

K8000

I. OVERVIEW-SPECIFICATIONS

- a) K8000 Specifications
- b) Applications

II. CIRCUITS

- a) Power Supply and Auto Degauss
- b) Sync and Horizontal AFC
- c) Horizontal Output, HV, Beam Limit, and HV Shut Down
- d) Vertical Sweep and Outout
- e) Video Processor
- f) Video Output, CRT
- g) Remote control board

III. OPTIONS

- a) NTSC Decoder
- b) .75 volt Video
- c) VGA

THE PRISMATIC™ SERIES

CRT

- **From 13" to 31"** diagonal measure
- **P22 Phosphor**
- **Polished faceplate standard:** variety of optional faceplates and transmittances available.
- **Stripe trio spacing (standard):** 0.82 mm (25"), 0.84 mm (19").
- **Optional finer pitch available (19")** 0.72 mm.

INPUT SIGNALS

- **Video:** RGB analog, .7V peak to peak, 75 Ohms input impedance.

OPTIONAL INPUTS AVAILABLE

- **RGB analog .7V to 5V peak to peak** 75 Ohms or high input impedance (4.7K Ohms).
- **Sync:** TTL positive or negative, going, or composite sync. Input impedance: 4.7K Ohms.

HORIZONTAL SCAN

- **Frequency:** Available in scan frequencies from 15 kHz to 31 kHz.
- **Linearity:** $\pm 5\%$

LIGHT OUTPUT

- 35fl (typical with 25" CRT, 50% glass transmittance).

PICTURE SIZE REGULATION

- 2%

VERTICAL SCAN

- **Frequency:** 47 Hz to 63 Hz (other frequencies available)
- **Linearity:** $\pm 5\%$

COLOR SPECIFICATIONS K8000

GEOMETRIC DISTORTION

- $\pm 2\%$ max.

VIDEO CHARACTERISTICS

- **Bandwidth (-3 dB):** 25 MHz typical
- **Rise Time:** Less than 15 nanoseconds
- **Overshoot (typical):** 10%

MECHANICAL

- The monitor is also available in universal mount brackets. The monitor can be mounted in a horizontal or vertical configuration. Custom frames can be furnished.
- Contact your sales representative for details.

USER ADJUSTABLE CONTROLS AND ADJUSTMENTS

- Brightness, Contrast, Horizontal Hold, Horizontal Size, Horizontal Raster Position, Focus. Custom Control Location available. Vertical Size, Vertical Linearity, Vertical Hold. Vertical and Horizontal video position.

POWER INPUT

- 120 VAC $\pm 10\%$ -15%, 50-60 Hz, 165W (max).
Special isolation transformer required: furnished with monitor.

ENVIRONMENTAL CONDITIONS

- Operating temperature 0° to 55°C. Complies with U.L., C.S.A., and D.H.H.S. radiation performance standard.

RESOLUTION

- 25" 560 Pixels x 240 Lines (15.7 kHz)
- 25" 640 Pixels x 400 Lines (25 kHz)
- 19" 540 Pixels x 400 Lines (25 kHz)

