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Nota di contenuto	Front Cover; Acoustics: Sound Fields and Transducers; 1.3 PROPAGATION OF SOUND THROUGH GAS; 1.4 MEASURABLE ASPECTS OF SOUND; 1.6 STANDARD INTERNATIONAL (SI) UNITS; 1.8 SPEED AND VELOCITY; 1.10 INTENSITY, ENERGY DENSITY, AND LEVELS; 2.5 SOLUTION OF WAVE EQUATION FOR AIR IN A TUBE FILLED WITH ABSORBENT MATERIAL; 2.7 FREELY TRAVELING CYLINDRICAL WAVE; 2.10 CYLINDRICAL COORDINATES; 2.11 SPHERICAL COORDINATES; 6.6 SOUND PRESSURE PRODUCED AT DISTANCE R; 4.6 Intermediate-sized tube-mixed mass-resistance element [a (in meters)>0.01/ f and a<10/f] [2]; 4.8 ACOUSTIC TRANSFORMERS 4.9 REFLECTION OF A PLANE WAVE FROM A PLANE 4.14 DIPOLE POINT SOURCE (DOUBLET); 4.15 RADIATION FROM AN OSCILLATING SPHERE; 4.16 DIRECTIVITY INDEX AND DIRECTIVITY FACTOR; 4.18 OSCILLATING SPHERE; 4.19 PLANE CIRCULAR PISTON IN INFINITE BAFFLE; 4.20 PLANE CIRCULAR FREE DISK; 4.21 PLANE CIRCULAR PISTON RADIATING FROM ONE SIDE ONLY IN FREE SPACE; 4.22 SOUND IN LOSSY TUBES; 4.23 WAVE EQUATION FOR AN INFINITE LOSSY TUBE; 5.5 ELECTROSTATIC MICROPHONE (CAPACITOR MICROPHONE); 5.6 ELECTROMAGNETIC RIBBON MICROPHONES; 6.10 MEASUREMENT OF THIELE-SMALL PARAMETERS; 6.13 VOICE-COIL DESIGN

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	7.2 UNBAFFLED DIRECT-RADIATOR LOUDSPEAKER 7.6 CLOSED-BOX BAFFLE [1,2]; 7.9 ACOUSTICAL CIRCUIT; 9.9 INFINITE PARABOLIC HORN [11]; 10.9 TOTAL STEADY SOUND-PRESSURE LEVEL; 12.5 RADIATION FROM A POINT SOURCE ON A SPHERE; 12.9 RADIATION FROM AN OSCILLATING CONVEX DOME IN AN INFINITE BAFFLE; 13.6 REFLECTION OF A POINT SOURCE FROM A PLANE; 13.9 RADIATION FROM A RESILIENT DISK IN AN INFINITE BAFFLE [19]; 14.7 WORKED EXAMPLE NO. 1: LOUDSPEAKER IN AN ENCLOSURE WITH A BASS-REFLEX PORT; 12.7 RADIATION FROM A RECTANGULAR CAP IN A SPHERE; 14.9 FAR-FIELD ON-AXIS PRESSURE; Index
Sommario/riassunto	Acoustics: Sound Fields and Transducers is a thoroughly updated version of Leo Beranek's classic 1954 book that retains and expands on the original's detailed acoustical fundamentals while adding practical formulas and simulation methods. Serving both as a text for students in engineering departments and as a reference for practicing engineers, this book focuses on electroacoustics, analyzing the behavior of transducers with the aid of electro-mechano-acoustical circuits. Assuming knowledge of electrical circuit theory, it starts by guiding readers through the basics of sound