



# T 762i

Surround Sound Receiver

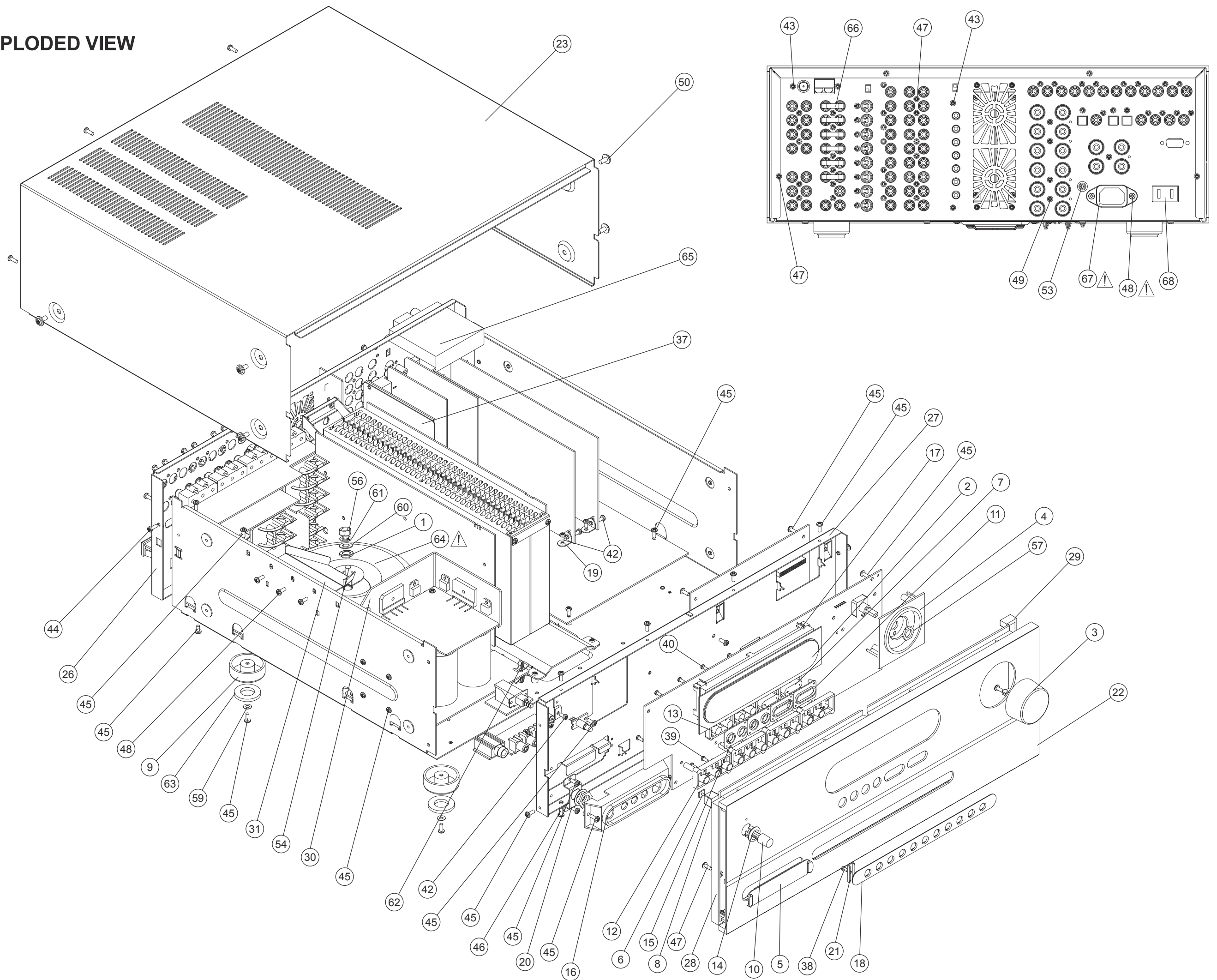
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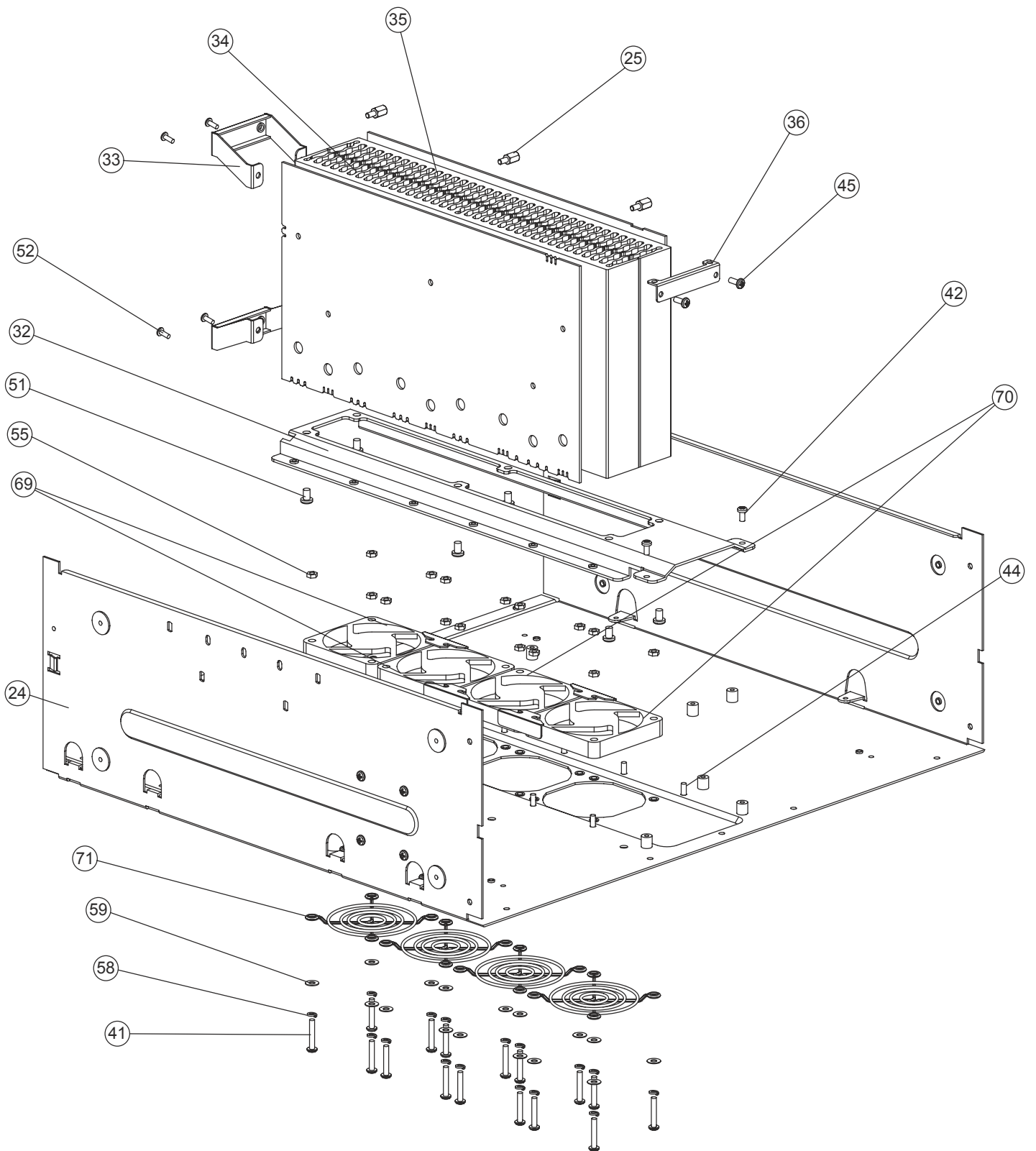
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*ISSUE DATE: 30 MAR 2004*

# T 762i EXPLODED VIEW



# T 762i EXPLODED VIEW



## T 762i EXPLODED VIEW PARTS LIST

<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Qty.</u>
1	02-0000019-00-00	NYLON OD16.5 X 9.3 X 3.5mm	1
2	10-0752001-00-10	WINDOW LENS	1
3	11-0752002-72-00	VOLUME KNOB ASSY	1
4	10-0752005-71-00	VOLUME BEZEL	1
5	10-0752007-01-00	VIDEO COVER	1
6	10-0752011-00-00	LED LENS	1
7	10-0752012-01-00	RACKER BUTTON	2
8	10-0752015-01-02	LED BEZEL	1
9	10-0752017-01-00	PLASTIC FOOT	4
10	10-0752022-01-00	POWER BUTTON	1
11	10-0752025-01-00	RACKER BEZEL	2
12	10-0752032-01-00	INPUT BUTTON	4
13	10-0752042-01-00	DUO BUTTONS	2
14	10-0752045-01-00	POWER BUTTON BEZEL	1
15	10-0752055-01-00	DUO BEZEL	2
16	10-0752065-01-00	VIDEO HOUSING	1
17	10-0752075-00-00	DISPLAY BRACKET	1
18	10-0762035-71-00	INPUT BUTTON LOZENGE	1
19	11-0570075-80-01	L BRACKET	2
20	11-0752065-80-00	PHONE BRACKET	1
21	11-0752075-80-00	DUMMY BRACKET	1
22	11-0762000-95-11	FASCIA	1
23*AH	11-0762003-85-13	TOP COVER (AH)	1
23*C	11-0762013-85-13	TOP COVER (C)	
24	11-0762004-80-04	BOTTOM CHASSIS	1
25	11-0762005-80-00	HEX SPACER AF5.5 H8+6	10
26*AH	11-0762006-94-12	REAR PANEL(AH)	1
26*C	11-0762016-94-12	REAR PANEL (C)	
27	11-0762025-80-01	SUBFASCIA	1
28	11-0762028-95-00	SIDE CAP L	1
29	11-0762038-95-00	SIDE CAP R	1
30	11-0762048-80-01	HEATSINK- RECTIFER	1
31	11-0762065-80-00	XORMER SUPPORT BRACKET	1
32	11-0762085-80-00	LARGE FAN MOUNTING BRACKET	1
33	11-0762095-80-00	HTSK SUPPORT BRACKET	2
34	11-0762098-94-00	NEW EXTRUDED HTSK LEFT	1
35	11-0762108-94-00	NEW EXTRUDED HTSK RIGHT	1
36	11-0752045-80-00	HEATSINK MOUNTING BRACKET	1
37	12-0762011-70-00	FIBER PAPER 133 X 98 X 0.8mm	1
38	13-0260500-02-00	SELF TAP SCREW 2.6 X 5 P/H TYPE B NI PLT	1
39	13-0260600-02-00	SELF TAP SCREW 2.6 X 6 P/H TYPE B NI PLT	9
40	13-0260803-02-00	SELF TAP SCREW 2.6 X 8 B/H TYPE B NI PLT	16
41	14-0300180-02-00	MACHINE SCREW M3 X 18 P/H NI PLT	16
42	14-0300600-02-00	MACHINE SCREW M3 X 6 P/H NI PLT	20
43	14-0300600-04-00	MACHINE SCREW M3 X 6 P/H BLK	4
44	14-0300600-52-00	SELF TAP SCREW 3 X 6 P/H NI-PLT TYPE B	21
45	14-0300800-53-00	SELF TAP SCREW 3 X 8 B/B ZINC PLATED	39
46	14-0350803-52-00	TAPTITE SCREW 3.5 X 8.0 B/H TYPE B NI PLT	5
47	14-0300803-54-00	TAPTITE SCREW 3 X 8 B/H TYPE B BLK PLT	58
48	14-0300804-54-00	TAPTITE SCREW M3 X 8 K/H TYPE B BLK PLT	5



<u>Item</u>	<u>Part No.</u>	<u>Description</u>	<u>Qty.</u>
49	14-0301000-54-00	TAPTITE SCREW 3 X 10 P/H TYPE B BLK	5
50	14-0400802-04-00	MACHINE SCREW M4 X 8 WASHER HEAD BLK	6
51	14-0400803-52-00	TAPTITE SCREW 4 X 8 B/H NI TYPE-B	6
52	14-0400803-54-00	TAPTITE SCREW 4 X 8 B/H BLK TYPE-B	4
53	14-0401002-04-00	MACHINE SCREW M4 X 10 WASHER HEAD BLK	1
54	14-0801005-03-02	HEX.BOLT M8 LENGTH=100mm ZN PLATED	1
55	15-0300240-05-20	NUT M3 X 2.4mm	16
56	15-0807600-05-30	HEX NUT M8 X 6.5 THK	1
57	15-0900220-11-30	NUT ZINC PLATED M9.0 X 2.2mm 11p	1
58	16-0320560-09-20	SPRING WASHER I/D 3.2 X O/D 5.6 0.9mm THK	44
59	16-0350080-04-35	STEEL WASHER I/D 3.5 X O/D 8.0 0.4mm ZINC PLT	22
60	16-0850160-10-30	METAL WASHER ID8.5 X OD16 X 1.0mm NI PLT	1
61	16-0851500-12-30	SPRING WASHER I/D 8.5 X O/D 12.5 X 1.9THK	1
62	17-0500960-00-01	PCB SUPPORTER H=9.6mm PCB HOLE 4mm	3
63	17-1402603-30-22	RUBBER FOOT I/D14 X O/D26 X 3 PORON HH-48C	4
64 ⚠	25-0090056-00-21	XFORMER PW TOROIDAL 120V/240V TI-0130203 ISS6	1
65*AH	29-4000003-00-38	AM/FM TUNER MODULE KST-MB114MA1-22	1
65*C	29-4000002-00-38	AM/FM TUNER MODULE KST-MB114MA1-23	
66	34-0061030-00-67	JUMPER PLUG PITCH 14mm	6
67 ⚠	34-0101000-00-67	AC SOCKET IEC 15A/250V	1
68*AH ⚠	34-0101001-00-70	AC OUTLET US POLARIZED 3512-MITIBKUC	1
68*C ⚠	34-0100002-00-78	AC OUTLET EURO CEE 7 2.5A/250V A302D0060P	
69	37-2011230-00-63	FAN DC 12V 0.09A 3000RPM W/450mm CONNECTOR	2
70	37-2011230-01-63	FAN DC 12V 0.09A 3000RPM W/350mm CONNECTOR	2
71	39-0000008-00-63	FAN GUARD 60mm DFG-60	4

**NOTE: THE COMPONENTS IDENTIFIED BY ⚠ 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.

# SERVICE MANUAL



# T 762

AV SURROUND  
SOUND RECEIVER

# T 762

AV SURROUND  
SOUND RECEIVER

# SAFETY INFORMATION

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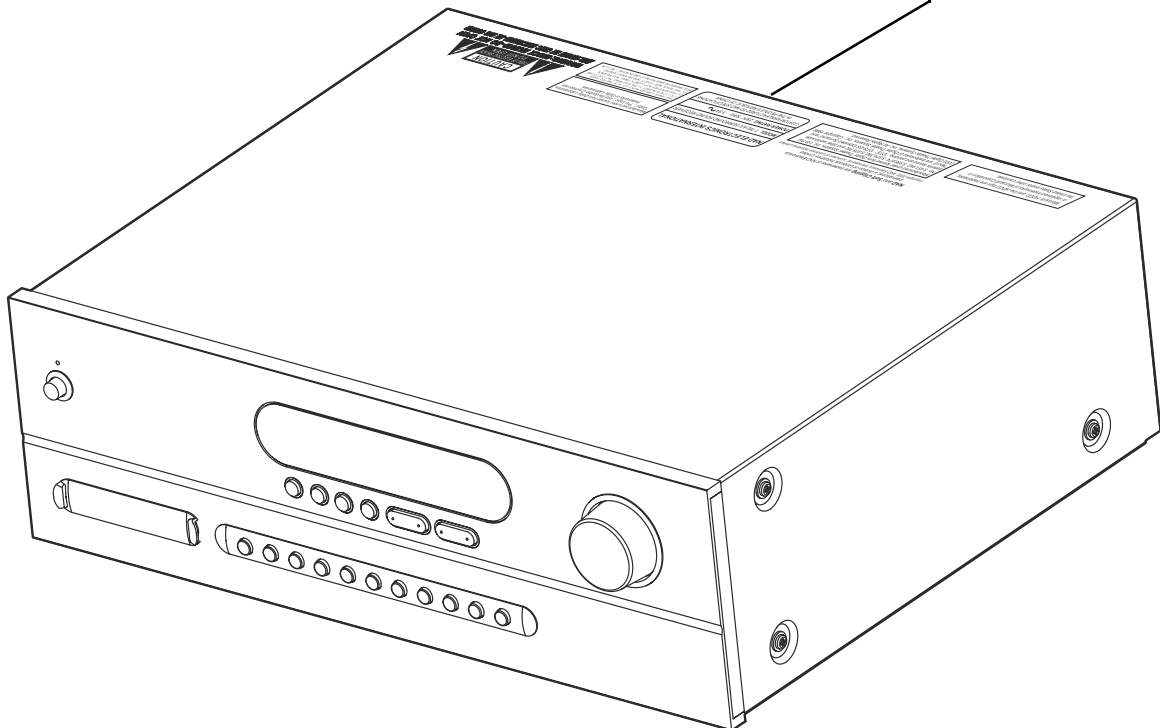
Manufactured under license from Digital Theater Systems, Inc. US Pat. No. 5,451,942, 5,956,674, 5,974,380, 5,978,762 and other world-wide patents issued and pending. "DTS", "DTS-ES Extended Surround" and "Neo:6" are trademarks of Digital Theater Systems, Inc. Copyright 1996, 2000 Digital Theater Systems, Inc. All Rights Reserved.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic", and the double-D symbol are trademarks of Dolby Laboratories.

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 UNDESIRE OPERATION.



**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	Part Number	Description
F751*AH	33-0191001-00-88	Fuse 10A 250V Time Lag 5x20 MM UL/CSA
F751*C	33-0181006-00-88	Fuse 6.3A 250V Time Lag 5x20 MM UL/CSA/SEMKO/VDE
F752*AH	33-0111006-00-48	Fuse 1.6A 250V Time Lag 5x20 MM UL/CSA/VDE/SEMKO
F752*C	33-0151006-00-48	Fuse 800mA 250V Time Lag 5x20 MM UL/CSA/VDE/SEMKO

**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 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) (Rated power level into 8 ohms, THD 20 Hz-20 kHz SL/SR/BS)	$\leq 0.1 \%$ $\leq 0.1 \%$
Input Sensitivity	(ref. 8 ohms, 1 kHz)	<b>220 <math>\pm</math> 20 mV</b>
S/N Ratio	(A-wtd, 1kHz, 1 W, 8 ohm, SL/SR/BL)	<b><math>\geq -72</math> dB</b>
Frequency Response	(20 Hz - 20 kHz)	<b>0 <math>\pm</math> 1.0 dB</b>
Channel Balance	(1 dB to -40 dB, 1 kHz) (-41 dB to -50 dB, 1 kHz)	$\leq 2$ dB $\leq 3$ dB
Audio muting at 1 kHz		<b><math>\geq 55</math> dB</b>
Subwoofer out, 500 mV in	(THD at 2 V O/P, 100 Hz)	$\leq 0.5 \%$
Crosstalk	(500 mV input, 10 W, 1 kHz)	<b><math>\geq -57</math> dB</b>
<b>Controls</b>		
Bass	(at 500 mV in, 1 W out, 100 Hz)	<b><math>\pm 10</math> dB <math>\pm 2</math> dB</b>
Treble	(at 500 mV in, 1 W out, 10 kHz)	<b><math>\pm 10</math> dB <math>\pm 2</math> dB</b>

## DOLBY DIGITAL SECTION

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

## DOLBY PRO LOGIC II SECTION

### Frequency Response

I/P mode : L, R	: 1 V in, 1 W, Ch L/R	40 Hz	<b>0 <math>\pm</math> 2.0 dB</b>
		20 Hz	<b>0 <math>\pm</math> 2.0 dB</b>
I/P mode : L=R	: 1 V in, 1 W, Ch /L/R	40 Hz	<b>0 <math>\pm</math> 2.0 dB</b>
	Ch C	20 kHz	<b>0 <math>\pm</math> 2.0 dB</b>
I/P mode : L=-R	: 1 V in, 1 W, Ch SL/SR	40 Hz	<b>0 <math>\pm</math> 2.0 dB</b>
		20 kHz	<b>0 <math>\pm</math> 2.0 dB</b>
S/N Ratio (200 mV in, 1 W, A-WTD w/ 1 k termination)			
I/P mode : L, R	: 1 kHz, Ch L/R		<b><math>\geq 65</math> dB</b>
I/P mode : L=R	: 1 kHz, Ch C		<b><math>\geq 65</math> dB</b>
I/P mode : L=-R	: 1 kHz, Ch SL/SR		<b><math>\geq 65</math> dB</b>
THD (2.2 V in, 1 W, w/ 80 kHz LPF, 1 kHz)			<b><math>\leq 0.2 \%</math></b>



## DTS SECTION

Output Level (Vol 0 dB) : FL/FR/C/SL/SR	Track 6 1 kHz	<b>0.5 ± 2.0 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>10.5 ± 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 dBuV</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 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

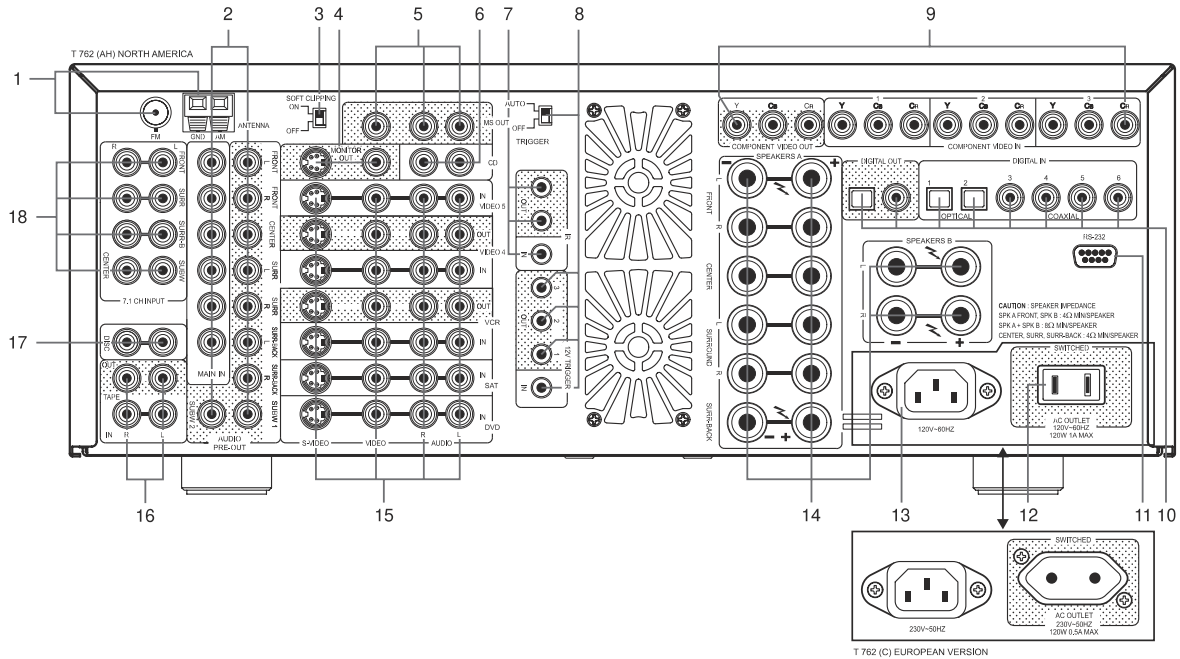
Usable sensitivity (98 MHz)		<b>≤ 15 dBμV</b>	<b>≤ 15 dBuV</b>
S/N Ratio (60 dB, IHF wtd)	Mono	<b>≥ 63 dB</b>	<b>≥ 63 dB</b>
	Stereo	<b>≥ 63 dB</b>	<b>≥ 63 dB</b>
Frequency Response (20 Hz - 15 kHz, 60 dBμ)		<b>0 ± 1.5 dB</b>	<b>0 ± 1.5 dB</b>
Channel Separation (60 dBμ)	100 Hz	<b>≥ 30 dB</b>	<b>≥ 30 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 dBμ, ± 400 kHz)		<b>≥ 60 dB</b>	<b>≥ 45 dB</b>
Capture Ratio (40 dBμ)		<b>≤ 3 dB</b>	<b>≤ 3 dB</b>
AM Suppression (60 dBμ, 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 dBμ, 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 dBμ</b>	<b>≥ 24 dBμ</b>
	Off	<b>≤ 15 dBμ</b>	<b>≤ 15 dBμ</b>
RDS decode Sensitivity		<b>≤ 26 dBμ</b>	-

## PHYSICAL SPECIFICATIONS

Dimensions (Width x Height x Depth)	<b>435 x 167 x 382 mm</b>
Net Weight	<b>18.50 Kg (40.70 lbs)</b>
Shipping Weight	<b>22.20 Kg (48.84 lbs)</b>

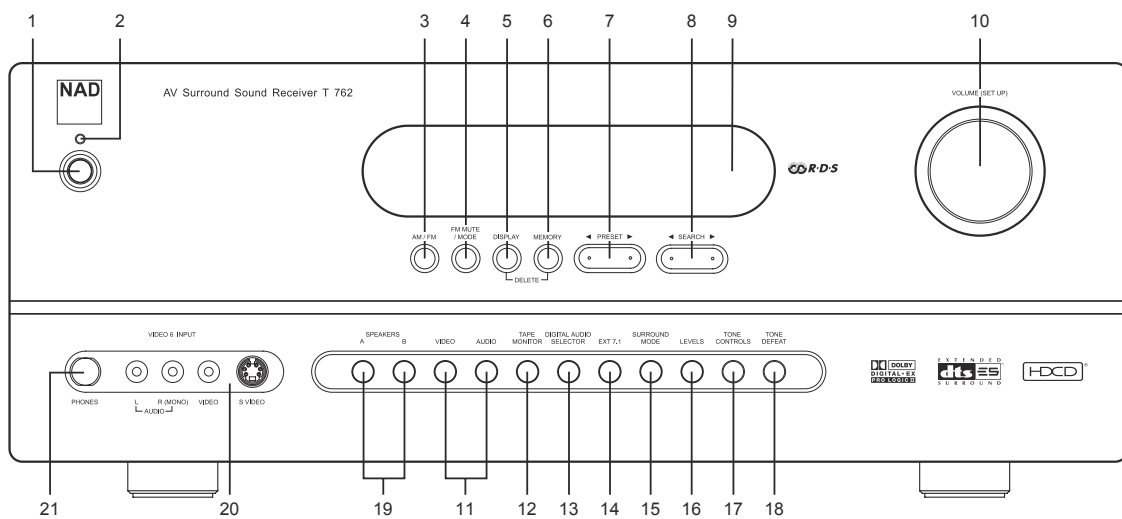
# REAR PANEL / FRONT PANEL VIEW

## REAR PANEL



- |   |  |
|---|--|
| 1. FM & AM ANTENNA                          | 10. DIGITAL AUDIO INPUT & DIGITAL AUDIO OUTPUT |
| 2. MAIN IN / AUDIO PRE-OUTS / SUBWOOFER OUT | 11. RS-232                                     |
| 3. SOFT CLIPPING ON/OFF                     | 12. SWITCHED AC OUTLETS                        |
| 4. MONITOR OUT                              | 13. AC POWER INLET                             |
| 5. MS OUT (MULTISOURCE OUT)                 | 14. SPEAKERS A & B                             |
| 6. CD INPUT                                 | 15. DVD, SAT, VCR, VIDEO 4 & VIDEO 5           |
| 7. IR INPUT & OUTPUT                        | 16. TAPE INPUT & OUTPUT                        |
| 8. 12V TRIGGER INPUT & OUTPUT               | 17. DISC INPUT                                 |
| 9. COMPONENT VIDEO IN & COMPONENT VIDEO OUT | 18. 7.1 CH. INPUTS                             |

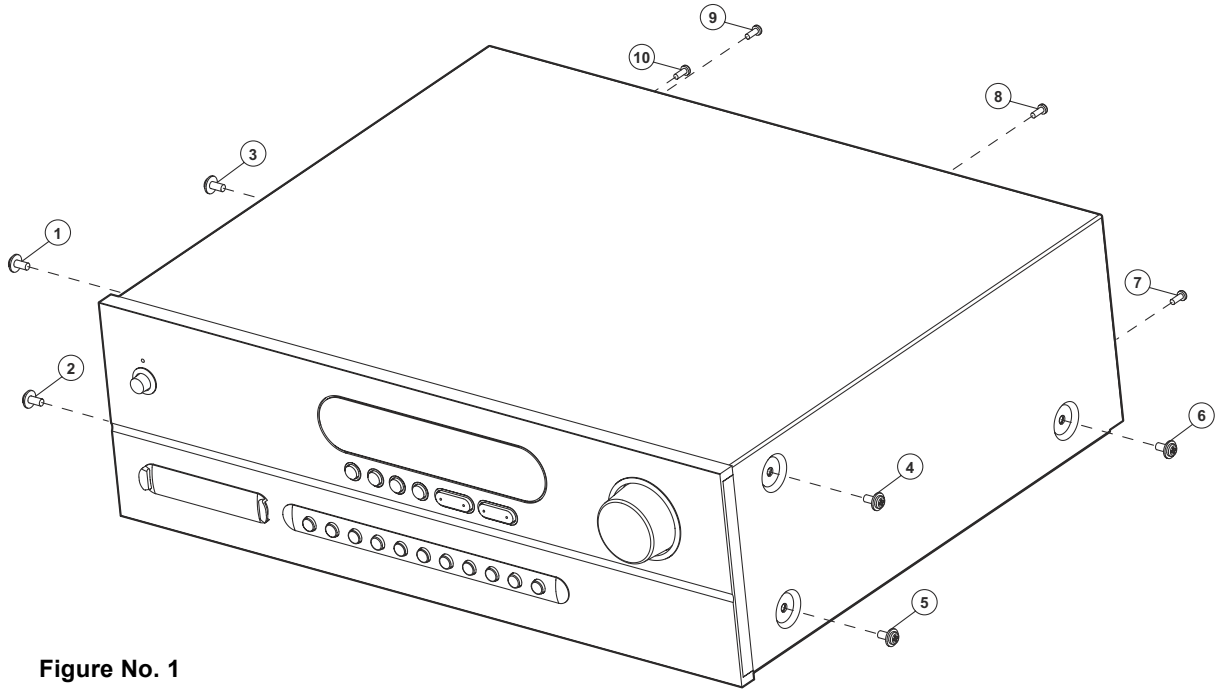
## FRONT PANEL



- |                     |                            |                    |
|---------------------|----------------------------|--------------------|
| 1. POWER            | 8. SEARCH DOWN / UP        | 15. SURROUND MODE  |
| 2. STAND-BY         | 9. VFL DISPLAY             | 16. LEVELS         |
| 3. AM / FM          | 10. VOLUME (SETUP)         | 17. TONE CONTROLS  |
| 4. FM MUTE / MODE   | 11. VIDEO & AUDIO          | 18. TONE DEFEAT    |
| 5. DISPLAY          | 12. TAPE MONITOR           | 19. SPEAKERS A & B |
| 6. MEMORY           | 13. DIGITAL AUDIO SELECTOR | 20. VIDEO 6 INPUT  |
| 7. PRESET DOWN / UP | 14. EXT. 7.1               | 21. PHONES         |

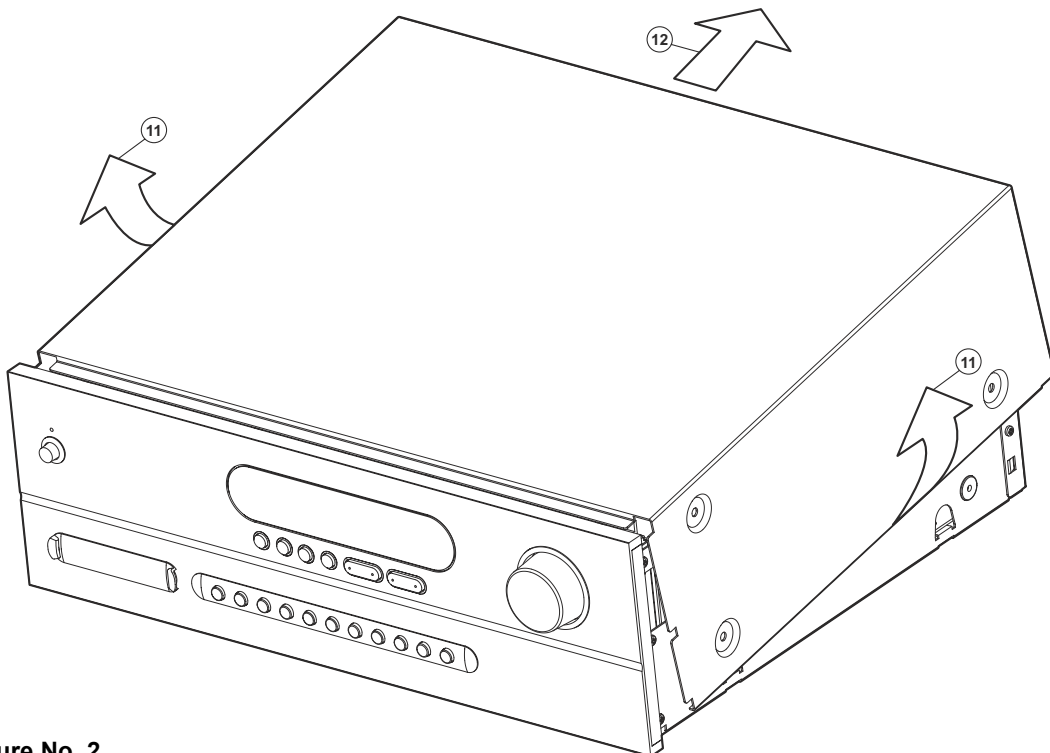
# DISASSEMBLY INSTRUCTIONS

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**.



