

SERVICE GUIDE

IBK SYSTEMS CORP.



MA-970S

Version:1.0

Total 20 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.

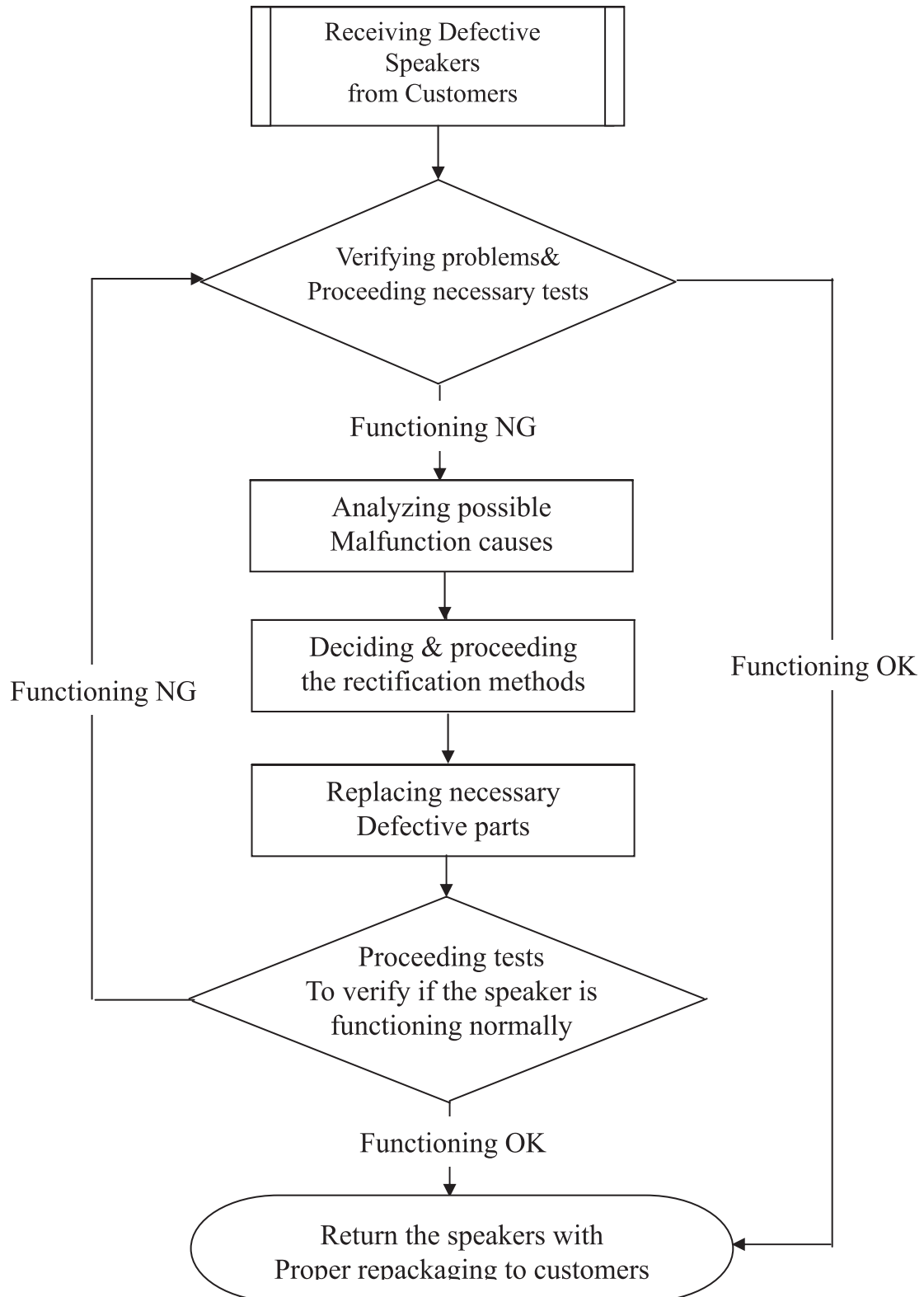
Disconnect the AC power cord from the AC outlet before performing any maintenance on the speakers.

Do not perform any maintenance with wet hand.

