

# BLOCK DIAGRAM, EX-800

REV A, 3-18-91, QSC AUDIO PRODUCTS INC, DOC NO SH-004100-01, FILE SH4100A2.FCD

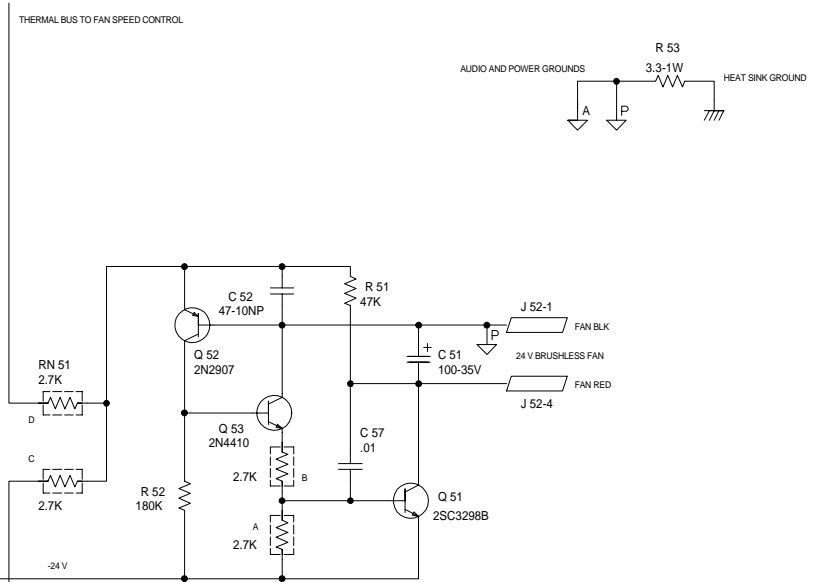
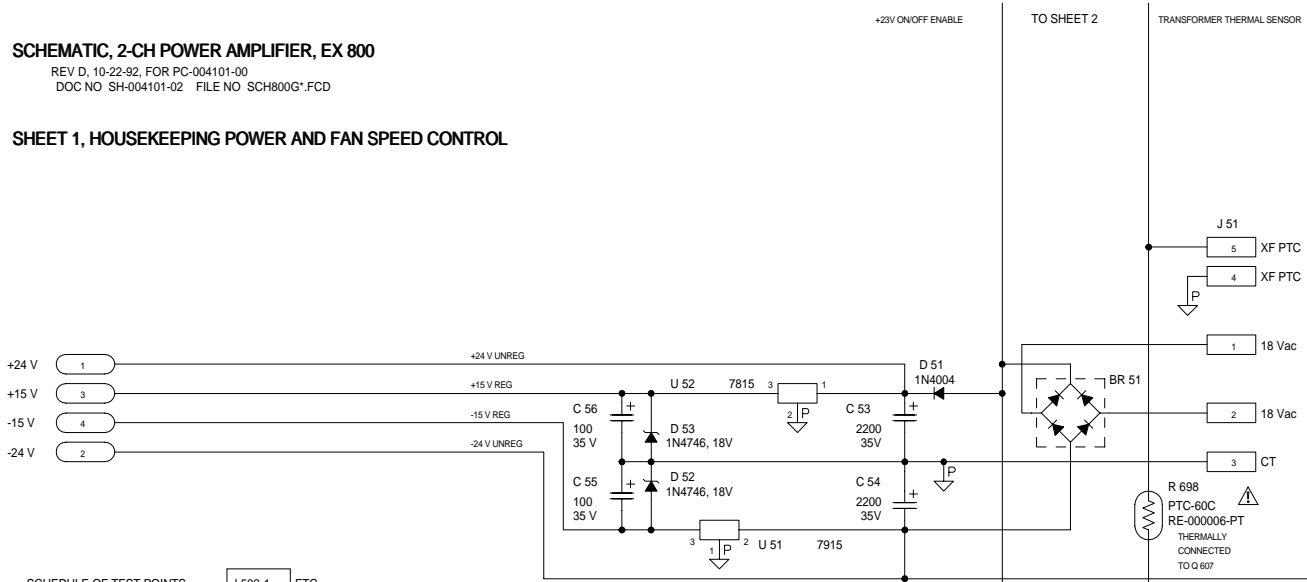
PART NUMBERING SCHEDULE FOR PCBs USED IN EX-800

