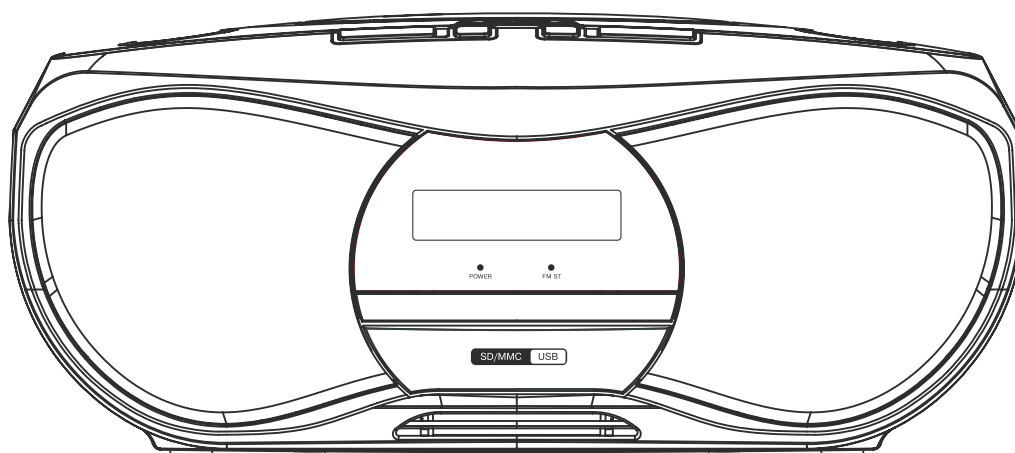


Service Manual

Model: BX102U



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SPECIFICATIONS

MODEL: BX102U BAND : AM DATE : 2011/08/10

SUPPLY VOLTAGE	LOAD	REF. O / P	MOD. DEPTH	MOD. FREQUENCY
AC <u>220</u> V. DC <u>12</u> V.	<u>8 Ohm</u>	<u>50 mW</u>	<u>30%</u>	<u>1 KHz</u>

DESCRIPTION	TEST CONDITION	TEST POINT	UNIT	NOR .	LIMIT	SAMPLE	
BAND COVERAGE	LOW END	LOW	khz	522	+/-10		
BAND COVERAGE	HIGH END	HIGH	khz	1620	+/-20		
20 dB S / N SENSITIVITY	603 KHz	LOW	db/m	86	94		
20 dB S / N SENSITIVITY	999KHz	MED	db/m	85	94		
20 dB S / N SENSITIVITY	1404 KHz	HIGH	db/m	85	94		
AUTO SCANNING STOP sensitivity		LOW/ HIGH	db	88	96		
MAX DISTORTION	74dB/m REF.O / P	MED	%	15	20		
MAXIMUM O / P L/R 1K	74dB/m 80% MOD.	MED	w	2	2±0.2		
10% DISTORTION O / P	74dB/m 80% MOD.	MED	w	1.5	1.3		
A.F. FREQ.RESP. - 6 dB (LOW)	74dB/m REF. O / P	MED	hz	50	100		
A.F. FREQ.RESP. - 6 dB (HIGH)	74dB/m REF. O / P	MED	khz	2.4	2.2		
MINIMUM VOLUME HUM			mv	1	5		
DISTORTION	74dB/m REF. O / P	MED	%	2.5	5		

MODEL: BX102U BAND : AM DATE : 2011/08/10

SUPPLY VOLTAGE	LOAD	REF. O / P	DEVIATION		DEV . FREQ	PILOT
			FM	STEREO		
AC <u>220</u> V. DC <u>12</u> V.	<u>8 Ohm</u>	<u>50</u> mW	<u>KHz</u> 22.5	<u>KHz</u>	<u>1 KHz</u>	<u>10%</u>

DESCRIPTION	TEST CONDITION	TEST POINT	UNIT	NOR .	LIMIT	SAMPLE	
BAND COVERAGE	LOW END	LOW	mhz	64	+/- 0.5		
BAND COVERAGE	HIGH END	HIGH	mhz	108	+/-0.5		
30 dB S / N SENSITIVITY	90 MHz	LOW	db	22	26		
30 dB S / N SENSITIVITY	98 MHz	MED	db	22	26		
30 dB S / N SENSITIVITY	106 MHz	HIGH	db	22	26		
AUTO SCANNING STOP sensitivity		LOW/ HIGH	db	20	26		
MINMUM VOLUME HUM			mv	2	3		
IMAGE REJECTION	106 MHz + 2 I.F.	HIGH	db	40	30		
	98 MHz + - 400 KHz	MED	db	25	14		
- 3 dB LIMITING SENSISTIVITY	60 dB FEF.O / P	MED	db	25	30		
A F C。 HOLDING RANGE -3 dB	60 dB FEF.O / P	MED	khz	300	160		
MODULATION HUM	60 dB FEF.O / P	MED	db	50	40		
MAX DISTORTION L/R	60 dB FEF.O / P	MED	%	15	20		
MAXIMUM O / P 1K L/R	75 KHz DEV. 60 dB	MED	w	2.0	2.0 +0.3W		
10% DISTORTION O / P 1K L/R	75 KHz DEV. 60 dB	MED	w	1.5	1.3		

SPECIFICATIONS

A.F. FREQ.RES.P. - 6 dB (LOW)	60 dB FEF. O / P	MED	hz	50	100		
A.F. FREQ.RES.P. - 6 dB (HIGH)	60 dB FEF. O / P	MED	khz	4.5	3.5		

MODEL: BX102U BAND : AM DATE : 2011/08/10

SUPPLY VOLTAGE	LOAD	REF.O / P	
AC <u>220</u> V.	<u>8</u> Ohm	<u>50</u> mW	
DC <u>12</u> V.			