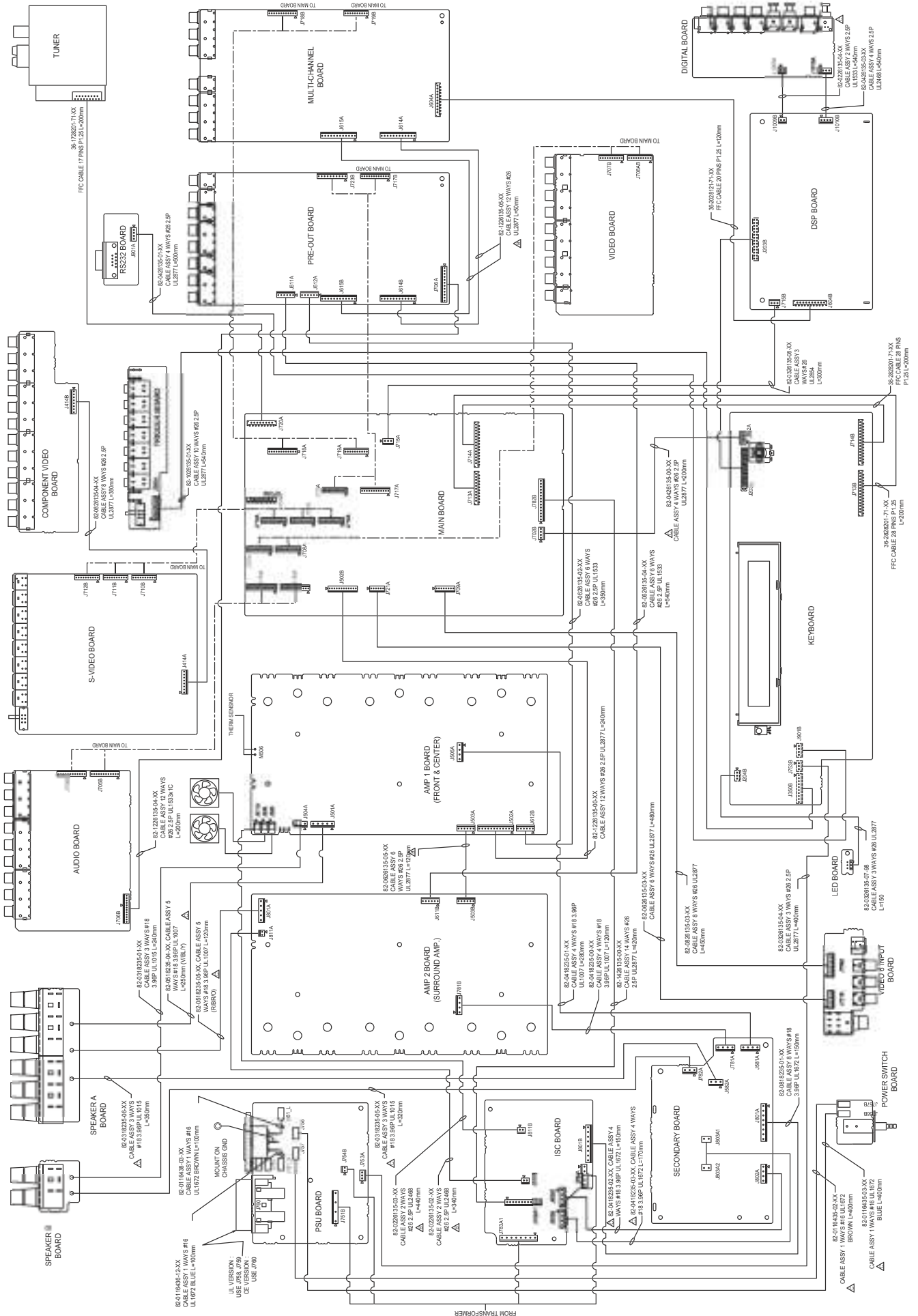
**Figure No. 1**

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**.

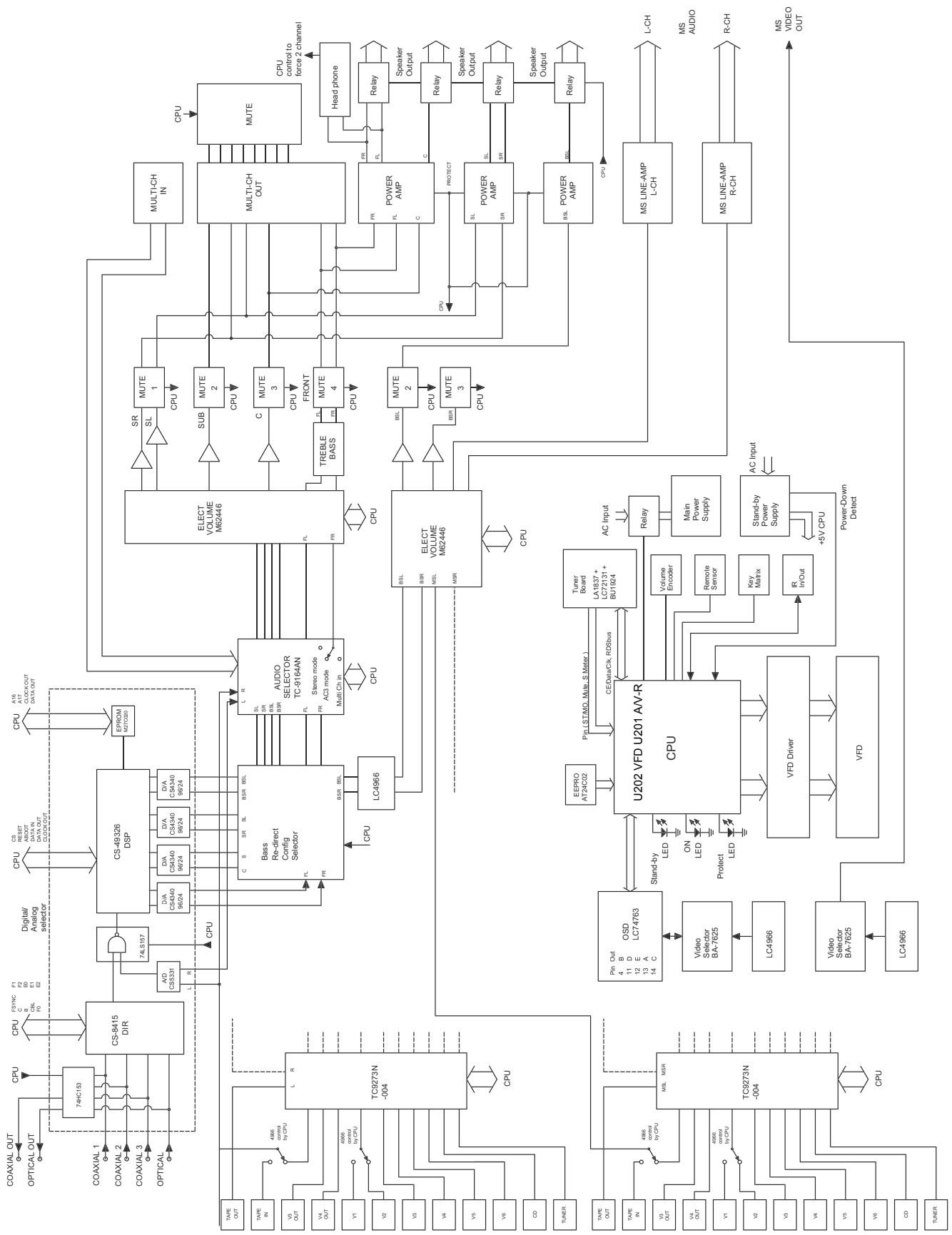


**Figure No. 2**

# WIRING DIAGRAM



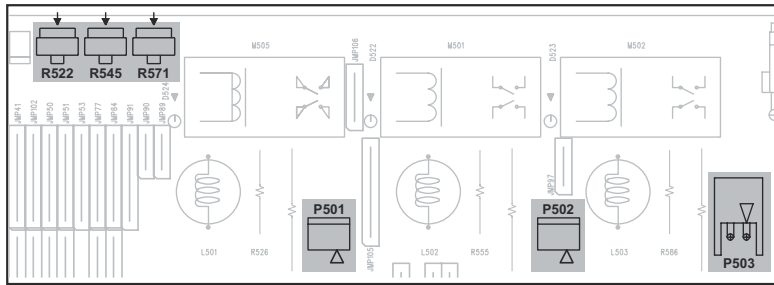
# BLOCK DIAGRAM



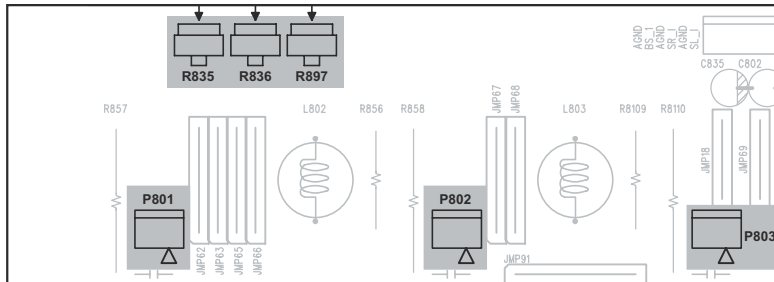


# ADJUSTMENT POINT DIAGRAM

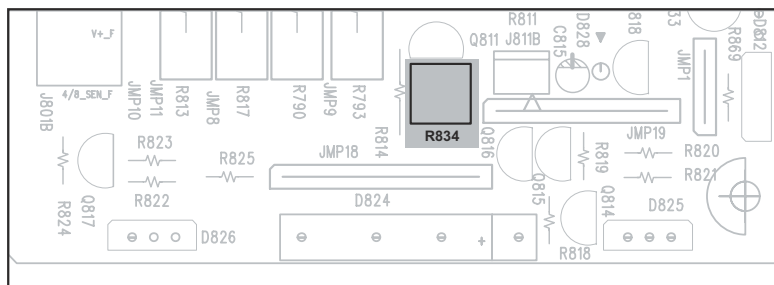
## FRONT/CENTER AMPLIFIER BOARD



## SURROUND AMPLIFIER BOARD



## 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.

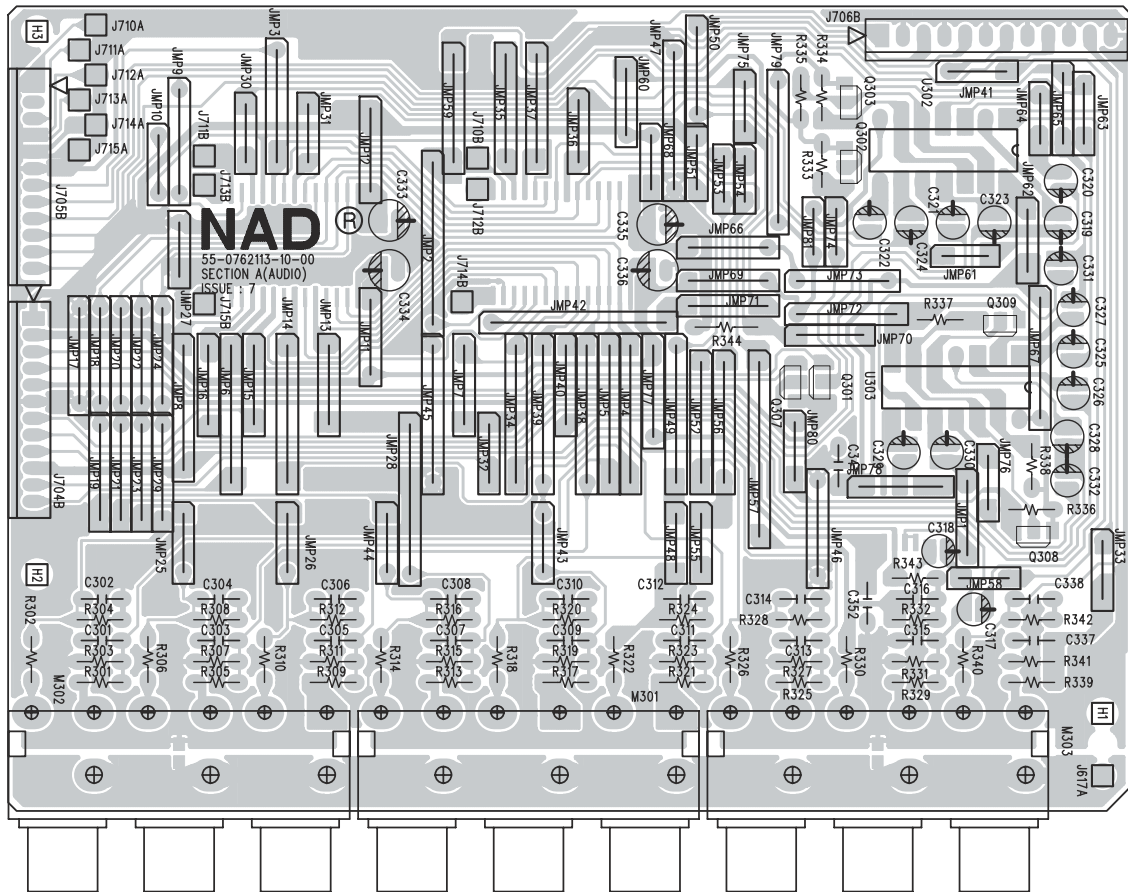
CHANNEL	JUMPER	VR
FL	P503	R571
FR	P502	R545
C	P501	R522
SL	P801	R835
SR	P802	R836
BS	P803	R897

## ISC Sensitivity

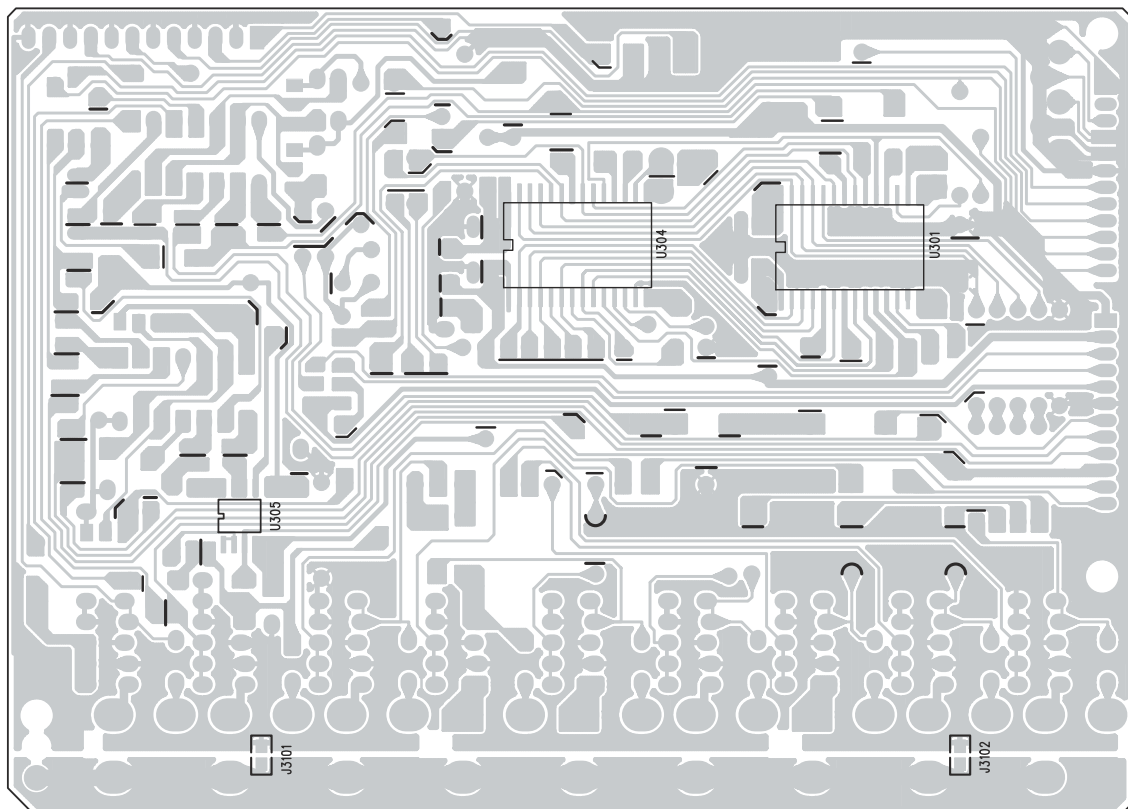
1. Connect 8 ohm loading to all channels.
2. Rotate R881 fully clockwise.
3. Load all channels at full power using 1kHz sine wave.
4. At this time, monitor the THD of the SL,SR,BS output. Clipping should occur before full power achieved.
5. Rotate R834 counter-clockwise slowly until the THD just below 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 - COMPONENT SIDE



