

PROFESSIONAL GRAPHIC EQUALIZERS

MQ 3300/3400/3600

SERVICE MANUAL



PHONIC
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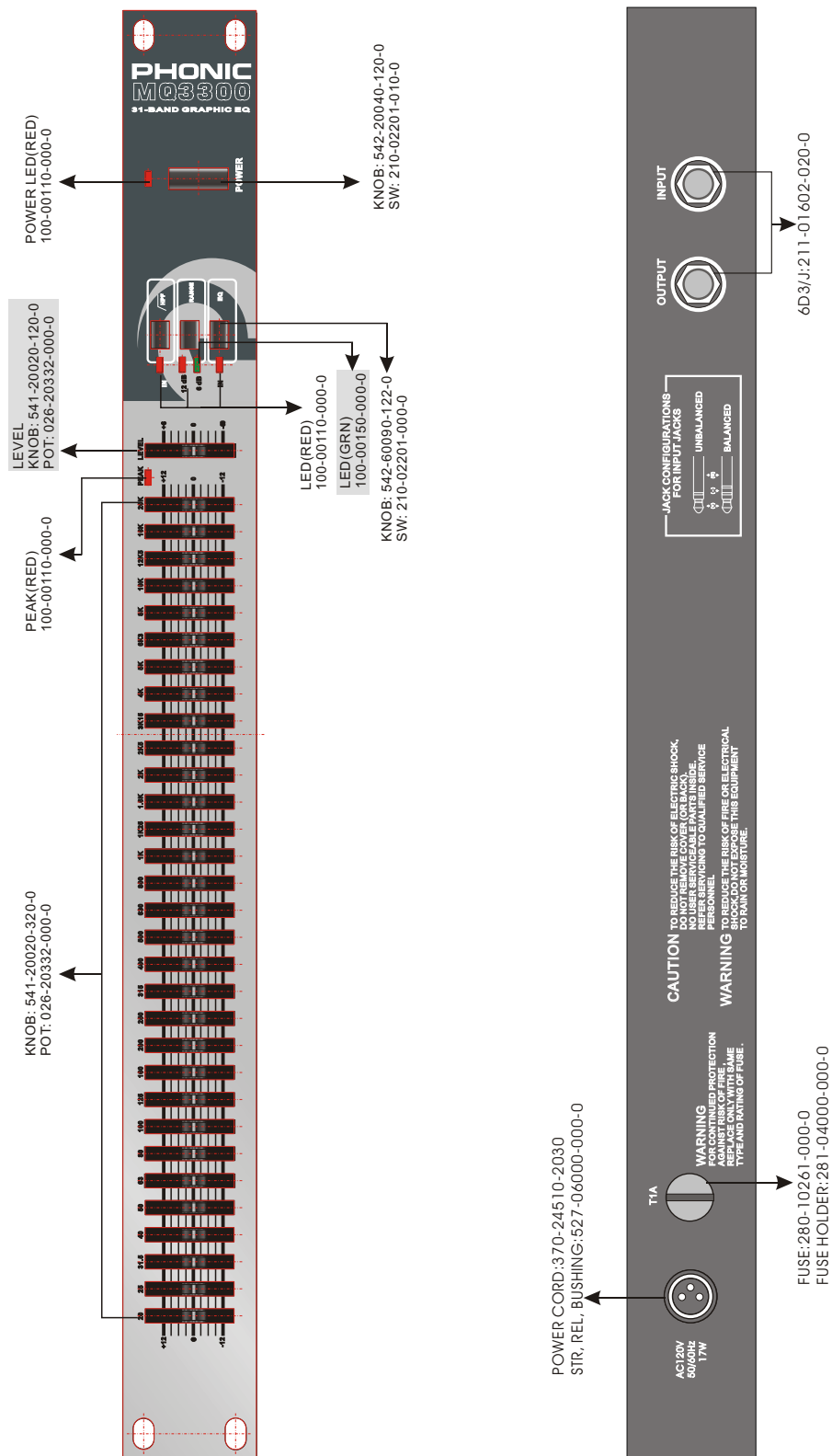
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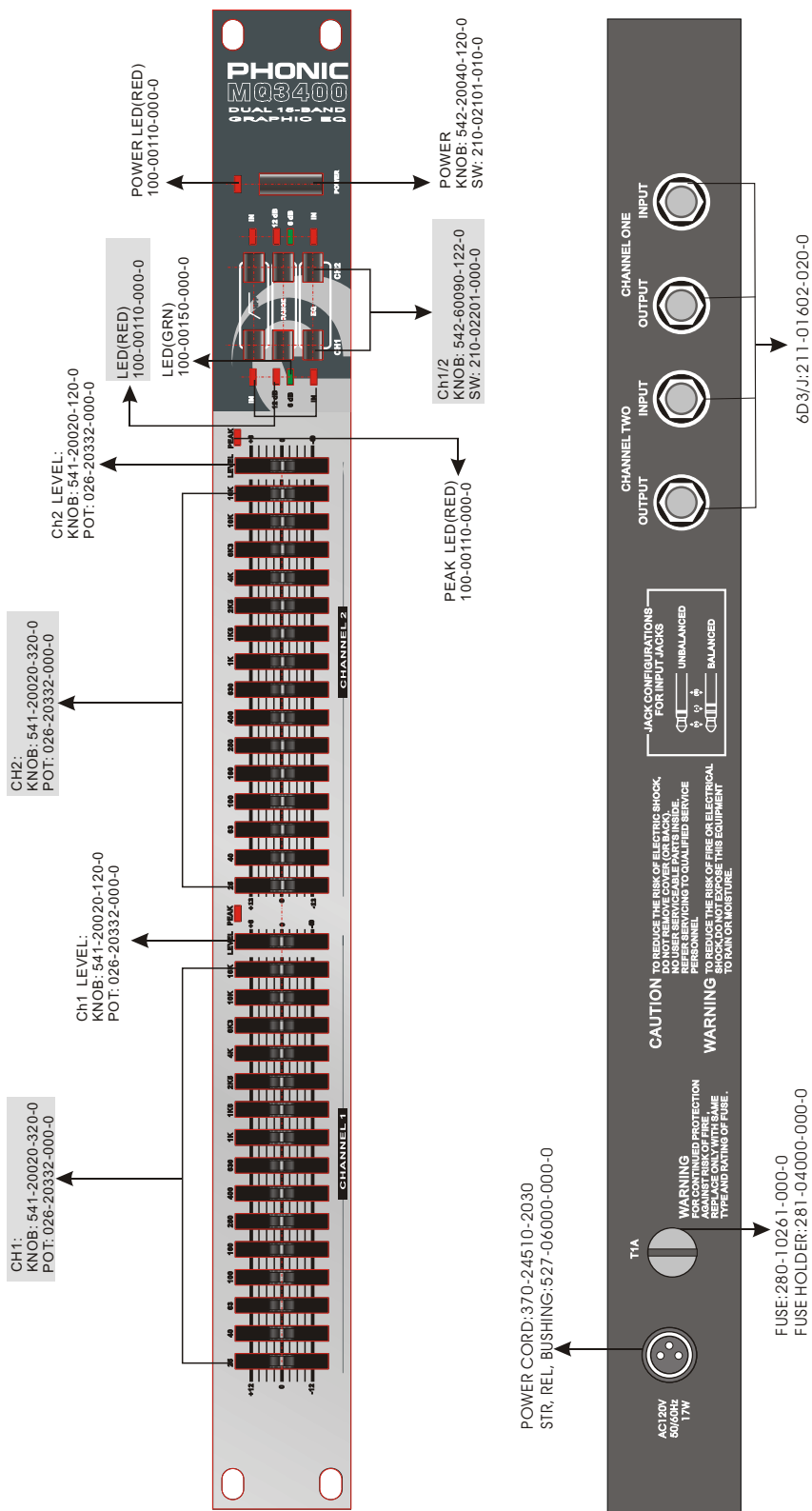
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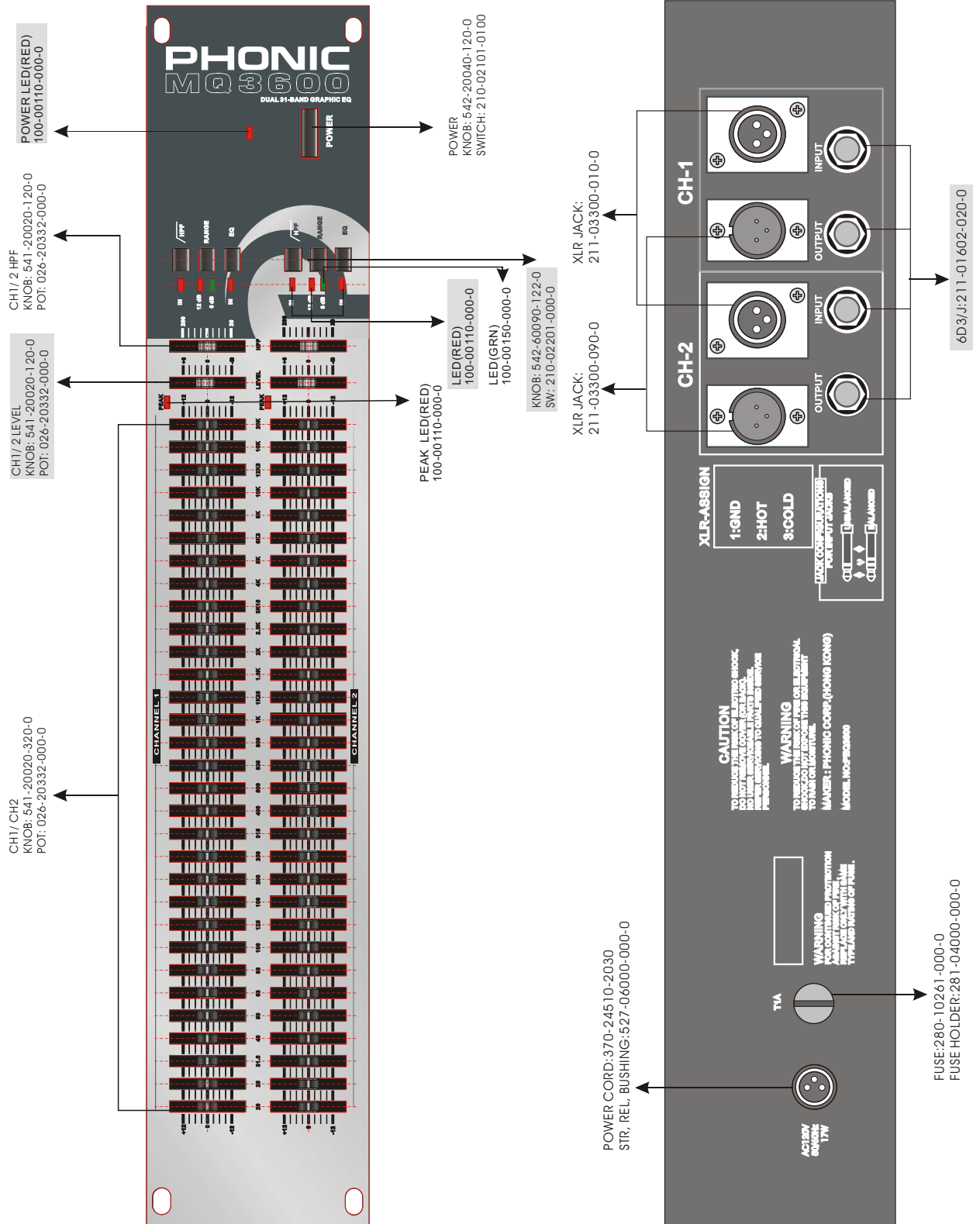
MQ 3300



