

**T 751**

**SURROUND  
SOUND RECEIVER**

# **SERVICE MANUAL**



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SOUND RECEIVER**

# SERVICE SAFETY PRECAUTIONS

## 1. Replacing the fuses

**CAUTION:** FOR CONTINUED PROTECTION AGAINST THE RISK OF FIRE REPLACE ONLY WITH SAME TYPE OF FUSE.

Reference No	Part Number	Description
M751*AH	5120-0200-0	Fuse 5A 125V Time Lag 5x20 MM MITI/UL/CSA
M754*AH	5120-0052-0	Fuse 1.6A 250V Time Lag 5x20 MM UL/CSA
M752*C	5120-0024-0	Fuse 3.15A 250V Time Lag 5x20 MM SEMKO/VDE

NOTE:


<\*AH > : USA, CANADIAN MODEL ONLY.

<\*C > : EUROPEAN MODEL ONLY.

## 2. Safety check out

(Only U.S.A. model)

Before returning the product to the customer, make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit.

Parts marked with the symbol  are critical with regard to the risk of fire and electric shock. Replace only with parts recommended by the manufacturer.

## CONTENTS

DESCRIPTION	PAGE
SPECIFICATIONS .....	.3-4
REAR PANEL / FRONT PANEL .....	.5
DISASSEMBLY INSTRUCTIONS .....	.6
WIRING DIAGRAM .....	.7-8
BLOCK DIAGRAM .....	.9
ADJUSTMENT POINTS DIAGRAM .....	.10
INSTRUMENT SETUP .....	.11
ALIGNMENT PROCEDURES .....	.11-12
IMPORTANT NOTES .....	.12
PCB LAYOUT .....	.13-19
SCHEMATIC DIAGRAM .....	.20-38
IC BLOCK DIAGRAM .....	.39-46
ELECTRICAL PARTS LIST .....	.47-69
EXPLODED VIEW .....	.70
EXPLODED VIEW PARTS LIST .....	.71-72
PACKING DIAGRAM .....	.73

# SPECIFICATIONS

## POWER AMPLIFIER AND PREAMPLIFIER SECTIONS

Rated distortion	(THD 20Hz-20 kHz FC/C/FR)	≤ 0.08%
	(THD 20Hz-20 kHz SL/SR)	≤ 0.3%
Input Sensitivity	(ref. 8 ohms, 1 kHz)	180+/-30 mV
S/N Ratio	(A-wtd, 1KHz, 1W, 8 ohm)	≥ -76 dB
	(A-wtd, 1KHz, 70W, 8 ohm)	≥ -90 dB
Frequency Response	(20 Hz - 20 kHz)	0 ± 0.8 dB
Channel Balance	(1 dB to -40 dB, 1 kHz)	≤ 2 dB
	(-41 dB to -50 dB, 1 kHz)	≤ 3 dB
Audio muting at 1kHz		≥ 53 dB
Headphone O/P in 0.1%, 600 ohm load, CD in 500mV, 1 kHz		≥ 10V
Subwoofer out, 500mV in	(THD at 2V O/P, 100 Hz)	≥ 0.5%
	(S/N at 2V O/P, 100 Hz)	≥ 80 dB
Crosstalk	(2V input, 10W, 1 kHz)	> -68 dB
Continuous average power output		70 W

## **Controls**

Bass	(at 500mV in, 1W out, 100 Hz)	± 9 dB
Treble	(at 500mV in, 1W out, 10 kHz)	± 9 dB

## SURROUND SECTION

### **Channel separation**

I/p mode : L, R	: 1V in, 1 kHz, Ch R, L	≥ 45 dB
	: o/p at unexpected, 1 kHz, Ch C	≥ 35 dB
I/p mode : L= -R	: 1V in, 1 kHz, Ch R, L	≥ 28 dB
	: o/p at unexpected, 1 kHz, Ch C	≥ 30 dB
I/p mode : L= R	: 1V in, 1 kHz, Ch R, L	≥ 45 dB
	: o/p at unexpected, 1 kHz, Ch SL, SR	≥ 30 dB

### **Frequency Response**

I/p mode : L, R	: 1V in, 1W, Ch R, L	40Hz	0 ± 1.5 dB
		20kHz	0 ± 0.8 dB
I/p mode : L= R	: 1V in, 1W, Ch C	300Hz	0 ± 0.8 dB
		20kHz	0 ± 0.8 dB
I/p mode : L= -R	: 1V in, 1W, Ch SL, SR	30Hz	0 ± 1.0 dB
		6.5kHz	-3 ± 1.0 dB

S/N Ratio ( 200mV in, 1, A-WTD w/ 1k termination)

I/p mode : L, R	: 1 kHz, Ch L, R	≥ 65 dB
I/p mode : L=R	: 1 kHz, Ch C	≥ 65 dB
I/p mode : L=-R	: 1 kHz, Ch SL, SR	≥ 65 dB
THD (2.2V in, 1W, w/ 80 kHz LPF, 1 kHz)		≤ 0.2%

## AC-3/DTS SECTION

### **Frequency Response**

FL, FR, C, SL, SR:	200Hz	0 ± 0.8 dB
	20kHz	0 ± 0.8 dB
Distortion 1W all channels		0.08%
S/N 1 W ( CCIR/ARM, 200 Hz NOTCH & 400 Hz HPF)		≥ 85 dB

## **AM TUNER SECTION**

Input level is expressed as the reading in open-circuit  
of 75-ohm source impedance signal generator

Usable sensitivity (999/1000kHz)		≤ 30 dBμ
S/N Ratio (5mV in)		≥ 38 dB
THD (5mV in)		≤ 3%
IF Rejection (450 kHz)		≥ 36 dB
Image Rejection (F+2xIF)		≥ 28 dB
Selectivity		≥ 17 dB
Output		130+/- 20mV
Loop sensitivity (20dB S/N)		
	999/1000 kHz	≤ 66 dB
	603/600 kHz	≤ 66 dB
	1404/1400 kHz	≤ 66 dB
Frequency response (100 - 2.3 kHz, 5mV)		± 6 dB

## **FM TUNER SECTION**

Input level is expressed as the reading in open-circuit  
of 75-ohm source impedance signal generator

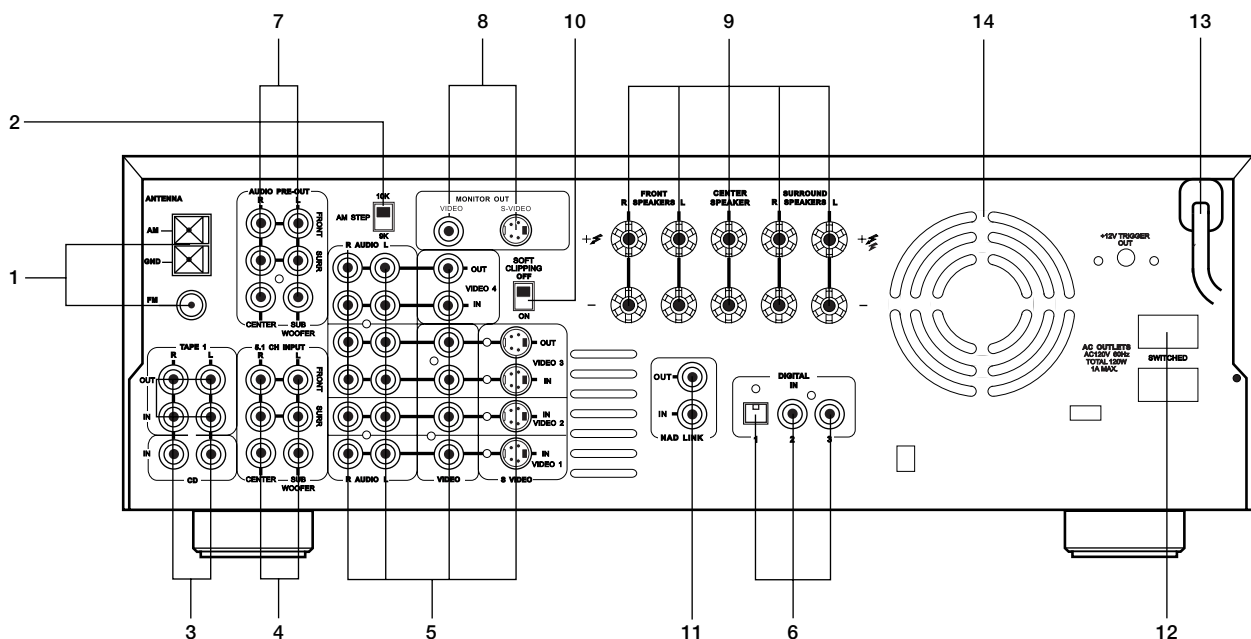
		<b><u>*C</u></b>	<b><u>*AH</u></b>
Usable Sensitivity ( 98 MHz)		≤ 15 dBμ	≤ 15 dBμ
Signal / Noise Ratio	Mono	≥ 72 dB	≥ 72 dB
(60 dBμ, IHF wtd)	Stereo	≥ 66 dB	≥ 66 dB
Frequency Response (20 Hz - 15 kHz, 60 dBμ)		0 ± 1.5 dB	0 ± 1.5 dB
Channel Separation (60 dBμ)	100 Hz	≥ 30 dB	≥ 30dB
	1 kHz	≥ 38 dB	≥ 38 dB
	10 kHz	≥ 30 dB	≥ 30 dB
Alternate Channel Selectivity (40 dBμ, ±400 kHz)		≥ 60 dB	≥ 45 dB
Capture Ratio (40 dBμ)		≤ 3 dB	≤ 3 dB
AM Suppression (60 dBμ, 100% Mod.FM, 30% Mod.AM)		≥ 48 dB	≥ 48 dB
Image Rejection (119.4 MHz)		≥ 85 db	≥ 40 dB
I.F. Rejection ( 10.7 MHz)		≥ 78 dB	≥ 65 dB
Pilot Suppression (60 dBμ)		≥ 60 dB	≥ 60 dB
THD (60 dBμ, L=R 75 kHz for AH, 40 kHz Dev for C)			
	Mono	≤ 0.25%	≤ 0.25%
	Stereo	≤ 0.35%	≤ 0.35%
Auto-Search Sensitivity	On	≥ 24 dBμ	≥ 24 dBμ
	Off	≤ 15 dBμ	≤ 15 dBμ
RDS decode Sensitivity		≤ 26 dBμ	≤ 26 dBμ

## **PHYSICAL SPECIFICATIONS**

Dimensions (Width x Height x Depth)	435 x 131 x 348mm
Net weight	12.27kg (27 lbs)
Shipping weight	13.63kg (30 lbs)

# REAR PANEL / FRONT PANEL

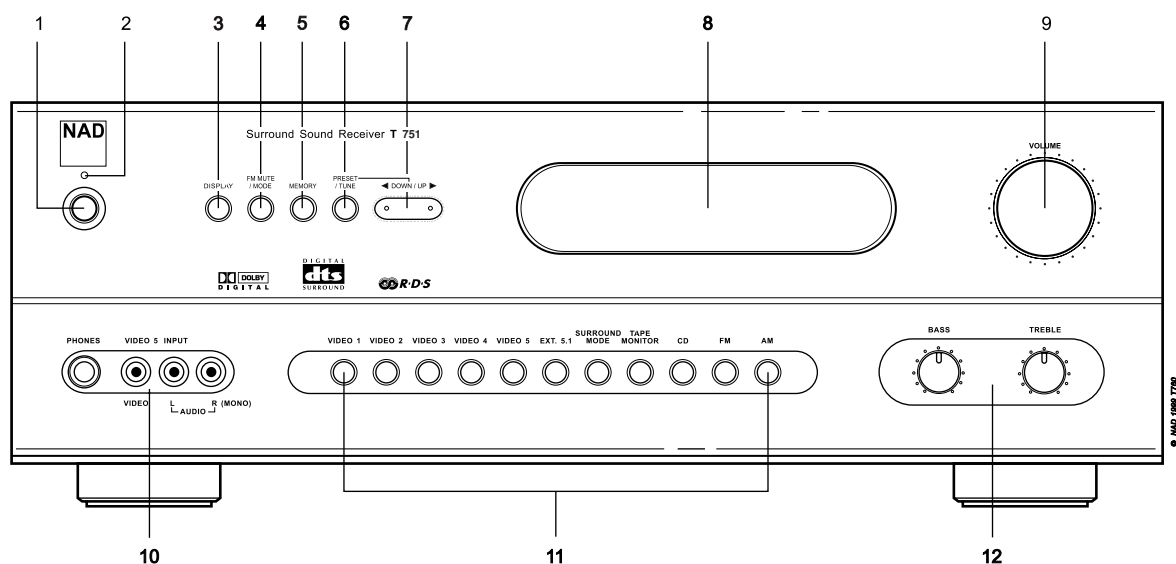
## REAR PANEL



1. FM & AM ANTENNA
2. AM STEPPING FREQUENCY
3. TAPE 1 & CD INPUTS
4. 5.1 CHANNEL INPUTS
5. VIDEO 1 - VIDEO 4 (AUDIO & VIDEO) INPUTS
6. DIGITAL AUDIO INPUTS
7. AUDIO PRE-OUTS / SUBWOOFER OUT

8. MONITOR OUT
9. FRONT, CENTER & SURROUND SPEAKERS
10. SOFT CLIPPING
11. NAD-LINK INPUT/OUTPUT
12. SWITCHED POWER OUTLETS (\*AH ONLY)
13. AC POWER CORD
14. COOLING FAN

## FRONT PANEL



1. POWER
2. STAND-BY
3. DISPLAY
4. FM MUTE / MODE
5. MEMORY
6. PRESET / TUNE
7. DOWN / UP ◀ AND ▶

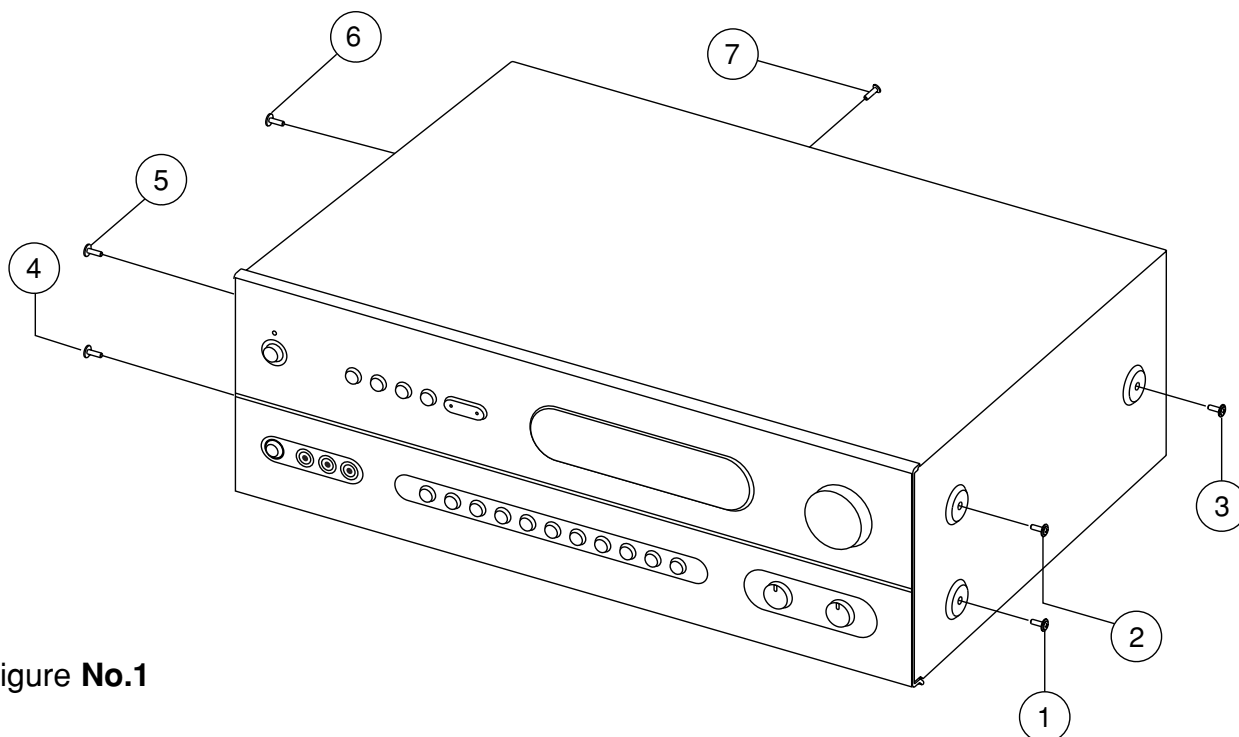
8. VFL DISPLAY
9. VOLUME
10. HEADPHONE SOCKET & VIDEO 5 INPUT
11. AUDIO & VIDEO INPUT SELECTORS & SURROUND MODE
12. BASS & TREBLE CONTROLS

## DISASSEMBLY INSTRUCTIONS

1. Remove machine screws M 4.0 x 6.0 ( ① to ⑥ ) from the side panels.

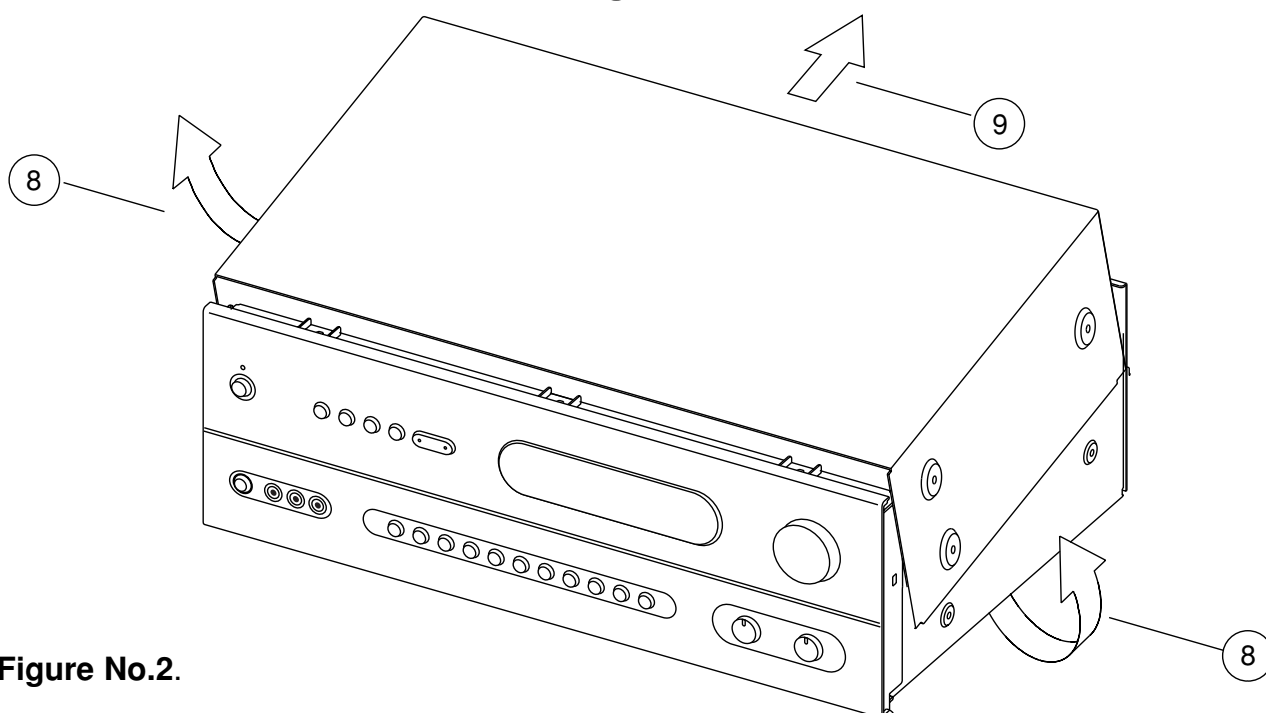
Remove tapping screw 3.0 x 8.5 ( ⑦ ) from the back panel.

Refer to **Figure No.1**.



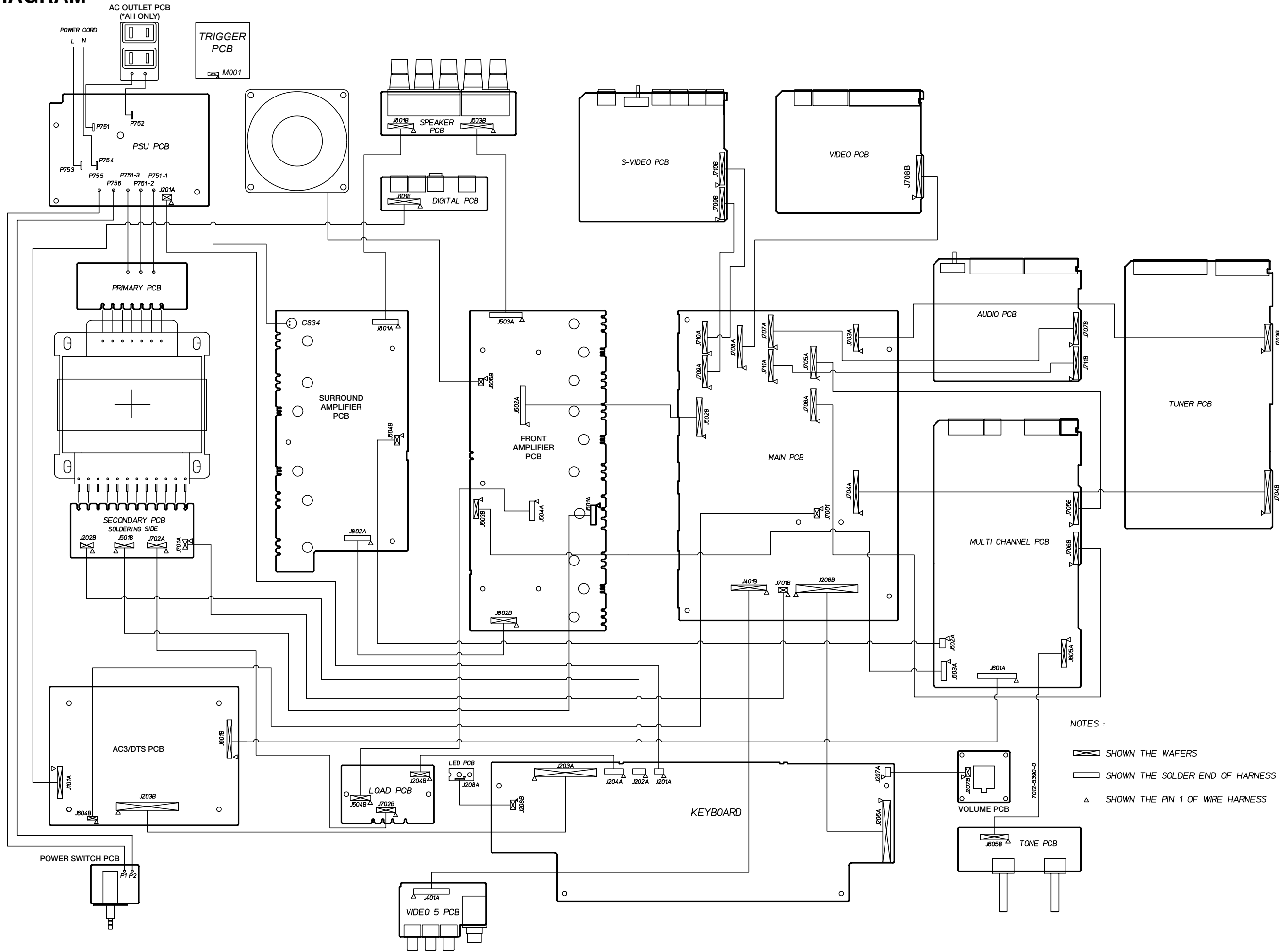
**Figure No.1**

2. Pull both sides of the TOP COVER slightly outwards ( ⑧ ) and tilt approx. 35° and then remove in the direction as indicated by the arrow ( ⑨ ). Refer to **Figure No.2**.

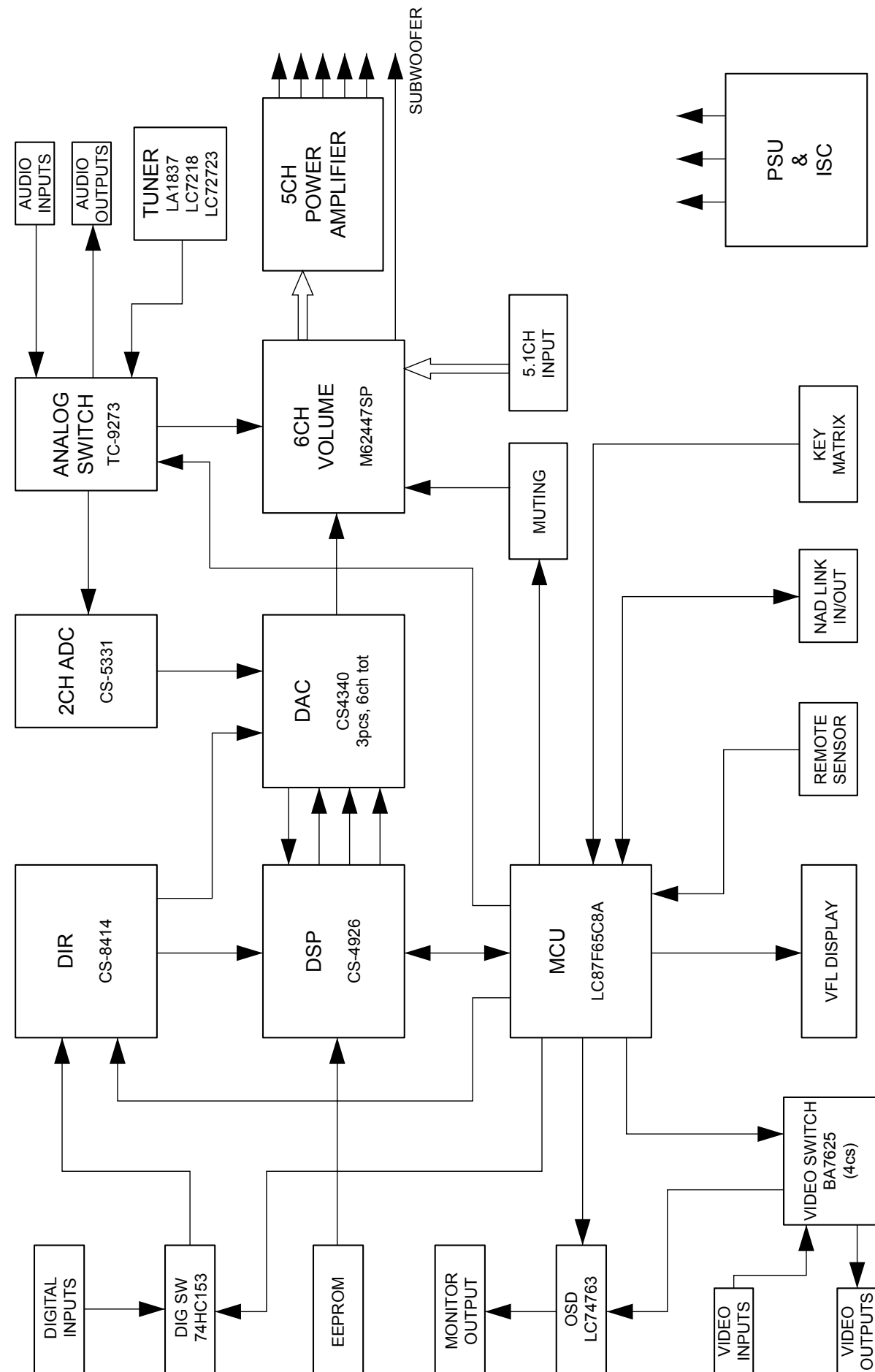


**Figure No.2.**

WIRING DIAGRAM

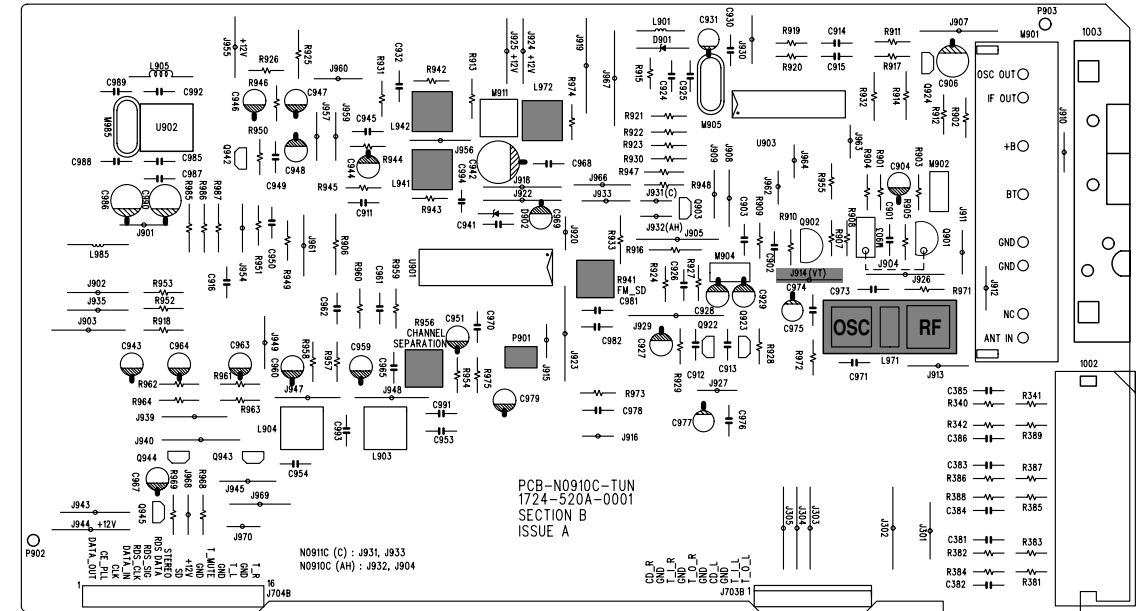


## BLOCK DIAGRAM

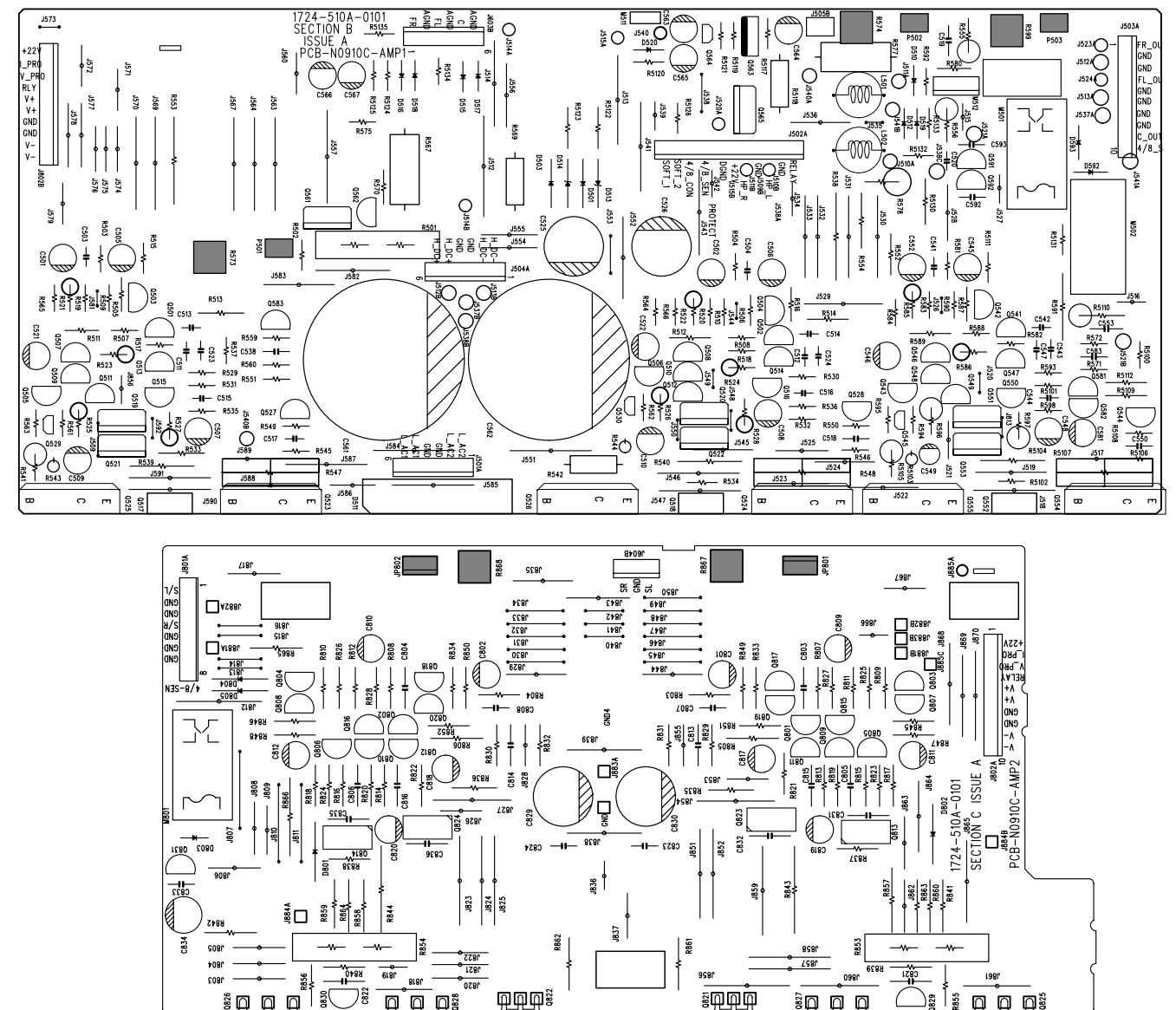


## ADJUSTMENT POINTS DIAGRAM

## 1. TUNER



## 2. IDLE CURRENT - Front Amplifier & Surround Amplifier Board





# INSTRUMENT SETUP

## 1. FM MEASUREMENT

Fig. 1

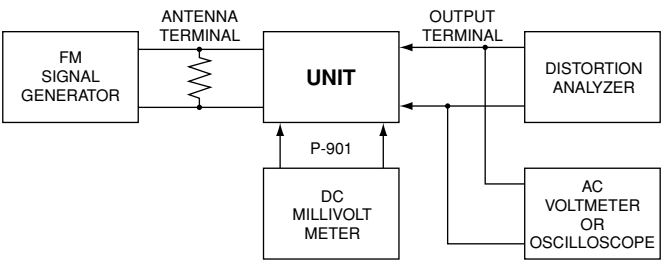
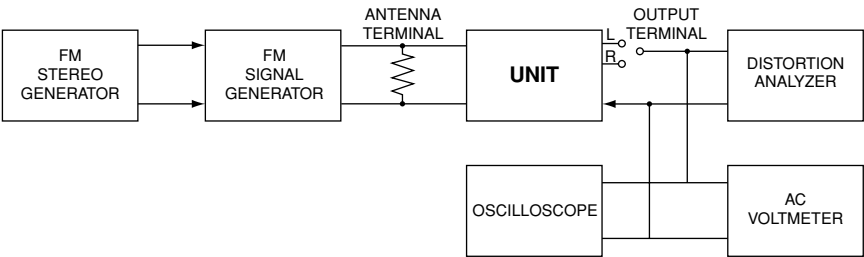
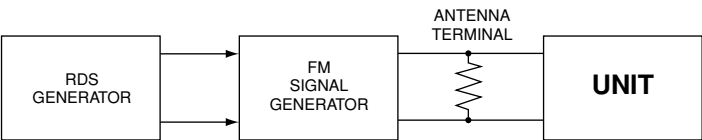


