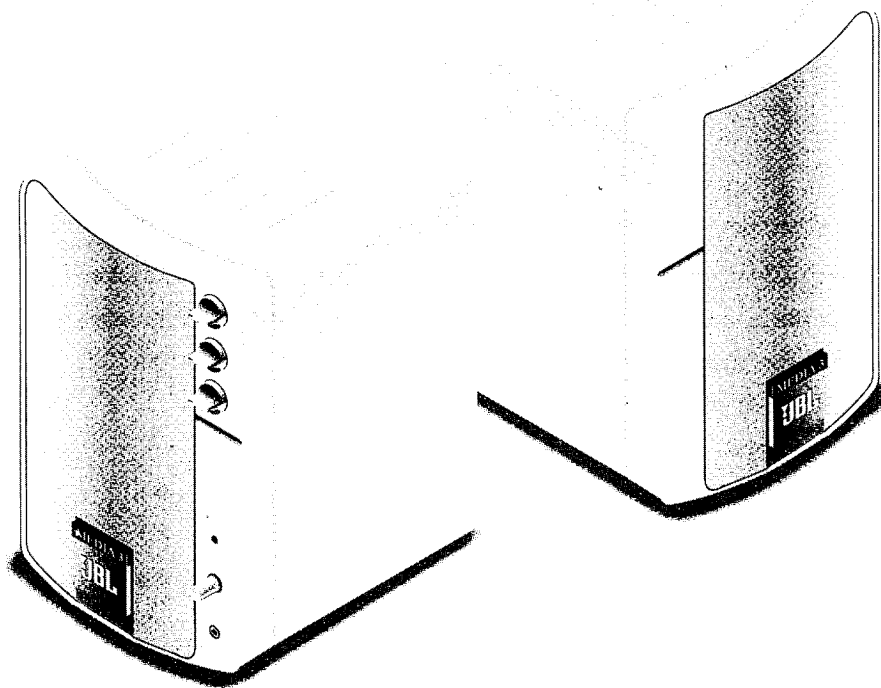


**JBL**

# Media 3

2-way 4" Powered Multimedia Speaker System

## 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.: MEDIA3SM Rev A

**TABLE OF CONTENTS**

Features.....1	Block Diagram .....6
Specifications .....1	Printed Circuit Boards .....7
Disassembly Procedures.....2	Electrical Parts Lists.....9
Media 3 Master Speaker Exploded View .....3	Packaging Exploded View & Parts List .....10
Media 3 Slave Speaker Exploded View .....4	Integrated Circuit Diagrams .....11
Trouble Shooting .....5	Schematic Diagram .....12

**FEATURES**

- Two-way speaker system.
- 14 watt stereo amplifier.
- Auto turn-on / turn off circuitry.
- Magnetically shielded speakers for flicker-free use near computer monitors.
- Dual stereo inputs.
- Separate bass and treble controls.
- Subwoofer output.
- Stereo headphone output.
- Built-in electronic equalization for proper frequency balance with satellite speakers.

**SPECIFICATIONS**

Speaker System. . . . .	Full range, two-way system
Speaker Size: . . . . .	4" woofer and 1.5" tweeter
Total Amplifier Output Power: . . . . .	14W at less than 10% THD
Frequency Response: . . . . .	90Hz - 20kHz
Input Impedance . . . . .	50k ohms
Headphone Output Jack . . . . .	Stereo miniplug (1/8")
Subwoofer Output Jack: . . . . .	Stereo miniplug (1/8")
Signal Input Jacks: . . . . .	Stereo miniplug (1/8")
External Dimensions:	
Height . . . . .	8.25"
Width . . . . .	5.5"
Depth . . . . .	4.9"
Weight . . . . .	9.75 lbs. per pair
External Dimensions (metric)	
Height . . . . .	210mm
Width . . . . .	140mm
Depth . . . . .	124mm
Weight: . . . . .	4.4 kgs per pair

## DISASSEMBLY PROCEDURES

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Please refer to the explosion drawing, the disassembly procedures are as follows:

### For Master Speaker

#### Step 1

Unscrew 6 M3.5x15 screws (36) from rear panel (35). Separate the Front and Rear Panels (8) (35).

#### Step 2

To disassemble the Heat-sink (31) from IC PCB (25) unscrew 4 M3x8 (33) screws from Rear Panel.

#### Disassembling the Heat-sink

Unscrew 2 M3x12 (26) screws from the IC PCB (25).

Unscrew 4 M3x5 ISO screws (33) of IC PCB (25).

Unscrew 4 M3x5 ISO screws (32) from Heat-sink (31). Hexagon bronze stick between Heat-sink and IC PCB (25) will be loosened at the same time.

#### Step 3 (RCA PCB(28))

Unscrew 2 M3x8 screw (30) on Rear Panel, then take out the RCA bracket. The RCA PCB (28) can be separated from the shell also.

#### Step 4 (Front Panel)

To disassemble **VR PCB** (22) remove 3 VR knobs (6). Unscrew 2 M3x6 screws (21). Remove VR PCB (22). Loosen 3 internal caps (20).

To disassemble the **LED PCB** (17) unscrew M3x8 (18).

To disassemble the **SW PCB** (16) unscrew 2 M3x8 (14) screws on Rear Panel.

To disassemble the **Earphone PCB** (9) unscrew 2 M3x8 (11) screws on the Front Panel. Remove the bracket (10) and Earphone PCB (9).

To disassemble the 1 3/4" **Speaker** (23) unscrew 2 M3.5x13 screws (24) from the internal side of the Front Panel.

