# that make the best kits....

#### KITS THAT FIT

Heathkit chassis are precision punched to fit the quality parts supplied. The grey crackle aluminum cabinet and the two color panels are die punched to assure proper fitting.

Many builders have written marveling at the ease with which assembly can be accomplished.

The chassis are specially engineered for easy assembly and wiring — there are no small tight corners which cannot be reached — the ends of the chassis are left open in order that installation of parts and soldering can be done with both hands.

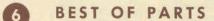


#### PRECISION PARTS

Wherever required, the finest quality 1% ceramic resistors are supplied. These require no aging and do not shift. No matching of common resistors is required. You find in Heathkit the same quality voltage divider resistors as in the most expensive equipment.

The transformers are designed especially for the Heathkit unit. The scope transformer has two electrostatic shields to prevent interaction of AC fields.

These transformers are built by several of the finest transformer companies in the United States.



You will find many famous names on the parts in your Heathkit. Mallory switches and filter condensers, Chicago Transformer Corporation and Electrical Assembly Transformers, Centralab Potentiometers, Belden Cable, IRC & Allen Bradley resistors, G.E. tubes, Cinch and Amphenol sockets with silver plated contacts, Defiance variable condensers, Eby binding post and many other quality parts. The finest of parts are used to assure long trouble-free service from Heathkits.



#### MODERN STYLING

Heathkits have brought a new conception of beauty to laboratories and service benches.

Many organizations have standardized on Heathkits to make their shops appear attractive and uniform.

The panels are produced in grey and maroon and the modern streamline aluminum handles give the instruments a pleasant professional appearance.

There is no waste space or false effort to appear large in Heathkits — space on service benches is at a premium and the size of Heathkit instruments is kept as small as is consistent with good engineering design.



#### COMPLETE KITS

When you receive your Heathkit you are assured of every necessary part for the proper operation of the instrument.

Beautiful cabinets, handles, 2 color panels, all tubes, test leads where they are a necessary part of the instrument, quality rubber line cords and plugs, rubber feet for each instrument, all scales and dials ready printed and calibrated. Every Heathkit is 110V 60 cy. power transformer operated by a husky transformer especially designed for the job.



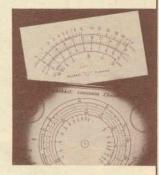
#### INSTRUCTION MANUALS

Everyone is pleased at the thorough instructions covering the assembly of each Heathkit instrument. Every detail of the assembly is covered, together with sections on the use of the instrument and trouble shooting instructions in case of difficulty. Actual photos of the assembled instrument enable fast and accurate assembly, clear schematics and pictorial diagrams of the confusing parts such as rotary switches enable the wiring to be completed quickly.



No charts or calculations are necessary to use any Heathkit properly. All scales are simply and plainly marked.

The operator instantly knows the proper use of the instrument and can proceed confidently. No multiplication is required as each scale is calibrated independently of the others.

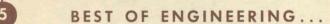


# 9

# IDEAL FOR SCHOOLS Heathkits have been adopted as standard equipment of many of the largest universities and called the largest universities and called the largest plus the fact that

equipment of many of the largest universities and colleges. The low cost plus the fact that the students learn by actual assembly make them ideal training mediums. Many high schools and small colleges are finding that they too can have a modern physics and electronics laboratory by using Heathkits.

Some of the largest technical schools recommend Heathkits to their students as the best means of securing the necessary equipment to start their own shops.



Heathkits are the result of many years experience in the test equipment field.

Heathkit oscilloscopes have been under development and test since 1943 and most other instruments now being produced have had over two years of thorough testing.

As proof of their design, Heathkits have been adopted by many of the largest Universities and laboratories in the United States. Thousands of engineering students are receiving their training using Heathkits.

#### 10 WHY NOT BUILD YOUR OWN...

The great strides made in electronics during the war have made it hard for everyone to keep abreast of new developments. By actually assembling modern test equipment knowledge is gained in the most practical manner. Further a complete knowledge of the instrument allows greater flexibility of use and many possible uses suggest themselves.

Lastly with the cost of everything shooting upward any means of eliminating costs is welcomed. This reduction is a remarkable saving, as can be seen by comparing Heathkit prices with comparable built up test equipment.

HEATH COMPANY BENTON HARBOR, MICH.



