

## SPECIFICATIONS

### VERTICAL AND HORIZONTAL AMPLIFIERS

Bandwidth. . . . .	DC to 400 kc (3 db point).
Sensitivity. . . . .	.1 volt (peak to peak) per 1/4" deflection (un-calibrated).
Attenuator. . . . .	3-position, compensated.
Input Impedance. . . . .	3.6 megohm shunted by 35 $\mu\text{mf}$ .
Gain Control. . . . .	Continuously variable.
Centering. . . . .	Any portion of a 2" x 2" trace may be positioned on any portion of the CR tube screen. Panel markings for the centering controls allow for easy beam finding.
Coupling. . . . .	Either AC or DC, selected with the input attenuator switch.
Polarity. . . . .	A positive signal applied to the vertical channel causes upward deflection; a positive signal applied to the horizontal channel causes beam deflection to the left.
Relative Phase Shift Between Channels. . . . .	Less than 5 degrees.

### SWEEP GENERATOR

Recurrent Type. . . . .	Linear sawtooth produced by multivibrator type generator.
Sync Provisions. . . . .	Internal or External sync may be switch selected. Sync level is automatically maintained over a range of 1/4" to 2" vertical trace.
Sync Polarity. . . . .	Plus or minus sync may be switch selected.
Frequency Coverage. . . . .	5 cps to 50 kc in four overlapping ranges. Lower sweep rates may be obtained by adding capacitance to the "External Capacity" binding post.
Blanking. . . . .	Retrace is blanked in conjunction with the internal sweep generator.

