

Wharfedale

Pro

Service Manual : PM-500 Professional Audio Mixers

PM-500

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1. SPECIFICATIONS

INPUTS	
BALANCED MIC	4
LINE CHAMMELS	5
INPUT IMPEDANCE	
LOW Z(BALANCED)	2KOHMS
LINE	16KOHMS
MAIN OUT	UNBA.TRS
FREQUENCY RESPONSE	20TO25KHz
MAXIMUM CHANNEL GAIN	
LOW Z(BALANCED)	40dB
LINE	20dB
MAXIMUM INPUT LEVEL	
LOE Z(MIC)	0dB
LINE	20dB
MAXIMUM OUTPUT LEVEL	
MAIN	18dBv
RECORD OUT	5dBv
MASTER EQ	
HI EQ	NA
MID EQ	NA
LOW EQ	NA
PROTECTION	THERMAL/LOAD
MASTER SECTION	
BUILT IN DIGITAL EFFECT	YES
THD	LESS THAN0.1%
CHANNEL EQUALISATION	
LOW EQ	80Hz ±15dB
HI EQ	12KHz ±15dB
POWER CONSUMPTION	120 WATTS
POWER REQUIREMENTS	160WATTS
WEIGHT	9.32KG/PCS
DIMENSIONS(H*W*D)	475*269*155

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3.ASSEMBLY PART LIST

R/N	P/N	PART NAME	DESCRIPTION	QUA
1	088-1245000000	MAIN P.C.B		1
2	088-1245002200	ECHO P.C.B		1
3	088-1245000300	AMP P.C.B		1
4	088-1245003800	IMPROT P.C.B		1
5	022-1076902014	TRANSFORMER		1
6	041-2013000000	SWITCH	R130-22C-11P	1
7	215-1247000011	KNOB	ASHE	10
8	215-1247000022	KNOB	REN	7
9	215-1247000033	KNOB	ASHE	6
10	309-1245000001	MAIN FRAME		1
11	307-3000602401	CUPREOUS POLE		6
12	344-1245000001	PM500 CABINET		1
13	226-3800601111	RUBBER FOOT		4
14	524-3022080811A	SCREWS	SK(+)*3*8MC H BZn	6
15	524-3003080811A	SCREWS	SK(+)*3*8DA H BZn	10
16	527-3022180811A	SCREWS	SP(+)*3*18MC H BZn	4
17	537-4001120801A	SCREWS	MP(+)*4*12MC H BZn	4
18	541-4001240801A	SCREWS	MO(+)*4*24MF OB	2
19	541-4001300801A	SCREWS	MO(+)*4*30 MF OB	8
20	553-4001208061A	SCREWS	WT(+)*4*20 DA HOB	4
21	553-4002168061A	SCREWS	WT(+)*4*16DA HOB	32

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4.ELECTRONIC PARTS LIST

R/N	P/N	PART NAME	DESCRIPTION	QUA
	088-124500000	MAIN PCB PM-500		1
1	053-1245001300	P.C.B	93*423mm	1
2	001-1001105050	RESISTOR	100 O1/4W	5
3	001-1002105050	RESISTOR	1K 1/4W	4
4	001-1003105050	RESISTOR	10K 1/4W	16
5	001-1004105050	RESISTOR	100K 1/4W	2
6	001-1202105050	RESISTOR	1.2K 1/4W	8
7	001-2202105050	RESISTOR	2.2K 1/4W	1
8	001-1203105050	RESISTOR	12K 1/4W	6
9	001-1502105050	RESISTOR	1.5K 1/4W	1
10	001-1802105050	RESISTOR	1.8K 1/4W	1
11	001-1803105050	RESISTOR	18K 1/4W	12
12	001-2703105050	RESISTOR	27K 1/4W	2
13	001-6801105050	RESISTOR	680R 1/4W	4
14	001-3302105050	RESISTOR	3.3K 1/4W	3
15	001-3303105050	RESISTOR	33K 1/4W	1
16	001-5602105050	RESISTOR	5.6K 1/4W	10
17	001-5603105050	RESISTOR	56K 1/4W	1
18	001-6802105050	RESISTOR	6.8K 1/4W	7
19	001-2203105050	RESISTOR	22K 1/4W	8
20	001-8202105050	RESISTOR	8.2K 1/4W	4
21	006-1004051143	CAPACITOR	10UF/25V	4
22	006-2204051133	CAPACITOR	22UF/16V	8
23	006-2204051143	CAPACITOR	22UF/25V	5
24	006-2204061163	CAPACITOR	22UF/50V	16
25	006-4704051143	CAPACITOR	47UF/25V	7
26	008-1001005014	CAPACITOR	100PF/50V	8
27	008-1003005015	CAPACITOR	0.01UF/50V	2
28	008-1004005017	CAPACITOR	0.1UF/50V Z5U	13
29	008-1502005017	CAPACITOR	0.0015UF/50V Z5U	1
30	008-4703005015	CAPACITOR	0.047UF/50V	3
31	009-1010507000	CAPACITOR	100PF/50V	6
32	009-1020507000	CAPACITOR	1000PF/50V	2

