

General Information

1995  
Chassis: EE3  
CRT: A59EAK71X11  
Remote Control:  
290P054070  
Door Flap - TV: 752C603000  
Door Flap - Sat:  
752C600090 (BD/LD)  
Door Flap - Sat:  
752C601000 (DS)  
Door Catch - Fixed:  
761C550010  
Door Catch - Openable:  
761C573010  
Main Power Button:  
754C600030

Matrix

Item	See Model
Safety Precautions	Mitsubishi CT-14MS1
Service Adjustments	Mitsubishi CT-21AV1B
Satellite Diagram	Mitsubishi CT-21AV1B
Text Diagram	Mitsubishi CT-21AV1BS

Specifications

Reception System:	CCIR-I PAL
Reception Frequency:	UHF 470MHz -862MHz (all models) VHF 47 - 170MHz (VB1), 170 - 448MHz (VB2) (LD models only)
Mains input:	AC 230V 50Hz
Power Consumption:	110W (25AV1BD LD) 128W (25AV1BDS)
Aerial input:	75 ohm
Intermediate Frequency:	Video: 39.5MHz Sound: 33.5MHz
Audio Output:	2 x 12W (L/R) +12W (Centre) (music power) + 2 x 6W (Rear) (25AV1* models)
Speakers:	2 x 10cm dia + 4cm (L/R) + 12 x 8cm (Centre) + 2 x 10cm (Rear) (25AV1* models)

Recommended Safety Parts

Item	Part No.	Description
	255P807010	CRT A66EGW83X101 (28)
	255P914030	CRT A59EAK71X11 (25)
	409P564040	Coil Degaussing (25)
	409P564050	Coil Degaussing (28)
	920A416001	ASSY-PWB-Main (28LD)
	920A416003	ASSY-PWB-Main (28BDS)
	920A416019	ASSY-PWB-Main (28BD)
	920A425001	ASSY-PWB-Main (25LD)
	920A425006	ASSY-PWB-Main (25BD)
	920A425013	ASSY-PWB-Main (25BDS)
	H92D001005	ASSY-PWB-Main (25BDS)
	930C899001	ASSY-PWB-VM/CRT (25BD, 25LD)
	930C899003	ASSY-PWB-VM/CRT (28BD, 28LD)
	930C899007	ASSY-PWB-VM/CRT (25BDS)
	930C899008	ASSY-PWB-VM/CRT (28BDS)
	930C900001	ASSY-PWB-Power-Sub
	930C901001	ASSY-PWB-LED
	930C902010	ASSY-PWB-V/CRYPT (BDS)
	930C903020	ASSY-PWB-SAT (25BDS)
	930C903040	ASSY-PWB-SAT (BDS)
	930C904004	ASSY-PWB-AUDIO-PWR (28)
	930C904006	ASSY-PWB-AUDIO-PWR (25)
	930C909001	ASSY-PWB-TEXT
	930C911002	ASSY-PWB-DOLBY (25BD, 25LD)
	930C911006	ASSY-PWB-DOLBY (28BDS)
	930C911007	ASSY-PWB-DOLBY (28BD, 28LD)
	930C911014	ASSY-PWB-DOLBY (25BDS)
	246C162010	AC-Power Cord/UK-Plug
	700C600080	ASSY-Back-Cover (25BD)
	700C600090	ASSY-Back-Cover (25BDS)
	700C601020	ASSY-Back-Cover (25LD)
	700C604050	ASSY-Back-Cover (28BD)
	700C604060	ASSY-Back-Cover (28BDS)
	700C604080	ASSY-Back-Cover (28LD)
C981	189P091010	C-Ceramic-AC AC400V E4700pF-M
C991	189P117030	C-M-Polyester-AC AC275V 0.22uF-uF
F991	283D047040	Fuse T2A
PC951	268P068010	Photo Coupler TCDT1124G
R3A11, R3A12,	103P378060	R-Fuse 1 4W 3.3-J
R3B01, R3B02	103P378060	R-Fuse 1 4W 3.3-J (28)
R512	103P442020	R-Fuse Metal 1W 560-K-OR-J
R513	103P398040	R-Fuse 1 2W 2.2-J
R514, R516	103P397090	R-Fuse 1 2W 0.82-J
R671	103P447080	R-Fuse-Metal 1W 0.68-K-OR-J (28)
R671	103P448040	R-Fuse-Metal 1W 2.2-K-OR-J (25)
R6B1, R6B7	103P370010	R-Fuse 1 4W 10-J (28)
R6B4, R6B8	103P392050	R-Fuse 1 2W 1.0K-J (28)
R6B6	103P370050	R-Fuse 1 4W 22-J (28)
R981, R982	109P913050	R-Composition 1 2W 6.8M-J
S991	432C048010	SW-Push AC250V 5A 80A
T551	334P243010	Assy-Trans-Flyback (25, 28)
T901	350P663010	Trans-Power
Z552	299P193010	Protector 2000
Z951	299P193030	Protector 2000 (BD, LD)
Z951	299P193010	Protector 3150 (BDS)
Z952	299P193070	Protector 5000
Z953	299P193000	Protector 1600
Z968	299P193000	Protector 1600 (BDS)

