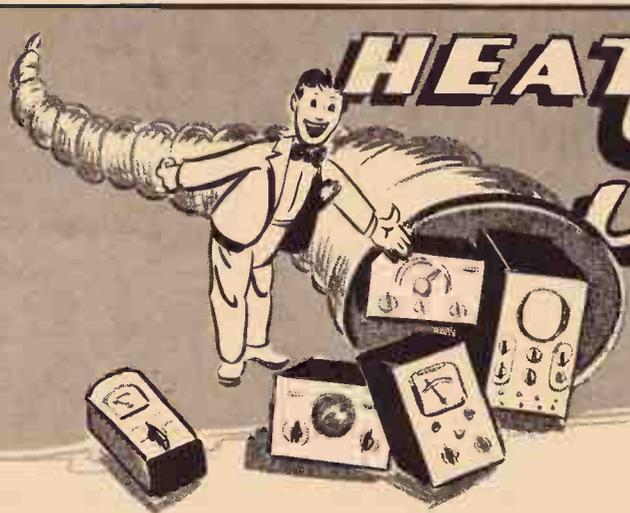


# HEATH September FLYER



There has been no Flyer since June. New Models--It has always been our policy to improve kite or change to better design as soon as the changes can be incorporated. This last six months has helped--we have been able to effect savings in purchases which are passed on to you in the form of improvements.

The oscilloscope is a good example. Last year, we designed a push-pull oscilloscope kit but would have had to price it at least \$64.50. Now, however, we are able to sell this wonderful instrument at \$39.50. (A purchase of 100,000 tubes was necessary to get the price down.)

In this scope, we have incorporated features we ourselves didn't believe possible--both vertical and horizontal amplifiers push-pull with amazing frequency response and tremendous amplification--new multivibrator sweep generator with over twice the previous range--an Allegheny magnetic alloy CR tube shield--everything you would expect in a 200 dollar oscilloscope--everything you need for TV or laboratory work. An important fact for present owners is that for very little they too can have the new push-pull

amplifiers, as a conversion kit is available for all O-3 and O-4 Heathkits.

The R.F. Signal Generator now has the two additional features many of you requested--VERNIER TUNING--and EXTERNAL MODULATION. These improve what was already an outstanding buy--here again a conversion kit is available for owners of present Model G-1.

Delivery of the new Handi-Tester Kit was delayed by failure of a spring manufacturer to meet promised delivery but all deliveries will be on schedule by the time this issue is published.

There are several excellent articles in this month's Flyer. The auto transformer is an extremely handy device around any shop. Often the ability to raise the line voltage will show up defective capacitors which are intermittent while lowering the voltage discloses oscillators which quit. The article on vibrator testing is an excellent use for your scope--incidentally if you have an idea send it in--we will appreciate it.

## NEW 1950 Heathkit PUSH-PULL...EXTENDED RANGE 5" OSCILLOSCOPE KIT

### FEATURES

- \*The first truly television oscilloscope.
- \*Tremendous sensitivity .06 Volt RMS per inch deflection.
- \*Push-pull vertical and horizontal amplifiers.
- \*Useful frequency range to 2½ Mega-cycles.
- \*Extended sweep range 15 cycles to 70,000 cycles.
- \*New television type multivibrator sweep generator.
- \*New magnetic alloy shield included.
- \*Still the amazing price of \$39.50.

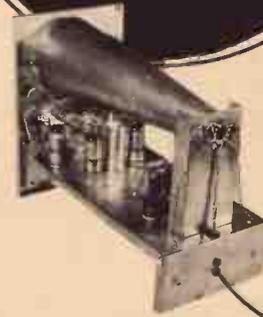
The new 1950 Push-Pull 5" Oscilloscope has features that seem impossible in a \$39.50 oscilloscope. Think of it--push-pull vertical and horizontal amplifiers with tremendous sensitivity only six one hundredths of a volt required for full inch of deflection. The weak impulses of television can be boosted to full size on the five inch screen. Traces you couldn't see before. Amazing frequency range, clear useful response at 2½ Megacycles, made possible by improved push-pull amplifiers. Only Heathkit Oscilloscopes have the frequency range required for television. New type multi-vibrator sweep generator with more than twice the frequency range, 15 cycles to 70,000 cycles, will actually synchronize with 250,000 cycle signal. Dual positioning controls will move trace over any section of the screen for observation of any part. New magnetic alloy CR tube shield protects the instrument from the outside fields. All the same high quality parts, cased electrostatically shielded power transformer, aluminum cabinet, all tubes and parts. New instruction manual now has complete step-by-step pictorials for easiest assembly. Shipping Wt. 24 lbs. Order now for this winter's use. Express shipment only.

