HEATHKIT SPECIFICATIONS AND SCHEMATICS is intended to provide reference information and to answer your questions pertinent to Heathkit design.

The Heath Company has always freely offered schematics and technical information in the sincere belief that the material is interesting and will prove helpful to many.
Hindustan pioneered in the electronic measurement of oilfields, making the available equipment well-designed, very user-friendly, and long-lasting. This has led to a significant reduction in the cost of electronic equipment, and thereby, a lower cost of equipment for the oil industry, making it a viable and affordable solution.

The combination of efficient engineering, careful selection and planning of materials, use of high-quality components, and attention to the detail work in the design and fabrication of panels and chassis has allowed us to produce excellent, high-quality equipment, which is a pleasure to own and highly portable in appearance.

The advantages of using equipment that is not equipment are numerous. The builder saves the money, time, and effort of the cost of buying, building, and repairing equipment. The builder eliminates the need for maintenance or repair every year, the knowledge gained in construction will prevent the loss that he might experience, and the builder ensures that his equipment operates properly, which is what we expect of Hindustan equipment for which he has always been a leader.
HEATHKIT MODEL A-7B and A-7C
AUDIO AMPLIFIERS

SPECIFICATIONS

Frequency Response: +1.5 db 20 to 20,000 cps
Power Output: 6 watts
Tube Complement:
1 - 12J5 First Amplifier
1 - 12SJ7 Second Amplifier and Phase Splitter
2 - 12S6 Beam Power Output
1 - 5Y3 Rectifier
1 - 12AT7 or 12AT7 Preamplifier (A-7C only)

Output Impedance: 4, 8, or 16 ohms
Input Voltage: 110-120 volts AC 50/60 cycles
Physical Specifications: 11 1/2" wide, 5 1/4" high, 6 1/2" deep
Shipping Weight: 10 lbs.
**HEATHKIT AUDIO AMPLIFIER**

**MODEL A-9A**

### Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Response</td>
<td>±1 db 20 to 20,000 cps</td>
</tr>
<tr>
<td>Power Output</td>
<td>20 watts</td>
</tr>
<tr>
<td>Total Harmonic Distortion</td>
<td>1/2 (at 3 db below rated output)</td>
</tr>
<tr>
<td>Input Requirements (for 15 watts output)</td>
<td></td>
</tr>
<tr>
<td>Magnetic Phone Input</td>
<td>0.007 volts</td>
</tr>
<tr>
<td>Microphone Input</td>
<td>0.01 volts</td>
</tr>
<tr>
<td>Crystal Phone Input</td>
<td>0.06 volts</td>
</tr>
<tr>
<td>Tuner Input</td>
<td>0.6 volts</td>
</tr>
<tr>
<td>Tone Controls</td>
<td></td>
</tr>
<tr>
<td>Bass (at 30 cps)</td>
<td>15 db boost, 15 db cut</td>
</tr>
<tr>
<td>Treble (at 15 kc)</td>
<td>15 db boost, 20 db cut</td>
</tr>
<tr>
<td>Power Requirements</td>
<td>100 watts, 105-125 volts 50/60 cycle AC</td>
</tr>
<tr>
<td>Tube Complement</td>
<td>12AX7 magnetic phone preamplifier and input amplifier, 12AU7 voltage amplifier and tone control amplifier, 12AU7 voltage amplifier and phase splitter, Two 6L6G push-pull pentode power amplifiers, 5U4G Rectifier, 12 1/4&quot; x 8 1/2&quot; x 8 5/8&quot; high</td>
</tr>
</tbody>
</table>

**Dimensions**

17 lbs.
HEATHKIT ANTENNA COUPLER
MODEL AC-1

SPECIFICATIONS

Maximum RF Power Input: 75 watt
Input Connection: 52 ohm coaxial cable
Output Connection: Single-ended
Low Pass Filter Cut-off Frequency: 36 megacycles
Dimensions: 7 1/8" x 1 3/8" x 4 7/8"
Net Weight: 3 lbs.
Shipping Weight: 3 lbs.