Prevent foreign substance, 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

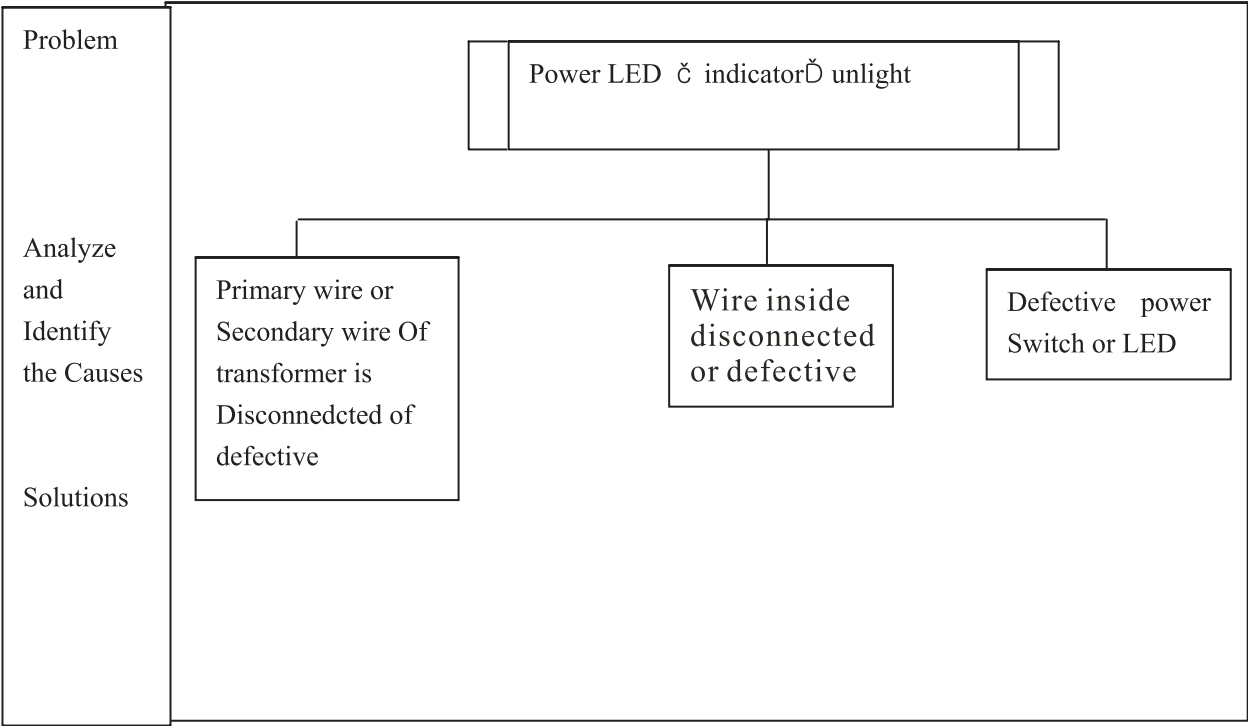
Item	Problem descriptions
1.2.1	<u>Power LED (indicator) unlight</u>
1.2.2	<u>Does not work or one channel no sound</u>
1.2.3	<u>Noise</u>

