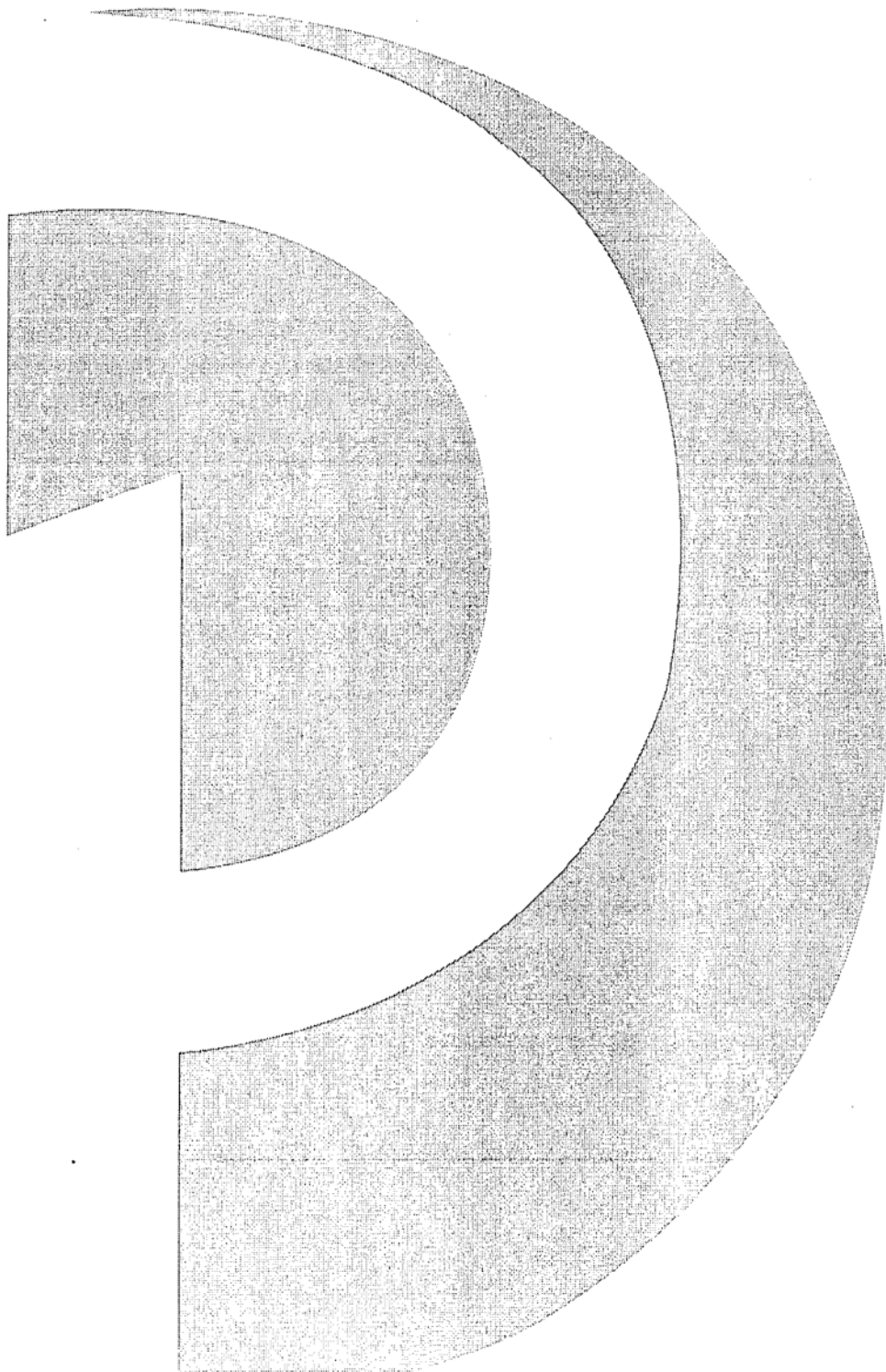


T8100 SIGNAL PROCESSOR

SERVICE MANUAL



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A8100

Inte grated Mobile Sound System

SERVICE MANUAL

contents

PANEL LAYOUT 3

BLOCK GIAGRAN 4

MAIN 5

POWER SUPPLY 6

TUBE POWER SUPPLY 7

VALVES STAGE 8

CH1 INPUT 9

CH1_2 TONES 10

CH1_2 CONNECTOR 11

CH1_2 INPUT VUMETER 12

CH1_2 OUT PUT 13

CH1_2 OUT PUT2 14

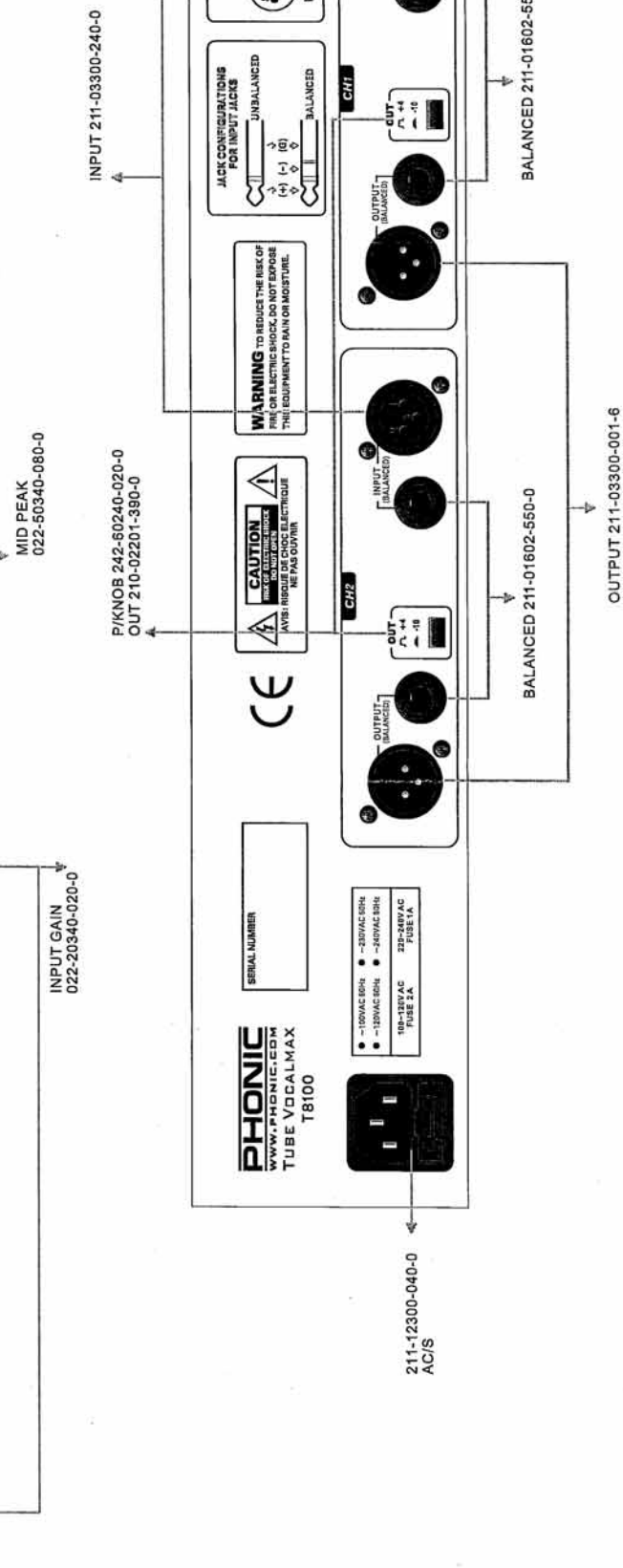
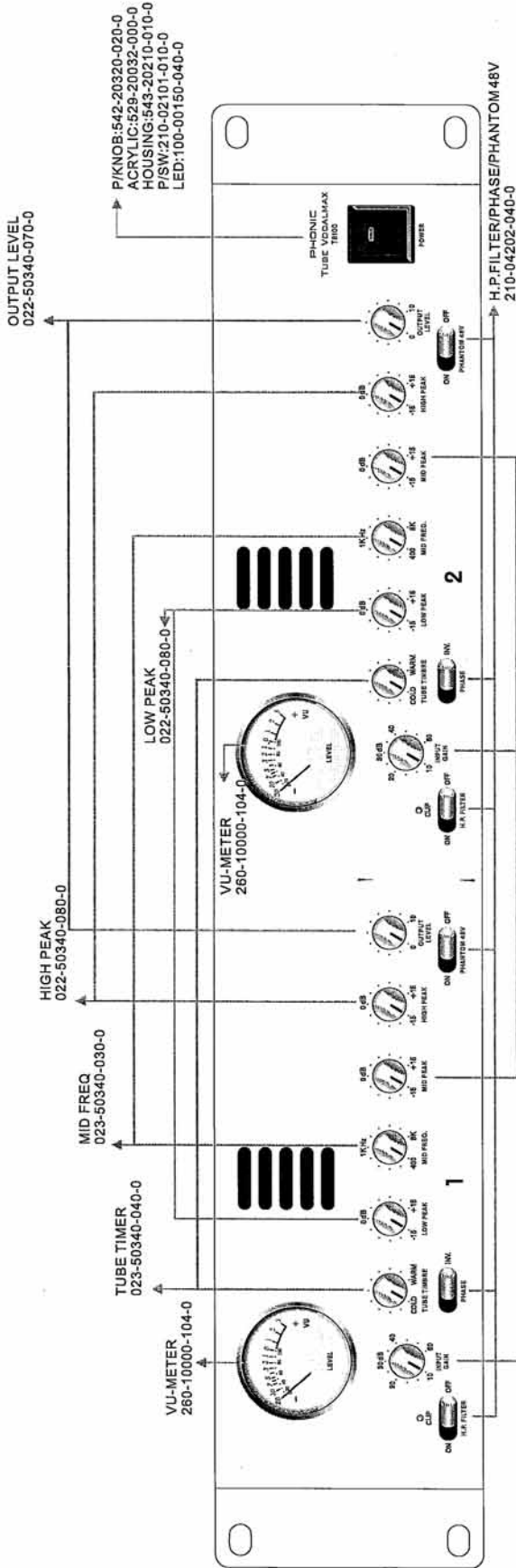
BOM

