

COMMERCIAL OSCILLOSCOPES AND RELATED EQUIPMENT

DU MONT MODEL 164-E

FREQUENCY RESPONSE

Vertical Amplifier 5 cps to 100,000 cps
Horizontal Amplifier 5 cps to 100,000 cps
Sweep Circuit 15 cps to 30,000 cps (sawtooth)

DEFLECTION FACTORS

Vertical Amplifier 0.80 rms volts/inch
Vertical-Deflection Plates 30 rms volts/inch
Horizontal Amplifier 0.65 rms volts/inch
Horizontal-Deflection Plates 30 rms volts/inch

LINE RATING 115/230 volts, 40-60 cps

TUBE COMPLEMENT

Type	Function
3AP (V1)	Cathode-Ray Tube
6C6 (V2)	Vertical Amplifier
6C6 (V3)	Horizontal Amplifier
Du Mont 2B4 (V4)	Sawtooth Sweep Oscillator
80 (V5)	Full-Wave Rectifier (Low Voltage)
80 (V6)	Half-Wave Rectifier (High Voltage)

The schematic circuit diagram for Model 164-E is shown in Fig. 22-6.

PARTS LIST FOR DU MONT MODEL 164-E

C1 0.5 μ f 1500V	R1 200 K $\frac{1}{2}$ W
C2 0.5 μ f 600V	R2 500 K $\frac{1}{2}$ W
C3 8 μ f 150V elec.	R3 4 meg. 2W
C4 } 4+4 μ f 475V elec.	R4 " "
C5 }	R5 1 meg. $\frac{1}{2}$ W
C6 0.05 μ f 400V	R6 4 meg. 2W
C7 " "	R7 " "
C8 0.25 μ f 400V	R8 15 K $\frac{1}{2}$ W
C9 " "	R9 100 K $\frac{1}{2}$ W $\pm 10\%$
C10 " "	R10 560 K 1W $\pm 10\%$
C11 " "	R11 390 K 1W $\pm 10\%$
C12 0.05 μ f 400V	R12 820 ohm $\frac{1}{2}$ W "
C13 0.2 μ f "	R13 10 K 3W "
C14 0.04 μ f "	R13A " " "
C15 0.01 μ f "	R14 25 K 10W $\pm 5\%$
C16 2400 μ f 500V	R15 4.7 meg. $\frac{1}{2}$ W $\pm 10\%$
C17 620 μ f "	R16 4.7 meg. $\frac{1}{2}$ W $\pm 10\%$
C18 120 μ f "	R17 91 K 1W $\pm 5\%$
C19 50 μ f 1200V	R18 1 meg. $\frac{1}{2}$ W $\pm 10\%$
C20 25 μ f 50V elec.	R19 470 K $\frac{1}{2}$ W "
C21 3900 μ f 500V	R20 820 ohm $\frac{1}{2}$ W "
C22 3900 μ f "	R21 91 K 1W $\pm 5\%$
C23 0.1 μ f 1000V	R22 1 meg. $\frac{1}{2}$ W $\pm 10\%$
C24 0.1 μ f 1600V	R23 100 K $\frac{1}{2}$ W "
	R24 1 K $\frac{1}{2}$ W "
L1 8 h 0.035 amp	R25 100 K 3W "
L2 60 mh Peaking Coil	R26 470 K 1W "
L3 60 mh " "	R27 10 K $\frac{1}{2}$ W "

DU MONT MODEL 168

FREQUENCY RESPONSE

Vertical Amplifier 15 cps to 30,000 cps
Horizontal Amplifier 15 cps to 30,000 cps
Sweep Circuit 15 cps to 30,000 cps

DEFLECTION FACTORS

Vertical Amplifier 0.046 rms volts/inch
Vertical-Deflection Plates 20 rms volts/inch

