

# ***SERVICE GUIDE***

**KYE SYSTEMS CORP.**



**SW-5.1 Value**

Version: 1.0

Total 15 Pages (Cover page included)

Revision History

Version	Date	Changes
1.0	Official Release	

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## Getting Started

### Conventions Used in this Guide



#### Attention

Pay Special Attention: Instructions that are important to remember and may prevent mistakes.



Caution: Information that, if not followed, may result in damage to the product.

### Safety Precautions

The following precautions should be observed in handling the speaker described in this guide:

Place the speakers on a flat, level and stable surface.

Do not place the speakers in environments subject to mist, smoke, vibration, excessive dust, salty or greasy air, or other corrosive gases and fumes.

Do not drop or jolt the speakers.

Do not allow anything to drop into the subwoofer case through its ventilator, as it could result in fatal electric shock or fire.

Place the unit far enough from other equipments for good heat dissipation.

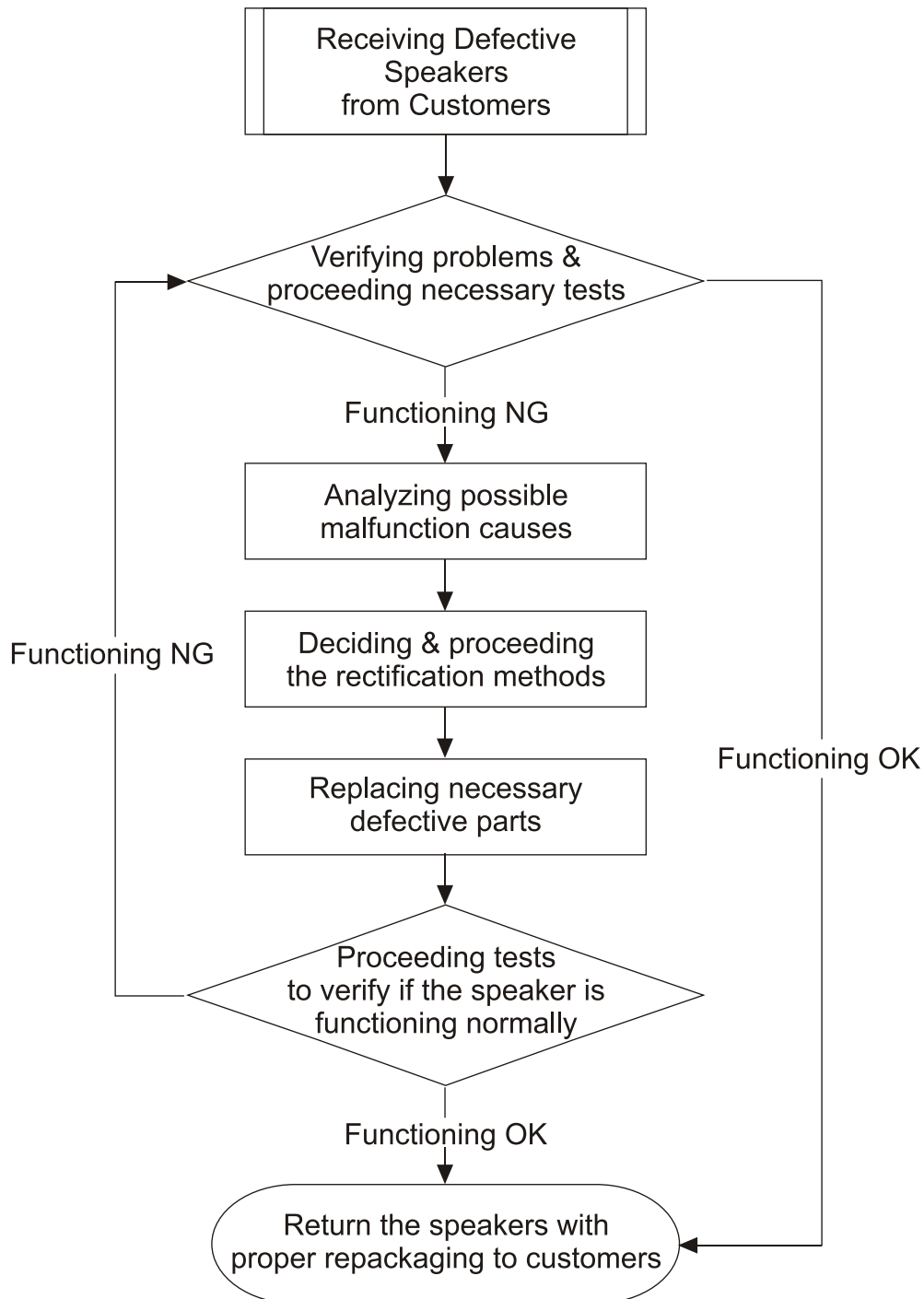
Disconnect the AC power cord from the AC outlet before performing any maintenance on the speakers.