Block and Connection Diagram

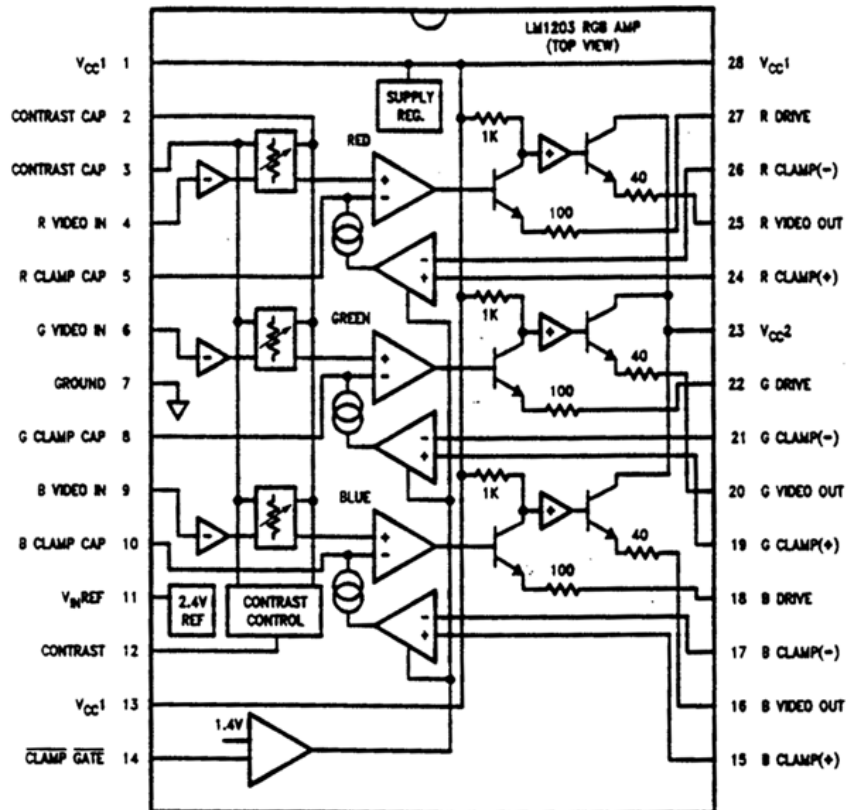
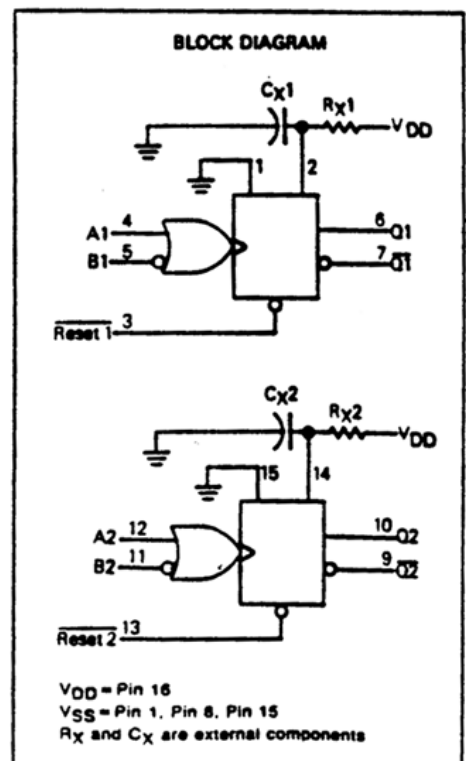
