

5. J104, J204 ARE CONNECTED PIN TO PIN BY 13-LINE RIBBON CABLE.
4. PART NUMBERING SCHEME  
PARTS IN COMMON TO BOTH CH: 1-99. CH 1 PARTS 101-199, CH 2 PARTS 201-299.
3. COMPONENTS MARKED WITH  $\Delta$  ARE SAFETY CRITICAL PARTS.
2. COMPONENTS WITH VALUE PREFIXED WITH A "\*" REPRESENT SMT COMPONENTS.
1. THIS DRAWING USED IN CONJUNCTION WITH ASSEMBLY WP-000851-00

NOTES: UNLESS OTHERWISE SPECIFIED

QTY	ITEM NO.	PART NO.	DESCRIPTION	VENDOR
<b>PARTS LIST</b>				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982 TOLERANCES ARE: DECIMALS    DECIMALS    ANGLES .xx ±    .xxx ±    0			CONTRACT NO.	
DRAWN PAT QUILTER			APPROVALS	DATE
CHECKED			2-25-00	
MATERIAL			FINISH	
WP-000850-00    RMX 850			ISSUED	SIZE    FSCM NO.    DWG NO.
NEXT ASSY    USED ON			CAD SEED FILE NO.	SCALE    NONE    CAD FILE NO.    SH0850R3.sch
APPLICATION    DO NOT SCALE DRAWING			PLOT DATE:    Fri May 05, 2000	SHEET 1 OF 3

