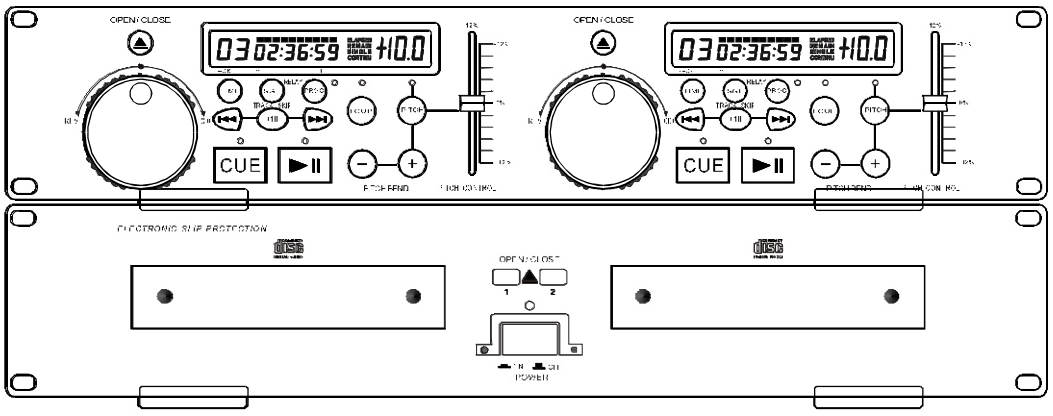
DJ-Tech Professional

PROFESSIONAL DUAL CD PLAYER



SERVICE MANUAL

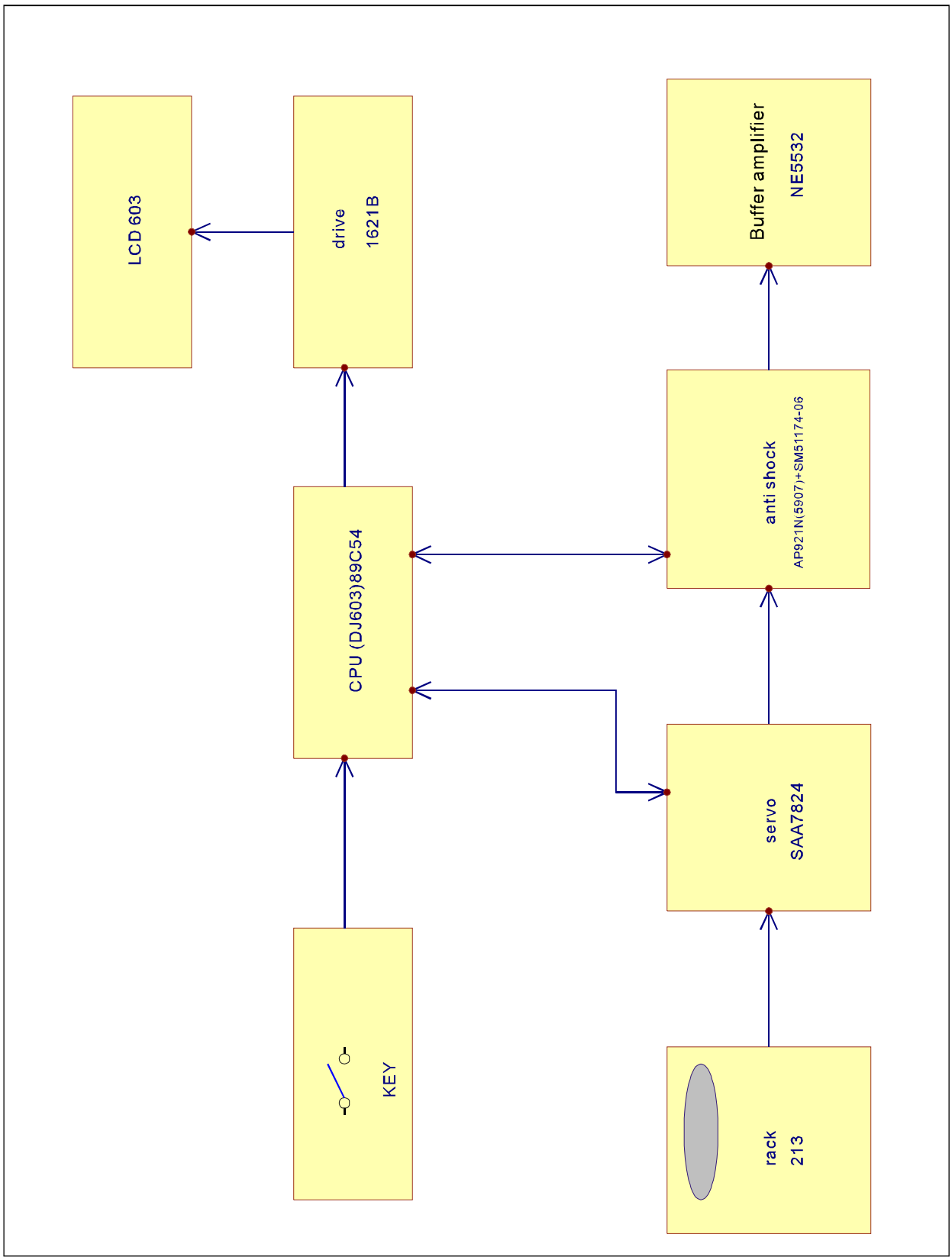
CONTENT

1.Electric property criteria

PARAMETER	
Lineal quantification :	24 bits
Sampling frequency :	44.1khz
Oversampling :	8X
D/A Converter	24 bits
Frequency response :	20 Hz -20 KHz
Harmonic distortion:	0.03%
Signal/noise (A weighted):	(-70dB)
Dynamic:	80 dB
Separation:	45dB
Output level:	2 V
Load impedance :	more than 10 KOhms
Speed edge (PITCH):	(+/-16%)
Power supply:	110V/220V (115V/230V) AC 25 W
Dimensions:	Control unit:482 x 90 x 65 mm(width x height x depth)
	Main unit: 482 x 90 x 250mm.(width x height x depth)
Weight:	6.3 kgs

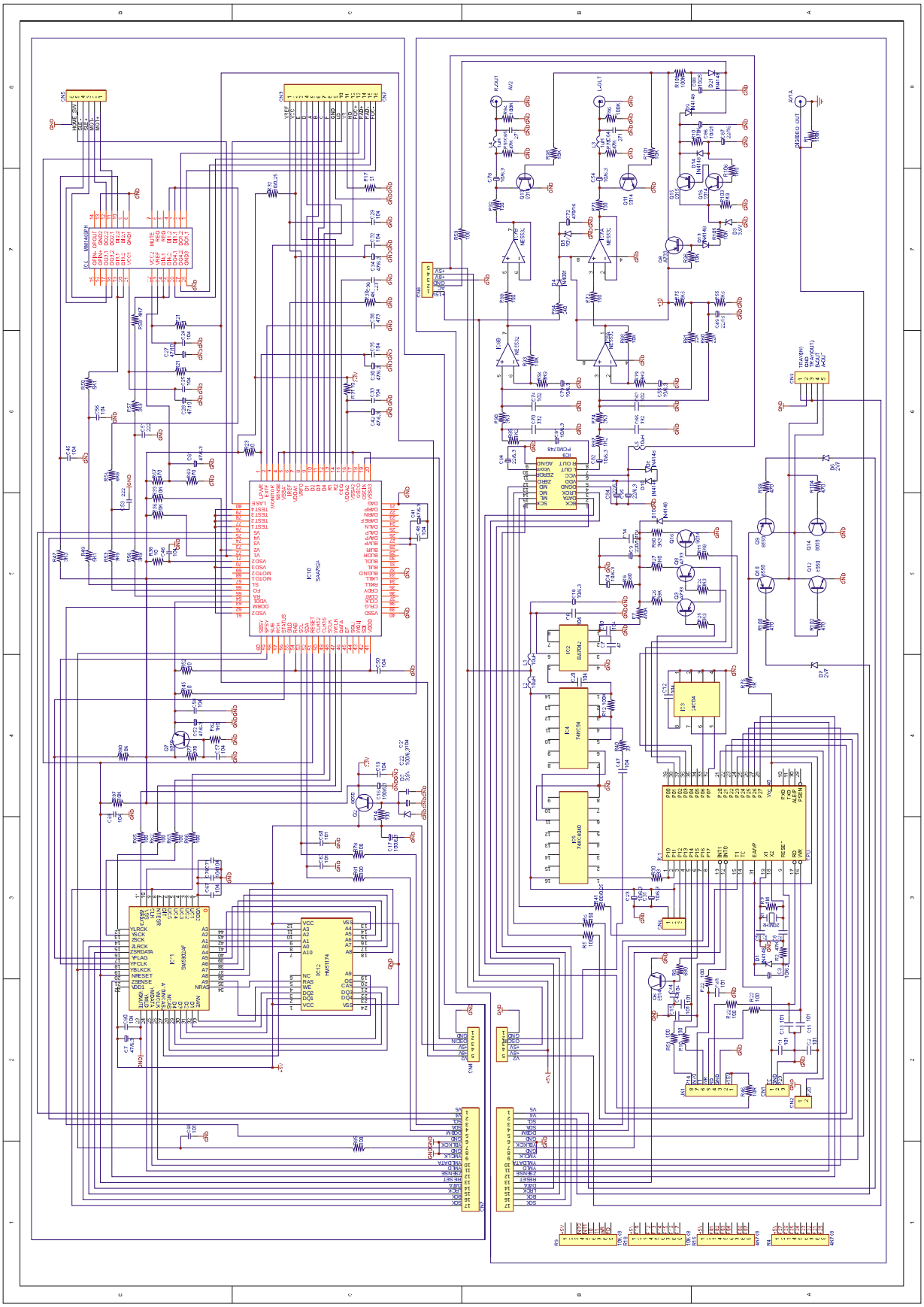
Specifications are subject to change without notice.

