

SPECIFICATIONS

Model No CD003
Section: FM TUNER

Date:2013-1-17
Page: 1 of 6

Measuring Items	Condition	Unit	Normal	Limit	Test Data		
					1	2	3
Tuning Frequency Range	Low End	MHz	64	+/-0.5			
	High End	MHz	108	+/-0.5			
Intermediate Frequency		MHz	10.7	+/-0.1			
Max. Sensitivity	64MHz	dB		20			
	90MHz	dB		20			
	106MHz	dB		20			
-30dB Quieting S/N Sensitivity	64MHz	dB		26			
	90MHz	dB		26			
	106MHz	dB		26			
Dial Calibration	64MHz	MHz		0.5			
	60MHz	MHz		0.5			
	106MHz	MHz		0.5			
IF Rejection	90MHz	dB	40	35			
Image Rejection	106MHz	dB	26	20			
AM Rejection	90MHz	dB	40	30			
RF Overload Distortion:100dB 75KHz Dev	90MHz	%	3	4			
10%THD Output Power 75KHz Dev	90MHz	W	8	7.8			
Maximum o/p	75KHz Dev 60dB	W	8	7.8			
Distortion at Max Volume 22.5KHz Dev	90MHz	%		10			
	Distortion at Max Volume, 75KHz Dev	90MHz	%		25		
-6dB Audio Fidelity	Low Freq	Hz	100	150			
	High Freq	KHz	4.5	3.8			
-3dB Limiting Sensitivity	90MHz	dB	30	35			
Distortion at Ref Output, 75KHz Dev	90MHz	%	1	3			
S/N Ratio with 1mV	90MHz	dB	50	40			
Modulation Hum	90MHz	dB	55	45			
Noise Output (Hum and Noise)	Max Vol	mV					
	Min Vol	mV		<3			
Auto Tuning Stop(Seek) Sensitivity	64MHz	dB	20	28			
	90MHz	dB	20	28			
	106MHz	dB	20	28			
Fall Out Voltage(AC)	90MHz	%		<70			
Fall Out Voltage(DC)	90MHz	%		<70			
Fall Out Voltage 9VDC Clock Backup		%		-30			
AFC Holding -3dB		KHz					
Stereo Separation: 1mV75KHzDev	100HZ	dB					
	1KHZ	dB		28			
	10KHZ	dB					
Stereo indicator Sensitivity	90MHz	dB	24	28			
Mono/Stereo Output Difference	90MHz	dB		1			
L/R Channel Output Difference		dB		3			

Test Conditions

1. Supply Voltage : AC 220-240V 50Hz
2. Standard Output : 50 Mw
3. Speaker impedance: 4 OHM

Approved By: 程挺锋

SPECIFICATIONS

Model NO: CD003

Date: 2013-1-17

Section: CD

Page: 2 of 6

Measuring Items	Condition	Unit	Normal	Limit	Test Data		
					1	2	3
Distortion at Max Vol CD-1(0dB)	1KHz	%		25			
CD10% THD Output Power CD-1(0dB)	1KHz	W	8	7.8			
CD Output Level Voltage(Max)	1KHz	W	8	7.8			
Frequency Response Speaker Output CD-1, 1Khz at Reference Output 0dB	63Hz	dB					
	100Hz	dB		+/-3			
	1KHz	dB					
	10KHz	dB		+/-3			
	20KHz	dB					
THD at Standard Output(at-10dB)	1KHz	%		1			
Separation:CD-1at Speaker Output	100Hz	dB					
	1KHz	dB	45	40			
	10KHz	dB					
S/N Ratio(Input Filter)	TCD-782	dB		45			
Dynamic Range	TCD-782	Sec					
Initial Reading Time	TCD-782	Sec		<10			
Access Time: TCD-782	First Track	Sec		<8			
	Last Track	Sec		<10			
Interruption Philips#444A	Scratch	mm		0.8			
	Black Doc	mm		0.6			
	Fingerprint	mm		0.075			
Eccentricity	TCD-712R	mm					
Vertical Deviation	TCD-713R	mm		0.8			
Hum and Noise	Vol Max	mV		<10			
	Vol Min	mV		<3			
Minimum Operating Voltage(AC)		%		<80			
Minimum Operating Voltage(DC)		%		<70			
Maximum power Consumption	Full load burn-in	W					

Test Conditions

1. Supply Voltage : AC 220-240V 50Hz
2. Standard Output : 50 mW
3. Speaker impedance: 4 OHM

Approved By: 程挺锋

SPECIFICATIONS

Model NO: CD003

Date: 2013-1-17

Section:EQ

Page: 3 of 6

Measuring Items	Condition	Unit	Normal	Limit	Test Data		
					1	2	3
ROCK	20Hz	dB					
	100Hz	dB					
	1K	dB					
	10K	dB					
	20K	dB					
CLAS	20Hz	dB					
	100Hz	dB					
	1K	dB					
	10K	dB					
	20K	dB					
POP	20Hz	dB					
	100Hz	dB					
	1K	dB					
	10K	dB					
	20K	dB					
JAZZ	20Hz	dB					
	100Hz	dB					
	1K	dB					
	10K	dB					
	20K	dB					
FLAT	20Hz	dB					
	100Hz	dB					
	1K	dB					
	10K	dB					
	20K	dB					

Test Conditions

1. Supply Voltage : AC 220-240V 50Hz
2. Standard Output : 50 mW
3. Speaker impedance: 4 OHM

Approved By: 程挺锋

SPECIFICATIONS

Model NO: CD003

Date: 2013-1-17

Section: Audio

Page: 4 of 6

Measuring Items	Condition	Unit	Normal	Limit	Test Data		
					1	2	3
Max Power O/P at Headphone	90MHz	MW					
FM 75KHz Dev 1KHz CD 0dB 1KHz AUX IN 500mV 1KHz BLUETOOTH 784 0dB 1KHz		dB		+/-3			
	90KHz	dB		+/-3			
	784 0dB 1KHz	dB		+3/-0			
	0dB 1KHz	dB		+3/-0			
	784 0dB 1KHz	dB					
Bass Boost	100Hz	dB					
	125Hz	dB					

