# **General Information**

# **Specifications**

20" measured diagonally Picture Tube: Colour System UHF band channels Channel Coverage: 21 - 69 (470 - 862 MHz) Tuning System: 40 channels External Antenna: 75 ohm DIN type 6 ohm tweeter x 2 Audio output (RMS): 4W maximum AV Connection 21 pin SCART 485(D) x 5°0(L) x 440(H) mm 19.5Kg Dimensions: Weight: Mains Supply: AC240V - 50Hz Power Consumption:

# Service Adjustments

## **Colour Television Adjustments**

#### High Voltage Test

There is no high voltage adjustment component on the chassis to measure high voltage.

- 1: Connect the + probe of high voltage tester to the anode of CRT.
- Adjust contrast and brightness to minimum.
- 3: Measure the high voltage as 23.5KV, that voltage is 24.5KV for 20" (51cm) screen size
- 4: For maximum brightness, high voltage must be 22.5KV for 51cm.

#### **Adjustment of Horizontal Oscillator**

For the adjustment of horizontal oscillator C601 capacitor must be SHORT-CIRCUIT. Adjust P601 until an optimum stationary picture.

#### **Adjustment of Horizontal Position**

- Apply test signal of cross-hatch with circle to RF input.
- 2: Centre the circle by using P601.

### Adjustment of Supply Voltage

- Adjust the volume, brightness and contrast to minimum.
- : Adjust the supply voltage on the pin of

C118 capacitor to read 107V using P100 control.

#### Focus Adjustment

Adjust the thickness of lines until being minimum, by focus trimpot on the EHT transformer. By using cross-hatch or multiburst test pattern.

## 39.5MHz PIF Adjustment

- 1: Disconnect the IF output of tuner from input
- Apply 39.5MHz white picture to IF input.
- 3: Connect the oscilloscope to video output.
- 4: Adjust the video signal by using L206 coil shown in fig. 1.
- Make AFT adjustment after 39.5MHz adjustment.

### **AGC Delay Adjustment**

- Apply PAL colour bar signal which is 60dB uV amplitude (!mV) to the RF input.
- Turn P200 which is AGC delay control trimpot clock-wise up to the end.
- Adjust P200 until you find a picture without snow (noise).

#### AFT Adjustment

- 1: Disconnect the IF output from IF input.
- Apply 39.5MHz signal with a PM5518 Phillips pattern generator to IF input.
- Connect a digital voltmeter to AFT pin of IF.
- Adjust L207 coil until the voltage of AFT pin of IF is 16V DC.

# 5: Re-connect the IF input.

# Colour Sync Adjustment

- 1: Apply colour bar signal to RF input.
- Connect a 8K2 resistor between the pins 8 and 16 of IC500 also connect pin 12 to ground (adjust contrast, brightness and colour to minimum).
- Adjust the colour synchronisation by using CT500 trimmer cap to the best position.
- 4: Remove 8K2 resistor and ground connection.

#### Colour Gain Phase Adjustment

- Apply PAL demodulator signal to RF input.
- Connect the oscilloscope to the blue signal output.
- 3: Adjust the hanover bars to G-Y=0 level by using L601 coil then make minimum -V, +V changing of the hanover bars by using P500. Likewise test the other alternatives.

Signal: colour bar pattern.
Adjust: P500 minimum hanover bars.

## SIF Detector Adjustment

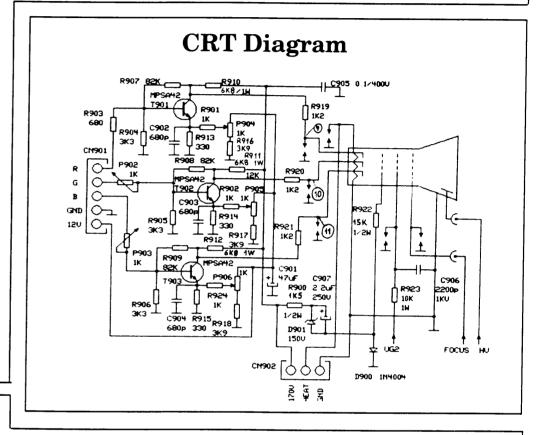
- 1: Apply 1KHz sound signal with test pattern to RF input.
- Adjust the maximum sound output by using L208 which is SIF detector coil.

### White-Balance Adjustment

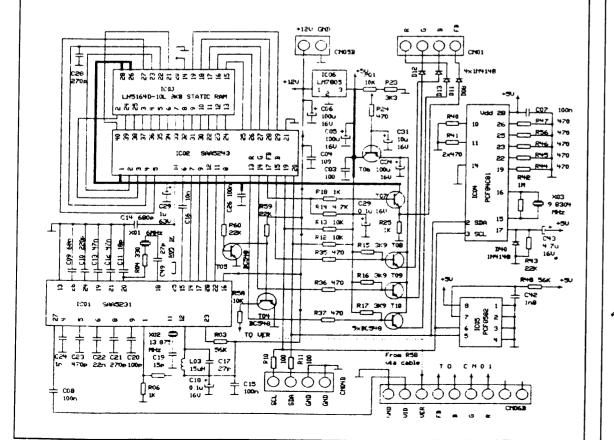
 Apply only white pattern to RF input and wait 15 minutes for heating, to allow CRT to reach stable tempera-

#### ture

- Adjust P904, 905, 906 which are RGB bias control trimpots to anti clockwise at rear side
- 3: Adjust P902 and ,903 which are G, B driver trimpot, to mid point.
- Adjust brightness, contrast and colour to minimum.
- 5: Turn the screen voltage trimpot on the EHT transformer to clockwise until any
- visible picture appears on the screen.
  6: Adjust brightness to 15% dark picture.
- Adjust brightness to 15% dark picture
   Adjust grey level by using P904, 905, 906 an ideal level.
- Adjust brightness and contrast to max. Then adjust P902 and P903, which are G, B driver trimpots, until you obtain a white level IF appears any colour on screen.



# **Teletext Diagram**



# Remote Control Diagram

