

# SERVICE MANUAL



# T 754

Surround Sound Receiver

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Surround Sound Receiver

# SAFETY INFORMATION

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THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:  
 (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE.  
 (2) THIS DEVICE MUST ACCEPT INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRABLE OPERATION.

**NAD ELECTRONICS INTERNATIONAL**  
 633 GRANITE COURT, PICKERING, ON CANADA L1W 3K1

**MODEL T 753 A/V SURROUND SOUND RECEIVER**

**POWER RATING** 120V 60Hz 6A ~

CUSTOM MANUFACTURED TO NAD SPECIFICATIONS  
 IN THE PEOPLE'S REPUBLIC OF CHINA

**AH VERSION**


**NAD ELECTRONICS INTERNATIONAL**  
 633 GRANITE COURT, PICKERING, ON CANADA L1W 3K1

**MODEL T 753 A/V SURROUND SOUND RECEIVER**

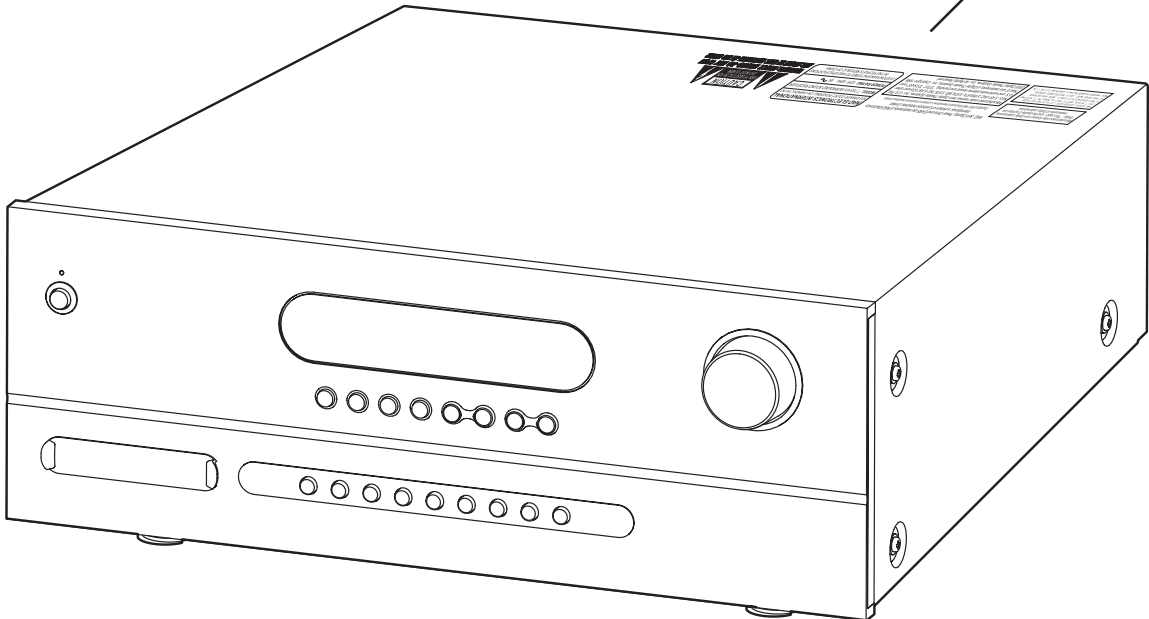
**POWER RATING** 230V 50Hz 3A ~

CUSTOM MANUFACTURED TO NAD SPECIFICATIONS  
 IN THE PEOPLE'S REPUBLIC OF CHINA

**C VERSION**

 **CAUTION**  
 RISK OF ELECTRIC SHOCK  
 DO NOT OPEN

**WARNING: SHOCK HAZARD - DO NOT OPEN**  
**AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR**



# SERVICE SAFETY PRECAUTIONS

## 1. Replacing the fuses

### CAUTION:

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

Reference Designator		Database Part Number	Description
F751*AH	⚠	20-001-0078-90	FUSE TIME-LAG 10A/250VAC 5X20mm UL/CSA 5T
F751*C,CT	⚠	20-001-0069-90	FUSE 800mA 250V TIME LAG LBC 5x20mm 5T UL/CSA/VDE/SEMKO
F752*AH	⚠	20-001-0076-90	FUSE 1.6A 250V TIME LAG LBC 5x20mm 5T UL/CSA/VDE/SEMKO
F752*C,CT	⚠	20-001-0072-90	FUSE TIME-LAG 6.3A/250VAC 5X20mm VDE/UL/CSA 5T

### NOTE:

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

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# SPECIFICATIONS

## POWER AMPLIFIER SECTION

Rated distortion (Rated power level into 8 ohms, THD 20 Hz-20 kHz FL/C/FR)		≤ 0.1 %
(Rated power level into 8 ohms, THD 20 Hz-20 kHz SL/SR/BS)		≤ 0.1 %
Input Sensitivity (ref. 8 ohms, 1 kHz)		296 ± 20 mV
S/N Ratio (A-wtd, 1kHz, 1 W, 8 ohm, SL/SR/BL)		≥ - 75 dB
Frequency Response (20 Hz - 20 kHz)		0 ± 1.0 dB
Channel Balance (1 dB to -40 dB, 1 kHz)		≤ 2 dB
(-41 dB to -50 dB, 1 kHz)		≤ 3 dB
Audio muting at 1 kHz		≥ 55 dB
Subwoofer out, 500 mV in (THD at 2 V O/P, 100 Hz)		≤ 0.5 %
Crosstalk (500 mV input, 10 W, 1 kHz)		≥ -57 dB
<b>Controls</b>		
Bass (at 500 mV in, 1 W out, 100 Hz)		± 10 dB ± 2 dB
Treble (at 500 mV in, 1 W out, 10 kHz)		± 10 dB ± 2 dB

## DOLBY DIGITAL SECTION

Channel Difference (FL ref. Track 30)		± 1.2 dB
Frequency Response at Dolby config.2	SL Track 46 200 - 20 kHz	± 0.8 dB
	SR Track 47 200 - 20 kHz	± 0.8 dB
	C Track 44 200 - 20 kHz	± 0.8 dB
Harmonic Distortion (1 W, Audio LPF, Dolby Congfig 1)	FL Track 65 997 Hz	≤ 0.08 %
	FR Track 67 997 Hz	≤ 0.08 %
	SL Track 68 997 Hz	≤ 0.08 %
	SR Track 69 997 Hz	≤ 0.08 %
	C Track 66 997 Hz	≤ 0.08 %
S/N Ratio (31 for O/P 1 W, Track 35)	CCIR / ARM	≥ 65 dB
	Audio LPF	≥ 70 dB
	A-wtd	≥ 70 dB
Channel Separation (1 W, 20 kHz LPF)	Track 65 997 Hz	≥ 60 dB

## DOLBY PRO LOGIC II SECTION

### **Frequency Response**

I/P mode : L, R : 1 V in, 1 W, Ch L/R	40 Hz	0 ± 2.0 dB
	20 Hz	0 ± 2.0 dB
I/P mode : L=R : 1 V in, 1 W, Ch /L/R	40 Hz	0 ± 2.0 dB
Ch C	20 kHz	0 ± 2.0 dB
I/P mode : L=-R : 1 V in, 1 W, Ch SL/SR	40 Hz	0 ± 2.0 dB
	20 kHz	0 ± 2.0 dB
S/N Ratio (200 mV in, 1 W, A-WTD w/ 1 k 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 (2.2 V in, 1 W, w/ 80 kHz LPF, 1 kHz)		≤ 0.2 %

## **DTS SECTION**

Output Level (Vol 0 dB)	: FL/FR/C/SL/SR Track 6	1 kHz	<b>0.3 ± 1.3 W</b>
Channel Difference (FL ref)	: FL/FR/C/SL/SR Track 6	1 kHz	<b>± 1.0 dB</b>
Harmonic Distortion (Audio Filter)	: FL/FR/C/SL/SR Track 10-14	1 kHz	<b>≤ 0.08 %</b>
Frequency Response (20 Hz to 20 kHz)	Track 26-30		<b>+2/-1.5</b>
Subwoofer Output Level	1 kHz ref at pre-out (FL) Play Track 10, charge to 15		<b>12.5 ± 1.5 dB</b>

## **AM TUNER SECTION**

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

Usable sensitivity	(999/1000 kHz)	<b>≤ 30 dB<math>\mu</math>V</b>
S/N Ratio	(5 mV in)	<b>≥ 38 dB</b>
THD	(5 mV in)	<b>≤ 3 %</b>
IF Rejection	(450 kHz)	<b>≤ 36 dB</b>
Image Rejection	(F+2xIF)	<b>≥ 28 dB</b>
Selectivity		<b>≥ 17 dB</b>
Output		<b>170 -20/+30 mV</b>
Loop sensitivity	(20 dB S/N)	
	999/1000 kHz	<b>≤ 66 dB</b>
	603/600 kHz	<b>≤ 66 dB</b>
	1404/1400 kHz	<b>≤ 66 dB</b>
Frequency Response	(100 - 2.3 kHz, 5 mV)	<b>± 6 dB</b>

## **FM TUNER SECTION**

**\*C**

**\*AH**

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

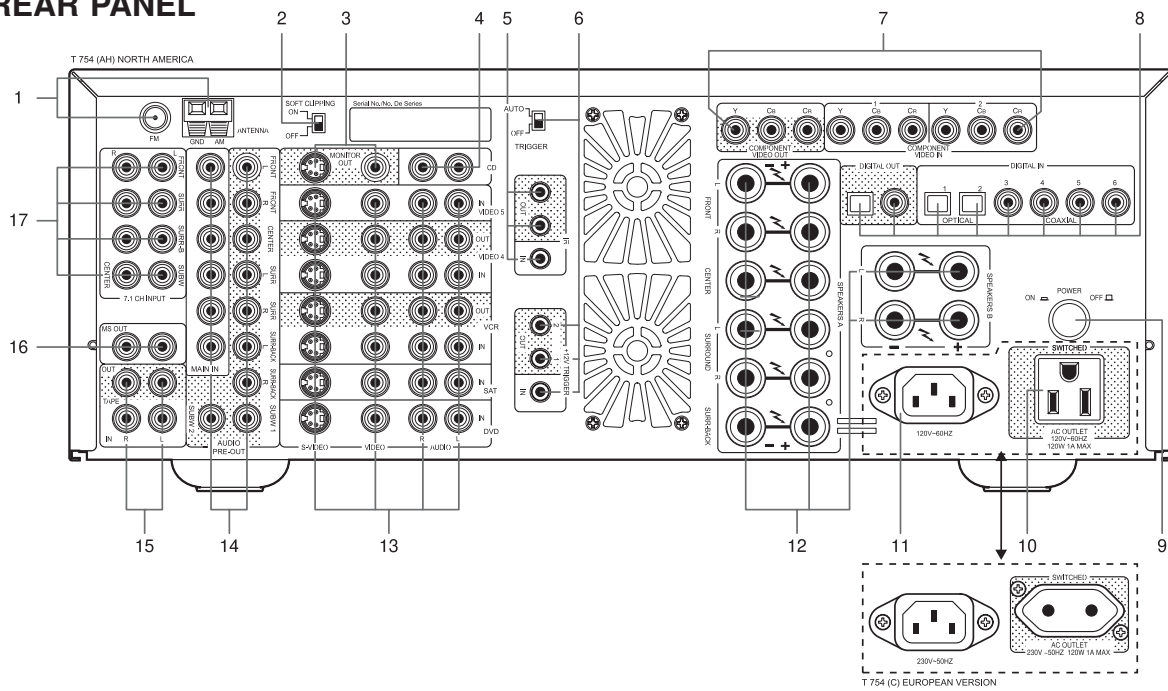
Usable sensitivity	(98 MHz)		<b>≤ 15 dB<math>\mu</math></b>	<b>≤ 15 dB<math>\mu</math>v</b>
S/N Ratio	(60 dB, IHF wtd)	Mono	<b>≥ 63 dB</b>	<b>≥ 63 dB</b>
		Stereo	<b>≥ 63 dB</b>	<b>≥ 63 dB</b>
Frequency Response	(20 Hz - 15 kHz, 60 dB $\mu$ )		<b>0 ± 1.5 dB</b>	<b>0 ± 1.5 dB</b>
Channel Separation	(60 dB $\mu$ )	100 Hz	<b>≥ 30 dB</b>	<b>≥ 30 dB</b>
		1 k	<b>≥ 38 dB</b>	<b>≥ 38 dB</b>
		10 kHz	<b>≥ 30 dB</b>	<b>≥ 30 dB</b>
Alternate Channel Selectivity (40 dB $\mu$ , ± 400 kHz)			<b>≥ 60 dB</b>	<b>≥ 45 dB</b>
Capture Ratio	(40 dB $\mu$ )		<b>≤ 3 dB</b>	<b>≤ 3 dB</b>
AM Suppression (60 dB $\mu$ , 100% Mod. FM, 30% Mod. AM)			<b>≥ 48 dB</b>	<b>≥ 48 dB</b>
Image Rejection	(119.4 MHz)		-	<b>≥ 65 dB</b>
I.F. Rejection	(10.7 MHz)		<b>≥ 78 dB</b>	-
Pilot Suppression	(98 MHz)		<b>≥ 60 dB</b>	<b>≥ 60 dB</b>
THD (60 dB $\mu$ , L=R 75 kHz for AH, 40 kHz Dev for C)		Mono	<b>≤ 0.25 %</b>	<b>≤ 0.25 %</b>
		Stereo	<b>≤ 0.35 %</b>	<b>≤ 0.35 %</b>
Auto-Search Sensitivity		On	<b>≥ 24 dB<math>\mu</math></b>	<b>≥ 24 dB<math>\mu</math></b>
		Off	<b>≤ 15 dB<math>\mu</math></b>	<b>≤ 15 dB<math>\mu</math></b>
RDS decode Sensitivity			<b>≤ 26 dB<math>\mu</math></b>	-

## **PHYSICAL SPECIFICATIONS**

Dimensions (Width x Height x Depth)	<b>435 x 170 x 423 mm</b>
Net Weight	<b>20.50 Kg (45.10 lbs)</b>
Shipping Weight	<b>24.0 Kg (52.80 lbs)</b>

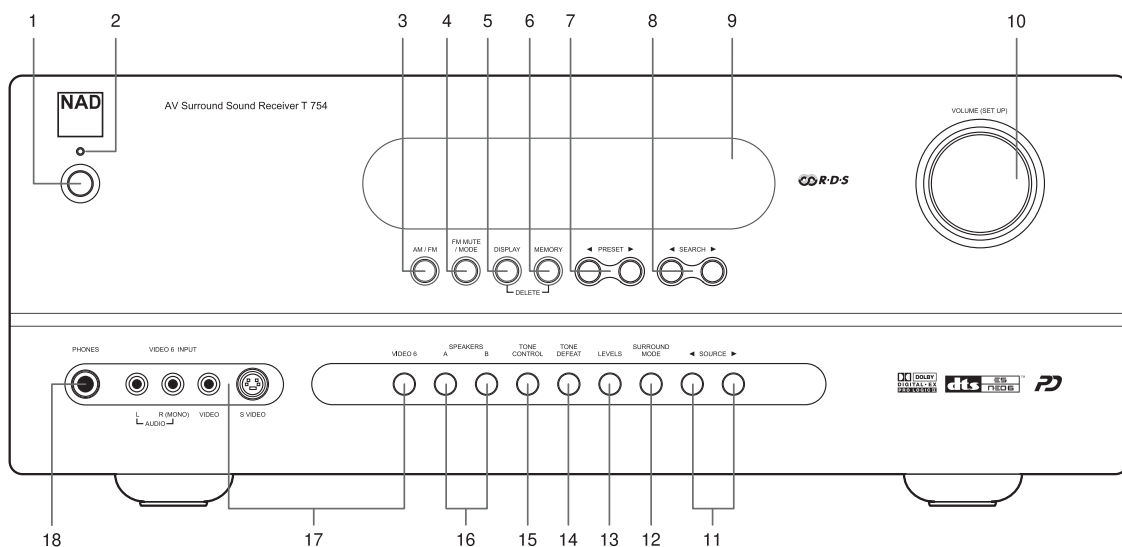
# REAR PANEL / FRONT PANEL VIEW

## REAR PANEL



- |   |  |
|---|--|
| 1. FM & AM ANTENNA                            | 9. POWER SWITCH                              |
| 2. SOFT CLIPPING ON/OFF                       | 10. SWITCHED AC OUTLETS                      |
| 3. MONITOR OUT                                | 11. AC POWER INLET                           |
| 4. CD INPUT                                   | 12. SPEAKERS A & B                           |
| 5. IR INPUT & OUTPUT                          | 13. DVD, SAT, VCR, VIDEO 4 & VIDEO 5         |
| 6. +12V TRIGGER INPUT & OUTPUT                | 14. MAIN IN / AUDIO PRE-OUTS / SUBWOOFER OUT |
| 7. COMPONENT VIDEO IN & COMPONENT VIDEO OUT   | 15. TAPE INPUT & OUTPUT                      |
| 8. DIGITAL AUDIO INPUT & DIGITAL AUDIO OUTPUT | 16. MS OUT (MULTISOURCE OUT)                 |
|   | 17. 7.1 CH. INPUTS                           |

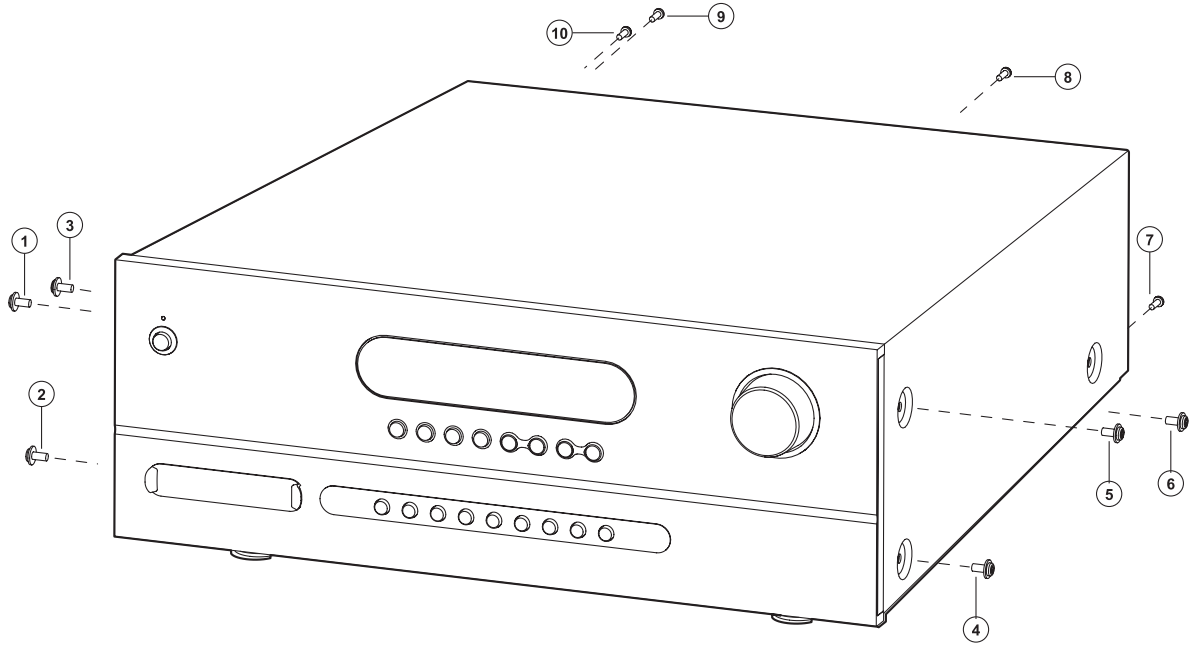
## FRONT PANEL



- |                   |                      |                    |
|-------------------|----------------------|--------------------|
| 1. STANDBY SWITCH | 7. PRESET DOWN / UP  | 13. LEVELS         |
| 2. STANDBY LED    | 8. SEARCH DOWN / UP  | 14. TONE DEFEAT    |
| 3. AM / FM        | 9. VFL DISPLAY       | 15. TONE CONTROLS  |
| 4. FM MUTE / MODE | 10. VOLUME (SETUP)   | 16. SPEAKERS A & B |
| 5. DISPLAY        | 11. SOURCE DOWN / UP | 17. VIDEO 6 INPUT  |
| 6. MEMORY         | 12. SURROUND MODE    | 18. PHONES         |

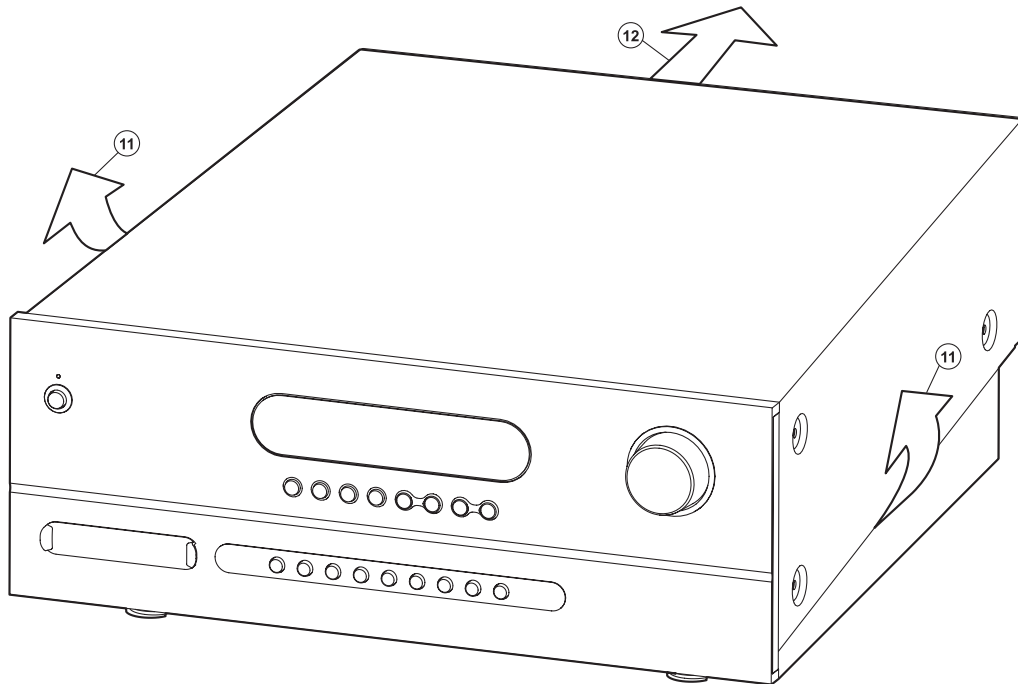
# DISASSEMBLY INSTRUCTIONS

1. Remove machine screws M4.0 x 8.0 (1 to 6) from the side panels.  
Remove tapping screw 3.0 x 8.0 (7 to 10) from the back panel.  
Refer to **Figure No. 1**.



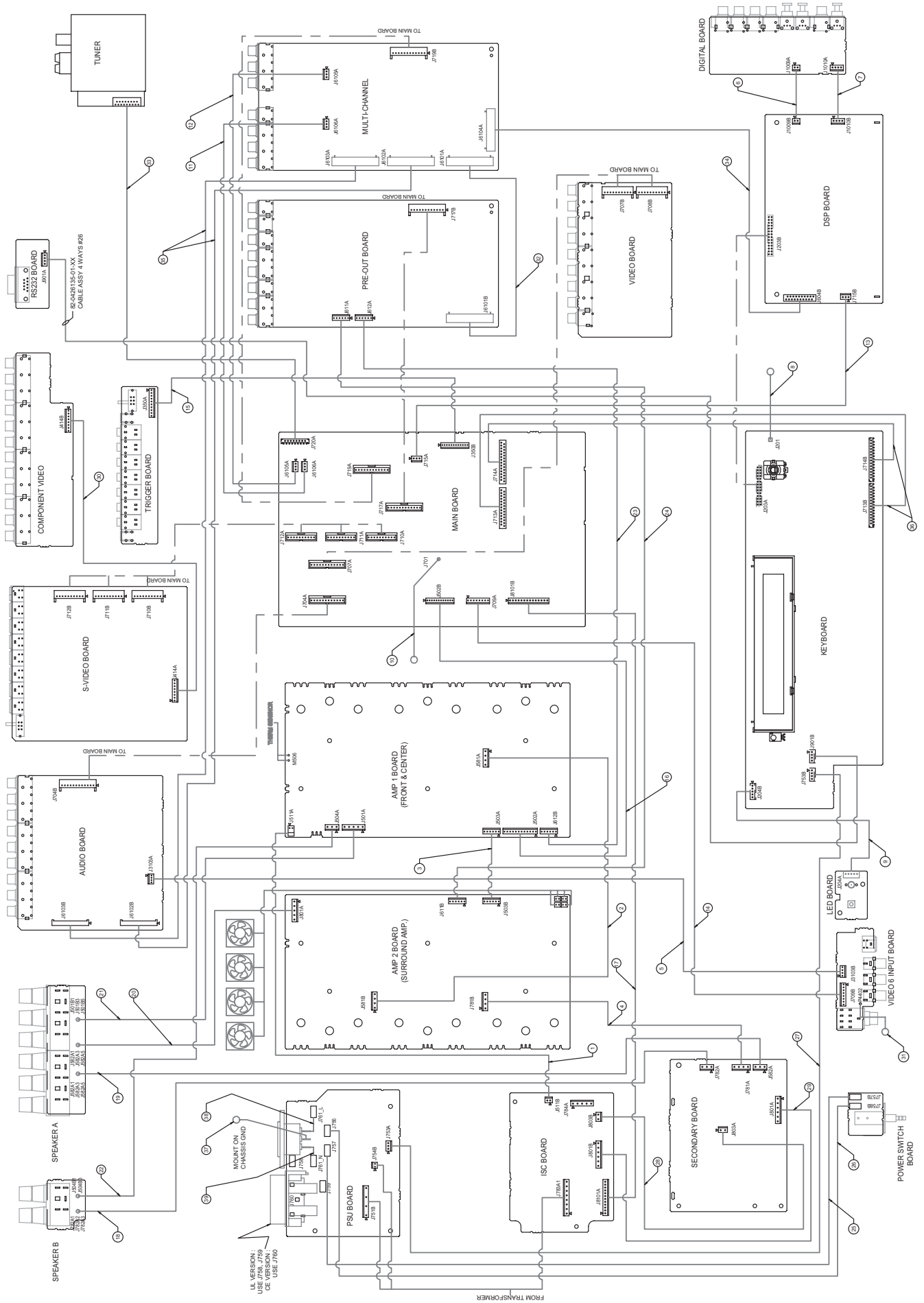
**Figure No. 1**

2. Pull both sides of the TOP COVER slightly outwards **11** and tilt approx. 35 ° and then remove in the direction as indicated by the arrow **12**. Refer to **Figure No. 2**.



**Figure No. 2**

# WIRING DIAGRAM



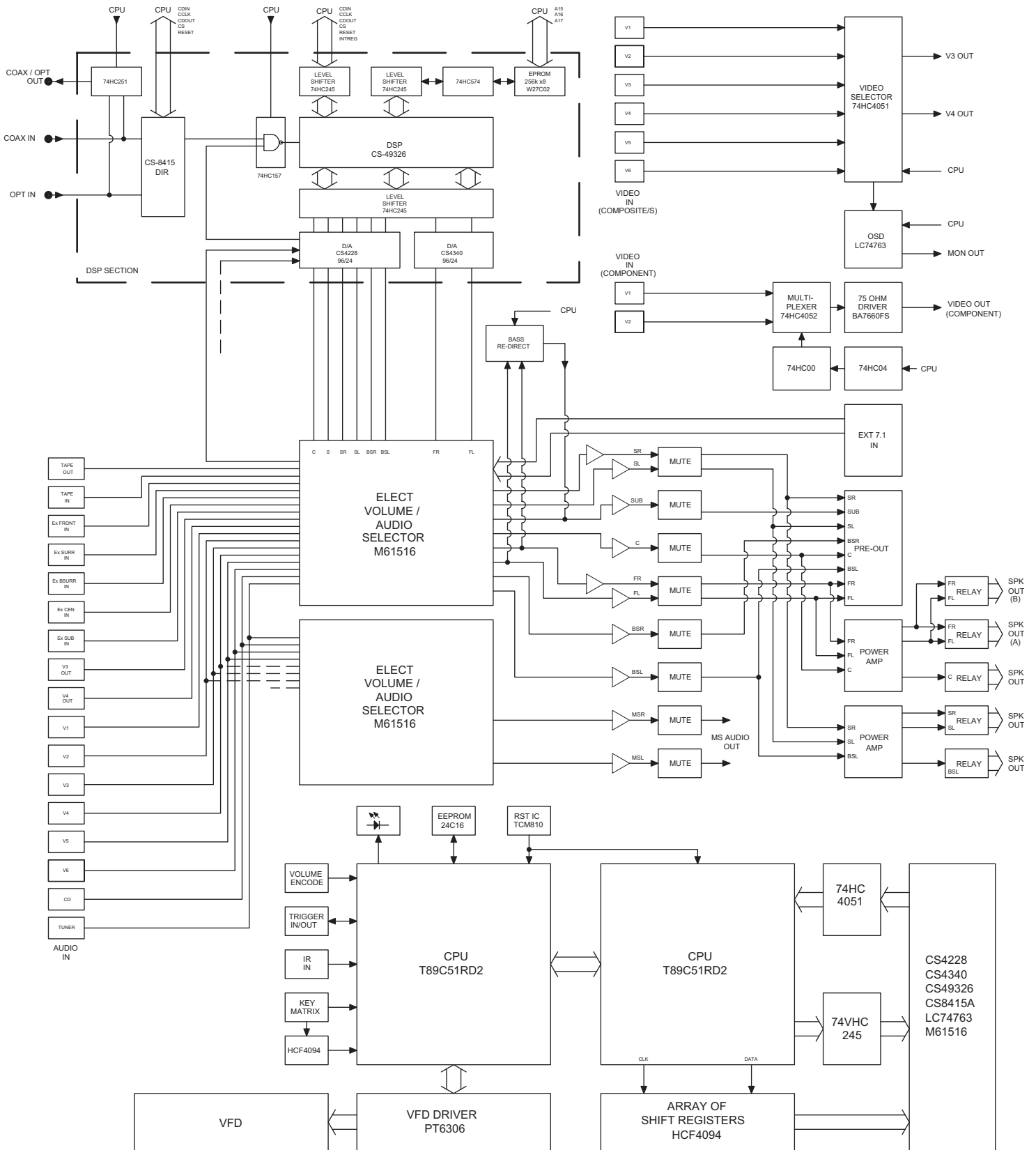


## WIRING DIAGRAM PARTS LIST

Item	Database Part Number	Description	Remark
1	17-012-2986-90	CABLE ASSY 2 WAYS AWG=26 2.5P UL2468 L=440mm	AMP1 BD-J511A
2	17-012-2987-90	CABLE ASSY 4 WAYS AWG=18 3.96P UL1007 L=420mm	AMP1 BD-J581A
3	17-012-2988-90	CABLE ASSY 6 WAYS AWG=26 2.5P UL1007 L=320mm	AMP1 BD-J503A
4	17-012-2989-90	CABLE ASSY 4 WAYS AWG=18 3.96P UL1007 L=200mm REV.B	AMP2 BD-J781B
5	17-012-2966-90	CABLE ASSY 4 WAYS AWG26 2.5P UL1533 L=450MM	AUDIO BD- J3103A
6	17-012-2957-90	CABLE ASSY 2 WAYS AWG=26 2.5P UL1533 L=540mm	DIGIT BD- J1009A
7	17-012-2990-90	CABLE ASSY 4 WAYS AWG=26 2.5P UL2468 L=540mm	DIGITAL BD- J1010A
8	17-012-2956-90	CABLE ASSY 1 WAY AWG18 UL1007 BLACK L=100mm W/ RING TERMINAL	KEYBOARD- J201
9	17-012-3404-90	CABLE ASSY 5 WAYS AWG26 2.5P UL1007 L=160mm	LED BD-J204A
10	17-012-2991-90	CABLE ASSY 1 WAY AWG=18 UL1007 BLACK L=360mm W/ RING TERMINAL	MAIN BD-J701
11	17-012-2963-90	CABLE ASSY 3 WAYS AWG=26 2.5P L=110mm	MAIN BD- J6106B
12	17-012-2992-90	CABLE ASSY 3 WAYS AWG=26 2.5P L=60mm	MAIN BD- J6105B
13	17-012-2964-90	CABLE ASSY 3 WAYS AWG26X2C UL2547 L=210mm	MAIN BD-J715A
14	17-012-2974-90	CABLE ASSY 8 WAYS AWG=26X3C L=480mm	MAIN BD-J709A
15	17-012-2993-90	CABLE ASSY 10 WAYS AWG26 2.5P UL1007 L=460mm	MA BD-J350B
16	17-012-2977-90	CABLE ASSY 12 WAYS AWG26 2.5P UL2468 L=230mm	MA BD-J502B
17	17-012-2994-90	CABLE ASSY 14 WAYS #26 2.5P UL1007 L=540mm	MA BD-J8101B
18	17-012-2960-90	CABLE ASSY 3 WAYS AWG=18 3.96P UL1015 L=320mm	SPK BD-J782B1, J782B2,J782B3
19	17-012-2995-90	CABLE ASSY 3 WAYS AWG=18 3.96P UL1015 L=350mm	SPK BD-J582B1, J582B2,J582B3
20	17-012-2996-90	CABLE ASSY 5 WAYS AWG=18 3.96P UL1007 L=250mm (V/BL/Y)	SPK BD-J801B1, J801B3,J801B5
21	17-012-2997-90	CABLE ASSY 5 WAYS AWG=18 3.96P UL1007 L=120mm (BR/R/O)	SPK BD-J501B1, J501B3,J501B5
22	17-012-2998-90	CABLE ASSY 3 WAYS AWG=18 3.96P UL1015 L=240mm	SPK BD-J504B1, J504B3
23	17-012-2972-90	CABEL ASSY 6 WAYS AWG=26 2.5P UL1533X1C L=350mm	PO BD-J612A

Item	Database Part Number	Description	Remark
24	17-012-2999-90	CABLE ASSY 6 WAYS AWG=26 2.5P UL 1533X1C L=540mm	PO BD-J611A
25	17-012-2948-90	CABLE ASSY 1 WAY AWG=16 UL1672 BROWN L=100mm	PS BD-J757
26	17-012-2874-90	CABLE ASSY 1 WAY AWG=16 UL1672 BLUE L=100mm	PS BD-J756
27	17-012-2965-90	CABLE ASSY 4 WAYS AWG26 2.5P UL2468 L=400mm	PS BD-J753A
28	17-012-3000-90	CABLE ASSY 2 WAYS AWG=18 UL1007 L=170MM	SE BD-J803A
29	17-012-3001-90	CABLE ASSY 6 WAYS #18 3.96P UL1007 L=150MM	SE BD-J801A
30	17-012-2973-90	CABLE ASSY 8 WAYS AWG=26 2.5P UL1007 L=380mm	SV BD-J414A
31	17-012-2956-90	CABLE ASSY 1 WAY AWG18 UL1007 BLACK L=100mm W/ RING TERMINAL	V6 BD-P4402
32	17-010-0032-90	FFC CABLE 30 PINS P1.25 L=70mm W/SHIELD	J601C
33	17-010-0033-90	FFC CABLE 17 PINS P1.25 L=200mm W/ SHIELD	J720C
34	17-010-0038-90	FFC CABLE 20 PINS P1.25 L=160mm W/ SHIELD	J604C
35	17-010-0039-90	FFC CABLE 28 PINS P1.25 L=170mm W/ SHIELD	J602C,J603C
36	17-010-0040-90	FFC CABLE 30 PINS P1.25 L=220mm W/ SHIELD	J713C,J714C
37	17-012-2875-90	CABLE ASSY 1 WAY AWG=16 UL 1015 GREEN/YELLOW L=100mm	1-CHASSIS GND
38	17-012-2948-90	CABLE ASSY 1 WAY AWG=16 UL1672 BROWN L=100mm	1-INLET/PSU.BD (L),J759
39	17-012-2874-90	CABLE ASSY 1 WAY AWG=16 UL1672 BLUE L=100mm	1-INLET/ PSU.BD,J758