### GENERAL

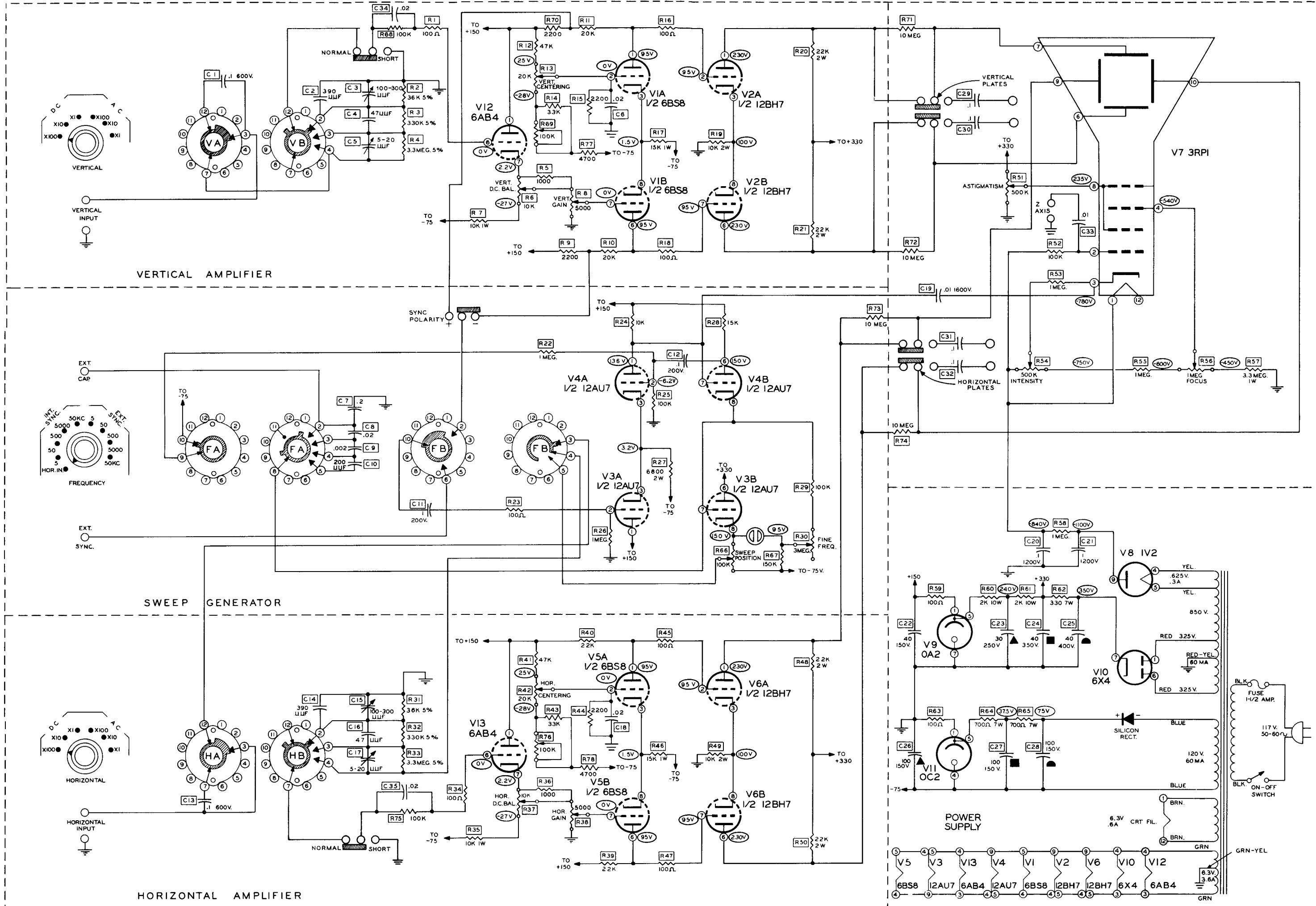
Tube Complement. . . . .	<ul style="list-style-type: none"> <li>1 - 3RP1 medium persistence, green trace CRT.</li> <li>2 - 6AB4 Cathode followers.</li> <li>2 - 6BS8 Amplifiers.</li> <li>2 - 12BH7 Push-pull deflection amplifiers.</li> <li>2 - 12AU7 Sweep multivibrator.</li> <li>1 - 6X4 Low voltage rectifier.</li> <li>1 - 1V2 High voltage rectifier.</li> <li>1 - OA2 B+ voltage regulator.</li> <li>1 - OC2 Bias voltage regulator.</li> </ul>
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Front Panel Controls. . . . .	VERTICAL AMPLIFIER - Step Attenuator, Variable Attenuator, Balance, Input Shorting Switch, Vertical Positioning. HORIZONTAL AMPLIFIER - Step Attenuator, Variable Attenuator, Balance, Input Shorting Switch, Horizontal Positioning. SWEEP GENERATOR - Coarse Frequency Selector, Fine Frequency Selector, Sync Polarity Switch. FOCUS. INTENSITY - AC Switch.
Input Connections. . . . .	Vertical, Horizontal, External Sync, and External Capacity are 5-way binding posts.  Input to vertical and horizontal deflection plates on rear panel.  Z-Axis input on rear panel, requires 1 to 15 volts for complete blanking, depending on Intensity control setting.
Power Supplies. . . . .	Transformer-operated, fused, B+ supply, full-wave rectifier. High voltage and B- supply, half-wave rectifier. All critical voltages regulated with VR tubes.
Dimensions. . . . .	9-3/8" high x 9-3/16" wide x 11-9/16" deep.
Net Weight. . . . .	15 lbs.
Shipping Weight. . . . .	17 lbs.



All prices are subject to change without notice. The Heath Company reserves the right to discontinue instruments and to change specifications at

any time without incurring any obligation to incorporate new features in instruments previously sold.



SWITCHES ARE IN THE POSITIONS SHOWN BY THE FRONT PANEL MARKINGS.  
 SWITCHES ARE VIEWED FROM THE FRONT.  
 ALL RESISTORS ARE 1/2 WATT UNLESS SHOWN OTHERWISE.  
 ALL RESISTOR VALUES ARE IN OHMS (K = 1000 OHMS, MEG. = 1,000,000 OHMS).  
 ALL CAPACITOR VALUES ARE IN  $\mu$ f UNLESS OTHERWISE SHOWN.  
 ALL VOLTAGES ARE FROM POINT INDICATED TO CHASSIS GROUND.  
 (EXCEPT AC VOLTAGES ON POWER TRANSFORMER WINDINGS.)  
 READINGS WERE TAKEN WITH AN 11 MEGOHM INPUT VTVM.

**SCHMATIC OF THE  
 HEATH SCIENCE SERIES  
 D.C. COUPLED OSCILLOSCOPE  
 MODEL EUW-25**

V5	V3	V13	V4	V1	V2	V6	V10	V12
6BS8	12AU7	6AB4	12AU7	6BS8	12BH7	12BH7	6X4	6AB4