

SERVICE MANUAL



T 763

Surround Sound Receiver

T 763

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 763 A/V SURROUND SOUND RECEIVER

POWER RATING 120V 60Hz 7A ~

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

AH VERSION

NAD ELECTRONICS INTERNATIONAL

MODEL T 763 A/V SURROUND SOUND RECEIVER

POWER RATING 230V 50Hz 3.5A ~

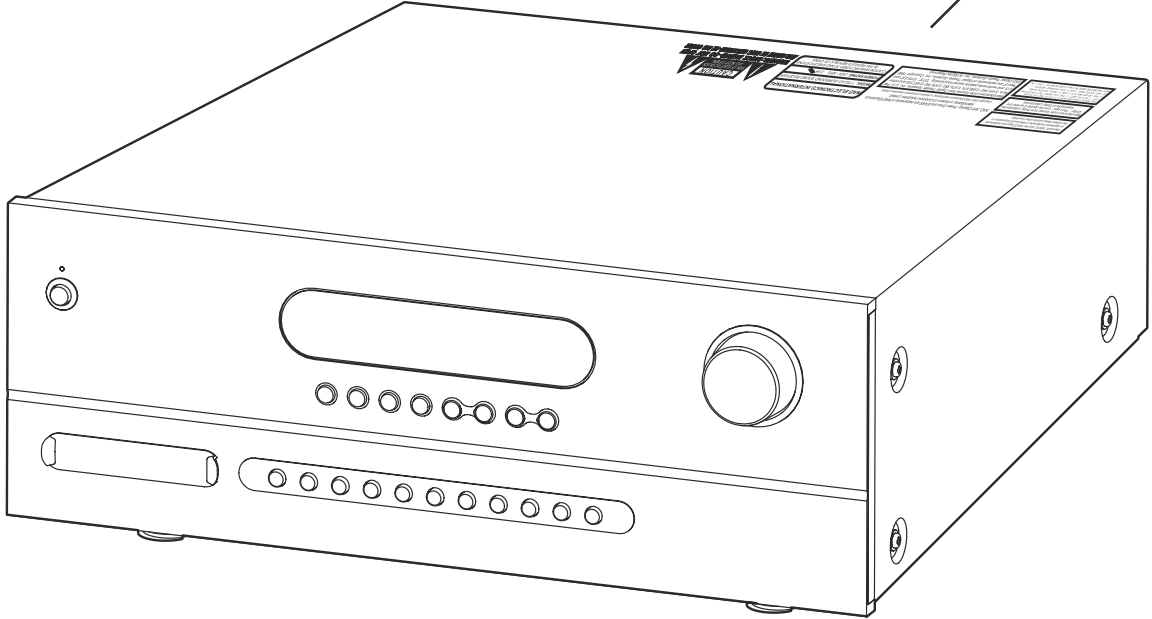
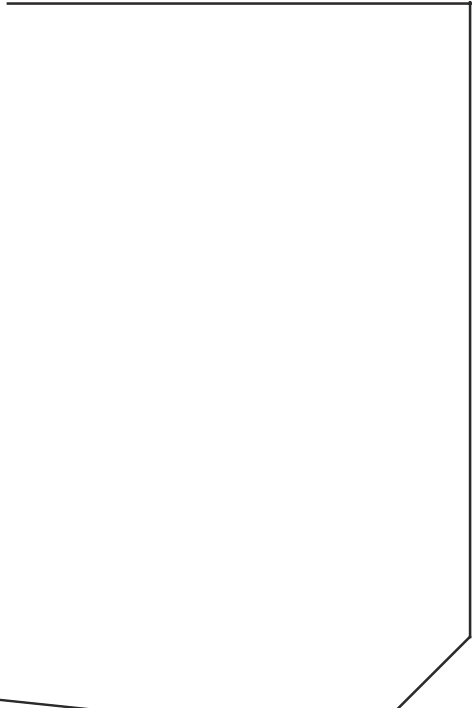
CUSTOM MANUFACTURED TO NAD SPECIFICATIONS
 IN THE PEOPLE'S REPUBLIC OF CHINA

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.

| <u>Reference Designator</u> | <u>Part Number</u> | <u>Description</u> |
|-----------------------------|--------------------|--|
| F751*AH ⚠ | 33-0191001-00-88 | FUSE 10A/250VAC TIME-LAG 5X20mm 5T UL/CSA |
| F751*C ⚠ | 33-0181006-00-88 | FUSE 6.3A/250VAC TIME-LAG 5X20mm 5T VDE/UL/CSA |
| F752*AH ⚠ | 33-0111006-00-88 | FUSE 1.6A 250V TIME LAG 5x20mm 5T UL/CSA/VDE/SEMKO |
| F752*C ⚠ | 33-0151006-00-88 | FUSE 800mA 250V TIME LAG 5x20mm 5T 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) | $\leq 0.1 \%$ |
| | (Rated power level into 8 ohms, THD 20 Hz-20 kHz SL/SR/BS) | $\leq 0.1 \%$ |
| Input Sensitivity | (ref. 8 ohms, 1 kHz) | 157 ± 20 mV |
| S/N Ratio | (A-wtd, 1kHz, 1 W, 8 ohm, SL/SR/BL) | ≥ - 72 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 |

Controls

| | | |
|--------|---------------------------------|-----------------------|
| 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 | (TRACK 30 for O/P 1 W, FAUSE) | |
| | CCIR / ARM | ≥ 65 dB |
| | Audio LPF | ≥ 70 dB |
| | A-WTD | ≥ 70 dB |
| Channel Separation | (1 W, A-WTD FILTER) | |
| | 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 kHz | 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 | 0.3 ± 1.3 W |
| Channel Difference (FL ref): FL/FR/C/SL/SR | Track 6 1 kHz | ± 1.0 dB |
| Harmonic Distortion (Audio Filter) : FL/FR/C/SL/SR | Track 10-14 1 kHz | ≤ 0.08 % |
| Frequency Response (20 Hz to 20 kHz) | Track 26-30 | +2/-1.5 |
| Subwoofer Output Level 1 kHz ref at pre-out (FL) | Play Track 10, charge to 15 | 12.5 ± 1.5 dB |

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

FM TUNER SECTION

*C

*AH

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

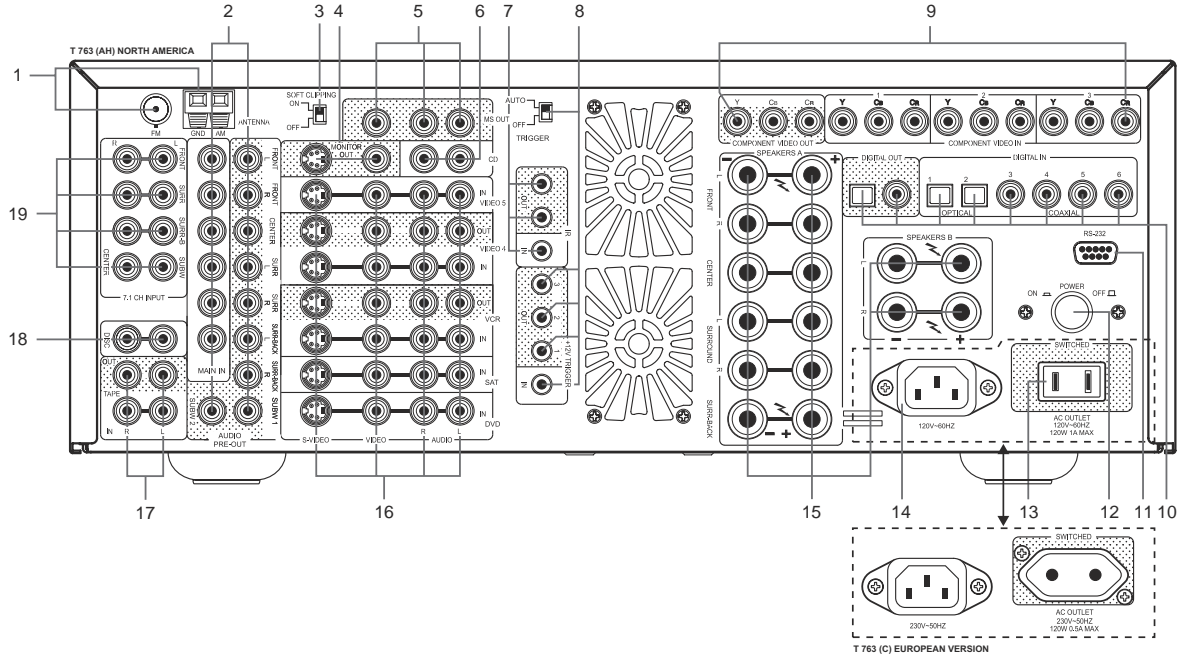
| | | | |
|--|--------|-------------------|-------------------|
| Usable sensitivity (98 MHz) | | ≤ 15 dBμV | ≤ 15 dBuV |
| S/N Ratio (60 dB, IHF wtd) | Mono | ≥ 63 dB | ≥ 63 dB |
| | Stereo | ≥ 63 dB | ≥ 63 dB |
| Frequency Response (20 Hz - 15 kHz, 60 dBμ) | | 0 ± 1.5 dB | 0 ± 1.5 dB |
| Channel Separation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

PHYSICAL SPECIFICATIONS

| | |
|-------------------------------------|-----------------------------|
| Dimensions (Width x Height x Depth) | 435 x 167 x 382 mm |
| Net Weight | 18.50 Kg (40.70 lbs) |
| Shipping Weight | 22.20 Kg (48.84 lbs) |

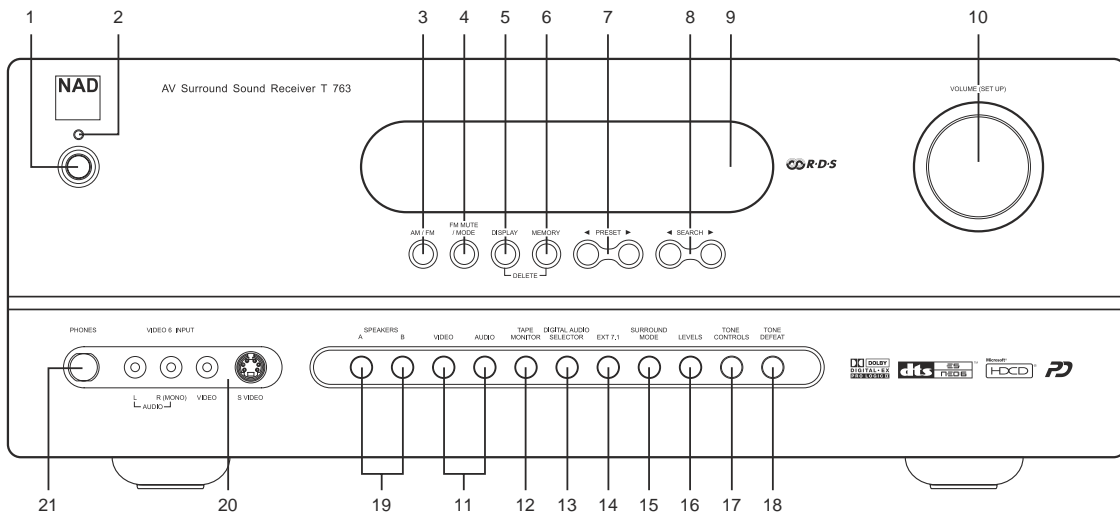
REAR PANEL / FRONT PANEL VIEW

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. POWER SWITCH |
| 4. MONITOR OUT | 13. SWITCHED AC OUTLETS |
| 5. MS OUT (MULTISOURCE OUT) | 14. AC POWER INLET |
| 6. CD INPUT | 15. SPEAKERS A & B |
| 7. IR INPUT & OUTPUT | 16. DVD, SAT, VCR, VIDEO 4 & VIDEO 5 |
| 8. 12V TRIGGER INPUT & OUTPUT | 17. TAPE INPUT & OUTPUT |
| 9. COMPONENT VIDEO IN & COMPONENT VIDEO OUT | 18. DISC INPUT |
| | 19. 7.1 CH. INPUTS |

FRONT PANEL



- | | | |
|---------------------|----------------------------|--------------------|
| 1. STANDBY SWITCH | 8. SEARCH DOWN / UP | 15. SURROUND MODE |
| 2. STANDBY LED | 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**.

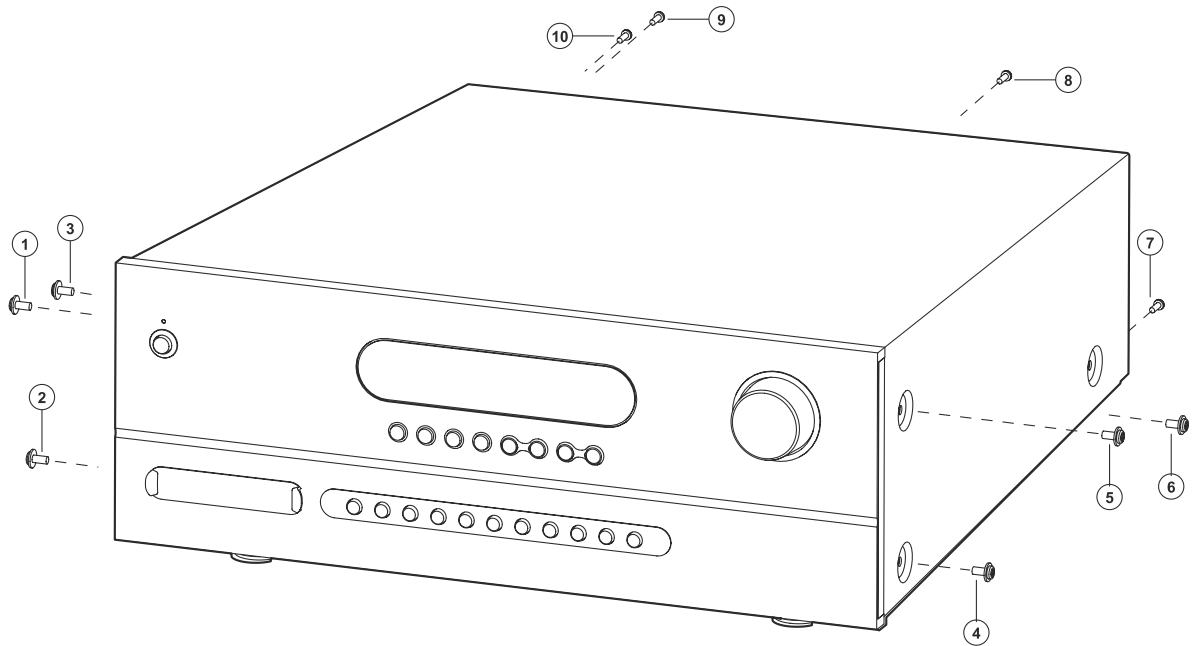


Figure No. 1

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**.

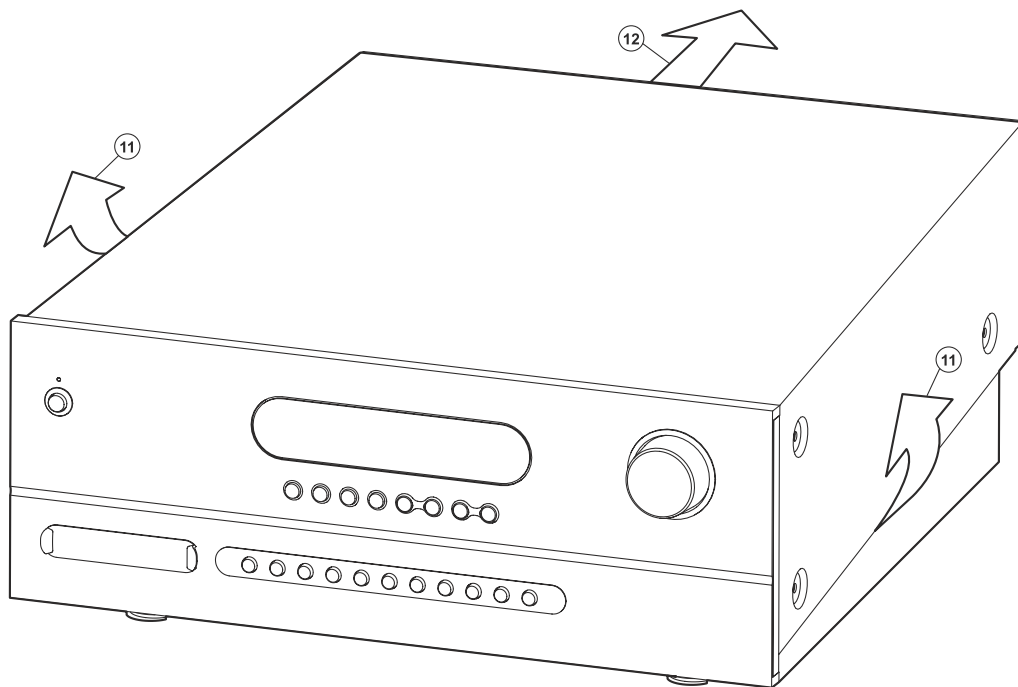
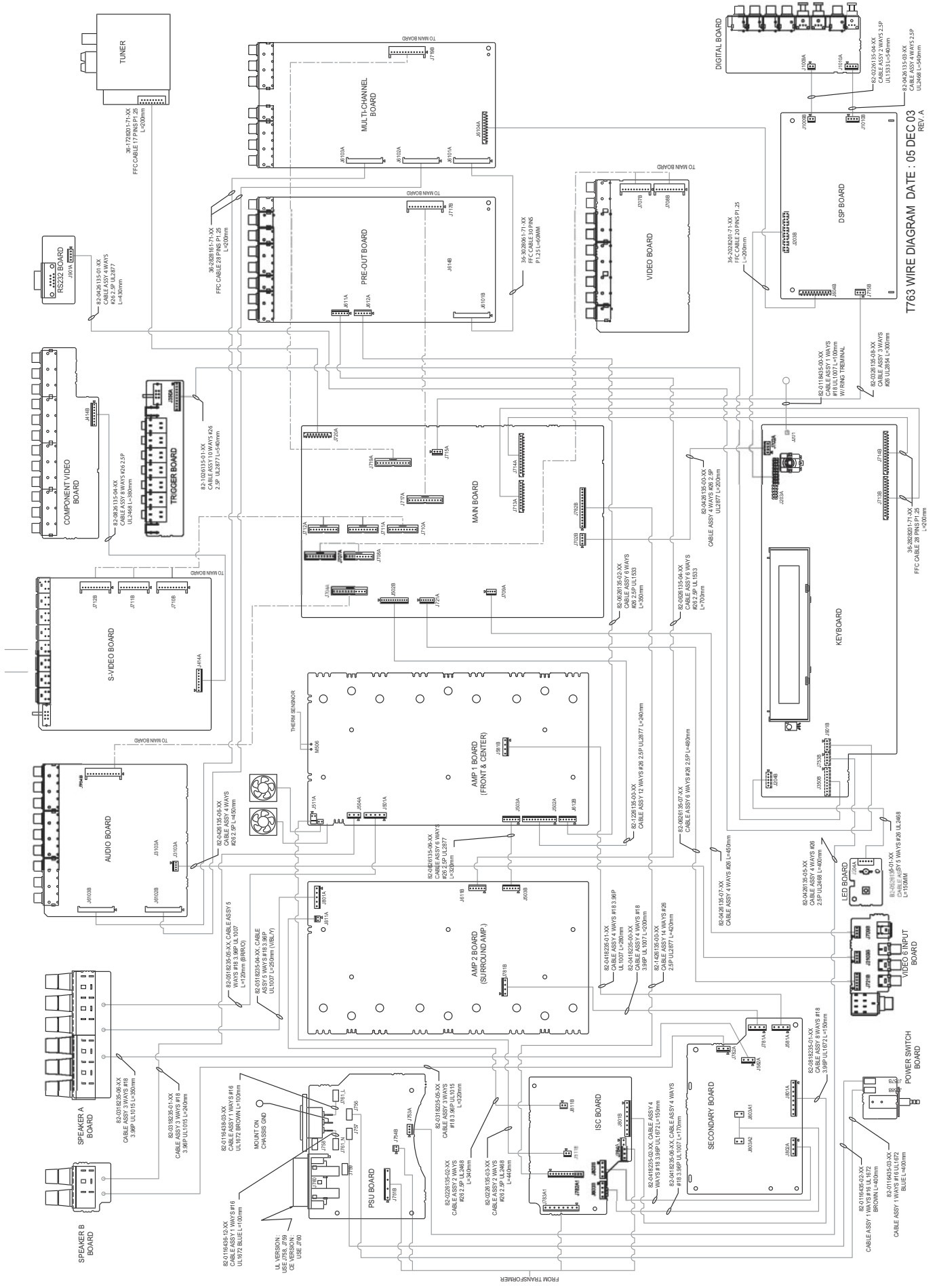


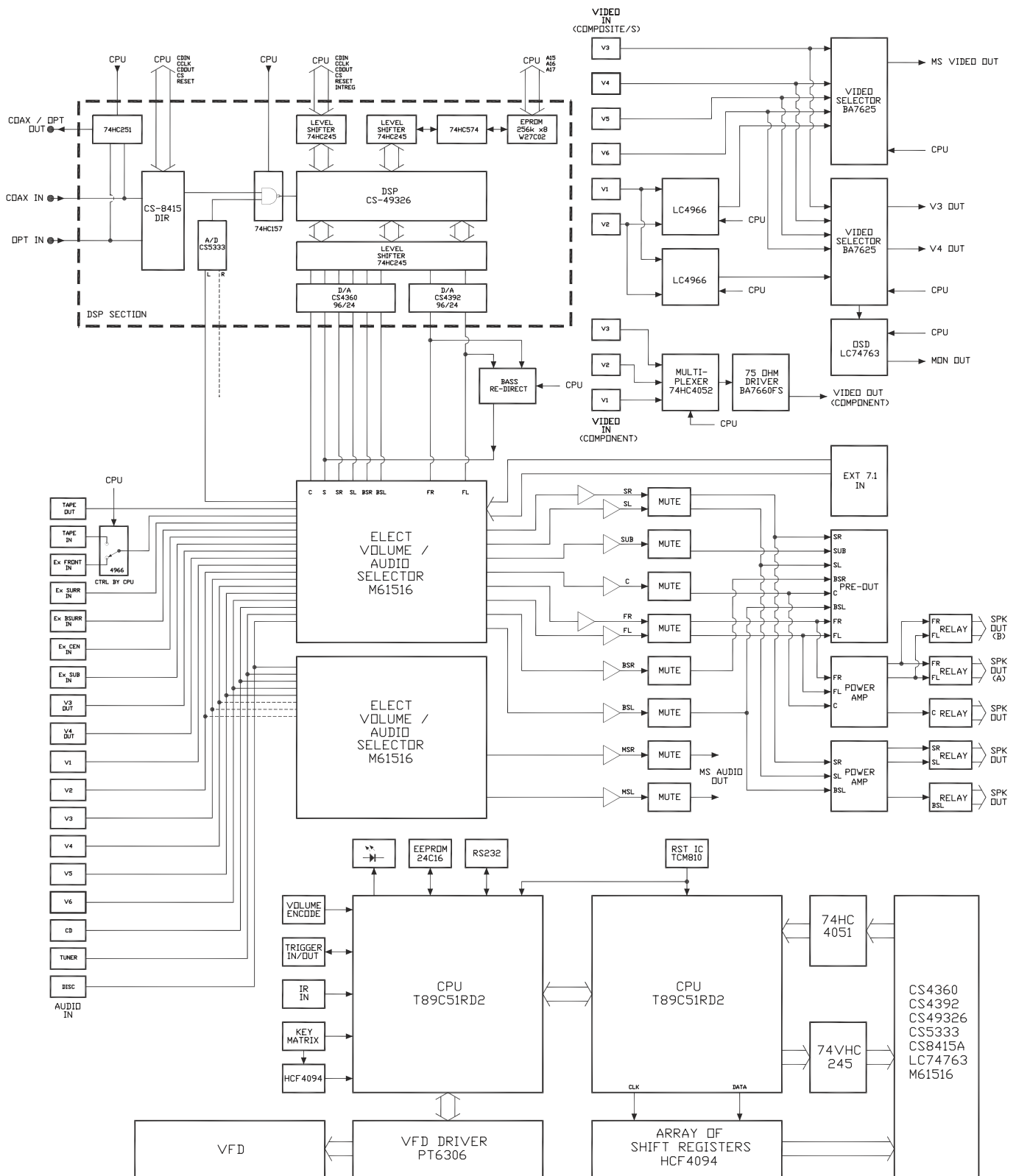
Figure No. 2

WIRING DIAGRAM



T763 WIRE DIAGRAM DATE : 05 DEC 03
REV. A

BLOCK DIAGRAM



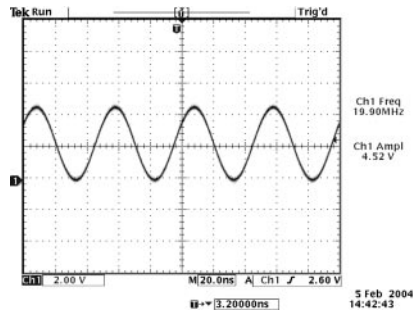
T763 Block Diagram
Issue : 01

SPECIAL FUNCTION

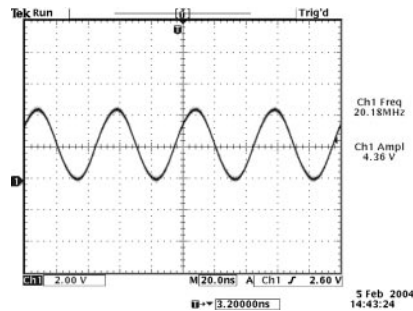
| FEATURE | KEYS PRESS ON FRONT PANEL |
|---|---|
| RESET FOR AH VERSION RESET FOR C VERSION NTSC / PAL SELECTION VFD ALL DISPLAY AM FREQ. STEP | VIDEO + TONE DEFEAT VIDEO + TONE CONTROLS VIDEO + MEMORY AUDIO + TAPE MONITOR AM/FM + FM MUTE |

DETAILS & WAVEFORMS ON SYSTEM TEST & DEBUGGING

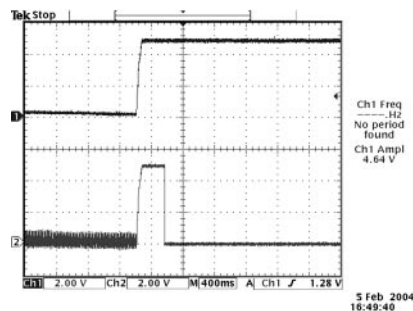
T89C51RD2 (U202) main clock is at 20MHz (X202)



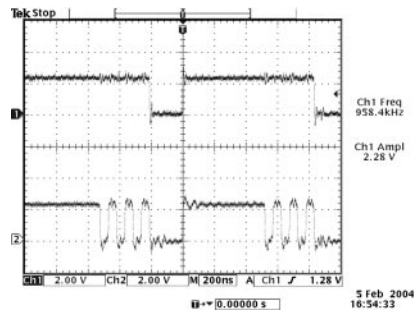
T89C51RD2 (U201) main clock is at 20MHz (X201)



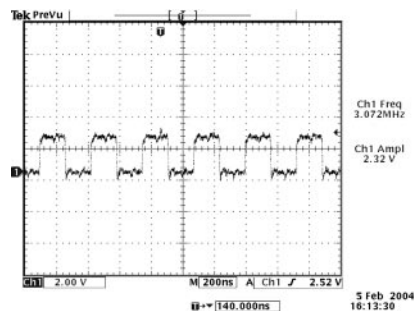
UPPER - +5V supply to KEYBOARD when power up
 LOWER - RESET line (TCM810LENB713) when power up



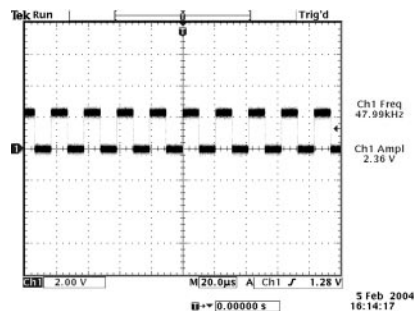
UPPER - OUTPUT ENABLE (pin 24) of EPROM (W27C02) when changing SURROUND MODES
 LOWER - CHIP ENABLE (pin 22) of EPROM (W27C02) when changing SURROUND MODES



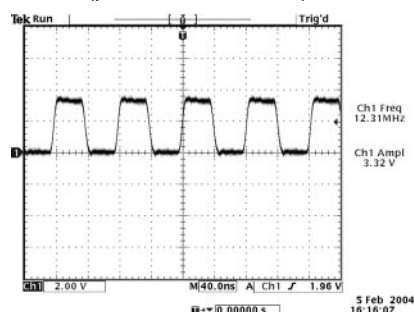
SCLK (pin 43 of CS49326)



LRCLK (pin 42 of CS49326)



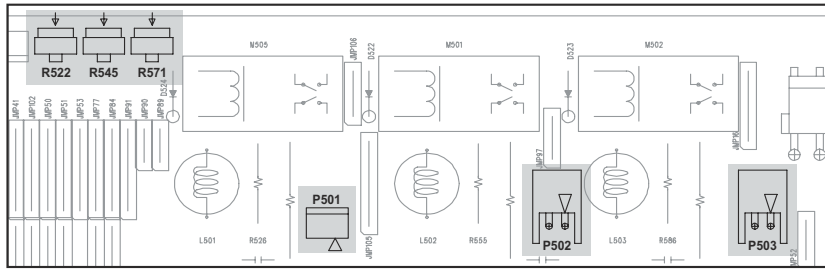
MCLK (pin 30 of CS49326)



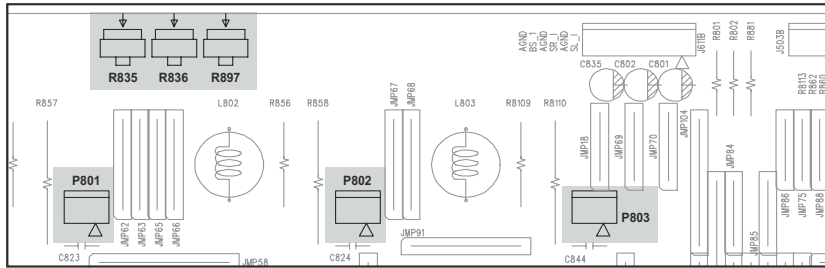
NOTE: The waveforms are based on software version V1.26.

ADJUSTMENT POINT DIAGRAM

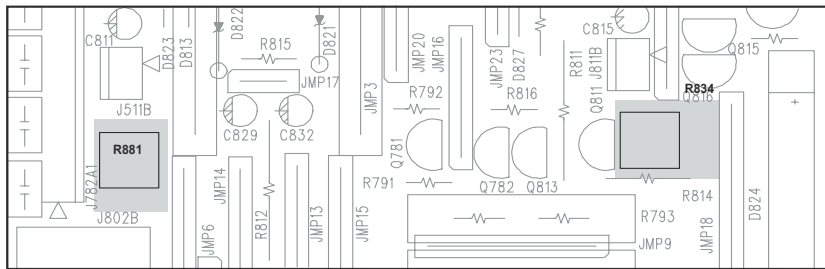
FRONT/CENTER AMPLIFIER BOARD



SURROUND AMPLIFIER BOARD



ISC BOARD



AMPLIFIER ADJUSTMENT

Idle Current

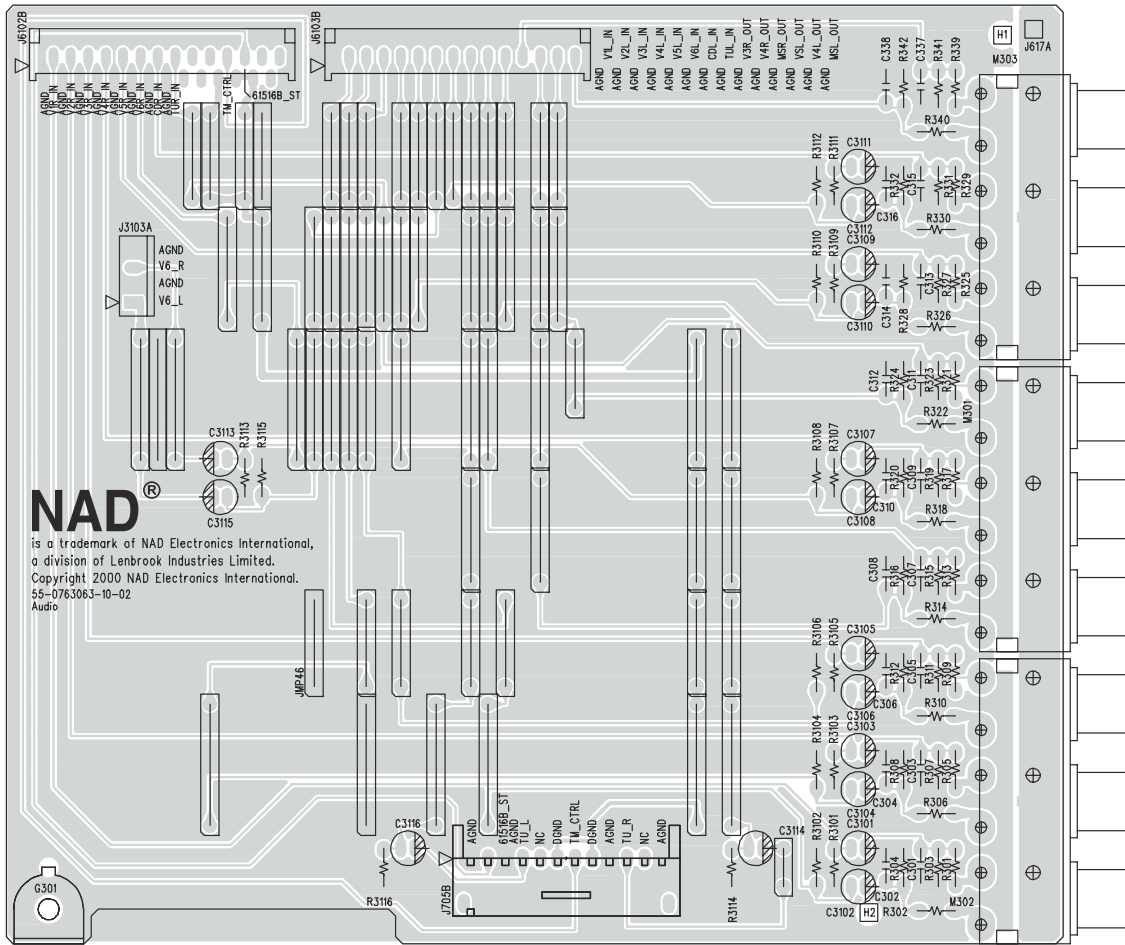
1. Rotate R522 fully clockwise.
2. Connect DC millivoltmeter to P501 (i.e. Across half of R523, 0.22 Ohm resistor).
3. Turn on the unit.
4. Adjust R522 for 1mV reading on voltmeter.
5. Leave power on for at least 5 min, and check for idle current again.
6. Repeat for other channels.