TYPE & AUDIO

DESCRIPTION	TESTDIST	TEST CON	UNIT	NOR .	LIMIT	SAMPLE	
CD 10% DIST. OUTPUT POWER	TCD782	TN 02	w	1.5	1.3		
CD MAX. POWER OUTPUT	TCD782	TN02	w	2.0	2.0±0.2		
S / N RATIO	TCD782	TN02 1KHz	db	55	40		
HUM & NOISE(VOL.MAX)	TCD782	TN8	mv	5	10		
HUM & NOISE(VOL.MIN)	TCD782	TN8	mv	1	3		
CHANNEL SEPARATION	TCD782	TN09 TN11	db	45	35		
FREQ.RESPONSE	TCD782	TN04 127HZ	db	0	+5/-3		
		TN05 997HZ	db	0	0		
		TN06 10.007KHZ	db	0	+5/-3		
INTERRUPTION	TCD-725		mm		0.8		
BLACK DOTS	TCD-725		mm		0.6		
FINGERPRINTS	TCD-725		um		75		
ECCENTRIC	TCD71R		um	140	70		
VERTICAL DEVIATION	TCD731RA		mm	1.0	0.8		
MAX DISTORTION L/R	TCD782	TN02 1K	%	20	30		

MODEL: BX102U BAND : AM DATE : 2011/08/10

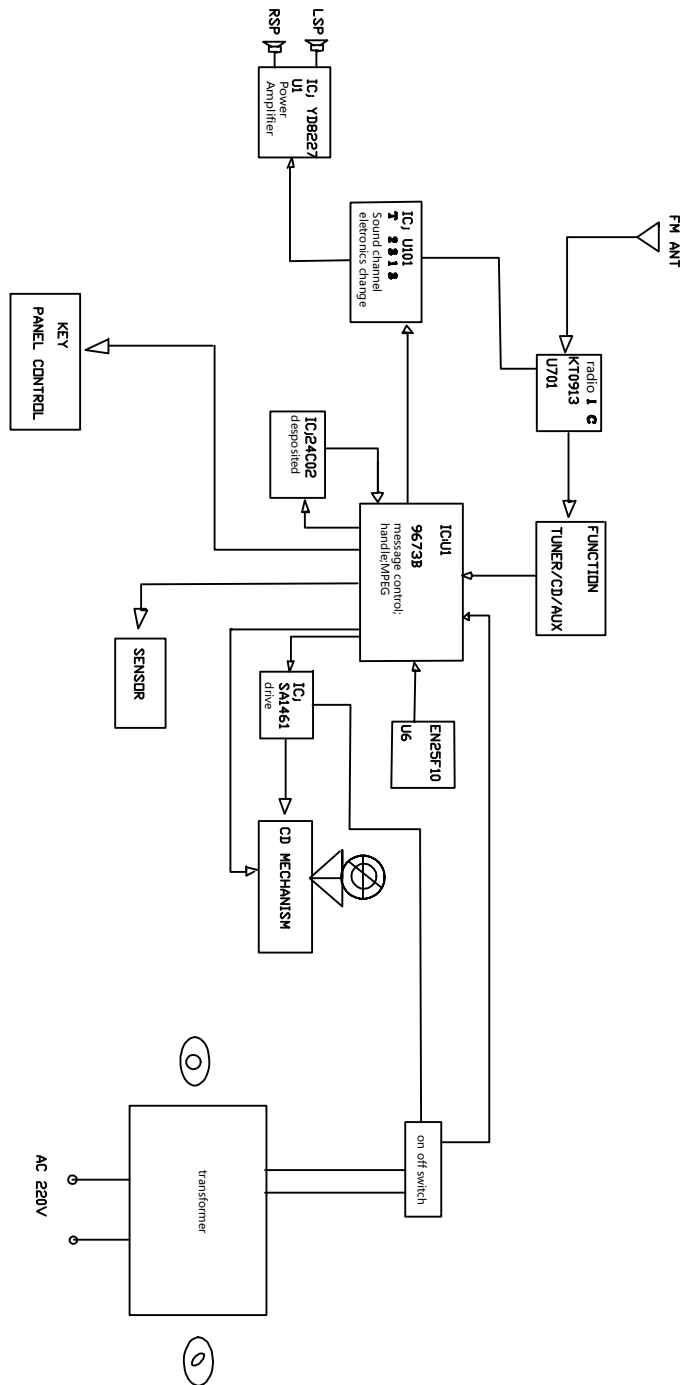
SUPPLY VOLTAGE	LOAD	REF.O / P	
AC <u>220</u> V	<u>8</u> Ohm	<u>50MW</u>	
DC <u>12v</u>			

