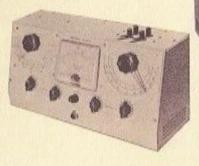
# October Flyce





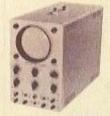
#### new heathkits...

The demand for our newly announced Heathkits has overwhelmed us. We knew that there was interest in grid dip meters but the orders have far exceeded our estimates. Thus we are somewhat behind in deliveries.

Simpson designed the extremely light compact meter for our grid dip and they are having diffi-

culty getting production up to our needs. By the time this reaches you, we hope, however, to make almost immediate shipment on nearly every kit.

#### modifying older heathkits...



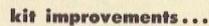
In this issue of the Flyer, we outline means of making a number of improvements in earlier models. Be assured, we will whenever possible, provide this information.

#### williamson amplifier changes...

A new article "Gilding the Lily" appeared in the July AUDIO ENGINEERING Magazine. Most of the changes suggested have been made in the Heathkit Williamson. The output tubes are now 5881's instead of 807's.

Arrangements have also been completed whereby our amplifier can be ordered with the Acrosound TO-300 output transformer and wired with their recommended "Ultra Linear" circuitry.





Many of the improvements in the newly announced Heathkits are the result of customer suggestions. We welcome these ideas, as it is obvious that the thinking of many thousands of customers should be more productive than that of a handful of factory engineers. Please continue to send them. Your idea may benefit thousands next year and thus contribute to electronic progress.

#### inflation ...



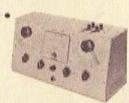
We firmly believe that the best way to combat inflation is not to raise prices and are proud of the Heathkit record.

Our first model VTVM in 1947 was priced at \$24.50. We now produce a vastly better one but the price is still

\$24.50. The secret of this is, of course, constantly greater sales and better manufacturing methods. Every time you recommend a Heathkit, you are helping us keep the prices in line.

#### heathkit Q meter kit...

There has been a delay in placing the Q meter in production, but we expect to start deliveries by November 1. It is hard to realize the thousands of hours of engineering time developing a kit of this type consumes.



Hundreds of sets of measurements are made for comparison to correlate with established Q values. Each circuit change necessitated an entire set of measurements. The final version is excellent, however, and well worth waiting for.

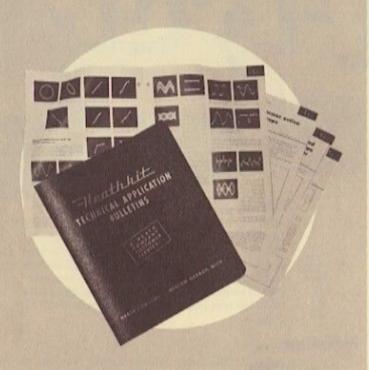
#### engineers...

The Heath Company has grown to five times the size it was in 1948 and is still growing rapidly. We have occasional openings on our staff and welcome your application. If your special interest is in test equipment in wide variety, we believe you would enjoy it in Benton Harbor.

#### looking for interesting heathkit uses . . .

The new Heathkit Technical Bulletins give details of hundreds of applications for Heathkits, shows the traces to be expected, how to identify phenomena, service techniques, and will provide many weeks of educational experiments.

# NEW TECHNICAL BULLETINS OFFERED AS SERVICE TO HEATHKIT OWNERS



A series of "Heathkit Technical Application Bulletins" has been prepared to fill the need for all who wish to get the most from their Heathkits—both as to newest applications and regular everyday uses.

Three well-known technical authors, Glen Southworth, Louis Garner, and Lawrence Fleming have written them.

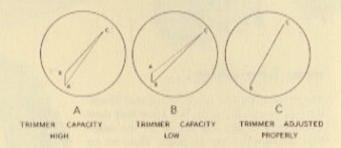
A good quality loose leaf binder is provided and contains the first 20 bulletins with space for additional bulletins to be published in the future. Of the current bulletins, five are devoted to the Oscilloscope, four to the RF Signal Generator, plus bulletins on the Voltage Calibrator, Square Wave Generator, Intermodulation Analyzer, etc.

These bulletins, which are offered as a service to Heathkit owners, are four pages long and include such things as test setups, scope traces, methods of testing with results to be expected, interesting experiments and the like.

The price of the binder and 20 bulletins is \$2.00, postage prepaid — please, no C.O.D. orders. Future bulletins will be announced in the FLYER.