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

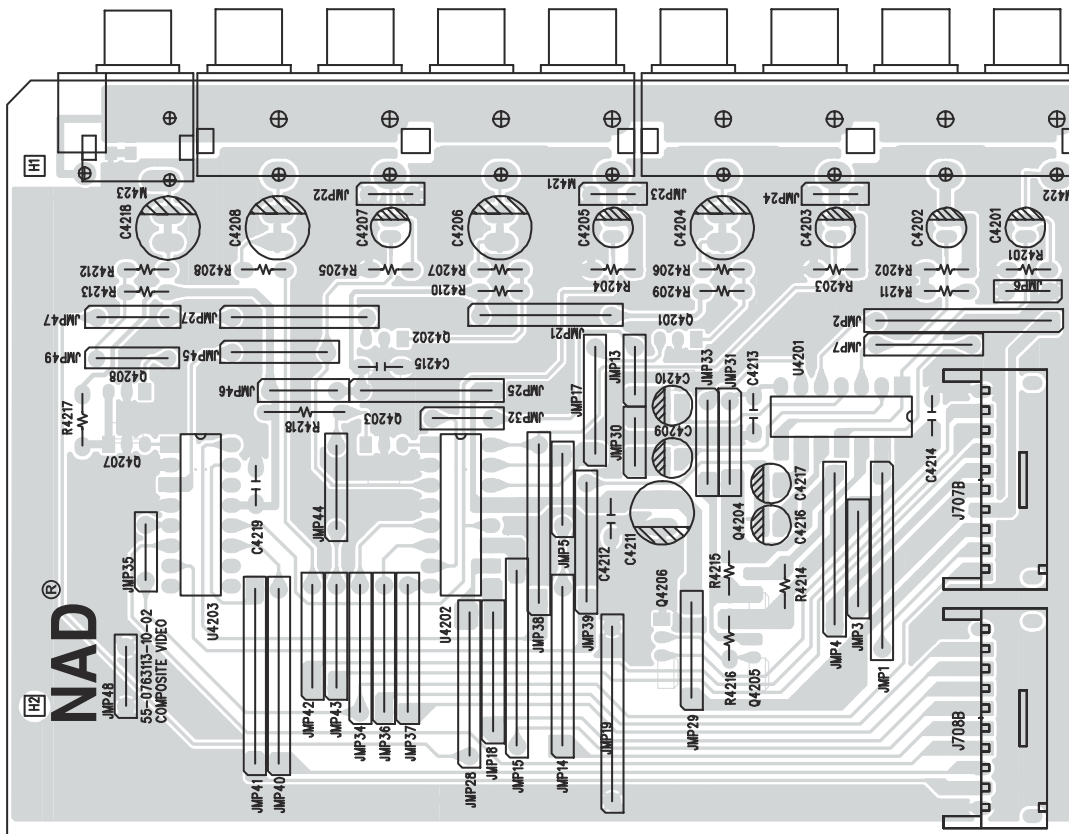
ISC Sensitivity

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.

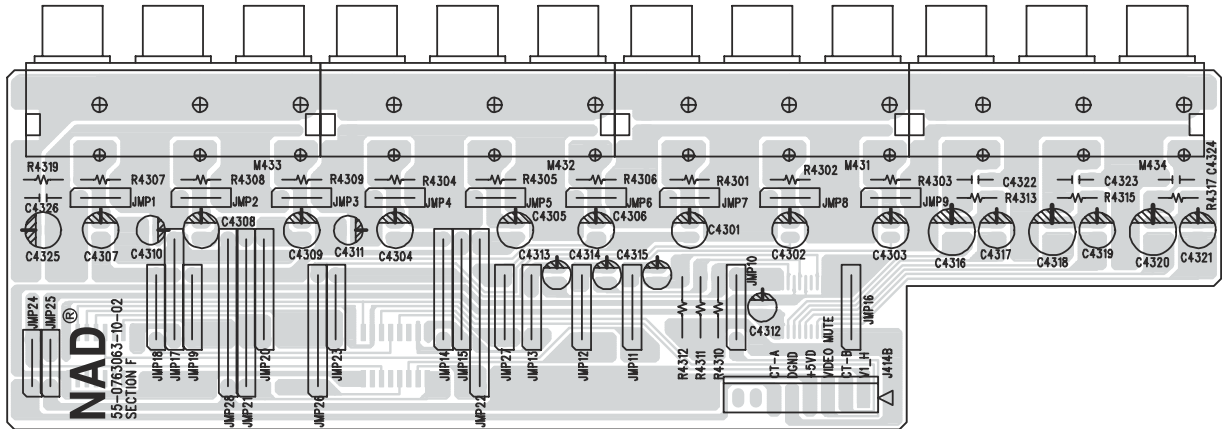
PCB LAYOUT AUDIO BOARD



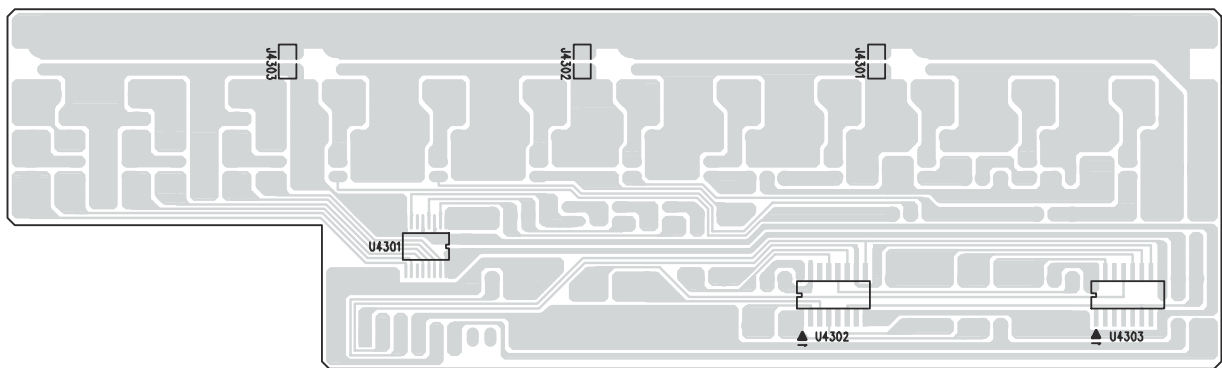
COMPOSITE VIDEO BOARD



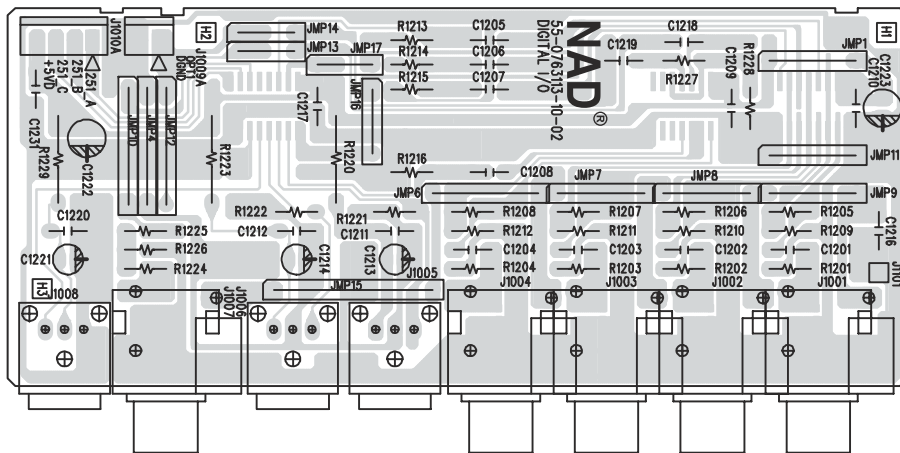
COMPONENT VIDEO BOARD - COMPONENT SIDE



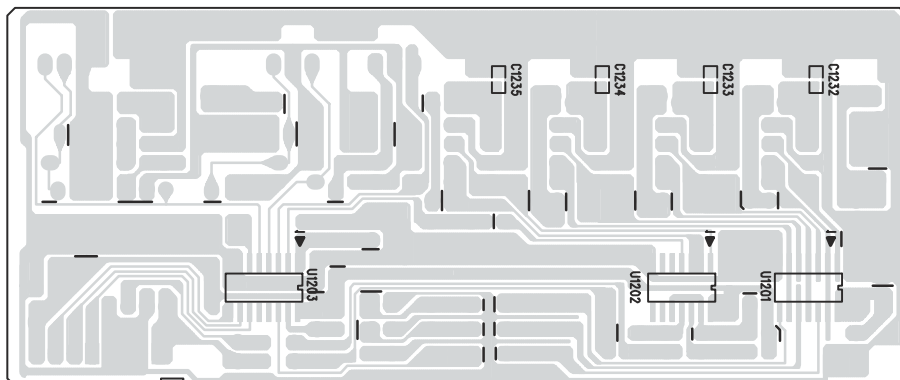
COMPONENT VIDEO BOARD - COPPER SIDE



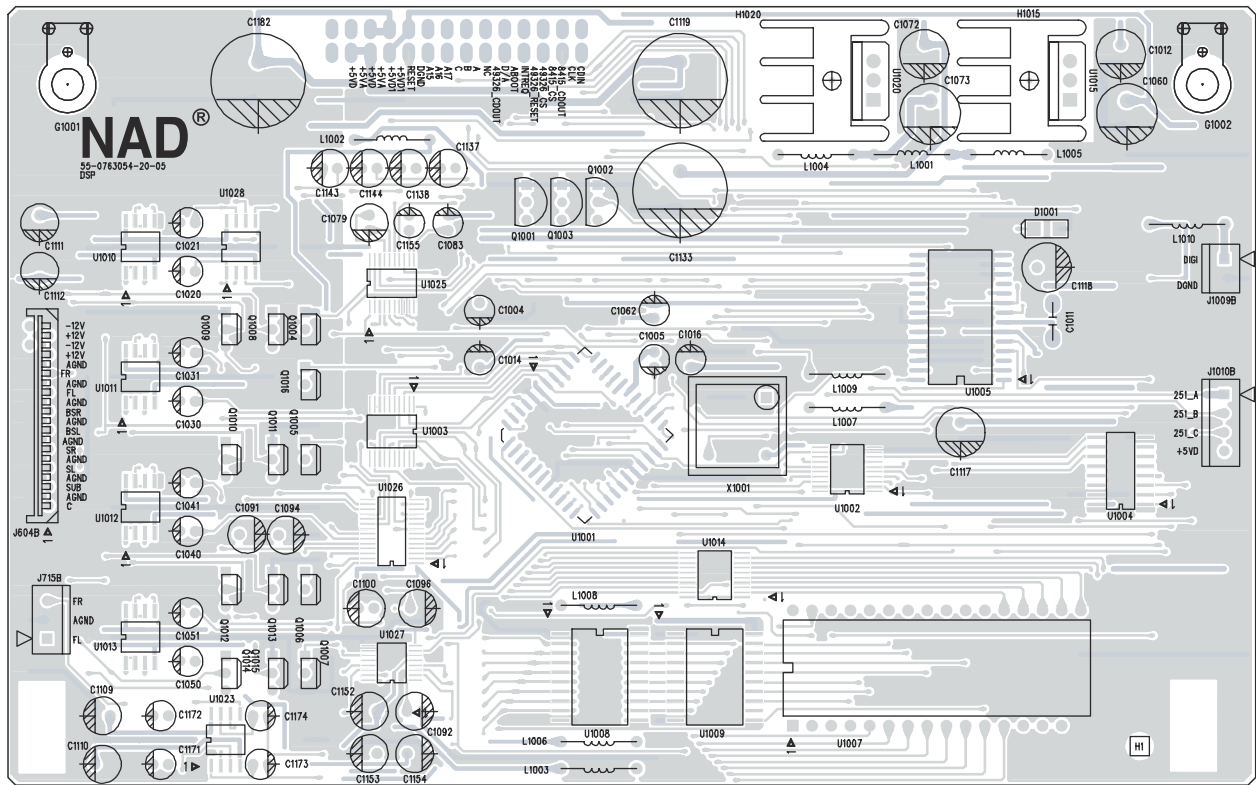
DIGITAL BOARD - COMPONENT SIDE



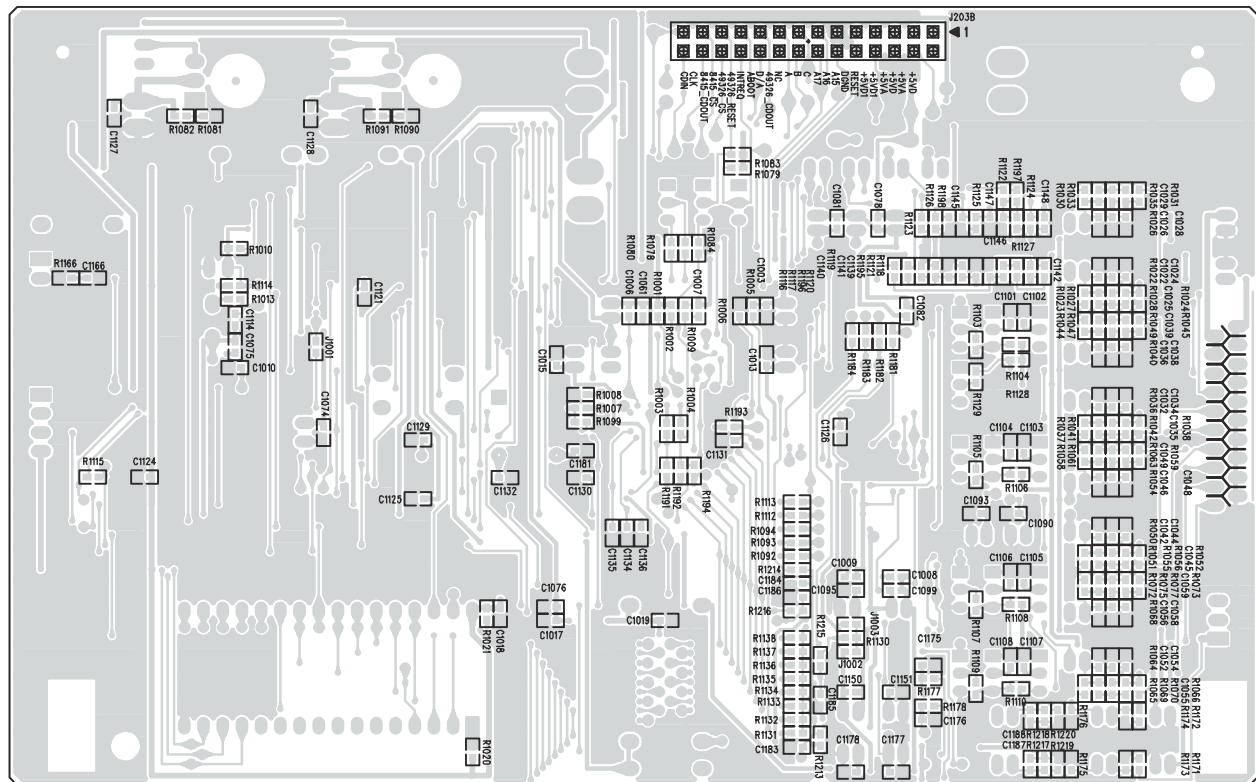
DIGITAL BOARD - COPPER SIDE



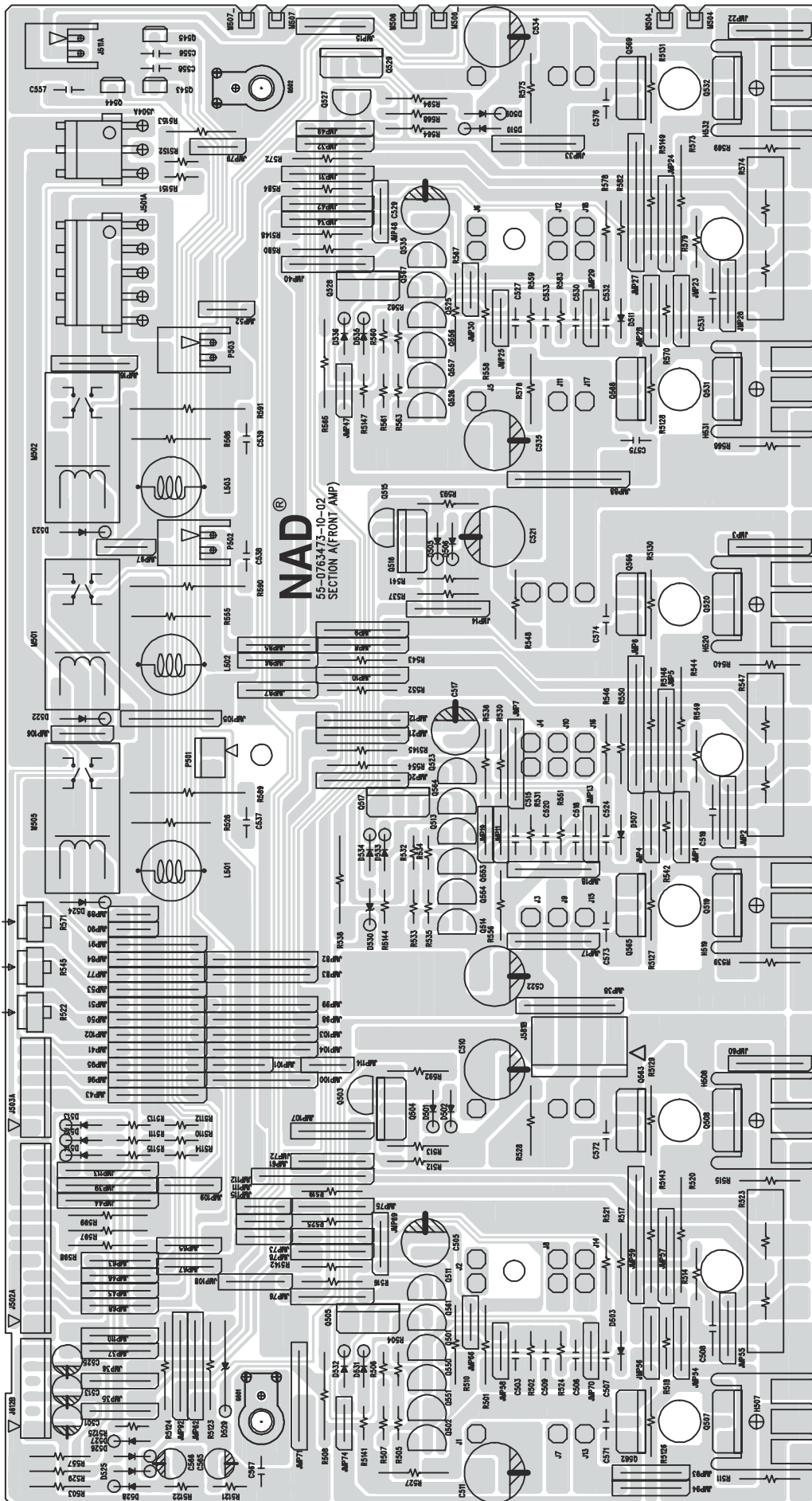
DSP BOARD - COMPONENT SIDE



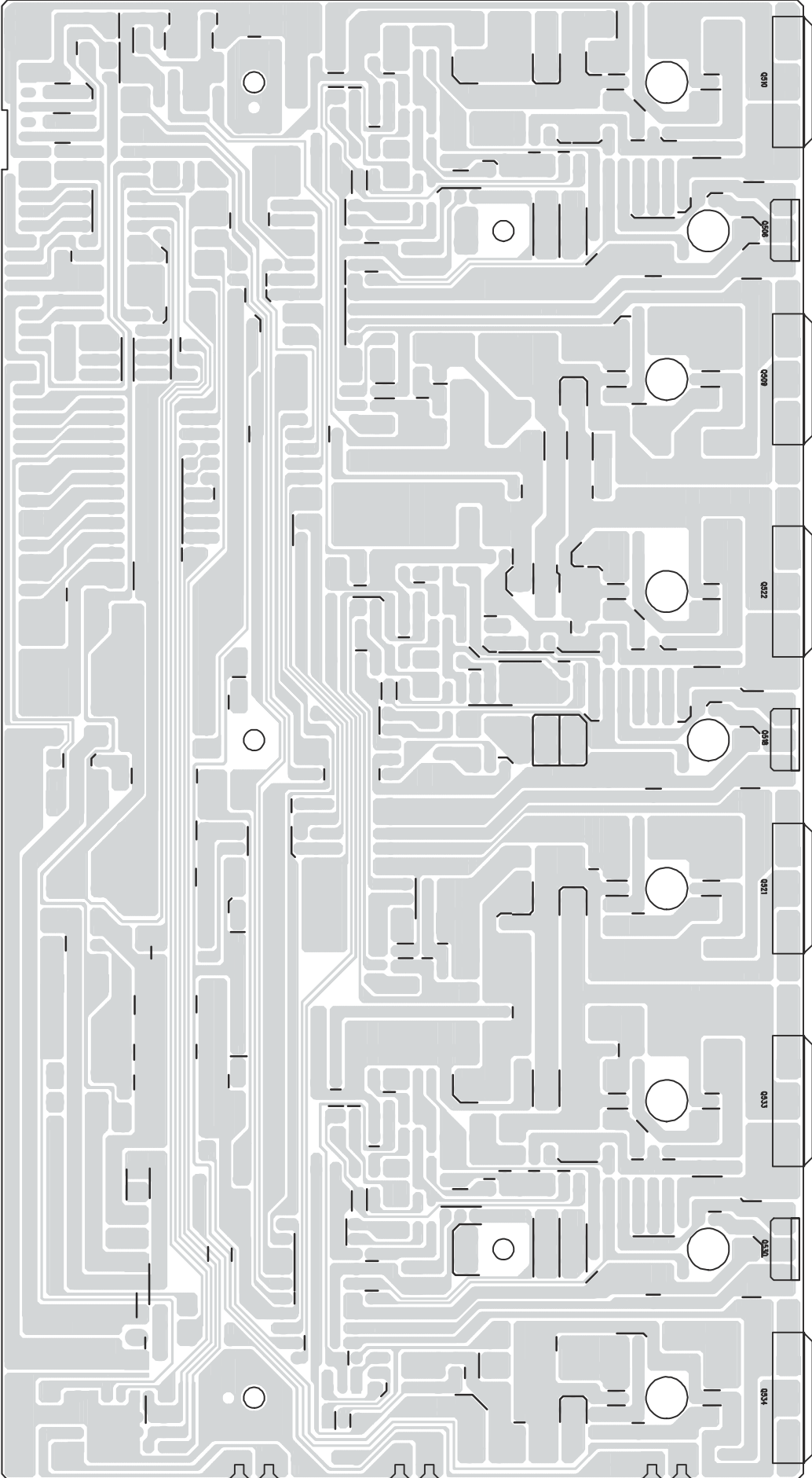
DSP BOARD - COPPER SIDE



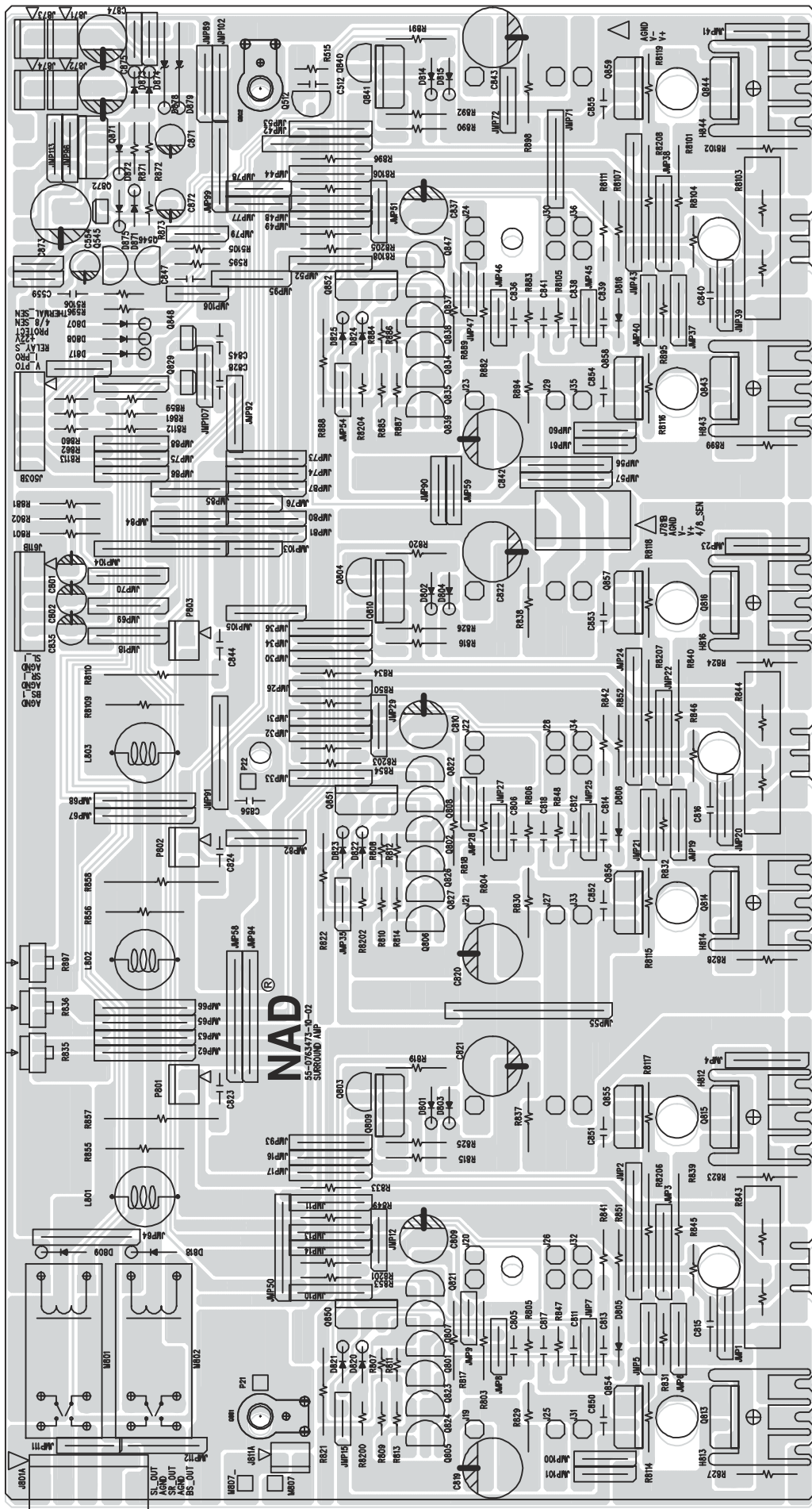
FRONT/CENTER AMPLIFIER BOARD - COMPONENT SIDE



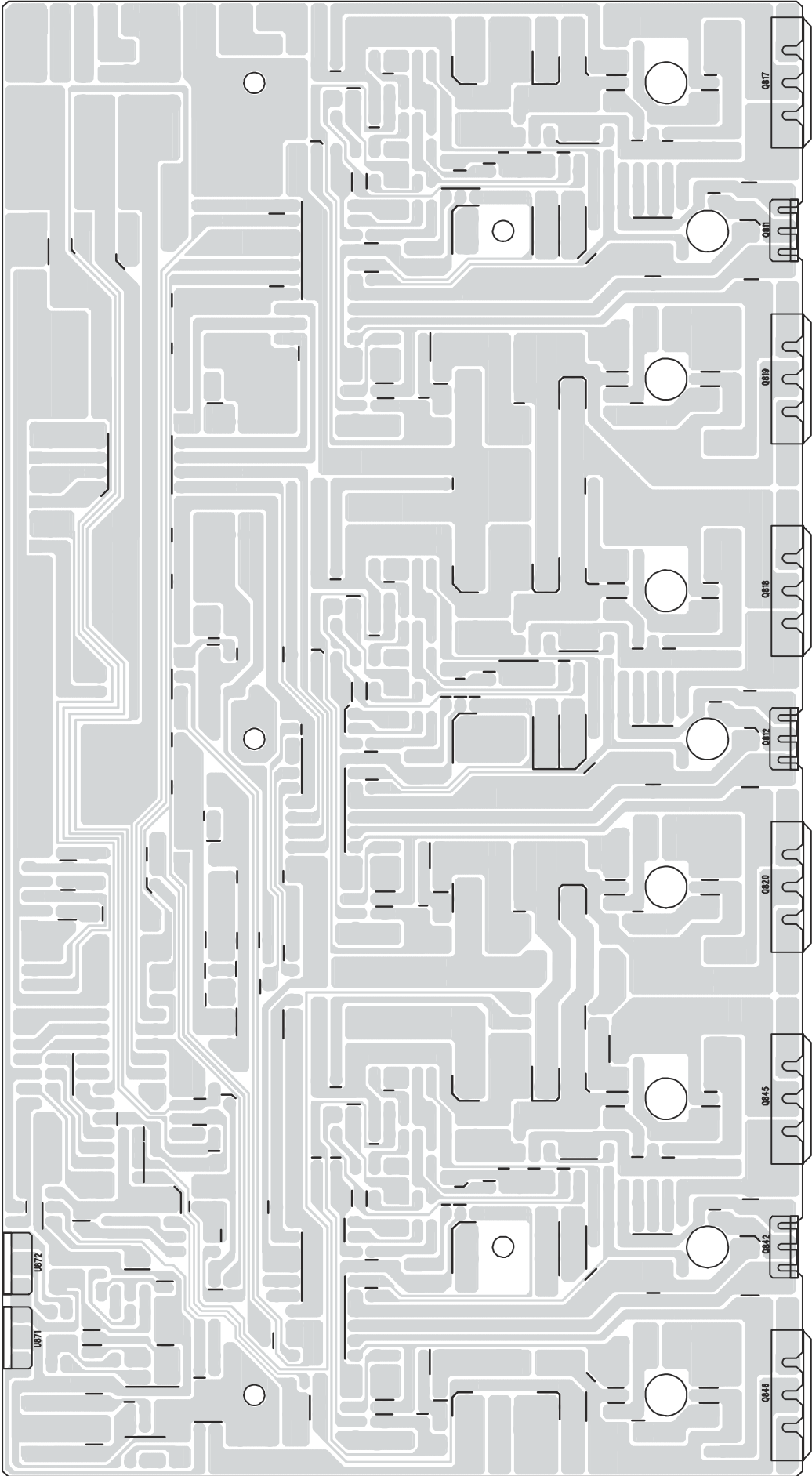
FRONT/CENTER AMPLIFIER BOARD - COPPER SIDE



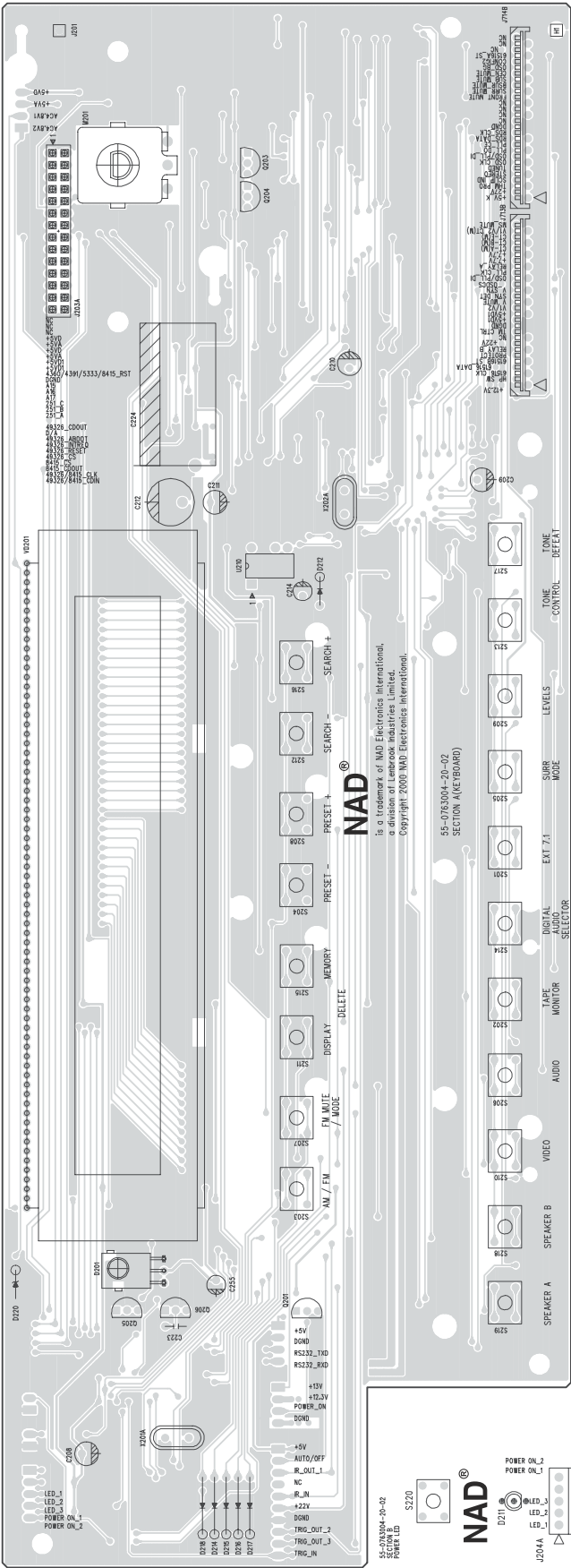
SURROUND AMPLIFIER BOARD - COMPONENT SIDE