Fig. 2



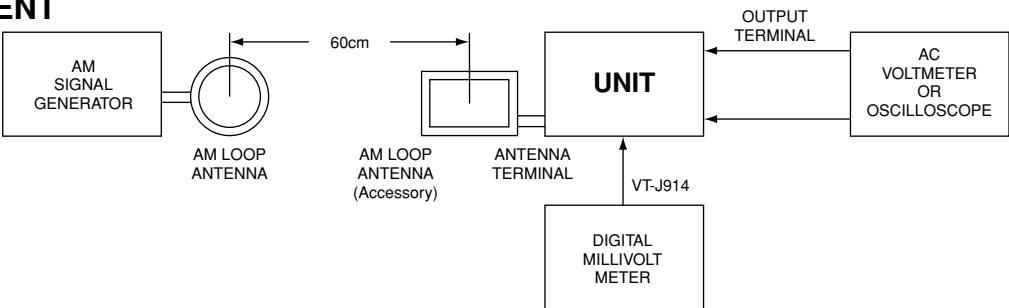
## 2. RDS MEASUREMENT

Fig. 3



## 3. AM MEASUREMENT

Fig. 4



# ALIGNMENT PROCEDURES

## AMPLIFIER SECTION

Idle Current

Step	Item	Connection	Adjustment	Adjust for
1	Front Left Channel	Voltmeter to P502 on Front Amp Board	R574	2mV±0.2mV
2	Front Right Channel	Voltmeter to P501 on Front Amp Board	R573	2mV±0.2mV
3	Center Channel	Voltmeter to P503 on Front Amp Board	R599	2mV±0.2mV
4	Rear Left Channel	Voltmeter to JP801 on Surround Amplifier Board (PCB N0901C-AMP2)	R867	2mV±0.2mV
5	Rear Right Channel	Voltmeter to JP802 on Surround Amplifier Board (PCB N091C-AMP2)	R868	2mV±0.2mV

## FM/RDS SECTION

- FM mono: 1kHz, 75kHz devi., 60dB/μV
- FM stereo: 1kHz, 67.5kHz devi., 60dB/μV
- Pilot signal 19kHz 7.5kHz devi.

### OUTPUTS

- Connect the non-inductive type resistor of 8 ohms to the all speaker terminals unless otherwise noted.

Item	Step	Connection of instrument	FM SG output	Stereo modulator output	Tuning frequency	Output indicator	Adjustment point	Adjust for	Remarks
FM IF/RF	1	Fig.1	99.0MHz 1kHz 75kHz devi. 65dBf (60dB)	—	99.0MHz	DC voltmeter	L941	0±100mV	FM MUTE/MODE switch: ON/AUTO Repeat the steps 1 to 3 until no further adjustment is necessary.
	2					AC voltmeter	IFT on the front end	Maximum	
	3					Distortion analyzer	L942	Minimum	
Stereo Distortion		Fig.2	99.0MHz Ext. mod. 65dBf (60dB)	Channel L or R 1kHz	99.0MHz	Distortion analyzer	IFT on the front end	Minimum	FM MUTE/MODE switch: ON/AUTO Don't turn more than +/-180°
Stereo Separation		Fig.2	99.0MHz Ext. mod. 65dBf (60dB)	Channel L or R 1kHz	99.0MHz	Oscilloscope	R956	Maximum separation	Repeat stereo distortion and stereo separation alignment until THD at minimum and separation at maximum.
Muting Level		Fig.1	99.0MHz 18dB	—	99.0MHz	Oscilloscope	R941	Signal output	
RDS		Fig.3	99.0MHz Ext. mod. 65dBf (60dB) RDS 2% MOD	—	99.0MHz	—	—	—	Decode the RDS-Program Station.

## AM SECTION

AM Modulation: 400Hz, 30%  
For AH Version

Step	AM SG output	Tuning frequency	Output indicator	Adjustment point	Adjust for
1	—	530kHz	Digital DC voltmeter	OSC coil on RF block L971	1.35±0.2V
2	600kHz 400Hz 30% mod. 60dB/m	600kHz	AC voltmeter	RF coil on RF block L971	Maximum
3	600kHz 400Hz 30% mod. 60dB/m	990kHz	AC voltmeter	L972	Maximum

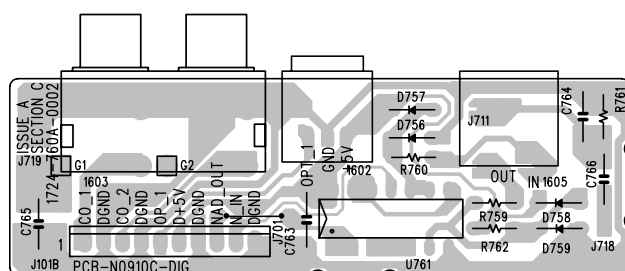
For C Version

Step	AM SG output	Tuning frequency	Output indicator	Adjustment point	Adjust for
1	—	522kHz or 531kHz	Digital DC voltmeter	OSC coil on RF block L971	1.3±0.2V (522kHz) 1.35±0.2V (531kHz)
2	600kHz 400Hz 30% mod. 60dB/m	603kHz	AC voltmeter	RF coil on RF block L971	Maximum
3	600kHz 400Hz 30% mod. 60dB/m	999kHz	AC voltmeter	L972	Maximum

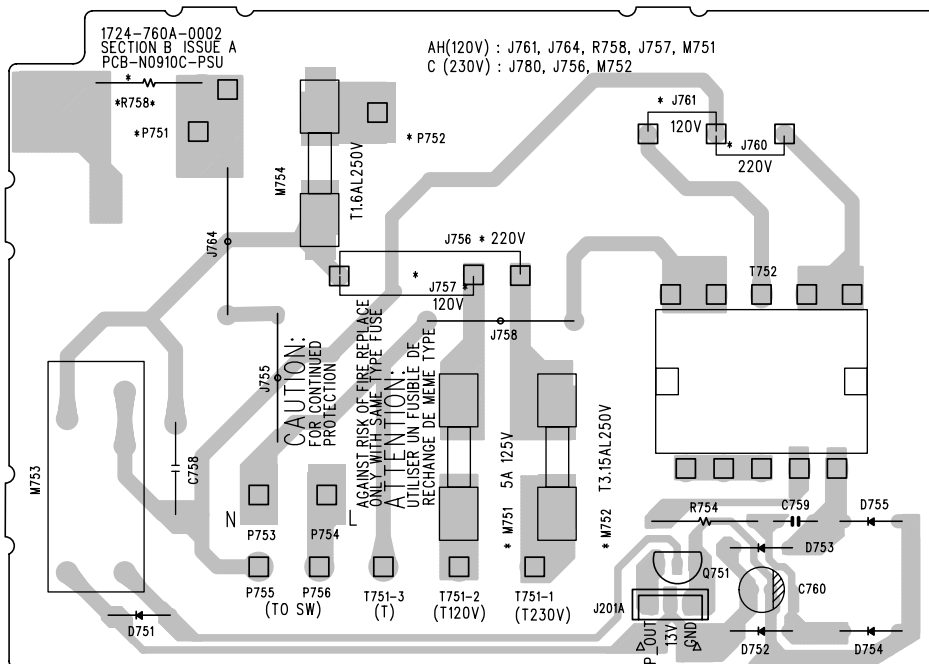
## IMPORTANT NOTES

- Show the software version**  
Press "VIDEO 5" and "EXT 5.1" and "DISPLAY".
- Toggle between PAL and NTSC**  
Press "MEMORY" and "VIDEO 1".
- Light UP all the icon on the VFL.**  
Press "VIDEO 1" and "EXT 5.1" and "DISPLAY".
- Delete All Tuner Presets**
  - Change the setting of 9kHz/10kHz AM step switch and then switch on the unit.
  - Switch off the unit and put back the 9kHz/10kHz AM step switch to the right setting. Then switch on the unit. (i.e. 9kHz=C ver., 10kHz=AH ver.)

