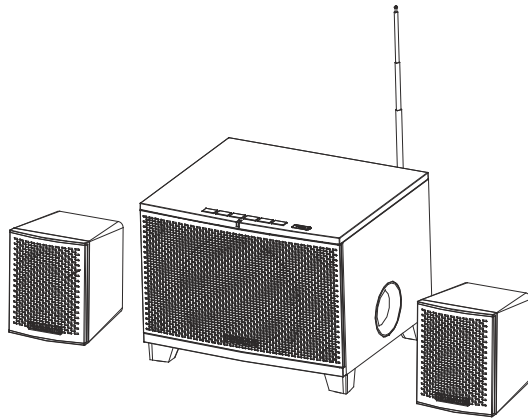


Service Manual

2.1 CHANNEL SPEAKER SYSTEM

Model No. SC-HT18GW-K



WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

Panasonic®

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Specification

Output Power (RMS)	: 20 W + 12.5 W x 2
Frequency response	: Satellites: 120 Hz - 20 KHz Subwoofer: 20 Hz - 170 Hz
Signal to Noise ratio	: ≥ 70 dB
Separation	: ≥ 40 dB
Driver Units	: 3" x 2 full range magnetically shielded + 5" subwoofer
Dimensions (L x B x H)	: 26.5 x 22.4 x 38.8 cm
Net / Gross Weight	: 4.03 kg / 4.59 kg

Notes :

1. Specifications are subject to change without notice.
Mass and dimensions are approximate.

“ATTENTION SERVICER”

Some chassis components may have sharp edges. Be careful when disassembling and servicing.

1. This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
2. For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.
3. Select items from the following index when checks or replacement are required.
4. Refer to the Parts No. on the page of “Parts Location and Replacement Parts List” (Section 5), if necessary.

Caution:

Original screws should be used.

Below is the list of disassembly sections

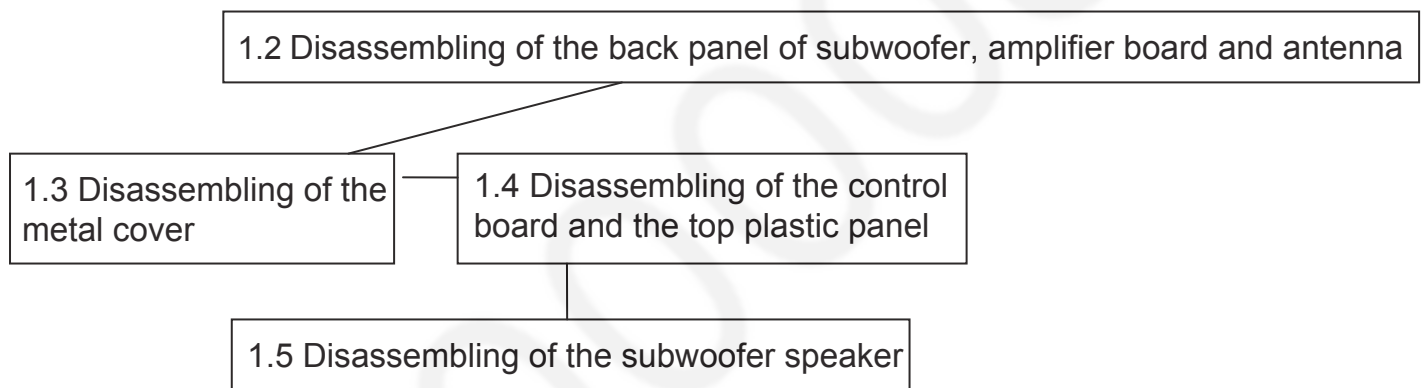
- 1.2. Disassembling of the back panel of subwoofer, amplifier board and antenna
- 1.3. Disassembling of the metal cover
- 1.4. Disassembling of the control board and the top plastic panel
- 1.5. Disassembling of the subwoofer speaker

Assembling and Disassembling

1. Disassembling

1.1. Disassembly flow chart

The following chart is the procedure for disassembling the casing and inside parts for internal inspection when carrying out the servicing.



Installation

1. Connect the audio sources

Connect the RCA cable to the input of the subwoofer, make sure the red and white color jack to the correspond input of the woofer. Connect the 3.5" stereo input jack into the output of the audio sources, such as MP3, MP4, computer etc.

2. Power on the system, adjust the master volume to the suitable level. Adjust "VOL"& "BASS" to the suitable to meet your different requirements.

Functions

- 1.ST-BY (Stand-by): Turns on the unit; default input mode is AUX.
When in ST-BY mode the LED will blink in Red colour; after turning on the unit, the LED will glow in Red colour.
- 2.AUX: AUX input mode selection, red LED will be on.
- 3.CLASSIC: A kind of EQ mode, only workable at USB mode.
- 4.USB: USB reader mode selection. When enter into USB mode, blue LED will be on. "NEXT" means next song; "PREV" means previous song; "PLAY/PAUSE" means play/pause.
- 5.PREVIOUS: For selection previous song in USB and previous stored FM station in FM.
- 6.VOL-: Decrease the volume by continuous or long press of VOL-.
- 7.NORMAL: A kind of EQ mode, only workable at USB mode.
- 8.MUTE: Turn off volume. Press again to activate volume.
- 9.POP: A kind of EQ mode, only workable at USB mode.
- 10.JAZZ: A kind of EQ mode, only workable at USB mode.
- 11.ROCK: A kind of EQ mode, only workable at USB mode.
- 12.VOL+: Increase the volume by continuous or long press of VOL+.
- 13.PLAY/PAUSE: Play/Pause the song in USB and FM.
- 14.NEXT: Play next song by pressing "Next".
- 15.FM: FM tuner mode selection. When you enter FM mode, the purple LED will be on and press "▶||" for long time, it searches FM station/channel automatically.