**QSC** AUDIO PRODUCTS, INC.  
COSTA MESA, CALIFORNIA

**SCHEMATIC DIAGRAM**  
**RMX 850**

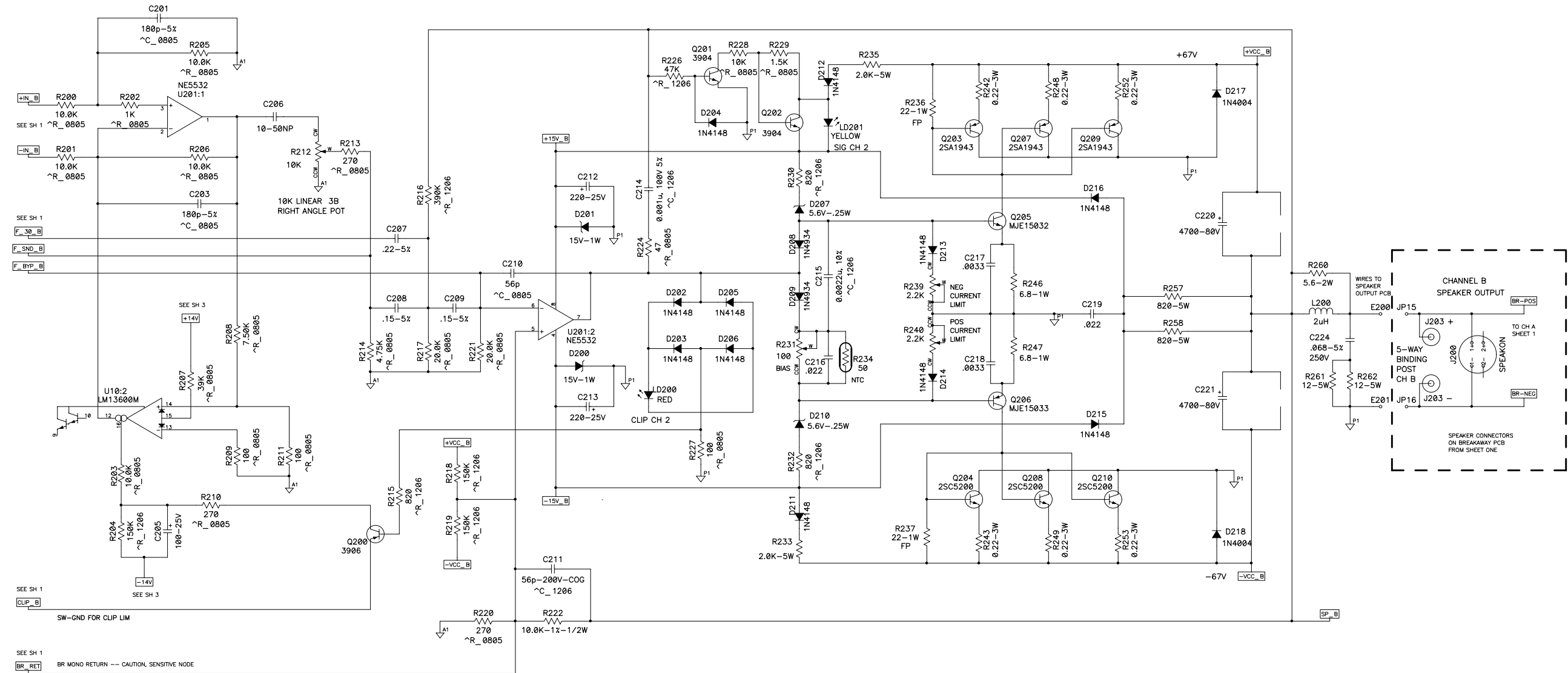
**SH-000850-00**

SCALE    NONE    PLOT DATE:    Fri May 05, 2000

1 SH-000850-00

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### CHANNEL-2



NOTES: UNLESS OTHERWISE SPECIFIED

SIZE <b>D</b>	FSCM NO.	DWG NO. <b>SH-000850-00</b>	REV
SCALE NONE	CAD FILE NO. SH0850R3.sch	SHEET 2 OF 3	
PLOT DATE: Fri May 05, 2000		1	

2 SH-000850-00

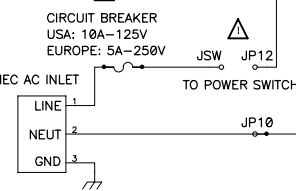
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AC VOLTAGE PROGRAMMING TERMINALS

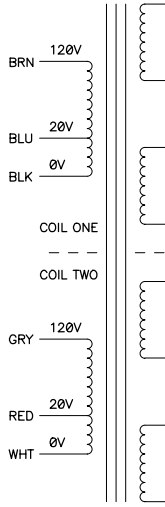
AC INPUT, HIGH (ALL)

100V	120V	240V
BRN	BRN	BRN
GRY	GRY	-
BLK	BLU	BLU
-	-	BLK
-	-	GRY
WHT	RED	RED
BLU	BLK	-
RED	WHT	WHT

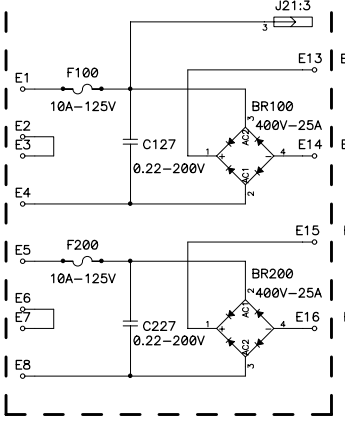
AC INPUT, LOW (ALL)