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

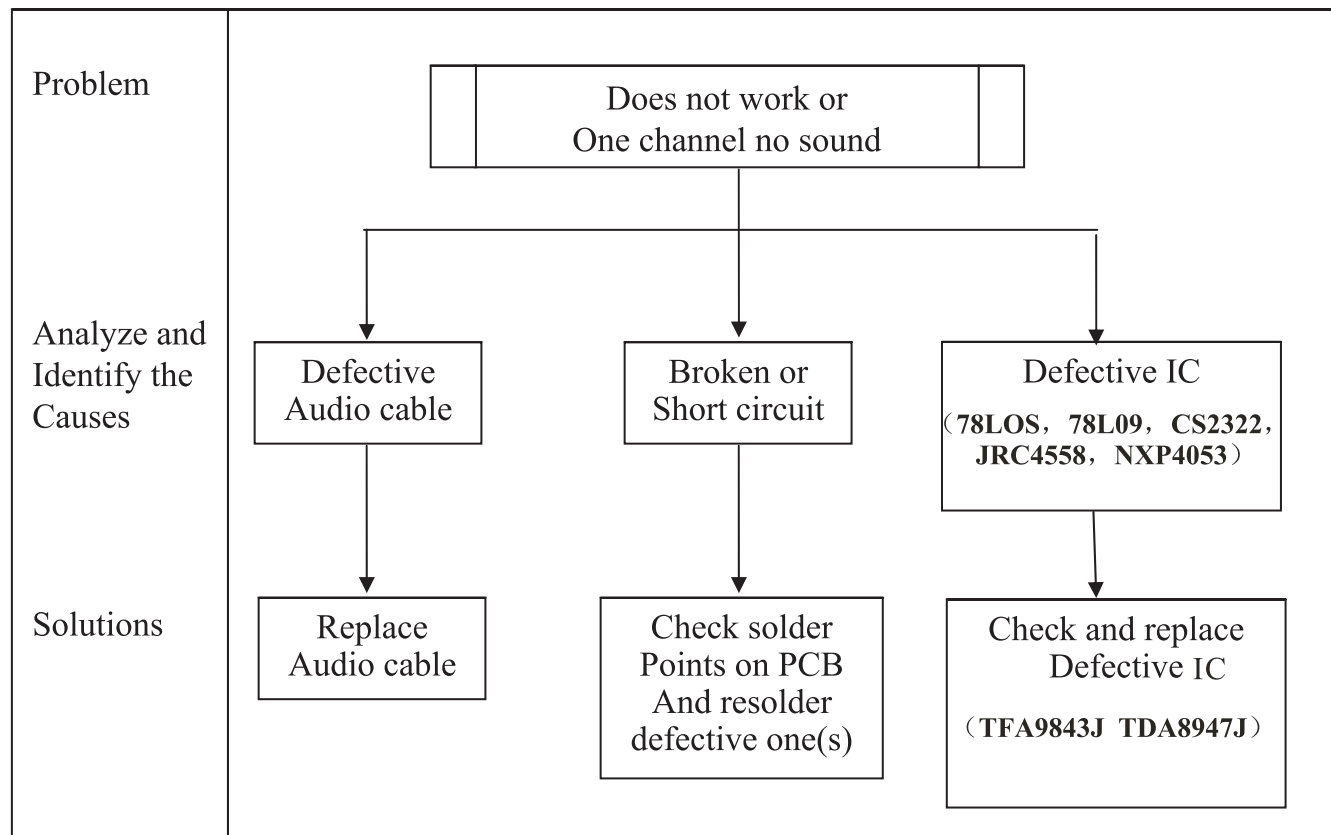


Attention

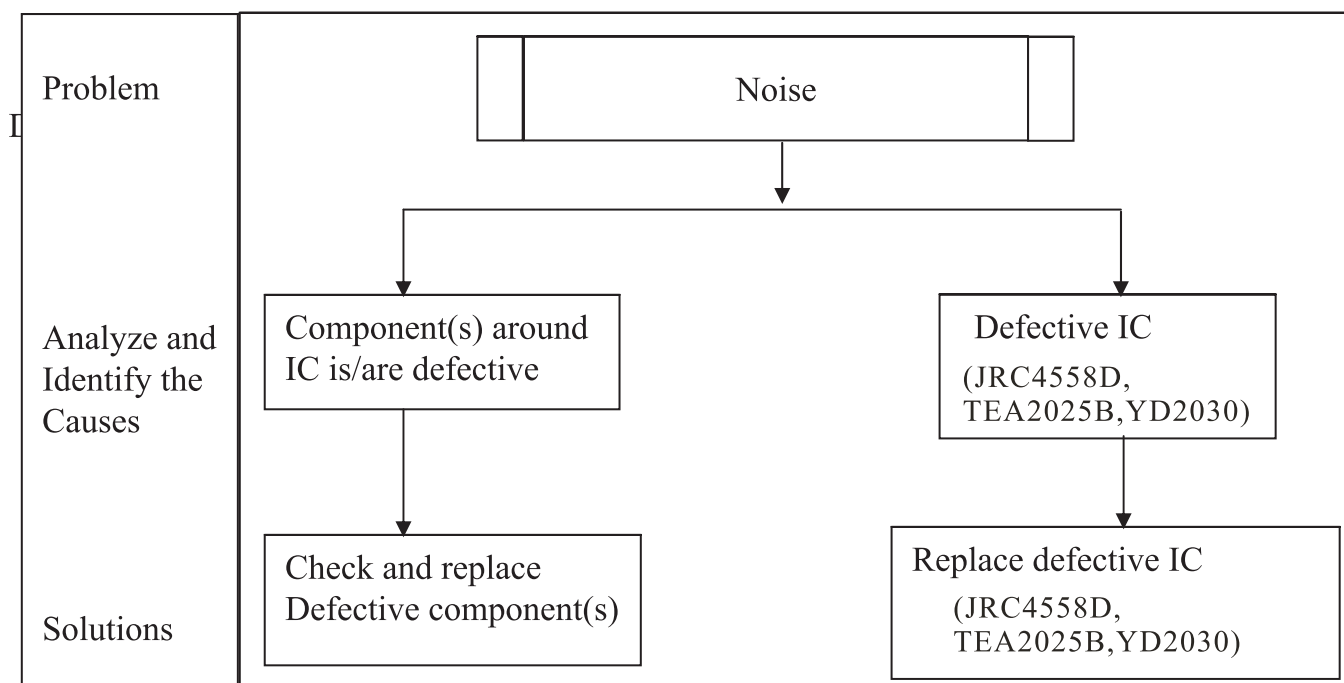
1.2.1 Power LED (indicator) unlight



1.2.2 Does not work jor jone channel no sound



1.2.3 Noise



Chapter 2. Specifications

Satellite

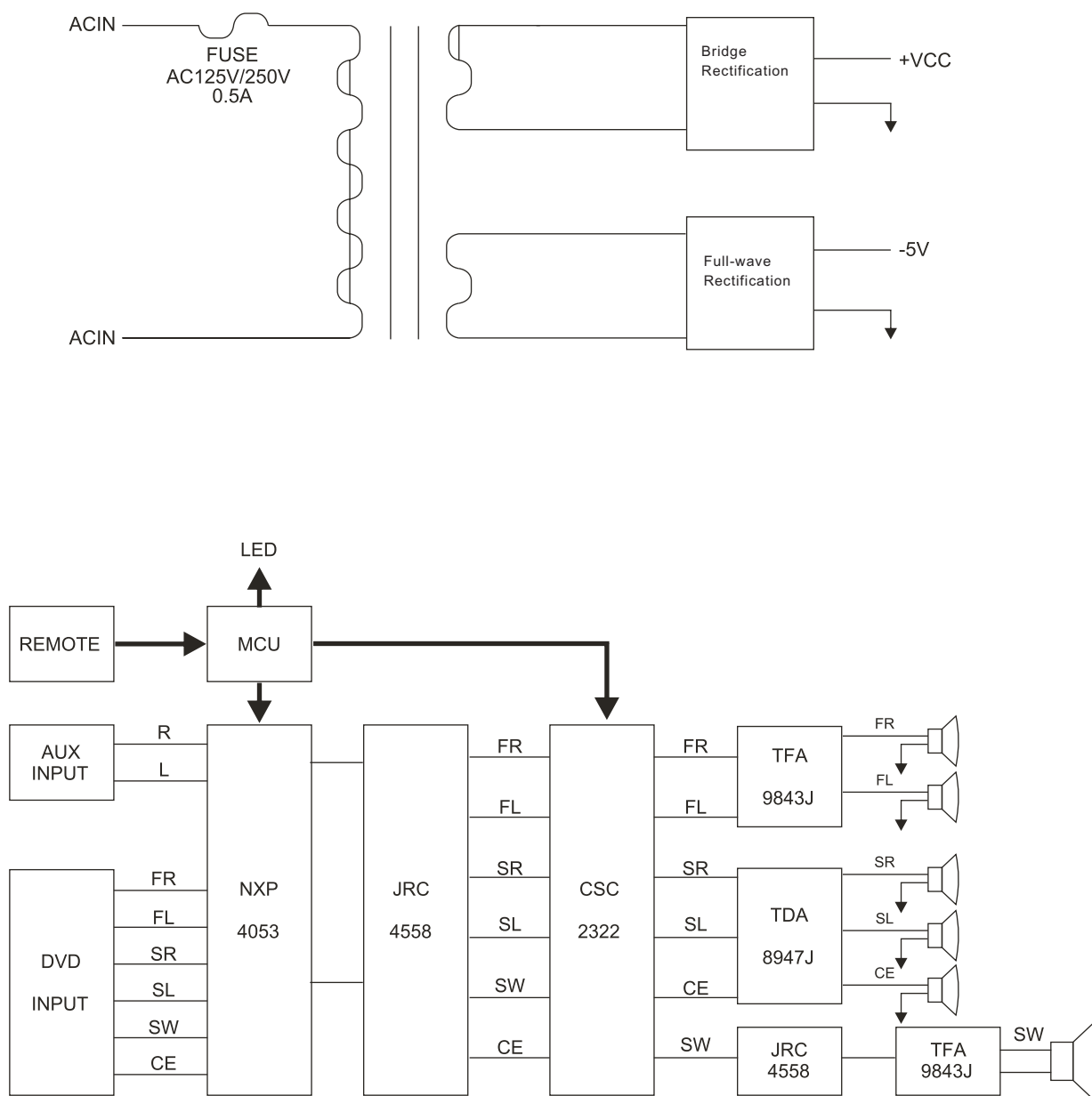
No	DESCRIPTION	UNIT	NOMINAL					LIMIT
			R	L	FL	SR	SL	
1.	RATED OUTPUT POWER@THD 10%	W	9	9	9	9	20	>5
2	SENSITIVITY 1KHz @RATED O/P POWER	mV	480	480	480	480	480	±50
3	SENSITIVITY(1KHz)@W O/P POWER	mV	78	130	130	76	76	±30
4	MAX INPUT LEVEL@1% THD	mV	320	510	510	290	290	±40
5	FREQUENCY RESPONSE(1KHz=0dB)							
	+3 dB	Hz	180	120	120	130	130	±20
	0 dB	KHz	1	1	1	1	1	
	-3 dB	KHz	30	95	95	70	70	>20
6	S/N @RATED O/P POWER	dB	70	70	83	80	80	≥65
7	CHANNEL UNBALANCE@REFO/P POWER	dB	0.2	0.2	0.2	0.2	0.2	≤0.5
8	CHANNEL SEPARATION(ONE CHANNEL IN; OTHER CHANNEL INPUT SHORTING)	dB	55	55	55	55	55	≥40
9	HUM NOISE (VR MAX) (VOLUME MAX; INPUT SHORTING)	mV	0.8	0.6	0.6	0.9	0.9	≤4
10	HUM NOISE (VR MIN) (VOLUME MIN. INPUT SHORTING)	mV	0.2	0.4	0.4	0.5	0.5	≤3