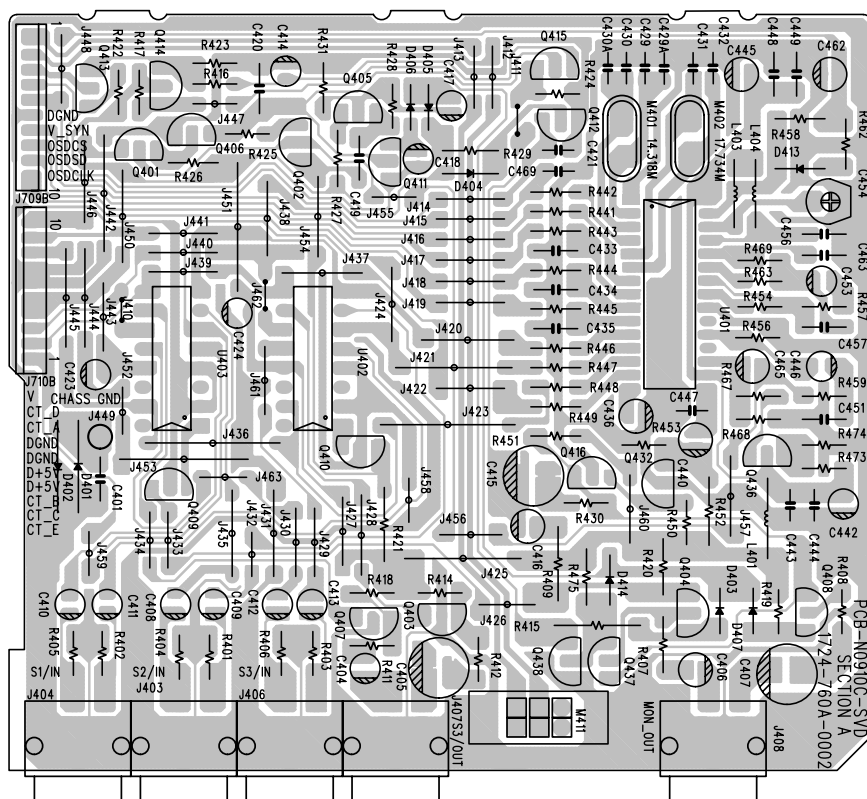
## SPEAKER BOARD



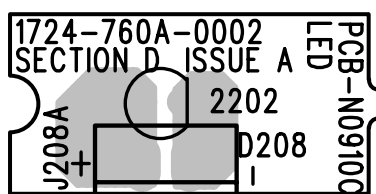
## PSU BOARD



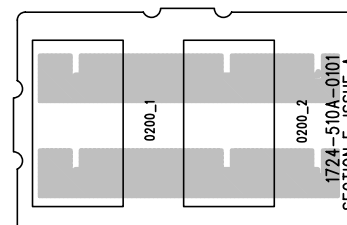
## S-VIDEO BOARD



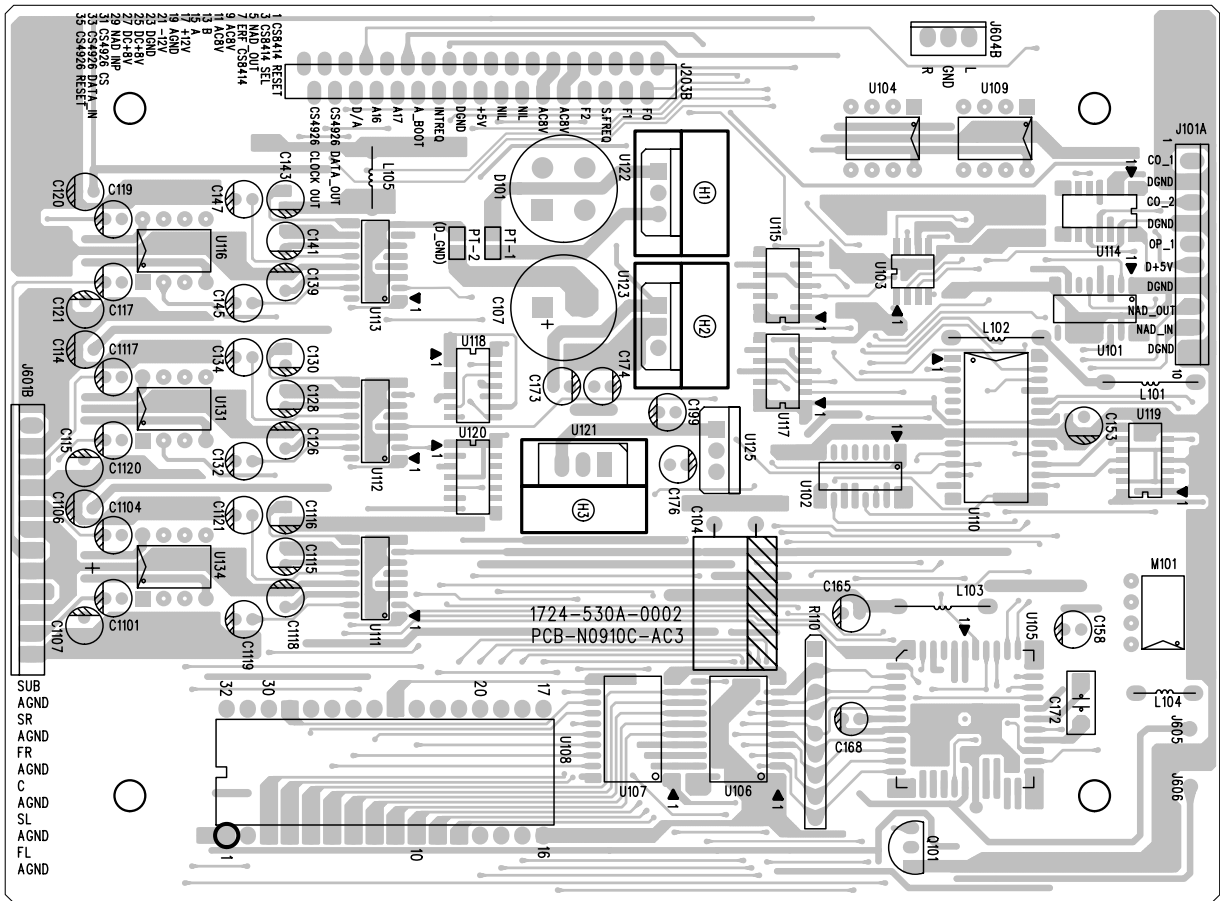
## LED BOARD



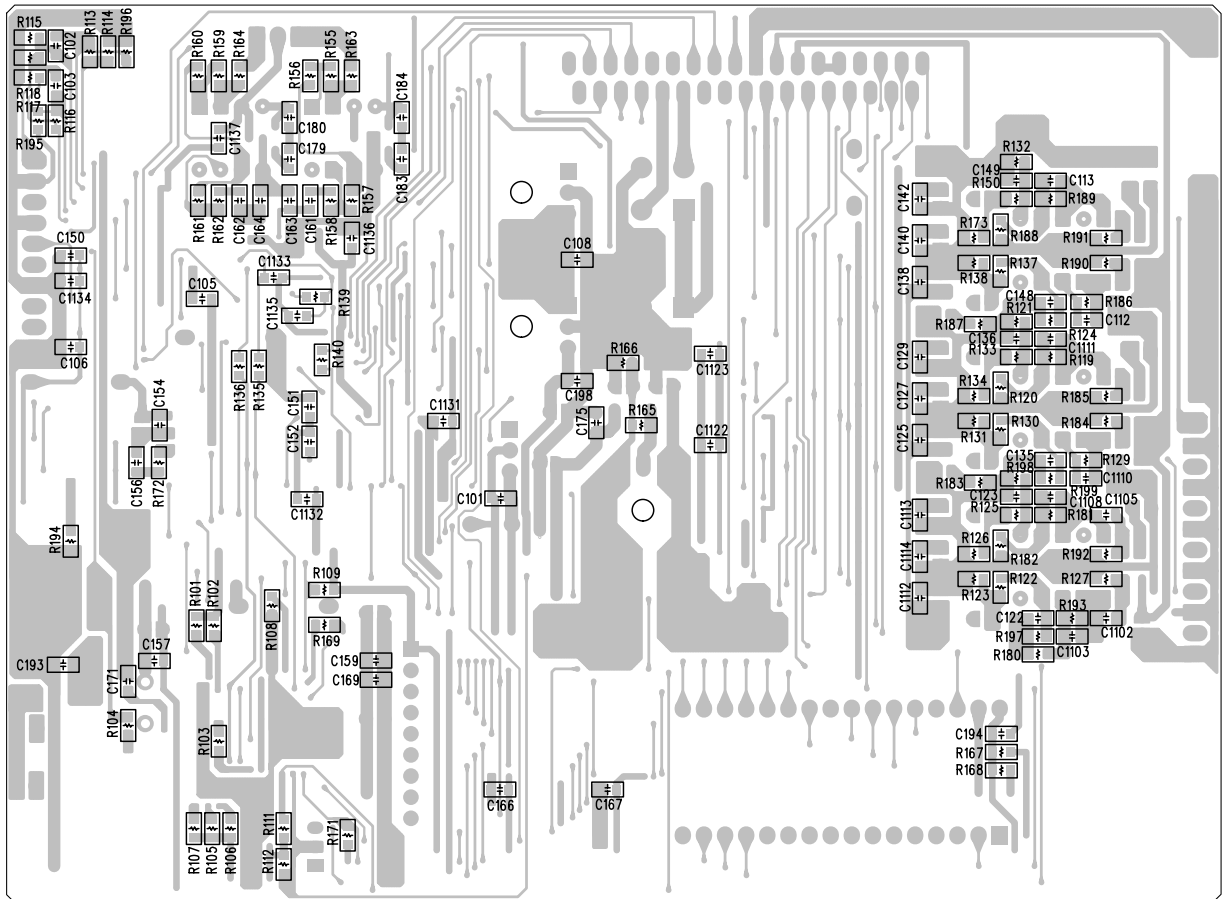
## AC OUTLET BOARD



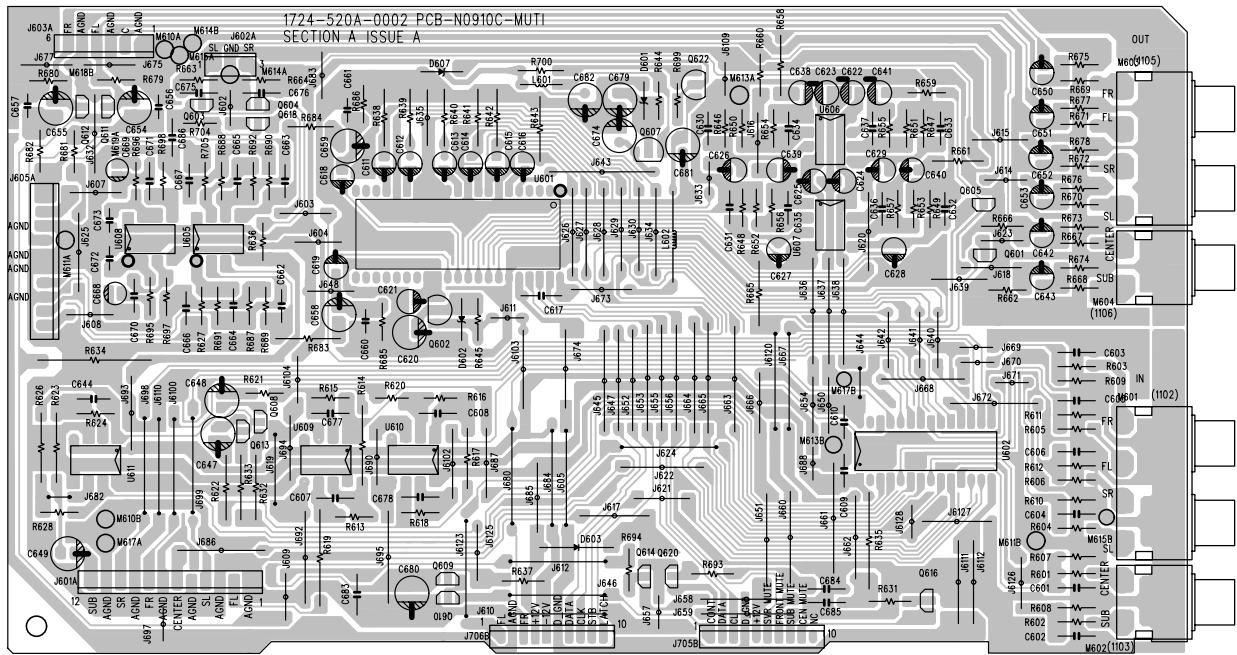
AC3 / DTS BOARD - COMPONENT SIDE



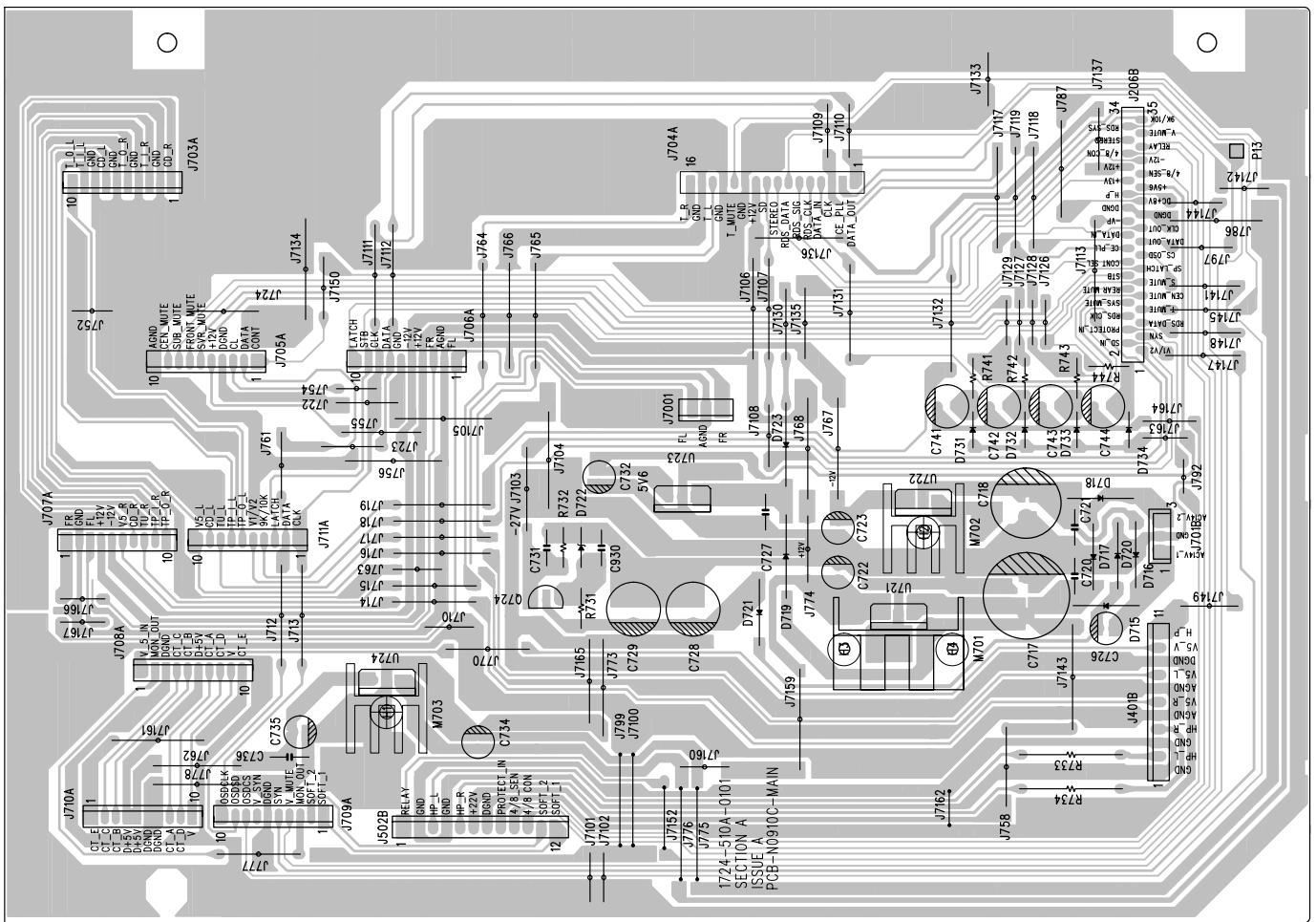
AC3 / DTS BOARD - SOLDER SIDE



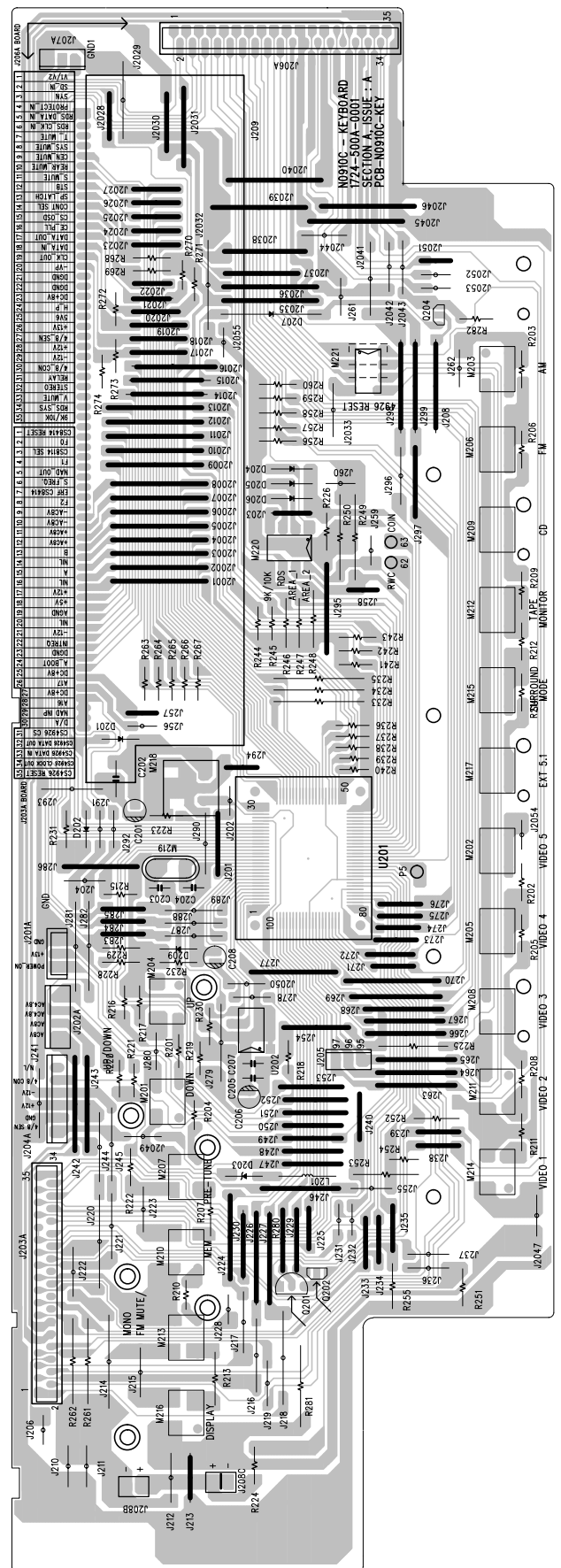
## MULTI-CHANNEL BOARD



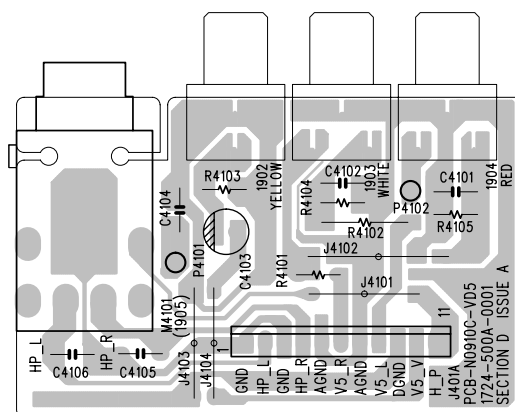
## MAIN BOARD



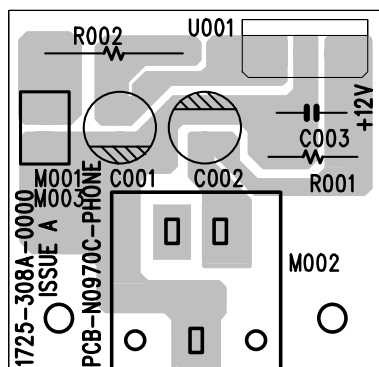
## KEYBOARD - SOLDER SIDE



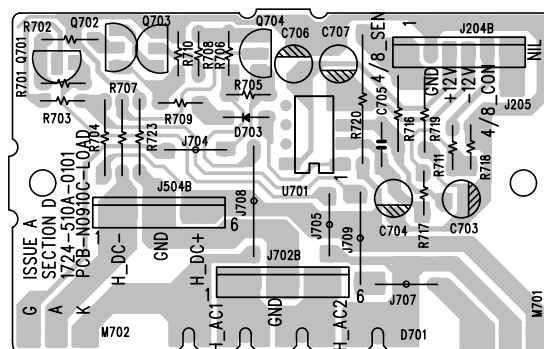
## VIDEO 5 BOARD



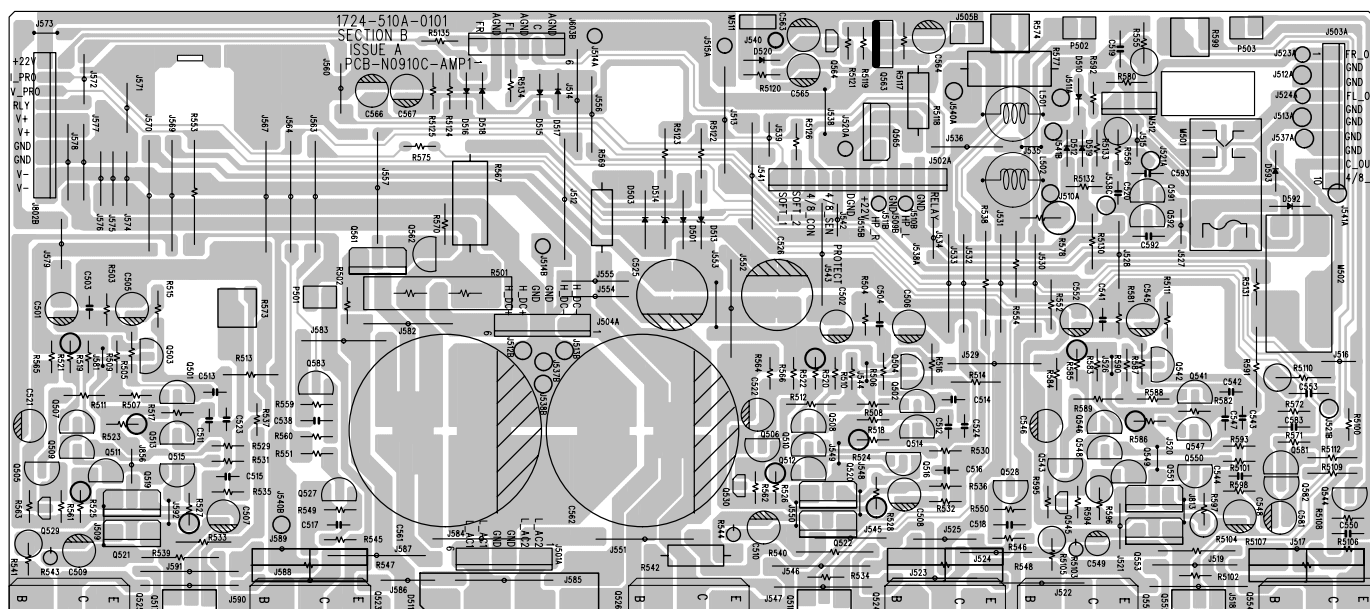
## TRIGGER BOARD



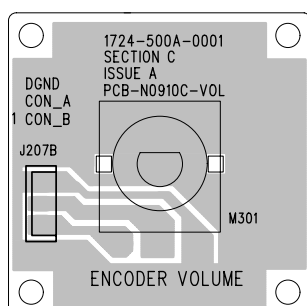
## LOAD BOARD



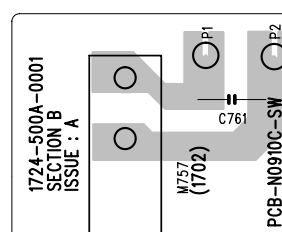
## FRONT AMPLIFIER BOARD



## VOLUME BOARD

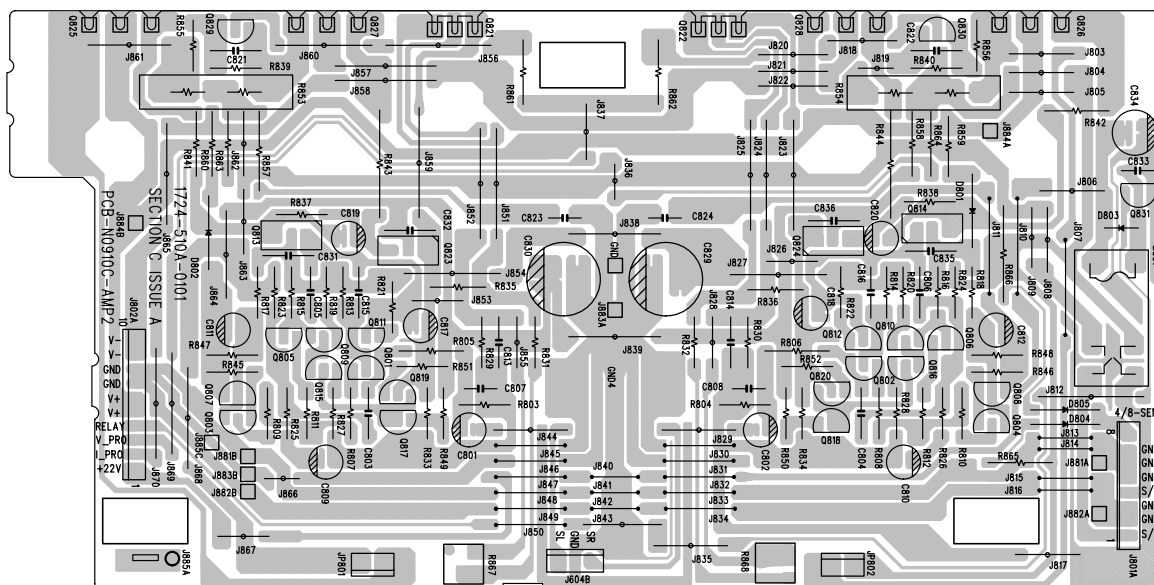


## POWER SWITCH BOARD

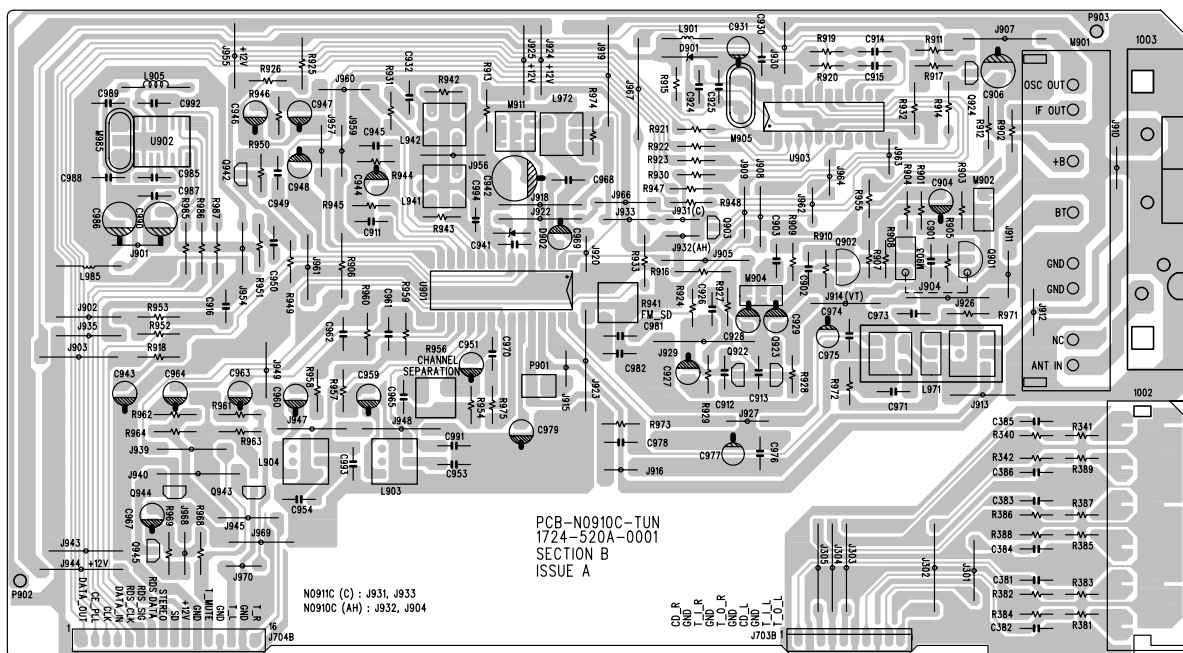




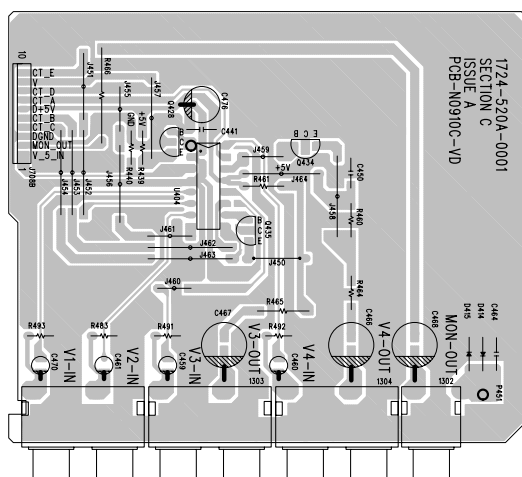
## SURROUND AMPLIFIER BOARD



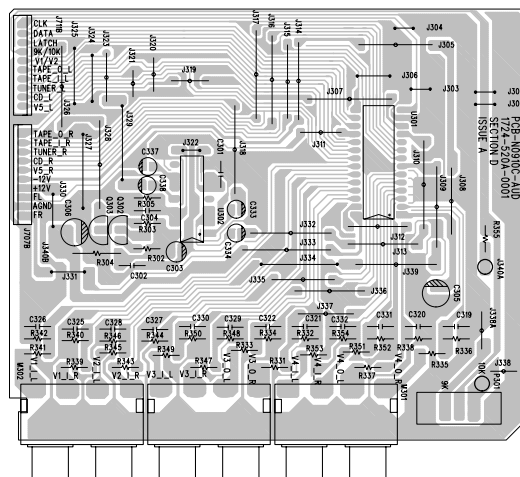
## TUNER BOARD



## VIDEO BOARD



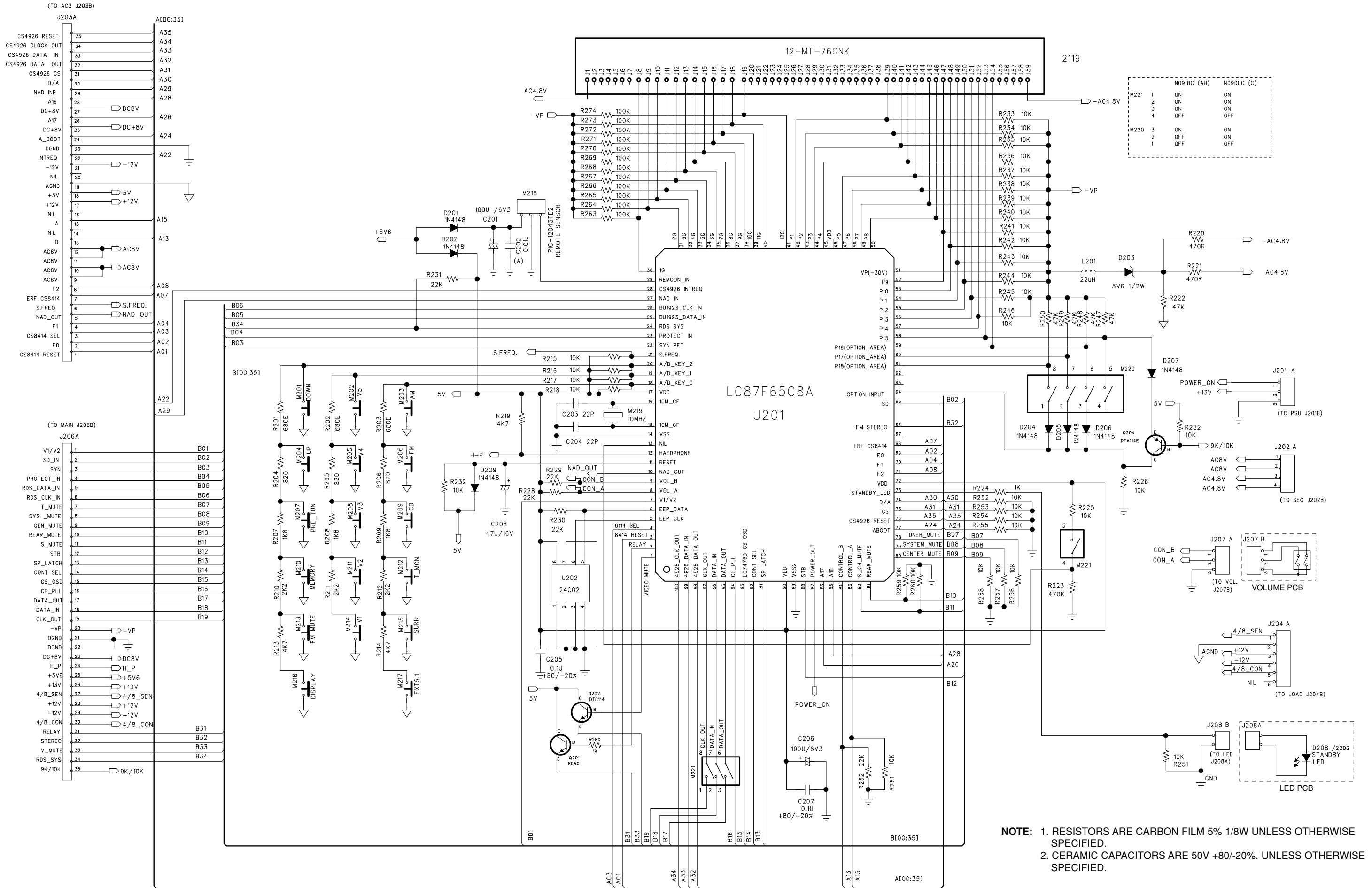
## AUDIO BOARD



## LOAD

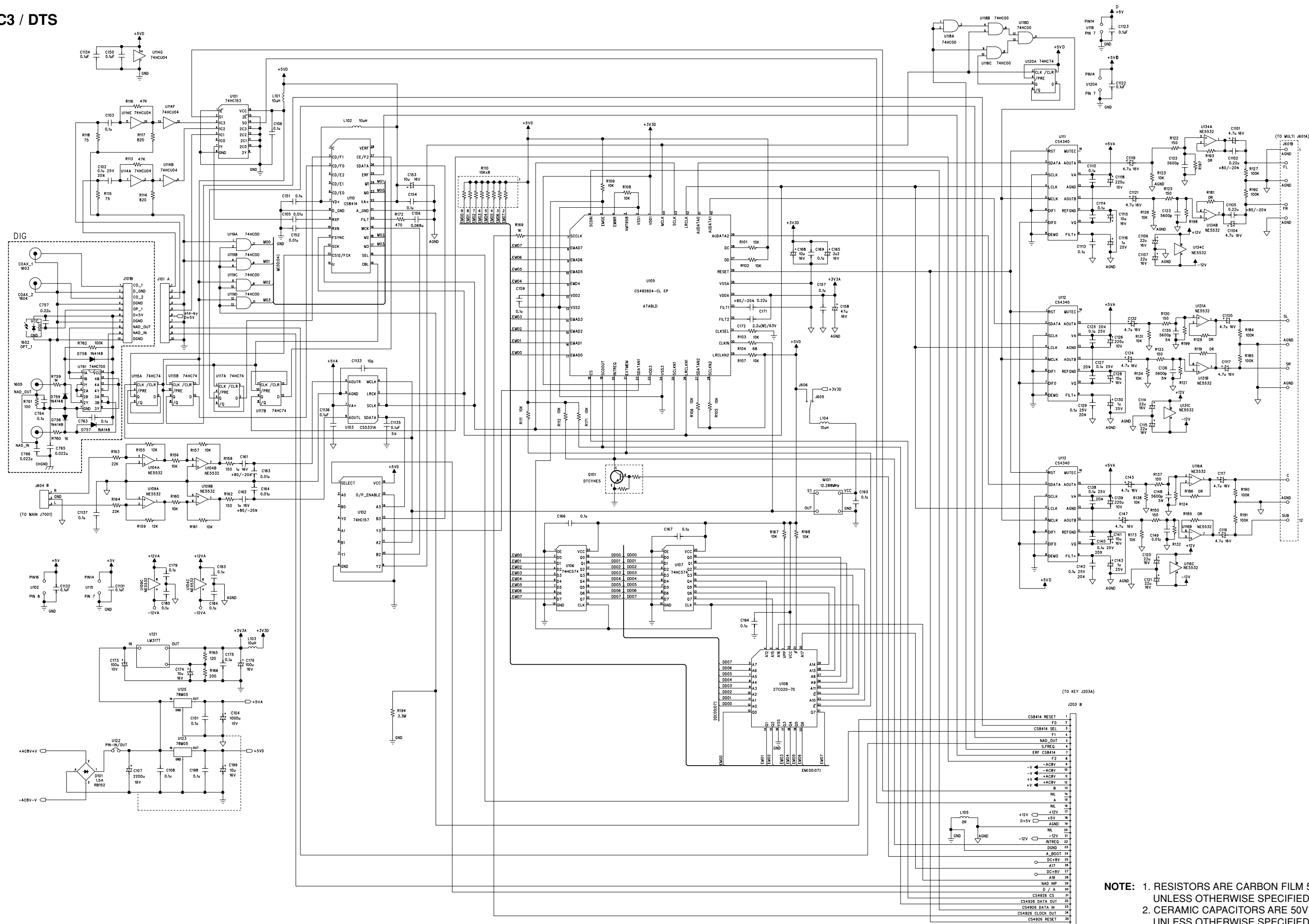


## KEY



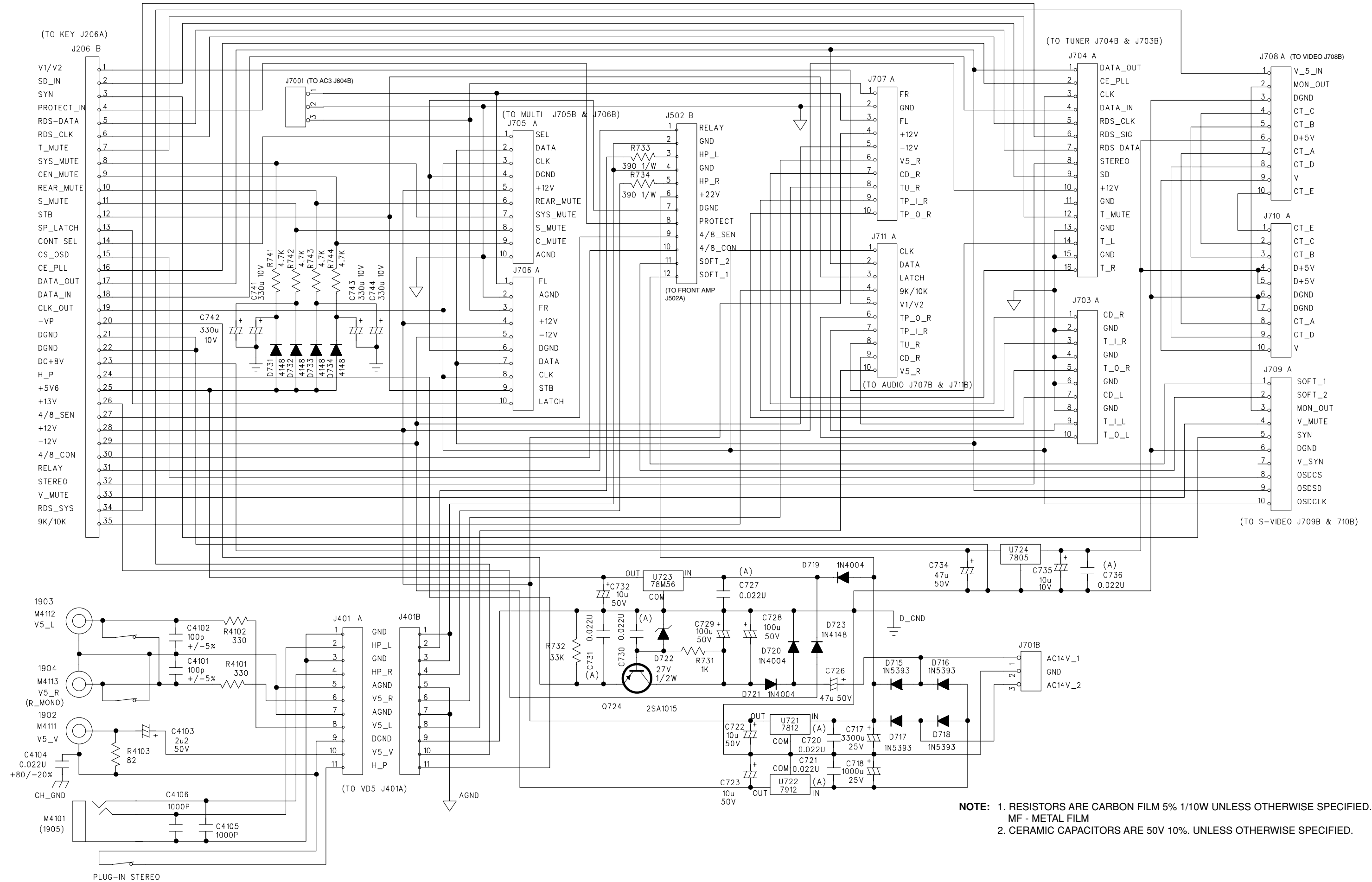
**NOTE:** 1. RESISTORS ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.  
2. CERAMIC CAPACITORS ARE 50V +80/-20%. UNLESS OTHERWISE SPECIFIED.

AC3 / DTS

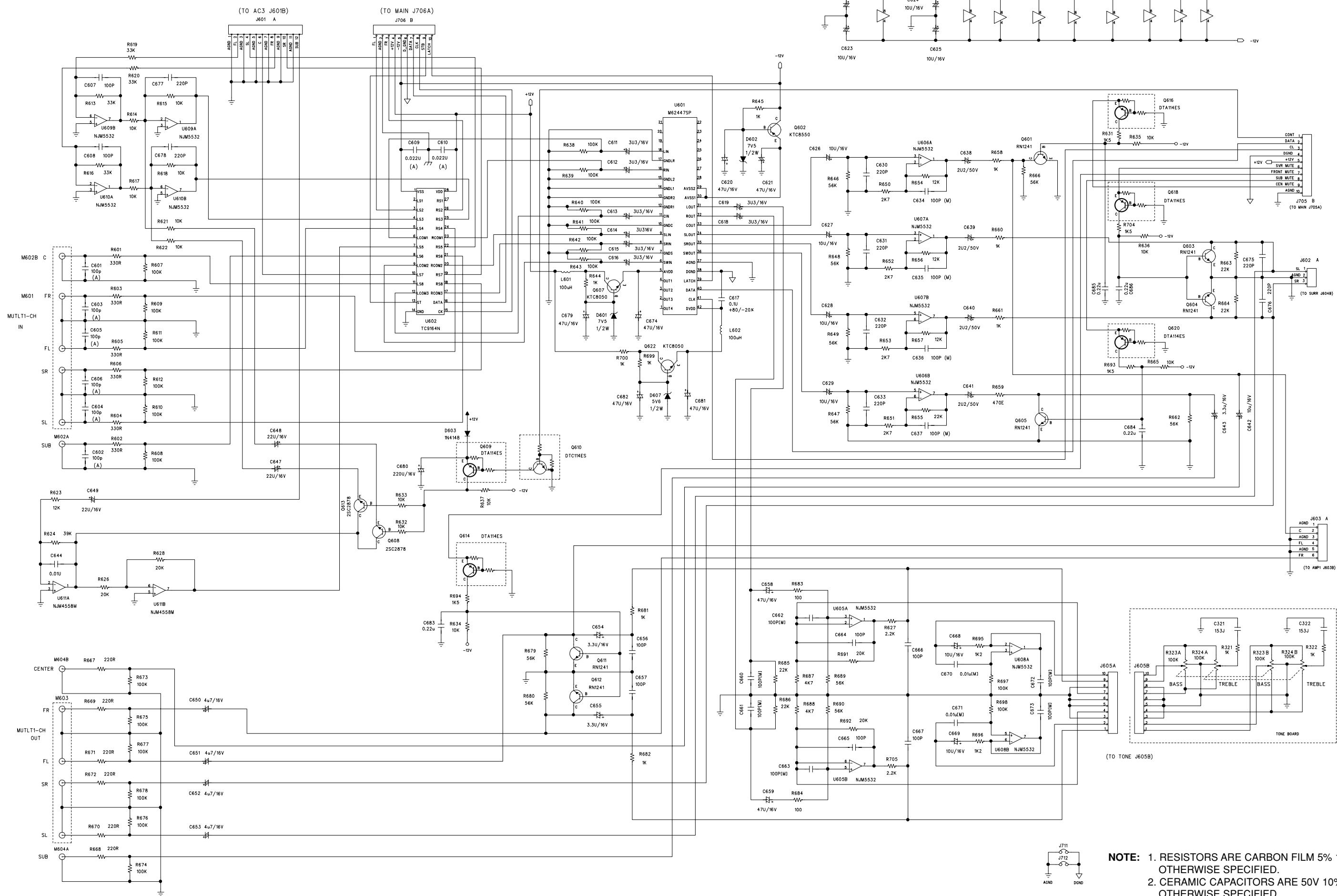


NOTE: 1. RESISTORS ARE CARBON FILM 5% 1/8W  
UNLESS OTHERWISE SPECIFIED.  
2. CERAMIC CAPACITORS ARE 50V 10%  
UNLESS OTHERWISE SPECIFIED.