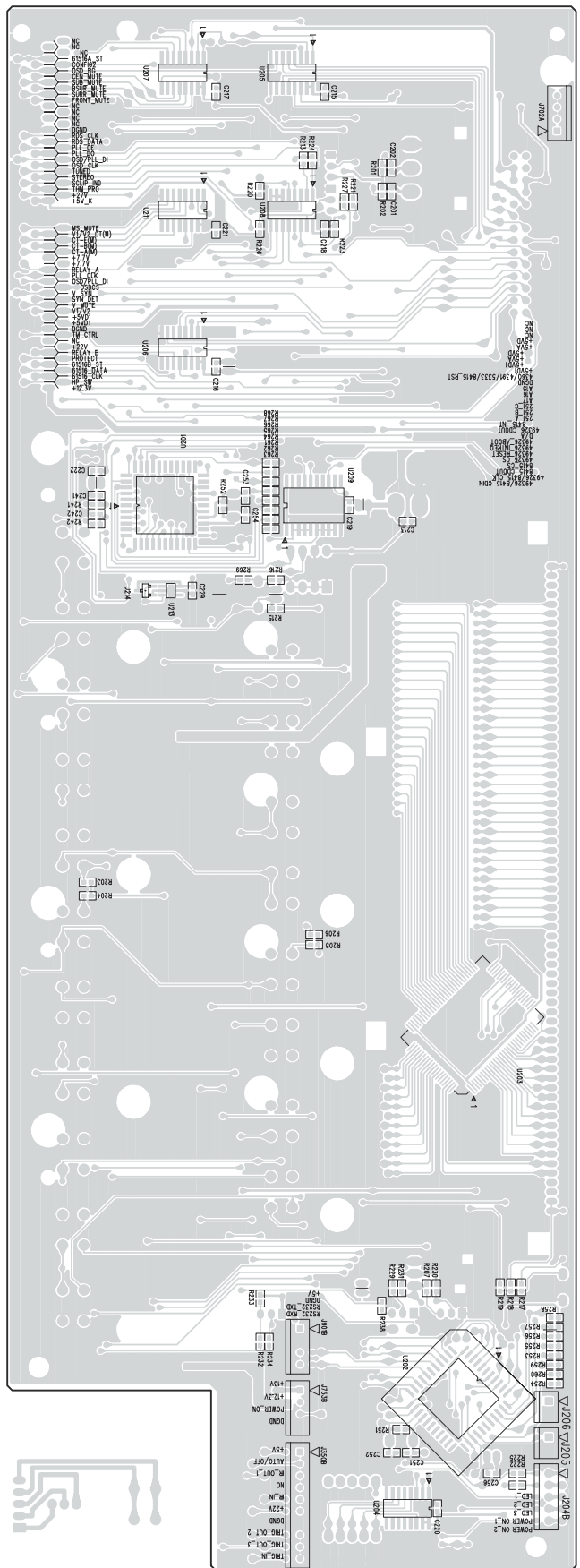
SURROUND AMPLIFIER BOARD - COPPER SIDE



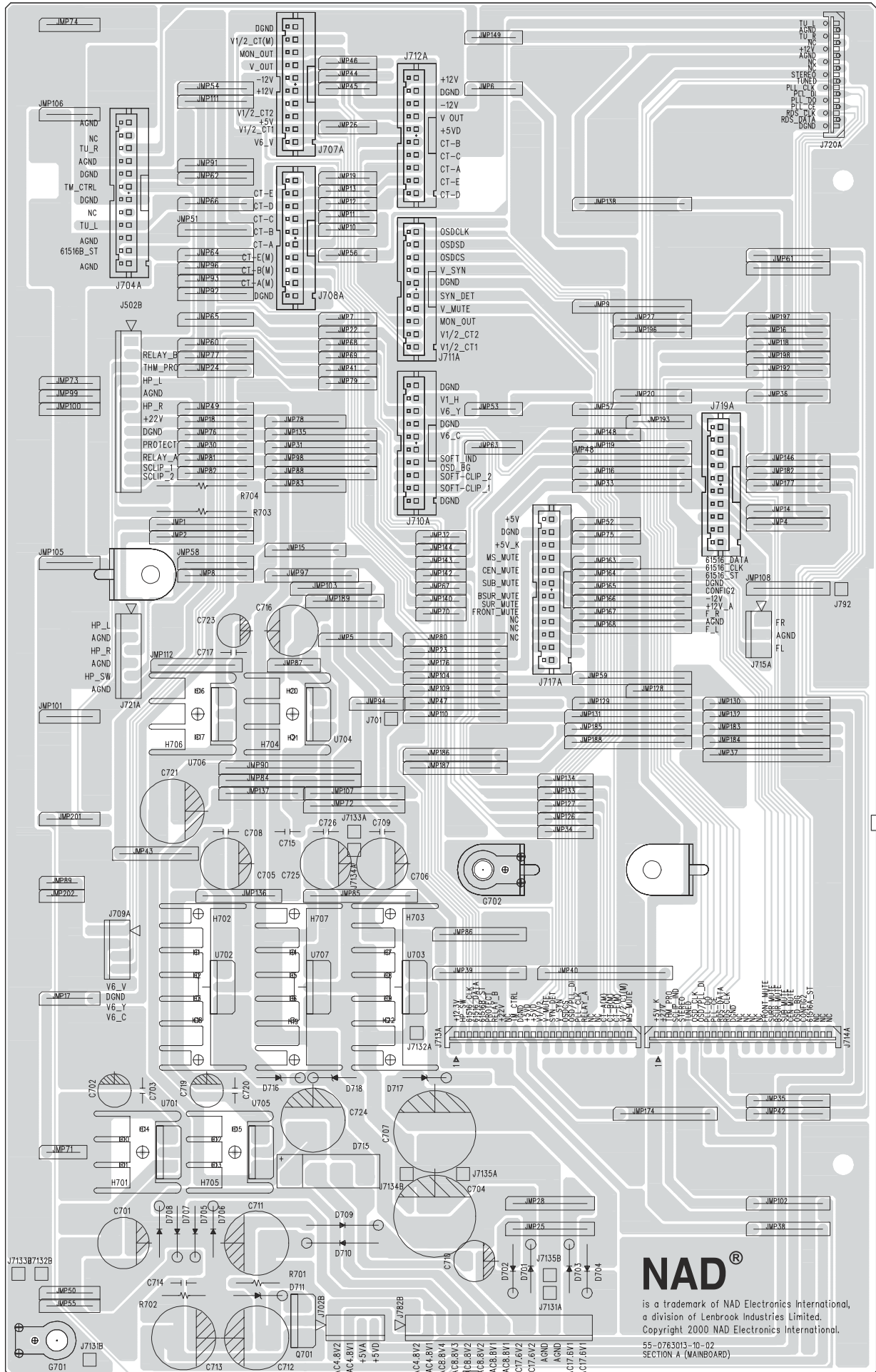
KEY BOARD / LED BOARD - COMPONENT SIDE



KEY BOARD / LED BOARD - COPPER SIDE



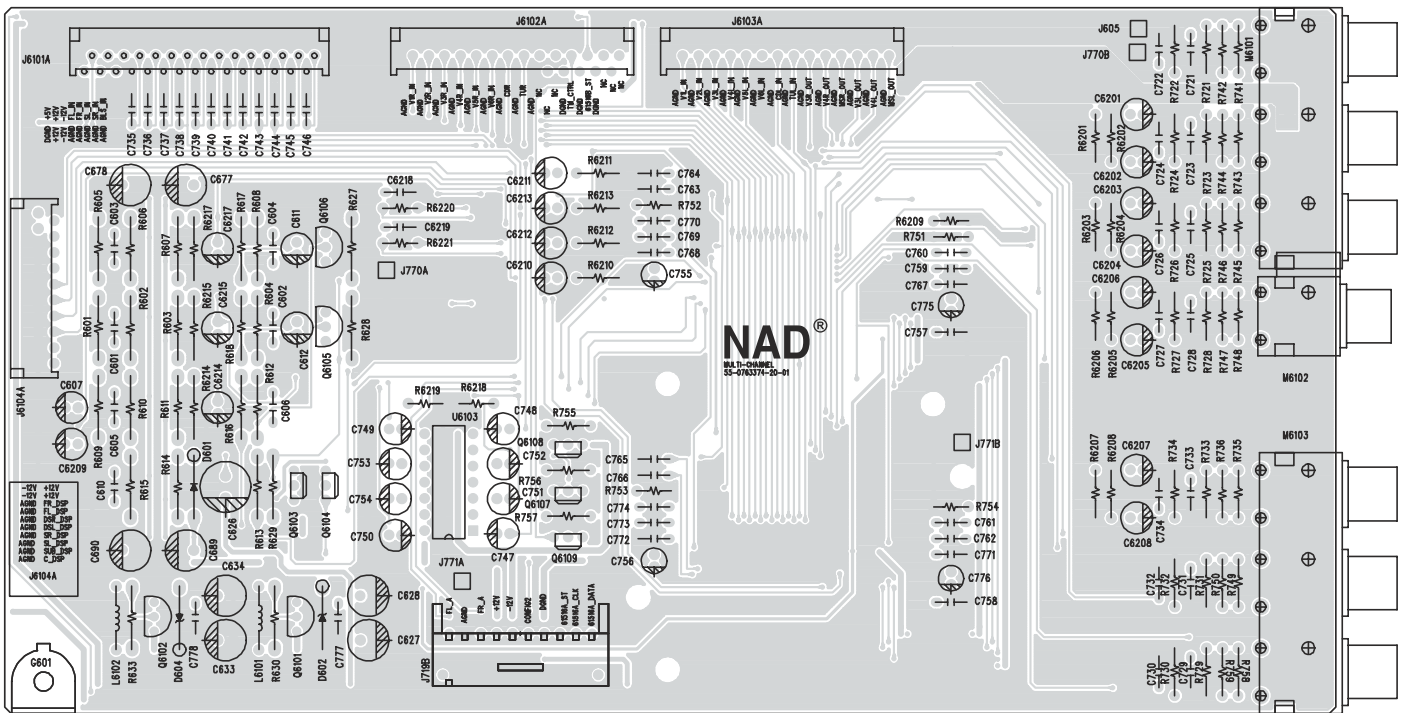
MAIN BOARD



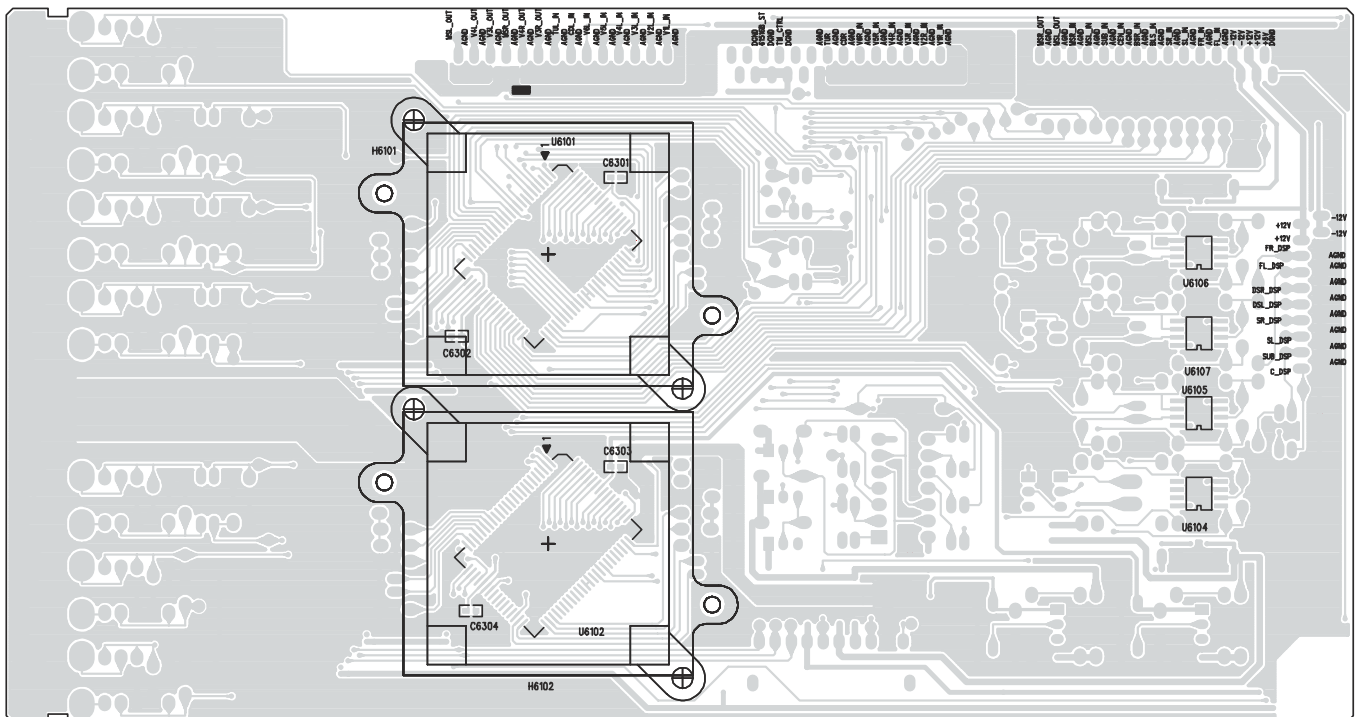
NAD[®]

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 55-0763013-10-02
 SECTION A (MAINBOARD)

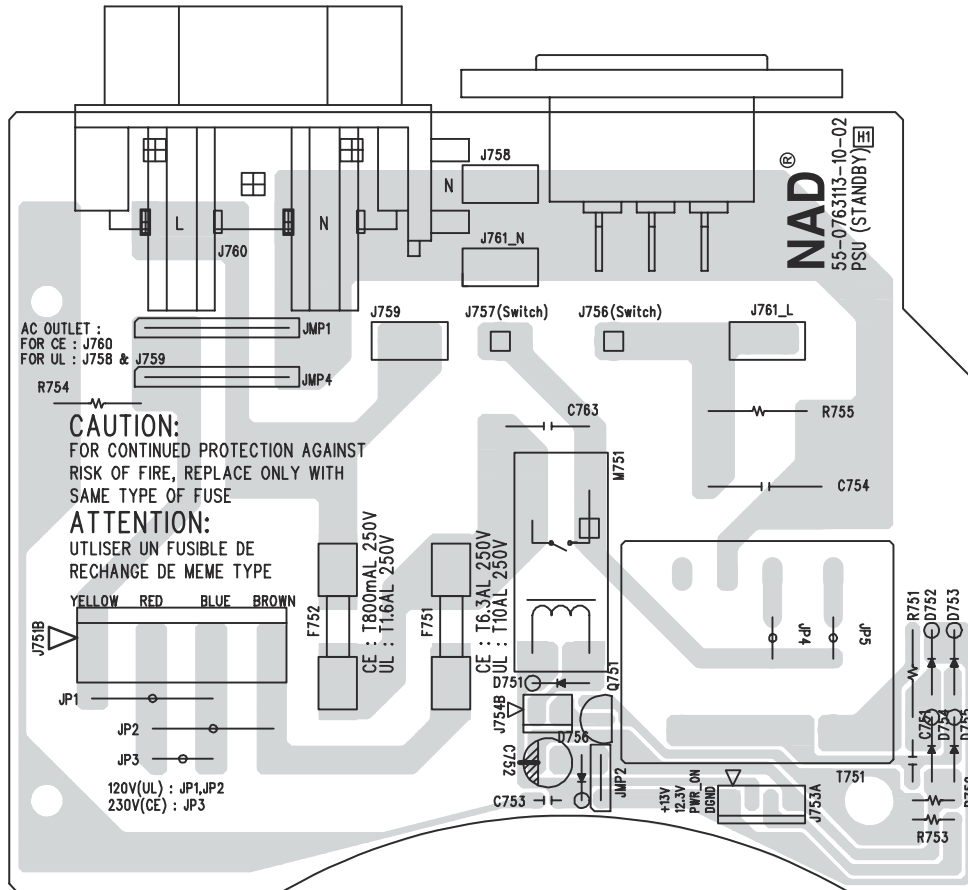
MULTI-CHANNEL BOARD - COMPONENT SIDE



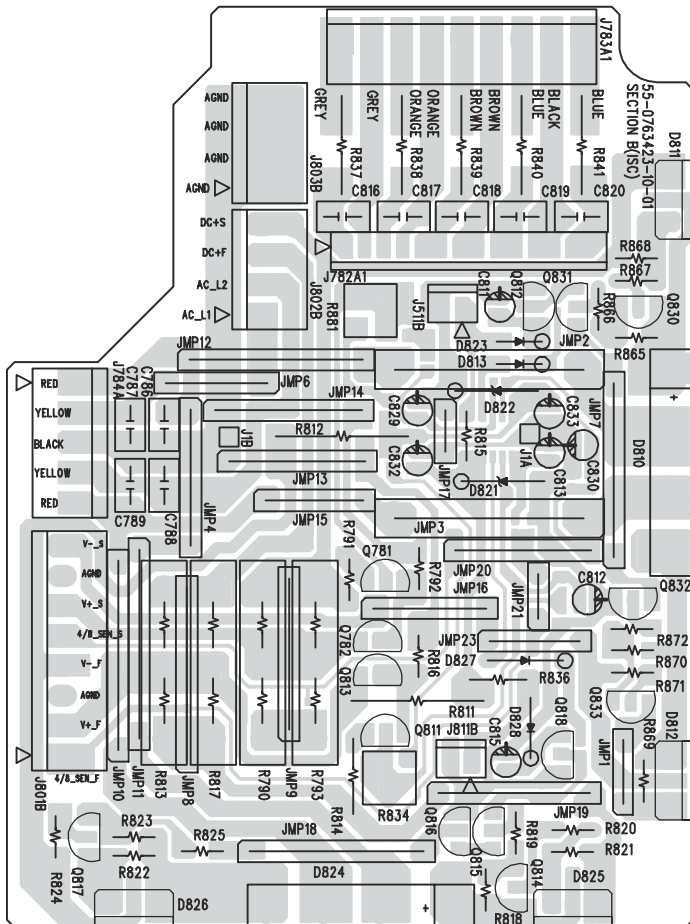
MULTI-CHANNEL BOARD - COPPER SIDE



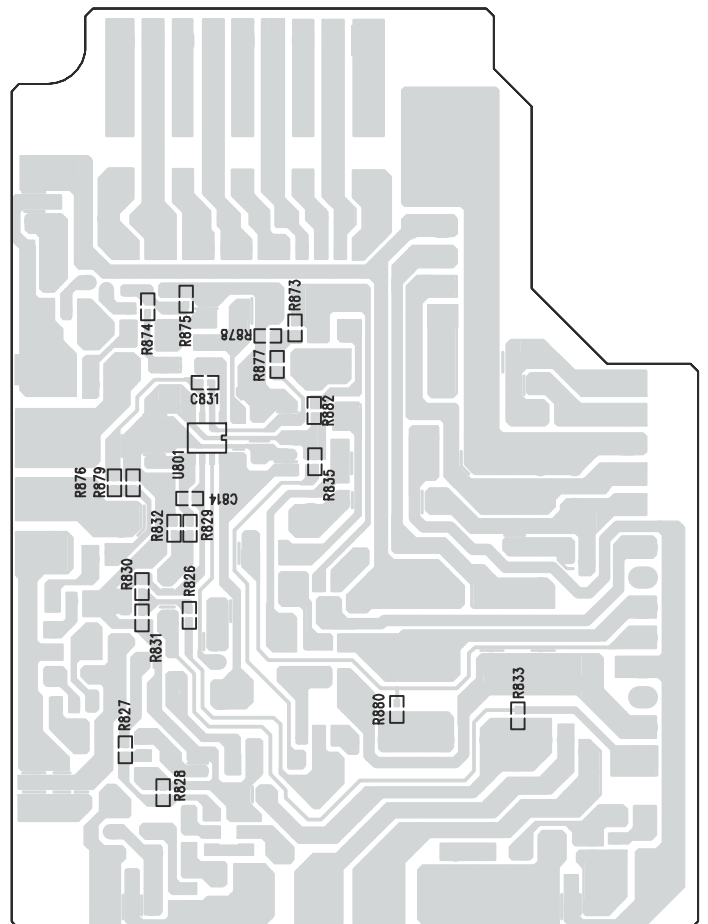
POWER SUPPLY (STANDBY)