SCHEMATIC ANTENNA COUPLER
HEATHKIT
* AUDIO FREQUENCY METER
MODEL AF-1

TECHNICAL SPECIFICATIONS

Power Requirements: 105-125 V AC 50-60 cycles, 35 Watts

Tube Complement:
1 - 6V6
1 - 6H6
1 - 6X5
1 - 6SJ7 - VR150

Ranges:
0-100, 0-300, 0-1KC, 0-3KC, 0-10KC, 0-30KC, 0-100KC.

Input:
Impedance 250,000 Ohms at 1,000 CPS
Voltage 2-300 Volts RMS

Physical Specifications: 12½" long x 7" high x 7½" deep, Shipping Wt. 12 lbs.
HEATHKIT AUDIO GENERATOR
MODEL AG-8

SPECIFICATIONS

Frequency range: 20 cps to 1 mc in five ranges
Output voltage: 10 volts (no load) plus or minus 1 db 20 cps to 400 kc; down 3 db at 600 kc; down 8 db at 1 mc.
Generator impedance: 600 ohms
Distortion: less than 0.4%, 100 cps through audible range
Power requirements: 30 watts, 105-125 volts 50-60 cycles AC
Dimensions: 7½" high, 10½" wide, 7½" deep
Shipping weight: 15 lbs.
HEATHKIT ANTENNA IMPEDANCE METER
MODEL AM-1

SPECIFICATIONS

Frequency Range: 0-150 megacycles
Impedance Range: 0-600 ohms
Null Indicator: 100 μ ampere meter
Dimensions: 2 1/2" x 3" x 7"
Net Weight: 1 lb.
Shipping Weight: 3 lbs.
HEATHKIT
MODEL AO-1
AUDIO OSCILLATOR

SPECIFICATIONS

Frequency Range
Output Voltage (Sine Wave)
Square Wave)
Generator Impedance
Distortion
Power Requirements
Dimensions
Shipping Weight

20 to 23,000 cps, in three ranges
10 volts, no load, plus or minus 1 db.
10 volts, rise time 2 microseconds, (10-90%)
600 ohms
Less than 0.05%, 100 cps through audible range
30 watts, 105-125 volts, 50-60 cycles AC
7¼” high, 13¼” wide, 7¾” deep.
14 lbs.
HEATHKIT MODEL AR-2
COMMUNICATIONS RECEIVER

SPECIFICATIONS

Frequency Range ........................................ 550 kc to 35 mc on four bands
Tube Complement ........................................ 1 - 12B6 Oscillator and Mixer
1 - 13BA6 IF Amplifier
1 - 12AV6 Second Detector and First Audio Amplifier
1 - 12A6 Beam Power Output
1 - 13B16 BFO Tube
1 - 5Y3 Full Wave Rectifier

Power Requirements .................................... 105-125 volts AC 50/60 cycles 45 watts
Dimensions ............................................... 11 1/2" wide x 5 3/4" high x 8 3/4" deep
Shipping Weight ........................................ 15 lbs.

FEATURES

Band Spread Tuning
Phone - Standby - CW
Headphone Jack
Noise Limiter
RF Gain Control
Ham Band Identifications
HEATHKIT AMATEUR TRANSMITTER
MODEL AT-1

SPECIFICATIONS

RF Amplifier Power Input ........................................... 25-30 Watts
Output Connection ..................................................... 52 Ohm Coaxial Cable
Oscillator Operation ................................................... CW, can be modulated for phone
Amplifier Operation ................................................... 80, 40, 20, 15, 11, 10 Meters
Tube Complement ...................................................... Rectifier
SUG, SAGT ................................................................. Oscillator - Multiplier
81A ............................................................... Amplifier - Doubler
Power Requirements .................................................. 105-25 50/60 Cycle, 100 Watts
Cabinet Size ............................................................... 8 1/4" high x 13 1/8" wide x 7" deep
Net Weight ............................................................... 13 lbs.
HEATHKIT
MODEL AV-2
A. C. VOLTOMETER

