



SERVICE MANUAL

TYPE: YS1003
YCV50

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

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Printed in Canada

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:

AFIN DE REDUIRE LES RISQUE DE CHOC ELECTRIQUE, 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 être comprises avant l'opération de votre appareil. Conservez S.V.P. ces instructions pour consultations ultérieures.

Emballage

Conservez la boîte au cas où l'appareil devait être retourner pour réparation.

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 être 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 être prises afin d'éviter que le système de mise à la terre de l'appareil ne soit désengagé.

Risque

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'appareil ne doit pas être exposé à des égouttements d'eau ou des éclaboussures et qu'aucun objet rempli de liquide tel que des vases ne doit être 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 connexion extérieure doivent être 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.

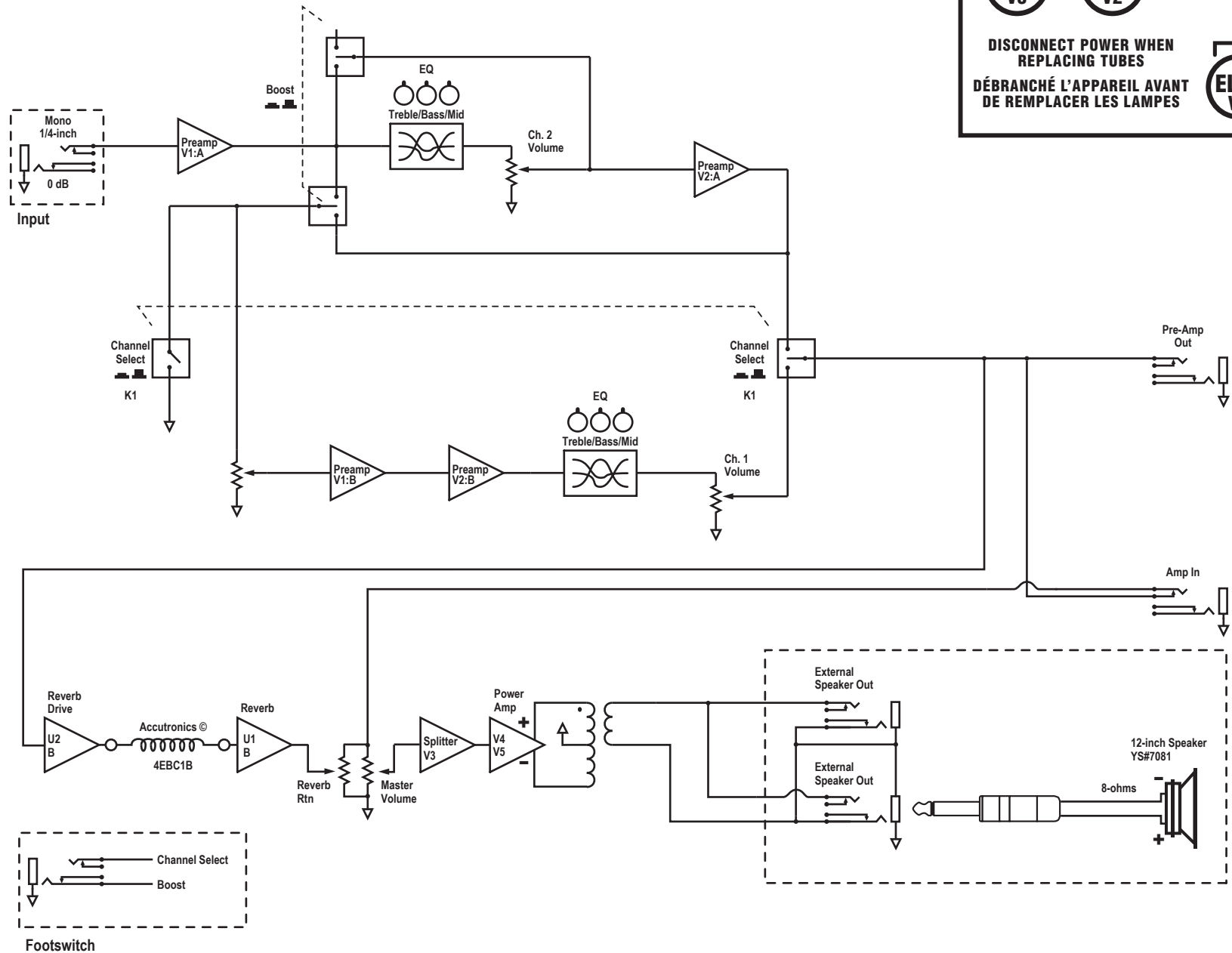
YCV50BLUE Parts List 2/15/2005

YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
6397	JEWELLED PILOT LAMP AMBER REG V1	1	3438	IEC PWR SOC W/205TAB &FUSE 10A250V	1	3865	1/2 PLASTIC HEX SPACER #6	11
5906	RED 3MM LED 1V9 20MA .4SPCER T&R	1	3552	NYLON SPRING CLAMP	4	3858	3/4 PLASTIC HEX SPACER #4	7
6398	RED 5MM LED 1V5 20MA HIGH EFF	1	3810	4" NYLON CABLE TIE	14	7081	12" BR 60WPGM SPKR CELEST VINT30	1
6399	YEL 5MM LED 1V5 20MA HIGH EFF	1	8430	YCV40 CHICKEN-BEAK KNOB	11	8482	3/8 1D FLAT WASHER	1
5907	YEL 3MM LED 1V9 20MA .4SPCER T&R	1	8638	AP MIXER SERIES PUSH SW BUTTON GREY	4	8488	3/8 INT TOOTH LOCKWASHE ZINC	1
5908	GRN 3MM LED 1V9 20MA .4SPCER T&R	1	3428	8' 3/18 SJT AC LINE CORD REMOVABLE	1	3511	#6 FLAT WASHER NYLON	2
6825	1N4148 75V 0A45 DIODE T&R	6	8264	YBA200/YCV LOGO EMBOSSED ALUMINUM	1	8491	#10 SPLIT LOCK WASHER BO	8
6438	1N4007 400V 1A0 DIODE T&R	10	8910	YORKVILLE PRODUCT MANUAL	1	8820	#8 FLAT WASHER JS500	4
6461	1N5240BRL 10V0 0W5 ZENER 5% T&R	1	8900	YORKVILLE WARRANTY CARD 2-YR UNLTD.	1	8817	#10 FLAT WASHER FOR 3/16" BOLT	8
6432	1N5248B 18V0 0W5 ZENER 5% T&R	1	YCV40POP	YCV40/WR/T POINT OF PURCHASE BOOK	1	3522	DPDT MINI PC VERT SNP ALT	4
6475	1N5262B 51V0 0W5 ZENER 5% T&R	6	3674	9 CIR CABLE HOLDER .098	4	3698	SPST ROKR SW QUIK 180" AC PWR BL/BL	1
6731	7824 TO220 P 24V0 REG	1	8701	4-40 KEPS NUT ZINC	2	3731	SPRING RETAINER FOR OUTPUT TUBE	2
