

multivibrator-amplifier circuit shown in Figure 4-34. The output voltage dividers, R608, R609 and R610, also function as load resistors for the circuit.

4.2.5. Power Supply Circuit (Figure 4-35)

The input line voltage is applied to T601, a transformer with five secondary windings.

o High Voltage Power Supply Circuit:

The 150 V AC output from L9-10 is rectified by the 200 V DC bridge type rectifier. The 80 V output from L7-8 which is connected to 200 V DC line at its one terminal, is rectified for 270 V.

These voltages are fed to the final stages of the horizontal and vertical amplifiers.

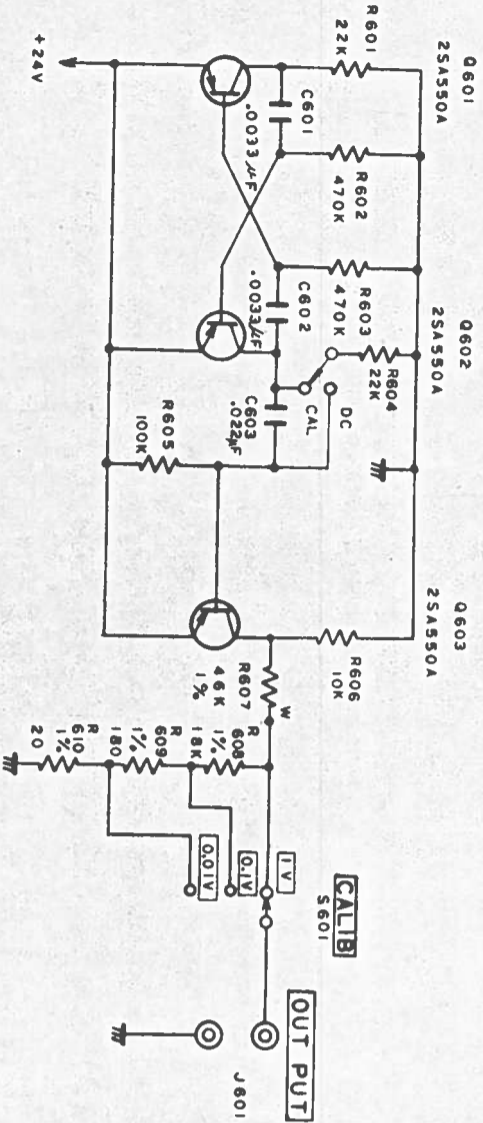


Fig. 4-34 Calibration Signal Circuit

o Constant Low Voltage Circuit:

The 28 V AC output from L11-12 is rectified by bridge rectifiers, producing outputs voltages of +35 V and -35 V.

The -35 V rectifier output is applied to the -24 V power supply.

The output of this supply is controlled by series regulator Q608 in the power supply ground path. Resistors R622, R623, and 624 sample the

output voltage and a variable top on R624 (-6V) provides a control voltage to the base of Q611. Any change in the output voltage, whether caused by a change in the load or by a change in the input voltage is thus sensed by Q611. At the same time the base of Q611 is held constant at -6 V by reference diode D608. The difference voltage output of the Q610-Q611 voltage comparator is coupled from the collector of Q611 to the base of driver Q609.

The output of Q609 is coupled to regulator Q608 which functions to return the output of the supply to normal.

The +24 V power supply operates in a similar manner. Since the +24 V output voltage is used as the reference voltage for this supply, R624 (-6 V) functions to control both supplies.

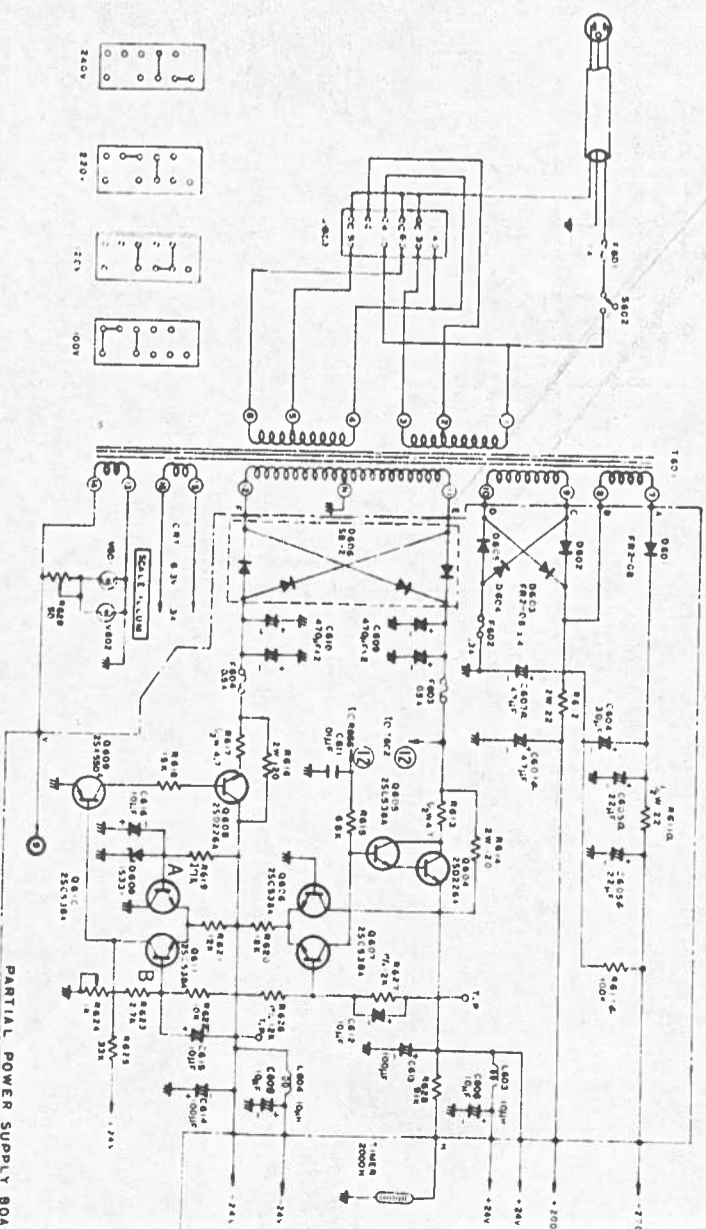
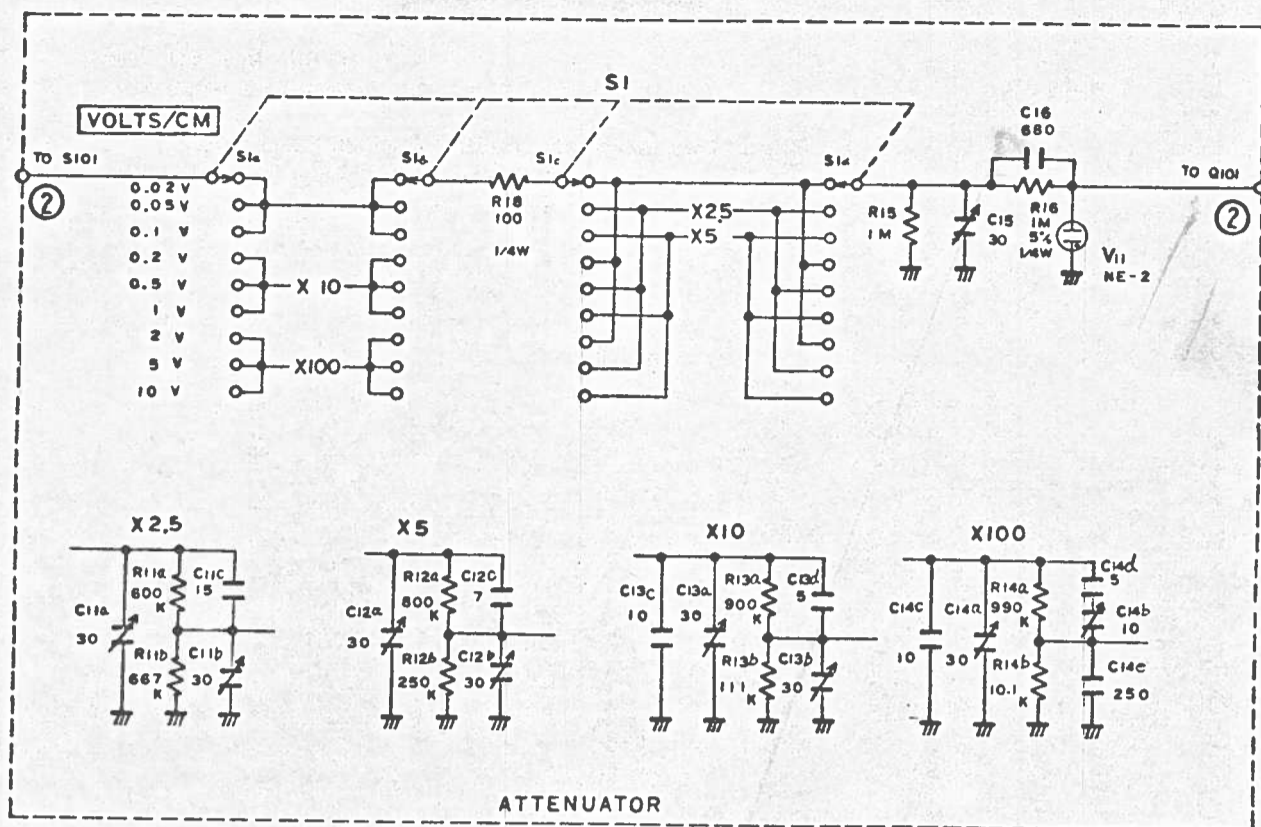


