

 DISK INCLUDED
DO NOT DEMAGNETIZE

MODERN SIGNALS^{AND} SYSTEMS

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This book contains an elementary, well-integrated, and comprehensive exploration of the basics of signal theory, and of both the time- and frequency-domain analyses of systems. You will find a wealth of examples illustrating practical applications.

The discrete and continuous-time cases are presented in parallel, at times in a two-column format for easy comparison and understanding. The book also offers coverage of:

- Linear systems
- Stability of convolution systems
- Harmonic and periodic inputs
- Frequency response of various system models
- State description of systems
- Expansion theory
- Fourier series analysis and transforms
- The z- and Laplace transforms

To put the material into a real-world context, the book examines applications in separate chapters of signal processing, digital filtering, communication systems, and automatic control systems.

Included with each book is application software containing a powerful interpreter named SIGSYS that offers a wide and flexible range of operations to generate and handle signals, such as Fourier transformation, convolution, and the integration of differential equations. In addition, graphical support provides instantaneous visualization.

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