TYPE & AUDIO

DESCRIPTION	TESTDIST	TEST CON	UNIT	NOR .	LIMIT	SAMPLE		
						1	2	3
10% DIST. OUTPUT POWER L/R	550mv-in	Aux-in 1kHz	w	1.5	1.3			
MAX. POWER OUTPUT L/R	550mv-in	Aux-in 1kHz	w	2.0	2.0±0.2			
S / N RATIO L/R	550mv-in	Aux-in 1kHz	db	45	35			
HUM & NOISE(VOL.MAX) L/R	550mv-in	Aux-in 1kHz	mv	5	8			
HUM & NOISE(VOL.MIN) L/R	550mv-in	Aux-in 1kHz	mv	2	5			
CHANNEL SEPARATION L/R	550mv-in	Aux-in 1kHz	db	45	35			
FREQ.RESPONSE	550mv-in	Aux-in 100HZ	db	±5	±3			
		Aux-in 1kHz	db	0	0			
		Aux-in 10KHZ	db	±3	±3			
MAX DISTORTION L/R	550mv-in	Aux-in 1kHz	%	18	30			

PREPARED BY : 赵恒灿

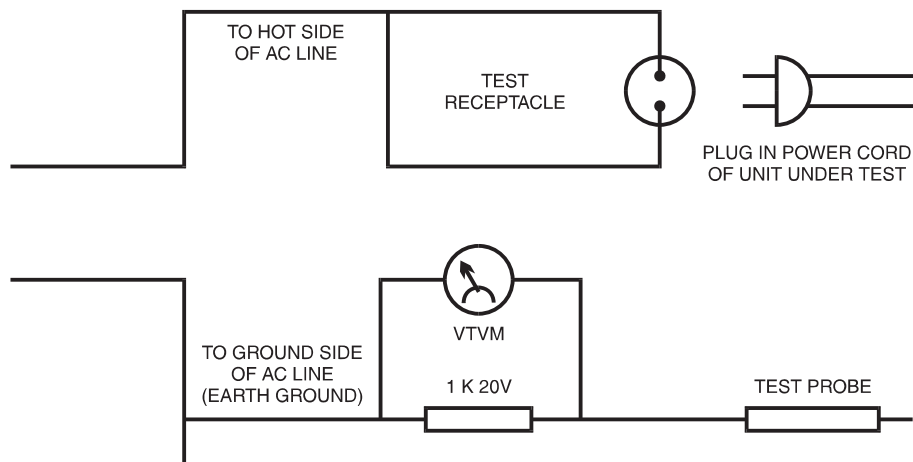
BLOCK DIAGRAM



SAFETY CHECKS

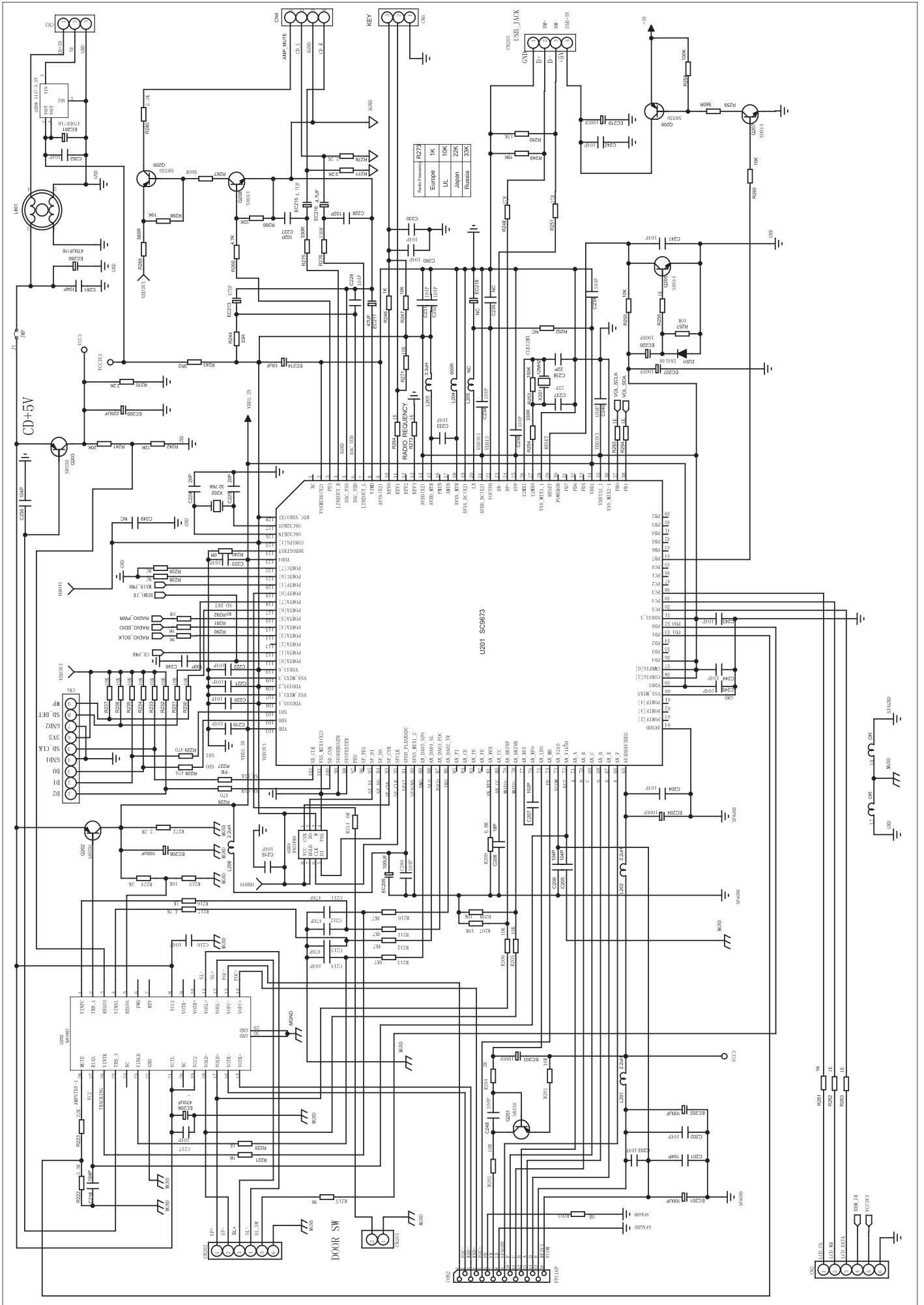
Important Note!!! Do the following safety checks after servicing this unit.