## Adjusting the Vertical Input Compensating Condenser in O-7 Scopes

Those who don't have a square wave generator to use for adjusting the vertical input frequency compensating condenser can use the following method: with power off, take scope out of the cabinet, and run test lead from terminal Y1 on the CR tube bracket to the vertical input binding post. This feeds a portion of the saw-tooth sweep generator voltage into the vertical amplifier. Set the vertical input control to the 400 V RMS maximum position. Turn scope on and adjust the compensating trimmer until the trace is a straight line which is free of "tails" at its extreme. The three drawings below show how the pattern should (C) and should not (A and B) look. When adjusted, turn scope off, remove the test lead, and place back in cabinet.





quickly prove its usefulness as an Oscilloscope accessory.

## NEW Heathkit

# OSCILLOSCOPE KIT

Direct connections to deflection plates.

New wide band vertical amplifier ± 2 db 10 cycles to 1 Mc.

New wide band vertical amplifier ± 2 db 10 cycles to 1 Mc.

The 5" Heathkit O-8 Oscilloscope has tremendous NEW FEATURES AND VAST IMPROVEMENTS in addition to the many desirable features of previous models. New vertical amplifier circuitry gives improved frequency response — amplifier within ± 2 db from 10 cycles to 1 MC — useful beyond 5 MC. This excellent frequency response allows observation of TV Sync, pulses with front and back porches clearly displayed. Ideal for all radio and TV servicing.

Greatly increased vertical sensitivity of .025 V RMS per inch gives you that extra sensitivity needed for lower level signal observations. Now you can clearly observe weak signals. A fine feature for schools and laboratories.

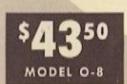
Direct connections to CR tube deflection plates easily made on special terminal board accessible through removable plate in back of cabinet. Hams like this arrangement for checking percent modulation in transmitter tests, etc.

Note the beautiful newly designed cabinet with its rounded corners and fitted panel. The new baked enamel panel is really tough for taking laboratory and service bench abuse.

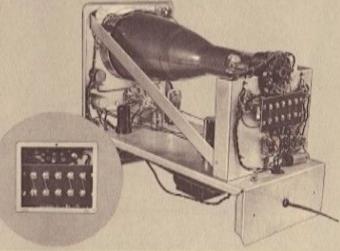
5CP1 CR tube with intensifier gives greater trace brilliance. Special 3 step input attenuator is convenient when working with input levels of greatly different magnitudes. Scope has internal synchronization which operates on either positive or negative peaks of input signal —Z axis modulation (intensity modulation) — provisions for external synchronization.

Comes complete, detailed instruction manual has step-by-step instructions, pictorials, schematic, circuit description and uses of scope. All parts furnished — tubes (including CR tube), chassis, cabinet, transformer, etc.

INTENSIFIER KIT: For extreme trace brilliance in special applications such as photography, group demonstrations or operation in brightly lighted areas, an optional Intensifier kit providing 2200 volt operation of the CR tube is available. Kit includes high voltage filter condenser, high voltage selenium rectifier, etc. \$7.50

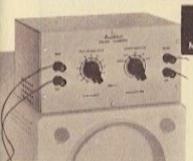


SHIPPING WEIGHT 29 LBS.



#### NEW Heathkit

#### **VOLTAGE CALIBRATOR KIT**



\$950 MODEL VC-1

SHIPPING WT. 5 LBS.

Use the Heathkit Voltage Calibrator with your oscilloscope to measure peak-to-peak TV complex waveshapes. TV manufacturer's specifications indicate correct peak-to-peak voltages and this kit will permit making these important measurements. Makes peak-to-peak voltage measure-

ments of complex waveshapes of all kinds. Flat topped semi-square wave output of calibrator assures fast and easy measurement of any voltage between .01 and 100 V peak-to-peak.

The Voltage Calibrator can remain connected to your oscilloscope at all times for instant use. "Signal" position connects signal under study directly through calibrator and into scope input circuit for direct observation. A wonderful scope accessory.

#### Heathkit

### **ELECTRONIC SWITCH KIT**



\$19<sup>50</sup>

SHIPPING WT. 11 LBS. A few dollars spent for this accessory will increase the usefulness of a scope immeasurably. An electronic switch will open up a whole new field of scope applications for you. The S-2 allows TWO SIGNALS to be observed at the SAME TIME—this important feature allows you to immediately spot phase shift, clipping, distortion, etc. The two signals under observation can be superimposed or separated for individual atudy. Each signal input has an individual gain control for properly adjusting scope trace patterns. Has both coarse and fine frequency controls for adjusting switching time. Multivibrator switching frequency

is from less than 10 cps to over 2000 cps in three overlapping ranges. Kit comes complete including 5 tubes, power transformer, all controls, instruction manual, etc. Every scope owner should have one!