5101	BC550C TO92 NPN TRAN T&R TB	4	8800	6-32 KEPS NUT ZINC	4	3732	9 PIN PC MOUNT TUBE SOCKET BE	3
5103	MP5A06 TO92 NPN TRANSISTOR T&R TA	3	8890	1/4-20 CAGE NUT C79-88142027	4	3733	8 PIN PC MOUNT TUBE SOCKET	2
5104	MP5A56 TO92 PNP TRAN T&R TA	2	3830	TO218 PREGREASED MICA 56-78-2AP	2	12AX7	12AX7 DUAL TRIODE PREAMP TUBE	3
6873	MJE340 TO126 NPN TRANSISTOR TG	1	3850	TO-220 PLASTIC TRANSISTOR INSULATOR	2	EL34	EL34 E.H. EARLY MULLARD STYLE	2
6730	IRF830 TO220 NCH MFT TN	1	4599	22AWG SOLID SC WIR T&R JMP	58	1324	YCV40 POWER 120VAC 60HZ XFMR	1
6884	NE5532N IC DUAL OP AMP	2	5299	24AWG SOLID SC WIR RAD JMP	1	1324M	YCV40 OUTPUT XFMR	1
6880	4N35 OPTO-COUPLER	1	4748	2.0W 3R9 5% T&R	1			
6467	10K 10% THERMISTOR NTC TO-92	1	2008	1.0W 10R 5%FLAME PROOF T&R RES	2			
5203	.47P 100V 2%CAP T&R RAD CER.2"NPO	1	4817	1/4W 47R 5% T&R RES	3			
5197	220P 100V 2%CAP T&R RAD CER.2"NPO	2	2019	1/8W 100R0 1%FLAME PROOF T&R RES	2			
5194	470P 1000V 10%CAP T&R RAD CER.2"Y5P	1	4852	1/4W 100R 5% T&R RES	2			
5201	470P 100V 5%CAP T&R RAD CER.2"NPO	3	2022	1.0W 220R 5%FLAME PROOF T&R RES	2			
5206	.1N 400V 5%CAP T&R RAD .2"FLM	3	4821	1/4W 470R 5% T&R RES	2			
5422	.1N 50V 10%CAP T&R BEAD NPO	2	4891	1/4W 620R 5% T&R RES	2			
5273	.1N5 200V 5%CAP T&R RAD CER.2"NPO	1	4822	1/4W 820R 5% T&R RES	2			
5606	1N5 50V 5%CAP T&R RAD CER.2" X7R	1	4726	5.0W 1K 5% BLK RES	1			
5208	.2N2 400V 5%CAP T&R RAD .2"FLM	2	4823	1/4W 1K 5% T&R RES	1			
5274	.2N2 200V 5%CAP T&R RAD CER.2"NPO	1	4913	1.0W 1K 5% T&R RES	2			
5209	.4N7 250V 5%CAP T&R RAD .2"FLM	3	4824	1/4W 1K5 5% T&R RES	5			
6451	.4N7 250V 20%CAP BLK 'Y' 10MM AC	1	4631	1/2W 2K 5% T&R RES	2			
5204	.10N 100V 10%CAP T&R RAD .2"FLM	1	4808	1/4W 2K 5% T&R RES	1			
5840	.22N 400V 10%CAP BLK RAD POLY FLM	3	4847	1/4W 2K2 5% T&R RES	5			
6435	.22N 275V 20%CAP BLK 'X2' 15MM AC	1	4827	1/4W 4K7 5% T&R RES	2			
5224	.47N 100V 10%CAP T&R RAD .2"FLM	4	4828	1/4W 6K8 5% T&R RES	1			
5841	.47N 250V 10%CAP RAD POLYFILM BULK	1	4663	1/2W 8K2 5% T&R RES	2			
5227	.82N 100V 5%CAP T&R RAD .2"FLM	1	4829	1/4W 10K 5% T&R RES	10			
5228	100N 100V 5%CAP T&R RAD .2"FLM	5	4983	1/4W 10K 5%MINI T&R RES	1			
5314	100N 50V 10%CAP T&R BEAD X7R	1	4831	1/4W 18K 5% T&R RES	2			
5865	100N 250V 10%CAP BLK RAD POLY FLM	2	4833	1/4W 27K 5% T&R RES	5			
5231	220N 63V 10%CAP T&R RAD .2"FLM	2	4840	1/4W 33K 5% T&R RES	1			
5882	220N 250V 10%CAP BLK RAD POLY FLM	2	4868	1/4W 36K 5% T&R RES	2			
5233	330N 63V 5%CAP T&R RAD .2"FLM	1	4834	1/4W 47K 5% T&R RES	9			
5234	470N 63V 10%CAP T&R RAD .2"FLM	2	4927	1/4W 47K 5% .2"U T&R RES	1			
5254	.1U 63V 20%CAP T&R 4X7MM .2"EL	1	4586	1/4W 82K 5%MINI T&R RES	1			