1. Remove all the externally connected test equipment and wires before testing the unit.
2. Use the safety test circuit as shown below.
3. Plug the power cord or unit to be tested into the test receptacle.
4. Switch the unit being tested to ON or PLAY.
5. Connect external jack/terminal contact VTVM across a 1k resistor in the test circuit. Set the meter to a high (150V AC) scale to avoid meter damage and then touch the points with the test probe. If the meter reading indicates less than 3 volts on all test points, set the meter to a low (3V AC) scale and repeat the test.
6. Any reading greater than 0.2 volt indicates a potential shock hazard. If this occurs, determine the cause of the leakage, correct the problem, and repeat the safety test.

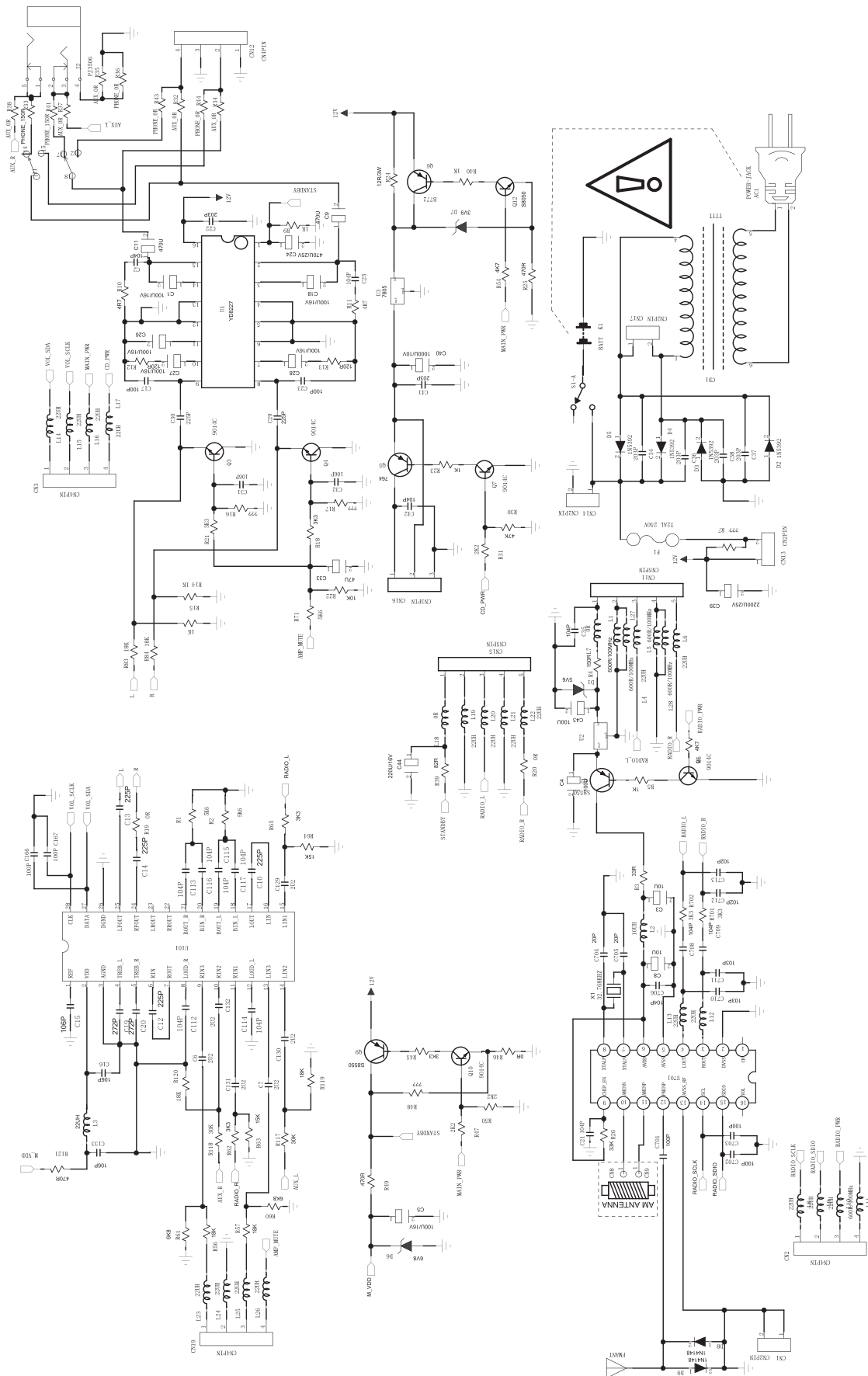


SAFETY TEST CIRCUIT

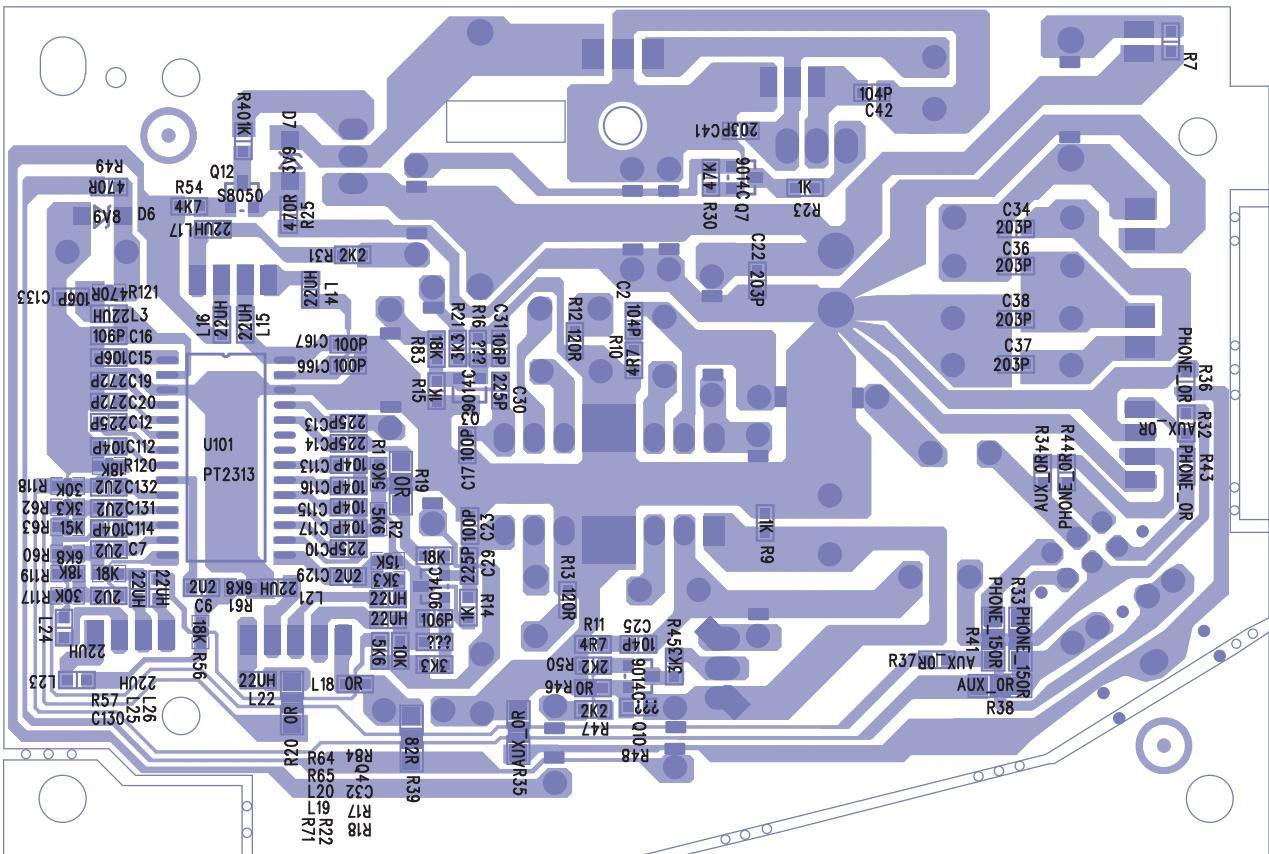
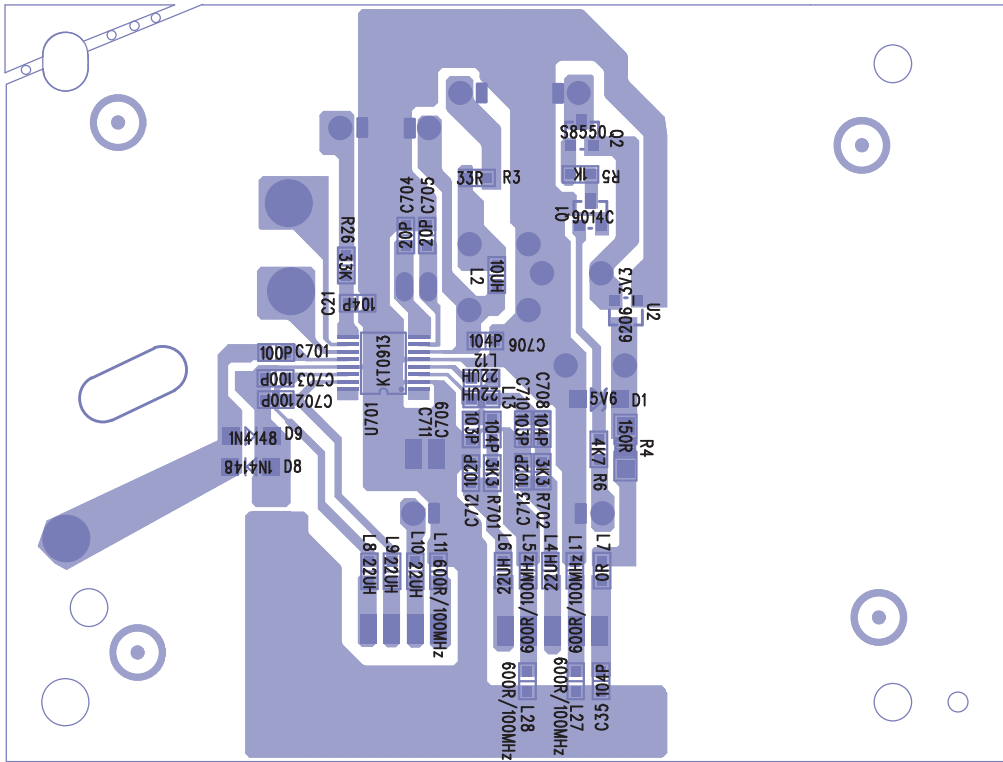
SCHEMATIC DIAGRAMS