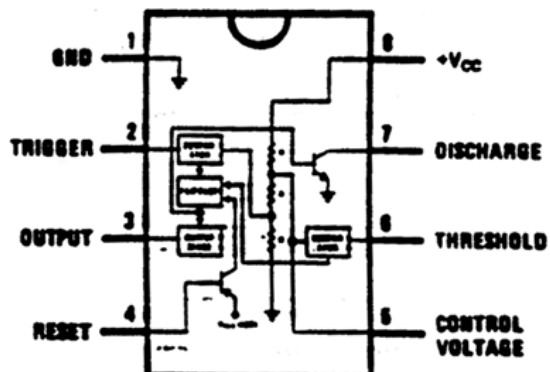
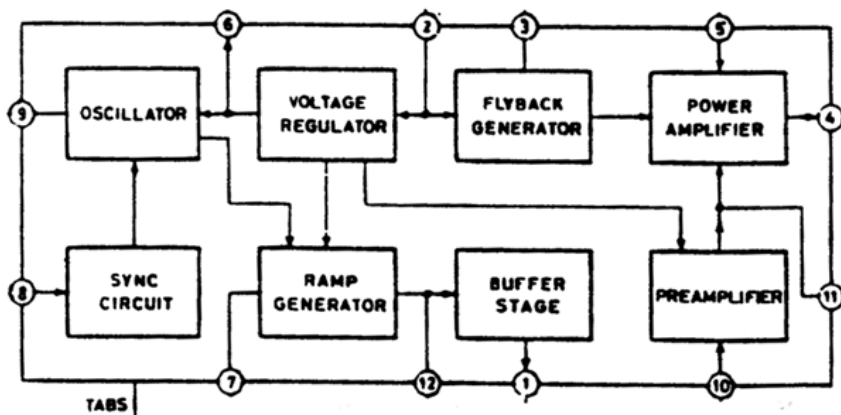
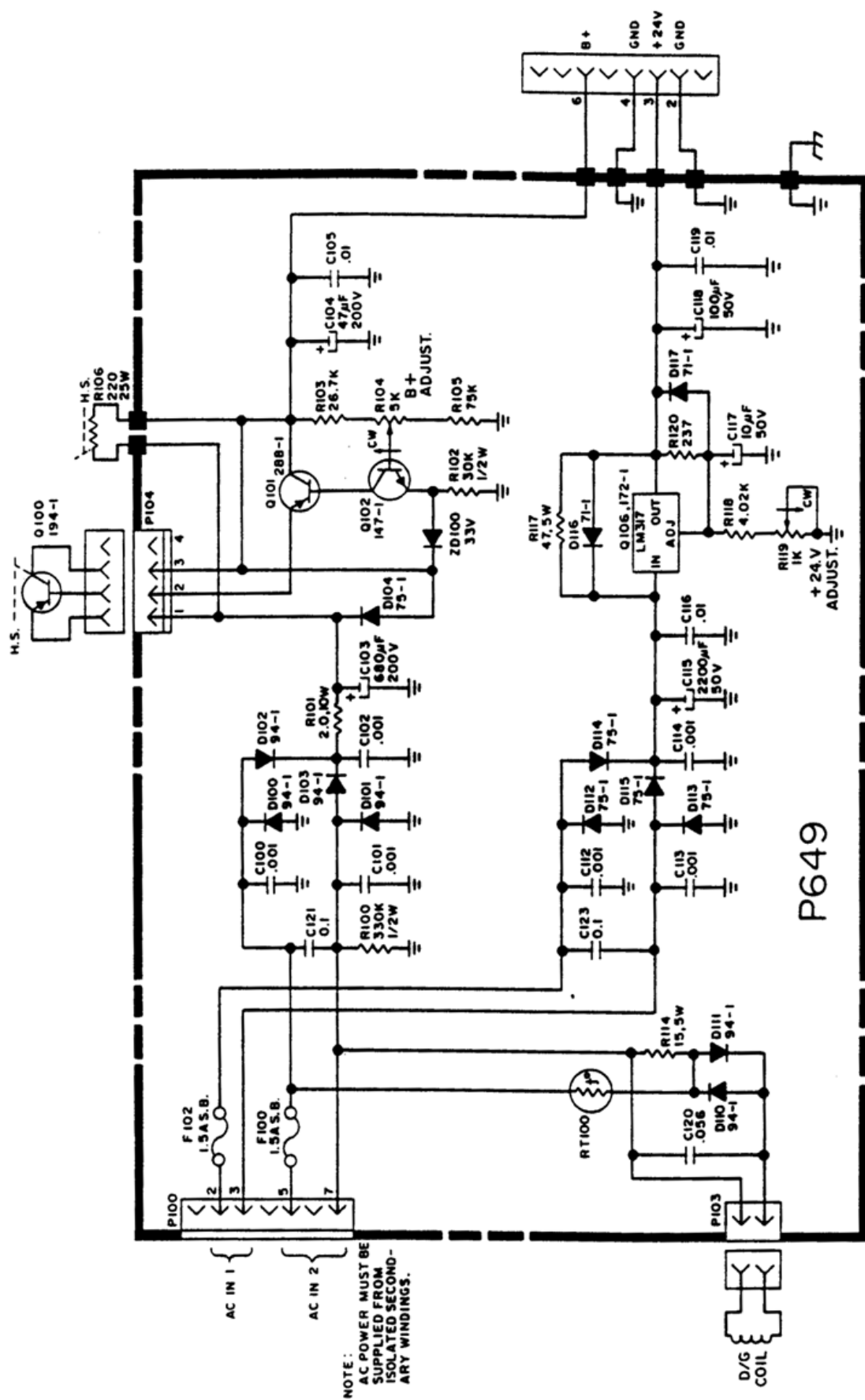