Fig. 4-35 Power Circuit

o 6.3 V AC:

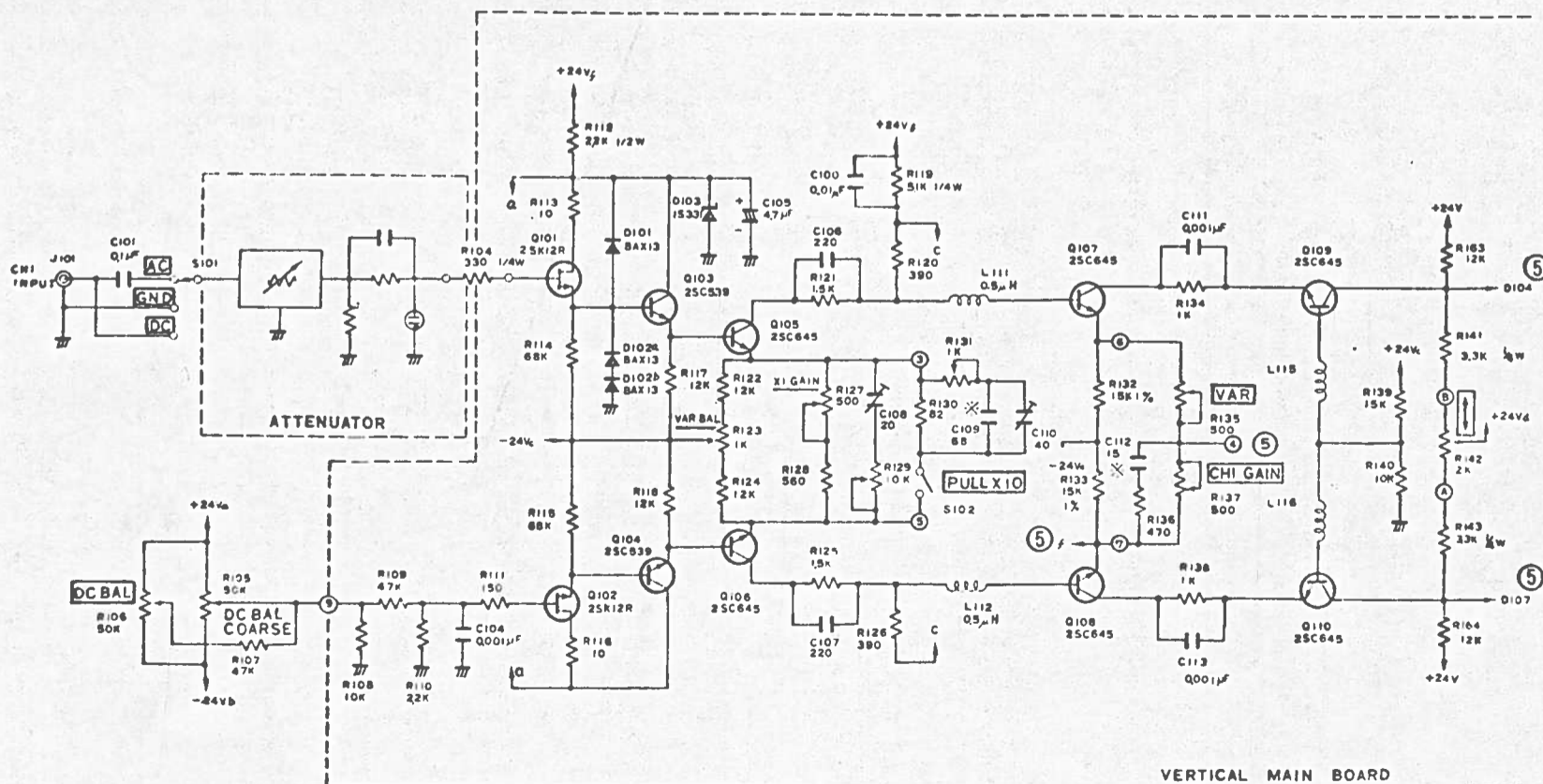
The 6.3 V output from L13-14 is used for lamp for lightening the CRT scale illumination circuit. The illumination for the scale is required

5-1. CIRCUIT DIAGRAMS



RESISTANCE VALUES IN $\Omega \pm 1\%$, $\frac{1}{2}$ WATT
AND CAPACITANCE IN μF UNLESS OTHERWISE SPECIFIED.