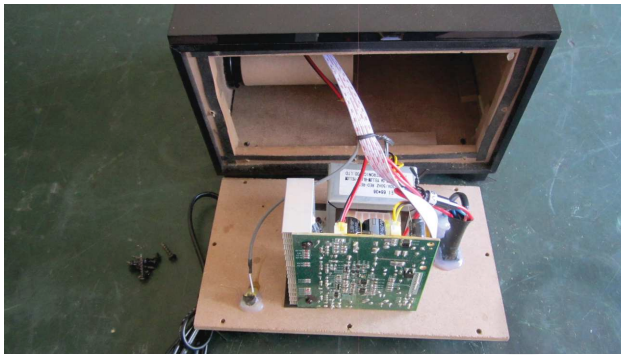
1.2 Disassembling of the back panel of subwoofer, amplifier board and antenna



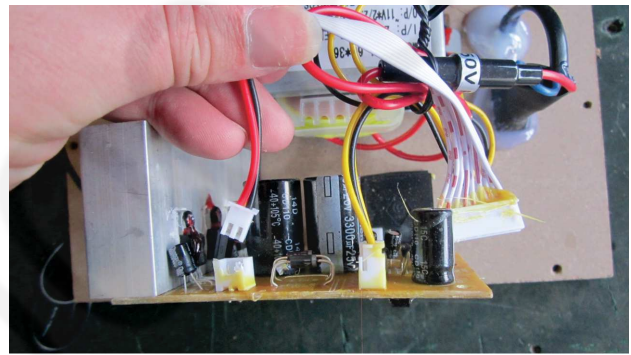
1. Disassemble subwoofer.



2. Disassemble the screws on back panel.



3. After back panel being disassembled.



4. Disassemble the cable connected on amplifier board.



5. Disassemble the antenna with the soldering tool as shown.

1.3 Disassembling of the metal cover



1. Disassemble the front metal cover with the tool as shown.

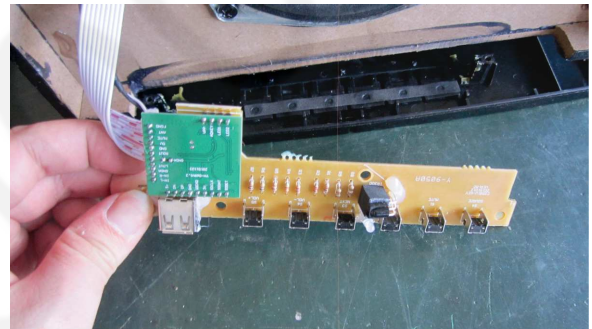


2. After metal cover being disassembled.

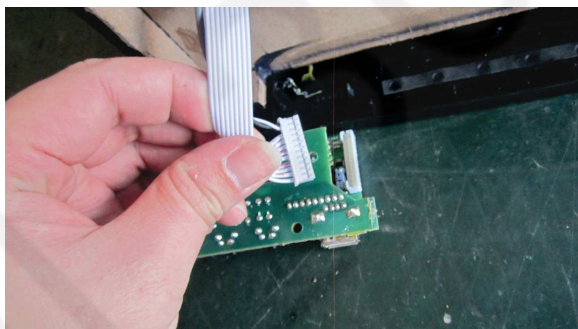
1.4 Disassembling of the control board and the top plastic panel



1. Disassemble the screws on control board.



2. After control board being disassembled.



3. Disassemble the cable connected on the control board.

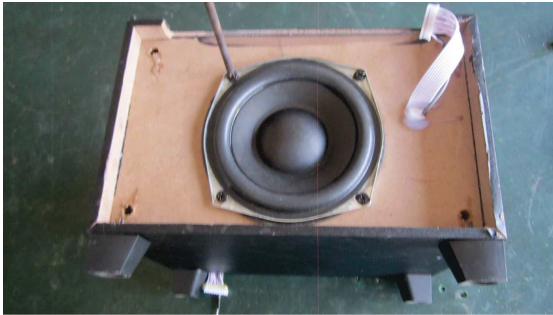


4. Disassemble the top plastic panel with the tool as shown.



5. After top plastic panel being disassembled.

1.5 Disassembling of the subwoofer speaker



1. Disassemble the screws for subwoofer speaker.

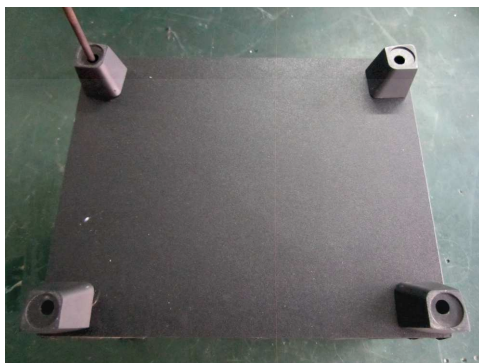


2. After subwoofer speaker being disassembled.



3. Subwoofer being disassembled.

2. Assembling subwoofer



1. Assemble the foot pad.



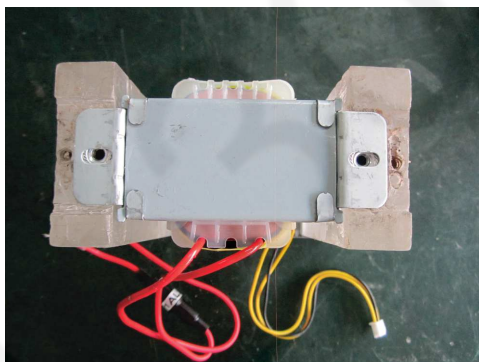
2. Assemble the EVA pad on subwoofer wooden box.



3. Assemble the cables in subwoofer.



4. Assemble the screws of speakers.



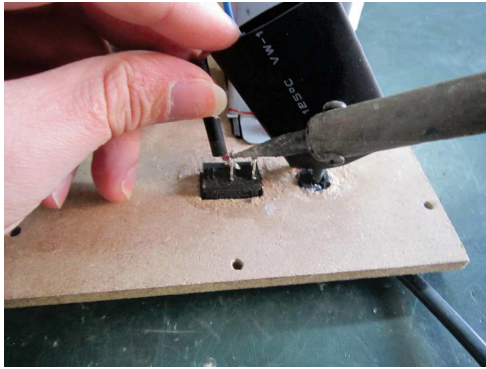
5. Assemble the transformer.



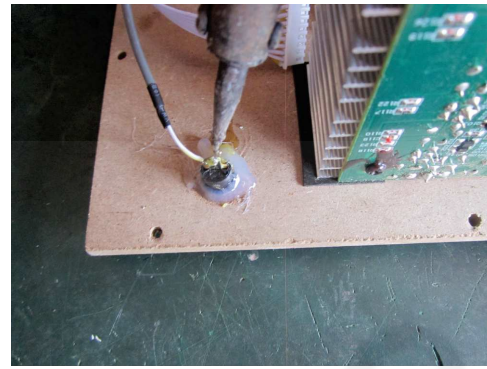
6. Assemble the screws of transformer.