# Heathkit LABORATORY REGULATED POWER SUPPLY KIT



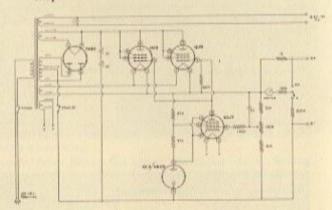
New Heathkit Laboratory Power Supply provides continuously variable regulated DC voltage output from 160 volts to 400 volts depending on load. Panel terminals supply separate 6.3 V. AC supply at 4 amperes for filament circuits. A 3½" plastic cased panel mounted meter provides accurate metered output for either voltage of current measurements. Exceptionally low ripple content of .012% admirably qualifies the Heathkit Laboratory Power Supply for high gain audio applications. Ideal for laboratory work requiring a reference voltage for meter calibration or for plotting tube characteristics. In service work, it can be used as a separate variable voltage supply to determine the desirable operating voltage in a specific circuit. Use it as a DC substitution voltage in trouble shooting TV circuits exhibiting symptoms of extraneous undesirable components in plate supply circuits. Entire kit, including all 5 tubes now available at this low price.

# Regulating the Output of PS-1 Power Supplies

The PS-1 Power Supply can be modified without a great deal of trouble to give the voltage regulation found in PS-2's. The circuit of the PS-2 is given below. However, in making the modification, one loss is the 6.3 V AC available at the front panel of the PS-1. This 6.3 V AC is used to operate the filaments of the 6SJ7 which is added to the circuit. In order to modify the PS-1, additional parts required (in addition to small items such as 6-32 screws and nuts, terminal strips if needed, etc.) are:

- 1 10K Ohm Resistor (1/2 Watt 20%)
- 1 27K Ohm Resistor (1/2 Watt 20%)
- 1 33K Ohm Resistor ( 1/2 Watt 20% )
- 1 47K Ohm Resistor (1/2 Watt 20%)
- 1 680K Ohm Resistor (1/2 Watt 20%)
- 1 Megohm Resistor (1/2 Watt 20%)
- 1 6SJ7 Tube
- 1 OC3/VR150 Tube
- 2 20 MFD, 350 V. Electrolytic Condensers
- 1 .1 MFD. Paper Tubular Condensers
- 2 Octal Tube Sockets

An additional socket hole must be punched in the chassis to accommodate one of the added two tube sockets. The hole in the chassis now holding the filter condenser can be used for mounting the other tube socket. A 5Y3 can be used in the power supply. Please do not write to the Heath Company for the additional parts, purchase them from a local radio shop.



## Heathkit BATTERY TESTER KIT

The new Heathkit Battery Tester measures all types of dry batteries between 11/2 volts and 150 volts under actual load conditions. Readings are made directly on a three-color GOOD-WEAK-REPLACE scale that your customers can readily understand. Operation is extremely simple and merely requires that the leads be connected to the battery under test. Only one control to adjust in addition to a panel switch for A or B battery types.

The Heathkit Battery Tester features compact assembly. An accurate meter movement and wire wound control mount in the portable, rugged plastic case.

Use the BT-1 to check portable radio batteries, hearing aid batteries, lantera batteries and photo flash gun batteries.