### CONVERSION FOR OTHER MODEL HEATHKIT OSCILLOSCOPES

A conversion for all O-3 and O-4 scopes is available changing them to the new push-pull amplifiers (does not change the sweep generator). Complete kit includes new chassis, tubes and all parts. For a small investment, add the latest improvements to your present oscilloscope (except CR Tube Shield). Shipping Wt. 10 lbs. Order O-5 Conversion Kit No. 315. Specify O-3 or O-4 .....\$12.50



Only  
\$39.50



Everything you'd expect  
in a \$200.00 Scope . . . .



*A Coil Manufacturer  
in Chicago - writes  
"more accurate than  
factory built Bridge"*

# Heathkit IMPEDANCE BRIDGE KIT

A LABORATORY INSTRUMENT NOW WITHIN  
THE PRICE RANGE OF ALL

Measures inductance from 10 microhenries to 100 henries, capacitance from .00001 MFD to 1,000 MFD. Resistance from .01 ohms to 10 megohms. Dissipation factor from .001 to 1. "Q" from 1 to 1,000.

Ideal for schools, laboratories, service shops, serious experimenters.

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 1,000 cycle hummer. Mallory ceramic switches with 60 degree indexing--200 microamp zero center galvanometer-- $\frac{1}{2}$  of 1% ceramic non-inductive decade resistors. Professional type binding posts with standard  $\frac{3}{4}$ " 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. 15 lbs.

*Only*  
**\$69.50**

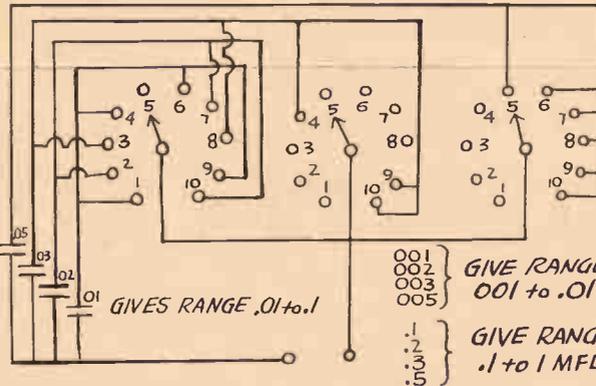
*Ideal  
FOR SCHOOLS  
LABORATORIES  
Service Shops*

## Why Laboratories prefer Measurements with an Impedance Bridge

For measurement of resistances and impedances, a bridge is generally preferred because of accuracy and convenience. The accuracy is not dependent on the accuracy of a meter, because bridge balance is a "null" condition. Increased applied voltage and detector sensitivity result in a more accurate "null." The convenience is obtained through the use of direct calibration of the dial scales whereby calculations to obtain the final result are eliminated. For impedances, the reactive and resistive indications are obtained from separate dials.

## Handy CONDENSER DECADE BOX

A handy condenser decade box is easily assembled from a 3 pole 10 position rotary switch and four condensers. This will give a ten to one range and can be made up for any capacity range desired. Use it to determine the correct replacement for unmarked units or to aid in the design of amplifiers, etc.



## TIPS and COMMENTS

A new book, "The Recording and Reproduction of Sound" has just been published by H. W. Sams and Co., Indianapolis, Ind. It is certainly the most complete assembly of data ever printed for sound engineers and music lovers who build their own. The data is the latest and complete. Written by Oliver Read, editor of RADIO NEWS, it has a pleasant--not too technical style that makes for enjoyable understanding reading--we recommend it.