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
B		PROD RELEASE PER ECO 1107 GLF	5-29-91	SGM
C		REVISED PER ECO 1158	7-9-91	W.R. / SGM
D		REVISED PER ECO 1128	RDS 7-26-91	SGM
E		REVISED PER ECO 1262	11-6-91	SGM
F		REVISED PER ECO 1508 SGM	6-10-92	SGM
G		REVISED PER ECO 1602 WR	10-22-92	SGM / RAB
H		REVISED PER ECO 2009	5-11-94	SGM
J		REVISED PER ECO 2371 MP (EFF. 7-28-94)	7-20-94	SGM
K		REVISED PER ECO 2393 MP (EFF. X-28-94)		

**SCHEMATIC, 2-CH POWER AMPLIFIER, EX 800**  
 REV D, 10-22-92, FOR PC-004101-00  
 DOC NO SH-004101-02 FILE NO SCH800G\*.FCD

**SHEET 1, HOUSEKEEPING POWER AND FAN SPEED CONTROL**



- SCHEDULE OF TEST POINTS** J 502-1 ETC
- CH-1 CH 2
  - J 502-1 J 602-1 NEGATIVE LIMITING VOLTAGE
  - J 502-2 J 602-2 POSITIVE LIMITING VOLTAGE
  - J 502-3 J 602-3 NOT USED
  - J 502-4 J 602-4 AMPLIFIER LOOP OPAMP OUTPUT
  - J 502-6 J 602-6 POS AMPLIFIER RAIL-HIGH VOLTAGE
  - J 502-8 J 602-8 NEG AMPLIFIER RAIL-HIGH VOLTAGE

**PART NUMBERING SCHEDULE FOR PCBs USED IN EX-1600:**

PCB NUMBER	DESCRIPTION	CH 1 PARTS	CH 2 PARTS	PARTS IN COMMON
PC-004001-00	DISPLAY PCB	101-199	201-299	1-29
PC-004002-00	INPUT PCB	301-399	401-499	31-49
PC-004101-00	AMP PCB	501-599	601-699	51-69
PC-004104-00	SPKR PCB	701-799	801-899	71-99
PC-004103-00	AC PCB	901-UP (SAME BOARD FOR CH 1, CH2)		

**LAST USED REF. DESIGN.**

- BR 51, BR 502, 602
- C51 - 57, C526, 626
- D51 - 53, D513, 613
- F504, 604
- J51, 52, J503, 603
- K501, 601
- L501, 601
- Q51 - 53, Q510, 610
- R51 - 53, R544, 644, R598, 698, R599, 699
- RN51, RN502, 602
- U51, 52, U506, 606
- VR503, 603

- NOTES.**
- ALL RESISTORS 1/4-WATT, 5% UNLESS NOTED.
  - ALL CAPACITORS 100V UNLESS NOTED.  
TOLERANCE 20% FOR ELECTROLYTIC TYPES, 10% ON OTHER TYPES.
  - BRIDGE RECTIFIER BR 51, 1.5A, 100V.
  - R 598, 698 IS POSITIVE TEMPERATURE COEFFICIENT RESISTOR MOUNTED TO HEAT SINK.  
RESISTANCE 100 OHM COLD, RISING AT 55 C. QSC P/N RE-000006-PT
  - PARTS MARKED WITH TRIANGLE MUST BE REPLACED WITH EXACT TYPE ONLY.  
125 W. 60 V MINIMUM, ON-RESISTANCE 0.030 OHMS MAX.
  - ZENERS D 503, 504, 603, 604 MARKED 7.5 V TESTED FOR LOW LEAKAGE, QSC P/N QD-0007.5-ZT.
  - ZENERS D 509, 513, 609, 613, 6.2V-500mW, TESTED FOR LOW LEAKAGE, QSC P/N QD-000024-QD.
  - PARTS ENCLOSED WITHIN DOTTED OUTLINE HAVE VOLTAGES GREATER THAN 42V.

