



150W into 4 ohms per channel

# SR 300

---

## REFERENCE SERIES

WEB ACCESS: <http://www.yorkville.com>

### WORLD HEADQUARTERS CANADA

**Yorkville Sound**  
550 Granite Court  
Pickering, Ontario  
L1W-3Y8 CANADA

Voice: (905) 837-8481  
Fax: (905) 837-8746

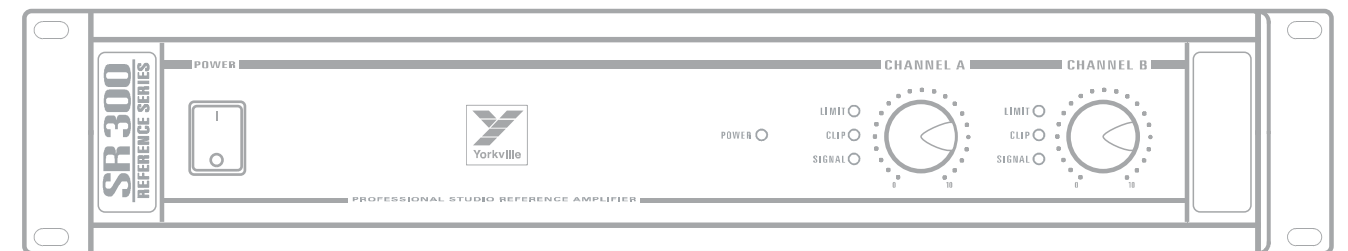
### U.S.A.

**Yorkville Sound Inc.**  
4625 Witmer Industrial Estate  
Niagara Falls, New York  
14305 USA

Voice: (716) 297-2920  
Fax: (716) 297-3689



**Quality and Innovation Since 1963**  
Printed in Canada



# ***SERVICE MANUAL***

Manual-Service-sr300-1v1.pdf

**IMPORTANT SAFETY INSTRUCTIONS**



**INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.**

**INSTRUCTIONS RELATIVES AU RISQUE DE FEU, CHOC ÉLECTRIQUE, OU BLESSURES AUX PERSONNES.**

**CAUTION:**  
TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE.  
  
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**AVIS:**  
N'ENLEVEZ PAS LE COUVERT (OU LE PANNEAU ARRIERE). NE CONTIENT AUCUNE PIECE REPARABLE PAR L'UTILISATEUR.  
  
CONSULTEZ UN TECHNICIEN QUALIFIE POUR L'ENTRETIEN.

**Read Instructions:**

The *Owner's Manual* should be read and understood before operation of your unit. Please, save these instructions for future reference.

**Packaging:**

Keep the box and packaging materials, in case the unit needs to be returned for service.

**Warning:**

When using electric products, basic precautions should always be followed, including the following:

**Power Sources:**

Your unit should be connected to a power source only of the voltage specified in the owners manual or as marked on the unit. This unit has a polarized plug. Do not use with an extension cord or receptacle unless the plug can be fully inserted. Precautions should be taken so that the grounding scheme on the unit is not defeated.

**Hazards:**

Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious personal injury and serious damage to the product. Use only with cart, stand, tripod, bracket, or table recommended by the manufacturer or sold with the product. Follow the manufacturer's instructions when installing the product and use mounting accessories recommended by the manufacturer.

The apparatus should not be exposed to dripping or splashing water; no objects filled with liquids should be placed on the apparatus.

Terminals marked with the "lightning bolt" are hazardous live; the external wiring connected to these terminals require installation by an instructed person or the use of ready made leads or cords.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

**Power Cord:**

The AC supply cord should be routed so that it is unlikely that it will be damaged. If the AC supply cord is damaged **DO NOT OPERATE THE UNIT.**

**Service:**

The unit should be serviced only by qualified service personnel.

**Veillez lire le manuel:**

Il contient des informations qui devraient étre comprises avant l'opération de votre appareil. Conservez S.V.P. ces instructions pour consultations ultérieures

**Emballage:**

Conservez la boite au cas ou l'appareil devait étre retourner pour réparation.

**Warning:**

Attention: Lors de l'utilisation de produits électrique, assurez-vous d'adhérer à des précautions de bases incluant celle qui suivent:

**Alimentation:**

L'appareil ne doit étre branché qu'à une source d'alimentation correspondant au voltage spécifié dans le manuel ou tel qu'indiqué sur l'appareil. Cet appareil est équipé d'une prise d'alimentation polarisée. Ne pas utiliser cet appareil avec un cordon de raccordement à moins qu'il soit possible d'insérer complètement les trois lames. Des précautions doivent étre prises afin d'éviter que le système de mise à la terre de l'appareil ne soit désengagé.