2. block scheme



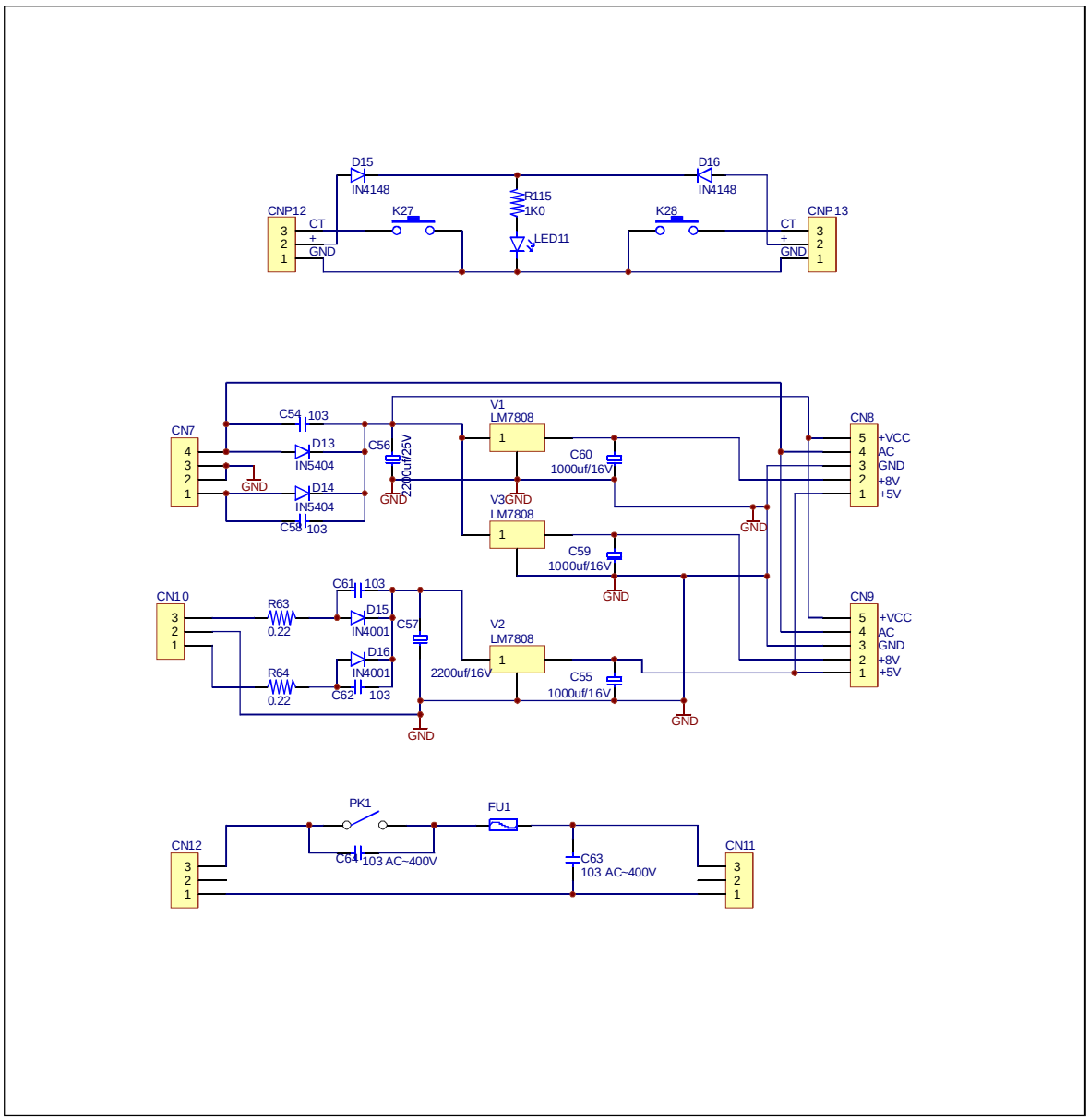
3. Schematic circuit

Main unit



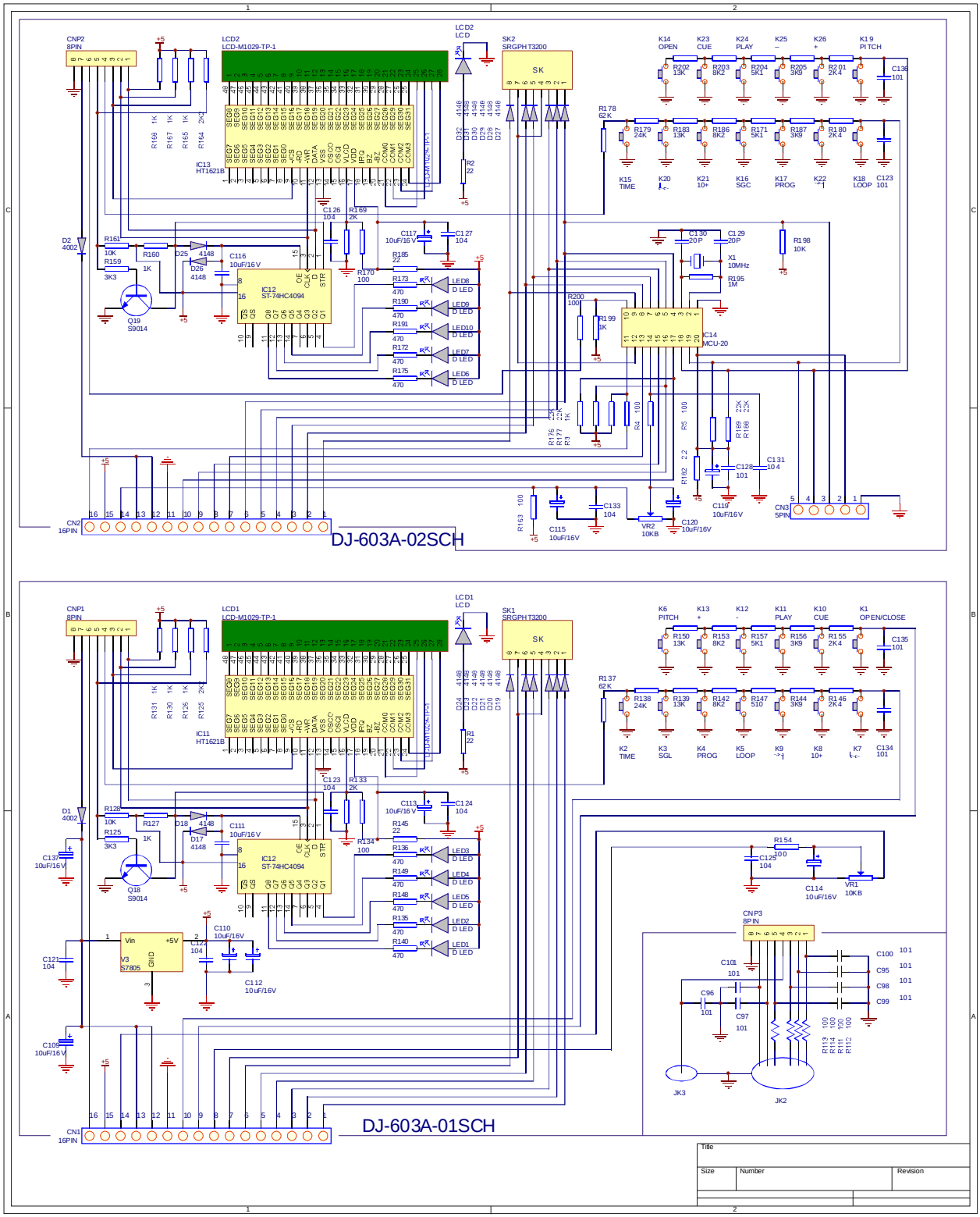
3. Schematic circuit

Main unit

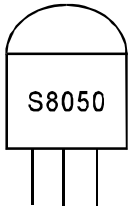
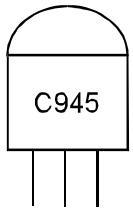
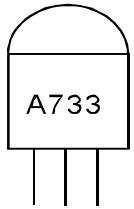
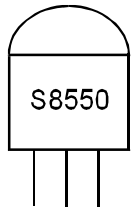
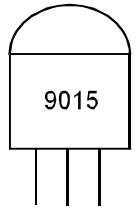
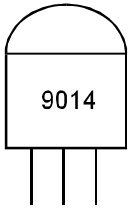
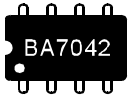
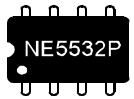
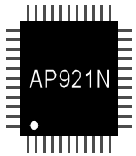
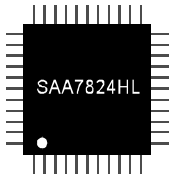
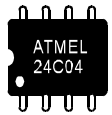