# BLOCK DIAGRAM

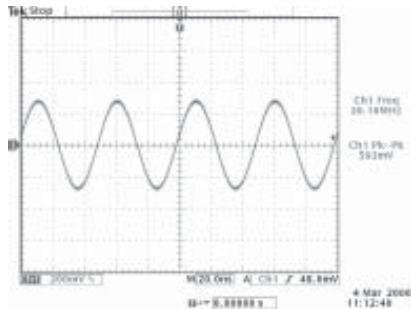


# SPECIAL FUNCTION

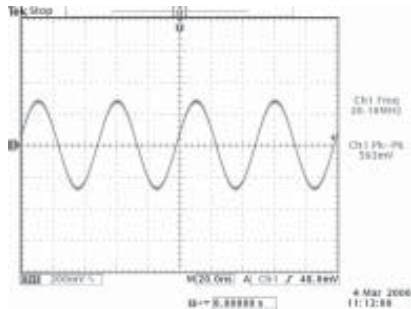
FEATURE	KEYS PRESS ON FRONT PANEL
RESET FOR AH VERSION	VIDEO 6 + SOURCE UP
RESET FOR C VERSION	VIDEO 6 + SOURCE DOWN
NTSC / PAL SELECTION	VIDEO + MEMORY
VFD ALL DISPLAY	AUDIO 6 + TONE DEFEAT
AM FREQ. STEP	AM/FM + FM MUTE

## DETAILS & WAVEFORMS ON SYSTEM TEST & DEBUGGING

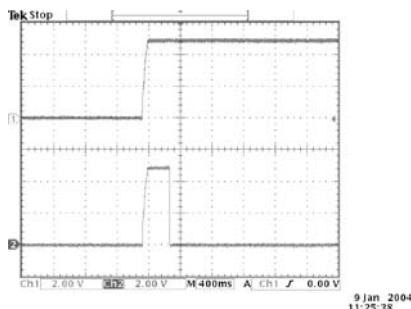
M6759(U202) main clock is at 20MHz(X202)



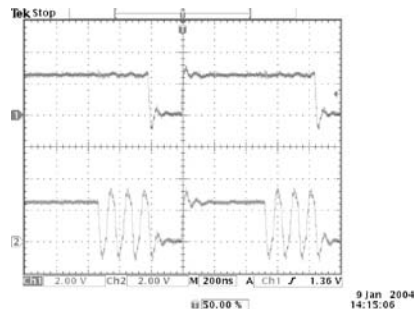
M6759(U201) main clock is at 20MHz(X201)



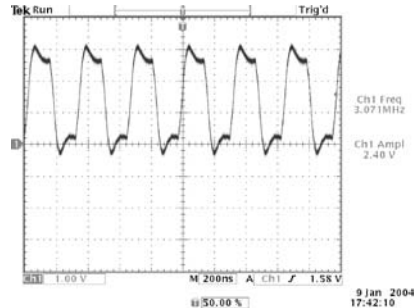
UPPER - +5V supply to KEYBOARD when power up  
LOWER - RESET line (TCM810LENB713) when power up



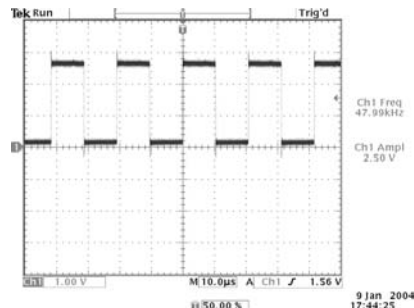
UPPER - OUTPUT ENABLE(pin 24) of EPROM (W27C02) when changing SURROUND MODES  
LOWER - CHIP ENABLE(pin 22) of EPROM (W27C02) when changing SURROUND MODES



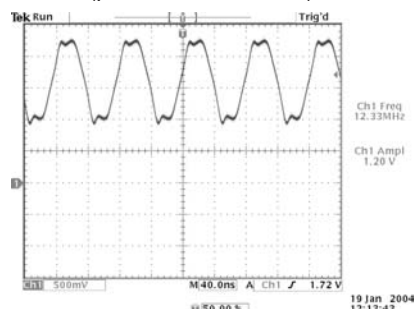
SCLK (pin 43 of CS49326)



LRCLK (pin 42 of CS49326)



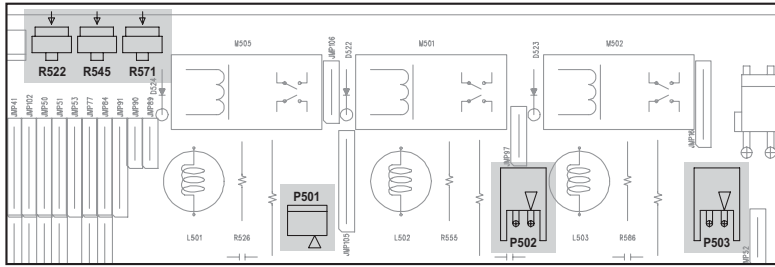
MCLK (pin 30 of CS49326)



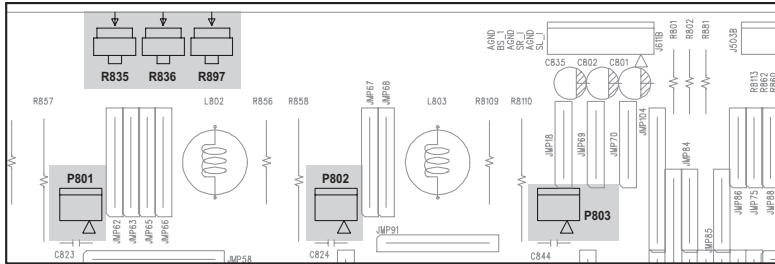
**NOTE:** The waveforms are based on software version V2.10.

# ADJUSTMENT POINT DIAGRAM

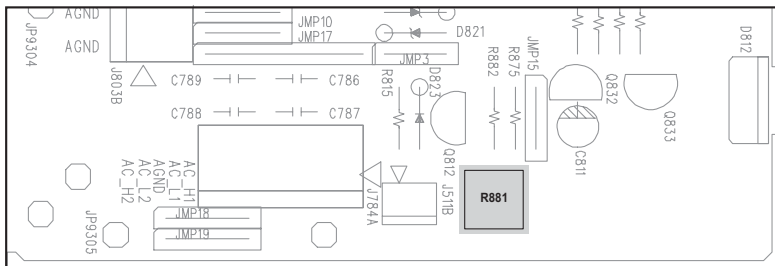
## FRONT / CENTER AMPLIFIER BOARD



## SURROUND AMPLIFIER BOARD



## SECONDARY / ISC BOARD



# AMPLIFIER ADJUSTMENT

## Idle Current

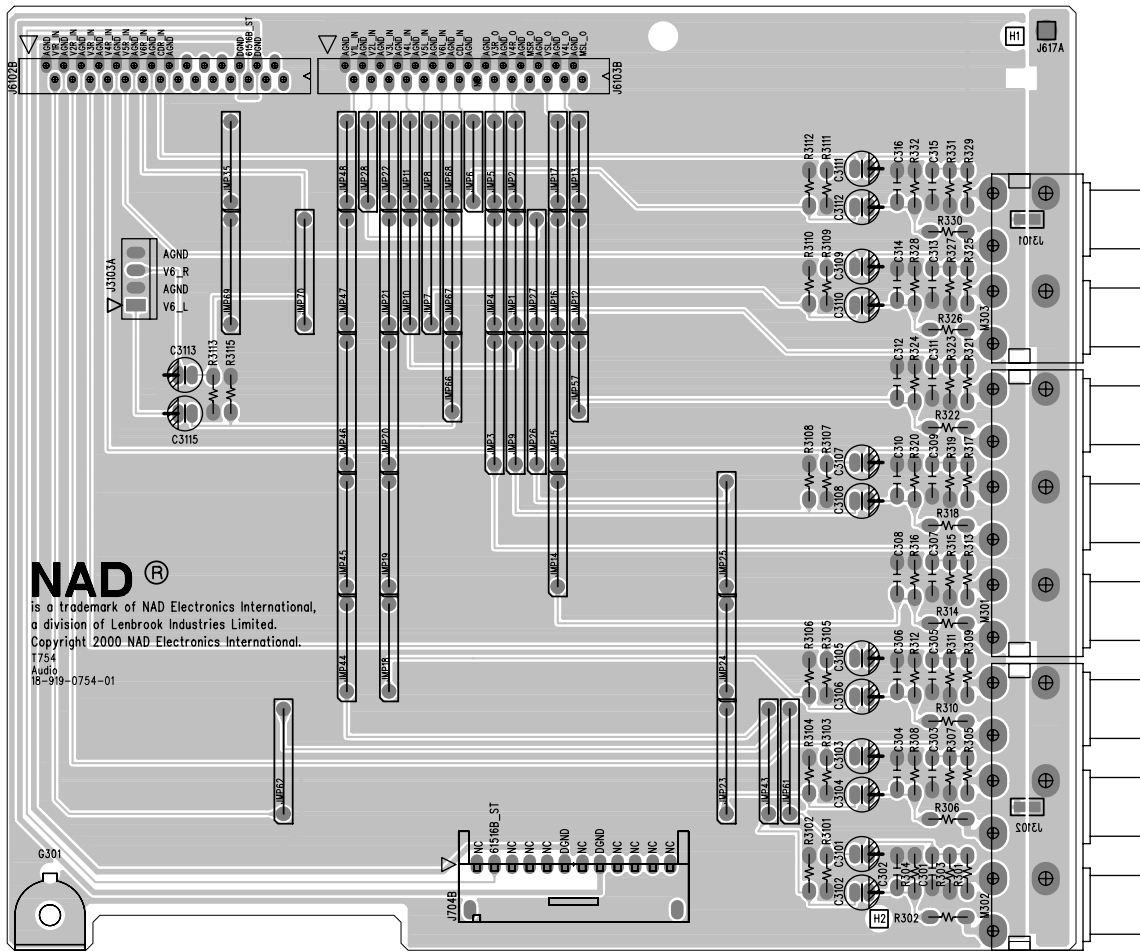
1. Rotate R522 fully clockwise.
2. Connect DC millivoltmeter to P501 (i.e. Across half of R523, 0.22 Ohm resistor).
3. Turn on the unit.
4. Adjust R522 for 1mV reading on voltmeter.
5. Leave power on for at least 5 min, and check for idle current again.
6. Repeat for other channels.

CHANNEL	JUMPER	VR
FL	P501	R522
FR	P502	R545
C	P503	R571
SL	P801	R835
SR	P802	R836
BS	P803	R897

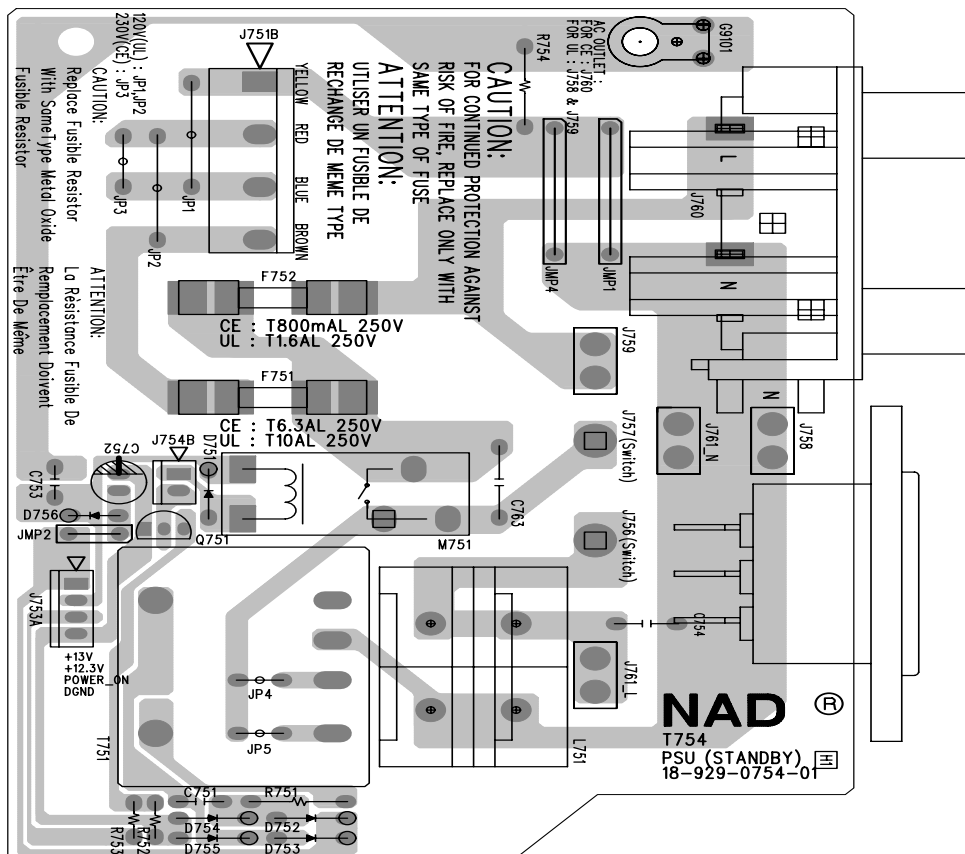
## ISC Sensitivity

1. Connect 8 ohm loading to all channels.
2. Rotate R881 fully clockwise.
3. Load all channels at full power using 1kHz sine wave.
4. At this time, monitor the THD of the SL,SR,BS output. Clipping should occur before full power achieved.
5. Rotate R834 counter-clockwise slowly until the THD just below 0.1%.
6. Repeat step 2-5 for R834 but monitor FL, FR & Center output.
7. The procedure is finish at this step.
8. Load all channels at full power using 1kHz sine wave with 4 ohm load.
9. The clipping power(at THD 0.1%) should less than 85W.

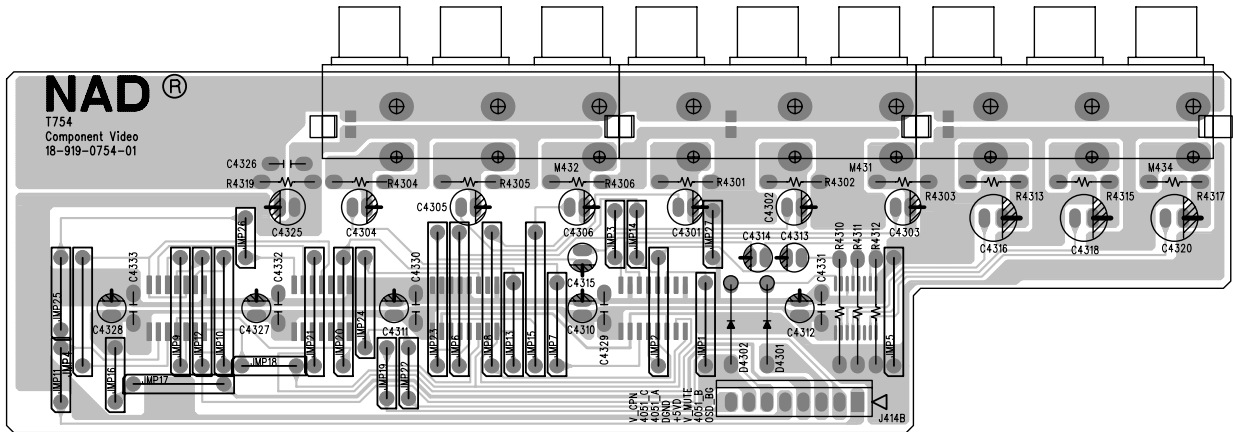
# PCB LAYOUT AUDIO BOARD



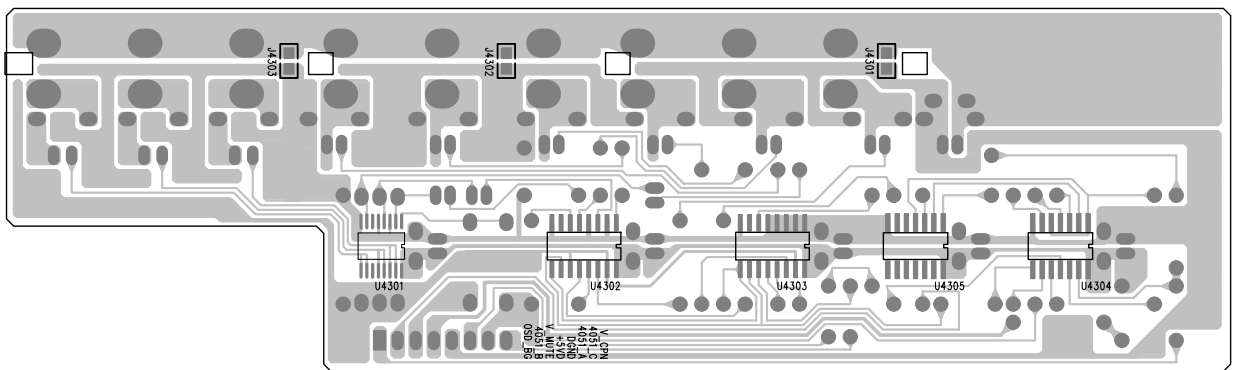
# POWER SUPPLY (STANDBY) BOARD



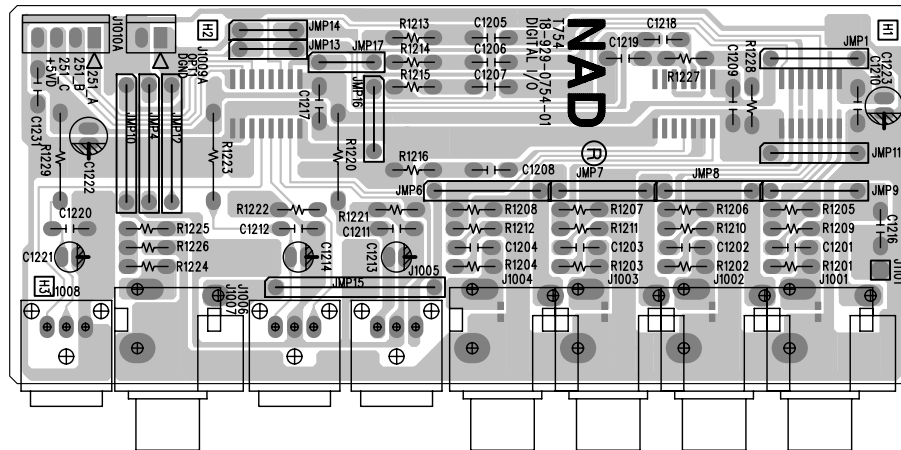
## COMPONENT VIDEO BOARD - COMPONENT SIDE



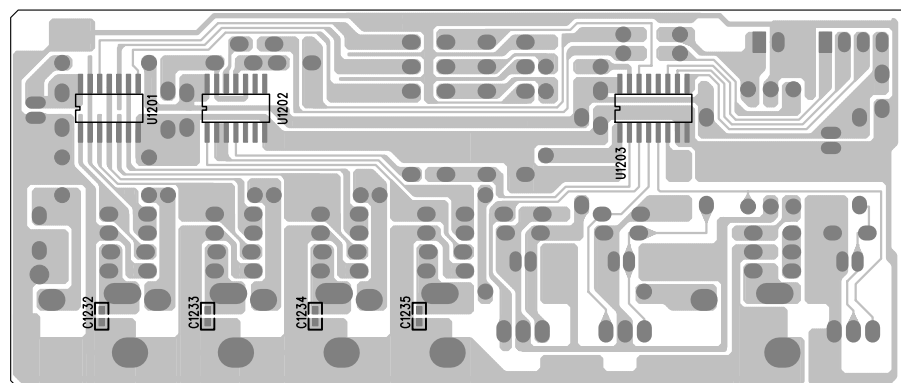
## COMPONENT VIDEO BOARD - COPPER SIDE



## DIGITAL BOARD - COMPONENT SIDE SIDE



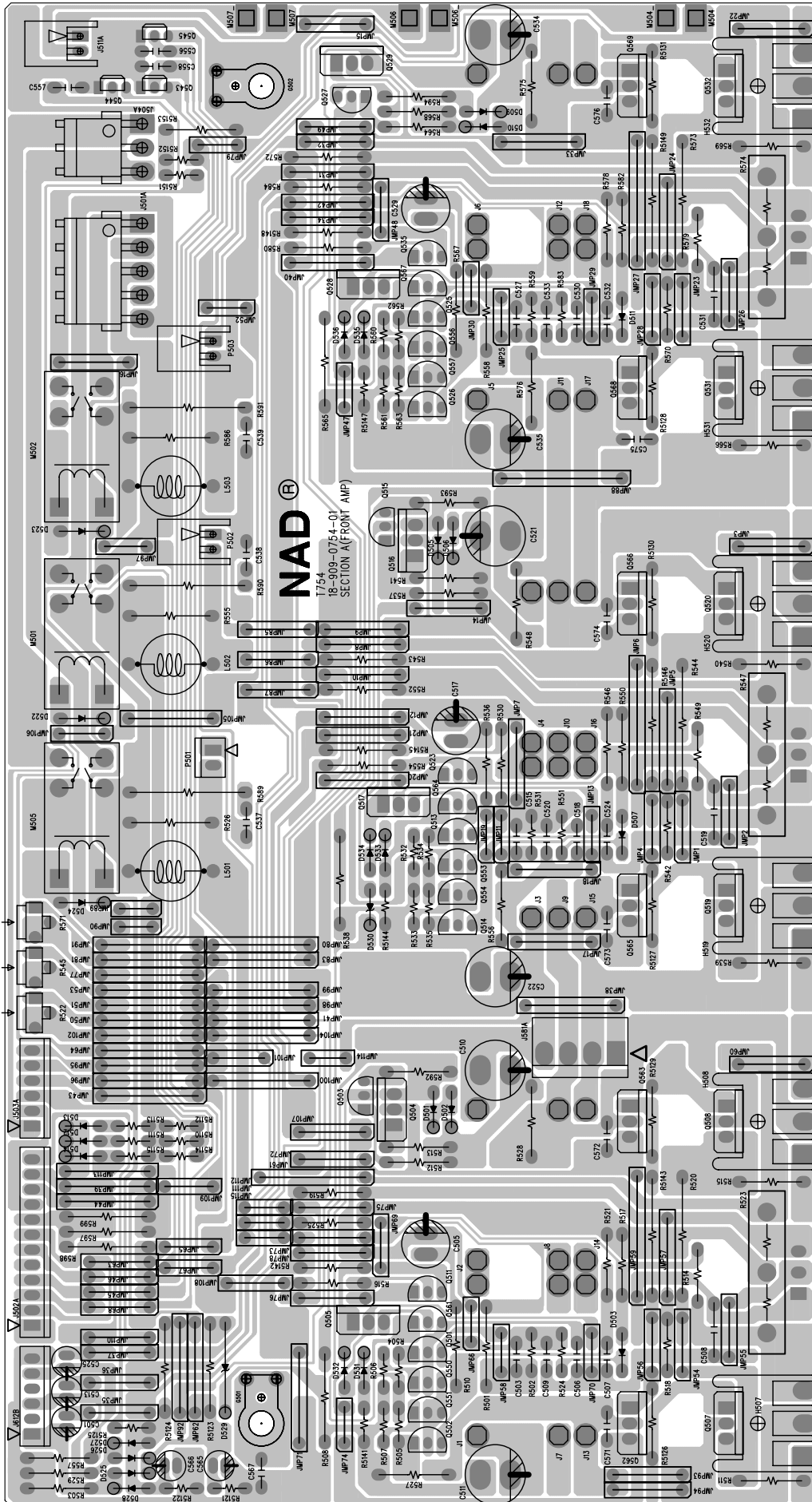
## DIGITAL BOARD - COPPER SIDE



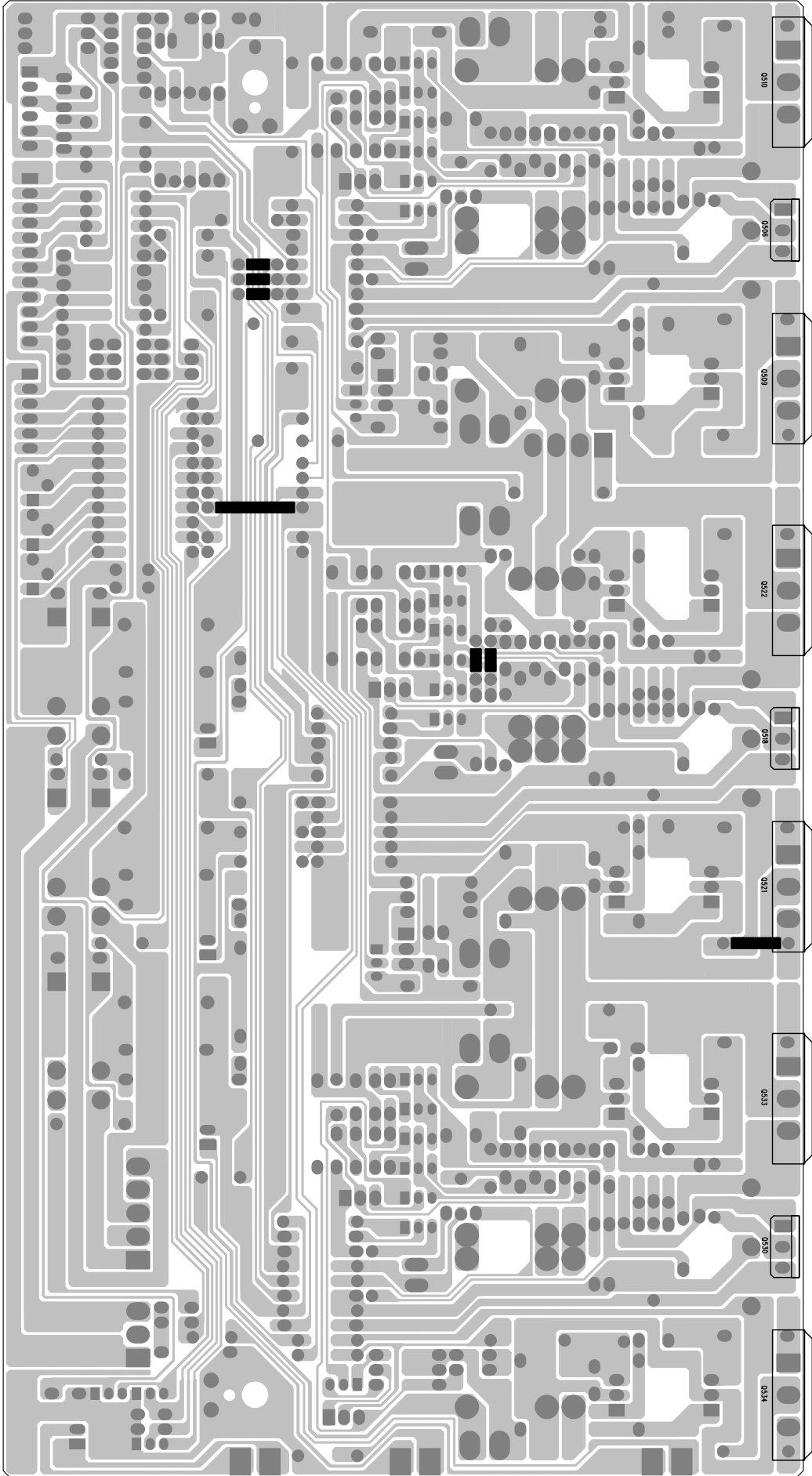




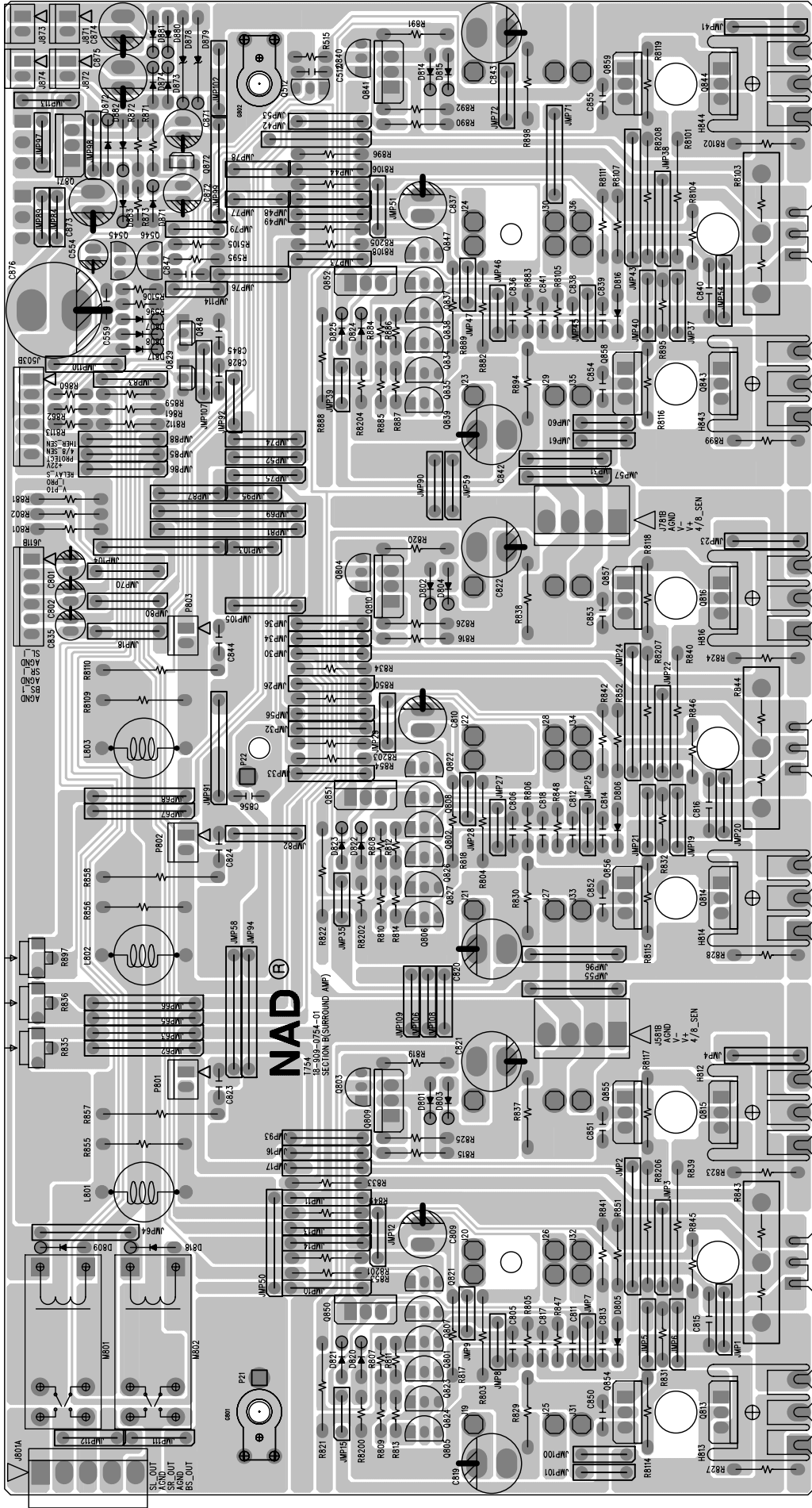
# FRONT / CENTER AMPLIFIER BOARD - COMPONENT SIDE



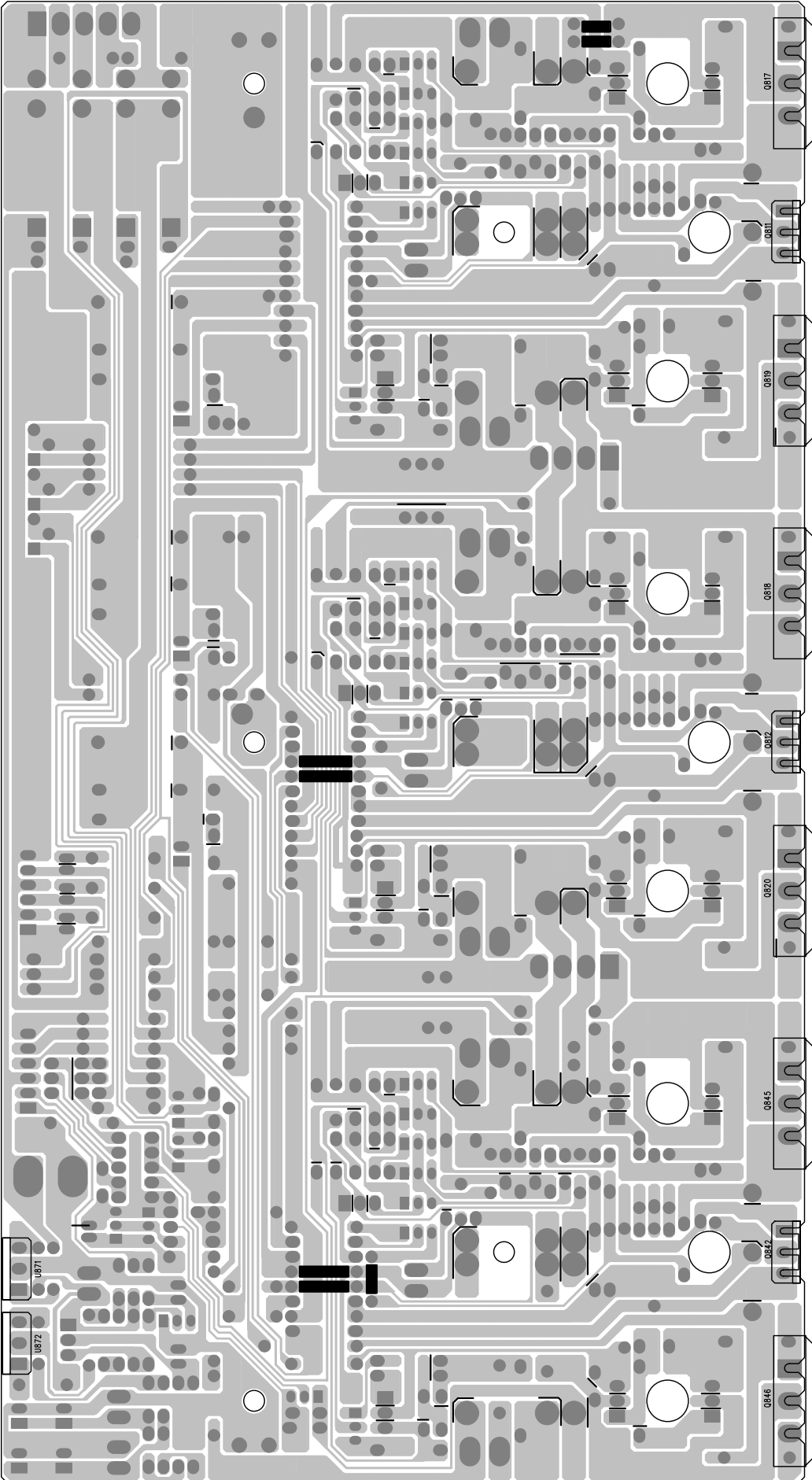
FRONT / CENTER AMPLIFIER BOARD - COPPER SIDE