LINE RATING 115/230 volts, 40-60 cps

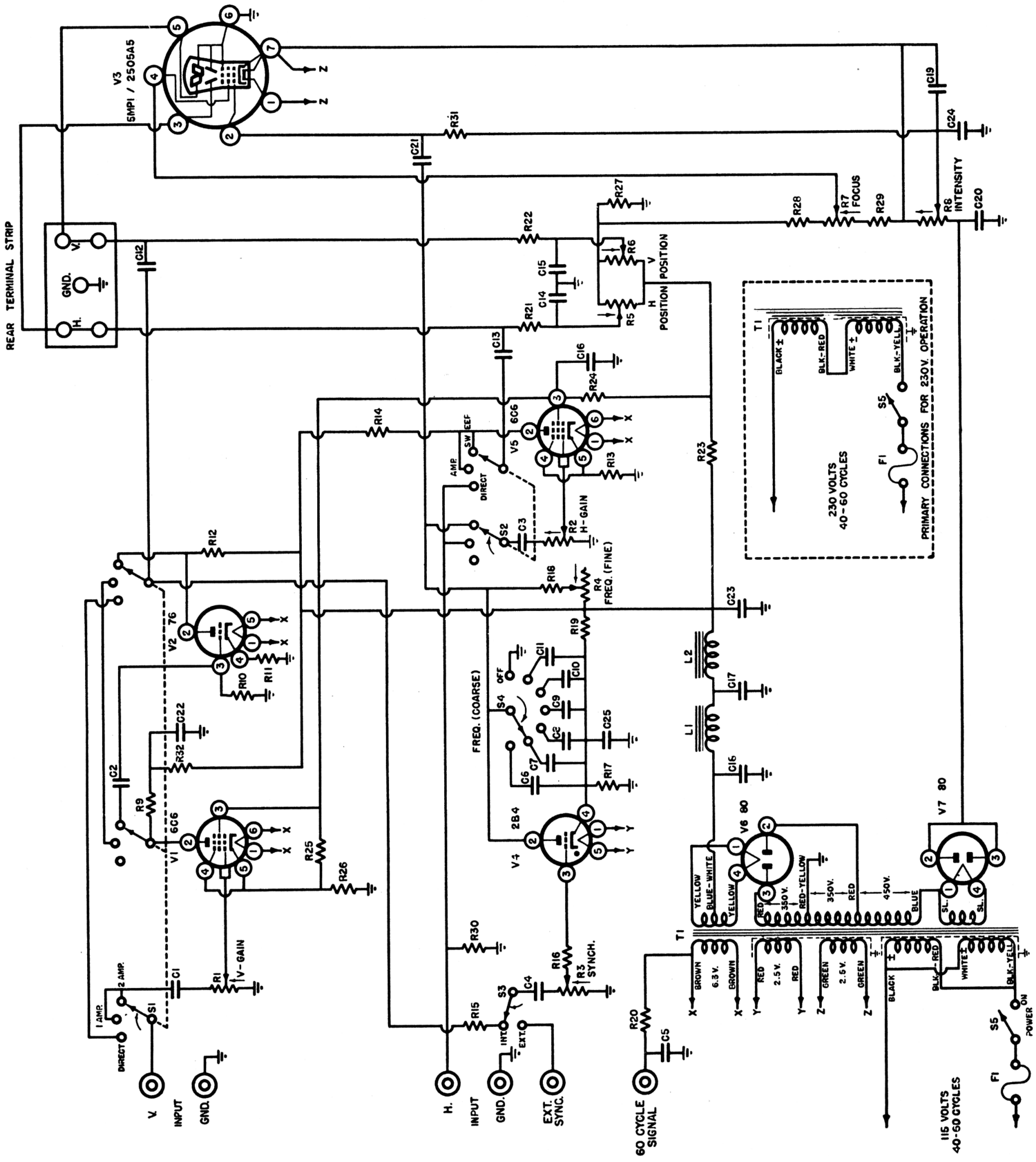
TUBE COMPLEMENT

Type	Function
6C6 (V1)	Vertical Amplifier
76 (V2)	Vertical Amplifier
5MP (V3)	Cathode-Ray Tube
Du Mont 2B4 (V4)	Sawtooth Sweep Oscillator
6C6 (V5)	Horizontal Amplifier
80 (V6)	Full-Wave Rectifier (Low Voltage)
80 (V7)	Half-Wave Rectifier (High Voltage)

The schematic circuit diagram of Model 168 is shown in Fig. 22-7. A special 3-position switch enables the input signal to be applied directly to the plates of the cathode-ray tube, through the first amplifier alone, or through both vertical amplifiers.

PARTS LIST FOR DU MONT MODEL 168

C1 1 μ f. 400v.	R2 4meg. pot.
C2 0.1 μ f. 1000v.	R3 15K pot.
C3 0.1 μ f. 1000v.	R4 4meg. pot.
C4 0.05 μ f. 400v.	R5 4meg. pot.
C5 0.1 μ f. 1000v.	R6 4meg. pot.
C6 200 μ f. 500v.	R7 500k pot.
C7 600 μ f. 500v.	R8 200K pot.
C8 2500 μ f. 500v.	R9 100K 1 W.
C9 0.01 μ f. 400v.	R10 500K $\frac{1}{2}$ W.
C10 0.04 μ f. 400v.	R11 6K $\frac{1}{2}$ W.
C11 0.2 μ f. 400v.	R12 100K 1 W.
C12 1 μ f. 400v.	R13 1K $\frac{1}{2}$ W.
C13 0.05 μ f. 400v.	R14 100K 1 W.
C14 0.05 μ f. 400v.	R15 1meg. $\frac{1}{2}$ W.
C15 0.05 μ f. 400v.	R16 100K $\frac{1}{2}$ W.
C16 8 μ f. 150v.	R17 750 ohms $\frac{1}{2}$ W.
C17 4 μ f. 450v.	R18 750K. 1 W.
C18 4 μ f. 450v.	R19 100K. 3 W.
C19 0.5 μ f. 600v.	R20 10K. $\frac{1}{2}$ W.
C20 0.5 μ f. 1500v.	R21 5meg. $\frac{1}{2}$ W.
C21 50 μ f. 1200v.	R22 1meg. $\frac{1}{2}$ W.
C22 4 μ f. 450v.	R23 25K. 10 W.
C23 4 μ f. 450v.	R24 10K. 3 W.
C24 0.1 μ f. 1600v.	R25 10K. 3 W.
C25 25 μ f. 50v.	R26 220 ohms $\frac{1}{2}$ W.
	R27 250K. $\frac{1}{2}$ W.
	R28 750K. 1 W.
	R29 100K. $\frac{1}{2}$ W.
	R30 1meg. $\frac{1}{2}$ W.
	R31 3K. $\frac{1}{2}$ W.
	R32 3K $\frac{1}{2}$ W.
F1 1 amp. 250v.	
L1 8.5H. 35ma. 325 ohms d.c.	
L2 8.5H. 35ma. 325 ohms d.c.	
R1 1meg. pot.	



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Fig. 22-7.—Schematic of Du Mont Model 168.

Courtesy Du Mont Labs.