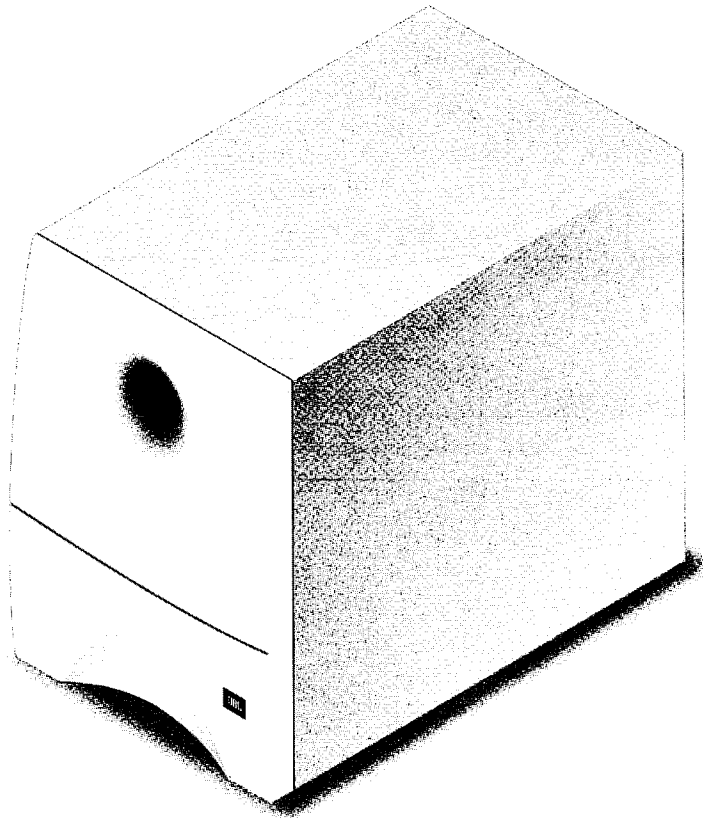


JBL

Media Sub

Single 5.25" Powered Multimedia Subwoofer

TECHNICAL MANUAL



JBL Consumer Products Inc.
80 Crossways Park West
Woodbury, N.Y. 11797
1-800-336-4JBL in the USA

H A Harman International Company

Part No.: MEDIASUBSM Rev A

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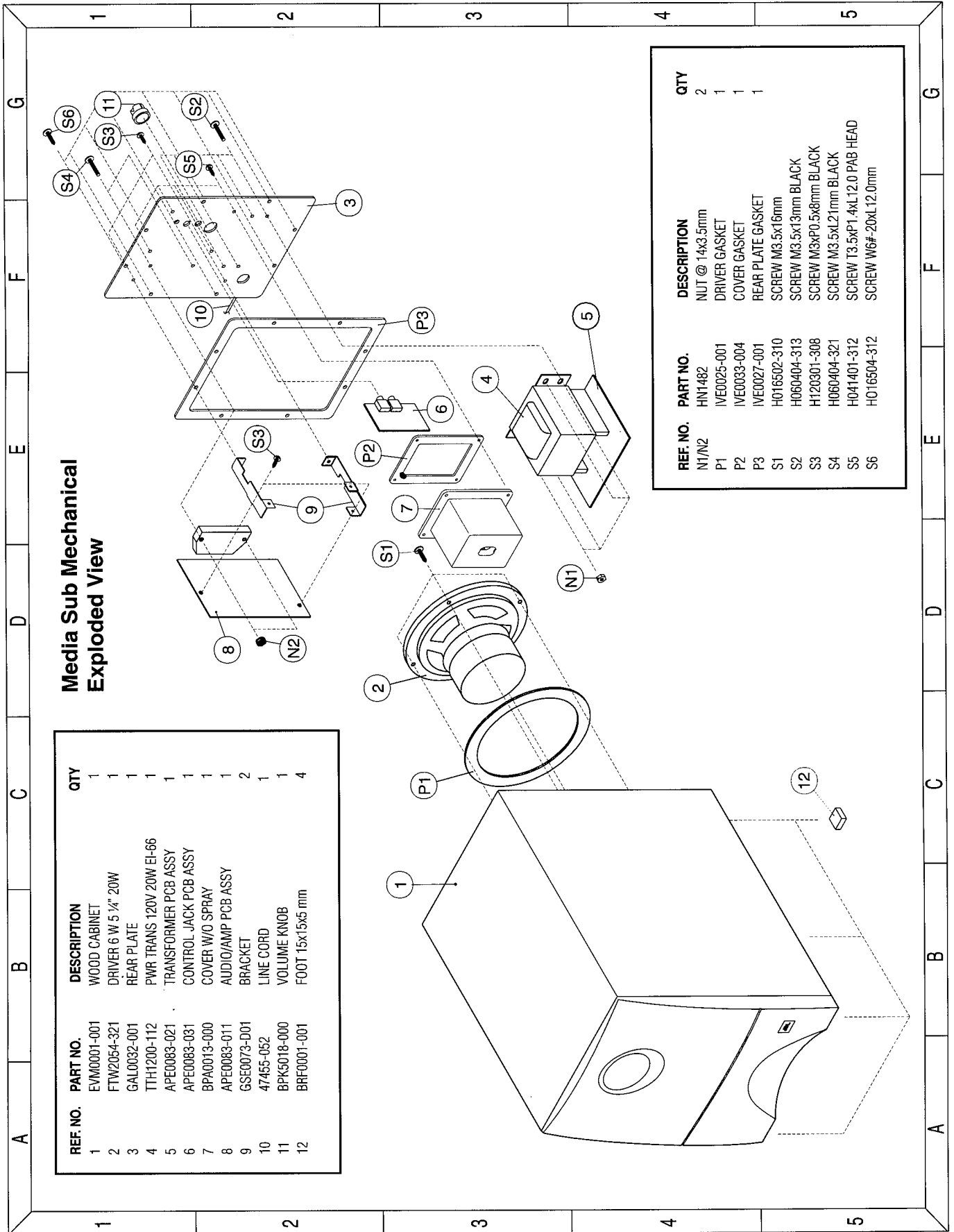
FEATURES

- Powered subwoofer system.
- 25 watt amplifier.
- Auto turn-on / turn-off circuitry.
- Subwoofer is magnetically shielded for flicker-free use near computer monitors.
- Built-in electronic equalization for proper frequency balance with satellite speakers.
- Line level stereo output for use with satellite speakers that don't have a subwoofer output.

