Equipment Used To Prepare Specifications. . . .	Heathkit IM-11 VTVM with 309-C RF Probe. Heathkit HO-10 Monitorscope. Heathkit IG-72 Audio Generator. Heathkit IM-12 Distortion Meter. Heathkit HN-31 Cantenna. Panoramic Radio Products, Inc. "Panalyzer," Model SB-12A. Hewlett Packard, Signal Generator, Model 606A. Tektronix Oscilloscope, Model 515A. Esterline Chart Recorder, Model AW. Boonton RF Voltmeter, Model 91-CA. Dynascan Digital Voltmeter, Model III.
Equipment Needed To Check And Calibrate. . .	VTVM and RF Probe. Frequency standard (100 kH crystal calibrator). Crystal-calibrated receiver, covering the 40-meter band, or an accurate broadcast receiver.

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.

CIRCUIT DESCRIPTION

The circuit of the Transceiver may be more easily understood if you refer to the Schematic Diagram (fold-out from Page 69) and Block Diagram (fold-out from Page 56) while reading the Circuit Description.

SCHEMATIC DIAGRAM

The letter-number designations on the Schematic Diagram are used to identify resistors, capacitors, chokes, etc. Each of these designations is related by the first one or two numbers to the tube stage in which it is used. For instance, the resistors in the tube stage V1 are designated R10, R11, etc. In tube stage V12 they are marked R120, R121, etc. This system of circuit component designation is used throughout the Schematic.

Numbers in diamonds on the Schematic refer to the terminals on the circuit board and the color coding of the cable assembly wires. Numbers 1 through 9 indicate solid colors; numbers 10 through 18 refer to wires with a white background and a single color stripe; and numbers 20 through 28 refer to wires with a white background and two identical color stripes. The numbers can be related to wire colors by using the same color code as used for resistors: brown = 1, red = 2, orange = 3, etc.

TRANSMITTER SECTION

Microphone Amplifier V1A

Voice signals from the microphone are coupled through capacitor C12 to the grid of microphone amplifier tube V1A. The amplified signal at the plate of V1A is coupled through C14 to the Mic Gain control, and through capacitor C102 to the VOX (voice operated transmitter) circuit. The setting of the Mic Gain control determines the amount of modulation. Since V1A supplies signals for modulation and for VOX, it operates during both receiving and transmitting. Capacitor C201 bypasses to ground