Test Conditions

- 1. Supply Voltage : AC 220-240V 50Hz
- 2. Standard Output : 50 Mw
- 3. Speaker impedance: 4 OHM

Approved By: 程挺锋

SPECIFICATIONS

Model NO: CD003

Date: 2013-1-17

Section: AUX SECTION

Page: 5 of 6

Measuring Items	Condition	Unit	Normal	Limit	Test Data		
					1	2	3
10% T.H.D Power O/P	500MV(Input)	W	8	7.8			
Stereo Separation	180MV(Input)	dB	38	35			
Min Hum	180MV(Input)	mV	0.7	2			
Max Hum		mV					
S/N		dB	55	50			
Total Harmonic Distortion		%	0.5	1			

Test Conditions

1. Supply Voltage : AC 220-240V 50Hz
2. Standard Output : 50 Mw
3. Speaker impedance: 4 OHM

Approved By: 程挺锋

SPECIFICATIONS

Model NO: CD003

Date:2013-1-17

Section: BLUETOOTH

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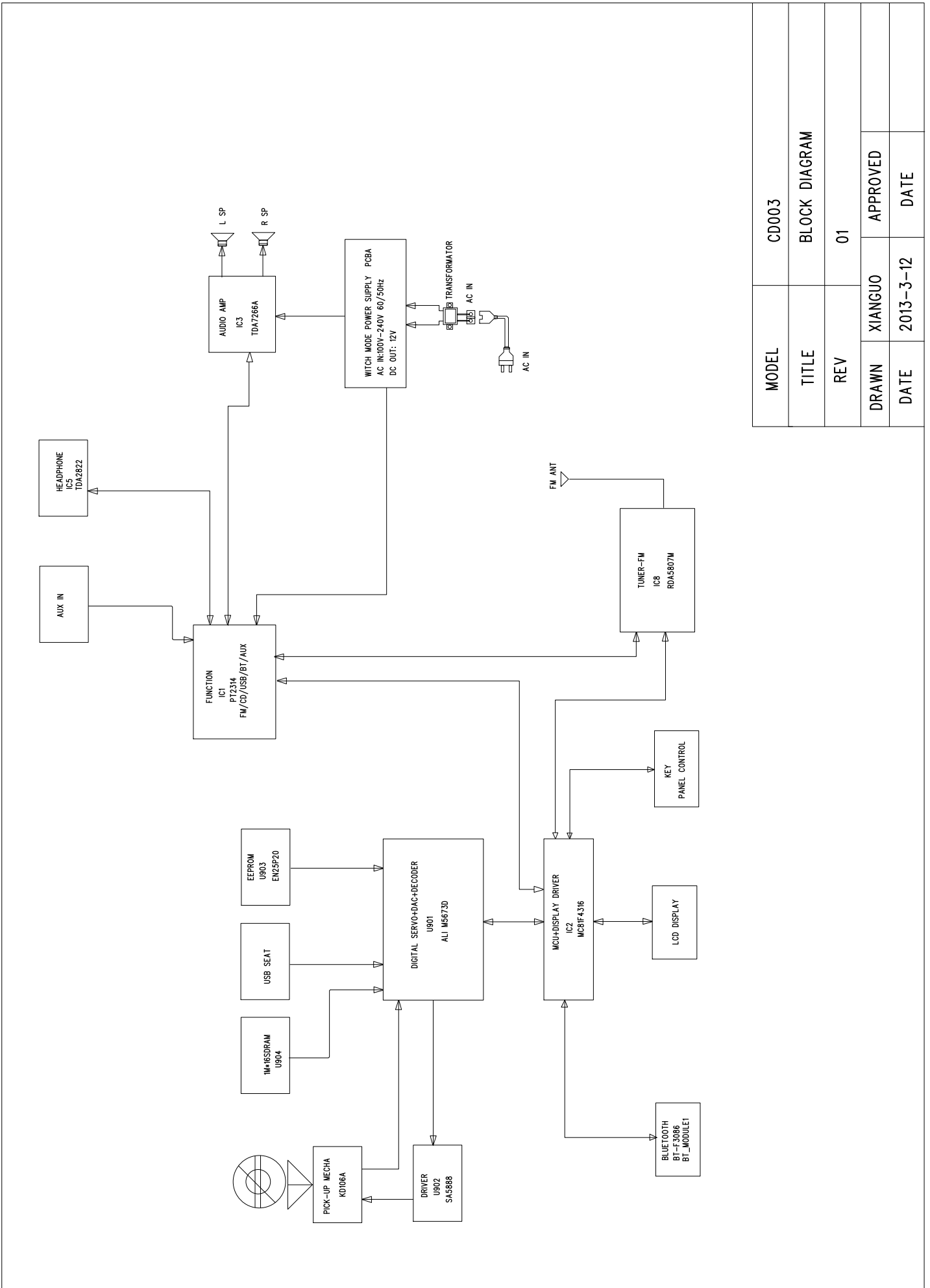
Measuring Items	Condition	Unit	Normal	Limit	Test Data		
					1	2	3
Distortion at Max Vol 784(0dB)	1KHz	%		25			
CD10% THD Output Power 784(0dB)	1KHz	W	8	7.8			
CD Output Level Voltage	1KHz	W	8	7.8			
Frequency Response Speaker Output CD-1, 1Khz at Reference Output 0dB	63Hz	dB					
	100Hz	dB		+6/-3			
	1KHz	dB					
	10KHz	dB		+6/-3			
	20KHz	dB					
THD at Standard Output(at-10dB)	1KHz	%		1			
Separation:CD-1at Speaker Output	100Hz	dB					
	1KHz	dB	45	40			
	10KHz	dB					
S/N Ratio(Input Filter)	TCD-784	dB		40			
Hum and Noise	Vol Max	mV		<15			
	Vol Min	mV		<5			
Minimum Operating Voltage(AC)		%		<80			
Minimum Operating Voltage(DC)		%		<70			