Impedance Bridge Owners--a typographical error appears in the manual under calibration of "D" control--500 ohms should read 800 ohms.

## Get your share of auto Radio service with a . . . . Heathkit BATTERY ELIMINATOR KIT

Even the smallest shop can afford the Heathkit Battery Eliminator Kit. A few auto radio repair jobs will pay for it. It's fast for service, the voltage can be lowered to find sticky vibrators or raised to ferret out intermittents. Provides variable DC voltage 5 to 7 $\frac{1}{2}$  Volts at 10 Amperes continuous or 15 Amperes intermittent. Also serves as storage battery charger. Ideal for all auto radio testing and demonstrating.

A well filtered rugged power supply uses heavy duty selenium rectifier, choke input filter with 4,000 MFD of electrolytic filter for clean DC. 0-15V voltmeter indicates output which is variable in eight steps. Easily constructed in a few hours from our instructions and diagrams--better be equipped for all types of service--it means more income. Shipping Wt. 19 lbs.

*Variable Voltage helps locate trouble . . . . .*



**\$27.50**

## Heathkit 3 TUBE ALL-WAVE RADIO KIT

**\$8.75**

*CABINET  
Extra*

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. 4 lbs.
- ES30 Headphones per set. . . . . \$1.00
- Shipping Wt. 1 lb.
- 2 $\frac{1}{2}$ " Permanent Magnet Loudspeaker. . . . . 1.95
- Shipping Wt. 2 lbs.
- Mahogany Cabinet. . . . . 2.95
- Shipping Wt. 2 lbs.



*Radio School in Detroit writes*

*"Our Heathkit T.V. Sweep Generators do everything a \$695.00 Laboratory Sweep Gen. will do"*

FEATURES

- \*Calibrated sweep width 0-30 Mc.
- \*Calibrated absorption marker 19 to 43 Mc.
- \*Vernier driven master oscillator 0-110 Mc. and 165-220 Mc.
- \*Over 45 inches of calibration.

- \*10,000 to 1 step type output attenuator.
- \*Mechanical driven inductive sweep.
- \*AM modulation over entire range.
- \*Variable phase control.
- \*All coils wound and calibrated.
- \*5 T.V. instruments in one.

The new Heathkit Television Generator is as simple and easy to use as a conventional AM generator--the traces are steady--solid and easy to follow. There is more than enough sweep. The first truly wide band sweep generator. The absorption marker indicator "pip" can be moved directly through the trace and peaks and traps instantly located. Size of "pip" adjustable with marker amplitude control. Covering all FM and TV frequencies--0-110 and 165 to 220 megacycles--a marker indicator covering 19 to 43 megacycles--AM modulation for RF alignment--variable calibrated sweep width 0-30 Mc.--mechanical drive inductive sweep. Husky 110V. 60 cycle power transformer operated--step type output attenuator with 10,000 to 1 range--high output on all ranges--band switching for each range--vernier driven main calibrated dial with over 45 inches of calibration--vernier driven calibrated indicator marker tuning. Large grey crackle cabinet 16 1/8" x 10 5/8" x 7 3/16". Phase control for single trace adjustment. Uses four high frequency triodes plus 5Y3 rectifier--split stator tuning condensers for greater efficiency and accuracy at high frequencies--this Heathkit is complete and adequate for every alignment need and is supplied with every part--cabinet--calibrated panel--all coils and condensers wound, calibrated and adjusted. Tubes, transformer, test leads--every part with instruction manual for assembly and use. Actually three instruments in one--TV sweep generator--TV AM generator and TV marker indicator. Also covers FM band. Shipping Wt. 20 lbs.

**Heathkit T.V. GENERATOR KIT**



**\$39.50**

*Add to your Income with Heathkits*

A customer in California writes that he has purchased six Heathkits for himself with funds made assisting others to assemble Heathkits or assembling Heathkits for his neighbors. Don't overlook this additional income--many families would like an FM tuner--a fine phonograph amplifier--or a new radio chassis for their old cabinet--assemble Heathkits for them--you can charge liberally for your services and still save your friends plenty.