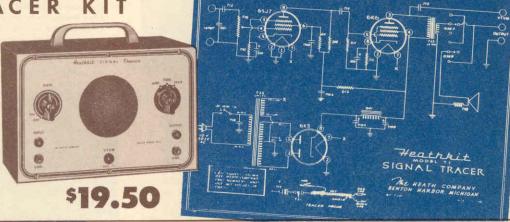
Every shop needs a good signal generator. The Heathkit fulfills every servicing need, fundamentals from 150Kc. to 30 megacycles with strong harmonics over 100 megacycles covering the new television and FM bands. 110V 60 cycle transformer

operated power supply.
400 cycle audio available for modulation or audio testing. Uses 6SN7 as RF oscillator and audio amplifier. Complete kit has every part necessary and detailed blueprints and instructions enable the builder to assemble it in a few hours. Large easy to read calibration. Convenient size 9" x 6" x 43/4". Shipping weight 41/2 lbs.

Nothing ELSE TO BUY

#### HEATHKIT SIGNAL TRACER

Let a Heathkit Signal Tracer do the tedious watching of intermittents while you go on to other profit-able jobs. Follow the signal from the antenna to the defective part in a matter of seconds. Triples the detective part in a matter of seconds. Imples the repairs per man in many shops. A Heathkit Signal Tracer Kit pays for itself in a matter of days of operation. Locates faults immediately. Internal amplifier available for speaker testing and internal speaker available for amplifier testing. Connection for VTVM on panel allows visual tracing and gain measurements. Also tests phonograph pickups, microphones, PA systems, etc. Frequency range to 200 Mc. Complete ready to assemble. 110V 60 cycle transformer operated. Supplied with 3 tubes, diode probe, 2 color panel, all other parts. Easy to assemble, detailed blueprints and instructions. Shipping weight 10 lbs.



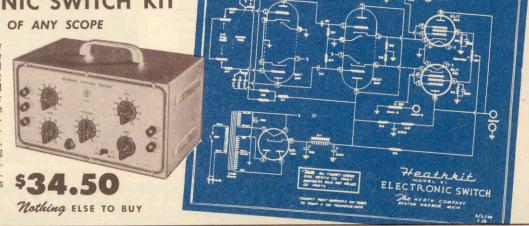
# HEATHKIT SINE AND SQUARE AUDIO GENERATOR \$34.5 Nothing ELSE TO BUY

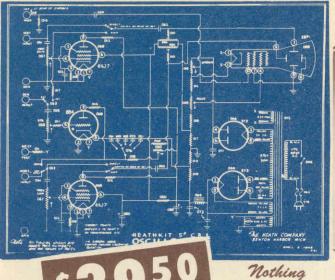
Experimenters and servicemen working with a square experimenters and servicemen working with a square wave for the first time invariably wonder why it was not introduced before. The characteristics of an amplifier can be determined in seconds compared to several hours of tedious plotting using older methods. Stage by stage, amplifier testing is as easy as signal tracing. The low distortion (less than 1%) and linear output (± one db.) make this Heathkit equal or superior to factory built equipment selling for three or four times its price. The circuit is the popular RC tuning circuit using a four gang variable condenser. Three ranges 20-200, 200-2,000, 2,000-20,000 cycles are provided by selector switch. Either sine or square waves instantly available at toggle switch. All components are of highest quality, cased 110V 60 cycle power transformer, Mallory F.P. filter condensers, 5 tubes, calibrated 2 color panel, grey crackle aluminum cabinet. The detailed instructions make assembly an interesting and instructive few hours. Shipping weight 13 lbs.

#### Heathkit ELECTRONIC SWITCH

DOUBLES THE UTILITY OF ANY SCOPE

An electronic switch used with any oscilloscope provides two separately controllable traces on the screen. Each trace is controlled independently and the position of the traces may be varied. The input and output traces of an amplifier may be observed one beside the other or one directly over the other illustrating perfectly any change occurring in the amplifier. Distortion—phase shift and other defects show up instantly. 110 Volt 60 cycle transformer operated. Uses 5 tubes (1—6X5, 2—6SN7's, 2—6SJ7's). Has individual gain controls, positioning control, and coarse and fine sweeping rate controls. The cabinet and panel match all other Heathkits. Every part supplied including detailed instructions for assembly and use. Shipping weight 11 lbs.