Test Conditions

1. Supply Voltage : AC 220-240V 50Hz
2. Standard Output : 50 Mw
3. Speaker impedance: 4 OHM

Approved By: 程挺锋

BLOCK DIAGRAM

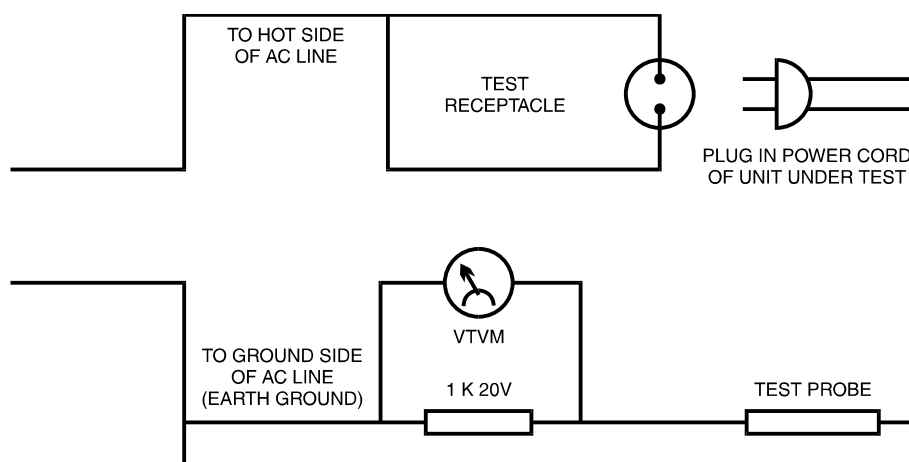


MODEL	CD003		
TITLE	BLOCK DIAGRAM		
REV	01		
DRAWN	XIANGUO	APPROVED	
DATE	2013-3-12	DATE	

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

ALIGNMENT AND ADJUSTMENT

SERVICE ADJUSTMENT

Lubrication

The mechanical parts are factory coated with a thin coat of light grease and should not require further lubrication. If a light grease is applied, be careful not to get any grease on the play/record head or erase head, hubs, pulleys, tapes reels, drive belts, or switches. Use a good lubricant such as Silicon Lube G331L or Lubricate (00).

Service Check

Before aligning the mechanism, wipe off any accumulated dirt with denatured alcohol. Wipe around parts where the tape contacts and around all rotating parts. Drive belts are specially processed. Do not clean them with alcohol.

CD PLAYER CHECKING PROCEDURES

A. WAVE E/F BALANCE ADJUSTMENT

- 1) Test Point : VC, TS10.
- 2) Test Disc : Sony Test CD Type 3.
- 3) Test Equipment :
Scope : DC 0.2 V 0.5 ms.
- 4) Test Mode : Play Sony CD, Type 3, Track 1, Press FF.
(Fast Forward), Until A=B (as Figure Bellow).

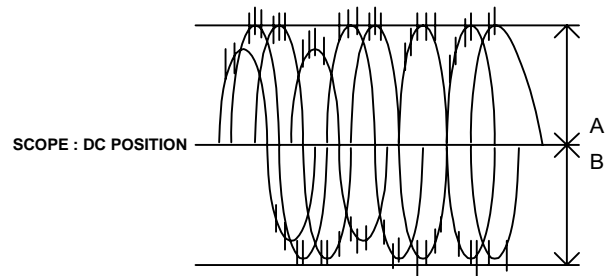


Figure A

B. FOCUS-BIAS ADJUSTMENT

- 1) Test Point : VC RFO.
- 2) Test Disc : Sony Test CD, Type 3.
- 3) Test Equipment :
Scope : DC 0.5 V 0.5 μ s.
- 4) Test Mode : Play Sony CD, Type 3, Track 1,
Make Wave Form (Eye Pattern) Max. And Clear.

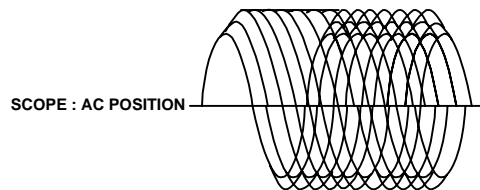
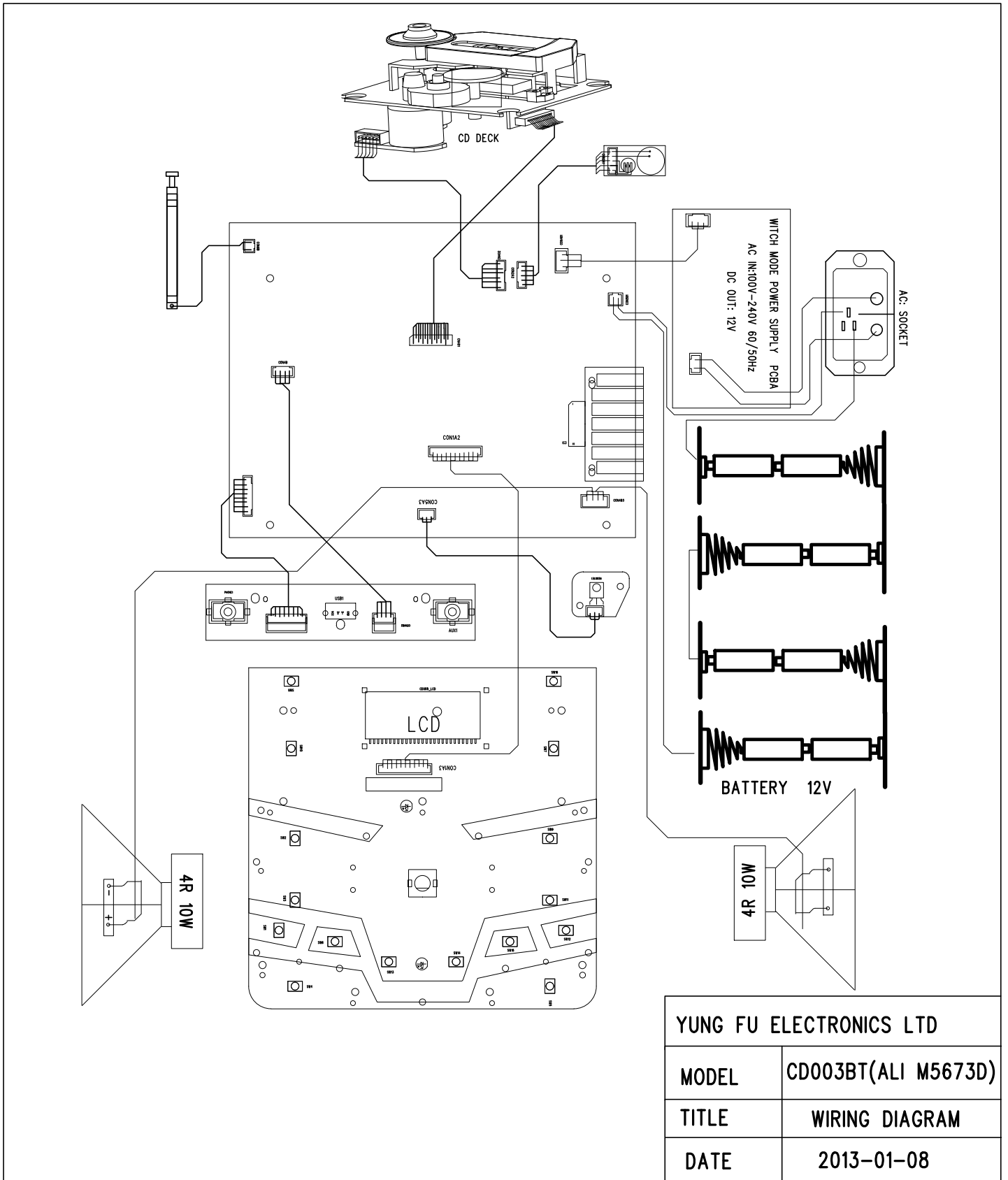