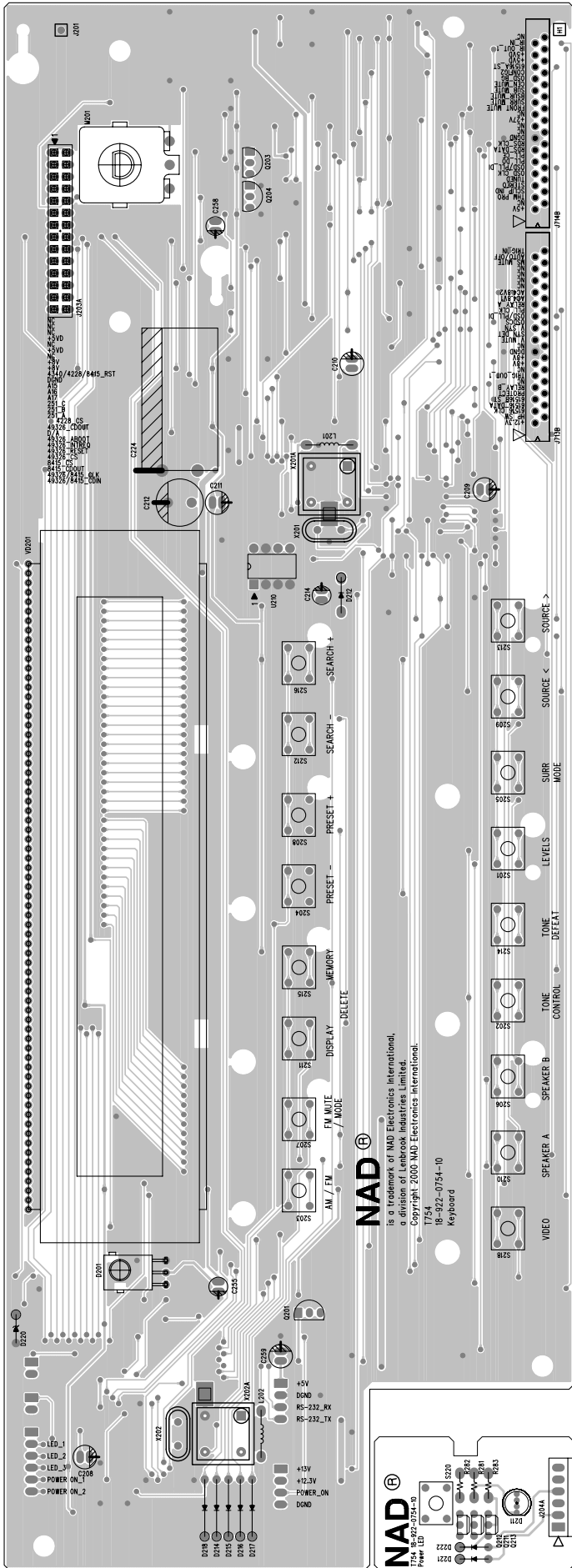
**SURROUND AMPLIFIER BOARD - COMPONENT SIDE**



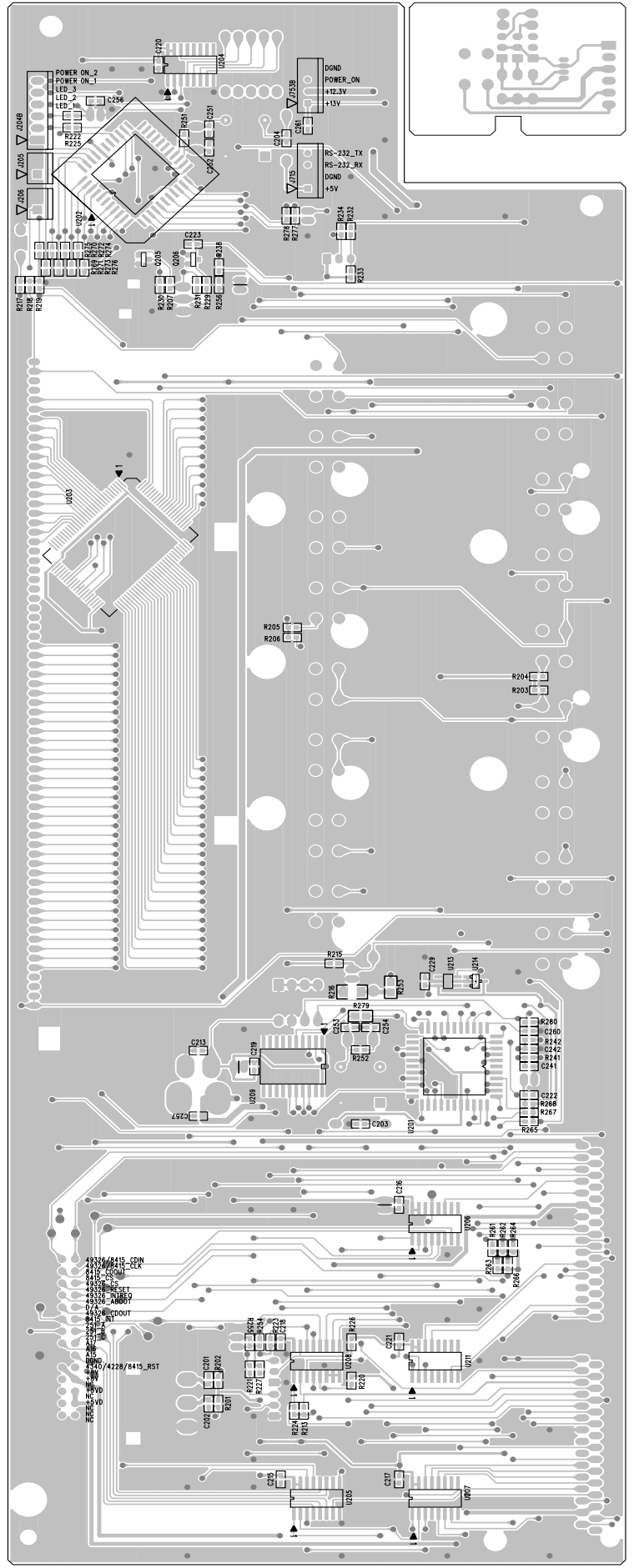
**SURROUND AMPLIFIER BOARD - COPPER SIDE**



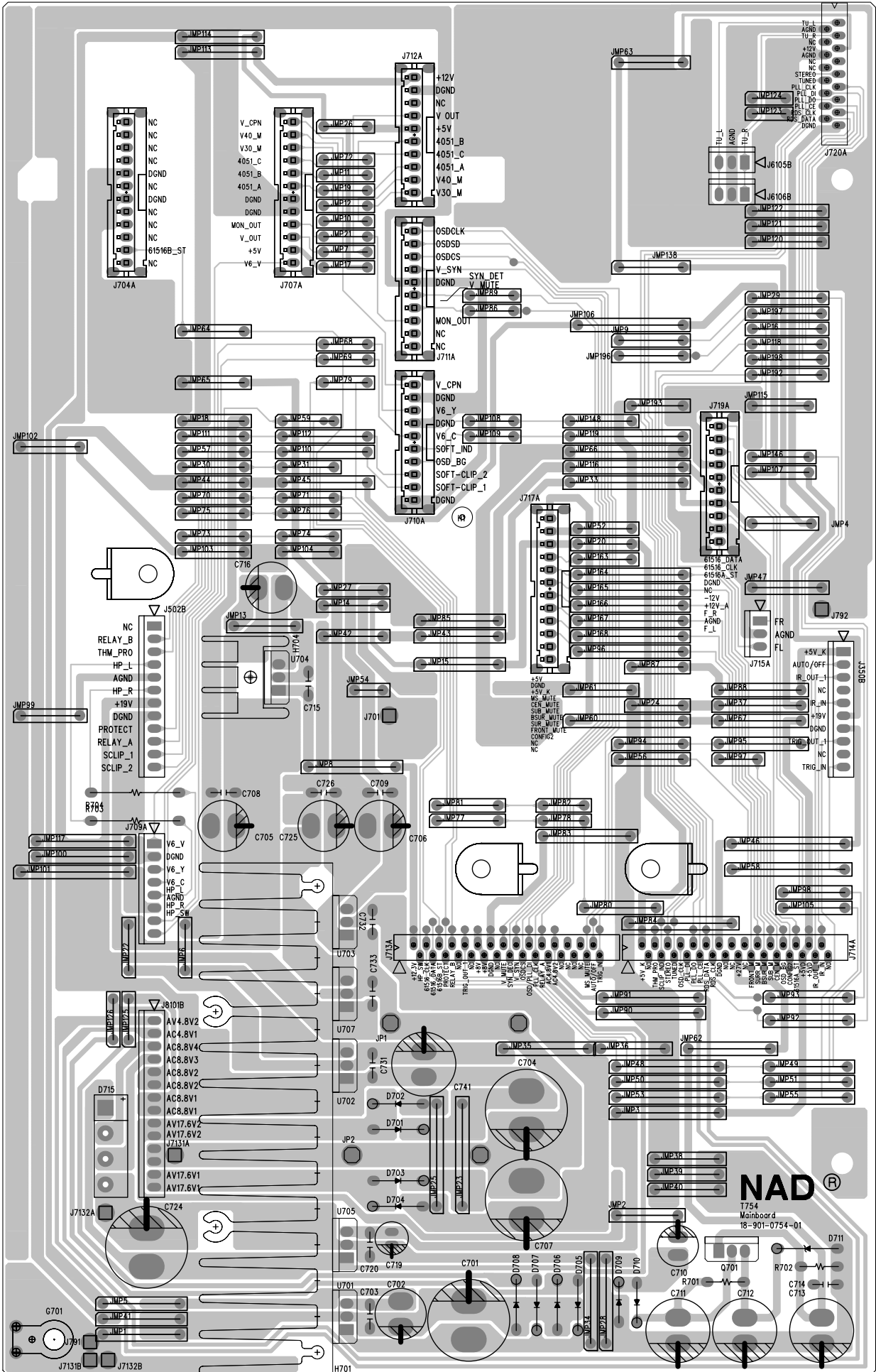
# KEY BOARD/POWER SWITCH - COMPONENT SIDE



# KEY BOARD/POWER SWITCH - COPPER SIDE

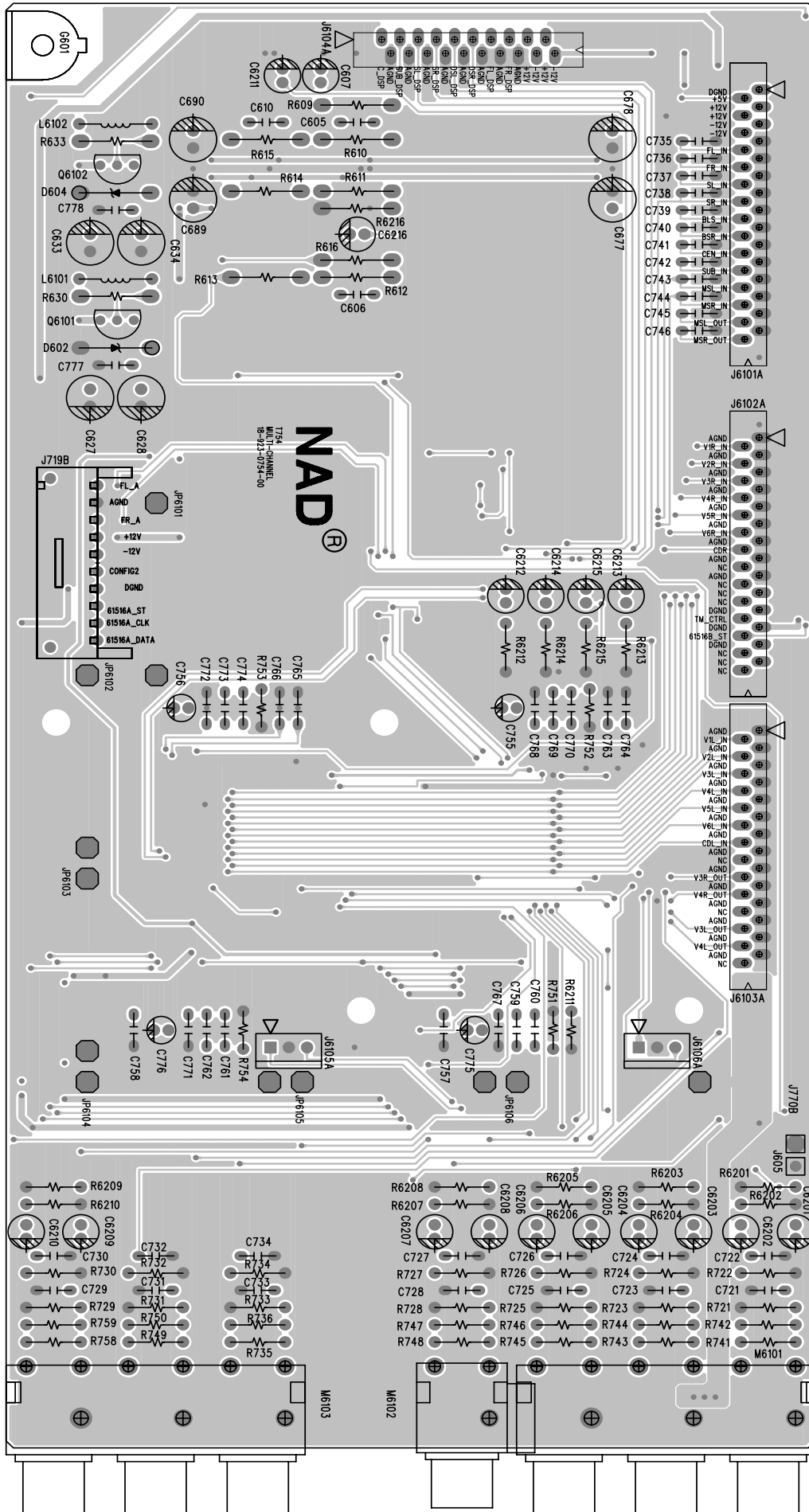


# MAIN BOARD

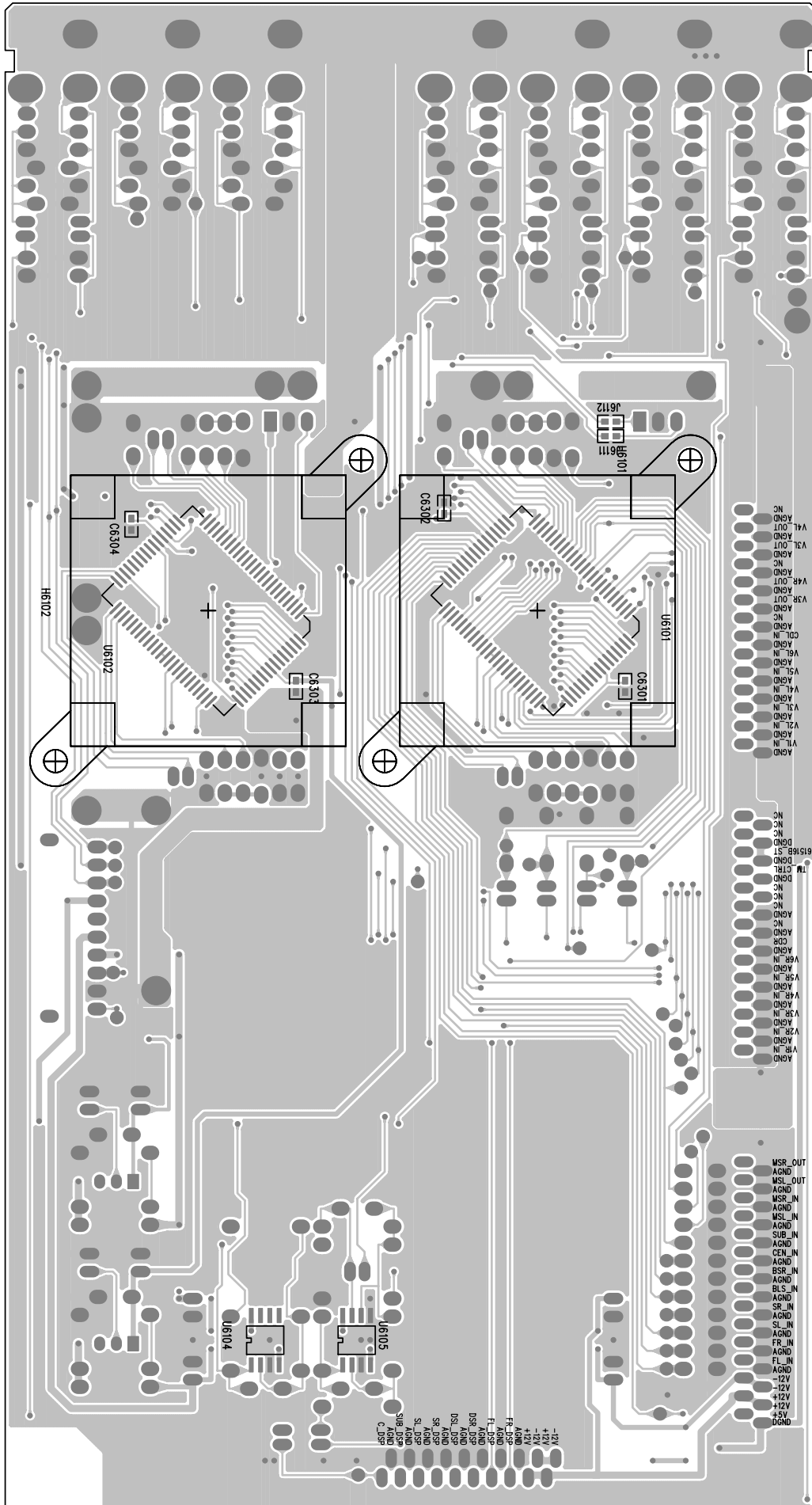


**NAD®**  
 T754  
 Mainboard  
 18-901-0754-01

# MULTI-CHANNEL BOARD - COMPONENT SIDE

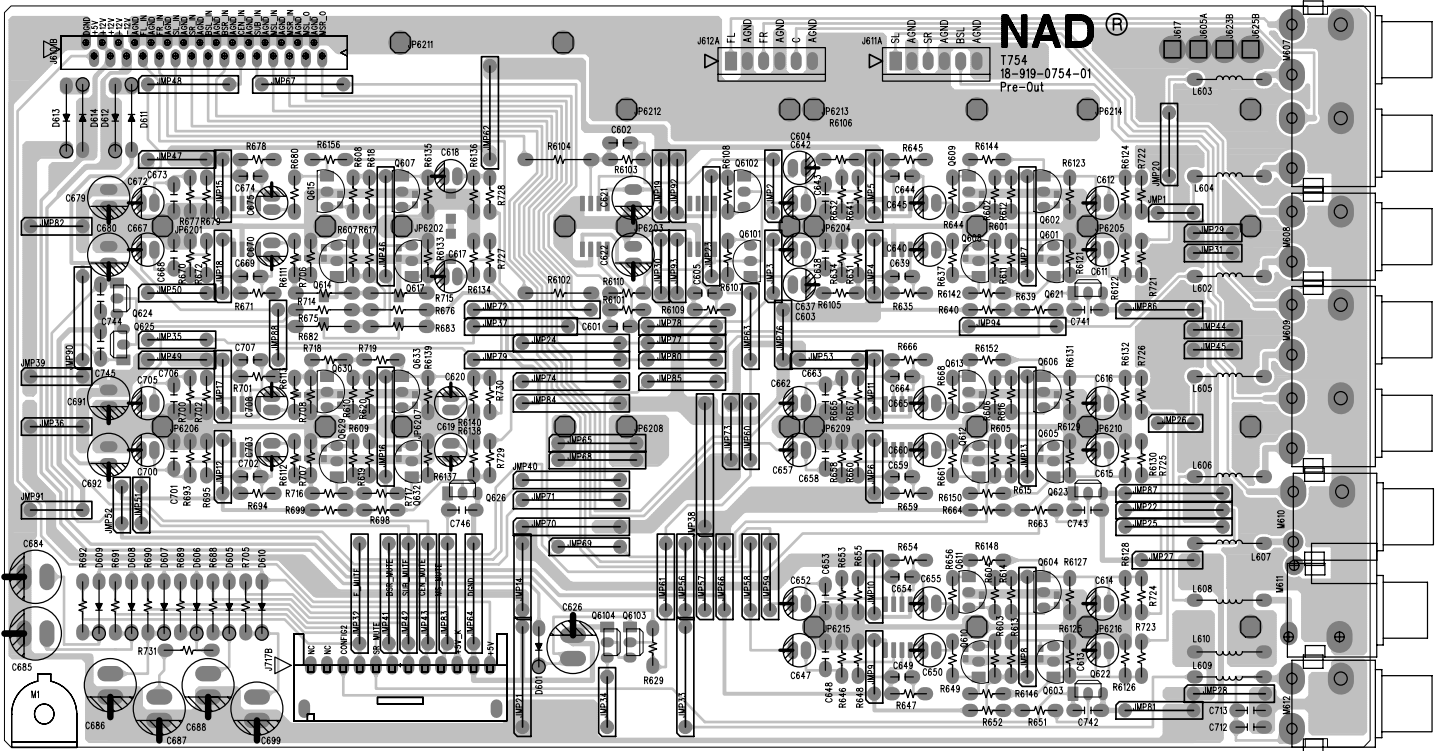


# MULTI-CHANNEL BOARD - COPPER SIDE

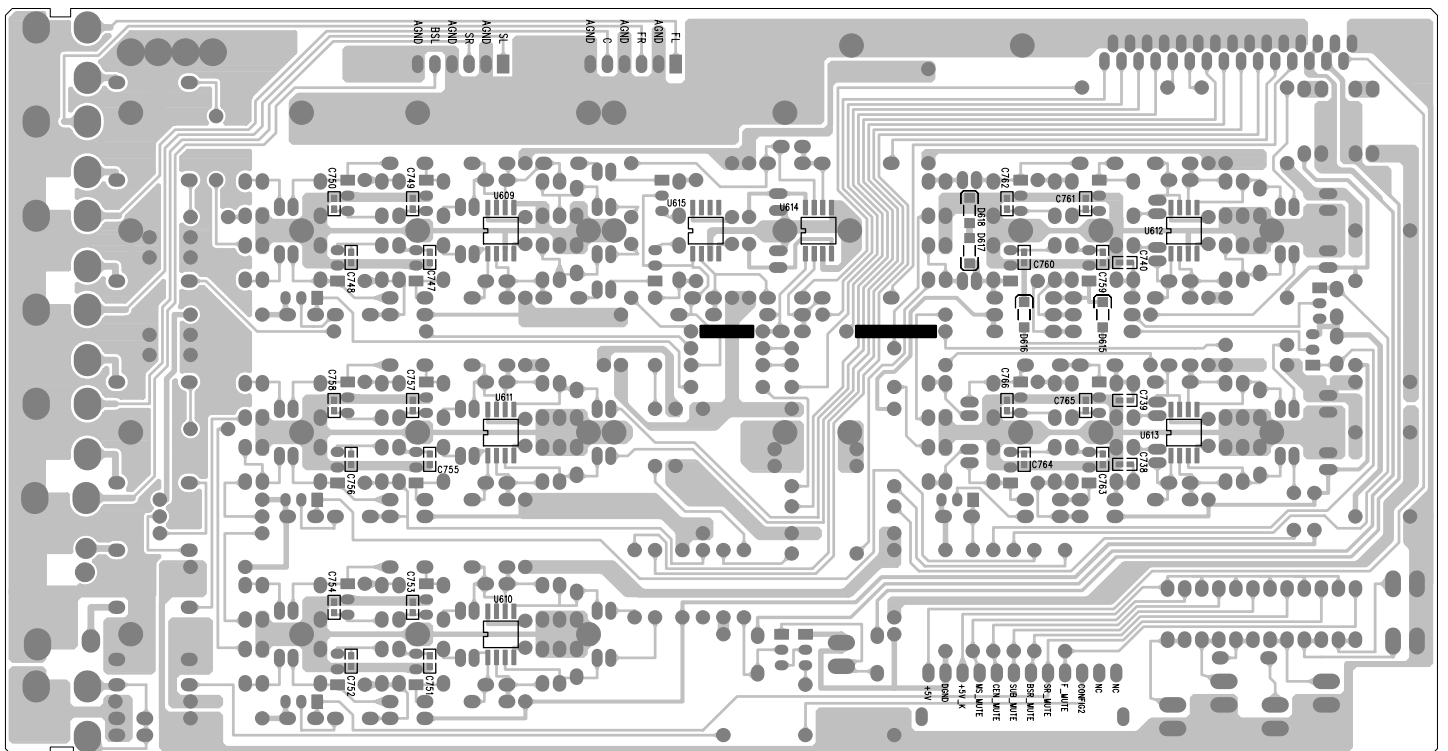




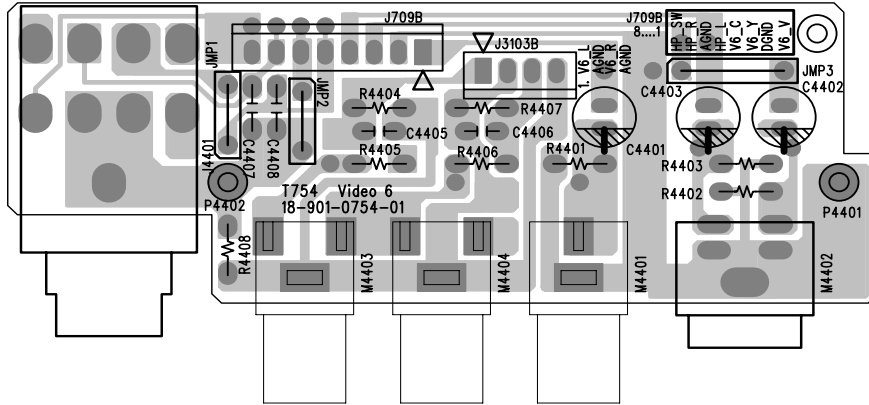
# PRE-OUT BOARD - COMPONENT SIDE



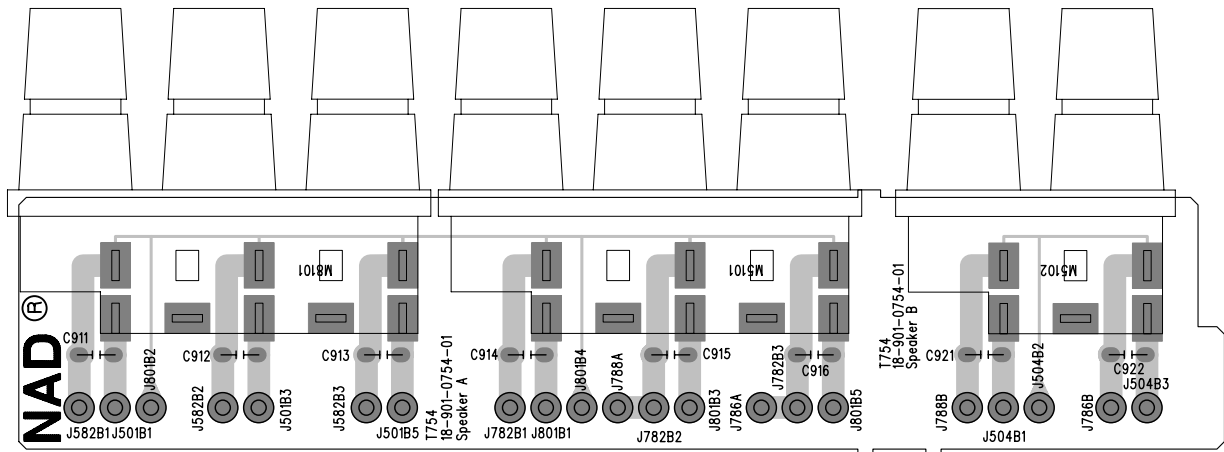
# PRE-OUT BOARD - COPPER SIDE



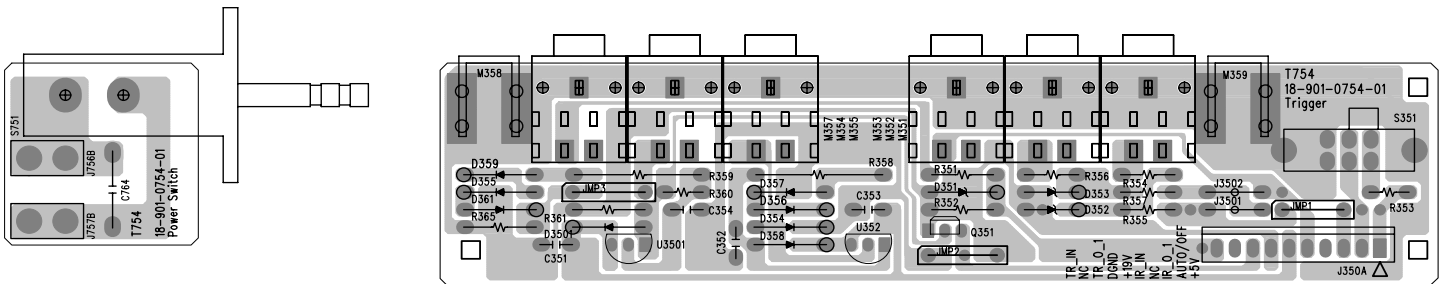
## VIDEO 6 BOARD



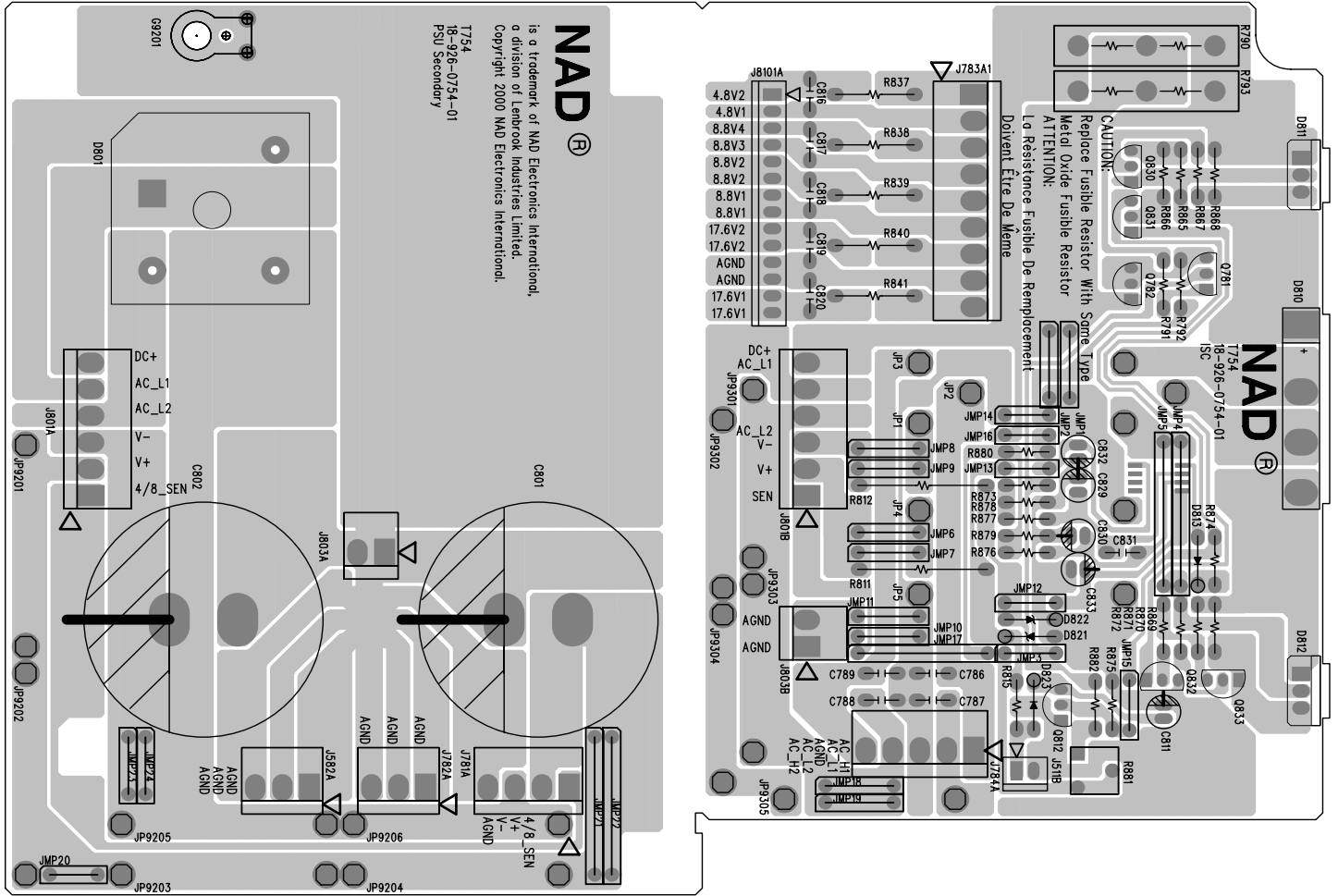
## SPEAKER TERMINAL BOARD



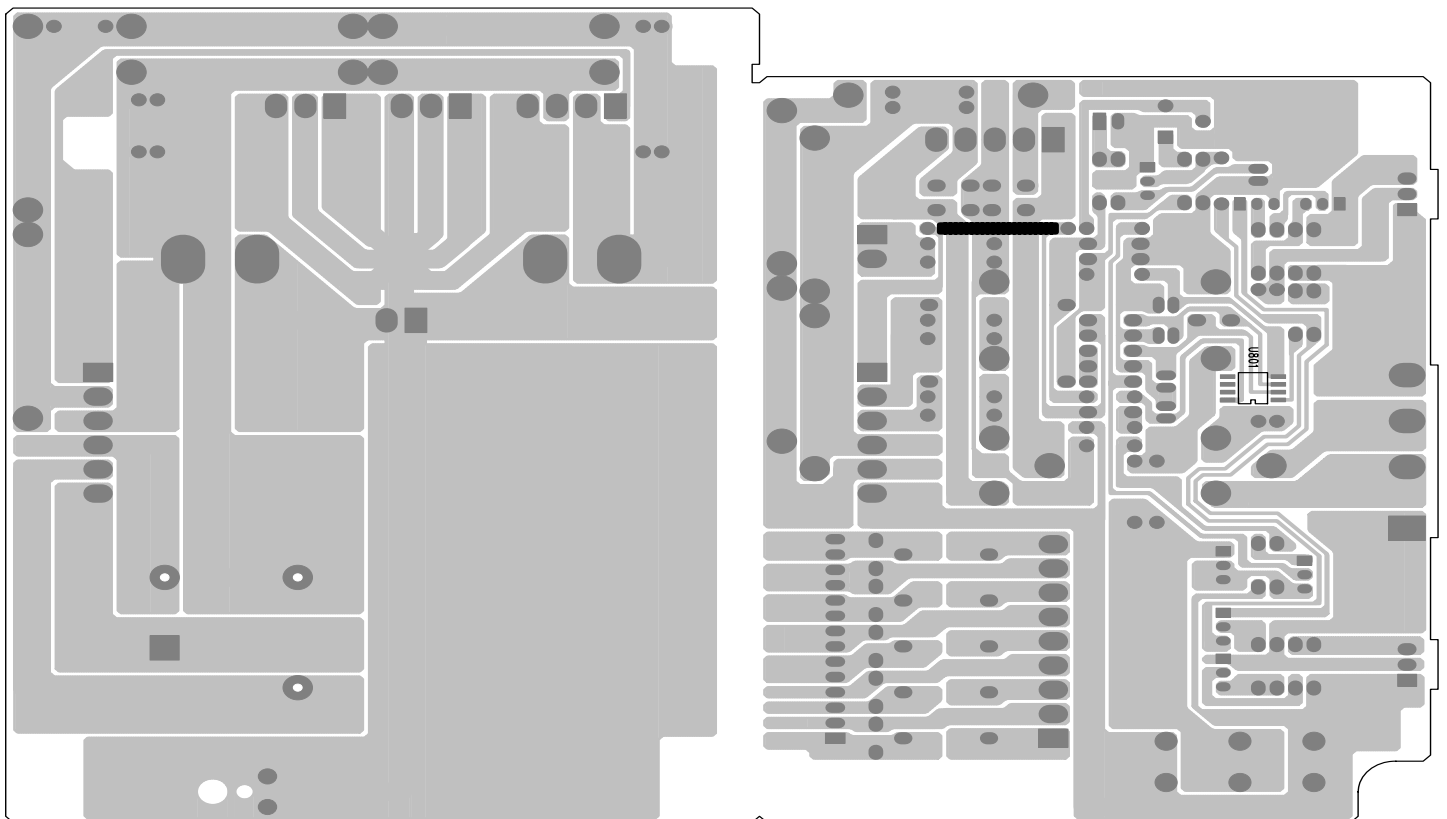
## POWER SWITCH / TRIGGER BOARD



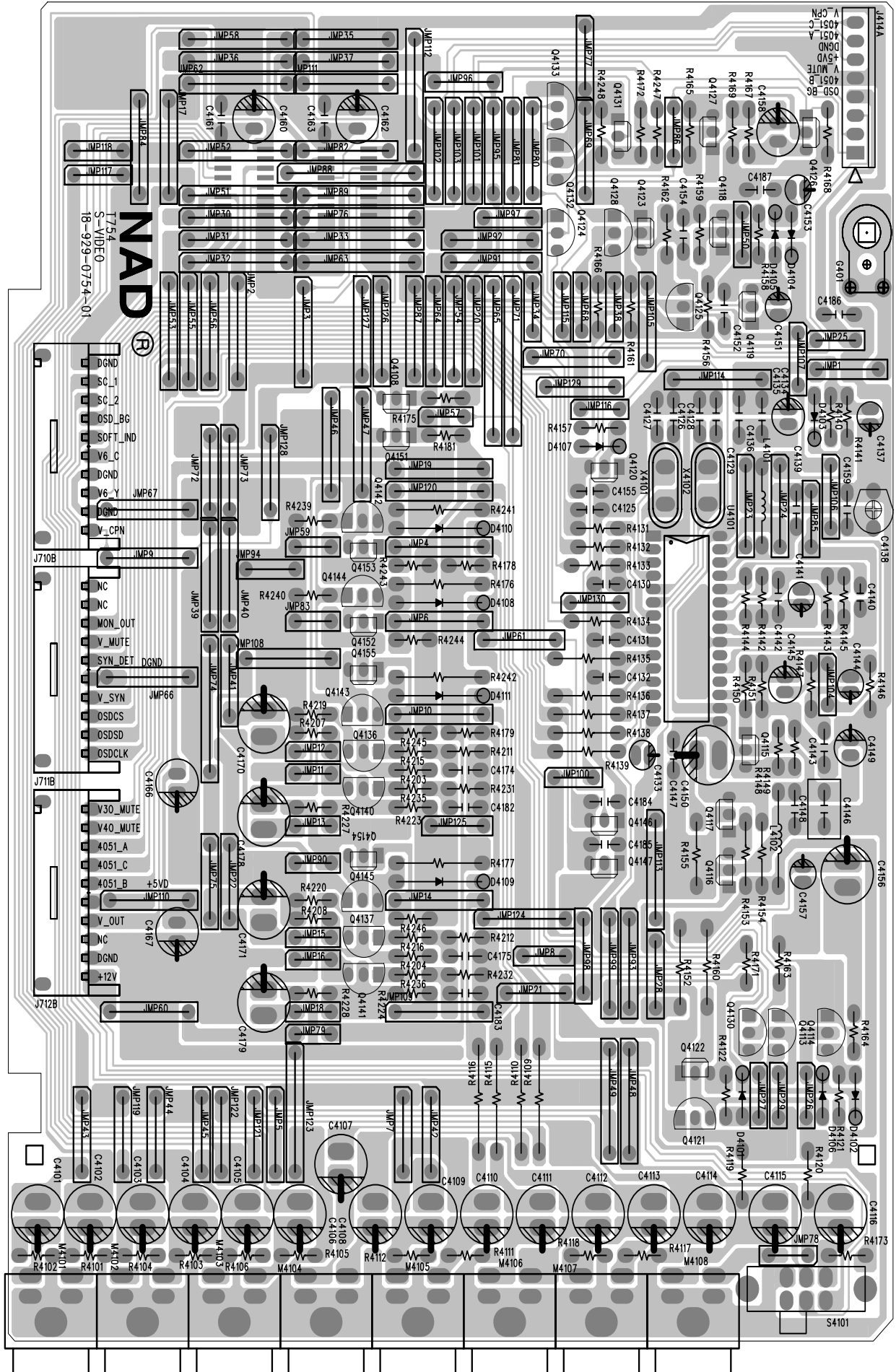
## SECONDARY / ISC BOARD - COMPONENT SIDE