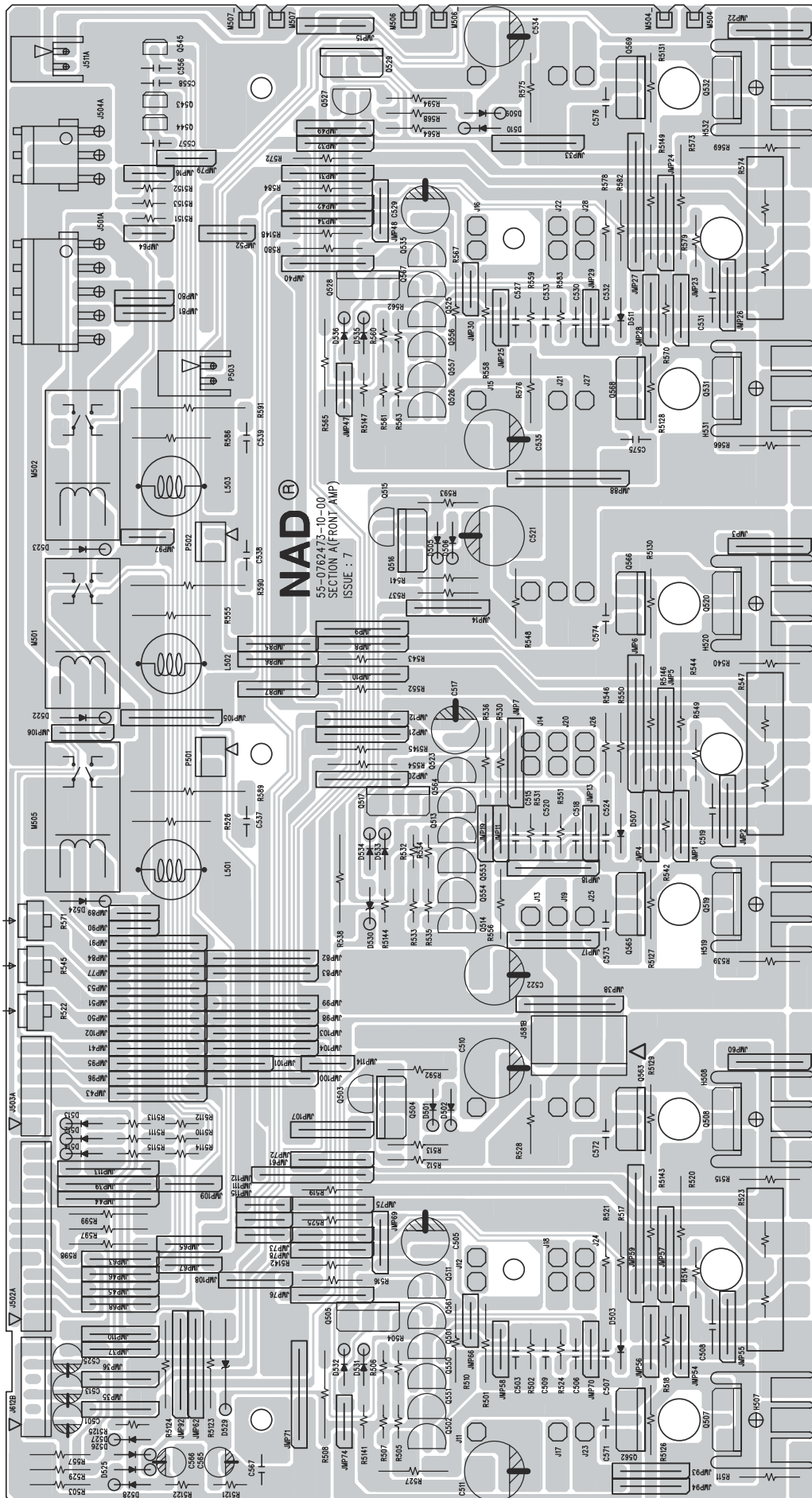
## AUDIO BOARD - COPPER SIDE







# FRONT/CENTER AMPLIFIER BOARD

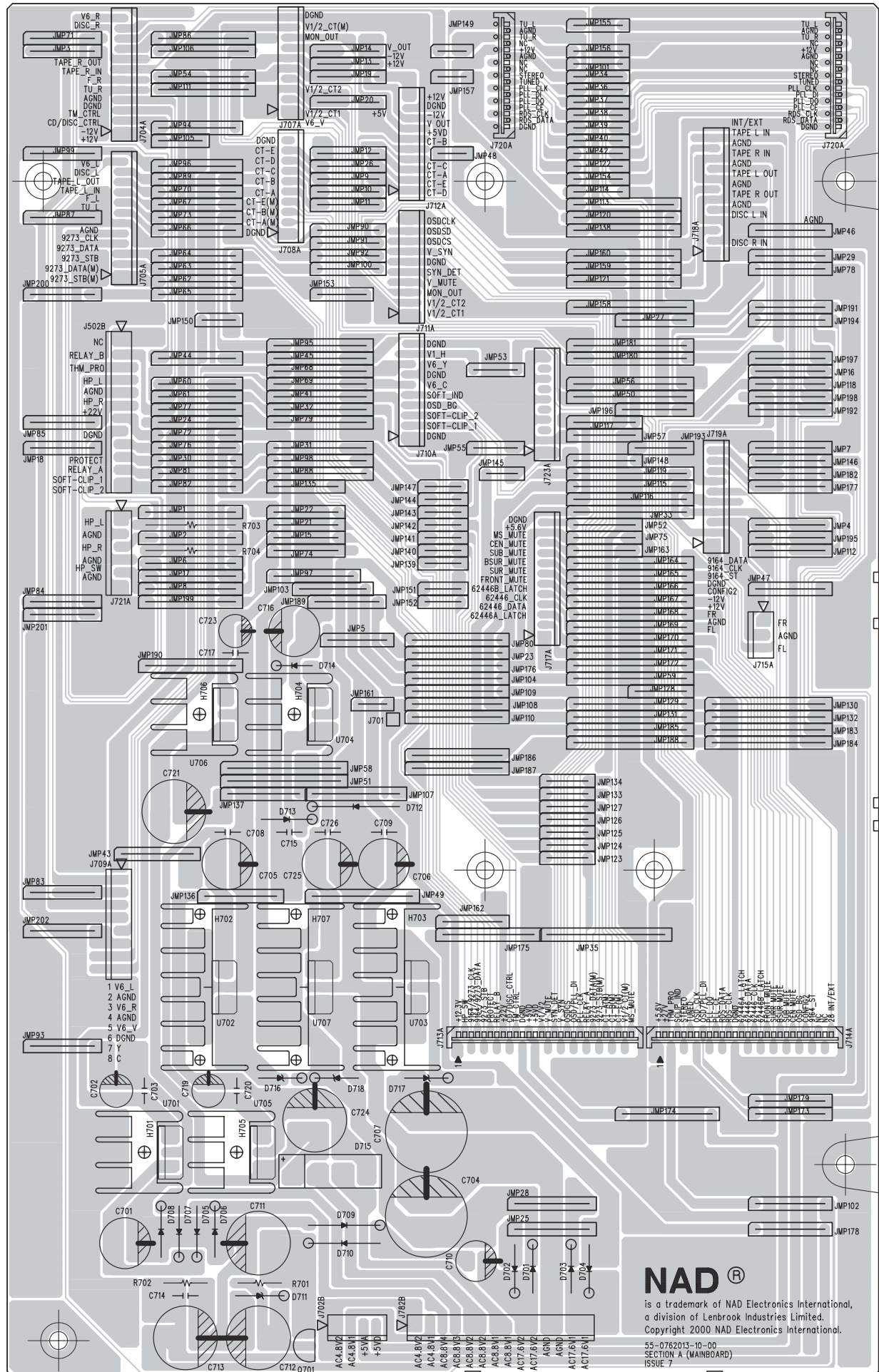




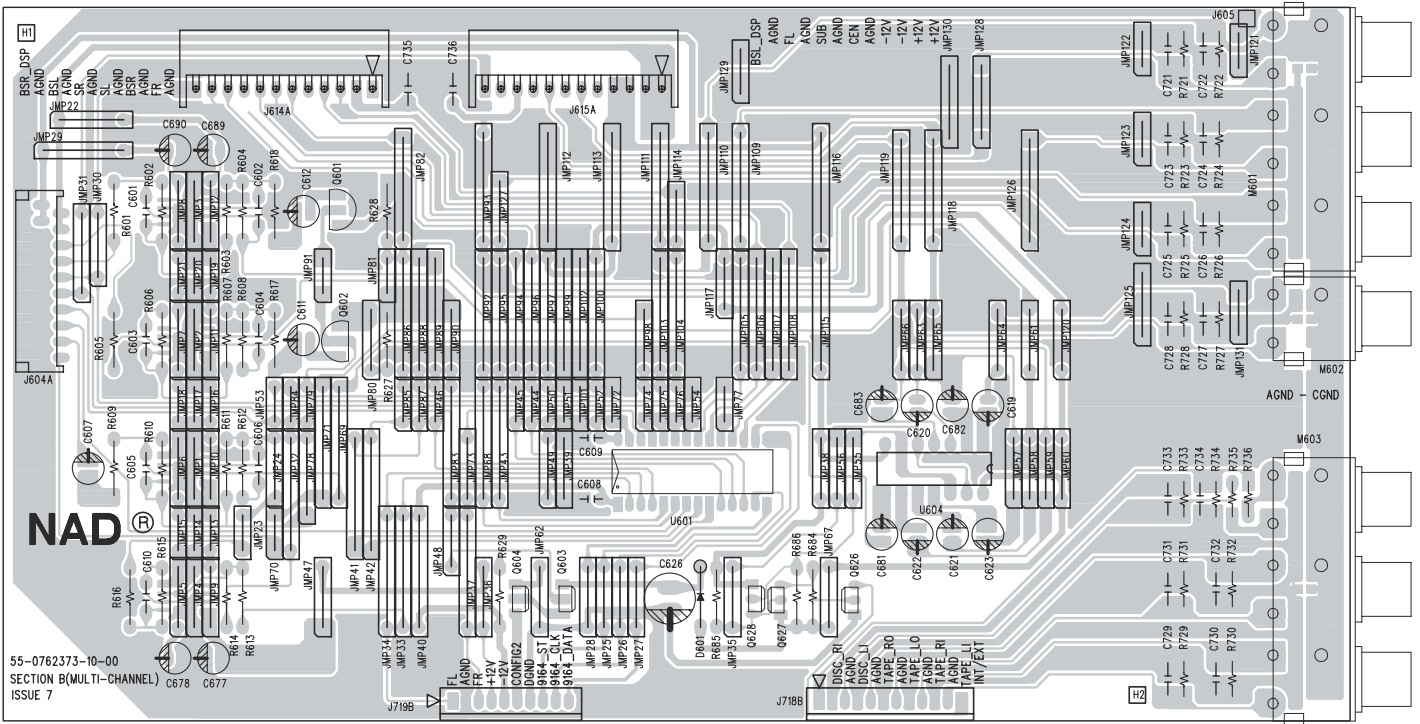




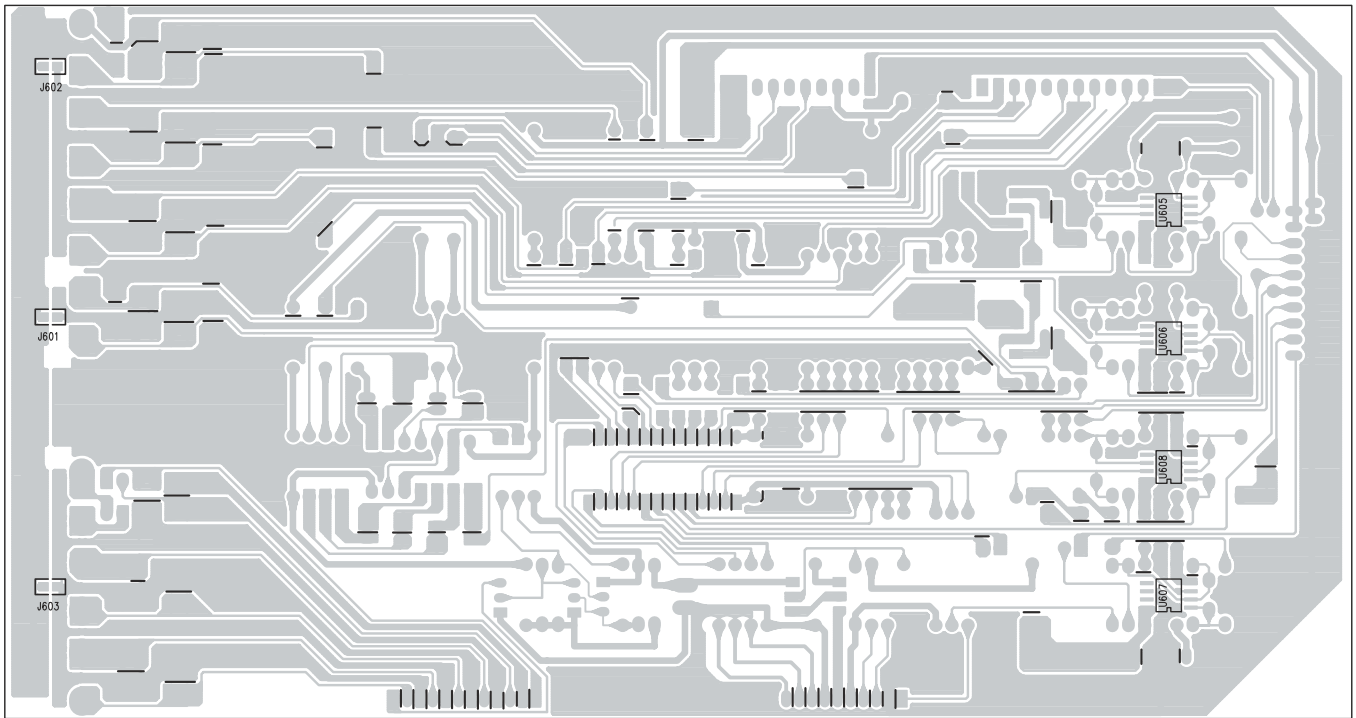
# MAIN BOARD



# MULTI-CHANNEL BOARD - COMPONENT SIDE



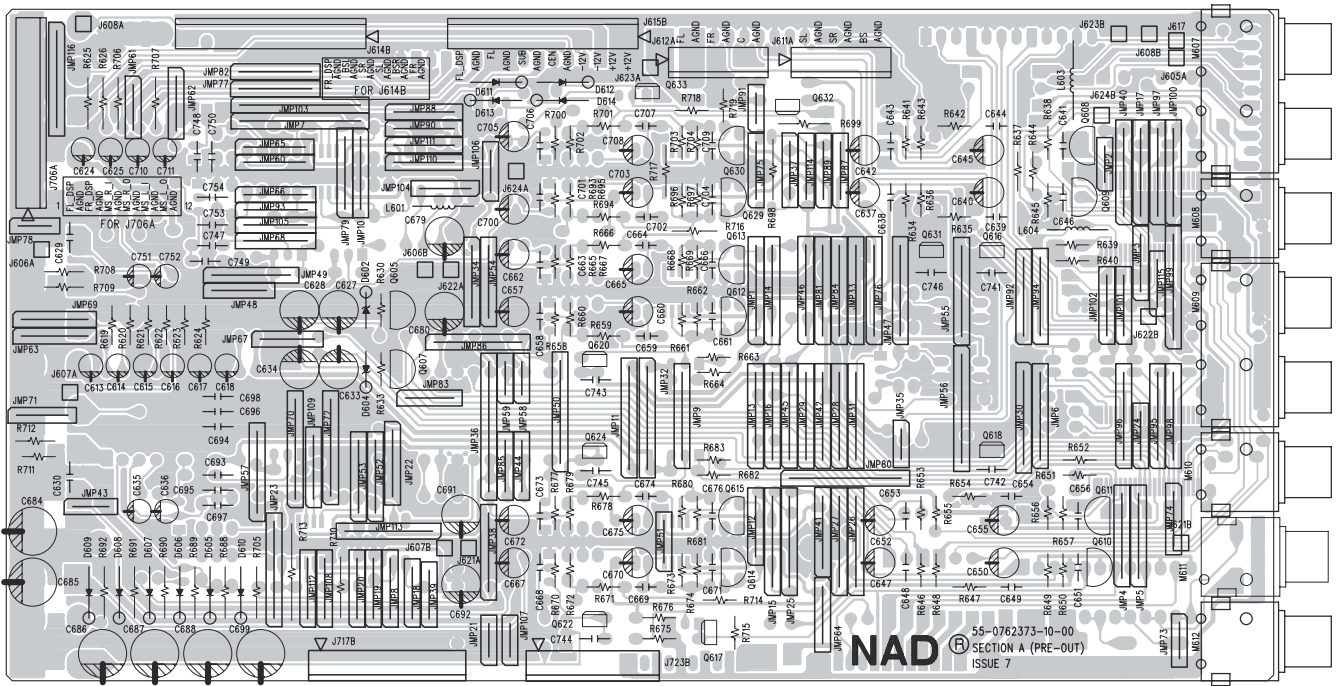
# MULTI-CHANNEL BOARD - COPPER SIDE



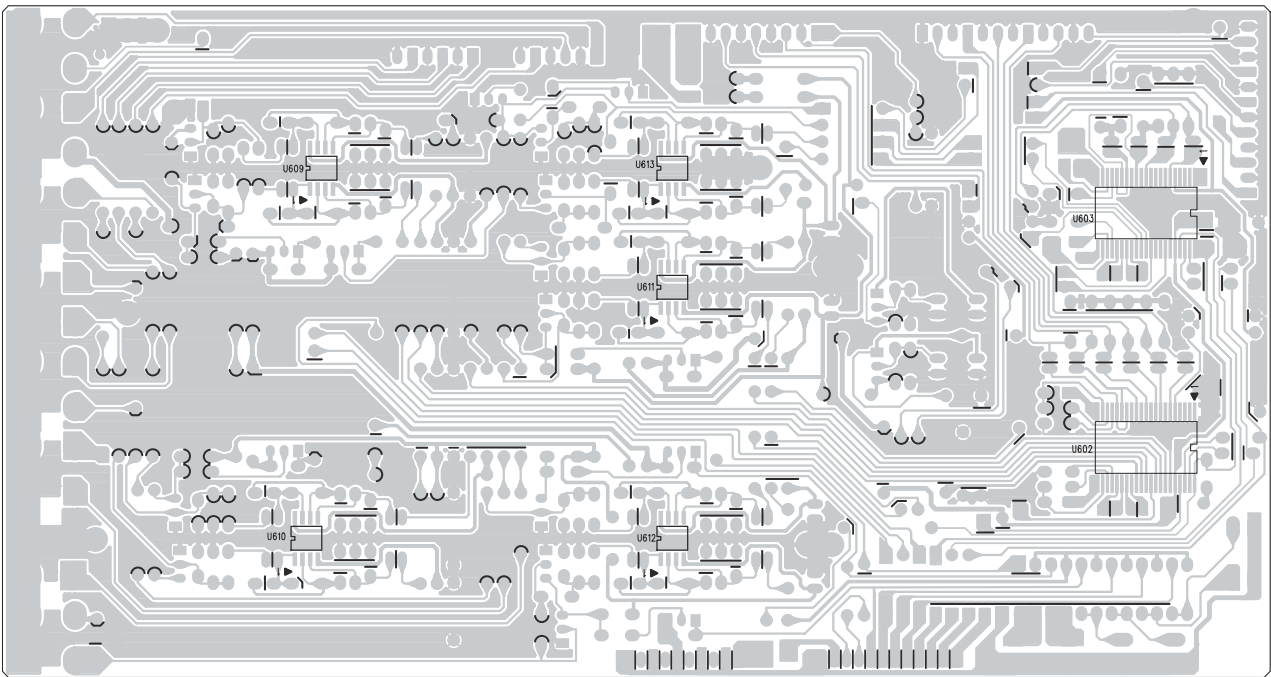




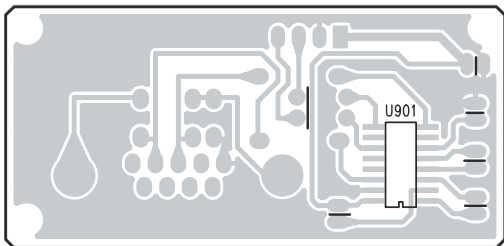
**PRE-OUT BOARD - COMPONENT SIDE**



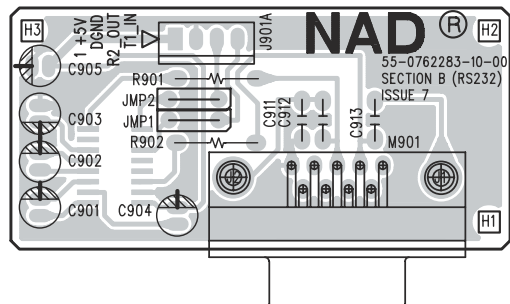
**PRE-OUT BOARD - COPPER SIDE**



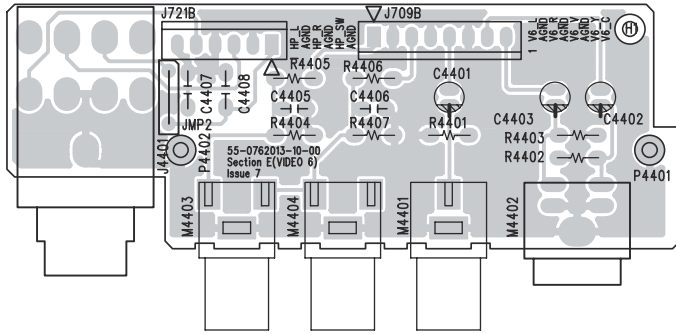
**RS-232 BOARD - COPPER SIDE**



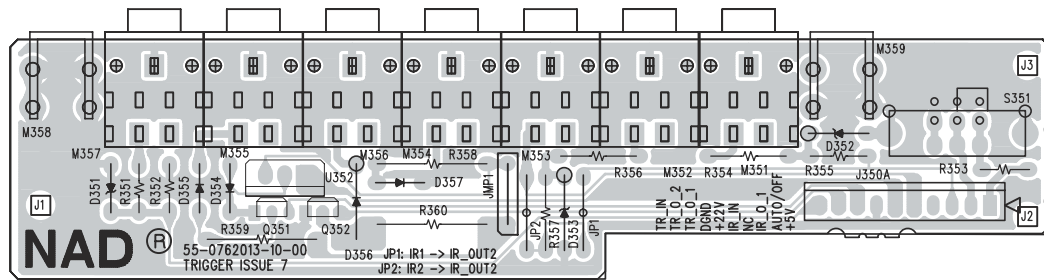
**- COMPONENT SIDE**



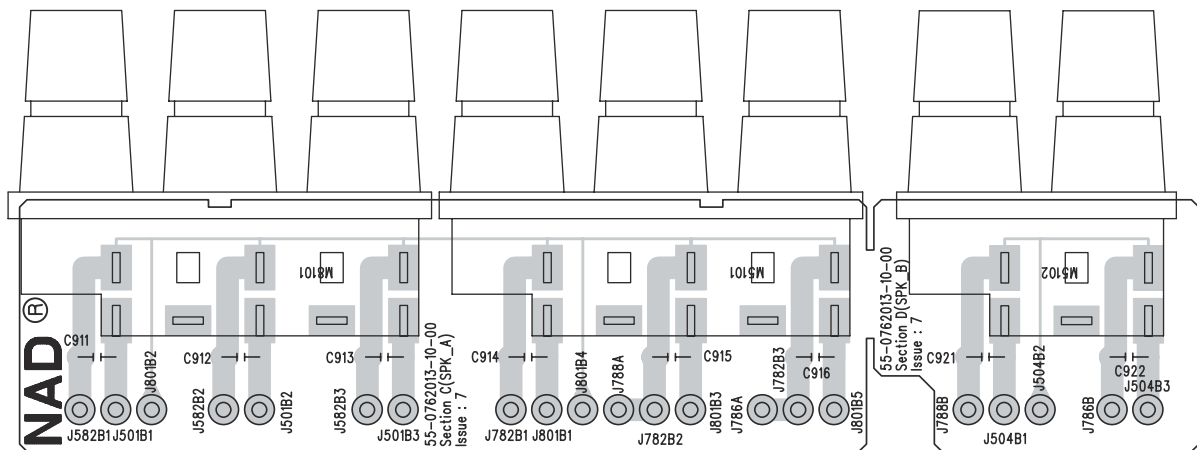
## VIDEO 6 BOARD



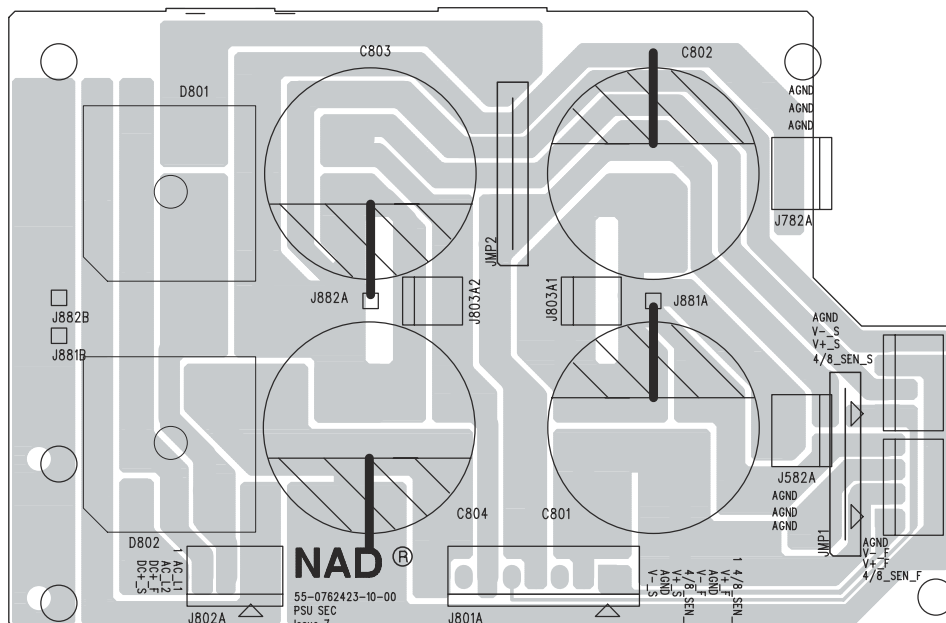
## TRIGGER BOARD



## SPEAKER TERMINAL BOARD



## SECONDARY BOARD

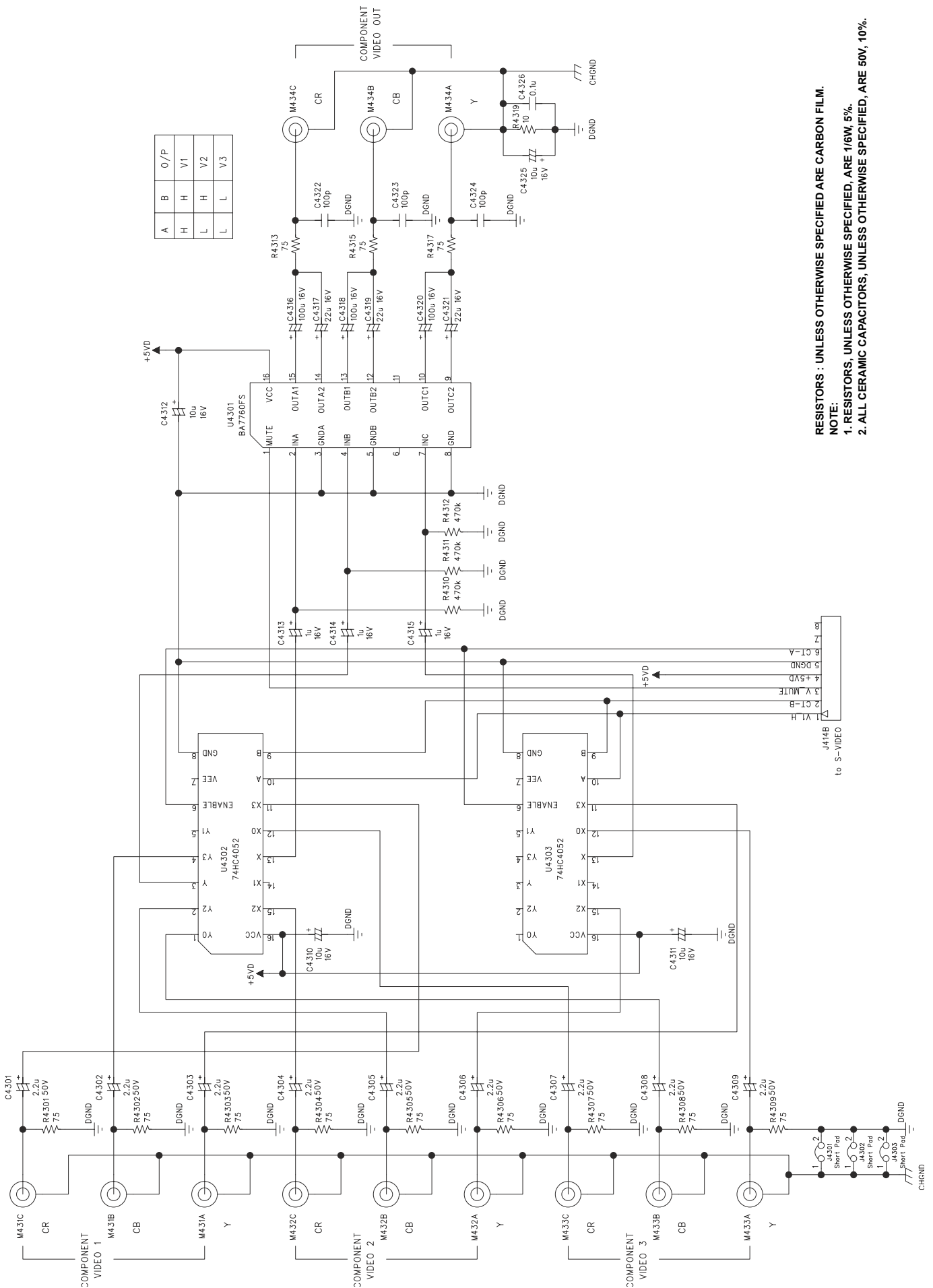






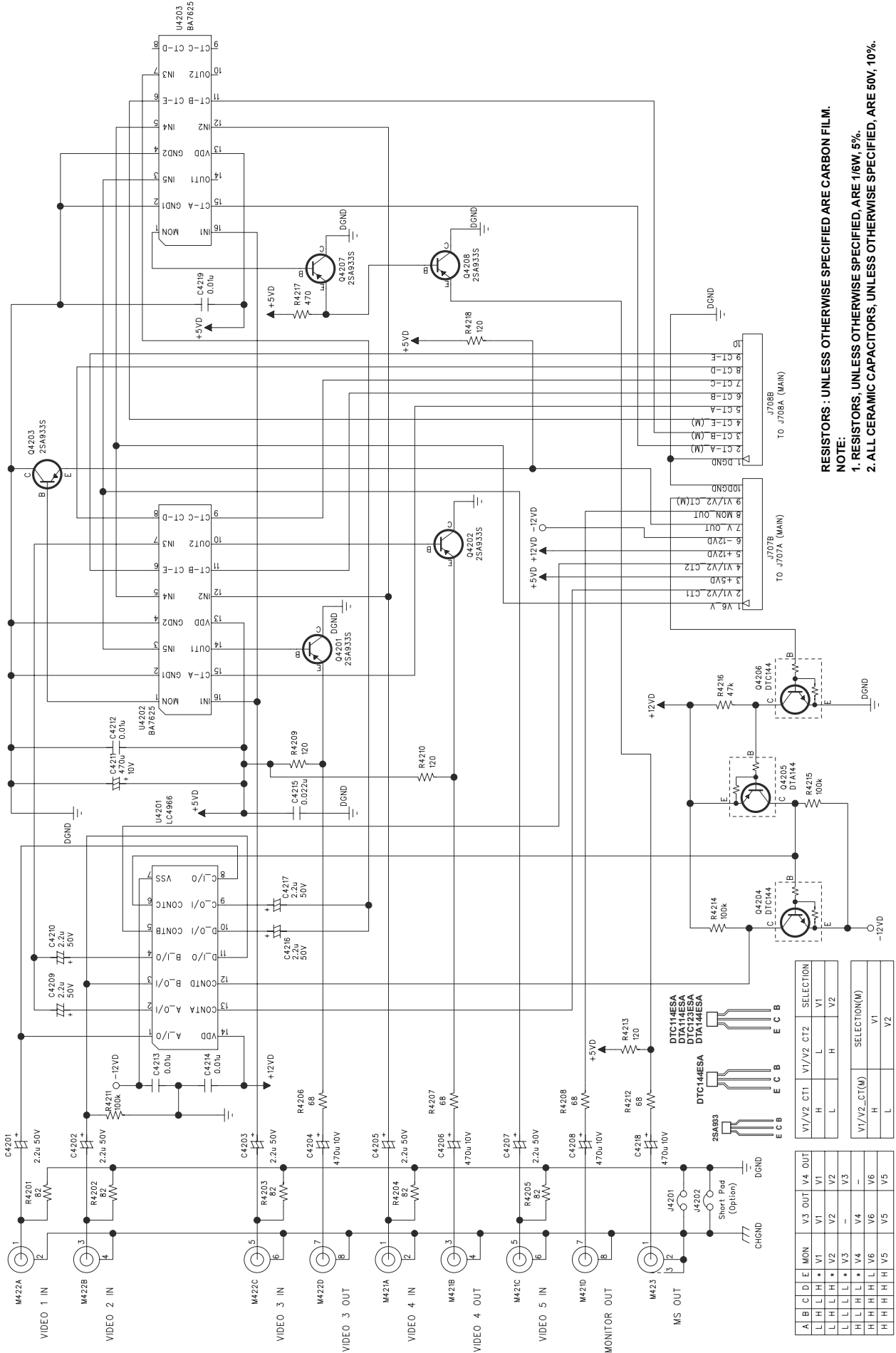


# COMPONENT VIDEO



**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%.**

# 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%.

A	B	C	D	E	MON	V3	OUT	V4	OUT
L	H	L	H	*	V1	V1	V1	V1	
L	H	L	H	*	V2	V2	V2	V2	
L	L	L	*	V3	-	V3			
H	L	L	*	V4	V4	V4	V4	V4	
H	H	L	L	*	V6	V6	V6	V6	
H	H	H	H	*	V5	V5	V5	V5	

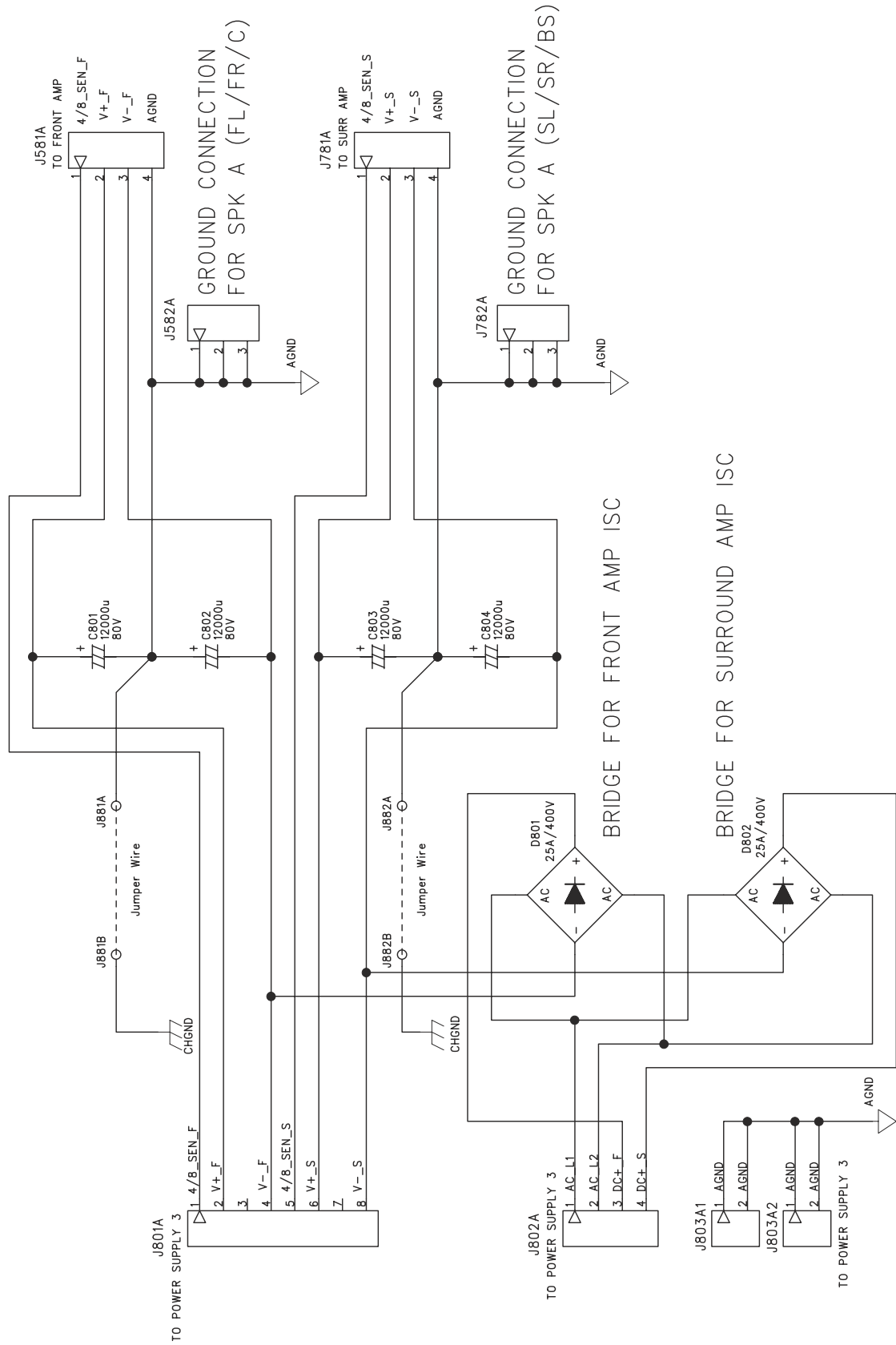
V1/V2	CT1	V1/V2	CT2	SELECTION
H	H	L	H	V1
L	L	H	H	V2

V1/V2	CT(M)	SELECTION(M)
H	H	V1
L	L	V2

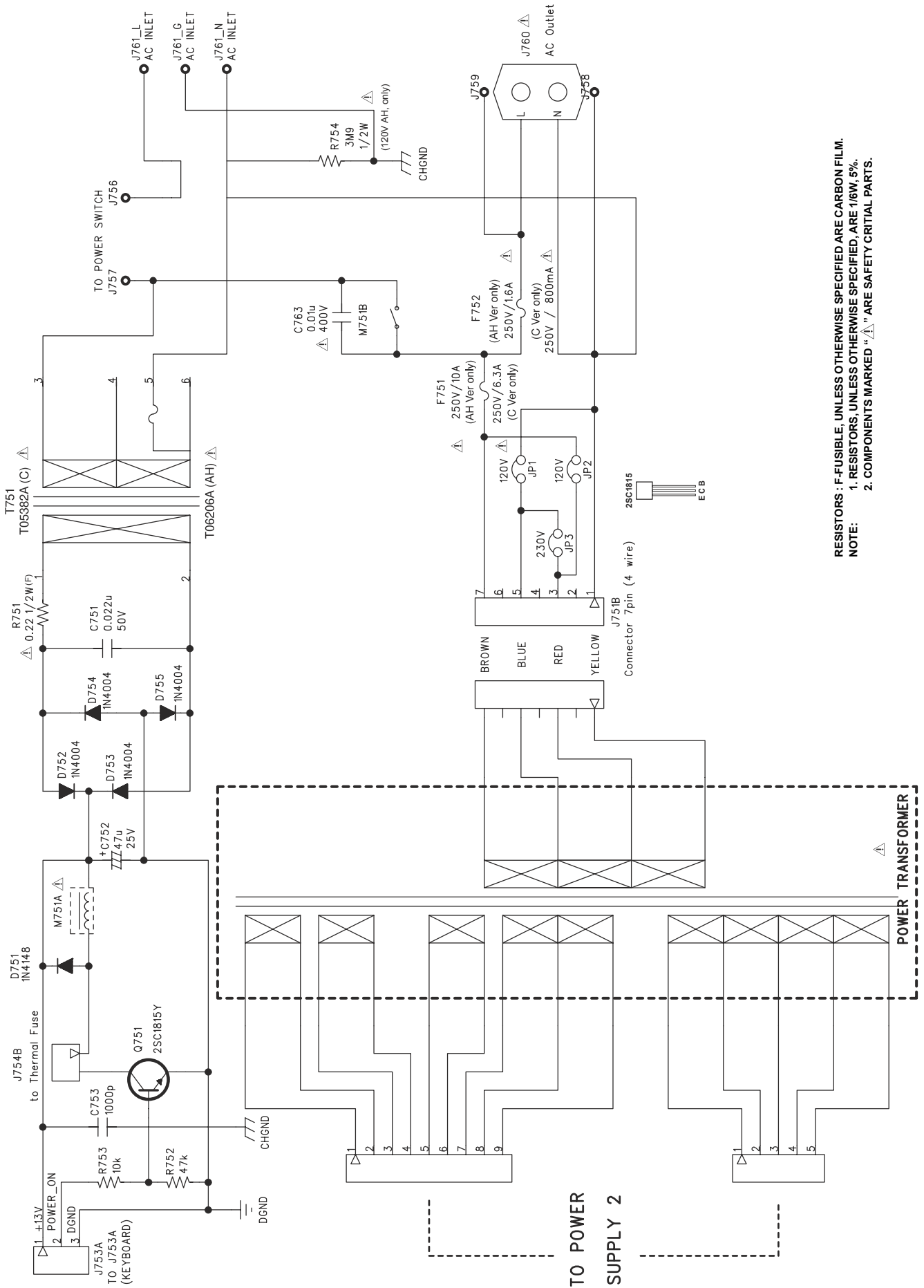


# POWER SUPPLY (SECONDARY)



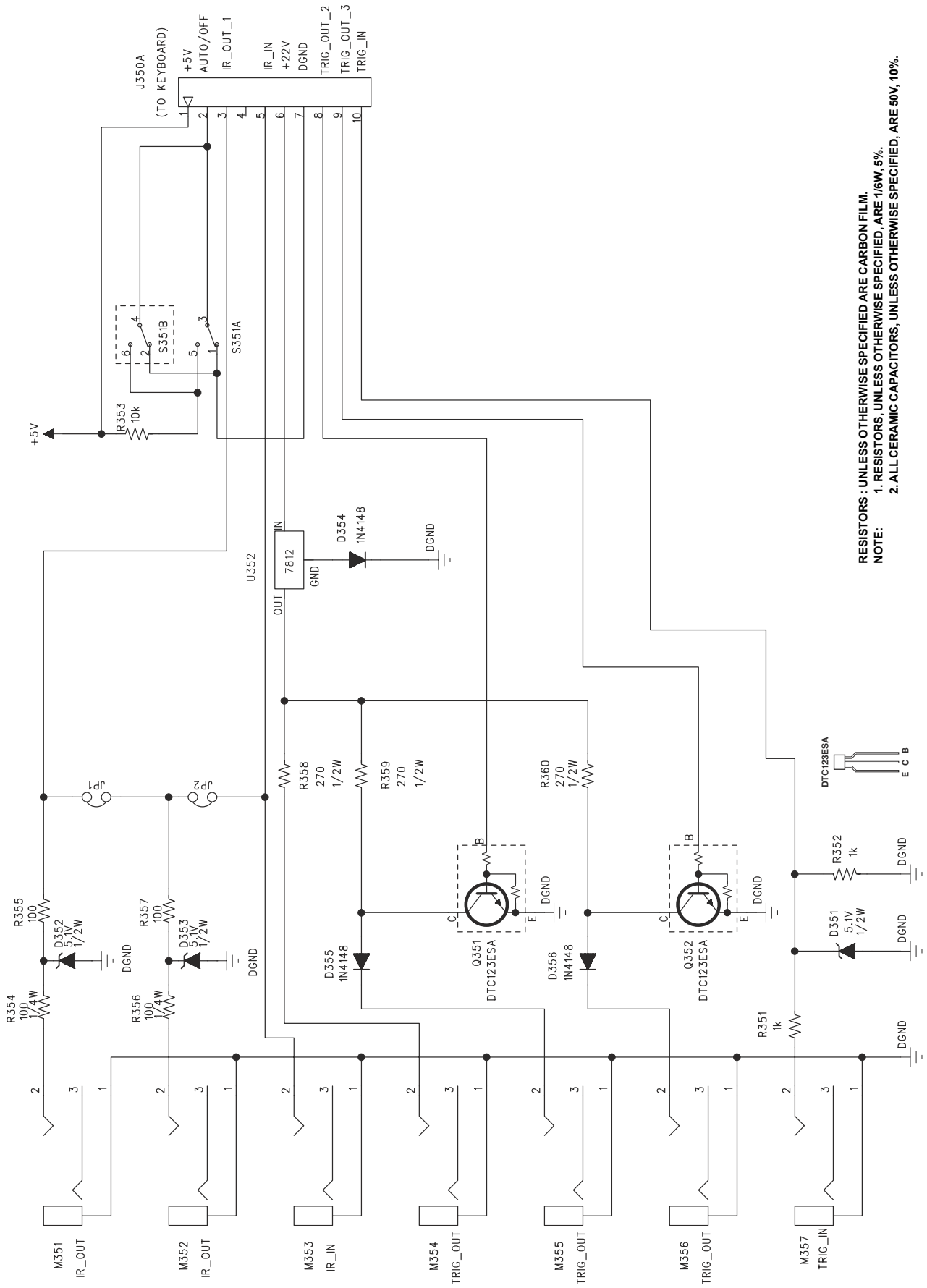
NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/8W, 5%.  
 2. COMPONENTS MARKED "△" ARE SAFETY CRITICAL PARTS.

