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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; Wagging 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 Synthesizers Realizing 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 Machine  
Small-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 Offspring  
Reliable 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 Basics  
130; Real-World Acoustics; Types of Synthesis  
Audio Sources: Oscillators, Noise, and More  
VCAs, 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

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## 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 Comprehensive*

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