

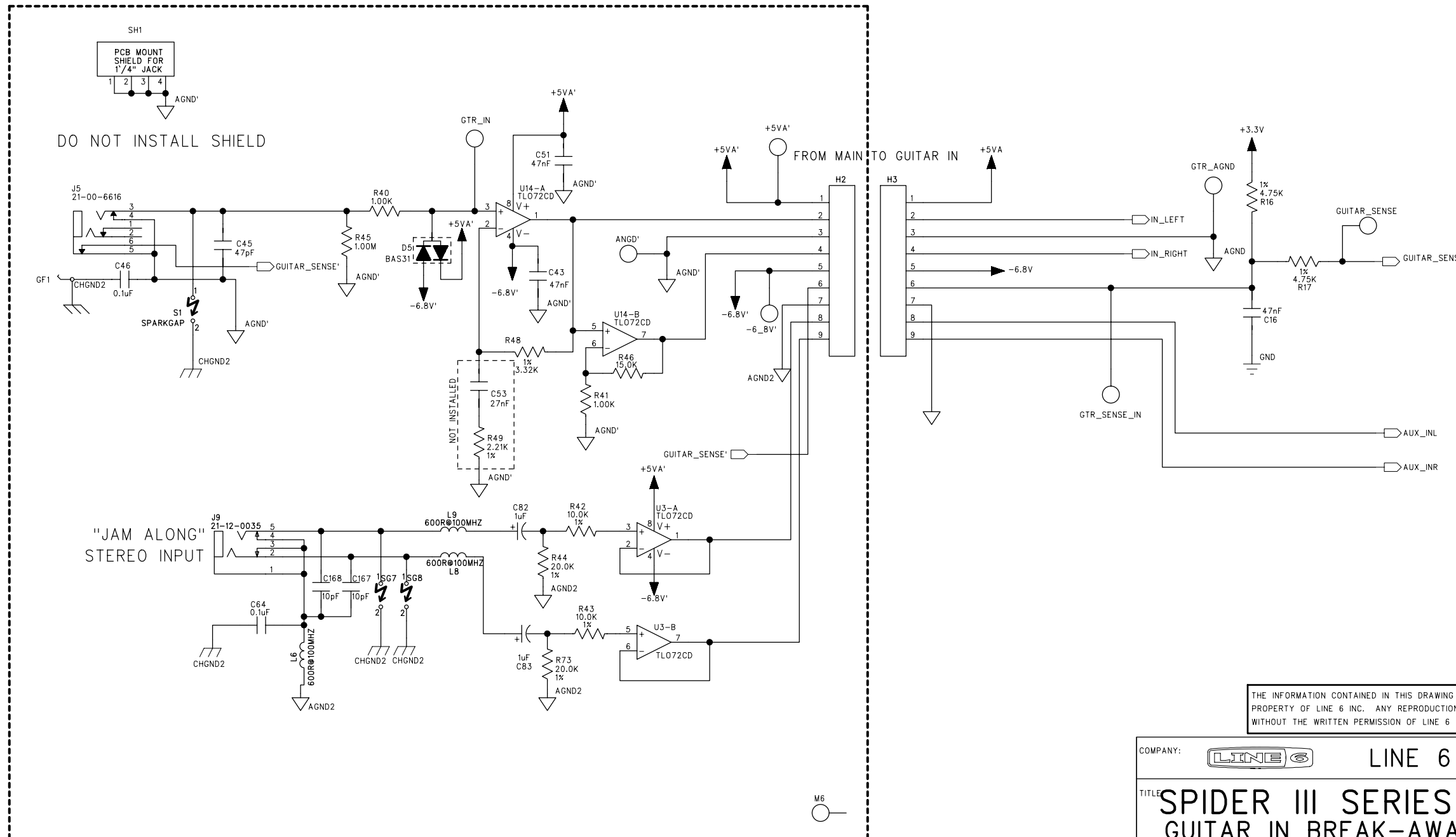


112 210 212 HD150
1508 3012 HD75

Service Manual

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
	08.28.06	Released as Rev.B2. Revised C5 to 1000uF.

GUITAR IN BREAK-AWAY PCB



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COMPANY:	LINE 6
TITLE:	SPIDER III SERIES MAIN GUITAR IN BREAK-AWAY PCB
PROGRAM:	PADS POWER LOGIC V5.0
REV:	B2
FILENAME:	
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0308-1	SHEET: 1 OF 5

DRAWN:	G. Kirtley / D. Molnar	DATED:	08/28/2006
CHECKED:	review panel	DATED:	

D

D

C

C

B

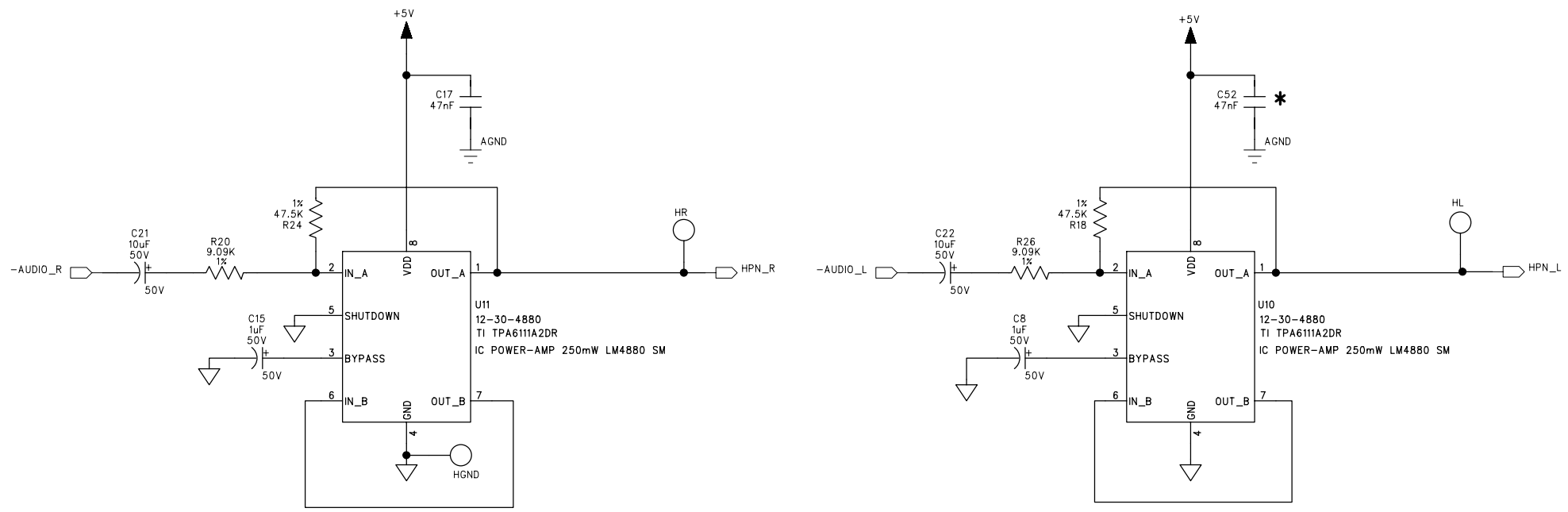
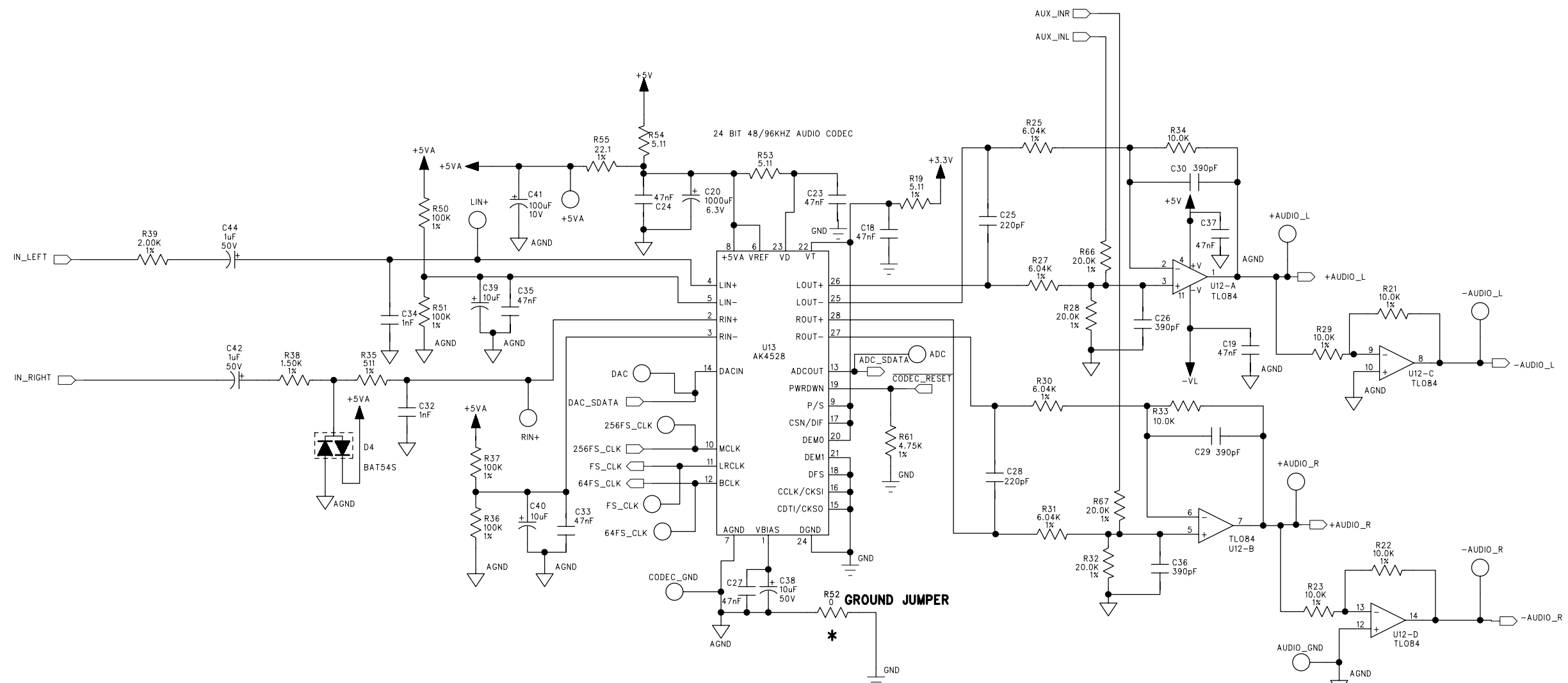
B

A

A

CODEC/HEADPHONE AMP

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



Headphone Amplifiers

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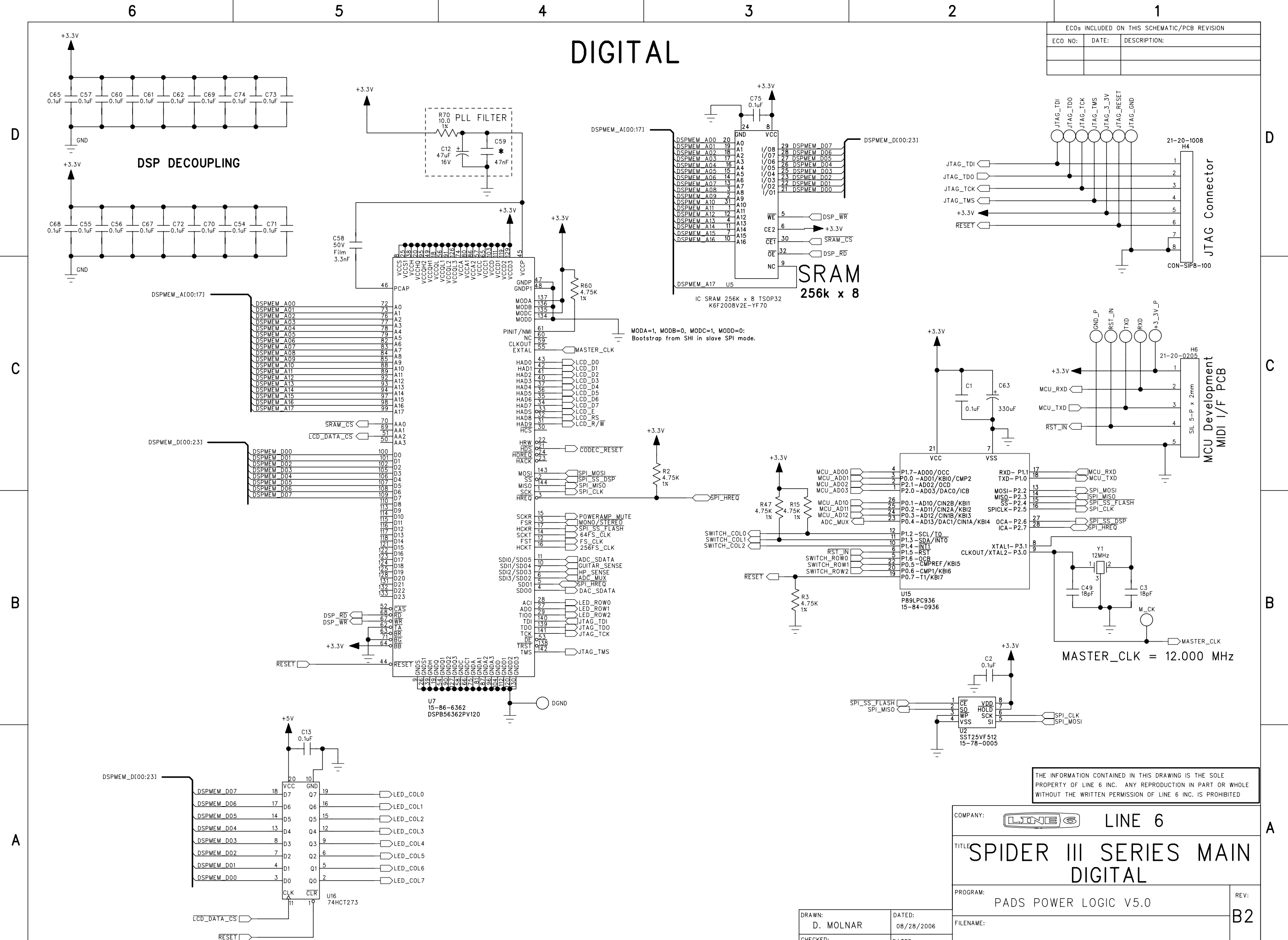
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED

DRAWN: G. Kirtley / D. Molnar	DATED: 08/28/2006
CHECKED: review panel	DATED:

COMPANY: LINE 6	TITLE: SPIDER III SERIES MAIN CODEC/HEADPHONE AMP
PROGRAM: PADS POWER LOGIC V5.0	REV: B2
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0308	SHEET: 2 OF 5

DIGITAL

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



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COMPANY:	LINE 6
TITLE:	SPIDER III SERIES MAIN DIGITAL
PROGRAM:	PADS POWER LOGIC V5.0
REV:	B2
FILENAME:	
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0308	SHEET: 3 OF 5

DRAWN:	DATED:
D. MOLNAR	08/28/2006
CHECKED:	DATED:
review panel	

6

5

4

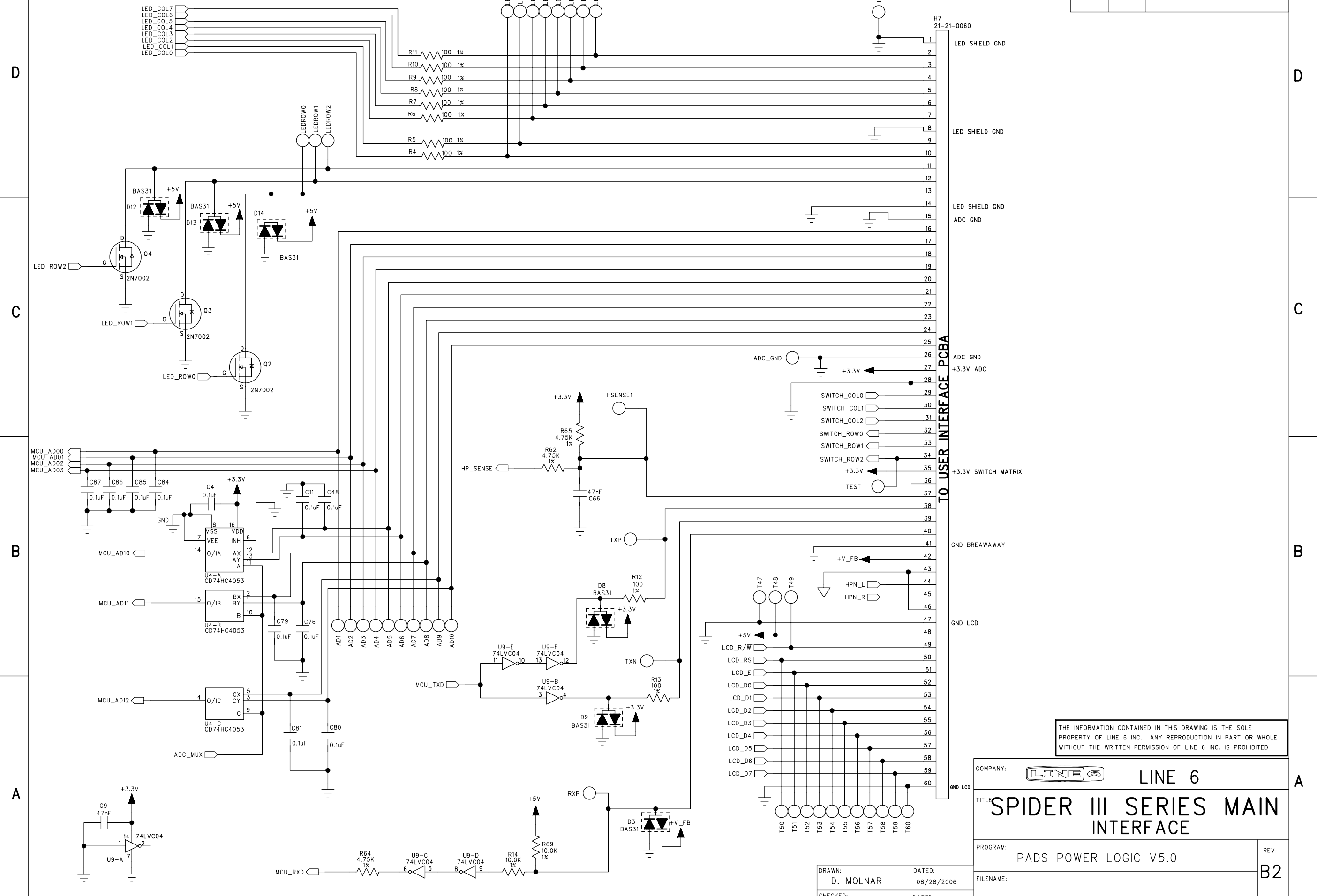
3

2

1

INTERFACE

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



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COMPANY: **LINE 6**

TITLE: **SPIDER III SERIES MAIN INTERFACE**

PROGRAM: PADS POWER LOGIC V5.0

REV: **B2**

FILENAME: _____

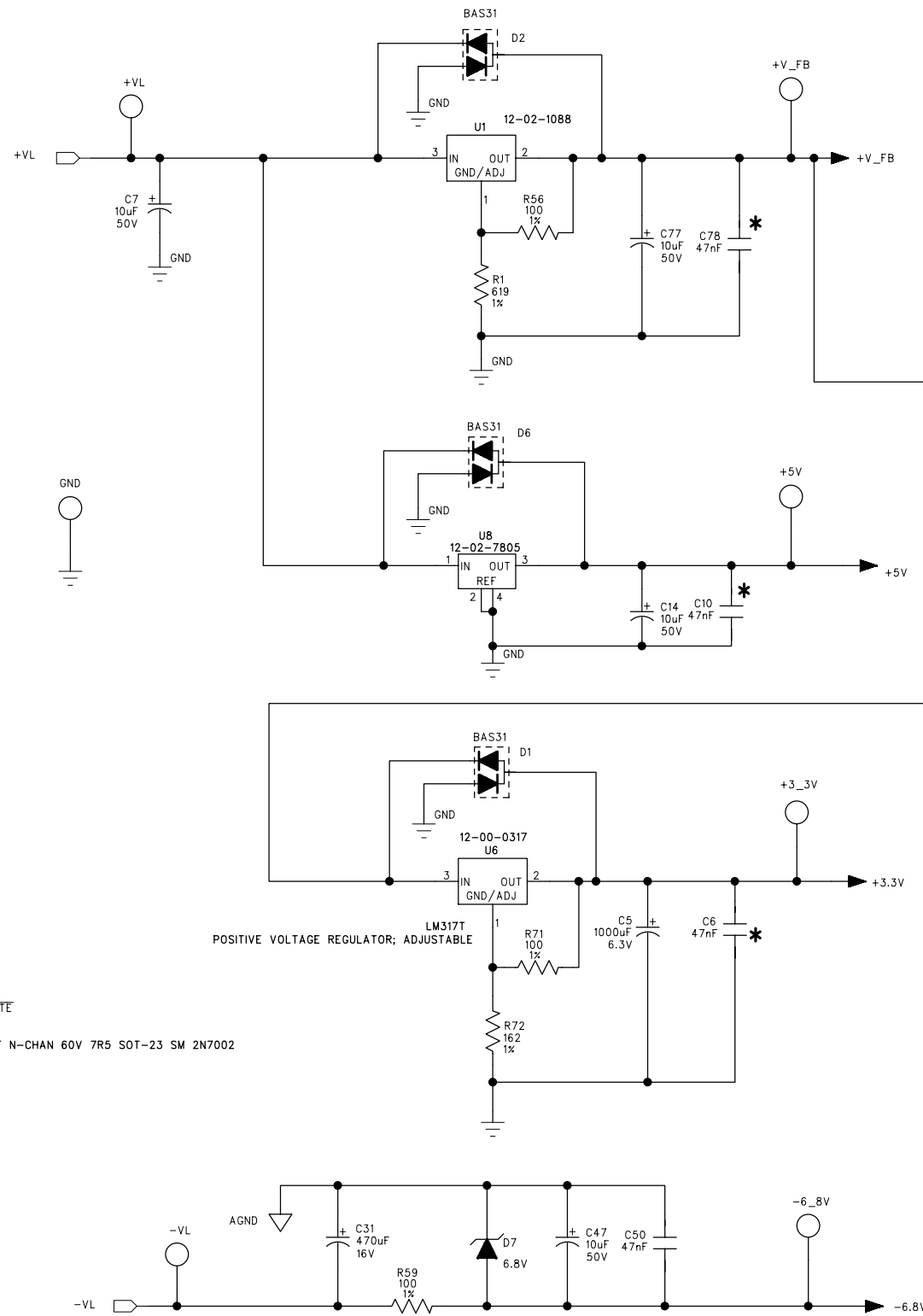
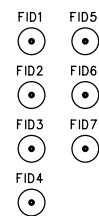
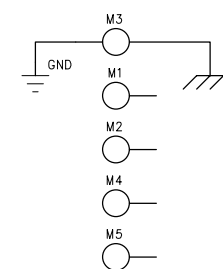
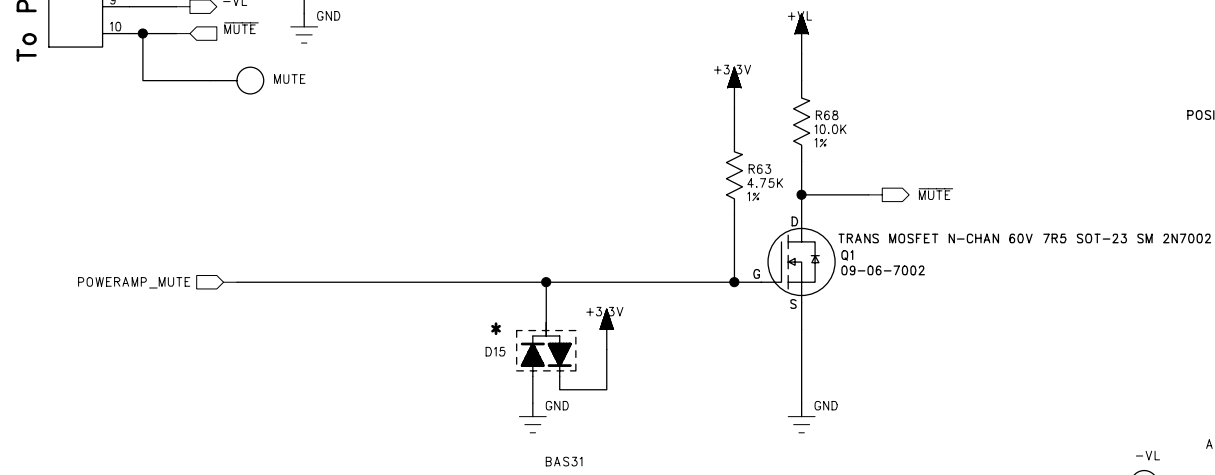
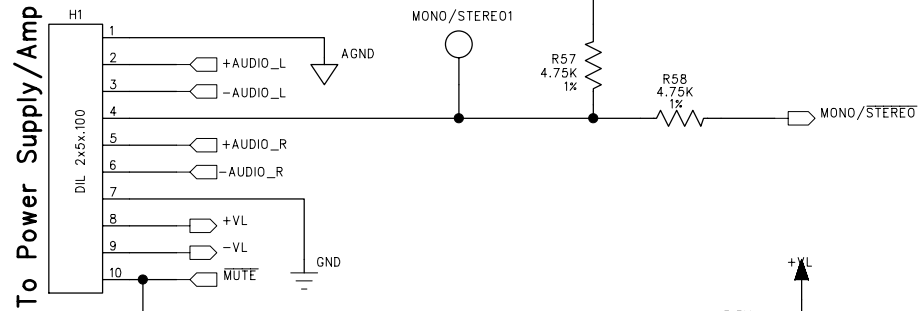
SCALE: 1:1 | SIZE: C | PART NUMBER: 35-00-0308 | SHEET: 4 OF 5

DRAWN: **D. MOLNAR** | DATED: 08/28/2006

CHECKED: **review panel** | DATED: _____

POWER

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



GND and AGND connected at supply

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COMPANY:	LINE 6
TITLE:	SPIDER III SERIES MAIN POWER
PROGRAM:	PADS POWER LOGIC V5.0
REV:	B2
SCALE:	1:1
SIZE:	C
PART NUMBER:	35-00-0308
SHEET:	5 OF 5

DRAWN:	G. Kirtley	DATED:	08/28/2006
CHECKED:	review panel	DATED:	

6

5

4

3

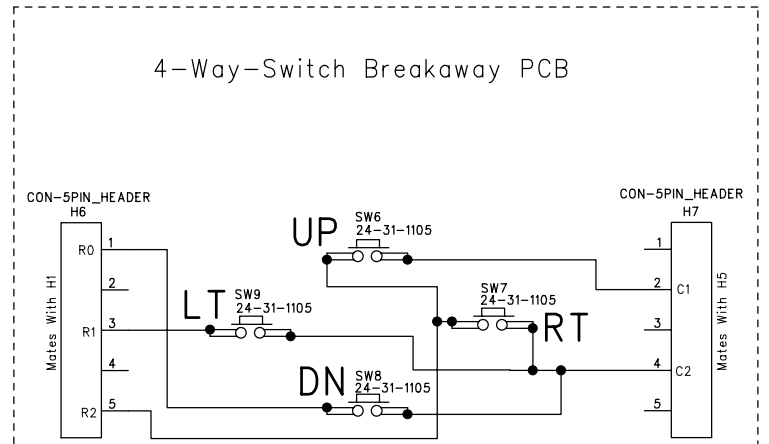
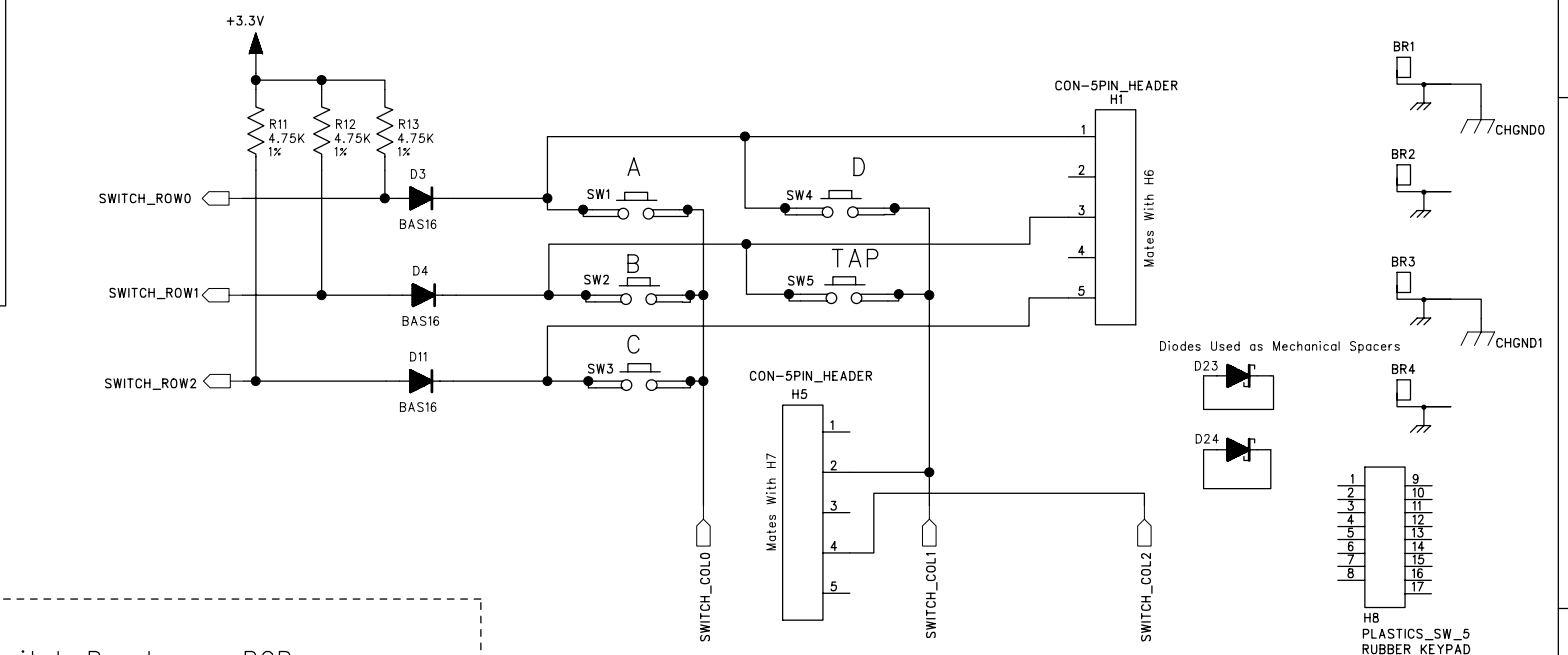
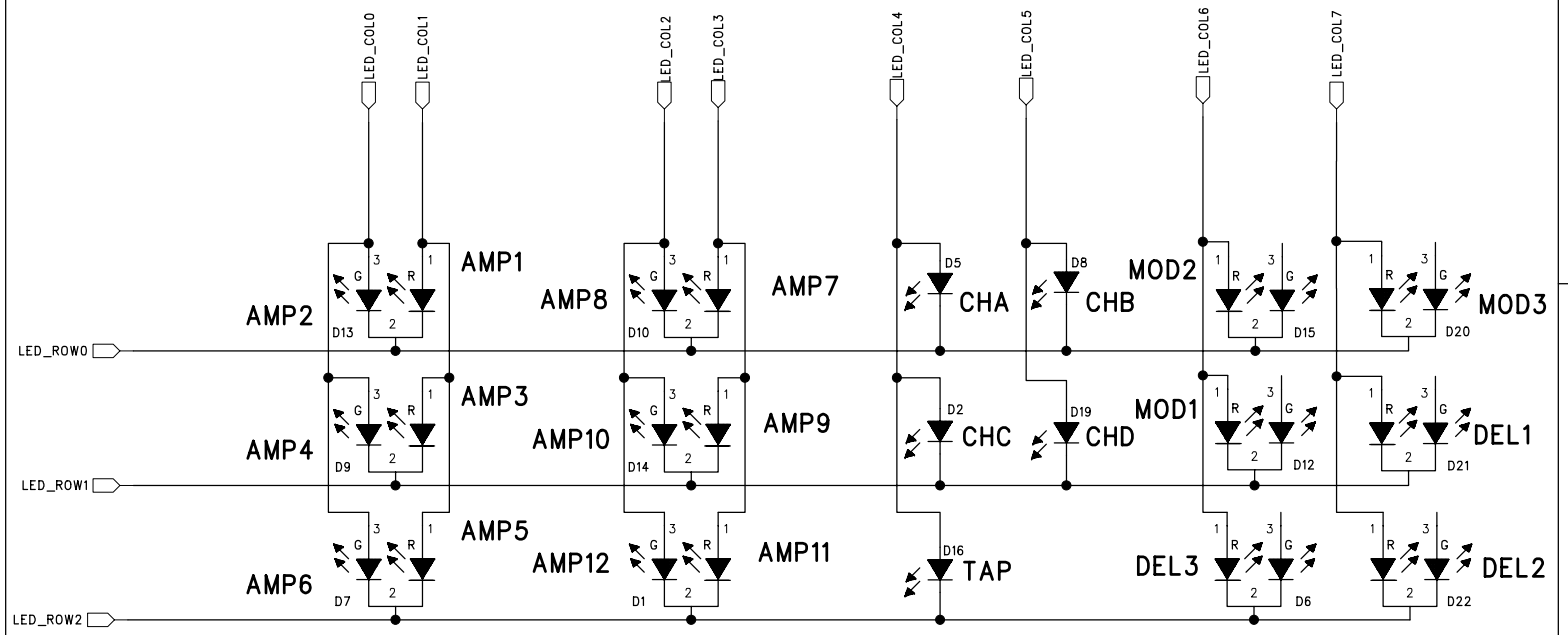
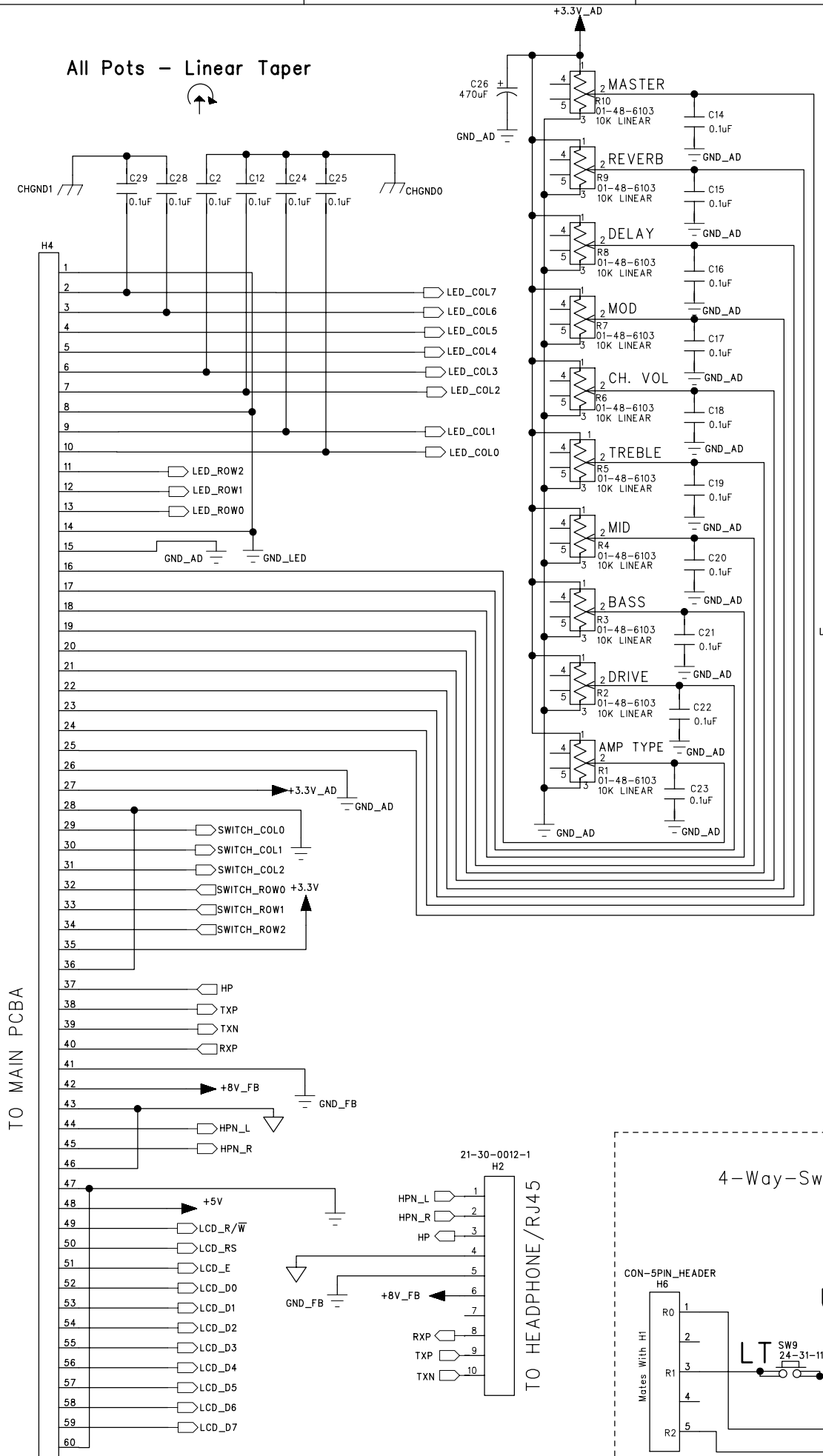
2

1

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0615604	06.05.2006	Initial Release for Rev A
0615806	06.07.2006	No schematic change. Revised location of R15/R18.

USER INTERFACE

All Pots - Linear Taper



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COMPANY:	LINE 6
TITLE:	A8-1: SPIDER III UI PCB
PROGRAM:	PADS POWER LOGIC V5.0
FILENAME:	A8-1 Spider III UI Rev B.sch
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0309	SHEET: 1 OF 3

DRAWN:	D. MOLNAR	DATED:	06.07.2006
CHECKED:	review panel	DATED:	

D

C

B

A

D

C

B

A

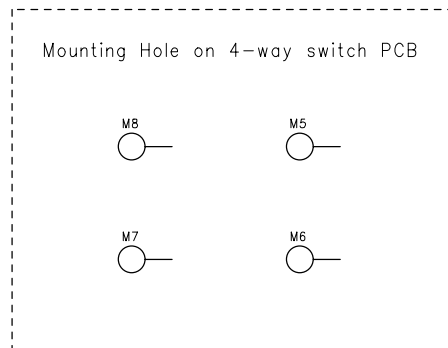
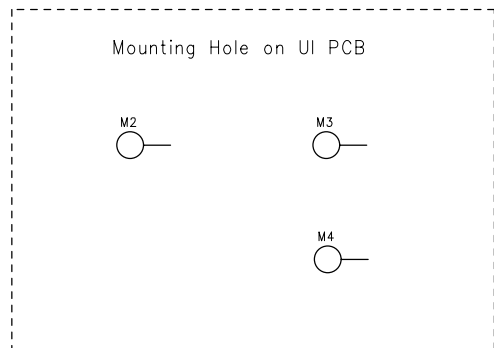
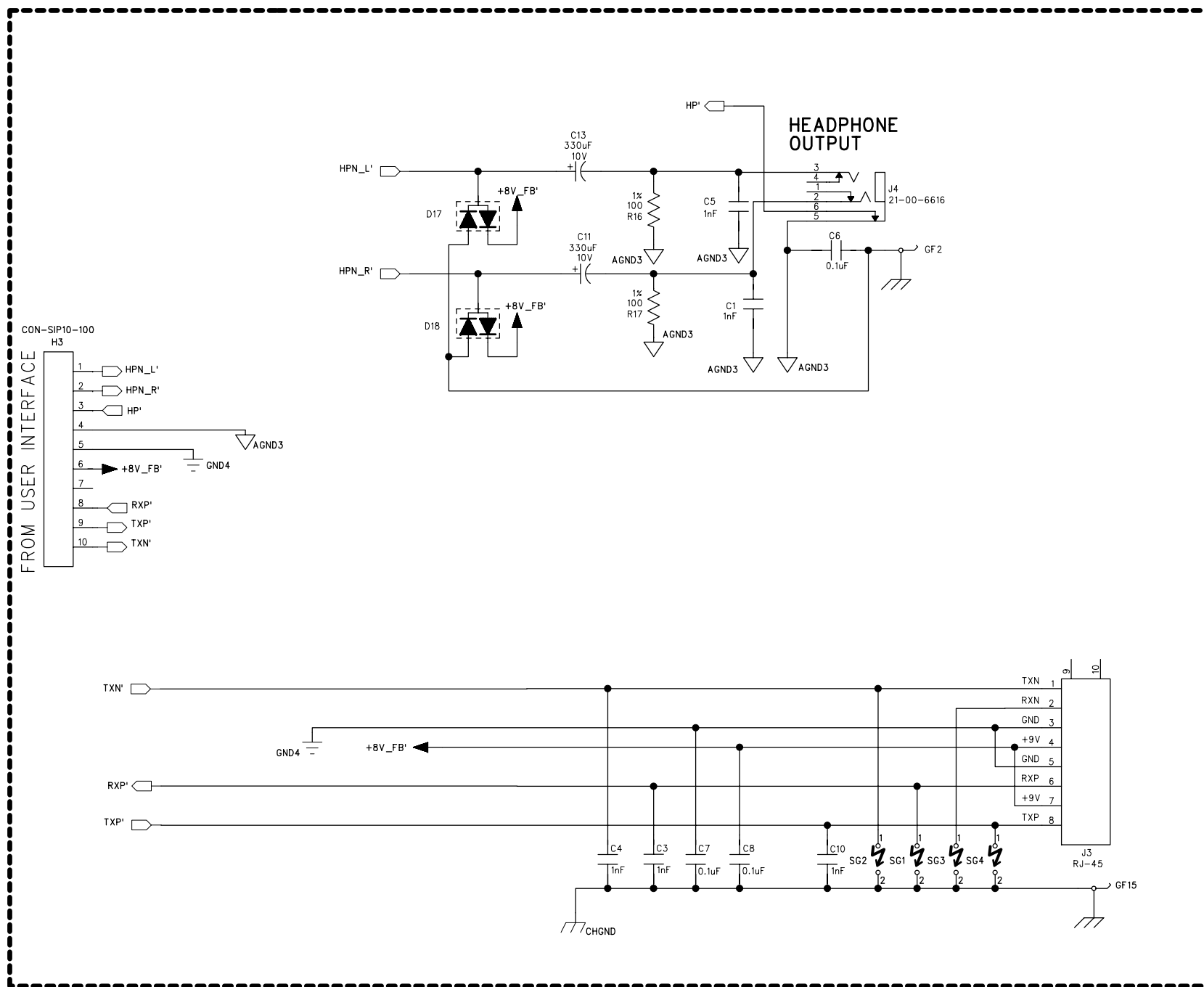
TO MAIN PCBA

TO HEADPHONE/RJ45

21-21-0060

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

HEADPHONE/RJ-45 BREAK-AWAY PCB



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COMPANY:	LINE 6
TITLE:	A8-1: SPIDER III UI PCB HEADPHONE/RJ-45 BREAK-AWAY PCB
PROGRAM:	PADS POWER LOGIC V5.0
FILENAME:	A8-1 Spider III UI Rev B.sch
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0309	SHEET: 2 OF 3

DRAWN:	D. MOLNAR	DATED:	6.07.2006
CHECKED:	review panel	DATED:	

REV: B

6

5

4

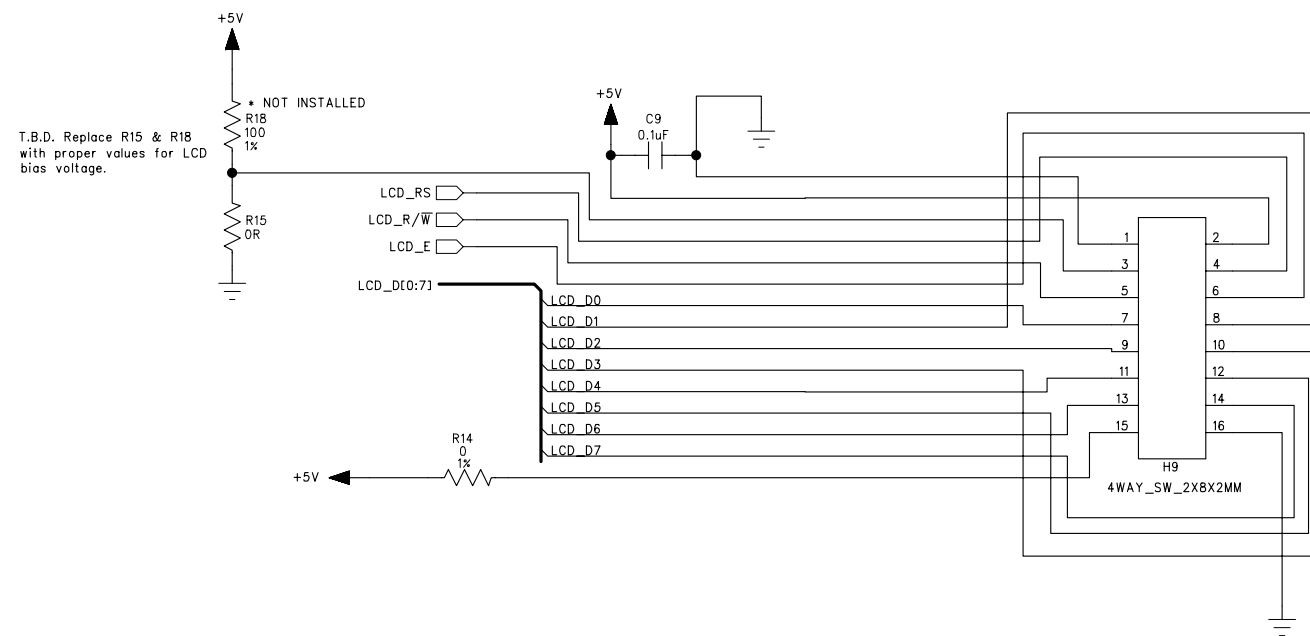
3

2


1

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

LCD INTERFACE TO MCU



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED

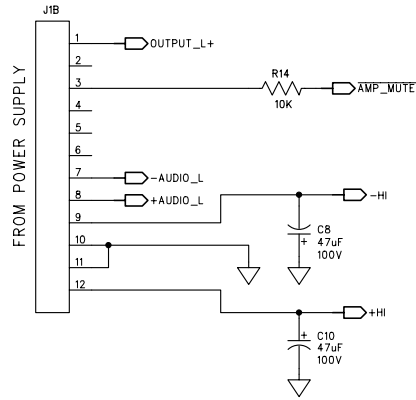
COMPANY:  LINE 6		REV: B
TITLE: A8-1: SPIDER III UI PCB LCD		
PROGRAM: PADS LOGIC 2004		SHEET: 3 OF 3
FILENAME: A8-1 Spider III UI Rev B.sch		
SCALE: 1:1	SIZE: C	PART NUMBER: 35-00-0309

**PRELIMINARY DRAWINGS
FOR QUOTATION PURPOSES ONLY
DO NOT USE FOR PRODUCTION**

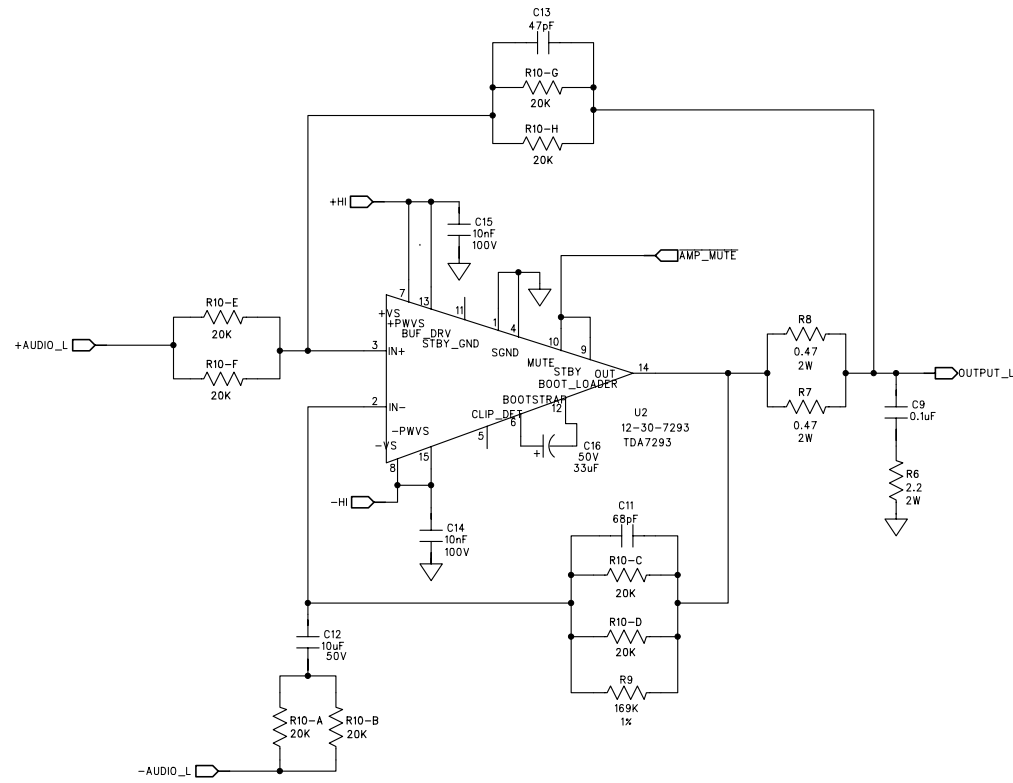
DRAWN: D. MOLNAR	DATED: 6.07.2006
CHECKED: review panel	DATED:

POWER AMP

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0314803	05.22.03	Released as rev.A to MFG - (mh)



BRI
PCB SUPPORT CLIP
30-51-0105



LEFT CHANNEL



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COMPANY: **LINE 6**

TITLE: **SPIDER II POWER AMP/SUPPLY
112 POWER AMP**

PROGRAM: **PADS POWER LOGIC V5.0**

FILENAME: G:/CLIENTS/FFD/Spider II/PCBs/

DRAWN: T. BURTON
DATED: 05/20/03

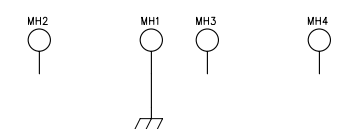
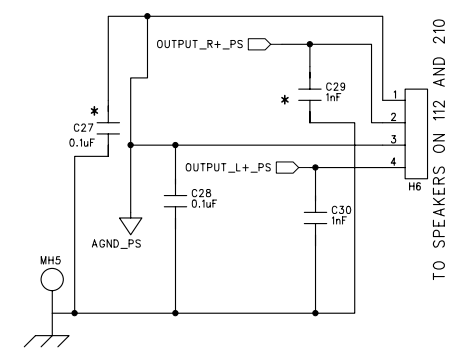
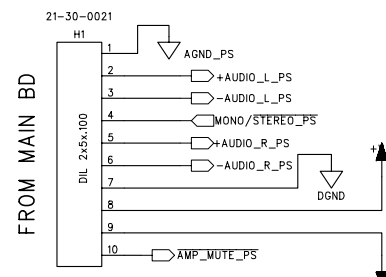
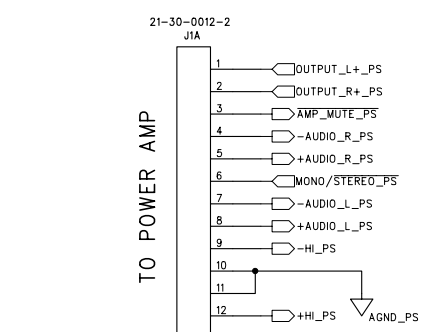
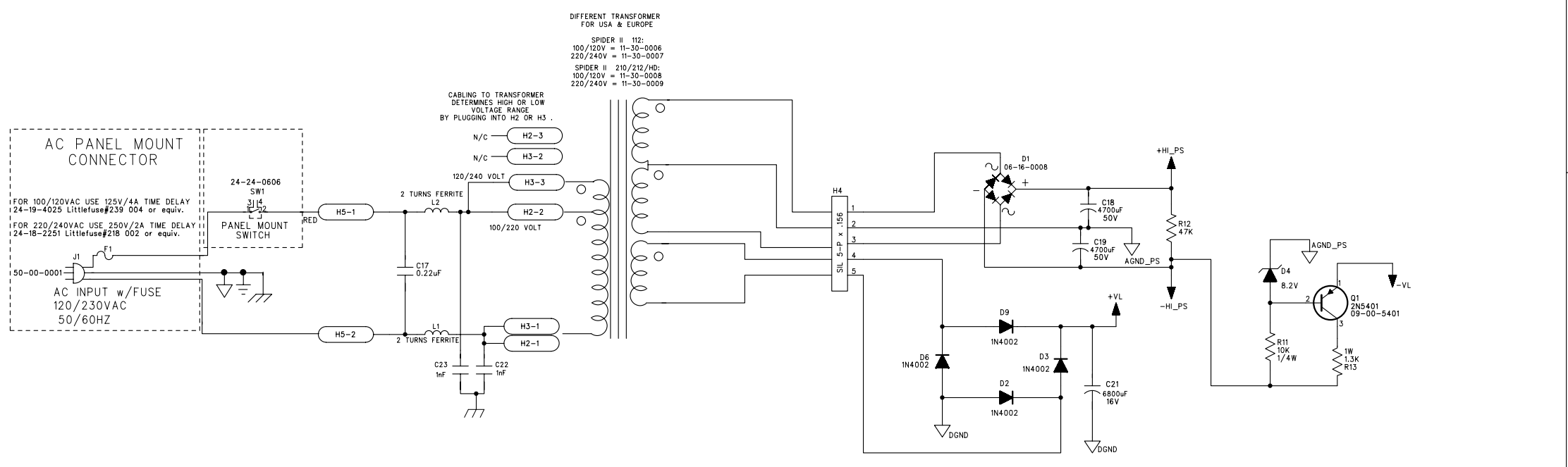
CHECKED: Date

SCALE: 1:1 SIZE: C PART NUMBER: 35-00-0217 SHEET: 1 OF 2

REV: A

POWER SUPPLY

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



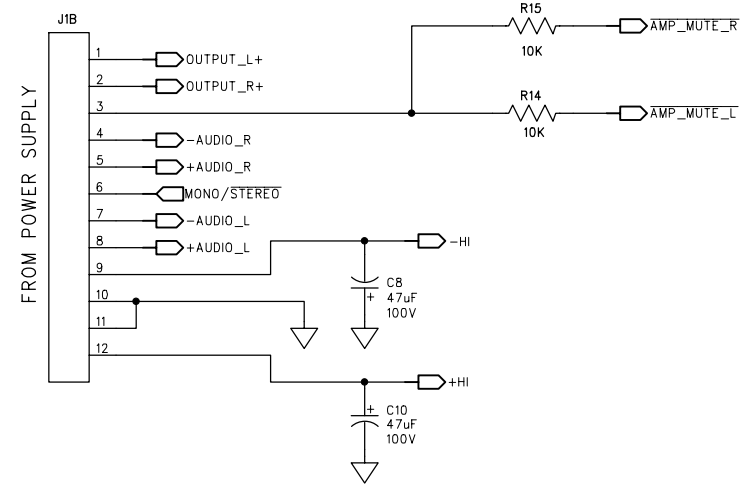
*DO NOT INSTALL

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COMPANY: LINE 6		REV: A
TITLE: SPIDER II POWER AMP/SUPPLY POWER SUPPLY		
PROGRAM: PADS POWER LOGIC V5.0		FILENAME: G:/CLIENTS/FFD/Spider II/PCBs/
DRAWN: T. BURTON	DATED: 05/20/03	
CHECKED:	DATED:	SCALE: 1:1 SIZE: C PART NUMBER: 35-00-0222 SHEET: 2 OF 2

POWER AMP

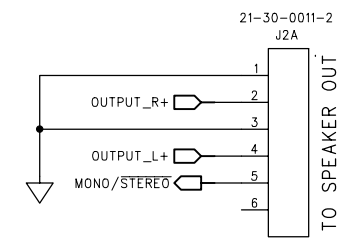
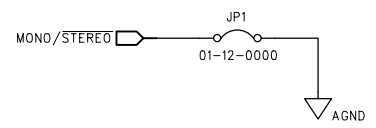
ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0314803	05.22.03	Released to MFG as rev.A - (mh)



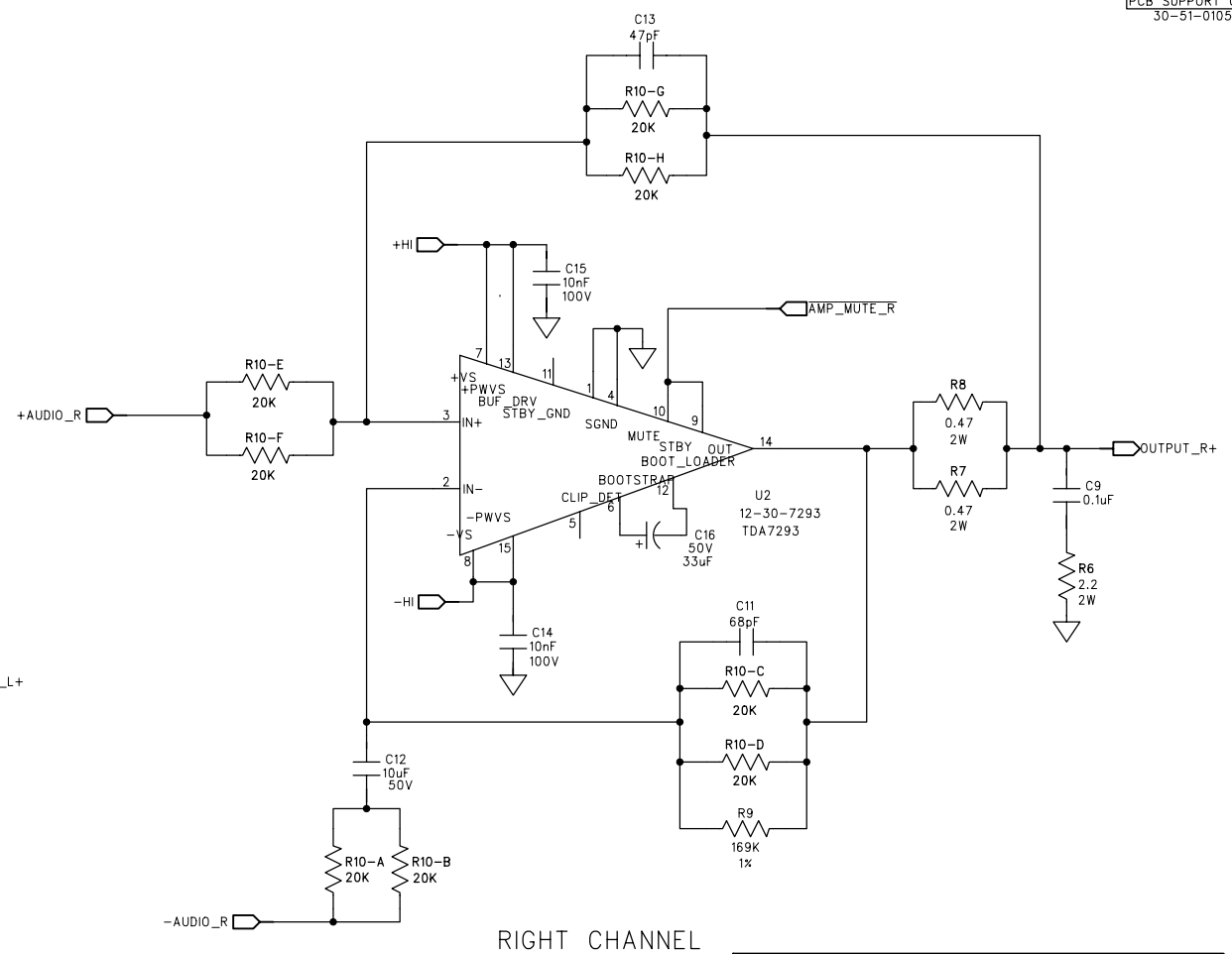
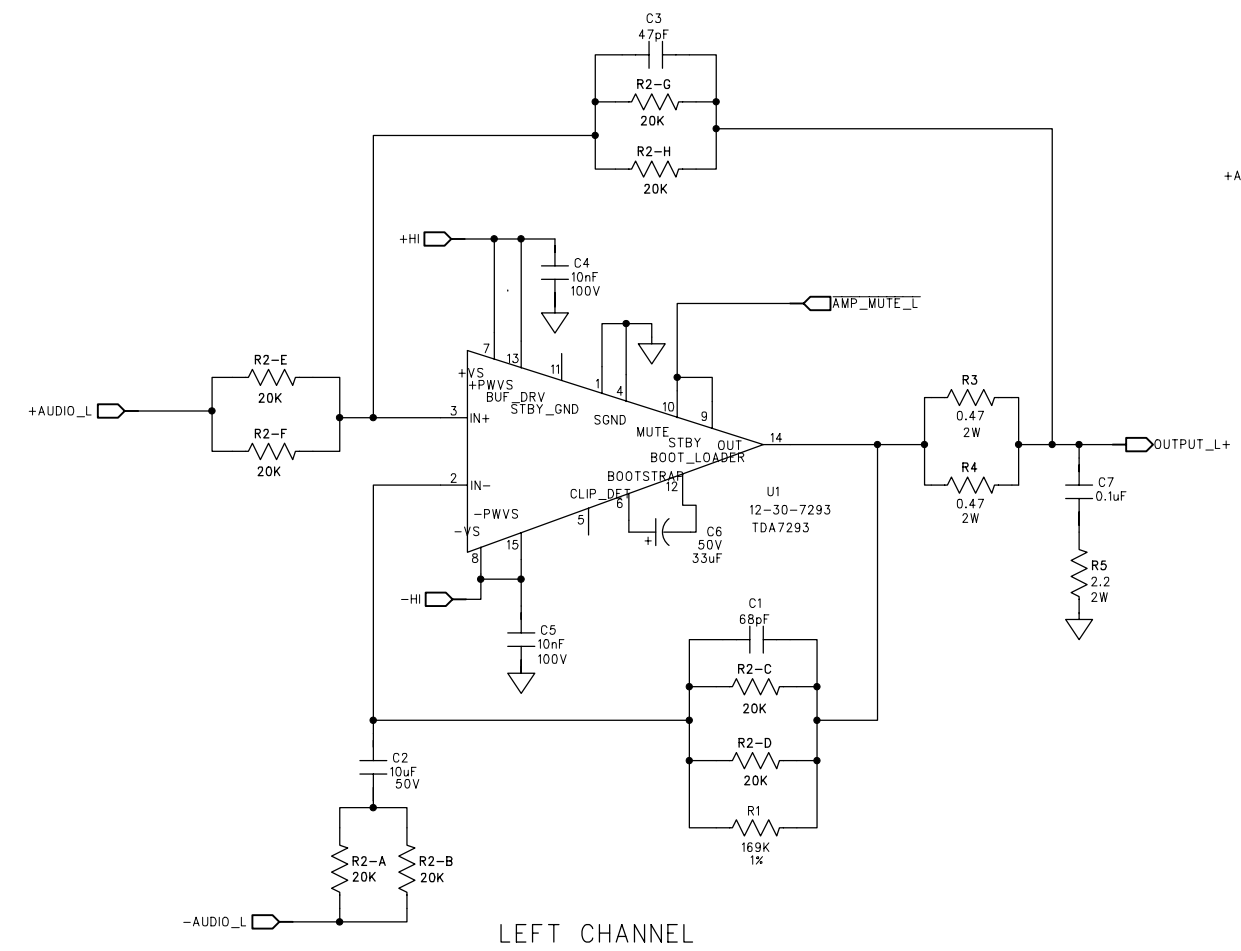
JP-1 JUMPER SELECTION

Speakers	Config.	JP-1 Status
2 X 12	STEREO	Install
2 X 10	STEREO	Install
HEAD	MONO/STEREO	Do Not Install

STEREO = LOW
MONO = HI
(PULL-UP ON SIGNAL AT MAIN BOARD)



BRT
PCB SUPPORT CLIP
30-51-0105



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COMPANY: **LINE 6**

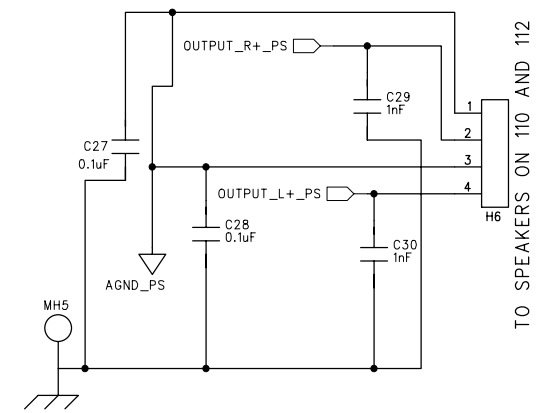
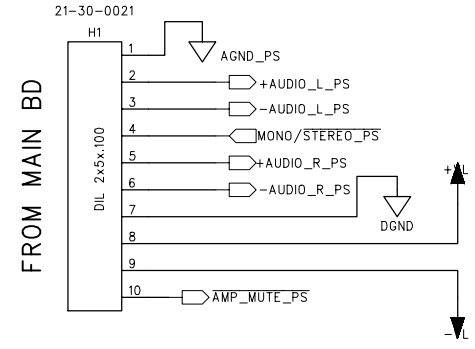
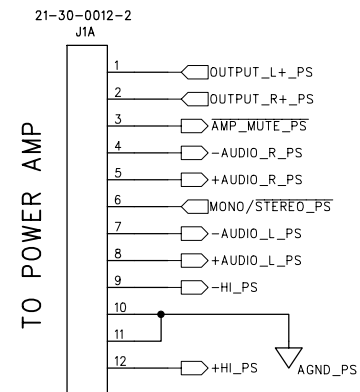
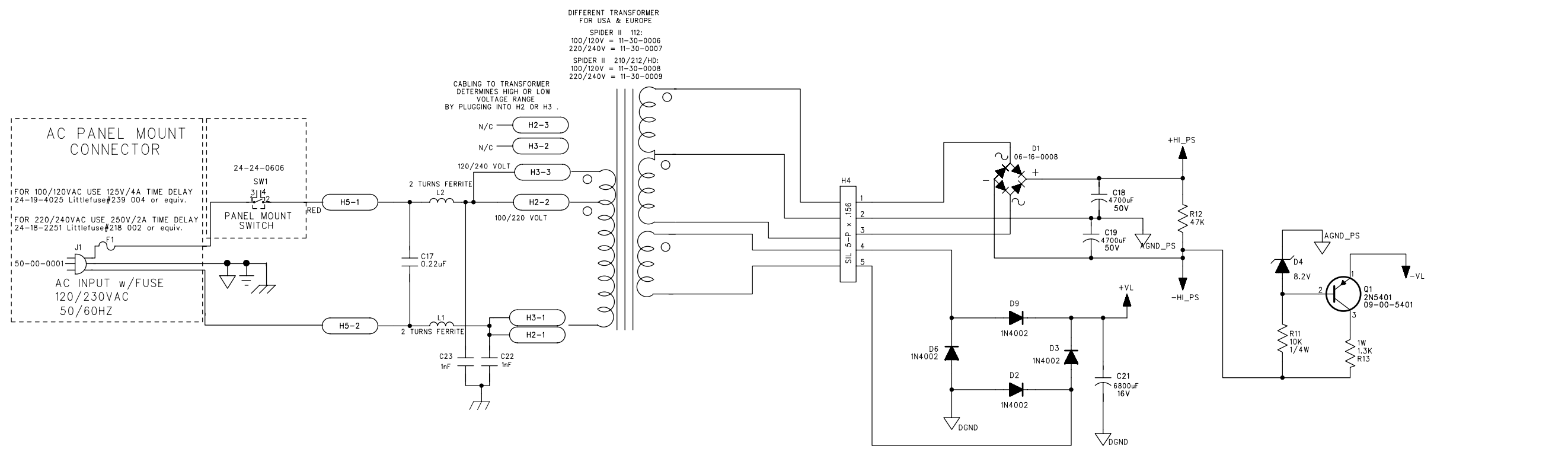
TITLE: **SPIDER II & III POWER AMP/SUPPLY POWER AMP**

PROGRAM: PADS POWER LOGIC V5.0	REV: B
FILENAME: Spider II & III_AMP_SUPPLY_RevB.sch	
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0221	SHEET: 1 OF 3

DRAWN: T. BURTON	DATED: APR/19/06
CHECKED:	DATED: Date

POWER SUPPLY

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0314803	05.2203	Released to MFG as rev.A - (mh)



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COMPANY:	LINE 6
TITLE:	SPIDER II & III POWER AMP/SUPPLY POWER SUPPLY

PROGRAM:	PADS POWER LOGIC V5.0	REV:	B
FILENAME:	Spider II & III_AMP_SUPPLY_RevB.sch	SCALE:	1:1
DRAWN:	T. BURTON	SIZE:	C
CHECKED:		PART NUMBER:	35-00-0222
DATED:	APR/19/06	SHEET:	2 OF 3

6

5

4

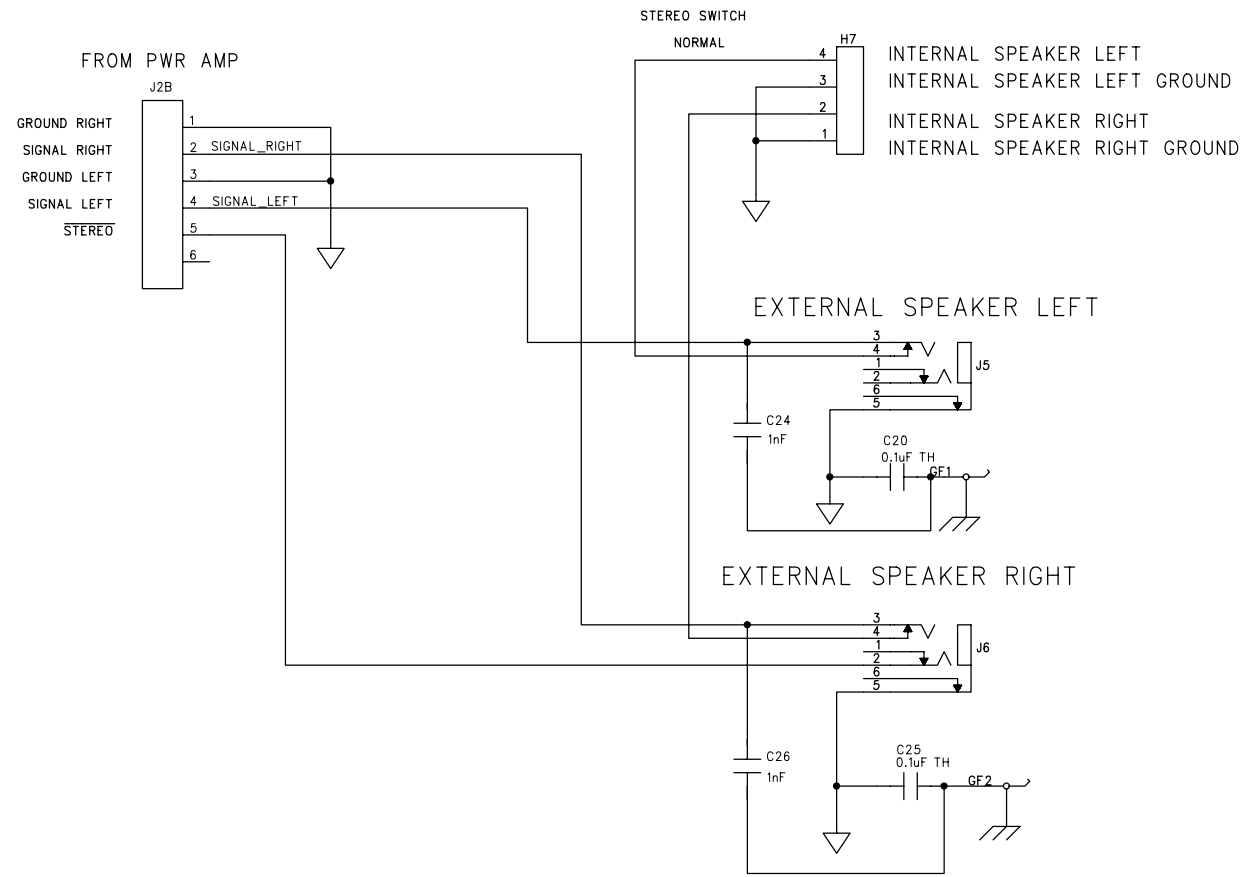
3

2

1

SPEAKER OUTPUT PCB

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0314803	05.22.03	Released to MFG as rev.A - (mh)



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COMPANY:	LINE 6
TITLE:	SPIDER II & III POWER AMP/SUPPLY SPEAKER OUT
PROGRAM:	PADS POWER LOGIC V5.0
FILENAME:	Spider II & III_AMP_SUPPLY_RevB.sch
SCALE: 1:1	SIZE: C
PART NUMBER:	35-00-0218
SHEET:	3 OF 3

DRAWN:	T. BURTON	DATED:	APR/19/06
CHECKED:		DATED:	

REV: B

D

D

C

C

B

B

A

A

6

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4

3

2

1

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0615305	06/02/06	Initial Rev A Release to MFG - JB
0615807	06/02/06	No schematic revision. PCB silkscreen revised for JP1-4
0615605 xxxxxxx	06/06/06 06/13/06	No schematic revision. Change R65-66 to 1K 1/2W 5%
0618606	07/05/06	Rev C: Added C82 across U3 supply.

