

**SCHEMATIC OF THE
HEATHKIT®
60 MHz TRIPLE TRACE OSCILLOSCOPE
MODEL IO-4360/SO-4360**

ManualsPlus.com

NOTES:

1. ALL RESISTORS ARE 1/4 WATT, 5% UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHM S (K=1,000; M=1,000,000).
2. ALL CAPACITOR VALUES LESS THAN 1 ARE IN μ F, VALUES GREATER THAN 1 ARE IN pF, UNLESS OTHERWISE SPECIFIED.
3.  INDICATES A LETTERED WIRE CONNECTION ON A CIRCUIT BOARD.
4.  INDICATES A CIRCUIT BOARD PLUG (PINS NUMBERED AS SHOWN).
5.  INDICATES A CIRCUIT BOARD SINGLE-WIRE PCB PIN W/ FEMALE TERMINAL CONNECTION.
6.  INDICATES A CHASSIS GROUND.
7.  INDICATES CIRCUIT BOARD GROUND.
8.  INDICATES A PART MOUNTED ON THE CHASSIS, ALTHOUGH ITS LOCATION IN THE SCHEMATIC SUGGESTS ANOTHER LOCATION.
9. CIRCUIT COMPONENT NUMBERS ARE IN THE FOLLOWING GROUPS:
 - 1-99 PARTS ON THE CHASSIS.
 - 101-199 PARTS ON THE LOW VOLTAGE POWER SUPPLY BOARD.
 - 201-299 PARTS ON THE HIGH VOLTAGE CIRCUIT BOARD.
 - 301-359 PARTS ON THE VERTICAL DEFLECTION CIRCUIT BOARD.
 - 361-399 PARTS ON THE CONTROL CIRCUIT BOARD.
 - 401-699 PARTS ON THE VERTICAL PREAMPLIFIER CIRCUIT BOARD
 - 701-999 PARTS ON THE HORIZONTAL CIRCUIT BOARD.
10.  INDICATES A DC VOLTAGE MEASURED FROM THE POINT INDICATED TO GROUND WITH THE VERTICAL AMPLIFIERS BALANCED AND THE HORIZONTAL POSITION CONTROL CENTERED. VOLTAGE MAY VARY $\pm 20\%$. OTHER SWITCHES ARE SET AS FOLLOWS:
 - VERTICAL DISPLAY-Y1.
 - HORIZONTAL DISPLAY-A.
 - TRIGGER MODE-NORM.
 - TRIG COUPLING-DC. TRIGG
 - TRIGGER SELECT-EXT-.
 - TIME/cm-X-Y.
 - VOLT/CM-2mV.
11. ALL WAVEFORMS ARE MEASURED FROM THE POINT INDICATED TO GROUND. THE FRONT PANEL CONTROLS ARE SET AS FOLLOWS:
 - HORIZONTAL POSITION - FOR TRACE TO START AT LEFT EDGE OF SCREEN.
 - HORIZONTAL DISPLAY - A.
 - TRIGGER MODE - AUTO.
 - TRIG COUPLING - DC.
 - TRIGGER SELECT - Y1+.
 - EXT \div 10P. B. - $\div 1$.
12. TRANSISTOR TRANSISTOR LOGIC (TTL) LEVELS ARE AS FOLLOWS: A LOGIC 0, OR LOW, IS < 0.8 VOLTS. A LOGIC 1, OR HIGH, IS > 2.0 VOLTS BUT < 5.5 VOLTS. A LOGIC 0 CONTROLS SET/RESETS.
13. ECL LEVELS ARE AS FOLLOWS: A LOGIC 0, OR LOW, IS -1.6 VOLTS. A LOGIC 1, OR HIGH, IS -0.9 VOLT. A LOGIC 1 CONTROLS SET/RESETS.
14. ONLY IN CHOP MODE.