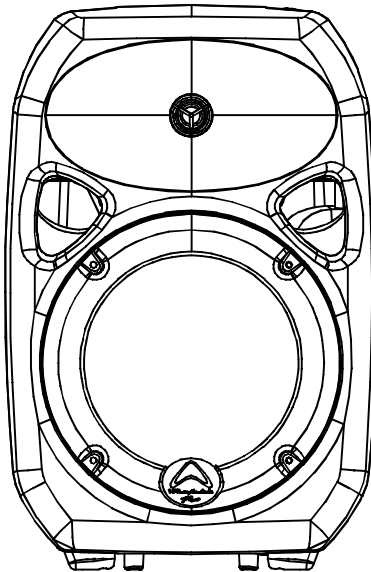


# Titan™ 8 ACTIVE

## Service Manual



SPECIFICATION	1
SPECIFICATION	2
ASSEMBLY SKETCH	3
SCHEMATIC DIAGRAM	4
SCHEMATIC DIAGRAM	5
SCHEMATIC DIAGRAM	6
SCHEMATIC DIAGRAM	7
SCHEMATIC DIAGRAM	8
SCHEMATIC DIAGRAM	9
ASSEMBLY PARTS LIST	10
ELECTRONIC PARTS LIST	11
ELECTRONIC PARTS LIST	12
ELECTRONIC PARTS LIST	13
ELECTRONIC PARTS LIST	14
ELECTRONIC PARTS LIST	15
ELECTRONIC PARTS LIST	16



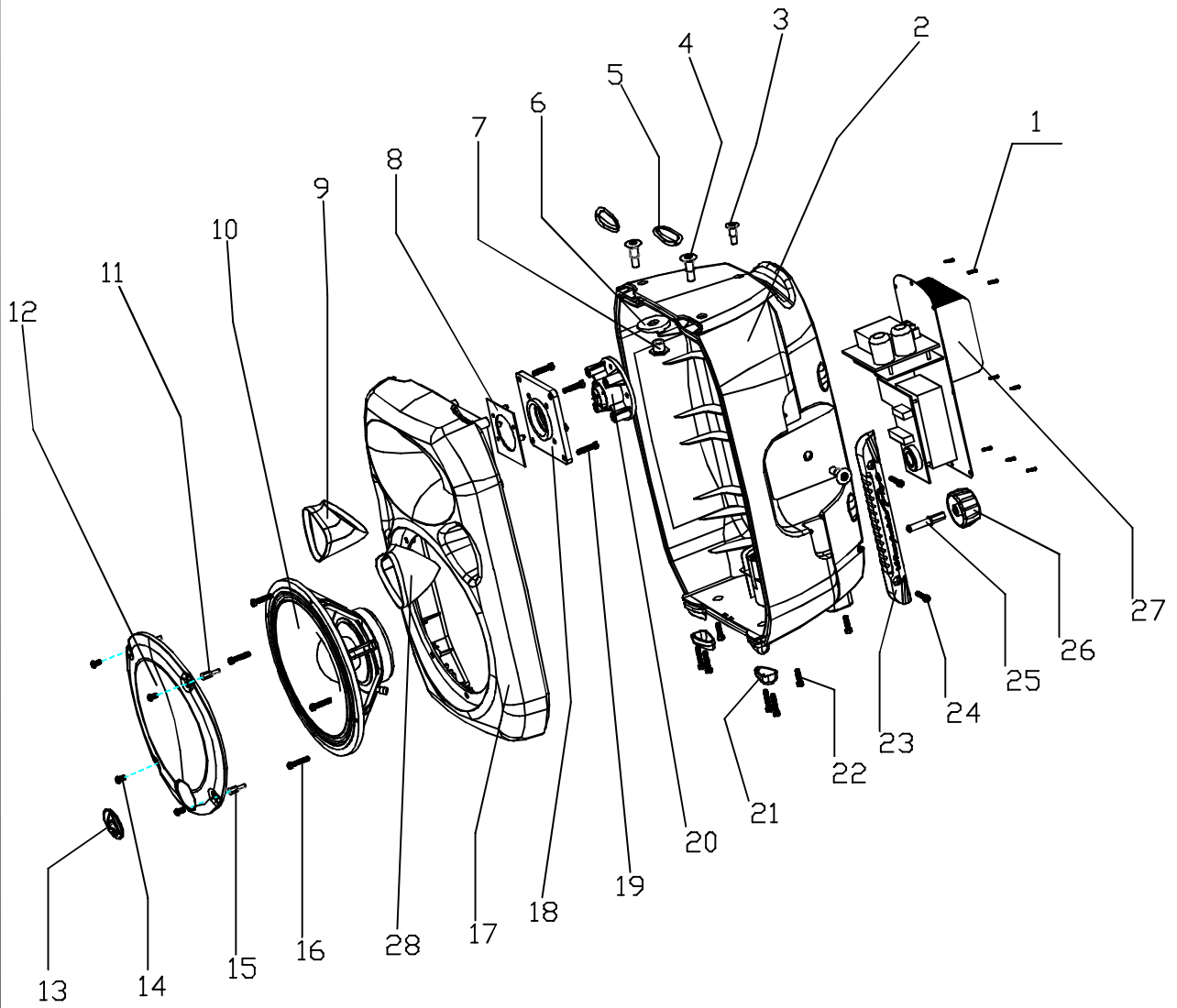
# 1. SPECIFICATIONS

System Type	Active 8" 2-way Bi-Amplified system
Frequency Response (+/-3dB)	70-20kHz
Low Frequency Transducer	
Size (mm / inches)	205mm / 8"
Coil Size (mm / inches)	38.86mm / 1.53"
Impedance	4 $\Omega$
High Frequency Transducer	
Type	Compression Driver
Coil Size (mm / inches)	25mm / 1"
Exit Size (mm / inches)	30mm / 1.2"
Diaphragm Material	cloth
Impedance	8 $\Omega$
High Frequency Coverage (H×V)	90° × 60°
Amplifiers	
Low-Frequency Power Amplifier (Class D)	Rated 150W RMS, 300W Peak
High-Frequency Power Amplifier (Class A/B)	Rated 30W RMS, 60W Peak
Electronic Crossover:	24dB per octave Linkwitz-Riley
Crossover Frequency	2.4kHz
Bass Response Optimizer ("BRO"# ) circuit	
Subsonic Filter	30Hz, Second-order filter
Amplifier Protection	
Power On Protection	Power switch on / off mute
Thermal Protection	Amplifier shutdown, auto reset
Low Line Voltage Shut Down	60% Nominal line voltage
Driver Protection	Independent LF and HF limiters
DC Protection	Yes
Short Protection	Yes
Clip Limiter:	Turns on approx 150W output
Limiter Indicator	Red LED
Power Indicator	Blue LED
Inputs	
Input A \$ type	Switchable balanced mic or line level input
Input Sensitivity	Mic: -36dBu (-38.2dBv or 12.28mVrms) Line: +4dBu (1.78dBv or 1.228Vrms)
Maximum Input Level	+22dBu
Input Connector	XLR / 1/4" Combo jack
Input Impedance	Balanced: 20k $\Omega$
Maximum Input Level	+22dBu
Maximum Input Level	+22dBu

