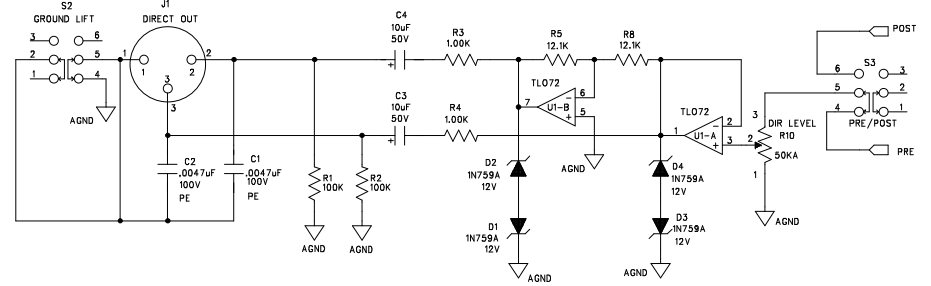
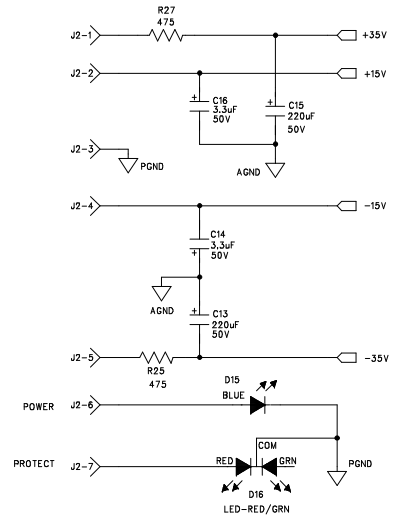
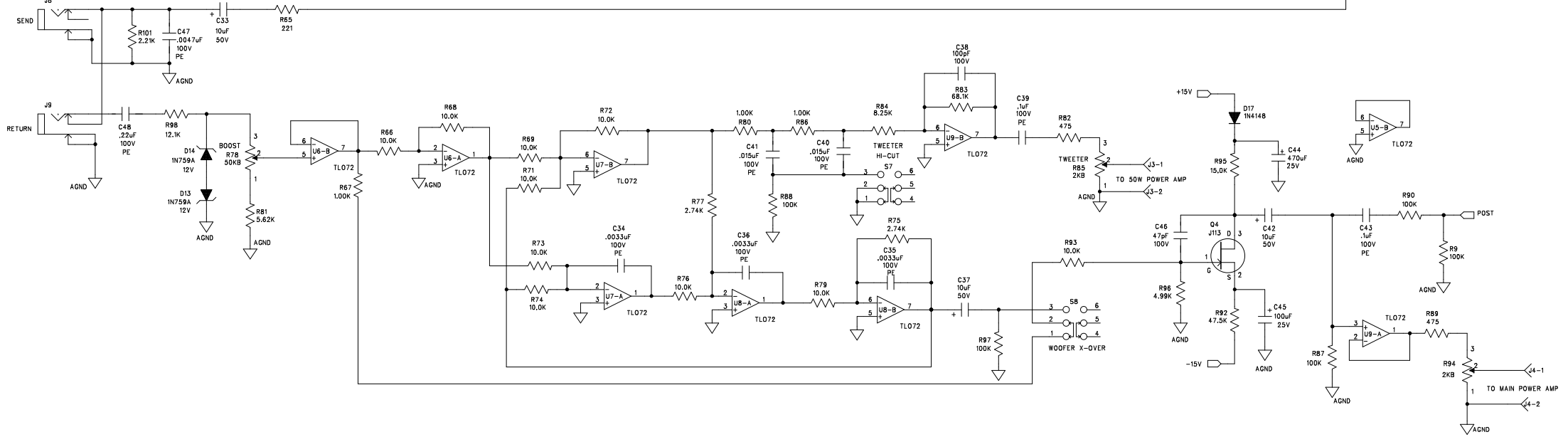
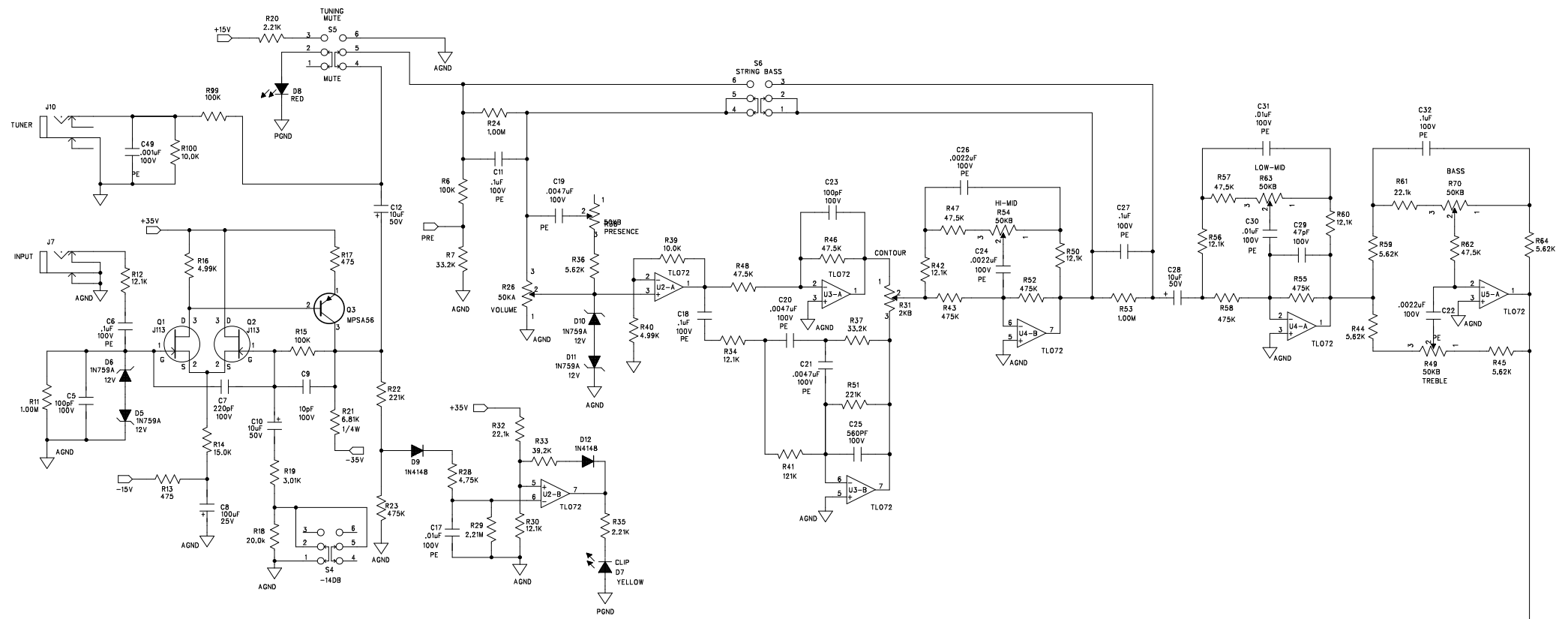
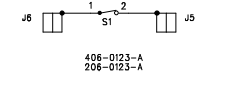


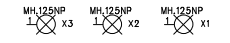
REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:



FOR POWER SWITCH BOARD



FOR PANEL



NOT VALID UNLESS STAMP IS RED

gallien technology

2240 PARAGON DRIVE
SAN JOSE CA. 95131
VOICE: 408-441-8081
FAX: 408-441-8085

TITLE: 700RB-II PREAMP

DESIGNED: R.A.G. 7/24/01
DRAWN: R.A.G. 12/4/02
ELEC: B
MECH:
Q/A:
RELEASED:

REV. A

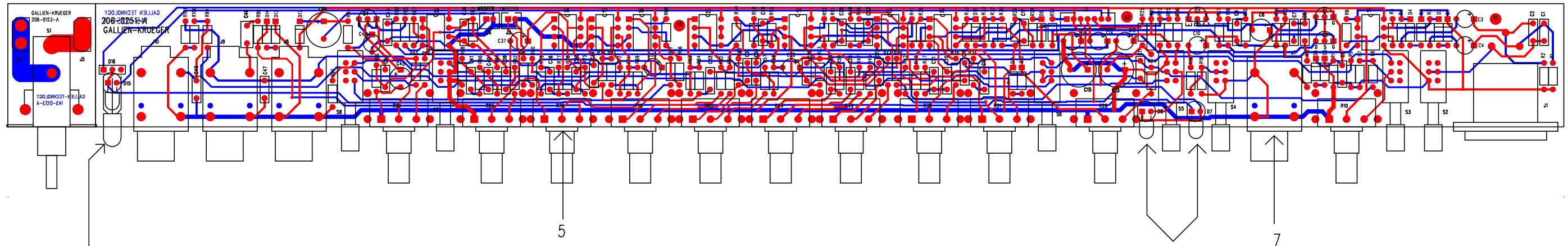
DRAWING NO: 406-0251-A
PART NO: 206-0251-A
COMPANY: GALLIEN-KRUEGER
FILENAME: 6251A

NOTES:
1. CHANGE BOARD NO. TO 206-0251-A FROM 206-0105-02.
2. CHANGE R18 TO 20.0K FROM 15.0K.
3. CORRECT SHORTED TRACE FROM C45 TO S8.
4. CORRECT SHORTED TRACE FROM C45 TO S8.
5. UPDATE HOLE AND PAD SIZES.

GK GALLIEN-KRUEGER

1001RB-II PRE AMP 206-0251-A

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-1030-1	U1-9	TLO72CP, LOW NOISE JFET OPAMP	MOTOROLA	TL072CP
010-1013-0	Q3	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
010-2010-0	Q1-2 Q4	J113,N-JFET,.35V,2MA,TO-92	NATIONAL	J113
020-0120-0	D1-6 D10-11 D13-14	1N759A, ZENER,12V,5%,400MW, DO-35	MOTOROLA	1N759A
020-1000-0	D9 D12 D17	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
025-0012-0	D16	LED,RED/GRN,5MM,630NM/560NM,15MCD	STANLEY	VRPG5614S
025-0023-0	D7	LED,YELLOW, 3MM, 585NM, 5MCD, 10MA	EVERLIGHT	EL204YD
025-0030-2	D15	LED,BLUE, 10MA	LITEON	LTL-42B6
025-0116-0	D8	LED,RED, 3MM, 635NM, 6MCD, 10MA	EVERLIGHT	EL2041D
031-1107-0	C8 C45	CAP,ELEC,RAD,107,20%,25V	UNITED CHEMI-CON	SMG25VB101M6X11LL
031-1477-0	C44	CAP, ELEC, RAD, 470uF, 20%, 25V	UNITED CHEMI-CON	SMG25VB471M10X12LL
031-2106-0	C3,4,10,12,28,33,37,42	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2227-0	C13 C15	CAP, ELEC, 220uF, 20%, 50V	UNITED CHEMI-CON	SMG50VB221M10X12LL
031-2335-0	C14 C16	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
032-4102-0	C49	CAP,PE,102,5%,100V,	PANASONIC	ECQB1102JF
032-4103-0	C17 C30-31	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C6,11,18,27,32,39,43	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4153-0	C40-41	CAP,PE,153,5%,100V,	PANASONIC	ECQV1153JM
032-4222-0	C22 C24 C26	CAP,PE,222,5%,100V,	PANASONIC	ECQB1222JF
032-4224-0	C48	CAP,PE,224,5%,100V,	PANASONIC	ECQV1224JM
032-4332-0	C34-36	CAP,PE,332,5%,100V,	PANASONIC	ECQB1332JF
032-4472-0	C1-2 C19-21 C47	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
034-4100-0	C9	CAP, MCR,10pF,5%,100V,NPO	TAITRON	TMRS100J100NPOB
034-4101-0	C5 C23 C38	CAP,MCR,100pF,5%,100V,	TAITRON	TMRS101J100NPOB
034-4221-0	C7	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4470-0	C29 C46	CAP,MCR,47PF,5%,100V,NPO	TAITRON	TMRS470J100NPOB
034-4561-0	C25	CAP,MCR,560pF,5%,100V,	TAITRON	TMRS561J100NPOB
052-6812-0	R21	RES, METAL FILM, 6.81K OHM, 1/4W, 1%	ECI	M2F1AK006.81
060-1002-0	R3-4 R67 R80 R86	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R39,66,68,69,71-74,76 R79,93,100	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R1,2,6,9,15,87,88,90,97 R99	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1005-0	R11 R24 R53	RES, MF, 1.00M, 1%,1/8W, 060-1005-0	ECI	M1F1AM001.00
060-1213-0	R5,8,12,30,34,42,50,56 R60 R98	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10
060-1214-0	R41	RES,METAL FILM, 121K, 1/8W, 1%	ECI	M1F1AK121.00
060-1503-0	R14,95	RES,METAL FILM, 15.0K, 1/8W, 1%	ECI	M1F1AK015.00
060-2003-0	R18	RES,METAL FILM, 20.0K, 1/8W, 1%	ECI	M1F1AK020.00
060-2211-0	R65	RES,METAL FILM, 221 ohm, 1/8W, 1%	ECI	M1F1AJ221.00
060-2212-0	R20 R35 R101	RES,METAL FILM, 2.21K, 1/8W, 1%	ECI	M1F1AK002.21
060-2213-0	R32 R61	RES,METAL FILM, 22.1K, 1/8W, 1%	ECI	M1F1AK022.10
060-2214-0	R22 R51	RES,METAL FILM, 221K, 1/8W, 1%	ECI	M1F1AK221.00
060-2215-0	R29	RES, METAL FILM, 2.21M, 1/8W, 1%	ECI	M1F1AM002.21
060-2742-0	R75 R77	RES,METAL FILM, 2.74K, 1/8W, 1%	ECI	M1F1AK002.74
060-3012-0	R19	RES,METAL FILM, 3.01K, 1/8W, 1%	ECI	M1F1AK003.01
060-3323-0	R7 R37	RES,METAL FILM, 33.2K, 1/8W, 1%	ECI	M1F1AK033.20
060-3923-0	R33	RES,METAL FILM,39.2K,1/8W,1%	ECI	M1F1AK039.2
060-4751-0	R13,17,25,27,82,89	RES,METAL FILM, 475 ohm, 1/8W, 1%	ECI	M1F1AJ475.00
060-4752-0	R28	RES,METAL FILM, 4.75K, 1/8W, 1%	ECI	M1F1AK004.75
060-4753-0	R46-48 R57 R62 R92	RES,METAL FILM, 47.5K, 1/8W, 1%	ECI	M1F1AK047.50
060-4754-0	R23 R43 R52 R55 R58	RES,METAL FILM, 475K, 1/8W, 1%	ECI	M1F1AK475.00
060-4992-0	R16 R40 R96	RES,METAL FILM, 4.99K, 1/8W, 1%	ECI	M1F1AK004.99
060-5622-0	R36,44,45,59,64,81	RES,METAL FILM, 5.62K, 1/8W, 1%	ECI	M1F1AK005.62
060-6813-0	R83	RES,METAL FILM, 68.1K, 1/8W, 1%	ECI	M1F1AK068.10
060-8252-0	R84	RES,METAL FILM, 8.25K, 1/8W, 1%	ECI	M1F1AK008.25
070-1513-0	R10 R26	POT,50K-15A,7MM,KNURL,.1W	SONG HUEI	16K1-A50K-L15KC
070-1514-0	R38,49,54,63,70,78	POT,50KB,7MM,KNURL,.1W	SONG HUEI	16K1-B50K-L15KC
070-1522-0	R31 R85 R94	POT,2KB,7MM,KNURL,.1W	SONG HUEI	16K1-B2K-L15KC
090-0007-0	S1	SWITCH, 8A/128A,250V,PP,PCB	TECX	KDC-A04-10-B, B2-F
090-0012-0	S2-8	SWITCH,MIMI PP,DPDT,.1A BRK/MAKE	ELKECTRONIC COMP	MTH2UEE-1D911
092-0069-0	J5-6	FASTON, M, PC, .250",HOR	ZIERICK	901
092-0081-0	J7-10	JACK,1/4",MONO,PC,NON GROUNDING	NEUTRIK	S102-84
092-0084-0	J1	CON,XLR,MALE,PC,PL, SCREW MNT	NEUTRIK	X906-05
093-0051-0	J3-4	HDR, 2MMX2, VERT, LOCK	JST	B2B-PH-K-S
093-2005-0	J2	HDR, 2MMX7, VERT, SHROUDED	JST	B7B-PH-K-S
145-0251-A		700RB-II PREAMP RAW BOARD		

