BETA ELECTRONICS MODEL 701

FREQUENCY RESPONSE
Vertical Amplifier 10 cps to 50 kc, ±10%
Sweep Circuit 25 cps to 2 kc

DEFLECTION FACTORS
Vertical Amplifier 0.06 volts rms/inch
Horizontal Amplifier 0.065 volts rms/inch

LINE RATING 110-120 volts, 50-60 cps

TUBE COMPLEMENT

Type	*Function*
12AU7 (V1)	Vertical Amplifier
6B6G (V2)	Vertical-Deflection Amplifier
12AU7 (V3)	Horizontal Amplifier
6B6G (V4)	Horizontal-Deflection Amplifier
6C8 (V5)	Horizontal Sweep Oscillator
5U4 (V6)	High-Voltage Rectifiers
3NP4 (V7)	Cathode-Ray Tube
1B3G (V8)	High-Voltage Rectifiers

The schematic circuit diagram for Model 701 is shown in Fig. 22-2. This instrument was designed for educational purposes, and uses conventional circuits. It has a large screen which makes it suitable for displaying waveforms to technical students, engineers, or other groups. The instrument may also be used in industrial or research applications, where cathode-ray monitoring is required, and the advantages of a large picture to reduce eye strain or to permit long-distance viewing may be required.

The cathode-ray tube is a 2½-inch type designed for projection television use. A compact folding Schmidt optical system enlarges and projects the image from the face of the tube vertically to a mirror mounted on the underside of the lid of the cabinet. This lid is raised to an angle of 45° when the oscilloscope is in use. The mirror reflects the light horizontally onto the screen plane where it is focused. The response is adequate to permit good vertical square-wave reproduction from d.c. to more than 10 kc at horizontal sweep repetition rates up to several kc. The circuit also provides for the injection of blanking or Z-axis modulation voltage into the picture.

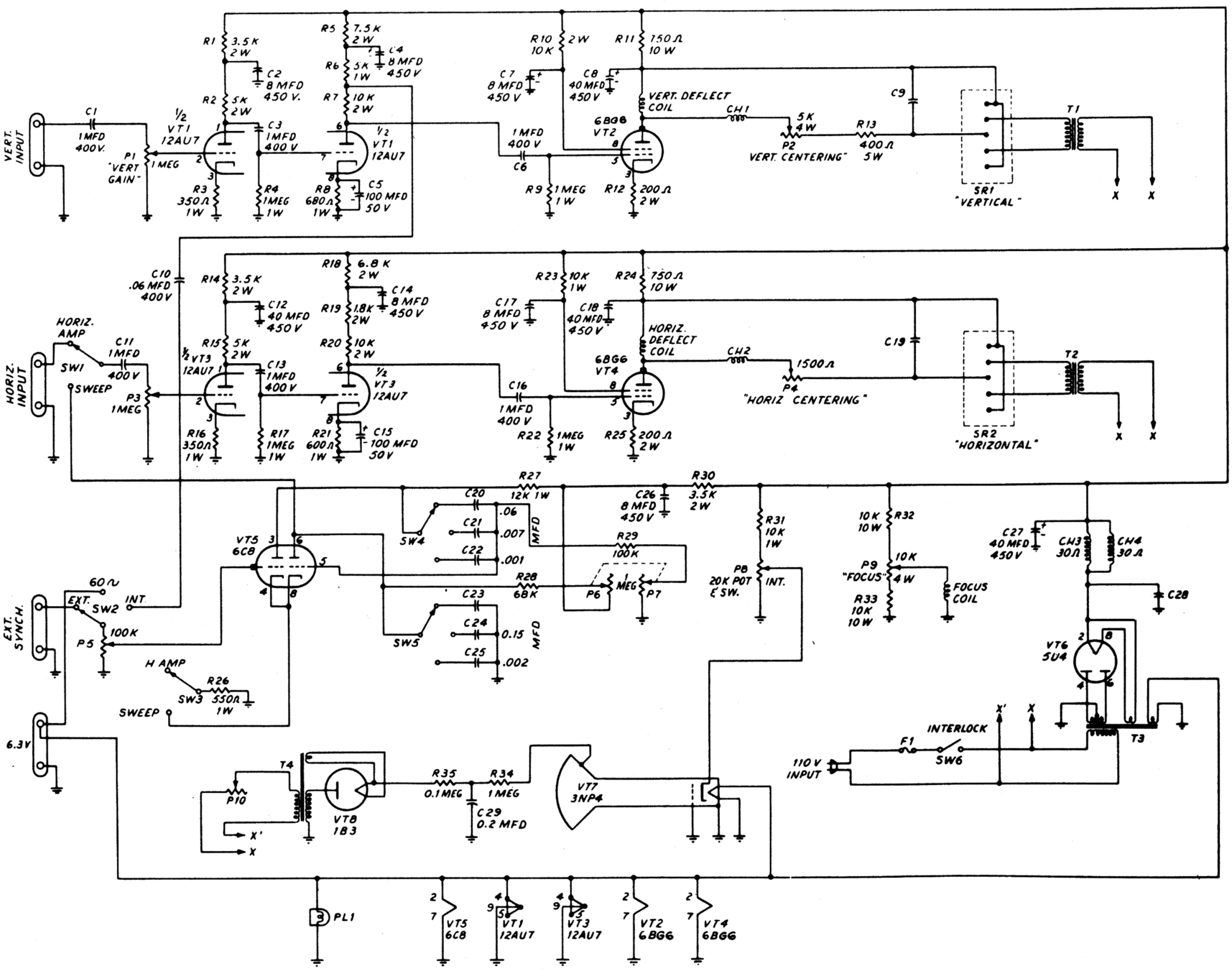

Fig. 22-2.—Schematic of Beta Model 701.

Courtesy Beta Elec. Corp.