5257	.2U2 63V 20%CAP T&R RAD .2"EL	1	4838	1/4W 100K 5% T&R RES	11			
5945	.10U 63V 20%CAP T&R RAD .2"EL	1	4942	1/4W 100K 5% .2"U T&R RES	1			
5959	.10U 450V 20%CAP BLK EL	4	6120	1/4W 100K 5%MINI T&R RES	1			
5631	.22U 50V 20%CAP T&R 6X7MM .2"EL	13	4776	1/4W 113K 1% T&R RES	3			
5902	.82U 450V 20%CAP BLK 22X30MM	1	4851	1/4W 120K 5% T&R RES	5			
5267	100U 25V 20%CAP T&R RAD .2"EL	1	4668	2.0W 220K 5%10MM BODY T&R RES	1			
5879	100U 16V 20%CAP T&R 8X7MM .2"EL	2	4841	1/4W 220K 5% T&R RES	2			
5914	100U 63V 20%CAP BLK 10X13MM EL	1	6126	1/4W 220K 5%MINI T&R RES	4			
5621	470U 63V 20%CAP BLK 12X25MM EL	1	6145	1/4W 249K 1%MINI T&R RES	1			
TFS-2B	TRAYNOR DUAL FOOTSWCH 10' CORD-BULK	1	4842	1/4W 330K 5% T&R RES	2			
4423	.20K 15AAUDIO 9MM P32	4	4843	1/4W 470K 5% T&R RES	3			
4424	100K 1B LIN 9MM P32	2	4844	1/4W 1M 5% T&R RES	6			
4425	500K 15AAUDIO 9MM P32	5	4845	1/4W 2M2 5% T&R RES	1			
713	25 X 20 X 50 2 MIL PLASTIC BAG	1	3610	10" 9C-26AWG RIB 3/4" NOTCH 0.1"	2			
3976	SNAP ON 0.843" INSULATING BUSHING	2	3700	RELAY 2C 01AMP DC24 015MA PC-S	2			
8522	RUBBER BUMPER WITH WASHER -SMALL-	4	3537	ACC#4EB3C1B LONG REVERB	1			
8563	CORNER, 2 LEGS NOTCED BLK PLASTIC	8	8865	4-40 X 5/16 PAN PH MS JS500	18			
3478	CLIP 205/187X032 18-22AWG DISCO/INS	5	8741	4-40 X 1/2 PAN PH MS JS500	2			
3489	CLIP 250X032 18-22AWG DISCO/INSL	2	8832	6-32 X 1/4 PAN PH TAPTITE JS500	11			
3494	CLIP 205/187X020 14-16AWG DISCO/INS	2	8807	6-32 X 5/16 PAN PH MS JS500	3			
3602	RING TERMINAL 18AWG WIRE & #8 SCREW	1	8801	6-32 X 3/8 PAN PH TAPTITE JS500	4			
3682	250 MALE PCB TAB REEL	16	8829	6-32 X 3/8 FLAT PH TAPTITE BO#4 HEA	11			
NYS224	280 PLUG NEUTRIK NYS224	1	8755	#6 X 5/8 PAN PH TYPE A JS500 BLACK	2			
3498	1/4" JCK PCB MT HORZ	3	8785	#8 X 3/4 OVAL PH TYPE A BLACK OXIDE	16			
3523	1/4" JCK PCB MT HORZ GOLD T__	1	8722	#8 X 1" PAN QUAD TYPE AB B/O	4			
3528	1/4" JCK PCB MT HORZ GOLD TR__	1	8809	10-32 X 1/4 PAN PH TAPTITE JS500	25			
3921	1/4" JCK PCB MT VERT STER RT SWT	1	8756	#10 X 3/4 PAN PH TYPE A BLACK OXIDE	2			
3890	36"90"RCA DUAL RED-WHITE PREFAB CBL	1	8727	#10 X 1" PAN PH TYPE A JS500 BLACK	4			
3914	RCA SNGL PCB MT HORZ	2	8843	10-32 X 1 1/8 FLAT PH MS JS500	2			
3451	EYELET SMALL 0.089 OD PLATED	13	8786	10-32 X 1 1/4 PAN QD MS JS500 BLACK	4			
2403	T2A 5X20MM FUSE	1	8862	#10 X 1 1/2 PAN PH TYPE A JS500	4			
8451	10" STRAP HANDLE,BLACK METAL ENDCAP	1	8770	1/4-20 X 1 5/16 TRUSS PH MS JS500	4			
8604	10-32 T NUT	6	8905	YORKVILLE PRODUCT SCHEMATIC	1			
8889	RUBBER GROMMET #2183-034-BLK	4	3741	.5 SPACER ID-.171 OD-.25 #912-500	4			