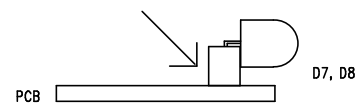


6 PCB WORK INSTRUCTIONS
 DWG #420-0251-A

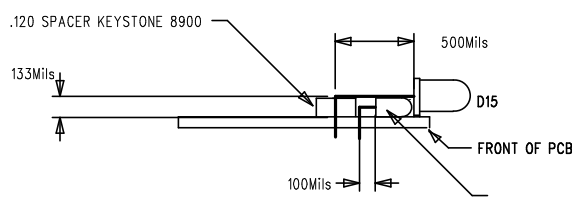
NOTES:

- UNLESS OTHERWISE SPECIFIED:
1. SQUARE PADS ON THRU HOLE PARTS (ie: CONNECTORS, DIPS, SIPS, LEDES) DENOTE PIN 1.
 2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTIONS.
 3. ALL BOARDS MUST BE BARE BOARD TESTED.
 4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.
- LOADING
5. CLIP TABS OFF ON POTS R8, R24, R30, R47, R52, R61, R68, R76, R83, R91
 6. SEE DETAIL A FOR MOUNTING D7 AND D8. SEE DETAIL B FOR MOUNTING D15 AND D16.
- FINAL QA
7. CHECK TO SEE ALL POTS, JACKS, AND SWITCHES ARE MOUNTED FLUSH AND STRAIGHT

DETAIL A
 LED SPACER
 GT PART# 100-0119-0



DETAIL "B"



NOT VALID UNLESS STAMP IS RED

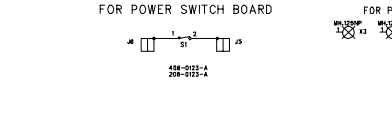
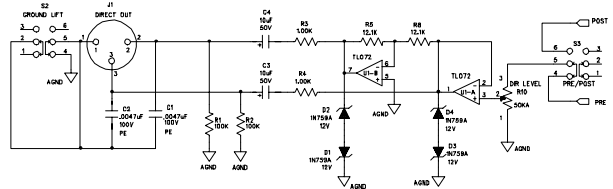
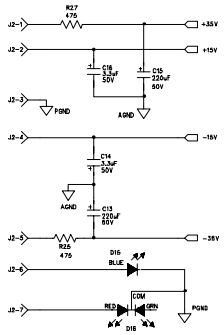
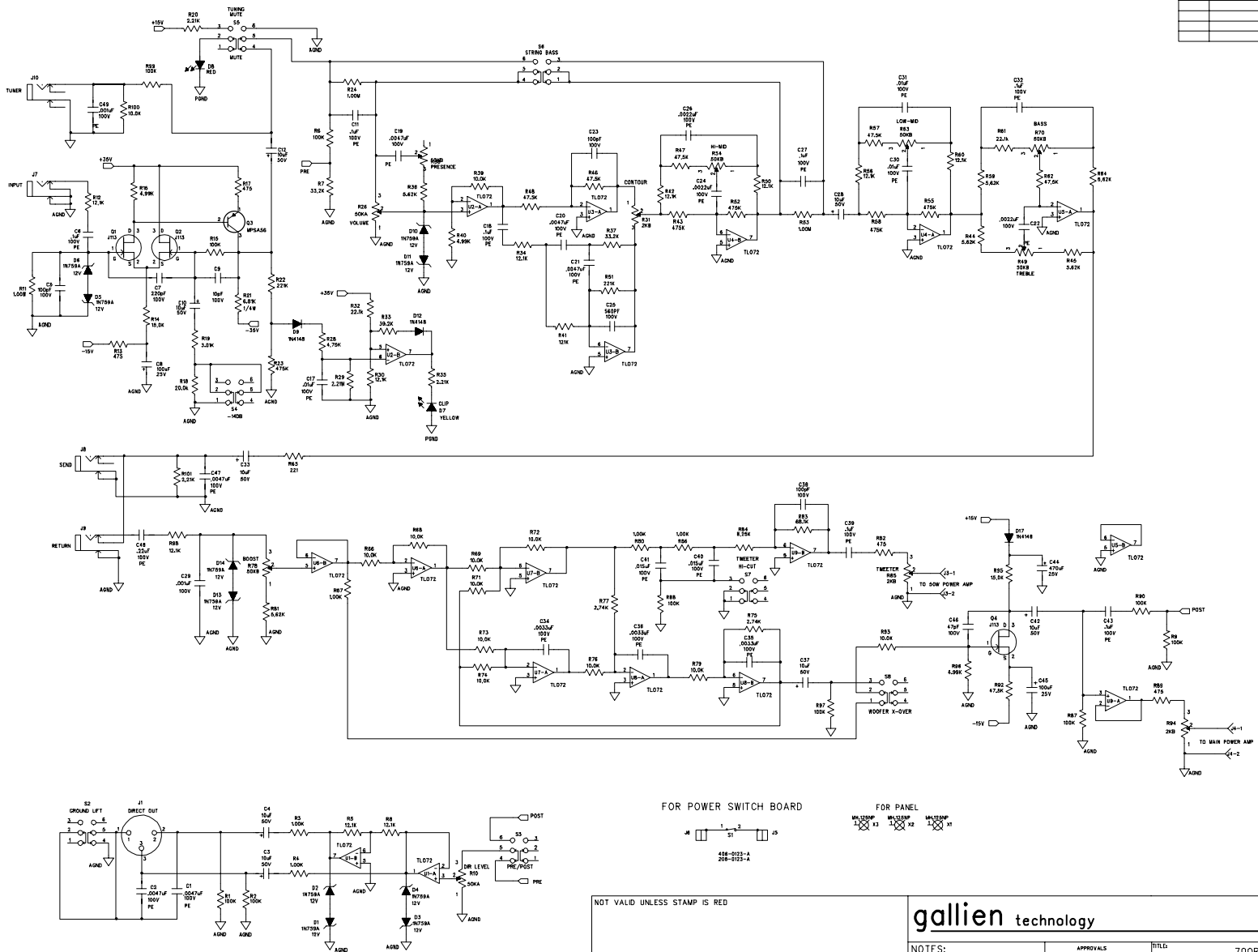
gallien technology

2240 PARAGON DRIVE
 SAN JOSE CA, 95131
 VOICE: 408-441-8081
 FAX: 408-441-8085

APPROVALS		TITLE: 700B-II PRE-AMP BD	
INIT	DATE	SIZE	DRAWING NO: 405-0251-A
DESIGNED:		B	PART NO: 145-0251-A
DRAWN:			REV. A
ELEC:			
LAYER DESCRIPTION:		COMPANY:	
SOPR SSBEEB BOCNOCEN		GERBER FILE NAME: sst01209.pbo	
		FILENAME: 5251A	

Customer Name:		Gallien-Krueger		Current Rev #:	A	New ECO Rev #:	A1
Model:		700RB-II/1001RB-II		Distribute To:		Page:	1 Of: 2
Assembly Description:		700RB-II/1001RB-II preamp		Originator:	Robert A. Gallien		
Assembly Numbers:		206-0251-A		Approved by:			
				Effective Date:	4/17/2003		
Effective				Document Update		Date	Initials
<input checked="" type="checkbox"/>	All in Process	<input checked="" type="checkbox"/>	Next Buy	<input type="checkbox"/>	Artwork		
<input type="checkbox"/>	All in Service	<input checked="" type="checkbox"/>	Next Production Run	<input type="checkbox"/>	Assembly Dwg.		
<input type="checkbox"/>	All in Stock	<input type="checkbox"/>		<input type="checkbox"/>	Board Artwork		
Beginning Serial Number:				<input checked="" type="checkbox"/>	BOM		
Reason For Change				<input type="checkbox"/>	Control Form		
Preamp will oscillate under certain EQ settings				<input checked="" type="checkbox"/>	Costing		
				<input type="checkbox"/>	Fab Drawing		
				<input type="checkbox"/>	Inspection Proc.		
				<input checked="" type="checkbox"/>	Part Master File		
				<input checked="" type="checkbox"/>	Schematic		
				<input type="checkbox"/>	Service Manual		
				<input type="checkbox"/>	Test Procedure		
				<input type="checkbox"/>			
				<input type="checkbox"/>			
Other Affected Assemblies							
303 & 302 Assmblies							
<input type="checkbox"/>	Continued on ECO Supplement Page						
Description Of Change				Distribution		Date	Initials
				<input type="checkbox"/>	Accounting		
Remove C29 (Figure 1)				<input type="checkbox"/>	Assembly		
				<input type="checkbox"/>	Customer		
Add .001uf cap from D14 cathode to gnd (Fig 2)				<input checked="" type="checkbox"/>	Engineering		
This will be referenced as C29.				<input checked="" type="checkbox"/>	Incoming Q.C.		
				<input type="checkbox"/>	Planning		
This change is a mod to existing Rev A boards.				<input checked="" type="checkbox"/>	Production Eng.		
The board artwork was not updated.				<input checked="" type="checkbox"/>	Purchasing		
				<input type="checkbox"/>	Q.A.		
				<input type="checkbox"/>	Receiving		
				<input type="checkbox"/>	Service		
				<input checked="" type="checkbox"/>	Test		
				<input type="checkbox"/>	Vendor		
				<input type="checkbox"/>			
				<input type="checkbox"/>			
<input type="checkbox"/>	Continued on ECO Supplement Page						
				<input checked="" type="checkbox"/>	Drawing(s) attached		
Part Number	Description	Parts Added		Parts Deleted			
		Qty	Ref. Designator	Qty	Ref. Designator		
034-4470-0	47pf, 100V			1	C29		
032-4102-0	.001UF, 100v	1	C29				

REVISION RECORD			
LTR	ECO NO.	APPROVED	DATE



gallien technology

2240 PARAGON DRIVE
SAN JOSE CA. 95131
VOICE: 408-441-8081
FAX: 408-441-8083

700RB-II PREAMP

NOTES:
1. CHANGE BOARD NO. TO 206-0251-A FROM 206-0251-01.
2. CHANGE R18 TO 20.0K FROM 15.0K.
3. CORRECT SHORTED TRACE FROM C45 TO S8.
4. UPDATE HOLE AND PAD SIZES.