MQ 3400



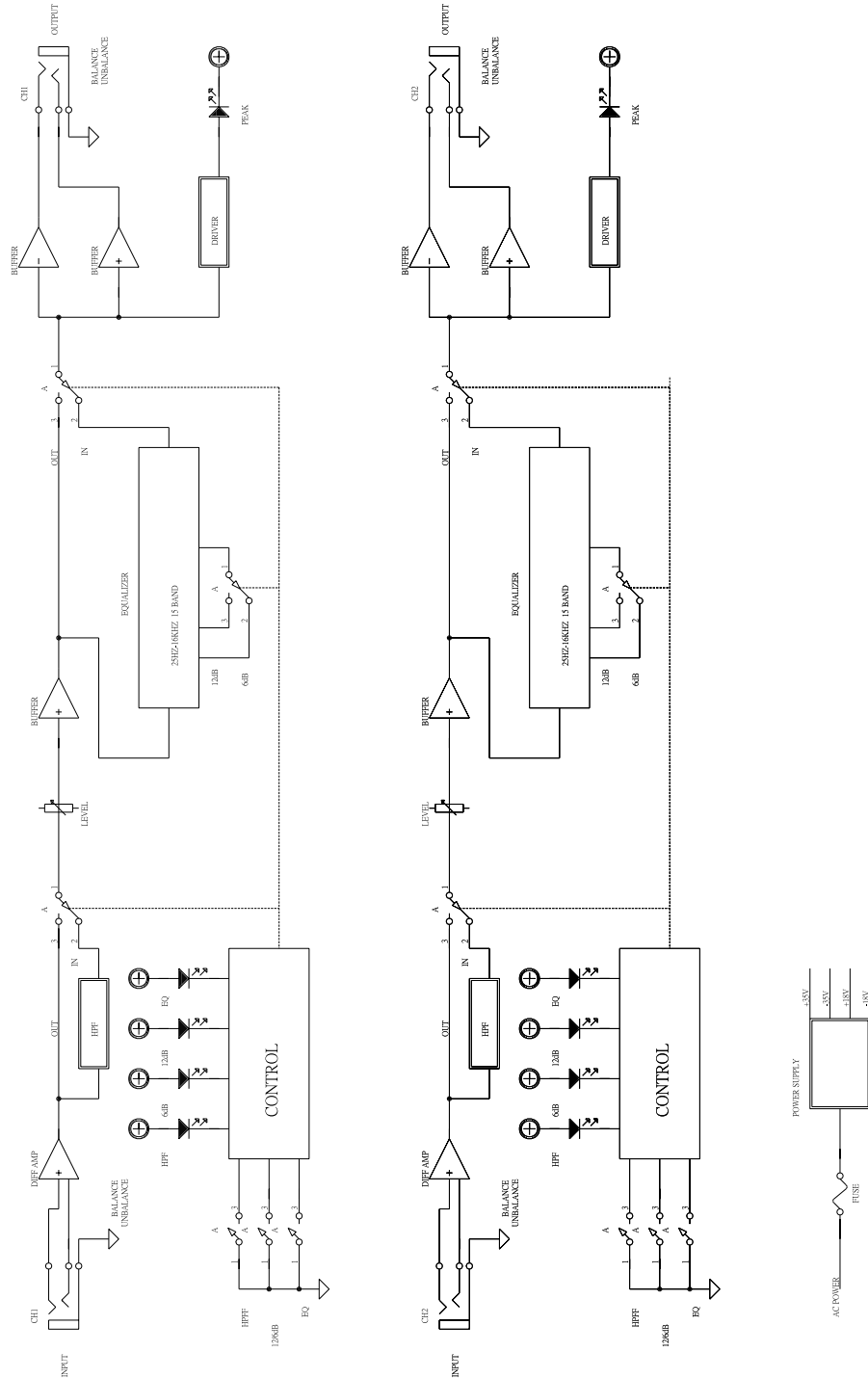
MQ 3600



MQ 3300 SYSTEM BLOCK DIAGRAM

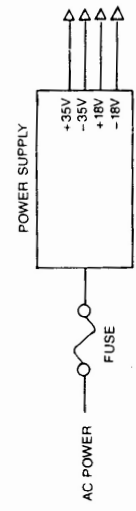
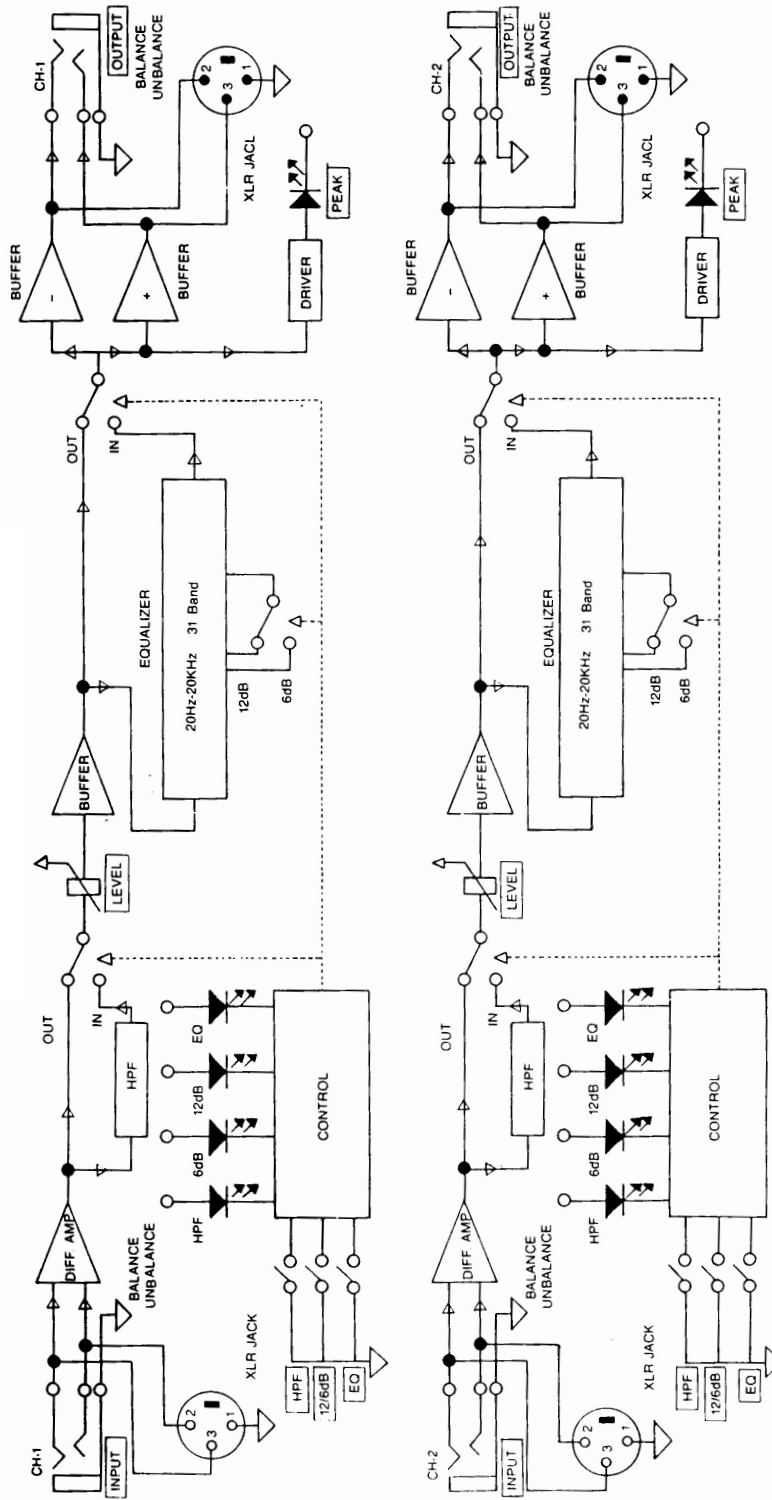
MQ 3300