POWER REQUIREMENT CLASSIFICATION 15

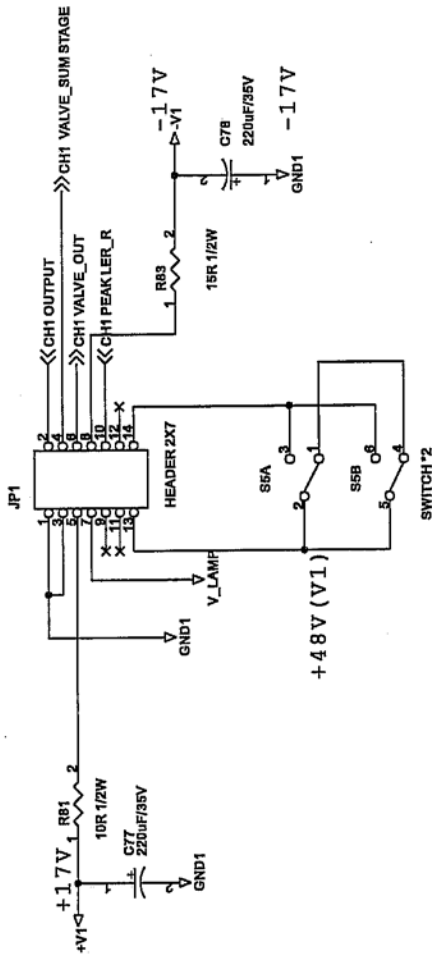
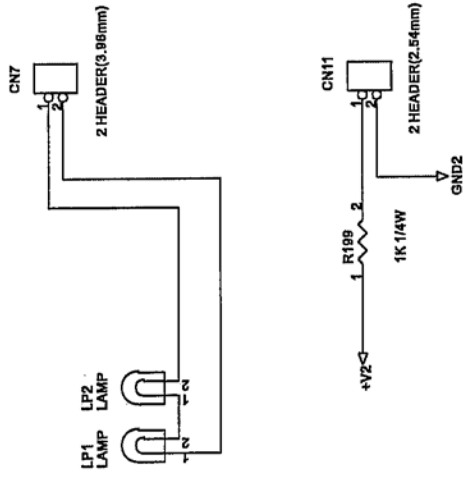
MISCELLANEOUS ITEMS 16

