There was no May Flyer. In fact the eight page April issue took so long to print, it was not mailed until the middle of May.

Last winter, we asked what kits were most desired. The answer overwhelmingly was a small convenient voltohmmeter--many of you sent suggestions for making it. The result is the Heathkit Handitester--more convenience than ever offered in a hand type instrument--beautiful modern styled Bakelite case--coureniently located hearing aid type ohms adjust control placed right under your thumb--complete AC and DC voltage ranges to 5,000 volts and the usual Heath accuracy assured by 1% ceramic precision resistore--high quality dual half wave AC rectifier--but read all about it below.

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HANDI-TESTER KIT

Beautiful streamline Bakelite case. AC and DC ranges to 5,000 Volts. 1% Precision ceramic resistors. Convenient thumb type adjust control. 400 Microampere meter movement. Quality Bradley AC rectifier. Multiplying type ohms ranges. All the convenient ranges 10-30-300-1,000-5,000 Volts. Large quality 3" built-in meter.

The instrument all of you designed--the ranges you requested--beauty you'll enjoy for years and you can assemble it in a matter of minutes--an instrument for everyone. The handiest quality voltohmeter of all. Small enough to put in your pocket yet a full 3" meter. Easy pictorial wiring diagrams eliminate all assembly problems. Uses only 1\$ precision ceramic divider resistors and wire wound shunts. Twelve different ranges. AC and DC ranges of 10-30-300-1,000-5,000 Volts. Ohms ranges of 0-3,000 ohms and 0-300,000 ohms. Milliampere ranges of 10 MA and 100 MA. Hearing aid type ohms adjust control fits conveniently under thumb for one hand adjustment. Banama type jacks for positive low resistance connections. Quality test leads included. The high quality

Bradley instrument rectifier was especially chosen for linear scales on AC. The modern case was styled by Harrah Engineering for this instrument. The 400 microampere meter movement comes already mounted in the case protected from dust during assembly. An ideal classroom assembly instrument useful for a lifetime. Perfect for radio service calls, electricians, garage mechanics, students, amateurs and beginners in radio. The only quality voltohmeter under \$20.00. An hour of assembly saves you onehalf the cost and quality parts give you a better instrument. Order today. Shipping Wt. 2 lbs.





An excellent way to get acquainted with F.M. This little super regenerative F.M. converter outperforms the big tuners. Amazing sensitivity. Rasy to build as all coils and tuning condenser are wound and adjusted. Only the assembly and

wiring necessary. Like all Heathkits, it is 110 Volt 60 cycle transformer operated. Has 2 gang tuning condenser, alide rule calibrated dial, two tubes; complete instructions including pictorial makes assembly easy and pleasant. Assemble these tumers for your neighbors at a profit. Shipping Wt. 5 lbs.

Beautiful mahogany cabinet, extra......\$3.75



Amazing quality  $\neq 1\frac{1}{2}$  db. response between 20 cycles and 17,000 cycles achieved by phase inverter and push-pull circuit together with high quality Chicago Transformer cased output transformer cased output transformer. Husky RCA cased power transformer. Has pre-amplifier stage, approximately 14 watts output. Uses 65L7 and 1619 (military type

22 Volt 6L6's). The price is made possible by use of high grade army surplus parts. Complete with four tubes, punched chassis and all parts (speaker extra). Has tone control. Shipping Wt. 20 lbs.

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## Heathkit SIGNAL TRACER & UNIVERSAL TEST SPEAKER KIT

The popular Heathkit Signal Tracer has now been combined with a universal test speaker at no increase in price. The same high quality tracer follows signal from antenna to speaker -- locates intermittents -- defective parts quicker -- saves valuable service time -- gives greater income per service hour. Works equally well on broadcast, FM or TV receivers. The test speaker has assortment of switching ranges to match pushpull or single output impedance. Also tests microphones, pickups, PA systems. Comes complete -cabinet -- 110V. 60 cycle power transformer -- tubes -- test probe -all parts and detailed instructions for assembly and use. Shipping Wt. 8 lbs.

# Fleathkit CONDENSER CHECKER KIT



Checks all types of condensers, paper-mica-electrolytic-ceramic over a range of .00001 MFD to 1,000 MFD. All on readable scales that are read direct from the panel. NO CHARTS OR MULTIPLIERS NECESSARY. A condenser checker anyone can read without a college education. A leakage test and polarizing voltage for 20 to 500 volts provided. Measures power factor of electrolytics between 0% and 50%. 110V. 60 cycle transformer operated complete with rectifier and magic eye tubee, cabinet, calibrated panel, test leads and all other parts. Clear detailed instructions for assembly and use. Why guess at the quality and capacity of a condenser when you can know for less than a twenty dollar bill. Shipping Wt. 7 lbs.