To disassemble the 4" **Speaker** remove the metal grille (3) and unscrew 4 M3.5x13(4) screws. The Speaker can then be removed.

### The Slave Speaker

#### Step 1

Unscrew 6 M3.5x15 screws (36) and separate the Front and Rear Panels (38) & (39).

#### Step 2 (Rear Panel)

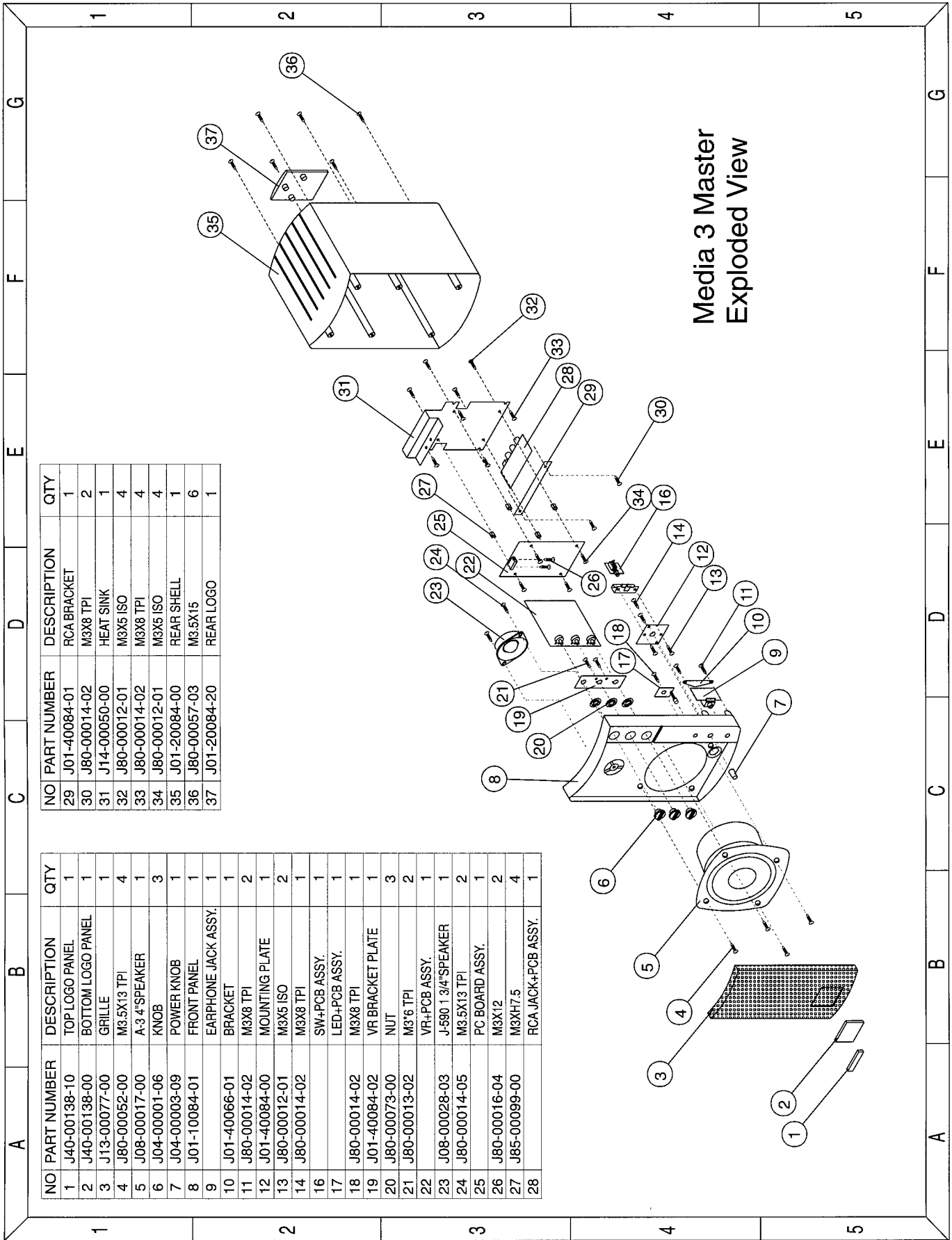
To Disassemble RCA PCB (28) unscrew 2 M3x8 screws (30) from Rear Panel. Take out RCA bracket (29), then RCA PCB (28) can be removed from sink.

#### Step 3 (Front Panel)

To disassemble 1 3/4" speak (23) Unscrew 2 M3.5x13 screws (24).

To disassemble 4" speaker (5) remove the grille (15) and remove 4 M3.5x13 screws (4). Then the speaker can be removed.

MEDIA 3 MASTER EXPLODED VIEW ( with amplifier )



NO	PART NUMBER	DESCRIPTION	QTY
29	J01-40084-01	RCA BRACKET	1
30	J80-00014-02	M3X8 TPI	2
31	J14-00050-00	HEAT SINK	1
32	J80-00012-01	M3X5 ISO	4
33	J80-00014-02	M3X8 TPI	4
34	J80-00012-01	M3X5 ISO	4
35	J01-20084-00	REAR SHELL	1
36	J80-00057-03	M3.5X15	6
37	J01-20084-20	REAR LOGO	1

