



# ***SERVICE MANUAL***

MODEL TYPE: YS1007

## ***AM150T***

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

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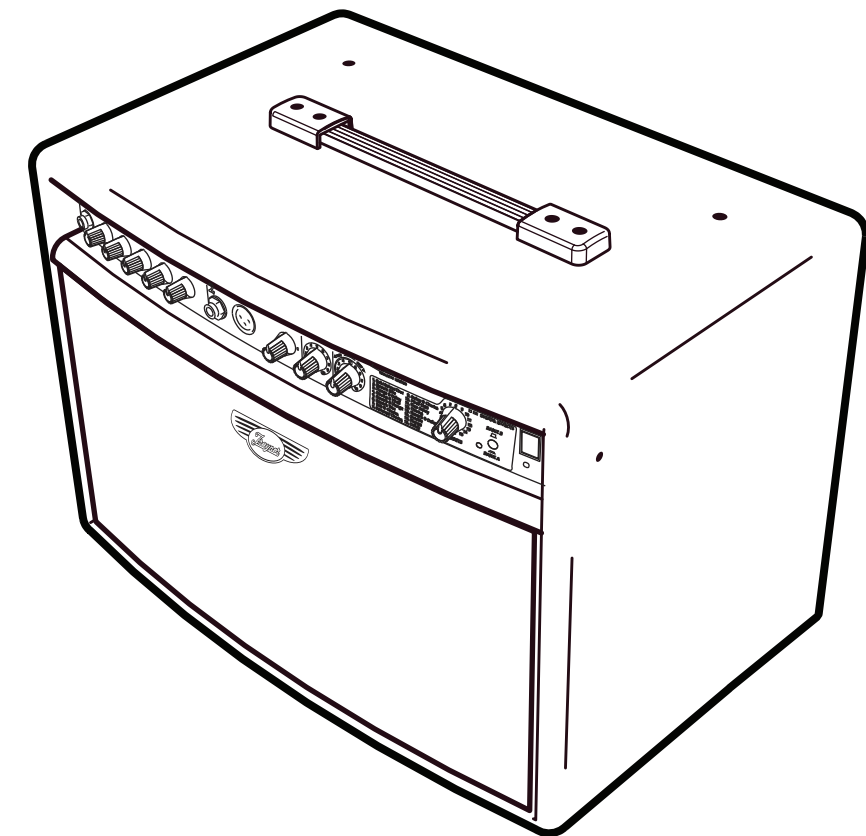
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**Quality and Innovation Since 1963**  
Printed in Canada



## 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 étre 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 étre 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 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.

#### **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 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:**

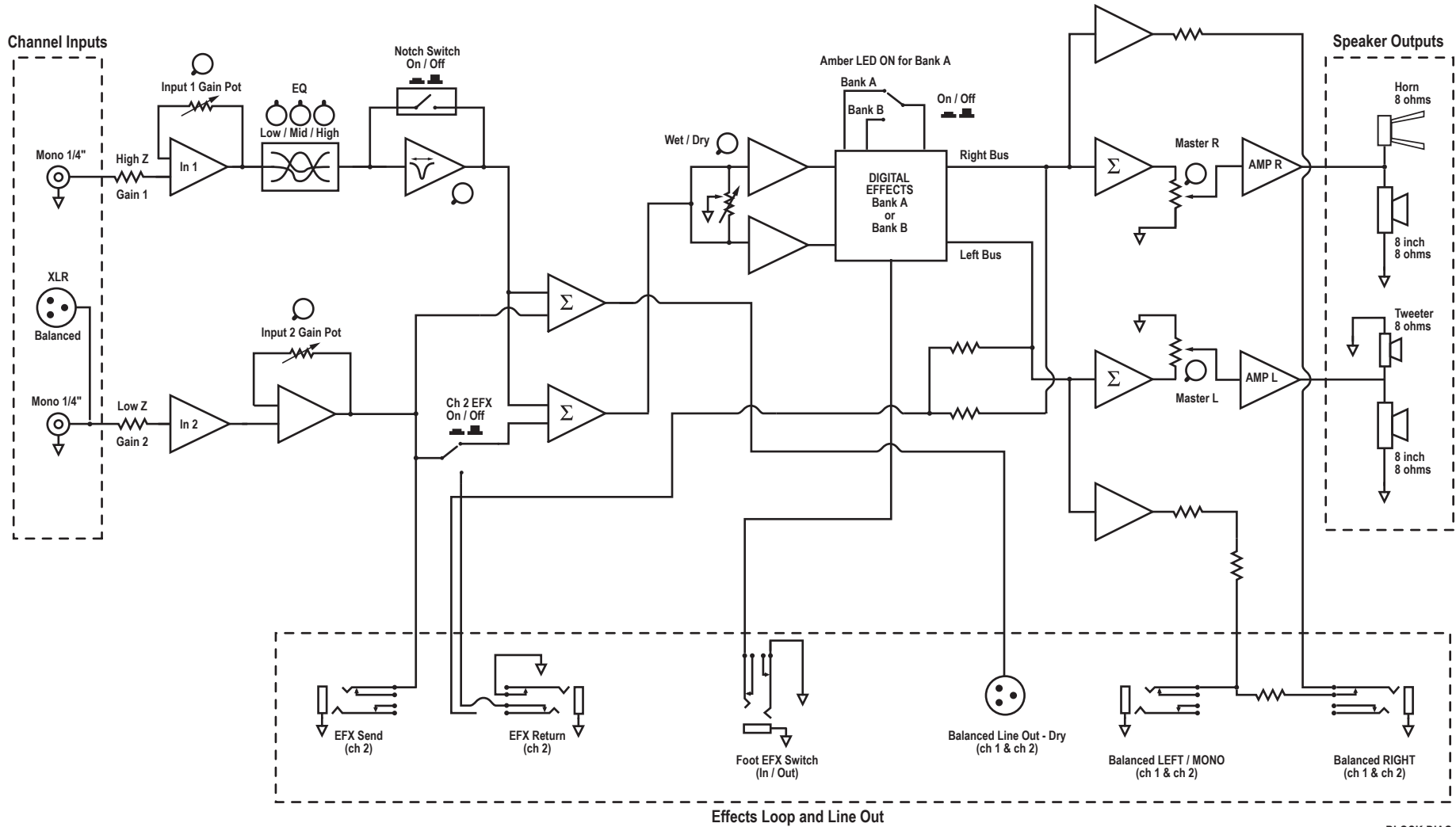
Consultez un technicien qualifié pour l'entretien de votre appareil.