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4.ELECTRONIC PARTS LIST

33	009-2700507000	CAPACITOR	27PF/50V	6
34	009-3300507000	CAPACITOR	33PF/50V	1
35	009-3320507000	CAPACITOR	0.0033UF/50V	5
36	009-4730507000	CAPACITOR	0.047UF/50V	5
37	009-2200507000	CAPACITOR	22PF/50V	5
38	009-5610507000	CAPACITOR	560PF/50V	1
39	017-0160000000	IC	NJM4558D	9
40	019-0311122001	LED		1
41	222-0200503011	LAMPSTANDARD		1
42	020-5022127315	POTENTIOMETER	L=30mm EVU J84 F3053Y	1
43	020-5032111115	POTENTIOMETER	S.ROT/VR 50KB 30MM P	10
44	048-1700000000	SOCKET	NYS139 K3Y1	4
45	048-1800000000	SOCKET	NYS234	7
46	051-0500000000	SOCKET	JK20056 RCA/JACK	2
47	056-4206220000	WIRE	JS-1135R-06	1
48	056-4202220000	WIRE	2P WAFER/S PH=2.5	1
49	055-2502300344	WIRE	2P WAFER/P	1
50	057-2541801081	ACUS	PH=2.5 H=18mm	1
	088-1245002200	ECHO P.C.B		1
1	053-1245001322	P.C.B	66*51* 1.6mm	1
2	001-1001510050	RESISTOR	100O 5W	1
3	001-1503103050	RESISTOR	15K 1/8W	2
4	001-1003103050	RESISTOR	10K 1/8W	4
5	001-4702103050	RESISTOR	4.7K 1/8W	2
6	001-5602103050	RESISTOR	5.6K 1/8W	1
7	006-1014061133	CAPACITOR	100UF/16V	2
8	006-1004051143	CAPACITOR	10UF/25V	2
9	006-1004051163	CAPACITOR	10UF/50V	1
10	006-4704051133	CAPACITOR	47UF/16V	1
11	006-4714102154	CAPACITOR	470UF/35V	1
12	006-4794051133	CAPACITOR	4.7UF/16V	2
13	008-1004005017	CAPACITOR	0.1UF/50V Z5U	2

4.ELECTRONIC PARTS LIST

15	008-3302005017	CAPACITOR	3300PF/50V Z5U ±20% f 5	1
16	008-3902005017	CAPACITOR	3900PF/50V Z5U ±20% f 5	1
17	008-5601005017	CAPACITOR	560PF/50V Z5U ±20% f 5	2
18	014-8230100001	CAPACITOR	0.082UF/50VJ	2
19	017-0150000000	IC	PT2399	1
20	017-0950000000	IC	HPC7805H LM7805CK NEC TO-220	1
21	056-4108001144	WIRE	8P WAFER/S PH=2.5 H=8.5mm	1
22	001-1002103050	RESISTOR	1K 1/8W	1
	088-1245000300	AMP PM500		1
1	053-1247001310	P.C.B	AMP PCB 70*170mm	1
2	001-3302105050	RESISTOR	3.3K 1/4W J	3
3	001-1003105050	RESISTOR	10K 1/4W J	1
4	001-3003105050	RESISTOR	30K 1/4W J	1
5	001-2703105050	RESISTOR	27K 1/4W J	2
6	001-1503105050	RESISTOR	15K 1/4W J	1
7	001-5601105050	RESISTOR	560 1/4W J	1
8	001-1001105050	RESISTOR	100 1/4W J	2
9	001-1202105050	RESISTOR	1.2K 1/4W J	2
10	001-9100105050	RESISTOR	91 1/4W J	3
11	001-1002105050	RESISTOR	1K 1/4W J	3
12	001-1802105050	RESISTOR	1.8K 1/4W J	1
13	001-7301105050	RESISTOR	730 1/4W J	1
14	001-1501105050	RESISTOR	150 1/4W J	2
15	001-6201105050	RESISTOR	620 1/4W J	2
16	001-1005105050	RESISTOR	1M 1/4W J	1
17	001-3001308050	RESISTOR	300 2W J	1
18	001-0339810050	RESISTOR	0.33 5W J	2
19	001-4702307050	RESISTOR	4.7K 1W J	2
20	001-3903105050	RESISTOR	39K 1/4W J	1
21	001-2202105050	RESISTOR	2.2K 1/4W J	1
22	001-0390308050	RESISTOR	3.9 2W J	1
23	001-1000308050	RESISTOR	10 2W J	1
24	006-1004051163	CAPACITOR	SM10UF/50V 20%	2