# 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 "△" ARE SAFETY CRITICAL PARTS.

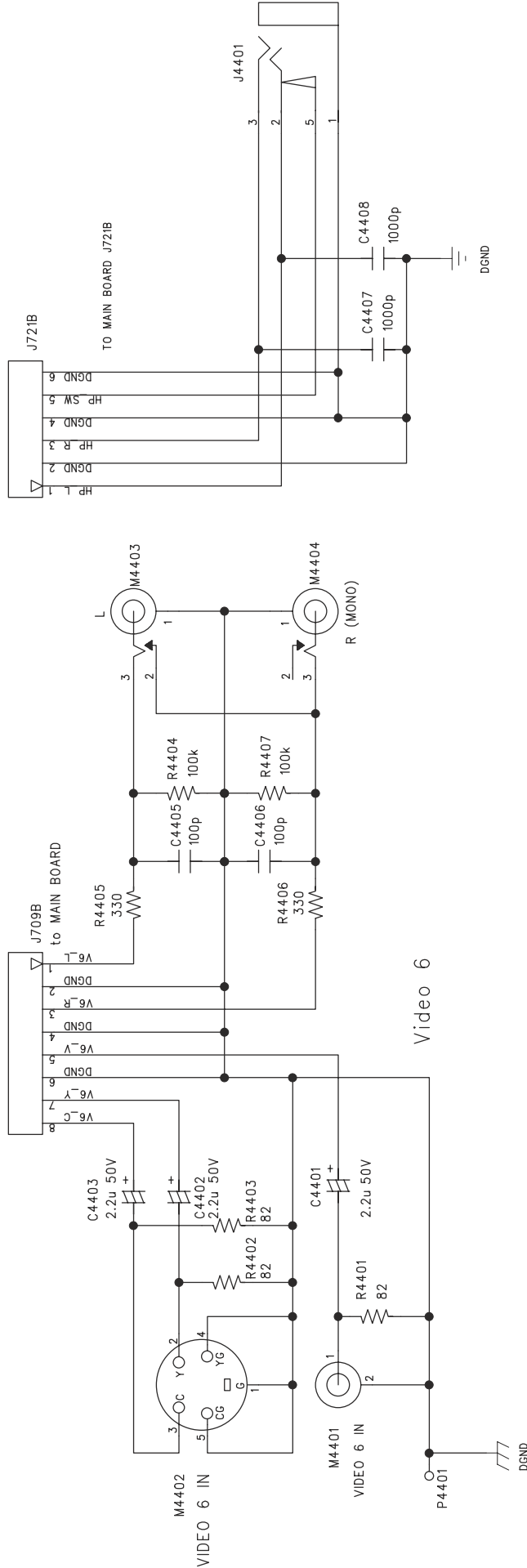
# TRIGGER



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%.

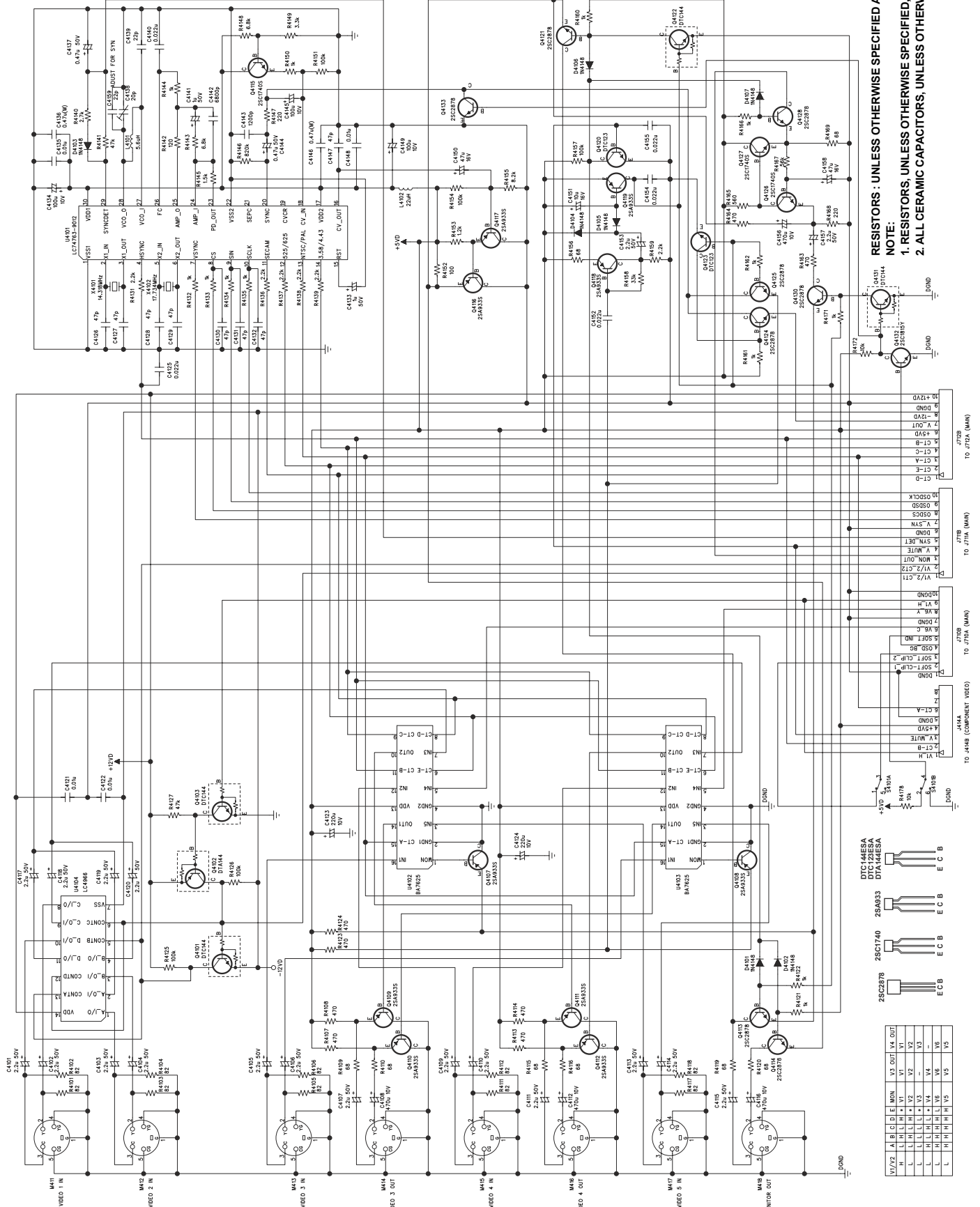


# VIDEO 6



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%.

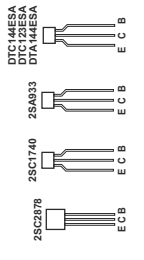
# S-VIDEO



RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

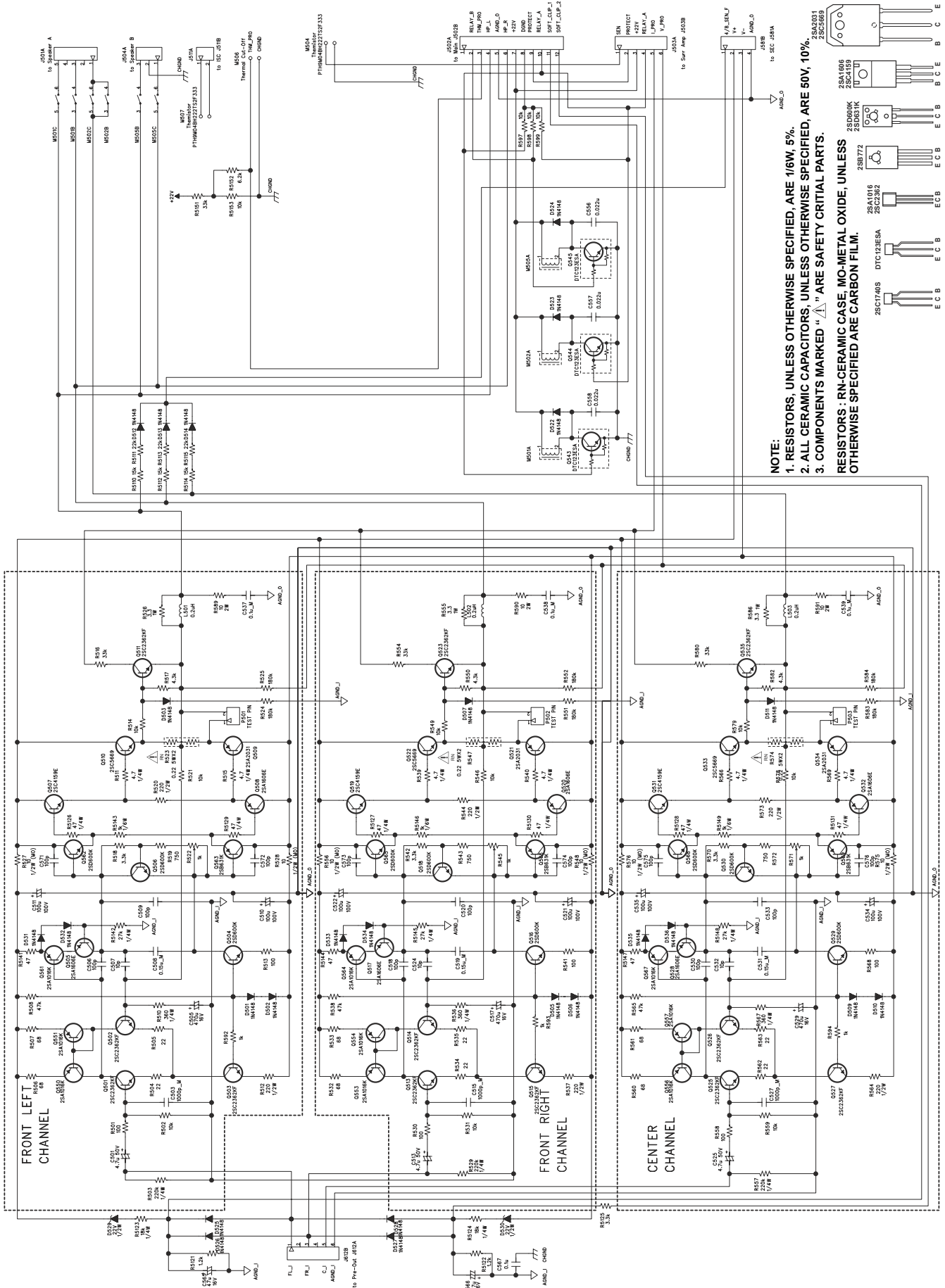
NOTE:

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



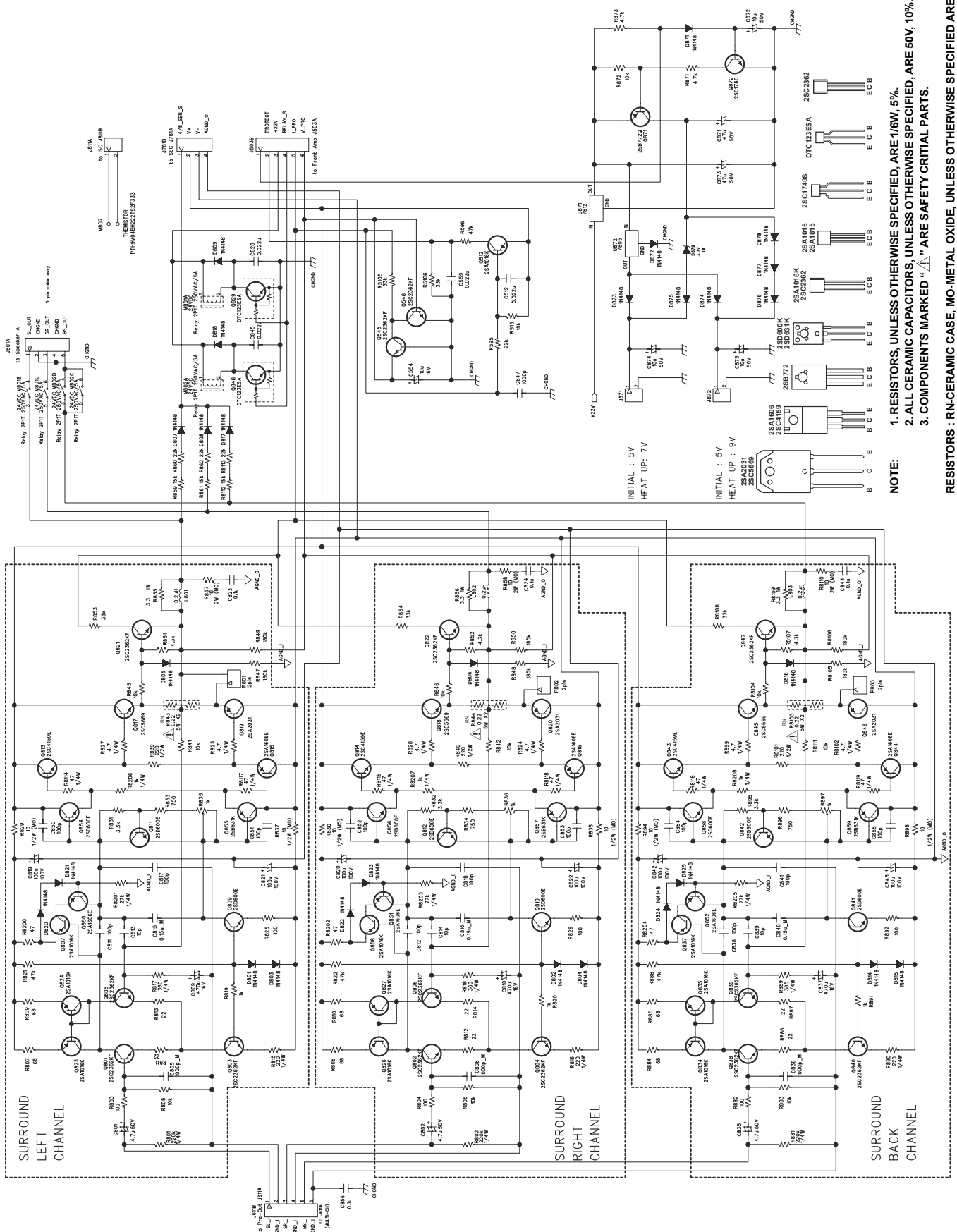
V1/V2	A	B	C	D	MON	V3	OUT	V4	OUT
H	L	L	L	L	H	V1	V1	V1	V1
L	L	L	L	L	H	V2	V2	V2	V2
L	L	L	L	L	H	V3	V3	V3	V3
L	L	L	L	L	H	V4	V4	V4	V4
L	L	L	L	L	H	V5	V5	V5	V5
L	L	L	L	L	H	V6	V6	V6	V6
L	L	L	L	L	H	V5	V5	V5	V5

# FRONT / CENTER AMPLIFIER



- NOTE:**
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/8W, 5%.
  2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
  3. COMPONENTS MARKED  $\Delta$  ARE SAFETY CRITICAL PARTS.
- RESISTORS : RN-CERAMIC CASE, MO-METAL OXIDE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
- 25A1016 E C B
  - 25C1282 E C B
  - DTC1285A E C B
  - 25C1740S E C B
  - 25A165 E C B
  - 25C169 E C B
  - 25D81K E C B
  - 25B772 E C B
  - 25D80K E C B
  - 25D81K E C B

# SURROUND / BACK SURROUND AMPLIFIER

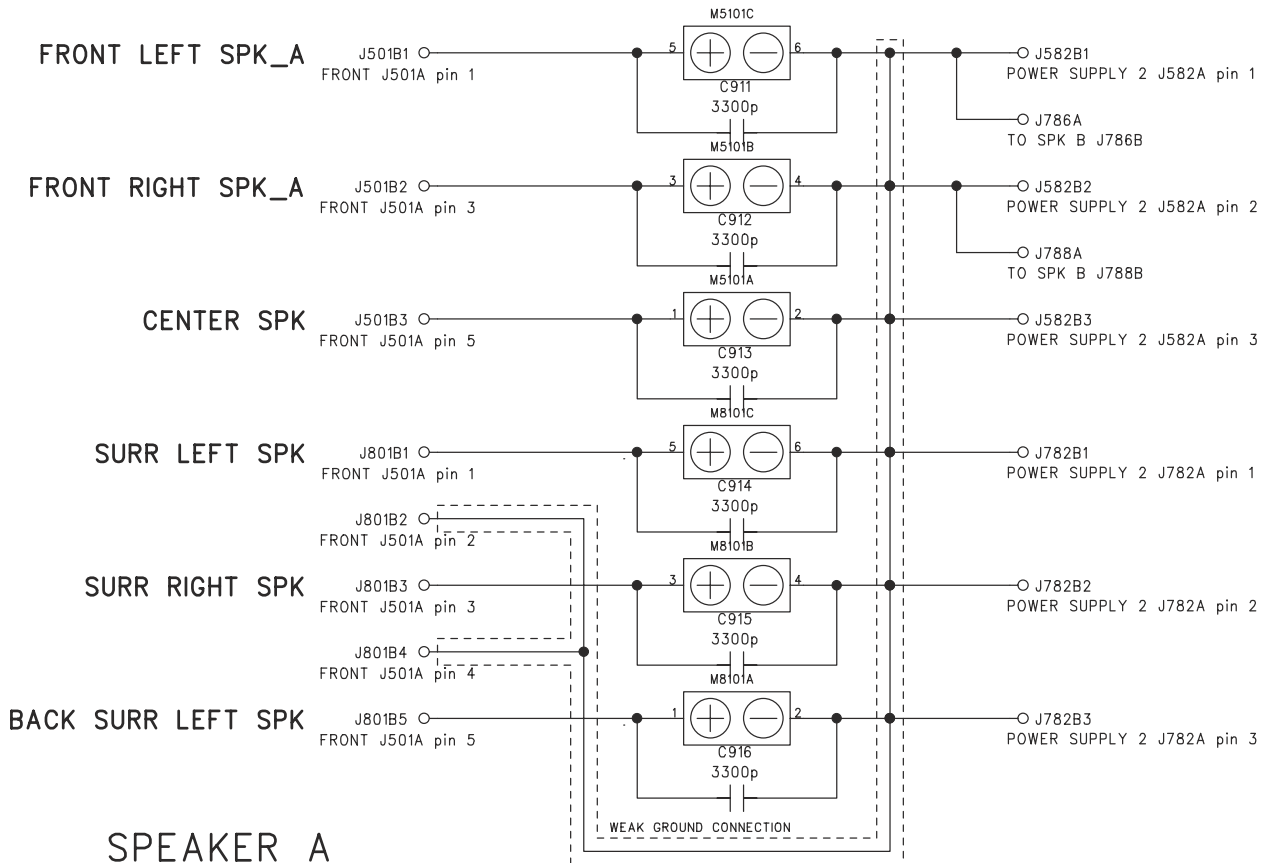


**NOTE:**

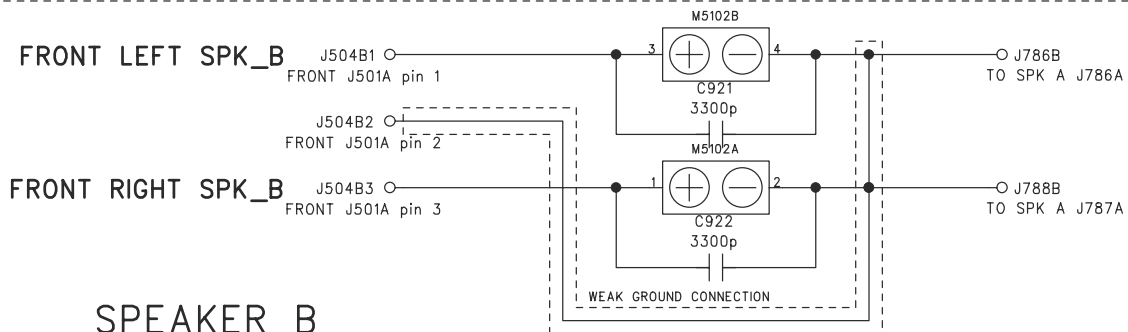
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
3. COMPONENTS MARKED "Δ" ARE SAFETY CRITICAL PARTS.

RESISTORS : RN-CERAMIC CASE, MO-METAL OXIDE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

## SPEAKER A & B

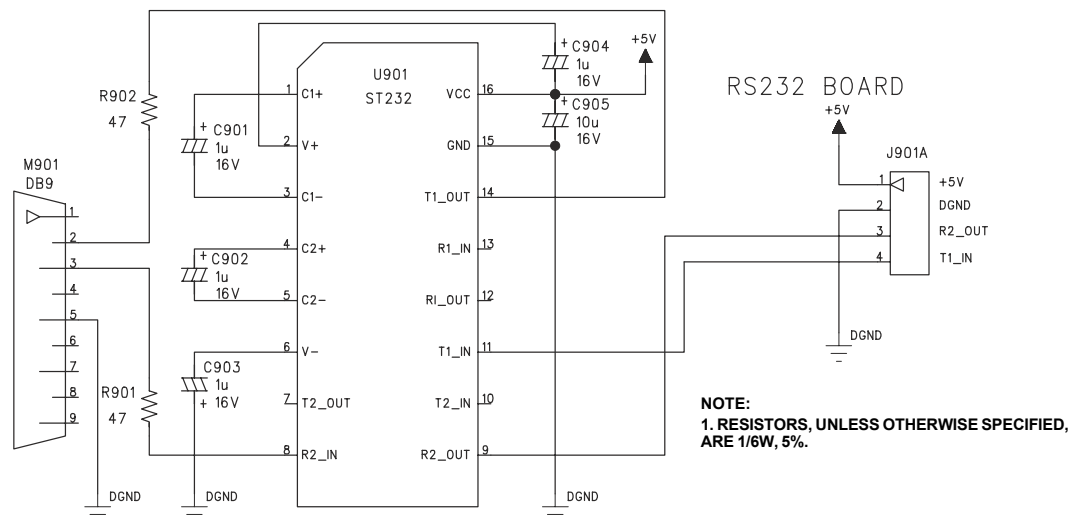


## SPEAKER A



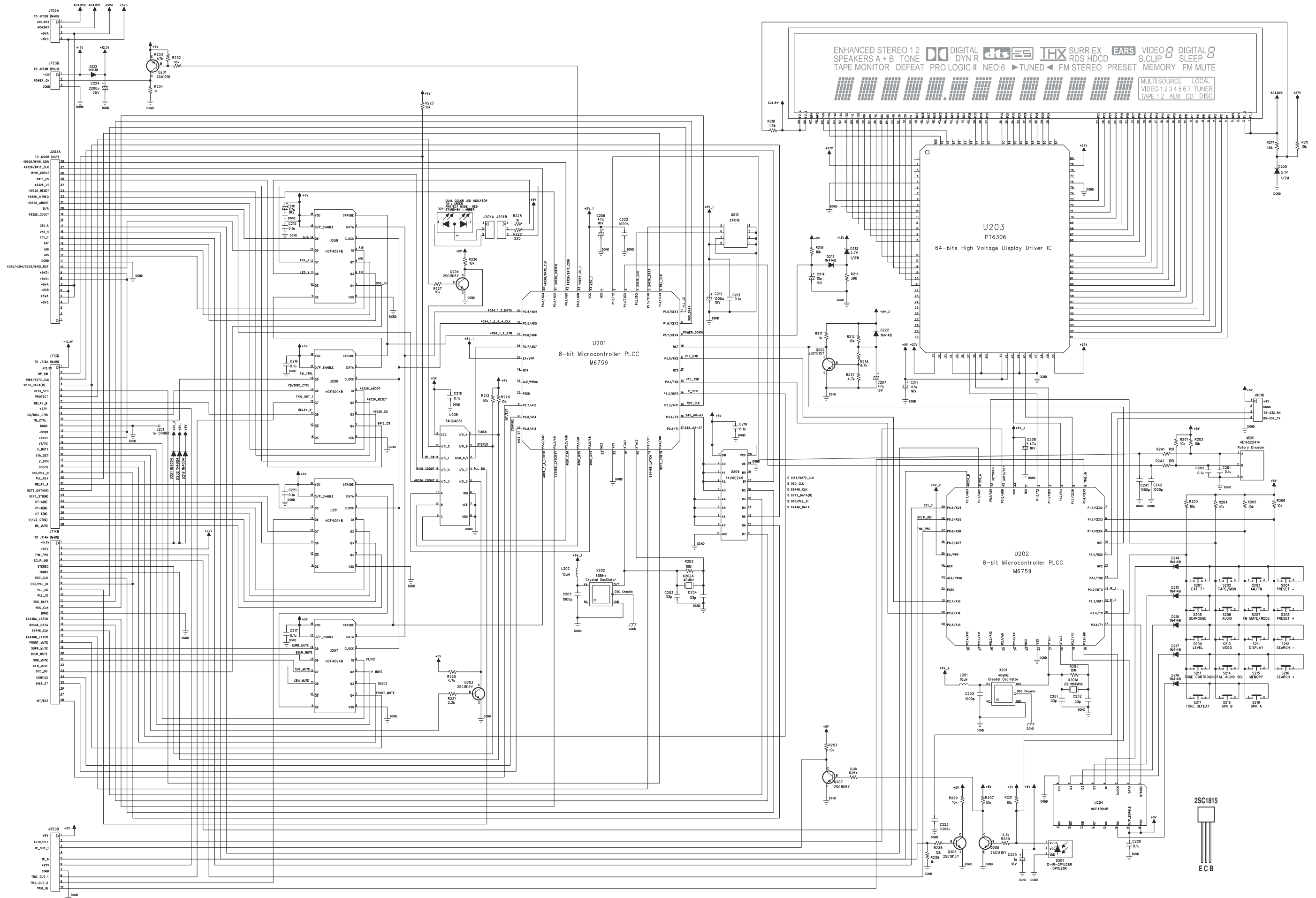
## SPEAKER B

## RS-232





# KEYBOARD

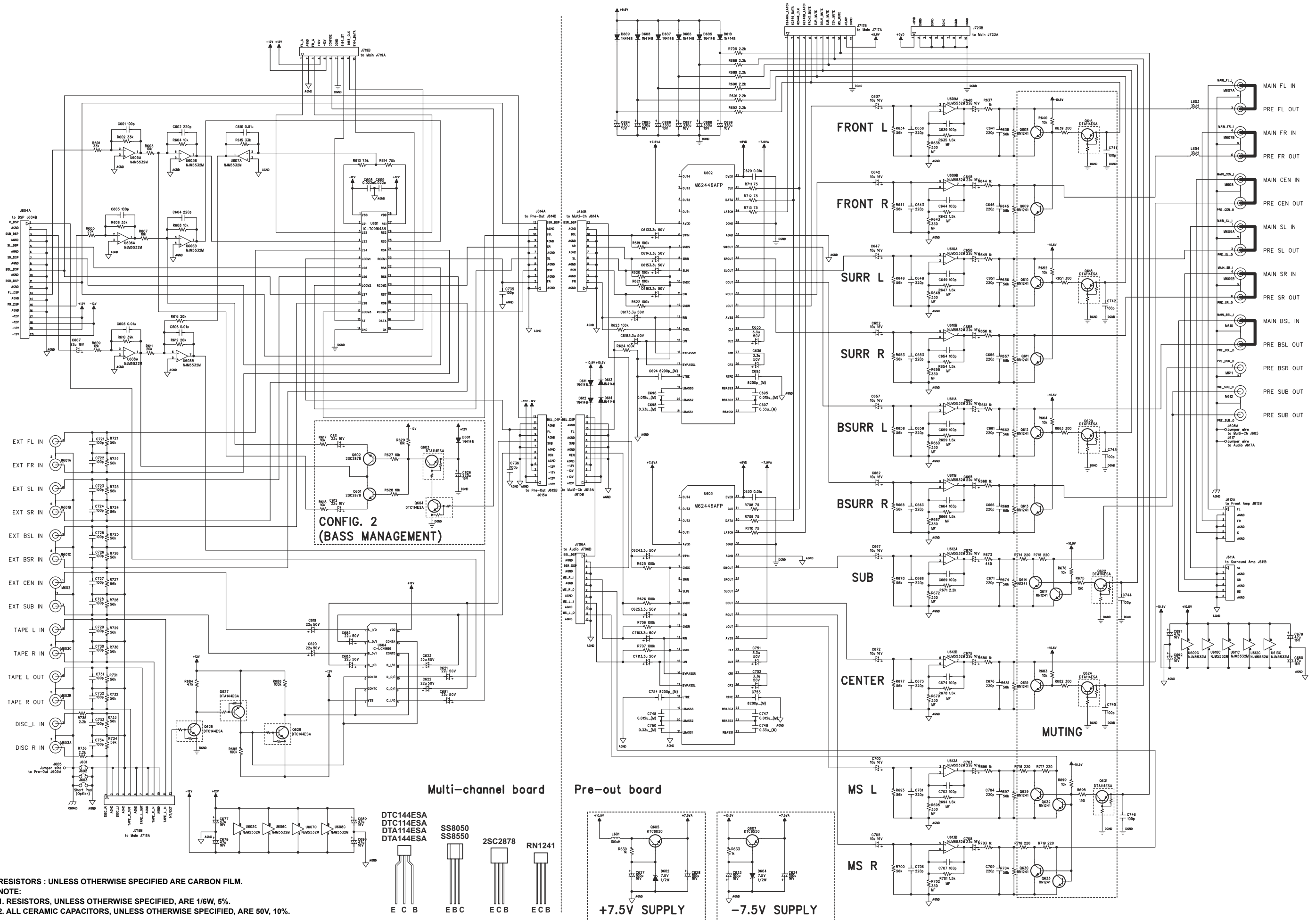


**NOTE:**  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 5%.

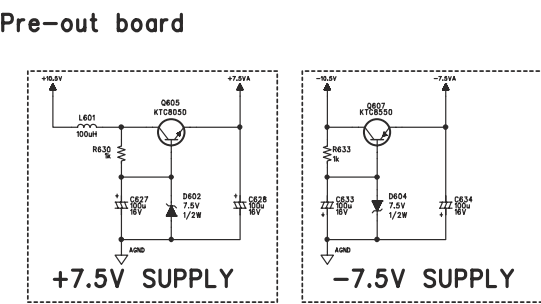
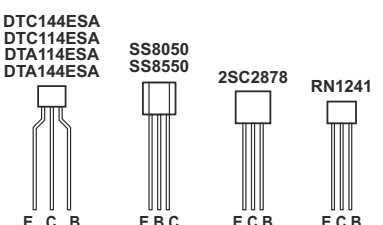
Cutting line for folded page!



# MULTI-CH / PRE-OUT



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%.