Figure B

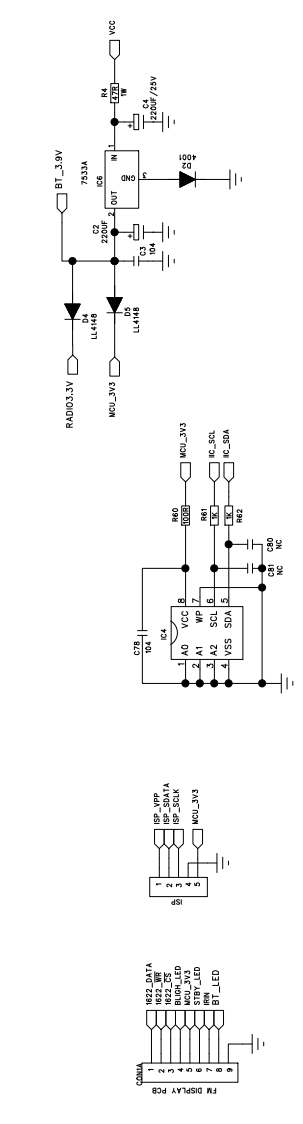
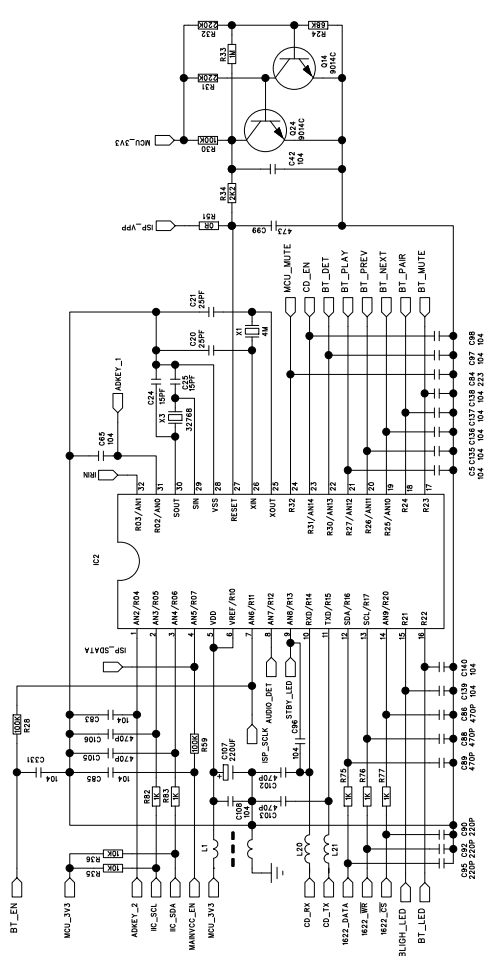
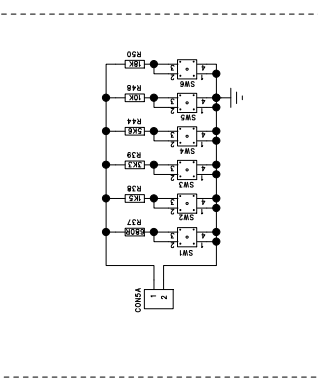
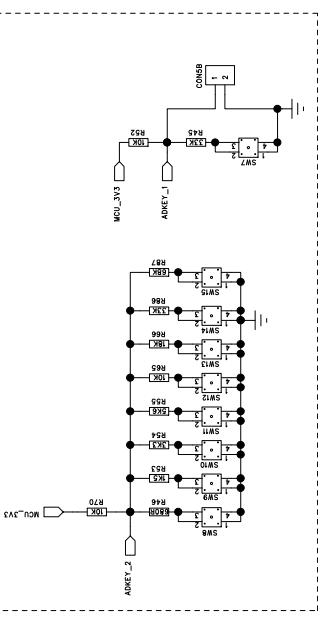
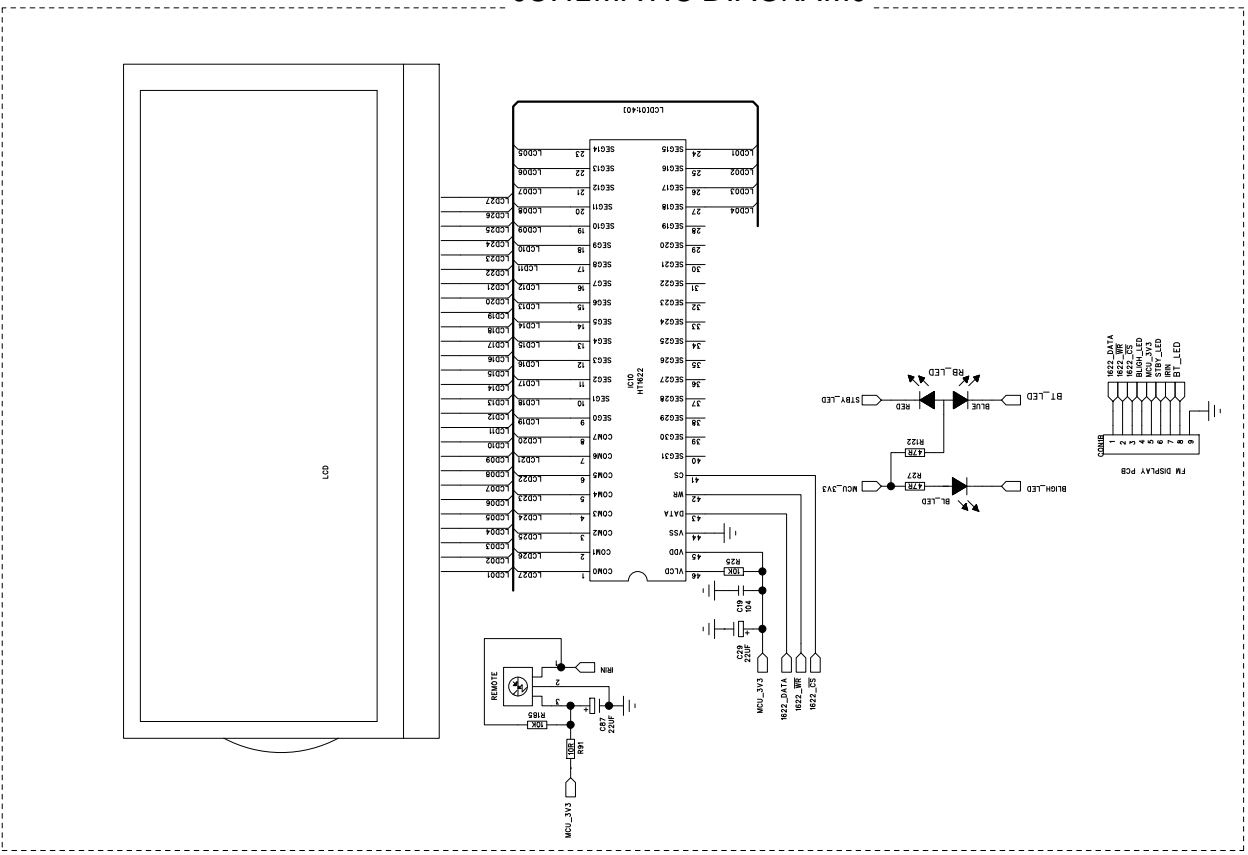
WIRING DRAWING