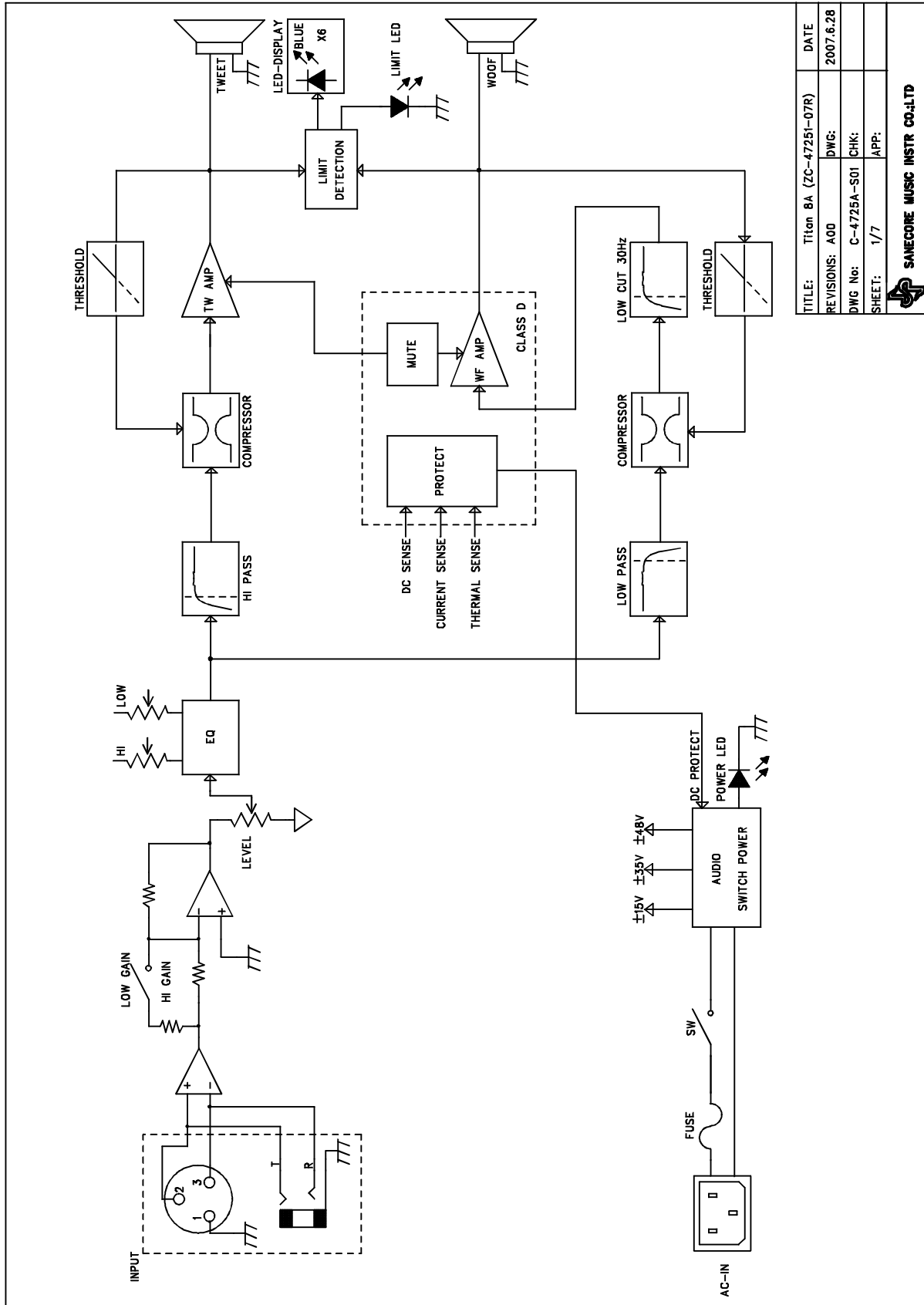
## 2.SPECIFICATIONS

Input Connectors	Combo jack: 1/4" - XLR
AC Power details	
Power Supply	High Efficiency Switching Mode Power Supply
AC Power Options	AC100~120V / 220~240V, 50 / 60Hz
Power On Indicator	LED
Rigging / Bracket / Mounting Options	8 M6 threaded inserts including 4 M6 threaded inserts on bottom in OmniMount 60.0-type footprint
	Pole-mount receptacle with lock screw
	1 carry handles ( on each side)
	Optional wall-mount bracket
Enclosure	
Enclosure Material	Injection Moulded Polypropylene
Colour	Grey or white
Dimensions (mm / inches):	
H	396mm / 15.59"
W	266mm /10.47"
D	221mm / 8.7"
Weight:	
Net Weight (kg / lbs)	5.7kg / 12.54lbs
Gross Weight (kg / lbs)	7.70kg /16.94lbs