**AP800 Parts List 11/25/2005**

YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
3507	"28 PIN X .6"" I.C DEEP SOCKET"	2	3660	XLR FEML PCB MT HORZ	1	4844	1/4W 1M 5% T&R RES	1
3550	44PIN I.C PLCC SOCKET	1	3923	XLR MALE PCB MT HORZ MTHOLE-V SNAP	1	3640	_3" 8C-26AWG RIB 1/4" S&R 0.1"	1
3557	84 PIN I.C PLCC SOCKET	1	3451	EYELET SMALL 0.089 OD PLATED	7	3608	10" 9C-24AWG RIBBON HITMP 0.1"	1
6994	44PIN I.C PLCC CRYSTAL CODEC	1	3414	INTERNATIONAL PC MOUNT FUSEHOLDER	2	8742	4-40 X 3/8 PAN PH TAPTITE J5500	2
6940	16MHZ CRYSTAL VERT 2-PIN .25"CASE	1	2425	2.0 AMP SLO-BLO .25X1.25 FUSE	1	8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	4
6405	RED 3MM LED 1V7 5MA BRT	2	8451	10" STRAP HANDLE, BLACK METAL ENDCAP	1	8832	6-32 X 1/4 PAN PH TAPTITE J5500	1
5994	YEL 3MM LED 1V9 20MA .12SPCR T&R	1	8604	10-32 T NUT	5	8801	6-32 X 3/8 PAN PH TAPTITE J5500	7
6408	GRN 3MM LED 1V9 5MA FROSTED	1	7395	1" 8R 30W POWERLINE COMP. DRIVER	1	8829	6-32 X 3/8 FLAT PH TAPTITE BO#4 HEA	4
6825	1N4148 75V 0A45 DIODE T&R	9	7396	HORN 6 1/8" X 7 11/16" MOULDED ABS	1	8806	6-32 X 1/2 PAN PH TAPTITE J5500	1
6438	1N4007 400V 1A0 DIODE T&R	4	7417	8R 30W TWEETER PIEZO TLC 1	1	8828	6-32 X 3/4 PAN PH TAPTITE J5500	3
6827	1N5402 200V 3A0 DIODE	4	3745	DUAL XSISTOR PBL SPRING CLEAR ZINC	2	8778	6-32 X 1.25 PN PH TAPTITE ZN	2
6822	1N4745A 16V0 1W0 ZENER 5% T&R	2	3645	AC SOCKET RECEPTACLE WITH 0.250 TAB	1	8876	#6 X 1 1/2 PAN PH TYPE A JS500 BLK	4
6463	1N5251BRL 22V0 0W5 ZENER 5% T&R	1	3803	NYLON SECUR-A-TACH MINI PLASTIC TIE	1	8803	8-32 X 3/8 PAN PHIL TAPTITE J5500	2
6738	MC7805CT TO220 P 5V0 REG V1	1	3810	4" NYLON CABLE TIE	7	8779	1/4-20X 2 1/2 CARRIAGE BOLT ZINC	1
5103	MPSA06 TO92 NPN TRANSISTOR T&R TA	1	8636	BUTTON KNOB FLAT BLACK	3	8767	#8 X 3/4 PAN PHIL TYPE A JS500 BLK	4
5105	MPSA13 TO92 NPN TRANS DARL T&R	3	8642	MAROON KNOB FOR AM WINE RED SERIES	9	8874	8-32 X 1" PAN PHIL TAPTITE J5500	2
5122	J109 TO92 NCH JFET T&R TC	1	3428	8' 3/18 SJT AC LINE CORD REMOVABLE	1	8749	10-32 X 1/2 QDX PH TAPTITE J5500	1
6757	LM3886 IC 85 WATT POWER AMP	2	8261	GE VELVET/MATTE LEXAN .007"X12"X24"	0.5	8753	#10 X 1/2 PAN PH TYPE A JS500 BLACK	16
6840	MC33078P IC DUAL OP AMP	1	8267	SMALL TRAYNOR LOGO EMBOSSED ALUMIN.	1	8756	8 X 3/8 (250 OD,.171 ID)JNY SPACER	24
6882	TL072CP IC FET DUAL OP AMP	2	3672	6 CIR CABLE HOLDER .098	2	8781	#10 X 7/8 FLAT PHIL TYPE A JS500BLK	6
6889	TL074CN IC QUAD O/A T.I. ONLY	4	3674	9 CIR CABLE HOLDER .098	2	8912	10-32 X 1 FLAT SW MS JS500 BLK	2
6943	74HC374N IC OCTAL DTYPE LATCH	1	3676	8 CIR CABLE HOLDER .098	2	8752	10-32 X 2 1/2 PAN PHIL MS JS500	2
6986	27C512 PROM IC YORKVILLE 16X2 PRG	1	8701	4-40 KEPS NUT ZINC	2	8770	1/4-20 X 1 5/16 TRUSS PH MS JS500	3
6992	1365-102 IC DIGITAL REVERB ASIC	1	8800	6-32 KEPS NUT ZINC	8	8905	YORKVILLE PRODUCT SCHEMATIC	1
6993	1250-101 IC SRAM 32KX8	1	8787	8-32 KEPS NUT ZINC	2	3833	8 X 3/8 (250 OD,.171 ID)JNY SPACER	7
6474	10R 3% 0W0 PTC THERMISTOR	1	8845	10-32 PEMNUT C-1032-2-Z1	2	7394	8" 8R 150WPGM SPEAKER WOOFERR	2
5402	_15P 100V 10%CAP T&R BEAD NPO	2	8788	1/4-20 KEPS NUT ZINC	1	8820	#8 FLAT WASHER JS500	4
5405	_27P 200V 5%CAP T&R RAD CER.2"NPO	2	8898	1/4-20 CAGE NUT C79 98142027	3	8473	#10 BLACK CUPWASHER SWF-10BK	3
5199	100P 100V 2%CAP T&R RAD CER.2"NPO	1	3830	TO218 PREGREASED MICA 56-78-2AP	3	3425	DPDT PUSH SW PCMT BREAK B4 MAKE	3
5410	100P 100V 10%CAP T&R BEAD NPO	1	3850	TO-220 PLASTIC TRANSISTOR INSULATOR	1	3698	SPST ROKR SW QUIK 180° AC PWR BL/BL	1
5420	680P 50V 10%CAP T&R BEAD NPO	4	8581	CUSTOM PBL TRANSISTOR SPACER	2	8468	VELCRO STRAP 3/4"X22CM (VELSTRAP)	1