**Hazard:**

Ne pas placer cet appareil sur un chariot, un support, un trépied ou une table instables. L'appareil pourrait tomber et blesser quelqu'un ou subir des dommages importants. Utiliser seulement un chariot, un support, un trépied ou une table recommandés par le fabricant ou vendus avec le produit. Suivre les instructions du fabricant pour installer l'appareil et utiliser les accessoires recommandés par le fabricant.

Il convient de ne pas placer sur l'appareil de sources de flammes nues, telles que des bougies allumées.

L'appel ne doit pas étre exposé à des égouttements d'eau ou des éclaboussures et qu'aucun objet rempli de liquide tel que des vases ne doit étre placé sur l'appareil.

Les dispositifs marqués d'une symbole "d'éclair" sont des parties dangereuses au toucher et que les câblages extérieurs connectés à ces dispositifs de connection extérieure doivent étre effectués par un opérateur formé ou en utilisant des cordons déjà préparés.

**Cordon d'alimentation:**

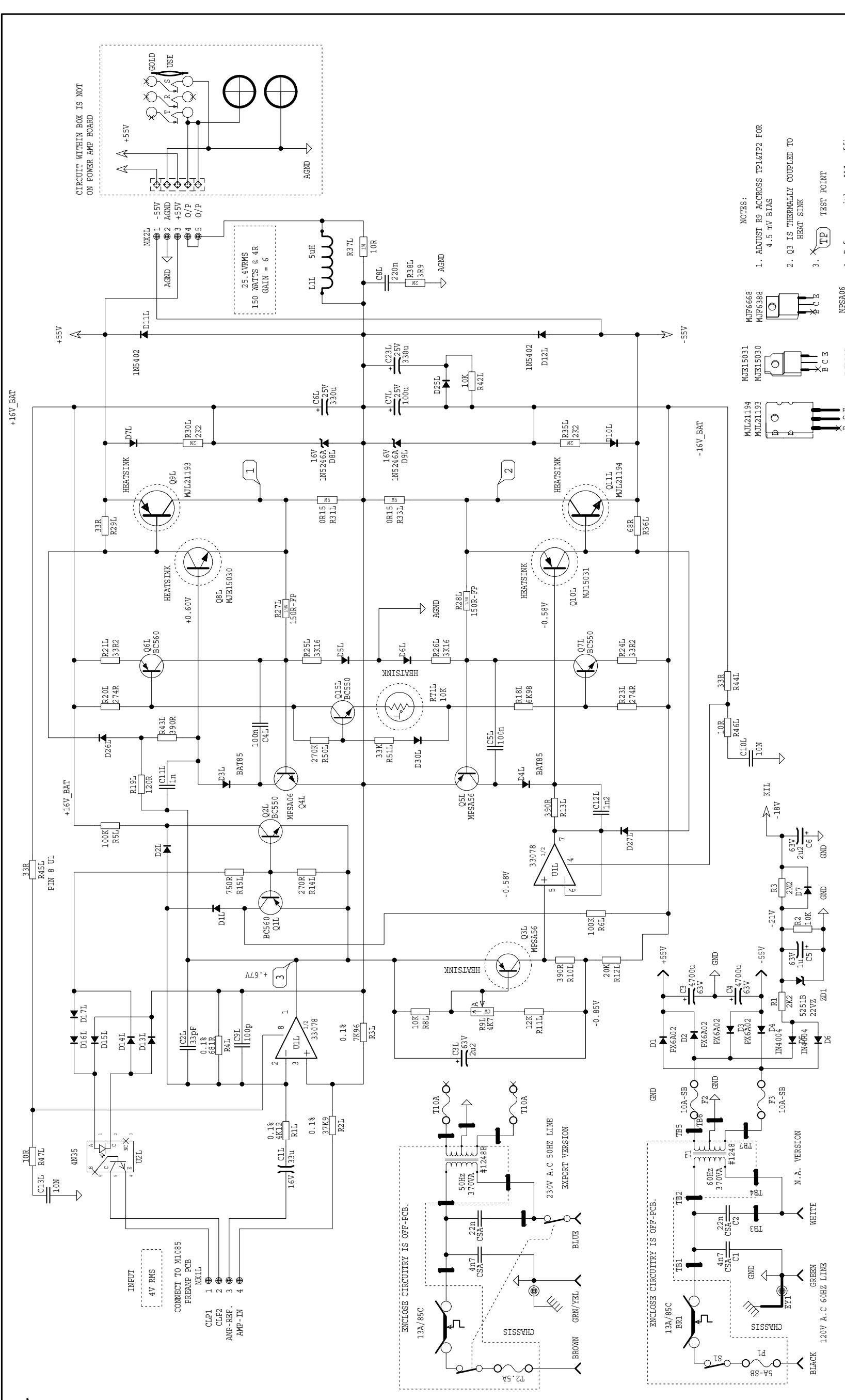
Évitez d'endommager le cordon d'alimentation. **N'UTILISEZ PAS L'APPAREIL** si le cordon d'alimentation est endommagé.