D

C

B

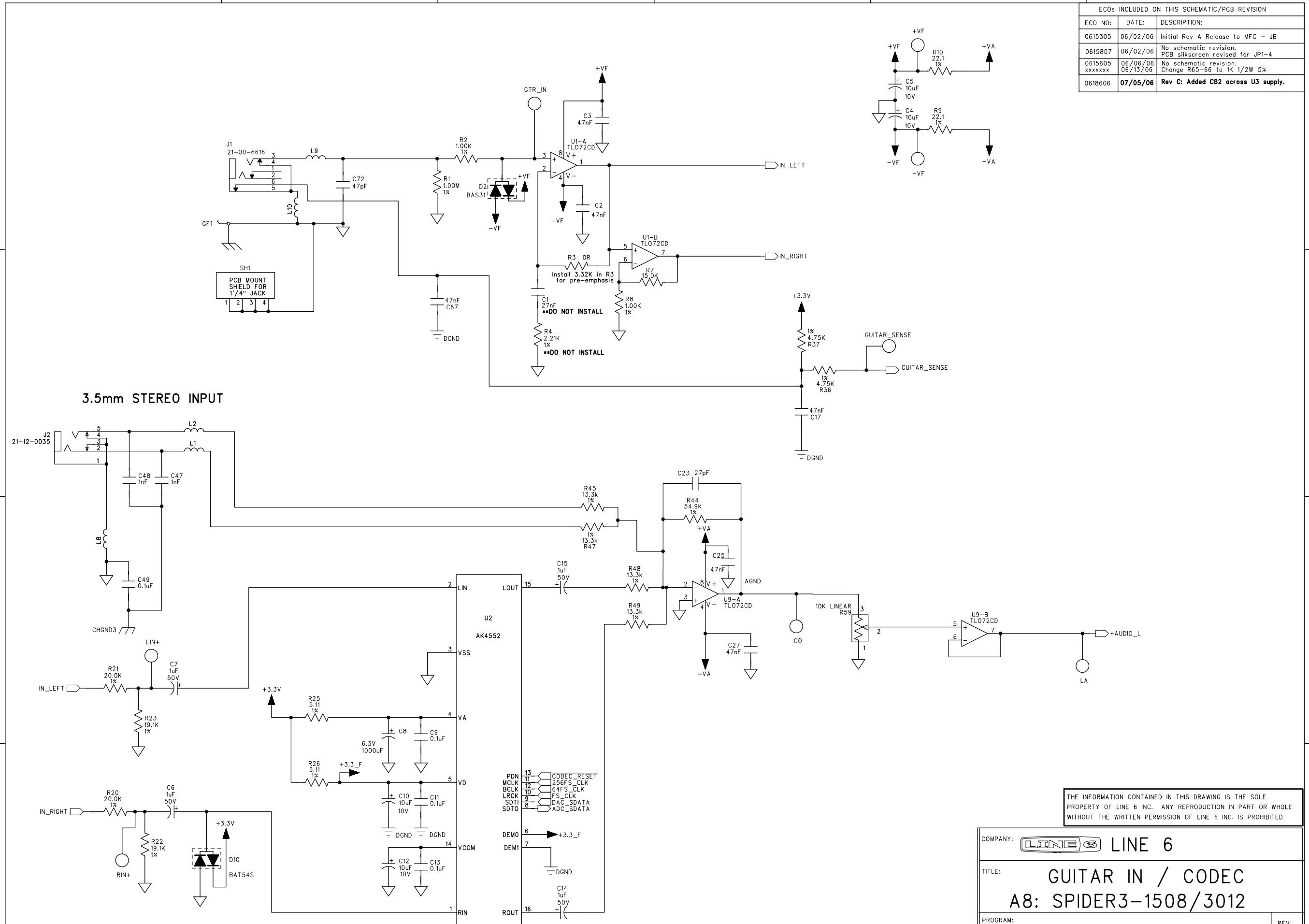
A

D

C

B

A



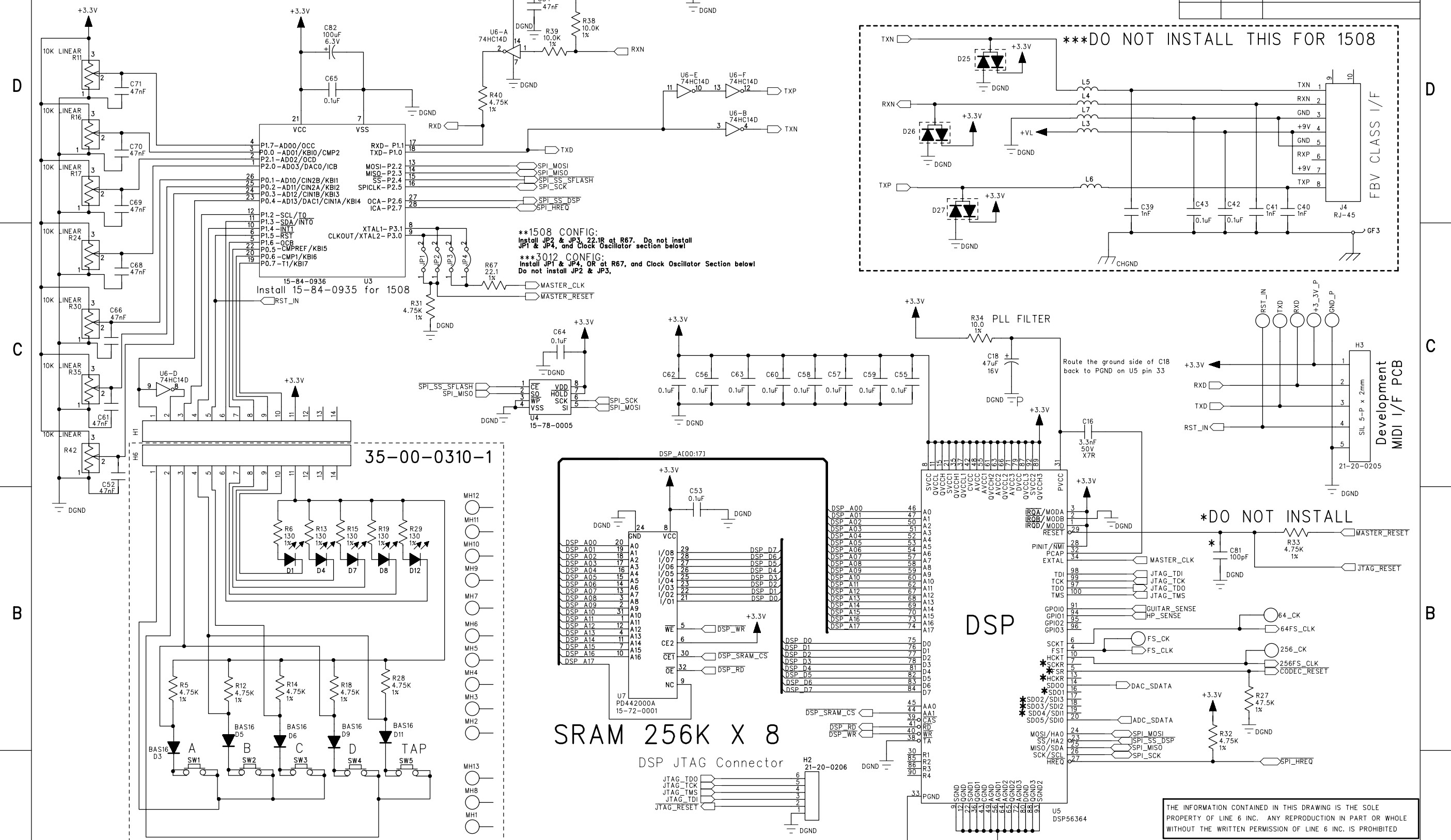
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COMPANY: LINE 6	
TITLE: GUITAR IN / CODEC A8: SPIDER3-1508/3012	
PROGRAM: PADS POWER LOGIC V5.0	REV: C
FILENAME: A8-2 & A8-5 SPIDER III 1508-3012 REV C	
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-0310-1	SHEET: 1 OF 4

DRAWN: T. BURTON	DATED: 06/28/2006
CHECKED:	DATED:

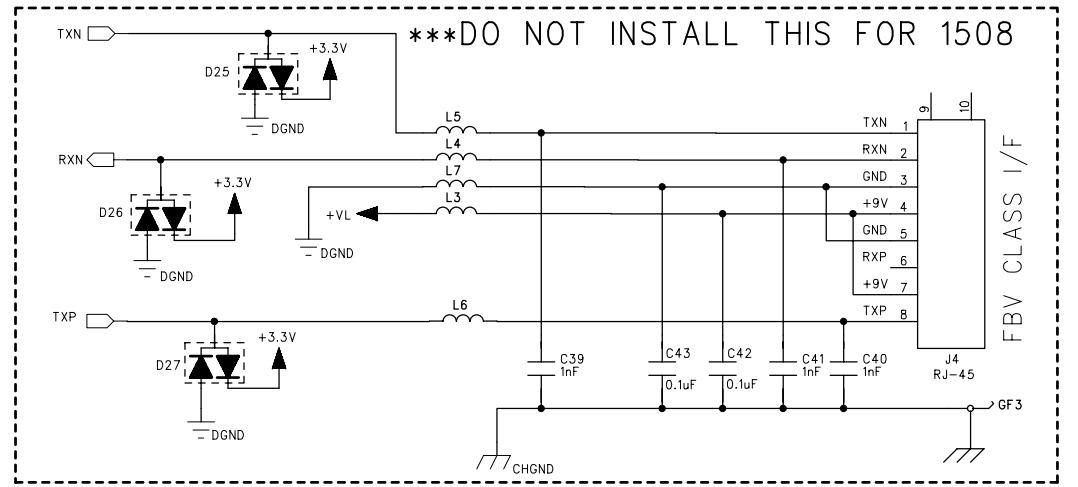
DIGITAL SECTION

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

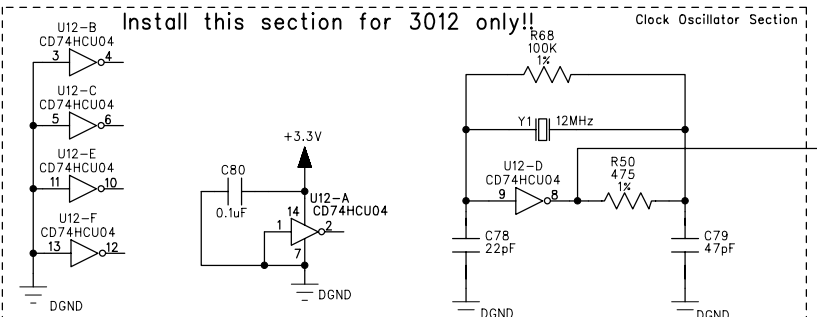


****1508 CONFIG:**
Install JP2 & JP3, 22.1R at R67. Do not install JP1 & JP4, and Clock Oscillator section below

****3012 CONFIG:**
Install JP1 & JP4, OR at R67, and Clock Oscillator Section below
Do not install JP2 & JP3.



DSP CLOCKING
When using the Clock Oscillator Section:
DSP CORE CLOCK = 100MHz
256FS_CLK = 10MHz
64FS_CLK = 2.5MHz
FS_CLK = 39.0625KHz

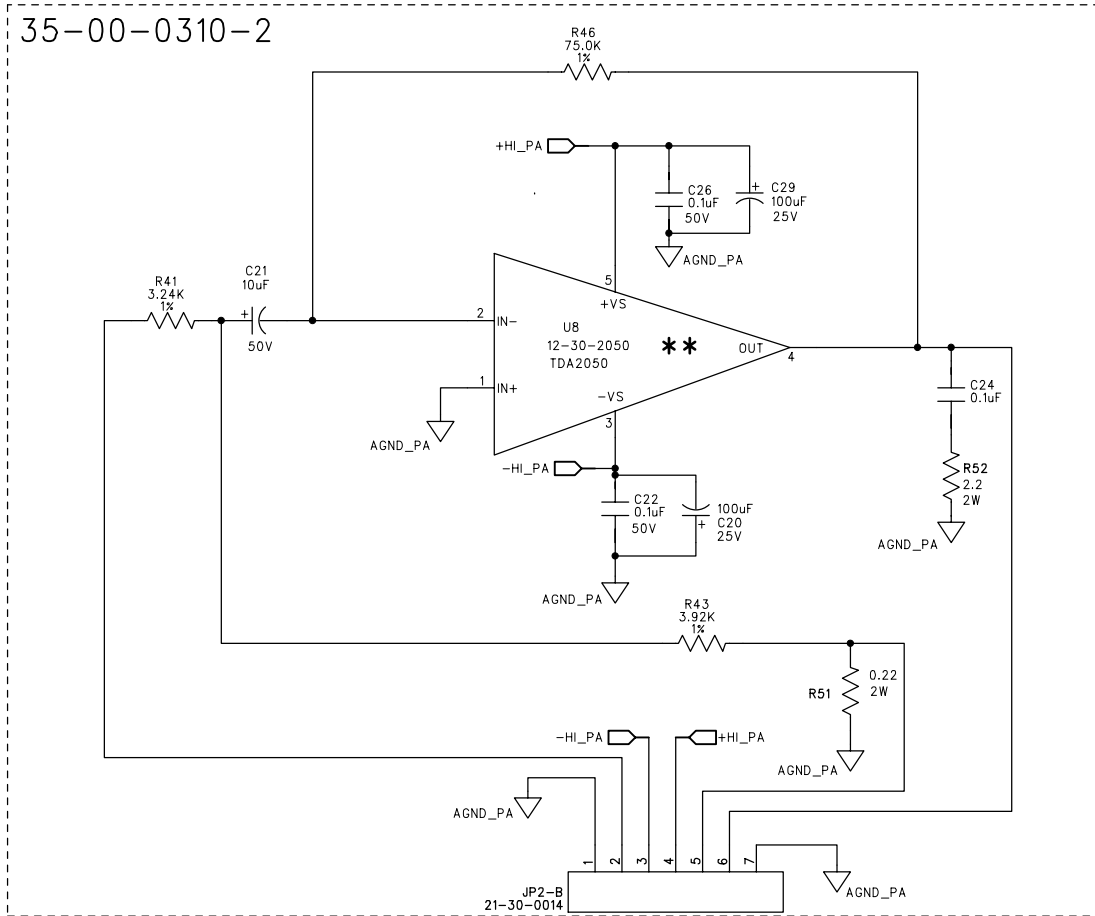


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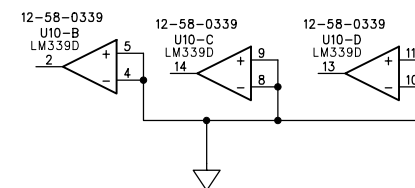
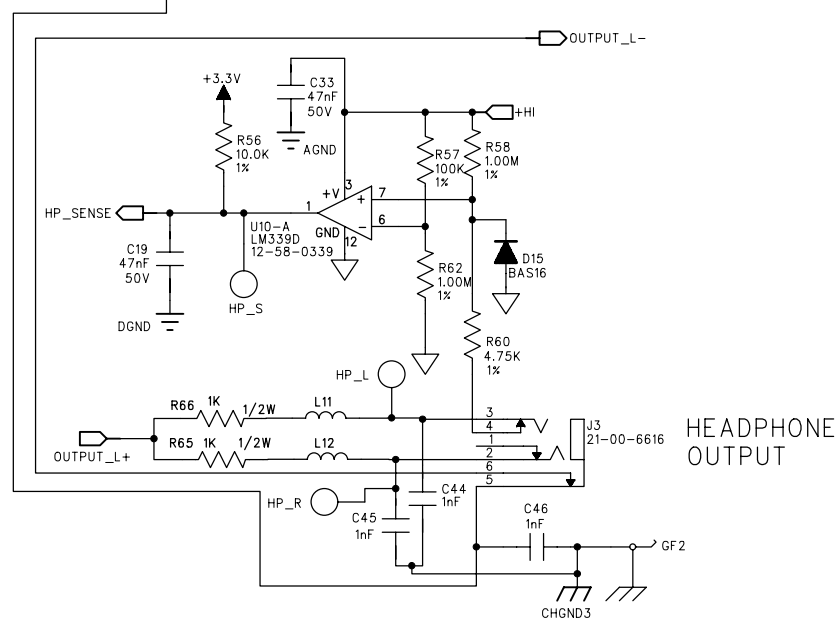
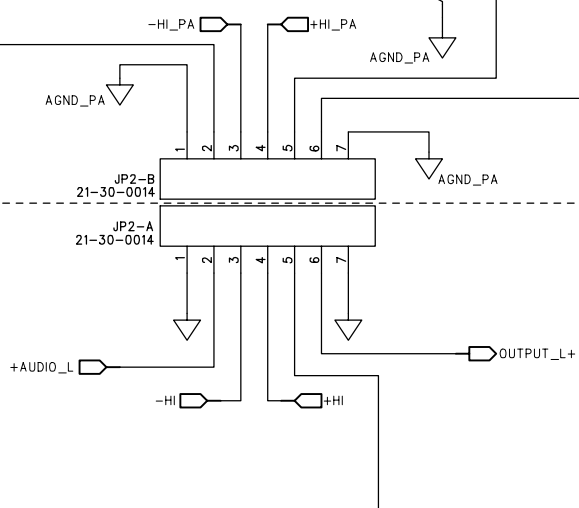
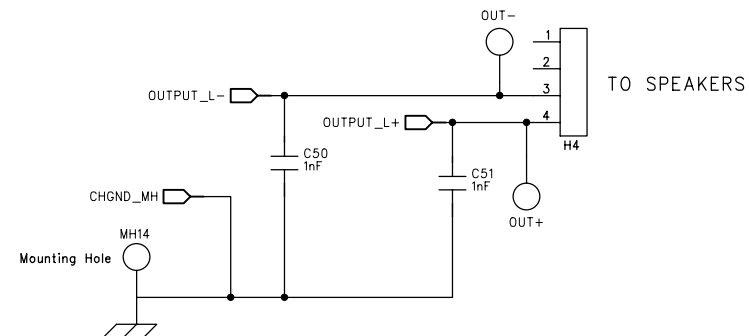
COMPANY:	LINE 6	
TITLE:	DIGITAL SECTION	
PROGRAM:	PADS POWER LOGIC V5.0	
FILENAME:	A8-2 & A8-5 SPIDER III 1508-3012 REV C	
DRAWN:	T. Burton / D. Molnar	DATED: 06/28/2006
CHECKED:		DATED:
SCALE:	1:1	SIZE: C
PART NUMBER:	35-00-0310	35-00-0310-1
SHEET:	2	OF 4

POWER AMP / HEADPHONE AMP

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



**U8: INSTALL 12-30-2050 FOR 3012
INSTALL 12-30-2030 FOR 1508



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COMPANY:	LINE 6
TITLE:	A8: SPIDER3 - 1508/3012 POWER AMP / HEADPHONE AMP
PROGRAM:	PADS POWER LOGIC V5.0
REV:	C
FILENAME:	A8-2 & A8-5 SPIDER III 1508-3012 REV C
SCALE:	1:1
SIZE:	C
PART NUMBER:	35-00-0310-1 35-00-0310-2
SHEET:	3 OF 4

DRAWN:	T. BURTON	DATED:	06/28/2006
CHECKED:		DATED:	

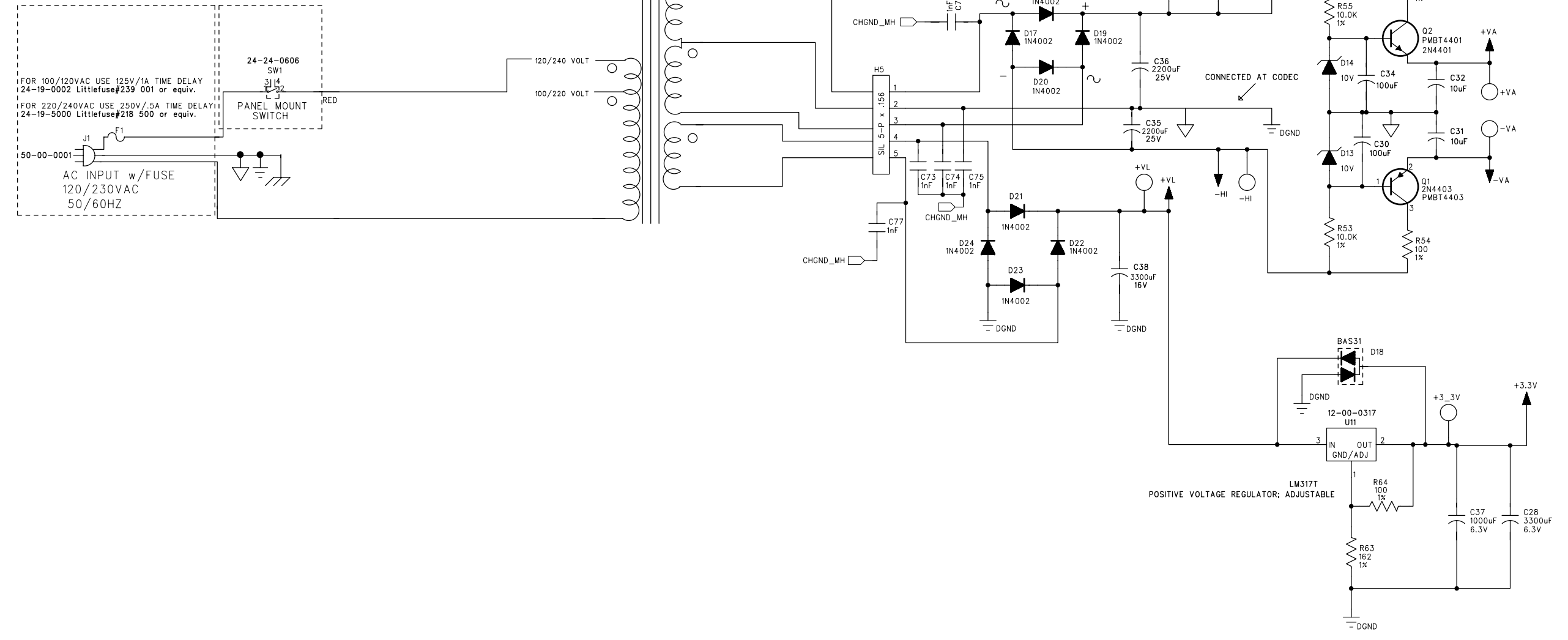
POWER SUPPLY

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

DIFFERENT TRANSFORMER
FOR USA & EUROPE

1508:
100/120V = 11-30-0015
220/240V = 11-30-0016

3012:
100/120V = 11-30-0013
220/240V = 11-30-0014



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED

COMPANY:	LINE 6
TITLE:	A8: SPIDER 3 - 1508/3012 POWER SUPPLY
PROGRAM:	PADS POWER LOGIC V5.0
REV:	C
FILENAME:	A8-2 & A8-5 SPIDER III 1508-3012 REV C
SCALE:	1:1
SIZE:	C
PART NUMBER:	35-00-0310 35-00-0310-1 35-00-0310-2
SHEET:	4 OF 4

DRAWN:	T. BURTON	DATED:	06/28/2006
CHECKED:		DATED:	

ECOs INCLUDED ON THIS SCHEMATIC/PCB REVISION		
ECO NO:	DATE:	DESCRIPTION:
0615304	06.02.06	Released as Rev A to MFG - JB
0618607	07.05.06	Rev B: Added C29 across U3 for pot jitter.

D

D

C

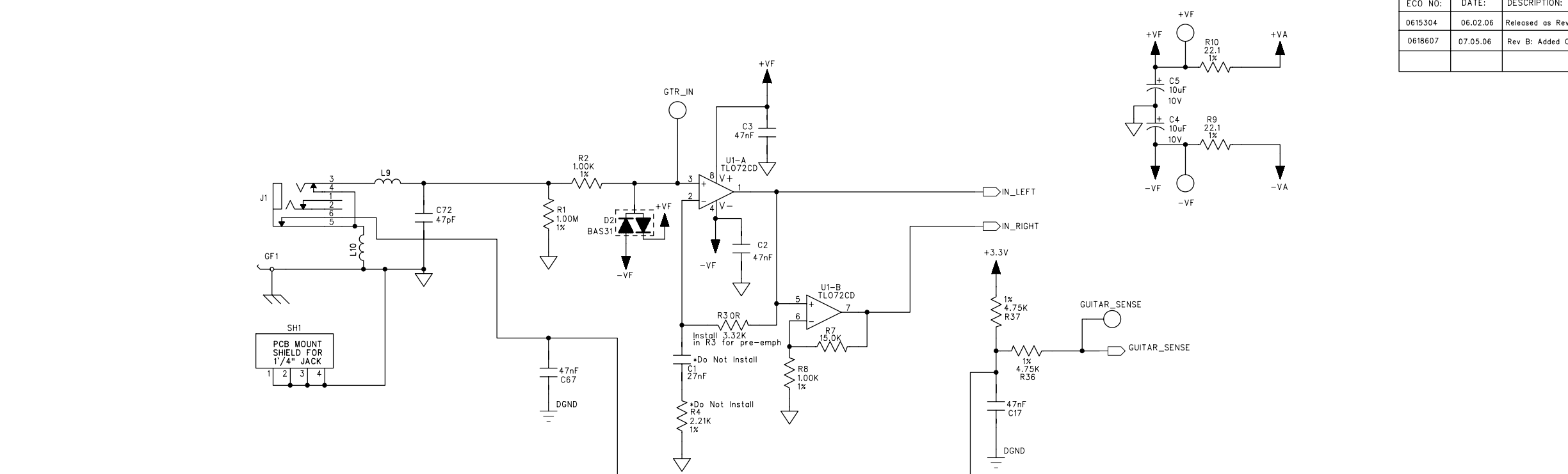
C

B

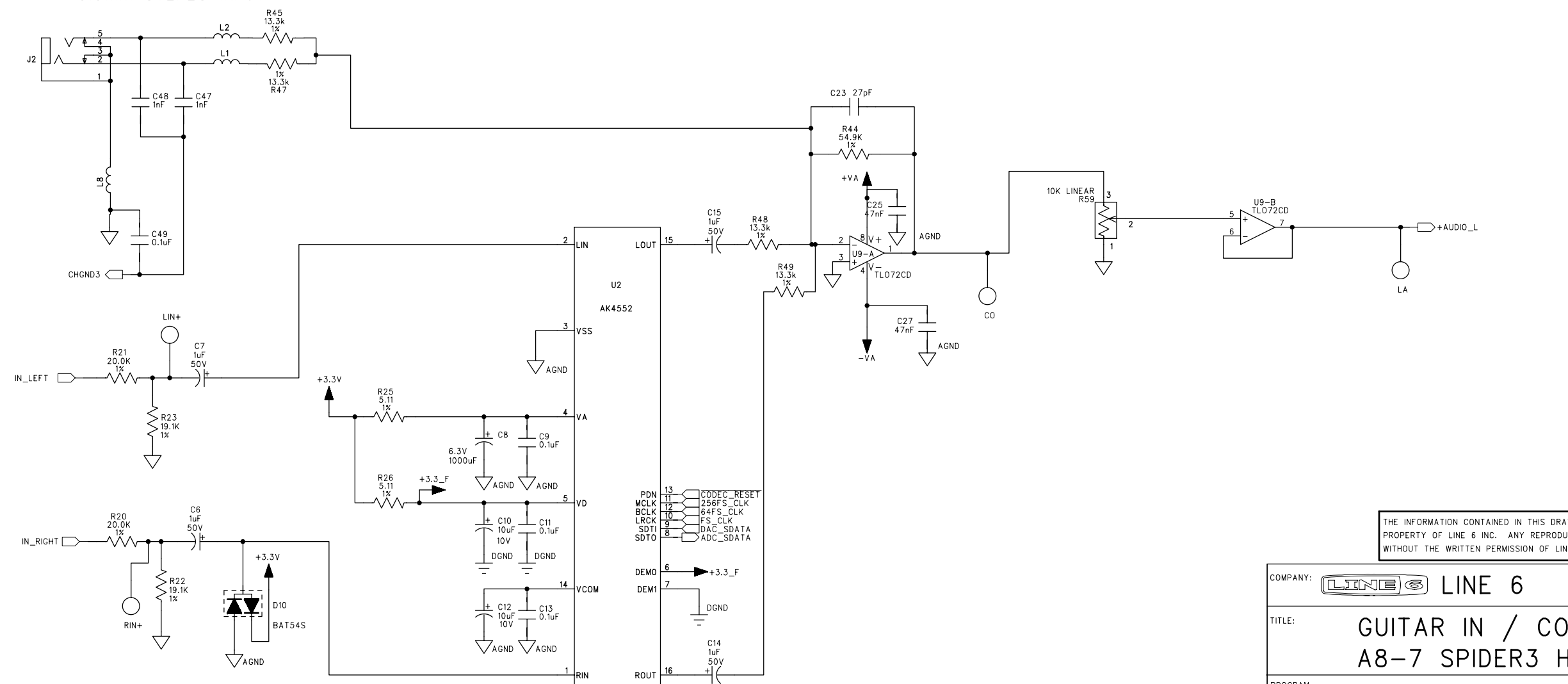
B

A

A



3.5mm STEREO INPUT



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COMPANY:	LINE 6
TITLE:	GUITAR IN / CODEC A8-7 SPIDER3 HD75
PROGRAM:	PADS POWER LOGIC V5.0
REV:	B
FILENAME:	A8-7 MAIN_LED_REV B.sch
SCALE:	1:1
SIZE:	C
PART NUMBER:	35-00-0311 35-00-0311-1
SHEET:	1 OF 4

DRAWN:	T. BURTON	DATED:	06/28/2006
CHECKED:		DATED:	

6

5

4

3

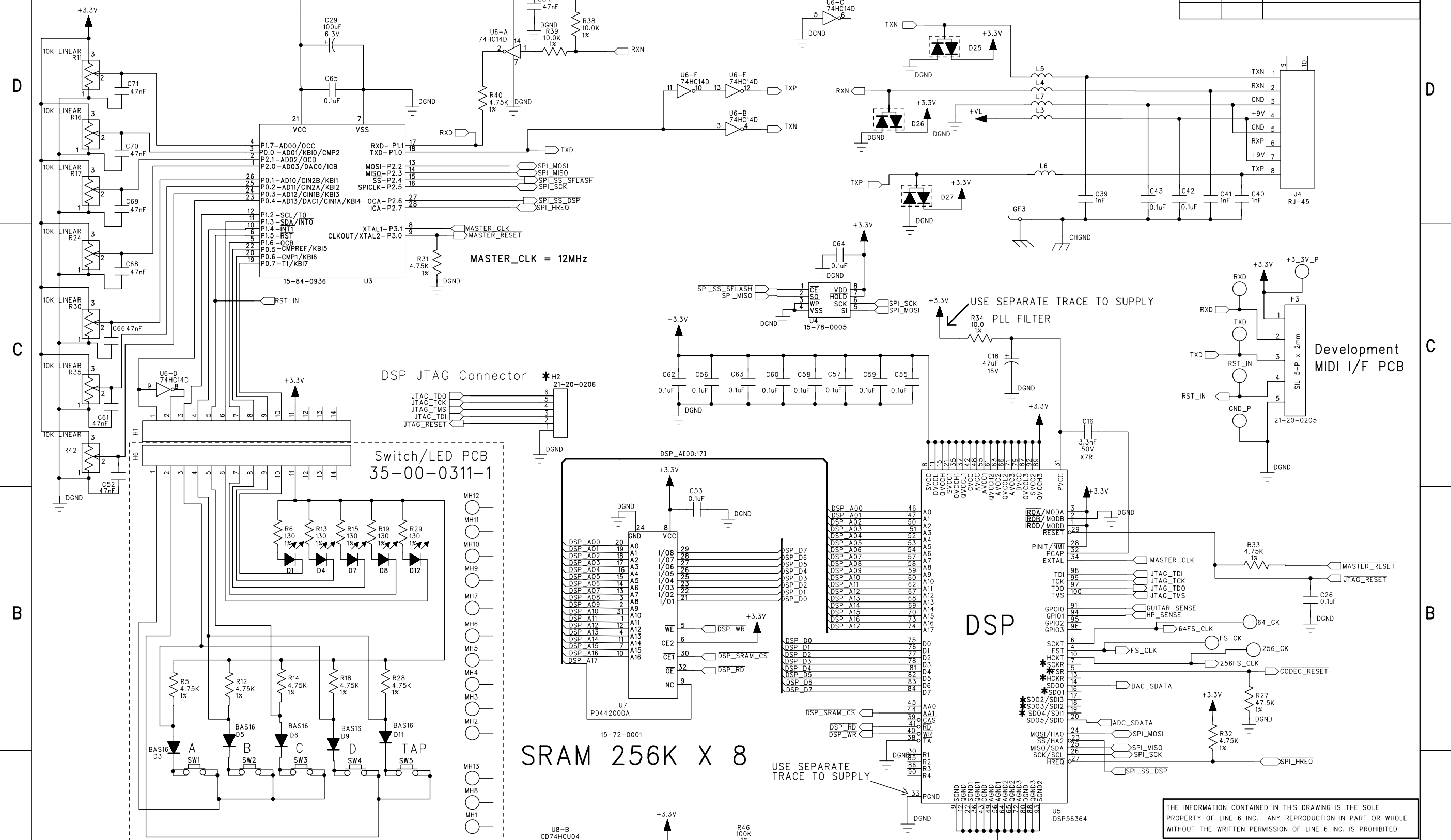
2

1

DIGITAL SECTION

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

* = DO NOT INSTALL



DSP CORE CLOCK = 99,993,600 Hz (approx 100MHz)
 256FS_CLK = 9,999,360 Hz
 64FS_CLK = 2,499,840 Hz
 MASTER_CLK = 12,000,000 Hz

SRAM 256K X 8

DSP

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED

COMPANY: LINE 6	
TITLE: DIGITAL SECTION	
PROGRAM: PADS POWER LOGIC V5.0	
FILENAME: AB-7 MAIN_LED_REV B.sch	REV: B
SCALE: 1:1	SIZE: C
PART NUMBER: 35-00-031135-00-0311-1	SHEET: 2 OF 4

DRAWN: T. BURTON/B.H.	DATED: 06/28/2006
CHECKED:	DATED:

6

5

4

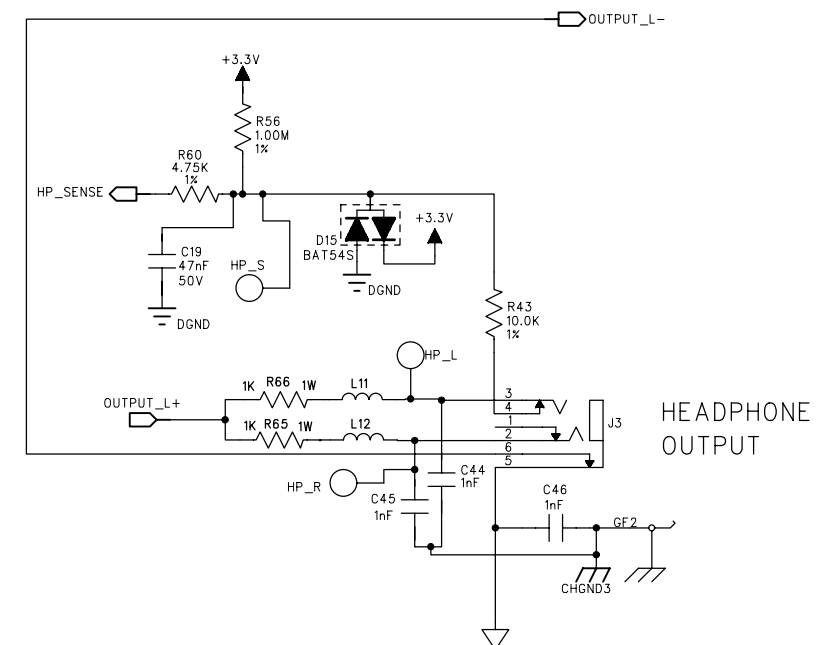
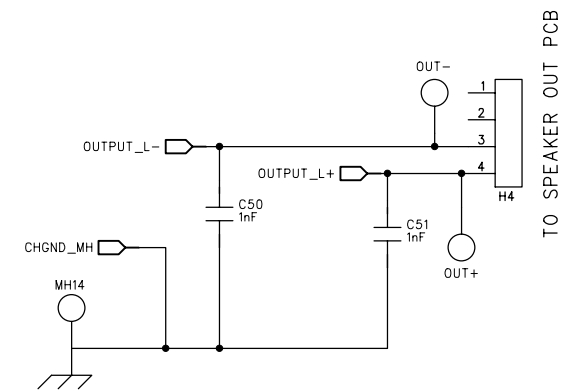
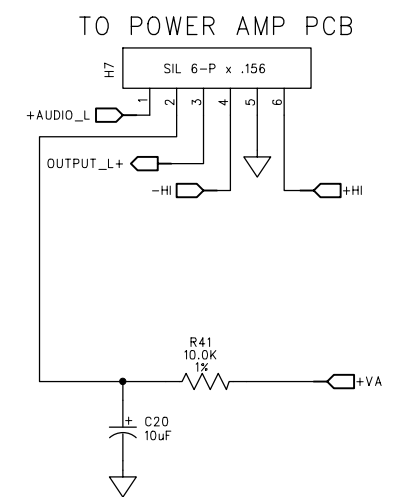
3

2

1

POWER AMP / HEADPHONE AMP

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



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED.

COMPANY:	LINE 6
TITLE:	A8-7 SPIDER3 HD75 POWER AMP / HEADPHONE AMP
PROGRAM:	PADS POWER LOGIC V5.0
REV:	B
FILENAME:	A8-7 MAIN_LED_REV B.sch
SCALE:	1:1
SIZE:	C
PART NUMBER:	35-00-031135-00-0311-1
SHEET:	3 OF 4

DRAWN:	T. BURTON	DATED:	06/28/2006
CHECKED:		DATED:	

D

D

C

C

B

B

A

A

6

5

4

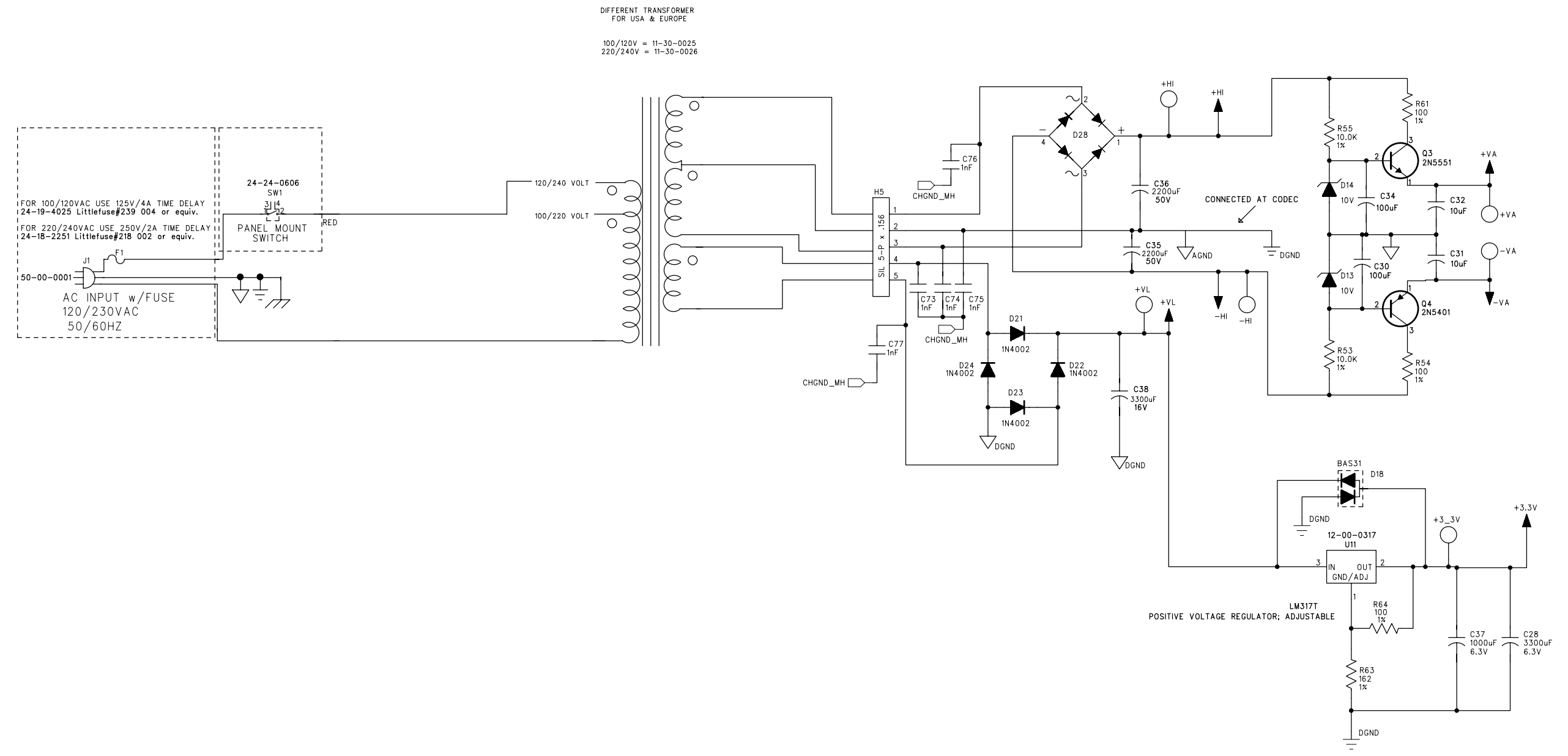
3

2


1

POWER SUPPLY

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



THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF LINE 6 INC. ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF LINE 6 INC. IS PROHIBITED

COMPANY:  LINE 6		REV: B
TITLE: A8-7 SPIDER3 HD75 POWER SUPPLY		
PROGRAM: PADS POWER LOGIC V5.0		SHEET: 4 OF 4
FILENAME: A8-7 MAIN_LED_REV B.sch		
DRAWN: T. BURTON	DATED: 06/28/2006	SCALE: 1:1
CHECKED:	DATED:	SIZE: C
PART NUMBER: 35-00-0311 35-00-0311-1		

DRAWN: T. BURTON	DATED: 06/28/2006
CHECKED:	DATED:

D

D

C

C

B

B

A

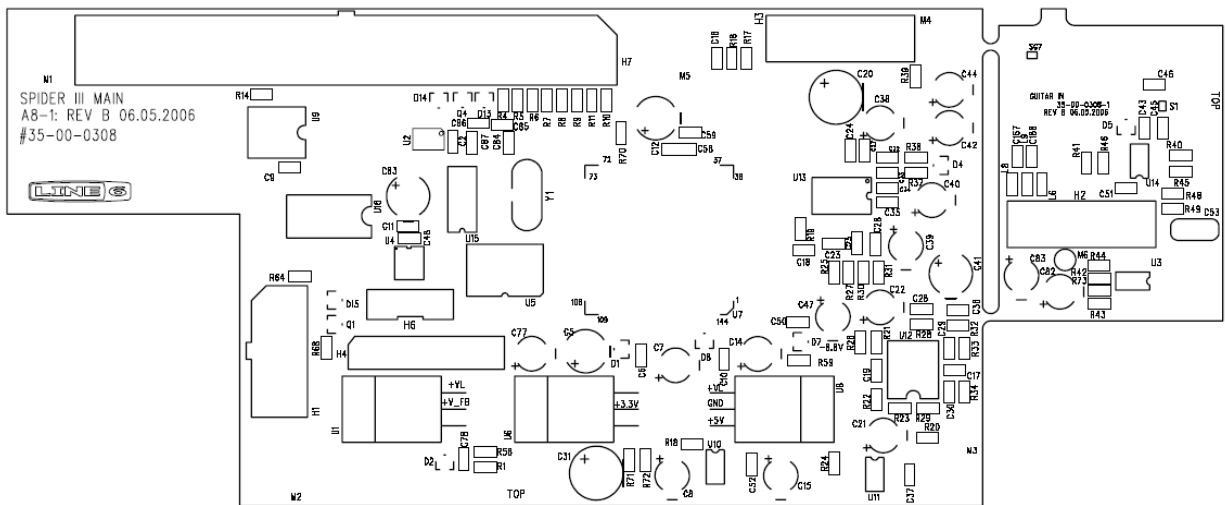
A

SPIDER3 MAIN/GUITAR IN PCBA ASSEMBLY INSTRUCTIONS

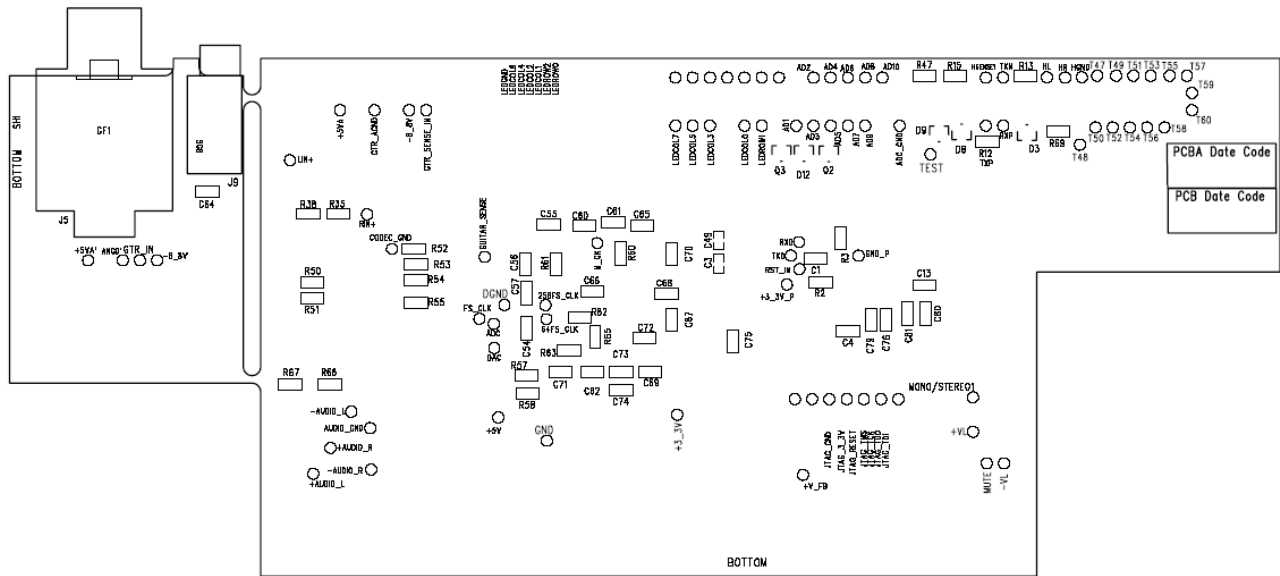
Rev. A

- SPIDER3 PCBA MAIN SPIDER3 112/210/212 A8-1/3/4:** **50-02-0308**
 (Refers to Main PCB, Rev.B: (35-00-0308))
- SPIDER3 PCBA MAIN SPIDER3-HD150 A8-6:** **50-02-1308**
 (Refers to Main PCB, Rev.B: (35-00-0308))
- SPIDER3 GUITAR INPUT PCBA:** **50-02-0308-1**
 (Refers to Guitar Input Break-Away PCB, Rev.B: (35-00-0308-1))

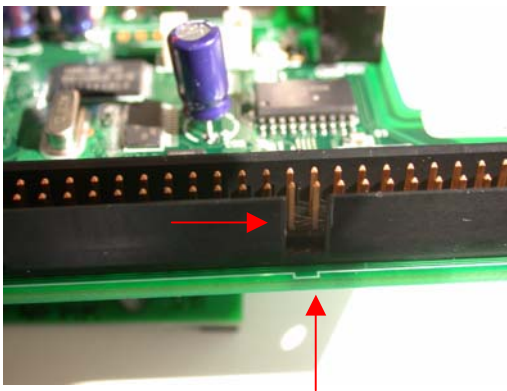
TOP



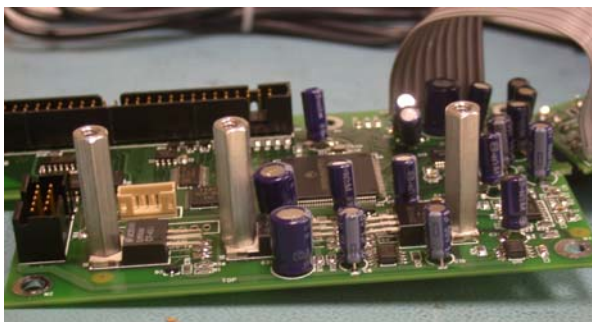
BOTTOM



1. **“NOT INSTALLED” COMPONENTS:** Do not install the following components: R49, R52, C6, C10, C52, C53, C59, C78, D15, SH1, H4, H6.
2. **BREAKAWAY BOARD: DO NOT BREAK APART GUITAR INPUT PCBA FROM MAIN PCBA. ONLY SEPARATE BOARDS AFTER BED-OF-NAILS TEST IS COMPLETE.**
3. **JACK:** J5 (21-00-6616) and J9 (21-12-0035) must be mounted flush with the PCB and lined up with the silkscreen outline within +/-1 degree of accuracy. **The jacks are mounted on the BOTTOM SIDE of the PCB.**
4. **HEADERS:** H1 (21-20-2010) and H7 (21-21-0060) are mounted flush with the PCB. Confirm that header is installed correctly by confirming center notch in header is on same side as notch in silkscreen outline.



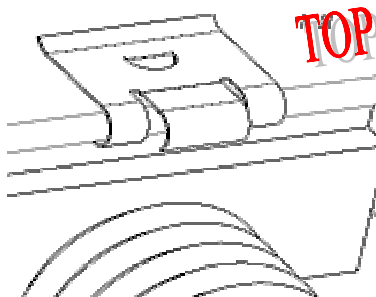
5. **REGULATOR ICs:** U1 (12-02-1088), U6 (12-00-0317), U8 (12-02-7805) are installed with the 1” heat sink standoff (30-12-0632) and screw (30-00-0607). U1, U6, and U8 must be mounted to the PCB with standoffs before soldering. This will ensure proper alignment of the regulator, and reduce strain on the regulator leads.



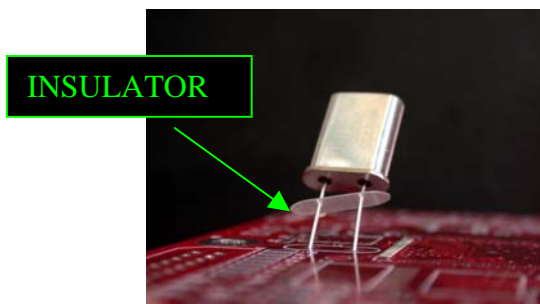
LINE 6

Engineering

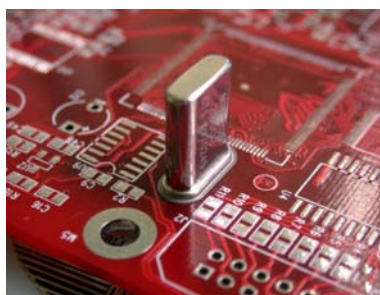
6. **GROUNDING FINGER:** The grounding finger GF1 (30-18-3030) is mounted flush against the PCB edge, under J5. GF1 is mounted with its center clip hole on the **TOP SIDE** of the PCB (the jack is on the **BOTTOM SIDE**) see drawing below. The “curl” of the grounding finger should curve toward the **BOTTOM SIDE**. **It should then be manually soldered on the TOP side.**



7. **CRYSTAL AND INSULATOR:** Crystal X1 (11-00-1201), is to be installed with the insulator (30-15-0007) and must be mounted flush with the PCB.

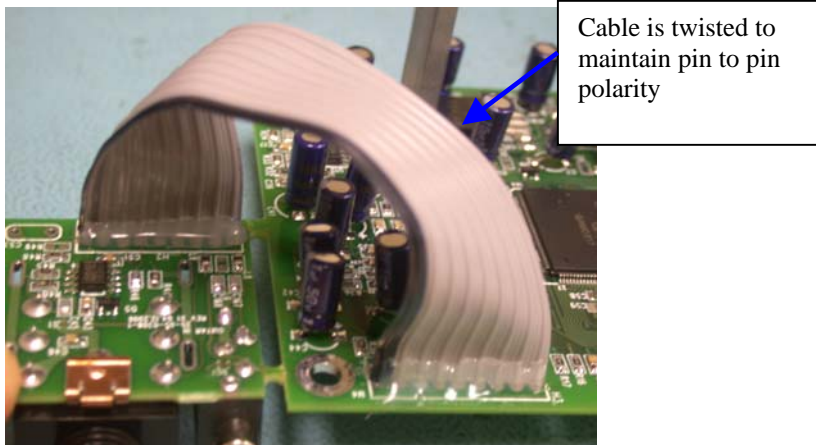


BE SURE TO INSTALL INSULATOR



CRYSTAL INSTALLED WITH INSULATOR

8. **RADIAL LEAD CAPACITORS:** Check orientation of all electrolytic capacitors. All radial lead capacitors are to be mounted perpendicular to the PCB within +/- 5 degree of accuracy. They are to be mounted as low to the PCB without sacrificing the lead to package body integrity.
9. **9-PIN RIBBON CABLE:** Install the 9-pin ribbon cable (21-30-0030) on **TOP SIDE** of PCB connecting H3 on MAIN PCB to H2 on GUITAR INPUT PCB break-away. Check Pin 1 orientation (square pad). See photograph below. Apply glue to secure cable to PCB.





- END OF MAIN-GUITAR INPUT PCBA INSTRUCTIONS -

PCBA ASSEMBLY INSTRUCTIONS REVISION CHANGE HISTORY

REVISION	NOTES	DATE	RELEASED BY
X0	- Initial Release - For X0 Prototype Build.	11/23/05	Alex Monge
A	- Revised based on Rev A PCB design.	05/25/05	Erik VP

112 POWER AMP_SUPPLY PCBA ASSEMBLY INSTRUCTIONS

Rev. A

Note: Spider III uses the same power amp and supply as Spider II.

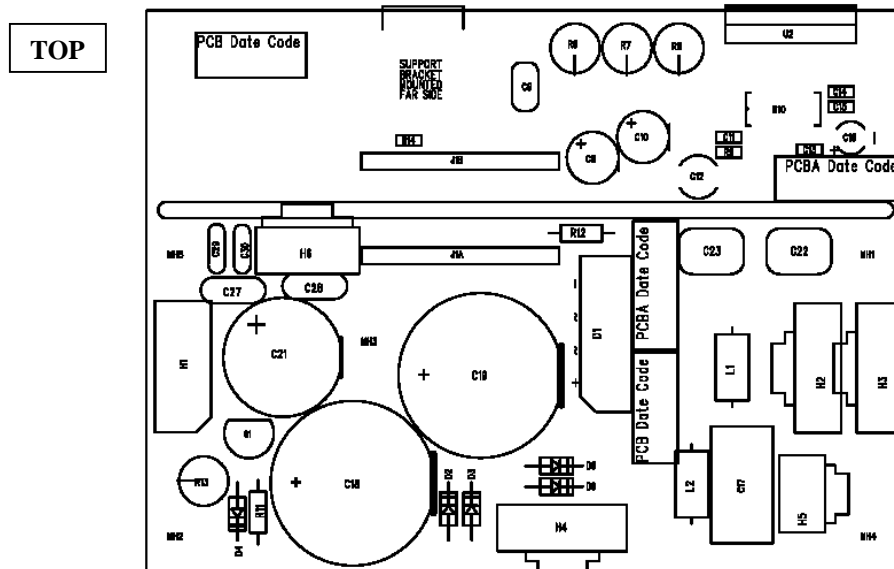
SPIDER3 112 POWER AMP\HEATSINK ASSY: 50-02-0217-1

SPIDER3 112 POWER AMP PCBA: 50-02-0217

(Refers to Power Amp PCB, Rev. A: (35-00-0217))

SPIDER3 POWER SUPPLY PCBA: 50-02-0222

(Refers to Power Supply PCB, Rev. A: (35-00-0222))



1. **BREAKAWAY SECTIONS:** DO NOT BREAK APART THE SECTIONS OF THE PCB.

2. **INSTALLATION OF HEADERS, DIODES AND CAPACITORS:**

50-00-0217/50-00-0222:

Check orientation of all headers. All headers must be mounted flush to PCB.

- The staked end of ribbon cable 21-30-0021 should be installed in H1 and socket end of cable should hang over left side of the board.
- The edged tab of H4 (21-20-1565) should face the bottom edge of the board.
- The edged tab of H5 (21-20-3122) should face the right edge of the board.
- The edged tab of H6 (21-20-1564) should face the top edge of the board.
- The edged tabs of H2 and H3 (21-20-3123) should face the left edge of the board.

Check orientation of all diodes and capacitors.

- Check for installation and correct orientation of rectifier D1 (06-16-0008).
- Check for installation and correct orientation of diodes D2, D3, D4, D6, and D9.

LINE 6

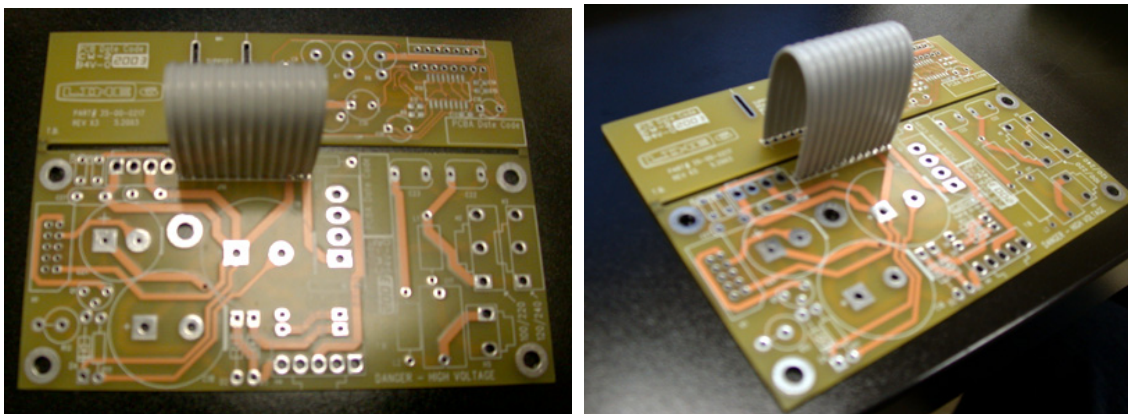
Engineering

Check for the installation and correct orientation of all electrolytic capacitors.

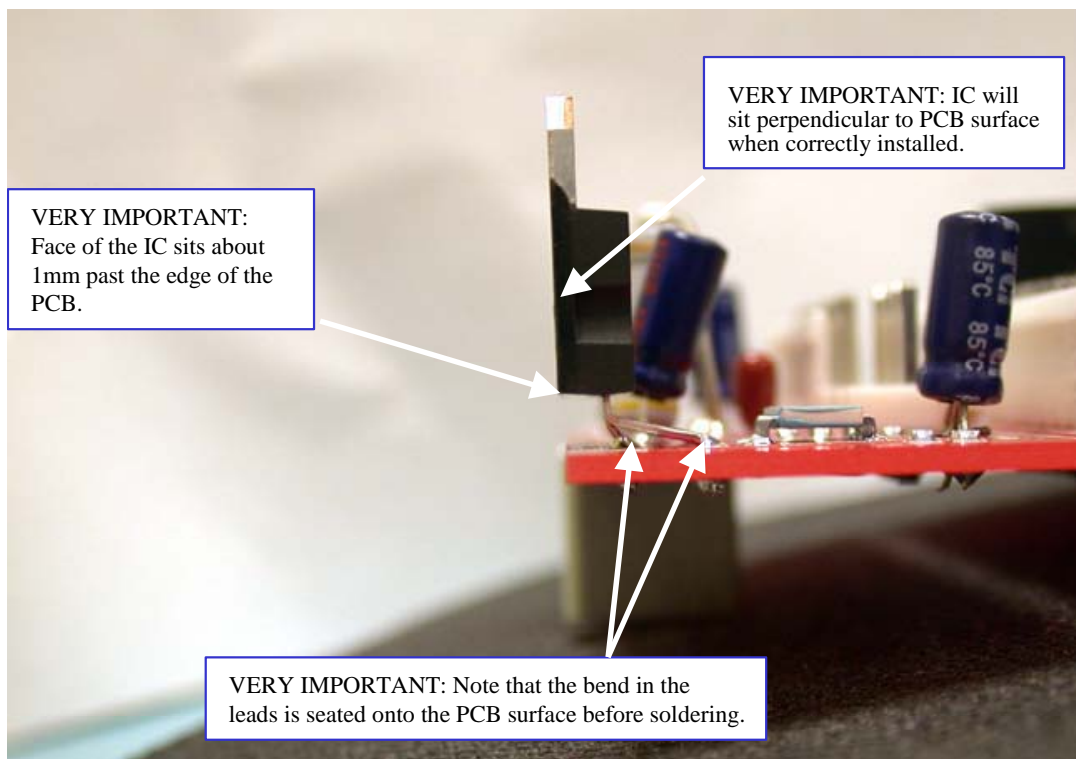
3. INSTALLATION OF RIBBON JUMPERS:

50-02-0217/50-02-0222:

- A 12-pin ribbon jumper cable (21-30-0012-2) will be installed between J1A on the POWER SUPPLY PCB and J1B on the POWER AMP PCB.



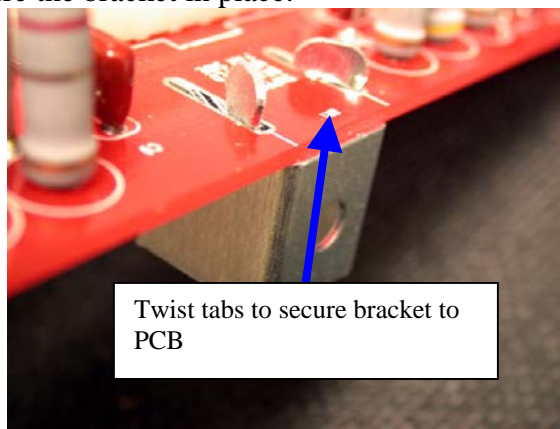
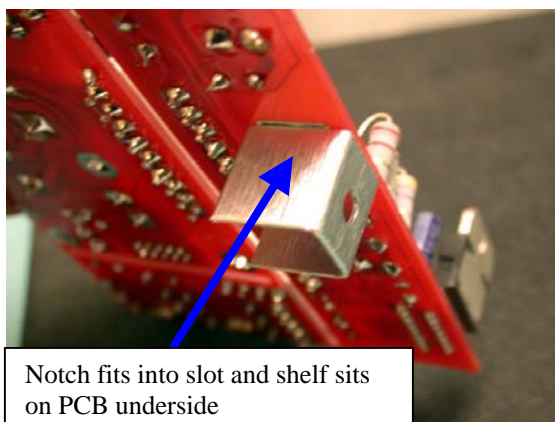
- ### 4. ATTACH POWER COMPONENTS: Install Power Amp IC (12-30-7293) on component side of the Power Amp PCB to position labeled as U2 (note orientation of the component).



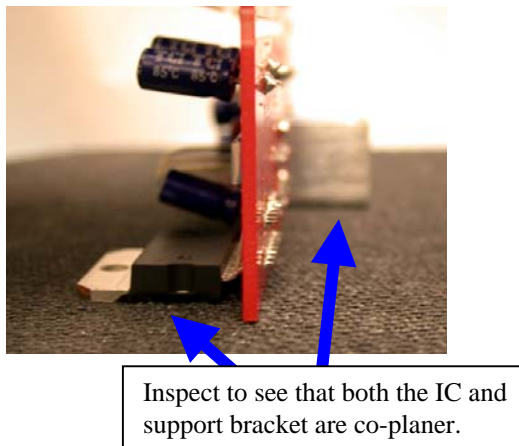
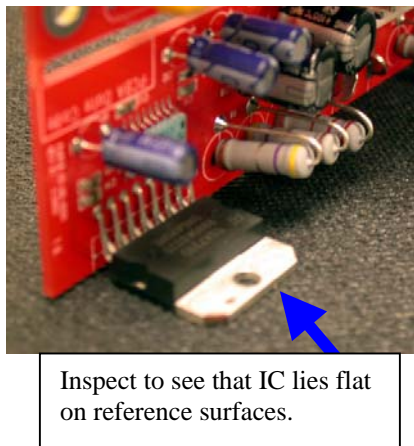
Ensure that the IC:

- 1 - seats down to the bend in the leads then solder in place.
- 2 - is vertical with a slant of no more than +/- 2 degrees from the vertical (perpendicular to the PCB plane).
- 3 - overhangs the edge back edge of the board 1 mm.