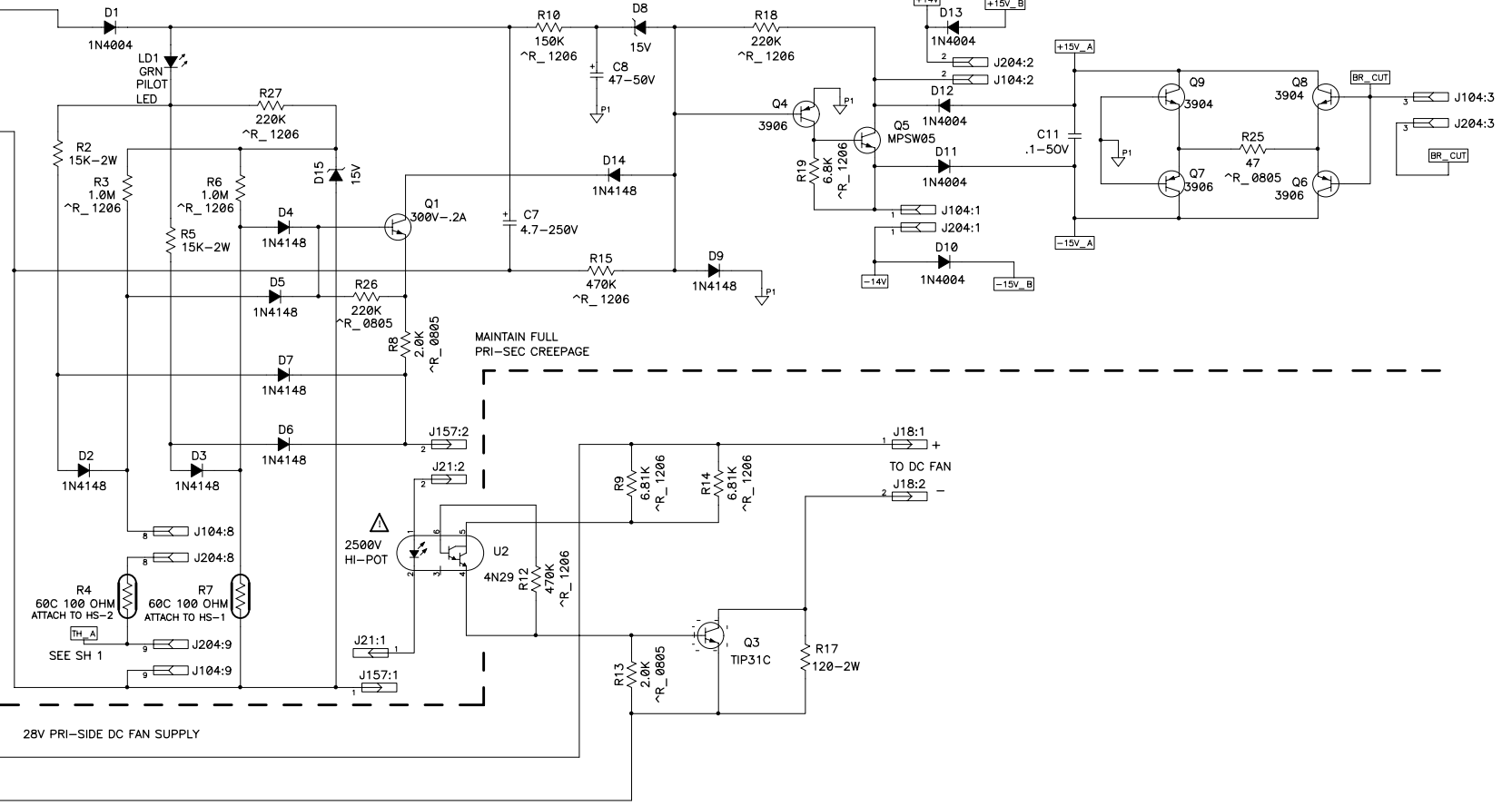
U-I CORE POWER TRANSFORMER  
NOTE SPLIT SECONDARY WIRING FROM EACH LEG TO EACH CHANNEL



RECTIFIERS BR100, 200 AND C127-227 ARE LOCATED OFF THE MAIN PCB, MOUNTED TO CHASSIS.



MUTING AND THERMAL PROTECTION.



MAINTAIN FULL PRI-SEC CREEPAGE

MAINTAIN FULL PRI-SEC CREEPAGE

28V PRI-SIDE DC FAN SUPPLY

20 VAC TO FAN POWER RECTIFIER

NOTES: UNLESS OTHERWISE SPECIFIED

SIZE D	FSCM NO.	DWG NO. SH-000850-00	REV
SCALE NONE	CAD FILE NO. SH0850R3.sch	SHEET 3 OF 3	
PLOT DATE: Fri May 05, 2000		1	