5206	_1N 400V 5%CAP T&R RAD .2"FLM	1	3818	EMI SUPPRESSION FERRITE BEAD T&R	2	CH1402	125VAC DOUBLE INSULATED 168VA T'RD	1
5422	_1N 50V 10%CAP T&R BEAD NPO	3	4597	22AWG STRAN TC WIR JMP	18			
5208	_2N2 400V 5%CAP T&R RAD .2"FLM	1	4599	22AWG SOLID SC WIR T&R JMP	77			
5274	_2N2 200V 5%CAP T&R RAD CER.2"NPO	6	4605	1/8W 10R 5% T&R RES	1			
5426	_2N2 50V 10%CAP T&R BEAD Y5R	2	4675	1/2W 10R 5% T&R RES	4			
6451	_4N7 250V 20%CAP BLK 'Y' 10MM AC	1	4816	1/4W 33R 5% T&R RES	1			
5204	_10N 100V 10%CAP T&R RAD .2"FLM	4	4704	5.0W 33R 5% BLK RES	2			
5300	_10N 50V 10%CAP T&R BEAD X7R	3	4735	1.0W 100R 5% T&R RES	6			
5207	_18N 100V 5%CAP T&R RAD .2"FLM	2	4897	1/4W 120R 5% T&R RES	1			
5210	_22N 100V 10%CAP T&R RAD .2"FLM	1	4909	1/4W 200R 5% T&R RES	1			
6435	_22N 275V 20%CAP BLK 'X2' 15MM AC	1	4977	1/4W 220R 5%MINI T&R RES	2			
5310	_68N 50V 10%CAP T&R BEAD X7R	2	4770	1/4W 249R 1% T&R RES	7			
5228	100N 100V 5%CAP T&R RAD .2"FLM	3	4655	1/2W 330R 5% T&R RES	8			
5314	100N 50V 10%CAP T&R BEAD X7R	17	4855	1/4W 330R 5% T&R RES	1			
5865	100N 250V 10%CAP BLK RAD POLY FLM	1	5010	1/4W 330RX9 5% 10PIN SIP RES	1			
5231	220N 63V 10%CAP T&R RAD .2"FLM	3	4821	1/4W 470R 5% T&R RES	2			
5234	470N 63V 10%CAP T&R RAD .2"FLM	1	4933	1/4W 470R 5% .2"U T&R RES	1			
5255	_1U 63V 20%CAP T&R RAD .2"EL	2	4799	1/4W 562R 1% T&R RES	2			
5256	_1U 63V 5%CAP T&R RAD .2"FLM	6	4823	1/4W 1K 5% T&R RES	9			
5932	_2U2 100V 10%CAP BLK RAD POLY FLM	1	4981	1/4W 1K 5%MINI T&R RES	4			
5259	_4U7 63V 20%CAP T&R RAD .2"EL	3	6110	1/4W 1K0 1%MINI MF T&R RES	2			
5281	_10U 16V 20%CAP T&R RAD .2"NP	4	4854	1/4W 1K2 5% T&R RES	1			
5945	_10U 63V 20%CAP T&R RAD .2"EL	3	4824	1/4W 1K5 5% T&R RES	4			
5260	_22U 50V 20%CAP T&R RAD .2"EL	1	4808	1/4W 2K 5% T&R RES	4			
5961	_33U 16V 20%CAP T&R RAD .2"NP	7	4847	1/4W 2K2 5% T&R RES	1			
5267	100U 25V 20%CAP T&R RAD .2"EL	1	4883	1/4W 2K49 1% T&R RES	10			
5879	100U 16V 20%CAP T&R 8X7MM .2"EL	2	6114	1/4W 2K49 1%MINI MF T&R RES	4			
5630	330U 25V 20%CAP BLK 10X13MM EL	2	4826	1/4W 3K3 5% T&R RES	4			
5887	2200U 50V 20%CAP BLK 18X27MM EL	2	4827	1/4W 4K7 5% T&R RES	2			
4527	ROT GRY 20MM 4BIT ENCODER P31	1	4639	1/4W 4K99 1% T&R RES	2			
4417	_10K 5B LIN 9MM HORIZONTAL P28	2	4893	1/4W 5K1 5% T&R RES	2			
4418	_10K 5C R/A 9MM HORIZONTAL P28	1	4978	1/4W 6K8 5%MINI T&R RES	3			
4420	_50K B LIN 9MM HORIZONTAL P28	3	4800	1/4W 10K0 1% T&R RES	19			
4419	100K B LIN 12MM HORIZONTAL STP27	2	4829	1/4W 10K 5% T&R RES	9			
713	25 X 20 X 50 2 MIL PLASTIC BAG	1	4983	1/4W 10K 5%MINI T&R RES	1			
3804	SNAP ON 1.5" INSULATING BUSHING	1	5011	1/4W _10KX9 2% 10PIN SIP RES	1			
8547	PLASTIC FOOT BLACK, POLYETHYLENE	4	6116	1/4W 10K0 1%MINI MF T&R RES	9			
8570	CORNER, 2 LEGS NOTCHED LIP BLACK	8	4830	1/4W 15K 5% T&R RES	3			
3463	CLIP 110X020 18-22AWG DISCO/INSL	2	4885	1/4W 20K 5% T&R RES	2			
3478	CLIP 205/187X032 18-22AWG DISCO/INS	2	6123	1/4W 20K0 1%MINI MF T&R RES	3			
3489	CLIP 250X032 18-22AWG DISCO/INSL	11	4777	1/4W 21K5 1% T&R RES	1			
3491	CLIP 205/187X020 18-22AWG DISCO/INS	8	4917	1/4W 31K6 1% T&R RES	1			
3601	RING TERMINAL 16AWG WIRE & #8 SCREW	1	4840	1/4W 33K 5% T&R RES	1			
3682	250 MALE PCB TAB REEL	14	4834	1/4W 47K 5% T&R RES	2			
3795	#8 GROUND LUG ZIERICK 505-169	2	4838	1/4W 100K 5% T&R RES	5			
3498	1/4" JCK PCB MT HORZ	4	4942	1/4W 100K 5% .2"U T&R RES	1			
3523	1/4" JCK PCB MT HORZ GOLD T__	2	6120	1/4W 100K 5%MINI T&R RES	2			
3528	1/4" JCK PCB MT HORZ GOLD TR__	1	4796	1/4W 180K 5%MINI T&R RES	2			
3417S	6-32 SCREW TERMINAL PC MNT SNAP-IN	3	6127	1/4W 470K 5%MINI T&R RES	2			