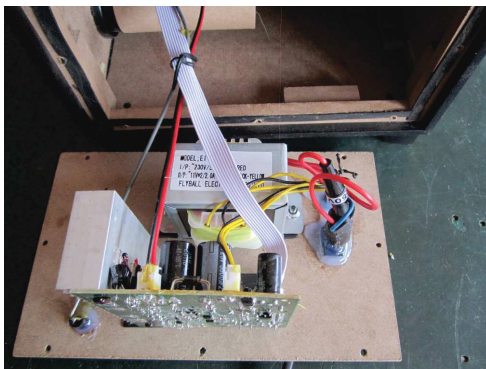
7. Assemble the power switch and cable.



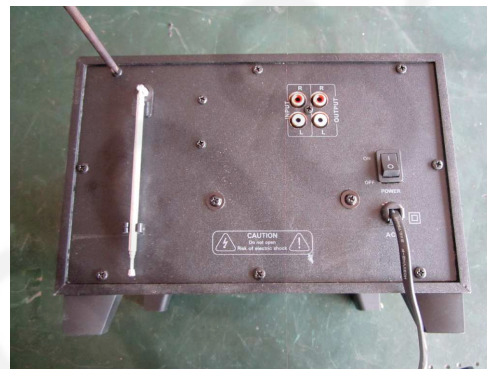
8. Soldering the power switch.



9. Assemble the antenna.



10. Connected the cables on the PCB board.



11. Assemble the screws on back panel.



12. Assemble the top plastic panel.



13. Assemble the metal cover.



14. Subwoofer being assembled well.

3 Connection of the Speaker Cables

- Be sure to connect speaker cables before connecting the AC power supply cord.
- Be sure to connect the cable of speaker to output RCA plug, connect audio cable to input RCA plug.
- Twist and pull off the vinyl tip of the speaker cords. If the speaker cords do not have vinyl tips, connect them directly to the terminals. Make sure the bare ends of the wires are not unravelled.

Placement

- **Place this unit on a even surface.**
- **To reduce the risk of fire, electric shock or product damage.**
 - **Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.**
 - **Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.**
 - **Do not expose this unit to direct sunlight, high temperatures, high humidity and excessive vibration**

Notes

- You can damage your speakers and shorten their useful life
- if you play sound at high levels over extended periods.
- Reduce the volume in the following cases to avoid damage.
- When playing distorted sound.
- When the speakers emit strange noise (howling) from a microphone or record player, noise from FM broadcasts, or continuous signals from an oscillator, test disc, or electronic instrument.
- When adjusting the sound quality.
- When turning the unit on or off.

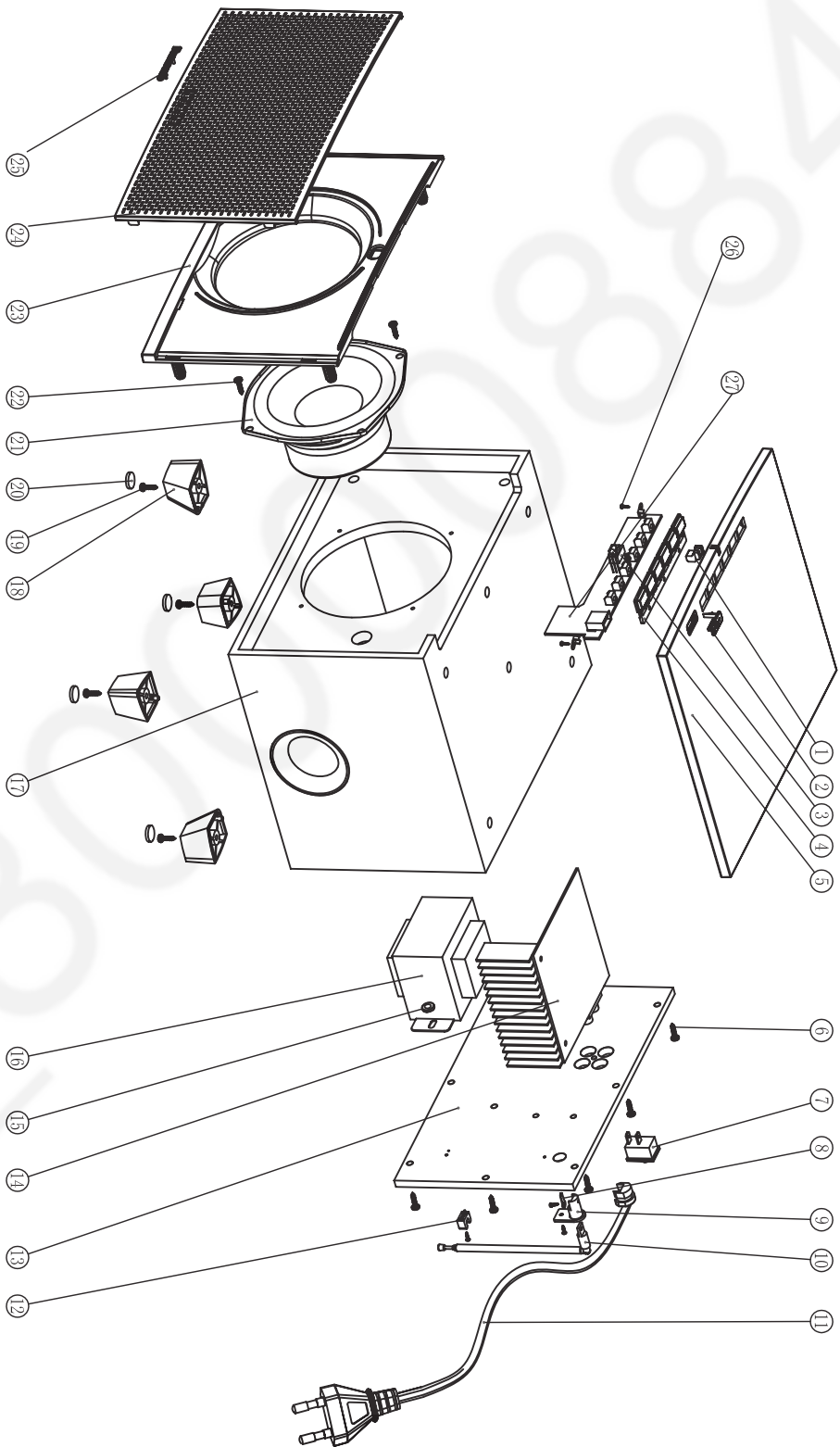
5 Exploded view

请不要测绘图面

研发	公差	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400
采购	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400	500
工程	公差	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400
品管	公差	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400
电子	公差	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400
塑胶	公差	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400
木箱	公差	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400
喇叭	公差	基本尺寸	3	6	10	18	30	50	80	120	180	250	315	400

