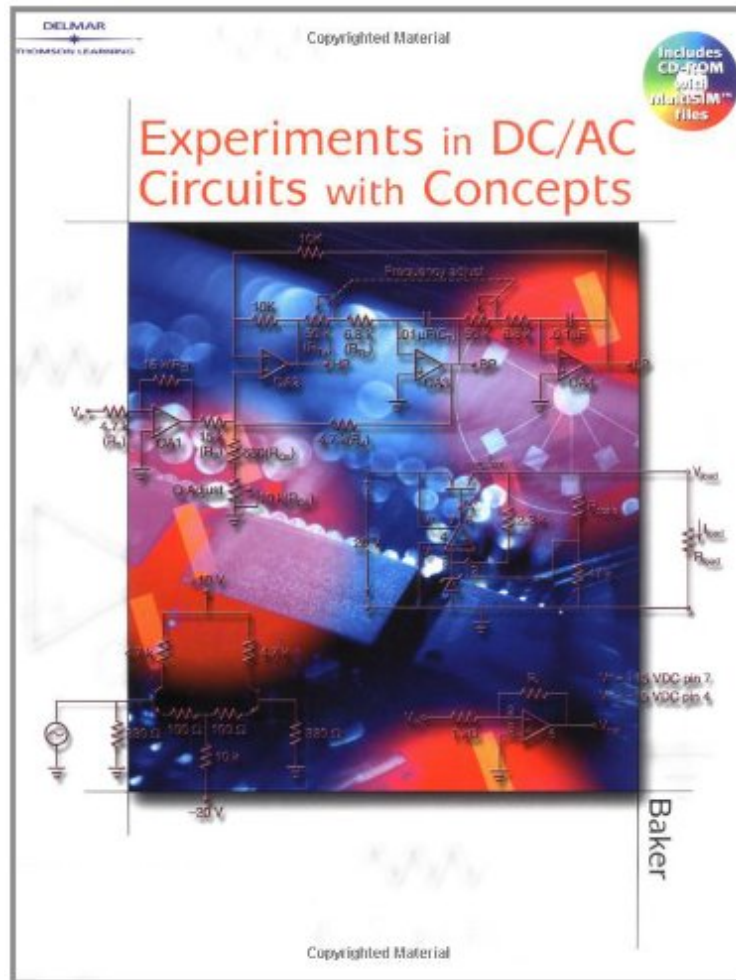


Experiments In DC/AC Circuits With Concepts

Timothy Baker

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#1583235 in Books Cengage Learning 2001-10-15 Original language: English PDF # 1 10.62 x .33 x 8.261, .77 #File Name: 0766840352128 pages | File size: 41.Mb

Timothy Baker : Experiments In DC/AC Circuits With Concepts before purchasing it in order to gauge whether or not it would be worth my time, and all praised Experiments In DC/AC Circuits With Concepts:

Designed for use as a companion to any core DC/AC electronics book, this lab manual contains 35 experiments that build upon each other to guide users from basic concepts to more complex circuit analyses. Beyond simple data collection, each lab promotes critical thinking skills by requiring users to make their own predictions about the behavior of a circuit, test them, and draw conclusions by comparing their hypotheses to actual lab results. A series of questions at the end of each experiment leads users through the process of drawing logical conclusions about circuit behavior that are grounded firmly in their understanding of basic electronics principles. In addition, each experiment provides continuous reinforcement of DC/AC electronics concepts. Necessary components for all experiments are

readily available in most electronics labs, and component values may be substituted if needed without altering the concept of the experiment.

Scientific Notation and Symbols Open and Closed Circuits Current Voltage Resistance Power Resistance in Series Current in Series Voltage in Series Power in Series Voltage Sources in Series Voltages Measured to a Ground Reference Internal Resistance of a Voltage Source Resistance in Parallel Voltage in Parallel Current in Parallel Power in Parallel Resistance in a Series-Parallel Circuit Current in a Series-Parallel Circuit Voltage in a Series-Parallel Circuit Wheatstone Bridge Loaded Voltage Divider Thevenin's and Norton's Equivalent Circuits Mesh Current and Superposition Measure DC Voltage with an Oscilloscope Transformers Series and Parallel AC Circuits Series and Parallel RL Circuits Series and Parallel RC Circuits RLC Circuits and Resonance Low-pass and High-pass Filters Band-pass and Band-stop Filters