

# SUB300/300B

Dolby Pro-Logic® Surround  
Processor/Amplifier/Subwoofer

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## SERVICE MANUAL



JBL Consumer Products Inc.  
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**H** A Harman International Company

Rev A 11/99

**The Sub300/300b are part of the ESC300 system. Subwoofers SUB300 and SUB300b can be easily identified by the label on the main control plate, either SUB300 or SUB300b.**

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**SPECIFICATIONS**

PRODUCT: JBL ESC-300 Surround Processor/Amplifier  
 DESCRIPTION: 5x30w + 1x60w amp module

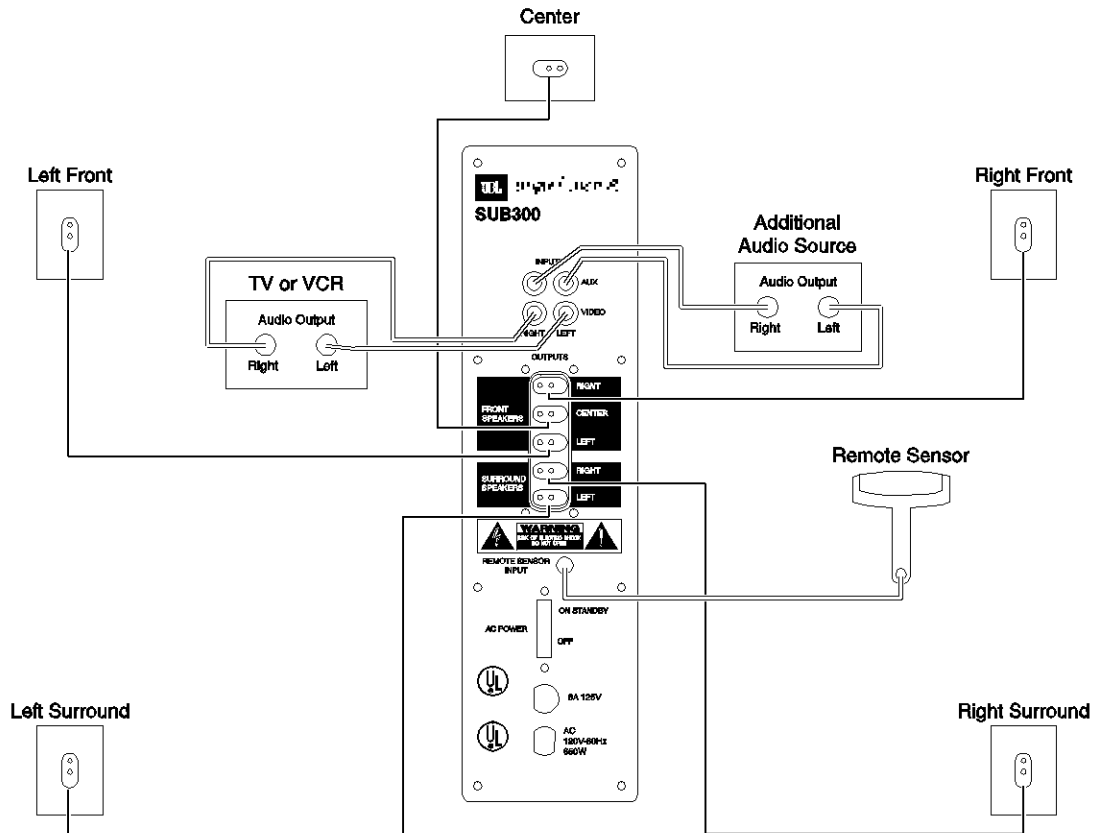
LINE VOLTAGE	Yes/No	Voltage	Nominal	
US 120vac/60Hz	Yes	120VAC	120VAC	
EU 230vac/50-60Hz	Yes	230VAC	230VAC	
Asia 100vac/50Hz	Yes	100VAC	100VAC	
Parameter	Spec.	Unit	Conditions	Notes
<b>Amp Section: L,C,R,LS,RS</b>				
Rated Output Power/ Prologic mode	30	Watts	Prologic Mode 1 KHz, 1 % THD: Load Impedance 6 Ohms all channels	Prologic mode 1% THD, Input voltage 120VAC
THD@ Rated Power	0.08	%	22k filter Stereo mode	25W (Power Bandwidth 250Hz-20KHz)
THD @ 1 Watt	0.1	%	22k filter Stereo mode	
Rated Output Power/ STEREO MODE	30	Watts@1%THD	Stereo Mode Ma x @ 1 KHz	
DC Offset	50	mV-DC	@ Speaker Outputs	
Damping factor	>20	DF		30 Watts @ 1 KHz, 6 Ohms stereo mode
Input Sensitivity (L,C,R,LS,RS)				
Input Frequency	1k	Hz	Nominal Freq.	
Video Input L,R (Stereo mode)	360	mVrms	To Rated Power/ Vol @ Max stereo mode	AP Outputs Zo=600 Ohms
Video Input Central (Prologic mode)	260	mVrms	All controls nominal position	AP Outputs A&B Zo=600 Ohms
Video Input LS,RS (Prologic mode)	260	mVrms		AP Outputs A&B Zo=600 Ohms
Signal to Noise (L,C,R,LS,RS)				
SNR-A-Weighted	80	dBA	Relative to Max output power/ AP Zo=600 Ohms	A-Weighting filter
SNR-unweighted	65	dBr	Relative to Max output power/ AP Zo=600 Ohms	22k filter
SNR rel. 1W-unweighted	55	dBr	Relative to 1W Output/ AP Zo=600 Ohms	22k filter
Residual Noise Floor	5	mVrms	Volume @max, using RMS reading DMM/VOM (or A/P BW=22 KHz.)	22k filter
Residual Noise Floor	5	mVrms(max)	Volume @max, w/ A/P Swept Bandpass Measurement (max V-RMS Line freq.+ harmonics)	22k filter
Filters/EQ (L,C,R,LS,RS)				
Treble Control: @ 10kHz	<input type="checkbox"/> 8	dB	Relative to 0dBr at 1w output/6 ohms	
Bass Control: @ 200Hz	<input type="checkbox"/> 6	dB	Relative to 0dBr at 1w output/6 ohms	
HPF stereo mode Left and Right channels	Fixed	dBr	0dBr = 1w @ 1kHz , HP -3dB point @ 100 Hz.	
Level Controls (L,C,R,LS,RS)				
Balance Control (Stereo Mode)	-30	dB	Attenuation-Relative to 0dBr at 1w output/6 ohms	
Rear Level Control (Surround Mode)	<input type="checkbox"/> 20	dB	Relative to 0dBr at 1w output/6 ohms	
Center Level Control (Surround Mode)	<input type="checkbox"/> 20	dB	Relative to 0dBr at 1w output/6 ohms	
Channel Separation at 1w, 1kHz				
Inputs AUX and Video in Stereo Mode	>50	dB	Separation @ 1w/6 ohms, 1kHz	Relative to FL and FR
<b>Amp: 60w x 1 Subwoofer Section</b>				
Load Impedance (speaker)	4	Ohms	Nominal	
Rated Output Power	60	Watts	200 Hz, 1 % THD	Surround mode simulated 200Hz crossover frequency.
THD@ Rated Power	0.08	%		60w (Power Bandwidth 30-250Hz)
THD @ 1 Watt	0.1	%	22k filter	
Output Power at 1% THD+N	65	Watts@1%THD	2 ch. Stereo Mode @ 40 Hz	
DC Offset	50	mV-DC	@ Speaker Outputs	

Damping factor	>60	DF	—	40 Hz test stereo mode @ 60 Watts output power
Input Sensitivity				
Input Frequency	40	Hz	Nominal Freq.	Stereo Mode Zo=600 Ohms
Video IN & Aux IN	200	mVrms	To rated power Volume control @max,(Stereo mode) all other controls at nominal position.	Stereo Mode Zo=600 Ohms
Signal to Noise				
SNR-A-Weighted	90	dBA	Relative to Full power (60 Watts).	A-Weighting filter
SNR-unweighted	65	dBr	Relative to Full power (60 Watts).	22k filter
SNR rel. 1W-unweighted	60	dBr	Relative to 1W Output/ 1k ohm term.	22k filter
Residual Noise Floor	6	mVrms	Volume @max, using RMS reading DMM/VOM (or A/P)	
Residual Noise Floor	6	mVrms(max)	Volume @max, w/ A/P Swept Bandpass Measurement (max V-RMS Line freq.+ harmonics)	
Filters/EQ				
Bass Control: Boost @ 40Hz	<input type="checkbox"/> 8	dB	Relative to 0dBr at 1w output/4 ohms	
Bass Control: Cut @ 40Hz	<input type="checkbox"/> 8	dB	Relative to 0dBr at 1w output/4 ohms	
LPF Stereo mode	Fixed		0dBr = 1w @ 40Hz , LP -3dB point @ 250 Hz.	
Power on Delay time	3	sec.	AC Power Applied	
Efficiency				
Quiescent Input Power	30	Watts	@ nom. line voltage	Nominal input voltage Nominal Input frequency and voltage.
Power Cons.@ rated power	400	Watts	@ nom. line voltage	Maximum input power consumption has been rated by UL to 650Watts .
Protection				
Short Circuit Protection	yes		Direct short at output	During short circuit condition unit will automatically change its operating mode to Stand-by (AC reset required to restart ). Input power should not exceed Stand-by input power.
Thermal Protection	yes		@ 1/8 max unclipped Power	
Line Fuse Rating Asia & US versions	6A	Amps	Fast blow fuse	Removable on rear panel 5x20mm 125VAC version
European version (EU)	4A	Amps	Slo-Blo	Removable on rear panel 5x20mm 230VAC version

PRODUCT: JBL ESC-300 Surround Processor/Amplifier  
 DESCRIPTION: 5x30w + 1x60w amp module

LINE VOLTAGE	Yes/No	Voltage	Nominal
US 120vac/60Hz	Yes	120VAC	120VAC
EU 230vac/50-60Hz	Yes	230VAC	230VAC

## SUB300/SUB300B SPEAKER AND SOURCE CONNECTIONS



## CONTROLS AND THEIR FUNCTION

### Remote Control

**1. Mute** From either the front panel or the remote control; press (Mute) to lower the volume completely. The mute symbol indicator (27) will begin to flash. When you press either of the mute buttons again, the volume will return to its previous setting. Note: The mute function can also be turned off by pressing either of the volume buttons on the front panel or the remote control,

**2. 0dB** Press this button to reset the Center, Surround, Balance, Treble and Bass controls to their default positions.

**3. Test** Press this button to activate the Test Tone mode (see "Test Tone" section).

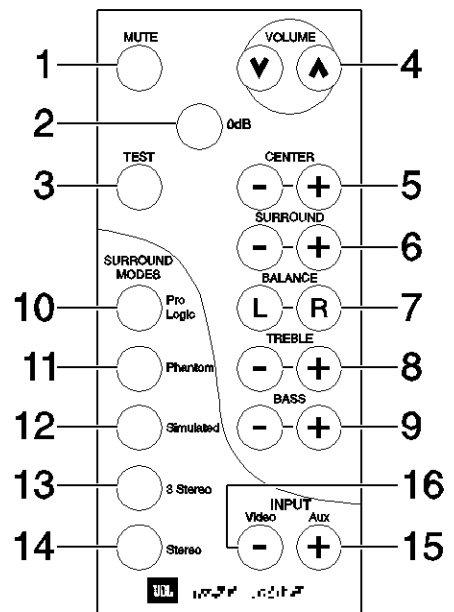
**4. Volume** Press (▲) on the remote control to raise the system's volume. Press (▼) on the remote control or front panel to lower the system's volume.

**5. Center** Press (+) on the remote control to increase the relative volume of the center channel. Press (-) on the remote control to decrease the relative volume of the center channel.

**6. Surround** Press (+) on the remote control to increase the relative volume of the surround channels. Press (-) on the remote control to decrease the relative volume of the surround channels.

**7. Balance** Press (R) on the remote control to decrease the volume of the left channel. Press (L) on the remote control to decrease the volume of the right channel.

**8. Treble** Press (+) to increase the level of high-frequency information. Press (-) to decrease the level of high-frequency information.



**9. Bass** Press (+) to increase the level of high-frequency information. Press (-) to decrease the level of low-frequency information.

**10-14. Surround Modes** From the remote, press one of these buttons to directly choose the desired surround mode (see "Surround Modes" section). From the front panel, press (Surround Mode) to cycle between the surround modes.

**15-16. Input Selector** From the remote, press either (Aux) or (Video) to select the desired input. From the front panel, press (Input) to select the desired input.

**Front Panel Indicators**

**17-18. Input** Either Video or Aux will illuminate, depending on which input is chosen.

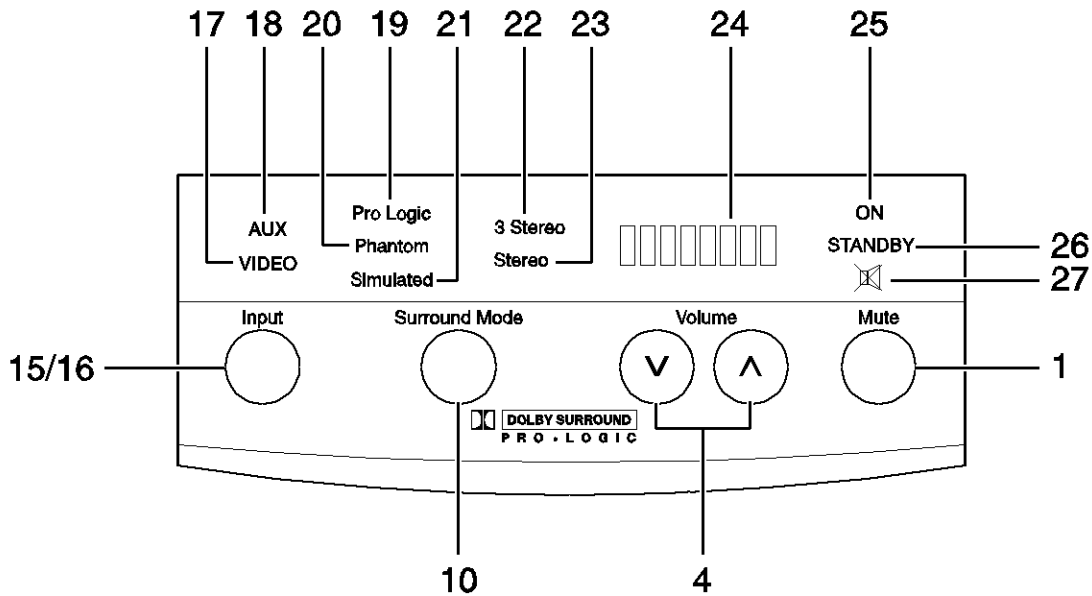
**19-23. Surround** One of these will illuminate depending on which surround mode is chosen.

**24. Status Bar Indicators** These LEDs show the relative setting of volume, balance, center level, surround level, bass and treble controls.

**25. On** This will illuminate when the Master On/Off is switched to On/Standby and a signal is present.

**26. Standby** This will illuminate when the Master On/Off is switched to On/Standby and a signal is *not* present.

**27. Mute Symbol** This will flash whenever the Mute feature is engaged.



**Surround Modes**

**Dolby Pro Logic**

Use this mode for films recorded using Dolby Pro Logic Surround. The Surround channels have a 20-ms delay.

**Phantom**

This mode creates surround sound from stereo recordings. The center channel is not used and the surround channels have a 20-ms delay.

**Simulated**

This mode provides surround sound with no delay for the surround speakers. This is not a Dolby Mode.

**3-Stereo Mode**

Use this mode to play back Pro Logic-encoded films when you do not want the surround channels to play.

**Stereo**

This mode plays a recording in traditional two-channel stereo.

**Test Tone**

The test tone is used to calibrate the volume settings of the speakers. A static noise will be heard cycling, in order, from the front left, center, right, and both surround speakers.

Using the remote control, adjust the Center and Surround levels until the volume of all the speakers is the same during the test.

**NOTE:** The test tone is used to calibrate the performance of the system. When listening to an actual recording, the volume level of the surround channels is generally much lower than that of the front channels. In fact, when listening to a movie, virtually all of the dialogue and a substantial amount of the effects are reproduced through the center channel.

## SUB 300/300B DISASSEMBLY PROCEDURE

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- 1) Unplug all external cables; lay the subwoofer on a padded surface so that plastic cabinet base is facing upwards.
  - 2) Remove (4) oblong rubber feet from cabinet base, exposing the (4) recessed screws holding the base on.
  - 3) Remove the (4) screws; remove the cabinet base.
  - 4) Remove the (8) woofer mounting screws and remove the woofer; unplug the main speaker wires from the terminals.
  - 5) In the woofer opening, cut all plastic cable ties holding the bundled wires together.
  - 6) Identify the (5) two-conductor molex connectors from the Pro Logic board mounted on the inside of the cabinet that must be removed. Use the map on the following page to identify. Observe the wire colors on each connector, and write each connector and it's corresponding wire color either in this manual, or on a separate piece of paper. This is important to avoid mixing up the connectors upon reassembly.
  - 7) Unplug the (5) two-conductor molex connectors from the Pro Logic board.
- NOTE:** These molex connectors may be glued together, or glued to the PCB; utmost care is required to unplug them without damaging nearby components or the connectors themselves. We recommend using a heat gun or blow dryer at moderate temperature to warm the adhesive first on each connector, and then unplug using long-nosed pliers.
- 8) Remove the (10) 3/4" machine screws holding the heatsink in place; remove only the screws on the outer perimeter
  - 9) Remove both the heatsink (with power supply and main amplifiers) out of the cabinet; unplug additional connectors as necessary.
  - 10) Normally the input/output plate (with power cord & switch) will not have to be removed; however, if necessary for the repair:
    - a) Remove the (8) 3/4" machine screws holding the input/output plate on the cabinet.
    - b) Remove the plate; use caution because one of the 3 conductor cables connecting to the Pro Logic board is very short; unplug it from its molex connector. Unplug all other connectors as needed.
  - 11) If complete removal is desired of the both the amplifier and the input/output plate, the main 2 conductor power wires will have to be separated (cut) or the wire nuts removed near the power transformer.

## REASSEMBLY

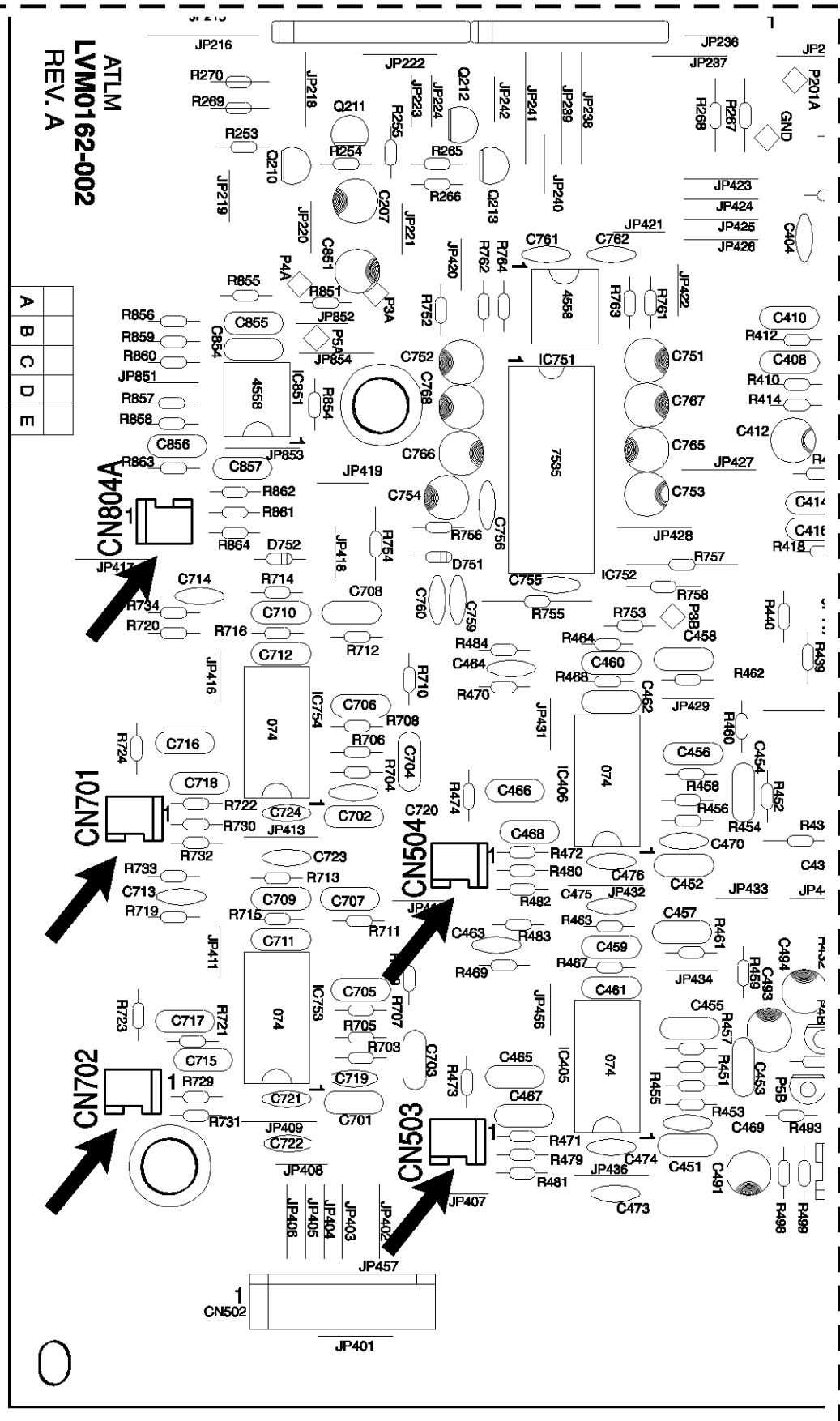
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Use a backwards sequence from the above steps; some additional notes include:

- 1) If the input/output plate was removed, make sure the speaker wires exiting the plastic cover are still air-tight; seal with additional hot glue or silicon seal if necessary.
- 2) Make sure all connectors, molex, power cord, and woofer wires, are attached and plugged in their original locations. Refer to your notes regarding the wire colors for the final (5) two-conductor molex connectors to the Pro Logic board. These connectors do not need to be re-glued.
- 3) Replace plastic cable ties as necessary.
- 4) Replace the woofer. SUB300 - Observe polarity on woofer wires - red wire to red dot on woofer.
- 5) Last step is to re-fit plastic base to cabinet, reattach with screws, re-fit rubber plugs.