3. Schematic circuit

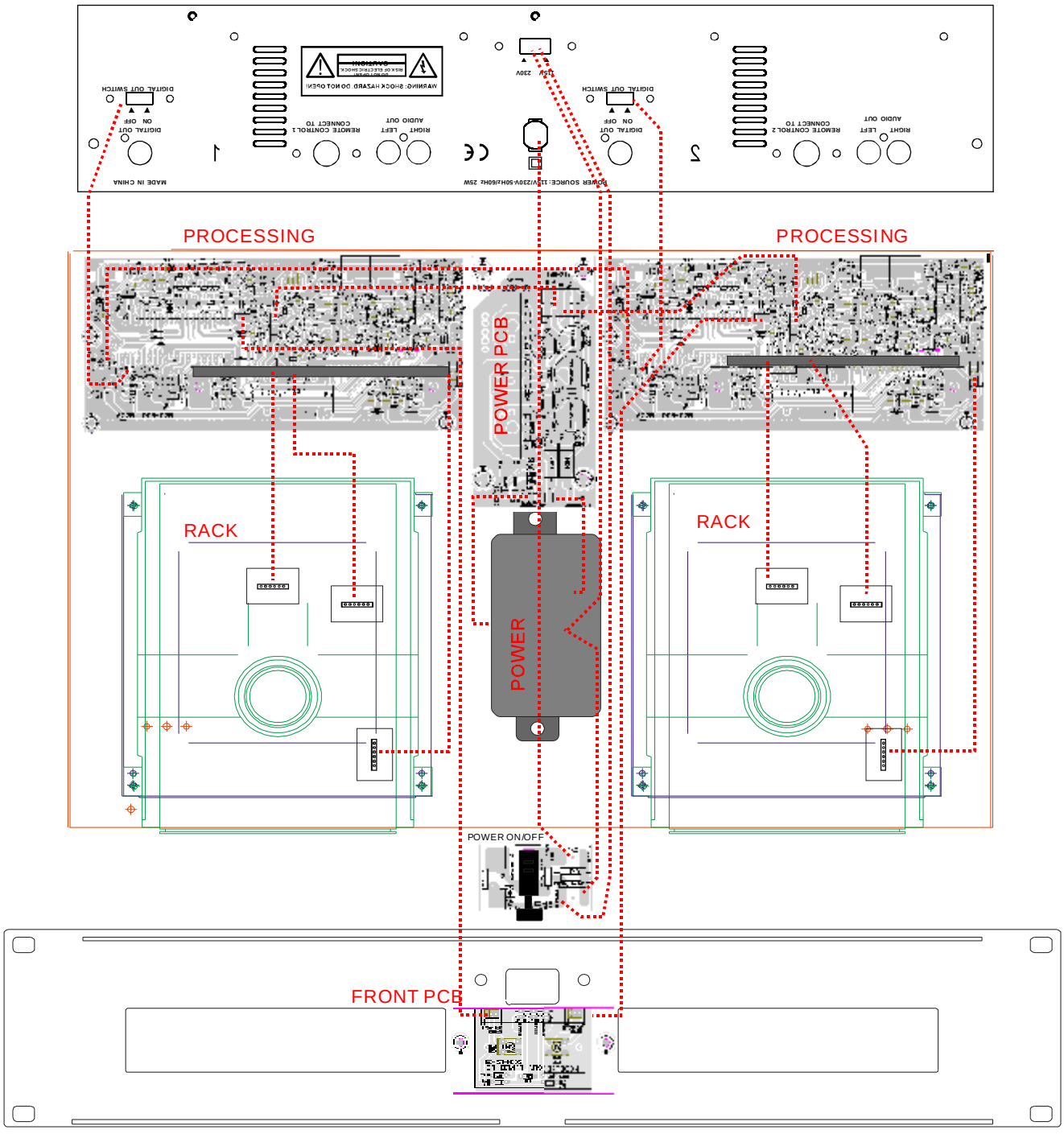
Control unit



Triode、integrated form

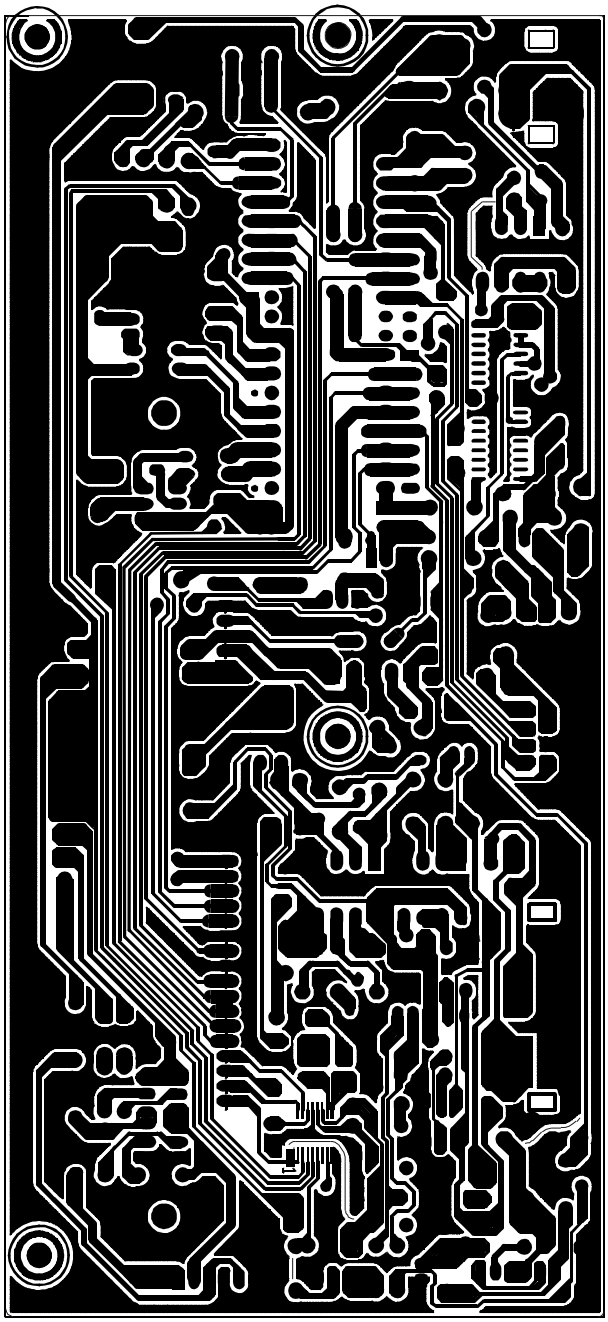
 S8050	 C945	 A733	 S8550	 9015
 9014	 BA7042	 NE5532P	 PCM1742E	 MM1 469PH
 HC4040	 74HC04D	 AP921N	 SAA7824HL	 9733
 DJ603 CPU	 ESC1621B	 24C04		

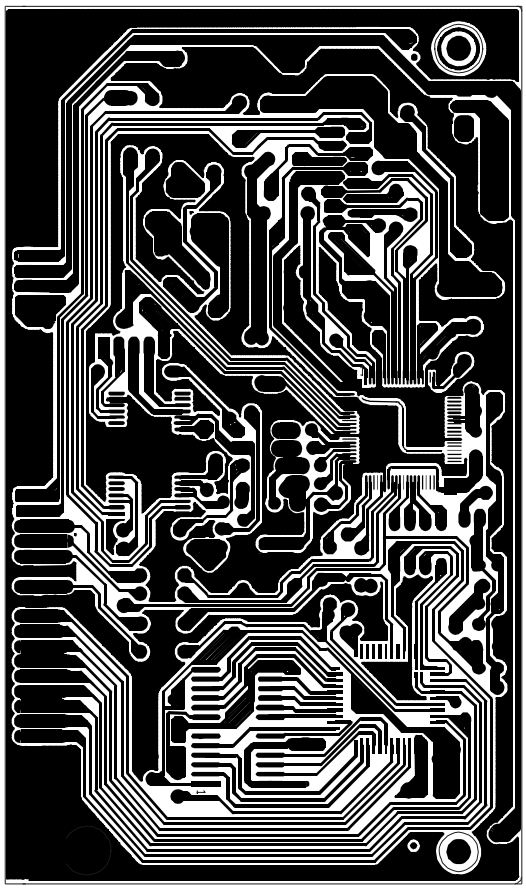
5.Wiring diagram



6.Copper map

Main unit





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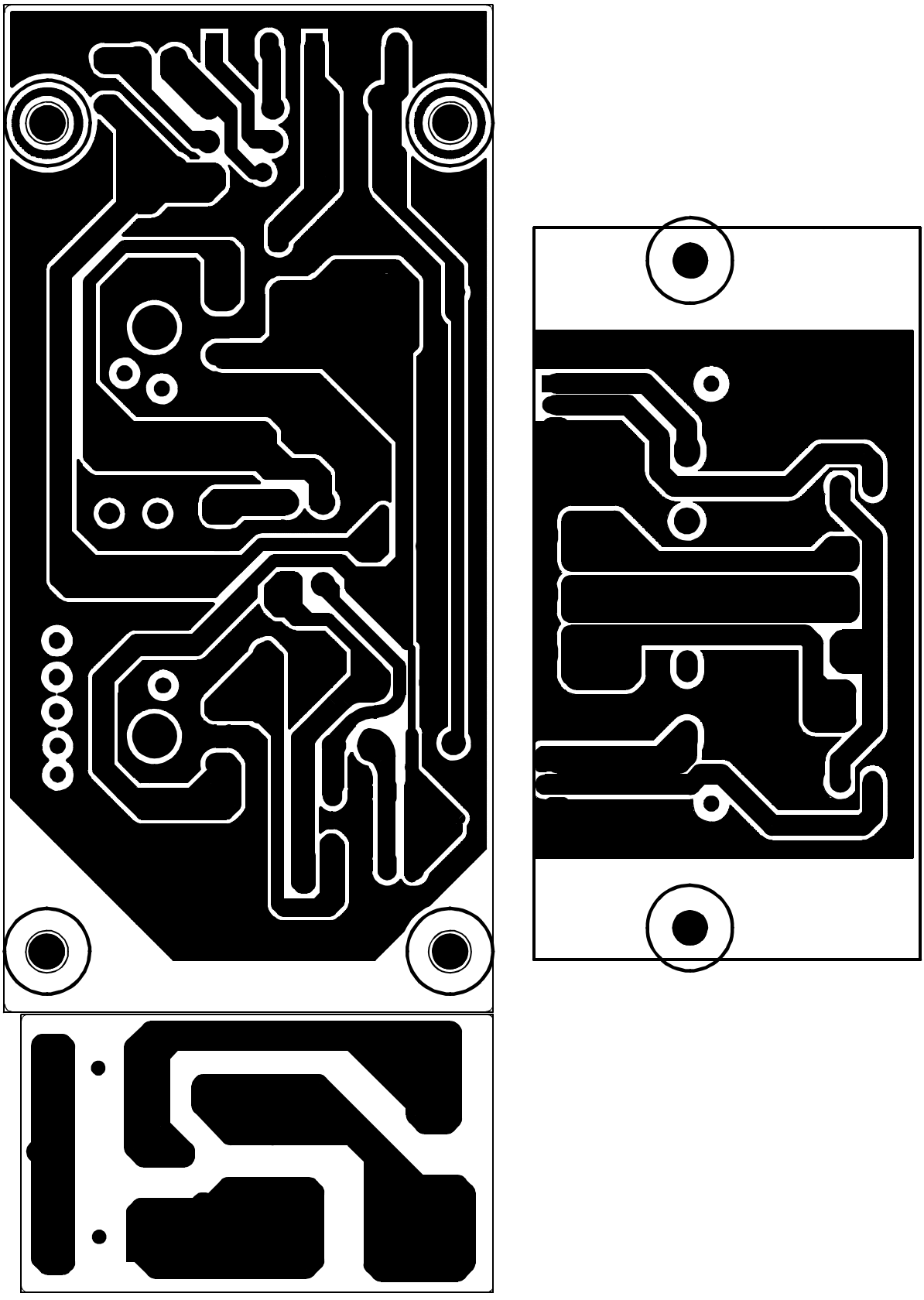
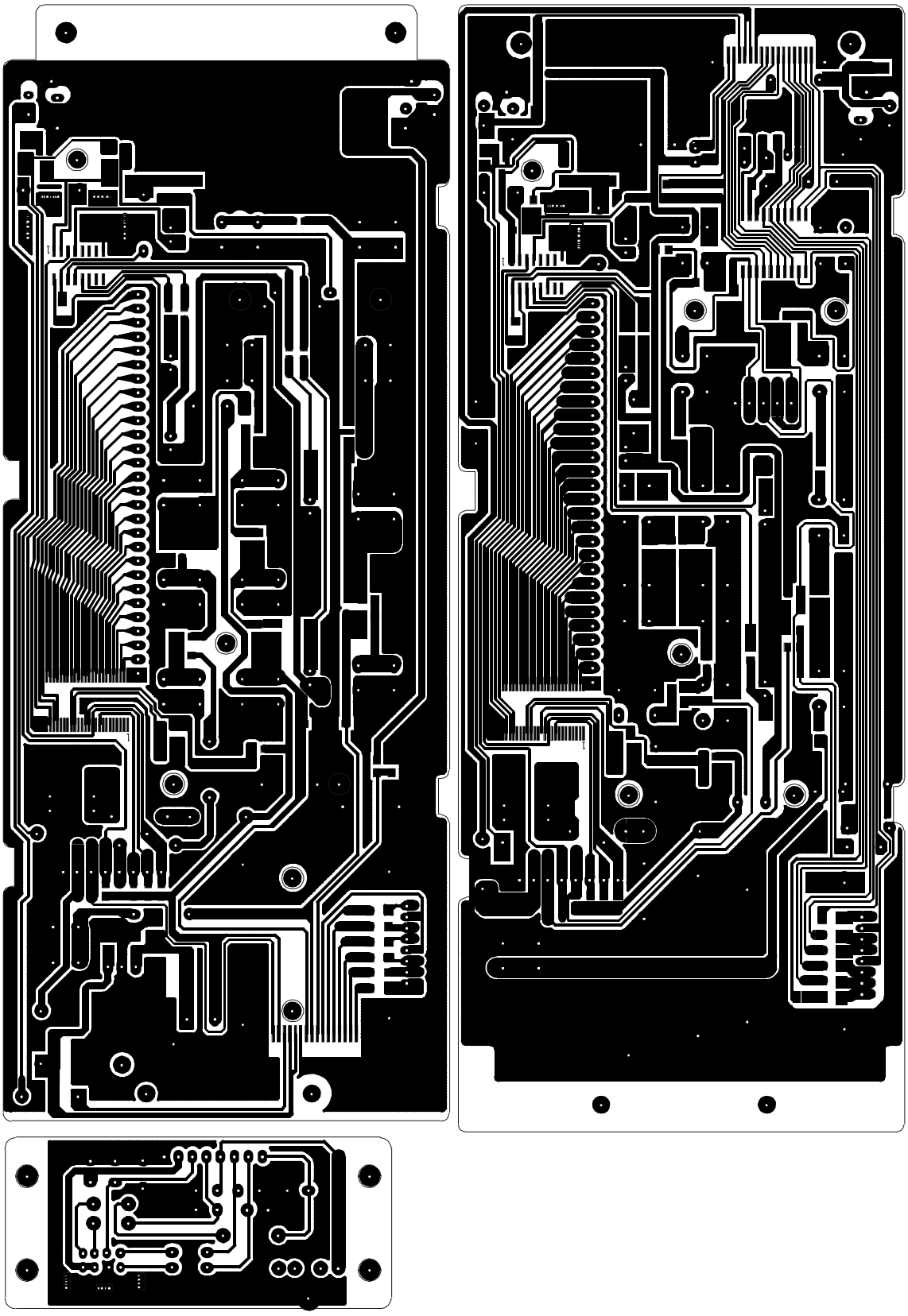
Main unit