Technical Specifications

Power Requirement: 105-125V AC, 50-60 cycles, 10 Watts
Tube Complement: 1 - 6AU6 1 - 6AT6
Input Impedance: 1 Megohm at 1 KC
Ranges: .01, .03, .1, .3, 1, 3, 10, 30, 100, 300 V RMS
Decibels: Total range -55 to -52 db, scale -12 to +2 db.
(1 MW = 800 ohm) ten switch selected ranges from -40 to +50 db.
Physical Specifications: 7-3/8" high x 4-11/16" wide x 4-1/8" deep
Net Weight 3 1/2 lbs. Shipping Weight 5 lbs.
HEATHKIT AUDIO WATTMETER
MODEL AW-1

SPECIFICATIONS

Frequency Response.............................................................................. ±1 db, 10 cycles to 250 kc
Wattage Range......................................................................................... 0-5 milliwatts, 50 milliwatts, 500 milliwatts, 5 watts, 50 watts full scale.
DB Ranges................................................................................................ Total range, -15 db to +40 db, scale -5 to +18 db
 (1 mw - 600 Ω). Five switch selected ranges from 
Load Resistors............................................................................................... 4 Ω, 60, 19 Ω and 600 Ω non-inductive, switch selected.
Audio Input Power Ratings.......................................................................... Up to 25 watts maximum continuous duty, 50 watts maximum intermittent. Duty cycle 50 watts is 3 minutes. Ventilated cabinet allows efficient cooling.
Multipliers................................................................................................. Precision type
Meter........................................................................................................ 4 1/2" streamlined case with 200 microampere movement.
Meter Rectifier............................................................................................. Crystal diode bridge for wide range frequency response.
Tube............................................................................................................. 12AU7 - voltage amplifier and current amplifier for meter.
Power Supply............................................................................................... Power transformer and selenium rectifier
Power Requirements................................................................................... 110-125 volt AC, 50/60 cycle, 6 watts
Dimensions.................................................................................................. 7 3/8" high x 4 11/16" wide x 4 1/8" deep
Net Weight................................................................................................. 3 lbs.
Shipping Weight....................................................................................... 6 lbs.
HEATHKIT BATTERY ELIMINATOR
MODEL BE-4

SPECIFICATIONS

Continuously variable voltage output
0-8 volts DC...........................................10 amperes continuously
0-16 volts DC...........................................15 amperes maximum intermittent
3 amperes continuously
7.5 amperes maximum intermittent

Power Requirements.................................105-125 V., 50-60 cycles AC at 175 watts

Dimensions...........................................11 1/4" wide x 7 1/3" deep x 7 1/4" high

Approximate shipping weight....................22 lbs.
HEATHKIT BAR GENERATOR
MODEL BG-1

SPECIFICATIONS

Carrier Frequency: 60 to 80 megacycles
Modulating Frequencies
Radio Frequency (Horizontal Linearity): 113 to 172 KC
Low Frequency (Vertical Linearity): 400 cps. (approx.)
Output Voltage: 100,000 microvolts
Tube: 12AT7
Power Supply: Transformer operated half-wave selenium rectifier
Power Requirements: 105-125 volts, 50-60 cycles AC
Dimensions: 8 1/8” wide, 4 3/8” high, 4 7/8” deep
Shipping Weight: 6 lbs.
HEATHKIT BROADCAST BAND RECEIVER
MODEL BR-2

SPECIFICATIONS

Radio
- Tuning Range: 550 kc to 1630 kc
- I.F. Frequency: 455 kc
- Antenna: Built-in High Sensitivity Rod Type
- Speaker (included): 5 1/2" FM 4 ohm Voice Coil
- Tuner Operation: High impedance to any amplifier input with resistance of 100,000 ohms or more. 110 V outlet provided for amplifier, phonograph player, etc.

Phonograph
- Input: 1 megohm high impedance for optimum performance with any good quality crystal or ceramic phonograph pickup.