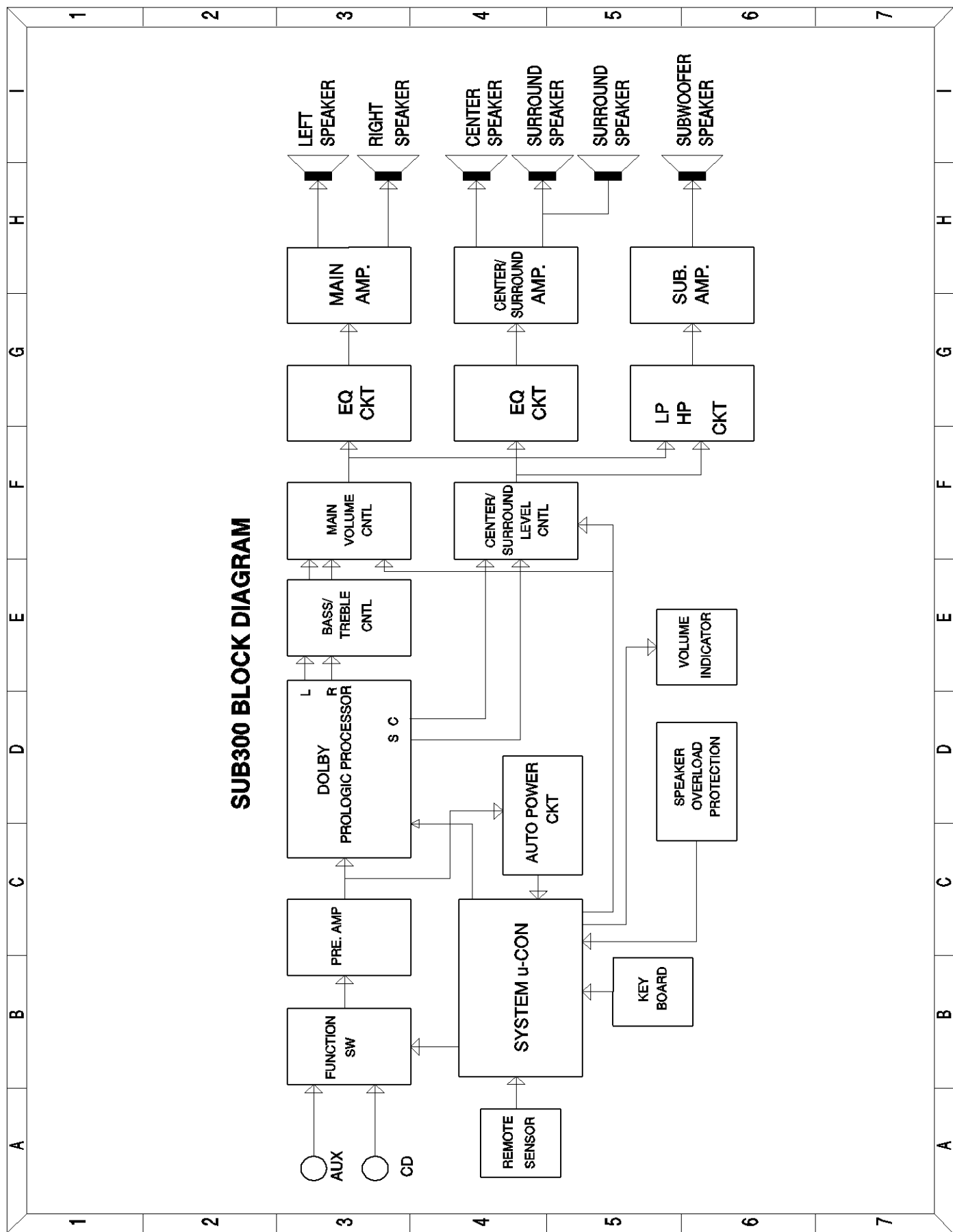
**DOLBY PRO LOGIC PCB CONNECTORS**

**Dolby Pro Logic PCB Connectors**



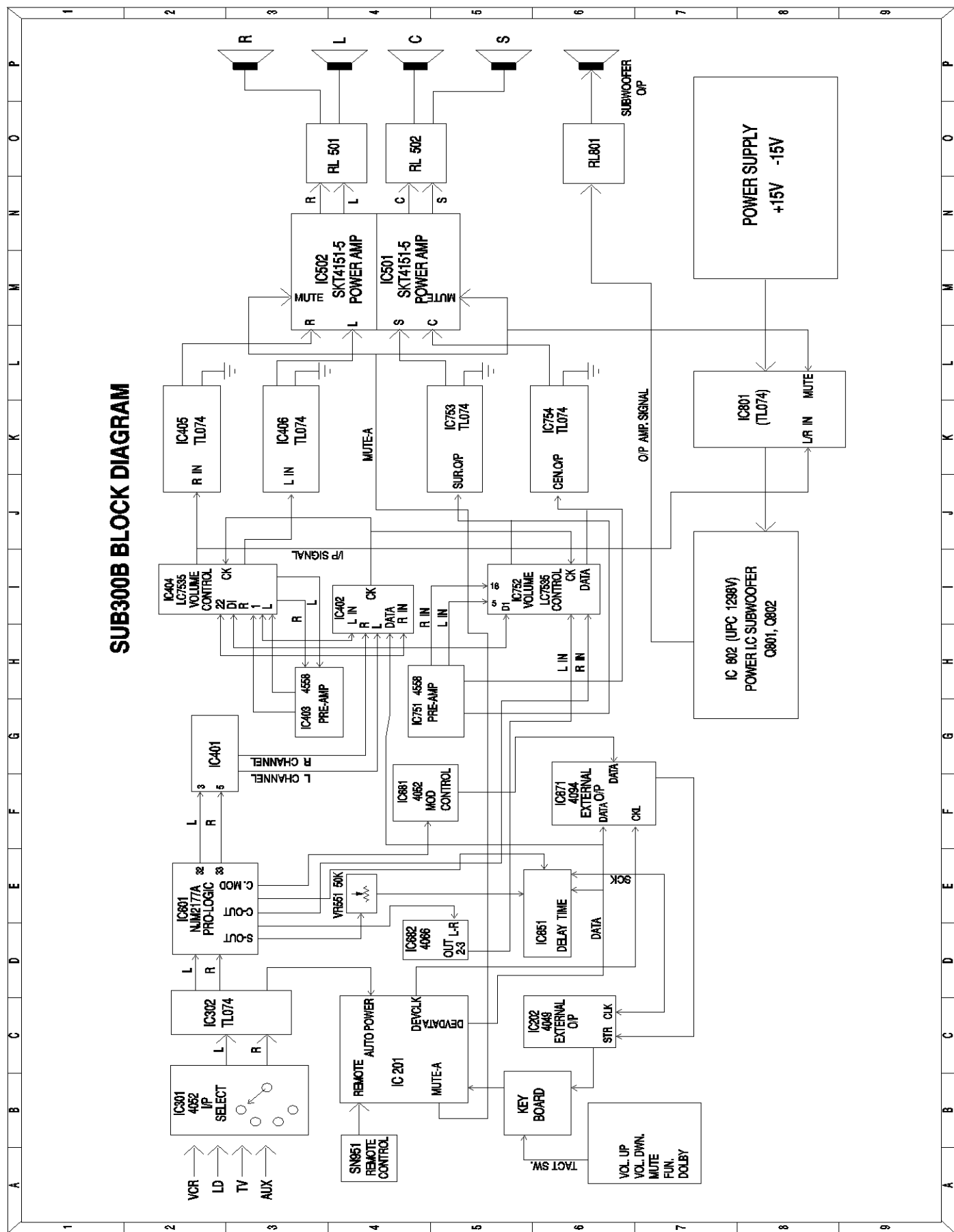


**SUB300 BLOCK DIAGRAM**

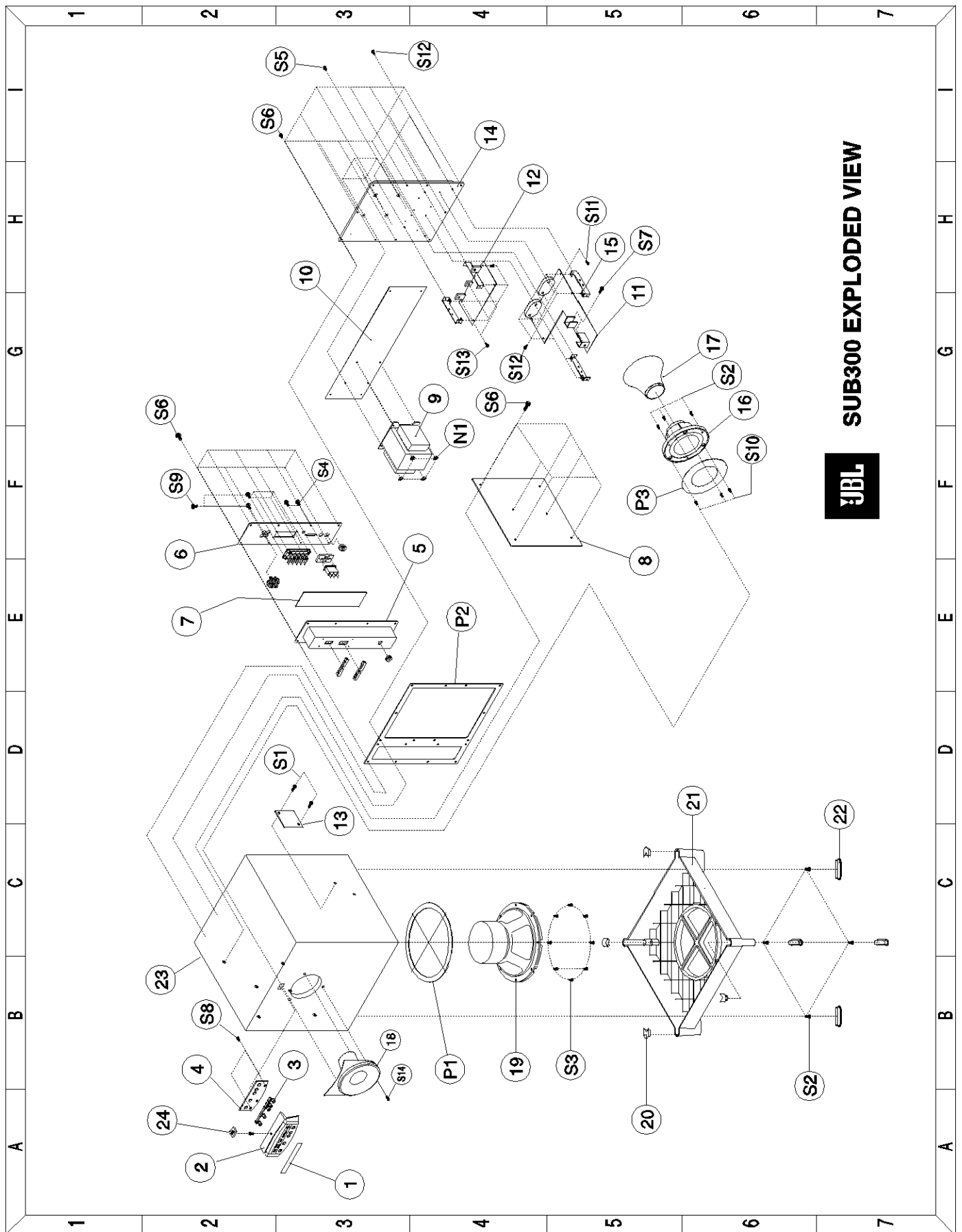


**SUB300 BLOCK DIAGRAM**

**SUB300B BLOCK DIAGRAM**



### SUB300 UNIT EXPLODED VIEW

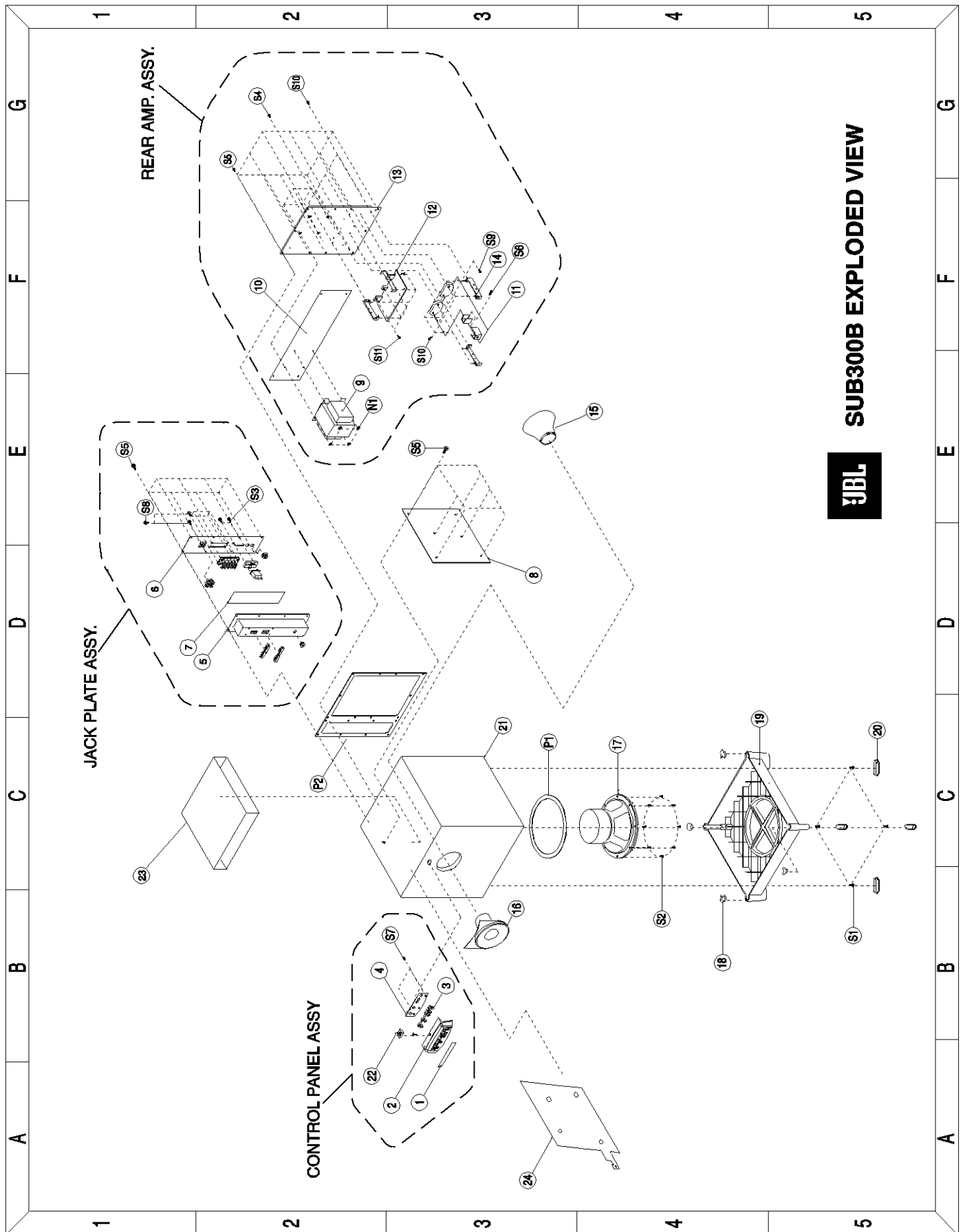


JBL SUB300 EXPLODED VIEW

## SUB300 MECHANICAL PARTS LIST

Ref.#	Part Number	Description	Qty.	Ref.#	Part Number	Description	Qty
1	BNP0027-001	PVC PLATE PVC	1	P1	IVE0041-001	DRIVER GASKET 184x210x2Tmm	1
2	BPF5033-001	CONTROL PANEL, BLACK	1	P2	IVE0042001	BOX GASKET 2Tmm	1
	BPF5033-002	CONTROL PANEL, WHITE	1	P3	IVE0043-001	PORT GASKET 75x131x1.0mm	1
3	BPK5031-000	PUSHBUTTON PANEL	1	S1	H010301-116	SCREW T3.0xL16.0mm	2
4	APE0161-C31	CONTROL PCB ASSY	1	S2	H016504-316	SCREW W6#-20xL16.0mm	5
5	BPA0021-000	REAR COVER HI-PS	1	S3	H016701-316	SCREW W8#-1 8xL16.0mm	8
6	GSE0139-003	JACK PLATE 100V	1	S4	H060301-314	SCREW M3.0xL14.0xP0.5mm	2
	GSE0139-001	JACK PLATE 120V	1	S5	H060404-321	SCREW M3.5xL21mm	4
	GSE0139-002	JACK PLATE 230V	1	S6	H060501-320	SCREW M4x0.7PxL20.0mm	24
7	APE0163-C01	JACK PCB ASSY	1	S7	H100301-306	SCREW TAPPING 3.0 x 6	
8	APE0162-C01	MAIN PCB ASSY	1	S8	H101001-108	SCREW T3.0xL8.0 mm	3
9	TTK1000-002	TRANSFORMER 100V	1	S9	H101001-310	SCREW T3.0xL10.0mm	5
	TTK1200-005	TRANSFORMER 120V	1	S10	H101002-110	SCREW T3.0xL10.0mm NICKEL	3
	TTK2300-003	TRANSFORMER 230V	1	S11	H120301-308	SCREW M2x0.5PX8mm	8
10	BNP0035-001	TRANSFORMER. PLATE L420xW120mm UL	1	S12	H120301-314	SCREW M3x0.5Px14mm	8
11	APE0161-C11	AMP PCB ASSEMBLY	1	S13	H120302-308	SCREW M3.0xL8.0xP0.5mm	2
12	APE0161-C21	SUB WOOFER PCB ASSY	1	S14	H016502-316	SCREW W6#20xL16mm	3
13	APE0162-C11	CENTER PCB ASSY	1		47455-056	LINE CORD 100V (NOT SHOWN)	1
14	GAL0055-001	HEAT SINK AL	1		47455-052	LINE CORD 120V (NOT SHOWN)	1
15	GSE0144000	BRACKET SECC	1		2559-022122	LINE CORD 230V (NOT SHOWN)	1
16	BPR0021-001	PORT ABS	1				
17	BPR0020-000	PORT EDGE ABS, BLACK	1				
	BPR0020-001	PORT EDGE ABS, WHITE	1				
18	BPR001 9-000	PORT TUBE, BLACK	1				
	BPR001 9-001	PORT TUBE, WHITE	1				
19	FTW6080-311	SPKR DRIVER 8" 4	1				
20	BRF0015-001	RUBBER PAD, BLACK	4				
	BRF0015-002	RUBBER PAD, WHITE	4				
21	BPB0012-001	BOTTOM CAB	1				
22	BRF0014-001	RUBBER PAD, BLACK	4				
	BRF0014-002	RUBBER PAD, WHITE	4				
23	EVM0011-001	CABINET W330xH330xD330mm					
24	BPL0013-001	LOGO PLATE N1	1				
	H141482	NUT @14x3.5mm	1				

### SUB300B UNIT EXPLODED VIEW



JBL SUB300B EXPLODED VIEW

## SUB300B / 230 MECHANICAL PARTS LIST

Ref.#	Part Number	Description	Qty.	Ref.#	Part Number	Description	Qty.
1	BNP0027-001	PVC PLATE	1	S3	H060301-314	SCREW M3.0x0.5pxL14.0mm BLACK	4
2	BPF5033-001	CNTL PANEL1	1	S4	H060404-321	SCREW M3.5x0.6pxL21.0mm WAFER BLK	4
3	BPK5031-000	CNTL KNOB	1	S5	H060501-320	SCREW M4.0x0.7pxL20.0mm PAN HEAD BLK	10
4	APE0161-C32	CONTROL PCB ASSY	1	S6	H100301-306	SCREW T3.0xL6.0mm BLACK	1
5	BPA0021-000	REAR COVER	1	S7	H101001-108	SCREW T3.0x1.27p-2RH xL8.0mm NICKEL	2
6	GSE0139-007	JACK PLATE SECC 230V	1	S8	H101001-310	SCREW T3.0x1.27p-2RH xL10.0mm BLACK	1
7	APE0163-C01	JACK PCB ASSY	1	S9	H120301-308	SCREW T3.0x0.5pxL8.0mm PAN HEAD BLK	1
8	APE0162-C03	MAIN PCB ASSY	1	S10	H120301-314	SCREW T3.0x0.5pxL14.0mm PAN HEAD BLK	4
9	TTK2300-003	PWR TRANS 230V 50W EI-96	1	S11	H120302-308	SCREW T3.0x0.5pxL8.0mm W/WASHER BLK	5
10	BNP0035-001	X'MER PLT L420xW120 mm UL	1				
11	APE0161-C12	AUDIO/AMP PCB ASSEMBLY	1				
12	APE0161-C22	SUBWOOFER PCB ASSEMBLY	1				
13	GAL0055-002	HEAT SINK ALUMINUM	1				
14	GSE0140-000	BRACKET PCB BRACKET SECC	1				
15	BPR0020-000	PORT EDGE HI-PS W/O SPRAY BLK	1				
16	BPR0042-BA0	PORT HI-PS (DP6P1083)	1				
17	FTW6080-312	SPK DRIVER "8" 4 OHM 60W"	1				
18	BRF0015-001	RUBBER PAD	4				
19	BPB0012-001	BOTTOM CAB	1				
20	BRF0014-001	RUBBER PAD	4				
21	EVM0011-003	WOOD BOX W330xH330xD330 mm	1				
22	BPL0013-001	LOGO PLATE L22.5xW18.0 mm	1				
23	DAB3030-601	FIB SHEET L300.0xW300.0 xH60.0 mm YELLOW	1				
24	GTN0043-002	TIN FOIL	1				
N1	HNI1482	NUT @14x3.5 mm	4				
P1	IVE0041-001	DRIVER SPONGE OD210.0 xID184.0xT1.0 mm BLACK	1				
P2	IVE0042-001	BOX SPONGE 2Tmm	1				
S1	H016504-316	SCREW W6#-20xL16.0mm WAFER HEAD BLK	4				
S2	H016701-316	SCREW W8#-18xL16.0mm PAN HEAD BLK	8				

## SUB300 ELECTRICAL PARTS LIST

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
<b>Capacitors</b>				C469, 470, 719, 720	PRD3545-681	COND DISC, 680 pF 50V 10% Y5P	4
C201	PVE3950-102	COND ELECT, 1000 uF 6.3V 20%	1	C493, 494, 512, 532	PRE3955-100	COND ELECT, 10 uF 50V 20%	4
C202, 321, 322, 323, 323, 324, 333, 334, 335, 336, 401, 402, 405, 406, 435, 436, 439, 440, 661, 675, 751, 752, 767, 768	PRE3955-109	COND ELECT, 1 uF 50V 20%	24	C501, 502, 521, 522, 810	PRD3545-102	COND DISC, 1000 pF 50V 10% Y5P	5
C203, 204	PRD1335-180	COND DISC, 18 PF 50V 5% NPO D=5	2	C503, 504, 523, 524	PRE3955-109	COND ELECT, 1 uF 50V 20%	4
C205, 209, 210, 310, 312, 317, 318, 329, 329, 331, 417, 418, 431, 432, 441, 442, 445, 473, 474, 475, 476, 667, 682, 721, 722, 723, 724, 755, 756, 759, 760, 761, 762, 913, 914, 921, 922, 923, 924, 929, 930	PRD3965-104	COND DISC, 0.1 uF 50V +80-20% Y5VIZ5V	41	C505, 506, 511, 525, 526, 531	PRE3954-101	COND ELECT, 100 uF 35V 20%	6
C206	PRE3955-478	COND ELECT, 0.47 uF 50V 20%	1	C507, 508, 527, 528	PRE3955-470	COND ELECT, 47 uF 50V 20%	4
C207, 411, 412, 533 671, 672, 690	PRE3952-100	COND ELECT, 10 uF 16V 20%	7	C509, 510, 529, 530, 822, 823, 918, 920	PRM3745-104	COND MYLAR, 0.1 uF 50V 10%	8
C208, 655, 941	PRE3951-470	COND ELECT, 47 uF 10V 20%	3	C515, 516, 535, 536	PRD3545-221	COND DISC, 220 pF 50V 10% 11 Y5P D=5	4
C305, 306, 307, 308, 814	PRD3545-101	COND DISC, 100 pF 50V 10% Y5P	5	C541, 601, 602, 603, 612, 613, 617, 618, 619, 642, 925	PRE3951-100	COND ELECT, 10 uF 10V 20%	11
C311, 313, 319, 320, 332, 419, 420	PRE3953-470	COND ELECT, 47 uF 25V 20%	7	C605, 641	PRE3942-220	COND ELECT, 22 uF 16V 10%	2
C325, 326, 327, 328	PRD1335-470	COND DISC, 47 pF 50V 5% NPO	4	C606, 611, 652, 662	PRM3737-562	COND MYLAR, .0056 uF 100V 5%	4
C330	PRD1335-100	COND DISC, 10 pF 50V 5% NPO	1	C608	PRD3545-471	COND DISC, 470 pF 50V 10% 11 Y5P D=5	1
C403, 404	PRD8035-270 SL D=5	COND DISC, 27 pF 50V 5% 1	2	C609	PRE3951-221	COND ELECT, 220 uF 10V 20%	1
C407, 408, 654, 658, 805, 811	PRM3737-683	COND MYLAR, 0.068 uF 100V 5%	6	C610, 639, 640 830, 831, 832, 833	PRM3737-473	COND MYLAR, 0.047 uF 100V 5%	7
C409, 410, 806	PRM3737-123	COND MYLAR, 0.012 uF 100V 5%	3	C614, 621, 622, 623, 626	PVM3737-224	COND MYLAR 0.22 uF 100V 5%	5
C413, 414	PRM3737-272	COND MYLAR, 0.0027 uF 100V 5%	2	C615	PRE3942-100	COND ELECT, 10 uF 16V 10%	1
C415, 416 631, 632	PRI43737-223	COND MYLAR, 0.022 uF 100V 5%	4	C616, 666, 670, 681	PRE3953-101	COND ELECT, 100 uF 25V 20%	4
C433, 434, 437, 438, 663, 674, 753, 754, 765, 766, 851, 942	PRE3955-479	COND ELECT, 4.7 uF 50V 20%	12	C620	PVP2637-684	COND METAL 0.68 uF 100V 5%	1
C451, 452, 701, 702	PRI43737-392	COND MYLAR, 0.0039 uF 100V 5%	4	C624, 625	PRE3951-479	COND ELECT, 4.7 uF 10V 20%	2
C453, 454, 455, 456, 703, 704, 705, 706	PRI43737-273	COND MYLAR, 0.027 uF 100V 5%	8	C627, 628, 629, 630, 633, 634, 635, 636, 656, 657, 803, 804	PRK3737-104	COND MYLAR, 0.1 uF 100V 5%	12
C457, 458, 459, 460, 707, 708, 709, 710	PRN3737-102	COND MYLAR, 0.001 uF 100V 5%	8	C637, 638	PVP3935-681	COND POLY 680 pF 50V 5%	2
C461, 462, 711, 712	PRM3737-182	COND MYLAR, 0.0018 uF 100V 5%	4	C653, 660	PRD3545-561	COND DISC, 560 pF 50V 10% 11 Y5P D=5	2
C463, 464, 713, 714	PRD3545-201	COND DISC, 200 pF 50V 10% Y5P	4	C659	PRD3545-562	COND DISC, 5600 pF 50V 10% Y5P	1
C465, 466, 467, 468, 604, 607, 715, 716, 717, 718	PRM3737-472	COND MYLAR, .0047 uF 100V 5%	10	C664, 665	PRD1335-300	COND DISC, 30 pF 50V 5% APO T.C.	2
				C673, 813	PRE3951-101	COND ELECT, 100 uF 10V 20%	2
				C683	PRD4965-223	COND DISC, .022 uF 50V +80-20% 11 Z5V	1
				C801, 802	PRD3965-104	COND DISC, 0.1 uF 50V +80-20% Y5V/Z5V	2
				C807	PRM3737-563	COND MYLAR, 0.056 uF 100V 5%	1
				C808	PRE3955-229	COND ELECT, 2.2 uF 50V 20%	1
				C809	PRD1335-150	COND DISC, 15 pF 50V 5% NPO	1
				C812	PRM3737-393	COND MYLAR, 0.039 uF 100V 5%	1
				C814	PRD3545-101	COND DISC, 100 pF 50V 10% Y5P	1
				C820, C821	PVE3955-332	COND ELECT, 3300 uF 50V 20%	2
				C822, 823	PRM3745-104	COND MYLAR, 0.1 uF 50V 10%	2

## SUB300 ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
C854, 855	PRM3737-183	COND MYLAR, 0.018 uF 100V 5%	2	F902, F903	KSA2100-002	FUSE 1A 250V 5x20 mm W/UL. CSA. T MARKING	2
C856	PRM3737-303	COND MYLAR, 0.03 uF 100V 5%	1	100V FUSE	KSA1600-001	FUSE 6A 250V 5x20 mm W/UL.	1
C903, 904, 905, 906, 907, 908, 909, 910	PRD4965-203	COND DISC, .02 uF 50V +80-20% 11 75Z D=7	8	120V FUSE	KSA1600-001	FUSE 6A 250V 5x20 mm W/UL.	1
C915, 916	PVE3954-222	COND ELECT, 2200 uF 35V 20%	2	230V FUSE	KSA2400-001	FUSE 3A 250V 5x20 mm W/UL.	1
C917, 919	PVE3955-332	COND ELECT, 3300 uF 50V 20%	2	<b>Integrated Circuits</b>			
C927	PRE3953-100	COND ELECT, 10 uF 25V 20%	1	IC201	RH14740-021	IC 42 PIN, TMP47CH400 TOSHIBA MICROPROCESSOR	1
C931	PRE3953-220	COND ELECT, 22 uF 25V 20%	1	IC202, IC671	RH14094-001	IC 16 PIN, TC4094BP TOSHIBA 8 BIT SHIFT REGISTER	2
<b>Connectors</b>				IC301, IC681	RH14052-001	IC 16 PIN, TC4052BP DIP 4 CH MULTIPLEXER	2
CN201, CN202	CCN7879-029	CONNECTOR, J.S.T. 2.0mm PH 898-PH-K TOP SIZE	2	IC302, IC405, IC406, IC753, IC754	RHI0740-001	IC 14 PIN, TLO74CN QUAD OP-AMP	5
CN203	CCN7879-027	CONNECTOR, J.S.T. 2.0mm PH B7B-PH-K TOP SIZE	1	IC401, IC403, IC751, IC801, IC851	RH14558-001	IC 8 PIN, JRC4558D JRC OP AMP	5
CN204, CN303, CN304, CN505	CCN1500-023	CONNECTOR, B3B-XH-A 3 PIN POST BASE TOP	4	IC402	RH19184-001	IC 16 PIN, TC9184 BASS/TREBLE CNTL	1
CN501	CCN3962-008	CONNECTOR, 8 PIN CL3962WVO PITCH=3.96 mm	1	IC404, IC752	RHIT535-001	IC 22 PIN, LC7535 ELECTRONIC VOLUME CONTROL	2
CN502	CCN1500-033	CONNECTOR, 898-XH-A 9 PIN POST BASE TOP	1	IC501, IC502	RH14151-001	18 PIN, STK4151MK5 SANYO 2CH 30W 0.08% DIS POWER AMP	2
CN503, CN504, CN701, CN702, CN804A	CCN1500-018	CONNECTOR, 828-XH-A 2 PIN POST BASE TOP	5	IC601	RH12177-001	IC 56 PIN, NJM2177A DOLBY PRO LOGIC SOUND DECODER	1
CN801	CCN1500-024	CONNECTOR, B68-XH-A 6 PIN POST BASE TOP	1	IC651	RH19702-001	IC 24 PIN, NJU9702D JRC DELAY IC	1
CN802 TO SPK	VWT1112-025	WIRE TERM, 250 mm WIRE AY TERMINAL LFTH205FOCO	1	IC682	RH14066-001	IC 14 PIN, MC140668CP QUAD SW/MULTIPLEXER	1
CN803	CCN3962-003	CONNECTOR, 3 PIN CL3962WVO	1	IC802	RHI1298-001	IC 14 PIN, uPC1298V NEC 50-80W POWER AMP DRV	1
CN901	CCN3962-006	CONNECTOR, 6 PIN CL3962WVO	1	IC901	RHI7815-001	3 PIN, REGULATOR +15V 1A 7815	1
<b>Diodes</b>				IC902	RHI7806-001	3 PIN, MC7806ACT (5V2)	1
D201, 202, 207, 241, 287, 288, 301, 401, 402, 503, 504, 505, 506, 507, 508, 509, 510, 651, 652, 671, 680, 691, 751, 752, 802, 803, 804, 805, 806	RAD4148-001	DIODE SW, IN4148	29	IC903	RHI7915-001	3 PIN, 7915 -9V REGULATOR	1
D501, 801, 903, 904, 905, 906, 915	RAD4001-001	RECTIFIER, IN4001 1A 35VRMS	7	<b>Miscellaneous</b>			
D801, 810, 811, 812, 813, 907, 908, 909, 910	RHD5401-001	RECTIFIER, IN5401 3.0 A 70 V	9	CR201	JQC6071-419	CRYSTAL, 4.194304 MHZ HC-49/UL=5.0 mm	1
ZD301, 302	RAZ0859-070	DIODE ZENR, 5.6-5.9V .5W HITACHI HZ68-2	2	F801, 802	CFC2557-001	FUSE CLIP , 5 D 5 X 20FUSE	4
ZD401, 402	RAZ0859-OTT	DIODE ZENR, 9.1-9.5V .5W HITACHI HZ9C-2	2	F902, 903	CFC2557-001	FUSE CLIP , 5 D 5 X 20FUSE	4
ZD681	RAZ0859-068	DIODE ZENR, 5.0-5.2V .5W HITACHI HZ5C-2	1	JK201	CJM9380-028	PHONE JACK, JYE TAI 3542-01-0303.5 DIM	1
ZD941	RAZ0859-071	DIODE ZENR 6.0-6.3V .5W HITACHI HZ6C-2	1	JK302	CJR6504-002	JACK RCA, 4P RJ-1073-10-0300A JYE TAI RED/WHITE	1
<b>Fuses</b>				JK501	CTMOO05-001	TERMINAL, JACK ASSY MOLEX TYPE	1
F801, F802	KSA2315-001	FUSE 3.15A 250V SLOW BEL 5x20mm VDE/CSA/UL	2	L202	SHC7414-100	CHOKE, 10 UN	1
				L501, 502, 503, 504	SHR6619-001	RF COIL, 1 uH	4
				L801	SHR6619-001	RF COIL, 1 uH	1
				LD201-208, 210A, 2108, 210C, 211A, 211B, 212A, 212B, 212C, 213A, 213B, 214A, 2148, 215A,	KEGO052-002	LED, 2X5 mm 523VGD-AA GREEN HIGH LIGHT	26



