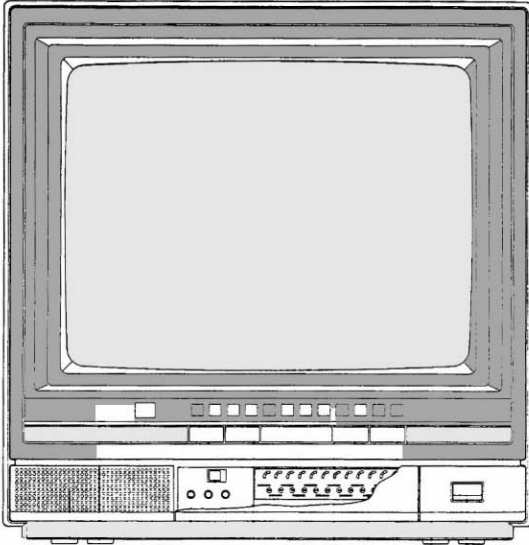


Service Manual

Colour Television

C20XA1

C22XA1



GRANADA TV RENTAL

SPECIFICATION

Tuning Range

Bands IV and V CCIR standard I
Covering UHF channels 21-68

Channel Selection

8 light action buttons
with LED indicators

Aerial Input

75 ohm co-axial socket

Intermediate Frequencies

Vision	39.5MHz
Sound	33.5MHz
Intercarrier Sound	6.0MHz

Loudspeaker Impedance

8 ohms

Audio Output

Approximately 5 Watts

Mains Input

240V 50Hz

Power Consumption

Approximately 90 Watts

Colour Picture Tube

90° P.I.L. quick start tube with pre-converged and
sealed yoke assembly
20" — GRTL Pt. No. A509940

Fuses

Mains fuses: T2.5A main circuit board
T3.15A, T250mA standby and
teletext supply
Secondary fuses: T500mA, T630mA

Controls

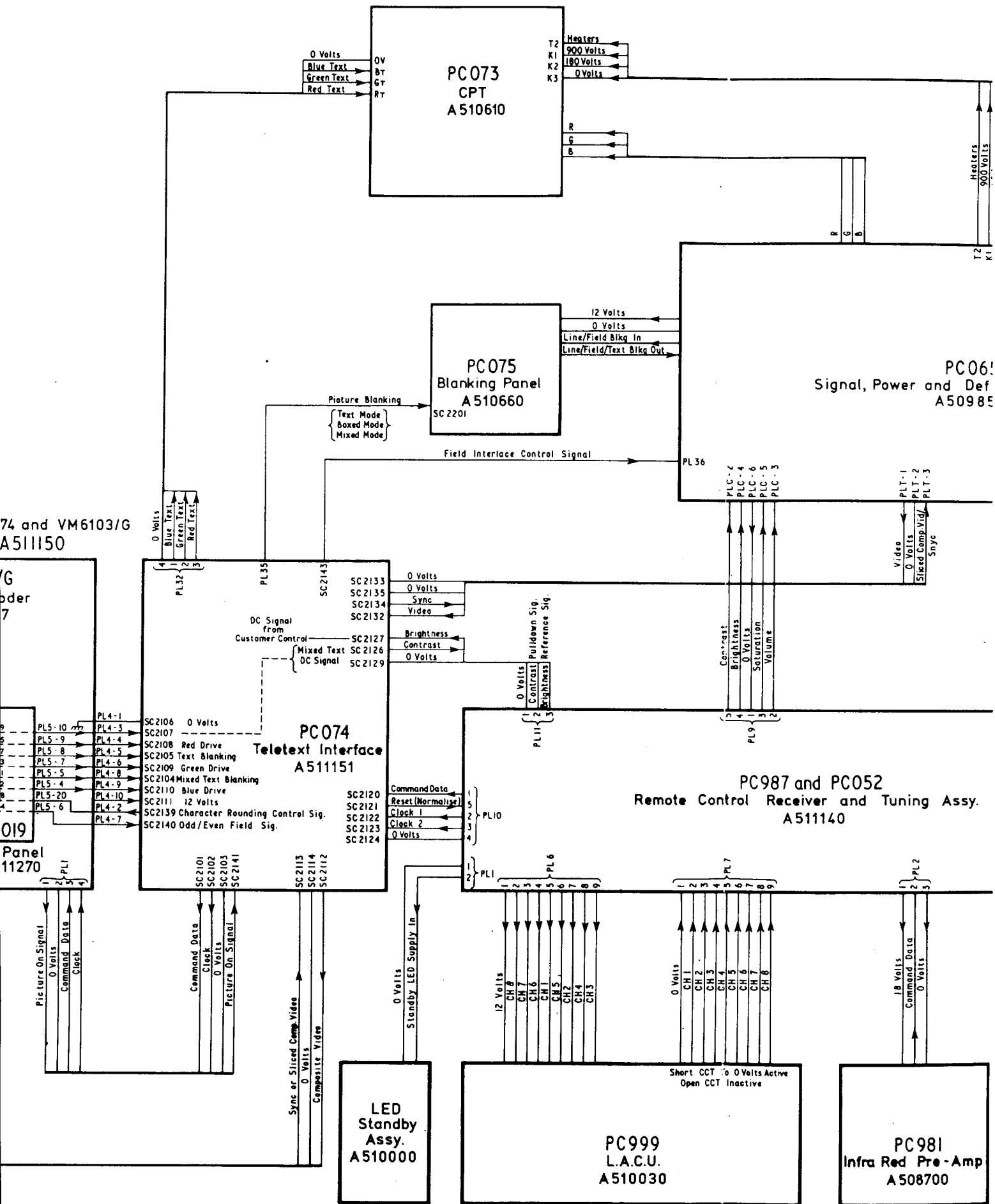
On/off push-button
Brightness, Colour, Contrast and
Volume slider controls