PEQ215 block diagram



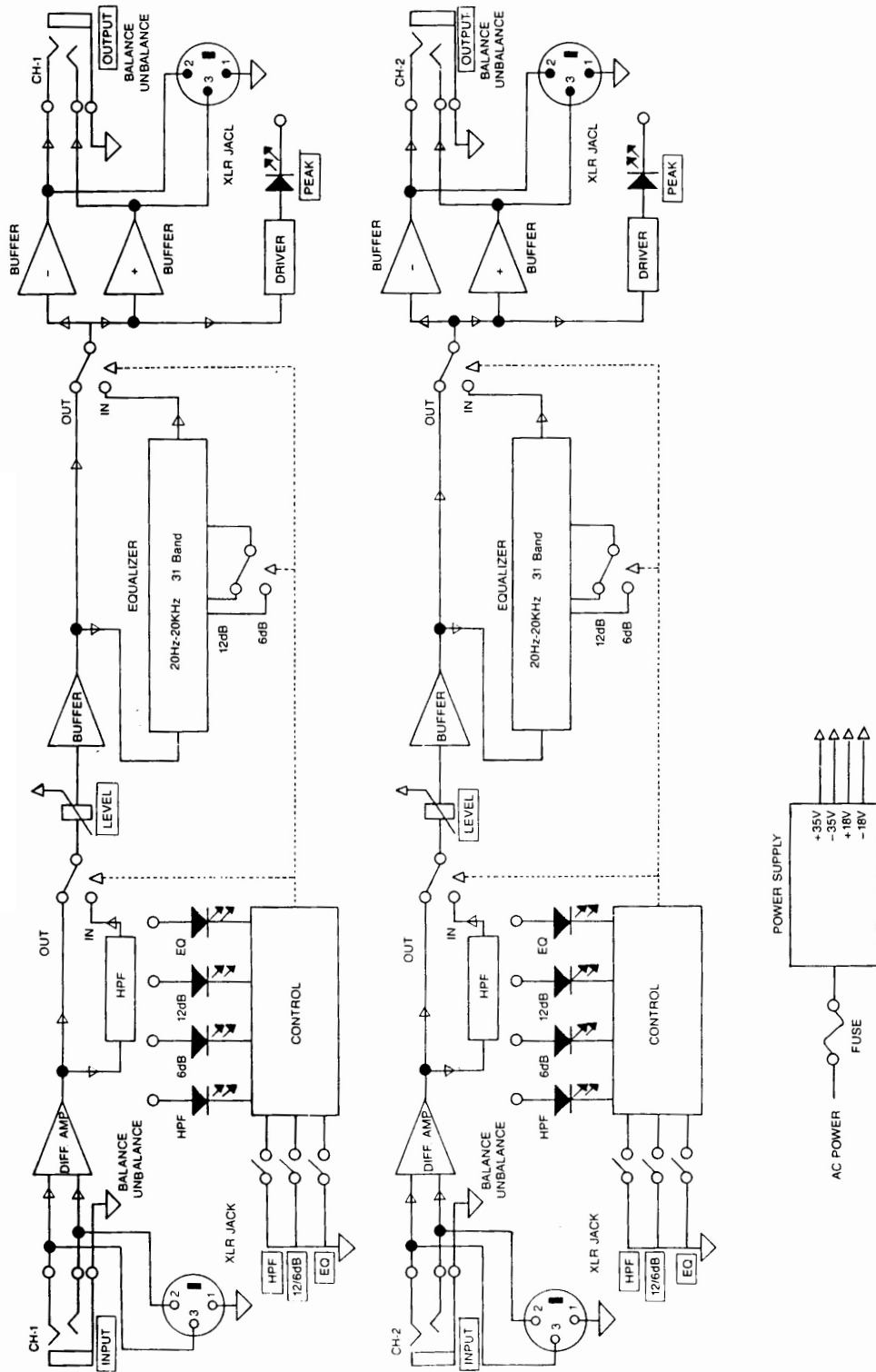
MQ 3400 SYSTEM BLOCK DIAGRAM

MQ 3400

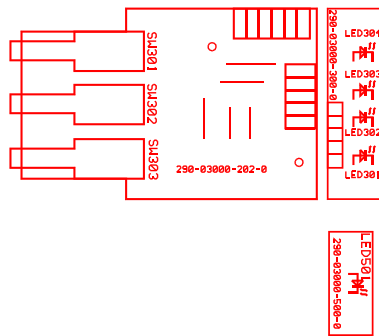


MQ 3600 SYSTEM BLOCK DIAGRAM

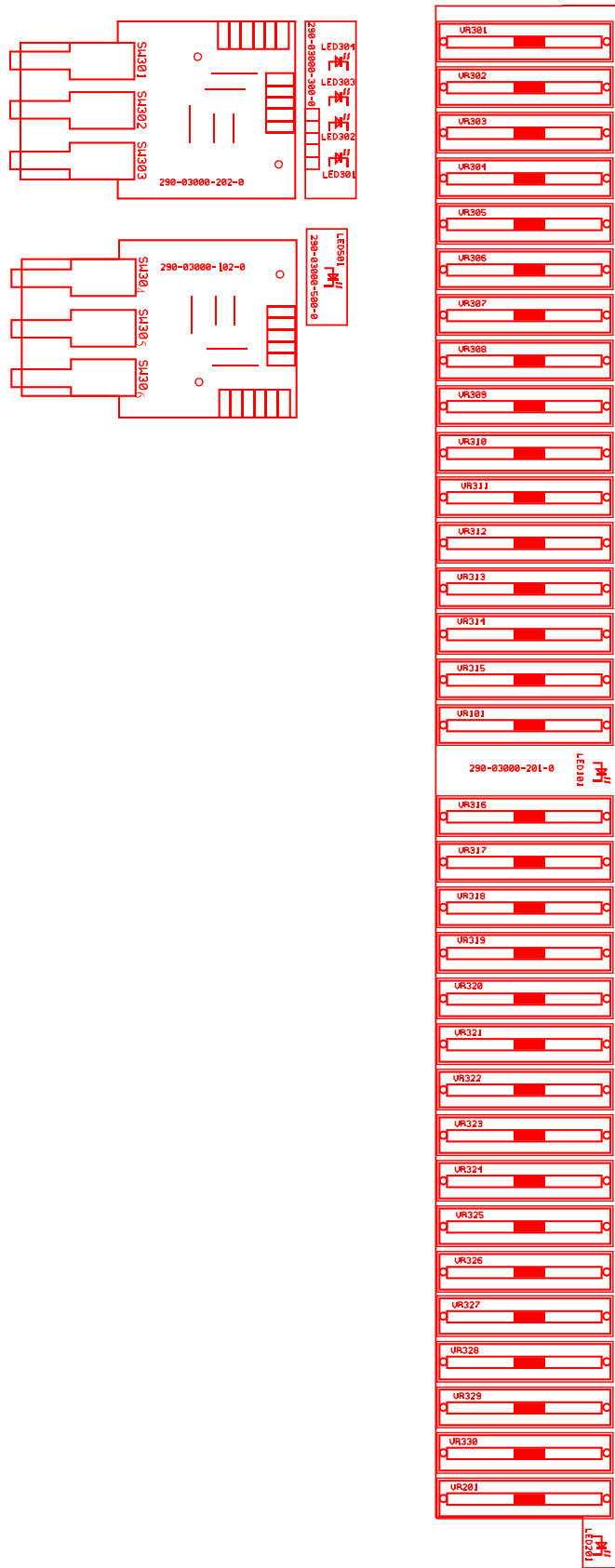
MQ 3600



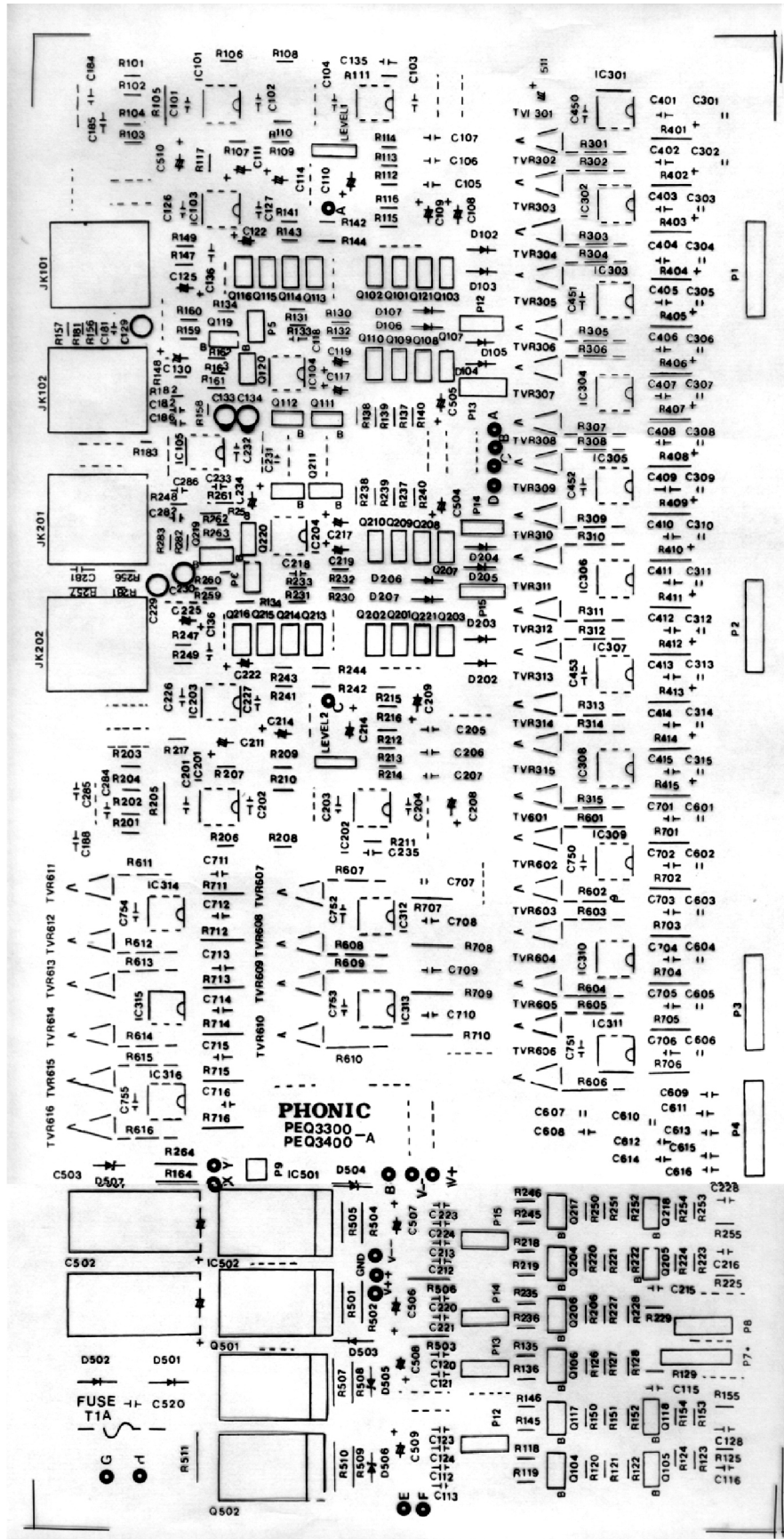
VR & SWITCH PCB



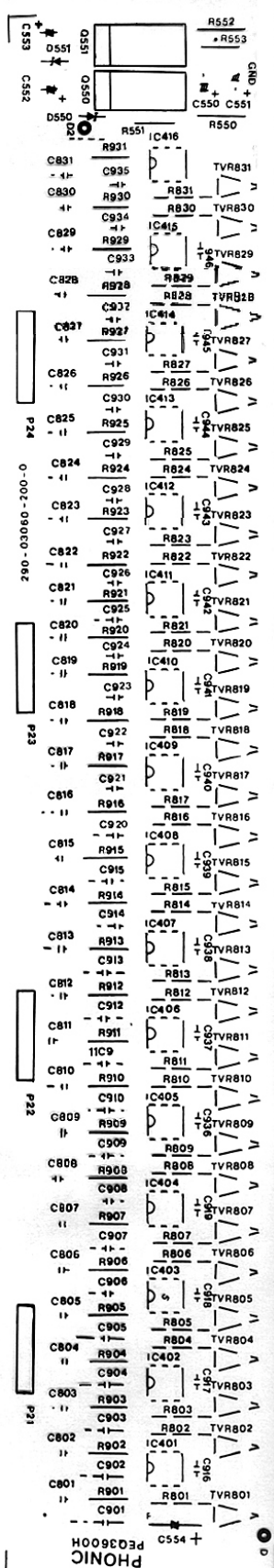
VR & SWITCH PCB



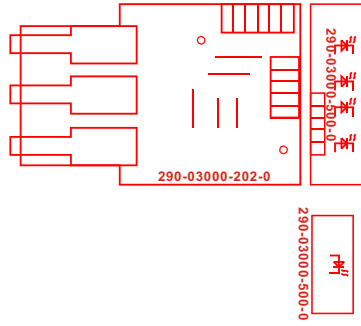
MQ 3300 3400 3600 MAIN BOARD PCB -A



MAIN BOARD PCB-B



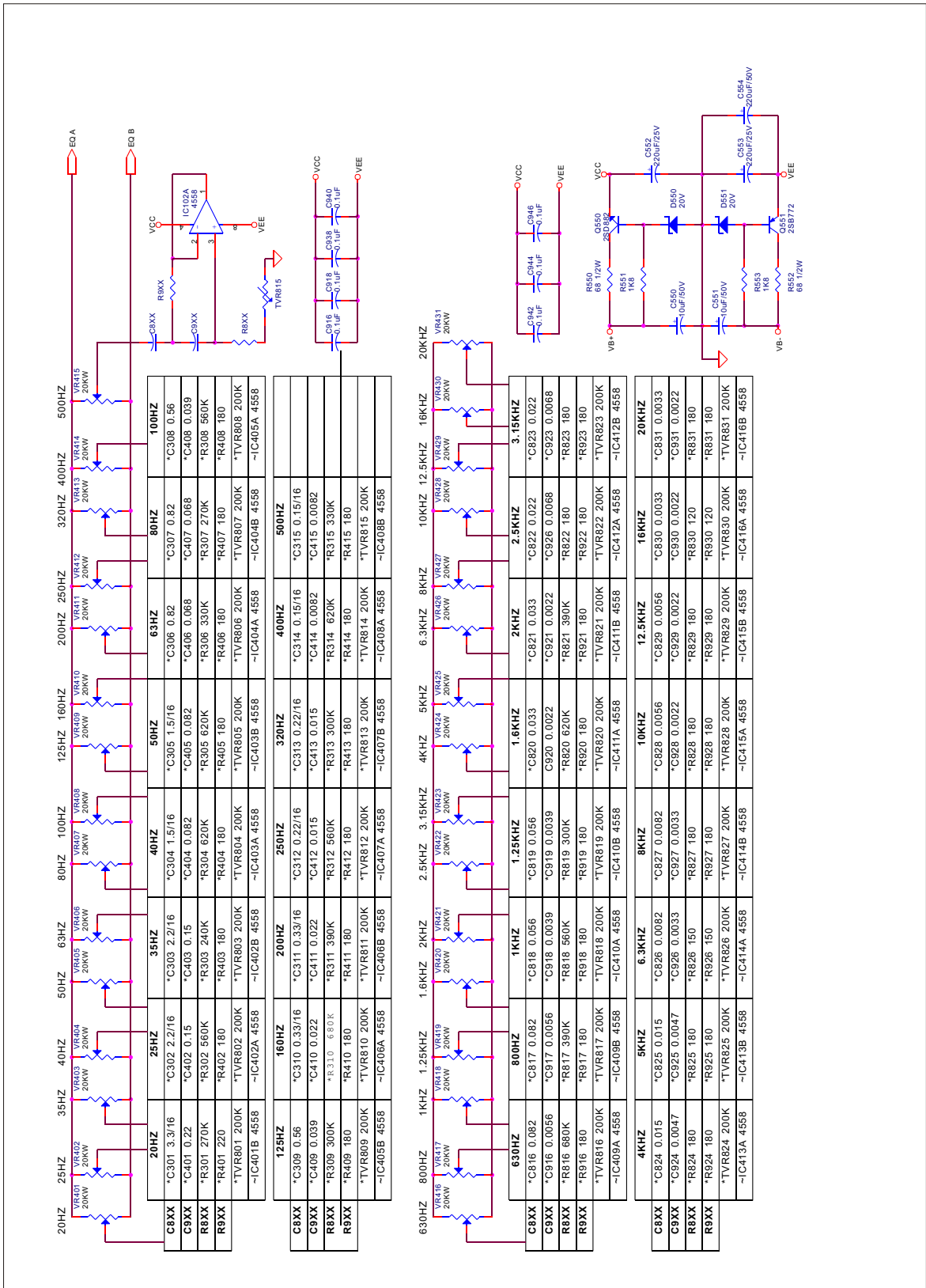
VR & SWITCH PCB



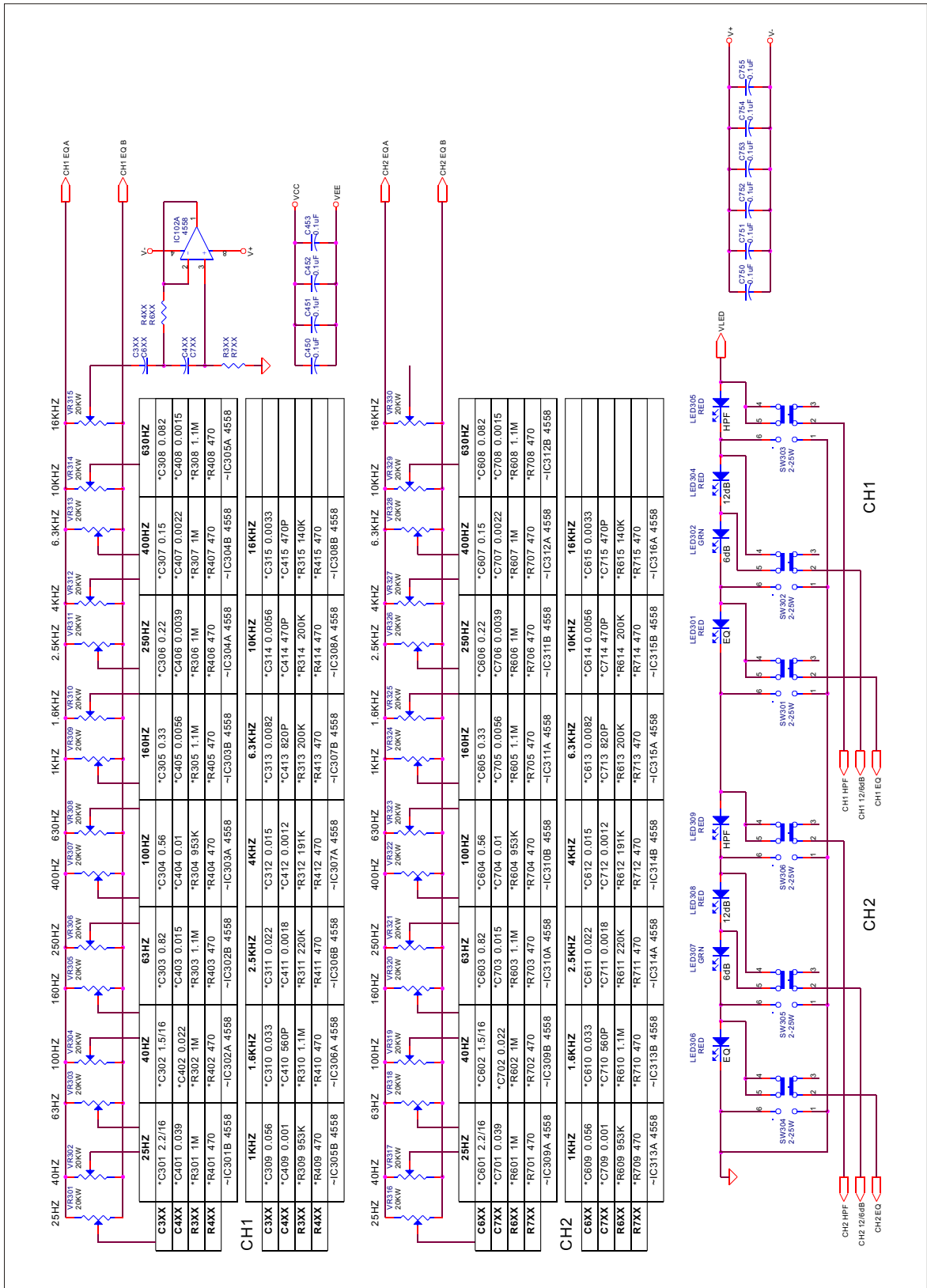
REGULATED POWER SUPPLY IC PCB



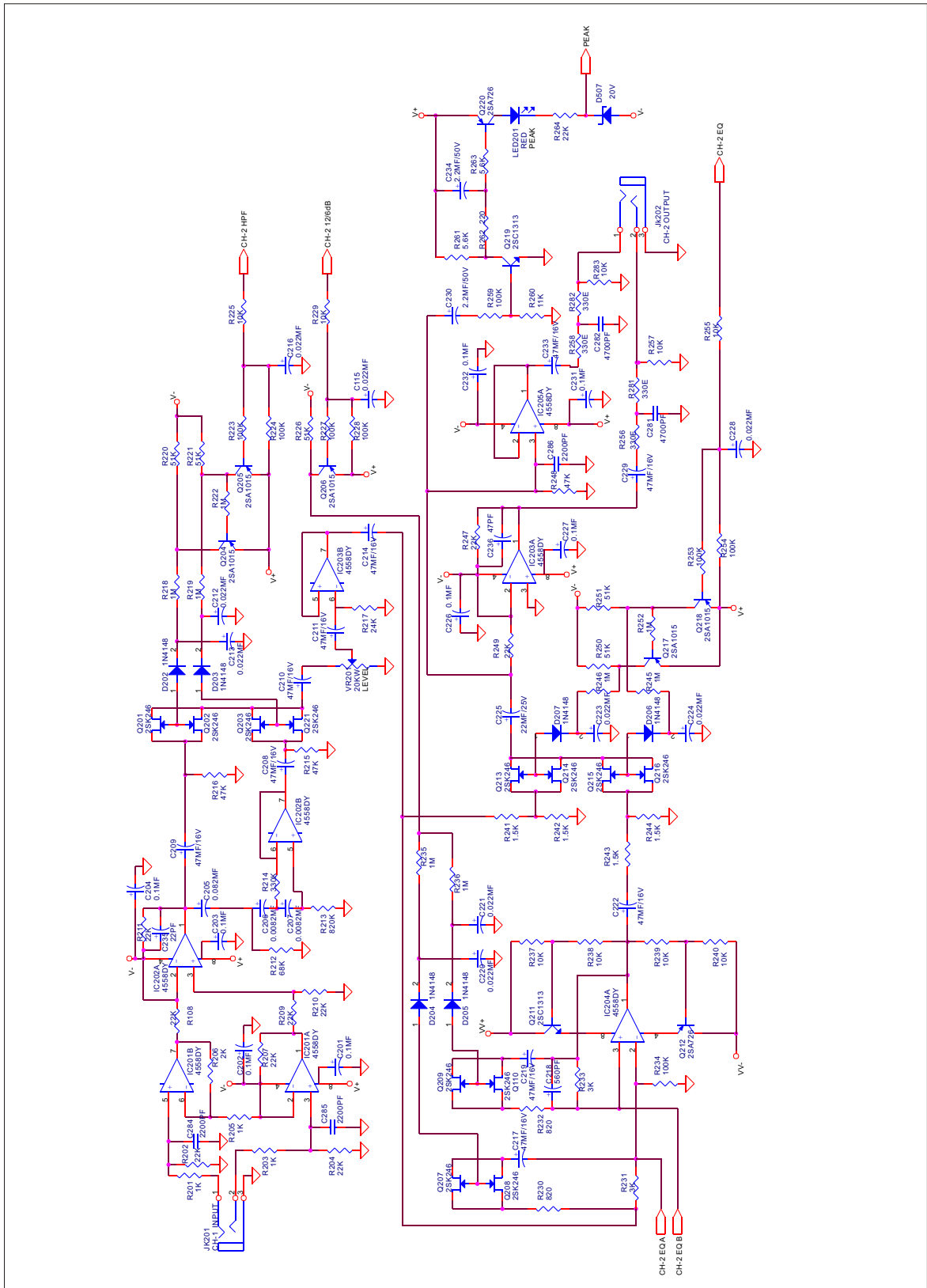
EQUALIZER SCHEMATIC



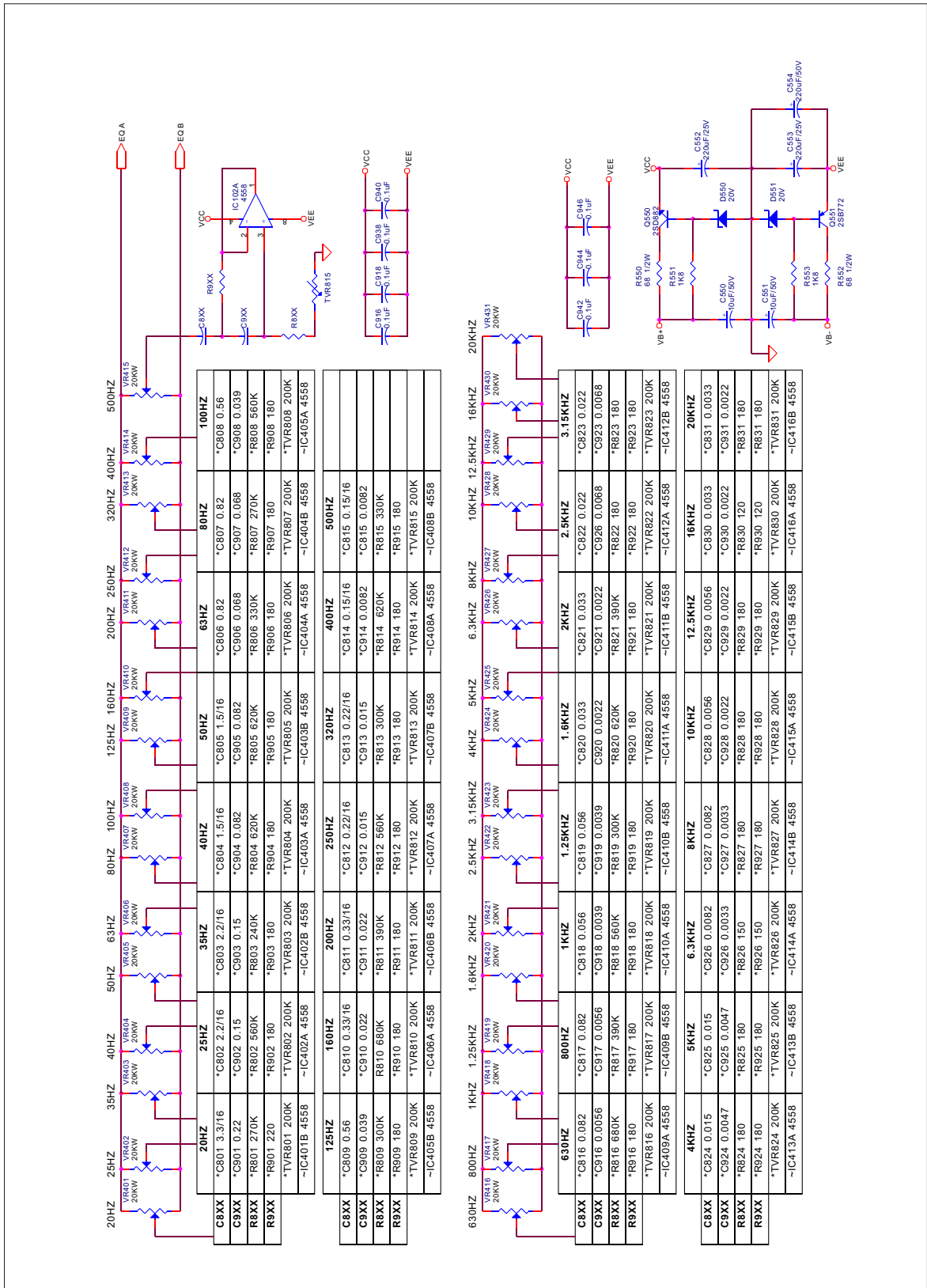
EQUALIZER SCHEMATIC



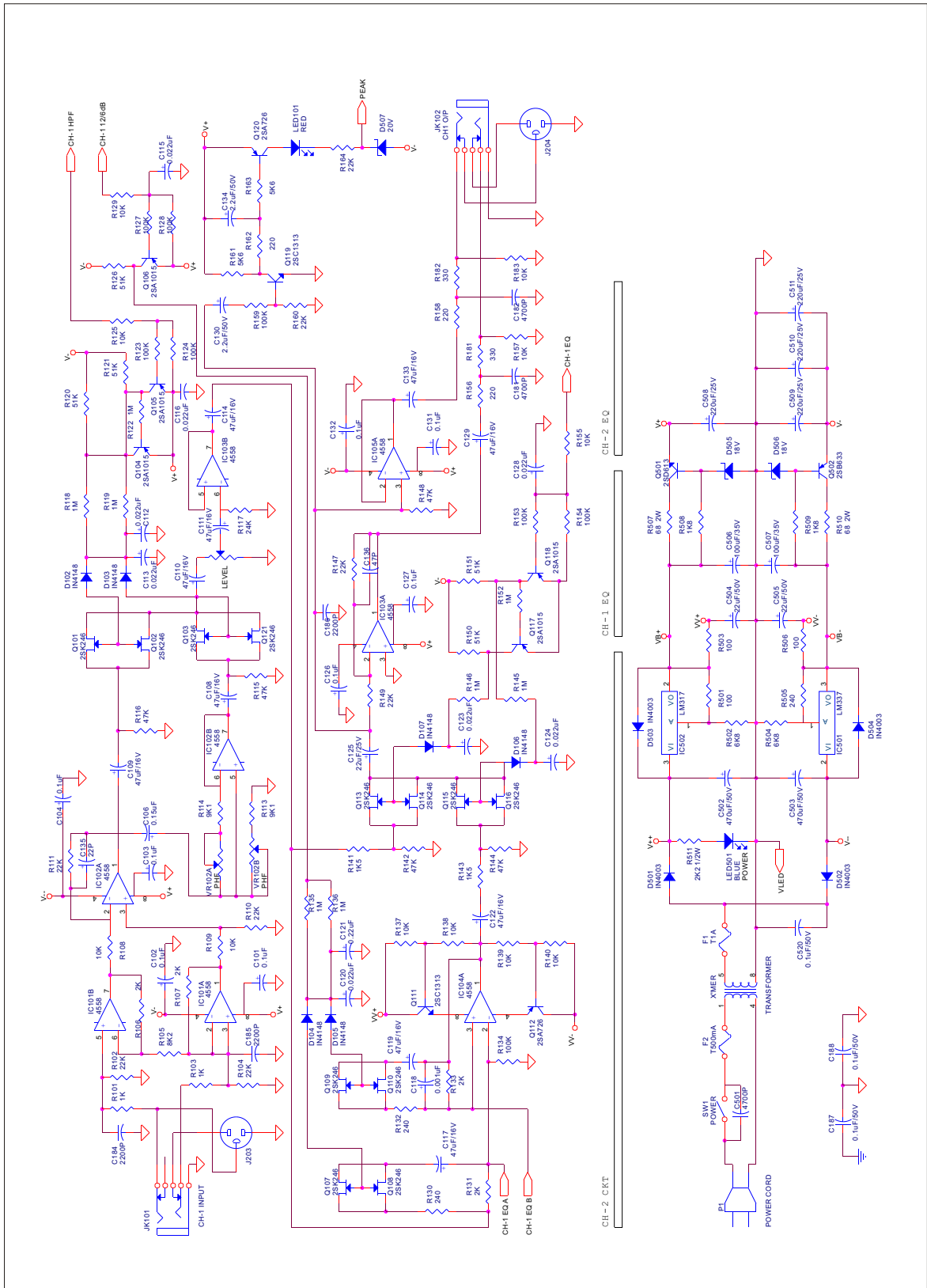
CH 2 INPUT & OUTPUT SCHEMATICS



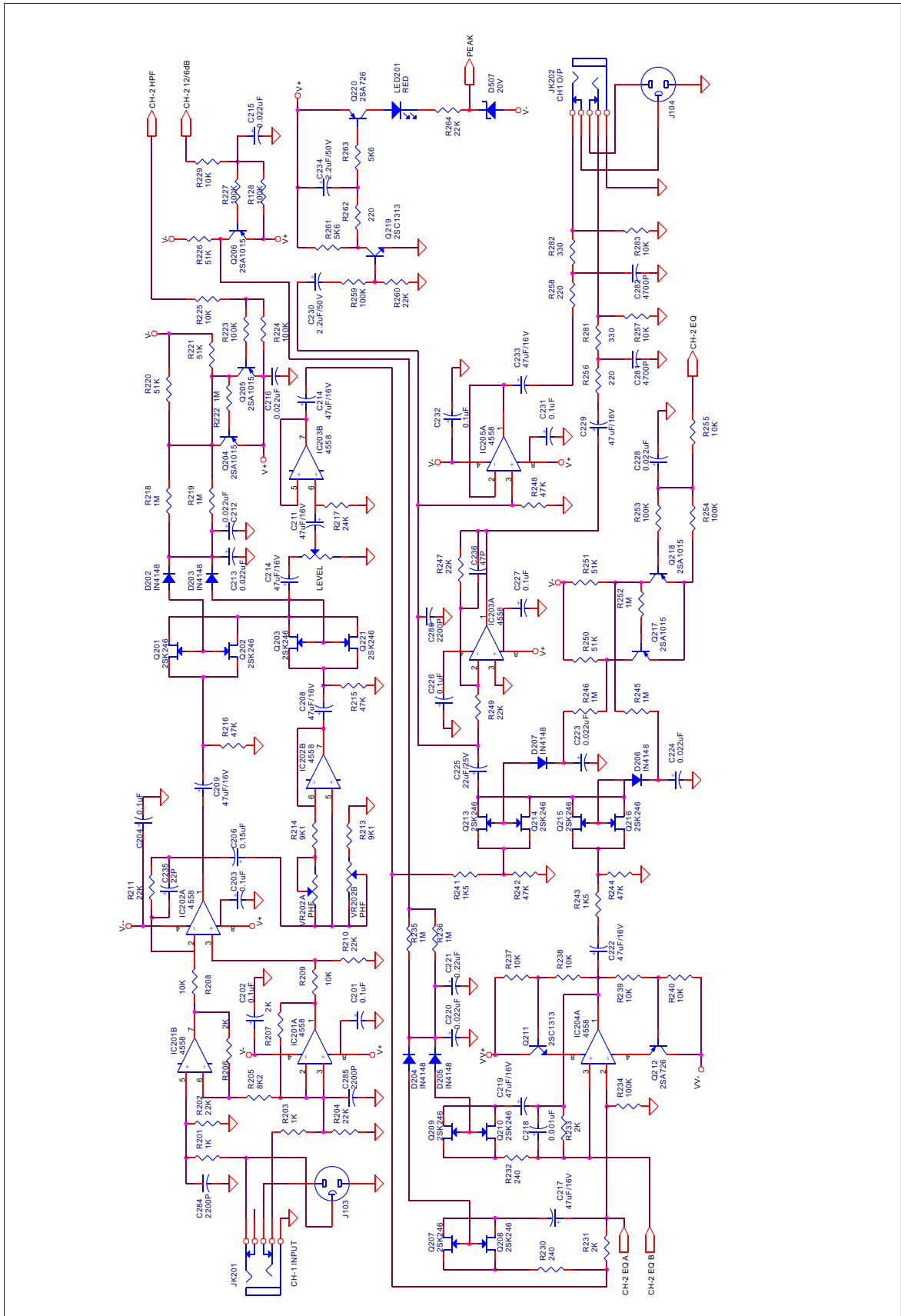
EQUALIZER SCHEMATIC



CH 1 INPUT & OUTPUT SCHEMATICS



CH 2 INPUT & OUTPUT SCHEMATICS



MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
	290-03000-101-0	PCB MQSERIES-A
	382-10010-010-0	TINNER WIRE 10MM D0.6
	382-10012-510-0	TINNER WIRE 12.5MM D0.6
	281-00000-020-0	FUSE CLIP FH-1206
	321-00000-000-0	CABLE TIE HW-80M
	322-01000-100-0	TUBE 10MM*D1
	376-00235-150-0	D.S.WIRE UL2547 #28 350MMGRN
	379-01800-101-0	M.WIRE UL1007 #26 80MM BLK
	379-02181-101-0	M.WIRE UL1007 #24 180MM BLK
	379-02211-101-0	M.WIRE UL1007 #24 210MM BLK
	379-02211-121-0	M.WIRE UL1007 #24 210MM RED
	385-04200-320-0	4P M.RIBBON WIRE 200MM
	385-04240-320-0	4P M.RIBBON WIRE 240MM
	385-04270-320-0	4P M.RIBBON WIRE 270MM
	385-08050-320-0	8P M.RIBBON WIRE 50MM
	526-10033-110-0	TRAN. HEAT SINK BJK MQ3400
	526-20001-110-0	HEAT SINK BLK 19*13*12 L=19MM
	590-53010-100-0	M/E SET SCR. M3.0*10 NI
	590-53012-100-0	M/E SET SCR. M3.0*12 NI
	600-00302-210-0	HEX. NUT M3.0*2.2 NI
	610-00301-018-0	FIBER WAS. D3.0*8*1
	610-30301-001-0	TOOTH WAS. D3*D8*1 NI
C101-104.188.126.232. 450-453.750-755	042-10448-050-0	C/C2 0.1MF Z 100V T]
C105.404.405.601.602	046-82304-000-0	M/C 0.082MF J 50V 5
C112.113.115.120. 121.123. 124.410.411.607.608	046-22304-003-0	M/C 0.022MF J 50V 5
C116.128	046-22304-003-0	M/C 0.022MF J 50V 5
C118	046-15204-020-0	M/C 0.0015MF J 50V 5
C122.C129.C108-C111 .C114.C117.C119	030-47628-070-0	E/C 47MF Z 16V 5*11 P 5]
C125	030-22638-000-0	E/C 22MF Z 25V 5*11 P
C130.134	030-22558-000-0	E/C 2.2MF Z 50V 5*11 P
C133.129	030-47628-070-0	E/C 47MF Z 16V 5*11 P 5

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
C135	042-22024-020-0	C/C2 22PF J 50V 5
C136	042-47024-020-0	C/C2 47PF J 50V 5
C181.182	042-47225-000-0	C/C2 4700PF K 50V
C184.185.186	042-22225-000-0	C/C2 2200PF K 50V 5
C184.186	042-22225-000-0	C/C2 2200PF K 50V 5
C187.127.231	042-10448-050-0	C/C2 0.1MF Z 100V T
C301	032-33525-000-0	NP E/C 3.3MF K 16V 5*11 P
C302.303	032-22525-000-0	NP E/C 2.2MF K 16V 5*11 P
C304.305	032-15525-000-0	NP E/C 1.5MF K 16V 5*11 P
C306.307	046-82404-020-0	M/C 0.82MF J 50V 7.5
C308.309	046-56404-020-0	M/C 0.56MF J 50V 7.5
C310.311	050-33404-001-0	M.M/C 0.33MF J 100V 10
C312,C313	046-22404-001-0	M/C 0.22MF J 50V 10
C401	046-22404-020-0	M/C 0.22MF J 50V 5
C402,C403,C314,C315	046-15404-020-0	M/C 0.15MF J 50V 5
C406.407	046-68304-020-0	M/C 0.068MF J 50V 5
C408.409	046-39304-001-0	M/C 0.039MF J 50V 5MM
C502,C503	030-47758-000-0	E/C 470MF Z 50V 16*25 P
C504.505	030-22658-070-0	E/C 22MF Z 50V 6*11 T
C506.507	030-10758-000-0	E/C 100MF Z 50V 8*12 P
C508.509.510.511	030-22738-000-0	E/C 220MF Z 25V 8*14 P
C603.604	046-56304-020-0	M/C 0.056MF J 50V 5
C605.606	046-33304-020-0	M/C 0.033MF J 50V 5
C609.412.413	046-15304-020-0	M/C 0.015MF J 50V 5
C610	046-15304-020-0	M/C 0.015MF J 50V 5
C611	046-10304-001-0	M/C 0.01MF J 50V 3.5