## SUB300 ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
215B, 216A, 216B, 216C, 219				R231, 232, 233, 234, 235, 236, 237, 238, 245, 271, 808	QAF0650-471	470 OHM 1/8W 5% CF	11
LD217A, 217B, 218A 218B, 218C	KEG0052-003	LED, 2x5 mm 5231D/LD-A RED HIGH LIGHT	5	R239, 241, 247	QAF0650-221	220 OHM 1/8W 5% CF	3
ON HEAT SINK-2	H100301-306	SCREW, TAPPING 3.0 x 6 BLACK	2	R243, 244, 249, 256	QAF0650-181	180 OHM 1/8W 5% CF	4
ON IC901	GAL0010-001	HEAT SINK, TOHEI 7 CD	1	R245	QAF0650-471	470 OHM 1/8W 5% CF	1
ON IC902	GAL0007-001	HEAT SINK, USE MKH-610	1	R246, 250	QAF0650-100	10 OHM 1/6W 5% CF	2
PCL201	SHC7414-100	CHOKER, 10 UN	1	R251, 254, 257, 261 267, 268, 401, 402, 451, 452, 453, 454, 459, 460, 467, 468, 493, 494, 564, 566, 567, 568, 569, 654, 655, 658, 681, 686, 688, 703, 704, 709, 710, 715, 716, 753, 754, 801, 901, 903, 905, 907, 908	QAF0650-103	10K OHM 1/8W 5% CF	43
RL501, RL502	MRL2212-002	RELAY, MI-SH-212LM 12V DC 44 MA GOOD SKY	2	R253, 331, 332, 334, 432, 679, 682, 685, 690, 756	QAF0650-101	100 OHM 1/8W 5% CF	10
RL801	MRL2212-005	RELAY, SHINMEI RPA-12 V DC 10A(AC)250V	1	R258, 403, 404	QAF0650-474	470K OHM 1/6W 5% CF	3
XL601	JRN6078-200	RESONATOR, 2 MHz	1	R259, 323, 324, 325, 326, 469, 470, 483, 484, 541, 542, 543, 544, 607, 680, 691, 694, 695, 696, 719, 720, 733, 734, 864	QAF0650-104	100K OHM 1/6W 5% CF	24
	APE0162-C11	Sub300 Loaded Audio Amp PCB	1	R262, 309, 310, 313, 314	QAF0650-223	22K OHM 1/6W 5% CF	5
	APE0161-C11	Sub300 Power Amplifier PCB	1	R317, 318	QAF0650-681	680 OHM 1/6W 5% CF	2
<b>Transistors</b>				R339	QAF0650-225	2.2M OHM 1/6W 5% CF	1
Q201, 202, 203, 204, 206, 208, 209, 210, 505, 672, 681, 906	RAP0733-001	XISTR PNP, 2SA733Q,P NEC	12	R340, 615	QAF0650-475	4.7M OHM 1/6W 5% CF	2
Q205, 207, 211, 212, 213, 214, 215, 216, 301, 302, 491, 492, 501, 502, 503, 504, 507, 508, 509, 510, 513,, 514, 533, 534 671, 673, 674, 804, 806, 818, 902, 904, 905, 908	RAN0945-001	XISTR NPN, 2SC945P NEC	34	R341, 616	QAF0650-680	68 OHM 1/6W 5% CF	2
Q511, 805, 941	RAN2001-001	XISTR NPN, 2SC2001L NEC	3	R342	QAF0650-185	1.8M OHM 1/6W 5% CF	1
Q801	RHN3181-001	XISTR NPN, 2SC3181N-O TOSHIBA	1	R343, 435, 436, 437 438, 441, 442, 751, 752, 761, 762, 763, 764	QAF0650-224	220K OHM 1/6W 5% CF	13
Q802	RHP1264-001	XISTR PNP, 2SA1264N-O TOSHIBA	1	R344	QAF0650-184	180K OHM 1/6W 5% CF	1
Q803	RHN0882-001	XISTR NPN, 2SD882P	1	R347, 353, 354, 651	QAF0650-105	1.0M OHM 1/6W 5% CF	4
Q901	RHP0772-001	XISTR PNP, 2SBT72P/Q NEC	1	R355, 356	QAF0650-333	33K OHM 1/6W 5% CF	2
Q907	RHM0882-001	XISTR NPN, 2SD882P	1	R405, 406	QAF0650-823	82K OHM 1/6W 5% CF	2
<b>Resistors</b>				R409, 410, 821	QAF0650-393	39K OHM 1/6W 5% CF	3
R201, 252, 269, 270, 349, 350, 407, 408, 479, 480, 561, 623, 626, 672, 692, 729, 730, 805, 857, 912, 942,	QAF0650-472	4.7K OHM 1/8W 5% CF	21	R411, 412	QAF0650-564	560K OHM 1/6W 5% CF	2
R204, 255, 321, 322 329, 330, 333, 565, 570, 605, 606, 673, 674, 675, 676, 677, 678, 803, 823, 851	QAF0650-223	22K OHM 1/6W 5% CF	20	R413, 414, 653	QAF0650-273	27K OHM 1/6W 5% CF	3
R205, 263, 264, 265, 266, 348, 513, 611, 612, 818	QAF0650-473	47K OHM 1/6W 5% CF	10	R415, 416	QAF0650-562	5.6K OHM 1/6W 5% CF	2
R209, 210, 211, 311, 312, 315, 316, 319, 327, 328, 351, 352, 433, 434, 503, 504, 505, 506, 523, 524, 525, 526, 549, 550, 552, 562, 671, 689, 820, 855, 859, 862, 863	QAF0650-102	1K OHM 1/6W 5% CF	33	R417, 418	QAF0650-122	1.2K OHM 1/6W 5% CF	2
				R421, 422	QAF0650-331	330 OHM 1/6W 5% CF	2
				R431, 755, 551, 902	QAF0650-152	1.5K OHM 1/6W 5% CF	4
				R439, 440, 650, 757, 758, 906	QAF0650-222	2.2K OHM 1/6W 5% CF	6
				R455, 456, 705, 706 801	QAF0650-202	2K OHM 1/6W 5% CF	5
				R457, 458, 471, 472, 707, 708, 721, 722	QAF0650-913	91K OHM 1/6W 5% CF	8
				R461, 462, 463, 464, 613, 614, 619, 652, 657, 711, 712, 713,	QAF0650-153	15K OHM 1/6W 5% CF	17

**SUB300 ELECTRICAL PARTS LIST Cont...**

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
714, 806, 807, 856, 860				P201B(+) TO P201A(+) & JP423(-)	CL170GBEGBE SHLD CABLE, 170 mm BLACK		1
R473, 474, 723, 724	QAF0650-243	24K OHM 1/6W 5% CF	4	R18201 TO CH201	4999A-316	CON/WIRE, 9 COND 340mm FLAT WIRE PITCH=2.0mm	1
R481, 482, 609, 610 731, 732	QAF0650-752	7.5K OHM 1/6W 5% CF	6	R18203 TO CN203	4999A-313	CON/WIRE, 7 COND 380mm 28 AWG PITCH=2.0mm	1
R501, 502, 521, 522 624, 625, 697, 810	QAF0650-563	56K OHM 1/6W 5% CF	8	R1B502 TO CN502	50039300180	CON/WIRE, 9 COND 300 mm BLACK 26 AWG PITCH=2.5 mm	1
R507, 508, 509, 510 527, 528, 529, 530	QAF0450-222	2.2K OHM 1/4W 5% CF340X2222934	8	R1B801 TO CN801	50036150180	CON/WIRE 6 COND 150 mm BLACK 26 AWG PITCH=2.5 mm	1
R511, 512, 531, 532	QAF0250-479	4.7 OHM 1/2W 5% CF	4	R1B902 TO CN505	50033450180	CON/CABLE 3 COND 450 mm	1
R515, 518, 535, 538	QAF0450-101	100 OHM 1/4W 5% CF340X2101934	4	RB505A TO R6505B	24684150880	FLAT/CABLE, 4 COND 150 mm	1
R516, 517, 536, 537	QAF0450-102	1.0K OHM 1/4W 5% CF340X2102934	4	RIB202 TO CN202	4999A-314	CON/WIRE, 9 COND 340mm 28 AWG PITCH=2.0mm	1
R545, 546, 547, 548 813, 814	QVE3050-228	0.22 OHM 3W 5% HI RADIAL CEMENT FIXED	6	RIB204 TO CN204	500331001BO	CON/WIRE, 3 COND 100 mm	1
R553, 554, 555, 556	QAF0650-393	39K OHM 1/6W 5% CF	4	RIB303 TO CN303	50024AJIBMM	CON/CABLE, 3 COND 100 mm BROWN	1
R617, 618, 621, 662	QAF0650-822	8.2K OHM 1/6W 5% CF	4	RIB304 TO CN304	50024AJ28MM	CON/CABLE, 3 COND 100 mm GRAY	1
R620	QAM0410-104	100K OHM 1/4W 1% METAL FILM	1	RIB501 TO CN501	4999A-296	CON/WIRE, 8 COND 350 mm	1
R622	QAF0650-334	330K OHM 1/6W 5% CF	1	RIB503 TO CN702	5002EBE18M	CON/CABLE 2 COND 250 mm BROWN	1
R656	QAF0650-300	30 OHM 1/6W 5% CF	1	RIB504 TO CN503	5002EBJ28MM	CON/CABLE 2 COND 200 mm GRAY	1
R659	QAF0650-183	18K OHM 1/6W 5% CF	1	RIB701 TO CN701	5002ECEABMM	CON/CABLE 2 COND 350 mm BLACK PITCH=2.5 mm	1
R660	QAF0650-272	2.7K OHM 1/6W 5% CF	1	RIB702 TO CN504	5002ECJ4BI4M	CON/CABLE 2 COND 300 mm WHITE PITCH=2.5 gm	1
R802	QAF0650-204	200K OHM 1/6W 5% CF	1	RIB804 TO CN804	5002EBJBBMN	CON/CABLE, 2 COND 200 mm RED PITCH=2.5 mm	1
R804	QAF0650-363	36K OHM 1/6W 5% CF	1				
R808	QAF0650-471	470 OHM 1/6W 5% CF	1				
R809	QAF0650-392	3.9K OHM 1/6W 5% CF	1				
R811, 812	QHS0250-100	10 OHM 1/2W 5% FUSEABLE	2				
R815, 816	QAF0250-100	10 OHM 1/2W 5% CF	2				
R817	QAF0250-101	100 OHM 1/2W 5% CF	1				
R822	QAF0650-683	68K OHM 1/6W 5% CF	1				
R854	QAF0650-133	13K OHM 1/6W 5% CF	1				
R858	QAF0650-362	3.6K OHM 1/6W 5% CF	1				
R861	QAF0650-683	68K OHM 1/6W 5% CF	1				
R941	QAF0250-221	220 OHM 1/2W 5% CF	1				
RA201, A203	QVP085A-472	RES ARRAY, 4.7K OHM 1/8W 5% 10 PIN	2				
RA202	QVP0856-472	RES ARRAY, 4.7K OHM 1/8W 5% 6 PIN	1				
RA204	QVP0859-472	RES ARRAY, 4.7K OHM 1/8W 5% 9 PIN	1				
VR651	MRT0503-003	CNTL TRIMR, 50KB 30% P=5x5 mm RHO61C54J	1				
<b>Switches</b>							
SW1	MSV0001-004	ROCKER SWITCH	1				
SW201, SW202, SW203, SW204, SW205	MAT2029-001	AI TACT SW, SKHVBE3520 5.0 mm 160 gf	5				
<b>Wires</b>							

**VOLTAGE DIFERENCES**

VOLTAGE	PART NO.	DESCRIPTION	QTY.
100V	47455-056	LINE CORD	1
100V	GSE0139-003	JACK PLATE	1
100V	KSA1600-001	FUSE	1
100V	TTK1000-002	TRANSFORMER	1
120V	47455-052	LINE CORD	1
120V	GSE0139-001	JACK PLATE	1
120V	KSA1600-001	FUSE	1
120V	TTK1200-005	TRANSFORMER	1
230V	2559-022122	LINE CORD	1
230V	GSE0139-002	JACK PLATE	1
230V	KSA2400-001	FUSE	1
230V	TTK2300-003	TRANSFORMER	1

## SUB300B ELECTRICAL PARTS LIST

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
<b>MAIN PCB ASSEMBLY</b>				C493, C494	PRE3955-100	ELECT 10uF 50V 20% 85°C	2
<b>CAPACITORS</b>				C601-C603	PRE3951-100	ELECT 10uF 10V 20% 85°C	3
C201	PVE3950-102	ELECT 1000uF 6.3V 20% 85°C	1	C604	PRM3737-472	MYLAR 0.0047uF 100V 5%	1
C202	PRE3955-109	ELECT 1uF 50V 20% 85°C	1	C605	PRE3942-220	ELECT 22uF 16V 10% 85°C	1
C203, C204	PRD1335-180	DISC 18pF 50V 5% NPO	2	C606	PRM3737-562	MYLAR 0.0056uF 100V 5%	1
C205	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	1	C607	PRM3737-472	MYLAR 0.0047uF 100V 5%	1
C206	PRE3955-478	ELECT 0.47uF 50V 20% 85°C	1	C608	PRD3545-471	DISC 470pF 50V 10% Y5P	1
C207	PRE3952-100	ELECT 10uF 16V 20% 85°C	1	C609	PRE3951-221	ELECT 220uF 10V 20% 85°C	1
C208	PRE3951-470	ELECT 47uF 10V 20% 85°C	1	C610	PRM3737-473	MYLAR 0.047uF 100V 5%	1
C209, C310	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	C611	PRM3737-562	MYLAR 0.0056uF 100V 5%	1
C311	PRE3953-470	ELECT 47uF 25V 20% 85°C	1	C612, C613	PRE3951-100	ELECT 10uF 10V 20% 85°C	2
C312	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	1	C614	PVM3737-224	MYLAR 0.22uF 100V 5% HI	1
C313	PRE3953-470	ELECT 47uF 25V 20% 85°C	1	C615	PRE3942-100	ELECT 10uF 16V 10% 85°C	1
C317, C318	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	C616	PRE3953-101	ELECT 100uF 25V 20% 85°C	1
C319, C320	PRE3953-470	ELECT 47uF 25V 20% 85°C	2	C617-C619	PRE3951-100	ELECT 10uF 10V 20% 85°C	3
C321-C324	PRE3955-109	ELECT 1uF 50V 20% 85°C	4	C620	PVP2637-684	METAL 0.68uF 100V 5% P:10.0mm	1
C325, C326	PRD3545-332	DISC 0.0033uF 50V 10% Y5P	2	C621-C623	PVM3737-224	MYLAR 0.22uF 100V 5% HI	3
C327, C328	PRD1335-470	DISC 47pF 50V 5% NPO	2	C624, C625	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	2
C329	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	1	C626	PVM3737-224	MYLAR 0.22uF 100V 5% HI	1
C330	PRD1335-100	DISC 10pF 50V 5% NPO	1	C627-C630	PRM3737-104	MYLAR 0.1uF 100V 5%	3
C331	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	1	C631, C632	PRM3737-223	MYLAR 0.022uF 100V 5%	2
C332	PRE3953-470	ELECT 47uF 25V 20% 85°C	1	C633-C636	PRM3737-104	MYLAR 0.1uF 100V 5%	4
C333-C336	PRE3955-109	ELECT 1uF 50V 20% 85°C	4	C637, C638	PVP3935-681	POLY 680pF 50V 5%	2
C401, C402	PRE3955-109	ELECT 1uF 50V 20% 85°C	2	C639, C640	PRM3737-473	MYLAR 0.047uF 100V 5%	2
C403, C404	PRD8035-270	DISC 27pF 50V 5% SL	2	C641	PRE3942-220	ELECT 22uF 16V 10% 85°C	1
C405, C406	PRE3955-109	ELECT 1uF 50V 20% 85°C	2	C642	PRE3951-100	ELECT 10uF 10V 20% 85°C	1
C407, C408	PRM3737-683	MYLAR 0.068uF 100V 5%	2	C652	PRM3737-562	MYLAR 0.0056uF 100V 5%	1
C409, C410	PRM3737-123	MYLAR 0.012uF 100V 5%	2	C653	PRD3545-561	DISC 560pF 50V 10% Y5P	1
C411, C412	PRE3952-100	ELECT 10uF 16V 20% 85°C	2	C654	PRM3737-683	MYLAR 0.068uF 100V 5%	1
C413, C414	PRM3737-272	MYLAR 0.0027uF 100V 5%	2	C655	PRE3951-470	ELECT 47uF 10V 20% 85°C	1
C415, C416	PRM3737-223	MYLAR 0.022uF 100V 5%	2	C656, C657	PRM3737-104	MYLAR 0.1uF 100V 5%	2
C417, C418	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	C658	PRM3737-683	MYLAR 0.068uF 100V 5%	1
C419, C420	PRE3953-470	ELECT 47uF 25V 20% 85°C	2	C659	PRD3545-562	DISC 560pF 50V 10% Y5P	1
C431, C432	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	C660	PRD3545-561	DISC 560pF 50V 10% Y5P	1
C433, C434	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	2	C661	PRE3955-109	ELECT 1uF 50V 20% 85°C	1
C435, C436	PRE3955-109	ELECT 1uF 50V 20% 85°C	2	C662	PRM3737-562	MYLAR 0.0056uF 100V 5%	1
C437, C438	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	2	C663	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	1
C439, C440	PRE3955-109	ELECT 1uF 50V 20% 85°C	2	C664, C665	PRD1335-470	DISC 47pF 50V 5% NPO	2
C441, C442	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	C666	PRE3953-101	ELECT 100uF 25V 20% 85°C	1
C445	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	1	C667	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	1
C451, C452	PRM3737-822	MYLAR 0.0082uF 100V 5%	2	C670	PRE3953-101	ELECT 100uF 25V 20% 85°C	1
C453-C456	PRM3737-273	MYLAR 0.027uF 100V 5%	4	C671, C672	PRE3952-100	ELECT 10uF 16V 20% 85°C	2
C457-C460	PRM3737-472	MYLAR 0.0047uF 100V 5%	4	C673	PRE3951-101	ELECT 100uF 10V 20% 85°C	1
C463, C464	PRD3545-681	DISC 680pF 50V 10% Y5P	2	C674	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	1
C465-C468	PRM3737-472	MYLAR 0.0047uF 100V 5%	4	C675	PRE3955-109	ELECT 1uF 50V 20% 85°C	1
C469, C470	PRD3545-221	DISC 220pF 50V 10% Y5P	2	C681	PRE3953-101	ELECT 100uF 25V 20% 85°C	1
C473-C476	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	4	C682	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	1
				C683	PRD4965-223	DISC 0.022uF 50V +80-20% Z5V	1

## SUB300B ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
C690	PRE3952-100	ELECT 10uF 16V 20% 85°C	1	D751, D752	RAD4148-001	DIODE SW 1N4148	1
C701, C702	PRM3737-822	MYLAR 0.0082uF 100V 5%	2	ZD301, ZD302	RAZ0859-070	DIODE ZENR 5.6~5.9V 0.5W	2
C703-C706	PRM3737-273	MYLAR 0.027uF 100V 5%	4	ZD401, ZD402	RAZ0859-077	DIODE ZENR 9.1~9.5V 0.5W	2
C707-C710	PRM3737-472	MYLAR 0.0047uF 100V 5%	4	ZD681	RAZ0859-068	DIODE ZENR 5.0~5.2V 0.5W	1
C713, C714	PRD3545-681	DISC 680pF 50V 10% Y5P	2	ZD941	RAZ0859-071	DIODE ZENR 6.0~6.3V 0.5W	1
C715-C718	PRM3737-472	MYLAR 0.0047uF 100V 5%	4	<b>Integrated Circuits</b>			
C719, C720	PRD3545-221	DISC 220pF 50V 10% Y5P	2	IC201	RHI4740-021	IC 42 PIN TMP47CH400 MICROPROCESSOR	1
C721-C724	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	4	IC202	RHI4094-001	IC 16 PIN TC4094BP 8 BIT FILT REGISTER	1
C751, C752	PRE3955-109	ELECT 1uF 50V 20% 85°C	2	IC301	RHI4052-001	IC 16 PIN TC4052BP DIP MULTIPLEXER	1
C753, C754	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	2	IC302	RHI0740-001	IC 14 PIN TL074CN QUAD OP-AMP	1
C755, C756	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	IC401	RHI4558-001	IC 8 PIN 4558D DUAL OP-AMP	1
C759-C762	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	4	IC402	RHI9184-001	IC 16 PIN TC9184 BASS/TREBLE CONTROL	1
C765, C766	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	2	IC403	RHI4558-001	IC 8 PIN 4558D DUAL OP-AMP	1
C767, C768	PRE3955-109	ELECT 1uF 50V 20% 85°C	2	IC404	RHI7535-001	IC 22 PIN LC7535 ELECTRIC VOLUME CONTROL	1
C851	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	1	IC405, IC406	RHI0740-001	IC 14 PIN TL074CN QUAD OP-AMP	2
C854, C855	PRM3737-183	MYLAR 0.018uF 100V 5%	2	IC601	RHI2177-001	IC 56 PIN NJM2177A PRO LOGIC DECODER	1
C856	PRM3737-303	MYLAR 0.03uF 100V 5%	1	IC651	RHI9702-001	IC 24 PIN NJU9702D DIGITAL DELAY	1
C941	PRE3951-470	ELECT 47uF 10V 20% 85°C	1	IC671	RHI4094-001	IC 16 PIN TC4094BP 8 BIT SHIFT REGISTER	1
C942	PRE3955-479	ELECT 4.7uF 50V 20% 85°C	1	IC681	RHI4052-001	IC 16 PIN TC4052BP MULTIPLEXER	1
JP634- TO IC301 PIN10+	PRE3953-220	ELECT 22uF 25V 20% 85°C	1	IC682	RHI4066-001	IC 14 PIN MC14066BCP QUAD SWITCH	1
R467, R468	PRM3737-392	MYLAR 0.0039uF 100V 5%	2	IC751	RHI4558-001	IC 8 PIN 4558D DUAL OP-AMP	1
R715, R716	PRM3737-392	MYLAR 0.0039uF 100V 5%	2	IC752	RHI7535-001	IC 22 PIN LC7535 ELECTRIC VOLUME CONTROL	1
<b>Connectors</b>				IC753, IC754	RHI0740-001	IC 14 PIN TL074CN QUAD OP-AMP	2
CN201, CN202	CCN7879-029	CONNECTOR 7 PIN B 7B-PH-K TOP SIZE	2	IC851	RHI4558-001	IC 8 PIN 4558D DUAL OP-AMP	1
CN203	CCN7879-027	CONNECTOR 9 PIN B 9B-PH-K TOP SIZE	1	<b>Resistors</b>			
CN204	CCN1500-023	CONNECTOR 3 PIN B 3B-XH-A TOP BASE	1	C461, C462	QAF0650-682	RESISTOR 6.8K OHM 1/8W 5% CF	2
CN303, CN304	CCN1500-023	CONNECTOR 3 PIN B 3B-XH-A TOP BASE	2	C711, C712	QAF0650-682	RESISTOR 6.8K OHM 1/8W 5% CF	2
CN502	CCN1500-033	CONNECTOR 9 PIN B 9B-XH-A TOP BASE	1	R201	QAF0650-472	RESISTOR 4.7K OHM 1/8W 5% CF	1
CN503, CN504	CCN1500-018	CONNECTOR 2 PIN B 2B-XH-A TOP BASE	2	R204	QAF0650-223	RESISTOR 22K OHM 1/8W 5% CF	1
CN505	CCN1500-023	CONNECTOR 3 PIN B 3B-XH-A TOP BASE	1	R205	QAF0650-473	RESISTOR 47K OHM 1/8W 5% CF	1
CN701, CN702	CCN1500-018	CONNECTOR 2 PIN B 2B-XH-A TOP BASE	2	R209-R211	QAF0650-102	RESISTOR 1K OHM 1/8W 5% CF	3
CN804A	CCN1500-018	CONNECTOR 2 PIN B 2B-XH-A TOP BASE	1	R231-R238	QAF0650-471	RESISTOR 470 OHM 1/8W 5% CF	8
<b>DIODES</b>				R250	QAF0650-100	RESISTOR 10 OHM 1/8W 5% CF	1
D201, D202	RAD4148-001	DIODE SW 1N4148	2	R251	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1
D207	RAD4148-001	DIODE SW 1N4148	1	R252	QAF0650-472	RESISTOR 4.7K OHM 1/8W 5% CF	1
D301	RAD4148-001	DIODE SW 1N4148	1	R253	QAF0650-101	RESISTOR 100 OHM 1/8W 5% CF	1
D401, D402	RAD4148-001	DIODE SW 1N4148	2	R254	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1
D651, D652	RAD4148-001	DIODE SW 1N4148	2	R255	QAF0650-223	RESISTOR 22K OHM 1/8W 5% CF	1
D671	RAD4148-001	DIODE SW 1N4148	1	R256	QAF0650-181	RESISTOR 180 OHM 1/8W 5% CF	1
D680	RAD4148-001	DIODE SW 1N4148	1	R257	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1
D691	RAD4148-001	DIODE SW 1N4148	1				

## SUB300B ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
R258	QAF0650-474	RESISTOR 470K OHM 1/6W 5% CF	1	R459, R460	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	2
R259	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	1	R461-R464	QAF0650-203	RESISTOR 20K OHM 1/6W 5% CF	4
R261	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	1	R469, R470	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	2
R262	QAF0650-223	RESISTOR 22K OHM 1/6W 5% CF	1	R471, R472	QAF0650-913	RESISTOR 91K OHM 1/6W 5% CF	2
R263-R266	QAF0650-473	RESISTOR 47K OHM 1/6W 5% CF	4	R473, R474	QAF0650-243	RESISTOR 24K OHM 1/6W 5% CF	2
R267, R268	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2	R479, R480	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	2
R269, R270	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	2	R481, R482	QAF0650-752	RESISTOR 7.5K OHM 1/6W 5% CF	2
R271	QAF0650-471	RESISTOR 470 OHM 1/6W 5% CF	1	R483, R484	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	2
R317, R318	QAF0650-681	RESISTOR 680 OHM 1/6W 5% CF	2	R493, R494	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2
R319	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	1	R605, R606	QAF0650-223	RESISTOR 22K OHM 1/6W 5% CF	2
R321, R322	QAF0650-223	RESISTOR 22K OHM 1/6W 5% CF	2	R607	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	1
R323-R326	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	4	R609, R610	QAF0650-752	RESISTOR 7.5K OHM 1/6W 5% CF	2
R327, R328	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	2	R611, R612	QAF0650-473	RESISTOR 47K OHM 1/6W 5% CF	2
R329, R330	QAF0650-132	RESISTOR 1.3K OHM 1/6W 5% CF	2	R613, R614	QAF0650-153	RESISTOR 15K OHM 1/6W 5% CF	2
R331, R332	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	2	R615	QAF0650-475	RESISTOR 4.7M OHM 1/6W 5% CF	1
R333	QAF0650-223	RESISTOR 22K OHM 1/6W 5% CF	1	R616	QAF0650-680	RESISTOR 68 OHM 1/6W 5% CF	1
R334	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	1	R617, R618	QAF0650-822	RESISTOR 8.2K OHM 1/6W 5% CF	2
R339	QAF0650-225	RESISTOR 2.2M OHM 1/6W 5% CF	1	R619	QAF0650-153	RESISTOR 15K OHM 1/6W 5% CF	1
R340	QAF0650-105	RESISTOR 1.0M OHM 1/6W 5% CF	1	R620	QAM0410-104	RESISTOR 100K OHM 1/4W 1% MF	1
R341	QAF0650-680	RESISTOR 68 OHM 1/6W 5% CF	1	R621	QAF0650-822	RESISTOR 8.2K OHM 1/6W 5% CF	1
R342	QAF0650-185	RESISTOR 1.8M OHM 1/6W 5% CF	1	R622	QAF0650-334	RESISTOR 330K OHM 1/6W 5% CF	1
R343	QAF0650-224	RESISTOR 220K OHM 1/6W 5% CF	1	R623	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	1
R344	QAF0650-184	RESISTOR 180K OHM 1/6W 5% CF	1	R624, R625	QAF0650-583	RESISTOR 56K OHM 1/6W 5% CF	2
R347	QAF0650-105	RESISTOR 1.0M OHM 1/6W 5% CF	1	R626	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	1
R348	QAF0650-473	RESISTOR 47K OHM 1/6W 5% CF	1	R650	QAF0650-222	RESISTOR 2.2K OHM 1/6W 5% CF	1
R349, R350	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	2	R651	QAF0650-105	RESISTOR 1.0M OHM 1/6W 5% CF	1
R351, R352	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	2	R652	QAF0650-153	RESISTOR 15K OHM 1/6W 5% CF	1
R353, R354	QAF0650-105	RESISTOR 1.0M OHM 1/6W 5% CF	2	R653	QAF0650-273	RESISTOR 27K OHM 1/6W 5% CF	1
R355, R356	QAF0650-333	RESISTOR 33K OHM 1/6W 5% CF	2	R654, R655	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2
R401, R402	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2	R656	QAF0650-300	RESISTOR 30 OHM 1/6W 5% CF	1
R403, R404	QAF0650-474	RESISTOR 470K OHM 1/6W 5% CF	2	R657	QAF0650-153	RESISTOR 15K OHM 1/6W 5% CF	1
R405, R406	QAF0650-823	RESISTOR 82K OHM 1/6W 5% CF	2	R658	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	1
R407, R408	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	2	R659	QAF0650-183	RESISTOR 18K OHM 1/6W 5% CF	1
R409, R410	QAF0650-393	RESISTOR 39K OHM 1/6W 5% CF	2	R660	QAF0650-272	RESISTOR 2.7K OHM 1/6W 5% CF	1
R411, R412	QAF0650-564	RESISTOR 560K OHM 1/6W 5% CF	2	R662	QAF0650-822	RESISTOR 8.2K OHM 1/6W 5% CF	1
R413, R414	QAF0650-273	RESISTOR 27K OHM 1/6W 5% CF	2	R671	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	1
R415, R416	QAF0650-562	RESISTOR 5.6K OHM 1/6W 5% CF	2	R672	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	1
R417, R418	QAF0650-122	RESISTOR 1.2K OHM 1/6W 5% CF	2	R673-R678	QAF0650-223	RESISTOR 22K OHM 1/6W 5% CF	6
R421, R422	QAF0650-331	RESISTOR 330 OHM 1/6W 5% CF	2	R679	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	1
R431	QAF0650-152	RESISTOR 1.5K OHM 1/6W 5% CF	1	R680	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	1
R432	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	1	R681	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	1
R433, R434	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	2	R682, R685	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	2
R435-R438	QAF0650-224	RESISTOR 220K OHM 1/6W 5% CF	4	R686, R688	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2
R439, R440	QAF0650-222	RESISTOR 2.2K OHM 1/6W 5% CF	2	R689	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	1
R441, R442	QAF0650-224	RESISTOR 220K OHM 1/6W 5% CF	2	R690	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	1
R451-R454	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	4	R691	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	1
R455, R456	QAF0650-202	RESISTOR 2K OHM 1/6W 5% CF	2	R692	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	1
R457, R458	QAF0650-913	RESISTOR 91K OHM 1/6W 5% CF	2	R694-R696	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	3

