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Quality and Innovation Since 1963
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SERVICE MANUAL



AP 312 320 WATT STEREO MIXER

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AP312 Parts List 10/21/99

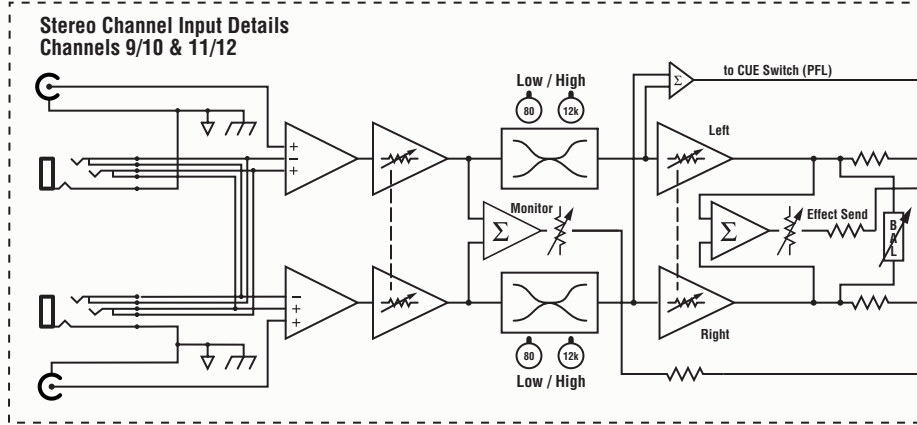
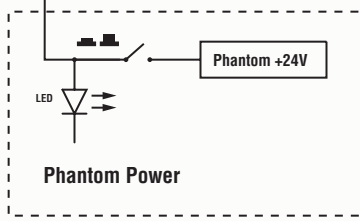
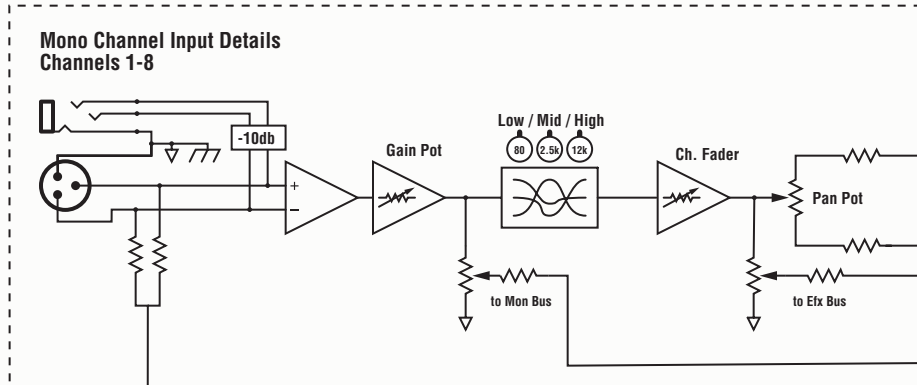
AP312 Parts List 10/21/99