APPROVALS	DATE	TITLE
DESIGNER: R.A.G.	7/24/01	406-0251-A
ELEC: R.A.G.	12/4/02	206-0251-A
RECD:		GALLIEN-KRUEGER
RELEASED:		6251A

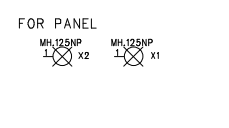
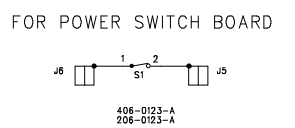
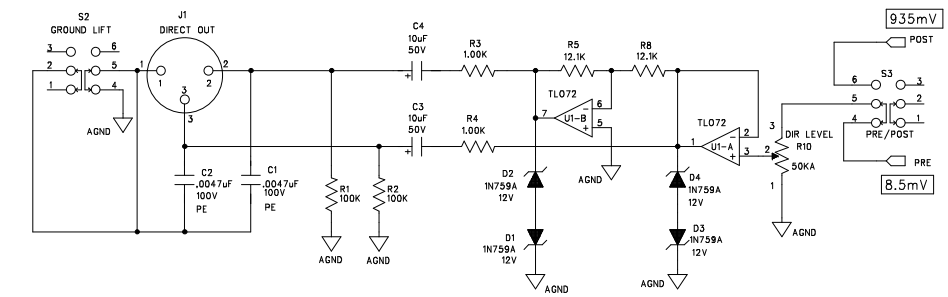
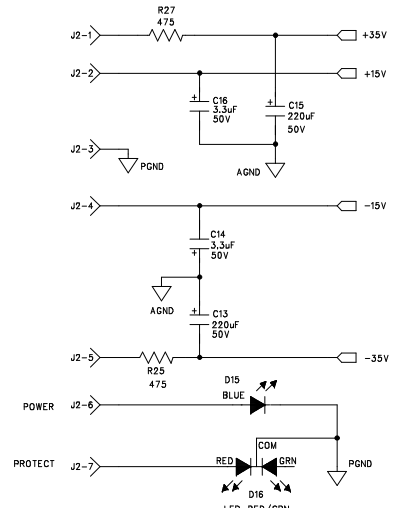
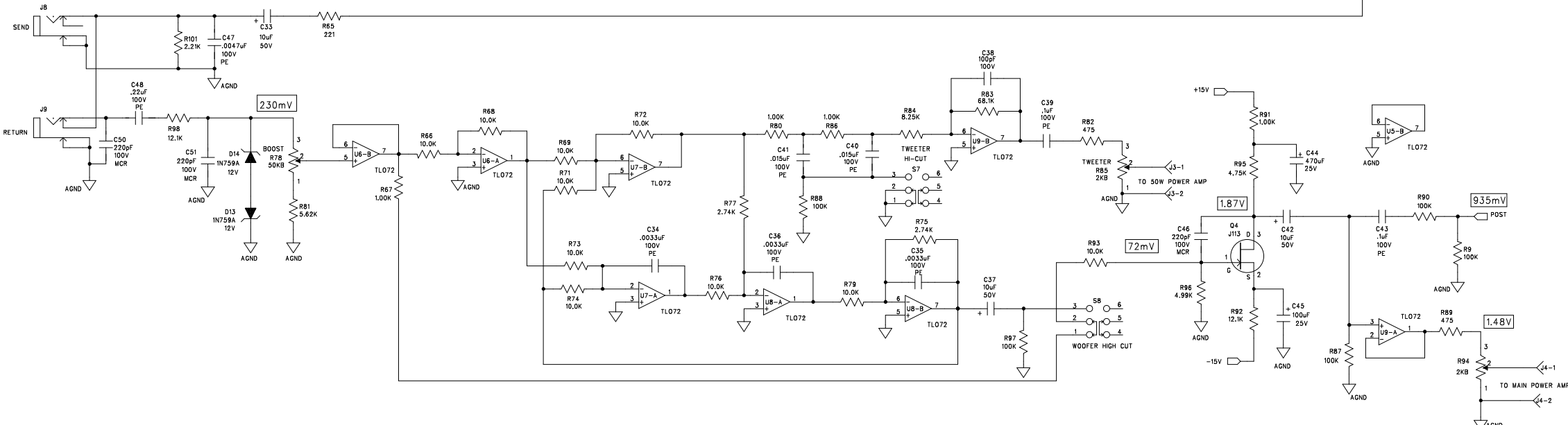
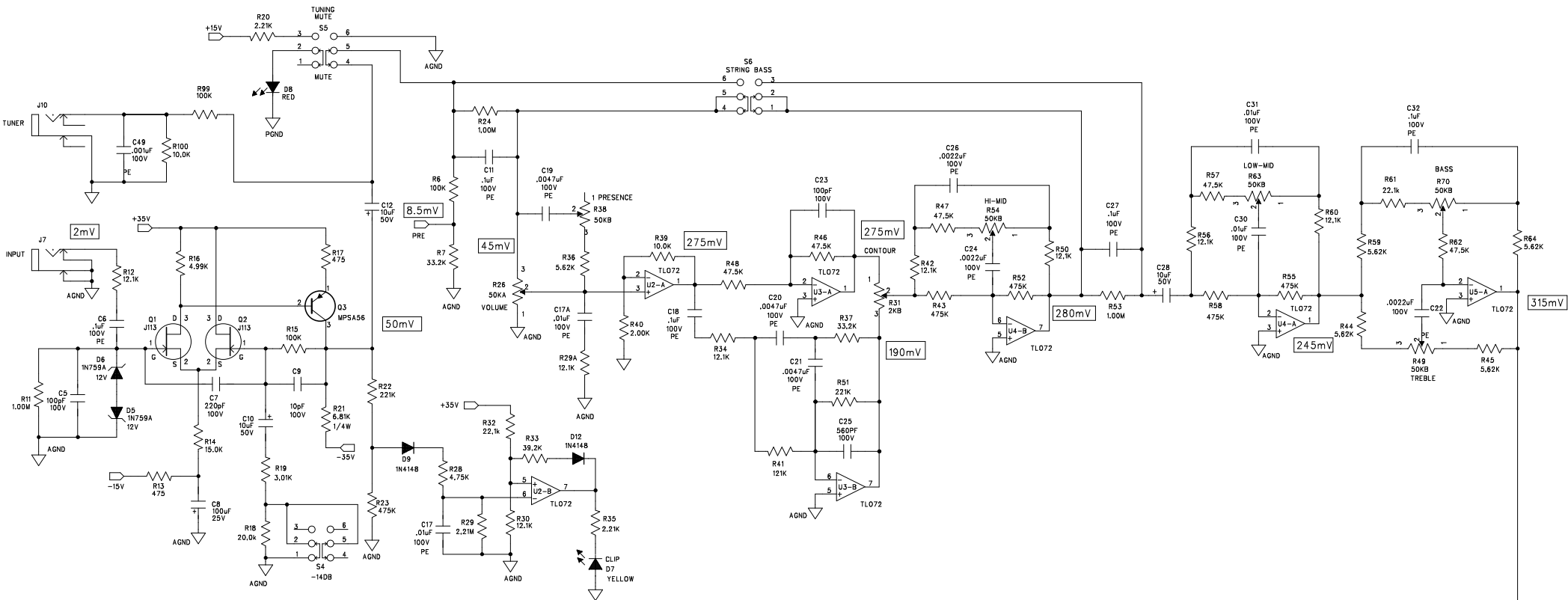
GK GALLIEN-KRUEGER

1001RB-II Preamp 206-0251-A1

Part No.	Reference	Description	Manufacturer	Mfr. Part No.
001-1030-1	U1-9	TLO72CP, LOW NOISE JFET OPAMP	MOTOROLA	TL072CP
010-1013-0	Q3	MPSA56 PNP 80V 500MA TO-92	MOTOROLA	MPS-A56
010-2010-0	J1-2 Q4	J113,N-JFET,35V,2MA,TO-92	NATIONAL	J113
020-0120-0	D1-6 D10-11 D13-14	1N759A, ZENER,12V,5%,400MW, DO-35	MOTOROLA	1N759A
020-1000-0	D9 D12 D17	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148
025-0012-0	D16	LED,RED/GRN,5MM,630NM/560NM,15MCD	STANLEY	VRPG5614S
025-0023-0	D7	LED,YELLOW, 3MM, 585NM, 5MCD, 10MA	EVERLIGHT	EL204YD
025-0030-2	D15	LED,BLUE, 10MA	LITEON	LTL-42B6
025-0116-0	D8	LED,RED, 3MM, 635NM, 6MCD, 10MA	EVERLIGHT	EL2041D
031-1107-0	C8 C45	CAP,ELEC,RAD,107,20%,25V	UNITED CHEMI-CON	SMG25VB101M6X11LL
031-1477-0	C44	CAP, ELEC, RAD, 470uF, 20%, 25V	UNITED CHEMI-CON	SMG25VB471M10X12LL
031-2106-0	C3,4,10,12,28,33,37,42	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL
031-2227-0	C13 C15	CAP, ELEC, 220uF, 20%, 50V	UNITED CHEMI-CON	SMG50VB221M10X12LL
031-2335-0	C14 C16	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL
032-4102-0	C49, (C29 ECOA1)	CAP,PE,102,5%,100V,	PANASONIC	ECQB1102JF
032-4103-0	C17 C30-31	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM
032-4104-0	C6,11,18,27,32,39,43	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM
032-4153-0	C40-41	CAP,PE,153,5%,100V,	PANASONIC	ECQV1153JM
032-4222-0	C22 C24 C26	CAP,PE,222,5%,100V,	PANASONIC	ECQB1222JF
032-4224-0	C48	CAP,PE,224,5%,100V,	PANASONIC	ECQV1224JM
032-4332-0	C34-36	CAP,PE,332,5%,100V,	PANASONIC	ECQB1332JF
032-4472-0	C1-2 C19-21 C47	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF
034-4100-0	C9	CAP, MCR,10pF,5%,100V,NPO	TAITRON	TMRS100J100NPOB
034-4101-0	C5 C23 C38	CAP,MCR,100pF,5%,100V,	TAITRON	TMRS101J100NPOB
034-4221-0	C7	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB
034-4470-0	C46	CAP,MCR,47PF,5%,100V,NPO	TAITRON	TMRS470J100NPOB
034-4561-0	C25	CAP,MCR,560pF,5%,100V,	TAITRON	TMRS561J100NPOB
052-6812-0	R21	RES, METAL FILM, 6.81K OHM, 1/4W, 1%	ECI	M2F1AK006.81
060-1002-0	R3-4 R67 R80 R86	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00
060-1003-0	R39,66,68,69,71-74,76 R79,93,100	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00
060-1004-0	R1,2,6,9,15,87,88,90,97 R99	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00
060-1005-0	R11 R24 R53	RES, MF, 1.00M, 1%,1/8W, 060-1005-0	ECI	M1F1AM001.00
060-1213-0	R5,8,12,30,34,42,50,56 R60 R98	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10
060-1214-0	R41	RES,METAL FILM, 121K, 1/8W, 1%	ECI	M1F1AK121.00
060-1503-0	R14,95	RES,METAL FILM, 15.0K, 1/8W, 1%	ECI	M1F1AK015.00
060-2003-0	R18	RES,METAL FILM, 20.0K, 1/8W, 1%	ECI	M1F1AK020.00
060-2211-0	R65	RES,METAL FILM, 221 ohm, 1/8W, 1%	ECI	M1F1AJ221.00
060-2212-0	R20 R35 R101	RES,METAL FILM, 2.21K, 1/8W, 1%	ECI	M1F1AK002.21
060-2213-0	R32 R61	RES,METAL FILM, 22.1K, 1/8W, 1%	ECI	M1F1AK022.10
060-2214-0	R22 R51	RES,METAL FILM, 221K, 1/8W, 1%	ECI	M1F1AK221.00
060-2215-0	R29	RES, METAL FILM, 2.21M, 1/8W, 1%	ECI	M1F1AM002.21
060-2742-0	R75 R77	RES,METAL FILM, 2.74K, 1/8W, 1%	ECI	M1F1AK002.74
060-3012-0	R19	RES,METAL FILM, 3.01K, 1/8W, 1%	ECI	M1F1AK003.01
060-3323-0	R7 R37	RES,METAL FILM, 33.2K, 1/8W, 1%	ECI	M1F1AK033.20
060-3923-0	R33	RES,METAL FILM,39.2K,1/8W,1%	ECI	M1F1AK039.2
060-4751-0	R13,17,25,27,82,89	RES,METAL FILM, 475 ohm, 1/8W, 1%	ECI	M1F1AJ475.00
060-4752-0	R28	RES,METAL FILM, 4.75K, 1/8W, 1%	ECI	M1F1AK004.75
060-4753-0	R46-48 R57 R62 R92	RES,METAL FILM, 47.5K, 1/8W, 1%	ECI	M1F1AK047.50
060-4754-0	R23 R43 R52 R55 R58	RES,METAL FILM, 475K, 1/8W, 1%	ECI	M1F1AK475.00
060-4992-0	R16 R40 R96	RES,METAL FILM, 4.99K, 1/8W, 1%	ECI	M1F1AK004.99
060-5622-0	R36,44,45,59,64,81	RES,METAL FILM, 5.62K, 1/8W, 1%	ECI	M1F1AK005.62
060-6813-0	R83	RES,METAL FILM, 68.1K, 1/8W, 1%	ECI	M1F1AK068.10
060-8252-0	R84	RES,METAL FILM, 8.25K, 1/8W, 1%	ECI	M1F1AK008.25
070-1513-0	R10 R26	POT,50K-15A,7MM,KNURL,.1W	SONG HUEI	16K1-A50K-L15KC
070-1514-0	R38,49,54,63,70,78	POT,50KB,7MM,KNURL,.1W	SONG HUEI	16K1-B50K-L15KC
070-1522-0	R31 R85 R94	POT,2KB,7MM,KNURL,.1W	SONG HUEI	16K1-B2K-L15KC
090-0007-0	S1	SWITCH, 8A/128A,250V,PP,PCB	TECX	KDC-A04-10-B, B2-F
090-0012-0	S2-8	SWITCH,MIMI PP,DPDT,.1A BRK/MAKE	ELKECTRONIC COMP	MTH2UEE-1D911
092-0069-0	J5-6	FASTON, M, PC, .250",HOR	ZIERICK	901
092-0081-0	J7-10	JACK,1/4",MONO,PC,NON GROUNDING	NEUTRIK	S102-84
092-0084-0	J1	CON,XLR,MALE,PC,PL, SCREW MNT	NEUTRIK	X906-05
093-0051-0	J3-4	HDR, 2MMX2, VERT, LOCK	JST	B2B-PH-K-S
093-2005-0	J2	HDR, 2MMX7, VERT, SHROUDED	JST	B7B-PH-K-S
145-0251-A		700RB-II PREAMP RAW BOARD		