Do not perform any maintenance with wet hand.

Prevent foreign substances, such as water, other liquids or chemicals, from entering the speakers while performing maintenance procedures on the speakers.

## Chapter 1. How to Handle Defective Returns

### 1.1 Overview



## 1.2 Problems

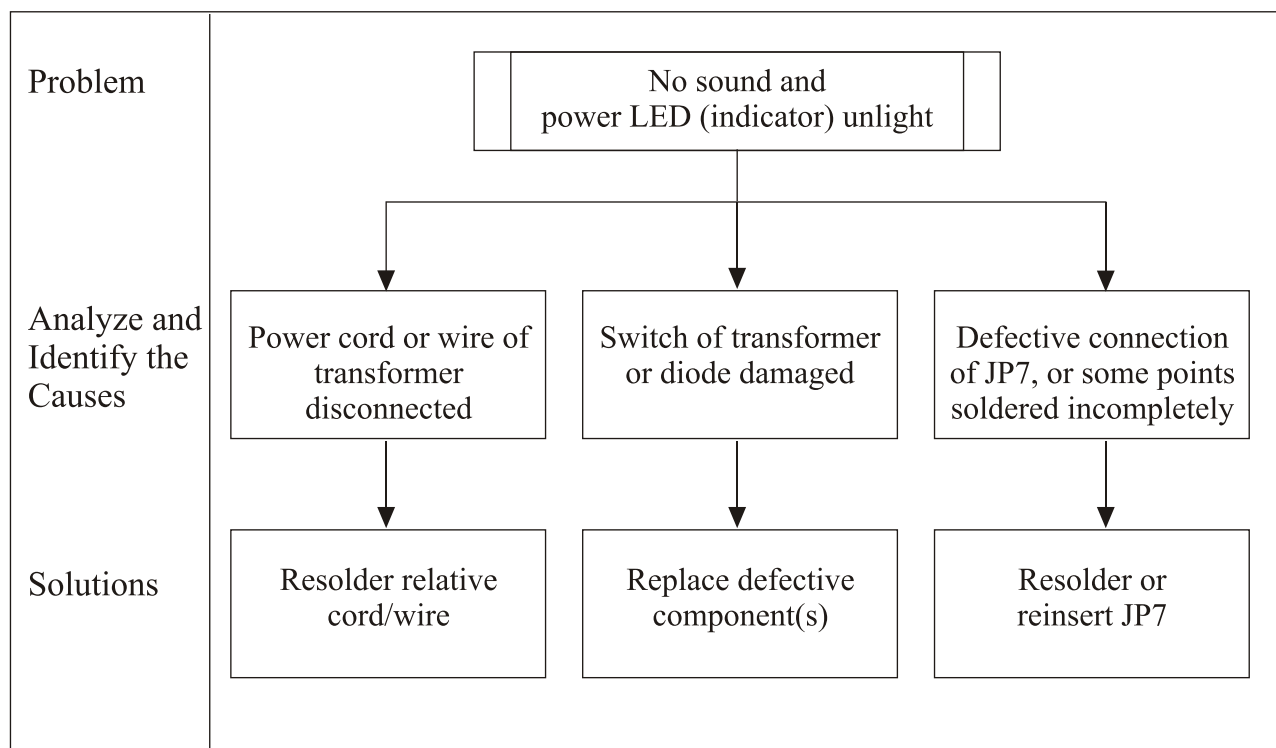
Item	Problem Descriptions
1.2.1	<u>No sound and power LED (indicator) unlight</u>
1.2.2	<u>Power LED (indicator) unlight</u>
1.2.3	<u>One or more channels no sound</u>
1.2.4	<u>Noise</u>



## Attention

Please follow the numbered sequence marked with parenthesis given in individual flow chart, in that this is the best-recommended sequence to rectify the problems.