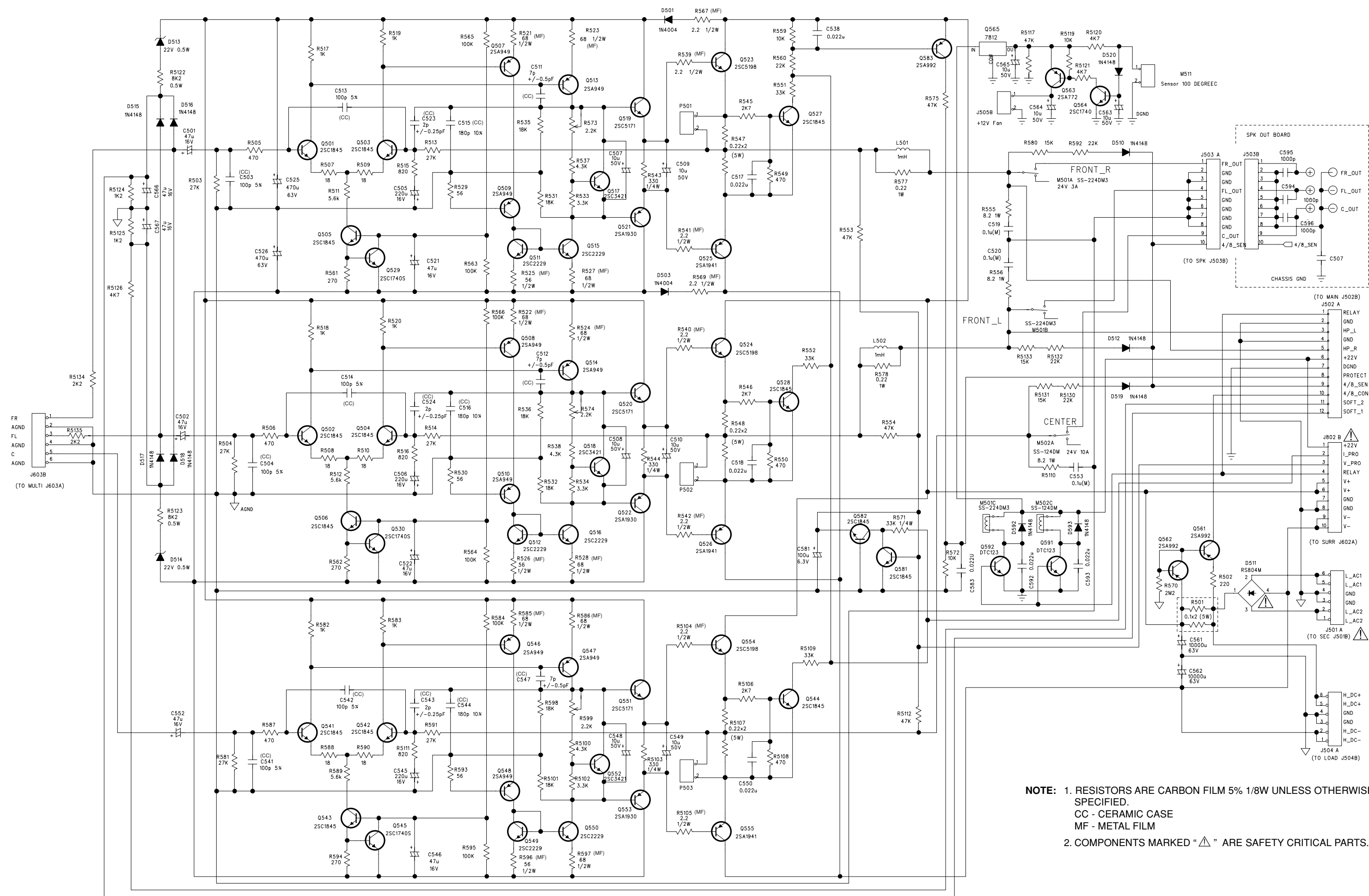
MAIN BOARD



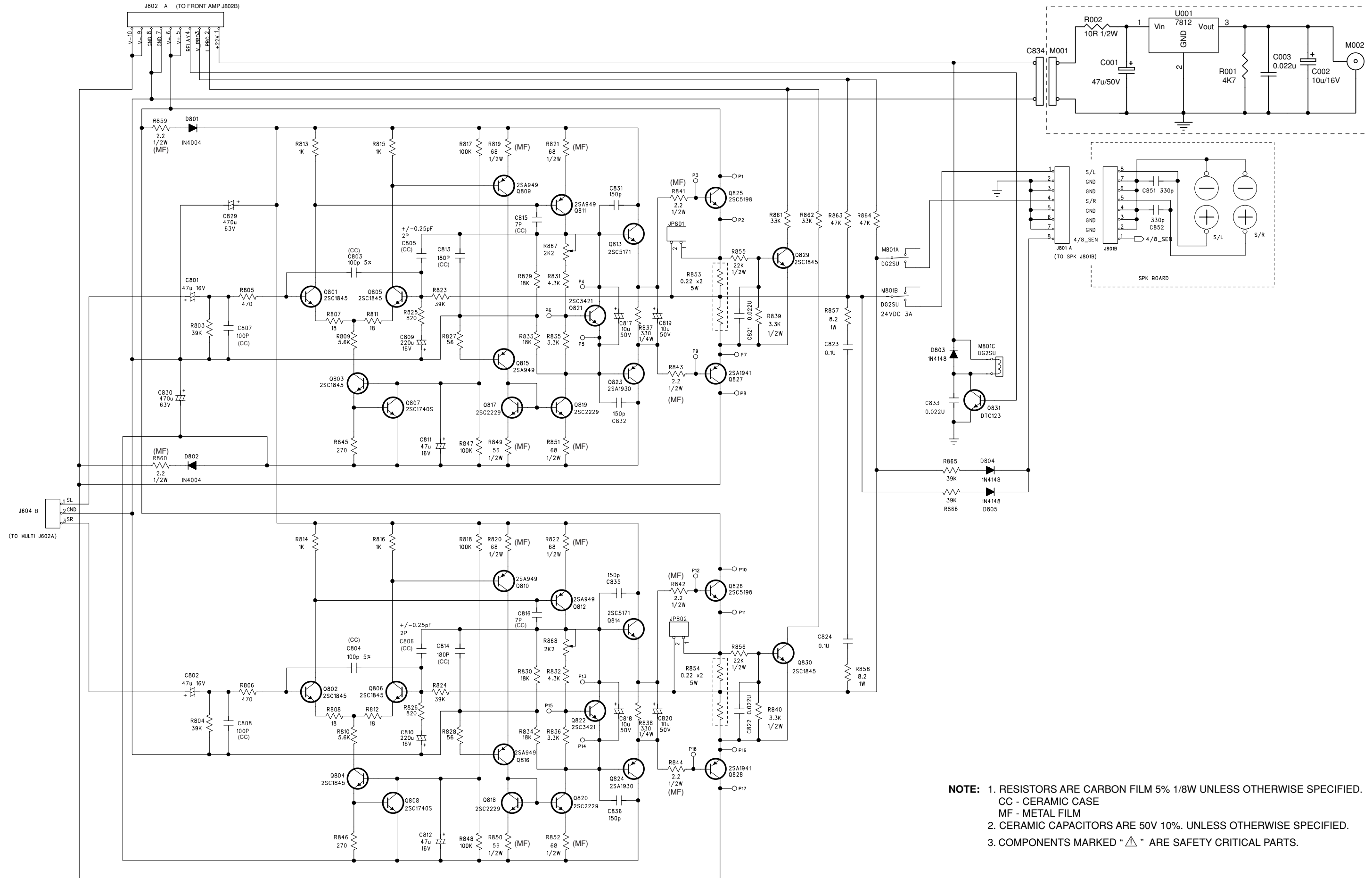
MULTI-CHANNEL



FRONT AMPLIFIER



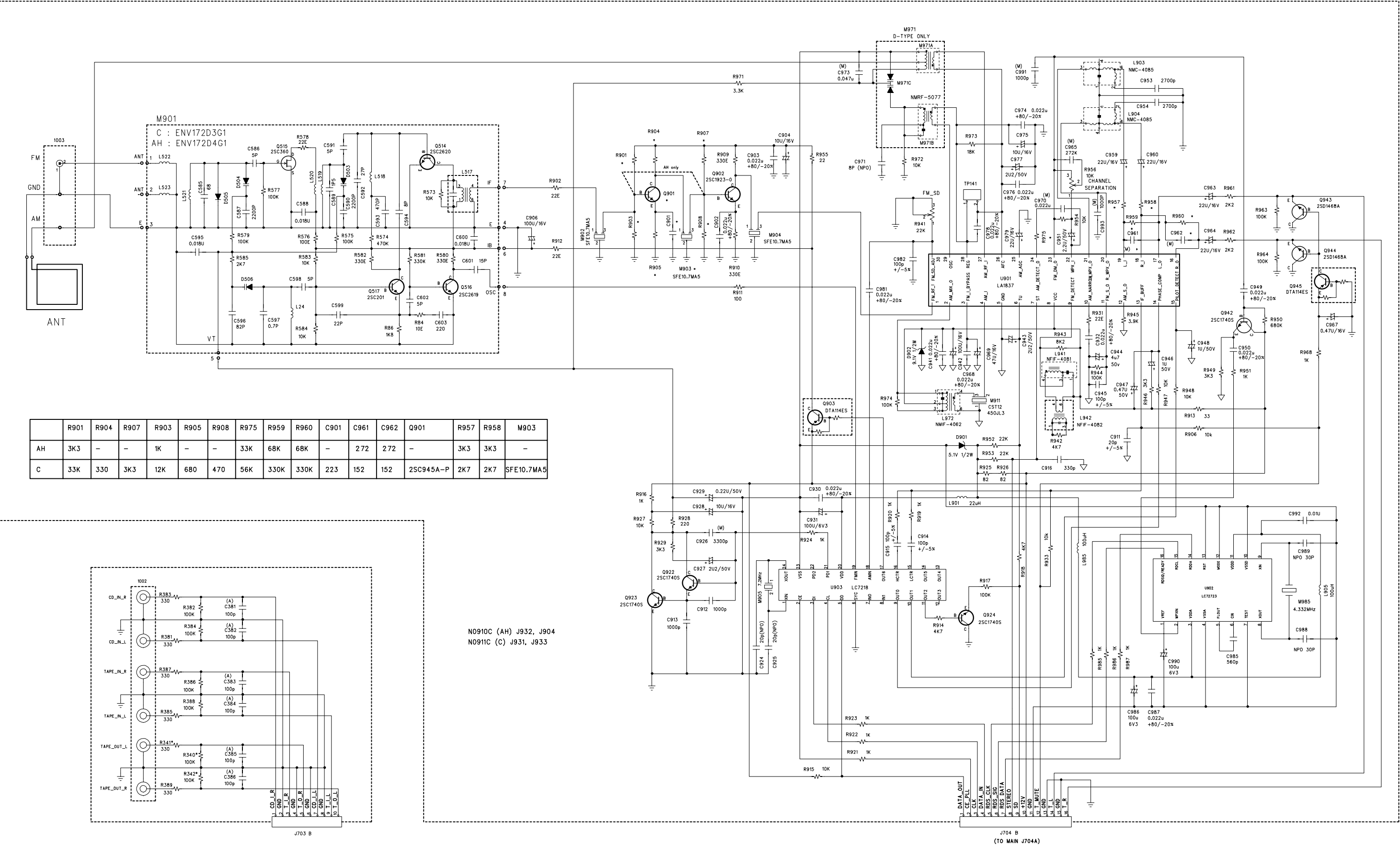
## SURROUND AMPLIFIER



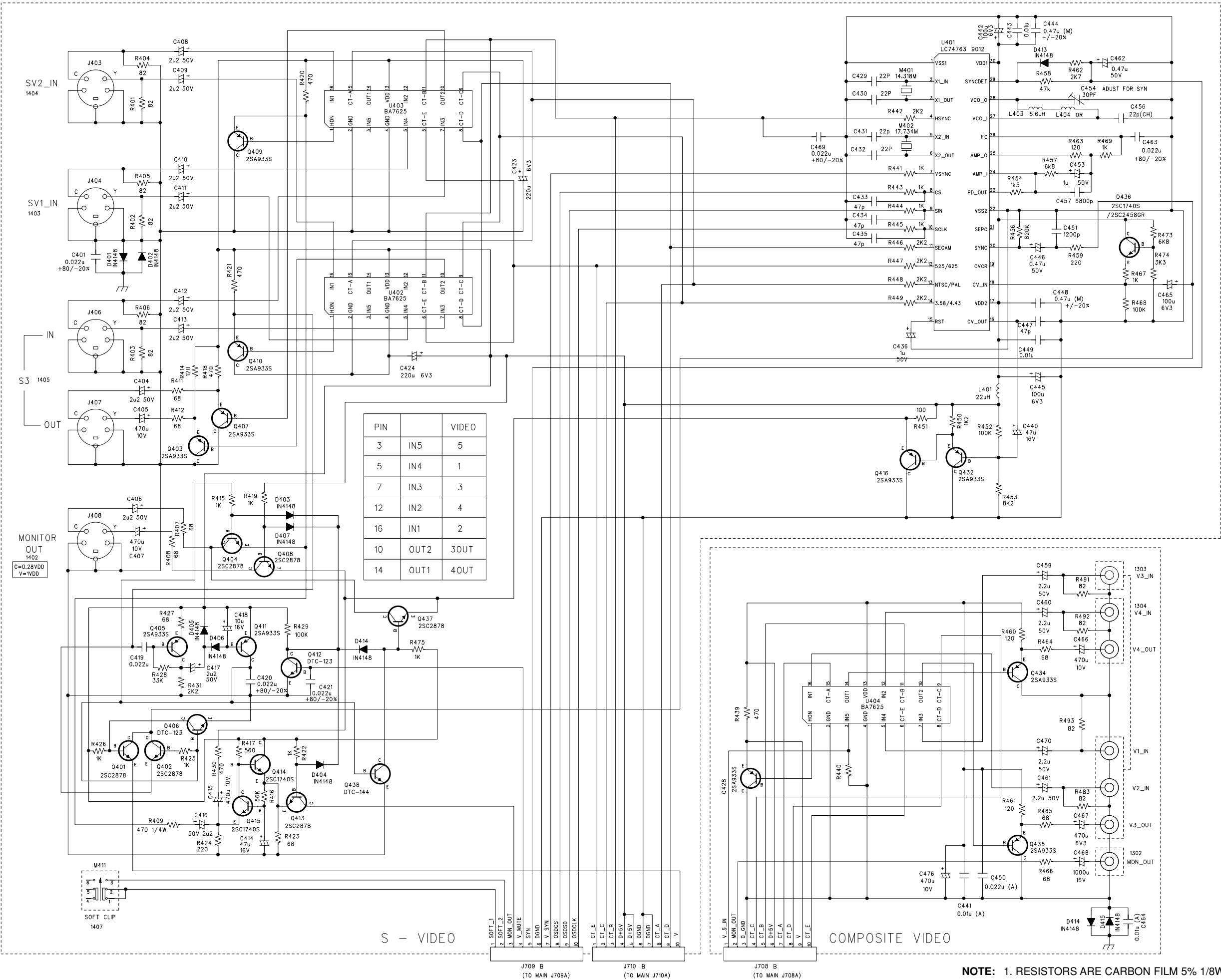
**NOTE:** 1. RESISTORS ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.  
CC - CERAMIC CASE  
MF - METAL FILM  
2. CERAMIC CAPACITORS ARE 50V 10%. UNLESS OTHERWISE SPECIFIED.  
3. COMPONENTS MARKED "△" ARE SAFETY CRITICAL PARTS.



TUNER



S-VIDEO

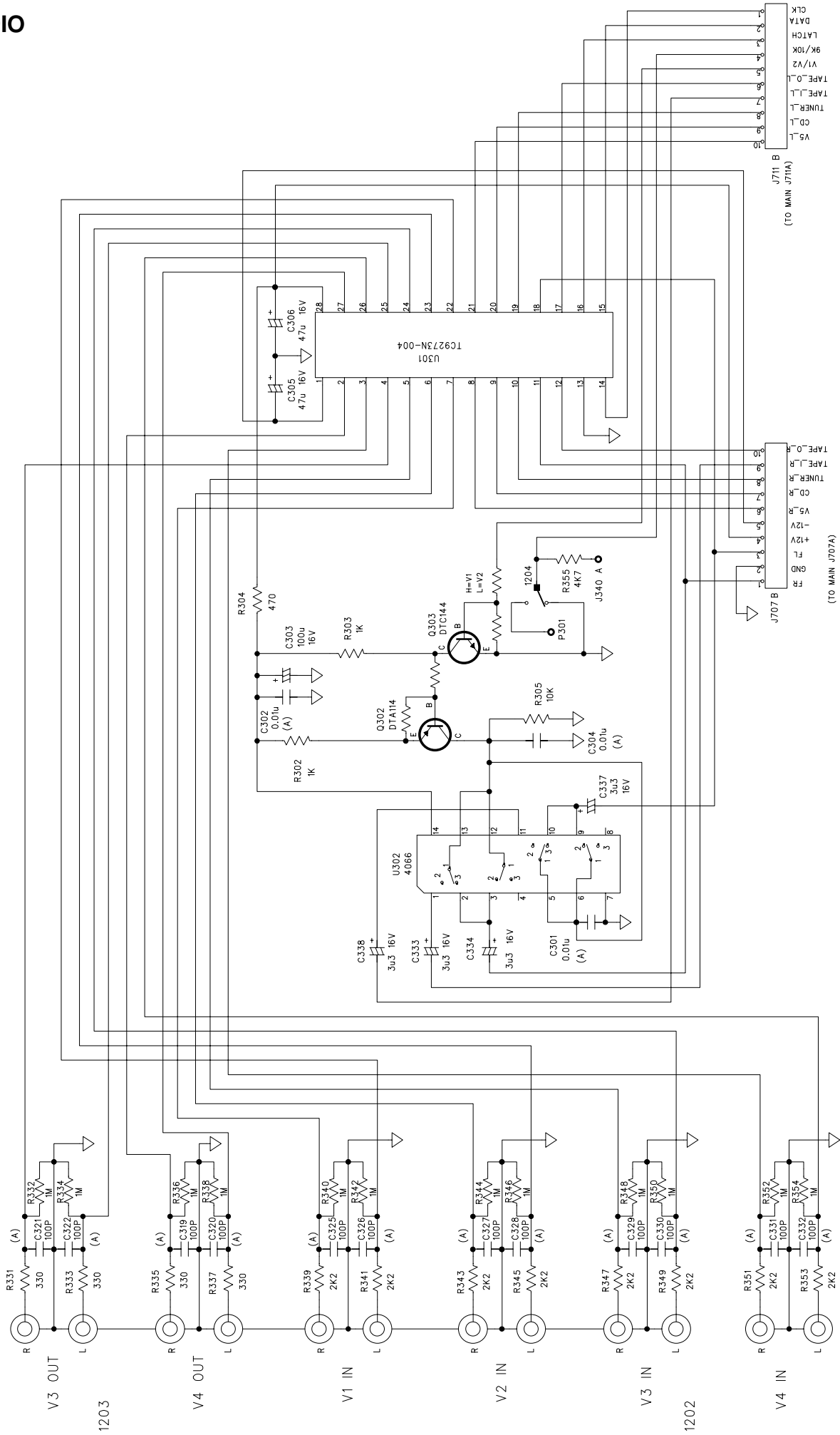


S - VIDEO

COMPOSITE VIDEO

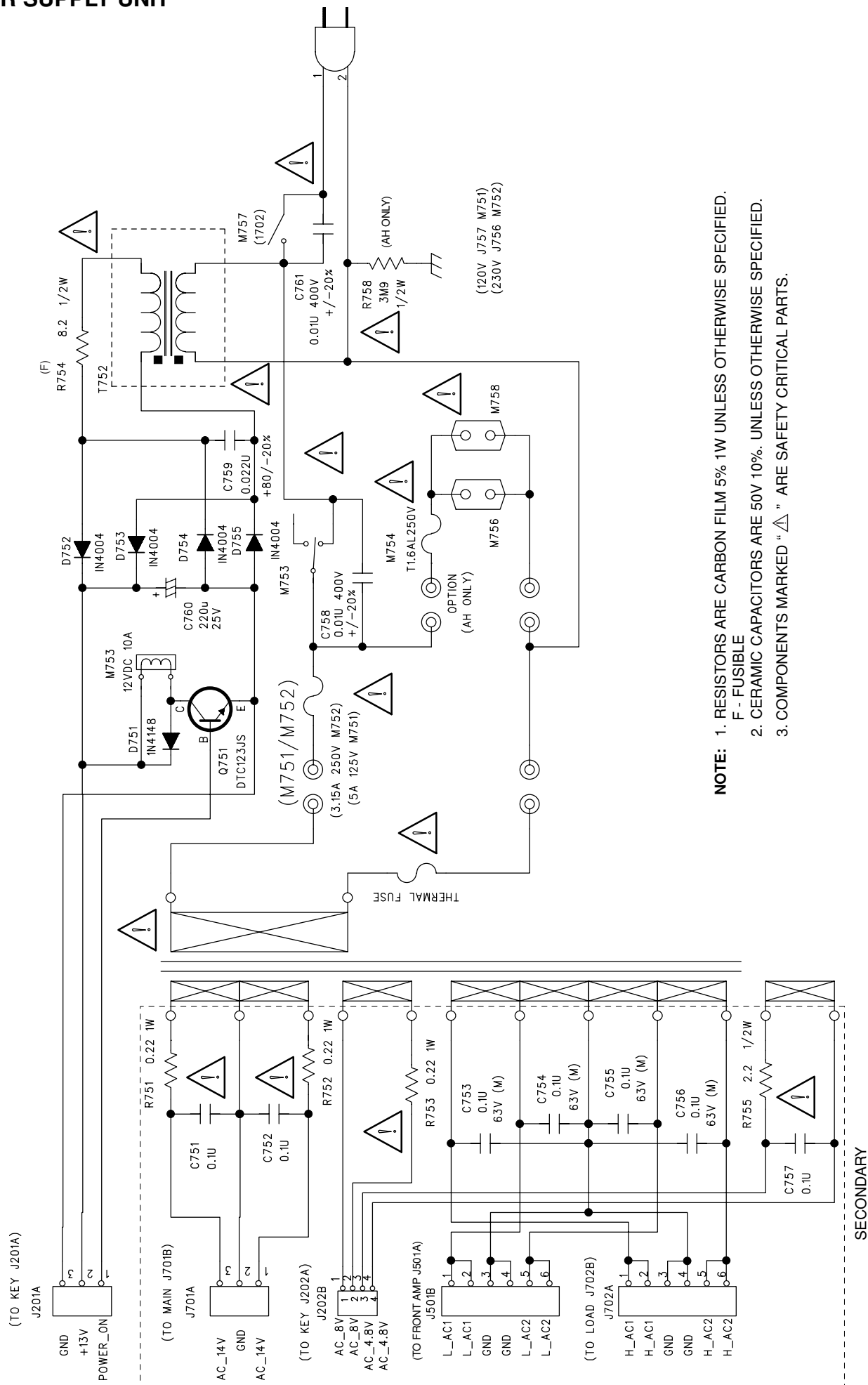
NOTE: 1. RESISTORS ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.  
2. CERAMIC CAPACITORS ARE 50V 10%. UNLESS OTHERWISE SPECIFIED.

# AUDIO



**NOTE:** 1. RESISTORS ARE CARBON FILM 5% 1/8W UNLESS OTHERWISE SPECIFIED.  
2. CERAMIC CAPACITORS ARE 50V 10%, UNLESS OTHERWISE SPECIFIED.

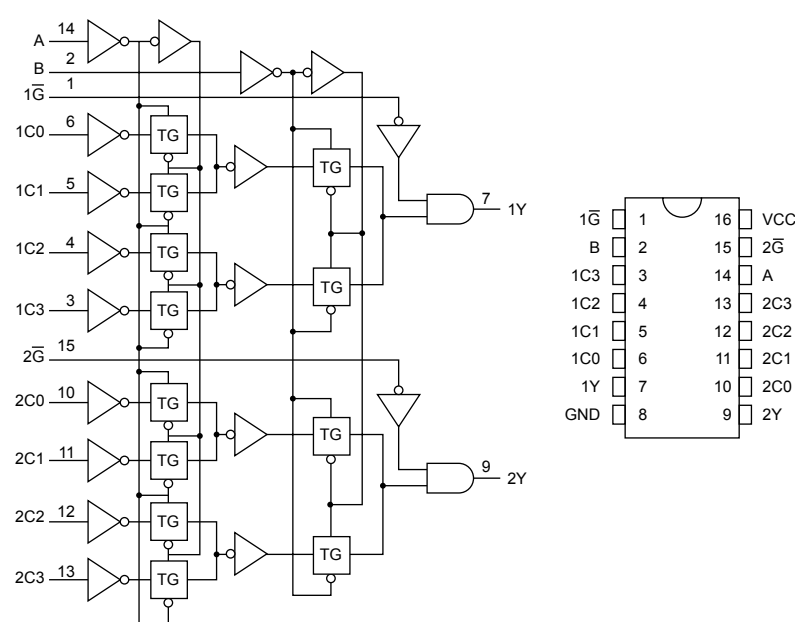
POWER SUPPLY UNIT



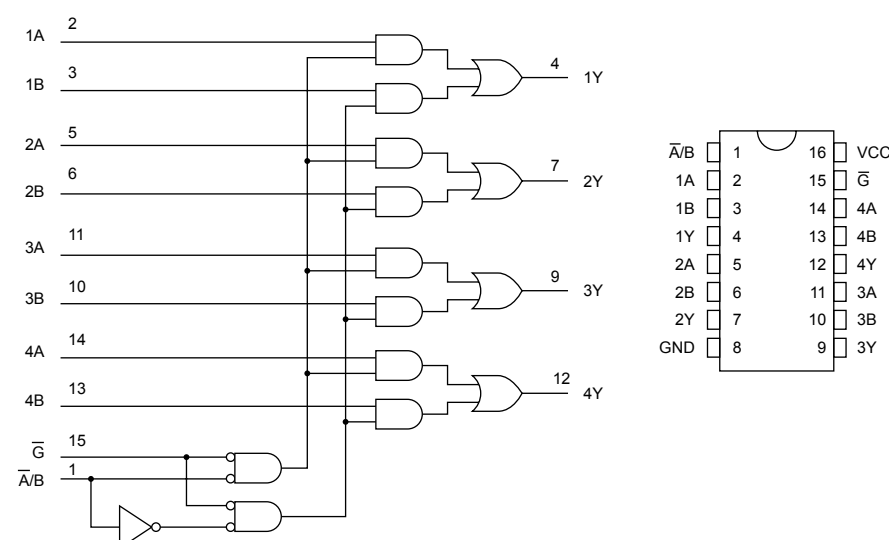
**NOTE:** 1. RESISTORS ARE CARBON FILM 5% 1W UNLESS OTHERWISE SPECIFIED.  
F - FUSIBLE  
2. CERAMIC CAPACITORS ARE 50V 10%. UNLESS OTHERWISE SPECIFIED.  
3. COMPONENTS MARKED "△" ARE SAFETY CRITICAL PARTS.

# IC BLOCK DIAGRAM

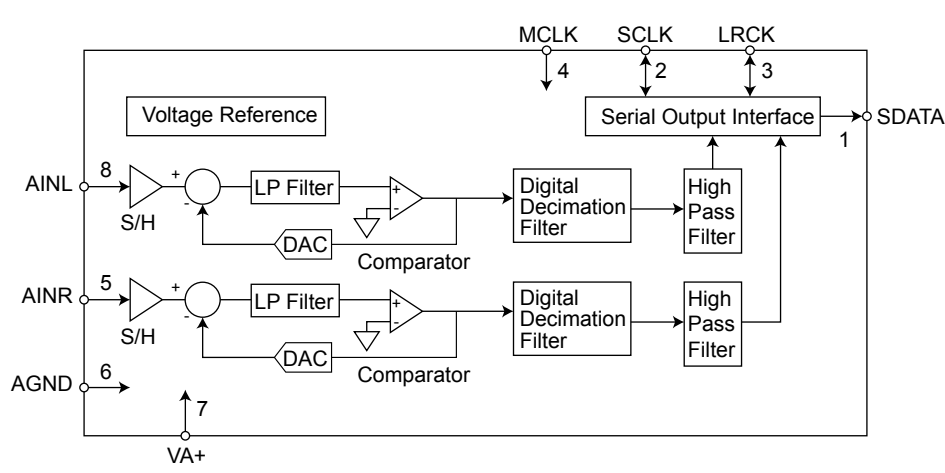
## AC3 BOARD U101: 74HC153



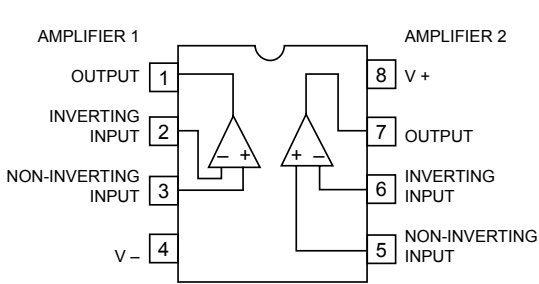
## AC3 BOARD U102: 74HC157



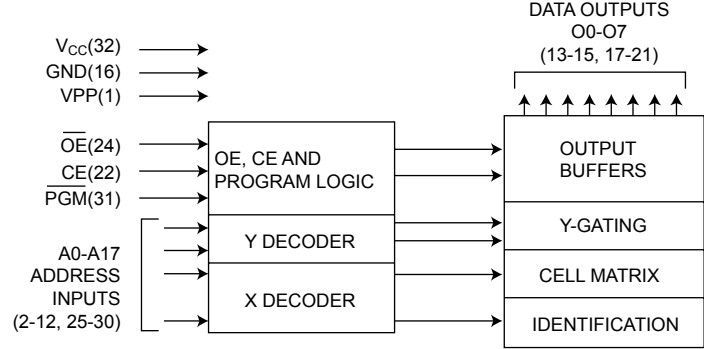
## AC3 BOARD U103: CS5331A



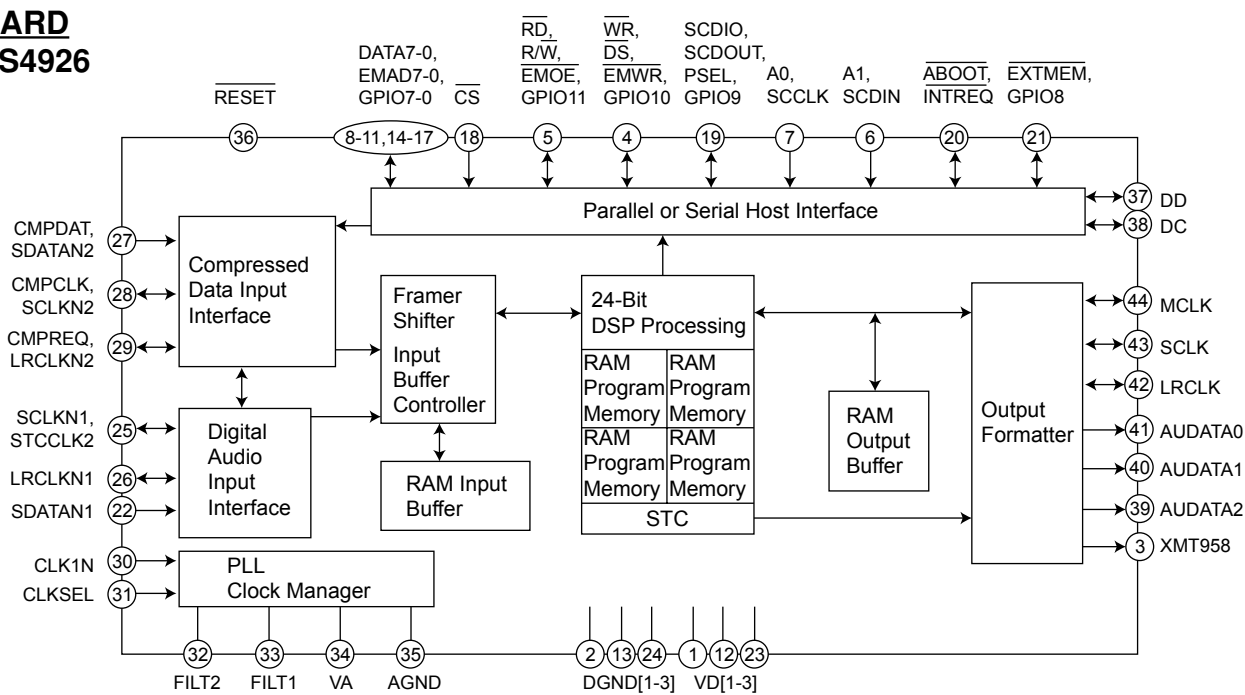
**AC3 BOARD**  
**U104, U109, U116,**  
**U131, U134: NJM5532**