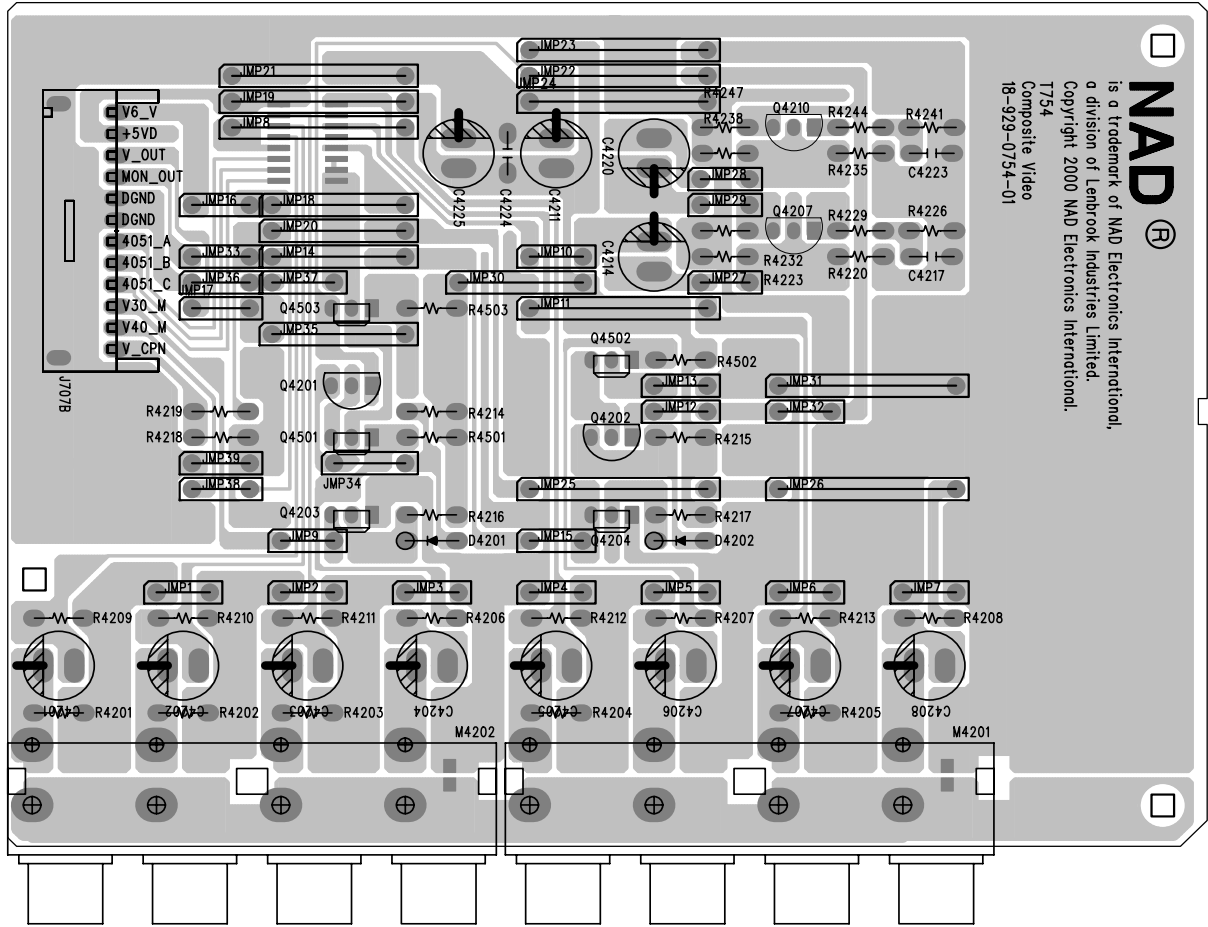
## SECONDARY / ISC BOARD - COPPER SIDE



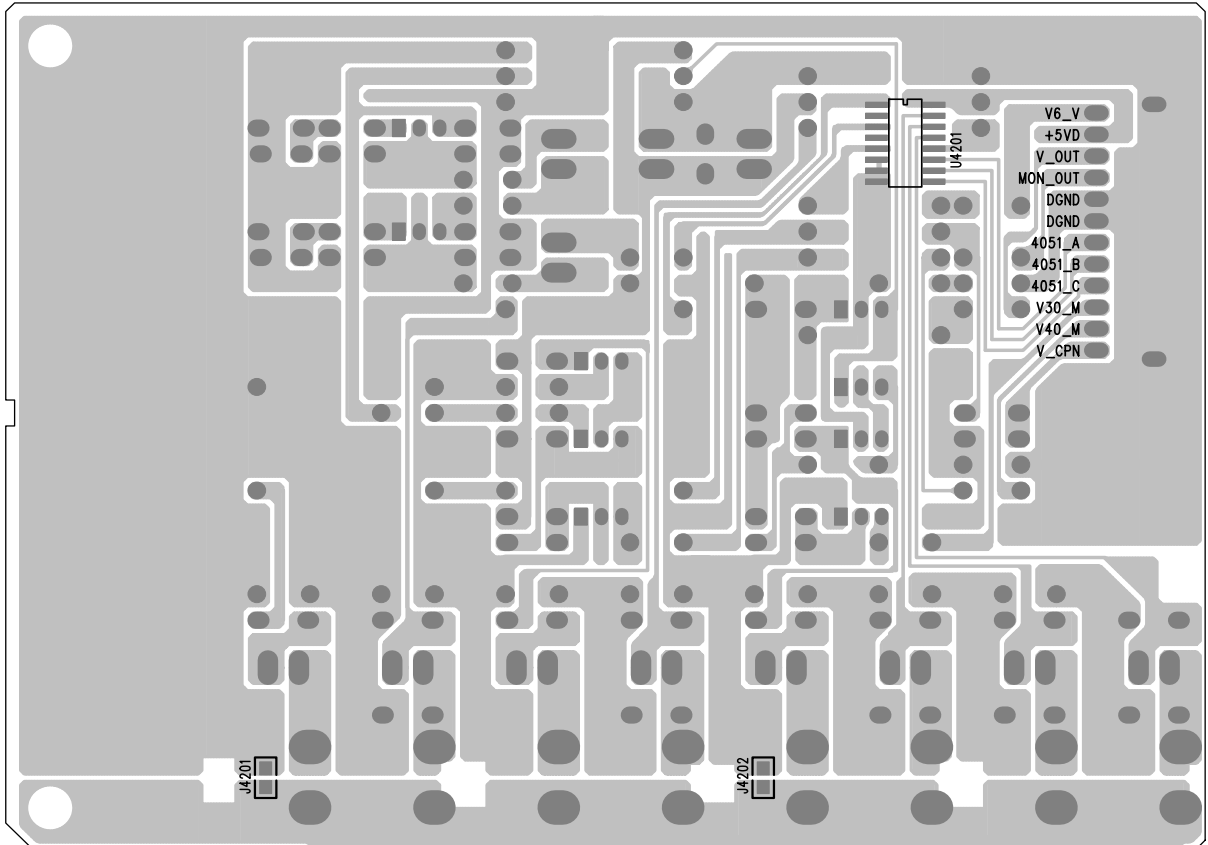
# S-VIDEO BOARD



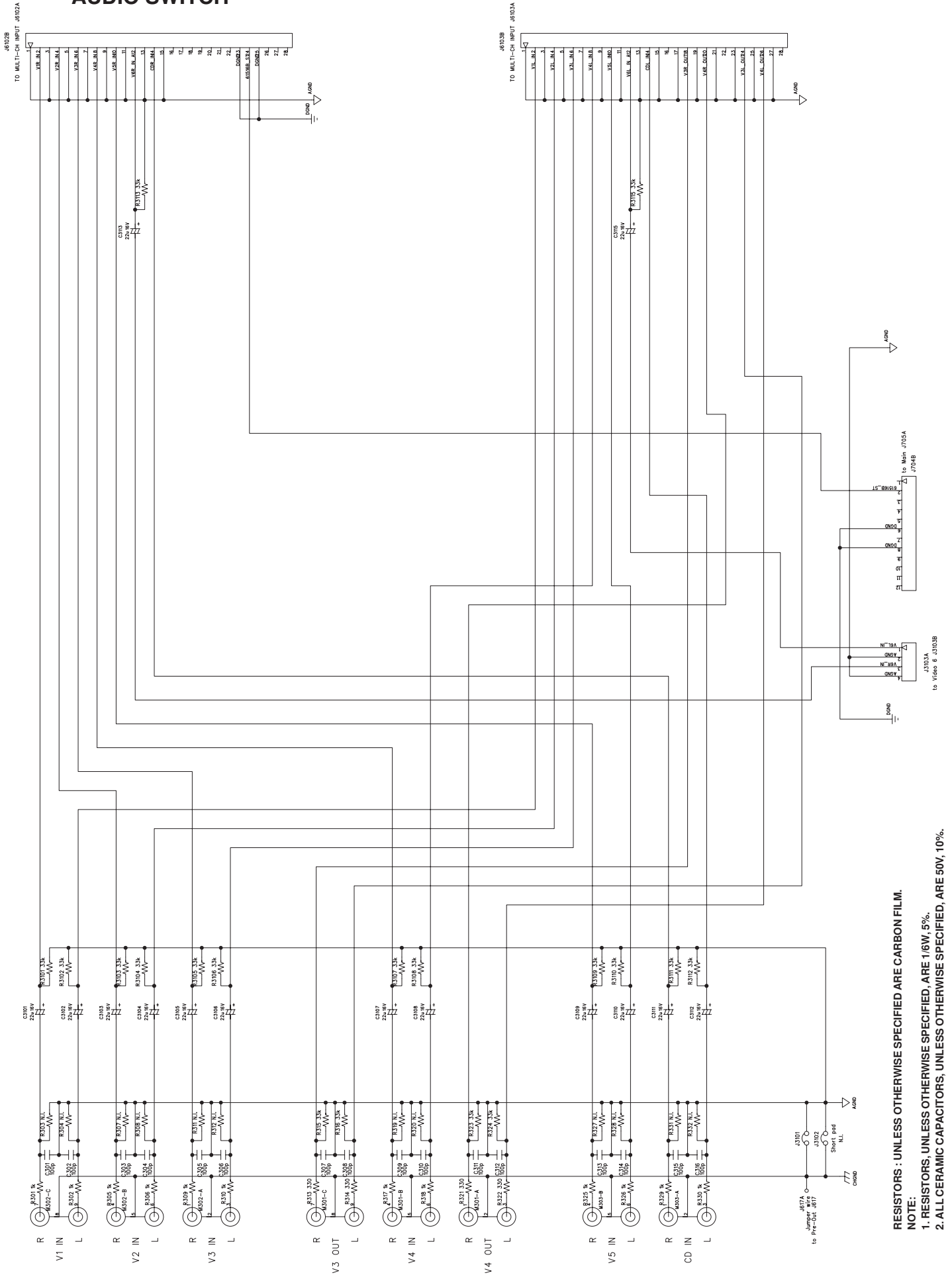
# COMPOSITE VIDEO BOARD - COMPONENT SIDE



# COMPOSITE VIDEO BOARD - COPPER SIDE

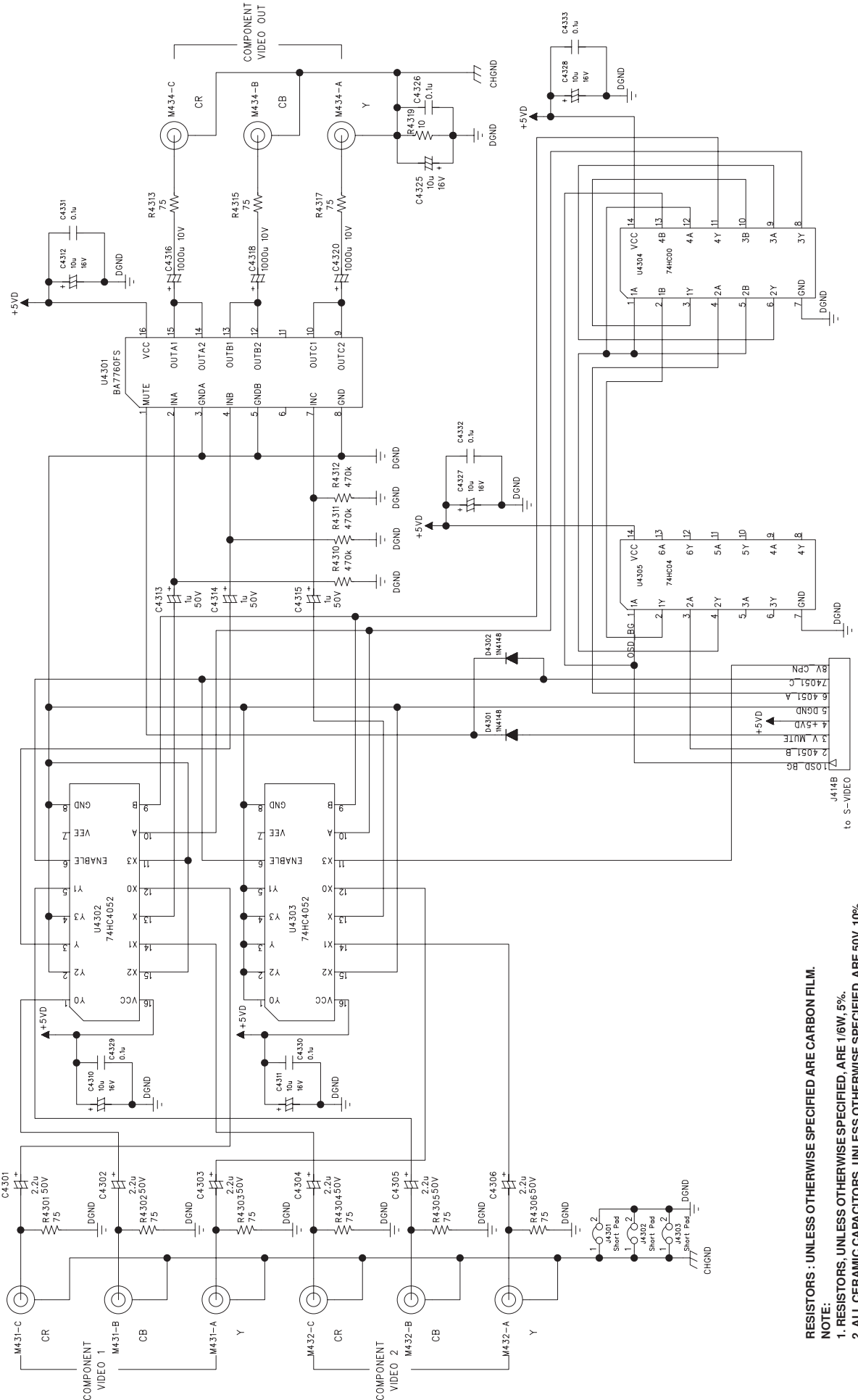


# SCHEMATIC DIAGRAM AUDIO SWITCH



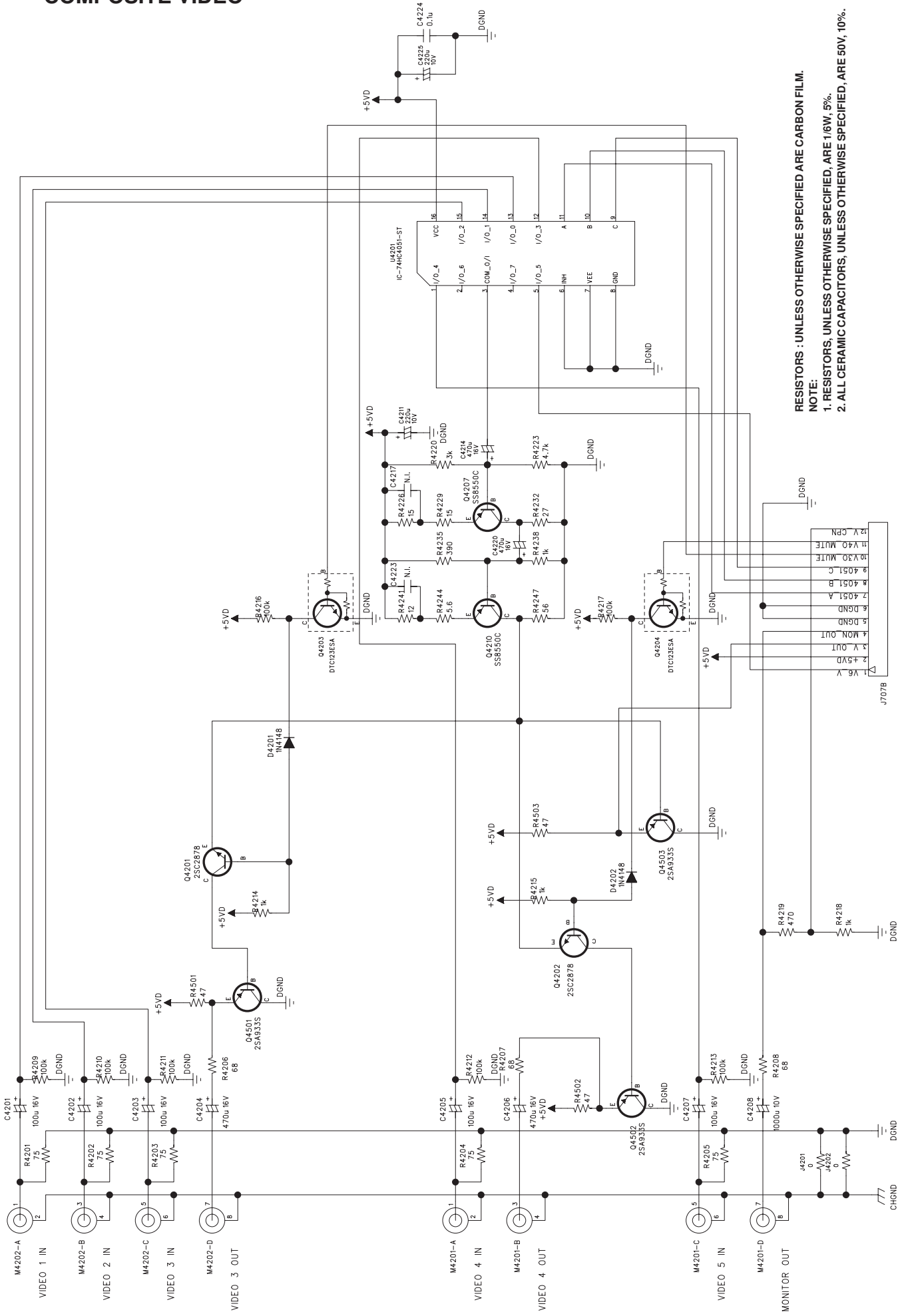
**RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.**  
**NOTE:**  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

# COMPONENT VIDEO



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

# COMPOSITE VIDEO

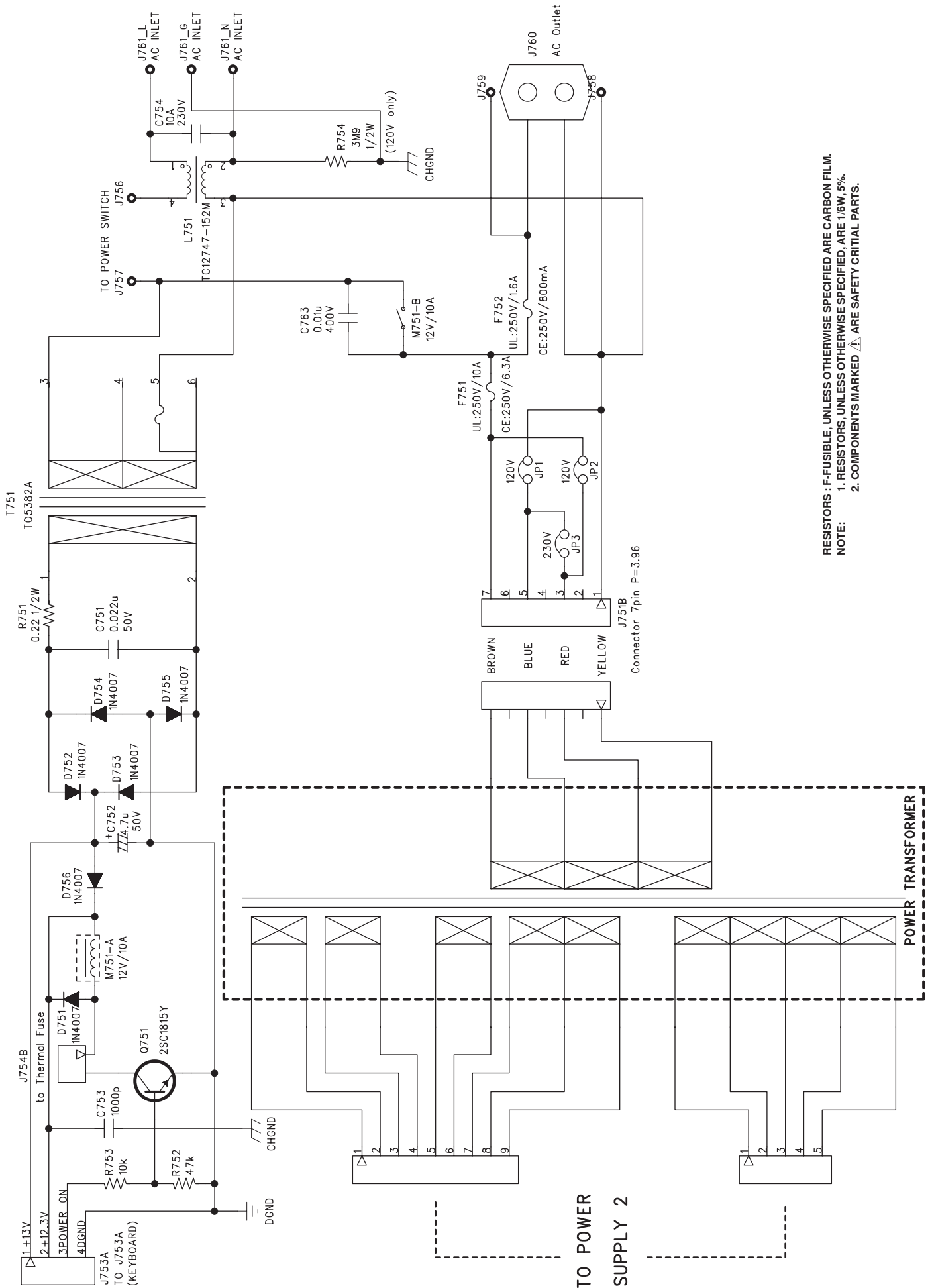


RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.  
 NOTE:  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.



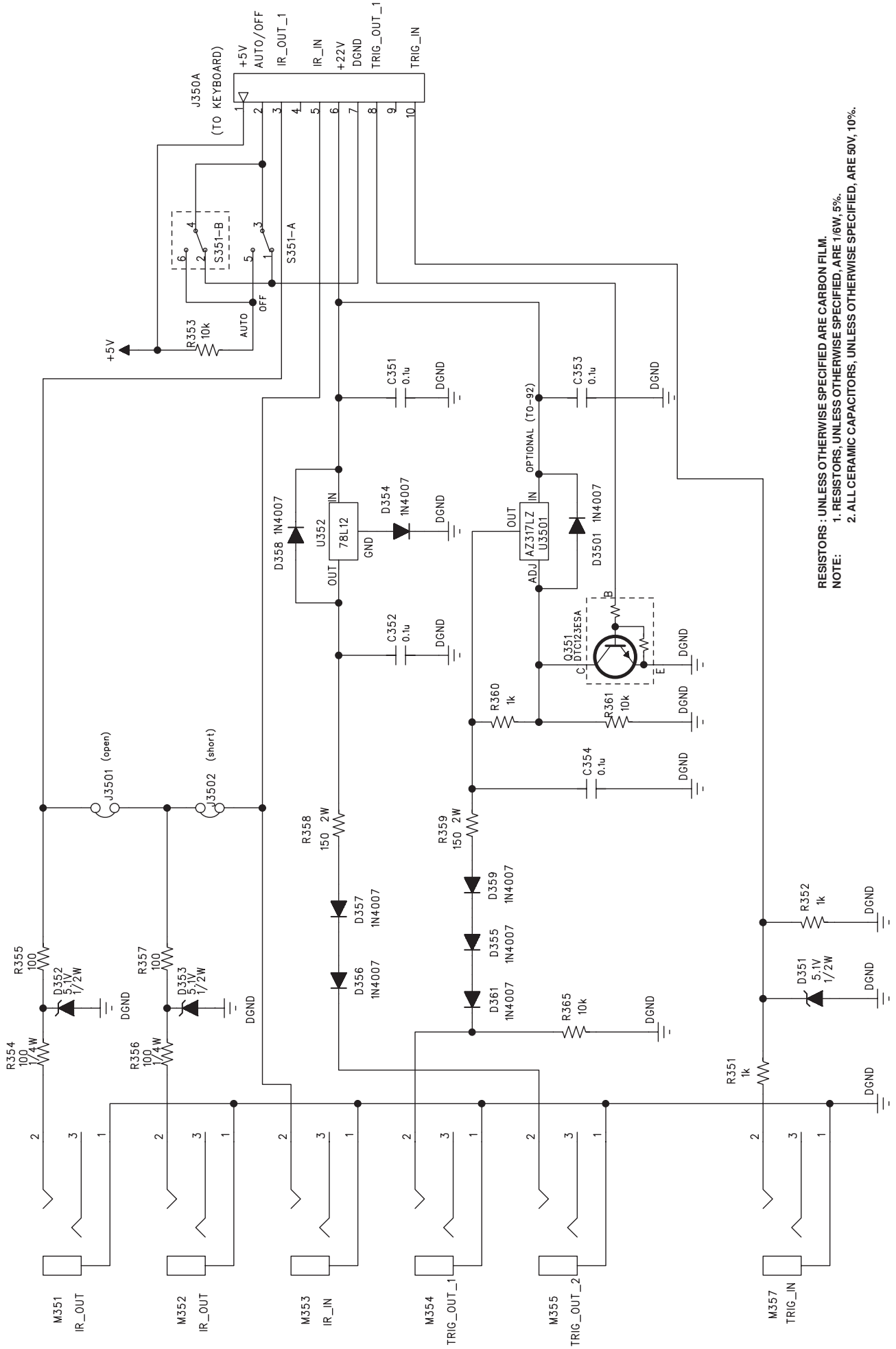


# POWER SUPPLY (STAND BY)



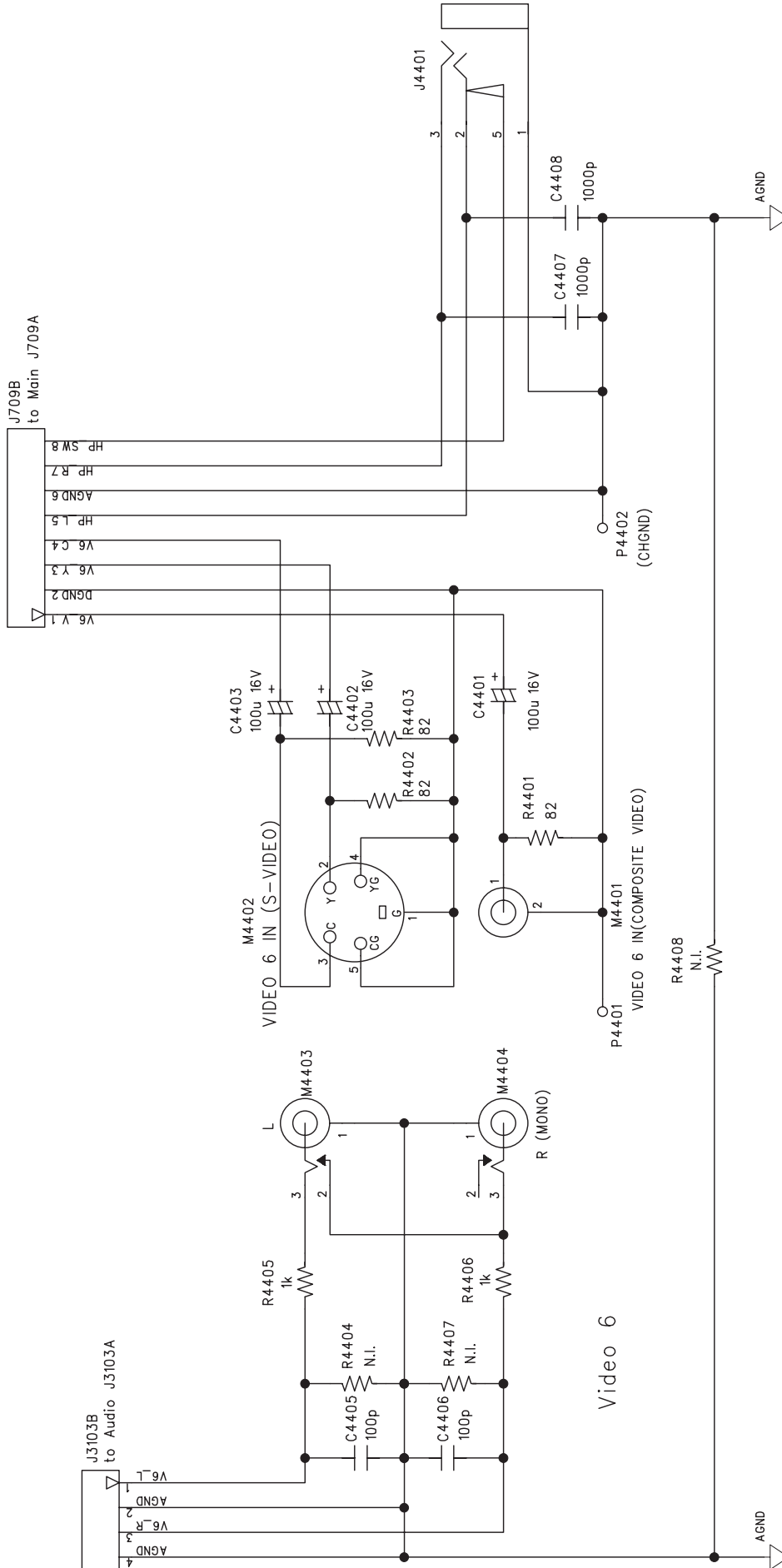
RESISTORS : F-FUSIBLE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.  
 NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. COMPONENTS MARKED  $\Delta$  ARE SAFETY CRITICAL PARTS.

