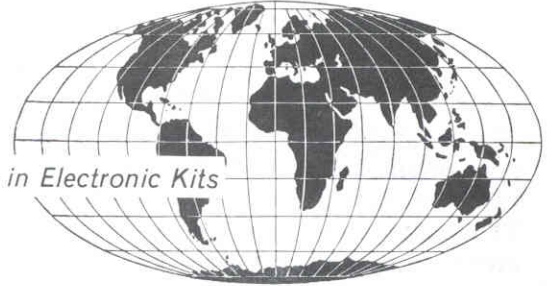


specifications

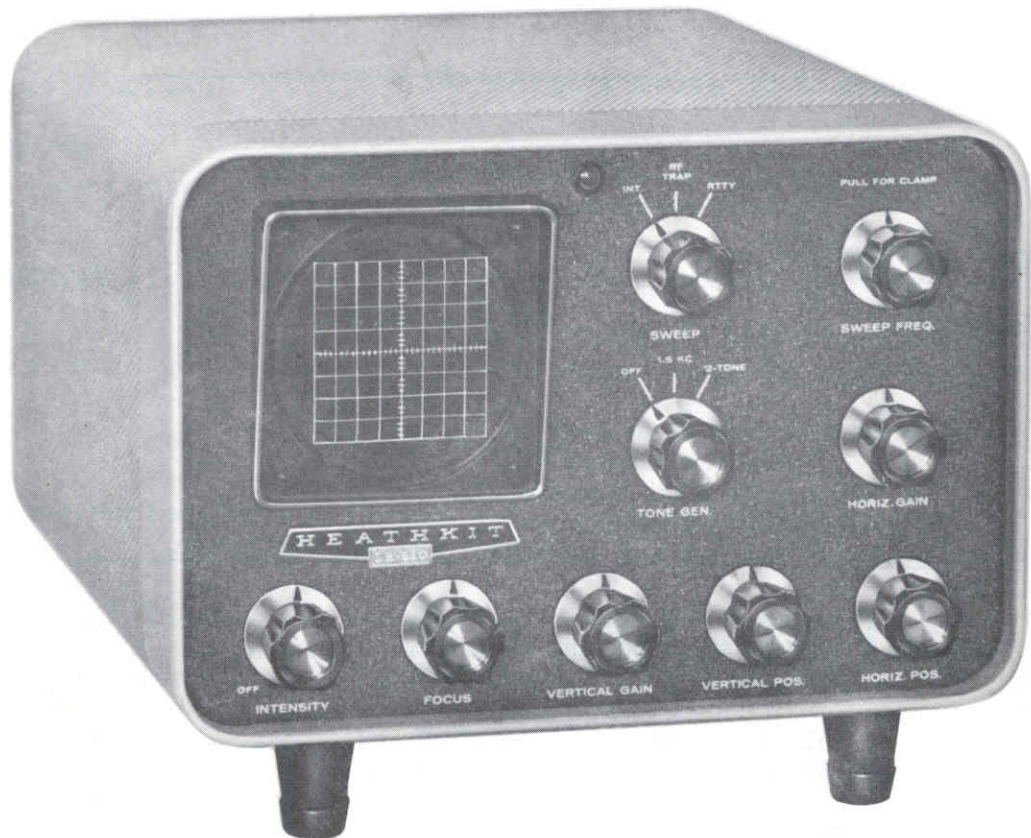
FOR THE



Pioneer And World-Leader in Electronic Kits



MONITOR SCOPE MODEL SB-610



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

**HEATH COMPANY,
BENTON HARBOR, MICHIGAN**

INTRODUCTION

The Heathkit Model SB-610 Monitor Scope is a convenient instrument for use with an amateur radio station to monitor "on-the-air" signals. The Scope can be used on any amateur band, or other frequency, from 160 through 6 meters without additional tuning or modification. It can also be used for citizen's band transceiver monitoring when a small modification is made to the Scope.

The primary function of the Monitor Scope is to display the transmitted signal pattern, RF envelope, RF trapezoid, or radioteletype (RTTY) cross pattern. It can also be used to monitor

radio signals from other stations when used in conjunction with a receiver.

A 2-tone generator (1500 and 1950 cps sine wave audio oscillators) is built into the Scope for single sideband adjustment and other test purposes. The Scope also has a special one-piece shield for the cathode ray tube to minimize the effects of stray magnetic fields on the trace.

Cabinet and front panel styling of the Model SB-610 Monitor Scope matches that of the Heath SB Series of amateur single-sideband equipment.

SPECIFICATIONS

VERTICAL AMPLIFIER

Input Resistance, 100 K Ω .