NO	PART NUMBER	DESCRIPTION	QTY
1	J40-00138-10	TOP LOGO PANEL	1
2	J40-00138-00	BOTTOM LOGO PANEL	1
3	J13-00077-00	GRILLE	1
4	J80-00052-00	M3.5X13 TPI	4
5	J08-00017-00	A-3.4" SPEAKER	1
6	J04-00001-06	KNOB	3
7	J04-00003-09	POWER KNOB	1
8	J01-10084-01	FRONT PANEL	1
9	J01-10084-01	EARPHONE JACK ASSY. BRACKET	1
10	J01-40066-01	BRACKET	1
11	J80-00014-02	M3X8 TPI	2
12	J01-40084-00	MOUNTING PLATE	1
13	J80-00012-01	M3X5 ISO	2
14	J80-00014-02	M3X8 TPI	1
16		SW+PCB ASSY.	1
17		LED+PCB ASSY.	1
18	J80-00014-02	M3X8 TPI	1
19	J01-40084-02	VR BRACKET PLATE	1
20	J80-00073-00	NUT	3
21	J80-00013-02	M3*6 TPI	2
22		VR+PCB ASSY.	1
23	J08-00028-03	J-590 1 3/4" SPEAKER	1
24	J80-00014-05	M3.5X13 TPI	2
25		PC BOARD ASSY.	1
26	J80-00016-04	M3X12	2
27	J85-00099-00	M3XH7.5	4
28		RCA JACK+PCB ASSY.	1



## **TROUBLE SHOOTING PROCEDURES**

---

### **1. If the power LED Fails**

- A. Check if the accessory adaptor is properly fitted.
- B. Check if the adaptor is plugged into the DC jack.

### **2. No sound from the Master Speaker**

- A. Check if the adaptor is plugged into the input jack and audio signal is lighted.
- B. Check if the power switch is on.
- C. Check to see if the volume knob is turned up half-way.

### **3. No sound from the Slave Speaker**

- A. Check to see if it is well connected to the Master Speaker.

### **4. The power signal is RED (normally it should be GREEN)**

- A. Check if the adaptor is plugged into the jack.

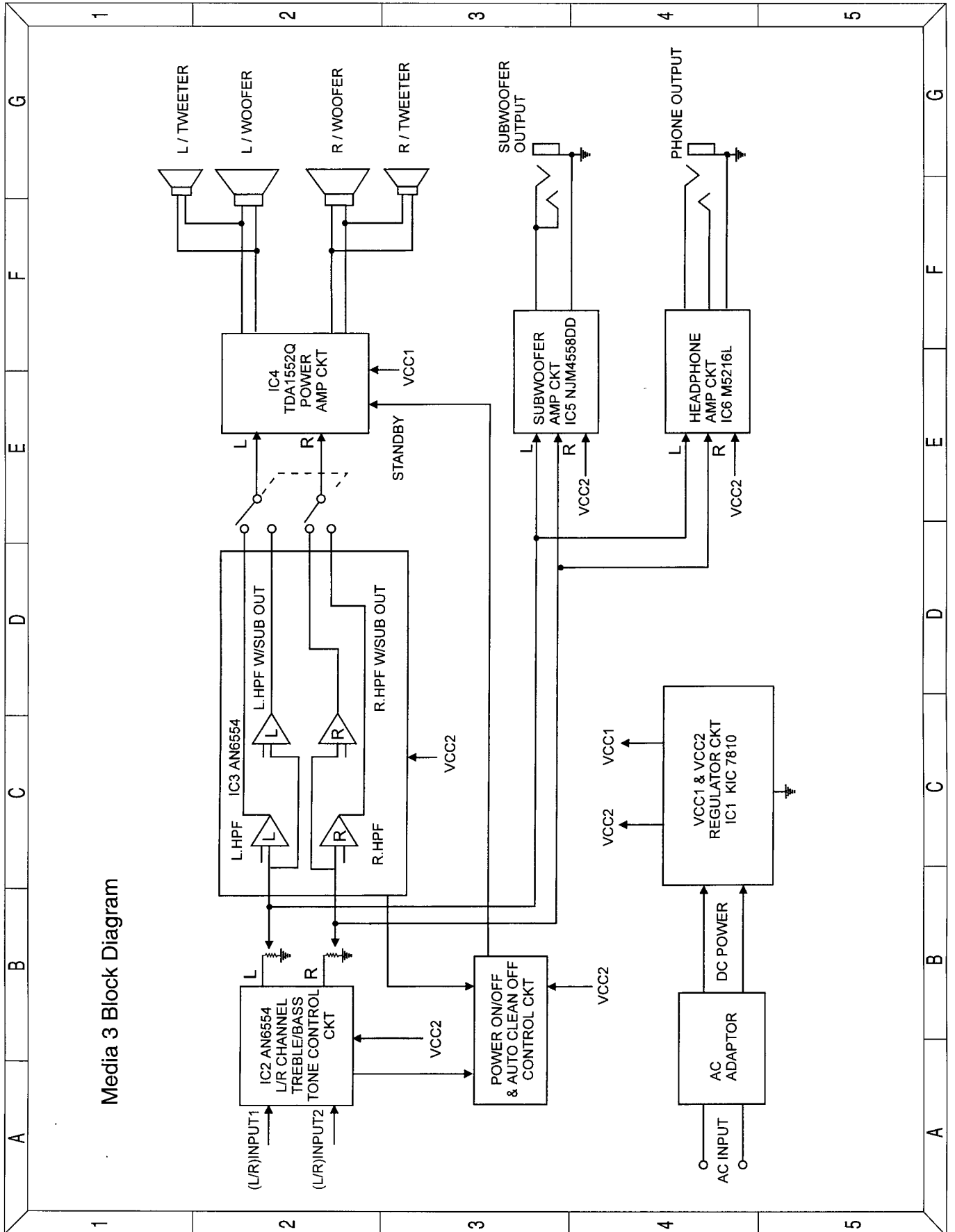
### **5. No volume**

- A. Check to see if both the treble and bass knobs are turned up half-way.