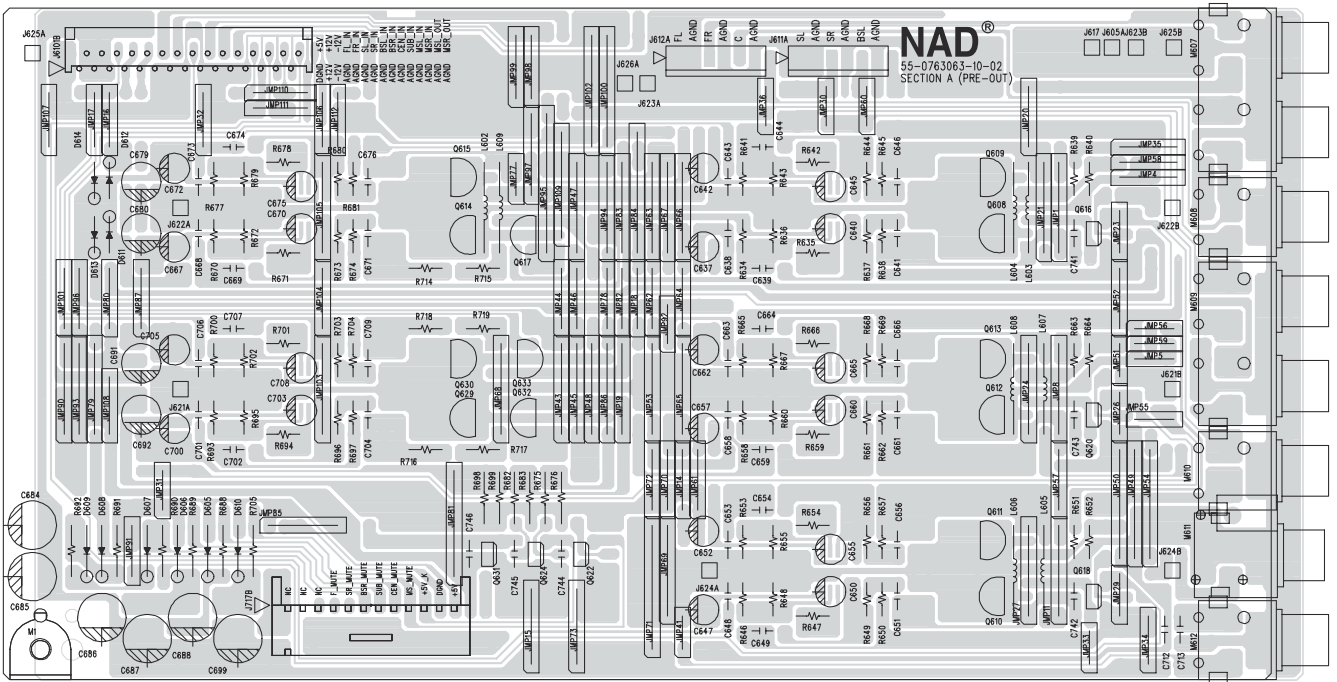
ISC BOARD - COMPONENT SIDE



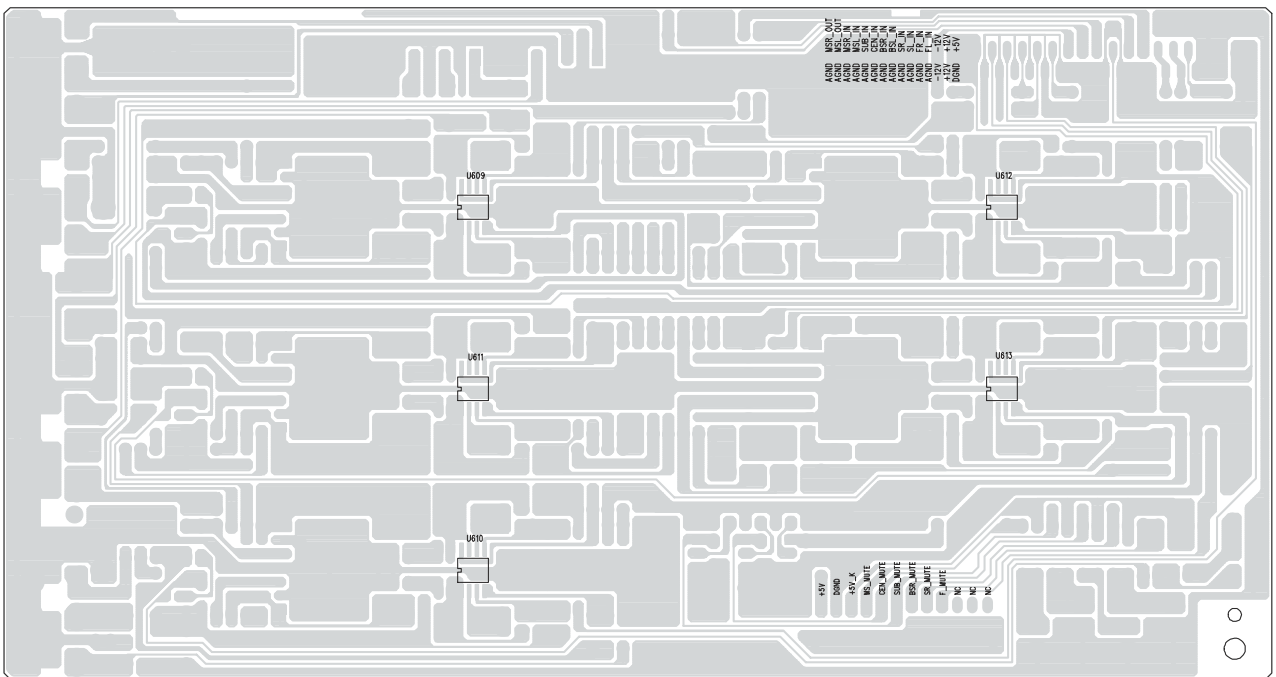
ISC BOARD - COPPER SIDE



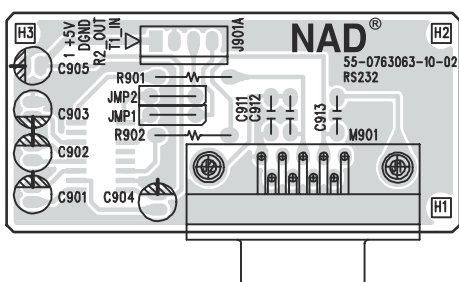
PRE-OUT BOARD - COMPONENT SIDE



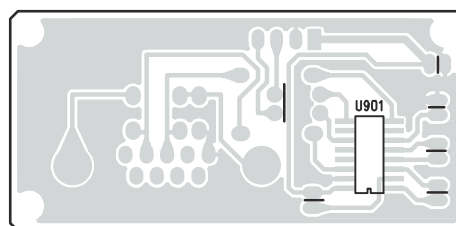
PRE-OUT BOARD - COPPER SIDE



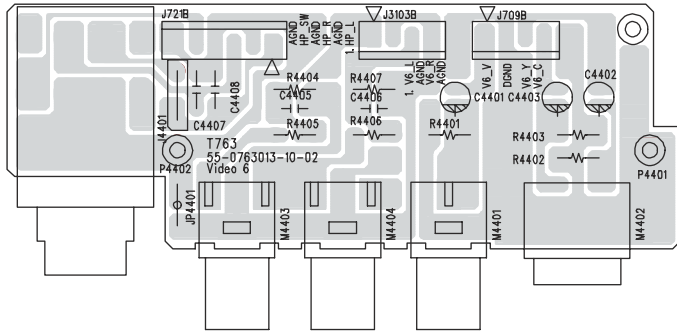
RS-232 BOARD - COPPER SIDE



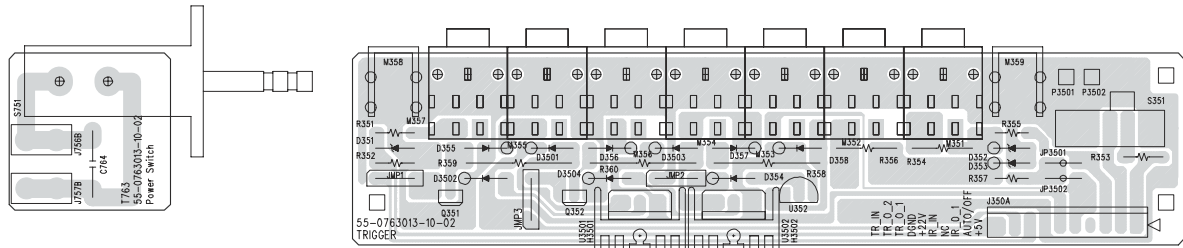
- COMPONENT SIDE



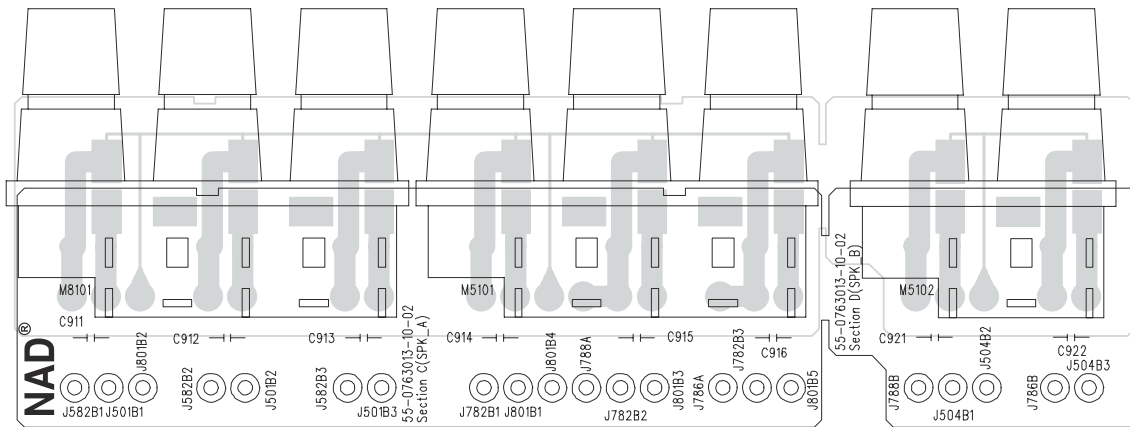
VIDEO 6 BOARD



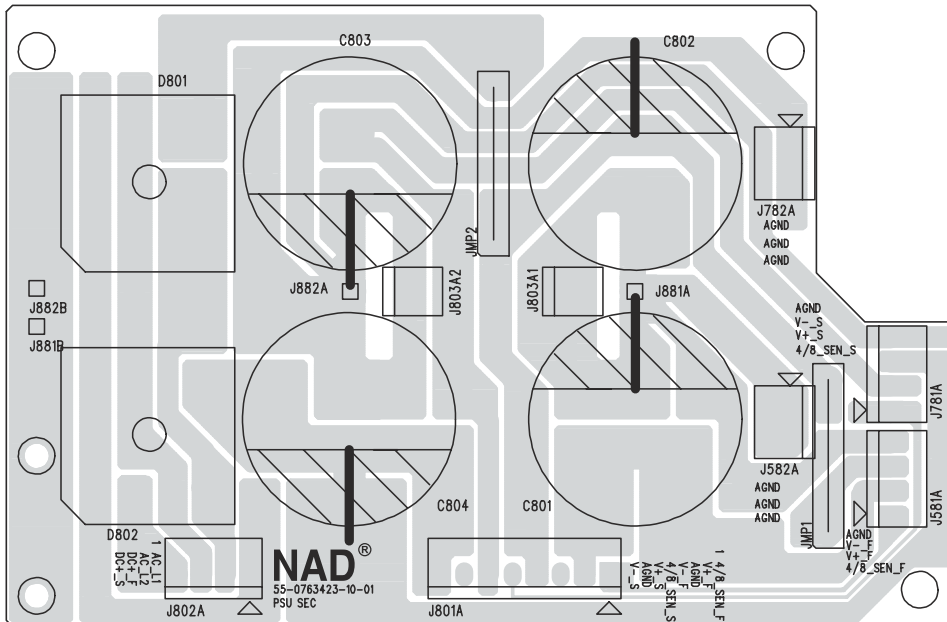
POWER SWITCH / TRIGGER BOARD



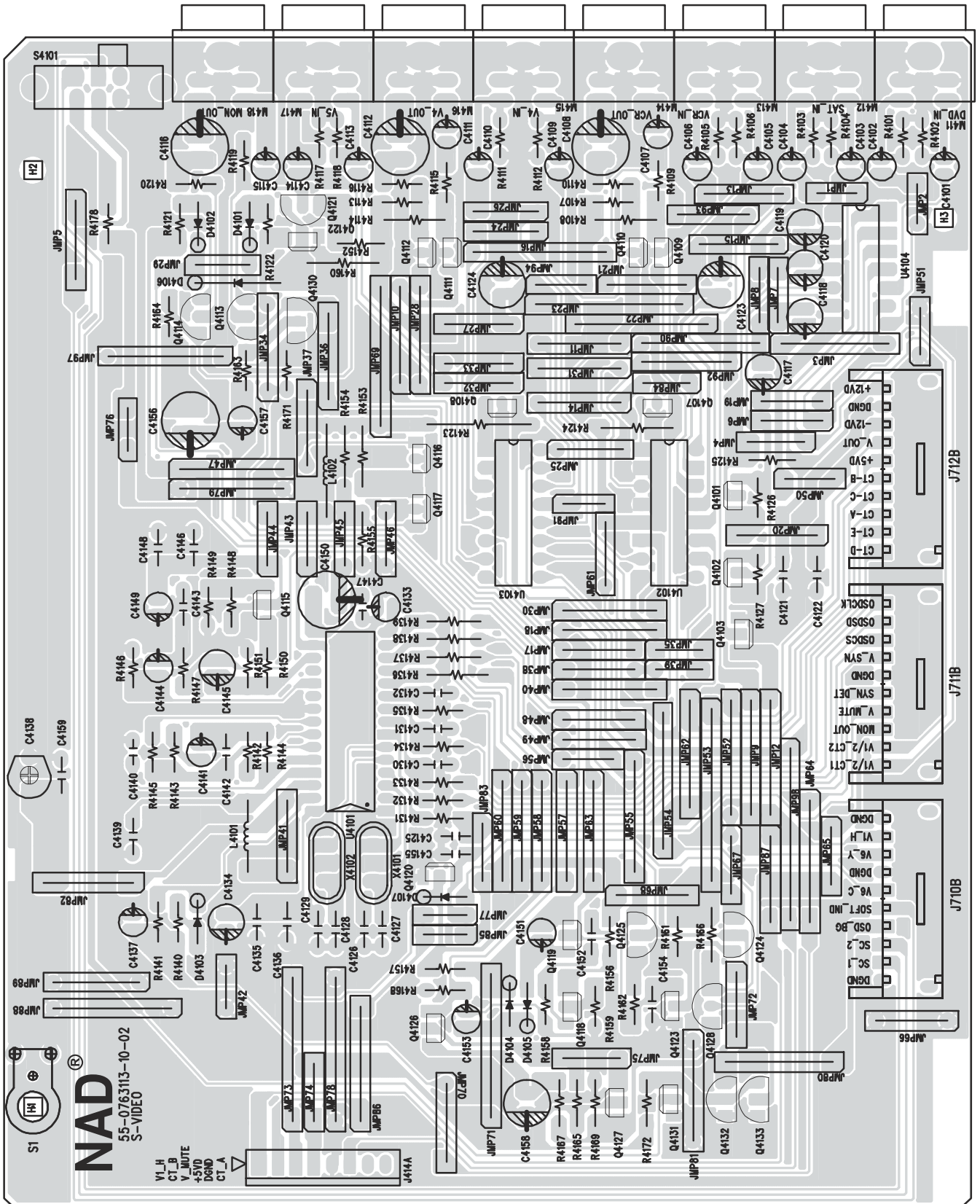
SPEAKER TERMINAL BOARD



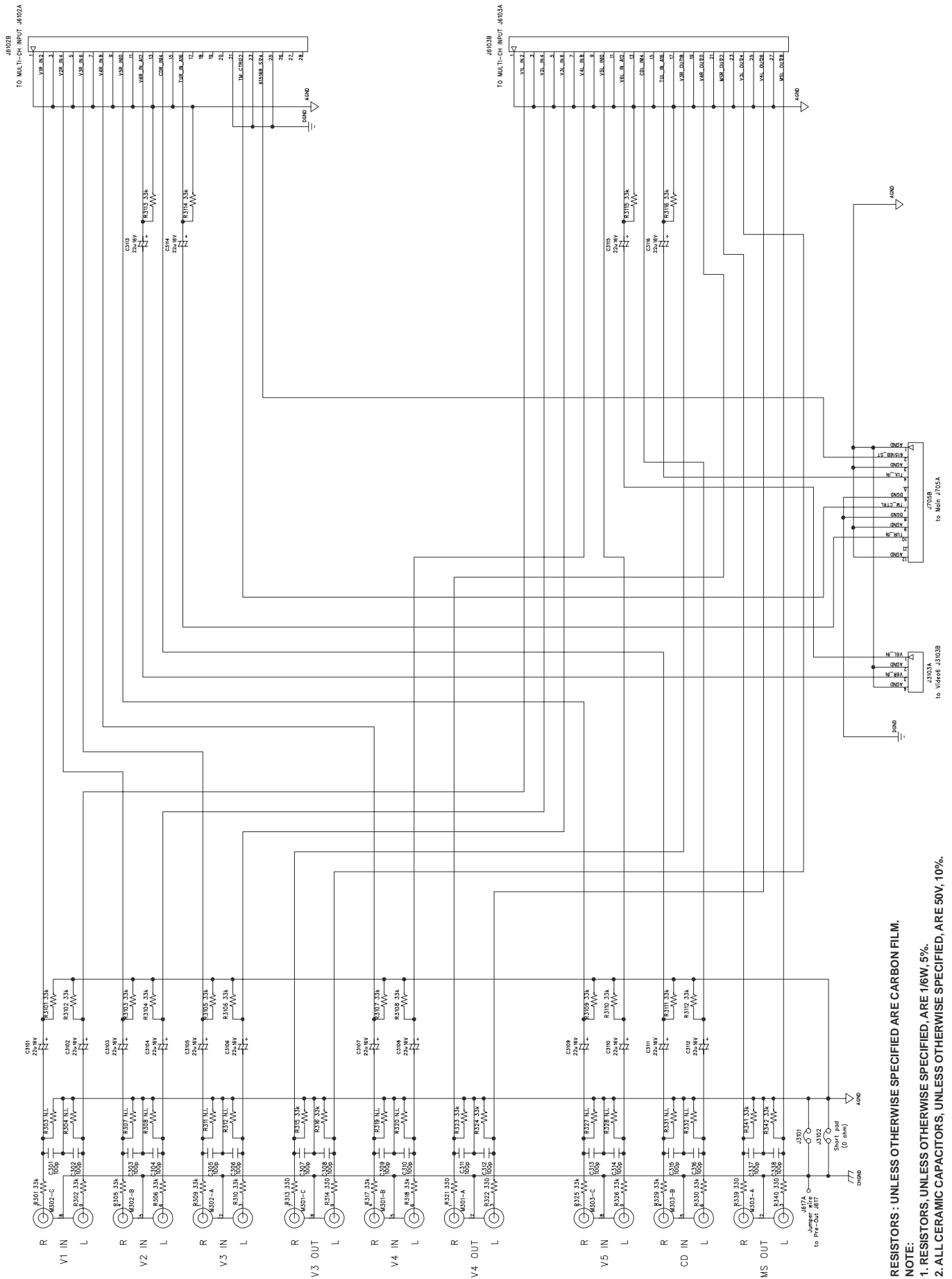
SECONDARY BOARD



S-VIDEO BOARD



SCHEMATIC DIAGRAM AUDIO SWITCH



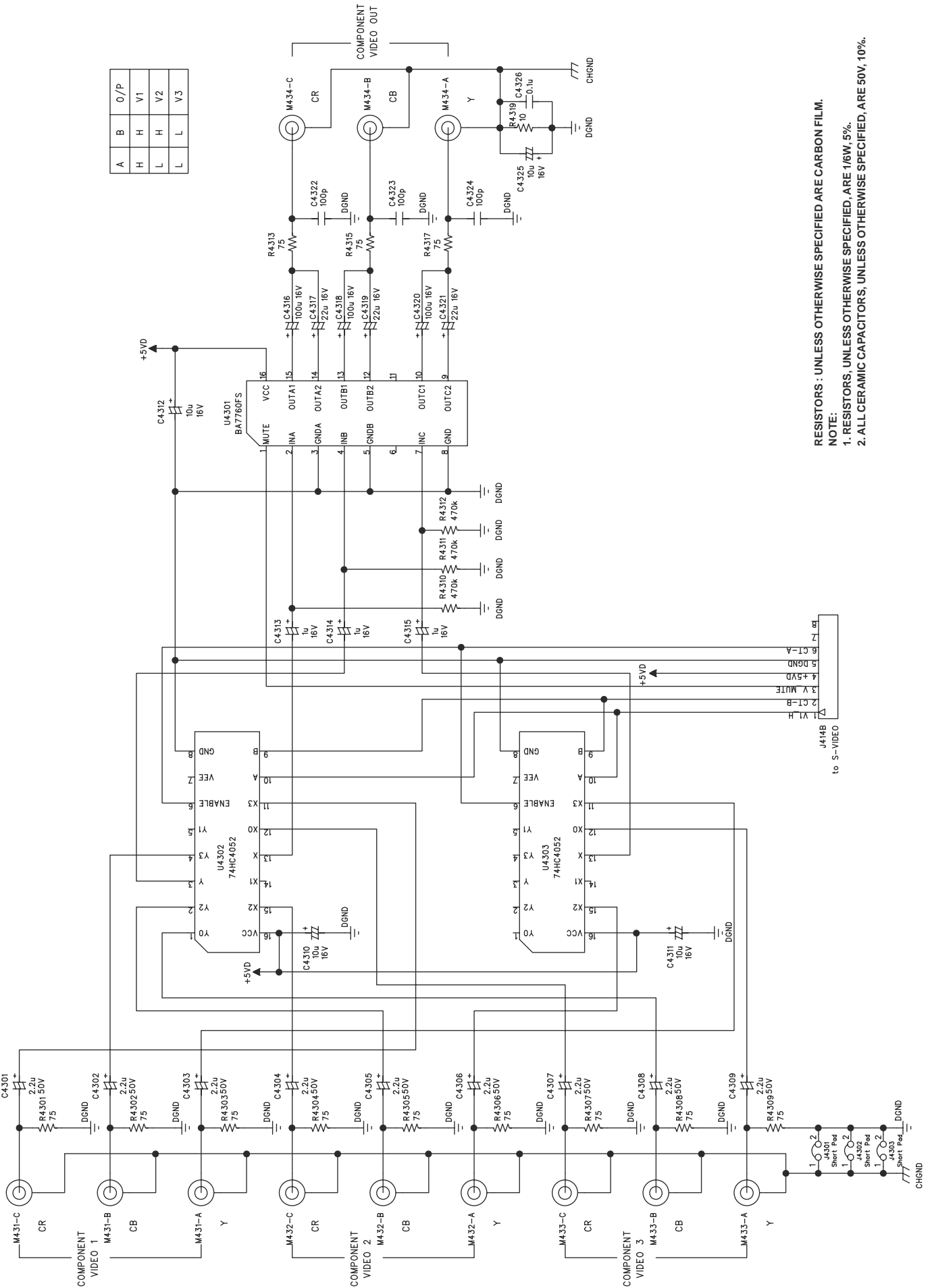
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.

NOTE:

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

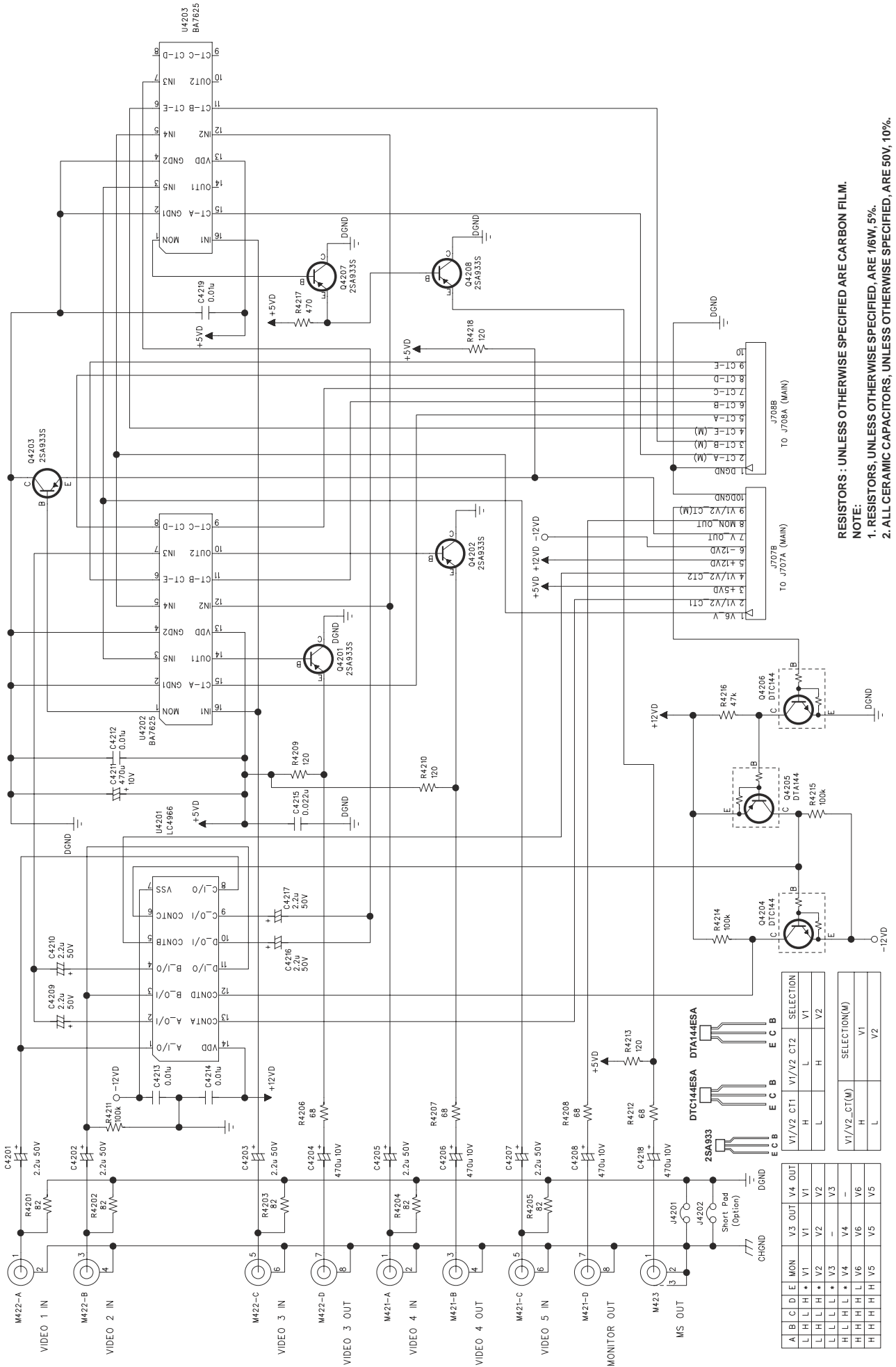
COMPONENT VIDEO

| A | B | O/P |
|---|---|-----|
| H | H | V1 |
| L | H | V2 |
| L | L | V3 |



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



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

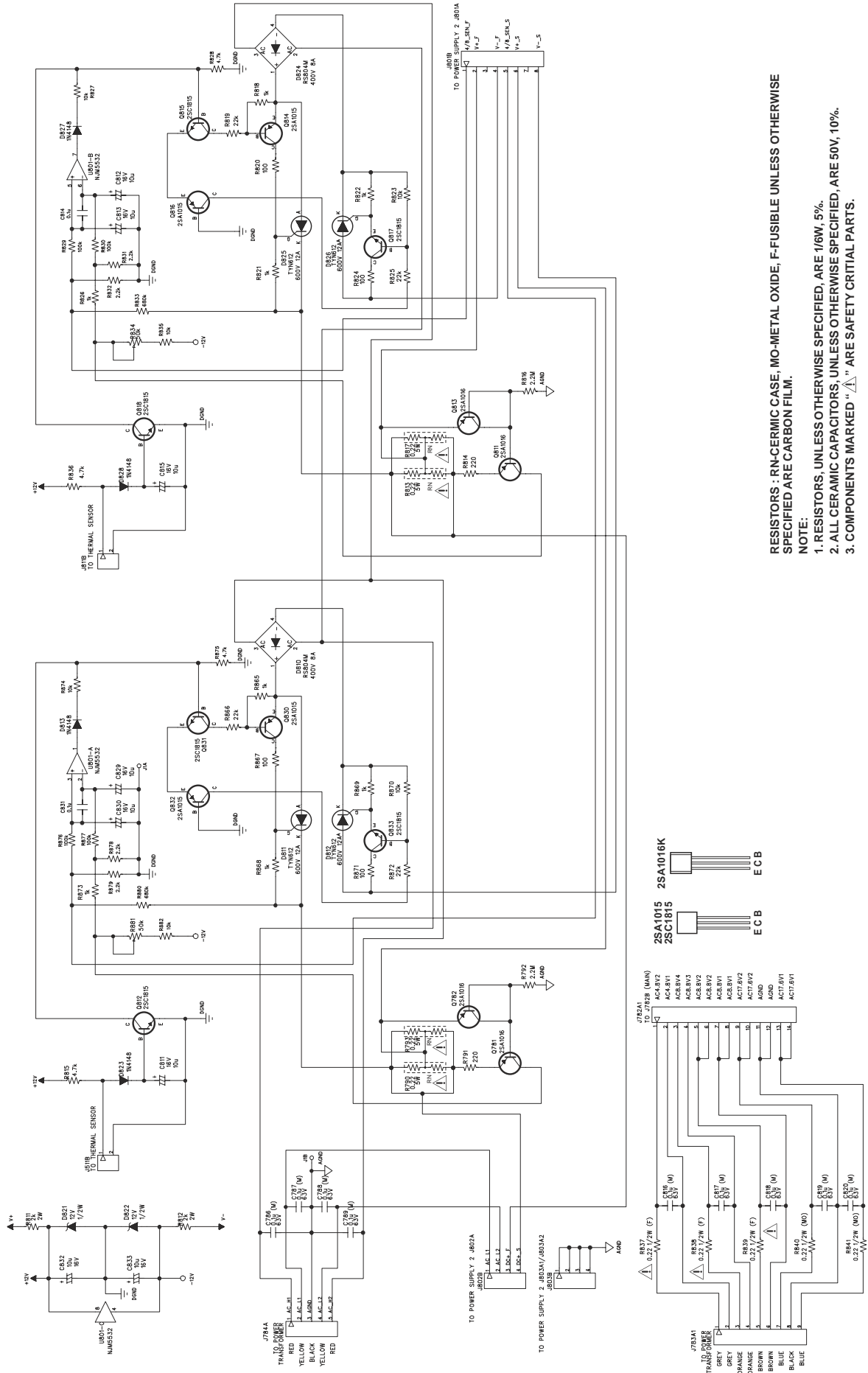
| SELECTION | | |
|-----------|-----|-------|
| V1/V2 | CT1 | V1/V2 |
| L | L | V1 |
| L | H | V2 |

| SELECTION(W) | | |
|--------------|-------|--------------|
| V1/V2 | CT(M) | SELECTION(W) |
| H | L | V1 |
| L | L | V2 |

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

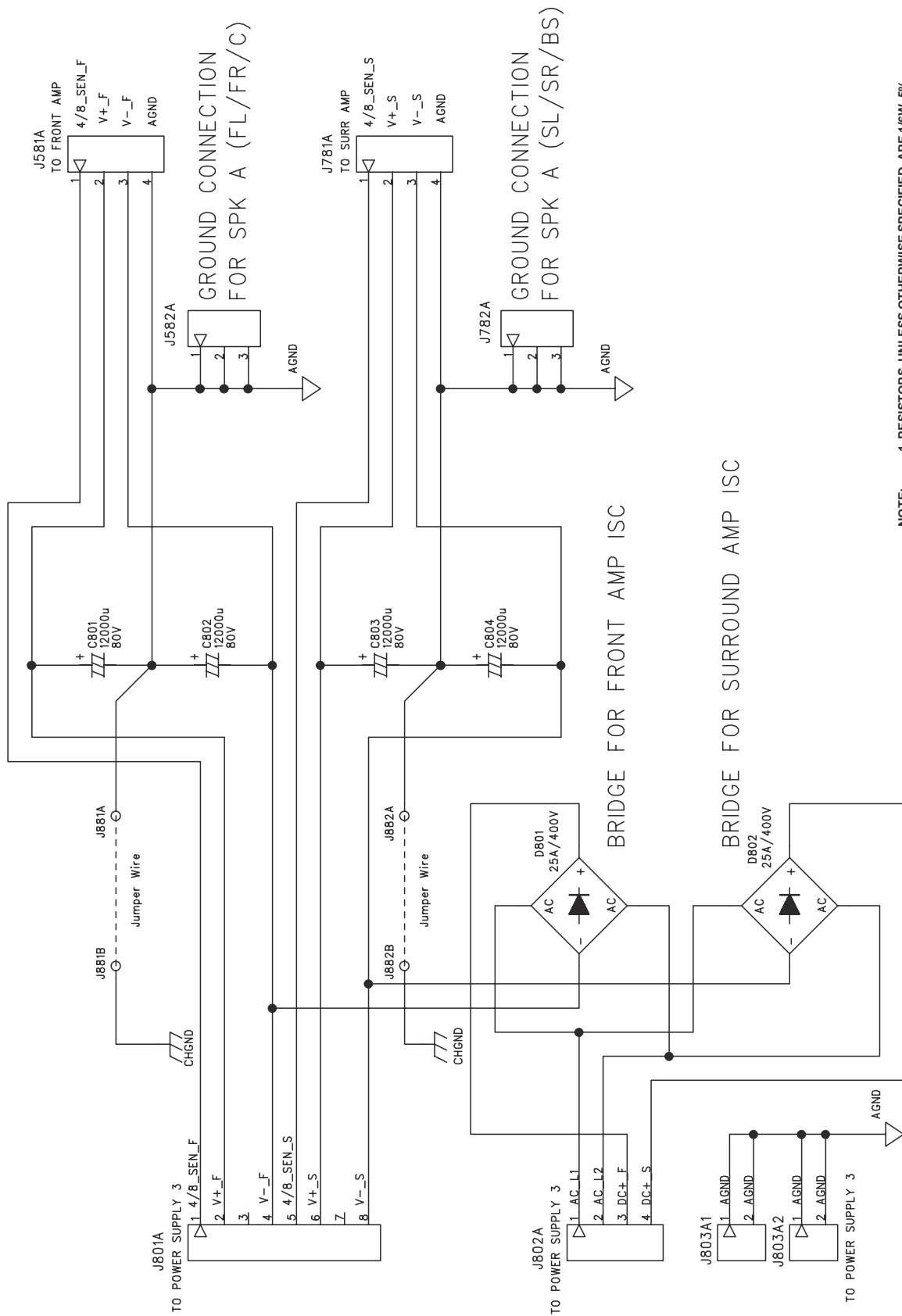
ISC FOR FRONT AMP

ISC FOR SURROUND AMP



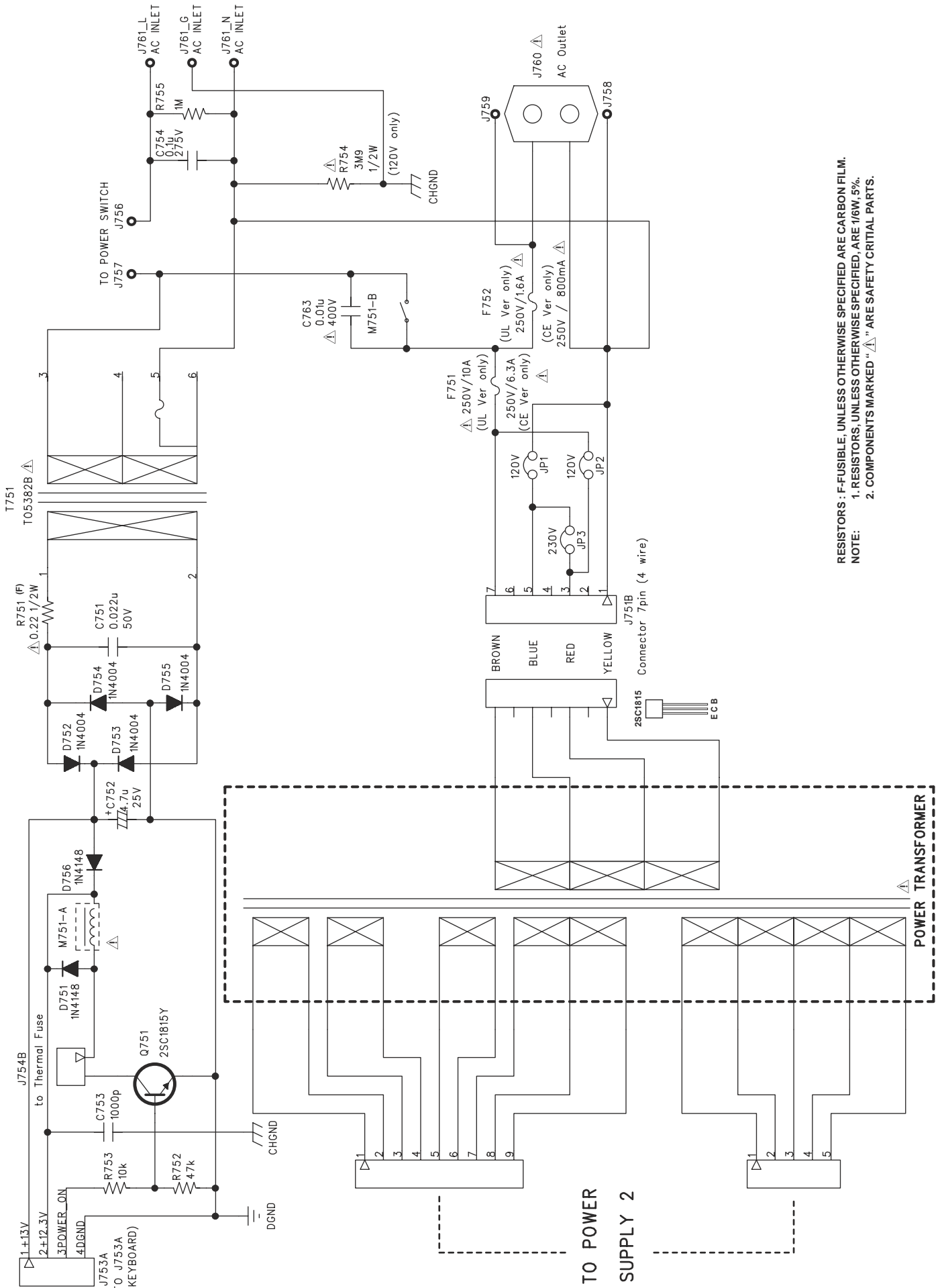
RESISTORS : RN-CERAMIC CASE, MO-METAL OXIDE, F-FUSIBLE UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
 NOTE:
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
 3. COMPONENTS MARKED "△" ARE SAFETY CRITICAL PARTS.

POWER SUPPLY (SECONDARY)



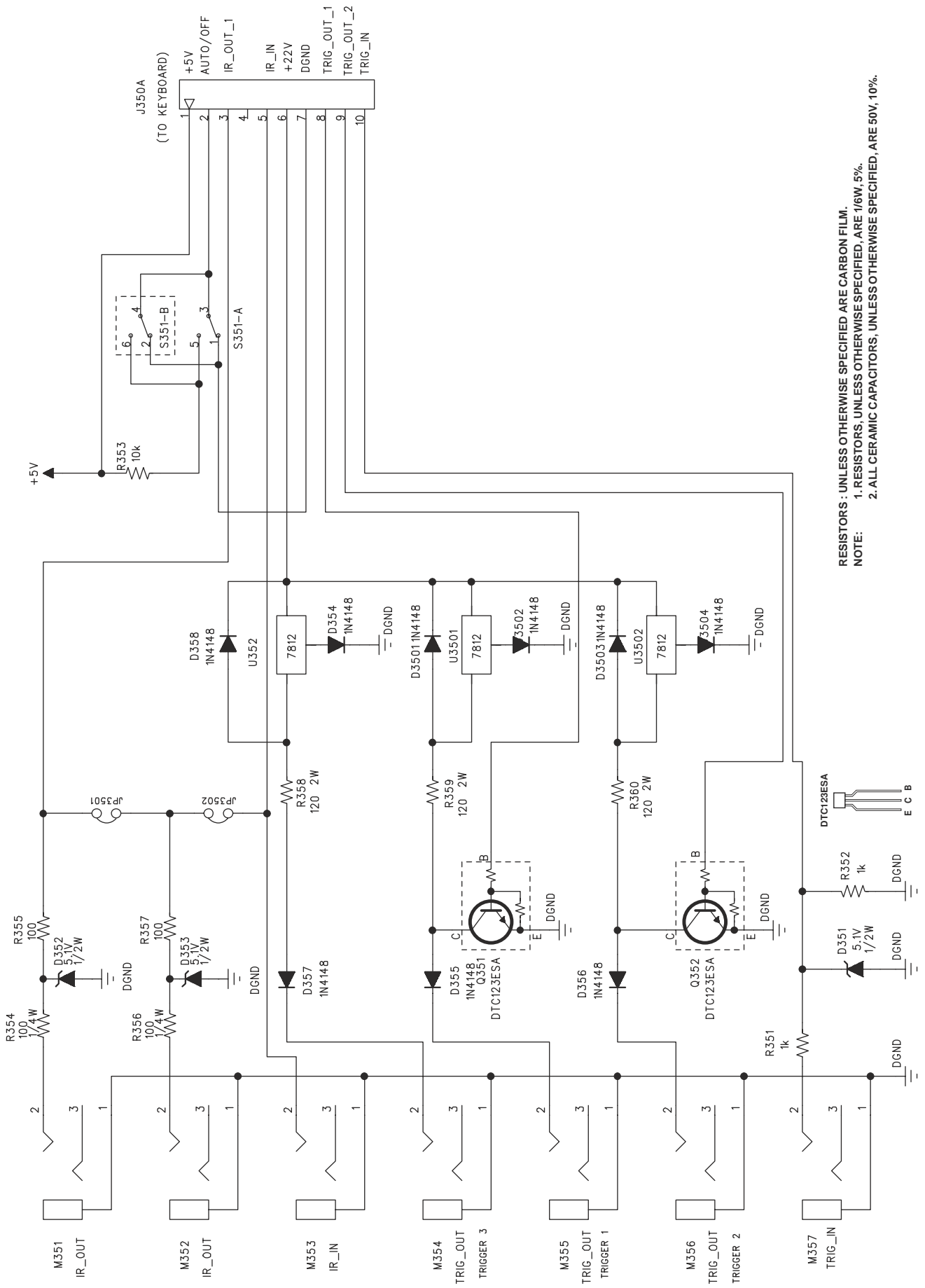
NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. COMPONENTS MARKED "△" ARE SAFETY CRITICAL PARTS.

POWER SUPPLY (STAND BY)



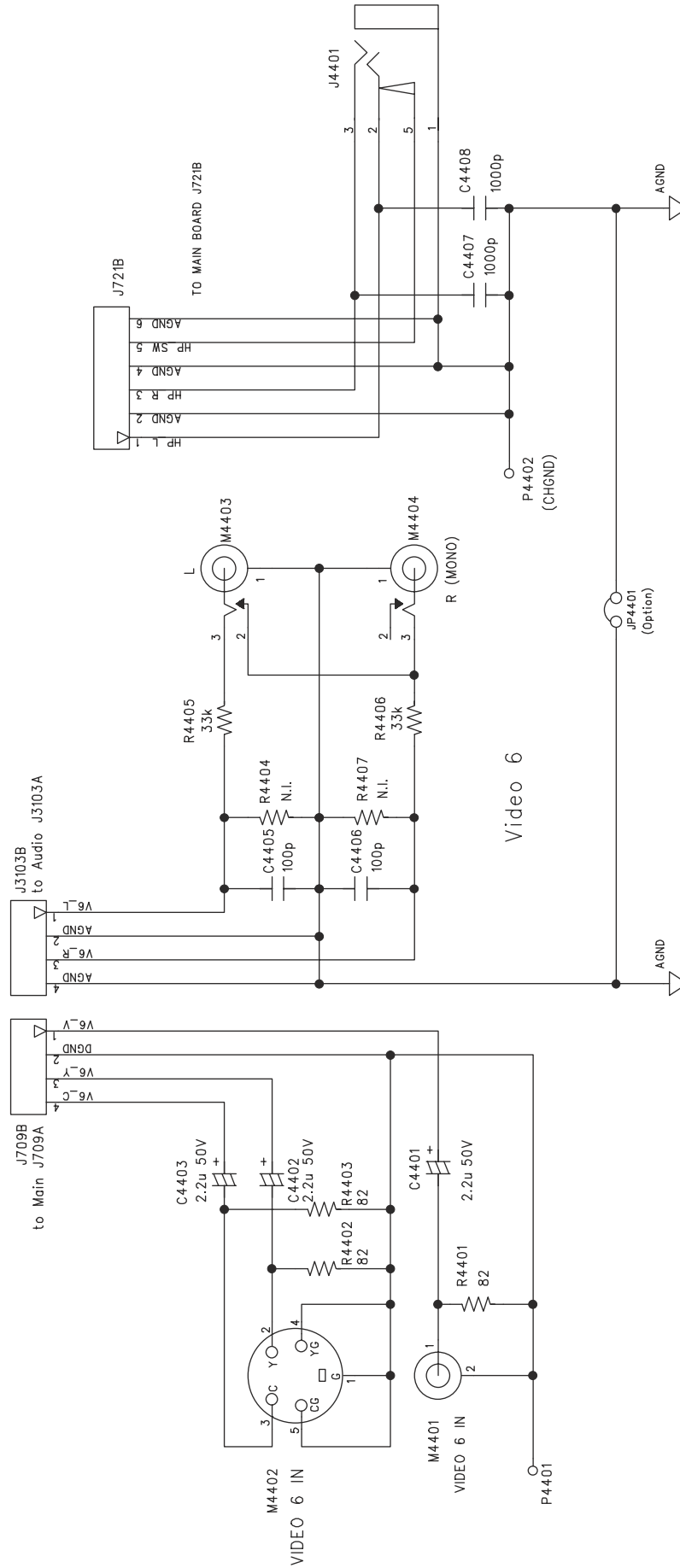
RESISTORS: F-FUSIBLE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
 NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. COMPONENTS MARKED "△" ARE SAFETY CRITICAL PARTS.

TRIGGER



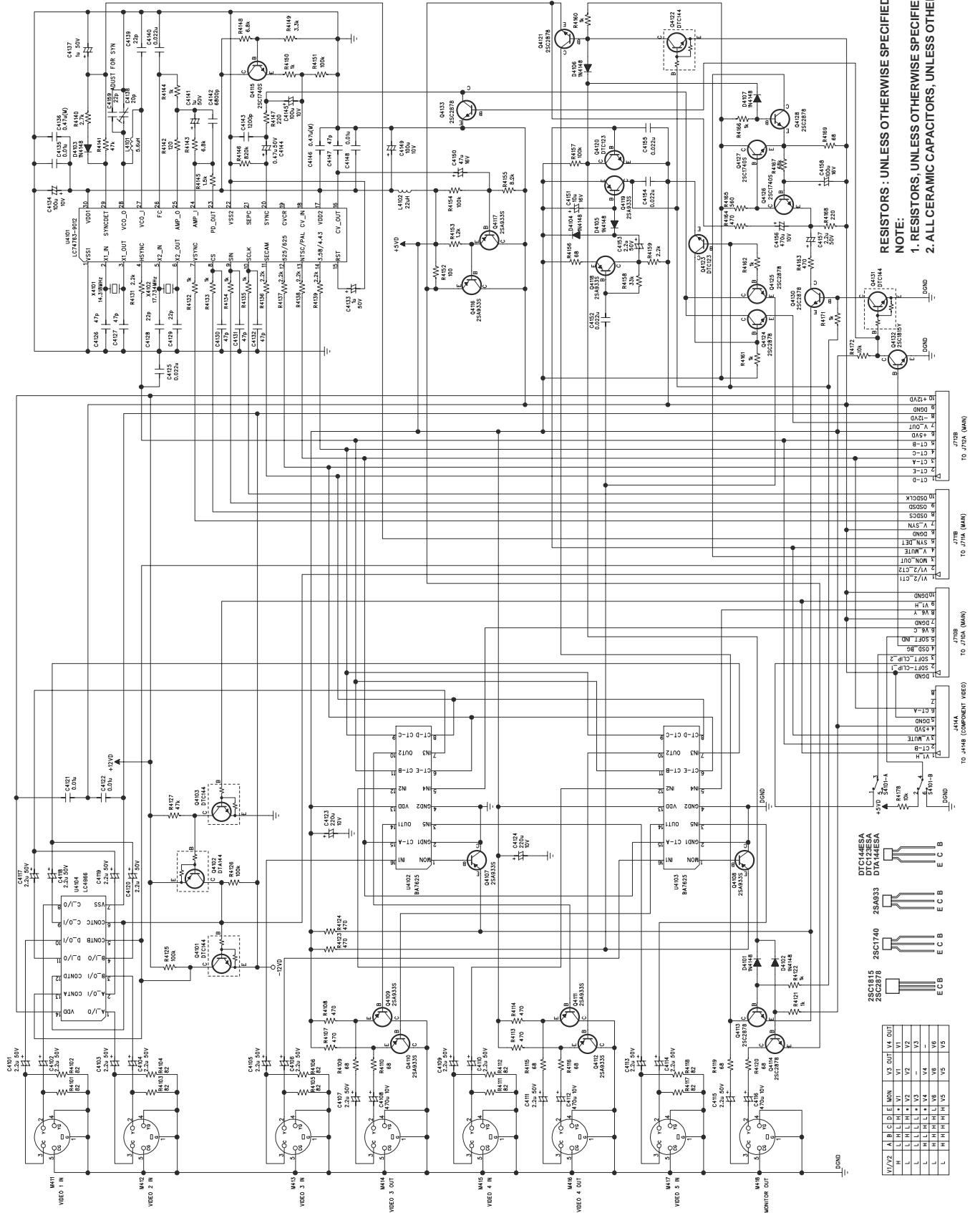
RESISTORS: UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
 NOTE: 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

VIDEO 6

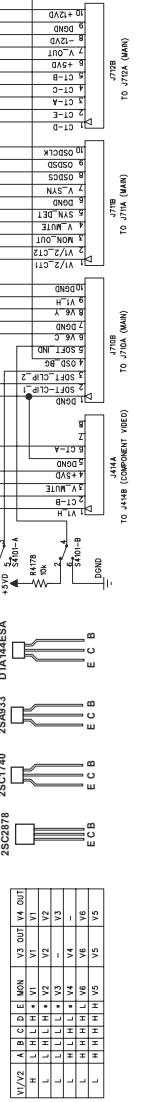


RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
 NOTE:
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

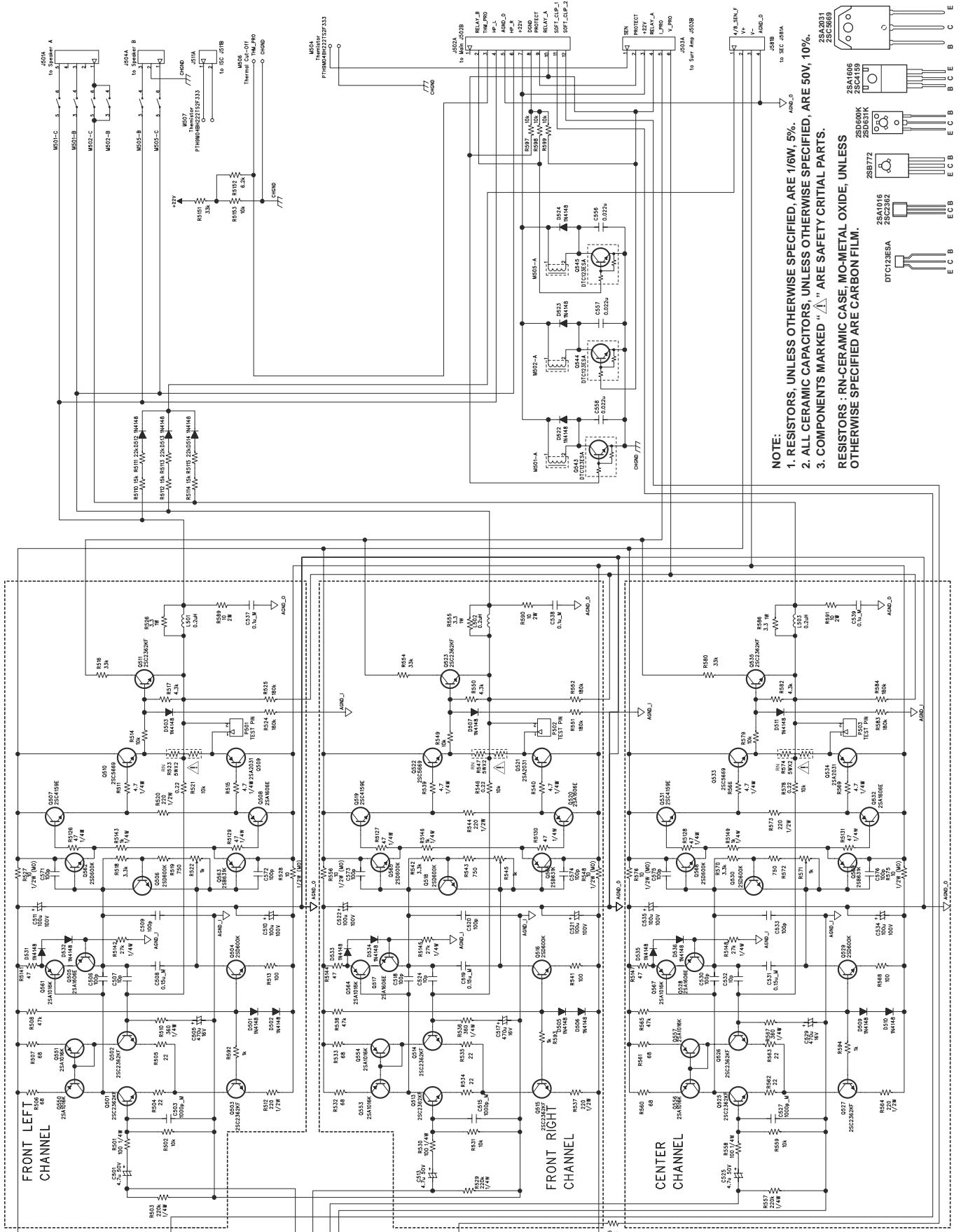
S-VIDEO



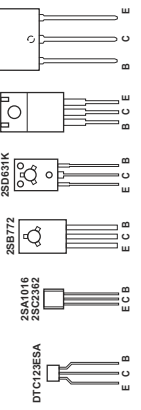
RESISTORS : UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.
 NOTE:
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/8W, 5%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.