Tube Complement
1 - 5Y3 Rectifier
1 - 12AS7 Beam Power Amplifier
1 - 12AV6 Detector, A.V.C. and Audio Amplifier
1 - 12BA6 I.F. Amplifier
1 - 12BK6 Pentagrid Converter

Power Requirements
- 105-125 V 50-60 cycles AC 40 watts

Dimensions
- 11 1/2" wide, 8 3/4" high, 6 3/4" deep
HEATHKIT
MODEL BT-1
BATTERY TESTER

SPECIFICATIONS
HEATHKIT BATTERY TESTER MODEL BT-1

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Range</td>
<td>0 to 15 volts, 0 to 100 volts</td>
</tr>
<tr>
<td>Load Current</td>
<td>“A-Batt” Range 100 mA, “B-Batt” Range 10 mA</td>
</tr>
<tr>
<td>Meter Indications</td>
<td>GOOD—WEAK—REPLACE</td>
</tr>
<tr>
<td>Size</td>
<td>Length 5 7/8&quot;, Width 3&quot;, Height 2 3/4&quot;</td>
</tr>
<tr>
<td>Shipping Weight</td>
<td>3 Pounds</td>
</tr>
</tbody>
</table>
HEATHKIT CONDENSER CHECKER  
MODEL C-3

SPECIFICATIONS

Power Requirements: .......................... 110-125 volts, 50-60 cycles a-c
Cabinet Size: .................................. 94" wide x 63" high x 5" deep
Kit Shipping Weight: ........................... 7 pounds
Power Supply: .................................. Power transformer-half wave rectifier
Capacity: 4 Ranges: ............................ 
1000 mfd
.001 mfd - .005 mfd
.001 mfd - .5 mfd
.1 mfd - 50 mfd
20 mfd - 1000 mfd

D-C Leakage Test
Polarizing Voltages: 5 Ranges: .............. 25 volts d-c
150 volts d-c
250 volts d-c
350 volts d-c
400 volts d-c

Resistance Ranges: 2 Ranges: ............... 100 ohms to 50,000 ohms
10,000 ohms to 5 megohms

Circuit: ........................................... A-c powered bridge for both capacitive and resistive measurements. Maximum opening of electron beam indicator denotes bridge balance.
HEATHKIT
MODEL DR-1
DECADE RESISTANCE KIT

SPECIFICATIONS

Range: 1 Ω to 99,999 Ω in one ohm steps

Components:
- Resistors: Precision - 1/2% accuracy
- Ceramic Switches

Maximum Current:
- Units: 500 MA
- Tens: 150 MA
- Hundreds: 50 MA
- Thousands: 15 MA
- Ten Thousands: 5 MA

Dimensions: 11 1/2" x 3 3/8" x 3 3/8" Birch Cabinet

HEATHKIT
MODEL DC-1
DECADE CONDENSER

SPECIFICATIONS

100 mmf to 0.111 mmf in increments of 100 mmf.

Voltage Rating:
350 volts DC, continuous; 500 volts DC, intermittent, 1000 volts DC test.

Dielectric:
Silver mica

Accuracy of Incremental Capacity:
Plus or minus 1%

Zero capacitance:
15 to 20 mmf, with all switches set at zero

Dimensions:
3 3/4" wide, 4 3/4" high, 10 5/8" deep

Shipping Weight:
4 lbs.
HEATHKIT GRID DIP METER
MODEL GD-1B

SPECIFICATIONS

Frequency Range: ........................................ 2 to 250 mc using five coils. Additional coils available; extending frequency to 350 mc.

Meter Movement: ........................................... 500 microampere

Power Requirements: ........................................ Transformer operated selenium rectifier

Power Supply: .............................................. 117 volt, 60 cycles

Dimensions: ................................................. 7" long x 2 1/2" wide x 3 1/4" deep

Shipping Weight: ........................................... 2 lbs.