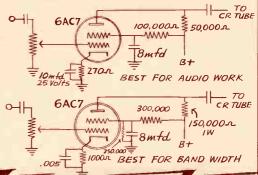
# Heathkit TELEVISION ALIGNMENT GENERATOR KIT

A television alignment generator within the price range of all. With every feature: Calibrated sweep width to 30 Mc.--main variable oscillator covers 0-110 Mc. and 165 to 220 Mc. in three bands--absorption marker for accurate identification of trace positions between 19 and 45 Mc.--10,000 to 1 step attenuator-mechanical driven inductive sweep for steady solid trace with variable phase control for single trace--AM modulation for trap and R.F. work. Every part supplied--1107 transformer-tubes--all coils wound and calibrated--all test leade--complete instruction manual. Several large television institutes have adopted Heathkit T.V. generators as standard for their schools--manufacturers are using them in production lines--get yours now and be ready to handle T.V. service calls. Shipping Wt. 20 lbs.

Nothing ELSE TO BUY

## INCREASING GAIN OF SCOPE AMPLIFIER

Several suggestions have been received from customers for increasing gain of Beathkit scopes as shown below. Both substitute a 6AC7 tube for the 6SJ7 in the amplifiers. The first increases the gain for audio purposes to .36 volt RMS per inch. The second is better for overall band width response and has a sensitivity of .25 volt RMS per inch. All parts not identified same as original.



# Heathkit VACUUM TUBE

A new model V2 Heathkit VTVM with new 200 microampere meter, four additional ranges. New model has greater sensitivity and accuracy--still the highest quality features --shatterproof plastic full view meter face, push-pull electronic voltmeter circuit, linear scales--db. scales--ll mogohm input resistance on DC--AC uses electronic rectification with 6H6 tube. All these features and still the amazing price of only \$24.50. Comes complete with cabinet--panel--three tubes--new Mallory switches--test prode and leade--1% ceramic divider resistors and all other parts. Shipping Wt. 8 lbs.

R.F. PROBE KIT NO. 309 R.F. Probe Kit uses 1N34 crystal to measure R.F. voltages with Heathkit VTVM. Will measure accurately to 100 Mc. and give good indication to 250 Mc. Reads on regular DC scales. Shipping Wt. 1 lb. \$6.50 ace, tires 50. **2450** H.V. PROBE KIT 0 Converts any Heathkit (or

#### No. 310 Converts any Heathkit (or other 11 meg input) VTVM into a kilovoltmeter. Highly insulated 1% accuracy multipliers. Reads 3,000 V. on 300 V. scale and 10,000 V. on 1,000 V. scale -a necessity for television. Wt. 1 lb. \$4.50

# Heathkit 5" OSCILLOSCOPE KIT

The Heathkit Oscilloscope incorporates the best of parts. Power transformer with proper electrostatic shield built by Chicago Transformer Corp., Mallory switches, Centra-lab controls, Kenrad tubes--all the best. The scope itself has all the features. Instant switching direct to the CR tube plates -instant switching to external synchronization -- instant switching to sweep generator or horizontal input-source of test voltage on front panel-sensitivity of 2 volt per inch deflection -- good frequency response. And it is complete, aluminum cabinet, 2 color panel, all tubes, transformers, condensers, everything including instruction manual for assembly and use. Has sweep generator covering 15 cycles to 30,000 cycles--vertical and horizontal amplifiers-high and low voltage rectifiers. An oscilloscope provides endless sources of experimentation in radio, electronics, medicine and scientific research. Better get one. Shipping Wt. 24 lbs.





## Heathkit SIGNAL GENERATOR



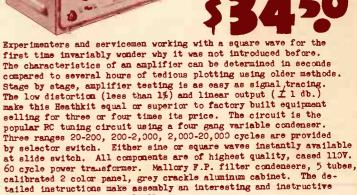
This RF Signal Generator Kit is rapidly becoming our most popular kit. Calibrated from 150 Kc. to over 100 Mc. with fundamentals to 34 Mc., it is adequate for every service need. An exceptionally complete assembly and use manual makes it a lot of fun to build and no one needs to resort to slipshod methods of alignment when a

quality Signal Generator Kit is available for less than a twenty dollar bill. The audio modulation is supplied by a relaxation type oscillator which also supplies a saw-tooth audio voltage for amplifier testing. The coils used are precision wound and factory calibrated eliminating the need for adjusting each band. The kit is complete with large calibrated scales on two color panel, grey crackle cabinet, 110V. 60 cycle power transformer, precision coils, test leads, tubes and all other parts. Shipping Wt. 8 lbs.



Now a bench 6 Volt power supply kit for all auto radio testing. Supplies 5-72 Volts at 10 Amperes continuous or 15 Amperes intermittent. A well filtered rugged power supply uses heavy duty selenium rectifier, choke input filter with 4,000 MFD of electrolytic filter.

0-15 Volt meter indicates output. Output variable in eight steps. Excellent for demonstrating auto radios. Ideal for servicing -can be lowered to find sticky vibrators or stepped up to equivalent of generator overload -- easily constructed in less than two hours. Complete in every respect. Shipping Wt. 18 lbs.



