

Elements of a Communication System

- The basic elements are : Source, Transmitter, Channel, Receiver and Destination.

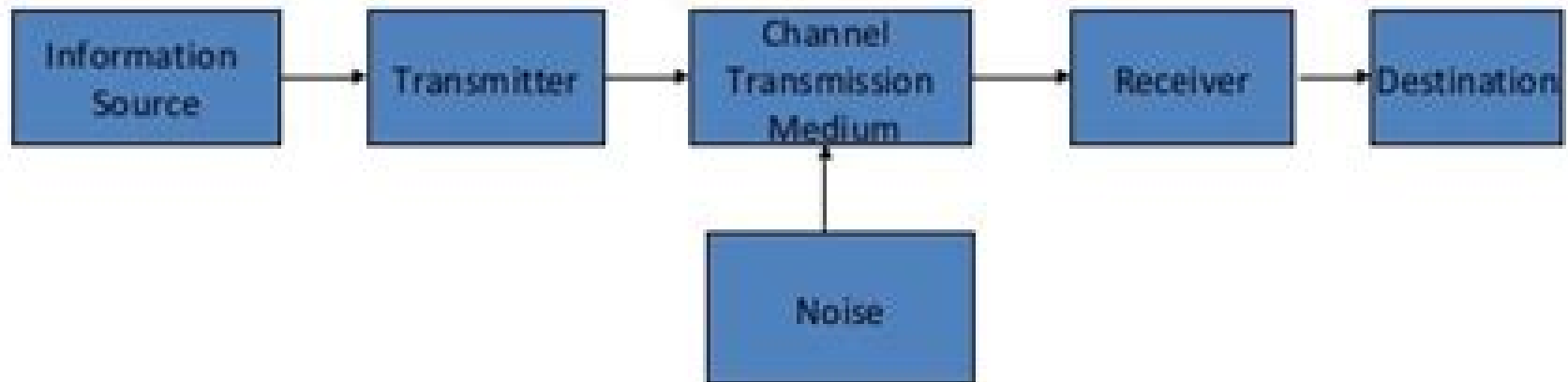


Figure : Basic Block Diagram of a Communication System

Introduction To Communication Systems

John B. Thomas



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An Introduction to Communication Systems Allan R.

Hambley, 1990-01

An Introduction to Communication Theory and Systems John B. Thomas, 2012-12-06 This book was written as a first treatment of statistical communication theory and communication systems at a senior graduate level The only formal prerequisite is a knowledge of elementary calculus however some familiarity with linear systems and transform theory will be helpful Chapter 1 is introductory and contains no substantial technical material Chapter 2 is an elementary introduction to probability theory at a nonrigorous and non abstract level It is essential to the remainder of the book but may be skipped or reviewed hastily by any student who has taken a one semester undergraduate course in probability Chapter 3 is a brief treatment of random processes and spectral analysis It includes an introduction to shot noise Sections 3.14-3.17 which is not subsequently used explicitly Chapter 4 considers linear systems with random inputs It includes a considerable amount of material on narrow band systems and on the representation of random processes Chapter 5 treats the matched filter and the linear least mean squared error filter at an elementary level but in some detail Numerous examples are provided throughout the book Many of these are of an elementary nature and are intended merely to

illustrate textual material A reasonable number of problems of varying difficulty are provided Instructors who adopt the text for classroom use may obtain a Solutions Manual for most of the problems by writing to the author

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