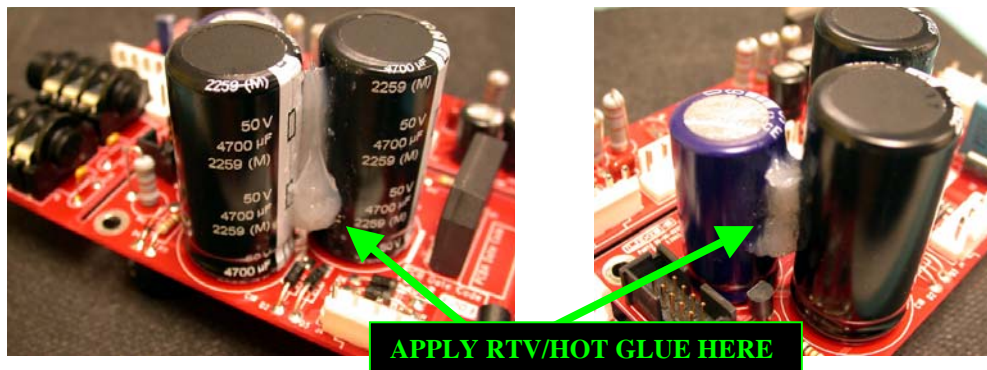
5. **ATTACH THE SUPPORT BRACKET TO THE PCB:** Install support bracket (Line 6# 30-51-0105) on solder side of board through the 2 slots in the middle of the PCB. Check that the bracket is flush to the underside, bend tabs outward to secure the bracket in place.



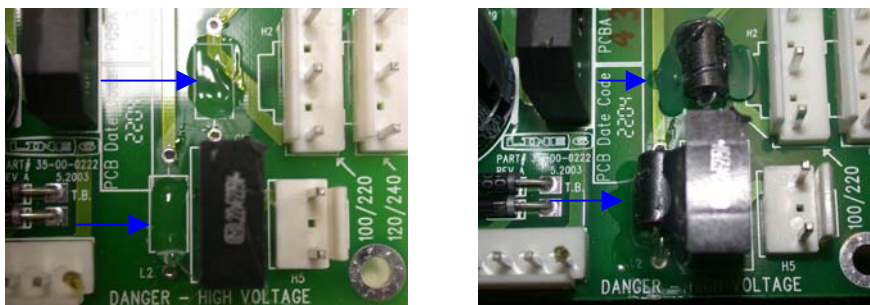
6. **INSPECT THE FLATNESS OF THE ASSEMBLED PCB:** Lay the assembled PCB on a reference flat surface. Confirm that the front face of the 2 IC's and the front of the support bracket lie flat on the surface. Maximum out of flatness tolerance is .5 mm (.020 inches). If part exceeds tolerance, do not use and set aside for rework.



7. **APPLY RTV OR HOT GLUE TO ELECTROLYTIC CAPS (C18, C19) AS SHOWN IN PICTURES BELOW:**



8. **APPLY RTV OR HOT GLUE TO PCB BEFORE INSTALLING FERRITE (L1, L2):**
Apply additional glue after L1 and L2 are installed. It is ok to apply glue between L2 and C17.



It is recommended that the following procedure be done using a jig to ensure accurate board placement and sufficient clearance for critical components – contact Line 6 manufacturing engineering for details

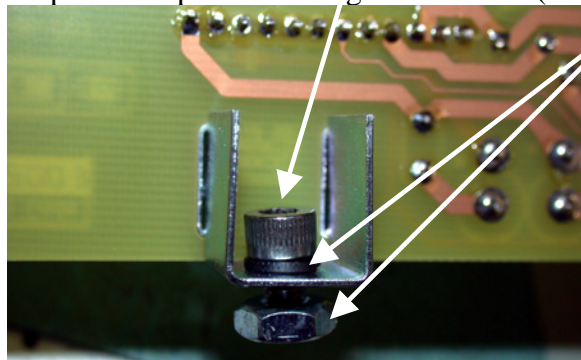
9. **MOUNT POWER AMP/SUPPLY PCB ASSY TO HEATSINK 50-02-0217-1:**
Partially assemble 1 device clamp (30-51-0073) using an #8 socket head cap screw (30-00-0010), #8 lock washer (30-03-0002) and #8 hex nut (30-06-0007), see exploded view on pg. 6 for reference. Slide assembly into the edge groove on the heat sink letting them lie loose upon placement.



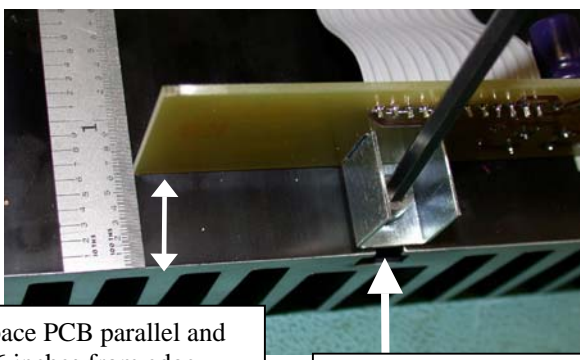
LINE 6

Engineering

Loosely secure a 5/16 #8 Socket head cap screw (30-00-0028) with a lock washer (30-03-0002) to the support bracket BR1 on the power amp PCBA using a #8 hex nut (30-06-0007).

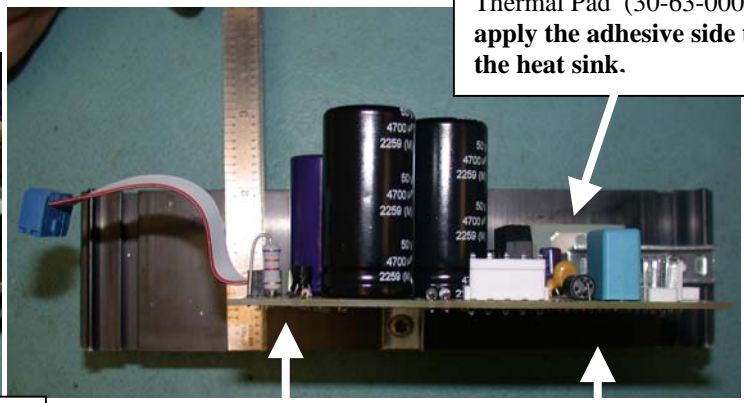


Mount thermal pad (30-63-0006) to U2 power amp IC. NOTE: **mount thermal pad w/adhesive to the heat sink** Slide the PCB assembly onto the heat sink 0.6 inches (15.2 mm) allowing the #8 cap screw to slide up the central groove. Insert the thermal pad under the IC covering the underside as shown in the figure below. Ensure that the board lies parallel to the top and bottom surfaces of the heat sink.



Space PCB parallel and 0.6 inches from edge.

Central groove.

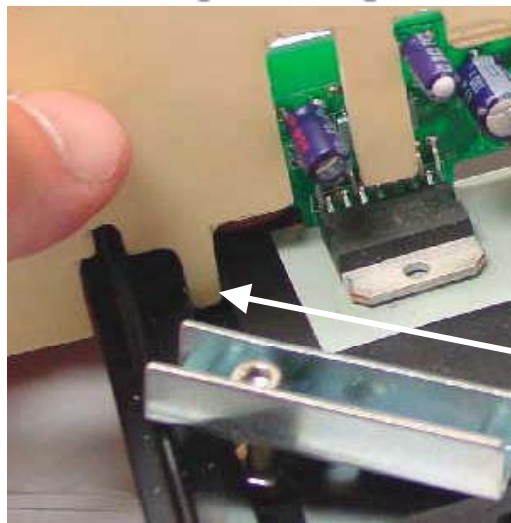


Thermal Pad (30-63-0006) apply the adhesive side to the heat sink.

Slide power amp onto heat sink from this direction.

Use a jig or alignment tool to align the board similar to the one shown in picture below. The tool will ensure parallel alignment of the board to the Heat sink edge. When fully engaged snug tighten the #8 cap screw on the support bracket.

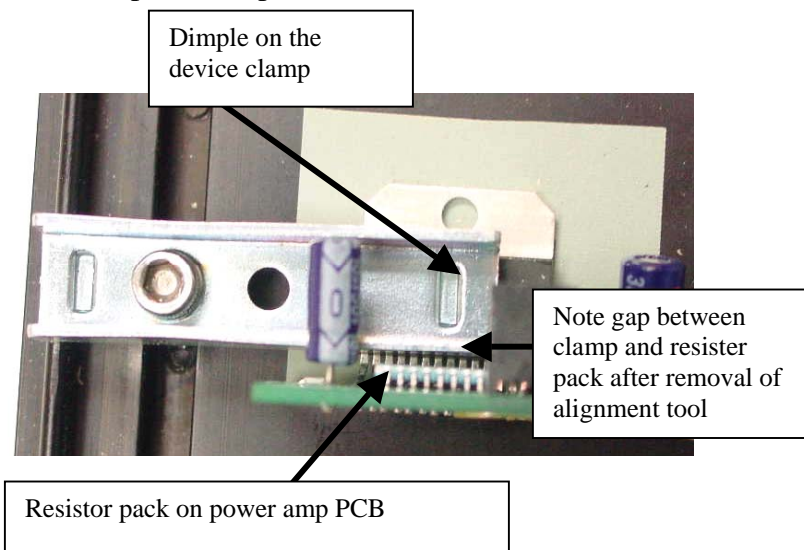
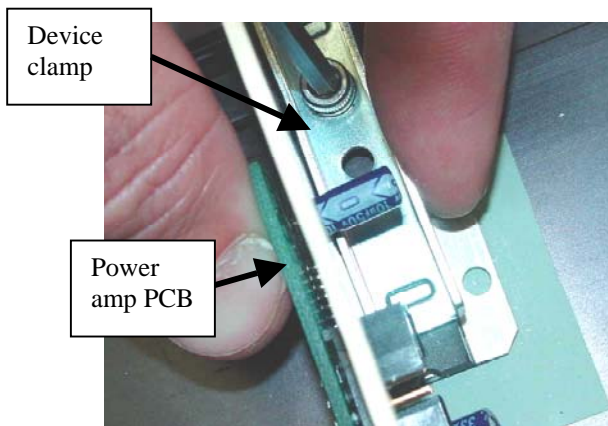
LINE 6 Engineering



Alignment tool (lies flat on amp PCB).

Ensure engagement of the tool with side grooves

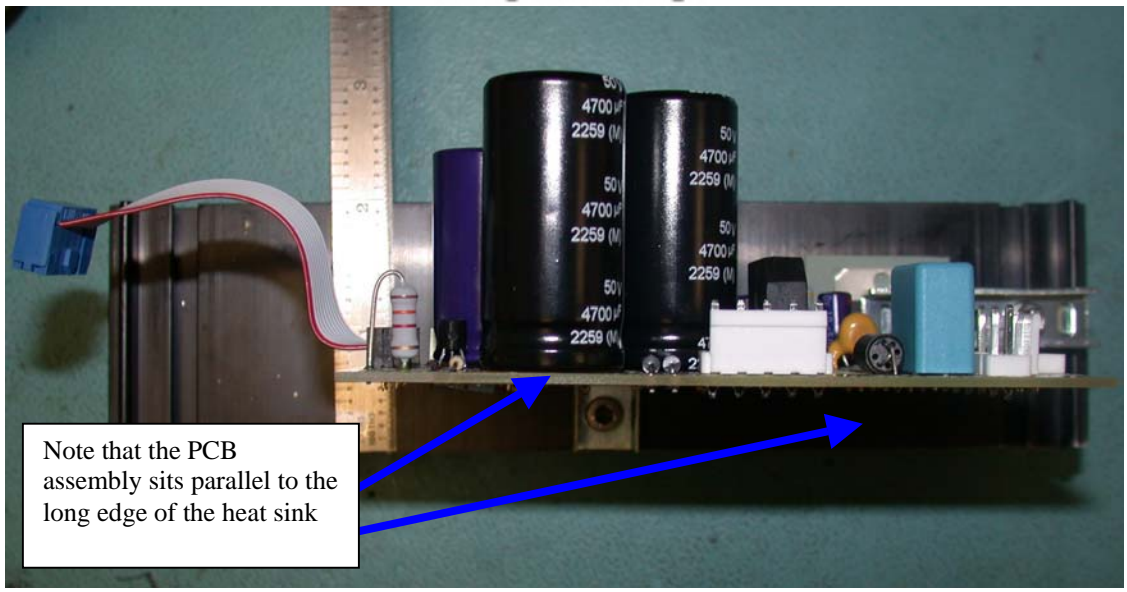
With the alignment tool still in place, position the device clamps over the IC ensuring that the edge of the alignment tool is pinched between the edge of the device clamp and the top surface of the resistor pack on the PCB. When positioned as shown in the figure below, snug tighten the #8 cap screws. Ensure that dimple fully sits upon the surface of the power amp IC.



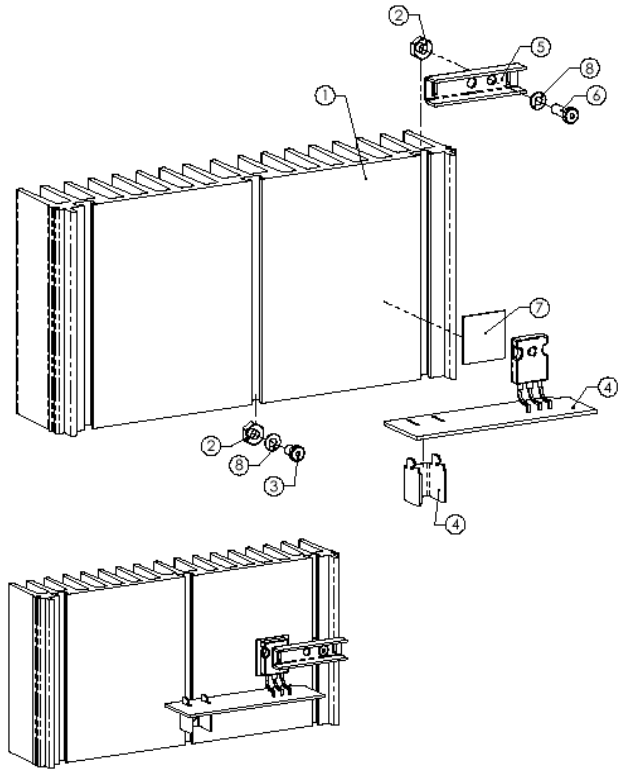
Tighten the #8 cap screw on the support bracket to **12 inch-lbs**. Tighten the cap screws on the device clamps to **12 inch-lbs** and remove the alignment tool. Ensure that a suitable gap of between **1 mm min to 2 mm max** exists between the device clamp and resistor packs (see figure above). Observe if the board is parallel and exhibits no significant flex or stress (see figure below).

LINE 6

Engineering



Note that the PCB assembly sits parallel to the long edge of the heat sink



ITEM	QTY.	LINE6 PIN	DESC.
1	1	30-51-0059-5	HEATSINK 2", BLACK ANODIZED
2	2	30-06-0007	NUT, HEX
3	1	30-00-0028	SCR CAP SOCKET #8 5/16"
4	1	50-02-0217	PCBA - POWER AMP 112
4	1	30-51-0105	SUPPORT BRACKET
5	1	30-51-0073	CLAMP
6	1	30-00-0010	SCR CAP SOCKET #8 9/16"
7	1	30-63-0006	THERMAL PAD
8	2	30-03-0002	WASHER LOCK #8

- END OF PWR AMP\SUPPLY PCBA INSTRUCTIONS -

112 PWR AMP\SUPPLY

PCBA ASSEMBLY INSTRUCTIONS REVISION CHANGE HISTORY



REVISION	NOTES	DATE	RELEASED BY
A	This document is a revised version of the Spider II Rev B assembly instructions, with all references to Spider II updated to Spider III. The Power Amp/Supply board is at Rev B. Added comments about gluing L1, L2.	6.09.2006	Erik VP

POWER AMP_SUPPLY_SPEAKER OUT PCBA ASSEMBLY INSTRUCTIONS

Rev. C

SPIDER3 210\212\HD150 POWER AMP\HEATSINK ASSY: 50-02-0221-1

SPIDER3 210\212\HD150 POWER AMP PCBA: 50-02-0221

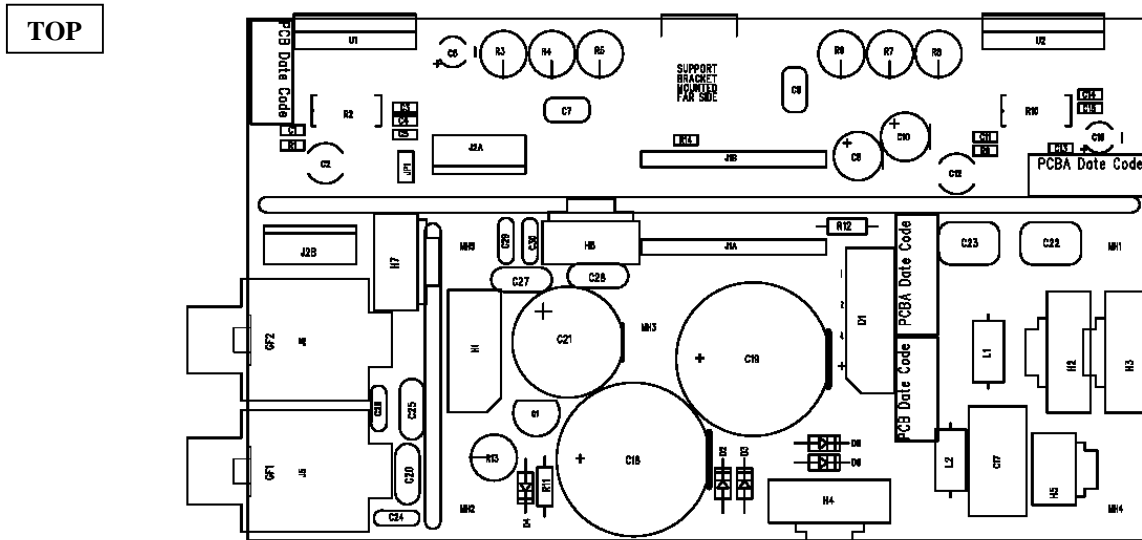
(Refers to Power Amp PCB, Rev. B: (35-00-0221))

SPIDER3 POWER SUPPLY PCBA: 50-02-0222

(Refers to Power Supply PCB, Rev. B: (35-00-0222))

SPIDER3 212\HD SPEAKER OUT PCBA: 50-02-0218

(Refers to Speaker Out PCB, Rev. B: (35-00-0218))



NOTE: FOR THE SPIDER3 210 DISCARD THE SPEAKER OUT PCB!

1. **BREAKAWAY SECTIONS: DO NOT BREAK APART THE SECTIONS OF THE PCB.**

2. **INSTALLATION OF HEADERS, DIODES AND CAPACITORS:**

50-02-0221/50-02-0222:

Check orientation of all headers. All headers must be mounted flush to PCB.

- The staked end of ribbon cable 21-30-0021 should be installed in H1 and socket end of cable should hang over left side of the board.
- The edged tab of H4 (21-20-1565) should face the bottom edge of the board.
- The edged tab of H6 (21-20-1564) should face the top edge of the board.
- The edged tabs of H7 (21-20-1564) and H5 (21-20-3122) should face the right edge of the board.
- The edged tabs of H2 and H3 (21-20-3123) should face the left edge of the board.

Check orientation of all diodes and capacitors.

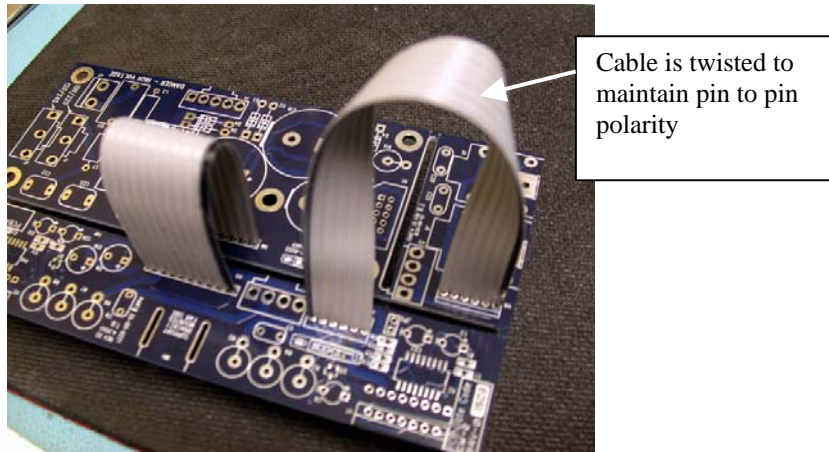
- Check for installation and correct orientation of rectifier D1 (06-16-0008).
- Check for installation and correct orientation of diodes D2, D3, D4, D6, and D9.

Check for the installation and correct orientation of all electrolytic capacitors.

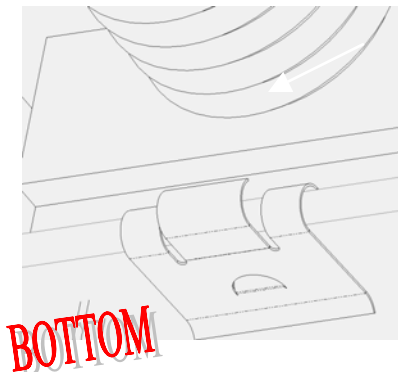
3. **INSTALLATION OF RIBBON JUMPERS:**

50-02-0221/50-02-0222/50-02-0218:

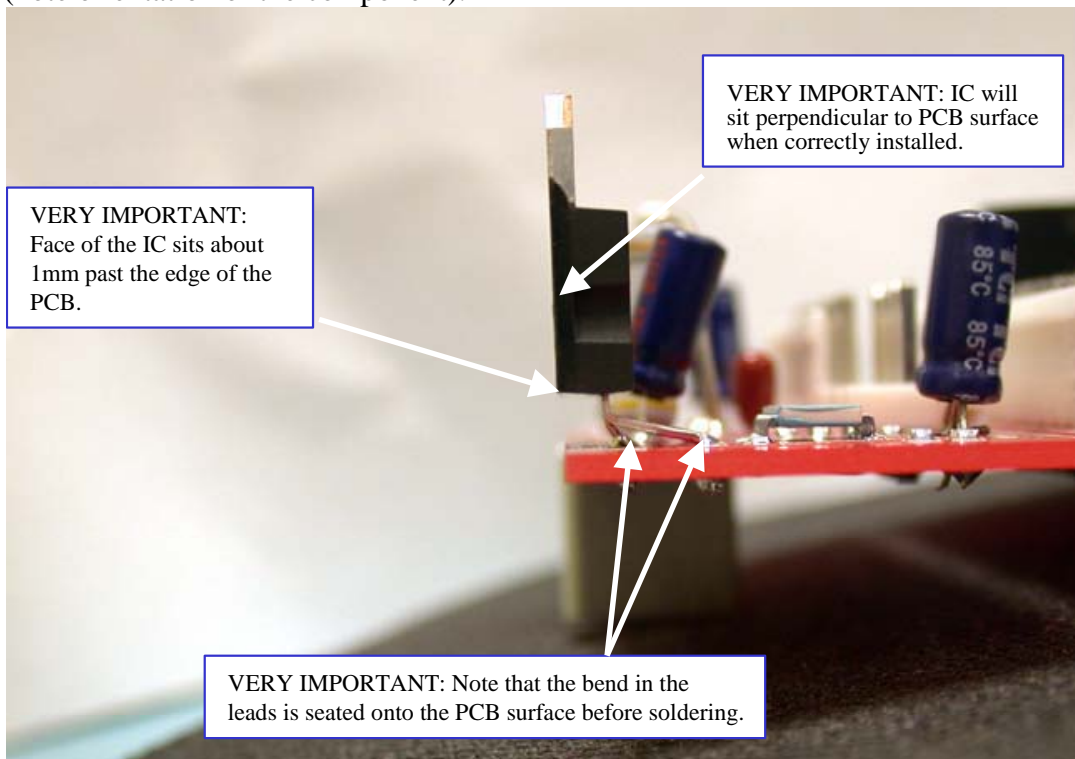
- A 12-pin ribbon jumper cable (21-30-0012-2) will be installed between J1A on the POWER SUPPLY PCB and J1B on the POWER AMP PCB.
- A 6-pin ribbon jumper cable (21-30-0011-2) will be installed between J2A on POWER AMP PCB and J2B on SPEAKER OUT PCB. Check for pin 1 orientation (square pad).



4. **SPEAKER OUT GROUNDING FINGERS:** The grounding fingers GF1 and GF2 (30-18-3030) are mounted flush against the PCB edge. They are mounted with their center clip hole on the **BOTTOM side** of the PCB (the jack is on the TOP SIDE) see drawing below. The “curl” of the grounding finger should curve toward the TOP SIDE. **It should then be manually soldered on the BOTTOM side.**

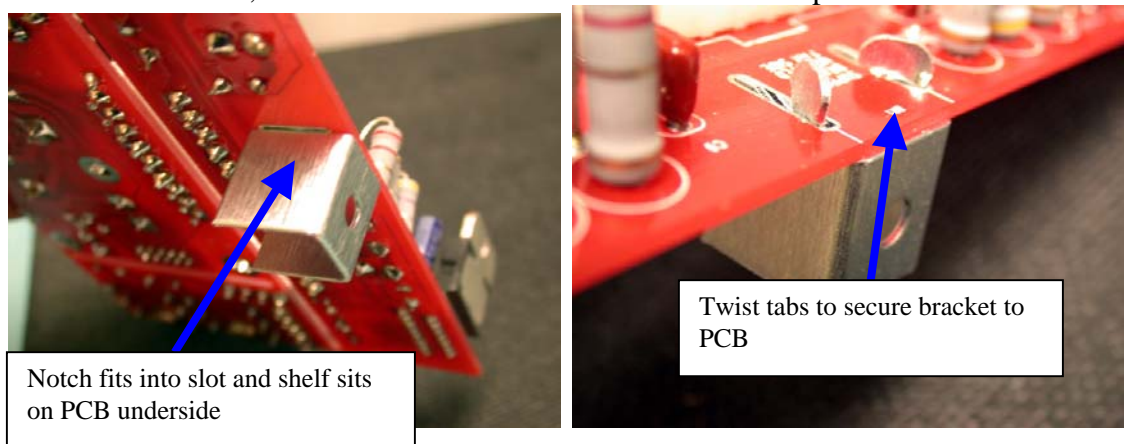


5. **ATTACH POWER COMPONENTS:** Install Power Amp IC's (Line 6# 12-30-7293) on component side of the Power Amp PCB to positions labeled as U1 and U2 as shown in the figure below (note orientation of the component).



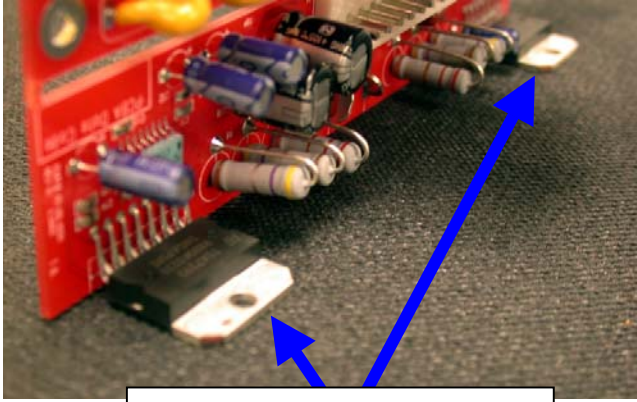
Ensure that the IC:

- 1 - seats down to the bend in the leads then solder in place.
 - 2 - is vertical with a slant of no more than +/- 2 degrees from the vertical (perpendicular to the PCB plane).
 - 3 - overhangs the edge back edge of the board 1 mm.
6. **ATTACH THE SUPPORT BRACKET TO THE PCB:** Install support bracket (Line 6# 30-51-0105) on the solder side of board through the 2 slots in the middle of the PCB. Check that the bracket is flush to the underside, bend tabs outward to secure the bracket in place.

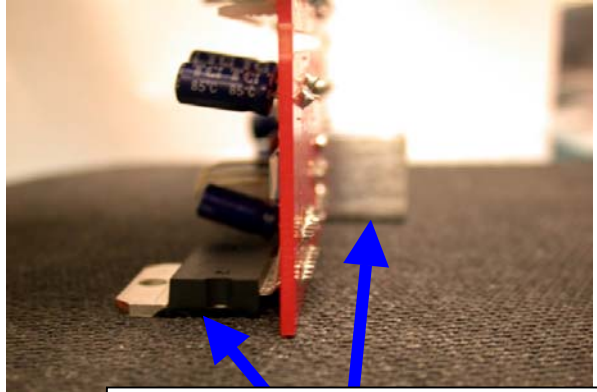


LINE 6 Engineering

7. **INSPECT THE FLATNESS OF THE ASSEMBLED PCB:** Lay the assembled PCB on a reference flat surface. Confirm that the front face of the 2 IC's and the front of the support bracket lie flat on the surface. Maximum out of flatness tolerance is .5 mm (.020 inches)). If part exceeds tolerance, do not use and set aside for rework.



Inspect to see that IC's lie flat on reference surfaces



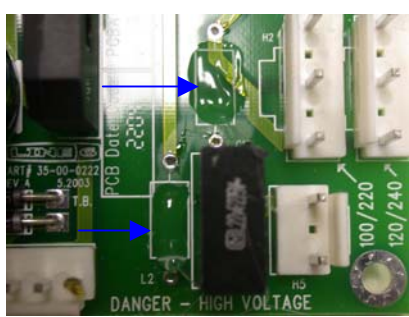
Inspect to see that both the IC's and support bracket are co-planer

8. **APPLY RTV TO ELECTROLYTIC CAPS (C18, C19) AS SHOWN IN PICTURES BELOW:**

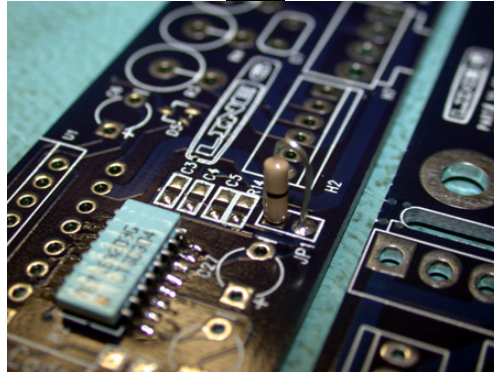


APPLY RTV/HOT GLUE HERE

9. **APPLY RTV OR HOT GLUE TO PCB BEFORE INSTALLING L1 AND L2:**
Apply additional glue after L1 and L2 are installed. It is ok to apply glue between L2 and C17.



10. **INSTALL JUMPER JP1: DO NOT INSTALL FOR HD!** In location JP1, install 0 ohm jumper vertically as shown below for the 210 and 212 **only**.



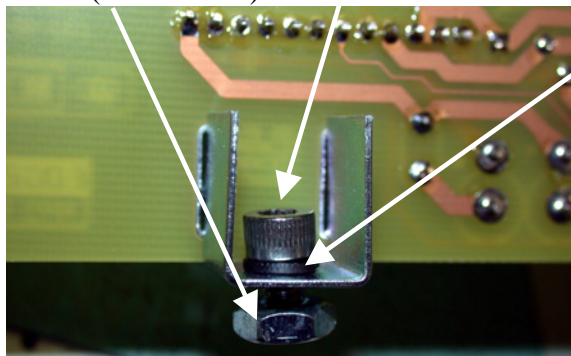
It is recommended that the following procedure be done using a jig to ensure accurate board placement and sufficient clearance for critical components – contact Line 6 manufacturing engineering for details

11. **MOUNT POWER AMP\SUPPLY PCB ASSY TO HEATSINK 50-02-0221-1:**

Partially assemble 2 device clamps (30-51-0073) using for each clamp a #8 socket head cap screw (30-00-0010), #8 lock washer (30-03-0002) and #8 hex nut (30-06-0007) (see exploded view on pg. 7 for reference). Slide each assembly into the edge grooves on the heat sink letting them lie loose upon placement.

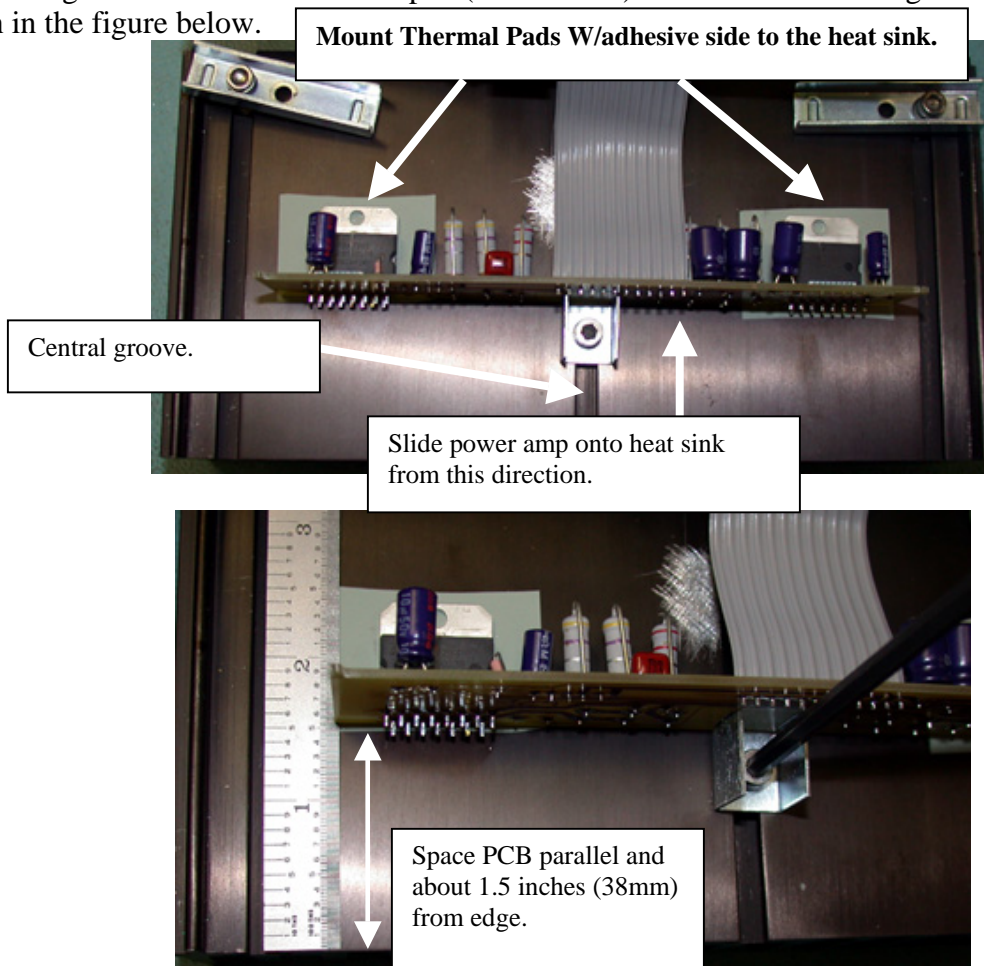


Loosely secure a 5/16 #8 Socket head cap screw (30-00-0028) with a lock washer (30-03-0002) to the support bracket using a #8 hex nut (30-06-0007).



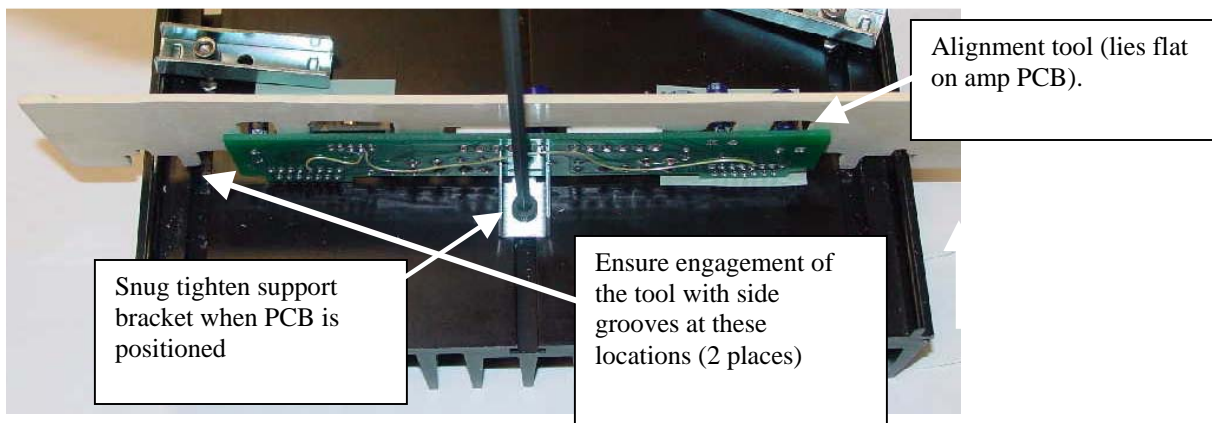
LINE 6 Engineering

Slide the PCB assembly onto the heat sink 1.50 inches (38 mm) allowing the #8 cap screw to slide up the central groove. Insert the thermal pad (30-63-0006) under the IC covering the underside as shown in the figure below.



Use a jig or alignment tool to align the board similar to the one shown in picture below as an example. The tool will ensure parallel alignment of the board to the Heat sink edge. When fully engaged snug tighten the #8 cap screw on the support bracket.

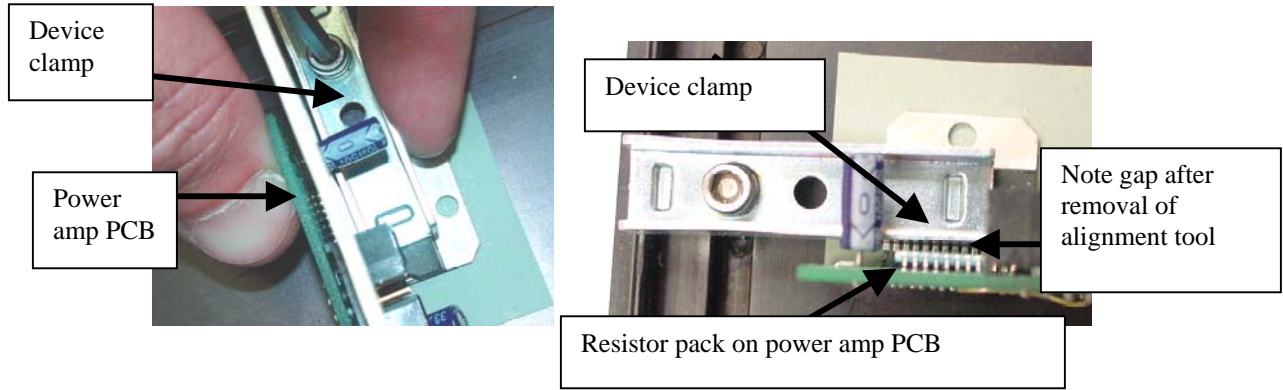
different power amp used below as example only (not actual power amp)



LINE 6

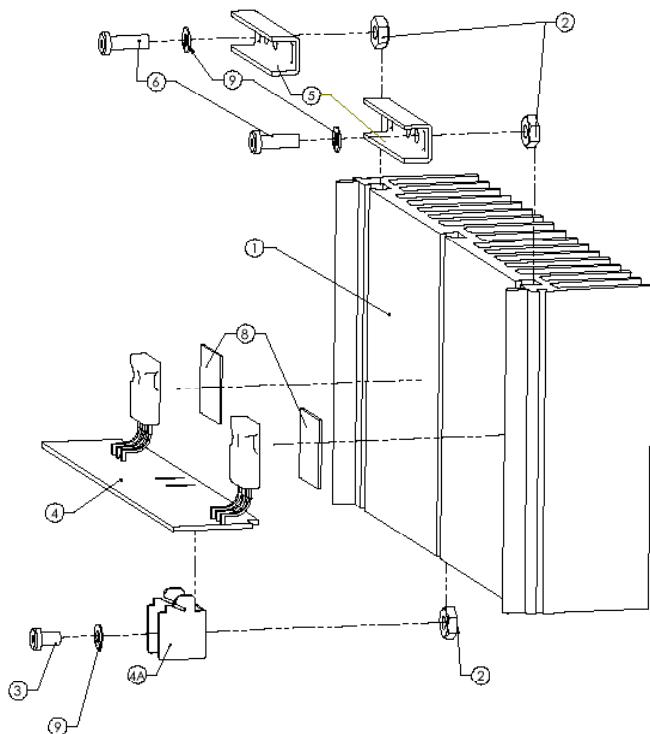
Engineering

With the alignment tool still in place, position the device clamps over the IC ensuring that the edge of the alignment tool is pinched between the edge of the device clamp and the top surface of the resistor pack on the PCB. When positioned as shown in the figure below, snug tighten the #8 cap screws. Ensure that dimple fully sits upon the surface of the IC.



Tighten the #8 cap screw on the support bracket to **12 inch-lbs**. Tighten the cap screws on the device clamps to **12 inch-lbs** and remove the alignment tool. Ensure that a suitable gap of between **1 mm min to 2 mm max** exists between the device clamp and resistor packs (see figure above). Observe if the board is parallel and exhibits no significant flex or stress.





ITEM	QTY.	LINE6 PN	DESCRIPTION
1	1	30-51-0059-3	HEATSINK 4", BLACK ANODIZED
2	3	30-06-0007	NUT, HEX
3	1	30-00-0028	SCR CAP SOCKET #8 5/16"
4	1	50-02-0221	PCBA - POWER AMP 210\212\HD
4A	1	30-51-0105	SUPPORT BRACKET
5	2	30-51-0073	CLAMP
6	2	30-00-0010	SCR CAP SOCKET #8 9/16"
8	2	30-63-0006	THERMAL PAD
9	3	30-03-0002	WASHER LOCK #8

- END OF PWR AMP\SUPPLY\SPEAKER OUT PCBA INSTRUCTIONS -

PWR AMP\SUPPLY\SPEAKER OUT
PCBA ASSEMBLY INSTRUCTIONS REVISION CHANGE HISTORY

REVISION	NOTES	DATE	RELEASED BY
C	This document is a revised version of the Spider II Rev B assembly instructions, with all references to Spider II updated to Spider III. The Power Amp/Supply board is at Rev B. Added comments about gluing L1, L2.	6.09.2006	Erik VP

**USER INTERFACE_HEADPHONE-RJ45 PCBA
ASSEMBLY INSTRUCTIONS**

Rev. C

SPIDER3 USER INTERFACE PCBA: 50-02-0309

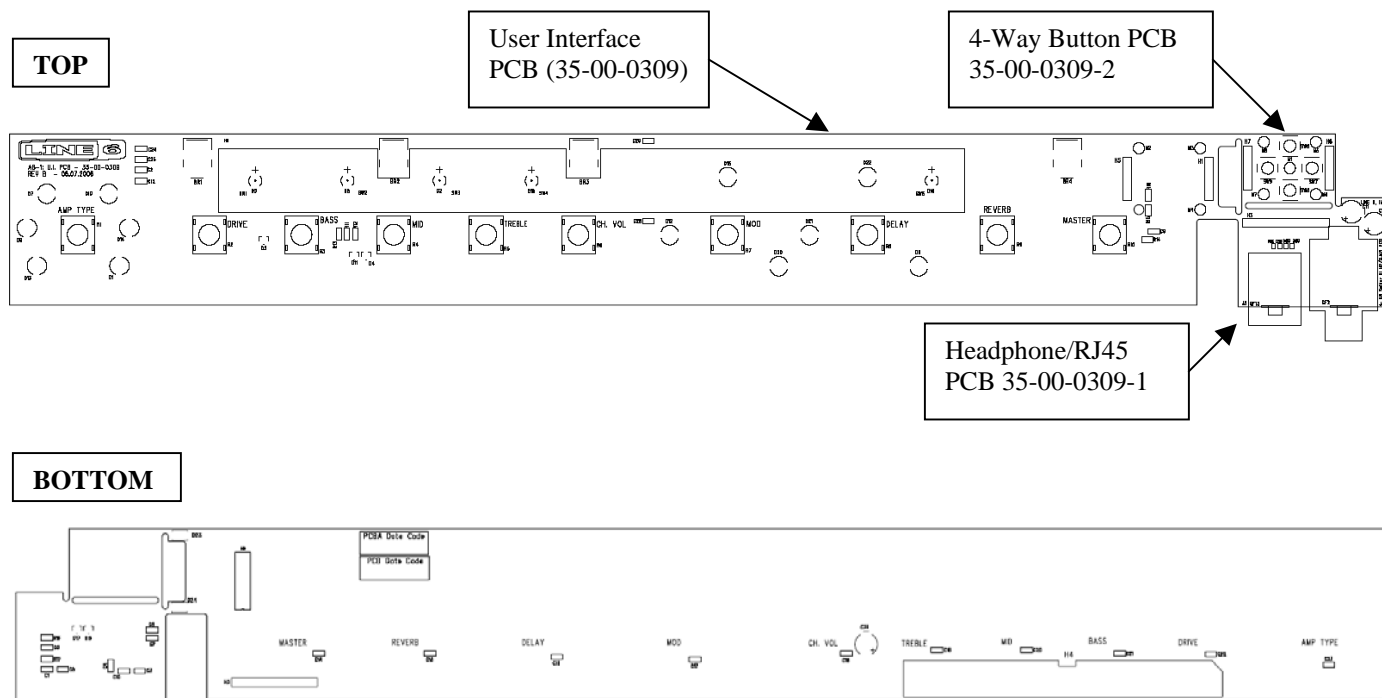
(Refers to User Interface PCB, Rev. B: 35-00-0309)

SPIDER3 HEADPHONE-RJ45 PCBA: 50-02-0309-1

(Refers to Headphone/RJ45 PCB, Rev. B: 35-00-0309-1)

SPIDER3 4-WAY BUTTON PCBA: 50-02-0309-2

(Refers to 4-Way Button PCB, Rev. B: 35-00-0309-2)



1. **DO NOT WATER WASH THE BOARD:** The potentiometers and tact switches are sensitive to water washing. If wave soldering is preferred, we recommend using a no-clean flux wave soldering process, rather than a process that requires washing. The fluxing process wave must be controlled so as not to have flux migrate inside the switch through the top of the housing. Good venting is required. No-clean flux vapors can enter the switch if adequate venting is not available. The vapors will condense on the internal contacts and become an insulator when they solidify.
2. **BREAKAWAY PCB: DO NOT BREAK APART THE TWO SECTIONS OF THE PCB UNTIL AFTER WAVE SOLDER.**

LINE 6

Engineering

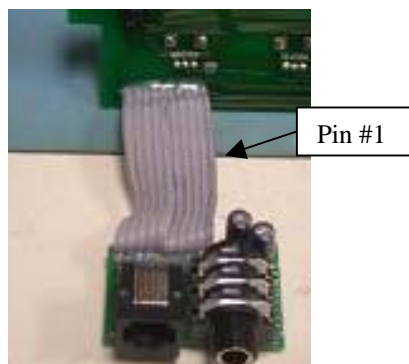
3. **POTENTIOMETERS:** All potentiometers are mounted on the **TOP SIDE** of the PCB, flush to the PCB, and as straight as possible. (Within +/- 1 degree)
4. **RADIAL LEAD CAPACITORS:** Check orientation of all electrolytic capacitors. All radial lead capacitors are to be mounted perpendicular to the PCB within +/- 5 degree of accuracy. They are to be mounted as low to the PCB without sacrificing the lead to package body integrity.
5. **JACKS:** Make sure the jacks J3 (21-16-0045) and J4 (21-00-6616) are mounted flush with the PCB and lined up with the silkscreen outline within +/-1 degree of accuracy. **The jacks are mounted on the TOP SIDE of the PCB.**



6. **GROUND FINGERS:** ALL grounding fingers are mounted flush against the PCB edge. They are mounted with their center clip hole on the **BOTTOM** side of the PCB. The “curl” of the grounding finger should curve toward the **TOP SIDE** (toward the jack). **They should then be manually soldered on the BOTTOM SIDE.**



7. **5-PIN RIBBON CABLES:** Two 5-pin cables (21-30-0032-1) are installed on the **BOTTOM SIDE** of the User Interface PCB and **TOP SIDE** of Headphone-RJ45 break-away board. The cables connect H2 on User Interface PCB to H3 on Headphone-RJ45 break-away PCB. The two 5-pin cables get installed the same as a single 10-pin cable. See photograph below. Check Pin 1 orientation (square pad).



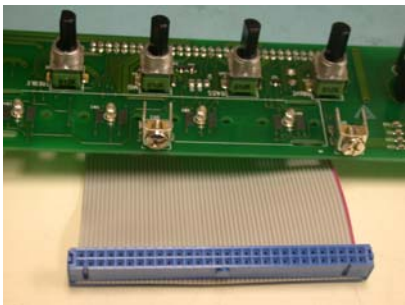
LINE 6

Engineering

8. **SWITCHES**: All tact switches are to be mounted flush to the PCB on the **TOP SIDE** and manually soldered on the **BOTTOM side**.



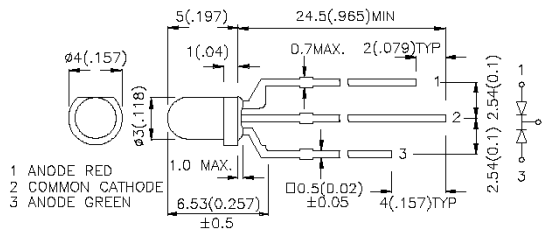
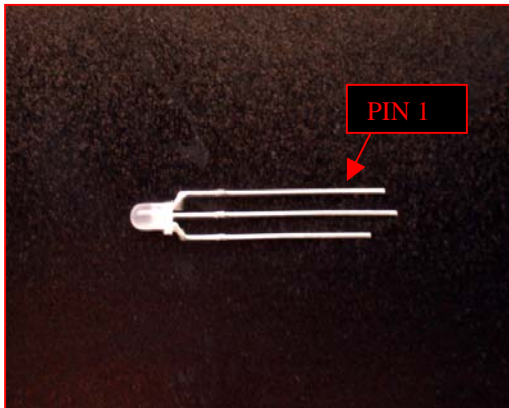
9. **60-PIN RIBBON CABLE**: The 60-pin ribbon cable (21-30-0031-1) is to be installed on the **BOTTOM SIDE** of the PCB. Make sure that the connector's staked end is mounted flush to the PCB. See photographs.



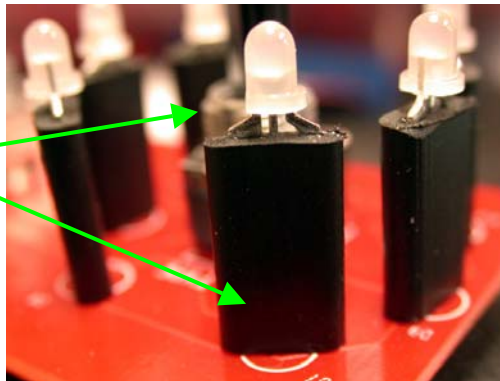
LINE 6

Engineering

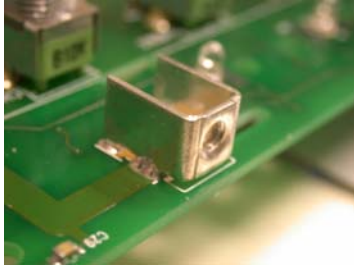
10. **LED'S:** All LED's are to be mounted on the **TOP SIDE** of the PCB. LEDs (D2,5,8,16,19) are mounted flush to the PCB. The remaining LEDs are mounted with LED spacers (30-15-0018) between the LED body and PCB (see photograph below). Make sure the LED's are installed to the height of the spacer. The LED's are to be mounted vertically to the PCB top surface within +/- 1 degree of accuracy. The LED's are bi-color, and have 3 pins. The medium length pin is pin 1 on the LED, the flat side of the LED package also designates pin 1. Ensure that each LED is installed with correct orientation on the PCB. Pin 1 on the PCB is the **square pad**, whereas pins 2 and 3 are round.



FLUSH WITH NO GAP

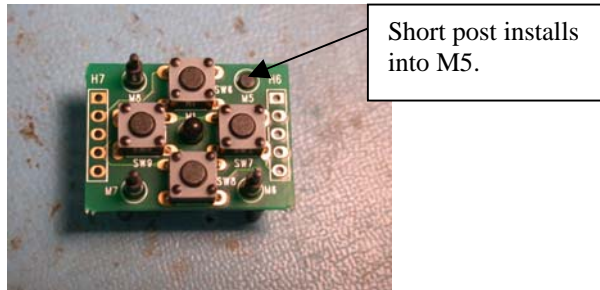
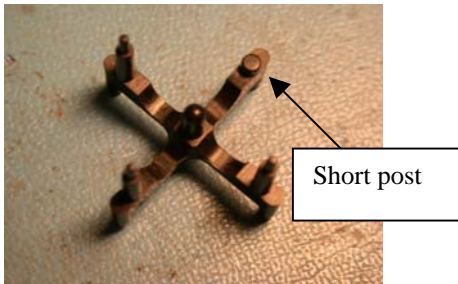


10. **BRACKETS:** (BR1-4) are mounted flush to PCB.

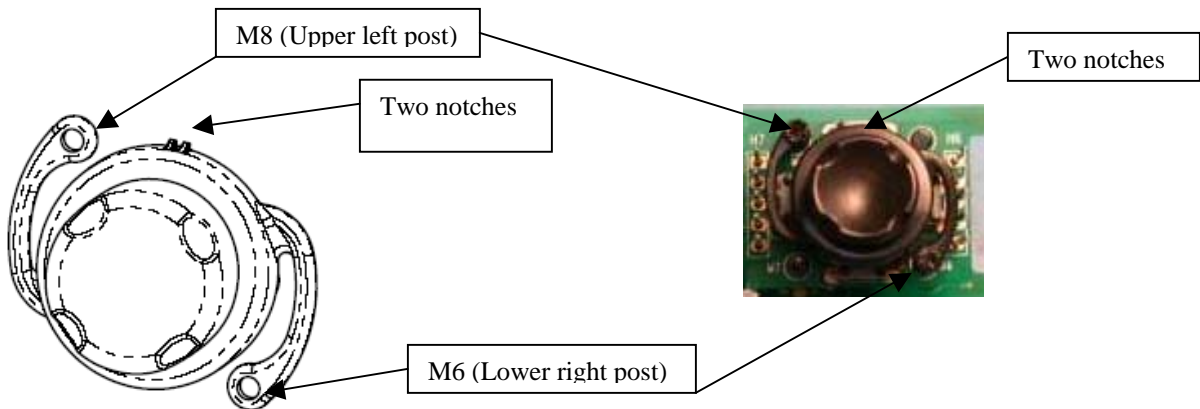


4-WAY BUTTON ASSEMBLY INSTRUCTIONS:

STEP 1: Install 4-way Button Support (30-27-0214) into mounting holes (M5-8). The short post installs into M5.



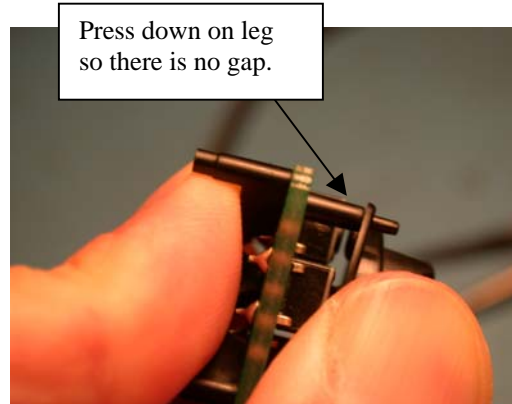
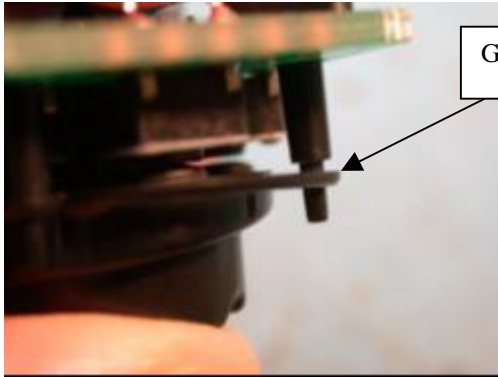
STEP 2: Place 4-Way Button (30-27-0213) on top of support posts so that the two notches are facing up.



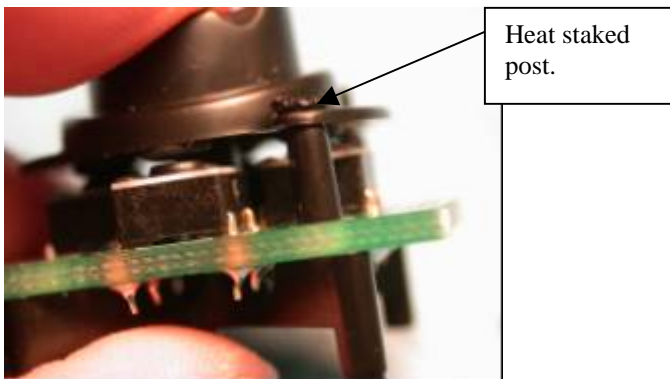
LINE 6

Engineering

STEP 3: Press down on each 4-Way Button leg so there is no gap between the 4-Way button leg and the thicker portion of the support post.



STEP 4: Heat stake top of post to secure 4-Way Button in place.

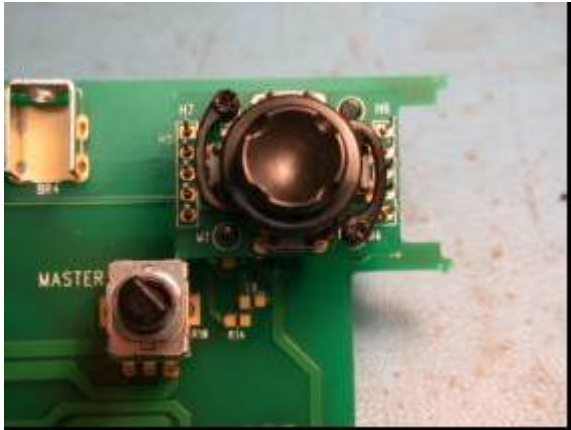


STEP 5: Repeat Steps 4 & 5 for the second leg.

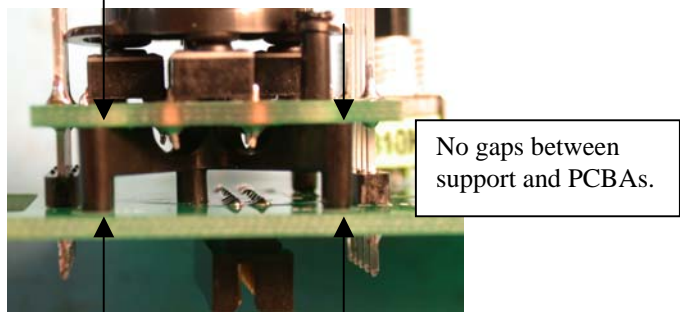
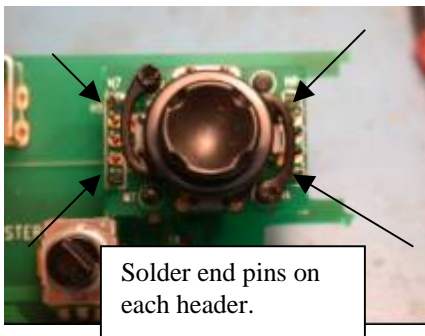
LINE 6

Engineering

STEP 6: Place 4-Way Button PCBA onto headers at H1, H5 on UI PCBA.
H1 (UI PCBA) connects to H6 (4-Way Button PCBA).
H5 (UI PCBA) connects to H7 (4-Way Button PCBA).



STEP 7: Press down firmly on 4-Way Button PCBA and solder endpins on each header. After soldering each pin, verify there are no gaps between 4-way Button Support (30-27-0214) and the PCBAs.



STEP 8: Solder remaining pins on each header and clip leads.



Engineering

PCBA ASSEMBLY INSTRUCTIONS REVISION CHANGE HISTORY

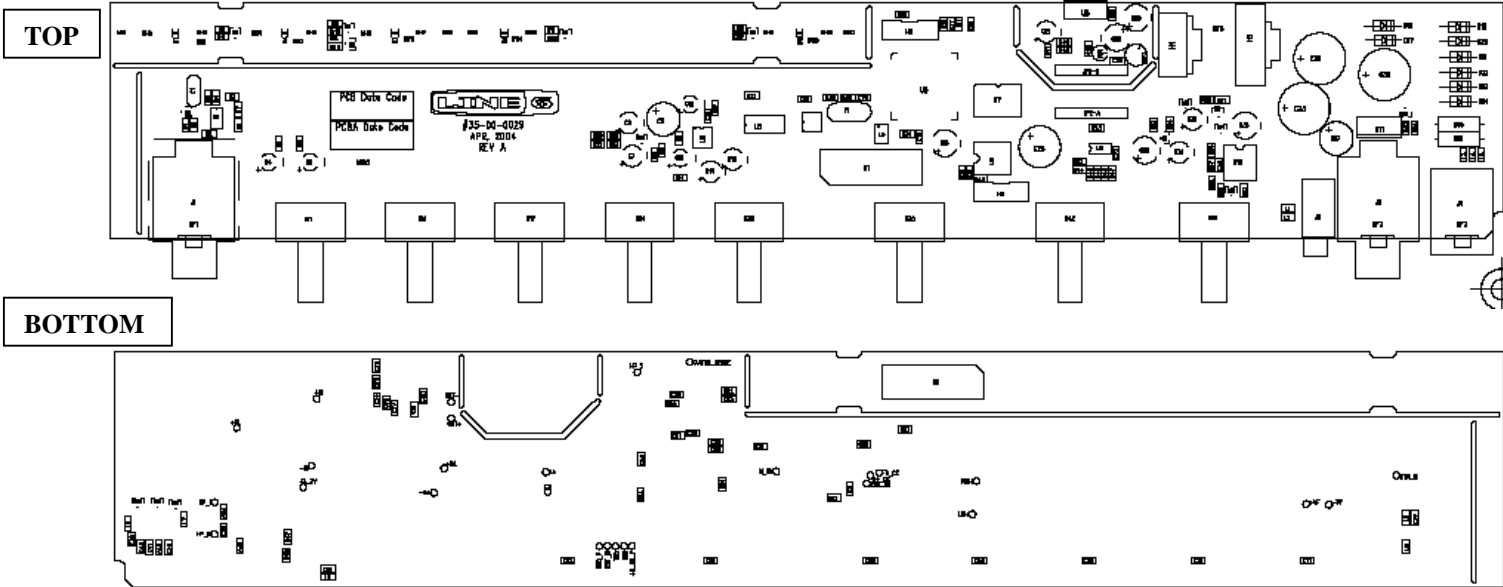
<u>REVISION</u>	<u>NOTES</u>	<u>DATE</u>	<u>RELEASED BY</u>
A	Initial release based on Rev B UI Board	06.11.2006	Erik VP
B	Revised 4-Way button assembly instructions Correct part numbers for 60-pin & 5-pin cables.	07.06.2006	Erik VP
C	Revised 4-Way button instructions. Removed step for cutting center leg. Added instructions for part orientation using two notches.	07.10.2006	Erik VP

SPIDER3 1508 / 3012
PCBA ASSEMBLY INSTRUCTIONS

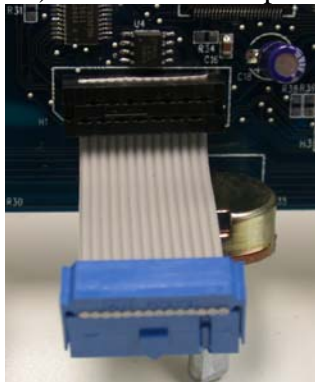
Rev. X0

SPIDER3-3012 ASSY: 50-02-0057 (Refers to PCB, Rev. X0: 35-00-0310, 35-00-0310-1, 35-00-0310-2)

SPIDER3-1508 ASSY: 50-02-0056 (Refers to PCB, Rev. X0: 35-00-0310, 35-00-0310-1, 35-00-0310-2)



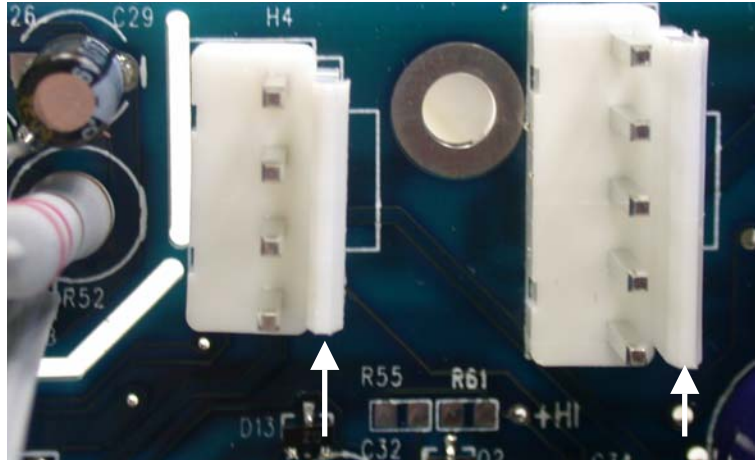
1. **DO NOT INSTALL PARTS FOR 3012 ONLY:**
R4, R67, C1, H2
2. **DO NOT INSTALL PARTS FOR 1508 ONLY:**
R4, R50, R68, J4, L3-L7, U12, D25-27, GF3, C1, C39-43, C78-80, H2, Y1
3. **BREAKAWAY SECTIONS: DO NOT BREAK APART THE SECTIONS OF THE PCB.**
4. **INSTALLATION OF HEADERS, DIODES AND CAPACITORS:**
Check orientation of all headers. All headers must be mounted flush to PCB.
 - Install 14-pin ribbon cable (21-30-0029) H1 as shown in picture below:



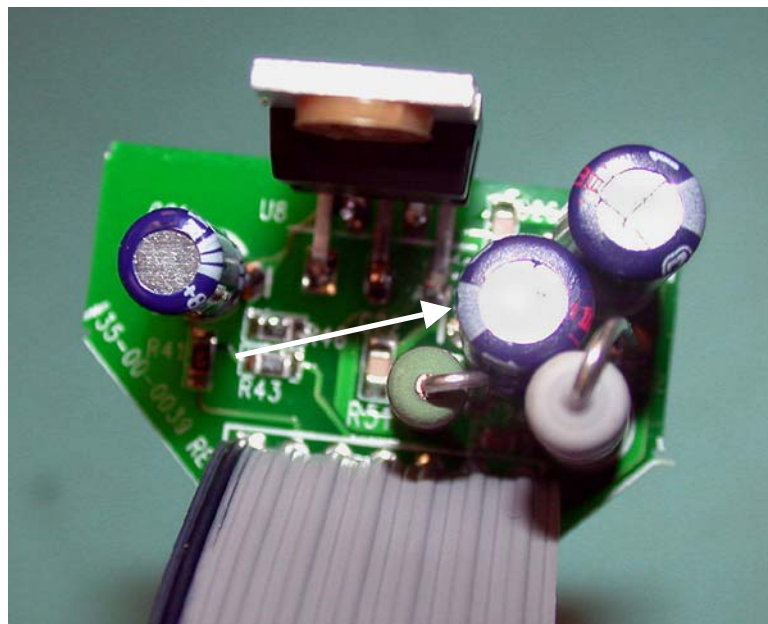
LINE 6

Engineering

- The edged tab of H4 (21-20-1564) and H5 (21-20-1565) should face the right edge of the board.