## SUB300B ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
R697	QAF0650-563	RESISTOR 56K OHM 1/6W 5% CF	1	Q672	RAP0733-001	XISTR PNP 2SA733Q,P NEC	1
R703, R704	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2	Q673, Q674	RAN0945-001	XISTR NPN 2SC945P NEC	2
R705, R706	QAF0650-202	RESISTOR 2K OHM 1/6W 5% CF	2	Q681	RAP0733-001	XISTR PNP 2SA733Q,P NEC	1
R707, R708	QAF0650-913	RESISTOR 91K OHM 1/6W 5% CF	2	Q941	RAN2001-001	XISTR NPN 2SC2001L NEC	1
R709, R710	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2	<b>Wires</b>			
R711-R714	QAF0650-203	RESISTOR 20K OHM 1/6W 5% CF	4	IC671 PIN5,6 TO DIODE*	24682400BBM	FLAT CABLE 2 COND 400 mm BLACK	
R719, R720	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	2	P2A TO P2B	5820-103BB	WIRE 26 GA 100 mm ORANGE	
R721, R722	QAF0650-913	RESISTOR 91K OHM 1/6W 5% CF	2	P3A TO P3B	5820-089BB	WIRE 26 GA 80 mm WHITE	
R723, R724	QAF0650-243	RESISTOR 24K OHM 1/6W 5% CF	2	P4A TO P4B	5820-154BB	WIRE 26 GA 150 mm YELLOW	
R729, R730	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	2	P5A TO P5B	5820-154BB	WIRE 26 GA 150 mm YELLOW	
R731, R732	QAF0650-752	RESISTOR 7.5K OHM 1/6W 5% CF	2	P691A TO P691B	5820-480BB	WIRE 26 GA 480 mm BLACK P201B(+) TO P201A(+) CL170GBEGBE SHLD CABLE 170 mm BLACK & JP423(-)	
R733, R734	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	2	[R723] TO SOLDER LUG	5820-080BB	WIRE 26 GA 80 mm BLACK	
R751, R752	QAF0650-224	RESISTOR 220K OHM 1/6W 5% CF	2	<b>Miscellaneous</b>			
R753, R754	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	2	CR201	JQC6071-419	CRYSTAL 4.194304 MHz L=5.0mm	
R755	QAF0650-152	RESISTOR 1.5K OHM 1/6W 5% CF	1	L201	SAC7414-100	CHOKE 10 uH AI	
R756	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	1	[R723]	CSL6521-002	SOLDER LUG OD7.0xID3.5xT0.3 mm NICKEL	
R757, R758	QAF0650-222	RESISTOR 2.2K OHM 1/6W 5% CF	2	VR651	MRT0503-003	CNTL TRIMR 50KB 30% P=5x5 mm RHO611C54J	
R761-R764	QAF0650-224	RESISTOR 220K OHM 1/6W 5% CF	4	XL601	JRN6078-200	RESONATOR 2 MHz	
R851	QAF0650-223	RESISTOR 22K OHM 1/6W 5% CF	1		DSS0011-001	SPACER SUP PINGOOD RL1/6S	
R854	QAF0650-133	RESISTOR 13K OHM 1/6W 5% CF	1	<b>SUB300B AMPLIFIER PCB ASSEMBLY PARTS LIST</b>			
R855	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	1	<b>CAPACITORS</b>			
R856	QAF0650-153	RESISTOR 15K OHM 1/6W 5% CF	1	C501, C502	PRD3545-102	DISC 1000pF 50V 10% Y5P	2
R857	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	1	C503, C504	PRE3955-109	ELECT 1uF 50V 20% 85°C	2
R858	QAF0650-362	RESISTOR 3.6K OHM 1/6W 5% CF	1	C505, C506	PRE3954-101	ELECT 100uF 35V 20% 85°C	2
R859	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	1	C507, C508	PRE3955-470	ELECT 47uF 50V 20% 85°C	2
R860	QAF0650-153	RESISTOR 15K OHM 1/6W 5% CF	1	C509, C510	PRM3745-104	MYLAR 0.1uF 50V 10%	2
R861	QAF0650-683	RESISTOR 68K OHM 1/6W 5% CF	1	C511	PRE3954-101	ELECT 100uF 35V 20% 85°C	1
R862, R863	QAF0650-102	RESISTOR 1K OHM 1/6W 5% CF	2	C512	PRE3955-100	ELECT 10uF 50V 20% 85°C	1
R864	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	1	C515, C516	PRD3545-221	DISC 220pF 50V 10% Y5P	2
R941	QAF0650-221	RESISTOR 220 OHM 1/2W 5% CF	1	C521, C522	PRD3545-102	DISC 1000pF 50V 10% Y5P	2
R942	QAF0650-472	RESISTOR 4.7K OHM 1/6W 5% CF	1	C523, C524	PRE3955-109	ELECT 1uF 50V 20% 85°C	2
RA201	QVP085A-472	RES ARRAY 4.7K OHM 1/8W 5% 10 PIN	1	C525, C526	PRE3954-101	ELECT 100uF 35V 20% 85°C	2
RA202	QVP0856-472	RES ARRAY 4.7K OHM 1/8W 5% 6 PIN	1	C527, C528	PRE3955-470	ELECT 47uF 50V 20% 85°C	2
RA203	QVP085A-472	RES ARRAY 4.7K OHM 1/8W 5% 10 PIN	1	C529, C530	PRM3745-104	MYLAR 0.1uF 50V 10%	2
RA204	QVP0859-472	RES ARRAY 4.7K OHM 1/8W 5% 9 PIN	1	C531	PRE3954-101	ELECT 100uF 35V 20% 85°C	1
<b>Transistors</b>				C532	PRE3955-100	ELECT 10uF 50V 20% 85°C	1
Q201-Q204	RAP0733-001	XISTR PNP 2SA733Q,P NEC	4	C533	PRE3952-100	ELECT 10uF 16V 20% 85°C	1
Q205	RAN0945-001	XISTR NPN 2SC945P NEC	1	C534	PRE3955-109	ELECT 1uF 50V 20% 85°C	1
Q206	RAP0733-001	XISTR PNP 2SA733Q,P NEC	1	C535, C536	PRD3545-221	DISC 220pF 50V 10% Y5P	2
Q207	RAN0945-001	XISTR NPN 2SC945P NEC	1				
Q208-Q210	RAP0733-001	XISTR PNP 2SA733Q,P NEC	3				
Q211-Q216	RAN0945-001	XISTR NPN 2SC945P NEC	6				
Q301, Q302	RAN0945-001	XISTR NPN 2SC945P NEC	2				
Q491, Q492	RAN0945-001	XISTR NPN 2SC945P NEC	2				
Q671	RAN0945-001	XISTR NPN 2SC945P NEC	1				

## SUB300B ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
C541	PRE3951-100	ELECT 10uF 10V 20% 85°C	1	<b>Diodes</b>			
C801, C802	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	D241	RAD4148-001	DIODE SW 1N4148	1
C803, C804	PRM3737-104	MYLAR 0.1uF 100V 5%	2	D501	RAD4001-001	RECTIFIER 1N4001 1.0A 35VRMS	1
C805	PRM3737-683	MYLAR 0.068uF 100V 5%	1	D503-D514	RAD4148-001	DIODE SW 1N4148	12
C806	PRM3737-123	MYLAR 0.012uF 100V 5%	1	D801	RAD4001-001	RECTIFIER 1N4001 1.0A 35VRMS	1
C807	PRM3737-563	MYLAR 0.056uF 100V 5%	1	D802-D806	RAD4148-001	DIODE SW 1N4148	5
C808	PRE3955-229	ELECT 2.2uF 50V 20% 85°C	1	D810-D813	RHD5401-001	RECTIFIER 1N5401 3.0A 70VRMS	4
C809	PRD1335-150	DISC 15pF 50V 5% NPO	1	D903-D906	RAD4001-001	RECTIFIER 1N4001 1.0A 35VRMS	4
C810	PRD3545-102	DISC 1000pF 50V 10% Y5P	1	D907-D910	RHD5401-001	RECTIFIER 1N5401 3.0A 70VRMS	4
C811	PRM3737-683	MYLAR 0.068uF 100V 5%	1	D915	RAD4001-001	RECTIFIER 1N4001 1.0A 35VRMS	1
C812	PRM3737-393	MYLAR 0.039uF 100V 5%	1	JP287, JP288	RAD4148-001	DIODE SW 1N4148	2
C813	PRE3951-101	ELECT 100uF 10V 20% 85°C	1	<b>Fuses</b>			
C814	PRD3545-101	DISC 100pF 50V 10% Y5P	1	F801, F802	KSA2315-001	FUSE 3.15A 250V SLOW VDE	2
C820, C821	PVE3955-332	ELECT 3300uF 50V 20% 85°C	2	F902, F903	KSA2100-001	FUSE 1.00A 250V SLOW VDE	2
C822, C823	PRM3745-104	MYLAR 0.1uF 50V 10%	2	<b>Integrated Circuits</b>			
C830-C833	PRM3737-473	MYLAR 0.047uF 100V 5%	4	IC501, IC502	RHI4151-001	IC 18 PIN STK4151MK5 STEREO AMP	2
C903-C910	PRD4965-203	DISC 0.02uF 50V +80-20% Z5V	8	IC801	RHI4558-001	IC 8 PIN JRC4558D DUAL OP-AMP	1
C913, C914	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	IC802	RHI1298-001	IC 14 PIN uPC1298VNEC AMP DRIVER	1
C915, C916	PVE3954-222	ELECT 2200uF 35V 20% 85°C	2	IC901	RHI7815-001	IC 3 PIN 7815 REGULATOR +15V 1A1	1
C917	PVE3955-332	ELECT 3300uF 50V 20% 85°C	1	IC902	RHI7806-001	IC 3 PIN MC7806ACT REGULATOR +6V 1A	1
C918	PRM3745-104	MYLAR 0.1uF 50V 10%	1	IC903	RHI7915-001	IC 3 PIN 7915 REGULATOR -15V 1A 1	1
C919	PVE3955-332	ELECT 3300uF 50V 20% 85°C	1	<b>LED s</b>			
C920	PRM3745-104	MYLAR 0.1uF 50V 10%	1	LD201-LD208	KEG0052-002	LED 2x5 mm GREEN 523VGD-AA	8
C921-C924	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	4	LD210A-LD216A	KEG0052-002	LED 2x5 mm GREEN 523VGD-AA	7
C925	PRE3951-100	ELECT 10uF 10V 20% 85°C	1	LD210B-LD216B	KEG0052-002	LED 2x5 mm GREEN 523VGD-AA	7
C927	PRE3953-100	ELECT 10uF 25V 20% 85°C	1	LD210C	KEG0052-002	LED 2x5 mm GREEN 523VGD-AA	1
C929, C930	PRD3965-104	DISC 0.1uF 50V +80-20% Y5V	2	LD212C	KEG0052-002	LED 2x5 mm GREEN 523VGD-AA	1
<b>Connectors</b>				LD216C	KEG0052-002	LED 2x5 mm GREEN 523VGD-AA	1
CN501	CCN3962-008	CONNECTOR 8 PIN CL3962WVO	1	LD217A, LD218A	KEG0052-003	LED 2x5 mm RED 523ID/LD-A	2
CN801	CCN1500-024	CONNECTOR 6 PIN B 6B-XH-A	1	LD217B, LD218B	KEG0052-003	LED 2x5 mm RED 523ID/LD-A	2
CN802 TO SPK	VWT13A3-025	WIRE TERM 250 mm WIRE ASSY		LD218C	KEG0052-003	LED 2x5 mm RED 523ID/LD-A	1
CN803	CCN3962-003	CONNECTOR 3 PIN CL3962WVO	1	LD219	KEG0052-002	LED 2x5 mm GREEN 523VGD-AA	1
CN901	CCN3962-006	CONNECTOR 6 PIN CL3962WVO	1	<b>Relays</b>			
PA TO IC871 PIN 7 & PB TO IC871 PIN 5	24682180BBM	FLAT CABLE 2 COND 180 mm BLACK		RL501, RL502	MRL2212-002	RELAY MI-SH-212LM 12V DC 44mA	2
P691B TO P691A	5820-100BC	WIRE 26 GA 100 mm BLACK		RL801	MRL2212-005	RELAY SHINMEI RPA-12V DC 10A	1
RB505A TO RB505B	24684150BB0	FLAT CABLE 4 COND 150 mm BLACK		<b>Resistors</b>			
RIB201 TO CN201	4999A-316	CON/WIRE AY 9 COND 340 mm FLAT		R239, R241	QAF0650-221	RESISTOR 220 OHM 1/8W 5% CF	2
RIB202 TO CN202	4999A-314	CON/WIRE AY 9 COND 340 mm		R243, R244	QAF0650-181	RESISTOR 180 OHM 1/8W 5% CF	2
RIB203 TO CN203	4999A-313	CON/WIRE AY 7 COND 380 mm		R245	QAF0650-471	RESISTOR 470 OHM 1/8W 5% CF	1
RIB502 TO CN502	500393001B0	COND WIRE 9 COND 300 mm BLACK		R246	QAF0650-100	RESISTOR 10 OHM 1/8W 5% CF	1
RIB503 TO CN702	5002EBE1BMM	COND WIRE 2 COND 250 mm BROWN		R247	QAF0650-221	RESISTOR 220 OHM 1/8W 5% CF	1
RIB504 TO CN503	5002EBJ2BMM	COND WIRE 2 COND 200 mm GREY		R249	QAF0650-181	RESISTOR 180 OHM 1/8W 5% CF	1
RIB701 TO CN701	5002ECEABMM	COND WIRE 2 COND 350 mm BLACK		R501, R502	QAF0650-563	RESISTOR 56K OHM 1/8W 5% CF	2
RIB702 TO CN504	5002ECJ4BMM	COND WIRE 2 COND 300 mm WHITE					
RIB801 TO CN801	500361501B0	COND WIRE 6 COND 150 mm BLACK					
RIB804 TO CN804	5002EBJBBMM	COND WIRE 2 COND 200 mm RED					
RIB902 TO CN505	500334501B0	COND WIRE 3 COND 450 mm BLACK					

## SUB300B ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
R503-R506	QAF0650-102	RESISTOR 1K OHM 1/8W 5% CF	4	R902	QAF0650-152	RESISTOR 1.5K OHM 1/8W 5% CF	1
R507-R510	QAF0450-221	RESISTOR 2.2K OHM 1/4W 5% CF	4	R903	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1
R511, R512	QAF0250-479	RESISTOR 4.7 OHM 1/2W 5% CF	2	R904	QAF0650-473	RESISTOR 47K OHM 1/8W 5% CF	1
R513, R514	QAF0650-473	RESISTOR 47K OHM 1/8W 5% CF	2	R905	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1
R515	QAF0450-101	RESISTOR 100 OHM 1/4W 5% CF	1	R906	QAF0650-222	RESISTOR 2.2K OHM 1/8W 5% CF	1
R516, R517	QAF0450-102	RESISTOR 1K OHM 1/4W 5% CF	2	R907, R908	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	2
R518	QAF0450-101	RESISTOR 100 OHM 1/4W 5% CF	1	R912	QAF0650-472	RESISTOR 4.7K OHM 1/8W 5% CF	1
R521, R522	QAF0650-563	RESISTOR 56K OHM 1/8W 5% CF	2	VR801	QAF0650-202	RESISTOR 2K OHM 1/8W 5% CF	1
R523-R526	QAF0650-102	RESISTOR 1K OHM 1/8W 5% CF	4	<b>Transistors</b>			
R527-R530	QAF0450-221	RESISTOR 2.2K OHM 1/4W 5% CF	4	Q501-Q504	RAN0945-001	XISTR NPN 2SC945P NEC	4
R531, R532	QAF0250-479	RESISTOR 4.7 OHM 1/2W 5% CF	2	Q505	RAP0733-001	XISTR PNP 2SA733Q,P NEC	1
R533, R534	QAF0650-473	RESISTOR 47K OHM 1/8W 5% CF	2	Q507-Q510	RAN0945-001	XISTR NPN 2SC945P NEC	4
R535	QAF0450-101	RESISTOR 100 OHM 1/4W 5% CF	1	Q511	RAN2001-001	XISTR NPN 2SC2001L NEC	1
R536, R537	QAF0450-102	RESISTOR 1K OHM 1/4W 5% CF	2	Q801	RHD5198-001	XISTR NPN 2SC5198-0	1
R538	QAF0450-101	RESISTOR 100 OHM 1/4W 5% CF	1	Q802	RHP1941-001	XISTR PNP 2SA1941-0	1
R541-R544	QAF0650-104	RESISTOR 100K OHM 1/8W 5% CF	4	Q803	RHN0882-001	XISTR NPN 2SD882	1
R545-R548	QAF0650-181	RESISTOR 0.22 OHM 3W 5% CEMENT	4	Q804	RAN0945-001	XISTR NPN 2SC945P NEC	1
R549, R550	QAF0650-102	RESISTOR 1K OHM 1/8W 5% CF	2	Q805	RAN2001-001	XISTR NPN 2SC2001L NEC	1
R551	QAF0650-152	RESISTOR 1.5K OHM 1/8W 5% CF	1	Q806	RAN0945-001	XISTR NPN 2SC945P NEC	1
R552	QAF0650-102	RESISTOR 1K OHM 1/8W 5% CF	1	Q901	RHP0772-001	XISTR PNP 2SB772P/Q NEC	1
R553-R556	QAF0650-393	RESISTOR 39K OHM 1/8W 5% CF	4	Q902, Q905	RAN0945-001	XISTR NPN 2SC945P NEC	2
R561	QAF0650-472	RESISTOR 4.7K OHM 1/8W 5% CF	1	Q906	RAP0733-001	XISTR PNP 2SA733Q,P NEC	1
R562	QAF0650-102	RESISTOR 1K OHM 1/8W 5% CF	1	Q907	RHN0882-001	XISTR NPN 2SD882	1
R564	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1	Q908	RAN0945-001	XISTR NPN 2SC945P NEC WIRES	1
R565	QAF0650-223	RESISTOR 22K OHM 1/8W 5% CF	1	<b>Miscellaneous</b>			
R566-R569	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	4	F801, F802	CFC2557-001	FUSE CLI P 5 D 5 X 20FUSE	2
R570	QAF0650-223	RESISTOR 22K OHM 1/8W 5% CF	1	F902, F903	CFC2557-001	FUSE CLI P 5 D 5 X 20FUSE	2
R801	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1	L501-L504	SHR6619-001	RF COIL 1uH MDEC T40818-08	4
R802	QAF0650-204	RESISTOR 200K OHM 1/8W 5% CF	1	L801	SHR6619-001	RF COIL 1uH MDEC T40818-08	1
R803	QAF0650-223	RESISTOR 22K OHM 1/8W 5% CF	1	ON HEAT SINK-2	H100301-306	SCREW T3.0xL6.0mm BLACK	1
R804	QAF0650-363	RESISTOR 36K OHM 1/8W 5% CF	1	ON IC901	GAL0010-001	HEAT SINK TOHEI 7CD	1
R805	QAF0650-472	RESISTOR 4.7K OHM 1/8W 5% CF	1	ON IC902	GAL0007-001	HEAT SINK USE MKH-610	1
R806, R807	QAF0650-153	RESISTOR 15K OHM 1/8W 5% CF	2	IC1298-1	HWF8335-005	WASHER FIB OD8.3xID3.5xT0.5mm	1
R808	QAF0650-471	RESISTOR 470 OHM 1/8W 5% CF	1	SW201-SW205	MAT2029-001	TACT SW 5.0 mm 160 gf ALPS SKHVBE3520	5
R809	QAF0650-392	RESISTOR 3.9K OHM 1/8W 5% CF	1	001X0776-001		SIL PAD 3000 +-500 LBS	
R810	QAF0650-563	RESISTOR 56K OHM 1/8W 5% CF	1	GS10003-001		SI RUBBER 16x28x0.3t mm	
R811, R812	QHS0250-100	RESISTOR 10 OHM 1/2W 5% FUSEABLE	2	<b>SUB300B CONTROL PANEL ASSY (SUB ASSY)</b>			
R813, R814	QVE3050-228	RESISTOR 0.22 OHM 3W 5% CEMENT	2	BPK5031-000		CNTL KNOB	
R815, R816	QAF0250-100	RESISTOR 10 OHM 1/2W 5% CF	2	BPF5033-001		CNTL PANEL	
R817	QAF0250-101	RESISTOR 100 OHM 1/2W 5% CF	1	APE0161-C32		CNTL PCB AY CONTROL PCB ASSY	
R818	QAF0650-473	RESISTOR 47K OHM 1/8W 5% CF	1	BNP0027-001		PVC PLATE	
R820	QAF0650-102	RESISTOR 1K OHM 1/8W 5% CF	1	H101001-108		SCREW T3.0x1.27p-2RH xL8.0 mm NICKEL	
R821	QAF0650-393	RESISTOR 39K OHM 1/8W 5% CF	1				
R822	QAF0650-683	RESISTOR 68K OHM 1/8W 5% CF	1				
R823	QAF0650-223	RESISTOR 22K OHM 1/8W 5% CF	1				
R901	QAF0650-103	RESISTOR 10K OHM 1/8W 5% CF	1				



## SUB300B ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.	Ref.#	Part #	Description	Qty.
<b>SUB300B / 230 PROTECT CIRCUIT PCB ASSEMBLY PARTS LIST</b>				<b>SUB300B / 230 JACK PLATE ASSY (SUB ASSY)</b>			
<b>Capacitors</b>							
C1, C2	PRD3965-104	DISC 0.1uF 50V 80-20% Y5V	2	BKT TO PCB-8	H120301-308	SCREW T3.0x0.5pxL8.0 mm PAN HEAD BLK	
C3, C4	PRD3965-104	ELECT 100uF 50V 20% 85°C	2	THERMAL PCB TO BKT-1	H120301-312	SCREW T3.0x0.5pxL12.0mm PAN HEAD BLK	
<b>Resistors</b>							
R1	QAF0650-103	RESISTOR 10K OHM 1/6W 5% CF	1	PCB BKT TO H/SINK-4	H120301-314	SCREW T3.0x0.5pxL14.0mm PAN HEAD BLK	
R2	QAF0650-822	RESISTOR 8.2K OHM 1/6W 5% CF	1	AUDIO PCB TO H/SINK-2	H120302-308	SCREW T3.0x0.5pxL8.0 mm W/WASHER BLK	
R3	QAF0650-271	RESISTOR 270 OHM 1/6W 5% CF	1	BETWEEN THERMAL	DSS0002-006	SPACER PCB & BKT OD5.0xD3.1xH5.0mm	
R4	QAF0650-474	RESISTOR 470K OHM 1/6W 5% CF	1	X'FORMER-1	BNP0035-001	X'MER PLT L420xW120 mm UL	
R5	QAF0650-104	RESISTOR 100K OHM 1/6W 5% CF	1	PCB BKT TO PCB-1	HWF8335-005	WASHER FIB OD8.3xD3.5xT0.5mm RED	
R6, R7	QAF0650-101	RESISTOR 100 OHM 1/6W 5% CF	2	X'FORMER TO H/SINK-4	HWS1550-515	WASHER STL OD15.0xD5.0xT1.5mm ZINC	
R8	QAF0650-220	RESISTOR 22 OHM 1/6W 5% CF	1				
<b>Wires</b>							
B+15V TO RIB902 PIN1	5820-222BB	WIRE 26 GA 220 mm RED		CCN0027-004		AC CONNTOR HW-C3 AC CORD	
B-15V TO RIB902 PIN2	5820-225BB	WIRE 26 GA 220 mm GREEN		DBU0002-001		BUSHING PINGOOD 4RF-5	
GND TO RIB902 PIN3	5820-220BB	WIRE 26 GA 220 mm BLACK		KSA2400-002		FUSE 4A 250V SLOW	
P-MUTE TO Q908(B)	5820-154BB	WIRE 26 GA 150 mm YELLOW TO-X'TER TO XISTR (B)-(C)		DFH1229-001		FUSE HOLDR FH-B02 10A; 5.2x20 mm	
5820-246BB	WIRE 26 GA	240 mm BLUE XISTR (E) TO CN802(GND)		GSE0139-007		JACK PLATE SECC 230V	
5820-230BB	WIRE 26 GA	230 mm BLACK		APE0163-C01		JACK PCB AY JACK PCB ASSY	
<b>Miscellaneous</b>							
IC1	RHI4558-001	IC 8 PIN JRC4558D JRC SLOT INTO TRANSFORMER	1	2559-022122		LINE CORD VDE 1980 mm AC SW TO X'FORMER	
RAN0945-001	XISTR NPN	SC945P NEC TO XISTR NPN (2SC945P)	1	2559-080022		LINE LINK 370 mm BLACK	
<b>SUB300b / 230 REAR AMPLIFIER ASSY (SUB ASSY)</b>							
AUDIO/SUBWOOFER PCB BKT	GSE0140-000	BRACKET SECC		BPA0021-000		REAR COVER SW ROCKER	
BETWEEN THERMAL PCB & BKT	BRF0024-001	FEET RUBBER FEET		BRF0007-001		RUBBER BLACK	
	GAL0055-002	HEAT SINK AL		BRB0003-001		RUBBER BUS NR-3	
X'FORMER TO H/SINK-4	HNI1482	NUT @14x3.5 mm		BRB0004-001		RUBBER BUS NR-3	
	TTK2300-003	PWR TRANS 230V 50W EI-96		BRB0005-001		RUBBER BUS NR-3 SW TO JACK PLATE	
IC501-2, IC502-2	H041001-314	SCREW T3.0x1.27p-2RHxL14.0mm BLACK		H060301-314		SCREW M3.0x0.5pxL14.0 mm BLACK	
CENTER XISTR SCREW TO H/SINK	H041002-308	SCREW T3.0x1.4pxL8.0 mm W/WASHER BLK		H101001-310		SCREW T3.0x1.27p-2RHxL10.0 mm BLACK	
X'FORMER TO H/SINK-4	H060404-321	SCREW M3.5x0.6pxL21.0mm WAFER BLK		MSV0001-004		SW ROCKER 5A AC 250V TV-5 FUSE HOLDER-2	
<b>SUB300b JACK PCB ASSEMBLY PARTS LIST</b>							
<b>Capacitors</b>							
C210	PRD3965-104	DISC 0.1uF 50V 80-20% Y5V	1				
C305-C308	PRD3545-101	DISC 100pF 50V 10% Y5P	4				
Jack / Terminal							

## SUB300B ELECTRICAL PARTS LIST Cont...

Ref.#	Part #	Description	Qty.
JK201	CJM9380-028	PHONE JACK 3542-01-030 JYE TAI 3.5DIM	1
JK302	CJR6504-002	RCA JACK 4P RJ-1073-10-0300A JYE TAI RED/WHT	1
JK501	CTM0005-001	TERMINAL JACK ASSY MOLEX TYPE	1

**Resistors**

R309-R316	QAF0650-223	RESISTOR 22K OHM 1/6W 5% CF	8
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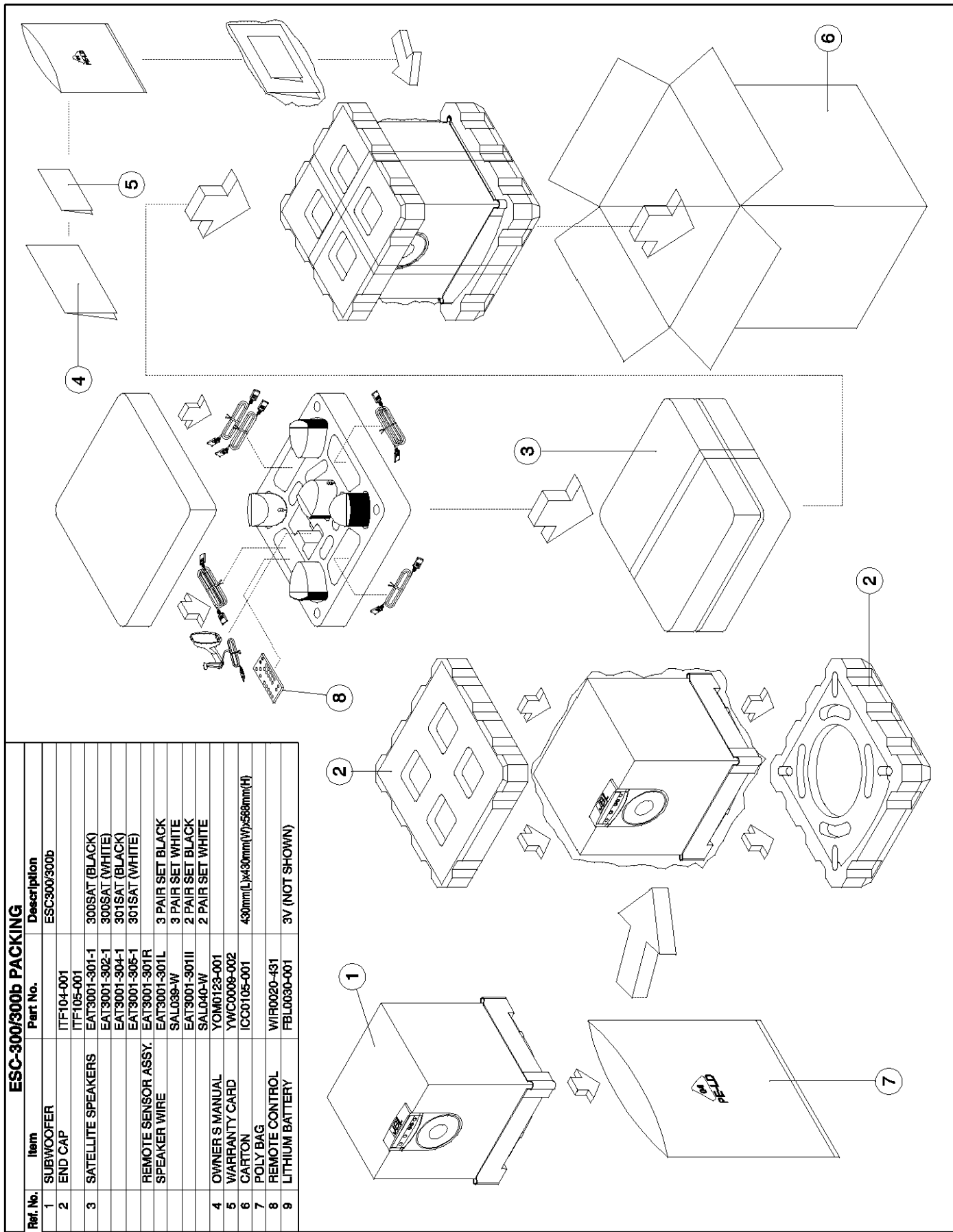
**Wires**

GND To Solder Lug	5820-080BB	WIRE 26 GA 80 mm BLACK	
RIB204 TO CN204	500331001B0	COND WIRE 3 COND 100 mm BLACK	
RIB303 TO CN303	50024AJ1BMM	COND WIRE 3 COND 100 mm BROWN	
RIB304 TO CN304	50024AJ2BMM	COND WIRE 3 COND 100 mm GREY	
RIB501 TO CN501	4999A-296	CON/WRE AY 8 COND 350 mm	