### **6. Distortion**

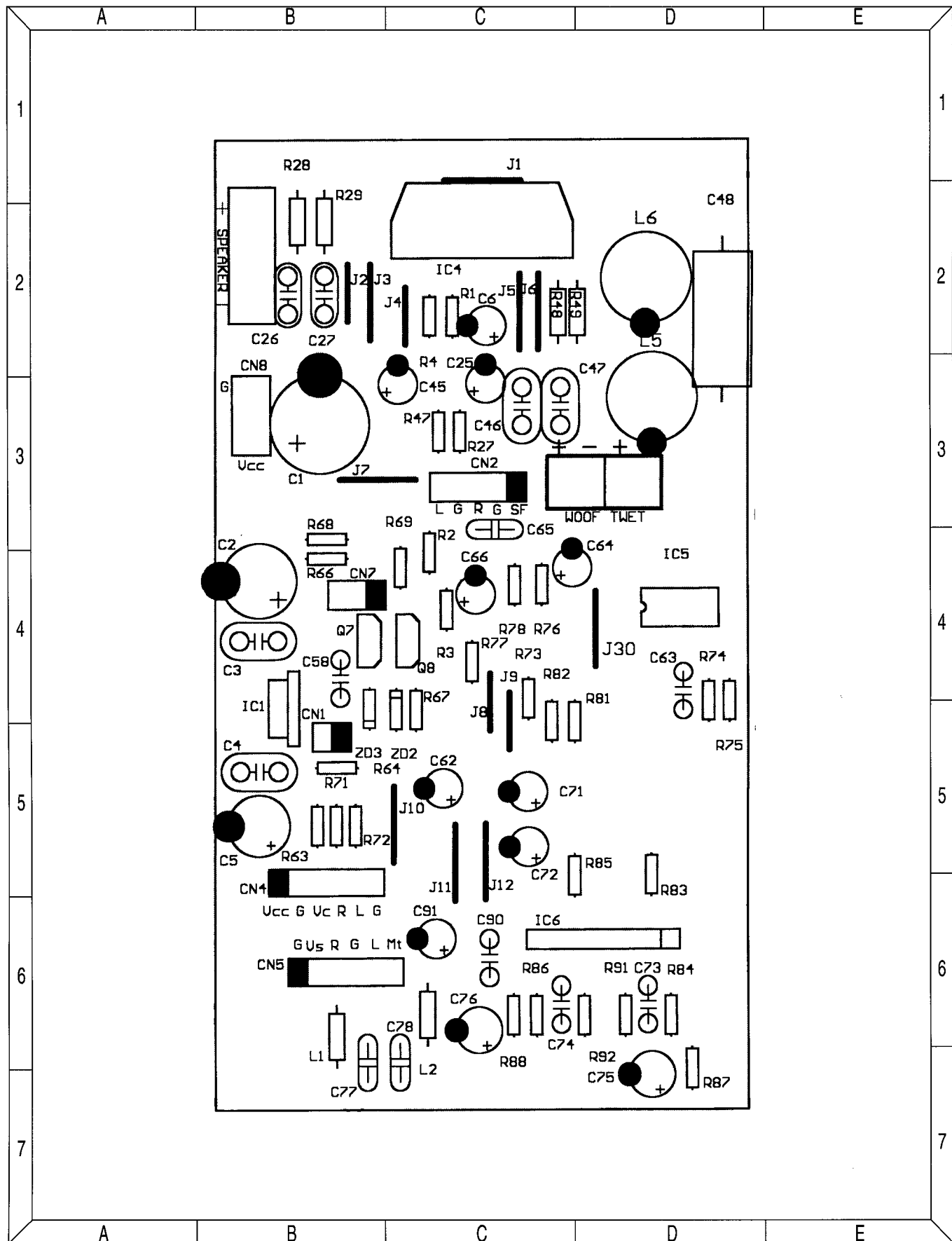
- A. Check if input jack 1 and input jack 2 are both connected.