FIGURE 1
Order Number LM1203N
See NS Package Number N28B

TLN/0170-1



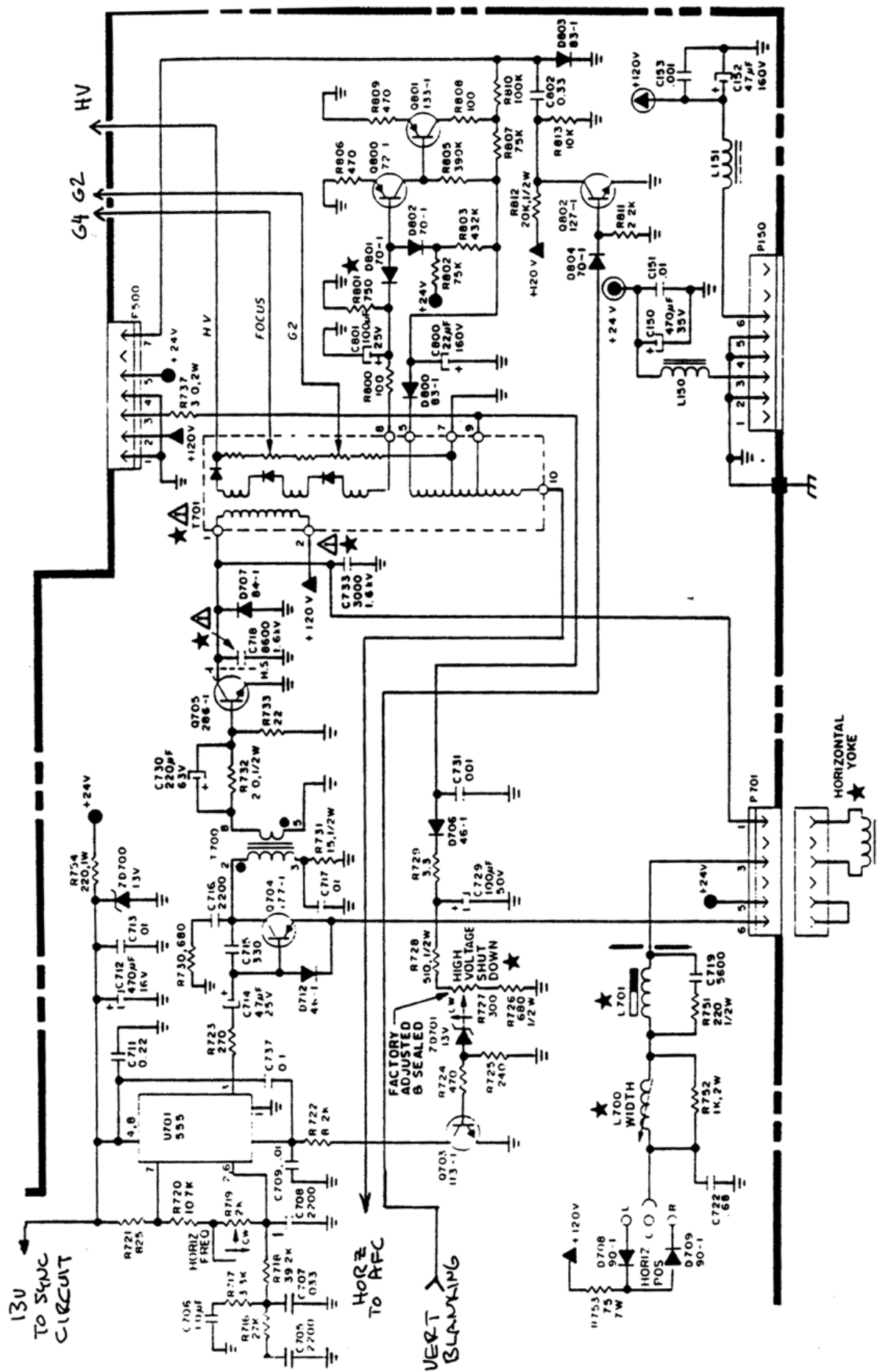


NOTES:

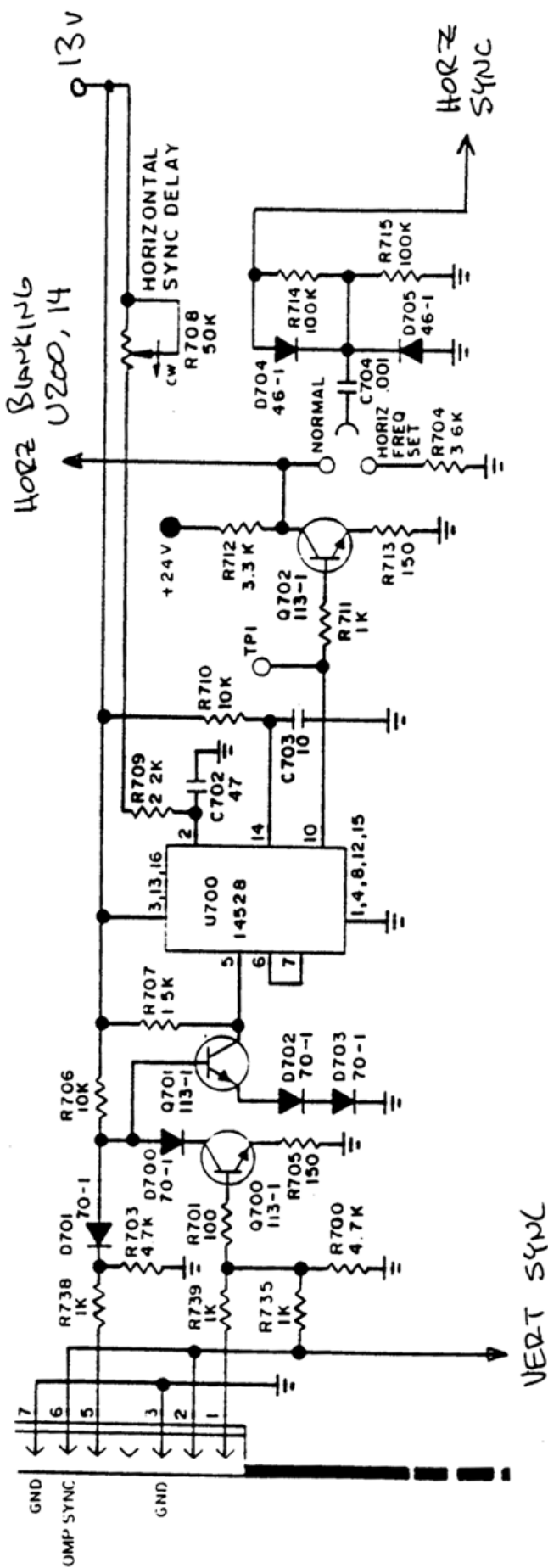
1. ALL RESISTORS ARE 1/4W, 5% UNLESS OTHERWISE SPECIFIED.
2. CAPACITANCE VALUES LESS THAN 1 IN MICROFARADS; ABOVE 1 IN PICOFARADS UNLESS OTHERWISE SPECIFIED.