SPECIFICATIONS

Speaker System	Sixth band-pass enclosure
Speaker Size	5.25" woofer
Total Amplifier Output Power	25W at 10% THD
Input Sensitivity	250mV input for full power
Frequency Response	40Hz - 150Hz
Input Impedance	10k ohms
Signal Output jack	Stereo miniplug jack (1/8")
Signal Input Jacks	Stereo miniplug jack (1/8")
External Dimensions	
Height	10.25"
Width	7.35"
Depth	12"
Weight	12.8 lbs.
External Dimensions (metric)	
Height	260mm
Width	186mm
Depth	305mm
Weight	5.8 kgs

MEDIA SUB EXPLODED VIEW



Media Sub Mechanical Exploded View

REF. NO.	PART NO.	DESCRIPTION	QTY
1	EVM0001-001	WOOD CABINET	1
2	FTW2054-321	DRIVER 6 W 5 1/4" 20W	1
3	GAL0032-001	REAR PLATE	1
4	TTH1200-112	PWR TRANS 120V 20W EI-66	1
5	APE0083-021	TRANSFORMER PCB ASSY	1
6	APE0083-031	CONTROL JACK PCB ASSY	1
7	BPA0013-000	COVER W/O SPRAY	1
8	APE0083-011	AUDIO/AMP PCB ASSY	1
9	GSE0073-D01	BRACKET	2
10	47455-052	LINE CORD	1
11	BPK5018-000	VOLUME KNOB	1
12	BRF0001-001	FOOT 15x15x5 mm	4

REF. NO.	PART NO.	DESCRIPTION	QTY
N1/N2	HN1482	NUT @ 14x3.5mm	2
P1	IVE0025-001	DRIVER GASKET	1
P2	IVE0033-004	COVER GASKET	1
P3	IVE0027-001	REAR PLATE GASKET	1
S1	H016502-310	SCREW M3.5x16mm	1
S2	H060404-313	SCREW M3.5x13mm BLACK	1
S3	H120301-308	SCREW M3xP0.5x8mm BLACK	1
S4	H060404-321	SCREW M3.5xL21mm BLACK	1
S5	H041401-312	SCREW T3.5xP1.4xL12.0 PAB HEAD	1
S6	H016504-312	SCREW W6#-20xL12.0mm	1

DISASSEMBLY PROCEDURES

Step 1

Remove the 8 purchase screws (S6) from the rear plate to separate the rear plate and the wood cabinet.

Step 2

Unplug the connector speaker wire from the PCB amp assembly.

Step 3

Remove the 4 purchase screws (S5) from the rear plate to separate the rear plate and cover.

Step 4

Remove the power/volume knob from the rear plate.

Step 5

Remove the 4 purchase screws (S2) and nuts (N1) to separate the rear plate and transformer assembly.