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

TEST CONDITIONS:
 SET VOLUME, BOOST AND MASTERS ON 10.
 SET TONE ON 10, VOICING FILTERS OFF.
 SET INPUT ATTENUATOR AND X-OVER OFF.
 SIGNAL 200HZ SINE SHOWN AS: 350mV
 DC VOLTAGES SHOWN AS: 3.4V



NOT VALID UNLESS STAMP IS RED

gallien technology

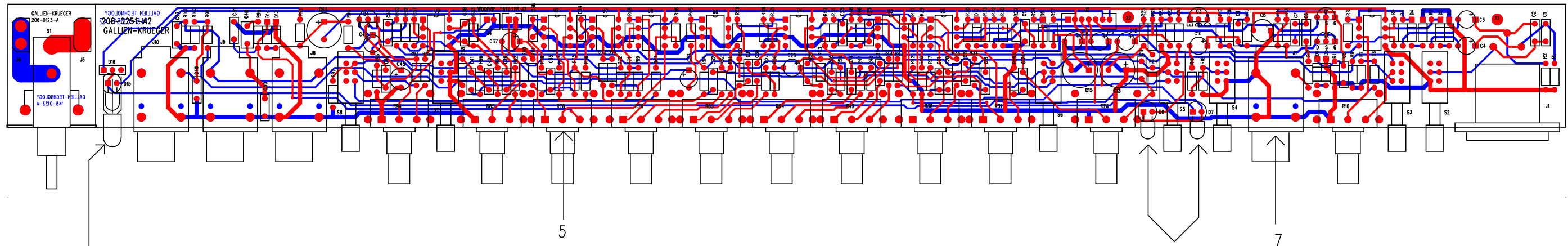
2234 INDUSTRIAL DRIVE
 STOCKTON CA. 95206
 VOICE: 209-234-7300
 FAX: 209-234-8420

TITLE: 700RB-II PREAMP

NOTES:
 1. CHANGE BOARD NO. TO 206-0251-A2
 2. CHANGE R40 TO 2.00K FROM 4.99K.
 3. ADD C51- 220pF ACROSS D14 & D15.
 4. ADD C50-220pF ACROSS J9.
 5. CHANGE D17 TO R91-1K.
 6. CHANGE R95-4.75K, R92-12.1K, R40-2.00K.
 7. REPLACE D10 AND D11 WITH R29A & C17A.
 8. REROUTE GROUND TRACES FROM U5 TO U6.

APPROVALS		DATE	TITLE
INIT			
DESIGNED:	R.A.G.	7/24/01	
DRAWN:	R.A.G.	8/04/03	
ELEC:			
MECH:			
Q/A:			
RELEASED:			

DRAWING NO: 406-0251-A2
 PART NO: 206-0251-A2
 COMPANY: GALLIEN-KRUEGER
 FILENAME: 6251A2



6 PCB WORK INSTRUCTIONS
 DWG #420-0251-A2

NOTES:

UNLESS OTHERWISE SPECIFIED:

1. SQUARE PADS ON THRU HOLE PARTS (ie: CONNECTORS, DIPS, SIPS, LEDES) DENOTE PIN 1.
2. ALL BOARDS REQUIRE A COMPLETE AND THOROUGH VISUAL INSPECTIONS.
3. ALL BOARDS MUST BE BARE BOARD TESTED.
4. ASSEMBLE AND SOLDER PER ANSI/IPC-A-610B.

LOADING

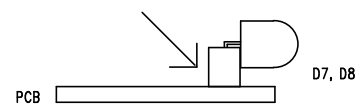
5. CLIP TABS OFF ON POTS R8, R24, R30, R47, R52, R61, R68, R76, R83, R91
6. SEE DETAIL A FOR MOUNTING D7 AND D8. SEE DETAIL B FOR MOUNTING D15 AND D16.

FINAL QA

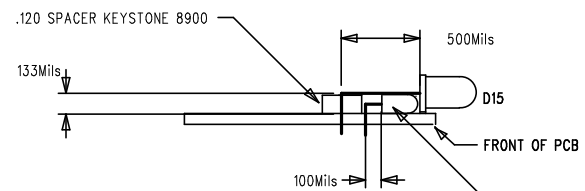
7. CHECK TO SEE ALL POTS, JACKS, AND SWITCHES ARE MOUNTED FLUSH AND STRAIGHT

DETAIL A

LED SPACER
 GT PART# 100-0119-0



DETAIL "B"



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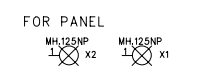
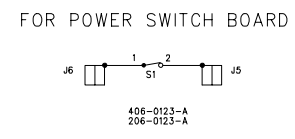
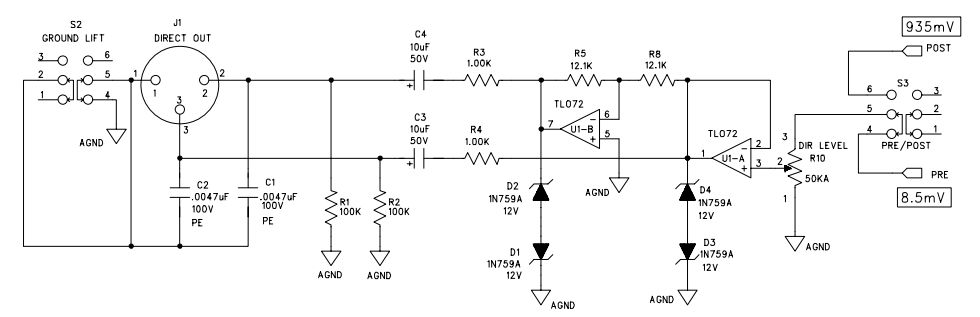
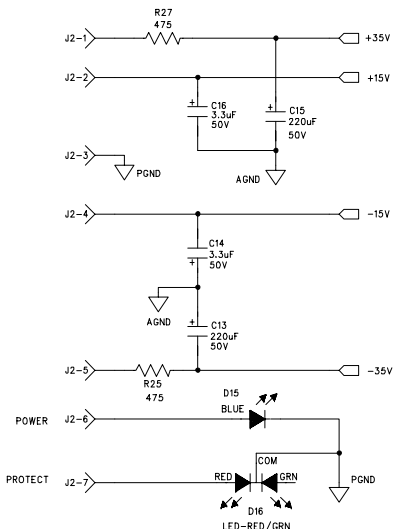
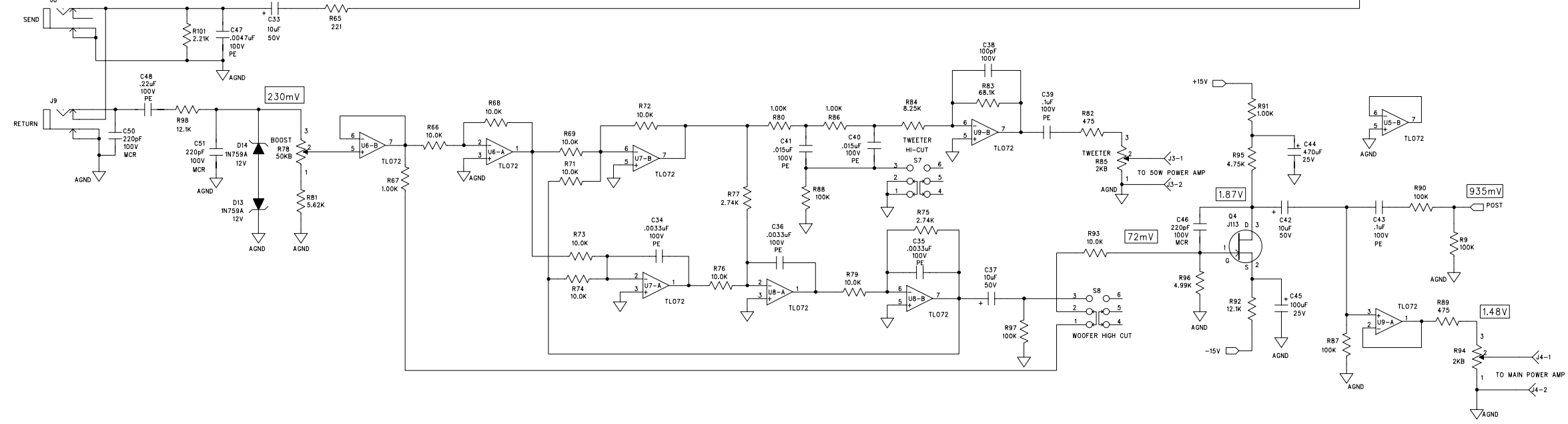
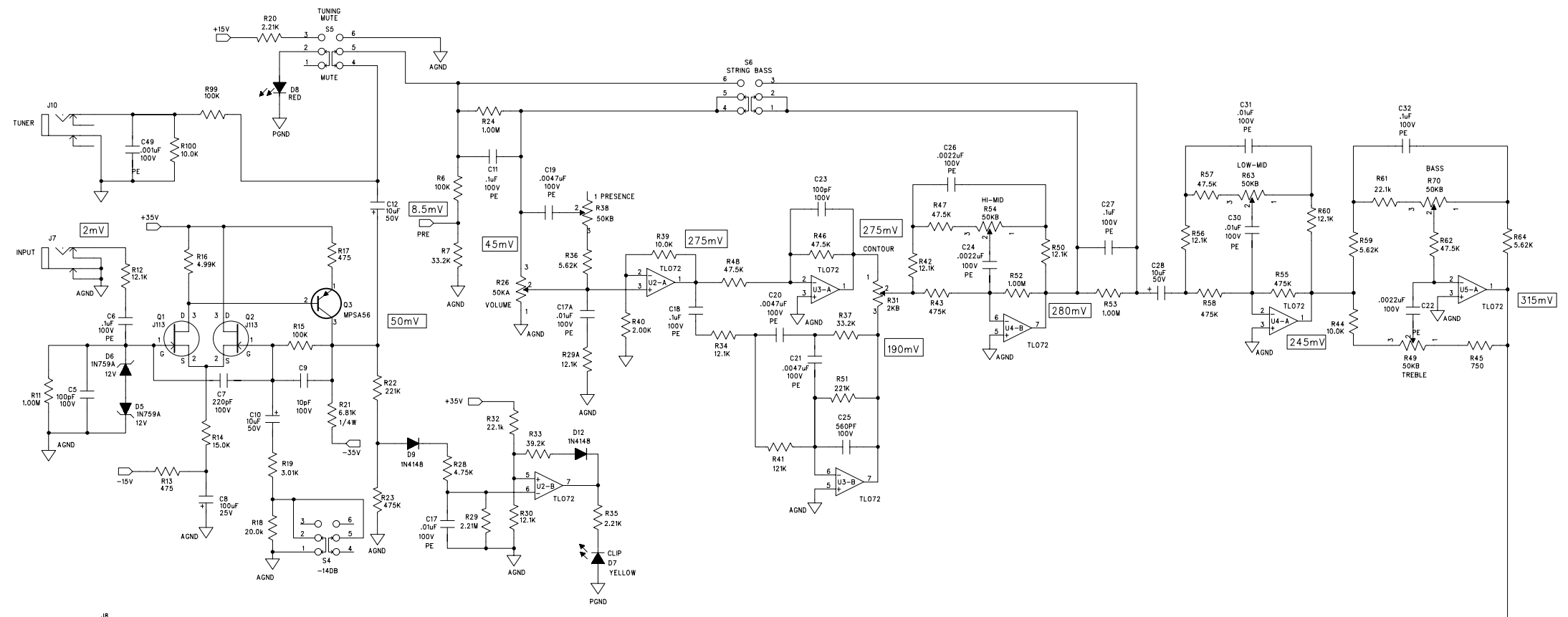
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2240 PARAGON DRIVE
 SAN JOSE CA, 95131
 VOICE: 408-441-8081
 FAX: 408-441-8085

APPROVALS		TITLE:	
INIT	DATE	700B-II PRE-AMP BD	
DESIGNED:		SIZE	DRAWING NO: 405-0251-A2
DRAWN:		B	PART NO: 145-0251-A2
ELEC:			REV. A2
LAYER DESCRIPTION:		COMPANY:	
SOP SOURCE: BUBSONEN		GERBER FILE NAME: 5251A2.pbo	
		FILENAME: 5251A2	

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:

TEST CONDITIONS:
 SET VOLUME, BOOST AND MASTERS ON 10.
 SET TONE ON 10, VOICING FILTERS OFF.
 SET INPUT ATTENUATOR AND X-OVER OFF.
 SIGNAL 200HZ SINE SHOWN AS: **350mV**
 DC VOLTAGES SHOWN AS: 3.4V



NOT VALID UNLESS STAMP IS RED

gallien technology

2234 INDUSTRIAL DRIVE
 STOCKTON CA. 95206
 VOICE: 209-234-7300
 FAX: 209-234-8420

NOTES:
 TO REDUCE BRIGHTNESS AND BASS EFFECYENCY
 THE VALUE OF THE FOLLOWING COMPONENT
 WERE CHANGED:
 1. CHANGE R44 TO 10K FROM 5.62K.
 2. CHANGE R45 TO 750 FROM 5.62K.
 3. CHANGE R52 TO 1M FROM 475K.
 4. CHANGE BOARD NO. TO 206-0251-A3

