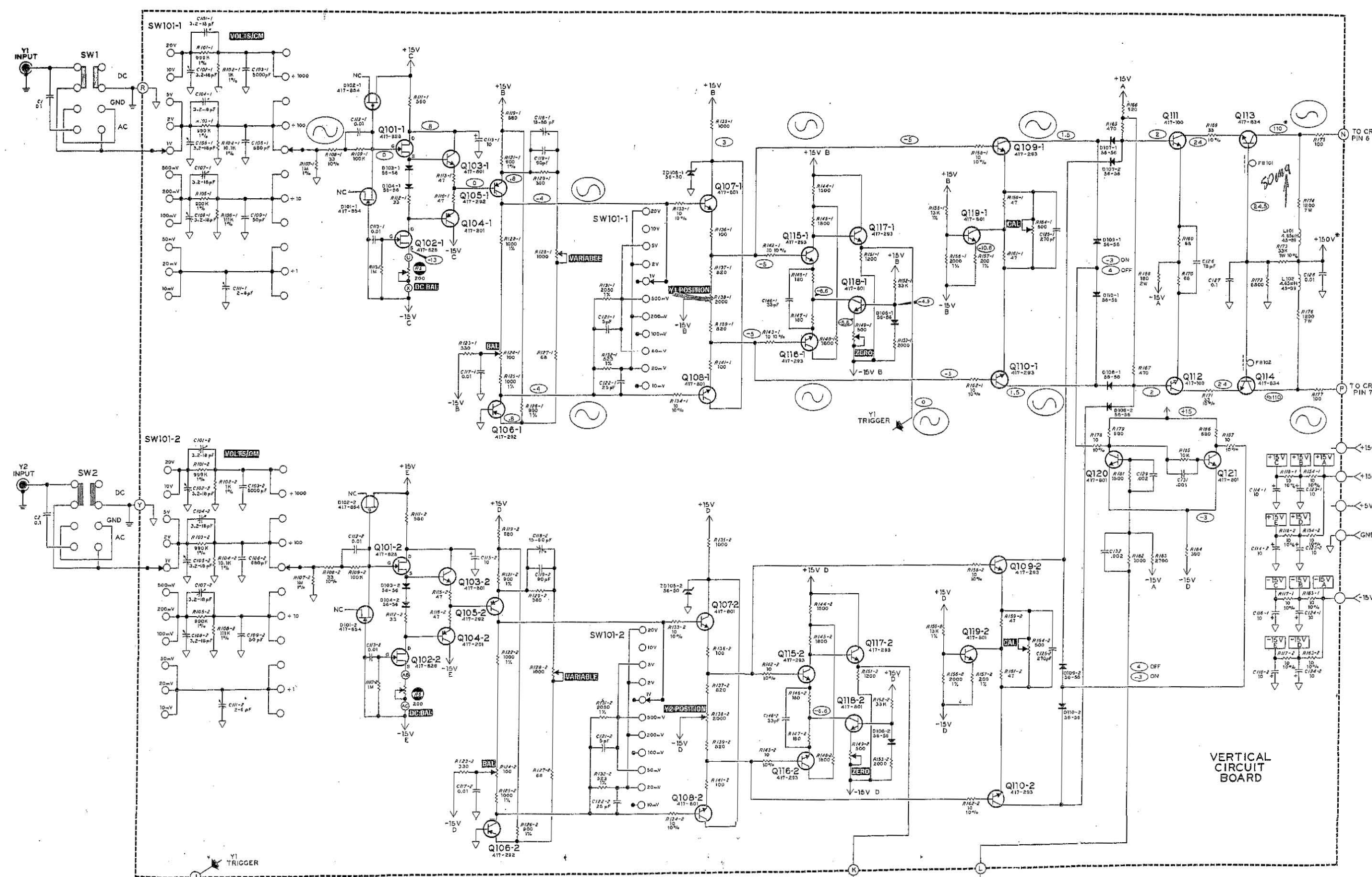




SCHEMATIC OF THE HEATHKIT® DUAL TRACE OSCILLOSCOPE MODEL IO-4550/50-4550

NOTES:

1. ALL CAPACITOR VALUES ARE IN μ F UNLESS OTHERWISE SPECIFIED.
2. ON THE VERTICAL CIRCUIT BOARD, THE WATTAGE VALUES OF 1/8-WATT AND 1/4-WATT RESISTORS ARE NOT MARKED. ALL OTHER RESISTORS ARE 1/2 WATT, 5% UNLESS MARKED OTHERWISE. RESISTOR VALUES ARE IN OHMS (X-1000; M-1,000,000).
3. $\bigcirc$ INDICATES A LETTERED WIRE CONNECTION ON A CIRCUIT BOARD.
4. $\equiv$ INDICATES CHASSIS GROUND.
5. ∇ INDICATES CIRCUIT BOARD GROUND.
6. $\bullet$ INDICATES A PART MOUNTED ON THE CHASSIS, ALTHOUGH ITS LOCATION IN THE SCHEMATIC SUGGESTS ANOTHER LOCATION.
7. CIRCUIT COMPONENT NUMBERS ARE IN THE FOLLOWING GROUPS:
1 - 99 PARTS ON CHASSIS;
100 - 199 PARTS ON THE VERTICAL CIRCUIT BOARD;
200 - 299 PARTS ON THE HORIZONTAL CIRCUIT BOARD;
300 - 399 PARTS ON THE LOW VOLTAGE CIRCUIT BOARD;
400 - 499 PARTS ON THE HIGH VOLTAGE CIRCUIT BOARD.
8. $\bigcirc$ INDICATES A DC VOLTAGE MEASURED FROM THE POINT INDICATED TO GROUND WITH THE VERTICAL AMPLIFIERS BALANCED, THE TIME/CW SWITCH IN THE EXT POSITION, AND THE HORIZONTAL POSITION CONTROL CENTERED. VOLTAGE MAY VARY $\pm 20\%$.
9. 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.
10. $\blacktriangle$ THIS SYMBOL INDICATES A LINE THAT CONTINUES. TO FIND THE CONTINUED PORTION, LAY A STRAIGHT EDGE ON THE LINE THAT THE SYMBOL IS ON.
11. CRT UNBLANKED - DEPENDS ON POSITION OF INTENSITY CONTROL.
12. CRT BLANKED.
13. ONLY IN DUAL TRACE CHOPPED MODE DURING SWEEP OR EXT-X DUAL TRACE OPERATION.
14. UNIT NOT SWEEPING. SPOT CENTERED HORIZONTALLY.

* DEPENDS ON LINE VOLTAGE.
HO - HOLD OFF (INCLUDES RETRACE).

Copyright © 1978
Heath Company
All Rights Reserved
Printed in the United States of America Part of 595-1850-04