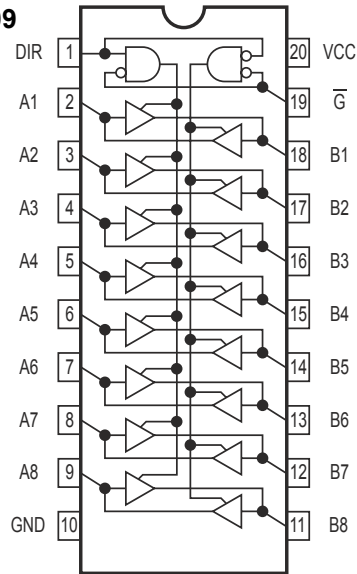
# IC BLOCK DIAGRAM

## 74LVC245

DSP BOARD: U1002, U1003, U1014

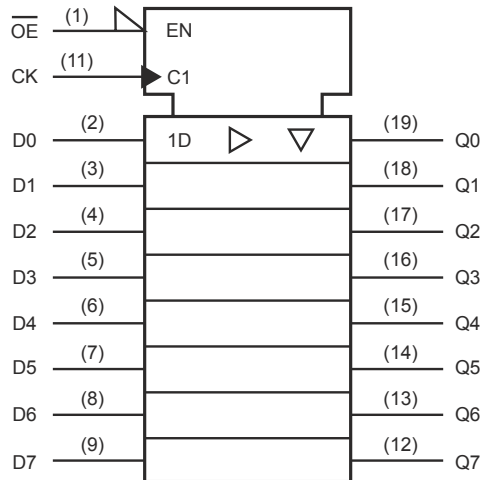
## 74VHC245

KEYBOARD: U209



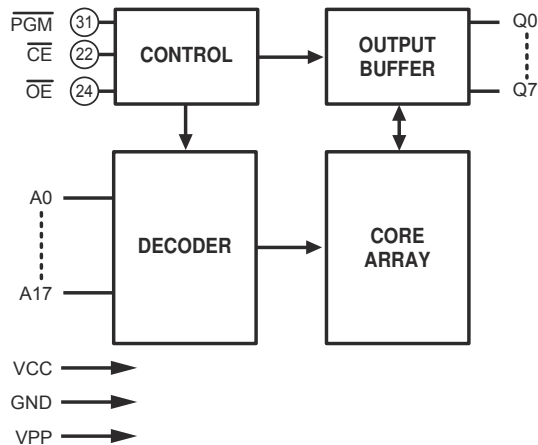
## 74LVQ574

DSP BOARD: U1008, U1009



## W27C020

DSP BOARD: U1007



## NJM5532

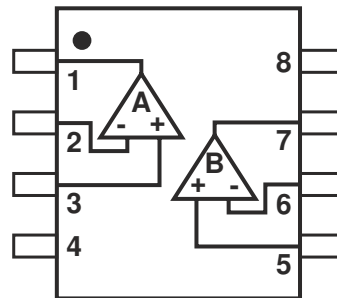
DSP BOARD: U1010~U1013, U1023 & U1028

MULTI-CHANNEL: U605~U608

PRE-OUT BOARD: U609~U613

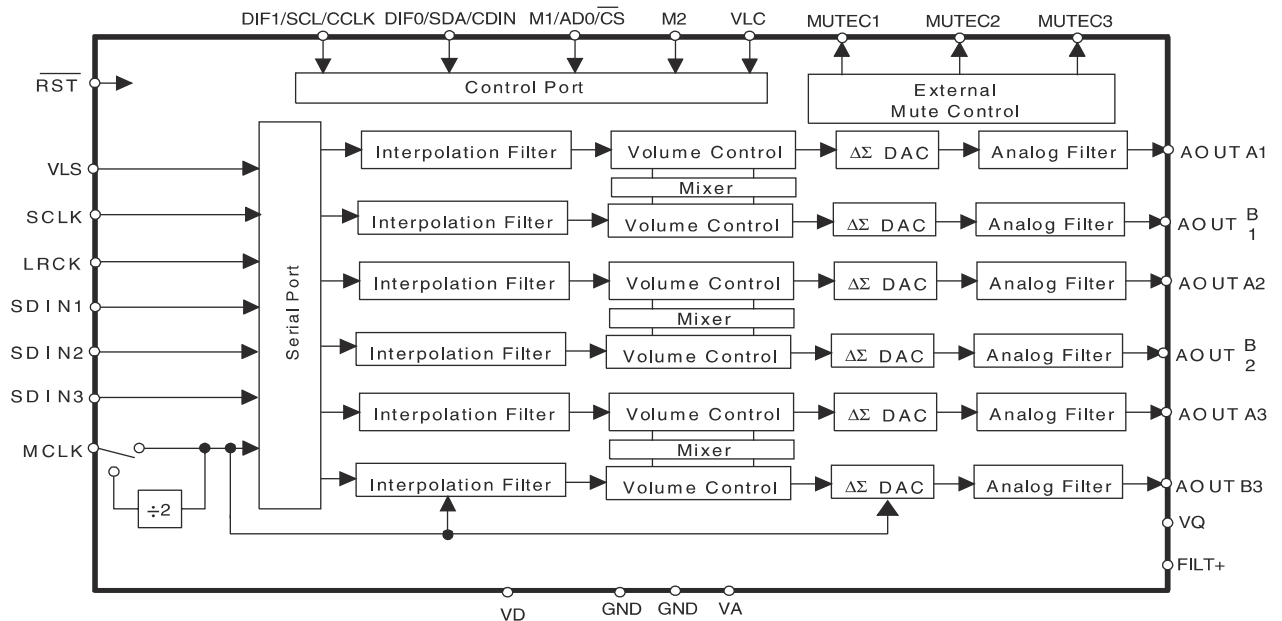
AUDIO BOARD: U305

ISC BOARD: U801

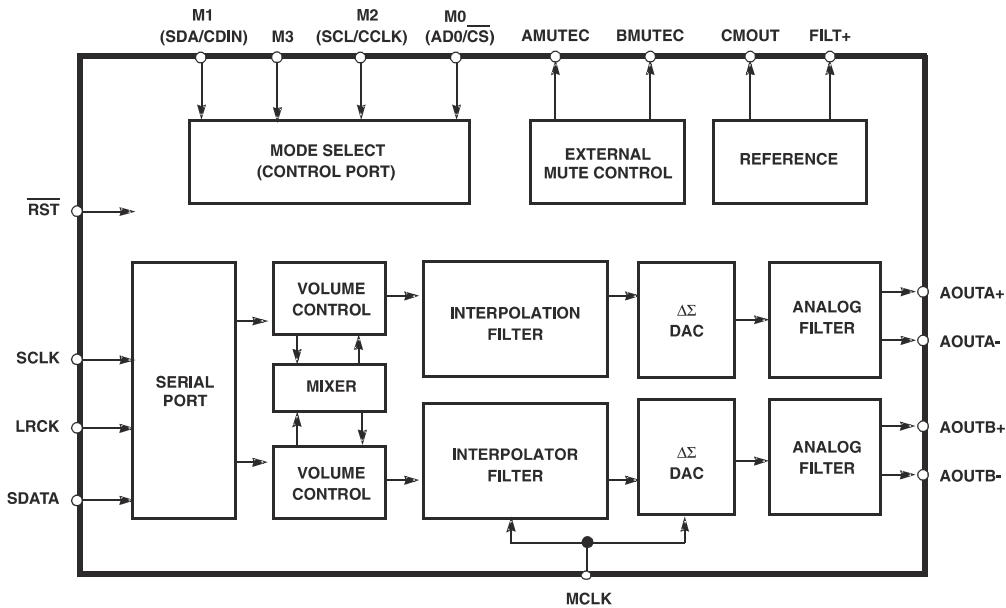


## CS4360KZ

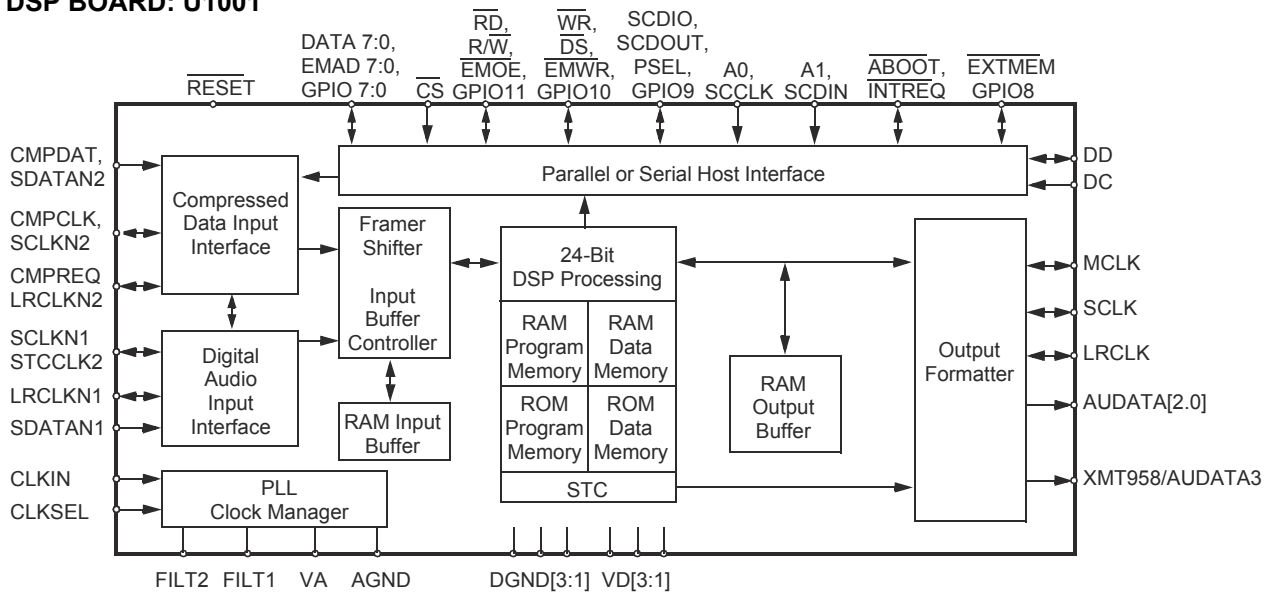
DSP BOARD: U1026



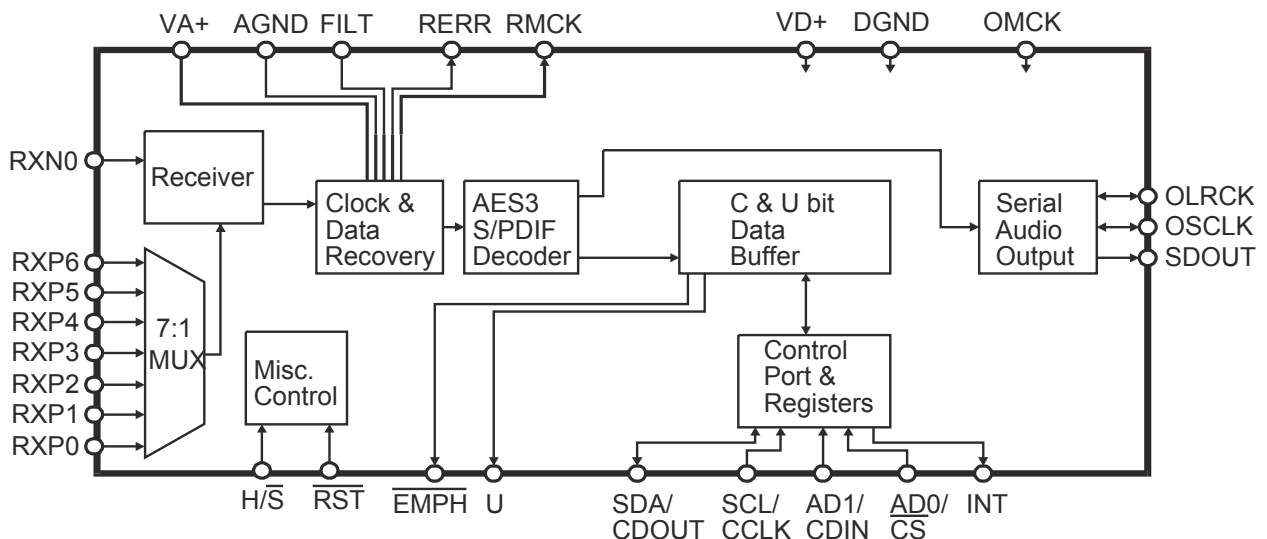
**CS4392**  
**DSP BOARD: U1025**



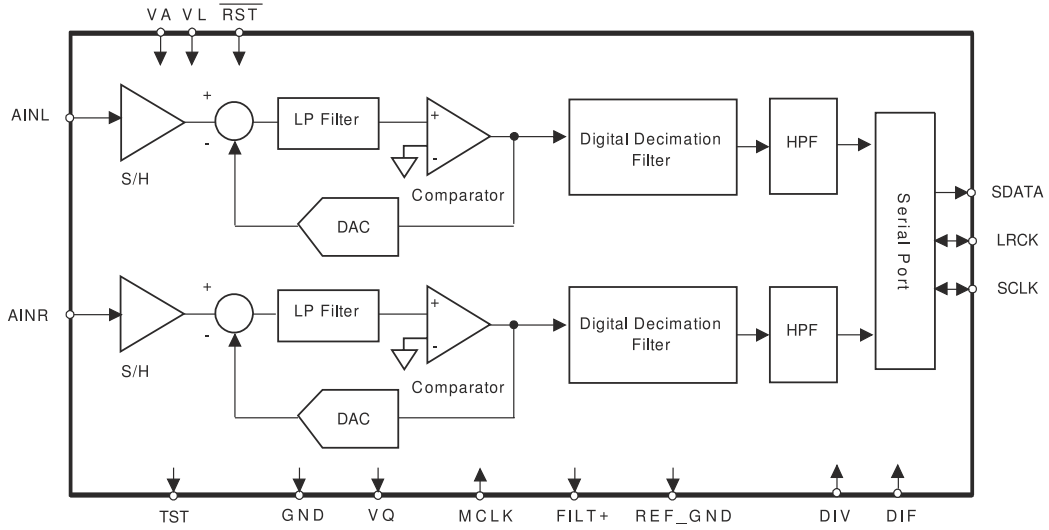
**CS49326**  
**DSP BOARD: U1001**



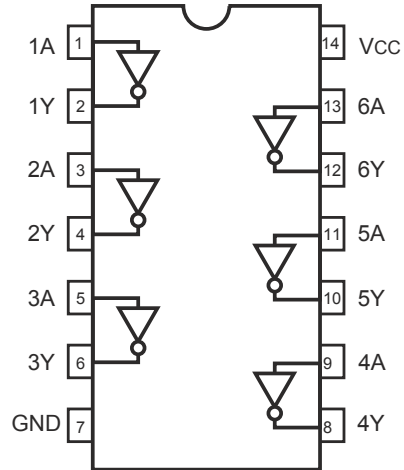
**CS8415A**  
**DSP BOARD: U1005**



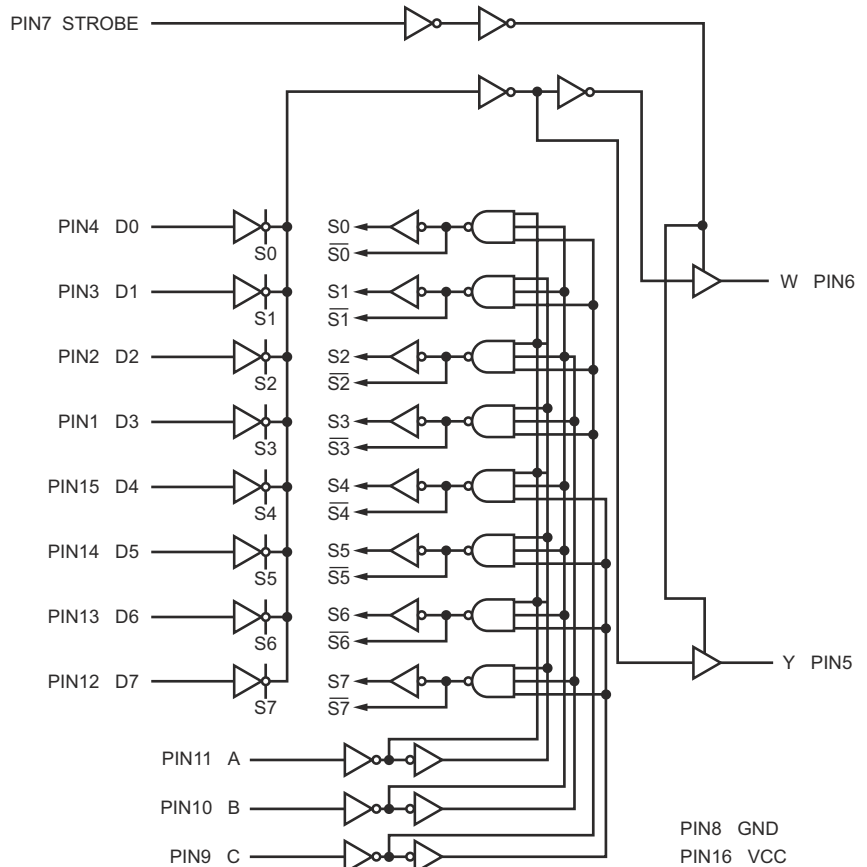
**CS5333KZ**  
**DSP BOARD: U1027**



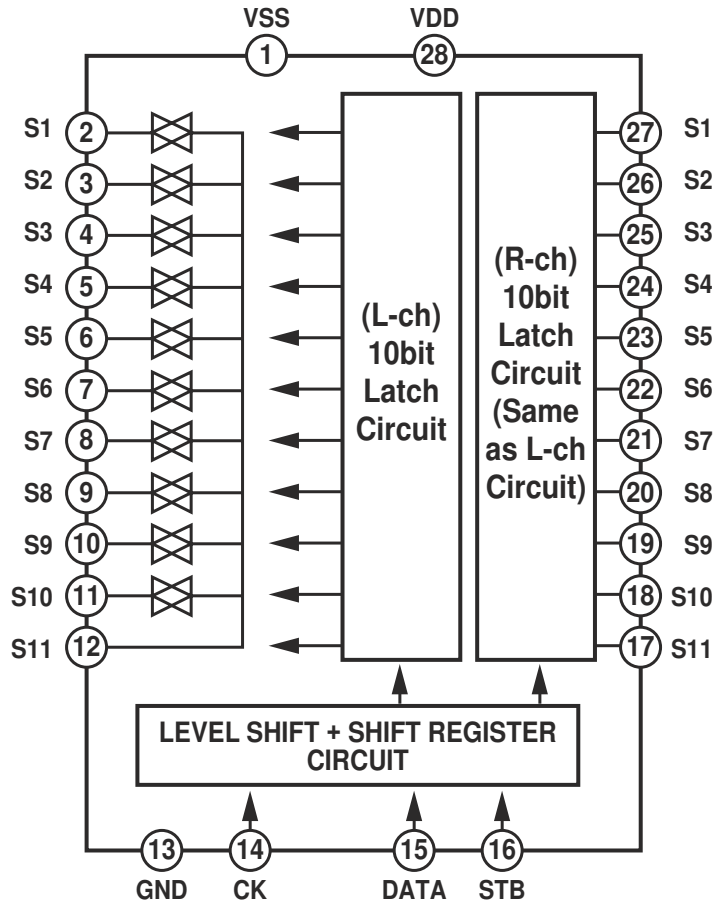
**74HCU04**  
**DIGITAL BOARD: U1201 & U1202**



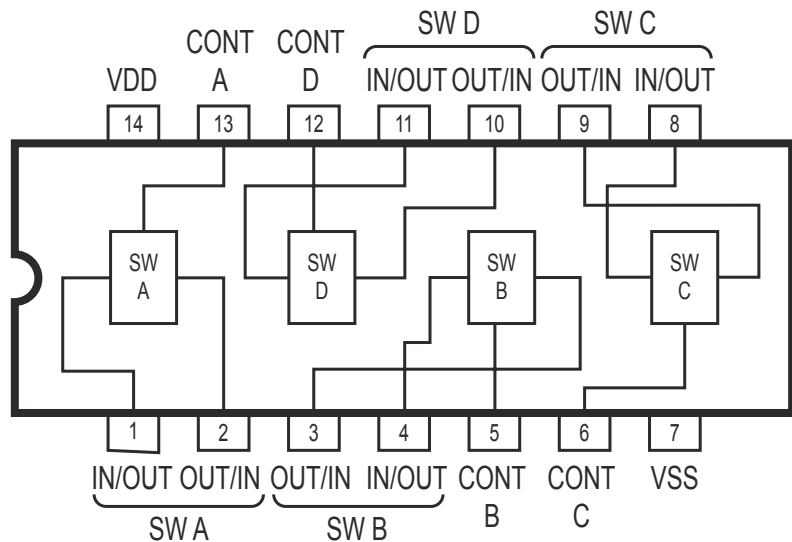
**74HC251**  
**DIGITAL BOARD: U1203**



**TC9273**  
AUDIO BOARD: U301 & U304



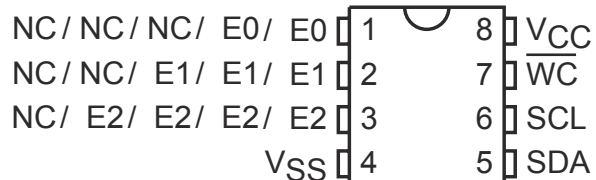
**LC4966**  
AUDIO BOARD: U302 & U303  
COMPOSITE VIDEO: U4201  
S-VIDEO BOARD: U4104  
MULTI-CHANNEL: U604



**AT24C16**  
KEYBOARD: U210

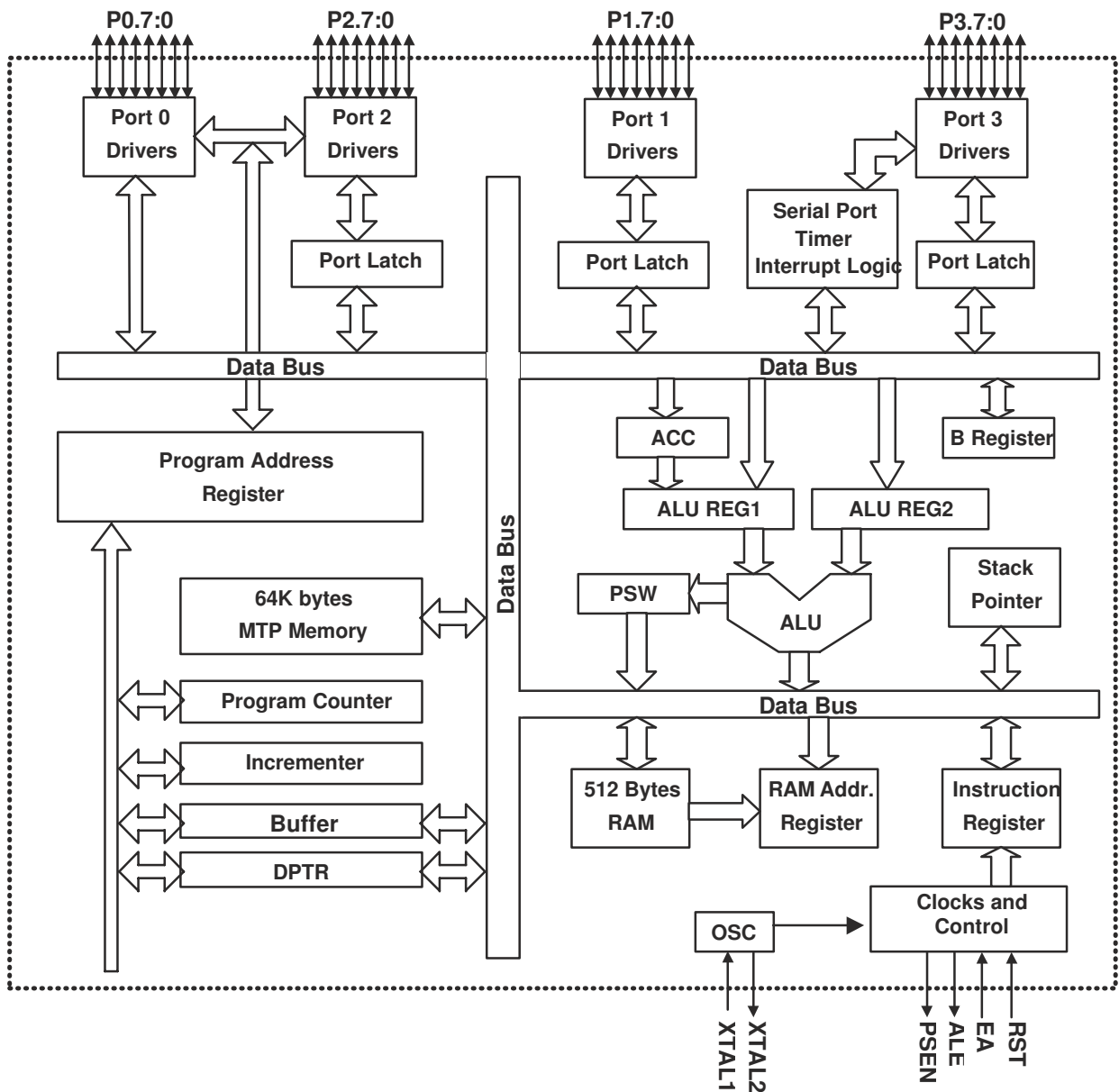
M24Cxx

16Kb/8Kb/4Kb/2Kb/1Kb

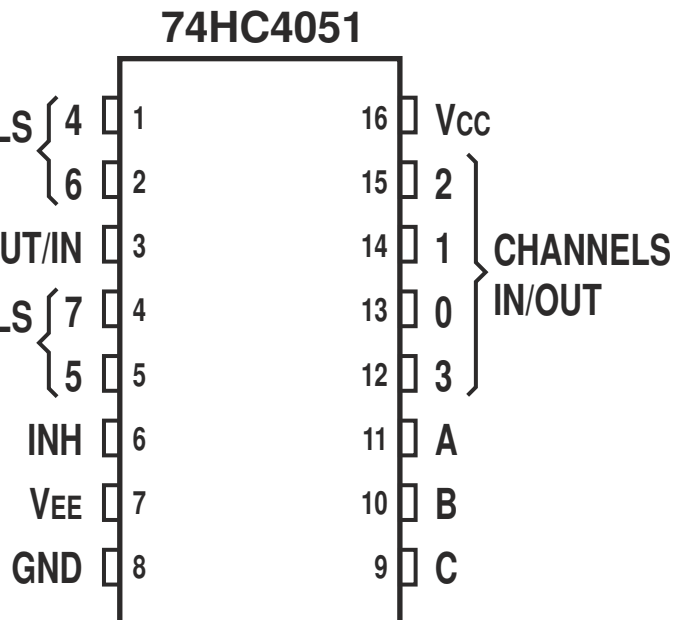




**M6759**  
**KEYBOARD: U201 & U202**

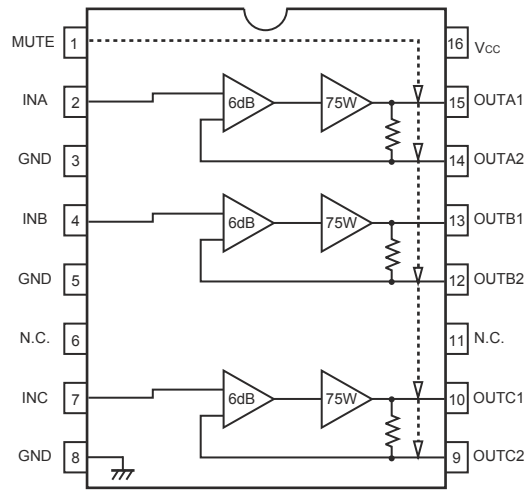


**74HC4051**  
**KEYBOARD: U208**

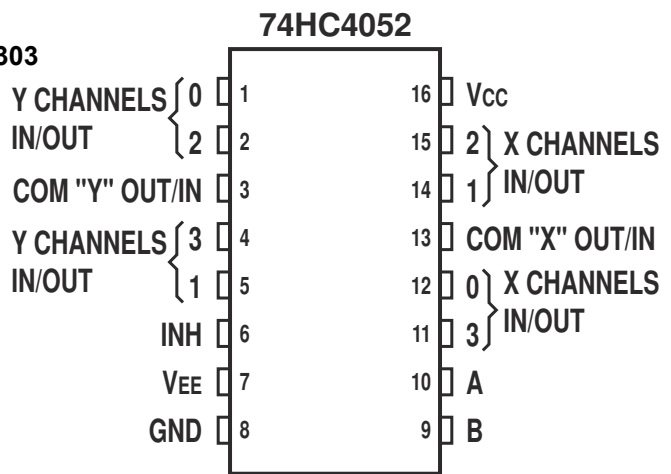




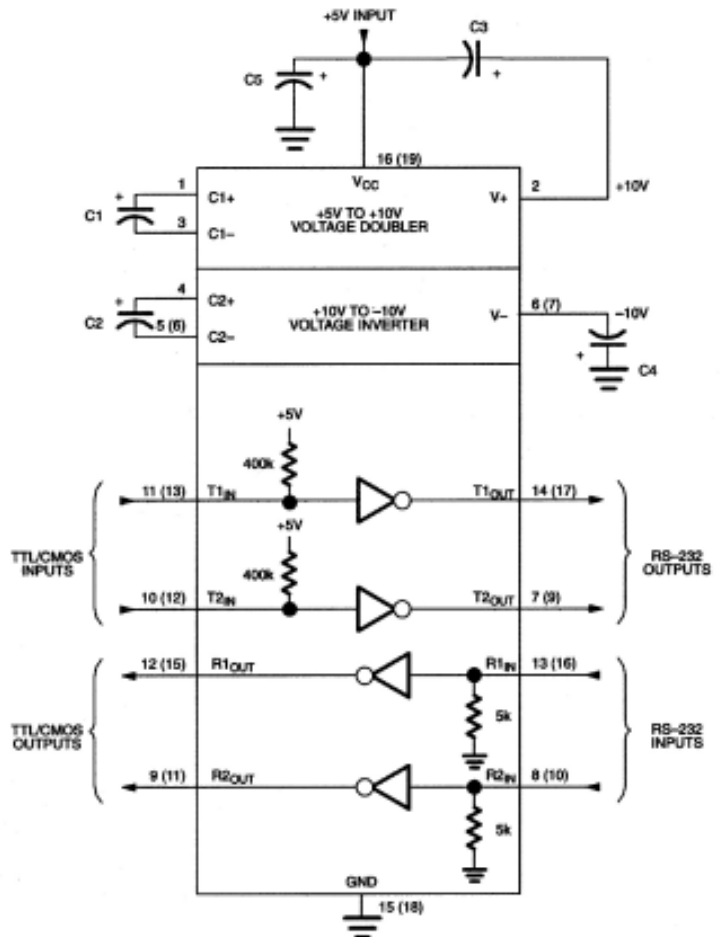
**BA7660FS**  
**COMPONENT VIDEO BOARD: U4301**



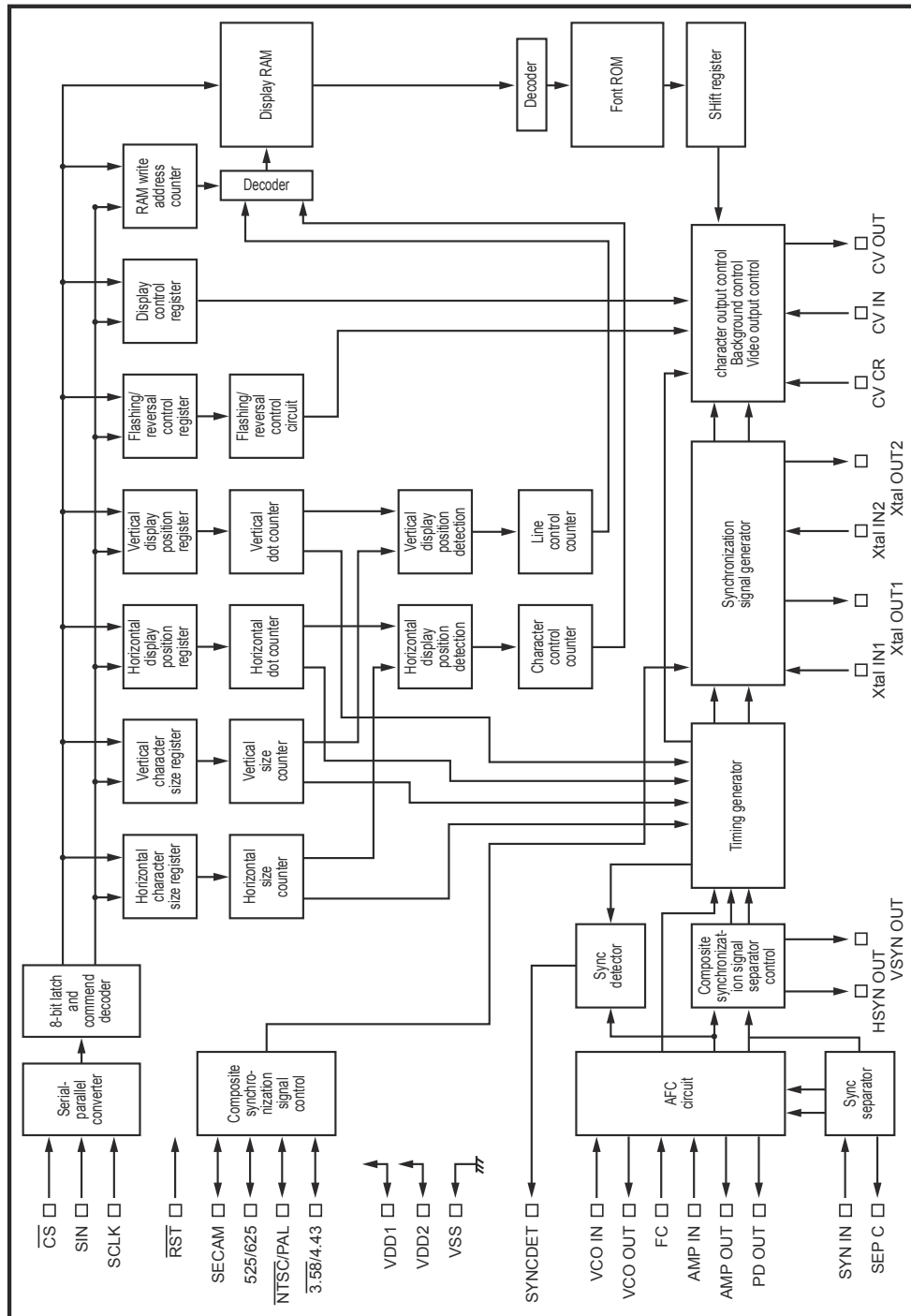
**74HC4052**  
**COMPONENT VIDEO BOARD: U4302 & U4303**