### ORDER BLANK

701	11	. 1	TI	1	1	n	A	D/	11	IV	
101	I L	M	ш		4	U	VI		11		

BENTON HARBOR,

From		
1		

11 14		

Parcel Post
Express

☐ Freight

Best Way

#### (PLEASE PRINT)

				11	LEASE	PRINTI	way	
Quantity	Hom and Shipping Wt.	\$43.50			Quantity	tlem and Shipping Wi.	Pric	
10 E TO BE	Heathkit Oscilloscope Kit-Model 0-8 (29 lbs.)			\$43.50			- 1.1/4	Heathkit AC VTVM Kit-Model AV-2 (5 lbs.)
	Heathkit Intensifier Kit (0-8 only) No. 339 (1 lb.)	7.50	Marie	1 8		Heathkit Intermodulation Analyzer Kit — Model IM-1 (18 lbs.)	39.50	1
	Heathkit Voltage Calibrator Kit Model VC-1 (5 lbs.)	9.50	Jin a		124174	Heathkit Regulated Power Supply Kit Model PS-2 (20 lbs.)	29.50	4
	Heathkit Electronic Switch Kit-Model S-2 (11 lbs.)	19.50			No. of Street, or other Persons	Heathkit Handitester Kit—Model M-1 (3 lbs.)	13.50	
	Heathkit Scope Demodulator Probe Kit No. 337 (1 lb.)	4.50	Photo		The Sale	Heathkit Decade Resistance Kit—Model DR-1 (4 lbs.)	19.50	
1 17	Heathkit T.V. Alignment Gen. Kit-Model TS-2 (20 lbs.)	39.50	6 3			Heathkit Decade Condenser Kit Model DC-I (4 lbs.)	16.50	
- 10	Heothkit Q Meter Kit-Model QM-1 (12 lbs.)	39.50	1		A PARTY	Heathkit Impedance Bridge Kit-Model IB-1B (15 lbs.)	69.50	50
TITLE	Heathkit Grid Dip Meter Kit-Model GD-1 (4 lbs.)	19.50	1	1	The state of	Heathkit Battery Tester Kit-Model BT-1 (3 lbs.)	7.50	
N-1 185	Heathkit VTVM Kit-Model V-6 (7 lbs.)	24.50				Heathkit Resistance Substitution Box Kit—Model R5-1 (3 lbs.)	5.50	
	Heathkit RF Probe Kit No. 309 (1 lb.)	5.50			1.7.1.1	Heathkit F.M. Toner KitModel FM-2 (9 lbs.)	22.50	
E 1/4	Heathkit HV Probe Kit No. 336 (2 lbs.)	5.50	1000	1		Heathkit Broadcast Receiver Kit-Model BR-1 (11 lbs.)	19.50	
SEA PER	Heathkit Peak-to-Peak Volt, Probe Kit No. 338 (2 lbs.)	6.50	of the	W.		Heathkit Three Band Receiver Kit-Model AR-1 (11 lbs.)	23.50	
70	Heathkit Visual-Aural Signal Tracer Kit Model T-3 (8 lbs.)	22.50	that -			Heathkit Amplifier Kit—Model A-7 (10 lbs.)	14.50	
HAR	Heathkit Condenser Checker Kit-Model C-3 (7 lbs.)	19.50	10		7-11	Heathkit Amplifier Kit-Model A-7A (10 lbs.)	16.50	
	Heathkit RF Signal Generator Kit—Model SG-7 (7 lbs.)	19.50	100		1000	Heathkit Amplifier Kit-Model A-8 (19 lbs.)	33.50	
100	Heathkit Tube Checker Kit-Model TC-1 (12 lbs.)	29.50				Heathkit Amplifier KitModel A-8A (19 lbs.)	35.50	
( - 1 1 S	Heathkit Portable Tube Checker Kit—Model TC-1P (14 lbs.)	34.50	10010		the sub-Life	W-2 Amplifier Kit (Incl. Main Amplifier with Peerless Output Transformer, Power Supply and WA-PI Preamplifier Kit) Shipping	69.50	
in the	Heathkit Portable Tube Checker Cab. only. No. 365 (7 lbs.)	7.50	( India)		BE MILE	Weight 39 lbs. Shipped express only.	MI /alway	
	Heathkit T.V. Tube Adapter No. 355 (1 lb.)	4.50	(faller)	Dong	MACO TO	W-2M Amplifier Kit (Incl. Main Amplifier with Feerless Output	49.75	
	Heathkit Battery Eliminator Kit-Model BE-3 (20 lbs.)	24.50				Transfermer and Power Supply) Shipping Weight 29 lbs. Shipped express only.	-	
	Heathkit Vibrator Tester Kit-Model VT-1 (7 lbs.)	14.50	MARK	d a	Tests V	W-3 Amplifier Kit (Inc. Main Amplifier with Acresound Output	69,50	
	Heathkit Audio Generator Kit-Model AG-8 (16 lbs.)	29.50	bear N		and the last	Transformer, Power Supply and WA-P1 Preamplifier Kit) Shipping Weight 39 (bs. Shipped express only.		
	Heathkit Audio Oscillator Kit-Model A0-1 (14 lbs.)	24.50			J. mallion	W-3M Amplifier Kit (Incl. Main Amplifier with Acrosound Out-	49.75	
	Heathkit Audio Frequency Meter Kit - Model AF-1 (15 lbs.)	34.50		9 199	Chelling	put Transformer and Power Supply) Shipping Weight 29 lbs. Shipped express only.		
	Heathkit Square Wave Gen. Kit—Model SQ-1 (14 lbs.)	29.50			Setting to	WA-P1 Preemplifier Kit only, Shipping Weight 7 lbs. Shipped express or parcel post.	19.75	
							13111	
The second second				-			Andrew Control of the last of	-

On Parcel Post Orders, include postage for weight shown and insurance. (We insure all shipments.)

On Express Orders, do not include transportation charges—they will be collected by the Express Agency at time of delivery.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Enclosed find	☐ Check	☐ Money Ore	der for	-
Please ship C.	O.D.   P	ostage enclosed	d for	Ibs.