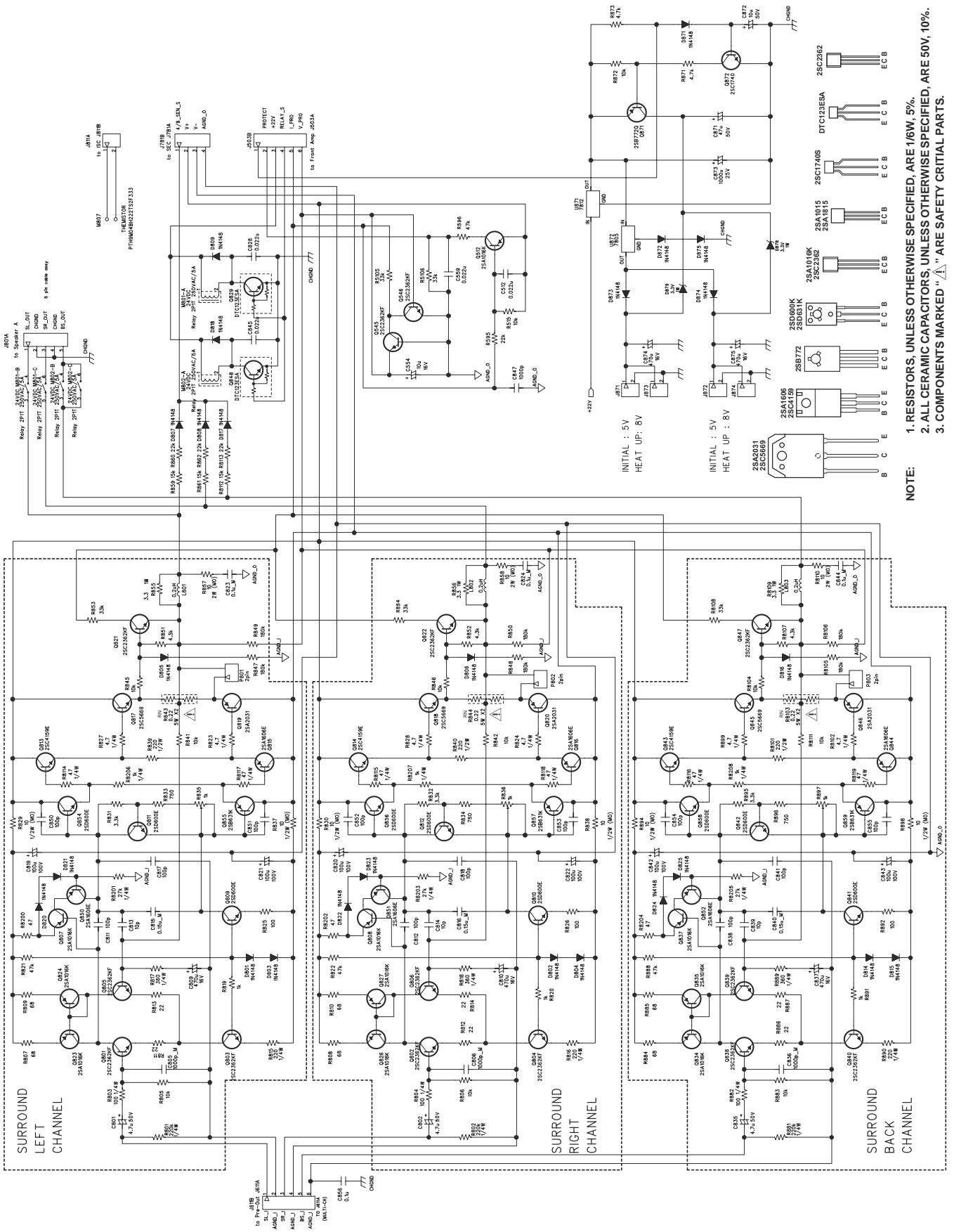
FRONT / CENTER AMPLIFIER



NOTE:
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%, ARE 50V, 10%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
 3. COMPONENTS MARKED ∇ ARE SAFETY CRITICAL PARTS.
 RESISTORS : RN-CERAMIC CASE, MO-METAL OXIDE, UNLESS OTHERWISE SPECIFIED ARE CARBON FILM.



SURROUND / BACK SURROUND AMPLIFIER

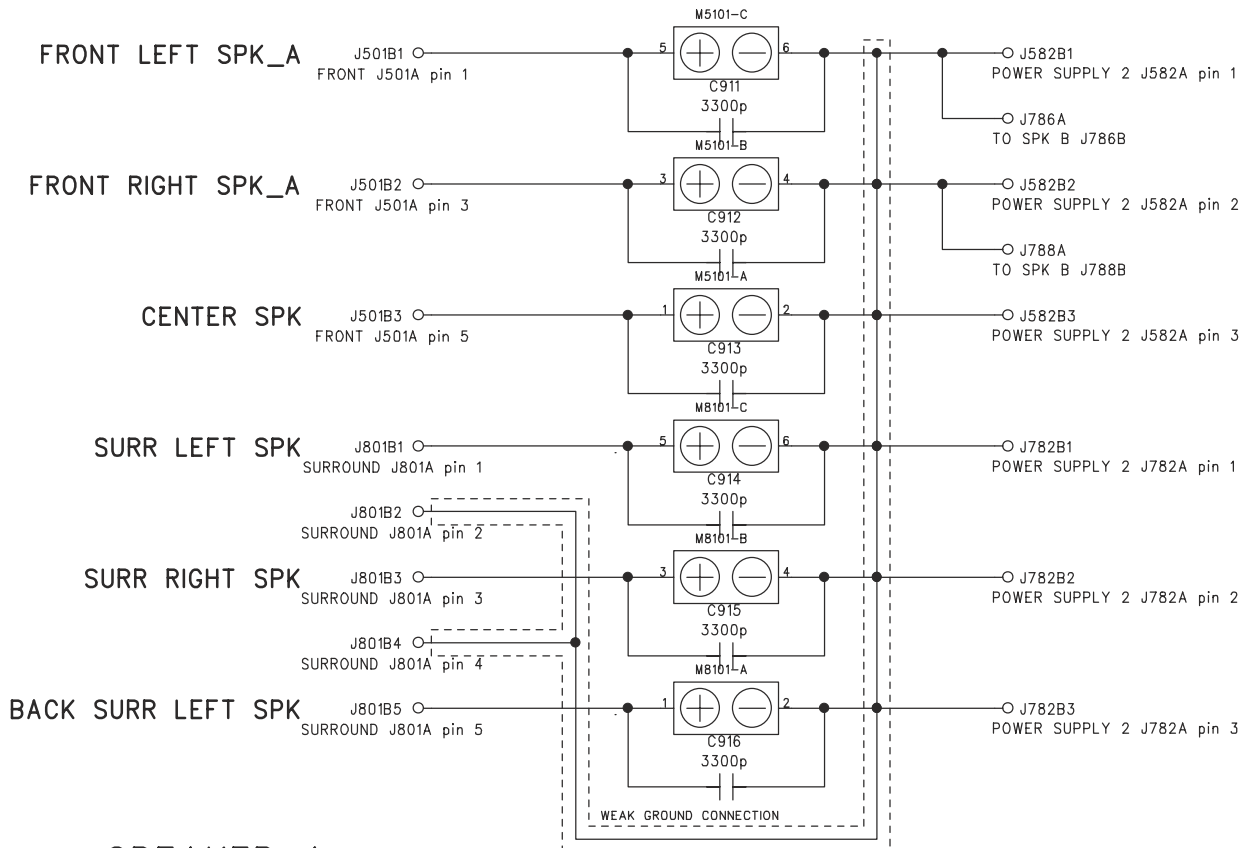


NOTE:

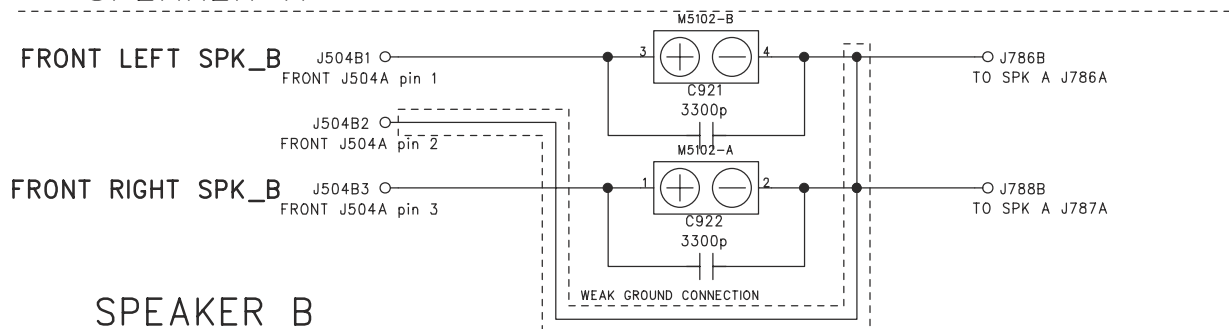
1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/8W, 5%.
2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.
3. COMPONENTS MARKED "△" ARE SAFETY CRITICAL PARTS.

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

SPEAKER A & B

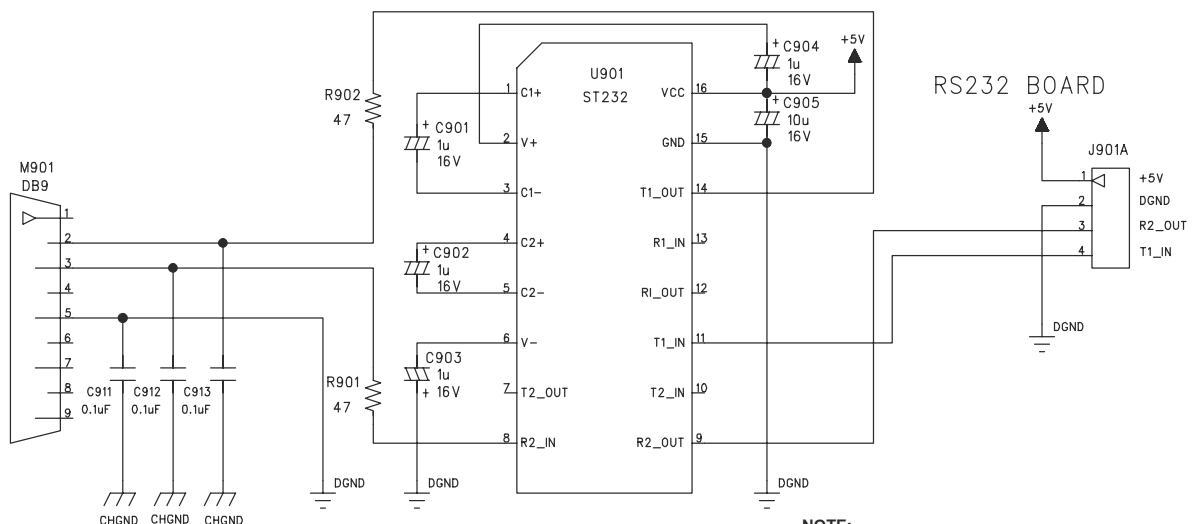


SPEAKER A



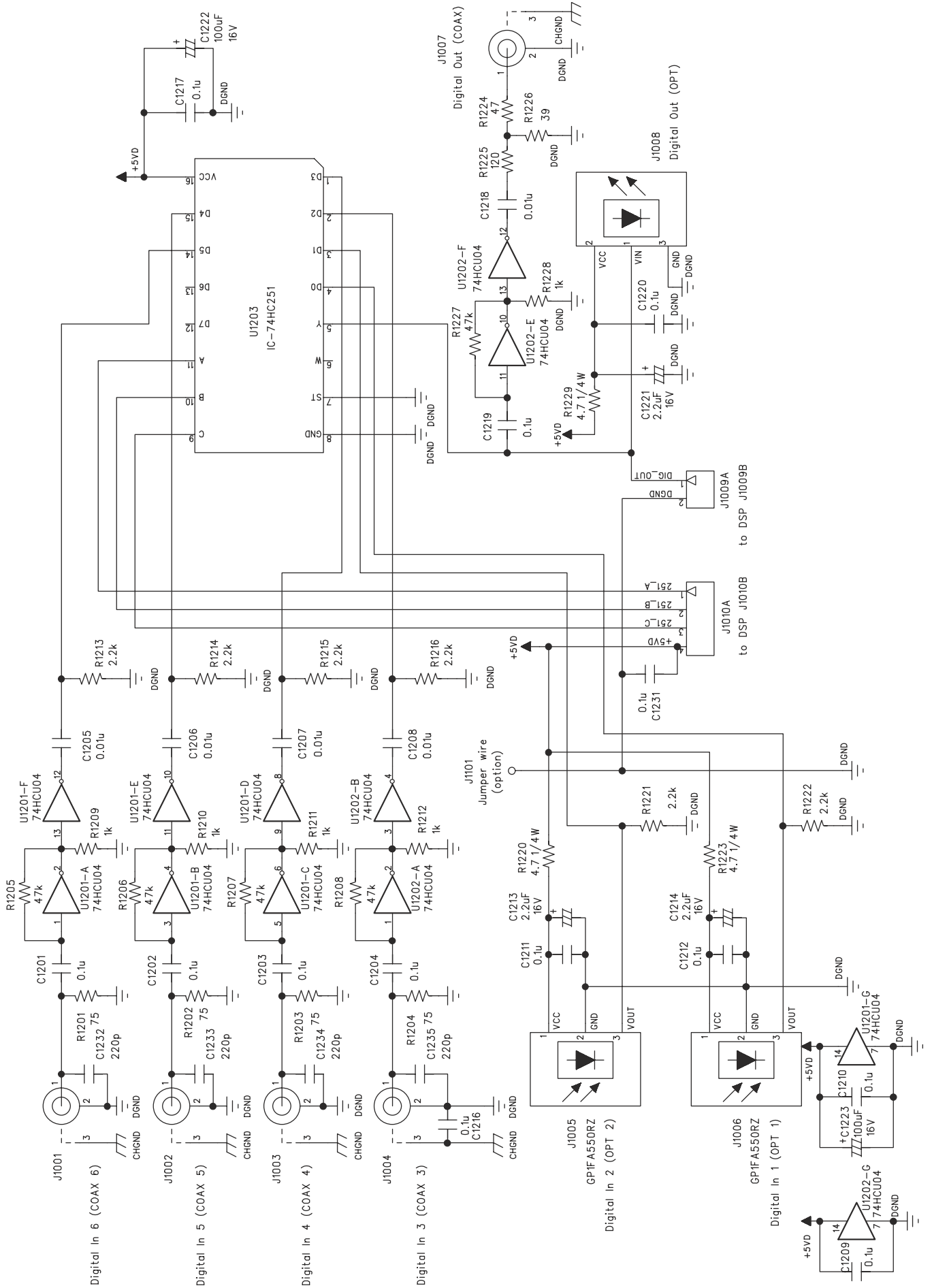
SPEAKER B

RS-232

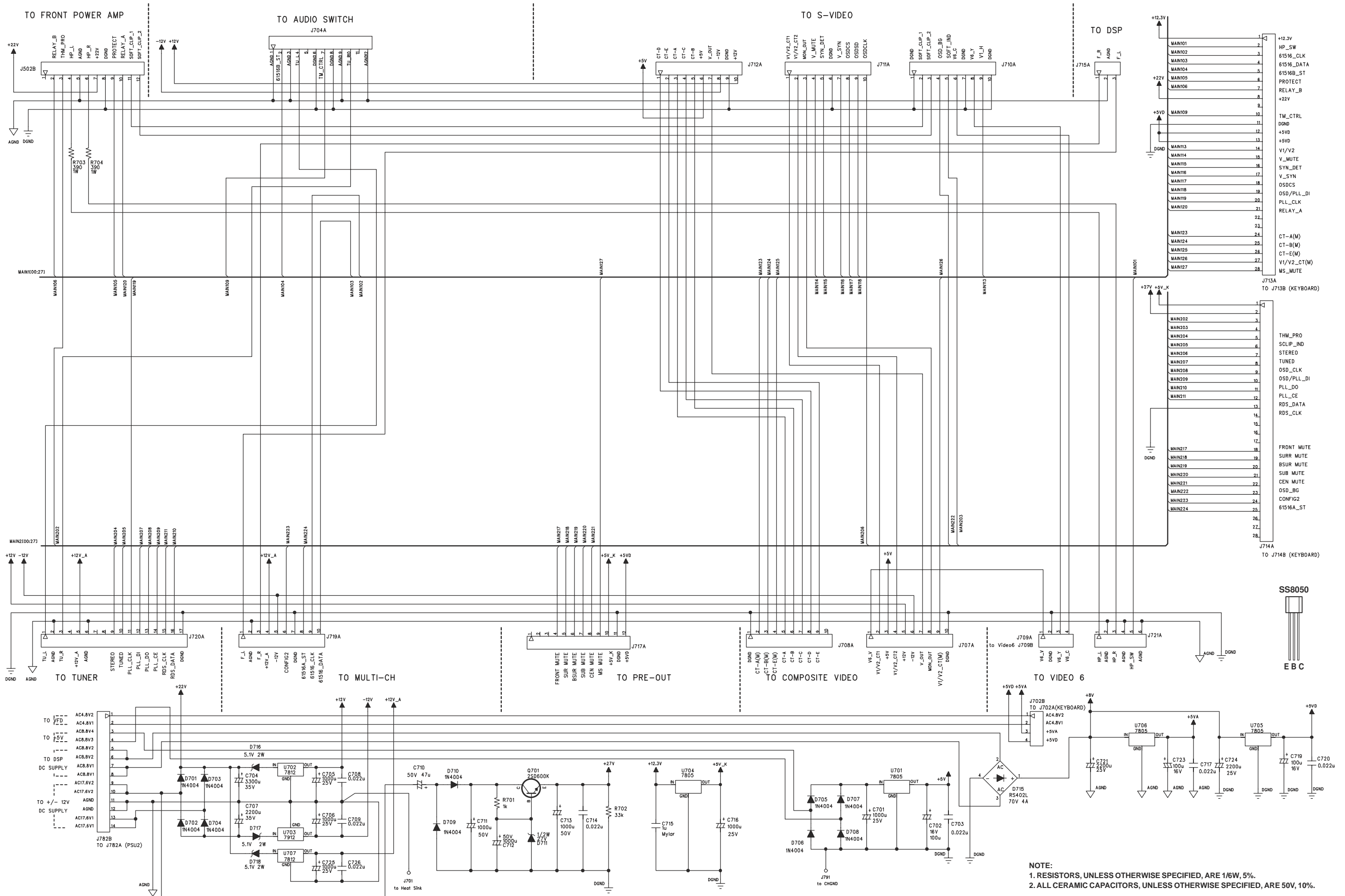


NOTE:
1. RESISTORS, UNLESS OTHERWISE SPECIFIED,
ARE 1/6W, 5%.

DIGITAL IN & OUT

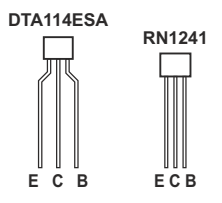
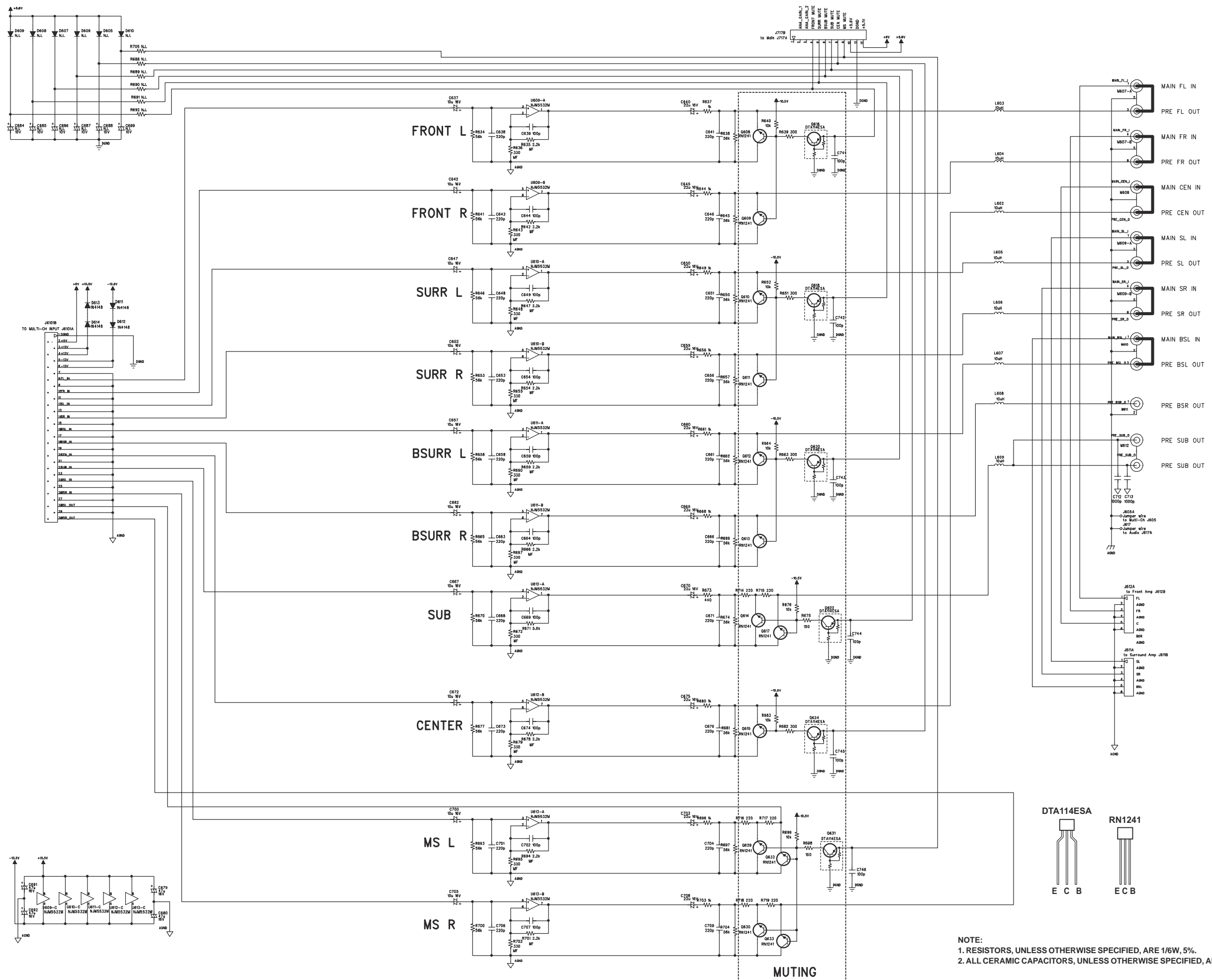


MAIN BOARD



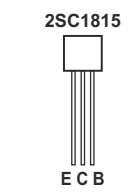
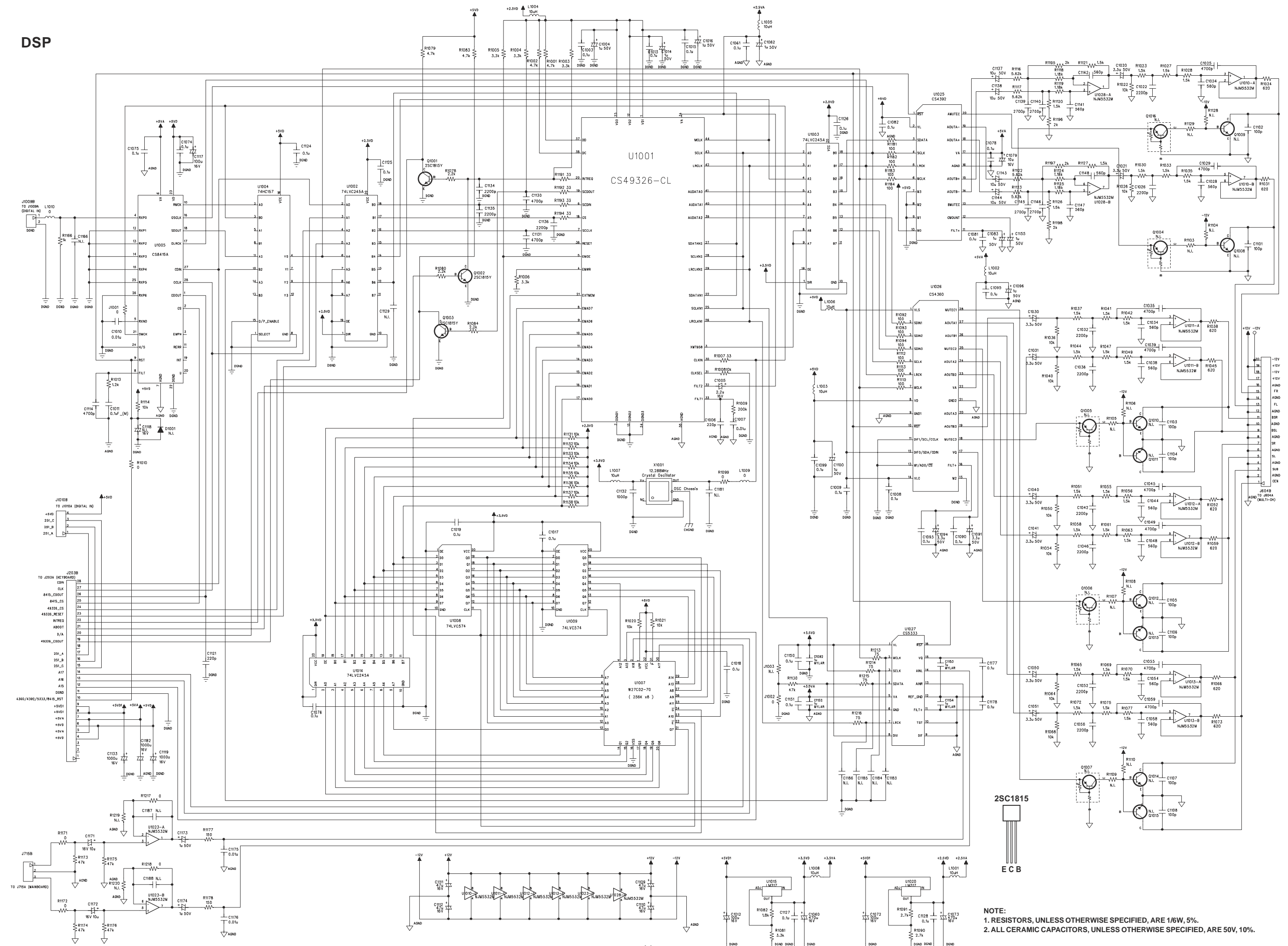
NOTE:
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

PRE-OUT



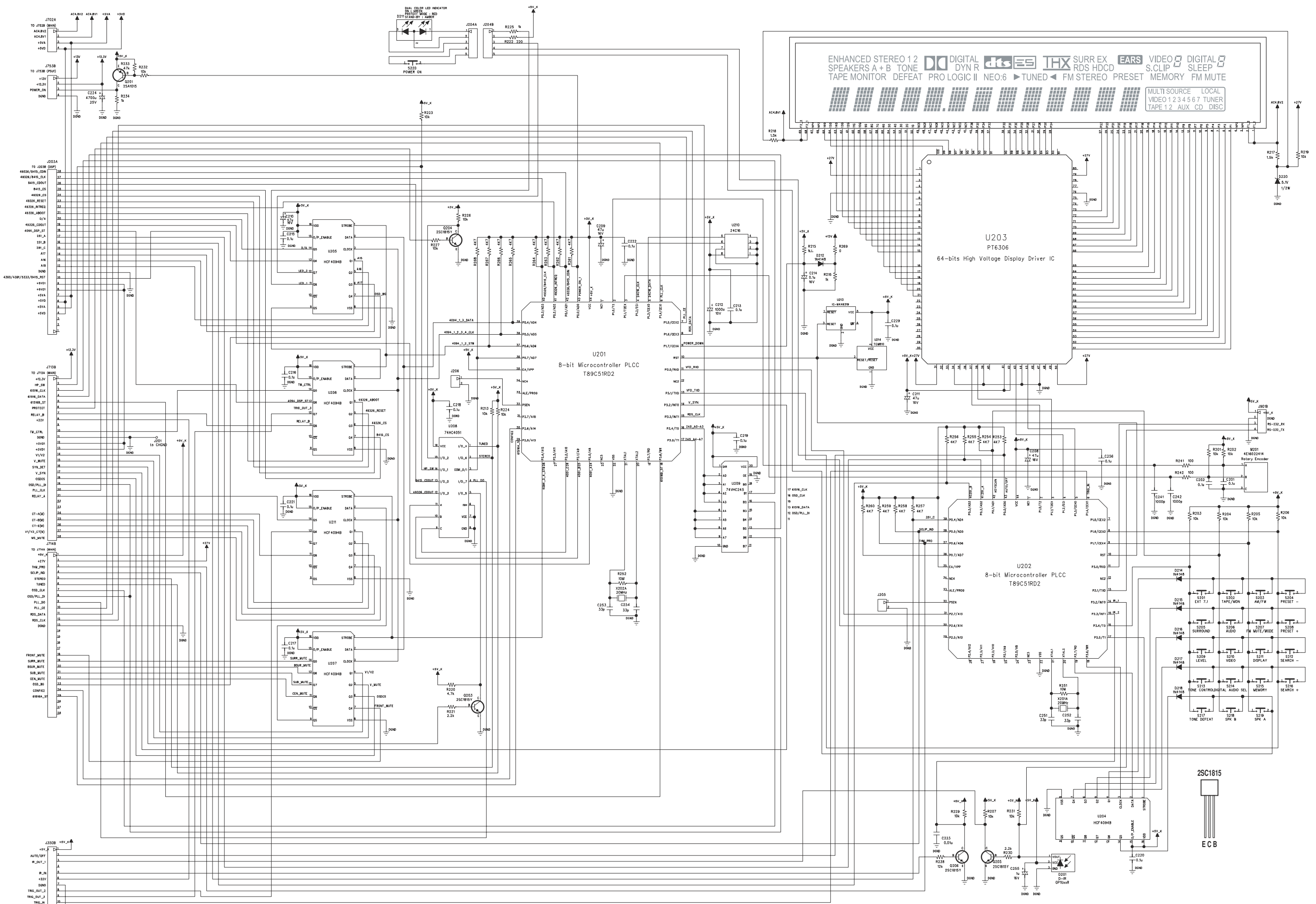
NOTE:
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

DSP



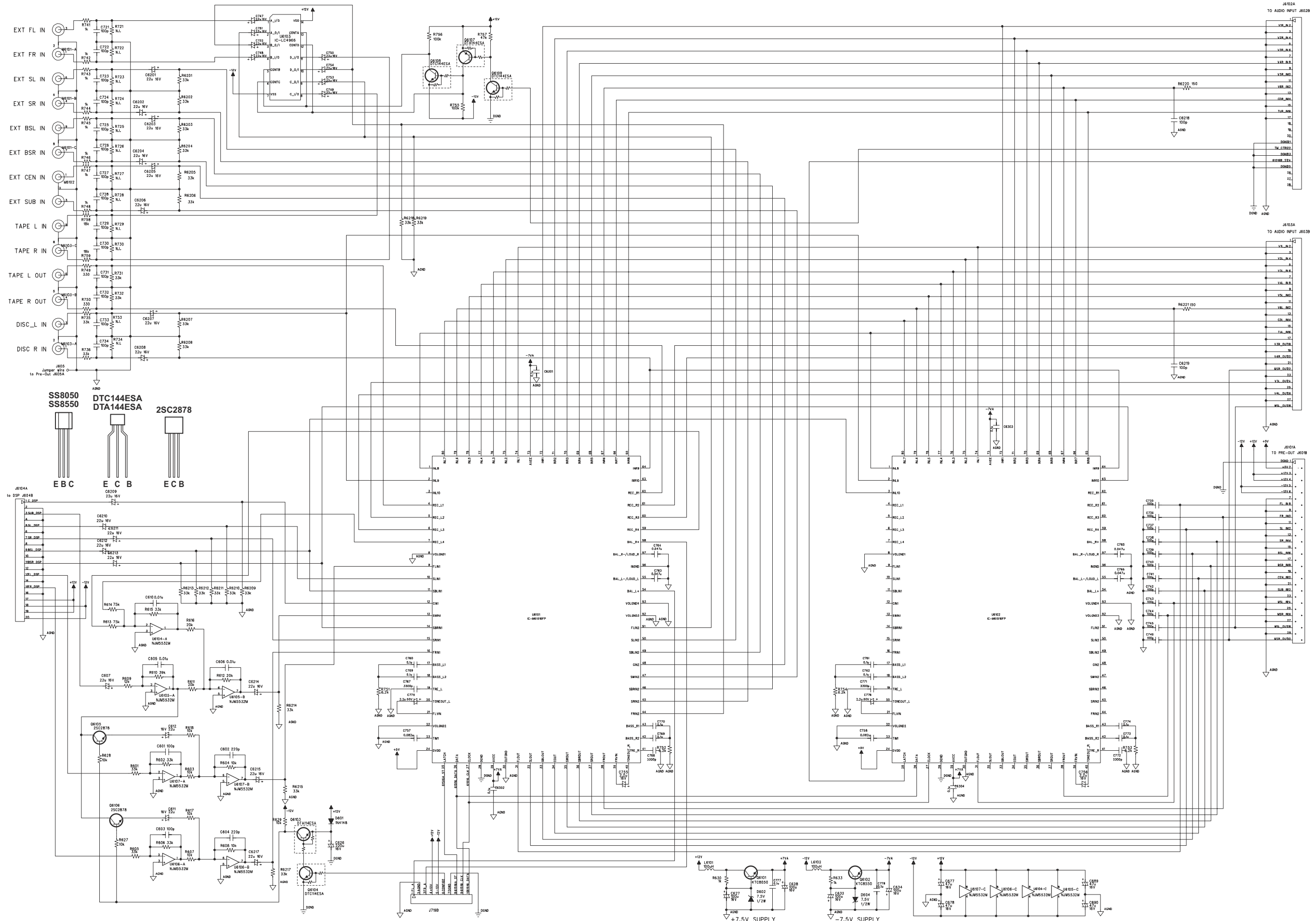
NOTE:
 1. RESISTORS, UNLESS OTHERWISE SPECIFIED, ARE 1/6W, 5%.
 2. ALL CERAMIC CAPACITORS, UNLESS OTHERWISE SPECIFIED, ARE 50V, 10%.