YS #	Description	Qty.	YS #	Description	Qty.	YS #	Description	Qty.
3507	28 PIN X .6" I.C DEEP SOCKET	1	5317	180N 50V 10%CAP T&R BEAD X7R	2	4645	1/8W 220R0 1%FLAME PROOF T&R RES	4
3550	44PIN PLCC SOCKET	1	5233	330N 63V 5%CAP T&R RAD .2"FLM	2	4857	1/4W 220R 5% T&R RES	11
3557	84PIN PLCC SOCKET	1	5240	680N 63V 10%CAP T&R RAD .2"FLM	2	4977	1/4W 220R 5%MINI T&R RES	4
3571	28 PIN X .6" I.C. SOCKET	1	5255	1U 63V 20%CAP T&R RAD .2"EL	2	4606	1/8W 249R 2%FLAME PROOF T&R RES	24
6994	CRYSTAL CODEC 44PIN PLCC	1	5256	1U 63V 5%CAP T&R RAD .2"FLM	3	4986	1/4W 270R 5%MINI T&R RES	4
6940	16MHZ CRYSTAL VERT 2-PIN .25"CASE	1	5257	2U2 63V 20%CAP T&R RAD .2"EL	4	4780	1/8W 274R 1%FLAME PROOF T&R RES	4
5991	RED 3MM LED 1V9 20MA W/STOP T&R	4	5259	4U7 63V 20%CAP T&R RAD .2"EL	3	5010	1/4W 330RX9 5% 10PIN SIP RES	1
6400	YEL 3MM LED 1V9 6MA HIGHEFF	2	5282	10U 16V 20%CAP T&R 5X7MM .2"NP	5	4950	1/4W 390R 5% .2"U T&R RES	4
6401	GRN 3MM LED 1V9 6MA HIGHEFF	6	5260	22U 50V 20%CAP T&R RAD .2"EL	13	4821	1/4W 470R 5% T&R RES	9
6403	ORN 3MM LED 1V7 5MA	15	5631	22U 50V 20%CAP T&R 5X7MM .2"EL	13	4933	1/4W 470R 5% .2"U T&R RES	4
6408	GRN 3MM LED 1V9 5MA FROSTED	1	5961	33U 16V 20%CAP T&R RAD .2"NP	41	4980	1/4W 470R 5%MINI T&R RES	12
6425	BAV21 200V 0A25 DIODE T&R	4	5267	100U 25V 20%CAP T&R RAD .2"EL	3	4799	1/4W 562R 1% T&R RES	24
6434	6A2 200V 6A0 DIODE	4	5879	100U 16V 20%CAP T&R 8X7MM .2"EL	26	4922	1/4W 620R 5% .2"U T&R RES	22
6438	1N4004 400V 1A0 DIODE T&R	13	5914	100U 63V 20%CAP BLK 10X13MM EL	4	4873	1/4W 680R 5% T&R RES	2
6825	1N4148 75V 0A45 DIODE T&R	81	5630	330U 25V 20%CAP BLK 10X13MM EL	1	4923	1/4W 680R 5% .2"U T&R RES	5
6733	BAT85 30V 0A2 DIODE SCHTKY T&R	8	5887	2200U 50V 20%CAP BLK 18X27MM EL	1	4924	1/4W 750R 5% .2"U T&R RES	4
6439	1N5225B 3V0 0W5 ZENER 5% T&R	2	5894	3900U 80V 20%CAP BLK 30X40MM ELS	4	4925	1/4W 820R 5% .2"U T&R RES	2
6440	1N750ARL 4V7 0W5 ZENER 5% T&R	4	4581	ROT GRY 18MM 4BIT ENCODER P23	2	5016	1/8W 820R 5%FLAME PROOF T&R RES	2
6436	1N753ARL 6V2 0W5 ZENER 5% T&R	1	4537	10K B LIN 9MM DETENT P25	26	4892	1/4W 910R 5% T&R RES	2
6450	1N5242B 12V0 0W5 ZENER 5% T&R	1	4566	10K B LIN 9MM P25	21	4823	1/4W 1K 5% T&R RES	1
6824	1N5246B 16V0 0W5 ZENER 5% T&R	4	4567	20K 5C R/A 9MM P25	8	4913	1.0W 1K 5% T&R RES	4
6463	1N5251BRL 22V0 0W5 ZENER 5% T&R	1	4570	20K 5C R/A 12MM STEREO P21	2	4981	1/4W 1K 5%MINI T&R RES	15
6426	1N5254B 27V0 0W5 ZENER 5% T&R	1	4545	50K LIN 12MM STEREO DETENTP21	4	4996	1/4W 1K070 0.1% *** T&R RES	2
6738	MC7805CT TO220 P 5V0 REG V1	1	4546	50K B LIN 9MM DETENT P25	8	4585	1/4W 1K2 5%MINI T&R RES	9
6856	NJM7815FA TO220 P 15V0 REG IS V1	1	4568	50K B LIN 9MM P25	3	4854	1/4W 1K2 5% T&R RES	12
6857	NJM7915FA TO220 N 15V0 REG IS V2	1	4487	10K 10A AUD 60MM STEREO S01	3	4718	5.0W 1K5 5% BLK RES	4
5101	BC550C TO92 NPN TRAN T&R TB	2	4489	10K B LIN 60MM S01	8	4824	1/4W 1K5 5% T&R RES	1
5102	BC560C TO92 PNP TRAN T&R TB	19	3996	20K LIN 30MM DETENT S12	18	4988	1/4W 1K5 5%MINI T&R RES	14
5103	MPSA06 TO92 NPN TRAN T&R TA	6	4488	50K B LIN 60MM S01	2	5017	1/8W 1K5 5%FLAME PROOF T&R RES	4
5104	MPSA56 TO92 PNP TRAN T&R TA	7	4529	470R TRIM POT	2	4808	1/4W 2K 5% T&R RES	6
5109	MPSA43 TO92 NPN TRAN TA	2	2459	7.0 AMP CIRCUIT BREAKER	1	4946	1/4W 2K 5% .2"U T&R RES	5
5110	MPSA93 TO92 PNP TRAN TA	4	714	1.5 MIL X 36" CLEAR POLY SHEETING	4	6113	1/4W 2K 5%MINI T&R RES	22
5105	MPSA13 TO92 NPN DARL T&R TA	12	3819	5UH COIL 18AWG R000 AIR CORE	2	4847	1/4W 2K2 5% T&R RES	5
5122	J109 TO92 NCH JFET T&R TC	2	3478	CLIP 205/187X032 18-22AWG DISCO/INS	2	4936	1/4W 2K7 5% .2"U T&R RES	1
6808	MJE15032 TO220 NPN TRAN TE	2	3489	CLIP 250X032 18-22AWG DISCO/INSL	2	4626	1/2W 3K3 5% T&R RES	1
6809	MJE15033 TO220 PNP TRAN TE	2	3490	CLIP 250X032 14-16AWG DISCO/INSL	11	6136	1/4W 3K3 5%MINI T&R RES	3
6913	2N6045 BD649TO220 NPN TRAN DARL TE	1	3529	CLIP 250X032 TN 18-22AWG MALE	1	4793	1/4W 4K590 0.1% *** T&R RES	2
6915	TIP102 TO220 NPN TRAN DARL TE	1	3601	RING TERMINAL 16AWG WIRE & #8 SCREW	2	4827	1/4W 4K7 5% T&R RES	29
6988	MJL21194 TO3P NPN TRAN TK	2	3682	250 MALE PCB TAB BULK CARTRIDGE	12	4982	1/4W 4K7 5%MINI T&R RES	18
6991	MJL21193 TO3P PNP TRAN TK	2	3497	1/4" JCK PCB MT VERT ISO	1	6128	1/4W 4K99 1%MINI MF T&R RES	54
6754	NJM072BL IC DUAL OPAMP INLINE	1	3498	1/4" JCK PCB MT HORZ	4	4978	1/4W 6K8 5%MINI T&R RES	6
6798	MC4741CP IC QUAD OP AMP	1	3921	1/4" JCK PCB MT VERT STER RT SWT	21	4801	1/4W 6K98 1% T&R RES	4
6840	MC33078P IC DUAL OP AMP	13	3466	RCA DUAL PCB MT VERT GOLD 24MM	2	4887	1/4W 7K5 5% T&R RES	20
6867	LM339N IC QUAD COMPARATOR	2	6956	SPKON 4C PCB MT HORZ GRY #4	2	4863	1/4W 8K2 5% T&R RES	3
6882	TL072CP IC FET DUAL OP AMP	21	3925	XLR FEML PCB MT VERT 24MM U-CONT	8	4990	1/4W 8K2 5%MINI T&R RES	5
6745	LM13600N IC XCONDUCTANCE AMP	1	3451	EYELET SMALL 0.089 OD PLATED	53	4762	1/4W 9K760 0.1% *** T&R RES	2
6943	74HC374N IC OCTAL DTYPE LATCH	1	2486	1.5 AMP SLO-BLO T&R FUSE	2	4800	1/4W 10K0 1% T&R RES	8
6962	74HC30 IC 8-INPUT NAND GATE	1	3861	FAN 80MM X 80MM 30CFM 12VDC 230MA	1	4829	1/4W 10K 5% T&R RES	17
6981	27C512 PROM IC YORKVILLE 16X16 PRG	1	3692	HEATSINK THERMALLOY 6079-PB	1	4940	1/4W 10K 5% .2"U T&R RES	3
6992	1365-102 IC DIGITAL REVERB ASIC	1	3745	DUAL XSISTOR PBL SPRING PLATE ZN	5	4983	1/4W 10K 5%MINI T&R RES	41
6993	1250-101 IC SRAM 32KX8	1	8682	#4 TEFLON WASHER .125ID .281OD .031	2	5011	1/4W 10KX9 2% 10PIN SIP RES	1
6477	100K 5% 1/4W THERMISTOR T&R 0.2	2	3821	HEYCO #1200 STRAIN RELIEF	1	6116	1/4W 10K0 1%MINI MF T&R RES	1
5200	10P 200V 5%CAP T&R RAD CER.2"NPO	2	3596	36PIN BREAKAWAY .15GOLD .100	0.333	4856	1/4W 12K 5% T&R RES	3
5405	27P 200V 5%CAP T&R RAD CER.2"NPO	3	3597	12 CIR HDR BOT ENTRY 0.1" GOLD	1	4775	1/4W 14K0 1% T&R RES	2
5203	47P 100V 2%CAP T&R RAD CER.2"NPO	3	3638	12 CIR CABLE HOLDER .098	3	4979	1/4W 15K 5%MINI T&R RES	8
5408	47P 100V 10%CAP T&R BEAD NPO	2	5989	4 CIR CABLE HOLDER .098	2	4831	1/4W 18K 5% T&R RES	9
5199	100P 100V 2%CAP T&R RAD CER.2"NPO	4	8800	6-32 KEPS NUT ZINC	5	4954	1/4W 18K 5% .2"U T&R RES	1
5196	150P 100V 2%CAP T&R RAD CER.2"NPO	6	8787	8-32 KEPS NUT ZINC	1	6125	1/4W 18K 5%MINI T&R RES	8
5414	270P 50V 10%CAP T&R BEAD NPO	2	8845	10-32 PEMNUT SS-032-2-Z1	6	6123	1/4W 20K0 1%MINI MF T&R RES	2
5417	330P 50V 10%CAP T&R BEAD NPO	2	8788	1/4-20 KEPS NUT ZINC	1	4832	1/4W 22K 5% T&R RES	4
5206	1N 400V 5%CAP T&R RAD .2"FLM	14	3866	ELASTOMER PAD TSIL 3 1.2X6.0	3	6129	1/4W 27K 5%MINI T&R RES	2
5273	1N5 200V 5%CAP T&R RAD CER.2"NPO	31	3580	12 CIR WAFER WLCK VT 0.1"	1	4840	1/4W 33K 5% T&R RES	7
5274	2N2 200V 5%CAP T&R RAD CER.2"NPO	16	3818	EMI SUPPRESSION FERRITE BEAD T&R	2	6122	1/4W 33K 5%MINI T&R RES	56
5209	4N7 250V 5%CAP T&R RAD .2"FLM	2	4597	22AWG STRAN TC WIR JMP	63	4794	1/4W 37K90 0.1% *** T&R RES	2
6451	4N7 250V 20%CAP BLK 'Y' 10MM AC	1	4599	22AWG SOLID SC WIR T&R JMP	293	4853	1/4W 39K 5% T&R RES	8
5433	5N6 50V 10%CAP T&R BEAD X7R	2	5299	24AWG SOLID SC WIR RAD JMP	33	4908	1/4W 45K3 1% T&R RES	4
5272	6N8 100V 5%CAP T&R RAD .2"FLM	8	4719	5.0W 0R18 5% BLK RES	4	4834	1/4W 47K 5% T&R RES	9
5204	10N 100V 10%CAP T&R RAD .2"FLM	9	4703	2.0W 2R 5% T&R RES	4	6119	1/4W 47K 5%MINI T&R RES	7
5205	15N 100V 10%CAP T&R RAD .2"FLM	1	4666	1/2W 4R7 5% T&R RES	4	4835	1/4W 56K 5% T&R RES	8
5207	18N 100V 5%CAP T&R RAD .2"FLM	2	4605	1/8W 10R 5% T&R RES	3	4928	1/4W 56K 5% .2"U T&R RES	2
5210	22N 100V 10%CAP T&R RAD .2"FLM	9	4610	1/4W 10R 2%FLAME PROOF T&R RES	1	4848	1/4W 62K 5% T&R RES	6
6435	22N 275V 20%CAP BLK 'X2' 15MM AC	1	4686	1.0W 10R 5%FLAME PROOF T&R RES	4	4836	1/4W 68K 5% T&R RES	2
5222	33N 100V 10%CAP T&R RAD .2"FLM	5	4930	1/4W 10R 5% .2"U T&R RES	4	4760	1/4W 75K 5% T&R RES	2
5306	33N 50V 10%CAP T&R BEAD X7R	1	4709	5.0W 22R 5% BLK RES	1	4586	1/4W 82K 5%MINI T&R RES	8
5223	39N 100V 10%CAP T&R RAD .2"FLM	1	4995	1/4W 33R2 1%FLAME PROOF T&R RES	6	4837	1/4W 82K 5% T&R RES	6
5224	47N 100V 10%CAP T&R RAD .2"FLM	4	6134	1/4W 47R 5%MINI T&R RES	1	4929	1/4W 82K 5% .2"U T&R RES	4
5226	68N 100V 5%CAP T&R RAD .2"FLM	12	4608	1/8W 75R 2%FLAME PROOF T&R RES	4	4942	1/4W 100K 5% .2"U T&R RES	4
5228	100N 100V 5%CAP T&R RAD .2"FLM	74	4602	1/8W 100R 5% T&R RES	16	4851	1/4W 120K 5% T&R RES	2
5314	100N 50V 10%CAP T&R BEAD X7R	12	4852	1/4W 100R 5% T&R RES	2	4796	1/4W 180K 5%MINI T&R RES	1
5230	180N 63V 5%CAP T&R RAD .2"FLM	2	4984	1/4W 150R 5%MINI T&R RES	4	4886	1/4W 200K 5% T&R RES	2

