

AUDIO INPUT STAGE

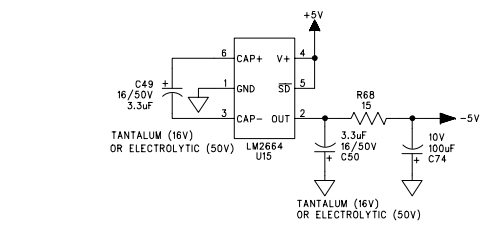
GUITAR INPUT MONO (LEFT)

GUITAR INPUT STEREO (RIGHT)

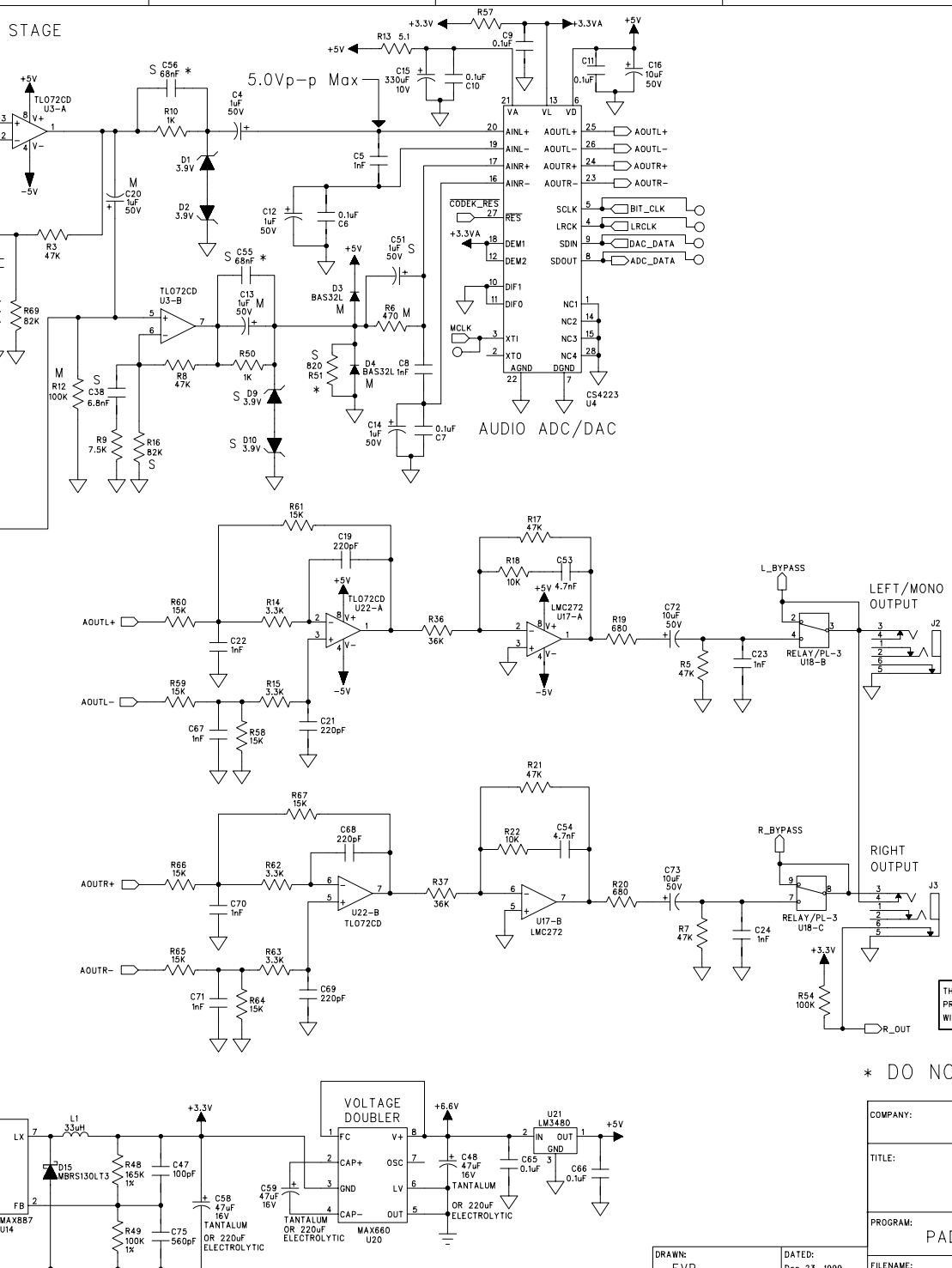
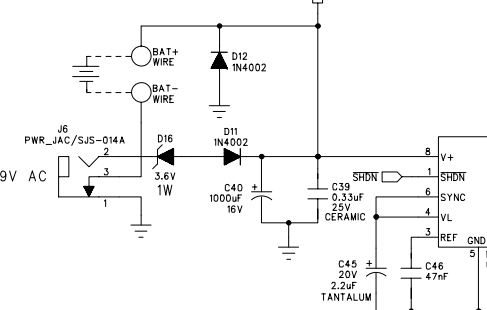
AUDIO ADC/DAC

LEFT/MONO OUTPUT

RIGHT OUTPUT



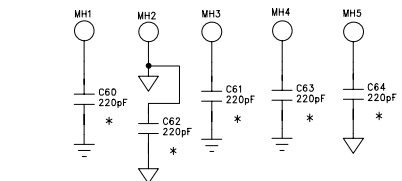
Four Series 1.5Vdc C Cell Batteries
6VDC



ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
???	10/6/99	Reversed connections on C50,74.
	12/23/99	Corrected values for C48,58,59

DNI: DO NOT INSTALL
S: INSTALL FOR STEREO MODE (Delay & Chorus)
M: INSTALL FOR MONO MODE (Distortion)

REF	STEREO	MONO
C36	INSTALL	DNI
C37	INSTALL	DNI
C38	INSTALL	DNI
C51	INSTALL	DNI
R16	INSTALL	DNI
R43	INSTALL	DNI
R44	INSTALL	DNI
D9	INSTALL	DNI
D10	INSTALL	DNI
J4	INSTALL	DNI
C55	DNI	DNI
C56	DNI	DNI
R51	DNI	DNI
C20	DNI	INSTALL
C13	DNI	INSTALL
R6	DNI	INSTALL
R12	DNI	INSTALL
D3	DNI	INSTALL
D4	DNI	INSTALL
R23	DNI	INSTALL



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* DO NOT INSTALL

COMPANY:	LINE 6		
TITLE:	4x4		
PROGRAM:	PADS POWER LOGIC V3.0		
REV:	4d		
FILENAME:	G:/Clients/Ffd/4x4/PADS/Schematics/4x4 Rev4d.sch		
SCALE: 1:1	SIZE: C	PART NUMBER: 50-00-0404	SHEET: 1 OF 2

DRAWN: EVP	DATED: Dec 23, 1999
CHECKED: INITIALS	DATED: MO Day, Year

ECO# INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

D

C

B

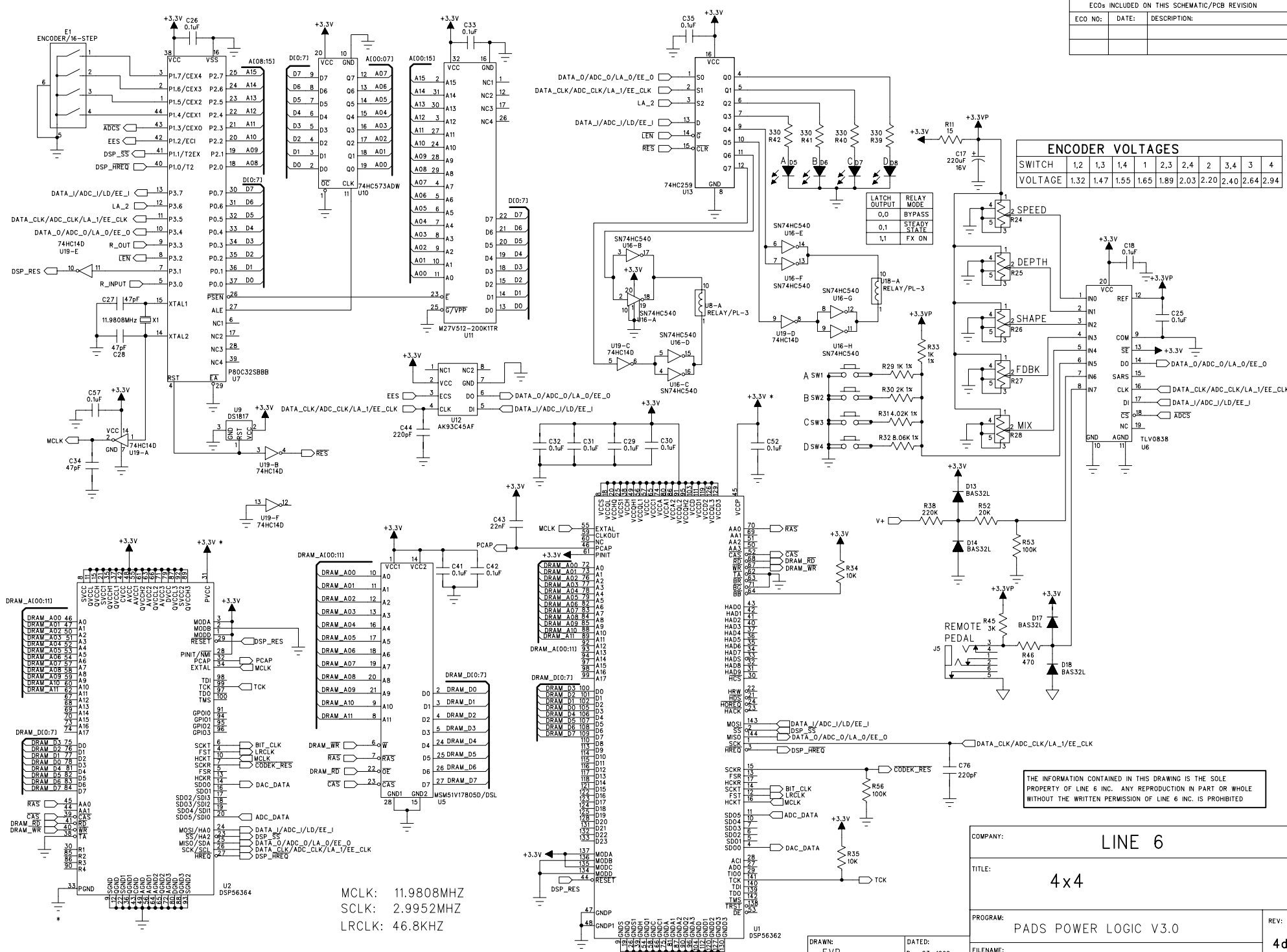
A

D

C

B

A



ENCODER VOLTAGES

SWITCH	1,2	1,3	1,4	1	2,3	2,4	2	3,4	3	4
VOLTAGE	1.32	1.47	1.55	1.65	1.89	2.03	2.20	2.40	2.64	2.94

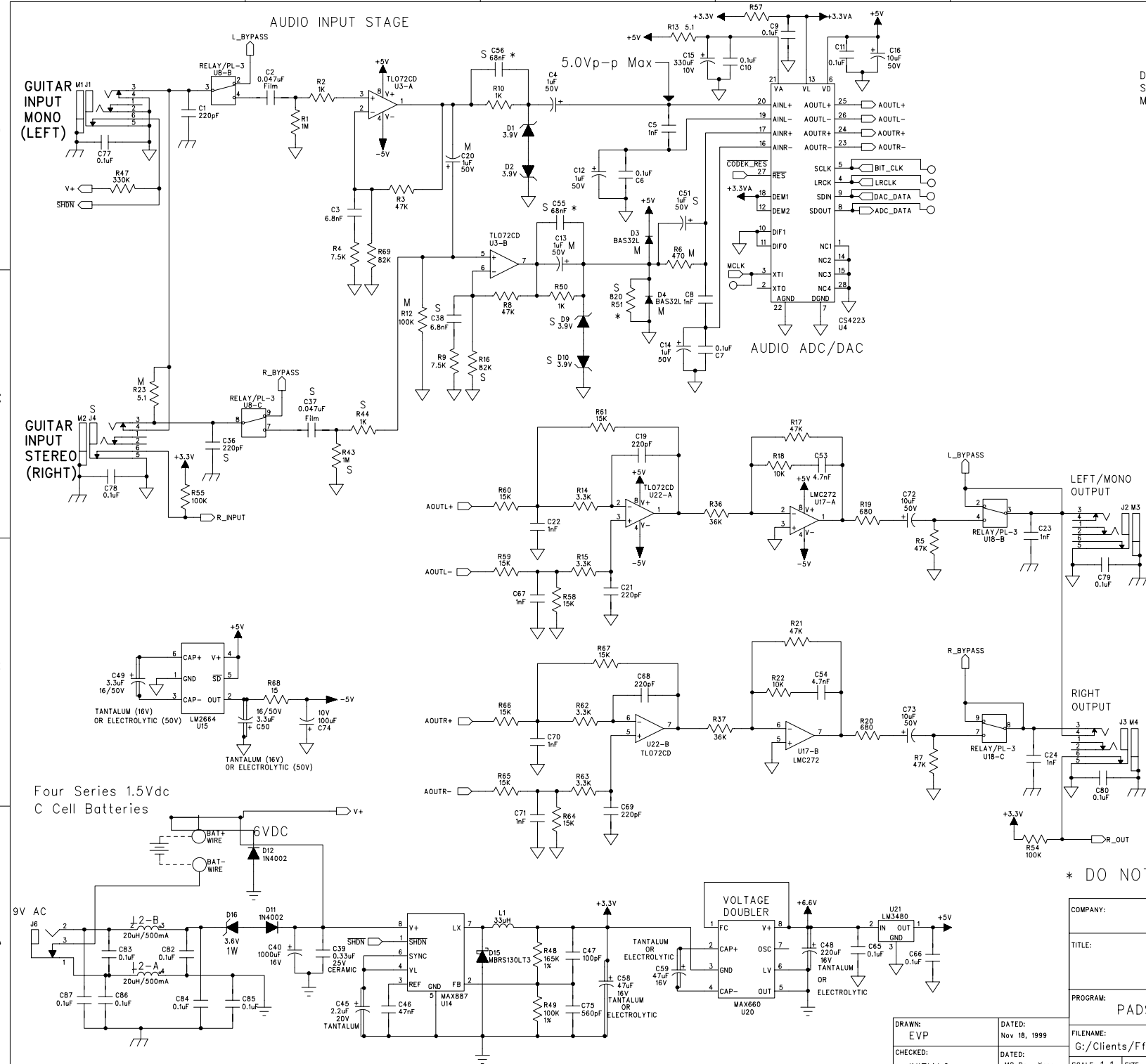
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MCLK: 11.9808MHZ
 SCLK: 2.9952MHZ
 LRCLK: 46.8KHZ

* USE SEPARATE TRACE TO SUPPLY

COMPANY:	LINE 6	
TITLE:	4x4	
PROGRAM:	PADS POWER LOGIC V3.0	
REV:	4d	
FILENAME:	G:/Clients/Ffd/4x4/PADS/Schematics/4x4 Rev4d.sch	
SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX
SHEET: 2	OF 2	

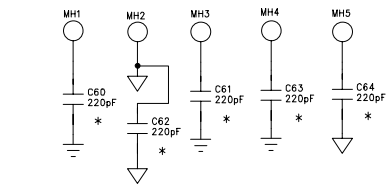
DRAWN:	EV P	DATED:	Dec 23, 1999
CHECKED:		DATED:	MO Day, Year
INITIALS:			



ECO#s INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
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DNI: DO NOT INSTALL
 S: INSTALL FOR STEREO MODE (Delay & Chorus)
 M: INSTALL FOR MONO MODE (Distortion)

REF	STEREO	MONO
C36	INSTALL	DNI
C37	INSTALL	DNI
C38	INSTALL	DNI
C51	INSTALL	DNI
R16	INSTALL	DNI
R43	INSTALL	DNI
R44	INSTALL	DNI
D9	INSTALL	DNI
D10	INSTALL	DNI
J4	INSTALL	DNI
C55	DNI	DNI
C56	DNI	DNI
R51	DNI	DNI
C20	DNI	INSTALL
C13	DNI	INSTALL
R6	DNI	INSTALL
R12	DNI	INSTALL
D3	DNI	INSTALL
D4	DNI	INSTALL
R23	DNI	INSTALL