**Service:**

Consultez un technicien qualifié pour l'entretien de votre appareil.

YS No.	Description	Qty.
3747	CUSTOM 5 LED SPACER BLACK	7
6405	RED 3MM LED 1V7 5MA BRT	2
6400	YEL 3MM LED 1V9 6MA HIGHEFF	2
6401	GRN 3MM LED 1V9 6MA HIGHEFF	3
6825	1N4148 75V 0A45 DIODE T&R	41
6438	1N4004 400V 1A0 DIODE T&R	2
6827	1N5402 200V 3A0 DIODE	4
6434	6A2 200V 6A0 DIODE	4
6733	BAT85 30V 0A2 DIODE SCHTKYT&R	4
6461	1N5240BRL 10V0 0W5 ZENER 5% T&R	2
6824	1N5246B 16V0 0W5 ZENER 5% T&R	6
6463	1N5251BRL 22V0 0W5 ZENER 5% T&R	1
5101	BC550C TO92 NPN TRAN T&R TB	8
5102	BC560C TO92 PNP TRAN T&R TB	11
5103	MPSA06 TO92 NPN TRAN T&R TA	2
5104	MPSA56 TO92 PNP TRAN T&R TA	2
6780	MPSA56 TO92 PNP TRAN TA	2
5119	2N5638 TO92 NCH JFET T&R TC	2
6810	MJF15030 T221D NPN TRAN TJ	2
6811	MJF15031 T221D PNP TRAN TJ	2
6814	MJF6668 T221D PNP TRAN DARL TJ	1
6815	MJF6388 T221D NPN TRAN DARL TJ	1
6988	MJL21194 TO3P NPN TRAN TK	2
6991	MJL21193 TO3P PNP TRAN TK	2
6840	MC33078P IC DUAL OP AMP	2
6882	TL072CP IC FET DUAL OP AMP	5
6884	NE5532N IC DUAL OP AMP	1
6745	LM13600N IC XCONDUCTANCE AMP	1
6880	4N35 OPTO-COUPLER	2
6467	10K 10% THERMISTOR NTC TO-92	2
5200	10P 200V 5%CAP T&R RAD CER.2"NPO	2
5406	33P 50V 10%CAP BLK BEAD NPO	2
5410	100P 100V 10%CAP T&R BEAD NPO	2
5416	470P 50V 10%CAP T&R BEAD NPO	2
5206	1N 400V 5%CAP T&R RAD .2"FLM	4
5422	1N 50V 10%CAP T&R BEAD NPO	2
5423	1N2 50V 10%CAP T&R BEAD X7R	2
6451	4N7 250V 20%CAP BLK Y 10MM AC	1
5204	10N 100V 10%CAP T&R RAD .2"FLM	4
6435	22N 275V 20%CAP BLK X2 15MM AC	1
5224	47N 100V 10%CAP T&R RAD .2"FLM	2
5227	82N 100V 5%CAP T&R RAD .2"FLM	2
5228	100N 100V 5%CAP T&R RAD .2"FLM	16
5314	100N 50V 10%CAP T&R BEAD X7R	2
5231	220N 63V 10%CAP T&R RAD .2"FLM	6
5255	1U 63V 20%CAP T&R RAD .2"EL	1
5257	2U2 63V 20%CAP T&R RAD .2"EL	3
5281	10U 16V 20%CAP T&R RAD .2"NIP	4
5260	22U 50V 20%CAP T&R RAD .2"EL	1
5961	33U 16V 20%CAP T&R RAD .2"NIP	6
5267	100U 25V 20%CAP T&R RAD .2"EL	4
5630	330U 25V 20%CAP BLK 10X13MM EL	4
5869	4700U 63V 20%CAP BLK 25X40MM ELS	2
4390	10K AUD 16MM DETENT P22	2
4522	4K7 TRIM POT	2
714	1.5 MIL X 36" CLEAR POLY SHEETING	4
3819	5UH COIL 18AWG R000 AIR CORE	2
3489	CLIP 250X032 18-22AWG DISCO/INSL	3
3491	CLIP 205/187X020 18-22AWG DISCO/INS	1
3682	250 MALE PCB TAB BULK CARTRIGE	7
3452	BND POST PCB MT HORZ QUAD ASSEMBLY	1
3498	1/4" JCK PCB MT HORZ	2
3528	1/4" JCK PCB MT HORZ GOLD TR	2
3451	EYELET SMALL 0.089 OD PLATED	5
3412	LOWPROFILE FUSEHOLDER 1/4" LITTLEFS	1
3414	INTERNATIONAL PC MOUNT FUSEHOLDER	4
2427	5.0 AMP SLO-BLO .25X1.25 FUSE	1
2405	10.0 AMP SLO-BLO .25X1.25 FUSE	2
8434	AP SERIES PLASTIC HANDLE PAIR	2
3501	B5220F006 COMP WASH #4 SMALL	2
3745	DUAL XSISTOR PBL SPRING PLATE ZN	2
3885	XSISTOR SPRING CLIP TO-220	4
3795	#8 GROUND LUG ZIERICK 505-169	1
3810	4" NYLON CABLE TIE	4
3827	SQUARE BUMPER BUTTON BLACK	5
8433	AP SERIES PLASTIC KNOB	2
8661	BUTTON KNOB FLAT GREY	2
3484	8 3/18 SJT AC LINE CORD 250WH187BL	1
3834	HEYCO #1214 STRAIN RELIEF	1
3593	PCB CONN 90 5 CIR .156	2
3654	PCB CONN 4 CIR .100 LOCKING	2
3655	13 CIR CABLE HOLDER .098	2
5989	4 CIR CABLE HOLDER .098	2
8793	4-40 HEX NUT ZINC	2
8800	6-32 KEPS NUT ZINC	2
8788	1/4-20 KEPS NUT ZINC	1
3830	TO218 PREGREASED MICA 56-78-2AP	4