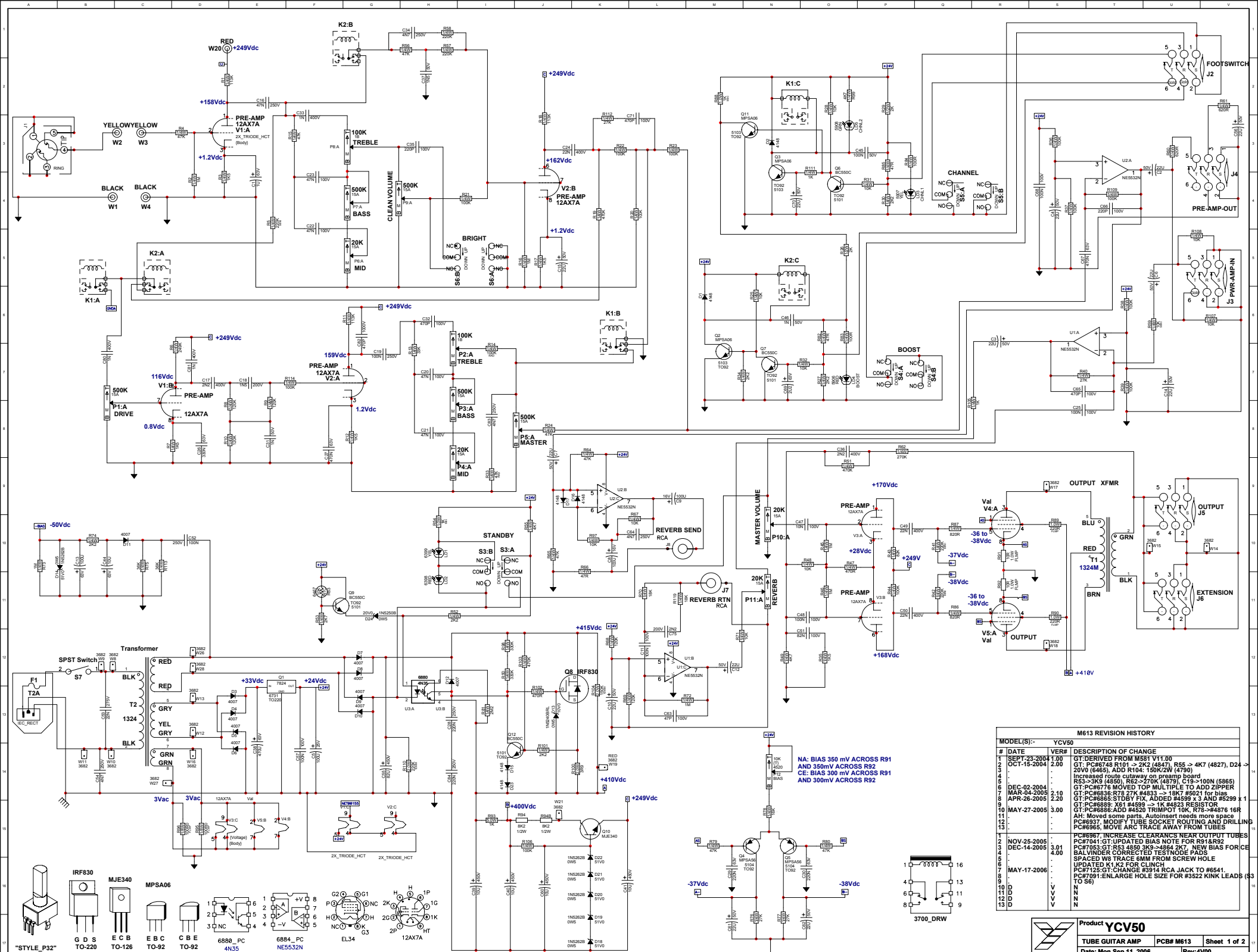
MODEL TYPE: YS1003

Block Diagram for YCV50

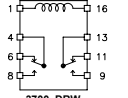
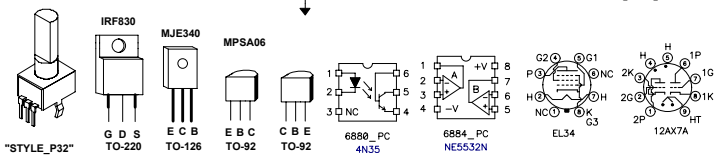
DESIGNED AND MANUFACTURED BY YORKVILLE SOUND