*New York Radio Station Says*

*"Our Heathkit Audio Generator is more accurate than Laboratory Generator costing 4 times as much"*

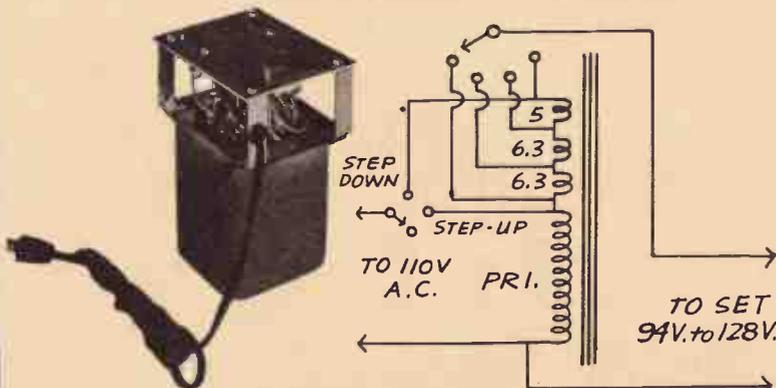


**\$34.50**

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 (1/2 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 slide 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 Wt. 12 lbs.

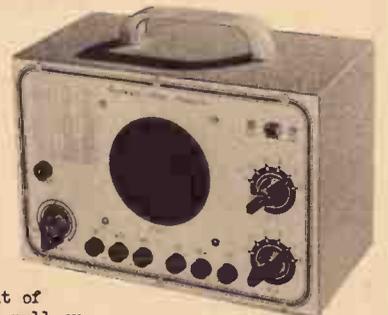
*Simplify YOUR SERVICE WORK with THIS AUTOTRANSFORMER*

Useful for checking intermittent sets, this simple autotransformer may be constructed from most any filament transformer. Higher voltage will quickly reveal potential failures and intermittents. Oscillator troubles readily show up with reduced voltage. Proper connections can be determined with a voltmeter. The unit shown gives voltages as low as 94 Volts and as high as 128 Volts.



*St. Louis Customer writes* *"My Heathkit Tracer does everything a \$150.00 Commercial one will do"*  
**New Heathkit SIGNAL TRACER & UNIVERSAL TEST SPEAKER KIT**

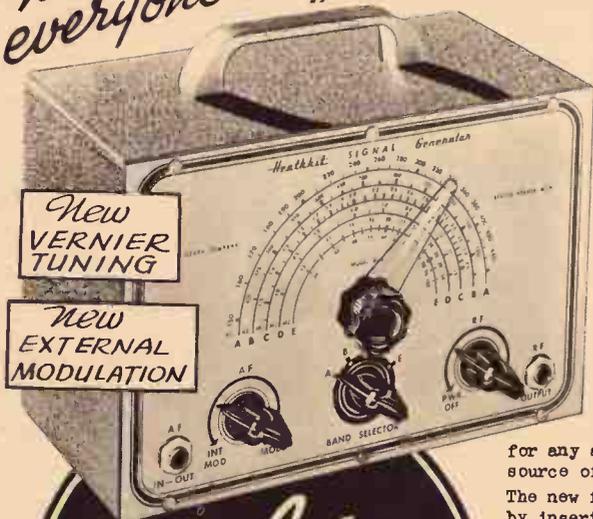
The popular Heathkit Signal Tracer has now been combined with a universal test speaker at no increase in price. The same high quality tracer follows signal from antenna to speaker--locates intermittents--defective parts quicker--saves valuable service time--gives greater income per service hour. Works equally well on broadcast--FM or TV receivers. The test speaker has assortment of switching ranges to match push-pull or single output impedance. Also test 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.



**\$19.50**

*New 1950 model has the features everyone requested*

# VERNIER TUNING R.F. Heathkit SIGNAL GENERATOR KIT



## FEATURES

- \*New 5 to 1 ratio vernier tuning for ease and accuracy.
- \*New external modulation switch--use it for fidelity testing.
- \*New precision coils for greater output.
- \*Cathode follower output for greater stability.
- \*400 cycle audio available for audio testing.
- \*Most modern type R.F. oscillator.
- \*Covers 150 Kc. to 34 Mc. on fundamentals and calibrated strong harmonics to 102 Mc.