#### ORDER BLANK

-	ш	EI	T	CO	AA	DA	AIV	ı
70	П	EF	11	LU	M	FA	NI	

BENTON HARBOR, MICHIGAN

From_		MICHAEL	
1			-

45 4.2	W		IA
5 14		•	

Parcel Post ☐ Express

Freight

Rest Way

Quantity	Item and Shipping Wt.				
117	Heathkit AC VTVM KitModel AV-2 (5 lbs.)	\$29.50			
	Heathkit Intermodulation Analyzer Kit-Model IM-1 (18 lbs.)	39.50			
	Heathkit Regulated Power Supply Kit Model PS-2 (20 lbs.)	29.50			
Same	Heathkit Handitester Kit-Model M-1 (3 lbs.)	13,50			
	Heathkit Decade Resistance Kit—Model DR-1 (4 lbs.)	19.50			
	Heathkit Decade Condenser Kit-Model DC-I (4 lbs.)	16.50			
	Heathkit Impedance Bridge Kit-Model IB-18 (15 lbs.)	69.50			
	Heathkit Battery Tester Kit—Model BT-1 (3 lbs.)	7.50			
N/OF	Heathkit Resistance Substitution Box Kit—Model RS-1 (3 lbs.)	5.50			
	Heathkit F.M. Toner Kit-Model FM-2 (9 lbs.)	22.50			
	Heathkit Broadcast Receiver Kit-Model BR-1 (11 lbs.)	19.50			
	Heathkit Three Band Receiver Kit-Model AR-1 (1) lbs.)	23.50			
	Heathkit Amplifier Kit Model A-7 (10 lbs.)	14.50			
	Heathkit Amplifier Kit-Model A-7A (10 lbs.)	16.50			
	Heathkit Amplifier KitModel A-8 (19 lbs.)	33.50			
	Heathkit Amplifier Kit-Model A-8A (19 lbs.)	35.50			
System.	W-2 Amplifier Kit (Incl. Main Amplifier with Peerless Output Transformer, Power Supply and WA-FI Preamplifier Kit) Shipping Weight 39 Ibs. Shipped express only.	69.50			
	W-2M Amplifier Kif (Incl. Main Amplifier with Peorless Output Transformer and Power Supply) Shipping Weight 29 lbs. Shipped express only.	49.75			
1210	W-3 Amplifier Kit Best More Amplifier with Acrosomet Colour Trumformer, Fower Supply and WA-FT Preamplifier Kit Shipping Weight 39 lbs. Shipped express only.	69.50			
	W-3M Amplifier Kit Bird. Main Amplifier with Acrosound Out- put Transformer and Power Supply! Shipping Weight 29 ibs. Shipped express only.	49.75			
nino n	WA-P1 Preamplifier Kit only, Shipping Weight 7 lbs. Shipped express or parcel post.	19.75			

Quantity	Hem and Shipping Wt.	Price		
	Heathkit Oscilloscope Kit-Model 0-8 (29 lbs.)	\$43.50		
-		7.50		
	Heathkit Intensifier Kit (0-8 only) No. 339 (1 lb.)	-		
	Heathkit Voltage Calibrator Kit—Model VC-1 (5 lbs.)	9.50	-	
	Heathkit Electronic Switch Kit Model 5-2 (11 lbs.)	19.50	-	
	Heathkit Scope Demodulator Probe Kit No. 337 (1 lb.)	4.50	230	
	Heathkit T.V. Alignment Gen. KitModel T5-2 [20 lbs.]	39.50		
-	Heathkit Q Meter KitModel QM-1 (12 lbs.)	39.50		
	Heathkit Grid Dip Meter Kit-Model GD-1 (4 lbs.)	19.50		
	Heathkit VTVM Kit-Madel V-6 (7 lbs.)	24.50		
1100	Heathkit RF Probe Kit No. 309 (1 lb.)	5.50		
	Heathkit HV Probe Kit No. 336 (2 lbs.)	5.50	100	
AT U	Heathkit Peak-to-Peak Valt. Probe Kit No. 338 (2 lbs.)	6.50	9	
	Heathkit Visual-Aural Signal Tracer-Kit Model T-3 (8 lbs.)	22.50		
DEST	Heathkit Condenser Checker Kit-Model C-3 (7 lbs.)	19.50	100	
1000	Heathkit RF Signal Generator Kit-Model SG-7 (7 lbs.)	19.50		
	Heathkit Tube Checker Kit-Model TC-1 (12 lbs.)	29.50		
	Heathkit Partable Tube Checker Kit-Model TC-1P (14 lbs.)	34.50	all and	
	Heathkit Portable Tube Checker Cab, only, No. 365 (7 lbs.)	7.50		
	Heathkit T.V. Tube Adapter No. 355 (1 lb.)	4.50		
	Heathkit Battery Eliminator KitMadel BE-3 (20 lbs.)	24.50		
	Heathkit Vibrator Tester Kit-Model VT-1 (7 lbs.)	14.50	1000	
	Heathkit Audio Generator Kit-Model AG-8 (16 lbs.)	29.50	March V	
	Heathkit Audio Oscillator Kit-Model A0-1 (14 lbs.)	24.50		
	Heathkit Audio Frequency Meter Kit - Model AF-1 (15 lbs.)	34.50	f talk	
	Heathkir Square Wave Gen. Kit-Model SQ-1 (14 lbs.)	29.50	1000	
			-	