# TRIGGER



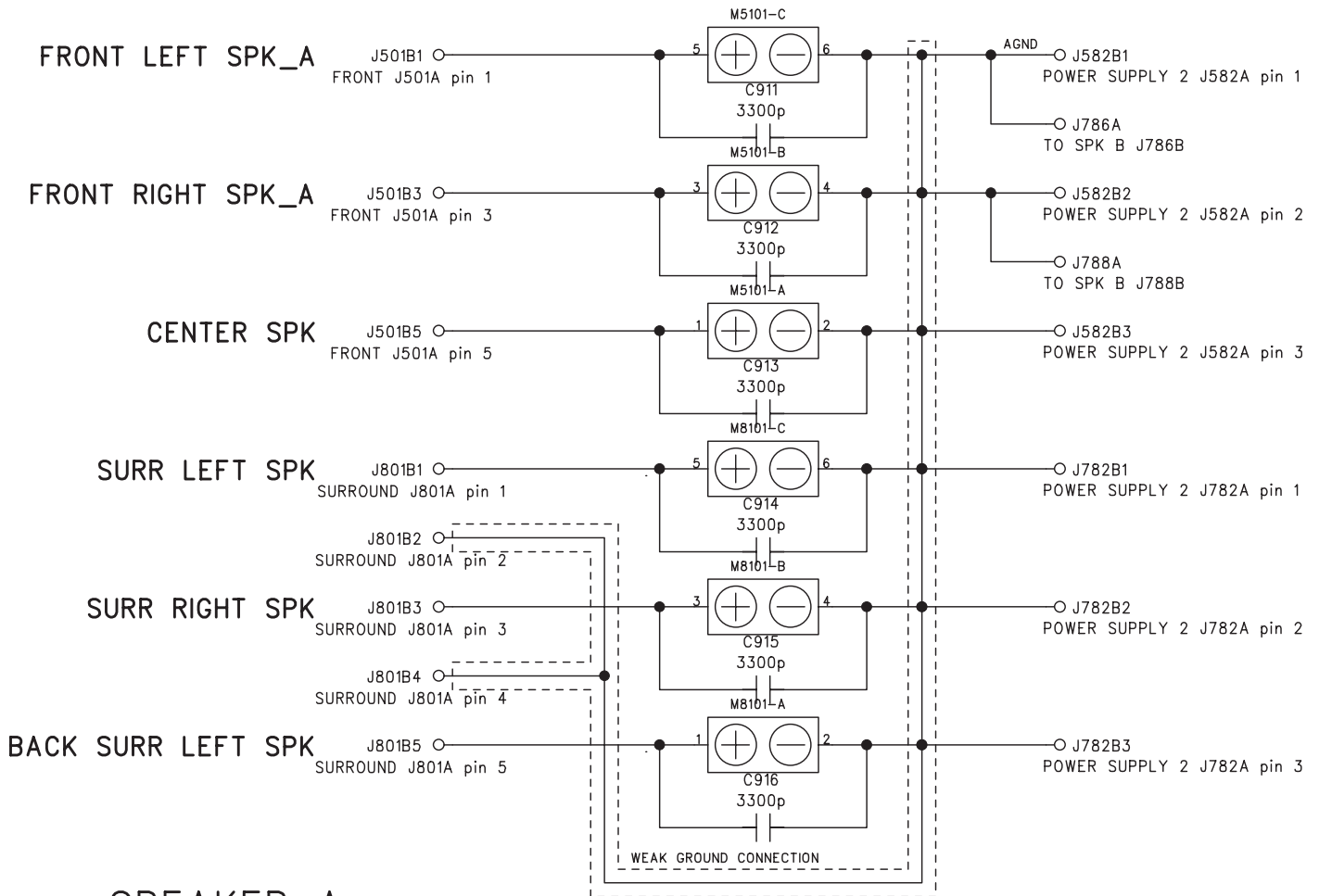
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.  
 NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

# VIDEO 6

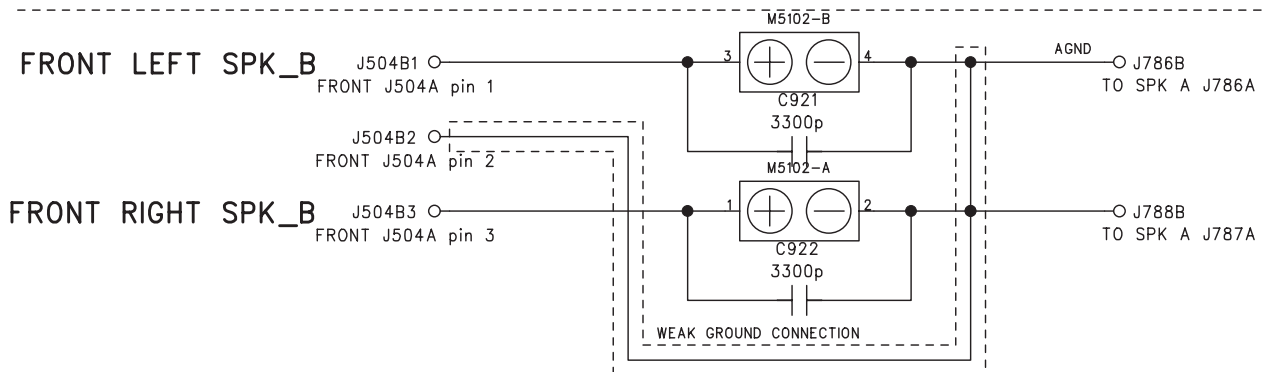


RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.  
 NOTE:  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

## SPEAKER A & B

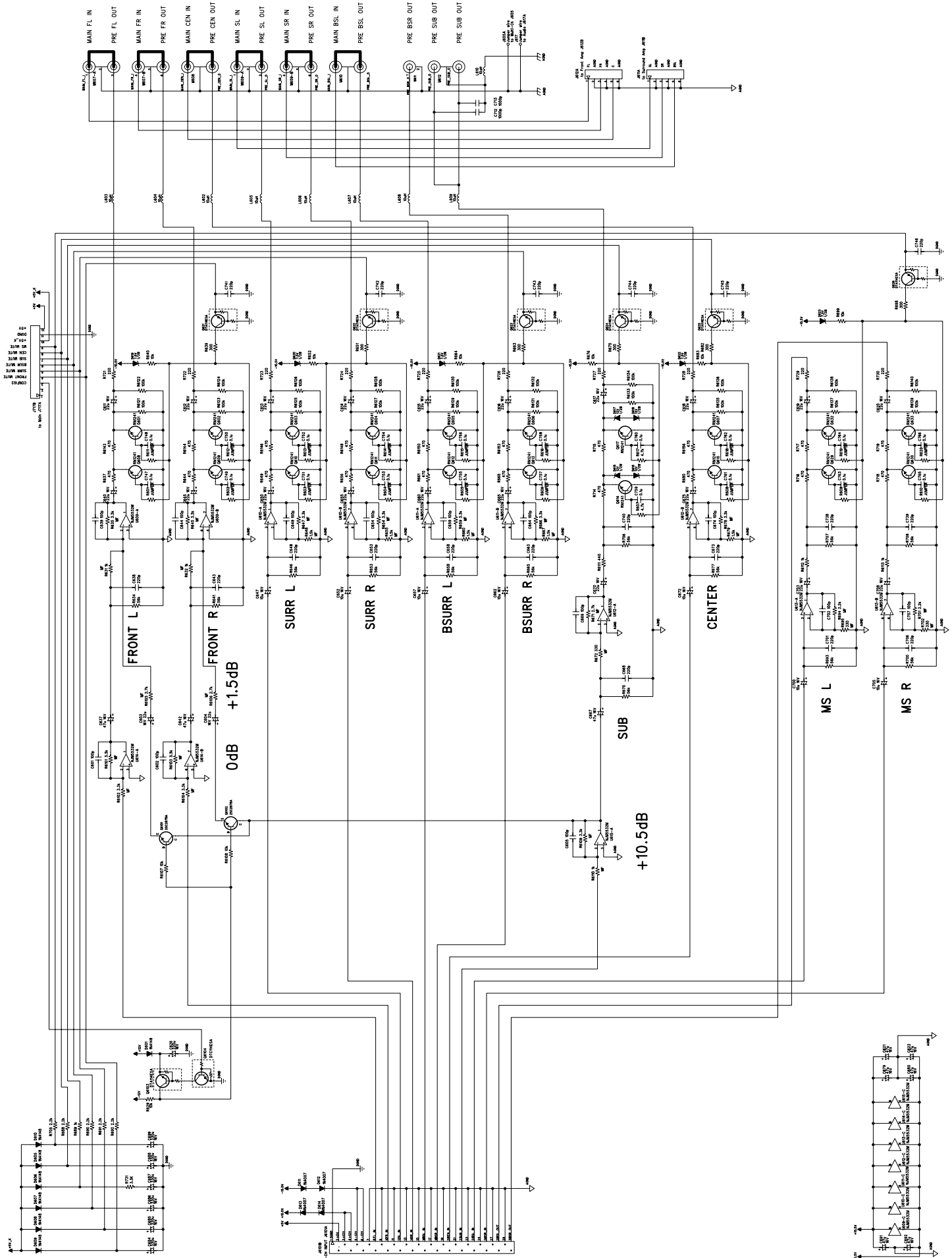


## SPEAKER A



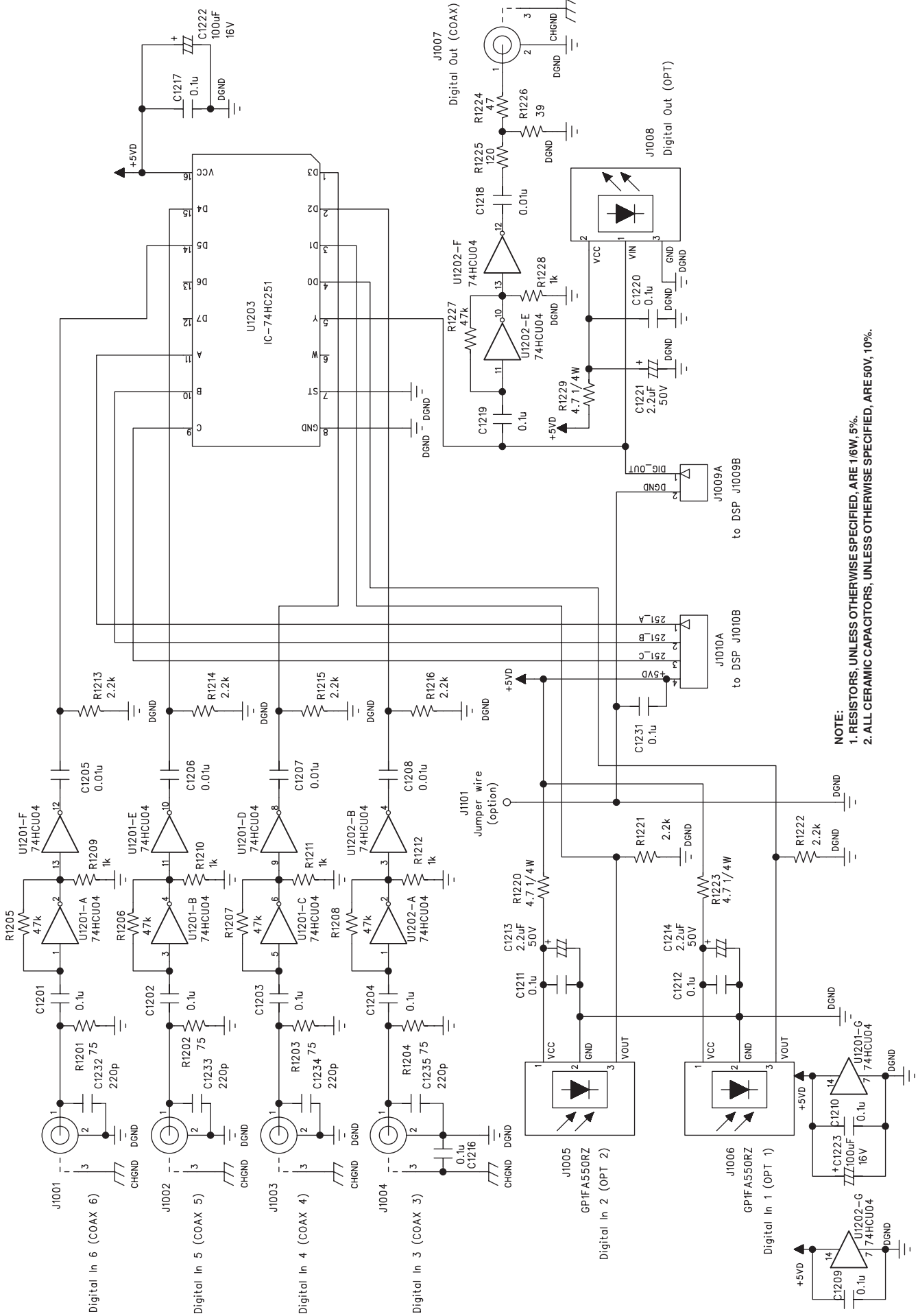
## SPEAKER B

# PREOUT

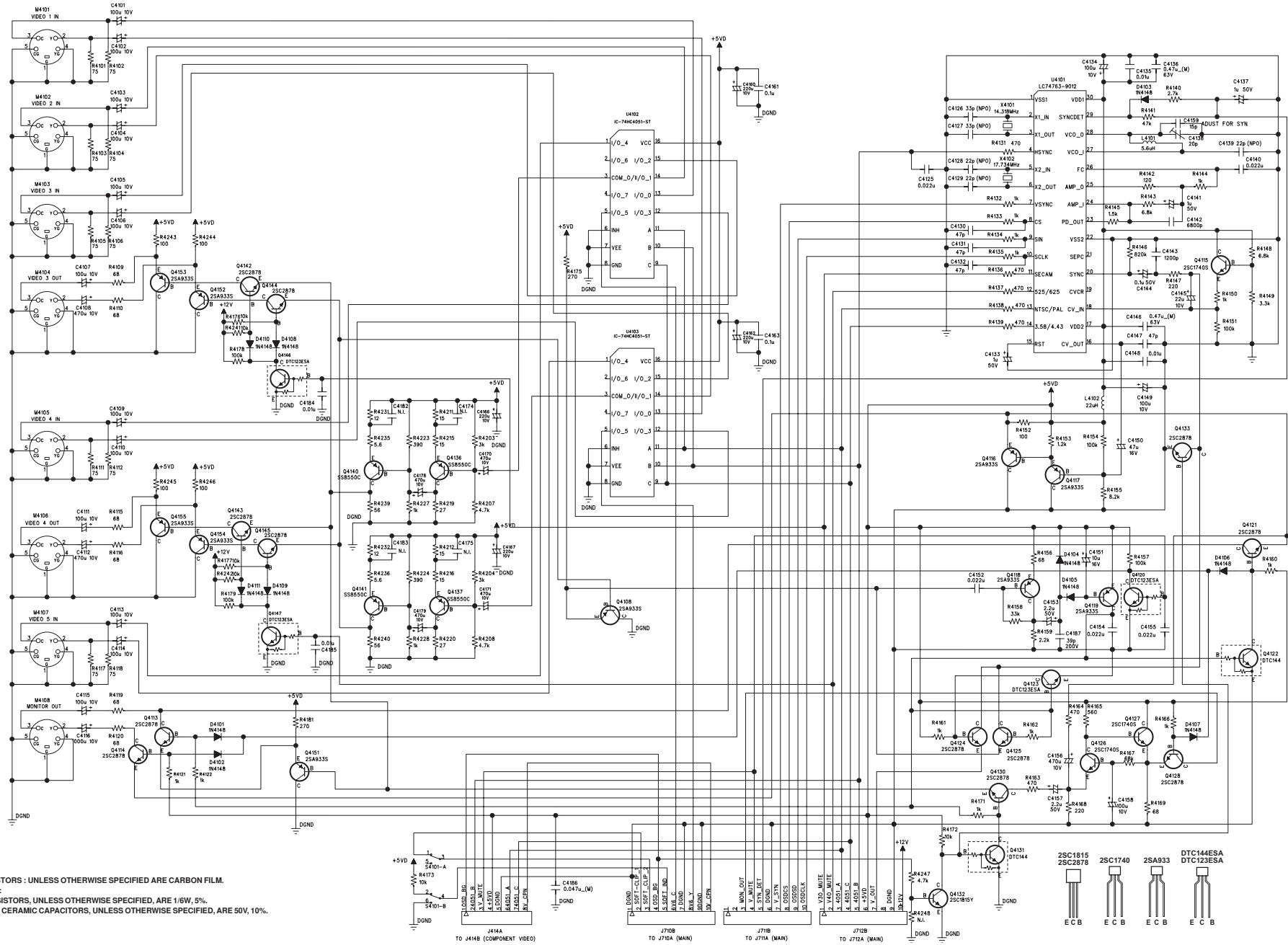


NOTE:  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

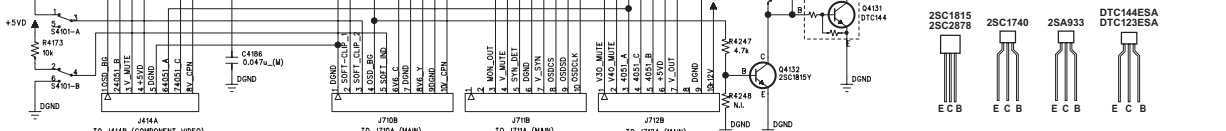
# DIGITAL INPUT / OUTPUT



# S-VIDEO

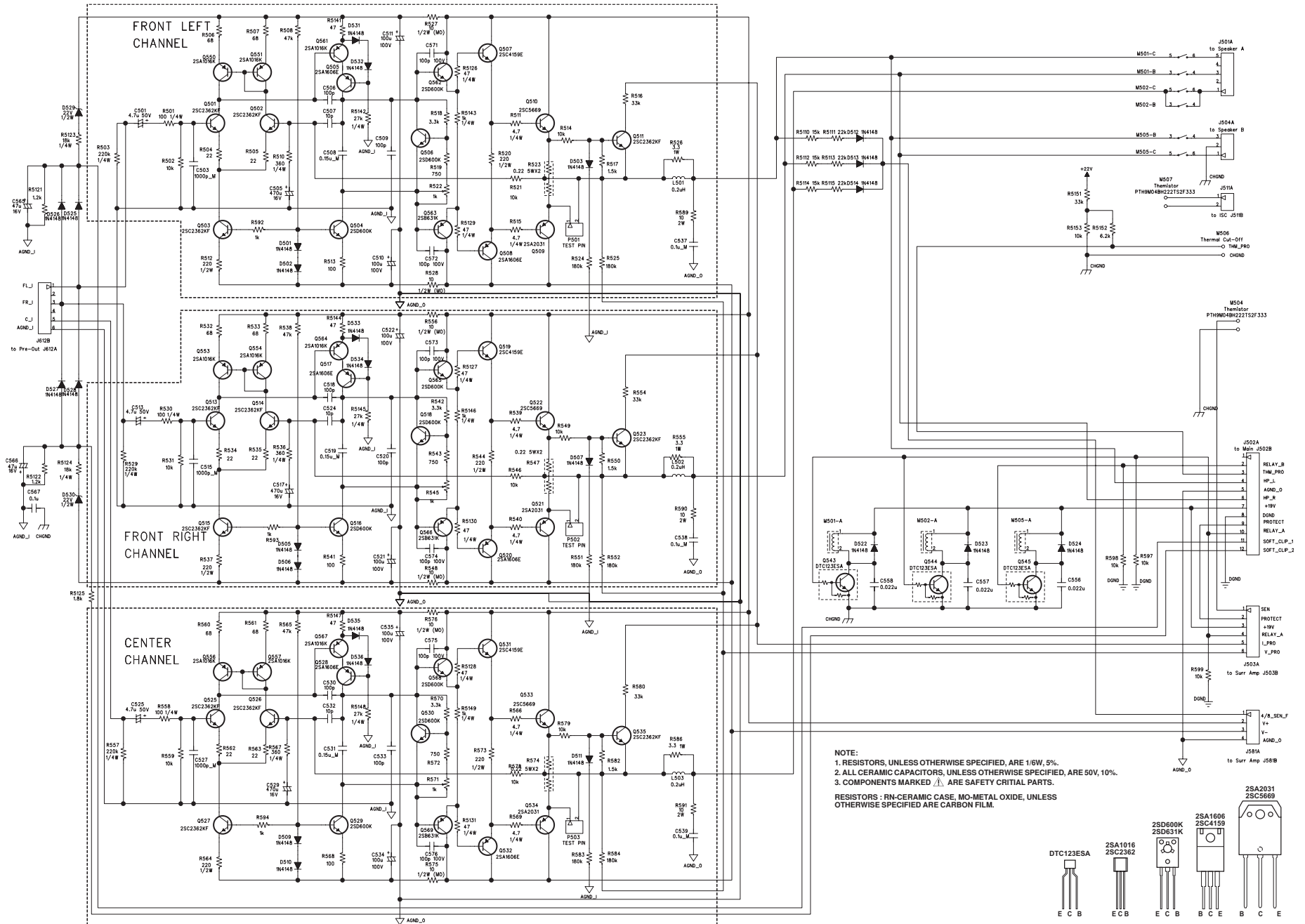


RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.  
 NOTE:  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

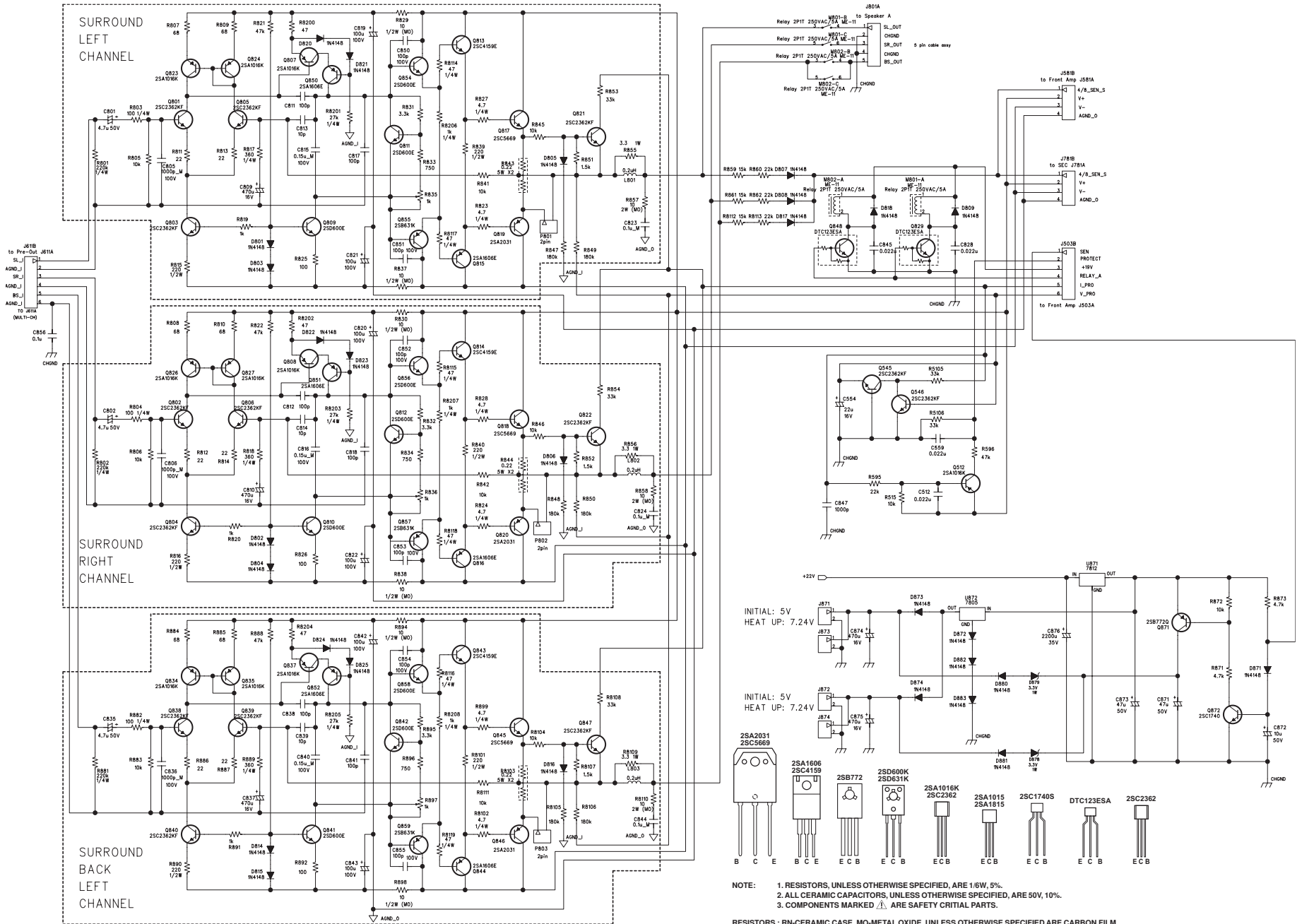




# FRONT / CENTER CHANNEL POWER AMPLIFIER

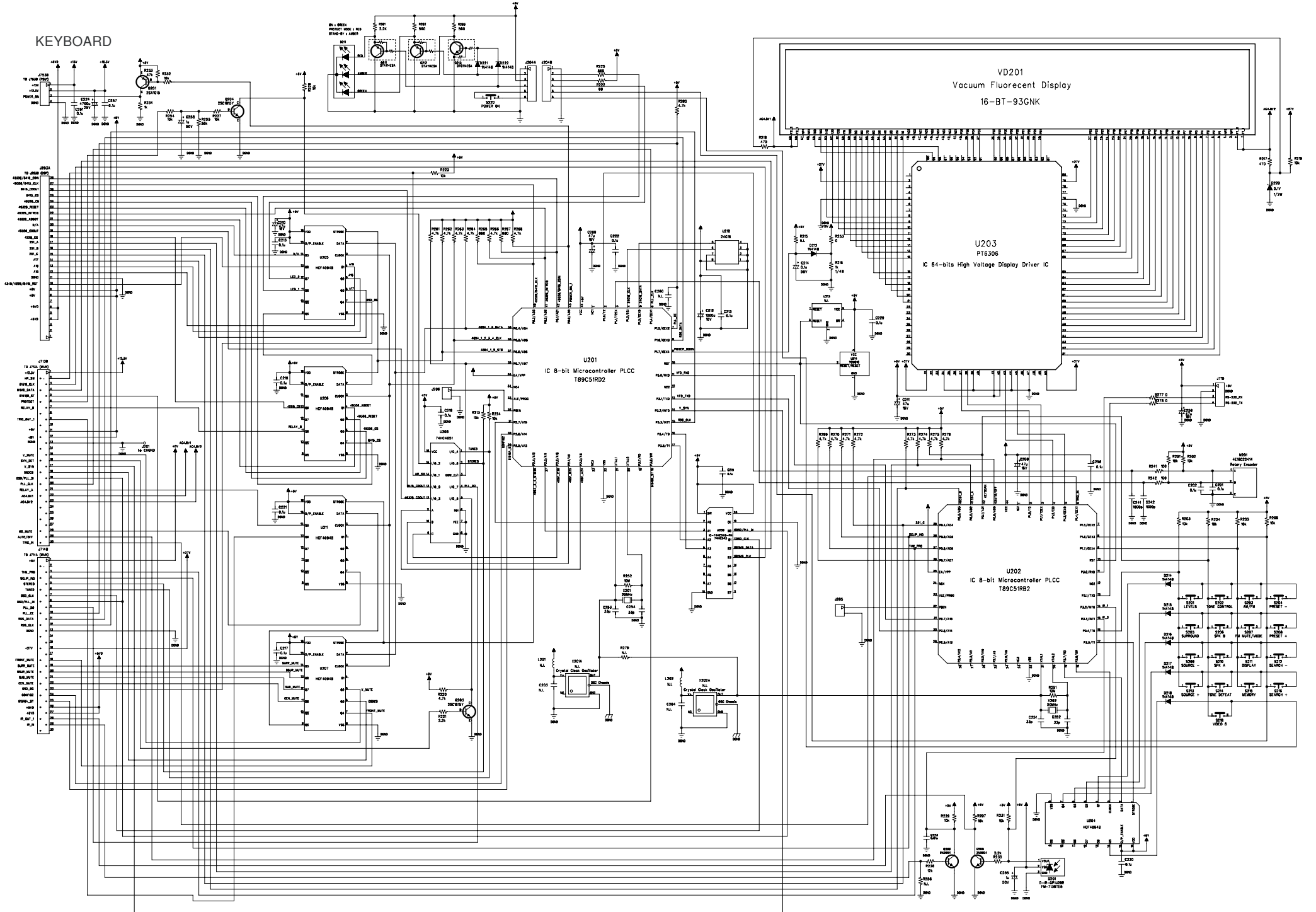


# SURROUND CHANNEL POWER AMPLIFIER



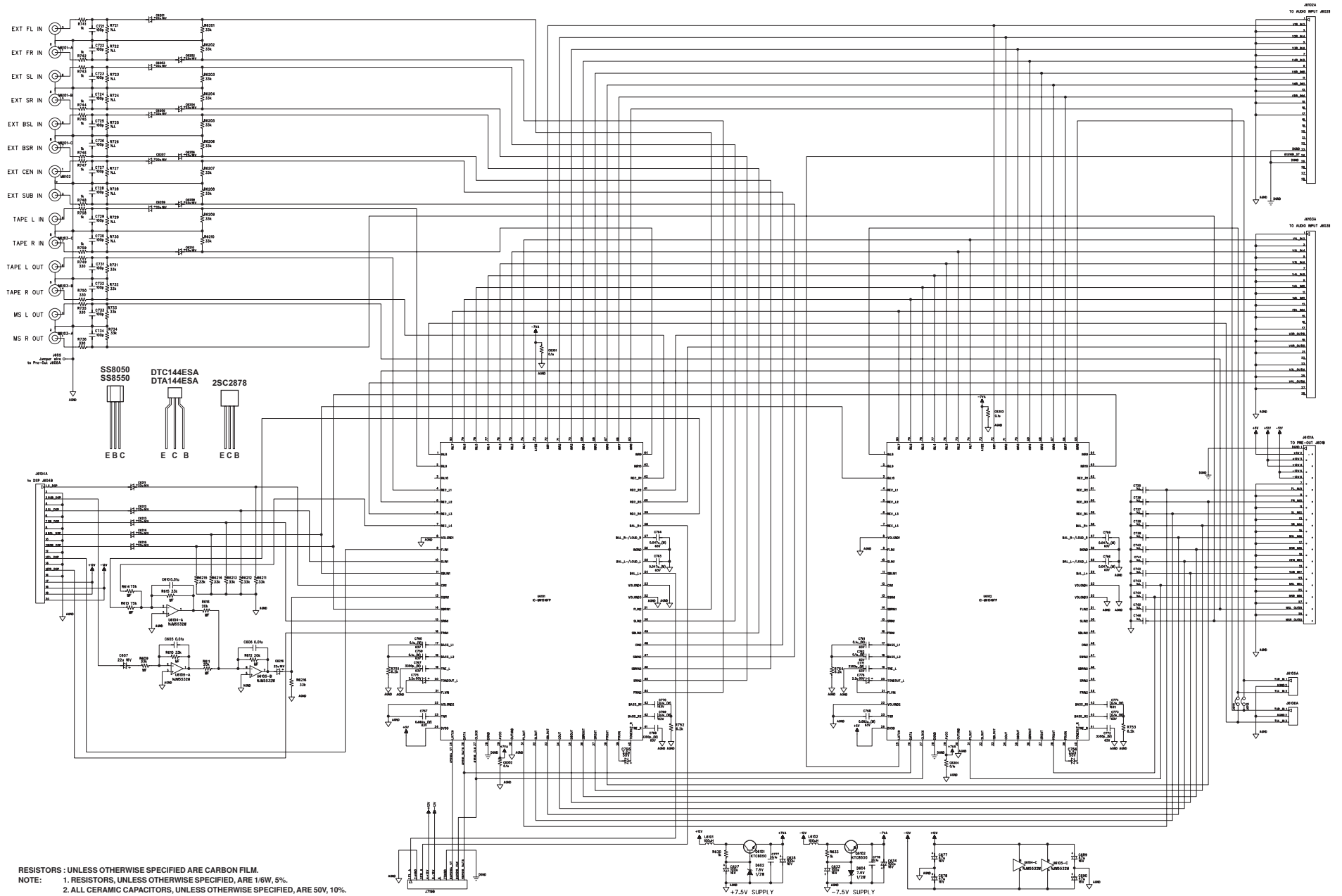


KEYBOARD



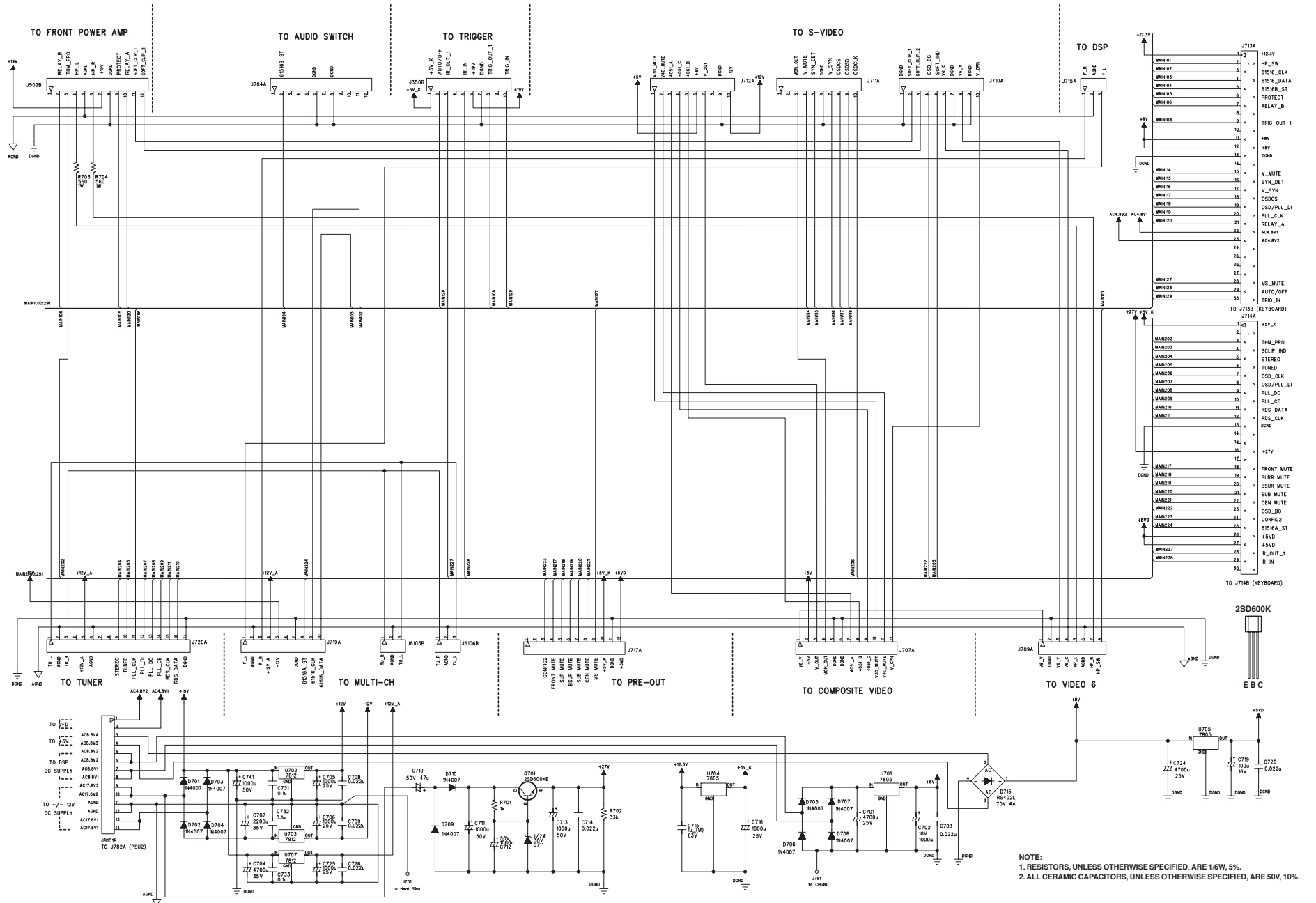
NOTE:  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 5%.