C612.106.107.414.415	046-82204-020-0	M/C 0.0082MF J 50V 5
C616	046-47204-004-0	M/C 0.0047MF J 50V 5
C701.702.614	046-56204-002-0	M/C 0.0056MF J 50V 5
C703.704	046-39204-020-0	M/C 0.0039MF J 50V 5
C705.706.714.715	046-22204-020-0	M/C 0.0022MF J 50V 5
C707.708.613	046-68204-020-0	M/C 0.0068MF J 50V 5
C709.710.615	046-47204-004-0	M/C 0.0047MF J 50V 5
C711.712	046-33204-020-0	M/C 0.0033MF J 50V 5
C713.716	046-22204-020-0	M/C 0.0022MF J 50V 5
D102-107	090-02000-020-0	DIODE 1N4148 T

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
D501-504	090-00001-020-0	DIODE 1N4003 SILITEK T
D505.506	090-01183-010-0	Z/DIODE 18V K 0.5W FAIRCH
D507	090-01203-010-0	Z/DIODE 20V K 0.5W FAIRCH
IC101-105.301-316	160-00000-902-0	IC NJM 4558DD JRC
IC501	160-00002-100-0	IC LM337T NS (DIP)
IC501.502	212-10032-370-0	3P WAFER/P 250MM UL1007#24 PH=2.5MM
IC501.502	313-00010-020-0	WASHER TO-220
IC501.502	314-00000-050-0	BUSHES 602S(V.0) 180DEGREE
IC501.502	610-60301-006-0	SPR .WAS. D3*D5*1 NI
IC502	160-00002-000-0	IC LM317T NS
J101,J102	211-01602-020-0	6D3/J HLJ2306-01-3040
Q101-103.107-110.113 -116.121	122-00000-300-0	FET 2SK246 GR TOSHIBA
Q104-Q106.117.118	121-00000-200-0	TRAN. 2SA1015 GR TOSHIBA
Q112.120	121-00000-500-0	TRAN 2SA970-BL TOSHIBA
Q119.111	120-00001-010-0	TRAN 2SC2240-BL TOSHIBA
Q501	120-00005-701-0	TRAN. MJE3055 T0220
Q501.502	615-10022-630-0	BOSS 5+5
Q502	121-00003-900-0	TRAN. MJE2955 TO220
R101.103	000-10206-400-0	CF RES. 1K J 0.0625W T
R105	000-82226-400-0	CF RES. 8K2 J 0.25W T
R106.107	000-20206-400-0	CF RES 2K J 0.0625W T
R110.111.102.104.147. 149	000-22306-400-0	CF RES. 22K J 0.0625W T
R112	000-68306-400-0	CF RES. 68K J 0.0625W T
R113	000-82406-400-0	CF RES. 820K J 0.0625W T
R114	000-33416-400-0	CF RES. 330K J 1/8W T
R115.116.142.144	000-47306-400-0	CF RES. 47K J 0.0625W T
R117	000-24316-400-0	CF RES. 24K J 1/8W T
R120.121.126.150.151	000-51306-400-0	CF RES. 51K J 0.0625 T
R130,132	000-82116-400-0	CF RES. 820 J 1/8W T
R131.133	000-30206-400-6	CF RES. 3K J 0.0625W T
R134.153.154.159.123. 124.127.128	000-10406-400-0	CF RES. 100K J 0.0625W T

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
R136.145.146.152.118. 119.122.135	000-10506-400-0	CF RES. 1M J 0.0625W T
R137.140.155.125.129. 138.139.108.109	000-10306-400-0	CF RES. 10K J 0.0625W T
R141.143	000-15206-400-0	CF RES. 1K5 J 0.0625W T
R148	000-47326-000-0	CF RES. 47K J 0.25W U
R156.158.181.182	000-33126-000-0	CF RES. 330 J 0.25W U
R157,183	000-10326-000-0	CF RES. 10K J 0.25W U
R160	000-11306-400-0	CF RES.11K J 0.0625W T
R161	000-56206-400-0	CF RES. 5K6 J 0.0625W T
R162	000-22106-400-0	CF RES. 220 J 0.0625W T
R163	000-56226-000-0	CF RES. 5K6 J 0.25W U
R164.R502.504	000-39226-400-0	CF RES. 3K9 J 0.25W T
R301,311,602,606	000-39426-400-0	CF RES. 390K J 0.25W T
R303	000-24426-400-0	CF RES. 240K J 0.25W T
R305.315	000-33426-400-0	CF RES. 330K J 0.25W T
R307	000-27426-400-0	CF RES. 270K J 0.25W T
R309,313,604	000-30426-400-0	CF RES. 300K J 0.25W T
R310,601	000-68426-400-0	CF RES. 680K J 0.25W T
R312,603,302,306,308	000-56426-400-0	CF RES. 560K J 0.25W T
R314,304,605	000-62426-400-0	CF RES. 620K J 0.25W T
R501,505	000-24126-400-0	CF RES. 240 J 0.25W T
R503,506	000-10126-400-0	CF RES. 100 J 0.25W T
R507,510	005-68026-400-0	MOF RES. 68 + -5% 2W T
R508,509	000-18226-400-0	CF RES. 1K8 J 0.25W T
R511	000-22236-400-0	CF RES 2K2 J 0.5W T
R611,711	000-15126-400-0	CF RES. 150 J 0.25W T
R615,715	000-12126-400-0	CF RES. 120 J 0.25W T
R701-710,712,713,714, 716,401-415,612,613,6 14,616,607,608,609,61 0	000-18126-400-0	CF RES. 180 J 0.25W T
TVR301-TV315,TVR6 01-TV616	020-20454-000-0	T/VR. 200K 0.1W D8 S 3M