POWER SUPPLY, AUTO DEGAUSS

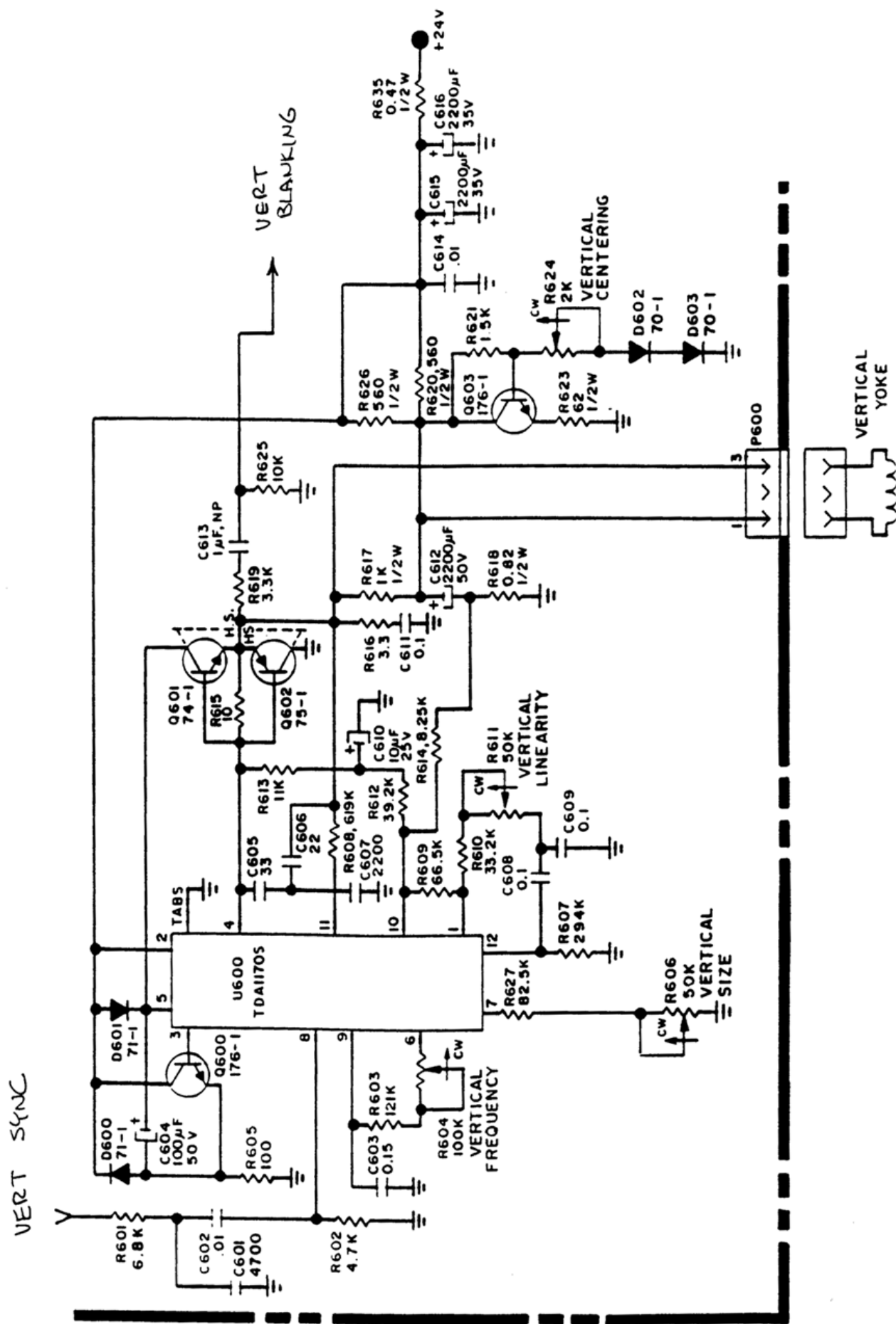
HORZ OUT, HV, HV SHUTDOWN, BEAM LIMITER



SYNC, HORZ AFC



VERTICAL SWEEP & OUTPUT

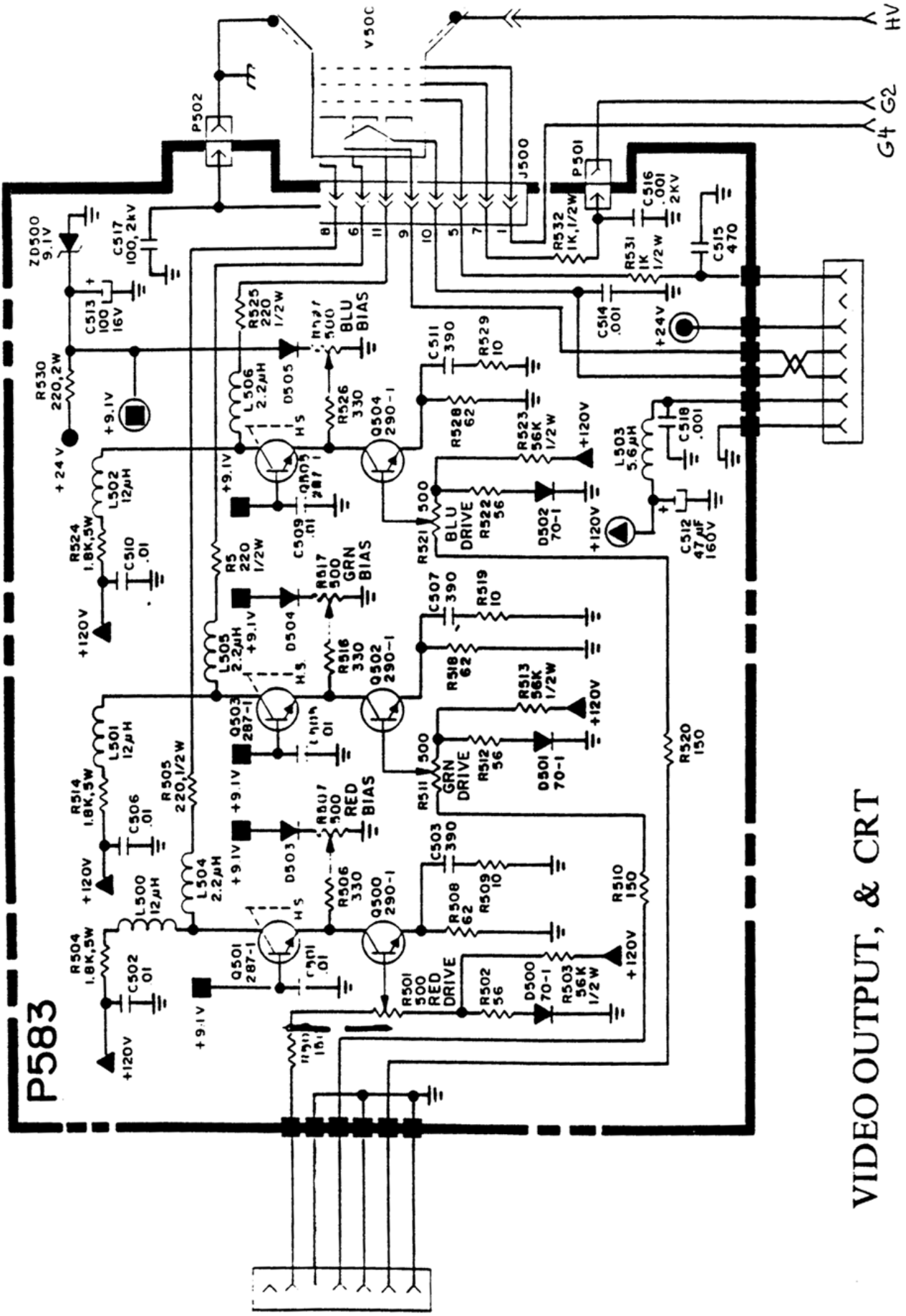


P648

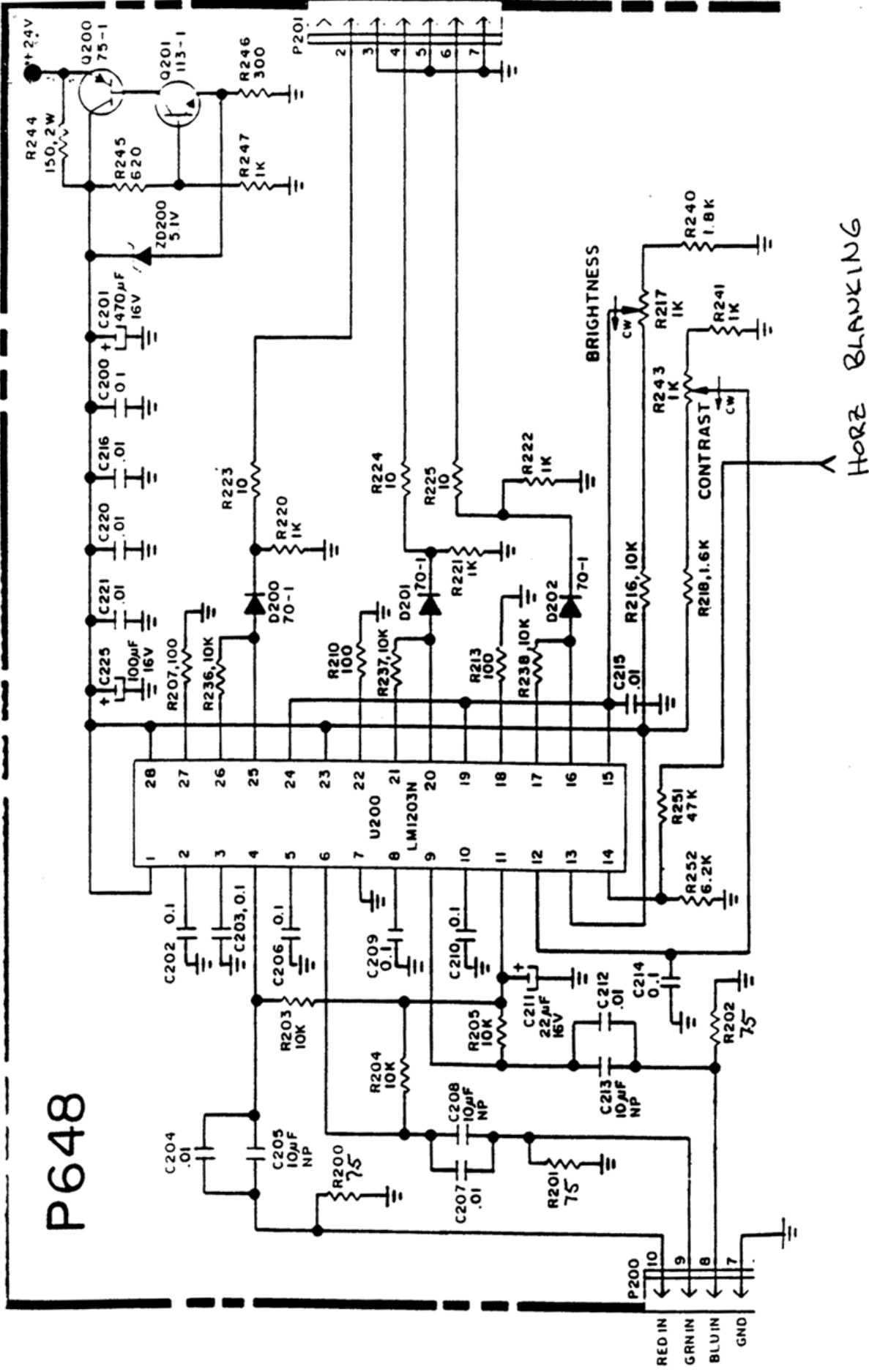
The schematic diagram illustrates the internal circuitry of the P648 device. It features an LM1203N integrated circuit (U200) as the central component. The circuit is powered by a +24V supply (R244, 150.2W) and includes a 100μF capacitor (C204). Key components include resistors (R200-R250) and capacitors (C200-C225) that form the timing and signal processing network. Transistors Q200 (75-1) and Q201 (113-1) are used for signal amplification and switching. The circuit also includes a 100μF capacitor (C204) and a 100μF capacitor (C204). The output section includes a 100μF capacitor (C204) and a 100μF capacitor (C204). The circuit is labeled with component values and pin numbers.

VIDEO PROCESSOR

RED IN
GRN IN
BLU IN
GND



P648



VIDEO PROCESSOR (.7 volt, 75 ohm)