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* DO NOT INSTALL

COMPANY:	LINE 6	
TITLE:	4X4	
PROGRAM:	PADS POWER LOGIC V3.0	
REV:	5	
FILENAME:	G:/Clients/Ffd/4x4/PADS/Schematics/4x4 Rev5.sch	
SCALE: 1:1	SIZE: C	PART NUMBER: 50-00-0404
SHEET: 1	OF 2	

DRAWN:	DATED:
EVP	Nov 18, 1999
CHECKED:	DATED:
INITIALS	MO Day, Year

ECO# INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

D

C

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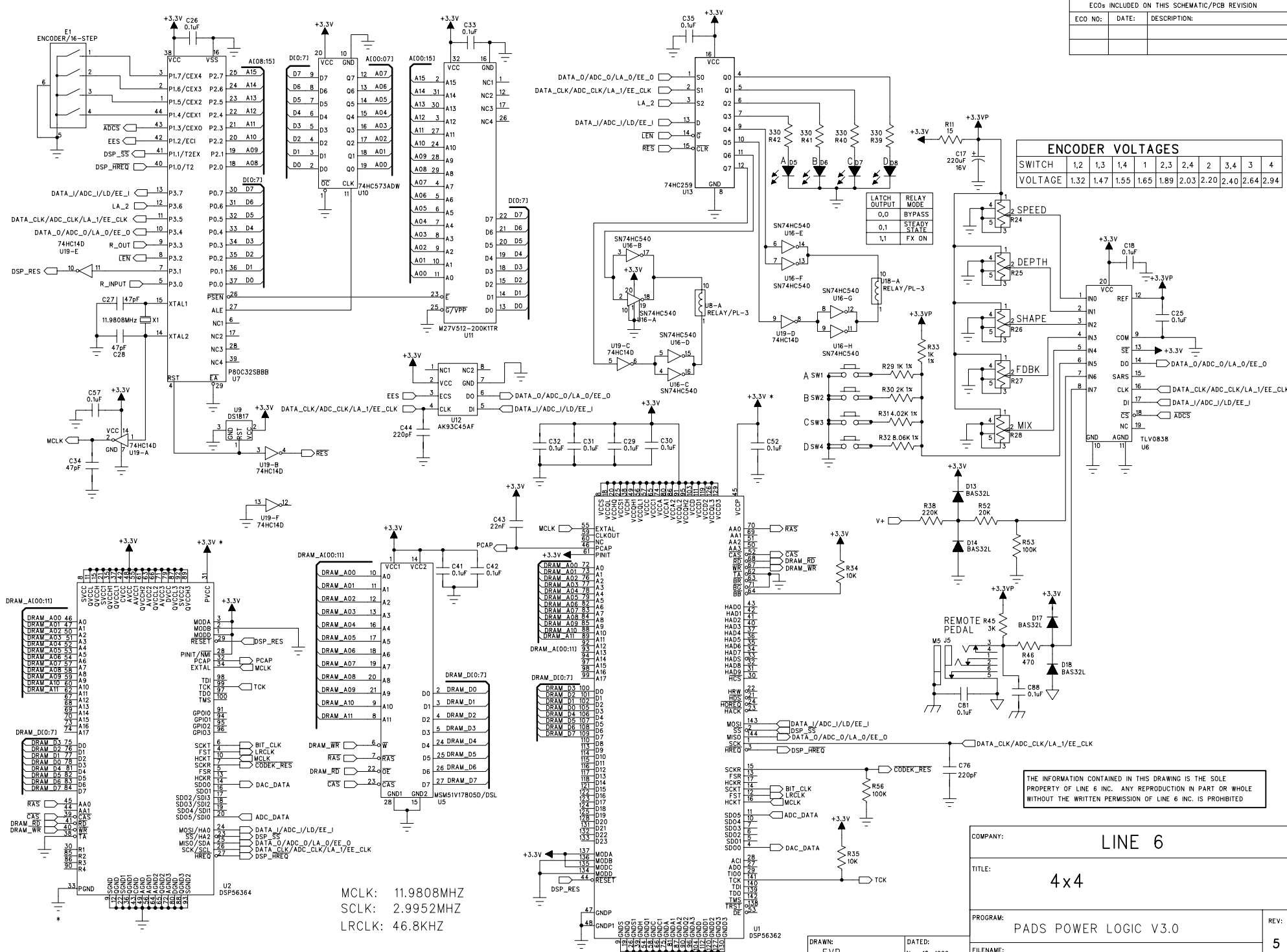
A

D

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B

A



ENCODER VOLTAGES

SWITCH	1,2	1,3	1,4	1	2,3	2,4	2	3,4	3	4
VOLTAGE	1.32	1.47	1.55	1.65	1.89	2.03	2.20	2.40	2.64	2.94

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MCLK: 11.9808MHZ
 SCLK: 2.9952MHZ
 LRCLK: 46.8KHZ

* USE SEPARATE TRACE TO SUPPLY

COMPANY:	LINE 6	
TITLE:	4x4	
PROGRAM:	PADS POWER LOGIC V3.0	
REV:	5	
FILENAME:	G:/Clients/Ffd/4x4/PADS/Schematics/4x4 Rev5.sch	
SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX
SHEET: 2	OF 2	

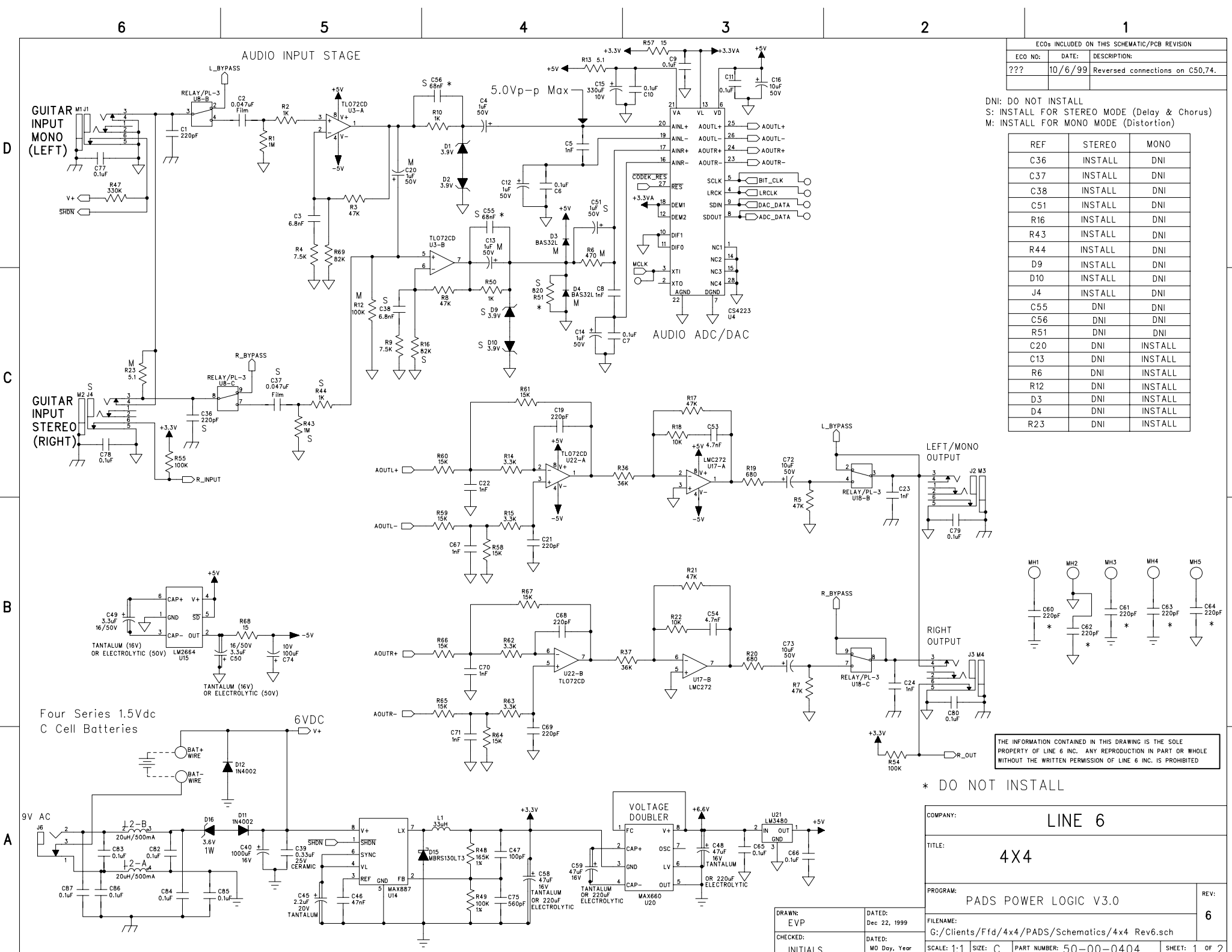
DRAWN: EVP
 DATED: Nov 18, 1999
 CHECKED:
 DATED: MO Day, Year
 INITIALS

D

C

B

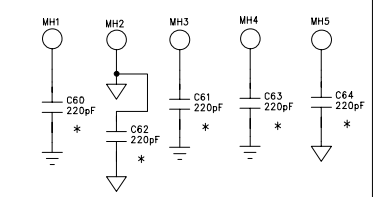
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ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
???	10/6/99	Reversed connections on C50,74.

DNI: DO NOT INSTALL
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REF	STEREO	MONO
C36	INSTALL	DNI
C37	INSTALL	DNI
C38	INSTALL	DNI
C51	INSTALL	DNI
R16	INSTALL	DNI
R43	INSTALL	DNI
R44	INSTALL	DNI
D9	INSTALL	DNI
D10	INSTALL	DNI
J4	INSTALL	DNI
C55	DNI	DNI
C56	DNI	DNI
R51	DNI	DNI
C20	DNI	INSTALL
C13	DNI	INSTALL
R6	DNI	INSTALL
R12	DNI	INSTALL
D3	DNI	INSTALL
D4	DNI	INSTALL
R23	DNI	INSTALL



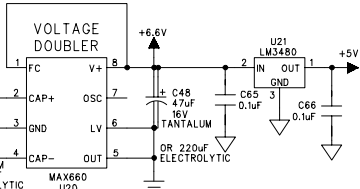
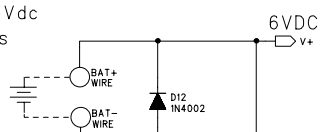
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* DO NOT INSTALL

COMPANY:	LINE 6	
TITLE:	4X4	
PROGRAM:	PADS POWER LOGIC V3.0	
REV:	6	
FILENAME:	G:/Clients/Ffd/4x4/PADS/Schematics/4x4 Rev6.sch	
SCALE: 1:1	SIZE: C	PART NUMBER: 50-00-0404
SHEET: 1	OF 2	

DRAWN:	DATED:
EVP	Dec 22, 1999
CHECKED:	DATED:
INITIALS	MO Day, Year

Four Series 1.5Vdc C Cell Batteries



ECO# INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

D

C

B

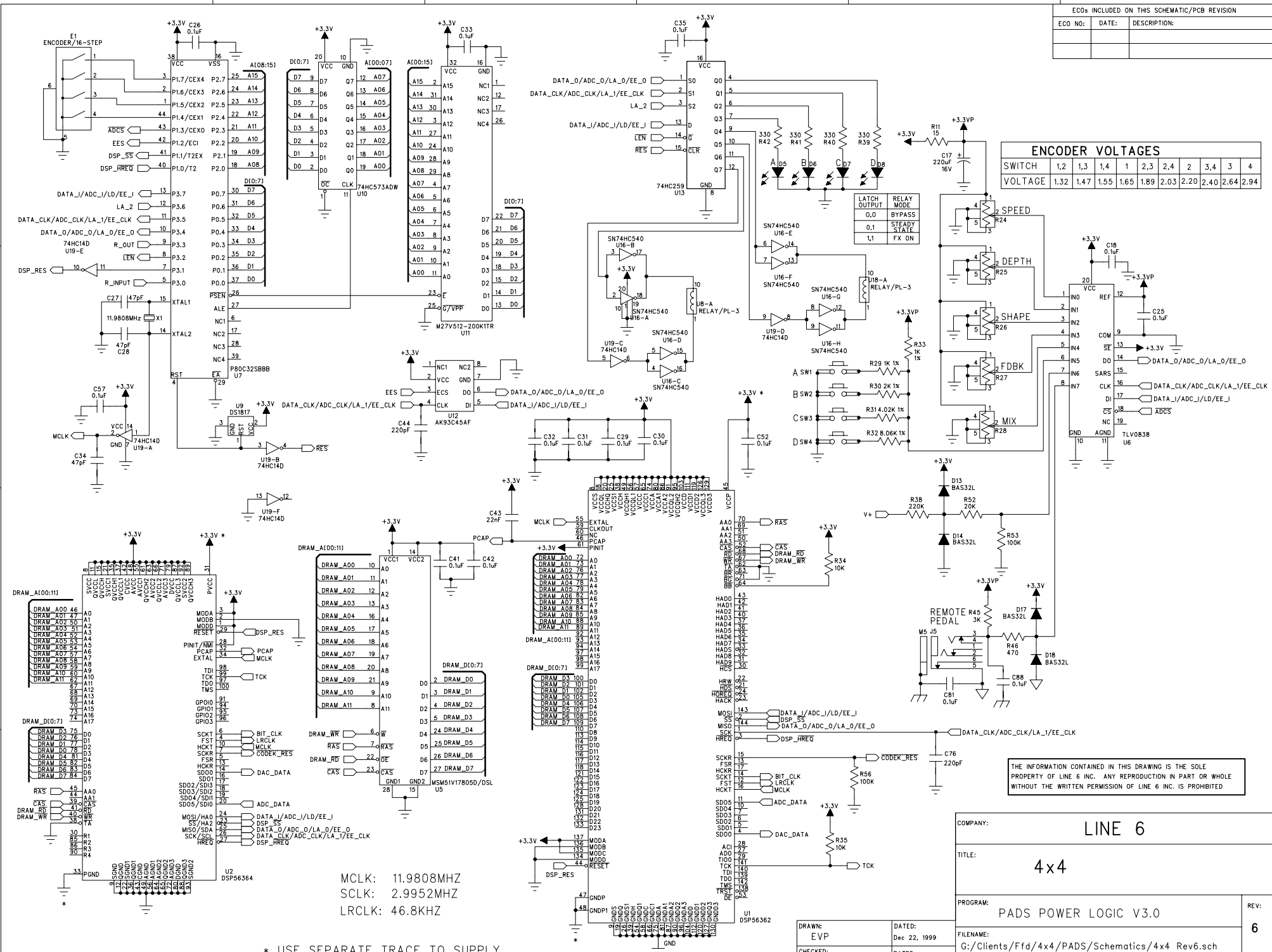
A

D

C

B

A



ENCODER VOLTAGES

SWITCH	1,2	1,3	1,4	1	2,3	2,4	2	3,4	3	4
VOLTAGE	1.32	1.47	1.55	1.65	1.89	2.03	2.20	2.40	2.64	2.94

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MCLK: 11.9808MHZ
 SCLK: 2.9952MHZ
 LRCLK: 46.8KHZ

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COMPANY:	LINE 6		
TITLE:	4x4		
PROGRAM:	PADS POWER LOGIC V3.0		
REV:	6		
FILENAME:	G:/Clients/Ffd/4x4/PADS/Schematics/4x4 Rev6.sch		
SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX	SHEET: 2 OF 2