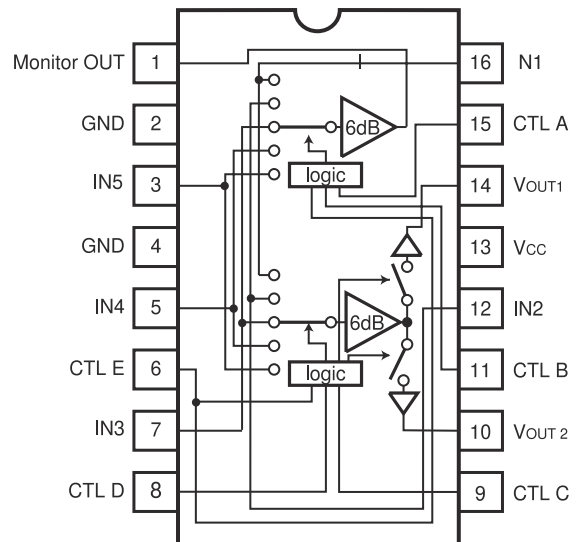
**DS232A**  
**RS232 BOARD: U901**



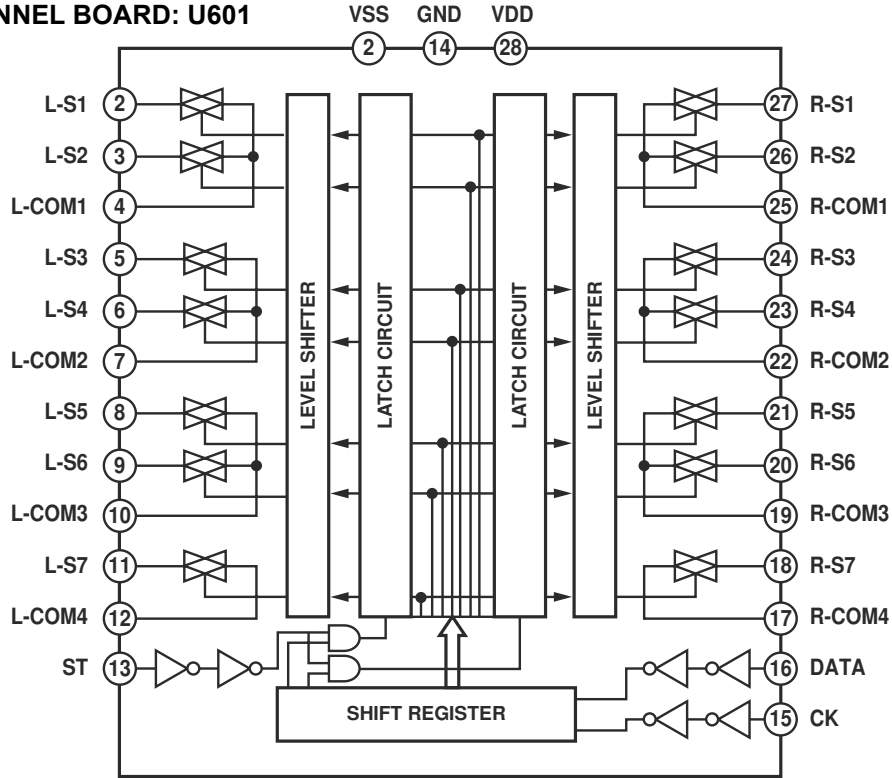
**LC74763**  
**S-VIDEO BOARD:**  
**U4101**



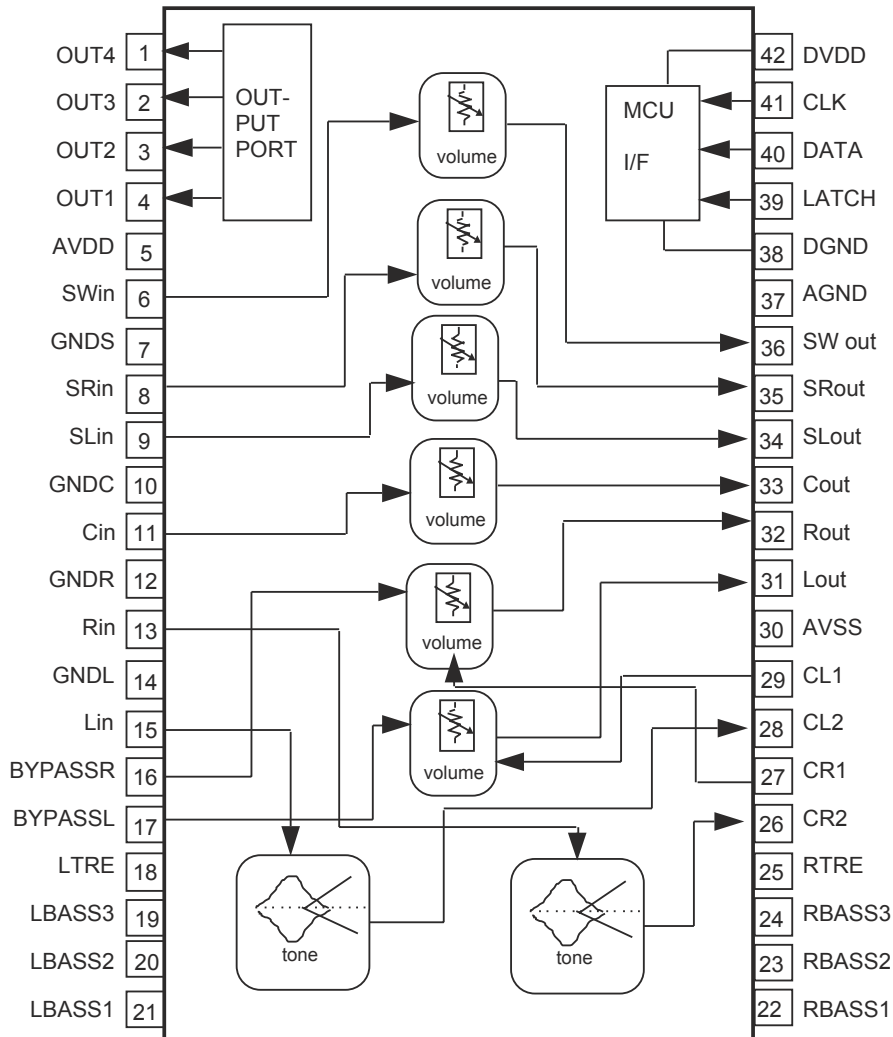
**BA7625**  
**COMPOSITE VIDEO BOARD: U4202 & U4203**  
**S-VIDEO BOARD: U4102 & U4103**



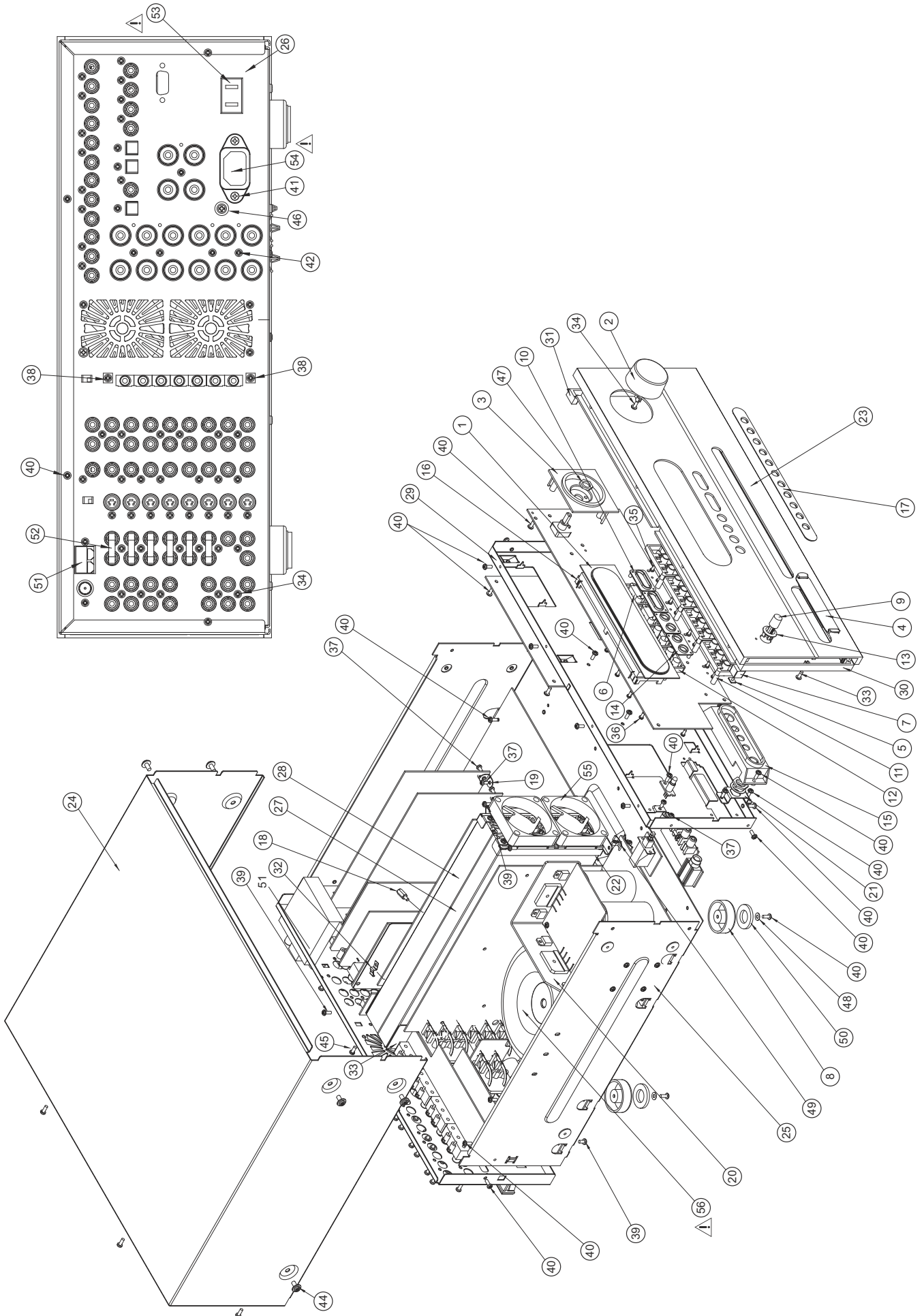
**TC9164N**  
**MULTI-CHANNEL BOARD: U601**



**M62446FP**  
**PRE-OUT BOARD: U602 & U603**







# EXPLODED VIEW



# EXPLODED VIEW PARTS LIST

Item	Part No.	Description	Qty.
1	10-0752001-00-10	WINDOW LENS	1
2	10-0752002-71-00	VOLUME KNOB ASSEMBLY	1
3	10-0752005-71-00	VOLUME BEZEL	1
4	10-0752007-01-00	VIDEO COVER	1
5	10-0752011-00-00	LED LENS	1
6	10-0752012-01-00	RACKER BUTTON	2
7	10-0752015-01-02	LED BEZEL	1
8	10-0752017-01-00	PLASTIC FOOT	4
9	10-0752022-01-00	POWER BUTTON	1
10	10-0752025-01-00	RACKER BEZEL	2
11	10-0752032-01-00	INPUT BUTTON	4
12	10-0752032-01-00	DUO BUTTONS	2
13	10-0752045-01-00	POWER BUTTON BEZEL	1
14	10-0752055-01-00	DUO BEZEL	2
15	10-0752065-01-00	VIDEO HOUSING	1
16	10-0752075-00-00	DISPLAY BRACKET	1
17	10-0762035-71-00	INPUT BUTTON LOZENGE	1
18	11-0762005-80-00	HEX SPACER AF5.5 H8+6	10
19	11-0570075-80-01	L BRACKET	2
21	11-0752065-80-00	PHONE BRACKET	1
22	11-0762055-80-01	HEATSINK MOUNTING BRACKET	1
20	11-0762048-80-01	HEATSINK- RECTIFIER	1
23	11-0762000-95-11	FASCIA	1
24*AH	11-0762003-85-12	TOP COVER	1
24*C	11-0762013-85-12	TOP COVER	1
25	11-0762004-80-02	BOTTOM CHASSIS	1
26*AH	11-0762006-94-12	REAR PANEL (AH)	1
26*C	11-0762016-94-12	REAR PANEL (C)	1
27	11-0762068-80-02	EXTRUDED HTSK LEFT	1
28	11-0762078-80-02	EXTRUDED HTSK RIGHT	1
29	11-0762025-80-01	SUBFASCIA	1
30	11-0762028-95-00	SIDE CAP L	1
31	11-0762038-95-00	SIDE CAP R	1
32	11-2100135-80-00	CLIP THERMAL SWITCH	1
33	12-0762001-70-00	FIBRE GASKET INSULATOR	1
34	14-0300803-54-00	TAPTITE SCREW 3 X 8 B/H BLK PLT	63
35	13-0260600-02-00	SELF TAP SCREW 2.6 X 6 P/H NI PLT	9
36	13-0260803-02-00	SELF TAP SCREW 2.6 X 8 B/H NI PLT	16
37	14-0300600-02-00	MACHINE SCREW M3 X 6 P/H NI PLT	19
38	14-0300600-04-00	MACHINE SCREW M3 X 6 P/H BLK	4
39	14-0300600-52-00	SELF TAP SCREW 3 X 6 P/H NI-PLT	28
40	14-0300800-53-00	SELF TAP SCREW 3 X 8 B/B ZINC PLT	39
41	14-0300804-54-00	TAPTITE SCREW M3 X 8 K/H BLK PLT	5
42	14-0301000-54-00	TAPTITE SCREW 3 X 10 P/H BLK	5
43	14-0301000-02-00	MACHINE SCREW M3 X 10 PAN HEAD NI PLT	25
44	14-0400802-04-00	MACHINE SCREW M4 X 8 WASHER HEAD BLK	6
45	14-0400803-54-00	TAPTITE SCREW 4 X 8 B/H BLK	4
46	14-0401002-04-00	MACHINE SCREW M4 X 10 WASHER HEAD BLK	1
47	15-0900220-11-30	NUT ZINC PLATED M9.0 X 2.2mm	1
48	16-0350080-04-35	STEEL WASHER I/D 3.5 X O/D 8.0 0.4mm ZINC PLT	6
49	17-0500960-00-01	PCB SUPPORTER H 9.6mm PCB HOLE 4mm	3

Item	Part No.	Description	Qty.
50	17-1402603-30-22	RUBBER FOOT I/D14 X O/D26 X 3 HH-48C	4
51*AH	29-4000003-00-38	AM/FM TUNER MODULE KST-MB114MA1-22	1
51*C	29-4000002-00-38	AM/FM TUNER MODULE KST-MB114MA1-20	1
52	34-0061030-00-67	JUMPER PLUG PITCH 14mm	6
53*AH 	34-0101001-00-70	AC OUTLET US POLARIZED 3512-MITIBKUC	1
53*C 	34-0100002-00-78	AC OUTLET CEE 7 2.5A/250V A302D0060P	1
54 	34-0101000-00-67	AC SOCKET IEC 15A/250V	1
55	37-2031245-00-63	FAN DC 60X60X20mm 12DVC 0.27A 4500RPM	2
56 	25-0090056-00-21	XFORMER PW TOROIDAL 120V/240V TI-0130203 ISS 6	1

**NOTE:**

THE COMPONENTS IDENTIFIED BY  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.

# ELECTRICAL PARTS LIST (refer to schematic diagram for non critical component values)

Reference No.	Part No.	Description
<b>PCB MODULE</b>	95-097625-12-01	POWER AMPLIFIER MODULE
<b>FRONT &amp; CENTER AMPLIFIER BOARD PCB ASSEMBLY</b>	80-0907620-40-00	FRONT AND CENTER AMP ASSEMBLY
<b>CAPACITORS</b>		
C501,C513,C525	22-3476052-00-43	CAP ELEC SS 4.7uF 50V 20%
C510-C511,C521-C522,C534-C535	22-3101082-00-28	CAP ELEC GR 100uF 100V 20%
C503,C515,C527	22-4110203-10-28	CAP MYLAR MCC-R 1000P 100V 10%
C505,C517,C529	22-3471022-00-28	CAP ELEC GR 470uF 16V 20%
C508,C519,C531	22-4115403-10-10	CAP MYLAR KT-G 150nF 100V 10%
C537-C539	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C565-C566	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
<b>DIODES</b>		
D501-D503,D505-D507,D509-D514, D522-D528,D531-D536	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D529-D530	20-3222002-02-01	DIODE ZENER BZX55 22V 1/2W 5%
<b>COILS</b>		
L501-L503	24-1000001-00-28	AIR COIL 0.2uH 10% 1 X 9 X 13.5 TURNS
<b>RELAYS</b>		
M501-M502,M505	32-3124051-03-40	RELAY POWER DC24V 5A/250V 2P1T
<b>THERMISTOR</b>		
M504,M507	23-6110100-00-08	THERMISTOR PTC PTH9MO4BH471TS2F333
<b>THERMAL PROTECTOR</b>		
M506	39-0000007-00-15	THERMAL CUT OFF SWITCH 90C UP72
<b>TRANSISTORS</b>		
Q507,Q519,Q531	21-1011610-30-12	XTR PW NPN 1.5A/160V TO-220ML 2SC4159E
Q510,Q522,Q533	21-1152310-10-12	XTR PW NPN 15A/230V TO-3PB 2SC5669
Q501-Q503,Q511,Q513-Q515,Q523, Q525-Q527,Q535	21-0000410-00-12	XTR SS NPN HFE160-320 130MHZ 2SC2362KF
Q504,Q506,Q516,Q518,Q529-Q530, Q562,Q565,Q568	21-1011210-50-12	XTR PW PNP 1A/100V TO-126 2SD600KE
Q505,Q508,Q517,Q520,Q528,Q532	21-1011611-30-12	XTR PW PNP 1.5A/160V TO-220ML 2SA1606E
Q509,Q521,Q534	21-1152311-10-12	XTR PW PNP 15A/230V TO-3PB 2SA2031
Q543-Q545	21-0000380-70-14	XTR SS NPN HFE20 250MHZ DTC-123ESA
Q550-Q551,Q553-Q554,Q556-Q557, Q561,Q564,Q567	21-0100410-00-12	XTR SS PNP HFE 280-560 110MHZ 2SA1016KG-AA
Q563,Q566,Q569	21-1011211-50-12	XTR PW PNP 1A/100V TO-126 2SB631KE
<b>RESISTORS</b>		
R527-R528,R548,R556,R575-R576	23-2100230-00-00	RES MO 10 OHM 5% 1/2W
R522,R545,R571	30-0102106-01-64	VR SEMI-FIX 1K OHM B 30% VER RM-063-1K



Reference No.	Part No.	Description
R523,R547,R574	23-4228280-08-20	RES RN 0.22 OHM 5% 5W SIL 3 PIN
R589-R591	23-2100250-00-01	RES MO 10 OHM 5% 2W
<b>SURROUND LEFT/RIGHT/BACK AMPLIFIER BOARD PCB ASSEMBLY</b>	80-0907620-18-00	SURROUND LEFT/RIGHT/BACK AMP ASSEMBLY
<b>CAPACITORS</b>		
C554	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C805-C806,C836	22-4110203-10-28	CAP MYLAR MCC-R 1000P 100V 10%
C801-C802,C835	22-3476052-00-43	CAP ELEC SS 4.7uF 50V 20%
C809-C810,C837	22-3471022-00-28	CAP ELEC GR 470uF 16V 20%
C815-C816,C840	22-4115403-10-10	CAP MYLAR KT-G 150nF 100V 10%
C819-C822,C842-C843	22-3101082-00-28	CAP ELEC GR 100uF 100V 20%
C823-C824,C844	22-4210402-00-31	CAP MpF 0.1uF 63V 5% DMF 5 SERIES
C871,C873	22-3470052-00-43	CAP ELEC SS 47uF 50V 20%
C872,C874,C875	22-3100052-00-43	CAP ELEC SS 10uF 50V 20%
<b>DIODES</b>		
D801-D809,D814,D815-D818,D820- D824,D825,D871-D874	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D878-D879	20-3133912-20-36	DIODE ZENER BZX85 3.3V 1W 5%
<b>COILS</b>		
L801-L803	24-1000001-00-28	AIR COIL 0.2uH 10% 1 X 9 X 13.5 TURNS
<b>RELAYS</b>		
M802,M801	32-3124051-03-40	RELAY POWER DC24V 5A/250V 2P1T
<b>THERMISTOR</b>		
M807	23-6110100-00-08	THERMISTOR PTC PTH9MO4BH471TS2F333
<b>TRANSISTORS</b>		
Q815-Q816,Q844,Q850-Q852	21-1011611-30-12	XTR PW PNP 1.5A/160V TO-220ML 2SA1606E
Q817-Q818,Q845	21-1152310-10-12	XTR PW NPN 15A/230V TO-3PB 2SC5669
Q819-Q820,Q846	21-1152311-10-12	XTR PW PNP 15A/230V TO-3PB 2SA2031
Q829,Q848	21-0000380-70-14	XTR SS NPN HFE20 250MHz DTC-123ESA
Q512,Q807-Q808,Q823-Q824,Q826- Q827,Q834-Q835,Q837	21-0100410-00-12	XTR SS PNP HFE 280-560 110MHz 2SA1016KG-AA
Q545-Q546,Q801-Q806,Q821-Q822, Q838-Q840,Q847	21-0000410-00-12	XTR SS NPN HFE160-320 130MHz 2SC2362KF
Q809-Q812,Q841-Q842,Q854, Q856,Q858	21-1011210-50-12	XTR PW PNP 1A/100V TO-126 2SD600KE
Q813-Q814,Q843	21-1011610-30-12	XTR PW NPN 1.5A/160V TO-220ML 2SC4159E
Q855,Q857,Q859	21-1011211-50-12	XTR PW PNP 1A/100V TO-126 2SB631KE

Reference No.	Part No.	Description
Q871	21-1036003-50-06	XTR PW 3A/60V TO-126 2SB772Q
Q872	21-0000390-70-14	XTR SS NPN HFE270-560 180MHz 2SC1740S
<b>RESISTORS</b>		
R843-R844,R8103	23-4228280-08-20	RES RN 0.22 OHM 5% 5W SIL 3 PIN
R857-R858,R8110	23-2100250-00-01	RES MO 10 OHM 5% 2W
R829-R830,R837-R838,R894,R898	23-2100230-00-00	RES MO 10 OHM 5% 1/2W
R835-R836,R897	30-0102106-01-64	VR SEMI-FIX CF 1K OHM B 30% VER RM-063-1K
<b>REGULATORS</b>		
U871	27-3001201-17-14	VOLT REG 12V 1A TO-220 NJM7812
U872	27-3000501-17-14	VOLT REG 5V 1A TO-220 NJM7805FA
<b>DSP BOARD PCB ASSEMBLY</b>		
	80-0907620-65-00	DSP ASSEMBLY
<b>CAPACITORS</b>		
C1004,C1014,C1016,C1062,C1083, C1096,C1100,C1155,C1173-C1174	22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
C1005	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C1011	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C1012,C1060,C1072-C1073,C1117	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C1021-C1020,C1030-C1031,C1040- C1041,C1050-C1051,C1091,C1094	22-3336052-00-43	CAP ELEC SS 3.3uF 50V 20%
C1109-C1112	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C1119,C1133	22-3102022-00-28	CAP ELEC GR 1000uF 16V 20%
C1137-C1138,C1143-C1144	22-3100052-00-43	CAP ELEC SS 10uF 50V 20%
C1152-C1154,C1092,C1079,C1171-C1172	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C1003,C1008-C1009,C1013,C1015, C1017-C1019,C1061,C1074-C1076, C1078,C1081-C1082,C1090,C1093, C1095,C1099,C1124-C1128,C1150- C1151,C1177-C1178	45-0104056-57-57	CAP CER SMD 0.1uF 50V 20% X5V 0603
C1025,C1029,C1035,C1039,C1045, C1049,C1055,C1059,C1114,C1130-C1131	45-0472055-55-57	CAP CER SMD 4.7nF 50V 10% X7R 0603
C1024,C1028,C1034,C1038,C1044, C1048,C1054,C1058	45-0681055-55-57	CAP CER SMD 680pF 50V 10% X7R 0603
C1101-C1108	45-0101055-55-57	CAP CER SMD 100pF 50V 10% X7R 0603
C1006,C1121	45-0221055-55-57	CAP CER SMD 220pF 50V 10% X7R 0603
C1129	45-0332055-55-57	CAP CER SMD 3.3nF 50V 10% X7R 0603
C1132	45-0102055-55-57	CAP CER SMD 1nF 50V 10% X7R 0603
C1134-C1136	45-0222055-55-57	CAP CER SMD 2.2nF 50V 10% X7R 0603
C1022,C1026,C1032,C1036,C1042, C1046,C1052,C1056,C1139-C1140, C1145-C1146	45-0272055-55-57	CAP CER SMD 2.7nF 50V 10% X7R 0603
C1141-C1142,C1147-C1148	45-0561055-55-57	CAP CER SMD 560pF 50v 10% X7R 0603

Reference No.	Part No.	Description
C1166	45-0331055-55-57	CAP CER SMD 330pF 50V 10% X7R 0603
C1007,C1010,C1175-C1176	45-0103055-55-57	CAP CER SMD 10nF 50V 10% X7R 0603
<b>INDUCTORS</b>		
L1001-L1008	24-0100127-00-28	IND CHOKE 10uH 10% EC36 EC36-100K
<b>TRANSISTORS</b>		
Q1001-Q1003	21-0000010-00-46	XTR SS NPN HEF 100 200MHZ TO-92 C1815Y
Q1008-Q1015	21-0000350-70-00	XTR SS NPN HFE200-700 30MHZ SPT RN1241A
Q1004-Q1007,Q1016	21-0100390-70-14	XTR SS PNP HFE 30 250MHZ SPT DTA 114ESA
<b>RESISTORS(SMD)</b>		
J1002,R1010,R1099	44-0000027-11-00	RES SMD 0 OHM 5% 1/10W 0805
R1001-R1002,R1079,R1083	44-0470120-51-00	RES SMD 4.7K OHM 5% 1/16W 0603
R1003-R1006	44-0330120-51-00	RES SMD 3.3K OHM 5% 1/16W 0603
R1007,R1191-R1194	44-0330920-51-00	RES SMD 33 OHM 5% 1/16W 0603
R1008,R1020,R1022,R1026,R1036, R1040,R1050,R1054,R1064,R1068, R1104,R1106,R1108,R1110,R1114, R1128,R1131-R1138	44-0100220-51-00	RES SMD 10K OHM 5% 1/16W 0603
R1009	44-0200320-51-00	RES SMD 200K OHM 5% 1/16W 0603
R1013	44-0120120-51-00	RES SMD 1.2K OHM 5% 1/16W 0603
R1023,R1030,R1037,R1044,R1051 R1065,R1072,R1103,R1105,R1107, R1109,R1058,R1120-R1121,R1126- R1127,R1129	44-0150120-51-00	RES SMD 1.5K OHM 5% 1/16W 0603
R1024,R1031,R1038,R1045,R1052, R1059,R1073,R1066	44-0620020-51-00	RES SMD 620 OHM 5% 1/16W 0603
R1027-R1028,R1033,R1035,R1041 R1042,R1047,R1049,R1055-R1056, R1061,R1063,R1069-R1070,R1075, R1077-R1078,R1080,R1084	44-0220120-51-00	RES SMD 2.2K OHM 5% 1/16W 0603
R1081	44-0330010-51-00	RES SMD 330 OHM 1% 1/16W 0603
R1082	44-0180020-51-00	RES SMD 180 OHM 5% 1/16W 0603
R1090-R1091	44-0270020-51-00	RES SMD 270 OHM 5% 1/16W 0603
R1092-R1094,R1112-R1113,R1115, R1181-R1184	44-0100020-51-00	RES SMD 100 OHM 5% 1/16W 0603
R1116-R1117,R1122-R1123	44-0562117-51-00	RES SMD 5.62K OHM 1% 1/10W 0603
R1118-R1119,R1124-R1125	44-0118117-51-00	RES SMD 1.18K OHM 1%/1/10W 0603
R1130,R1173-R1176	44-0470220-51-00	RES SMD 47K OHM 5% 1/16W 0603
R1166	44-0100120-51-00	RES SMD 1K OHM 5% 1/16W 0603
R1172-R1172	44-0330220-51-00	RES SMD 33K OHM 5% 1/16W 0603
R1177-R1178	44-0150020-51-00	RES SMD 150 OHM 5% 1/16W 0603
R1195-R1198	44-0200120-51-00	RES SMD 2K OHM 5% 1/16W 0603
<b>ICS</b>		
U1001	27-9493260-04-70	I.C. DD DTS & MPEG DECODER CS49326
U1004	27-0115790-25-00	I.C. LOGIC QUAD 2-INPUT SELECTOR 74HC157MIR

Reference No.	Part No.	Description
U1005	27-9841500-25-53	I.C. 96KHz DIGITAL AUDIO INTERFACE RECEIVER CS8415A-CS
U1007	27-2325607-00-88	I.C. EEPROM 256 X 8 BYTE 70nS W27C02-70
U1008-U1009	27-0657490-18-00	I.C. LOGIC OCTAL D-FLIP FLOPS 74LVQ574M
U1002-U1003,U1014	27-0324590-24-00	I.C. LOGIC OCTAL BIDIRECTIONAL TRANSCEIVER 74LVC245
U1010-U1013,U1028,U1023	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP NJM5532M
U1025	27-9439200-24-53	I.C. 24BIT 192KHz STEREO DAC CS4392-KZ
U1026	27-9436000-24-53	I.C. 24BIT 192KHz 6 CH DAC CS4360KZ
U1027	27-9533300-24-53	I.C. 24BIT 96KHz STEREO ACD CS5333KZ
<b>CRYSTAL</b> X1001	28-5122200-04-19	CRYSTAL CLOCK OSCILLATOR 12.288MHz 50ppm 4PIN HALF-SIZE
<b>REGULATORS</b> U1015,U1020	27-3031710-06-00	VOLT REG 1A TO-220(T) LM317T
<b>AUDIO BOARD PCB ASSEMBLY</b>	80-0907620-11-00	AUDIO ASSEMBLY
<b>TRANSISTORS</b> Q301,Q303,Q307,Q309	21-0000120-70-14	XTR SS NPN HFE 68 30MHz SPT DTC144ES
Q302	21-0100390-70-14	XTR SS PNP HFE 30 250MHz SPT DTA 114ESA
Q308	21-0000450-70-14	XTR SS NPN 68 250MHz SPT DTA144ESA
<b>CAPACITORS</b> C317-C332 C333-C336	22-3220022-00-43 22-3470022-00-43	CAP ELEC GS 22uF 16V 20% CAP ELEC SS 47uF 16V 20%
<b>ICS</b> U301,U304 U302,U303 U305	27-7892730-24-11 27-9496600-21-02 27-7055320-18-14	I.C. ANALOG SW SMD TC9273F-004 I.C. QUAD BILATERAL SWITCH LC4966 I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
<b>RCA JACKS</b> M301-M303	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W PCB MOUNT GOLD RCA-653D-04
<b>COMPONENT VIDEO BOARD PCB ASSEMBLY</b>	80-0907620-66-00	COMPONENT VIDEO ASSEMBLY
<b>CAPACITORS</b> C4301-C4309 C4310-C4312,C4325	22-3226052-00-43 22-3100022-00-43	CAP ELEC SS 2.2uF 50V 20% CAP ELEC SS 10uF 16V 20%