APPROVALS		TITLE:	
INIT	DATE	700RB-II PREAMP	
R.A.G.	7/24/01	DESIGNED BY:	406-0251-A3
NOLI	8/13/04	DRAWN BY:	206-0251-A3
		ELEC:	
		MECH:	
		Q/A:	
		RELEASED:	

COMPANY: GALLIEN-KRUEGER
 FILENAME: 6251A3

700RB-II Preamp		Bill Of Material	206-0251-A3		
Part No.	Reference	Description	Manufacturer	Mfr. Part No.	Quan
032-4102-0	C49	CAP,PE,102,5%,100V,	PANASONIC	ECQB1102JF	1
032-4222-0	C22 C24 C26	CAP,PE,222,5%,100V,	PANASONIC	ECQB1222JF	3
032-4332-0	C34-36	CAP,PE,332,5%,100V,	PANASONIC	ECQB1332JF	3
032-4472-0	C1-2 C19-21 C47	CAP,PE,472,5%,100V,	PANASONIC	ECQB1472JF	6
032-4153-0	C40-41	CAP,PE,153,5%,100V,	PANASONIC	ECQV1153JM	2
032-4103-0	C17 C30-31 C17A	CAP,PE,103,5%,100V,	PANASONIC	ECQV1103JM	4
032-4104-0	C6 C11 C18 C27 C32 C39 C43	CAP,PE,104,5%,100V,	PANASONIC	ECQV1104JM	7
032-4224-0	C48	CAP,PE,224,5%,100V,	PANASONIC	ECQV1224JM	1
034-4101-0	C5 C23 C38	CAP,MCR,100pF,5%,100V,	TAITRON	TMRS101J100NPOB	3
031-1107-0	C8 C45	CAP,ELEC,RAD,107,20%,25V	UNITED CHEMI-CON	SMG25VB101M6X11LL	2
034-4100-0	C9	CAP, MCR,10pF,5%,100V,NPO	TAITRON	TMRS100J100NPOB	1
031-2106-0	C3-4 C10 C12 C28 C33 C37 C42	CAP,ELEC,RAD, 106, 20%, 50V	UNITED CHEMI-CON	SMG50VB10RM5X11LL	8
034-4221-0	C7 C46 C50-51	CAP,MCR,220pF,5%,100V,	TAITRON	TMRS221J100NPOB	4
031-2227-0	C13 C15	CAP, ELEC, 220uF, 20%, 50V	UNITED CHEMI-CON	SMG50VB221M10X12LL	2
031-2335-0	C14 C16	CAP,ELEC,RAD,335,20%,50V	UNITED CHEMI-CON	SMG50VB3R3M5X11LL	2
031-1477-0	C44	CAP, ELEC, RAD, 470uF, 20%, 25V	UNITED CHEMI-CON	SMG25VB471M10X12LL	1
034-4561-0	C25	CAP,MCR,560pF,5%,100V,	TAITRON	TMRS561J100NPOB	1
092-0081-0	J7-10	JACK,1/4",MONO,PC,NON GROUNDING	NEUTRIK	S102-84	4
092-0069-0	J5-6	FASTON, M, PC, .250",HOR	ZIERICK	901	2
092-0084-0	J1	CON,XLR,MALE,PC,PL, SCREW MNT	NEUTRIK	X906-05	1
020-1000-0	D9 D12	1N4148, RECT-FAST, 200MA, 100V	MOTOROLA	1N4148	2
020-0120-0	D1-6 D13-14	1N759A, ZENER,12V,5%,400MW, DO-35	MOTOROLA	1N759A	8
093-0051-0	J3-4	HDR, 2MMX2, VERT, LOCK	JST	B2B-PH-K-S	2
093-2005-0	J2	HDR, 2MMX7, VERT, SHROUDED	JST	B7B-PH-K-S	1
001-1030-1	U1-9	TLO72CP, LOW NOISE JFET OPAMP	MOTOROLA	TL072CP	9
025-0030-2	D15	LED,BLUE, 10MA	LITEON	LTL-42B6	1
025-0012-0	D16	LED,RED/GRN,5MM,630NM/560NM,15MCD/15MCD	STANLEY	VRPG5614S	1
025-0116-0	D8	LED,RED, 3MM, 635NM, 6MCD, 10MA, 40DEG	EVERLIGHT	EL2041D	1
025-0023-0	D7	LED,YELLOW, 3MM, 585NM, 5MCD, 10MA	EVERLIGHT	EL204YD	1
000-0000-0	X1-2	.125 HOLE, NON-PLATED			2
070-1522-0	R31 R85 R94	POT,2KB,7MM,KNURL,.1W	SONG HUEI	16K1-B2K-L15KC	3
070-1513-0	R10 R26	POT,50K-15A,7MM,KNURL,.1W	SONG HUEI	16K1-A50K-L15KC	2
070-1514-0	R38 R49 R54 R63 R70 R78	POT,50KB,7MM,KNURL,.1W	SONG HUEI	16K1-B50K-L15KC	6
060-1002-0	R3-4 R67 R80 R86 R91	RES,METAL FILM, 1.00K, 1/8W, 1%	ECI	M1F1AK001.00	6
060-1005-0	R11 R24 R53	RES, MF, 1.00M, 1%,1/8W, 060-1005-0	ECI	M1F1AM001.00	3
060-1005-0	R52	RES, METAL FILM, 1.00M, 1/8W, 1%	ECI	M1F1AK475.00	1
060-1003-0	R39 R66 R68-69 R71-74 R76 R79 R93 R100	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK010.00	12
060-1003-0	R44	RES,METAL FILM, 10.0K, 1/8W,1%	ECI	M1F1AK005.62	1
060-1004-0	R1-2 R6 R9 R15 R87-88 R90 R97 R99	RES,METAL FILM, 100K, 1/8W, 1%	ECI	M1F1AK100.00	10
060-1213-0	R5 R8 R12 R30 R34 R42 R50 R56 R60 R98	RES,METAL FILM, 12.1K OHM, 1/8W, 1%	ECI	M1F1AK012.10	10
060-1213-0	R92 R29A	RES,METAL FILM, 12.1K, 1/8W, 1%	ECI	M1F1AK012.10	2
060-1214-0	R41	RES,METAL FILM, 121K, 1/8W, 1%	ECI	M1F1AK121.00	1
060-1503-0	R14	RES,METAL FILM, 15.0K, 1/8W, 1%	ECI	M1F1AK015.00	1
060-2002-0	R40	RES,METAL FILM, 2.00K, 1/8W, 1%	ECI	M1F1AK002.00	1
060-2212-0	R20 R35 R101	RES,METAL FILM, 2.21K, 1/8W, 1%	ECI	M1F1AK002.21	3
060-2215-0	R29	RES, METAL FILM, 2.21M, 1/8W, 1%	ECI	M1F1AM002.21	1
060-2742-0	R75 R77	RES,METAL FILM, 2.74K, 1/8W, 1%	ECI	M1F1AK002.74	2
060-2003-0	R18	RES,METAL FILM, 20.0K, 1/8W, 1%	ECI	M1F1AK020.00	1
060-2213-0	R32 R61	RES,METAL FILM, 22.1K, 1/8W, 1%	ECI	M1F1AK022.10	2
060-2214-0	R22 R51	RES,METAL FILM, 221K, 1/8W, 1%	ECI	M1F1AK221.00	2
060-2211-0	R65	RES,METAL FILM, 221 ohm, 1/8W, 1%	ECI	M1F1AJ221.00	1
060-3012-0	R19	RES,METAL FILM, 3.01K, 1/8W, 1%	ECI	M1F1AK003.01	1
060-3323-0	R7 R37	RES,METAL FILM, 33.2K, 1/8W, 1%	ECI	M1F1AK033.20	2
060-3923-0	R33	RES,METAL FILM,39.2K,1/8W,1%	ECI	M1F1AK039.2	1
060-4752-0	R28 R95	RES,METAL FILM, 4.75K, 1/8W, 1%	ECI	M1F1AK004.75	2
060-4992-0	R16 R96	RES,METAL FILM, 4.99K, 1/8W, 1%	ECI	M1F1AK004.99	2
060-4753-0	R46-48 R57 R62	RES,METAL FILM, 47.5K, 1/8W, 1%	ECI	M1F1AK047.50	5
060-4754-0	R23 R43 R55 R58	RES,METAL FILM, 475K, 1/8W, 1%	ECI	M1F1AK475.00	4
060-4751-0	R13 R17 R25 R27 R82 R89	RES,METAL FILM, 475 ohm, 1/8W, 1%	ECI	M1F1AJ475.00	6
060-5622-0	R36 R59 R64 R81	RES,METAL FILM, 5.62K, 1/8W, 1%	ECI	M1F1AK005.62	4
052-6812-0	R21	RES, METAL FILM, 6.81K OHM, 1/4W, 1%	ECI	M2F1AK006.81	1
060-6813-0	R83	RES,METAL FILM, 68.1K, 1/8W, 1%	ECI	M1F1AK068.10	1
060-7501-0	R45	RES,METAL FILM, 750, 1/8W, 1%	ECI	M1F1AK005.62	1
060-8252-0	R84	RES,METAL FILM, 8.25K, 1/8W, 1%	ECI	M1F1AK008.25	1
090-0012-0	S2-8	SWITCH,MIMI PP,DPDT,.1A BRK/MAKE,PC TERM	ELKELECTRONIC COMP	MTH2UEE-1D911	7

ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

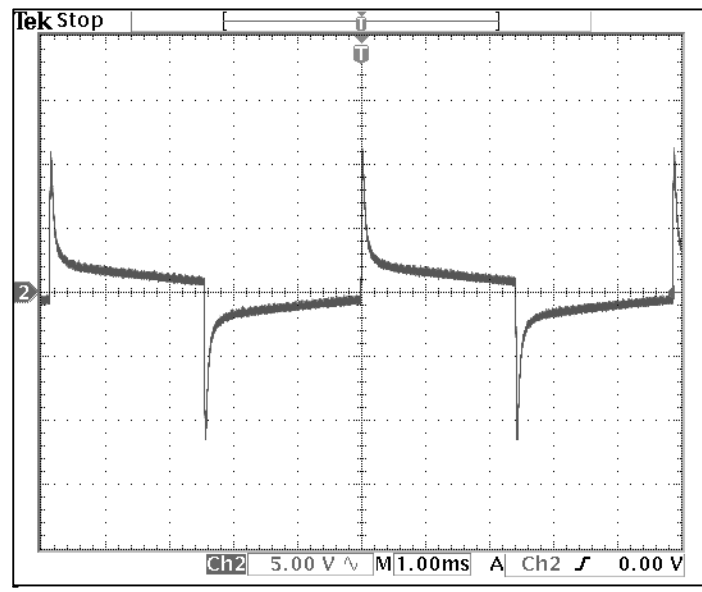


Figure 1
Tones center, Filters OFF

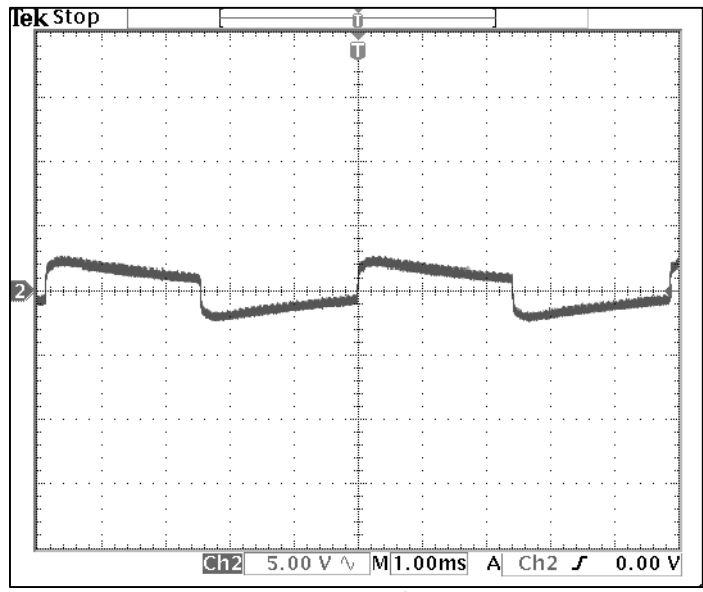


Figure 3
TREBLE to 0

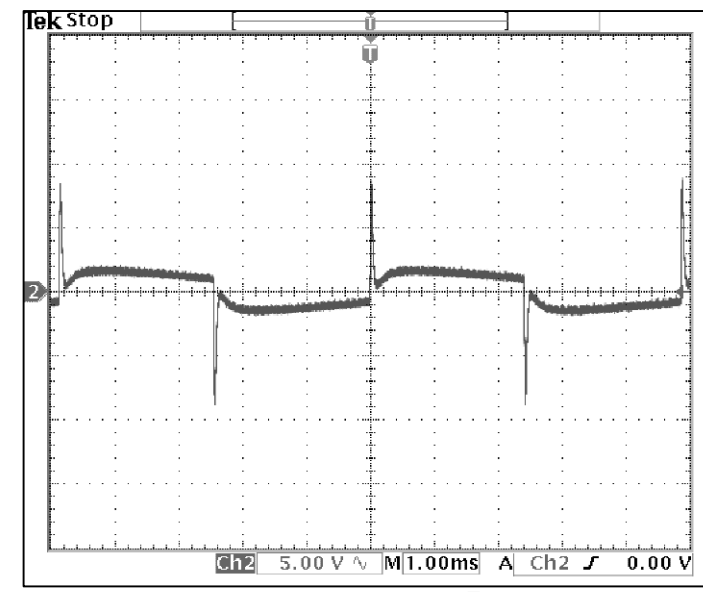


Figure 5
HI-MID to 0

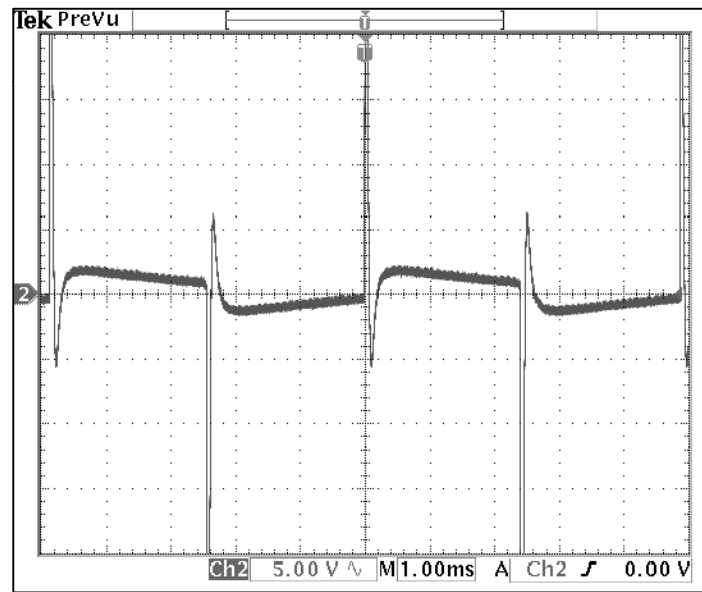


Figure 2
TREBLE to 10

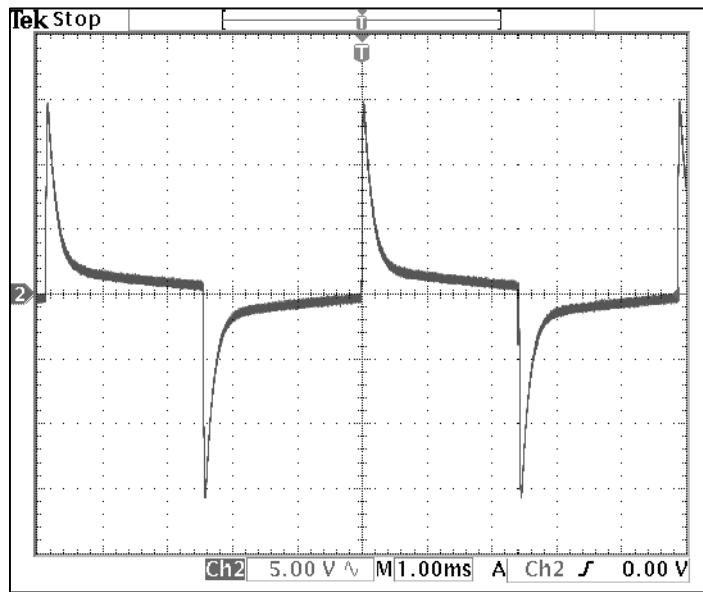


Figure 4
HI-MID to 10

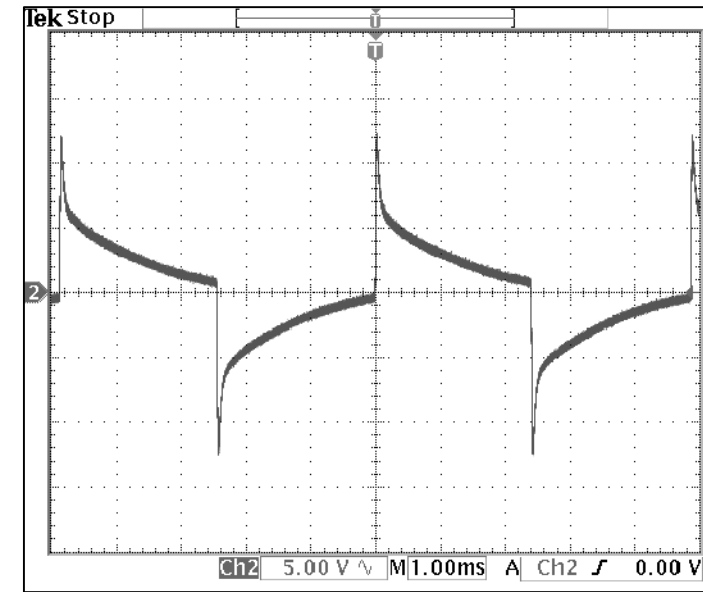


Figure 6
LO-MID to 10

Set up:

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set VOLUME, all ACTIVE EQ's, BOOST, TWEETER, and WOOFER to center(half way). CONTOUR and PRESENCE to 0.
3. Look at output with scope set on 1mS/div and 5V/div.

QTY PER ASSY	PART NUMBER	DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY				
THIS DRAWING CONTAINS INFORMATION WHICH IS PROPRIETARY TO GALLIEN TECHNOLOGY CORPORATION. DO NOT REPRODUCE IN ANY FORM OR DISTRIBUTE IN ANY FASHION WITHOUT THE EXPRESS WRITTEN PERMISSION OF GALLIEN TECHNOLOGY CORPORATION.				
<small>UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES</small> TOLERANCES FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		APPROVALS		
		INIT	DATE	
MATERIAL: (SEE NOTE 1)		MECH. DESIGN:	SIZE	
FINISH: (SEE NOTE 1)		DRAWN BY: ATM	DRAWING NUMBER:	
		ELEC:	B	
		PROJ. MGR.:	PART NUMBER: 206-0251-A1	
		Q/A:	REVISION: A1	
		RELEASED:	FILENAME:	
			SCALE: NOT TO SCALE	
			SHEET 1 OF 2	

gallien technology
2234 INDUSTRIAL DRIVE
STOCKTON, CA 95206

**TITLE: 700RB-II/1001RB-II
PREAMP TEST WAVEFORMS**

ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

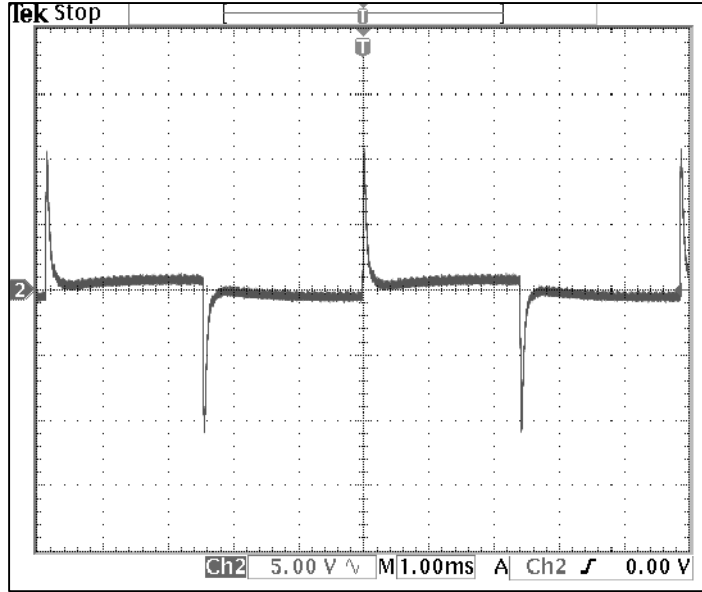


Figure 7
LO-MID to 0

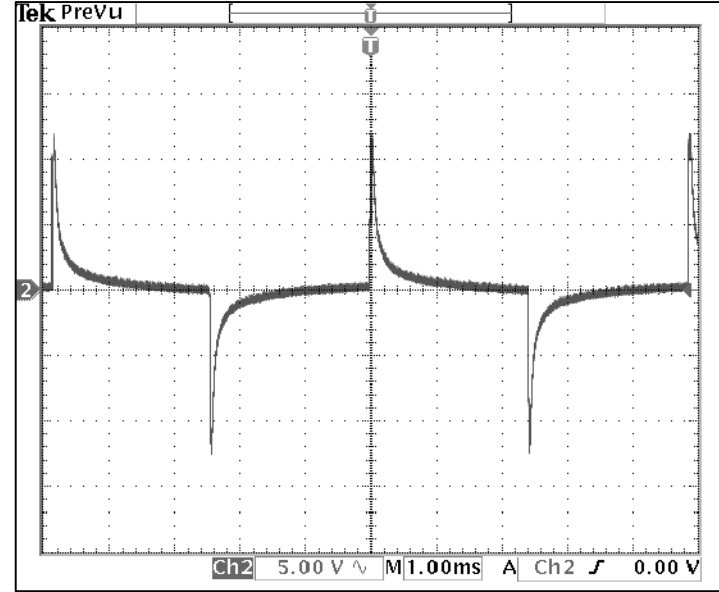


Figure 9
BASS to 0

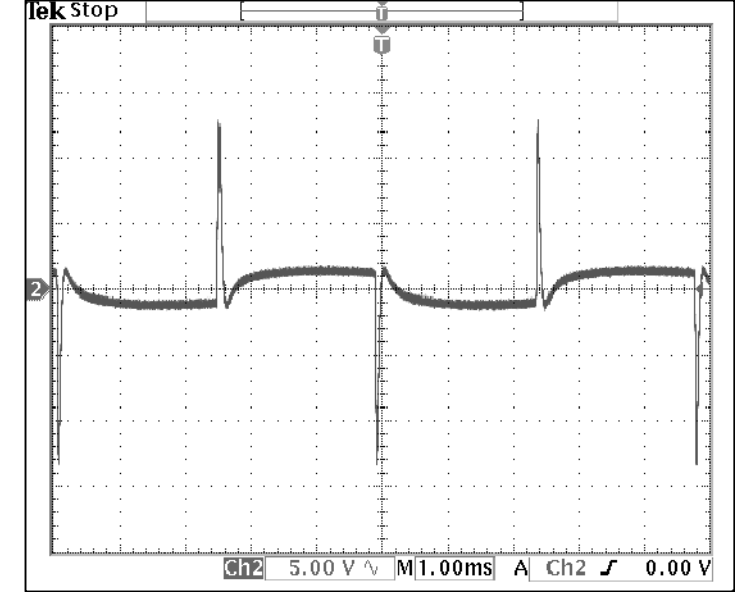


Figure 11
CONTOUR to 10

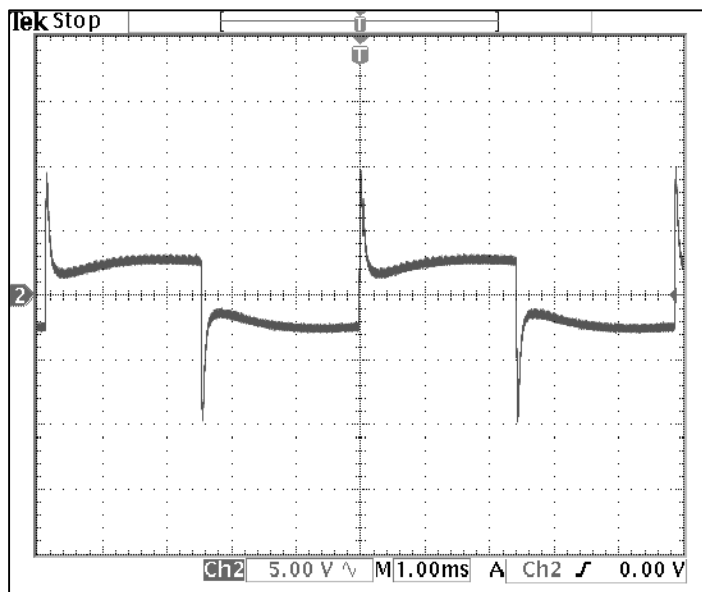


Figure 8
BASS to 10

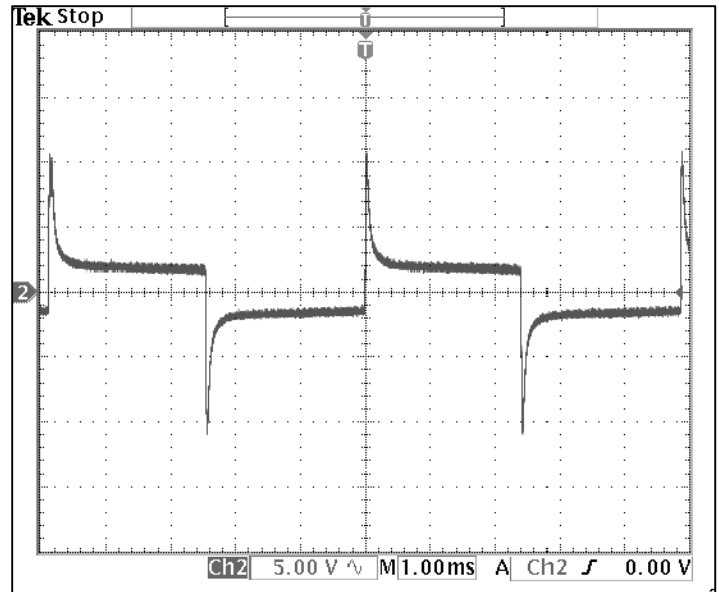


Figure 10
STRING BASS SWITCH IN

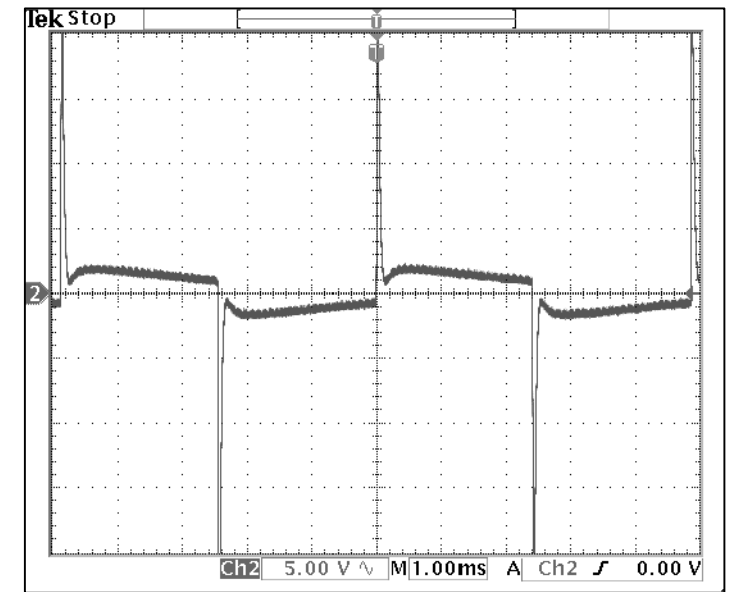


Figure 12
PRESENCE to 10

Set up:

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set VOLUME, all ACTIVE EQ's, BOOST and MASTER to center(half way), CONTOUR and PRESENCE to 0.
3. Look at output with scope set on 1mS/div and 5V/div.