# MULTI-CHANNEL



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

# MAIN BOARD



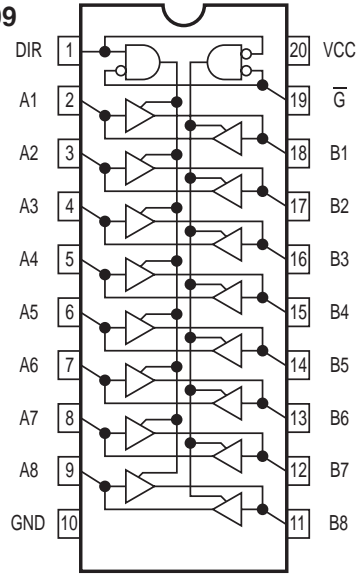
# IC BLOCK DIAGRAM

## 74LVC245

DSP BOARD: U1002, U1003, U1014

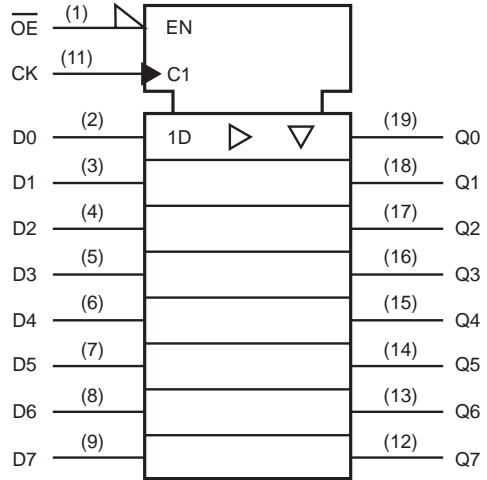
## 74VHC245

KEYBOARD: U209



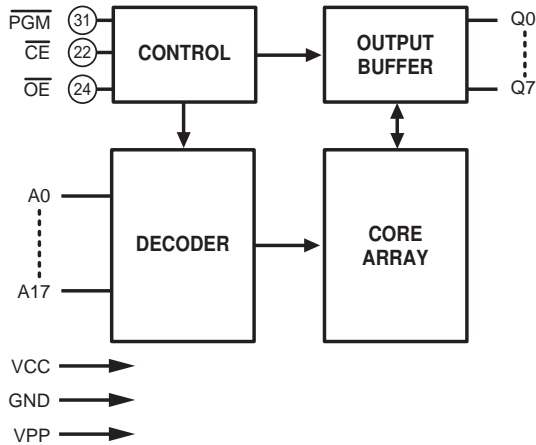
## 74LVQ574

DSP BOARD: U1008, U1009



## W27C020

DSP BOARD: U1007



## NJM5532

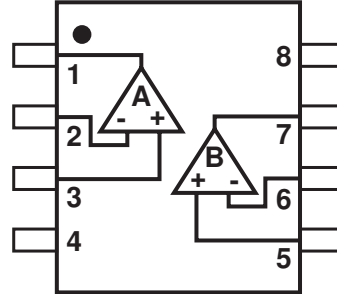
DSP BOARD: U1010~U1013, U1023 & U1025

MULTI-CHANNEL: U6104~U6107

PRE-OUT BOARD: U609~U613

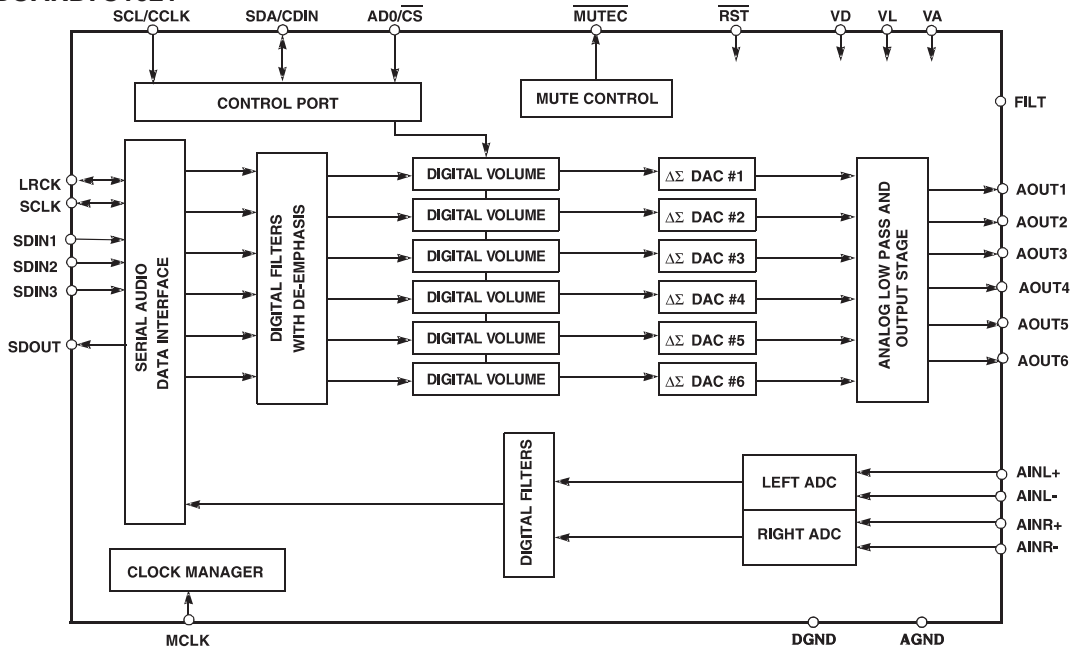
AUDIO BOARD: U305

ISC BOARD: U801

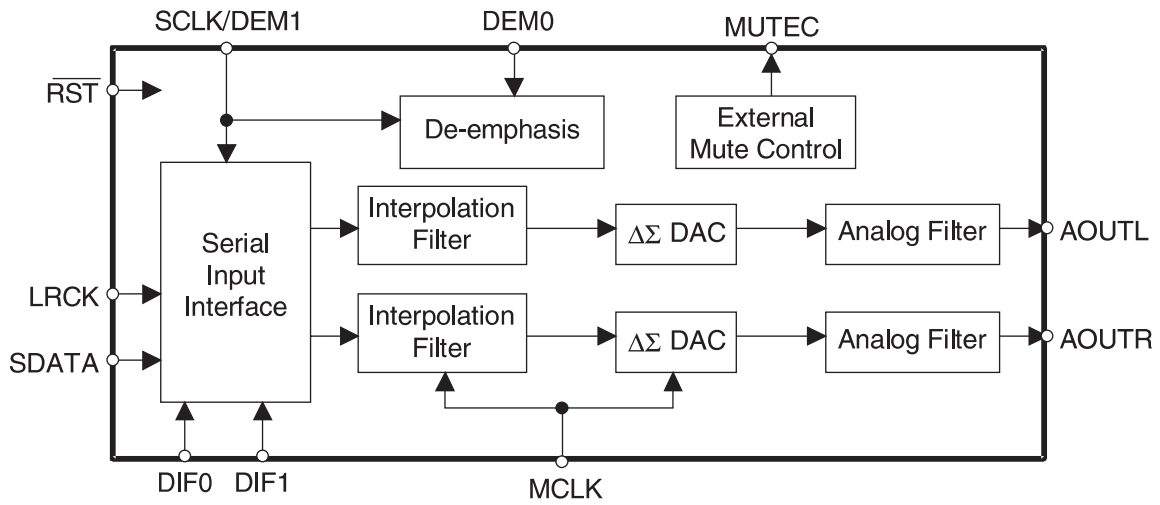


## CS4228AKS

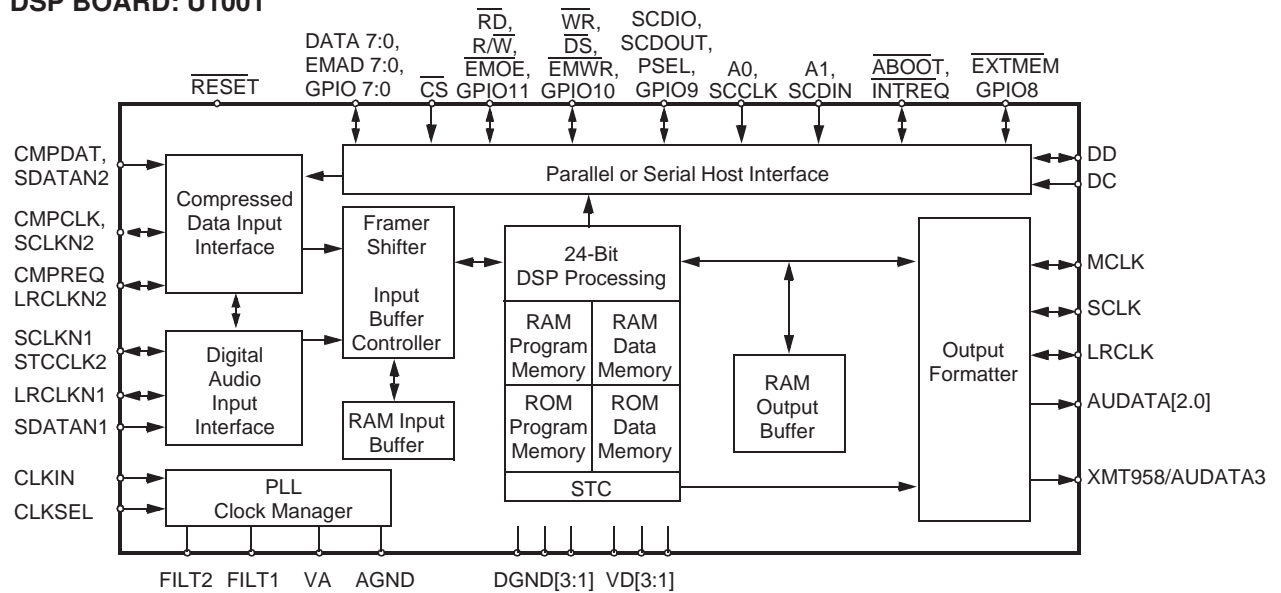
DSP BOARD: U1021



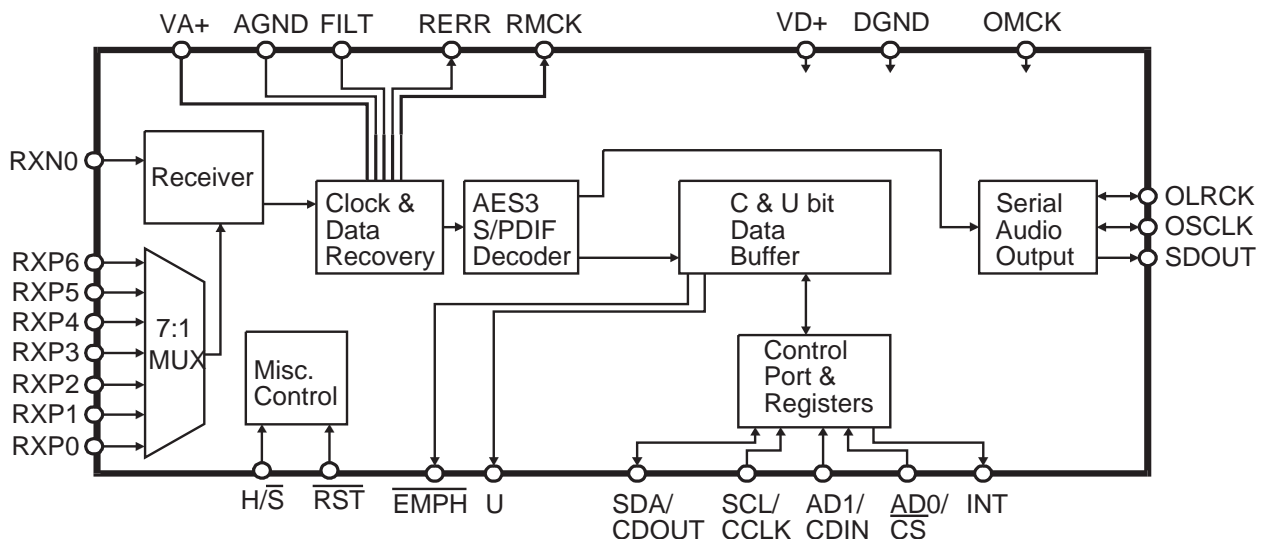
**CS4340**  
**DSP BOARD: U1022**



**CS49326**  
**DSP BOARD: U1001**

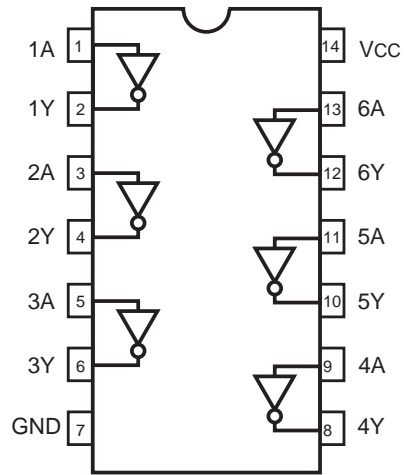


**CS8415A**  
**DSP BOARD: U1005**

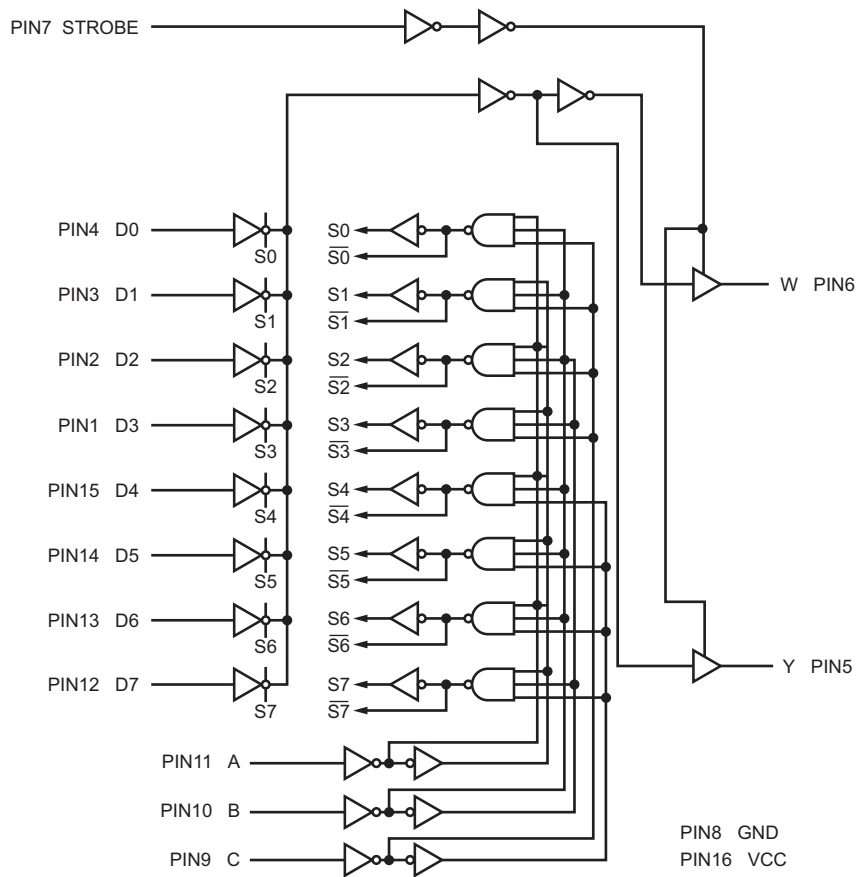




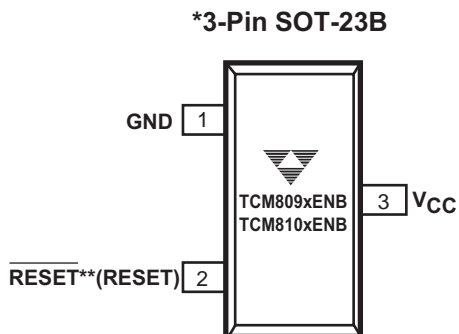
**74HCU04**  
DIGITAL BOARD: U1201 & U1202



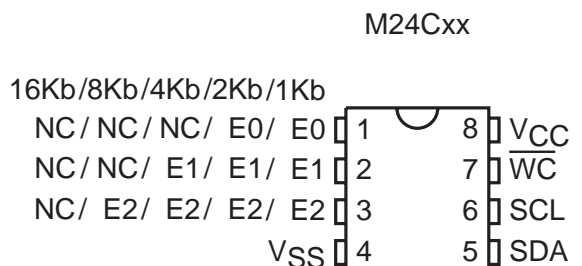
**74HC251**  
DIGITAL BOARD: U1203



**TCM810**  
KEYBOARD: U214

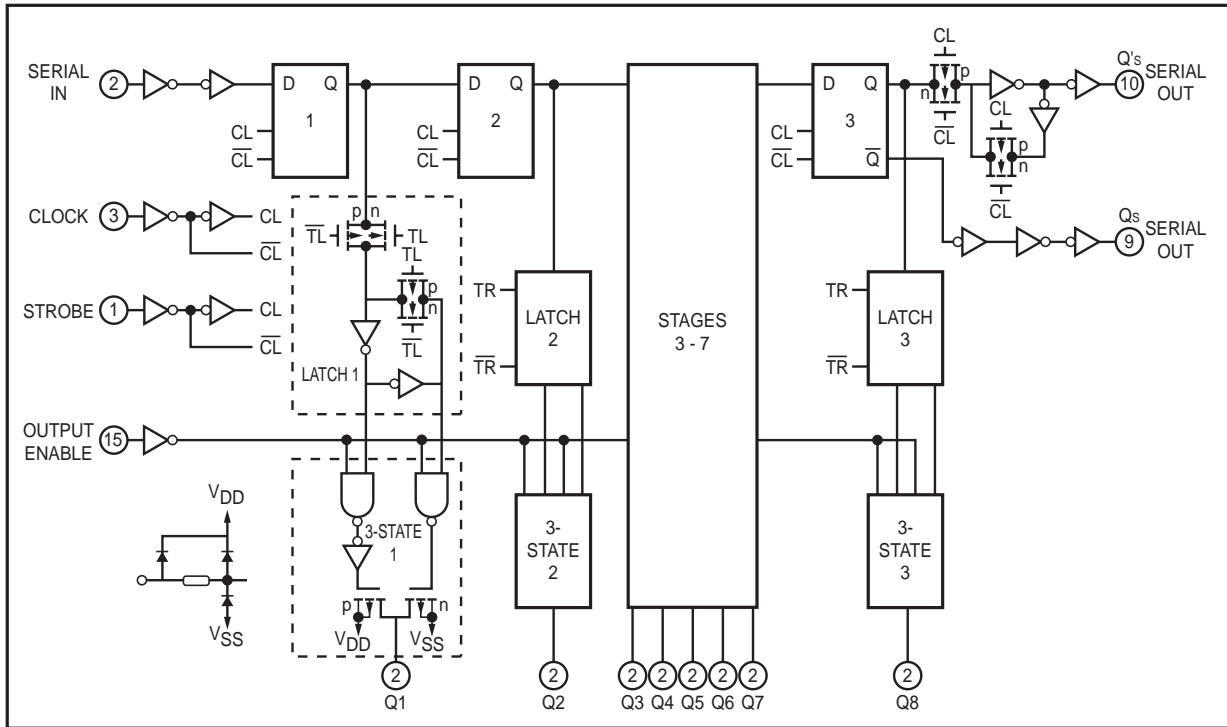


**AT24C16**  
KEYBOARD: U210

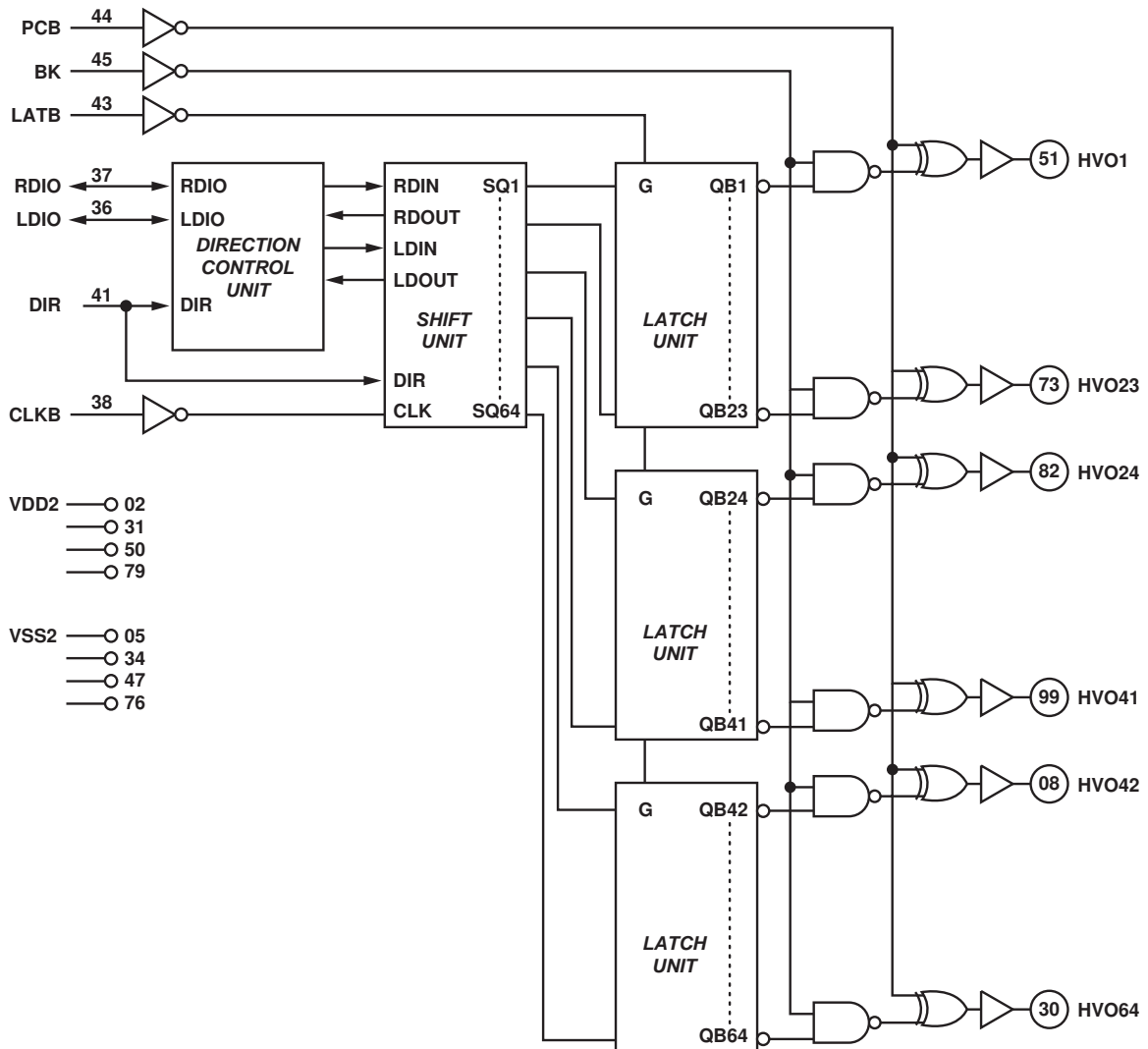


NOTE: \*3-Pin SOT-23B is equivalent to JEDEC TO-236  
\*\* () is for TCM810

**HCF4094B**  
**KEYBOARD: U204~U207 & U211**

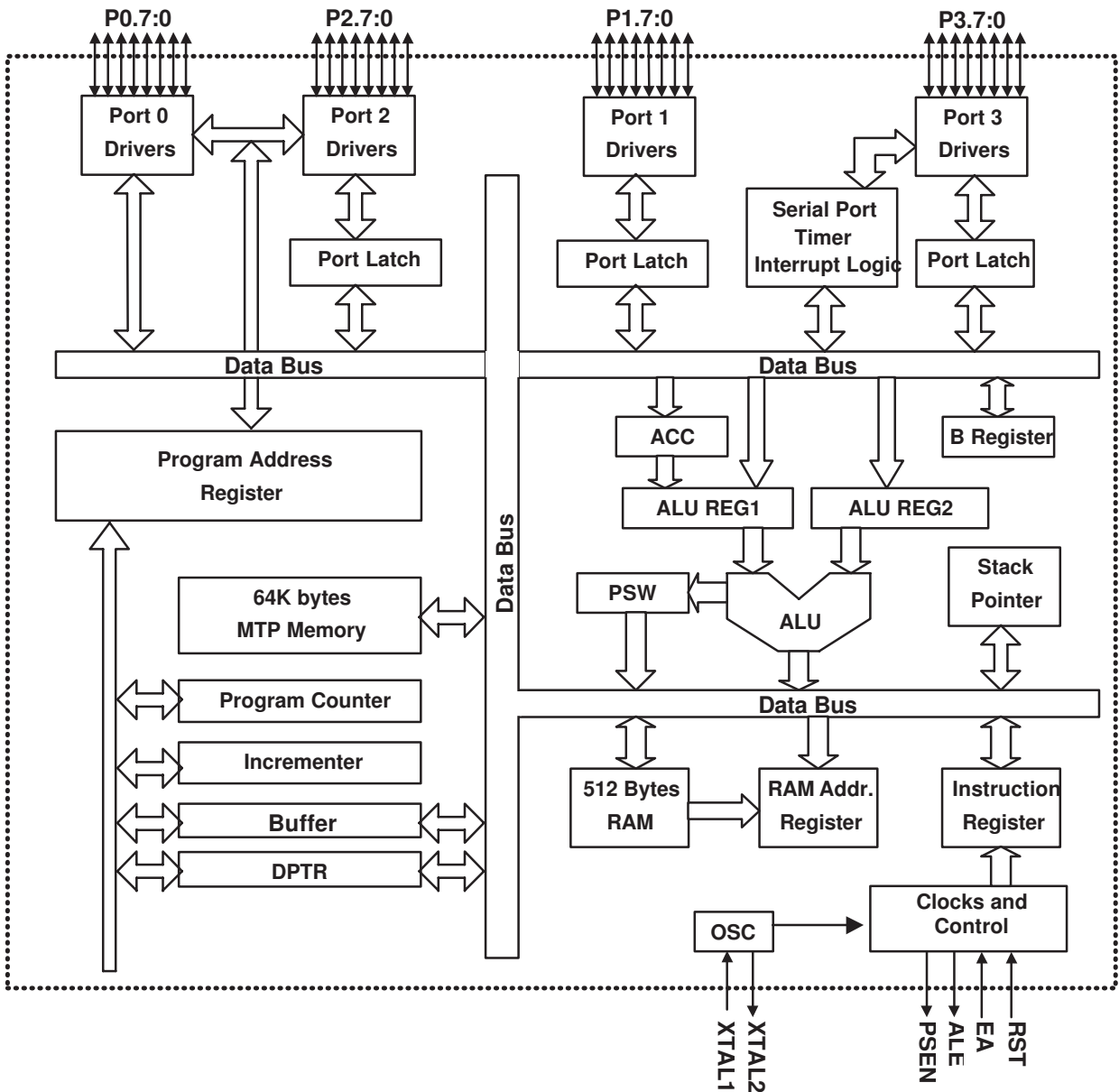


**PT6306**  
**KEYBOARD: U203**



**M6759**

KEYBOARD: U201 & U202

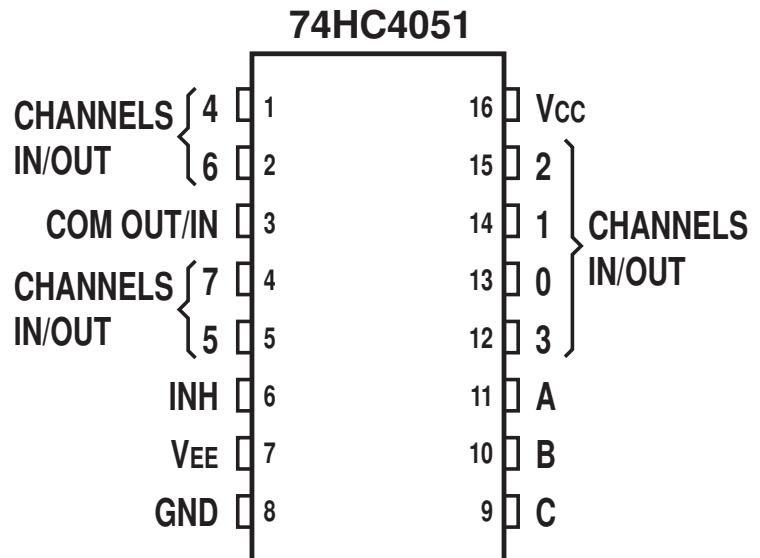


**74HC4051**

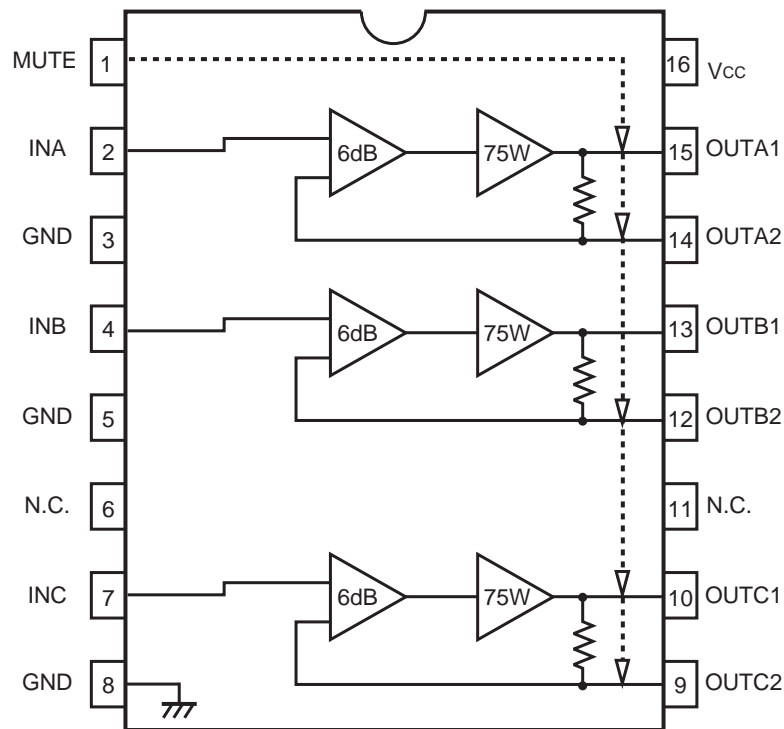
KEYBOARD: U208

S-VIDEO BOARD: U4102 & U4103

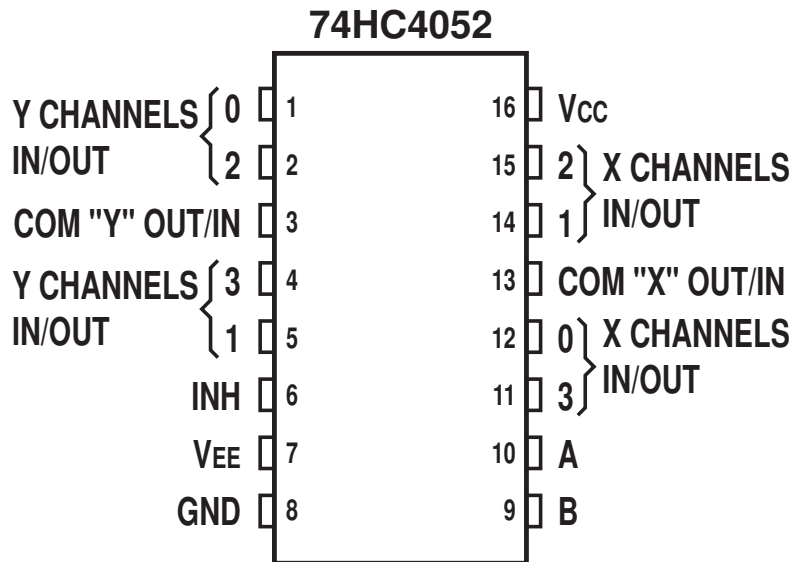
COMPOSITE VIDEO BOARD: U4201



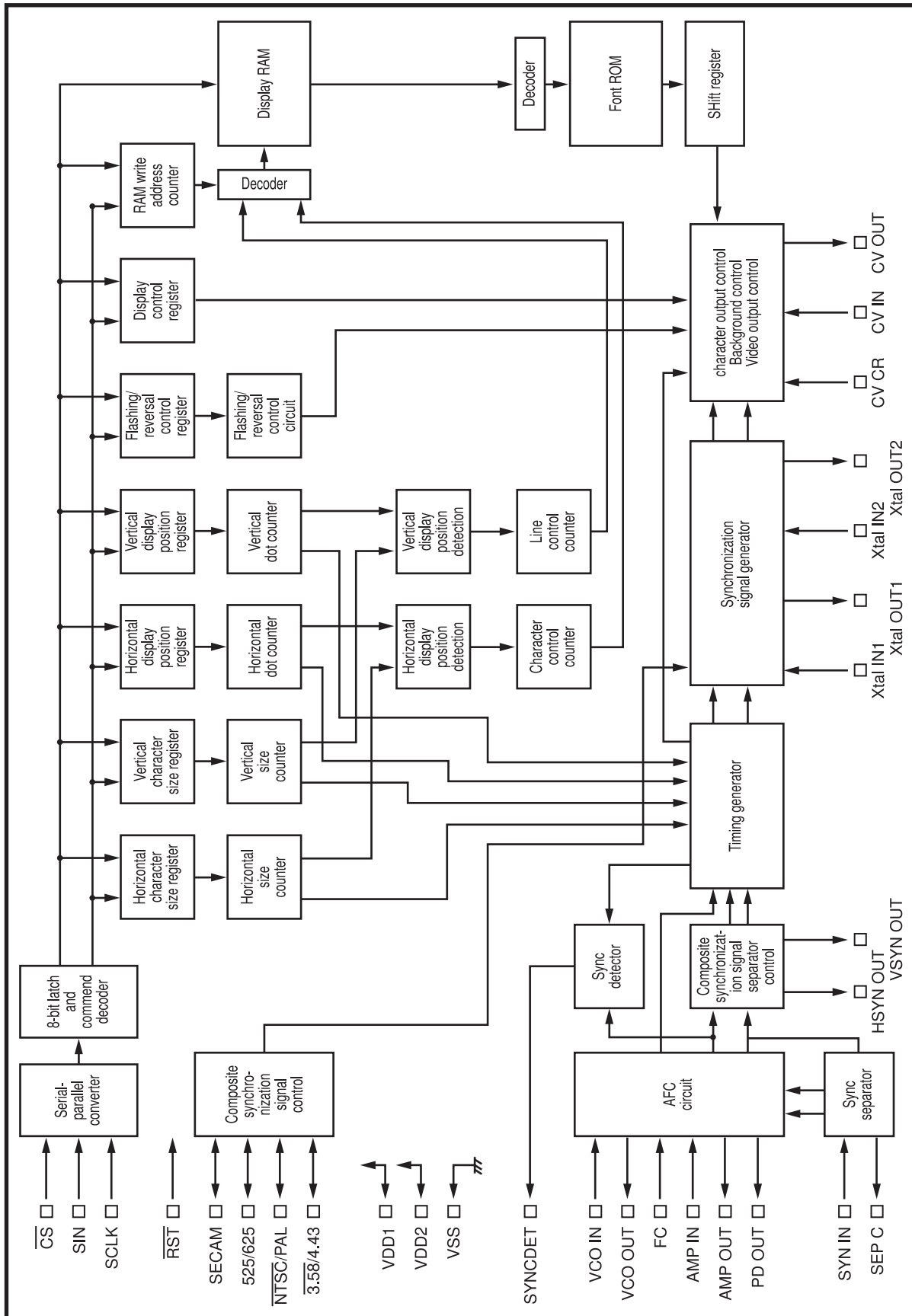
**BA7660FS**  
**COMPONENT VIDEO BOARD: U4301**