SPLITTER 12AX7 V3	PREAMP 12AX7 V2	12AX7 V1	
DISCONNECT POWER WHEN REPLACING TUBES DÉBRANCHÉ L'APPAREIL AVANT DE REMPLACER LES LAMPES			
		POWER EL34 V5	EL34 V4



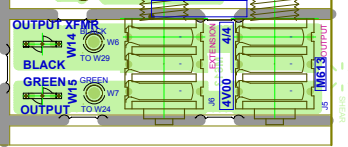
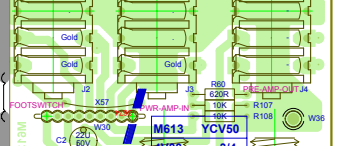
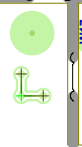
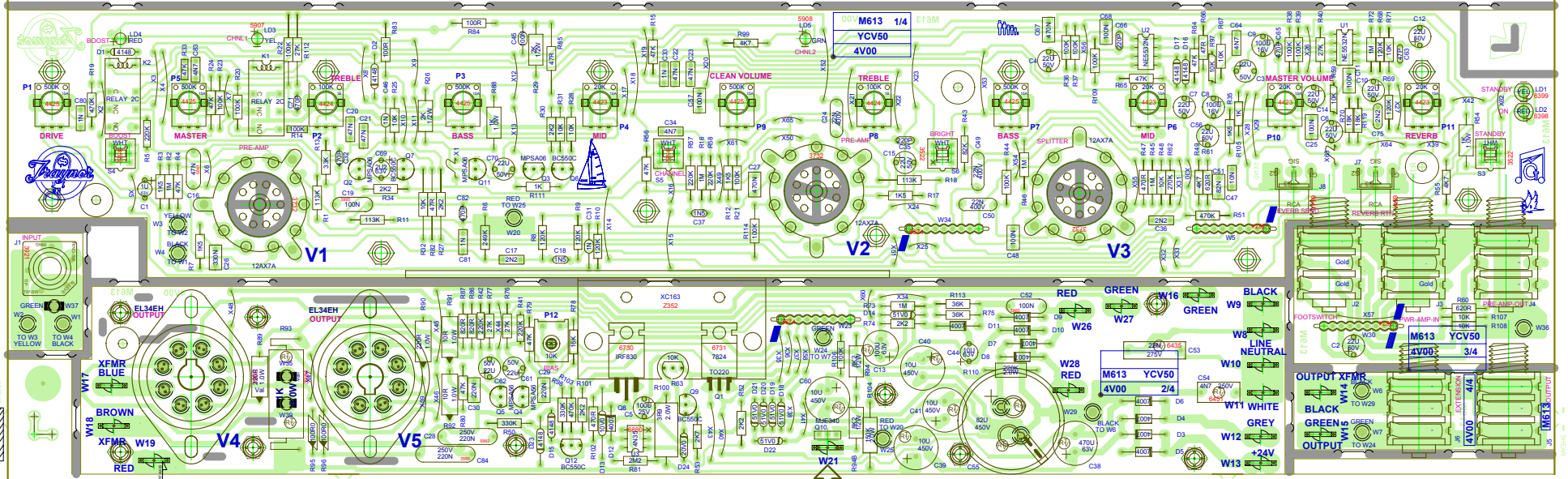
M613 REVISION HISTORY			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	SEPT-23-2004	1.00	GT: DERIVED FROM M581 V11.00
2	OCT-15-2004	2.00	GT: PC#6748 R101 -> 2K2 (4847), R65 -> 4K7 (4827), D24 -> 2V0 (8485), ADD R104: 150K (4700)
3			Increased route cutaway on preamp board
4			Increased route cutaway on preamp board
5			GT: PC#6836 R78 27K #4833 -> 18K7 #5021 for bias
6	DEC-02-2004		GT: PC#6836: ADD #4523 TRIMPOT 10K, R78->48276 16F
7	MAR-04-2005	2.10	GT: PC#6889: X61 #4895 -> 1K #4823 RESISTOR
8	APR-26-2005	2.20	GT: PC#6885: ADD #4523 TRIMPOT 10K, R78->48276 16F
9			AH: Moved some parts. Autoinsert needs more space
10	MAY-27-2005	3.00	PC#6937: MODIFY TUBE SOCKET ROUTING AND DRILLING
11			PC#6885: MOVE ARC TRACE AWAY FROM TUBES
12			PC#6987: INCREASE CLEARANCE NEAR OUTPUT TUBES
13	NOV-25-2005		PC#7041: GT-UPDATED BIAS NOTE FOR R91&R92
14	DEC-14-2005	3.01	PC#7053: GT: R53 4850 3K9->28K 27K NEW BIAS FOR CE BALUNDR CORRECTED TESTNODE PADS
15			SPACED W8 TRACE 6MM FROM SCREW HOLE
16			UPDATED K1/K2 FOR CLINCH
17	MAY-17-2006		PC#7125: GT-CHANGE #3914 RCA JACK TO #6541.
18			PC#7091: ENLARGE HOLE SIZE FOR #3522 KINK LEADS (S3 TO S6)
19			N
20			N
21			N
22			N
23			N