13	Back board	26	Screw
12	Antenna shelf	25	Nameplate
11	Power cord	24	Metal cover
10	Antenna	23	Front cover
9	Antenna base	22	Screw
8	Antenna pad	21	Speaker
7	Power switch	20	Foot pad
6	Screw	19	Screw
5	Upper cover	18	Foot holder
4	Button	17	Wooden box
3	EVA pad	16	Transformer
2	USB socket	15	Nut
1	LED light	14	Amplifier board
S No.	Item	S No.	Item

Part Code	S No.	Item	Part Code
L66-TC829-Q30	27	USB board	L66-Q2561-110

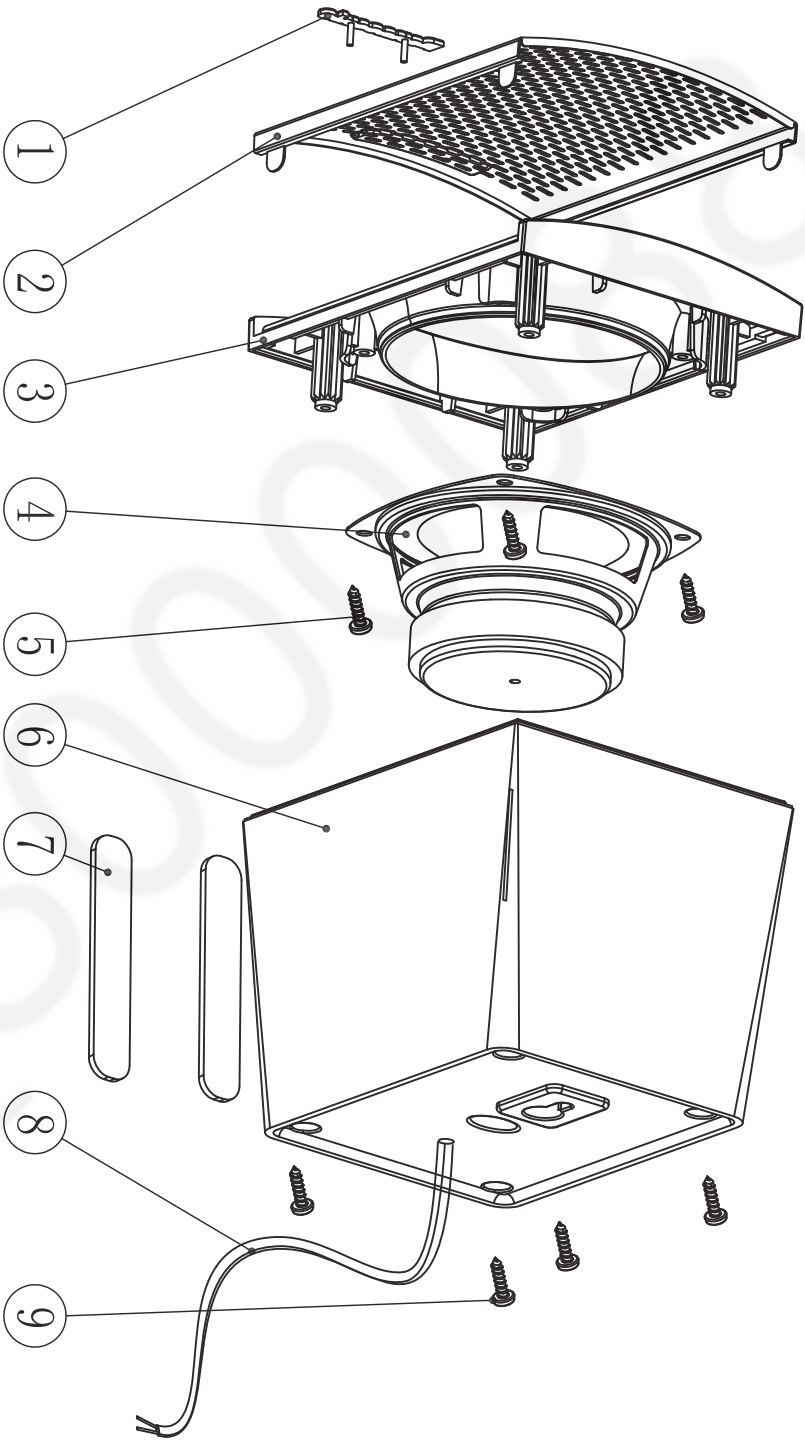


版本	工程变更号	区域	变更描述	核准	日期

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研发	公差	基本尺寸上	3	5	10	18	30	50	80	120	180	250	315	400
采购	IT14	基本尺寸下	3	5	10	18	30	50	80	120	180	250	315	400
工程	公差 ± mm		h125	h150	h180	h215	h260	h310	h370	h435	h500	h575	h700	h775
品管														
电子														
塑胶														
木箱														
喇叭														

9	Screw	—
8	Satellite wire	—
7	Foot pad	—
6	Back panel	—
5	Screw	—
4	Speaker	L08-03471-410
3	Front panel	—
2	Metal cover	—
1	Nameplate	—
S No.	Item	Part Code



版本	工程变更号	区域	变更描述	核准	日期

7. Replacement Parts List

Notes :

- Important safety notice :

When replacing any of these components, be sure to use only manufacturer's specified parts shown in the parts list.