Net Weight: .................................................. 2 lbs.
HEATHKIT IMPEDANCE BRIDGE
MODEL 1B-2

SPECIFICATIONS

Circuit........................................4-arm impedance bridge
DC Measurements...............................Built-in power supply operating directly from 110 V AC. Panel binding posts provide for use of external supply.
Meter..............................................100-0-100 microampere meter
AC Measurements...............................Built-in 1000 cycle vacuum tube oscillator. Terminals on panel provide for connecting an external generator for measurement at other frequencies.
Detector........................................Vacuum tube detector and rectifier make use of built-in meter. Panel binding posts provide for connection to external detector.
Resistance......................................0.1 Ω to 10 Megohm
Capacitance.....................................10 μf to 100 μf
Inductance......................................10 μh to 100 h
Dissipation Factor (D)..........................0.002 to 1
Storage Factor (Q)..............................0.1 to 1000
Accuracy........................................1/2 or 1/10 decade resistors used. 1/2 of 1% silver mica condensers used. Accuracy is limited more by interpretation of scales and workmanship of assembly. The following is normal:
Resistance ±3%
Capacitance ±5%
Inductance ±10%
Dissipation Factor (D=ωCR) ±20%
Storage Factor (Q=ωL/R) ±20%
Accuracy will fall off at extreme outer limits.
Power Requirements...........................105-135 volts, 50/60 cycles, 10 watts
Tube Complement..............................2 - 104 and 2 - 114
Power Supply..................................Power Transformer and Selenium Rectifier
Cabinet Size....................................8" high x 17" wide x 6" deep
Shipping Weight...............................15 lbs.
HEATHKIT INTERMODULATION ANALYZER
MODEL IM-1

TECHNICAL SPECIFICATIONS

Power Requirements: 105-125V AC, 50-60 cycles, 30 Watts
(115-230V on export model)

Tube Complement: 1 15AX7 Cascade Amplifier
1 15AT7 Detector and Meter Amplifier
1 6G5 HF Oscillator
1 6K5 Rectifier

Analyzer Ranges: Full scale 30% - 10% - 3%

Generator High Frequencies: Approx. 3000 and 7000 cycles

LF/HF Ratio: 4 to 1; voltage normal—can be set
to any combination.

Generator Output Impedance: 3000 ohms

Voltmeter Ranges: Full scale 30 Volts - 10 Volts - 3 Volts

Dimensions: 7" high x 15" wide x 8" deep

Shipping Weight: 10 lbs.
HEATHKIT ISOLATION TRANSFORMER
MODEL IT-1

APPLICATIONS
The Heathkit Isolation Transformer will fulfill a multitude of requirements in service shops. Not only will it provide isolation for universal or transformerless type radios and thereby eliminate shock hazard, it will also provide a means of increasing the AC voltage applied to the radio. In this manner, intermittent conditions of operation can be detected by applying higher than normal voltages and thereby inducing a breakdown in the component affected. While this does not necessarily represent the universal solution to intermittent operation difficulties, it will prove extremely helpful in eliminating some of the more common faults.

It is possible that many other applications of the Isolation Transformer will suggest themselves to the user; i.e., it can be used to isolate interference radiating devices from the AC line thereby reducing interference level. It can also be used in checking fluorescent lamp starters by determining the voltage level required for operation. Small motors or appliances may have their operating characteristics altered through the use of a variable-voltage isolation transform-
HEATHKIT HANDITESTER
MODEL M-1

SPECIFICATIONS

Range DC Volts: Full scale 10-30-300-1,000 and 5,000 Volts
Range AC Volts: Full scale 10-30-300-1,000 and 5,000 Volts
Range Ohmmeter: 0-3,000 Ohms 30 Ohms Center
Range Milliamperes: 0-10 MA 0-100 MA
Meter Movement: 400 Microampere 3"
AC Rectifier: Dual half wave
Accuracy: 1% divider and calibrating resistors provided
Case: Streamline Bakelite
Ohmmeter Battery: Burgess No. 1 Unicell Flashlight Battery
HEATHKIT MULTIMETER
MODEL MM-1