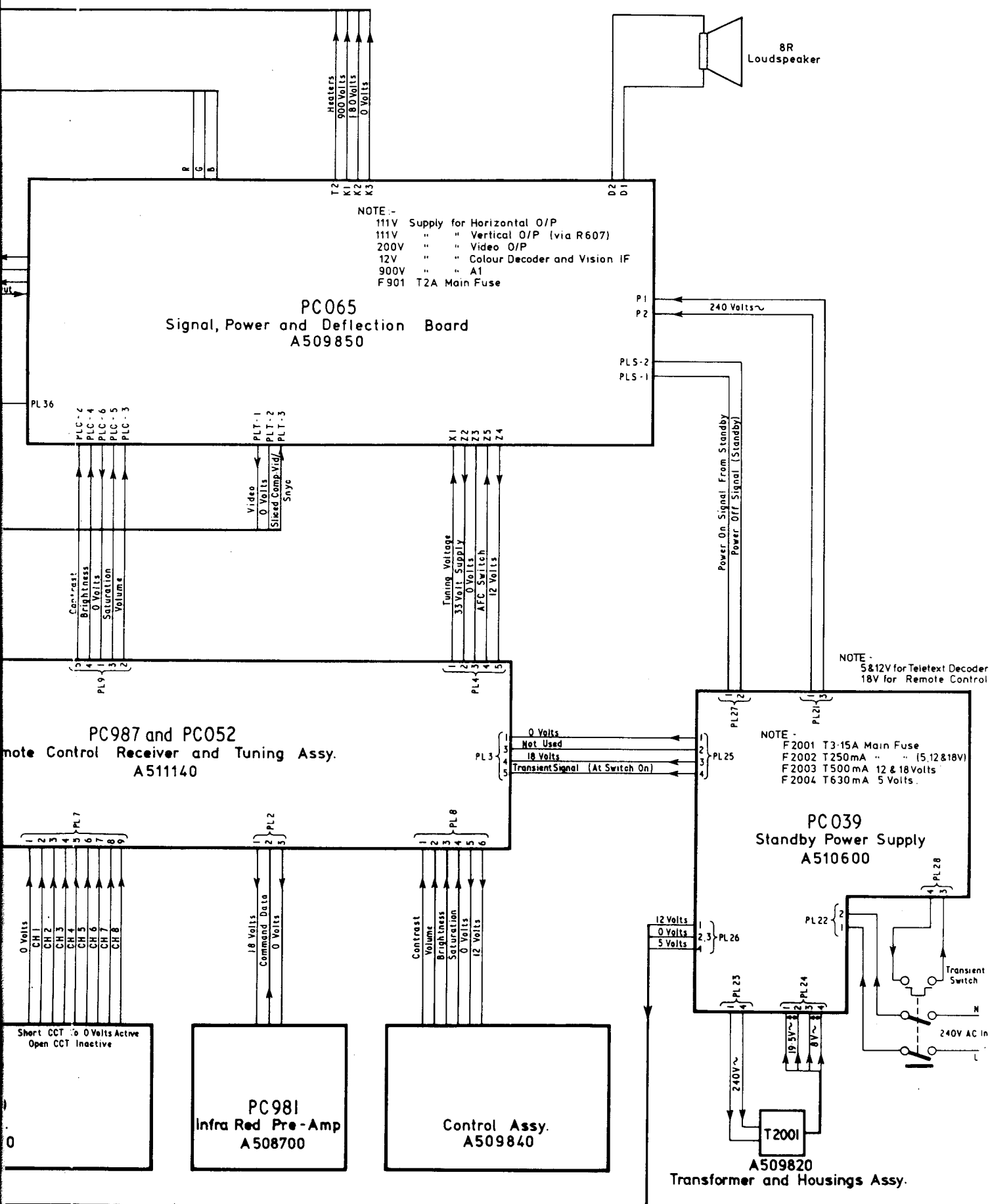
Remote Control Facilities

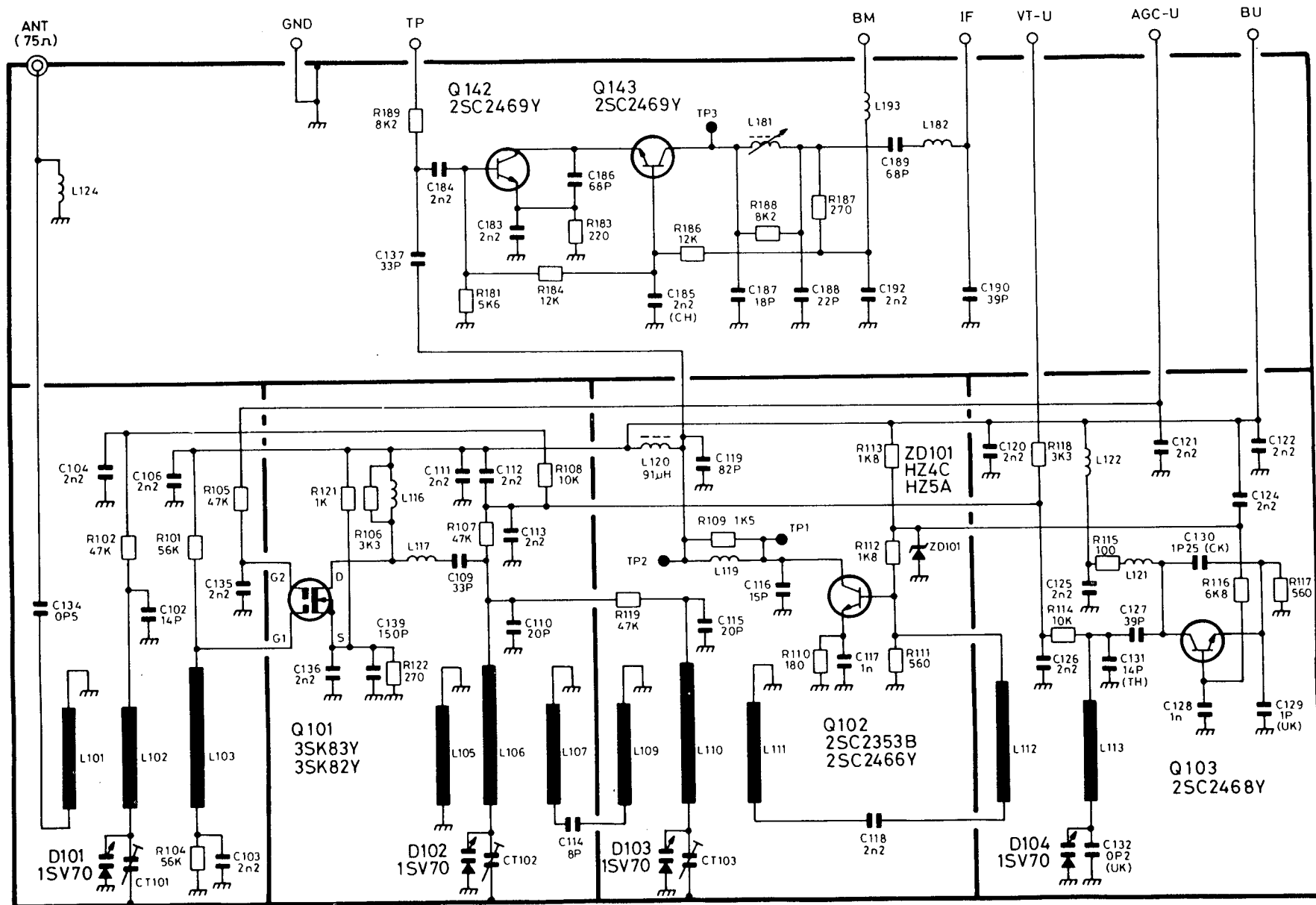
Channel selection, Teletext functions, Brightness, Colour,
Volume, Mute, Restore to Normal (Brightness and Colour),
Standby.