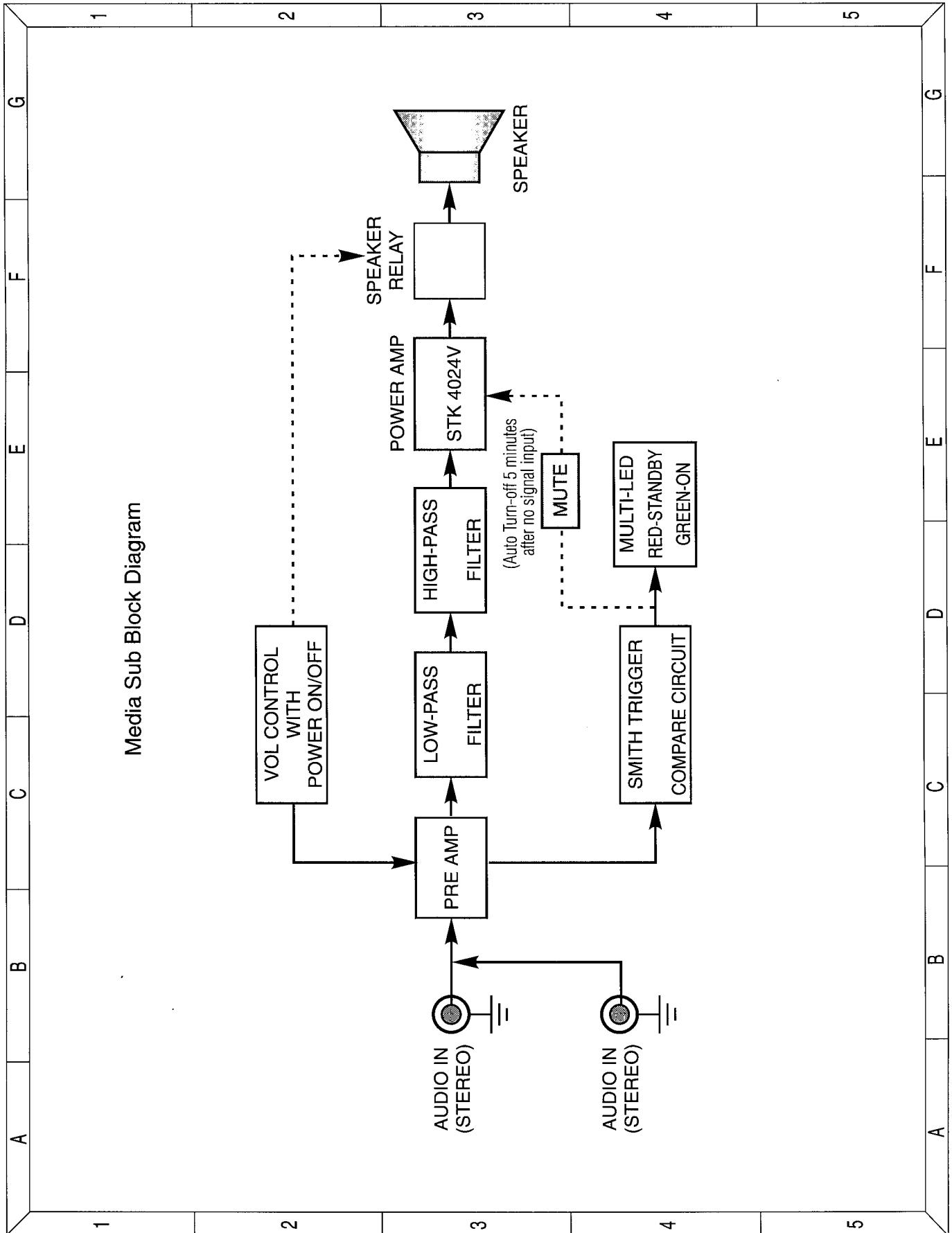
Step 6

Remove the 2 purchase screws (S3) from the bracket and the 2 purchase screws (S4) and nuts (N2) from the IC of STK4024 to separate the rear plate and Amp assembly.

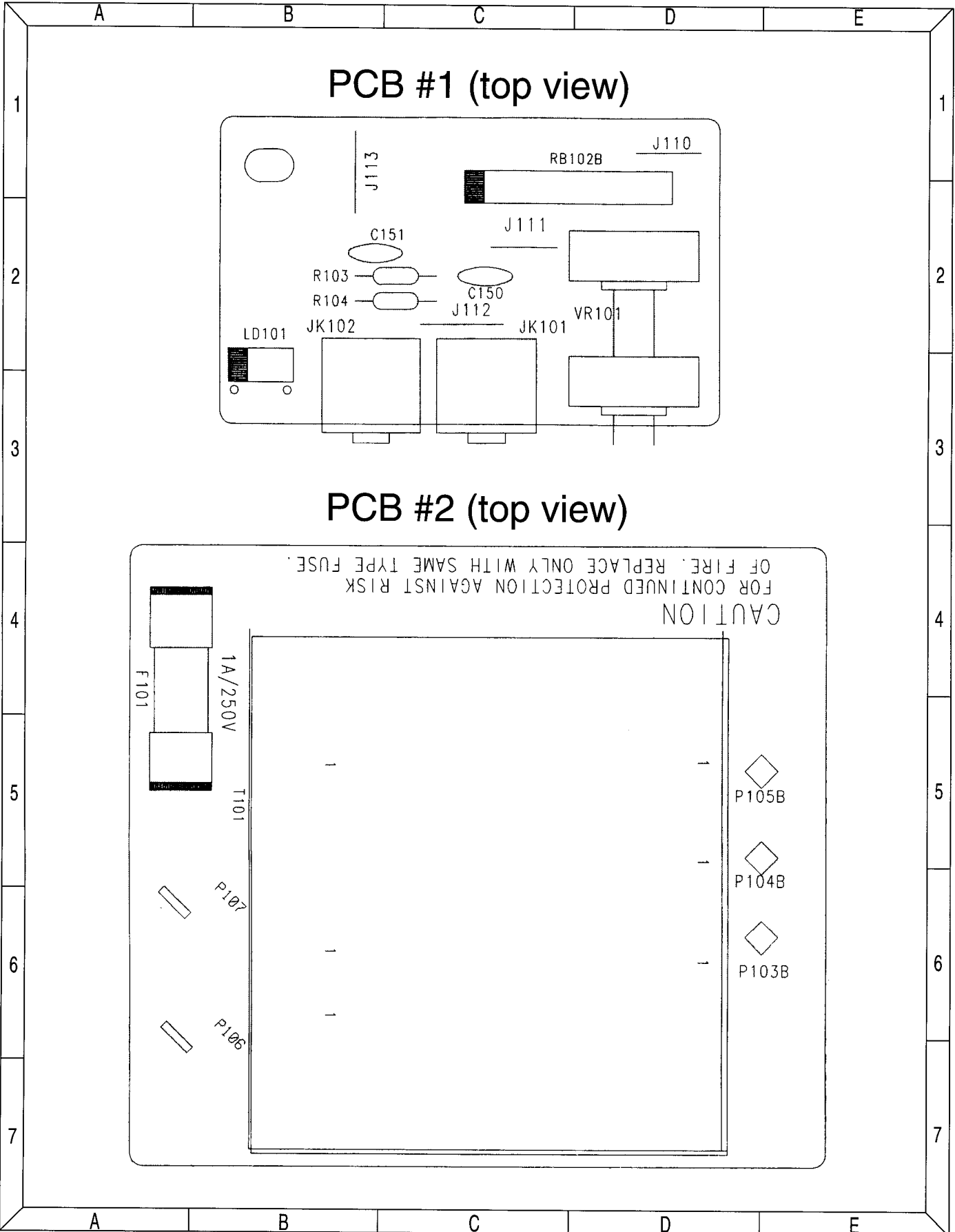
Step 7

Remove the 4 purchase screws (S1) from the driver inside the wood cabinet to separate the wood cabinet and the driver.