Note: Numbers in brackets indicates model

Service Adjustments

Initialising the EEPROM

If you have replaced the EEPROM (IC702) or if for any reason the adjustment data has become corrupted it will be necessary to initialise the EEPROM.

1. If necessary, switch off by the Main switch.
2. Hold the service switch (S701, next to the aerial socket) while switching on by the Main switch.
3. Release the service switch after 3 seconds.
4. Switch off by the Main switch. The EEPROM data values have now all been reset to their initial default values as shown in table 2.2C
5. Switch on by Main switch. Press the service switch and then button "9" within 5 seconds to enter service mode.
6. Press the QUAS button to select the OPTIONS adjustment display.
7. Press buttons "2" or "8" on the remote control to select the adjustment code.
8. Adjust data value for each code using buttons "2" or "4" on the remote control according to the table below:

(Other adjustment codes will be displayed but need not be changed on these models).

Code:	25 28 AV1BD	25/28 AV1BDS	25/28 AV1LD
TUN:	0	0	1
SAT:	0	1	0
AUD:	10	10	10
ATS:	1	1	1
STD:	1	1	1
SYS:	2	2	2
AV1:	2	2	2
SPK:	0	0	0
ABG:	02	02	02
AI:	02	02	02
AL:	00	00	00
ADK:	15	15	15
MNP:	70	70	70
FFT:	1	1	1
VCL:	74	74	74
HYP:	1	1	1
SCP:	20	20	20
FMP:	23	23	23

Data values for the OPTIONS adjustments.

9. Press the "0" button to write the changes to the EEPROM.
10. Press the QUAS button to select the VCJ adjustment display.
11. Press buttons "2" or "8" on the remote

control to select the adjustment code.  
12. Adjust the data value of each code using buttons "2" or "4" on the remote control according to the table below:

(Other adjustment codes will be displayed but need not be changed on these models).

CODE	25AV1BD/ BDS/LD	28AV1BD/ BDS/LDLS
07	-7	-7
11	001	001
12	111	111
19	-3	-2
1B	-11	-9
1C	-2	-3

Data values for the VCJ adjustments.

13. Press the "0" button to write the changes to the EEPROM.

EEPROM Default Data Values

These values are adequate to allow the set to be adjusted.

Other Notes:

COD E	FUNCTION	DATA VALUE
00	V-Amp	-16
01	V-Correct	-31
02	P-Amp	-05
03	Tilt	-12
04	V-Lin	-23
05	C-Correct	-09
06	H-Amp	-22
07	16x9-SW-RGB-Matrix	-7
08	V-Shift	-02
09	H-Phase	-10
0A	B-Drive	-01
0B	G-Drive	-01
0C	R-Drive	-01
0D	Contrast	-14
0E	BRIGHT	-01
0F	Colour-Sat	-10
10	NTSC-Tint	00
11	Sharp	111
12	PAL-Luma-Delay	111
13	Secam-Luma-Delay	111
14	V-Amp-60	00
15	P-Amp	00
16	H-Amp-60	00
17	V-Shift-60	00
18	H-Phase-60	00
19	H-Phase-Text	00
1A	H-Phase-Secam	00
1B	H-Phase-RGB	00
1C	P-Amp-16:9	00
1D	358NTSC-Luma-Delay	111
1E	443NTSC-Luma-Delay	111

For CT-25AV1BDS only you must order the correct part numbers for **Assy PCB Main** and **Assy PCB Satellite** depending on the Serial number:

Serial No.	Assy PCB Main	Assy PCB Satellite
000001 - 000500	H92D001C35	930C903020
000501 - onwards	920A425013	930C903040