### 3.ASSEMBLY SKETCH



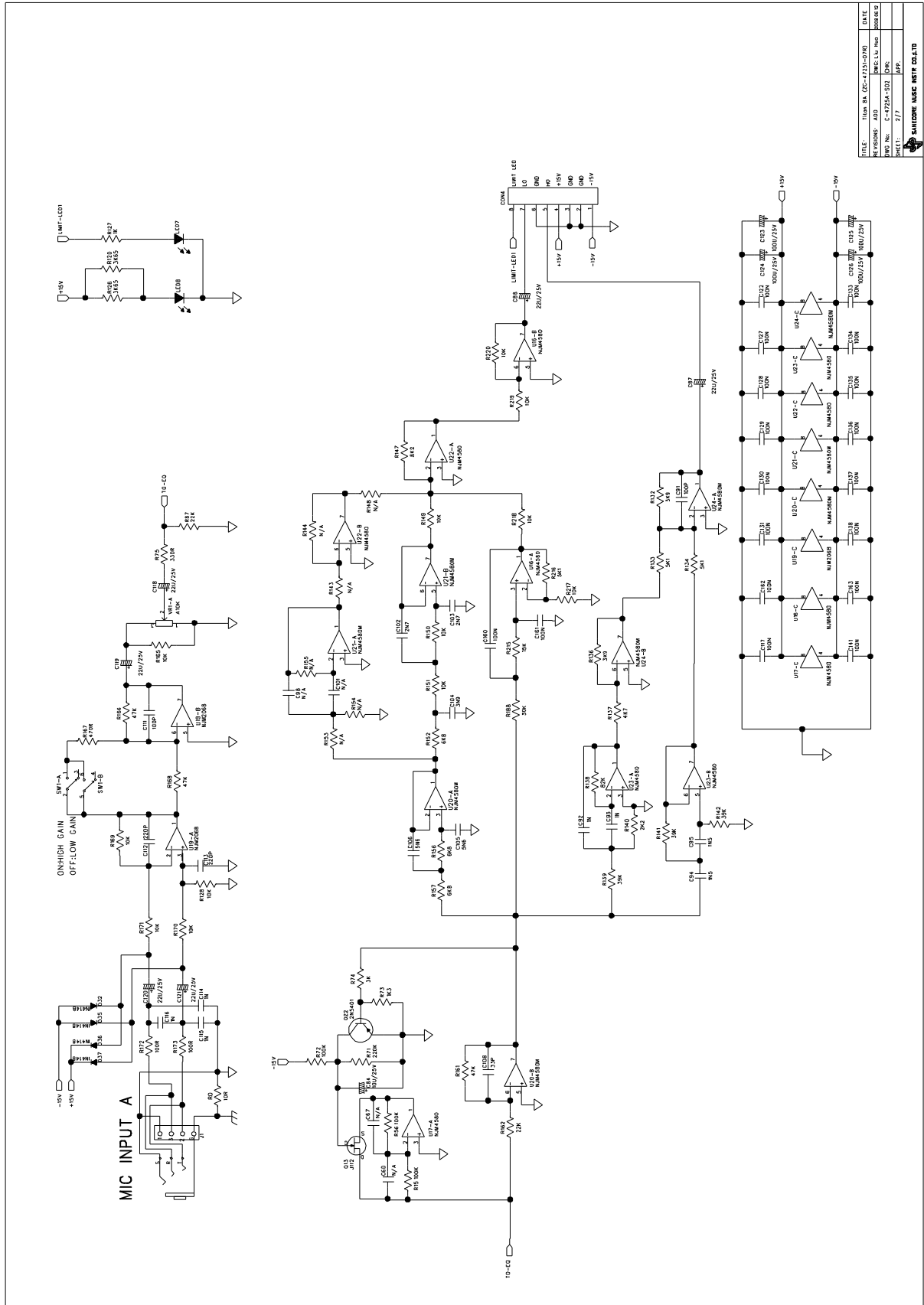
# 4. SCHEMATIC DIAGRAM



TITLE:	Titan 8A (ZC-47251-07R)	DATE	2007.6.28
REVISIONS:	A00	DWG:	
DWG No:	C-4725A-S01	CHK:	
SHEET:	1/7	APP:	

**SANECORE MUSIC INSTR CO.,LTD**

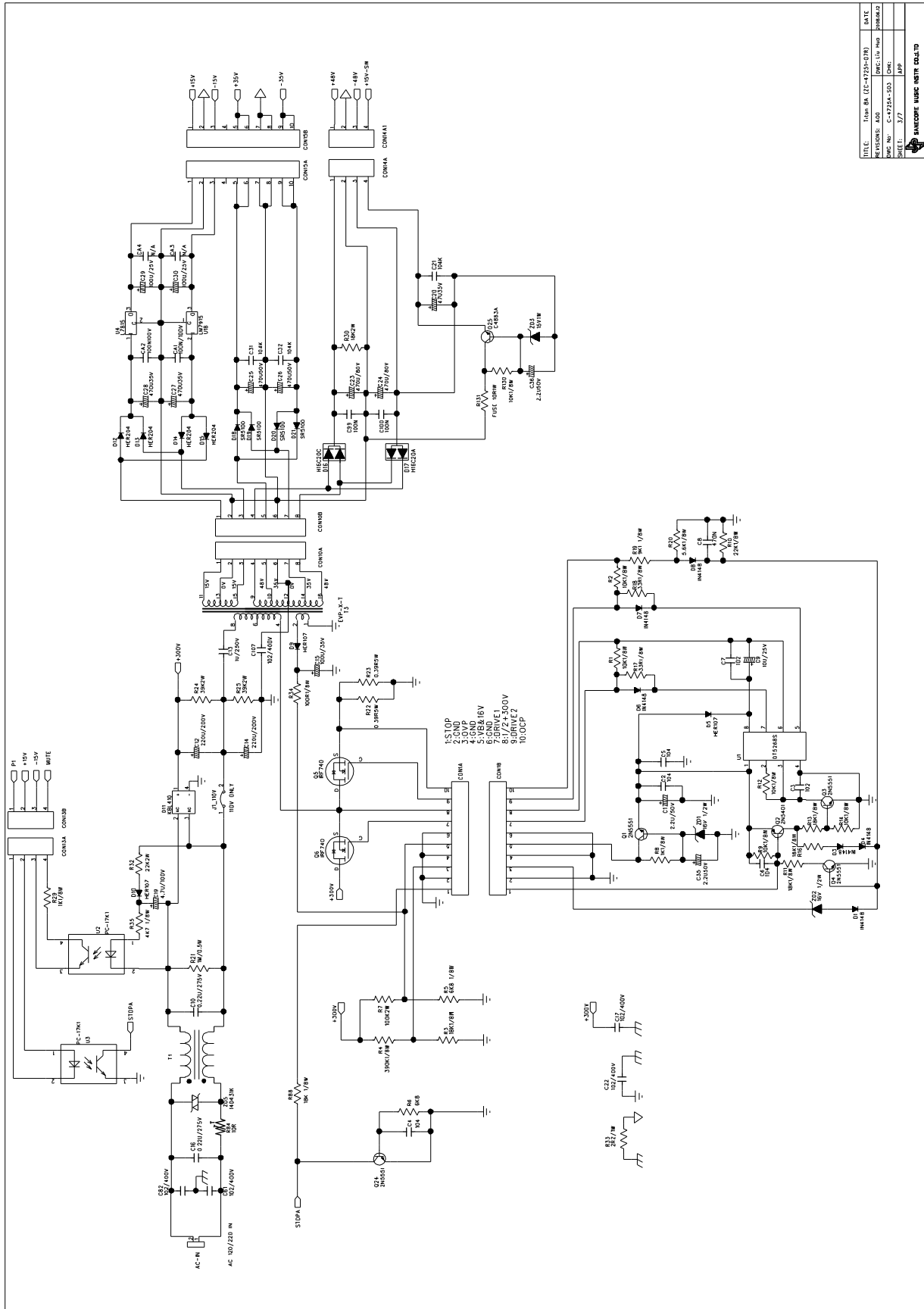
# 5. SCHEMATIC DIAGRAM



FILE:	Titon 8A (20-4721-029)	DATE:	
DESIGNER:	AD	CHK'D BY:	MS
DWG NO.:	5-4721A-302	DRS	
REV.:	1	APP.:	