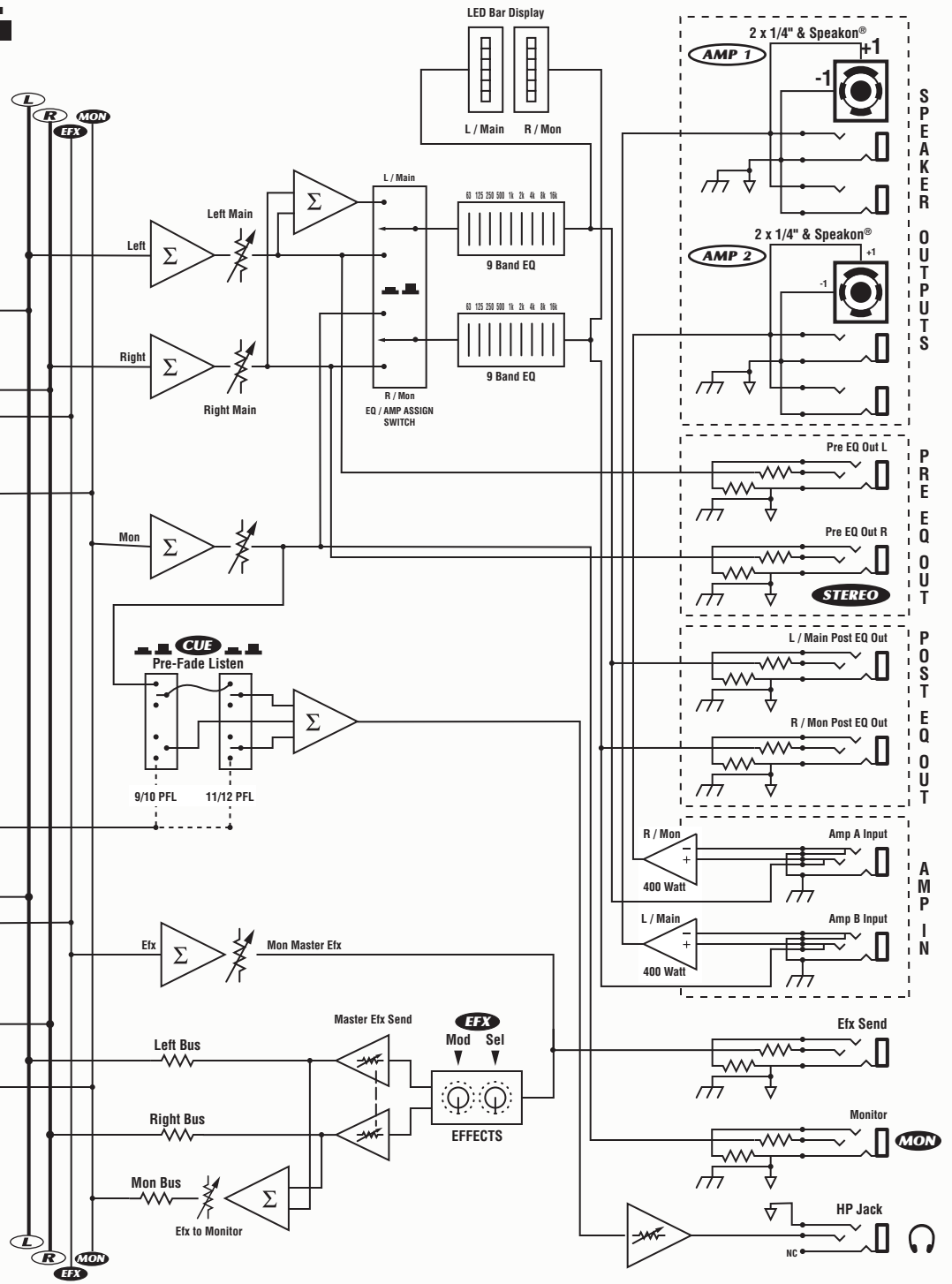
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4843	1/4W 470K 5% T&R RES	2						
6127	1/4W 470K 5%MINI T&R RES	1						
4844	1/4W 1M 5% T&R RES	1						
4948	1/4W 1M 5% .2"U T&R RES	6						
4845	1/4W 2M2 5% T&R RES	1						
4888	1/4W 4M7 5% T&R RES	9						
4951	1/4W 4M7 5% .2"U T&R RES	4						
4751	1/4W 22M 5% T&R RES	2						
3666	.2" 4C-26AWG RIBBON CABLE 0.1"	2						
3623	17" 4C-26AWG RIBBON CABLE 0.1"	1						
3665	.2" 8C-26AWG RIBBON CABLE 0.1"	1						
3639	1.7"12C-26AWG RIBBON 0.25"S&R 098	1						
3740	15" 12C-26AWG RIB 1 W/LCK HDR 098	1						
9006	20GA SATINCOAT STEEL 4 X 8 SHEET	4						
9020	18GA COLD ROLLED STEEL 4X8 SHEET	5.3						
9150	.081" 48X96 UTILITY ALUMINUM	1.28						
9251	.063" 48X96 5052H32 ALUM VINYL LAMI	3						
9564	HEATSINK (RIDGE) AP812/818/DJM806	0.766						
9583	BLACK 'U' EXTRUSION DIE #943	0.166						
8842	#4 X 5/16 PAN QUAD TYPE A JS500 BLK	18						
8832	6-32 X 1/4 PAN PH TAPTITE JS500	8						
8807	6-32 X 5/16 PAN PH MS JS500	18						
8801	6-32 X 3/8 PAN PH TAPTITE JS500	9						
8829	6-32 X 3/8 FLAT PH TAPTITE BO#4 HEA	24						
8828	6-32 X 3/4 PAN PH TAPTITE JS500	6						
8823	6-32 X 1 PAN PH TAPTITE JS500	2						
8803	8-32 X 3/8 PAN QUAD TAPTITE JS500	4						
8999	8-32 X 5/8 PAN PH TAPTITE JS500	10						
8785	#8 X 3/4 OVAL PH TYPE A JS500 BLACK	4						
8815	8-32 X 3/4 PAN PH TAPTITE JS500	3						
8874	8-32 X 1" PAN PHIL TAPTITE JS500	8						
8749	10-32 X 1/2 QDX PH TAPTITE JS500	4						
8753	#10 X 1/2 PAN PH TYPE A ZINC	6						
8821	10-16 X 1 3/32 TYPE B HEX W/SLOT BL	4						
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	8						
3751	SNAP IN 5/16 SPACER RICHCO	11						
3744	SNAP IN .375 SPACER RICHCO	7						

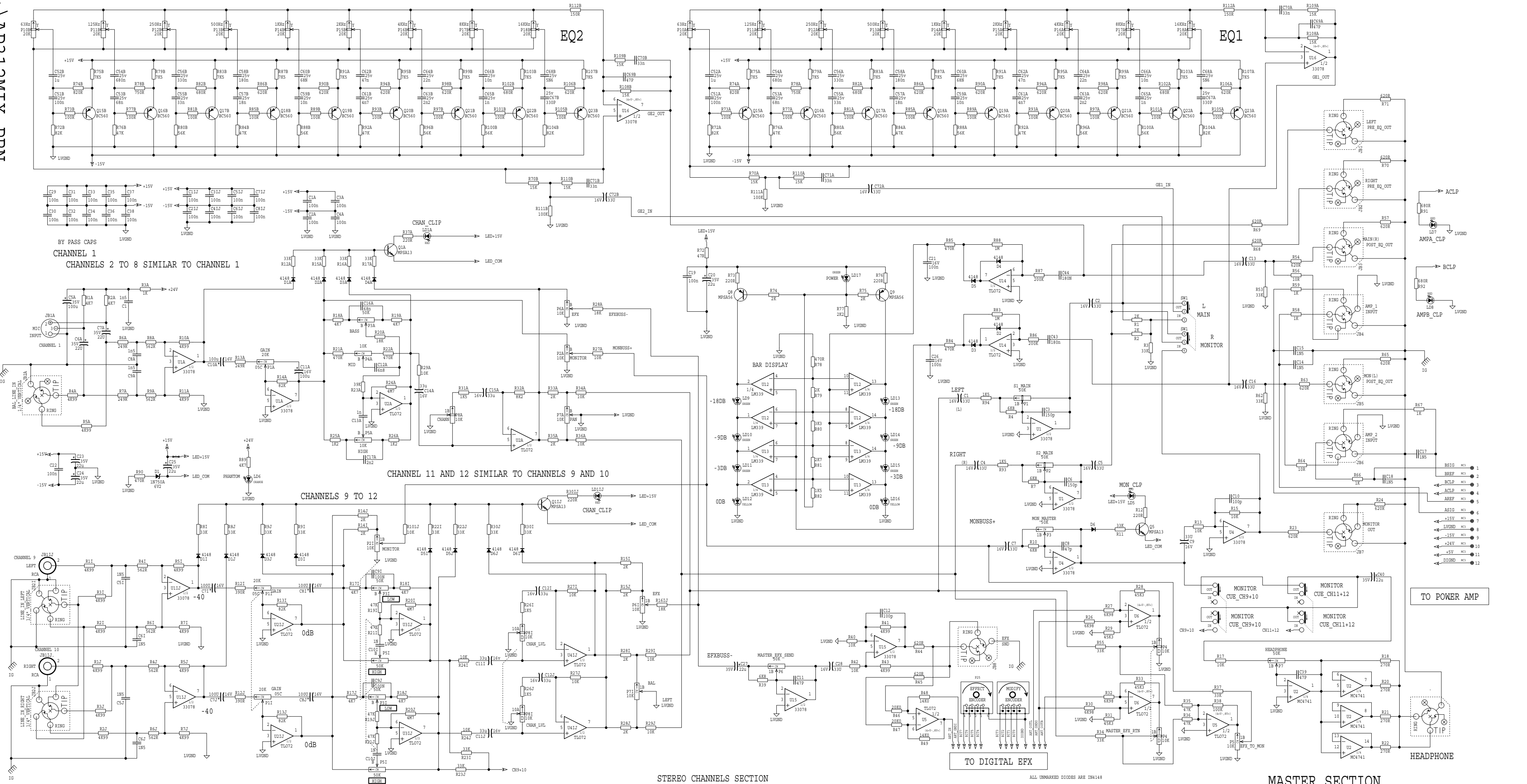
Block Diagram for AP312

DESIGNED & MANUFACTURED BY YORKVILLE SOUND



ap312blk.pdf June /98 Version 1.0





M1100IN.SCH DATABASE HISTORY

MODEL(S) :-	AP312		
#	DATE	VER#	DESCRIPTION OF CHANGE
1	MAY/07/97	1.50	PC#5370_ADD_C17A
2	D	N	N
3	D	N	N
4	D	N	N
5	D	N	N
6	D	N	N
7	D	N	N
8	D	N	N
9	D	N	N
10	D	N	N

M1101.SCH DATABASE HISTORY

MODEL(S) :-	AP312		
#	DATE	VER#	DESCRIPTION OF CHANGE
1	MAY/07/97	1.50	PC#5370_R211/R21J 18K-347K
2	D	N	ADD 150R(R112A,B) TO EQ
3	NOV/15/99	1.60	PC#E140_HEADPHONE_I/K CHANGED
4	D	N	N
5	D	N	N
6	D	N	N
7	D	N	N
8	D	N	N
9	D	N	N
10	D	N	N

M1100/1101.PCB POT LIST

MODEL(S) :-	AP312				
#	REF	FUNCTION	PART#	KNOB	AS OF
1	P1A	CHAN GAIN	#4567	#8392	JAN/2000
2	P2A	CHAN MON SND	#4566	#8394	.
3	P5A	CHAN HIGH	#4737	#8395	.
4	P4A	CHAN MID	#4537	#8395	.
5	P3A	CHAN LOW	#4546	#8395	.
6	P6A	CHAN_EFX_SND	#4566	#8393	.
7	P7A	PAN	#4537	#8392	.
8	P8A	CHAN VOLUME	#4489	#8680	.
9	P10-P18	EO	#3996	NO KNOB	.
10	P3	MON_MASTER	#4568	#8394	.