VR & SWITCH PCB-PART LIST

Ref.	Phonic	Specifications
	F03-07000-002-0	MQ3300 B(MQ3300M B)
	210-02201-000-0	P/SW SPJ222SE01-PJ
	211-10051-080-0	5P WAFER/S S5B-EH
	290-03000-202-0	PCB MQ3300M(B)
	379-01800-101-0	M.WIRE UL1007 #26 80MM BLK
	382-10007-510-0	TINNER WIRE 7.5MM D0.6
	382-10010-010-0	TINNER WIRE 10MM D0.6
	385-06090-320-0	6P M.RIBBON WIRE 90MM
	F03-07000-003-0	MQ3300 D(MQ3300M D)
	212-10050-250-0	5P WAFER/P DX-07
	290-03000-300-0	PCB MQ3300M D
VR101,VR301-VR331	026-20332-000-0	SS/VR 20K W 20MM P
	290-03000-410-0	PCB MQ3300M(F)
	550-20003-000-0	CHASSIS ZN(W)

MISCELLANEOUS ITEMS

Ref.	Phonic	Specifications
	058-47236-001-0	LINE/C 0.0047MF M 400V
	100-00110-000-0	LED BL-R5132N RED
	100-00150-000-0	LED SE6221 GRN
	210-02101-010-0	P/SW KDC-A04-10BA2-G
	281-04000-000-0	FUSE HOLDER FH-B02 EDK
	290-03000-500-0	PCB MQ3300M G
	307-00000-000-0	CORD CONNECTOR HW-C4
	321-00000-000-0	CABLE TIE HW-80M
	322-11910-400-0	TUBE 190MM*D4
	322-23001-000-0	TUBE 30MM*D10
	322-24001-600-0	TUBE 40MM*D16
	322-26002-800-0	TUBE 60MM*D28
	379-08261-122-0	M.WIRE UL1015 #22 260MM RED
	385-02140-310-0	2P M.RIBBON WIRE 2468#26 BLK:140MM
	385-03140-310-0	3P M.RIBBON WIRE 140MM
	510-20060-911-0	PANEL MQ3300
	516-20030-200-0	TOP COV. MQ3300M STEVEN
	517-20050-101-0	BOT. COV. MQ3300 STEVEN
	525-60011-000-0	FEET SIZE:D20*D15*H10.5 NF-008
	541-20020-120-0	S/KNOB 4*9*8 BLK+WHT
	541-20020-320-0	S/KNOB 4*9*8 BLK+SILVERY WHT
	542-20040-120-0	P/KNOB 18*5.5*14 BLK
	542-60090-122-0	P/KNOB 9.5*5.5*8 LOW WHT
	543-20020-120-0	P/KNOB BUSHING 18.5*5.5 BLK
	551-20006-000-0	PUSH SW BRKT. ZN(W)
	551-20007-001-0	RT BRKT. ZN(W)
	551-20008-000-0	LF BRKT. ZN(W)
	560-20052-103-0	CARTON MQ3300 SIZE:585*436*306 A=B
	561-20052-102-0	G/B MQ3300 SIZE:570*104*286 300g+B9B9
	567-60022-000-0	EPE MQ3300
	568-00003-000-0	PE BAG #10 240*340*0.05

MISCELLANEOUS ITEMS

Ref.	Phonic	Specifications
	568-20004-000-0	PE BAG 550*300*0.05
	572-00000-050-0	DRYER 5g
	573-10063-012-0	M.I.C LABEL 50*10MM
	573-60240-000-0	BAR CODE LABEL PHONIC SERIES LABEL
	573-60343-000-0	LABEL LEVEL METER LABEL BLUE D=8mm
	574-03070-310-0	OWN. MANU. MQ3300
	579-00000-068-0	MINI CATALOG PHONIC SERIES
	590-03004-100-0	M/E FLT SCR. M3.0*4 NI
	590-43006-100-0	M/E PAN SCR. M3.0*6 NI
	590-53004-200-0	M/E SET SCR. M3.0*4 BLK
	590-53008-200-0	M/E SET SCR. M3.0*8 D=6 BLK
	590-53012-100-0	M/E SET SCR. M3.0*12 NI
	591-53006-200-0	T/P SET SCR. M3.0*6 BLK
	600-00302-210-0	HEX. NUT M3.0*2.2 NI
	610-00301-018-0	FIBER WAS. D3.0*8*1
	610-30301-001-0	TOOTH WAS. D3*D8*1 NI
	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
	615-20006-630-0	BOSS 19
	630-20018-310-0	MYLAR INSU. 80*45*0.2
	631-20002-000-0	HEMELON 9*32
FEET*4	610-00300-502-0	PLA. WAS. D3.0*D7.0*0.5 BLK
	S03-07000-100-0	MQ3300 PHONIC MATERIAL
	510-20060-911-F	PANEL MQ3300
	511-20020-100-F	BACK PANEL MQ/MQ3300
	516-20030-200-F	TOP COV. MQ/MQ3300
	517-20050-101-F	BOT COV. MQ/MQ3300

POWER REQUIREMENT CLASSIFICATION

Ref.	Phonic	Specifications	
<u>BS</u>	070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA	
	280-1026E-000-0	FUSE T1A 250V S (UL/CSA/JIS/CE)	
	280-50165-000-0	FUSE T500MA 250V SMK S	
	GND 315-00000-000-0	LUG D4 GROUND	
	370-26B40-439-1	P/CORD 230V 13A 2m5 BS 3P	
	511-20020-100-0	BACK PANEL PEQ-3300M STEVEN BS/SAA	
	527-01000-000-0	STR.REL.BUSHING 5N4/5W-2	
	573-10031-010-0	CAUTION LABEL	
	573-10032-010-0	POWER LABEL (ONLY USED IN BS)	
	GND 590-54008-200-0	M/E SET SCR. M4.0*8 BLK	
	GND 600-00403-500-0	HEX. NUT M4.0*3.5 ZN	
	GND 610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI	
	<u>SAA</u>	070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA
280-1026E-000-0		FUSE T1A 250V S (UL/CSA/JIS/CE)	
280-50165-000-0		FUSE T500MA 250V SMK S	
GND 315-00000-000-0		LUG D4 GROUND	
370-11310-809-0		P/CORD 240V 7.5A 6F 3P SAA	
511-20020-100-0		BACK PANEL PEQ-3300M STEVEN BS/SAA	
527-01000-000-0		STR.REL.BUSHING 5N4/5W-2	
590-54008-200-0		M/E SET SCR. M4.0*8 BLK	
600-00403-500-0		HEX. NUT M4.0*3.5 ZN	
610-30400-501-0		TOOTH WAS. D4.0*D8.5*0.5 NI	
<u>IEC</u>		070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA
		280-10265-000-0	FUSE T 1A 250V SMK IEC/VDE
		280-3E065-000-0	FUSE T315MA 250V SMK S
	370-03410-909-0	P/CORD 220V 2.5A 6F 2P	
	511-20020-701-0	BACK PANEL PEQ3300 PHONIC SMK	
	527-00000-000-0	STR. REL. BUSHING 4P4 4N-4	

POWER REQUIREMENT CLASSIFICATION

Ref.	Phonic	Specifications	
<u>SA</u>	070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA	
	280-10265-000-0	FUSE T 1A 250V SMK IEC/VDE	
	280-3E065-000-0	FUSE T315MA 250V SMK S	
	GND 315-00000-000-0	LUG D4 GROUND	
	370-12020-829-0	P/CORD 240V 10A/250V 3P6F SA	
	511-20020-701-0	BACK PANEL PEQ3300 PHONIC SMK	
	527-01000-000-0	STR.REL.BUSHING 5N4/5W-2	
	GND 590-54008-200-0	M/E SET SCR. M4.0*8 BLK	
	600-00403-500-0	HEX. NUT M4.0*3.5 ZN	
	GND 610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI	
<u>UL</u>	070-20012-103-0	X'MER 120V PEQ3300/3400 AC=28V 300MA	
	280-10261-000-0	FUSE 1A 250V UL/CSA F 5*20	
	280-50165-000-0	FUSE T500MA 250V SMK S	
	370-24510-203-0	P/CORD 120V 7A 6F 2P SPT-2	
	511-20020-501-0	BACK PANEL PEQ3300 PHONIC CSA/UL	
	527-06000-000-0	STR. REL. BUSHING 4N4	
	<u>JIS</u>	070-20010-601-0	X'MER 100V JIS PEQ3300/3400 AC=28V 300MA
		280-1026B-000-0	FUSE 1A 250V UL/CSA/JIS S
		280-50165-000-0	FUSE T500MA 250V SMK S
		370-16510-609-0	P/CORD 100V 7A 6F 2P JIS
511-20021-001-0		BACK PANEL PEQ3300 PHONIC JIS	
527-00000-000-0		STR. REL. BUSHING 4P4 4N-4	

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
	290-03000-101-0	PCB MQSERIES-A
	382-10010-010-0	TINNER WIRE 10MM D0.6
	382-10012-510-0	TINNER WIRE 12.5MM D0.6
	160-00000-902-0	IC NJM 4558DD JRC
	160-00002-000-0	IC LM317T NS
	160-00002-100-0	IC LM337T NS (DIP)
	211-01602-020-0	6D3/J HLJ2306-01-3040
	281-00000-020-0	FUSE CLIP FH-1206
	321-00000-000-0	CABLE TIE HW-80M
	379-01800-101-0	M.WIRE UL1007 #26 80MM BLK
	379-02181-101-0	M.WIRE UL1007 #24 180MM BLK
	379-02211-101-0	M.WIRE UL1007 #24 210MM BLK
	379-02211-121-0	M.WIRE UL1007 #24 210MM RED
	385-04170-320-0	4P M.RIBBON WIRE 170MM
	385-04200-320-0	4P M.RIBBON WIRE 200MM
	385-04240-320-0	4P M.RIBBON WIRE 240MM
	385-04270-320-0	4P M.RIBBON WIRE 270MM
	385-08050-320-0	8P M.RIBBON WIRE 50MM
	526-10033-110-0	TRAN. HEAT SINK BJK MQ3400
	526-20001-110-0	HEAT SINK BLK 19*13*12 L=19MM
	590-53010-100-0	M/E SET SCR. M3.0*10 NI
	600-00302-210-0	HEX. NUT M3.0*2.2 NI
(R511,510,507)*2	322-01000-100-0	TUBE 10MM*D1
C104.188.101-103.126.	042-10448-050-0	C/C2 0.1MF Z 100V T
232.201-203.226.450-4		
53.750-755		
C105.205.608	046-82304-000-0	M/C 0.082MF J 50V 5
C108-111.114.117.119.	030-47628-070-0	E/C 47MF Z 16V 5*11 P 5
122.208.209.211.214*2		
.222.233.217.219		
C112.113.115.116.120.	046-22304-003-0	M/C 0.022MF J 50V 5
121.123.124.128.212.2		
15.216.228.213.220.22		
1.223.224.311.402		
C118,218,410,710	042-56124-020-0	C/C2 560PF J 50V 5
C125.225	030-22638-000-0	E/C 22MF Z 25V 5*11 P
C129.133.229	030-47628-070-0	E/C 47MF Z 16V 5*11 P 5
R119.140	008-03322-600-0	CHIP RES. 3.3K J 0603

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
C134.130.230.234	030-22558-000-0	E/C 2.2MF Z 50V 5*11 P
C135,235	042-22024-020-0	C/C2 22PF J 50V 5
C136*2	042-47024-020-0	C/C2 47PF J 50V 5
C181.182.282.281	042-47225-000-0	C/C2 4700PF K 50V
C184.284.185.285.186. 286	042-22225-000-0	C/C2 2200PF K 50V 5
C204.231.127.187.227	042-10448-050-0	C/C2 0.1MF Z 100V T
C301,601	032-22525-000-0	NP E/C 2.2MF K 16V 5*11 P
C302.602	032-15525-000-0	NP E/C 1.5MF K 16V 5*11 P
C303.603	046-82404-020-0	M/C 0.82MF J 50V 7.5
C304.604	046-56404-020-0	M/C 0.56MF J 50V 7.5
C305.605	050-33404-001-0	M.M/C 0.33MF J 100V 10
C306,C606	046-22404-001-0	M/C 0.22MF J 50V 10
C307,607	046-15404-020-0	M/C 0.15MF J 50V 5
C308	046-82304-000-0	M/C 0.082MF J 50V 5
C309.609	046-56304-020-0	M/C 0.056MF J 50V 5
C310.610	046-33304-020-0	M/C 0.033MF J 50V 5
C313.613.106.107.206. 207	046-82204-020-0	M/C 0.0082MF J 50V 5
C314.614.405.705	046-56204-002-0	M/C 0.0056MF J 50V 5
C315.615	046-33204-020-0	M/C 0.0033MF J 50V 5
C401.701	046-39304-001-0	M/C 0.039MF J 50V 5MM
C403,312,612,703	046-15304-020-0	M/C 0.015MF J 50V 5
C404,704	046-10304-020-0	M/C 0.01MF J 50V 5
C406,706	046-39204-020-0	M/C 0.0039MF J 50V 5
C407,707	046-22204-020-0	M/C 0.0022MF J 50V 5
C408,708	046-15204-020-0	M/C 0.0015MF J 50V 5
C409,709	046-10204-020-0	M/C 0.001MF J 50V 5
C411,711	046-18204-020-0	M/C 0.0018MF J 50V 5
C412,712	046-12204-020-0	M/C 0.0012MF J 50V 5
C413,713	042-82124-050-0	C/C2 820PF J 50V 5 T
C414,415,714,715	042-47124-020-0	C/C2 470PF J 50V 5
C502,503	030-47758-000-0	E/C 470MF Z 50V 16*25 P
C504.505	030-22658-070-0	E/C 22MF Z 50V 6*11 T
C506.507	030-10758-000-0	E/C 100MF Z 50V 8*12 P
C508.509.510.511	030-22738-000-0	E/C 220MF Z 25V 8*14 P
C611.702	046-22304-020-1	M/C 0.022MF J 50V 5

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
D102-107.202-207	090-02000-020-0	DIODE 1N4148 T
D501.502.503.504	090-00001-020-0	DIODE 1N4003 SILITEK T
D505.506	090-01183-010-0	Z/DIODE 18V K 0.5W FAIRCH
D507	090-01203-010-0	Z/DIODE 20V K 0.5W FAIRCH
IC+HEAT SINK	610-00301-018-0	FIBER WAS. D3.0*8*1
IC501.502	212-10032-370-0	3P WAFER/P 250MM UL1007#24 PH=2.5MM
IC501.502	313-00010-020-0	WASHER TO-220
IC501.502	314-00000-050-0	BUSHES 602S(V.0) 180DEGREE
IC501.502	610-30301-001-0	TOOTH WAS. D3*D8*1 NI
IC501.502	610-60301-006-0	SPR .WAS. D3*D5*1 NI
LEVEL1	376-00223-150-0	D.S.WIRE UL2547 #28 230MMGRN
LEVEL2	376-00226-140-0	D.S.WIRE UL2547 #28 260MMYLW
Q104-106.204-206.117 .118.217.218	121-00000-200-0	TRAN. 2SA1015 GR TOSHIBA
Q120.220.112.212	121-00000-500-0	TRAN 2SA970-BL TOSHIBA
Q213-216.201-203.221 .208-210.107-110.101- 103.121.113-116.207	122-00000-300-0	FET 2SK246 GR TOSHIBA
Q219.119.111.211	120-00001-010-0	TRAN 2SC2240-BL TOSHIBA
Q501	120-00005-701-0	TRAN. MJE3055 T0220
Q501.502	615-10022-630-0	BOSS 5+5
Q502	121-00003-900-0	TRAN. MJE2955 TO220
R101.103.201.203	000-10206-400-0	CF RES. 1K J 0.0625W T
R102.104.108.109.110. 111.147.149.202.204.2 08.209.210.211.247.24 9	000-22306-400-0	CF RES. 22K J 0.0625W T
R105,205	000-82226-400-0	CF RES. 8K2 J 0.25W T
R106.107.206.207	000-20206-400-0	CF RES 2K J 0.0625W T
R112.212	000-68306-400-0	CF RES. 68K J 0.0625W T
R113.213	000-82406-400-0	CF RES. 820K J 0.0625W T
R114,214	000-33416-400-0	CF RES. 330K J 1/8W T
R117,217	000-24316-400-0	CF RES. 24K J 1/8W T

