

# Linear Circuits



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*An introduction to linear electric circuit elements and a study of circuits containing such devices.*

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# Lab Demo: Introduction to Electrical Components

*Demonstrate basic instruments and components.*



## Module 2: Resistive Circuits

- ⦿ Resistance
- ⦿ Kirchhoff's Laws
- ⦿ Resistors
- ⦿ Superposition
- ⦿ Systematic Solution Methods
- ⦿ Maximum Power Transfer
- ⦿ Application: Sensors

# **Lab Demo: Introduction to Electrical Components**

# Summary

- ◎ Physical resistors
  - Color codes
  - Tolerances
- ◎ Digital Multimeter (DMM)
  - Measure voltage, current, resistance
- ◎ Protoboard (breadboard)
  - Ease of building circuits

## Next Lesson

- ⦿ Resistor connections in real circuits

# Credits

Thanks to Marion Crowder (School of Electrical and Computer Engineering at Georgia Tech) for video-taping the experiment

DMM used in experiment is manufactured by Fluke Corporation