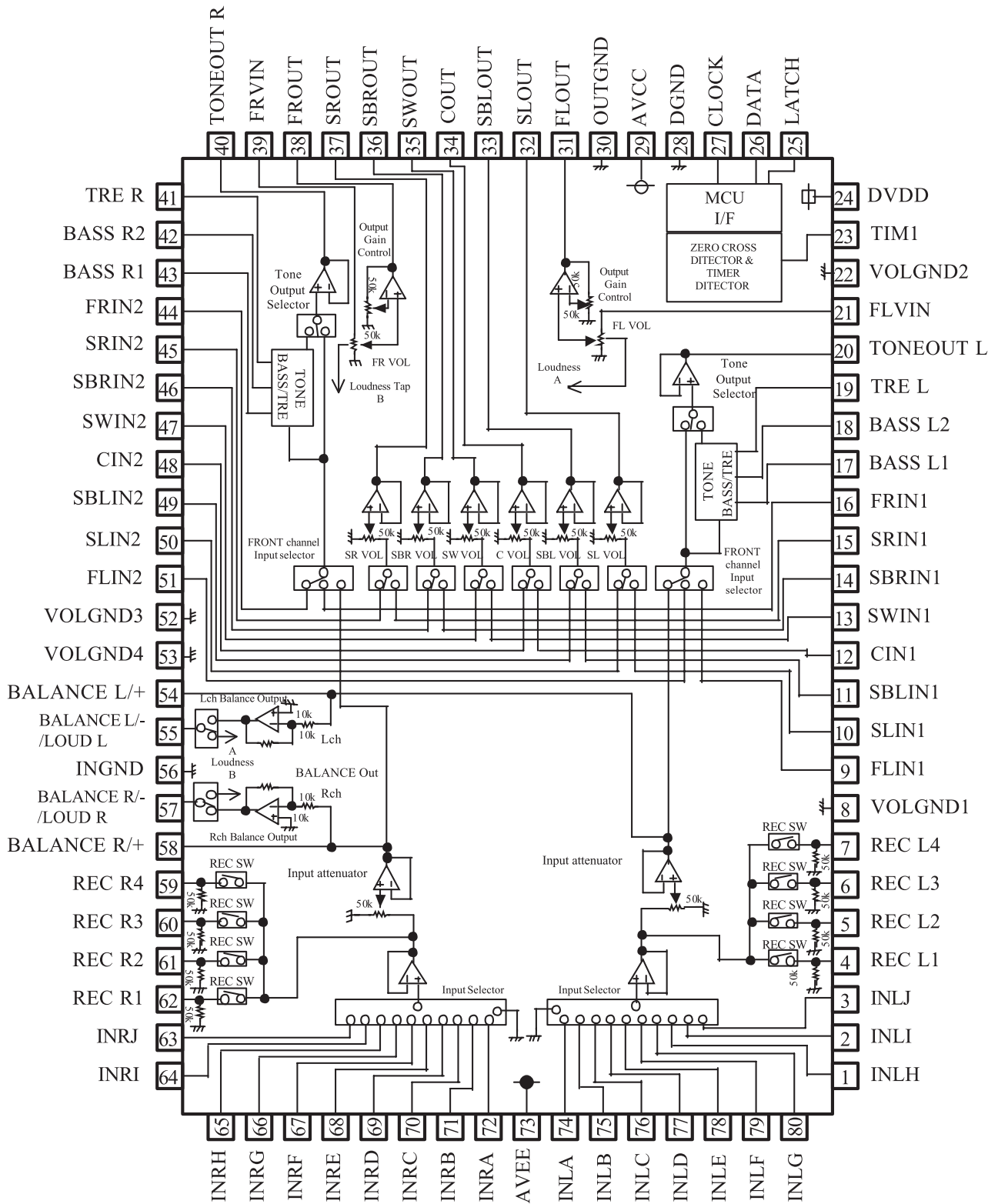
**74HC4052**  
**COMPONENT VIDEO BOARD: U4302 & U4303**



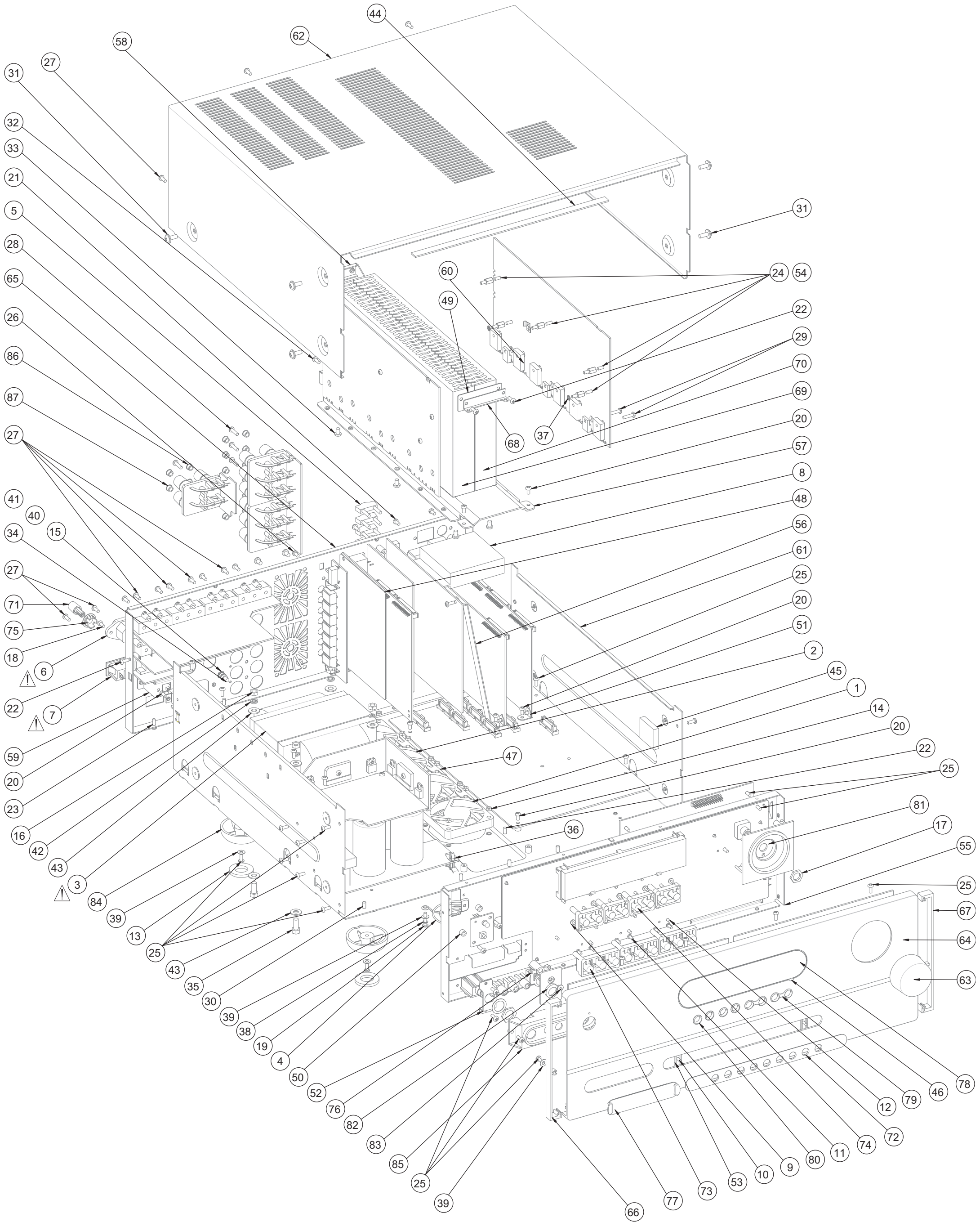
**LC74763**  
**S-VIDEO BOARD:**  
**U4101**



**M61516FP**  
**MULTI-CHANNEL BOARD: U6101 & U6102**



EXPLODED VIEW



# EXPLODED VIEW PARTS LIST

Item	Database Part No.	Description	Qty
1	08-002-0065-90	FAN DC 60x10mm 12V 0.09A 3000RPM DF126010SL L=450MM W/ 2.5P CONNECTOR	2
2	08-002-0066-90	FAN DC 60x10mm 12V 0.09A 3000RPM DF126010SL L=350MM W/ 2.5P CONNECTOR	2
3	10-005-0188-90	TRANSFORMER PW EI-114 115V/230V T754 T06675A	1
4	25-022-1381-90	FAN GUARD 60mm DFG-60	4
5	17-016-0078-90	JUMPER PLUG PITCH 14mm	6
6	15-004-0074-90	AC SOCKET IEC 10A/250V	1
7	15-004-0078-90	AC OUTLET 3 PINS US POLARIZED SS-6B-1-NY [FOR 120V VER.]	1
	15-004-0076-90	AC OUTLET EURO CEE 7 2.5A/250V A302D0060P [FOR 230V VER.]	1
8	15-016-0001-90	AM/FM TUNER MODULE KST-MB114MA0-23 [FOR 120V VER.]	1
	15-016-0002-90	AM/FM TUNER MODULE KST-MB114MA1-23 [FOR 230V VER.]	1
9	22-003-0138-90	SELF TAPPING SCREW 2X5 WASHER HEAD TYPE "B" NI PLT	8
10	22-003-0139-90	SELF TAPPING SCREW DIA2.6 X 5 P/H TYPE "A" NI PLT	2
11	22-003-0126-00	SELF TAPPING SCREW DIA2.6 X 6 P/H TYPE "A" NI PLT	6
12	22-003-0145-90	SELF TAPPING SCREW DIA2.6 X 8 B/H TYPE "A" NI PLT	14
13	25-014-0030-90	RUBBER FOOT I/D14 X O/D26 X 3 PORON HH-48C	4
14	22-007-0081-00	NUT M3 X 2.4mm	16
15	22-007-0078-00	NUT M4 X 3.2mm 0.7p	2
16	22-007-0082-90	NUT M5X3.4 NI PLT	4
17	22-007-0083-90	NUT ZINC PLATED M9.0 X 2.2mm 11p	1
18	22-003-0129-00	TAPTITE SCREW 3 X 8 SMALL K/H TYPE "B" BLK PLT	2
19	22-001-0383-90	MACHINE SCREW M3 X 18 P/H NI PLT	16
20	22-001-0367-00	MACHINE SCREW M3 X 6 P/H NI PLT	17
21	22-001-0376-90	MACHINE SCREW M3 X 6 P/H BLK	2
22	22-003-0149-90	MACHINE SCREW M3.0 X 6.0 B/H TAP TYPE NICKEL PLT	20
23	22-003-0141-90	TAPTITE SCREW 3 X 6 B/H TYPE "B" BLK	4
24	22-003-0142-90	MACHINE SCREW M3 X 8 P/H NI PLT	5
25	22-003-0030-00	SELF TAPPING SCREW DIA3 X 8 B/B ZINC PLD TAPTITE-TYPE	32
26	22-001-0023-00	MACHINE SCREW M3 X 8 B/H BLACK	2
27	22-003-0049-00	TAPTITE SCREW DIA3 X 8 B/H TYPE "B" BLK PLT	54
28	22-003-0143-90	TAPTITE SCREW DIA3 X 10 P/H TYPE "B" BLK	7
29	22-001-0372-00	MACHINE SCREW M3 X 12 B/H NI-PLT	20
30	22-003-0144-90	TAPTITE SCREW 3.5 X 8.0 B/H TYPE "B" NI PLT	5
31	22-001-0379-90	MACHINE SCREW M4 X 8 WASHER HEAD BLK	6
32	22-003-0146-90	TAPTITE SCREW DIA4 X 8 B/H BLK TYPE-B	4
33	22-003-0147-90	TAPTITE SCREW 4 X 8 C/H TYPE -B BLK	6
34	22-001-0384-90	MACHINE SCREW M4 X 14 WAHER HEAD BLK	1
35	22-001-0380-90	HEX HEAD SCREW M5 X 12 NI PLT	4
36	25-006-0043-90	PCB SUPPORTER "KSS" (H=9.6mm PCB HOLE 4mm) CS-0610	3
37	22-008-0024-00	INTERNAL TOOTH WASHER M3 X 0.4mm	5
38	22-005-0032-00	WASHER SPRING I/D 3.2 X O/D 5.6 0.9mm THK	35



<b>Item</b>	<b>Database Part No.</b>	<b>Description</b>	<b>Qty</b>
39	22-006-0081-00	WASHER STEEL I/D 3.5 X O/D 8.0 0.4mm THK. ZINC PLT.	22
40	22-005-0034-00	WASHER SPRING I/D 4 x O/D 7 x 1 THK	2
41	22-008-0025-00	OUTER TOOTH WASHER ID 4.2 X OD 8.2 X 0.4 THK NICKEL PLT	1
42	22-005-0036-90	WASHER SPRING I/D 5.2 X O/D 8 X 1.2 THK ZINC PLT.	4
43	22-006-0085-90	WASHER STEEL I/D 5.6 X O/D 12 X 1 THK. NI PLT.	8
44	25-016-0025-90	FOAM 9 X 240 X 1.5mm BLACK (UL GRADE) W/NITTO 500	1
45	25-016-0026-90	FOAM 30x25x6mm	1
46	24-031-0001-90	STATIC COVER SHEET (PET)	1
47	25-020-0352-90	FAN WIRE FIBRE PAPER	4
48	25-020-0353-90	FIBER PAPER 133 X 150 X 0.8mm	1
49	25-020-0354-90	FIBRE PAPER 54x20x0.8mm	1
50	25-022-1256-90	METAL SPACER OD6 X ID3.2 X 4.8mm	2
51	25-022-1239-90	L BRACKET R.1	2
52	25-022-1231-90	PHONE BRACKET	1
53	25-022-1232-90	DUMMY BRACKET	2
54	25-005-0118-90	HEX SPACER AF5.5 H8+6	10
55	25-022-1234-90	SUBFASCIA T762 R.2	1
56	25-022-1252-90	S-VIDEO SUPPORT BRACKET T762	1
57	25-022-1253-90	LARGE FAN MOUNTING BRACKET T762 R.1	1
58	25-022-1254-90	HTSK SUPPORT BRACKET (PAINTED BLACK)	2
59	25-022-1242-90	POWER BUTTON BRACKET H=24.8mm	1
60	25-022-1243-90	CLIP THERMAL SWITCH	1
61	23-235-0002-91	BOTTOM CHASSIS T754	1
62	23-236-0003-90	TOP COVER (AH) T754 (PAINTED GREY) R.7 [FOR 120V GREY VER.]	1
	23-236-0005-90	TOP COVER (C) T754 (PAINTED GREY) R.7 [FOR 230V GREY VER.]	1
	23-236-0006-90	TOP COVER (C) T754 (PAINTED TITANIUM) R.7 [FOR 230V TITANIUM VER.]	1
63	21-001-0025-90	VOLUME KNOB ASSY (D. GREY) [FOR GREY VER.]	1
	21-001-0026-90	VOLUME KNOB ASSY (TITANIUM) [FOR TITANIUM VER.]	1
64	23-237-0023-92	FASCIA T754 (GRAPHITE) R.1 [FOR GREY VER.]	1
	23-237-0024-92	FASCIA T754 (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	1
65	23-237-0001-90	REAR PANEL T754 (AH) R.6 [FOR 120V VER.]	1
	23-237-0002-91	REAR PANEL T754 (C) R.2 [FOR 230V VER.]	1
66	25-022-1229-92	SIDE CAP L T762 (GRAPHITE) R.1 [FOR GREY VER.]	1
	25-022-1226-92	SIDE CAP L T754 (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	1
67	25-022-1230-92	SIDE CAP R T762 (GRAPHITE) R.1 [FOR GREY VER.]	1
	25-022-1227-92	SIDE CAP R T754 (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	1
68	25-022-1244-90	HEATSINK MOUNTING BRACKET	1
69	19-001-0094-90	NEW EXTRUDED HTSK LEFT T762 R.3	1
70	19-001-0095-90	NEW EXTRUDED HTSK RIGHT T762 R.1	1
71	21-001-0027-90	POWER BUTTON BLACK	1
72	21-002-0148-92	INPUT BUTTON LOZENGE T752 (GRAPHITE) R.1 [FOR GREY VER.]	1

<b>Item</b>	<b>Database Part No.</b>	<b>Description</b>	<b>Qty</b>
73	21-002-0149-92	INPUT BUTTON LOZENGE T752 (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	1
	21-002-0150-92	INPUT BUTTON (GRAPHITE) R.5 [FOR GREY VER.]	3
74	21-002-0151-92	INPUT BUTTON (NEW TITANIUM) R.5 [FOR TITANIUM VER.]	3
	25-024-0309-92	DUO BUTTON (GRAPHITE) R.2 [FOR GREY VER.]	4
75	25-024-0310-92	DUO BUTTON (NEW TITANIUM) R.2 [FOR TITANIUM VER.]	4
	21-002-0147-90	POWER BUTTON BEZEL	1
76	21-002-0152-92	POWER BUTTON TACT ACTIVATE (GRAPHITE) R.2 [FOR GREY VER.]	1
	21-002-0153-92	POWER BUTTON TACT ACTIVATE (NEW TITANIUM) R.2 [FOR TITANIUM VER.]	1
77	25-024-0305-92	VIDEO COVER (GRAPHITE) R.1 [FOR GREY VER.]	1
	25-024-0306-92	VIDEO COVER (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	1
78	25-008-0402-90	WINDOW LENS	1
	25-024-0311-92	LINKED GOGGLE BEZEL(GRAPHITE) R.1 [FOR GREY VER.]	2
80	25-024-0312-92	LINKED GOGGLE BEZEL (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	2
	25-024-0313-92	DUO GOGGLE BEZEL (GRAPHITE) R.2 [FOR GREY VER.]	2
81	25-024-0314-92	DUO GOGGLE BEZEL (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	2
	25-024-0307-92	VOLUME BEZEL (GRAPHITE) R.1 [FOR GREY VER.]	1
82	25-024-0308-92	VOLUME BEZEL (NEW TITANIUM) R.1 [FOR TITANIUM VER.]	1
	21-002-0154-92	POWER BUTTON BEZEL (GRAPHITE) R.2 [FOR GREY VER.]	1
83	21-002-0163-92	POWER BUTTON BEZEL (NEW TITANIUM) R.2 [FOR TITANIUM VER.]	1
	25-008-0403-90	LED LENS ROUND	1
84	25-024-0315-90	PLASTIC FOOT DOME SHAPE	4
85	25-024-0317-90	VIDEO HOUSING	1
86	25-020-0350-90	BANANA PLUG BLACK PT#10.B [FOR 230V VER.]	8
87	25-020-0371-90	BANANA PLUG BRIGHT RED PT#10 R.1 [FOR 230V VER.]	8

# ELECTRICAL PARTS LIST

Reference No.	Database Part No.	Description
<b>POWER AMP MODULE</b> <i>PCB ASSEMBLY</i>	50-940-0754-90	T754 POWER AMP MODULE
<b>FRONT &amp; CENTER AMP BOARD</b> <i>PCB ASSEMBLY</i>	27-909-0754-90	T754AH Front and Center Amp Board Assembly
<b>RESISTORS</b>		
R574,R547,R523	02-005-0072-00	RES RN 0.22 OHM 5% 5W SIL STRAIGHT LEADS 3 PIN COMMON PIN2 WW
R556,R576,R548,R575,R528, R527	02-010-0013-00	RES MO 10 OHM 5% 1/2W AXIAL
R591,R590,R589	02-010-0014-00	RES MO 10 OHM 5% 2W AXIAL
R571,R545,R522	06-004-0018-90	VR SEMI-FIX RES CF 250 OHM B 30% 6mm HOR
<b>CAPACITORS</b>		
C529,C517,C505	03-002-0014-00	CAP ELEC GR 470uF 16V 20% 85C RAD
C510,C521,C522,C511,C535, C534	03-002-0134-00	CAP ELEC GR 100uF 100V 20% RAD
C566,C565	03-002-0143-00	CAP ELEC SS 47uF 16V 20% 85C RAD HEIGHT = 7mm
C501,C513,C525	03-002-0148-00	CAP ELEC SS 4.7uF 50V 20% 85C RAD HEIGHT = 7mm
C537-C539	03-004-0031-00	CAP MPF 0.1uF 63V +/-5% MEM TYPE
C527,C515,C503	03-006-0046-00	CAP MYLAR 1000P 100V 10% ST4.0
C531,C519,C508	03-006-0047-00	CAP MYLAR 150nF 100V 10% ST7.5
<b>TRANSISTORS</b>		
Q518,Q568,Q565,Q562,Q529, Q516,Q506,Q504,Q530	05-001-0065-00	XTR PW NPN 1A/100V TO-126 2SD600KE
Q566,Q563,Q569	05-001-0066-00	TRANSISTOR PW PNP 1A/100V TO-126 2SB631KE
Q507,Q519,Q531	05-001-0067-00	XTR PW NPN 1.5A/160V TO-220ML 2SC4159E
Q532,Q528,Q520,Q517,Q508, Q505	05-001-0068-00	XTR PW PNP 1.5A/160V TO-220ML 2SA1606E
Q510,Q522,Q533	05-001-0070-00	XTR PW NPN 15A/230V TO-3PB 2SC5669
Q534,Q521,Q509	05-001-0071-00	XTR PW PNP 15A/230V TO-3PB 2SA2031
Q543,Q544,Q545	05-001-0076-00	XTR SS NPN HFE20 250MHz DTC123ESATP
Q501-Q503,Q511,Q513-Q515, Q535,Q523,Q525-Q527,Q535	05-001-0079-00	TRANSISTOR SS NPN HFE160-320 130MHz 2SC2362KF
Q554,Q551,Q550,Q556,Q553, Q567,Q564,Q561,Q557	05-001-0083-00	TRANSISTOR SS PNP HFE 280-560 110MHz 2SA1016KG-AA
<b>COILS</b>		
L501-L503	07-002-0136-90	AIR COIL 0.2uH +/-10% 1 X 9 X 13.5 TURNS
<b>RELAY</b>		
M501,M502,M505	07-005-0039-90	RELAY POWER DC24V 5A/250V 2P1T PCB ME-7C024-2HS
<b>JUMPER BARS</b>		
J1-J18	17-016-0043-90	JUMPER BAR DIA1.5 X 25 R.1
R511,R515,R539,R540,R566, R569,R5126-5131	17-016-0080-90	Jumper Wire Dia. 0.5mm For L Smaller than 14mm Roll
<b>DIODES</b>		
D501-D503,D505-D507,D509- D514,D522-D528,D531-D536	04-001-0001-00	DIODE SW 4NS DO35 1N4148
D529,D530	04-002-0046-90	DIODE ZENER BZX55 22V 1/2W 5% DO-35 BZX-C22

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
<b>SURROUND AMP BOARD PCB ASSEMBLY</b>	27-910-0754-90	T754AH Surround Amp Board Assembly
<b>REGULATORS</b>		
U872	01-004-0048-00	IC VOLT REG 5V 1A TO-220 NJM7805FA ISOWATT
U871	01-004-0049-00	IC VOLT REG 12V 1A TO-220 NJM7812 ISOWATT
<b>RESISTORS</b>		
R844,R843,R8103	02-005-0072-00	RES RN 0.22 OHM 5% 5W SIL STRAIGHT LEADS 3 PIN COMMON PIN2 WW
R894,R898,R838,R837,R830, R829	02-010-0013-00	RES MO 10 OHM 5% 1/2W AXIAL
R858,R857,R8110	02-010-0014-00	RES MO 10 OHM 5% 2W AXIAL
R897,R836,R835	06-004-0018-90	VR SEMI-FIX RES CF 250 OHM B 30% 6mm HOR
<b>CAPACITORS</b>		
C837,C809,C810,C874,C875	03-002-0014-00	CAP ELEC GR 470uF 16V 20% 85C RAD ST5
C554	03-002-0073-00	CAP ELEC GS 22uF 16V 20% 85C RAD HEIGHT = 7mm
C876	03-002-0078-00	CAP ELEC KM 2200uF 35V 20% 105C VER
C872	03-002-0131-00	CAP ELEC SS 10uF 50V 20% 85C RAD HEIGHT= 7mm
C843,C842,C822,C821,C820, C819	03-002-0134-00	CAP ELEC GR 100uF 100V 20% RAD
C871,C873	03-002-0144-00	CAP ELEC SS 47uF 50V 20% 85C RAD HEIGHT = 8 X
C835,C802,C801	03-002-0148-00	CAP ELEC SS 4.7uF 50V 20% 85C RAD HEIGHT = 7mm
C844,C824,C823	03-004-0031-00	CAP MPF 0.1uF 63V +/-5% MEM TYPE
C806,C805,C836	03-006-0046-00	CAP MYLAR 1000P 100V 10% ST4.0
C840,C816,C815	03-006-0047-00	CAP MYLAR 150nF 100V 10% ST7.5
<b>DIODES</b>		
D879,D878	04-002-0048-90	DIODE ZENER BZX85 3.3V 1W 5% DO41 BZX85C3V3
<b>TRANSISTORS</b>		
Q842,Q809,Q810,Q811,Q841, Q854,Q856,Q858,Q812	05-001-0065-00	TRANSISTOR PW NPN 1A/100V TO-126 2SD600KE
Q859,Q855,Q857	05-001-0066-00	TRANSISTOR PW PNP 1A/100V TO-126 2SB631KE
Q843,Q814,Q813	05-001-0067-00	TRANSISTOR PW NPN 1.5A/160V TO-220ML 2SC4159E
Q815,Q816,Q844,Q850,Q851, Q852	05-001-0068-00	TRANSISTOR PW PNP 1.5A/160V TO-220ML 2SA1606E
Q871	05-001-0069-00	TRANSISTOR PW 3A/60V TO-126 2SB772Q
Q818,Q817,Q845	05-001-0070-00	TRANSISTOR PW NPN 15A/230V TO-3PB 2SC5669
Q819,Q820,Q846	05-001-0071-00	TRANSISTOR PW PNP 15A/230V TO-3PB 2SA2031
Q829,Q848	05-001-0076-00	TRANSISTOR SS NPN HFE20 250MHz DTC123ESATP
Q872	05-001-0077-00	TRANSISTOR SS NPN HFE270-560 180MHz
Q801-Q806,Q821,Q822,Q838- Q840,Q847,Q545,Q546	05-001-0079-00	TRANSISTOR SS NPN HFE160-320 130MHz 2SC2362KF
Q834,Q835,Q837,Q824,Q827, Q512,Q807,Q808,Q823,Q826	05-001-0083-00	TRANSISTOR SS PNP HFE 280-560 110MHz 2SA1016KG-AA
<b>COILS</b>		
L801-L803	07-002-0136-90	AIR COIL 0.2uH +/-10% 1 X 9 X 13.5 TURNS
<b>RELAYS</b>		
M801,M802	07-005-0041-90	RELAY POWER DC24V 8A/250V 2P1T PCB MOUNT
<b>JUMPER BARS</b>		
J19,J20,J21,J22,J23,J24,J25,J2 6,J27,J28,J29,J30,J31,J32,J33, J34,J35,J36	17-016-0043-90	JUMPER BAR DIA1.5 X 25 R.1

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
R823-824, R827-828, R899, R8102, R8114-8119	17-016-0080-90	Jumper Wire Dia. 0.5mm For L Smaller than 14mm Roll
<b>DIODES</b> D801-D809,D814-D818,D820- D825,D871-D874,D880-D883	04-001-0001-00	DIODE SW 4NS DO35 1N4148
<b>MAIN BOARD PCB ASSEMBLY</b>	27-901-0754-90	T754AH Main Board Assembly
<b>REGULATOR</b> U705,U704,U701 U702,U707 U703	01-004-0048-00 01-004-0049-00 01-004-0051-00	IC VOLT REG 5V 1A TO-220 NJM7805FA ISOWATT IC VOLT REG 12V 1A TO-220 NJM7812 ISOWATT IC VOLT REG TO-220F NJM7912
<b>RESISTORS</b> R703,R704	02-001-0446-00	RES CF 560 OHM 5% 1W AXIAL
<b>CAPACITORS</b> C701 C702,C705,C706,C716,C725 C707 C711-C713,C741 C719 C710 C704 C724 C715	03-002-0057-00 03-002-0066-00 03-002-0078-00 03-002-0090-00 03-002-0130-00 03-002-0144-00 03-002-0147-00 03-002-0159-00 03-004-0090-00	CAP ELEC EGH 4700uF 25V 20% 105C RAD ST7.5 CAP ELEC KM 1000uF 25V 20% 105C 10X20 CAP ELEC KM 2200uF 35V 20% 105C VER CAP ELEC KM 1000uF 50V 20% 105C RAD 13X25 CAP ELEC KM 100uF 16V 20% 105C RAD ST5 CAP ELEC SS 47uF 50V 20% 85C RAD HEIGHT = 8 X CAP ELEC 4700uF 35V 105C RAD CAP ELEC SK 6800uF 25V 20% 105C 16X36mm CAP MPF 1uF 63V +/-5% MEM TYPE
<b>DIODES</b> D701-D710 D715	04-001-0003-00 04-005-0020-90	DIODE RECT 1A/1000V DO41 WIN4007 REEL TYPE DIODE BRI 4A/70V RS402L
<b>TRANSISTORS</b> Q701	05-001-0065-00	XTR PW NPN 1A/100V TO-126 2SD600KE
<b>JUMPER BARS</b> JP1,JP2	17-016-0043-90	JUMPER BAR DIA1.5 X 25 R.1
<b>DIODES</b> D711	04-002-0045-90	DIODE ZENER BZX55 30V 1/2W 5% DO35 BZX55-C30V
<b>POWER SUPPLY BOARD PCB ASSEMBLY*AH PCB ASSEMBLY*C,CT</b>	27-903-0754-90 27-904-0754-90	T754AH (US) Power Supply Board Assembly T754C (CE) Power Supply Board Assembly
<b>RESISTOTRS</b> R754*AH R751	02-001-0451-00 02-004-0014-00	RES CONDUCTIVE PATH 3.9M OHM 1/2W 5% 250V RES FUSIBLE 0.22 OHM 10% 1/2W AXIAL
<b>CAPACITORS</b> C752 C753 C763	03-002-0148-00 03-004-0115-00 03-007-0014-00	CAP ELEC SS 4.7uF 50V 20% 85C RAD HEIGHT = 7mm CAP MpF 0.001uF 63V 5% DMF 5 SERIES HC CER CAP 0.01uF/250VAC ±20% Y5V RAD JY16F103MK02 UL/CSA/VDE

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
<b>DIODES</b> D751-D756	04-001-0003-00	DIODE RECT 1A/1000V DO41 WIN4007
<b>TRANSISTORS</b> Q751	05-001-0072-00	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
<b>RELAY</b> M751	07-005-0042-90	RELAY MINIATURE 2P1T SDT-S-112DMR
<b>STANDBY TRANSFORMER</b> T751	10-005-0186-90	TRANSFORMER PW EI-35 100V/220V T05382B
<b>FUSES</b> F751*AH	20-001-0078-90	FUSE TIME-LAG 10A/250VAC 5X20mm UL/CSA 5T
F751*C,CT	20-001-0072-90	FUSE TIME-LAG 6.3A 250VAC 5X20mm TSD UL/CSA/VDE/CCC WALTER
F752*AH	20-001-0076-90	FUSE 1.6A 250V TIME LAG LBC 5x20mm TSD UL/CSA/VDE/SEMKO
F752*C,CT	20-001-0069-90	FUSE TIME-LAG 800mA 250V 5x20mm TSD UL/CSA/VDE/CCC WALTER
<b>JUMPERS</b> JP1,JP2, JP4, JMP1,JMP2,JMP4*AH	17-016-0077-00	Jumper wire Dia. 0.5mm L=52.0mm
JP3,JP4, JMP1,JMP2,JMP4*C,CT	17-016-0077-00	Jumper wire Dia. 0.5mm L=52.0mm
<b>KEY BOARD AND LED BOARD PCB ASSEMBLY</b>	50-951-0754-90	T754 KEYBOARD AND LED ASSEMBLY
<b>LED BOARD PCB ASSEMBLY</b>	27-915-0754-90	T754AH LED Board Assembly
<b>TRANSISTORS</b> Q213	05-001-0078-00	Transistor SS NPN HFE30 250MHs SPT DTC114ESATP
Q211,Q212	05-001-0082-00	Transistor SS PNP HFE30 250MHs SPT DTA114ESATP
<b>TACT SWITCH</b> S220	11-007-0060-90	SW TACT NO 1P1T 50mA/12V VER H=7mm TM114BFJ
<b>LED</b> D211	12-006-0156-90	LED GRN-AMB-RED CIRCULAR 5X8.7MM BL- BG0A0D13C4V COMMON CATHODE
<b>DIODES</b> D221,D222	04-001-0001-00	Diode 1N4148 DO-35 0.15A/100V Signal Switching Diode
<b>KEY BOARD PCB ASSEMBLY</b>	27-922-0754-90	T754AH Keyboard Board Assembly
<b>CAPACITORS</b> C212	03-002-0135-00	CAP ELEC GS 1000uF 10V 20% 85C RAD ST5
C255,C258	03-002-0137-00	CAP ELEC SS 1uF 50V 20% 85C RAD HEIGHT= 7mm MAX
C214	03-002-0138-00	CAP ELEC. SS 0.1uF 50V 20% 85C RAD HEIGHT=7mm