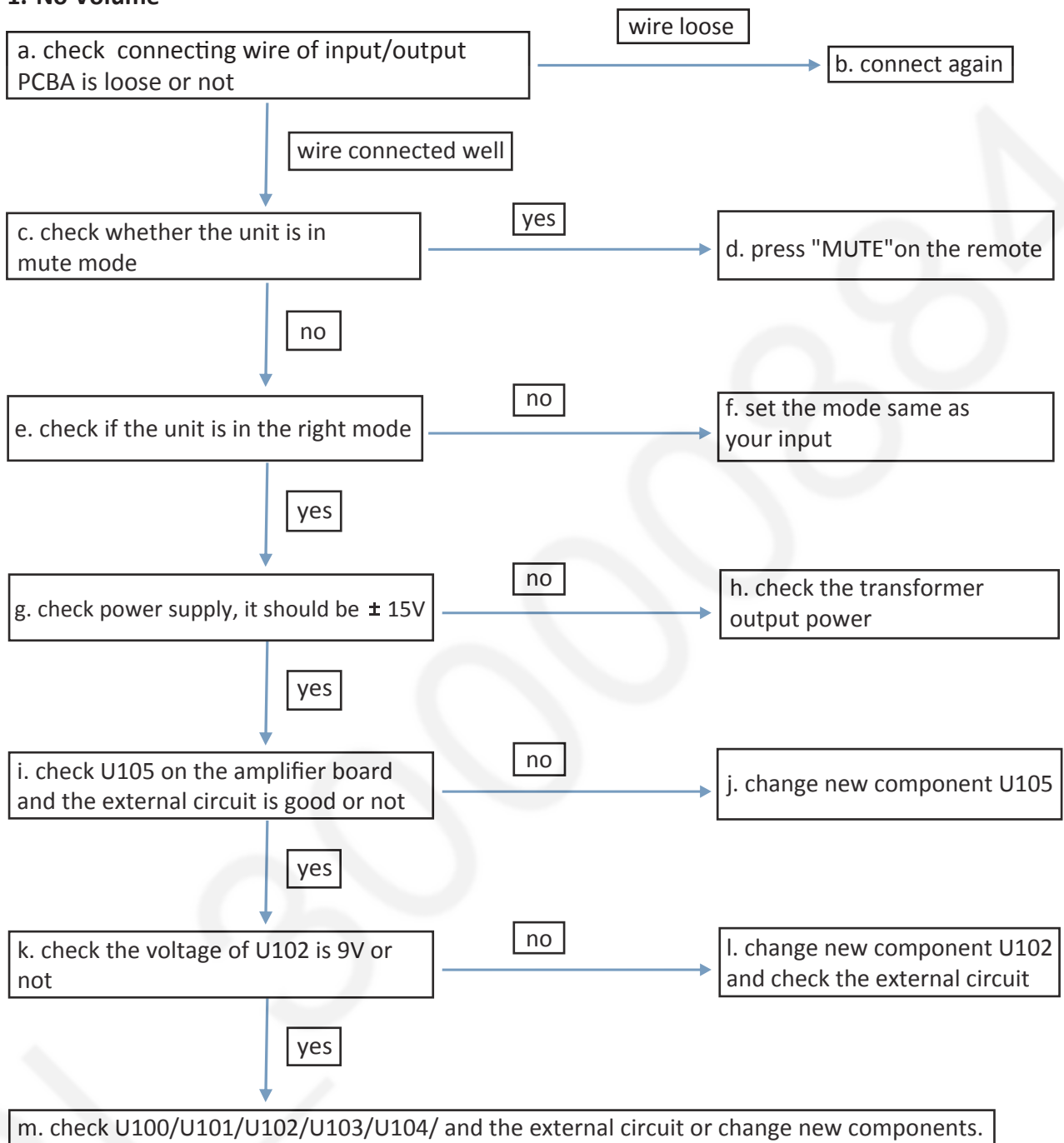
S/NO.	Part Code	Description	Position	Q'ty for one set
1	---L02-32580-010	后板 Back panel		1
2	---L14-1C106-011	散热器 Heat sink		1
3	---L66-TC829-030	PCB组合 Amplifier PCB combination		1
4	L50-TC829-V10	PCB板 Amplifier PCB board		1
5	----L51-02030-005	集成电路 IC2030A	U103.U104	2
6	----L51-02030-010	集成电路 IC2030A	U100.U101	2
7	----L53-05392-000	二极管 Diode	D100-D103	4
8	----L57-00102-501	电容 Capacitance	E117	1
9	----L57-00332-250	电容 Capacitance	E107.E108	2
10	----L62-42001-020	针座 Needle holder	CN102.CN105	2
11	----L62-43001-030	针座 Needle holder	CN103	1
12	----L62-49001-000	针座 Needle holder	CN101 (near CN101)	1
13	----L56-00500-03B	电位器 Potentiometer	VR102	1
14	----L62-20001-022	RCA插座 RCA socket	AV100	1
15	----L51-04558-010	集成电路 IC4558	U102.U106	2
16	----R51-78M05-000	三端稳压器 Three terminal regulator	U105	1
17	----L53-04001-000	二极管 Diode	D106.D107	2
18	----L53-04148-010	二极管 Diode	D104.D105.D108	3
19	----L53-10901-T10	二极管 Diode	ZD1.ZD2	2
20	----L52-08050-010	叁极管 Audion	Q101-Q104	4
21	----L54-00005-112	电阻 Resistance	JP100-JP102.JP4	4
22	----L54-00005-180	电阻 Resistance	JP1.JP103	2
23	----L54-22A05-180	电阻 Resistance	R128.R129.R138.R130	4
24	----L54-47105-180	电阻 Resistance	R139.R142	2
25	----L54-51105-180	电阻 Resistance	R122.R123	2
26	----L54-68105-180	电阻 Resistance	R125.R126.	2
27	----L54-10205-852	电阻 Resistance	R136.R147	2
28	----L54-22205-180	电阻 Resistance	R100.R101	2
29	----L54-33205-180	电阻 Resistance	R134	1
30	----L54-56205-180	电阻 Resistance	R110.R111	2
31	----L54-10305-180	电阻 Resistance	R104- R107.R114.R115.R116.R132.R133.R135.R137.R140	12
32	----L54-15305-180	电阻 Resistance	R108.R109.R117-R121	7
33	----L54-12305-180	电阻 Resistance	R145.R146	2
34	----L54-22305-180	电阻 Resistance	R131.R127	2
35	----L54-39305-180	电阻 Resistance	R102.R103	2
36	----L54-47305-180	电阻 Resistance	R112.R113.R143.R144	4
37	----L54-51305-180	电阻 Resistance	VR102 (near J120)	1
38	----L59-00104-500	电容 Capacitance	C106-C111.C113.C115-C117	10
39	----L59-00102-180	电容 Capacitance	C112	1
40	----L59-00221-180	电容 Capacitance	C120.C121	2

