



# American Basic Science Club's Amazing MASTER LAB!

## You Get ALL the Equipment on this Page in 8 Monthly Kits

SEND **\$200** WITH COUPON ONLY      PAY **\$395** PLUS COD POSTAGE FOR EACH OF THE MASTER LAB'S 8 MONTHLY KITS. YOUR SATISFACTION OR MONEY BACK... CANCEL AT ANY TIME — NO OBLIGATION.

### ELECTRONICS LAB AND RADIO COURSE

**SHORTWAVE AND BROADCAST RADIOS.** Three-tube regenerative circuit. Uses 115V AC house current. Complete with Headset.

**CARBON MICROPHONE** and two-stage **AUDIO AMPLIFIER**...

**RADIO TRANSMITTER** for code or voice.

**DC POWER SUPPLY** (Power Transformer, Vacuum Tube Rectifier and 20-20 mfd. capacitor filter circuit) converts home AC to the DC required for electronics.

**STROBE LIGHT**—oscillator controlled Neon Lamp "Freezes" the motion of vibrating or rotating objects and checks RPM.

**RIPPLE TANK WAVE GENERATOR** with variable frequency. Produces standing waves, nodal lines, etc. invaluable in understanding the wave theory.

**CODE PRACTICE OSCILLATOR** with manual.

"Steps to a Ham License." All you need to pass the FCC Ham License Exam.

**SIGNAL TRACER and CONTINUITY TESTER.** Valuable trouble-shooting tools. Use explained in accompanying manual. "Simplified Radio-TV Servicing" plus... **WHEATSTONE BRIDGE** (Measures Resistance)... **MAGNETIZER AND DEMAGNETIZER**... **ELECTROMAGNETIC RELAY**... **BURGLAR ALARM**... **PROXIMITY DETECTOR**... **EXTINCTION VOLTMETER**... **GALVANOMETER**... **THERMOCOUPLE**... **SOLENOID COIN TOSSEY**... and many more!

Graphic demonstrations with **VACUUM TUBES, TRANSFORMER, POTENTIOMETER, CAPACITATORS,** and other electronic components make it indelibly clear what they do and how they do it. Vivid experiments illustrate the **ELECTRON THEORY, DC and AC CHARACTERISTICS, INDUCTANCE, REACTANCE, CAPACITANCE, RECTIFICATION, AMPLIFICATION** and other electronic principles. The most exciting way to a solid background in electronics. **BASIC ENOUGH FOR BEGINNERS — REWARDING ENOUGH FOR THE "PROS."**

A VALUABLE ELECTRONICS LAB with quality parts by RCA, GE, Pyramid, Centralab, Trim, Stockpole, Cinch, Mallory and other reliable manufacturers. Retail value of parts alone is over \$25.00. Includes hardware, hook up wire, solder and a bonus **ELECTRIC SOLDERING IRON.**

(Available as a Separate Unit for \$17.80 Postpaid)

### ANALOG COMPUTER

Electronically multiplies, divides, calculates powers, roots, logarithms. The problem is set up on the scales of two linear potentiometers and the answer is found by listening for the null point on the third potentiometer. **More educational! More practical!** than similar computers that sell for several times the price! Has Trig, Squared and Log Scales. Accompanying manual covers **Computer Theory and use.**

(Available as a Separate Unit for \$4.95 Postpaid)

### PHOTOELECTRONIC RELAY

**COMPLETE PHOTO-RELAY UNIT.** Supersensitive Crystal Photocell, rugged Electronic Amplifier, Relay, large 1 1/2" diameter Condensing Lens, Mounting Board Cabinet, Hardware, Hookup Wires, Solder and complete instructions for easy assembly. Features automatic "on and off" or holding circuit operation. Sensitivity Control. Plug-in Outlet for controlled circuit. Use it for door announcers, counters, alarms, day-night light switches, etc. Operates on 115V AC. A basic unit for many exciting experiments.

(Available as a Separate Unit for \$7.95 Postpaid)

### 35MM AND MICRO-PROJECTOR

Sturdy black steel lamp housing with inner chimney and baffle for cool operation. **140 Watt GE Projection Lamp; Large Twin Condensing Lenses** for extra brightness. Rotary Switch; 6 Foot Cord. Included is an extra projection assembly that makes it a microprojector as illustrated.