# Block Diagram for AM150

DESIGNED AND MANUFACTURED BY YORKVILLE SOUND



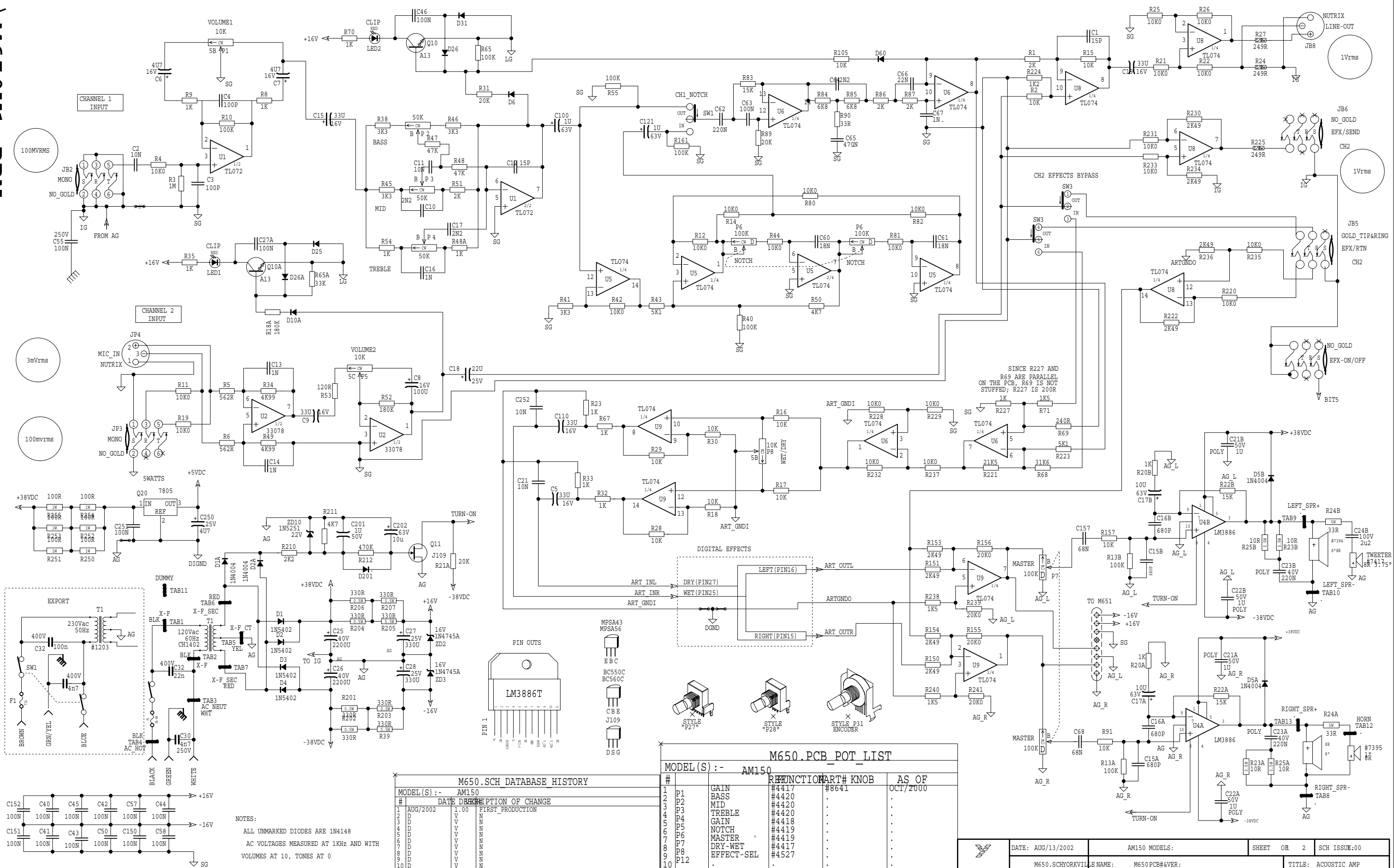


# DIGITAL EFFECTS TABLE

YORKVILLE SOUND • DIGITAL EFFECTS BY A.R.T.

PRESET	DESCRIPTION	BANK A	BANK B
1	Rev / Delay / Chor	0.8ms Room / 60ms Delay / Slow Chorus	2.0s hall / 220ms Delay / Chorus
2	Reverb One	1.0s Room Reverb	2.5s Hall Reverb
3	Flange & Delay	Med Flange - 10% regen & 300ms Delay	Slow Flange - 40% Regen & 420ms Delay
4	Chorus & Pitch	Med Chorus & Octave Down Pitch	Octave Up Pitch & Med chorus
5	Reverb & Flange	0.8ms Room Reverb & Med Flange	1.8s Hall Reverb & Slow Flange
6	Reverb Two	1.2ms Room Reverb	2.5s Hall Reverb
7	Reverb & Chorus	Room Reverb & Slow Chorus	1.8s Hall Reverb & Med Chorus
8	Detuned Chorus	Med Chorus & Detuned Pitch Shift	Slow Chorus & Detuned Pitch Shift
9	Delay & Chorus	345ms Delay & Slow Chorus	250ms Delay & Med - Slow Chorus
10	Pitch Shift	Octave Down Pitch Shift	+5th Pitch Up
11	Slap Delay	70ms Delay	110ms Delay
12	Chorus	Slow Chorus	Medium Chorus
13	Reverb & Delay	1.0s Room Reverb & 70ms delay	2.4 Hall Reverb & 220ms Delay
14	Double	40ms doubling delay	60ms Doubling Delay
15	Flange	Med Flange - 25%Regen	Slow Flang - 50% Regen
16	Delay	350ms Delay - 15% Regen	450ms Delay - 15% Regen