Dimensions

Width	631mm
Height	430mm
Depth	480mm

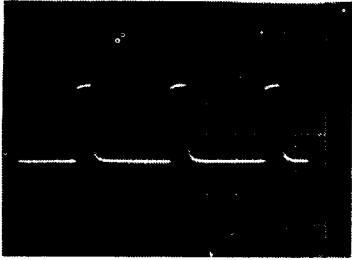




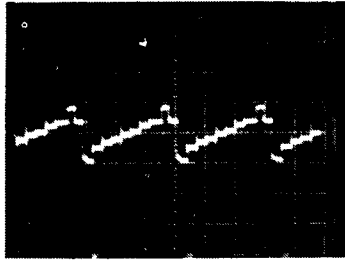


Circuit diagram of tuner

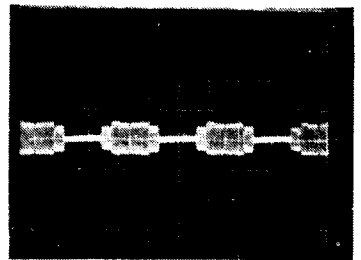
IC501 WAVEFORMS USING 10:1 PROBE AT 20μ SEC. (EXCEPT 17 & 18) ON COLOUR BAR SIGNAL,
WITH COLOUR CONTROL, BRILL. & CONTRAST CONTROLS AT MAX.



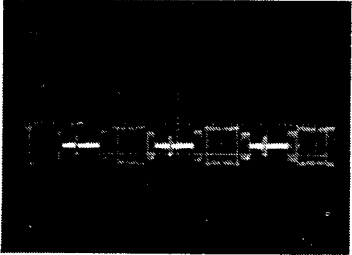
Pin 2 5v p.p.



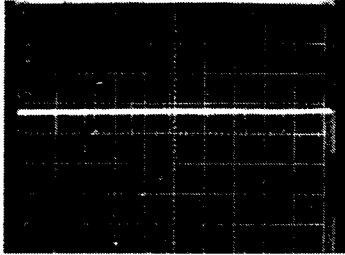
Pin 5 & 6 1v p.p.



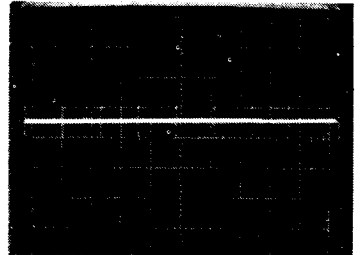
Pin 9 0.5v p.p.



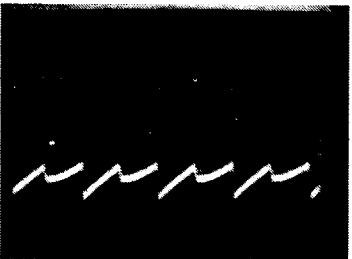
Pin 11 0.7v pp



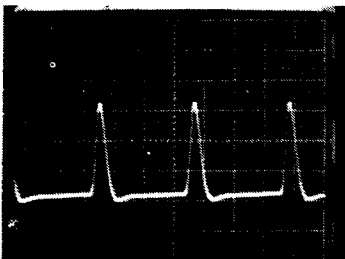
Pin 15 1.4v pp



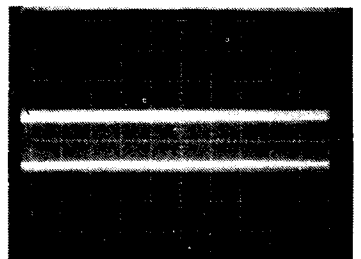
Pin 16 1v pp



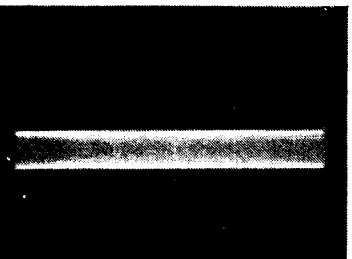
Pin 17 & 18 0.25v pp at 50μ .sec.