**Miscellaneous**

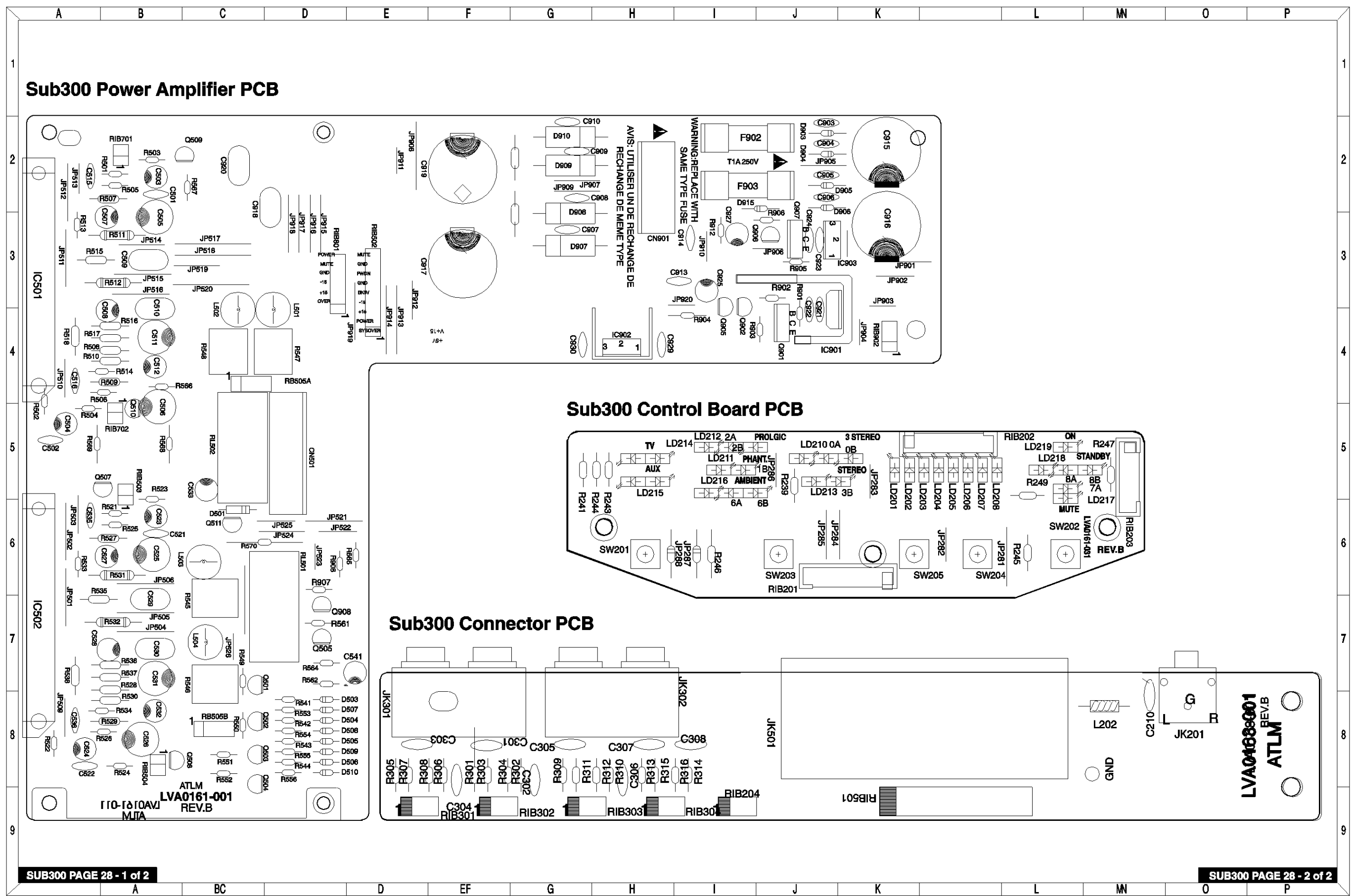
L202	SAC7414-100	CHOKE 10uH AI	
WIRE TO JACK PLT	CSL6521-002	SOLDER LUG OD7.0xD3.5xT0.3 mm NICKEL	

**SUB300/SUB300B PACKING EXPLODED VIEW**

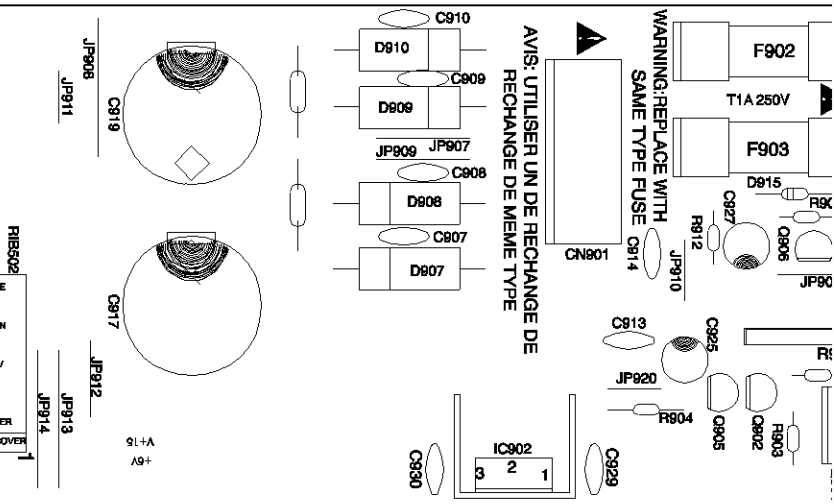
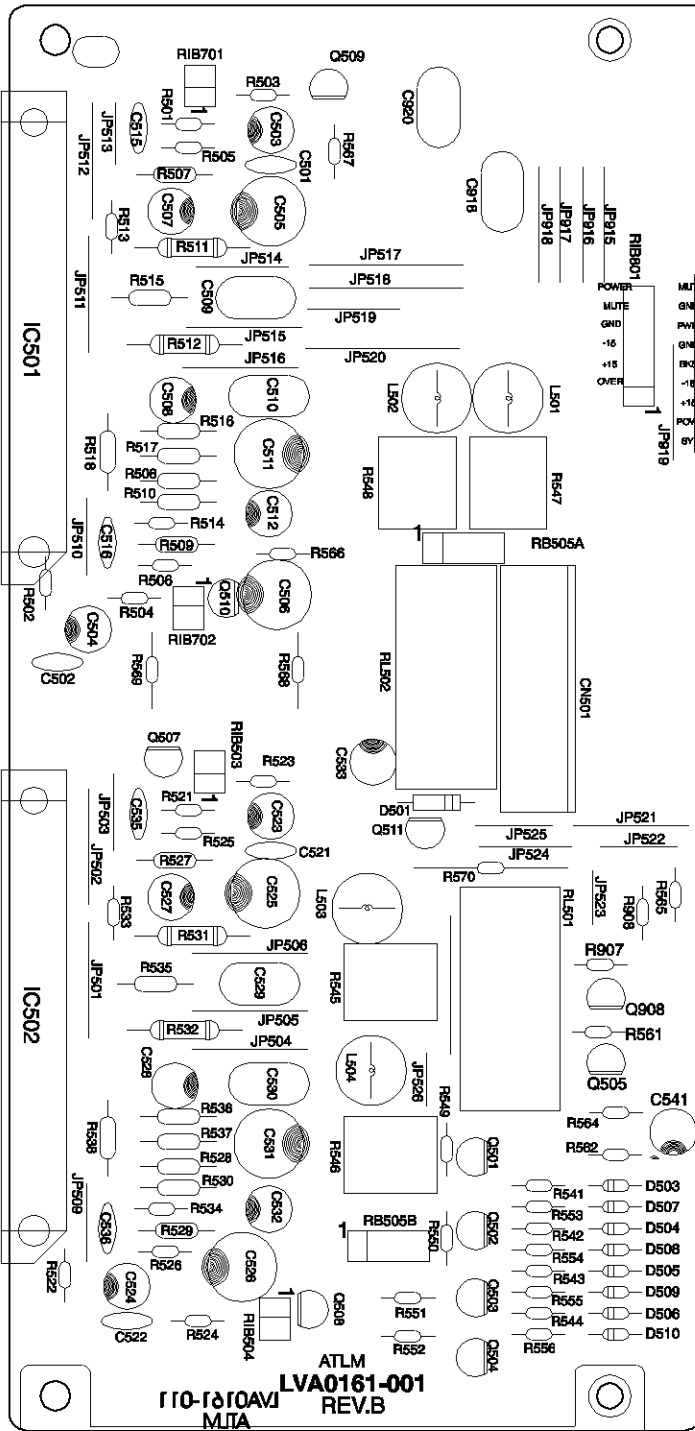


ESC-300/300b PACKING		
Ref. No.	Item	Description
1	SUBWOOFER	ESC-300/300b
2	END CAP	ITF104-001
		ITF105-001
3	SATELLITE SPEAKERS	EAT3001-301-1 300SAT (BLACK)
		EAT3001-302-1 300SAT (WHITE)
		EAT3001-304-1 301SAT (BLACK)
		EAT3001-305-1 301SAT (WHITE)
	REMOTE SENSOR ASSY.	EAT3001-301R
	SPEAKER WIRE	EAT3001-301L
		SAL039-W
		EAT3001-301H 3 PAIR SET BLACK
		SAL040-W 3 PAIR SET WHITE
		EAT3001-301H 2 PAIR SET BLACK
		EAT3001-301H 2 PAIR SET WHITE
4	OWNER'S MANUAL	YOM0123-001
5	WARRANTY CARD	YWC0008-002
6	CARTON	ICC0105-001 430mm(L)x430mm(W)x568mm(H)
7	POLY BAG	
8	REMOTE CONTROL	WIR0020-431
9	LITHIUM BATTERY	FBL0030-001 3V (NOT SHOWN)

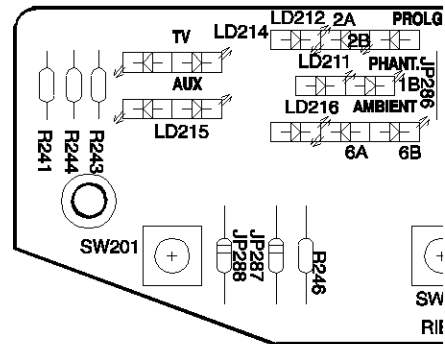
SUB300 POWER AMP, CONTROL & CONNECTOR PCB S