BLOCK DIAGRAM



PRINTED CIRCUIT BOARDS 1 & 2 (viewing trace layer through the board)

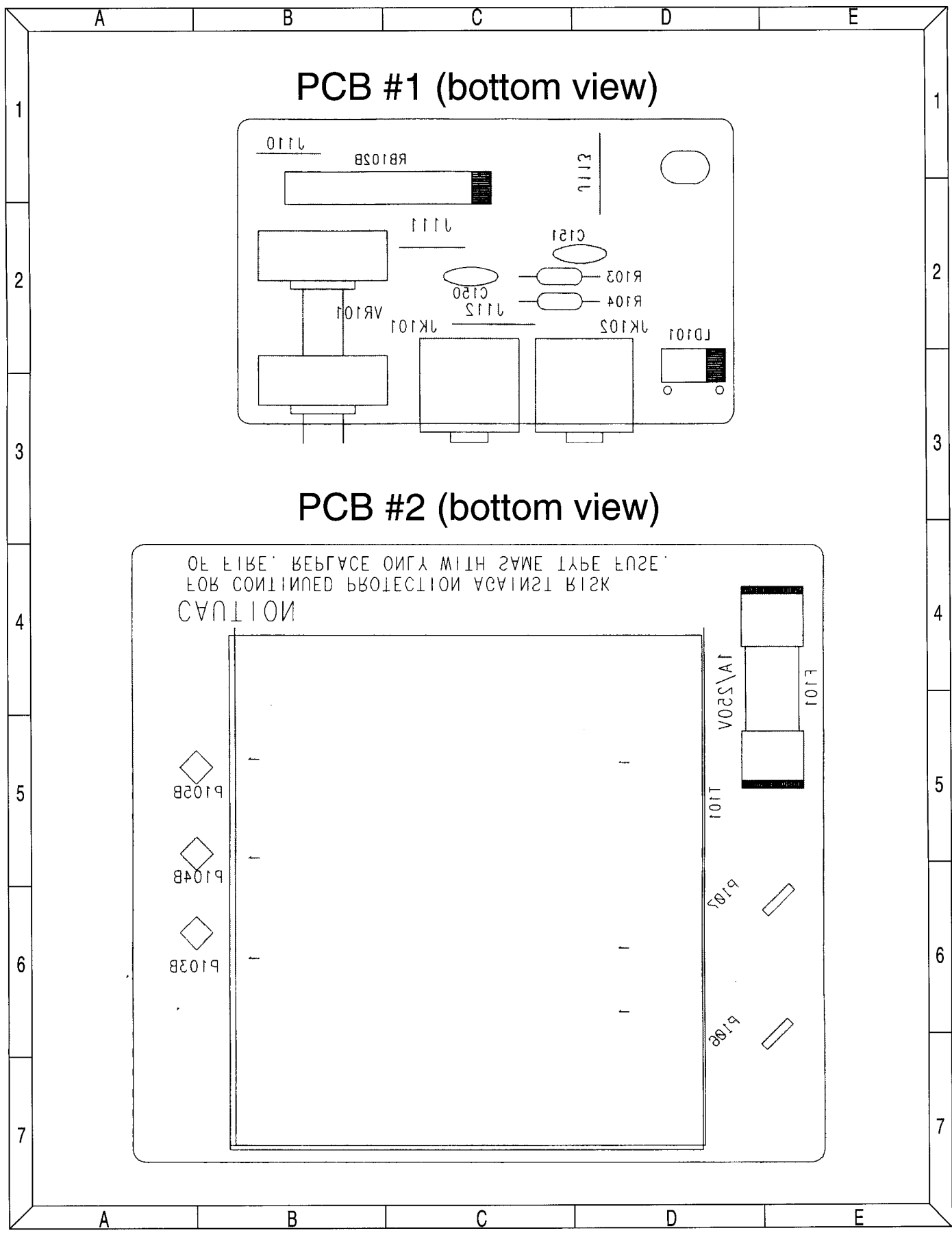


PCB #1 (top view)

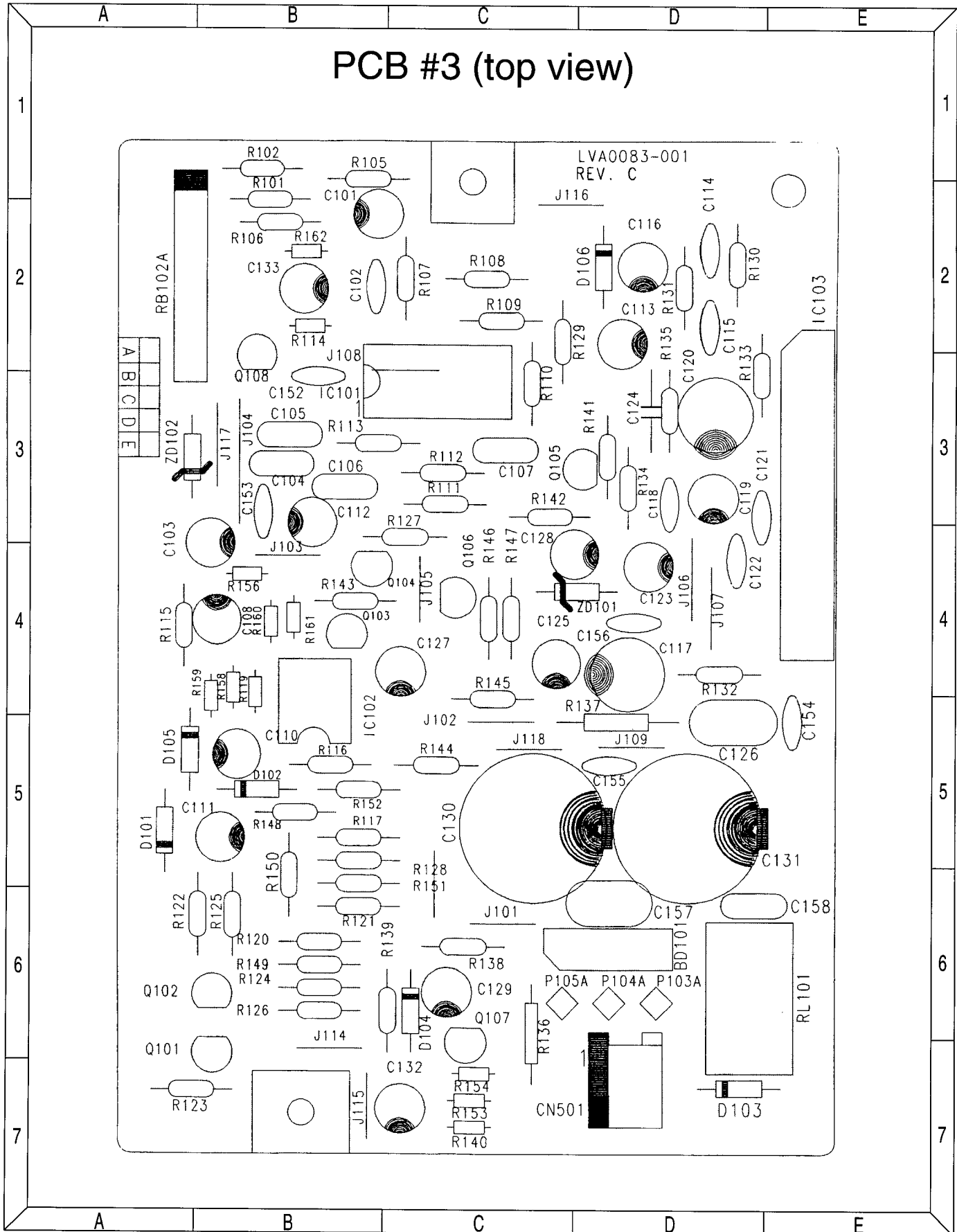
PCB #2 (top view)