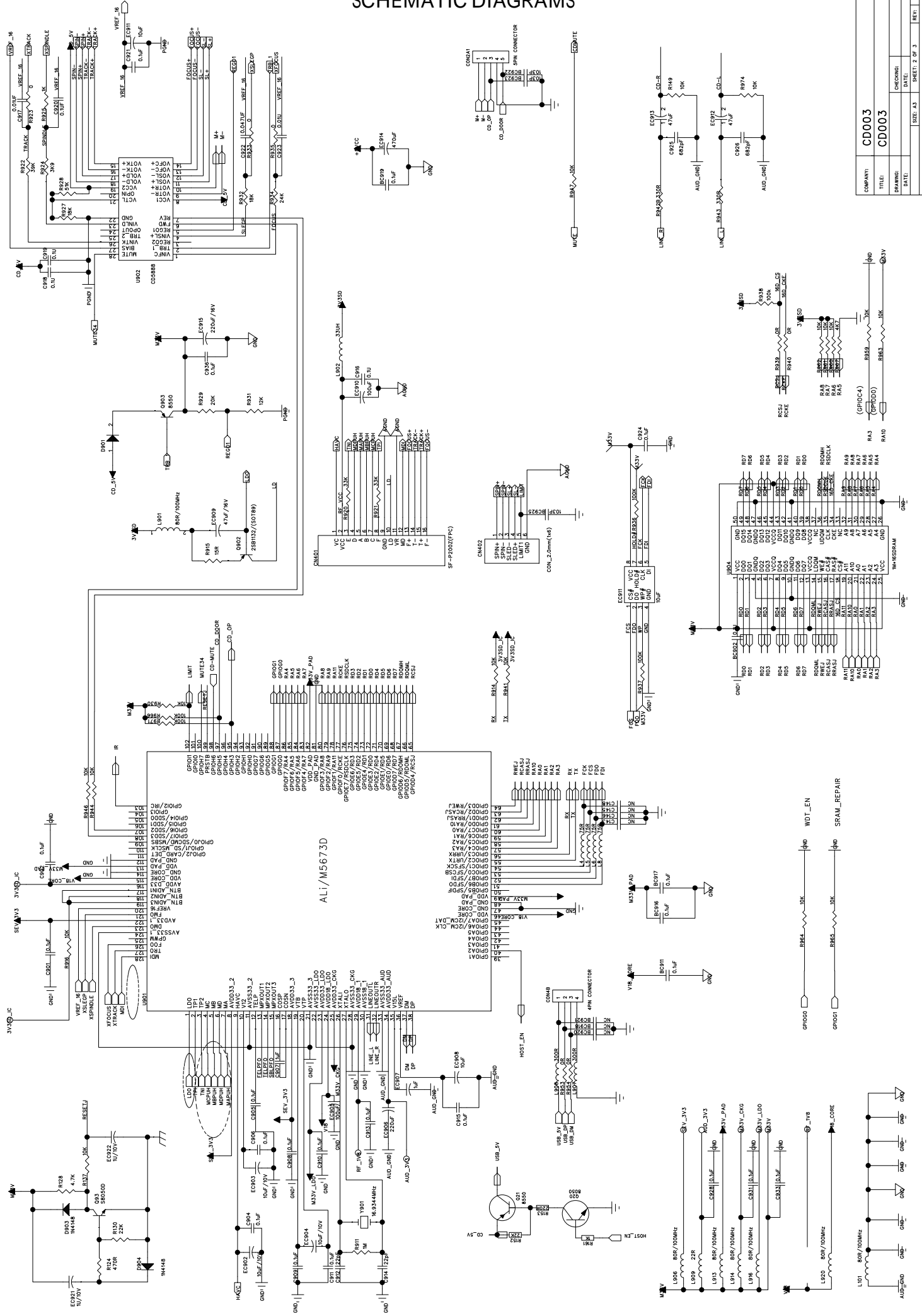
YUNG FU ELECTRONICS LTD	
MODEL	CD003BT(ALI M5673D)
TITLE	WIRING DIAGRAM
DATE	2013-01-08