3 SH-000850-00



**A U D I O**

# RMX 850 Replacement Parts

QSC part #	Description	Qty.	Notes or Component Reference
<b>Misc.</b>			
1806-2505-0	POWER TRANSFORMER 700	1	
2113-1144-0	AC INLET	1	
2444-1001-1	KNOB CONTROL	2	
4134-8432-0	RACK-MOUNT BRACKET	2	
5200-4717-0	ROCKER POWER SWITCH	1	
5200-3532-0	CIRCUIT BREAKER 10A	1	For 120V models
5200-4730-0	CIRCUIT BREAKER 5A	1	For 230V models
7010-9640-0	AC CORD SET 15A	1	For 120V models
7009-8620-0	POWER CORD SET CE	1	For 230V models
8900-9050-1	DC FAN 24V 80X80 (+5V)	1	
<b>AC board</b>			
153R-224K-5-Y1	CM 250V 0.22uF 10% RL	2	C127, C227
157Q-108M-5-X9E	CE 35V 1000UF 20% RL	1	C6
3130-9270-0	IC 4N29	1	U2
4134-8851-0	FUZE HOLDER (DIA.6.3MM)	4	REF: F100, F200
4701-202J-C	RCF 1/8W 2K 5% ATS	1	R13
4701-474J-C	RCF 1/8W 470K 5% ATS	1	R12
4701-682J-C	RCF 1/8W 6.8K 5% ATS	2	R9, R14
4719-121J-1-X	RMF 2W 120R 5% AL METAL	1	R17
4840-1760-0	DIODE RECT 1A 200V DB103	1	BR1
4840-2150-0	BRIDGE RECTIFIER 400V	2	BR100, BR200
4860-2620-5	TR TIP31C SAMSUNG	1	Q3
5100-1030-3A	FU T10A 125V/250V	2	F100, F200
5400-0831-0	HEATSINK	1	REF: Q3
8910-0273-0	POLYSWITCH 0.15 ohm 1.1A	1	R1
8910-0275-0	THERMAL NTC 30A 1 ohm	1	R21
<b>Channel 1 module</b>			
153F-223J-5-LQ	CM 50V 0.022UF 5% RL	2	C116, C119
153F-332J-5-KW	CM 50V 3300pF 5% RL 6x12	2	C117, C118
153R-683J-5-WWM	CM 250V 0.068u 5% RL	1	C124
157F-476M-5-LU	CE 50V 47uF 20% RL	1	C8
157R-475M-5-OV	CE 250V 4.7u 20% RL	1	C7
1804-1030-0	SPRING COIL 2uH	1	L100
3700-4531-G	LED 04mm GREEN W/STAND	1	LD1
4718-220J-2-P	RMF 1W 22R 5% AT FP	2	R136, R137
4718-6R8J-1-X	RMF 1W 6.8R 5% AL METAL	2	R146, R147
4719-153J-1-X	RMF 2W 15K 5% AL METAL	2	R2, R5
4719-5R6J-1-X	RMF 2W 5.6R 5% AL METAL	1	R160

<b>QSC part #</b>	<b>Description</b>	<b>Qty.</b>	<b>Notes or Component Reference</b>
471A-022K-5-N	RMF 3W 0.22R 10% RL RGC3	6	R142, R148, R149, R152, R153, R159
471B-120J-1-X	RMF 5W 12R 5% AL METAL	2	R161, R162
471B-202J-1-X	RMF 5W 2K 5% AL METAL	2	R133, R135
471B-821J-1-X	RMF 5W 820R 5% AL METAL	2	R157, R158
4756-1016-3-06	SVR H6 100R RH0615C	1	R131
4756-2226-3-06	SVR 2.2K H3 7X7.6 R0615C	2	R139, R140
4804-0040-1	DIODE IN4004 AL	5	D1, D11, D12, D117, D118
4804-9340-2	DIODE IN4934 AT	2	D108, D109
4837-5B10-2	DZ 1/2W 5.5-5.8V AT	2	D107, D110
4838-15V6-2	DZ 1W 15V AT TEMIC	2	D8, D15
4860-5020-5	TR MJE15032	1	Q105
4860-5030-5	TR MJE15033	1	Q106
4860-5050-5	TR 2SC5200 T0-3P (L)	3	Q108, Q110, Q112
4860-5060-5	TR 2SA1943 T0-3P (L)	3	Q103, Q107, Q109
4860-8890-0	TR MPS A06 VCE 80V NS	1	Q5
8910-0062-0	CE 80V 4700U 20% RL 25X	2	C120, C121
8910-0274-0	THERMAL PTC 60C 100 ohm	1	R7
8910-0488-0	ROD THERMISTOR NTC 50ohm	1	R134