### 1.2.1 No sound and power LED (indicator) unlight



## 1.2.2 Power LED (indicator) unlight

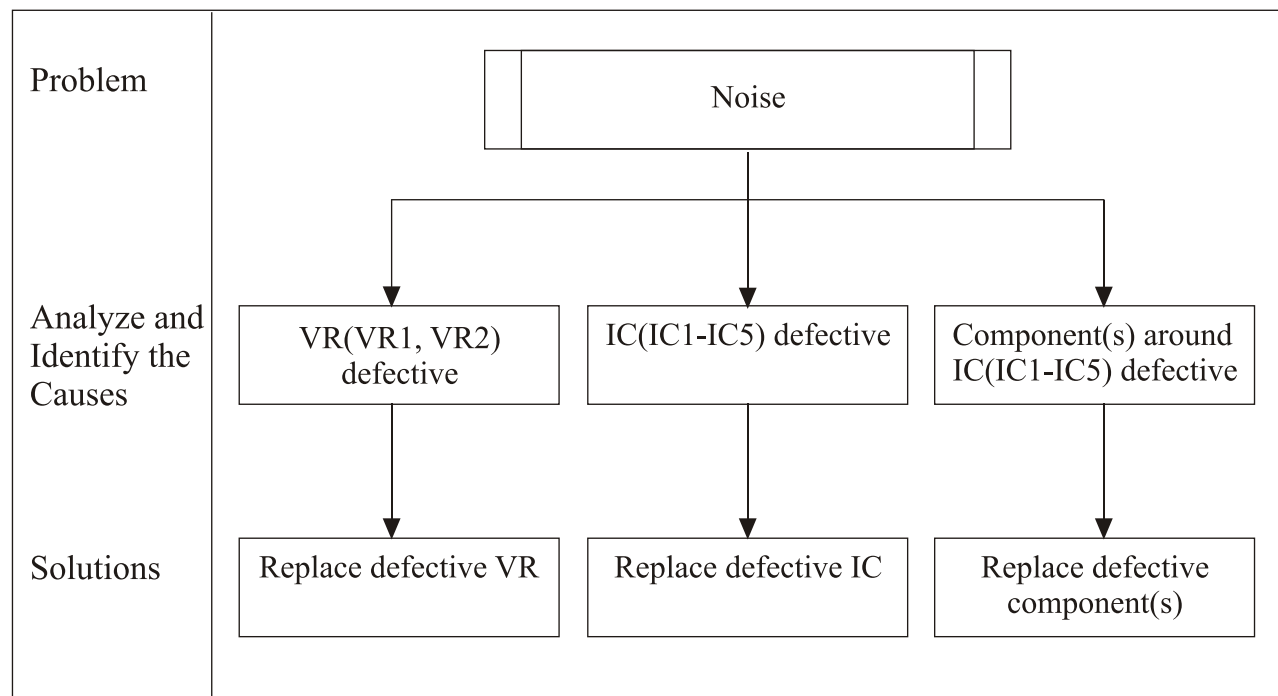
Problem	<div>Power LED (indicator) unlight</div>
Analyze and Identify the Causes	<div>Power LED disconnected or defective</div>
Solutions	<div>Resolder or replace defective power LED</div>

## 1.2.3 One or more channels no sound

Problem	<div>One or more channels no sound</div>
Analyze and Identify the Causes	<div> <div>No input audio signal</div> <div>Circuit of relative channel(s) is broken or short</div> <div>P1-P4, P7, P8 inserted incompletely or damaged</div> <div>IC (IC1-IC5) or component(s) around defective</div> <div>Output cable disconnected or speaker(s) damaged</div> </div>
Solutions	<div> <div>Check if input audio normal or not</div> <div>Check solder points in PCB and resolder defective points</div> <div>Reinsert or replace defective wafer</div> <div>Replace defective IC or component(s)</div> <div>Resolder or reinsert output cable or replace defective speaker(s)</div> </div>