M1100/1101.PCB POT LIST (continued)

MODEL(S) :-	AP312				
#	REF	FUNCTION	PART#	KNOB	AS OF
11	P6	MAS EFX_SND	#4568	#8393	JAN/2000
12	P5	EFX_TO_MON	#4566	#8393	D
13	P4	EFX_RETURN	#4487	#8680	D
14	P1	MAIN L	#4488	#8680	D
15	P2	MAIN R	#4488	#8680	D
16	P7	HEADPHONE	#4568	#8392	D
17	P11	SELECT	#4561	#8397	D
18	P12	WOLFFY	#4561	#8397	D
19	D	K	N	K	D
20	D	F	N	K	D

MASTER SECTION

STEREO CHANNELS SECTION

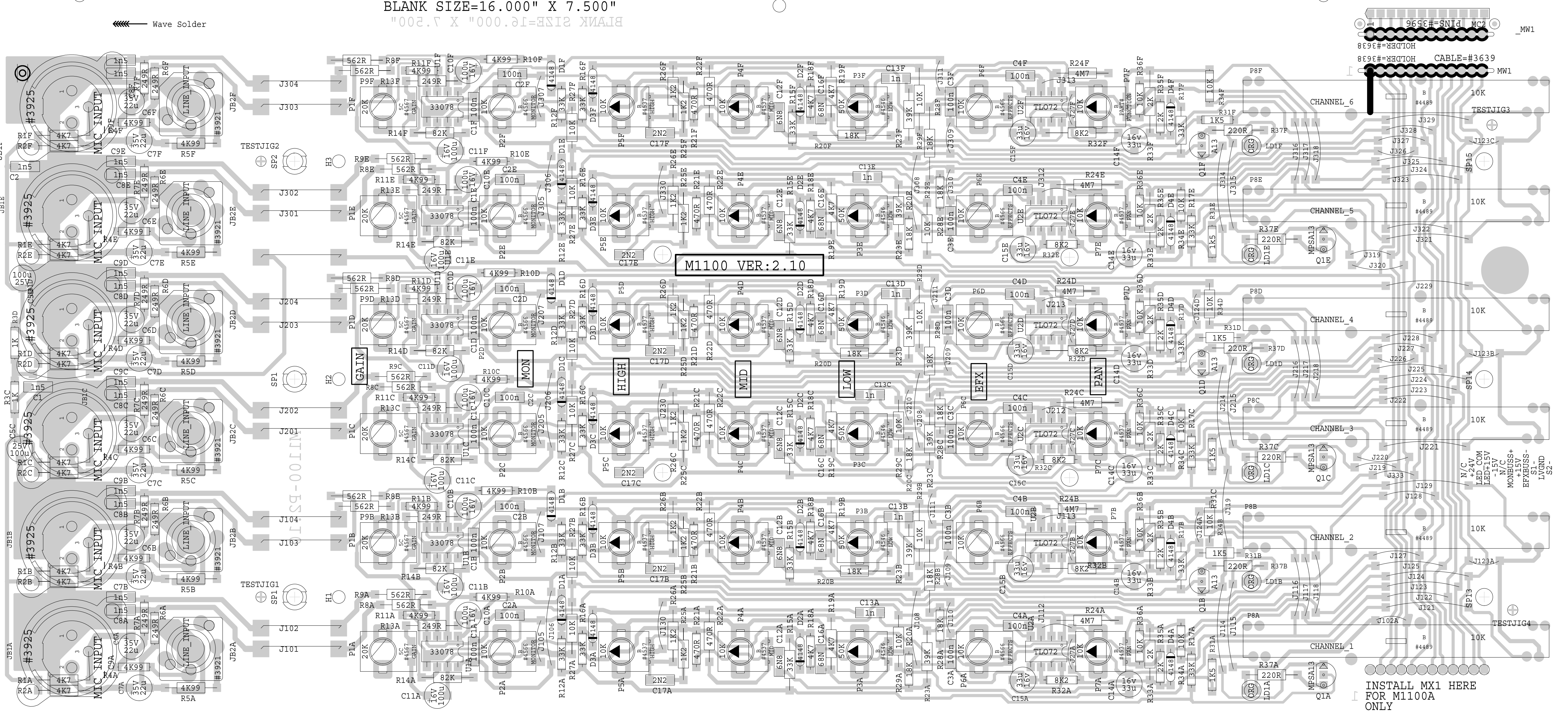
DATE: NOV/15/99 MODEL#: AP-312
 NAME: AP312MIX.SCH PCB#: M1100-M1101 TITLE: MIXER/BQ
 SHEET: 1/10

ALL UNMARKED DIODES ARE 1N4148

BLANK SIZE=16.000" X 7.500"
BLANK SIZE=16.000" X 7.500"

Wave Solder

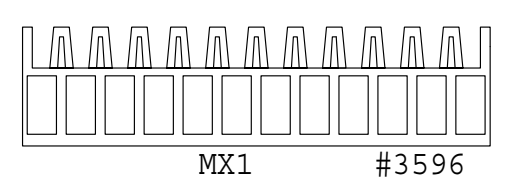
ASSEMBLY M1100-2.10
PCB MECH M1100-2.10



SOLDERSIDE M1100-3.01

PRODUCTION NOTES

1 INSTALL MX1 FOR M1100A ONLY



M1100.PCB DATABASE HISTORY			
MODEL(S) :- AP-812/818			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	JAN/11/97	P1.0	DEL R38A,R30A
2	MAR/03/97	P2.0	R32A->F TO 4K99
3	MAY/05/97	1.00	VALUE CHANGES SEE LIST
4	MAY/06/97	2.00	ADDED C2,C16A-F,CI7A-F_MOVED_JMPR
5			AWAY FROM P7A-F
6	AUG/31/99	2.10	XLR #3454->3925
7		N	
8		V	
9		N	
10		V	
11		N	
12		V	

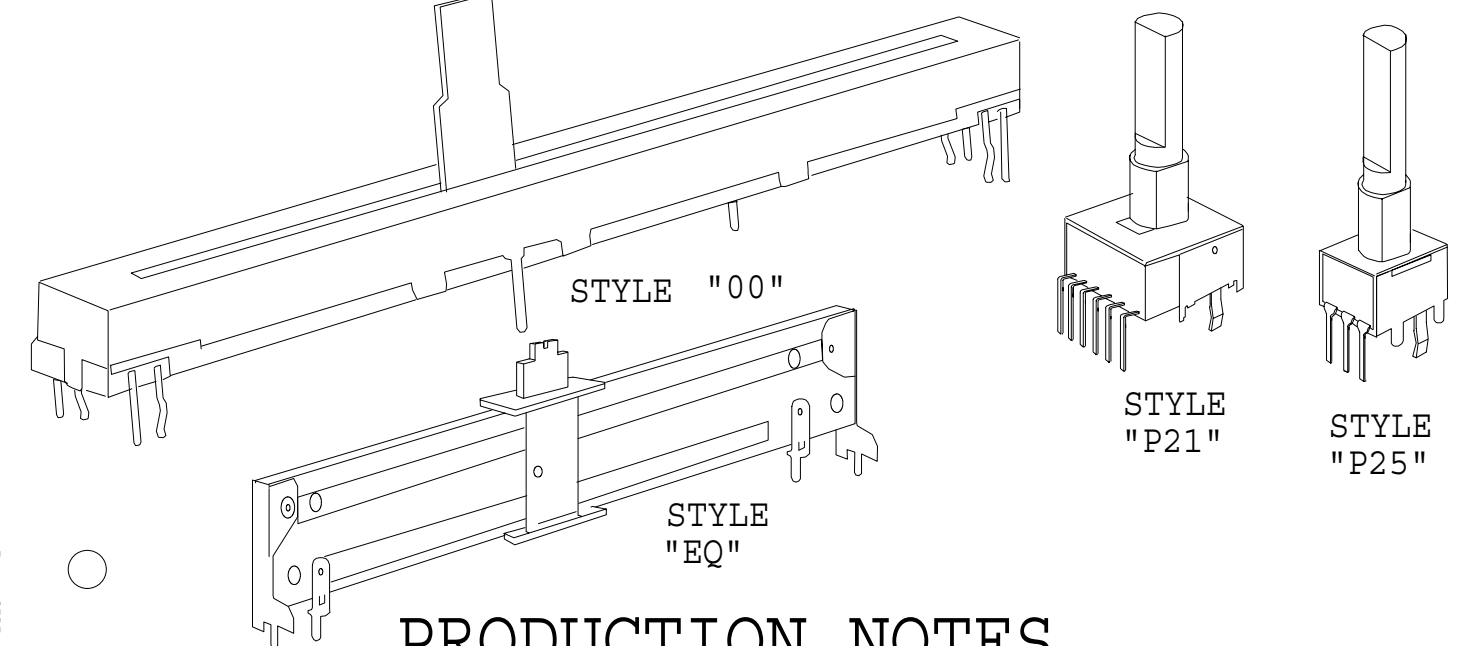
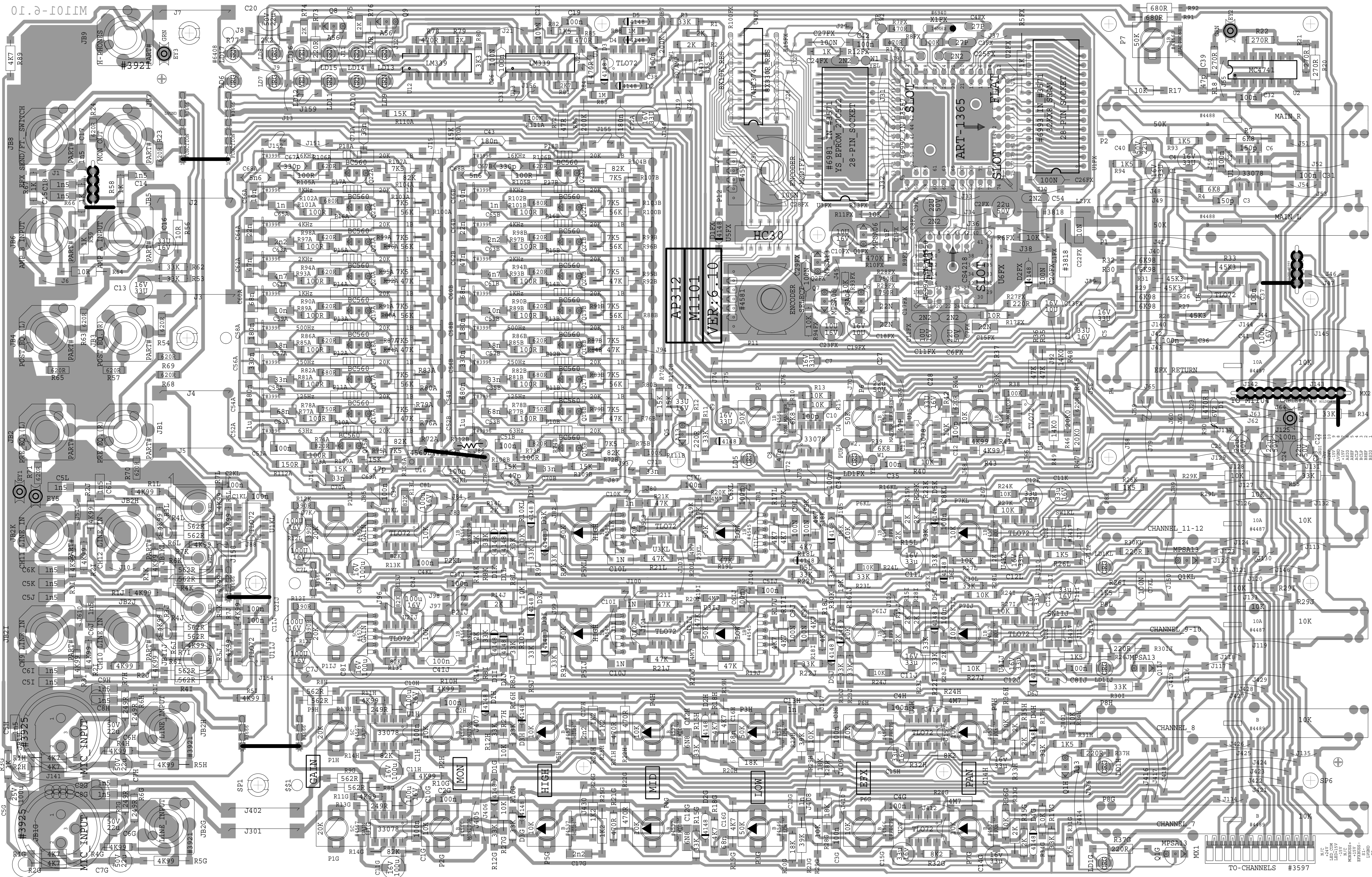
01.3-101IM