41	---L59-00224-180	电容 Capacitance	C122	1
42	---L59-00332-180	电容 Capacitance	C104.C105	2
43	---L59-00334-180	电容 Capacitance	C114	1
44	---L59-00471-180	电容 Capacitance	C118.C119	2
45	---L59-00475-180	电容 Capacitance	E118	1
46	---L57-00047-500	电容 Capacitance	E100.E101	2
47	---L57-00220-550	电容 Capacitance	E103.E104.E111	3
48	---L57-00101-500	电容 Capacitance	E114.E115	2
49	---L57-00101-250	电容 Capacitance	E110	1
50	---L57-00221-501	电容 Capacitance	E109	1
51	---L89-01001-056	跳线 jump wire	VR102(靠近J109)	1
52	---L89-01001-066	跳线 jump wire	J118.J119	2
53	---L89-01001-086	跳线 jump wire	J101.J102.J107.J109.J120	5
54	---L89-01001-092	跳线 jump wire	J104-J106.J116	4
55	---L89-01001-094	跳线 jump wire	J100.J103.J108.R124	4
56	---L80-03006-010	螺丝 Screws		4
57	---L80-03008-000	螺丝 Screws		2
58	---L80-03016-050	螺丝 Screws		3
59	---L87-11001-131	EVA垫 EVA pad		1
60	---L87-21001-114	EVA垫 EVA pad		1
61	--L66-12580-010	PCB组合 Button PCB combination		1
62	L50-12580-V10	PCB板 Button PCB board		1
63	---L51-21040-014	遥控接收头 Remote control receiver	IR300	1
64	L49-01000-002	双色发光二极管 Double color LEDs	LED1	1
65	---L54-22205-P85	电阻 Resistance	R2	1
66	---L54-27205-P85	电阻 Resistance	R3	1
67	---L54-20205-P85	电阻 Resistance	R1.R7	2
68	---L54-33205-P85	电阻 Resistance	R4	1
69	---L54-39205-P85	电阻 Resistance	R5	1
70	---L54-47005-P85	电阻 Resistance	R6	1
71	L54-39105-P85	电阻 Resistance	R8	1
72	L54-15205-P85	电阻 Resistance	R9	1
73	---L57-00101-500	电容 Capacitance	E100	1
74	---L61-11001-020	轻触开关 Tact swith	S1-S6	6
75	---R62-50001-R011	USB插座 USB socket	USB1	1
76	---L66-02581-110	PCB组合 USB/SD board	U100	1
77	---L87-10806-023	EVA垫 EVA pad		1
78	--L01-11258-010	面壳 Subwoofer front plastic panel		1
79	--L01-11258-110	上顶盖 Subwoofer top plastic panel		1
80	--L01-12258-010	按键 Button		1
81	--L01-13258-010	导光件 Light guiding		1
82	--L13-12580-010	铁网 Metal cover		1
83	--L01-71318-021	风管 Air hose		1
84	--L01-73180-050	电源线扣 Bushing for power cord		1
85	--L02-12580-N01	木箱 Subwoofer wooden box		1
86	--L08-A5824-830	喇叭 Subwoofer speaker		1
87	--L20-01550-070	电源线 Power cord		1
88	--L24-10300-200	红黑线 Red&black cable		1
89	--L24-20450-906	排线 Flat cable		1
90	--L29-66363-045	变压器 Transformer		1
91	--L37-24000-002	QCPASS纸 QCPASS sticker		1
92	--L37-24000-003	QCPASS纸 QCPASS sticker		1