Chapter 2. Specifications

Subwoofer

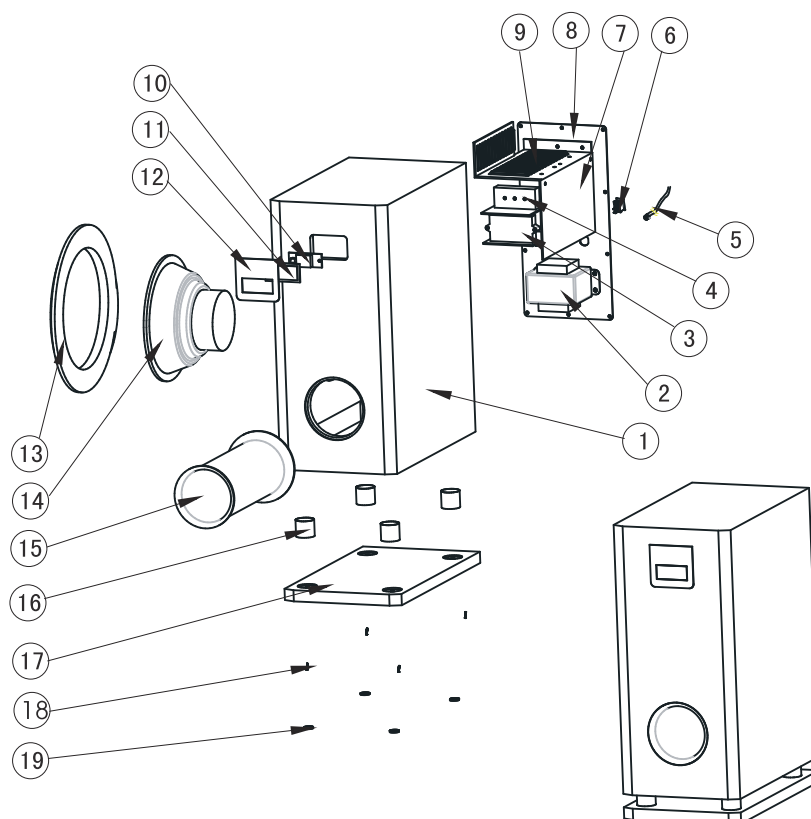
No.	DESCRIPTION	UNIT	NOMINAL	LIMIT
1.	RATED OUTPUT POWER@100Hz (10%THD)	W	18	≥ 25
2	SENSITIVITY 100Hz @RATED O/P POWER	mV	200	± 30
3	SENSITIVITY(1KHz)@W O/P POWER	mV	14	± 20
4	MAX INPUT <u>LEVEL @ 1%</u> THD	mV	76	± 30
5	DISTORTION@100Hz REF. O/P POWER	%	0.1	≤1
6	CROSSOVER FREQUENCY			
	LOW	Hz	16	± 20
	HI	Hz	200	± 30
7	S/N RATIO@100Hz RATED O/P POWER	dB	70	≥ 65
8	VR MIN NOISE	mV	1.2	≤ 3
9	VR MAX NOISE & HUM	mV	0.3	≤ 5