The most popular signal generator kit has been vastly improved--the experience of thousands combined to give you the best. Check the features in this fine generator and consider the low price of \$19.50. A best buy for any shop, yet inexpensive enough for hobbyists. Everyone can have an accurate controlled source of R.F. signal voltage.

The new features double the value--think of being able to make fidelity checks on receivers by inserting a variable audio signal. Internal 400 cycle saw-tooth audio oscillator modulates R.F. signal and is available externally for audio testing. The new 5 to 1 ratio vernier drive gives hairline tuning for maximum accuracy in scale settings. The coils are already precision wound and calibrated. Uses turret type coil and switch assembly for ease of construction. The generator is 110V. 60 cycle transformer operated and comes complete in every detail--cabinet--tubes--coils--beautiful two color calibrated panel and all small parts--new step-by-step pictorial diagrams and complete instruction manual make assembly a cinch even for novices. Why try to get along without a signal generator when you can have the best for less than a twenty dollar bill. Better order it now. Shipping Wt. 7 lbs.

## CONVERSION KIT FOR G-1 GENERATORS

Conversion kit for G-1 generators for vernier tuning and external modulation includes new high band coil for greater output. Gives all the features of new G-5 listed above. Order G-5 Conversion Kit No. 316. Shipping Wt. 2 lbs.....\$4.50

*Only*  
**\$19.50**

# THE NEW Heathkit HANDITESTER KIT

*More Features THAN EVER BEFORE*

- \*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 for all--the ranges you need--beauty you'll enjoy for years and you can assemble it in a matter of minutes--an instrument for everyone. The handiest quality voltmeter 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. Banana 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 voltmeter under \$20.00. An hour of assembly saves you one-half the cost and quality parts give you a better instrument. Order today. Shipping Wt. 2 lbs.

*Only ONE CONTROL*

*WIDE SELECTION OF VOLTAGES*

*OHMS OR MA*



*400 uA METER*

*1% PRECISION RESISTORS*

*BRADLEY RECTIFIER*

*AC OR DC*



*Note HANDY OHMS ADJUST*

**\$13.50**

*Streamline* BEAUTY - PRECISION - QUALITY

*Used by  
hundreds  
of schools*

# THE NEW Heathkit VACUUM TUBE VOLTMETER KIT

## FEATURES

- \*New 200 microampere meter.
- \*Shatterproof plastic meter face.
- \*Burn-out proof meter circuit.
- \*24 complete ranges.
- \*Isolated probe for dynamic testing.
- \*Most beautiful VTVM in America.
- \*Accessory probes (extra) extend ranges to 10,000 Volts and 100 Megacycles.
- \*Modern push-pull electronic voltmeter circuit.
- \*Electronic AC circuit. No current drawing rectifiers.
- \*Uses 1% precision ceramic divider resistors.



A new Model V-2. Heathkit VTVM with new 200 microampere meter four additional ranges --full scale linear ranges on both AC and DC of 0-3V., 30V., 100V., 300V. and 1,000V. Accessory probe listed elsewhere in ad extends voltage range to 3,000 and 10,000 volts DC. New model has greater sensitivity, stability and accuracy--still the highest quality features--shatterproof plastic full view meter face--automatic meter protection, push-pull electronic voltmeter circuit, linear scales--db. scales--ohmmeter measures 1/10 ohm to 1 billion ohms with internal battery--isolated DC test prod for dynamic measurements--11 megohm 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 prods and leads, 1% ceramic divider resistors and all other parts. Complete instruction manual for assembly and use. Better start your laboratory with this precision instrument. Shipping weight 8 lbs. Model V-2