CH1 INPUT ATTENUATOR (1)



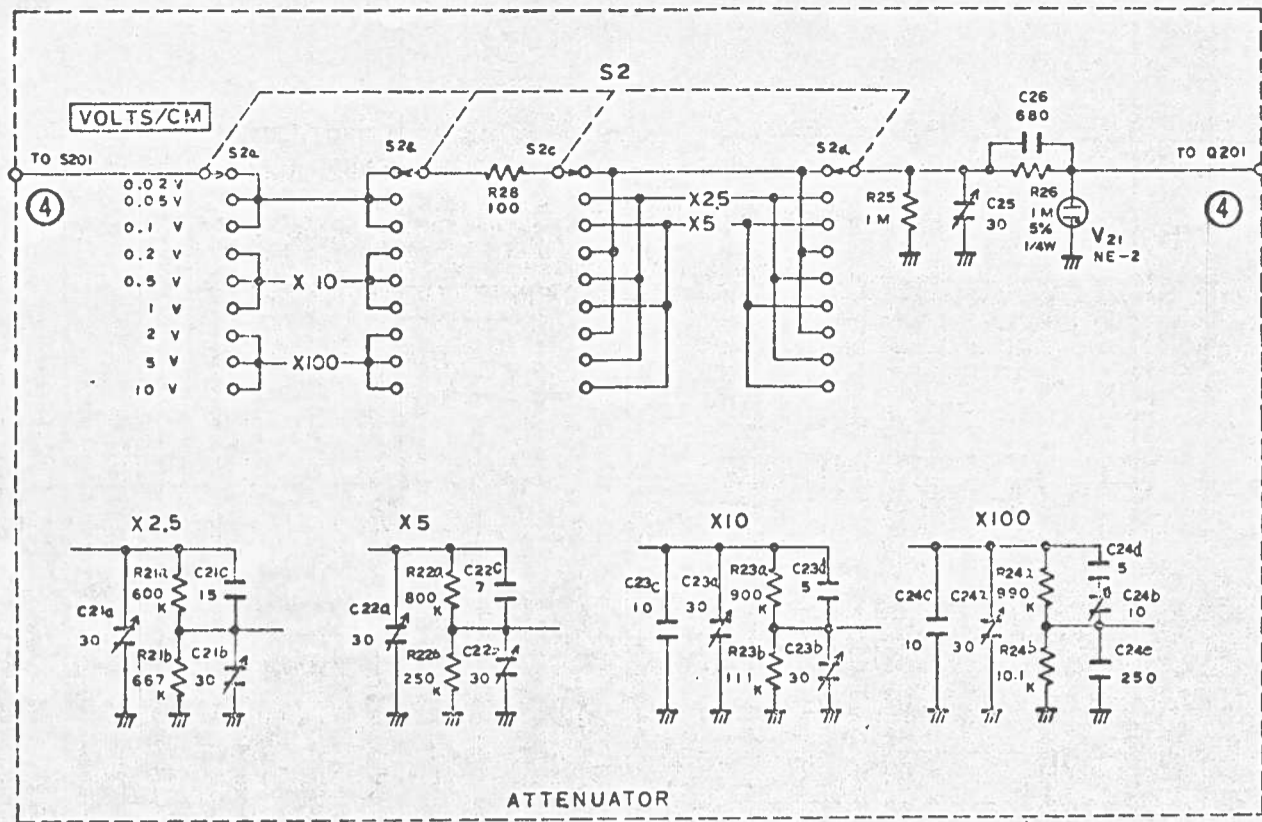
1. RESISTANCE VALUES IN Ω , $\frac{1}{2}$ WATT
AND CAPACITANCE IN μF UNLESS OTHERWISE SPECIFIED.
2. * ADJUSTED.
3. ○ CONNECTION WITH VERTICAL SUB-BOARD
AND ITS PIN NUMBER.

VERTICAL PRE-AMP (CH-1)

