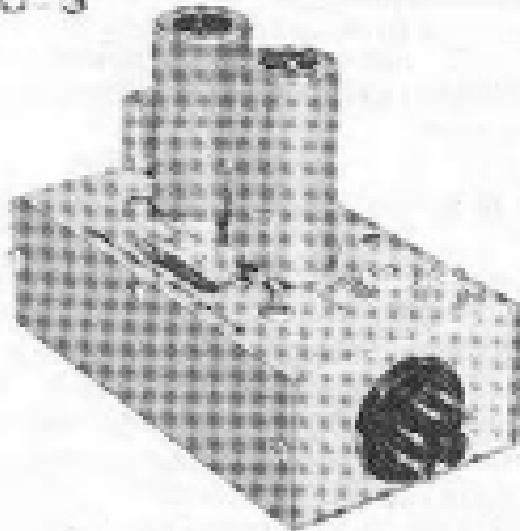


Assembly and Operation of the



**6-METER
CONVERTER**

MODEL SRA-300-3





SPECIFICATIONS

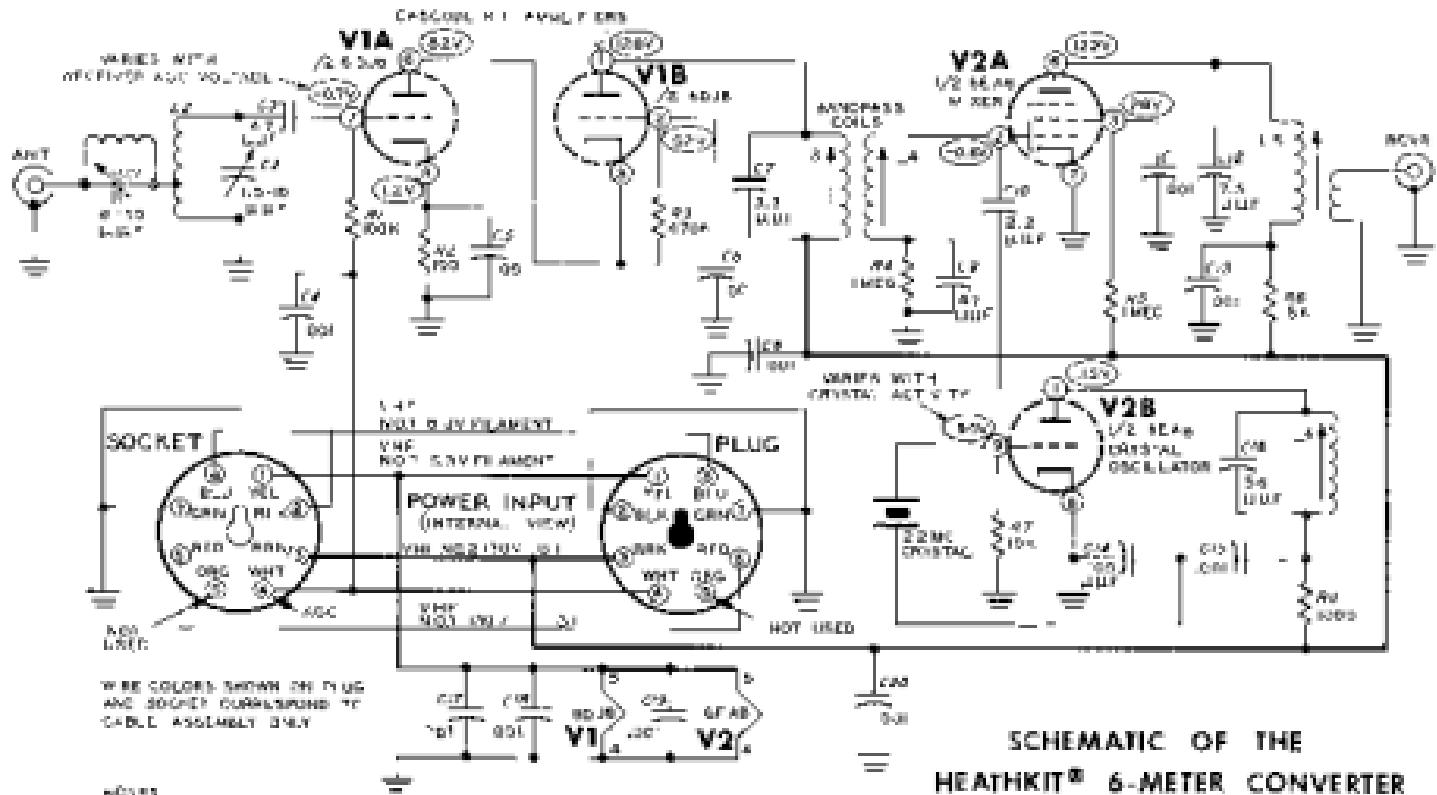
Sensitivity	4M: Less than 0.1 microvolt for 6 db at 3750 cps bandwidth. SSB: Less than 0.1 microvolt for 10 db at 2100 cps bandwidth. CW: Less than 0.1 microvolt for 15 db at 400 cps bandwidth. (Using Heathkit SB-300 Receiver.)
Noise Figure	3 db or less at 3750 cps bandwidth.
Frequency	Input: 48 to 54 megacycles (50 to 53 megacycles with crystal supplied). Output: 28 to 30 megacycles.
Bandpass	Essentially flat over any 2 megacycle segment from 48 to 54 megacycles.
Image Rejection	50 db or better at 6 megacycles.
IF Rejection	40 db or better at 28 megacycles.
Crystal	22 megacycles $\pm 0.05\%$ 3rd overtone.
Type Complement	6D18 cascode RF amplifier. 6EA8 oscillator-mixer.
Power Requirements	130 volts DC at 12.5 milliamperes. 6.3 volts AC at 615 milliamperes.
Dimensions	Overall: 2-5/8" wide x 2-3/4" long x 3-3/4" high.