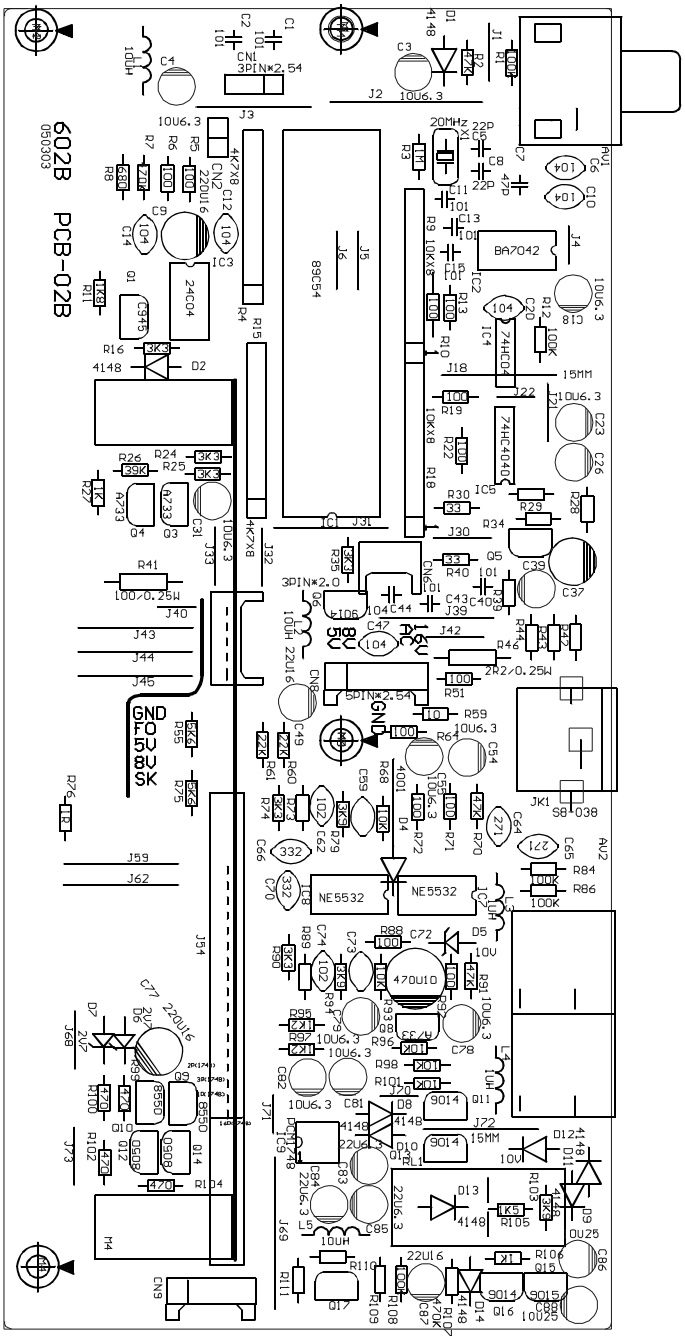
6.Copper map

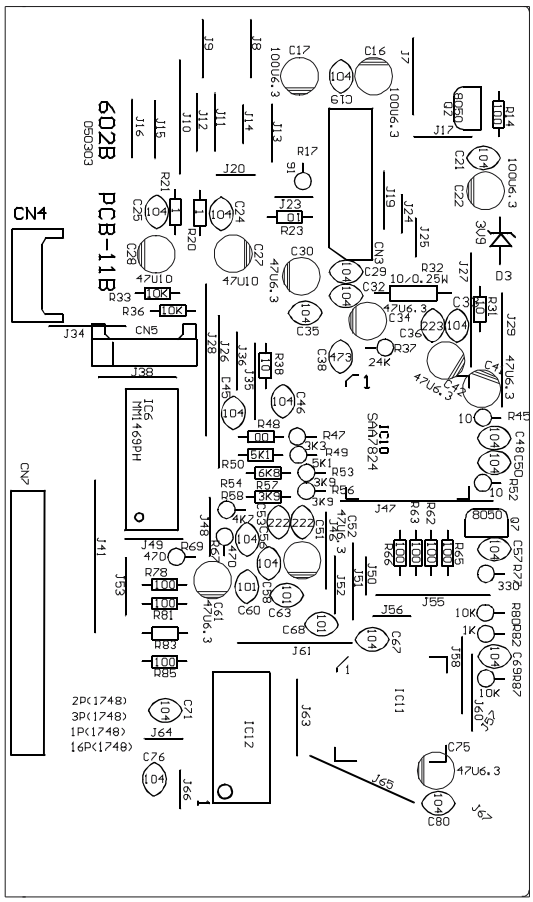
Control unit



7.Distributed

main unit





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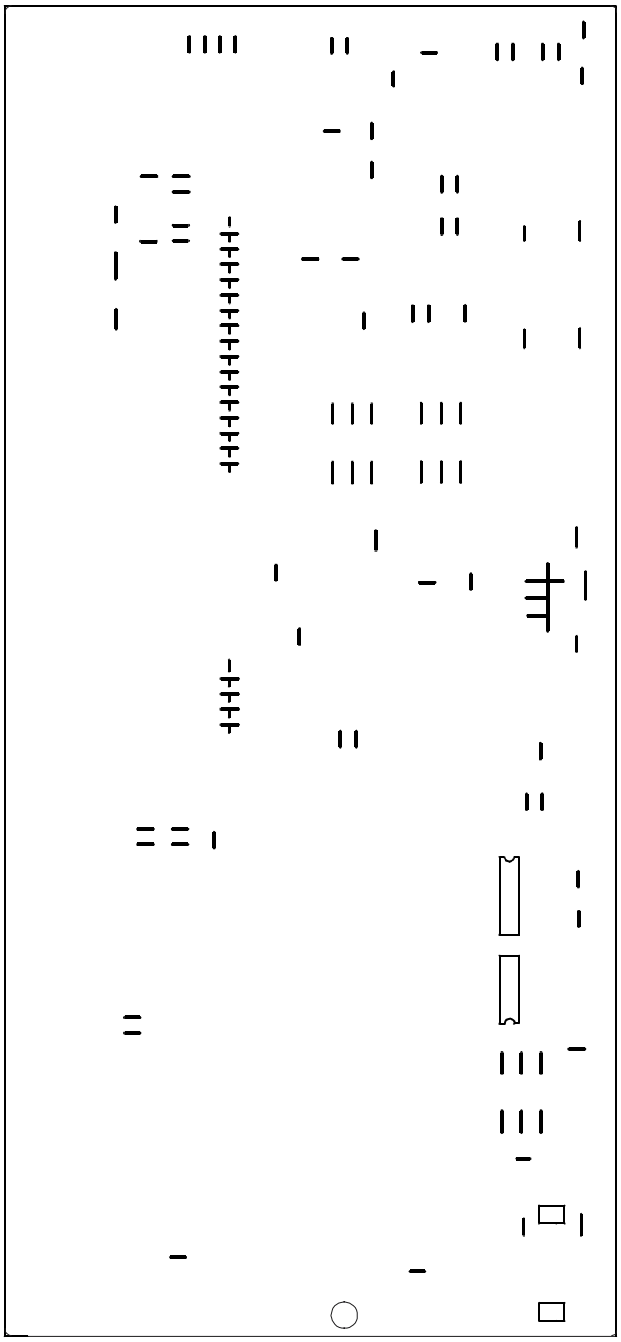
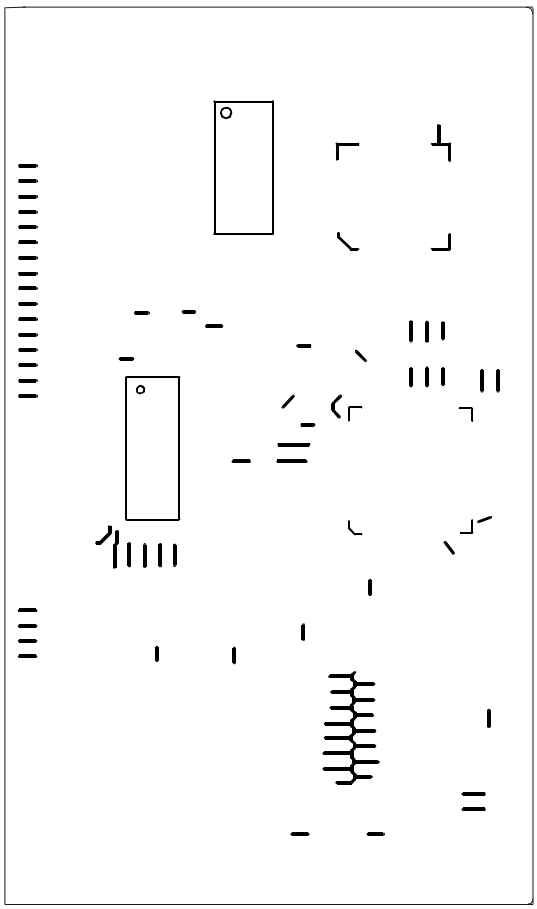
Main unit