5-2

5-3

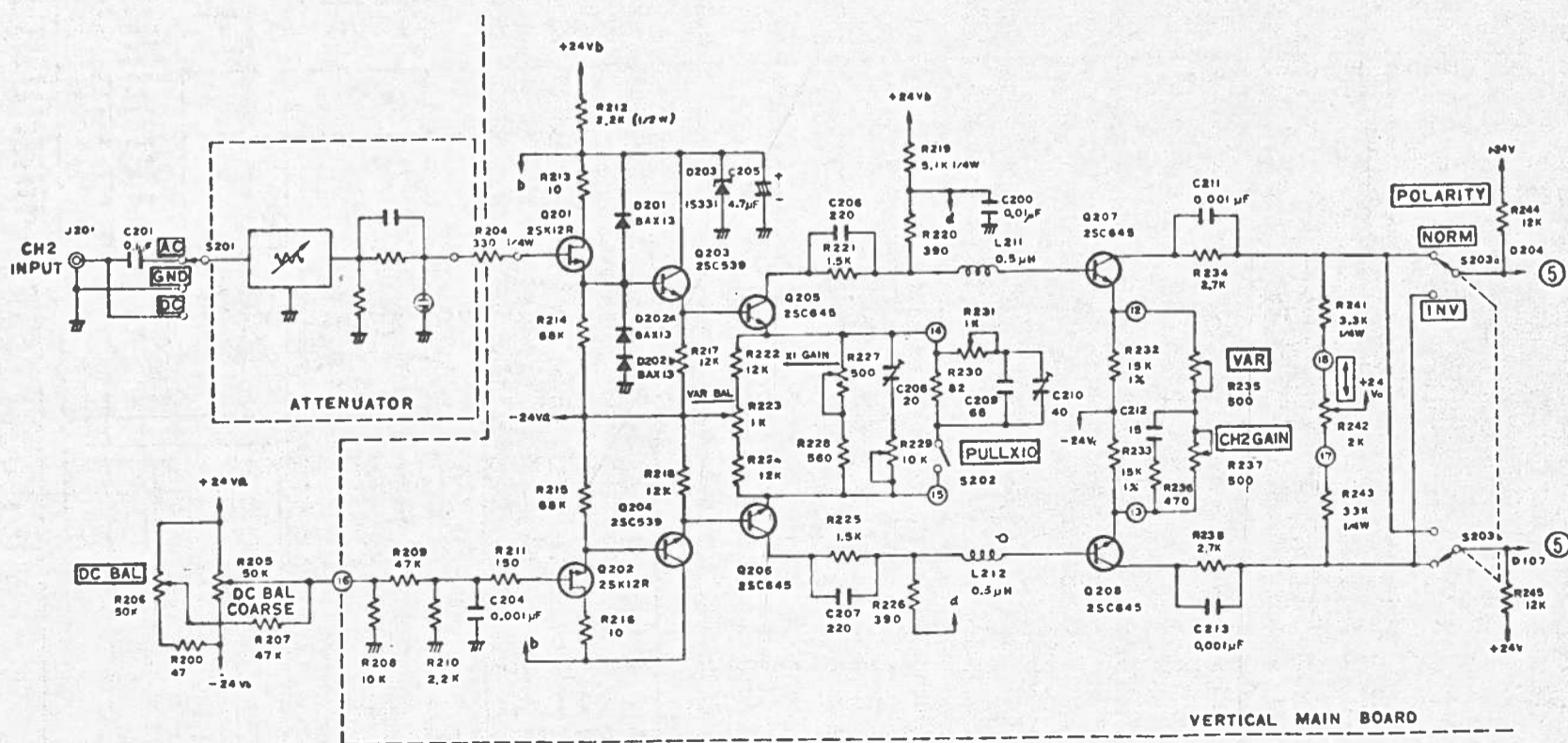
5-4



RESISTANCE VALUES IN Ω $\pm 1\%$, $\frac{1}{2}$ WATT
AND CAPACITANCE IN μF UNLESS OTHERWISE SPECIFIED.

CH2 INPUT ATTENUATOR (3)

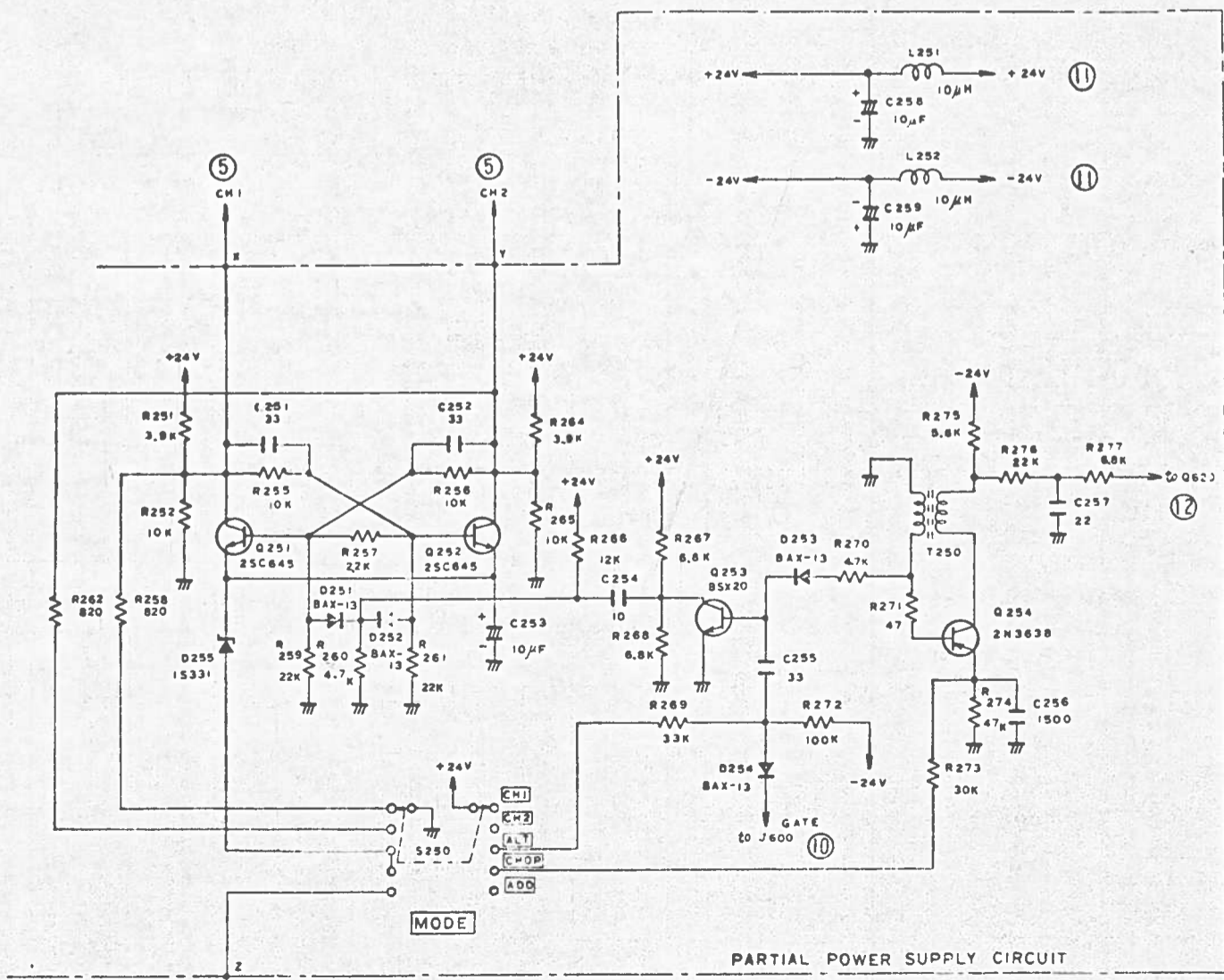
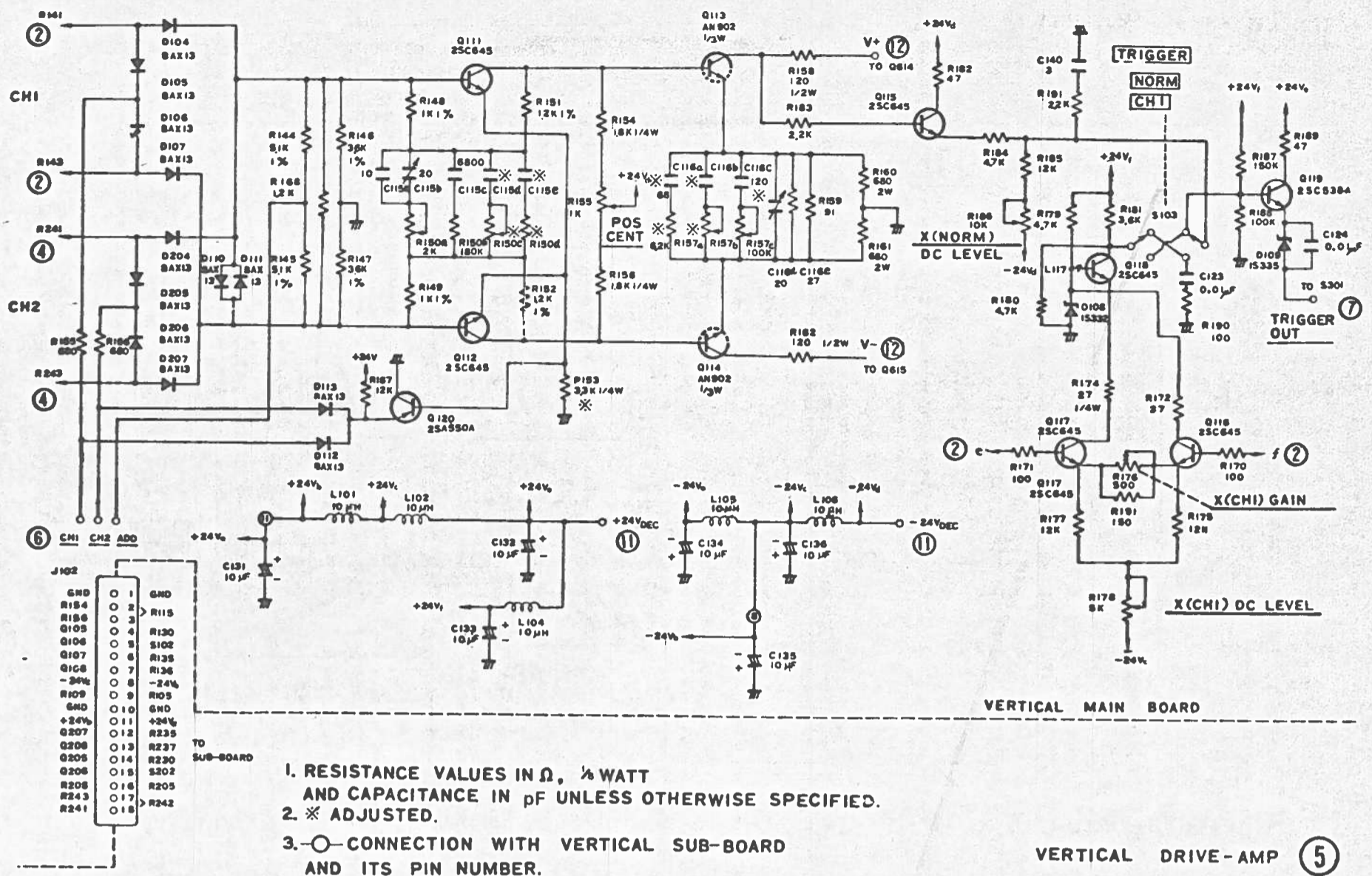
5-5