DRAWN:	DATE:
EVP	Dec 22, 1999
CHECKED:	DATE:
INITIALS	MO Day, Year

DL 4 Delay Modeler Parts List

Including: Reference Designators

Level	Seq Component-Item	Component-Description	Opr UOM	Qty-Per-Parent
=====				
	Parent Item: 99 DL 4	Foot Pedal, Delay Modeler Green		
1	11-40-0001	Battery, C-Cell	0 EA	4.000000
1	21-18-0581	Contact, Battery -	0 EA	1.000000
1	21-18-0580	Ref: ECO9924606 Moved from board assy Contact, Battery +	0 EA	1.000000
1	24-32-0108	Ref: ECO9924606 moved from board assy SWITCH ACTUATOR	0 EA	4.000000
1	30-00-1632	6-32x3/8 philips panhead screw taptite black	0 EA	9.000000
1	30-03-0044	Washer, Teflon/foam, UHMW 0.7"	0 EA	5.000000
1	30-15-0044	Ref: ECO925202- Under knobs Tape, Teflon & Foam UHMW-7"x.5	0 EA	2.000000
1	30-12-8414	Ref: ECO925202 In battery housing Standoff, 6-32 1/4 Hex .670L MF Male/Female Custom Length	0 EA	1.000000
1	30-28-0400	Ref: Added per ECO#9927303 Insulator, Battery Contact for 4x4	0 EA	2.000000
1	30-28-0404	Plastic Battery Door	0 EA	1.000000
1	30-42-0404	Overlay, back metal, DL4/MM4	0 EA	1.000000
1	30-42-0405	Overlay, top metal, DL4 Rev.F	0 EA	1.000000
1	30-45-2000	Knob	0 EA	6.000000
1	30-48-0404	Rubber Foot, 4 x 4	0 EA	1.000000

1	30-51-0404	METAL Bottom - 4 x 4	0 EA	1.000000
1	30-51-4001	Housing,Green-DL Pedal Painted Made from: -4000	0 EA	1.000000
1	30-75-5514	PEDAL RUBBER STOP 3M 70070080083	0 EA	2.000000
1	40-00-0404	Ref: added per ECO 9927304 Manual, User's, 4 X 4	0 EA	1.000000
1	40-10-0403	Foam,Expanded Polystyrene Battery shipping foam DL/MM4	0 EA	1.000000
1	40-10-0404	Ref: Added per ECO#9935101 1/18/00 Box,Shipping,4x4-DL4,Self-Lock 12 x 6.125 x 2.5, UV/Litho	0 EA	1.000000
1	40-20-0070	Plastic Bag, 9 x 12, 2 mil POD shipping	0 EA	1.000000
1	40-25-0002	Label, Transparent, 2", Pedals	0 EA	1.000000
1	40-25-0020	Label, Quality Inspection	0 EA	1.000000
1	40-25-0044	Label,Tweak/Tweez,DL/MM4 Chrome Look Mylar, Kiss cut	0 EA	1.000000
1	40-30-0020	Ref: Added per ECO 9930201 Label,Serial No.1wX.5L,2accros Gloss,Silver Duropoly 613	0 EA	2.000000
1	45-00-0404	EPROM,Programmed,DL4 Atmel AT27LV512A-90JC	0 EA	1.000000
1	50-00-0404	Ref: Send out to program PCBA, 4x4, delay	0 EA	1.000000
2	01-04-0051	RES 5.1R 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0102	Ref: R13 RES 1K 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0103	Ref: R2,R10,R44,R50 RES 10K 1/8W 5% 1206 SM	0 EA	4.000000

2	01-04-0104	Ref: R18,R22,R34,R35 RES 100K 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0105	Ref: R53,R56,R54,R55 RES 1M 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0150	Ref: R1,R43 RES 15R 1/8W 5% 1206 SM	0 EA	3.000000
2	01-04-0153	Ref: R68,R57,R11 RES CHIP 15K 5% 1/8W 1206, Thick Film	0 EA	8.000000
2	01-04-0203	Ref: R58,R59,R60,R61,R64,R65,R66,R67 RES 20K 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0224	Ref: R52 RES 220K 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0302	Ref: R38,R47 RES 3K 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0331	Ref: R45 RES 330R 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0332	Ref: R39,R40,R41,R42 RES 3.3K 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0363	Ref: r14,15,62,63 RES 36K 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0471	Ref: R36,R37 RES 470R 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0473	Ref: R46 Resistor chip, 47k, 5%, 1/8w	0 EA	6.000000
2	01-04-0681	Ref: R3,R8,R17,R21,R5,R7 RES 680R 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0752	Ref: R19,R20 RES 7.5K 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0823	Ref: R4,R9 RES 82K 1/8W 5% 1206 SM	0 EA	2.000000

2	01-28-0102	Ref: R69,R16 RES 1K 1/8W 1% 1206 SM	0 EA	2.000000
2	01-28-0104	Ref: R33,R29 Res chip 100k 1% 1/8W 1206	0 EA	1.000000
2	01-28-0202	Ref: R49 RES 2K 1/8W 1% 1206 SM	0 EA	1.000000
2	01-28-1653	Ref: R30 RES 165K 1/8W 1% 1206 SM	0 EA	1.000000
2	01-28-4021	Ref: R48 RES 4.02K 1/8W 1% 1206 SM	0 EA	1.000000
2	01-28-8061	Ref: R31 RES 8.06K 1/8W 1% 1206 SM	0 EA	1.000000
2	01-48-7103	Ref: R32 Pot 10k Mono Linear, 9mm R0901-CD1-10KB	0 EA	5.000000
2	03-10-0331	Ref: R24,R25,R26,R27,R28 CAP 330uF 10V 20% RADIAL ELEC TH	0 EA	1.000000
2	03-12-0102	Ref: C15 CAP 1000uF 16V 20% RADIAL ELEC TH	0 EA	1.000000
2	03-14-0107	Ref: c40 CAP 100uF 25V 20% RADIAL ELEC TH	0 EA	1.000000
2	03-14-0227	Ref: C74 CAP 220uF 25V 20% RADIAL ELEC .098LS TH	0 EA	2.000000
2	03-18-0105	Ref: C59,C17 CAP 1uF 50V 20% RADIAL ELEC TH	0 EA	4.000000
2	03-18-0106	Ref: C4, C12, C14, C51 CAP 10uF 50V 20% RADIAL ELEC TH	0 EA	3.000000
2	03-45-0473	Ref: C16,C72,C73 CAP 47nF 16V 20% 1206 FILM SM	0 EA	2.000000

2	03-46-0104	Ref: C2,C37 CAP 0.1uF 50V 20% 1206 X7R SM	0 EA	.000000
2	03-46-0334	Ref: C6-7,C9-11,18,25-26,29-33,35,41-42,52,57,65-66 Capacitor,0.33uF, Ceramic, 25v 12063C334MATMA	0 EA	1.000000
2	03-50-0101	Ref: C39 Capacitor, 100 pf Mfg p/n# 08055A101KATMA NPO	0 EA	1.000000
2	03-50-0102	Ref: C47 CAP 1nF 50V min 20% max 0805 NPO	0 EA	8.000000
2	03-50-0221	Ref: C5,C8,C23-24,C22,C67,C70-71 CAP 220pF 50V 20% NPO	0 EA	13.000000
2	03-52-0223	Ref: C1,C36,C44,C76,C60,C61,C62,C63,C64,C19,C21,C69,C69 CAP 22nF 50V 20% X7R 0805	0 EA	1.000000
2	03-50-0470	Ref: ECO#9924606 C43 Capacitor,47pf,50v,20%,SMT,NPO 0805 package (80mlx50ml)	0 EA	3.000000
2	03-50-0472	Ref: C27, C28, C34 Ref. ECO 9929201 Capacitor,4.7nf,50v,20%,SMT NPO, 0805 (80mlx50ml)	0 EA	2.000000
2	03-50-0561	Ref: C53, C54 Ref ECO# 9929201 Capacitor,560pf,50v20%SMT,NPO 0805package	0 EA	1.000000
2	03-51-0682	Ref: C75 Ref. ECO#9929201 Capacitor,Film,6.8nf,16v,20% 0805 Package, SMT	0 EA	2.000000
2	03-52-0473	Ref: C3, C38 Capacitor, 47nf, 50v min. 20% SMT	0 EA	1.000000
2	03-60-0225	Ref: c46 Capacitor, 2.2uF, Tant. 20V 595D225X0020A2T	0 EA	1.000000
2	03-60-0335	Ref: C45 Capacitor, 3.3uF, Ceramic 16v Murata #GRM42-6Y5V335Z016	0 EA	2.000000
2	03-66-0476	Ref: C49,C50 Capacitor, 47uF , Tant. 16v TPSD476K016R0150	0 EA	2.000000
2	06-04-4002	Ref: C58,C48 Diode, Mid Power TH	0 EA	2.000000

2	06-20-4148	Ref: D11,D12 DIODE, SMALL SIGNAL, GREEN	0 EA	4.000000
2	06-28-5228	Ref: D13,D14,D17,D18 Diode,Zener,3.9v,SMT DL35 Zmm5228B or PMLL5228B	0 EA	4.000000
2	06-34-0130	Ref: D1,D2, D9, D10 Rectifier, Schottkey Power SMT MOTOROLA - MTRS130LT3	0 EA	1.000000
2	06-28-0361	Ref: D15 Diode, Zener,3.6v, DL-41 Microsemi #2EZ3.6D5	0 EA	1.000000
2	11-00-1198	Ref: ECO# 9924601 D16 11.98080 MHz crystal in HC-49/ u holder	0 EA	1.000000
2	11-10-0033	Ref: X1 Choke 33uH CR-54	0 EA	1.000000
2	12-50-0660	Ref: L1 IC,VoltageDoubler,SMT Maxim #MAX660CSA	0 EA	1.000000
2	12-50-3840	Ref: U20 IC, 5v low drop out volt reg LM 3480IM3X-5.0	0 EA	1.000000
2	12-54-0072	Ref: U21 IC, OP-AMP TL072D	0 EA	2.000000
2	12-54-0272	Ref: U3,U22 IC, OP-AMP LMC272	0 EA	1.000000
2	12-64-0838	Ref: u17 IC ADC 8 bit, 11 channel SMT TI TLV0838C	0 EA	1.000000
2	12-64-4223	Ref: U6 IC STEREO 20 bit CODEC SMT	0 EA	1.000000
2	12-70-0887	Ref: U4 IC Converter, step-down PWM DC-DC, MAX887HESA	0 EA	1.000000
2	12-70-2664	Ref: U14 IC Voltage Inverter Switch Capacitor, LM2664M6	0 EA	1.000000

2	15-62-0014	Ref: u15 IC Hex Schmitt Inverter	0 EA	1.000000
2	15-62-0259 SMT	Ref: U19 OCTICAL LATCH D TYPE W/CLEAR	0 EA	1.000000
2	15-62-0540	Ref: u13 IC Octal Inverter	0 EA	1.000000
2	15-62-0573 rent	Ref: u16 IC Octal Latch D-Type *Transpa	0 EA	1.000000
2	15-70-1628 Siemens p/n HYB3117805BSJ-60	Ref: u10 DRAM 16mb (2 x 8)	0 EA	1.000000
2	15-78-1024	Ref: U5 IC, EEPROM 1K	0 EA	1.000000
2	15-84-8032	Ref: u12 IC, Microprocessor 8032SMT P80C32SBBB Surface Mount	0 EA	1.000000
2	15-86-0364	Ref: U7 IC DASP DSP-XCB56364FU100	0 EA	1.000000
2	15-92-1817	Ref: U2 RESET CHIP, LINEAR,I/O DS1817R-5/T/R Dallas SemiCondu	0 EA	1.000000
2	18-02-0002 L34LSRD	Ref: U9 LED RED Hi Intensity	0 EA	4.000000
2	21-00-0014 SJS-014A	Ref: D5,D6,D7,D8 Barrel Jack	0 EA	1.000000
2	21-00-6616 6 pin	Ref: j6 JACK 1/4" phone Stereo Female	0 EA	5.000000
2	21-34-0404	Ref: J1,J2,J3,J4,J5 Wire,Battery,Pos per dwg.Red 24awg,7/32 strand cut 10.315"	0 EA	1.000000
3	21-29-2403 C2015	Wire,24awg, Red, 7/32 stranded	0 FT	.860000
2	21-34-0414	Ref: EC09925804 changed colors Wire,Battery,Neg.per dwg.Black 24awg,7/32 strand cut 5"	0 EA	1.000000

3	21-29-2401 C2015	Wire,24awg,Black,7/32 stranded	0 FT	.420000
2	21-44-0032	Socket,32pin PLCC,SMT,LowProf. Low Ins.Force, Tape Mounted	0 EA	1.000000
2	24-12-0025	Ref: u11 ENCODER SHAFT 16 STEP	0 EA	1.000000
2	24-15-0001	Ref: e1 Relay, DPDT	0 EA	2.000000
2	24-31-0100	Ref: U8, U18 TACT SWITCH E SWITCH TL1100D Before ordering this part, See Tech Bulletin 015	0 EA	4.000000
2	30-15-0070	Ref: SW1,SW2,SW3, Spacer,LED,700 ml"ELM5-700	0 EA	4.000000

MM4 Modulation Modeler Parts List

Including: Reference Designators

Level	Seq	Component-Item	Component-Description	Opr	UOM	Qty-Per-Parent
=====						
Parent Item: 99		MM 4	Foot Pedal, Modulation Modeler Loc: Blue			
1		11-40-0001	Battery, C-Cell	0	EA	4.000000
1		21-18-0581	Contact, Battery -	0	EA	1.000000
1		21-18-0580	Ref: ECO9924606 Moved from board assy Contact, Battery +	0	EA	1.000000
1		24-32-0108	Ref: ECO9924606 moved from board assy SWITCH ACTUATOR	0	EA	4.000000
1		30-00-1632	6-32x3/8 philips panhead screw taptite black	0	EA	9.000000
1		30-03-0044	Washer, Teflon/foam, UHMW 0.7"	0	EA	5.000000
1		30-15-0044	Ref: ECO925202- Under knobs Tape, Teflon & Foam UHMW-7"x.5	0	EA	2.000000
1		30-12-8414	Ref: ECO925202 In battery housing Standoff,6-32 1/4 Hex .670L MF Male/Female Custom Length	0	EA	1.000000
1		30-28-0400	Ref: Added per ECO#9927303 Insulator, Battery Contact for 4x4	0	EA	2.000000
1		30-28-0404	Plastic Battery Door	0	EA	1.000000
1		30-42-0404	Overlay, back metal, DL4/MM4	0	EA	1.000000
1		30-42-0415	Overlay, top metal,MM4 Rev.F	0	EA	1.000000
1		30-45-2000	Knob	0	EA	6.000000
1		30-48-0404	Rubber Foot, 4 x 4	0	EA	1.000000

1	30-51-0404	METAL Bottom - 4 x 4	0 EA	1.000000
1	30-51-4002	Housing,Blue-MM4 Pedal Painted Made from: -4000	0 EA	1.000000
1	30-75-5514	PEDAL RUBBER STOP 3M 70070080083	0 EA	2.000000
1	40-00-0404	Ref: added per ECO 9927304 Manual, User's, 4 X 4	0 EA	1.000000
1	40-10-0403	Foam,Expanded Polystyrene Battery shipping foam DL/MM4	0 EA	1.000000
1	40-10-0405	Ref: Added per ECO#9935101 on 1/18 Box,Shipping,4x4-MM4,Self-Lock 12x 6.125 x 2.5, UV/Litho	0 EA	1.000000
1	40-20-0070	Plastic Bag, 9 x 12, 2 mil POD shipping	0 EA	1.000000
1	40-25-0002	Label, Transparent, 2", Pedals	0 EA	1.000000
1	40-25-0020	Label, Quality Inspection	0 EA	1.000000
1	40-25-0044	Label,Tweak/Tweez,DL/MM4 Chrome Look Mylar, Kiss cut	0 EA	1.000000
1	40-30-0020	Ref: Added per ECO #9930201 Place in bottom of box, under unit. Label,Serial No.1wX.5L,2accros Gloss,Silver Duropoly 613	0 EA	2.000000
1	45-00-0405	EPROM,Programmed,MM4 Atmel AT27LV512A-90JC	0 EA	1.000000
1	50-00-0405	PCBA, 4x4, modulation	0 EA	1.000000
2	01-04-0051	RES 5.1R 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0102	RES 1K 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0103	RES 10K 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0104	RES 100K 1/8W 5% 1206 SM	0 EA	4.000000