NA: BIAS 350 mV ACROSS R91
 AND 350mV ACROSS R92
 CE: BIAS 300 mV ACROSS R91
 AND 300mV ACROSS R92

BlankSize - 18600x12800

BlankSize - 18600x12800



00VA

Bottom M613

METAL BACK

Pcb Mech M613 4V00

Top Assy M613 4V00

SEE LAYOUT DOCUMENTATION

StepAndRepeat - X1@.000Y2@6.400

M613 REVISION HISTORY		
MODEL(S):-	YCV50	
#	DATE	VER# DESCRIPTION OF CHANGE
1	SEPT-23-2004	1.00 GT:DERIVED FROM M581 V11.00
2	OCT-15-2004	2.00 GT: PC#6748 R101 -> 2K2 (4847), R55 -> 4K7 (4827), D24 -> 20V0 (6465), ADD R104: 150K/2W (4790)
3	.	Increased route cutaway on preamp board
4	.	R53->3K9 (4850), R62->270K (4879), C19->100N (5865)
5	.	GT:PC#6776 MOVED TOP MULTIPLE TO ADD ZIPPER
6	DEC-02-2004	GT:PC#6836:R78 27K #4833 -> 18K7 #5021 for bias
7	MAR-04-2005	2.10 GT:PC#6865:STDBY FX. ADDED #4599 x 3 AND #5299 x 1
8	APR-26-2005	2.20 GT:PC#6889: X61 #4599 -> 1K #4823 RESISTOR
9	.	GT:PC#6886:ADD #4520 TRIMPOT 10K, R78->#4876 16R
10	.	AH: Moved some parts, Autoinsert needs more space
11	.	PC#6937, MODIFY TUBE SOCKET ROUTING AND DRILLING
12	.	PC#6965, MOVE ARC TRACE AWAY FROM TUBES
13	.	PC#6967, INCREASE CLEARANCS NEAR OUTPUT TUBES
1	NOV-25-2005	3.01 PC#7041:GT:UPDATED BIAS NOTE FOR R91&R92
2	DEC-14-2005	3.01 PC#7053:GT:R53 4850 3K9->4864 2K7, NEW BIAS FOR CE
3	.	BALVINDER CORRECTED TESTNODE PADS
4	.	SPACED W8 TRACE 6MM FROM SCREW HOLE
5	.	UPDATED K1,K2 FOR CLINCH
6	.	PC#7125:GT:CHANGE #3914 RCA JACK TO #6541.
7	MAY-17-2006	PC#7091:ENLARGE HOLE SIZE FOR #3522 KINK LEADS (S3 TO S6)
8	.	
9	.	
10	D	V N
11	D	V N
12	D	V N
13	D	V N
1	D	V N
2	D	V N
3	D	V N
4	D	V N
5	D	V N
6	D	V N
7	D	V N
8	D	V N
9	D	V N
10	D	V N
11	D	V N
12	D	V N
13	D	V N

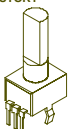
SEE LAYOUT DIAGRAM

M581 DRILL HISTORY		
MODEL(S):-	YCV50	
#	DATE	VER# DESCRIPTION OF CHANGE
1	D	V N
2	D	V N
3	D	V N
4	D	V N
5	D	V N
6	D	V N

M581 PENDING CHANGES		
MODEL(S):-	YCV50	
#	PC#	PENDING CHANGE
1	PC	X
2	PC	X
3	PC	X
4	PC	X
5	PC	X
6	PC	X

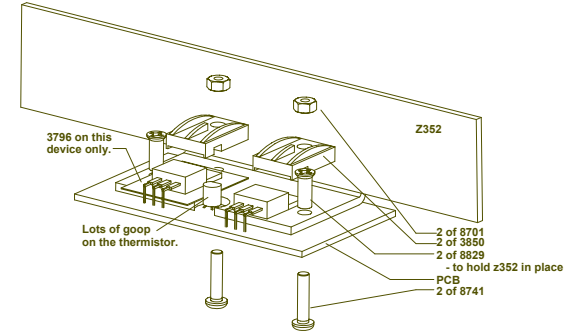
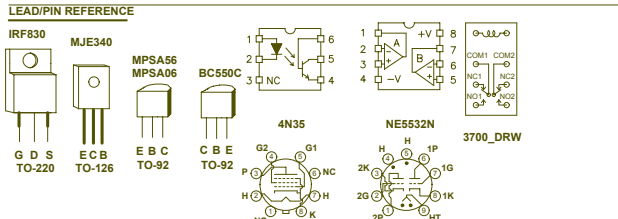
PLACE IMPLEMENTED CHANGES INTO BOARD HISTORY