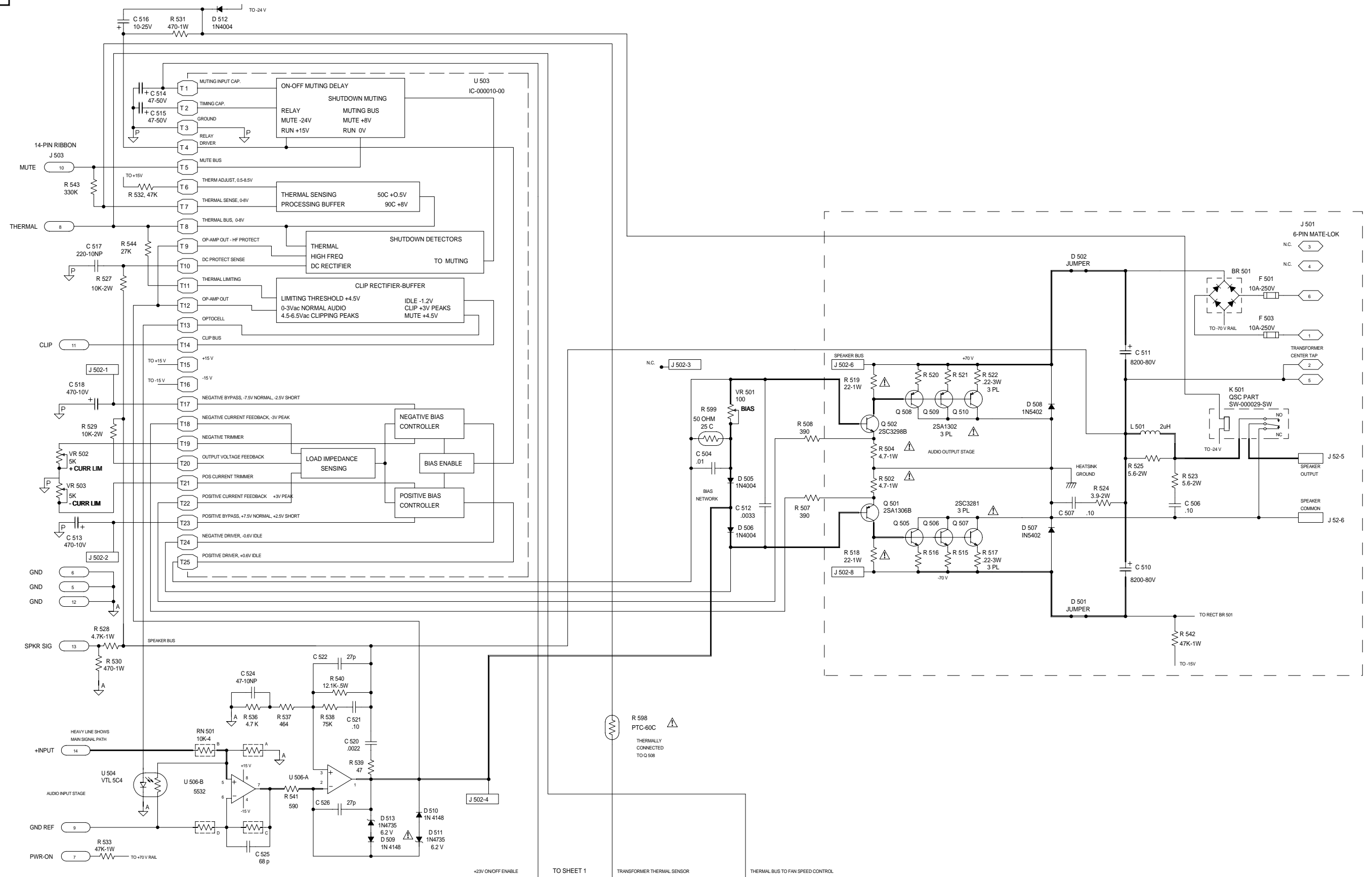
**PARTS LIST**

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.		QSC AUDIO PRODUCTS COSTA MESA, CALIFORNIA	
FRACTIONS	DECIMALS	ANGLES	APPROVALS	DATE	
+/-	.XX +/-	+/-			
	.XXX +/-		DRAWN	PHQ 5-15-91	
			CHECKED	SA/SGM 5-29-91	
			ISSUED		
WP-004101-20	EX800	FINISH			SIZE D
NEXT ASSY	USED ON				SCALE
APPLICATION		DO NOT SCALE DRAWING			SH0800K1.FCD