BLANK SIZE=6.10 X 10.00" X 005" 000" X 10.200" 000" X 10.200"

ASSEMBLY M1101-6.10
PCB MECH M1101-6.10

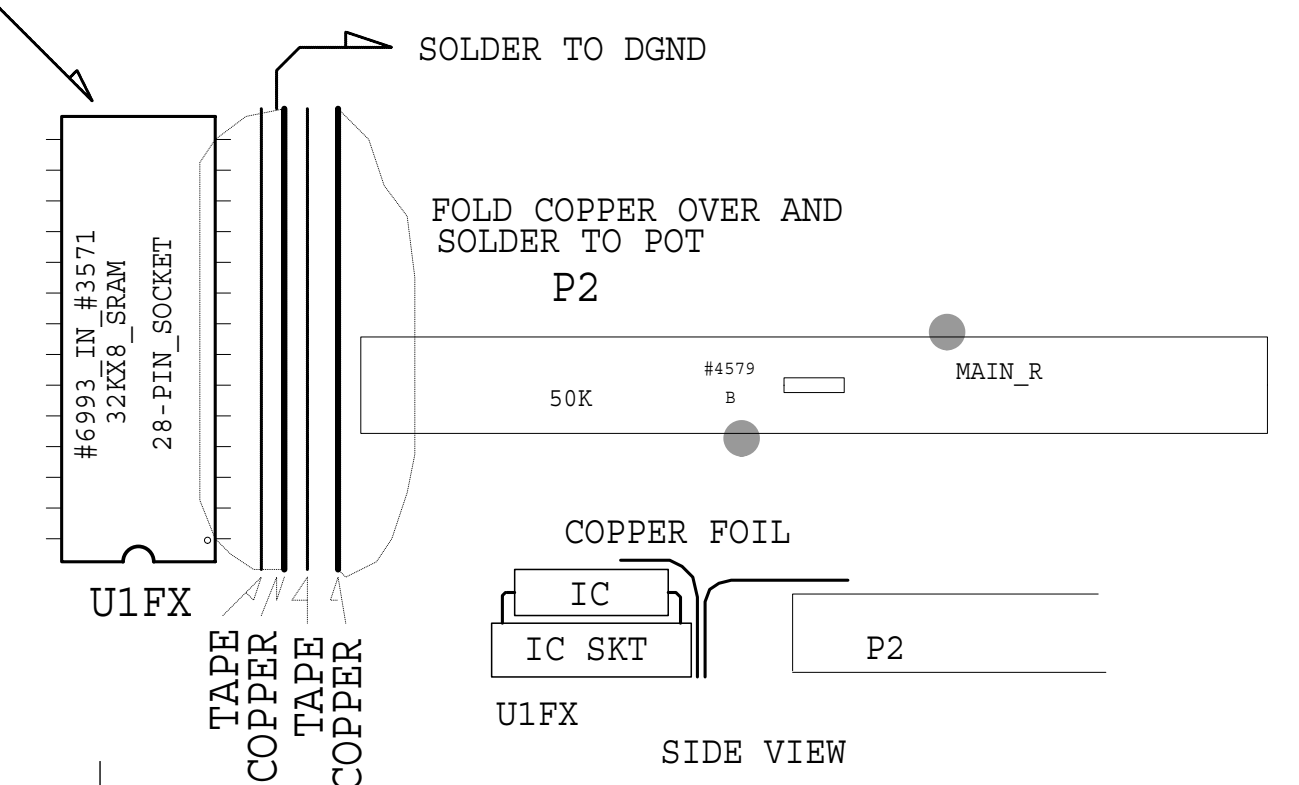
M1101.PCB DATABASE HISTORY

#	DATE	VER#	DESCRIPTION OF CHANGE
1	MAY/06/97	V1.5	PC#5367
2	V	-	R92,R91 220R TO 680R
3	D	-	R83,R88 240K TO 1M
4	V	-	R86,R87 47K TO 200K
5	MAY/06/97	V1.5	PC#5368
6	D	-	CORRECT Q7FX,Q6FX TO AGREE WITH SCHEMATIC
7	MAY/06/97	V1.5	PC#5370
8	V	-	CHANGE R21I,J,K,L TO 47K
9	V	-	CHANGE C2,C6 TO 150P
10	V	-	TACK ON 1K5 IN SERIES WITH C1,C4
11	V	-	TACK ON 150R IN SERIES WITH BQ,BUSS
12	V	-	TACK ON 2N2 ACROSS OUT SIDE LEGS OF P5G,H
13	V2.00	-	NOTE:IMPLEMENT ABOVE PC'S ON TAPE-UP
14	V	-	#5371 MOVE TRACE OF C5H,C1 TO AGREE WITH SCHEMATIC
15	MAY/07/97	V	-
16	JUN/23/97	3.00	ADD 1NS FROM R3G TO IG GROUND
17	AUG/18/97	3.10	PC#5426 ADD C26FX,27FX,28FX,29FX
18	AUG/31/99	4.00	RELOCATE PARTS 4 BETTER INSERTION
19	OCT/25/99	5.00	XLR #3454->#3925
20	JAN/27/00	6.00	PC#5140 HD-PH JK #3497->#3921
21	MAR/02/00	6.00	FIX MISSING TRACE AT U6FX_PIN_36
22	OCT/17/00	6.10	FIX ERROR AT HD-PHN-JK
23	V	N	PC#5292_RI6FX_680R->470R_DEL_C5FX
24	V	N	
25	V	N	
26	V	N	