M613 POT LIST				
MODEL(S):- YCV50 TUBE AMP				
REF	FUNCTION	PART#	KNOB	AS OF
P1	DRIVE	#4425	#8430	11/00
P2	TREBLE	#4424	#8430	11/00
P3	BASS	#4425	#8430	11/00
P4	MID	#4423	#8430	11/00
P5	MASTER	#4425	#8430	11/00
P6	MID	#4423	#8430	11/00
P7	BASS	#4425	#8430	11/00
P8	TREBLE	#4424	#8430	11/00
P9	CLEAN VOLUME	#4425	#8430	11/00
P10	MASTER VOLUME	#4423	#8430	23/04
P11	REVERB	#4424	#8430	11/00



PRODUCTION NOTES

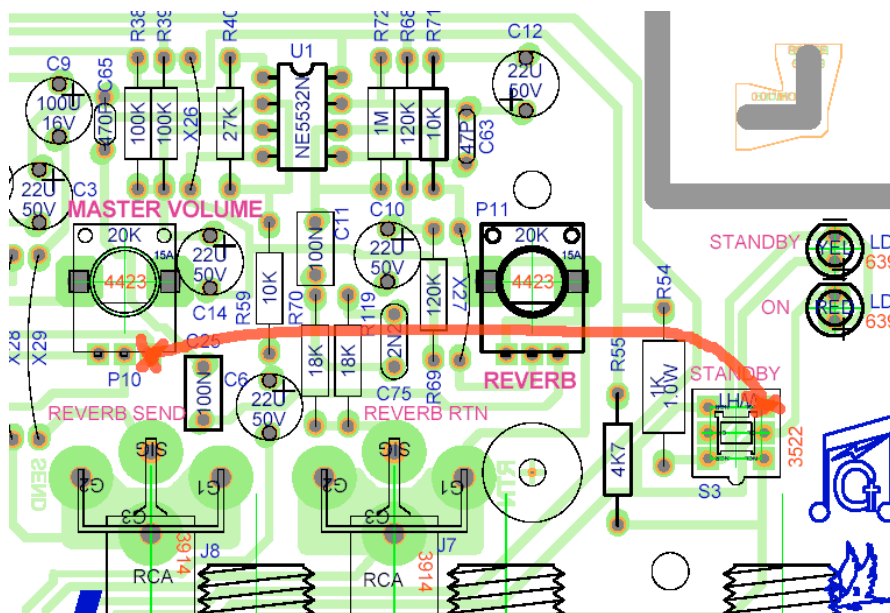
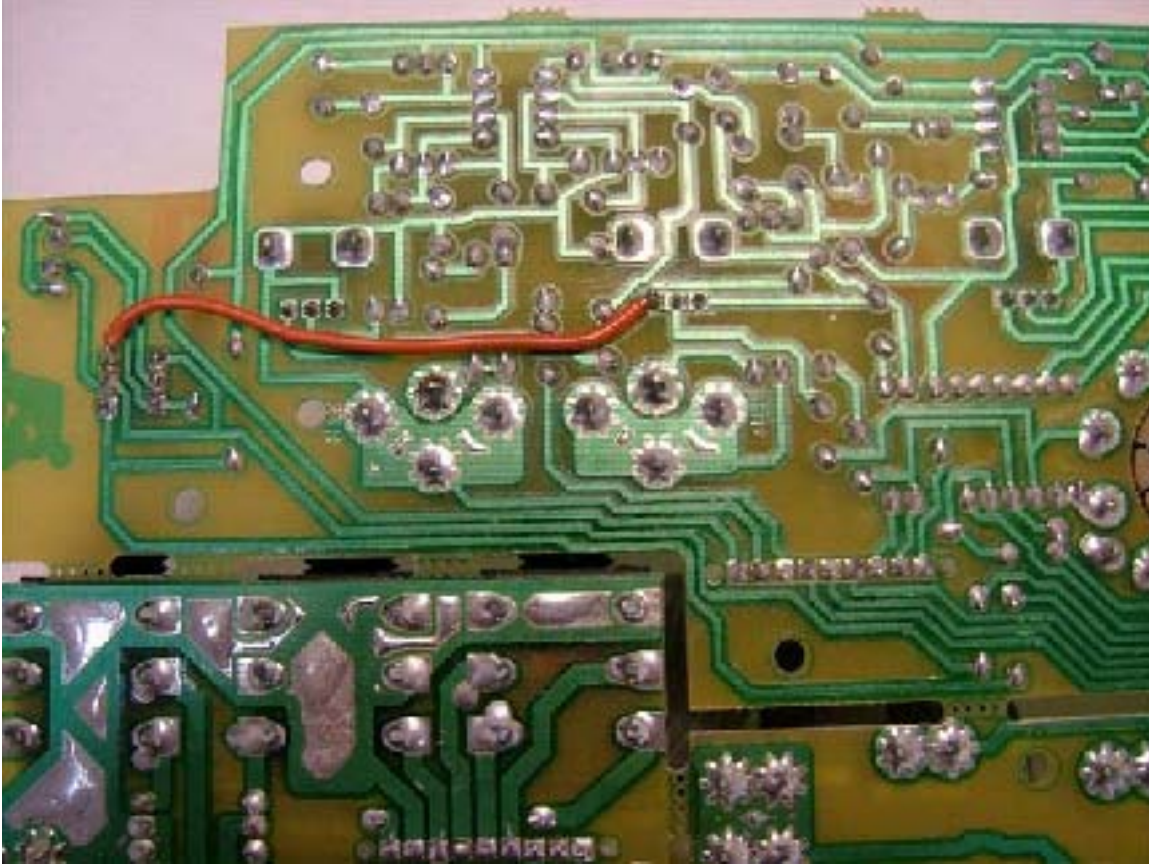
- RTV MUST BE ADDED TO THE FOLLOWING CAPS C1,C16,C19,C17,C70 BETWEEN C84,C28,C60,C15 BETWEEN C49,C50, ADDED TO C15,C7,C8,C3,C9 C56,C14,C6,C10,C4,C2 AND C12
- C53 IS 22N FOR BOTH NORTH AMERICA AND CE
- C3,C7,C6 MUST BE LOW PROFILE PT#5631
- C8,C9 MUST BE LOW PROFILE PT#5879
- R63 #6467: APPLY THERMAL COMPOUND GENEROUSLY BETWEEN PART AND HEATSINK
- NA: BIAS 350mV ACROSS R91 AND 350mV ACROSS R92
CE: BIAS 300mV ACROSS R91 AND 300mV ACROSS R92