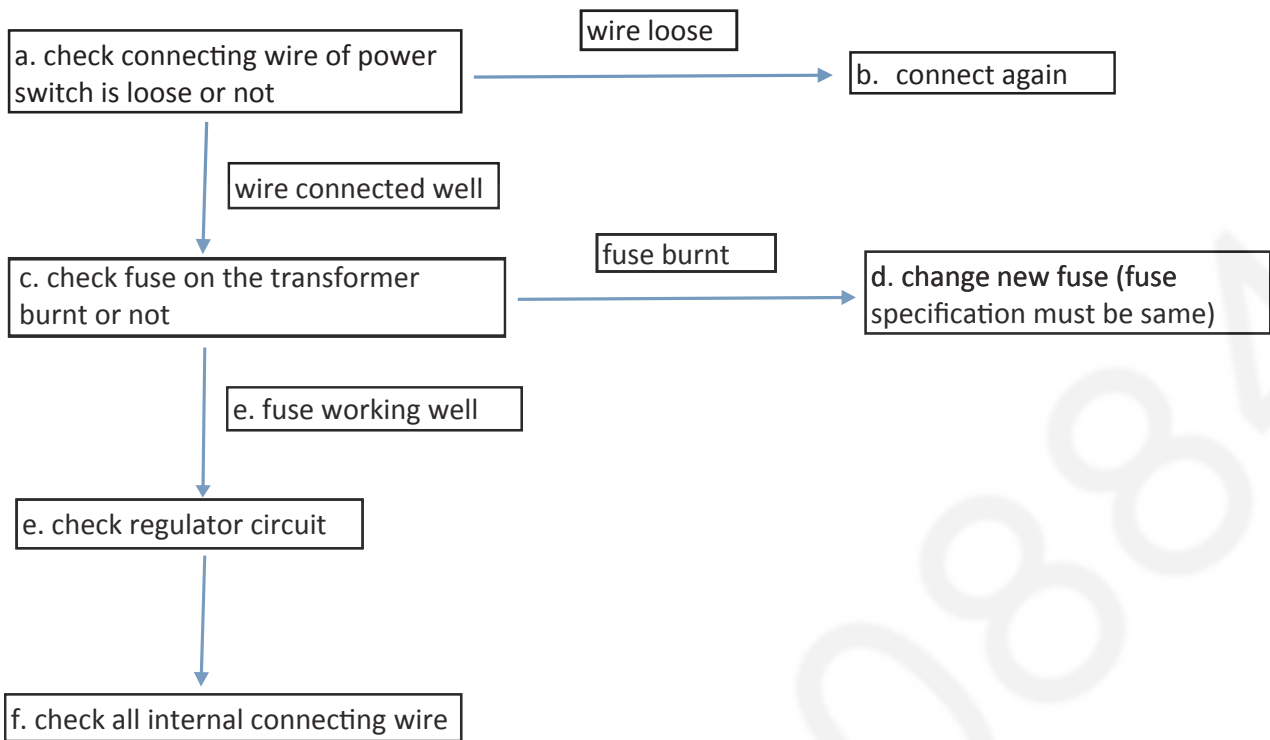
93	--L45-01030-030	胶袋 Polybag		1
94	--L45-05055-020	胶袋 Polybag		1
95	--L61-01001-000	电源开关 power switch		1
96	S66-L7521-010	天线组合 Antenna combination		1
97	---L80-25010-040	垫片 Pad		1
98	--L40-10S71-R010	铭牌 Name plate		1
99	--L86-01001-035	USB塞 USB cover		1
100	--L01-32580-010	脚座 Footstand		4
101	L86-01001-122	脚垫 Footpad		4
102	--L80-02808-020	螺丝 Screws		2
103	--L80-04016-081	螺丝 Screws		2
104	--L80-04016-020	螺丝 Screws		4
105	--L80-03520-010	螺丝 Screws		8
106	--L80-03512-010	螺丝 Screws		4
107	--L80-02015-010	螺丝 Screws		2
108	--L80-02206-010	螺丝 Screws		1
109	--L80-14000-000	螺母 Nut		2
110	--L84-01000-010	热缩套管 Heat shrink tube		3
111	--L84-01000-020	热缩套管 Heat shrink tube		1
112	--L84-01000-040	热缩套管 Heat shrink tube		1
113	--R84-20001-030	闭端子 close-end wire connector		1
114	--L87-31001-329	EVA垫 EVA pad		1
115	--L87-12000-010	EVA垫 EVA pad		1
116	--L87-21001-048	EVA垫 EVA pad		1
117	--L87-21001-012	EVA垫 EVA pad		2
118	--L87-21001-404	EVA垫 EVA pad		2
119	--L87-22001-110	EVA垫 EVA pad		2
120	--L87-21001-262	EVA垫 EVA pad		1
121	--L89-41001-000	扎线 Bundle		3
122	YCT2581U-FLBA	副机本体组合 Satellite combination		1
123	--L01-21258-010	面壳 Satellite plastic panel		2
124	--L01-21258-020	后壳 Satellite back panel		2
125	--L13-12580-020	铁网 Satellite metal cover		2
126	--L08-03471-410	喇叭 Satellite speaker		2
127	--L40-10S71-R010	铭牌 Satellite nameplate		2
128	--L22-11200-005	副机线 Satellite cable		2
129	--L37-24000-002	QCPASS纸 Satellite QCPAA sticker		2
130	L01-7S220-090	胶套 Polybag		2
131	L45-01050-000	胶袋 Polybag		2
132	--L45-01030-030	胶袋 Polybag		2
133	--L45-02822-010	胶袋 Polybag		2
134	L80-04045-000	螺丝 Screws		2
135	--L80-03008-010	螺丝 Screws		8
136	--L80-03008-030	螺丝 Screws		8
137	--L86-01001-123	脚垫 Footpad		4
138	L20-11200-030	信号线 Signal cable		1
139	L35-02580-010	彩盒 Gift box		1
140	L44-12580-010	保利龙 Satellite polyfoam		1
141	L44-12580-020	保利龙 Subwoofer polyfoam		1
142	L44-12580-030	保利龙 Subwoofer polyfoam		1
143	L45-01222-020	胶袋 Polybag		1
144	L89-0010U-025	遥控器 Remote control		1