FRONT PCB-PART LIST 18

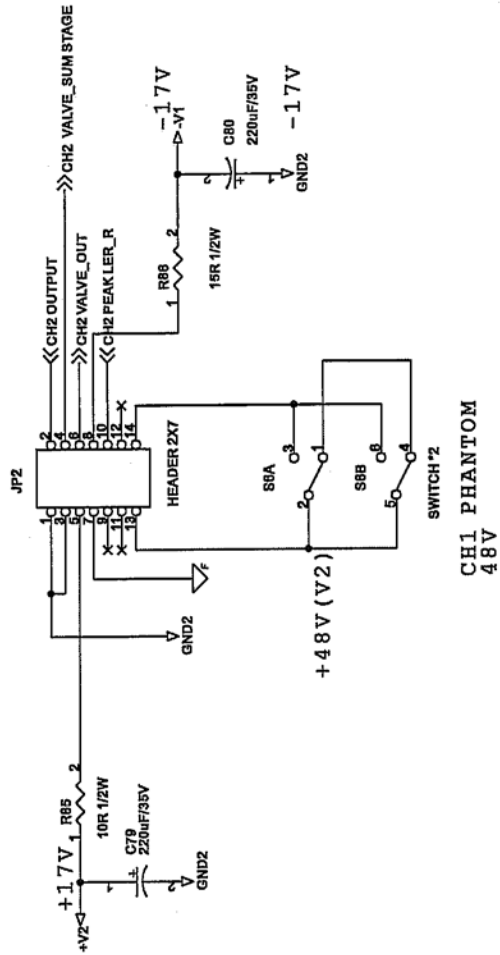
BACK PCB-PART LIST 20



MAIN



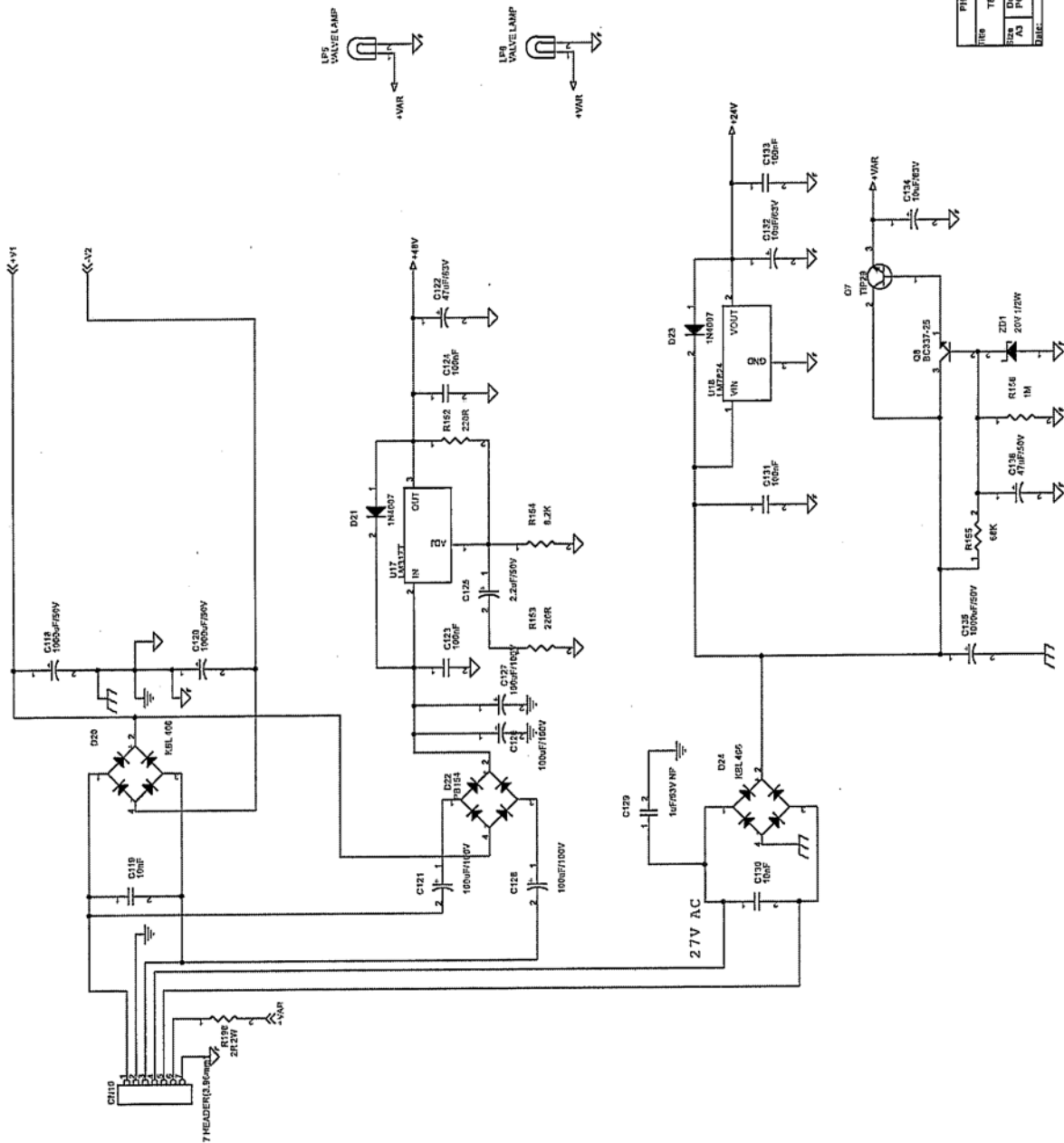
CH1 PHANTOM
48V



CH2 PHANTOM
48V

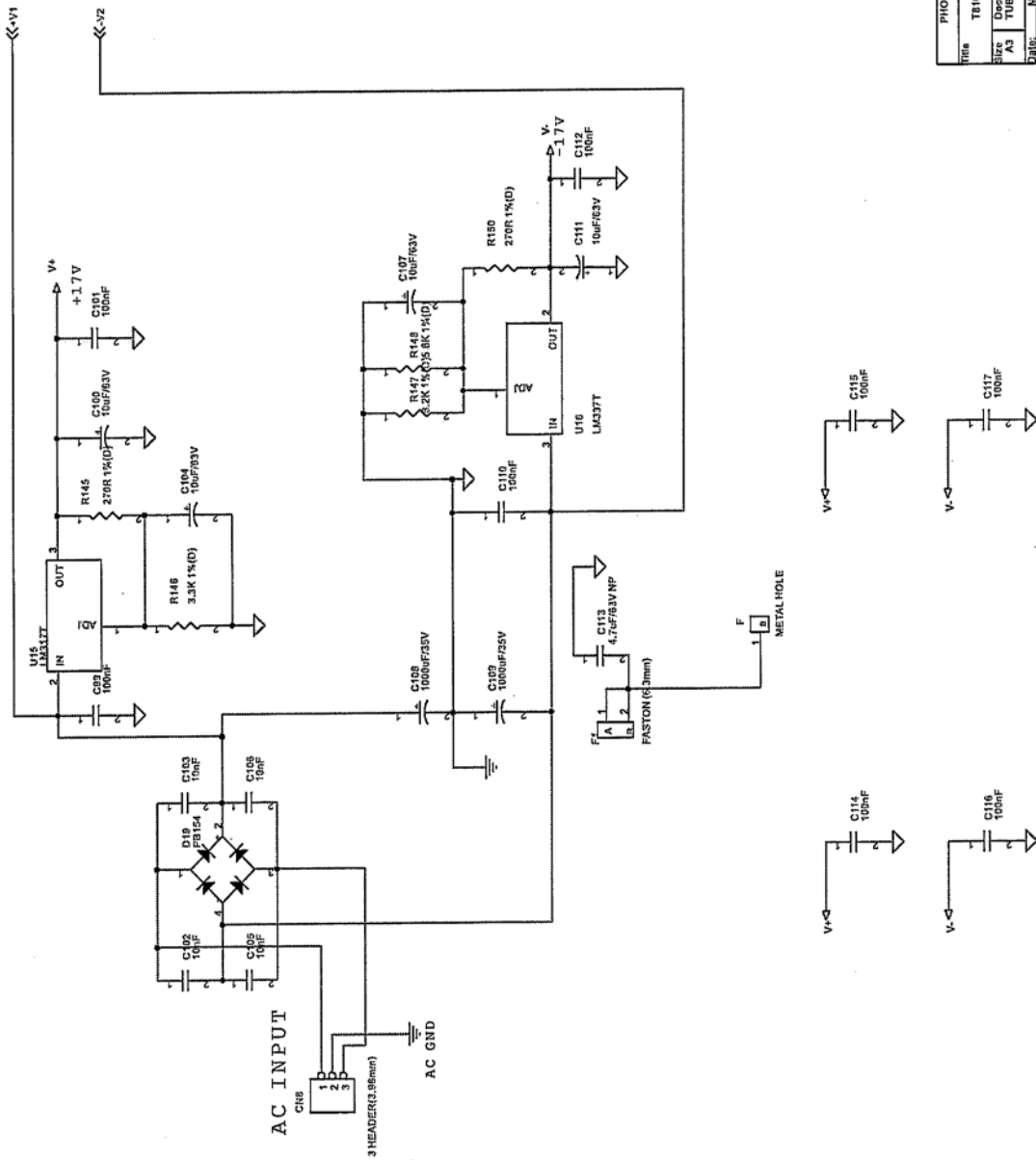
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Part Number		T8100	
Size	Document Number	CONNECTORS	
A4	Rev	03	
Date:	Monday, July 21, 2003	Sheet:	7 of 13

POWER SUPPLY



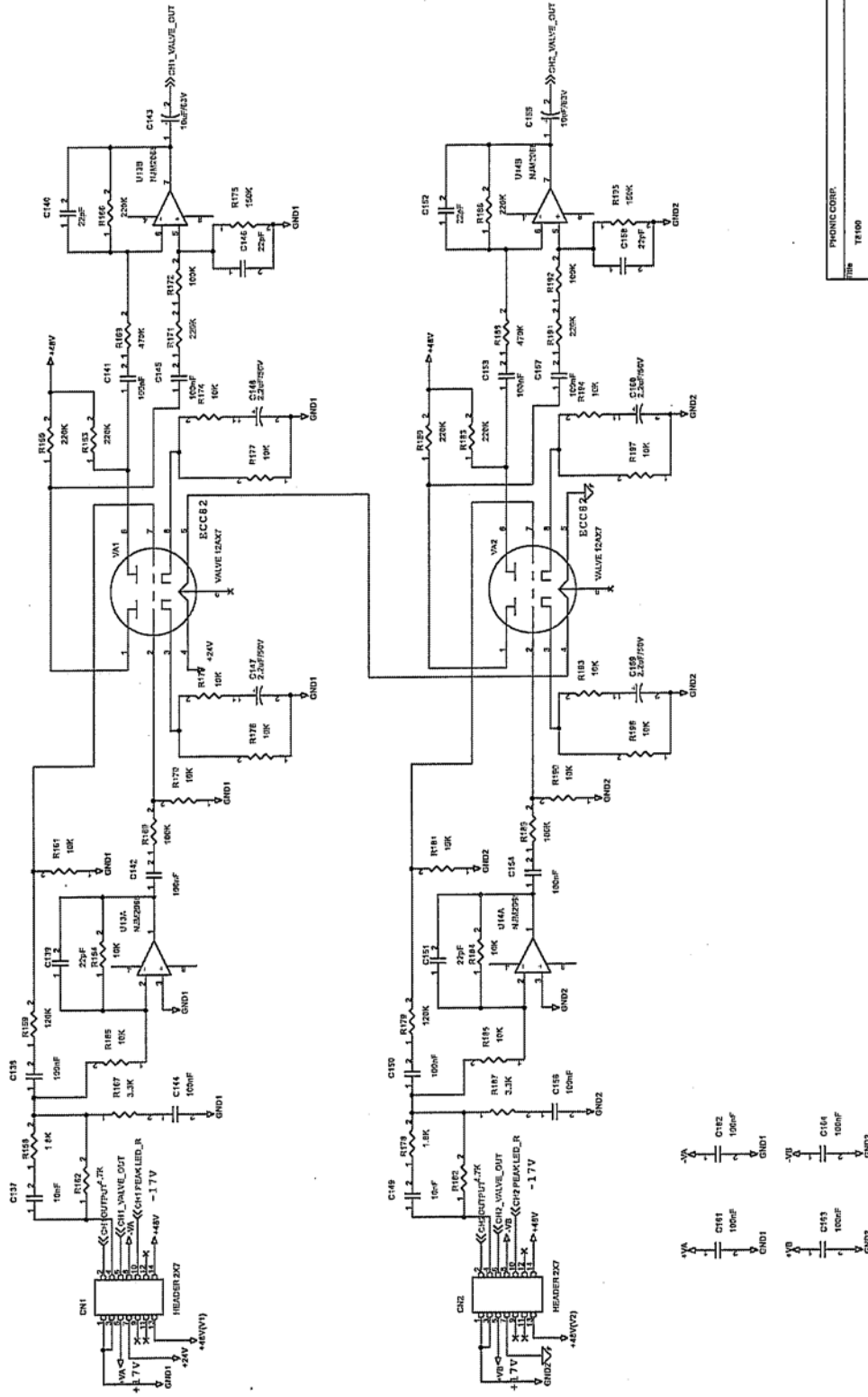
PHONIC CORP.	
Rev	T8100
POWER SUPPLY	
Rev	E3
Date: MONDAY, JULY 21, 2003 Sheet 11 of 13	

