
Quite a few more textbooks and new editions of older publications have been added to the field of electronics and communications in the past five years. The interested group of readers provides the main influence on the selection of materials and manner of presentation by the author. In Professor Sheingold’s own words, this book presents “in sufficiently comprehensive form for basic understanding, the principles and techniques in modern radio-communication systems.”

There are twenty-one chapter headings in the entire book. After an introduction of transmission principles in general, there follows a discussion of basic radio circuits, generation and propagation of radio waves, and the construction and characteristics of electron tubes. Then separate chapters deal with amplification, rectification, oscillation, modulation, and detection. The last five chapters include pulse circuits, ultra-high-frequency techniques, image-transmission systems, special communication techniques, and radar and radio navigation systems. Each chapter varies in length from fifteen to thirty pages, which seems to be suitable for undergraduate instructional purposes. Diagrams are carefully drawn and faithfully reproduced in readable sizes.

One of the difficulties of teaching an introductory course in engineering subjects seems to be a good balance of basic ideas and methods of analysis on one hand, and a clear, modern, and stimulating overall picture on the other. Here the author has picked up essential topics in radio communication systems and succeeded in treating them neatly and concisely. It should prove a readable book even to students who do not have extensive background in mathematics and electricity.

Both the author and the publishers are to be congratulated in producing this lucid and pleasing introductory textbook with a strong emphasis on modern radio communications. It will prove interesting to follow the new Van Nostrand Series of Communication Engineering, of which this is the first one published.

Tsute Yang