Chapter 3. Block Diagram

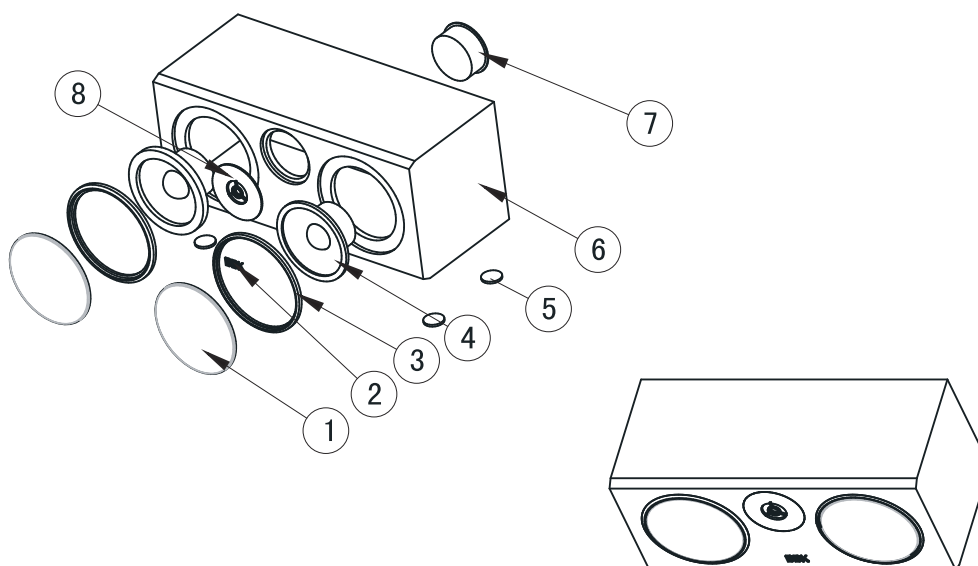


Chapter 4. Exploded View

Subwoofer

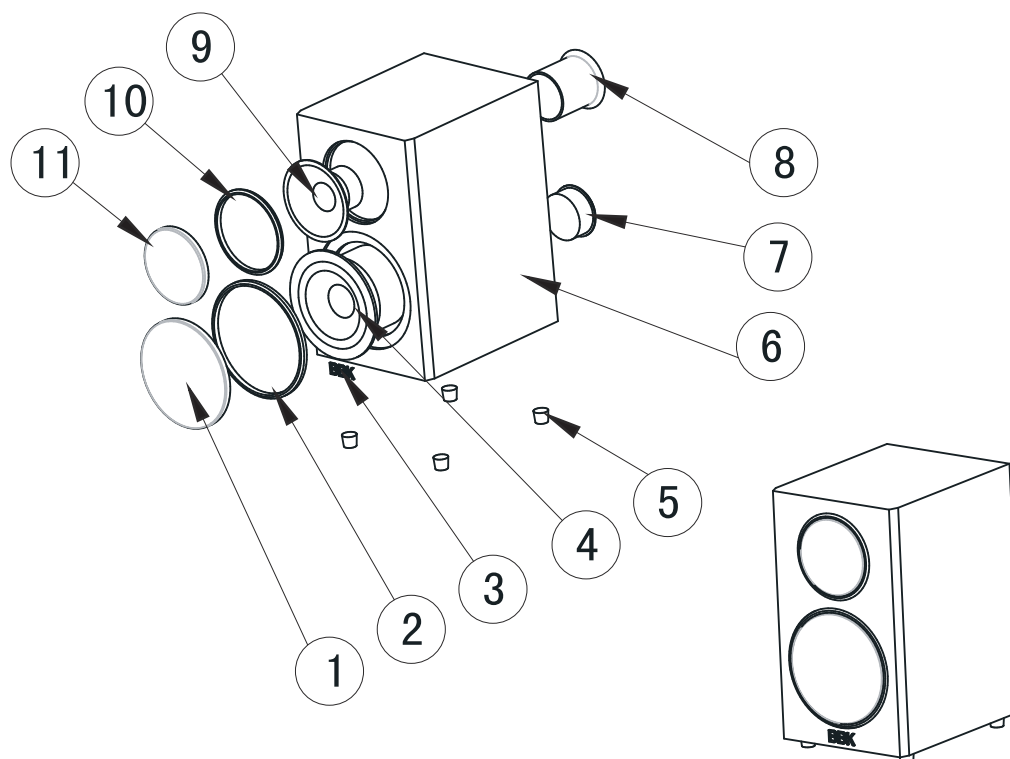


Center-Satellite

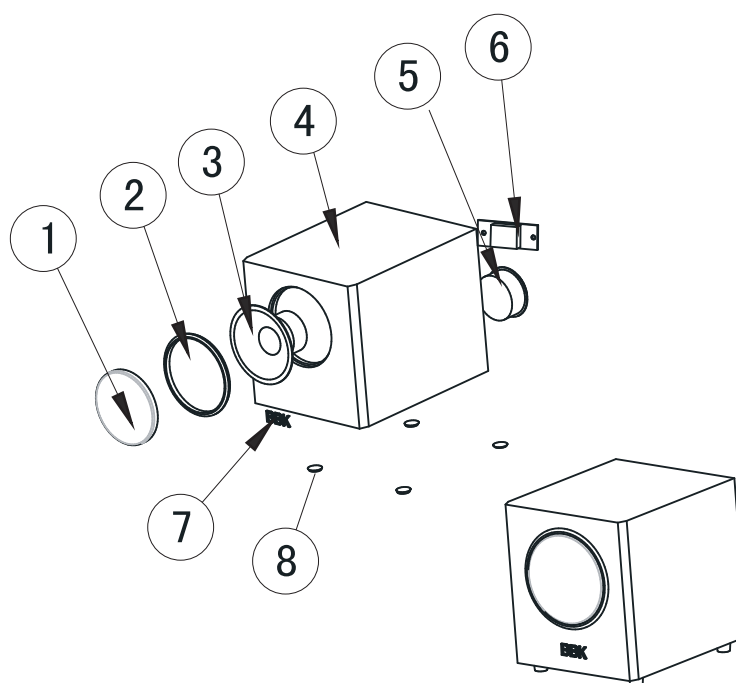


Chapter 4. Exploded View

Front-Satellite



Back-Satellite



Chapter 5. Part List

Subwoofer

Ref. No.	Description	RS Part No.	Quantity
1	wooden case	11720356	1
2	Transformer	11120038	1
3	Wire clamp	11250039	1
4	AV connector	11250043	1
5	Power Wire	11210022	1
6	Switch	11250004	1
7	Amplifier PCB	14800054	1
8	Steel back panel	11420031	1
9	Radiator	11450020	1
10	PCB (control front panel)	14800057	1
11	Mirror	11310159	1
12	BBK nameplate	11840022	1
13	Frame of Speaker driver unit	11720360	1
14	Speaker driver unit	11110107	1
15	Port	11350042 /11350043	1
16	Steel circle	11450021	4
17	Bottom Panel	11720359	1
18	Screw	11410080	4
19	Cushion	11820015	4