TUBE POWER SUPPLY



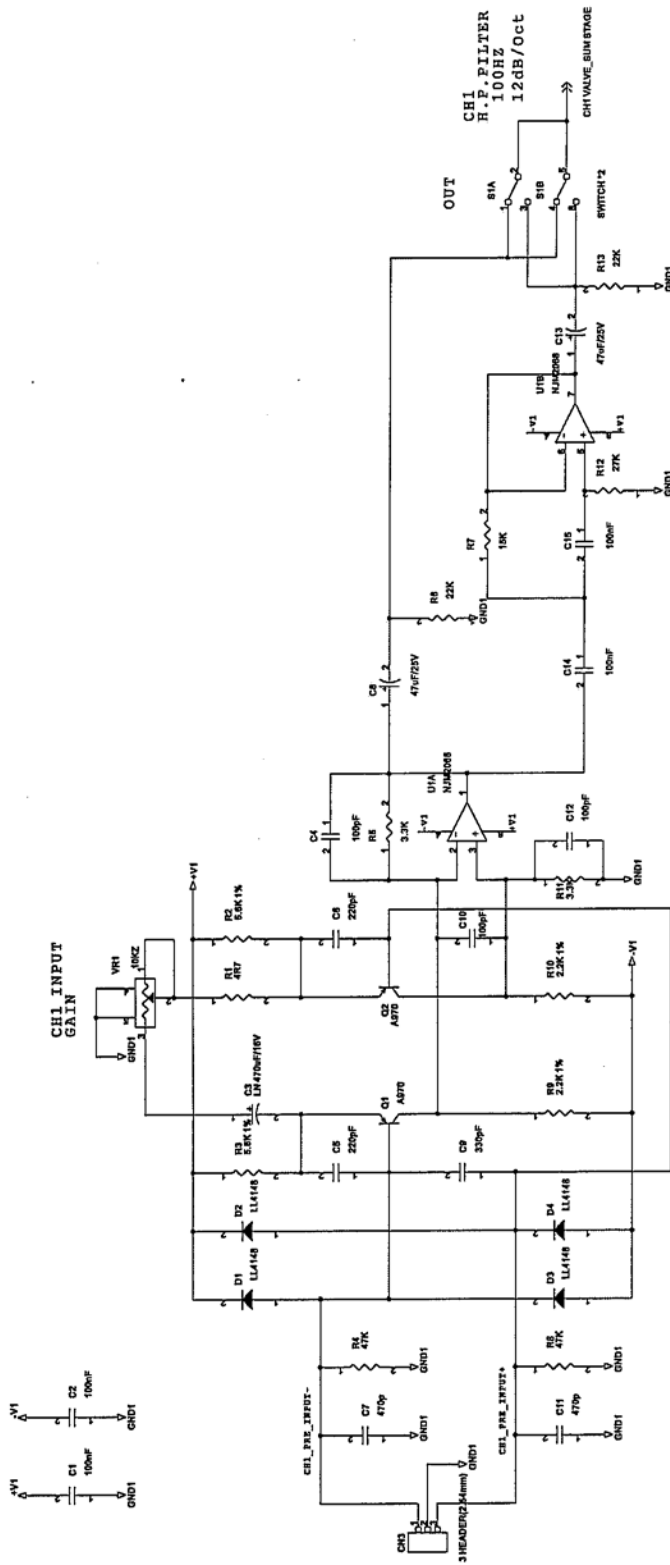
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Docu. Number	TUBE POWER SUPPLY
Rev	02
Date	Monday, July 21, 2003
Sheet	10 of 13

VALVES STAGE

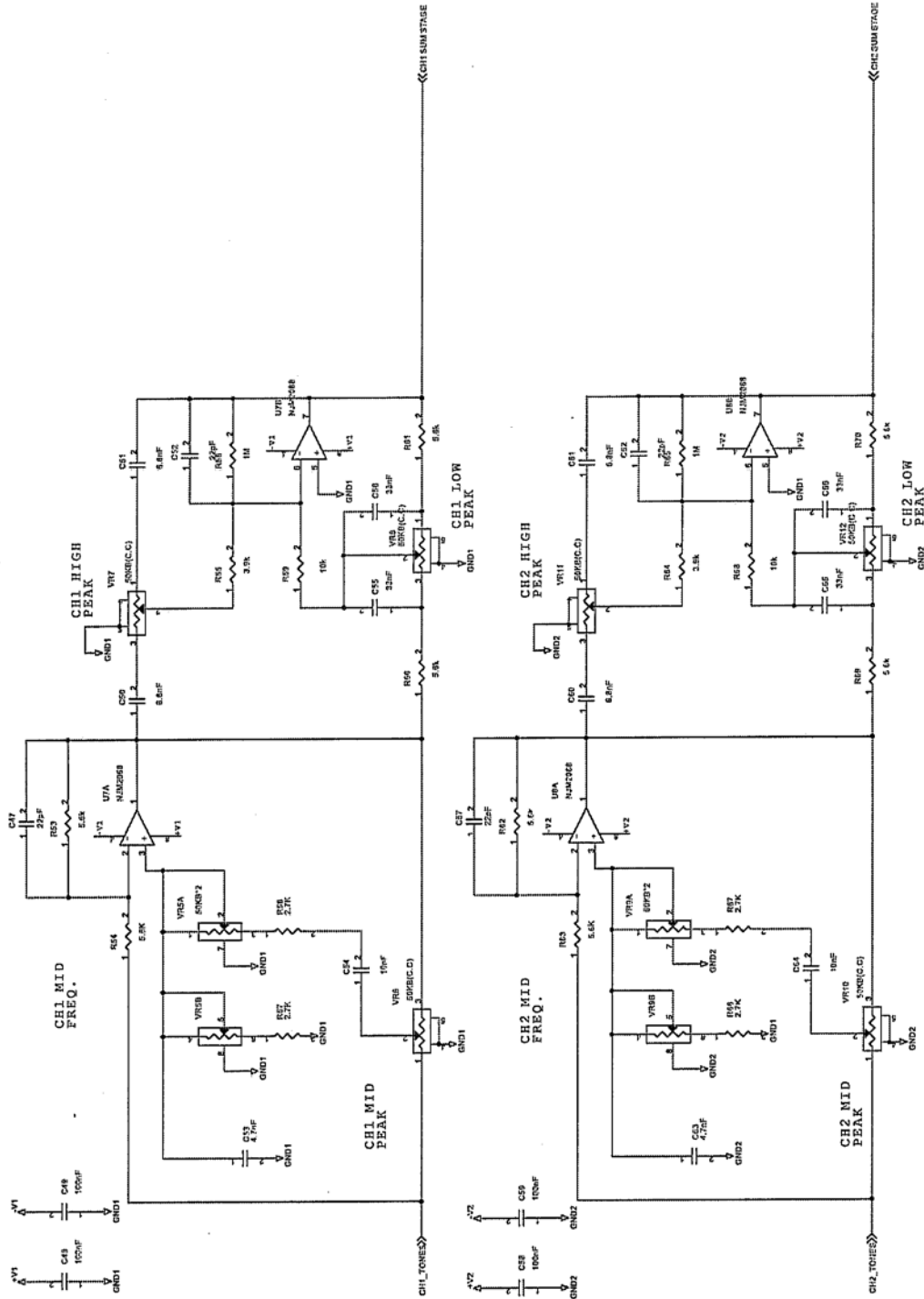


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Doc#	12-01-13
Doc Name	T8100 SERVICE MANUAL
Doc Title	VALVES STAGE
Date	Monday, June 21, 2023