Reference No.	Part No.	Description
C4313-C4315	22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
C4316,C4318,C4320	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C4317,C4319,C4321	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
<b>ICS</b>		
U4301	27-5176600-18-23	I.C. VIDEO 3-CHANNEL 75 OHM DRIVER SSOP BA7660FS
U4302-U4303	27-0140520-18-00	I.C. LOGIC SINGLE DUAL TRIPLE SMD SOP M74HC4052MIR
<b>RCA JACKS</b>		
M431-M434	34-4032020-00-60	RCA 3 G-BL-R PCB MOUNT GOLD RS-354G-18
<b>DIGITAL BOARD PCB ASSEMBLY</b>	80-0907620-47-00	DIGITAL ASSEMBLY
<b>CAPACITORS</b>		
C1213-C1214,C1221	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C1222-C1223	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
<b>FIBRE OPTICAL</b>		
J1005-J1006	26-6701380-01-16	FIBRE OPTIC RECEIVING UNIT GP1FA550RZ
J1008	26-6691386-00-16	FIBRE OPTIC TRANSMITTER GP1FA550TZ
<b>ICS</b>		
U1201-U1202	27-0804990-18-00	I.C. HEX INVERTER SMD SOP M74HCU04MIR
U1203	27-0125190-18-00	I.C. 8-CHANNEL MULTIPLEXER-SSOP 74HC251M1R
<b>RCA JACKS</b>		
J1001-J1004,J1007	34-4010320-00-60	RCA JACK 1 BLACK PCB MOUNT GOLD RS-146G/B
<b>KEYBOARD PCB ASSEMBLY</b>	80-0907620-02-00	KEYBOARD ASSEMBLY
<b>DIODES</b>		
D202,D219,D221	20-1001401-20-44	DIODE RECT 1A/400V DO41 1N4004
D212,D214-D218,D222	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D213	20-3227902-00-01	DIODE ZENER BZX55 2.7V 1/2W 5%
D220	20-3251902-00-01	DIODE ZENER BZX55 5.1V 1/2W 5%
D223	20-1001500-20-51	DIODE RECT 1A/50V DO41 1N4001
<b>TRANSISTORS</b>		
Q201	21-0100100-00-46	XTR SS PNP HFE 100 200MHz TO-92 A1015Y
Q202-Q207	21-0000010-00-46	XTR SS NPN HEF 100 200MHz TO-92 C1815Y

Reference No.	Part No.	Description
<b>CAPACITORS</b>		
C207-C211	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C212	22-3102012-00-28	CAP ELEC GR 1000uF 10V 20%
C214	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C224	22-3222032-00-34	CAP ELEC GS 2200uF 25V 20%
C255	22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
<b>IR</b>		
D201	26-0941380-00-00	IR RX 940nm 37.9KHz SHIELD ST FM-7138TE5
<b>ICS</b>		
U201(A/V-R)-U202(VFD)	7-1086400-04-87	I.C. MCU 8 BIT 64KROM 512 BYTE SRAM PLCC M6759-A1F(sold as a pair)
U203	27-9630600-14-62	I.C. VFD DRIVER SMD QFP PT6306
U204-U207,U211	27-0540940-18-00	I.C. 8-STAGE SHIFT-AND-STORE BUS REGISTER HCF4094BM1
U208	27-0140510-18-00	I.C. SINGLE 8 CAANALOG MUX/DEMUX SMD M74HC4051MIR
U210	27-2300225-00-25	I.C. EEPROM 2K BYTE 250nS PDIL ENDURANCE AT24C16
<b>CRYSTALS</b>		
X201A-X202A	28-5400200-06-33	CRYSTAL 40MHz 30ppm HC-49S
<b>SWITCHES</b>		
S201-S219	35-1001117-00-67	SW TACT NO 1P1T 50mA/12V VER H=7mm TM114BFJ
<b>ENCODER</b>		
M201	35-6001219-00-08	ENCODER ROTATRY L=20mm VERTICAL W/O CLICK ECB16F-1-24PS
<b>VFD</b>		
VD201	41-4340100-00-13	VFD 16-BT-93GNK
<b>RESISTORS(SMD)</b>		
R201-R207,R212-R213,R215,R219, R223-R227,R229,R231-R232,R253	44-0100220-51-00	RES SMD 10K OHM 5% 1/16W 0603
R211,R225,R234,R239	44-0100120-51-00	RES SMD 1K OHM 5% 1/16W 0603
R216	44-0390020-51-00	RES SMD 390 OHM 5% 1/16W 0603
R217-R218	44-0150120-51-00	RES SMD 1.5K OHM 5% 1/16W 0603
R220,R236-R237	44-0470120-51-00	RES SMD 4.7K OHM 5% 1/16W 0603
R221,R230,R254	44-0220120-51-00	RES SMD 2.2K OHM 5% 1/16W 0603
R222	44-0220020-51-00	RES SMD 220 OHM 5% 1/16W 0603
R233	44-0470220-51-00	RES SMD 47K OHM 5% 1/16W 0603
R238	44-0120220-51-00	RES SMD 12K OHM 5% 1/16W 0603
R241-R242	44-0100020-51-00	RES SMD 100 OHM 5% 1/16W 0603
R251-R252	44-0100520-51-00	RES SMD 10M OHM 5% 1/16W 0603
<b>CAPACITORS(SMD)</b>		
C201-C202,C213,C215-C221	45-0104056-57-57	CAP CER SMD 0.1uF 50V 20% Y5V 0603

Reference No.	Part No.	Description
C222,C241-C242	45-0102055-55-57	CAP CER SMD 1nF 50V 10% X7R 0603
C223	45-0123055-55-57	CAP CER SMD 12nF 50V 10% X7R 0603
C251-C254	45-0330055-55-57	CAP CER SMD 33pF 50V 10% X7R 0603
<b>LED BAORD PCB ASSEMBLY</b>	80-0907620-32-00	LED ASSEMBLY
<b>LEDs</b> D211	26-0012587-01-10	LED RED-GREEN CIRCULAR 5X807mm L-59SRKSGW-CA C ANODE
<b>MAIN BOARD PCB ASSEMBLY</b>	80-0907620-00-00	MAIN ASSEMBLY
<b>DIODES</b> D701-D712 D711	20-1001401-20-44 20-3227002-00-47	DIODE RECT 1A/400V DO41 1N4004 DIODE ZENER BZX55 27V 1/2W 5% DO35 BZX55-C27V
D714	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D715	20-5004700-50-02	DIODE BRI 4A/70V RS402L
D716-D718	20-3951943-50-01	DIODE ZENER ZY5.1 2W 10% DO-204AM ZY5.1
<b>TRANSISTOR</b> Q701	21-0000140-00-11	XTR SS NPN HFE 120 100MHZ TO-92 SS8050C
<b>CAPACITORS</b> C701,C705-C706,C716,C725 C702,C719,C723 C704 C707 C710 C711-C713 C721,C724	22-3102032-00-28 22-3101022-00-43 22-3332042-00-28 22-3222042-00-34 22-3470052-00-43 22-3102052-00-28 22-3222032-00-34	CAP ELEC GR 1000uF 25V 20% CAP ELEC SS 100uF 16V 20% CAP ELEC GR 3300uF 35V 20% CAP ELEC GS 2200uF 35V 20% CAP ELEC SS 47uF 50V 20% CAP ELEC GR 1000uF 50V 20% CAP ELEC GS 2200uF 25V 20%
<b>REGULATORS</b> U701,U704-U706 U702,U707 U703	27-3000501-17-14 27-3001201-17-14 27-3101201-13-14	VOLT REG 5V 1A TO-220 NJM7805FA VOLT REG 12V 1A TO-220 NJM7812 VOLT REG TO-220F NJM7912
<b>MULTI-CHANNEL BOARD PCB ASSEMBLY</b>	80-0907620-64-00	MULTI-CHANNEL ASSEMBLY
<b>DIODE</b> D601	20-0000000-00-1	DIODE SW 4NS DO35 1N4148



Reference No.	Part No.	Description
<b>TRANSISTORS</b>		
Q601-Q602	21-0000360-00-00	XTR SS NPN HFE200-700 30MHz 2SC2878A
Q603	21-0100390-70-14	XTR SS PNP HFE 30 250MHz SPT DTA 114ESA
Q604	21-0000400-70-14	XTR SS NPN HFE30 250MHz SPT DTC114ESA
Q626,Q628	21-0000120-70-14	XTR SS NPN HFE 68 30MHz SPT DTC144ES
Q627	21-0000450-70-14	XTR SS NPN 68 250MHz SPT DTA144ESA
<b>CAPACITORS</b>		
C607,C611-C612,C619-C623,C681-C683	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
C626	22-3221022-00-43	CAP ELEC SS 220uF 16V 20%
C677-C678,C689-C690	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
<b>ICS</b>		
U601	27-7891640-21-11	I.C. HIGH VOLTAGE ANALOG SWITCH ARRAY TC9164AN
U604	27-9496600-21-02	I.C. QUAD BILATERAL SWITCH LC4966
U605-U608	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
<b>RCA JACKS</b>		
M601,M603	34-4060420-00-60	RCA JACK 6 R-R-R/W-W-W PCB MOUNT GOLD RCA-653D-04
M602	34-4020320-00-60	RCA JACK 2 B/B PCB MOUNT GOLD RS-253G-02
<b>RESISTORS(SMD)</b>		
J601-J603	44-0000027-11-00	RES SMD 0 OHM 5% 1/10W 0805 TAPE
<b>PRE-OUT BOARD PCB ASSEMBLY</b>		
	80-0907620-63-00	PRE-OUT ASSEMBLY
<b>DIODES</b>		
D602,D604	20-3275902-00-01	DIODE ZENER BZX55 7.5V 1/2W 5%
D605-D614	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
<b>TRANSISTORS</b>		
Q605	21-0000140-00-11	XTR SS NPN HFE 120 100MHz TO-92 SS8050C
Q607	21-0100131-00-11	XTR SS PNP HFE 170 1.5A TO-92 SS8550C
Q608-Q615,Q617,Q629-Q630,Q632-Q633	21-0000350-70-00	XTR SS NPN HFE200-700 30MHz SPT RN1241A
Q616,Q618,Q620,Q622,Q624,Q631	21-0100390-70-14	XTR SS PNP HFE 30 250MHz SPT DTA 114ESA
<b>CAPACITORS</b>		
C613-C618,C624-C625,C635-C636,C710-C711,C751-C752	22-3336052-00-43	CAP ELEC SS 3.3uF 50V 20%

Reference No.	Part No.	Description
C627-C628,C633-C634	22-3101022-00-43	CAP ELEC SS 100uF 16V 20%
C637,C642,C647,C652,C657,C662, C667,C672,C700,C705	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
C640,C645,C650,C655,C660,C665, C670,C675,C703,C708	22-3220022-00-43	CAP ELEC GS 22uF 16V 20%
C679-C680,C691-C692	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C684-C688,C699	22-3331022-00-28	CAP ELEC GR 330uF 16V 20%
C693-C694,C753-C754	22-4182203-10-10	CAP MYLAR KT-G 8.2nF 100V 10%
C695-C696,C747-C748	22-4115303-10-28	CAP MYLAR MCC-R 15nF 100V 10%
C697-C698,C749-C750	22-4233402-00-31	CAP MPF 0.33uF 5%
<b>RESISTORS</b>		
R635,R642,R647,R654,R659,R666, R678,R694,R701	23-1150102-00-00	RES MF 1.5K OHM 1% 1/8W
R636,R643,R648,R655,R660,R667, R672,R679,R695,R702	23-1330002-00-00	RES MF 330 OHM 1% 1/6W
R671	23-1220102-00-00	RES MF 2.2K OHM 1% 1/6W
<b>INDUCTORS</b>		
L601	24-0101108-00-28	IND CHOKE 100uH 10% AXIAL EC24-101K
L603-L604	24-0100127-00-28	IND CHOKE 10uH 10% EC36 AXIAL EC36-100K
<b>ICS</b>		
U602-U603	27-7262440-10-01	I.C. AUDIO 6CH VOL/TONE CONTROL M62446AFP
U609-U613	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M
<b>RCA JACKS</b>		
M607,M609	34-4040520-00-60	RCA JACK 4 R-W/R-W PCB MOUNT GOLD RS-453G-08
M608,M612	34-4020320-00-60	RCA JACK 2 B/B PCB MOUNT GOLD RS-253G-02
M610	34-4020220-00-60	RCA 2 W/W PCB MOUNT GOLD RS-253G W/SHIELD
M611	34-4010120-00-60	RCA 1 R PCB MOUNT GOLD RS-146G/R W/ SHIELD
<b>POWER SUPPLY BOARD</b>		
<b>PCB ASSEMBLY*AH</b>	80-0907620-01-00	POWER SUPPLY ASSEMBLY
<b>PCB ASSEMBLY*C</b>	80-0907620-01-01	POWER SUPPLY ASSEMBLY
<b>DIODES</b>		
D751	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D752-D755	20-1001401-20-44	DIODE RECT 1A/400V DO41 1N4004
<b>TRANSISTOR</b>		
Q751	21-0000010-00-46	XTR SS NPN HEF 100 200MHZ TO-92 C1815Y
<b>CAPACITORS</b>		
C752	22-3470032-00-00	CAP ELEC GS 47uF 25V 20%

Reference No.		Part No.	Description
C763	⚠	22-1103470-35-45	CAP CER ECKDRS 10nF 400VAC +80/-20%
<b>RESISTORS</b>			
R751	⚠	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W AXIAL
R754*AH	⚠	23-8395232-00-25	CONDUCTIVE PATH RESISTOR 3.9M OHM 1/2W 5% 250V
<b>STANDBY TRANSFORMER</b>			
T751*AH	⚠	25-0040057-01-18	XFORMER PW EI-35 120V UL/CUL T06206A WHP35-14A5F
T751*C	⚠	25-0040020-31-18	XFORMER PW EI-35 100V/220V T05382A RV.04
<b>RELAY</b>			
M751*AH	⚠	32-1212100-01-97	RELAY 12VDC/10A SPST SDT-S- 112DMR TV-8 UL/CSA/TUV/SEMKO
M751*C	⚠	32-3112100-02-97	RELAY 12VDC/10A SPST PCB OMI-SS-112LM UL/CSA/VDE/SEMKO
<b>FUSES &amp; FUSE HOLDERS</b>			
F751*AH	⚠	33-0191001-00-88	FUSE TIME-LAG 10A 250VAC 5X20mm VDE/UL/CSA
F751*C	⚠	33-0181006-00-88	FUSE TIME-LAG 6.3A 250VAC 5X20mm VDE/UL/CSA 5T
F752*AH	⚠	33-0111006-00-88	FUSE 1.6A 250V TIME LAG LBC 5x20mm UL/CSA/VDE/SEMKO
F752*C	⚠	33-0151006-00-88	FUSE 800mA 250V TIME LAG LBC 5x20mm 5T UL/CSA/VDE/SEMKO
FH751-FH752	⚠	33-1000000-00-88	FUSE CLIP 0.05mm FC-53-11
<b>POWER SWITCH BAORD PCB ASSEMBLY</b>		80-0907620-48-00	POWER SWITCH ASSEMBLY
<b>CAPACITORS</b>			
C764	⚠	22-1103470-35-45	CAP CER ECKDRS 10nF 400VAC +80/-20%
<b>POWER SWITCH</b>			
S751	⚠	35-0101109-00-67	SW POWER TV-8 10A 250VAC PS3-22SPA-P7AZ
<b>RS232 BOARD PCB ASSEMBLY</b>		80-0907620-38-0	S232 ASSEMBLY
<b>CAPACITORS</b>			
C901-C904		22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
C905		22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
<b>IC</b>			
U901		27-0723200-18-43	I.C. DUAL RS-232 TRANSMITTER SMD SOIC DS232AR

Reference No.	Part No.	Description
<b>SECONDARY BOARD PCB ASSEMBLY</b>	80-0907620-27-00	SECONDARY ASSEMBLY
<b>CAPACITORS</b> C801-C804	22-3123072-00-41	CAP ELEC LP 12000uF 80V 20%
<b>DIODES</b> D801-D802	20-5125401-50-02	BRIDGE RECTIFIER 25A 400V MP254W BR-25W
<b>ISC BOARD PCB ASSEMBLY</b>	80-0907620-74-00	ISC ASSEMBLY
<b>DIODES</b> D801-D802	20-5125401-50-02	BRIDGE RECTIFIER 25A 400V MP254W BR-25W
D810,D824	20-5010401-50-47	DIODE BRI 10A/400V KBK10G
D811-D812,D825-D826	20-1912601-90-45	DIODE RECT 12A/600V TO-220 TYN612
D813,D823,D827-D828	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
D821-D822	20-3212002-00-36	DIODE ZENER BZX55 12V 1/2W 5%
<b>TRANSISTORS</b> Q811,Q813,Q781-Q782	21-0100410-00-12	XTR SS PNP HFE 280-560 110MHZ 2SA1016KG-AA
Q812,Q815,Q817-Q818,Q831,Q833	21-0000010-00-46	XTR SS NPN HEF 100 200MHZ TO-92 C1815Y
Q830,Q832,Q814,Q816	21-0100100-00-46	XTR SS PNP HFE 100 200MHZ TO-92 A1015Y
<b>CAPACITORS</b> C786-C789,C816-C820	22-4210402-00-31	CAP MPF 0.1uF 63V 5% DMF 5 SERIES
C801-C804	22-3123072-00-41	CAP ELEC LP 12000uF 80V 20%
C811-C813,C815,C829-C830,C832-C833	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
<b>RESISTORS</b> R790,R793,R813,R817	23-4228280-08-20	RES RN 0.22 OHM 5% 5W SIL 3 PIN
R826,R873	44-0100120-51-00	RES SMD 1K OHM 5% 1/16W
R827,R835,R874,R882	44-0100220-51-00	RES SMD 10K OHM 5% 1/16W
R828,R875	44-0470120-51-00	RES SMD 4.7K OHM 5% 1/16W
R833,R880	44-0680320-51-00	RES SMD 680K OHM 5% 1/16W
R837-R839	23-5228330-00-00	RES FUSIBLE 0.22 OHM 10% 1/2W
R841-R840	23-2228232-00-00	RES MO 0.22 OHM 5% 1/2W
R877,R829,R876,R830	44-0100320-51-00	RES SMD 100K OHM 5% 1/16W
R879,R832,R831,R878	44-0220120-51-00	RES SMD 2.2K OHM 5% 1/16W
R834,R881	30-0503106-02-22	VR SEMI-FIXED 50K OHM 30% B 6mm HOR
<b>IC</b> U801	27-7055320-18-14	I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M

Reference No.	Part No.	Description
<b>SPEAKER BOARD</b> <b>PCB ASSEMBLY</b>	80-0907620-76-00	SPEAKER ASSEMBLY
<b>SPEAKER TERMINALS</b> M5101,M8101	34-3000021-00-80	SPK TER 6P BINDING R/B W/O PLUG KF-J5000-06
M5102	34-3000022-00-80	SPK TER 4P BINDING R/B W/O PLUG KF-J5000-04
<b>S-VIDEO BOARD</b> <b>PCB ASSEMBLY</b>	80-0907620-26-00	S-VIDEO ASSEMBLY
<b>DIODES</b> D4101-D4107	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
<b>TRANSISTORS</b> Q4101,Q4103,Q4122,Q4131	21-0000120-70-14	XTR SS NPN HFE 68 30MHZ SPT DTC144ES
Q4102	21-0000450-70-14	XTR SS NPN 68 250MHZ SPT DTA144ESA
Q4107-Q4109,Q4110-Q4112, Q4116-Q4119	21-0100370-70-14	XTR SS PNP HFE 270-560 140MHZ 2SA933AS
Q4120,Q4123	21-0000380-70-14	XTR SS NPN HFE20 250MHZ DTC-123ESA
Q4121,Q4124-Q4125,Q4130,Q4128, Q4113-Q4114,Q4133	21-0000360-00-00	XTR SS NPN HFE200-700 30MHZ 2SC2878A
Q4126-Q4127,Q4115	21-0000390-70-14	XTR SS NPN HFE270-560 180MHZ 2SC1740S
Q4132	21-0000010-00-46	XTR SS NPN HEF 100 200MHZ TO-92 C1815Y
<b>CAPACITORS</b> C4101-C4107,C4109-C4111,C4113- C4115,C4117-C4120,C4153,C4157	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
C4108,C4116,C4112,C4156	22-3471012-00-28	CAP ELEC GR 470uF 10V 20%
C4123-C4124	22-3221012-00-43	CAP ELEC SS 220uF 10V 20%
C4133,C4141	22-3106052-00-43	CAP ELEC SS 1uF 50V 20%
C4134,C4145,C4149	22-3101012-00-43	CAP ELEC SS 100uF 10V 20%
C4137,C4144	22-3477052-00-43	CAP ELEC SS 0.47uF 50 20%
C4138	22-7200210-00-09	CAP TRIMMER 20pF 20%
C4146,C4136	22-4247402-00-31	CAP MPF 0.47uF 63V 5% DMF 5 SERIES
C4150,C4158	22-3470022-00-43	CAP ELEC SS 47uF 16V 20%
C4151	22-3100022-00-43	CAP ELEC SS 10uF 16V 20%
<b>INDUCTORS</b> L4102	24-0220107-00-28	IND CHOKE 22uH 10% AXIAL EC24-220K
L4101	24-0569107-00-28	IND CHOKE 5.6uH 10% AXIAL EC24-5R6K
<b>ICS</b> U4101	27-5574763-21-02	I.C. OSD DIP LC74763-9012

Reference No.	Part No.	Description
U4102,U4103 U4104	27-5076250-21-23 27-9496600-21-02	I.C. AV SWITCH DIP BA7625 I.C. QUAD BILATERAL SWITCH LC4966
<b>CRYSTALS</b>		
X4101	28-5143200-06-19	CRYSTAL 14.318MHz 30ppm HC-49S
X4102	28-5177200-06-19	CRYSTAL 17.73447MHz 30ppm HC-49S
<b>DIN JACKS</b>		
M411-M418	34-4110300-00-60	DIN JACK 1 BLACK PCB MOUNT MD-113
<b>SLIDE SWITCH</b>		
S4101	35-4102209-00-67	SW SLIDE 2P2T RIGHT L=9 JSK022N09-G09
<b>TRIGGER BOARD PCB ASSEMBLY</b>	80-0907620-68-00	TRIGGER ASSEMBLY
<b>DIODES</b>		
D351-D353	20-3251902-00-01	DIODE ZENER BZX55 5.1V 1/2W 5%
D354-D356	20-0000000-00-13	DIODE SW 4NS DO35 1N4148
<b>TRANSISTORS</b>		
Q351,Q352	21-0000380-70-14	XTR SS NPN HFE20 250MHz DTC-123ESA
<b>REGULATOR</b>		
U352	27-3001201-17-14	VOLT REG 12V 1A TO-220 NJM7812
<b>JACKS</b>		
M351-M357	34-4310300-00-60	PHONE JACK 3.5mm RIGHT ST-030-07
<b>SWITCH</b>		
S351	35-4102209-00-67	SW SLIDE 2P2T RIGHT L=9 JSK022N09-G09
<b>VIDEO-6 BOARD PCB ASSEMBLY</b>	80-0907620-45-00	VIDEO ASSEMBLY
<b>CAPACITORS</b>		
C4401-4403	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
<b>JACKS</b>		
M4401	34-4010000-01-60	RCA JACK 1 YELLOW PCB MOUNT GOLD RS-105G/Y
M4402	34-4110300-00-60	DIN JACK 1 BLACK PCB MOUNT MD-113
M4403	34-4010200-01-60	RCA 1 WHITE PCB MOUNT GOLD RS-105AG/W
M4404	34-4010100-01-60	RCA JACK 1 RED PCB MOUT GOLD RS-105AG/R

Reference No.	Part No.	Description
J4401	34-4510302-00-60	PHONE JACK D6.3 1 PCB MOUNT ST-016S-01
<b>COMPOSITE VIDEO BOARD PCB ASSEMBLY</b>	80-0907620-42-00	COMPOSITE VIDEO ASSEMBLY
<b>TRANSISTORS</b> Q4201-Q4203,Q4207-Q4208	21-0100370-70-14	XTR SS PNP HFE 270-560 140MHz 2SA933AS
Q4204,Q4206	21-0000120-70-14	XTR SS NPN HFE 68 30MHz SPT DTC144ES
Q4205	21-0000450-70-14	XTR SS NPN 68 250MHz SPT DTA144ESA
<b>CAPACITORS</b> C4201-C4203,C4205,C4207,C4209-C4210,C4216-C4217 C4204,C4206,C4208,C4211,C4218	22-3226052-00-43	CAP ELEC SS 2.2uF 50V 20%
	22-3471012-00-28	CAP ELEC GR 470uF 10V 20%
<b>ICS</b> U4201 U4202-U4203	27-9496600-21-02 27-5076250-21-23	I.C. QUAD BILATERAL SWITCH LC4966 I.C. AV SWITCH DIP BA7625
<b>RCA JACKS</b> M421-M422 RS-454-03 M423	34-4040020-00-60 34-4010000-00-60	RCA JACK 4 Y-Y/Y-Y PCB MOUNT GOLD RCA 1 Y PCB MOUNT GOLD RS-146G/Y
<b>RESISTORS (SMD)</b> J4201-J4202	44-0000027-11-00	RES SMD 0 OHM 5% 1/10W 0805 TAPE

**NOTE: THE COMPONENTS IDENTIFIED BY ⚠ MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.**

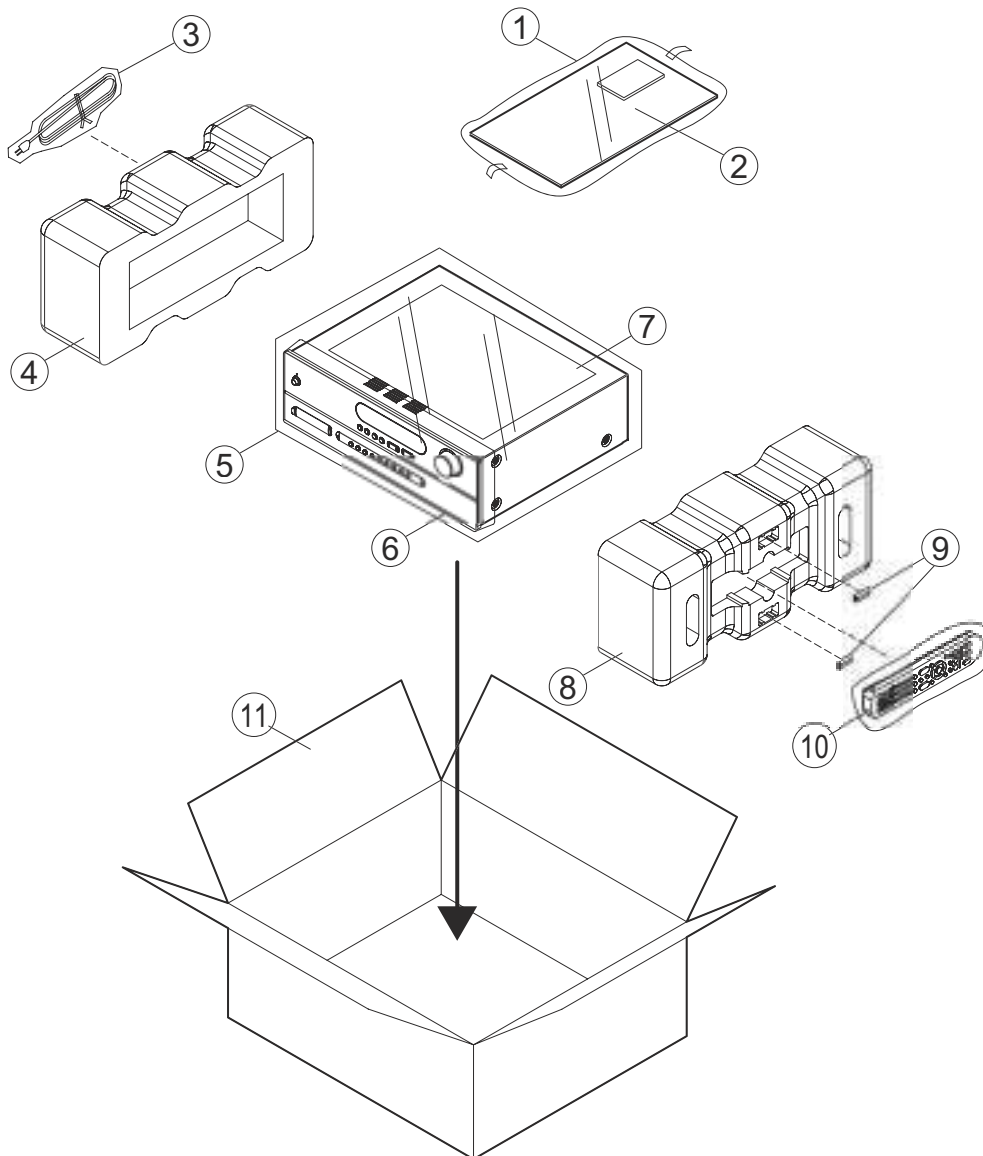
<\*AH > : USA, CANADIAN MODEL ONLY.

<\*C > : EUROPEAN MODEL ONLY.

RESISTORS: MO-METAL OXIDE, RN-CERAMIC CASE, MF-METAL FILM.