YS No.	Description	Qty.
4597	22AWG STRAN TC WIR JMP	11
5299	24AWG SOLID SC WIR RAD JMP	7
4749	5.0W 0R15 5% BLK RES	4
4748	2.0W 3R9 5% T&R	2
2008	1.0W 10R 5%FLAME PROOF T&R RES	2
4605	1/8W 10R 5% T&R RES	4
2014	1/8W 33R 2%FLAME PROOF T&R RES	6
4604	1/4W 33R2 1% T&R RES	4
4811	1/4W 68R 5% T&R RES	2
4735	1.0W 100R 5% T&R RES	2
4852	1/4W 100R 5% T&R RES	1
4921	1/4W 100R 5% 2"U T&R RES	1
4897	1/4W 120R 5% T&R RES	2
2020	1/8W 150R 2%FLAME PROOF T&R RES	4
4986	1/4W 270R 5%MINI T&R RES	2
2025	1/8W 274R 1%FLAME PROOF T&R RES	4
4950	1/4W 390R 5% 2"U T&R RES	6
4821	1/4W 470R 5% T&R RES	3
2030	1/8W 681R 1%FLAME PROOF T&R RES	2
4869	1/4W 750R 5% T&R RES	2
4758	1/4W 953R 1% T&R RES	6
4823	1/4W 1K 5% T&R RES	4
4981	1/4W 1K 5%MINI T&R RES	2
4824	1/4W 1K5 5% T&R RES	2
4988	1/4W 1K5 5%MINI T&R RES	1
4808	1/4W 2K 5% T&R RES	2
4705	2.0W 2K2 5% BLK RES	4
4847	1/4W 2K2 5% T&R RES	1
6124	1/4W 3K 5%MINI T&R RES	2
4992	1/4W 3K16 1% T&R RES	4
4756	1/4W 4K120 0.1% *** T&R RES	2
4943	1/4W 4K7 5% 2"U T&R RES	2
6121	1/4W 6K98 1%MINI MF T&R RES	2
4787	1/4W 7K960 0.1% *** T&R RES	2
4762	1/4W 9K760 0.1% *** T&R RES	8
4829	1/4W 10K 5% T&R RES	2
4940	1/4W 10K 5% 2"U T&R RES	8
4983	1/4W 10K 5%MINI T&R RES	3
4856	1/4W 12K 5% T&R RES	2
4953	1/4W 12K 5% 2"U T&R RES	2
4830	1/4W 15K 5% T&R RES	2
4954	1/4W 18K 5% 2"U T&R RES	2
6123	1/4W 20K0 1%MINI MF T&R RES	10
4833	1/4W 27K 5% T&R RES	3
4956	1/4W 27K 5% 2"U T&R RES	1
6122	1/4W 33K 5%MINI T&R RES	2
4794	1/4W 37K90 0.1% *** T&R RES	2
4878	1/4W 43K 5% T&R RES	2
4834	1/4W 47K 5% T&R RES	2
4761	1/4W 60K4 1% T&R RES	2
4898	1/4W 91K 5% T&R RES	4
4942	1/4W 100K 5% 2"U T&R RES	2
6120	1/4W 100K 5%MINI T&R RES	6
4991	1/4W 133K 1%MINI T&R RES	2
4796	1/4W 180K 5%MINI T&R RES	2
4841	1/4W 220K 5% T&R RES	2
6135	1/4W 270K 5%MINI T&R RES	2
4880	1/4W 680K 5% T&R RES	2
4845	1/4W 2M2 5% T&R RES	1
4809	1/4W 10M 5% T&R RES	2
4751	1/4W 22M 5% T&R RES	2
3690	8" 4C-28AWG RIB 1 W/LCK HDR 098	2
3574	9" 5C-22AWG RIBBON CABLE 0.1"	2
3603	16" 13C-24AWG RIBBON CABLE 0.1"	1
8870	#4 X 1/4 PAN PH TYPE A ZINC	2
8865	4-40 X 5/16 PAN PH MS JS500	4
8861	4-40 X 3/8 PAN PH MS JS500	2
8801	6-32 X 3/8 PAN PH TAPTITE JS500	2
8829	6-32 X 3/8 FLAT PH TAPTITE BO#4 HEA	22
8824	8-32 X 5/16 PAN QUAD TAPTITE JS500	14
8869	8-18 X 1/2 THRD CUTTING FOR PLASTIC	4
8999	8-32 X 5/8 PAN PH TAPTITE JS500	7
8765	1/4-20 X 2 1/2 HEX HD MS JS500 BLK	1
8607	3/16 NYLON SPACER OD 1/8 X ID .063	18
3744	SNAP IN .375 SPACER RICHCO	5
8818	3/4 OD X 5/16 ID X .08 THICK WASHER	2
3511	#6 FLAT WASHER NYLON	2
8850	#10 INT TOOTH LOCKWASHER BO	4
3436	DPDT PUSH SW PCMT H BREAK B4 MAKE	2
3587	DPDT ROKR SW QUIK 250*AC/PWR ON-OFF	1
1248	SR-300 POWER TRANSFORMER T'RD	1



