Record Nr. UNINA9910453244503321 Autore Vail Mark Titolo The synthesizer: a comprehensive guide to understanding, programming, playing, and recording the ultimate electronic music instrument / / Mark Vail Pubbl/distr/stampa New York, New York:,: Oxford University Press,, 2014 ©2014 **ISBN** 0-19-933486-2 0-19-539481-X 0-19-933485-4 Descrizione fisica 1 online resource (908 p.) Disciplina 786.7/419 Soggetti Synthesizer (Musical instrument) - Instruction and study Electronic music - Instruction and study Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Cover: Title Page: Copyright Page: Contents: Foreword by Michelle Moog-Koussa; Preface; About the Companion Website; 1 Trendsetting All-Stars: Control: No Touch Required: For The Birds: Waggling Keyboard; Timbral Flowage; Tape-to-Electronics Transition; Voltage and Digital (Fingertip) Control; Synth Italia; Armand Pascetta's Pratt-Reed Polyphony; Heavyweight Polyphony and Control; Multitimbral Polyphony; Physical Modeling; Finger-Controlled Speech; Sound; Quantized Note Selection; Polyphonic Progenitor; Polyphony from an Expander: Switched-On Additive Synthesis Groundbreaking German Digital SynthesizersRealizing John Chowning's Linear FM Synthesis; Phase Distortion; Linear Arithmetic; Vector Synthesis; MultiSynthesis and -Processing Environment; Open Architecture; Virtual Analog; Neural Modeling; Performance; Keyboard-Controlled Tape Player; Optical Sonics, Part; Optical Sonics, Part;

Digital-Sampling Trailblazer from Down Under; More Affordable Digital Sampling; The Volksampler; Multitimbral Sample Playback, Sampling Optional; Direct-from-Disk Sample Playback; First Programmable

Polysynth; Classic Beat Boxes

First Programmable Sample-Playback Drum MachineSmall-Scale Improvisation Instrument; Interface; Patchboard-Matrix British Synths; Educational Instruments that Went Well Beyond; Unique Improvisation Machine; Multitasking Pre-MIDI Wonder Workstation; Original Resynthesizer; Hybrid Modular; Early Electronic Music Applications from Max Mathews; Barry Vercoe's Long-Lived Synthesis and Processing Software; Personal Computer with a Built-In Synth Chip; Graphically Programmable Computer Music Language; "Obsolete" and Ever-Evolving Sonic Software; Premier Softsynths for Discriminating Enthusiasts

DIY Softsynth Apps and Their Potent OffspringReliable Softsynth Platform for the Road; Composition; The First Synthesizer; Room-Filling Automated Composition Machine; Photo-Optic Instrument from Russia; Instantaneous Composing/Performance Machine; Hybrid Music Workstation that Arrived Too Late; Gigabuck Digital Audio System; Economical Multitimbral Sequencing Synth: Musical Playstation for the Masses: Instrument that Launched Hip-Hop; Multipurpose Environment for Composition and Performance; Beyond; 2 Acoustics and Synthesis Basics130; Real-World Acoustics; Types of Synthesis Audio Sources: Oscillators, Noise, and MoreVCAs, Envelopes, and LFOs; Envelope Followers and Pitch-to-Voltage Converters; Filters; EQs and Filter Banks: Analog Sequencers: Arpeggiators: Reverb: Analog Delay: Digital Delay: Loopers: Other Effects: 3 Choosing Your Synthesizer(s): Options: What's Your Budget?: Musical Tastes and Goals: Hardware vs. Software: Portability and Power: Programmability: Pros and Cons: Expandability: As Others Have Done; Perspective; Modular Synthesizers in the Twenty-first Century; An Overview; Modular Synth Shopping; More on Eurorack Modular: More on FracRak Modular More on Serge Modular

Sommario/riassunto

Electronic music instruments weren't called synthesizers until the 1950s, but their lineage began in 1919 with Russian inventor Lev Sergeyevich Termen's development of the Etherphone, now known as the Theremin. From that point, synthesizers have undergone a remarkable evolution from prohibitively large mid-century models confined to university laboratories to the development of musical synthesis software that runs on tablet computers and portable media devices. Throughout its history, the synthesizer has always been at the forefront of technology for the arts. In The Synthesizer: A Comprehensi