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

PRINTED CIRCUIT BOARDS 1 & 2 (viewing silk-screen through the board)



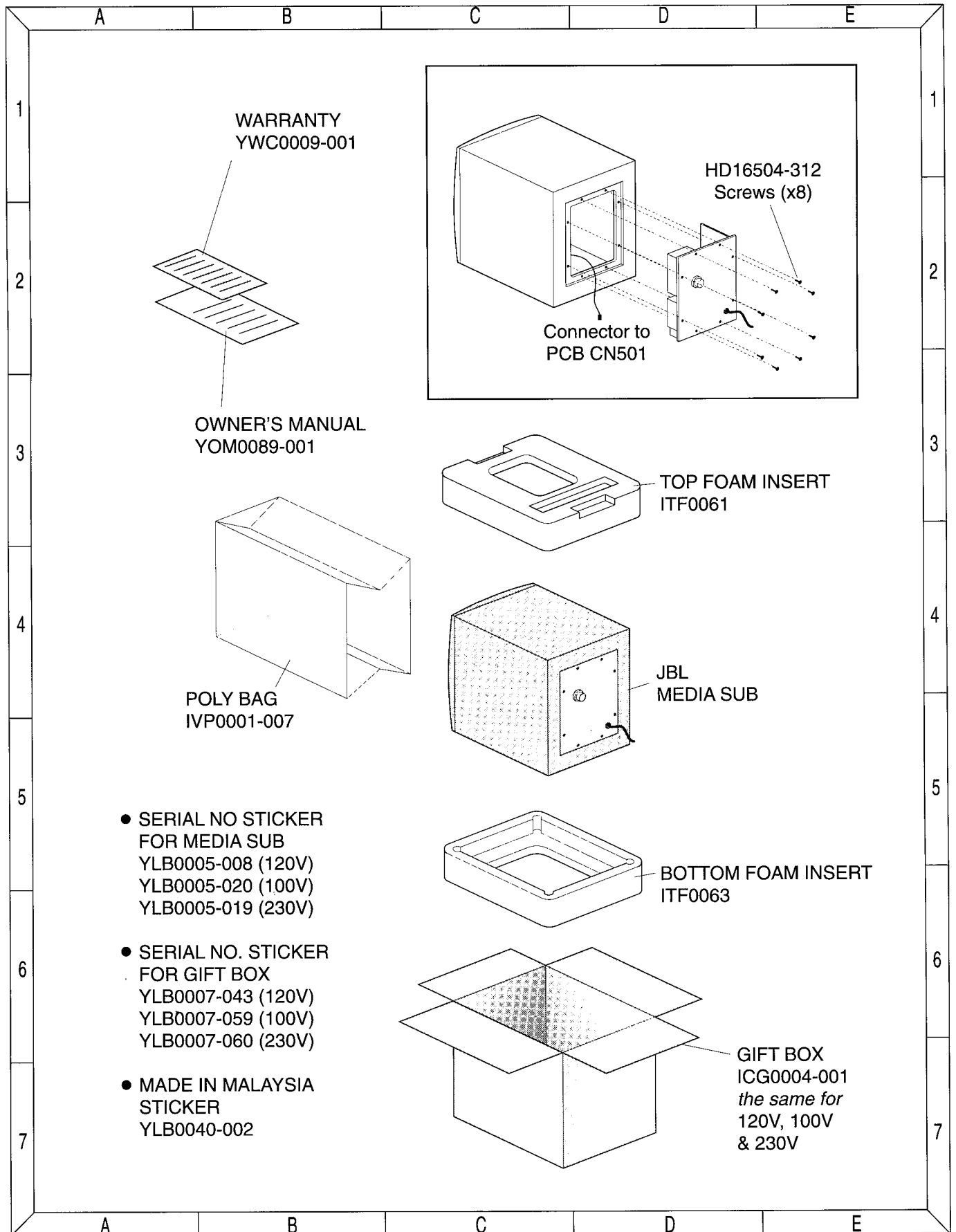
PRINTED CIRCUIT BOARD 3 (viewing trace layer through the board)