Back-Satellite

Ref. No.	Description	RS Part No.	Quantity
1	Small steel cover	11420032	1
2	Small plastic circle	11310160	1
3	Small speaker driver unit	11110106	1
4	Wooden case	11720368	1
5	Wire Clamp	11250044	4
6	Hook	11350041	1
7	BBK nameplate	11840023	1
8	Cushion	11820018	4

Chapter 5. Part List**Front-Satellite**

Ref. No.	Description	RS Part No.	Quantity
1	Big steel cover	11420033	1
2	Big steel circle	11310161	1
3	BBK nameplate	11840024	1
4	Big Speaker driver unit	11110105	1
5	Foot	11820057	4
6	Wooden cast	11720362	1
7	Wire clamp	11250044	1
8	Port	11350045	1
9	Small speaker driver unit	11110103	1
10	Small plastic circle	11310162	1
11	Small steel cover	11420034	1

Center-Satellite

Ref. No.	Description	RS Part No.	Quantity
1	Steel cover	11420032	2
2	BBK nameplate	11840023	1
3	Plastic Circle	11310160	2
4	Speaker driver unit	11110104	2
5	Cushion	11820018	4
6	Wooden Case	11720365	1
7	Wire Clamp	11250044	1
8	Treble Speaker driver unit	11110102	1

Chapter 6. Important Notes**6.1 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.

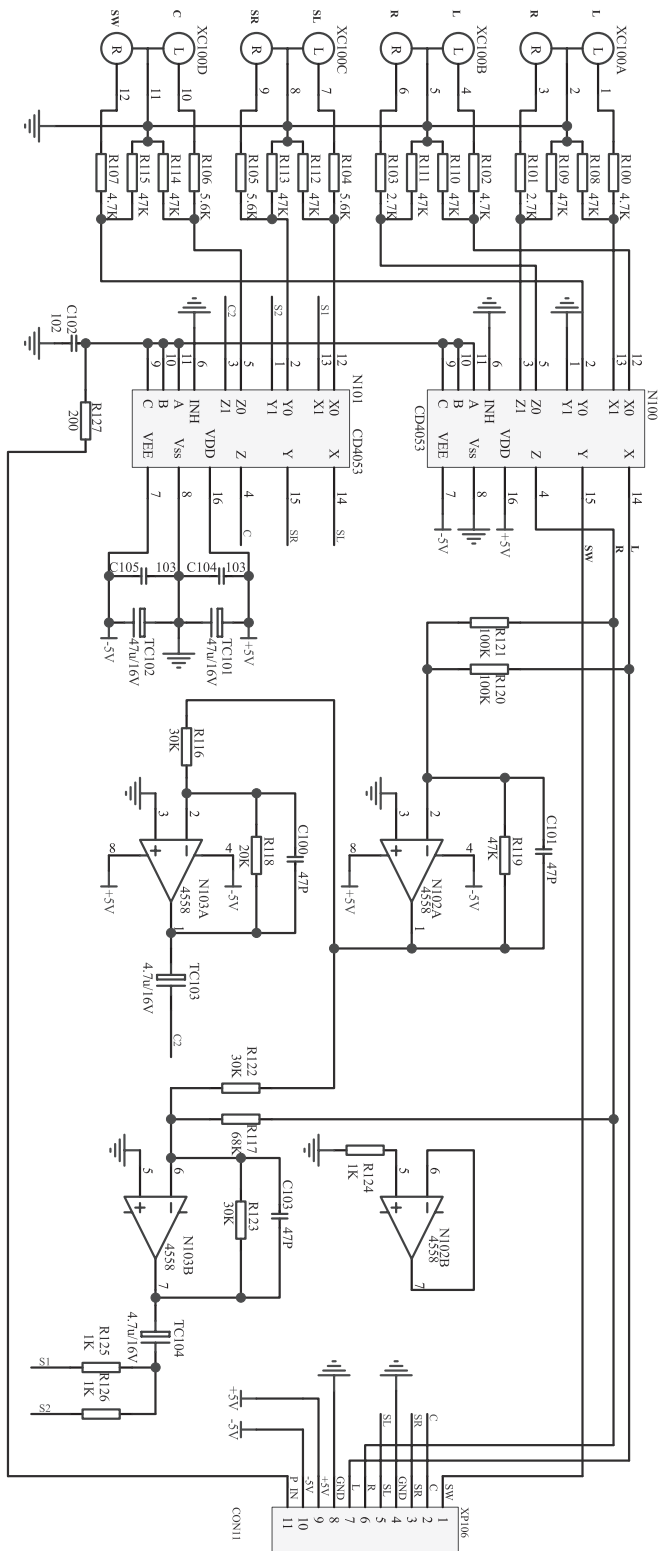
*Some sophisticated IC components are mounted on the PCB assembly, hence it is necessary to pack each PCB assembly with a separate static protecting bag, in order to avoid static electricity.

