the man with only the most elementary knowledge of mathematics to produce his own design and make it work.

With the objective of filling in this gap, we have written various articles that have appeared in RADIO-ELECTRONICS magazine. And the correspondence we have received assures us that we have achieved our objective in this. In fact, many people find the only complaint is the inconvenience of having numerous copies of RADIO-ELECTRONICS strewn about the place for easy reference!

For this reason the Gernsback Library undertook the assembly of this material into book form. But a number of separate magazine articles do not too readily go together to make the best book, just like that. The result is apt to be rather a mass of bits and pieces. So the authors' help was called upon, and the original articles have been considerably edited and rewritten. In several places additional material has been added, in the interest of overall clarity, and to fill in some gaps that naturally result from preparing a book in this way. But now that we have finished the work we feel confident in offering it to the reader as a real primer on designing the best in audio.

Often people ask where we get the ideas for articles. We feel this introduction is a good opportunity to give the answer to this question, as credit to whom credit is due. Practically all the subjects for our articles arise from questions various people have asked, and the discussions that have followed. To be able to explain a

subject successfully, it is necessary not only to understand it properly one's self, but also to understand the obstacles that make it difficult for others to grasp. It is odd how obstacles in the attainment of knowledge seem insurmountable as we approach them, but having passed them, they seem to vanish, and we find it difficult to realize the obstacle ever existed. This is why questions from people seeking knowledge, and the discussions that ensue, are invaluable in providing material for this kind of presentation.

Knowing that many look in the introduction of a book to find out for whom it is written, we should answer that. While we have avoided using expressions that would put it over the heads of the many enthusiasts who do not possess very much theoretical knowledge, we are also confident that much of its contents will prove helpful to many who have more advanced training, but who have failed to visualize adequately some of the problems they encounter, largely due to the vagueness of the "classical" approach. As a "primer" to read, it will give a sound basic knowledge of the subject, after which it will serve for years as an invaluable reference book. We make no apology for such a claim — we use our own writings for reference. It's so much easier than trying to memorize it all!

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