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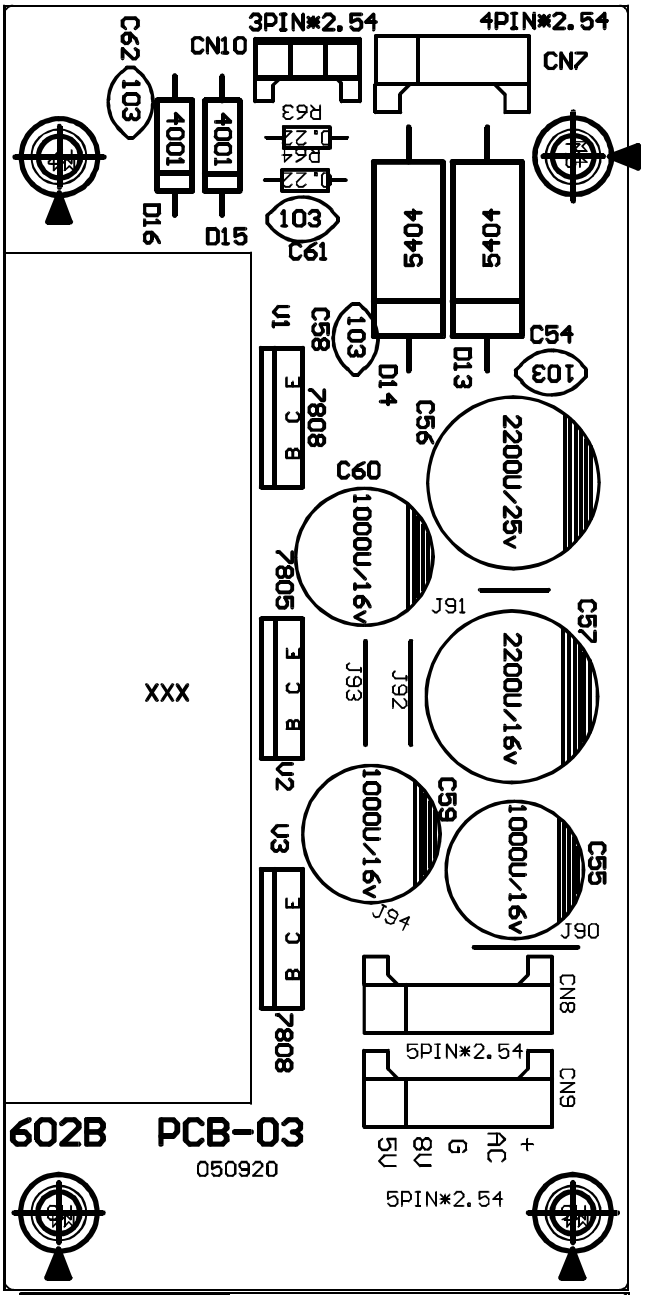
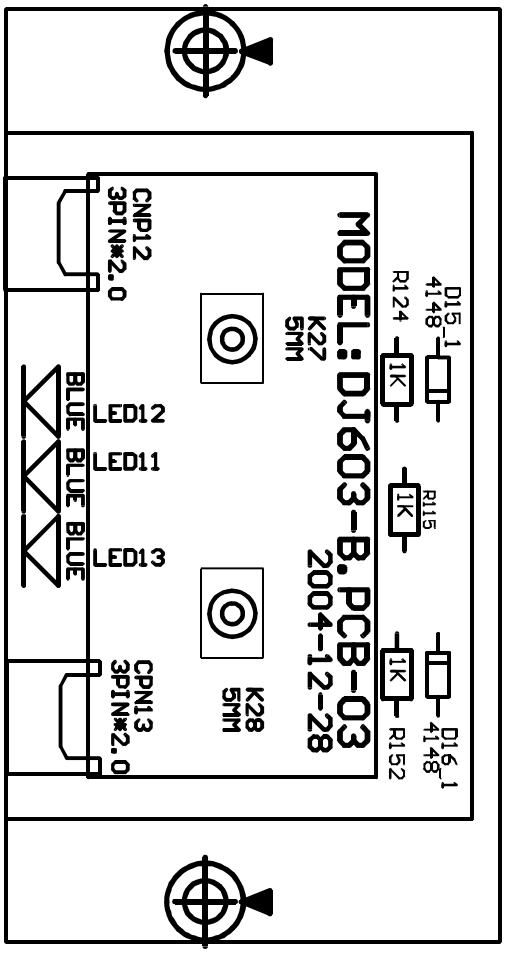
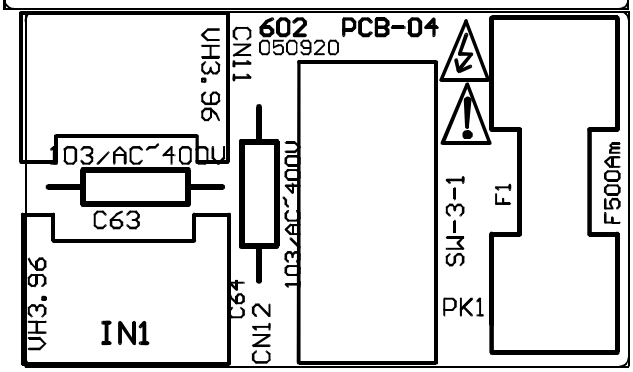
Main unit







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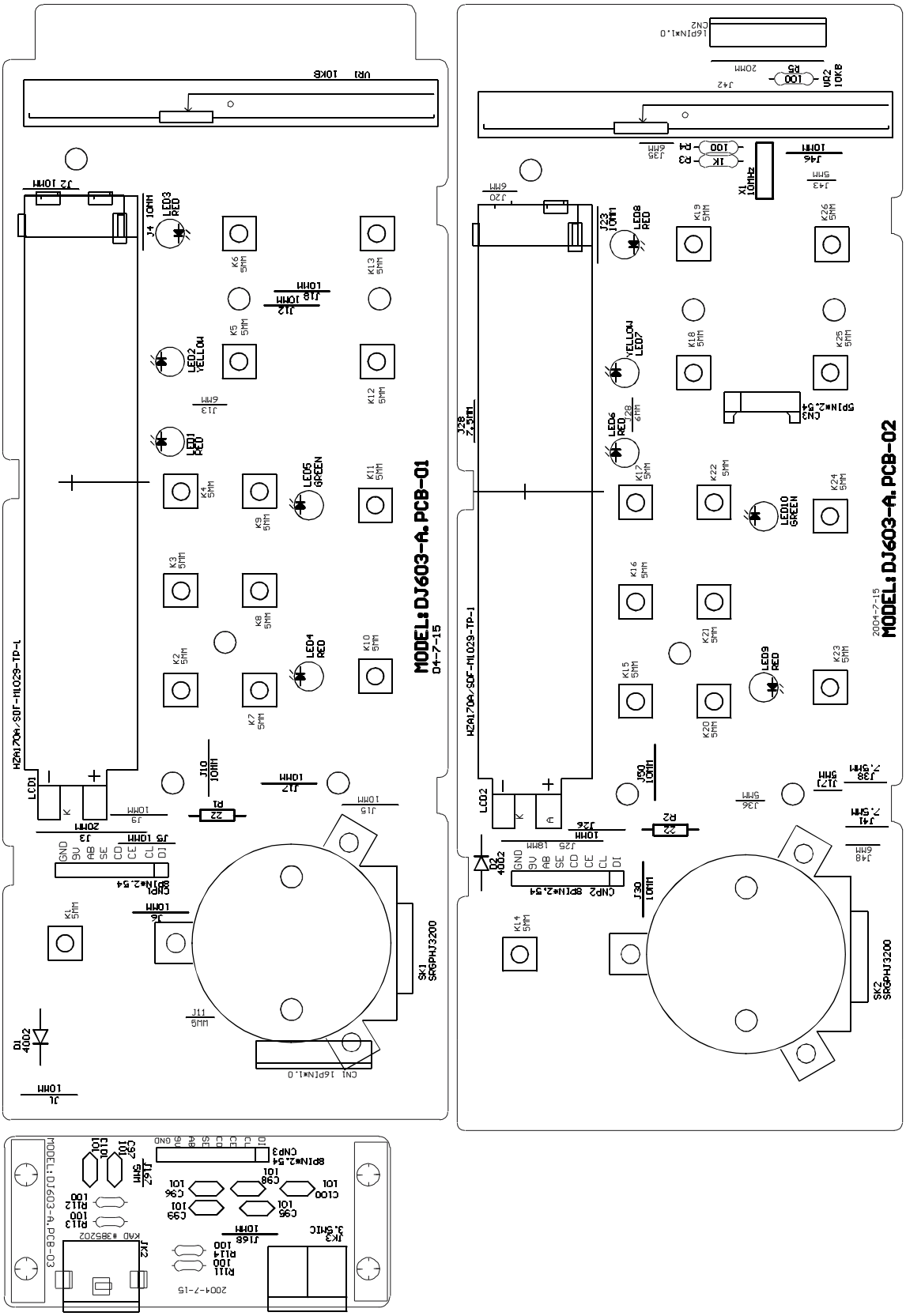
Control unit



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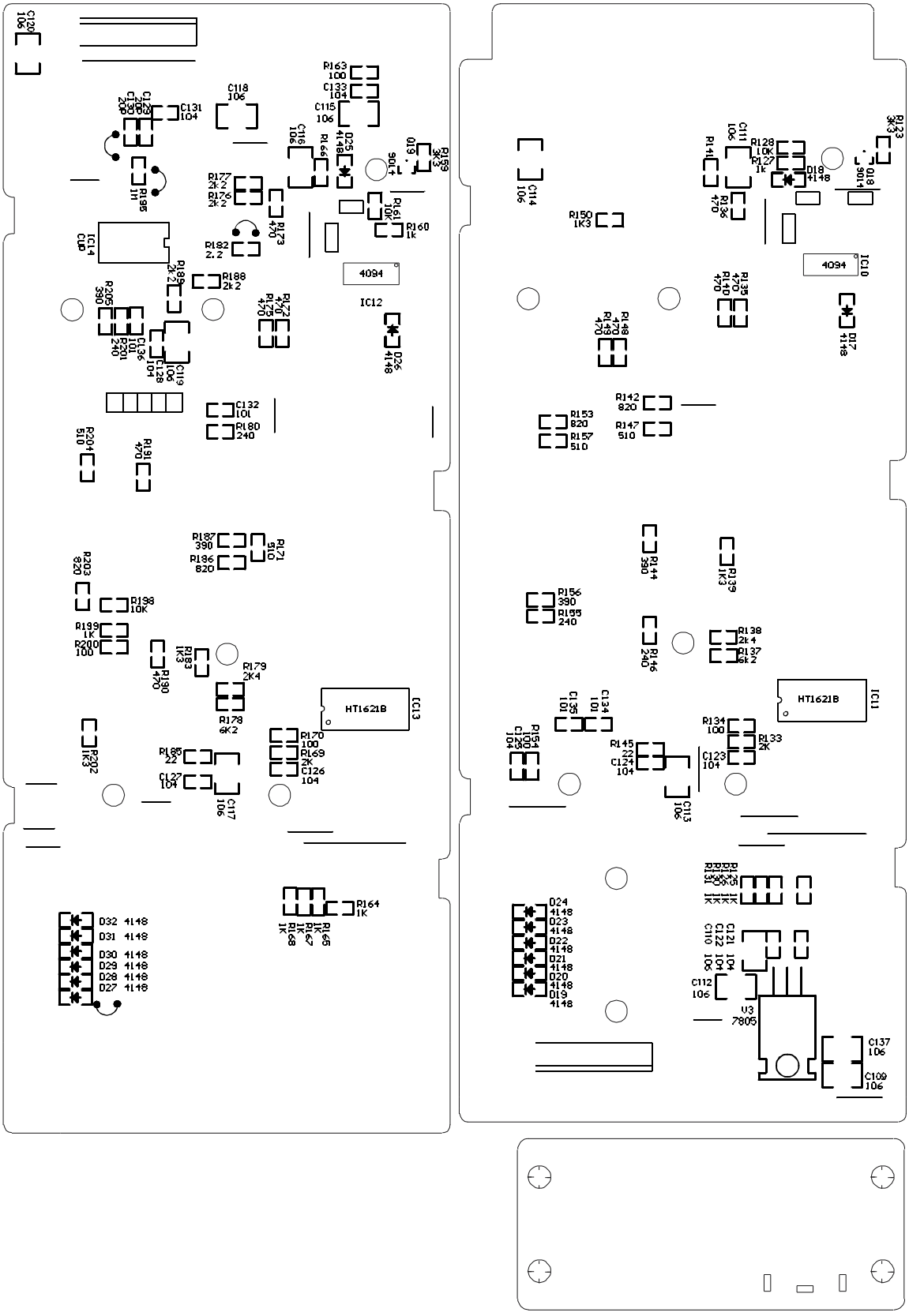
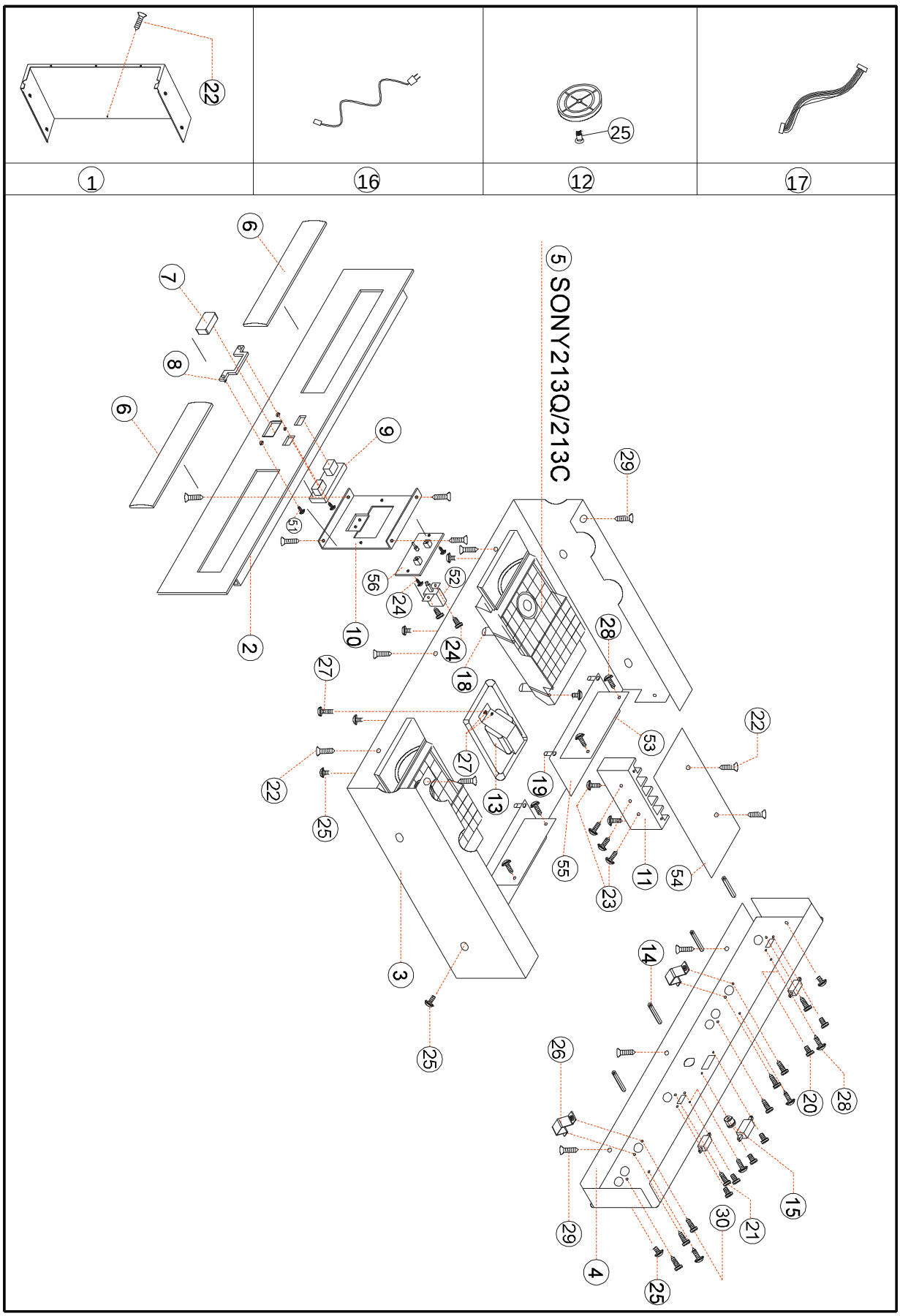
Control unit