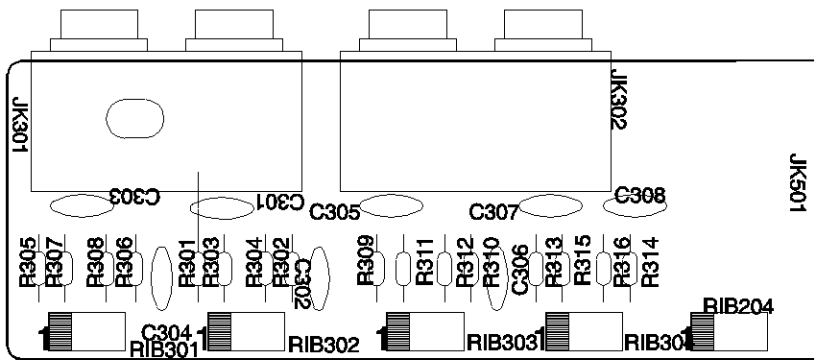
**Sub300 Power Amplifier PCB**



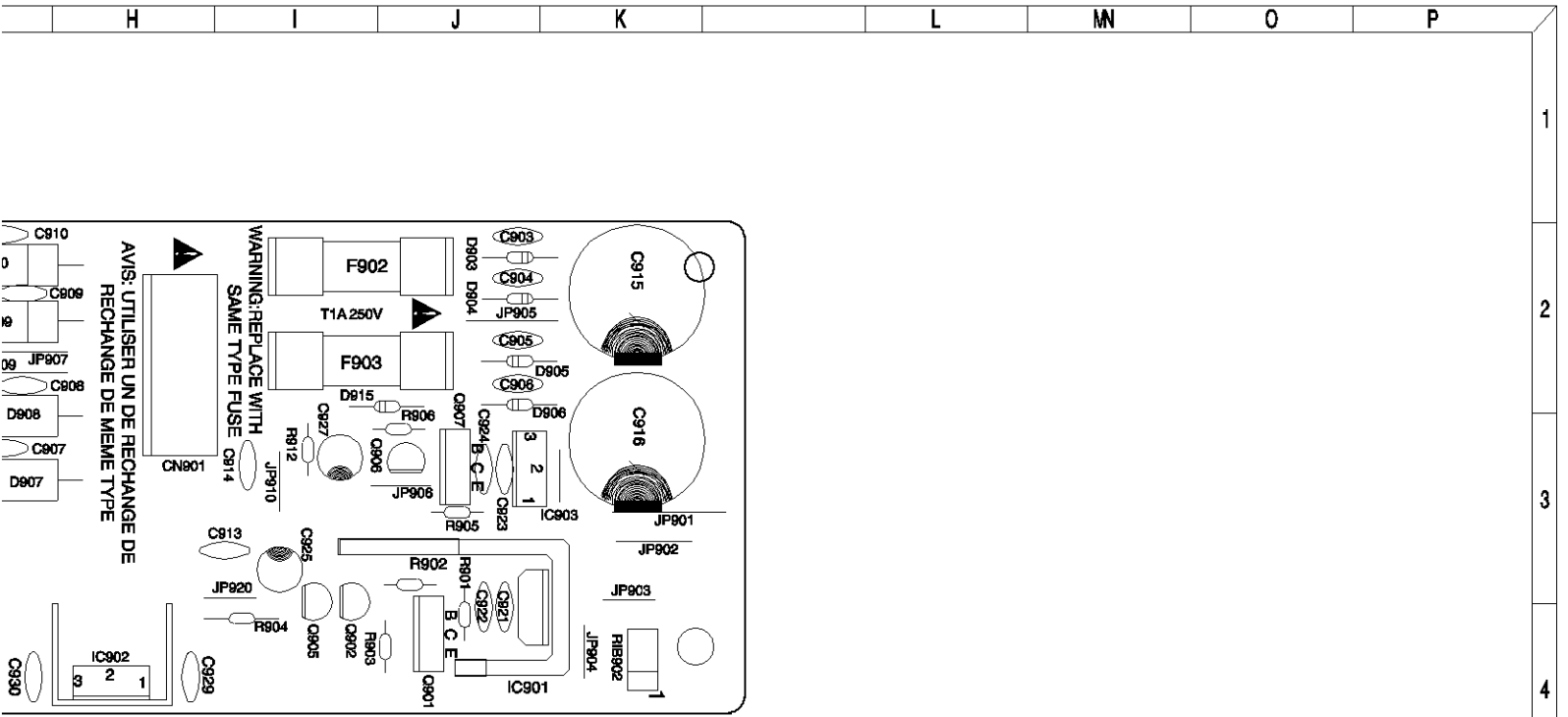
**Sub300 Control Board PCB**



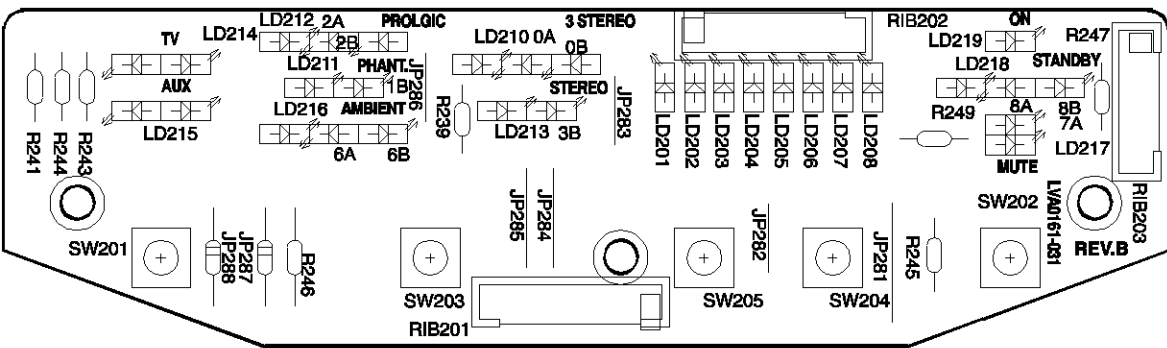
**Sub300 Connector PCB**



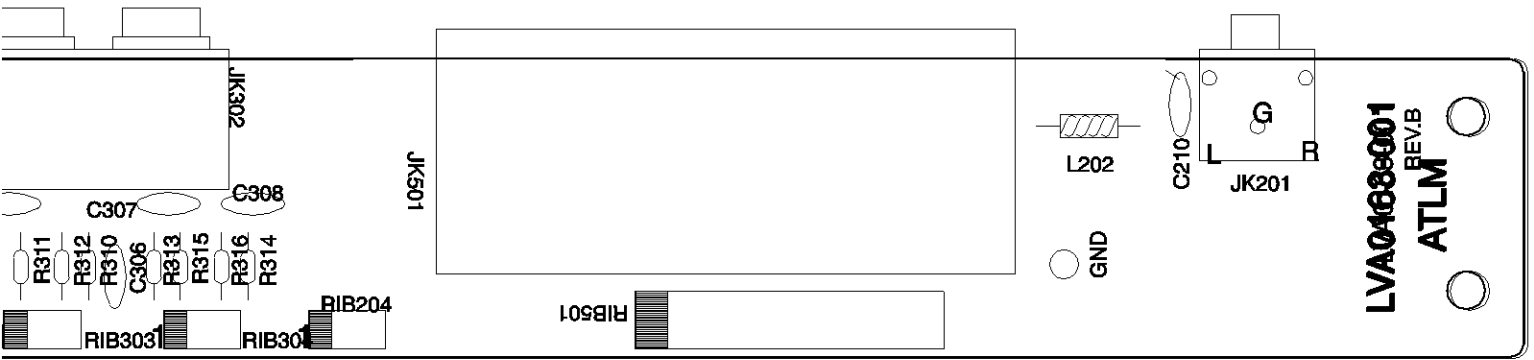
AMP, CONTROL & CONNECTOR PCB'S



Sub300 Control Board PCB

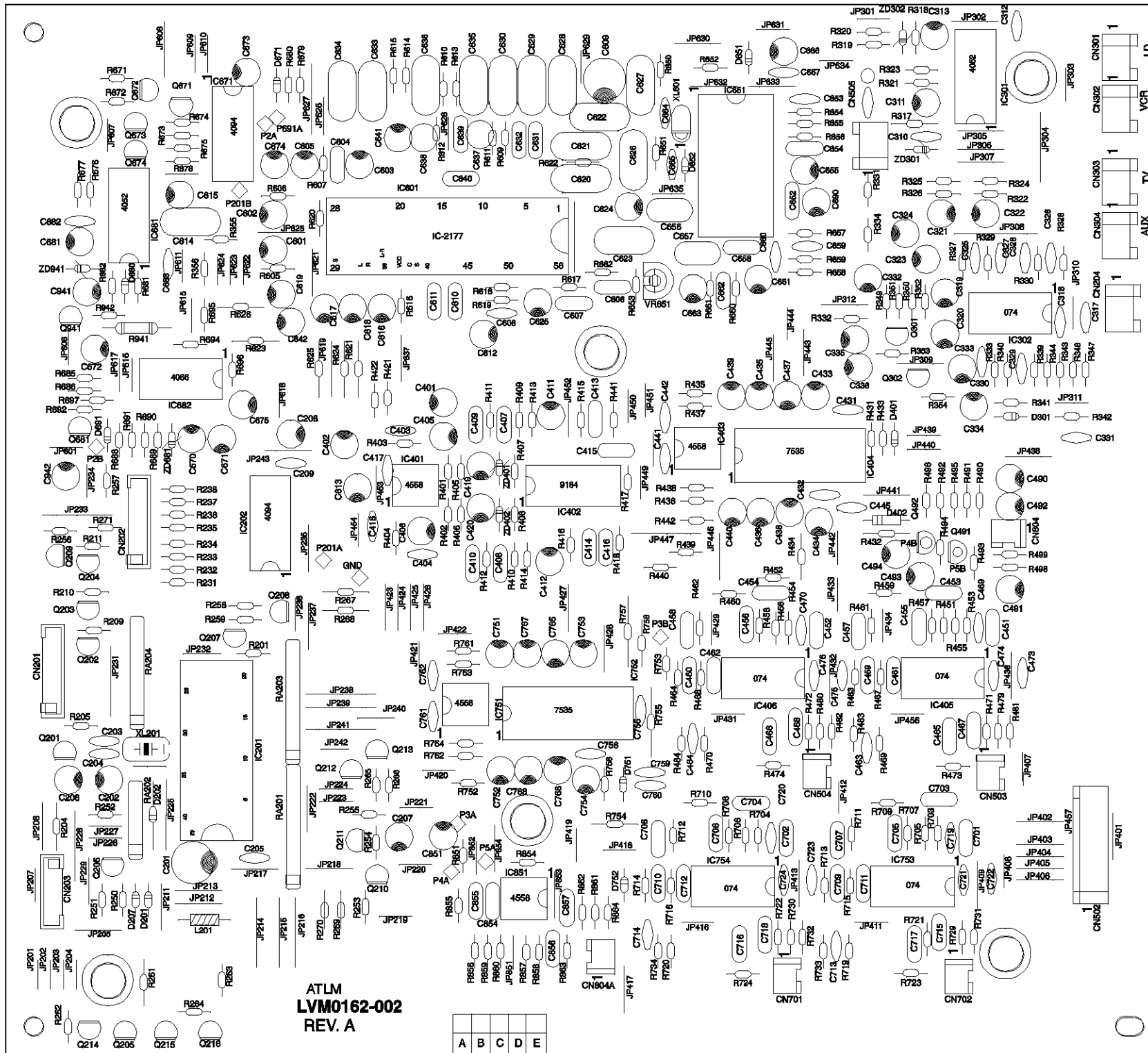


CB

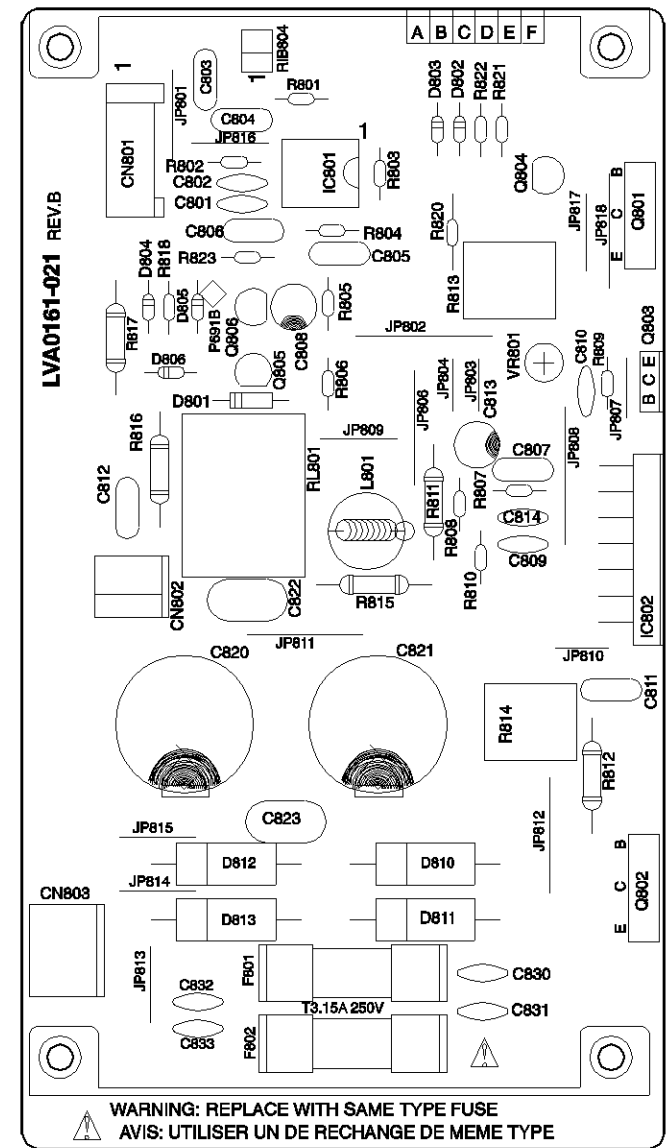


SUB300 MAIN & SUBWOOFER AMP PCB s

For both the Sub300 & Sub300B Dolby ProLogic PCB



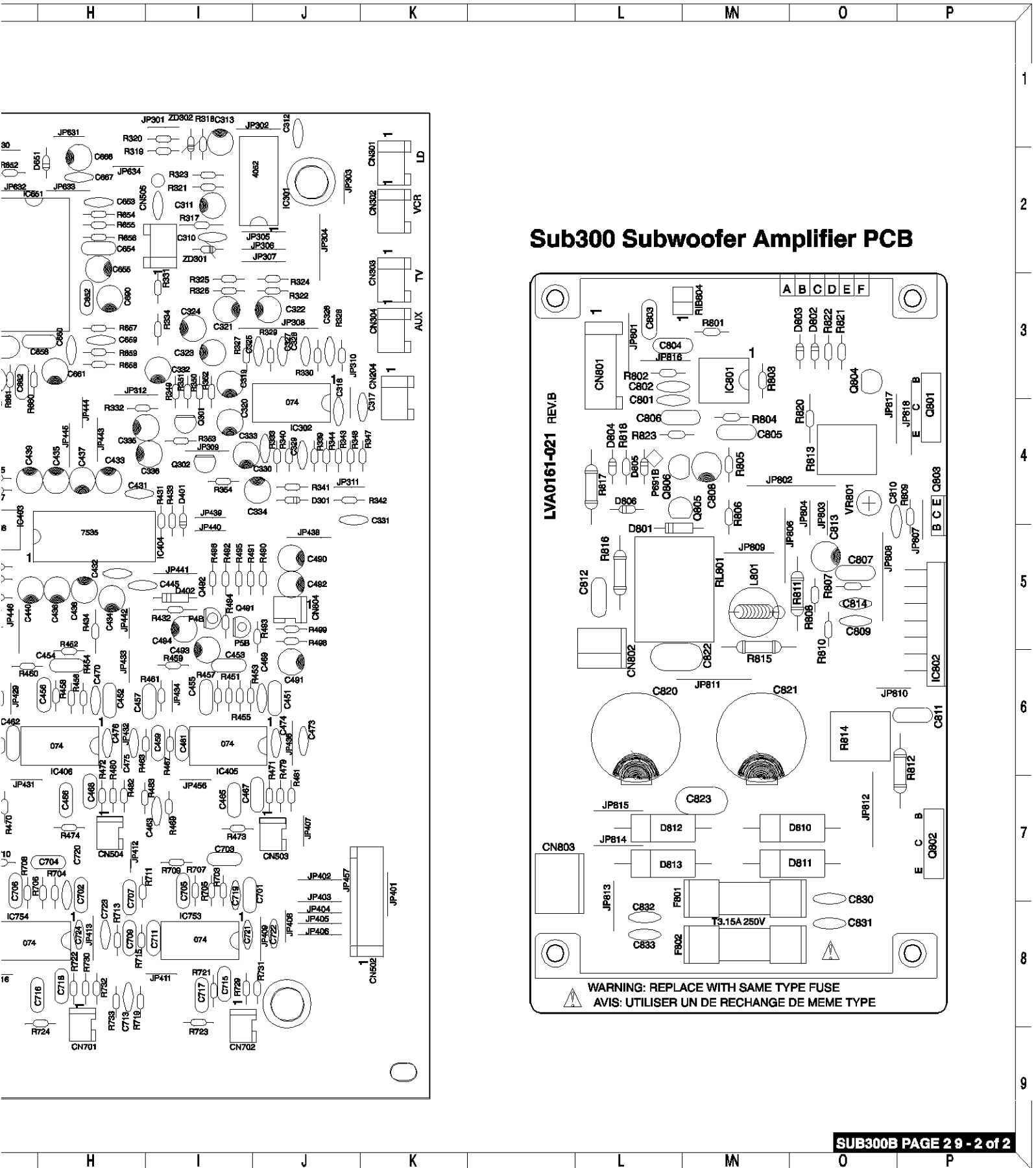
Sub300 Subwoofer Amplifier PCB





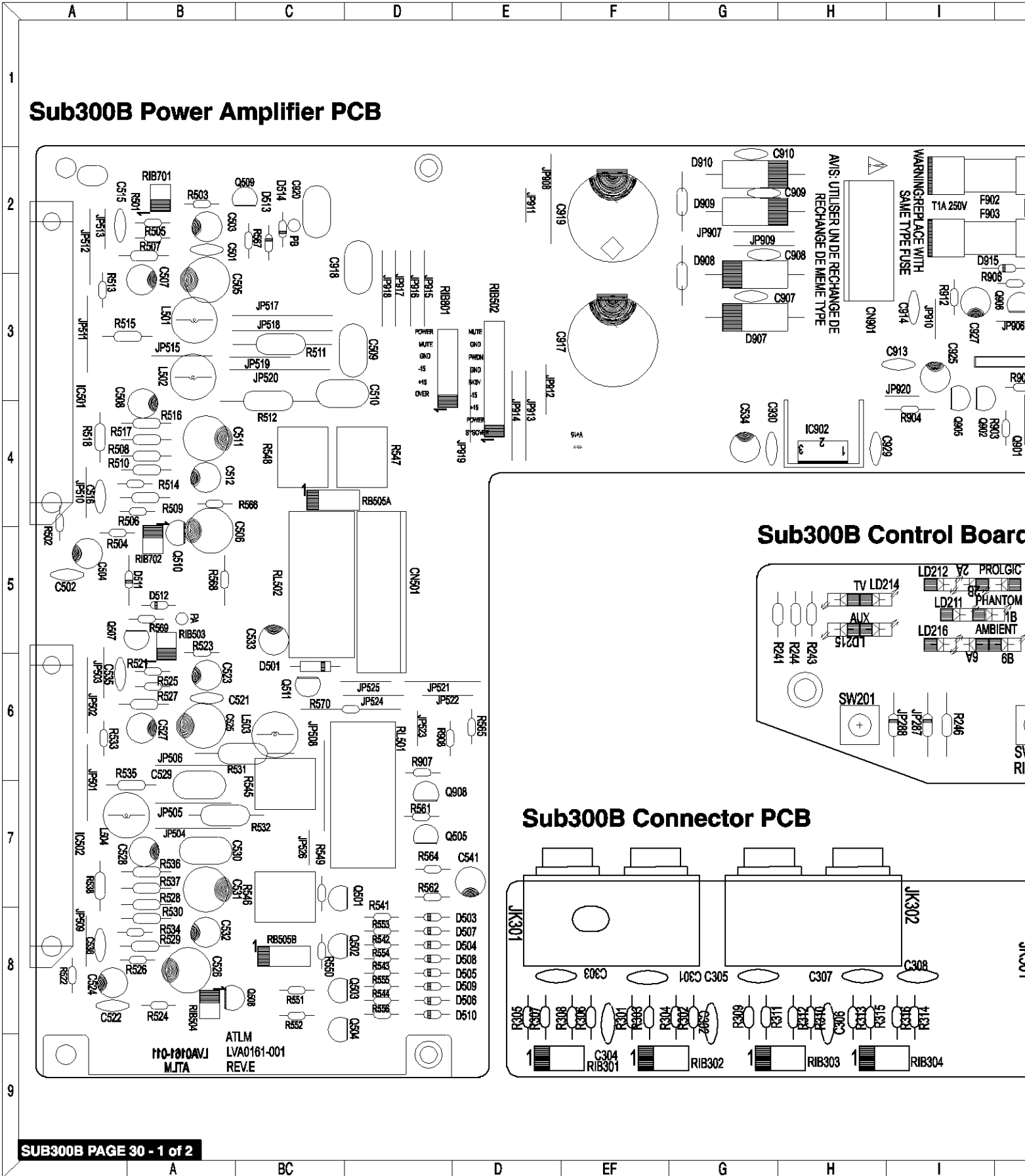


MAIN & SUBWOOFER AMP PCB's

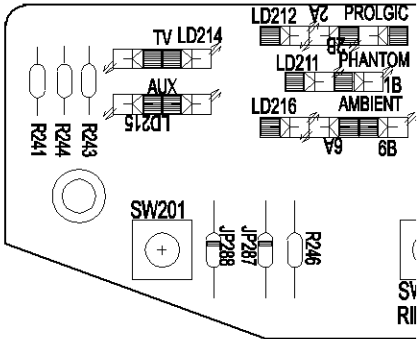




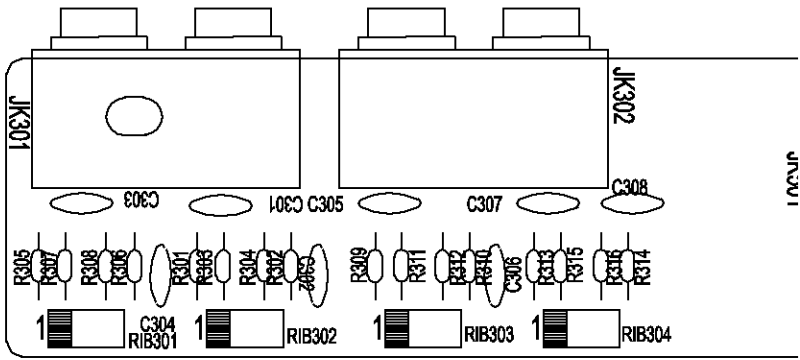
### Sub300B Power Amplifier PCB



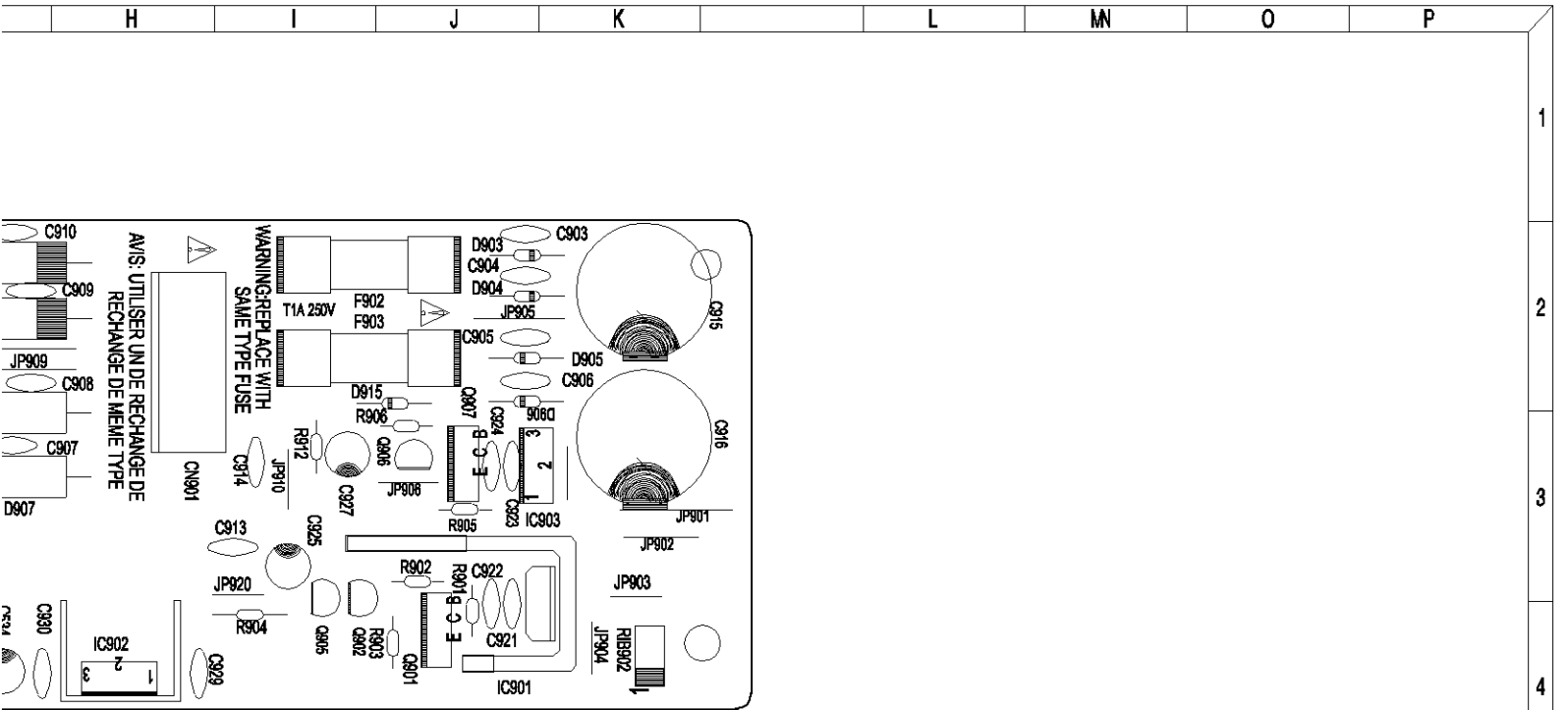
### Sub300B Control Board



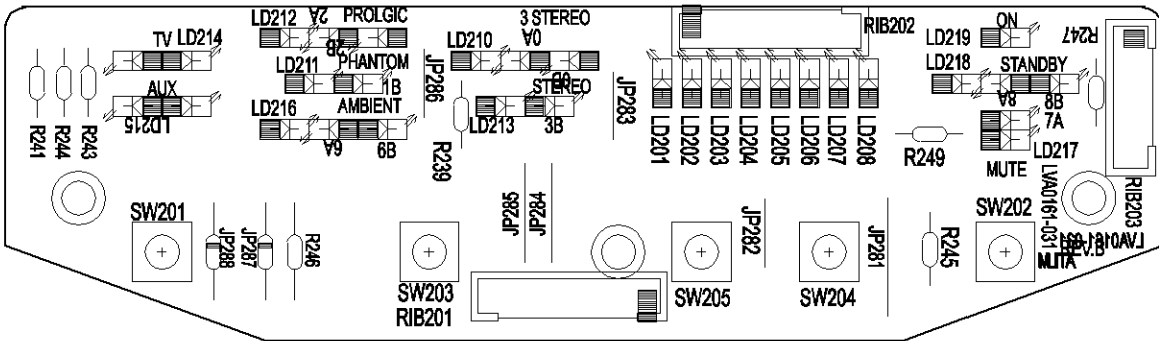
### Sub300B Connector PCB



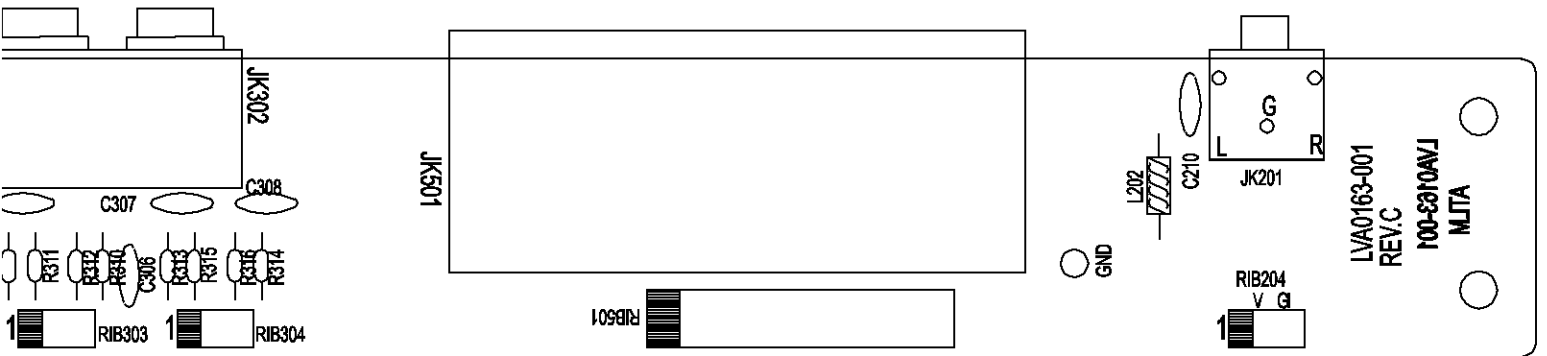
ER AMP, CONTROL & CONNECTOR PCB'S



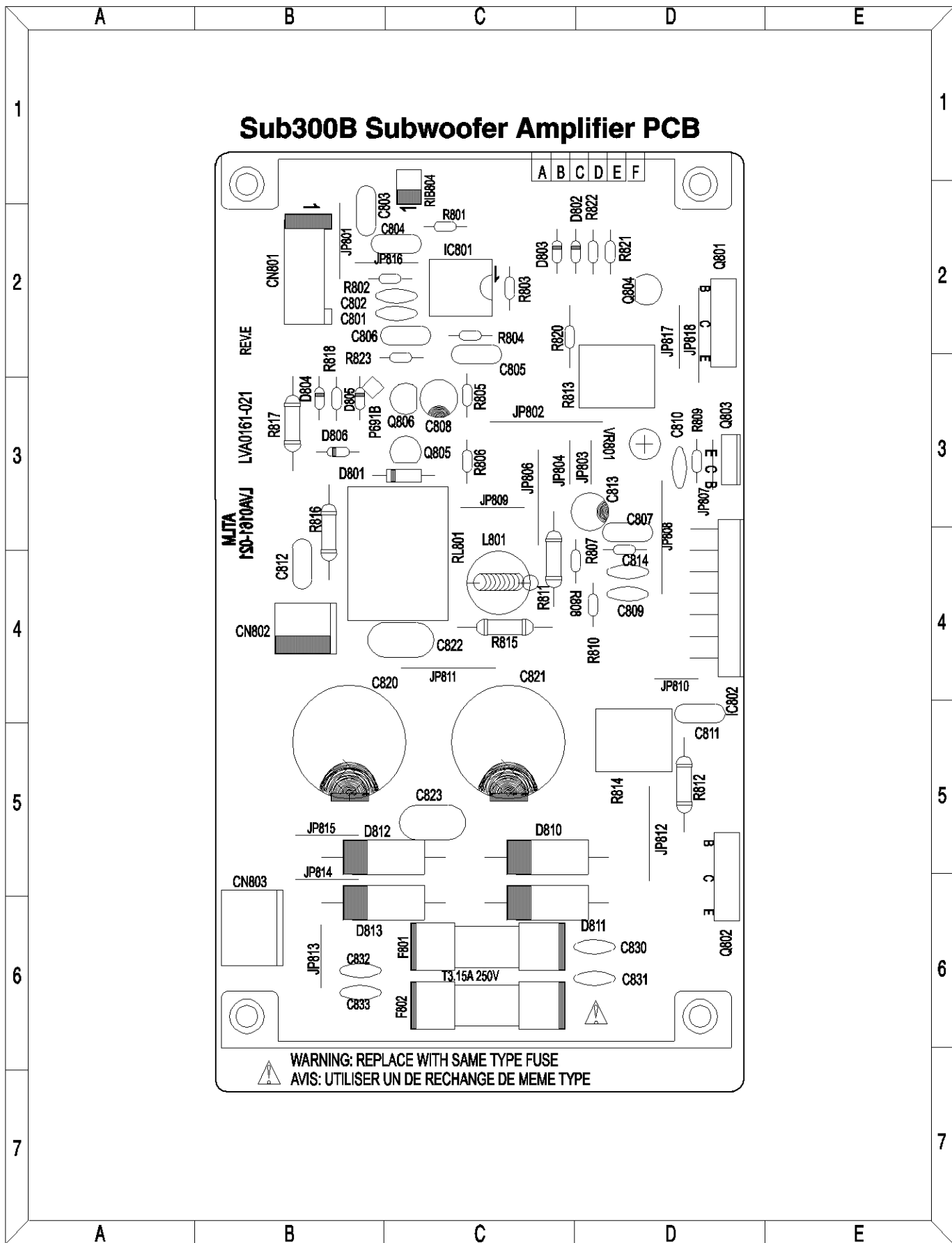
Sub300B Control Board PCB



r PCB

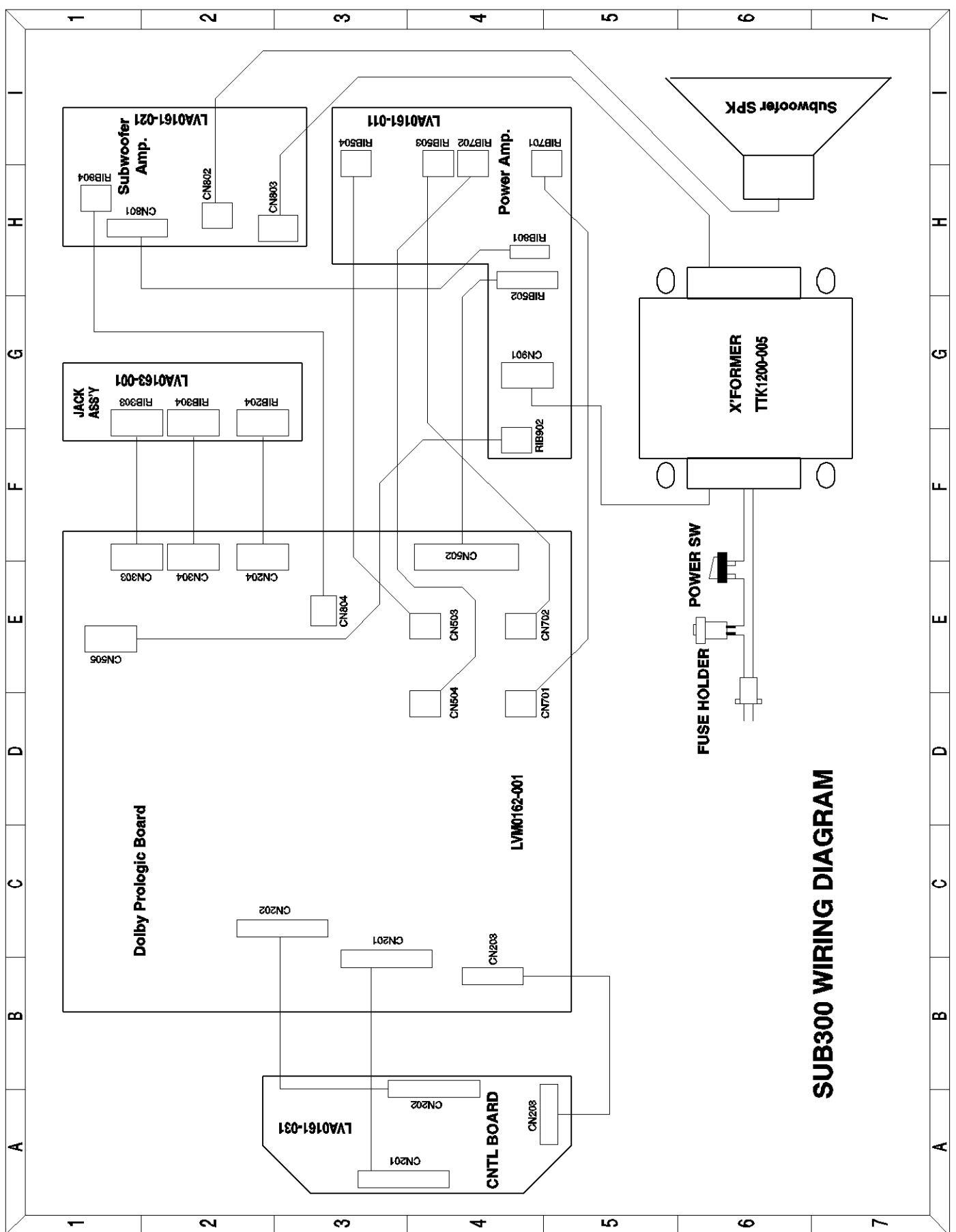


**SUB300B SUBWOOFER AMPLIFIER PCB**



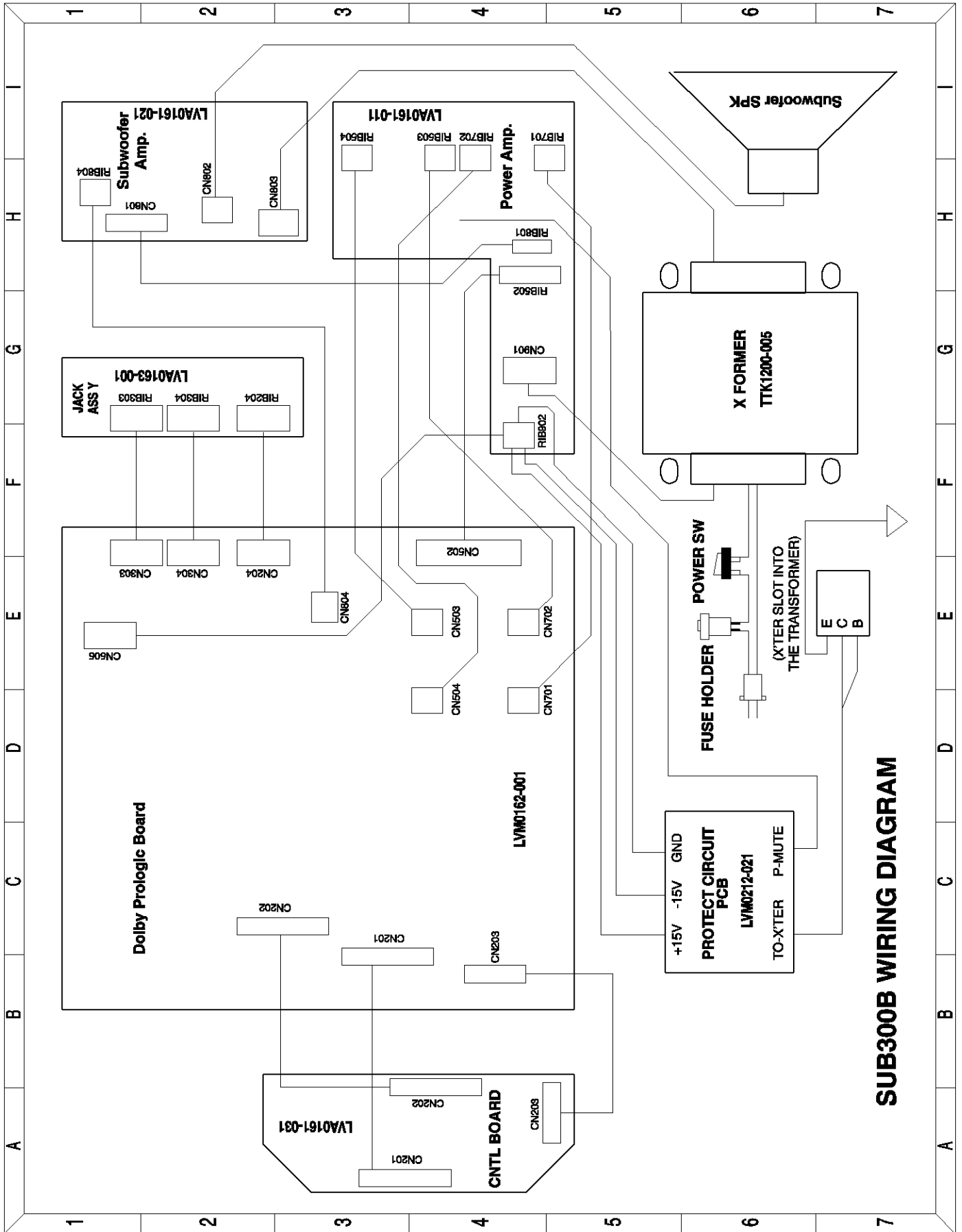
⚠ WARNING: REPLACE WITH SAME TYPE FUSE  
 AVIS: UTILISER UN DE RECHANGE DE MEME TYPE

### SUB300 WIRING DIAGRAM



SUB300 WIRING DIAGRAM

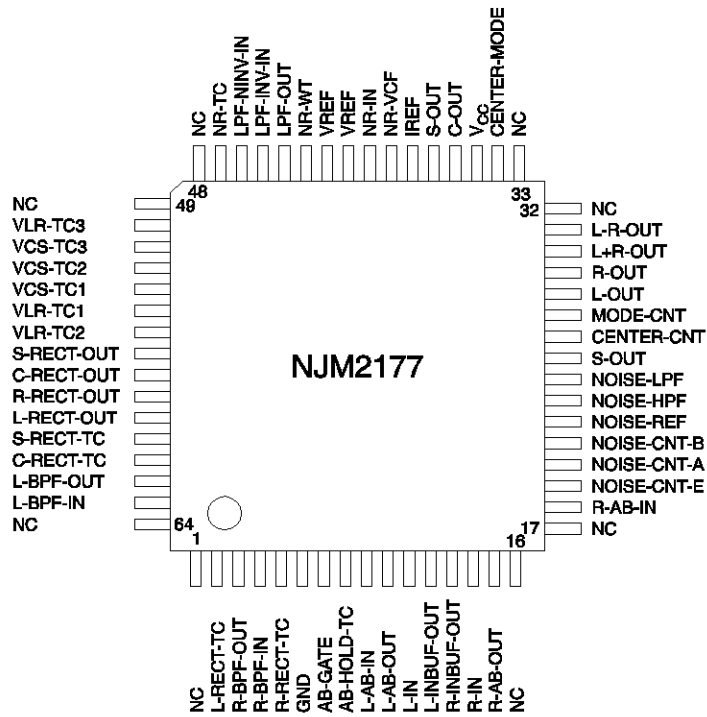
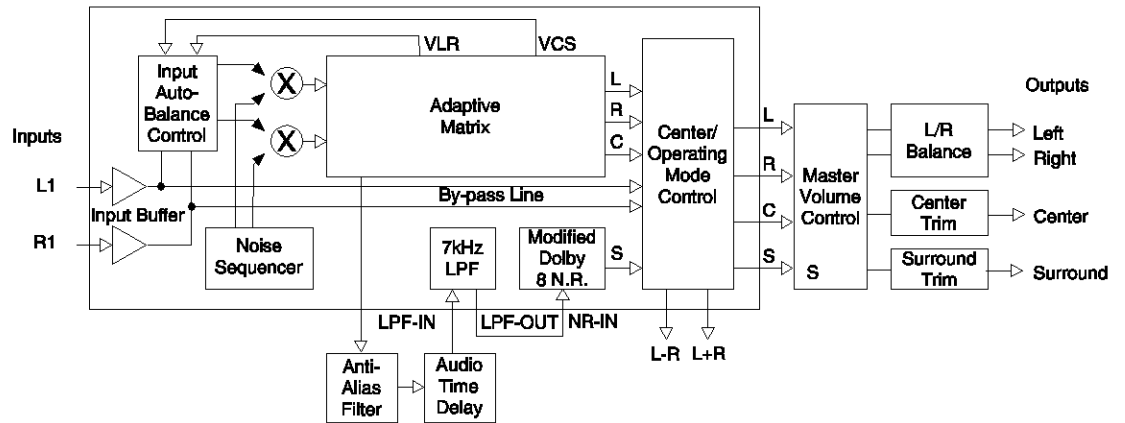
**SUB300B WIRING DIAGRAM**



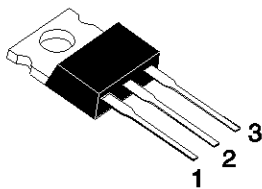
**SUB300B WIRING DIAGRAM**

INTEGRATED CIRCUIT DIAGRAMS

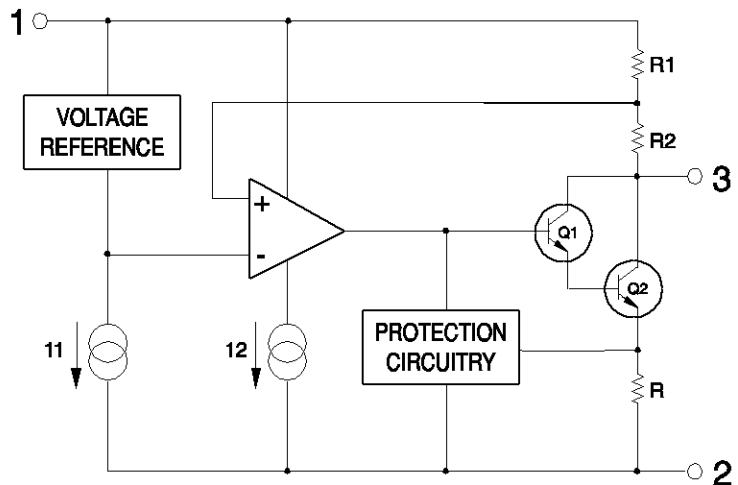
IC601 - NJM2177A, DOLBY PRO LOGIC SOUND DECODER



IC903 - 7915, -9V REGULATOR

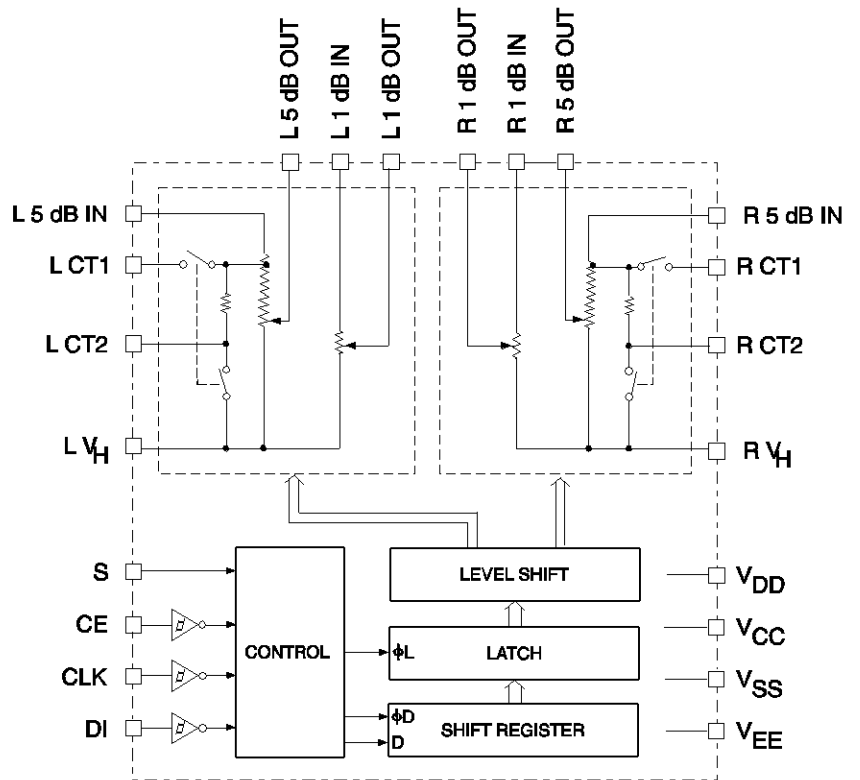
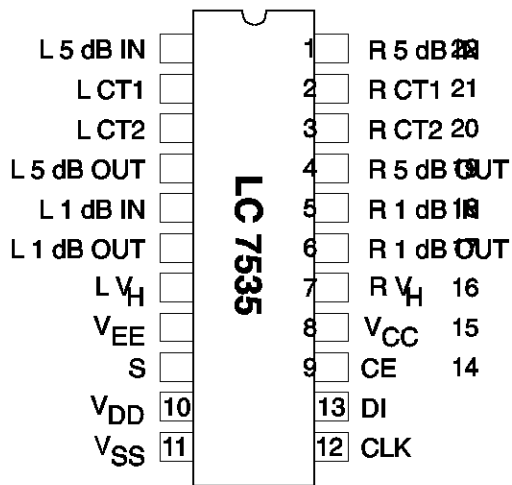


1: GND, 2: INPUT, 3: OUTPUT

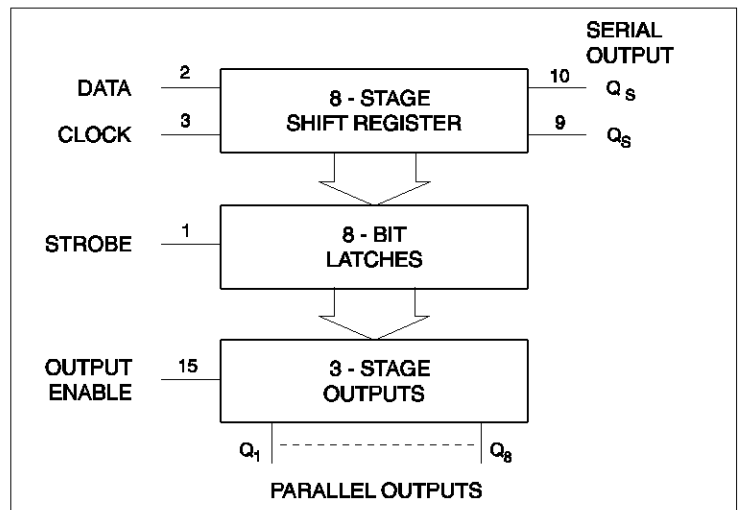
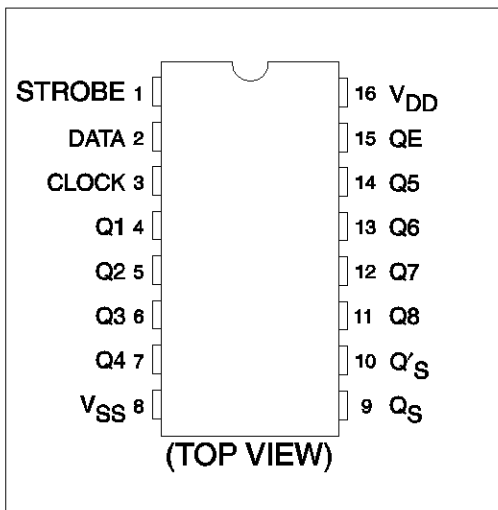