Do not order these two parts using the numbers listed on the parts inside the TV

VideoCrypt Decoder

The VideoCrypt decoder PCB is only serviceable by Mitsubishi service department. In the event of a fault on this PCB please follow this procedure

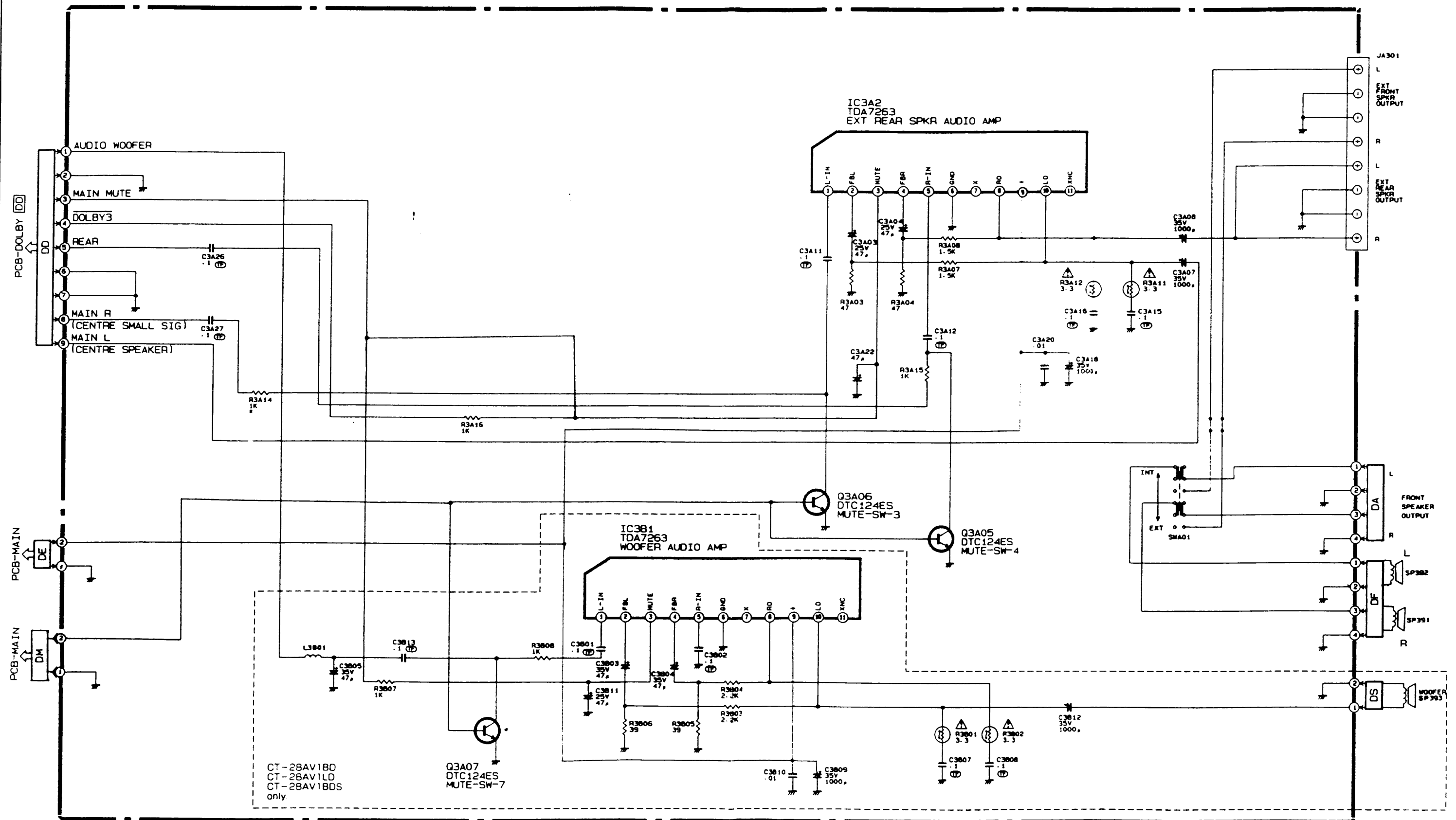
	DESCRIPTION	DATA VALUE
TUN	Tuner Type	
SAT	Satellite Encode	
AUD	Audio System	
ATS	Auto Tuning Stop	
STD	Reception Standard	
SYS	Colour System	
AV1	No. of AV inputs	
AVD	AV Dubbing	
EEX	Chassis Type	
SPK	Speaker SW Enabled	
EEP	EEPROM Size	
ABG	AGC GAIN - BG	
AI	AGC GAIN - I	
AL	AGC GAIN - L	
ADK	AGC GAIN - DV	
MNP	NICAM PRWESCALE	
TXT	TELETEXT TYPE	
FFT	FAST-TCF TEXT	
VOL	VOLUME PRESCALE	
HYP	HYPER-SOND	
SCP	SCART PRESCALE	
FMP	FM PRESCALE	

