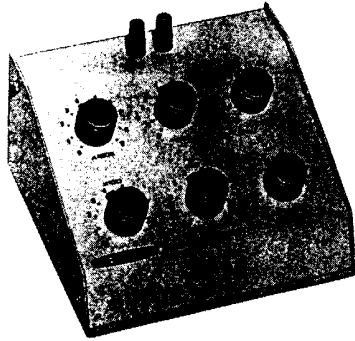


Assembly and Operation of the



DECADE RESISTANCE KIT MODEL IN-17



HEATH COMPANY
BENTON HARBOR, MICHIGAN 49022

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The Heath Company reserves the right to discontinue instruments and to change specifications at any time without incurring any obligations to incorporate new features in instruments previously sold.



SPECIFICATIONS

Range.	1 Ω to 999,999 Ω in 1 Ω steps.
Resistors.	Precision, 1/2% accuracy, 1 watt.
Maximum Current For Each Range.	
	<u>WORKING RATING</u> <u>MAXIMUM RATING</u>
	X1 - 500 ma. 1000 ma.
	X10 - 150 ma. 300 ma.
	X100- 50 ma. 100 ma.
	X1K- 15 ma. 30 ma.
	X10K- 5 ma. 10 ma.
	X100K- 1.5 ma. 3 ma.
Minimum DC Resistance.025 Ω at terminals with all switches set at zero.
Dimensions.	7-1/2" wide x 5" high x 6-5/8" deep.
Net Weight.	2-1/2 lbs.

INTRODUCTION

The IN-17 Decade Resistance Kit was designed as an accurate laboratory-type instrument for use wherever electrical measurements involving resistors are made. The wide range of available resistance values makes the IN-17 invaluable as a variable multiplier or shunt, a variable substitution resistor, or as an arm for DC and AC bridges. The Heathkit Decade Capacitance Kit makes an ideal companion with the IN-17 for solving re-

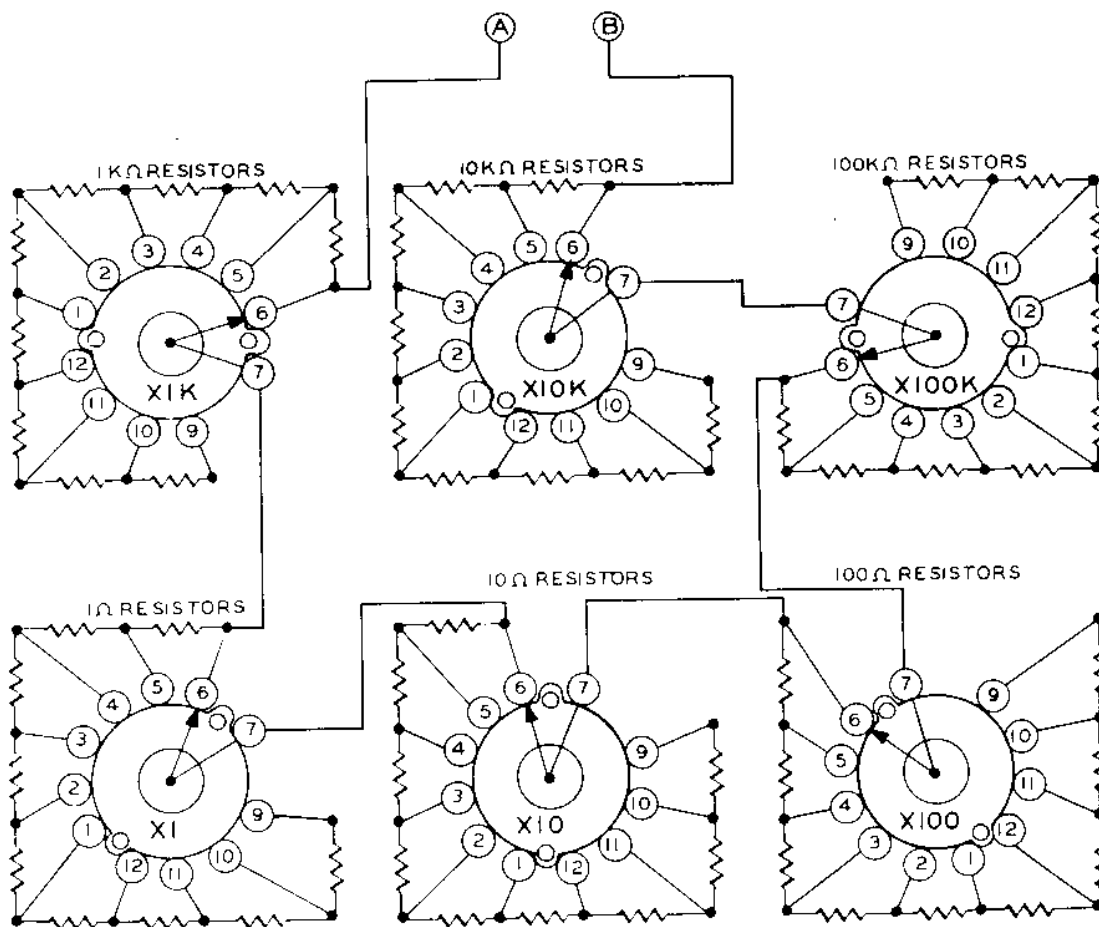
sistance and capacitance networks where a large range of values are necessary.

Refer to the "Kit Builders Guide" for complete information on unpacking, parts identification, tools, wiring, soldering, and step-by-step assembly procedures.

CIRCUIT DESCRIPTION

The series arrangement of the range switches and the precision resistors as shown on the Schematic Diagram will yield any resistance value from 1 to 999,999 Ω in 1 Ω steps. Each resistor is rated to be within 1/2% of its ohmic value for precision applications. The 0 position of the range switches allows the resistors to be bypassed if desired. The multiplier printed

beneath each range switch on the front panel indicates the value of each resistor for that particular switch. The "shorting-type" switches with make-before-break action permit smooth adjustment of the resistance value without opening or shorting of the circuit.



SCHEMATIC OF THE HEATHKIT[®]

DECADE RESISTANCE KIT MODEL IN-17