## 1.2.4 Noise



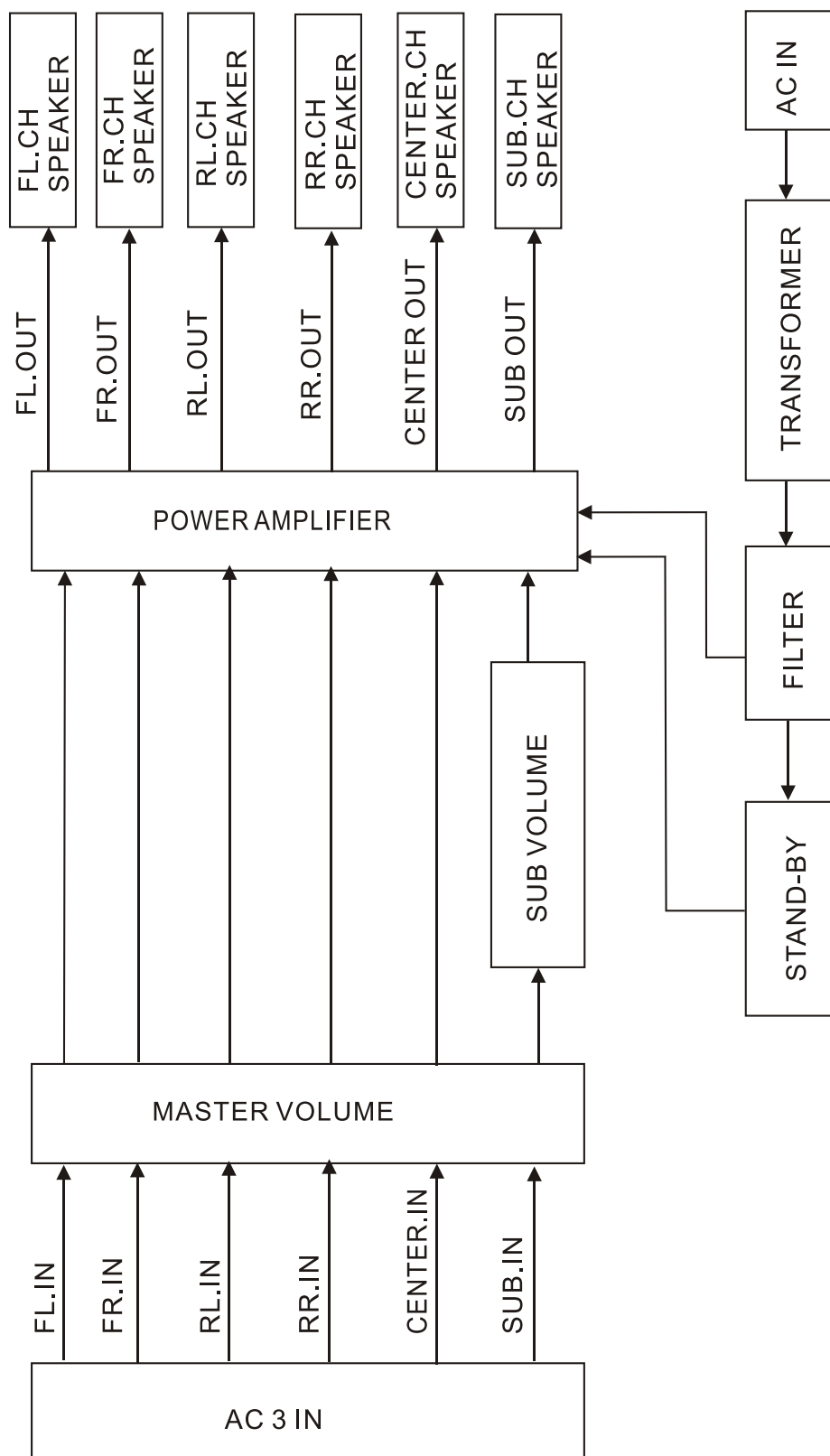
## Chapter 2. Specifications

NO.	DESCRIPTION	UNIT	NOMINAL	LIMIT
1	INPUT SENSITIVITY AT 10%			
	SUBWOOFER	mV		100+/-50
	CENTER	mV		200+/-50
	FRONT	mV		180+/-50
	REAR	mV		180+/-50
2	DISTORTION AT 1 KHz	%		3
	AT 100 Hz	%		3
3	OUTPUT POWER AT 10% DISTORTION			
	SUBWOOFER	W		10
	CENTER	W		2
	FRONT	W		2
	REAR	W		2
4	S/N RATIO			
	SUBWOOFER	dB		50
	CENTER	dB		50
	FRONT	dB		50