### **Channel 1 SMT parts**

150F-222K-6-CF	CC 50V 2200pF 10% 1206 1	1	C115
150H-102J-6-CF	CC 100V 0.001U 5% 1206	1	C114
4720-103J-J	RMG 1/10W 10K 5% 0805	1	R128
4720-152J-J	RMG 1/10W 1.5K 5% 0805	1	R129
4720-202J-J	RMG 1/10W 2K 5% 0805	1	R8
4720-224J-J	RMG 1/10W 220K 5% 0805	1	R26
4720-470J-J	RMG 1/10W 47R 5% 0805	2	R25, R124
4721-105J-6	RMG 1/8W 1M 5% 1206	2	R3, R6
4721-154J-6	RMG 1/8W 150K 5% 1206	1	R10
4721-224J-6	RMG 1/8W 220K 5% 1206	2	R18, R27
4721-473J-6	RMG 1/8W 47K 5% 1206	1	R125
4721-474J-6	RMG 1/8W 470K 5% 1206	1	R15
4721-682J-6	RMG 1/8W 6.8K 5% 1206	1	R19
4721-821J-6	RMG 1/8W 820R 5% 1206	2	R130, R132
4804-1480-3	DIODE LL4148 SM	15	D2-D7, D9, D14, D104, D111-D116
4853-9060-3	TR 3906 PNP SM	3	Q4, Q6, Q7
4860-0640-3	TR 3904 HFE 100-300 SM	4	Q8, Q9, Q101, Q102
4860-5110-3	TR KST42	1	Q1

### **Channel 2 module**

153F-154J-5-NLM	CM 50V 0.15UF 5% RL	4	C108, C109, C208, C209
153F-223J-5-LQ	CM 50V 0.022UF 5% RL	2	C216, C219
153F-224J-5-NLM	CM 50V 0.22UF 5% RL	2	C107, C207
153F-332J-5-KW	CM 50V 3300pF 5% RL 6x12	2	C217, C218
153R-683J-5-WWM	CM 250V 0.068u 5% RL	1	C224
157E-107M-5-KW	CE 25V 100uF 20% RL 6x12	2	C105, C205
157E-227M-5-PU	CE 25V 220uF 20% RL	4	C112, C113, C212, C213
157F-106M-5-LUN	CE 50V 10uF 20% RL	2	C106, C206
1804-1030-0	SPRING COIL 2uH	1	L200
2101-1991-0	8 PIN IC SOCKET DIP	2	REF: U101, U201
3130-2430-0	IC-NE5532 OPER. AMP PHIL	2	U101, U201
3700-4529-R	LED 04mm RED W/STAND	2	LD100, LD200
3700-4530-Y	LED 04mm YELLOW W/STAND	2	LD101, LD201
471A-022K-5-N	RMF 3W 0.22R 10% RL RGC3	6	R242, R248, R249, R252, R253, R259
471B-120J-1-X	RMF 5W 12R 5% AL METAL	2	R261, R262