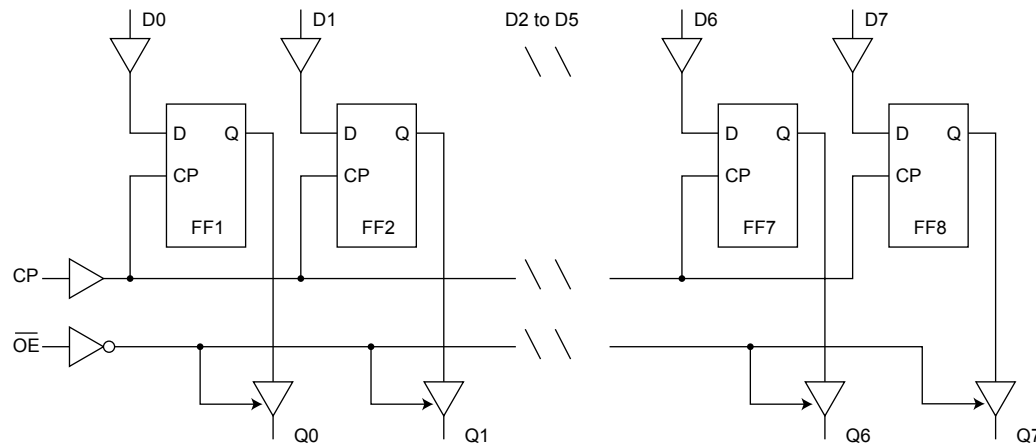
**AC3 BOARD**  
**U108: AT27C020-70**



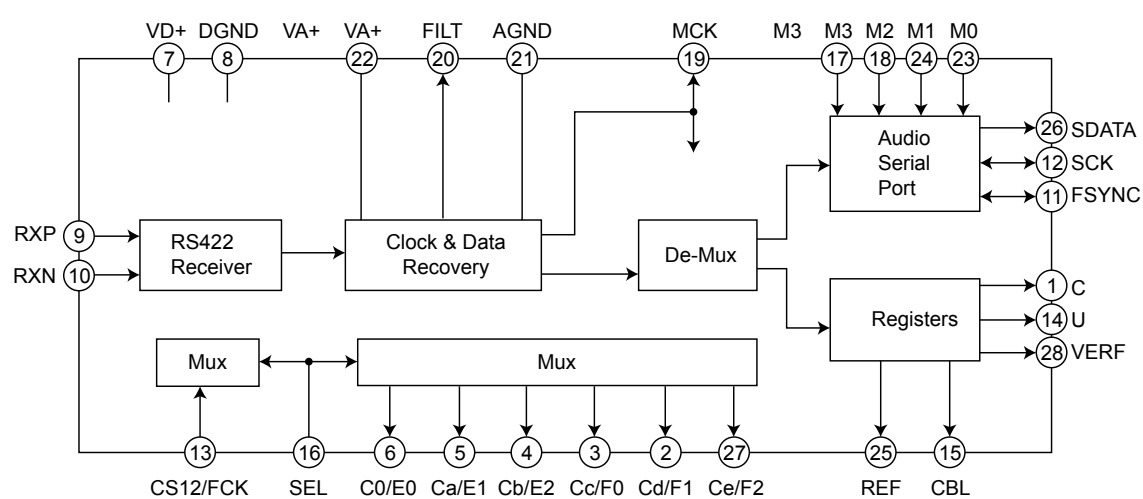
**AC3 BOARD**  
**U105: CS4926**



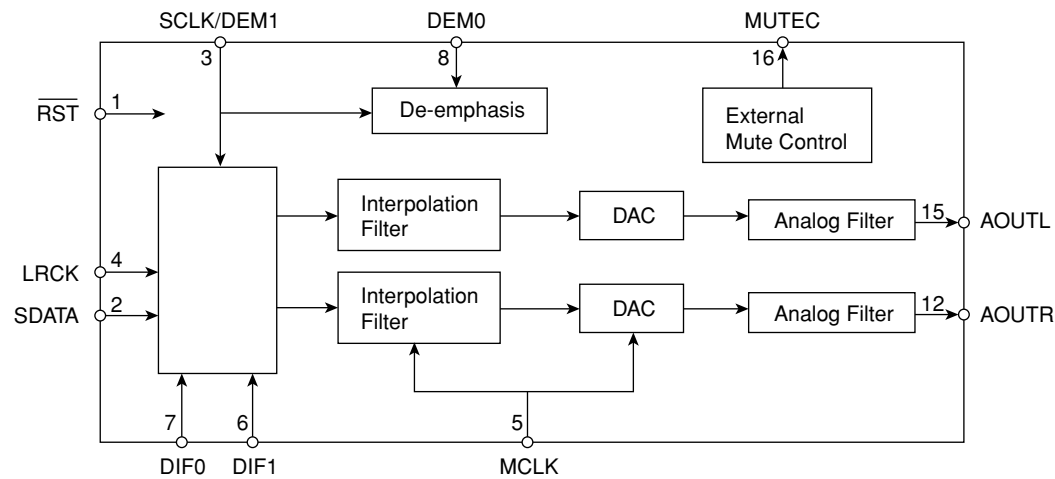
**AC3 BOARD**  
**U106, U107: 74HC574**



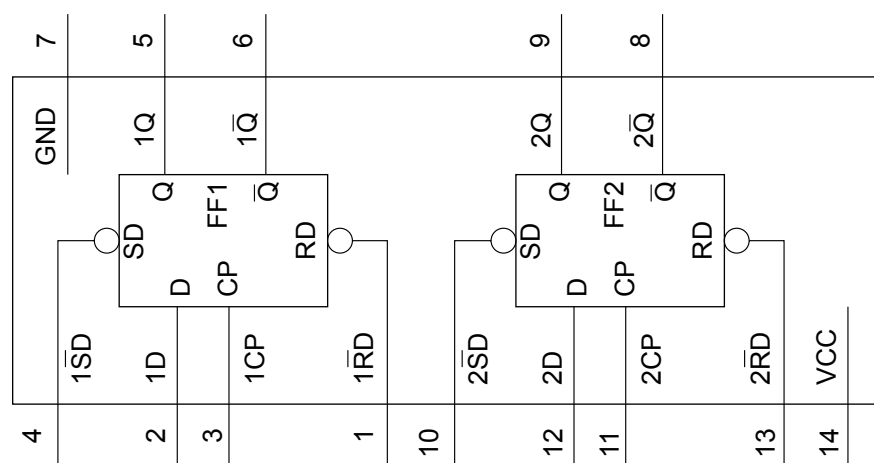
**AC3 BOARD**  
**U110: CS8414**



**AC3 BOARD**  
**U111-U113: CS4340**

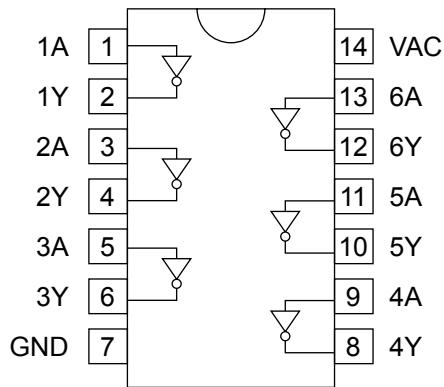


**AC3 BOARD**  
**U115,U117, U120: 74HC74**



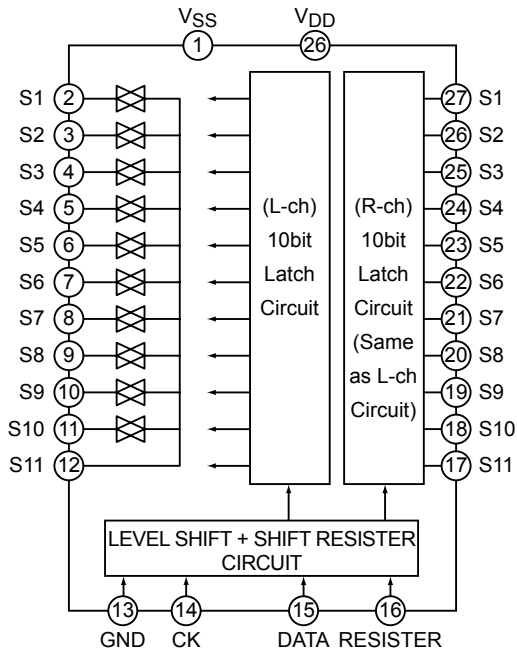
### AC3 BOARD

U114: 74HCU04



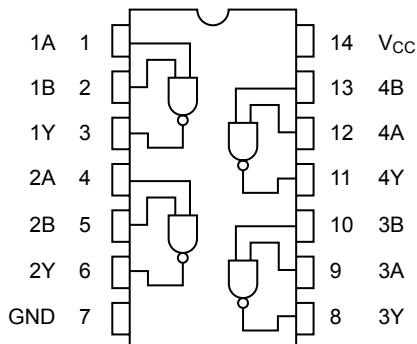
### AUDIO BOARD

U301: TC9273N-004



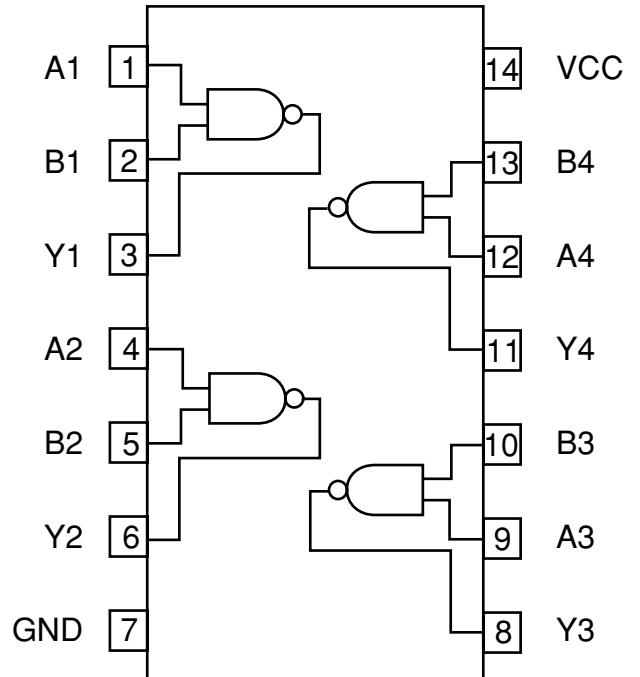
### DIGITAL BOARD

U761: 74HCT00



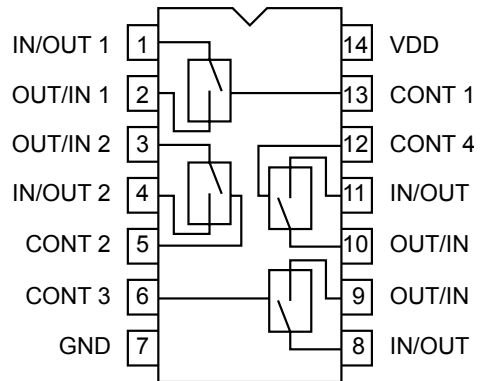
### AC3 BOARD

U118-U119: 74HC00



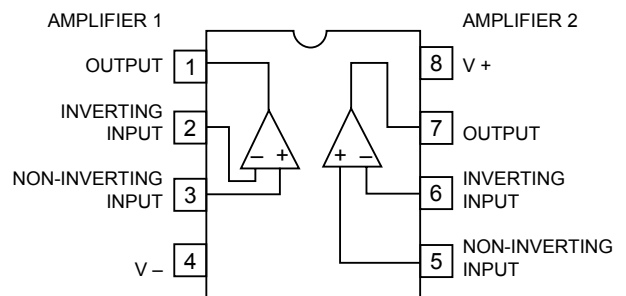
### AUDIO BOARD

U302: 4066



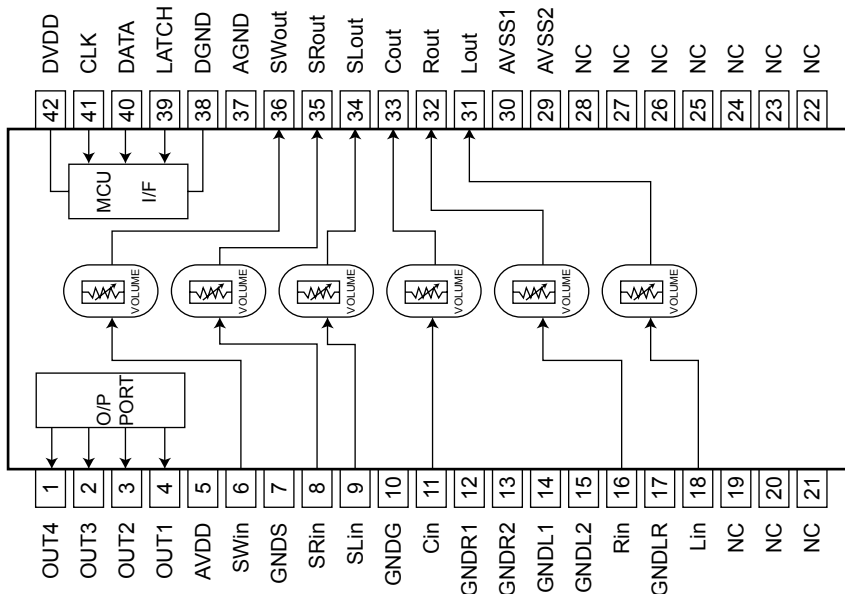
### LOAD BOARD

U701: NJM4558D

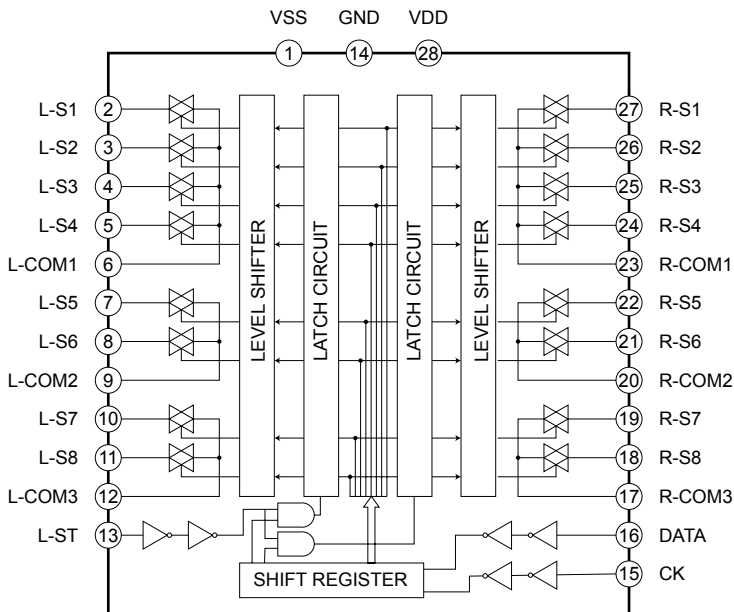




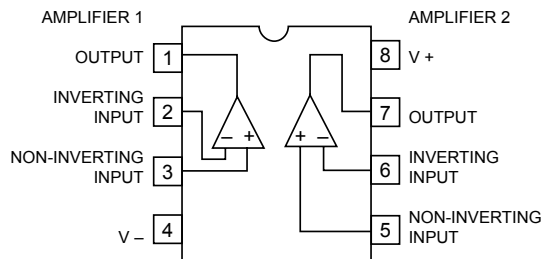
**MULTI-CHANNEL BOARD**  
**U601: M62447SP**



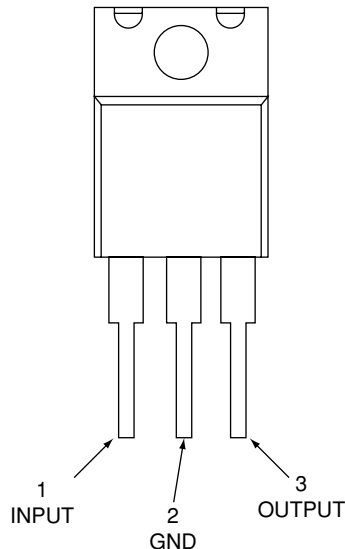
**MULTI-CHANNEL BOARD**  
**U602: TC9164AN**



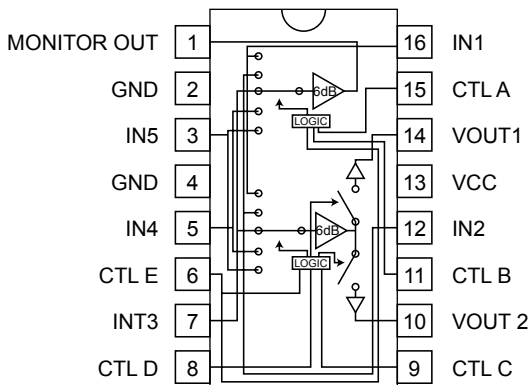
**MULTI-CHANNEL BOARD**  
**U605-U611: NJM5532**



**MAIN BOARD**  
**U723: NJM78M56FA**

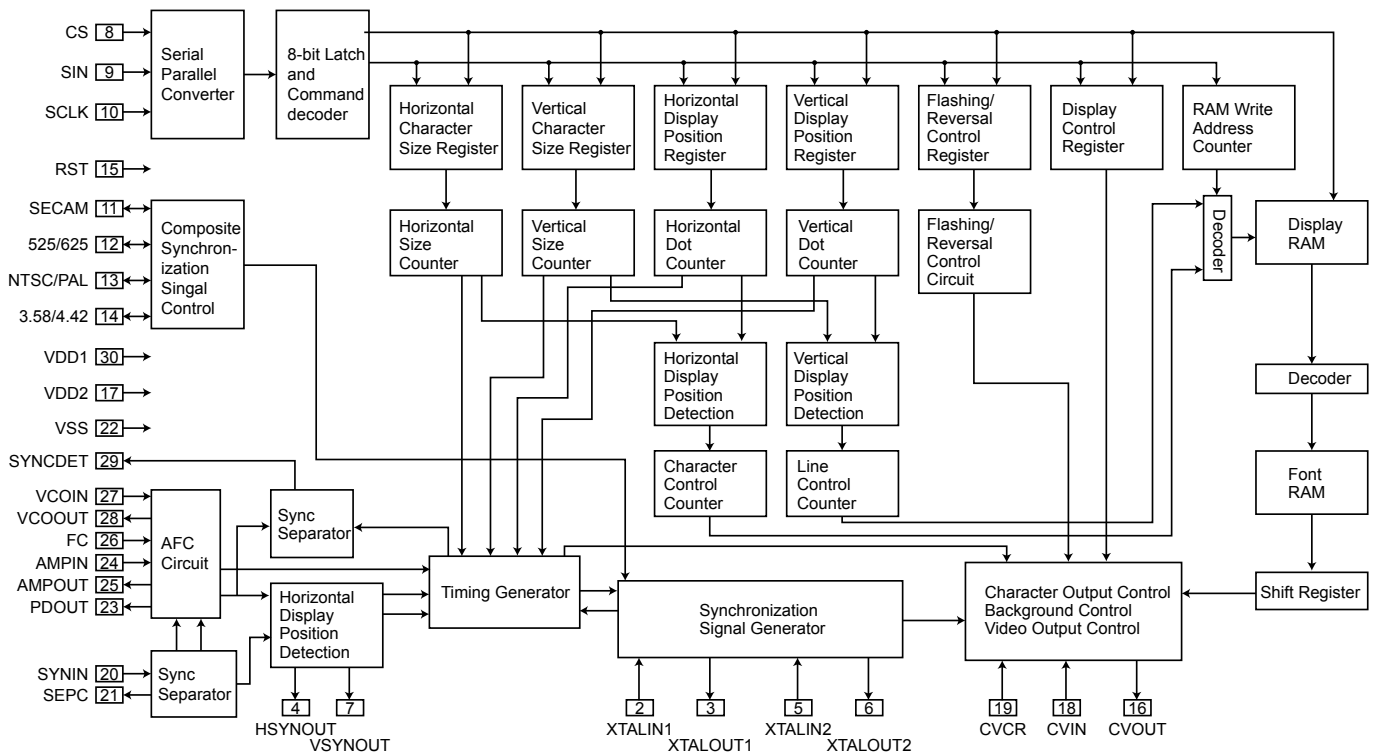


## **S-VIDEO & VIDEO BOARD**



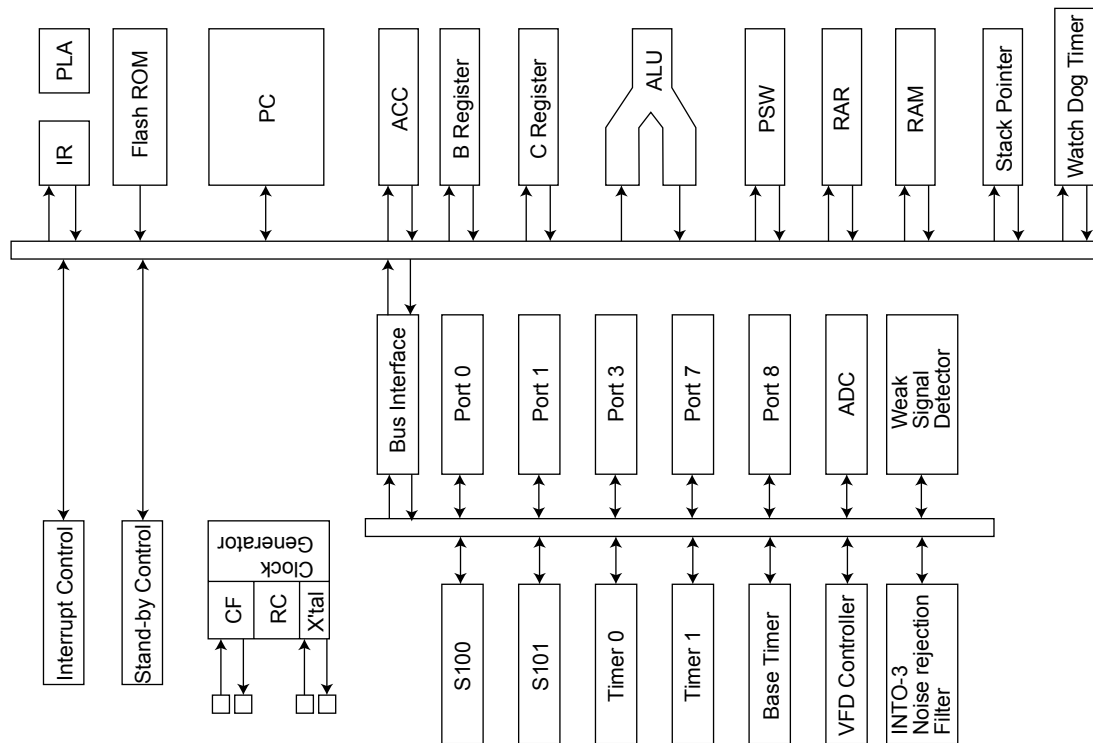
## S-VIDEO BOARD

### U401: LC74763-9012

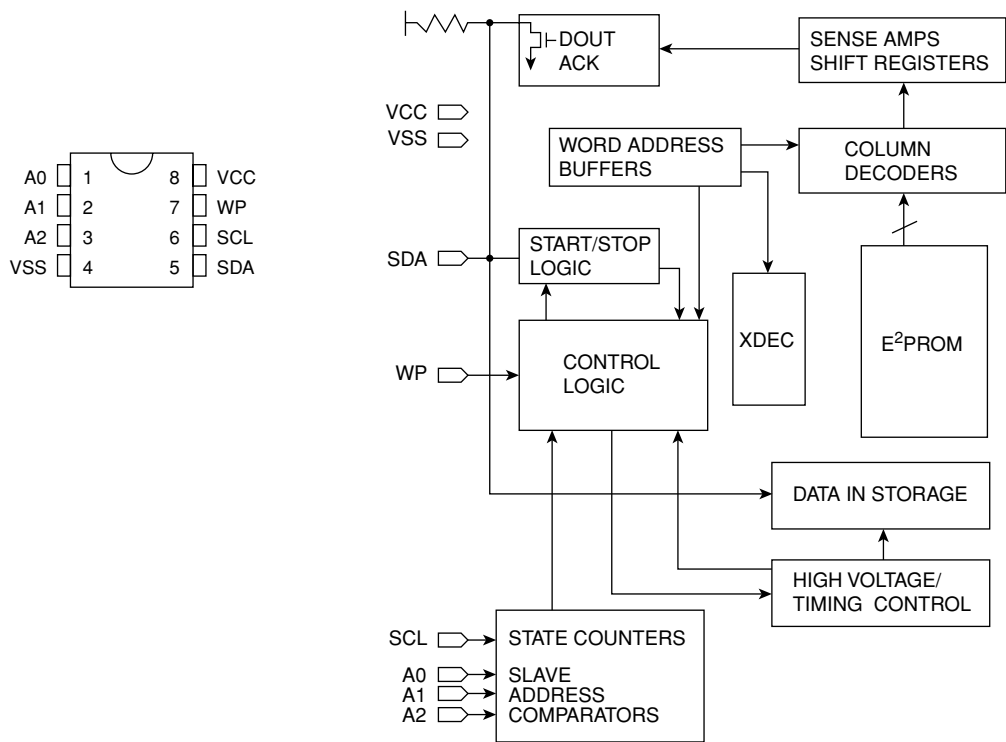


## KEY BOARD

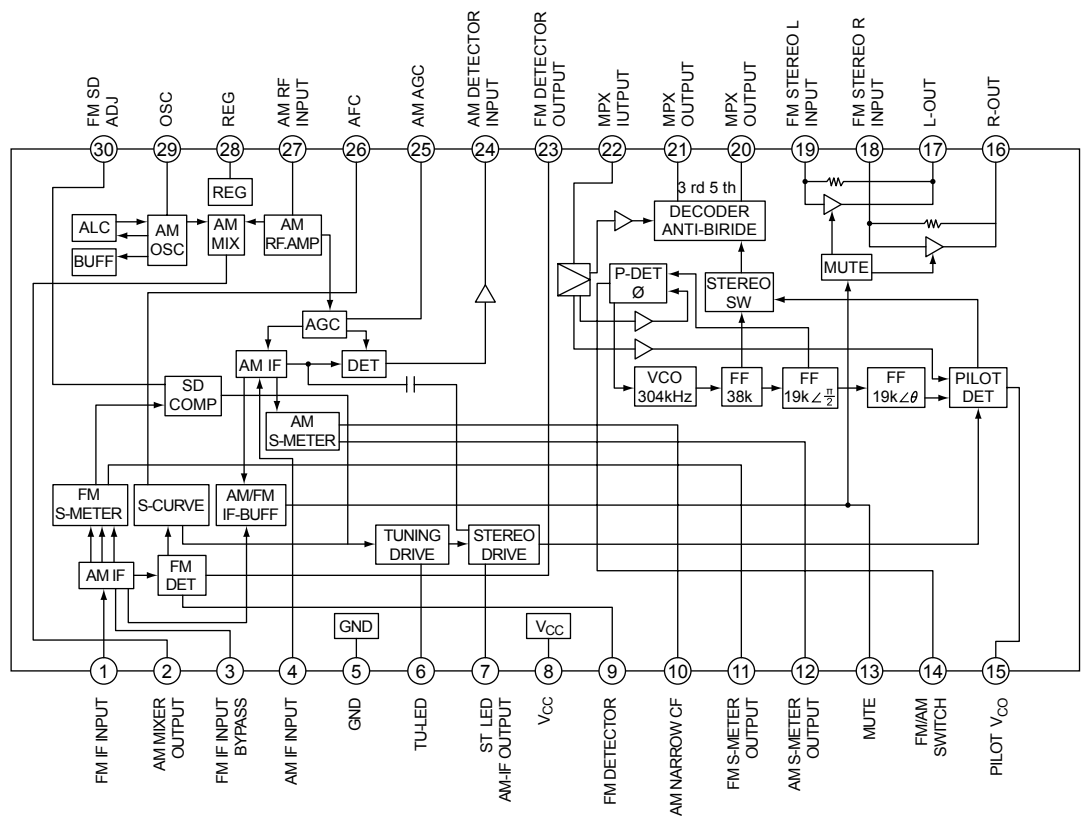
### U201: LC87F65C8A



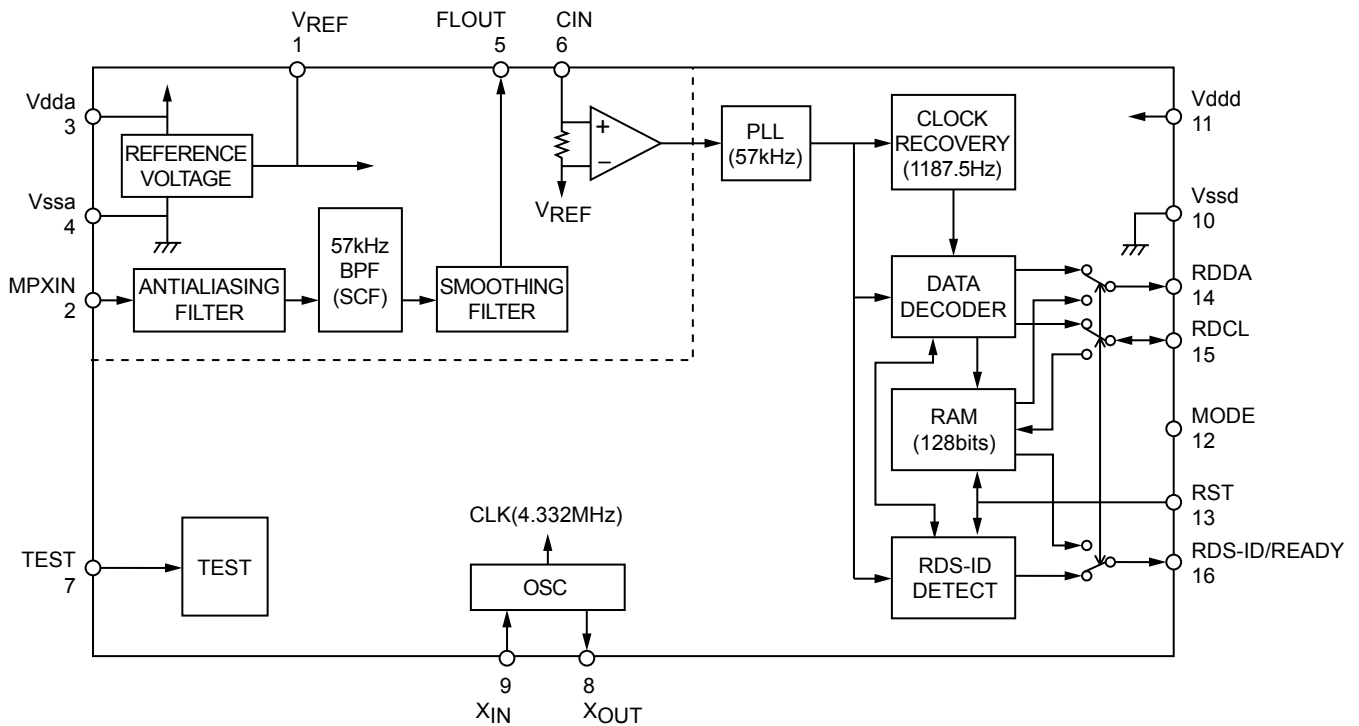
**KEY BOARD**  
**U202: EEPROM 24C02**



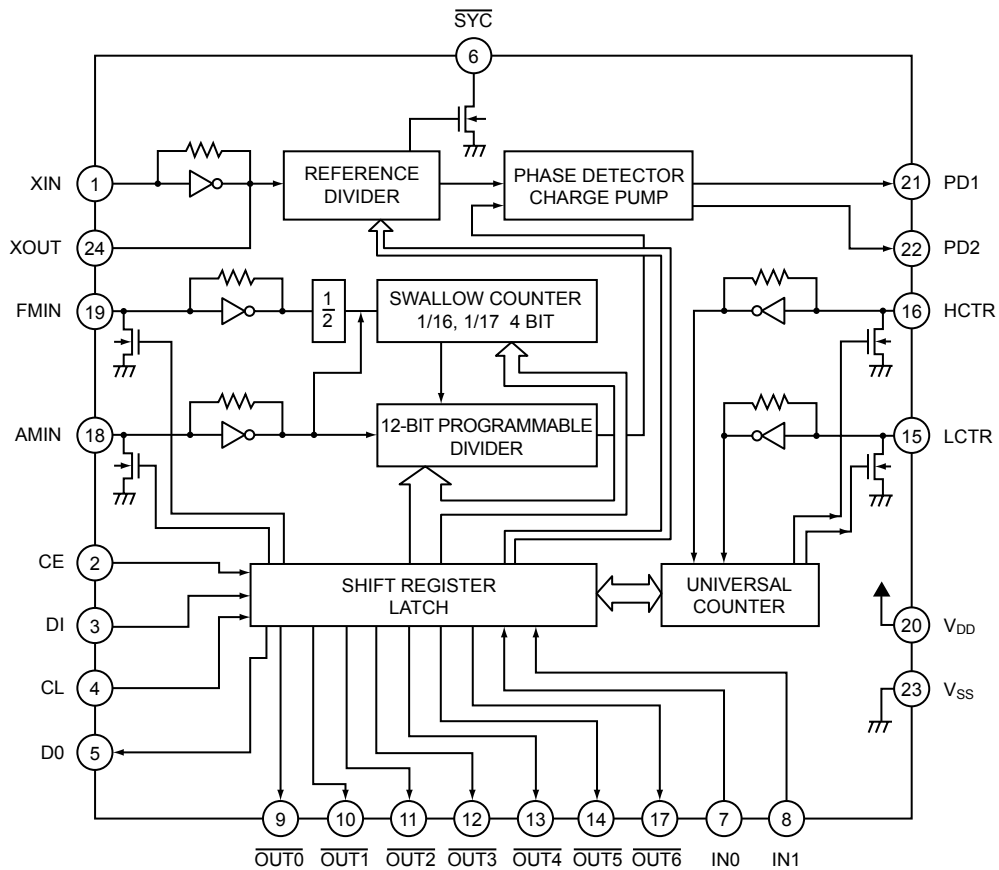
**TUNER BOARD**  
**U901: LA1837**



## TUNER BOARD U902: LC72723M



## TUNER BOARD U903: LC7218



# ELECTRICAL PARTS LIST

<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
<b><u>AC3 BOARD ASSEMBLY</u></b>		
<b><u>PC BOARD</u></b>		
2701	PCB-N0910C-AC3	PCB ASSY AC3 N091XC
<b><u>CAPACITORS</u></b>		
C101	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C102	150E-104M-J-BD	CC 25V 0.1μF20% 0805 1.2x2.0
C103	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C104	157C-108M-5-S5	CE 10V 1000μF 20% RL 10x16
C105	150F-103K-J-BD	CC 50V 0.01μF 10% 0805 1.2x2.0
C106	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C107	157D-228M-5-W9	CE 16V 2200μF 20% RL 12x20
C108	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C114-C115	157D-226M-5-GM	CE 16V 22μF 20% RL 4x7
C117, C119	157D-475M-5-EI	CE 16V 4.7μF 20% RL 3x5
C120-C121	157D-226M-5-GM	CE 16V 22μF 20% RL 4x7
C122-C123	150F-562J-J-BD	CC 50V 5600pF 5% 0805 1.2x2.0
C125	150E-104M-J-BD	CC 25V 0.1μF20% 0805 1.2x2.0
C126	157D-227M-5-KW	CE 16V 220μF 20% RL 6x12
C127	150E-104M-J-BD	CC 25V 0.1μF20% 0805 1.2x2.0
C128	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C129	150E-104M-J-BD	CC 25V 0.1μF20% 0805 1.2x2.0
C130	157E-105M-5-EI	CE 25V 1μF 20% RL 3x5
C132, C134	157D-475M-5-EI	CE 16V 4.7μF 20% RL 3x5
C135-C136	150F-562J-J-BD	CC 50V 5600pF 5% 0805 1.2x2.0
C138	150E-104M-J-BD	CC 25V 0.1μF20% 0805 1.2x2.0
C139	157D-227M-5-KW	CE 16V 220μF 20% RL 6x12
C140	150E-104M-J-BD	CC 25V 0.1μF20% 0805 1.2x2.0
C141	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C142	150E-104M-J-BD	CC 25V 0.1μF20% 0805 1.2x2.0
C143	157E-105M-5-EI	CE 25V 1μF 20% RL 3x5
C145, C147	157D-475M-5-EI	CE 16V 4.7μF 20% RL 3x5
C148	150F-562J-J-BD	CC 50V 5600pF 5% 0805 1.2x2.0
C149	150F-103K-J-BD	CC 50V 0.01μF 10% 0805 1.2x2.0
C150-C151	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C152	150F-103K-J-BD	CC 50V 0.01μF 10% 0805 1.2x2.0
C153	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C154	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C156	150F-683K-J-BD	CC 50V 0.068μF 10% 0805 1.5x2.5
C157	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C158	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C159	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C161-C162	15FD-105Z-J-BD	CC 16V 1μF +80/-20% 0805
C163-C164	150F-103K-J-BD	CC 50V 0.01μF 10% 0805 1.2x2.0
C165	157D-225M-5-GM	CE 16V 2.2μF 20% RL 4x7
C166-C167	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C168	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C169	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0
C171	15FF-224Z-J-BD	CC 50V 0.22μF +80/-20% 0805
C172	153F-225J-5-TOM	CM 50V 2.2μF RL 10x8 METALLIZED
C173	157C-107M-5-IU	CE 10V 100μF 20% RL 5x11
C174	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C175	150F-104K-J-BD	CC 50V 0.1μF 10% 0805 1.2x2.0