On Parcal Past Orders, include postage for weight shown and insuronce, (We insure all shipments.)

On Express Orders, do not include transportation charges-they will be collected by the Express Agency at time of delivery.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

Please ship C.O.D. Postage enclosed for\_\_\_\_\_

\*Orders from Canada must be accompanied by cash payment including postage.

Enclosed find Check Money Order for\_

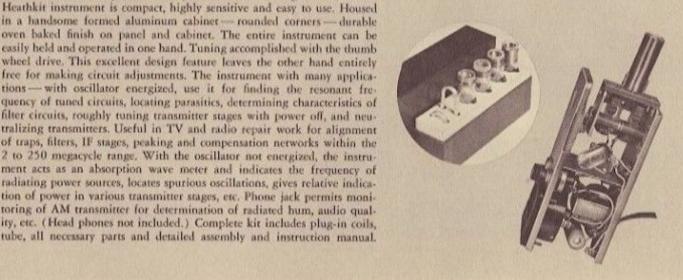
NEW Heathbit GRID DIP METER Convenient one hand operation. Complete in one unit.

Indicates frequency of both energized and de-energized circuits.



Complete coverage from 2 to 250 Mc.

Here is the Grid Dip Meter Kit you have been asking for, This new Heathkit instrument is compact, highly sensitive and easy to use. Housed in a handsome formed aluminum cabinet - rounded corners - durable oven baked finish on panel and cabinet. The entire instrument can be easily held and operated in one hand. Tuning accomplished with the thumb wheel drive. This excellent design feature leaves the other hand entirely free for making circuit adjustments. The instrument with many applications - with oscillator energized, use it for finding the resonant frequency of tuned circuits, locating parasitics, determining characteristics of filter circuits, roughly tuning transmitter stages with power off, and neutralizing transmitters. Useful in TV and radio repair work for alignment of traps, filters, IF stages, peaking and compensation networks within the 2 to 250 megacycle range, With the oscillator not energized, the instrument acts as an absorption wave meter and indicates the frequency of radiating power sources, locates spurious oscillations, gives relative indication of power in various transmitter stages, etc. Phone jack permits monitoring of AM transmitter for determination of radiated hum, audio quality, etc. (Head phones not included.) Complete kit includes plug-in coils, SHIPPING WEIGHT 4 LBS.



#### Heathkit HANDITESTER

The Heathkit Model M-1 Handitester fulfills requirements for a portable volt ohm milliammeter. This kit features precision 1% resistors, 3 deck switch for trouble free mounting of parts, specially designed battery bracket, smooth acting ohms adjust control, beautiful molded bakelite case and a 400 microampere meter movement. 5 convenient AC and DC. voltage ranges as follows: 10 - 30 - 300 - 1000 -5000 volts. Ohms ranges 0 - 3000 and 0 -300,000. DC milliampere ranges 0 - 10 milliamperes and 0 - 100 milliamperes. The instrument is easily assembled from complete instructions and pictorial diagrams. Test leads are included. Carry the Heathkit M-1 Handitester in your tool box at all times for those simple jobs and eliminate that extra trip for additional testing equipment.



Pre-wound and adjusted coils.

SHIPPING WT. 3 LBS.

## Heathkit RESISTANCE SUBSTITUTION BOX KIT

New Heathkit Resistance Substitution Box Kit provides switch selection of any single one of 36 RTMA 1 watt 10% standard value resistors, ranging from 15 ohms to 10 megohms. This coverage available in 2 ranges in decades of 15, 22, 33, 47, 68 and 100, Housed in rugged plastic cabinet featuring new Heathkit universal type binding posts. The entire kit priced less than the retail value of the resistors alone.