32 PRESET 16BIT DIGITAL EFFECTS PROCESSOR



M650.PCB\_POT\_LIST

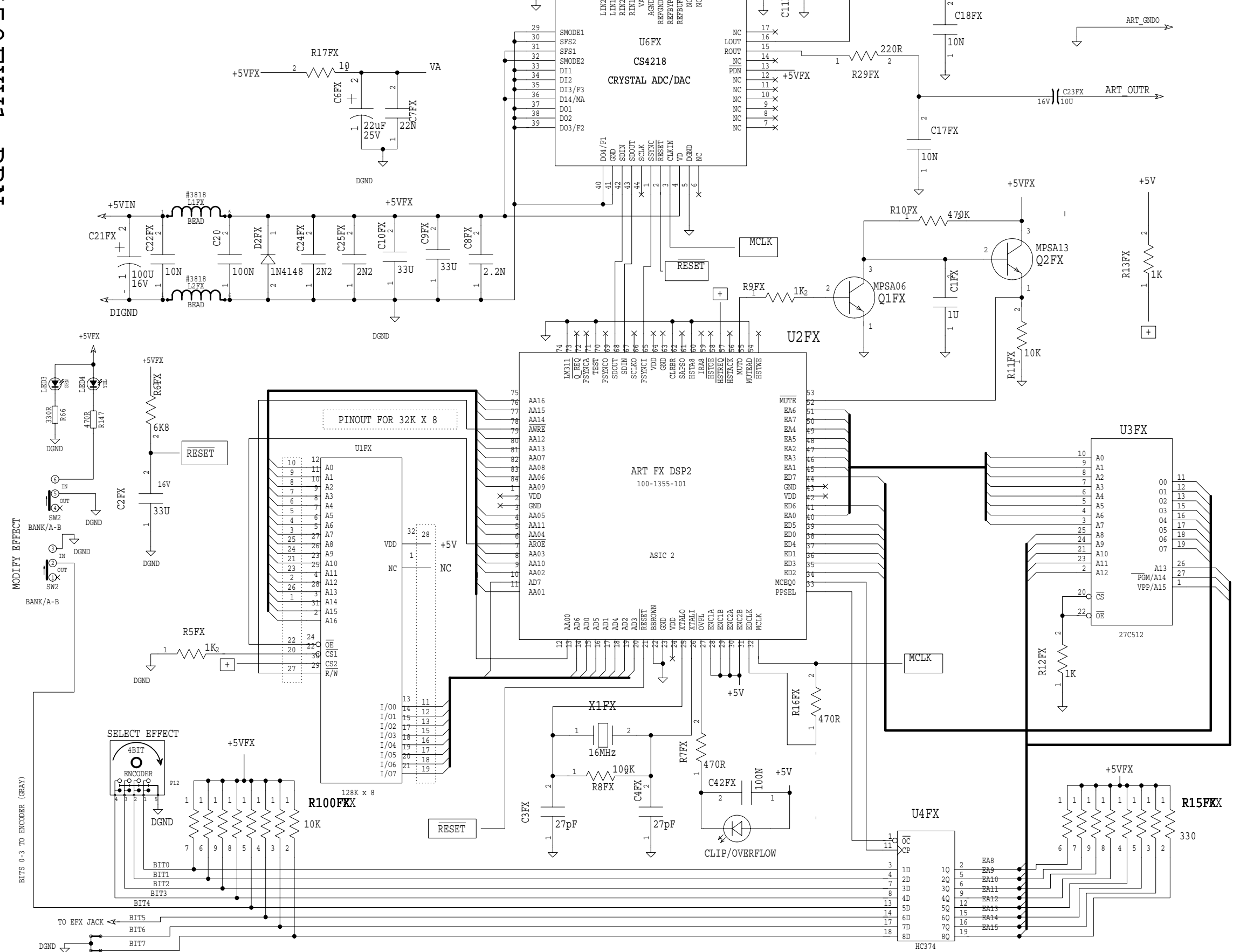
MODEL(S) :-	#	FUNCTION	PART#	AS OF
AM150	1	GAIN	#4417	OCT/2000
	2	BASS	#4420	
	3	MID	#4420	
	4	TREBLE	#4420	
	5	GAIN	#4418	
	6	NOTCH	#4419	
	7	MASTER	#4419	
	8	DRY-WET	#4417	
	9	EFFECT-SEL	#4527	
	10			