BLOCK DIAGRAM



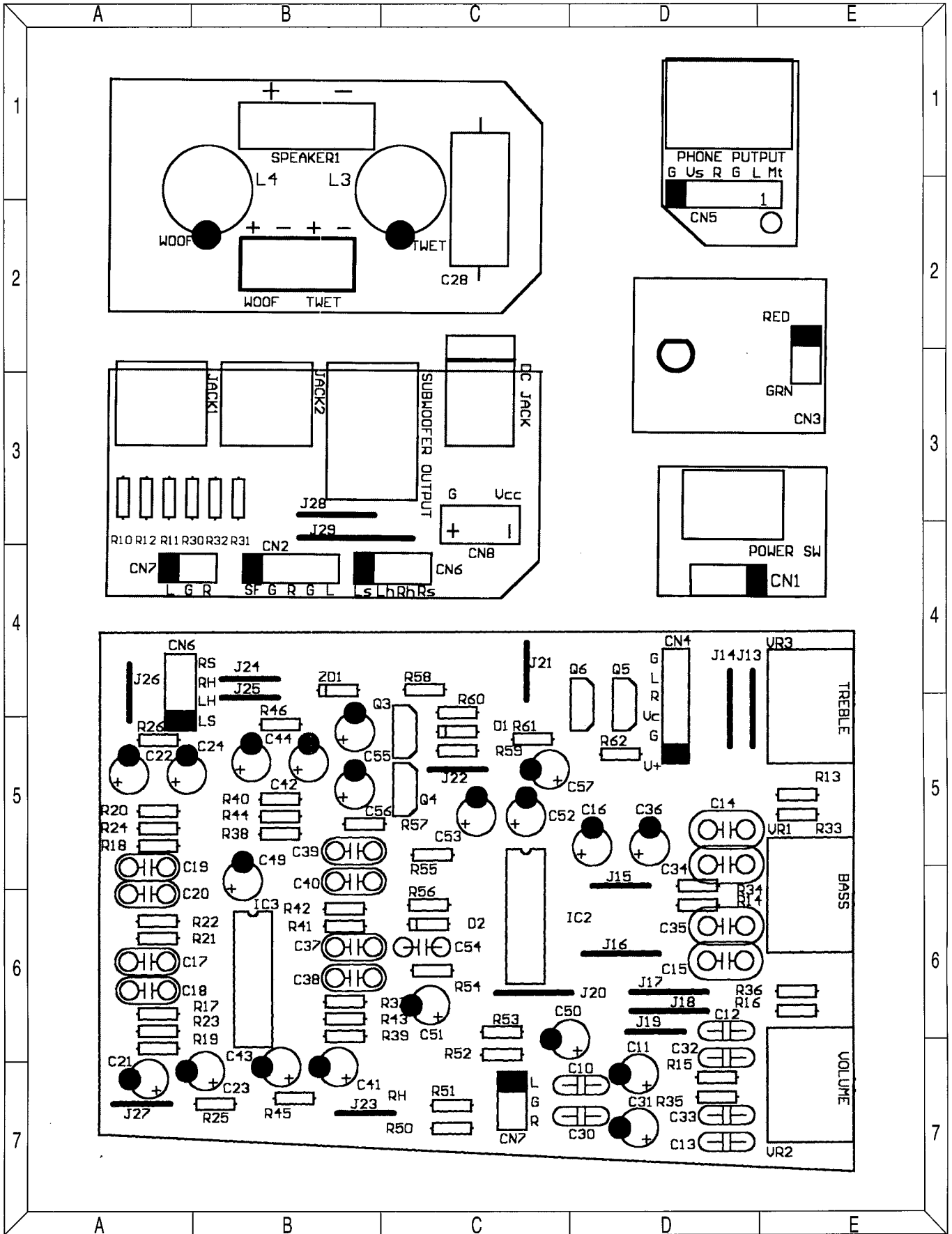
Media 3 Block Diagram

PRINTED CIRCUIT BOARDS (viewing trace layer through the board)