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
R118.119.122.135.136. 145.146.152.218.219.2 22.235.236.245.246.25 2	000-10506-400-0	CF RES. 1M J 0.0625W T
R121.120.126.151.150. 220.221.206.250.251	000-51306-400-0	CF RES. 51K J 0.0625 T
R123.124.127.128.134. 153.154.159.223.224.2 27.228.234*2.253.254	000-10406-400-0	CF RES. 100K J 0.0625W T
R125.129.137-140.155. 283.225.229.237-240.2 55	000-10306-400-0	CF RES. 10K J 0.0625W T
R130,132,230,232	000-82116-400-0	CF RES. 820 J 1/8W T
R131.133.231.233	000-30206-400-6	CF RES. 3K J 0.0625W T
R141.143.241.243	000-15206-400-0	CF RES. 1K5 J 0.0625W T
R142.144.115.116.215. 216.248.242.244	000-47306-400-0	CF RES. 47K J 0.0625W T
R148	000-47326-000-0	CF RES. 47K J 0.25W U
R156.158.281.181.182	000-33126-000-0	CF RES. 330 J 0.25W U
R160	000-11306-400-0	CF RES.11K J 0.0625W T
R161.261	000-56206-400-0	CF RES. 5K6 J 0.0625W T
R162	000-22106-400-0	CF RES. 220 J 0.0625W T
R163.263	000-56226-000-0	CF RES. 5K6 J 0.25W U
R164.264.502.504	000-39226-400-0	CF RES. 3K9 J 0.25W T
R183.157	000-10326-000-0	CF RES. 10K J 0.25W U
R256.258	000-33106-400-0	CF RES. 330 J 0.0625W T
R257	000-10306-400-0	CF RES. 10K J 0.0625W T
R259	000-10426-000-0	CF RES. 100K J 0.25W U
R260	000-11326-000-0	CF RES. 11K J 0.25W U
R262	000-22126-000-0	CF RES. 220 J 0.25W U
R282	000-33106-400-0	CF RES. 330 J 0.0625W T
R301,302,306,307,601, 602,606,607	000-10526-400-0	CF RES. 1M J 0.25W T
R303,305,308,310,603, 605,608,610	000-11526-400-0	CF RES. 1.1M J 0.25W T
R304,309,604,609	006-95332-400-0	MF RDS. 953K F 0.25W T

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
R311,611	000-22426-400-0	CF RES. 220K J 0.25W T
R312,612	006-19132-400-0	MF RES. 191K F 0.25W T
R315,615	006-14032-400-0	MF RES. 140K F 0.25W T
R401-415,701-715	000-47126-400-0	CF RES. 470 J 0.25W T
R501,505	000-24126-400-0	CF RES. 240 J 0.25W T
R503,506	000-10126-400-0	CF RES. 100 J 0.25W T
R507,510	005-68026-400-0	MOF RES. 68 + -5% 2W T
R508,509	000-18226-400-0	CF RES. 1K8 J 0.25W T
R511	000-22236-400-0	CF RES 2K2 J 0.5W T
R613,614,313,314	000-20426-400-0	CF RES. 200K J 0.25W T
TRAN.HEAT SINK*2	590-53012-100-0	M/E SET SCR. M3.0*12 NI

VR & SWITCH PCB-PART LIST

Ref.	Phonic	Specifications
	F03-08000-002-0	PCB WITH COMPONENTS MQ3400 B(MQ3300M B)
	210-02201-000-0	P/SW SPJ222SE01-PJ
	211-10051-080-0	5P WAFER/S S5B-EH
	290-03000-202-0	PCB MQ3300M(B)
	379-01800-101-0	M.WIRE UL1007 #26 80MM BLK
	382-10007-510-0	TINNER WIRE 7.5MM D0.6
	382-10010-010-0	TINNER WIRE 10MM D0.6
	385-06090-320-0	6P M.RIBBON WIRE 90MM
	F03-08000-003-0	PCB WITH COMPONENTS MQ3400 C(MQ3400S C)
	210-02201-000-0	P/SW SPJ222SE01-PJ
	211-10051-080-0	5P WAFER/S S5B-EH
	290-03010-102-0	PCB MQ3400S(C)
	382-10010-010-0	TINNER WIRE 10MM D0.6
	385-05120-320-0	5P M.RIBBON WIRE 120MM
	F03-08000-005-0	PCB WITH COMPONENTS MQ3400 F(MQ3400S F)
	026-20332-000-0	SS/VR 20K W 20MM P
	290-03010-201-0	PCB MQ3400S(F)
	382-10010-010-0	TINNER WIRE 10MM D0.6
	550-20003-000-0	CHASSIS ZN(W)
	590-42003-100-0	M/E PAN SCR. M2.0*3 NI

MISCELLANEOUS ITEMS

Ref.	Phonic	Specifications
	058-47236-001-0	LINE/C 0.0047MF M 400V
	100-00110-000-0	LED BL-R5132N RED
	100-00150-000-0	LED SE6221 GRN
	210-02101-010-0	P/SW KDC-A04-10BA2-G
	211-10031-170-0	3P WAFER/S 2532-03 (PITCH:2.5MM)
	212-10050-250-0	5P WAFER/P DX-07
	281-04000-000-0	FUSE HOLDER FH-B02 EDK
	290-03000-300-0	PCB MQ3300M D
	290-03000-500-0	PCB MQ3300M G
	290-63600-000-0	PCB MQ3600 IC501/502 Q501/502
	307-00000-000-0	CORD CONNECTOR HW-C4
	321-00000-000-0	CABLE TIE HW-80M
	322-11810-400-0	TUBE 180MM*D4
	322-24001-600-0	TUBE 40MM*D16
	322-26002-800-0	TUBE 60MM*D28
	379-08261-122-0	M.WIRE UL1015 #22 260MM RED
	385-02140-310-0	2P M.RIBBON WIRE 2468#26 BLK:140MM
	385-03140-310-0	3P M.RIBBON WIRE 140MM
	510-20071-711-0	PANEL MQ3400
	516-20030-200-0	TOP COV. MQ3300M STEVEN
	517-20050-101-0	BOT. COV. MQ3300 STEVEN
	525-60011-000-0	FEET SIZE:D20*D15*H10.5 NF-008
	541-20020-120-0	S/KNOB 4*9*8 BLK+WHT
	541-20020-320-0	S/KNOB 4*9*8 BLK+SILVERY WHT
	542-20040-120-0	P/KNOB 18*5.5*14 BLK
	542-60090-122-0	P/KNOB 9.5*5.5*8 LOW WHT
	543-20020-120-0	P/KNOB BUSHING 18.5*5.5 BLK
	551-20006-000-0	PUSH SW BRKT. ZN(W)
	551-20007-001-0	RT BRKT. ZN(W)
	551-20008-000-0	LF BRKT. ZN(W)
	560-20052-104-0	CARTON MQ3400 SIZE:585*436*306 A=B
	561-20052-201-0	G/B MQ3400 SIZE:510*104*286 300g+B9B9

MISCELLANEOUS ITEMS

Ref.	Phonic	Specifications
	567-60022-000-0	EPE MQ3300
	568-00003-000-0	PE BAG #10 240*340*0.05
	568-20004-000-0	PE BAG 550*300*0.05
	572-00000-050-0	DRYER 5g
	573-10063-012-0	M.I.C LABEL 50*10MM
	573-60240-000-0	BAR CODE LABEL PHONIC SERIES LABEL
	573-60343-000-0	LABEL LEVEL METER LABEL BLUE D=8mm
	574-03070-310-0	OWN. MANU. MQ3300
	579-00000-068-0	MINI CATALOG PHONIC SERIES
	590-03004-200-0	M/E FLT SCR. M3.0*4 BLK
	590-43006-100-0	M/E PAN SCR. M3.0*6 NI
	590-44008-200-0	M/E PAN SCR. M4.0*8 BLK
	590-53004-200-0	M/E SET SCR. M3.0*4 BLK
	590-53008-200-0	M/E SET SCR. M3.0*8 D=6 BLK
	590-53012-100-0	M/E SET SCR. M3.0*12 NI
	591-53006-200-0	T/P SET SCR. M3.0*6 BLK
	600-00302-210-0	HEX. NUT M3.0*2.2 NI
	610-00301-018-0	FIBER WAS. D3.0*8*1
	610-30301-001-0	TOOTH WAS. D3*D8*1 NI
	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
	615-20006-630-0	BOSS 19
	630-20018-310-0	MYLAR INSU. 80*45*0.2
	631-20002-000-0	HEMELON 9*32
FEET*4	610-00300-502-0	PLA. WAS. D3.0*D7.0*0.5 BLK
Ref.	Phonic	Specifications
	S03-08000-100-0	MQ3400 MATERIAL
	510-20071-711-F	PANEL MQ3400
	511-20030-300-F	BACK PANEL MQ3400/MQ3400
	516-20030-200-F	TOP COV. MQ/MQ3300
	517-20050-101-F	BOT COV. MQ/MQ3300

POWER REQUIREMENT CLASSIFICATION

Ref.	Phonic	Specifications
<u>BS</u>		
	070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA
	280-1026E-000-0	FUSE T1A 250V S (UL/CSA/JIS/CE)
	280-50165-000-0	FUSE T500MA 250V SMK S
GND	315-00000-000-0	LUG D4 FOR GROUD
	370-26B40-439-1	P/CORD 230V 13A 2m5 BS 3P
	511-20030-801-0	BACK PANEL PEQ3400 BS/SAA/SA
	527-01000-000-0	STR.REL.BUSHING 5N4/5W-2
	573-10031-010-0	CAUTION LABEL
	573-10032-010-0	POWER LABEL (ONLY USED IN BS)
	590-54008-200-0	M/E SET SCR. M4.0*8 BLK
GND	600-00403-500-0	HEX. NUT M4.0*3.5 ZN
GND	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
<u>UL</u>		
	070-20012-103-0	X'MER 120V PEQ3300/3400 AC=28V 300MA
	280-10261-000-0	FUSE 1A 250V UL/CSA F 5*20
	280-50165-000-0	FUSE T500MA 250V SMK S
	370-24510-203-0	P/CORD 120V 7A 6F 2P SPT-2
	511-20030-501-0	BACK PANEL PEQ3400 PHONIC CSA/UL/SA
	527-06000-000-0	STR. REL. BUSHING 4N4
<u>SAA</u>		
	070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA
	280-1026E-000-0	FUSE T1A 250V S (UL/CSA/JIS/CE)
	280-50165-000-0	FUSE T500MA 250V SMK S
	315-00000-000-0	LUG D4 FOR GROUD
	370-11310-809-0	P/CORD 240V 7.5A 6F 3P SAA
	511-20030-801-0	BACK PANEL PEQ3400 BS/SAA/SA
	527-01000-000-0	STR.REL.BUSHING 5N4/5W-2
GND	590-54008-200-0	M/E SET SCR. M4.0*8 BLK
	600-00403-500-0	HEX. NUT M4.0*3.5 ZN

POWER REQUIREMENT CLASSIFICATION

Ref.	Phonic	Specifications	
GND	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI	
<u>IEC</u>	070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA	
	280-10265-000-0	FUSE T 1A 250V SMK IEC/VDE	
	280-3E065-000-0	FUSE T315MA 250V SMK S	
	370-03410-909-0	P/CORD 220V 2.5A 6F 2P	
	511-20030-701-0	BACK PANEL PEQ3400 PHONIC SMK IEC	
	527-00000-000-0	STR. REL. BUSHING 4P4 4N-4	
<u>SA</u>	070-20019-501-0	X'MER PEQ3300/3400 230V AC=28V 300MA	
	280-10261-000-0	FUSE 1A 250V UL/CSA F5*20	
	280-50165-000-0	FUSE T500MA 250V SMK S	
	315-00000-000-0	LUG D4 FOR GROUD	
	370-12020-829-0	P/CORD 240V 10A/250V 3P6F SA	
	511-20030-501-0	BACK PANEL PEQ3400 PHONIC CSA/UL/SA	
	527-01000-000-0	STR.REL.BUSHING 5N4/5W-2	
	590-54008-200-0	M/E SET SCR. M4.0*8 BLK	
	600-00403-500-0	HEX. NUT M4.0*3.5 ZN	
	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI	
<u>JIS</u>	T1	070-20010-601-0	X'MER 100V JIS PEQ3300/3400 AC=28V 300MA
		280-1026B-000-0	FUSE 1A 250V UL/CSA/JIS S
		280-50165-000-0	FUSE T500MA 250V SMK S
		370-16510-609-0	P/CORD 100V 7A 6F 2P JIS
		511-20031-001-0	BACK PANEL PEQ3400 PHONIC JIS
		527-00000-000-0	STR. REL. BUSHING 4P4 4N-4

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
	290-03000-101-0	PCB MQSERIES-A
	382-10010-010-0	TINNER WIRE 10MM D0.6
	382-10012-510-0	TINNER WIRE 12.5MM D0.6
	211-01602-020-0	6D3/J HLJ2306-01-3040
	281-00000-020-0	FUSE CLIP FH-1206
	321-00000-000-0	CABLE TIE HW-80M
	376-00234-140-0	D.S.WIRE UL2547 #28 340MMYLW
	376-00234-160-0	D.S.WIRE UL2547 #28 340MMBLU
	376-00245-110-0	D.S.WIRE UL2547 #28 450MMBWN
	376-00245-150-0	D.S.WIRE UL2547 #28 450MMGRN
	379-01800-101-0	M.WIRE UL1007 #26 80MM BLK
	379-02151-101-0	M.WIRE UL1007 #24 150MM BLK
	379-02151-121-0	M.WIRE UL1007 #24 150MM RED
	379-02151-191-0	M.WIRE UL1007 #24 150MM WHT
	379-02181-101-0	M.WIRE UL1007 #24 180MM BLK
	379-02241-101-0	M.WIRE UL1007 #24 240MM BLK
	379-02241-121-0	M.WIRE UL1007 #24 240MM RED
	382-10010-010-0	TINNER WIRE 10MM D0.6
	385-02270-310-0	2P M.RIBBON WIRE 270MM
	385-05190-320-0	5P M.RIBBON WIRE 190MM
	385-06190-320-0	6P M.RIBBON WIRE 190MM
	385-08130-320-0	8P M.RIBBON WIRE 130MM
C105,205	382-10005-010-0	TINNER WIRE 5MM D0.6
C106,C107,C206,C207 ,C314,C315,C402,C40	046-15404-020-0	M/C 0.15MF J 50V 5

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
C108-111,114,117,119, 122,129,209,214*2,217	030-47628-0A0-0	E/C 47MF Z 16V 5*11 T
C116.607.608	046-22304-060-0	M/C 0.022MF J 50V 5 T
C118,C218	046-15204-020-0	M/C 0.0015MF J 50V 5
C125,225	030-22638-0A0-0	E/C 22MF Z 25V 5*11 T
C130.134.230	030-22558-0A0-0	E/C 2.2MF Z 50V 5*11 T
C133.208.222.211.219. 229.233	030-47628-0A0-0	E/C 47MF Z 16V 5*11 T
C135,C235	042-22024-020-0	C/C2 22PF J 50V 5
C136*2	042-47024-020-0	C/C2 47PF J 50V 5
C181.281.182.282	042-47225-000-0	C/C2 4700PF K 50V
C184.284.185.285.186. 286	042-22225-000-0	C/C2 2200PF K 50V 5
C187.227.231	042-10448-050-0	C/C2 0.1MF Z 100V T
C188.126.127.201-204. 101-104.232.226.450-4 53.750-755	042-10448-050-0	C/C2 0.1MF Z 100V T
C212,213,112,113,115, 116,120,121,215,216,2 20,221,223,123,124,12 8,224,228,410,411	046-22304-060-0	M/C 0.022MF J 50V 5 T
C234	030-22558-0A0-0	E/C 2.2MF Z 50V 5*11 T
C301	032-33525-000-0	NP E/C 3.3MF K 16V 5*11 P
C302,C303	032-22525-000-0	NP E/C 2.2MF K 16V 5*11 P
C304,C305	032-15525-000-0	NP E/C 1.5MF K 16V 5*11 P
C306,C307	046-82404-020-0	M/C 0.82MF J 50V 7.5
C308,C309	046-56404-020-0	M/C 0.56MF J 50V 7.5
C310.C311	050-33404-001-0	M.M/C 0.33MF J 100V 10
C401,C312,C313	046-22404-020-0	M/C 0.22MF J 50V 5
C404.405.601.602	046-82304-000-0	M/C 0.082MF J 50V 5
C406,407	046-68304-060-0	M/C 0.068MF J 50V T
C408.409	046-39304-001-0	M/C 0.039MF J 50V 5MM
C412,C413,C610.C609	046-15304-020-0	M/C 0.015MF J 50V 5
C415,C612,C414	046-82204-020-0	M/C 0.0082MF J 50V 5
C502,C503	030-47758-000-0	E/C 470MF Z 50V 16*25 P
C504,505	030-22658-0A0-0	E/C 22MF Z 50V 6*11 T
C506,C507	030-10748-000-0	E/C 100MF Z 35V 10*12 P