<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
C176 C179-C180, C183-C184 C193-C194, C198 C199 C1101 C1102 C1104 C1105 C1106-C1107 C1112-C1114 C1115 C1116 C1117 C1118 C1119-C1121 C1122-C1123, C1131-C1134 C1135 C1136-C1137	157C-107M-5-IU 150F-104K-J-BD 150F-104K-J-BD 157D-106M-5-GM 157D-475M-5-EI 15FF-224Z-J-BD 157D-475M-5-EI 15FF-224Z-J-BD 157D-226M-5-GM 150F-104K-J-BD 157D-106M-5-GM 157E-105M-5-EI 157D-475M-5-EI 157D-227M-5-KW 157D-475M-5-EI 150F-104K-J-BD 150F-100J-J-BD 150F-104K-J-BD	CE 10V 100μF 20% RL 5x11 CC 50V 0.1μF 10% 0805 1.2x2.0 CC 50V 0.1μF 10% 0805 1.2x2.0 CE 16V 10μF 20% RL 4x7 CE 16V 4.7μF 20% RL 3x5 CC 50V 0.22μF +80/-20% 0805 CE 16V 4.7μF 20% RL 3x5 CC 50V 0.22μF +80/-20% 0805 CE 16V 22μF 20% RL 4x7 CC 50V 0.1μF 10% 0805 1.2x2.0 CE 16V 10μF 20% RL 4x7 CE 25V 1μF 20% RL 3x5 CE 16V 4.7μF 20% RL 3x5 CE 16V 220μF 20% RL 6x12 CE 16V 4.7μF 20% RL 3x5 CC 50V 0.1μF 10% 0805 1.2x2.0 CC 50V 10pF 5% 0805 1.2x2.0 CC 50V 0.1μF 10% 0805 1.2x2.0
<b>DIODE</b> D101	4840-0490-0	BRIDGE RECTIFIER RB152 100V 1.5A
<b>WAFER</b> J101A	2102-101S-004	WAFER 10P P2.5 ST.(COULOMB)
<b>CONNECTORS</b> J203B J601B J604B	2101-1581-0 2102-121S-004 2102-031S-004	FLEXIBLE CONN. 35P P1.25 SIDE ENTRY 12P ST.WAFER P=2.5 COULOMB 3 PIN ST. WAFER P=2.5 COULOMB
<b>COILS</b> L101-L104	1801-100K-M	COIL 10μH 10% BL7.0
<b>CRYSTAL</b> M101	2300-3060-0	X'TAL 12.288MHZ +/-20PPM HCMOS/TTL OSCILLATOR
<b>TRANSISTOR</b> Q101	485C-114E-5	TR DTC114ES
<b>RESISTORS</b> R101-R103 R104 R105-R109 R110 R111-R112 R113 R114 R115 R116 R117 R118 R119 R122 R123 R125 R126 R127 R129	4720-103J-J 4720-680J-J 4720-103J-J 4707-103C-5-8 4720-103J-J 4720-473J-J 4720-821J-J 4720-750J-J 4720-473J-J 4720-821J-J 4720-750J-J 4720-000J-J 4720-151J-J 4720-103J-J 4720-151J-J 4720-103J-J 4720-104J-J 4720-000J-J	RMG 1/10W 10K 5% 0805 RMG 1/10W 68R 5% 0805 RMG 1/10W 10K 5% 0805 RCFA 1/2W 10K 2% RL 8 9P SIP 4609x-101-103 RMG 1/10W 10K 5% 0805 RMG 1/10W 47K 5% 0805 RMG 1/10W 820R 5% 0805 RMG 1/10W 75R 5% 0805 RMG 1/10W 47K 5% 0805 RMG 1/10W 820R 5% 0805 RMG 1/10W 75R 5% 0805 RMG 1/10W 0R 5% 0805 RMG 1/10W 150R 5% 0805 RMG 1/10W 10K 5% 0805 RMG 1/10W 150R 5% 0805 RMG 1/10W 10K 5% 0805 RMG 1/10W 100K 5% 0805 RMG 1/10W 0R 5% 0805

<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
R130	4720-151J-J	RMG 1/10W 150R 5% 0805
R131	4720-103J-J	RMG 1/10W 10K 5% 0805
R133	4720-151J-J	RMG 1/10W 150R 5% 0805
R134	4720-103J-J	RMG 1/10W 10K 5% 0805
R135-R136	4720-102J-J	RMG 1/10W 1K 5% 0805
R137	4720-151J-J	RMG 1/10W 150R 5% 0805
R138	4720-103J-J	RMG 1/10W 10K 5% 0805
R139	4720-102J-J	RMG 1/10W 1K 5% 0805
R140	4720-101J-J	RMG 1/10W 100R 5% 0805
R150	4720-151J-J	RMG 1/10W 150R 5% 0805
R155	4720-153J-J	RMG 1/10W 15K 5% 0805
R156-R157	4720-103J-J	RMG 1/10W 10K 5% 0805
R158	4720-151J-J	RMG 1/10W 150R 5% 0805
R159	4720-153J-J	RMG 1/10W 15K 5% 0805
R160-R161	4720-103J-J	RMG 1/10W 10K 5% 0805
R162	4720-151J-J	RMG 1/10W 150R 5% 0805
R163-R164	4720-223J-J	RMG 1/10W 22K 5% 0805
R165	4720-121J-J	RMG 1/10W 120R 5% 0805
R166	4720-201J-J	RMG 1/10W 200R 5% 0805
R167-R168	4720-103J-J	RMG 1/10W 10K 5% 0805
R169	4720-102J-J	RMG 1/10W 1K 5% 0805
R171	4720-103J-J	RMG 1/10W 10K 5% 0805
R172	4720-471J-J	RMG 1/10W 470R 5% 0805
R173	4720-103J-J	RMG 1/10W 10K 5% 0805
R181	4720-000J-J	RMG 1/10W 0R 5% 0805
R184-R185	4720-104J-J	RMG 1/10W 100K 5% 0805
R186, R189	4720-000J-J	RMG 1/10W 0R 5% 0805
R190-R192	4720-104J-J	RMG 1/10W 100K 5% 0805
R193	4720-000J-J	RMG 1/10W 0R 5% 0805
R194	4720-335J-J	RMG 1/10W 3.3M 5% 0805
<b><i>ICs</i></b>		
U101	3131-3980-0	IC 74HC153 QUAD 4-INPUT MUX SOP16
U102	3131-3870-0	IC 74HC157 QUAD 2-INPUT MUX SO16
U103	3131-3700-0	IC CS5331A 18BIT A/D CONVERTER CRYSTAL
U104	3130-9560-0	NJM5532 IC 'DIP8' ELE-IC029
U105	3131-3720-0	IC CS4926 DSP CRYSTAL
U106-U107	3130-8980-0	IC 74HC574 8x D-TYPE LATCHES
U108	3131-9320-0	IC AT27C020-70 256Kx8 OTP
U109	3130-9560-0	NJM5532 IC 'DIP8' ELE-IC029
U110	3130-8890-0	IC CS8414 DIR 96KHZ 24BIT
U111-U113	3131-3710-0	IC CS4340 D/A CONVERTER CRYSTAL
U114	3131-9100-0	IC 74HCU04 HEX INVERTERS (SOP)
U115	3130-6590-0	IC 74HC74 DUAL D-TYPE FLIP-FLOP
U116	3130-9560-0	NJM5532 IC 'DIP8' ELE-IC029
U117	3130-6590-0	IC 74HC74 DUAL D-TYPE FLIP-FLOP
U118, U119	3131-9050-0	IC 74HC00 QUAD 2I/P NAND GATE SOP
U120	3130-6590-0	IC 74HC74 DUAL D-TYPE FLIP-FLOP
U121	3130-5610-0	IC LM317T+ADJ REGULATOR
U123, U125	3130-2020-2	IC 7805 REG 5V
U131, U134	3130-9560-0	NJM5532 IC 'DIP8' ELE-IC029
<b><u>FRONT AMP BOARD</u></b>		
<b><u>ASSEMBLY</u></b>		
<b><i>PC BOARD</i></b>		
2401	PCB-N0910C-AMP1	PCB ASSY POWER AMP L/R/C N091XC
<b><i>CAPACITORS</i></b>		
C501-C502	157D-476M-5-IM	CE 16V 47µF 20% RL 5x7

<b>Reference No.</b>	<b>Part No.</b>	<b>Description</b>
C503-C504	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C505-C506	157D-227M-5-KW	CE 16V 220μF 20% RL 6x12
C507-C510	157F-106M-5-IU	CE 50V 10μF 20% RL 5x11
C511-C512	150F-070D-5-GG	CC 50V 7pF 0.5pF RL 4x4
C513-C514	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C515-C516	150F-181K-5-GG	CC 50V 180pF 10% RL 4x4
C517-C518	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C519-C520	153F-104J-5-QUN	CM 50V 0.1μF RL (9x11) POLYESTER
C521-C522	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C523-C524	15CH-020C-5-GG	CTC 0/60 2pF 0.25pF RL 4x4
C525-C526	157I-477M-5-x&	CE 63V 470μF 20% RL 12.5x25
C538	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C541-C542	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C543	15CH-020C-5-GG	CTC 0/60 2pF 0.25pF RL 4x4
C544	150F-181K-5-GG	CC 50V 180pF 10% RL 4x4
C545	157D-227M-5-KW	CE 16V 220μF 20% RL 6x12
C546	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C547	150F-070D-5-GG	CC 50V 7pF 0.5pF RL 4x4
C548-C549	157F-106M-5-IU	CE 50V 10μF 20% RL 5x11
C550	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C552	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C553	153F-104J-5-QUN	CM 50V 0.1μF RL (9x11) POLYESTER
C561-C562	8910-0078-0	CE 63V 10000μF 20% RL 35x40
C563-C565	157F-106M-5-GM	CE 50V 10μF 20% RL 4x7
C566-C567	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C581	157B-107M-5-KM	CE 6.3V 100μF 20% RL 6x7
C583, C592-C593	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
<b>DIODES</b>		
D501, D503	4804-0040-1	DIODE 1N4004 AL
D510	4804-1480-C	DIODE 1N4148 ATS
D511	4840-7060-0	DIODE BRIDGE RS804M
D512	4804-1480-C	DIODE 1N4148 ATS
D513-D514	4840-0850-0	ZD 1/2W 21.52-22.63V AT
D515-D520, D592-D593	4804-1480-C	DIODE 1N4148 ATS
<b>CONNECTOR WIRES</b>		
J501A	7706-1480-3004	CONN.ASSY 6P P2.5 L480 AWG 24
J502A	7712-1150-3004	CONN.ASSY 12P P2.5 L150 AWG24
J503A	7710-1100-3004	CONN.ASSY 10P P2.5 L100 AWG24
J504A	7706-1480-3004	CONN.ASSY 6P P2.5 L480 AWG 24
<b>WAFERS</b>		
J505B	2102-021S-004	2P ST.WAFER P=2.5 COULOMB
J603B	2102-061S-004	6P ST. WAFER P=2.5 COULOMB
J802B	2102-101S-004	WAFER 10P P2.5 ST. (COULOMB)
<b>COILS</b>		
L501-L502	1804-0540-0	SPRING COIL 1MH
<b>RELAYS</b>		
M501	4500-0910-0	RELAY 24VDC,125VA,3A OSA-SS-224DM3 OEG
M502	4500-0900-0	RELAY 24VDC,250VAC,10A SDT-SS-124D OEG
<b>THERMISTOR</b>		
M511	8910-0489-0	THERMISTOR 100C PTH9M04BD222TS2F333
<b>WAFERS</b>		
P501-P503	2113-1160-0	WAFER 2P ST. P=2.5 NH (JST)



<b><u>Reference No.</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
<b><i>TRANSISTORS</i></b>		
Q501-Q506	4860-0190-5	TR 2SC1845 (F.E) RL
Q507-Q510	485A-949O-5	TR 2SA949-O HFE 70-140 TOSHIBA
Q511-Q512	485C-2229-5	TR 2SC2229-0 HFE 70-140 TOSHIBA
Q513-Q514	485A-949O-5	TR 2SA949-O HFE 70-140 TOSHIBA
Q515-Q516	485C-2229-5	TR 2SC2229-0 HFE 70-140 TOSHIBA
Q517-Q518	4860-1220-5	TR 2SC3421 (0,Y) RL TSB
Q519-Q520	485C-5171-5	TR 2SC5171 HFE 100-320
Q521-Q522	485A-1930-5	TR 2SA1930 HFE 100-320
Q523-Q524	4860-5210-5	TR 2SC5198-0 HFE 80-160 70W TOSHIBA
Q525-Q526	4860-5220-5	TR 2SA1941-0 HFE 80-160 70W TOSHIBA
Q527-Q528	4860-0190-5	TR 2SC1845 (F.E) RL
Q529-Q530	4860-1590-5	TR 2SC1740S (R) HFE180-390
Q541-Q544	4860-0190-5	TR 2SC1845 (F.E) RL
Q545	4860-1590-5	TR 2SC1740S (R) HFE180-390
Q546-Q548	485A-949O-5	TR 2SA949-O HFE 70-140 TOSHIBA
Q549-Q550	485C-2229-5	TR 2SC2229-0 HFE 70-140 TOSHIBA
Q551	485C-5171-5	TR 2SC5171 HFE 100-320
Q552	4860-1220-5	TR 2SC3421 (0,Y) RL TSB
Q553	485A-1930-5	TR 2SA1930 HFE 100-320
Q554	4860-5210-5	TR 2SC5198-0 HFE 80-160 70W TOSHIBA
Q555	4860-5220-5	TR 2SA1941-0 HFE 80-160 70W TOSHIBA
Q561-Q562	4850-992F-5	TR 2SA992 HFE 300-600
Q563	485B-772P-5	TR 2SB772P PNP POWER TR
Q564	4860-1590-5	TR 2SC1740S (R) HFE180-390
Q581-Q582	4860-0190-5	TR 2SC1845 (F.E) RL
Q583	4850-992F-5	TR 2SA992 HFE 300-600
Q591-Q592	485C-123J-5	TR DTC123JSA ROHM
<b><i>RESISTORS</i></b>		
R501	474B-R10K-5-02	RWR 5W 0.1Rx2 10% RL
R502	4701-221J-C	RCF 1/8W 220R 5% ATS
R503-R504	4701-273J-C	RCF 1/8W 27K 5% ATS
R505-R506	4701-471J-C	RCF 1/8W 470R 5% ATS
R507-R510	4701-180J-C	RCF 1/8W 18R 5% ATS
R511-R512	4701-562J-C	RCF 1/8W 5.6K 5% ATS
R513-R514	4701-273J-C	RCF 1/8W 27K 5% ATS
R515-R516	4701-821J-C	RCF 1/8W 820R 5% ATS
R517-R520	4701-102J-C	RCF 1/8W 1K 5% ATS
R521-R524	4717-680J-1	RMF 1/2W 68R 5% AL
R525-R526	4717-560J-2	RMF 1/2W 56R 5% AT
R527-R528	4717-680J-1	RMF 1/2W 68R 5% AL
R529-R530	4701-560J-C	RCF 1/8W 56R 5% ATS
R531-R532	4701-183J-C	RCF 1/8W 18K 5% ATS
R533-R534	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R535-R536	4701-183J-C	RCF 1/8W 18K 5% ATS
R537-R538	4701-512J-C	RCF 1/8W 5.1K 5% ATS
R539-R542	4717-2R2J-2	RMF 1/2W 2.2R 5% AT
R543-R544	4705-331J-2	RCF 1/4W 330R 5% AT
R545-R546	4701-272J-C	RCF 1/8W 2.7K 5% ATS
R547-R548	474B-R22K-5-02	RWR 5W 0.22R x2 10% RL
R549-R550	4701-471J-C	RCF 1/8W 470R 5% ATS
R551-R552	4701-333J-C	RCF 1/8W 33K 5% ATS
R553-R554	4701-473J-C	RCF 1/8W 47K 5% ATS
R555-R556	4718-8R2J-2-X	RMF 1W 8.2R 5% AT
R559	4701-103J-C	RCF 1/8W 10K 5% ATS
R560	4701-223J-C	RCF 1/8W 22K 5% ATS
R561-R562	4701-271J-C	RCF 1/8W 270R 5% ATS
R563-R566	4701-104J-C	RCF 1/8W 100K 5% ATS

<b><u>Reference No.</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
R567, R569	4717-2R2J-2	RMF 1/2W 2.2R 5% AT
R570	4701-225J-C	RCF 1/8W 2.2M 5% ATS
R571	4705-333J-2	RCF 1/4W 33K 5% AT
R572	4701-103J-2	RCF 1/8W 10K 5% AT
R575	4701-473J-2	RCF 1/8W 47K 5% AT
R577-R578	4718-R22J-2	RMF 1W 0.22R 5% AT
R580	4701-562J-C	RCF 1/8W 5.6K 5% ATS
R581	4701-273J-C	RCF 1/8W 27K 5% ATS
R582-R583	4701-102J-2	RCF 1/8W 1K 5% AT
R584	4701-104J-2	RCF 1/8W 100K 5% AT
R585-R586	4717-680J-1	RMF 1/2W 68R 5% AL
R587	4701-471J-C	RCF 1/8W 470R 5% ATS
R588	4701-180J-C	RCF 1/8W 18R 5% ATS
R589	4701-562J-C	RCF 1/8W 5.6K 5% ATS
R590	4701-180J-C	RCF 1/8W 18R 5% ATS
R591	4701-273J-C	RCF 1/8W 27K 5% ATS
R592	4701-223J-C	RCF 1/8W 22K 5% ATS
R593	4701-560J-C	RCF 1/8W 56R 5% ATS
R594	4701-271J-C	RCF 1/8W 270R 5% ATS
R595	4701-104J-C	RCF 1/8W 100K 5% ATS
R596	4717-560J-2	RMF 1/2W 56R 5% AT
R597	4717-680J-1	RMF 1/2W 68R 5% AL
R598	4701-183J-C	RCF 1/8W 18K 5% ATS
R5100	4701-512J-C	RCF 1/8W 5.1K 5% ATS
R5101	4701-183J-C	RCF 1/8W 18K 5% ATS
R5102	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R5103	4705-331J-2	RCF 1/4W 330R 5% AT
R5104-R5105	4717-2R2J-2	RMF 1/2W 2.2R 5% AT
R5106	4701-272J-C	RCF 1/8W 2.7K 5% ATS
R5107	474B-R22K-5-02	RWR 5W 0.22R x2 10% RL
R5108	4701-471J-C	RCF 1/8W 470R 5% ATS
R5109	4701-333J-C	RCF 1/8W 33K 5% ATS
R5110	4718-8R2J-2-X	RMF 1W 8.2R 5% AT
R5111	4701-821J-C	RCF 1/8W 820R 5% ATS
R5112, R5117	4701-473J-C	RCF 1/8W 47K 5% ATS
R5119	4701-103J-C	RCF 1/8W 10K 5% ATS
R5120-R5121	4701-472J-C	RCF 1/8W 4.7K 5% ATS
R5122-R5123	4707-822J-2	RCF 1/2W 8.2K 5% AT
R5124-R5125	4701-122J-C	RCF 1/8W 1.2K 5% ATS
R5126	4701-561J-C	RCF 1/8W 560R 5% AT
R5130	4701-223J-C	RCF 1/8W 22K 5% ATS
R5131	4701-562J-C	RCF 1/8W 5.6K 5% ATS
R5132	4701-223J-C	RCF 1/8W 22K 5% ATS
R5133	4701-562J-C	RCF 1/8W 5.6K 5% ATS
R5134-R5135	4701-222J-C	RCF 1/8W 2.2K 5% ATS
<b><i>IC</i></b>		
Q565	3130-2520-3	IC 7812 12V REGULATOR
<b><i>SEMI-FIXED RESISTORS</i></b>		
R573-R574, R599	4756-2226-3-06	SVR 2.2K H3 7x7.6 R0615C
<b><u>SURROUND AMP BOARD ASSEMBLY</u></b>		
<b><i>PC BOARD</i></b>		
2501	PCB-N0910C-AMP2	PCB ASSY POWER AMP SL/SR N091XC
<b><i>CAPACITORS</i></b>		
C801-C802	157D-476M-5-IU	CE 16V 47µF 20% RL 5x11

<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
C803-C804 C805-C806 C807-C808 C809-C810 C811-C812 C813-C814 C815-C816 C817-C820 C821-C822 C823-C824 C829-C830 C831-C832 C833 C835-C836	150F-101J-5-IF 150F-020C-5-GG 150F-471K-5-GG 157D-227M-5-KW 157D-476M-5-IU 150F-181K-5-GG 150F-070D-5-GG 157F-106M-5-GM 150F-223Z-5-UG 153F-104J-5-QUN 157I-477M-5-X& 150F-151K-2-FC 150F-223Z-5-UG 150F-151K-2-FC	CC 50V 100pF 5% RL 5x3.5 CC 50V 2pF 0.25pF RL 4x4 CC 50V 470pF 10% RL 4x4 CE 16V 220µF 20% RL 6x12 CE 16V 47µF 20% RL 5x11 CC 50V 180pF 10% RL 4x4 CC 50V 7pF 0.5pF RL 4x4 CE 50V 10µF 20% RL 4x7 CC 50V 0.022µF +80/-20% RL 11x4 CM 50V 0.1µF RL (9x11) POLYESTER CE 63V 470µF 20% RL 12.5x25 CC 50V 150pF 10% AT 3.5x2 CC 50V 0.022µF +80/-20% RL 11x4 CC 50V 150pF 10% AT 3.5x2
<b>DIODES</b> D801-D802 D803-D805	4804-0040-1 4804-1480-C	DIODE 1N4004 AL DIODE 1N4148 ATS
<b>WAFERS</b> J602B JP801-JP802	2102-031S-004 2113-1160-0	3 PIN ST. WAFER P=2.5 COULOMB WAFER 2P ST. P=2.5 NH (JST)
<b>CONNECTOR WIRES</b> J801A J802A	7708-1150-3004 7710-1200-3004	CONN.ASSY AWG24 8P P2.5 L=150 CONN ASSY 10P P2.5 L200 AWG24
<b>RELAY</b> M801	4500-0910-0	RELAY 24VDC,125VA,3A OSA-SS-224DM3 OEG
<b>TRANSISTORS</b> Q801-Q806 Q807-Q808 Q809-Q812 Q813-Q814 Q815-Q816 Q817-Q820 Q821-Q822 Q823-Q824 Q825-Q826 Q827-Q828 Q829-Q830 Q831	4860-0190-5 4860-1590-5 485A-949O-5 485C-5171-5 485A-949O-5 485C-2229-5 4860-1220-5 485A-1930-5 4860-5210-5 4860-5220-5 4860-0190-5 485C-123J-5	TR 2SC1845 (F.E) RL TR 2SC1740S (R) HFE180-390 TR 2SA949-O HFE 70-140 TOSHIBA TR 2SC5171 HFE 100-320 TR 2SA949-O HFE 70-140 TOSHIBA TR 2SC2229-0 HFE 70-140 TOSHIBA TR 2SC3421 (0,Y) RL TSB TR 2SA1930 HFE 100-320 TR 2SC5198-0 HFE 80-160 70W TOSHIBA TR 2SA1941-0 HFE 80-160 70W TOSHIBA TR 2SC1845 (F.E) RL TR DTC123JSA ROHM
<b>RESISTORS</b> R803-R804 R805-R806 R807-R808 R809-R810 R811,R812 R813-R816 R817-R818 R819-R822 R823-R824 R825-R826 R827-R828 R829-R830 R831-R832 R833-R834	4701-273J-C 4701-471J-C 4701-180J-C 4701-562J-C 4701-180J-C 4701-102J-C 4701-104J-C 4717-680J-1 4701-273J-C 4701-821J-C 4701-560J-C 4701-183J-C 4701-512J-C 4701-183J-C	RCF 1/8W 27K 5% ATS RCF 1/8W 470R 5% ATS RCF 1/8W 18R 5% ATS RCF 1/8W 5.6K 5% ATS RCF 1/8W 18R 5% ATS RCF 1/8W 1K 5% ATS RCF 1/8W 100K 5% ATS RMF 1/2W 68R 5% AL RCF 1/8W 27K 5% ATS RCF 1/8W 820R 5% ATS RCF 1/8W 56R 5% ATS RCF 1/8W 18K 5% ATS RCF 1/8W 5.1K 5% ATS RCF 1/8W 18K 5% ATS

<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
R835-R836 R837-R838 R839-R840 R841-R844 R845-R846 R847-R848 R849-R850 R851-R852 R853-R854 R855-R856 R857-R858 R859-R860 R861-R862 R863-R864 R865-R866	4701-332J-C 4715-331A-2 4701-471J-C 4717-2R2J-2 4701-271J-C 4701-104J-C 4717-560J-2 4717-680J-1 474B-R22K-5-02 4707-272J-2 4718-8R2J-2-x 4717-2R2J-2 4701-333J-C 4701-473J-C 4701-223J-C	RCF 1/8W 3.3K 5% ATS RMF 1/4W 330R 1% AT RCF 1/8W 470R 5% ATS RMF 1/2W 2.2R 5% AT RCF 1/8W 270R 5% ATS RCF 1/8W 100K 5% ATS RMF 1/2W 56R 5% AT RMF 1/2W 68R 5% AL RWR 5W 0.22R x2 10% RL RCF 1/2W 2.7K 5% AT RMF 1W 8.2R 5% AT RMF 1/2W 2.2R 5% AT RCF 1/8W 33K 5% ATS RCF 1/8W 47K 5% ATS RCF 1/8W 22K 5% ATS
<b>SEMI-FIXED RESISTORS</b> R867-R868	4756-2026-3-03	SVR 2.2K H3 7x7.6 R0615C
<b>AUDIO BOARD ASSEMBLY</b> <b>PC BOARD</b> 1201	PCB-N0910C-AUD	PCB ASSY AUDIO N091xC
<b>JACKS</b> 1202, 1203	2113-1805-0	6P RCA JACK R/W GOLD W/SHIELD
<b>SWITCH</b> 1204	5200-3171-0-01	DPDT SLIDE SW.SK-22F28-G9TS
<b>CAPACITORS</b> C301-C302 C303 C304 C305-C306 C319-C322, C325-C332 C333-C334, C337-C338	150F-103K-2-FC 157D-107M-5-IU 150F-103K-2-FC 157D-476M-5-IU 150F-101K-2-FC 157D-335M-5-II	CC 50V 0.01μF 10% AT 3.5x2 CE 16V 100μF 20% RL 5x11 CC 50V 0.01μF 10% AT 3.5x2 CE 16V 47μF 20% RL 5x11 CC 50V 100pF 10% AT 3.5x2 CE 16V 3.3μF 20% RL 5x5
<b>SOCKETS</b> J707B, J711B	2101-1801-0	SOCKET (PCB/PCB) 10P P2.0
<b>TRANSISTORS</b> Q302 Q303	485A-114E-5 485C-144E-5	TR DTA114ESA ROHM TR DTC144ES ROHM
<b>RESISTORS</b> R302-R303 R304 R305 R331 R332 R333 R334 R335 R336 R337 R338 R339 R340 R341	4701-102J-C 4701-470J-C 4701-103J-C 4701-331J-C 4701-105J-C 4701-331J-C 4701-105J-C 4701-331J-C 4701-105J-C 4701-331J-C 4701-105J-C 4701-331J-C 4701-105J-C 4701-222J-C 4701-105J-C 4701-222J-C	RCF 1/8W 1K 5% ATS RCF 1/8W 47R 5% ATS RCF 1/8W 10K 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 1M 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 1M 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 1M 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 1M 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 1M 5% ATS RCF 1/8W 2.2K 5% ATS RCF 1/8W 1M 5% ATS RCF 1/8W 2.2K 5% ATS

<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
R342	4701-105J-C	RCF 1/8W 1M 5% ATS
R343	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R344	4701-105J-C	RCF 1/8W 1M 5% ATS
R345	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R346	4701-105J-C	RCF 1/8W 1M 5% ATS
R347	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R348	4701-105J-C	RCF 1/8W 1M 5% ATS
R349	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R350	4701-105J-C	RCF 1/8W 1M 5% ATS
R351	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R352	4701-105J-C	RCF 1/8W 1M 5% ATS
R353	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R354	4701-105J-C	RCF 1/8W 1M 5% ATS
R355	4701-472J-C	RCF 1/8W 4.7K 5% ATS
<b>ICs</b>		
U301	3131-3570-0	IC TC9273N-004 ANALOG SWITCH ARRAY
U302	3130-5220-0	IC 4066 QUAD BILATERAL SWITCH
<b><u>DIGITAL BOARD ASSEMBLY</u></b>		
<b><u>PC BOARD</u></b>		
1601	PCB-N0910C-DIG	PCB ASSY DIGITAL N091XC
<b><u>TOS-LINK</u></b>		
1602	4811-F32R-3	LIGHT Rx UNIT GPIF32R SHARP
<b><u>JACKS</u></b>		
1603-1604	2113-1806-0	1P RCA JACK BK GOLD W/SHIELD
1605	2113-1121-0	2P RCA JACK Y/Y AU HSP-242V-22
<b><u>CAPACITORS</u></b>		
C763, C764	150F-104K-2-FC	CC 50V 0.1μF 10% AT 3.5x2
C765, C766	150F-223K-2-FD	CC 50V 0.022μF 10% AT 3.2x2.2
<b><u>DIODES</u></b>		
D756-D759	4804-1480-C	DIODE 1N4148 ATS
<b><u>WAFER</u></b>		
J101B	2102-101S-004	WAFER 10P P2.5 ST. (COULOMB)
<b><u>RESISTORS</u></b>		
R759	4701-102J-C	RCF 1/8W 1K 5% ATS
R760	4701-102J-C	RCF 1/8W 1K 5% ATS
R761	4701-101J-C	RCF 1/8W 100R 5% ATS
R762	4701-104J-C	RCF 1/8W 100K 5% ATS
<b><u>IC</u></b>		
U761	3130-7370-0	IC 74HCT00 NAND GATE
<b><u>KEYBOARD ASSEMBLY</u></b>		
<b><u>PC BOARD</u></b>		
2101 * AH	PCB-N0910C-KEY	PCB ASSY KEYBOARD N091XC
2101 * C	PCB-N0911C-KEY	PCB ASSY KEYBOARD N091XC
<b><u>VFL</u></b>		
2119	2460-1890-1	VFD 12-MT-79GNK FUTABA
<b><u>CAPACITORS</u></b>		
C201	157B-107M-5-KM	CE 6.3V 100μF 20% RL 6x7

