

LOUDSPEAKERS

VOLUME 2



**An anthology
of articles on
loudspeakers
from the pages of the
Journal of the
Audio Engineering
Society
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preface

The first AES *Loudspeaker* anthology published in 1978 incorporated 61 papers which had appeared in the *Journal of the Audio Engineering Society* during a period of 24 years, from 1953 to 1977. It contains 450 pages of text and diagrams representing the most up-to-date reviews of loudspeaker theory and practice available at the time of publication.

Few textbooks about loudspeakers have been published in the last two decades due, I believe, to the fact that progress has been so rapid in recent years. A textbook is bound to be out of date before the ink is dry on the page. Also, practicing development engineers are busy people and they cannot devote the time necessary to set down all that is required in a fully comprehensive technical book. Therefore, the engineering world has to rely more and more on technical papers from specialized contributors and, provided that these are readily accessible, such publications are probably more reliable than an all-embracing text by a single author. These views were certainly borne out by experience from the first *Loudspeaker* anthology which proved to be extremely popular, and is now in its third printing. Since 1977, loudspeaker development has accelerated and in the space of only six years sufficient papers have appeared to fill a second anthology. In fact, so much has been published in the meantime that we were obliged to omit from this edition some important historical papers reprinted in the *Journal* from other

publications. These are listed under Related Reading at the back of the book and should be regarded as an essential part of the narrative.

The advances cataloged in this second series of papers reveal how scientists and engineers are now coming to grips with the fundamental nature of loudspeakers. There are, of course, many purely practical problems which remain to be solved, but here and there one can see where understanding has penetrated to the theoretical heart of this extremely complex subject. Every year that passes deepens our insight and we live in hope that eventually the world of transducers will reach the state of development which electronics currently enjoys.

The papers cover a wide range of topics and although this compilation is by no means exhaustive—because no attempt has been made by the *Journal* to solicit material to fill “black holes” in the subject matter—nevertheless, there is no other publication which contains so comprehensive and penetrating an overview of loudspeakers between two covers. We are all immensely grateful to those engineers who, in addition to pushing outward the frontiers of human knowledge, have also devoted their leisure time to disseminating their ideas and experiences.

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