2	01-04-0105	RES 1M 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0150	RES 15R 1/8W 5% 1206 SM	0 EA	3.000000
2	01-04-0153	RES CHIP 15K 5% 1/8W 1206, Thick Film	0 EA	8.000000
2	01-04-0203	RES 20K 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0224	RES 220K 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0302	RES 3K 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0331	RES 330R 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0332	RES 3.3K 1/8W 5% 1206 SM	0 EA	4.000000
2	01-04-0363	Ref: R14-15,62,63 Added per ECO9924606 RES 36K 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0471	RES 470R 1/8W 5% 1206 SM	0 EA	1.000000
2	01-04-0473	Resistor chip, 47k, 5%, 1/8w	0 EA	6.000000
2	01-04-0681	RES 680R 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0752	RES 7.5K 1/8W 5% 1206 SM	0 EA	2.000000
2	01-04-0823	RES 82K 1/8W 5% 1206 SM	0 EA	2.000000
2	01-28-0102	RES 1K 1/8W 1% 1206 SM	0 EA	2.000000
2	01-28-0104	Res chip 100k 1% 1/8W 1206	0 EA	1.000000
2	01-28-0202	RES 2K 1/8W 1% 1206 SM	0 EA	1.000000
2	01-28-1653	RES 165K 1/8W 1% 1206 SM	0 EA	1.000000
2	01-28-4021	RES 4.02K 1/8W 1% 1206 SM	0 EA	1.000000

2	01-28-8061	RES 8.06K 1/8W 1% 1206 SM	0 EA	1.000000
2	01-48-7103	Pot 10k Mono Linear, 9mm R0901-CD1-10KB	0 EA	5.000000
2	03-10-0331	CAP 330uF 10V 20% RADIAL ELEC TH	0 EA	1.000000
2	03-12-0102	CAP 1000uF 16V 20% RADIAL ELEC TH	0 EA	1.000000
2	03-14-0107	CAP 100uF 25V 20% RADIAL ELEC TH	0 EA	1.000000
2	03-14-0227	CAP 220uF 25V 20% RADIAL ELEC .098LS TH	0 EA	2.000000
2	03-18-0105	Ref: C59, C17 CAP 1uF 50V 20% RADIAL ELEC TH	0 EA	4.000000
2	03-18-0106	CAP 10uF 50V 20% RADIAL ELEC TH	0 EA	3.000000
2	03-45-0473	CAP 47nF 16V 20% 1206 FILM SM	0 EA	2.000000
2	03-46-0104	CAP 0.1uF 50V 20% 1206 X7R SM EL 4	0 EA	20.000000
2	03-46-0334	Ref: C6-7,9-11,18,25-26,29-33,35,41-42,52,57,65-66 Capacitor,0.33uF, Ceramic, 25v 12063C334MATMA	0 EA	1.000000
2	03-50-0101	Ref: c39 Capacitor, 100 pf Mfg p/n# 08055A101KATMA NPO	0 EA	1.000000
2	03-50-0102	CAP 1nF 50V min 20% max 0805 NPO	0 EA	8.000000
2	03-50-0221	CAP 220pF 50V 20% NPO	0 EA	13.000000
2	03-52-0223	CAP 22nF 50V 20% X7R 0805	0 EA	1.000000
2	03-50-0470	Ref: ECO#9924606 C43 Capacitor,47pf,50v,20%,SMT,NPO 0805 package(80mlx50ml)	0 EA	3.000000
2	03-50-0472	Ref: C27, C28, C34 Ref. ECO# 9929201 Capacitor,4.7nf,50v,20%,SMT NPO, 0805 (80mlx50ml)	0 EA	2.000000
		Ref: C53, C54 Ref. ECO#9929201		

2	03-50-0561	Capacitor, 560pf, 50v20%SMT, NPO 0805package	0 EA	1.000000
		Ref: C75 Ref. ECO#9929201		
2	03-51-0682	Capacitor, Film, 6.8nf, 16v, 20% 0805 Package, SMT	0 EA	2.000000
		Ref: C3, C38		
2	03-52-0473	Capacitor, 47nf, 50v min. 20% SMT	0 EA	1.000000
2	03-60-0225	Capacitor, 2.2uF, Tant. 20V 595D225X0020A2T	0 EA	1.000000
2	03-60-0335	Capacitor, 3.3uF, Ceramic 16v Murata #GRM42-6Y5V335Z016	0 EA	2.000000
2	03-66-0476	Capacitor, 47uF, Tant. 16v TPSD476K016R0150	0 EA	2.000000
2	06-04-4002	Diode, Mid Power TH	0 EA	2.000000
2	06-20-4148	DIODE, SMALL SIGNAL, GREEN	0 EA	4.000000
		Ref: D13, D14, D17, D18		
2	06-28-5228	Diode, Zener, 3.9v, SMT DL35 Zmm5228B or PMLL5228B	0 EA	4.000000
		Ref: D1, D2		
2	06-34-0130	Rectifier, Schottkey Power SMT MOTOROLA - MTRS130LT3	0 EA	1.000000
2	11-00-1198	11.98080 MHz crystal in HC-49/ u holder	0 EA	1.000000
2	11-10-0033	Choke 33uH CR-54	0 EA	1.000000
2	12-50-0660	IC, Voltage Doubler, SMT Maxim #MAX660CSA	0 EA	1.000000
		Ref: U20		
2	12-54-0072	IC, OP-AMP TL072D	0 EA	2.000000
2	12-54-0272	IC, OP-AMP LMC272	0 EA	1.000000
2	12-64-0838	IC ADC 8 bit, 11 channel SMT TI TLV0838C	0 EA	1.000000
2	12-70-0887	IC Converter, step-down PWM DC-DC, MAX887HESA	0 EA	1.000000
2	12-70-2664	IC Voltage Inverter Switch Capacitor, LM2664M6 E	0 EA	1.000000

2	15-62-0259 SMT	OCTICAL LATCH D TYPE W/CLEAR	0 EA	1.000000
2	15-62-0540	IC Octal Inverter	0 EA	1.000000
2	15-62-0573 rent	IC Octal Latch D-Type *Transpa	0 EA	1.000000
2	15-78-1024	IC, EEPROM 1K	0 EA	1.000000
2	15-84-8032	IC, Microprocessor 8032SMT P80C32SBBB Surface Mount	0 EA	1.000000
2	15-86-0364	IC DASP DSP-XCB56364FU100	0 EA	1.000000
2	15-92-1817	RESET CHIP, LINEAR,I/O DS1817R-5/T/R Dallas SemiCondu	0 EA	1.000000
2	18-02-0002	LED RED Hi Intensity L34LSRD	0 EA	4.000000
2	21-00-0014	Barrel Jack SJS-014A	0 EA	1.000000
2	21-00-6616	JACK 1/4" phone Stereo Female 6 pin	0 EA	5.000000
2	21-34-0404	Wire,Battery,Pos per dwg.Red 24awg,7/32 strand cut 10.315"	0 EA	1.000000
3	21-29-2403	Wire,24awg, Red, 7/32 stranded C2015	0 FT	.860000
2	21-34-0414	Ref: ECO9925804 changed colors Wire,Battery,Neg.per dwg.Black 24awg,7/32 strand cut 5"	0 EA	1.000000
3	21-29-2401	Wire,24awg,Black,7/32 stranded C2015	0 FT	.420000
2	21-44-0032	Socket,32pin PLCC,SMT,LowProf. Low Ins.Force, Tape Mounted	0 EA	1.000000
2	24-12-0025	ENCODER SHAFT 16 STEP	0 EA	1.000000
2	24-15-0001	Relay, DPDT	0 EA	2.000000
2	24-31-0100	TACT SWITCH E SWITCH TL1100D Before ordering this part, See Tech Bulletin 015	0 EA	4.000000
2	30-15-0070	Spacer,LED,700 ml"ELM5-700	0 EA	4.000000

2	15-62-0014	IC Hex Schmitt Inverter	0 EA	1.000000
		Ref: U19		
2	12-64-4223	IC STEREO 20 bit CODEC SMT	0 EA	1.000000
		Ref: U4		
2	06-28-0361	Diode, Zener, 3.6v, DL-41 Microsemi #2EZ3.6D5	0 EA	1.000000
		Ref: ECO#9924601 D16		
2	12-50-3840	IC, 5v low drop out volt reg LM 3480IM3X-5.0	0 EA	1.000000
		Ref: U21		

99 FM 4

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Parent Item:	99 FM 4	STOMP-BOX FREQ.MOD FM4	
1	11-40-0001	Battery, C-Cell	4.000000
1	21-18-0580	CONTACT BATTERY POSITIVE (+)	1.000000
1	21-18-0581	CONTACT BATTERY NEGATIVE (-) W/SPRING	1.000000
1	24-32-0108	SWITCH ACTUATOR	4.000000
1	30-00-1632	SCR 6-32x3/8 PNH PHH TAP TITE STL BLK	9.000000
1	30-03-0044	Washer, Teflon/foam, UHMW 0.7"	5.000000
1	30-12-8414	STDF .250 HEX 6-32 MALE / FEMA LE .670 LG STL	1.000000
1	30-15-0044	TAPE, 7" x .5",TEFLON AND FOAM MFG PN# UHMW-7" x 5"	2.000000
1	30-15-0049	Insulator, spacer for Bomar HC-49 osc.	1.000000
1	30-15-0070	SPC LED .155 O.D. x .700 LG, B LK PVC BIVAR ELM5 - 700	4.000000
1	30-28-0400	INSULATOR, BATTERY CONTACT (4X 4)	2.000000
1	30-28-0404	DOOR, BATTERY, PLASTIC	1.000000
1	30-42-0404	OVERLAY,HOUSING BACK 40.1 MM X 225.7MM AL (DL4/MM4)	1.000000
1	30-42-0416	OVERLAY TOP FM4	1.000000
1	30-45-2000	KNOB PLASTIC	6.000000
1	30-48-0404	FOOT RUBBER BLACK (4 x 4)	1.000000

1	30-51-0404	BOTTOM COVER CRS ZINC PLATED (Stomp Box)	1.000000
1	30-51-4005	Housing, FM4 Pedal - Purple	1.000000
1	30-75-5514	STOP PEDAL RBR BLK (3M 700700 80083)	2.000000
1	40-00-0404	Manual, User's, 4 X 4	1.000000
1	40-10-0400	BOX SHIPPING FM4	1.000000
1	40-10-0403	Foam,Expanded Polystyrene Battery shipping foam DL/MM4	1.000000
1	40-20-0070	Plastic Bag, 9 x 12, 2 mil POD shipping	1.000000
1	40-25-0002	Label, Transparent, 2", Pedals	1.000000
1	40-25-0045	Label Tweak/Tweez FM4 Chrome Look Mylar Kiss-Cut	1.000000
1	50-00-0407	PCBA 4X4 FM4	1.000000
2	01-04-0051	RES 5.1R 1/8W 5% 1206 SM INCORRECT PN S/B 01-04-05R1	1.000000
2	01-04-0102	Ref: R13. RES 1K 1/8W 5% 1206 SM	4.000000
2	01-04-0103	Ref: R2,R10,R44,R50. RES 10K 1/8W 5% 1206 SM	4.000000
2	01-04-0104	Ref: R18,R22,R34,R35. RES 100K 1/8W 5% 1206 SM	4.000000
2	01-04-0105	Ref: R53,R54,R56. RES 1M 1/8W 5% 1206 SM	1.000000
		Ref: R1,R43.	

2	01-04-0150	RES 15R 1/8W 5% 1206 SM	3.000000
2	01-04-0153	Ref: R11,R57,R68. RES 15K 1/8W 5% 1206 SM	8.000000
2	01-04-0203	Ref: R58-R61,R64-R67. RES 20K 1/8W 5% 1206 SM	1.000000
2	01-04-0224	Ref: R52. RES 220K 1/8W 5% 1206 SM	2.000000
2	01-04-0302	Ref: R38,R47. RES 3K 1/8W 5% 1206 SM	1.000000
2	01-04-0331	Ref: R45. RES 330R 1/8W 5% 1206 SM	4.000000
2	01-04-0332	Ref: R39-R42. RES 3.3K 1/8W 5% 1206 SM	4.000000
2	01-04-0363	Ref: R14,R15,R62,R63. RES 36K 1/8W 5% 1206 SM	2.000000
2	01-04-0471	Ref: R36,R37. RES 470R 1/8W 5% 1206 SM	1.000000
2	01-04-0473	Ref: R46. RES 47k 1/8w 5% 1206 SM	6.000000
2	01-04-0681	Ref: R3,R5,R7,R8,R17,R21. RES 680R 1/8W 5% 1206 SM	2.000000
2	01-04-0752	Ref: R19,R20. RES 7.5K 1/8W 5% 1206 SM	2.000000
2	01-04-0823	Ref: R4,R9. RES 82K 1/8W 5% 1206 SM	2.000000
2	01-28-0102	Ref: R16,R69. RES 1K 1/8W 1% 1206 SM	2.000000
2	01-28-0104	Ref: R29,R33. RES 100k 1/8W 1% 1206 SM	1.000000

Ref: R49.

2	01-28-0202	RES 2K 1/8W 1% 1206 SM	1.000000
		Ref: R30.	
2	01-28-1653	RES 165K 1/8W 1% 1206 SM	1.000000
		Ref: R48.	
2	01-28-4021	RES 4.02K 1/8W 1% 1206 SM	1.000000
		Ref: R31.	
2	01-28-8061	RES 8.06K 1/8W 1% 1206 SM	1.000000
		Ref: R32.	
2	01-48-7103	POT 10KB SINGLE 17MM R0901-CD1 R0901-CD1-10KB	5.000000
		Ref: R24-R28.	
2	03-10-0331	CAP 330uF 10V 20% RAD ELEC TH	1.000000
		Ref: C15.	
2	03-12-0102	CAP 1000uF 16V 20% RAD ELEC TH	1.000000
		Ref: C40.	
2	03-14-0107	CAP 100uF 25V 20% RAD ELEC TH	1.000000
		Ref: C74.	
2	03-14-0227	CAP 220uF 25V 20% RAD ELEC TH .098LS	2.000000
		Ref: C17,C59.	
2	03-18-0105	CAP 1uF 50V 20% RAD ELEC TH	4.000000
		Ref: C4,C12,C14,C51.	
2	03-18-0106	CAP 10uF 50V 20% RAD ELEC TH	3.000000
		Ref: C16,C72,C73.	
2	03-45-0473	CAP 47nF 16V 20% 1206 FILM SM	2.000000
		Ref: C2,C37.	
2	03-46-0104	CAP 0.1uF 50V 20% 1206 SM X7R	32.000000
		Ref: C6,C7,C9-C11,C18,C25-C26,C29-C33,C35,C41-C42,C52,C57,C65-C66 C77-C88.	
2	03-46-0334	CAP 0.33uF 25v 20% 1206 SM X7R 12063C334MATMA	1.000000
		Ref: C39.	

2	03-50-0101	CAP 100pF 50V 10% 0805 SM NPO Mfg p/n# 0805C101K5GAC NPO	1.000000
		Ref: C47.	
2	03-50-0102	CAP 1nF 50V 5% 0805 NPO SM	6.000000
		Ref: C5,C8,C22,C67,C70,C71.	
2	03-50-0221	CAP 220pF 50V 20% 0805 SM NPO	11.000000
		Ref: C19,C21,C44,C60-C64,C68-C69,C76.	
2	03-50-0470	CAP 47pF 50v 20% 0805 SM NPO	3.000000
		Ref: C27,C28,C34.	
2	03-50-0472	CAP 4.7nF 50v 20% 0805 SM NPO	2.000000
		Ref: C53,C54.	
2	03-50-0561	CAP 560pF 50v 20% 0805 SM NPO	1.000000
		Ref: C75.	
2	03-51-0682	CAP 6.8nf 16v 20% 0805 SM POLYFILM	2.000000
		Ref: C3,C38.	
2	03-52-0223	CAP 22nF 50V 20% 0805 SM X7R	1.000000
		Ref: C43.	
2	03-52-0473	CAP 47nF 50V 20% 0805 SM X7R	1.000000
		Ref: C46.	
2	03-60-0225	CAP 2.2uF TANT 20V 595D225X0020A2T	1.000000
		Ref: C45.	
2	03-60-0335	CAP 3.3uF CER 16v Murata #GRM42-6Y5V335Z016	2.000000
		Ref: C49,C50.	
2	03-66-0476	CAP 47uF TANT 16v TPSD476K016R0150	2.000000
		Ref: C48,C58.	
2	06-04-4002	DIODE POWER 1N4002 TH	2.000000
		Ref: D11-D12.	
2	06-20-4148	DIODE SMALL-SIGNAL 4148 DL-35 SM	4.000000
		Ref: D13-D14,D17-D18.	