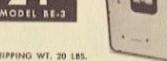


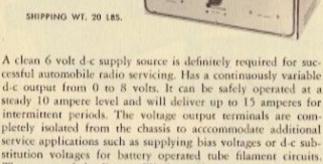
SHIPPING WT. 3 LBS.

MODEL RS-1

# Heathkit BATTERY ELIMINATOR KIT

\$2450 MODEL BE-3





The output of the Battery Eliminator is constantly monitored

by a d-c voltmeter and a d-c ammeter. The circuit features an

automatic overload relay of self resetting type. For additional

protection, a panel mounting fuse is provided. Build this kit

in a few hours and pocket a substantial savings.

Heathkit
VIBRATOR
TESTER KIT



\$1450 MODEL VT-1

SHIPPING WT. 7 LBS.

Repair time is valuable, and the Heathkit Vibrator Tester will save you hours of work. Instantly tells the condition of the vibrator under test — and the check is thorough and complete. Checks vibrator for proper starting, and the easy-to-read meter indicates the quality of output on large BAD - GOOD scales. Tests both interrupter and selfrectifier types of vibrators. Five different sockets for checking hundreds of vibrators.

Operates from any battery eliminator capable of delivering continuously variable voltage from 4-6V at 4 amps. The Heathkit BE-3 Battery Eliminator is ideal for operating this kit. Faulty vibrators can be spotted within seconds and you're free to go on to other service jobs.

### Heathkit FM TUNER KIT



The Heathkit Model FM-2 Tuner was specifically designed for simplified kit construction. A pre-assembled and adjusted tuning condenser assembly, double tuned IF transformers and discriminator transformer and an 8 tube transformer operated circuit are among its many features. Smooth tuning is obtained through a 9:1 ratio vernier drive using a calibrated 6" alide rule type dial. Frequency coverage of 88 to 108 mc is provided. Kit supplied with all parts and manual.

#### Heathkit

#### SUPERHETERODYNE RECEIVER KITS

Two excellent radio receiver kits featuring clean design and open layout for simplified construction. Satisfy that urge to build your own radio receiver and select the model which meets your requirements. Both receivers feature continuously variable tone control, a radio phono switch and phono input and an AC receptacle for the phono motor. A six inch calibrated slide rule type dial with a 9 to 1 ratio vernier dial drive insures easy tuning.



#### BROADCAST MODEL BR-1

5 tube broadcast band 550 to 1600 kc coverage, shipping wt. 11 lbs.

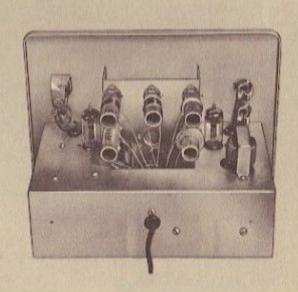
#### THREE BAND - MODEL AR-1

6 tube all wave circuit. 3 ranges, continuous coverage 530 kc to over 20 megacycles, shipping wt. 11 fbs,



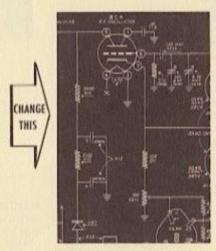


The new Heathkit Model SG-7 Signal Generator easily fulfills requirements for a controllable, modulated or unmodulated source of variable frequency. A convenient 400 cycle sine wave output is available for audio work. All RF oscillator coils are precision wound and adjusted to calibration before shipment thereby assuring maximum accuracy. The coils, band switch and tuning condenser all mount as a turret assembly so as to offer the advantage of short wiring leads and easy mounting of parts. The RF output circuit is of the low impedance type obtained by the use of cathode coupling to the output jacks. The level of RF output is varied by means of the RF step and RF output control. Use the Heathkit SG-7 as an RF signal source modulated or unmodulated for radio repair, laboratory work, experimental testing, 400 cycle sine wave audio testing, checking RF stages, alignment of both AM and FM IF stages, marker generator for TV alignment, etc. The kit is transformer operated and utilizes miniature tubes for ease in handling high frequency. Panel jacks and a convenient switching system permit either external or internal modulation. The entire kit is supplied complete with tubes and all necessary material as well as a detailed step by step instruction manual for the assembly and operation of the instrument,

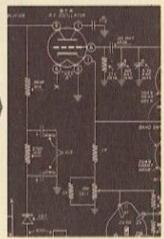


### Increasing the RF Output of SG-6 Signal Generators

The RF output of the SG-6 can be increased by modifying the circuit as follows: the 10K resistor in the cathode circuit of the RF oscillator should be replaced with a 1K resistor. The 10K RF output control should either be replaced with a 1K control or should have a 1K resistor placed across its two outside lugs. The schematic shows the latter method, Please secure the two 1K resistors or 1K resistor and 1K control at a local radio shop.