<b>Reference No.</b>	<b>Part No.</b>	<b>Description</b>
C202 C203-C204 C205 C206 C207 C208	150F-103K-2-FC 150F-220K-5-GG 150F-104Z-5-IU 157B-107M-5-KM 150F-104Z-5-IU 157D-476M-5-IU	CC 50V 0.01μF 10% AT 3.5 x2 CC 50V 22pF 10% RL 4x4 CC 50V 0.1μF +80/-20% RL 5x11 CE 6.3V 100μF 20% RL 6x7 CC 50V 0.1μF +80/-20% RL 5x11 CE 16V 47μF 20% RL 5x11
<b>DIODES</b>		
D201-D202 D203 D205 *C D206-D207, D209	4804-1480-C 4837-5V61-2 4804-1480-C 4804-1480-C	DIODE 1N4148 ATS DZ 1/2W 5.6V ROHM AT DIODE 1N4148 ATS DIODE 1N4148 ATS
<b>CONNECTORS</b>		
J201A J202A J203A J204A J206A J207A	7703-1360-2004 7704-1200-2004 2101-1581-0 7706-1100-2004 2101-1581-0 7703-1090-2004	CONN.ASSY 3P P205 L=360 AWG26 CN ASSY 4P P=2.5 L=200 FLEXIBLE CONN. 35P P1.25 SIDE ENTRY CONN ASSY AWG26 6P P2.5 L=100 FLEXIBLE CONN. 35P P1.25 SIDE ENTRY CONN. ASSY 3P P2.5 L=90
<b>WAFER</b>		
J208C	2102-8002-3-100	WAFER 2 PIN 9mm
<b>COIL</b>		
L201	1801-220K-M	COIL 22μH 10% AL BL7
<b>SWITCHES</b>		
M201-M217	5200-3538-0	SWITCH, TACT SKHHBY 7mm HIGH
<b>SENSOR</b>		
M218	4814-3TE2-3	IR SENSOR PIC-12043TE2
<b>CRYSTAL</b>		
M219	2300-3150-0	CRYSTAL 10MHZ +/-30PPM LOAD CAP 22P HC49U
<b>TRANSISTORS</b>		
Q201 Q202 Q204	4860-0050-5 485C-144E-5 485A-114E-5	TR SS8050 C/D SAMSUNG RL TR DTC144ES ROHM TR DTA114ESA ROHM
<b>RESISTORS</b>		
R201-R203 R204-R206 R207-R209 R210-R212 R213-R214 R215-R218 R219 R220-R221 R222 R223 R224 R225-R226 R228-R231 R232-R246 R247-R250 R251-R261	4701-681J-C 4701-821J-C 4701-182J-C 4701-222J-C 4701-472J-C 4701-103J-C 4701-472J-C 4701-471J-C 4701-473J-C 4701-474J-C 4701-102J-C 4701-103J-C 4701-223J-C 4701-103J-C 4701-473J-C 4701-103J-C	RCF 1/8W 680R 5% ATS RCF 1/8W 820R 5% ATS RCF 1/8W 1.8K 5% ATS RCF 1/8W 2.2K 5% ATS RCF 1/8W 4.7K 5% ATS RCF 1/8W 10K 5% ATS RCF 1/8W 4.7K 5% ATS RCF 1/8W 470R 5% ATS RCF 1/8W 47K 5% ATS RCF 1/8W 470K 5% ATS RCF 1/8W 1K 5% ATS RCF 1/8W 10K 5% ATS RCF 1/8W 22K 5% ATS RCF 1/8W 10K 5% ATS RCF 1/8W 47K 5% ATS RCF 1/8W 10K 5% ATS

<b><u>Reference No.</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
R262 R263-R274 R280 R282	4701-223J-C 4701-104J-C 4701-102J-C 4701-103J-C	RCF 1/8W 22K 5% ATS RCF 1/8W 100K 5% ATS RCF 1/8W 1K 5% ATS RCF 1/8W 10K 5% ATS
<b><i>ICs</i></b> U201 U202	3131-3810-1 3131-3920-0	IC LC87F65C8A 8 BIT MCU MASKED IC EEPROM 24C02 2KBIT 8PIN DIP
<b><u>LED BOARD ASSEMBLY</u></b> <b><i>PC BOARD</i></b> 2201	PCB-N0910C-LED	PCB ASSY LED N091XC
<b><i>LED</i></b> 2202	3700-2489-G	LED 3mm GREEN SP
<b><i>CONNECTOR</i></b> J208A	7702-1060-2004	CONN.ASSY 2P P2.5 L60 AWG26
<b><u>LOAD BOARD ASSEMBLY</u></b> <b><i>PC BOARD</i></b> 2601	PCB-N0910C-LOAD	PCB ASSY LOAD N091XC
<b><i>CAPACITORS</i></b> C703-C704 C705 C706-C707	157F-106M-5-IU 150F-104Z-5-IU 157D-106M-5-GM	CE 50V 10μF 20% RL 5x11 CC 50V 0.1μF +80/-20% RL 5x11 CE 16V 10μF 20% RL 4x7
<b><i>DIODES</i></b> D701 D703	4840-7060-0 4804-1480-C	DIODE BRIDGE RS804M DIODE 1N4148 ATS
<b><i>WAFERS</i></b> J204B J504B, J702B	2102-061R-004 2102-061S-004	WAFER 6 PIN P2.5 6P ST. WAFER P=2.5 COULOMB
<b><i>TRANSISTORS</i></b> M701-M702 Q701 Q702 Q703 Q704	4860-5270-5 4860-0660-5 4860-0700-5 4860-0660-5 4860-0700-5	TR TYN412 400V 12A THYRISTOR TR 2SA1015 (G.R.) RL TR 2SC1815 (G.R) RL TR 2SA1015 (G.R.) RL TR 2SC1815 (G.R) RL
<b><i>RESISTORS</i></b> R701 R702 R703 R704-R705 R706 R707 R708 R709 R710 R711 R716-R717 R718-R719 R720	4701-102J-C 4701-223J-C 4701-101J-C 4701-102J-C 4701-103J-C 4701-101J-C 4701-223J-C 4701-103J-C 4701-472J-C 4701-102J-C 4701-104J-C 4701-222J-C 4701-684J-C	RCF 1/8W 1K 5% ATS RCF 1/8W 22K 5% ATS RCF 1/8W 100R 5% ATS RCF 1/8W 1K 5% ATS RCF 1/8W 10K 5% ATS RCF 1/8W 100R 5% ATS RCF 1/8W 22K 5% ATS RCF 1/8W 10K 5% ATS RCF 1/8W 4.7K 5% ATS RCF 1/8W 1K 5% ATS RCF 1/8W 100K 5% ATS RCF 1/8W 2.2K 5% ATS RCF 1/8W 680K 5% ATS

<b><u>Reference No.</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
<b><i>IC</i></b> U701	3130-0890-0	IC NJM4558D DUAL OP AMP.
<b><u>MAIN BOARD ASSEMBLY</u></b> <b><u>PC BOARD</u></b> 2301	PCB-N0910C-MAIN	PCB ASSY MAIN N091XC
<b><i>CAPACITORS</i></b> C717 C718 C720, C721 C722-C723 C726 C727 C728 C731 C732 C734 C735 C736 C741-C744 C930	157E-338M-5-5\$ 157E-108M-5-X& 150F-223K-2-FD 157F-106M-5-GM 157F-476M-5-LU 150F-223K-2-FD 157F-107M-5-OW 150F-223K-2-FD 157F-106M-5-GM 157F-476M-5-LU 157D-106M-5-GM 150F-223K-2-FD 157C-337M-5-OVK 150F-223K-2-FD	CE 25V 3300µF 20% RL 16x32 CE 25V 1000µF 20% RL 12.5x25 CC 50V 0.022µF 10% AT 3.2x2.2 CE 50V 10µF 20% RL 4x7 CE 50V 47µF 20% RL 6.5x11 CC 50V 0.022µF 10% AT 3.2x2.2 CE 50V 100µF 20% RL 8x12 CC 50V 0.022µF 10% AT 3.2x2.2 CE 50V 10µF 20% RL 4x7 CE 50V 47µF 20% RL 6.5x11 CE 16V 10µF 20% RL 4x7 CC 50V 0.022µF 10% AT 3.2x2.2 CE 10V 330µF 20% RL 8x11.5 ELNA CC 50V 0.022µF 10% AT 3.2x2.2
<b><i>DIODES</i></b> D715-D718 D720-D721 D722 D731-D734 J7159-J160	4805-3930-2 4804-0040-1 4837-27V0-2 4804-1480-C 4804-0010-2	DIODE 1N5393 200V 1.5A AT DIODE 1N4004 AL DZ 1/2W 27V(26.2-27.6)AT DIODE 1N4148 ATS DIODE 1N4001 AT
<b><i>WAFERS</i></b> J206B J401B J502B J7001, J701B J703A J704A J705A-J711A	2101-1591-0 2102-111S-004 2102-121S-004 2102-031S-004 2101-1621-0 2101-1641-0 2101-1621-0	FLEXIBLE CONN. 35P P1.25 TOP ENTRY 11P ST.WAFER P=2.5 COULOMB 12P ST.WAFER P=2.5 COULOMB 3 PIN ST. WAFER P=2.5 COULOMB WAFER (PCB/PCB) 10P P2.0 ST WAFER (PCB/PCB) 16P P2.0 ST WAFER (PCB/PCB) 10P P2.0 ST
<b><i>TRANSISTOR</i></b> Q724	4860-0660-5	TR 2SA1015 (G.R.) RL
<b><i>RESISTORS</i></b> R731 R732 R733-R734 R741-R744	4701-102J-C 4701-333J-C 4718-391J-2-X 4701-472J-C	RCF 1/8W 1K 5% ATS RCF 1/8W 33K 5% ATS RMF 1W 390R 5% AT RCF 1/8W 4.7K 5% ATS
<b><i>ICs</i></b> U721 U722 U723 U724	3130-2520-3 3130-3800-0 3130-8190-0 3130-2020-2	IC 7812 12V REGULATOR IC UPC79M12HF REGULATOR IC NJM78M56FA 5.6V REGULATOR IC 7805 REG 5V
<b><u>MULTI-CHANNEL BOARD</u></b> <b><u>ASSEMBLY</u></b> <b><u>PC BOARD</u></b> 1101	PCB-N0910C-MUTI	PCB ASSY MULTI CHI N091XC



<b><u>Reference No.</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
<b><i>JACKS</i></b>		
1102	2113-1808-0	4P RCA JACK R/W GOLD W/SHIELD
1103	2113-1809-0	2P RCA JACK BK/BK GOLD W/SHIELD
1105	2113-1808-0	4P RCA JACK R/W GOLD W/SHIELD
1106	2113-1809-0	2P RCA JACK BK/BK GOLD W/SHIELD
<b><i>CAPACITORS</i></b>		
C601-C606	150F-101K-2-FC	CC 50V 100pF 10% AT 3.5x2
C609-C610	150F-223K-2-FD	CC 50V 0.022μF 10% AT 3.2x2.2
C611-C616	157D-335M-5-II	CE 16V 3.3μF 20% RL 5x5
C617	150F-104Z-5-IU	CC 50V 0.1μF +80/-20% RL 5x11
C618-C619	157D-335M-5-II	CE 16V 3.3μF 20% RL 5x5
C620-C621	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C622-C629	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C630-C633	150F-221K-5-GG	CC 50V 220pF 10% RL 4x4
C634-C637	153F-101K-5-MKN	CM 100pF 50V RL (7x6) POLYESTER
C638-C641	157F-225K-5-GM	CE 50V 2.2μF 10% RL 4x7
C642	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C643	157D-335M-5-II	CE 16V 3.3μF 20% RL 5x5
C644	150F-103K-5-II	CC 50V 0.01μF 10% RL 5x5
C647-C649	157D-226M-5-II	CE 16V 22μF 20% RL 5x5
C650-C653	157D-475M-5-EI	CE 16V 4.7μF 20% RL 3x5
C654-C655	157D-335M-5-II	CE 16V 3.3μF 20% RL 5x5
C656-C657	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C658-C659	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C660-C663	153F-101K-5-MKN	CM 100pF 50V RL (7x6) POLYESTER
C664-C667	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C668-C669	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C670-C671	153F-103J-5-IM	CM 50V 0.01μF 5% RL 5x7
C672-C673	153F-101K-5-MKN	CM 100pF 50V RL (7x6) POLYESTER
C674	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C675-C676	150F-221K-2-FC	CC 50V 220pF 10% AT 3.5x2
C679	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C680	157D-227M-5-KW	CE 16V 220μF 20% RL 6x12
C681-C682	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C683-C686	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
<b><i>DIODES</i></b>		
D601-D602	4837-7V51-2	DZ 1/2W 7.5V ROHM AT
D603	4804-1480-2	DIODE 1N4148 AT
D607	4837-5V61-2	DZ 1/2W 5.6V ROHM AT
<b><i>WAFERS</i></b>		
J601A	7712-1400-2004	CONN.ASSY 12P P2.5 L400 AWG26
J602A	2102-031S-004	3 PIN ST. WAFER P=2.5 COULOMB
J603A	7706-1150-3004	CONN.ASSY 6P P2.5 L150 AWG 24
J605A	2102-101S-004	WAFER 10P P2.5 ST. (COULOMB)
J705B-J706B	2101-1801-0	SOCKET (PCB/PCB) 10P P2.0
<b><i>COILS</i></b>		
L601-L602	1801-101K-M	COIL 100μH 10%
<b><i>TRANSISTORS</i></b>		
Q601	4851-241A-5	TR RN1241-A
Q602	4860-0060-5	TR SS8550 C/D SAMSUNG RL
Q603-Q605	4851-241A-5	TR RN1241-A
Q607	4860-0050-5	TR SS8050 C/D SAMSUNG RL
Q608	4860-0770-5	TR 2SC2878 (APB) RL
Q609-Q610	485A-114E-5	TR DTA114ESA ROHM

<b>Reference No.</b>	<b>Part No.</b>	<b>Description</b>
Q611-Q612	4851-241A-5	TR RN1241-A
Q613	4860-0770-5	TR 2SC2878 (APB) RL
Q614, Q616, Q618, Q620	485A-114E-5	TR DTA114ESA ROHM
Q622	4860-0050-5	TR SS8050 C/D SAMSUNG RL
<b><i>RESISTORS</i></b>		
J6123, J680	4701-682J-C	RCF 1/8W 6.8K 5% ATS
R601-R606	4701-331J-C	RCF 1/8W 330R 5% ATS
R607-R612	4701-104J-C	RCF 1/8W 100K 5% ATS
R613	4701-333J-C	RCF 1/8W 33K 5% ATS
R614-R615	4701-103J-C	RCF 1/8W 10K 5% ATS
R616	4701-333J-C	RCF 1/8W 33K 5% ATS
R617	4701-103J-C	RCF 1/8W 10K 5% ATS
R618	4701-103J-C	RCF 1/8W 10K 5% ATS
R619-R620	4701-333J-C	RCF 1/8W 33K 5% ATS
R621-R622	4701-103J-C	RCF 1/8W 10K 5% ATS
R623	4701-123J-C	RCF 1/8W 12K 5% ATS
R624	4701-393J-C	RCF 1/8W 39K 5% ATS
R626	4701-203J-C	RCF 1/8W 20K 5% ATS
R627	4701-272J-C	RCF 1/8W 2.7K 5% ATS
R628	4701-203J-C	RCF 1/8W 20K 5% ATS
R631	4701-152J-C	RCF 1/8W 1.5K 5% ATS
R632-R637	4701-103J-C	RCF 1/8W 10K 5% ATS
R638-R643	4701-104J-C	RCF 1/8W 100K 5% ATS
R644-R645	4701-102J-C	RCF 1/8W 1K 5% ATS
R646-R649	4701-563J-C	RCF 1/8W 56K 5% ATS
R650-R653	4701-272J-C	RCF 1/8W 2.7K 5% ATS
R654	4701-103J-C	RCF 1/8W 10K 5% ATS
R655	4701-183J-C	RCF 1/8W 18K 5% ATS
R656-R657	4701-103J-C	RCF 1/8W 10K 5% ATS
R658	4701-102J-C	RCF 1/8W 1K 5% ATS
R659	4701-471J-C	RCF 1/8W 470R 5% ATS
R660-R661	4701-102J-C	RCF 1/8W 1K 5% ATS
R662	4701-563J-C	RCF 1/8W 56K 5% ATS
R663-R664	4701-223J-C	RCF 1/8W 22K 5% ATS
R665	4701-103J-C	RCF 1/8W 10K 5% ATS
R666	4701-563J-C	RCF 1/8W 56K 5% ATS
R667-R672	4701-221J-C	RCF 1/8W 220R 5% ATS
R673-R678	4701-104J-C	RCF 1/8W 100K 5% ATS
R679-R680	4701-563J-C	RCF 1/8W 56K 5% ATS
R681-R682	4701-102J-C	RCF 1/8W 1K 5% ATS
R683-R684	4701-101J-C	RCF 1/8W 100R 5% ATS
R685-R686	4701-223J-C	RCF 1/8W 22K 5% ATS
R687-R688	4701-472J-C	RCF 1/8W 4.7K 5% ATS
R689	4701-563J-C	RCF 1/8W 56K 5% ATS
R690	4701-563J-C	RCF 1/8W 56K 5% ATS
R691-R692	4701-203J-C	RCF 1/8W 20K 5% ATS
R693-R694	4701-152J-C	RCF 1/8W 1.5K 5% ATS
R695-R696	4701-122J-C	RCF 1/8W 1.2K 5% ATS
R697-R698	4701-104J-C	RCF 1/8W 100K 5% ATS
R699-R700	4701-102J-C	RCF 1/8W 1K 5% ATS
R704	4701-152J-C	RCF 1/8W 1.5K 5% ATS
R705	4701-272J-C	RCF 1/8W 2.7K 5% ATS
<b><i>ICs</i></b>		
U601	3130-8120-0	IC M62447SP ELECTRIC VOLUME
U602	3130-3730-1	IC TC9164AN HIV ANALOG SW
U605-U611	3130-9560-0	NJM5532 IC 'DIP8' ELE-IC029

Reference No.	Part No.	Description
<b>POWER SUPPLY BOARD</b>		
<b>ASSEMBLY</b>		
<b>PC BOARD</b>		
3002 * AH	PCB-N0910C-PSU	PCB ASSY POWER SUPPLY N0910C
3002 * C	PCB-N0911C-PSU	PCB ASSY POWER SUPPLY N0911C
<b>CAPACITORS</b>		
C758 $\triangle$	8910-0091-0	CC 400V 0.01 $\mu$ F +-20% RL 17x9.5
C759	150F-223Z-5-UG	CC 50V 0.022 $\mu$ F +80/-20% RL 11x4
C760	157E-227M-5-PU	CE 25V 220 $\mu$ F 20% RL 8.5x11
<b>DIODES</b>		
D751	4804-1480-C	DIODE 1N4148 ATS
D752-D755	4804-0040-1	DIODE 1N4004 AL
<b>WAFER</b>		
J201B	2102-031S-004	3 PIN ST. WAFER P=2.5 COULOMB
<b>FUSES</b>		
M751 *AH $\triangle$	5120-0200-0	FUSE T5A/125V 5x20mm MITT/UL/SA
M752 *C $\triangle$	5120-0024-0	3.15A TIME-LAG 5x20
M754 *AH $\triangle$	5120-0052-0	FUSE T1.6A 250V 5x20mm UL/SA
<b>RELAY</b>		
M753 $\triangle$	4500-0890-0	RELAY 12VDC,250VAC,10A SDT-SS-112DM OEG
<b>TRANSISTOR</b>		
Q751	485C-123J-5	TR DTC123JSA ROHM
<b>RESISTORS</b>		
R754 *AH	4707-8R2J-2	RCF 1/2W 8.2R 5% AT
R754 *C	4717-8R2J-2-F	RMF 1/2W 8.2R 5% AL
R758 *AH $\triangle$	4717-335J-2-S	RMF 1/2W 3.3M 5% AT UL APPROVED (NO FUSIBLE RESISTOR)
<b>TRANSFORMER</b>		
T752 $\triangle$	1806-2311-0	EI-35 TRANSFORMER 12V/AC 200MA Q0020C
<b>SECONDARY BOARD</b>		
<b>ASSEMBLY</b>		
<b>PC BOARD</b>		
2801	PCB-N0910C-SEC	PCB ASSY SECONDARY N091XC
<b>CAPACITORS</b>		
C751-C752	150F-104K-5-II	CC 50V 0.1 $\mu$ F 10% RL 5x5
C753-C756	153I-104J-5-NMN	CM 63V 0.1 $\mu$ F RL (7.5x7) POLYESTER
C757	150F-104K-5-II	CC 50V 0.1 $\mu$ F 10% RL 5x5
<b>WAFERS</b>		
J202B	2102-041S-004	4P ST.WAFER P=2.5 COULOMB
J501B	2102-061S-004	6P ST. WAFER P=2.5 COULOMB
<b>CONNECTORS</b>		
J701A	7703-1430-2004	CONN.ASSY 3P P2.5 L430 AWG26
J702A	7706-1220-1004	6P CONN WIRE ASSY L=220 28AWG
<b>RESISTORS</b>		
R751-R753, R755	4718-R22J-2	RMF 1W 0.22R 5% AT

<b><u>Reference No.</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
<b><u>SPEAKER BOARD ASSEMBLY</u></b>		
<b><u>PC BOARD</u></b>		
1501 * AH	PCB-N0910C-SPK	PCB ASSY SPEAKER N0910C
1501 * C	PCB-N0911C-SPK	PCB ASSY SPEAKER N0911C
<b><u>TERMINALS</u></b>		
1502 * AH	2113-1663-0	4P SPEAKER TERMINAL R/B W/BANANA
1503 * AH	2113-1664-0	6P SPEAKER TERMINAL R/B W/BANANA
1502 * C	2113-1655-0	4P SPEAKER TERMINAL R/B
1503 * C	2113-1656-0	6P SPEAKER TERMINAL R/B
<b><u>CAPACITORS</u></b>		
C594-R596	153F-102J-5-IM	CM 50V 1000pF 5% RL 5x7
C851-C852	150F-331K-5-GE	CC 50V 330pF 10% RL 4x3
<b><u>WAFERS</u></b>		
J503B	2102-101S-004	WAFER 10P P2.5 ST. (COULOMB)
J801B	2102-081S-004	WAFER 8P P2.5 ST.
<b><u>S-VIDEO BOARD ASSEMBLY</u></b>		
<b><u>PC BOARD</u></b>		
1401	PCB-N0910C-SVD	PCB ASSY S-VIDEO N091XC
<b><u>CONNECTORS</u></b>		
1402-1406	2113-1183-0	1P DIN CONNECTOR HDC-050
<b><u>SWITCH</u></b>		
1407	5200-3171-0-01	DPDT SLIDE SW.SK-22F28-G9TS
<b><u>CAPACITORS</u></b>		
C401	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C404	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C405	157C-477M-5-OU	CE 10V 470μF 20% RL 8x11
C406	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C407	157C-477M-5-OU	CE 10V 470μF 20% RL 8x11
C408-C413	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C414	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C415	157C-477M-5-OU	CE 10V 470μF 20% RL 8x11
C416-C417	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C418	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C419	153F-223J-5-LQ	CM 50V 0.022μF 5% RL 6.5x9
C420-C421	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C423-C424	157B-227M-5-KW	CE 6.3V 220μF 20% RL 6x12
C429	15CH-300J-5-IG	CTC 0/60 30pF 5% RL 5x4
C429A	15CH-050D-5-GG	CTC 0/60 5pF 0.5pF RL 4x4
C430	15CH-300J-5-IG	CTC 0/60 30pF 5% RL 5x4
C430A	15CH-050D-5-GG	CTC 0/60 5pF 0.5pF RL 4x4
C431-C432	15CH-270J-5-GG	CTC 0/60 27pF 5% RL 4x4
C433-C435	150F-470J-5-IF	CC 50V 47pF 5% RL 5x3.5
C436	157F-105M-5-GM	CE 50V 1μF 20% RL 4x7
C440	157D-476M-5-IU	CE 16V 47μF 20% RL 5x11
C442	157B-107M-5-KM	CE 6.3V 100μF 20% RL 6x7
C443	150F-103K-5-II	CC 50V 0.01μF 10% RL 5x5
C444	150F-474M-5-II	CC 50V 0.47μF 20% RL 5x5 MONO
C445	157B-107M-5-KM	CE 6.3V 100μF 20% RL 6x7
C446	157F-474M-5-GM	CE 50V 0.47μF 20% RL 4x7
C447	150F-470J-5-IF	CC 50V 47pF 5% RL 5x3.5
C448	150F-474M-5-II	CC 50V 0.47μF 20% RL 5x5 MONO

<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
C449	150F-103K-5-II	CC 50V 0.01μF 10% RL 5x5
C451	150F-122K-5-IF	CC 50V 1200pF 10% RL 5x3.5
C453	157F-105M-5-GM	CE 50V 1μF 20% RL 4x7
C454	1551-0210-0	TRIMCAP 5.2-30P TZ03R300FR MUR
C456	15CH-220J-5-GG	CTC 0/60 22pF 5% RL 4x4
C457	150F-682K-5-SF	CC 50V 6800pF 10% RL 10x3.5
C462	157F-474M-5-GM	CE 50V 0.47μF 20% RL 4x7
C463	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C465	157B-107M-5-KM	CE 6.3V 100μF 20% RL 6x7
C469	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
<b>DIODES</b>		
D401-D407, D413-D414	4804-1480-C	DIODE 1N4148 ATS
<b>SOCKETS</b>		
J709B-J710B	2101-1801-0	SOCKET (PCB/PCB) 10P P2.0
<b>COILS</b>		
L401	1801-220K-M	COIL 22μH 10% AL BL7
L403	1801-5R6K-M	COIL 5.6μH 10% BL=7
<b>CRYSTALS</b>		
M401	2300-3020-0	X'TAL 14.318MHZ +-20PPM LOAD CAP 22P HC49/U
M402	2300-3030-0	X'TAL 17.734MHZ +-20PPM LOAD CAP 22P HC49/U
<b>TRANSISTORS</b>		
Q401-Q402	4860-0770-5	TR 2SC2878 (APB) RL
Q403	485A-933S-5	TR 2SA933S HFE 120-560 ROHM
Q404	4860-0770-5	TR 2SC2878 (APB) RL
Q405	485A-933S-5	TR 2SA933S HFE 120-560 ROHM
Q406	485C-123J-5	TR DTC123JSA ROHM
Q407	485A-933S-5	TR 2SA933S HFE 120-560 ROHM
Q408	4860-0770-5	TR 2SC2878 (APB) RL
Q409-Q411	485A-933S-5	TR 2SA933S HFE 120-560 ROHM
Q412	485C-123J-5	TR DTC123JSA ROHM
Q413	4860-0770-5	TR 2SC2878 (APB) RL
Q414-Q415	4860-1590-5	TR 2SC1740S (R) HFE180-390
Q416, Q432	485A-933S-5	TR 2SA933S HFE 120-560 ROHM
Q436	4860-1590-5	TR 2SC1740S (R) HFE180-390
Q437	4860-0770-5	TR 2SC2878 (APB) RL
Q438	485C-144E-5	TR DTC144ES ROHM
<b>RESISTORS</b>		
R401-R406	4701-820J-C	RCF 1/8W 82R 5% ATS
R407-R408	4701-680J-C	RCF 1/8W 68R 5% ATS
R409	4705-471J-2	RCF 1/4W 470R 5% AT
R411-R412	4701-680J-C	RCF 1/8W 68R 5% ATS
R414	4701-121J-C	RCF 1/8W 120R 5% ATS
R415	4701-102J-C	RCF 1/8W 1K 5% ATS
R416	4701-563J-C	RCF 1/8W 56K 5% ATS
R417	4701-561J-C	RCF 1/8W 560R 5% ATS
R418	4701-471J-C	RCF 1/8W 470R 5% ATS
R419	4701-102J-C	RCF 1/8W 1K 5% ATS
R420-R421	4701-471J-C	RCF 1/8W 470R 5% ATS
R422	4701-102J-C	RCF 1/8W 1K 5% ATS
R423	4701-680J-C	RCF 1/8W 68R 5% ATS
R424	4701-221J-C	RCF 1/8W 220R 5% ATS

<b>Reference No.</b>	<b>Part No.</b>	<b>Description</b>
R425-R426	4701-102J-C	RCF 1/8W 1K 5% ATS
R427	4701-680J-C	RCF 1/8W 68R 5% ATS
R428	4701-333J-C	RCF 1/8W 33K 5% ATS
R429	4701-104J-C	RCF 1/8W 100K 5% ATS
R430	4701-471J-C	RCF 1/8W 470R 5% ATS
R431	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R441	4701-102J-C	RCF 1/8W 1K 5% ATS
R442	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R443-R445	4701-102J-C	RCF 1/8W 1K 5% ATS
R446-R449	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R450	4701-122J-C	RCF 1/8W 1.2K 5% ATS
R451	4701-101J-C	RCF 1/8W 100R 5% ATS
R452	4701-104J-C	RCF 1/8W 100K 5% ATS
R453	4701-822J-C	RCF 1/8W 8.2K 5% ATS
R454	4701-152J-C	RCF 1/8W 1.5K 5% ATS
R456	4701-824J-C	RCF 1/8W 820K 5% ATS
R457	4701-682J-C	RCF 1/8W 6.8K 5% ATS
R458	4701-473J-C	RCF 1/8W 47K 5% ATS
R459	4701-221J-C	RCF 1/8W 220R 5% ATS
R462	4701-272J-C	RCF 1/8W 2.7K 5% ATS
R463	4701-121J-C	RCF 1/8W 120R 5% ATS
R467	4701-102J-C	RCF 1/8W 1K 5% ATS
R468	4701-104J-C	RCF 1/8W 100K 5% ATS
R469	4701-102J-C	RCF 1/8W 1K 5% ATS
R473	4701-682J-C	RCF 1/8W 6.8K 5% ATS
R474	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R475	4701-102J-C	RCF 1/8W 1K 5% ATS
<b>ICs</b>		
U401	3131-3750-0	IC LC74763-9012 OSD PAL/NTSC SANYO
U402-U403	3131-3730-0	IC BA7625 2x5CH MULTIPLEXER ROHM
<b><u>POWER SWITCH ASSEMBLY</u></b> <b><u>PC BOARD</u></b>		
1701	PCB-N0910C-SW	PCB ASSY MAIN SW N091xC
<b><u>SWITCH</u></b>		
1702    ⚠	5200-3665-0	POWER SWITCH TV5 W/THREAD
<b><u>CAPACITORS</u></b>		
C761    ⚠	8910-0091-0	CC 400V 0.01μF +-20% RL 17x9.5
<b><u>TONE BOARD ASSEMBLY</u></b> <b><u>PC BOARD</u></b>		
1801	PCB-N0910C-TONE	PCB ASSY TONE N091XC
<b><u>CAPACITORS</u></b>		
C321-C322	153F-153J-5-KP	CM 50V 0.015μF 5% RL 6x8.5
<b><u>WAFER</u></b>		
J605B	2102-101S-004	WAFER 10P P2.5 ST.(COULOMB)
<b><u>RESISTORS</u></b>		
R321-R322	4701-102J-C	RCF 1/8W 1K 5% ATS
R323-R324	4750-9730-0	VARIABLE RESISTORS
<b><u>TUNER BOARD ASSEMBLY</u></b> <b><u>PC BOARD</u></b>		
1001    * AH	PCB-N0910C-TUN	PCB ASSY TUNER (AH) N0910C