SPECIFICATIONS

Sensitivity: 20,000 ohm/volt DC, 500 ohm/volt AC
Range, DC Volts: 1.5 - 150 - 500 - 1500 - 5000
Range, AC Volts: 1.5 - 1 - 50 - 150 - 500 - 1500 - 5000
Range, Direct Current: 150 microamperes, 15 - 150 - 500 milliamperes, 15 amperes.
Range, Ohmmeter: 0.3 ohms to 20 megohms
Range, Decibels: -10 to +65 dB
Resistors: 1% precision type
 Controls: Range switch, Output-AC-D-C-Reverse DC switch, Ohms adjust control.
Batteries: 1 type C cell, 4 Penlite cells
Cabinet: Black Bakelite
Dimensions: 7 1/2" x 5 1/2" x 4"
Net Weight: 4 lbs.
Shipping Weight: 8 lbs.
HEATHKIT OSCILLOSCOPE
MODEL 0-9

SPECIFICATIONS

Vertical: Frequency Response.............. 50 db 10 cycles to 2 mc

Sensitivity.................. 6 db 5 cycles to 3 mc
Input Impedance........... 47 uF shunting 2 megohm X1 position

Horizontal: Frequency Response.............. 50 db 10 cycles x 500 kc

Sensitivity.................. 6 db 5 cycles to 3 mc
Input Impedance........... 47 uF shunting 2 megohm X10-100 position

Sweep Generator........... Multivibrator - frequency range of 10-50,000 cps

Tube Complement........... 1 - 5Y3GI Cathode Ray Tube
1 - 6AM Vertical Input
1 - 12AT7 Horizontal Input and Blanking
1 - 6G3 Regulator
1 - 6C4 Vertical Phase Splitter
4 - 12AT7 Multivibrator, Vertical Cascade Amplifier, Horizontal and Vertical Deflection Amplifiers.

Power Requirements........... 105-125 volts 50/60 cycle, 70 watts

Dimensions.................. 8 5/8" wide x 11 1/8" high x 10" deep

Net Weight.................. 18 1/2 lbs.
Shipping Weight............. 20 lbs.
HEATHKIT
MODEL GM-1
Q-METER

SPECIFICATIONS

Power Requirements: 115 volts AC 50/60 cycles 30 watts

Tube Complete:
1 - 12AT7 Oscillator
1 - 6AL5 VTVM diode
1 - 12AU7 VTVM amplifier
1 - OD3/VR150 Regulator
1 - 6X5 Rectifier

Frequency Range:
150 KC - 18 MC

Inductance Scale Range:
1 micro H. - 10 milli H.

Actual Capacity Scale Range:
40 MMF - 450 MMF

Effective Capacity Scale Range:
40 MMF - 400 MMF

Vernier Capacity Scale Range:
3 MMF - 20 MMF

"Q" Scale Range:
250 Full scale x1 or x2

Dimensions:
8" high x 17" wide x 6" deep
HEATHKIT RECORD PLAYER
MODEL RP-1

AMPLIFIER SPECIFICATIONS

Tube Complement ........................................... 12AX7 Voltage Amplifier and Phase Splitter
2 - 35CS Push-Pull Power Amplifiers
3SJ4 Rectifier
Compensated Volume Control
Separate Tone Control
Power Requirements ....................................... 117 volt 60 cycle AC, 45 watts

FEATURES

Record Changer ........................................... Three speed, Automatic shut-off
Speakers ................................................... 2 - 6" matched
Cabinet ...................................................... Praylin Impregnated Fabric Covered
Dimensions .............................................. 16 3/4" x 12 1/4" x 10 1/2" high
Shipping Weight ......................................... 30 lbs.
Heathkit Electronic Switch
Model S-2

Technical Specifications

Input Voltage: 110-125V AC 50-60 cycles
Power Consumption: 15 Watts

Tube Complement:
1. 6X5 (GT) Rectifier
1. 6SN7 (GT) Multivibrator
1. 6SN7 (GT) Blocking Tube
1. 6SN7 (GT) or 6SJ7 (GT) A Amplifier
1. 6SN7 (GT) or 6SJ7 (GT) B Amplifier

Control Line Up:
Gain A Control
Gain B Control
Position Control

Coarse Frequency Control
Fine Frequency Control

Approximate Switching Rates: (Continuously variable)
Low range: Less than 10 Cps. to 100 Cps.
Middle range: 50 Cps. to 400 Cps.
High range: 250 Cps. to 2000 Cps.