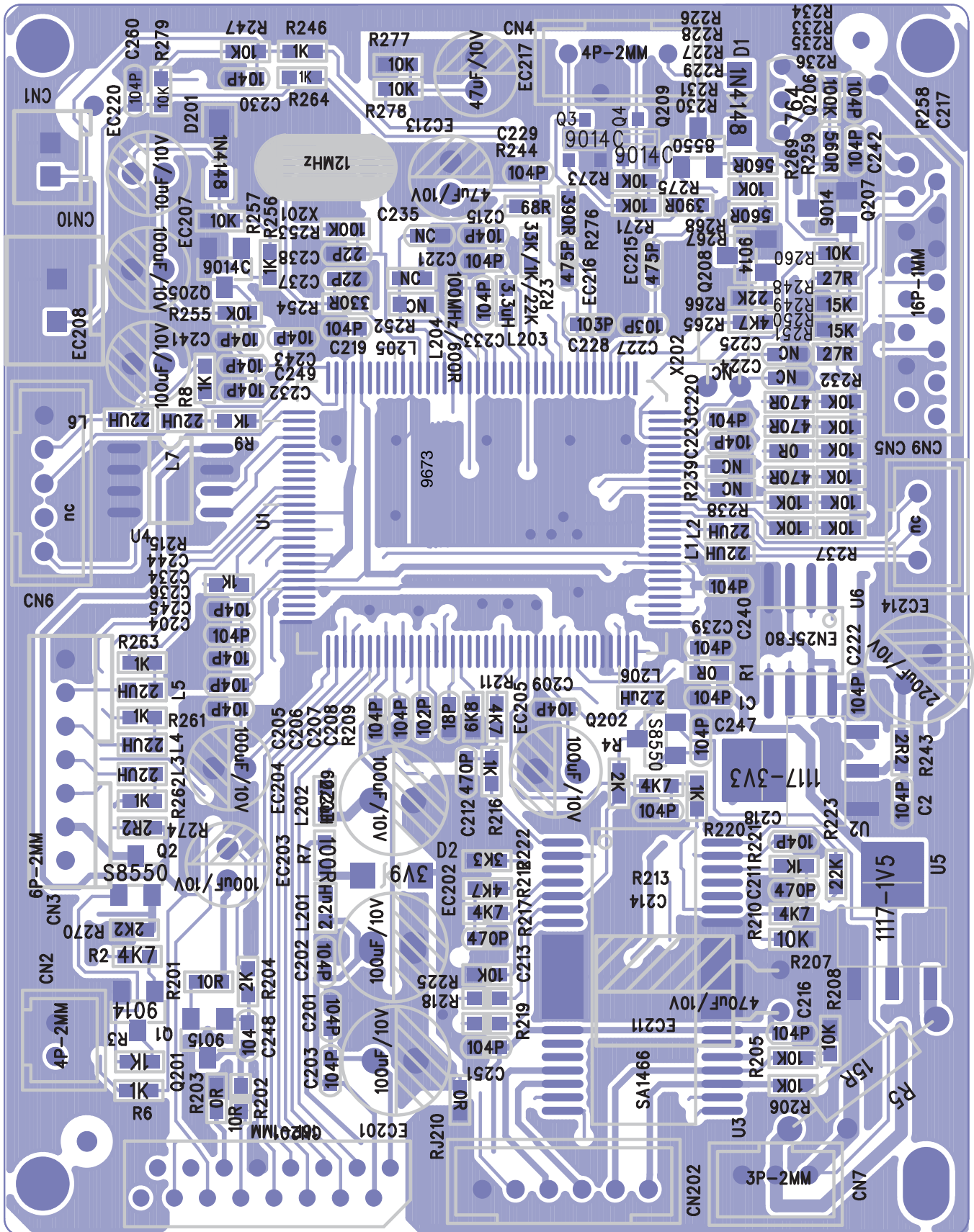
SCHEMATIC DIAGRAMS



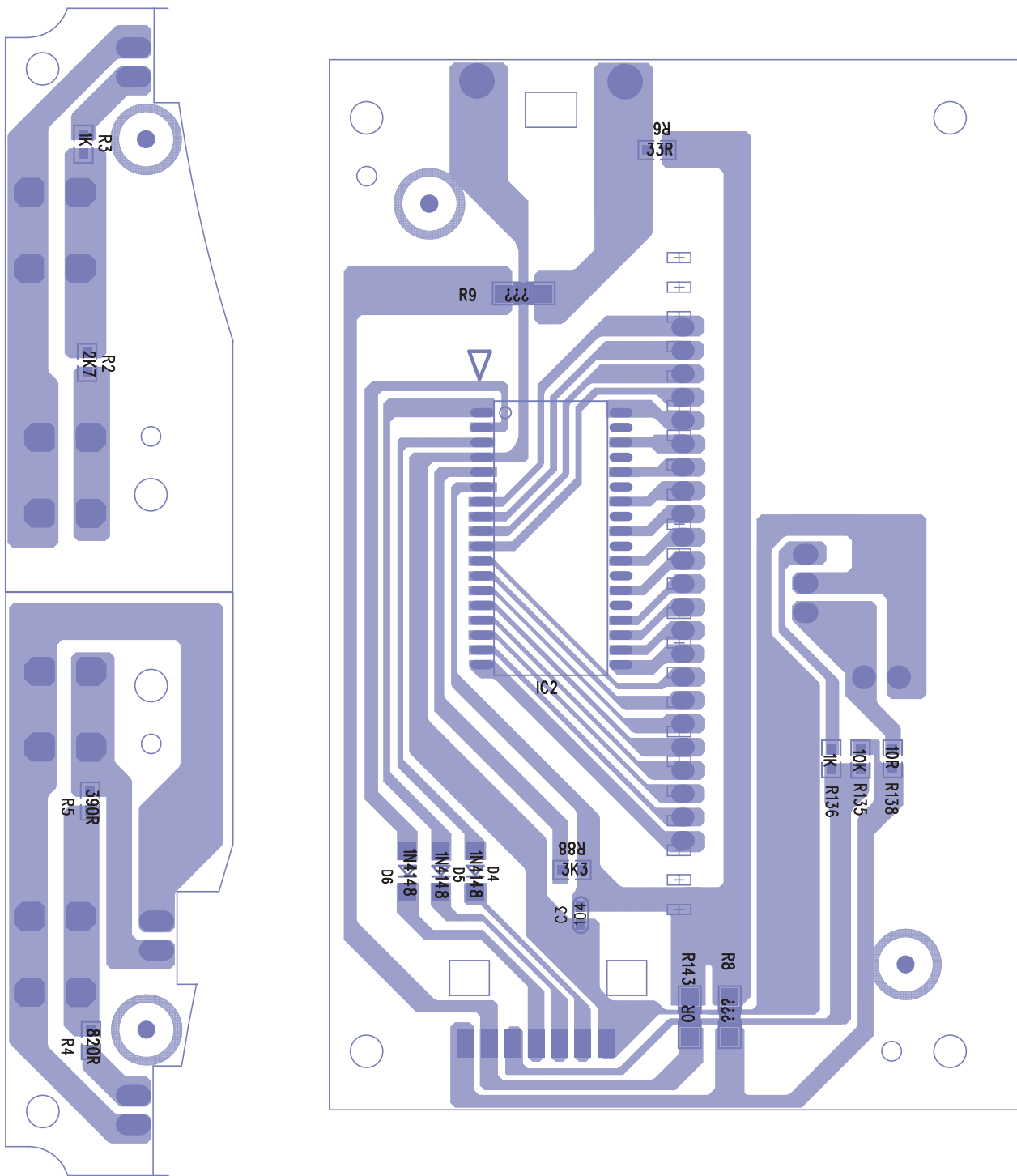
PRINTED CIRCUIT BOARDS



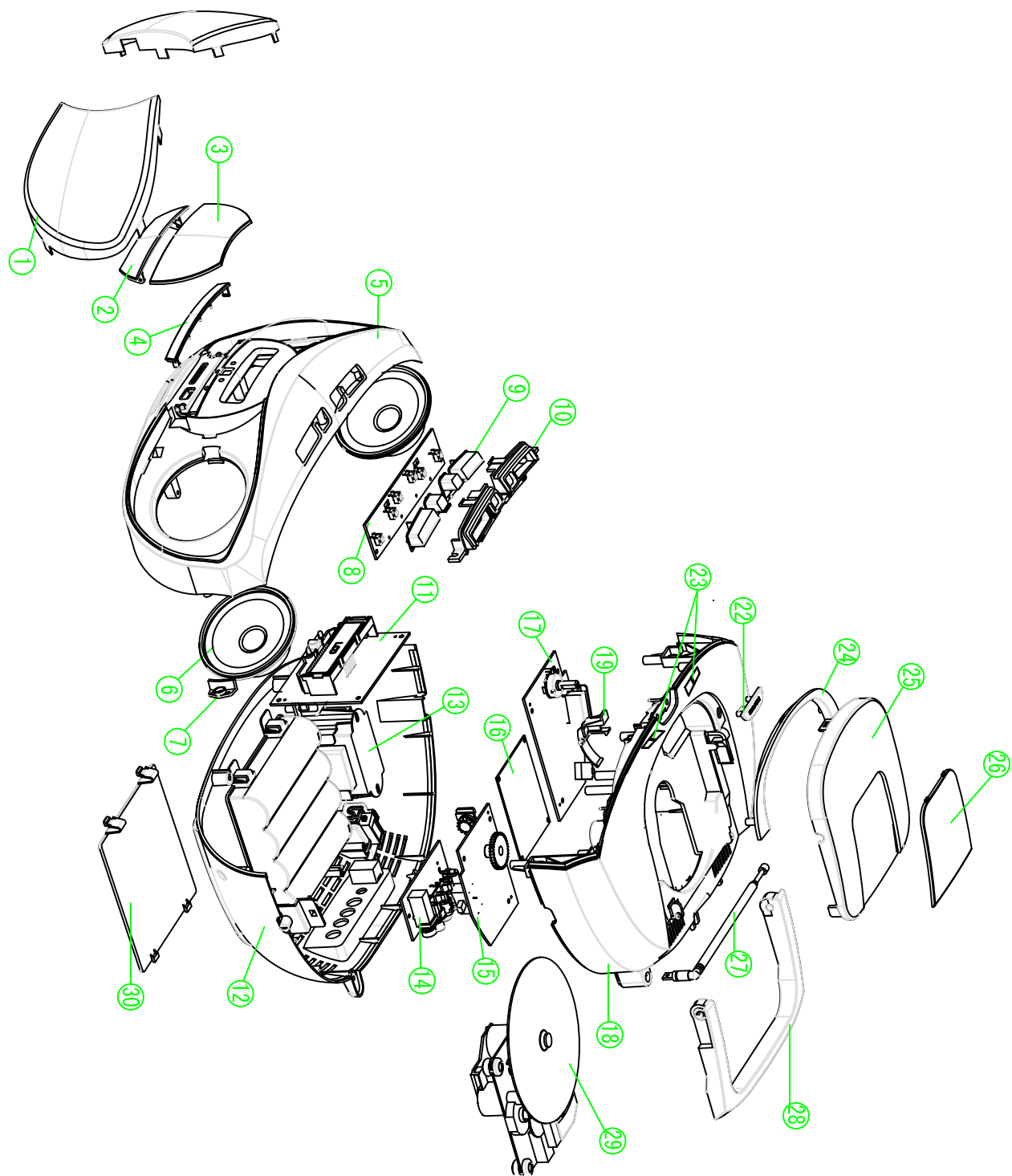
PRINTED CIRCUIT BOARDS



PRINTED CIRCUIT BOARDS



EXPLODED VIEW



No.	Disc.
1	speaker grill
2	USB slot
3	Display lens
4	front panel decoration
5	front panel
6	speaker
7	platic speaker code
8	key board
9	CD knob panel
10	CD knob panel decoration
11	display panel
12	buttom plastic
13	transformer
14	output board
15	Tunning switch knob
16	MPEG board
17	Amplifier board
18	top cover
19	CD door lock
20	CD door knob
21	button
22	top cover decoration
23	CD door
24	Top cover decoration circle
25	antenna
26	handle
27	lens
28	batteries door