4.ELECTRONIC PARTS LIST

25	006-4794051163	CAPACITOR	4.7UF/50V 20%	3
26	006-4704081163	CAPACITOR	SM47UF/50V 20%	2
27	006-4704051143	CAPACITOR	SM47UF/25V 20%	2
28	006-2224163053	CAPACITOR	2200UF/35V 20%	2
29	006-2204061163	CAPACITOR	SM22UF/50V 20%	1
30	006-4724224073	CAPACITOR	SM4700UF/63V 20% T 25*40mm	2
31	008-2201010014	CAPACITOR	220PF 100V J	3
32	008-1001010014	CAPACITOR	100PF 100V	4
33	008-1501010014	CAPACITOR	150PF 100V	1
34	008-4701010014	CAPACITOR	470PF 100V	1
35	008-1003027505	CAPACITOR	0.01UF/275V	2
36	014-1040300001	CAPACITOR	104/100V/CL-11	3
37	023-0120110101	INDUCTANCE	2.2UH	1
38	056-0102220000	SOCKET	JS-4001-02-2PIN	2
39	056-0103220000	SOCKET	JS-4001-03-3PIN	1
40	056-3106220000	SOCKET	JS1135-06-6PIN	1
41	067-2204004000	DIODE	IN4004	3
42	067-1104148000	DIODE	IN4148	4
43	018-0500030115	AUDIBLE	2SK30ATM TO-92	2
44	034-1114000805	BRIDGE	BR804	1
45	034-1112000405	BRIDGE	KBP204	1
46	018-0903200115	AUDION	KTC3200	3
47	018-0901027115	AUDION	KTC1027	1
48	018-0903198115	AUDION	KTC3198	1
49	018-0904370111	AUDION	KTA4370	1
50	018-0401047116	AUDION	D1047	1
51	018-0701268115	AUDION	KTA1268	3
52	018-0701023115	AUDION	KTA1023	2
53	018-0701659111	AUDION	KTA1659	1
54	018-0200817116	AUDION	B817	1
55	306-1245000001	RADIATOR		1
56	017-0190000000	IC	L7815CV+15 OUT	1
57	017-1830000000	IC	L7915CV-15V OUT	1

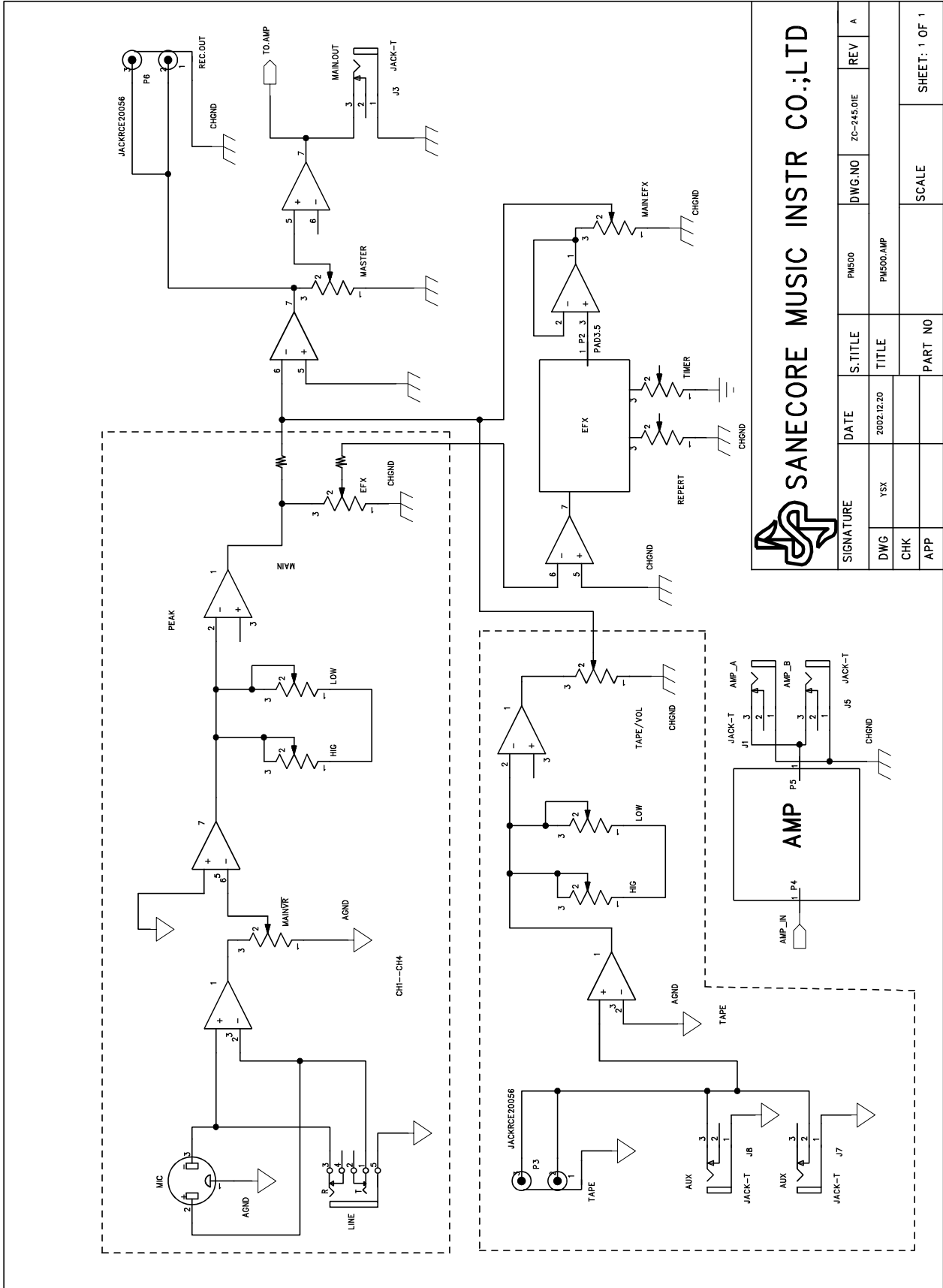
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4.ELECTRONIC PARTS LIST