**PRINTED CIRCUIT BOARDS** (viewing traces through the board)

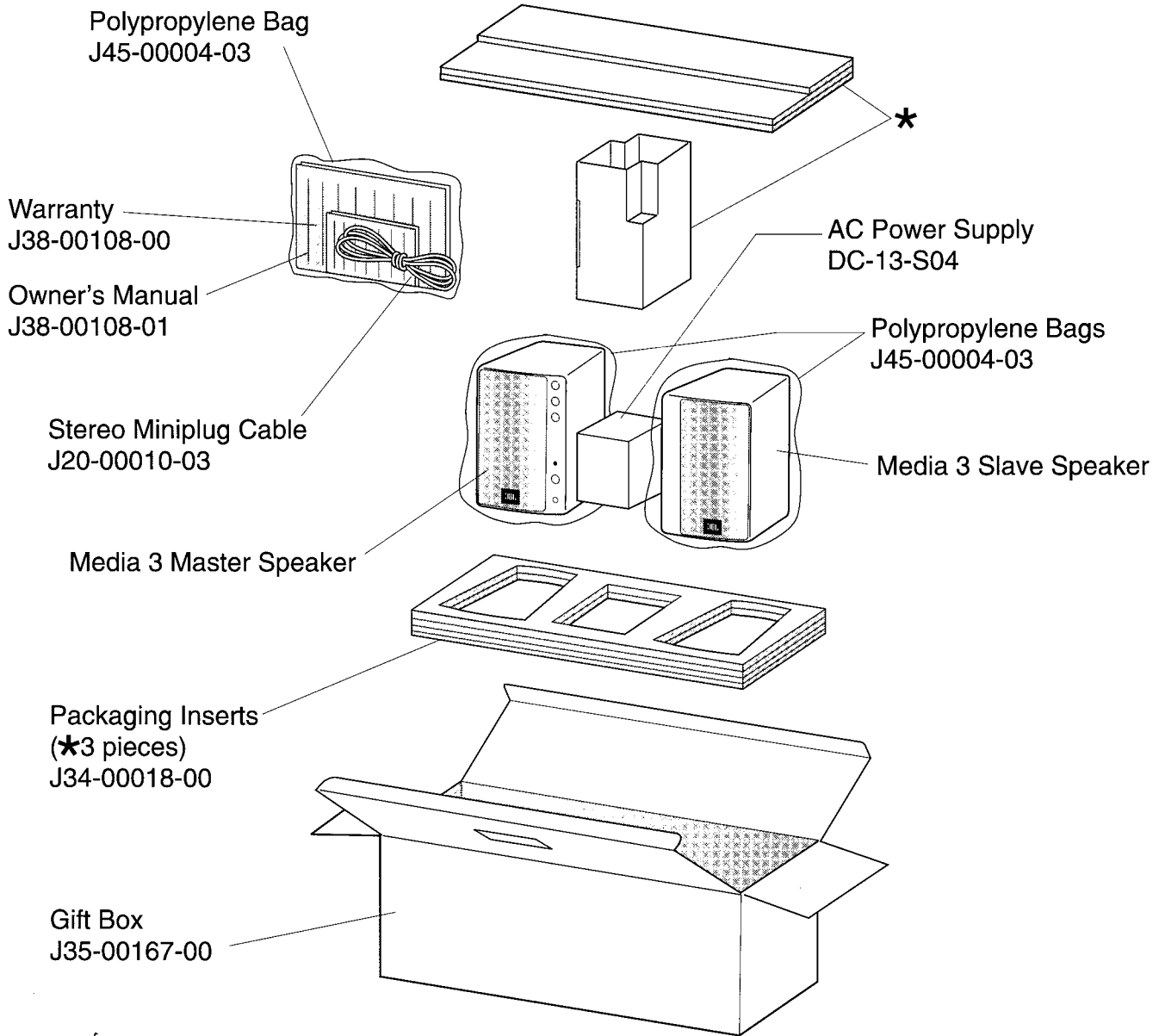


**ELECTRICAL PARTS LIST**

REF. NO.	PART NO.	DESCRIPTION	QTY	REF. NO.	PART NO.	DESCRIPTION	QTY
<b>Resistors</b>				C17, 18, 37, 38	J58-10683-50	M/C 683	4
R1, 52, 77	J54-47305-85	47K / 1/8W	3	C19, 20, 39, 40	J58-10823-50	M/C 823	4
R2, 22, 42	J54-18305-85	18K / 1/8W	3	C21, 22, 41, 42, 49, 50, 52, 55, 64, 66	J57-10100-25	E/C 10uF/25V	10
R3, 18, 38, 64	J54-91205-85	9.1K / 1/8W	4	C28, 48	J57-10339-02	E/C 3.3uF/100V NP	2
R4, 57	J54-68305-85	68K / 1/8W	2	C54, 63, 73, 74	J59-10101-25	C/C 101 25V	4
R10, 11, 30, 31	J54-15205-85	1.5K / 1/8W	4	C56	J57-10101-25	E/C 100uF/25V	1
R12, 13, 16, 17, 32, 33, 36, 37, 59, 76, 93	J54-10305-85	10K / 1/8W	11	C57	J57-10221-26	E/C 220uF/25V +/-5%	1
R14, 34	J54-39205-85	3.9K / 1/8W	1	C58, 90	J59-10104-50	C/C 104 50V0	2
R15, 27, 35, 47, 67, 84, 86	J54-47205-85	4.7K / 1/8W	7	C77, 78	J58-10223-50	M/C 223	2
R19, 20, 39, 40, 68, 83, 85	J54-82105-85	820Ω / 1/8W	7	C91	J57-10470-25	E/C 47uF/25V	1
R21, 41	J54-82305-85	82K / 1/8W	2	<b>Inductors</b>			
R25, 26, 45, 46	J54-10405-85	100K / 1/8W	4	L3, 5	J60-10101-00	0.1mm (FERRITE CORE) Crystal	2
R23, 24, 43, 44, 66	J54-10205-85	1K / 1/8W	5	L4, 6	J60-10201-00	0.2mm (FERRITE CORE) Crystal	2
R28, 29, 48, 49	J54-33905-45	3.3Ω / 1/4W	4	<b>Integrated Circuits</b>			
R50, 51, 53, 54, 71, 72, 73, 75, 78, 81, 82	J54-56305-85	56K / 1/8W	11	IC1	J51-00019-01	7810 1A REGULATOR	1
R55	J54-33205-85	3.3K / 1/8W	1	IC2, IC3	J51-00063-00	AN6554 OP AMP	2
R56	J54-22405-85	220K / 1/8W	1	IC4	J51-00061-00	IC TDA1552Q POWER AMP	1
R58, 63	J54-22205-85	2.2K / 1/8W	2	IC5	J51-00002-03	NJM4558DD OP AMP	1
R60, 69, 91, 92	J54-47105-85	470Ω / 1/8W	4	IC6	J51-00065-00	M5216L OP AMP	1
R61	J54-56405-85	560K / 1/8W	1	<b>Jumper Wires</b>			