**M1085PA.SCH DATABASE HISTORY**

MODEL(S) :-	SR-300	DESCRIPTION OF CHANGE
1	JUL/12/95	PC#4850/4851 REMOVE R7L, C13L, ADD D26L D27L, R43L, R19L FROM 510R TO 120R
2	NOV/24/95	ADDED O/P JACKS CORRECTED I/P WIRES
3	DEC/08/95	PC#4971 ADDED BATTERY BYPASS CIRCUIT
4	MAR/30/99	R11L 15K->12K
5	APR/27/99	PC#5890 RT1L 100K->10K, ADD R50L, R51L, Q15L, D30L
6	OCT/08/99	HEATSINK SYMBOL ADDED
7	SEP/30/02	CORRECTION_R27L/R28L->1/8W-FLM-PRF
8	SEP/30/02	
9		
10		

DATE:	SEE/30/2002	MODELS:	SR-300
NAME:	M1085AMP.SCH	PCB#AYER:	M1085
YORKVILLE			

SCH ISSUE:	1.70
TITLE:	AMPLIFIER_150W

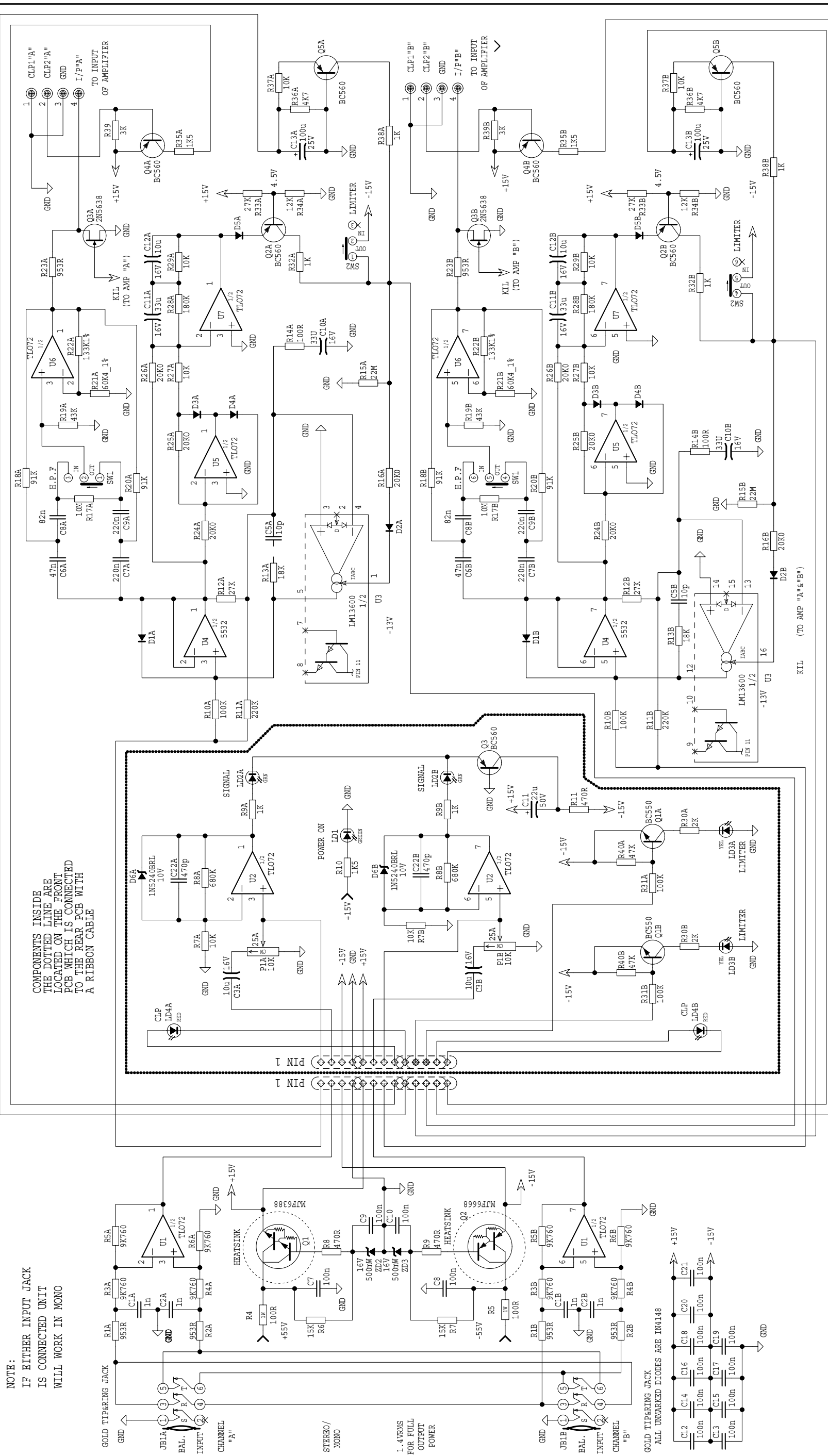
NOTES:

- ADJUST R9 ACROSS TP1&TP2 FOR 4.5 mV BIAS
- Q3 IS THERMALLY COUPLED TO HEAT SINK
- TEST POINT
- Reference with a "L" suffix will have a "R" suffix for the right channel amplifier.
- ALL UNMARKED DIODES IN4148



U:\SR300IP2.PRN

NOTE:  
IF EITHER INPUT JACK  
IS CONNECTED UNIT  
WILL WORK IN MONO



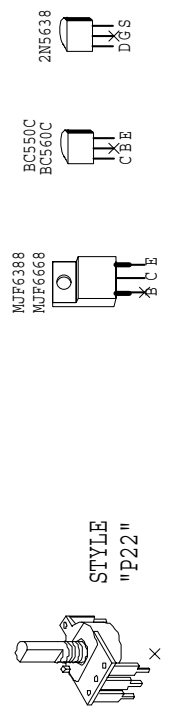
COMPONENTS INSIDE  
THE DOTTED LINE ARE  
LOCATED ON THE FRONT  
PCB WHICH IS CONNECTED  
TO THE REAR PCB WITH  
A RIBBON CABLE

M1085.SCH DATABASE HISTORY

MODEL(S) :-	SR-300	DESCRIPTION OF CHANGE
1	1-20	REAR OUTPUTS TO MATCH WR AMP SCHEM.
2	1-30	UPDATE POTS
3	1-40	HEATSINK SYMBOL ADDED
4	V	N
5	V	N
6	V	N
7	V	N
8	V	N
9	V	N
10	V	N

DATE	MODELS	PCB#	TITLE
OCT/08/99	SR-300	M1085.SCH	INPUT/PREAMP

DWG\_1\_OF\_2  
SCH ISSUE: 1.40



STYLE  
"P22"

ASSEMBLY M1085-8.00  
PCB MECH M1085-8.00

BLANK SIZE=13.075" X 10.600"