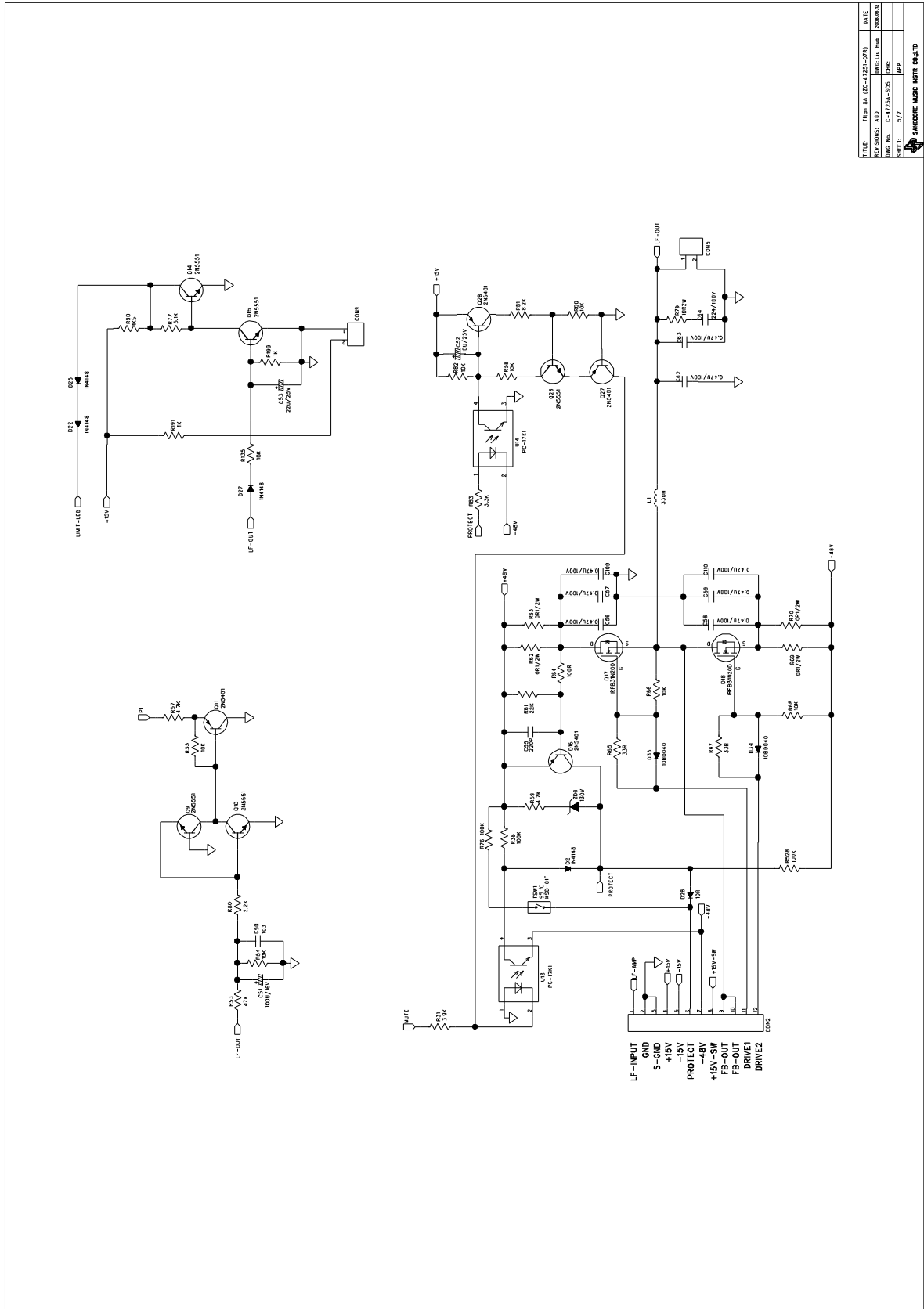


# 6. SCHEMATIC DIAGRAM



TITLE:	Titan 8A (C-4723A-C19)	DATE:	
REVISED:	A00	ENG: Liu Ming	2016.02.02
DWG No:	C-4723A-003	CHK:	
SHEET:	3/7	APP:	