Net Weight - 10-1/2 oz.

Test Equipment Used in Preparing Specimens, Measurements,
and Alignment Instructions -

Measurements Corporation Model 80 Standard Signal Generator
(with 80 12 pads).

Hewlett Model 1M-13 Variac Tube Voltmeter.



SCHEMATIC OF THE
HEATHKIT® 6-METER CONVERTER
MODEL SBA-300-3

The Converter is now ready to put into operation. Instrument alignment should not be required, as the preset adjustments of the coils and capacitors should provide converter operation equal to or better than the specifications. Information on using other crystal frequencies to cover different band segments is provided in the following section of the manual.

CRYSTAL INFORMATION

The 22 megacycle crystal supplied with the Converter provides reception from 50 to 52 megacycles. Other crystal frequencies can be used to cover different 2-megacycle segments between 48 and 64 megacycles. The following chart lists some of the crystal frequencies that can be used. In each case, the output frequency of the Converter is between 28 and 30 mc, which corresponds to 10 meter reception with the SB-300 Receiver.

CRYSTAL CHART
(Frequencies in megacycles)

CONVERTER CRYSTAL	COVERAGE
20	48 to 50
21	49 to 51
22	50 to 52
23	51 to 53
24	52 to 54

When purchasing a crystal for use with this Converter, you should specify the frequency and the following crystal characteristics. Crystals that do not have these characteristics will not provide optimum performance.

Holder HC-6/U

Pin diameter .050"
Pin spacing .480".

Loud capacity (C1)

12.8 μ uf.

Internal capacity (Co)

0 μ uf, maximum

Series resistance (Rs)

30 Ω , maximum

Drive level

6 milliwatts.

Also, if you install a crystal other than the 22 megacycle crystal supplied, it will be necessary to readjust oscillator coil L6 as directed in the Test And Adjustment section of the manual.