2	06-28-0361	DIODE ZENER 3.6V DL-41 SM MICR OSEMI-2EZ3.6D5	1.000000
		Ref: D16.	
2	06-28-5228	DIODE ZENER 3.9V DL-35 SM Zmm5 228B or PMLL5228B	4.000000
		Ref: D1-D2,D9-D10.	
2	06-34-0130	DIODE RECTIFIER SCHOTTKEY POWER SMT	1.000000
		Ref: D15.	
2	11-00-1198	XTAL 11.98080MHz HC-49/U	1.000000
		Ref: X1.	
2	11-10-0033	INDUCTOR CHOKE 33uH CR-54 SM	1.000000
		Ref: L1.	
2	11-10-2000	INDUCTOR 20uH 500mA .065DCR 1L COILCRAFT TRF2000	1.000000
		Ref: L2.	
2	12-50-0660	IC REG VoltageDoubler SM Maxim #MAX660CSA	1.000000
		Ref: U20.	
2	12-50-3840	IC REG 5v low drop out volt SM LM3480IM3X-5.0	1.000000
		Ref: U21.	
2	12-54-0072	IC OP-AMP DUAL TL072CD SM	2.000000
		Ref: U3,U22.	
2	12-54-0272	IC OP-AMP DUAL LMC272 SM	1.000000
		Ref: U17.	
2	12-64-0838	IC ADC 8 bit, 11 channel SMT TI TLV0838C	1.000000
		Ref: U6.	
2	12-64-4223	IC CONVERTER CODEC 24--BIT CS4223 SM	1.000000
		Ref: U4.	
2	12-70-0887	IC Converter, step-down PWM DC-DC, MAX887	1.000000
		Ref: U14.	
2	12-70-2664	IC Voltage Inverter Switch Cap LM2664	1.000000
		Ref: U15.	
2	15-62-0014	IC 74HC14 INVERTER-HEX SIN 1-IN SM	1.000000
		Ref: U19.	

2	15-62-0259 SM	IC 74HC259 LATCH D-TYPE 8-BIT	1.000000
		Ref: U13.	
2	15-62-0540 8-BIT SM	IC 74HC540 BUFFER INVERTING	1.000000
		Ref: U16.	
2	15-62-0573 8-BIT SM	IC 74HC573 BUFFER INVERTING	1.000000
		Ref: U10.	
2	15-78-1024 (AK93C45AF)	IC EEPROM 1K SERIAL	1.000000
		Ref: U12.	
2	15-84-8032 P80C32SBBB Surface Mount	IC Microprocessor 8032SMT	1.000000
		Ref: U7.	
2	15-86-0364	IC DASP DSP-XCB56364FU100	1.000000
		Ref: U2.	
2	15-92-1817 DS1817R-5/T/R Dallas SemiCondu	IC RESET CHIP, LINEAR,I/O	1.000000
		Ref: U9.	
2	18-02-0002 L34LSRD	LED RED Hi Intensity	4.000000
		Ref: D5-D8.	
2	21-00-0014	JACK BARREL SJS-014A	1.000000
		Ref: J6.	
2	21-00-4420 JB0661-K01-3	WASHER EARTHING 1/4" JACK	5.000000
		Ref: M1-M5.	
2	21-00-6616 6-PIN FLUSH	JACK 1/4" STEREO FEMALE PCB-MN	5.000000
		Ref: J1-J5.	
2	21-34-0405	Wire Battery Positive Red 22awg 7/32 strand cut 10.875"	1.000000
2	21-34-0415	Wire Battery Negative Black 22awg 7/32standcut 5"LG	1.000000
2	21-44-1032	Socket,32pin PLCC,ThroughHole Soldertail,Normal,Square	1.000000
		Ref: U11.	
2	24-12-0025	ENCODER 16-STEP V-MOUNT PCB Ref: E1.	1.000000

2	24-15-0001	Relay, DPDT	2.000000
2	24-31-0100	Ref: U8,U18. TACT SWITCH E SWITCH TL1100D Ref des: SW1-S'	4.000000
		Before order tact switch, See Tech Bulletin 015	
2	45-00-0400	EEPROM PROGRAMMED v1.0 FM4	1.000000
3	15-76-0512	IC EEPROM 512 Atmel AT27LV512A-90JC	1.000000
		Ref: U11.	

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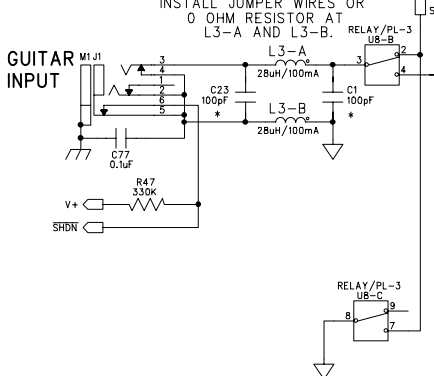
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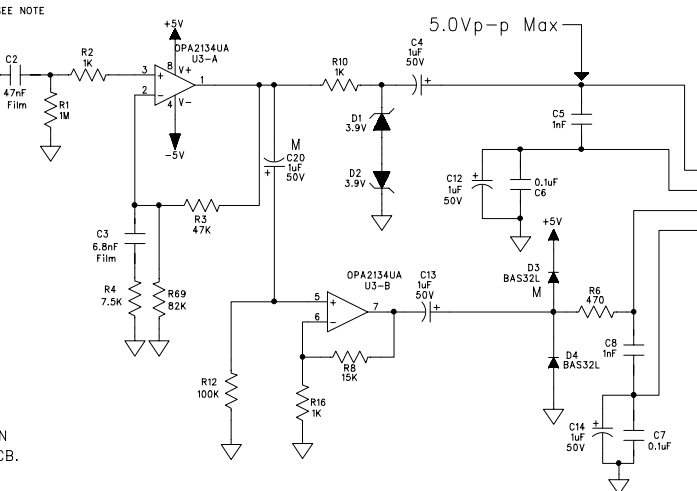
AUDIO INPUT STAGE

GUITAR INPUT

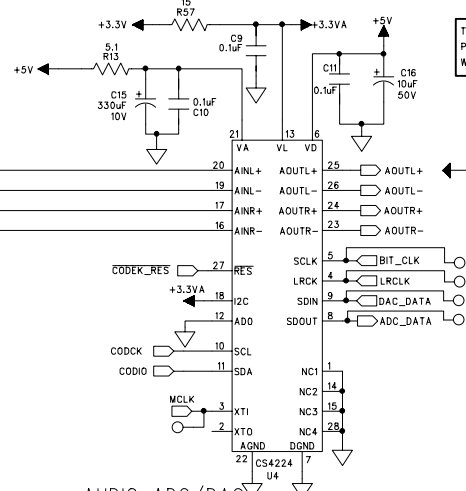
DO NOT INSTALL L3
 INSTALL JUMPER WIRES OR
 0 OHM RESISTOR AT
 L3-A AND L3-B.



NOTE: 'BYPASS' TRACE MUST NOT RUN
 CLOSE TO AUDIO INPUTS ON PCB.

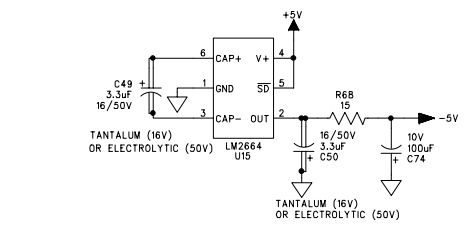
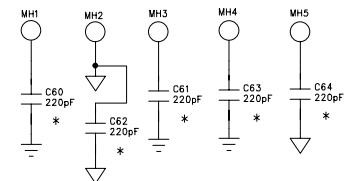
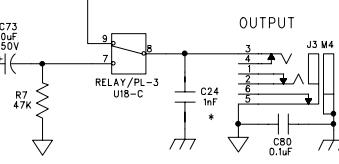
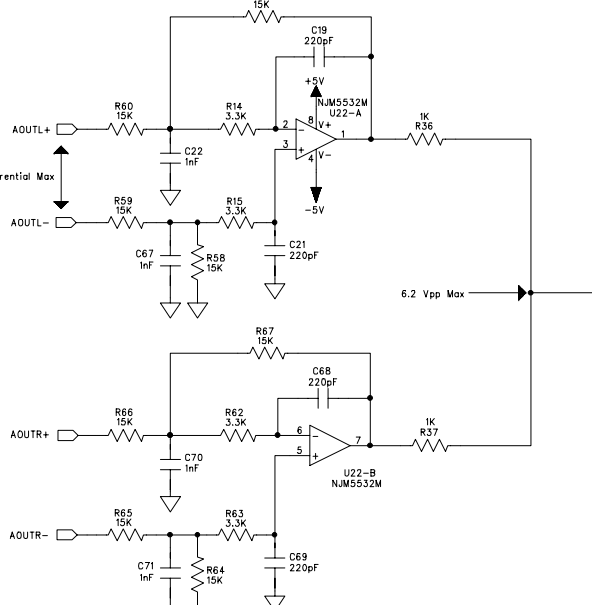
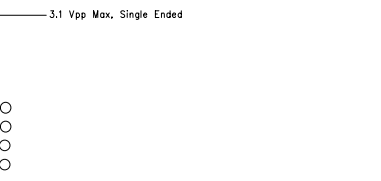


AUDIO ADC/DAC

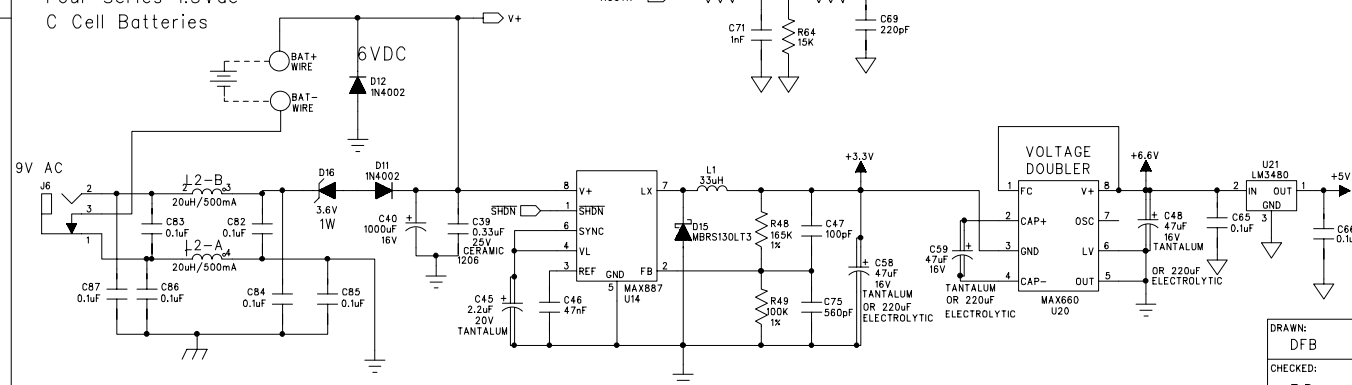


ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

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 PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE
 WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED



Four Series 1.5Vdc
 C Cell Batteries



* DO NOT INSTALL

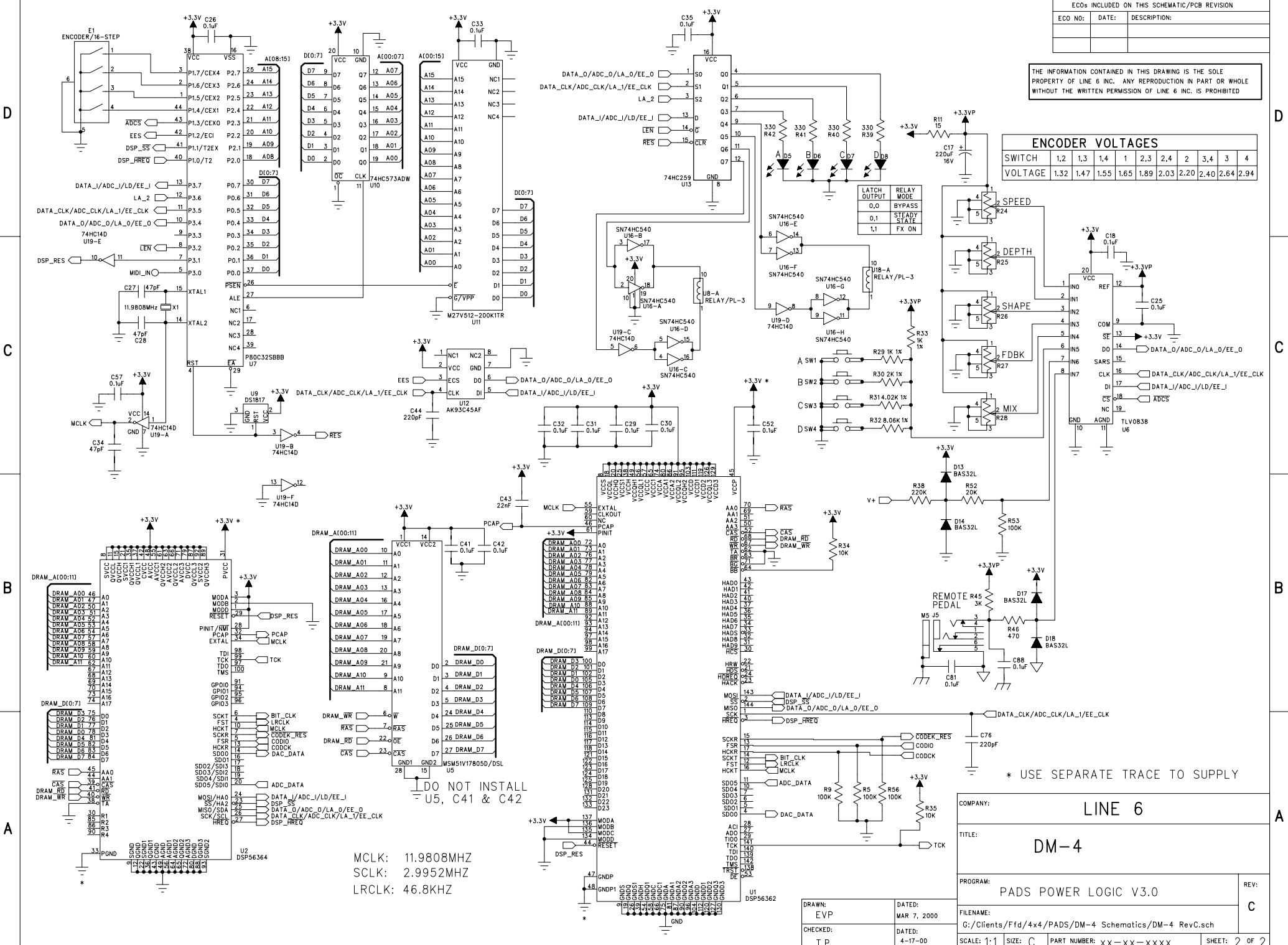
COMPANY:	LINE 6		
TITLE:	DM-4 ANALOG		
PROGRAM:	PADS POWER LOGIC V3.0		
REV:	C		
FILENAME:	G:/Clients/Ffd/4x4/PADS/DM-4 Schematics/DM-4 RevC.sch		
SCALE: 1:1	SIZE: C	PART NUMBER: XX-XX-XXXX	SHEET: 1 OF 2

DRAWN:	DFB
CHECKED:	T.P.
DATED:	June 21, 2000
DATED:	4-17-00

ECO# INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:

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ENCODER VOLTAGES										
SWITCH	1,2	1,3	1,4	1	2,3	2,4	2	3,4	3	4
VOLTAGE	1.32	1.47	1.55	1.65	1.89	2.03	2.20	2.40	2.64	2.94