1. Contact the Mitsubishi consumer services department to request an advance replacement VideoCrypt decoder PCB.
2. Upon receipt of the replacement PCB, complete the enclosed form and return it with the faulty PCB in the packaging provided.  
Failure to return the PCB within 30 days will incur full replacement PCB costs.

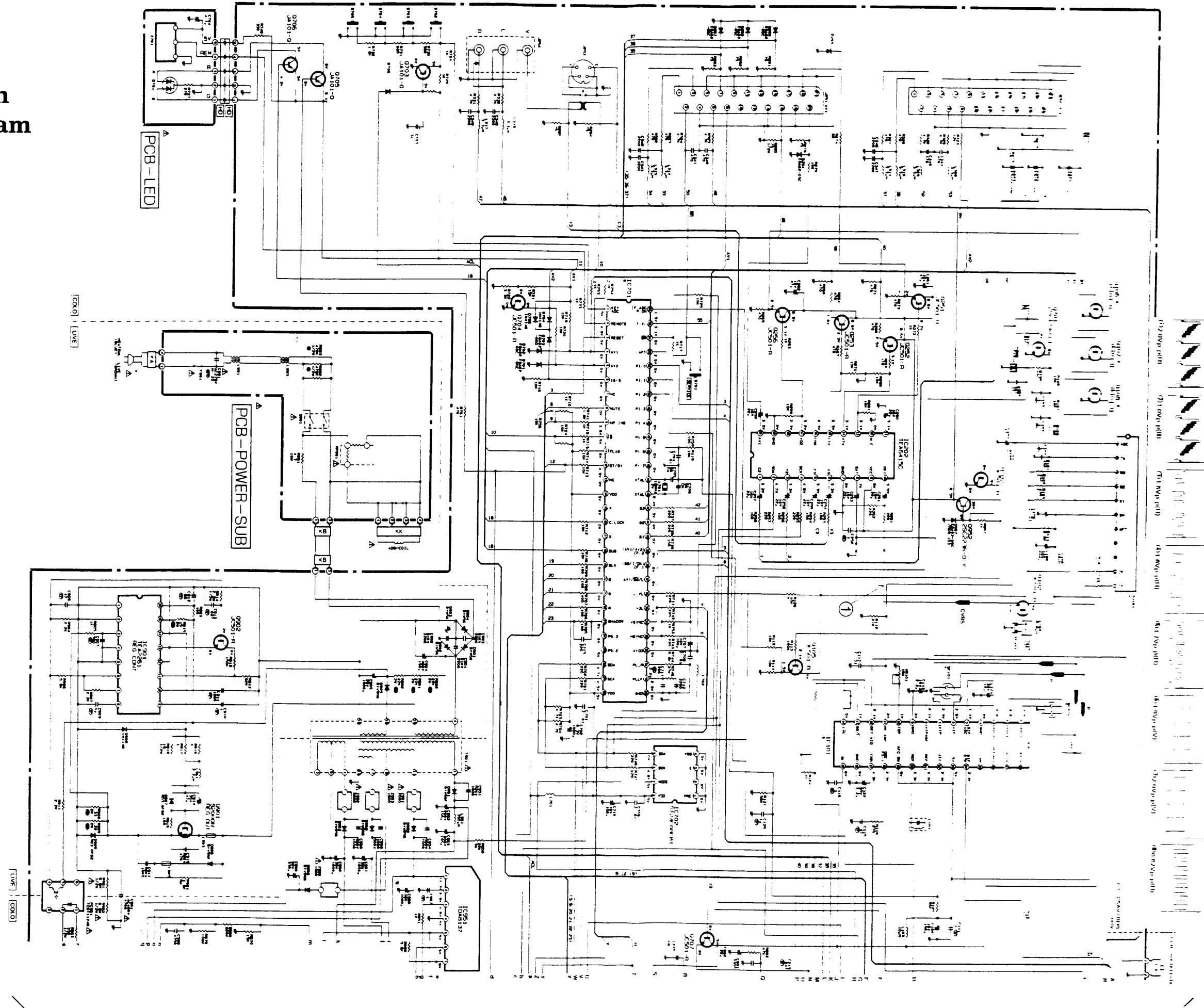
Note:

The plastic PCB frame connecting lead and fixing screw should be retained as the replacement PCB is supplied without these items.