CH1 INPUT

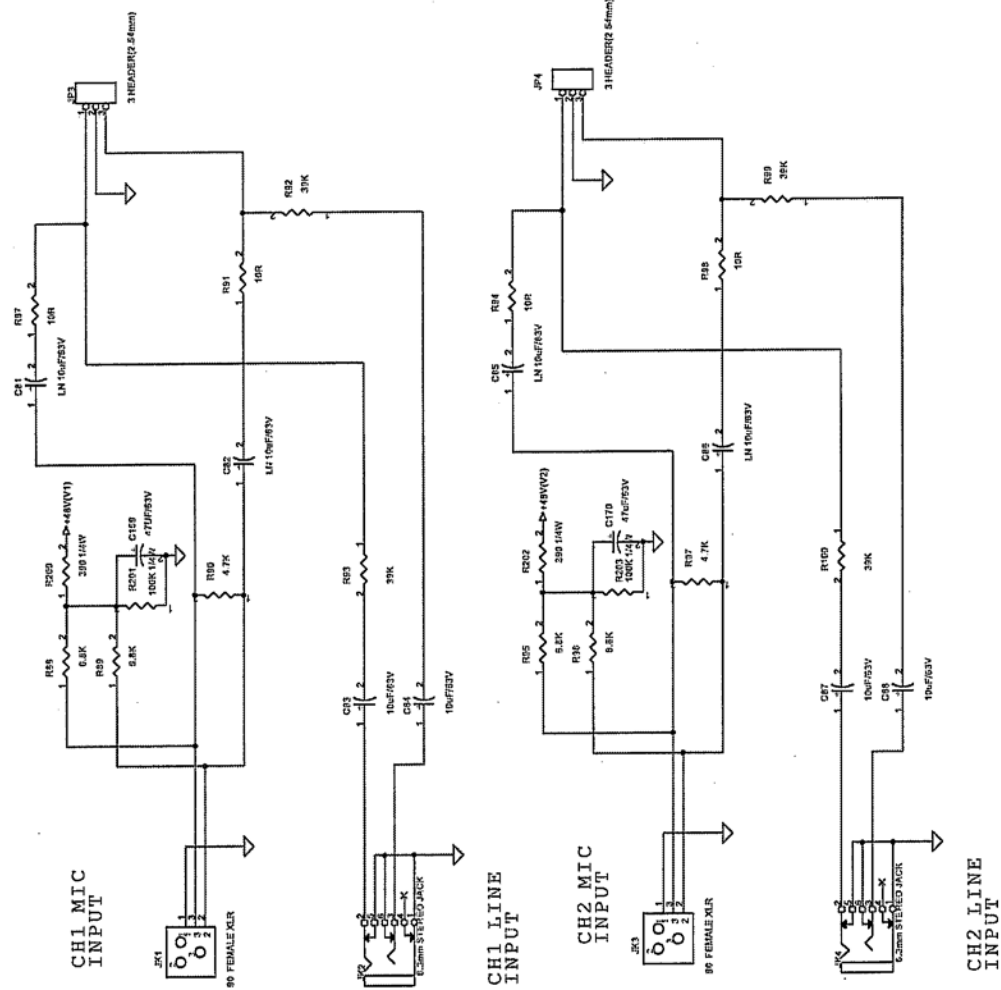


CH1_2 TONES



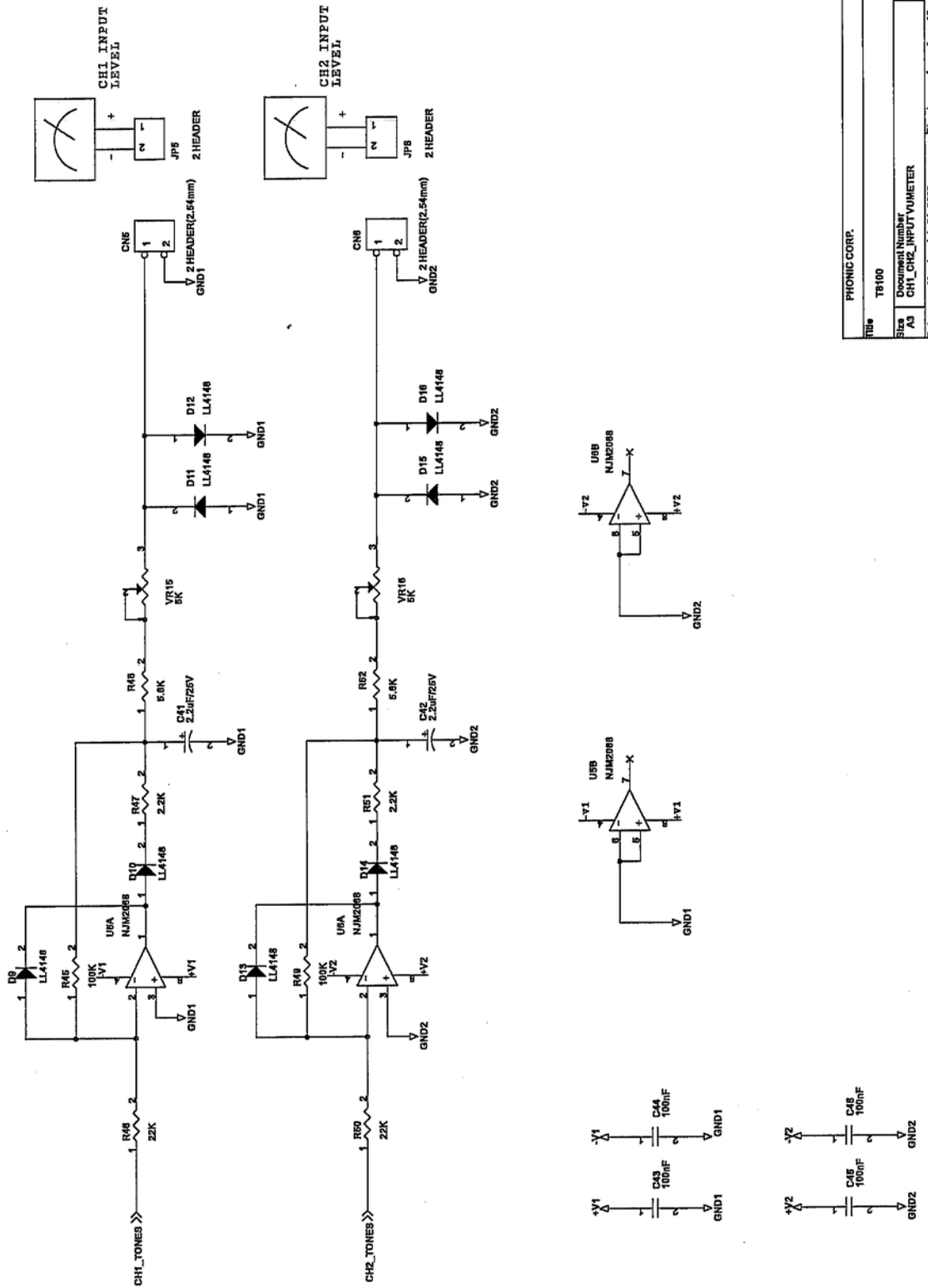
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TE 100
Document Number
CH1_2 TONES
Rev. 0
DATE: March 21, 2003
Sheet 3 of 3