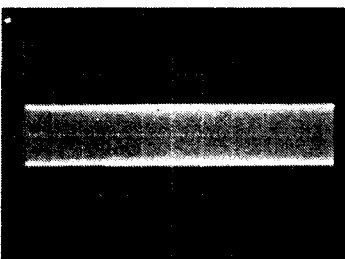
Pin 19 3.2 pp



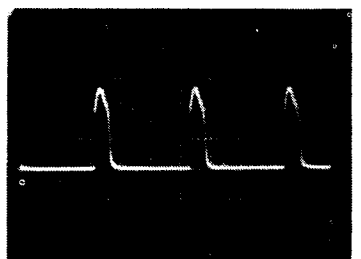
Pin 20 2v pp



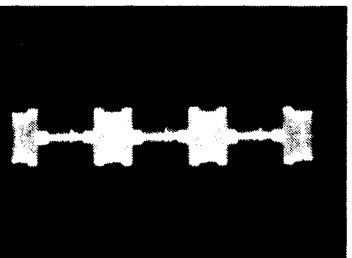
Pin 21 0.6v pp



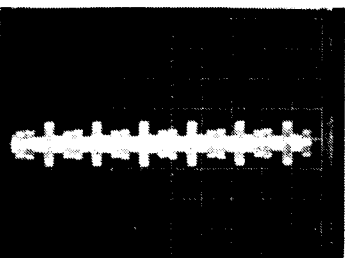
Pin 22 0.4v pp



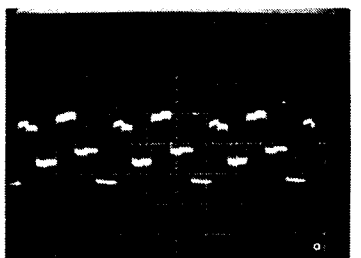
Pin 23 5.6v pp



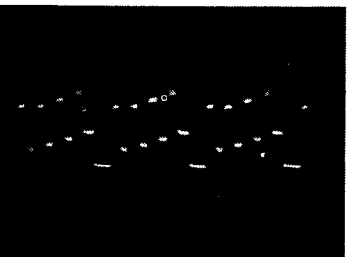
Pin 24 0.4v pp



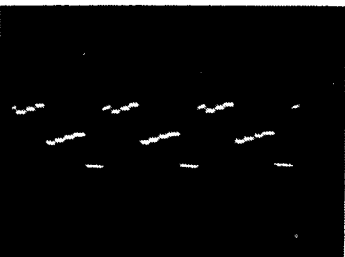
Pin 25 0.35v pp



Pin 26 2v pp

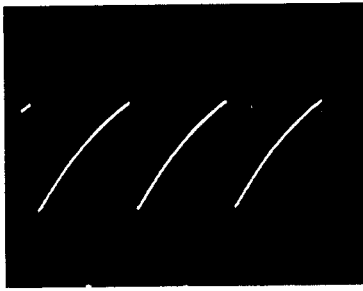


Pin 27 2.6v pp

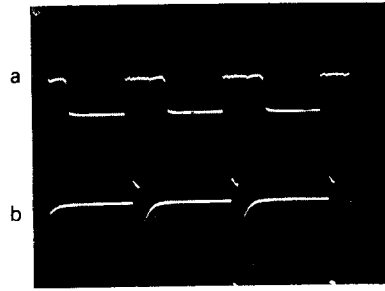


Pin 28 2v pp

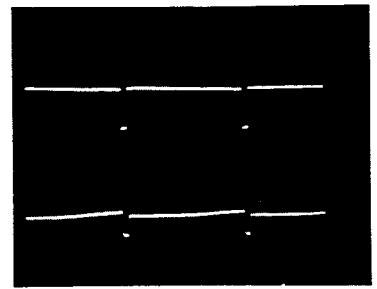
WAVEFORMS ON IC701 USING 10:1 PROBE



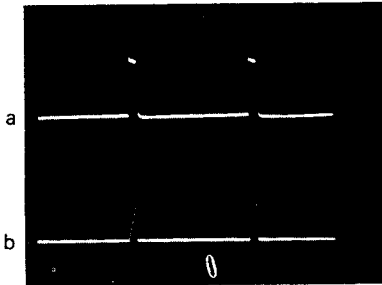
Pin 2 3.5V p-p at $20\mu\text{s}$



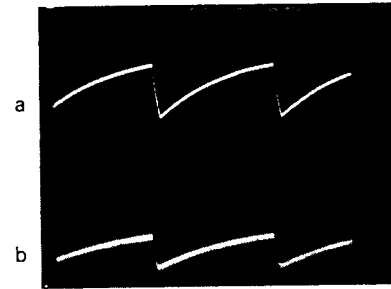
(a) Pin 4 1.2V p-p at $20\mu\text{s}$
(b) Pin 3 2V p-p at $20\mu\text{s}$



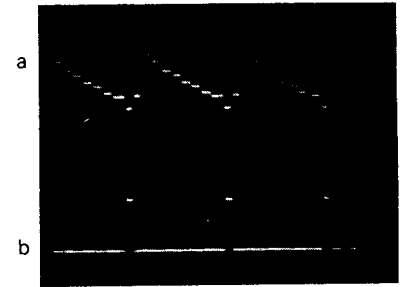
(a) Pin 7 3V p-p at 5ms
(b) Pin 6 0.8V p-p at 5ms



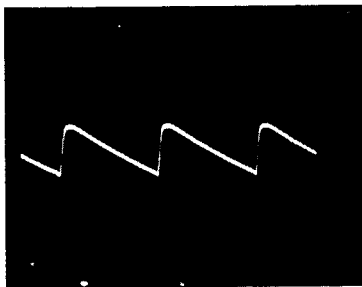
(a) Pin 9 10V p-p at 5ms
(b) Pin 8 6V p-p at 5ms