# 7. SCHEMATIC DIAGRAM

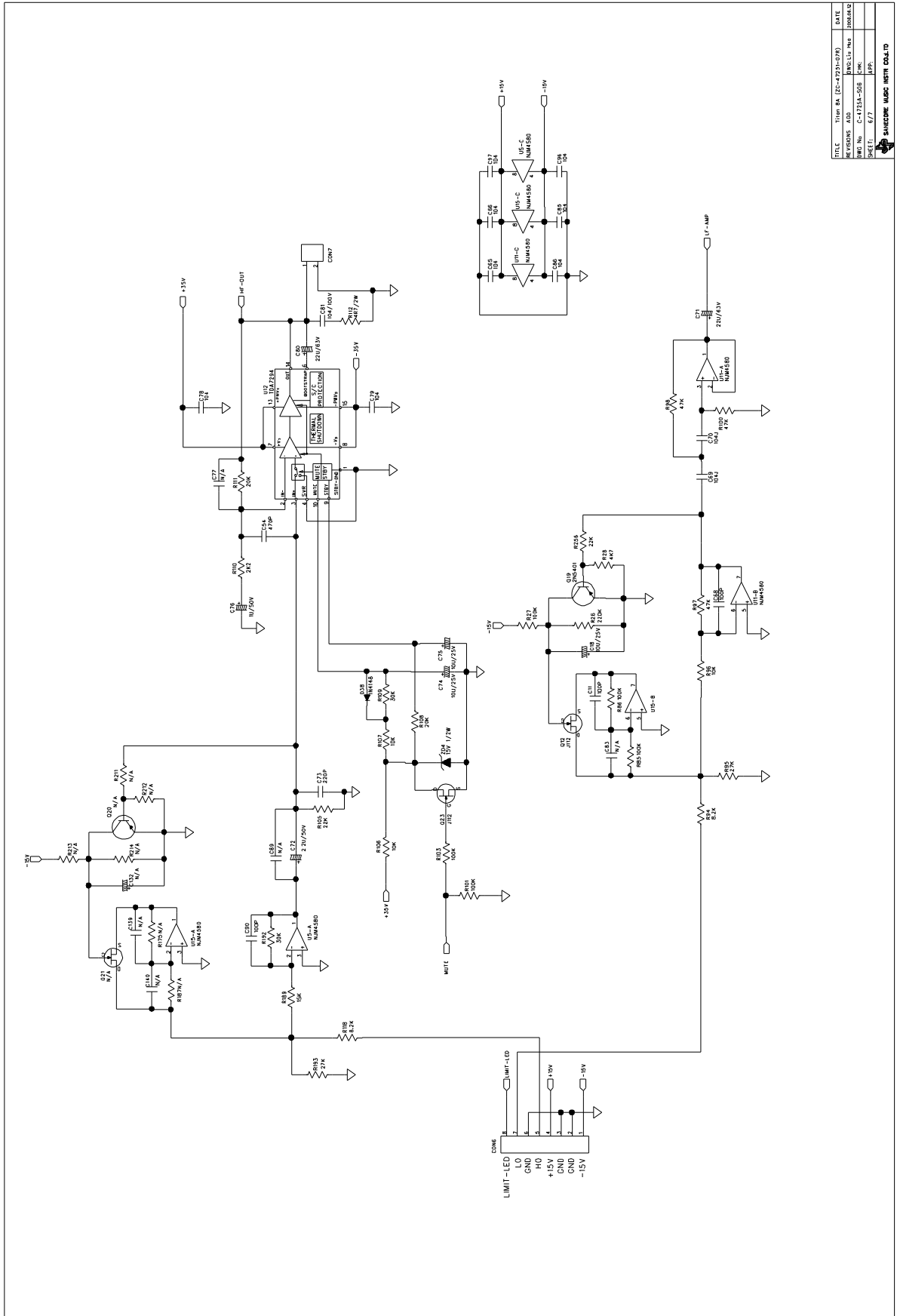


FILE:	Titon 8A (C1-47)D-0793	DATE:	
VERSION:	R15	PREPARED BY:	BOONW C
DATE:	17-12-2015	DATE:	
SHEET:	5/7	SHEET:	4/4

SHANGHAI MUSIC INSTRUMENT CO., LTD



# 8. SCHEMATIC DIAGRAM

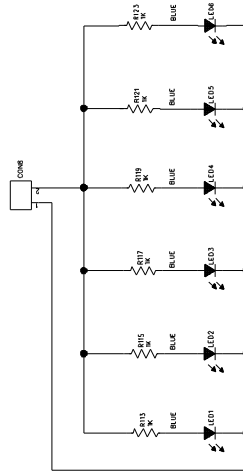


TITLE	Titon 8A (2C-47231-078)	DATE
REVISION	A00	2008.04.02
DWG No.	C-1715A-001	PK
SHEET	8/7	JPM

SHANGHAI MUSIC INSTR CO., LTD

# 9. SCHEMATIC DIAGRAM

FROM PAGE 3



NOTE: ALL RESISTORS ARE 1/4 WATTS

FILE	Titans DA (12-1724-379)	DATE
DESIGNED BY	XXXXXXXXXX	DESIGNED
APP. No.	C-4323A-107	APP.
CHECK	7/7	
SMI GROUP MADE WITH CAD19		

## 10.ASSEMBLY PARTS LIST

R/N	P/N	PART NAME	DESCRIPTION	QTY
1	558-3502167061AR	SCREW	M3.5*16	8
2	201-2104500003R	HOUSING		1
3	321-2601002286R	RIGGING	M6*M10*26	6
4	321-3701002286R	RIGGING	M6*M10*38	2
5	292-2104500001R	STACK CUP		2
6	274-1253600496R	WASHER		2
7	500-1015800800AR	NUT		8
8	053-1472511658R	LED PCB		1
9	232-2104500001R	RIGHT ELBOW		1
10	ZD-75601-01R	WOOFER		1
11	565-0520100000R	SOCKET		2
12	310-2104500000R	GRILLE		1
13	313-2104500001R	LOGO		1
14	537-4001080301R	SCREW	M4*8	4
15	565-0519100000R	SOCKET		2
16	537-5001150801AR	SCREW	M5*15	4
17	200-2104600003R	BAFFLE		1
18	249-2104600001R	PANEL		1
19	537-6001100801AR	SCREW	M6*10	4
20	ZD-53200-01R	TWEETER		1
21	231-2360182212R	FOOT		2
22	539-6001180302AR	SCREW	M6*15	4
23	243-2104500000R	HANDLE		3
24	537-4002300301AR	SCREW		6
25	565-0825100001R	KNOB SCREW	M8*25	1
26	293-2010470002R	KNOB		1
27	ZC-47251-07R	AMPLIFIER		1
28	232-2104500002R	LEFT ELBOW		1