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
C508,C509,C510,C511	030-22738-000-0	E/C 220MF Z 25V 8*14 P
C603,604	046-56304-060-0	M/C 0.056MF J 50V T
C605,C606	046-33304-020-0	M/C 0.033MF J 50V 5
C611	046-10304-001-0	M/C 0.01MF J 50V 3.5
C614,C613,C707,C708	046-68204-003-0	M/C 0.0068MF J 50V 5
C701,702	046-56204-060-0	M/C 0.0056MF J 50V T
C703,C704	046-39204-020-0	M/C 0.0039MF J 50V 5
C705,706,714,715	046-22204-060-0	M/C 0.0022MF J 50V 5 T
C709,710,615,616	046-47204-060-0	M/C 0.0047MF J 50V T
C711,C712	046-33204-020-0	M/C 0.0033MF J 50V 5
C713.716	046-22204-060-0	M/C 0.0022MF J 50V 5 T
D102-107.D202-207	090-02000-020-0	DIODE 1N4148 T
D505.506	090-01183-010-0	Z/DIODE 18V K 0.5W FAIRCH
D507	090-01203-010-0	Z/DIODE 20V K 0.5W FAIRCH
IC101-105.201-204.301-316	160-00000-902-0	IC NJM 4558DD JRC
IC501.502.Q550.551	212-10031-840-0	3P WAFER/P 170MM
J501-504	090-00001-020-0	DIODE 1N4003 SILITEK T
P12	385-04270-320-0	4P M.RIBBON WIRE 270MM
P13	385-04240-320-0	4P M.RIBBON WIRE 240MM
P14	385-04200-320-0	4P M.RIBBON WIRE 200MM
P15	385-04170-320-0	4P M.RIBBON WIRE 170MM
Q101-Q103.Q107-Q110.Q113-Q116.Q121.Q201-203.Q207-Q210.Q213-Q216.Q221	122-00000-300-0	FET 2SK246 GR TOSHIBA
Q104.105.106.117.118.204.205.206.218.217	121-00000-200-0	TRAN. 2SA1015 GR TOSHIBA
Q111.211.119.219	120-00001-010-0	TRAN 2SC2240-BL TOSHIBA
Q112.220.120.C231	121-00000-500-0	TRAN 2SA970-BL TOSHIBA
Q501.502	212-10031-820-0	3P WAFER/P 210MM
R 311,602,606	000-39426-400-0	CF RES. 390K J 0.25W T
R101.103.201.203	000-10206-400-0	CF RES. 1K J 0.0625W T
R102.104.110.111.147.149.160.202.204.210.211.247.249	000-22306-400-0	CF RES. 22K J 0.0625W T

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
R105,205	000-82226-400-0	CF RES. 8K2 J 0.25W T
R106.107.131.133.206. 207.231.233	000-20206-400-0	CF RES 2K J 0.0625W T
R108.109.125.129.137- 140.155.208.209.225.2 29.237-240.255.283.	000-10306-400-0	CF RES. 10K J 0.0625W T
R115.116.142.144.215. 216.248.242.244	000-47306-400-0	CF RES. 47K J 0.0625W T
R117,217	000-24316-400-0	CF RES. 24K J 1/8W T
R118.135.136.145.146. 119.122.152.218.219.2 22.235.236.245.246.25 2	000-10506-400-0	CF RES. 1M J 0.0625W T
R120.121.126.150.151. 220.221.206.250.251	000-51306-400-0	CF RES. 51K J 0.0625 T
R123.124.127.128.134 *2.153.154.159.223.22 4.227.228.253.254	000-10406-400-0	CF RES. 100K J 0.0625W T
R130.132.230.232	000-24106-400-6	CF RES 240 J 0.0625W T
R148	000-47326-000-0	CF RES. 47K J 0.25W U
R156.158,181.182.281. 282	000-33126-000-0	CF RES. 330 J 0.25W U
R157,183	000-10326-000-0	CF RES. 10K J 0.25W U
R161.261	000-56206-400-0	CF RES. 5K6 J 0.0625W T
R162	000-22106-400-0	CF RES. 220 J 0.0625W T
R163,R263	000-56226-000-0	CF RES. 5K6 J 0.25W U
R164,264	000-39226-400-0	CF RES. 3K9 J 0.25W T
R243.141.143.241	000-15206-400-0	CF RES. 1K5 J 0.0625W T
R256.258	000-33106-400-0	CF RES. 330 J 0.0625W T
R257	000-10306-400-0	CF RES. 10K J 0.0625W T
R259	000-10426-000-0	CF RES. 100K J 0.25W U
R260	000-22326-000-0	CF RES. 22K J 0.25W U
R262	000-22126-000-0	CF RES. 220 J 0.25W U
R301,307	000-27426-400-0	CF RES. 270K J 0.25W T
R302,306,308,312,603	000-56426-400-0	CF RES. 560K J 0.25W T
R303	000-24426-400-0	CF RES. 240K J 0.25W T
R304,314,605	000-62426-400-0	CF RES. 620K J 0.25W T

MAIN BOARD PCB-PART LIST

Ref.	Phonic	Specifications
R310,601	000-68426-400-0	CF RES. 680K J 0.25W T
R315,305	000-33426-400-0	CF RES. 330K J 0.25W T
R401	000-22126-400-0	CF RES. 220 J 0.25W T
R402-415,701-706,607 -610,707-710,612-614, 616,712-714,716	000-18126-400-0	CF RES. 180 J 0.25W T
R501,505	000-24126-400-0	CF RES. 240 J 0.25W T
R502,504	000-68226-400-0	CF RES. 6K8 J 0.25W T
R503,506	000-10126-400-0	CF RES. 100 J 0.25W T
R507,510	005-68026-400-0	MOF RES. 68 + -5% 2W T
R508,509	000-18226-400-0	CF RES. 1K8 J 0.25W T
R511	000-22236-400-0	CF RES 2K2 J 0.5W T
R511	322-01000-100-0	TUBE 10MM*D1
R604,309,313	000-30426-400-0	CF RES. 300K J 0.25W T
R611	000-15126-400-0	CF RES. 150 J 0.25W T
R711	000-15126-400-0	CF RES. 150 J 0.25W T
R715,615	000-12126-400-0	CF RES. 120 J 0.25W T
TVR301-315,TVR601-6	020-20454-000-0	T/VR. 200K 0.1W D8 S 3M

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VR & SWITCH PCB-PART LIST

Ref.	Phonic	Specifications
	F03-06000-002-0	MQ3600 B(MQ3300M-B)
	210-02201-000-0	P/SW SPJ222SE01-PJ
	211-10051-080-0	5P WAFER/S S5B-EH
	290-03000-202-0	PCB MQ3300M(B)
	379-01800-101-0	M.WIRE UL1007 #26 80MM BLK
	382-10007-510-0	TINNER WIRE 7.5MM D0.6
	382-10010-010-0	TINNER WIRE 10MM D0.6
	F03-06000-003-0	MQ3600 I
	000-91226-400-0	CF RES. 9K1 J 0.25W T
	026-20332-000-0	SS/VR 20K W 20MM P
	027-10432-000-0	DS/VR 100K B 20MM P
	290-03060-100-0	PCB MQ3600 I
	382-10010-010-0	TINNER WIRE 10MM D0.6
	590-42003-100-0	M/E PAN SCR. M2.0*3 NI
	F03-06000-004-0	MQ3600 H
R830,930	000-12126-400-0	CF RES. 120 J 0.25W T
R826,926	000-15126-400-0	CF RES. 150 J 0.25W T
R822-825,827-829,831 ,902-925,927-929,931	000-18126-400-0	CF RES. 180 J 0.25W T
R551,553	000-18226-400-0	CF RES. 1K8 J 0.25W T
R901	000-22126-400-0	CF RES. 220 J 0.25W T
R803	000-24426-400-0	CF RES. 240K J 0.25W T
R801,807	000-27426-400-0	CF RES. 270K J 0.25W T
R813,819,809	000-30426-400-0	CF RES. 300K J 0.25W T
R805,815	000-33426-400-0	CF RES. 330K J 0.25W T
R811,817,821	000-39426-400-0	CF RES. 390K J 0.25W T
R802,806,808,812,818	000-56426-400-0	CF RES. 560K J 0.25W T
R804,814,820	000-62426-400-0	CF RES. 620K J 0.25W T
R550,R552	000-68036-400-0	CF RES 68J 1/2W T
R810,816	000-68426-400-0	CF RES. 680K J 0.25W T
TVR801-816,TVR817-8 31	020-20454-000-0	T/VR. 200K 0.1W D8 S 3M
C550,C551	030-10658-000-0	E/C 10MF Z 50V 5*11 P
C552,C553,C554	030-22738-000-0	E/C 220MF Z 25V 8*14 P
C804,C805	032-15525-000-0	NP E/C 1.5MF K 16V 5*11 P
C802,C803	032-22525-000-0	NP E/C 2.2MF K 16V 5*11 P

VR & SWITCH PCB-PART LIST

Ref.	Phonic	Specifications
C801	032-33525-000-0	NP E/C 3.3MF K 16V 5*11 P
C940.942.944.946.918. 938.916.936	042-10448-000-0	C/C2 0.1MF Z 100V 5
C826	046-10304-001-0	M/C 0.01MF J 50V 3.5
C824,C825,C912,C913	046-15304-020-0	M/C 0.015MF J 50V 5
C814,C815,C902,C903	046-15404-020-0	M/C 0.15MF J 50V 5
C924,C925,C932,C933 ,C934,C935	046-22204-020-0	M/C 0.0022MF J 50V 5
C822.823.910.911	046-22304-003-0	M/C 0.022MF J 50V 5
C901,C812,C813	046-22404-020-0	M/C 0.22MF J 50V 5
C930,C931	046-33204-020-0	M/C 0.0033MF J 50V 5
C820,C821	046-33304-020-0	M/C 0.033MF J 50V 5
C922,923	046-39204-020-0	M/C 0.0039MF J 50V 5
C908.909	046-39304-001-0	M/C 0.039MF J 50V 5MM
C928.929.830.831	046-47204-004-0	M/C 0.0047MF J 50V 5
C829,920,921	046-56204-002-0	M/C 0.0056MF J 50V 5
C818,C819	046-56304-020-0	M/C 0.056MF J 50V 5
C808,C809	046-56404-020-0	M/C 0.56MF J 50V 7.5
C828,926,927	046-68204-003-0	M/C 0.0068MF J 50V 5
C906,C907	046-68304-020-0	M/C 0.068MF J 50V 5
C827,C914,C915	046-82204-020-0	M/C 0.0082MF J 50V 5
C816.817.904.905	046-82304-000-0	M/C 0.082MF J 50V 5
C806,C807	046-82404-020-0	M/C 0.82MF J 50V 7.5
C810.C811	050-33404-001-0	M.M/C 0.33MF J 100V 10
D550,D551	090-01203-010-0	Z/DIODE 20V K 0.5W FAIRCH
	160-00000-902-0	IC NJM 4558DD JRC
	290-03060-200-0	PCB MQ3600 H
	382-10010-010-0	TINNER WIRE 10MM D0.6
	385-08050-320-0	8P M.RIBBON WIRE 50MM
	550-20014-000-0	CHASSIS (ZN)
	F03-06000-005-0	MQ3600 IC501/502. Q501/502. Q550/551
Q550	120-00000-300-0	TRAN. 2SD882 P NEC
Q501	120-00005-701-0	TRAN. MJE3055 T0220
Q551	121-00000-400-0	TRAN. 2SB772 P NEC
Q502	121-00003-900-0	TRAN. MJE2955 T0220
IC502	160-00002-000-0	IC LM317T NS

VR & SWITCH PCB-PART LIST

Ref.	Phonic	Specifications
IC501	160-00002-100-0	IC LM337T NS (DIP)
	211-10031-170-0	3P WAFER/S 2532-03 (PITCH:2.5MM)
	290-63600-000-0	PCB MQ3600 IC501/502 Q501/502
	F03-07000-003-0	MQ3300 D(MQ3300M D)
	212-10050-250-0	5P WAFER/P DX-07
	290-03000-300-0	PCB MQ3300M D

MISCELLANEOUS ITEMS

Ref.	Phonic	Specifications
	058-47236-001-0	LINE/C 0.0047MF M 400V
	100-00110-000-0	LED BL-R5132N RED
	100-00150-000-0	LED SE6221 GRN
	210-02101-010-0	P/SW KDC-A04-10BA2-G
	211-03300-010-0	XLR/J SUP-555A
	211-03300-090-0	XLR/J 89M-107 NO PUSH
	281-04000-000-0	FUSE HOLDER FH-B02 EDK
	290-03000-300-0	PCB MQ3300M D
	290-03000-500-0	PCB MQ3300M G
	307-00000-000-0	CORD CONNECTOR HW-C4
	321-00000-000-0	CABLE TIE HW-80M
	322-11910-400-0	TUBE 190MM*D4
	322-23001-000-0	TUBE 30MM*D10
	322-24001-600-0	TUBE 40MM*D16
	322-26002-800-0	TUBE 60MM*D28
	379-02101-121-0	M.WIRE UL1007 #24 100MM RED
	379-02101-131-0	M.WIRE UL1007 #24 100MM ONG
	385-03270-310-0	3P M.RIBBON WIRE 270MM
	510-20290-812-0	PANEL MQ3600
	516-20210-100-0	TOP COV. MQ3600 STEVEN
	517-20180-100-0	BOT. COV. MQ3600 STEVEN
	525-60011-000-0	FEET SIZE:D20*D15*H10.5 NF-008
	541-20020-120-0	S/KNOB 4*9*8 BLK+WHT
	541-20020-320-0	S/KNOB 4*9*8 BLK+SILVERY WHT
	542-20040-120-0	P/KNOB 18*5.5*14 BLK
	542-60090-122-0	P/KNOB 9.5*5.5*8 LOW WHT
	543-20020-120-0	P/KNOB BUSHING 18.5*5.5 BLK
	551-20025-401-0	RT BRKT
	551-20026-000-0	LF BRKT (ZN)
	552-10125-000-0	PCB FIXED ZNW
	552-90001-100-0	X'MER FIXED 20*8*2

MISCELLANEOUS ITEMS

Ref.	Phonic	Specifications
	560-20170-102-0	CARTON MQ3600 SIZE:664*585*382 A=B
	561-20150-302-0	G/B MQ3600 SIZE:570*161*362 300g+B9B9
	566-10015-010-0	SPONGE 40*10*5
	567-60023-000-0	EPE MQ3600
	568-00003-000-0	PE BAG #10 240*340*0.05
	568-10068-000-0	PE BAG 700*430*0.05
	572-00000-050-0	DRYER 5g
	573-10063-012-0	M.I.C LABEL 50*10MM
	573-60240-000-0	BAR CODE LABEL PHONIC SERIES LABEL
	573-60343-000-0	LABEL BLUE D=8mm
	573-60358-000-0	LABEL PVC 13*3.2mm MQ3600
	574-03070-310-0	OWN. MANU. MQ3300
	579-00000-068-0	MINI CATALOG PHONIC SERIES
	590-53004-200-0	M/E SET SCR. M3.0*4 BLK
	590-53008-200-0	M/E SET SCR. M3.0*8 D=6 BLK
	600-00302-210-0	HEX. NUT M3.0*2.2 NI
	610-00301-018-0	FIBER WAS. D3.0*8*1
	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
	615-20013-630-0	CU BOSS M3.0 H21.5
	630-20018-310-0	MYLAR INSU. 80*45*0.2
	631-20010-000-0	HEMELON 324*77.5
BLOCK BACK+PCB	590-33004-200-0	M/E RUD SCR. M3.0*4 BLK
BRACKET	590-53006-100-0	M/E SET SCR. M3.0*6 NI
COV*1	590-42608-200-0	M/E PAN SCR. M2.6*8 BLK
DANEL+CHASSIS	590-03004-100-0	M/E FLT SCR. M3.0*4 NI
EQ*4, SW*2, BOSS*3	590-43006-100-0	M/E PAN SCR. M3.0*6 NI
FEET	590-43012-200-0	M/E PAN SCR. M3.0*12 BLK
FEET	610-00300-502-0	PLA. WAS. D3.0*D7.0*0.5 BLK
IC501.502.Q501.502	314-00000-050-0	BUSHES 602S(V.0) 180DEGREE
IC501.502.Q501.502.5 50.551	313-00000-060-0	RUBBER WASHER TO-2203
IC501.502.Q501.502.5 50.551	610-60300-700-0	PAN SPR WAS. D3.0*6.0*0.7ZN