ELSE TO BUY SHIPPING WT. 24 LBS. **EXPRESS ONLY** 

Heathkit 5 INCH OSCILLOSCOPE

Features

- ★ Instant switching to plates or amplifier from front panel.
- Sweep generator supplying variable sweep 15 cycles to 30,000 cycles.
- \* All controls on front panel.
- ★ Cased electrostaticly shielded 110V 60 cycle power transformer.
- \* AC test voltage post on front panel.
- ★ External synchronization post on front panel.
- ★ Deflection sensitivity .65V per inch full gain.
- ★ Frequency response ± 20% from 50 cycles to 50 Kc.
- ★ Input impedance 1 Megohm and 50 MMF.

The Heathkit 5" Oscilloscope Kit fulfills every servicing need. The husky cased power transformer supplies 1100 Volts negative and 350 Volts positive. Tubes supplied are two 6SJ7 amplifiers, 884 sweep generator, two 5Y3 rectifiers, and 5BP1 or 5BP4 CR

tube. Grey crackle aluminum cabinet and beautiful grey and maroon panel. Chassis especially designed for easy assembly

An oscilloscope provides almost endless sources of experimentation in radio, electronics, medicine and scientific research.

Detailed instructions make assembly fun and instructive.

#### Heathkit VACUUM TUBE

Everything you want in a VTVM. Shatterproof solid plastic meter face, automatic meter protection in burn-out proof circuit, push pull electronic voltmeter circuit assuring maximum stability. Linear DC and AC scales. Complete selection of voltage ranges starting with 3 Volts full scale up to 1,000 Volts. Isolated DC test prod for signal tracing and measurements of voltage while instrument is in operation. An ohmmeter section accurately measuring resistance of 1/10 ohm to one billion ohms with internal battery. Extremely high input resistance 11 megohms on all ranges DC and 6.5 megohms on AC. All these features and many more are the reasons hundreds of radio and television schools are using Heathkit VTVM's and recommending them to all students. Like all Heathkits, the VTVM kit is complete, 110V 60 cy power transformer, 500 microamp meter, tubes, grey crackle cabinet, panel, test leads, 1% ceramic

precision divider resistors and all other parts. Complete instruction

VACUUM TUBE VOLTMETER

Nothing ELSE TO BUY

Shipping weight 8 lbs. manual. Better start your laboratory now,

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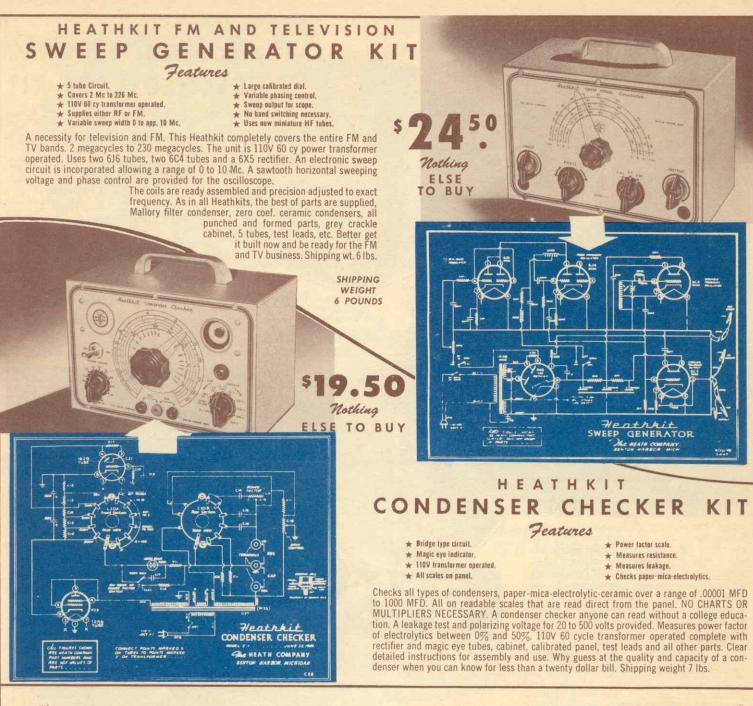
HEATH COMPANY BENTON HARBOR, MICHIGAN

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## The HEATH COMPANY BENTON HARBOR, MICHIGAN

### Why BUILD YOUR OWN

- 1. You save two-thirds in cost. With increasing prices of most everything, labor costs are an important factor. Eliminating assembly labor costs, we can offer the Heathkit Oscilloscope, VTVM and Signal Generator at a total of only \$83.50—about the cost of a factory-built VTVM alone.
- 2. You have all the fun and learn while you save. The thrill of assembling these beautiful instruments makes them seem more your own to be used with justifiable pride. Through knowledge of construction gained in assembly, better use can be made of the instruments and you can keep them in better repair if need arises.

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