58	306-1102000002	RADIATOR	(C102.10M)	2
59	305-1245000001	BRACKET		2
60	527-3022100811A	SCREW	SP(+) 3×10 MC H BZn	16
61	513-3005050800A	WASHER		10
62	517-3000000800A	WASHER		10
63	500-3050240800A	NUT		2
	088-1245003800	IMPORT P.C.B		1
1	053-1018001206	P.C.B	50*30mm	1
2	049-1304113124	SOCKET	LS-2036	2
3	055-0402220322	WIRE	1JS5001/-02/220	1

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5. SCHEMATIC DIAGRAM

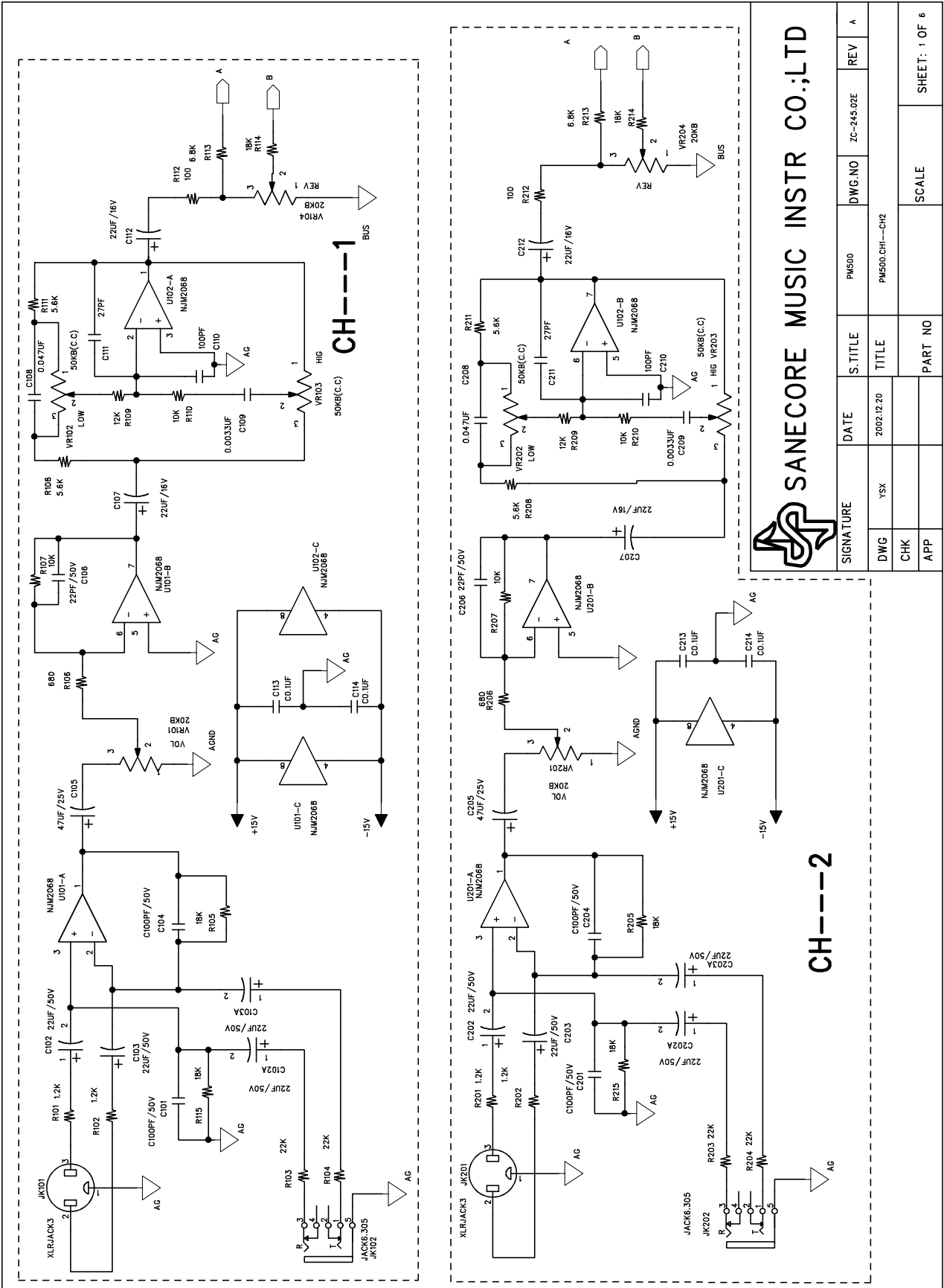


SANECORE MUSIC INSTR CO.,LTD

SIGNATURE	DATE	S. TITLE	PM500	DWG. NO	ZC-245.01E	REV	A
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CHK							
APP				PART NO	SCALE	SHEET: 1 OF 1	