(Available as a Separate Unit for \$6.95 Postpaid)

### SURVEYOR'S TRANSIT AND RANGE FINDER

A practical instrument for laying out foundations, ditches, fences, etc. **6X erect image Telescope.** Vertical arc numbered 50° to 0° to 50°. Horizontal circle marked in single degrees. **Venier** reading for both scales. **Leveling Head** with circular **Spirit Level** and 3 **Adjusting Thumb Screws.** Clamps under Head hold the wooden legs of the Tripod (legs not included). Telescope Eyepiece fitted with **Range Finder Reticle** that enables you to measure remote heights and distances. **Complete instructions** for running levels, elementary surveying, range-finding, etc.

(Available as a Separate Unit for \$5.95 Postpaid)

### TELESCOPE AND MOUNT

**22X and 44X,** Astronomical and Erect Image. Extends to 30" length. Five ground and polished Lenses. **Ramsden Eyepiece.** Sturdy **Equatorial Mount** makes it easy to follow the movement of heavenly bodies. Mount has fittings for wooden legs that complete the tripod (legs not included). A **serviceable telescope** for use on field trips, astronomy, etc.

(Available as a Separate Unit for \$4.95 Postpaid)

### MICROSCOPE

**100X, 150X and 200X.** Precision ground and polished Lenses. **Ramsden Eyepiece** gives large field. **Substage Illuminator** with Condensing Lens provides easy viewing. **Adjustable Polarizing Filters** give a jewel-like brilliance to crystals, grains, etc. Slides and cover glasses included with **Manual on Microscopy.**

(Available as a Separate Unit for \$5.95 Postpaid)

### ATOMIC ENERGY LAB

**ATOMIC CLOUD CHAMBER WITH PROJECTOR ILLUMINATOR.** See the vapor trails of alpha and beta particles, and of cosmic rays from outer space. **SPINTHARISCOP** gives a dramatic magnified ring-side view of exploding atoms. **ELECTROSCOPE**—metal housed with **Scale** and **Magnifying Viewer.** Measures background radiation and tests sample sources. **SAFE RADIOACTIVE MATERIALS.** Alpha Source in handy container and Uranium Ore (U<sub>3</sub>O<sub>8</sub> 229%). Full instructions and explanations open up the fascinating field of nuclear physics.

(Available as a Separate Unit for \$5.95 Postpaid)

### WEATHER STATION

**CUP ANEMOMETER** and **WINDVANE** give remote readings of wind speed and direction on indoor Mounting Board (lead-in wire not furnished). **BAROMETER, SLING PSYCHROMETER** (measures relative humidity), **RAIN GAUGE** (measures 1/100th of an inch), **CLOUD CHART, WEATHER MAP.** Complete set-up for the amateur meteorologist, including Forecasting Manual.

(Available as a Separate Unit for \$6.95 Postpaid)

### PHOTO DARKROOM LAB

**Complete Darkroom Set-up: ENLARGER, CONTACT PRINTER, 3 Plastic Developing Trays, Safe Light, 2 Thrometers, Film Clips, Developing Chemicals, Printing and Enlarging Paper—** and a **Darkroom Handbook.** Everything you need to develop negatives, make prints and enlargements.

(Available as a Separate Unit for \$8.95 Postpaid)

### ULTRAVIOLET LAMP

**140 Watt filter type UV LAMP** in heavy metal cabinet. 6 Foot Cord, Rotary Switch. Produces dazzling color effects with invisible black light. Has many uses in the fields of Mineralogy, Crime Detection and Science. Accessories include **Invisible Ink, Tracer Powder, Fluorescent Crayons,** and full instructions on its many applications.

(Available as a Separate Unit for \$5.95 Postpaid)

### SPECTROSCOPE

Analyze the spectra of glowing gases. See and identify the Fraunhofer Lines. Measure the wave length of light rays. A quality instrument featuring an **easy-to-read built-in scale** and a **powerful condensing system** for a bright spectrum. Equipment includes an **Alcohol Burner** and a **2 Watt Neon Spectral Lamp.** Full instructions cover theory and use.

(Available as a Separate Unit for \$5.95 Postpaid)

### LIGHT BEAM TRANSMITTER-RECEIVER

The **TRANSMITTER** consists of a **Light Source, a Modulating Reflector Diaphragm** and an **Optical Projection System.** The **RECEIVER** is a **Two-Stage Audio-Amplifier,** controlled by a **Photoelectric Cell, Sound Waves** (voice, music, etc.) vibrate the reflector diaphragm and so modulate the projected light beam. A **Condensing Lens** mounted in the front of the Receiver Cabinet catches the light and focuses it on the photocell which modulates an electric current that is amplified and reproduces the original sound waves in the headphones. A fascinating unit that lends itself to many imaginative experiments.