8.Exploded view

MAIN UNIT



8.Exploded view

MAIN UNIT

No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
1	DJ603B01	upper cover		PCS	1
2	DJ603B02	front panel B		PCS	1
3	DJ603B03	bottom panel		PCS	1
4	DJ603B04	rear panel		PCS	1
5	DJ603B05	cartridge&CD holder	08B-213Q	PCS	2
6	DJ603B06	gate for CD		PCS	2
7	DJ603B07	button for power switch		PCS	1
8	DJ603B08	decorative frame for power switch button		PCS	1
9	DJ603B09	button with 2		PCS	1
10	DJ603B10	support for power switch		PCS	1
11	DJ603B11	radiator	DJ602B	PCS	1
12	DJ603B12	foot for main unit	M3X50X12	PCS	4
13	DJ603B13	transformer	E157-F5730184	PCS	1
14	DJ603B14	plastic pillar	DJ601B(L=49,M3)	PCS	4
15	DJ603B15	clamp for power cord		PCS	1
16	DJ603B16	power cord	QL-203	PCS	1
17	DJ603B17	connector	DJ603	SET	1
18	DJ603B18	copper pillar for fix CD holder	Φ8x16.4-16.5	PCS	8
19	DJ603B19	fix pillar for PCB	-8	PCS	8
20	DJ603B20	big cheese head screw	M3X6 plating nickel	PCS	14
21	DJ603B21	cheese head tapping screw	M3X12plating nickel	PCS	4
22	DJ603B22	sunk tapping screw	M3X8plating nickel	PCS	10
23	DJ603B23	tapping screw with washer	M3X8plating nickel	PCS	5
24	DJ603B24	tapping screw with washer	M3X6plating nickel	PCS	6
25	DJ603B25	screw with washer	M3X6plating nickel	PCS	29
26	DJ603B26	fixer		PCS	2
27	DJ603B27	screw with washer&wash& elastic washer&nut	M4X8	SET	2
28	DJ603B28	tapping screw with washer	M3X10plating nickel	PCS	8
29	DJ603B29	sunk screw	M3X8plating nickel	PCS	5
30	DJ603B30	big cheese head tapping screw	M3X6plating nickel	PCS	4

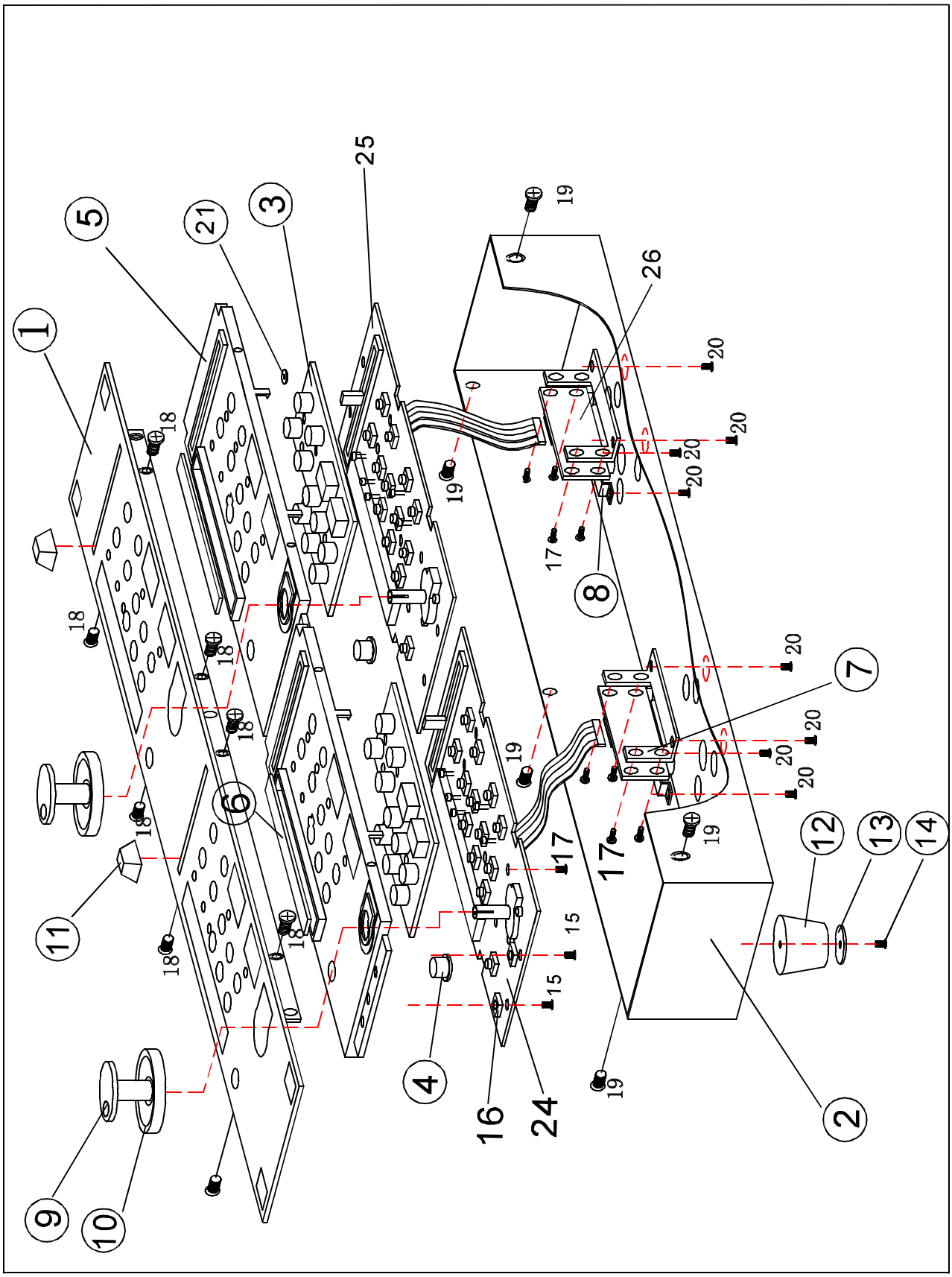
8.Exploded view

MAIN UNIT

No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
31	DJ603B31	foam		PCS	2
32	DJ603B32	plastic bag	730X380	PCS	1
33	DJ603B33	manual		PCS	1
34	DJ603B34	bag for manual	220X330	PCS	1
35	DJ603B35	gift box	525X405X163	PCS	1
36	DJ603B36	outer carton	545X425X675	PCS	0.25
37	DJ603B37	connector(8Pin)		PCS	2
38	DJ603B38	RCA cord		PCS	2
39	DJ603B39	laser label		PCS	2
40	DJ603B40	radium radiation label		PCS	1
41	DJ603B41	support for PCB of main unit		PCS	4
42	DJ603B42	red gel		PCS	1
43	DJ603B43	black gel		PCS	1
44	DJ603B44	silicon gel	Φ11X268	PCS	1
45	DJ603B45	tube	Φ3X20	PCS	2
46	DJ603B46	tube	Φ40x55	PCS	1
47	DJ603B47	packaging tape	WIDTH47mm	M	2
48	DJ603B48	line	3X100	PCS	6
49	DJ603B49	SN label		PCS	4
50	DJ603B50	copper radiator		PCS	2
51	DJ603B51	tapping screw with washer	ST3X5plating nickel	PCS	4
52	DJ603B52	power switch		PCS	1
53	DJ603B53	PCB for servo		PCS	2
54	DJ603B54	PCB for power		PCS	1
55	DJ603B55	main PCB(main board)		PCS	2
56	DJ603B56	PCB for close/open		PCS	1
57	DJ603B57	tube	Φ5x20	PCS	1

8.Exploded view

CONTROL UNIT



8.Exploded view

CONTROL UNIT

No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
1	DJ603A01	front panel A		PCS	1
2	DJ603A02	rear body		PCS	1
3	DJ603A03	button with 12	DJ603A	PCS	2
4	DJ603A04	button for close/open		PCS	2
5	DJ603A05	support for buttons		PCS	2
6	DJ603A06	glass		PCS	2
7	DJ603A07	support for PCB of output		PCS	2
8	DJ603A08	fixer		PCS	2
9	DJ603A09	jog wheel		PCS	2
10	DJ603A10	shuttle wheel		PCS	2
11	DJ603A11	button for potentiometer		PCS	2
12	DJ603A12	foot for control unit		PCS	4
13	DJ603A13	washer	M3X12X1plating nickel	PCS	4
14	DJ603A14	screw with washer	M3x12plating nickel	PCS	4
15	DJ603A15	cheese head screw	ST3x6plating nickel	PCS	7
16	DJ603A16	nut	M3	PCS	7
17	DJ603A17	cheese head tapping screw	ST3x6plating nickel	PCS	22
18	DJ603A18	sunk tapping screw	ST3x6plating nickel	PCS	8
19	DJ603A19	sunk tapping screw	ST3x8plating nickel	PCS	6
20	DJ603A20	big cheese head tapping screw	M3x6plating nickel	PCS	8
21	DJ603A21	paper washer	M3X8X0.5	PCS	2
22	DJ603A22	bag for unit	580X200	PCS	1
23	DJ603A23	foam		PCS	2
24	DJ603A24	PCB for control 1	dj603-a.pcb-01	PCS	1
25	DJ603A25	PCB for control 2	dj603-a.pcb-02	PCS	1
26	DJ603A26	PCB for output	dj603-a.pcb-03	PCS	2