1. RESISTANCE VALUES IN Ω , $\frac{1}{4}$ WATT
AND CAPACITANCE IN μF UNLESS OTHERWISE SPECIFIED.
2. * ADJUSTED.
3. ○ CONNECTION WITH VERTICAL SUB-BOARD
AND ITS PIN NUMBER.

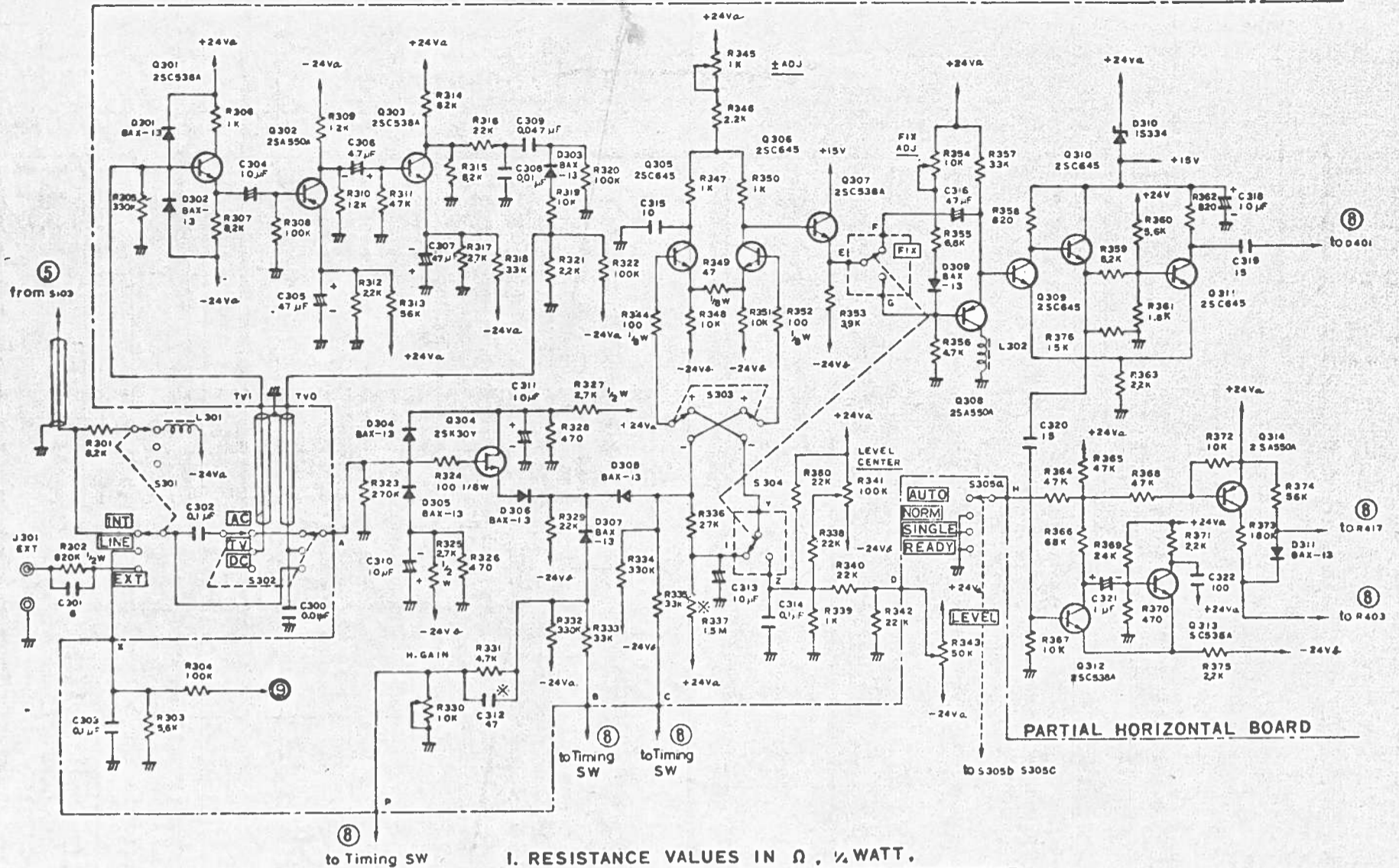
VERTICAL PRE-AMP (CH-2)

(4)