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
C208,C209,C210,C211,C259 C224	03-002-0143-00 03-002-0146-00	CAP ELEC SS 47uF 16V 20% 85C RAD HEIGHT = 7mm CAP ELEC GR 4700uF 25V 20% 85C RAD
<b>IR</b> D201	04-004-0008-91	IR RX 940nm 37.9KHz SHIELD ST PIC-37143TE5-H
<b>TRANSISTORS</b> Q204,Q203 Q201	05-001-0072-00 05-001-0080-00	XTR SS NPN HEF 100 200MHz TO-92 C1815Y XTR SS PNP HFE 100 200MHz TO-92 A1015Y
<b>ENCODER</b> M201	06-006-0009-90	ENCODER ROTATRY STD L=20MM VERT. W/O CLICK EC162102F2B-HA1-002
<b>TACT SWITCHES</b> S201-S216,S218	11-007-0060-90	SW TACT NO 1P1T 50mA/12V VER H=7mm TM114BFJ
<b>VFD</b> VD201	12-005-0028-00	VFD 16-BT-132-GNK 16 GRIDX36 ANODE 2 COLORS
<b>CRYSTALS</b> X201,X202	14-002-0023-00	CRYSTAL 20.000MHz 30ppm 32pF HC-49/S
<b>ICS</b> U210	01-002-0053-00	IC EEPROM 2K BYTE 250ns PDIL ENDURANCE AT 24C16
U202	01-010-0022-00	IC MCU 8 BIT 16KROM 1024 BYTE XRAM PLCC AT89C51RB2-SL
U201	01-010-0023-00	IC MCU 8 BITS 64K ROM 1792 BYTES RAM PLCC AT89C51RD2
U208	01-012-0062-00	IC LOGIC SINGLE 8 CH ANALOG MUX/DEMUX SMD M74HC4051MIR
U209	01-012-0064-00	IC LOGIC OCTAL BUS TRANSCEIVER 3-STATE SOP 74AHC245D
U204-U207,U211	01-012-0065-00	IC LOGIC 8-STAGE SHIFT-AND-STORE BUS REGISTER SMD SO16 HEF40 94BT
U203	01-015-0004-00	IC VFD DRIVER SMD QFP PT6306
U214	01-026-0002-90	IC MICROCONTROLLER RESET MONITORS MAX810LTR
<b>DIODES</b> D212,D214-D218 D220	04-001-0001-00 04-002-0040-00	DIODE SW 4NS DO35 1N4148 DIODE ZENER BZX79 5.1V 1/2W 5% DO35
<b>SMD RESISTORS</b> R234	02-007-0042-00	RES SMD 1K OHM 5% 1/16W 0603
R216	02-007-0094-00	RES SMD 1K OHM 1% 1/4W 1206
R238	02-007-0132-00	RES SMD 12K OHM 5% 1/16W 0603
R220,R261-R264,R266,R268- R276,R280	02-007-0139-00	RES SMD 4.7K OHM 5% 1/16W 0603
R233	02-007-0140-00	RES SMD 47K OHM 5% 1/16W 0603
R241,R242	02-007-0141-00	RES SMD 100 OHM 5% 1/16W 0603
R221,R230	02-007-0144-00	RES SMD 2.2K OHM 5% 1/16W 0603
R201-R207, R213, R219, R223, R224,R226, R227, R229, R231, R232,R254	02-007-0148-00	RES SMD 10K OHM 5% 1/16W 0603
R255	02-007-0268-00	RES SMD 56K OHM 5% 1/16W 0603
R222,R225,R253,R277,R278	02-007-0288-00	RES SMD 0 OHM 5% 1/16W 0603
R217,R218	02-007-0294-00	RES SMD 470 OHM 5% 1/16W 0603

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
R265,R267	02-007-0298-00	RES SMD 680 OHM 5% 1/16W 0603
R252,R251	02-007-0299-00	RES SMD 10M OHM +/-5% 1/16W 0603
<b>SMD CAPACITORS</b>		
C201-C202,C213,C215- C222,C229,C256,C257	03-009-0075-00	CAP CER SMD 0.1uF 50V 20% Y5V 0603
C241,C242	03-009-0112-00	CAP CER SMD 1nF 50V 10% X7R 0603
C223	03-009-0113-00	CAP CER SMD 10nF 50V 10% X7R 0603
C251-C254	03-009-0116-00	CAP CER SMD 33pF 50V 10% X7R 0603
Q205,Q206	05-004-0020-00	XTR SS NPN HFE100-300 250MHz SOT-23 SMD T3904
<b>DSP BOARD</b>		
<b>PCB ASSEMBLY</b>	27-918-0754-90	T754AH DSP Board Assembly
<b>CAPACITORS</b>		
C1060,C1073	03-002-0014-00	CAP ELEC GR 470uF 16V 20% 85C RAD ST5
C1148,C1147,C1146,C1145	03-002-0073-00	CAP ELEC GS 22uF 16V 20% 85C RAD HEIGHT = 7mm
C1012,C1072,C1092,C1137- C1140,C1080,C1079	03-002-0129-00	CAP ELEC SS 10uF 16V 20% 85C RAD HEIGHT =7mm MAX
C1117	03-002-0133-00	CAP ELEC SS 100uF 16V 20% 85C RAD HEIGHT = 7mm
C1096,C1098,C1100,C1004, C1083,C1002	03-002-0137-00	CAP ELEC SS 1uF 50V 20% 85C RAD HEIGHT= 7mm MAX
C1011	03-002-0138-00	CAP ELEC SS 0.1uF 50V 20% 85C RAD HEIGHT=7mm
C1050,C1051,C1041,C1040, C1030,C1031,C1021,C1020	03-002-0142-00	CAP ELEC SS 3.3uF 50V 20% 85C RAD HEIGHT = 7mm MAX
C1109-C1113,C1209,C1210 C1005	03-002-0143-00 03-002-0157-00	CAP ELEC SS 47uF 16V 20% 85C RAD HEIGHT = 7mm CAP ELEC SS 2.2uF 50V 20% 85C RAD HEIGHT=7mm
<b>TRANSISTORS</b>		
Q1003,Q1002,Q1001	05-001-0072-00	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
<b>INDUCTORS</b>		
L1001- L1007,L1010,L1012,L1014-1017	07-002-0132-90	IND CHOKE 10uH +/-10% AXIAL EC24-100K
L1012	07-002-0135-90	IND CHOKE 5.6uH +/-10% AXIAL EC24-5R6K
<b>CRYSTAL</b>		
X1001	14-003-0011-00	CRYSTAL CLOCK OSCILLATOR 12.288MHz 50ppm 4PIN HALF-SIZE
<b>ICS</b>		
U1007	01-002-0052-00	I.C.EEPROM 256X8 BYTE 70nS PDIL SST27SF020
U1020,U1015	01-004-0054-90	IC REG 1A TO-220(T) LM317T
U1008,U1009	01-012-0058-00	IC LOGIC OCTAL D-FLIP FLOPS WITH 3-STAGE OUTPUT SMD 74LVQ574 M
U1004	01-012-0060-00	IC LOGIC QUAD 2-INPUT SELECTOR SOIC 74HC157MIR
U1014,U1002,U1003	01-012-0068-90	IC LOGIC OCTAL BUS TRANSCEIVER WITH 3- STATE20PIN TSSOP SN74LVC245APWR
U1010-U1013,U1023,U1025	01-014-0041-00	IC AUDIO LOW NOISE OP-AMP SMD NJM5532M
U1022	01-020-0020-90	IC 24BIT 96KHz STEREO DAC FOR AUDIO SOIC CS4340
U1001	01-027-0001-90	IC DD DTS & MPEG DECODER PLCC CS49326
U1021	01-027-0002-90	IC 24BIT 96KHz SURROUND SOUND CODE SSOP CS4228AKS
U1005	01-027-0003-90	IC 96KHz DIGITAL AUDIO INTERFACE RECEIVER SMD CS8415A-CSZ



<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
<b>SMD RESISTORS</b>		
R1151	02-007-0042-00	RES SMD 1K OHM 5% 1/16W 0603
L1011	02-007-0089-00	RES SMD 0 OHM +/-5% 1/10W 0805
R1090,R1091	02-007-0135-00	RES SMD 2.7K OHM 5% 1/16W 0603
R1092,R1093	02-007-0141-00	RES SMD 100 OHM 5% 1/16W 0603
R1008,R1020- R1021,R1114,R1131- R1138,R1230	02-007-0148-00	RES SMD 10K OHM 5% 1/16W 0603
R1082	02-007-0149-00	RES SMD 1.8K OHM 5% 1/16W 0603
R1003-R1006,R1081	02-007-0150-00	RES SMD 3.3K OHM 5% 1/16W 0603
R1095,R1096,R1117-R1120, R1050,R1054,R1064,R1068, R1022,R1026,R1036,R1040	02-007-0157-00	RES SMD 10K OHM 1% 1/16W 0603
R1010,J1001	02-007-0288-00	RES SMD 0 OHM 5% 1/16W 0603
R1013	02-007-0290-00	RES SMD 1.2K OHM 5% 1/16W 0603
R1121-R1124	02-007-0291-00	RES SMD 150 OHM 5% 1/16W 0603
R1023,R1027,R1028,R1030,R10 33,R1035,R1037,R1041,R1042,R 1044,R1047,R1049,R1051,R105 5,R1056,R1058,R1061,R1063,R1 065,R1069,R1070,R1072,R1075, R1077,R1078,R1080,R1084	02-007-0292-00	RES SMD 2.2K OHM 1% 1/16W 0603
R1007	02-007-0293-00	RES SMD 33 OHM 5% 1/16W 0603
R1001-R1002, R1079, R1083, R1097-R1098, R1101-R1102, R1231-R1246	02-007-0295-00	RES SMD 4.7K OHM +/-1% 1/16W 0603
R1099,R1100	02-007-0296-00	RES SMD 4.99K OHM +/-1% 1/16W 0603
R1009	02-007-0300-00	RES SMD 200K OHM +/-5% 1/16W 0603
R1141-R1148	02-007-0301-00	RES SMD 620 OHM +/-5% 1/16W 0603
<b>SMD CAPACITORS</b>		
C1001,C1003,C1017-C1019, C1074-C1076,C1078, C1081, C1082,C1095,C1097,C1099, C1123-C1128,CC1141,C1142	03-009-0075-00	CAP CER SMD 0.1uF 50V 20% Y5V 0603
C1101-C1108	03-009-0111-00	CAP CER SMD 100pF 50V 10% X7R 0603
C1024,C1028,C1034,C1038, C1044,C1048,C1054,C1058, C1132	03-009-0112-00	CAP CER SMD 1nF 50V 10% X7R 0603
C1010,C1007,C1160	03-009-0113-00	CAP CER SMD 10nF 50V 10% X7R 0603
C1006,C1121	03-009-0114-00	CAP CER SMD 220pF 50V 10% X7R 0603
C1130-C1131,C1134- C1136,C1143-C1144	03-009-0115-00	CAP CER SMD 2.2nF 50V 10% X7R 0603
C1201-C1208	03-009-0117-00	CAP CER SMD 330pF 50V 10% X7R 0603
C1022,C1026,C1032,C1036, C1042,C1046,C1052,C1056	03-009-0118-00	CAP CER SMD 3.3nF 50V 10% X7R 0603
C1114	03-009-0119-00	CAP CER SMD 4.7nF 50V 10% X7R 0603
C1025,C1029,C1035,C1039, C1045,C1049,C1055,C1059	03-009-0120-00	CAP CER. SMD 1.5 nF 50V +/-10 % X7R 0603
C1161	03-009-0121-00	CAP CER SMD 68pF 50V 10% X7R 0603
<b>SMD INDUCTORS</b>		
L1013	07-007-0017-90	IND 2.7uH SMD 10% 0805 CI201209-2R7KG

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
<b>AUDIO BOARD</b> <b>PCB ASSEMBLY</b>	27-919-0754-90	T754AH Audio Board Assembly
<b>CAPACITORS</b> C3101-C3113,C3115	03-002-0073-00	CAP ELEC GS 22uF 16V 20% 85C RAD HEIGHT = 7mm
<b>JACKS</b> M303 M301,M302	15-003-0027-90 15-003-0029-90	RCA JACK 4 R-R/W-W PCB MOUNT GOLD RCA JACK 6 R-R-R/W-W-W PCB MOUNT GOLD
<b>COMPOSITE VIDEO BOARD</b> <b>PCB ASSEMBLY</b>	27-920-0754-90	T754AH Composite Video Board Assembly
<b>CAPACITORS</b> C4204,C4206,C4214,C4220 C4201,C4202,C4203,C4205, C4207 C4208 C4211,C4225	03-002-0014-00 03-002-0133-00 03-002-0135-00 03-002-0139-00	CAP ELEC GR 470uF 16V 20% 85C RAD ST5 CAP ELEC SS 100uF 16V 20% 85C RAD HEIGHT = 7mm MAX CAP ELEC GS 1000uF 10V 20% 85C RAD ST5 CAP ELEC SS 220uF 10V 20% 85C RAD
<b>DIODES</b> D4201,D4202	04-001-0001-00	DIODE SW 4NS DO35 1N4148
<b>TRANSISTORS</b> Q4201,Q4202 Q4203,Q4204 Q4501-Q4503 Q4207,Q4210	05-001-0075-00 05-001-0076-00 05-001-0081-00 05-001-0095-90	XTR SS NPN HFE200-700 30MHz 2SC2878A XTR SS NPN HFE20 250MHz DTC123ESATP XTR SS PNP HFE 270-560 140MHz 2SA933ASTPS XTR SS PNP HFE 120-200 200MHz TO-92 8550C
<b>RCA JACKS</b> M4201,M4202	15-003-0026-90	RCA JACK 4 Y-Y/Y-Y PCB MOUNT GOLD RS-454-03
<b>IC</b> U4201	01-012-0062-00	IC LOGIC SINGLE 8 CH ANALOG SMD M74HC4051MIR
<b>SMD RESISTORS</b> J4201,J4202	02-007-0089-00	RES SMD 0 OHM +/-5% 1/10W 0805
<b>DIGITAL INPUT BOARD</b> <b>PCB ASSEMBLY</b>	27-921-0754-90	T754AH Digital Input Board Assembly
<b>CAPACITORS</b> C1222,C1223 C1221,C1214,C1213	03-002-0133-00 03-002-0157-00	CAP ELEC SS 100uF 16V 20% 85C RAD HEIGHT = 7mm CAP ELEC SS 2.2uF 50V 20% 85C RAD HEIGHT=7mm
<b>OPTICAL FIBRE</b> J1008 J1006,J1005	04-004-0005-00 04-009-0001-90	FIBER OPTIC TRANSMITTER 660nm 180ns MOF-T3C2 FIBER OPTIC RECEIVING MODULE 650nm 180ns 5V MOF-R3C2
<b>RCA JACKS</b> J1007,J1004,J1003,J1002,J1001	15-003-0021-90	RCA JACK 1 BLACK PCB MOUNT GOLD
<b>ICS</b> U1203 U1201,U1202	01-012-0061-00 01-012-0066-00	IC LOGIC 8-CHANNEL MULTIPLEXER-SSOP IC LOGIC HEX INVERTER SMD SOP M74HCU04MIR

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
<b>SMD CAPACITORS</b> C1232, C1233, C1234, C1235	03-009-0114-00	CAP CER SMD 220pF 50V 10% X7R 0603
<b>MULTI-CHANNEL BOARD PCB ASSEMBLY</b>	27-923-0754-90	T754AH Multi-Channel Board Assembly
<b>CAPACITORS</b> C607,C6201-C6216	03-002-0073-00	CAP ELEC GS 22uF 16V 20% 85C RAD HEIGHT = 7mm
C755,C756,C775,C776	03-002-0102-00	CAP ELEC 2.2uF 50V 20% NON-POLAR 99NPO2020
C627,C628,C633,C634	03-002-0133-00	CAP ELEC SS 100uF 16V 20% 85C RAD HEIGHT = 7mm
C677,C678,C689,C690	03-002-0143-00	CAP ELEC SS 47uF 16V 20% 85C RAD HEIGHT = 7mm
C759-	03-004-0031-00	CAP MPF 0.1uF 63V +/-5% MEM TYPE
C762,C769,C770,C773,C774	03-004-0116-00	CAP MPF 0.0033uF 100V +/-5% MEM TYPE
C767,C768,C771,C772	03-004-0117-00	CAP MPF 0.047uF 100V +/-5% MEM TYPE
C763,C764,C765,C766	03-004-0118-00	CAP MPF 0.082uF 100V +/-5% MEM TYPE
C757,C758		
<b>TRANSISTORS</b> Q6101 Q6102	05-001-0094-90 05-001-0095-90	TRANSISTOR 8050C NPN TO-92 HFE 120-200 1.5A 40V XTR SS PNP HFE 120-200 200MHz TO-92 8550C
<b>INDUCTORS</b> L6101,L6102	07-002-0133-90	IND CHOKE 100uH +/-10% AXIAL EC24-101K
<b>RCA JACKS</b> M6102 M6101,M6103	15-003-0023-90 15-003-0029-90	RCA JACK 2 B/B PCB MOUNT GOLD RCA JACK 6 R-R/R/W-W-W PCB MOUNT GOLD RCA-
<b>ICS</b> U6101,U6102 U6104,U6105	01-028-0001-90 01-014-0041-00	IC SOUND PROCESSOR 7.1CH VOL+TONE SMD QFP M61516FP IC AUDIO LOW NOISE OP-AMP SMD NJM5532M
<b>DIODES</b> D602,D604	04-002-0047-90	DIODE ZENER BZX55 7.5V 1/2W 5% DO35 BZX55-C7.5V
<b>SMD CAPACITORS</b> C6301-C6304	03-009-0075-00	CAP CER SMD 0.1uF 50V 20% Y5V 0603 TAPE
<b>PRE-OUT BOARD PCB ASSEMBLY</b>	27-924-0754-90	T754AH Pre-Out Board Assembly
<b>RESISTORS</b> R645, R654, R666, R678	02-002-0134-00	RES MF 3.3K OHM 1% 1/6W AXIAL
<b>CAPACITORS</b> C603,C604,C611-C620,C640, C645,C650,C655,C660,C665, C670,C675,C703,C708 C647,C652,C657,C662,C672, C700,C705 C684,C685,C686,C687,C688, C699	03-002-0073-00 03-002-0129-00 03-002-0141-00	CAP ELEC GS 22uF 16V 20% 85C RAD HEIGHT = 7mm MAX CAP ELEC SS 10uF 16V 20% 85C RAD HEIGHT =7mm MAX CAP ELEC GR 330uF 16V 20% 85C RAD

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
C621,C622,C637,C642,C667, C679,C680,C691,C692 C626	03-002-0143-00 03-002-0150-00	CAP ELEC SS 47uF 16V 20% 85C RAD HEIGHT = 7mm MAX CAP ELEC SS 220uF 16V 20% 85C 8x9mm RAD
<b>DIODES</b>	03-002-0150-00	CAP ELEC SS 220uF 16V 20% 85C 8x9mm RAD
D601	04-001-0001-00	DIODE SW 4NS DO35 1N4148
D611-D614	04-001-0003-00	DIODE RECT 1A/1000V DO41 WIN4007
<b>TRANSISTORS</b>		
Q601-Q615,Q617,Q629, Q630, Q632,Q633	05-001-0074-00	XTR SS NPN HFE200-700 30MHz SPT RN1241A
Q6101,Q6102	05-001-0075-00	XTR SS NPN HFE200-700 30MHz 2SC2878A
Q6104	05-001-0078-00	XTR SS NPN HFE30 250MHz SPT DTC114ESATP
Q621-Q626,Q6103	05-001-0082-00	XTR SS PNP HFE 30 250MHz SPT DTA114ESATP
<b>INDUCTORS</b>		
L602-L610	07-002-0132-90	IND CHOKE 10uH 10% EC36 AXIAL EC36-100K
<b>RCA JACKS</b>		
M608,M612	15-003-0022-90	RCA JACK 2 B/B PCB MOUNT GOLD RS-213G-02
M607,M609	15-003-0028-90	RCA JACK 4 R-W/R-W PCB MOUNT GOLD
M611	15-003-0030-90	RCA JACK 1 RED PCB MOUNT GOLD RS-116G/R
M610	15-003-0031-90	RCA JACK 2 W/W PCB MOUNT GOLD RS-213G-06
<b>RESISTORS</b>		
R631,R632,R6110	02-002-0129-00	RES MF 1K OHM 1% 1/6W
R648,R655,R660,R667,R679	02-002-0130-00	RES MF 1.5K OHM 1% 1/8W
R671,R6105,R6106	02-002-0132-00	RES MF 2.7K OHM 1% 1/6W
R672,R695,R702	02-002-0133-00	RES MF 330 OHM 1% 1/6W
R635,R647,R659,R6101-R6104, R6109	02-002-0134-00	RES MF 3.3K OHM 1% 1/6W
R694,R701	02-002-0137-00	RES MF 2.2K OHM 1% 1/6W
<b>JIMBERS</b>		
R601-R606,R608-R616 R618-R620	17-006-0080-90	JUMPER WIRE DIA0.5MM FOR L SMALLER THAN 14MM ROLL
<b>DIODES</b>		
D605-D610	04-001-0001-00	DIODE SW 4NS DO35 1N4148
D619-D623	04-002-0047-90	DIODE ZENER BZX55 7.5V 1/2W 5% DO35
<b>ICS</b>		
U609-U615	01-014-0041-00	IC AUDIO LOW NOISE OP-AMP SMD NJM5532M
<b>SMD RESISTORS</b>		
C747-C766	03-009-0075-00	CAP CER SMD 0.1uF 50V 20% Y5V 0603
C738-C740	03-009-0114-00	CAP CER SMD 220pF 50V 10% X7R 0603
<b>SMD DIODES</b>		
D615-D618, D619-D654	04-007-0039-90	DIODE ZENER SMD 12V 500mW 5% SOD123 MM1Z12

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
<b><u>POWER SWITCH BOARD</u></b> <b><u>PCB ASSEMBLY</u></b>	27-925-0754-90	T754AH Power Switch Board Assembly
<b><u>CAPACITORS</u></b> C764	03-007-0014-00	HC CER CAP 0.01uF/250VAC ±20% Y5V RAD JY16F103MK02 UL/CSA/VDE
<b><u>CAPACITORS</u></b>	11-001-0061-90	POWER SWITCH TV-8 10A/250VAC UL/CSA/VDE/F/D/S PS3-22SPA-P7CZ BABY BLUE HN
<b><u>SECONDARY BOARD</u></b> <b><u>PCB ASSEMBLY</u></b>	27-926-0754-90	T754AH Secondary Board Assembly
<b><u>CAPACITORS</u></b> C801,C802	03-002-0098-00	CAP ELEC LP 12000uF 80V +/-20% RAD
<b><u>RECTIFIER</u></b> D801	04-005-0015-00	BRIDGE RECTIFIER 25A 400V BR254W BR-25W
<b><u>JUMPER BARS</u></b> JMP9201, JMP9202, JMP9203, JMP9204, JMP9205, JMP9206	17-016-0044-00	JUMPER BAR DIA1.5 X 30 R.1
<b><u>SPEAKER A BOARD</u></b> <b><u>PCB ASSEMBLY</u></b>	27-927-0754-90	T754AH Speaker A Board Assembly
<b><u>CAPACITORS</u></b> C912,C911,C913,C914,C915, C916	03-001-0066-00	CAP CER HIK 3.3nF 50V 10% B RAD ST7.5 HIKB332K507
<b><u>SPEAKER TERMINAL</u></b> M5101,M8101	16-001-0429-90	SPEAKER TERMINAL 6P BINDING R/B W/O PLUG KF- J5000-06
<b><u>SPEAKER B BOARD</u></b> <b><u>PCB ASSEMBLY</u></b>	27-928-0754-90	T754AH Speaker B Board Assembly
<b><u>CAPACITORS</u></b> C921,C922	03-001-0066-00	CAP CER HIK 3.3nF 50V 10% B RAD ST7.5
<b><u>SPEAKER TERMINAL</u></b> M5102	16-001-0430-90	SPEAKER TERMINAL 4P BINDING R/B W/O PLUG
<b><u>S-VIDEO BOARD</u></b> <b><u>PCB ASSEMBLY</u></b>	27-929-0754-90	T754AH S-Video Board Assembly
<b><u>CAPACITORS</u></b> C4145 C4151	03-002-0073-00 03-002-0129-00	CAP ELEC GS 22uF 16V 20% 85C RAD HEIGHT = 7mm CAP ELEC SS 10uF 16V 20% 85C RAD HEIGHT =7mm

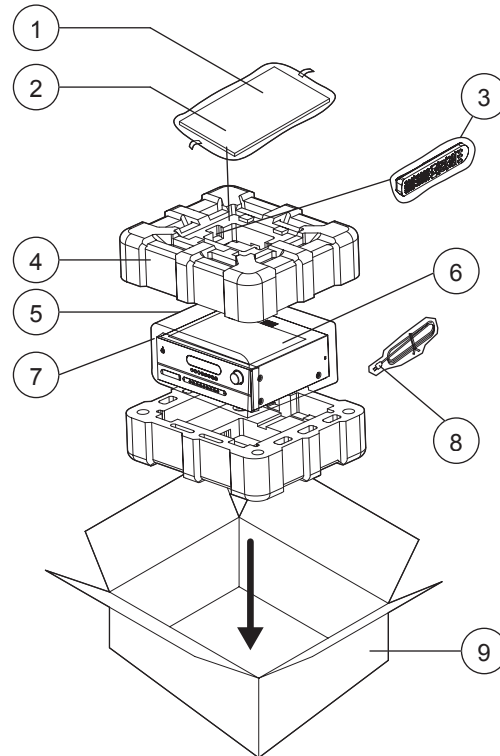
<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
C4134,C4149,C4101-C4107, C4109-C4111,C4113-C4115, C4158	03-002-0132-00	CAP ELEC SS 100uF 10V 20% 85C RAD HEIGHT = 7mm MAX
C4116	03-002-0135-00	CAP ELEC GS 1000uF 10V 20% 85C RAD ST5
C4141,C4133,C4137	03-002-0137-00	CAP ELEC SS 1uF 50V 20% 85C RAD HEIGHT= 7mm MAX
C4144	03-002-0138-00	CAP ELEC. SS 0.1uF 50V 20% 85C RAD HEIGHT=7mm
C4160,C4162,C4166,C4167	03-002-0139-00	CAP ELEC SS 220uF 10V 20% 85C RAD
C4150	03-002-0143-00	CAP ELEC SS 47uF 16V 20% 85C RAD HEIGHT = 7mm
C4108,C4112,C4156,C4170, C4171,C4178,C4179	03-002-0145-00	CAP ELEC GR 470uF 10V 20% 85C RAD
C4153,C4157	03-002-0157-00	CAP ELEC SS 2.2uF 50V 20% 85C RAD HEIGHT=7mm
C4136,C4146	03-004-0049-00	CAP MpF 0.47uF 63V +/-5% DMF 5 SERIES
C4186	03-004-0117-00	CAP MPF 0.047uF 100V +/-5% MEM TYPE
C4138	03-011-0001-00	CAP TRIMMER 20pF 20% SEALED HOR PITCH=5mm
<b>DIODES</b>		
D4101-D4111	04-001-0001-00	DIODE SW 4NS DO35 1N4148
<b>TRANSISTORS</b>		
Q4132	05-001-0072-00	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
Q4122,Q4131	05-001-0073-00	XTR SS NPN HFE 68 30MHz SPT DTC144ESATP
Q4113,Q4114,Q4121,Q4124, Q4125,Q4128,Q4130,Q4133, Q4142,Q4143,Q4144,Q4145	05-001-0075-00	XTR SS NPN HFE200-700 30MHz 2SC2878A
Q4120,Q4123,Q4146,Q4147	05-001-0076-00	XTR SS NPN HFE20 250MHz DTC123ESATP
Q4115,Q4126,Q4127	05-001-0077-00	XTR SS NPN HFE270-560 180MHz 2SC1740STPS
Q4108,Q4116-Q4119,Q4151- Q4155	05-001-0081-00	XTR SS PNP HFE 270-560 140MHz 2SA933ASTPS
Q4136,Q4137,Q4140,Q4141	05-001-0095-90	XTR SS PNP HFE 120-200 200MHz TO-92 8550C
<b>INDUCTORS</b>		
L4102	07-002-0134-90	IND CHOKE 22uH 10% AXIAL EC24-220K
L4101	07-002-0135-90	IND CHOKE 5.6uH +/-10% AXIAL EC24-5R6K
<b>SLIDE SWITCH</b>		
S4101	11-002-0042-90	SW SLIDE 2P2T RIGHT L=9 JSK022N09-G09
<b>CRYSTALS</b>		
X4101	14-002-0019-00	CRYSTAL 14.31818MHz 30ppm 32pF HC-49S
X4102	14-002-0021-00	CRYSTAL 17.734475MHz 30ppm 32pF HC-49/S
<b>DIN JACKS</b>		
M4101-M4108	15-017-0001-90	DIN JACK 1 BLACK PCB MOUNT MD-113
<b>ICS</b>		
U4101	01-023-0001-90	IC OSD DIP30SD LC74763-9012
U4102,U4103	01-012-0062-00	IC LOGIC 8-CHANNEL ANALOG MUX/DEMUX SMD 74HC4051D
<b>TRIGGER BOARD PCB ASSEMBLY</b>	27-930-0754-90	T754AH Trigger Board Assembly
<b>REGULATORS</b>		
U3501	01-004-0047-00	I.C. REG 0.1A TO-92 AZ317LZ

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
U352	01-004-0050-00	IC VOLT REG 12V 0.1A TO-92 LM78L12
<b>RESISTORS</b> R358,R359	02-010-0012-00	RES MO 150 OHM 5% 2W AXIAL
<b>DIODES</b> D354-D359,D361,D3501	04-001-0003-00	DIODE RECT 1A/1000V DO41 WIN4007 REEL
<b>TRANSISTOR</b> Q351	05-001-0076-00	XTR SS NPN HFE20 250MHz DTC123ESATP
<b>SLIDE SWITCH</b> S351	11-002-0042-90	SW SLIDE 2P2T RIGHT L=9 JSK022N09-G09
<b>JACKS</b> M351-M355, M357	15-002-0028-90	PHONE JACK 1 BLACK PCB MOUNT 3.5mm RIGHT
<b>DIODES</b> D351-D353	04-002-0040-00	DIODE ZENER BZX79 5.1V 1/2W 5% DO35 BZX79-C 5.1V
<b>VIDEO -6 BOARD</b> <b>PCB ASSEMBLY</b>	27-931-0754-90	T754AH Video-6 Board Assembly
<b>CAPACITORS</b> C4401,C4402,C4403	03-002-0133-00	CAP ELEC SS 100uF 16V 20% 85C RAD HEIGHT = 7mm
<b>JACKS</b> J4401 M4401 M4404 M4403 M4402	15-002-0029-90 15-003-0018-90 15-003-0019-90 15-003-0020-90 15-017-0001-90	PHONE JACK D6.3 1 PCB MOUNT GOLD RCA JACK 1 YELLOW PCB MOUNT GOLD RCA JACK 1 RED PCB MOUNT GOLD RCA JACK 1 WHITE PCB MOUNT GOLD DIN JACK 1 BLACK PCB MOUNT MD-113
<b>COMPOSITE VIDEO BOARD</b> <b>PCB ASSEMBLY</b>	27-932-0754-90	T754AH Component Video Board Assembly
<b>CAPACITORS</b> C4310- C4312,C4325,C4327,C4328 C4316,C4318,C4320 C4315,C4314,C4313 C4301-C4306	03-002-0129-00 03-002-0135-00 03-002-0137-00 03-002-0157-00	CAP ELEC SS 10uF 16V 20% 85C RAD HEIGHT =7mm MAX CAP ELEC GS 1000uF 10V 20% 85C RAD ST5 CAP ELEC SS 1uF 50V 20% 85C RAD HEIGHT= 7mm MAX CAP ELEC SS 2.2uF 50V 20% 85C RAD HEIGHT=7mm
<b>RCA JACKS</b> M431,M432,M434	15-003-0025-90	RCA 3 G-BL-R PCB MOUNT GOLD
<b>IC</b> U4304 U4305 U4302,U4303 U4301	01-012-0059-00 01-012-0066-00 01-012-0067-00 01-026-0001-90	IC LOGIC QUAD 2-INPUT NAND GATE SOP 74HC00D IC LOGIC HEX INVERTER SMD SOP M74HCU04MIR IC LOGIC ANALOG MULTIPLEXER/DEMULTIPLEXER SMD SOIC-16 74HC4052D IC VIDEO 3-CHANNEL 75 OHM DRIVER SSOP BA7660FS
<b>DIODES</b> D4301,D4302	04-001-0001-00	DIODE SW 4NS DO35 1N4148

<u>Reference No.</u>	<u>Database Part No.</u>	<u>Description</u>
<b>SMD RESISTORS</b> J4301-J4303	02-007-0089-00	RES SMD 0 OHM +/-5% 1/10W 0805
<b>ISC BOARD PCB ASSEMBLY</b>	27-934-0754-90	T754AH ISC Board Assembly
<b>RESISTORS</b> R793,R790	02-005-0062-00	RES RN 0.22 OHM 5% 5W SIL 3 PIN COMMAND PIN2 WW
R837-R841	02-010-0011-00	RES MO 0.22 OHM 5% 1/2W AXIAL
R881	06-004-0017-90	VR SEMI-FIXED RESISTOR CF 50K OHM 30% B 6mm HOR
<b>CAPACITORS</b> C811,C829,C830,C832,C833	03-002-0129-00	CAP ELEC SS 10uF 16V 20% 85C RAD HEIGHT =7mm
C786-C789,C816-C820	03-004-0031-00	CAP MPF 0.1uF 63V +/-5% MEM TYPE
<b>RECTIFIER</b> D811,D812	04-001-0046-00	DIODE RECT 12A/600V TO-220 TYN612
D810	04-005-0021-90	DIODE BRI 10A/400V KBK10G
<b>TRANSISTOR</b> Q812,831,Q833	05-001-0072-00	XTR SS NPN HEF 100 200MHz TO-92 C1815Y
Q830,Q832	05-001-0080-00	XTR SS PNP HFE 100 200MHz TO-92 A1015Y
Q782,Q781	05-001-0083-00	TRANSISTOR SS PNP HFE 280-560 110MHz 2SA1016KG-
<b>JUMPER BARS</b> JMP9301-JMP9305	17-016-0043-90	JUMPER BAR DIA1.5 X 25 R.1
J1-J5	17-016-0044-00	JUMPER BAR DIA1.5 X 30 R.1
<b>IC</b> U801	01-014-0041-00	IC AUDIO LOW NOISE OP-AMP SMD NJM5532M
<b>DIODES</b> D813,D823	04-001-0001-00	DIODE SW 4NS DO35 1N4148
D821,D822	04-002-0049-90	DIODE ZENER BZX55 12V 1/2W 5% DO35 BZX55-C12V



# PACKING DIAGRAM & PARTS LIST



Item	Database Part No.	Description	Qty
1	24-003-0127-90	POLYBAG MANUAL 260 X 350 X 0.03mm W/SILKSCREEN RECYCLE R.0	1
2	25-027-0001-90	FM WIRE ANTENNA L=2700mm TRANSPARENCE W/Y-TERMINALS (RoHS)	1
	25-027-0002-90	ANTENNA AM LOOP ASSY W/STAND 4910	1
	28-008-0002-90	REMOTE CONTROLLER NAD ZR-2 W/ BATTERY (RoHS)	1
	15-015-0001-90	ANTENNA ADAPTER 300 TO 75 OHM AJ2010	1
	24-004-1938-90	T754 OWNER'S MANUAL GB/F/D/NL W/WEEE R.2	1
	24-004-1939-90	T754 OWNER'S MANUAL E/I/P/S W/WEEE R.2	1
	24-004-1936-90	CARD WARRANTY T752/T762 "NAD" R.0 (RoHS)	1
3	28-008-0001-90	REMOTE CONTROLLER NAD HTR-2A Graphite Yellow LED (RoHS)	1
4	24-006-0718-90	POLYOAM TOP/BOTTOM T763 R.3	2
5	24-003-0130-90	POLYBAG T762 W/SILKSCREEN MAIN UNIT (W650 X L650mm) HD PE R.0	1
6	24-005-0890-90	A3 WHITE PAPER 80G (RoHS)	1
7	24-003-0131-90	PROTECTIVE COVER T763 (RoHS)	1
8*AH	17-004-0007-00	AC CORD 110V 3PINS 125V/13A SJT AWG16/3C UL/CSA L=2M	1
*C	17-004-0008-00	AC CORD CE 3 PINS 16A 250V LF L=6'7" LP-34 H05VV-F 3C LS- 60	1
9	24-001-0630-91	MASTER CARTON BOX T754 R.2	1

# SERVICE MANUAL

**T 754**

**Surround Sound Receiver**