# Heathkit WILLIAMSON TYPE AMPLIFIER KIT

The new HEATHKIT WILLIAMSON TYPE AMPLIFIER incorporates the latest improvements described in Audio Engineering's "Gilding the Lily." 5881 output tubes and a new Peerless output transformer with additional primary taps afford peak power output of well over 20 watts. Frequency response ± 1 db from 10 cycles to 100 kc, allows reproduction of highs and lows with equal crispness and clarity. Harmonic and intermodulation distortion have been reduced to less than  $V_2$  of 1% at 5 watts. This eliminates the harsh unpleasant qualities which contribute to listening fatigue. Make this amplifier the heart of your radio system to achieve the fine reproduction that is the goal of all music lovers.

contribute to listening ratigue. Make this amplifier the heart of your radio system to achieve the fine reproduction that is the goal of all music lovers.

The HEATHKIT PREAMPLIFIER (available separately or in combination with the amplifier kit) features inputs for magnetic or low level cartridges, crystal pickups and tuners, turnover control for LP or 78 type records, individual bass and treble tone controls each providing up to 15 DB of boost or attenuation. Special notched shafts on preamplifier controls and switches adaptable to custom installation. The preamplifier can be mounted in any position and a liberal length of connecting cable is supplied. No radio experience is required to construct this

#### PRICES OF VARIOUS COMBINATIONS

W-2 Amplifier Kit (Incl. Main Amplifier with Peerless Output Transformer, Power Supply and WA F1 Preamplifier Kit) Shipping Weight 39 lbs. Shipped express only.

W-2M Amplifier Kit (Incl. Main Amplifier with Peerless Output Transformer and Power Supply) Shipping Weight 29 lbs. Shipped express only.

W-3 Amplifier Kit (Incl. Main Amplifier with Acrosound Output Transformer, Power Supply and WA-P1 Preamplifier Kit)
Shipping Weight 39 lbs. Shipped express only.

W-3M Amplifier Kit (Incl. Main Amplifier with Acrosound Output Transformer and Power Supply) Shipping Weight 29 lbs. Shipped express only.

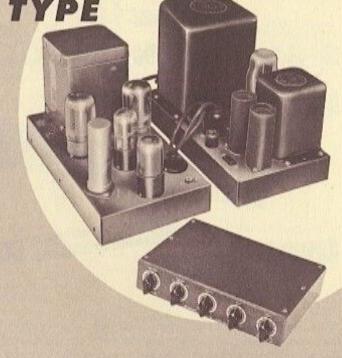
WA-P1 Preamplifier Kit only, Shipping Weight 7 lbs, Shipped express or parcel past. \$6950

\$4975

\$6950

\$4975

\$1975



amplifier. All punching, forming, or drilling has already been done. The complete kit includes all necessary parts as well as a detailed step by step construction manual with pictorial diagrams to greatly simplify the construction.

ACROSOUND TRANSFORMER OPTION. If desired, the output transformer with the kit will be the Acrosound output transformer, type TO-300. The use of this transformer permits ultra-linear operation as described in Audio Engineering's "Ultra-Linear Operation of the Williamson Amplifier."

#### Heathkit ECONOMY 6 WATT



The Heathkit Model A-7 amplifier features beam power, push pull output with frequency response flat ± 1½ DB from 20 to 20,000 cycles. Separate volume, bass and treble controls. Two input circuits, output impedances of 4, 8, and 15 ohms. Peak power output rated at full 6 watts. High quality components, simplified layout, attractive gray finished chassis, break off type adjustable length-control shafts and attractive lettered control panel.

THE MODEL A7A amplifier incorporates a preamplifier stage with special compensated network to provide the necessary voltage gain for operation with variable reluctance or low output level phono cartridges. Excellent gain for microphone operation in a moderate powered sound system. \$16.50

### Heathkit HIGH FIDELITY 20 WATT



The Heathkit Model A8 Amplifier kit was designed for high fidelity performance, adequate power output, and moderate cost. Frequency response is within ± 1 db from 20 to 20,000 cycles. The amplifier features a Chicago Power transformer in a drawn steel case and a Peerless output transformer with output impedances of 4, 8 and 16 ohms. Has two input jacks for either crystal or tuner operation and separate bass and treble tone controls. The kit includes all necessary material as well as detailed construction manual.

MODEL A8-A features an added 6SJ7 stage (preamplifier) for operating from a variable reluctance cartridge or other low output level phono pickups. Can also be used with a microphone. A 3-position panel switch affords the desired input service....... \$35.50