9.BOM

No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
1	DJ603-001	jumper	5MM	PCS	32
2	DJ603-002	jumper	6MM	PCS	5
3	DJ603-003	jumper	7.5MM	PCS	54
4	DJ603-004	jumper	10MM	PCS	38
5	DJ603-005	jumper	15MM	PCS	32
6	DJ603-006	jumper	18MM	PCS	1
7	DJ603-007	jumper	20MM	PCS	16
8	DJ603-008	resistor	1/2W 10 OHM	PCS	2
9	DJ603-009	resistor	1/4w10 OHM	PCS	2
10	DJ603-010	resistor	1/4w100 OHM	PCS	2
11	DJ603-011	resistor	1/8W 0 OHM	PCS	2
12	DJ603-012	resistor	1/8W0.22 OHM	PCS	2
13	DJ603-013	resistor	1/8W 1 OHM	PCS	6
14	DJ603-014	resistor	1/8W 10 OHM	PCS	12
15	DJ603-015	resistor	1/8W 22 OHM	PCS	2
16	DJ603-016	resistor	1/8W 33 OHM	PCS	4
17	DJ603-017	resistor	1/8W 56 OHM	PCS	2
18	DJ603-018	resistor	1/8W 91 OHM	PCS	2
19	DJ603-019	resistor	1/8W 100 OHM	PCS	50
20	DJ603-020	resistor	1/8W 330 OHM	PCS	2
21	DJ603-021	resistor	1/8W 470 OHM	PCS	12
22	DJ603-022	resistor	1/8W 680 OHM	PCS	2
23	DJ603-023	resistor	1/8W 1K	PCS	8
24	DJ603-024	resistor	1/8W 1K2	PCS	4
25	DJ603-025	resistor	1/8W 1K8	PCS	2
26	DJ603-026	resistor	1/8W 3K3	PCS	14
27	DJ603-027	resistor	1/8W 3K9	PCS	12
28	DJ603-028	resistor	1/8W 4K7	PCS	2
29	DJ603-029	resistor	1/8W 5K1	PCS	4
30	DJ603-030	resistor	1/8W 5K6	PCS	4
31	DJ603-031	resistor	1/8W 6K8	PCS	2
32	DJ603-032	resistor	1/8W 10K	PCS	20

9.BOM

No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
33	DJ603-033	resistor	1/8W 22K	PCS	4
34	DJ603-034	resistor	1/8W 24K	PCS	2
35	DJ603-035	resistor	1/8W 39K	PCS	2
36	DJ603-036	resistor	1/8W 47K	PCS	6
37	DJ603-037	resistor	1/8W 100K	PCS	10
38	DJ603-038	resistor	1/8W 470K	PCS	4
39	DJ603-039	resistor	1/8W 1M	PCS	2
40	DJ603-040	resistor	4K7*8	PCS	4
41	DJ603-041	resistor	10K*8	PCS	4
42	DJ603-042	resistor	0805 2.2	PCS	1
43	DJ603-043	resistor	0805 22	PCS	2
44	DJ603-044	resistor	0805 100	PCS	5
45	DJ603-045	resistor	0805 2.4K	PCS	4
46	DJ603-046	resistor	0805 3.9K	PCS	4
47	DJ603-047	resistor	0805 470	PCS	10
48	DJ603-048	resistor	0805 5.1K	PCS	4
49	DJ603-049	resistor	0805 8.2K	PCS	4
50	DJ603-050	resistor	0805 1K	PCS	9
51	DJ603-051	resistor	0805 13K	PCS	4
52	DJ603-052	resistor	0805 2K	PCS	2
53	DJ603-053	resistor	0805 2K2	PCS	2
54	DJ603-054	resistor	0805 22K	PCS	4
55	DJ603-055	resistor	0805 24K	PCS	2
56	DJ603-056	resistor	0805 3K3	PCS	2
57	DJ603-057	resistor	0805 62K	PCS	2
58	DJ603-058	resistor	0805 10K	PCS	3
59	DJ603-059	resistor	0805 1M	PCS	1
60	DJ603-060	capacitor	0805 20P	PCS	2
61	DJ603-061	capacitor	0805 101	PCS	4
62	DJ603-062	capacitor	0805 104	PCS	10
63	DJ603-063	inductance	10UH	PCS	6
64	DJ603-064	capacitor	22P/50V	PCS	4

9.BOM

No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
65	DJ603-065	capacitor	47P/50V	PCS	2
66	DJ603-066	capacitor	101/50V	PCS	32
67	DJ603-067	capacitor	102/50V	PCS	4
68	DJ603-068	capacitor	103/50V	PCS	4
69	DJ603-069	capacitor	104/50V	PCS	54
70	DJ603-070	capacitor	222/50V	PCS	4
71	DJ603-071	capacitor	223/50V	PCS	2
72	DJ603-072	capacitor	271/50V	PCS	4
73	DJ603-073	capacitor	473/50V	PCS	2
74	DJ603-074	capacitor	332/50V	PCS	4
75	DJ603-075	capacitor	103/AC~400V	PCS	2
76	DJ603-076	capacitor	16V10UFφ5*11	PCS	22
77	DJ603-077	capacitor	25V10UFφ5*11	PCS	4
78	DJ603-078	capacitor	16V22UFφ5*11	PCS	10
79	DJ603-079	capacitor	100U16Vφ6.3*7.5	PCS	6
80	DJ603-080	capacitor	16V220UFφ6*13	PCS	4
81	DJ603-081	capacitor	10V470UFφ8*13	PCS	2
82	DJ603-082	capacitor	16V/47UFφ4*7	PCS	18
83	DJ603-083	capacitor	16V/1000UFφ10*18	PCS	3
84	DJ603-084	capacitor	16V/2200UFφ12*21	PCS	1
85	DJ603-085	capacitor	25V/2200UFφ12*25	PCS	1
86	DJ603-086	diode	IN4148	PCS	18
87	DJ603-087	diode	IN4002	PCS	4
88	DJ603-088	diode	2V7 1/2W	PCS	4
89	DJ603-089	diode	3V9 1/2W	PCS	2
90	DJ603-090	diode	10V 1/2W	PCS	4
91	DJ603-091	diode	IN201(2A/100V)	PCS	2
92	DJ603-092	diode	IN5404(4A/400V)	PCS	2
93	DJ603-093	triode	C9014	PCS	8
94	DJ603-094	triode	A733	PCS	6
95	DJ603-095	triode	C945	PCS	2
96	DJ603-096	triode	S8050	PCS	8

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No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
97	DJ603-097	triode	S8550	PCS	4
98	DJ603-098	triode	S9015	PCS	2
99	DJ603-099	IC	7805	PCS	2
100	DJ603-100	LED(red)	3R4SD-3	PCS	6
101	DJ603-101	LED(yellow)		PCS	2
102	DJ603-102	LED(green)	3G4UD-23	PCS	2
103	DJ603-103	LED(blue)	3B4SW-27	PCS	1
104	DJ603-104	IC	74HC4094	PCS	2
105	DJ603-105	IC	PCM1742	PCS	2
106	DJ603-106	IC	MCU-20	PCS	1
107	DJ603-107	IC	HT1621B	PCS	2
108	DJ603-108	triode	SOT-23 9014	PCS	2
109	DJ603-109	diode	D1206 4148	PCS	16
110	DJ603-110	IC	74HC04	PCS	2
111	DJ603-111	IC	74HC4040	PCS	2
112	DJ603-112	IC	5V NT511740C5J-60S	PCS	2
113	DJ603-113	capacitor	A 106C S10K3	PCS	13
114	DJ603-114	IC	NE5532	PCS	4
115	DJ603-115	IC	24C04	PCS	2
116	DJ603-116	IC	BA7042	PCS	2
117	DJ603-117	IC	LM7808	PCS	2
118	DJ603-118	IC	SAA7824	PCS	2
119	DJ603-119	IC	MM1469PH	PCS	2
120	DJ603-120	IC	PA921N	PCS	2
121	DJ603-121	IC	87C54	PCS	2
122	DJ603-122	connector	DJ603	PCS	1
123	DJ603-123	pin socket	3P*VH3.96	PCS	1
124	DJ603-124	pin socket	3P*2.54	PCS	1
125	DJ603-125	pin socket	4P*2.45	PCS	1
126	DJ603-126	pin socket	PH2.0*5P(40P)	PCS	2
127	DJ603-127	pin socket	PH2.0*17P(40P)	PCS	2
128	DJ603-128	RCA socket	AV1-8.4-8 BLACK	PCS	2

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No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
129	DJ603-129	RCA socket	AV2-8.4-14RED/WHITE	PCS	2
130	DJ603-130	S terminal	S8-03	PCS	4
131	DJ603-131	MIC socket	CKX-3.5mm-02	PCS	2
132	DJ603-132	LCD	780287-2 16MM	PCS	2
133	DJ603-133	light sheet(pale yellow)	CA803A-01	PCS	2
134	DJ603-134	potentiometer	SC6005NOBOX-HA1-027	PCS	2
135	DJ603-135	relay	YL-202H-DV6	PCS	
136	DJ603-136	encoder	SRGPHJ3200	PCS	2
137	DJ603-137	crystal oscillator	20MHz	PCS	2
138	DJ603-138	crystal oscillator	10MHz	PCS	1
139	DJ603-139	touch switch	5MM	PCS	28
140	DJ603-140	IC socket	40P	PCS	2
141	DJ603-141	power switch	T12-42	PCS	1
142	DJ603-142	selector for voltage	L21-22A2	PCS	1
143	DJ603-143	selector for digital output	SS22L15G4	PCS	2
144	DJ603-144	fuse box	metal	PCS	2
145	DJ603-145	fuse	T500mA/250~V	PCS	1
146	DJ603-146	inductance	1UH	PCS	4
147	DJ603-147	Pick up lens(cartridge)	SONY-213Q	PCS	2
148	DJ603-148	holder for CD	GL-08B	PCS	2
149	DJ603-149	PCB 1 for control	DJ603-A.PCb-01	PCS	1
150	DJ603-150	PCB 2 for control	DJ603-A.Pcb-02	PCS	1
151	DJ603-151	PCB for close/open	DJ603-b-PCB-03	PCS	1
152	DJ603-152	main PCB(main board)	DJ602-B PCB-02B	PCS	2
153	DJ603-153	PCB for power	DJ602.PCB-03	PCS	1
154	DJ603-154	PCB for power switch	DJ602.PCB-04	PCS	1
155	DJ603-155	PCB for output	DJ603APCB-08	PCS	2
156	DJ603-156	PCB for servo	DJ602-B PCB-11B	PCS	2
157	DJ603-157	clamp for power cord		PCS	1
158	DJ603-158	radiator	LH-082(40mm)	PCS	1
159	DJ603-159	front panel B		PCS	1
160	DJ603-160	front panel A		PCS	1