**\$24.50**

*The most  
Beautiful  
VTVM in  
the world*

*The only quality VTVM kit using 1% CERAMIC RESISTORS*



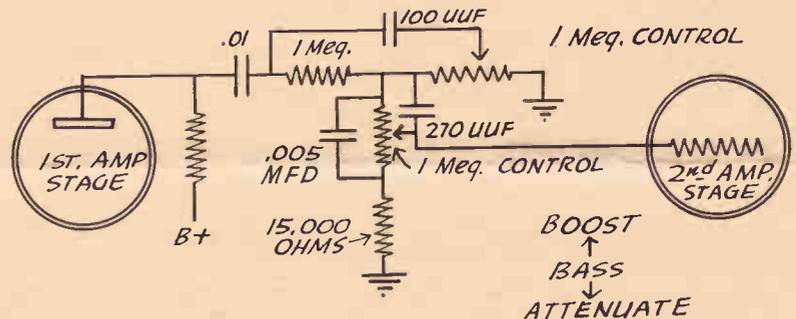
## Heathkit R.F. PROBE KIT

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**

## EXCELLENT DUAL TONE CONTROL *gives TREBLE OR BASS BOOST...*

BOOST ← TREBLE → ATTENUATE



An excellent dual tone control using only standard resistors and capacitors which gives base and treble boost or attenuate. It is simple and easy to build and does not introduce the distortion inherent in choke and feedback type circuits--try it--it's the best we've heard and the cheapest. It does reduce overall volume however.

## Heathkit H.V. PROBE KIT

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



**\$4.50**

## *Why Guess about Condensers..* THE NEW Heathkit CONDENSER CHECKER KIT *will answer your needs*

**\$19.50**



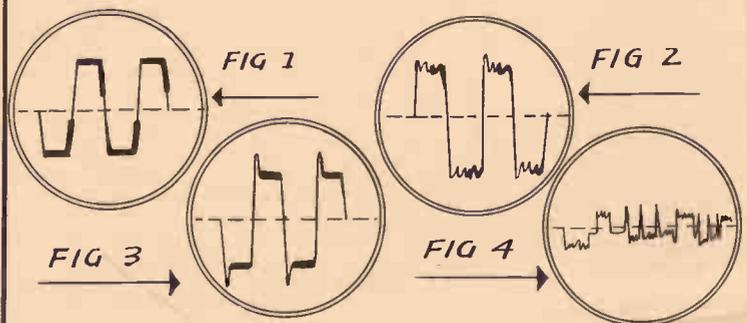
### FEATURES

- \*Power factor scale.
- \*Measures resistance.
- \*Measures leakage.
- \*Checks paper-mica-electrolytics.
- \*Bridge type circuit.
- \*Magic eye indicator.
- \*110V. transformer operated.
- \*All scales on panel.

Checks all types of condensers 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. 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 tubes, cabinet, calibrated panel, test leads and all other parts. Clear detailed instructions for assembly and use. Shipping Wt. 7 lbs.

## Using YOUR OSCILLOSCOPE FOR VIBRATOR TESTING

Hours can be saved by using the scope in servicing auto radio power supplies. In using the scope, connect the vertical plates across the primary points of the vibrator at the socket. Comparing this picture with the patterns below, any trouble can be quickly spotted. Figure 1 is the ideal pattern. Figure 2 results from a worn vibrator where the contacts are pitted or bouncing. When the buffer condenser opens up, the long pip shown in Figure 3 is present. A shorted buffer condenser or an overloaded circuit shows up as in Figure 4.



*New*

# Heathkit RECEIVER KIT

SUPER HETERODYNE



\$19.50



Cabinet available shortly.

*Nothing ELSE TO BUY*

## Features...

- \*10 microvolt sensitivity.
- \*110V. 60 cy. power transformer operated.
- \*Attractive calibrated slide rule dial.
- \*Phono-radio switch and connection.
- \*Wide range tone control.
- \*High quality audio system.
- \*Iron core I.F. transformers for maximum gain.
- \*Two dual tubes give 7 tube performance.
- \*Simple assembly with pictorial diagrams.

A Heathkit Superheterodyne Broadcast Receiver with all the features--quality you will be proud of--power adequate for any home--sensitivity that will amaze you--practically a station on every 10 Kc. point--the circuit is especially free of annoying whistles. Uses 12K8 as converter--12SH7 1st IF--12C8 as diode detector and pentode first audio stage with 12A6 as power output stage--a husky output transformer for 3.2 ohm PM speaker is included.