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5. SCHEMATIC DIAGRAM

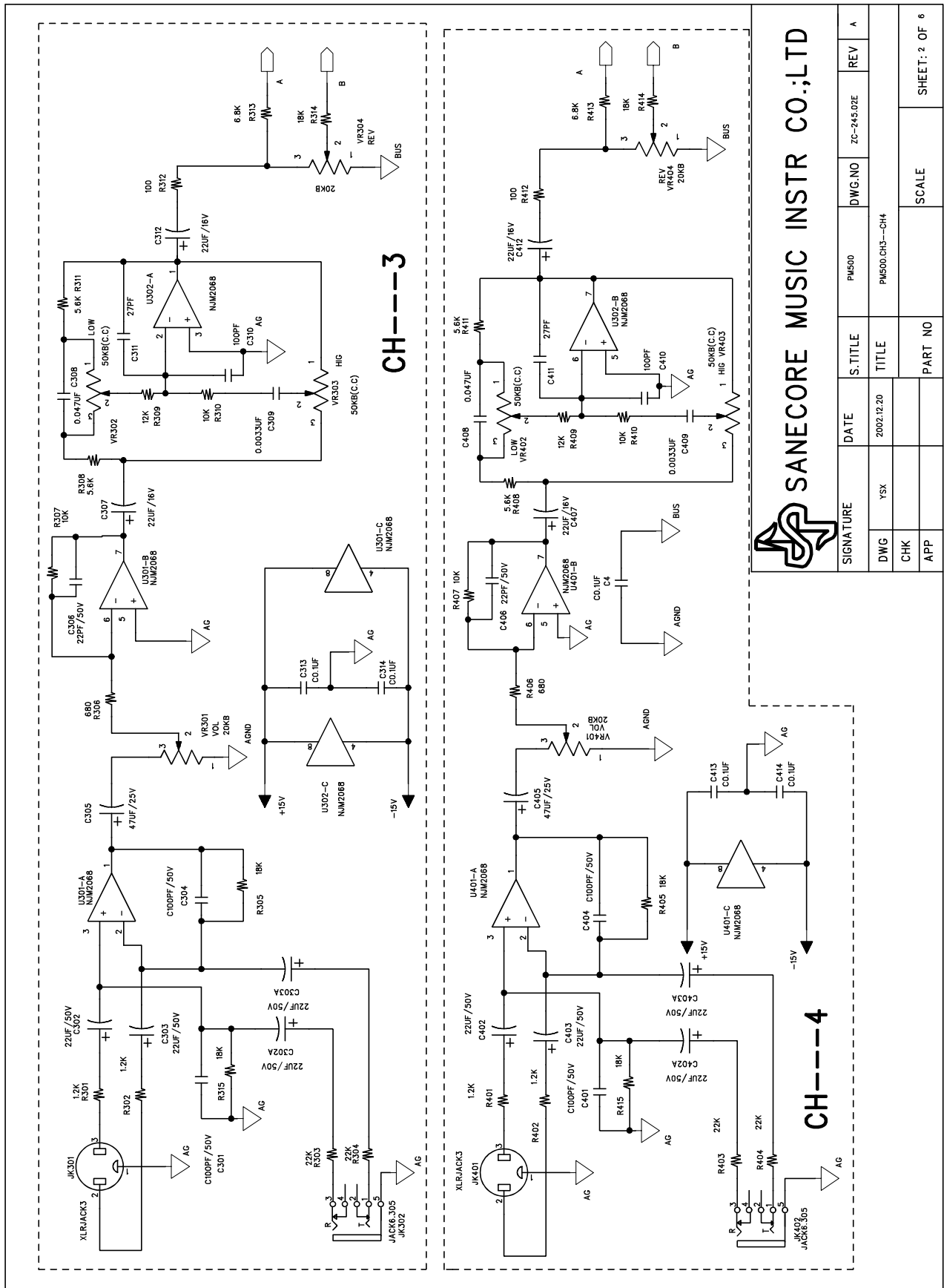


SANECORE MUSIC INSTR CO.,LTD

SIGNATURE	DATE	S.TITLE	PM500	DWG.NO	ZC-245.02E	REV	A
	2002.12.20	TITLE	PM500.CH1---CH2				
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CHK							
APP							
						SCALE	
							SHEET: 1 OF 6

