Contents :

6. Combined Loads
7. Actual Lines with Losses
8. Transmission Lines as Impedance Transformers

Chapter VI. Antennas

1. Radiating Systems
2. Double-Dipole Antennas
3. Ground Effects on Radiation
4. Resonant Frequencies and Harmonic Antennas
5. Reflectors and Directors
6. Radiation Patterns
7. Complex Dipoles
8. Loop Antennas
9. Long- and Medium-Wave Antennas
10. Short-Wave Antennas
11. Ultrashort-Wave Antennas

Chapter VII. Radio Wave Propagation

1. Atmospheric and Ground Effects
2. General Propagation Laws
3. Long-Wave Propagation
4. Medium-Wave Propagation
5. Short-Wave Propagation
6. Ultrashort-Wave Propagation
7. Electromagnetic Waves in Outer Space

Chapter VIII. Vacuum and Semiconductor Devices

1. Modern Electronics
2. Motion of Electrons in Vacuum
3. Diodes
4. Triodes
5. Multigrid Electron Tubes
6. Semiconductor Conduction
7. PN Junctions and Crystal Diodes
8. Transistors
9. Miniaturization of Electronic Devices
10. Cathode-Ray Tubes

Chapter IX. Primary-Signal Amplifiers

1. Purpose and Classification
2. Audio-Frequency Amplifiers
3. Small-Signal Amplifiers
4. Output Amplifiers

5. Feedback in Amplifiers
6. Video Amplifiers

Chapter X. Wave Generation

1. Valve Oscillators
2. Separately Excited Oscillators
3. Self-Excited Oscillators
4. Ultrahigh-Frequency Oscillators
5. Klystron Amplifiers and Oscillators
6. Travelling-Wave Oscillators
7. Backward-Wave Oscillators
8. Transistor Oscillators and Amplifiers
9. Negative-Resistance Oscillators
10. RC Oscillators
11. Frequency Pulling and Locking
12. Nonsinewave Oscillators

Chapter XI. Conversion of Electric Signals

1. Signal Conversion Principles
2. Amplitude Modulation
3. Frequency and Phase Modulation
4. Pulse Modulation
5. Detection of Radio Signals
6. Frequency Converters
7. Conversion of Electric Pulses

Chapter XII. Receivers

1. Purpose and Characteristics
2. Receiver Input Circuits
3. High-Frequency Amplifiers
4. Intermediate-Frequency Amplifiers
5. Radio Interference
6. Frequency Converters
7. Detector Stages
8. Controls and Adjustments
9. Examples of Receiver Circuits

Reference Data

Index