	REAR	dB		50
5	CHANNEL SEPARATION	dB		40
6	FREQUENCY RESPONSE			
	(DOWN 3dB)			
	SUBWOOFER	Hz		35~130
	CENTER	Hz		130~20K
	FRONT	Hz		130~20K
	REAR	Hz		130~20K
7	HUM LEVEL (AT VOL. MIN.)			
	SUBWOOFER	mV		3
	CENTER	mV		2
	FRONT	mV		2
	REAR	mV		2
	HUM LEVEL (AT VOL. MAX.)			
	SUBWOOFER	mV		6
	CENTER	mV		3
	FRONT	mV		3
	REAR	mV		3
8	OPERATING VOLTAGE			
	MAX.255 VAC			
	MIN.205 VAC			

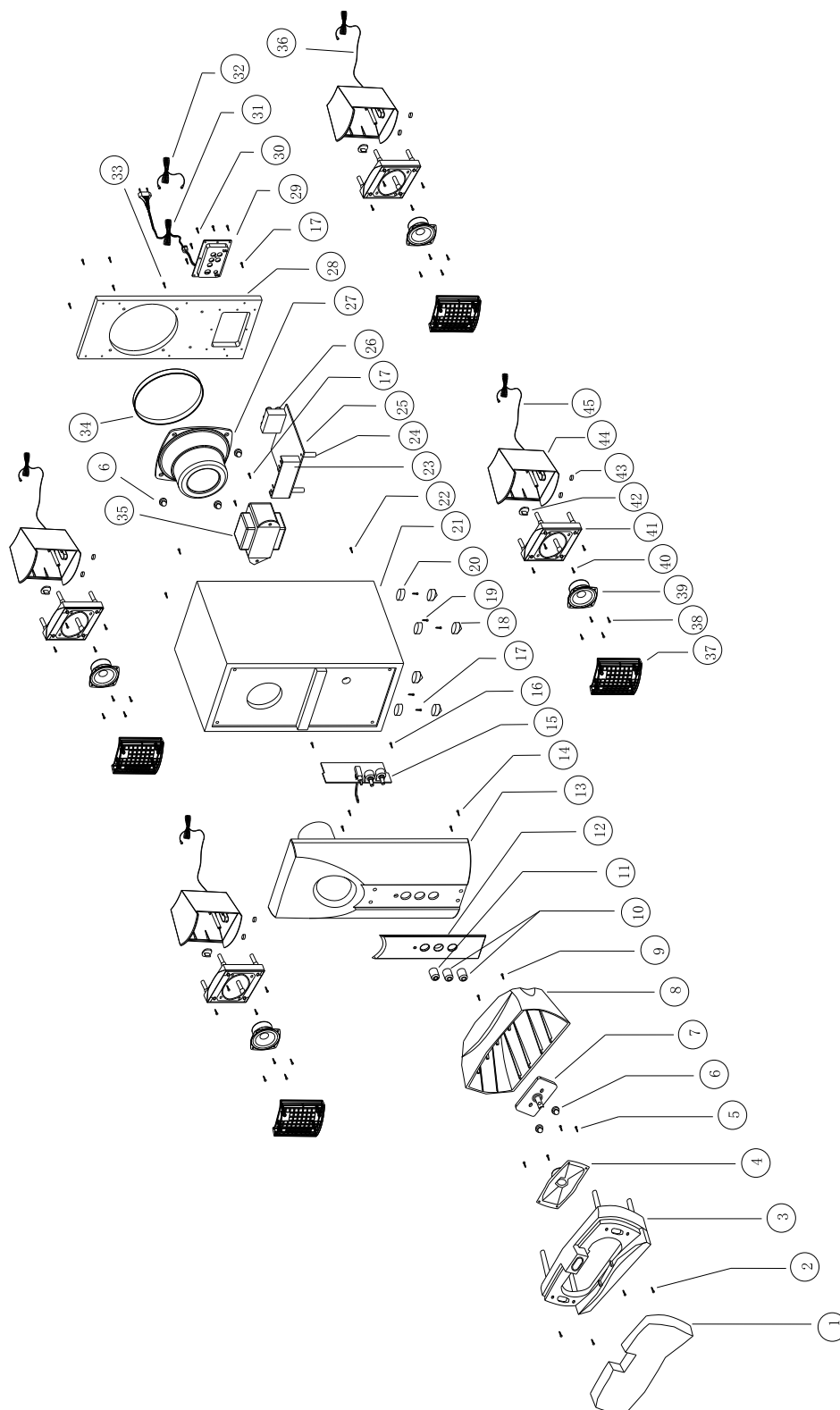
TEST CONDITION:

- 1) LOAD: SUBWOOFER / FRONT / REAR / CENTER 4  $\Omega$
- 2) RATED POWER: 50 mW (SATELLITE)  
5.0 W (SUBWOOFER)
- VOLUME AT MAX.
- 3) AC 230 V / 50 Hz

## Chapter 3. Block Diagram



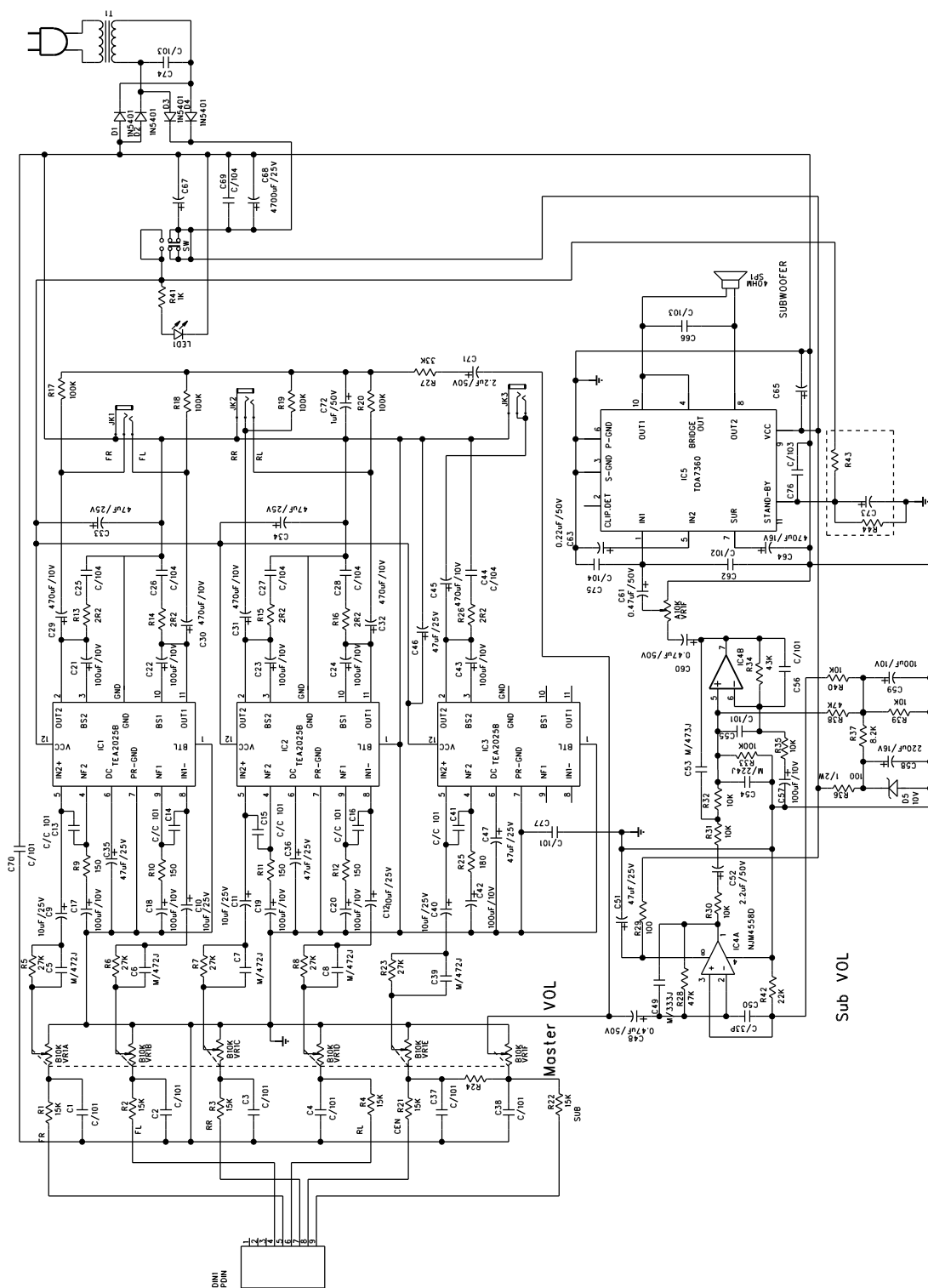
## Chapter 4. Exploded View



## Chapter 5. Part List

Ref. No.	Description	RS Part No.	Mfr's Part No.
1	Fabric Front, for Center, Silver JY-230A-1		T13967
2	Screw, PTB3.0x16mm, White		T71011
3	Front Panel, for Center, Brown 8603C		T13965
4	Speaker, 2"x5", 3W, Magnetically Shielded		T20245
5	Screw, TA3.5x10mm, Black		71025
6	Nut Washer, 3Φ		71050
7	RCA Jack, RJ-3622, Orange 157C		T56369
8	Rear Panel, for Center, Brown 8603C		T13966
9	Screw, PM3.0x12mm, White		71036
10	Knob, Brown 8603C		T80469
11	Button, Brown 8603C		T13670
12	Decorative Panel, Silver 37P2783		T13974
13	Front Panel, for Subwoofer, Brown 8603C		T15137
14	Screw, BB3.5x6mm, Black		T71159
15	Control PCB Assembly, 6D-168A/2		T50950
16	Screw, PWA3.0x8mm, White		T71027
17	Screw, BA3.5x16mm, Black		71045
18	Rubber cushion, 18.5Φx10, Black		T86197
19	Screw, TM3.0x14mm, Black		71069
20	Cushion, 3D101, Black		T86177
21	Wooden Case, 134x269x172.5, Silver M-815-28		TC0315
22	Screw, BA3.5x25mm, Black		T71158
23	Heat Sink, HS-10C		T72070
24	Copper pole, Hex5.5x27mm		T71163
25	Amplifier PCB Assembly, 6D-168A/1		T50949
26	RCA Jack, 4-Pin, SCJ-1060-4V33		T56359
27	Speaker, 4", 4Ω, 15W, P4DUC-28, Magnetically Shielded		T20056
28	Wooden Rear Panel, Black, T=9.0mm		TC0071
29	Rear Cover, Black		T13642
30	Screw, PA3.0x12mm, Black		71021
31	AC Cord, 6', Black, VDE, H03VVH2-F		40004
32	Speaker Cable, for Center, 8', Black		T42099