KEYBOARD



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

MULTI-CH



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%.

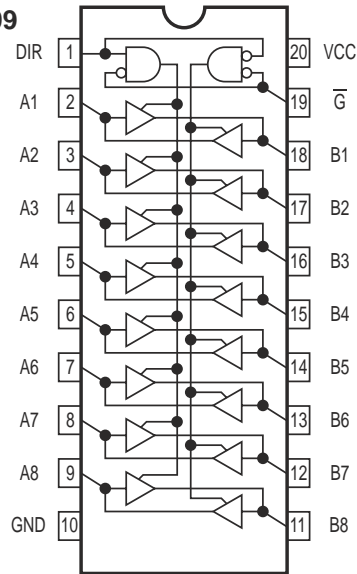
IC BLOCK DIAGRAM

74LVC245

DSP BOARD: U1002, U1003, U1014

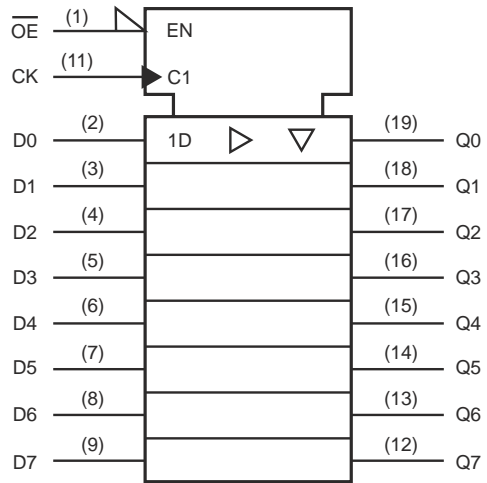
74VHC245

KEYBOARD: U209



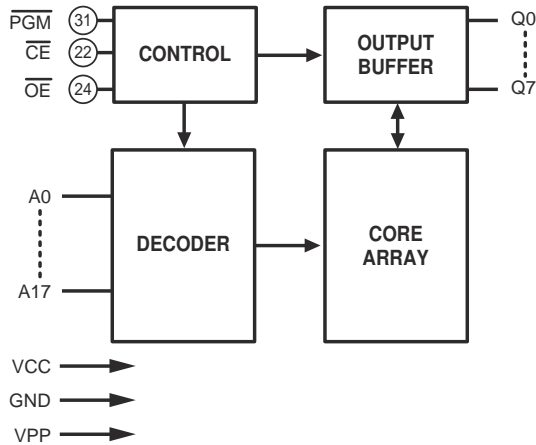
74LVQ574

DSP BOARD: U1008, U1009



W27C020

DSP BOARD: U1007



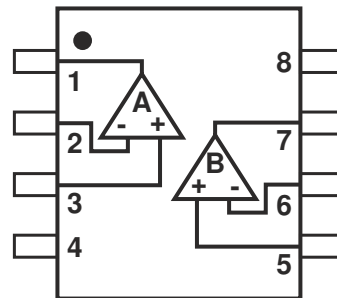
NJM5532

DSP BOARD: U1010~U1013, U1023 & U1028

MULTI-CHANNEL: U6104~U6107

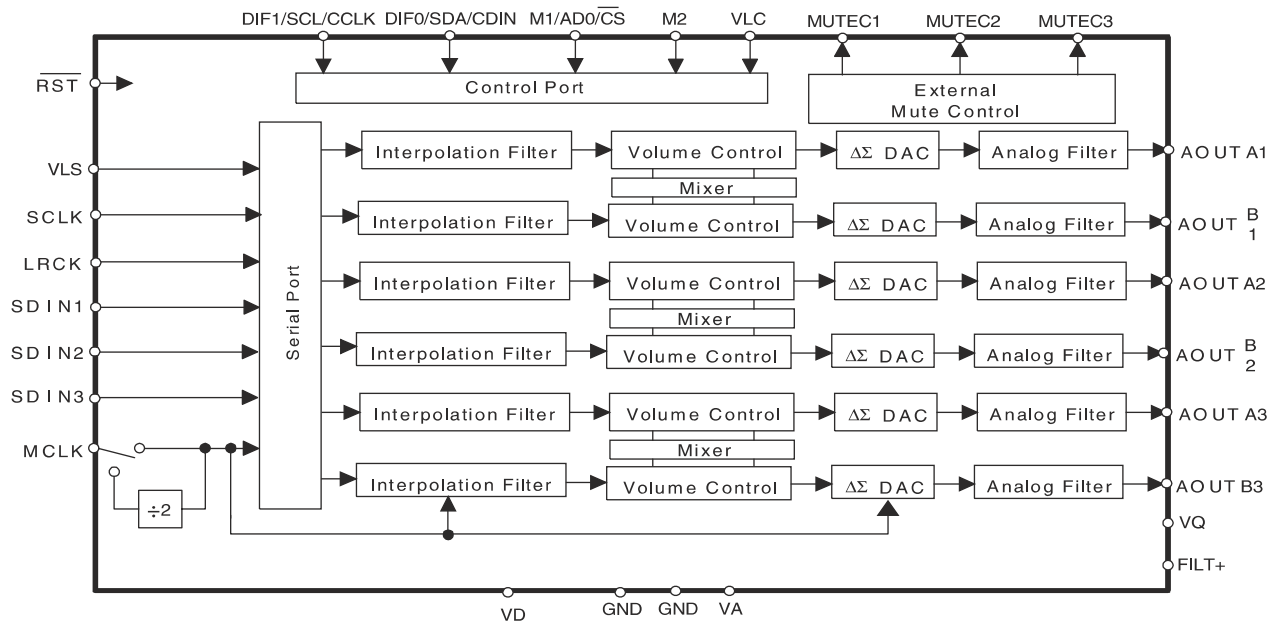
PRE-OUT BOARD: U609~U613

ISC BOARD: U801

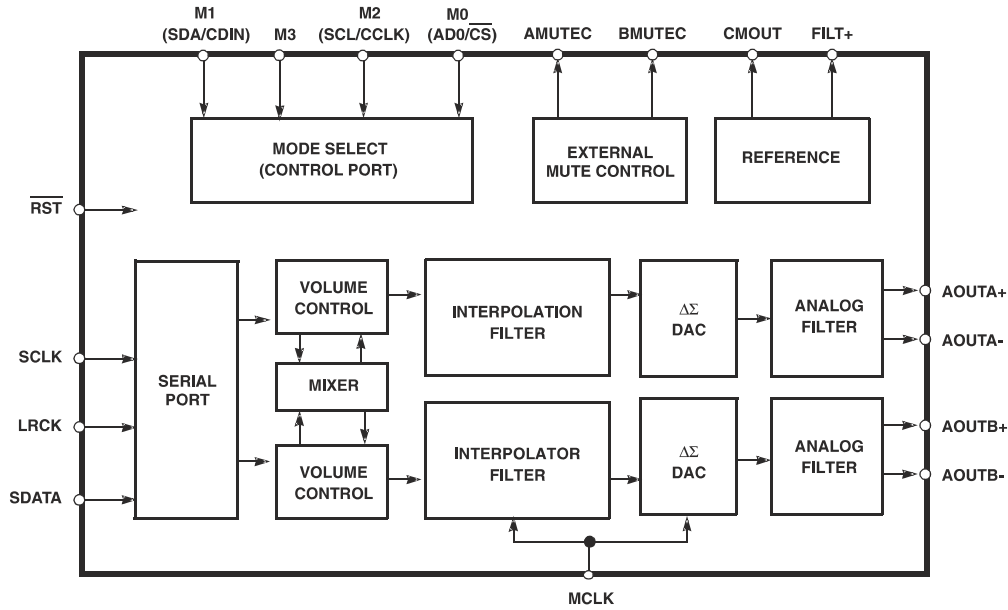


CS4360KZ

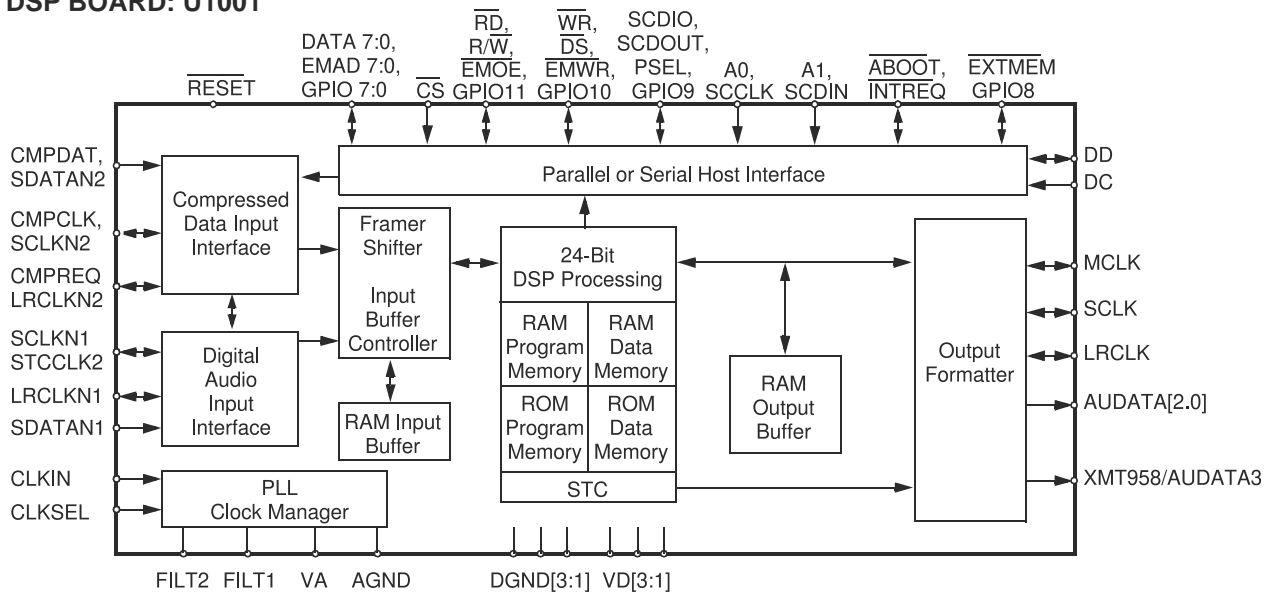
DSP BOARD: U1026



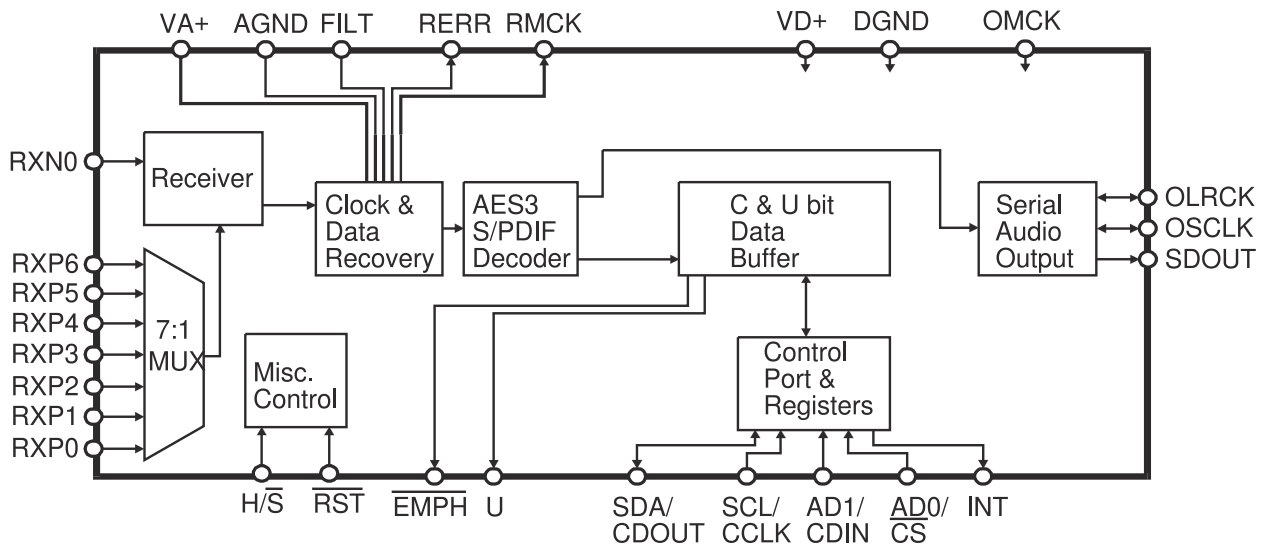
CS4392
DSP BOARD: U1025



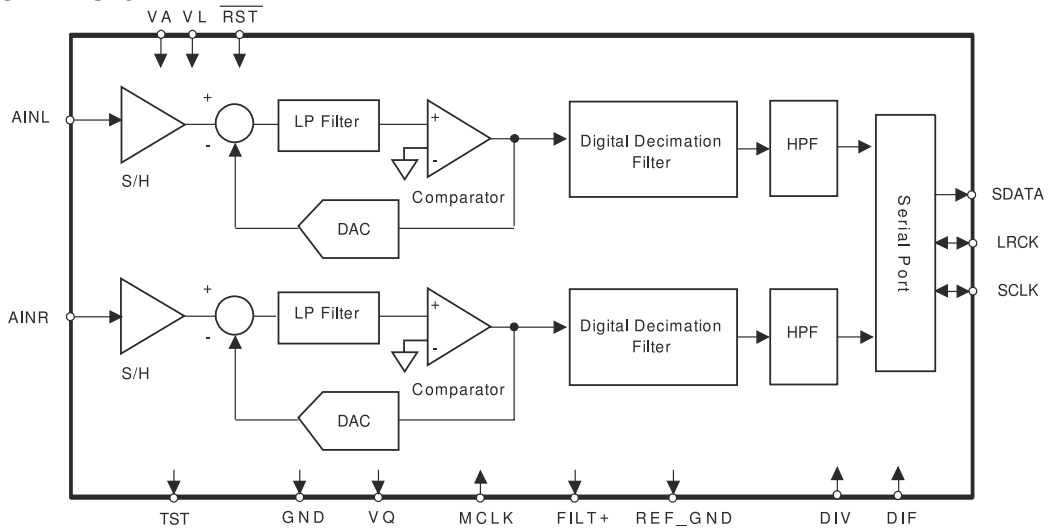
CS49326
DSP BOARD: U1001



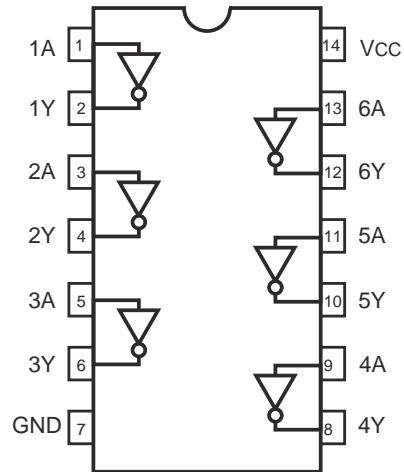
CS8415A
DSP BOARD: U1005



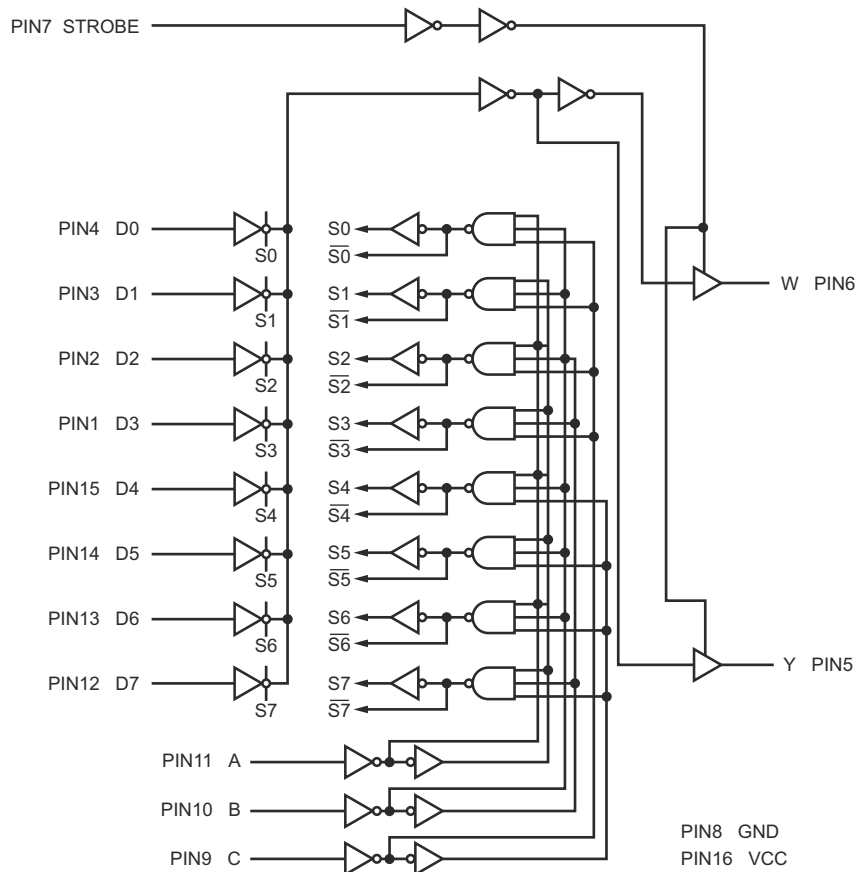
CS5333KZ
DSP BOARD: U1027



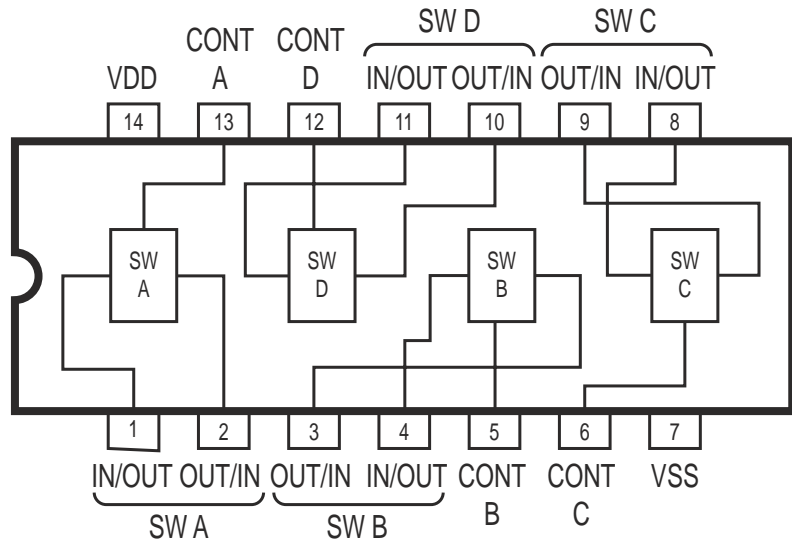
74HCU04
DIGITAL BOARD: U1201 & U1202



74HC251
DIGITAL BOARD: U1203



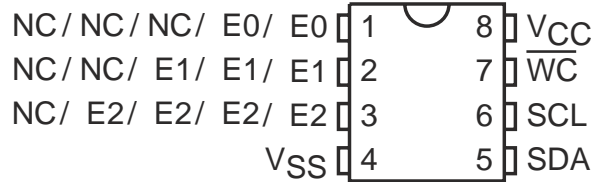
LC4966
COMPOSITE VIDEO: U4201
S-VIDEO BOARD: U4104
MULTI-CHANNEL: U6103



AT24C16
KEYBOARD: U210

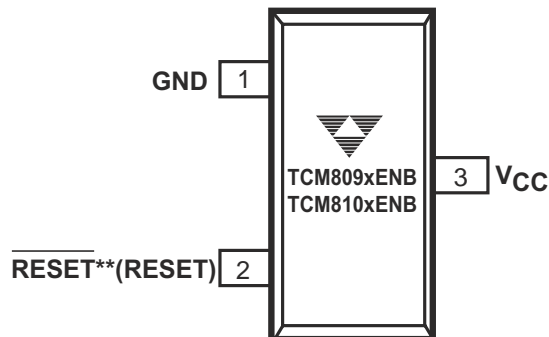
M24Cxx

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



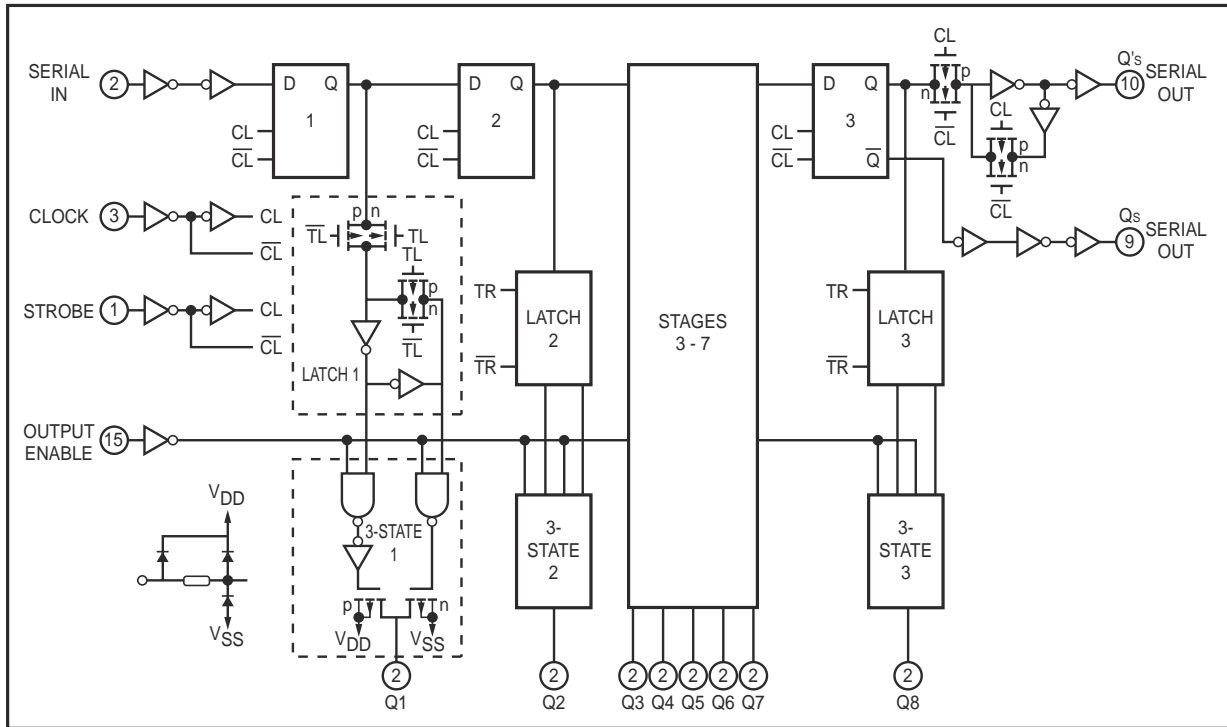
TCM810
KEYBOARD: U214

***3-Pin SOT-23B**

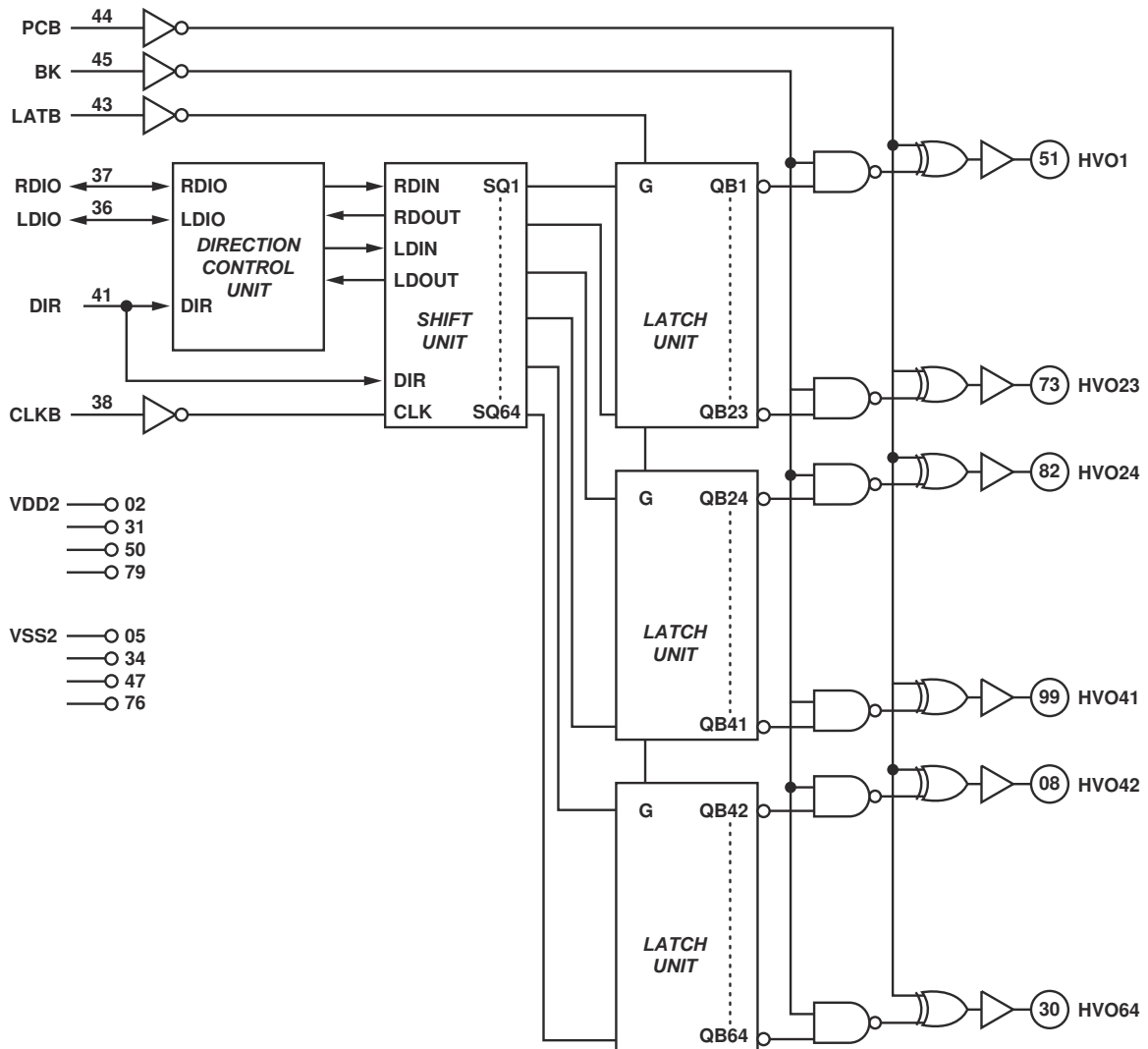


NOTE: *3-Pin SOT-23B is equivalent to JEDEC TO-236
 ** () is for TCM810

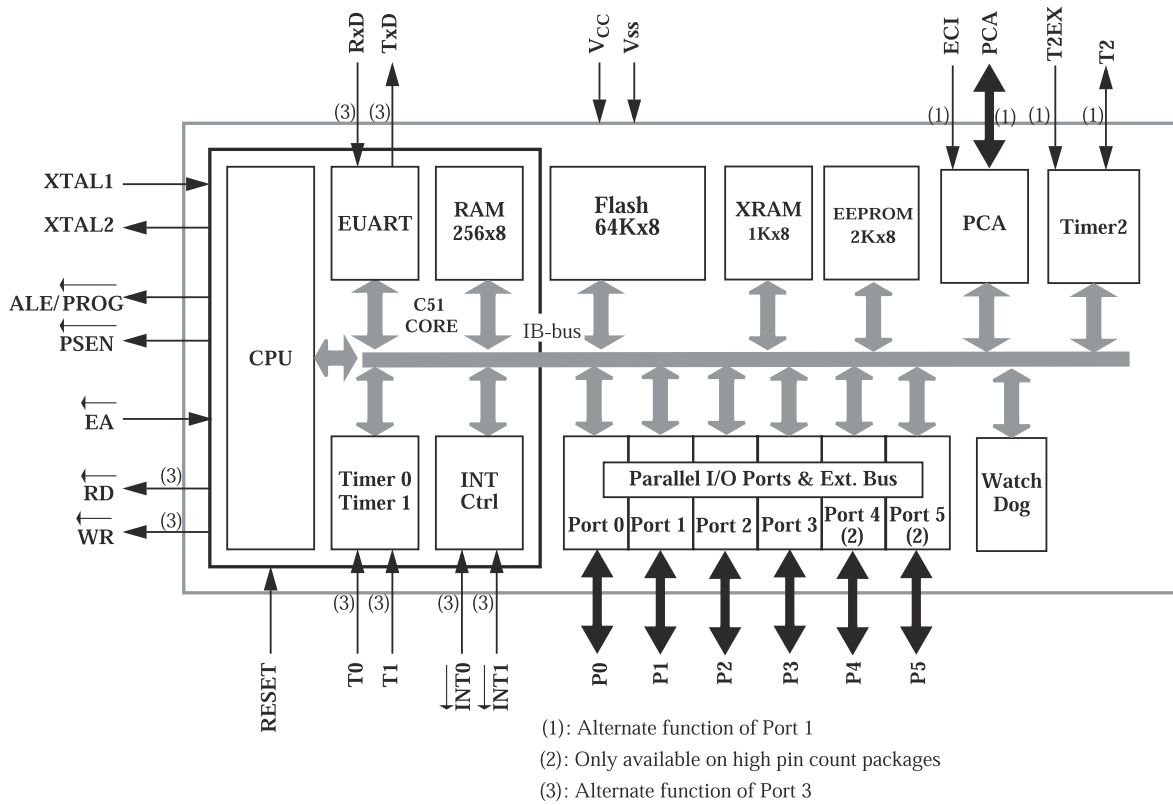
HCF4094B
KEYBOARD: U204~U207 & U211



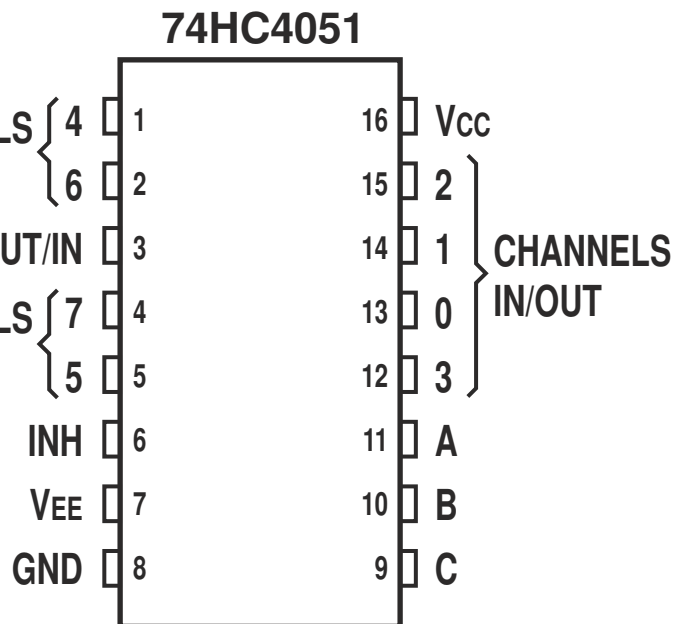
PT6306
KEYBOARD: U203



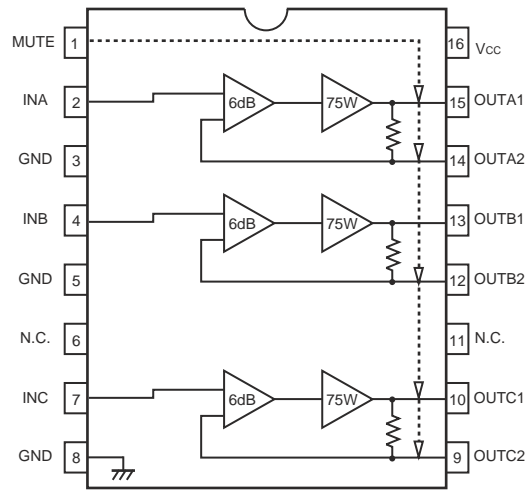
T89C51RD2
KEYBOARD: U201 & U202



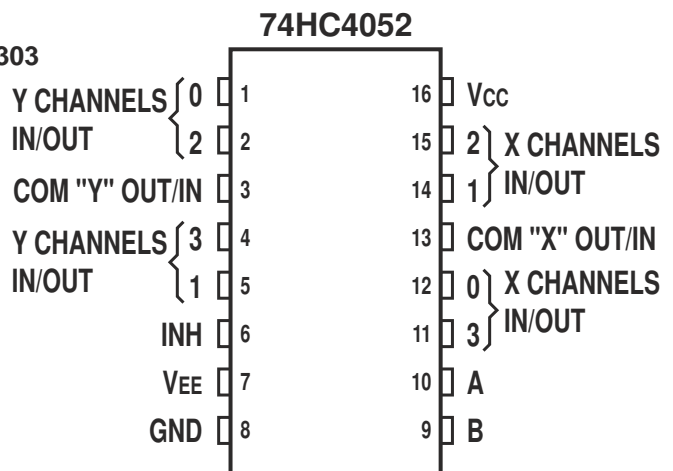
74HC4051
KEYBOARD: U208



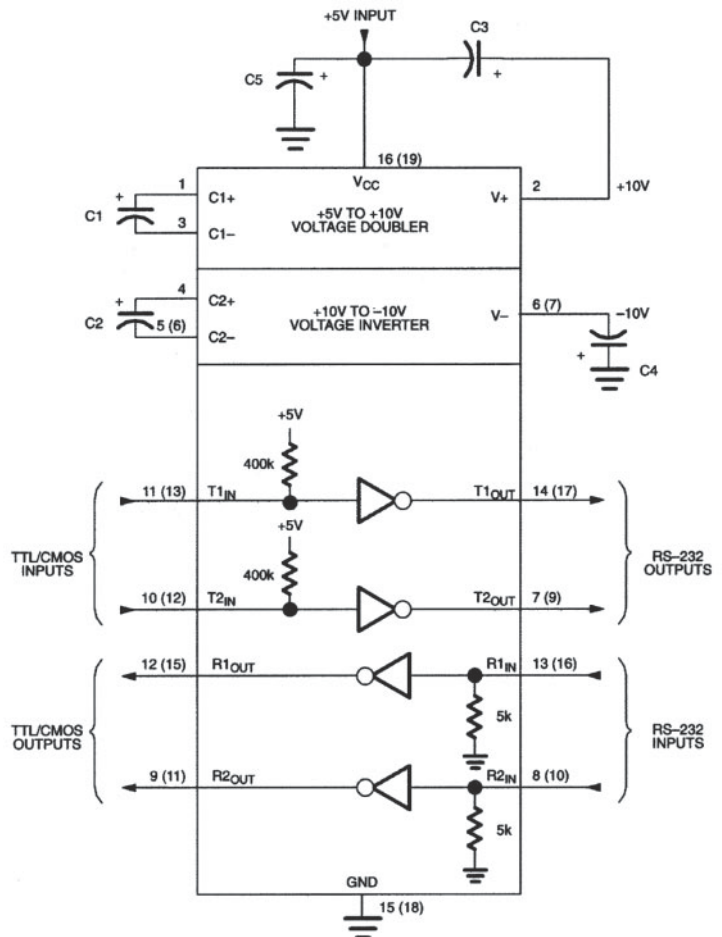
BA7660FS
COMPONENT VIDEO BOARD: U4301



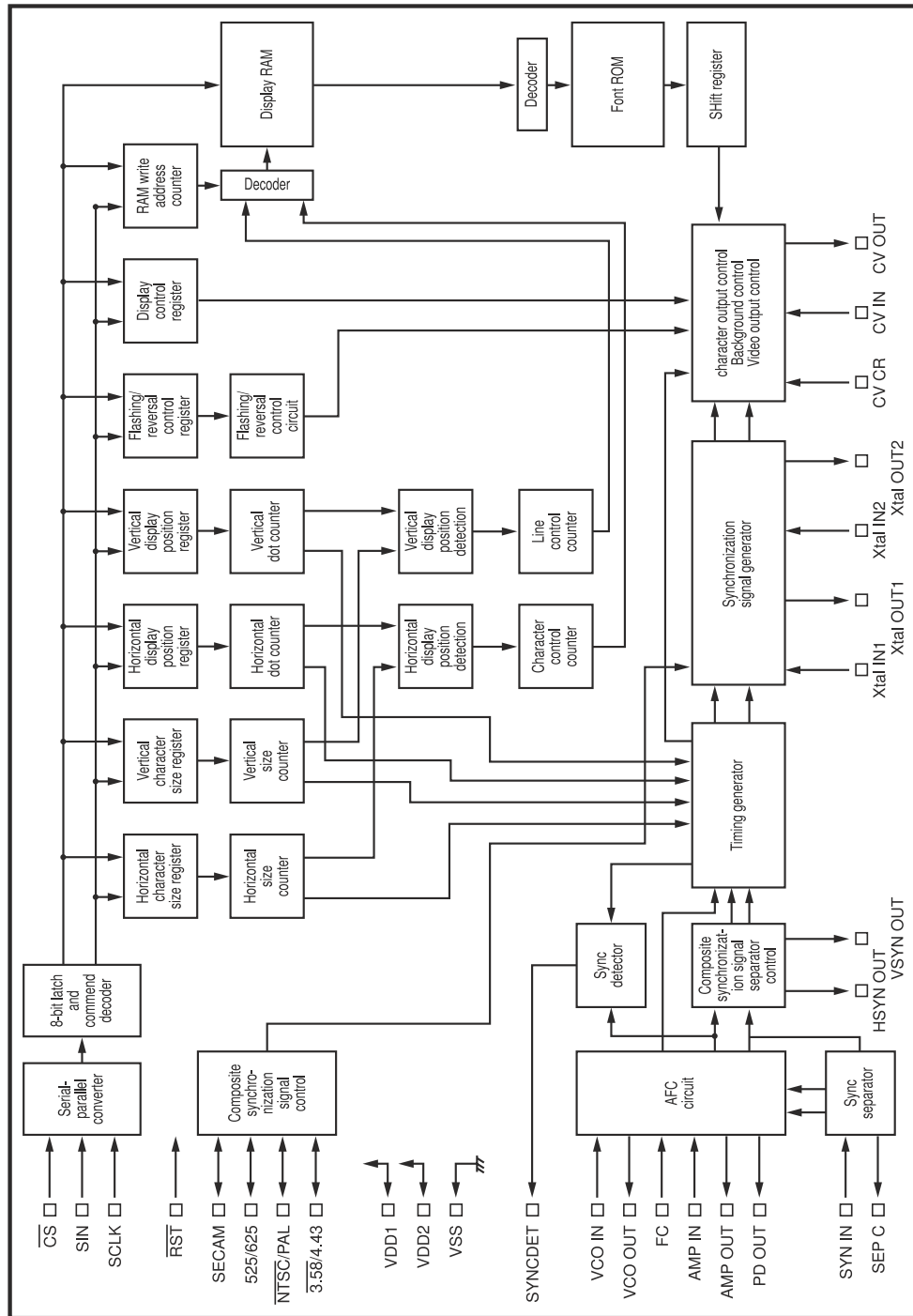
74HC4052
COMPONENT VIDEO BOARD: U4302 & U4303



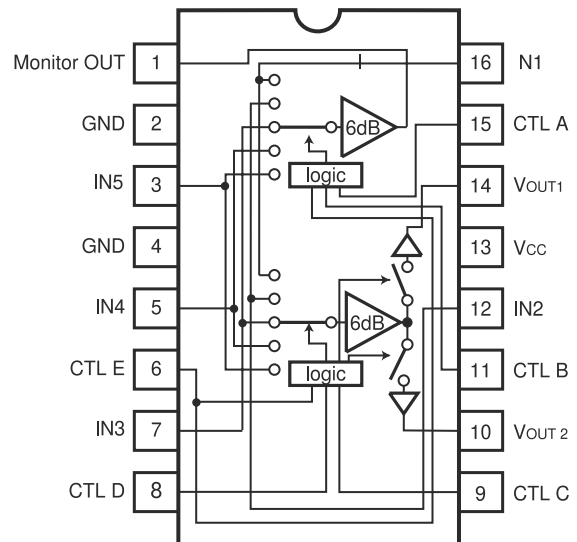
DS232A
RS232 BOARD: U901



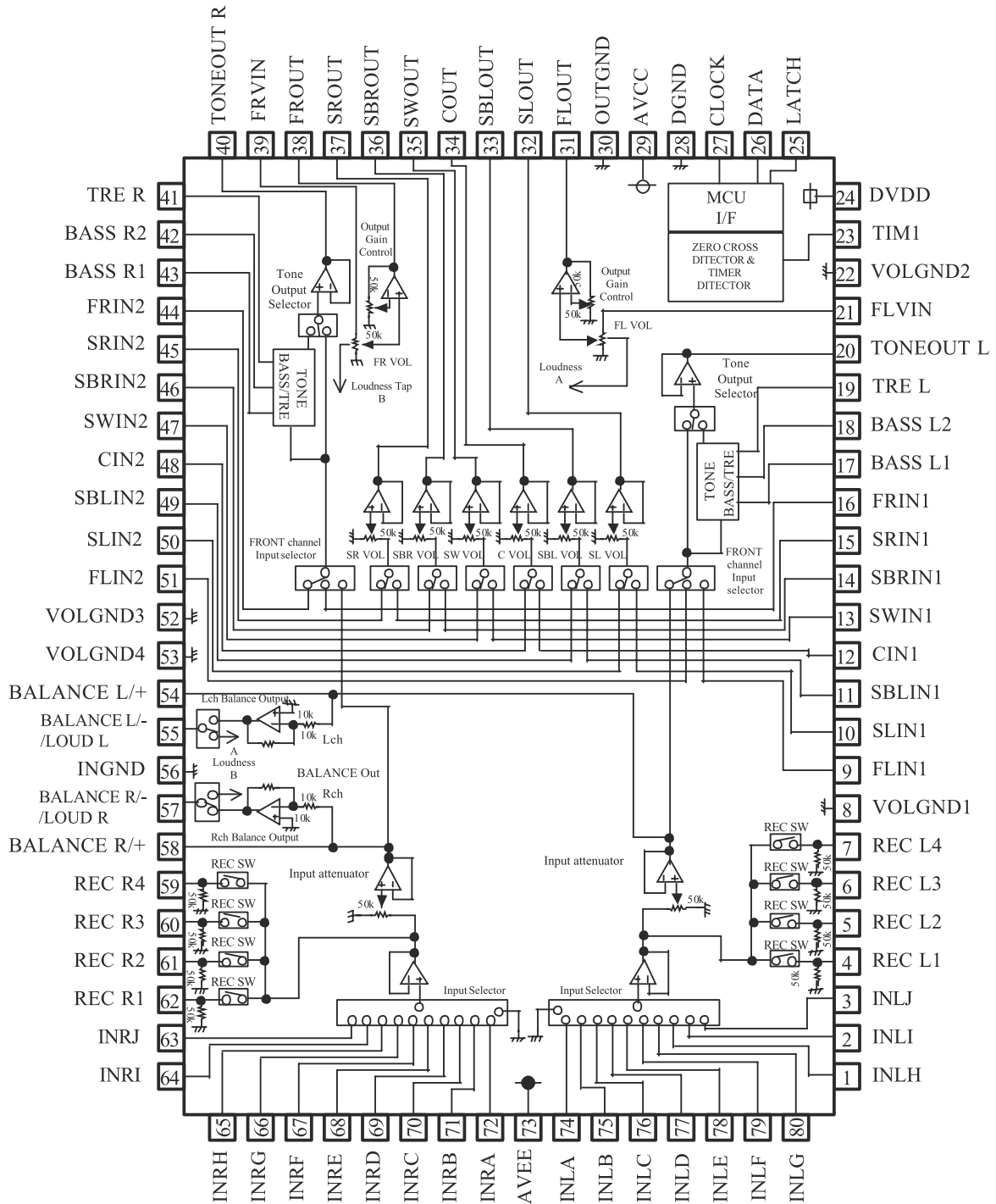
LC74763
S-VIDEO BOARD:
U4101



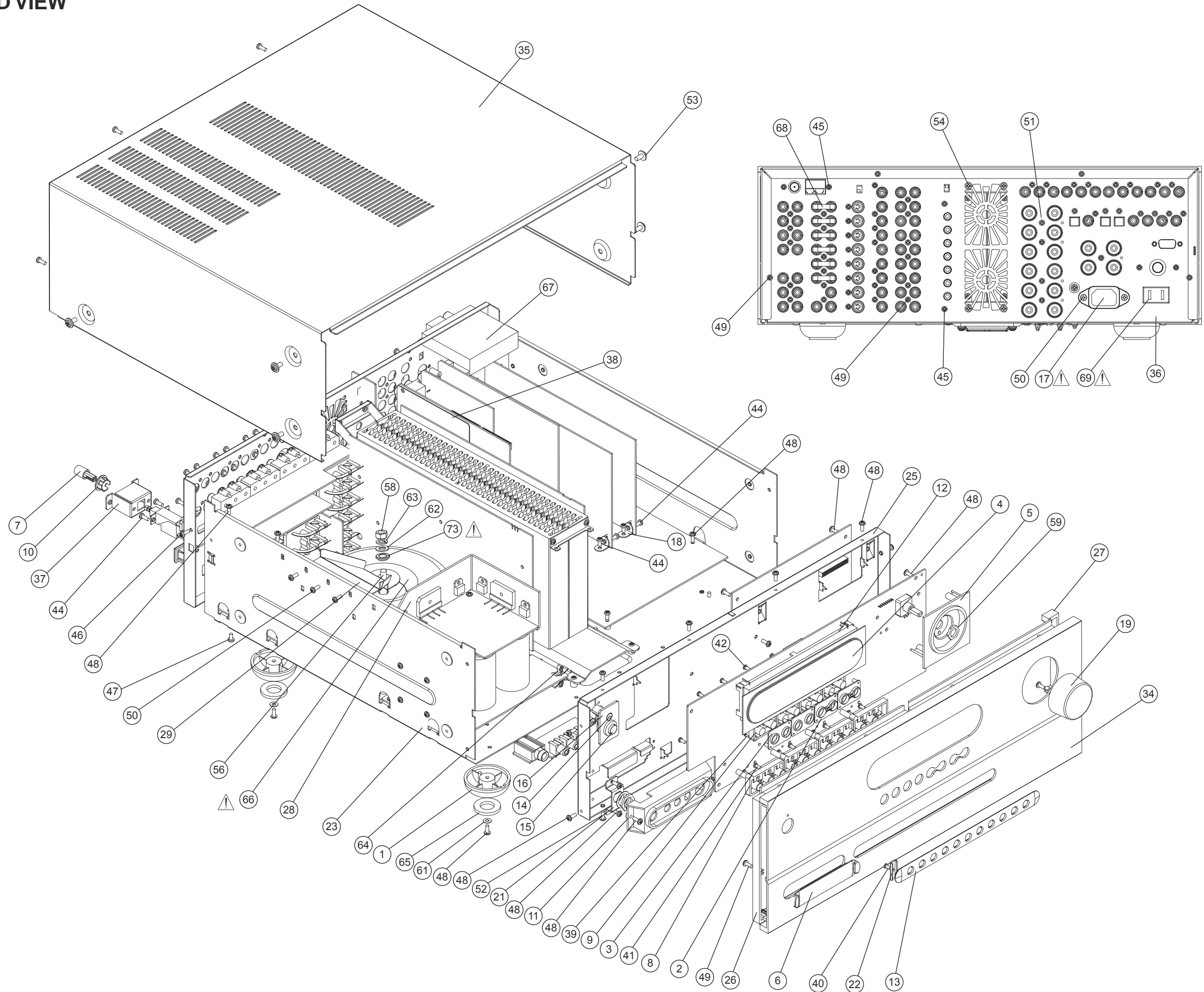
BA7625
COMPOSITE VIDEO BOARD: U4202 & U4203
S-VIDEO BOARD: U4102 & U4103



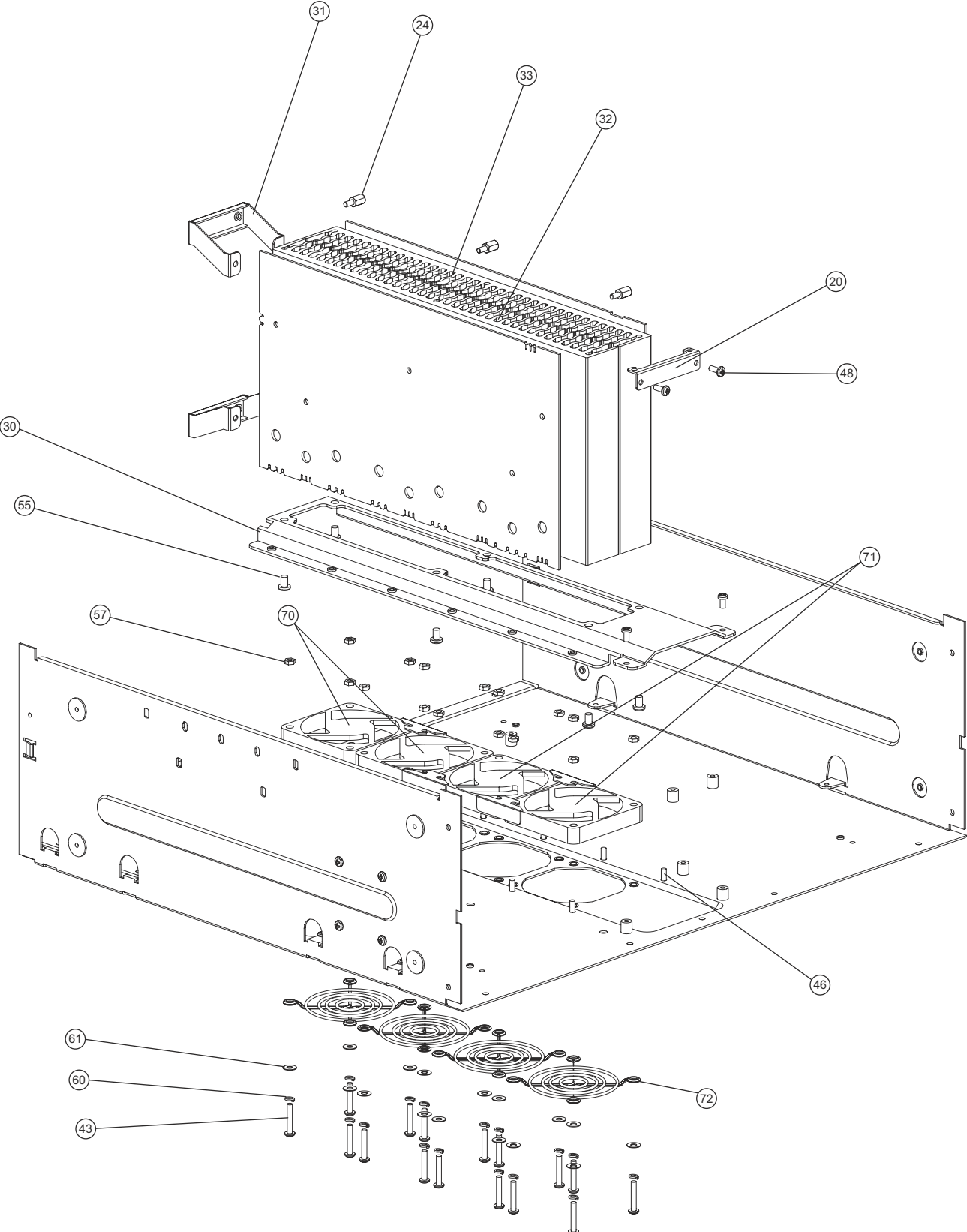
M61516FP
MULTI-CHANNEL BOARD: U6101 & U6102




EXPLODED VIEW






EXPLODED VIEW



EXPLODED VIEW PARTS LIST

| <u>Item</u> | <u>Part No.</u> | <u>Description</u> | <u>Qty.</u> |
|-------------|--|---|-------------|
| 1 | 10-0163017-01-00 | PLASTIC FOOT DOME SHAPE | 4 |
| 2 | 10-0163045-72-00 | LINKED GOGGLE BEZEL | 2 |
| 3 | 10-0163055-72-01 | DUO GOGGLE BEZEL | 2 |
| 4 | 10-0752001-00-10 | WINDOW LENS | 1 |
| 5 | 10-0752005-72-00 | VOLUME BEZEL | 1 |
| 6 | 10-0752007-72-00 | VIDEO COVER | 1 |
| 7 | 10-0752022-02-00 | POWER BUTTON BLACK | 1 |
| 8 | 10-0752032-72-01 | INPUT BUTTON | 4 |
| 9 | 10-0752042-72-01 | DUO BUTTON | 4 |
| 10 | 10-0752045-01-00 | POWER BUTTON BEZEL | 1 |
| 11 | 10-0752065-01-00 | VIDEO HOUSING | 1 |
| 12 | 10-0752075-00-00 | DISPLAY BRACKET | 1 |
| 13 | 10-0762035-72-01 | INPUT BUTTON LOZENGE | 1 |
| 14 | 10-0772011-00-00 | LED LENS ROUND | 1 |
| 15 | 10-0772022-72-01 | POWER BUTTON TACT ACTIVATE | 1 |
| 16 | 10-0772045-72-01 | POWER BUTTON BEZEL | 1 |
| 17 |  34-0101000-00-67 | AC SOCKET IEC 15A/250V | 1 |
| 18 | 11-0570075-80-01 | L BRACKET | 2 |
| 19 | 11-0752002-72-00 | VOLUME KNOB ASSY | 1 |
| 20 | 11-0752045-80-00 | HEATSINK MOUNTING BRACKET | 1 |
| 21 | 11-0752065-80-00 | PHONE BRACKET | 1 |
| 22 | 11-0752075-80-00 | DUMMY BRACKET | 1 |
| 23 | 11-0762004-80-07 | BOTTOM CABINET | 1 |
| 24 | 11-0762005-80-00 | HEX SPACER AF5.5 H8+6 | 10 |
| 25 | 11-0762025-80-02 | SUBFASCIA | 1 |
| 26 | 11-0762028-95-00 | SIDE CAP L | 1 |
| 27 | 11-0762038-95-00 | SIDE CAP R | 1 |
| 28 | 11-0762048-80-01 | HEATSINK- RECTIFER | 1 |
| 29 | 11-0762065-80-00 | XIFORMER SUPPORT BRACKET | 1 |
| 30 | 11-0762085-80-01 | LARGE FAN MOUNTING BRACKET | 1 |
| 31 | 11-0762095-14-00 | HTSK SUPPORT BRACKET | 2 |
| 32 | 11-0762098-94-02 | NEW EXTRUDED HTSK LEFT | 1 |
| 33 | 11-0762108-94-00 | NEW EXTRUDED HTSK RIGHT | 1 |
| 34 | 11-0763000-95-12 | FASCIA | 1 |
| 35*AH | 11-0763003-85-16 | TOP COVER (AH) | 1 |
| 35*C | 11-0763013-85-16 | TOP COVER (C) | 1 |
| 36*AH | 11-0763006-94-13 | REAR PANEL (AH) | 1 |
| 36*C | 11-0763016-94-13 | REAR PANEL (C) | 1 |
| 37 | 11-0772065-80-00 | POWER BUTTON BRACKET | 1 |
| 38 | 12-0763001-70-00 | FIBER PAPER 133 X 150 X 0.8mm | 1 |
| 39 | 13-0200502-22-00 | SELF TAPPING SCREW 2X5 WASHER HEAD TYPE-B NI PLT | 8 |
| 40 | 13-0260500-02-00 | SELF TAPPING SCREW 2.6 X 5 P/H TYPE-A NI PLT | 1 |
| 41 | 13-0260600-02-00 | SELF TAPPING SCREW 2.6 X 6 P/H TYPE-A NI PLT | 9 |
| 42 | 13-0260803-02-00 | SELF TAPPING SCREW 2.6 X 8 B/H TYPE-A NI PLT | 16 |
| 43 | 14-0300180-02-00 | MACHINE SCREW M3 X 18 P/H NI PLT | 16 |
| 44 | 14-0300600-02-00 | MACHINE SCREW M3 X 6 P/H NI PLT | 18 |
| 45 | 14-0300600-04-00 | MACHINE SCREW M3 X 6 P/H BLK | 4 |


| <u>Item</u> | <u>Part No.</u> | <u>Description</u> | <u>Qty.</u> |
|---|------------------|---|-------------|
| 46 | 14-0300600-52-00 | SELF TAPING SCREW 3 X 6 P/H TAPTITE NI-PLT TYPE-B | 23 |
| 47 | 14-0300603-54-00 | TAPTITE SCREW 3 X 6 B/H TYPE-B BLK | 4 |
| 48 | 14-0300800-53-00 | SELF TAPPING SCREW 3 X 8 B/B ZINC PLATED TAPTITE-TYPE | 36 |
| 49 | 14-0300803-54-00 | TAPTITE SCREW 3 X 8 B/H TYPE-B BLK PLT | 65 |
| 50 | 14-0300804-54-00 | TAPTITE SCREW 3 X 8 K/H TYPE-B BLK PLT | 5 |
| 51 | 14-0301000-54-00 | TAPTITE SCREW 3 X 10 P/H TYPE-B BLK | 7 |
| 52 | 14-0350803-52-00 | TAPTITE SCREW 3.5 X 8.0 B/H TYPE-B NI PLT | 5 |
| 53 | 14-0400802-04-00 | MACHINE SCREW M4 X 8 WASHER HEAD BLK | 6 |
| 54 | 14-0400803-54-00 | TAPTITE SCREW 4 X 8 B/H BLK TYPE-B | 4 |
| 55 | 14-0400808-54-00 | TAPTITE SCREW 4 X 8 C/H TYPE-B BLK | 6 |
| 56 | 14-0801005-03-02 | HEX.BOLT M8,LENGTH=100mm ,ZN PLATED | 1 |
| 57 | 15-0300240-05-20 | NUT M3 X 2.4mm | 16 |
| 58 | 15-0807600-05-30 | HEX NUT M8 X 6.5 THK | 1 |
| 59 | 15-0900220-11-30 | NUT ZINC PLATED M9.0 X 2.2mm 11p | 1 |
| 60 | 16-0320560-09-20 | SPRING WASHER I/D 3.2 X O/D 5.6 0.9mm | 39 |
| 61 | 16-0350080-04-35 | STEEL WASHER I/D 3.5 X O/D 8.0 0.4mm ZINC PLT | 22 |
| 62 | 16-0850160-10-30 | METAL WASHER ID8.5 X OD16 X 1.0mm | 1 |
| 63 | 16-0851500-12-30 | SPRING WASHER ID 8.5 X OD 12.5 X 1.9THK | 1 |
| 64 | 17-0500960-00-01 | PCB SUPPORTER (H=9.6mm PCB HOLE 4mm) CS-0610 | 3 |