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No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
161	DJ603-161	copper radiator	19*20MM	PCS	2
162	DJ603-162	upper cover	DJ601B-04	PCS	1
163	DJ603-163	bottom panel	DJ602B-02C	PCS	1
164	DJ603-164	rear panel	DJ2500B-03	PCS	1
165	DJ603-165	rear body	DJ613A-03	PCS	1
166	DJ603-166	support for power switch	DJ613B-09A	PCS	1
167	DJ603-167	support for PCB of output	CDX-3A-12	PCS	2
168	DJ603-168	fixer	CDX-3A-13A	PCS	2
169	DJ603-169	button for close/open		PCS	2
170	DJ603-170	button with 12		PCS	2
171	DJ603-171	button with 2		PCS	2
172	DJ603-172	glass		PCS	2
173	DJ603-173	foot for control unit	G2 plastic	PCS	4
174	DJ603-174	foot for main unit	M3X50X12	PCS	4
175	DJ603-175	washer	Φ12*3(BLACK)	PCS	4
176	DJ603-176	copper pillar for fix CD holder	Φ8*16.5	PCS	8
177	DJ603-177	cheese head screw (with washer)	M3*12(plating nickel)	PCS	4
178	DJ603-178	cheese head screw	M3*6(plating nickel)	PCS	7
179	DJ603-179	big cheese head screw	M3*6(plating nickel)	PCS	14
180	DJ603-180	big cheese head tapping screw	M3*6(plating nickel)	PCS	8
181	DJ603-181	big cheese head pointless tapping screw	M3*6(plating nickel)	PCS	4
182	DJ603-182	sunk tapping screw	M3*8(plating nickel)	PCS	16
183	DJ603-183	sunk tapping screw	M3*6(plating nickel)	PCS	8
184	DJ603-184	sunk screw	M3*8(plating nickel)	PCS	5
185	DJ603-185	cheese head tapping screw with washer	M3*8(plating nickel)	PCS	5
186	DJ603-186	cheese head tapping screw with washer	M3*6(plating nickel)	PCS	2
187	DJ603-187	big cheese head pointless tapping screw	M3*5(plating nickel)	PCS	4
188	DJ603-188	cheese head tapping screw	M3*6(plating nickel)	PCS	22
189	DJ603-189	cheese head slotted tapping screw	M3*12(plating nickel)	PCS	4
190	DJ603-190	screw with washer	M3*6(plating nickel)	PCS	29
191	DJ603-191	cheese head tapping screw with washer	M3*10(plating nickel)	PCS	8
192	DJ603-192	cheese head screw (with washer)	4*8	PCS	2

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No.	Part No.	DESCRIPTION	SPECIFICATION	UNIT	QUANTITY
193	DJ603-193	flat washer	M4	PCS	2
194	DJ603-194	elastic washer	M4	PCS	2
195	DJ603-195	nut	M4	PCS	2
196	DJ603-196	nut	M3	PCS	7
197	DJ603-197	paper washer	Φ3*8*0.5MM	PCS	2
198	DJ603-198	button for potentionmeter		PCS	2
199	DJ603-199	gate for CD		PCS	2
200	DJ603-200	button for power switch		PCS	1
201	DJ603-201	decorative frame for power switch button		PCS	1
202	DJ603-202	support for buttons		PCS	2
203	DJ603-203	jog wheel		PCS	2
204	DJ603-204	shuttle wheel		PCS	2
205	DJ603-205	transformer	E157-F5730211	PCS	1
206	DJ603-206	plastic pillar	M3*49	PCS	4
207	DJ603-207	power cord	QL-312+VH3.96 2*0.75*2M	PCS	1
208	DJ603-208	fixer for LED	Φ5*7	PCS	11
209	DJ603-209	fix pillar for PCB	H8MM	PCS	8
210	DJ603-210	foam	DJ603	PCS	2
211	DJ603-211	manual		PCS	1
212	DJ603-212	RCA cord	2P*1.2M	PCS	2
213	DJ603-213	connector	8pin	PCS	2
214	DJ603-214	gift box		PCS	1
215	DJ603-215	outer carton		PCS	0.25
216	DJ603-216	tube	Φ40*55	PCS	1
217	DJ603-217	tube	Φ3*20	PCS	2
218	DJ603-218	tube	Φ5*20	PCS	1
219	DJ603-219	laser label		PCS	2
220	DJ603-220	radium radiation label		PCS	1

10.Note on safety and maintenance

Safety

General controls

During maintenance, the safety precautions must be adopted so as to protect the loudspeaker cabinet and electronic components against any damages caused by short circuit.

Leads must be placed far away from high-voltage and high-temperature components.

Maintenance

Note: Please carefully read "Safety" section in this manual prior to servicing work. In the event of the conflict between the safety notice and maintenance work, the observance of safety consideration must be put at the first place.

General caution notes

1. Before the operation, disconnect the plug of the AC power line connected to the loudspeaker cabinet:
   a. Remove any components, circuit board, subassembly and other devices.
   b. Disconnect or reconnect the plug of the loudspeaker cabinet or connectors of other electric appliances.
   c. While connecting the electrolytic capacitor with the test component in parallel, please note that the reverse polarity or replacement error of the capacitor will result in explosion.
2. Spraying chemicals around or on the loudspeaker cabinet and its subassemblies is strictly prohibited.:
3. Only use the cotton stick wetted with cleaning agent to clean up the contacts of the electric appliances unless there are other special requirements in the manual. The cleaning agent is the mixture of 10% (acc. to the capacity) acetone and 90% (acc. to the capacity) isopropyl ethanol (90%。99%).

Note: The mixture is extremely inflammable.

No lubricants can be used on soldering points unless there are other requirements stated in the manual.

General welding rules

1. Use grounded welding head. Low-power electric iron and welding head with fitting dimension shall be applied so as to maintain the temperature of the welding head at 230C～ 280C.
2. Use the resin cored solder (containing 60% tin and 40% aluminum) specified by RMA (Radio Manufacturers' Association of the Unite States).
3. Maintain the electric iron and the tin content in good condition.
4. Thoroughly clean the welding surface. The cleaning shall be carried out with a wire brush (0.5 inch or 1.25cn).The application of Freon spraying detergent is strictly prohibited.
5. Following fusion techniques shall be adopted:
   a，Obtain the normal temperature of the electric welding head.(230C 280C)。
   b，Heat up the down-lead of the component until the tin solder melts.
   c，Use the antistatic solder sucker to molten the tin solder right away.

Note: In case of the overheating of the copper foil on the printed circuit, quick operation is required.

6. Following welding techniques shall be applied:

a, Obtain the normal temperature of the electric welding head.(230C 280C)。

b. First of all, hold the electric iron and welding rod, and point them to the component lead until the tin solder is melted down.

c. Quickly move the electric welding head to the pin of the component lead and the copper foil of the PCB (printed circuit board)so that the tin solder flows towards the welded pin of the component lead and around the copper foil.

Note: In case of the overheating of the copper foil on the PCB, quick operation is required.

d, Carefully check the weld zone and use a small hard-copper brush to remove redundant tin solder.

10.Note on safety and maintenance

Disassembly/replacement of IC (integrated circuit)

Certain printed circuit and PCB have slotted holes (in oval shape) in which the IC lead pins are inserted. Level the IC lead pins along the copper foil on the circuit after inserting them into the slotted holes. Following techniques can be adopted for the disassembly or replacement of IC.

Disassembly:

1. Straighten the IC lead pins (to be dismantled) one by one and point the electric welding head to the pins to melt down the tin solder.
2. Before detaching the IC, use antistatic iron sucker to suck out the melted tin solder and then remove the components.

Replacement:

1. Carefully insert the new IC into PCB.
2. Carefully bend each IC lead pin, point it to the welding pad of copper foil on the circuit board and then carry out the welding operation.
3. Use a small and stiff brush to clean the weld zone (recoating the weld zone with PP is unnecessary).

The important notices upon replacing the IC and component sheets

The IC and component sheets are so fragile that they are subject to the damage caused by static. Therefore, we need to observe following items when carrying out the replacement:

(1) Must not use the soldering iron to contact the component sheets directly in case of any damage caused by high temperature.

(2) Some components are subject to the damage resulted from sudden heating up. So, the soldering iron must be pre-heated for a few minutes at 100C. Pay more attention to the handling of the iron point to prevent the component from heating up suddenly.

(3) To weld general components, the service temperature of the iron point shall be kept at approx. 240C. The temperature can be increased up to approx. 280C when welding the components at bigger size.

(4) Since the compact-type components are incapable of containing more tin solders, fine solders stick and thin solder layer (0.3mm) must be used. The solder can be supplemented depending on the actual situation during the welding operation.

(5) While replacing the component, the welding operation must be fast and the caution must be applied so as to avoid any damage to the circuit board.

(6) There are many terminals on the IC. After removing the component, thoroughly clean the base board to ensure good contact for future reassembling.

(7) During the welding operation, prevent the tin solder dropping on the circuit board. Otherwise, short circuit will happen.

(8) The mounting position of the component must be accurate. For the accuracy and easier welding, align the first terminal of IC and fix it. Then align other terminals.

(9) To avoid any damage to the components and circuit board caused by repeated disassembly and assembly, the replacement only can be carried out after the verification of defective components.

(10) During the welding operation, carefully inspect the welded joints and higher attention shall be paid on various small components connected to leading wires.

(11) After replacement, use the magnifying glass to check the items such as missed welding, false welding or short circuit, "tilting or broken" printing lines, and poor contact of adjacent components caused by welding operation.

10.Note on safety and maintenance

Disassembly/Replacement of small discrete transistor

1. Clamp and remove the detective transistor.
2. Bend three led pins into "U" shape and insert them into the circuit board.
3. Bend the lead pins of a replacing transistor into "U" shape.
4. Place the lead pin of the replacing transistor on corresponding welding pad to ensure the good contact between metal units.

Power output, disassembly/replacement of transistor components

1. Heat up the area around the lead pin of the transistor and clean the tin solder.
2. Remove the mounting screws of the cooling fin (if it is available).
3. Carefully remove the transistor from the cooling fin on the PCB.
4 Insert a new transistor into the circuit board.
5. Weld each lead pin of the transistor and cut out redundant leading wire.
6. Remount the cooling fin.

Disassembly/replacement of the diode

1. Clamp the lead pin of the diode (clamping the body of the diode will be the better) and remove defective diode.
2. Bend two lead pins and have them vertical to the circuit board.
3. Check the polarity of the diode and then place the leading pin of the diode on the corresponding welding pad.
4. Tightly press every connection point and weld them on.
5. Check soldering points of two leading pins by the side of the copper coating of the PCB. If the connection points are not glossy enough, add tin solder for re-welding.

11.Error tracing and checking form

Symptom	Cause	Solution
No power	Voltage do not accord with unit	Select correct voltage
	Voltage do not input unit	Connect the power cord properly
	Fuse melting	Replace a same specification fuse
Unable to play	Disc is bad	Replace the disc
	Play format of disc is not compatible	Replace compatible disc
	Cartridge cord is not connected well	Connect the cord properly
	Cartridge(pick up lens) is malfunction	Replace cartridge
No sound output	Audio cord is not connected well	Connect the audio cord properly
	Play format of disc is not compatible	Replace compatible disc
	Software is wrong	Turn on again

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