(Available as a Separate Unit for \$14.95 Postpaid)

## 8 KIT MASTER LAB Includes ALL the Equipment for ALL the Above...only \$3360

SEND **\$200** WITH COUPON ONLY      PAY **\$395** PLUS COD POSTAGE FOR EACH OF THE MASTER LAB'S 8 MONTHLY KITS. YOUR SATISFACTION OR MONEY BACK... CANCEL AT ANY TIME — NO OBLIGATION.

### HOW IS IT POSSIBLE?... A GOOD QUESTION!

All the above equipment, as separate units, adds up to over \$1000.00. How can the 8 kit Master Lab have it all for only \$33.60?

The answer is in the versatile, multi-purpose equipment. For example: the 35MM Projector quickly and easily converts into the housing for the Ultraviolet Lamp, Spectroscope, Photo Enlarger, Cloud Chamber Illuminator, etc. Similarly, the Surveyor's Transit Head doubles as an Equatorial Mount for the Telescope. The unique Light Beam Transmitter-Receiver is made up of the two stage Audio-Amplifier of the Electronics Lab and parts of the Slide Projector and Photoelectric Units. Such multi-purpose use makes it possible for the Master Lab to provide a wide range of practical equipment at a fraction of the customary cost. Multi-purpose design is not used where it would be impractical: for the permanently mounted weather instruments, for example.

#### KIT-A-MONTH OR ALL AT ONCE

The Master Lab may be received either on the kit-a-month plan, or all 8 kits in one shipment (see coupon). You may start out on the kit-a-month plan and change at any time. For example: if, after having received 3 kits, you decide you would like the remaining 5 all at once, you would send \$19.75 (5 x \$3.95) for full payment, postage paid. We suggest you start with the kit-a-month plan. It is preferred by many.

#### SEPARATE UNITS ALL GOOD BUYS

Although we strongly recommend the complete Master Lab — you can order any of the individual units and be sure that it is the best buy in its field. Nowhere else can you get a Photo Lab with Enlarger, Contact Printer, and all the other accessories for only \$8.95, or a practical Transit for only \$5.95. Similarly, all the units are priced far below competitive items of comparable quality.

#### DEVELOPED BY TOP SCIENTISTS

The Master Lab was developed with the Southwest Research Institute of San Antonio, Texas, a non-profit public service organization, nationally known as the center of scientific activity in the Southwest. Its varied programs range from polar expeditions to high temperature experiments for missile research. The Master Lab is the result of the enthusiastic efforts of top scientists of this highly regarded research organization.

#### ACCLAIMED BY EDUCATORS

"You offer a range of experiments usually performed only in the better high school and college laboratories. The number of concepts presented, and the clarity and concreteness of their development is amazing."

R. M. HELM, Prof. of Physics  
East Carolina College, Greenville, N. C.



Order MASTER LAB Today  
Get **MYSTERY SHOCK BOX**  
with your first kit!

### MASTER LAB A REAL SCIENCE COURSE

The 8 Instruction Manuals and 6 Auxiliary texts are Expertly Written, Clearly Illustrated, Excitingly Different... over 480 pages... more than 270 illustrations.

**WITHOUT PREVIOUS EXPERIENCE** you can build more than 120 projects and gain a VALUABLE SCIENCE BACKGROUND.

Actual Use is the Only Way to Appreciate the MASTER LAB! Order Yours Today on 10 Day Approval. See for Yourself!

You Will be **SURPRISED! AMAZED! DELIGHTED!**

#### MAIL COUPON TODAY

All Orders on 10 Day Approval — Your Satisfaction or Your Money Back

- Send me the complete Master Lab in 8 monthly kits. I enclose \$2.00 and will pay \$3.95 plus COD postage on receipt of each kit. I may cancel unshipped kits at any time.
- Send me complete Master Lab (all 8 kits) in one shipment I enclose \$33.60 Full Payment, Postage Paid.
- Send me only the \_\_\_\_\_ Unit. I enclose \$ \_\_\_\_\_, Full Payment, Postage Paid.

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY & STATE \_\_\_\_\_

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