8. Trouble Shooting

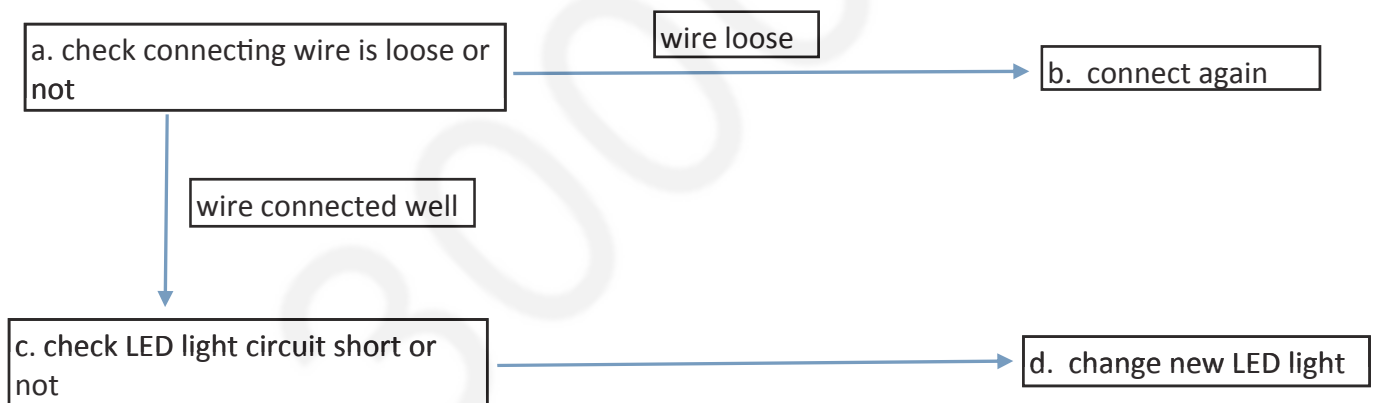
1. No Volume



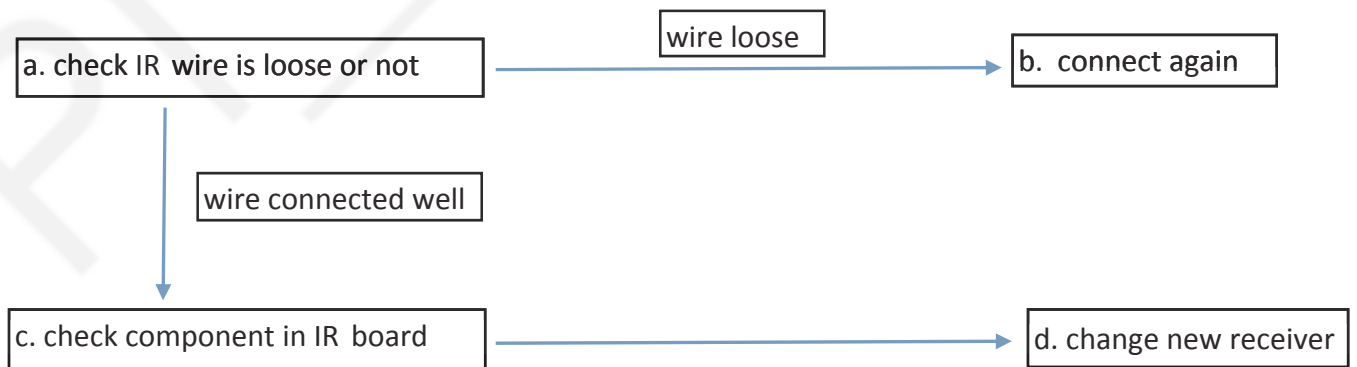
2. No power



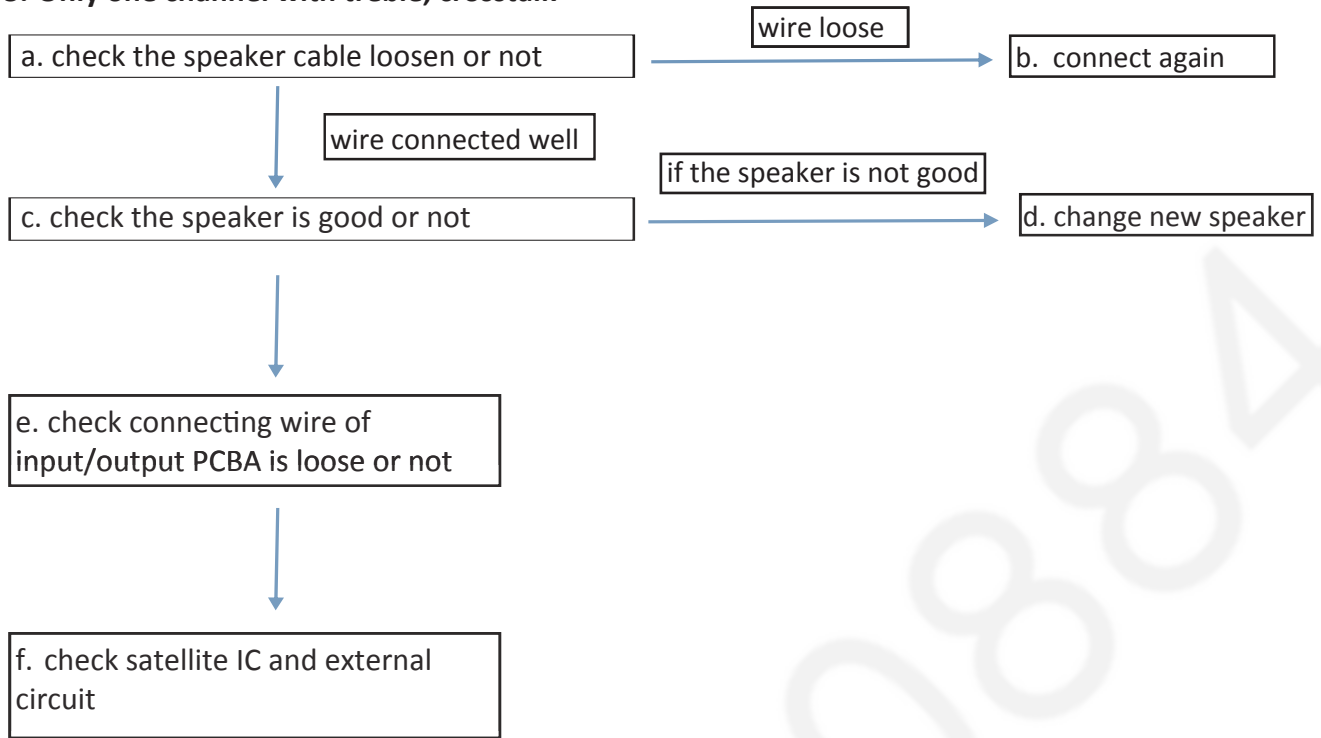
3. LED indicator does not glow



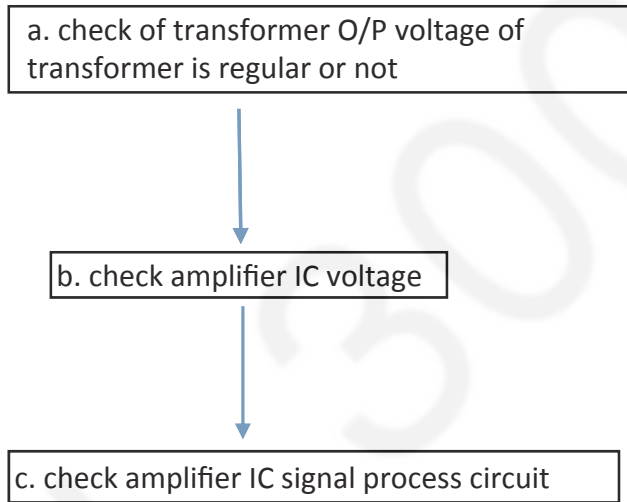
4. Remote not working



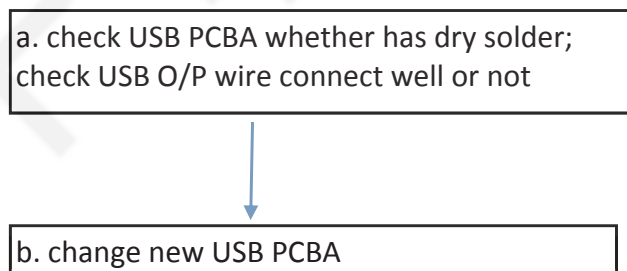
5. Only one channel with treble, crosstalk



6. Current Noise



7. U disk not working / one channel not working



9. IGP LIST

Part	Part Code	Generic Description	Used Qty/ Unit
amplifier PCB board assembly	L66-TC829-030	amplifier PCB board	1
USB board complete	L66-02581-110	USB board	1
transformer	L29-66363-045	transformer	1
subwoofer speaker	L08-A5824-830	subwoofer speaker	1
satellite speaker	L08-03471-410	satellite speaker	2
remote control	L89-0010U-025	remote control	1
gift box	L35-02580-010	gift box	1