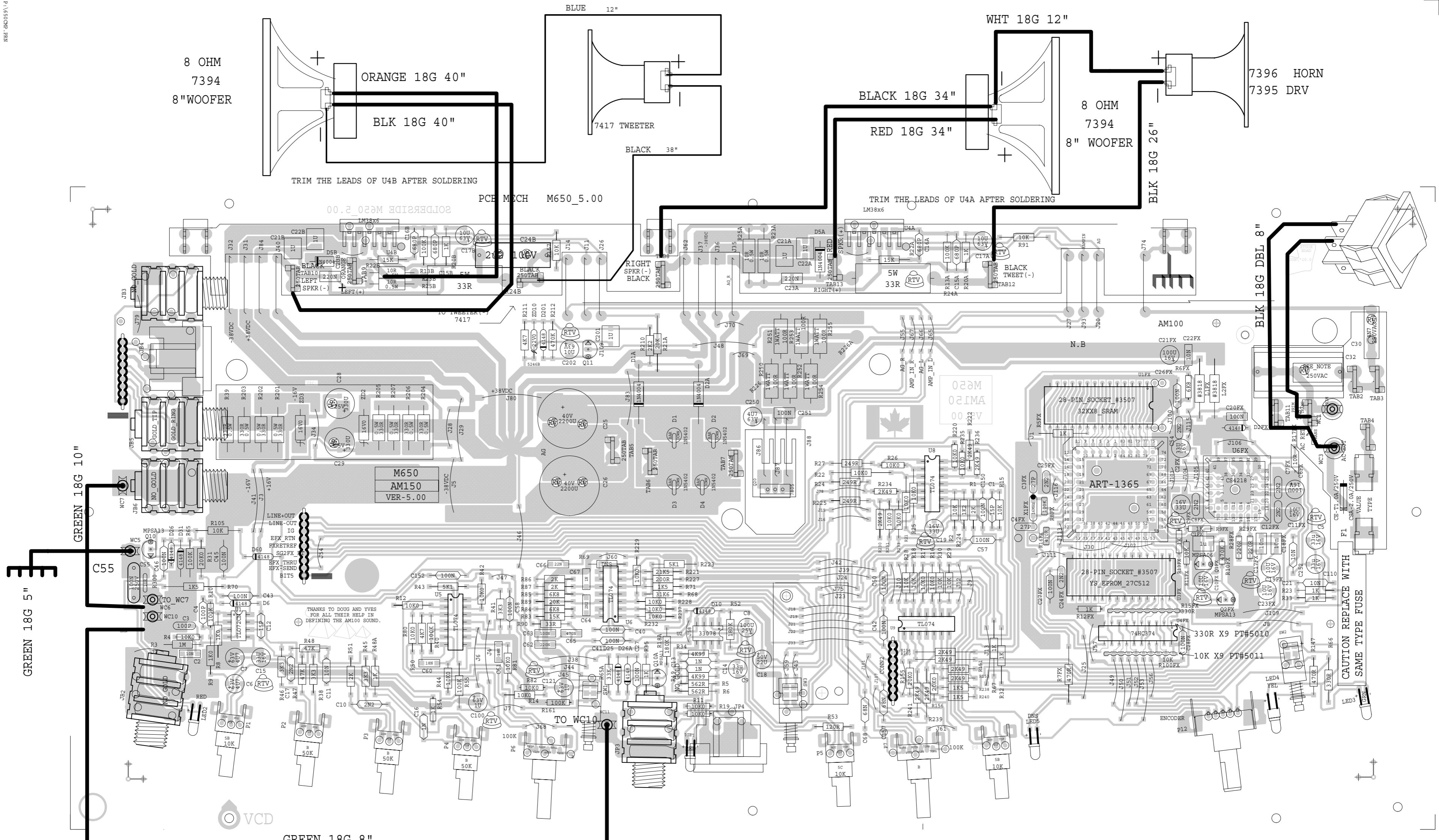
M650.SCH DATABASE HISTORY

MODEL(S) :-	#	DATE	DESCRIPTION OF CHANGE
AM150	1	AUG/2002	1.00 FIRST PRODUCTION
	2		
	3		
	4		
	5		
	6		
	7		
	8		
	9		
	10		

U:\M650FX\V1.PRN

# DIGITAL EFFECTS SECTION





GREEN 18G 5"

GREEN 18G 10"

GREEN 18G 8"

M650.PCB DATABASE HISTORY

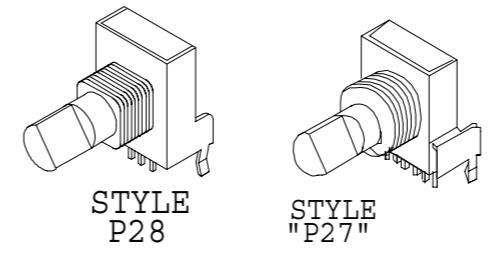
#	DATE	VER#	DESCRIPTION OF CHANGE
1	JUN/2002	1.P1	FIRST PROTOTYPE
2	JAN/15/03	2.00	PC#6584 YEL-LED#6407->#5994
3	APR/17/03	3.00	FIX MISSING TRACE @ LED3
4	SEP/04/03	4.00	PC#6606 ENLARGE -38V TRACE & MASK
5	NOV/23/04	5.00	PC#6771 #3571->#3507 SKT FOR #6993 SRAM
6	JUN/16/05	5.00	PC#6932 REDO SOLDERMASK
7			
8			
9			
10			
11			