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5. SCHEMATIC DIAGRAM

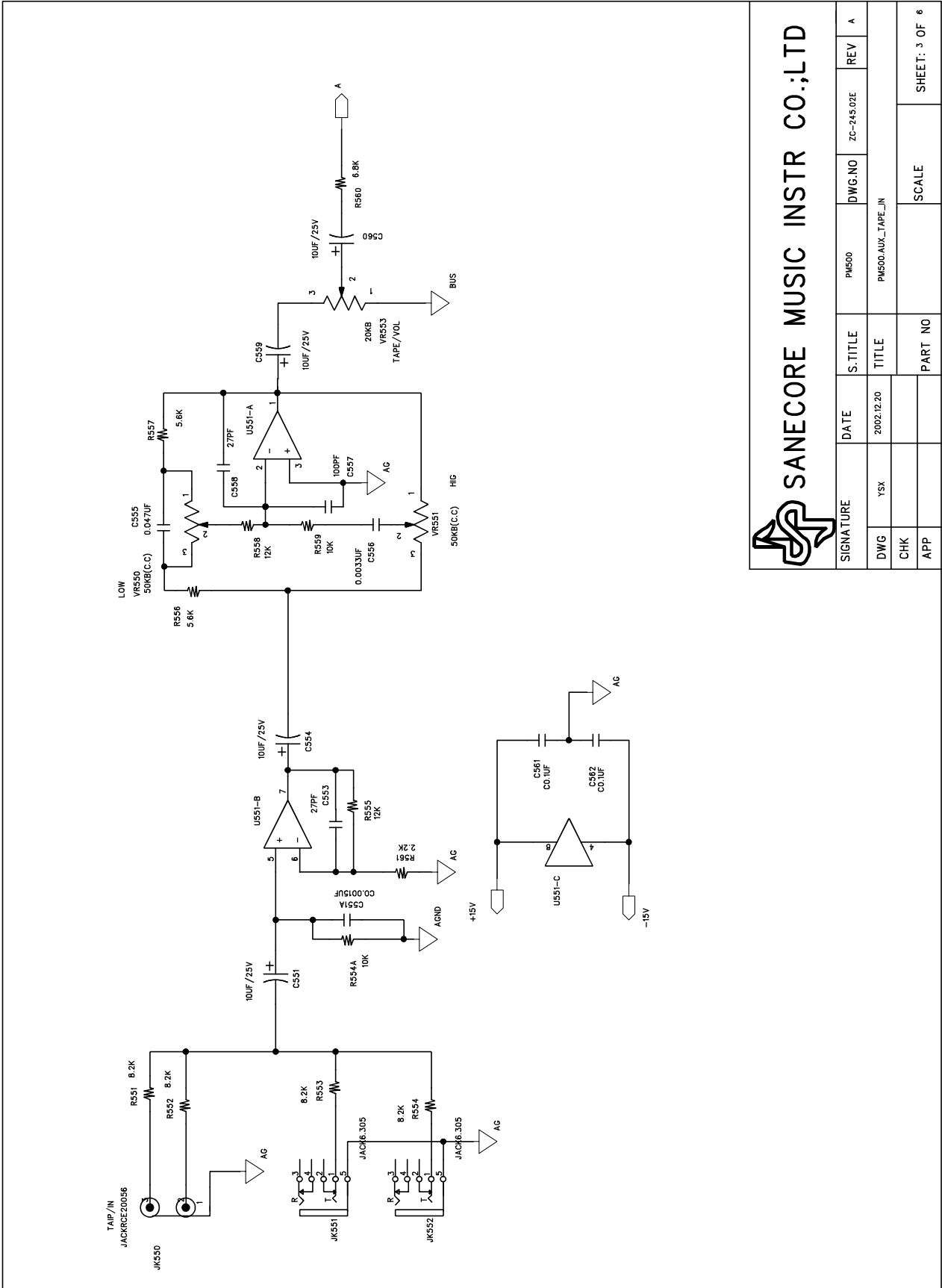


SANECORE MUSIC INSTR CO.,LTD

SIGNATURE	DATE	S.TITLE	PM500	DWG.NO	ZC-245.02E	REV	A