SIZE	FSCM NO.	DWG NO.	REV
D		SH-004101-02 K	
SCALE	SH0800K1.FCD	SHEET	1 OF 3

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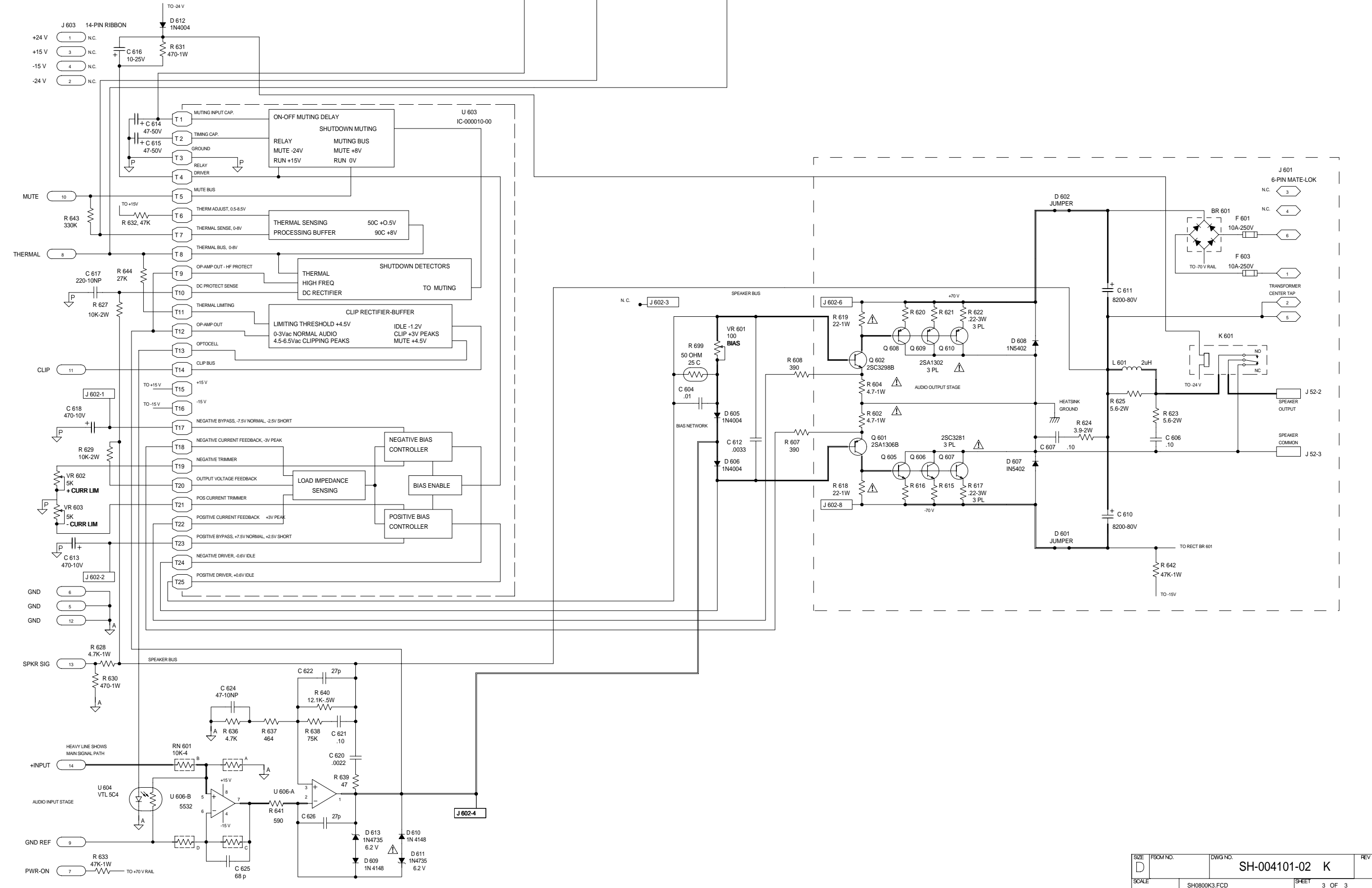
SCHEMATIC, EX-800, SHEET 2, AMPLIFIER CHANNEL A



+23V ON/OFF ENABLE TO SHEET 1 TRANSFORMER THERMAL SENSOR THERMAL BUS TO FAN SPEED CONTROL

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SCHEMATIC, EX-800, SHEET 3, AMPLIFIER CHANNEL B