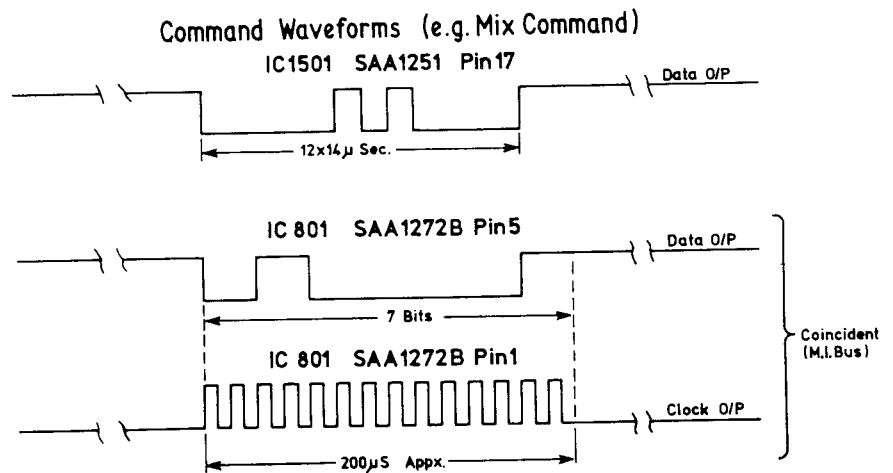
(a) Pin 10 3.5V p-p at 5ms
(b) Pin 11 1.8V p-p at 5ms



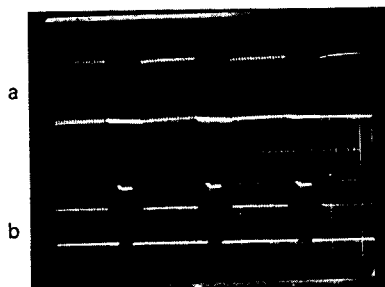
(a) Pin 14 1.8V p-p at $20\mu\text{s}$
(b) Pin 13 8V p-p at $20\mu\text{s}$



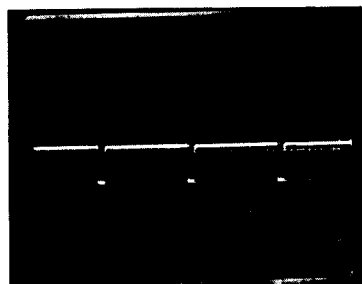
Pin 16 0.8V p-p at $20\mu\text{s}$



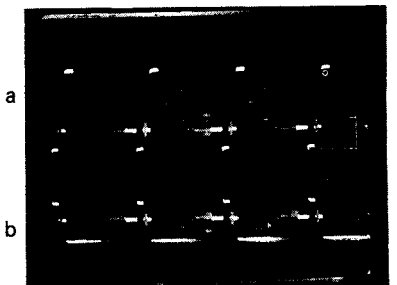
TYPICAL INTERFACE WAVEFORMS USING 10:1 PROBE



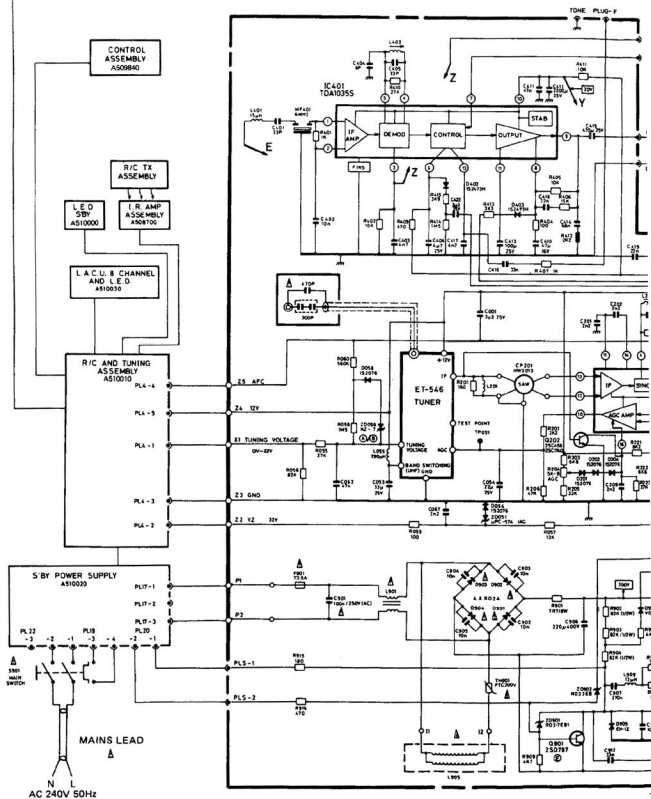
(a) PL32 pins 2, 3, 4 text mode
4.4V p-p at $20\mu\text{s}$ on clock
cracker pattern test page
(b) PL35 mixed blanking to PC075
2V p-p at $20\mu\text{s}$ clock cracker
pattern test page in text mode