MISCELLANEOUS ITEMS

Ref.	Phonic	Specifications
IC501/502.Q501.502.5 50.551	526-20040-010-0	HEAT.SINK POD1860 20*18
JACK	379-02101-101-0	M.WIRE UL1007 #24 100MM BLK
JACK*8	591-03006-100-0	T/P FLT SCR. D3.0*6 NI
Q550.551	590-53012-100-0	M/E SET SCR. M3.0*12 NI
SW-FUSE	379-08261-122-0	M.WIRE UL1015 #22 260MM RED
	S03-06000-100-0	MQ3600 PHONIC MATERIAL
	510-20290-812-F	PANEL MQ3600
	511-20110-400-F	BACK PANEL MQ3600/MQ3600
	516-20210-100-F	TOP COV MQ3600/MQ3600
	517-20180-100-F	BOT COV MQ3600/MQ3600

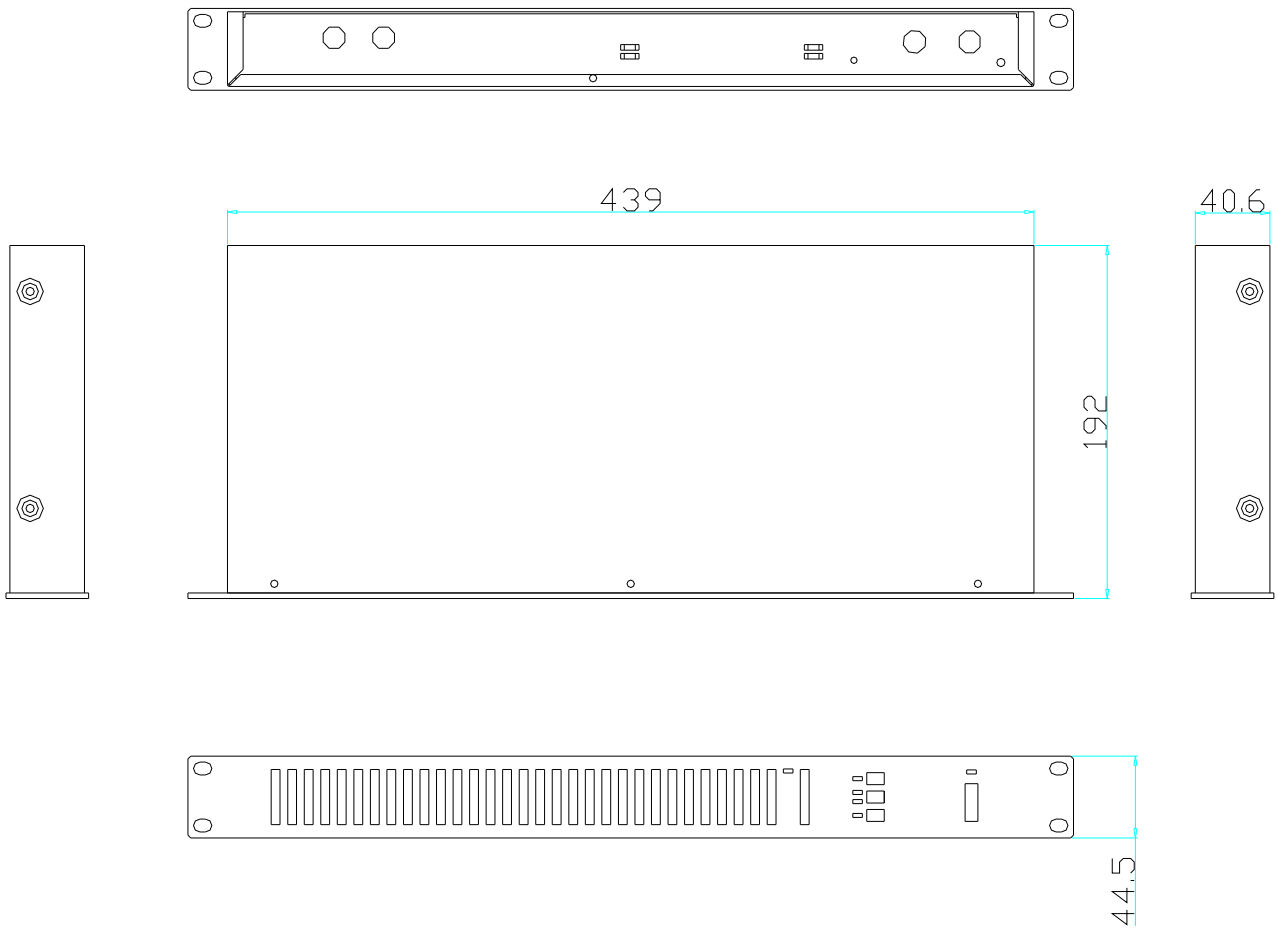
POWER REQUIREMENT CLASSIFICATION

Ref.	Phonic	Specifications
<u>BS</u>		
	070-20118-801-0	X'MER 600mA
	280-1026E-000-0	FUSE T1A 250V S(UL/CSA/JIS/CE)
	280-50165-000-0	FUSE T500MA 250V SMK S
GND	315-00000-000-0	LUG D4 FOR DROUND
	370-26B40-439-1	P/CORD 230V 13A 2m5 BS 3P
	511-20110-702-0	BACK PANEL PEQ3600 PHONIC BS/SAA/SA
	527-01000-000-0	STR.REL.BUSHING 5N4/5W-2
	573-10031-010-0	CAUTION LABEL
	573-10032-010-0	POWER LABEL (ONLY USED IN BS)
GND	590-54008-200-0	M/E SET SCR. M4.0*8 BLK
	600-00403-500-0	HEX. NUT M4.0*3.5 ZN
	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
<u>IEC</u>		
	070-20118-801-0	X'MER 600mA
	280-10263-001-0	FUSE 1A 250V VDE/CE S
	280-50165-000-0	FUSE T500MA 250V SMK S
IEC POWER CORD	370-03410-909-0	P/CORD 220V 2.5A 6F 2P
	511-20110-602-0	BACK PANEL PEQ3600 PHONIC SMK IEC
	527-00000-000-0	STR. REL. BUSHING 4P4 4N-4
<u>SA</u>		
	070-20118-801-0	X'MER 600mA
	280-1026E-000-0	FUSE T1A 250V S (UL/CSA/JIS/CE)
	280-50165-000-0	FUSE T500MA 250V SMK S
	315-00000-000-0	LUG D4 FOR GROUND
	370-12020-829-0	P/CORD 240V 10A/250V 3P6F SA
	511-20110-702-0	BACK PANEL PEQ3600 PHONIC BS/SAA/SA
	527-03000-000-0	STR. REL. BUSHING SBR5-1
	590-54008-200-0	M/E SET SCR. M4.0*8 BLK
GND	600-00403-500-0	HEX. NUT M4.0*3.5 ZN

POWER REQUIREMENT CLASSIFICATION

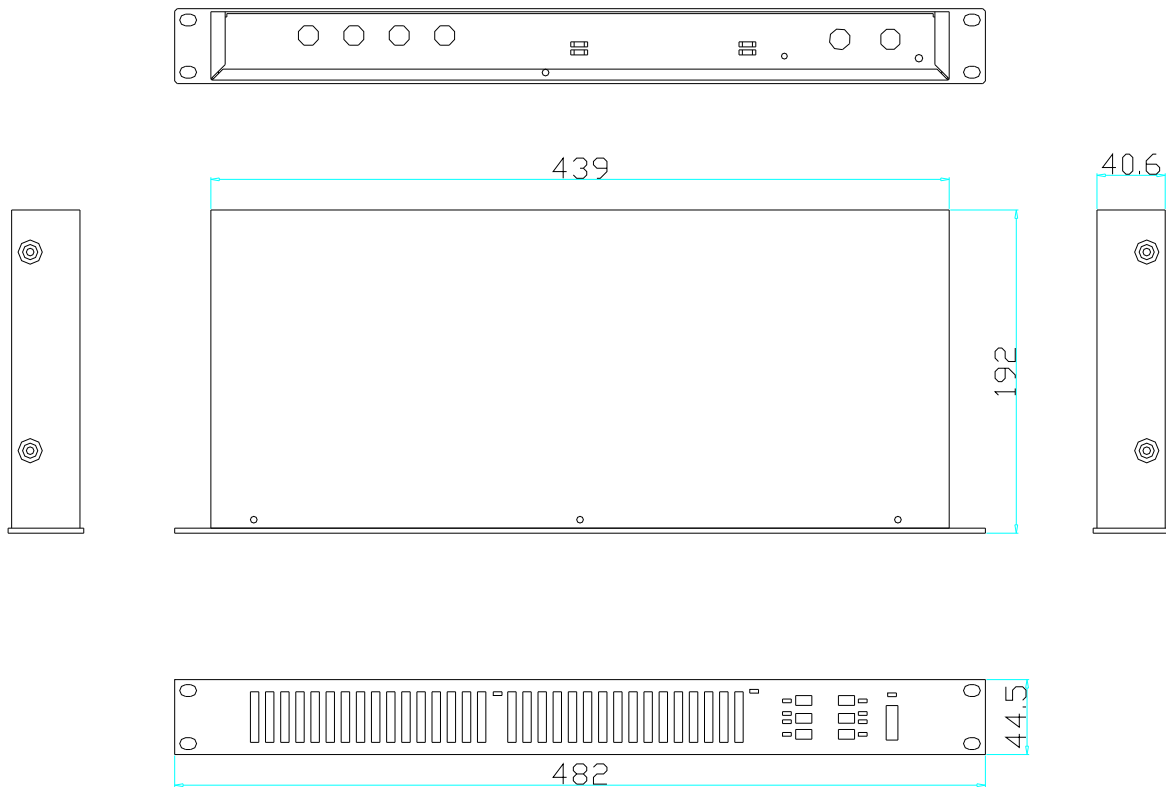
Ref.	Phonic	Specifications
GND	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
<u>UL</u>		
	070-20118-801-0	X'MER 600mA
	280-10261-000-0	FUSE 1A 250V UL/CSA F 5*20
	280-10265-000-0	FUSE T 1A 250V SMK IEC/VDE
	370-24510-203-0	P/CORD 120V 7A 6F 2P SPT-2
	511-20110-402-0	BACK PANEL PEQ3600 PHONIC CSA/UL
	527-06000-000-0	STR. REL. BUSHING 4N4
<u>SAA</u>		
	070-20118-801-0	X'MER 600mA
	280-1026E-000-0	FUSE T1A 250V S (UL/CSA/JIS/CE)
	280-50165-000-0	FUSE T500MA 250V SMK S
GND	315-00000-000-0	LUG D4 FOR GROUND
	370-11310-809-0	P/CORD 240V 7.5A 6F 3P SAA
	511-20110-702-0	BACK PANEL PEQ3600 PHONIC BS/SAA/SA
	527-01000-000-0	STR.REL.BUSHING 5N4/5W-2
GND	590-54008-200-0	M/E SET SCR. M4.0*8 BLK
GND	600-00403-500-0	HEX. NUT M4.0*3.5 ZN
GND	610-30400-501-0	TOOTH WAS. D4.0*D8.5*0.5 NI
<u>JIS</u>		
T1	070-20110-600-0	X'MER 100V JIS PEQ3600
	280-1026B-000-0	FUSE 1A 250V UL/CSA/JIS S
	280-50165-000-0	FUSE T500MA 250V SMK S
	370-16510-609-0	P/CORD 100V 7A 6F 2P JIS
	511-20111-002-0	BACK PANEL PEQ3600 PHONIC JIS
	527-00000-000-0	STR. REL. BUSHING 4P4 4N-4

DIMENSIONS



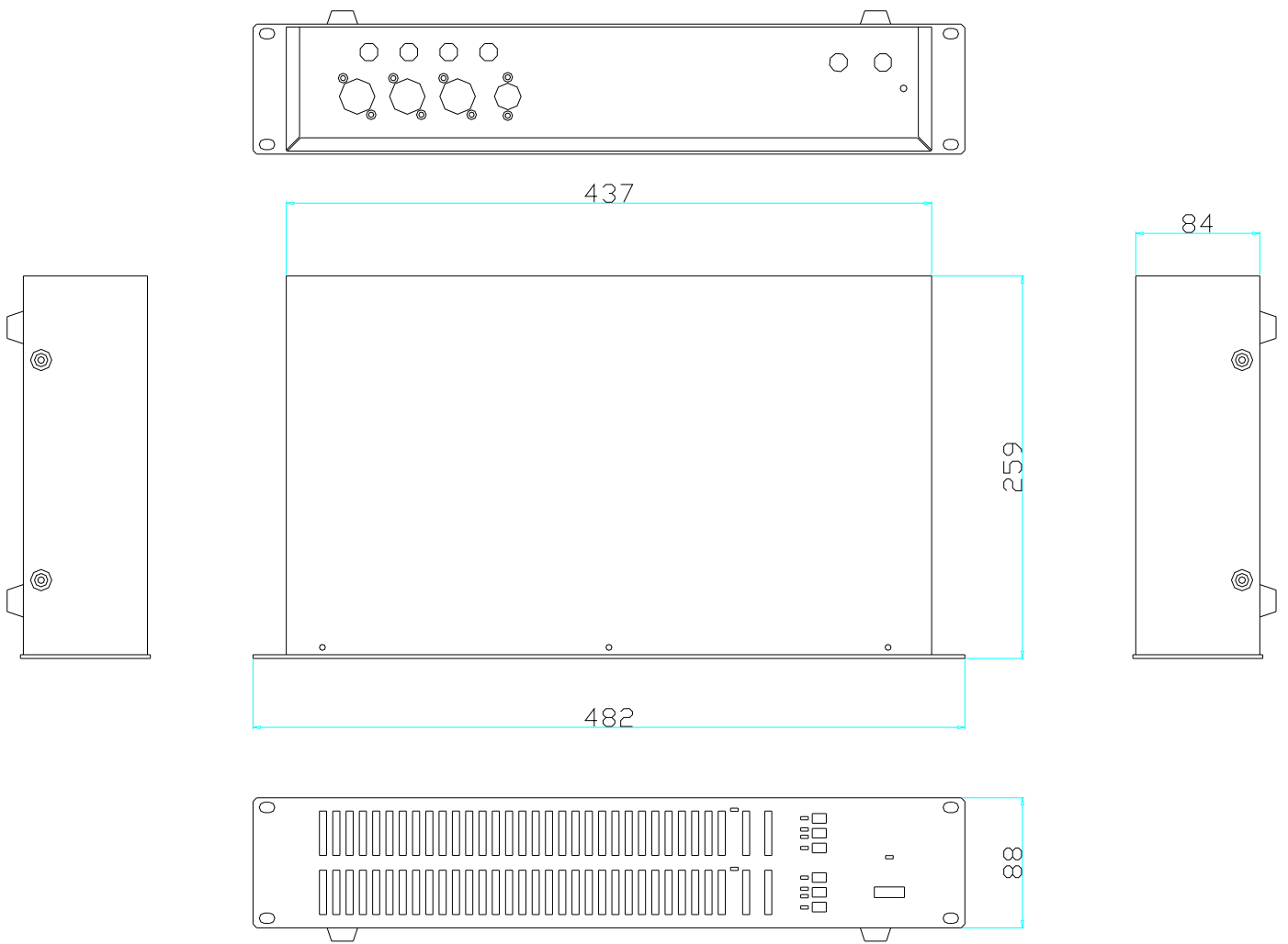
MQ3300

DIMENSIONS



MQ3400

DIMENSIONS



MQ3600

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