1. RESISTANCE VALUES IN Ω , $\frac{1}{2}$ WATT AND CAPACITANCE IN μF UNLESS OTHERWISE SPECIFIED.
 2. * ADJUSTED.

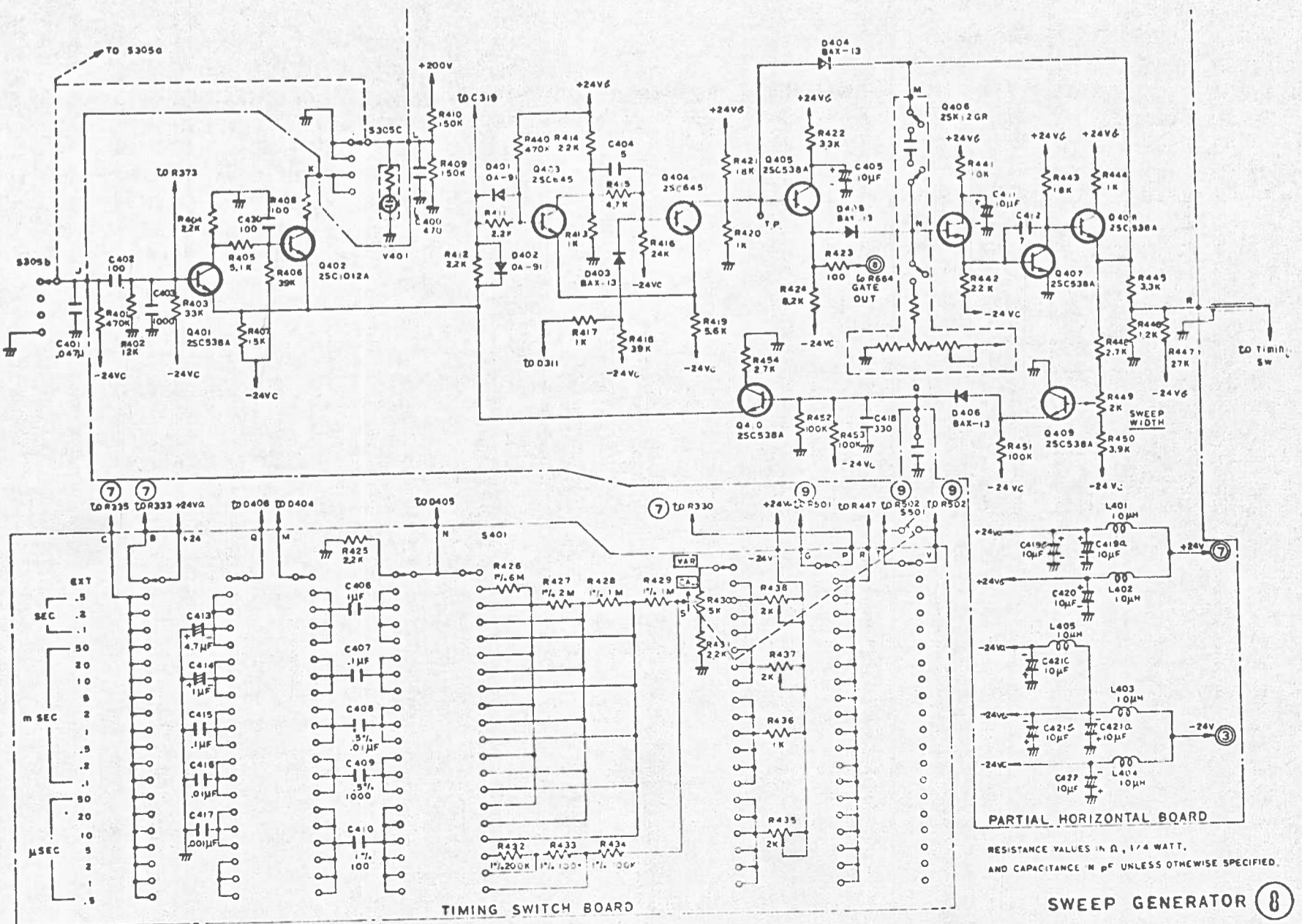
5-8



1. RESISTANCE VALUES IN Ω , $\frac{1}{2}$ WATT,
AND CAPACITANCE IN μ F UNLESS OTHERWISE
SPECIFIED.
2. * ADJUSTED.

TRIGGER CIRCUIT (7)

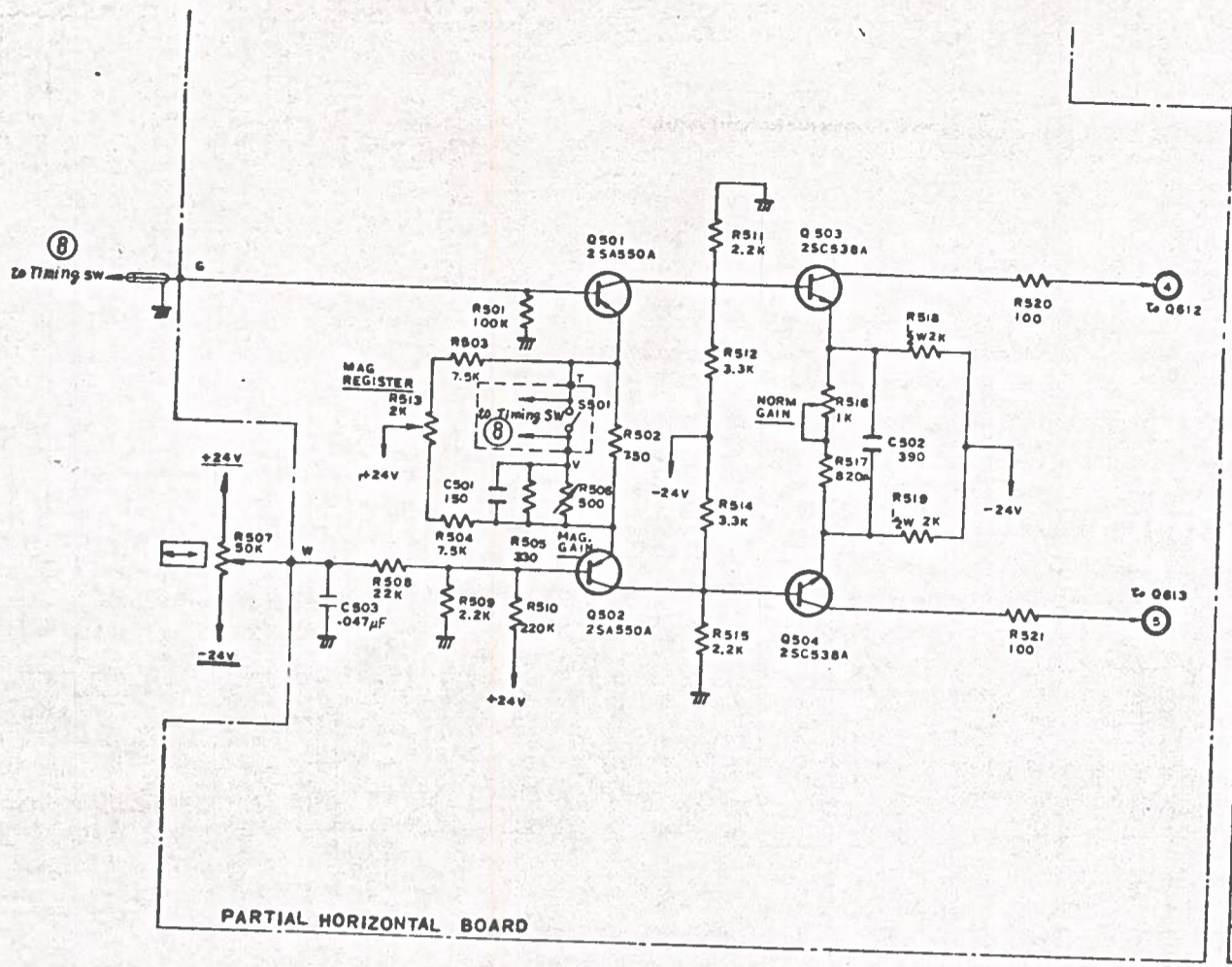
5-9



RESISTANCE VALUES IN Ω , $\frac{1}{4}$ WATT,
AND CAPACITANCE IN μ F UNLESS OTHERWISE SPECIFIED.

