1. Record Nr. UNINA9910682600003321

Autore	Pfanzagl-Cardone Edwin
Titolo	The Art and Science of 3D Audio Recording / / by Edwin Pfanzagl-Cardone
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2023
ISBN	9783031230462 9783031230455
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (433 pages)
Collana	Engineering Series
Disciplina	799 621.3893
Soggetti	Signal processing Science - Social aspects Signal, Speech and Image Processing Sound Studies
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Critical introduction and a few case studies -- 3D- or 'Immersive Audio' – the Basics and a Primer on Spatial Hearing -- The DOLBY® „AtmosTM“ System -- HOA – Higher Order Ambisonics (Eigenmike) -- The Isosceles-Triangle, M.A.G.I.C Arrayand MMAD 3D (after Williams) -- DTS:X -- SONY “360 Reality Audio” -- Recording microphone techniques for 3D-Audio -- Comparative 3D audio microphone array tests.
Sommario/riassunto	This professional book offers a unique, comprehensive and timely guide on 3D audio recording. Intended for sound engineers and professionals, and summarizing more than twenty-year research on this topic, it includes extensive information and details on various microphone techniques and loudspeaker layouts, such as Auro-3D®, Dolby® AtmosTM, DTS:X®, MMAD, SONY 360 Reality Audio and Ambisonics. It presents a rich set of results obtained from both objective measurements and subjective listening tests, and a number of case studies for 3D recording, ranging from solo-instrument techniques to full symphony orchestra, and microphone systems for

virtual reality applications. Further, it includes a chapter on spatial hearing discussing issues of 3D audio sound reproduction. All in all, this book offers extensive, practical information for sound engineers and professionals.