R62	J54-10505-85	1M / 1/8W	1	J1, 3, 5, 6, 7, 10, 11, 12, 13, 14, 16, 17, 18, 20, 28	J23-00008-01	10 m/m	15
R74	J54-12405-85	120K / 1/8W	1	J2, 4, 8, 9, 15, 19, 21, 22, 23, 24, 25, 26, 27	J23-00006-01	7.5 m/m	13
R87, 88	J54-10005-85	10Ω / 1/8W	2	J29	J23-00011-01	15 m/m	1
VR1-1, 1-2, 2-1, 2-2	J56-00037-00	31610G B10K*2 L=15 W/GC	4	<b>Connectors</b>			
VR3-1(R), 3-2(L)	J56-00041-00	VR A10K*2 L=15	2	CN1	J24-00070-00	1007#26 2PIN 250 m/m	1
<b>Transistors</b>				CN2	J24-00066-01	1007#26 5PIN 180 m/m	1
Q3, 4, 7, 8	J52-00027-01	2SC1815	4	CN3	J24-00069-00	1007#26 3PIN 250 m/m	1
Q5, 6	J52-00026-01	2SC1015	2	CN4	J24-00067-00	1007#26 6PIN 250 m/m	1
<b>Diodes</b>				CN5	J24-00067-01	1007#26 6PIN 200 m/m	1
D1, 2	J53-00001-02	IN4148	2	CN6	J24-00071-00	1007#26 4PIN 250 m/m	1
ZD1, ZD2	J53-00013-02	ZENER 5.6V / 1/2W	2	CN7	J24-00068-00	2651#28 3PIN 250 m/m	1
ZD3	J53-00015-00	ZENER 5.1V / 1/2W	1	CN8	J24-00064-00	1015#20 2PIN 180 m/m +SIN 21T 1.	1
L1, 2	J53-10001-00	LEAD WIRE BEAD 3.5*0.8*6	2	L (WOOF. TWET) R(WOOF. TWET)	J24-00065-00	1015#20 4PIN 250 m/m	2
<b>Capacitors</b>				<b>LED</b>			
C1	J57-00222-25	E/C 2200U/25V	1	J49-00027-00	L-3WAEGW LED		1
C2	J57-00102-25	E/C 1000U/25V	1	J49-00028-01	3PIN 7.0 m/m LED HOLDER		1
C3, 4, 14, 15, 26, 27, 34, 35, 46, 47	J58-10104-50	M/C 104	10	<b>Miscellaneous</b>			
C5, 75, 76	J57-10471-25	E/C 470uF/25V	3	S1	J61-00001-07	Power Switch PUSH 6PS+ 1F6PLB-M	1
C6, 23, 24, 25, 43, 44, 45, 51, 53	J57-10109-50	E/C 1uF/50V	9	JACK 1, 2	J62-00038-00	3.5 D=7 L=3 H=6.5(BLACK)	2
C10, 30, 65	J58-10102-50	M/C 102	3	JACK 3	J62-00039-00	3.5 D=7 L=3 H=6.5	1
C11, 16, 31, 36, 62, 71, 72	J57-10479-50	E/C 4.7uF/50V	7	JACK 4	J62-00040-00	3.5 D=7 L=3 H=6.5 (BEIGE)	1
C12, 13, 32, 33	J58-10103-50	M/C 103	4	JACK 5	J62-00024-01	PIN2.0 D=6.3 L=3.5 H=11 DC	1
				SPEAKER+.-	J85-00108-00	PIN TERMINAL, PIN 2	4