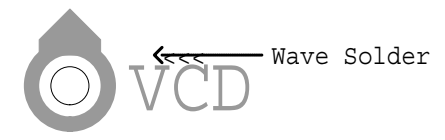


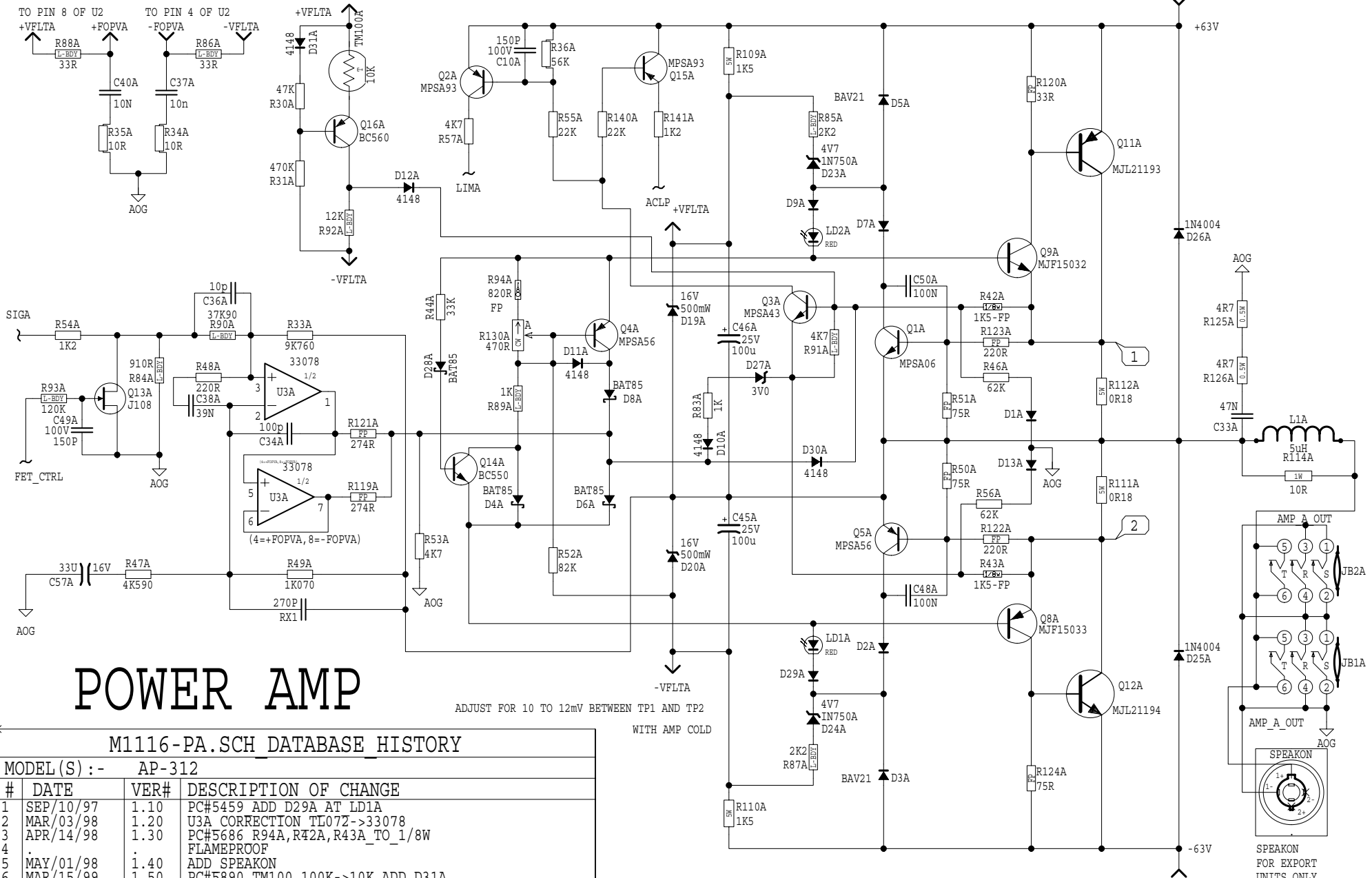
PRODUCTION NOTES

- PCBSA DEPT.
- 1 ADD COPPER FOIL ON I.C SOCKET OF U1FX ADD EXTRA SOLDEF
 - 2 ADD YELLOW WIRE NEXT TO U6
 - 3 ADD .5" COPPER STRIP ON TOP OF P2 FOR N.A. AND EXPORT
 - 4 ADD 1" COPPER STRIP ON BOTTOM OF U1FX FOR EXPORT
 - 5 J152,J155,J156,J159 ARE USED AS RIBBON CABLE CLAMPS
 - 6 J103 IS HAND INSERTED
 - 7 YEL AND PURPLE WIRES FROM WC1 AND WC2 MUST GO BEHIND P6



PUSH C5H AWAY BEFORE INSTALLING XLR





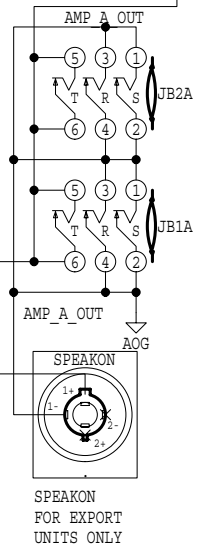
POWER AMP

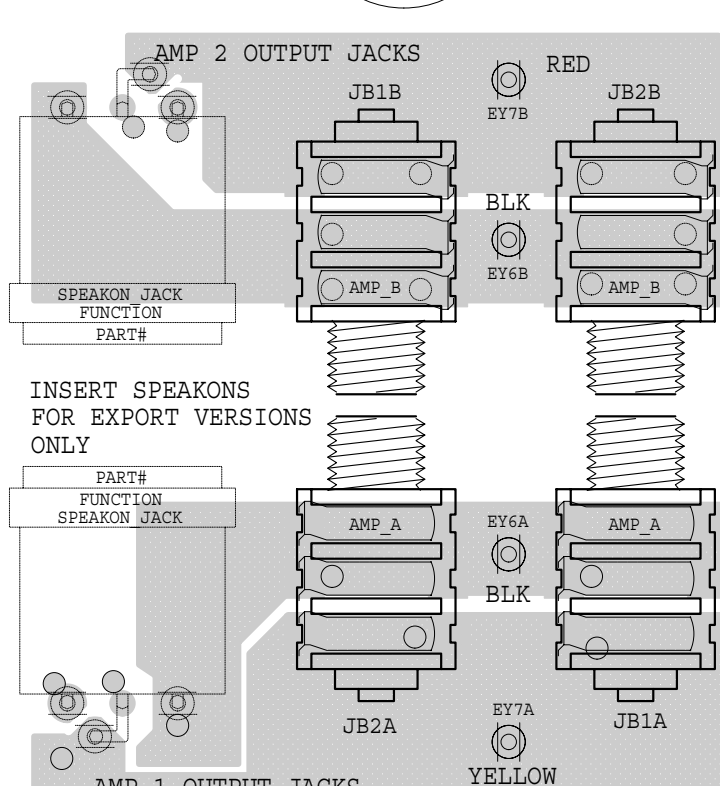
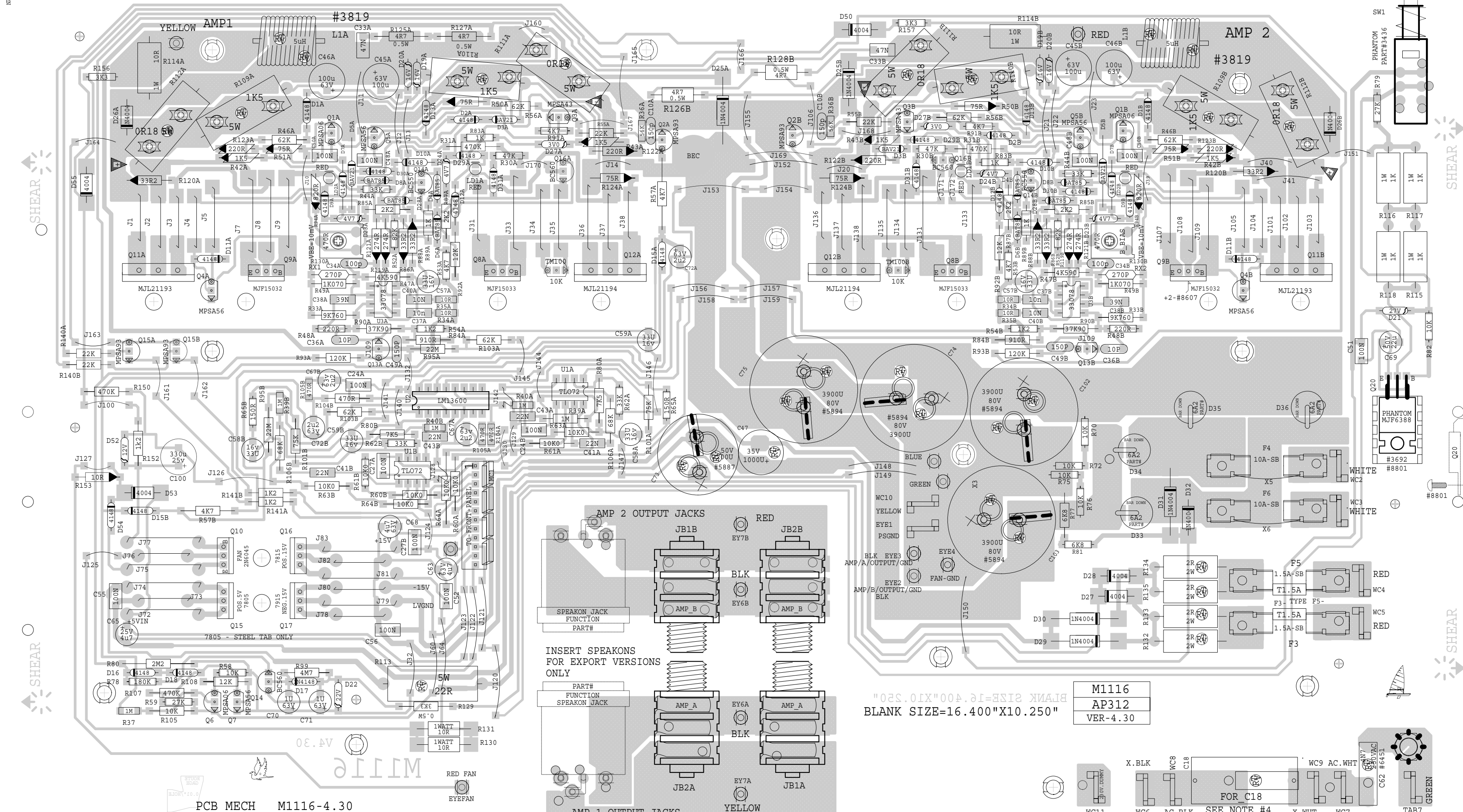
ADJUST FOR 10 TO 12mv BETWEEN TP1 AND TP2
WITH AMP COLD