Heathkit

SINE & SQUARE WAVE

AUDIO

**GENERATOR KIT** 

few hours. Shipping Wt. 13 lbs. Heathkit

ELECTRONIC SWITCH KIT

An electronic switch used with any oscilloscope provides two separately controllable traces on the screen.

Doubles the Utility

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. Dis-tortion, phase shift and other defects show up instantly, 110 Volt 60 cycle transformer operated. Uses 5 tubes (1 6X5, 2 6SW7's, Dis-2 6517'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 of according to a control and a co instructions for assembly and use. Shipping Wt. 11 lbs.

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	3. ITEM PRICE	QUANTITY	ITEM	PRICE	
0	Heathkit Handi-Tester Kit		Heathkit Battery Eliminator Kit		
	Heathkit FM Tuner Kit		Heathkit Audio Generator Kit		
	Heathkit Amplifier Kit	- 1	Heathkit Electronic Switch Kit	'	
	Heathkit Signal Tracer Kit		Heathkit Tube Checker Kit		
	Heathkit T.V. Alignment Gen. Kit		Heathkit Impedance Bridge Kit		
	Heathkit VIVM Kit		Heathkit All Wave Radio Kit		
	Heathkit R.F. Probe Kit				
	Heathkit H.V. Probe Kit	-   '			
	Heathkit Condenser Checker Kit	_			
	Heathkit 5" Oscilloscope Kit	- 1			
	Heathkit Signal Generator Kit	Enclose	d find Check Money Order fo	e	
	World	Please Radio distory	ship C.O.D. Postage enclosed for	pounds.	



- 1. Has gear driven roller chart.
- 2. Has lever switching for speed.
- Checks every tube element.
  Large size--ll"xl4"x4" overall.
- 5. Checks new 9 pin miniatures.
- 6. Measures each element individually. 7. Complete range of filament voltages. 8. Uses beautiful shatter-proof full
- view meter.
- 9. Uses latest type lever switches.

Check the features and you will realize that this Heathkit has all the features you want. Speed--simplicity--beauty--protection against obsolescence. The most modern type of tester -- measures each element -- beautiful Bad-Good scale, high quality meter--the best of parts--rugged oversize 110V. 60 cycle power transformer--finest of Mallory switches -- Centralab controls -- quality wood cabinet -- complete set of sockets for all type tubes including spare blank for future types -- fast action gear driven roller chart uses brass gears to quickly locate and set up any type tube. Simplified switching cuts necessary time to minimum and saves valuable service time. Short and open element check. No matter what arrangement of tube elements, the Heathkit flexible switching arrangement easily handles it. Order your Heathkit Tube Checker today. See for yourself that Heath again saves you two-thirds and yet retains all the quality--this tube checker will pay for itself in a few weeks-better build it now. Complete with detailed instructions--all parts--cabinet--roller chart--ready to wire up and operate. Shipping Wt. 15 lbs.

### Heathkit IMPEDANCE KIT

\*Measures inductance from 10 microhenries to 100 henries. \*Capacitance from .00001 MFD to 100 MFD. \*Resistance from .01 ohm to 10 megohms. \*Dissipation factor from .001 to 1. \*"Q" from 1 to 1000.

An impedance bridge for everyone -- the most useful instrument of all, which heretofore has been out of the price range of serious experimenters and service shops. Now at the lowest price possible. All highest quality parts. General Radio main calibrated control. General Radio 1000 cycle hummer. Mallory ceramic switches with 60 degree indexing -- 200 microamp zero center galvangmeter -- 2 of 1% ceramic non-inductive decade resistors. Professional type binding posts with

standard 3/4" centers. Beautiful birch cabinet. Directly calibrated "Q" and dissipation factor scales. Ready calibrated capacity and inductance standards of Silver Mica, accurate to  $\frac{1}{2}$  of 1% and with dissipation factors of less than 30 parts in one million. Provisions on panel for external generator and detector. Measure all your unknowns the way laboratories do -- with a bridge for accuracy and speed.

Internal 6 volt battery for resistance and hummer operation. Circuit utilizes Wheatstone, Hay and Maxwell circuits for different measurements. Supplied complete with every quality part-all calibrations completed and instruction manual for assembly and use. Deliveries are limited. Shipping Wt. approximately 15 lbs.

## The HEATH COMPANY BENTON HARBOR, MICHIGAN

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Mothing ELSE TO BUY

radio

CABINET EXTRA

Heathkit 3-TUBE ALL-WAVE

An ideal way to learn radio. This kit is

complete, ready to assemble, with tubes and all other parts. Operates from 110V AC. Simple, clear detailed instructions make

this a good radio training course. Covers regular broadcasts and short wave bands.

Plug-in coils. Regenerative circuit. Operates loud speaker. Shipping Wt. 3 lbs.

HS30 Headphones.....per set \$1.00 22" Permanent Magnet Loudspeaker.... 1.95 Mahogany Cabinet..... 2.95

> Benton Harbor, Mich. Permit No. 273

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World Radio History

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