ENGINEERING NOTES

NOTE 1 ADD HEATSHRINK TUBING TO R22L/R BEFORE WAVE SOLDERING

NOTE 2 HEATSHRINK TUBING MUST NOT EXTEND ABOVE THE THERMISTOR R22L/R

NOTE 3 TRANSISTOR MOUNTING DETAIL

NOTE 3A USE ONLY PART #6780 FOR Q3L/R NO SUBSTITUTION ALLOWED

NOTE 4 NEW #3747 SPACER

NOTE 5 FOR C2 USE PART#5266 680N FOR EMC UNITS USE PART#6435 22N FOR N.A. UNITS

NOTE 6 Q11L/R Q9L/R Q10L/R Q8L/R

NOTE 7 STYLE "P22" PCB 3511 WASHER 8870 SCREW

SEE NOTE

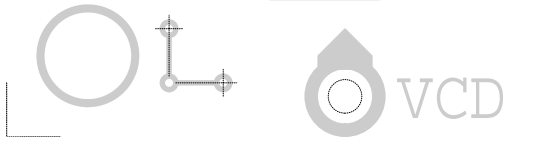
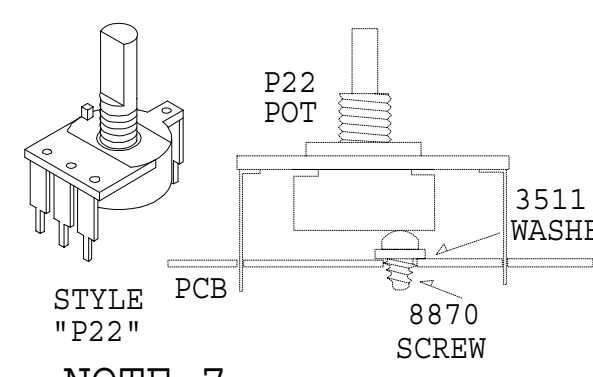
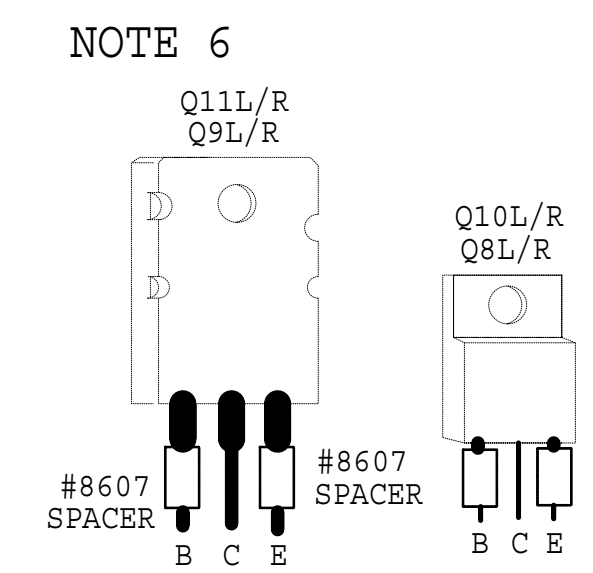
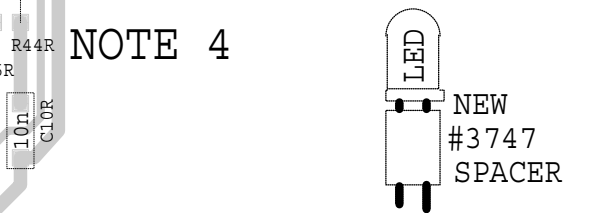
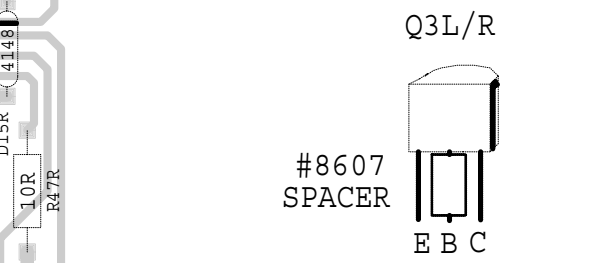
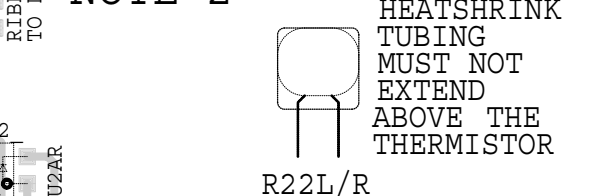
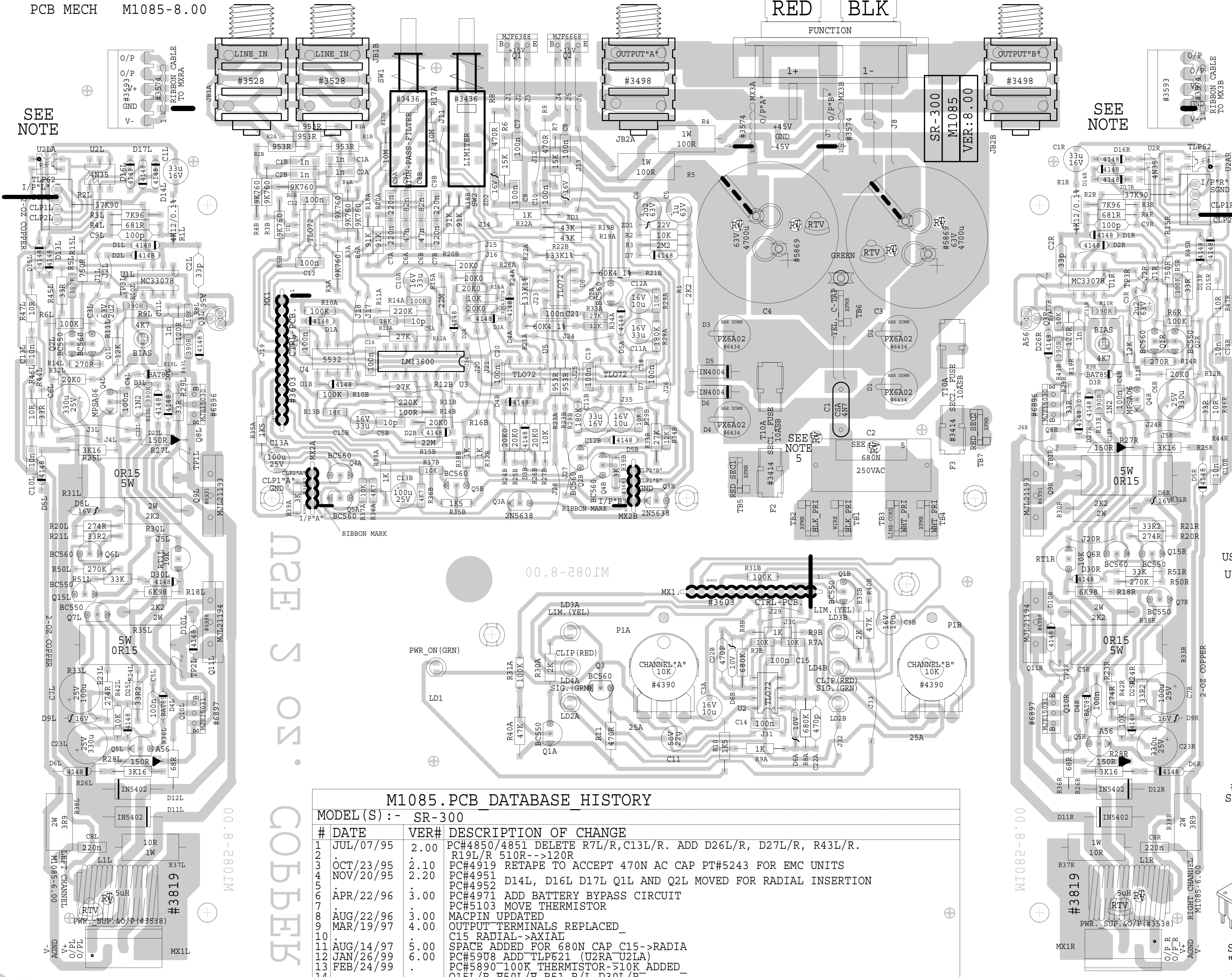
SEE NOTE