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APP							SHEET: 2 OF 6

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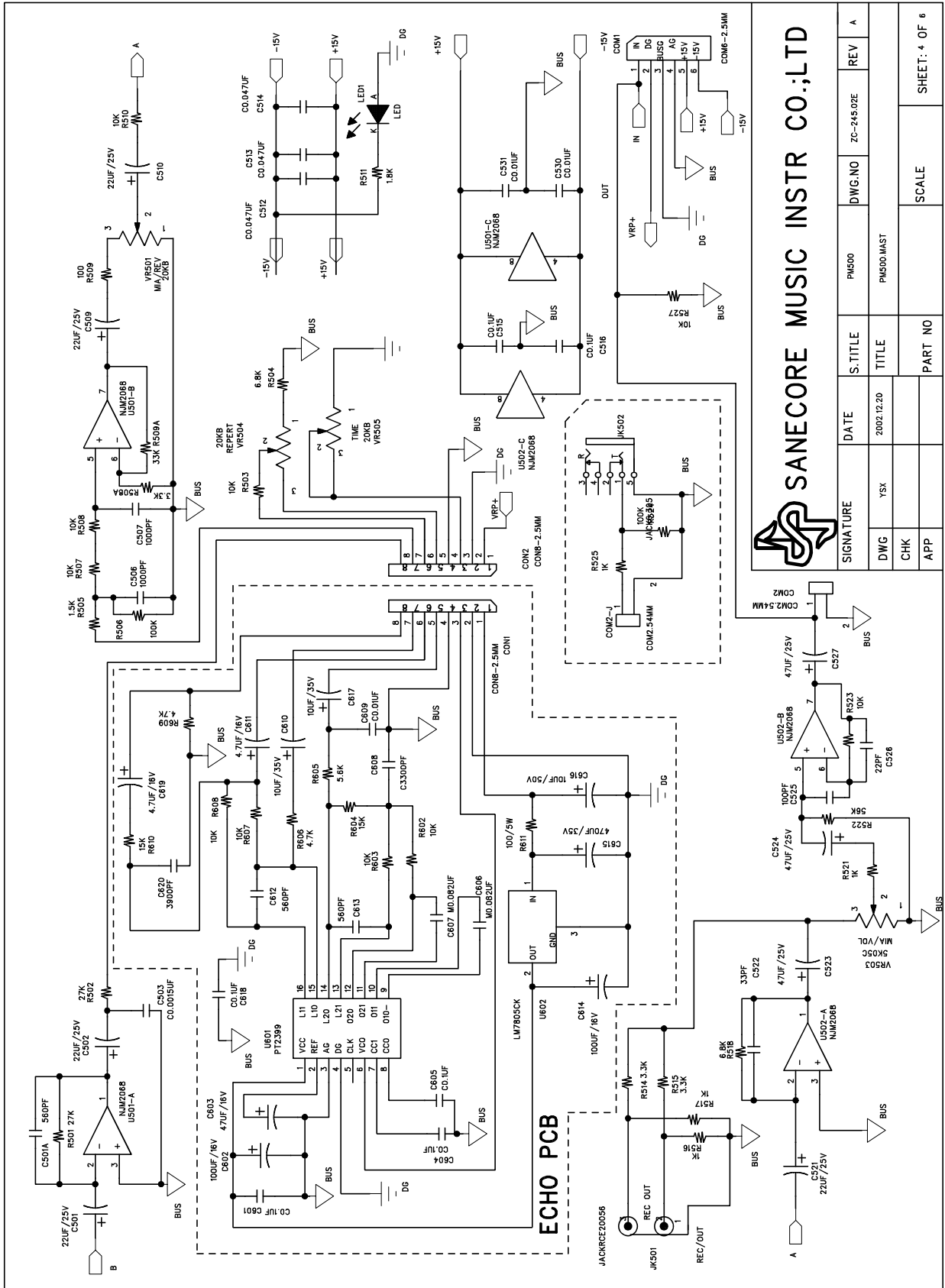
5. SCHEMATIC DIAGRAM