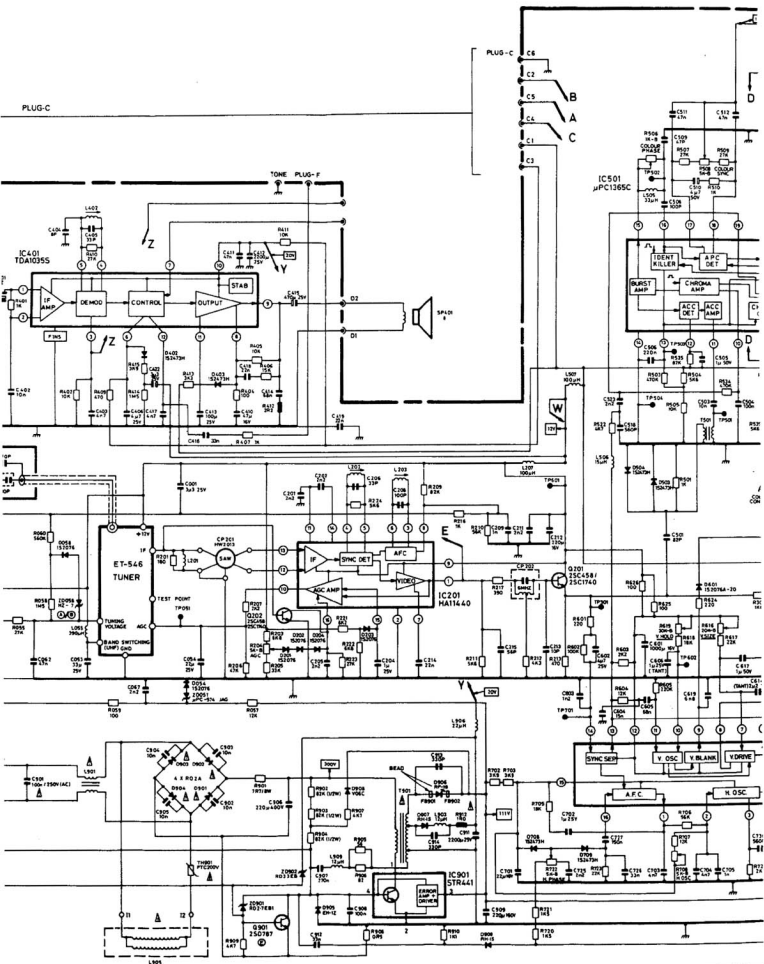


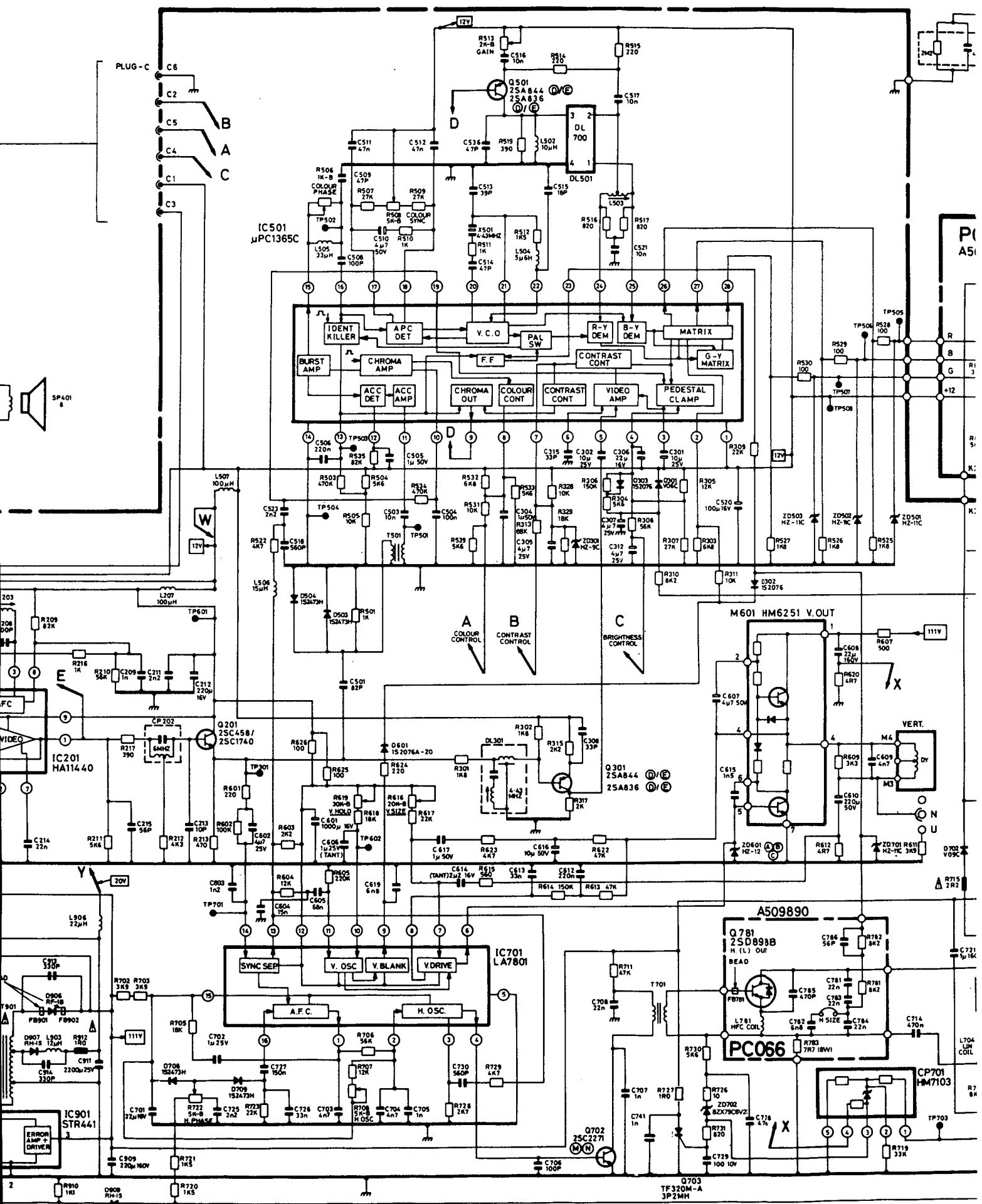
SC2134 sync input to PC065
taken in text mode
on clock cracker pattern
1.2V p-p at $20\mu\text{s}$