## 11.ELECTRONIC PARTS LIST

R/N	P/N	PART NAME	DESCRIPTION	QTY	LOCATION
1	031-4200527121R	FUSE	T1.6A/250V	1	
2	042-1003005001R	POWER SWITCH	RF-1003TV-5AC250V	1	
3	044-2600000000R	POWER SOCKET	RF-2004	1	
4	055-0304008233R	RIBBON CABLE	UL1007 24# 4PIN PH=2.54MM	1	
5	055-0308020201R	RIBBON CABLE	8PIN PH=2.54MM	1	
6	055-0310008133R	RIBBON CABLE	UL1007 24# 10PIN PH=2.54MM	1	
7	055-0402030333R	RIBBON CABLE	UL1617 18# 2PIN PH=3.96MM	1	
8	055-0404008111R	RIBBON CABLE	UL1007 18# 4PIN PH=3.96MM	1	
9	055-0408011511R	RIBBON CABLE	UL1007 18# 8PIN PH=3.96MM	1	
10	060-0180120100R	WIRE	1617#18 L=120MM	1	
11	060-0180120300R	RIBBON CABLE	C-022-8 L=120MM	1	
12	060-0180151004R	RIBBON CABLE	C-022-6 L=150 18#	1	
13	071-1100000000R	CABLE TIES	100MM YJ-100	9	
14	527-3012100811AR	SCREW	SP(+)*3*10	2	
15	537-3001060301AR	SCREW	MP(+)*3*6 NI D	9	
16	537-3001080801AR	SCREW	MP(+)*3*8	5	
17	537-3001140801AR	SCREW	MP(+)*3*14	8	
18	826-0008905250R	DAMPING PAD	79*52MM, T=0.5MM	1	
19	826-0009807950R	DAMPING PAD	98.5*79MM T=0.5MM	1	
	088-1472511000R	AMP BOARD		1	
1	001-0220107050R	RESISTOR	2.2Ω /1W J	1	R33
2	001-0393108050R	RESISTOR	39K 2W 5%	2	R24.25
3	001-0398810050R	RESISTOR	0.39R 5W 5%	2	R22.23
4	001-0470308050R	RESISTOR	4.7Ω 2W J	1	R112
5	001-1000207051R	RESISTOR	10R FMF 1W 5%	1	R131
6	001-1000308050R	RESISTOR	10Ω 2W J	1	R79
7	001-1004208050R	RESISTOR	100K2W 5%	1	R7
8	001-1005106050R	RESISTOR	1M-1/2W-5%	1	R21
9	001-1008708050R	RESISTOR	0.1Ω 2W 5%	4	R62.63.69.70
10	001-1803308050R	RESISTOR	18K 2W 5% T66	1	R30
11	001-2203208010R	RESISTOR	22K 2W 1%	1	R32
12	004-3327010000R	RESISTOR	10Ω	1	R84
13	004-7700010000R	RESISTOR	TVR14431 430V@1MA # 10%	1	ZD5
14	006-0104051143AR	CAPACITOR	1UF/50V 20% 5*11 105\$	1	C76
15	006-0474405119R	CAPACITOR	4.7U/100V,20%,5*11MM	1	C19
16	006-1006051243R	CAPACITOR	10UF/25V % 5*12 105\$	4	C18.52.74.75
17	006-1014060533R	CAPACITOR	SVP101M1CE05ME2	1	C51
18	006-1014061153AR	CAPACITOR	100UF/25V 6.3*11 20%105\$	2	C29.30
19	006-1014081153AR	CAPACITOR	100UF/35V 8*11 20%105\$	1	C15

## 12.ELECTRONIC PARTS LIST

20	006-2201061173R	CAPACITOR	22uF/63V 20% 6*11.5	2	C71.80
21	006-2204051143AR	CAPACITOR	22UF/25V 20% 5*11 105\$	1	C53
22	006-2211202403R	CAPACITOR	220UF/200V/20% % 22*31MM	2	C12.14
23	006-2291051163R	CAPACITOR	2.2UF/50V 10% 5*11 105\$	2	C36.72
24	006-4700051251R	CAPACITOR	47uF 35V 105\$ % 5.1*11.5	1	C20
25	006-4714102053AR	CAPACITOR	470UF/35V 10*20 20%105\$	2	C27.28
26	006-4714132063R	CAPACITOR	470UF/50V 20% 13*20 105\$	2	C25.26
27	006-4714162593R	CAPACITOR	470UF/100V 16*25	2	C23.24
28	008-1021040005R	CAPACITOR	102PF 400V M	5	C17.22.61.82.107
29	013-2240320503R	CAPACITOR	220NF100V # 5% PH=5MM	1	C64
30	014-0220083300R	CAPACITOR	0.22UF/275VAC	2	C10.16
31	014-1040311028R	CAPACITOR	MKS2 100nF 100V 10%	7	C31.32.81.99.100.CA1. CA2
32	014-1050411006R	CAPACITOR	1UF/250V 10%	1	C13
33	016-4741112201R	CAPACITOR	0.47UF/100V P=15mm	8	C56.57.58.59.62.63.109. 110
34	017-0190000000R	IC	NJM7815FA T0-220F(JRC)	1	U4
35	017-1830000000R	IC	KIA7915 T0-220 KEC	1	U18
36	017-2700000000R	IC	TDA7294 ST	1	U12
37	018-0304883113R	TRANSISTOR	2SC4883A (SANKEN) T0-220F	1	Q25
38	018-2800112115R	FIELD EFFECT TRANSISTOR	J112G T0-92	2	Q12.23
39	018-4400740111R	FIELD EFFECT TRANSISTOR	IRF740 IR	2	Q5.6
40	018-7100031211R	FIELD EFFECT TRANSISTOR	IRFB31N20D T0-220AB 3P	2	Q17.18
41	022-1014101343R	TRANSFORMER	EC35	1	T3
42	026-3304103150R	INDUCTOR	33uH,10%	1	L1
43	026-8595003210R	INDUCTOR	8.5UH 20%	1	T1
44	034-1001501110R	BRIDGE RECTIFIER	KBL410	1	D11
45	056-0102224400R	JACK	JS3962-2P-WAFER	2	CON5.7
46	056-0103003300R	POWER SOCKET	2PIN 3.96PH	1	AC-IN
47	056-4102220000R	POWER SOCKET	JS-1001-02	1	CON9
48	056-4104003300R	POWER SOCKET	4PIN PH=2.54mm	2	CON13A.CON13B
49	056-4108000000R	JACK	XH-8P	1	CON6
50	056-4110000000R	JACK	10PIN 2.54	2	CON15A.CON15B
51	056-6104224400R	JACK	VH3.96 4PIN	2	CON14A.CON14A1
52	056-6108223150R	JACK	8PIN PH=3.96MM	2	CON10A.CON10B
53	066-0095010000R	SWITCH	T0-2P	1	TSW1
54	067-2200107000R	DIODE	HER107 JAL	2	D9.10
55	067-2200207000R	DIODE	HER204	4	D12.13.14.15
56	067-2201620000R	DIODE	F16C20C mospec T0-220	1	D16
57	067-2201620001R	DIODE	F16C20A mospec T0-220	1	D17
58	067-2205100000R	DIODE	SB/SR5100 DIP	4	D18.19.20.21

