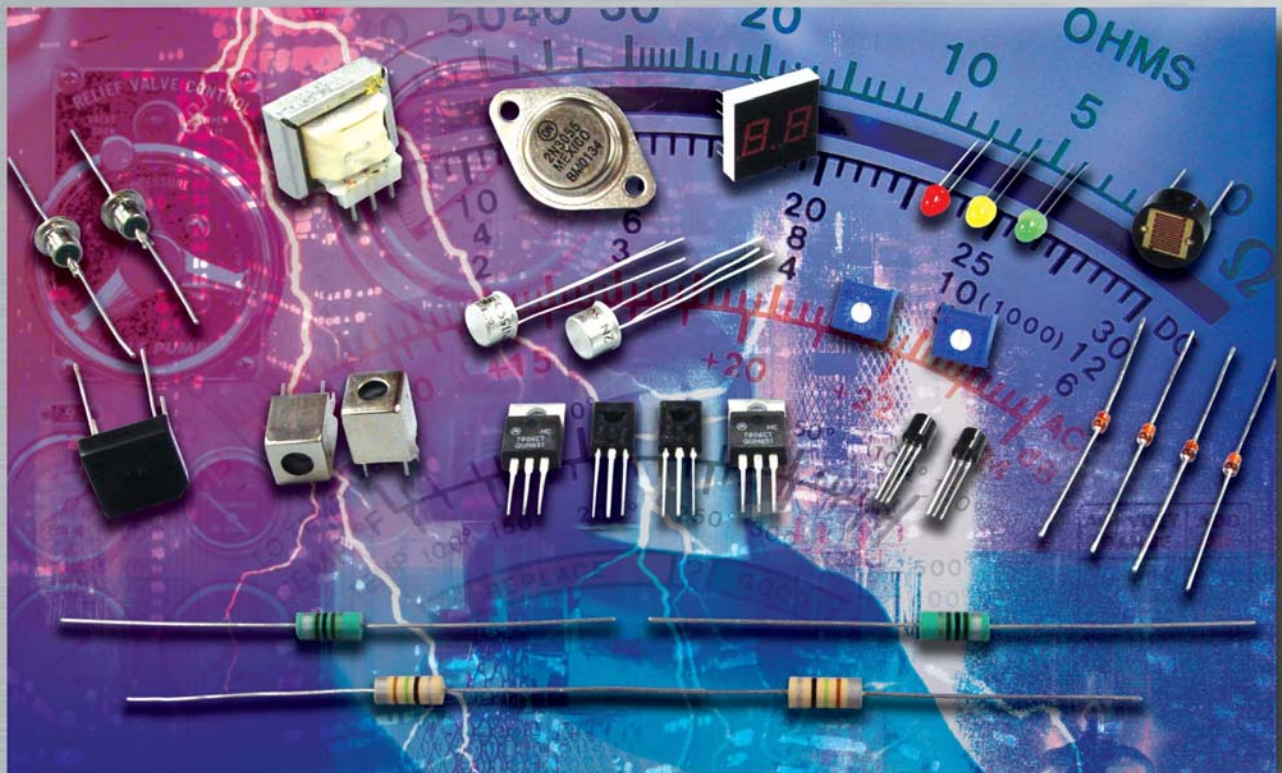


# Analogue Circuits



## Nothing "Semi" About E & L-Nida's Semi-Conductor

Semi-Conductors, Solid State Devices, and Transistor Circuits are just some of the terms used to describe analogue circuit courses. The E & L-Nida Analogue Circuits courseware is one of the most comprehensive analogue teaching packages on the market today. From the introduction of diodes to the complex principles of operational amplifiers, the modular design of E & L-Nida's Analogue Circuits courseware provides just the right level of analogue electronics education to meet your programme needs.

The E & L-Nida Analogue Circuits courseware is provided as computer based instruction which is ideal for classroom or distance learning environments. E & L-Nida Analogue Circuits courseware provides students with theoretical concepts that are immediately reinforced by experiments on real-world circuitry. In-depth topics of transistor circuits, trigger devices, pulse circuits, amplifiers, oscillators, power supplies, and RF electronics are all part of the extensive E & L-Nida Analogue Circuits course.



# E & L-Nida Analogue Circuits

The E & L-Nida Analogue Circuits courseware is designed in a computer based format to provide your students with a comprehensive, interactive course that makes learning about semi-conductors and discrete components interesting. The courseware provides experiments and troubleshooting scenarios that align with the E & L-Nida Model 1403 (Series) of Analogue Circuits Experiment Board Sets. The board sets support different levels of analogue experiments from basic level to University level. For determining which board set is right for your Analogue Circuits course, refer to the E & L-Nida CAI Course Chart.



## Topics

### Diodes & Diode Circuits

Introduction to Diodes, Junction Diodes  
Diode Limiters, Diode Clampers, Vacuum Tubes

### Transistor Circuits

Introduction to Transistors, Transistor Operation  
Common Emitter, Collector, & Base Amplifiers

### Power Supplies

Introduction to Diode Rectifiers, Bridge Rectifiers  
Full & Half Wave Rectifiers, Zener Diodes  
Voltage Regulator Operation & Troubleshooting  
IC Regulator & Voltage Doubler Operation

### Transistor Amplifiers

Multistage Transistor & RC Coupled Amplifiers  
Push-Pull, FET, & MOSFET Amplifiers  
Amplifier Operation & Troubleshooting

### Transistor Oscillators

Sine Wave, Non-Sine Wave, & Blocking Oscillators  
Hartley, Colpitts & RC Phase Shift Oscillators  
Crystal Controlled Oscillators, Sawtooth Generators

### Transistor Pulse Circuits

Astable, Monostable, & Bistable Multivibrators  
Schmitt Trigger Operation & Troubleshooting

### Trigger Device Circuits

Trigger Devices, Four-Layer Diodes  
SCR Trigger & Power Circuits, Triacs & Diacs  
Programmable Unijunction Transistors

### Operational Amplifiers

Operational Amp Operation & Troubleshooting

### RF Electronics

AM Receiver Operation & Troubleshooting

## Supporting Hardware

• Model 130E Test Console

• Model 4050 Test Instrument Module

• Model TD2000 Tec Dec

• Model 140 (Series) Analogue Circuits Experiment Boards Set

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