Audio Power Diagram



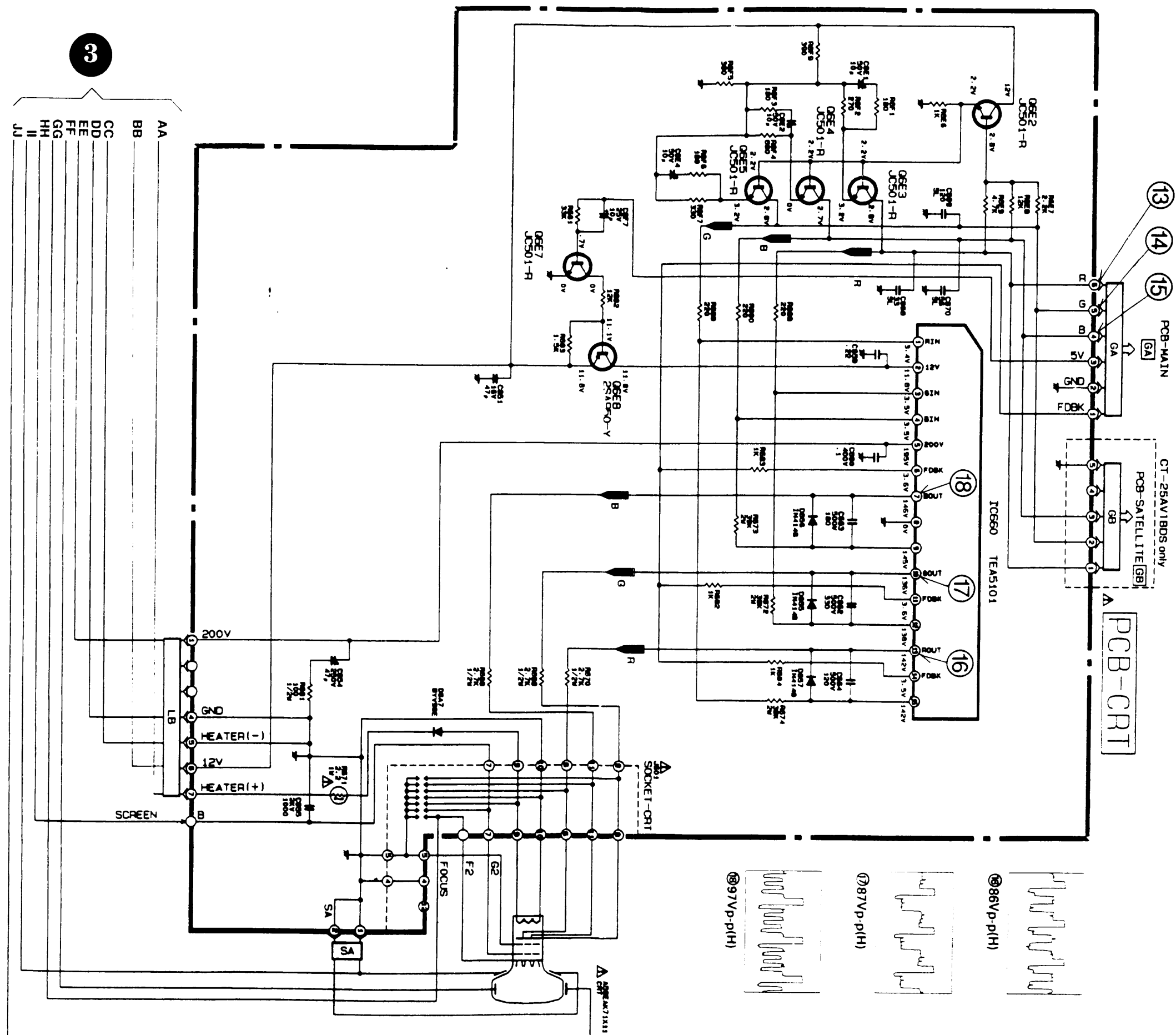
Main  
Diagram



## 1



### Main Diagram Cont'd.



PCB-DOLBY