<b>Reference No.</b>	<b>Part No.</b>	<b>Description</b>
1001 * C	PCB-N0911C-TUN	PCB ASSY TUNER (C) N0911C
<b>JACK</b>		
1002	2113-1805-0	6P RCA JACK R/W GOLD W/SHIELD
<b>ANT-TERMINAL</b>		
1003 *AH	2107-0641-0	ANT-TERMINAL F-TYPE AJ-2019-040
1003 *C	2107-0681-0	ANT-TERMINAL (DIN-TYPE)
<b>CAPACITORS</b>		
C381-C386	150F-101K-2-FC	CC 50V 100pF 10% AT 3.5x2
C901 * C	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C902-C903	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C904	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C906	157D-107M-5-IU	CE 16V 100μF 20% RL 5x11
C911	150F-200J-5-GG	CC 50V 20pF 5% RL 4x4
C912-C913	150F-102K-5-IF	CC 50V 1000pF 10% RL 5x3.5
C914-C915	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C916	150F-331K-5-GE	CC 50V 330pF 10% RL 4x3
C924-C925	15CH-200J-5-GG	CTC 0/60 20pF 5% RL 4x4
C926	153F-333J-5-NLM	CM 50V 0.033μF 5% RL 7.5x6.5 Metalzd
C927	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C928	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C929	157F-224M-5-GM	CE 50V 0.22μF 20% RL 4x7
C930	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C931	157B-107M-5-KM	CE 6.3V 100μF 20% RL 6x7
C932, 941	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C942	157D-107M-5-IU	CE 16V 100μF 20% RL 5x11
C943	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C944	157F-475M-5-GM	CE 50V 4.7μF 20% RL 4x7
C945	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C946	157F-105M-5-GM	CE 50V 1μF 20% RL 4x7
C947	157F-474M-5-GM	CE 50V 0.47μF 20% RL 4x7
C948	157F-105M-5-GM	CE 50V 1μF 20% RL 4x7
C949-C950	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C951	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C953-C954	153F-272J-5-JM	CM 50V 2700pF 5% RL 5.5x7
C959-C960	157D-226M-5-GM	CE 16V 22μF 20% RL 4x7
C961-C962 *AH	153F-272J-5-JM	CM 50V 2700pF 5% RL 5.5x7
C961-C962 *C	153F-152J-5-JM	CM 50V 1500pF 5% RL
C963-C964	157D-226M-5-GM	CE 16V 22μF 20% RL 4x7
C965	153F-272J-5-JM	CM 50V 2700pF 5% RL 5.5x7
C967	157D-474M-5-II	CE 16V 0.47μF 20% RL 5x5
C968	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C969	157D-476M-5-IM	CE 16V 47μF 20% RL 5x7
C970	153F-223J-5-LQ	CM 50V 0.022μF 5% RL 6.5x9
C971	15CH-080D-5-GG	CTC 0/60 8pF 0.5pF RL 4x4
C973	153F-473J-5-NLM	CM 50V 0.047μF 5% RL 7.5 x6.5 Metalzd
C974	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C975	157D-106M-5-GM	CE 16V 10μF 20% RL 4x7
C976	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C977	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C978	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C979	157D-226M-5-GM	CE 16V 22μF 20% RL 4x7
C981	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C982	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C985	150F-561K-5-GG	CC 50V 560pF 10% RL 4x4
C986	157B-107M-5-KM	CE 6.3V 100μF 20% RL 6x7
C987	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4

<b>Reference No.</b>	<b>Part No.</b>	<b>Description</b>
C988-C989 C990 C991 C992	15CH-300J-5-IG 157B-107M-5-KM 153F-102J-5-IM 150F-103K-5-II	CTC 0/60 30pF 5% RL 5x4 CE 6.3V 100μF 20% RL 6x7 CM 50V 1000pF 5% RL 5x7 CC 50V 0.01μF 10% RL 5x5
<b>ZENERS</b>		
D901 D902	4837-4C20-2 4837-7C20-2	DZ 1/2W 5.0-5.2V AT DZ 1/2W 9.1-9.5V AT
<b>SOCKETS</b>		
J703B J704B	2101-1801-0 2101-1601-0	SOCKET (PCB/PCB) 10P P2.0 SOCKET (PCB/PCB) 16P P2.0 RA
<b>COILS</b>		
L901 L903-L904 L905 L941 L942 L971 L972 L985, R912	1801-220K-M 5600-3386-S 1801-101K-M 5600-3396-S 5600-3406-S 5600-3280-G 5600-3416-S 1801-101K-M	COIL 22μH 10% AL BL7 COIL MPX LPF NMC-4085 COIL 100μH 10% COIL FM DET-1 10.7MHZ NFIF-4081 COIL FM DET-2 10.7MHZ NFIF-4082 COIL MW RF BLOCK NMRF-5077 COIL AM IFT NMIF-4062 COIL 100μH 10%
<b>TUNER FRONT-END</b>		
M901 *AH M901 *C	1300-0666-0 1300-0726-0	TUNER ENV172D4G1 PANASONIC TUNER ENV172D3G1
<b>CERAMIC FILTERS</b>		
M902 M903 *C M904 M911	2701-0010-1 2701-0010-1 2701-0010-1 2701-0680-0	CF10.7 +30 SFE10.7MA5-A CF10.7 +30 SFE10.7MA5-A CF10.7 +30 SFE10.7MA5-A CF 450 +-1 SFZ450JL3 MURATA
<b>CRYSTALS</b>		
M905 M985	2300-0440-0 2300-1220-0	CRYSTAL 7.2MHZ 20PPM CRYSTAL 4.332MHZ
<b>WAFER</b>		
P901	2113-1160-0	WAFER 2P ST. P=2.5 NH (JST)
<b>TRANSISTORS</b>		
Q901 *C Q902 Q903 Q922-Q923, Q942 Q943-Q944 Q945	485C-945P-5 4851-9230-5 485A-114E-5 4860-1590-5 4860-8120-0 485A-114E-5	TR 2SC945P HFE 200-400 TR 2SC1923-0 HFE 70-140 TR DTA114ESA ROHM TR 2SC1740S (R) HFE180-390 TR 2SD 1468 S TR DTA114ESA ROHM
<b>RESISTORS</b>		
R340* R341* R342* R381 R382 R383 R384 R385 R386 R387	4701-104J-C 4701-331J-C 4701-104J-C 4701-331J-C 4701-104J-C 4701-331J-C 4701-104J-C 4701-331J-C 4701-104J-C 4701-331J-C 4701-104J-C 4701-331J-C	RCF 1/8W 100K 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 100K 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 100K 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 100K 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 100K 5% ATS RCF 1/8W 330R 5% ATS RCF 1/8W 100K 5% ATS RCF 1/8W 330R 5% ATS



<u>Reference No.</u>	<u>Part No.</u>	<u>Description</u>
R388	4701-104J-C	RCF 1/8W 100K 5% ATS
R389	4701-331J-C	RCF 1/8W 330R 5% ATS
R901 *AH	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R901 *C	4701-333J-C	RCF 1/8W 33K 5% ATS
R902	4701-220J-C	RCF 1/8W 22R 5% ATS
R903 *AH	4701-102J-C	RCF 1/8W 1K 5% ATS
R903 *C	4701-123J-C	RCF 1/8W 12K 5% ATS
R904 *C	4701-331J-C	RCF 1/8W 330R 5% ATS
R905 *C	4701-681J-C	RCF 1/8W 680R 5% ATS
R906	4701-103J-C	RCF 1/8W 10K 5% ATS
R907 *C	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R908 *C	4701-471J-C	RCF 1/8W 470R 5% ATS
R909-R910	4701-331J-C	RCF 1/8W 330R 5% ATS
R911	4701-101J-C	RCF 1/8W 100R 5% ATS
R913	4701-330J-C	RCF 1/8W 33R 5% ATS
R915	4701-103J-C	RCF 1/8W 10K 5% ATS
R916	4701-102J-C	RCF 1/8W 1K 5% ATS
R918	4701-472J-C	RCF 1/8W 4.7K 5% ATS
R919-R924	4701-102J-C	RCF 1/8W 1K 5% ATS
R925-R926	4701-820J-C	RCF 1/8W 82R 5% ATS
R927	4701-103J-C	RCF 1/8W 10K 5% ATS
R928	4701-221J-C	RCF 1/8W 220R 5% ATS
R929	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R931	4701-220J-C	RCF 1/8W 22R 5% ATS
R933	4701-103J-C	RCF 1/8W 10K 5% ATS
R942	4701-472J-C	RCF 1/8W 4.7K 5% ATS
R943	4701-822J-C	RCF 1/8W 8.2K 5% ATS
R944	4701-104J-C	RCF 1/8W 100K 5% ATS
R945	4701-392J-C	RCF 1/8W 3.9K 5% ATS
R946	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R947-R948	4701-103J-C	RCF 1/8W 10K 5% ATS
R949	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R950	4701-684J-C	RCF 1/8W 680K 5% ATS
R951	4701-102J-C	RCF 1/8W 1K 5% ATS
R952-R953	4701-223J-C	RCF 1/8W 22K 5% ATS
R954	4701-103J-C	RCF 1/8W 10K 5% ATS
R955	4701-220J-C	RCF 1/8W 22R 5% ATS
R957-R958 *AH	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R957-R958 *C	4701-272J-C	RCF 1/8W 2.7K 5% ATS
R959-R960 *AH	4701-683J-C	RCF 1/8W 68K 5% ATS
R959-R960 *C	47001-334J-C	RCF 1/8W 330K 5% ATS
R961-R962	4701-222J-C	RCF 1/8W 2.2K 5% ATS
R963-R964	4701-104J-C	RCF 1/8W 100K 5% ATS
R968	4701-102J-C	RCF 1/8W 1K 5% ATS
R971	4701-332J-C	RCF 1/8W 3.3K 5% ATS
R972	4701-103J-C	RCF 1/8W 10K 5% ATS
R973	4701-183J-C	RCF 1/8W 18K 5% ATS
R974	4701-104J-C	RCF 1/8W 100K 5% ATS
R975 *AH	4701-333J-C	RCF 1/8W 33K 5% ATS
R975 *C	4701-563J-C	RCF 1/8W 56K % ATS
R985-R987	4701-102J-C	RCF 1/8W 1K 5% ATS
<b>SEMI-FIXED RESISTORS</b>		
R956	4756-1036-3-06	SVR 10K H3 7x7.6 RH0615C
R941	4756-2236-3-06	SVR 22K H3 7x7.6 RH0615C
<b>ICs</b>		
U901	3130-8180-0	IC LA1837 AM/FM IF
U902	3131-9040-0	IC LC72723M RDS DEMODULATOR MFP16

<b>Reference No.</b>	<b>Part No.</b>	<b>Description</b>
U903	3131-3760-0	IC LC7218 PLL FREQ SYNTHESIZER SANYO
<b><u>VIDEO BOARD ASSEMBLY</u></b> <b><u>PC BOARD</u></b>		
1301	PCB-N0910C-VD	PCB ASSY VIDEO N091XC
<b><u>JACKS</u></b>		
1302	2113-1810-0	1P RCA JACK YL GOLD W/SHIELD
1303	2113-1811-0	4P RCA JACK YL GOLD W/SHIELD
1304	2113-1812-0	2P RCA JACK YL GOLD W/SHIELD
<b><u>CAPACITORS</u></b>		
C441	150F-103K-2-FC	CC 50V 0.01μF 10% AT 3.5x2
C450	150F-223K-2-FD	CC 50V 0.022μF 10% AT 3.2x2.2
C459-C461	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C464	150F-103K-2-FC	CC 50V 0.01μF 10% AT 3.5x2
C466-C467	157C-477M-5-OU	CE 10V 470μF 20% RL 8x11
C468	157D-108M-5-S9	CE 16V 1000μF 20% RL 10x20
C470	157F-225M-5-GM	CE 50V 2.2μF 20% RL 4x7
C476	157C-477M-5-OU	CE 10V 470μF 20% RL 8x11
<b><u>DIODES</u></b>		
D414-D415	4804-1480-C	DIODE 1N4148 ATS
<b><u>SOCKET</u></b>		
J708B	2101-1801-0	SOCKET (PCB/PCB) 10P P2.0
<b><u>TRANSISTORS</u></b>		
Q428, Q434-Q435	485A-933S-5	TR 2SA933S HFE 120-560 ROHM
<b><u>RESISTORS</u></b>		
R439	4701-471J-C	RCF 1/8W 470R 5% ATS
R460-R461	4701-121J-C	RCF 1/8W 120R 5% ATS
R464-R466	4701-680J-C	RCF 1/8W 68R 5% ATS
R483, R491-R493	4701-820J-C	RCF 1/8W 82R 5% ATS
<b><u>IC</u></b>		
U404	3131-3730-0	IC BA7625 2X5CH MULTIPLEXER ROHM
<b><u>VIDEO-5 BOARD ASSEMBLY</u></b> <b><u>PC BOARD</u></b>		
1901	PCB-N0910C-VD5	PCB ASSY VIDEO-5 N091XC
<b><u>JACKS</u></b>		
1902	2113-1290-0	1P RCA YL GOLD PLATED GND
1903	2113-1291-0	1P RCA WH GOLD PLATED GND
1904	2113-1292-0	1P RCA RD GOLD PLATED GND
1905	2113-1011-0	PHONE JACK 6312-03-070 W/CLIP
<b><u>CAPACITORS</u></b>		
C4101-C4102	150F-101J-5-IF	CC 50V 100pF 5% RL 5x3.5
C4103	157F-225K-5-GM	CE 50V 2.2μF 10% RL 4x7
C4104	150F-223Z-5-UG	CC 50V 0.022μF +80/-20% RL 11x4
C4105-C4106	150F-102K-5-IF	CC 50V 1000pF 10% RL 5x3.5
C4107	150F-223K-2-FD	CC 50V 0.022μF 10% AT 3.2x2.2
<b><u>CONNECTOR</u></b>		
J401A	7711-1320-2004	CONN.ASSY 11P P2.5 L=320 AWG 26

<b><u>Reference No.</u></b>	<b><u>Part No.</u></b>	<b><u>Description</u></b>
<b><i>RESISTORS</i></b> R4101-R4102 R4103	4701-331J-C 4701-820J-C	RCF 1/8W 330R 5% ATS RCF 1/8W 82R 5% ATS
<b><u>VOLUME BOARD ASSEMBLY</u></b> <b><i>PC BOARD</i></b> 2001	PCB-N0910C-VOL	PCB ASSY VOLUME N091XC
<b><i>WAFER</i></b> J207B	2102-031S-004	3 PIN ST. WAFER P=2.5 COULOMB
<b><i>ROTARY</i></b> M301	4750-6000-0	ROTARY ENCODER EC16B2425 ALPS
<b><u>TRIGGER BOARD ASSEMBLY</u></b> <b><i>PC BOARD</i></b> 2002	PCB-N0970C-PHON	PCB ASSY TRIGGER BOARD N0970C
<b><i>CAPACITORS</i></b> C001 C002 C003	157F-476M-5-LU 157D-106M-5-GM 150F-223K-2-FD	CE 50V 47μF 20% RL 6.5x11 CE 16V 10μF 20% RL 4x7 CC 50V 0.022μF 10% AT 3.2x2.2
<b><i>WAFERS</i></b> M001 M001C	2102-021S-005 7702-1250-2005	WAFER 2P ST. P=2.5 COULS CN. ASSY 2P P2.5 L=250
<b><i>JACK</i></b> M002	2113-1179-0	PHONE JACK D3.5 BK JY-3537-01-140
<b><i>RESISTORS</i></b> R001 R002	4701-472J-C 4707-100J-2	RCF 1/8W 4.7K 5% ATS RCF 1/2W 10R 5% AT
<b><i>IC</i></b> U001	3130-2520-3	IC 7812 12V REGULATOR

**NOTE:**

- The components identified by  $\triangle$  mark are critical for risk of fire and electrical shock. Replace only with part number specified.
- <\*AH> : USA, Canadian model only.
- <\*C> : European model only.
- Capacitors : CP-Polystyrene, CM-Mylar, CE-Electrolytic, CC-Ceramic, CTC-NPO.
- Resistors : RMF-Metal Film, RCF-Carbon Film, RWR-Wirewound Metal Oxide Film, RMG-1/10W SMD 0805, RCFA-Thick Film Resistor Network.




This exploded view diagram illustrates the internal components of the HP Z440 G2 Mini PC, organized by assembly order. The components are labeled with part numbers in circles, and some are identified by text labels within the diagram.

**Key Components and Labels:**


- 0103:** Main chassis housing.
- 0105, 0106, 0107, 0108, 0109, 0110, 0111, 0112, 0113, 0114, 0115, 0116, 0117, 0118, 0119, 0120, 0121, 0122, 0123, 0124, 0125, 0126, 0127, 0128, 0129, 0130, 0131, 0132, 0133, 0134, 0135, 0136, 0137, 0138, 0139, 0140, 0141, 0142, 0143, 0144, 0145, 0146, 0147, 0148, 0149, 0150, 0151, 0152, 0153, 0154, 0155, 0156, 0157, 0158, 0159, 0160, 0161, 0162, 0163, 0164, 0165, 0166, 0167, 0168, 0169, 0170, 0171, 0172, 0173, 0174, 0175, 0176, 0177, 0178, 0179, 0180, 0181, 0182, 0183, 0184, 0185, 0186, 0187, 0188, 0189, 0190, 0191, 0192, 0193, 0194, 0195, 0196, 0197, 0198, 0199, 0200, 0201, 0202, 0203, 0204, 0205, 0206, 0207, 0208, 0209, 0210, 0211, 0212, 0213, 0214, 0215, 0216, 0217, 0218, 0219, 0220, 0221, 0222, 0223, 0224, 0225, 0226, 0227, 0228, 0229, 0230, 0231, 0232, 0233, 0234, 0235, 0236, 0237, 0238, 0239, 0240, 0241, 0242, 0243, 0244, 0245, 0246, 0247, 0248, 0249, 0250, 0251, 0252, 0253, 0254, 0255, 0256, 0257, 0258, 0259, 0260, 0261, 0262, 0263, 0264, 0265, 0266, 0267, 0268, 0269, 0270, 0271, 0272, 0273, 0274, 0275, 0276, 0277, 0278, 0279, 0280, 0281, 0282, 0283, 0284, 0285, 0286, 0287, 0288, 0289, 0290, 0291, 0292, 0293, 0294, 0295, 0296, 0297, 0298, 0299, 0300, 0301, 0302, 0303, 0304, 0305, 0306, 0307, 0308, 0309, 0310, 0311, 0312, 0313, 0314, 0315, 0316, 0317, 0318, 0319, 0320, 0321, 0322, 0323, 0324, 0325, 0326, 0327, 0328, 0329, 0330, 0331, 0332, 0333, 0334, 0335, 0336, 0337, 0338, 0339, 0340, 0341, 0342, 0343, 0344, 0345, 0346, 0347, 0348, 0349, 0350, 0351, 0352, 0353, 0354, 0355, 0356, 0357, 0358, 0359, 0360, 0361, 0362, 0363, 0364, 0365, 0366, 0367, 0368, 0369, 0370, 0371, 0372, 0373, 0374, 0375, 0376, 0377, 0378, 0379, 0380, 0381, 0382, 0383, 0384, 0385, 0386, 0387, 0388, 0389, 0390, 0391, 0392, 0393, 0394, 0395, 0396, 0397, 0398, 0399, 0400, 0401, 0402, 0403, 0404, 0405, 0406, 0407, 0408, 0409, 0410, 0411, 0412, 0413, 0414, 0415, 0416, 0417, 0418, 0419, 0420, 0421, 0422, 0423, 0424, 0425, 0426, 0427, 0428, 0429, 0430, 0431, 0432, 0433, 0434, 0435, 0436, 0437, 0438, 0439, 0440, 0441, 0442, 0443, 0444, 0445, 0446, 0447, 0448, 0449, 0450, 0451, 0452, 0453, 0454, 0455, 0456, 0457, 0458, 0459, 0460, 0461, 0462, 0463, 0464, 0465, 0466, 0467, 0468, 0469, 0470, 0471, 0472, 0473, 0474, 0475, 0476, 0477, 0478, 0479, 0480, 0481, 0482, 0483, 0484, 0485, 0486, 0487, 0488, 0489, 0490, 0491, 0492, 0493, 0494, 0495, 0496, 0497, 0498, 0499, 0500, 0501, 0502, 0503, 0504, 0505, 0506, 0507, 0508, 0509, 0510, 0511, 0512, 0513, 0514, 0515, 0516, 0517, 0518, 0519, 0520, 0521, 0522, 0523, 0524, 0525, 0526, 0527, 0528, 0529, 0530, 0531, 0532, 0533, 0534, 0535, 0536, 0537, 0538, 0539, 0540, 0541, 0542, 0543, 0544, 0545, 0546, 0547, 0548, 0549, 0550, 0551, 0552, 0553, 0554, 0555, 0556, 0557, 0558, 0559, 0560, 0561, 0562, 0563, 0564, 0565, 0566, 0567, 0568, 0569, 0570, 0571, 0572, 0573, 0574, 0575, 0576, 0577, 0578, 0579, 0580, 0581, 0582, 0583, 0584, 0585, 0586, 0587, 0588, 0589, 0590, 0591, 0592, 0593, 0594, 0595, 0596, 0597, 0598, 0599, 0600, 0601, 0602, 0603, 0604, 0605, 0606, 0607, 0608, 0609, 0610, 0611, 0612, 0613, 0614, 0615, 0616, 0617, 0618, 0619, 0620, 0621, 0622, 0623, 0624, 0625, 0626, 0627, 0628, 0629, 0630, 0631, 0632, 0633, 0634, 0635, 0636, 0637, 0638, 0639, 0640, 0641, 0642, 0643, 0644, 0645, 0646, 0647, 0648, 0649, 0650, 0651, 0652, 0653, 0654, 0655, 0656, 0657, 0658, 0659, 0660, 0661, 0662, 0663, 0664, 0665, 0666, 0667, 0668, 0669, 0670, 0671, 0672, 0673, 0674, 0675, 0676, 0677, 0678, 0679, 0680, 0681, 0682, 0683, 0684, 0685, 0686, 0687, 0688, 0689, 0690, 0691, 0692, 0693, 0694, 0695, 0696, 0697, 0698, 0699, 0700, 0701, 0702, 0703, 0704, 0705, 0706, 0707, 0708, 0709, 0710, 0711, 0712, 0713, 0714, 0715, 0716, 0717, 0718, 0719, 0720, 0721, 0722, 0723, 0724, 0725, 0726, 0727, 0728, 0729, 0730, 0731, 0732, 0733, 0734, 0735, 0736, 0737, 0738, 0739, 0740, 0741, 0742, 0743, 0744, 0745, 0746, 0747, 0748, 0749, 0750, 0751, 0752, 0753, 0754, 0755, 0756, 0757, 0758, 0759, 0760, 0761, 0762, 0763, 0764, 0765, 0766, 0767, 0**

## EXPLODED VIEW PARTS LIST

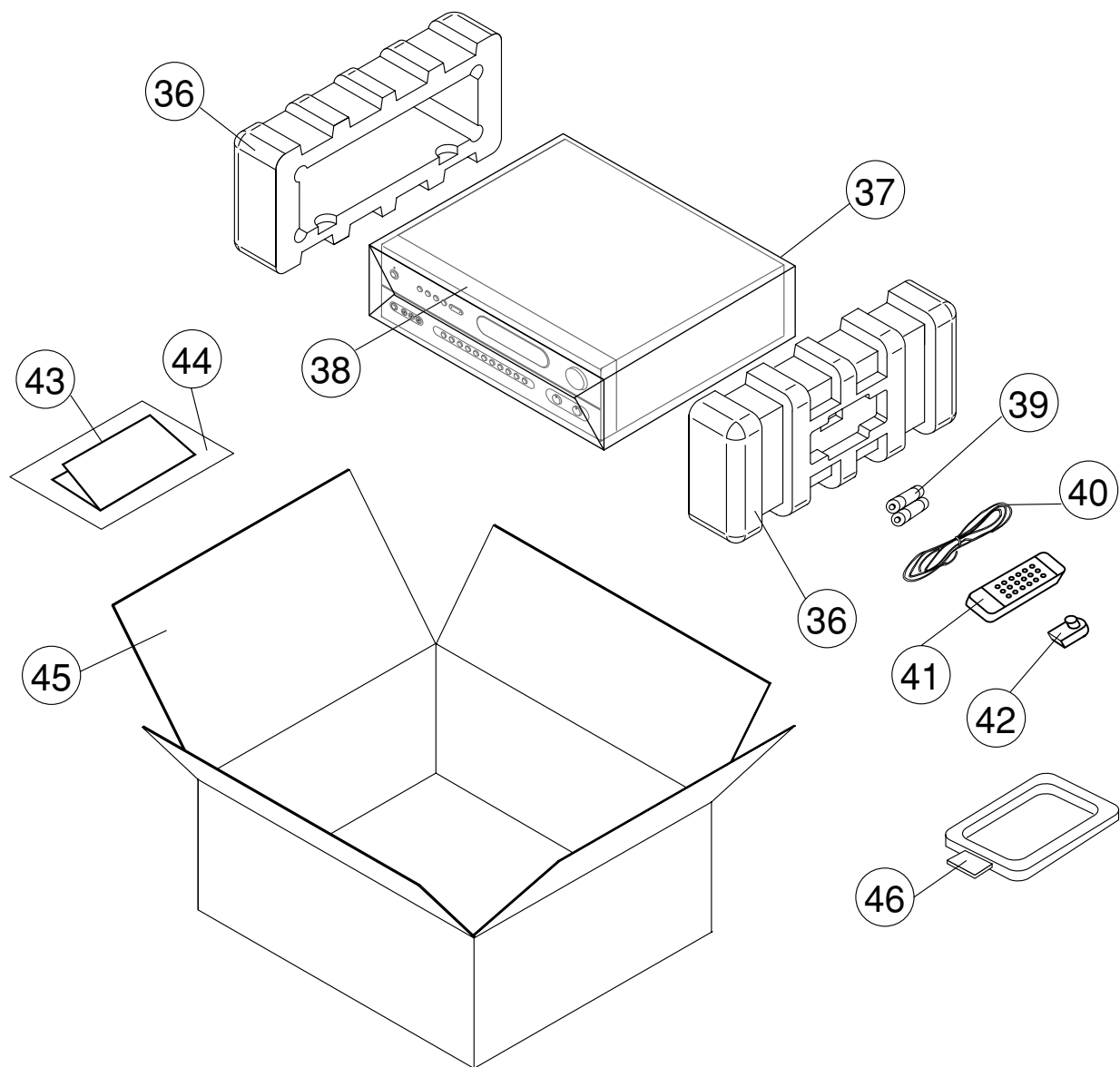
<u>ITEM</u>	<u>Part No.</u>	<u>Description</u>	<u>Qty</u>
0101	1403-5160-1	BOTTOM CHASSIS	1
0102*AH	1403-6360-0	REAR PANEL 120V	1
0102*C	1403-6361-0	REAR PANEL 230V	1
0103	1403-5180-0	TOP COVER	1
0104	1403-5190-2	SUB-FASCIA	1
0105	1403-6350-0	FASCIA	1
0106	4154-0301-0	FRONT INPUT BEZEL	1
0107	4134-9031-0	SURR BOARD BRACKET	1
0108	4134-9041-0	AC3 BOARD BRACKET	1
0109	4134-9051-0	ANGLE BRACKET	2
0110	4134-9061-0	PHONES BRACKET	1
0111	4134-9071-0	PCB MOUNTING BRACKET	5
0112	4154-0311-0	DUMMY CLAMP	1
0113	2444-1601-0	POWER BUTTON GREEN LONG	1
0114	3716-4401-0	WINDOW LENS	1
0115	4154-0321-0	TONE CONTROL LOZENGE	1
0116	4152-4341-0	INPUT BUTTON LOZENGE	1
0118	2444-1801-0	TONE KNOB LONG	2
0119	2444-1901-0	DUO BUTTON	2
0120	2444-1301-1	BUTTON RACKER	1
0121	4154-0091-0	BEZEL RACKER	1
0122	2444-2101-0	INPUT BUTTON	4
0123	4154-0411-0	BEZEL DUO	2
0124	4134-9081-0	VOLUME KNOB SKIN	1
0125	4154-0341-0	VOLUME KNOB CORE	1
0126	4152-4631-0	RUBBER FOOT 14MM HIGH	4
0127	4152-4641-0	CUSHION FOOT	4
0128	4152-4331-0	POWER BUTTON BEZEL	1
0129	4154-0331-0	VIDEO COVER	1
0130	4152-1701-0	LED BEZEL	1
0131	3714-5706-0	LED LENS	1
0132	8900-3040-0	DC FAN 12V 80X80MM	1
0133     ▲	4152-3851-0	SQ. STRAIN RELIEF BUSHING	1
0134*AH     ▲	7009-3100-2	AC CORD 18AWGX2 SPT-2UL/CSA D.INSULATED	1
0134*C     ▲	7009-3110-0	AC CORD SEMKO	1
0136	5400-9051-0	HEATSINK	1
0137	4134-0121-0	HEATSINK MOUNTING BRACKET	2
0138	4152-0451-0	L-BRACKET	4
0139	2600-4008-0973	FLAT WASHER M4X0.8X9.7 BZ	4
0140	2607-4010-0703	SPRING WASHER M4X1X7 BZ	4
0141	2904-4010-3000	MACHINE SCREW 4X10MM(BLK.ZN)	4
0142	2954-3008-3000	TAPPING SCREW 3X8MM B-TITE(BLK.ZN)	34
0143	2842-3367-0	METAL WASHER ID=3.3 OD=6.7	4
0144	2900-4006-3010	M4X0.5PX6MM W/FLAT WASHER	6
0146	2904-3008-0000	M3X8MM B-TITL (YEL.ZN)	38

<b>ITEM</b>	<b>Part No.</b>	<b>Description</b>	<b>Qty</b>
0147	2954-3006-0000	3X6MM B-TITL (YEL.ZN)	3
0148	2954-3008-0000	TAPPING 3X8MM B-TITL (YEL.ZN)	58
0154	2954-2606-3000	SCREW BH 2.6X6 BLACK	23
0162	2904-3006-0000	SCREW M3X6	3
0178	4152-5831-0	PCB SUPPORT 12MM HIGH	1
0180	2904-3010-3000	SCREW M3X10 (BLK)	4
0181	2600-3005-0800	METAL WASHER M3X0.5X8MM ZNC	4
0182	2640-3022-0540	M3 NUT	6
0183	2607-3007-0550	SPRING WASHER	6
0193	2900-3008-3000	SCREW M3X8 PM BZ	2
0194	2954-3006-3000	3X6MM B-TITL	2
0200*AH 	2113-1662-0	AC INLET 2 PIN 15A 125VAC	2
0205	4152-3291-1	FOAM 6X4X1.5T MM	1
0208	4152-1161-0	FOAM RUBBER 10X10X10 BK W/TAPE	2
2118	4152-5741-0	FL HOLDER	1
T752 	1806-2311-0	TRANSFORMER 12VAC	1
T002 	1806-3581-0	TRANSFORMER EI105	1

**NOTE:**

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- <\*C > : European model only.

# PACKING DIAGRAM



ITEM	PART NO.	DESCRIPTION	Q'TY
36	1490-2783-2	POLYFORM ENDCAP	2
37	1497-1072-4	UNIT POLYBAG	1
38	1497-1162-0	FASCIA COVER	1
39	4060-0530-0	BATTERIES	2
40	2107-0661-1	300 OHM T ANTENNA	1
41	8900-9710-1	REMOTE CONTROL HANDSET	1
42*AH	2103-6101-0	RF CONNECTOR PLUG	1
42*C	2103-6201-0	RF CONNECTOR PLUG	1
43-1	4301-4108-1	OWNER'S MANUAL (GB,F,D)	1
43-2	4301-4109-1	OWNER'S MANUAL (E,I,S,P)	1
44	1497-1062-0	MANUAL POLYBAG	1
45	1478-1000-1	CARTON BOX	1
46	2113-1155-0	AM LOOP ANTENNA	1

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# SERVICE MANUAL

## T 751

SURROUND  
SOUND RECEIVER

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