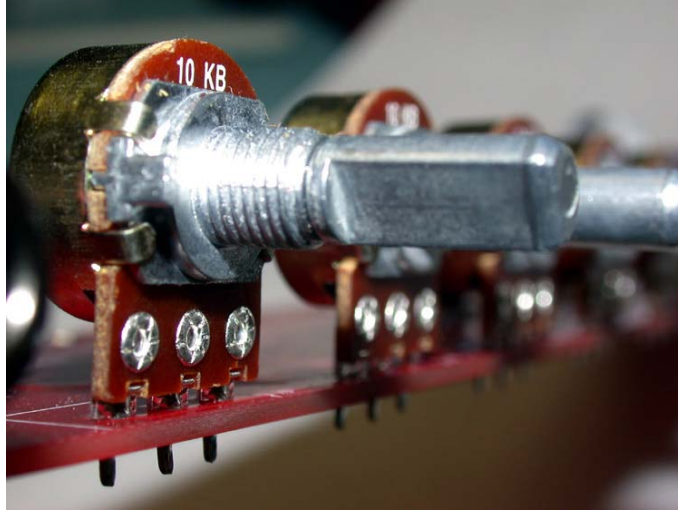
- DO NOT INSTALL H2
- The edged tab of H3 should face the top of the board.
- Check for installation and correct orientation of diodes D16, D17, D19-24.
- Check for the installation and correct orientation of all electrolytic capacitors.
- **Note that the orientation of C20 is opposite of all other electrolytic capacitors.**



LINE 6

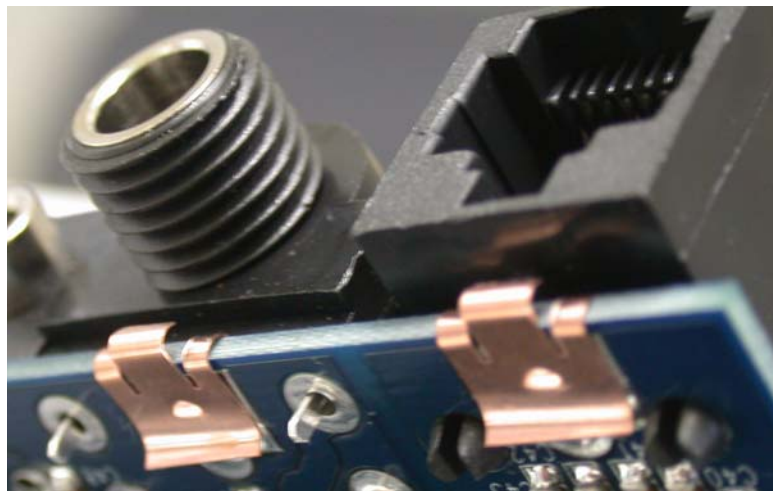
Engineering

5. **POTENTIOMETERS:** All potentiometers are mounted on the **TOP SIDE** of the PCB, flush to the PCB, and as straight as possible. (Within +/- 1 degree)

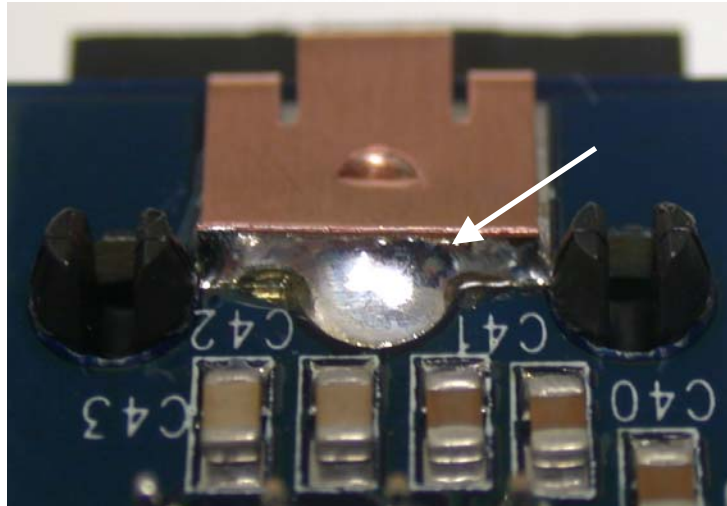


DO NOT WATER WASH THE BOARD: The potentiometers are sensitive to water washing. If wave soldering is preferred, we recommend using a no-clean flux wave soldering process, rather than a process that requires washing.

6. **GROUNDING FINGERS:** Grounding fingers GF1-3 (30-18-3030) are mounted flush against the PCB edge. It is mounted with its center clip hole on the **BOTTOM SIDE** of the PCB. The “curl” of the grounding finger should curve toward the Top side. **It should then be manually soldered on the BOTTOM SIDE.**

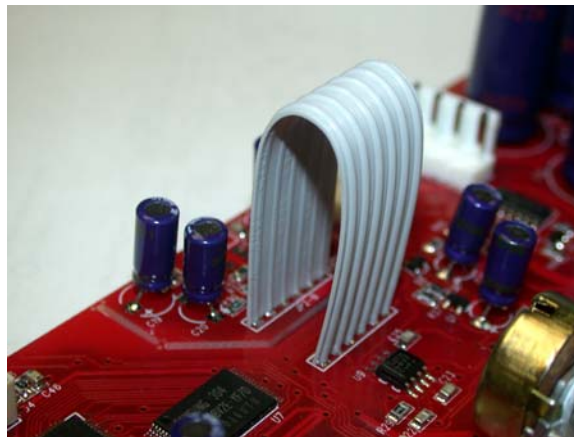


LINE 6
Engineering



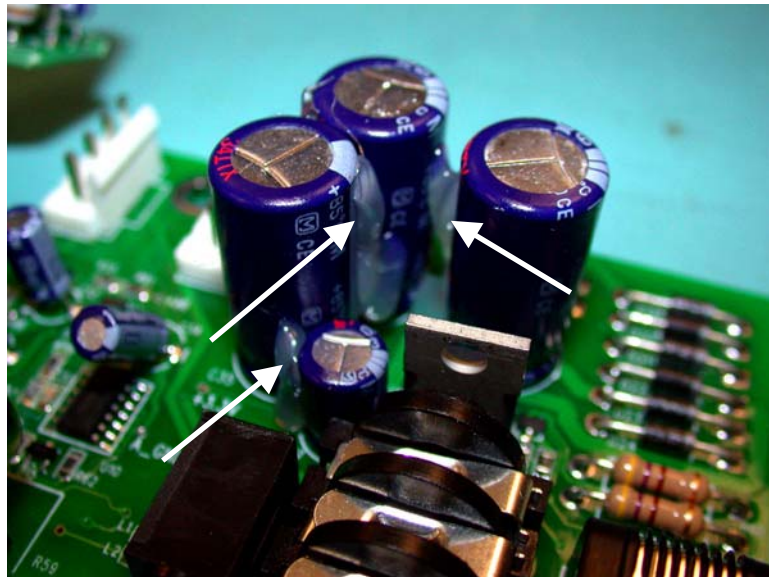
7. **INSTALLATION OF RIBBON JUMPER:**

- A 7-pin ribbon jumper cable (21-30-0014) will be installed between JP2A on the MAIN PCB (35-00-0310) and JP2B on the POWER AMP PCB breakaway (35-00-0310-2).

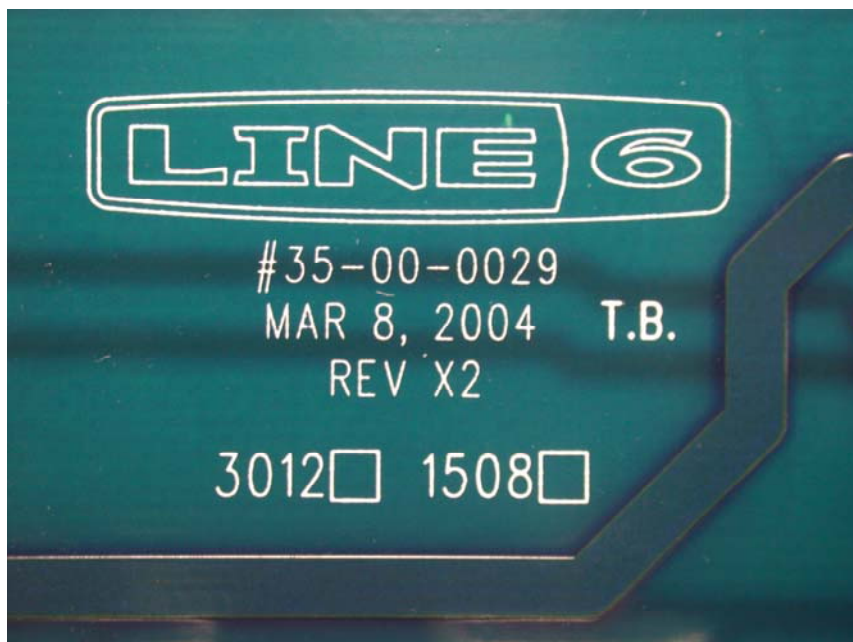


LINE 6
Engineering

8. **APPLY RTV TO ELECTROLYTIC CAPACITORS:** Apply RTV as shown below to C28,C35-C38



9. **3012 / 1508 CHECK BOX:**
Mark 1508 or 3012 check box below Line6 logo to indicate either a 1508 or 3012 PCB.



- END OF PCBA INSTRUCTIONS -



Engineering

SPIDER3 1508/3012

PCBA ASSEMBLY INSTRUCTIONS REVISION CHANGE HISTORY

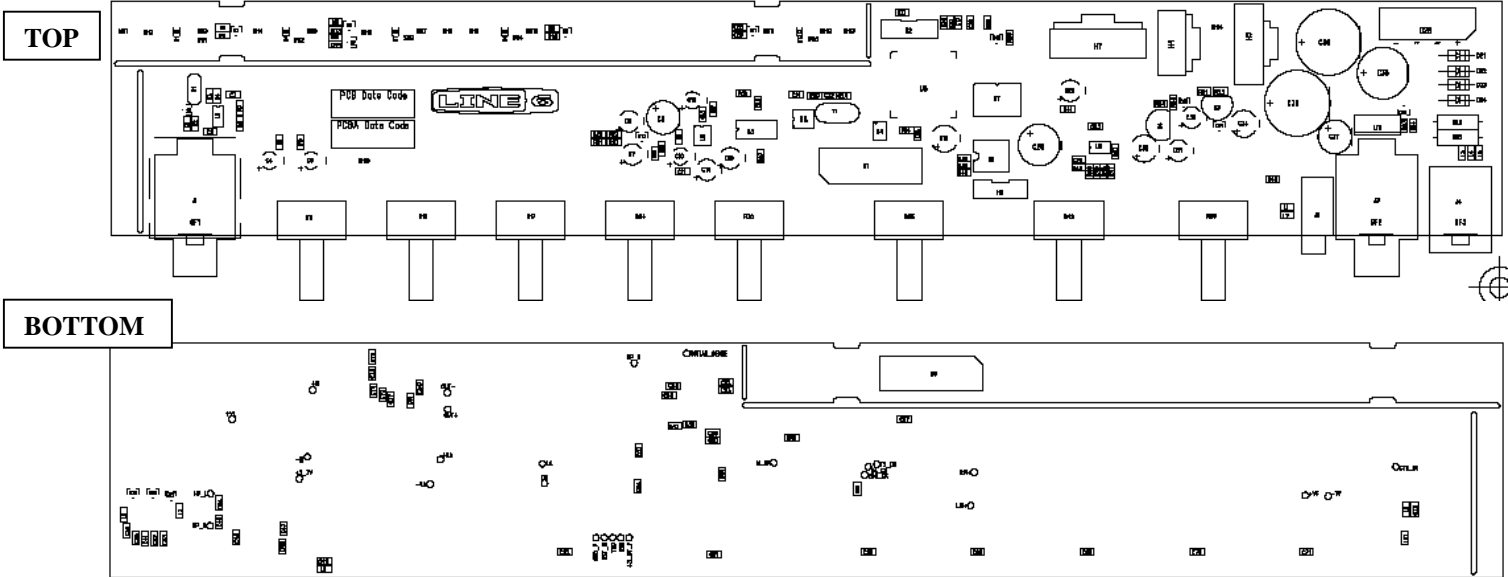
REVISION	NOTES	DATE	RELEASED BY
X0	- Initial Release - For Rev X0 Prototype Build.	11/23/05	Alex Monge

SPIDER3 HD75
PCBA ASSEMBLY INSTRUCTIONS

Rev. X0

SPIDER3-HD75 MAIN ASSY: 50-02-0311 (Refers to PCB, Rev. X0: 35-00-0311)

SPIDER3-HD75 SWITCH/LED ASSY: 50-02-0311-1 (Refers to PCB, Rev. X0: 35-00-0311-1)



1. **DO NOT INSTALL PARTS:**
R4, R67, C1
2. **BREAKAWAY SECTIONS:** DO NOT BREAK APART THE SECTIONS OF THE PCB.
3. **INSTALLATION OF HEADERS, DIODES AND CAPACITORS:**
Check orientation of all headers. All headers must be mounted flush to PCB.
 - Install 14-pin ribbon cable (21-30-0029) H1 as shown in picture below:

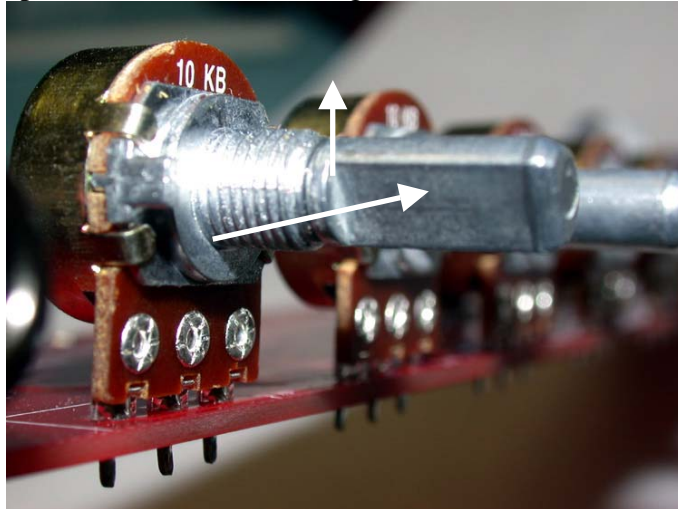


- The edged tab of H4 (21-20-1564) and H5 (21-20-1565) should face the right edge of the board.

LINE 6

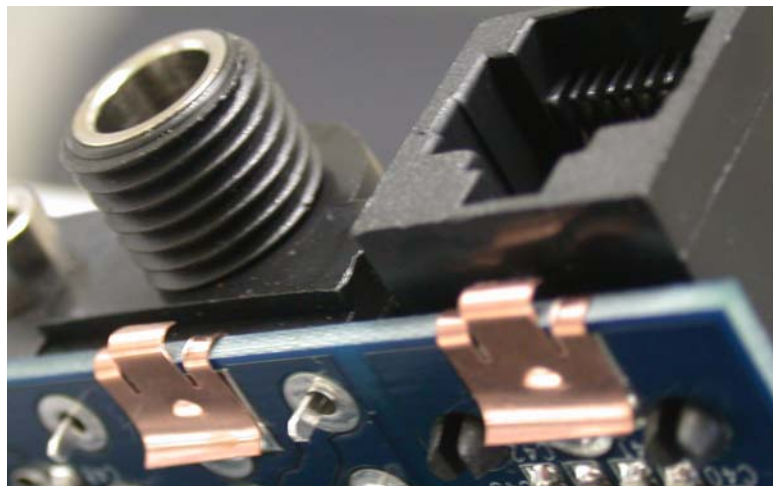
Engineering

- The edged tab of H3 (21-20-0205) and H7 (21-20-1566) should face the top of the board.
 - Check for installation and correct orientation of diodes D21-24.
 - Check for the installation and correct orientation of all electrolytic capacitors.
4. **POTENTIOMETERS:** All potentiometers are mounted on the **TOP SIDE** of the PCB, flush to the PCB, and as straight as possible. (Within +/- 1 degree)

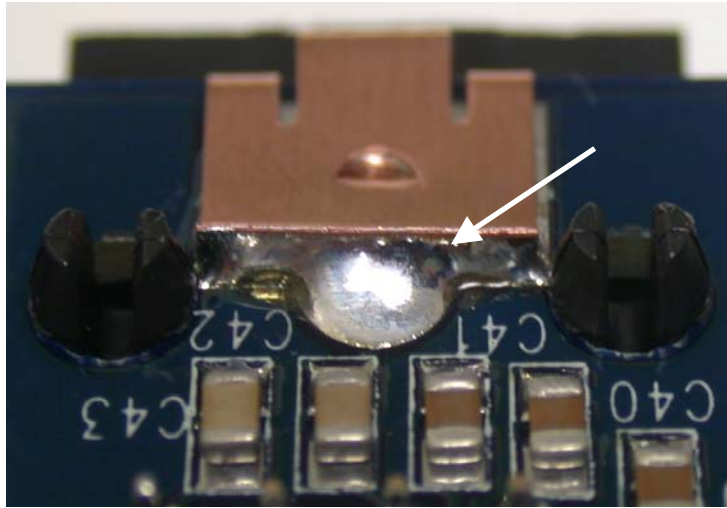


DO NOT WATER WASH THE BOARD: The potentiometers are sensitive to water washing. If wave soldering is preferred, we recommend using a no-clean flux wave soldering process, rather than a process that requires washing.

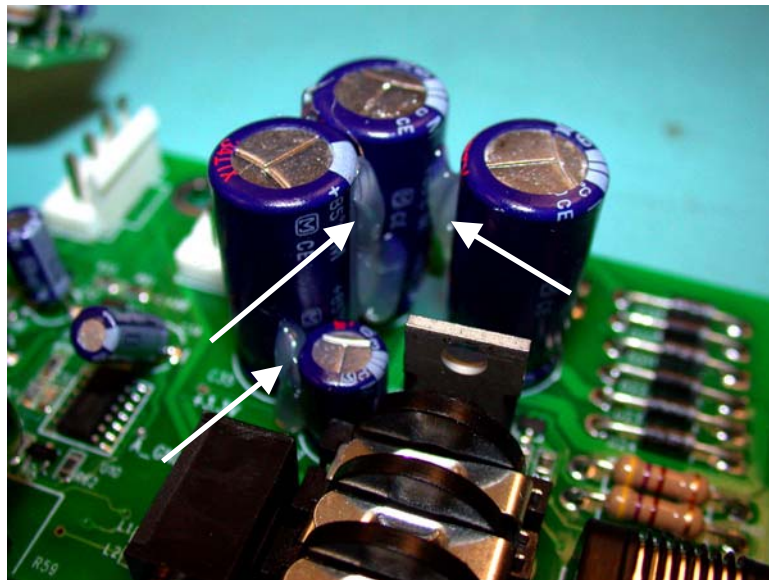
5. **GROUNDING FINGERS:** Grounding fingers GF1-3 (30-18-3030) are mounted flush against the PCB edge. It is mounted with its center clip hole on the **BOTTOM SIDE** of the PCB. The “curl” of the grounding finger should curve toward the Top side. **It should then be manually soldered on the BOTTOM SIDE.**



LINE 6
Engineering



6. **APPLY RTV TO ELECTROLYTIC CAPACITORS:** Apply RTV as shown below to C35-36, C38.



- END OF PCBA INSTRUCTIONS -



Engineering

SPIDER3 HD75

PCBA ASSEMBLY INSTRUCTIONS REVISION CHANGE HISTORY

REVISION	NOTES	DATE	RELEASED BY
X0	- Initial Release - For Rev X0 Prototype Build.	11/23/05	Alex Monge

99-010-2705 A8-1 SPIDER 3 75 US 120V			
Part Number	Description	Qty. Per	Reference Designator(s)
21-37-1160	CBL PWR UL/CSA SJT 8.2ft Bk EL-302 w/GND EL70	1	PACKOUT
40-00-0099	MANUAL USER SPIDER3 SERIES A8-1/A8-3/A8-4/A8-6	1	PACKOUT
59-00-0024-5	ASSY UNIT COMPLETE SPIDER3-112A8-1 US 120V	1	

59-00-0024-5 ASSY UNIT COMPLETE SPIDER3-112			
Part Number	Description	Qty. Per	Reference Designator(s)
11-20-0002	SPEAKER 12" 8-OHM CELESTION G12P-80 T5382	1	CABINET
21-34-0037	CBL ASSY 2 PIN 13.5 IN LG	1	SPEAKER OUT PCBA to SPEAKERS
30-00-0033	SCREW 10-24 x7/8 TRUSS HD PHH BLK	4	SPEAKERS to CABINET
30-00-0048	SCREW 10-32 x 1-IN OVAL CTSK PB STL	6	4 CABINET TOP-CHASSIS, 2 CABINET SIDES-CHASSIS
30-00-0675	SCREW WOOD NO 6 x 3/4" PHIL PHBLACK	2	LOGO MOUNTING PLATE to CABINET
30-00-0858	SCREW #8 x 5/8IN PHIL-TRUSS BLACK w/WAX	6	L-BRACKET to SPEAKER CABINET
30-00-9358	SCREW #3 x1/2 IN OVAL PHILLIPS BLACK (SUB FOR 30-00-0358)	2	LOGO to MOUNTING PLATE
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	6	CABINET TOP & SIDES-CHASSIS
30-27-0175	MOUNTING PLATE LOGO 9.4 x 1.8 x 0.26" ABS SILVER A8-SERIES	1	CABINET ASSY/CHASSIS
30-51-0242	BRACKET-L 18.9" x 1.0" x .60" GALVS A8-1 112	1	SPEAKER CABINET
30-60-0005	LOGO LINE 6 MED 139.70x28.63mmBRUSHED/BLK FINISH AL	1	MOUNTING PLATE
40-25-0020	LABEL INSPECTION QUALITY	1	
40-25-0095	STICKER SPEAKER-GRILL PROMO SPIDER3-112 A8-1	1	
50-03-0037	ASSY CABINET SPIDER3-112 A8-1	1	
50-04-0046-5	ASSY E/M CHASSIS SPIDER3-112 A8-1 US	1	

50-03-0037 ASSY CABINET SPIDER3-112			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0812	SCREW w/WAX 8 x 3/4 PTB	14	
30-00-1024	SCREW 10-24 x 1IN OVAL CTSK PPB STL WAXED	2	
30-00-8112	SCREW WOOD #8 x 1 1/2" OVAL PHH STL BLK OXIDE	3	
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	3	
30-06-1024	NUT-T 10-24 X 5/16 STEEL	6	
30-28-0002	CORNER LEFT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0003	CORNER RIGHT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0004	CORNER BACK HI-DENSITY POLYETHYLENE TEXTURED BLACK	6	
30-33-0032	CABINET MDF 5/8IN 20.375x10.5x17-IN SPIDER2-112	1	
30-36-0005	COVER VINYL TEXTURED BLACK SEMI-GLOSS	5.2	
30-39-0013	GRILL CLOTH BLACK SPIDER3	1.2	
30-57-0580	HANDLE/STRAP HEAVY DUTY BLACK	1	
30-57-0581	ENDCAPS BLACK TEXTURED FINISH	2	

50-04-0046-5 ASSY E/M CHASSIS SPIDER3-112			
Part Number	Description	Qty. Per	Reference Designator(s)
11-30-0006	XFMR 100/120VAC 50/60Hz 76mm 34VAC x 2 / 9.8VAC 1-CONNECTOR	1	CHASSIS
21-34-0044-1	CBL 18AWG 3PIN SIL .256 209.6 / .250-F FLAG 330.2mm/.250-RCPT	1	POWER SUPPLY to POWER SWITCH to AC RECEPTACLE
21-34-1015	CBL FSTN .187-RCPT/.250-F FLAG1-COND 161.34mm STRND 18AWG BK	1	AC SWITCH to AC RECEPTACLE
24-19-4025	FUSE 4A 125V TL 5x20mm Littlefuse# H239 004 or equiv.	1	AC RECEPTACLE FUSE CLIP
24-24-0606	SWITCH POWER ROCKER 6A/250VAC 10A/120VAC PNL-MNT BLK	1	CHASSIS
30-00-0018	SCREW SELF-TAP 6-32 x .75 PFZ	4	CHASSIS - HEATSINK
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	15	GND WIRE (1),MAIN PCBA (5),POWER SUPPLY PCBA (5) to CHASSIS,UI PCBA (4) TO CHASSIS
30-00-0111	SCREW #2 x 1/4 PAN HD PHILLIPSSTL	2	MOUNTING LCD MODULE ONTO E/M CHASSIS
30-00-1033	SCREW 10-32 x 3/8IN SCH STL BLK OXIDE	4	F/T to CHASSIS
30-00-6103	NUT HEX M9-0.75 ZINC	10	F/T to CHASSIS - POTS
30-06-0832	NUT .335 HEX 8-32 STL ZINC W/ TOOTH WASHER	4	TRANSFORMER - CHASSIS
30-24-0003	CABLE-TIE 4" CLEAR	4	
30-27-0170	PANEL FRONT 18.9 x 2.8 x .66- IN ABS SPIDER3-112 A8-1	1	CHASSIS
30-27-0213	BUTTON 4 WAY 1.0" x 1.0" x .4"SHORT LEG ABS BLACK A8-1/3/4/6	1	USER INTERFACE PCBA
30-27-0214	SUPPORT 4 WAY BUTTON .75" x .75" x .7" ABS BLACK (A8-3,4,6)	1	USER INTERFACE PCBA
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	10	FRONT PANEL - POTS
30-51-0241	CHASSIS 18.9 x 6.9 x 3.2" STL A8-1 SPIDER3-112	1	
30-63-0010	FOAM w/ADHSV 26.5x 1/4x 1/16INVOLARAPOLELEFIN	5	CHASSIS
30-63-0010	FOAM w/ADHSV 26.5x 1/4x 1/16INVOLARAPOLELEFIN	5	CHASSIS
30-75-0037	KEYPAD RUBBER 8.5" x .79" x .12" A8-1/3/4/6	1	USER INTERFACE PCBA
30-75-9600	GROMMET RUBBER 7/16-D x 1/16-GRV x 3/4" GRV-DIA BLK	1	CHASSIS - SPEAKER WIRES
40-25-0015	LABEL GROUND SYMBOL	1	CHASSIS - INSIDE BY GND WIRE
50-00-0001	ASSY RECEPTACLE-A/C w/GND WIRE SNAP-IN	1	CHASSIS
50-02-0217-1	PCBA POWER AMP w/HEATSINK SPIDER2 112-COMBO / A8-1	1	
50-02-0222	PCBA POWER SUPPLY SPIDER2/ SPIDER3 A8-1/3/4/6	1	
50-02-0308	PCBA MAIN SPIDER3 112/210/212 A8-1/3/4	1	
50-02-0308-1	PCBA GUITAR INPUT SPIDER3 112/210/212/HD150 A8-1/3/4/6	1	
50-02-0309	PCBA USER INTERFACE SPIDER3 112/210/212/HD150 A8	1	
50-02-0309-1	PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150 A8	1	
50-04-0050	ASSY E/M LCD MODULE 1x16 CHAR SPIDER3 A8-1/3/4/6	1	

50-02-0217-1 PCBA POWER AMP w/HEATSINK SPIDER2 112-COMBO			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0010	SCREW 8-32 x 9/16 SKT-CAP S-STL	1	HEATSINK CLAMPS
30-00-0028	SCREW 8-32 x 5/16" SHCS	1	SUPPORT BRACKET BR1
30-03-0002	WASHER #8 .293 x .174x .040 STEEL	2	(1)CLAMPS (1) SUPPORT BRK
30-06-0007	NUT .344 HEX 8-32 STEEL ZINC	2	(1)CLAMPS (1)SUPPORT BRK
30-51-0059-5	HEATSINK 2.0 IN LG AL ALY BLK ANODIZE	1	POWER AMP PCBA
30-51-0073	CLAMP HEATSINK TO-220 1.3x.45x.35" CR STEEL 1018	1	HEATSINK - POWER AMPS
30-51-0105	BRKT SUPPORT .565 x .530 x .690 EG STEEL	1	BR1
30-63-0006	PAD THERMAL 6mil 25mm x 30mm w/ADHESIVE 4KVAC VTM-O	1	HEATSINK - POWER AMP
50-02-0217	PCBA POWER AMP SPIDER2/SPIDER3112-COMBO A8-1	1	

50-02-0217		PCBA POWER AMP SPIDER2/SPIDER3112-COMBO	
Part Number	Description	Qty. Per	Reference Designator(s)
01-00-0103	RES 10K 5% 0805	1	R14
01-22-0R47	RES METAL OXIDE 0.47R 2W 5% TH	2	R7-8
01-23-02R2	RES METAL OXIDE 2.2R 3W 5% TH FORMED LEADS @ 20mm SPACING	1	R6.
01-24-1693	RES 169K 1% 0805	1	R9
01-60-0203	RES NETWORK ISOLATED 20K 16P 8R .3W 2% CER SOP-16 SM	1	R10
03-18-0336	CAP ELEC 33uF 50V 20% RADIAL 5/11/5	1	C16
03-18-1106	CAP ELEC 10uF 50V 20% BI-POLARRADIAL 6.3/11.2/5	1	C12
03-22-0476	CAP ELEC 47uF 100V 20% RADIAL 10/15/5	2	C8,C10
03-24-0564	CAP MET-POLY 0.56uF 100VDC 5% TH 4.5/7.5/7/5	1	C9.
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C13
03-52-0680	CAP X7R 68pF 50V 10% 0805	1	C11
03-52-1103	CAP X7R 10nF 100V 10% 0805	2	C14,C15
12-30-7293	IC POWER-AMP 100W TDA7293 TO-220/15 TH	1	U2
35-00-0217	PCB POWER AMP REV.B SPIDER2 112-COMBO	1	BREAKAWAY OF PWR SUPPLY

50-02-0222		PCBA POWER SUPPLY SPIDER2/ SPIDER3	
Part Number	Description	Qty. Per	Reference Designator(s)
01-12-0103	RES CARBON FILM 10K 1/4W 5% TH	1	R11
01-12-0473	RES CARBON FILM 47K 1/4W 5% TH	1	R12
01-20-0132	RES METAL OXIDE 1.3K 1W 5% TH S/B 01-21-0132	1	R13
03-00-0104	CAP CER DISC 100nF 50V 20% TH (0.1uF)	2	C27,C28
03-12-0688	CAP ELEC 6800uF 16V 20% RADIAL18/35.5/7.5	1	C21
03-18-0478	CAP ELEC 4700uF 50V 20% SNAPINRADIAL 25/40/10 OR 22/35/10__	2	C18,C19
03-36-0102	CAP ESTR 1nF 100V 5% TH 7.2/2.5/6.5/5	2	C29,C30
03-41-0224	CAP X-CAP 0.22uF 275VAC 20% POLYPROPYLENE 18/9.5/17.5/15	0	C17
03-75-0102	CAP Y-CAP 1nF 250VAC 20% TH CER DISC 7D/7/7.5	2	C22-23
06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	4	D2,D3,D6,D9
06-08-0820	DIODE ZENER 8.2V 5% 500mW DO-35 TH 1N5237B	1	D4
06-16-0008	DIODE BRIDGE-RECT 8A 600V 4-PIN SIL TH KBU8J	1	D1
09-00-5401	TRANS PNP SMALL-SIGNAL 2N5401 TH	1	Q1
11-10-2020	CHOKE WIDE BAND 1-5 TURNS ISI LB2/1.5ZA	2	L1,L2
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H6
21-20-1565	HDR SIL PCB-MT 5-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H4
21-20-3122	HDR SIL PCB-MT 2-PIN x 7.92mm MALE VERT-MNT FRIC-LOCK	1	H5
21-20-3123	HDR SIL PCB-MT 3-PIN X 7.92mm MALE VERT-MNT FRIC-LOCK	2	H2,H3
21-30-0012-2	CBL SIL 12-PIN 2.54 x 76.2mm 22 AWG S/T	1	J1A on power supply PCB to J1B on power amp break-away
21-30-0021	CBL DIL 10 PIN .100 PITCH 3.0 IN RIBBON STAKED TO FEMALE	1	H1
35-00-0222	PCB POWER SUPPLY REV.B SPIDER2/SPIDER3 112/210/212/HD150	1	

50-02-0308		PCBA MAIN SPIDER3 112/210/212	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	13	R4-R13,R56,R59,R71
01-24-1002	RES 10.0K 1% 0805	9	R14,R21,R22,R23,R29,R33,R34,R68,R69
01-24-1003	RES 100K 1% 0805	4	R36,R37,R50,R51
01-24-10R0	RES 10.0R 1% 0805	1	R70
01-24-1501	RES 1.50K 1% 0805	1	R38
01-24-1620	RES 162R 1% 0805	1	R72
01-24-2001	RES 2.00K 1% 0805	1	R39
01-24-2002	RES 20.0K 1% 0805	4	R28,R32,R66,R67
01-24-22R1	RES 22.1R 1% 0805	1	R55
01-24-4751	RES 4.75K 1% 0805	14	R2,R3,R15-R17,R47,R57,R58,R60,R61,R62,R63,R64,R65
01-24-4752	RES 47.5K 1% 0805	2	R18,R24
01-24-5110	RES 511R 1% 0805	1	R35
01-24-5R11	RES 5.11R 1% 0805	3	R19,R53,R54
01-24-6041	RES 6.04K 1% 0805	4	R25,R27,R30,R31
01-24-6190	RES 619R 1% 0805	1	R1
01-24-9091	RES 9.09K 1% 0805	2	R20,R26
03-10-0107	CAP ELEC 100uF 10V 20% RADIAL 6.3/8/5	1	C41
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	1	C63
03-10-0477	CAP ELEC 470uF 6.3V 20% RADIAL6.3/11/5	1	C5
03-10-6108	CAP ELEC 1000uF 6.3V 20% RADIAL 8/11.5/5	1	C20
03-12-0476	CAP ELEC 47uF 16V 20% RADIAL 6.3/11.2/5	1	C12
03-12-1477	CAP ELEC 470uF 16V 20% RADIAL 8/12/5	1	C31
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	4	C8,C15,C42,C44
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	9	C7,C14,C21,C22,C38,C39,C40,C47,C77
03-45-0332	CAP 3.3nF 50V 5% FILM 1206 SM	1	C58
03-52-0102	CAP X7R 1nF 50V 10% 0805	2	C32,C34
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	31	C1,C2,C4,C11,C13,C47,C54,C55,C56C57,C60,C61,C62,C65,C67,C68,C69,C70,C71,C72,C73,C74,C75,C76,C79,C80,C81,C84,C84,C86,C87
03-52-0221	CAP X7R 220pF 50V 10% 0805	2	C25,C28
03-52-0391	CAP X7R 390pF 50V 10% 0805	4	C26,C29,C30,C36
03-52-0473	CAP X7R 47nF 50V 10% 0805	13	C9,C16,C17,C18,C19,C23,C24,C27,C33,C35,C37,C50,C66
03-56-0180	CAP NPO 18pF 50V 5% 0603	2	C3,C49
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	1	D4
06-28-8468	DIODE ZENER 6.8V 5% 350mW SOT-23 SM BZX84C6V8	1	D7
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	9	D1-D3,D6,D8,D9,D12,D13,D14
09-06-7002	TRANS MOSFET N-CHAN 60V 7R5 SOT-23 SM 2N7002	4	Q1,Q2,Q3,Q4
11-00-1201	CRYSTAL 12MHZ SHORT-CAN HC49 TH	1	Y1
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	1	U6
12-02-1088	IC REG ADJ TO-220 TH LM1086CT /NOPB	1	U1
12-02-7805	IC REG +5v 1.5 Amp TH	1	U8
12-30-4880	IC POWER-AMP 250mW TI TPA6111A2DR 8-PIN JEDEC SM	2	U10,U11
12-54-0072	IC OP-AMP DUAL TL072CD SM	1	U3

50-02-0308		PCBA MAIN SPIDER3 112/210/212	
Part Number	Description	Qty. Per	Reference Designator(s)
12-54-0084	IC OP AMP QUAD TL084CD SM	1	U12
12-62-0053	IC SWITCH-ANALOG TRIPLE 2-CHANTSSOP-16 SM 74HC4053B	1	U4
12-64-4528	IC CONVERTER 24B 48/96KHz AUDIO CODEC SM AK4528	1	U13
15-64-0273	IC 74HCT273 FLIP-FLOP D-TYPE 8-BIT SO-20 SM	1	U16
15-65-0004	IC 74LVC04 LOW VOLTAGE CMOS HEX INVERTER SO-14 SM	1	U9
15-72-0001	IC SRAM-256K x 8 TSOP32 SM	1	U5
15-86-6362	IC DSP 24-BIT TQFP144 SM DSPB56362PV120	1	U7
21-20-0205	HDR SIL PCB-MT 5-PIN x 2mm MALE SHRD VERT MT TH	1	H6
21-20-1008	HDR SIL PCB-MT 8-PIN 1x8x .100MALE VERT MT TH	1	H4 (For Test Only)
21-20-2010	HDR DIL PCB-MT 10-PIN 2x5x100 MALE SHRD VERT	1	H1
21-21-0060	HDR DIL PCB-MT 60PIN 2x30x.100" MALE SHRD VERT MT TH	1	H7
21-30-0030-1	CABLE RIBBON SIL 9-PIN 2.54mm x 101.6mm 26 AWG S/T (A8)	1	
30-00-0607	SCREW 6-32 x 7/16IN w/LK WASH PPZ STL	3	U1,U6,U8
30-12-0632	STANDOFF HEX .250 6-32 F-F 1IN-F AL	3	U1,U6,U8
30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	1	X1
35-00-0308	PCB MAIN SPIDER3-112/210/212/ HD150 A8 REV.B	1	
45-01-0027	IC PROGRAMMED MCU v1.03 SPIDER3 A8-1/3/4/6	1	U15
45-02-0029	IC PROGRAMMED FLASH v1.02 SPIDER3-COMBOS A8-1/3/4	1	U2

50-02-0308-1		PCBA GUITAR INPUT SPIDER3 112/210/212/HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES 0R 1% 0805	1	R48
01-24-1001	RES 1.00K 1% 0805	2	R40,R41
01-24-1002	RES 10.0K 1% 0805	2	R42-43
01-24-1004	RES 1.00M 1% 0805	1	R45
01-24-1502	RES 15.0K 1% 0805	1	R46
01-24-2002	RES 20.0K 1% 0805	2	R44,R73
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	2	C82,C83
03-52-0100	CAP X7R 10pF 50V 10% 0805	2	C167,C168
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	2	C46,C64
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C45
03-52-0473	CAP X7R 47nF 50V 10% 0805	2	C43,C51
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	1	D5
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	3	L6,L8,L9
12-54-0072	IC OP-AMP DUAL TL072CD SM	2	U3,U14
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J5
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J9
30-18-3030	CLIP GND PCB .30x.30x.07	1	GF1
35-00-0308-1	PCB GUITAR INPUT SPIDER3 112/210/212/HD150 A8 REV.B	1	

50-02-0309		PCBA USER INTERFACE SPIDER3 112/210/212/HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES 0R 1% 0805	2	R14,R15
01-24-4751	RES 4.75K 1% 0805	3	R11,R12,R13
01-48-6103	POT MONO 10KB LINEAR TAPER 25mm W/9mm NUT D-SHAFT	10	R1,R2,R3,R4,R5,R6,R7,R8,R9,R10
03-10-0477	CAP ELEC 470uF 6.3V 20% RADIAL6.3/11/5	1	C26
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	17	29
06-23-0340	DIODE SCHOTTKY 3A 40V SMA SM B340LA	2	D23,D24
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	3	D3,D4,D11
18-02-0001	LED YELLOW SUPERBRITE T1(3MM) TH WP7104SYC	5	D2,D5,D8,D16,D19
18-06-0002	LED RED/GRN 3-P COM CATH HI EFF 627/565nm TH	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
21-18-0002	TERMINAL SCREW PCB MOUNT RT ANGLE SNAP-IN TH	4	BR1,BR2,BR3,BR4
21-20-0023	HDR SIL PCB-MT 5-PIN 2.54mm MALE VERT MT TH	2	H1,H5 (See Assembly Instruction For The Detail How To Install From H1 to H6 & H5 to H7)
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	H9
21-30-0002-1	CBL RIBBON DIL 16-COND 2mm x 88.9mm 28AWG	1	(H9)
21-30-0031-1	CABLE DIL 60-PIN .100 PITCH x 3.0" RBN STAKED TO FEMALE A8	1	H4 to H7 Main PCBA
21-30-0032-1	CABLE SIL 5-PIN 2.54mm x 101.6mm 26 AWG S/T (A8)	2	
30-15-0018	SPACER LED .560 LG	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309	PCB USER INTERFACE SPIDER3- 112/210/212/HD150 A8 REV.B	1	

50-02-0309-1		PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	2	R16,R17
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	2	C11,C13
03-52-0102	CAP X7R 1nF 50V 10% 0805	5	C1,C3,C4,C5,C10
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	3	C6,C7,C8
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	2	D17,D18
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J4
21-16-0045	JACK RJ-45 8-PIN FEMALE PCB-MNT RT-ANG	1	J3
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309-1	PCB RJ45/HEADPHONE SPIDER3- 112/210/212/HD150 A8 REV.B	1	

50-04-0050		ASSY E/M LCD MODULE 1x16 CHAR SPIDER3	
Part Number	Description	Qty. Per	Reference Designator(s)
18-30-0004	DISPLAY LCD MODULE 1x16 CHAR 12-O'CLK POS-XMIS AMBR SPIDER3	1	
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	
30-27-0172	FRAME INNER LED 1.9" x .33" x .16" ABS NAT A8-1/3/4/6	1	
30-27-0173	FRAME LCD 2.4" x .78" x .35" ABS NAT A8-1/3/4/6	1	
30-27-0174	BEZEL 1.9" x .50" x .02" POLYCARBONATE A8-1/3/4/6	1	
30-75-0038	STRIP LCD CONDUCT RBR 25.4" x .30" x .06" NAT A8-1/3/4/6	1	

99-010-2805 A8-3 SPIDER 3 210 US 120V			
Part Number	Description	Qty. Per	Reference Designator(s)
21-37-1160	CBL PWR UL/CSA SJT 8.2ft Blk EL-302 w/GND EL70	1	PACKOUT
40-00-0099	MANUAL USER SPIDER3 SERIES A8-1/A8-3/A8-4/A8-6	1	PACKOUT
59-00-0025-5	ASSY UNIT COMPLETE SPIDER3-210A8-3 US 120V	1	

59-00-0025-5 ASSY UNIT COMPLETE SPIDER3-210A8-3 US 120V			
Part Number	Description	Qty. Per	Reference Designator(s)
11-20-0000	SPEAKER 10" 8-OHM CELESTION T5345	2	CABINET GRILL
21-34-0020-2	CBL SIL 4-PIN .156 x 15 IN	1	SPEAKER OUT PCBA to SPEAKERS
30-00-0033	SCREW 10-24 x7/8 TRUSS HD PHH BLK	8	SPEAKERS to CABINET
30-00-0048	SCREW 10-32 x 1-IN OVAL CTSK PB STL	6	4-CABINET TOP to CHASSIS, 2-CABINET SIDES to CHASSIS
30-00-0675	SCREW WOOD NO 6 x 3/4" PHIL PHBLACK	2	LOGO MOUNTING PLATE to CABINET
30-00-0858	SCREW #8 x 5/8IN PHIL-TRUSS BLACK w/WAX	6	L-BRACKET to SPEAKER CABINET
30-00-9358	SCREW #3 x1/2 IN OVAL PHILLIPS BLACK (SUB FOR 30-00-0358)	2	LOGO to MOUNTING PLATE
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	6	CABINET TOP & SIDES-CHASSIS
30-27-0175	MOUNTING PLATE LOGO 9.4 x 1.8 x 0.26" ABS SILVER A8-SERIES	1	CABINET ASSY/CHASSIS
30-51-0248	BRACKET L 21.7" x .96" x .60" GALVS A8-3 210	1	SPEAKER CABINET
30-60-0005	LOGO LINE 6 MED 139.70x28.63mmBRUSHED/BLK FINISH AL	1	MOUNTING PLATE
40-25-0020	LABEL INSPECTION QUALITY	1	REAR CHASSIS
40-25-0096	STICKER SPEAKER-GRILL PROMO SPIDER3-210 A8-3	1	
50-03-0039	ASSY CABINET SPIDER3-210 A8-3	1	
50-04-0047-5	ASSY E/M CHASSIS SPIDER3-210 A8-3 US	1	

50-03-0039 ASSY CABINET SPIDER3-210			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0812	SCREW w/WAX 8 x 3/4 PTB	14	CABINET ASSY-CONNER SCREWS
30-00-1024	SCREW 10-24 x 1IN OVAL CTSK PPB STL WAXED	2	CABINET ASSY-HANDLE SCREWS
30-00-8112	SCREW WOOD #8 x 1 1/2" OVAL PHH STL BLK OXIDE	3	CABINET ASSY-BAFFLE BOARD SIDES AND BOTTOM
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	3	CABINET ASSY-BAFFLE BOARD SIDES AND BOTTOM
30-06-1024	NUT-T 10-24 X 5/16 STEEL	10	CABINET ASSY-HANDLE & BAFFLE BOARD
30-28-0002	CORNER LEFT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	CABINET ASSY-FRONT LEFT CONNER
30-28-0003	CORNER RIGHT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	CABINET ASSY-FRONT RIGTH CONNER
30-28-0004	CORNER BACK HI-DENSITY POLYETHYLENE TEXTURED BLACK	6	CABINET ASSY-TOP BACK AND BOTTOM
30-33-0031	CABINET PARTICLE BOARD 5/8IN 23.15x10.5x17-IN SPIDER2-210	1	
30-36-0005	COVER VINYL TEXTURED BLACK SEMI-GLOSS	6	CABINET ASSY
30-39-0013	GRILL CLOTH BLACK SPIDER3	3	BAFFLE BOARD
30-57-0580	HANDLE/STRAP HEAVY DUTY BLACK	1	CABINET ASSY-TOP
30-57-0581	ENDCAPS BLACK TEXTURED FINISH	2	CABINET ASSY-TOP

50-04-0047-5 ASSY E/M CHASSIS SPIDER3-210 US			
Part Number	Description	Qty. Per	Reference Designator(s)
11-30-0008	XFMR 100/120VAC 34Vx2/9V 86mm SPIDER2-210/212/HD & A5-1/2	1	
21-34-0044-2	CBL 18AWG 3PIN SIL .256 273.0 / .250-F FLAG 381.0mm/.250-RCPT	1	POWER SUPPLY to POWER SWITCH to RECEPTACLE
21-34-1015	CBL FSTN .187-RCPT/.250-F FLAG1-COND 161.34mm STRND 18AWG BK	1	AC SWITCH to AC RECEPTACLE
24-19-4025	FUSE 4A 125V TL 5x20mm Littlefuse# H239 004 or equiv.	1	AC RECEPTACLE FUSE CLIP
24-24-0606	SWITCH POWER ROCKER 6A/250VAC 10A/120VAC PNL-MNT BLK	1	CHASSIS
30-00-0018	SCREW SELF-TAP 6-32 x .75 PFZ	4	CHASSIS - HEATSINK
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	15	GND WIRE (1),MAIN PCBA (5),POWER SUPPLY PCBA (5) to CHASSIS,UI PCBA (4) TO CHASSIS
30-00-0111	SCREW #2 x 1/4 PAN HD PHILLIPSSTL	2	MOUNTING LCD MODULE ONTO E/M CHASSIS
30-00-1033	SCREW 10-32 x 3/8IN SCH STL BLK OXIDE	4	F/T to CHASSIS
30-00-6103	NUT HEX M9-0.75 ZINC	10	F/T to CHASSIS - POTS
30-06-0832	NUT .335 HEX 8-32 STL ZINC W/ TOOTH WASHER	4	TRANSFORMER - CHASSIS
30-24-0003	CABLE-TIE 4" CLEAR	4	
30-27-0176	PANEL FRONT 21.7 x 2.8 x .66- IN ABS SPIDER3-210 A8-3	1	CHISSIS
30-27-0213	BUTTON 4 WAY 1.0" x 1.0" x .4"SHORT LEG ABS BLACK A8-1/3/4/6	1	USER INTERFACE PCBA
30-27-0214	SUPPORT 4 WAY BUTTON .75" x .75" x .7" ABS BLACK (A8-3,4,6)	1	USER INTERFACE PCBA
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	10	FRONT PANEL - POTS
30-51-0243	CHASSIS 21.7 x 6.9 x 3.2" STL A8-3 SPIDER3-210	1	
30-63-0010	FOAM w/ADHSV 26.5x 1/4x 1/16INVOLARAPOLELEFIN	5	CHASSIS
30-75-0037	KEYPAD RUBBER 8.5" x .79" x .12" A8-1/3/4/6	1	USER INTERFACE PCBA
30-75-9600	GROMMET RUBBER 7/16-D x 1/16-GRV x 3/4" GRV-DIA BLK	1	CHASSIS - SPEAKER WIRES
40-25-0015	LABEL GROUND SYMBOL	1	CHASSIS - INSIDE BY GND WIRE
50-00-0001	ASSY RECEPTACLE-A/C w/GND WIRE SNAP-IN	1	CHASSIS
50-02-0222	PCBA POWER SUPPLY SPIDER2/ SPIDER3 A8-1/3/4/6	1	
50-02-0226-1	PCBA POWER AMP w/HEATSINK SPIDER3 210 A8-3	1	
50-02-0308	PCBA MAIN SPIDER3 112/210/212 A8-1/3/4	1	
50-02-0308-1	PCBA GUITAR INPUT SPIDER3 112/210/212/HD150 A8-1/3/4/6	1	
50-02-0309	PCBA USER INTERFACE SPIDER3 112/210/212/HD150 A8	1	
50-02-0309-1	PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150 A8	1	
50-04-0050	ASSY E/M LCD MODULE 1x16 CHAR SPIDER3 A8-1/-3/-4/-6	1	

50-02-0222		PCBA POWER SUPPLY SPIDER2/ SPIDER3	
Part Number	Description	Qty. Per	Reference Designator(s)
01-12-0103	RES CARBON FILM 10K 1/4W 5% TH	1	R11
01-12-0473	RES CARBON FILM 47K 1/4W 5% TH	1	R12
01-20-0132	RES METAL OXIDE 1.3K 1W 5% TH S/B 01-21-0132	1	R13
03-00-0104	CAP CER DISC 100nF 50V 20% TH (0.1uF)	2	C27,C28
03-12-0688	CAP ELEC 6800uF 16V 20% RADIAL18/35.5/7.5	1	C21
03-18-0478	CAP ELEC 4700uF 50V 20% SNAPINRADIAL 25/40/10 OR 22/35/10 __	2	C18,C19
03-36-0102	CAP ESTR 1nF 100V 5% TH 7.2/2.5/6.5/5	2	C29,C30
03-41-0224	CAP X-CAP 0.22uF 275VAC 20% POLYPROPYLENE 18/9.5/17.5/15	0	C17
03-75-0102	CAP Y-CAP 1nF 250VAC 20% TH CER DISC 7D/7/7.5	2	C22,C23
06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	4	D2,D3,D6,D9
06-08-0820	DIODE ZENER 8.2V 5% 500mW DO-35 TH 1N5237B	1	D4
06-16-0008	DIODE BRIDGE-RECT 8A 600V 4-PIN SIL TH KBU8J	1	D1
09-00-5401	TRANS PNP SMALL-SIGNAL 2N5401 TH	1	Q1
11-10-2020	CHOKE WIDE BAND 1-5 TURNS ISI LB2/1.5ZA	2	L1,L2
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H6
21-20-1565	HDR SIL PCB-MT 5-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H4
21-20-3122	HDR SIL PCB-MT 2-PIN x 7.92mm MALE VERT-MNT FRIC-LOCK	1	H5
21-20-3123	HDR SIL PCB-MT 3-PIN X 7.92mm MALE VERT-MNT FRIC-LOCK	2	H2,H3
21-30-0012-2	CBL SIL 12-PIN 2.54 x 76.2mm 22 AWG S/T	1	J1A on power supply PCB to J1B on power amp break-away
21-30-0021	CBL DIL 10 PIN .100 PITCH 3.0 IN RIBBON STAKED TO FEMALE	1	H1
35-00-0222	PCB POWER SUPPLY REV.B SPIDER2/SPIDER3 112/210/212/HD150	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0226-1		PCBA POWER AMP w/HEATSINK SPIDER3 210	
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0010	SCREW 8-32 x 9/16 SKT-CAP S-STL	2	HEATSINK CLAMPS
30-00-0028	SCREW 8-32 x 5/16" SHCS	1	SUPPORT BRACKET BR1
30-03-0002	WASHER #8 .293 x .174x .040 STEEL	3	(2) CLAMPS (1) SUPPORT BRKT
30-06-0007	NUT .344 HEX 8-32 STEEL ZINC	3	(2) CLAMPS (1) SUPPORT BRKT
30-51-0059-3	HEATSINK 4.0 IN LG AL ALY BLK ANODIZE	1	POWER AMP PCBA
30-51-0073	CLAMP HEATSINK TO-220 1.3x.45x.35" CR STEEL 1018	2	HEATSINK - POWER AMPS
30-51-0105	BRKT SUPPORT .565 x .530 x .690 EG STEEL	1	BR1
30-63-0006	PAD THERMAL 6mil 25mm x 30mm w/ADHESIVE 4KVAC VTM-O	2	HEATSINK - POWER AMP
50-02-0226	PCBA POWER AMP SPIDER3 210 A8-3	1	

50-02-0226		PCBA POWER AMP SPIDER3 210	
Part Number	Description	Qty. Per	Reference Designator(s)
01-00-0103	RES 10K 5% 0805	2	R14,R15
01-12-0000	RES CARBON FILM 0R 1/4W 5% TH	1	JP1.
01-22-0R47	RES METAL OXIDE 0.47R 2W 5% TH	4	R3,R4,R7,R8
01-23-02R2	RES METAL OXIDE 2.2R 3W 5% TH FORMED LEADS @ 20mm SPACING	2	R5,R6.
01-24-1693	RES 169K 1% 0805	2	R1,R9
01-60-0203	RES NETWORK ISOLATED 20K 16P 8R .3W 2% CER SOP-16 SM	2	R2,R10
03-18-0336	CAP ELEC 33uF 50V 20% RADIAL 5/11/5	2	C6,C16
03-18-1106	CAP ELEC 10uF 50V 20% BI-POLARRADIAL 6.3/11.2/5	2	C2,C12
03-22-0476	CAP ELEC 47uF 100V 20% RADIAL 10/15/5	2	C8,C10
03-24-0564	CAP MET-POLY 0.56uF 100VDC 5% TH 4.5/7.5/7/5	2	C7,C9.
03-52-0470	CAP X7R 47pF 50V 10% 0805	2	C3,C13
03-52-0680	CAP X7R 68pF 50V 10% 0805	2	C1,C11
03-52-1103	CAP X7R 10nF 100V 10% 0805	4	C4,C5,C14,C15
12-30-7293	IC POWER-AMP 100W TDA7293 TO-220/15 TH	2	U1-2
35-00-0221	PCB POWER AMP REV.B SPIDER2/ SPIDER3 210/212/HD	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0308		PCBA MAIN SPIDER3 112/210/212	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	13	R4,R5,R6,R7,R8,R9,R10,R11,R12,R13,R56,R59,R71
01-24-1002	RES 10.0K 1% 0805	9	R14,R21,R22,R23,R29,R33,R34,R68,R69
01-24-1003	RES 100K 1% 0805	4	R36,R37,R50,R51
01-24-10R0	RES 10.0R 1% 0805	1	R70
01-24-1501	RES 1.50K 1% 0805	1	R38
01-24-1620	RES 162R 1% 0805	1	R72
01-24-2001	RES 2.00K 1% 0805	1	R39
01-24-2002	RES 20.0K 1% 0805	4	R28,R32,R66,R67
01-24-22R1	RES 22.1R 1% 0805	1	R55
01-24-4751	RES 4.75K 1% 0805	14	R2,R3,R15-R17,R47,R57,R58,R60,R61,R62,R63,R64,R65
01-24-4752	RES 47.5K 1% 0805	2	R18,R24
01-24-5110	RES 511R 1% 0805	1	R35
01-24-5R11	RES 5.11R 1% 0805	3	R19,R53,R54
01-24-6041	RES 6.04K 1% 0805	4	R25,R27,R30,R31
01-24-6190	RES 619R 1% 0805	1	R1
01-24-9091	RES 9.09K 1% 0805	2	R20,R26
03-10-0107	CAP ELEC 100uF 10V 20% RADIAL 6.3/8/5	1	C41
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	1	C63
03-10-0477	CAP ELEC 470uF 6.3V 20% RADIAL6.3/11/5	1	C5
03-10-6108	CAP ELEC 1000uF 6.3V 20% RADIAL 8/11.5/5	1	C20
03-12-0476	CAP ELEC 47uF 16V 20% RADIAL 6.3/11.2/5	1	C12
03-12-1477	CAP ELEC 470uF 16V 20% RADIAL 8/12/5	1	C31
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	4	C8,C15,C42,C44

50-02-0308 PCBA MAIN SPIDER3 112/210/212			
Part Number	Description	Qty. Per	Reference Designator(s)
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	9	C7,C14,C21,C22,C38,C39,C40,C47,C77
03-45-0332	CAP 3.3nF 50V 5% FILM 1206 SM	1	C58
03-52-0102	CAP X7R 1nF 50V 10% 0805	2	C32,C34
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	31	C1,C2,C4,C11,C13,C47,C54,C55,C56C57,C60,C61,C62,C65,C67,C68,C69,C70,C71,C72,C73,C74,C75,C76,C79,C80,C81,C84,C84,C86,C87
03-52-0221	CAP X7R 220pF 50V 10% 0805	2	C25,C28
03-52-0391	CAP X7R 390pF 50V 10% 0805	4	C26,C29,C30,C36
03-52-0473	CAP X7R 47nF 50V 10% 0805	13	C9,C16,C17,C18,C19,C23,C24,C27,C33,C35,C37,C50,C66
03-56-0180	CAP NPO 18pF 50V 5% 0603	2	C3,C49
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	1	D4
06-28-8468	DIODE ZENER 6.8V 5% 350mW SOT-23 SM BZX84C6V8	1	D7
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	9	D1,D2,D3,D6,D8,D9,D12,D13,D14
09-06-7002	TRANS MOSFET N-CHAN 60V 7R5 SOT-23 SM 2N7002	4	Q1,Q2,Q3,Q4
11-00-1201	CRYSTAL 12MHZ SHORT-CAN HC49 TH	1	Y1
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	1	U6
12-02-1088	IC REG ADJ TO-220 TH LM1086CT /NOPB	1	U1
12-02-7805	IC REG +5v 1.5 Amp TH	1	U8
12-30-4880	IC POWER-AMP 250mW TI TPA6111A2DR 8-PIN JEDEC SM	2	U10,U11
12-54-0072	IC OP-AMP DUAL TL072CD SM	1	U3

50-02-0308 PCBA MAIN SPIDER3 112/210/212			
Part Number	Description	Qty. Per	Reference Designator(s)
12-54-0084	IC OP AMP QUAD TL084CD SM	1	U12
12-62-0053	IC SWITCH-ANALOG TRIPLE 2-CHANTSSOP-16 SM 74HC4053B	1	U4
12-64-4528	IC CONVERTER 24B 48/96KHz AUDIO CODEC SM AK4528	1	U13
15-64-0273	IC 74HCT273 FLIP-FLOP D-TYPE 8-BIT SO-20 SM	1	U16
15-65-0004	IC 74LVC04 LOW VOLTAGE CMOS HEX INVERTER SO-14 SM	1	U9
15-72-0001	IC SRAM-256K x 8 TSOP32 SM	1	U5
15-86-6362	IC DSP 24-BIT TQFP144 SM DSPB56362PV120	1	U7
21-20-0205	HDR SIL PCB-MT 5-PIN x 2mm MALE SHRD VERT MT TH	1	H6
21-20-1008	HDR SIL PCB-MT 8-PIN 1x8x .100MALE VERT MT TH	1	H4 (For Test Only)
21-20-2010	HDR DIL PCB-MT 10-PIN 2x5x100 MALE SHRD VERT	1	H1
21-21-0060	HDR DIL PCB-MT 60PIN 2x30x.100" MALE SHRD VERT MT TH	1	H7
21-30-0030-1	CABLE RIBBON SIL 9-PIN 2.54mm x 101.6mm 26 AWG S/T (A8)	1	
30-00-0607	SCREW 6-32 x 7/16IN w/LK WASH PPZ STL	3	U1,U6,U8
30-12-0632	STANDOFF HEX .250 6-32 F-F 1INF-F AL	3	U1,U6,U8
30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	1	X1
35-00-0308	PCB MAIN SPIDER3-112/210/212/ HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)
45-01-0027	IC PROGRAMMED MCU v1.03 SPIDER3 A8-1/3/4/6	1	U15
45-02-0029	IC PROGRAMMED FLASH v1.02 SPIDER3-COMBOS A8-1/3/4	1	U2

50-02-0308-1 PCBA GUITAR INPUT SPIDER3 112/210/212/HD150			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES 0R 1% 0805	1	R48
01-24-1001	RES 1.00K 1% 0805	2	R40,R41
01-24-1002	RES 10.0K 1% 0805	2	R42-43
01-24-1004	RES 1.00M 1% 0805	1	R45
01-24-1502	RES 15.0K 1% 0805	1	R46
01-24-2002	RES 20.0K 1% 0805	2	R44,R73
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	2	C82,C83
03-52-0100	CAP X7R 10pF 50V 10% 0805	2	C167,C168
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	2	C46,C64
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C45
03-52-0473	CAP X7R 47nF 50V 10% 0805	2	C43,C51
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	1	D5
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	3	L6,L8,L9
12-54-0072	IC OP-AMP DUAL TL072CD SM	2	U3,U14
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J5
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J9
30-18-3030	CLIP GND PCB .30x.30x.07	1	GF1
35-00-0308-1	PCB GUITAR INPUT SPIDER3 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0309 PCBA USER INTERFACE SPIDER3 112/210/212/HD150			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES 0R 1% 0805	2	R14,R15
01-24-4751	RES 4.75K 1% 0805	3	R11,R12,R13
01-48-6103	POT MONO 10KB LINEAR TAPER 25mm W/9mm NUT D-SHAFT	10	R1,R2,R3,R4,R5,R6,R7,R8,R9,R10
03-10-0477	CAP ELEC 470uF 6.3V 20% RADIAL6.3/11/5	1	C26
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	17	9
06-23-0340	DIODE SCHOTTKY 3A 40V SMA SM B340LA	2	D23,D24
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	3	D3,D4,D11
18-02-0001	LED YELLOW SUPERBRITE T1(3MM) TH WP7104SYC	5	D2,D5,D8,D16,D19
18-06-0002	LED RED/GRN 3-P COM CATH HI EFF 627/565nm TH	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
21-18-0002	TERMINAL SCREW PCB MOUNT RT ANGLE SNAP-IN TH	4	BR1,BR2,BR3,BR4
21-20-0023	HDR SIL PCB-MT 5-PIN 2.54mm MALE VERT MT TH	2	H1,H5 (See Assembly Instruction For The Detail How To Install From H1 to H6 & H5 to H7)
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	H9
21-30-0002-1	CBL RIBBON DIL 16-COND 2mm x 88.9mm 28AWG	1	(H9)
21-30-0031-1	CABLE DIL 60-PIN .100 PITCH x 3.0" RBN STAKED TO FEMALE A8	1	H4 to H7 Main PCBA
21-30-0032-1	CABLE SIL 5-PIN 2.54mm x 101.6mm 26 AWG S/T (A8)	2	
30-15-0018	SPACER LED .560 LG	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309	PCB USER INTERFACE SPIDER3- 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0309-1 PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	2	R16,R17
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	2	C11,C13
03-52-0102	CAP X7R 1nF 50V 10% 0805	5	C1,C3,C4,C5,C10
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	3	C6,C7,C8
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	2	D17,D18
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J4
21-16-0045	JACK RJ-45 8-PIN FEMALE PCB-MNT RT-ANG	1	J3
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309-1	PCB RJ45/HEADPHONE SPIDER3- 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-04-0050 ASSY E/M LCD MODULE 1x16 CHAR SPIDER3			
Part Number	Description	Qty. Per	Reference Designator(s)
18-30-0004	DISPLAY LCD MODULE 1x16 CHAR 12-O'CLK POS-XMIS AMBR SPIDER3	1	
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	
30-27-0172	FRAME INNER LED 1.9" x .33" x .16" ABS NAT A8-1/3/4/6	1	
30-27-0173	FRAME LCD 2.4" x .78" x .35" ABS NAT A8-1/3/4/6	1	
30-27-0174	BEZEL 1.9" x .50" x .02" POLYCARBONATE A8-1/3/4/6	1	
30-75-0038	STRIP LCD CONDUCT RBR 25.4" x .30" x .06" NAT A8-1/3/4/6	1	

99-010-2905		A8-4 SPIDER 3 150 US 120V	
Part Number	Description	Qty. Per	Reference Designator(s)
21-37-1160	CBL PWR UL/CSA SJT 8.2ft Blk EL-302 w/GND EL70	1	PACKOUT
40-00-0099	MANUAL USER SPIDER3 SERIES A8-1/A8-3/A8-4/A8-6	1	PACKOUT
59-00-0026-5	ASSY UNIT COMPLETE SPIDER3-212A8-4 US 120V	1	

59-00-0026-5		ASSY UNIT COMPLETE SPIDER 3-212 US 120V	
Part Number	Description	Qty. Per	Reference Designator(s)
11-20-0002	SPEAKER 12" 8-OHM CELESTION G12P-80 T5382	2	CABINET GRILL
21-34-0020-2	CBL SIL 4-PIN .156 x 15 IN	1	SPEAKER OUT PCBA to SPEAKERS
30-00-0033	SCREW 10-24 x7/8 TRUSS HD PHH BLK	8	SPEAKERS to CABINET
30-00-0048	SCREW 10-32 x 1-IN OVAL CTSK PB STL	6	4 CABINET TOP-CHASSIS, 2 CABINET SIDES-CHASSIS
30-00-0675	SCREW WOOD NO 6 x 3/4" PHIL PHBLACK	2	LOGO MOUNTING PLATE to CABINET
30-00-0858	SCREW #8 x 5/8IN PHIL-TRUSS BLACK w/WAX	6	L-BRACKET to SPEAKER CABINET
30-00-9358	SCREW #3 x1/2 IN OVAL PHILLIPS BLACK (SUB FOR 30-00-0358)	2	LOGO to MOUNTING PLATE
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	6	CABINET TOP & SIDES-CHASSIS
30-27-0175	MOUNTING PLATE LOGO 9.4 x 1.8 x 0.26" ABS SILVER A8-SERIES	1	CABINET ASSY/CHASSIS
30-51-0249	BRACKET L 24.8" x .96" x .60" GALVS A8-4 212	1	SPEAKER CABINET
30-60-0005	LOGO LINE 6 MED 139.70x28.63mmBRUSHED/BLK FINISH AL	1	MOUNTING PLATE
40-25-0020	LABEL INSPECTION QUALITY	1	
40-25-0097	STICKER SPEAKER-GRILL PROMO SPIDER3-212 A8-4	1	
40-25-0107	STICKER SPEAKER-GRILL PRESETS SPIDER3 COMBOS A8-1/A8-3/A8-4	1	
50-03-0040	ASSY CABINET SPIDER3-212 A8-4	1	
50-04-0048-5	ASSY E/M CHASSIS SPIDER3-212 A8-4 US	1	

50-03-0040		ASSY CABINET SPIDER 3-212	
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0812	SCREW w/WAX 8 x 3/4 PTB	14	CABINET ASSY-CONNER SCREWS
30-00-1024	SCREW 10-24 x 1IN OVAL CTSK PPB STL WAXED	2	CABINET ASSY-HANDLE SCREWS
30-00-8112	SCREW WOOD #8 x 1 1/2" OVAL PHH STL BLK OXIDE	3	CABINET ASSY-BAFFLE BOARD SIDES AND BOTTOM
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	3	CABINET ASSY-BAFFLE BOARD SIDES AND BOTTOM
30-06-1024	NUT-T 10-24 X 5/16 STEEL	10	CABINET ASSY-HANDLE & BAFFLE BOARD
30-28-0002	CORNER LEFT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	CABINET ASSY-FRONT LEFT CORNER
30-28-0003	CORNER RIGHT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	CABINET ASSY-FRONT RIGHT CORNER
30-28-0004	CORNER BACK HI-DENSITY POLYETHYLENE TEXTURED BLACK	6	CABINET ASSY-TOP BACK AND BOTTOM
30-33-0030	CABINET PARTICLE BOARD 5/8IN 26.19x10.5x20-IN SPIDER2-212	1	
30-36-0005	COVER VINYL TEXTURED BLACK SEMI-GLOSS	6	CABINET ASSY
30-39-0013	GRILL CLOTH BLACK SPIDER3	3	BAFFLE BOARD
30-57-0580	HANDLE/STRAP HEAVY DUTY BLACK	1	CABINET ASSY-TOP
30-57-0581	ENDCAPS BLACK TEXTURED FINISH	2	CABINET ASSY-TOP