SWEEP GENERATOR (8)

5-10

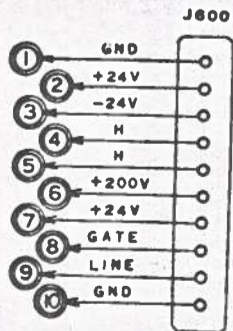
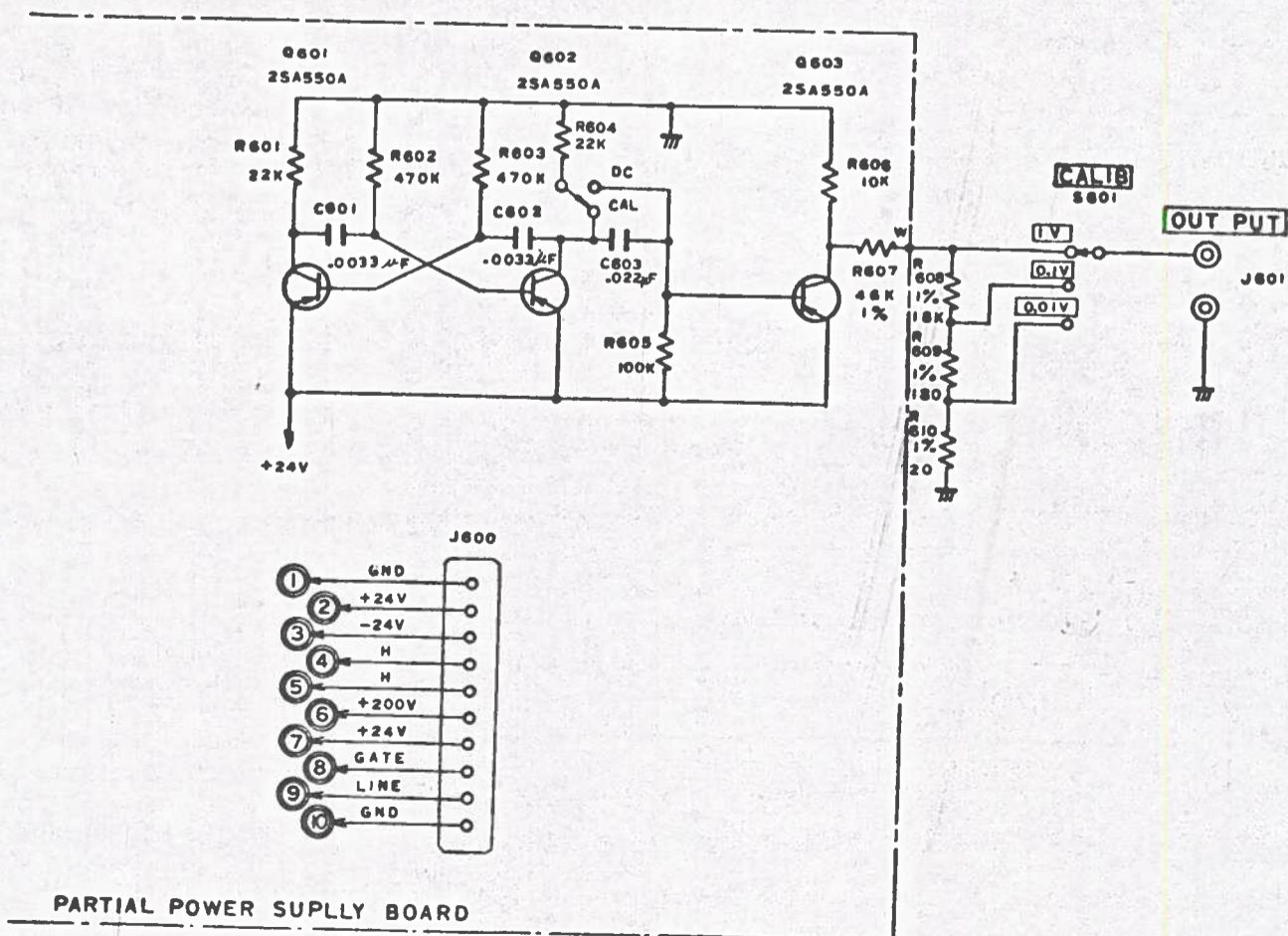


PIN NO.	NOTE
①	GND
②	+24V
③	-24V
④	H1
⑤	H2
⑥	+200V
⑦	+24V
⑧	GATE
⑨	LINE
⑩	GND

RESISTANCE VALUES IN Ω , $\frac{1}{2}$ WATT,
AND CAPACITANCE IN μF UNLESS OTHERWISE
SPECIFIED.