| 65 | 17-1402603-30-22 | RUBBER FOOT I/D14 X O/D26 X 3 PORON HH-48C | 4 |
| 66  | 25-0090061-00-21 | XFORMER PW TOROIDAL 120V/240V | 1 |
| 67*AH | 29-4000004-00-38 | AM/FM TUNER MODULE KST-MB114MA0-23 | 1 |
| 67*C | 29-4000002-00-38 | AM/FM TUNER MODULE KST-MB114MA1-23 | 1 |
| 68 | 34-0061030-00-67 | JUMPER PLUG PITCH 14mm | 6 |
| 69*AH  | 34-0101001-00-70 | AC OUTLET US POLARIZED 3512-MITIBKUC | 1 |
| 69*C  | 34-0100002-00-78 | AC OUTLET EURO CEE 7 2.5A/250V A302D0060P | 1 |
| 70 | 37-2011230-00-63 | FAN DC 12V 0.09A 3000RPM MGA6012LR-A10 W/450mm | 2 |
| 71 | 37-2011230-01-63 | FAN DC 12V 0.09A 3000RPM MGA6012LR-A10 W/350mm | 2 |
| 72 | 39-0000008-00-63 | FAN GUARD 60mm DFG-60 | 4 |
| 73 | 02-0000020-00-XX | NYLON OD 18 X 9.3 X 3.5mm | 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)

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|--|------------------|---|
| <u>POWER AMP MODULE</u> | 95-0907635-12-01 | POWER AMPLIFIER MODULE |
| <u>FRONT & CENTER AMP BOARD PCB ASSEMBLY</u> | 80-0907630-40-00 | FRONT AND CENTER AMP ASSEMBLY |
| <u>CAPACTIORS</u> | | |
| C501,C513,C525 | 22-3476052-00-43 | CAP ELEC SS 4.7uF 50V 20% 85C |
| 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% 85C |
| C508,C519,C531 | 22-4115403-10-10 | CAP MYLAR KT-G 150nF 100V 10% |
| C510,C511,C521,C522,C534,C535 | 22-3101082-00-28 | CAP ELEC GR 100uF 100V 20% |
| 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% 85C |
| <u>DIODES</u> | | |
| 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% |
| <u>COILS</u> | | |
| L501-L503 | 24-1000001-00-28 | AIR COIL 0.2uH 10% 1 X 9 X 13.5 TURNS |
| <u>RELAYS</u> | | |
| M501,M502,M505 | 32-3124051-03-40 | RELAY POWER DC24V 5A/250V 2P1T |
| <u>THERMISTORS</u> | | |
| M504,M507 | 23-6110100-00-08 | THERMESTOR PTC 100 OHM |
| <u>THERMAL PROTECTOR</u> | | |
| M506  | 39-0000007-00-15 | THERMAL CUT OFF SWITCH 90C UP72 |
| <u>TRANSISTORS</u> | | |
| 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 |
| Q507,Q519,Q531 | 21-1011610-30-12 | XTR PW NPN 1.5A/160V TO-220ML 2SC4159E |
| Q509,Q521,Q534 | 21-1152311-10-12 | XTR PW PNP 15A/230V TO-3PB 2SA2031 |
| Q510,Q522,Q533 | 21-1152310-10-12 | XTR PW NPN 15A/230V TO-3PB 2SC5669 |
| 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 |
| <u>RESISTORS</u> | | |
| R522,R545,R571 | 30-0102106-01-64 | VR SEMI-FIX RES CF 1K OHM B 30% |

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|---|------------------|---|
| R523,R547,R574 | 23-4228280-08-20 | RES RN 0.22 OHM 5% 5W SIL 3 PIN |
| R527,R528,R548,R556,R575,R576 | 23-2100230-00-00 | RES MO 10 OHM 5% 1/2W |
| R589,R590,R591 | 23-2100250-00-01 | RES MO 10 OHM 5% 2W |
| <u>SURROUND LEFT/RIGHT/BACK AMP BOARD</u> | | |
| <u>PCB ASSEMBLY</u> | 80-0907630-18-00 | SURROUND LEFT/RIGHT/BACK AMP ASSEMBLY |
| <u>DIODES</u> | | |
| D801-D809,D814-D825,D871-D875 | 20-0000000-00-13 | DIODE SW 4NS DO35 1N4148 |
| D879,D878 | 20-3133912-20-36 | DIODE ZENER BZX85 3.3V 1W 5% |
| <u>TRANSISTORS</u> | | |
| 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 |
| 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 |
| Q855,Q857,Q859 | 21-1011211-50-12 | XTR PW PNP 1A/100V TO-126 2SB631KE |
| Q871 | 21-1036003-50-06 | XTR PW 3A/60V TO-126 2SB772Q |
| Q872 | 21-0000390-70-14 | XTR SS NPN HFE270-560 180MHZ 2SC1740S |
| <u>CAPACITORS</u> | | |
| C554 | 22-3220022-00-43 | CAP ELEC GS 22uF 16V 20% 85C |
| C801,C802,C835 | 22-3476052-00-43 | CAP ELEC SS 4.7uF 50V 20% 85C |
| C805,C806,C836 | 22-4110203-10-28 | CAP MYLAR MCC-R 1000P 100V 10% |
| C809,C810,C837,C874,C875 | 22-3471022-00-28 | CAP ELEC GR 470uF 16V 20% 85C |
| 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 | 22-3470052-00-43 | CAP ELEC SS 47uF 50V 20% 85C |
| C872 | 22-3100052-00-43 | CAP ELEC SS 10uF 50V 20% |
| C873 | 22-3102032-30-28 | CAP ELEC KM 1000uF 25V 20% 105C |
| <u>COILS</u> | | |
| L801-L803 TURNS | 24-1000001-00-28 | AIR COIL 0.2uH 10% 1 X 9 X 13.5 |
| <u>RELAYS</u> | | |
| M801,M802 | 32-3124081-02-40 | RELAY POWER DC24V 8A/250V 2P1T |
| <u>THERMISTORS</u> | | |
| M807 | 23-6110100-00-08 | THERMESTOR PTC 100 OHM |

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|---|------------------|--|
| RESISTORS | | |
| R8103,R843,R844 | 23-4228280-08-20 | RES RN 0.22 OHM 5% 5W SIL 3 PIN |
| R8110,R857,R858 | 23-2100250-00-01 | RES MO 10 OHM 5% 2W AXIAL |
| R829,R830,R837,R838,R894,R898 | 23-2100230-00-00 | RES MO 10 OHM 5% 1/2W AXIAL |
| R835,R836,R897 | 30-0102106-01-64 | VR SEMI-FIX RES CF 1K OHM B 30% |
| REGULATORS | | |
| U871 | 27-3001201-17-14 | I.C. VOLT REG 12V 1A TO-220 NJM7812 |
| U872 | 27-3000501-17-14 | I.C. VOLT REG 5V 1A TO-220 NJM7805FA |
| DSP BOARD | | |
| PCB ASSEMBLY | | |
| | 80-0907630-65-00 | DSP ASSEMBLY |
| CAPACITORS | | |
| C1004,C1014,C1016,C1062,C1083, C1096,C1100,C1155,C1173,C1174 | 22-3106052-00-43 | CAP ELEC SS 1uF 50V 20% 85C |
| C1005 | 22-3226052-00-43 | CAP ELEC SS 2.2uF 50V 20% 85 |
| C1012,C1072,C1117 | 22-3101022-00-43 | CAP ELEC SS 100uF 16V 20% 85C |
| C1020,C1021,C1030,C1031,C1040, C1041,C1050,C1051,C1091,C1094 | 22-3336052-00-43 | CAP ELEC SS 3.3uF 50V 20% 85C |
| C1060,C1073 | 22-3471022-00-28 | CAP ELEC GR 470uF 16V 20% 85C |
| C1079,C1171,C1172 | 22-3100022-00-43 | CAP ELEC SS 10uF 16V 20% 85C |
| C1109-C1112 | 22-3470022-00-43 | CAP ELEC SS 47uF 16V 20% 85C |
| C1137,C1138,C1143,C1144 | 22-3100052-00-43 | CAP ELEC SS 10uF 50V 20% 85C |
| C1182,C1119,C1133 | 22-3102022-00-28 | CAP ELEC GR 1000uF 16V 20% 85 |
| C1011 | 22-4210402-00-31 | CAP MpF 0.1uF 63V 5% DMF 5 SERIES |
| C1092,C1152-C1154 | 22-4210502-00-31 | CAP MpF 1uF 63V 5% DMF 5 SERIES |
| C1101-C1108 | 45-0101055-55-57 | CAP CER SMD 100pF 50V 10% X7R 0603 |
| C1132 | 45-0102055-55-57 | CAP CER SMD 1nF 50V 10% X7R 0603 |
| C1007,C1010,C1175,C1176 | 45-0103055-55-57 | CAP CER SMD 10nF 50V 10% X7R 0603 |
| 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% Y5V 0603 |
| C1006,C1121 | 45-0221055-55-57 | CAP CER SMD 220pF 50V 10% X7R 0603 |
| C1134-C1136,C1022,C1026,C1032, C1036,C1042,C1046,C1052,C1056 | 45-0222055-55-57 | CAP CER SMD 2.2nF 50V 10% X7R 0603 |
| C1139,C1140,C1145,C1146 | 45-0272055-55-57 | CAP CER SMD 2.7nF 50V 10% X7R 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 |
| C1141,C1142,C1147,C1148,C1024, C1028,C1034,C1038,C1044,C1048, C1054,C1058 | 45-0561055-55-57 | CAP CER SMD 560pF 50v 10% X7R 0603 |
| INDUCTORS | | |
| L1001-L1008 | 24-0100127-00-28 | IND CHOKE 10uH 10% |
| TRANSISTORS | | |
| Q1001-Q1003 | 21-0000010-00-46 | XTR SS NPN HEF 100 200MHZ TO-92 C1815Y |