50-04-0048-5 ASSY E/M CHASSIS SPIDER 3-212			
Part Number	Description	Qty. Per	Reference Designator(s)
11-30-0008	XFMR 100/120VAC 34Vx2/9V 86mm SPIDER2-210/212/HD & A5-1/2	1	CHASSIS
21-34-0044-2	CBL 18AWG 3PIN SIL .256 273.0 / .250-F FLAG 381.0mm/.250-RCPT	1	POWER SUPPLY to POWER SWITCH to RECEPTACLE
21-34-1015	CBL FSTN .187-RCPT/.250-F FLAG1-COND 161.34mm STRND 18AWG BK	1	AC SWITCH to AC RECEPTACLE
24-19-4025	FUSE 4A 125V TL 5x20mm Littlefuse# H239 004 or equiv.	1	AC RECEPTACLE FUSE CLIP
24-24-0606	SWITCH POWER ROCKER 6A/250VAC 10A/120VAC PNL-MNT BLK	1	CHASSIS
30-00-0018	SCREW SELF-TAP 6-32 x .75 PFZ	4	CHASSIS - HEATSINK
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	15	GND WIRE (1),MAIN PCBA (5),POWER SUPPLY PCBA (5) to CHASSIS,UI PCBA (4) TO CHASSIS
30-00-0111	SCREW #2 x 1/4 PAN HD PHILLIPSSTL	2	MOUNTING LCD MODULE ONTO E/M CHASSIS
30-00-1033	SCREW 10-32 x 3/8IN SCH STL BLK OXIDE	4	F/T to CHASSIS
30-00-6103	NUT HEX M9-0.75 ZINC	10	F/T to CHASSIS - POTS
30-06-0832	NUT .335 HEX 8-32 STL ZINC W/ TOOTH WASHER	4	TRANSFORMER - CHASSIS
30-24-0003	CABLE-TIE 4" CLEAR	4	
30-27-0177	PANEL FRONT 24.6 x 2.8 x .66" ABS A8-4/A8-6 212/HD150	1	CHASSIS
30-27-0213	BUTTON 4 WAY 1.0" x 1.0" x .4"SHORT LEG ABS BLACK A8-1/3/4/6	1	USER INTERFACE PCBA
30-27-0214	SUPPORT 4 WAY BUTTON .75" x .75" x .7" ABS BLACK (A8-3,4,6)	1	USER INTERFACE PCBA
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	10	FRONT PANEL - POTS
30-51-0244	CHASSIS 24.6 x 6.9 x 3.2" STL A8-4/A8-6 212/HD150	1	
30-63-0010	FOAM w/ADHSV 26.5x 1/4x 1/16INVOLARAPOLOLEFIN	5	CHASSIS
30-75-0037	KEYPAD RUBBER 8.5" x .79" x .12" A8-1/3/4/6	1	USER INTERFACE PCBA
30-75-9600	GROMMET RUBBER 7/16-D x 1/16-GRV x 3/4" GRV-DIA BLK	1	CHASSIS - SPEAKER WIRES
40-25-0015	LABEL GROUND SYMBOL	1	CHASSIS - INSIDE BY GND WIRE
50-00-0001	ASSY RECEPTACLE-A/C w/GND WIRE SNAP-IN	1	CHASSIS
50-02-0218	PCBA SPEAKER OUT SPIDER3 212/HD A8-4 A8-6	1	
50-02-0221-1	PCBA POWER AMP w/HEATSINK SPIDER3 212 A8-4	1	
50-02-0222	PCBA POWER SUPPLY SPIDER2/ SPIDER3 A8-1/3/4/6	1	
50-02-0308	PCBA MAIN SPIDER3 112/210/212 A8-1/3/4	1	
50-02-0308-1	PCBA GUITAR INPUT SPIDER3 112/210/212/HD150 A8-1/3/4/6	1	
50-02-0309	PCBA USER INTERFACE SPIDER3 112/210/212/HD150 A8	1	
50-02-0309-1	PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150 A8	1	
50-04-0050	ASSY E/M LCD MODULE 1x16 CHAR SPIDER3 A8-1/3/4/6	1	

50-02-0218 PCBA SPEAKER OUT SPIDER 3 212/HD			
Part Number	Description	Qty. Per	Reference Designator(s)
03-00-0104	CAP CER DISC 100nF 50V 20% TH (0.1uF)	2	C20,C25
03-36-0102	CAP ESTR 1nF 100V 5% TH 7.2/2.5/6.5/5	2	C24,C26
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	2	J5,J6
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H7
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF1,GF2
35-00-0218	PCB SPEAKER OUT REV.B SPIDER2/SPIDER3 212/HD	1	NOT AVAILABLE AS A REPLACEMENT PART (unpopulated pcb)

50-02-0221-1		PCBA POWER AMP w/HEATSINK SPIDER 3 212	
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0010	SCREW 8-32 x 9/16 SKT-CAP S-STL	2	HEATSINK CLAMPS
30-00-0028	SCREW 8-32 x 5/16" SHCS	1	SUPPORT BRACKET BR1
30-03-0002	WASHER #8 .293 x.174x .040 STEEL	3	(2) CLAMPS (1) SUPPORT BRKT
30-06-0007	NUT .344 HEX 8-32 STEEL ZINC	3	(2) CLAMPS (1) SUPPORT BRKT
30-51-0059-3	HEATSINK 4.0 IN LG AL ALY BLK ANODIZE	1	POWER AMP PCBA
30-51-0073	CLAMP HEATSINK TO-220 1.3x.45x.35" CR STEEL 1018	2	HEATSINK - POWER AMPS
30-51-0105	BRKT SUPPORT .565 x .530 x .690 EG STEEL	1	BR1
30-63-0006	PAD THERMAL 6mil 25mm x 30mm w/ADHESIVE 4KVC VTM-O	2	HEATSINK - POWER AMP
50-02-0221	PCBA POWER AMP SPIDER3 212 A8-4	1	
01-00-0103	RES 10K 5% 0805	2	R14,R15
01-12-0000	RES CARBON FILM 0R 1/4W 5% TH	1	JP1.
01-22-0R47	RES METAL OXIDE 0.47R 2W 5% TH	4	R3,R4,R7,R8
01-23-02R2	RES METAL OXIDE 2.2R 3W 5% TH FORMED LEADS @ 20mm SPACING	2	R5,R6.
01-24-1693	RES 169K 1% 0805	2	R1,R9
01-60-0203	RES NETWORK ISOLATED 20K 16P 8R .3W 2% CER SOP-16 SM	2	R2,R10
03-18-0336	CAP ELEC 33uF 50V 20% RADIAL 5/11/5	2	C6,C16
03-18-1106	CAP ELEC 10uF 50V 20% BI-POLARRADIAL 6.3/11.2/5	2	C2,C12
03-22-0476	CAP ELEC 47uF 100V 20% RADIAL 10/15/5	2	C8,C10
03-24-0564	CAP MET-POLY 0.56uF 100VDC 5% TH 4.5/7.5/7/5	2	C7,C9.
03-52-0470	CAP X7R 47pF 50V 10% 0805	2	C3,C13
03-52-0680	CAP X7R 68pF 50V 10% 0805	2	C1,C11
03-52-1103	CAP X7R 10nF 100V 10% 0805	4	C4,C5,C14,C15
12-30-7293	IC POWER-AMP 100W TDA7293 TO-220/15 TH	2	U1,U2
21-30-0011-2	CBL RIBBON SIL 6-PIN 2.54mm x 152.4mm 22 AWG S/T	1	J2A on power amp to J2B on speaker out
35-00-0221	PCB POWER AMP REV.B SPIDER2/ SPIDER3 210/212/HD	1	NOT AVAILABLE AS A REPLACEMENT PART (unpopulated pcb)

50-02-0222		PCBA POWER SUPPLY SPIDER2/ SPIDER3	
Part Number	Description	Qty. Per	Reference Designator(s)
01-12-0103	RES CARBON FILM 10K 1/4W 5% TH	1	R11
01-12-0473	RES CARBON FILM 47K 1/4W 5% TH	1	R12
01-20-0132	RES METAL OXIDE 1.3K 1W 5% TH S/B 01-21-0132	1	R13
03-00-0104	CAP CER DISC 100nF 50V 20% TH (0.1uF)	2	C27,C28
03-12-0688	CAP ELEC 6800uF 16V 20% RADIAL18/35.5/7.5	1	C21
03-18-0478	CAP ELEC 4700uF 50V 20% SNAPINRADIAL 25/40/10 OR 22/35/10	2	C18,C19
03-36-0102	CAP ESTR 1nF 100V 5% TH 7.2/2.5/6.5/5	2	C29,C30
03-41-0224	CAP X-CAP 0.22uF 275VAC 20% POLYPROPYLENE 18/9.5/17.5/15	0	C17
03-75-0102	CAP Y-CAP 1nF 250VAC 20% TH CER DISC 7D/7/7.5	2	C22,C23
06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	4	D2,D3,D6,D9
06-08-0820	DIODE ZENER 8.2V 5% 500mW DO-35 TH 1N5237B	1	D4
06-16-0008	DIODE BRIDGE-RECT 8A 600V 4-PIN SIL TH KBU8J	1	D1
09-00-5401	TRANS PNP SMALL-SIGNAL 2N5401 TH	1	Q1
11-10-2020	CHOKE WIDE BAND 1-5 TURNS ISI LB2/1.5ZA	2	L1,L2
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H6
21-20-1565	HDR SIL PCB-MT 5-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H4
21-20-3122	HDR SIL PCB-MT 2-PIN x 7.92mm MALE VERT-MNT FRIC-LOCK	1	H5
21-20-3123	HDR SIL PCB-MT 3-PIN x 7.92mm MALE VERT-MNT FRIC-LOCK	2	H2,H3
21-30-0012-2	CBL SIL 12-PIN 2.54 x 76.2mm 22 AWG S/T	1	J1A on power supply PCB to J1B on power amp break-away
21-30-0021	CBL DIL 10 PIN .100 PITCH 3.0 IN RIBBON STAKED TO FEMALE	1	H1
35-00-0222	PCB POWER SUPPLY REV.B SPIDER2/SPIDER3 112/210/212/HD150	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0308		PCBA MAIN SPIDER3 112/210/212	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	13	R4,R5,R6,R7,R8,R9,R10,R11,R12,R13,R56,R59,R71
01-24-1002	RES 10.0K 1% 0805	9	R14,R21,R22,R23,R29,R33,R34,R68,R69
01-24-1003	RES 100K 1% 0805	4	R36,R37,R50,R51
01-24-10R0	RES 10.0R 1% 0805	1	R70
01-24-1501	RES 1.50K 1% 0805	1	R38
01-24-1620	RES 162R 1% 0805	1	R72
01-24-2001	RES 2.00K 1% 0805	1	R39
01-24-2002	RES 20.0K 1% 0805	4	R28,R32,R66,R67
01-24-22R1	RES 22.1R 1% 0805	1	R55
01-24-4751	RES 4.75K 1% 0805	14	R2,R3,R15-R17,R47,R57,R58,R60,R61,R62,R63,R64,R65
01-24-4752	RES 47.5K 1% 0805	2	R18,R24
01-24-5110	RES 511R 1% 0805	1	R35
01-24-5R11	RES 5.11R 1% 0805	3	R19,R53,R54
01-24-6041	RES 6.04K 1% 0805	4	R25,R27,R30,R31
01-24-6190	RES 619R 1% 0805	1	R1
01-24-9091	RES 9.09K 1% 0805	2	R20,R26
03-10-0107	CAP ELEC 100uF 10V 20% RADIAL 6.3/8/5	1	C41
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	1	C63
03-10-0477	CAP ELEC 470uF 6.3V 20% RADIAL6.3/11/5	1	C5
03-10-6108	CAP ELEC 1000uF 6.3V 20% RADIAL 8/11.5/5	1	C20
03-12-0476	CAP ELEC 47uF 16V 20% RADIAL 6.3/11.2/5	1	C12
03-12-1477	CAP ELEC 470uF 16V 20% RADIAL 8/12/5	1	C31
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	4	C8,C15,C42,C44

50-02-0308		PCBA MAIN SPIDER3 112/210/212	
Part Number	Description	Qty. Per	Reference Designator(s)
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	9	C7,C14,C21,C22,C38,C39,C40,C47,C77
03-45-0332	CAP 3.3nF 50V 5% FILM 1206 SM	1	C58
03-52-0102	CAP X7R 1nF 50V 10% 0805	2	C32,C34
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	31	C1,C2,C4,C11,C13,C47,C54,C55,C56,C57,C60,C61,C62,C65,C67,C68,C69,C70,C71,C72,C73,C74,C75,C76,C79,C80,C81,C84,C84,C86,C87
03-52-0221	CAP X7R 220pF 50V 10% 0805	2	C25,C28
03-52-0391	CAP X7R 390pF 50V 10% 0805	4	C26,C29,C30,C36
03-52-0473	CAP X7R 47nF 50V 10% 0805	13	C9,C16,C17,C18,C19,C23,C24,C27,C33,C35,C37,C50,C66
03-56-0180	CAP NPO 18pF 50V 5% 0603	2	C3,C49
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	1	D4
06-28-8468	DIODE ZENER 6.8V 5% 350mW SOT-23 SM BZX84C6V8	1	D7
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	9	D1,D2,D3,D6,D8,D9,D12,D13,D14
09-06-7002	TRANS MOSFET N-CHAN 60V 7R5 SOT-23 SM 2N7002	4	Q1,Q2,Q3,Q4
11-00-1201	CRYSTAL 12MHZ SHORT-CAN HC49 TH	1	Y1
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	1	U6
12-02-1088	IC REG ADJ TO-220 TH LM1086CT /NOPB	1	U1
12-02-7805	IC REG +5v 1.5 Amp TH	1	U8
12-30-4880	IC POWER-AMP 250mW TI TPA6111A2DR 8-PIN JEDEC SM	2	U10,U11
12-54-0072	IC OP-AMP DUAL TL072CD SM	1	U3

50-02-0308		PCBA MAIN SPIDER3 112/210/212	
Part Number	Description	Qty. Per	Reference Designator(s)
12-54-0084	IC OP AMP QUAD TL084CD SM	1	U12
12-62-0053	IC SWITCH-ANALOG TRIPLE 2-CHANTSSOP-16 SM 74HC4053B	1	U4
12-64-4528	IC CONVERTER 24B 48/96KHz AUDIO CODEC SM AK4528	1	U13
15-64-0273	IC 74HCT273 FLIP-FLOP D-TYPE 8-BIT SO-20 SM	1	U16
15-65-0004	IC 74LVC04 LOW VOLTAGE CMOS HEX INVERTER SO-14 SM	1	U9
15-72-0001	IC SRAM-256K x 8 TSOP32 SM	1	U5
15-86-6362	IC DSP 24-BIT TQFP144 SM DSPB56362PV120	1	U7
21-20-0205	HDR SIL PCB-MT 5-PIN x 2mm MALE SHRD VERT MT TH	1	H6
21-20-1008	HDR SIL PCB-MT 8-PIN 1x8x .100MALE VERT MT TH	1	H4 (For Test Only)
21-20-2010	HDR DIL PCB-MT 10-PIN 2x5x100 MALE SHRD VERT	1	H1
21-21-0060	HDR DIL PCB-MT 60PIN 2x30x.100" MALE SHRD VERT MT TH	1	H7
21-30-0030-1	CABLE RIBBON SIL 9-PIN 2.54mm x 101.6mm 26 AWG S/T (A8)	1	
30-00-0607	SCREW 6-32 x 7/16IN w/LK WASH PPZ STL	3	U1,U6,U8
30-12-0632	STANDOFF HEX .250 6-32 F-F 1IN-F AL	3	U1,U6,U8
30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	1	X1
35-00-0308	PCB MAIN SPIDER3-112/210/212/ HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)
45-01-0027	IC PROGRAMMED MCU v1.03 SPIDER3 A8-1/3/4/6	1	U15
45-02-0029	IC PROGRAMMED FLASH v1.02 SPIDER3-COMBOS A8-1/3/4	1	U2

50-02-0308-1		PCBA GUITAR INPUT SPIDER3 112/210/212/HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES 0R 1% 0805	1	R48
01-24-1001	RES 1.00K 1% 0805	2	R40,R41
01-24-1002	RES 10.0K 1% 0805	2	R42-43
01-24-1004	RES 1.00M 1% 0805	1	R45
01-24-1502	RES 15.0K 1% 0805	1	R46
01-24-2002	RES 20.0K 1% 0805	2	R44,R73
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	2	C82,C83
03-52-0100	CAP X7R 10pF 50V 10% 0805	2	C167,C168
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	2	C46,C64
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C45
03-52-0473	CAP X7R 47nF 50V 10% 0805	2	C43,C51
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	1	D5
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	3	L6,L8,L9
12-54-0072	IC OP-AMP DUAL TL072CD SM	2	U3,U14
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J5
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J9
30-18-3030	CLIP GND PCB .30x.30x.07	1	GF1
35-00-0308-1	PCB GUITAR INPUT SPIDER3 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0309		PCBA USER INTERFACE SPIDER3 112/210/212/HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES OR 1% 0805	2	R14,R15
01-24-4751	RES 4.75K 1% 0805	3	R11,R12,R13
01-48-6103	POT MONO 10KB LINEAR TAPER 25mm W/9mm NUT D-SHAFT	10	R1,R2,R3,R4,R5,R6,R7,R8,R9,R10
03-10-0477	CAP ELEC 470uF 6.3V 20% RADIAL6.3/11/5	1	C26
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	17	C2,C9,C12,C14,C15,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C28,C29
06-23-0340	DIODE SCHOTTKY 3A 40V SMA SM B340LA	2	D23,D24
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	3	D3,D4,D11
18-02-0001	LED YELLOW SUPERBRITE T1(3MM) TH WP7104SYC	5	D2,D5,D8,D16,D19
18-06-0002	LED RED/GRN 3-P COM CATH HI EFF 627/565nm TH	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
21-18-0002	TERMINAL SCREW PCB MOUNT RT ANGLE SNAP-IN TH	4	BR1,BR2,BR3,BR4
21-20-0023	HDR SIL PCB-MT 5-PIN 2.54mm MALE VERT MT TH	2	H1,H5 (See Assembly Instruction For The Detail How To Install From H1 to H6 & H5 to H7)
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	H9
21-30-0002-1	CBL RIBBON DIL 16-COND 2mm x 88.9mm 28AWG	1	(H9)
21-30-0031-1	CABLE DIL 60-PIN .100 PITCH x 3.0" RBN STAKED TO FEMALE A8	1	H4 to H7 Main PCBA
21-30-0032-1	CABLE SIL 5-PIN 2.54mm x 101.6mm 26 AWG S/T (A8)	2	
30-15-0018	SPACER LED .560 LG	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309	PCB USER INTERFACE SPIDER3- 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0309-1		PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	2	R16,R17
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	2	C11,C13
03-52-0102	CAP X7R 1nF 50V 10% 0805	5	C1,C3,C4,C5,C10
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	3	C6,C7,C8
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	2	D17,D18
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J4
21-16-0045	JACK RJ-45 8-PIN FEMALE PCB-MNT RT-ANG	1	J3
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309-1	PCB RJ45/HEADPHONE SPIDER3- 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-04-0050		ASSY E/M LCD MODULE 1x16 CHAR SPIDER3	
Part Number	Description	Qty. Per	Reference Designator(s)
18-30-0004	DISPLAY LCD MODULE 1x16 CHAR 12-O'CLK POS-XMIS AMBR SPIDER3	1	
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	
30-27-0172	FRAME INNER LED 1.9" x .33" x .16" ABS NAT A8-1/3/4/6	1	
30-27-0173	FRAME LCD 2.4" x .78" x .35" ABS NAT A8-1/3/4/6	1	
30-27-0174	BEZEL 1.9" x .50" x .02" POLYCARBONATE A8-1/3/4/6	1	
30-75-0038	STRIP LCD CONDUC RBR 25.4" x .30" x .06" NAT A8-1/3/4/6	1	

99-020-1215 A8-6 SPIDER3 HD150 US 120V			
Part Number	Description	Qty. Per	Reference Designator(s)
21-37-1160	CBL PWR UL/CSA SJT 8.2ft Blk EL-302 w/GND EL70	1	PACKOUT
40-00-0099	MANUAL USER SPIDER3 SERIES A8-1/A8-3/A8-4/A8-6	1	PACKOUT
59-00-0027-5	ASSY UNIT COMPLETE SPIDER3- HD150 A8-6 US 120V	1	

59-00-0027-5 ASSY UNIT COMPLETE SPIDER3- HD150 US 120V			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0048	SCREW 10-32 x 1-IN OVAL CTSK PB STL	2	CABINET SIDES-CHASSIS
30-00-0675	SCREW WOOD NO 6 x 3/4" PHIL PHBLACK	2	LOGO MOUNTING PLATE to CABINET
30-00-1128	SCREW 10-32 x 1-3/4 OVAL CTSK PB STL	4	CABINET TOP-CHASSIS
30-00-9358	SCREW #3 x1/2 IN OVAL PHILLIPS BLACK (SUB FOR 30-00-0358)	2	LOGO to MOUNTING PLATE
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	6	CABINET TOP & SIDES-CHASSIS
30-27-0175	MOUNTING PLATE LOGO 9.4 x 1.8 x 0.26" ABS SILVER A8-SERIES	1	CABINET ASSY/CHASSIS
30-60-0005	LOGO LINE 6 MED 139.70x28.63mmBRUSHED/BLK FINISH AL	1	MOUNTING PLATE
40-25-0020	LABEL INSPECTION QUALITY	1	
40-25-0098	STICKER SPEAKER-GRILL PROMO SPIDER3-HD150 A8-6	1	
40-25-0108	STICKER SPEAKER-GRILL PRESETS SPIDER3-HD150 A8-6	1	
50-03-0042	ASSY CABINET SPIDER3-HD150 / HD75 A8-6, A8-7	1	
50-04-0059-5	ASSY E/M CHASSIS SPIDER3-HD150A8-6 US	1	

50-03-0042 ASSY CABINET SPIDER3-HD150 / HD75			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0812	SCREW w/WAX 8 x 3/4 PTB	14	
30-00-1024	SCREW 10-24 x 1IN OVAL CTSK PPB STL WAXED	2	
30-00-6839	SCREW WOOD 10-12 x 7/8" PPZ	4	Feet to Cabinet
30-00-8112	SCREW WOOD #8 x 1 1/2" OVAL PHH STL BLK OXIDE	5	
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	5	
30-06-1024	NUT-T 10-24 X 5/16 STEEL	2	
30-28-0002	CORNER LEFT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0003	CORNER RIGHT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0004	CORNER BACK HI-DENSITY POLYETHYLENE TEXTURED BLACK	6	
30-36-0005	COVER VINYL TEXTURED BLACK SEMI-GLOSS	5	
30-39-0013	GRILL CLOTH BLACK SPIDER3	1	
30-57-0580	HANDLE/STRAP HEAVY DUTY BLACK	1	
30-57-0581	ENDCAPS BLACK TEXTURED FINISH	2	
30-75-0008	FOOT RUBBER 1.50" I.D. x .75"HBLACK	4	

50-04-0059-5 ASSY E/M CHASSIS SPIDER3-HD 150W			
Part Number	Description	Qty. Per	Reference Designator(s)
11-30-0008	XFMR 100/120VAC 34Vx2/9V 86mm SPIDER2-210/212/HD & A5-1/2	1	CHASSIS
21-34-0044-2	CBL 18AWG 3PIN SIL .256 273.0 /250-F FLAG 381.0mm/.250-RCPT	1	POWER SUPPLY to POWER SWITCH to AC RECEPTACLE
21-34-1015	CBL FSTN .187-RCPT/.250-F FLAG1-COND 161.34mm STRND 18AWG BK	1	AC SWITCH to AC RECEPTACLE
24-19-4025	FUSE 4A 125V TL 5x20mm Littlefuse# H239 004 or equiv.	1	AC RECEPTACLE FUSE CLIP
24-24-0606	SWITCH POWER ROCKER 6A/250VAC 10A/120VAC PNL-MNT BLK	1	CHASSIS
30-00-0018	SCREW SELF-TAP 6-32 x .75 PFZ	4	CHASSIS-HEATSINK
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	15	GND WIRE (1),MAIN PCBA (5),POWER SUPPLY PCBA (5) to CHASSIS,UI PCBA (40 TO CHASSIS
30-00-0111	SCREW #2 x 1/4 PAN HD PHILLIPSSTL	2	MOUNTING LCD MODULE ONTO E/M CHASSIS
30-00-1033	SCREW 10-32 x 3/8IN SCH STL BLK OXIDE	4	F/T to CHASSIS
30-00-6103	NUT HEX M9-0.75 ZINC	10	F/T to CHASSIS-POT
30-06-0832	NUT .335 HEX 8-32 STL ZINC W/ TOOTH WASHER	4	TRANSFORMER-CHASSIS
30-24-0003	CABLE-TIE 4" CLEAR	4	
30-27-0177-2	PANEL FRONT 24.6 x 2.8 x .66" ABS SPIDER3-HD150 A8-6	1	CHASSIS
30-27-0213	BUTTON 4 WAY 1.0" x 1.0" x .4"SHORT LEG ABS BLACK A8-1/3/4/6	1	USER INTERFACE PCBA
30-27-0214	SUPPORT 4 WAY BUTTON .75" x .75" x .7" ABS BLACK (A8-3,4,6)	1	USER INTERFACE PCBA
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	10	FRONT PANEL-POTS
30-51-0244	CHASSIS 24.6 x 6.9 x 3.2" STL A8-4/A8-6 212/HD150	1	
30-63-0010	FOAM w/ADHSV 26.5x 1/4x 1/16INVOLARAPOLEFIN	5	CHASSIS
30-75-0037	KEYPAD RUBBER 8.5" x .79" x .12" A8-1/3/4/6	1	USER INTERFACE PCBA
30-75-9600	GROMMET RUBBER 7/16-D x 1/16-GRV x 3/4" GRV-DIA BLK	1	CHASSIS-SPEAKER WIRES
40-25-0015	LABEL GROUND SYMBOL	1	CHASSIS-INSIDE BY GND WIRE
50-00-0001	ASSY RECEPTACLE-A/C w/GND WIRE SNAP-IN	1	CHASSIS
50-02-0218	PCBA SPEAKER OUT SPIDER3 212/HD A8-4 A8-6	1	
50-02-0222	PCBA POWER SUPPLY SPIDER2/ SPIDER3 A8-1/3/4/6	1	
50-02-0227-1	PCBA POWER AMP w/HEATSINK SPIDER3 HD150 A8-6	1	
50-02-0308-1	PCBA GUITAR INPUT SPIDER3 112/210/212/HD150 A8-1/3/4/6	1	
50-02-0309	PCBA USER INTERFACE SPIDER3 112/210/212/HD150 A8	1	
50-02-0309-1	PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150 A8	1	
50-02-1308	PCBA MAIN SPIDER3-HD150 A8-6	1	
50-04-0050	ASSY E/M LCD MODULE 1x16 CHAR SPIDER3 A8-1/3-/4-/6	1	

50-02-0218 PCBA SPEAKER OUT SPIDER 3 212/HD			
Part Number	Description	Qty. Per	Reference Designator(s)
03-00-0104	CAP CER DISC 100nF 50V 20% TH (0.1uF)	2	C20,C25
03-36-0102	CAP ESTR 1nF 100V 5% TH 7.2/2.5/6.5/5	2	C24,C26
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	2	J5,J6
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H7
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF1,GF2
35-00-0218	PCB SPEAKER OUT REV.B SPIDER2/SPIDER3 212/HD	1	NOT AVAILABLE AS A REPLACEMENT PART (unpopulated pcb)

50-02-0222		PCBA POWER SUPPLY SPIDER2/ SPIDER3	
Part Number	Description	Qty. Per	Reference Designator(s)
01-12-0103	RES CARBON FILM 10K 1/4W 5% TH	1	R11
01-12-0473	RES CARBON FILM 47K 1/4W 5% TH	1	R12
01-20-0132	RES METAL OXIDE 1.3K 1W 5% TH S/B 01-21-0132	1	R13
03-00-0104	CAP CER DISC 100nF 50V 20% TH (0.1uF)	2	C27,C28
03-12-0688	CAP ELEC 6800uF 16V 20% RADIAL18/35.5/7.5	1	C21
03-18-0478	CAP ELEC 4700uF 50V 20% SNAPINRADIAL 25/40/10 OR 22/35/10	2	C18,C19
03-36-0102	CAP ESTR 1nF 100V 5% TH 7.2/2.5/6.5/5	2	C29,C30
03-41-0224	CAP X-CAP 0.22uF 275VAC 20% POLYPROPYLENE 18/9.5/17.5/15	0	C17
03-75-0102	CAP Y-CAP 1nF 250VAC 20% TH CER DISC 7D/7/7.5	2	C22,C23
06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	4	D2,D3,D6,D9
06-08-0820	DIODE ZENER 8.2V 5% 500mW DO-35 TH 1N5237B	1	D4
06-16-0008	DIODE BRIDGE-RECT 8A 600V 4-PIN SIL TH KBU8J	1	D1
09-00-5401	TRANS PNP SMALL-SIGNAL 2N5401 TH	1	Q1
11-10-2020	CHOKE WIDE BAND 1-5 TURNS ISI LB2/1.5ZA	2	L1,L2
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H6
21-20-1565	HDR SIL PCB-MT 5-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H4
21-20-3122	HDR SIL PCB-MT 2-PIN x 7.92mm MALE VERT-MNT FRIC-LOCK	1	H5
21-20-3123	HDR SIL PCB-MT 3-PIN x 7.92mm MALE VERT-MNT FRIC-LOCK	2	H2,H3
21-30-0012-2	CBL SIL 12-PIN 2.54 x 76.2mm 22 AWG S/T	1	J1A on power supply PCB to J1B on power amp break-away
21-30-0021	CBL DIL 10 PIN .100 PITCH 3.0 IN RIBBON STAKED TO FEMALE	1	H1
35-00-0222	PCB POWER SUPPLY REV.B SPIDER2/SPIDER3 112/210/212/HD150	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0227-1		PCBA POWER AMP w/HEATSINK SPIDER3 HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0010	SCREW 8-32 x 9/16 SKT-CAP S-STL	2	HEATSINK CLAMPS
30-00-0028	SCREW 8-32 x 5/16" SHCS	1	SUPPORT BRACKET BR1
30-03-0002	WASHER #8 .293 x.174x .040 STEEL	3	(2) CLAMPS (1) SUPPORT BRKT
30-06-0007	NUT .344 HEX 8-32 STEEL ZINC	3	(2) CLAMPS (1) SUPPORT BRKT
30-51-0059-3	HEATSINK 4.0 IN LG AL ALY BLK ANODIZE	1	POWER AMP PCBA
30-51-0073	CLAMP HEATSINK TO-220 1.3x.45x.35" CR STEEL 1018	2	HEATSINK - POWER AMPS
30-51-0105	BRKT SUPPORT .565 x .530 x .690 EG STEEL	1	BR1
30-63-0006	PAD THERMAL 6mil 25mm x 30mm w/ADHESIVE 4KVAC VTM-O	2	HEATSINK - POWER AMP
50-02-0227	PCBA POWER AMP SPIDER3 HD150 A8-6	1	
01-00-0103	RES 10K 5% 0805	2	R14-15
01-22-0R47	RES METAL OXIDE 0.47R 2W 5% TH	4	R3,R4,R7,R8
01-23-02R2	RES METAL OXIDE 2.2R 3W 5% TH FORMED LEADS @ 20mm SPACING	2	R5,R6
01-24-1693	RES 169K 1% 0805	2	R1,R9
01-60-0203	RES NETWORK ISOLATED 20K 16P 8R .3W 2% CER SOP-16 SM	2	R2,R10
03-18-0336	CAP ELEC 33uF 50V 20% RADIAL 5/11/5	2	C6,C16
03-18-1106	CAP ELEC 10uF 50V 20% BI-POLARRADIAL 6.3/11.2/5	2	C2,C12
03-22-0476	CAP ELEC 47uF 100V 20% RADIAL 10/15/5	2	C8,C10
03-24-0564	CAP MET-POLY 0.56uF 100VDC 5% TH 4.5/7.5/7/5	2	C7,C9
03-52-0470	CAP X7R 47pF 50V 10% 0805	2	C3,C13
03-52-0680	CAP X7R 68pF 50V 10% 0805	2	C1,C11
03-52-1103	CAP X7R 10nF 100V 10% 0805	4	C4,C5,C14,C15
12-30-7293	IC POWER-AMP 100W TDA7293 TO-220/15 TH	2	U1,U2
21-30-0011-2	CBL RIBBON SIL 6-PIN 2.54mm x 152.4mm 22 AWG S/T	1	J2A on power amp to J2B on speaker out
35-00-0221	PCB POWER AMP REV.B SPIDER2/ SPIDER3 210/212/HD	1	UNAVAILABLE AS A REPLACEMENT PART (Unpopulated PCB)

50-02-0308-1 PCBA GUITAR INPUT SPIDER3 112/210/212/HD150			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES 0R 1% 0805	1	R48
01-24-1001	RES 1.00K 1% 0805	2	R40,R41
01-24-1002	RES 10.0K 1% 0805	2	R42,R43
01-24-1004	RES 1.00M 1% 0805	1	R45
01-24-1502	RES 15.0K 1% 0805	1	R46
01-24-2002	RES 20.0K 1% 0805	2	R44,R73
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	2	C82,C83
03-52-0100	CAP X7R 10pF 50V 10% 0805	2	C167,C168
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	2	C46,C64
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C45
03-52-0473	CAP X7R 47nF 50V 10% 0805	2	C43,C51
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	1	D5
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	3	L6,L8,L9
12-54-0072	IC OP-AMP DUAL TL072CD SM	2	U3,U14
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J5
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J9
30-18-3030	CLIP GND PCB .30x.30x.07	1	GF1
35-00-0308-1	PCB GUITAR INPUT SPIDER3 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0309 PCBA USER INTERFACE SPIDER3 112/210/212/HD150			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-0000	RES 0R 1% 0805	2	R14,R15
01-24-4751	RES 4.75K 1% 0805	3	R11,R12,R13
01-48-6103	POT MONO 10KB LINEAR TAPER 25mm W/9mm NUT D-SHAFT	10	R1,R2,R3,R4,R5,R6,R7,R8,R9,R10
03-10-0477	CAP ELEC 470uF 6.3V 20% RADIAL6.3/11/5	1	C26
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	17	C2,C9,C12,C14,C15,C16,C17,C18,C19,C20,C21,C22,C23,C24,C25,C28,C29
06-23-0340	DIODE SCHOTTKY 3A 40V SMA SM B340LA	2	D23,D24
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	3	D3,D4,D11
18-02-0001	LED YELLOW SUPERBRITE T1(3MM) TH WP7104SYC	5	D2,D5,D8,D16,D19
18-06-0002	LED RED/GRN 3-P COM CATH HI EFF 627/565nm TH	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
21-18-0002	TERMINAL SCREW PCB MOUNT RT ANGLE SNAP-IN TH	4	BR1,BR2,BR3,BR4
21-20-0023	HDR SIL PCB-MT 5-PIN 2.54mm MALE VERT MT TH	2	H1,H5 (See Assembly Instruction For The Detail How To Install From H1 to H6 & H5 to H7)
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	H9
21-30-0002-1	CBL RIBBON DIL 16-COND 2mm x 88.9mm 28AWG	1	(H9)
21-30-0031-1	CABLE DIL 60-PIN .100 PITCH x 3.0" RBN STAKED TO FEMALE A8	1	H4 to H7 Main PCBA
21-30-0032-1	CABLE SIL 5-PIN 2.54mm x 101.6mm 26 AWG S/T (A8)	2	
30-15-0018	SPACER LED .560 LG	12	D1,D6,D7,D9,D10,D12-D15,D20,D21,D22
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309	PCB USER INTERFACE SPIDER3- 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-0309-1 PCBA RJ45/HEADPHONE SPIDER3 112/210/212/HD150			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	2	R16,R17
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	2	C11,C13
03-52-0102	CAP X7R 1nF 50V 10% 0805	5	C1,C3,C4,C5,C10
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	3	C6,C7,C8
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	2	D17,D18
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	1	J4
21-16-0045	JACK RJ-45 8-PIN FEMALE PCB-MNT RT-ANG	1	J3
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF2,GF15
35-00-0309-1	PCB RJ45/HEADPHONE SPIDER3- 112/210/212/HD150 A8 REV.B	1	Not Available as a Replacement Part (Unpopulated PCB)

50-02-1308 PCBA MAIN SPIDER3-HD150			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1000	RES 100R 1% 0805	13	R4,R5,R6,R7,R8,R9,R10,R11,R12,R13,R56,R59,R71
01-24-1002	RES 10.0K 1% 0805	9	R14,R21-R23,R29,R33,R34,R68,R69
01-24-1003	RES 100K 1% 0805	4	R36,R37,R50,R51
01-24-10R0	RES 10.0R 1% 0805	1	R70
01-24-1501	RES 1.50K 1% 0805	1	R38
01-24-1620	RES 162R 1% 0805	1	R72
01-24-2001	RES 2.00K 1% 0805	1	R39
01-24-2002	RES 20.0K 1% 0805	4	R28,R32,R66,R67
01-24-22R1	RES 22.1R 1% 0805	1	R55
01-24-4751	RES 4.75K 1% 0805	14	R2,R3,R15,R16,R17,R47,R57,R58,R60,R61,R62,R63,R64,R65
01-24-4752	RES 47.5K 1% 0805	2	R18,R24
01-24-5110	RES 511R 1% 0805	1	R35
01-24-5R11	RES 5.11R 1% 0805	3	R19,R53,R54
01-24-6041	RES 6.04K 1% 0805	4	R25,R27,R30,R31
01-24-6190	RES 619R 1% 0805	1	R1
01-24-9091	RES 9.09K 1% 0805	2	R20,R26
03-10-0107	CAP ELEC 100uF 10V 20% RADIAL 6.3/8/5	1	C41
03-10-0331	CAP ELEC 330uF 10V 20% RADIAL 6.3/11.2/5	1	C63
03-10-6108	CAP ELEC 1000uF 6.3V 20% RADIAL 8/11.5/5	2	C5,C20
03-12-0476	CAP ELEC 47uF 16V 20% RADIAL 6.3/11.2/5	1	C12
03-12-1477	CAP ELEC 470uF 16V 20% RADIAL 8/12/5	1	C31
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	4	C8,C15,C42,C44
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	9	C7,C14,C21,C22,C38,C39,C40,C47,C77
03-45-0332	CAP 3.3nF 50V 5% FILM 1206 SM	1	C58
03-52-0102	CAP X7R 1nF 50V 10% 0805	2	C32,C34

50-02-1308		PCBA MAIN SPIDER3-HD150	
Part Number	Description	Qty. Per	Reference Designator(s)
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	31	C1,C2,C4,C11,C13,C47,C54-C57,C60-C62,C65,C67-C76,C79,C80,C81, C84,C85,C86,C87
03-52-0221	CAP X7R 220pF 50V 10% 0805	2	C25,C28
03-52-0391	CAP X7R 390pF 50V 10% 0805	4	C26,C29,C30,C36
03-52-0473	CAP X7R 47nF 50V 10% 0805	13	C9,C16,C17,C18,C19,C23,C24,C27,C33,C35,C37,C50,C66
03-56-0180	CAP NPO 18pF 50V 5% 0603	2	C3,C49
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	1	D4
06-28-8468	DIODE ZENER 6.8V 5% 350mW SOT-23 SM BZX84C6V8	1	D7
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	9	D1,D2,D3,D6,D8,D9,D12,D13,D14
09-06-7002	TRANS MOSFET N-CHAN 60V 7R5 SOT-23 SM 2N7002	4	Q1,Q2,Q3,Q4
11-00-1201	CRYSTAL 12MHZ SHORT-CAN HC49 TH	1	Y1
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	1	U6
12-02-1088	IC REG ADJ TO-220 TH LM1086CT /NOPB	1	U1
12-02-7805	IC REG +5v 1.5 Amp TH	1	U8
12-30-4880	IC POWER-AMP 250mW T1 TPA6111A2DR 8-PIN JEDEC SM	2	U10,U11
12-54-0084	IC OP AMP QUAD TL084CD SM	1	U12
12-62-0053	IC SWITCH-ANALOG TRIPLE 2-CHANTSSOP-16 SM 74HC4053B	1	U4
12-64-4528	IC CONVERTER 24B 48/96KHz AUDIO CODEC SM AK4528	1	U13
15-64-0273	IC 74HCT273 FLIP-FLOP D-TYPE 8-BIT SO-20 SM	1	U16
15-65-0004	IC 74LVC04 LOW VOLTAGE CMOS HEX INVERTER SO-14 SM	1	U9
15-72-0001	IC SRAM-256K x 8 TSOP32 SM	1	U5
15-86-6362	IC DSP 24-BIT TQFP144 SM DSPB56362PV120	1	U7
21-20-0205	HDR SIL PCB-MT 5-PIN x 2mm MALE SHRD VERT MT TH	1	H6
21-20-1008	HDR SIL PCB-MT 8-PIN 1x8x .100MALE VERT MT TH	1	H4 - FOR TEST ONLY
21-20-2010	HDR DIL PCB-MT 10-PIN 2x5x100 MALE SHRD VERT	1	H1
21-21-0060	HDR DIL PCB-MT 60PIN 2x30x.100" MALE SHRD VERT MT TH	1	H7
30-00-0607	SCREW 6-32 x 7/16IN w/LK WASH PPZ STL	3	U1,U6,U8
30-12-0632	STANDOFF HEX .250 6-32 F-F 1INF-F AL	3	U1,U6,U8
30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	1	X1
35-00-0308	PCB MAIN SPIDER3-112/210/212/ HD150 A8 REV.B	1	UNAVAILABLE AS A REPLACEMENT PART (unpopulated pcb)
45-01-0027	IC PROGRAMMED MCU v1.03 SPIDER3 A8-1/3/4/6	1	U15
45-02-0030	IC PROGRAMMED FLASH v1.02 SPIDER3-HD150 A8-6	1	U2

50-04-0050		ASSY E/M LCD MODULE 1x16 CHAR SPIDER3	
Part Number	Description	Qty. Per	Reference Designator(s)
18-30-0004	DISPLAY LCD MODULE 1x16 CHAR 12-O'CLK POS-XMIS AMBR SPIDER3	1	
21-21-2006	HDR DIL PCB-MT 16-PIN 2x8x2mm MALE SHRD VERT TH	1	
30-27-0172	FRAME INNER LED 1.9" x .33" x .16" ABS NAT A8-1/3/4/6	1	
30-27-0173	FRAME LCD 2.4" x .78" x .35" ABS NAT A8-1/3/4/6	1	
30-27-0174	BEZEL 1.9" x .50" x .02" POLYCARBONATE A8-1/3/4/6	1	
30-75-0038	STRIP LCD CONDUCT RBR 25.4" x .30" x .06" NAT A8-1/3/4/6	1	

99-010-2505 SPIDER 3 15 US 120V Packout			
Part Number	Description	Qty. Per	Reference Designator(s)
21-37-1160	CBL PWR UL/CSA SJT 8.2ft Blk EL-302 w/GND EL70	1	PACKOUT
40-00-0106	MANUAL USER STEELHEAD SPIDER3-1508/3012/HD75 A8-2/A8-5/A8-7	1	PACKOUT
59-00-0021-5	ASSY UNIT COMPLETE SPIDER3 1508 A8-2 US 120V	1	

59-00-0021-5 SPIDER3 1508 ASSY UNIT COMPLETE			
Part Number	Description	Qty. Per	Reference Designator(s)
11-20-0003	SPEAKER 8" 4-OHM 15W CHUNIL 200RFL06-3C	1	CABINET GRILL
21-34-0055	CBL ASSY 2 PIN 8.0 IN LG	1	H4 Main to Speaker
21-34-1015	CBL FSTN .187-RCPT/.250-F FLAG1-COND 161.34mm STRND 18AWG BK	1	AC RECEPTACLE to POWER SWITCH
24-24-0606	SWITCH POWER ROCKER 6A/250VAC 10A/120VAC PNL-MNT BLK	1	CHASSIS
30-00-0033	SCREW 10-24 x7/8 TRUSS HD PHH BLK	4	SPEAKER MOUNTING
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	5	(3) SWITCH PCBA,(1) MAIN PCBA,(1) GROUND WIRE TERMINAL
30-00-0402	SCREW #4 x 1/2IN SEMS w/EXT. TOOTH WASHER STL/ZNC	1	POWER AMP IC to CHASSIS
30-00-0675	SCREW WOOD NO 6 x 3/4" PHIL PHBLACK	2	LOGO MOUNTING PLATE to CABINET
30-00-1020	SCREW 10-24 x 1-1/4 OVAL CTSKPB STL	4	CHASSIS to CABINET
30-00-1033	SCREW 10-32 x 3/8IN SCH STL BLK OXIDE	4	SECURE FRONT PANEL to CHASSIS
30-00-9358	SCREW #3 x1/2 IN OVAL PHILLIPS BLACK (SUB FOR 30-00-0358)	2	LOGO To MOUNTING PLATE
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	4	CHASSIS To CABINET
30-03-0400	WASHER #4 SPLIT LOCKWASHER ZINC	1	POWER AMP IC to CHASSIS
30-03-0425	WASHER #4 0.125" ID x .233" OD.018 HEIGHT ZINC PLATE	1	POWER AMP to CHASSIS
30-06-0440	NUT HEX .242 4-40 STL/ZNC	1	POWER AMP IC
30-06-0832	NUT .335 HEX 8-32 STL ZINC W/ TOOTH WASHER	2	TRANSFORMER to CHASSIS
30-15-0404	SHOULDER BUSHING TO-220 VALPAKNY04-040-140-012TWG	1	POWER AMP IC
30-24-0003	CABLE-TIE 4" CLEAR	3	SPEAKER PROGRAMMING CABLE (REFERENCE CHASSIS ASSEMBLY INSTRUCTIONS FOR DETAILS)
30-27-0175	MOUNTING PLATE LOGO 9.4 x 1.8 x 0.26" ABS SILVER A8-SERIES	1	
30-27-0189	PANEL FRONT 13.8 x 2.8 x .70 ABS SPIDER3-1508 A8-2	1	
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	8	
30-51-0258	CHASSIS 13.8" x 5.9" x 3.3" ALSPIDER3-1508 A8-2	1	
30-60-0005	LOGO LINE 6 MED 139.70x28.63mmBRUSHED/BLK FINISH AL	1	LOGO PLATE
30-63-1325	FOAM W/ADH. 13.25" x 0.25" x 0.06" VOLARAPOLEFIN	2	CHASSIS TOP
30-63-1550	FOAM W/ADH. 15.50" x 0.25" x 0.06" VOLARAPOLEFIN	2	CHASSIS-FRONT
30-63-4003	PAD THERMAL TO-220 TYPE:K6 BERG K6AC-58	1	
30-75-0020	KEYPAD RUBBER 6.74 x .57 x0.23BLK SPIDER2-3012/1508/A3-1	1	SWITCH PCBA
30-75-9600	GROMMET RUBBER 7/16-D x 1/16-GRV x 3/4" GRV-DIA BLK	1	SPEAKER WIRE
40-25-0015	LABEL GROUND SYMBOL	1	CHASSIS-INSIDE BY GND WIRE
40-25-0020	LABEL INSPECTION QUALITY	1	
50-00-0001	ASSY RECEPTACLE-A/C w/GND WIRE SNAP-IN	1	CHASSIS
50-03-0038	ASSY CABINET SPIDER3-1508 A8-2	1	
50-04-0037-1	ASSY E/M CHASSIS SPIDER3-1508 A8-2 100V/120V	1	

50-03-0038 SPIDER3-1508 ASSY CABINET			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0061	SCREW WOOD NO.6 x 1.0 FHP BLACK OXIDE	5	See Mech. Assy Dwg
30-00-0812	SCREW w/WAX 8 x 3/4 PTB	14	
30-00-0858	SCREW #8 x 5/8IN PHIL-TRUSS BLACK w/WAX	5	See Mech. Assy Dwg
30-00-1024	SCREW 10-24 x 1IN OVAL CTSK PPB STL WAXED	2	See Mech. Assy Dwg
30-00-8112	SCREW WOOD #8 x 1 1/2" OVAL PHH STL BLK OXIDE	3	See Mech. Assy Dwg
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	7	See Mech. Assy Dwg
30-06-1024	NUT-T 10-24 X 5/16 STEEL	6	See Mech. Assy Dwg
30-28-0002	CORNER LEFT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	See Mech. Assy Dwg
30-28-0003	CORNER RIGHT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	See Mech. Assy Dwg
30-28-0004	CORNER BACK HI-DENSITY POLYETHYLENE TEXTURED BLACK	6	See Mech. Assy Dwg
30-36-0005	COVER VINYL TEXTURED BLACK SEMI-GLOSS	2.5	See Mech. Assy Dwg
30-39-0013	GRILL CLOTH BLACK SPIDER3	0.8	See Mech. Assy Dwg
30-51-0188-1	BRACE BAFFLBOARD 13.8x.90x.69 EGS	1	See Mech. Assy Dwg
30-57-0580	HANDLE/STRAP HEAVY DUTY BLACK	1	See Mech. Assy Dwg
30-57-0581	ENDCAPS BLACK TEXTURED FINISH	2	See Mech. Assy Dwg
30-63-0016	FOAM w/ADHSV 8.0 x 1/4 x 1/16 VOLARAPOLELEFIN	4	See Mech. Assy Dwg

50-04-0037-1 SPIDER3-1508 ASSY E/M CHASSIS			
Part Number	Description	Qty. Per	Reference Designator(s)
11-30-0015	XFMR 100/120VAC 15.2VAC x 2 / 7.2VAC SPIDER2-1508	1	CHASSIS
24-19-0002	FUSE 1A/250V 5x20mm FRN T Littlefuse H239 001 or equiv.	1	
50-02-0056	PCBA PANELIZED MAIN/SW/PA SPIDER3-1508 A8-2	1	

50-02-0056 SPIDER3-1508 PCBA PANELIZED MAIN/SW/PA			
Part Number	Description	Qty. Per	Reference Designator(s)
50-02-0058	PCBA MAIN SPIDER3-1508 A8-2	1	
50-02-0060	PCBA POWER AMP SPIDER3-1508 A8-2	1	
50-02-0310-1	PCBA SWITCH/LED SPIDER3 1508/3012 A8-2/A8-5	1	

50-02-0058 SPIDER3-1508 PCBA MAIN			
Part Number	Description	Qty. Per	Reference Designator(s)
01-16-0102	RES CARBON FILM 1K 1/2W 5% TH	2	R65,R66
01-24-0000	RES 0R 1% 0805	1	R3
01-24-1000	RES 100R 1% 0805	3	R54,R61,R64
01-24-1001	RES 1.00K 1% 0805	2	R2,R8
01-24-1002	RES 10.0K 1% 0805	5	R38,R39,R53,R55,R56
01-24-1003	RES 100K 1% 0805	1	R57
01-24-1004	RES 1.00M 1% 0805	3	R1,R58,R62
01-24-10R0	RES 10.0R 1% 0805	1	R34
01-24-1332	RES 13.3K 1% 0805	4	R45,R47,R48,R49
01-24-1502	RES 15.0K 1% 0805	1	R7
01-24-1620	RES 162R 1% 0805	1	R63
01-24-1912	RES 19.1K 1% 0805	2	R22,R23
01-24-2002	RES 20.0K 1% 0805	2	R20,R21
01-24-22R1	RES 22.1R 1% 0805	3	R9,R10,R67
01-24-4751	RES 4.75K 1% 0805	7	R31,R32,R33,R36,R37,R40,R60
01-24-4752	RES 47.5K 1% 0805	1	R27
01-24-5492	RES 54.9K 1% 0805	1	R44
01-24-5R11	RES 5.11R 1% 0805	2	R25,R26
01-25-0000	RES 0R 1% 0603	2	JP2,JP3
01-48-0001	POT MONO 10KB LINEAR 9mm/20mm D-SHFT HOR TH	8	R11,R16,R17,R24,R30,R35,R42,R59
03-10-0106	CAP ELEC 10uF 10V 20% RADIAL 5/11/5	4	C4,C5,C10,C12
03-10-0338	CAP ELEC 3300uF 6.3V 20% RADIAL 10/20/5	1	C28
03-10-1107	CAP ELEC 100uF 6.3V 20% RADIAL5/11/5	1	C82
03-10-6108	CAP ELEC 1000uF 6.3V 20% RADIAL 8/11.5/5	2	C8,C37
03-12-0107	CAP ELEC 100uF 16V 20% RADIAL 6.3/11/5	2	C30,C34
03-12-0476	CAP ELEC 47uF 16V 20% RADIAL 6.3/11.2/5	1	C18
03-12-1338	CAP ELEC 3300uF 16V 20% RADIAL12.5/25/5	1	C38
03-14-0228	CAP ELEC 2200uF 25V 20% RADIAL 12.5/25/5	2	C35,C36
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	4	C6,C7,C14,C15
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	2	C31,C32
03-50-0270	CAP NPO 27pF 50V 5% 0805	1	C23
03-52-0102	CAP X7R 1nF 50V 10% 0805	12	C44-C48,C50,C51,C73,C74,C75,C76,C77
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	15	C9,C11,C13,C49,C53,C55-C60,C62,C63,C64,C65
03-52-0332	CAP X7R 3.3nF 50V 10% 0805	1	C16
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C72
03-52-0473	CAP X7R 47nF 50V 10% 0805	16	C2,C3,C17,C19,C25,C27,C33,C52,C54,C61,C66,C67,C68,C69,C70,C71
06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	8	D16,D17,D19-D24
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	1	D10

50-02-0058 SPIDER3-1508 PCBA MAIN			
Part Number	Description	Qty. Per	Reference Designator(s)
06-28-8410	DIODE ZENER 10V 5% 350mW SOT-23 SM BZX84C10	2	D13,D14
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	1	D15
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	2	D2,D18
09-10-4401	TRANS NPN SMALL-SIGNAL MBT4401SOT-23 SM	1	Q2
09-10-4403	TRANS PNP SMALL-SIGNAL MBT4403SOT-23 SM	1	Q1
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	7	L1,L2,L8,L9,L10,L11,L12
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	1	U11
12-54-0072	IC OP-AMP DUAL TL072CD SM	2	U1,U9
12-58-0339	IC COMPARATOR QUAD LM339D SM	1	U10
12-64-4552	IC CONVERTER 3V 24B 96KHz AUDIO CODEC SM AK4552	1	U2
15-62-0014	IC 74HC14 INVERTER HEX SCHMITT TRIGGER SO-14 SM	1	U6
15-72-0001	IC SRAM-256K x 8 TSOP32 SM	1	U7
15-86-0364	IC DSP 24-BIT TQFP-100 SM DSPB56364AF100	1	U5
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	2	J1,J3
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J2
21-20-0205	HDR SIL PCB-MT 5-PIN x 2mm MALE SHRD VERT MT TH	1	H3 (TEST ONLY)
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H4
21-20-1565	HDR SIL PCB-MT 5-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H5
21-30-0014	CBL SIL 7 PIN 2.54 x 76MM 22 AWG S/T	1	JP2-A (MAIN PCBA) to JP2-B (POWER AMP)
21-30-0029	CBL DIL 14 PIN .100 PITCH 2.0 IN RIBBON STAKED TO FEMALE	1	H1
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF1,GF2
30-51-0146	SHIELD PCB MT FOR 1/4 JACK 1.00 Hx1.25Wx.013THK BERYL COP	1	SH1
35-00-0310	PCB MAIN SPIDER3-1508/3012 A8-2/A8-5 REV.C	1	
45-01-0028	IC PROGRAMMED MCU v1.00 SPIDER3-1508 A8-2	1	U3
45-02-0025	IC PROGRAMMED FLASH v1.00 SPIDER3-1508 A8-2	1	U4

50-02-0060 SPIDER3-1508 PCBA POWER AMP			
Part Number	Description	Qty. Per	Reference Designator(s)
01-22-02R2	RES METAL OXIDE 2.2R 2W 5% TH	1	R52
01-22-0R22	RES METAL OXIDE 0.22R 2W 5% TH	1	R51
01-24-3241	RES 3.24K 1% 0805	1	R41
01-24-3921	RES 3.92K 1% 0805	1	R43
01-24-7502	RES 75.0K 1% 0805	1	R46
03-14-0107	CAP ELEC 100uF 25V 20% RADIAL 6.3/11.2/5	2	C20,C29
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	1	C21
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	3	C22,C24,C26
12-30-2030	IC POWER-AMP 18W TDA2030AV TO-220/5 TH	1	U8
35-00-0310-2	PCB POWER AMP SPIDER3 1508/3012 A8-2/A8-5 REV.C	1	

50-02-0310-1 SPIDER3 1508/3012 PCBA SWITCH/LED			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1300	RES 130R 1% 0805	5	R6,R13,R15,R19,R29
01-24-4751	RES 4.75K 1% 0805	5	R5,R12,R14,R18,R28
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	5	D3,D5,D6,D9,D11
18-22-0003	LED YELLOW SUPER 2.0x1.2x1.1mmAP2012SYC SM	5	D1,D4,D7,D8,D12
21-21-0014	HDR DIL PCB-MT 14-PIN 2x7x.100MALE SHRD VERT MT TH	1	H6
35-00-0310-1	PCB SWITCH/LED SPIDER3 1508/3012 A8-2/A8-5 REV.C	1	

99-010-2605 A8-5 SPIDER 3 30 US 120V			
Part Number	Description	Qty. Per	Reference Designator(s)
21-37-1160	CBL PWR UL/CSA SJT 8.2ft Blk EL-302 w/GND EL70	1	PACKOUT
40-00-0106	MANUAL USER STEELHEAD SPIDER3-1508/3012/HD75 A8-2/A8-5/A8-7	1	PACKOUT
59-00-0022-5	ASSY UNIT COMPLETE SPIDER3 3012 A8-5 US 120V	1	

59-00-0022-5 ASSY UNIT COMPLETE SPIDER3 3012			
Part Number	Description	Qty. Per	Reference Designator(s)
11-20-0006	SPEAKER 12" 4-OHM 50W CH-CONE CELESTION G12E-50 T5400	1	SPEAKER CABINET GRILL
21-34-0055	CBL ASSY 2 PIN 8.0 IN LG	1	H4 (MAIN PCBA to SPEAKER)
21-34-1015	CBL FSTN .187-RCPT/.250-F FLAG1-COND 161.34mm STRND 18AWG BK	1	AC RECEPTACLE to POWER SWITCH
24-24-0606	SWITCH POWER ROCKER 6A/250VAC 10A/120VAC PNL-MNT BLK	1	CHASSIS
30-00-0033	SCREW 10-24 x7/8 TRUSS HD PHH BLK	7	SPEAKER to CABINET
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	5	3-SWITCH/LED PCBA, 1-MAIN PCBA, 1-GROUND WIRE TERMINAL
30-00-0402	SCREW #4 x 1/2IN SEMS w/EXT. TOOTH WASHER STL/ZNC	1	POWER AMP IC to CHASSIS
30-00-0675	SCREW WOOD NO 6 x 3/4" PHIL PHBLACK	2	LOGO MOUNTING PLATE to CABINET
30-00-1020	SCREW 10-24 x 1-1/4 OVAL CTSKPB STL	4	CHASSIS to CABINET
30-00-1033	SCREW 10-32 x 3/8IN SCH STL BLK OXIDE	4	SECURE FRONT PANEL to CHASSIS
30-00-9358	SCREW #3 x1/2 IN OVAL PHILLIPS BLACK (SUB FOR 30-00-0358)	2	LOGO to MOUNTING PLATE
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	4	CHASSIS to CABINET
30-03-0400	WASHER #4 SPLIT LOCKWASHER ZINC	1	POWER AMP to CHASSIS
30-03-0425	WASHER #4 0.125" ID x .233" OD.018 HEIGHT ZINC PLATE	1	POWER AMP to CHASSIS
30-06-0440	NUT HEX .242 4-40 STL/ZNC	1	POWER AMP IC
30-06-0832	NUT .335 HEX 8-32 STL ZINC W/ TOOTH WASHER	4	TRANSFORMER to CHASSIS
30-15-0404	SHOULDER BUSHING TO-220 VALPAKNY04-040-140-012TWG	1	POWER AMP IC
30-24-0003	CABLE-TIE 4" CLEAR	3	REFERENCE CHASSIS ASSEMBLY INSTRUCTIONS FOR DETAILS
30-27-0175	MOUNTING PLATE LOGO 9.4 x 1.8 x 0.26" ABS SILVER A8-SERIES	1	
30-27-0191-1	PANEL FRONT 16.5 x 2.8 x .70 ABS SPIDER3-3012 A8-5	1	
30-27-0204	LOGO PLATE 9.4 x 1.8 x .26 ABSSILVER A8	1	
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	8	
30-51-0259-1	CHASSIS 16.5 x 5.9 x 3.3" AL SPIDER3-3012 A8-5	1	
30-60-0005	LOGO LINE 6 MED 139.70x28.63mmBRUSHED/BLK FINISH AL	1	LOGO PLATE
30-63-1325	FOAM W/ADH. 13.25" x 0.25" x 0.06" VOLARAPOLELEFIN	2	CHASSIS TOP
30-63-1550	FOAM W/ADH. 15.50" x 0.25" x 0.06" VOLARAPOLELEFIN	2	CHASSIS FRONT
30-63-4003	PAD THERMAL TO-220 TYPE:K6 BERG K6AC-58	1	POWER AMP to CHASSIS
30-75-0020	KEYPAD RUBBER 6.74 x .57 x0.23BLK SPIDER2-3012/1508/A3-1	1	SWITCH PCBA
30-75-9600	GROMMET RUBBER 7/16-D x 1/16-GRV x 3/4" GRV-DIA BLK	1	SPEAKER WIRE
40-25-0015	LABEL GROUND SYMBOL	1	CHASSIS-INSIDE BY GND WIRE
40-25-0020	LABEL INSPECTION QUALITY	1	PLACE INSPECTION LABEL ON REAR OF CHASSIS, ON THE RIGHT SIDE OF THE HEATSINK
50-00-0001	ASSY RECEPTACLE-A/C w/GND WIRE SNAP-IN	1	CHASSIS
50-03-0041	ASSY CABINET SPIDER3-3012 A8-5	1	
50-04-0038-1	ASSY E/M CHASSIS SPIDER3-3012 A8-5 100V/120V	1	

50-03-0041		ASSY CABINET SPIDER3-3012	
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0061	SCREW WOOD NO.6 x 1.0 FHP BLACK OXIDE	5	
30-00-0812	SCREW w/WAX 8 x 3/4 PTB	14	
30-00-0858	SCREW #8 x 5/8IN PHIL-TRUSS BLACK w/WAX	5	
30-00-1024	SCREW 10-24 x 1IN OVAL CTSK PPB STL WAXED	2	
30-00-8112	SCREW WOOD #8 x 1 1/2" OVAL PHH STL BLK OXIDE	3	
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	3	
30-06-1024	NUT-T 10-24 X 5/16 STEEL	10	
30-28-0002	CORNER LEFT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0003	CORNER RIGHT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0004	CORNER BACK HI-DENSITY POLYETHYLENE TEXTURED BLACK	6	
30-36-0005	COVER VINYL TEXTURED BLACK SEMI-GLOSS	4	
30-39-0013	GRILL CLOTH BLACK SPIDER3	1	
30-51-0188-2	BRACE BAFFLBOARD 16.55x.90x.69EGS	1	
30-57-0580	HANDLE/STRAP HEAVY DUTY BLACK	1	
30-57-0581	ENDCAPS BLACK TEXTURED FINISH	2	
30-63-0016	FOAM w/ADHSV 8.0 x 1/4 x 1/16 VOLARAPOLEFIN	4	

50-04-0038-1		ASSY E/M CHASSIS SPIDER3-3012	
Part Number	Description	Qty. Per	Reference Designator(s)
11-30-0013	XFMR 100/120VAC 16.5VAC x 2 / 7.2VAC SPIDER2-3012	1	
24-19-0002	FUSE 1A/250V 5x20mm FRN T Littlefuse H239 001 or equiv.	1	
50-02-0057	PCBA PANELIZED MAIN/SW/PA SPIDER3-3012 A8-5	1	

50-02-0057		PCBA PANELIZED MAIN/SW/PA SPIDER3-3012	
Part Number	Description	Qty. Per	Reference Designator(s)
50-02-0310	PCBA MAIN SPIDER3-3012 A8-5	1	
50-02-0310-1	PCBA SWITCH/LED SPIDER3 1508/3012 A8-2/A8-5	1	
50-02-0310-2	PCBA POWER AMP SPIDER3-3012 A8-5	1	

50-02-0310 PCBA MAIN SPIDER3-3012			
Part Number	Description	Qty. Per	Reference Designator(s)
01-16-0102	RES CARBON FILM 1K 1/2W 5% TH	2	R65,R66
01-24-0000	RES 0R 1% 0805	2	R3,R67
01-24-1000	RES 100R 1% 0805	3	R54,R61,R64
01-24-1001	RES 1.00K 1% 0805	2	R2,R8
01-24-1002	RES 10.0K 1% 0805	5	R38,R39,R53,R55,R56
01-24-1003	RES 100K 1% 0805	2	R57,R68
01-24-1004	RES 1.00M 1% 0805	3	R1,R58,R62
01-24-10R0	RES 10.0R 1% 0805	1	R34
01-24-1332	RES 13.3K 1% 0805	4	R45,R47,R48,RR49
01-24-1502	RES 15.0K 1% 0805	1	R7
01-24-1620	RES 162R 1% 0805	1	R63
01-24-1912	RES 19.1K 1% 0805	2	R22,R23
01-24-2002	RES 20.0K 1% 0805	2	R20,R21
01-24-22R1	RES 22.1R 1% 0805	2	R9,R10
01-24-4750	RES 475R 1% 0805	1	R50
01-24-4751	RES 4.75K 1% 0805	7	R31-R33,R36,R37,R40,R60
01-24-4752	RES 47.5K 1% 0805	1	R27
01-24-5492	RES 54.9K 1% 0805	1	R44
01-24-5R11	RES 5.11R 1% 0805	2	R25,R26
01-25-0000	RES 0R 1% 0603	2	JP1,JP4
01-48-0001	POT MONO 10KB LINEAR 9mm/20mm D-SHFT HOR TH	8	R11,R16,R17,R24,R30,R35,R42,R59
03-10-0106	CAP ELEC 10uF 10V 20% RADIAL 5/11/5	4	C4,C5,C10,C12
03-10-0338	CAP ELEC 3300uF 6.3V 20% RADIAL 10/20/5	1	C28
03-10-1107	CAP ELEC 100uF 6.3V 20% RADIAL5/11/5	1	C82
03-10-6108	CAP ELEC 1000uF 6.3V 20% RADIAL 8/11.5/5	2	C8,C37
03-12-0107	CAP ELEC 100uF 16V 20% RADIAL 6.3/11/5	2	C30,C34
03-12-0476	CAP ELEC 47uF 16V 20% RADIAL 6.3/11.2/5	1	C18
03-12-1338	CAP ELEC 3300uF 16V 20% RADIAL12.5/25/5	1	C38
03-14-0228	CAP ELEC 2200uF 25V 20% RADIAL 12.5/25/5	2	C35,C36
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	4	C6,C7,C14,C15
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	2	C31,C32
03-50-0220	CAP NPO 22pF 50V 5% 0805	1	C78
03-50-0270	CAP NPO 27pF 50V 5% 0805	1	C23
03-50-0470	CAP NPO 47pF 50V 5% 0805	1	C79
03-52-0102	CAP X7R 1nF 50V 10% 0805	15	C39-C41,C44,C45,C46,C47,C48,C50,C51,C73,C74,C75,C76,C77
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	18	C9,C11,C13,C42,C43,C49,C53,C55,C56,C57,C58,C59,C60,C62,C63,C64C65,C80

50-02-0310 PCBA MAIN SPIDER3-3012			
Part Number	Description	Qty. Per	Reference Designator(s)
03-52-0332	CAP X7R 3.3nF 50V 10% 0805	1	C16
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C72
03-52-0473	CAP X7R 47nF 50V 10% 0805	16	1
06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	8	D16,D17,D19,D20,D21,D22,D23,D24
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	1	D10
06-28-8410	DIODE ZENER 10V 5% 350mW SOT-23 SM BZX84C10	2	D13,D14
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	1	D15
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	5	D2,D18,D25,D26,D27
09-10-4401	TRANS NPN SMALL-SIGNAL MBT4401SOT-23 SM	1	Q2
09-10-4403	TRANS PNP SMALL-SIGNAL MBT4403SOT-23 SM	1	Q1
11-00-1201	CRYSTAL 12MHZ SHORT-CAN HC49 TH	1	Y1
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	12	L1,L2,L3,L4,L5,L6,L7,L8,L9,L10,L11,L12
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	1	U11
12-54-0072	IC OP-AMP DUAL TL072CD SM	2	U1,U9
12-58-0339	IC COMPARATOR QUAD LM339D SM	1	U10
12-64-4552	IC CONVERTER 3V 24B 96KHz AUDIO CODEC SM AK4552	1	U2
15-62-0014	IC 74HC14 INVERTER HEX SCHMITT TRIGGER SO-14 SM	1	U6
15-62-1009	IC 74HCU04 UNBUFFERED CMOS HEXINVERTER TSSOP-14 SM	1	U12
15-72-0001	IC SRAM-256K x 8 TSOP32 SM	1	U7
15-86-0364	IC DSP 24-BIT TQFP-100 SM DSPB56364AF100	1	U5
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	2	J1,J3
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J2
21-16-0045	JACK RJ-45 8-PIN FEMALE PCB-MNT RT-ANG	1	J4
21-20-0205	HDR SIL PCB-MT 5-PIN x 2mm MALE SHRD VERT MT TH	1	H3 - TEST ONLY
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H4
21-20-1565	HDR SIL PCB-MT 5-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H5
21-30-0014	CBL SIL 7 PIN 2.54 x 76MM 22 AWG S/T	1	JP2-A Main PCB to JP2-B Power Amp
21-30-0029	CBL DIL 14 PIN .100 PITCH 2.0 IN RIBBON STAKED TO FEMALE	1	H1
30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	1	Y1
30-18-3030	CLIP GND PCB .30x.30x.07	3	GF1,GF2,GF3
30-51-0146	SHIELD PCB MT FOR 1/4 JACK 1.00 Hx1.25Wx.013THK BERYL COP	1	SH1
35-00-0310	PCB MAIN SPIDER3-1508/3012 A8-2/A8-5 REV.C	1	
45-01-0026	IC PROGRAMMED MCU v1.00 SPIDER3 A8-5/7	1	U3
45-02-0026	IC PROGRAMMED FLASH v1.00 SPIDER3-3012 A8-5	1	U4