ELECTRICAL PARTS LIST

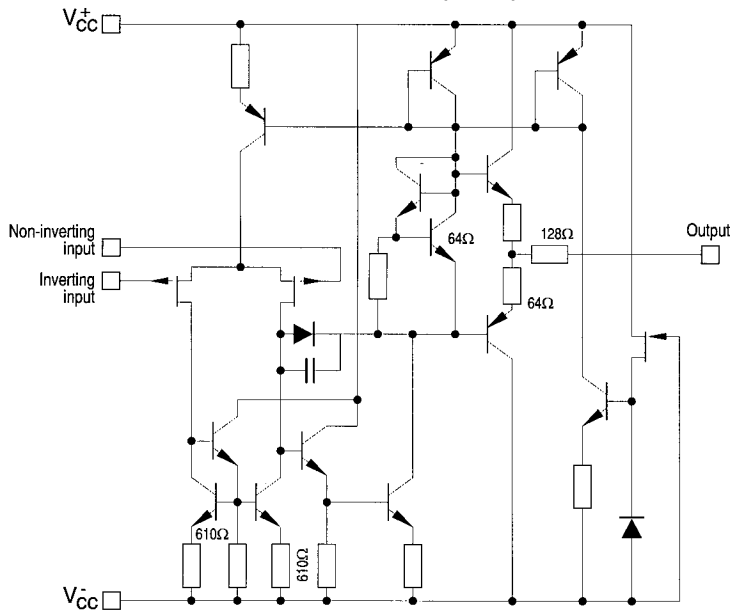
REF. NO.	PART NO.	DESCRIPTION	QTY				
				R121	QAF0650-824	820K Ω 1/6W \pm 5%	1
				R122, 123	QAF0650-103	10K Ω 1/6W \pm 5%	2
				R124	QAF0650-102	1K Ω 1/6W \pm 5%	1
				R125	QAF0650-152	1.5K Ω 1/6W \pm 5%	1
				R126	QAF0650-152	1.5K Ω 1/6W \pm 5%	1
				R127	QAF0650-330	33 Ω 1/6W \pm 5%	1
				R128	QAF0650-103	10K Ω 1/6W \pm 5%	1
				R129	QAF0650-562	5.6K Ω 1/6W \pm 5%	1
				R130	QAF0650-563	56K Ω 1/6W \pm 5%	1
				R131	QAF0650-821	820K Ω 1/6W \pm 5%	1
				R132	QAF0450-101	100 Ω 1/4W \pm 5%	1
				R133	QAF0650-103	10K Ω 1/6W \pm 5%	1
				R134	QAF0450-101	100 Ω 1/4W \pm 5%	1
				R135	QAF0650-563	56K Ω 1/6W \pm 5%	1
				R136	QAF0250-331	330 Ω 1/2W \pm 5%	1
				R137	QAF0250-479	4.7 Ω 1/2W \pm 5%	1
				R138, 139, 140	QAF0650-103	10K Ω 1/6W \pm 5%	3
				R146	QAF0450-100	10 Ω 1/4W \pm 5%	1
				R147	QAF0650-152	1.5K Ω 1/6W \pm 5%	1
				R148	QAF0650-332	3.3K Ω 1/6W \pm 5%	1
				R149	QAF0650-152	1.5K Ω 1/6W \pm 5%	1
				R150	QAF0650-562	5.6K Ω 1/6W \pm 5%	1
				R151	QAF0650-223	22K Ω 1/6W \pm 5%	1
				R152	QAF0650-682	6.8K Ω 1/6W \pm 5%	1
				R153	QAF0650-103	10K Ω 1/6W \pm 5%	1
				R154	QAF0650-392	3.9K Ω 1/6W \pm 5%	1
				R156	QAF0650-472	4.7K Ω 1/6W \pm 5%	1
				R158	QAF0650-304	300K Ω 1/6W \pm 5%	1
				R159	QAF0650-334	330K Ω 1/6W \pm 5%	1
				R160, 161	QAF0650-103	10K Ω 1/6W \pm 5%	2
				R162	QAF0650-223	22K Ω 1/6W \pm 5%	1
				Miscellaneous			
				FLUX	XFX0516-003	FLUX SM-35-10	
				SOLDER BAR	XSD0515-001	60% TIN 40% LEAD	
				SOLDER WIRE	XSD9143	0.05	
				THINNER FLUX	XTN5714-002	ALPHA 425	
				THINNER OIL	XTN5714-002	HOLLIS 225	
				RL101	MRL2212-003	RELAY OJE-SS-112DM 12V DC 37.5mA	1
				WIRE, BARE	AI20870-022	22 Ga Tinned	
				TRANSFORMER PARTS LIST			
				F101	KSA2100-001	FUSE 1A 250V	
				P103A to P103B	20565-122BB	WIRE 22 Ga 120mm RED	
				P104A to P104B	20565-120BB	WIRE 22 Ga 120mm BLACK	
				P105A to P105B	20565-122BB	WIRE 22 Ga 120mm RED	
				P106, 107	XHP0001-001	L PIN	
				CABLE/WIRE	VMC0001-006	MIC CABLE BLACK 9 FT PLUG 3.5"	
				FUSE CLIP	CFC2557-001	5D 5x20	
				CONTROL JACK PCB PARTS LIST			
				ROTARY CONTROL	MRR0103-001	10K W W/SW ON RED	1
				JK101, 102	CJM9380-028	PHONE JACK JYE TAI	2
				LD001	DSS0545-003	LED HOUSING	1
				LD001	KEM0001-001	LED	1
				R103, 104	QAF0650-103	RESISTOR 10 Ω 1/6W 5%	2
				RB102B to RB102A	5003A2501B0	CON/WIRE 10 COND 250mm	