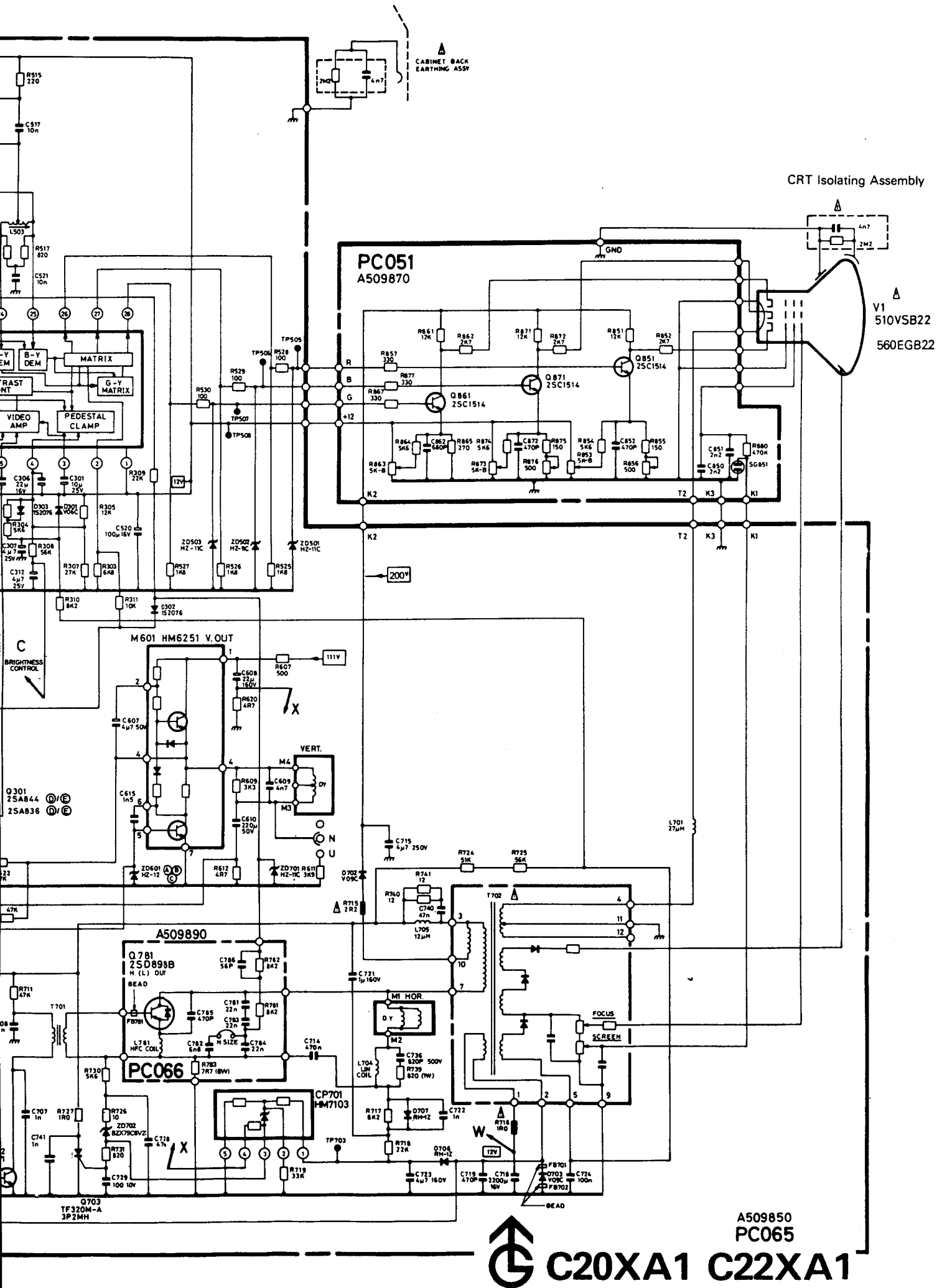


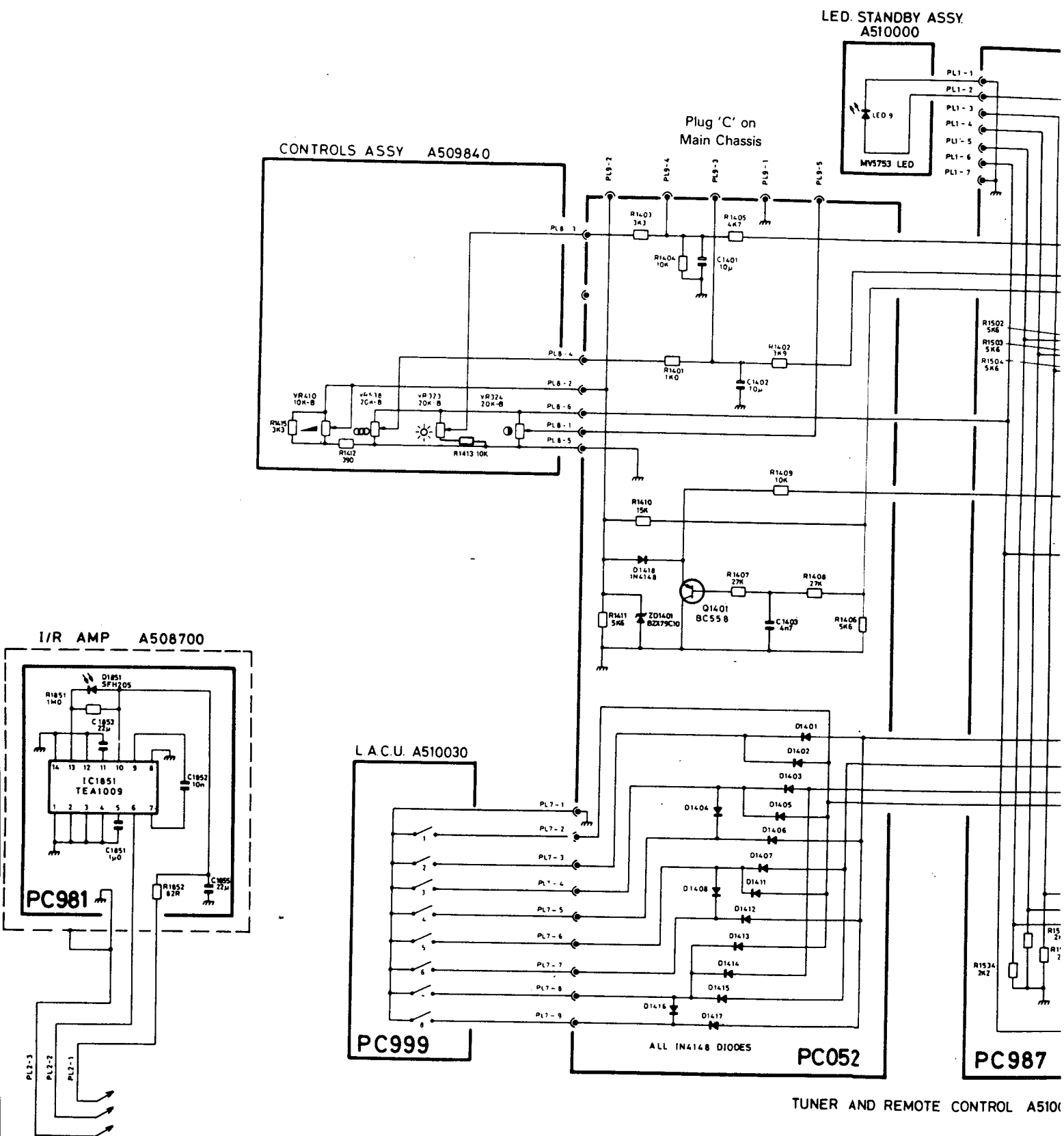
(a) SC2112 composite video input to
text decoder
2.8V p-p at $20\mu\text{s}$ taken on colour
bar signal in TV or mixed mode.
(b) SC2113 sync output from
text decoder
1.5V p-p at $20\mu\text{s}$ taken on colour
bar signal in TV or mixed mode.