SCHEMATIC DIAGRAMS

COMPANY:	CD003		
TITLE:	CD003_MCU+DISPLAY		
DRAWING:	DATE:	DESIGNED:	REV:
DATE:	SHEET: 1 OF 3	REV:	1

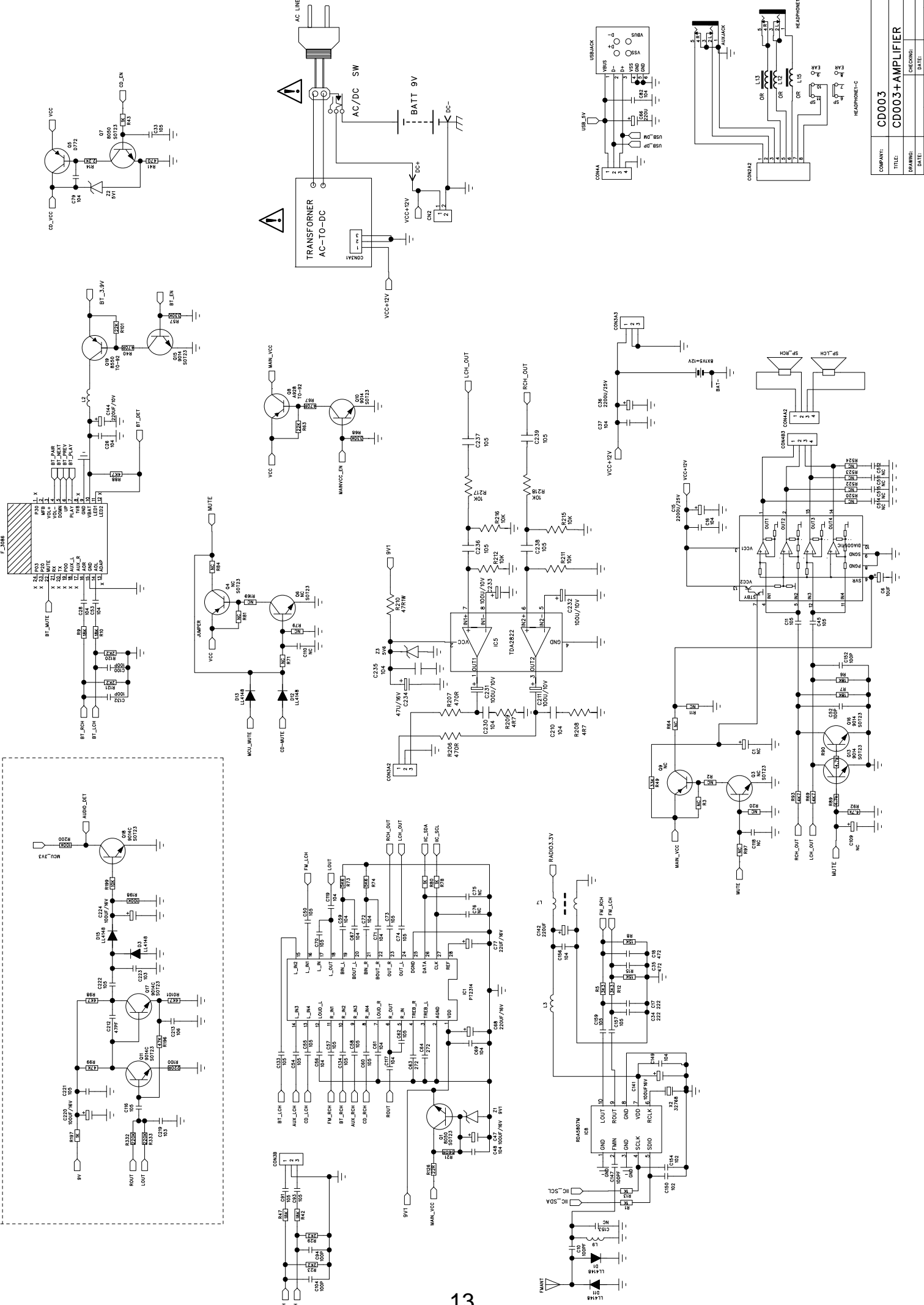


SCHEMATIC DIAGRAMS



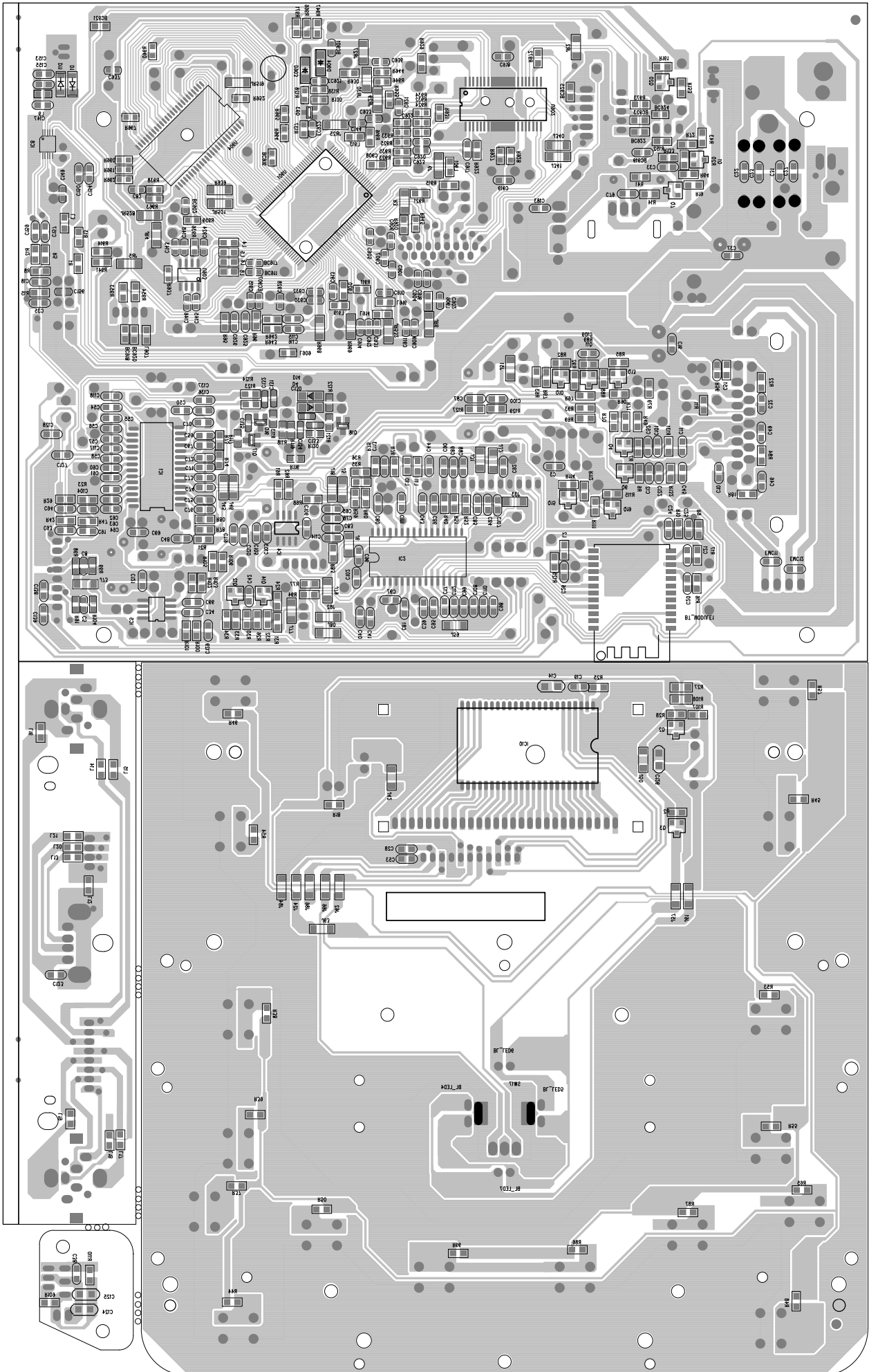
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TITLE:	CD003
DATE:	
DESIGNER:	
CHECKER:	
DATE:	
SHEET 2 OF 3	REV. 1