HORIZONTAL AMPLIFIER ⑨

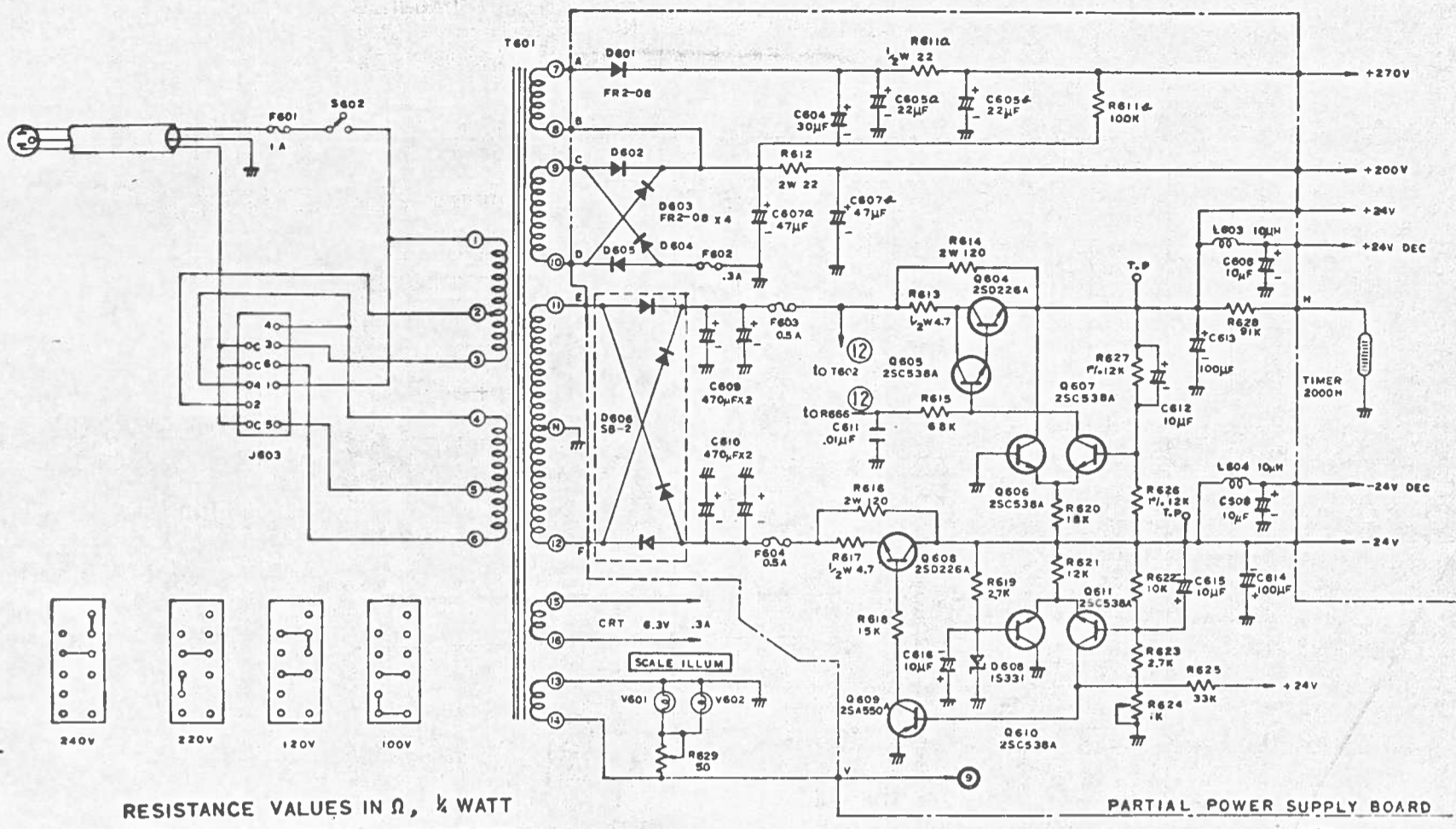
5-11



RESISTANCE VALUES IN Ω , $\frac{1}{2}$ W
AND CAPACITANCE IN μF UNLESS
OTHERWISE SPECIFIED.

CALIBRATOR ⑩

5-12



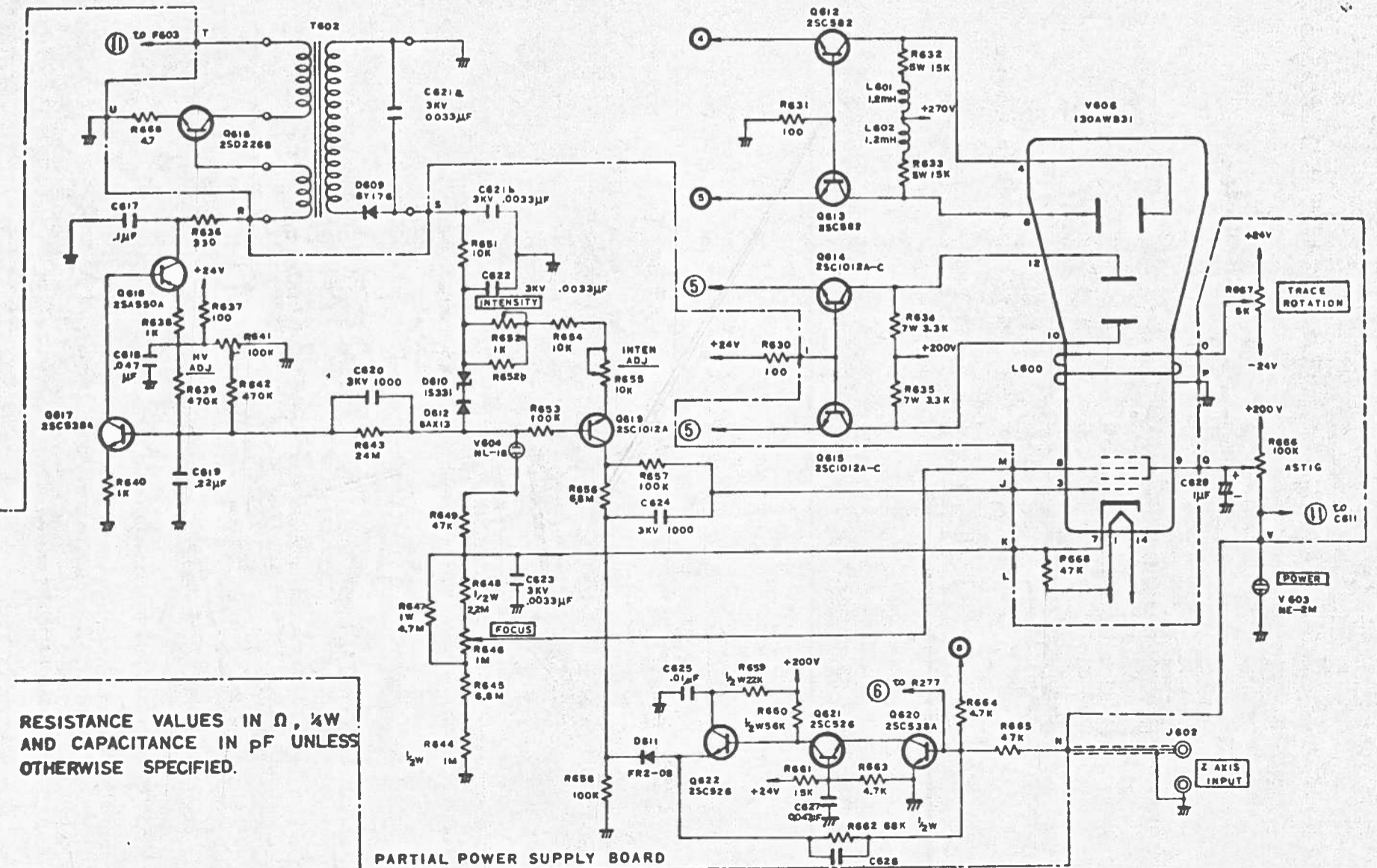
RESISTANCE VALUES IN Ω , $\frac{1}{2}$ WATT
AND CAPACITANCE IN μF UNLESS
OTHERWISE SPECIFIED.

PARTIAL POWER SUPPLY BOARD

11

LOW VOLTAGE CIRCUIT

5-13



RESISTANCE VALUES IN Ω , $\frac{1}{2}$ W
AND CAPACITANCE IN μF UNLESS
OTHERWISE SPECIFIED.

PARTIAL POWER SUPPLY BOARD

CRT CIRCUIT 12