# PACKING DIAGRAM



Item	Part No.	Description	Qty.
1	64-0200001-01-00	POLYBAG MANUAL	1
2	31-6407520-00-98	FM WIRE ANTENNA	1
	31-6472801-00-28	AM LOOP ANTENNA W/STAND	1
	34-0081004-00-67	300 TO 75 OHM ADAPTER	1
	37-0240300-00-81	LITHIUM BUTTON CELL CR2025	1
	61-0762004-40-99	OWNER'S MANUAL T762 GB/F/D/NL	1
	61-0762004-41-99	OWNER'S MANUAL T762 E//P/S	1
	83-0762000-00-04	REMOTE CONTROLLER NAD ZR-2	1
3	36-2871010-07-88	POWER CORD 110V 3PINS 15A/125V UL/CSA	1
	36-2983110-07-97	POWER CORD CE 3 PINS 10A/16A 250V	1
4	63-0762001-00-01	POLYFOAM ENDCAP LEFT	1
5	64-0762001-00-00	POLYBAG MAIN UNIT	1
6	64-0762000-00-00	EPE PROTECTIVE COVER	1
7	65-0752070-00-99	A3 WHITE PAPER	1
8	63-0762002-00-01	POLYFOAM ENDCAP RIGHT	1
9	37-0020200-00-79	BATTERY AAA 1.5V	4
10	83-0752000-00-04	REMOTE CONTROLLER NAD HTR-2	1
11	67-0762000-11-99	MASTER CARTON BOX	1

## VERSION HISTORY

SERIAL NUMBER	SOFTWARE VER.	PCB ASSEMBLY VERSION
R2ZT76200001-R2ZT76200003	V1.12	ALL ARE A6 PCB ASSEMBLY
R2ZT76200004-R2ZT76200360	V1.13	ALL ARE A6 PCB ASSEMBLY
R2ZT76200361-R2ZT76200900	V1.18	ALL ARE A6 PCB ASSEMBLY

## T 762i VERSION PART NUMBERS

SERIAL NUMBER	SOFTWARE VER.	PCB ASSEMBLY VERSION
R35T762i4101 - R35T762i4540	V1.20	ALL ARE A6 PCB ASSEMBLY
R37T762i4541 - R37T762i4600	V1.22	ALL ARE A6 PCB ASSEMBLY
		ALL ARE A6 PCB ASSEMBLY

# SERVICE MANUAL

**T 762**

**AV SURROUND  
SOUND RECEIVER**

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**NAD ELECTRONICS LTD  
LONDON**



# T 762

Surround Sound Receiver

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## SERVICE MANUAL

# ADDENDUM

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VERSION HISTORY .....	2
PCB LAYOUT - DSP BOARD (ISSUE 8 - 10) .....	3 - 5
PCB LAYOUT - KEYBOARD (ISSUE 8 - 10) .....	6 - 8
SCHEMATIC DIAGRAM - DSP BOARD (ISSUE 8 - 10) .....	9 - 11
SCHEMATIC DIAGRAM - KEYBOARD (ISSUE 8 - 10) .....	12 - 14

# VERSION HISTORY

ISSUE	DESC. / PART NO.	CAUSE(S)	SERIAL NUMBER
<b>ISSUE 6</b>	DSP : 55-0762054-20-00 (CNC BOARD)	<ul style="list-style-type: none"> <li>• Change FFC connector to pin connector</li> </ul>	R2ZT76200001-R2ZT76200400
	KEYBOARD : 55-0762003-20-00 (CNC BOARD)	<ul style="list-style-type: none"> <li>• Change FFC connector to pin connector</li> </ul>	
<b>ISSUE 7</b>	DSP : 55-0762054-20-00 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Move A/D Component</li> <li>• Add Coil in Digital Input</li> <li>• Del Wire form Crystal to Chassis</li> </ul>	R2ZT76200401-R2ZT76201400
	KEYBOARD : 55-0762003-20-00 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Add Supply E.Cap</li> <li>• Add Transistor for IR_OUT</li> </ul>	
<b>ISSUE 8</b>	DSP : 55-0762054-20-01 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Add test pin</li> </ul>	R31T76201401-R31T76202198
	KEYBOARD : 55-0762003-20-01 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Add missing connection of R229.2 to C223.1</li> <li>• Add test pin</li> </ul>	
<b>ISSUE 9</b>	DSP : 55-0762054-20-02 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Add C.Cap C1181 for safety issue</li> </ul>	R33T76202201-R33T76204100
	KEYBOARD : 55-0762003-20-02 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Swap connection of TRIG_OUT_2 / TRIG_OUT_3</li> </ul>	
<b>ISSUE 10</b>	DSP : 55-0762054-20-03 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Add E.Cap C1182 for eliminate Pop noise</li> </ul>	R35T76214101-R35T76214600
	KEYBOARD : 55-0762003-20-03 (TOOLED PCB)	<ul style="list-style-type: none"> <li>• Delete Component of IR_OUT</li> <li>• C223 Change to Axial Type</li> </ul>	

**NOTE:**

The PCBs are compatible use from Issue 7 to 10. (Issue 6 is not compatible use to other issue)

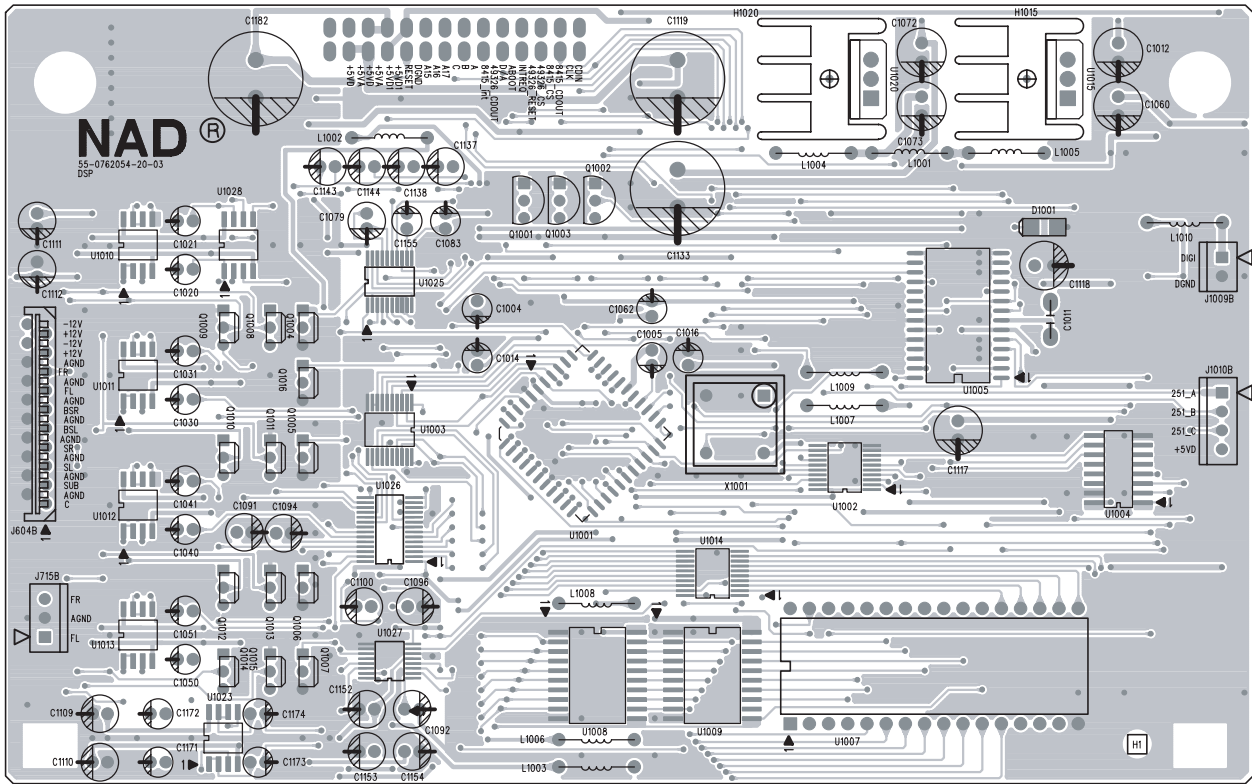




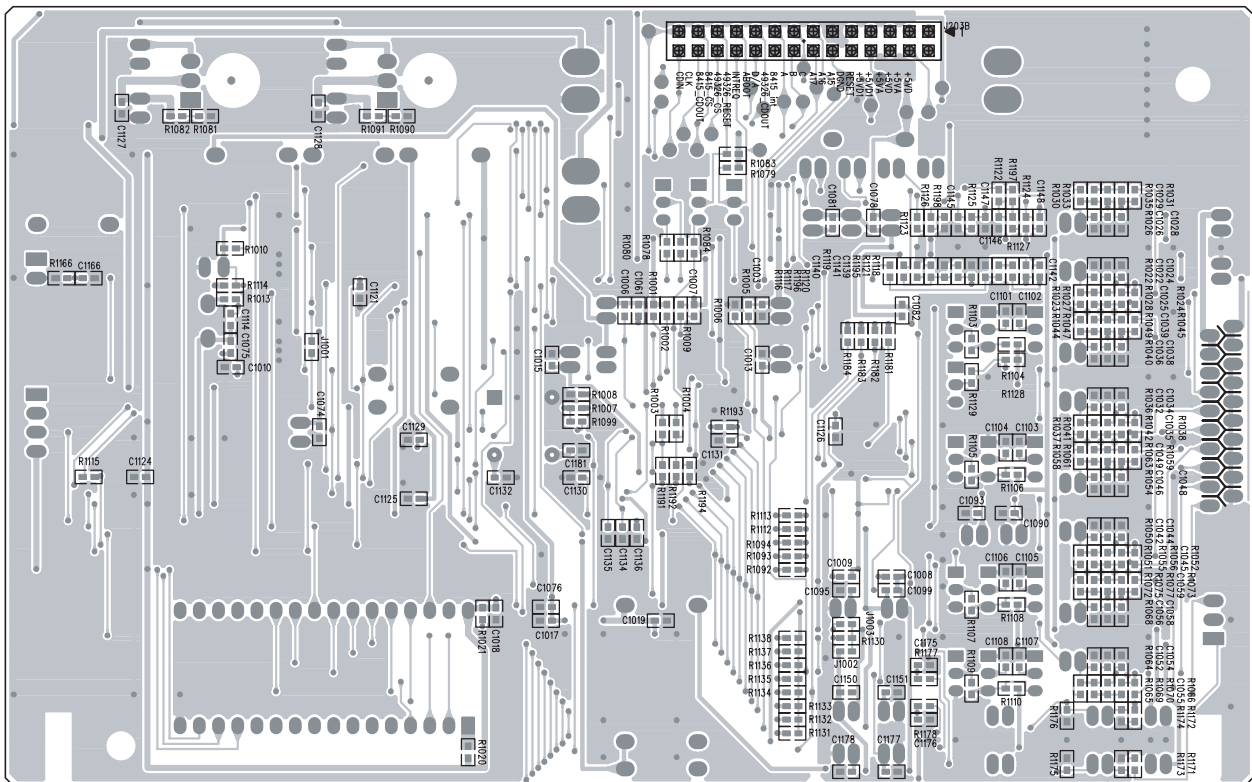


# PCB LAYOUT DSP BOARD (ISSUE 10)

## COMPONENT SIDE



## COPPER SIDE

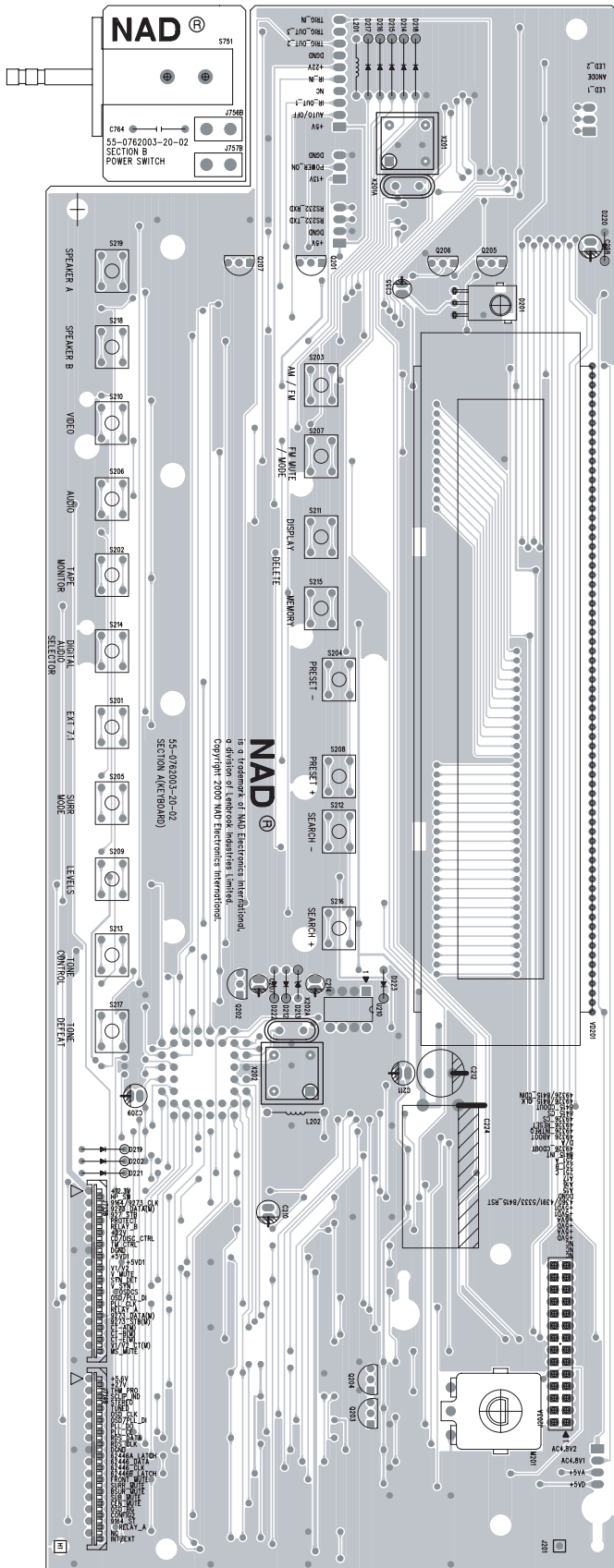




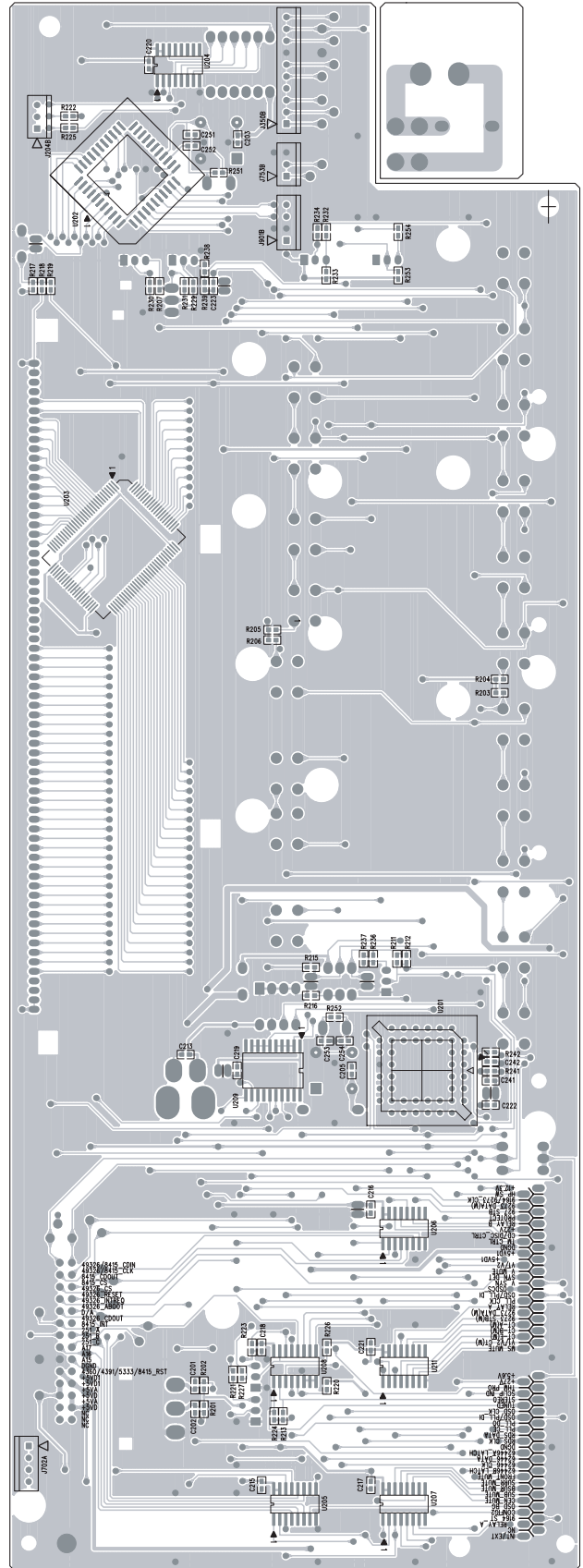


# PCB LAYOUT KEYBOARD (ISSUE 9)

## COMPONENT SIDE

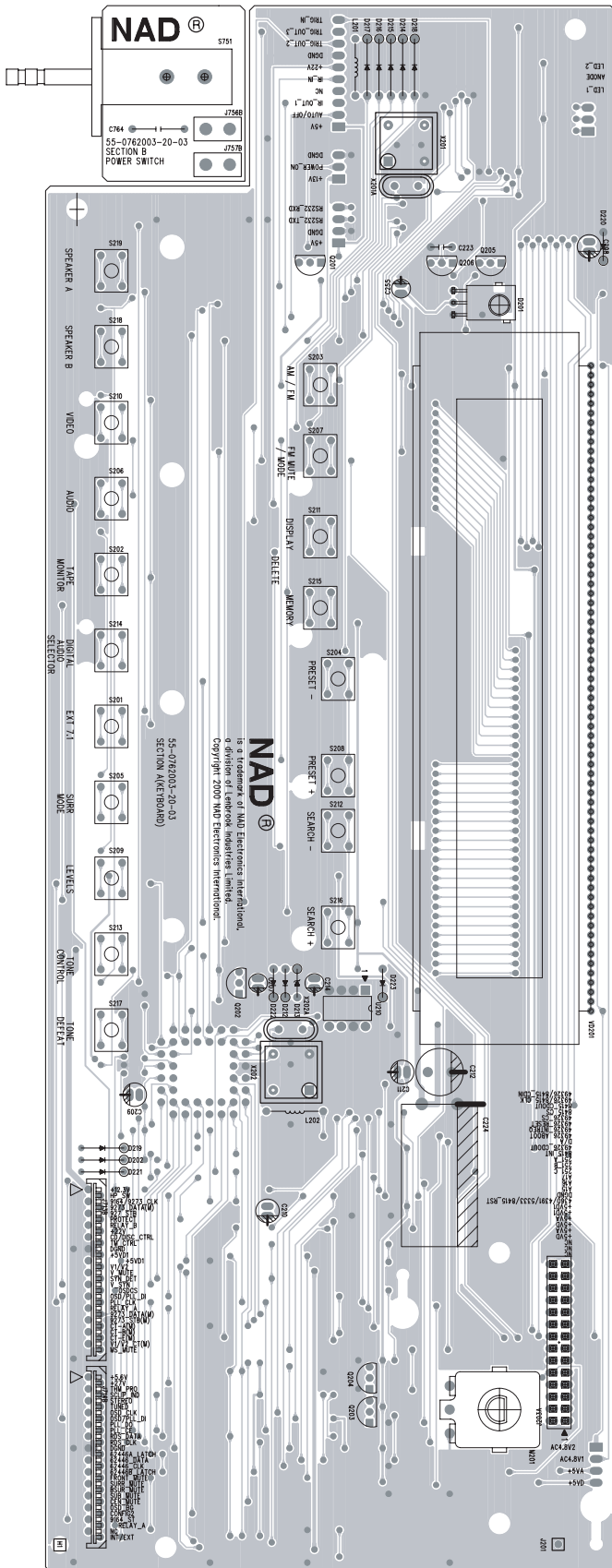


## COPPER SIDE



# PCB LAYOUT KEYBOARD (ISSUE 10)

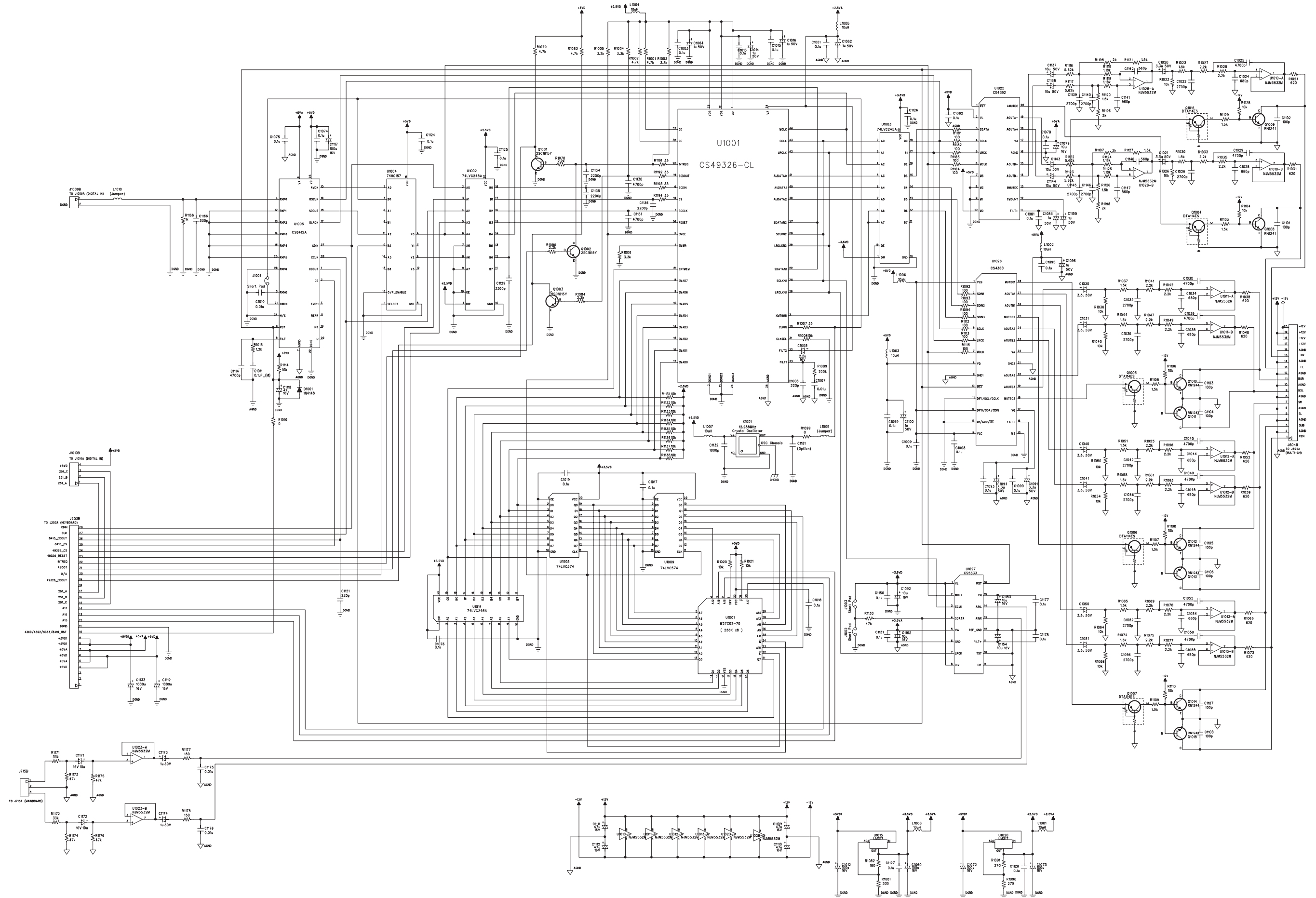
## COMPONENT SIDE







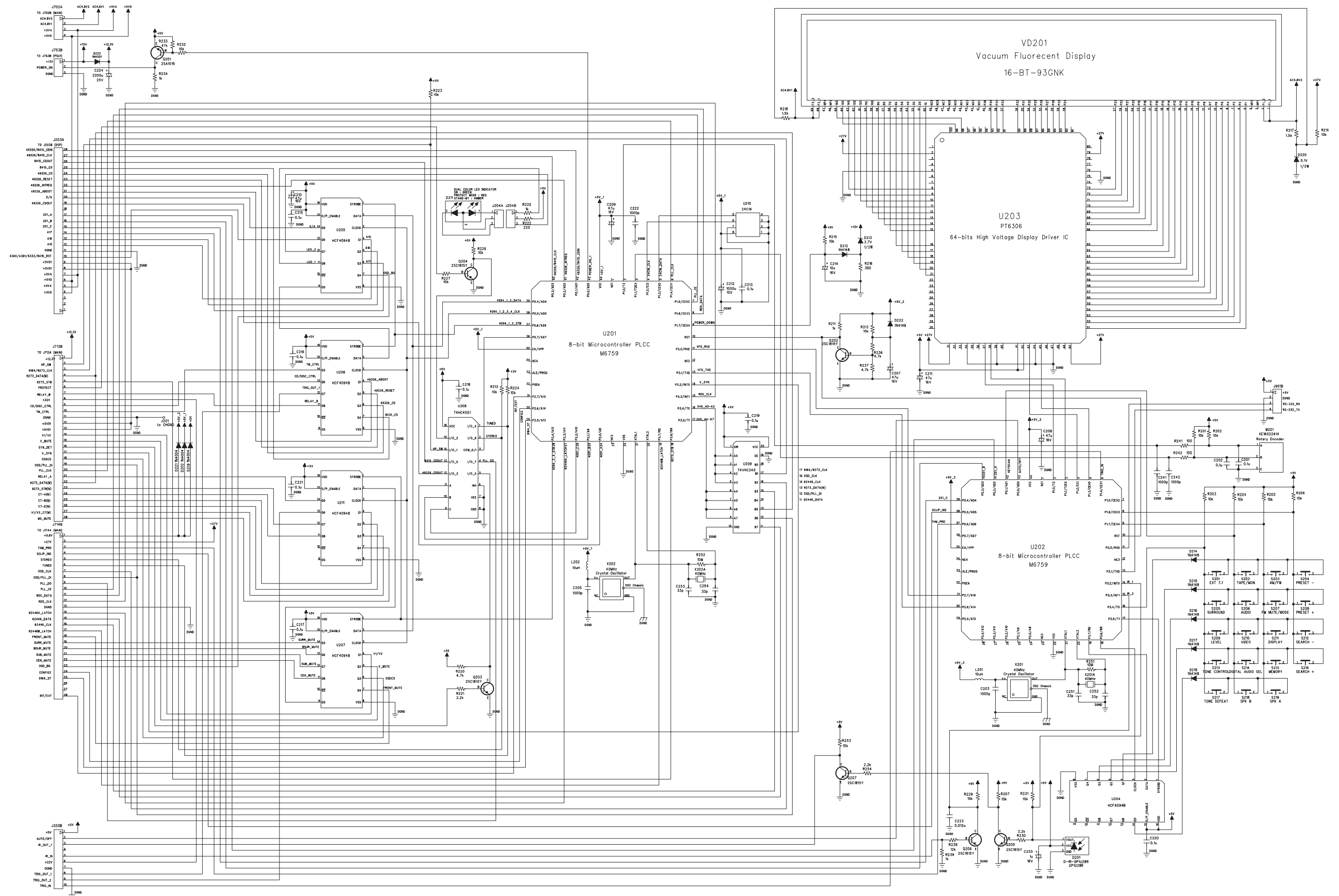
# SCHEMATIC DIAGRAM DSP BOARD (ISSUE 9)



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

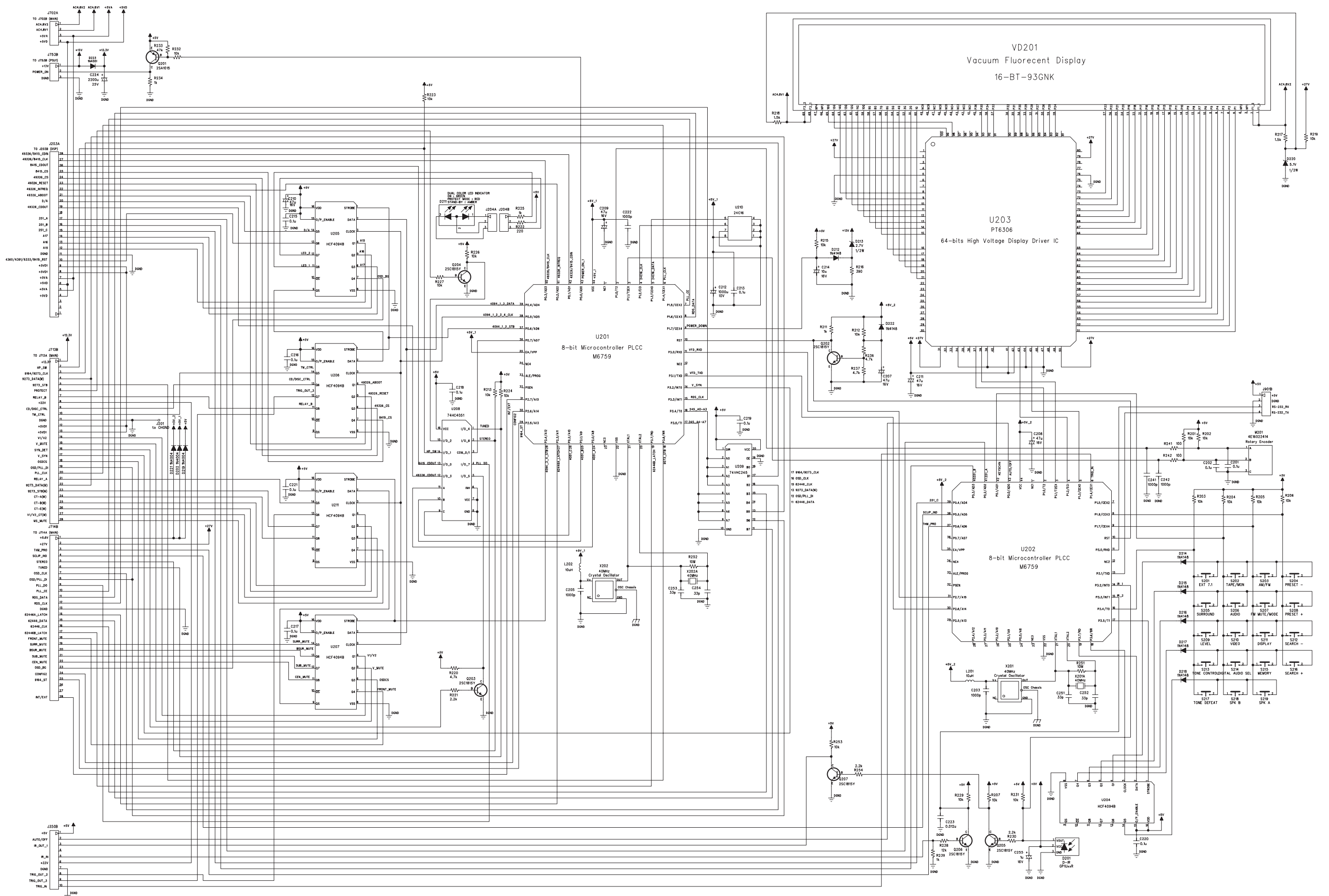


# SCHEMATIC DIAGRAM KEYBOARD (ISSUE 8)



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

# SCHEMATIC DIAGRAM KEYBOARD (ISSUE 9)

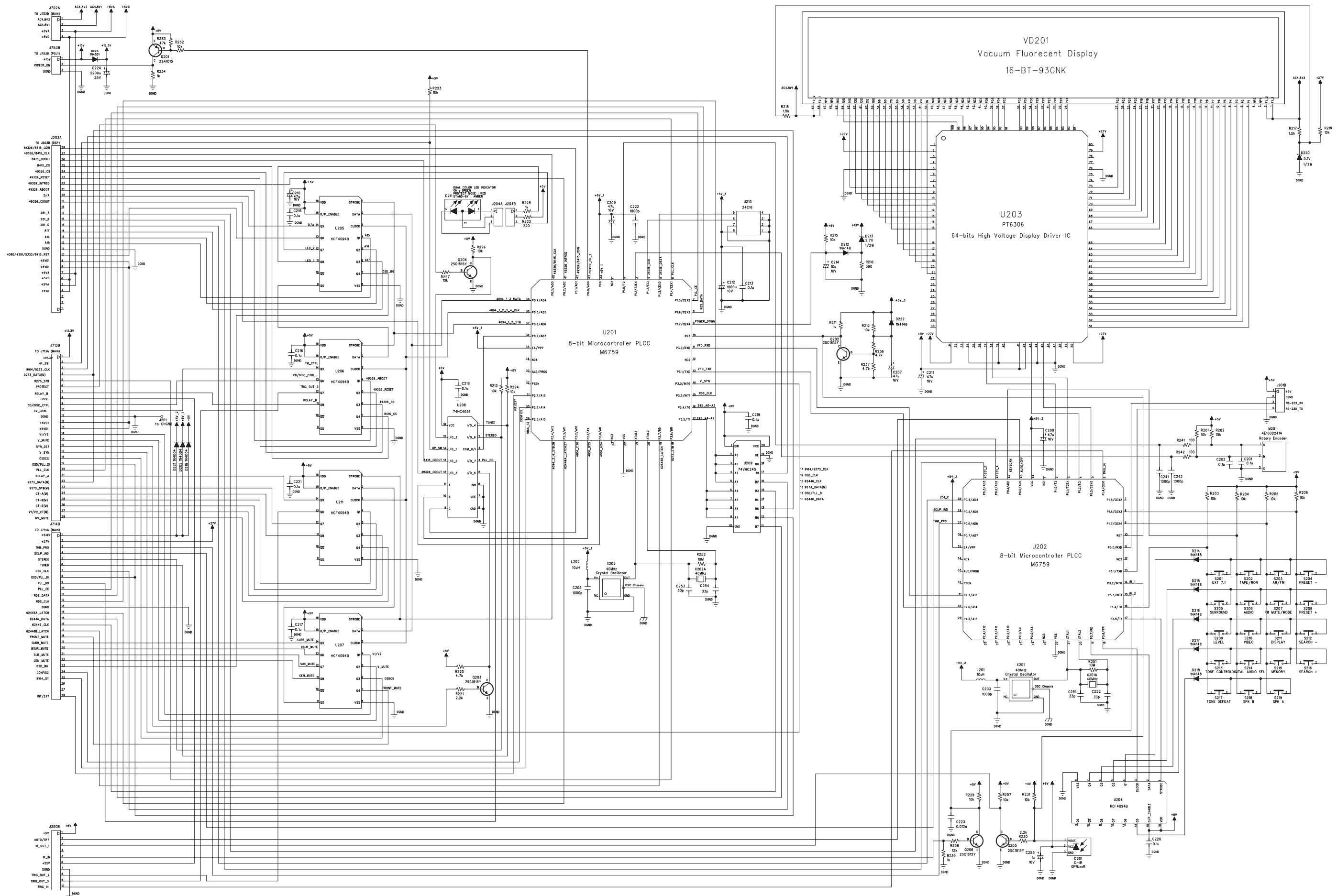


NOTE:  
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.  
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.



# SCHEMATIC DIAGRAM

## KEYBOARD (ISSUE 10)



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