Physical Specifications:
Length (excluding knobs): 10 1/8"
Width: 5 5/8"
Height (excluding handle and feet): 6 5/8"
Net Weight: 8 lbs.
Shipping Weight: 10 lbs.
HEATHKIT SIGNAL GENERATOR
MODEL SG-8

SPECIFICATIONS

Frequency Range
Band A. .................................. 160 kc to 500 kc
Band B. .................................. 500 kc to 1500 kc
Band C. .................................. 1.05 mc to 6.5 mc
Band D. .................................. 6.5 mc to 26 mc
Band E. .................................. 25 mc to 110 mc
Calibrated Harmonics. ................. 110 mc to 220 mc
Radio Frequency Output. .............. In excess of 100,000 microvolts
Modulation Frequency. ............... Approximately 400 cycles
Audio Frequency Input. ............... 2 to 3 volts
Audio Frequency Output. .............. Approximately 5 v across 1 megohm
Tubes
12AU7 .................................. RF Oscillator-Buffer
6C4 ...................................... Audio Oscillator or Audio Amplifier
Power Requirements. ................. 105-125 v, 60/60 cycles
Cabinet Size. .................. 9 1/2 wide x 6 1/2 high x 5 deep
Shipping Weight. .................. 7 lbs.
HEATHKIT
SQUARE WAVE GENERATOR
MODEL SQ-1

TECHNICAL SPECIFICATIONS

Power Requirements: 105-125 VAC, 50-60 Cycle, 10 Watts
Ranges: 100 - 1000 - 10 KC - 100 KC
Tube Complement: 1 - 6SL7, 1 - 6AC7, 1 - 6V6, 1 - 6X5
Physical Specifications: 12½" Long, 7" High, 7¼" Deep
Shipping Weight 13 lbs.
Net Weight 11 lbs.
HEATHKIT TUBE CHECKER
MODEL TC-2

SPECIFICATIONS

Simplified set-up procedure,
Rapid switch selection of individual tube elements,
Any combination of base pin connections,
Check for quality, emission, shorted elements, open elements, and filament continuity,
Checks 4, 5, 6, and 7 pin large, regular and miniature, octal, locval, Hytron, 9 pin miniature
and pilot lamps,
Individual tests on multiple element tubes,
Blank panel socket for obsolescence protection,
Compensation for line voltage variation,
New smooth rolling illuminated roll chart,
Easy to read GOOD-BAD meter scale.
Fourteen Filament voltages -.75 to 117 volts
Element Test Voltages...............................0-250 volts
Dimensions.......................................14" wide x 11" deep x 4 1/4" high
Power Requirements..............................105-125 volts 50/60 cycles AC
HEATHKIT VISUAL-AURAL SIGNAL TRACER
MODEL T-3

FEATURES AND APPLICATIONS

High gain RF channel for direct observation of actual transmitted signal. Can be used for AM, FM and TV circuit investigation.

Low gain channel for audio circuit exploration.

Visual signal indicator.

Convenient wattmeter circuit.

Noise locator circuit.

Utility amplifier for checking record changers, tuners, etc.

Useful for checking microphones, musical instrument pickups and speakers.

Substitution test speaker and output transformer.

Oscilloscope preamplifier.

VTVM panel terminals.

Output meter.

TUBE COMPLEMENT

12CS amplifier and wattmeter rectifier.

12SH7 high gain pentode amplifier.

12A6 beam power output.

1629 electron beam visual indicator.

6X5 full-wave rectifier.

PROBES AND TEST LEADS

Shielded RF probe and lead.

Audio probe and lead.

Two flexible panel test leads with alligator clips.

SPECIFICATIONS

Cabinet size 93/4" wide 63/4" high 5" deep.

Shipping weight 8 pounds.

Power requirements 110 to 120 volts AC at 50-60 cycles.
HEATHKIT VTVM - MODEL V-6

SPECIFICATIONS

Power Requirements: 105-125V 50/60 Cycle AC, 10 Watts.
Cabinet Size: 7 3/8" high x 4 1/16" wide x 4 1/8" deep.
Kit Shipping Weight: 7 pounds
Meter: 4¼" Streamlined case with 200 microampere movement.