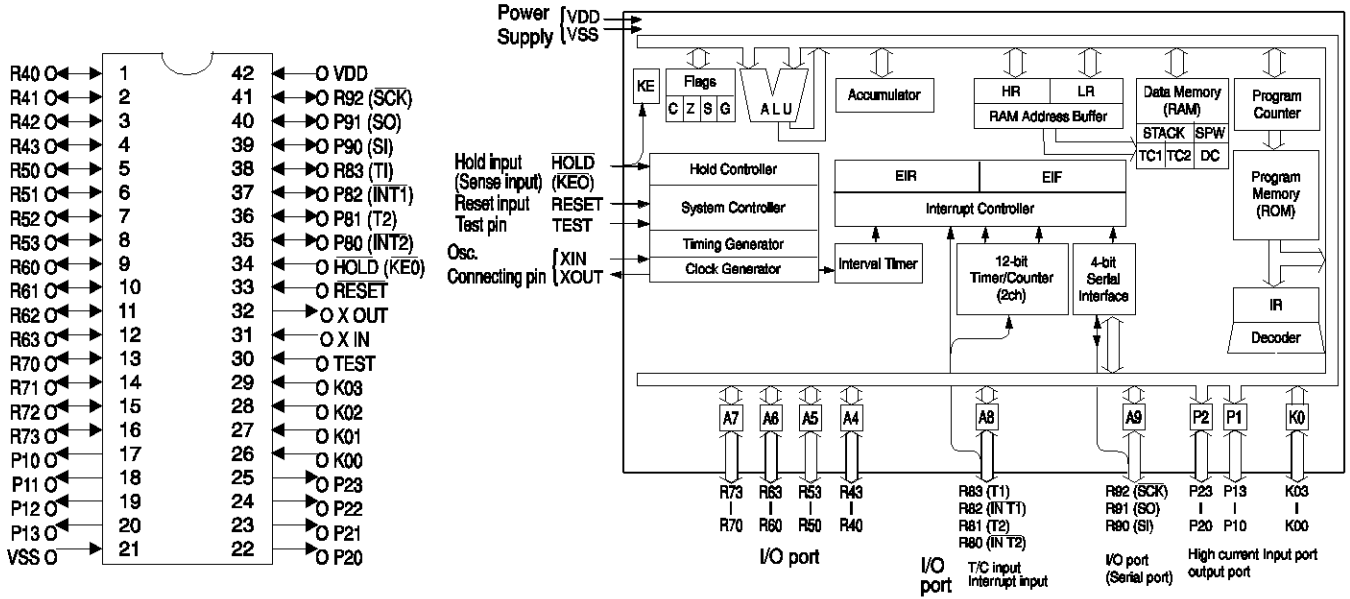
**IC404, IC752 - LC7535**  
ELECTRONIC VOLUME CONTROL



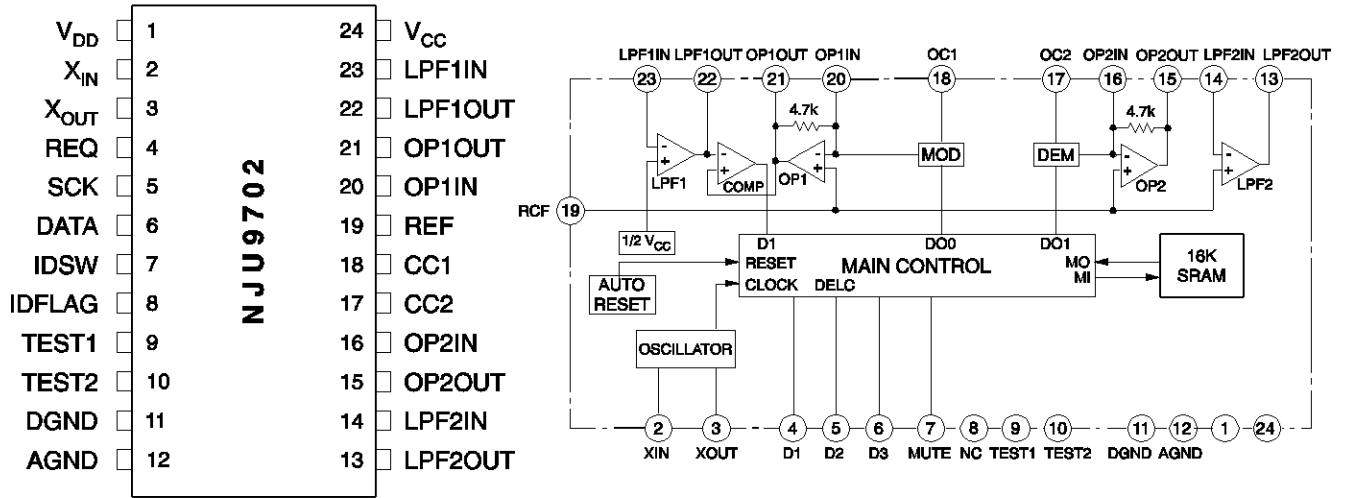
**IC202, IC671 - TC4094BP, 8 BIT SHIFT REGISTER**



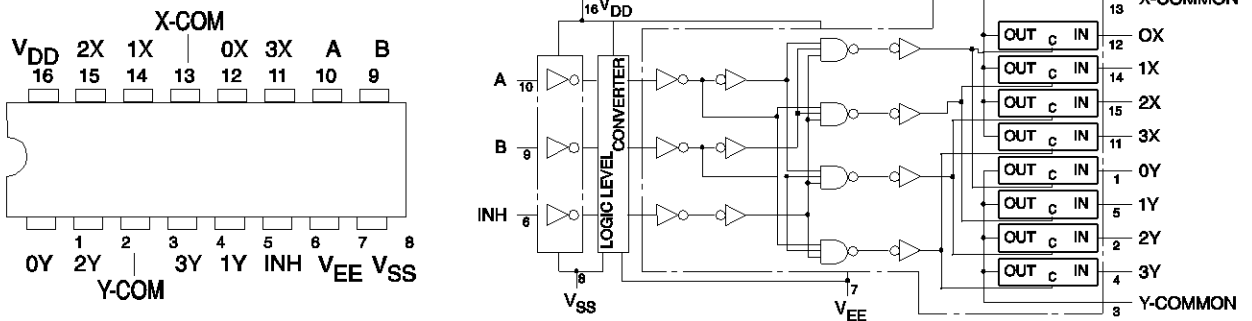
IC201 - TMP47CH400, MICROPROCESSOR



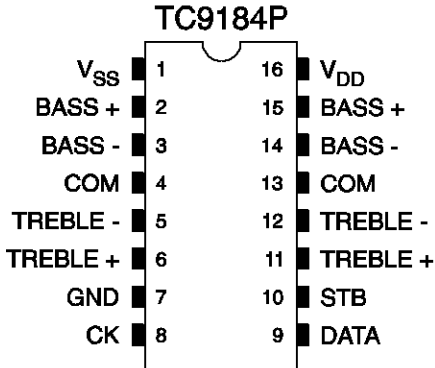
IC651 - NJU9702D, DELAY



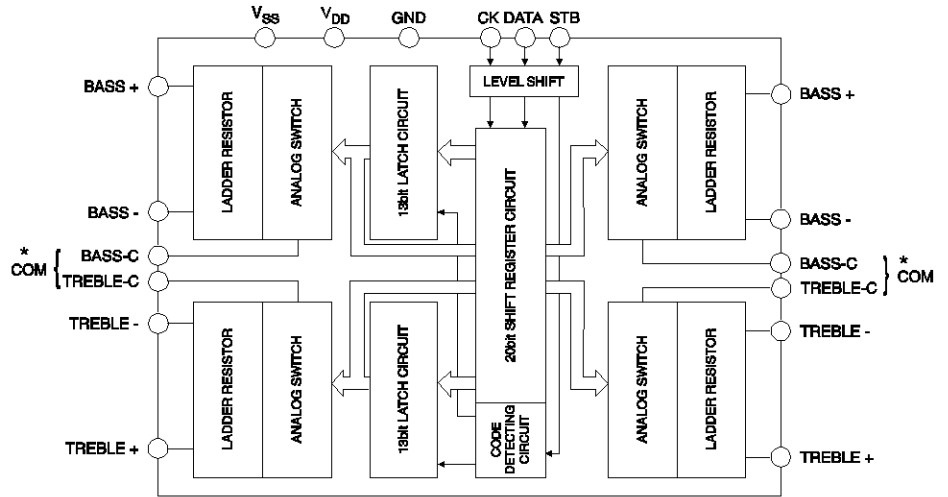
IC301, IC681 - TC4052BP, 4 CH MULTIPLEXER



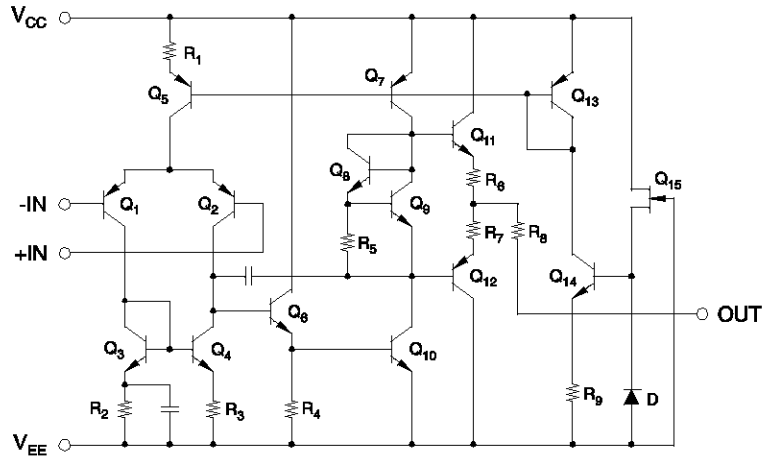
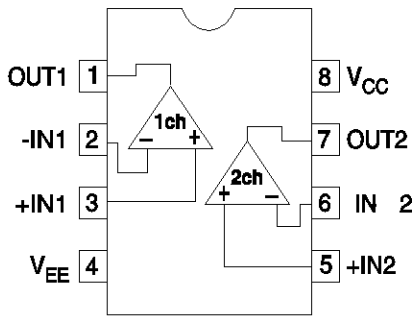
**IC402 - TC9184P**  
BASS/TREBLE CONTROL



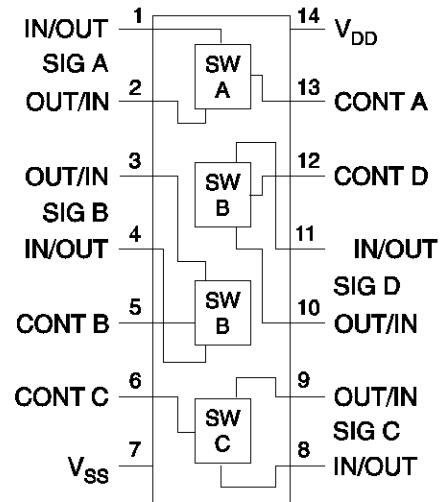
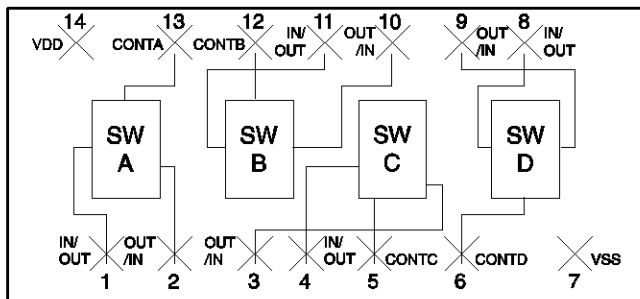
**BLOCK DIAGRAM**  
TC9194P



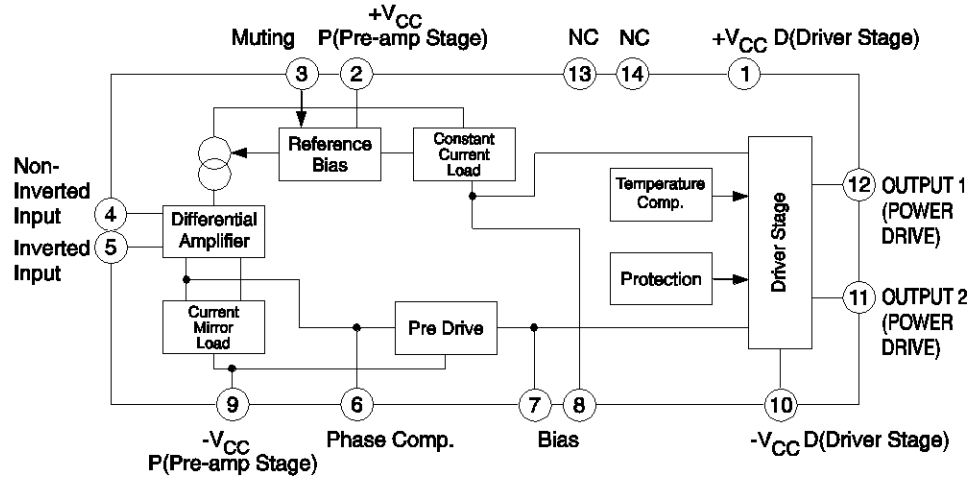
**IC1, 401, 403, 751, 801, 851**  
JRC4558D, OP-AMP



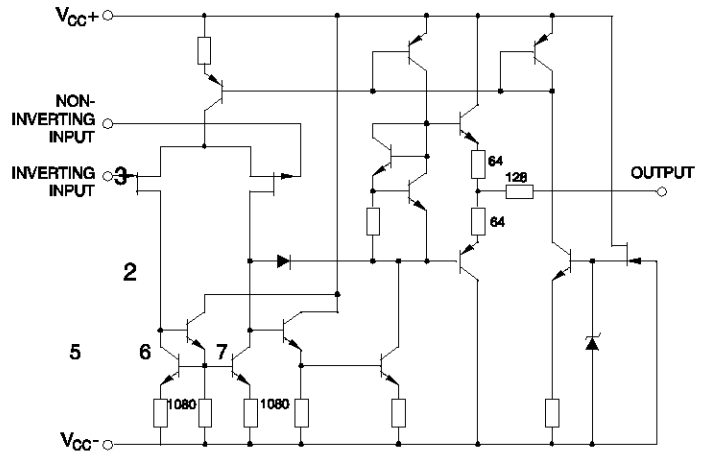
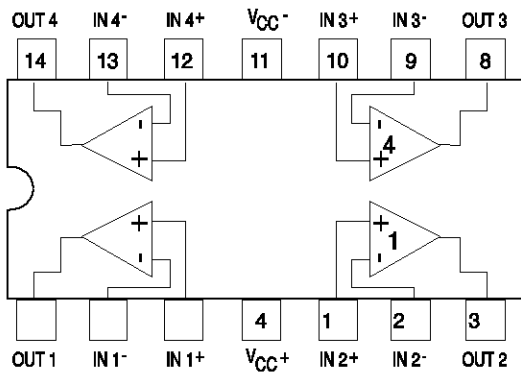
**IC682 - MC14066BCP, QUAD SW/MULTIPLEXER**



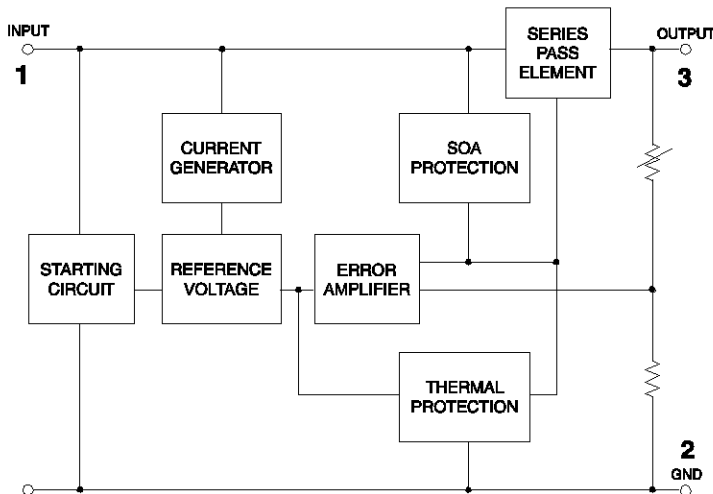
**IC802 - UPC1298V, POWER AMP DRIVER**



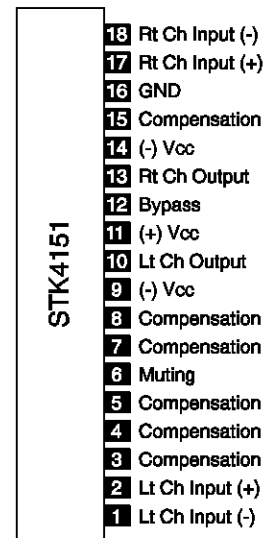
**IC302, 405, 406, 753, 754  
TL074CN, QUAD OP AMP**



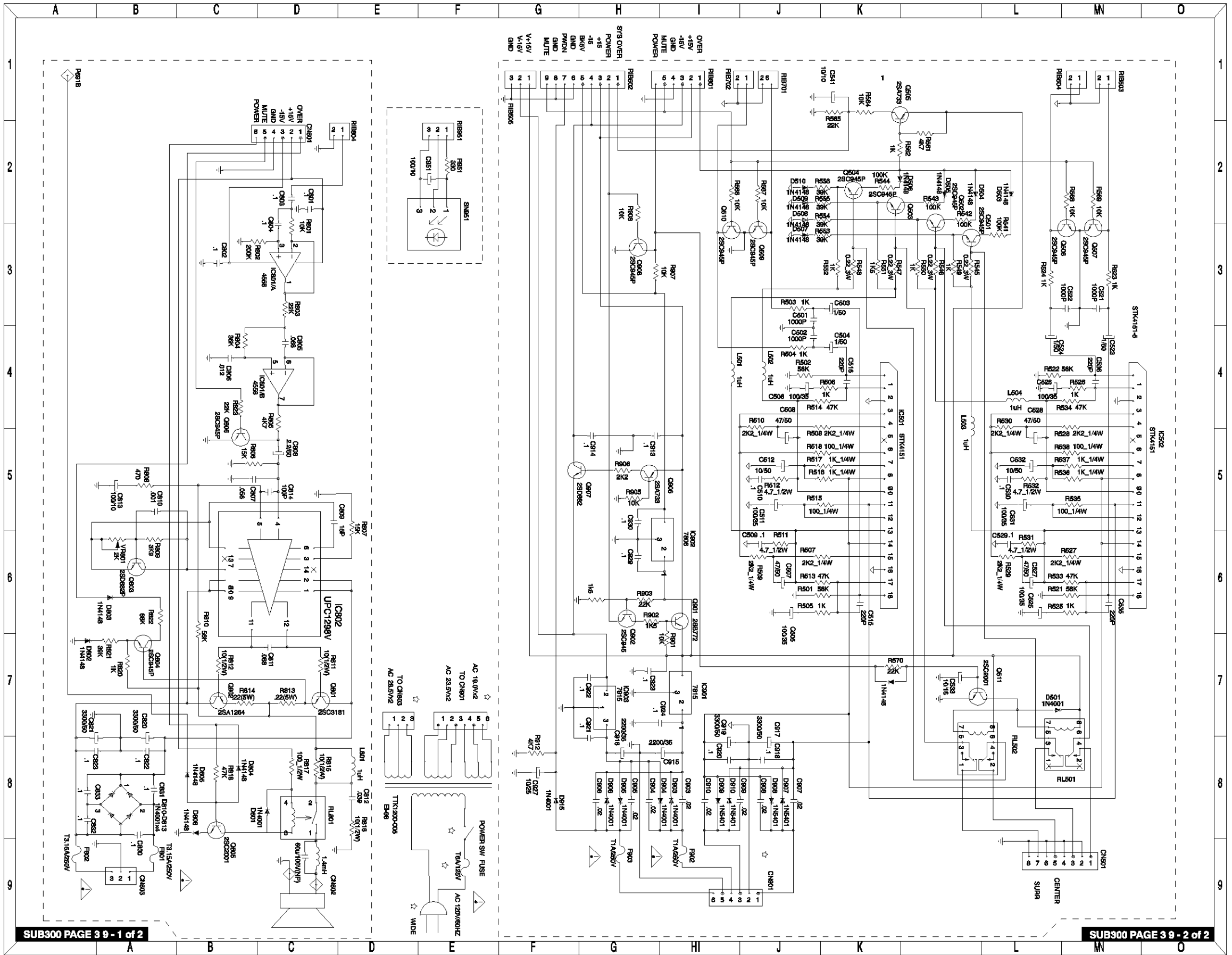
**IC901 - 7815 +15V REGULATOR (or)  
IC902 - MC7806ACT +6V REGULATOR**