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CHK			SCALE		SHEET: 3 OF 6		
APP							

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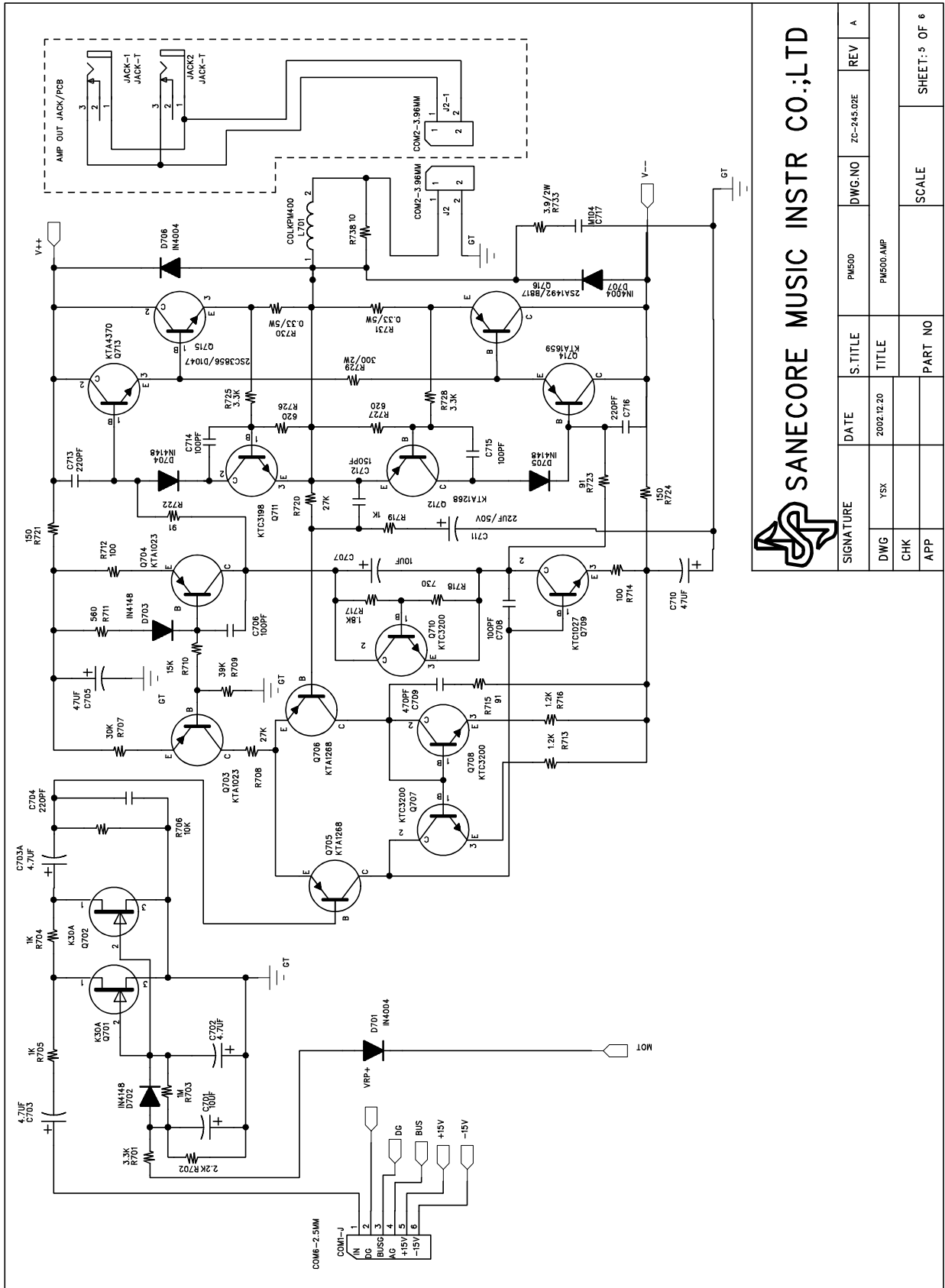
5. SCHEMATIC DIAGRAM



		SIGNATURE	DATE	S.TITLE	PKGNO	DWG.NO	ZC-245.02E	REV	A
		DWG	YSX	2002.12.20	TITLE	PM500.MAST			
CHK									
APP									
		PART NO	SCALE					SHEET: 4 OF 6	

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5. SCHEMATIC DIAGRAM



SANECORE MUSIC INSTR CO.,LTD

SIGNATURE	DATE	S. TITLE	DWG. NO	REV	A
DWG	YSX	2002.12.20	PM500	ZC-245.02E	
CHK		TITLE	PM500.AMP		
APP		PART NO		SCALE	SHEET: 5 OF 6

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