The power transformer is an adequately rated fully cased 110V. 60 cycle type. The filter condenser is metal cased quality unit. The I.F. transformers are dual iron core type, both in aluminum shield cans. The two gang tuning condenser is driven by six inch modern slide rule dial which is already calibrated. Octal type tubes are used to avoid the assembly troubles and expense of miniatures. A 110 Volt outlet is provided on the chassis for phonograph motor together with phonograph pickup connection and phono-radio switch on panel making this chassis excellent for replacement in radio phonograph combinations. An attractive professional communications type metal table model cabinet and a chairside console radio phonograph cabinet kit will both be available shortly for this chassis.

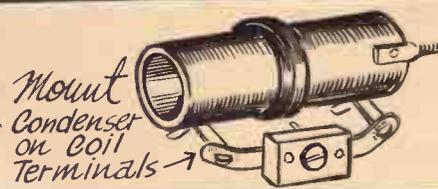
Everything is included completely punched and formed steel chassis--tubes--transformers --all coils--dial--resistors--condensers with detailed instructions and pictorial diagrams for assembly. Shipping Wt. lbs.

Quality 5" PM table model speaker for above receiver.....\$2.75  
High fidelity 8" console PM speaker, a truly extended range speaker for above.. 8.50

### IMPROVED CALIBRATION ACCURACY ON HEATHKIT SIGNAL GENERATOR

A Chicago customer sent in the suggestion below and says it gave his Heathkit Signal Generator almost frequency meter accuracy.

Remove the 50 MMF air trimmer normally used for calibration and substitute a 2-20 MMF compression type trimmer across each oscillator coil, then calibrate each band separately using this trimmer.



# Heathkit TUBE CHECKER KIT

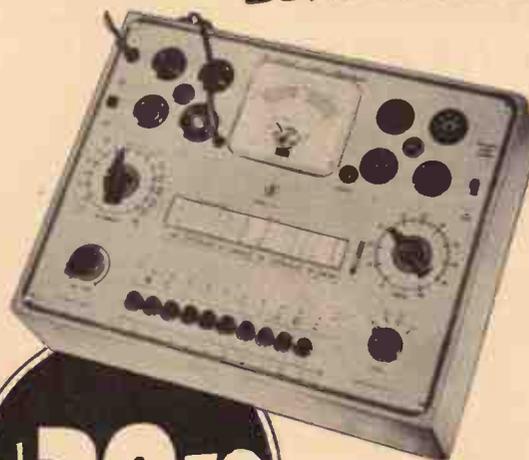
DYNAMIC

*Tests every element Individually*

- \*Measures each element individually.
- \*Has gear driven roller chart.
- \*Has lever switching for speed.
- \*Complete range of filament voltages.
- \*Checks every tube element.
- \*Uses latest type lever switches.
- \*Uses beautiful shatterproof full view meter.
- \*Large size 11"x14"x4" complete.
- \*Checks new 9 pin miniatures.

Test your tubes the modern way--dynamically--the simplest, yet fastest and surest method--your Heathkit has a switch for each tube element and measures that element--no chance for open or shorted elements slipping by, all the advantages of the mutual conductance type without the slow cumbersome time consuming setups.

Your Heathkit Tube Checker has all the features--beautiful 3 color BAD-GOOD meter--complete selection of voltages--roller chart listing hundreds of tubes including the new 9 pin miniatures--finest quality Centralab lever switches for each element--high grade birch counter type cabinet--continuously variable line adjust control--every feature you need to sell tubes properly. The most modern type tube checker with complete protection against obsolescence. The best of parts--rugged oversize 110V. 60 cycle power transformer--finest of Mallory and Centralab switches and controls, complete set of sockets for all type tubes with blank spare for future types. Fast action brass gear driven roller chart quickly locates the settings for any type tube. Simplified switching cuts necessary testing time to minimum and saves valuable service time. Short and open element check. Simple method allows instant setup of new tube types without waiting for factory data. No matter what the arrangement of tube elements, the Heathkit flexible switching arrangement easily handles it. Order your Heathkit Tube Checker Kit 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 assemble it now for the winter business. Complete with instructions--pictorial diagrams--all parts--cabinet--ready to wire up and operate. Shipping wt. 12 lbs.