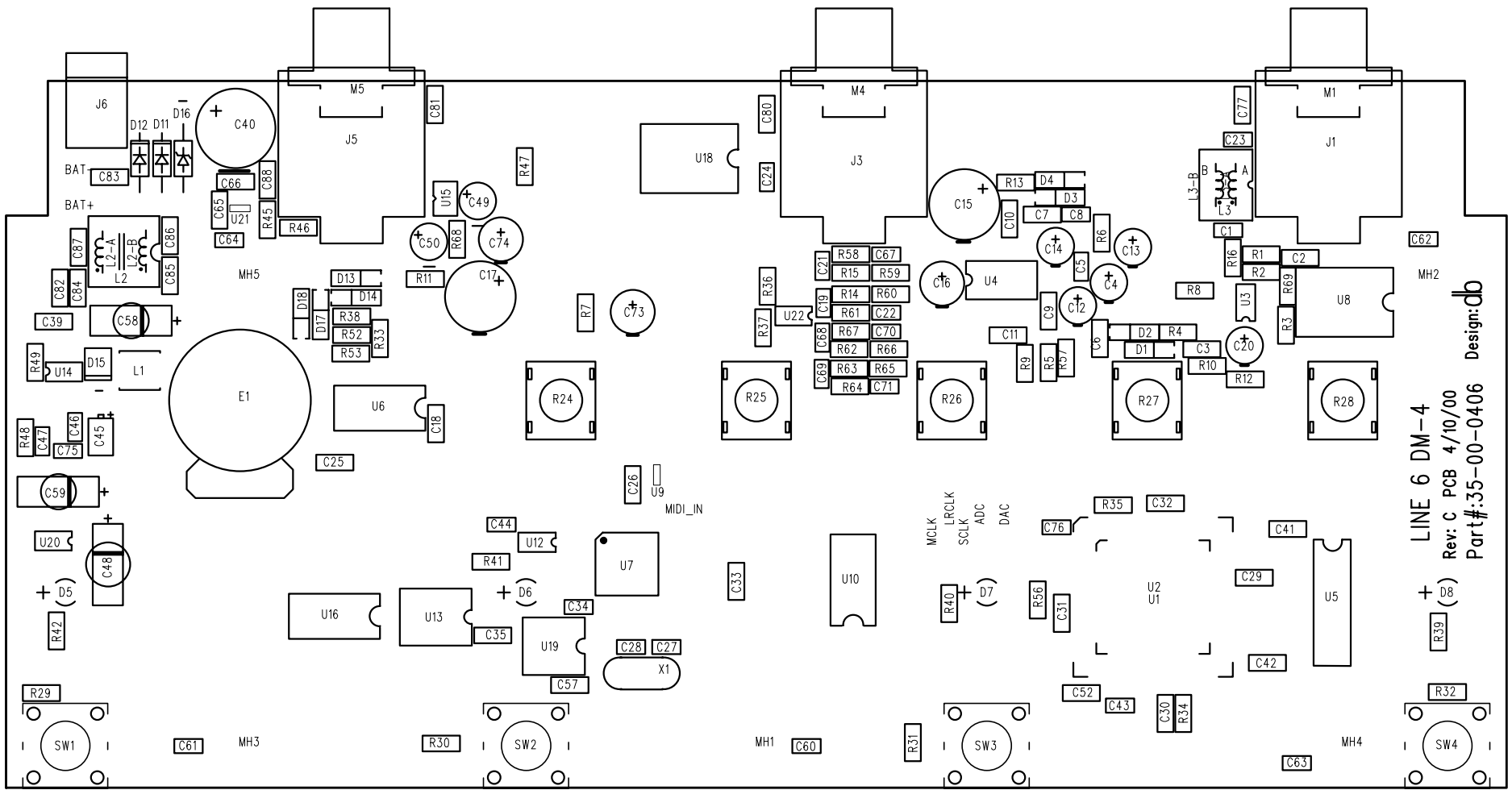


MCLK: 11.9808MHz
 SCLK: 2.9952MHz
 LRCLK: 46.8KHz

COMPANY:	LINE 6	
TITLE:	DM-4	
PROGRAM:	PADS POWER LOGIC V3.0	
FILENAME:	G:/Clients/Ffd/4x4/PADS/DM-4 Schematics/DM-4 RevC.sch	
SCALE:	1:1	SIZE: C
PART NUMBER:	XX-XX-XXXX	SHEET: 2 OF 2

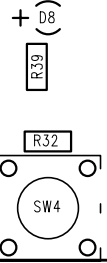
DRAWN:	EVP	DATED:	MAR 7, 2000
CHECKED:	T.P	DATED:	4-17-00

REV: C



SILKSCREEN TOP

LINE 6 DM-4
 Rev: C PCB 4/10/00
 Part#:3.5-00-0406 Design:db



LINE 6
DM4 Parts list

Items: 99 DM 4

Level	Seq	Component-Item	Component-Description	Qty-Per-Parent
		Parent Item: 99 DM 4	Foot Pedal, Distortion Modeler Yellow	
1		11-40-0001	Battery, C-Cell	4.000000
1		21-18-0580	CONTACT BATTERY POSITIVE (+)	1.000000
1		21-18-0581	Ref: ECO9924606 moved from board assy CONTACT BATTERY NEGATIVE (-) W/SPRING	1.000000
1		24-32-0108	SWITCH ACTUATOR	4.000000
1		30-00-1632	SCR, 6-32 x 3/8 LG, PHILLIPS P H, STL, BLK	9.000000
1		30-03-0044	Washer, Teflon/foam, UHMW 0.7"	5.000000
1		30-12-8414	Ref: ECO925202- Under knobs STDF .250 HEX 6-32 MALE / FEMA LE .670 LG STL	1.000000
1		30-15-0044	TAPE 7 IN x 5 IN TEFLON AND FO AM UHMW-7" x 5"	2.000000
1		30-28-0400	Ref: ECO925202 In battery housing INSULATOR, BATTERY CONTACT (4X 4)	2.000000
1		30-28-0404	DOOR, BATTERY, PLASTIC	1.000000
1		30-42-0424	OVERLAY BACK 8.8 x 1.6 AL (DM4)	1.000000
1		30-42-0425	OVERLAY TOP 8.6 x 1.4 AL (DM4)	1.000000
1		30-45-2000	KNOB PLASTIC	6.000000
1		30-48-0404	FOOT RUBBER BLACK (4 x 4)	1.000000
1		30-51-0404	BOTTOM COVER CRS BLK PWD COAT	1.000000

LINE 6

1	30-51-4004	HOUSING CAST AL PAINT YELLOW (DM4)	1.000000
1	30-75-5514	STOP PEDAL RBR BLK (3M 700700 80083)	2.000000
1	40-00-0404	Ref: added per ECO 9927304 Manual, User's, 4 X 4	1.000000
1	40-10-0403	Foam,Expanded Polystyrene Battery shipping foam DL/MM4	1.000000
1	40-10-0406	Ref: Added per ECO#9935101 1/18/00 Box,Shipping,4x4-DM4,Self-Lock 12x 6.125 x 2.5, UV/Litho	1.000000
1	40-20-0070	Plastic Bag, 9 x 12, 2 mil POD shipping	1.000000
1	40-25-0002	Label, Transparent, 2", Pedals	1.000000
1	40-25-0101	Label, Bar Code Serial Number 1 panel - LTX 16 1125502	1.000000
1	40-25-0020	Label, Quality Inspection	1.000000
1	45-00-0406	EPROM,Programmed,DM4	1.000000
2	15-76-0512	Ref: U11 IC, EEPROM 512 Atmel AT27LV512A-90JC	1.000000
		Ref: Send out to program	
1	50-00-0406	PCBA, 4x4, distortion	1.000000
2	01-04-0002	RES 0K 1/8W 5% 1206 SM	2.000000
2	01-04-0051	Ref: L3A, L3B RES 5.1R 1/8W 5% 1206 SM	1.000000
2	01-04-0101	Ref: R13 RES 100R 1/8W 5% 1206 SM	1.000000
2	01-04-0102	Ref: R57 RES 1K 1/8W 5% 1206 SM	5.000000

LINE 6

2	01-04-0103	Ref: R2,R10,R16,R36,R37 RES 10K 1/8W 5% 1206 SM	2.000000
2	01-04-0104	Ref: R34,R35 RES 100K 1/8W 5% 1206 SM	5.000000
2	01-04-0105	Ref: R5,R9,R12,R53,R56 RES 1M 1/8W 5% 1206 SM	1.000000
2	01-04-0150	Ref: R1 RES 15R 1/8W 5% 1206 SM	2.000000
2	01-04-0153	Ref: R11,R68 RES 15K 1/8W 5% 1206 SM	9.000000
2	01-04-0203	Ref: R8,R58-R61,R64-R67 RES 20K 1/8W 5% 1206 SM	1.000000
2	01-04-0224	Ref: R52 RES 220K 1/8W 5% 1206 SM	1.000000
2	01-04-0302	Ref: R38 RES 3K 1/8W 5% 1206 SM	1.000000
2	01-04-0331	Ref: R45 RES 330R 1/8W 5% 1206 SM	4.000000
2	01-04-0332	Ref: R39-42 RES 3.3K 1/8W 5% 1206 SM	4.000000
2	01-04-0334	Ref: R14-15,R62-63 RES 330K 1/8W 5% 1206 SM	1.000000
2	01-04-0471	Ref: R47 RES 470R 1/8W 5% 1206 SM	2.000000
2	01-04-0473	Ref: R6,R46 RES 47k 1/8w 5% 1206 SM	2.000000
2	01-04-0752	Ref: R3,R7 RES 7.5K 1/8W 5% 1206 SM	1.000000

LINE 6

2	01-04-0823	Ref: R4 RES 82K 1/8W 5% 1206 SM	1.000000
2	01-28-0102	Ref: R69 RES 1K 1/8W 1% 1206 SM	2.000000
2	01-28-0104	Ref: R29,R33 RES 100k 1/8W 1% 1206 SM	1.000000
2	01-28-0202	Ref: R49 RES 2K 1/8W 1% 1206 SM	1.000000
2	01-28-1653	Ref: R30 RES 165K 1/8W 1% 1206 SM	1.000000
2	01-28-4021	Ref: R48 RES 4.02K 1/8W 1% 1206 SM	1.000000
2	01-28-8061	Ref: R31 RES 8.06K 1/8W 1% 1206 SM	1.000000
2	01-48-7103 -10KB	Ref: R32 POT 10KB SINGLE 17MM R0901-CD1	5.000000
2	03-12-0107	Ref: R24-R28 CAP 100uF 16V 20% RAD ELEC TH	1.000000
2	03-12-0108	Ref: C74 CAP 1000uF 16V 20% RAD ELEC TH	1.000000
2	03-12-0227	Ref: C40 CAP 2200uF 16V 20% RAD ELEC TH	1.000000
2	03-18-0105	Ref: C17 CAP 1uF 50V 20% RAD ELEC TH	5.000000
2	03-18-0106	Ref: C4,C12-14,C20 CAP 10uF 50V 20% RAD ELEC TH	2.000000
2	03-18-0337	Ref: C16,C73 CAP 330uF 50V 20% RAD ELEC TH	1.000000
2	03-45-0473	Ref: C15 CAP 47nF 16V 20% 1206 FILM SM	1.000000

LINE 6

2	03-45-0682	Ref: C2 CAP 6.8nF 50V 20% 1206 FILM SM	1.000000
2	03-46-0104 X7R	Ref: C3 CAP 0.1uF 50V 20% 1206 SM	30.000000
2	03-46-0334 X7R	Ref: C6,C7,C9-11,C18,C25-26,C29-33,C35,C41-42,C52,C57,C65-66,C77, C80-88. CAP 0.33uF 25v 20% 1206 SM 12063C334MATMA	1.000000
2	03-50-0561 NPO	Ref: C39 CAP 560pF 50v 20% 0805 SM	1.000000
2	03-52-0101 X7R	Ref: C75 CAP 100 pF 50V 20% 0805 SM 08055A101KATMA	3.000000
2	03-52-0102 X7R	Ref: C1,C23,C47 CAP 1nF 50V 20% 0805 SM	7.000000
2	03-52-0221 X7R	Ref: C5,C8,C22,C24,C67,C70,C71 CAP 220pF 50V 20% 0805 SM	11.000000
2	03-52-0223 X7R	Ref: C19,C21,C44,C60-C64,C68-C69,C76 CAP 22nF 50V 20% 0805 SM	1.000000
2	03-52-0470 X7R	Ref: C43 CAP 47pF 50V 20% 0805 SM	3.000000
2	03-52-0473 X7R	Ref: C27,C28,C34 CAP 47nF 50V 20% 0805 SM	1.000000
2	03-60-0225	Ref: C46 CAP 2.2uF TANT 20V 595D225X0020A2T	1.000000
2	03-60-0335	Ref: C45 CAP 3.3uF CER 16v Murata #GRM42-6Y5V335Z016	2.000000
2	03-66-0476	Ref: C49,C50 CAP 47uF TANT 16v TPSD476K016R0150	3.000000
2	06-04-4002	Ref: C48,C58,C59 DIODE POWER 1N4002 TH	2.000000

LINE 6

2	06-20-4148	Ref: D11,D12 DIODE SMALL-SIGNAL 4148 DL-35 SM	6.000000
2	06-28-0361	Ref: D3,D4,D13,D14,D17,D18 DIODE ZENER 3.6V DL-41 SM MICR OSEMI-2EZ3.6D5	1.000000
2	06-28-5228	Ref: D16 DIODE ZENER 3.9V DL-35 SM Zmm5 228B or PMLL5228B	2.000000
2	06-34-0130	Ref: D1,D2 Rectifier, Schottkey Power SMT MOTOROLA - MTRS130LT3	1.000000
2	11-00-1198	Ref: D15 Crystal Osc 11.98080MHz HC-49/u holder	1.000000
2	11-10-0033	Ref: X1 INDUCTOR CHOKE 33uH CR-54 SM	1.000000
2	11-10-2000	Ref: L1 INDUCTOR 20uH 500mA .065DCR 1L COILCRAFT TRF2000	2.000000
2	12-50-0660	Ref: L2A, L2B IC REG VoltageDoubler SM Maxim #MAX660CSA	1.000000
2	12-50-3840	Ref: U20 IC REG5v low drop out volt SM LM 3480IM3X-5.0	1.000000
2	12-54-2134	Ref: U21 IC OP-AMP DUAL OPA2134VA SM	1.000000
2	12-54-5538	Ref: U3 IC OP-AMP DUAL NE5532D8 SM	1.000000
2	12-64-0838	IC ADC 8 bit, 11 channel SMT TI TLV0838C	1.000000
2	12-64-4224	Ref: U6 IC CODEC 24-bit w/Vol. control Cirrus Logic CS4224	1.000000
2	12-70-0887	Ref: U4 IC Converter, step-down PWM DC-DC, MAX887HESA	1.000000
2	12-70-2664	Ref: U14 IC Voltage Inverter	1.000000

LINE 6

Switch Capacitor, LM2664M6

		Ref: U15	
2	15-62-0014	IC 74HC14 INVERTER-HEX SIN 1-IN SM	1.000000
		Ref: U19	
2	15-62-0259	IC 74HC259 LATCH D-TYPE 8-BIT SM	1.000000
		Ref: U13	
2	15-62-0540	IC 74HC540 BUFFER INVERTING 8-BIT SM	1.000000
		Ref: U16	
2	15-62-0573	IC 74HC573 BUFFER INVERTING 8-BIT SM	1.000000
		Ref: U10	
2	15-70-1628	DRAM 16mb (2 x 8) Siemens p/n HYB3117805BSJ-60	1.000000
		Ref: U5	
2	15-84-8032	IC, Microprocessor 8032SMT P80C32SBBB Surface Mount	1.000000
		Ref: U7	
2	15-86-0364	IC DASP DSP-XCB56364FU100	1.000000
		Ref: U2	
2	15-92-1817	RESET CHIP, LINEAR,I/O DS1817R-5/T/R Dallas SemiCondu	1.000000
		Ref: U9	
2	18-02-0002	LED RED Hi Intensity L34LSRD	4.000000
		Ref: D5-D8	
2	21-00-0014	JACK BARREL SJS-014A	1.000000
		Ref: J6	
2	21-00-4420	JACK 1/4" EARTHING-WASHER JB0661-K01-3	3.000000
		Ref: M1,M4,M5	
2	21-00-6616	JACK 1/4" STEREO FEMALE PCB-MN 6-PIN FLUSH	3.000000
		Ref: J1,J3,J5	
2	21-34-0404	Wire,Battery,Pos per dwg.Red 24awg,7/32 strand cut 10.315"	1.000000