M1116-PA.SCH DATABASE HISTORY

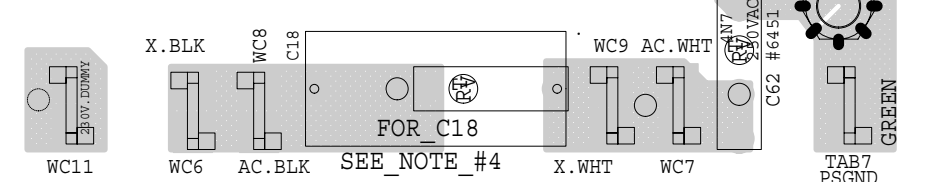
MODEL(S) :- AP-312			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	SEP/10/97	1.10	PC#5459 ADD D29A AT LD1A
2	MAR/03/98	1.20	U3A CORRECTION TL072->33078
3	APR/14/98	1.30	PC#5686 R94A, R42A, R43A_TO_1/8W FLAMEPROOF
4			
5	MAY/01/98	1.40	ADD SPEAKON
6	MAR/15/99	1.50	PC#5890 TM100 100K->10K_ADD D31A, R30A, R31A, Q16A
7			
8	JUL/18/00	1.60	PC#6273_R48A_1K->220R_C38A_15N->39N
9	D	N	
10	D	N	

YORKVILLE	DATE: JUL/18/00	MODELS: AP-312	SHEET 7OF 7	SCH ISSUE: 1.60
	NAME: M1116-PA	PCB#&VER: M1116	TITLE: POWER_AMP	





M1116
AP312
VER-4.30

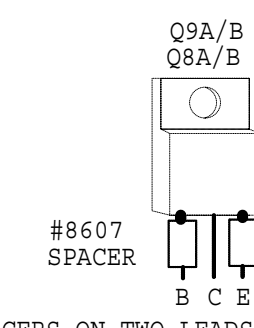


ETCH GUIDE

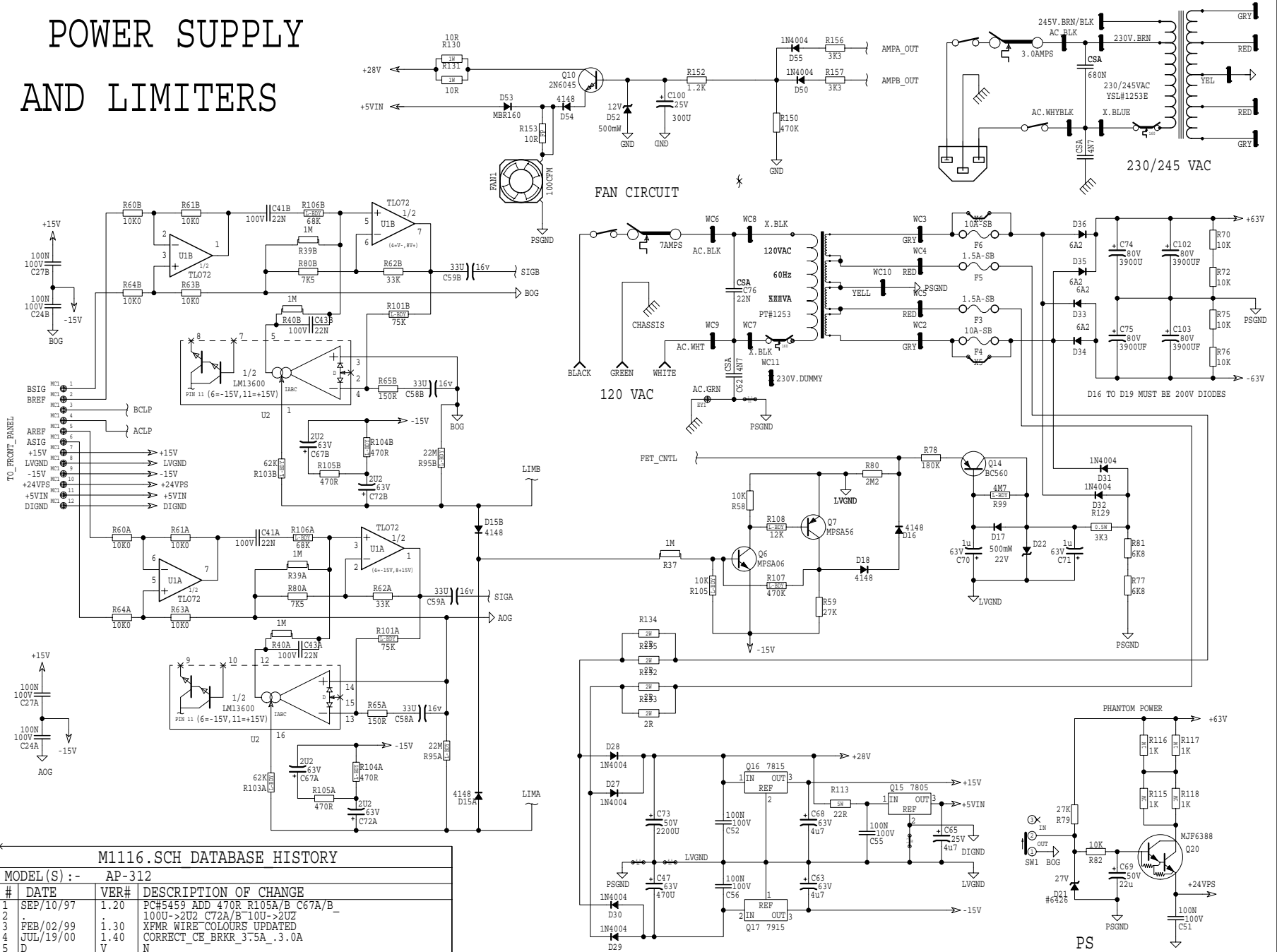
M1116.PCB DATABASE HISTORY			
#	DATE	VER#	DESCRIPTION OF CHANGE
MODEL(S) :- AP312			
1	SEP/02/97	2.00	PC#XXXX SPKONS ADDED
2	SEP/09/97	2.00	PC#5459 C67A/B C72A/B ->2U2 R104A/B
3	.	.	4K7->470R ADD 470R (R105A/B_ADD
4	.	.	D29A/B AT LD1A/B
5	APR/14/98	3.00	PC#5686 R94A, R94B, R42A, R42B, R43A, R43B TO 1/8W FLAMEPROOF
6	.	.	PC#5890 TM100 100K->10K ADD R30A/B
7	MAR/15/99	4.00	R31A/B Q16A/B D31A/B
8	.	.	PC#5951 C47 470u->1000u
9	MAR/25/99	.	PC#5775 MOVE C50A/B FROM LD2A/B
10	JAN/24/00	.	PC#6133 MOVE C38A AWAY FROM R49A/
11	.	.	PC#5916 RX2 VALUE CONFIRMED(270P)
12	.	.	MOVE TRACE AWAY FROM PAD_ADD
13	JUL/17/00	4.10	SHEAR ON SIDE
14	.	.	
15	JUL/18/00	4.20	PC#6273 R48B 1K->220R C38B 15N->39N
16	SEP/18/00	4.30	PC#6206_1 EYELET REMOVED FOR SPKONS
17	.	.	
18	.	.	
19	.	.	
20	.	.	
21	.	.	
22	.	.	
23	.	.	

PRODUCTION NOTES

- AUTO-INSERTION
- BOARD-ASSEMBLY
- 1. MOUNT MJE15032 AND '33 TRANSISTORS WITH #8607 SPACERS ON TWO LEADS Q8A, Q8B, Q9A, Q9B
- 2. Q15 7805 REGULATOR MUST BE STEEL TAB VERSION ONLY.
- 3. NO FUSE HOLDERS SHOULD BE STUFFED. F3&5 ARE REPLACED WITH AUTO-INSERT FUSES, F4&6 WITH JUMPERS.
- 4. FOR NORTH AMERICAN C18 IS 22N, AND 680N FOR EUROPEAN.
- 5. INSERT SPEAKERS FOR EXPORT VERSIONS ONLY