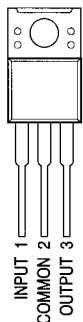
**PACKAGING EXPLODED VIEW**

Item Description	Part Number	Quantity
JBL Media 3 serial No. sticker	J37-00194-00	1
Made in Taiwan sticker	J37-0004-04	1
Serial No. sticker for Master Speaker	J37-00194-02	1
Serial No. sticker for Slave Speaker	J37-00194-03	1
Serial No. sticker for gift box	J37-00194-04	1

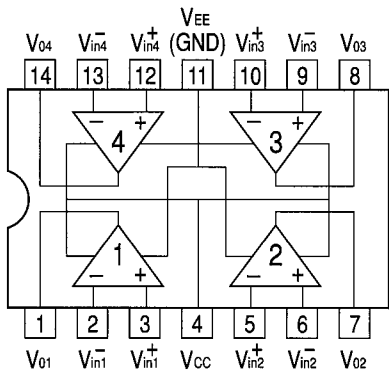


INTEGRATED CIRCUIT DIAGRAMS

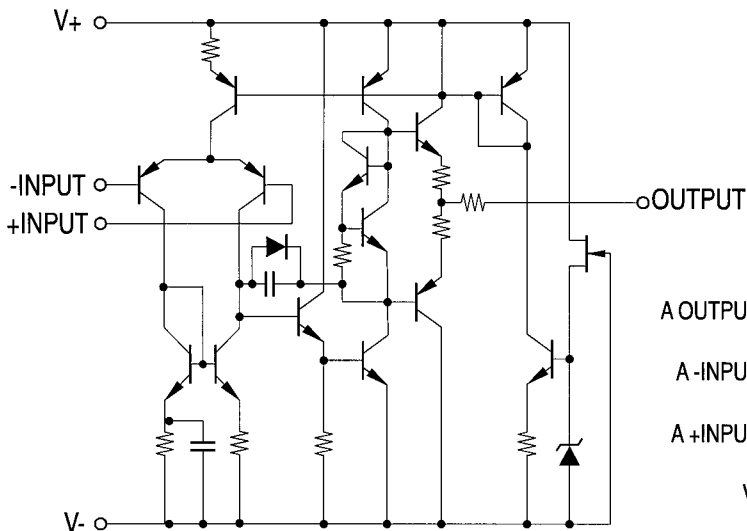
IC1 - 7810 1A REGULATOR



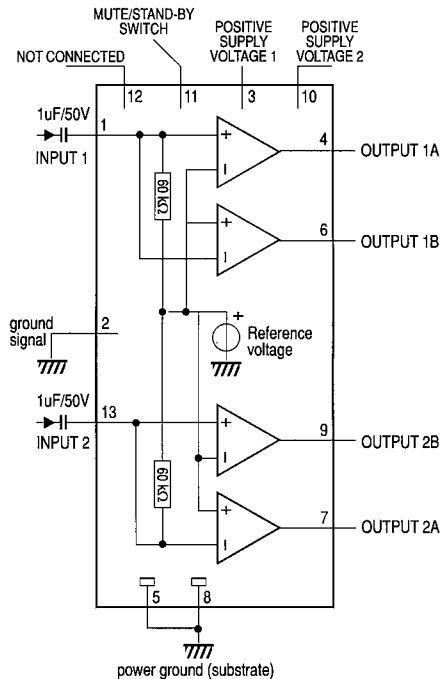
IC2 & IC3 - AN6554 OP AMP



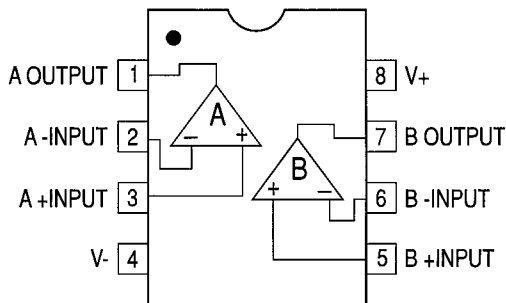
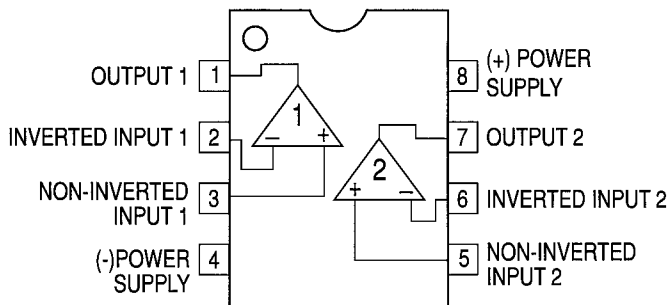
IC5 - NJM4558DD OP AMP (1/2 SHOWN)

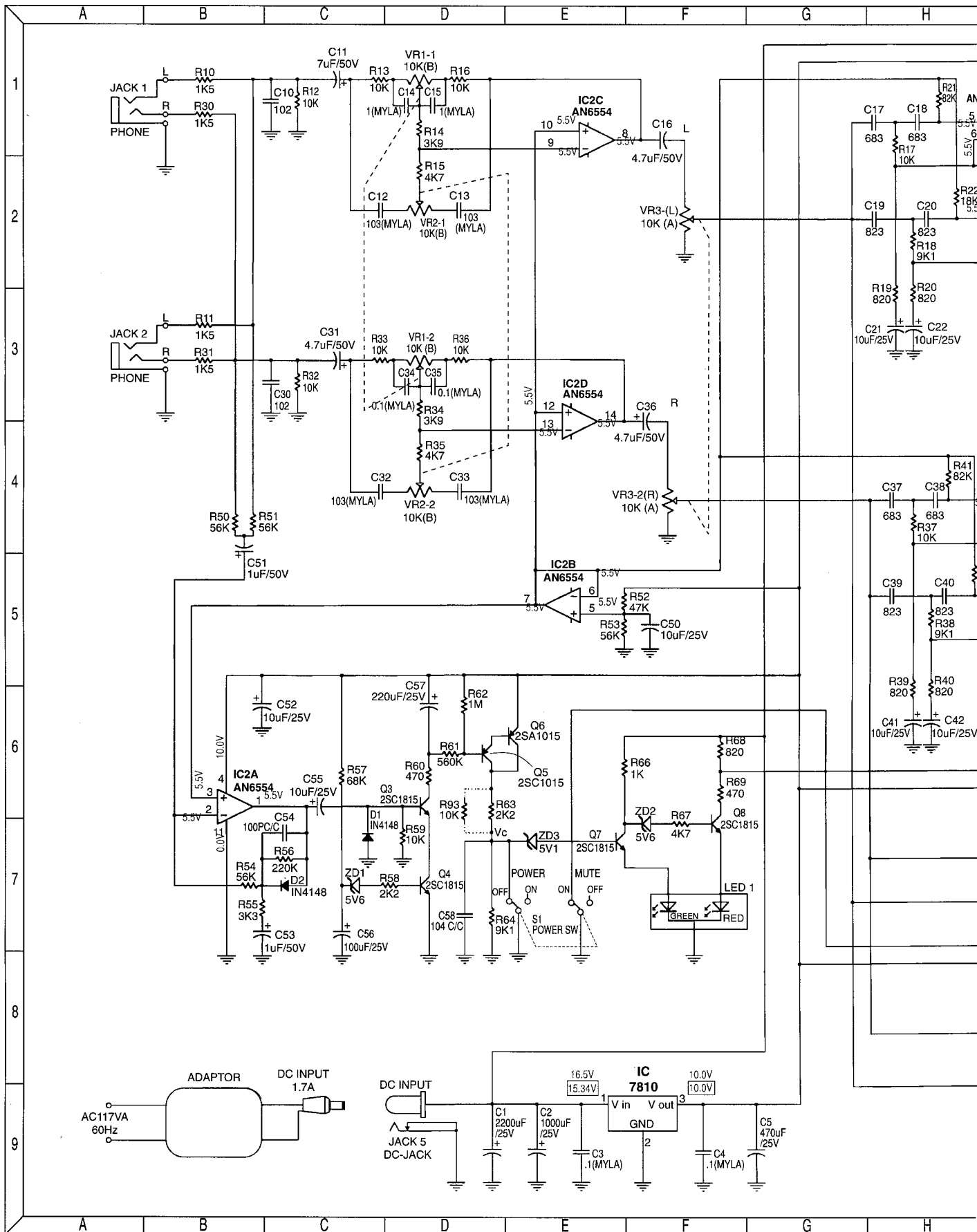


IC4 - TDA1552Q POWER AMP



IC6 - M5216L OP AMP





# Media 3 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.