<b>QSC part #</b>	<b>Description</b>	<b>Qty.</b>	<b>Notes or Component Reference</b>
471B-202J-1-X	RMF 5W 2K 5% AL METAL	2	R233, R235
471B-821J-1-X	RMF 5W 820R 5% AL METAL	2	R257, R258
4717-103A-2	RMF 1/2W 10K 1% AT	2	R122, R222
4717-9091-2	RMF 1/2W 9.09K 1% AT	1	R123
4718-220J-2-P	RMF 1W 22R 5% AT FP	2	R236, R237
4750-6200-0	VR V012CPH, D-SHAFT 10K	2	R112, R212
4756-1016-3-06	SVR H6 100R RH0615C	1	R231
4756-2226-3-06	SVR 2.2K H3 7X7.6 R0615C	2	R239, R240
4718-6R8J-1-X	RMF 1W 6.8R 5% AL METAL	3	R20, R246, R247
4719-5R6J-1-X	RMF 2W 5.6R 5% AL METAL	1	R260
4804-0040-1	DIODE IN4004 AL	4	D10, D13, D217, D218
4804-9340-2	DIODE IN4934 AT	2	D208, D209
4837-5B10-2	DZ 1/2W 5.5-5.8V AT	2	D207, D210
4838-15V6-2	DZ 1W 15V AT TEMIC	4	D100, D101, D200, D201
4860-5020-5	TR MJE15032	1	Q205
4860-5030-5	TR MJE15033	1	Q206
4860-5050-5	TR 2SC5200 T0-3P (L)	3	Q208, Q210, Q212
4860-5060-5	TR 2SA1943 T0-3P (L)	3	Q203, Q207, Q209
8910-0062-0	CE 80V 4700U 20% RL 25X	2	C220, C221
8910-0274-0	THERMAL PTC 60C 100 ohm	1	R4
8910-0488-0	ROD THERMISTOR NTC 50ohm	1	R234
<b>SMT parts</b>			
150F-104K-6-CF	CER2 1206 X7R 50V 100N	3	C100, C102, C104
150F-181K-J-BD	CC 50V 180P 10% 0805	4	C101, C103, C201, C203
150F-222K-6-CF	CC 50V 2200pF 10% 1206 1	1	C215
150F-560K-J-BD	CC 50V 56pF 10% 0805 1.2	2	C110, C210
150H-102J-6-CF	CC 100V 0.001µF 5% 1206	1	C214
15CG-560J-6-CF	CTC 0/30 56P 5% 1206	2	C111, C211
3131-9730-0	IC NE5517D	1	U10
4720-101J-J	RMG 1/10W 100R 5% 0805	6	R109, R110, R127, R209, R211, R227
4720-102J-J	RMG 1/10W 1K 5% 0805	3	R102, R126, R202
4720-103A-J	RMG 1/10W 10K 1% 0805	8	R100, R101, R105, R106, R200, R201, R205, R206
4720-103J-J	RMG 1/10W 10K 5% 0805	3	R103, R203, R228
4720-152J-J	RMG 1/10W 1.5K 5% 0805	1	R229
4720-203A-J	RMG 1/10W 20K 1% 0805	4	R117, R121, R217, R221
4720-271J-J	RMG 1/10W 270R 5% 0805	6	R111, R113, R120, R210, R213, R220
4720-332J-J	RMG 1/10W 3.3K 5% 0805	1	R24
4720-393J-J	RMG 1/10W 39K 5% 0805	2	R107, R207
4720-470J-J	RMG 1/10W 47R 5% 0805	1	R224
4720-472J-J	RMG 1/10W 4.7K 5% 0805	2	R114, R214
4720-752J-J	RMG 1/10W 7.5K 5% 0805	2	R108, R208
4721-154A-6	RMG 1/8W 150K 1% 1206	4	R118, R119, R218, R219
4721-154J-6	RMG 1/8W 150K 5% 1206	2	R104, R204
4721-333J-6	RMG 1/8W 33K 5% 1206	2	R22, R23
4721-394J-6	RMG 1/8W 390K 5% 1206	2	R116, R216
4721-473J-6	RMG 1/8W 47K 5% 1206	1	R225
4721-821J-6	RMG 1/8W 820R 5% 1206	4	R115, R215, R230, R232
4804-1480-3	DIODE LL4148 SM	15	D102, D103, D105, D106, D202-D206, D211-D216
4853-9060-3	TR 3906 PNP SM	2	Q100, Q200
4860-0640-3	TR 3904 HFE 100-300 SM	2	Q201, Q202

<b>QSC part #</b>	<b>Description</b>	<b>Qty.</b>	<b>Notes or Component Reference</b>
<b>Input board</b>			
150F-471J-5-OF	CC 50V 470pF 5% RL 8x3.5	4	C1–C4
7010-9860-0	26 PIN IEC RIBBON CABLE	1	J1
2113-1337-1	XLR FEMALE CONN.	2	J101, J201
2113-1652-0	PHONE JACK 06.4	2	J102, J202
2113-1335-0	5 POLE SPEAKER TERMINAL	1	J5
5200-4713-0	10 POLE DIP SWITCH	1	SW1
<b>Output board</b>			
2113-1336-1	SPEAKON NEUTRIK 4 WIRE	2	J100, J200
2113-1338-0	4-POLE SPEAKER TERMINAL	1	J103
4154-2111-0	OUTPUT POST PLUG FOR CE	2	For European models only
4154-2121-0	OUTPUT POST PLUG FOR CE	2	For European models only