QTY PER ASSY	PART NUMBER	DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY				
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<small>TOLERANCES UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES</small> FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		APPROVALS		
		INIT	DATE	
MATERIAL: (SEE NOTE 1)		MECH. DESIGN:	SIZE	DRAWING NUMBER:
FINISH: (SEE NOTE 1)		DRAWN BY: ATM	B	700RB-II/1001RB-II
Q/A:		ELEC:	FILENAME:	REVISION
RELEASED:		PROJ. MGR.:	206-0251-A1	A1
		SCALE: NOT TO SCALE	SHEET 2 OF 2	

ZONE	Dim.	ECO#	Rev.	REVISIONS	Date

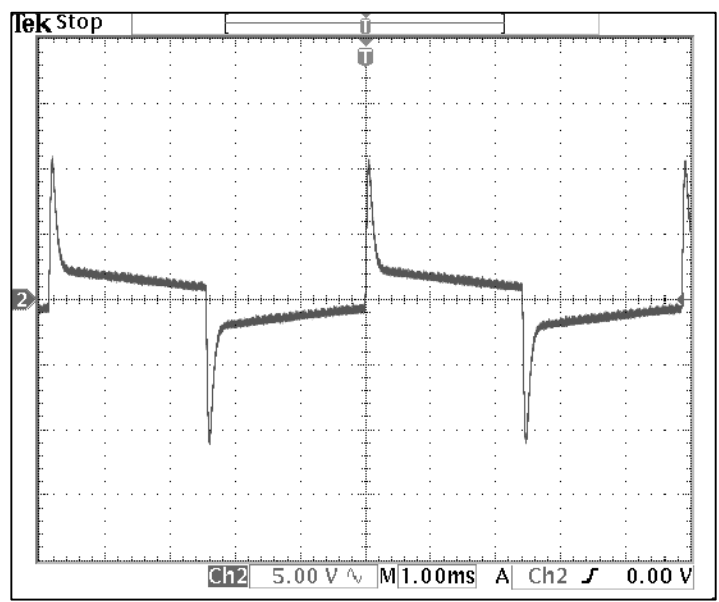


Figure 7
WOOFER HI-CUT SWITCH IN

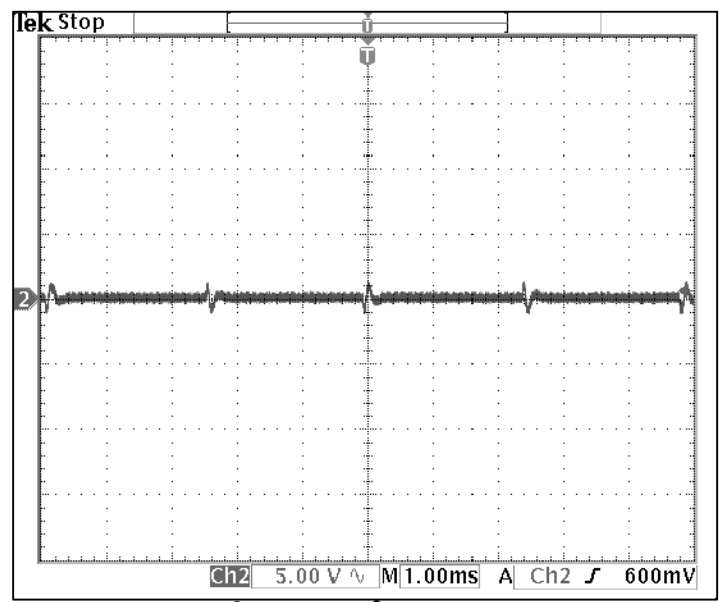


Figure 9
TWEETER HI-CUT SWITCH IN

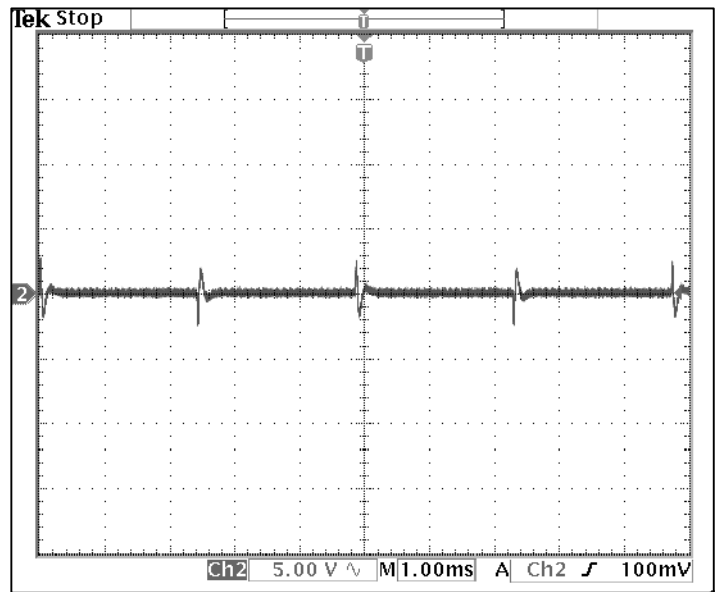


Figure 8
TWEETER

Set up:

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set VOLUME, all ACTIVE EQ's, BOOST and MASTER to center(half way), CONTOUR and PRESENCE to 0.
3. Look at output with scope set on 1mS/div and 5V/div.

QTY PER ASSY	PART NUMBER	DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY				
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<small>UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES</small> TOLERANCES FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005		APPROVALS		
		INIT	DATE	
MATERIAL: (SEE NOTE 1)		MECH. DESIGN:	SIZE	DRAWING NUMBER:
FINISH: (SEE NOTE 1)		DRAWN BY: ATM	B	700RB-II/1001RB-II
PROJ. MGR.:		ELEC:	FILENAME:	REVISION
Q/A:		RELEASED:	206-0251-A1	A1
SCALE: NOT TO SCALE			SHEET 2 OF 2	

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ZONE	Dim.	ECO#	Rev.	REVISIONS		Date