PACKAGING EXPLODED VIEW

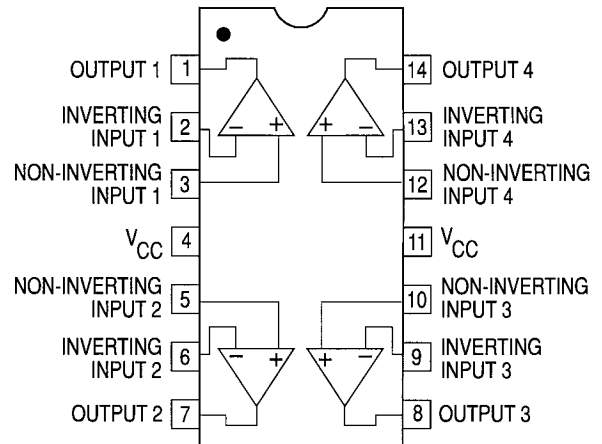


INTEGRATED CIRCUIT DIAGRAMS

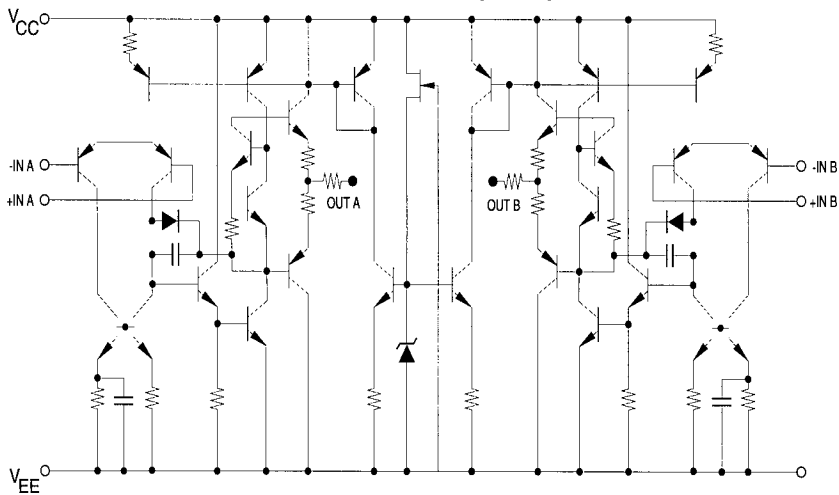
IC101 - TL0740 Op Amp



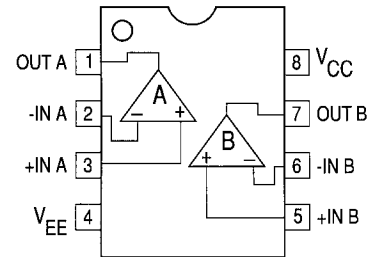
IC101 - TL0740 Op Amp



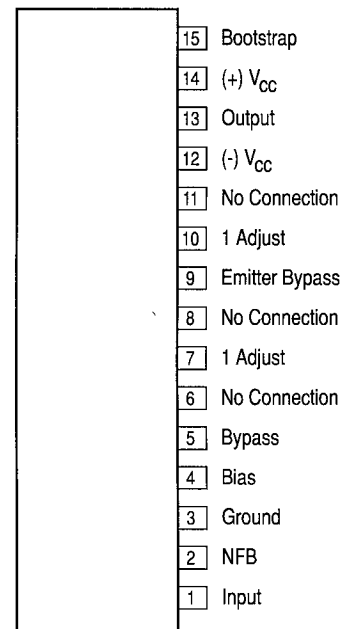
IC102 - 4558P Op Amp

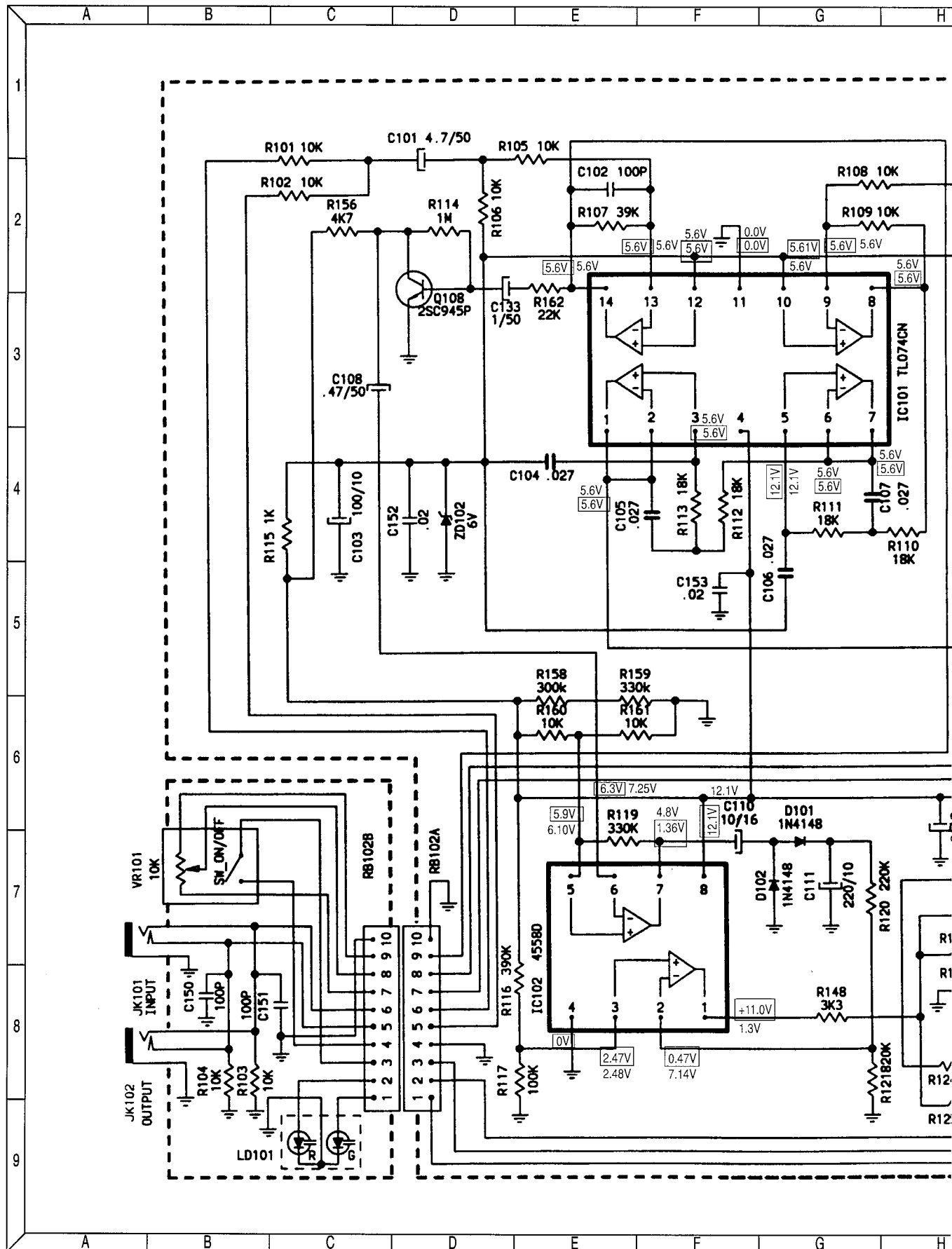


