

# Tronix Basic Electronics Labs

Learn Basic Digital Electronics

Great for  
Middle School, High School,  
Tech School & College!

Labs come with all electronic parts, and Solderless Circuit Board.

Only  
**\$42.95 ea**  
Educator Discount Price  
# TL200

## TRONIX 2 Basic Digital Lab



<http://www.gssteched.com/TRONIX2.html>

Tronix 2 Lab includes:

- #TM202-3 Lab manual - \$16.95 each  
ISBN 0-9712340-1-9
- #TP202 Parts Kit - \$18.95 each
- #CB222 Solderless Circuit Board - \$7.85 each

Also Available:

- #CD-TL2 Interactive Software:  
\$99 per computer
- #TL2-WB Student Workbook - \$4.98

This hands-on lab will give the student a feel for what is digital electronics. For those who want to go on, this is a great continuation to basic electronics.

It comes with a beautiful book, parts and solderless circuit board to help you build 39 challenging experiments. Learn to combine Logic Gates to create clocks, flip-flops, memories and timers! Learn how to use digital displays, decoders and multiplexers; or how to read and use Timing Diagrams, use Schmidt Trigger, and even how to convert Binary to Digital and the functions of an Operational Amplifier a long with much much more.

Each experiment comes with a complete lesson with drawings and diagrams to explain the basic concepts of digital electronics.  
NO soldering required  
Educators: Call for Free Evaluation Copy

### 39 Lessons and Experiments - Table of Contents

L01 - Digital vs Analog	L21 - 8-Output Multiplexer Circuit
L02 - Digital Terminology	L22 - Digital 'Chasing Lights' Circuit
L03 - Solderless Circuit Board Assembly	L23 - Visual 'Logic Probe' Circuit
L04 - LED Logic Indicator Circuit	L24 - 'Touch-Activated' Pulse Generator
L05 - 'AND' Logic Gate w/ discrete components	L25 - 555 Pulse Train Generator
L06 - 'OR' Logic Gate w/ discrete components	L26 - Yes/No Decision Maker Circuit
L07 - 'NOT' and 'YES' Logic Circuits	L27 - Yes/No/Maybe Circuit
L08 - 'NOR' Logic Gate	L28 - Stop-Action Timing Circuit
L09 - 'NAND' Logic Gate	L29 - Digital 'Touch-Activated' Switch
L10 - 2 'NAND' Logic Gate Clock	L30 - Digital 'Stepping Touch-Activated' Switch
L11 - 'NAND' Logic Gate Timer	L31 - Digital 'Light-Activated' Counter Circuit
L12 - 2 'NAND' Logic Gate Memory Circuit	L32 - 'Winning Number' Generator
L13 - 555 Timer IC and formulas	L33 - Digital Dice Circuit
L14 - Binary Counter Circuit (MOD16)	L34 - Introduction to Flip-Flops
L15 - Decade Counter Circuit (MOD10)	L35 - 'D' Flip-Flop Circuits
L16 - 2,4,8,26 Divider Circuit	L36 - 'J-K' Flip-Flops
L17 - Digital Readout LED display	L37 - Schmidt Trigger
L18 - Digital Readout Decoder Chip	L38 - Shift Registers
L19 - Digital Counter with 7-Segment Chip	L39 - OP AMP Circuit
L20 - Digital UP-DOWN Counter	

# Multimeter Module

Learn Multimeters

Only  
**\$109.90 ea**  
Educator Discount Price  
#MM1

## "How to use a Multimeter" Module

#MM1

<http://www.gssteched.com/mm1.html>



The module comes with a 55-page Lab Manual and includes hands-on experiments.

Learn how to test for Continuity, measure DC voltages, measure AC voltages, measure resistance and Ohms, etc. You will test transformer voltage, test a fuse, test a light bulb, test a speaker, test a diode, test NPN and PNP transistors and measure the strength of batteries.

Your students will become very proficient in the use of a multimeter and this will help them throughout their experience in the field of electronics. This is a perfect module for future engineers, electricians, and technicians. Recommended for grades K6-12.

Quizzes are included to measure the student's progress.

Time needed to complete: 5 class periods of approx. 1 hour each. Comes complete with all equipment necessary, includes a Deluxe Multimeter with stand. All components are reusable.



### Additional Multimeters

Only  
**\$10.90 ea**

Digital Multimeter  
Part # RP-DMR-1000

<http://www.gssteched.com/DMR-1000at.html>

Only  
**\$38.38 ea**

Deluxe Full-Function Digital  
Multimeter Kit/Trainer  
Part # E-M2666K

<http://www.gssteched.com/em2666k.html>



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