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M650.PCB POT LIST

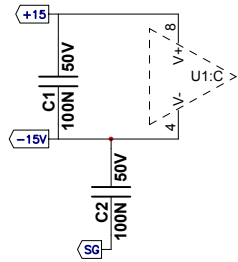
REF	FUNCTION	PART#	KNOB	AS OF
P1	GAIN CH1	4417	8641	JUN/2002
P2	GAIN CH2	4419	8641	
P3, P4	BASS, MID, TREB	4420	8641	N
P6, P7	NOTCH, MASTER	4419	8641	N
P8	DRY/WET	4417	8641	N
P12	EFFECTS	4527	8641	N

PRODUCTION NOTES

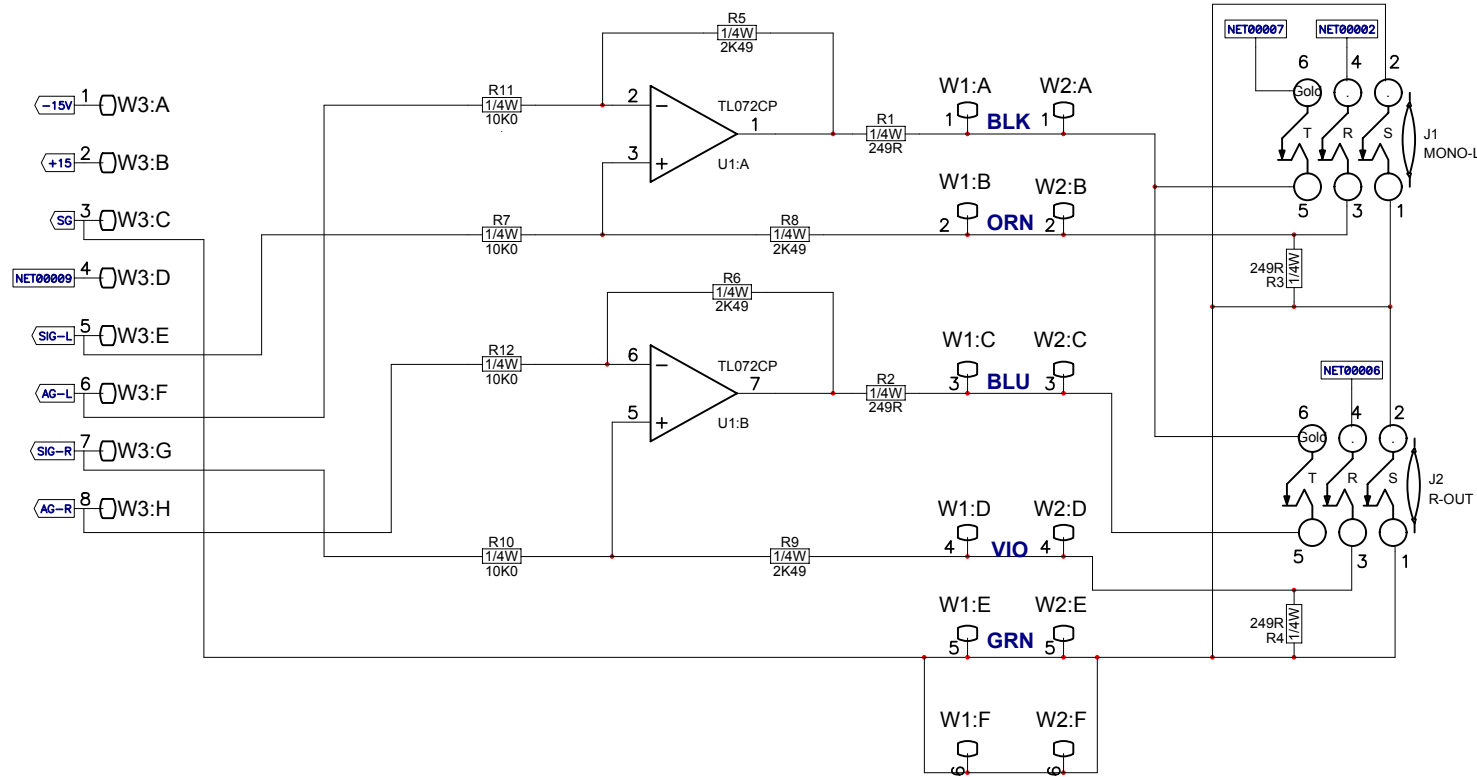
- 1) RTV ALL 0.2" ELECTROLYTIC CAPS. RTV CAPS TO SOCKET IN DIG. EFFECTS AREA
- 2) DO NOT STUFF LEDS, R69
- 3) TRIM THE LEADS OF U4A AND U4B AFTER SOLDERING
- 4) FOR CE USE 100N 250V PT#5242 FOR C32 AC CAP
- 5) FOR NA USE 22N 275V PT#6435 FOR C32 AC CAP
- 6) DO NOT CUT THE LEADS OF D1, D2, D3, D4 BEND OVER FLAT TO BOARD
- 7) ADD M651 TO M650 BEFORE WAVE SOLDERING