CH1_2 CONNECTOR

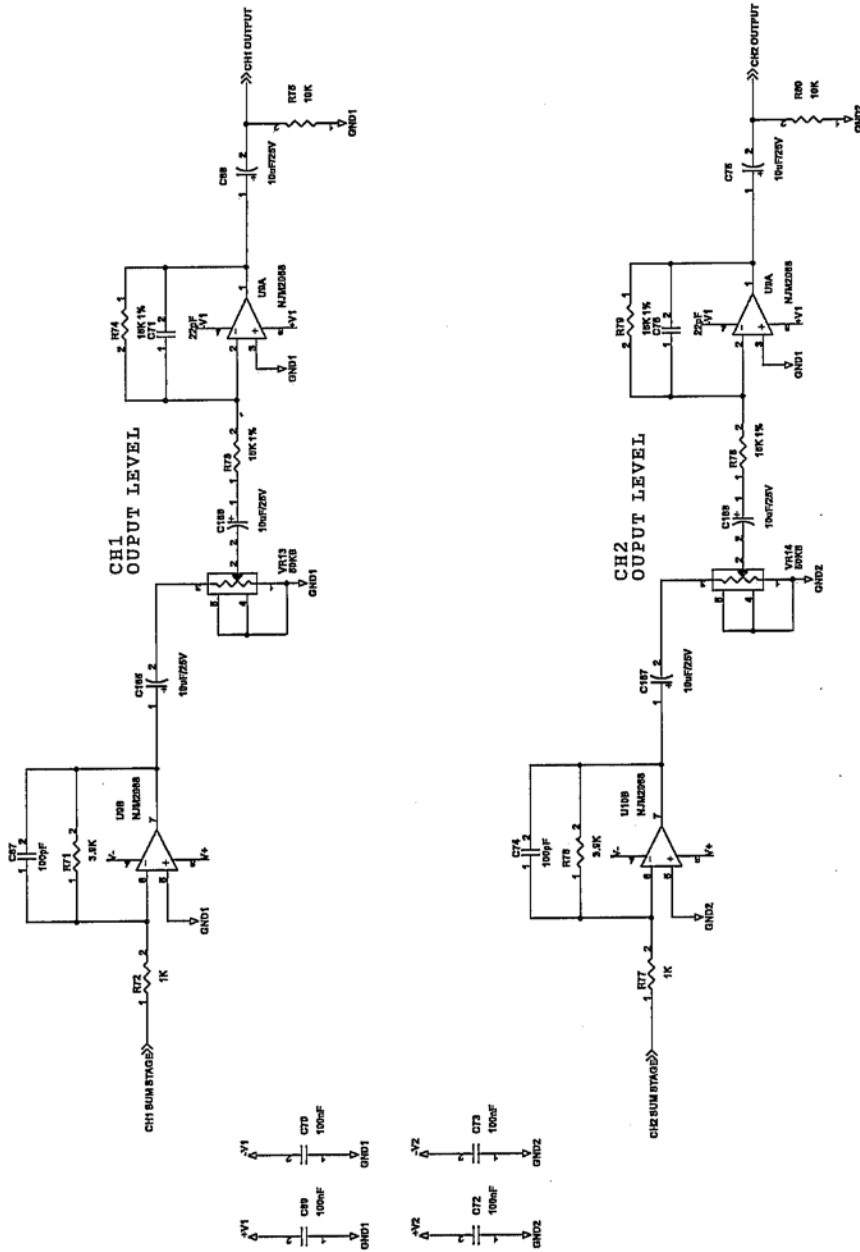


PHONIC CORP.	
File	T8100
Doc	Electronic Schematics
Part	CH1, CH2 INPUT & CONNECTORS
Rev	02
Doc	Model: J6121.003
Sheet	3 of 3

CH1_2 INPUT VUMETER

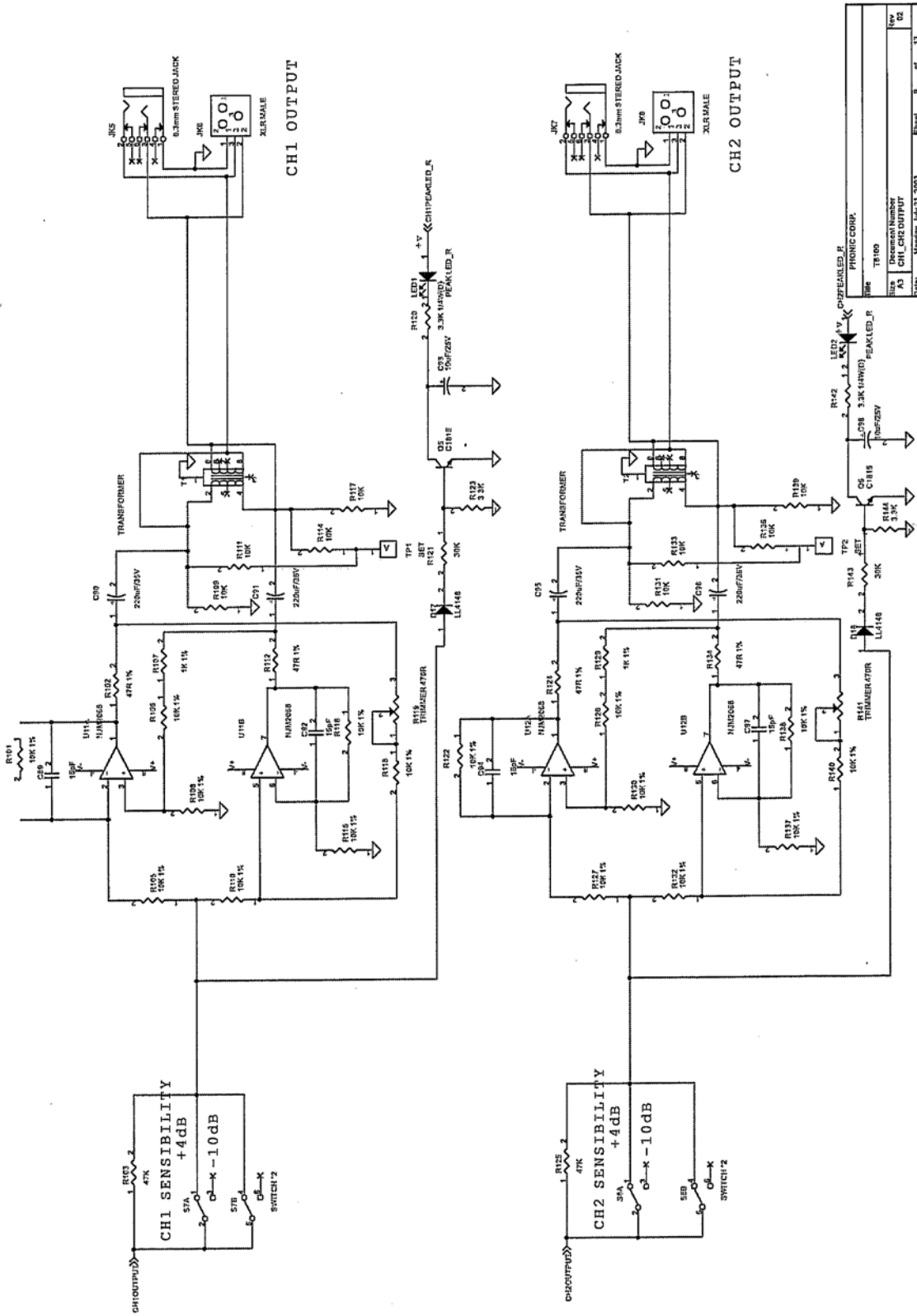


CH1_2 OUT PUT



PHONIC CORP.	
TYPE	T8100
REV	1
Doc. No.	CH1, CH2 OUTPUT
DATE	March 1971.2683
Sheet	6 of 13

CH1_2 OUT PUT2



Rev	1	2	3	4	5	6	7	8	9	10	11	12	13
Docu	1	2	3	4	5	6	7	8	9	10	11	12	13
Part	1	2	3	4	5	6	7	8	9	10	11	12	13
Rev	1	2	3	4	5	6	7	8	9	10	11	12	13
Docu	1	2	3	4	5	6	7	8	9	10	11	12	13
Part	1	2	3	4	5	6	7	8	9	10	11	12	13
Rev	1	2	3	4	5	6	7	8	9	10	11	12	13
Docu	1	2	3	4	5	6	7	8	9	10	11	12	13
Part	1	2	3	4	5	6	7	8	9	10	11	12	13
Rev	1	2	3	4	5	6	7	8	9	10	11	12	13
Docu	1	2	3	4	5	6	7	8	9	10	11	12	13
Part	1	2	3	4	5	6	7	8	9	10	11	12	13