50-02-0310-1 PCBA SWITCH/LED SPIDER3 1508/3012			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1300	RES 130R 1% 0805	5	R6,R13,R15,R19,R29
01-24-4751	RES 4.75K 1% 0805	5	R5,R12,R14,R18,R28
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	5	D3,D5,D6,D9,D11
18-22-0003	LED YELLOW SUPER 2.0x1.2x1.1mmAP2012SYC SM	5	D1,D4,D7,D8,D12
21-21-0014	HDR DIL PCB-MT 14-PIN 2x7x.100MALE SHRDR VERT MT TH	1	H6
35-00-0310-1	PCB SWITCH/LED SPIDER3 1508/3012 A8-2/A8-5 REV.C	1	

50-02-0310-2 PCBA POWER AMP SPIDER3-3012			
Part Number	Description	Qty. Per	Reference Designator(s)
01-22-02R2	RES METAL OXIDE 2.2R 2W 5% TH	1	R52
01-24-3241	RES 3.24K 1% 0805	1	R41
01-24-3921	RES 3.92K 1% 0805	1	R43
01-24-7502	RES 75.0K 1% 0805	1	R46
03-14-0107	CAP ELEC 100uF 25V 20% RADIAL 6.3/11.2/5	2	C20,C29
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	1	C21
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	3	C22,C24,C26
12-30-2050	IC POWER-AMP 32W TDA2050V TO-220/5 TH	1	U8
35-00-0310-2	PCB POWER AMP SPIDER3 1508/3012 A8-2/A8-5 REV.C	1	

99-020-1315 A8-7 SPIDER3 HD75 US 120V			
Part Number	Description	Qty. Per	Reference Designator(s)
21-37-1160	CBL PWR UL/CSA SJT 8.2ft Blk EL-302 w/GND EL70	1	PACKOUT
40-00-0106	MANUAL USER STEELHEAD SPIDER3-1508/3012/HD75 A8-2/A8-5/A8-7	1	PACKOUT
59-00-0023-5	ASSY UNIT COMPLETE SPIDER3 HD75 A8-7 US 120V	1	

59-00-0023-5 ASSY UNIT COMPLETE SPIDER3 HD75			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0048	SCREW 10-32 x 1-IN OVAL CTSK PB STL	4	MOUNTS CHASSIS to CABINET
30-00-0675	SCREW WOOD NO 6 x 3/4" PHIL PHBLACK	2	LOGO MOUNTING PLATE to CABINET
30-00-9358	SCREW #3 x1/2 IN OVAL PHILLIPS BLACK (SUB FOR 30-00-0358)	2	LOGO to MOUNTING PLATE
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	4	MOUNTS CHASSIS to WOOD BOX
30-27-0175	MOUNTING PLATE LOGO 9.4 x 1.8 x 0.26" ABS SILVER A8-SERIES	1	
30-27-0204	LOGO PLATE 9.4 x 1.8 x .26 ABSSILVER A8	1	
30-60-0005	LOGO LINE 6 MED 139.70x28.63mmBRUSHED/BLK FINISH AL	1	FRONT PANEL
40-25-0020	LABEL INSPECTION QUALITY	1	PLACE INSPECTION LABEL ON THE REAR of CHASSIS, ON THE RIGHT SIDE of THE HEATSINK
50-03-0042	ASSY CABINET SPIDER3-HD150 / HD75 A8-6, A8-7	1	
50-04-0039-1	ASSY E/M CHASSIS SPIDER3-HD75 A8-7 100V/120V	1	

50-03-0042 ASSY CABINET SPIDER3-HD150 / HD75			
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0812	SCREW w/WAX 8 x 3/4 PTB	14	
30-00-1024	SCREW 10-24 x 1IN OVAL CTSK PPB STL WAXED	2	
30-00-6839	SCREW WOOD 10-12 x 7/8" PPZ	4	Feet to Cabinet
30-00-8112	SCREW WOOD #8 x 1 1/2" OVAL PHH STL BLK OXIDE	5	
30-03-0112	WASHER FINISHING #10 FLANGED STL BLK OXIDE	5	
30-06-1024	NUT-T 10-24 X 5/16 STEEL	2	
30-28-0002	CORNER LEFT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0003	CORNER RIGHT HI-DENSITY POLYETHYLENE TEXTURED BLACK	1	
30-28-0004	CORNER BACK HI-DENSITY POLYETHYLENE TEXTURED BLACK	6	
30-36-0005	COVER VINYL TEXTURED BLACK SEMI-GLOSS	5	
30-39-0013	GRILL CLOTH BLACK SPIDER3	1	
30-57-0580	HANDLE/STRAP HEAVY DUTY BLACK	1	
30-57-0581	ENDCAPS BLACK TEXTURED FINISH	2	
30-75-0008	FOOT RUBBER 1.50" I.D. x .75"HBLACK	4	

50-04-0039-1		ASSY E/M CHASSIS SPIDER3-HD75	
Part Number	Description	Qty. Per	Reference Designator(s)
11-30-0025	XFMR 100/120VAC 50/60Hz 76mm 27.4VACx2 / 7.2VAC 3-CONN A3-1	1	CHASSIS
21-34-0008-1	CBL SIL 4-PIN .156 IN PITCH 6.0-IN	1	H4 (Main PCBA) to H7 (Speaker Out PCBA)
21-34-0021-3	CBL SIL 6-PIN .156 PITCH 10.0-IN	1	H7 (Main PCBA) to H1 (Power Amp PCBA)
21-34-1015	CBL FSTN .187-RCPT/.250-F FLAG1-COND 161.34mm STRND 18AWG BK	1	AC RECEPTACLE to POWER SWITCH
24-19-4025	FUSE 4A 125V TL 5x20mm Littlefuse# H239 004 or equiv.	1	FUSE HOLDER
24-24-0606	SWITCH POWER ROCKER 6A/250VAC 10A/120VAC PNL-MNT BLK	1	FRONT PANEL
30-00-0018	SCREW SELF-TAP 6-32 x .75 PFZ	4	SECURES POWER AMP PCBA to CHASSIS
30-00-0043	SCREW 6-32 x 5/16 w/LK WASH PPZ STL	5	1-MAIN PCBA TO CHASSIS STANDOFF, 1-GROUND WIRE STUD, 3-SWITCH/LED PCBA
30-00-1033	SCREW 10-32 x 3/8IN SCH STL BLK OXIDE	12	SECURES PLASTIC FRONT PANEL to CHASSIS
30-06-0832	NUT .335 HEX 8-32 STL ZINC W/ TOOTH WASHER	4	SECURES TRANSFORMER
30-24-0003	CABLE-TIE 4" CLEAR	4	REFERENCE CHASSIS ASSEMBLY INSTRUCTIONS FOR DETAILS
30-27-0191-2	PANEL FRONT 16.5 x 2.8 x .70 ABS SPIDER3-HD75 A8-7	1	to FRONT of CHASSIS
30-27-0192-1	PANEL FRONT EXT. LEFT 4.1 x 2.9 ABS SPIDER3-HD75 A8-7	1	
30-27-0192-2	PANEL FRONT EXT. RIGHT 4.1 x 2.8 ABS SPIDER3-HD75 A8-7	1	
30-45-0011	KNOB POT .77 DIA x .76 HT PLASTIC CHROME-PLATED	8	POTENTIOMETERS
30-51-0260	CHASSIS 24.6 x 7.1 x 4.2 STL SPIDER3-HD75 A8-7	1	
30-63-0010	FOAM w/ADHSV 26.5x 1/4x 1/16INVOLARAPOLELEFIN	6	There Are 4 long strips And 2 Short ones. (See MAI)
30-75-0020	KEYPAD RUBBER 6.74 x .57 x0.23BLK SPIDER2-3012/1508/A3-1	1	ONTO SWITCH PCBA
50-00-0001	ASSY RECEPTACLE-A/C w/GND WIRE SNAP-IN	1	CHASSIS
50-02-0062	PCBA SPEAKER OUT SPIDER2/ SPIDER3-HD75 A3-1/A8-7	1	
50-02-0066	PCBA POWER AMP w/HEATSINK SPIDER2/3-HD75 A3-1/A8-7	1	
50-02-0311	PCBA MAIN SPIDER3-HD75 A8-7	1	
50-02-0311-1	PCBA SWITCH/LED SPIDER3-HD75 A8-7	1	

50-02-0062		PCBA SPEAKER OUT SPIDER2/ SPIDER3-HD75	
Part Number	Description	Qty. Per	Reference Designator(s)
03-00-0101	CAP CER DISC 100pF 50V 5% TH	2	C20, C25
03-36-0102	CAP ESTR 1nF 100V 5% TH 7.2/2.5/6.5/5	2	C24, C26
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	2	J5,J6
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H7
30-18-3030	CLIP GND PCB .30x.30x.07	2	GF1,GF2
35-00-0062	PCB SPEAKER OUT SPIDER2-HD75 A3-1 REV.A	1	

50-02-0066		PCBA POWER AMP w/HEATSINK SPIDER2/3-HD75	
Part Number	Description	Qty. Per	Reference Designator(s)
30-00-0010	SCREW 8-32 x 9/16 SKT-CAP S-STL	1	Secures clamp to headsink
30-00-0028	SCREW 8-32 x 5/16" SHCS	1	secures bracket to headsink
30-03-0002	WASHER #8 .293 x.174x .040 STEEL	2	Install betweek clamp & screw, bracket & screw
30-06-0007	NUT .344 HEX 8-32 STEEL ZINC	2	Secures clamp/screw & bracket/screw to headsink
30-51-0059-3	HEATSINK 4.0 IN LG AL ALY BLK ANODIZE	1	
30-51-0073	CLAMP HEATSINK TO-220 1.3x.45x.35" CR STEEL 1018	1	Secures Pwr Amp IC to headsink
30-51-0105	BRKT SUPPORT .565 x .530 x .690 EG STEEL	1	Mounts Pwr Amp PCBA to Headsink
30-63-0006	PAD THERMAL 6mil 25mm x 30mm w/ADHESIVE 4KVAC VTM-O	1	Install between Pwr Amp IC and headsink
01-00-0103	RES 10K 5% 0805	1	R14
01-22-0R22	RES METAL OXIDE 0.22R 2W 5% TH	2	R7-R8
01-23-02R2	RES METAL OXIDE 2.2R 3W 5% TH FORMED LEADS @ 20mm SPACING	1	R6
01-24-1693	RES 169K 1% 0805	1	R9
01-60-0203	RES NETWORK ISOLATED 20K 16P 8R .3W 2% CER SOP-16 SM	1	R10
03-18-0336	CAP ELEC 33uF 50V 20% RADIAL 5/11/5	1	C16
03-18-1106	CAP ELEC 10uF 50V 20% BI-POLARRADIAL 6.3/11.2/5	1	C12
03-22-0476	CAP ELEC 47uF 100V 20% RADIAL 10/15/5	2	C8, C10
03-24-0564	CAP MET-POLY 0.56uF 100VDC 5% TH 4.5/7.5/7/5	1	C9
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C13
03-52-0680	CAP X7R 68pF 50V 10% 0805	1	C11
03-52-1103	CAP X7R 10nF 100V 10% 0805	2	C14, C15
12-30-7293	IC POWER-AMP 100W TDA7293 TO-220/15 TH	1	U2
21-20-1566	HDR SIL PCB-MT 6-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H1
35-00-0061	PCB POWER AMP SPIDER2-HD75 A3-1 REV.A	1	(Breakaway of Speaker Out PCB)

50-02-0311		PCBA MAIN SPIDER3-HD75	
Part Number	Description	Qty. Per	Reference Designator(s)
01-21-0202	RES METAL OXIDE 2K 1W 5% TH	2	R65,R66
01-24-0000	RES 0R 1% 0805	1	R3
01-24-1000	RES 100R 1% 0805	3	R54,R61,R64
01-24-1001	RES 1.00K 1% 0805	2	R2,R8
01-24-1002	RES 10.0K 1% 0805	6	R38,R39,R41,R43,R53,R55
01-24-1003	RES 100K 1% 0805	1	R46
01-24-1004	RES 1.00M 1% 0805	2	R1,R56
01-24-10R0	RES 10.0R 1% 0805	1	R34
01-24-1332	RES 13.3K 1% 0805	4	R45,R47-R49
01-24-1502	RES 15.0K 1% 0805	1	R7
01-24-1620	RES 162R 1% 0805	1	R63
01-24-1912	RES 19.1K 1% 0805	2	R22,R23
01-24-2002	RES 20.0K 1% 0805	2	R20,R21
01-24-22R1	RES 22.1R 1% 0805	2	R9,R10
01-24-4750	RES 475R 1% 0805	1	R50

50-02-0311 PCBA MAIN SPIDER3-HD75			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-4751	RES 4.75K 1% 0805	7	R31,R32,R33,R36,R37,R40,R60
01-24-4752	RES 47.5K 1% 0805	1	R27
01-24-5492	RES 54.9K 1% 0805	1	R44
01-24-5R11	RES 5.11R 1% 0805	2	R25,R26
01-48-0001	POT MONO 10KB LINEAR 9mm/20mm D-SHFT HOR TH	8	R11,R16,R17,R24,R30,R35,R42,R59
03-10-0106	CAP ELEC 10uF 10V 20% RADIAL 5/11/5	4	C4,C5,C10,C12
03-10-0338	CAP ELEC 3300uF 6.3V 20% RADIAL 10/20/5	1	C28
03-10-1107	CAP ELEC 100uF 6.3V 20% RADIAL5/11/5	1	C29
03-10-6108	CAP ELEC 1000uF 6.3V 20% RADIAL 8/11.5/5	2	C8,C37
03-12-0107	CAP ELEC 100uF 16V 20% RADIAL 6.3/11/5	2	C30,C34
03-12-0476	CAP ELEC 47uF 16V 20% RADIAL 6.3/11.2/5	1	C18
03-12-1338	CAP ELEC 3300uF 16V 20% RADIAL12.5/25/5	1	C38
03-18-0105	CAP ELEC 1uF 50V 20% RADIAL 5/11/5	4	C6,C7,C14,C15
03-18-0106	CAP ELEC 10uF 50V 20% RADIAL 5/11/5	3	C20,C31,C32
03-18-0228	CAP ELEC 2200uF 50V 20% RADIAL 16/31.5/7.5	2	C35-C36
03-50-0220	CAP NPO 22pF 50V 5% 0805	1	C22
03-50-0270	CAP NPO 27pF 50V 5% 0805	1	C23
03-50-0470	CAP NPO 47pF 50V 5% 0805	1	C24
03-52-0102	CAP X7R 1nF 50V 10% 0805	15	C39-C41,C44-C48,C50,C51,C73,C74,C75,C76,C77
03-52-0104	CAP X7R 0.1uF 50V 10% 0805	18	C9,C11,C13,C21,C42,C43,C49,C53,C55-C60,C62,C63,C64,C65
03-52-0332	CAP X7R 3.3nF 50V 10% 0805	1	C16
03-52-0470	CAP X7R 47pF 50V 10% 0805	1	C72
03-52-0473	CAP X7R 47nF 50V 10% 0805	15	C2,C3,C17,C19,C25,C27,C52,C54,C61,C66,C67,C68,C69,C70,C71
06-04-4002	DIODE SMALL-SIGNAL 100V 30A DO-41 AXIAL TH 1N4002	4	D21,D22,D23,D24
06-16-0008	DIODE BRIDGE-RECT 8A 600V 4-PIN SIL TH KBU8J	1	D28
06-23-0054	DIODE SCHOTTKY DUAL 30V 200mA 5nS SOT-23 SM BAT54S	2	D10,D15
06-28-8410	DIODE ZENER 10V 5% 350mW SOT-23 SM BZX84C10	2	D13,D14
06-34-0031	DIODE GEN PUR DUAL 120V 600mA 50nS SOT-23 SM BAS31	5	D2,D18,D25,D26,D27
09-00-5401	TRANS PNP SMALL-SIGNAL 2N5401 TH	1	Q4
09-00-5551	TRANS NPN SMALL-SIGNAL 2N5551 TH	1	Q3
11-00-1201	CRYSTAL 12MHZ SHORT-CAN HC49 TH	1	Y1
11-10-2012	FERRITE BEAD 600R@100MHZ 300mA 0805 SM	12	L1,L2,L3,L4,L5,L6,L7,L8,L9,L10,L11,L12
12-00-0317	IC VREG ADJ 1.2-37V 1.5 AMP TO-220 LM317/NOPB TH	1	U11
12-54-0072	IC OP-AMP DUAL TL072CD SM	2	U1,U9
12-64-4552	IC CONVERTER 3V 24B 96KHz AUDIO CODEC SM AK4552	1	U2
15-62-0014	IC 74HC14 INVERTER HEX SCHMITT TRIGGER SO-14 SM	1	U6
15-62-1009	IC 74HCU04 UNBUFFERED CMOS HEXINVERTER TSSOP-14 SM	1	U8
15-72-0001	IC SRAM-256K x 8 TSOP32 SM	1	U7
15-86-0364	IC DSP 24-BIT TQFP-100 SM DSPB56364AF100	1	U5
21-00-6616	JACK 1/4" TRS 6-PIN PCB MT HORIZ TH	2	J1,J3
21-12-0035	JACK 3.5mm STEREO 5 PIN CRIMPED LEADS NON-THREADED	1	J2
21-16-0045	JACK RJ-45 8-PIN FEMALE PCB-MNT RT-ANG	1	J4

50-02-0311 PCBA MAIN SPIDER3-HD75			
Part Number	Description	Qty. Per	Reference Designator(s)
21-20-0205	HDR SIL PCB-MT 5-PIN x 2mm MALE SHRD VERT MT TH	1	H3 - TEST ONLY
21-20-0206	HDR SIL PCB-MT 6-PIN x 2mm MALE SHRD VERT MT TH	1	H2
21-20-1564	HDR SIL PCB-MT 4-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H4
21-20-1565	HDR SIL PCB-MT 5-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H5
21-20-1566	HDR SIL PCB-MT 6-PIN X .156 MALE VERT-MNT FRIC-LOCK	1	H7
21-30-0029	CBL DIL 14 PIN .100 PITCH 2.0 IN RIBBON STAKED TO FEMALE	1	H1 (Connects to H6 on Switch PCBA)
30-15-0007	INSULATOR XTAL 4.9mm C-C 11.8x5.6mm MYLAR	1	Y1
30-18-3030	CLIP GND PCB .30x.30x.07	3	GF1,GF2,GF3
30-51-0146	SHIELD PCB MT FOR 1/4 JACK 1.00 Hx1.25Wx.013THK BERYL COP	1	SH1
35-00-0311	PCB MAIN SPIDER3-HD75 A8-7 REV.B	1	
45-01-0026	IC PROGRAMMED MCU v1.00 SPIDER3 A8-5/7	1	U3
45-02-0028	IC PROGRAMMED FLASH v1.00 SPIDER3-HD75 A8-7	1	U4

50-02-0311-1 PCBA SWITCH/LED SPIDER3-HD75			
Part Number	Description	Qty. Per	Reference Designator(s)
01-24-1300	RES 130R 1% 0805	5	R6,R13,R15,R19,R29
01-24-4751	RES 4.75K 1% 0805	5	R5,R12,R14,R18,R28
06-34-0016	DIODE SWITCHING 75V 200mA 6nS SOT-23 SM BAS16LT1G	5	D3,D5,D6,D9,D11
18-22-0003	LED YELLOW SUPER 2.0x1.2x1.1mmAP2012SYC SM	5	D1,D4,D7,D8,D12
21-21-0014	HDR DIL PCB-MT 14-PIN 2x7x.100MALE SHRD VERT MT TH	1	H6
35-00-0311-1	PCB SWITCH/LED SPIDER3-HD75 A8-7 REV.B	1	(Breakaway Of MAIN PCB)



Parts Quick-View Guide

This is a new feature to the Line 6 Service Manual, which enables you the ability to move your computers mouse over the embedded picture to locate the Part Number or Assembly Number.

Please note that to maximize the use of these features you will need to update Adobe Acrobat to at least version 7.0. Acrobat Reader can be installed for free at www.adobe.com



USA Version Model ID # 99-010-2705
Australian Version Model ID # 99-010-2701
European Version Model ID # 99-010-2702
Japanese Version Model ID # 99-010-2703
UK Version Model ID # 99-010-2704

Spider III 112

Quick View Guide for Parts

Finished Good

Includes Packaging



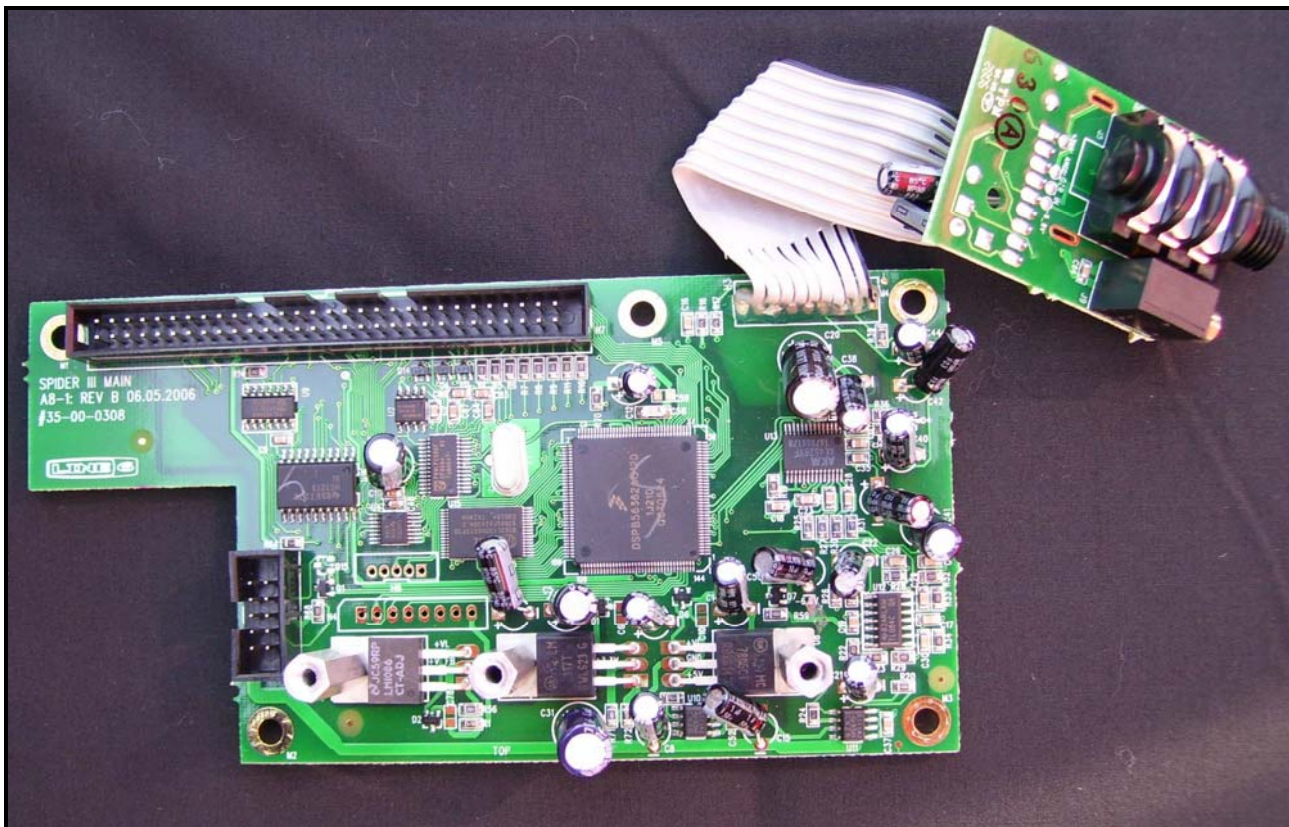
Front View —

Spider III 112/75

Rear View of speaker



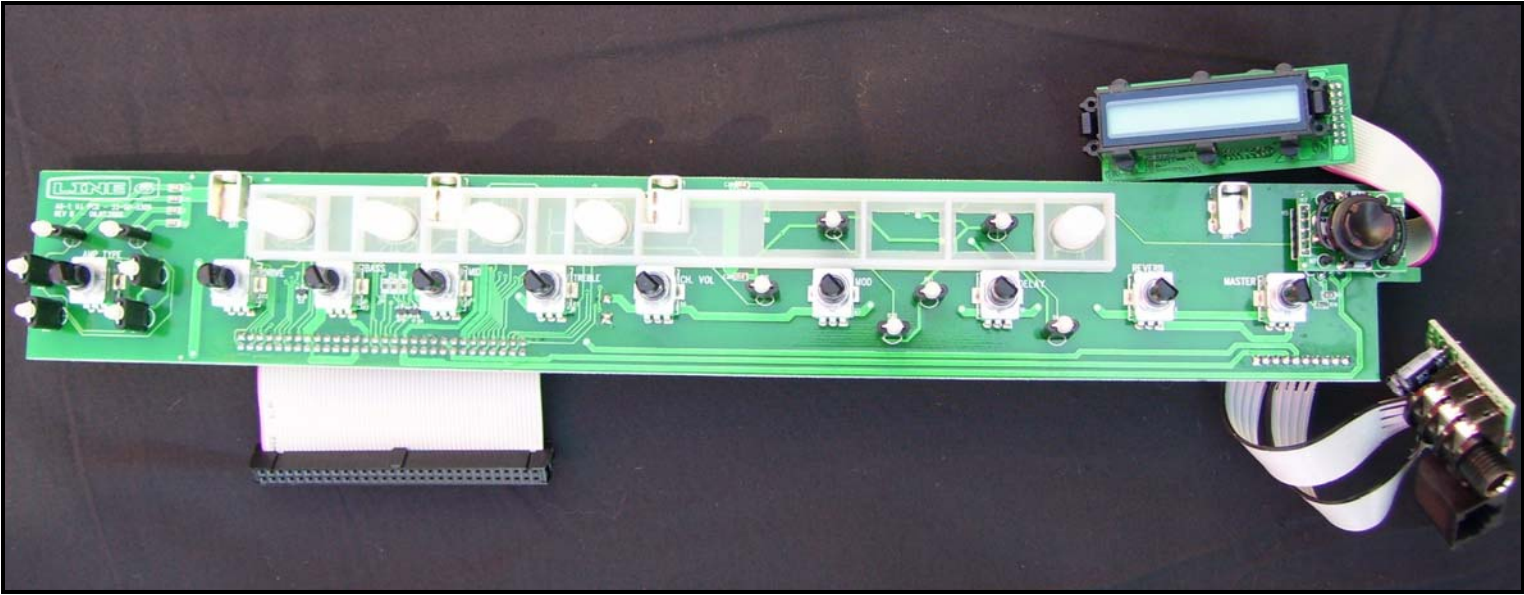
Spider III 112/75



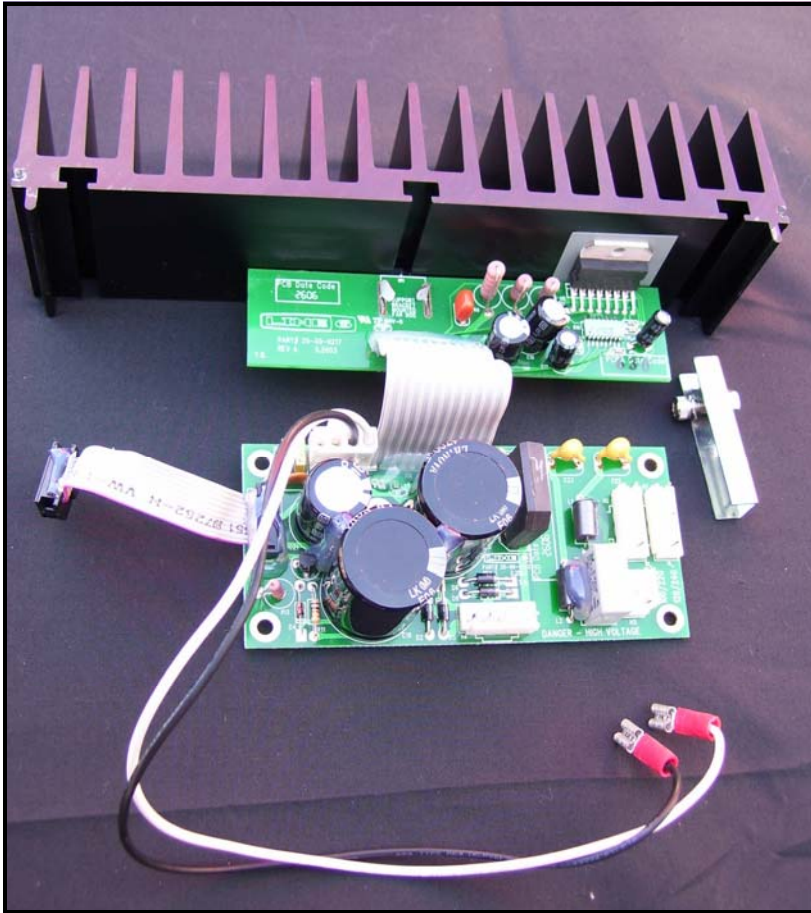
Part# 50-02-0308 Spider III 112 Main PCBA

—Main Board

Spider III 112/75



Part# 50-02-0309 User Interface PCBA



Part# 50-02-0217-1 Power Amp PCBA
Part# 50-02-0222 Power Supply PCBA



Spider III 112/75



USA Version Model ID # 99-010-2805
Australian Version Model ID # 99-010-2801
European Version Model ID # 99-010-2802
Japanese Version Model ID # 99-010-2803
UK Version Model ID # 99-010-2804

Spider III 210 / 120

Quick View Guide for Parts

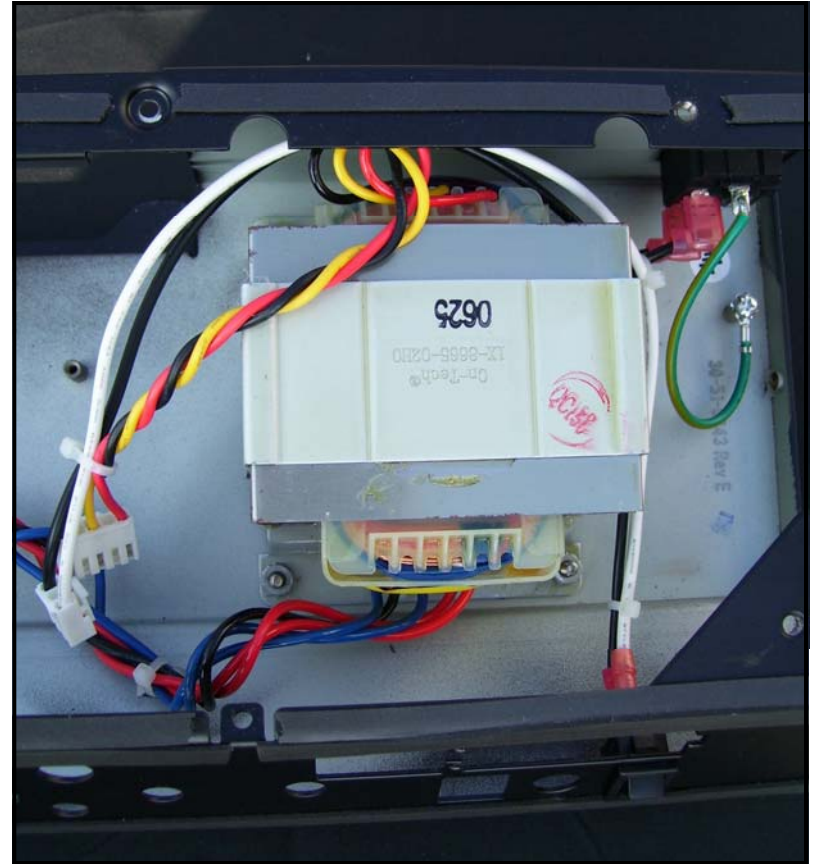
Includes Packaging Finished Good



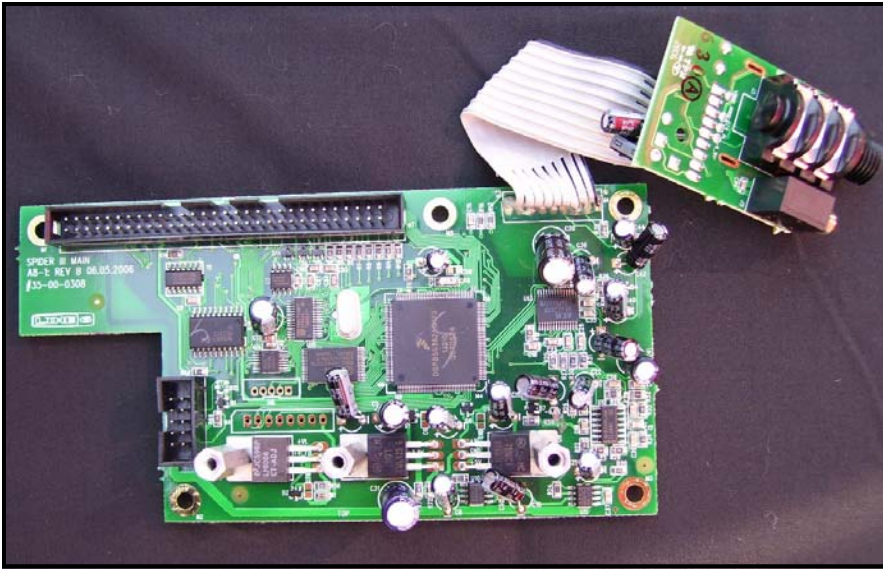
Spider III 120

Front View —

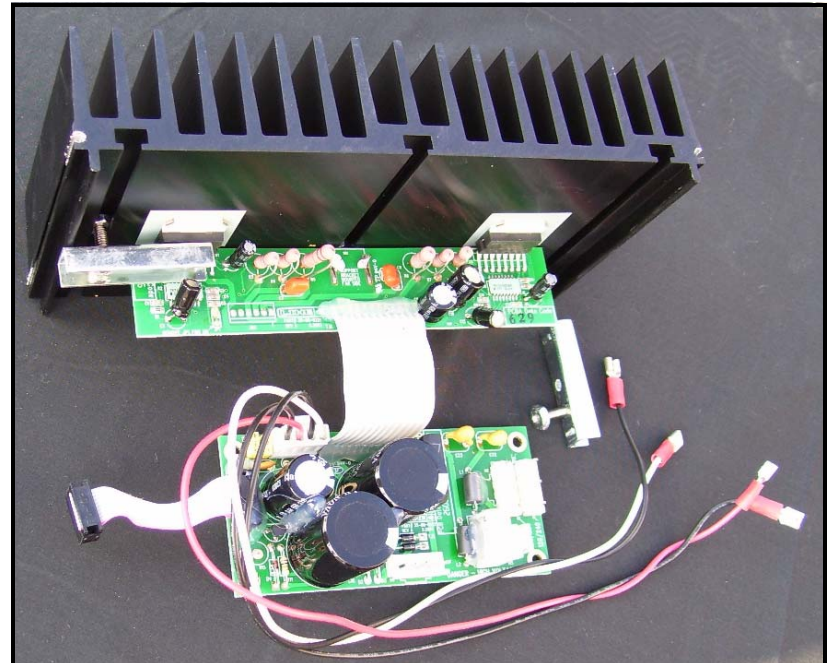
Spider III 210



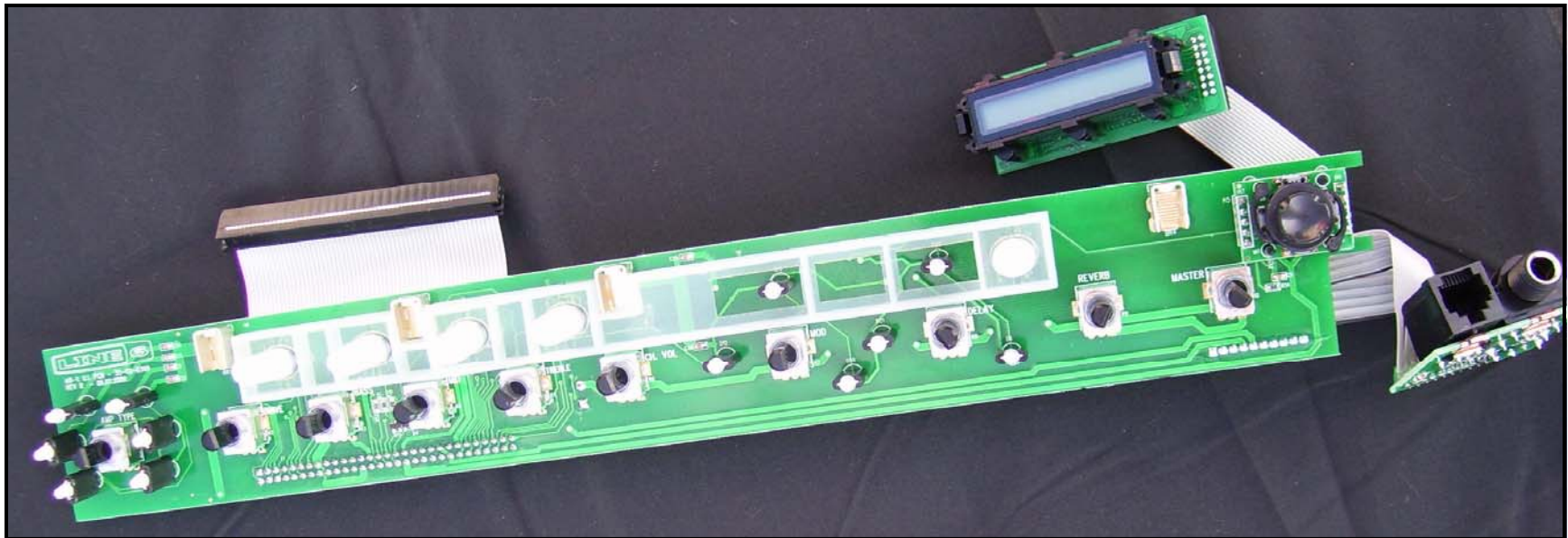
Spider III 210



Part# 50-02-0308 Spider III Main PCBA



Spider III 210



Part# 50-02-0309 Spider III User Interface



USA Version Model ID # 99-010-2905
Australian Version Model ID # 99-010-2901
European Version Model ID # 99-010-2902
Japanese Version Model ID # 99-010-2903
UK Version Model ID # 99-010-2904

Spider III 150 / 212

Quick View Guide for Parts

Finished Good

Includes Packaging

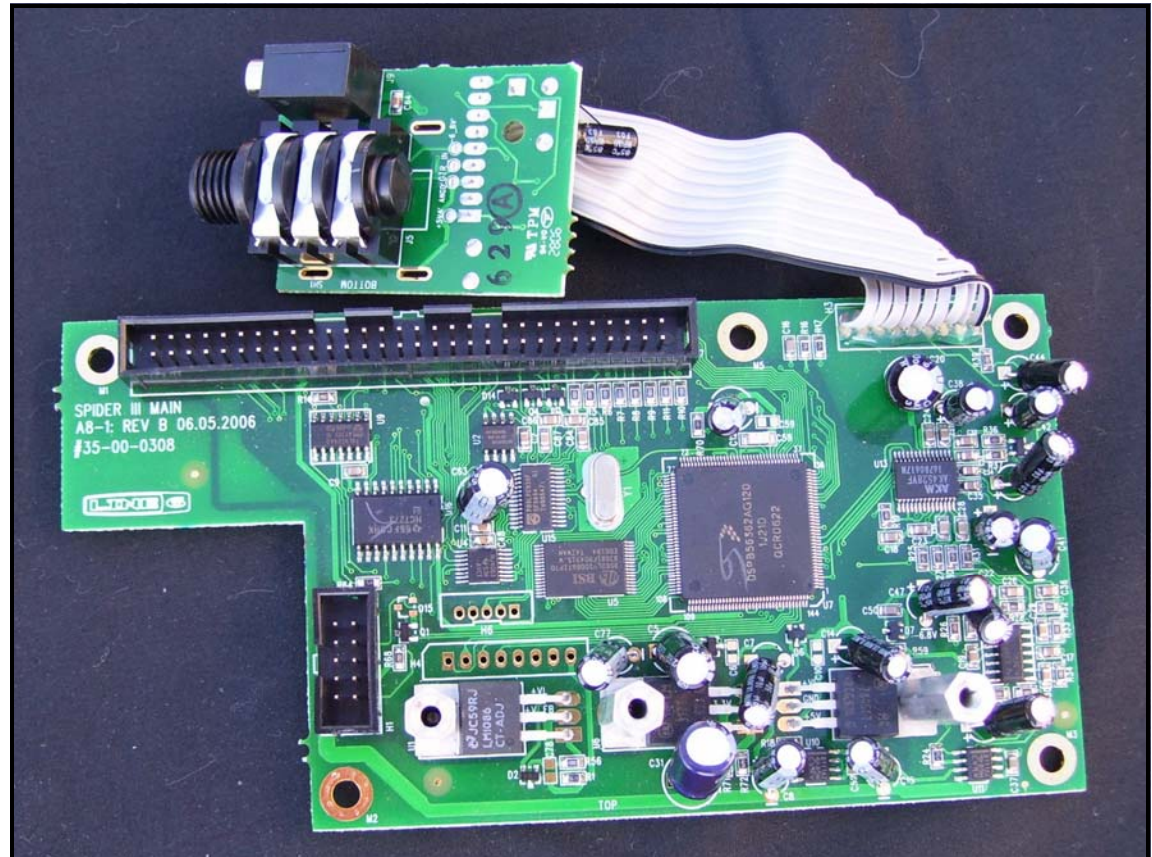


Front View

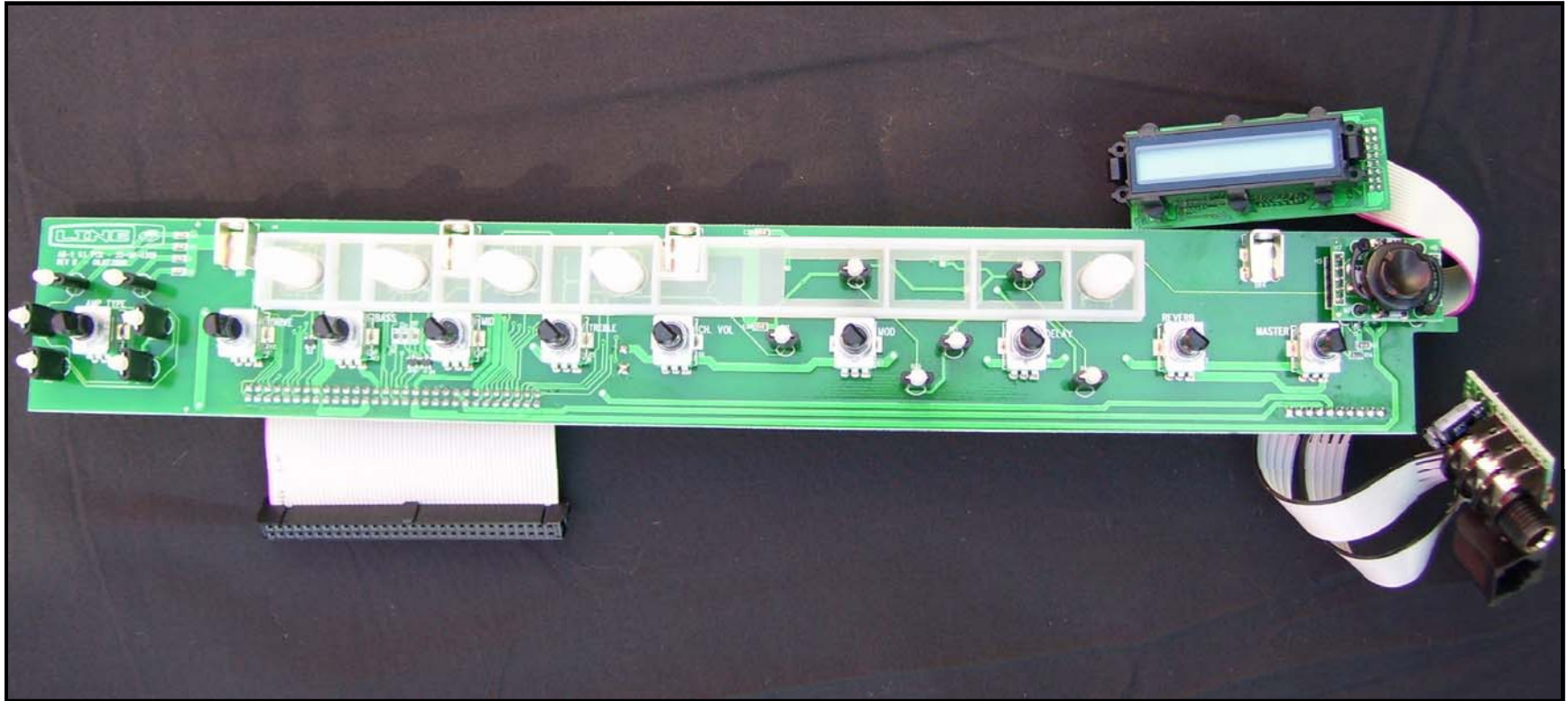
Spider III 150 / 212

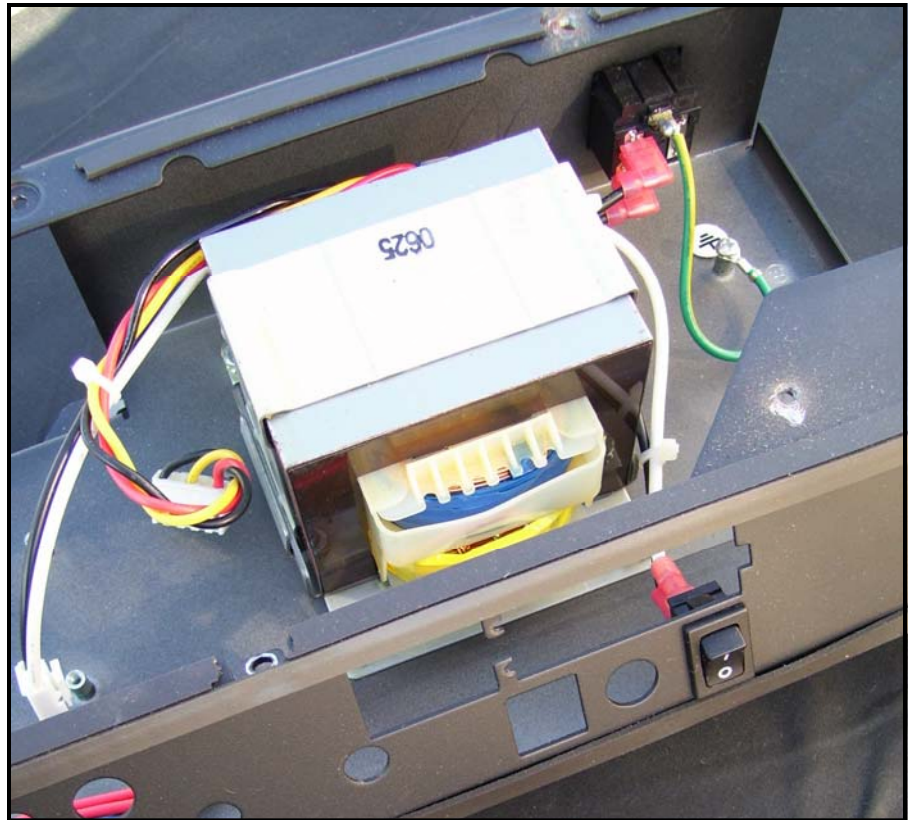
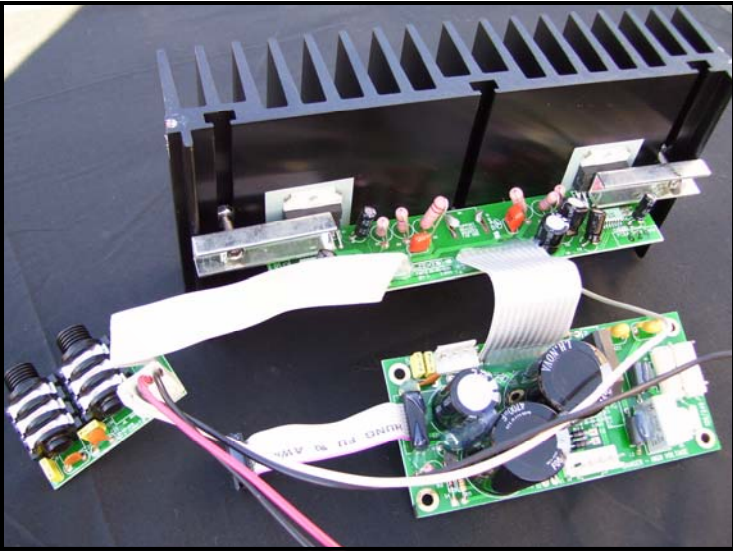


Speakers



Spider III 150 / 212





Spider III 150 / 212



USA Version Model ID # 99-020-1215
Australian Version Model ID # 99-020-1211
European Version Model ID # 99-020-1212
Japanese Version Model ID # 99-020-1213
UK Version Model ID # 99-020-1214

Spider III HD 150

Quick View Guide for Parts

Finished Good

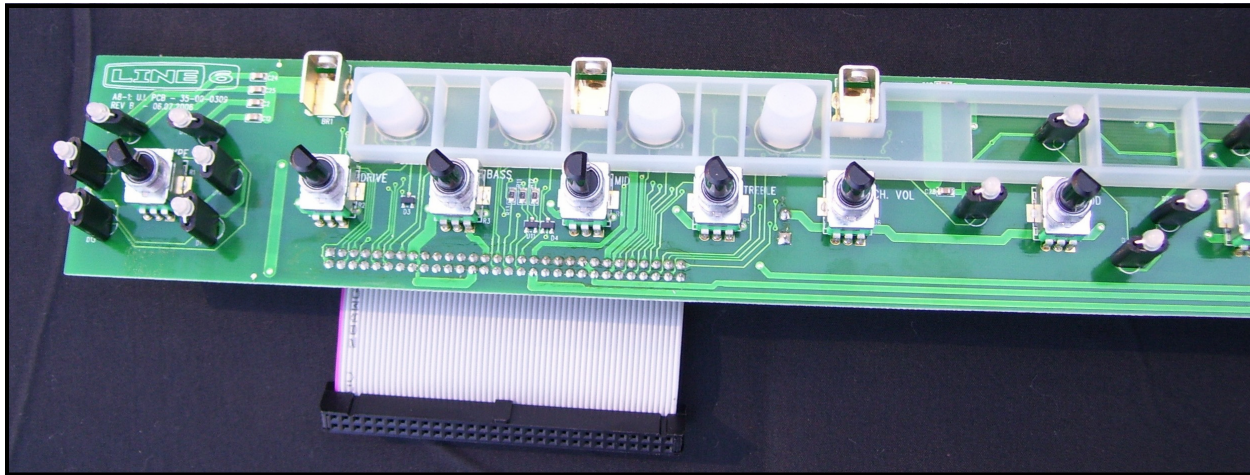
Includes Packaging



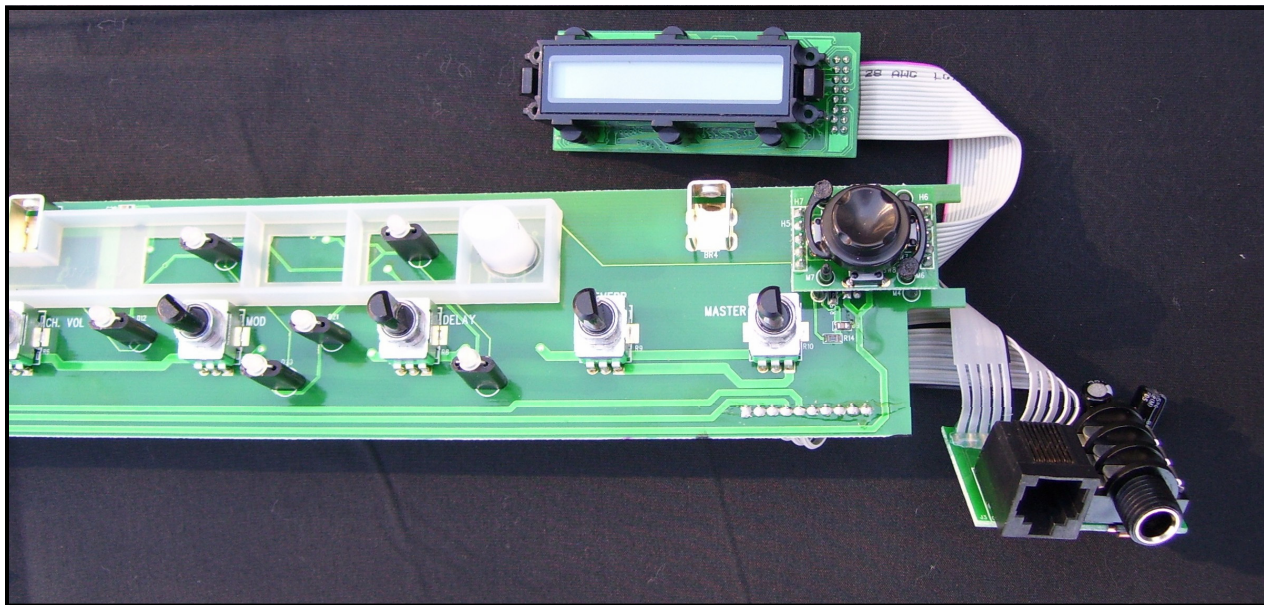
Spider III HD150

Front View —

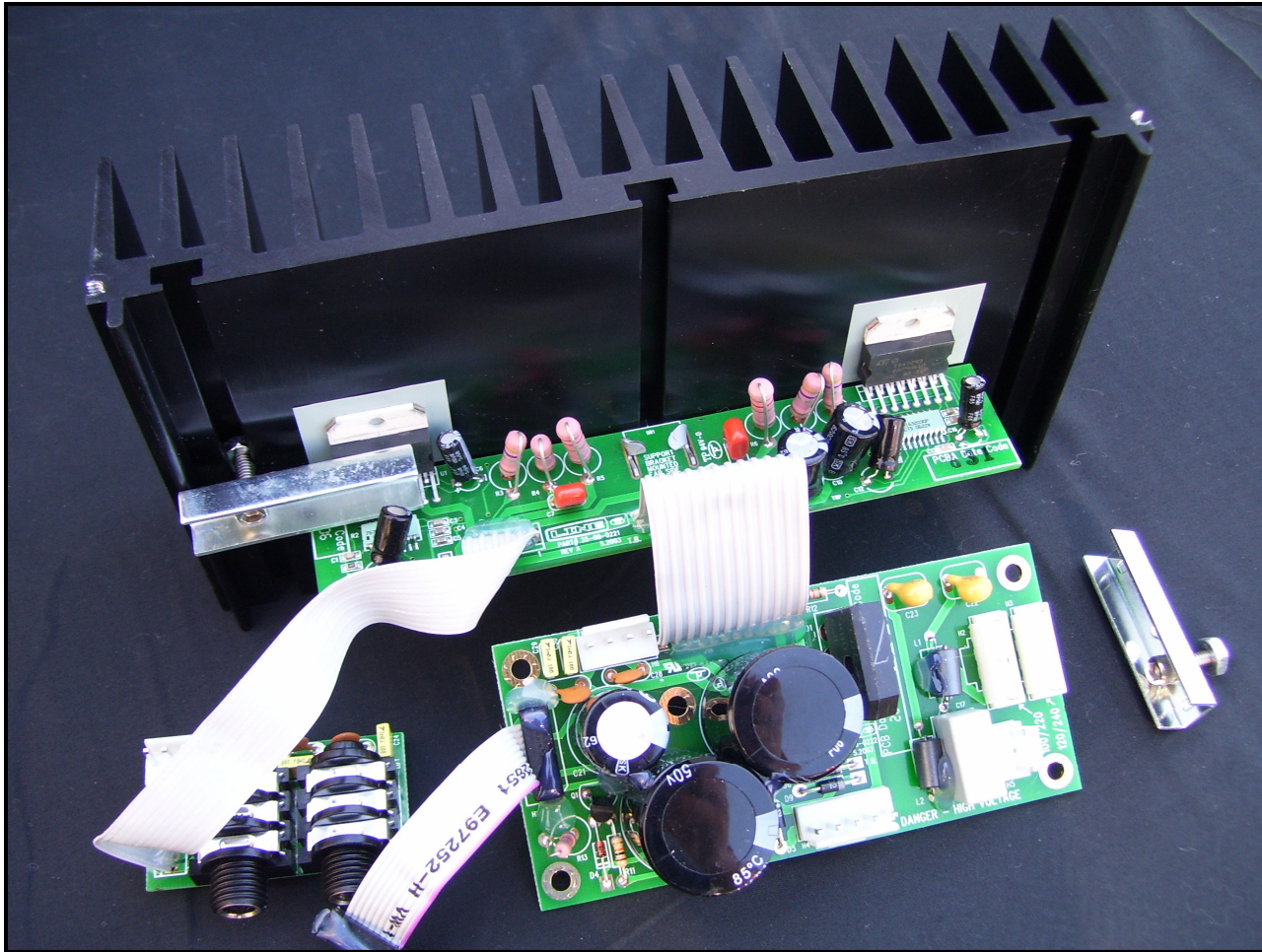
Spider III HD 150



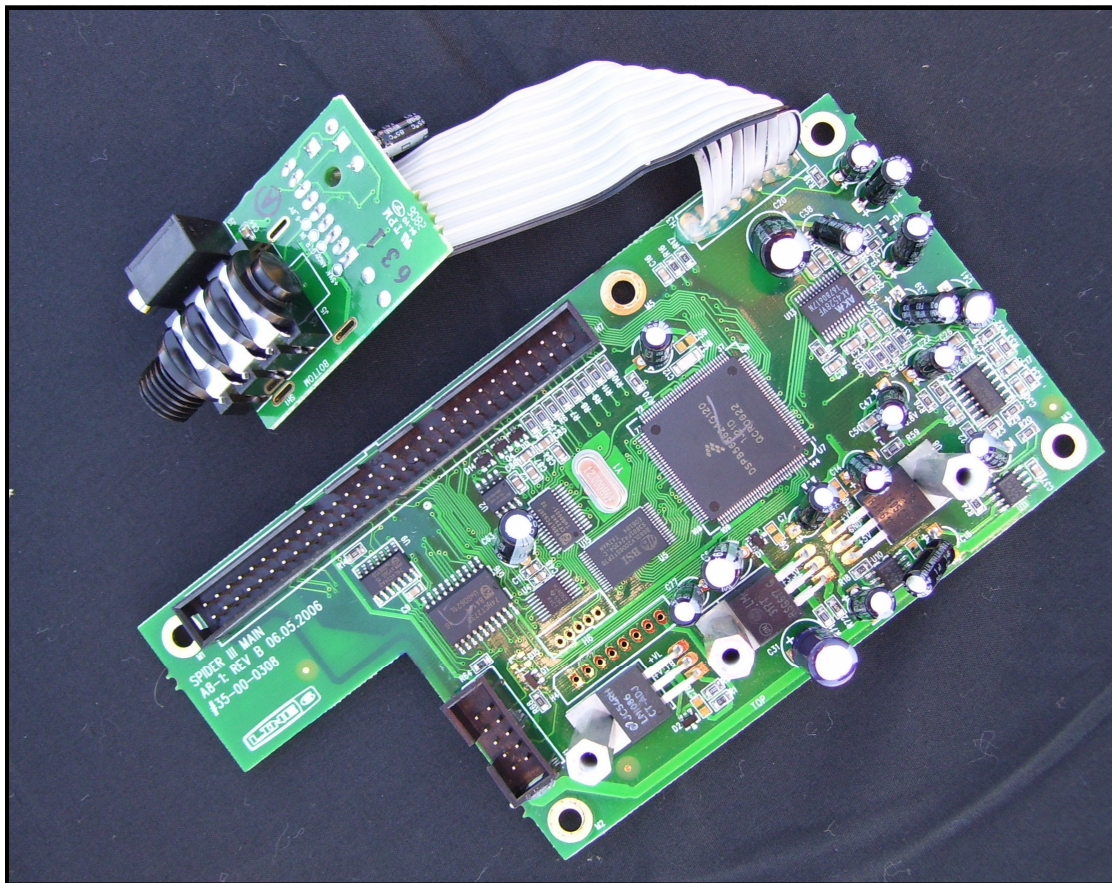
Part# 50-02-0309 User Interface (left side)



Part# 50-02-0309 User Interface (right side)



Spider III HD 150



Spider III HD 150



Spider III HD 75

USA Version Model ID # 99-020-1215
Australian Version Model ID # 99-020-1211
European Version Model ID # 99-020-1212
Japanese Version Model ID # 99-020-1213
UK Version Model ID # 99-020-1214

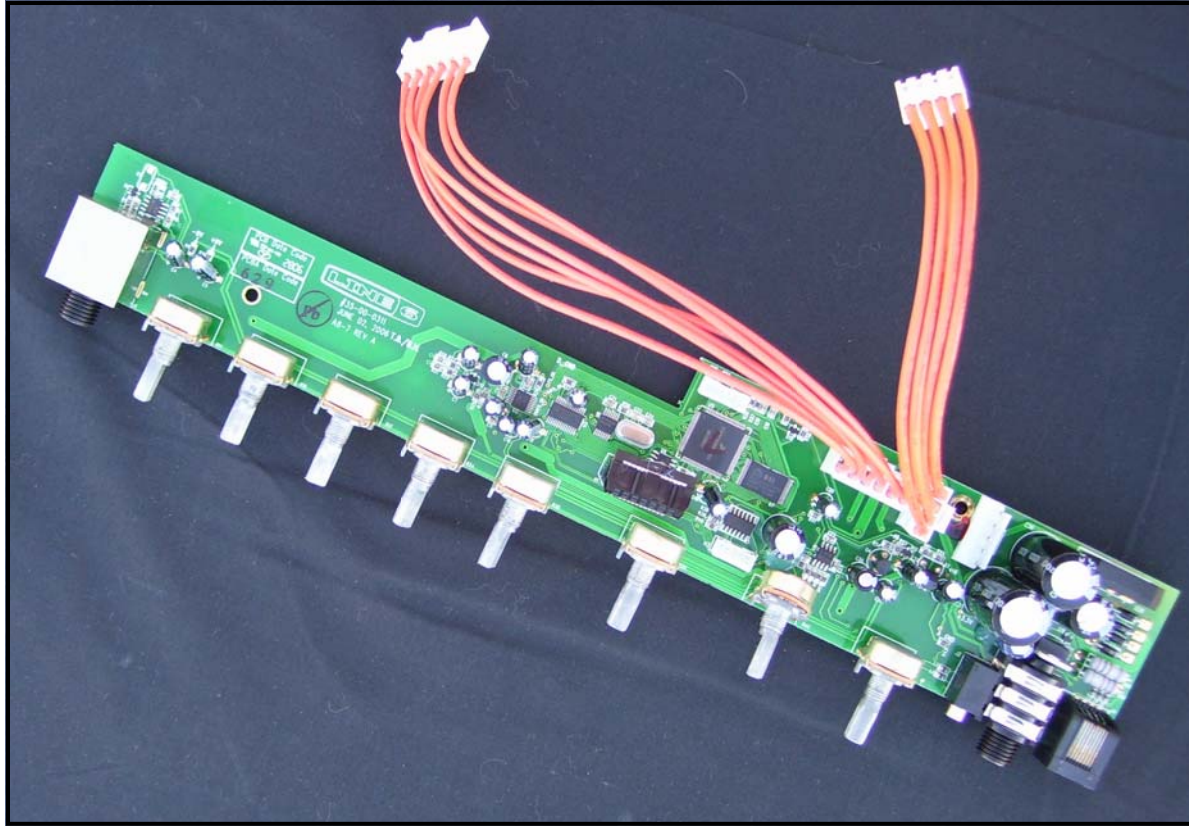
Quick View Guide for Parts

Finished Good

Includes Packaging

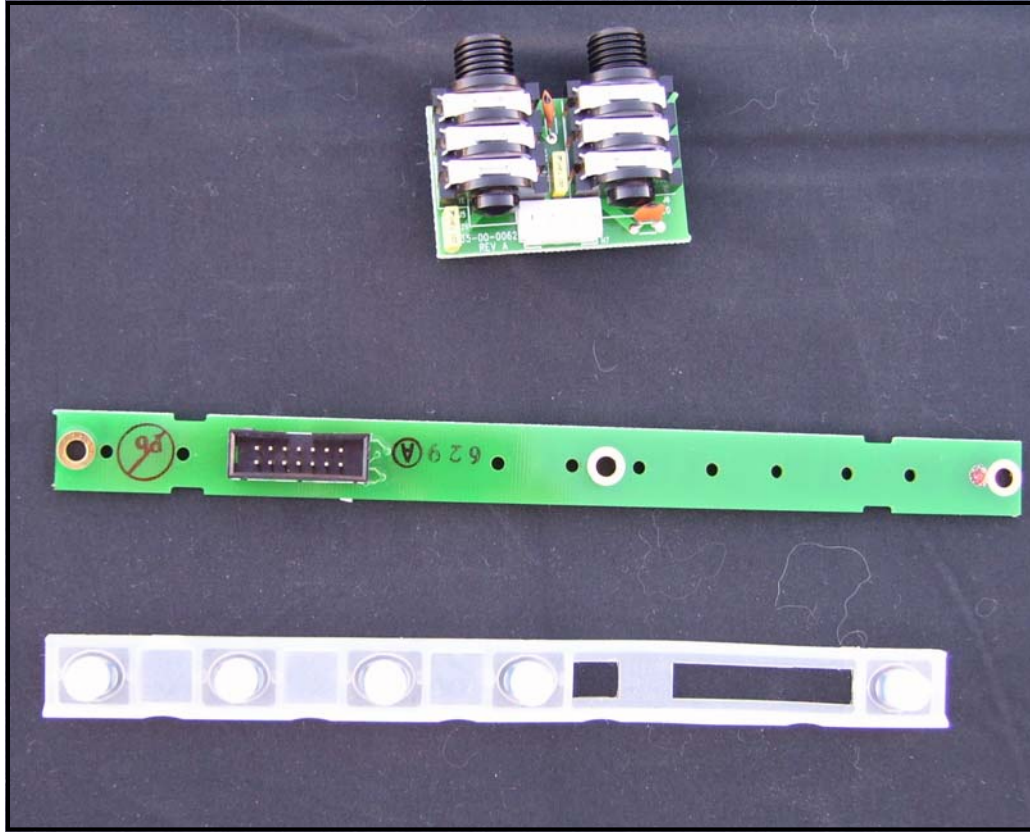


Spider III HD 75

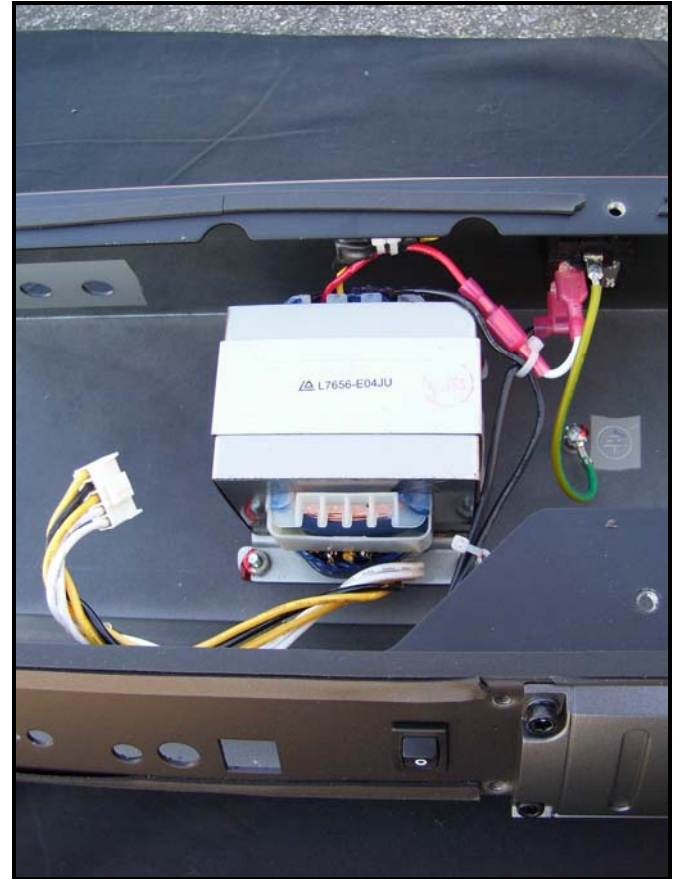
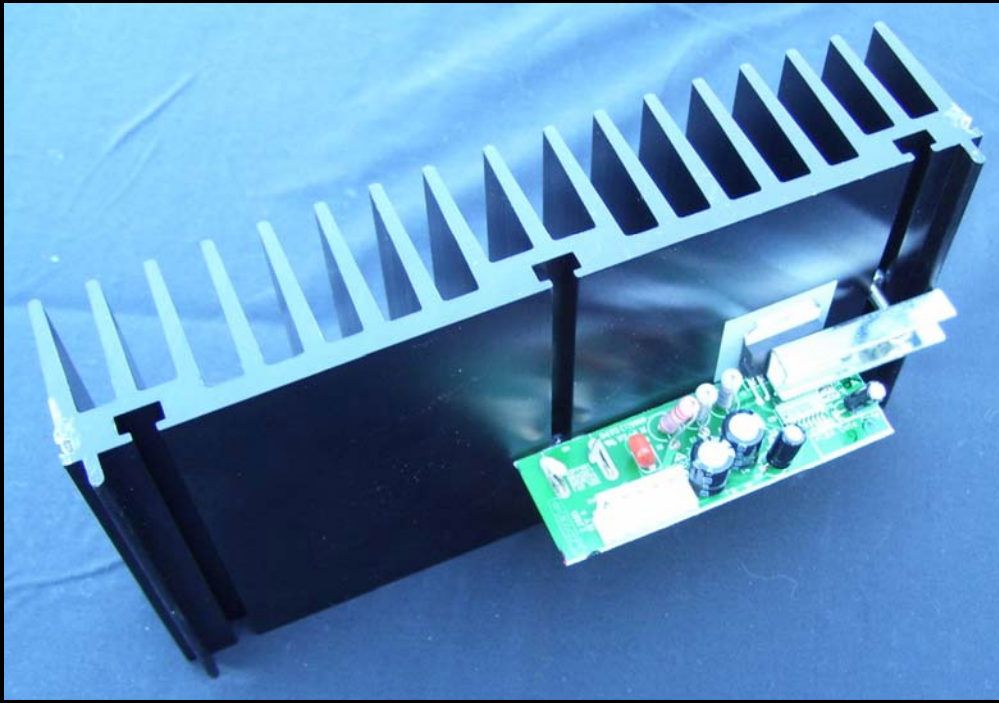


50-02-0311— PCBA Main

Spider III HD 75



Spider III HD 75

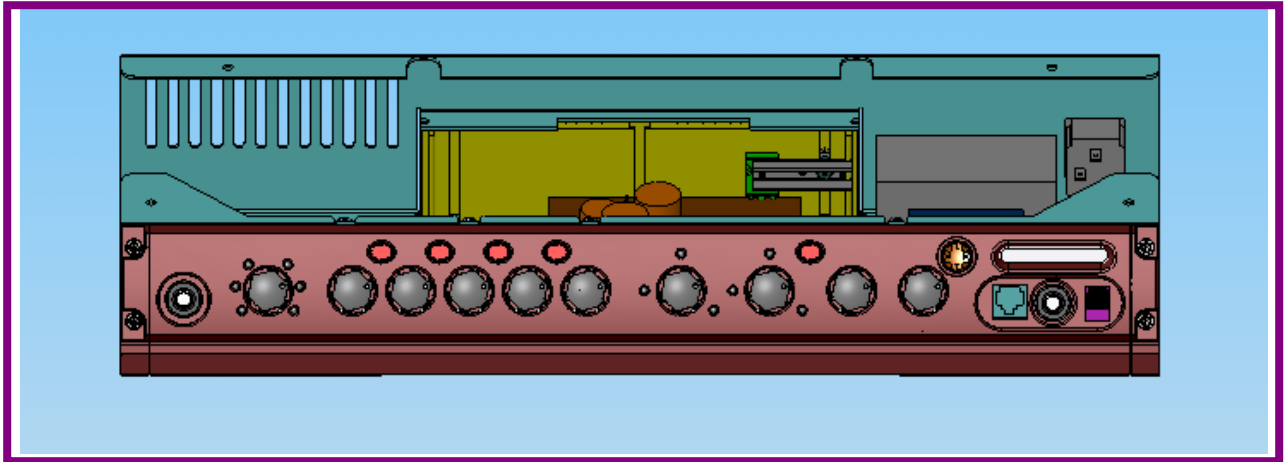


Spider III HD 75

Spider III A8-1 Mechanical Assembly Instructions

Rev A

P/N 50-04-0046-X (112)



Forward and Notes

The information in this booklet applies to the mechanical assembly of the Spider III chassis. See also the Related Electrical assembly documentation, for major considerations in assembling the electrical components of the PCBs (through the soldering process and preparation of the board for addition of custom components).