SEE NOTE 5

SHEAR HERE AFTER BOARD TEST

M1085.PCB DATABASE HISTORY

#	DATE	VER#	DESCRIPTION OF CHANGE
1	JUL/07/95	2.00	PC#4850/4851 DELETE R7L/R,C13L/R. ADD D26L/R, D27L/R, R43L/R. R19L/R 510R-->120R
2			
3	OCT/23/95	2.10	PC#4919 RETAPE TO ACCEPT 470N AC CAP PT#5243 FOR EMC UNITS
4	NOV/20/95	2.20	PC#4951 PC#4952 D14L, D16L D17L Q1L AND Q2L MOVED FOR RADIAL INSERTION
5			
6	APR/22/96	3.00	PC#4971 ADD BATTERY BYPASS CIRCUIT
7			
8	AUG/22/96	3.00	PC#5103 MOVE THERMISTOR
9	MAR/19/97	4.00	MACPIN UPDATED
10			
11	AUG/14/97	5.00	SPACE ADDED FOR 680N CAP C15->RADIAL
12	JAN/26/99	6.00	PC#5908 ADD TLP621 (U2RA U2LA)
13	FEB/24/99		PC#5890 100K THERMISTOR->10K ADDED
14			
15	MAR/30/99		Q15L/R,R50L/R,R51,R/L D30L/R
16	MAR/02/00	7.00	R11R/L 15K->12K PC#5982
17	JUL/03/02	8.00	PC#621I FIX ERROR Q6R->Q16R
18			PC#6227_MOVE_D16L,D17L,D14L



USE SOLDER COBBERS

SOLDSIDE M1085-8.00

SR-300E AC WIRING  
VERSION 1.30  
FEB 02, 99