## 13.ELECTRONIC PARTS LIST

59	067-3305245000R	DIODE	15V 1/2W IN5245	2	ZD3.4
	088-1472511001R	AMP BOARD		1	
1	002-1000033050R	RESISTOR	1206 10R 1/8W 5%	1	D28
2	002-1001032050R	RESISTOR	100Ω 0805 # 5% 1/8W	2	R34.64
3	002-1002032010R	RESISTOR	1K 1/8W 1% 0805	2	R29.199
4	002-1003032010R	RESISTOR	10KΩ 1/8W 1% 0805	11	R54.55.58.60.66.68.82.9 6.106.107.130
5	002-1004032010R	RESISTOR	100KΩ 1/8W 1% 0805	8	R27.38.76.85.86.101.103 .528
6	002-1502032050R	RESISTOR	1.5K 0805 # 5% 1/8W	1	R90
7	002-1503032010R	RESISTOR	15K 1/8W 1% 0805	1	R189
8	002-1803032010R	RESISTOR	18K 1/8W 0805 1%	3	R3.88.135
9	002-2003032010R	RESISTOR	20KΩ 1/8W 1% 0805	2	R108.111
10	002-2202032010R	RESISTOR	2.2K 1/8W 1% 0805	2	R80.110
11	002-2203032010R	RESISTOR	22K 1/8W 1% 0805	3	R61.105.256
12	002-2203032011R	RESISTOR	220K 1/8W 0805 1%	1	R26
13	002-2703032010R	RESISTOR	27K 1/8W 1% 0805	2	R95.193
14	002-3003032010R	RESISTOR	30KΩ 1/8W 1% 0805	2	R1089.192
15	002-3300032050QR	RESISTOR	33R 1/8W 5%	2	R65.67
16	002-3302032010R	RESISTOR	3.3K 1/8W 1% 0805	1	R83
17	002-3902032050R	RESISTOR	3.9K 0805 # 5% 1/8W	1	R31
18	002-4024022010R	RESISTOR	0805 390K 1/10W J	1	R4
19	002-4701032010R	RESISTOR	470Ω 1/8W 1% 0805	1	R191
20	002-4702032010R	RESISTOR	4.7K 1/8W 1% 0805	4	R28.35.57.59
21	002-4703032010R	RESISTOR	47KΩ 1/8W 1% 0805	4	R53.97.98.100
22	002-5102032010R	RESISTOR	5.1KΩ 1/8W 1% 0805	1	R77
23	002-6802032010R	RESISTOR	6.8KΩ 1/8W 1% 0805	2	R5.6
24	002-8202032010R	RESISTOR	8.2K 1/8W 1% 0805	3	R81.94.118
25	007-1001032060R	CAPACITOR	100PF 50V 5% 0805	3	C11.68.90
26	007-1003062090R	CAPACITOR	103/100V 0805 10%	1	C50
27	007-1004062060R	CAPACITOR	100nF CP50V 10% 0805	12	C4.21.65.66.69.70. 78.79.85.86.96.97
28	007-2201062060R	CAPACITOR	220PF CP50V 10% 0805	2	C55.73
29	007-4701062060R	CAPACITOR	470PF CP50V 10% 0805	1	C54
30	017-5270000001R	IC	NJM4580M NJM-DMP8	3	U5.11.15
31	018-2905401227R	TRANSISTOR	2N5401S SOT-23 KEC	5	Q11.16.19.28
32	018-2905551227R	TRANSISTOR	2N5551S SOT-23 KEC	6	Q9.10.14.15.24.26
33	053-1472511610R	PCB	1.6T FR-4 20Z	1	
34	067-2204148110R	DIODE	ST LL4148 SMD1206	5	D2.22.23.27.38
35	067-3305274000R	DIODE	EIC/IN5274B 130V DO-35	1	ZD6
36	067-6600040110R	DIODE	10BQ040 SMB	2	D33.34
37	537-3001100801AR	SCREW	MP(+)*3*10	9	

## 14.ELECTRONIC PARTS LIST

38	826-0003500050R	DUMPING PAD	T=0.5MM	1	
	088-1472511300R	SIGNAL BOARD		1	
1	006-1006051243R	CAPACITOR	10UF/25V % 5*12 105\$	1	C84
2	006-1011061143R	CAPACITOR	SM 100uF 25V 10%	4	C123.124.125.126
3	006-2201051153R	CAPACITOR	SM 22uF 35V 10%	6	C87.88.118.119.120.121
4	018-2800112115R	FIELD EFFECT TRANSISTOR	J112G TO-92	1	Q13
5	019-0311122001R	POWER LED	204HD/E-A RED & 3	1	LED7
6	019-0322122001R	POWER LED	LED 204GD/E-A GREEN & 3	1	LED8
7	020-1032120325R	POTENTIOMETER	RD16K12D0094-10K15Ax2	1	VR1
8	049-2507222016R	POWER SOCKET	LA1113 7PIN	1	J1
9	056-4108000000R	JACK	XH-8P	1	CON4
	088-1472511301R	SIGNAL BOARD		1	
1	002-1000032010R	RESISTOR	10Ω 1/8W 1% 0805	1	R0
2	002-1001032050R	RESISTOR	100! 0805 # 5% 1/8W	2	R172.173
3	002-1002032010R	RESISTOR	1K 1/8W 1% 0805	1	R127
4	002-1003032010R	RESISTOR	10KΩ 1/8W 1% 0805	12	R128.149.150.151.165. 169.170.171.217.218. 219.220
5	002-1004032010R	RESISTOR	100KΩ 1/8W 1% 0805	3	R15.56.72
6	002-1302032010R	RESISTOR	1.3KΩ 1/8W 1% 0805	1	R73
7	002-1503032010R	RESISTOR	15K 1/8W 1% 0805	1	R215
8	002-2202032010R	RESISTOR	2.2K 1/8W 1% 0805	1	R140
9	002-2203032010R	RESISTOR	22K 1/8W 1% 0805	2	R87.162
10	002-2203032011R	RESISTOR	220K 1/8W 0805 1%	1	R71
11	002-3002032010R	RESISTOR	0805 3K 1/8W # 1%	1	R74
12	002-3003032010R	RESISTOR	30KΩ 1/8W 1% 0805	1	R188
13	002-3301032010R	RESISTOR	330Ω 1/8W 1% 0805	1	R75
14	002-3651012010R	RESISTOR	3.65K 1% 0805	2	R120.126
15	002-3902032050R	RESISTOR	3.9K 0805 # 5% 1/8W	2	R132.136
16	002-3903032010QR	RESISTOR	39K 1/8W 1% 0805	3	R139.141.142
17	002-4701032010R	RESISTOR	470Ω 1/8W 1% 0805	1	R167
18	002-4702032010R	RESISTOR	4.7K 1/8W 1% 0805	1	R137
19	002-4703032010R	RESISTOR	47KΩ 1/8W 1% 0805	3	R161.166.168
20	002-5102032010R	RESISTOR	5.1KΩ 1/8W 1% 0805	3	R133.134.216
21	002-6802032010R	RESISTOR	6.8KΩ 1/8W 1% 0805	3	R152.156.157
22	002-8202032010R	RESISTOR	8.2K 1/8W 1% 0805	1	R147
23	002-8203032050R	RESISTOR	82K 0805 # 5% 1/8W	1	R138
24	007-1001032060R	CAPACITOR	100PF 50V 5% 0805	2	C91.111
25	007-1002062060R	CAPACITOR	1nF CP50V 10% 0805	5	C92.93.114.115.116
26	007-1004062060R	CAPACITOR	100nF CP50V 10% 0805	18	C122.127.128.129.130. 131.133.134.135.136. 137.138.16.161.162.163. 117.141