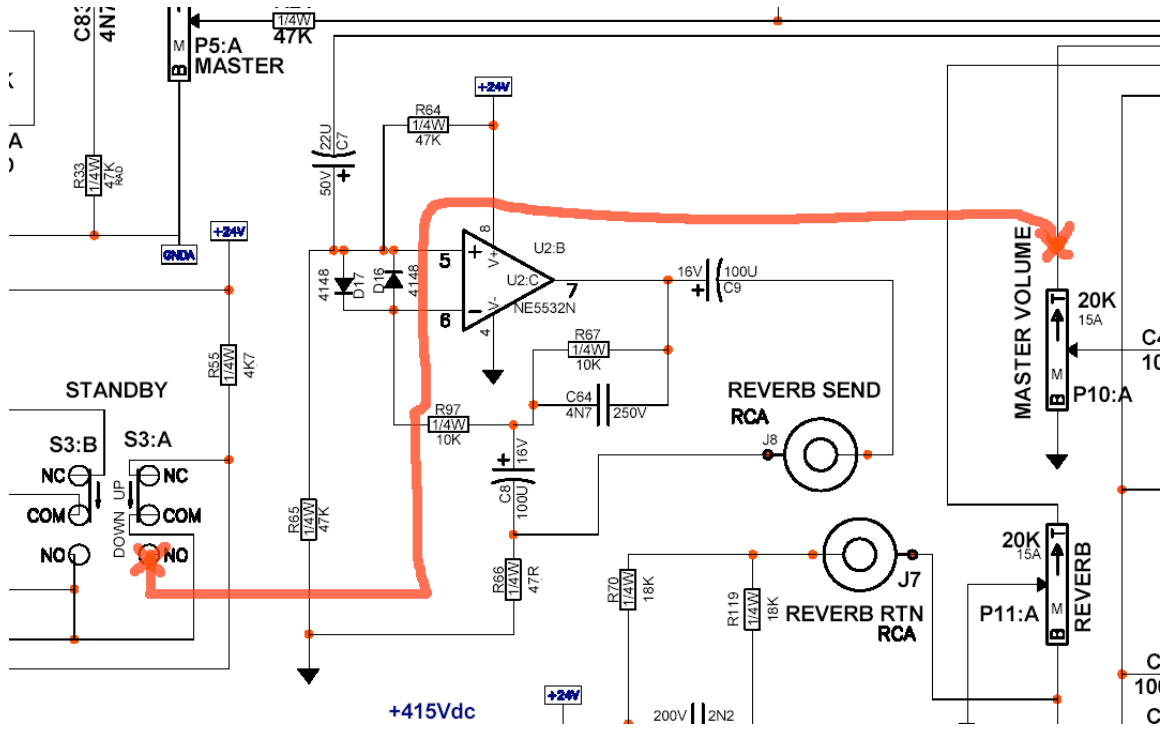


YCV50BLUE m613 Service Update for V2.10 boards

April 2005 boards have been reworked as described in this document.

To address PC#6865 a 22AWG wire, part # 3947 jumper, needs to be soldered from P10 to S3 on the bottom side of the board as shown:





YCV50BLUE m613 Service Update for V2.10 boards (additional)

1. First complete the Service fix PC#6865 as described in the pdf:

Service_YCV50-m613_Update_for_V2.10_PC#6865.pdf

To upgrade the unit from v2.10 to v2.20 PC#6889, complete the following:

2. Replace jumper X61 with a 1K resistor, #4823:

REMOVE X61 JUMPER AND REPLACE WITH #4823 1K RESISTOR