A note on the text: the illustrations in this book are for reference only. In some cases, color and geometry of illustrations may not accurately reflect the color or exact geometry of actual parts.

- Unless otherwise noted, all dimensions are in MM.
- Part identifying notes are in this format: Description (Part Number)
- Drawings are not to scale.
- Torque value tolerance +/- .5 in.-lbs. Do not over tighten any components.

For clarity, not all component details are shown. This is especially true with respect to cable assemblies. They are often omitted from views to provide a clearer picture of the material discussed. Do not be confused by the absence (or unexpected presence) of any component in the illustrations in this book.

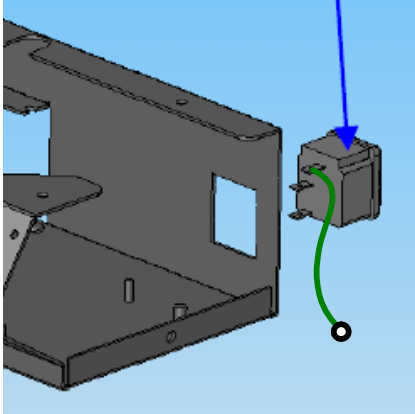


Revision Comment Sheet

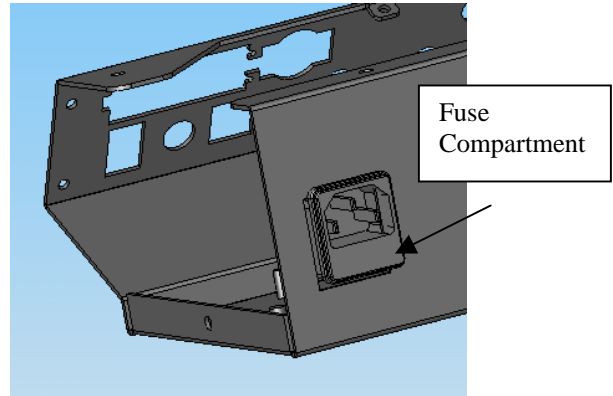
Revision	Changes
X0	Miscellaneous typographical errors corrected
A	Revised assembly pictures and instructions.

Step 1. Install AC Receptacle Assembly (50-00-0001) into A8-1 chassis (30-51-0241). Note the orientation of the AC Receptacle.

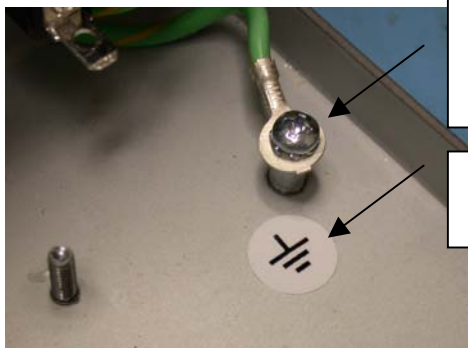
AC Receptacle Assembly
(50-00-0001)



Prongs toward the top
and fuse compartment on
bottom.



Step 2. Secure the earth ground wire to the standoff using a 6-32 x 5/16 screw. Place ground label next to standoff.



6-32 Screw
(30-00-0043)
Torque: 6 in/lbs.

Ground Label
(40-25-0015)

Step 3. Open and remove fuse holder. Install correct fuse value. Install fuse holder back into AC receptacle.

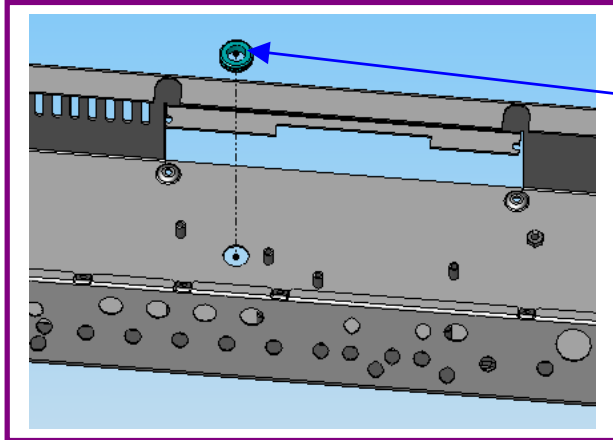
Fuse Type:

24-19-4025: 4A/125V – Use this fuse for all 100/120VAC US and JA units.

24-18-2251: 2A/250V – Use this fuse for all 220-240VAC EU, AU, and UK units.

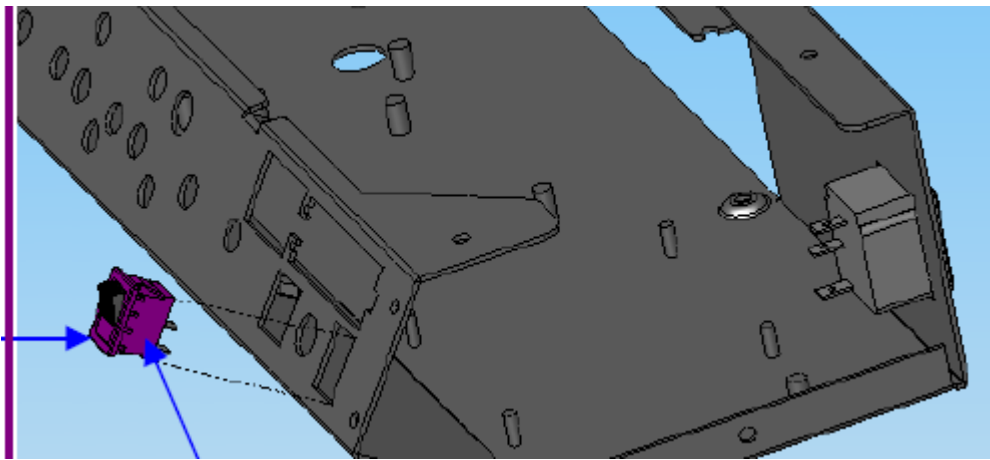


Step 4. Install Speaker Wire Grommet.



Speaker Wire Grommet
PN 30-75-9600.

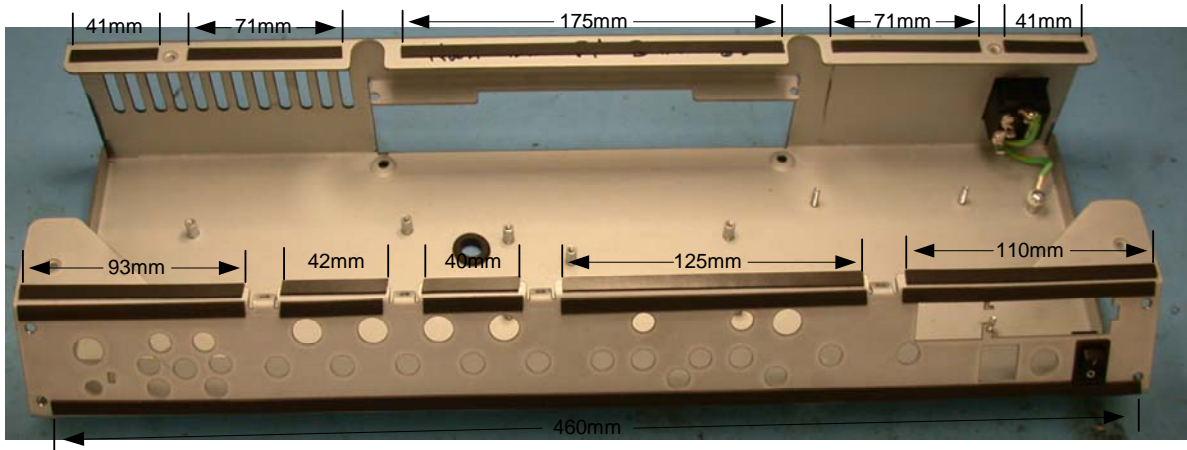
Step 5. Install Power Switch. **Note** orientation of the switch. Shown in the “ON” position.



“O” symbol
is on the
bottom “I”
symbol is on
the top when
switch is
properly
installed

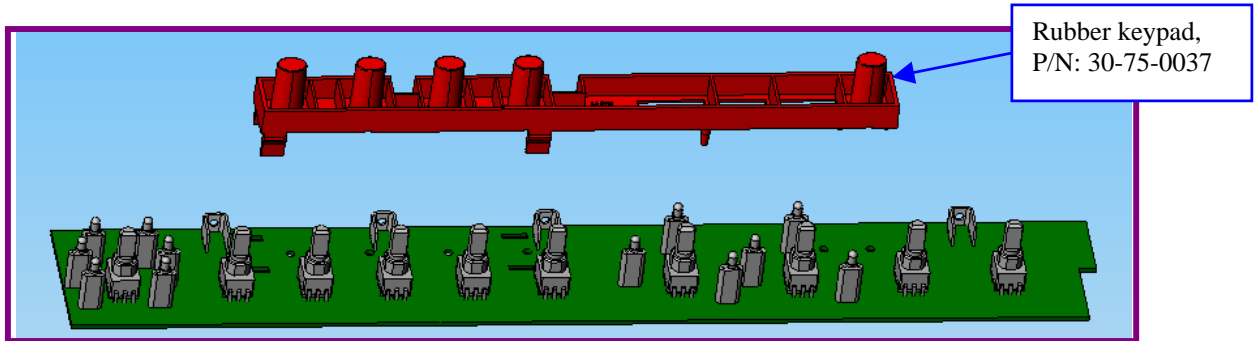
Power Switch
Line 6 P/N 24-24-0606

Step 6. Install anti-vibration foam strips.

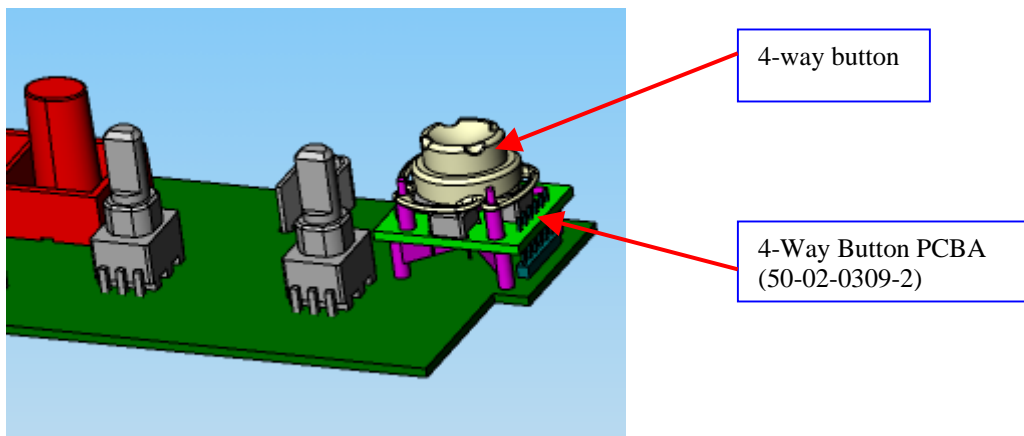


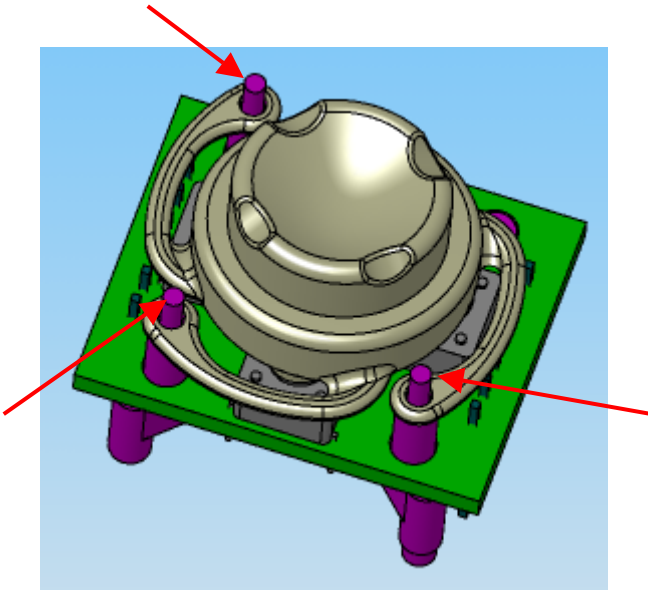
Install foam strips (30-63-0010) on the chassis front and top.
Cut to length as shown in picture.

Step 7. Install Rubber keypad (30-75-0037) on UI PCBA (50-02-0309) at mounting holes M1-M5.



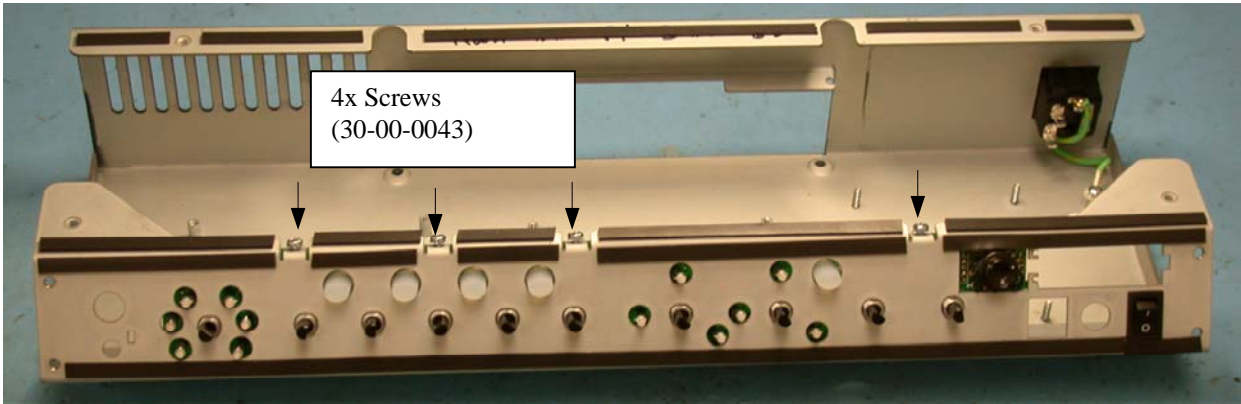
Step 8. Mount the 4-way button (30-27-0171) onto the 4-Way Button PCBA (50-02-0309-2). Align the three holes on the arms of the button with the three posts on the PCBA.



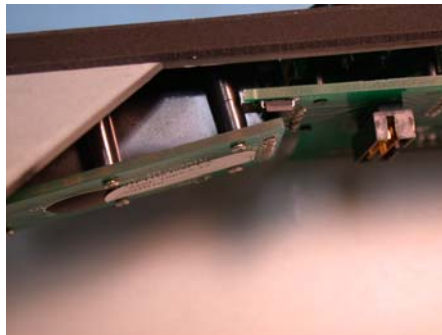


Secure the 4-way button to the PCBA by heat staking the three indicated posts.

Step 9. Install the User Interface PCBA (50-02-0309) into chassis. Install 6-32 screws but do not fully tighten.

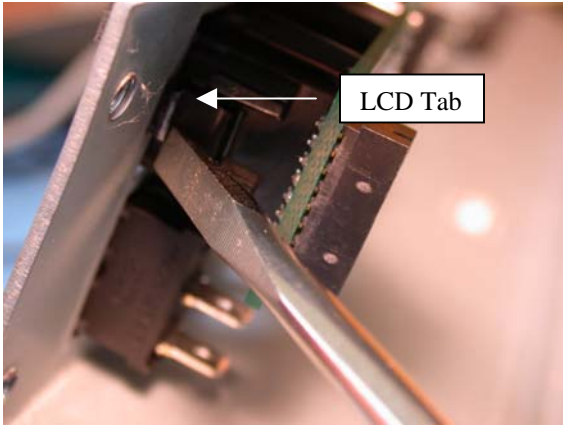


Step 10. Install LCD Assembly (50-04-0050).

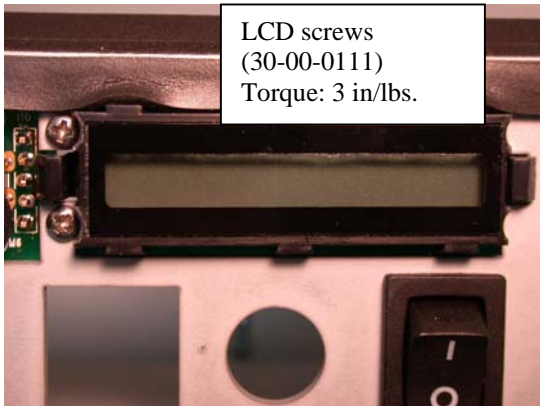




Step 10 (Continued). Press LCD tab into chassis so right side of LCD pushes through chassis.



Install screws to secure LCD to chassis.



Remove protective covering from LCD.



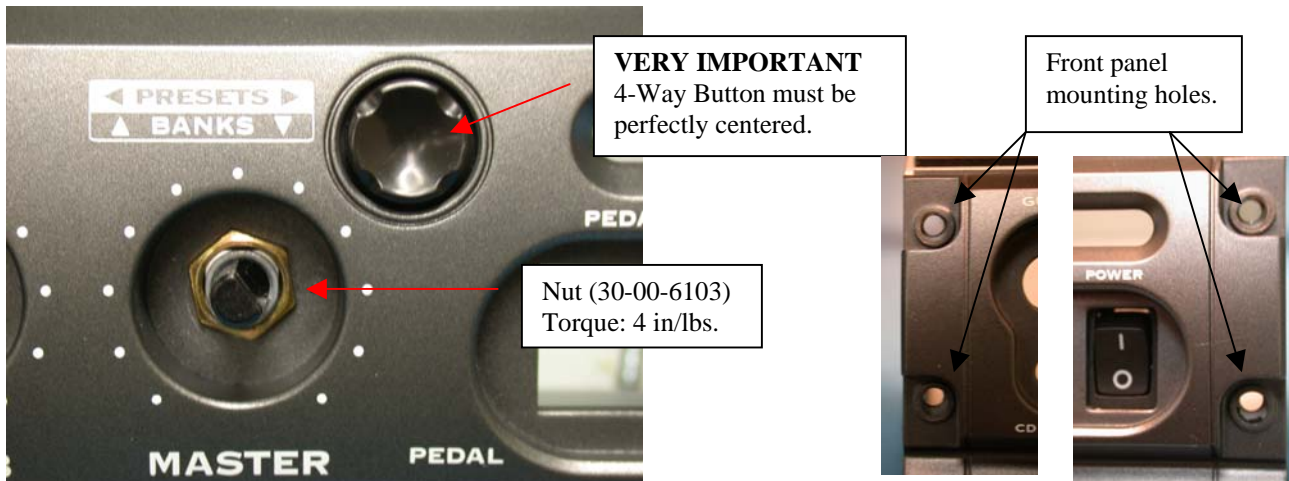


Step 11. Install front panel (30-27-0170) onto chassis.

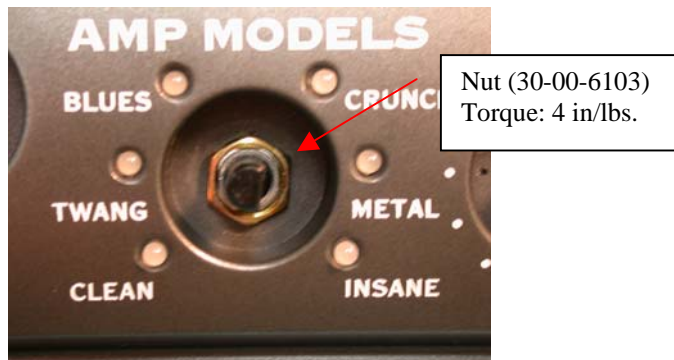


Step 12. VERY IMPORTANT – These instructions must be followed exactly to insure the 4-way button is perfectly centered with the front panel.

Install nut (30-00-6103) onto MASTER potentiometer. Adjust the front panel so the 4-Way Button is perfectly centered and the front panel mounting holes line up with chassis. It is more important for the 4-way button to be perfectly centered than the front panel mounting holes.

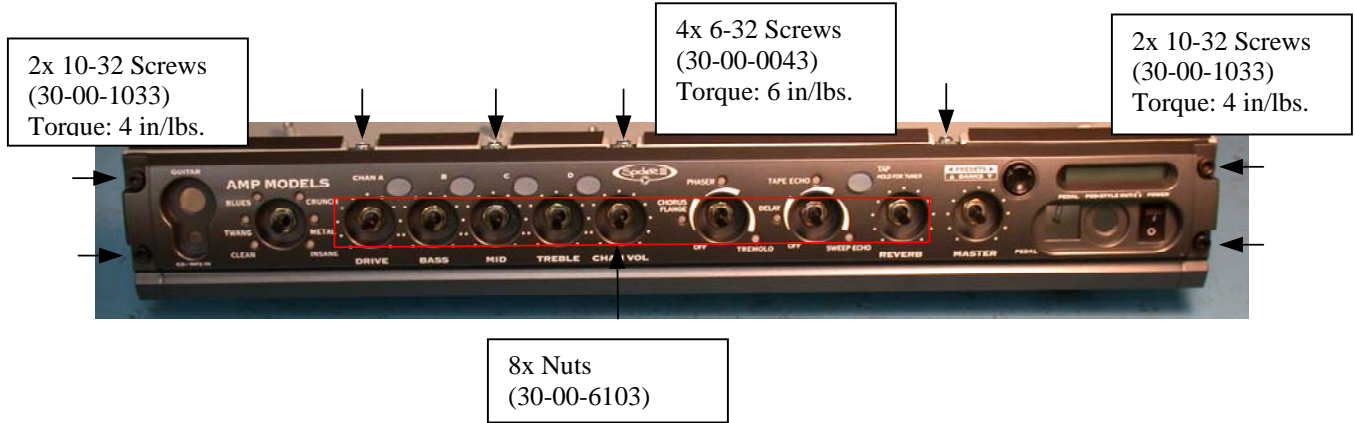


Install nut onto AMP MODELS potentiometer.





Step 12 (Continued). Complete installation of front panel.
Install all four 10-32 screws.
Tighten the 6-32 screws that secure the UI PCBA to the chassis.
Install the remaining eight nuts onto the potentiometers.

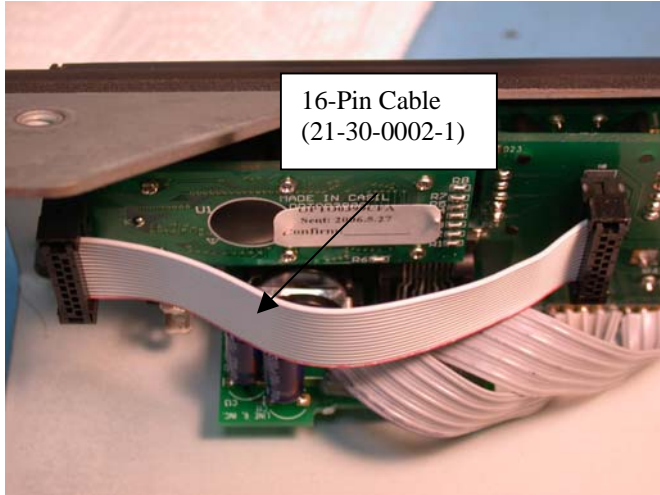


Step 13. Install Headphone/RJ 45 PCBA (50-02-0309-1). Secure PCBA in place by installing plastic nut onto 1/4" jack. The front of the RJ45 Jack must be flush to the plastic front panel after installation.

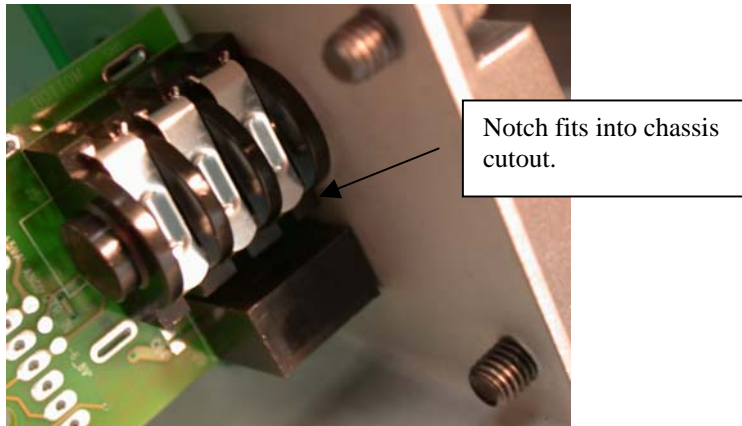


1/4 inch jack nut is included with 1/4" jack (21-00-6616) Torque to 4 in/lbs

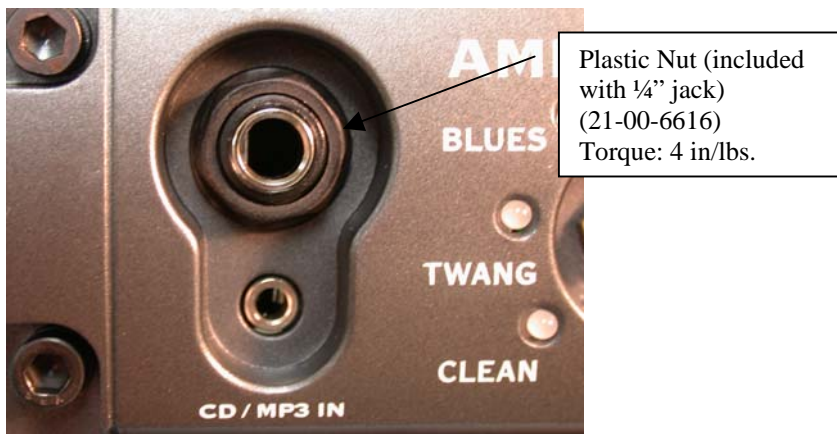
Step 14. Connect the 16-pin cable (21-30-0002-1) between LCD PCB and UI PCB.



Step 15. Install Guitar Input PCBA (50-02-0308-1). **Note:** The Guitar Input PCBA is part of the Main Board PCBA (50-02-0308). Break away Guitar Input PCBA from Main Board PCBA prior to installing. Orientation of Guitar PCBA shall be as indicated below. The notch on Guitar Input PCBA installs into the rectangle cutout in sheet metal.

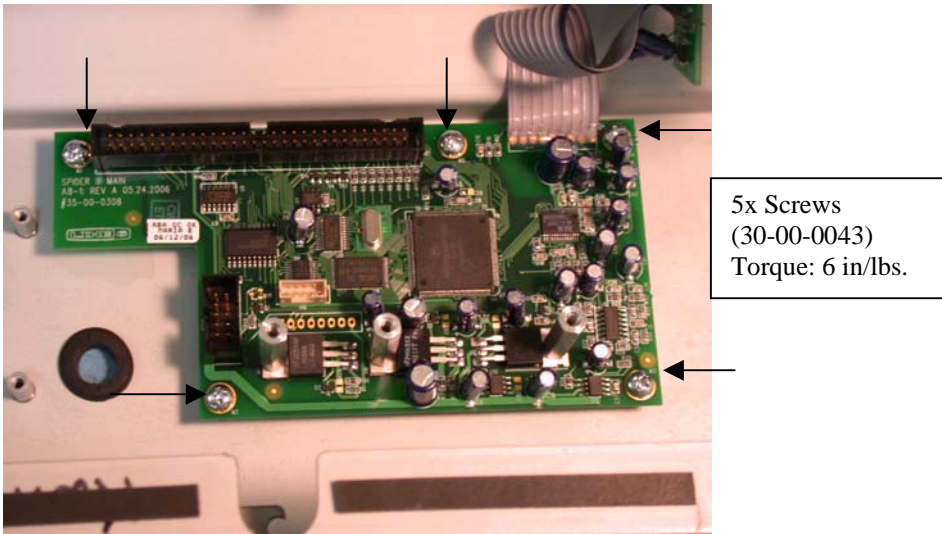


Install plastic nut onto 1/4" jack.

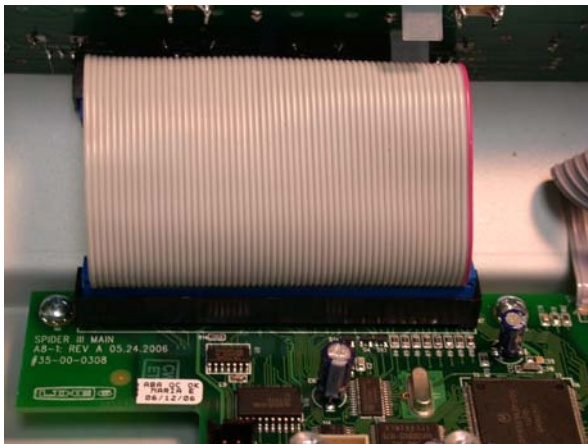


THE NEXT STEP IN THE ASSEMBLY PROCESS REQUIRES THE ASSEMBLER TO TAKE PROPER ESD PRECAUTION DUE TO THE STATIC SENSITIVE DEVICES ASSOCIATED WITH THIS ASSEMBLY.

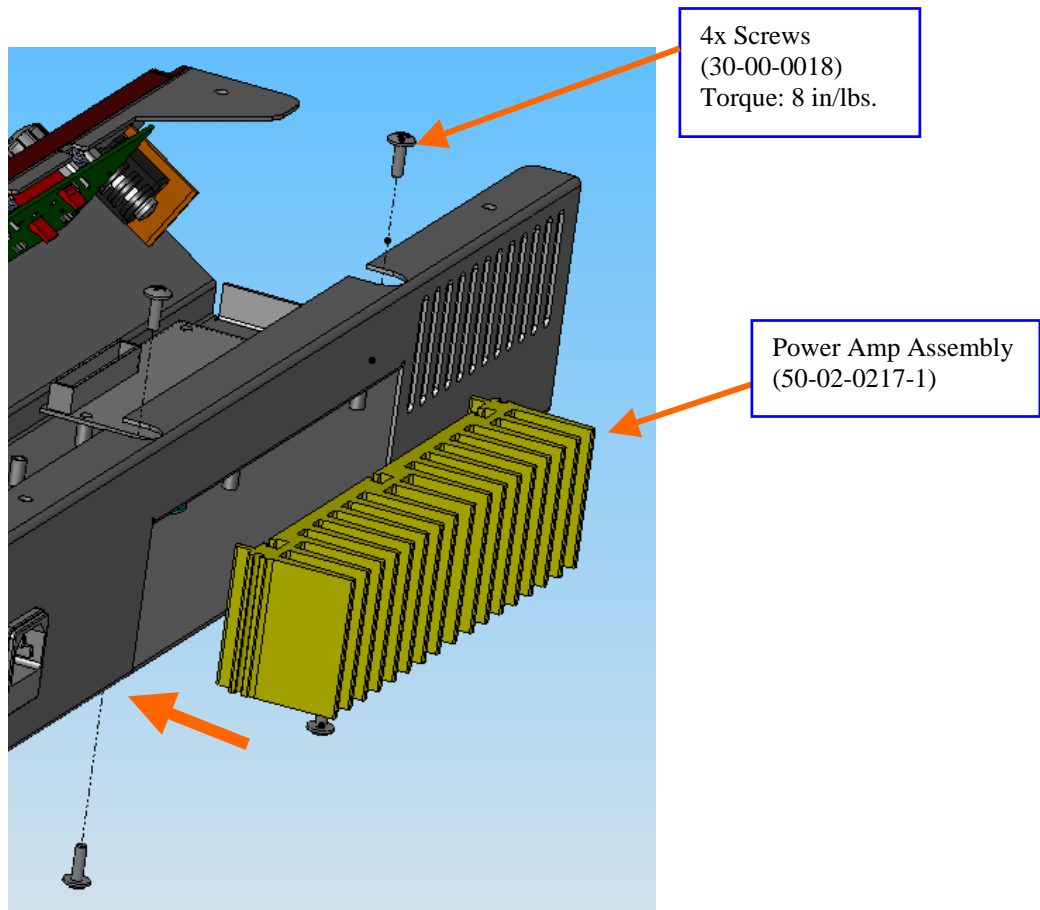
Step 16. Install Main Board PCBA (50-02-0308) using five, 6-32 x 5/16” screws.



Step 17. Connect 60-pin ribbon cable (21-30-0031) from UI PCBA to Main PCBA.

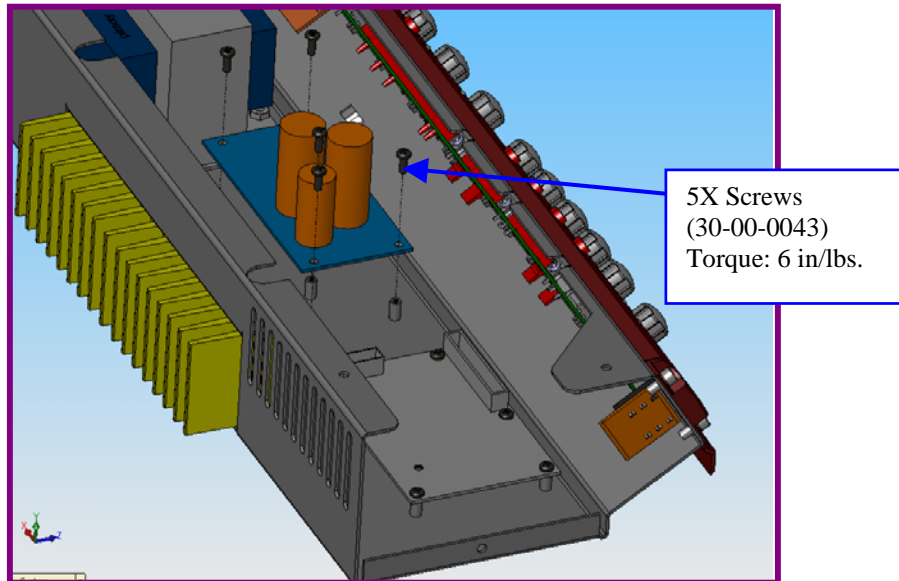


Step 18. Install Heat Sink-Power Amp/Supply Board Assembly (50-02-0217-1) using four, #6-32 self-tapping screws (30-00-0018).

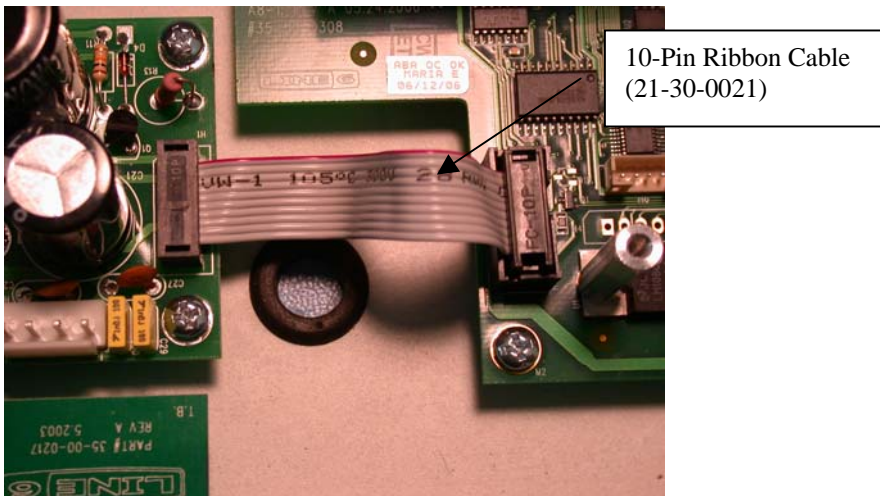


After installation of Heat Sink-Power Amp/Supply PCBA ASSEMBLY, break away the Power Supply PCBA.

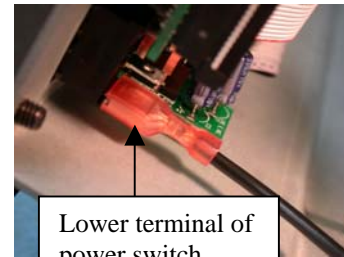
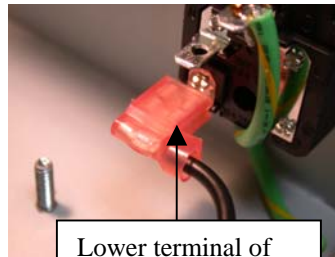
Step 19. Install Power Supply PCBA (50-02-0222), using five, 6-32 x 5/16" screws.



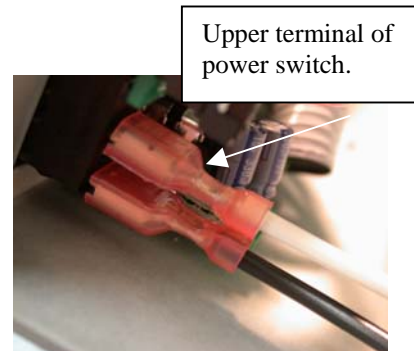
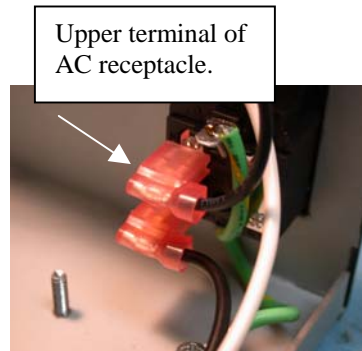
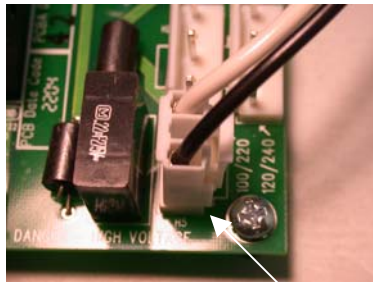
Step 20. Connect 10-pin ribbon cable (21-30-0021) on Power Supply PCBA to Main PCBA.



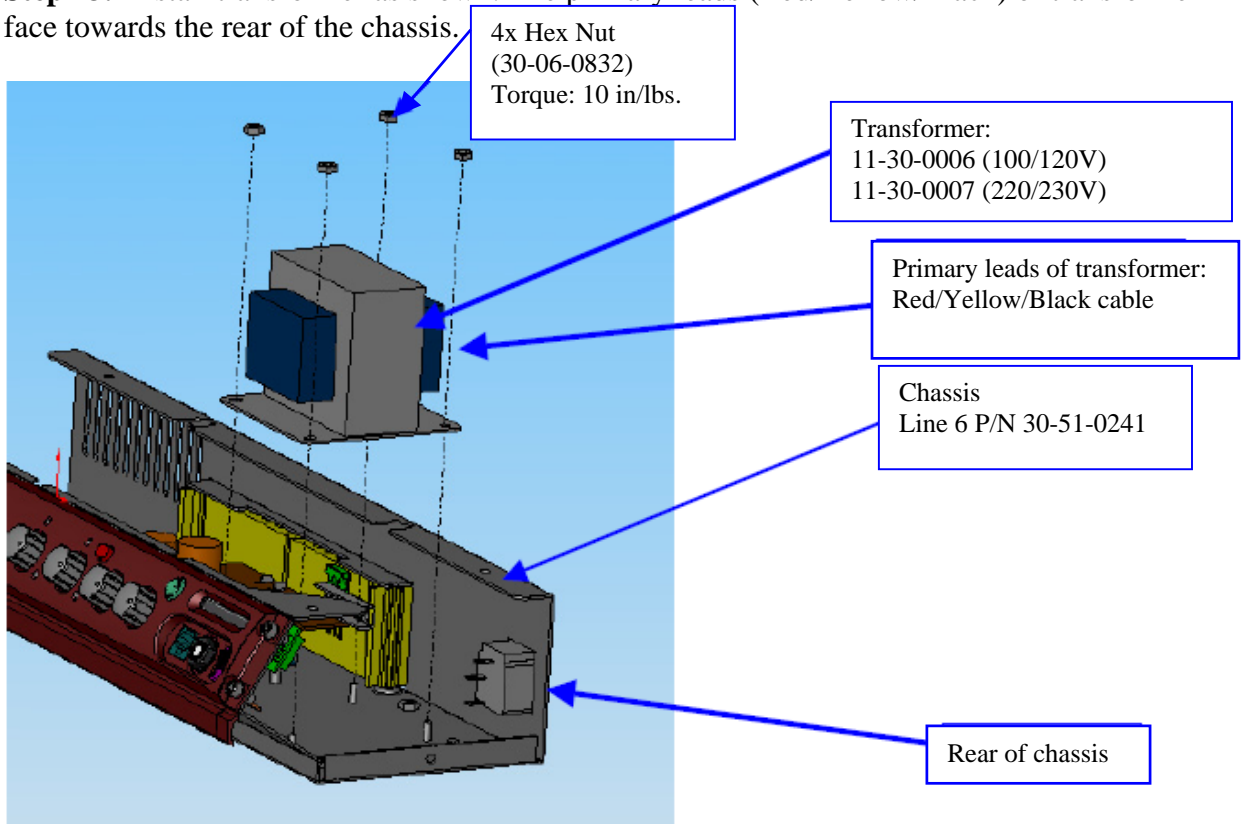
Step 21. Connect cable (21-34-1015) between lower terminal of AC receptacle and lower terminal of power switch. The right angle connector must connect to the AC receptacle.



Step 22. Connect cable (21-34-0044-1) between Power Supply PCBA (H5), and the upper terminals of the AC receptacle (black cable) and power switch (white cable).

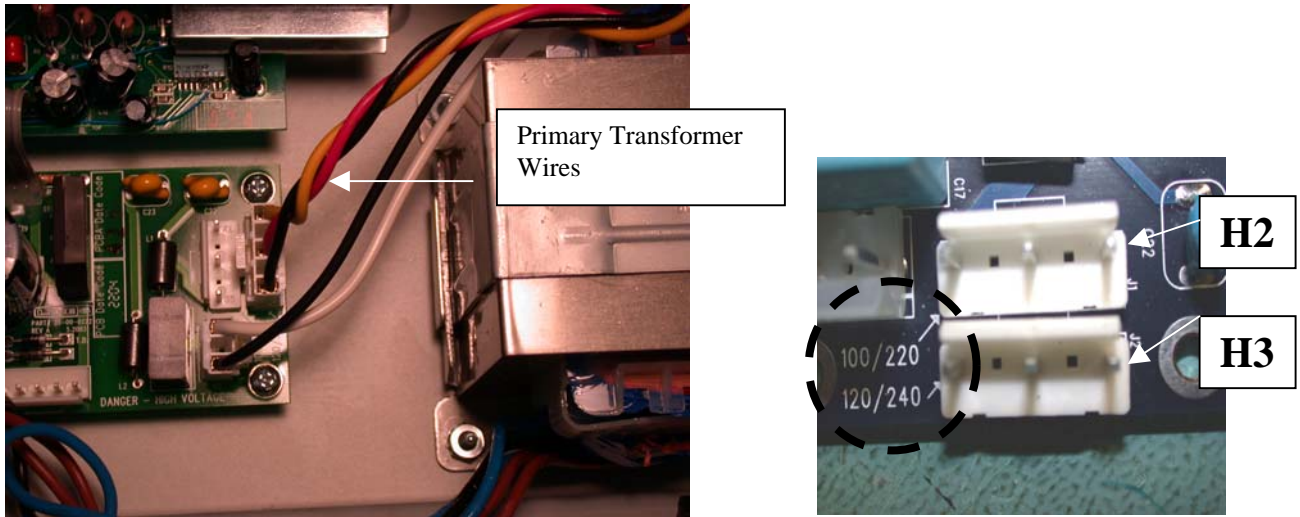


Step 23. Install transformer as shown. The primary leads (Red/Yellow/Black) of transformer face towards the rear of the chassis.



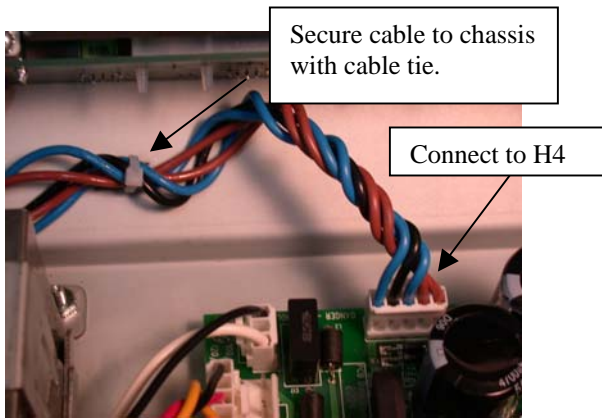
The following illustrations show Transformer connections

Step 24. Twist the primary transformer wires (1 twist per 2.54cm). Connect transformer primary cable to Power Supply PCBA header (H2 or H3). See table below for appropriate header configuration.

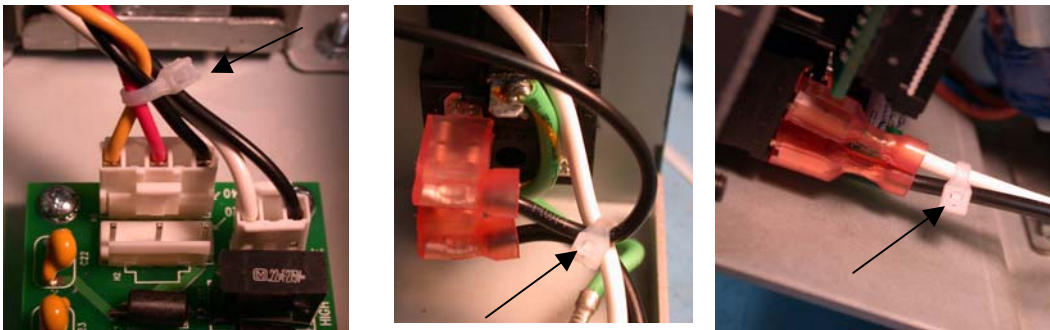


<u>AC VOLTAGE</u>	<u>XFMR PART NO.</u> 112	<u>HEADER ON PWR SPLY PCBA*</u>
100 VAC (JA)	11-30-0006	H2
120 VAC (US)	11-30-0006	H3
220 VAC (EU)	11-30-0007	H2
240 VAC (AU, UK)	11-30-0007	H3

Step 25. Twist the secondary transformer wires (1 twist per 2.54cm). Connect secondary cable to Power Supply PCBA header H4. Secure cable to chassis with cable tie (30-24-0003).

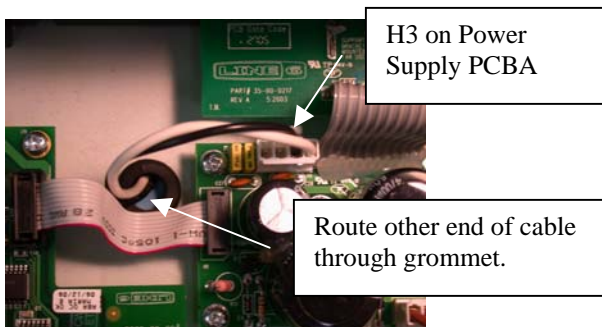


Step 26. Add cable ties (30-24-0003) to AC primary cables in three places.



Step 27. Connect speaker cable (21-34-0037) to H6 on Power Supply PCBA. Route other end of cable through grommet in chassis.

Note: Speaker cable is part of complete unit assembly (59-00-0024-X) and can be installed right before chassis is installed into cabinet.





Step 28. Apply bar code label (40-25-0100) to rear of chassis.



Step 29. Apply ETL label (40-25-0030).

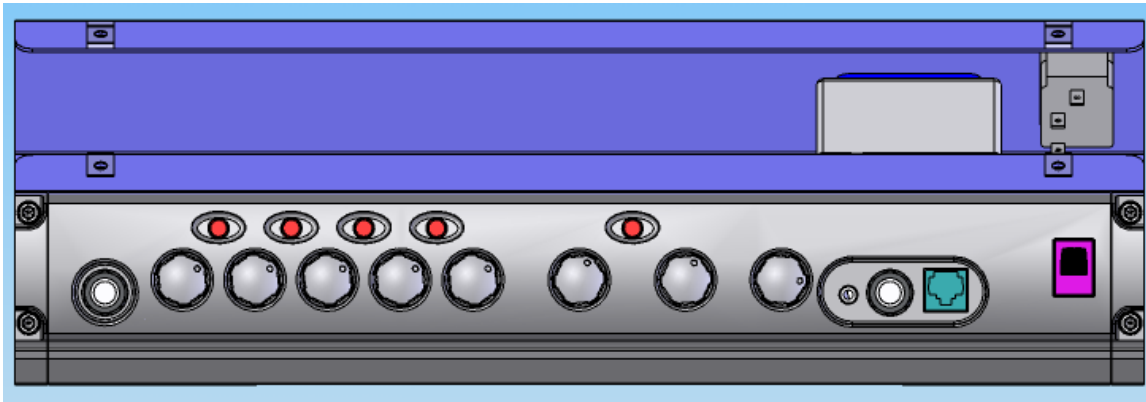
Note: All safety certification testing must be completed by Line 6 before label can be applied.
Do not apply label until an ECO has been issued to add the ETL label.



Step 30. Install ten knobs (30-45-0011) onto potentiometers.



Spider III 1508/3012 A8-2/5 Mechanical Assembly Instructions Rev A



Forward and Notes

The information in this booklet applies to the mechanical assembly of the Spider III chassis. See also the Related Electrical assembly documentation, for major considerations in assembling the electrical components of the PCBs (through the soldering process and preparation of the board for addition of custom components).

A note on the text: the illustrations in this book are for reference only. In some cases, color and geometry of illustrations may not accurately reflect the color or exact geometry of actual parts.

- Unless otherwise noted, all dimensions are in MM.
- Part identifying notes are in this format: Description (Part Number)
- Drawings are not to scale.
- Torque value tolerance +/- .5 in.-lbs. Do not over tighten any components.

For clarity, not all component details are shown. This is especially true with respect to cable assemblies. They are often omitted from views to provide a clearer picture of the material discussed. Do not be confused by the absence (or unexpected presence) of any component in the illustrations in this book.



Revision Comment Sheet

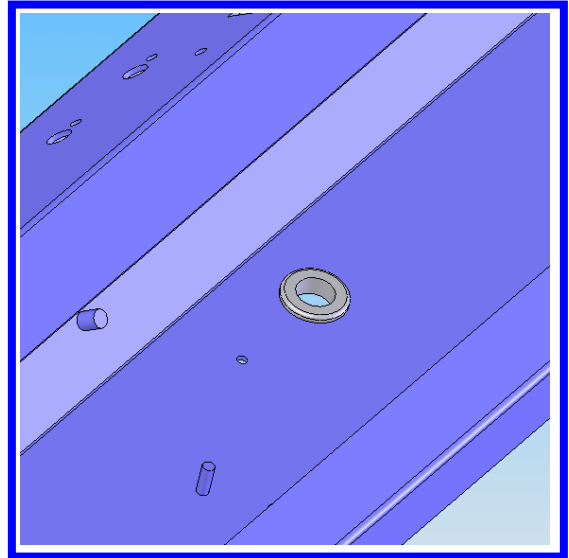
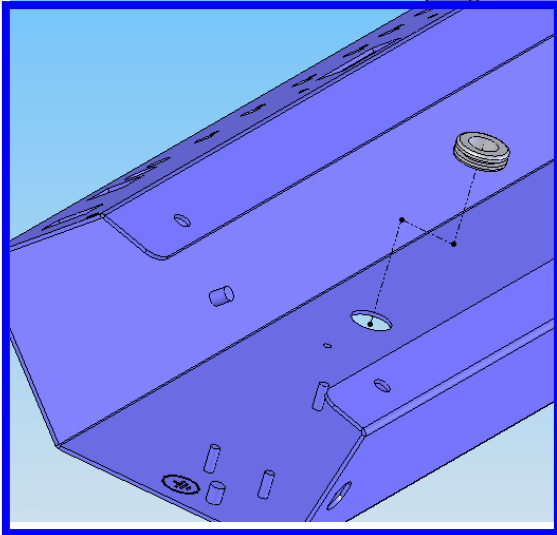
Revision	Changes
X0	N/A
X0	Miscellaneous typographical errors corrected
A	Revised assembly steps and assembly detail.

Step 1. Install grommet (30-75-9600) into chassis.

Spider III 1508 Chassis: 30-51-0258

Spider III 3012 Chassis: 30-51-0259-1

(Use same instructions for SPIDER III 1508 and 3012).



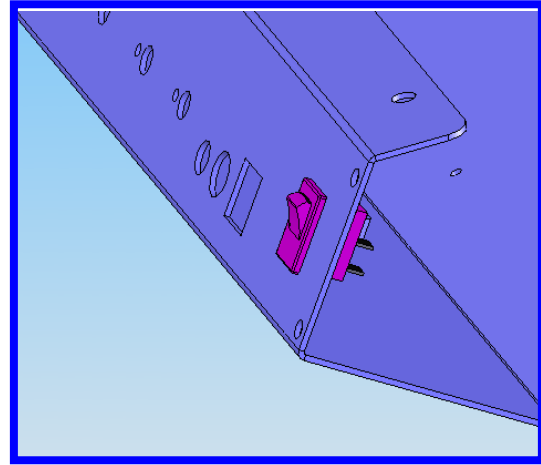
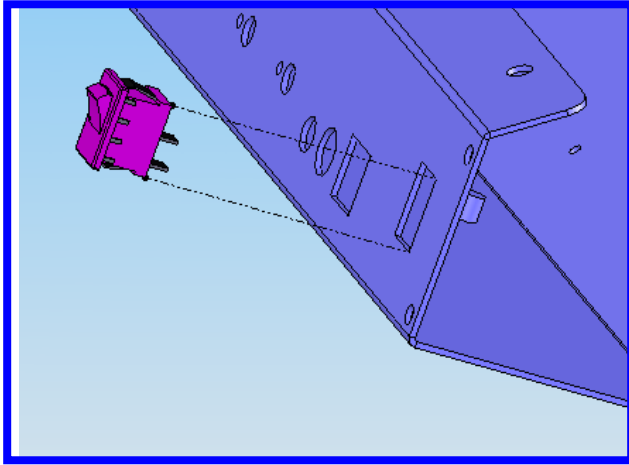
Step 2. Install thermal pad (30-63-4003) on the power amp, mounting hole.

(Use same instructions for SPIDER III 1508 and 3012.)

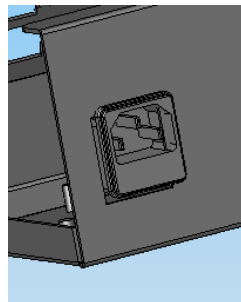
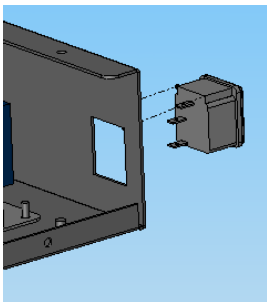


Step 3. Install Power Switch (24-24-0606). The switch should snap securely into place with the “I” above the “0”.

(Use same instructions for SPIDER III 1508 and 3012)



Step 4: Install AC receptacle assembly (50-00-0001)



Step 5: Open fuse holder, install fuse, close fuse holder. Use the table below to determine the fuse value.





Finished Goods P/N	Use 0.5A/250V Fuse (P/N: 24-19-5000)	Use 1A/250V Fuse (P/N: 24-19-0002)
99-010-2601 [SPIDER III 30 (A8-5) AU]	X	
99-010-2602 [SPIDER III 30 (A8-5) EU]	X	
99-010-2604 [SPIDER III 30 (A8-5) UK]	X	
99-010-2501 [SPIDER III 15 (A8-5) AU]	X	
99-010-2502 [SPIDER III 15 (A8-2) EU]	X	
99-010-2504 [SPIDER III 15 (A8-2) UK]	X	
99-010-2603 [SPIDER III 30 (A8-5) JA]		X
99-010-2605 [SPIDER III 30 (A8-5) US]		X
99-010-2503 [SPIDER III 15 (A8-2) JA]		X
99-010-2505 [SPIDER III 15 (A8-2) US]		X

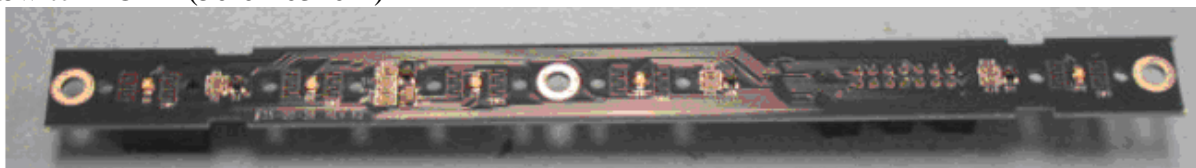
Step 6: Connect green/Yellow ground wire to PEM stud in chassis using a 6-32 screw (30-00-0043). Torque 8 in/lbs. Apply loctite P/N 21463 (Threadlocker 222) or equivalent, to screw and PEM stud after installation.

(Use same instructions for SPIDER III 1508 and 3012).

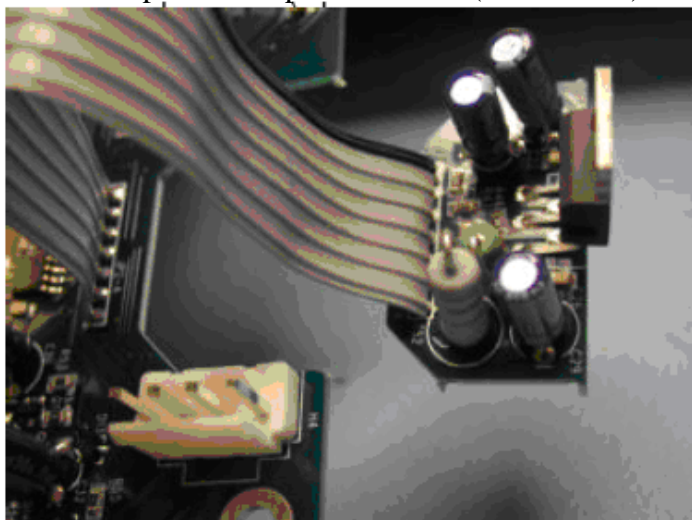


Step 7: Clip tabs and break away Switch PCBA (50-02-0310-1) and Power amp PCBA (SPIDER III 1508: 50-02-0060; SPIDER III 3012: 50-02-0310-2) From Main PCBA.

Switch PCBA (50-02-0310-1)



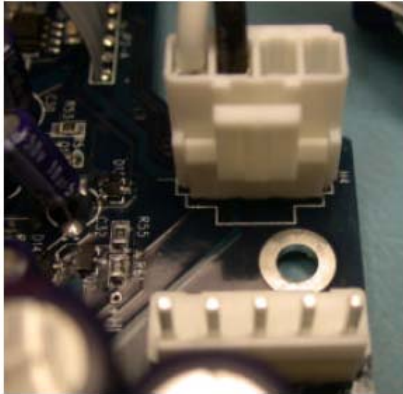
Power Amp PCBA: Spider III 1508 (50-02-0060) or Spider III 3012 (50-02-0310-2)



Step 8: The speaker cable (21-34-0055) should have 1 twist per inch.
(Use same instructions for SPIDER III 1508 and 3012)

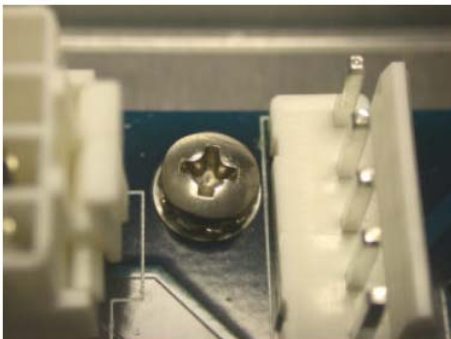


Step 9: Attach the speaker cable (21-34-0055) to H4 on the main PCBA.
(Use same instructions for SPIDER III 1508 and 3012).



Step 10: Install Main PCBA into chassis.
SPIDER III 1508 Main PCBA: 50-02-0058
SPIDER III 3012 Main PCBA: 50-02-0310

Secure Main PCBA to chassis by installing 6-32 screw (30-00-0043), to chassis PEM stud.
IMPORTANT: only partially tighten screw.



Step 11: Install Switch PCBA (50-02-0310-1) to front panel using three, 6-32, 5/16" screws (30-00-0043). Torque 6-8 in/lbs. Apply Loctite P/N:21463 (Threadlocker 222) or equivalent, to exposed screw threads after assembly.
(Use same instructions for Spider III 1508 and 3012)



Step 12: Install plastic washer (30-15-0404) into power amp mounting hole.
(Use same instructions for Spider III 1508 and 3012).



Step 13: Place power amp IC on thermal pad. Install a 4-40 screw (30-00-0402) through chassis and & plastic washer. Place split lock washer (30-03-0400) on top of plastic washer. Place flat washer (30-06-0440). Torque 8-10 in/lbs.

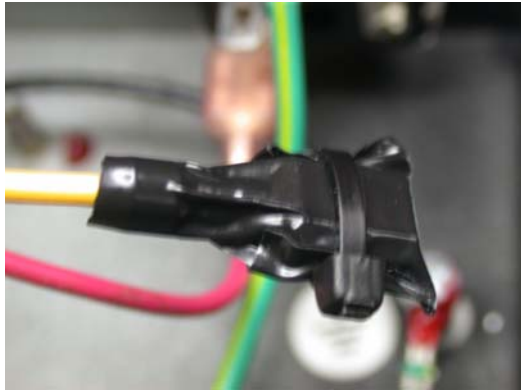
IMPORTANT: Power amp IC must be secured perfectly flush to chassis. Power amp IC is ESD sensitive. Use appropriate precautions when handling part.
 (Use same instructions for SPIDER III 1508 and 3012).



Step 14: Use the table below to determine which transformer wire is not used.

Finished Goods P/N	Transformer Part Number	Unused Transformer Wire
99-010-2501 [SPIDER III (A8-2) 15-AU]	11-30-0016	Yellow Wire
99-010-2502 [SPIDER III (A8-2) 15-EU]	11-30-0016	Red Wire
99-010-2503 [SPIDER III (A8-2) 15-JA]	11-30-0015	Red Wire
99-010-2504 [SPIDER III (A8-2) 15-UK]	11-30-0016	Yellow Wire
99-010-2505 [SPIDER III (A8-2) 15-US]	11-30-0015	Yellow Wire
99-010-2601 [SPIDER III (A8-5) 30-AU]	11-30-0014	Yellow Wire
99-010-2602 [SPIDER III (A8-5) 30-EU]	11-30-0014	Red Wire
99-010-2603 [SPIDER III (A8-5) 30-JA]	11-30-0013	Red Wire
99-010-2604 [SPIDER III (A8-5) 30-UK]	11-30-0014	Yellow Wire
99-010-2605 [SPIDER III (A8-5) 30-US]	11-30-0013	Yellow Wire

Apply standard electrical tape over the unused terminal and then use a cable tie (30-24-0003) to secure the tape.



Step 15: Install transformer into chassis as shown in picture below. Secure transformer to chassis using hex nuts (P/N: 30-06-0832). Torque to 12 in/lbs. Apply loctite P/N: 21463 (Threadlocker 222) or equivalent, to exposed screw threads and hex nuts after installation. Transformer must be installed with secondary wires (Red, Black, Blue) facing the Main PCBA.

Spider III 1508 Transformer uses one hex on each side.



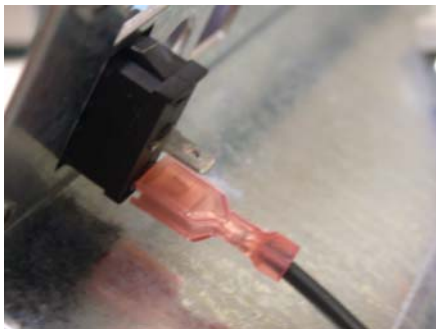
Spider III 3012 transformer uses two hex nuts on each side.



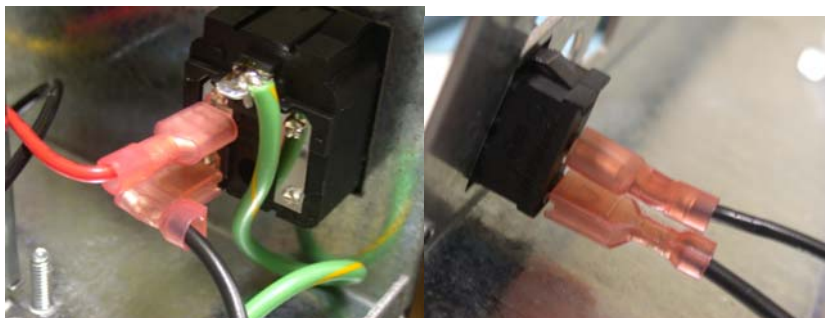
Step 16: Connect transformer secondary wires (5-pin connector) to H5 on Main PCBA.
(Use same instructions for Spider III 1508 and 3012).