LINE 6

3	21-29-2403 C2015	Ref: BAT+ Wire,24awg, Red, 7/32 stranded	.0	A	Y	.860000
2	21-34-0414	Ref: ECO9925804 changed colors Wire,Battery,Neg.per dwg.Black 24awg,7/32 strand cut 5"	0	EA	N	1.000000
3	21-29-2401 C2015	Ref: BAT- Wire,24awg,Black,7/32 stranded	0	FT	Y	.420000
2	21-44-1032	Socket,32pin PLCC,ThroughHole Soldertail,Normal,Square	0	EA	Y	1.000000
2	24-12-0025	Ref: U11 ENCODER SHAFT 16 STEP	0	EA	Y	1.000000
2	24-15-0001	Ref: E1 Relay, DPDT	0	EA	Y	2.000000
2	24-31-0100	Ref: U8,U18 TACT SWITCH E SWITCH TL1100D	Ref: SW1-SW4			4.000000
2	30-15-0070	Before ordering tact Switch, See Tech Bulletin 015 SPC LED .155 O.D. x .700 LG, B LK PVC BIVAR ELM5 - 700	0	EA	Y	4.000000

Line 6
AM4 Parts List

Item: 99-040-1001 AM4

Level	Seq	Component-Item	Component-Description	Qty	EA					Qty-Per-Parent
=====										
Parent Item:		99-040-1001	PEDAL AMP MODELER RED AM4							
1	10	11-40-0001	BATTERY C-CELL	10	EA	.0	A	Y	N	4.000000
1	20	21-18-0580	CONTACT BATTERY POSITIVE (+)	10	EA	.0	A	Y	N	1.000000
1	30	21-18-0581	CONTACT BATTERY NEGATIVE (-)	10	EA	.0	A	Y	N	1.000000
			W/SPRING							
1	40	24-32-0108	ACTUATOR SWITCH	10	EA	.0	A	Y	N	4.000000
1	50	30-00-1632	SCR 6-32x3/8 PNH PHH TAP TITE	10	EA	.0	A	Y	N	9.000000
			STL BLK							
1	60	30-03-0044	WASHER FOAM/TEFLON UHMW 0.7"	10	EA	.0	A	Y	N	5.000000
1	70	30-12-8414	STDF .250 HEX 6-32 MALE / FEMA	10	EA	.0	A	Y	N	1.000000
			LE .670 LG STL							
1	80	30-15-0010	SPACER .125"X.145" NYLON RED	10	EA	.0	A	Y	N	4.000000
1	90	30-15-0044	TAPE TEFLON AND FOAM 7" x .5"	10	EA	.0	A	Y	N	2.000000
1	100	30-28-0400	INSULATOR BATTERY CONTACT	10	EA	.0	A	Y	N	2.000000
			(4X4)							
1	110	30-28-0404	DOOR PLASTIC BATTERY BLACK	10	EA	.0	A	Y	N	1.000000
1	120	30-42-0417	OVERLAY TOP CHASSIS	10	EA	.0	A	Y	N	1.000000
			35.3 x 219.1mm AL AM4							
1	130	30-42-0424	OVERLAY REAR CHASSIS	10	EA	.0	A	Y	N	1.000000
			40.1 x 228.6mm AL DM4/AM4							
1	140	30-45-2000	KNOB POT PLASTIC BLACK w/WHITE	10	EA	.0	A	Y	N	6.000000
			INDICATOR LINE							
1	150	30-48-0404	FOOT RUBBER BLACK (4 x 4)	10	EA	.0	A	Y	N	1.000000
1	160	30-51-0404	BOTTOM COVER CRS ZINC PLATED	10	EA	.0	A	Y	N	1.000000
			(Stomp Box)							

Line 6
AM4 Parts List

1	170 30-51-4006	HOUSING CASTING AI RED AM4	10 EA	.0 A N	1.000000
1	180 30-75-5514 80083)	STOP PEDAL RBR BLK (3M 700700	10 EA	.0 A Y N	2.000000
1	190 40-00-0008	MANUAL USER AM4	10 EA	.0 A Y N	1.000000
1	200 40-10-0403	FOAM EXPANDED POLYSTYRENE SHIPPING BATTERY 4x4	10 EA	.0 A Y N	1.000000
1	210 40-10-0407	CARTON GIFT SELF LOCKING 12x 6.125 x 2.5 UV/Litho AM4	10 EA	.0 A Y N	1.000000
1	220 40-20-0070	BAG PLASTIC SHIPPING 9" x 12" 2-MIL	10 EA	.0 A Y N	1.000000
1	230 40-25-0002	LABEL ROUND 2" TRANSPARENT	10 EA	.0 A Y N	1.000000
1	240 40-25-0020	LABEL INSPECTION QUALITY	10 EA	.0 A Y N	1.000000
1	250 40-25-0101	LABEL BAR CODE S/N 2-PNL LTX 16 1125502	10 EA	.0 A Y N	1.000000
1	260 40-25-0254	LABEL LOGO LINE 6 PREMIUM	10 EA	.0 A Y N	1.000000
1	270 50-00-1406	PCBA MAIN AM4	10 EA	.0 A N	1.000000
2	40 01-04-0102	RES 1K 5% 1206	0 EA	.0 A Y N	5.000000
2	50 01-04-0103	Ref: R2,R10,R16,R36,R37 RES 10K 5% 1206	0 EA	.0 A Y N	2.000000
2	60 01-04-0104	Ref: R34,R35 RES 100K 5% 1206	0 EA	.0 A Y N	5.000000
2	70 01-04-0105	Ref: R5,R9,R12,R53,R56 RES 1M 5% 1206	0 EA	.0 A Y N	1.000000
2	80 01-04-0150	Ref: R1 RES 15R 5% 1206	0 EA	.0 A Y N	3.000000
2	90 01-04-0153	Ref: R11,R57,R68 RES 15K 5% 1206	0 EA	.0 A Y N	9.000000

Ref: R8,R58-R61,R64-R67

Line 6
AM4 Parts List

2	100 01-04-0203	RES 20K 5% 1206	0 EA	.0	A	Y	N	1.000000
2	110 01-04-0224	Ref: R52 RES 220K 5% 1206	0 EA	.0	A	Y	N	1.000000
2	120 01-04-0302	Ref: R38 RES 3K 5% 1206	0 EA	.0	A	Y	N	1.000000
2	130 01-04-0331	Ref: R45 RES 330R 5% 1206	0 EA	.0	A	Y	N	4.000000
2	140 01-04-0332	Ref: R39-42 RES 3.3K 5% 1206	0 EA	.0	A	Y	N	4.000000
2	150 01-04-0334	Ref: R14-15,R62-63 RES 330K 5% 120	0 EA	.0	A	Y	N	1.000000
2	160 01-04-0471	Ref: R47 RES 470R 5% 1206	0 EA	.0	A	Y	N	2.000000
2	170 01-04-0473	Ref: R6,R46 RES 47K 5% 1206	0 EA	.0	A	Y	N	2.000000
2	175 01-04-05R1	Ref: R3,R7 RES 5.1R 5% 1206	0 EA	.0	A	Y	N	1.000000
2	180 01-04-0752	Ref: R13 RES 7.5K 5% 1206	0 EA	.0	A	Y	N	1.000000
2	190 01-04-0823	Ref: R4 RES 82K 5% 1206	0 EA	.0	A	Y	N	1.000000
2	200 01-28-0202	Ref: R69 RES 20.0K 1% 1206	0 EA	.0	A	Y	N	1.000000
2	210 01-28-1001	Ref: R30 RES 1.00K 1% 1206	10 EA	.0	A		N	2.000000
2	220 01-28-1003	Ref: R29,R33 RES 100K 1% 1206	10 EA	.0	A		N	1.000000
2	230 01-28-1653	Ref: R49 RES 165K 1% 1206 Ref: R48	0 EA	.0	A	Y	N	1.000000

Line 6
AM4 Parts List

2	240 01-28-4021	RES 4.02K 1% 1206	0 EA	.0	A	Y	N	1.000000
		Ref: R31						
2	250 01-28-8061	RES 8.06K 1% 1206	0 EA	.0	A	Y	N	1.000000
		Ref: R32						
2	260 01-48-7103 17mm	POT MONO 10KB LINEAR TAPER	0 EA	.0	A	Y	N	5.000000
		Ref: R24-R28						
2	270 03-12-0107 6.3/11/5	CAP ELEC 100uF 16V 20% RADIAL	0 EA	.0	A	Y	N	1.000000
		Ref: C74						
2	280 03-12-0108 10/16/5	CAP ELEC 1000uF 16V 20% RADIAL	0 EA	.0	A	Y	N	1.000000
		Ref: C40						
2	290 03-12-0337 8/11.5/5	CAP ELEC 330uF 16V 20% RADIAL	0 EA	.0	A	Y	N	1.000000
		Ref: C15						
2	300 03-14-0227 10/16/5	CAP ELEC 220uF 25V 20% RADIAL	0 EA	.0	A	Y	N	4.000000
		Ref: C17,C48,C58-C59						
2	310 03-18-0105 5/11/5	CAP ELEC 1uF 50V 20% RADIAL	0 EA	.0	A	Y	N	5.000000
		Ref: C4,C12-14,C20						
2	320 03-18-0106 5/11/5	CAP ELEC 10uF 50V 20% RADIAL	0 EA	.0	A	Y	N	2.000000
		Ref: C16,C73						
2	340 03-45-0473	CAP 47nF 16V 20% 1206 FILM	0 EA	.0	A	Y	N	1.000000
		Ref: C2						
2	350 03-45-0682	CAP 6.8nF 16V 5% 1206 FILM	0 EA	.0	A	Y	N	1.000000
		Ref: C3						
2	360 03-46-0104	CAP X7R 0.1uF 50V 20% 1206	0 EA	.0	A	Y	N	30.000000
		Ref: C6-C7,C9-11,C18,C25-26,C29-33,C35,C41-42,C52,C57,C65-66,C77, C80-88						
2	370 03-46-0334	CAP X7R 0.33uF 25v 20% 1206	0 EA	.0	A	Y	N	1.000000
		Ref: C39						
2	380 03-50-0470	CAP NPO 47pF 50V 10% 0805	0 EA	.0	A	Y	N	3.000000
		Ref: C27-28,C34						

Line 6
AM4 Parts List

2	390 03-50-0561	CAP NPO 560pF 50v 20% 0805	0 EA	.0	A	Y	N	1.000000
		Ref: C75						
2	400 03-52-0101	CAP X7R 100pF 50V 20% 0805	0 EA	.0	A	Y	N	1.000000
		Ref: C47						
2	410 03-52-0102	CAP X7R 1nF 50V 20% 0805	0 EA	.0	A	Y	N	6.000000
		Ref: C5,C8,C22,C67,C70-C71						
2	420 03-52-0221	CAP X7R 220pF 50V 20% 0805	0 EA	.0	A	Y	N	11.000000
		Ref: C19,C21,C44,C60-C64,C68-C69,C76						
2	430 03-52-0223	CAP X7R 22nF 50V 10% 0805 SM	0 EA	.0	A	Y	N	1.000000
		Ref: C43						
2	450 03-52-0473	CAP X7R 47nF 50V 20% 0805	0 EA	.0	A	Y	N	1.000000
		Ref: C46						
2	460 03-60-0225	CAP TANT 2.2uF 20V 20% SM-A	0 EA	.0	A	Y	N	1.000000
		Ref: C45						
2	470 03-60-0335	CAP 3.3uF CER 16V Y5V 1206 Murata #GRM42-6Y5V335Z016	0 EA	.0	A	Y	N	2.000000
		Ref: C49-C50						
2	490 06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	0 EA	.0	A	Y	N	2.000000
		Ref: D11-D12						
2	500 06-20-4148	DIODE SMALL-SIGNAL DL-35 SM 4148	0 EA	.0	A	Y	N	6.000000
		Ref: D3-D4,D13-D14,D17-D18						
2	510 06-28-0361	DIODE ZENER 3.6V DL-41 SM MICRO SEMI-2EZ3.6D5	0 EA	.0	A	Y	N	1.000000
		Ref: D16						
2	520 06-28-5228	DIODE ZENER 3.9V 5% 500mW DL-35 SM 5228B	0 EA	.0	A	Y	N	2.000000
		Ref: D1-D2						
2	530 06-34-0130	DIODE SCHOTTKY 30V 1A SMB SM MBRS130L	0 EA	.0	A	Y	N	1.000000
		Ref: D15						
2	540 11-00-1198	CRYSTAL 11.98080MHz HC-49/U TH	0 EA	.0	A	Y	N	1.000000

Ref: X1

Line 6
AM4 Parts List

2	550 11-10-0033	INDUCTOR CHOKE 33uH CR-54 SM	0 EA	.0	A	Y	N	1.000000
		Ref: L1						
2	560 11-10-2000	INDUCTOR 20uH 500mA .065DCR 1L COILCRAFT TRF2000	0 EA	.0	A	Y	N	1.000000
		Ref: L2						
2	570 12-50-0660	IC REG VOLTAGE DOUBLER SM MAX660CSA	0 EA	.0	A	Y	N	1.000000
		Ref: U20						
2	580 12-50-3840	IC REG 5v LOW DROP OUT SOT-23 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U21						
2	590 12-54-2134	IC OP-AMP DUAL OPA2134UA SM SO-8	0 EA	.0	A	Y	N	1.000000
		Ref: U3						
2	600 12-54-5538	IC OP-AMP DUAL LO NOISE NE5532AD8 SM SO-8	0 EA	.0	A	Y	N	1.000000
		Ref: U22						
2	610 12-64-0838	IC ADC 8 BIT / 8 CHANNEL DW20 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U6						
2	620 12-64-4224	IC CODEC 24-BIT w/VOL CONTROL 28-PIN SSOP CS4224	0 EA	.0	A	Y	N	1.000000
		Ref: U4						
2	630 12-70-0887	IC CONVERTER STEP-DOWN PWM DC-DC SO-8 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U14						
2	640 12-70-2664	IC VOLTAGE INVERTER SWITCH CAP LM2664	0 EA	.0	A	Y	N	1.000000
		Ref: U15						
2	650 15-62-0014	IC 74HC14 INVERTER HEX SCHMITT TRIGGER SO-14 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U19						
2	660 15-62-0259	IC 74HC259 LATCH D-TYPE 8-BI SO-16 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U13						
2	670 15-62-0540	IC 74HC540 BUFFER INVERTING 8-BIT SO-20 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U16						
2	680 15-62-0573	IC 74HC573 LATCH TRANSPARENT 8-BIT W/3-S SO-20 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U10						
2	690 15-70-1628	IC DRAM 16MB 2 x 8 SOJ-28 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U5						

Line 6
AM4 Parts List

2	700 15-78-1024	IC EEPROM 1K 64X16 SERIAL AK93C45 SOP-8 SM	0 EA	.0	A	Y	N	1.000000
		Ref: U12						
2	710 15-84-8032	IC MPU P80C32SBBB SM PQFP44	0 EA	.0	A	Y	N	1.000000
		Ref: U7						
2	720 15-86-0364	IC DASP 24-BIT TQFP-100 SM DSP-B56364FU100	0 EA	.0	A	Y	N	1.000000
		Ref: U2						
2	730 15-92-1817	IC RESET 3.3V 5% ACTIVE-HI SM SOT-23 DS1817R-5/T&R	0 EA	.0	A	Y	N	1.000000
		Ref: U9						
2	740 18-02-0002	LED RED HI INTENSITY L34LSRD	0 EA	.0	A	Y	N	4.000000
		Ref: D5-D8						
2	750 21-00-0014	JACK BARREL PCB MT 2.5mm DC PWR 3 PIN TH SJS-014A	0 EA	.0	A	Y	N	1.000000
		Ref: J6						
2	760 21-00-4420	WASHER EARTHING FOR 1/4" JACK JB0661-K01-3	0 EA	.0	A	Y	N	3.000000
		Ref: M1,M4-M5						
2	770 21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	0 EA	.0	A	Y	N	3.000000
		Ref: J1,J3,J5						
2	780 21-34-0405	WIRE 24AWG 7/32 STRANDED 10.875" L STRIP/TIN RED	10 EA	.0	A	Y	N	1.000000
		Ref: MAIN PCB TO BAT CONTACT +						
2	790 21-34-0415	WIRE 24AWG 7/32 STRANDED 5" L STRIP/TIN BLK	0 EA	.0	A	N	N	1.000000
		Ref: MAIN PCB TO BATT CONTACT -						
2	800 21-44-1032	SOCKET 32-pin PLCC TH	0 EA	.0	A	Y	N	1.000000
		Ref: U11						
2	810 24-12-0025	ENCODER 16-STEP V-MOUNT PCB	0 EA	.0	A	Y	N	1.000000
		Ref: E1						
2	820 24-15-0001	RELAY DPDT SINGLE WINDING LATCHING TYPE DIP10 TH	0 EA	.0	A	Y	N	2.000000
		Ref: U8,U18						
2	830 24-31-0100	SWITCH TACT 12mm SQ 4-PIN TH	0 EA	.0	A	Y	N	4.000000