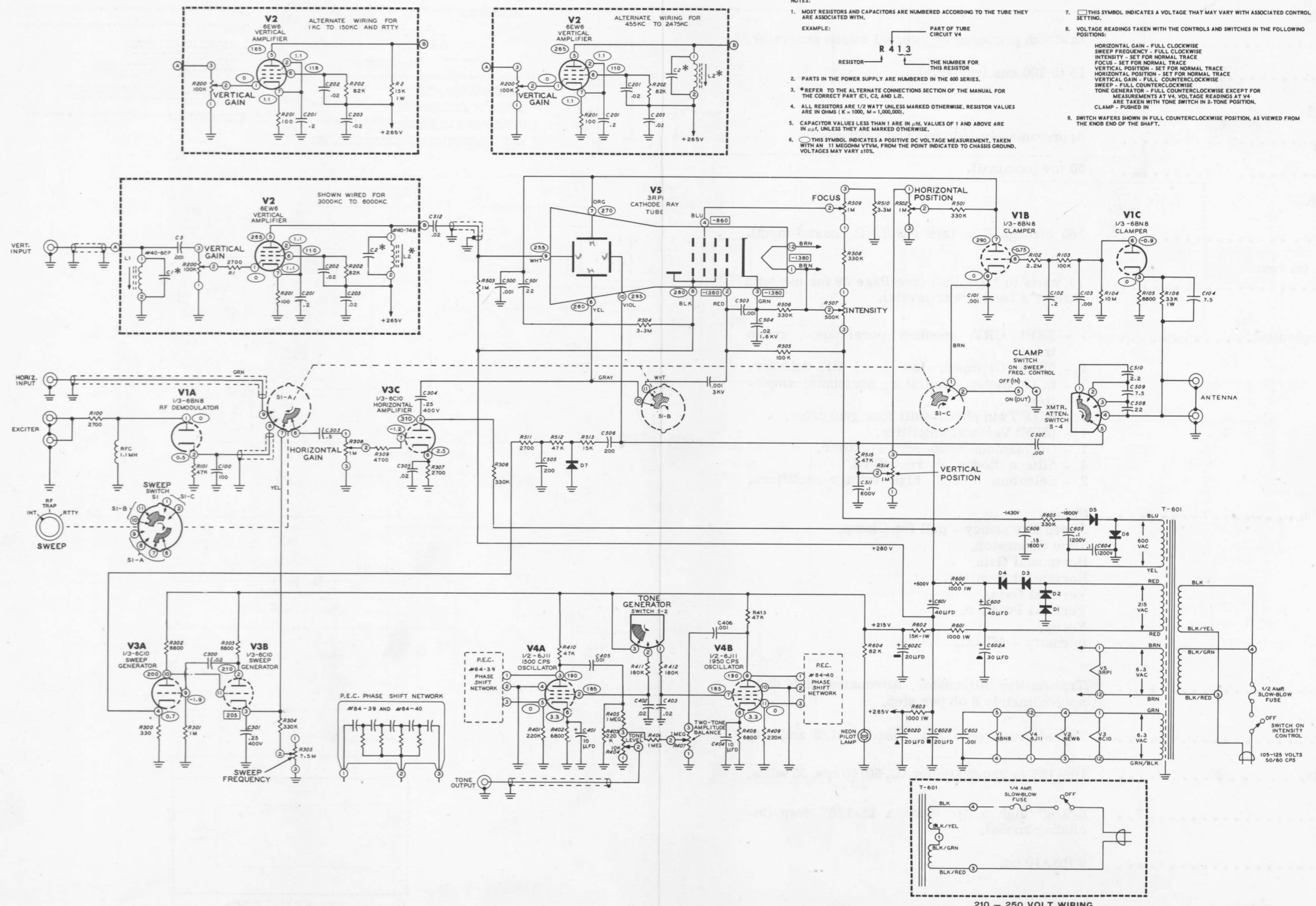
Sensitivity Chart

Optional Frequency Inputs	Nominal input voltage (rms) per inch of vertical deflection.
Untuned	
10 cps to 400 cps,	2.0 v
400 cps to 10,000 cps (RTTY),	1.0 v
10 kc to 455 kc,	500 mv
Tuned	
455 kc,	70 mv
1600 to 1680 kc,	200 mv
2075 kc,	200 mv
2215 kc,	200 mv
2475 kc,	200 mv
3000 kc,	400 mv
3055 kc,	400 mv
3395 kc,	500 mv
5000 to 6000 kc,	600 mv

HORIZONTAL AMPLIFIER

Frequency Response, ± 3 db from 3 cps to 15 kc.
 Sensitivity, 800 mv per inch deflection.
 Input Resistance, 1 megohm.

SCHEMATIC OF THE HEATHKIT[®] MONITOR SCOPE MODEL SB-610



SWEEP GENERATOR

Recurrent Type. Sawtooth produced by internal sweep generator.
Frequency. 15 to 200 cps (variable).

STONE OSCILLATORS

Frequencies. Approximately 1500 cps and 1950 cps.
Output Voltage. 50 mv (nominal).

GENERAL

Frequency Coverage. 160 through 6 meters (50-75 Ω coaxial input).

Signal Power Limits (at rear
coaxial connector). 15 watts to 1 kilowatt (see Page 39 for use with
Citizen's band power levels).

Tube And Diode Complement. 1 - 3RP1 CRT, medium persistence, green
trace.
1 - 6BN8 Clamper, low level RF detector.
1 - 6C10 Sweep generator, horizontal ampli-
fier.
1 - 6J11 Twin phase-shift tone generator.
1 - 6EW6 Vertical amplifier.
1 - Germanium diode, sync rectifier.
4 - Silicon diodes, B+ rectifiers.
2 - Selenium diodes, high voltage rectifiers.

Front Panel Controls. Sweep.
Sweep Frequency - pull for Clamp.
Tone Generator.
Horizontal Gain.
Horizontal Position.
Vertical Gain.
Vertical Position.
Focus.
Intensity - AC Off.

Rear Panel Control Transmitter Attenuator. Attenuates to 24 db at
approximately 8 db per step.

Power Supply. Transformer operated, fused at 1/2 ampere.

Power Requirements. 105-125 or 210-250 volts AC, 50/60 cps, 35 watts.

Dimensions. 6-5/8" high x 10" wide x 11-1/8" deep (in-
cluding knobs).

Net Weight. 9 lbs, 10 oz.