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

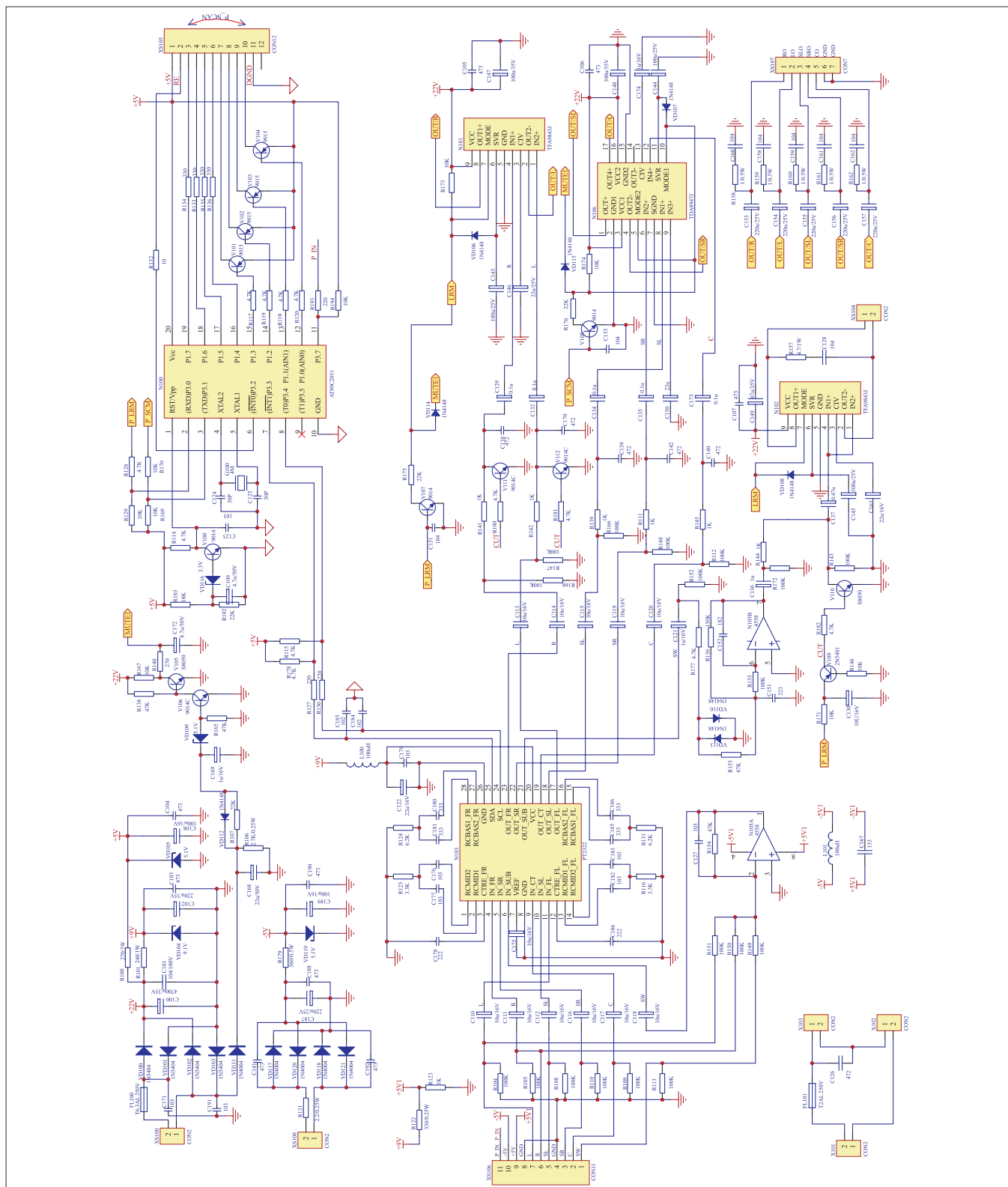
6.2 Short of spare parts while repairing a speaker system

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

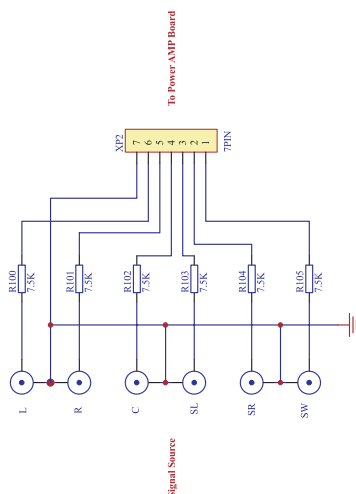
Chapter 7. Circuit schematic



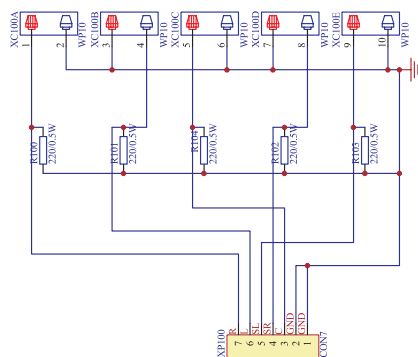
Chapter 7. Circuit schematic



Chapter 7. Circuit schematic



Chapter 7. Circuit schematic



Chapter 7. Circuit schematic