POWER REQUIREMENT CLASSIFICATION

Ref.	Phonic Part No.	Specifications
SA		
	070-20758-800-0	X'MER 115/230V CM-E-M-254
F3	280-10263-001-0	FUSE 1A 250V VDE/CE S (GTD-1)
AC/S,F1,F2	280-50163-000-0	FUSE 0.5A 250V VDE S
	370-06010-321-6	P/CORD 10A/250V SA 2.5M 3P
JIS		
	070-20750-600-0	X'MER 100V JIS I SERIES
AC/S,F3	280-1026B-000-0	FUSE 1A 250V UL/CSA/JIS S
F1.F2	280-5016B-000-0	FUSE 500MA 250V UL/CSA/JIS S
	370-16510-629-0	P/CORD 7A 125V 2P 6F JIS
UL		
	070-20758-800-0	X'MER 115/230V CM-E-M-254
AC/S.F3	280-1026B-000-0	FUSE 1A 250V UL/CSA/JIS S
F1.F2	280-5016B-000-0	FUSE 500MA 250V UL/CSA/JIS S
	370-08010-721-0	P/CORD 120V 10A 6F 3PUL/CSA
	070-20752-100-0	X'MER 127V I SERIES
AC/S.F3	280-1026B-000-0	FUSE 1A 250V UL/CSA/JIS S
F1.F2	280-5016B-000-0	FUSE 500MA 250V UL/CSA/JIS S
	370-08010-721-0	P/CORD 120V 10A 6F 3PUL/CSA
IEC		
	070-20758-800-0	X'MER 115/230V CM-E-M-254
F3	280-10263-001-0	FUSE 1A 250V VDE/CE S (GTD-1)
AC/S,F1.F2	280-50163-000-0	FUSE 0.5A 250V VDE S
	370-15010-921-0	P/CORD IEC 10A 6F 3P SVT
	070-20758-800-0	X'MER 115/230V CM-E-M-254
F3	280-10263-001-0	FUSE 1A 250V VDE/CE S (GTD-1)
AC/S,F1.F2	280-50163-000-0	FUSE 0.5A 250V VDE S
	370-05940-821-0	P/CORD 220V 10A 2.5M 3P SVT SAA
BS		
	070-20758-800-0	X'MER 115/230V CM-E-M-254
F3	280-10263-001-0	FUSE 1A 250V VDE/CE S (GTD-1)
AC/S*1,F1,F2	280-50163-000-0	FUSE 0.5A 250V VDE S
	370-01010-921-0	P/CORD 240V 10A 6F 3P
	573-10032-010-0	POWER LABEL (ONLY USED IN BS)
SAA		
	070-20758-800-0	X'MER 115/230V CM-E-M-254
F3	280-10263-001-0	FUSE 1A 250V VDE/CE S (GTD-1)
AC/S,F1.F2	280-50163-000-0	FUSE 0.5A 250V VDE S
	370-11010-821-0	P/CORD 240V 10A 6F 3P SAA SVT

MISCELLANEOUS ITEMS

Ref.	Phonic Part No.	Specifications	
SW9	210-02101-010-0	PSH/SW SDDL10074U-PJ	
	211-12300-040-0	AC/S 0717-1-PS	
	211-13000-000-0	LAMP JACK	
JP3.4	212-09032-010-0	3P B.E./P 250MM	
GND	212-10010-890-0	1P WAFER/P 100MM GRN	
	212-10023-700-0	2P WAFER/P 80MM	
	212-10023-800-0	2P WAFER/P 300MM	
	212-10023-900-0	2P WAFER/P 110MM	
JP1.2	212-10140-250-0	14P WAFER/P 170MM	
	307-00000-000-0	CORD CONNECTOR HW-C4	
	313-00000-060-0	RUBBER WASHER TO-2203	
	314-00000-050-0	BUSHES 602S(V.O)	
	321-00000-070-0	CABLE TIE HW-100MM	
	379-29240-191-0	M.WIRE UL1617 #18 240MM WHT	
	510-21260-010-0	PANEL T8100	
	511-20800-000-0	BACK PANEL T8100	
	516-20510-000-0	TOP COV. T SERIES	
	517-20730-000-0	BOT. COV. T SERIES	
	524-20012-010-0	L/R SIDE PANEL AL	
	525-60010-000-0	FEET 20*20*8.0MM (SF-006)	
	526-20062-011-0	HEAT SINK T SERIES 66MM *1PCS	
	526-20064-010-0	HEAT SINK T SERIES 30MM *1pc	
	528-20018-000-0	NET 36*25*t0.3 T SERIES	
	POWER SW KNOB	529-20032-000-0	LED ACRYLIC LENS 11.5*6*t3
	ALL ROT/VR*14	540-20420-020-0	R/KNOB 877C BODY+8423C LINE D:11.4
	POWER	542-20320-020-0	P/KNOB ABS BLK
	CH1 OUT,CH2 OUT	542-60240-020-0	P/KNOB 431C+WHT
	POWER KNOB BUSHING	543-20210-020-0	P/KNOB BUSH. BLK ABS
POWER SW BRKT.	551-20079-420-0	PUSH BRKT ABS I SERIES	
	552-00001-420-0	ADHESIVE FIXED AB-2-3M	
	552-20084-000-0	PCB FIXED T SERIES	
	552-20085-420-0	TUBE FIXED T SERIES	
TUBE *2	552-20085-420-0	TUBE FIXED T SERIES	
X'MER*2	552-80000-100-0	X'MER FIXED 23*10*2	
	560-21230-010-0	CARTON T8100	
	561-21420-200-0	G/B T8100	
	565-20059-000-0	RT/LF POLYLON T SERIES	
	566-20082-010-0	SPONGE 40*30*23MM	
VU METER*2	566-20084-011-0	SPONGE D36.5*40*1.2t	
	566-80001-010-0	SPONGE 12*8*8mm	
	568-00003-000-0	#10 240*340*0.05	

Ref.	Phonic Part No.	Specifications
	568-20083-000-0	PE BAG 650*380*0.08MM T SERIES
	572-00000-050-0	DRYER 5g
	573-10124-010-0	GND LABLE
	573-60240-000-0	S/N LABEL PHONIC
	573-60343-000-0	LABEL BLUE D=8mm
	574-02480-110-0	OWN. MANU. T8100 PHONIC
PANEL&PCB*8	590-02606-100-8	M/E FLT SCR. M2.6*6 NI D=4.5
HEAT SINK*4	590-02606-200-8	M/E FLT SCR. M2.6*6 BLK D=4.5
HANDLE*4	590-04010-100-0	M/E FLT SCR. M4*10 NI
PCB*5	590-33004-100-0	M/E RUD SCR. M3.0*4 NI
PCB&PCB	590-42606-100-0	M/E PAN SCR. M2.6*6 NI
POWER*2	590-43006-100-8	M/E PAN SCR. M3.0*6 NI
FIX X'MER*2,GND*1	590-44008-200-0	M/E PAN SCR. M4.0*8 BLK
IC*5	590-83006-100-0	M/E RUD SCR.(WAS) M3.0*6 NI
XLR*8	591-03008-200-0	T/P FLT SCR. M3.0*8 BLK
GNB*1	600-00403-510-0	HEX. NUT M4.0*3.5 NI
PCB	610-20300-501-1	TOOTH WAS. D3.0*6.8*0.5 NI
GND *1	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
IC*5	610-60300-501-0	PAN SPR. WAS D3.0*D5.3*0.5 NI
LED*2	615-60009-620-0	BOSS LED3-16
	618-14180-662-0	SPEC. FIXED PIN SR-2 WHT
LEVEL SW	631-10012-000-0	HEMELON 25*12.5*0.3MM

FRONT PCB-PART LIST

Ref.	Phonic Part No.	Specifications
R81.85	000-10036-400-0	CF RES. 10 J 0.5W T
R199	000-10226-400-0	CF RES. 1K J 0.25W T
R83.86	000-15036-400-0	CF RES. 15 J 0.5W T
R72.77	008-01022-600-0	CHIP RES. 1K J 0603
R28.29.31.32.34.35.37.38.40 .41.43.44.59.68.75.80	008-01032-600-0	CHIP RES. 10K J 0603
R45.49	008-01042-600-0	CHIP RES. 100K J 0603
R56.65	008-01052-600-0	CHIP RES. 1M J 0603
R7.20	008-01532-600-0	CHIP RES. 15K J 0603
R47.51	008-02222-600-0	CHIP RES. 2K2 J 0603
R6.13.19.26.46.50	008-02232-600-0	CHIP RES. 22K J 0603
R57.58.66.67	008-02722-600-0	CHIP RES. 2K7 J 0603
R12.25	008-02732-600-0	CHIP RES. 27K J 0603
R5.11.18.24	008-03322-600-0	CHIP RES. 3.3K J 0603
R48.52.55.64.71.76	008-03922-600-0	CHIP RES. 3K9 J 0603
R4.8.17.21	008-04732-600-0	CHIP RES. 47K J 0603
R1.14	008-04772-600-0	CHIP RES. 4.7 J 0603
R30.39.53.54.60.61.62.63. 69.70	008-05622-600-0	CHIP RES. 5.6K J 0603
R27.33.36.42	008-08222-600-0	CHIP RES. 8.2K J 0603
R73.74.78.79	008-15022-400-0	CHIP RES. 15K F 0603
R9.10.22.23	008-22012-400-0	CHIP RES. 2.2K F 0603
R2.3.15.16	008-56012-400-0	CHIP RES. 5.6K F 0603
VR15.16	020-50278-000-0	T/VR. 5K 0.3W D5 3M S
VR1.VR2	022-20340-020-0	S.ROT/VR 20KZ 25MM P RD09F1140027
VR13.VR14	022-50340-070-0	S.ROT/VR 50KB 25MM P
VR6.7.8.10.11.12	022-50340-080-0	S.ROT/VR 50KB(C.C) 25MM P
VR5.9	023-50340-030-0	D.ROT/VR 50KB 25MM P
VR3.4	023-50340-040-0	D.ROT/VR 50KB(C.C) 25MM P
C32.35.39.40.68.75.165.166 .167.168	030-10636-0A0-0	E/C 10MF M 25V 5*11 T
C41.42	030-22536-0A0-0	E/C 2.2MF M 25V 5*11
C77.78.79.80	030-22748-000-0	E/C 220MF Z 35V 10*15 P
C8.13.23.28	030-47638-0A0-0	E/C 47MF Z 25V 11*5 T
C3.18	033-47728-000-0	LN E/C 470MF Z 16V 8*14 P
C4.10.12.19.25.27.67.74	039-10124-220-0	CHIP C/C 100PF J 50V 0603
C54.64	039-10325-220-0	CHIP C/C 0.01MF K 50V 0603
C1.14.15.16.17.2.29.30.33.34 .37.38.43.44.45.46.48.49.58. 59.69.70.72.73	039-10424-220-0	CHIP C/C 0.1MF J 50V 0603
C31.36.47.52.57.62.71.76	039-22024-200-0	CHIP C/C 22PF J 50V 0603
C5.6.20.21	039-22124-220-0	CHIP C/C 220PF J 50V 0603