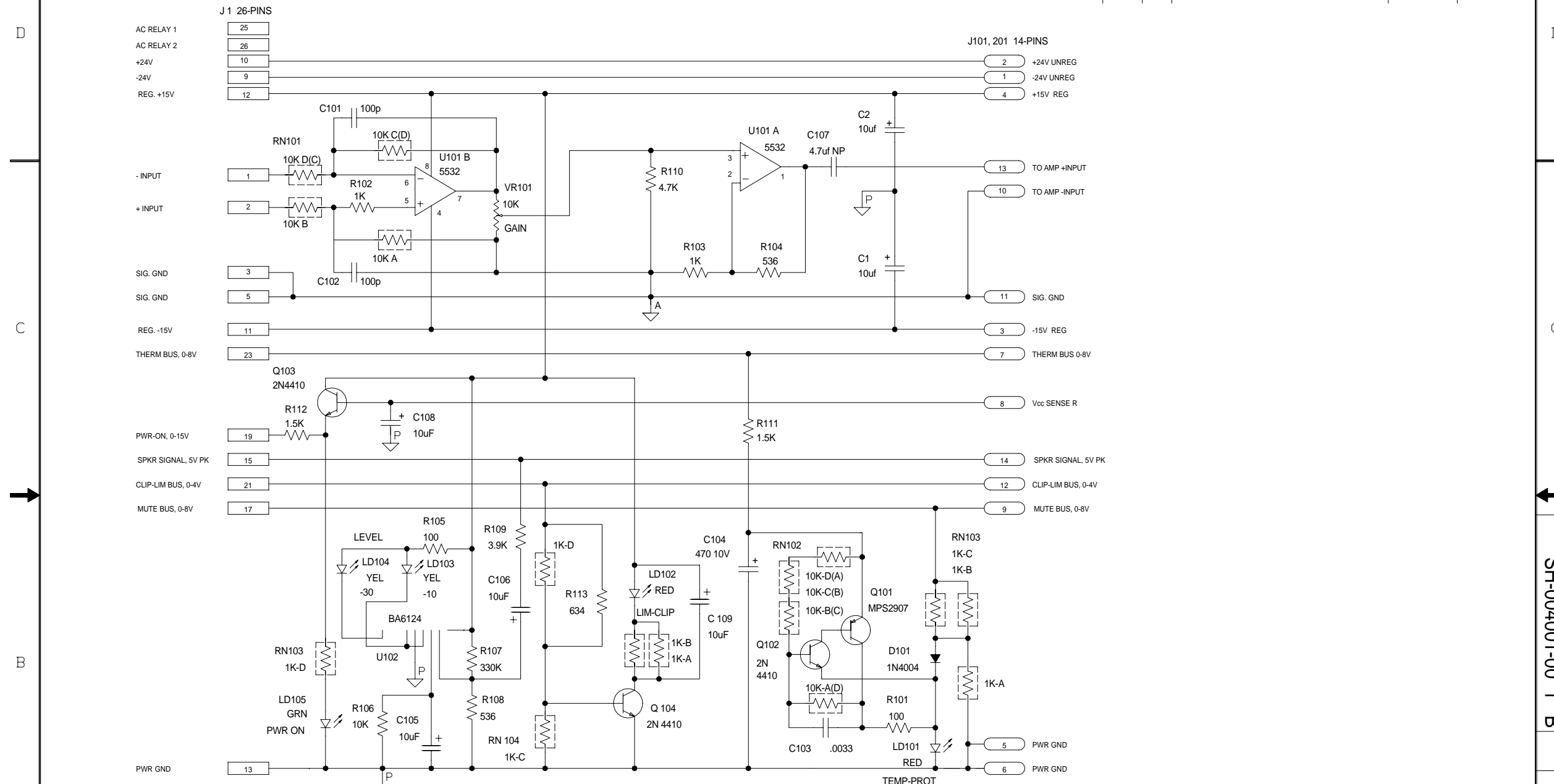


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### SCHEMATIC, EX-SERIES DISPLAY BOARD.

PC-004001-00, REV A.

REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	PROD REL PER ECO 756	6-19-90	
	B	REVISED PER ECO 1603 WR	9-29-92	



CH 2 PINS

- INPUT	4
+ INPUT	6
SIG. GND	7
SIG. GND	8
THERM BUS, 0-8V	24
PWR-ON, 0-15V	19
SPKR SIGNAL, 5V PK	16
CLIP-LIM BUS, 0-4V	22
MUTE BUS, 0-8V	18
PWR GND	14

- NOTES
1. ALL RESISTORS 1/4 WATT UNLESS SPECIFIED.
  2. ALL CAPACITORS 25V UNLESS SPECIFIED.
  3. CH 2 RESISTOR NETWORK SECTIONS ( ) WHEN DIFFERENT.
  4. CH 1 COMPONENTS NUMBERED 101-199
  5. CH 2 COMPONENTS NUMBERED 201-299.
  6. PARTS IN COMMON TO BOTH CHANNELS NUMBERED 1-99.
  7. U102, 202 ROHM BA6124 OR SAMSUNG KA2284/85
  8. LD 101, 102, HIGH-EFFICIENCY RED LED.
  9. LD 103, 104, HIGH-EFFICIENCY YELLOW LED.
  10. LD 105, HIGH-EFFICIENCY GREEN LED.

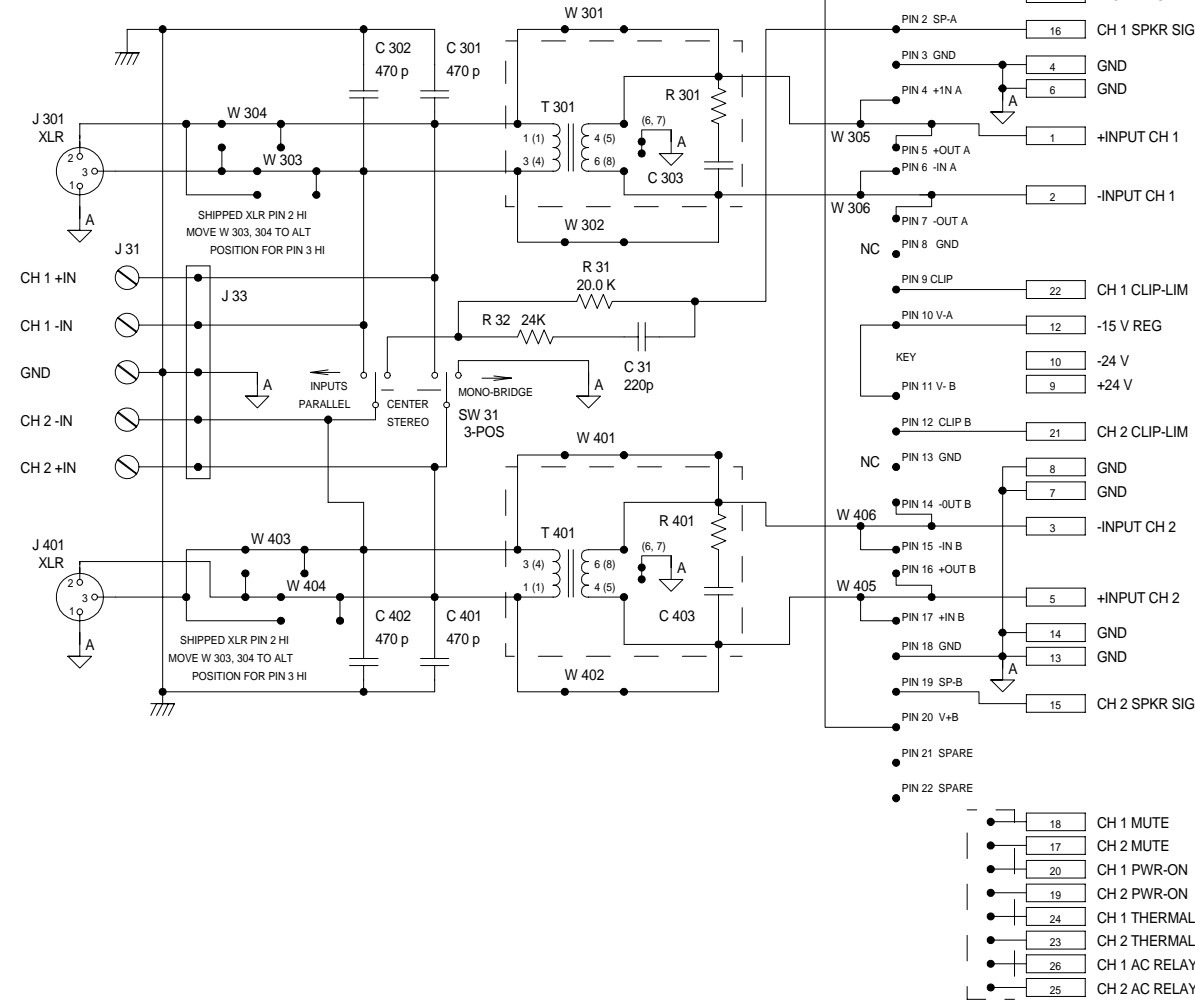
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE:		CONTRACT NO.		QSC AUDIO PRODUCTS COSTA MESA, CALIFORNIA	
FRACTIONS	DECIMALS	ANGLES	APPROVALS	DATE	<p>SCHEMATIC DIAGRAM EX-SERIES DISPLAY BOARD</p> <p>SIZE: FSCM NO. C Dwg. NO. SH-004001-00 B REV</p> <p>SCALE: SH4001B1.FDC SHEET 1 OF 1</p>
+/-	.XX +/-	+/- 0	DRAWN	PAT QUILTER 6-19-90	
	.XXX +/-		CHECKED		
MATERIAL			ISSUED		
FINISH			FCAD: 004001SH		
DO NOT SCALE DRAWING					