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|---|------------------|---|
| RESISTORS | | |
| R1001,R1002,R1079,R1083,R1222 | 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, R1114,R1131-R1138,R1230 | 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, R1058,R1065,R1072,R1120,R1121, R1126,R1127,R1027,R1028,R1033, R1035,R1041,R1042,R1047,R1049, R1055,R1056,R1061,R1063,R1069, R1070,R1075,R1077 | 44-0150120-51-00 | RES SMD 1.5K OHM 5% 1/16W 0603 |
| R1024,R1031,R1038,R1045,R1052, R1059,R1066,R1073 | 44-0620020-51-00 | RES SMD 620 OHM 5% 1/16W 0603 |
| R1078,R1080,R1084 | 44-0220120-51-00 | RES SMD 2.2K OHM 5% 1/16W 0603 |
| R1081,R1090,R1091 | 44-0270110-51-00 | RES SMD 2.7K OHM 1% 1/16W 0603 |
| R1082 | 44-0180110-51-00 | RES SMD 1.8K OHM 1% 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 |
| R1171,R1172,J1001,J1002,R1010, R1099,R1217,R1218 | 44-0000020-51-00 | RES SMD 0 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 |
| R1213-R1216 | 44-0750920-51-00 | RES SMD 75 OHM 5% 1/16W 0603 |
| R1221 | 44-0270120-51-00 | RES SMD 2.7K OHM 5% 1/16W 0603 |
| ICs | | |
| U1001 | 27-9493260-04-70 | I.C. DD DTS & MPEG DECODER PLCC CS49326 |
| U1002,U1003,U1014 | 27-0324590-24-00 | I.C. OCTAL TRANSCEIVER SMD 74LVC245ATTR |
| U1004 | 27-0115790-25-00 | I.C. QUAD 2-INPUT SELECTOR SOIC 74HC157MIR |
| U1005 | 27-9841500-25-53 | I.C. 96KHz AUDIO INTERFACE RECEIVER CS8415A-CS |
| U1007 | 27-2325607-00-88 | I.C. EEPROM 256 X 8 BYTE 70nS PDIL W27C02-70 |
| U1008,U1009 | 27-0657490-18-00 | I.C. OCTAL D-FLIP FLOPS 3-STAGE O/P 74LVQ574M |
| U1010-U1013,U1023,U1028 | 27-7055320-18-14 | I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M |
| U1015,U1020 | 27-3031710-06-00 | I.C. REG 1A TO-220(T) LM317T |
| 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 A/D CS5333KZ |

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|--|--|---|
| OSCILLATOR X1001 | 28-5122200-04-19 | CRYSTAL CLOCK 12.288MHz 50ppm |
| AUDIO BOARD PCB ASSEMBLY | 80-0907630-11-00 | AUDIO ASSEMBLY |
| CAPACITORS C3101-C3116 | 22-3220022-00-43 | CAP ELEC GS 22uF 16V 20% 85C |
| RESISTORS J3101,J3102 | 44-0000027-11-00 | RES SMD 0 OHM 5% 1/10W 0805 |
| RCA JACKS M301-M303 | 34-4060420-00-60 | RCA JACK 6 R-R-R/W-W-W RCA-653D-04 |
| COMPONENT VIDEO BOARD PCB ASSEMBLY | 80-0907630-42-00 | COMPONENT VIDEO ASSEMBLY |
| CAPACITORS C4301-C4309 C4310-C4312,C4325 C4313-C4315 C4316,C4318,C4320 C4317,C4319,C4321 | 22-3226052-00-43 22-3100022-00-43 22-3106052-00-43 22-3101022-00-43 22-3220022-00-43 | CAP ELEC SS 2.2uF 50V 20% 85C CAP ELEC SS 10uF 16V 20% 85C CAP ELEC SS 1uF 50V 20% 85C CAP ELEC SS 100uF 16V 20% 85C CAP ELEC GS 22uF 16V 20% 85C |
| RESISTORS J4301,J4302,J4303 | 44-0000027-11-00 | RES SMD 0 OHM 5% 1/10W 0805 |
| RCA JACKS M431-M434 | 34-4032020-00-60 | RCA 3 G-BL-R RS-354G-18 |
| ICs U4301 U4302,U4303 | 27-5176600-18-23 27-0140520-18-00 | I.C. VIDEO 3-CH 75 OHM DRIVER BA7660FS I.C. SINGLE DUAL TRIPLE M74HC4052MIR |
| DIGITAL BOARD PCB ASSEMBLY | 80-0907630-47-00 | DIGITAL ASSEMBLY |
| CAPACITORS C1213,C1214,C1221 C1222,C1223 | 22-3226052-00-43 22-3101022-00-43 | CAP ELEC SS 2.2uF 50V 20% 85C CAP ELEC SS 100uF 16V 20% 85C |
| RCA JACKS J1001-J1004,J1007 | 34-4010320-00-60 | RCA JACK 1 BLACK RS-146G/B |
| FIBRE OPTICAL J1005,J1006 | 26-6701380-01-16 | FIBRE OPTIC RECEIVING UNIT GP1FA550RZ |

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|------------------------------------|------------------|---|
| J1008 | 26-6691386-00-16 | FIBRE OPTIC TRANSMITTER GP1FA550TZ |
| ICs | | |
| U1201,U1202 | 27-0804990-18-00 | I.C. HEX INVERTER SMD SOP M74HCU04MIR |
| U1203 | 27-0125190-18-00 | I.C. 8-CH MULTIPLEXER-SSOP 74HC251M1R |
| ISC BOARD | | |
| PCB ASSEMBLY | 80-0907630-74-00 | ISC ASSEMBLY |
| CAPACITORS | | |
| C786-C789,C816-C820 | 22-4210402-00-31 | CAP MpF 0.1uF 63V 5% DMF 5 SERIES |
| C811-C813,C815,C829,C830,C832,C833 | 22-3100022-00-43 | CAP ELEC SS 10uF 16V 20% 85C |
| DIODES | | |
| 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% |
| TRANSISTORS | | |
| Q812,Q815,Q817,Q818,Q831,Q833 | 21-0000010-00-46 | XTR SS NPN HEF 100 200MHz TO-92 C1815Y |
| Q813,Q811,Q781,Q782 | 21-0100410-00-12 | XTR SS PNP HFE 280-560 110MHZ 2SA1016KG-AA |
| Q832,Q830,Q814,Q816 | 21-0100100-00-46 | XTR SS PNP HFE 100 200MHz TO-92 A1015Y |
| RESISTORS | | |
| 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 0603 |
| R827,R835,R874,R882 | 44-0100220-51-00 | RES SMD 10K OHM 5% 1/16W 0603 |
| R828,R875 | 44-0470120-51-00 | RES SMD 4.7K OHM 5% 1/16W 0603 |
| R829,R830,R876,R877 | 44-0100320-51-00 | RES SMD 100K OHM 5% 1/16W 0603 |
| R831,R832,R878,R879 | 44-0220120-51-00 | RES SMD 2.2K OHM 5% 1/16W 0603 |
| R833,R880 | 44-0680320-51-00 | RES SMD 680K OHM 5% 1/16W 0603 |
| R834,R881 | 30-0503106-02-22 | VR SEMI-FIXED RESISTOR CF 50K OHM 30% |
| 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 AXIAL |
| IC | | |
| U801 | 27-7055320-18-14 | I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M |
| KEYBOARD | | |
| PCB ASSEMBLY | 80-0907630-02-00 | KEYBOARD ASSEMBLY |
| CAPACITORS | | |
| C201,C202,C213,C215-C222,C229,C256 | 45-0104056-57-57 | CAP CER SMD 0.1uF 50V 20% Y5V 0603 |









| Reference No. | Part No. | Description |
|--|------------------|--|
| C208-C211 | 22-3470022-00-43 | CAP ELEC SS 47uF 16V 20% 85C |
| C212 | 22-3102012-00-28 | CAP ELEC GR 1000uF 10V 20% 85C |
| C214 | 22-3107052-00-43 | CAP ELEC. SS 0.1uF 50V 20% 85C |
| C224 | 22-3472032-00-28 | CAP ELEC GR 4700uF 25V 20% 85C |
| C241,C242 | 45-0102055-55-57 | CAP CER SMD 1nF 50V 10% X7R 0603 |
| C251-C254 | 45-0330055-55-57 | CAP CER SMD 33pF 50V 10% X7R 0603 |
| C255 | 22-3106052-00-43 | CAP ELEC SS 1uF 50V 20% 85C |
| DIODES | | |
| D212,D214-D218 | 20-0000000-00-13 | DIODE SW 4NS DO35 1N4148 |
| D220 | 20-3251902-00-01 | DIODE ZENER BZX55 5.1V 1/2W 5% |
| IR RECEIVER | | |
| D201 | 26-0941380-00-00 | IR RX 940nm 37.9KHz SHIELD ST FM-7138TE5 |
| ENCODER | | |
| M201 | 35-6001219-00-08 | ENCODER ROTATRY L=20mm VERTICAL W/O CLICK |
| TRANSISTORS | | |
| Q201 | 21-0100100-00-46 | XTR SS PNP HFE 100 200MHz TO-92 A1015Y |
| Q203-Q206 | 21-0000010-00-46 | XTR SS NPN HEF 100 200MHz TO-92 C1815Y |
| RESISTORS | | |
| R201-R207,R213,R219,R223,R224, R226,R227,R229,R231,R232 | 44-0100220-51-00 | RES SMD 10K OHM 5% 1/16W 0603 |
| R216,R225,R234 | 44-0100120-51-00 | RES SMD 1K OHM 5% 1/16W 0603 |
| R217,R218 | 44-0150120-51-00 | RES SMD 1.5K OHM 5% 1/16W 0603 |
| R220,R253-R268 | 44-0470120-51-00 | RES SMD 4.7K OHM 5% 1/16W 0603 |
| R221,R230, R222 | 44-0220120-51-00 | RES SMD 2.2K OHM 5% 1/16W 0603 |
| R233 | 44-0220020-51-00 | RES SMD 220 OHM 5% 1/16W 0603 |
| R238 | 44-0470220-51-00 | RES SMD 47K OHM 5% 1/16W 0603 |
| R241,R242 | 44-0120220-51-00 | RES SMD 12K OHM 5% 1/16W 0603 |
| R251,R252 | 44-0100020-51-00 | RES SMD 100 OHM 5% 1/16W 0603 |
| R269 | 44-0100520-51-00 | RES SMD 10M OHM 5% 1/16W 0603 |
| | 44-0000020-51-00 | RES SMD 0 OHM 5% 1/16W 0603 |
| TACT SWITCHES | | |
| S201-S219 | 35-1001117-00-67 | SW TACT NO 1P1T 50mA/12V |
| ICs | | |
| U201,U202 | 27-1086401-04-25 | I.C. MCU SCRAM PLCC T89C51RD2-SL |
| U203 | 27-9630600-14-62 | I.C. VFD DRIVER SMD QFP PT6306 |
| U204-U207,U211 | 27-0540940-18-00 | I.C. SHIFT-AND-STORE BUS REGISTER HCF4094BM1 |
| U208 | 27-0140510-18-00 | I.C. 8 CH ANALOG MUX/DEMUX SMD M74HC4051MIR |
| U209 | 27-0324591-18-00 | I.C. OCTAL BUS TRANSCEIVER 74VHC245M |

| Reference No. | Part No. | Description |
|--|--|--|
| U210 | 27-2300225-00-25 | I.C. EEPROM 2K BYTE 250nS PDIL AT24C16 |
| U214 | 27-9810000-28-36 | I.C. RESET MONITORS TCM810LENB713 |
| CRYSTALS X201A,X202A | 28-5200200-06-19 | CRYSTAL 20.000MHz 30ppm HC-49S |
| LED BOARD PCB ASSEMBLY | 80-0907630-32-00 | LED ASSEMBLY |
| LED D211 | 26-0012587-01-10 | LED RED-GREEN 5X807mm COMMON ANODE |
| TACT SWITCHES S220 | 35-1001117-00-67 | SW TACT NO 1P1T 50mA/12V |
| MAIN BOARD PCB ASSEMBLY | 80-0907630-00-00 | MAIN ASSEMBLY |
| DIODES D701-D710 D711 D715 D716-D718 | 20-1001401-20-44 20-3227002-00-47 20-5004700-50-02 20-3951943-50-01 | DIODE RECT 1A/400V DO41 1N4004 DIODE ZENER BZX55 27V 1/2W 5% DIODE BRI 4A/70V RS402L DIODE ZENER ZY5.1 2W 10% |
| TRANSISTOR Q701 | 21-1011210-50-12 | XTR PW PNP 1A/100V TO-126 2SD600KE |
| CAPACITORS C701,C705,C706,C716,C725 C704 C707 C710 C711,C712,C713 C715 C719,C723,C702 C721,C724 | 22-3102032-30-28 22-3332042-30-35 22-3222042-30-49 22-3470052-00-43 22-3102052-30-28 22-4210502-00-31 22-3101022-30-13 22-3222032-30-28 | CAP ELEC KM 1000uF 25V 20% 105C CAP ELEC KM 3300uF 35V 20% 105C CAP ELEC KM 2200uF 35V 20% 105C CAP ELEC SS 47uF 50V 20% 85C CAP ELEC KM 1000uF 50V 20% 105C CAP MpF 1uF 63V 5% DMF 5 SERIES CAP ELEC KM 100uF 16V 20% 105C CAP ELEC KM 2200uF 25V 20% 105C |
| REGULATORS U701,U704-U706 U702,U707 U703 | 27-3000501-17-14 27-3001201-17-14 27-3101201-13-14 | I.C. VOLT REG 5V 1A TO-220 NJM7805FA I.C. VOLT REG 12V 1A TO-220 NJM7812 I.C. VOLT REG TO-220F NJM7912 |
| MULTI-CH BOARD PCB ASSEMBLY | 80-0907630-64-00 | MULTI-CHANNEL ASSEMBLY |
| DIODES D601 D602,D604 | 20-0000000-00-13 20-3275902-00-01 | DIODE SW 4NS DO35 1N4148 DIODE ZENER BZX55 7.5V 1/2W 5% |

| Reference No. | Part No. | Description |
|--|------------------|--|
| TRANSISTORS | | |
| Q6101 | 21-0000140-00-11 | XTR SS NPN HFE 120 100MHz TO-92 SS8050C |
| Q6102 | 21-0100131-00-11 | XTR SS PNP HFE 170 1.5A TO-92 SS8550C |
| Q6103 | 21-0100390-70-14 | XTR SS PNP HFE 30 250MHz SPT DTA 114ESA |
| Q6104 | 21-0000400-70-14 | XTR SS NPN HFE30 250MHz SPT DTC114ESA |
| Q6105,Q6106 | 21-0000360-00-00 | XTR SS NPN HFE200-700 30MHz 2SC2878A |
| Q6107 | 21-0000450-70-14 | XTR SS NPN 68 250MHz SPT DTA144ESA |
| Q6108,Q6109 | 21-0000120-70-14 | XTR SS NPN HFE 68 30MHz SPT DTC144ES |
| CAPACITORS | | |
| C627,C628,C633,C634 | 22-3101022-00-43 | CAP ELEC SS 100uF 16V 20% 85C |
| C607,C611,C612,C747-C754, C6201-C6217 | 22-3220022-00-43 | CAP ELEC GS 22uF 16V 20% 85C |
| C626 | 22-3221022-00-43 | CAP ELEC SS 220uF 16V 20% 85C |
| C677,C678,C689,C690 | 22-3470022-00-43 | CAP ELEC SS 47uF 16V 20% 85C |
| C759-C762,C769,C770,C773,C774 | 22-4210402-00-31 | CAP MpF 0.1uF 63V 5% DMF 5 SERIES |
| C767,C768,C771,C772 | 22-4233202-00-31 | CAP MpF 0.0033uF 63V 5% DMF 5 SERIES |
| C763,C764,C765,C766 | 22-4247302-00-31 | CAP MpF 0.047uF 63V 5% DMF 5 SERIES |
| C757,C758 | 22-4282302-00-31 | CAP MpF 0.082uF 63V 5% DMF 5 SERIES |
| C775,C776,C755,C756 | 22-8226052-00-28 | CAP ELEC 2.2uF 50V 20% NON-POLAR |
| C6301-C6304 | 45-0104056-57-57 | CAP CER SMD 0.1uF 50V 20% Y5V 0603 |
| INDUCTORS | | |
| L6101,L6102 | 24-0101108-00-28 | IND CHOKE 100uH 10% AXIAL EC24-101K |
| ICs | | |
| U6104-U6107 | 27-7055320-18-14 | I.C. AUDIO LOW NOISE OP-AMP SMD NJM5532M |
| U6101,U6102 | 27-7661516-14-01 | I.C. SOUND PROCESSOR VOL+TONE M61516FP |
| U6103 | 27-9496600-21-02 | I.C. QUAD BILATERAL SWITCH LC4966 |
| PRE-OUT BOARD | | |
| PCB ASSEMBLY | 80-0907630-63-00 | PRE-OUT ASSEMBLY |
| DIODES | | |
| D611-D614 | 20-0000000-00-13 | DIODE SW 4NS DO35 1N4148 |
| TRANSISTORS | | |
| Q608-Q617,Q629,Q630,Q632,Q633 | 21-0000350-70-00 | XTR SS NPN HFE200-700 30MHz SPT RN1241A |

| <u>Reference No.</u> | <u>Part No.</u> | <u>Description</u> |
|---|------------------|---|
| Q616,Q618,Q620,Q622,Q624,Q631 | 21-0100390-70-14 | XTR SS PNP HFE 30 250MHz SPT DTA 114ESA |
| CAPACITORS | | |
| C637,C642,C647,C652,C657,C662, C667,C672,C700,C705 | 22-3100022-00-43 | CAP ELEC SS 10uF 16V 20% 85C |
| C640,C645,C650,C655,C660,C665, C670,C675,C703,C708 | 22-3220022-00-43 | CAP ELEC GS 22uF 16V 20% 85C |
| C679,C680,C691,C692 | 22-3470022-00-43 | CAP ELEC SS 47uF 16V 20% 85C |
| RESISTORS | | |
| R635,R642,R647,R654,R659,R666, R678,R694,R701 | 23-1220102-00-00 | RES MF 2.2K OHM 1% 1/6W |
| R636,R643,R648,R655,R660,R667, R672,R679,R695,R702 | 23-1330002-00-00 | RES MF 330 OHM 1% 1/6W |
| INDUCTORS | | |
| L602-L609 | 24-0100127-00-28 | IND CHOKE 10uH 10% EC36 AXIAL EC36-100K |
| ICs | | |
| U609-U613 | 27-7055320-18-14 | I.C. AUDIO LOW NOISE OP-AMP NJM5532M |
| PSU BOARD | | |
| PSU ASSEMBLY*AH | 80-0907630-01-00 | PSU ASSEMBLY |
| PSU ASSEMBLY*C | 80-0907630-01-01 | PSU ASSEMBLY |
| DIODES | | |
| D751,D756 | 20-0000000-00-13 | DIODE SW 4NS DO35 1N4148 |
| D752-D755 | 20-1001401-20-44 | DIODE RECT 1A/400V DO41 1N4004 |
| TRANSISTOR | | |
| Q751 | 21-0000010-00-46 | XTR SS NPN HEF 100 200MHz TO-92 C1815Y |
| CAPACITORS | | |
| C752 | 22-3476052-00-43 | CAP ELEC SS 4.7uF 50V 20% 85C |
| C763 | 22-1103960-37-71 | CAP CER 0.01uF 250VAC 20% Y5V |
| RESISTORS | | |
| R751 | 23-5228330-00-00 | RES FUSIBLE 0.22 OHM 10% 1/2W AXIAL |
| R754*AH | 23-8395232-00-25 | COND PATH RESISTOR 3.9M OHM 1/2W 5% 250V |
| STANDBY TRANSFORMER | | |
| T751 | 25-0040021-31-18 | XFOFMER PW EI-35 100V/220V T05382B |
| RELAY | | |
| M751 | 32-1212100-01-97 | RELAY MINIATURE 2P1T SDT-S-112DMR |

| Reference No. | Part No. | Description |
|---|------------------|---|
| FUSES | | |
| F751*AH  | 33-0191001-00-88 | FUSE 10A/250VAC TIME-LAG 5X20mm 5T UL/CSA |
| F751*C  | 33-0181006-00-88 | FUSE 6.3A/250VAC TIME-LAG 5X20mm 5T VDE/UL/CSA |
| F752*AH  | 33-0111006-00-88 | FUSE 1.6A 250V TIME LAG 5x20mm 5T UL/CSA/VDE/SEMKO |
| F752*C  | 33-0151006-00-88 | FUSE 800mA 250V TIME LAG 5x20mm 5T UL/CSA/VDE/SEMKO |
| POWER SWITCH BOARD PCB ASSEMBLY | | |
| | 80-0907630-48-00 | POWER SWITCHASSEMBLY |
| CAPACITOR | | |
| C764  | 22-1103960-37-71 | CAP CER 0.01uF 250VAC 20% Y5V |
| POWER SWITCH | | |
| S751  | 35-0101109-00-67 | SW POWER TV-8 10A 250VAC PS3-22SPA-P7AZ |
| RS232 BOARD PCB ASSEMBLY | | |
| | 80-0907630-38-00 | RS232 ASSEMBLY |
| CAPACITORS | | |
| C901-C904 | 22-3106052-00-43 | CAP ELEC SS 1uF 50V 20% 85C |
| C905 | 22-3100022-00-43 | CAP ELEC SS 10uF 16V 20% 85C |
| IC | | |
| U901 | 27-0723200-18-43 | I.C. DUAL RS-232 TRANSMITTER DS232AR |
| SECONDARY BOARD PCB ASSEMBLY | | |
| | 80-0907630-27-00 | SECONDARY ASSEMBLY |
| CAPACITORS | | |
| C801-C804 | 22-3123072-00-41 | CAP ELEC LP 12000uF 80V 20% RAD |
| DIODES | | |
| D801,D802 | 20-5125401-50-02 | BRIDGE RECTIFIER 25A 400V MP254W BR-25W |
| SPEAKER A BOARD PCB ASSEMBLY | | |
| | 80-0907630-67-00 | SPEAKER A ASSEMBLY |
| SPEAKER TERMINAL | | |
| M5101,M8101 | 34-3000021-00-80 | SPEAKER TERMINAL 6P BINDING R/B |
| SPEAKER B BOARD PCB ASSEMBLY | | |
| | 80-0907630-67-01 | SPEAKER B ASSEMBLY |
| SPEAKER TERMINAL | | |
| M5102 | 34-3000022-00-80 | SPEAKER TERMINAL 4P BINDING R/B |

| Reference No. | Part No. | Description |
|---|--|---|
| <u>S-VIDEO BOARD</u> PCB ASSEMBLY | 80-0907630-26-00 | S-VIDEO ASSEMBLY |
| <u>CAPACITORS</u> C4101-C4107,C4109-,C4111,C4113- C4115,C4117-C4120,C4153,C4157 C4108,C4112,C4116,C4156 C4123,C4124 C4134,C4145,C4158,C4149 C4136,C4146 C4137,C4133,C4141 C4138 C4144 C4150 C4151 | 22-3226052-00-43 22-3471012-00-28 22-3221012-00-43 22-3101012-00-43 22-4247402-00-31 22-3106052-00-43 22-7200210-00-09 22-3477052-00-43 22-3470022-00-43 22-3100022-00-43 | CAP ELEC SS 2.2uF 50V 20% 85C CAP ELEC GR 470uF 10V 20% 85C CAP ELEC SS 220uF 10V 20% 85C CAP ELEC SS 100uF 10V 20% 85C CAP MpF 0.47uF 63V 5% DMF 5 SERIES CAP ELEC SS 1uF 50V 20% 85C CAP TRIMMER 20pF 20% CAP ELEC SS 0.47uF 50 20% 85C CAP ELEC SS 47uF 16V 20% 85C CAP ELEC SS 10uF 16V 20% 85C |
| <u>DIODES</u> D4101-D4107 | 20-0000000-00-13 | DIODE SW 4NS DO35 1N4148 |
| <u>INDUCTORS</u> L4101 L4102 | 24-0569107-00-28 24-0220107-00-28 | IND CHOKE 5.6uH 10% IND CHOKE 22uH 10% |
| <u>TRANSISTORS</u> Q4101,Q4103,Q4122,Q4131 Q4102 Q4107-Q4112,Q4116-Q4119 Q4113,Q4114,Q4121,Q4124,Q4125, Q4128,Q4130,Q4133 Q4115-Q4127 Q4120,Q4123 Q4132 | 21-0000120-70-14 21-0000450-70-14 21-0100370-70-14 21-0000360-00-00 21-0000390-70-14 21-0000380-70-14 21-0000010-00-46 | XTR SS NPN HFE 68 30MHz SPT DTC144ES XTR SS NPN 68 250MHz SPT DTA144ESA XTR SS PNP HFE 270-560 140MHz 2SA933AS XTR SS NPN HFE200-700 30MHz 2SC2878A XTR SS NPN HFE270-560 180MHz 2SC1740S XTR SS NPN HFE20 250MHz DTC-123ESA XTR SS NPN HEF 100 200MHz TO-92 C1815Y |
| <u>SLIDE SWITCH</u> S4101 | 35-4102209-00-67 | SW SLIDE 2P2T RIGHT L=9 |
| <u>ICs</u> U4101 U4102,U4103 U4104 | 27-5574763-21-02 27-5076250-21-23 27-9496600-21-02 | I.C. OSD DIP30SD LC74763-9012 I.C. AV SWITCH DIP BA7625 I.C. QUAD BILATERAL SWITCH LC4966 |
| <u>CRYSTALS</u> X4101 X4102 | 28-5143200-06-19 28-5177200-06-19 | CRYSTAL 14.318MHz 30ppm HC-49S CRYSTAL 17.73447MHz 30ppm HC-49S |
| <u>TRIGGER BOARD</u> PCB ASSEMBLY | 80-0907630-68-00 | TRIGGER ASSEMBLY |

| Reference No. | Part No. | Description |
|---|--|---|
| DIODES D351-D353 D354-D358,D3501-D3504 | 20-3251902-00-01 20-0000000-00-13 | DIODE ZENER BZX55 5.1V 1/2W 5% DIODE SW 4NS DO35 1N4148 |
| PHONE JACKS M351-M357 | 34-4310300-00-60 | PHONE JACK 1 BLACK PCB MOUNT 3.5mm |
| TRANSISTORS Q351,Q352 Q353,Q354 | 21-0000380-70-14 21-0000140-00-11 | XTR SS NPN HFE20 250MHz DTC-123ESA XTR SS NPN HFE 120 100MHz TO-92 SS8050C |
| SLIDE SWITCH S351 | 35-4102209-00-67 | SW SLIDE 2P2T RIGHT L=9 JSK022N09-G09 |
| REGULATORS U3501,U3502 U352 | 27-3001201-17-14 27-3001201-07-85 | I.C. VOLT REG 12V 1A TO-220 NJM7812 I.C. VOLT REG 12V 0.1A TO-92 LM78L12 |
| VIDEO-6 BOARD PCB ASSEMBLY | 80-0907630-45-00 | VIDEO-6 BOARD |
| CAPACITORS C4401,C4402,C4403 | 22-3226052-00-43 | CAP ELEC SS 2.2uF 50V 20% 85C |
| RCA JACKS M4401 M4404 M4403 M4402 | 34-4010000-01-60 34-4010100-01-60 34-4010200-01-60 34-4110300-00-60 | RCA JACK 1 YELLOW PCB MOUNT GOLD RCA JACK 1 RED PCB MOUT GOLD RCA 1 WHITE PCB MOUNT GOLD DIN JACK 1 BLACK PCB MOUNT |
| PHONE JACK J4401 | 34-4510302-01-80 | PHONE JACK D6.3 1 PCB MOUNT GOLD |
| COMPOSITE VIDEO BOARD PCB ASSEMBLY | 80-0907630-66-00 | COMPOSITE VIDEO ASSEMBLY |
| CAPACITORS C4201-C4205,C4207,C4209,C4210, C4216,C4217 C4204,C4206,C4208,C4211,C4218 | 22-3226052-00-43 22-3471012-00-28 | CAP ELEC SS 2.2uF 50V 20% 85C CAP ELEC GR 470uF 10V 20% 85C |
| RESISTORS J4201,J4202 | 44-0000027-11-00 | RES SMD 0 OHM 5% 1/10W 0805 |
| RCA JACKS M421,M422 M423 | 34-4040020-00-60 34-4010000-00-60 | RCA JACK 4 Y-Y/Y-Y PCB MOUNT RCA 1 Y PCB MOUNT GOLD RS-146G/Y |

| Reference No. | Part No. | Description |
|-------------------------|------------------|---|
| TRANSISTORS | | |
| 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 |
| ICs | | |
| U4201 | 27-9496600-21-02 | I.C. QUAD BILATERAL SWITCH LC4966 |
| U4202,U4203 | 27-5076250-21-23 | I.C. AV SWITCH DIP BA7625 |

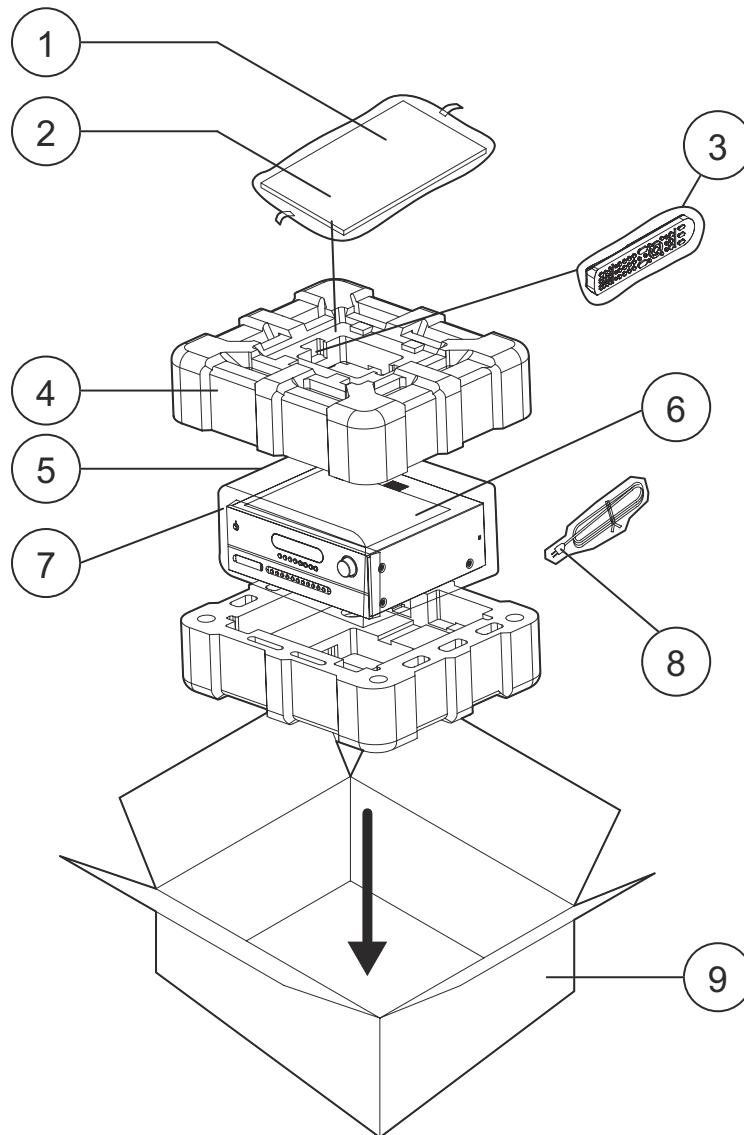
NOTE: THE COMPONENTS IDENTIFIED BY ⚠ MARK ARE CRITICAL FOR RISK OF FIRE AND ELECTRICAL SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.



<*AH > : USA, CANADIAN MODEL ONLY.

<*C > : EUROPEAN MODEL ONLY.

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

PACKING DIAGRAM & PARTS LIST



| <u>Item</u> | <u>Part No.</u> | <u>Description</u> | <u>Qty.</u> |
|---|------------------|---------------------------------------|-------------|
| 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 |
| | 61-0763004-40-99 | OWNER MANUAL T763 GB/F/D/NL | 1 |
| | 61-0763004-41-99 | OWNER MANUAL T763 E/I/P/S | 1 |
| | 83-0762000-00-04 | REMOTE CONTROLLER NAD ZR-2 | 1 |
| | 37-0020200-00-79 | BATTERY AAA 1.5V ER03X | 4 |
| | 65-0752000-00-78 | WARRANTY CARD | 1 |
| 3 | 83-0752000-01-04 | REMOTE CONTROLLER NAD HTR-2 | 1 |
| 4 | 63-0763001-00-01 | POLYFOAM TOP / BOTTOM T763 | 2 |
| 5 | 64-0762001-00-00 | POLYBAG MAIN UNIT | 1 |
| 6 | 65-0752070-00-99 | A3 WHITE PAPER | 1 |
| 7 | 64-0762000-00-00 | EPE PROTECTIVE COVER | 1 |
| 8 *AH  | 36-2881010-07-97 | POWER CORD 110V 3PINS 15A/125V UL/CSA | 1 |
| *C  | 36-2983110-07-97 | POWER CORD CE 3 PINS 16A 250V | 1 |
| 9 | 67-0763000-10-99 | MASTER CARTON BOX T763 | 1 |

VERSION HISTORY

| SERIAL NUMBER | SOFTWARE VER. | PCB ASSEMBLY VERSION |
|---------------------------|---------------|--|
| R38T76300001-R38T76300500 | V1.24 | ALL ARE ISSUE 3 |
| R39T76300501-R39T76300900 | V1.24 | ALL ARE ISSUE 3 |
| R3XT76300901-R3XT76301200 | V1.24 | ALL ARE ISSUE 4 |
| R3XT76301201-R3XT76302200 | V1.25 | ALL ARE ISSUE 4 |
| R3YT76302201-R3XT76302300 | V1.26 | ONLY MULTI/SECONDARY/ISC BOARDS ISSUE 4, ALL OTHER ISSUE 5. |
| R3ZT76302301-R3XT76302800 | V1.26 | ONLY MULTI/SECONDARY/ISC BOARDS ISSUE 4, ALL OTHER ISSUE 5. |
| R3ZT76302801-R3XT76303300 | V1.26 | ONLY MULTI/SECONDARY/ISC BOARDS ISSUE 4, ALL OTHER ISSUE 5. |
| R3ZT76303301-R3XT76303600 | V1.26 | SECONDARY/ISC BOARDS ISSUE 4, POWER AMP/ MULTI-CH/ KEYBOARD/MAIN/ TRIGGER/ SPEAKER/ VIDEO 6/ POWER SW ISSUE 5, ALL OTHER ISSUE 6. |
| R42T76303601-R42T76303750 | V1.26 | SECONDARY/ISC BOARDS ISSUE 4, POWER AMP/ MULTI-CH/ KEYBOARD ISSUE 5, ALL OTHER ISSUE 6. |
| R42T76303751-R42T76303950 | V1.26 | SECONDARY/ISC BOARDS ISSUE 4, POWER AMP/ MULTI-CH/ KEYBOARD ISSUE 5, ALL OTHER ISSUE 6. |
| R42T76303951-R42T76304250 | V1.26 | SECONDARY/ISC BOARDS ISSUE 4, POWER AMP/ MULTI-CH/ KEYBOARD ISSUE 5, ALL OTHER ISSUE 6. |

REMARK: PCB Number 55-0763XXX-XX-**00** = ISSUE 3,
 PCB Number 55-0763XXX-XX-**01** = ISSUE 4,
 PCB Number 55-0763XXX-XX-**02** = ISSUE 5,
 PCB Number 55-0763XXX-XX-**03** = ISSUE 6.

SERVICE MANUAL

T 763

Surround Sound Receiver