Ref.	Phonic Part No.	Specifications
C9.24	039-33124-200-0	CHIP C/C 330PF J 50V 0603 (Z5U)
C55.56.65.66	039-33324-220-0	CHIP C/C 0.033MF J 50V 0603
C7.11.22.26	039-47124-220-0	CHIP C/C 470PF J 50V 0603
C53.63	039-47224-220-0	CHIP C/C 0.0047MF J 50V 0603
C50.51.60.61	039-68224-220-0	CHIP C/C 0.0068MFJ 50V 0603
CC1	058-47236-000-0	LINE/C 4700PF M 400V MURATA
D1.2.3.4.5.6.7.8.9.10.11.12.13 .14.15.16	090-02000-010-0	DIODE 1N4148 SMD
LED3	100-00150-040-0	LED 2*4mm BL-RGE131 Green
LED1.2	100-00410-000-0	LED BL-S5149 RED
Q1.2.3.4	121-00000-500-0	TRAN. 2SA970-BL TOSHIBA
U1-10	160-00024-100-0	IC NJM4580M DMP JRC
S1.2.3.4.5.6	210-04202-040-0	LEL/SW LBC-22B-15K
CN5.6.11	211-10022-010-0	2P WAFER/S 2503-WS-2P
CN7	211-10024-110-0	2P WAFER/S 3961-WS-2P
CN3.4	211-10031-220-0	3P WAFER/S 2503-WS-3P
	260-10000-140-0	VU METER (LEVEL) T8100
	290-02480-001-0	PCB T8100 FRONT

BACK PCB-PART LIST

Ref.	Phonic Part No.	Specifications
R201.203	000-10426-400-0	CF RES. 100K J 0.25W T
R120.142	000-33226-400-0	CF RES. 3K3 J 0.25W T
R200.202	000-39126-400-0	CF RES. 390 J 0.25W T
R145.150	006-27002-440-0	MF RES. 270 F 0.25W T
R146	006-33012-440-0	MF RES. 3K3 F 0.25W T
R148	006-56012-440-0	MF RES. 5K6 F 0.25W T
R147	006-82012-440-0	MF RES. 8K2 F 0.25W T
R87.91.94.98	008-01002-600-0	CHIP RES. 10 J 0603
R109.117.131.139.161.164.16 5.170.173.174.176.177.181.18 4.185.190.193.194.196.197	008-01032-600-0	CHIP RES. 10K J 0603
R169.172.189.192	008-01042-600-0	CHIP RES. 100K J 0603
R156	008-01052-600-0	CHIP RES. 1M J 0603
R159.179	008-01242-600-0	CHIP RES. 120K J 0603
R175.195	008-01542-600-0	CHIP RES. 150K J 0603
R158.178	008-01822-600-0	CHIP RES. 1.8K J 0603
R152.153	008-02212-600-0	CHIP RES. 220 J 0603
R160.163.166.171.180.183.1 86.191	008-02242-600-0	CHIP RES. 220K J 0603
R121.143	008-03032-600-0	CHIP RES. 30K J 0603
R123.144.167.187	008-03322-600-0	CHIP RES. 3.3K J 0603
R92.93.99.100	008-03932-600-0	CHIP RES. 39K J 0603
R162.182.90.97	008-04722-600-0	CHIP RES. 4.7K J 0603
R103.125	008-04732-600-0	CHIP RES. 47K J 0603
R168.188	008-04742-600-0	CHIP RES. 470K J 0603
R88.89.95.96	008-06822-600-0	CHIP RES. 6K8 J 0603
R155	008-06832-600-0	CHIP RES. 68K J 0603
R154	008-08222-600-0	CHIP RES. 8.2K J 0603
R107.129	008-10012-400-0	CHIP RES. 1K F 0603
R101.105.106.108.110.115.11 6.118.122.127.128.130.132.13 7.138.140	008-10022-400-0	CHIP RES. 10K F 0603
R102.112.124.134	008-47072-400-0	CHIP RES. 47 F 0603
R119.141	020-47138-000-6	T/VR. 470 J 0.5W (T-085C-B470)
C93.98	030-10636-0A0-0	E/C 10MF M 25V 5*11 T
C83.84.87.88.100.104.107.11 1.132.134.143.155	030-10668-0A0-0	E/C 10MF Z 63V 5*11 T
C121.126.127.128	030-10788-000-0	E/C 100MF Z 100V 13*20 P
C108.109	030-10846-000-0	E/C 1000MF M 35V 10*21 T
C118.120.135	030-10858-000-0	E/C 1000MF Z 50V 16*28 P
C125.147.148.159.160	030-22558-0A0-0	E/C 2.2MF Z 50V 5*11 T

Ref.	Phonic Part No.	Specifications
C90.91.95.96	030-22748-000-0	E/C 220MF Z 35V 10*15 P
C136	030-47656-0A0-0	E/C 47MF M 50V 11*8 T
C122.169.170	030-47666-0A0-0	E/C 47MF M 63V T
C129	032-10566-0A0-0	NP E/C 1MF M 63V T
C113	032-47566-0A0-0	NP E/C 4.7MF M 63V T
C81.82.85.86	033-10664-0A0-0	LN E/C 10MF J 63V T 6*11
C102.103.105.106.119.130.137.149	039-10325-220-0	CHIP C/C 0.01MF K 50V 0603
C101.110.112.114.115.116.117.123.124.131.133.138.141.142.144.145.150.153.154.156	039-10424-220-0	CHIP C/C 0.1MF J 50V 0603
C157.161.162.163.164.99	039-10424-220-1	
C89.92.94.97	039-15024-220-0	CHIP C/C 15PF J 50V 0603
C139.140.146.151.152.158	039-22024-200-0	CHIP C/C 22PF J 50V 0603
D21.23	090-00003-000-0	DIODE 1N4007 SILITEK
ZD1	090-01203-000-0	ZEN/DIODE 20V J 0.5W
D17.18	090-02000-010-0	DIODE 1N4148 SMD
D19.22	090-10000-000-0	B/DIODE PB154
D20.24	090-10018-000-0	B/DIODE KBL406
Q5.6	120-00000-800-0	TRAN. 2SC1815 GR TOSHIBA
Q7	120-00010-800-0	TRAN. TIP29C FAIRCHILD
Q8	120-00010-900-0	TRAN. BC337-25 PHILIP
VA1.2	123-00000-000-0	TUBE T SERIES
U15.17	160-00002-000-0	IC LM317T NS
U16	160-00002-100-0	IC LM337T NS (DIP)
U11.12.13.14	160-00024-100-0	IC NJM4580M DMP JRC
U18	160-00026-700-0	IC AN7824 PANASONIC
S7.8	210-02201-390-0	PSH/SW SP70300-0202-11F1-N
JK2.4.5.7	211-01602-550-0	6D3/J PJB0661-6
JK6.8	211-03300-001-6	XLR/J 99M-108SP1
JK1.3	211-03300-240-0	XLR/J 99M-107SP1L
CN8	211-10034-110-0	3P WAFER/S 3961-WS-3P
CN10	211-10074-000-0	7P WAFER/S 3961-WS-7P
CN1A.2A	211-10142-000-0	14P WAFER/S 5701-14-G1-B
LP5.6	262-24010-000-0	LAMP 24V 3W
	290-02480-101-0	PCB T8100 BACK
R198	382-10005-010-0	TINNER WIRE 5MM D0.6