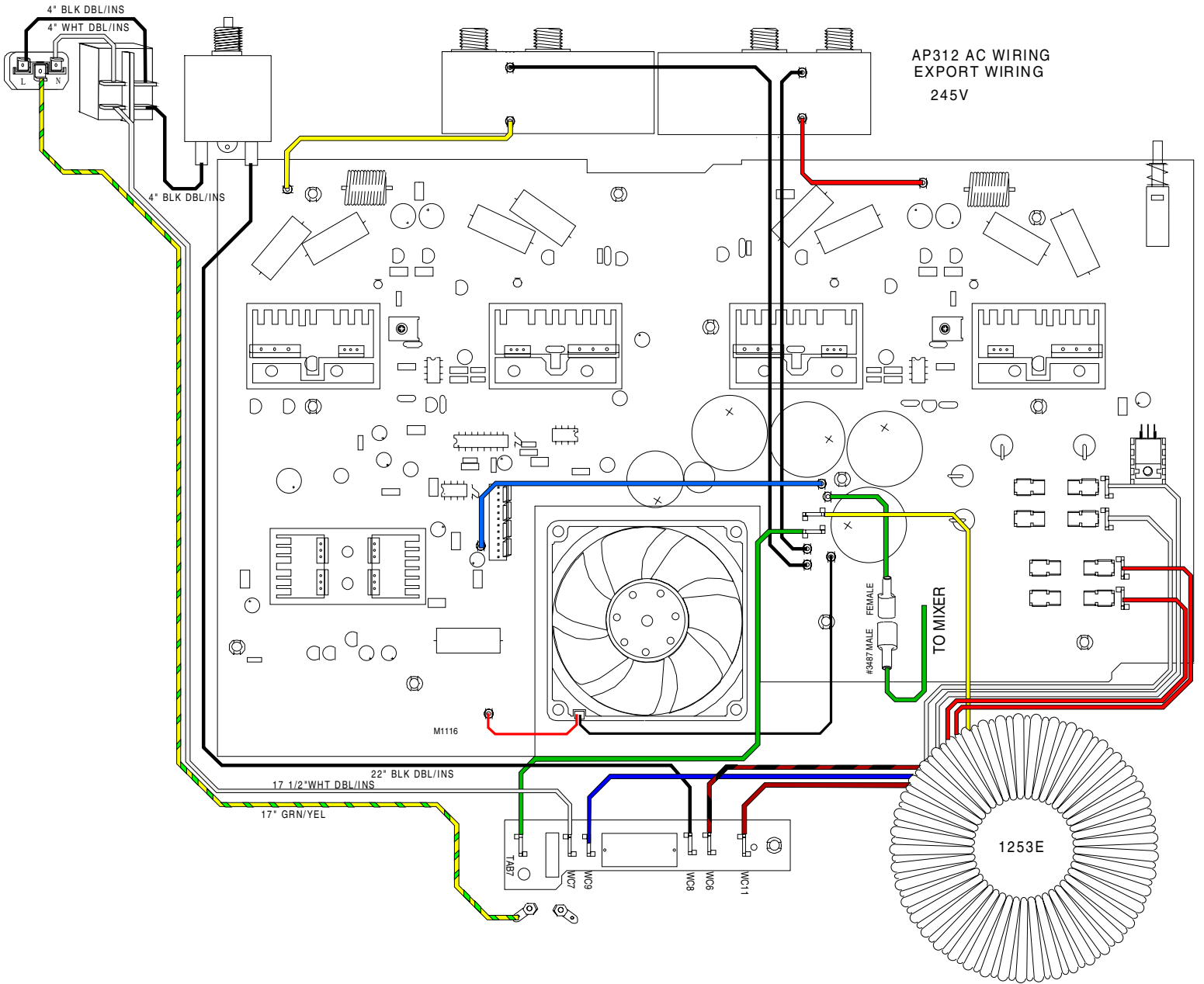
POWER SUPPLY AND LIMITERS



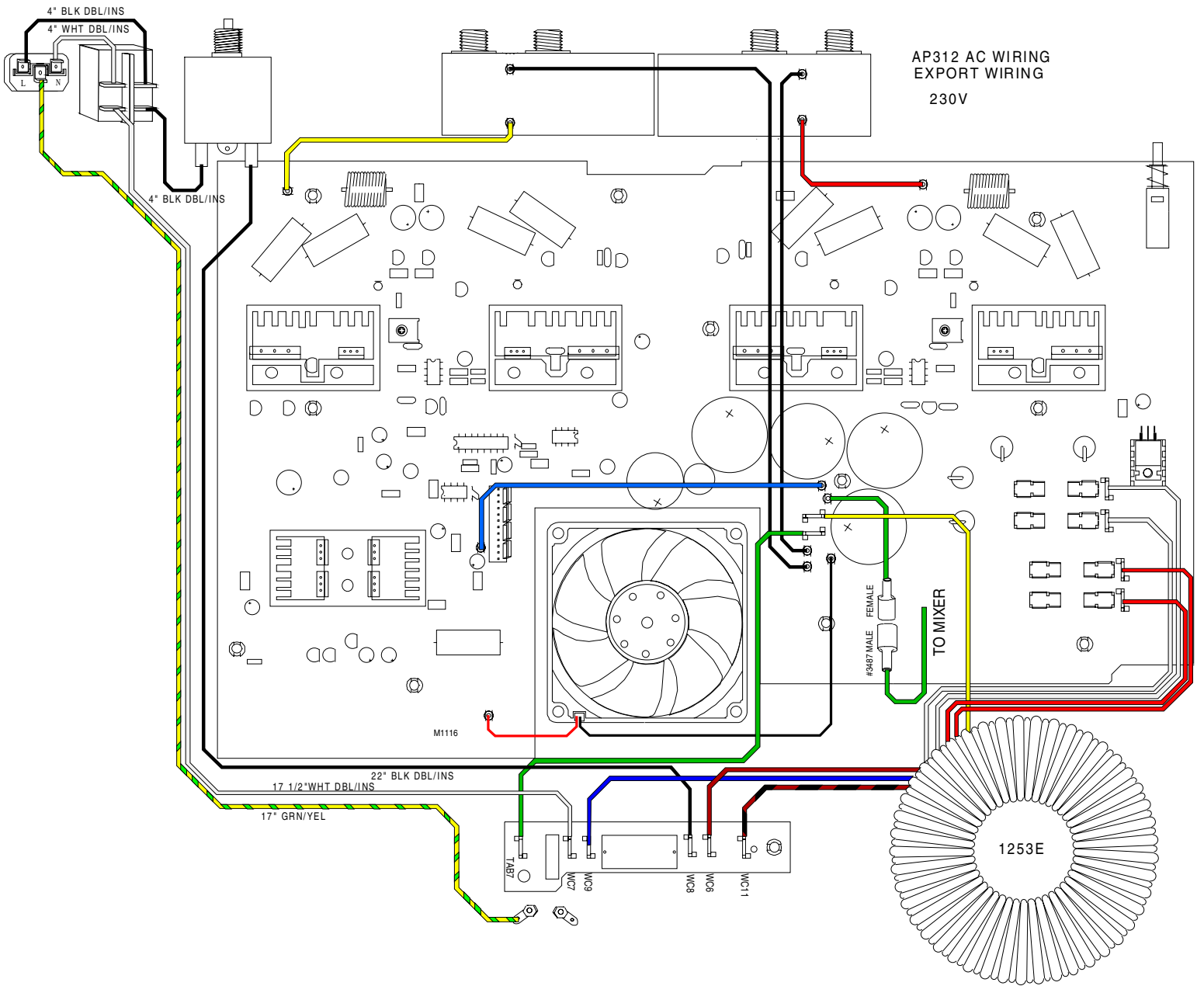
M1116.SCH DATABASE HISTORY

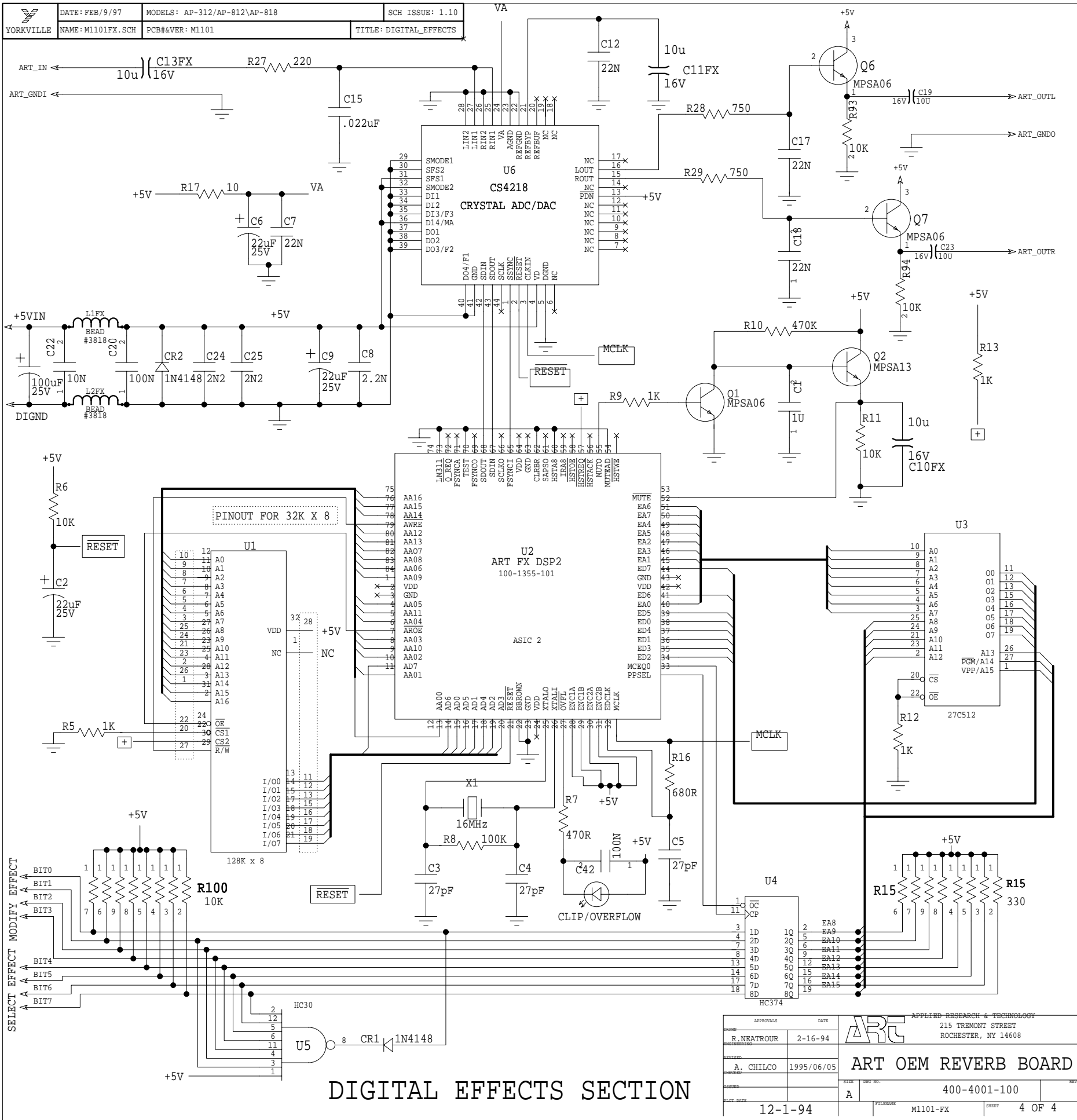
MODEL(S) :- AP-312			
#	DATE	VER#	DESCRIPTION OF CHANGE
1	SEP/10/97	1.20	PC#5459 ADD 470R R105A/B C67A/B_100U->2U2 C72A/B_10U->2U2
2	FEB/02/99	1.30	XFMR WIRE COLOURS UPDATED
3	JUL/19/00	1.40	CORRECT_CE_BRKR_3.5A_3.0A
4	D	V	N
5	D	V	N
6	D	V	N
7	D	V	N
8	D	V	N
9	D	V	N
10	D	V	N

AP312 AC WIRING
EXPORT WIRING
245V



AP312 AC WIRING
EXPORT WIRING
230V





APPROVALS		DATE	APPLIED RESEARCH & TECHNOLOGY 215 TREMONT STREET ROCHESTER, NY 14608
DESIGNED BY	R. NEATROUR	2-16-94	
DESIGNED BY	A. CHILCO	1995/06/05	ART OEM REVERB BOARD FILE NO. 400-4001-100 REV. A
DATE		12-1-94	
FILENAME	M1101-FX	SHEET	4 OF 4