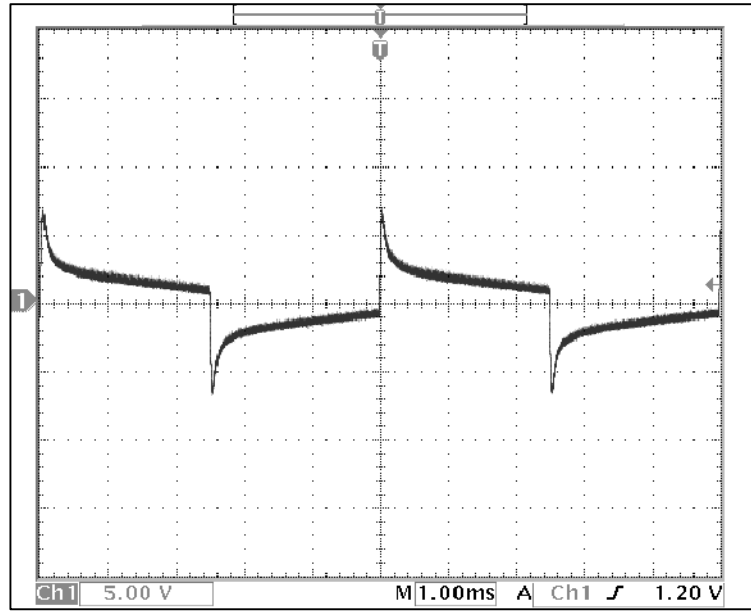


Figure 1
Tones center, Filters off

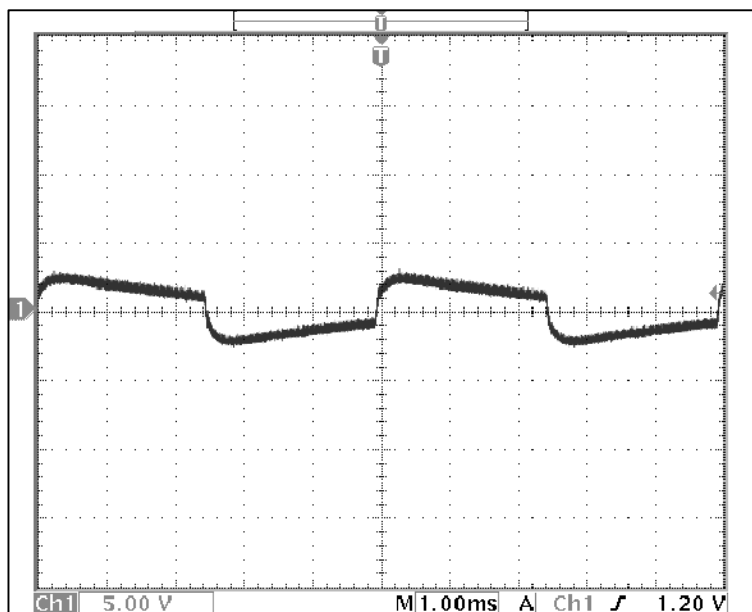


Figure 2
Treble to 0

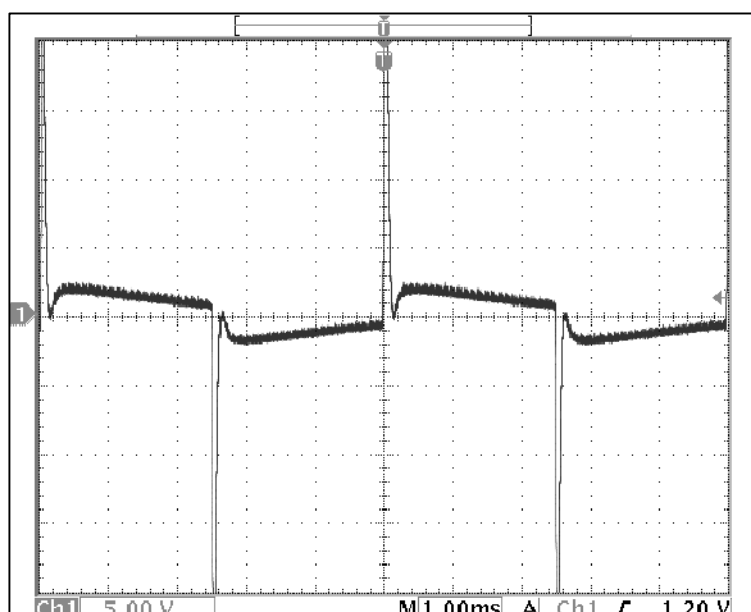


Figure 6
Lo-Mid to 0

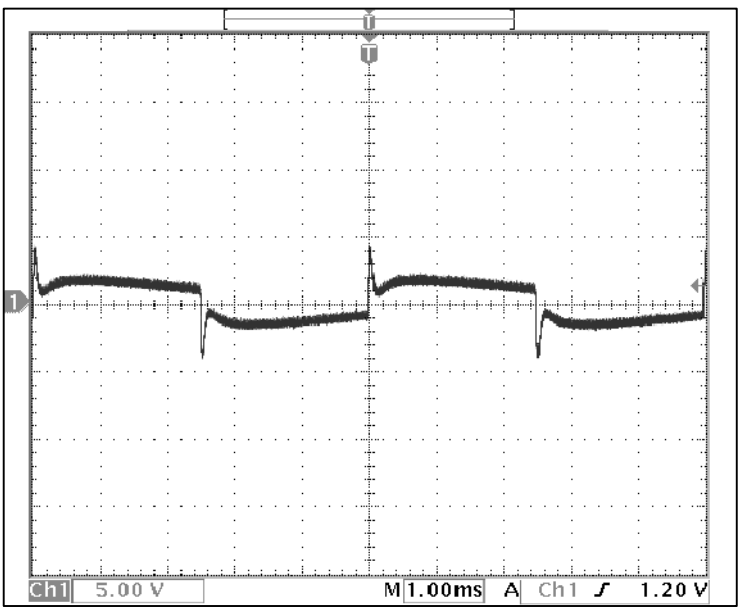


Figure 4
Hi-Mid to 0

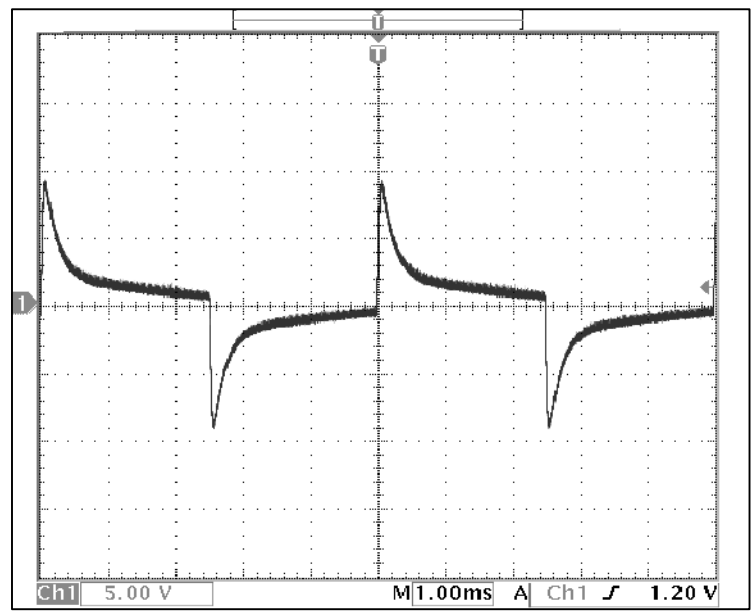
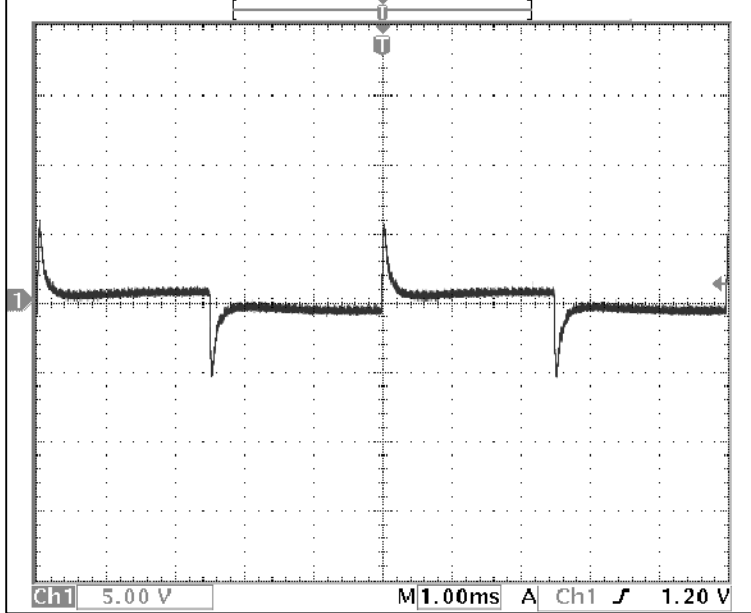


Figure 5
Hi-Mid to 10



1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center(halfway), Contour and Presence to 0.
3. Look at output with scope set on 5V/div and 1ms/div.

HOLE REFERENCE CHART		
HOLE	DESCRIPTION	QTY.

QTY PER ASSY		DESCRIPTION	DESIGNATION(S)	ITEM NO.
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UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES		gallien technology 2234 INDUSTRIAL DRIVE STOCKTON, CA 95206		
TOLERANCES FRACTION ± .XX ± 0.01 .XXX ± 0.005 MATERIAL: (SEE NOTE 1) FINISH: (SEE NOTE 1)		TITLE: 700RB-II/1001RB-II		
APPROVALS INIT DATE MECH. DESIGN: DRAWN BY: EAH 8/20/04 ELEC: PROJ. MGR.: Q/A: RELEASED:		SIZE DRAWING NUMBER: B	PART NUMBER: 206-0251-A2	REVISION A2
SCALE: NOT TO SCALE		SHEET 1 OF 3		

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ZONE	Dim.	ECO#	Rev.	REVISIONS	Date

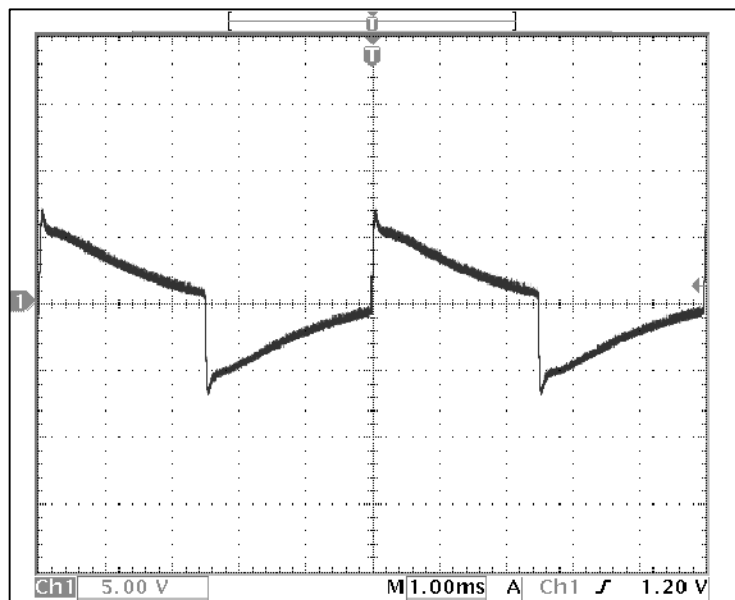


Figure 7
Lo-Mid to 10

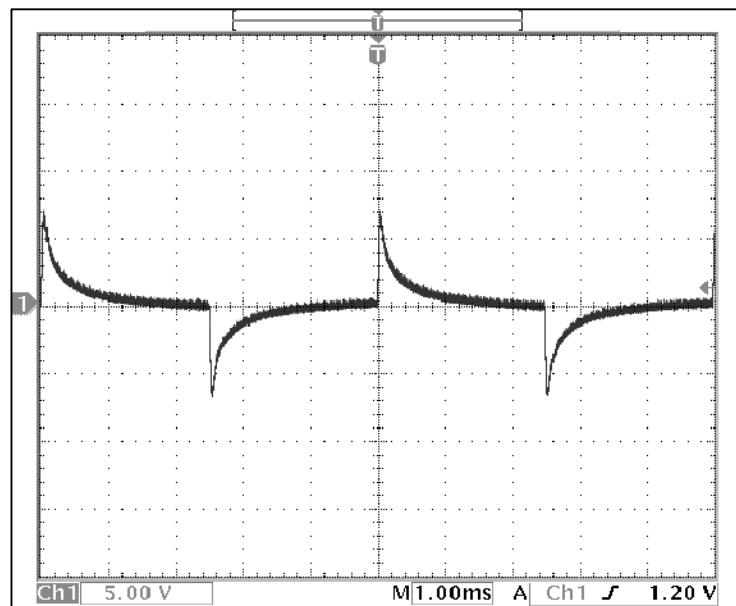


Figure 8
Bass to 0

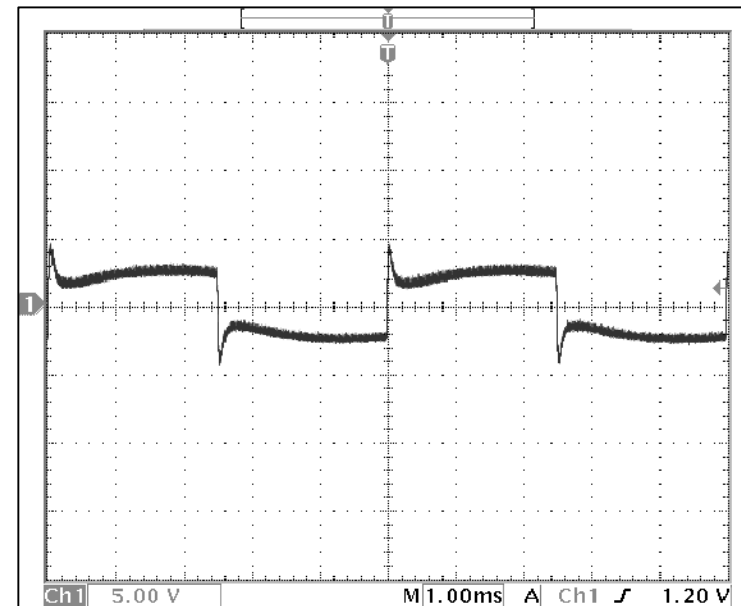


Figure 9
Bass to 10

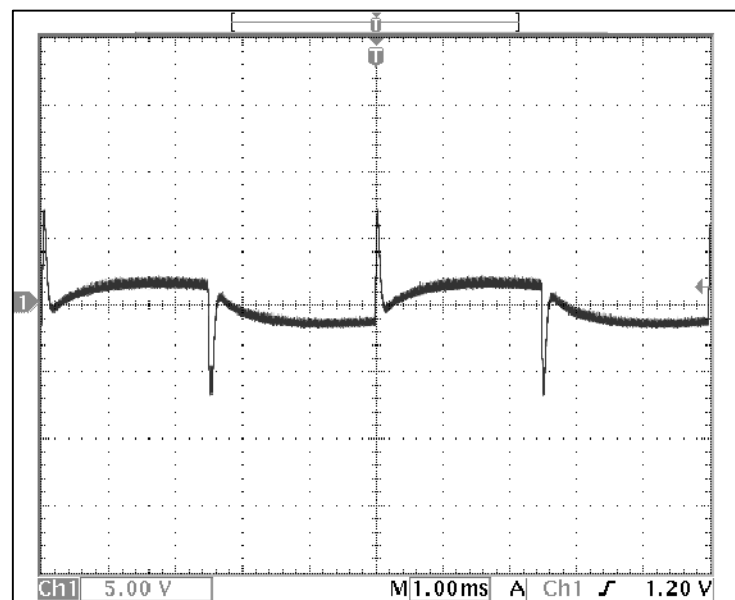


Figure 10
Contour to 10

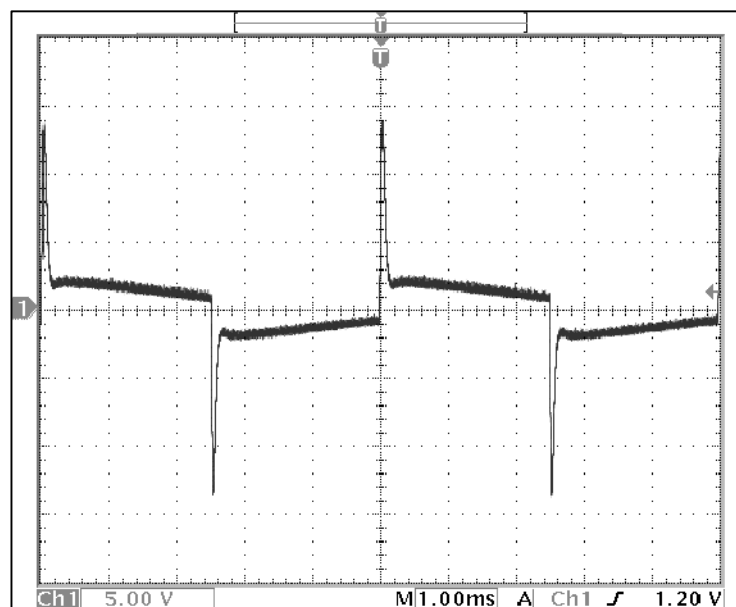


Figure 11
Presence to 10

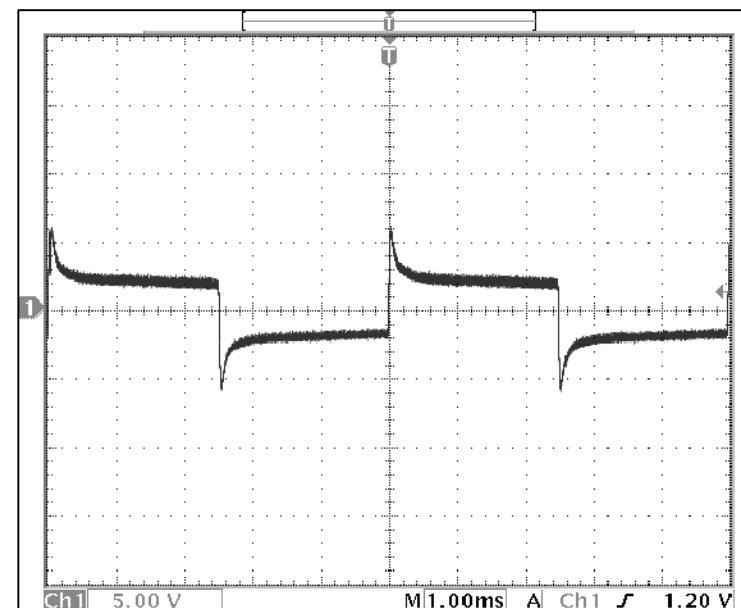


Figure 12
String Bass Switch In

1. Apply signal into the input with 200Hz square wave @ -46dBV(5mVrms).
2. Set Volume, all Active EQ's, Boost, Tweeter and Master to center (halfway), Contour and Presence to 0.
3. Look at output with scope set on 5V/div and 1ms/div.

HOLE REFERENCE CHART		
HOLE	DESCRIPTION	QTY.

QTY PER ASSY		DESCRIPTION	DESIGNATION(S)	ITEM NO.
PROPRIETARY		PARTS LIST		
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UNLESS OTHERWISE INDICATED DIMENSIONS SHOWN ARE IN INCHES		TITLE: 700RB-II/1001RB-II		
APPROVALS TOLERANCES FRACTION ± ANGLES ± .XX ± 0.01 .XXX ± 0.005 MATERIAL: (SEE NOTE 1) FINISH: (SEE NOTE 1)		MECH. DESIGN: DRAWN BY: EAH 8/20/04 ELEC: PROJ. MGR.: Q/A: RELEASED:		
SIZE: B		DRAWING NUMBER: 206-0251-A2		REVISION: A2
SCALE: NOT TO SCALE		SHEET 2 OF 3		

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