Multipliers: Precision type.
Tubes: 1 - 12A7 Twin triode meter bridge.
       1 - 6G6 Twin diode AC rectifier.
       Power transformer and selenium rectifier.

Power Supply: 1½ Volt flashlight cell
Battery: D.C. Voltmeter: 7 Ranges: 0-1, 1.5, 5, 15, 50, 150, 500, 1500 volts full scale.
Input Resistance: With accessory probe to 30,000 Volts.
Sensitivity: 11 Megohms (1 megohm in probe) on all ranges.
Circuit: 1,100 megohms with accessory probe.
Electronic AC Voltmeter: 7 Ranges: 0-1.5, 5, 15, 50, 150, 500, 1,500, 1,500V Max.
Circuit: Scales reading E.M.S. (.707 of positive peak).
Electronic Ohmmeter: 7 Ranges: Diode with adjustable compensation.
Electrical Ohmmeter: Scale with 10 ohms center x1, x10, x100, x1000, x10K, x100K, x1 Meg. Measures .1 ohm to 1,000 megohms with internal battery.
MODEL VC-2
VOLTAGE CALIBRATOR

SPECIFICATIONS

Power Requirements: 105-125V AC, 50-60 Cycles, 5 Watts.

Tube Complement: 1 6AL5 Clipper, 1 OB2 Voltage Regulator.

Input Impedance: Approx. 35 MMF with signal fed through calibrator.

Ranges: Using Peak-To-Peak Volts
Control and Output Multiplier switch
0 - 1 Volt
0 - 1 Volt
0 - 10 Volts
0 - 100 Volts

Cabinet Dimensions: 6 1/8" Wide x 4 3/8" High x 4 7/8" Deep
HEATHKIT
MODEL VT-1
VIBRATOR TESTER

SPECIFICATIONS

Power Requirements 4 to 6 Volts DC (Variable)

Meter Indications 4 Amperes
GOOD—BAD

Size Length 10", width 7 1/8”， Depth 3 1/2”

Shipping Weight 7 Pounds
AMPLIFIER CIRCUIT DIAGRAM
HEATHKIT "WILLIAMSON TYPE" AMPLIFIER
MODEL W-2

TECHNICAL SPECIFICATIONS
Amplifier and Power Supply (W-2M)

- Tube Complement: 2 - 6SN7GT; 2 - 5881; 1 - 5V4G
- Frequency response: within 1 dB from 10 cycles to 100 KC.
- Harmonic distortion at 5 watt output: less than 0.5% between 20 cycles and 20 KC
- IM distortion at 5 watt equivalent output: 0.5% using 80 and 3000 cycles.
- Output impedance: 4, 8 or 16 ohms.
- Input voltage for 5 watt output: 75 volts across 2.2 megohms.
- Power requirements: 105-125 volts 50/60 cycles 120 watts.
- Overall dimensions (each unit): 7" high x 5½" wide x 11" long.
Preamplifier (WA-P1)

- **Tube Complement**: 1 - 12AX7 (or 12AY7) and 1 - 12AU7.
- **Switch selected inputs**: 2 - low gain for crystal pickup and tuner.
- **Switch selected turn-over**: 1 - high gain for magnetic pickup.
- **Basic tone control at 20 cycles**: boosts 15 db max., cuts .5 db max.
- **Treble tone control at 20KC**: boosts 15 db max., cuts .5 db max.
- **Input voltage at 1KC for 1.2 volts output**: 0.2 volts across 1 megohm on low gain channel. 
- **Power requirements**: 0.004 volts across 25K on high gain channel

**Dimensions**: 220V DC at 6 mA and 0.3V at 600 mA.

**21/4" high x 101/2" wide x 71/2" deep.**
This presentation of HEATHKIT SPECIFICATIONS AND SCHEMATICS represents the world's greatest selection of kit form electronic equipment offered by the world's largest kit manufacturing company.

"Always the leader and pioneer in kit form electronics."

Heath Company     Benton Harbor, Michigan