



Direct-Detection LADAR Systems (SPIE Tutorial Text Vol. TT85) (Tutorial Texts in Optical Engineering Series)

Richard D. Richmond, Stephen C. Cain

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This text is designed to introduce engineers-in-training to the basic concepts and operation of 3D imaging LADAR systems. The book covers laser range equations; sources of noise in LADAR signals; LADAR waveforms; the effects of wavefront propagation on LADAR beams through optical systems and atmospheric turbulence; algorithms for detecting, ranging, and tracking targets; and comprehensive system simulation.

Computer code for accomplishing the many examples appearing throughout the text is provided. Exercises appear at the end of each chapter, allowing students to apply concepts studied throughout the text to fundamental problems encountered by LADAR engineers. Also included is a CD-ROM with the MATLAB code from the examples. **Table of Contents**

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