DESCRIPTION OF BLOCK DIAGRAM

1. Primary Rectifier Circuit

This circuit transform AC line voltage to DC voltage as the supplied source for secondary circuit.

It is operated by C908 (electrolytic capacitor) and D901 (bridge diode).

2. Switching Control Circuit

This circuit operate to be kept output of the secondary rectified circuit in constant level any conditions; no load, full load, and line voltage variation, ... etc.

The main function is operated by the IC901 (STR5717) syncronizing to horizontal frequency via a connector that tie around the core of the T701 (FBT).

3. Secondary Rectifier Circuit

This circuit rectifying the pulse waveform of the transformer generated by switching control circuit. It is consists of capacitors and diodes.

The output voltages are 77V, 50V, 40V, 13V, 6.3V, and 5V that are nacessary to the secondary circuit.

4. Video Pre-Amp Circuit

This circuit pre-amplify the video signal (Red, Green and Blue) to make sufficient signal for the video output circuit

The function is operated by the IC301 (MC13281).

5. Video Output Circuit

This circuit amplifies the video signal which comes from the video pre-amp circuit and amplified video signal is applied to the CRT cathode.

6. Microprocessor Circuit

This circuit generate control signal that need to operating of horizontal and vertical drive circuit, DDC1/2B (Plug & Play), and DPM (energy saviing) funtion. DDC1/2B (Plug & Play) function is operated by combination of H/V Sync and SDA/SCL signal.

7. Horizontal and Vertical Drive Circuit

This circuit take function, that are H/V-position, sidepincushion, and trapezoid, with the output of microprocessor circuit.

The generated vertical signal is applied to the vertical output circuit. The generated horizontal signal is applied to the horizontal output and high voltage generation circuit.

These are controlled by the IC701 (TDA4858) circuit.

8. Vertical Output Circuit

This circuit take the vertical ramp wave from the IC701 (TDA4858) and perform vertical deflection by supplying saw-tooth current from the IC601 (TDA4866) to the vertical deflection yoke.

9. High Voltage Generation Circuit

This circuit used for generating pulse the primary coil of T701 (FBT).

A boosted voltage—about 25kV—appears at the secondary of T701 (FBT) and it is supplied to the anode of the CDT (Cathode Display Tube).

10. Blanking and Brightness Control Circuit.

Blanking circuit eliminate retrace line by supplying negative pulse to the G1 of the CDT (Cathode Display Tube).

Brightness circuit is used to control screen brightness by changing the DC level of the G1.

11. D/D Converter.

To obtain constant high voltage, this circuit supplies controlled DC voltage to the FBT and the horizontal deflection circuit according to the horizontal sync frequency.

[CS545] SCHEMATIC DIAGRAM WAVE FORM 140M R Gain G GAIN (WF 11)-P903 E R381 ₩ 47 1/2W C902 R901 C901 C903 4700p AC250V 1/2W AC250V AC250V т901 🗘 9351 2SC3502 R328 L328 C916 0.01u 75K 630V(FI 1/2W C917 5600 P ESIF VR347 20K(B) B CUT OFF 12.1 6.5uS 18-631uS WF 1 WF1 🗘 WF2 STR5717 22K 1/2W R954 1K R935 C947 + C948 R935 F0V 16V BF 0362 R318 C362 ₩ 5071C1 8- 8uS 9- 83uS 11 · 756uS R938 R939 470 180 1/2W WF 9 WF4 WF3 } FR368 10K ST_G THE SYMBOL MARK OF THIS SCHEMETIC YR367 C DIAGRAM INCORPORATES SPECIAL FEATURES ST_B C391 100u 7777 160V + FIRE AND ELECTRICAL SHOCK HAZARDS WHEN SERVICING IT IS ESSENTIAL THAT ONLY MANUFATURES SPECFIED PARTS BE USED FOR THE CRITICAL COMPONENTS IN THE SYMBOL MARK OF THE SCHEMETIC. 3.5 15.13uS 11.756uS R421 1K R403 1K WF6 **⚠** R422 1K R404 1K 85,55 WF 2 R423 1K R424 10K C625 1000p R464 1701 FBT WF 7 HP_CTRL HS_CTRL WF 5 R790 0.471/2W 11 · 8uS 0417 KTC3198 DDC_SCL §\$\$ } 3.5 15.13uS R406 18K SUB SUB BRIGHTNESS R792 R793 47K 2% 36K 2% R407 18K WF7 WF8 R408 18K 91K 2% H755 10 1/4W 1/32 € 10mH VR850 SK IBI SK IBI 1K H. POSI /21 D411 KTC31 WF 4 47 1/2W R751 47 1/2W 47 1/2W R781 18-631uS H. SIZE D412

)3E81 1/2 1 2412

EKTC3196

D413

3E81 2/2 1 2413

EKTC3198

D414

R411

A414 WF9 WF 10 9 (8) (7) (6) (5) (4) (3) (2) (1) V.POSI C757 4700p 800V CONDITION -1503EB(2 V. SIZE . MODE MODE 5 53.68kHz/85.07Hz PINC. 0740 2. INPUT VOLTAGE 0951 R955 5. 1Vz 10K 0943 KTC3198 TRPZ. R765 L-1503EB12/21

R417
560

D416 VR831 5K(B) AC 115V BRIGHTNESS D795 3. PATTERN FULL WHITE

WIRING DIAGRAM