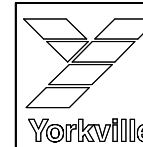


AG = AMP- GND  
SG = SIGNAL GND



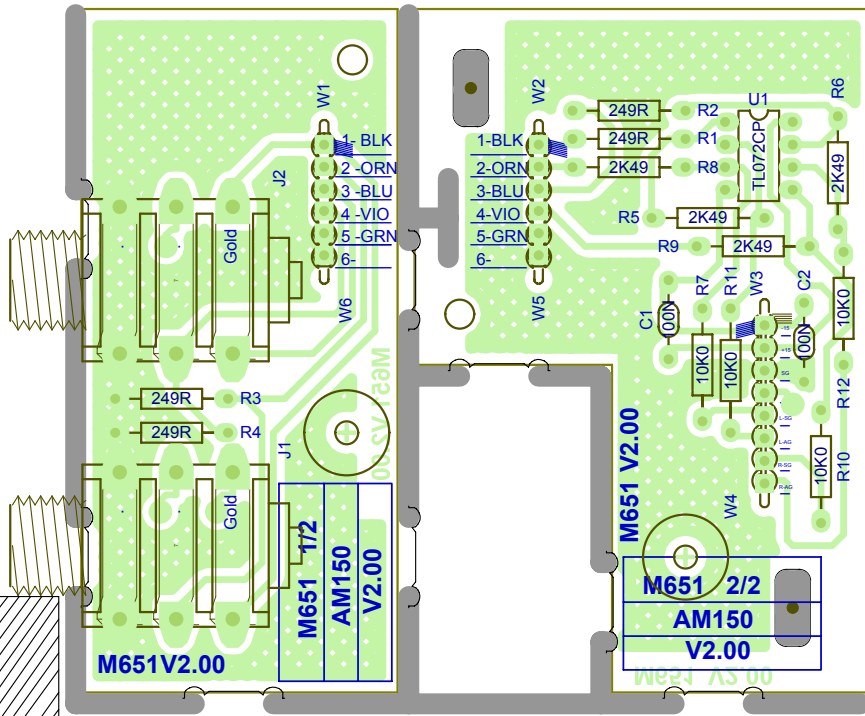
M651.PCB\_DATABASE\_HISTORY

MODEL(S):- AM 150			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG-14-2002	1.00	FIRST PRODUCTION
2	AUG-08-2005	2.00	AH, PC#6932, ADDING TARGET, INCREASE MASK
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



Product **AM150**

Sheet1	PCB# M651	Sheet 1 of 2
Date: Wed Aug 10, 2005		Rev:V2.00
Filename: M651-2V00sch.sch2002		



M651.PCB_DATABASE_HISTORY			
MODEL(S):-		AM 150	
#	DATE	VER#	DESCRIPTION OF CHANGE
1	AUG-14-2002	1.00	FIRST PRODUCTION
2	AUG-08-2055	2.00	AH, PC#6932, ADDING TARGETS, INCREASING MASK
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

## PRODUCTION NOTES

- 1-- SOLDER AND TEST M651 BOARD FIRST
- 2-- ADD M651 BOARD TO M650 BOARD AND WAVE SOLDER.

**Top Assy M651 V2.00**

**StepAndRepeat=X4@3550:Y3@3125**

BLANK SIZE=15225 X 11150