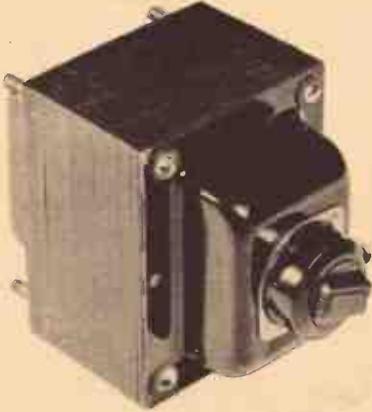


\$29.50

*Nothing ELSE TO BUY*

# Good SURPLUS BUYS

## Television POWER TRANSFORMER



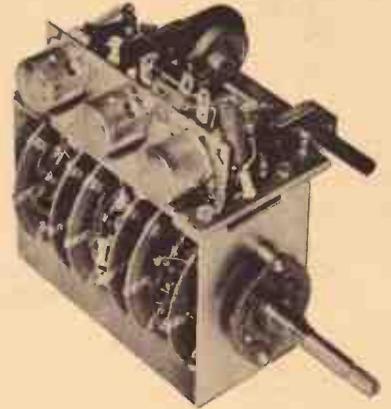
*Special*  
**\$3.95**  
 3 FOR  
**\$9.95**

Beautiful conservatively rated television power transformer used in 10" Farnsworth TV set. Fully cased dual half shell mounting. Tapped primary with switch for accurate adjustment of line voltage. Supplies 375 Volts DC at 150 MA, 6.3 Volts AC at 5 Amperes, 5 Volts AC at 3 Amperes. Will stand considerable overload. Shipping Wt. 7 lbs. each. No. 317

Same transformer with broken line adjust switch (wire around it and save money). No. 317D \$1.95 each, 3 for \$5.00

## 8 Channel . . . . TELEVISION TUNER

*Only*  
**\$4.95**



Farnsworth TV Tuner adjusts to any 8 channels. Rotary switch type with fine tuning control. Uses 6BA6RF 6AC5 mixer, 6J6 oscillator tubes (not supplied). Wiring diagram included. Have fun this winter experimenting with television. This well built tuner uses ceramic sockets--best of ceramic condenser and has individual slug tuned coils for each band. Quantity limited. Order now. No. 318. Shipping Wt. 3 lbs.

# ORDER

# BLANK

*Go* HEATH COMPANY  
 BENTON HARBOR,  
 MICHIGAN

*From* \_\_\_\_\_

Ship via

- \_\_\_\_\_ Parcel Post
- \_\_\_\_\_ Express
- \_\_\_\_\_ Freight
- \_\_\_\_\_ Best Way

PLEASE PRINT

QUANTITY	ITEM	PRICE	QUANTITY	ITEM	PRICE
_____	Heathkit Impedance Bridge Kit _____	_____	_____	Heathkit Battery Eliminator Kit _____	_____
_____	Heathkit Television Alignment Generator Kit _____	_____	_____	Heathkit Condenser Checker Kit _____	_____
_____	Heathkit Signal Tracer Kit _____	_____	_____	Heathkit Handi-Tester Kit _____	_____
_____	Heathkit VTVM Kit _____	_____	_____	Heathkit Receiver Kit _____	_____
_____	Heathkit R. F. Probe Kit _____	_____	_____	#318 Television Tuner _____	_____
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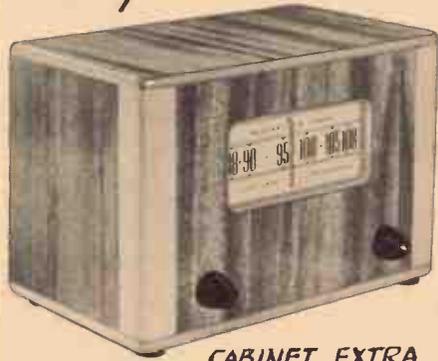
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