## 15.ELECTRONIC PARTS LIST

27	007-1502052060QR	CAPACITOR	1N5/50V 5%	2	C94.95
28	007-2201062060R	CAPACITOR	220PF CP50V 10% 0805	2	C112.113
29	007-2702052060R	CAPACITOR	2.7NF 50V 5% 0805 X7R	2	C102.103
30	007-3300052060R	CAPACITOR	33pF 50V NPO 5% 0805	1	C108
31	007-3902052060QR	CAPACITOR	3N9/50V 5%	1	C104
32	007-5602052060R	CAPACITOR	5.6NF 50V 5% 0805	2	C105.106
33	017-1370000000R	IC	NJM2068M SO-8B(JRC)	1	U19
34	017-5270000001R	IC	NJM4580M NJM-DMP8	7	U16.17.20.21.22.23.24
35	018-2905401227R	TRANSISTOR	2N5401S SOT-23 KEC	1	Q22
36	053-1472511653R	PCB	1.6T FR-4 10Z	1	
37	067-2204148110R	DIODE	ST LL4148 SMD1206	4	D32.35.36.37
38	089-0500000012R	SWITCH	SS-22F20-G12	1	
39	221-1472410000R	LED HOLDER	M5*22.5mm	2	
	088-1472514500R	POWER BOARD		1	
1	017-1124000000R	IC	IR2153D DIP-8 IR	1	U1
2	057-2545011241R	JACK	24P	0.5	CON1B
3	067-2200107000R	DIODE	HER107 JAL	1	D5
5	002-1002032010R	RESISTOR	1K 1/8W 1% 0805	1	R8
6	002-1003032010R	RESISTOR	10K $\Omega$ 1/8W 1% 0805	5	R1.2.9.12.14
7	002-1803032010R	RESISTOR	18K 1/8W 0805 1%	3	R11.13.16
8	002-2203032010R	RESISTOR	22K 1/8W 1% 0805	1	R10
9	002-3300032050QR	RESISTOR	33R 1/8W 5%	2	R17.18
10	002-5602032010R	RESISTOR	5.6K $\Omega$ 1/8W 1% 0805	1	R20
11	002-9102032050R	RESISTOR	9.1K 1/8W 0805 5%	1	R19
12	006-2250040561R	CAPACITOR	2.2UF/50V 4*5.5MM K	1	C35
13	007-1002062060R	CAPACITOR	1nF CP50V 10% 0805	2	C3.7
14	007-1004062060R	CAPACITOR	100nF CP50V 10% 0805	3	C2.5.6
15	007-1004079040R	CAPACITOR	1U/50V,20%	1	C1
16	007-1005079040R	CAPACITOR	10UF 25V # 20% & 4*5.4mm	1	C9
17	007-4704062070R	CAPACITOR	470NF/50V 0805 20%	1	C8
18	018-2905401227R	TRANSISTOR	2N5401S SOT-23 KEC	1	Q2
19	018-2905551227R	TRANSISTOR	2N5551S SOT-23 KEC	3	Q1.3.4
20	053-1472511605R	PCB	1.6T FR-4 10Z	1	
21	067-2204148110R	DIODE	ST LL4148 SMD1206	6	D1.3.4.6.7.8
22	067-3300016111R	DIODE	ZMM16 16V 0.5W LL34	2	ZD1.2
	088-1472515000R	LED BOARD		1	
1	001-1002105050R	RESISTOR	1K 1/4W J	6	
2	019-0379132200R	DIODE	BLUE	6	
3	053-1472511658R	PCB	1.6T 10Z	1	
4	055-0302025144R	RIBBON CABLE	UL1007 26# 2P PH=2.54MM	1	



## 16.ELECTRONIC PARTS LIST

	088-1472515500R	AMP BOARD		1	
1	057-2545011241R	JACK	24P	0.5	
2	088-1472515501R	AMP BOARD		1	
3	002-1002032010R	RESISTOR	1K 1/8W 1% 0805	1	R41
4	002-1003032010R	RESISTOR	10K $\Omega$ 1/8W 1% 0805	3	R37.42.51
5	002-2003032010R	RESISTOR	20K $\Omega$ 1/8W 1% 0805	1	R52
6	002-2003403010R	RESISTOR	2K 0805 1% 0.125W	1	R36
7	002-2203032010R	RESISTOR	22K 1/8W 1% 0805	1	R47
8	002-2205032010R	RESISTOR	2.2M 1/8W 1% 0805	1	R44
9	002-2703032010R	RESISTOR	27K 1/8W 1% 0805	1	R48
10	002-4701032010R	RESISTOR	470 $\Omega$ 1/8W 1% 0805	1	R43
11	002-4702032010R	RESISTOR	4.7K 1/8W 1% 0805	3	R39.40.49
12	002-4703032010R	RESISTOR	47K $\Omega$ 1/8W 1% 0805	2	R45.46
13	002-4709032010R	RESISTOR	4.7 $\Omega$ 1/8W 1% 0805	1	R50
14	007-1001052093R	CAPACITOR	10PF 100V 5% 0805	1	C45
15	007-1002062060R	CAPACITOR	1nF CP50V 10% 0805	3	C37.42.43
16	007-1004062060R	CAPACITOR	100nF CP50V 10% 0805	8	C34.38.39.41.44.46.47.48
17	007-1014063090R	CAPACITOR	1U/100V 10% 1206	2	C33.49
18	010-2251602010R	CAPACITOR	T450A12251CMAP1	1	C40
19	017-5220000001R	IC	L78L05ABD SO-8 ST	1	U10
20	017-7070000000R	IC	IR2011S PBF 8PIN	1	U9
21	017-7110000000R	IC	ISL55001IBZ SO-8 intersil	1	U6
22	017-7120000000R	IC	TC7WH08FU(TE12LF) 8PIN	1	U8
23	017-7130000000R	IC	TC7WH04FU 8PIN	1	U7
24	018-2905401227R	TRANSISTOR	2N5401S SOT-23 KEC	1	Q7
25	018-2905551227R	TRANSISTOR	2N5551S SOT-23 KEC	1	Q8
26	019-0012003103R	DIODE	MURS120T3 (Pk:SMB) ON	1	D26
27	053-1407001610R	PCB	FR-4 1.6 10Z	1	
28	067-2204148110R	DIODE	ST LL4148 SMD1206	3	D24.25.903