Ref: SW1-SW4

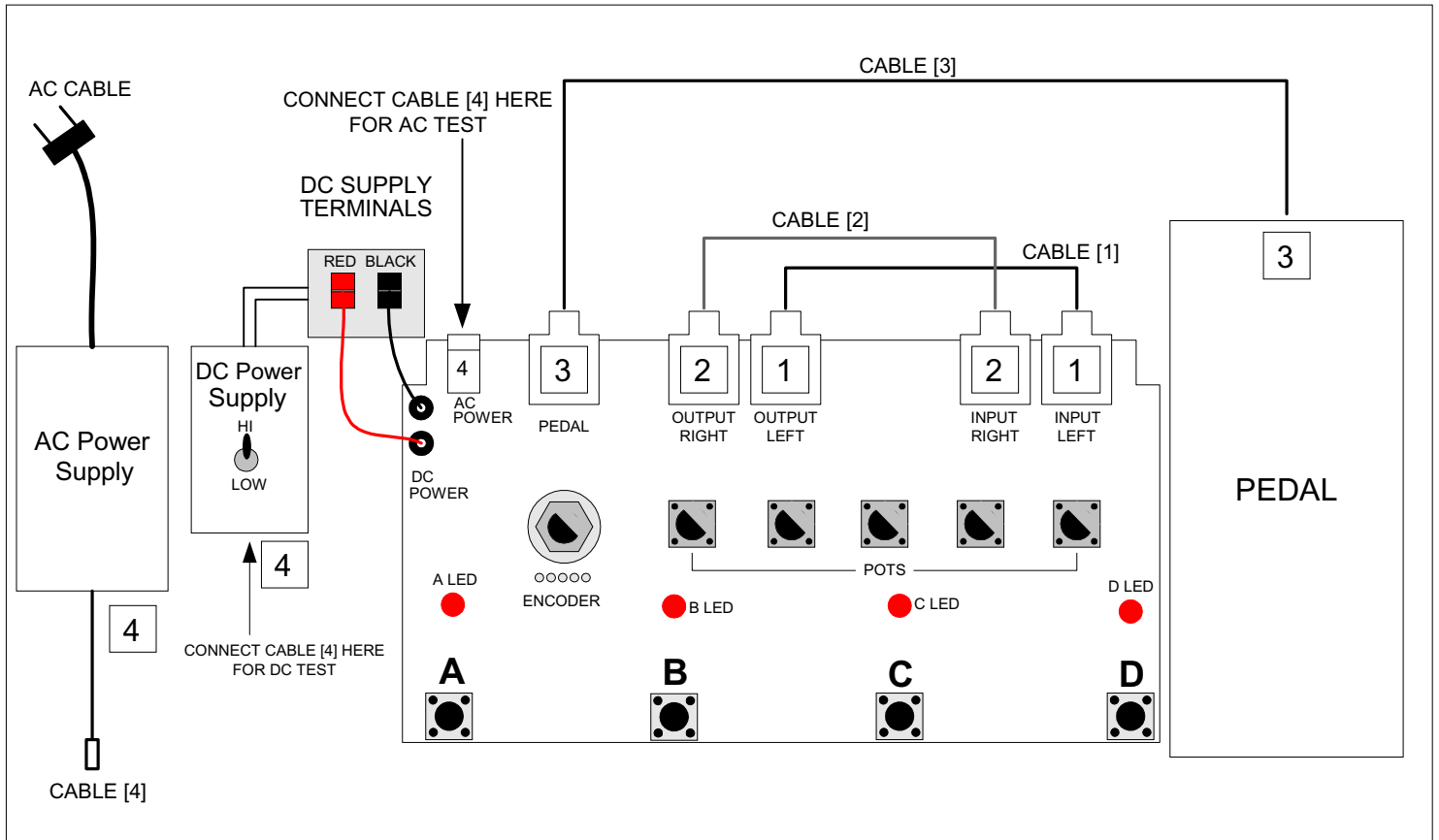
Before ordering tact Switch, See Tech Bulletin 015

Line 6
AM4 Parts List

2	840 30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	10 EA	.0	A	Y	N	1.000000
		Ref: X1						
2	850 30-15-0070	SPC LED .155 O.D. x .700 LG, B LK PVC BIVAR ELM5 - 700	0 EA	.0	A	Y	N	4.000000
		Ref: D5-D8.						
2	870 45-00-0000	EPROM PROGRAMMED v1.00 c/s=7128h AM4	0 EA	.0	A	Y	N	1.000000
3	10 15-76-0512	IC EPROM 512K 64Kx8 OTP 90nS AT27LV512A 32-PLCC SM	10 EA	.0	A	Y	N	1.000000

DL4/MM4/DM4 Detailed Test Instructions

Test Fixture Setup:



DM4 does not have a right input or output jack. Optional clip leads are included if red/black wires are not installed on PCB.

Setup Instructions:

1. Connect AC cable to wall outlet. Connect cable [4] to DC power supply.
2. Place PCB on test fixture.
3. Connect red and black wires on PCB to DC Supply Terminals. Make sure DC Power Supply switch is set to HI.
4. Connect cables [2] and [3]. NOTE: There is no cable [2] for DM4. Connect cable [1] only to left output.
5. Hold down the "A" button and connect cable [1] to left input. The "D" LED will turn on indicating you are in test mode.

Test Instructions:

Press the "D" button to select a test. The test number is indicated with the LEDs in binary.

Press "B" and "C" buttons at the same time to start test.

Check test results. Some tests will flash an LED to indicate pass or fail. Other tests results are determined checking the LED display.

Binary Numbers: Each LED has a different number value. The "A" LED = 8, "B" LED = 4, "C" LED = 2, "D" LED = 1. Only LEDs that are on have a value. The binary numbering method is used to indicate the test number (1-15) and also the test results for the encoder test (1-15).

Example: The number 7 is represented by the "A" LED = 0, "B" LED = 4, "C" LED = 2, "D" LED = 1. $0+4+2+1 = 7$

LED OFF LED ON



	8	4	2	1
1	○	○	○	●
2	○	○	●	○
3	○	○	●	●
4	○	●	○	○
5	○	●	○	●
6	○	●	●	○
7	○	●	●	●
8	●	○	○	○
9	●	○	○	●
10	●	○	●	○
11	●	○	●	●
12	●	●	○	○
13	●	●	○	●
14	●	●	●	○
15	●	●	●	●

Test 1

EPROM Test - Press buttons "B" and "C" at the same time to start test.

Pass: "A" LED flashes

Fail: "D" LED flashes.

Press button "D" to advance to next test.

Test 2

EEPROM Test - Press buttons "B" and "C" at the same time to start test.

Pass: "A" LED flashes.

Fail: "D" LED flashes.

Press button "D" to advance to next test.

Test 3

LED Test – Press buttons “B” and “C” at the same time to start test. All LEDs turn on, then off. Each LED turns on/off separately. Press button “D” to advance to next test.

Test 4

ENCODER Test – Press buttons “B” and “C” at the same time to start test. Rotate encoder (E1) through all 16 positions. LEDs will indicate corresponding binary number from 0 to 15. Start with the flat side of encoder shaft facing down, the LEDs will show 0. Turning clockwise from this position, the LEDs should count up in binary from 0 to 15. NOTE: There are three encoder positions between each of the four positions shown below. Press buttons “B” and “C” at the same time to stop test. Press button “D” to advance to next test.



Test 5

POTS Test - Press buttons “B” and “C” at the same time to start test. Rotate each pot and look for the following test results. Press buttons “B” and “C” at the same time to stop test. Press button “D” to advance to next test.

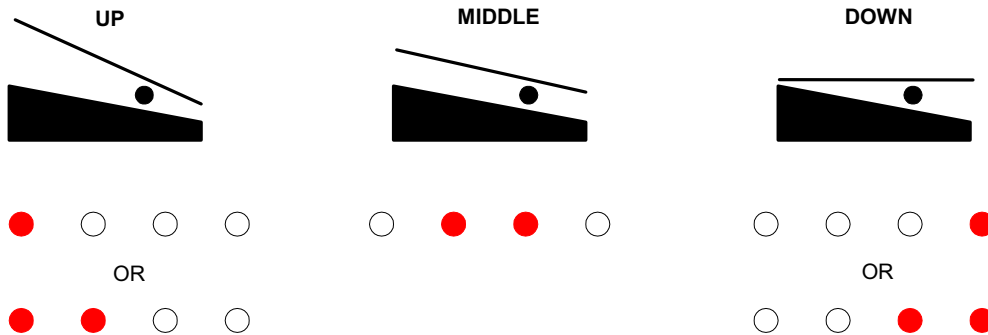


Test 6

BUTTON Test – Press buttons “B” and “C” at the same time to start test. Press each button separately and check that its corresponding LEDs turns on. LED will only turn on when button is held down. Press buttons “B” and “C” at the same time to stop test. Press button “D” to advance to next test.

Test 7

PEDAL Test - Press buttons “B” and “C” at the same time to start test. Move the pedal up and down checking for the following LED test results. Press buttons “B” and “C” at the same time to stop test. Press button “D” to advance to next test.



Test 8

BATTERY Test - Press buttons “B” and “C” at the same time to start test. “A” LED should flash with DC power supply switch in Hi (6.0V) position. “D” LED should flash with DC power supply switch in Low (4.2V) position. Press buttons “B” and “C” at the same time to stop test. Press button “D” to advance to next test.

Test 9

FREQUENCY Test – Make sure cables [1], [2] are connected to inputs/outputs. NOTE: DM4 does not have a cable [2]. Press buttons “B” and “C” at the same time to start test.

Pass: “A” LED flashes.

Fail: “D” LED flashes. “B” LED will turn on for left channel failure. “C” LED will turn on for right channel failure.

Press button “D” to advance to next test.

Test 10

DISTORTION Test – Make sure cables [1], [2] are connected to inputs/outputs. NOTE: DM4 does not have a cable [2]. Press buttons “B” and “C” at the same time to start test.

Pass: “A” LED flashes.

Fail: “D” LED flashes. “B” LED will turn on for left channel failure. “C” LED will turn on for right channel failure.

Press button “D” to advance to next test.

Test 11 (DL4 and DM4 ONLY)

DRAM Test - Make sure cables [1], [2] are connected to inputs/outputs. NOTE: DM4 does not have a cable [2].

Press buttons “B” and “C” at the same time to start test.

Pass: “A” LED flashes.

Fail: “D” LED flashes. “B” LED will turn on for left channel failure. “C” LED will turn on for right channel failure.

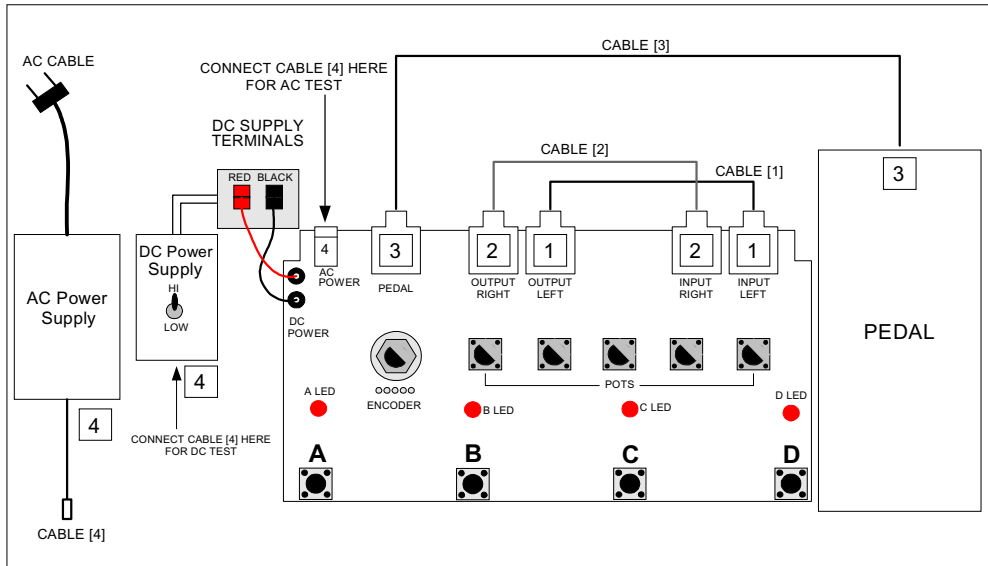
Press button “D” to advance back to Test 1.

Test 12 (You do not need to be in test mode for this test)

AC POWER Test – Disconnect cable [4] from DC power supply and connect to AC power jack [4] on PCB. Press “A” button and check if corresponding LED turns on. If LED turns on, the test passes.

DL4/MM4/DM4 Simple Test Instructions

Test Fixture Setup:



DM4 does not have a right input or output jack.

Setup Instructions:

1. Connect AC two prong cable to wall outlet. Connect other end of AC power supply to DC power supply.
2. Place PCB on test fixture.
3. Connect red and black wires on PCB to DC Supply Terminals. Make sure DC Power Supply switch is set to HI.
4. Connect cables [2] and [3]. NOTE: There is no cable [2] for DM4. Connect cable [1] only to left output.
5. Hold down the "A" button and connect cable [1] to left input. The "D" LED will turn on indicating you are in test mode.

1. **EPROM:** Pass = "A" LED Flashing Fail = "D" LED Flashing
2. **EEPROM:** Pass = "A" LED Flashing Fail = "D" LED Flashing
3. **LED:** All LEDs turn on, then off. Each LED turns on/off separately.
4. **ENCODER:** Rotate encoder (E1) through all 16 positions. LEDs will indicate corresponding binary number from 0 to 15. Start with the flat side of encoder shaft facing down.
5. **POTS:** Rotate each pot and use LED display to check for pass/fail.
6. **BUTTONS:** Press and hold down each button separately, checking that the corresponding LED turns on.
7. **PEDAL:** Move pedal up and down using LED display to check for pass/fail.
8. **BATTERY:** "A" LED should flash with DC switch set hi. "D" LED should flash with DC switch set low.
9. **FREQUENCY:** Pass = "A" LED Flashing Fail = "D" LED Flashing, "B" = left channel, "C" = right channel
10. **DISTORTION:** Pass = "A" LED Flashing Fail = "D" LED Flashing, "B" = left channel, "C" = right channel
11. **DRAM (DL4 and DM4 ONLY):** Pass = "A" LED Flashing Fail = "D" LED Flashing
12. **AC POWER:** Disconnect cable [4] from DC power supply and connect to AC power jack [4] on PCB. Press "A" button and check if corresponding LED turns on. If LED turns on, the test passes.



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Procedure for reinitialization of Line 6 Stomp Box modeler pedals.

Power unit up (plug ¼” jack into the “L/mono” input jack) while holding down the far right and far left buttons. Hold for 3 seconds and then release. Factory presets will be re-installed.

Procedure for identifying firmware version of Line 6 Stomp Box Modelers

Hold down far right button while powering unit up (insert a ¼” jack into L/mono” input jack). Far left LED will flash for the MAJOR version; second LED from left will flash for minor version.

Example: Version 1.2 = Far left LED will flash once, second LED from left will flash twice.