IC102 - 4558P Op Amp

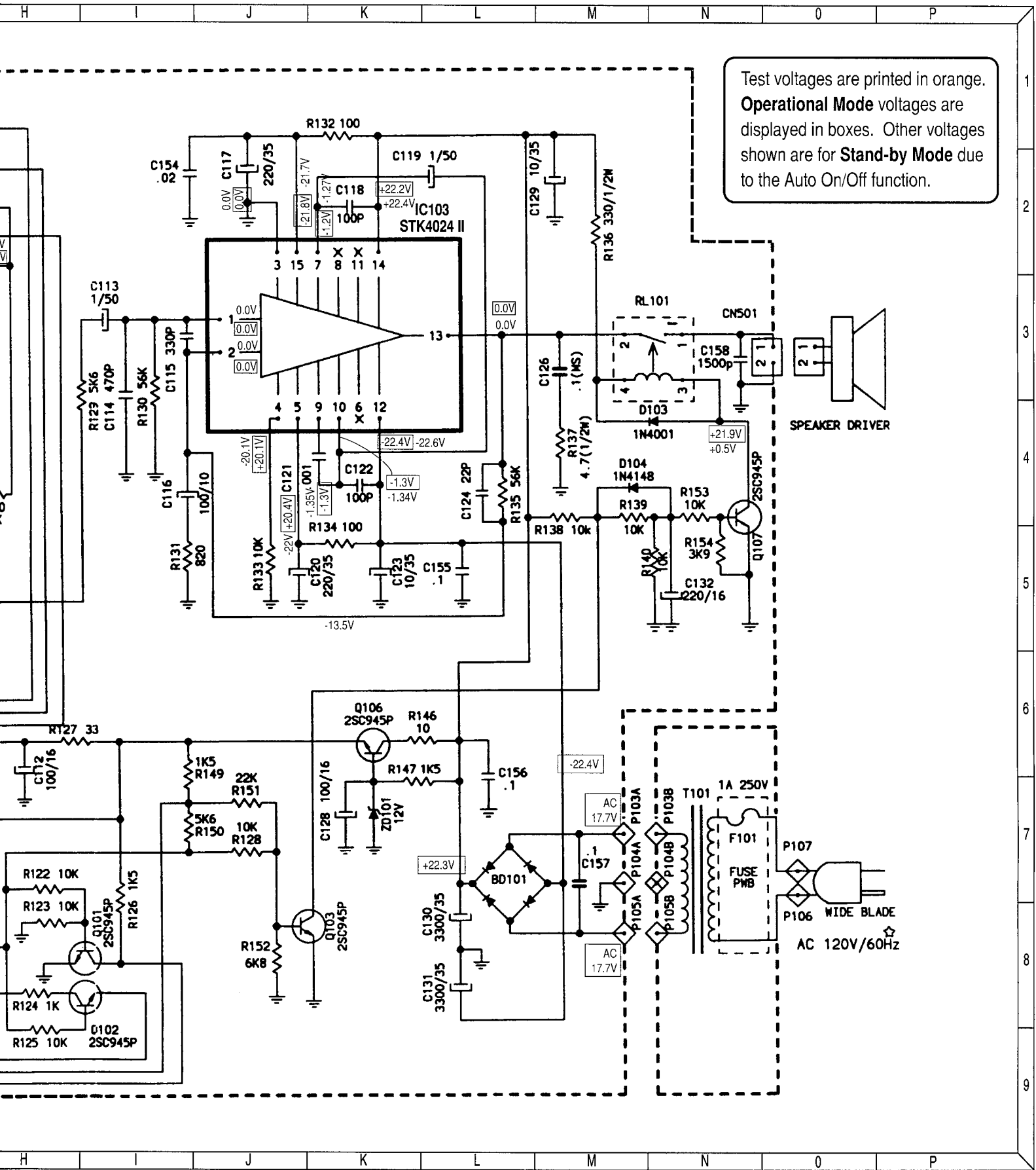


IC103 - STK4024 Power Amp





Sub Schematic Diagram



Test voltages are printed in orange.
Operational Mode voltages are displayed in boxes. Other voltages shown are for **Stand-by Mode** due to the Auto On/Off function.

1
2
3
4
5
6
7
8
9