SCHEMATIC DIAGRAMS

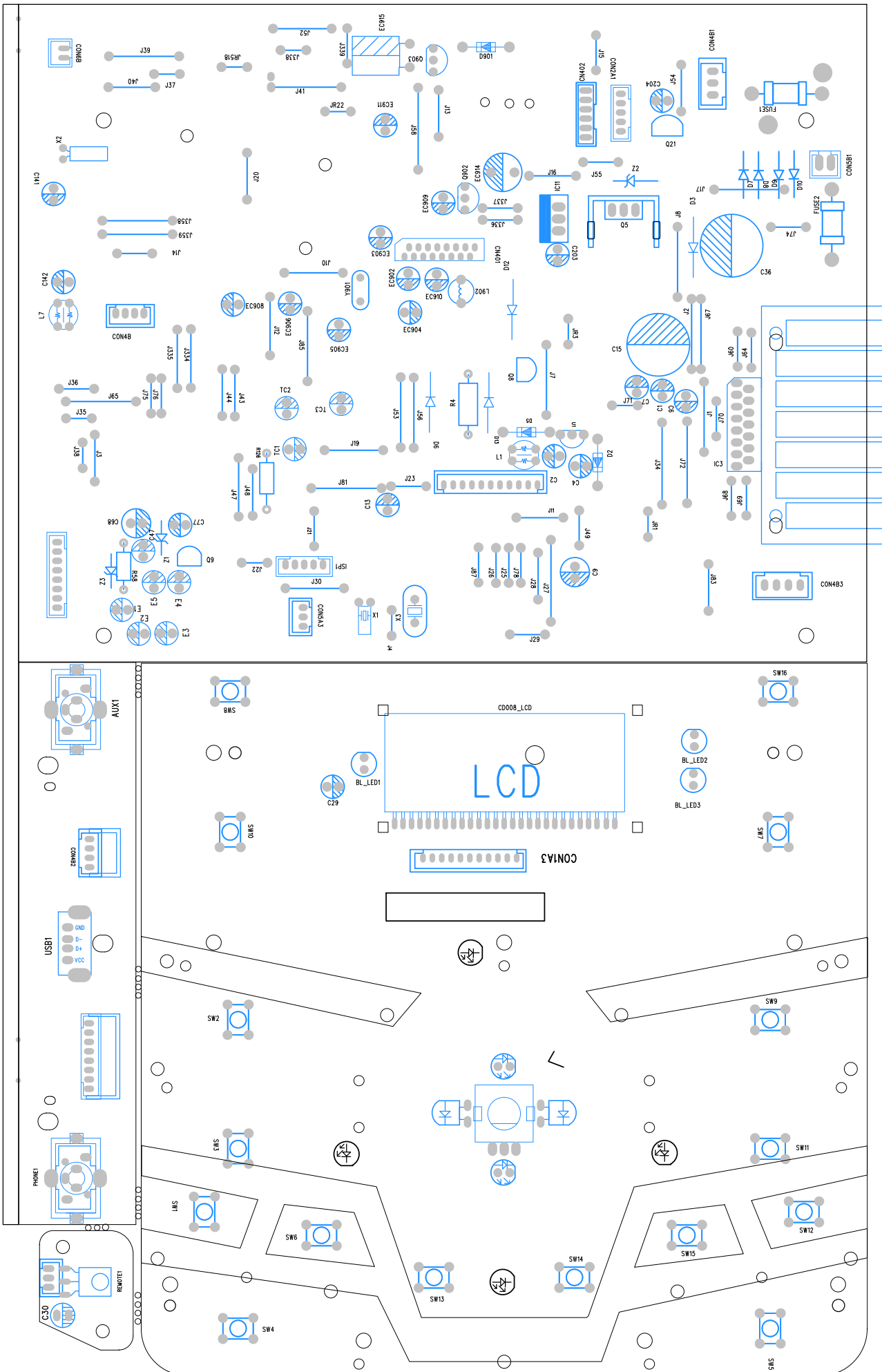


COMPANY:	CD003	DATE:	REV. 1
TITLE:	CD003+AMPLIFIER	CHECKING:	
DRAWING:		DATE:	
DATE:		SHEET 3 OF 3	REV. 1

PRINTED CIRCUIT BOARDS

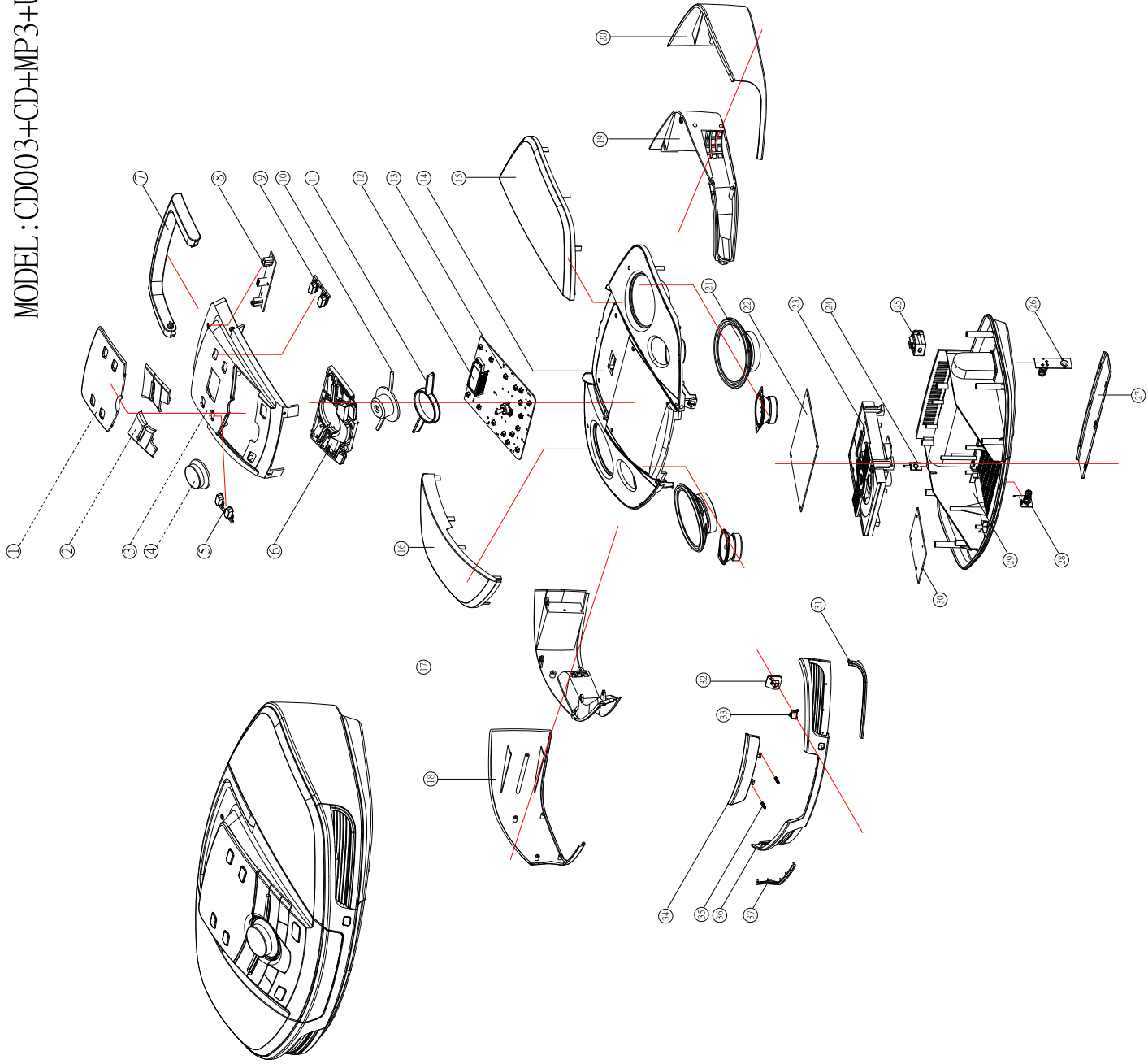


PRINTED CIRCUIT BOARDS



MODEL : CD003+CD+MP3+USB

EXPLODED VIEW PART LIST



NO.	DESCRIPTION	QTY
1	DISPLAY LENS	1
2	EQ-FUNCTION KNOB	1
3	TOP-COVER	1
4	VOLUME-KNOB	1
5	KEY-KNOB-1	1
6	KNOB-BRACKET	1
7	HANDL	1
8	PCB-USB	1
9	KEY-KNOB-2	1
10	VOLUME-BACK-LIGHT	1
11	VOLUME-RING	1
12	LCD-BRACKET	1
13	LCD-KEY-PCB	1
14	TOP-CABINET	1
15	LEFT SPEAKER GRILL	1
16	RIGHT SPEAKER GRILL	1
17	LEFT-TONE	1
18	LEFT-FACE	1
19	RIGHT-TONE	1
20	RIGHT-FACE	1
21	SPEAKER	4
22	MAIN-PCB	1
23	CD-DECK	1
24	BATTERY PLATE (+)	1
25	AC SOCKET	1
26	BATTERY PLATE (+ -)	1
27	BATTERY-DOOR	1
28	BATTERY PLATE (-)	1
29	BOTTOM-CABINET	1
30	PC-IF	1
31	LEFT-DIANDUTTIAO	1
32	IR-PCB	1
33	IR-LENS	1
34	CD-DOOR	1
35	CD-DOOR-SPRING	2
36	FRONT-PANLE	1
37	RIGHT-DIANDUTTIAO	1
38		
39		
40		
41		
42		