Dwg. NO. SH-004001-00 1 B

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REVISIONS				
ZONE	REV	DESCRIPTION	DATE	APPROVED
	A	PROD REL PER ECO 756		
	B	CHANGE VALUE R31, WAS 21 K SEE ECO 1097	6-10-91	SGM
	C	REVISED FOR MIN-SLOT, BR-SW SEE ECO 1297 BY PHQ	1-24-92	SGM
	D	REVISE PER ECO 1916	6.	

**SCHEMATIC, EX-SERIES STANDARD INPUT BOARD.**  
FOR PC-004005-00 REV B 7-15-93



**NOTES, ALL REV LEVELS**

1. ALL RESISTORS 1/4W, 5%.
2. ALL CAPACITORS 100V
3. J 32, 26-PIN CONNECTOR, TO J 1 ON FRONT DISPLAY BOARD PC-004001-00.
4. PARTS FOR CH 1 NUMBERED 301-399.
5. PARTS FOR CH 2 NUMBERED 401-499.
6. PARTS IN COMMON TO BOTH CHANNELS NUMBERED 31-49.
7. BOARD SHIPPED WITH W 301-304, W 401-404 MOUNTED AS SHOWN.
8. PARTS WITHIN DOTTED OUTLINE FOR USER MODIFICATION. SEE MANUAL.

**NOTES, REV LEVELS A-B**

1. THE FIRST YEAR OF PRODUCTION EX AMPLIFIERS SHIPPED WITH PC-004002-00 REV A OR B
2. FOR PC-004005-00 REV A, ADDED PADS 1-20 FOR LEVEL 1-A, 2-A INPUT ACCESSORY PCB
3. ADDED J33, 5-PIN INPUT EXTENDER HEADER AND W305,306,405 & 406.
4. NO CHANGE IN PINOUT OF J32, PINS 1-26
5. SW-31 WAS REVISED ON PC-004005-00 REV A, BUT WILL NOT AFFECT FUNCTION OF UPPER SLOT PCB.

NOTES: UNLESS OTHERWISE SPECIFIED

APPLICATION		PARTS LIST		QSC AUDIO PRODUCTS, INC. COSTA MESA, CALIFORNIA	
PC-004005-00	EX/MPA SERIES	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. DIMENSIONS PER ANSI Y14.5-1982	CONTRACT NO.	<p><b>SCHEMATIC DIAGRAM EX SERIES STANDARD, INPUT BOARD</b></p>	
NEXT ASSY	USED ON	TOLERANCES ARE: DECIMALS .XX ±    .XXX ±    ANGLES °	APPROVALS		
		DEBURR EDGES .XXX R MAX	DRAWN	PAT QUILTER    6-18-90	
		FINISH	CHECKED		
			ISSUED		
			CAD SEED FILE NO.	SH4002C1.FCD	
			SCALE	NONE	
			CAD FILE NO.	SH4002D1.FCD	
			SIZE	F50M NO.	DWG NO.
			C		SH-004002-00
					D
				SHEET	1 OF 1