33	Screw, TM3.0x14mm, Black		71069
34	Iron Mesh, Black		T70102
35	Transformer, 230V, 10V/2A, JUSP-10814U-1		T31434
36	Speaker Cable, for Rear, 5m, Black		T42107
37	Fabric Front, for Satellite, Silver JY-230A-1		T13970
38	Screw, TA3.0x10mm, Black		71026
39	Speaker, 3", 4Ω, 5W, P3DUC-19B		T20248
40	Screw, PTB3.0x25mm, Black		T71158
41	Front Panel, for Satellite, Light Gray		T13856
42	Airproof Patch, Gray		T14238
43	Rubber cushion, 10Φx1.5t, Black, Adhesive, 3M		T86675
44	Rear Cover, for Satellite, Brown 8603C		T13969
45	Speaker Cable, for Front, 8', Black		T42097

## Chapter 6. Schematic Diagram



- Notes:
1. All resistance values are indicated in " $\Omega$ " ( $k=10^3 \Omega$ ,  $M=10^6 \Omega$ ).
  2. All capacitance values are indicated in " $\mu F$ " ( $p=10^{-6} \mu F$ ).

## Chapter 7. Important Notes

### 7.1 Packing requirement for sending the PCB assembly by post

PCB assembly is a kind of sophisticated electronic circuit board. Well packing will be required when sending them by post.

- \* Some sophisticated IC components are mounted on the PCB assembly, hence it is necessary to pack each PCB assembly with a separate static protecting bag, in order to avoid static electricity.

- \* Reliable external packing is also very important when sending the PCB assembly by post, in that it would avoid unnecessarily lost or damage.

### 7.2 Short of spare parts while repairing a speaker system

If you are short of spare parts when you have some speaker systems waiting to be repaired, it would be recommended to take the necessary parts from one speaker system, so that you may have the as many speaker systems