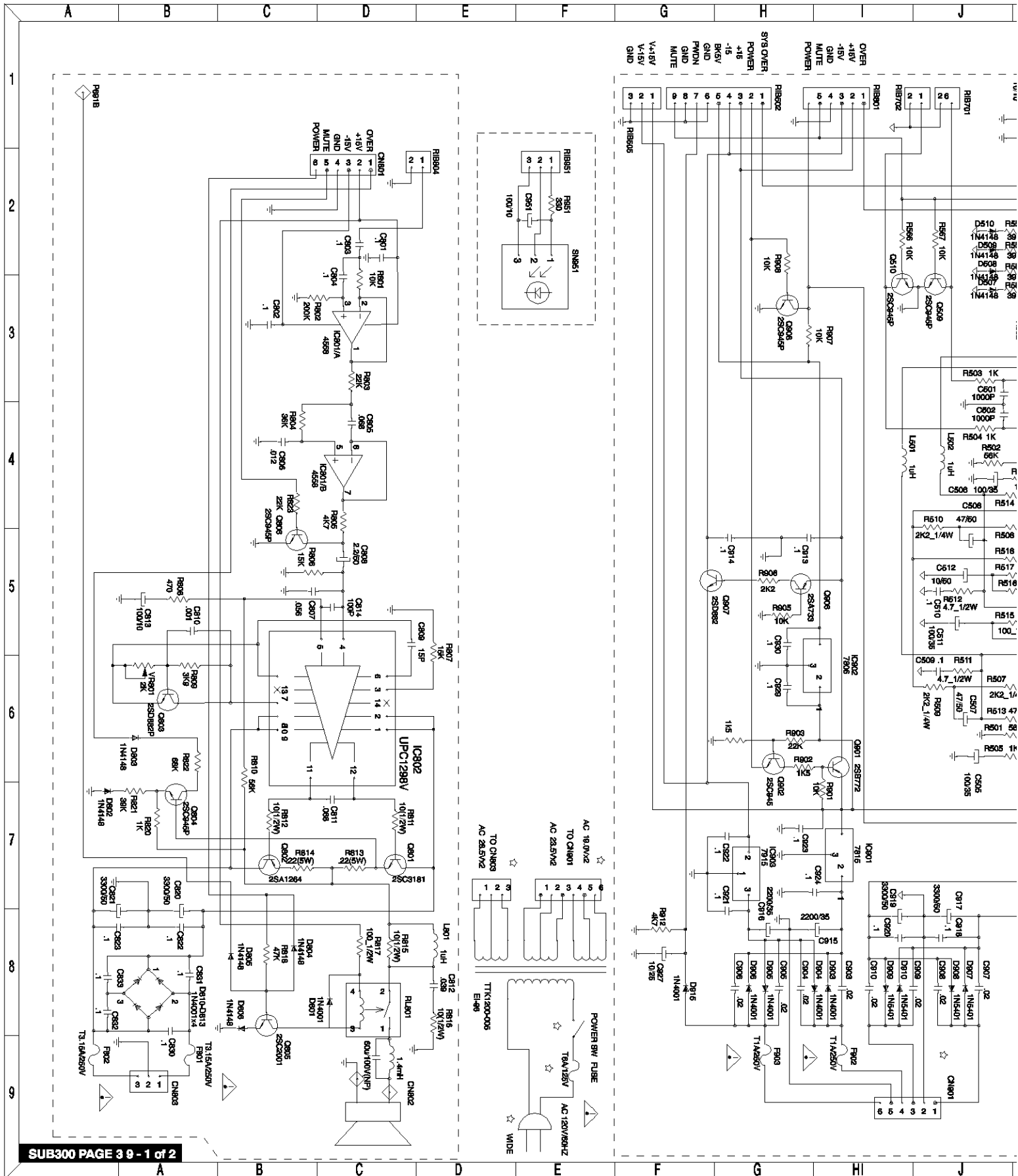


**IC501, 502 - STK4151  
POWER AMP**



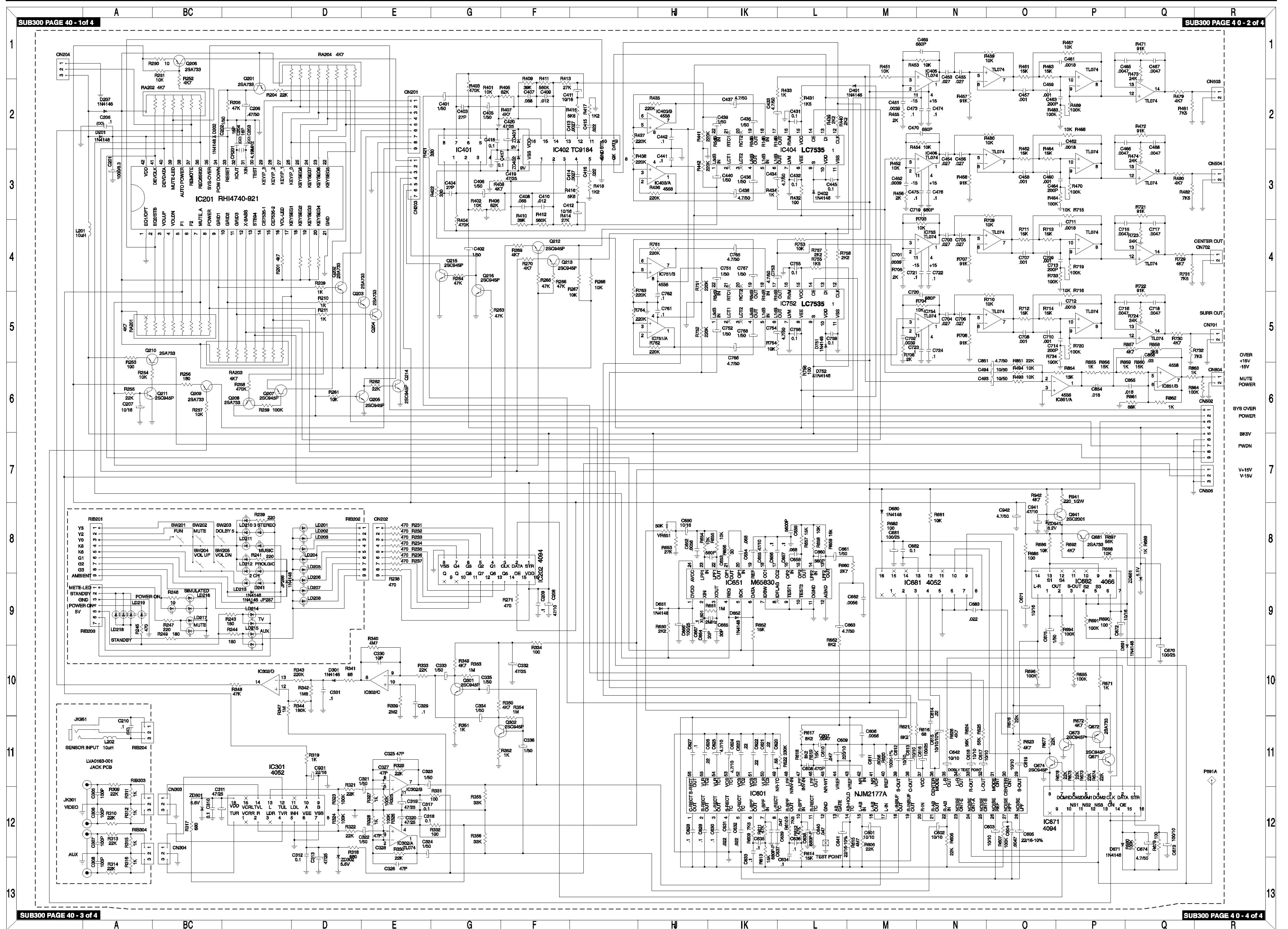
SUB300 SCHEMATIC DIAGRAM 1







SUB300 SCHEMATIC DIAGRAM 2

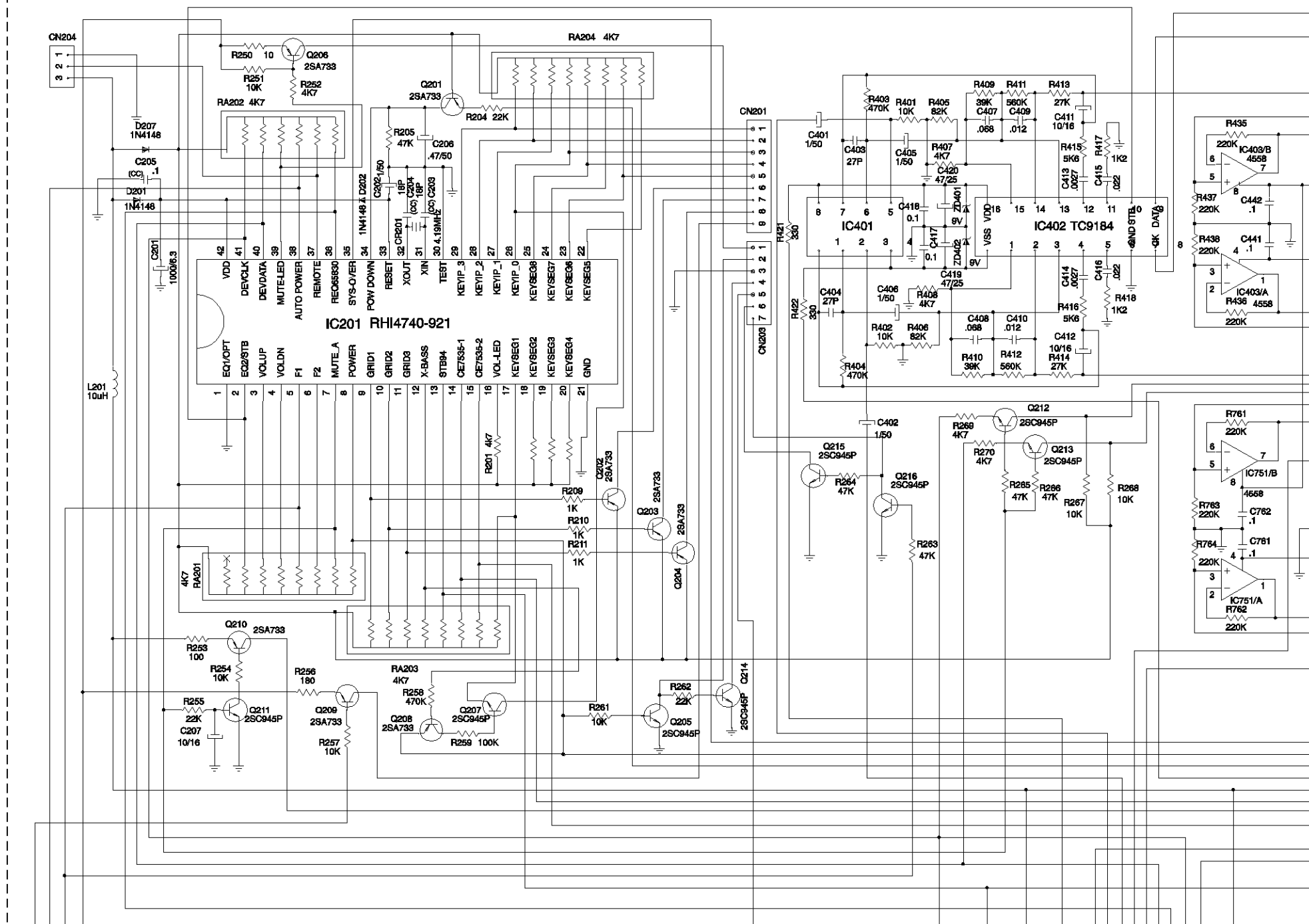




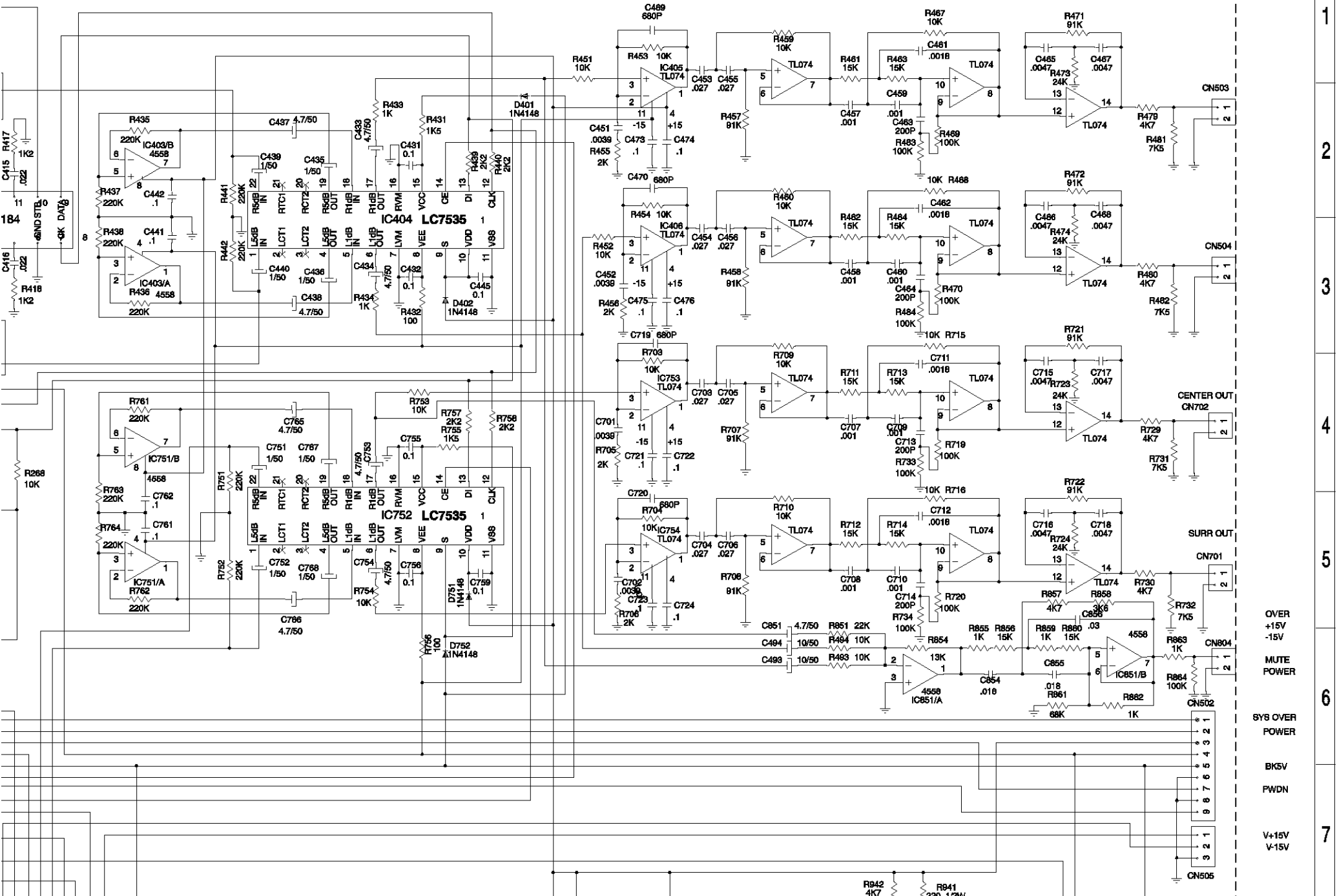
SUB300 PAGE 40 - 1 of 4

A BC D E F G H J

1  
2  
3  
4  
5  
6  
7



SCHEMATIC DIAGRAM 2



1  
2  
3  
4  
5  
6  
7

OVER  
+15V  
-15V  
MUTE  
POWER  
SYS OVER  
POWER  
BKSV  
PWDN  
V+15V  
V-15V

7

8

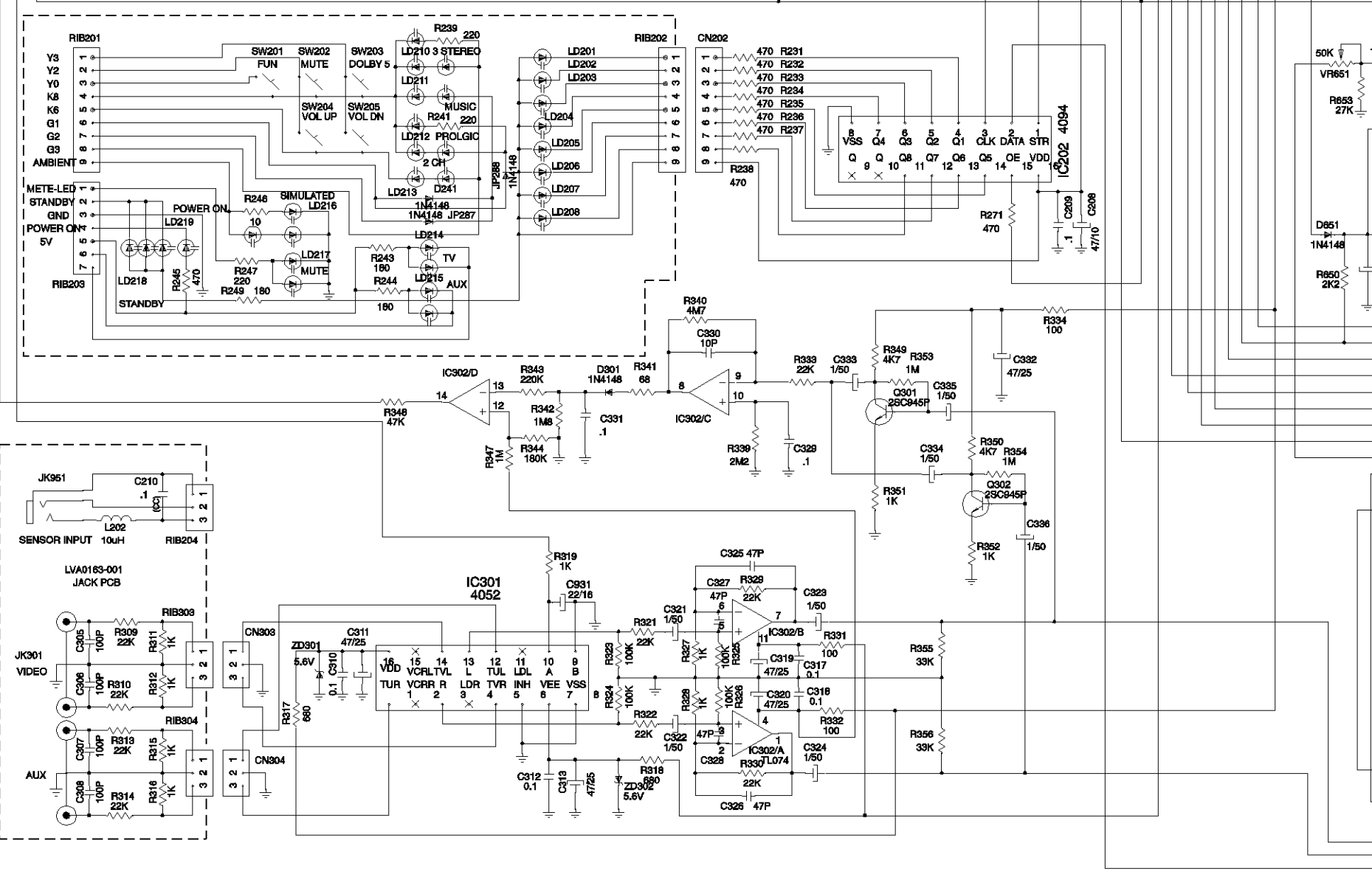
9

10

11

12

13



A

BC

D

E

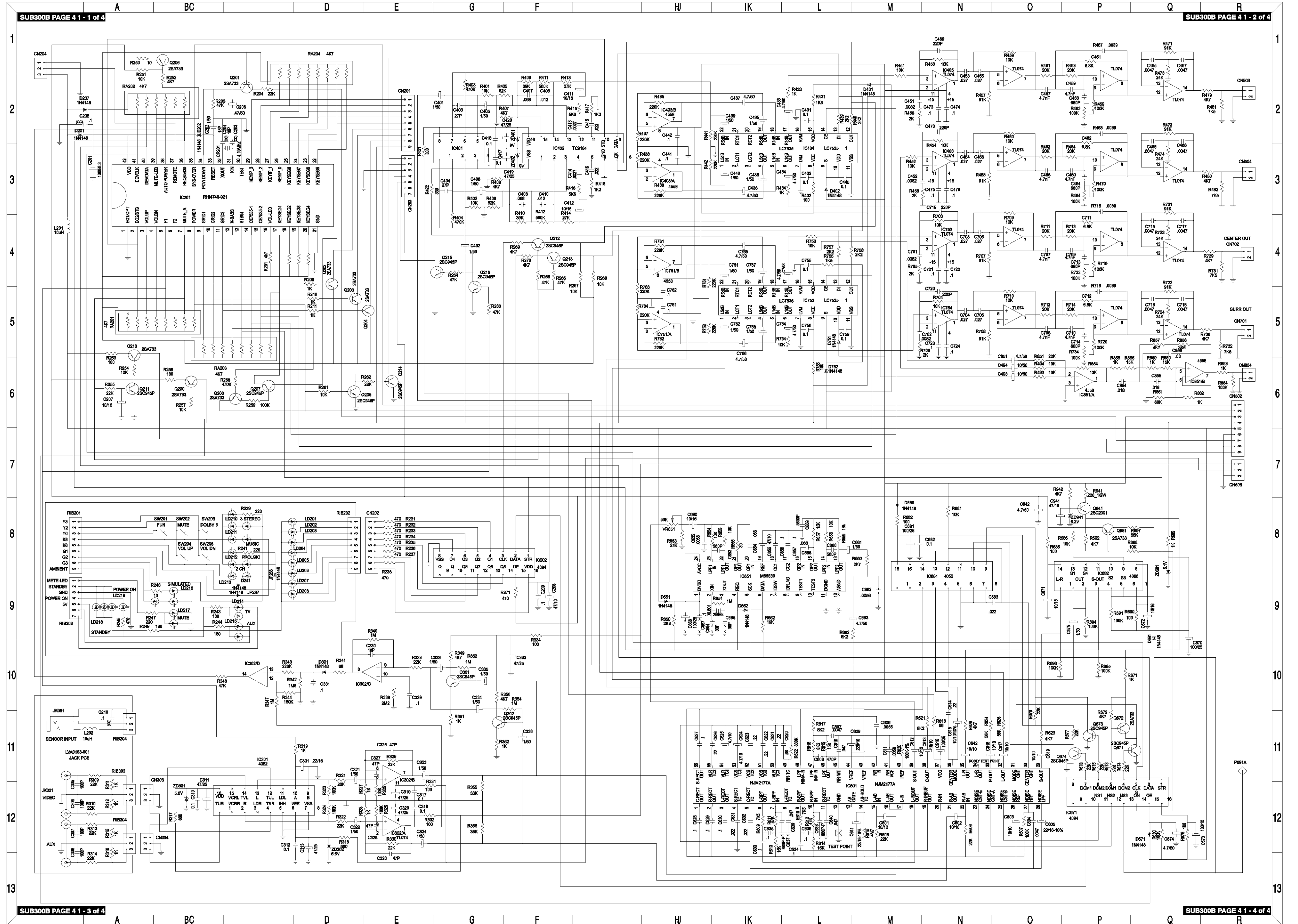
G

F

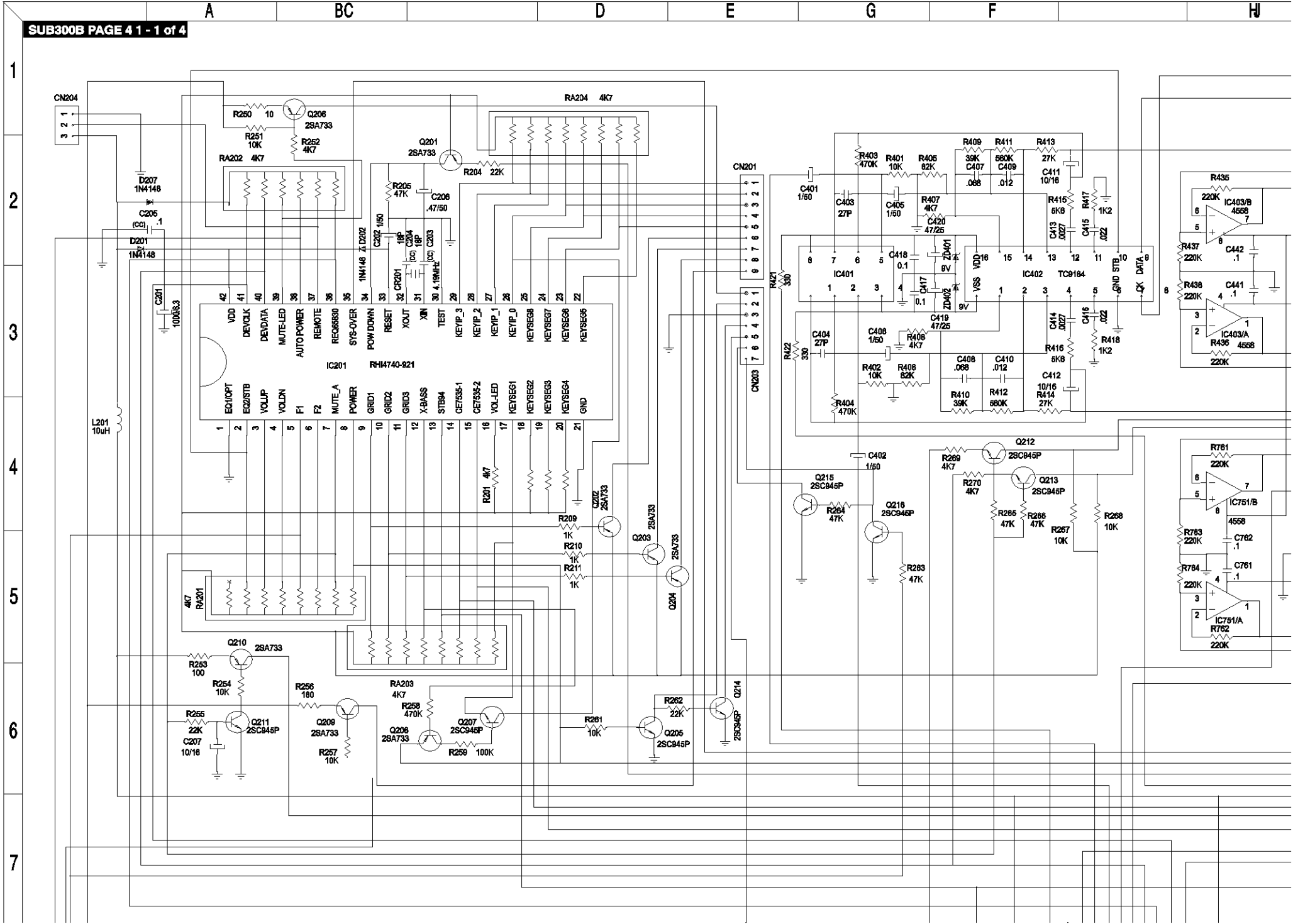
H



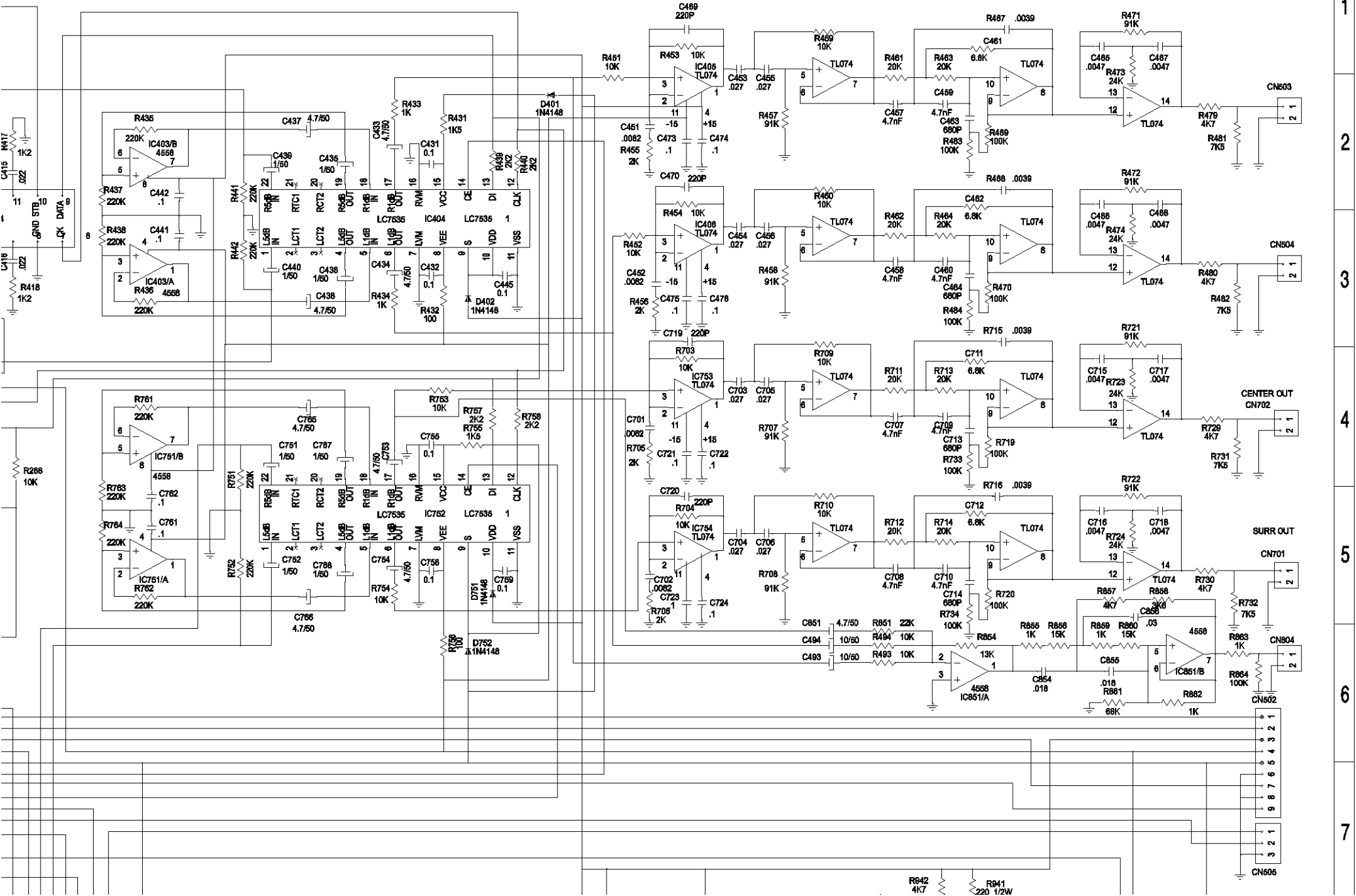
SUB300B SCHEMATIC DIAGRAM 1



SUB300B PAGE 4 1 - 1 of 4



OB SCHEMATIC DIAGRAM 1



7

8

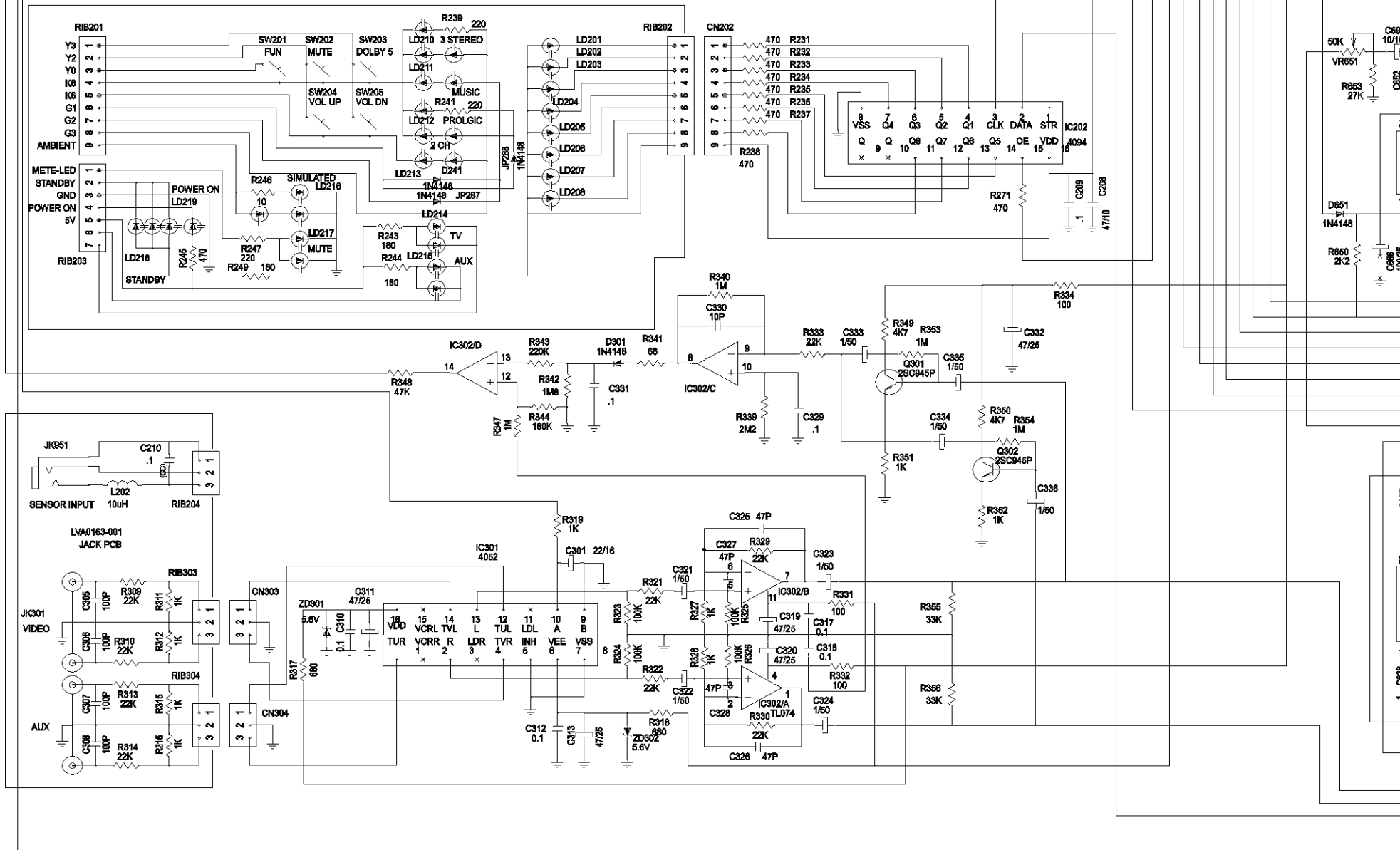
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11

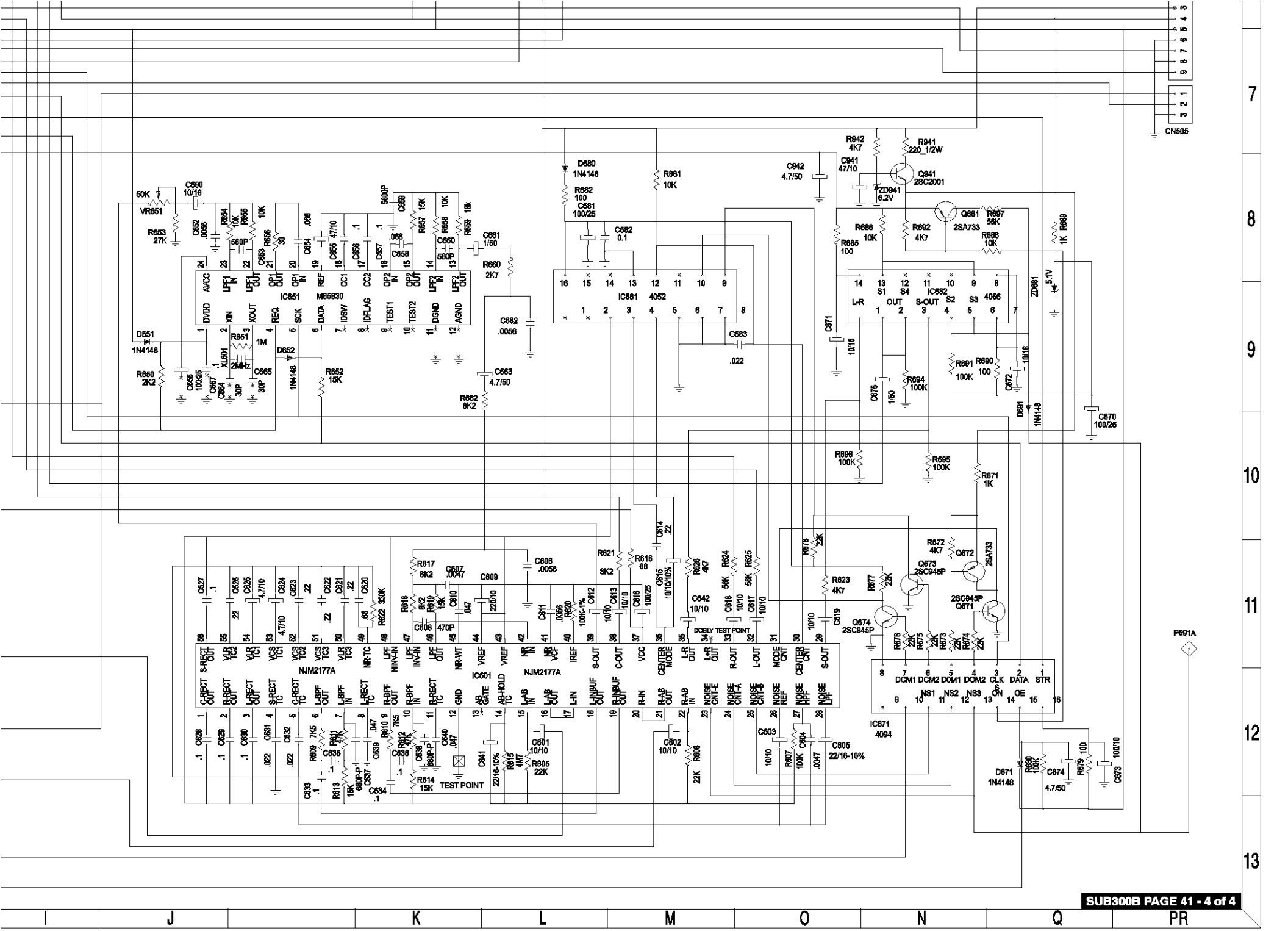
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13



A BC D E F G H





SUB300B SCHEMATIC DIAGRAM 2