To PC981



A.C.U. A510030

PC999

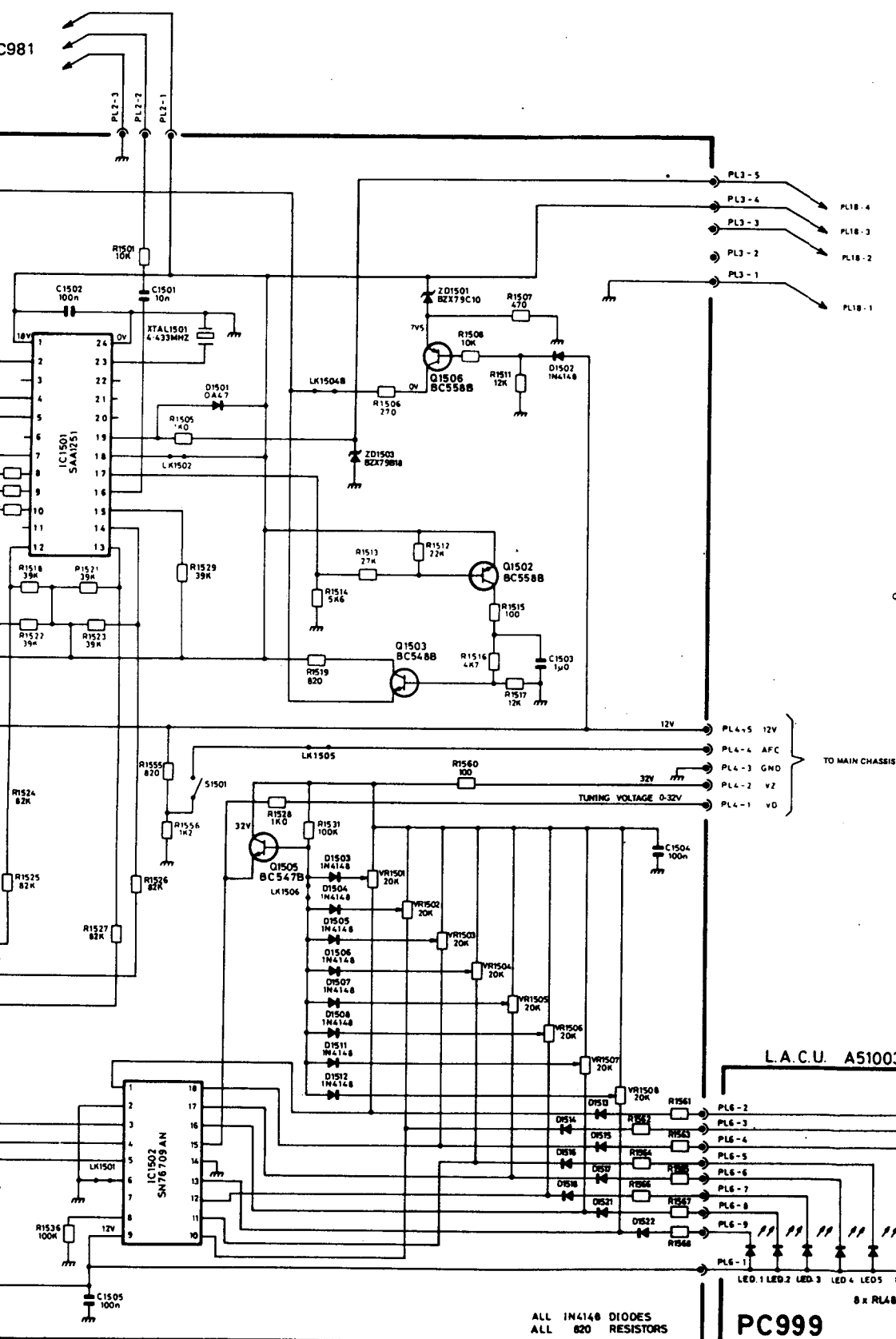
ALL IN4148 DIODES

PC052

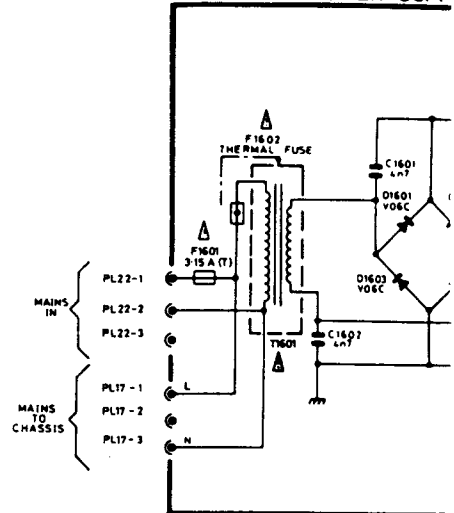
PC987

TUNER AND REMOTE CONTROL A510010

RCUIT DIAGRAM OF REMOTE CONTROL SYSTEM WITH STANDBY POWER SUPPLY



STANDBY POWER SUPPLY



L.A.C.U. A510030

PC999

LED 1 LED 2 LED 3 LED 4 LED 5 LED 6 LED 7 LED 8
8 x RL4850 LEDs

