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Nota di contenuto	Cover; Sound System Engineering; Copyright; Contents; Preface; Chapter 1 Why Sound System Engineering?; 1.1 Prerequisites; 1.2 Basic Electrical Training; 1.3 Mathematics; 1.4 Hearing Versus Listening; 1.5 Craftsmanship; 1.6 Rigging; 1.7 Literacy; 1.8 The Art, Philosophy, and Science of Sound; 1.9 Fields; Chapter 2 Voices Out of the Past; 2.1 Significant Figures in the History of Audio and Acoustics*; 2.2 1893-The Magic Year; 2.3 Bell laboratories and Western Electric; 2.4 Harvey Fletcher (1884-1981); 2.5 Harry Nyquist (1889-1976); 2.6 The dB, dBm, and the VI; 2.7 Sound System Equalization 2.8 Acoustic Measurements-Richard C. Heyser (1931-1987)2.9 Calculators and Computers; 2.10 The Meaning of Communication; 2.11 Historical Notes; Chapter 3 Sound and Our Brain; 3.1 The Human Brain; 3.2 The Current Era; 3.3 Unexpected Validation; Chapter 4 Psychoacoustics; 4.1 Motivations; 4.2 Sound Reproduction; 4.3 Is it Better to be Born Blind or Deaf ?; 4.4 Recording Sound at the Eardrum; 4.5 Psychoacoustics via a Metaphysical Foundation; 4.6 Barks, Bands, Equivalent Rectangular Bandwidths (ERBs), Phons and Sones; Chapter 5 Digital Theory; 5.1 Shannon's Theory; 5.2 Dynamic Range

5.3 The Steps from Art to Science5.4 Moravec's Warning; 5.5 Digital Nomenclature; 5.6 What Is a Bit of Data?; 5.7 Bayesian Theory; 5.8 Planck System; 5.9 Bits, Nats, and Bans; 5.10 A Communication System; 5.11 Holography; Chapter 6 Mathematics for Audio Systems; 6.1 Engineering Calculations; 6.2 Precision, Accuracy, and Resolution; 6.3 Simple Numbers; 6.4 How to Add Gains and Losses Algebraically; 6.5 The Factor-Label System; 6.6 Basic Physical Terms; 6.7 Mathematical Operations; 6.8 Complex Number Operations; 6.9 Decade Calibration; 6.10 Converting Linear Scales to Logarithmic Scales
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7.23 The Tempered Scale

Sommario/riassunto

Long considered the only book an audio engineer needs on their shelf, Sound System Engineering provides an accurate, complete and concise tool for all those involved in sound system engineering. Fully updated on the design, implementation and testing of sound reinforcement systems this great reference is a necessary addition to any audio engineering library.Packed with revised material, numerous illustrations and useful appendices, this is a concentrated capsule of knowledge and industry standard that runs the complete range of sound system design from the simplest all-analo