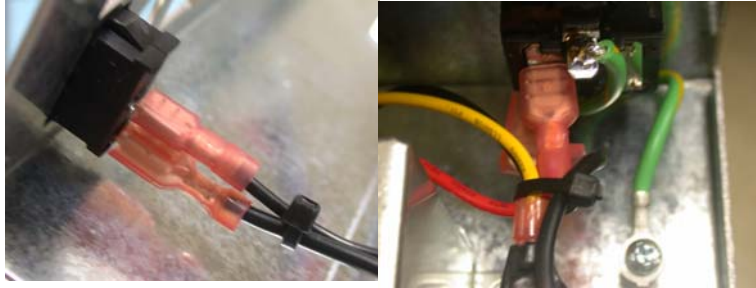
Step 17: Connect cable (21-34-1015) between the lower terminal of the AC receptacle and the lower terminal of the power on/off switch.
(Use same instructions for SPIDER III 1508 and 3012).



Step 18: Connect red or yellow transformer wire to top terminal of AC receptacle. Connect black transformer wire to top terminal of power on/off switch.
(Use same instructions for SPIDER III 1508 and 3012).



Step 19: Add cable ties (30-24-0003) to power on/off cables, and AC receptacle cables. Include unused transformer cable (red or yellow).



Step 20: Install 2 adhesive foam strips on top and front of chassis as picture below.

Use two pieces of adhesive foam (30-63-1325) for chassis top.
Use two pieces of adhesive foam (30-63-1550) for chassis front.
(Use same instructions for SPIDER III 1508 and 3012).



Step 21: Install rubber keypad (30-75-0020) onto switch PCBA.
(Use same instructions for SPIDER III 1508 and 3012)



Step 22: Install plastic front panel onto chassis and secure with four hex nuts (30-00-1033).
Torque 3-4 in/lbs

SPIDER III 1508- Use front panel (30-27-0189)
SPIDER III 3012- Use front panel (30-27-0191-1)

Install four hex nuts (30-00-1033), one at each corner of front panel.



Step 23: Install plastic hex nuts (21-00-6616) on Guitar and Phone jacks. Hex nuts are purchased with the jacks and use a common part number. Torque 4-5 in/lbs.
(Use same instructions for SPIDER III 1508 and SPIDER 3012).



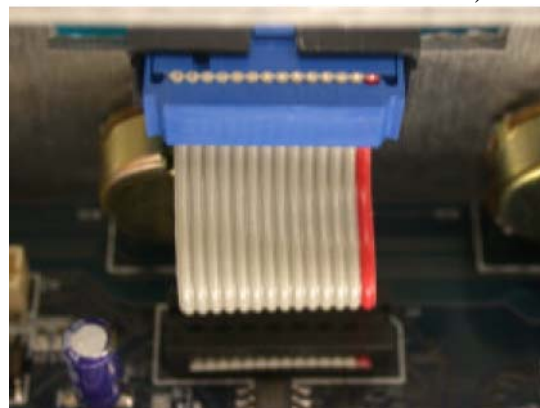
Step 24: Install hex nut and washer on all eight potentiometers. The hex nuts and washers are purchased with the pots and have a common part number (01-48-0001). Install washers between front panel and hex nut. Washer not shown in view below. Torque 3-4 in/lbs.
(Use same instructions for spider III 1508 and spider III 3012.)



Step 25: Tighten screw for Main PCBA to chassis PEM stud. Apply Loctite P/N: 21463(Threadlocker 222) or equivalent, To secure screw to PCBA.
(Use same instructions for SPIDER III 1508 and SPIDER 3012.)



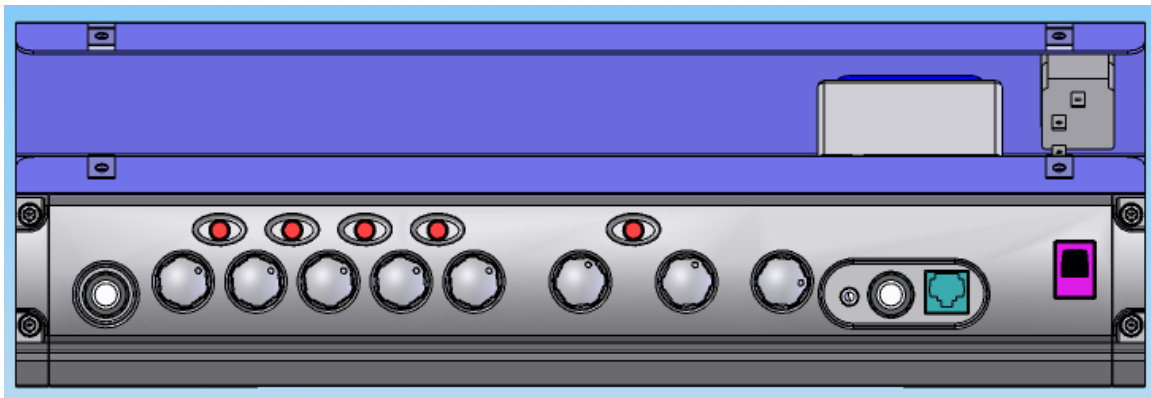
Step 26: Connect ribbon cable (H1) on Main PCBA to header (H5) on Switch PCBA. Apply RTV to cable connector and header to insure cable never comes loose.
(Use same instructions for SPIDER III 1508 and SPIDER 3012.)



Step 27: Install plastic chrome knobs (30-45-0011) on all eight potentiometer shafts.
(Use same instructions for SPIDER III 1508 and SPIDER 3012.)



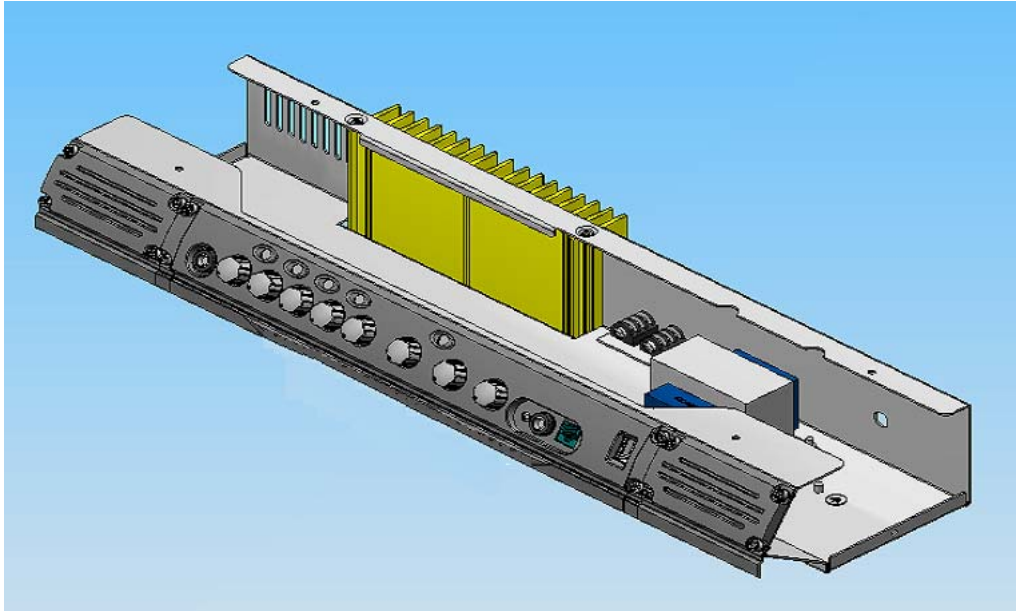
(Completed unit)



Spider III A8-7 Mechanical Assembly Instructions

Rev C

P/N 50-04-0039-X (HD75)



Forward and Notes

The information in this booklet applies to the mechanical assembly of the Spider II HD75 chassis and front panel.

See also the Related Electrical assembly documentation, for major considerations in assembling the electrical components of the PCBs (through the soldering process and preparation of the board for addition of custom components).

A note on the text: the illustrations in this book are for reference only. In some cases, color and geometry of illustrations may not accurately reflect the color or exact geometry of actual parts.

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- Part identifying notes are in this format: Description (Part Number)
- Drawings are not to scale.
- Torque value tolerance +/- .5 in.-lbs. Do not over tighten any components.

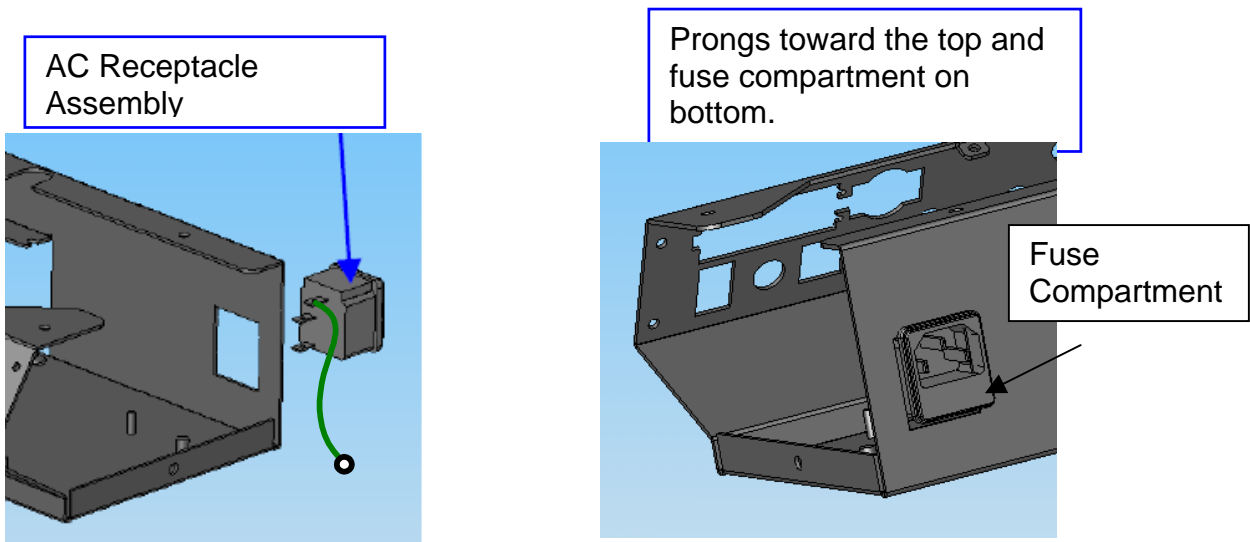
For clarity, not all component details are shown. This is especially true with respect to cable assemblies. They are often omitted from views to provide a clearer picture of the material discussed. Do not be confused by the absence (or unexpected presence) of any component in the illustrations in this book.



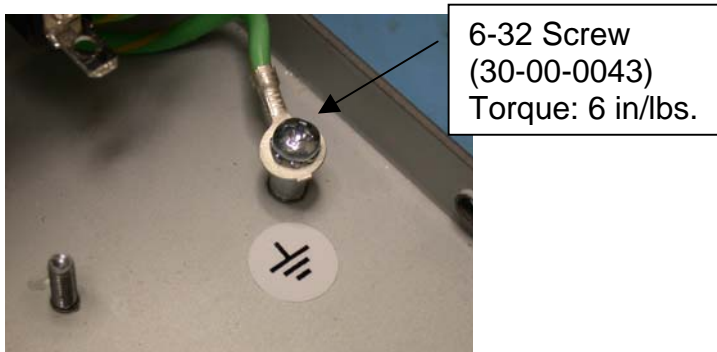
Revision Comment Sheet

Revision	Changes
A	Added new part numbers that changed between Spider II & III. Changed hardwired AC cable to AC receptacle. Modified instructions for unused primary xfmr wire to tie wrap instead of cut.
B	Corrected chassis part number error in Step #1, 11. The correct P/N is 30-51-0260. Corrected front panel extension part numbers. The correct P/N are 30-27-0192-1, 30-27-0192-2. Added cable assembly instructions in Step 12 for cable connections between Main PCBA to Speaker Out PCBA, and Main PCBA to Power Amp PCBA.
C	Corrected error in chassis assembly part number. Was: 50-03-0042-X, Is: 50-04-0039-X.

STEP 1: Install AC Receptacle Assembly (50-00-0001) into A8-7 chassis (30-51-0260). Note the orientation of the AC Receptacle.



STEP 2: Secure the earth ground wire to the standoff using a 6-32 x 5/16 screw.



STEP 3: Open fuse holder, install fuse, close fuse holder. Use the table below to determine the fuse value.

Fuse Type:

24-19-4025: 4A/125V – Use this fuse for all 100/120VAC US and JA units.

24-18-2251: 2A/250V – Use this fuse for all 220-240VAC EU, AU, and UK units.



STEP 4: Install Power switch (24-24-0606). The switch should snap securely into place with the “I” above the “O”.

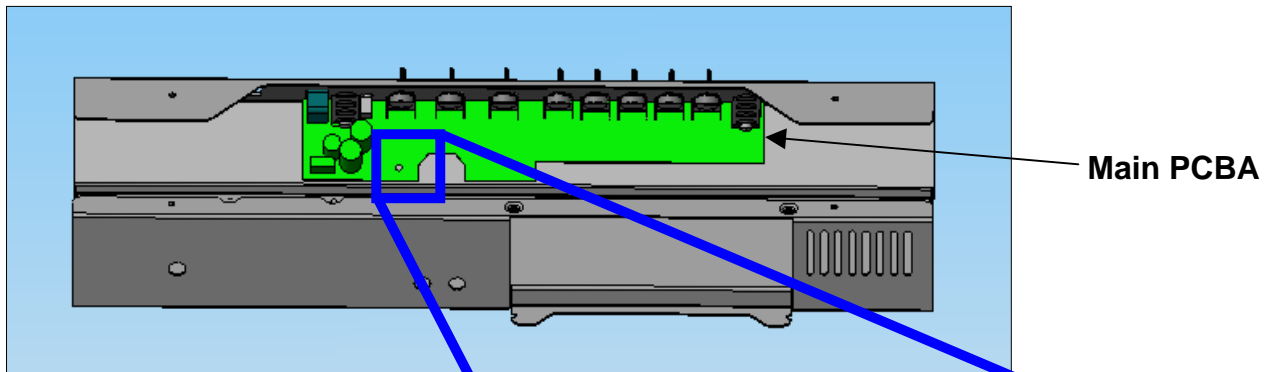


STEP 5: Clip tabs and break away Switch PCBA (50-02-0311-1)



STEP 6: Install Main PCBA (P/N 50-02-0311) into chassis.

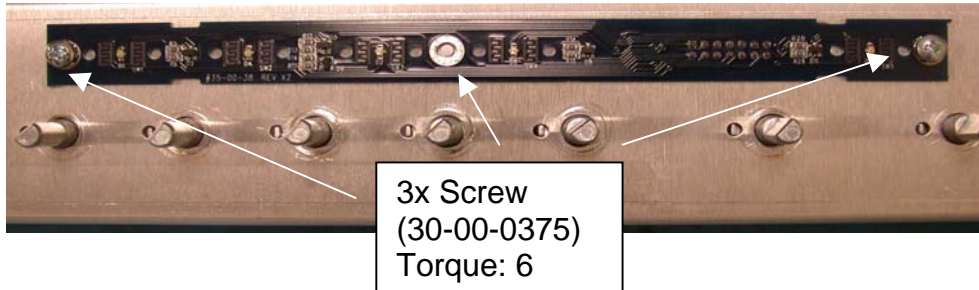
Secure Main PCBA to chassis by installing 6-32 screw (30-00-0043), to chassis PEM stud. **IMPORTANT: Only partially tighten screw.**



Chassis – Top View

Main PCBA

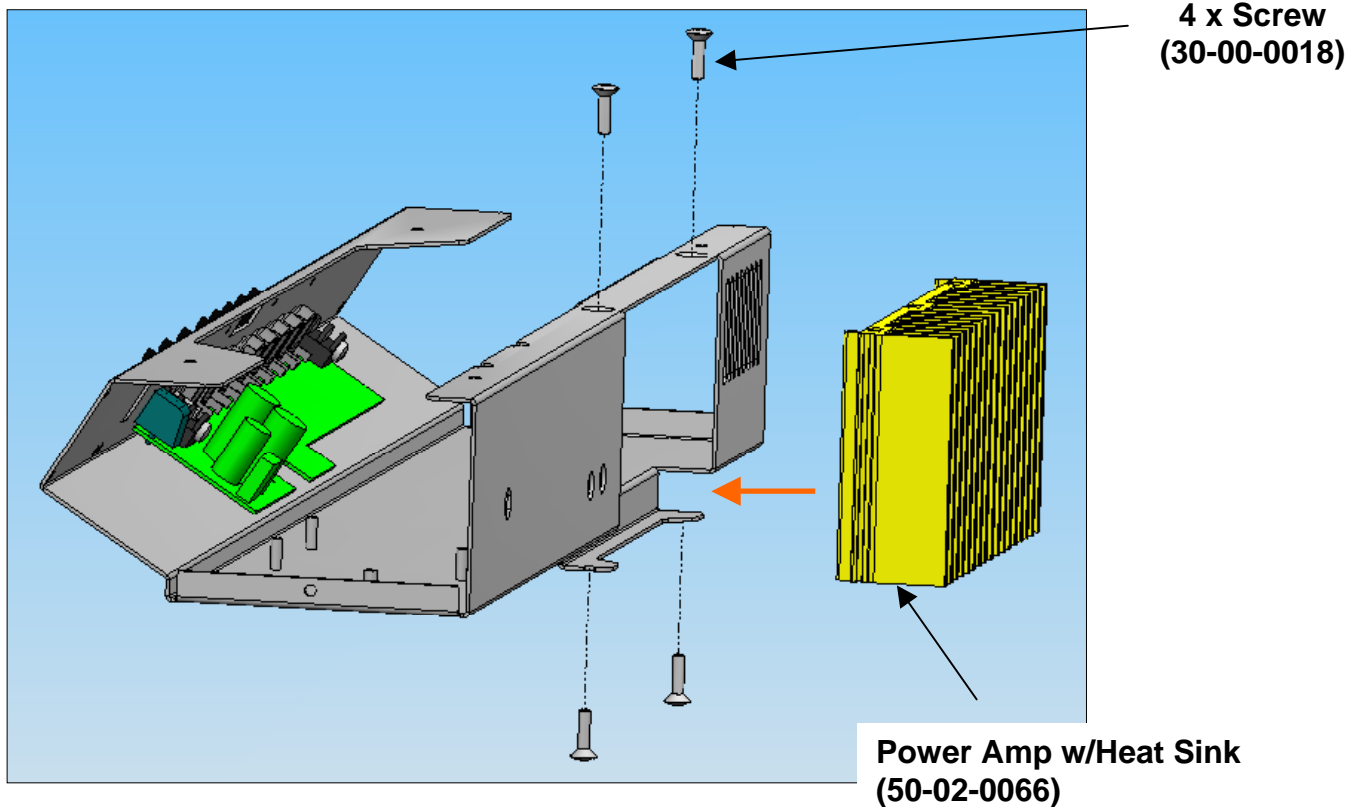
STEP 7: Install Switch/LED PCBA (50-02-0311-1) to front panel using three, 6-32, 3/8" screws. Apply Loctite P/N 21463 (Threadlocker 222) or equivalent, to exposed screw threads after assembly.



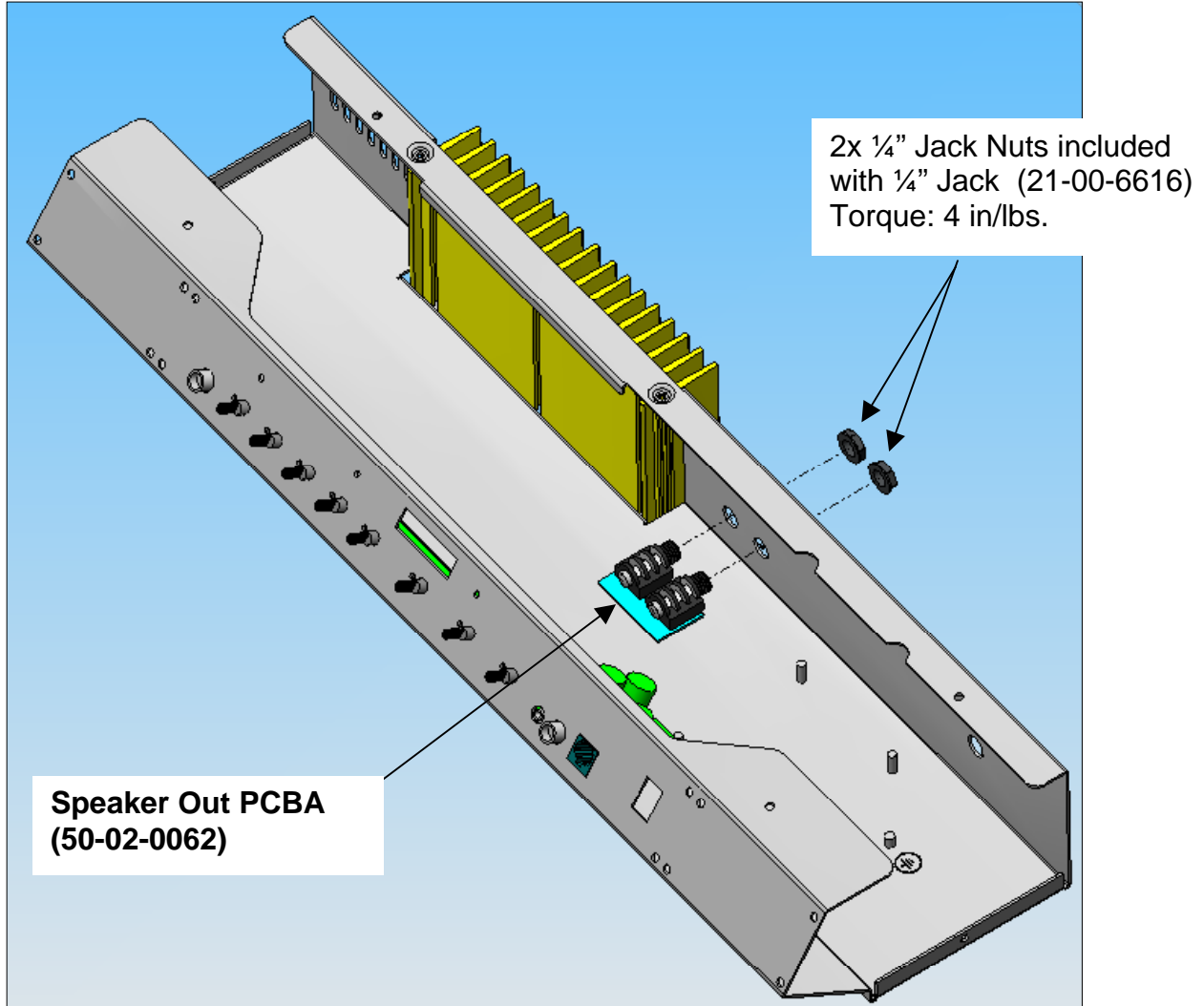
THE NEXT STEP IN THE ASSEMBLY PROCESS REQUIRES THE ASSEMBLER TO TAKE PROPER ESD PRECAUTION DUE TO THE STATIC SENSITIVE DEVICES ASSOCIATED WITH THIS ASSEMBLY.

STEP 8: Install Power Amp w/Heat Sink PCBA (50-02-0066) using four (4) #6-32 self-tapping screws (30-00-0018).

Note – Remove any metal debris that may have been introduced during installation.



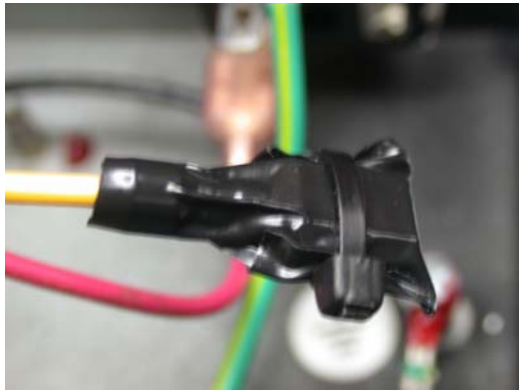
Step 9: Install Speaker Out PCBA (50-02-0062) using two ¼" Jack Nuts (21-00-6616).



STEP 10: Use the table below to determine which transformer wire is not used.

Finished Goods P/N	Transformer Part Number	Unused Transformer Wire
59-00-0023-1 (Spider II HD75 – AU)	11-30-0026	Yellow Wire
59-00-0023-2 (Spider II HD75 – EU)	11-30-0026	Red Wire
59-00-0023-3 (Spider II HD75 – JA)	11-30-0025	Red Wire
59-00-0023-4 (Spider II HD75 – UK)	11-30-0026	Yellow Wire
59-00-0023-5 (Spider II HD75 – US)	11-30-0025	Yellow Wire

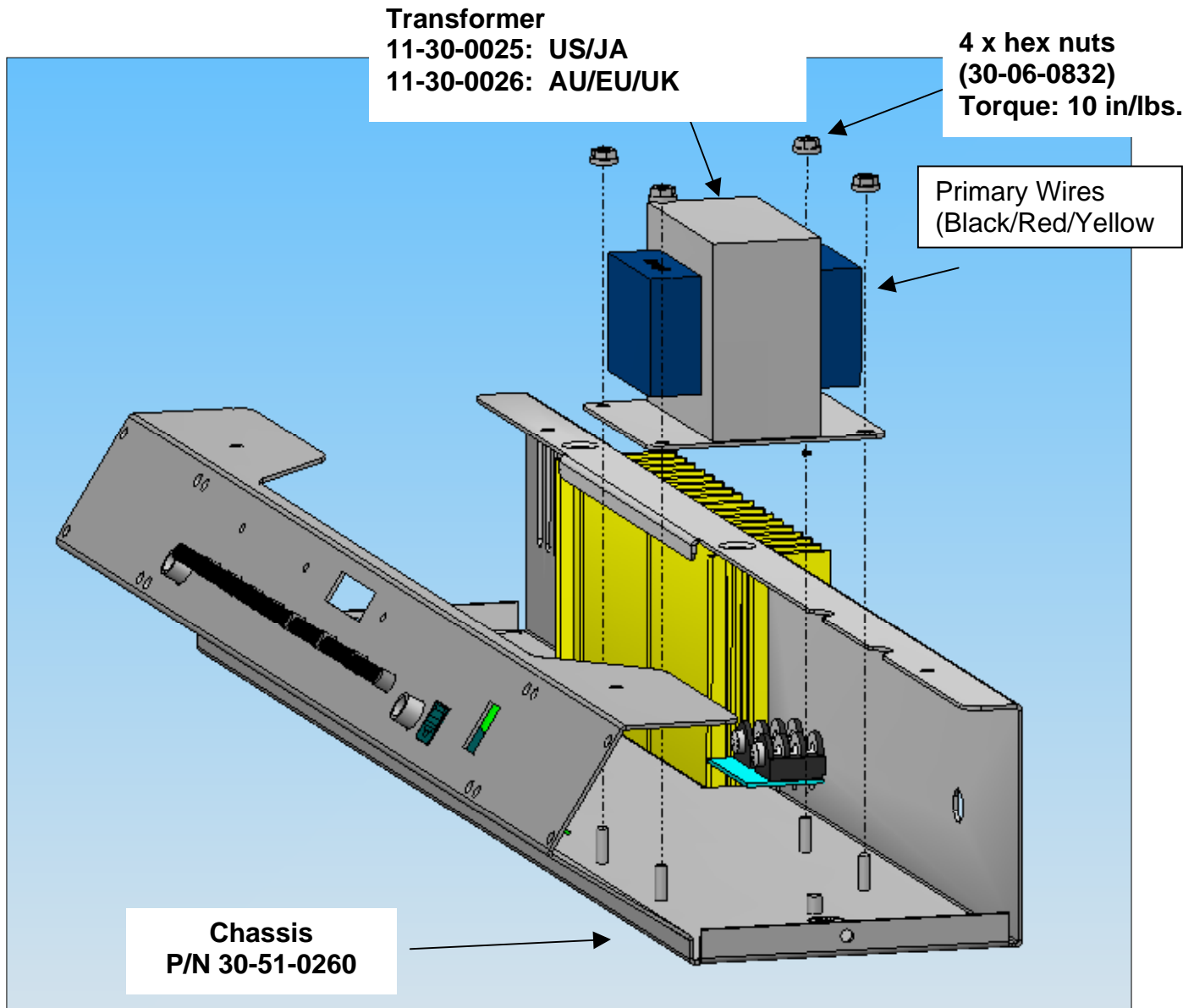
Apply standard electrical tape over the unused terminal and then use a cable tie (30-24-0003) to secure the tape.



STEP 11: Install transformer into chassis as shown in picture below. Secure transformer to chassis using four hex nuts (30-06-0832).

Apply Loctite P/N 21463 (Threadlocker 222) or equivalent, to exposed screw threads and hex nuts after installation.

Insure that primary leads (black, yellow and red) of transformer are toward the rear of chassis.

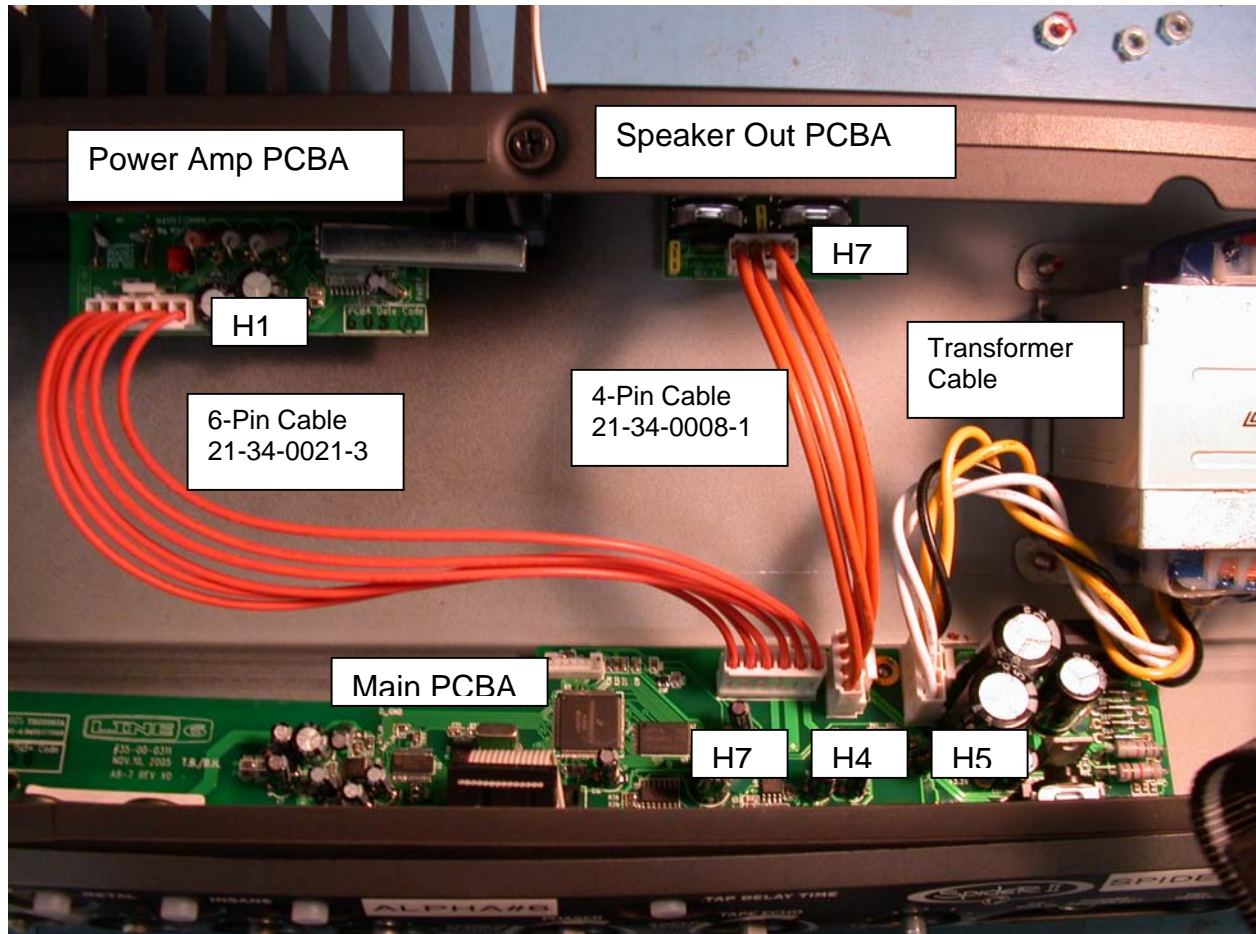


STEP 12: Connect the following cables:

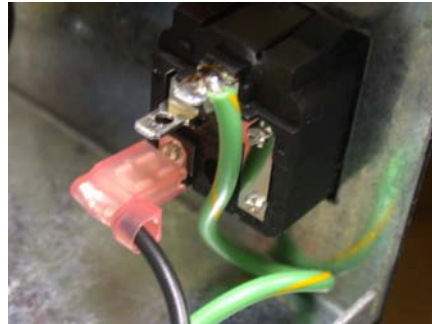
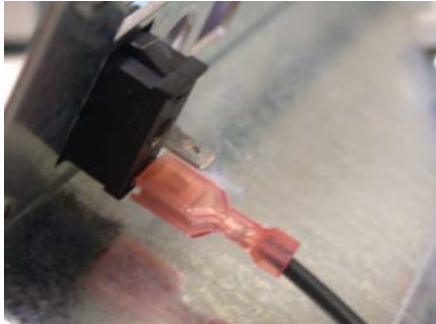
Connect secondary transformer cable to Main PCBA (H5).

Connect 4-pin cable (21-34-0008-1) between Main PCBA (H4) and Speaker Out PCBA (H7).

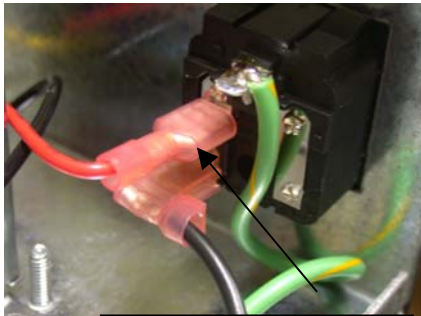
Connect 6-pin cable (21-34-0021-3) between Main PCBA (H7) and Power Amp PCBA (H1).



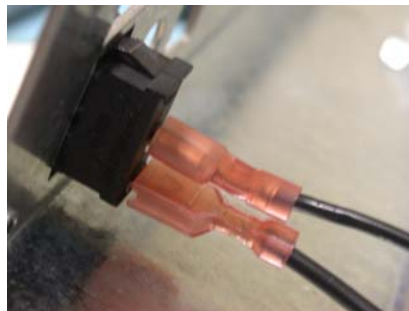
STEP 13: Connect cable (21-34-1015) between the lower terminal of the AC receptacle and the lower terminal of the power on/off switch.



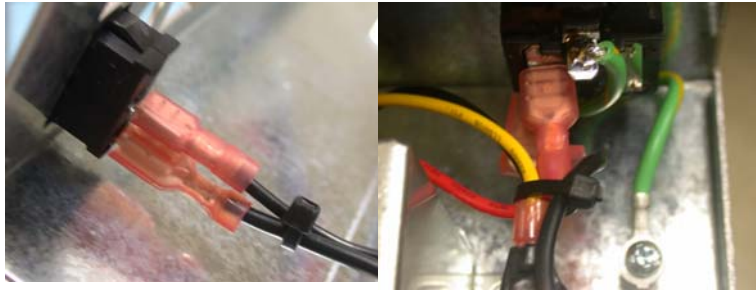
STEP 14: Connect red or yellow transformer wire to top terminal of AC receptacle. Connect black transformer wire to top terminal of power on/off switch.



Red or Yellow
Transformer Wire



STEP 15: Add cable ties (30-24-0003) to power on/off cables, and AC receptacle cables. Include unused transformer cable (red or yellow).



STEP 16: Install two adhesive foam strips (30-63-0010) on top and front of chassis. Cut strips to cover chassis approximately as pictured below.



Top View



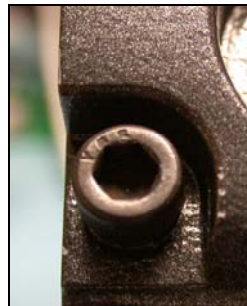
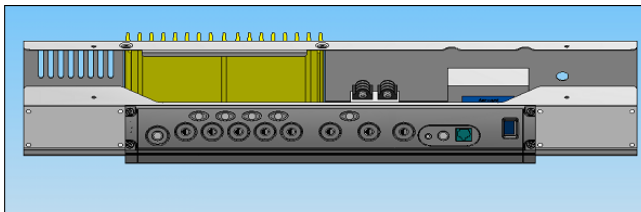
Front Panel View

STEP 17: Install rubber keypad (30-75-0020) onto Switch/LED PCBA.



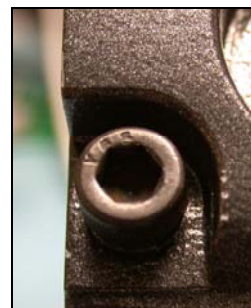
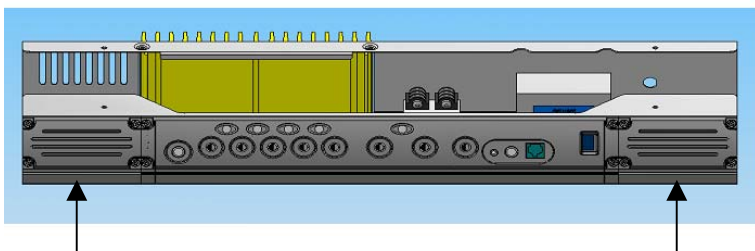
STEP 18: Install plastic front panel (30-27-0191-2) onto chassis and secure with four 10-32 x 3/8" screws (30-00-1033). Torque 3-4 in/lbs

Install hex nut at each corner of front panel.

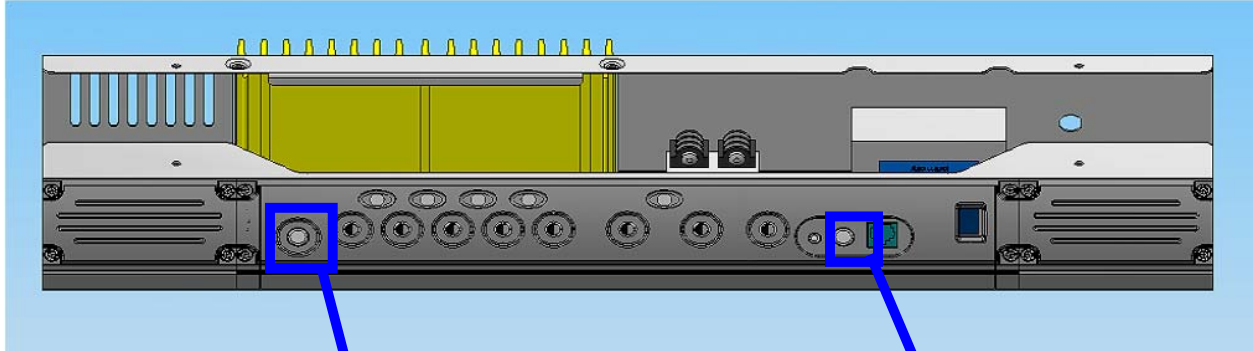


STEP 19: Install left and right front panel extensions (30-27-0192-1, 30-27-0192-2) onto chassis. Secure each extension with four 10-32 x 3/8" screws (30-00-1033). Torque 3-4 in/lbs.

Install hex nut at each corner of left and right extension panels.



STEP 20: Install plastic hex nuts (21-00-6616) on Guitar and Phone jacks. Hex nuts are included with the jacks.

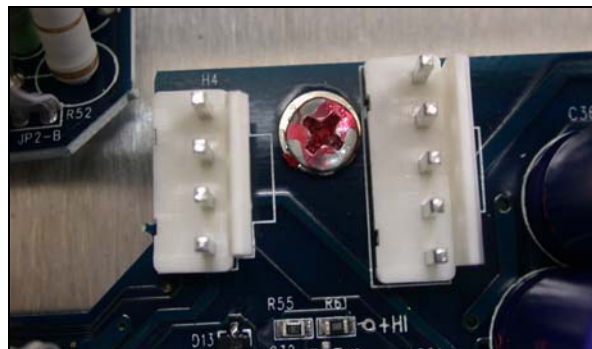


2x 1/4" Jack Nut
21-00-6616
Torque: 4-5 in/lbs.

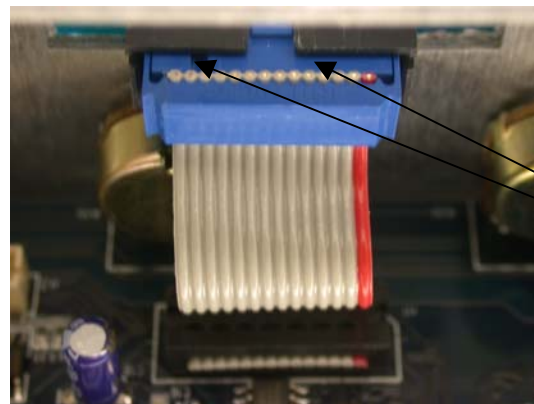
STEP 21: Washer and hex nut on all eight potentiometers. The hex nuts and washers are purchased with the pots and have a common part number (01-48-0001). Install washers between front panel and hex nut. Washer not shown in view below. Torque 3-4 in/lbs.



STEP 22: Tighten screw for Main PCBA to chassis PEM stud. Apply Loctite P/N 21463 (Threadlocker 222) or equivalent, to secure screw to PCBA. Torque 6 in/lbs.



STEP 23: Connect ribbon cable (H1) on Main PCBA to header (H6) on Switch/LED PCBA. Apply RTV or hot glue to cable connector and header to insure cable never comes loose.



Apply RTV or hot glue here.

STEP 24: Install plastic chrome knobs (30-45-0011) on all eight potentiometer shafts.





Technical Bulletin 036

Product: Spider 3 Series Amplifiers

Indications:

Potentiometer instability. Pots will seemingly jump "settings" randomly regardless of user saved patches.

Problem:

Problem is caused by a combination of Phillips 936 microprocessor, which can be sensitive to 3.3V supply noise and 3.3V filtering capacitors being on the lower range of their nominal value (C1 and C5).

This problem is more likely to show up at low ambient temperature (lower than 70 degrees F/ 21 degrees C) because C1 and C5 values decrease with temperature.

Solution:

Increase value of C5 from 470uF to 1000uF.

Date Codes Affected:

5630 + Serial Number Ex. S311P5630XXXXXX

Parts Affected:

Was: QTY 1, 03-10-0477 CAP ELEC **470uF** 6.3V 20% RADIAL 6.3/11/5. REFERENCE DESIGNATOR: **C5**.

Is: QTY 1, 03-10-6108 CAP ELEC **1000uF** 6.3V 20% RADIAL 8/11.5/5. REFERENCE DESIGNATOR: **C5**.

Tools/Supplies Required:

Soldering Iron, tweezers, RoHS compliant solder/ Flux, etc.

Repair Procedure:

Remove C5 470uF cap and replace with 1000uF cap.

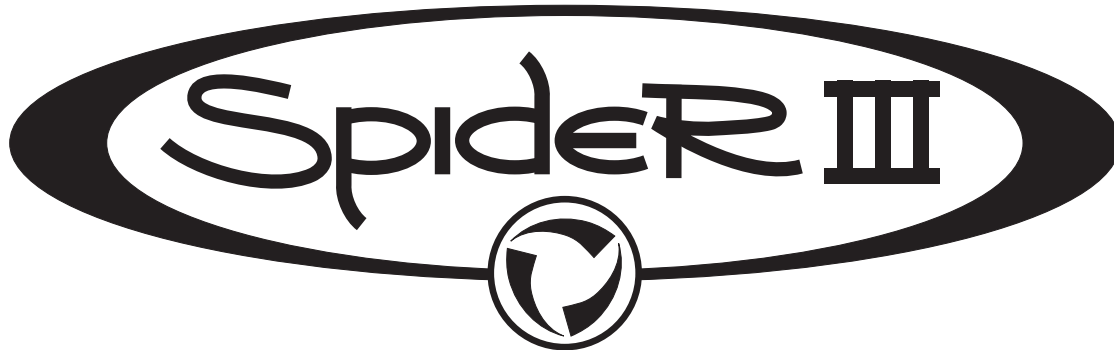
Warranty Implications:

Should be considered as Warranty Repair.

Reference:

ECO# 0624001/ TB36

LINE 6



Pilot's Guide
Manuel de pilotage
Pilotenhandbuch
Pilotenhandboek
Manual del Piloto

40-00-0099

Electroponic Limited Edition available @ www.line6.com

Rev B

All product names referred to in this manual are trademarks of their respective owners, which are in no way associated or affiliated with Line 6. These trademarks of other manufacturers are used solely to identify the products of those manufacturers whose tones and sounds were studied during Line 6's sound model development.



**You should read these Important Safety Instructions.
Keep these instructions in a safe place.**



Before using your Spider III, carefully read the applicable items of these operating instructions and the safety suggestions.

1. Obey all warnings on the amp and in the Spider III Manual.
2. Connect only to AC power outlets rated 100-120V or 200-240V 47-63Hz (depending on voltage range of the unit; refer to back panel).
3. Do not perform service operations beyond those described in the Spider III Manual. Service is required when the apparatus has been damaged in any way, such as:
 - power-supply cord or plug is damaged
 - liquid has been spilled or objects have fallen into the apparatus
 - the unit has been exposed to rain or moisture
 - the unit does not operate normally or changes in performance in a significant way
 - the unit is dropped or the enclosure is damaged.
4. The bottom of the metal chassis can get hot during operation. Do not touch during operation or shortly after.
5. Do not place near heat sources, such as radiators, heat registers, or appliances which produce heat. Keep the rear of the unit at least three inches from walls or other items that might block heat radiation.
6. Do not block any of the ventilation openings or use in an enclosed space.
7. Guard against objects or liquids entering the enclosure. Do not use or place unit near water.
8. Do not step on power cords. Do not place items on top of power cords so that they are pinched or leaned on. Pay particular attention to the cord at the plug end and the point where it connects to the amp.
9. Unplug the amp when not in use for extended periods of time. Unplug the amp during lightning storms.
10. Clean only with a damp cloth.
11. Do not defeat the safety purpose of the grounding type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
12. Only use attachments/accessories specified by the manufacturer.
13. Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice “safe listening.”

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CAUTION: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.



The exclamation point within a triangle means “caution!” Please read the information next to all caution signs.

CAUTION: To reduce the risk of fire or electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel.



The lightning symbol within a triangle means “electrical caution!” It indicates the presence of information about operating voltage and potential risks of electrical shock.

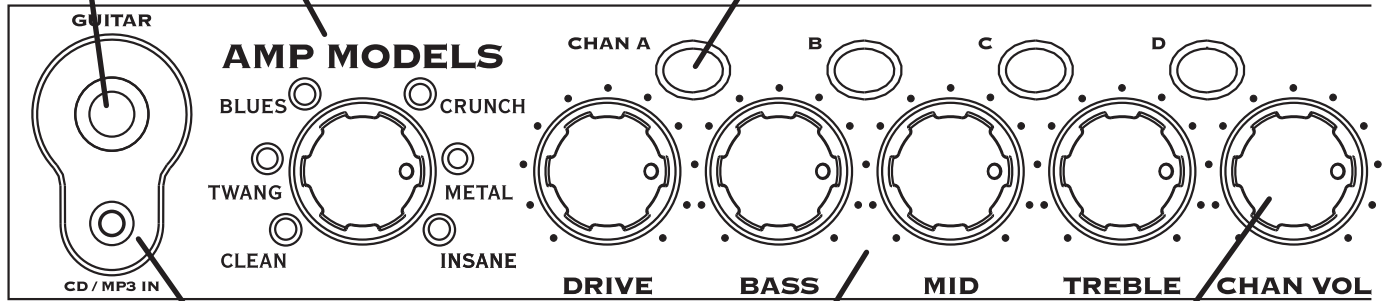


This symbol within a triangle means “caution! hot surface!” It is placed in areas that may become too hot to touch when device is in operation.

1 Plug In Here

2 **Amp Models**
Spin this knob to select one of twelve Amp Models. All the other Spider III controls will automatically be set to sound great with that Amp Model, so you can just play!

11 **Channel Memories**
Four programmable channels come pre-loaded with great factory presets. These buttons are also used when saving user presets. See **Saving** for more information.



3 **CD/MP3**
Plug in any audio source and it feeds directly into the Spider III's speaker or headphones so you can jam with your favorite music or drum machine. Use the device's output control to adjust its volume. Note: Start with the volume on your device at it's lowest setting and bring it up to the volume you desire.

4 **Tone Controls**
Drive is like the volume or gain knob on other amps; controls how much "dirt" you get in your sound. Bass, Mid, and Treble controls are customized for each Amp Model to give you optimal tonal control.

5 **Channel Volume**
This control helps you balance the volumes of different amp-and-effect setups that you store in your Spider III's channels. See 10 for the low-down on channels.

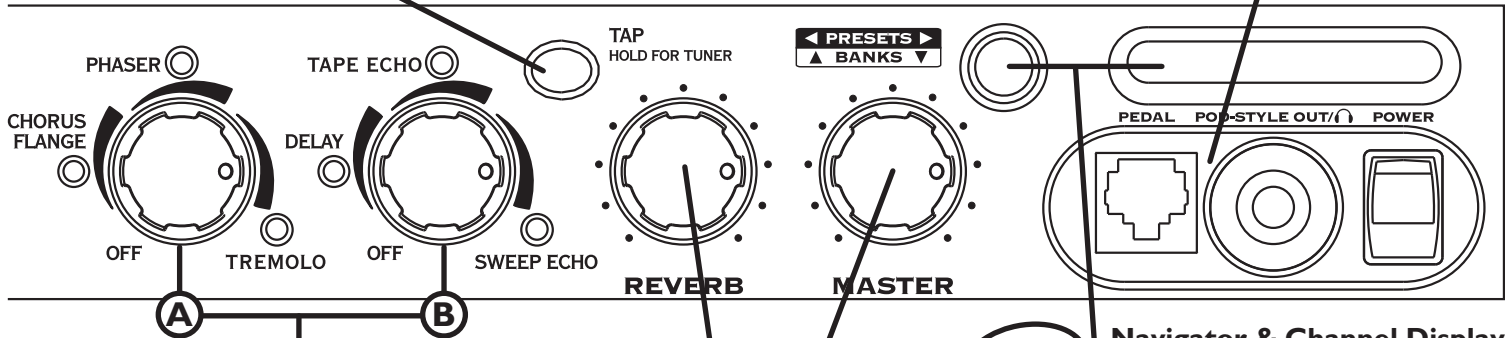
10

Foot Control & Headphone/Line Out

Plug in an FBV2 foot switch to scroll through the 4 channels or connect a Line 6 FBV Shortboard controller for channel switching, effects on/off control, wah/volume pedals, access to 32 more channel memories, a chromatic tuner, and tap tempo for delays. Consider the FBV Express for channel switching, tap tempo, wah/volume control and tuner capabilities. Listen in stereo with headphones, or use this as a direct out for recording! (If you need a stereo out, use a 1/4" TRS stereo-to-dual mono Y-adaptor cable).

9

TAP: Tap on the TAP button a few times to set the delay time. Also Tap button extra functions.

**6**

Smart Control FX

Spin one of these knobs to get great FX, fast and easy:

Knob A picks chorus/flange, phaser or tremolo, with a range of settings – from subtle to overpowering – for each effect. The LED shows the active effect.

Knob B picks delay, tape echo or sweep echo, with a range of mix settings from low to high. The LED shows the active effect and flashes the delay time. Tap the TAP button to change the delay time.

8

Master Volume

You can choose the overall volume of the amplifier, without affecting your tone.

7

Reverb

Dial up more or less virtual room.

12

Navigator & Channel Display

Navigate up and down to go through the various banks of presets (user, artist based, song based). Navigate left and right to select from different sounds in each of those banks. The display will indicate which preset you have selected both alphanumerically (e.g. 01A, 60S) and by name (e.g. Crunchzilla).

Welcome The Spider III...

Thank you for inviting Spider III home with you. This amp mines the tonal heritage of the past forty years of guitar amplifier design and matches it up with the kind of digital signal processing magic that will still be ahead of its time ten years from now.

Presets

Your new Spider III amplifier comes with a whopping 36 user presets and over 400 artist and song based presets that can be accessed through the Navigator.

User Presets are loaded with a good variety of great tones but are ready for you to tweak and leave your own musical imprint on. See Saving for more information. User presets are in Banks 1-9. Each bank contains 4 tones, ABCD on the display and will light the corresponding ABCD button on the front of the amp.

The Artist Presets were dialed in by a team of insane guitar slinging rock stars that cover a great range of styles. We sent an amp to each of them to create a bank of inspiring tone. Some chose to capture the tone of their records, some explored the insane range of tonal possibility that Spider III offers – whatever the

outcome, their work is at your disposal and is organized into banks by artist name. It is as if they came to your home and helped you dial in your amp.

Song Based Presets are based on the top 200 guitar rock songs of all time. These sounds are organized into banks by genre.

Amp Model Details

Clean

Red LED - Select this Amp Model and adjust the tone controls to get crisp, amazing clean tones, great warm jazz tones, and all the high-end shimmer you'll need with a generous amount of bottom end to boot. Then dial up a little chorus and delay to get the ultimate clean sound!

Green LED - We developed this Amp Model to emulate those late 60's and early 70's clean tones. It started off as an Amp Model based on a 1973 Hiwatt custom 100. We extended the tone control range and tightened up the low end. Hit an open A chord and let that big sweet tone ring!

Twang

Red LED - This Amp Model draws on our analysis of mid 60's Fender amps, including the blackface '65 Twin Reverb and blackface '64 Deluxe Reverb. We wanted an Amp Model that has that classic glassy high end tone, with some snap and bite for some serious chick'n pick'n. Things don't get too crunchy until reaching the top range of the Drive knob.

Green LED - This Amp Model is based on a number of vintage tweed amps. We evaluated a '53 Fender tweed Deluxe, '58 Fender tweed Bassman and a '60 Gibson Explorer to create a swingin' Rockabilly tone. Add some reverb and a slap echo and Be-bop-alu-la!

Blues

Red LED - What would happen if we based a model on three helpings of '65 Marshall JTM-45, one scoop of '58 Fender Bassman, a schmeer of '63 Fender Vibroverb and a dash of Supro for good measure? The biggest, fattest down home Blues amp ever heard. This Amp Model slides between gritty swamp-infected cleans to syrupy smooth, walloping drive tones. It's time to get down and dirty!

Green LED - Ready, steady...GO! This Amp Model is based on a fawn Vox AC-30 amplifier with an updated and expanded tone control circuit. We wanted to capture that early British pop rock tone that the Beatles and the Stones are so well known for.

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Crunch

Red LED - This sound was crafted during our studies of the '68 Marshall Plexi 50 Watt. This type of Marshall amp was used by a number of early metal bands. Check out albums like British Steel, Number of the Beast and Black Out. Crunch provides a wider range of tone control settings than the original Marshall amp had. This Amp Model will allow you to bump up the mids even at the highest Drive settings.

Green LED - Plexi On Fire! This Amp Model is based on a '68 Marshall Plexi 100 watt with a few added extras; The combination of a Variac and the jumpered input channels creates that infamous brown sound that will feel like flames are shooting out the input jack! "Come on Dave... Give me a break!"

Metal

Red LED - This Amp Model is based on the Mesa Dual Rectifier. For Spider III, we made careful enhancements to this classic tone. The resulting Amp Model has a definite modern flavor. This monster truck of tone delivers a tight bottom end that's big, powerful, tight and fast. Use this Amp Model to get a tight and punchy, high gain Metal sound.

Green LED - This sound was created to be an aggressive high gain Amp Model with a unique Mid control that will sweep through an entire spectrum of tone on one knob. The Mid knob for this Amp Model changes the character of the distortion. When set to minimum, the distortion exhibits Fuzz pedal characteristics. When the Mid is set to noon, it mimics the creamy modern high gain amp tones. And when the Mid knob is turned up to max, it's very much reminiscent of that Class A sound. Of course, then there are all the places in-between...

Insane

Red LED - This model is our "dialed in for shredding" version of the Mesa Dual Rectifier red channel. It combines the intensity and impact of Metal Red, but delivers more midrange and teeth for that bone-crushing, brain piercing insane grind.

Green LED - Our goal with Insane was to provide you with as much input gain distortion as possible short of complete meltdown. You get an obscene helping of distortion, while still retaining tonal definition and character. As a result, you get way more bottom end and cabinet character than other small amps. Crank up the Drive control and prepare to dominate!

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Smart Control FX:

Great amp tone is only part of a great guitar sound. Effect processing – whether it's stomp boxes or rack gear – is also a big part of the story. Your Spider III packs the power of several of these tone shapers in its Smart Control FX section.

The delay knob gives you a trio of delay effect choices: a standard delay, tape echo, and a sweep echo. The modulation effect knob lets you choose between chorus/flange, phaser, and tremolo, and for each of these effects you can choose anything from a subtle hint of processing to total tone-mangling overkill. While turning the knob, Spider III adjusts all the individual aspects of the effect automatically to give you the range of sounds you're looking for, without having to mess with multiple knobs and switches to get your tone. So you can spend your time making music instead.

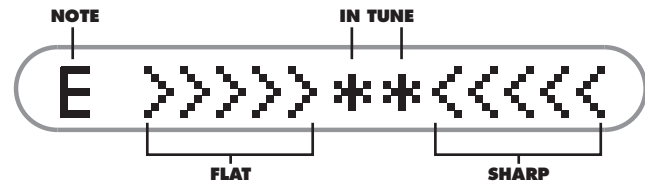
Tap Button “Extra” Functions

The Tap Tempo button, in addition to setting the speed of your delay effects, also lets you access a few extra Spider III features: a Tuner, Distortion Boost and a built-in Noise Gate (the tuner and the boost are also accessible via the optional FBV Shortboard). When

you hold down the Tap Tempo button, you can use some of Spider III's knobs to access these extra features.

Tuner Mode

Press and hold the TAP button or TAP footswitch for 2 seconds or more and you get instant digital tuner. The volume is muted during tuning so you won't hear anything coming out of the amp. Press any button to exit Tuner Mode. If there is no FBV Shortboard connected, the LCD on the front panel of the Spider III will work as the tuner display.



Distortion Boost

Press and hold the Tap button as you turn the Drive knob up past twelve o'clock. As you do this, Spider III's Channel A LED comes on. This gives the kind of extra 'dirt' that you'd expect from a Distortion pedal with the distortion control set low and the output control set high. It boosts your guitar signal before it reaches the Amp Model, so that you hit the model harder and get a more distorted sound. Enabling this is the same as kicking on Stomp on the FBV Shortboard.

Noise Gate

Press and hold Tap as you turn the Reverb knob up past twelve o'clock, and you turn on a built-in Noise Gate, which helps to cut down on hiss and noise. When you do this, the Channel D LED comes on to indicate that the Gate is on.

Saving

Once you've dialed up your own killer sound you're probably going to want to save it so you can get to it another time. To prepare for saving, it's a good idea to browse through the various factory-stored user preset

sounds to decide which user preset you can live without. Make a note of its Bank number and Channel letter so you can save your new tone there instead.

To save from a User Preset (Banks 1 thru 9) press and hold the lit channel memory button for 1 second. The LED will start to blink. You may wish to keep the same name or you can use the Navigator to name your patch. Press left and right to select the cursor position and up and down to select a letter, number or character. When you have the name you want press left until the cursor is under the bank number and then press up or down to select the bank you would like to save within. To complete a Save operation, press the ABCD button you wish to save to.

When you select an Artist or Song Based Preset, the ABCD channel LEDs will turn off to indicate that you have recalled a factory preset. If you'd like to copy this preset to a user location (banks 1-9), press and hold any of the ABCD buttons for 1 second. One of the LEDs will blink, and then follow the same instructions as saving from a User Preset.

Special Hidden Functions

When you select an Amp Model, Spider III automatically sets its tone controls and effects to match that Amp Model. You can disable the auto-FX selection (but not tone control auto-selection) by powering up Spider III with the Channel D button held. The auto-selection is re-enabled next time you power up.

Want to know where your Spider III's controls are set in the programmed channels? Hold – and keep holding – the Tap button. Now, before you do anything else, turn the Amp Models knob. This activates Spider III's "Compare" mode. Now turn any knob other than Amp Model and Master Volume, and the channel lights will tell you whether you need to turn that knob up (Channel A lights) or down (Channel D lights) to match the stored setting. The Channel B & C lights will be lit at the same time once the knob position matches the stored setting exactly.

You can reset your Spider III's programmable channels to their factory-programmed states by holding down the Channel A button as you turn on the power. Warning: This will erase ALL custom sounds you might have created. Ask yourself, "Do I really want to do this?" If your answer is yes, then go for it!

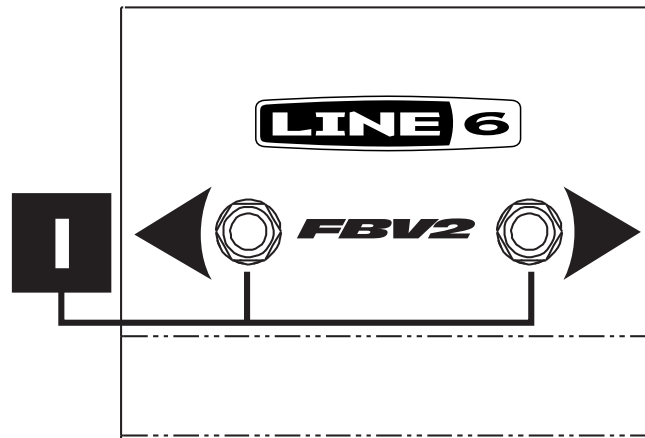
Using Your Feet

The FBV series of foot controllers includes the original FBV—with its extensive effects controls for the Line 6 Vetta amps—and the more-compact FBV Shortboard, which includes all the controls needed for the Spider III. Also available are the FBV Express for channel switching and tap and FBV2 for channel scroll. Note that the Line 6 Floor Board and FB4 foot controllers will not work with Spider III.

FBV footcontrollers come with an included RJ-45 cable. Connect this cable between the front panel of the Spider III and the side of the FBV. If you ever need a replacement cable, look for a Category 5, 10 Base-T or RJ-45 cable with male connectors on both ends. These can be found at almost any computer supply retailer.

FBV2

1. The FBV2 functions as a two button channel scroll foot switch. This foot switch allows you to scroll through the 4 channels (the A,B,C & D buttons) of your Spider III.

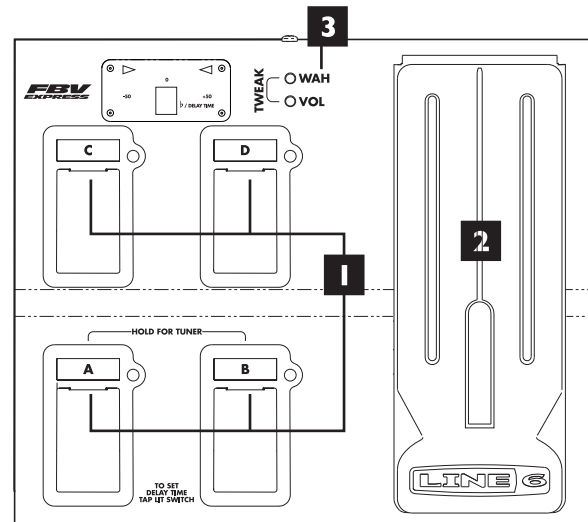


FBV Express

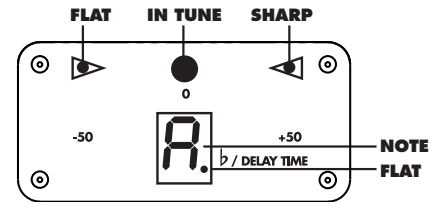
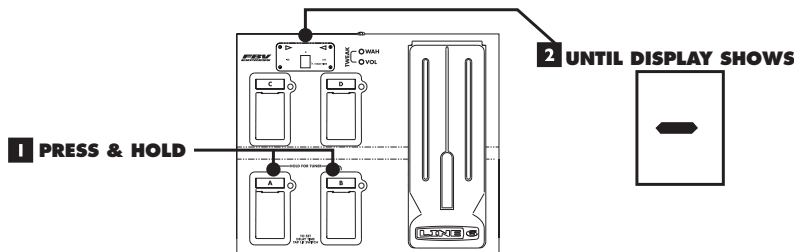
1. Channel A, B, C & D: Select from the four Channel Memories. You can also use your active channel to change your Tap Tempo setting. Just Tap the channel button twice to the drummer's beat and presto - you're locked in!

2. FBV Pedal: Press the pedal forward to click the toe-switch, turning the pedal from Volume to Wah.

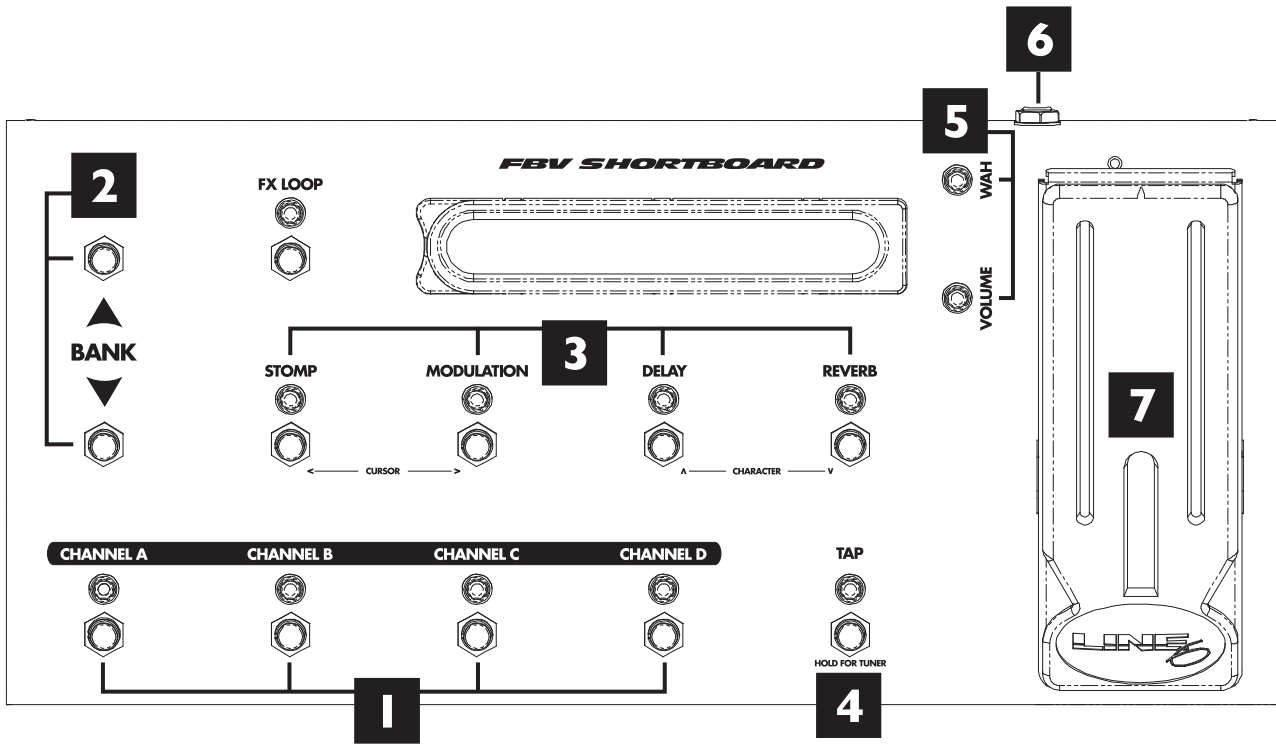
3. Wah and Volume Lights: These light to show that a pedal is ready to control Wah or Volume. **Note:** Press the pedal fully forward to click the toe-switch, switching the pedal to control Wah or Volume.



Using your FBV Express Tuner



3 DONE TUNING? PRESS ANY OF THE A,B,C OR D FOOTSWITCHES



FBV Shortboard

1. Channel A, B, C & D: Select from the four Channel Memories. **Note:** On the FBV Express, you can also use your active channel to change your Tap Tempo setting. Just Tap the channel button twice to the drummer's beat and presto - you're locked in!

2. Bank Up - Bank Down: The FBV Shortboard gives you 9 banks of 4 channels each. Bank 1 is the same 4 memories you get from the Spider III front panel A,B,C,D buttons when no FBV is connected.

3. STOMP/MOD/DELAY/REVERB: You guessed it! These switch the Spider III effects MOD, DELAY and REVERB on and off kinda like they were stomp boxes on a pedal board. STOMP engages the DISTORTION BOOST (see Tap Button extra functions)

4. Tap/Tuner: Tap a couple beats to set the tempo. Or press and hold this switch until you see the tuner on the pedal's display. Press it again to exit tuner mode.

5. Wah and Volume Lights: These light to show that a pedal is ready to control Wah or Volume. **Note:** Pressing the pedal fully forward to click the toe-switch selects its control between Wah or Volume. If a separate expression pedal is connected to the Shortboard's rear panel 1/4-inch jack, the Shortboard pedal controls Wah only, with the toe switch toggling the Wah on/off.

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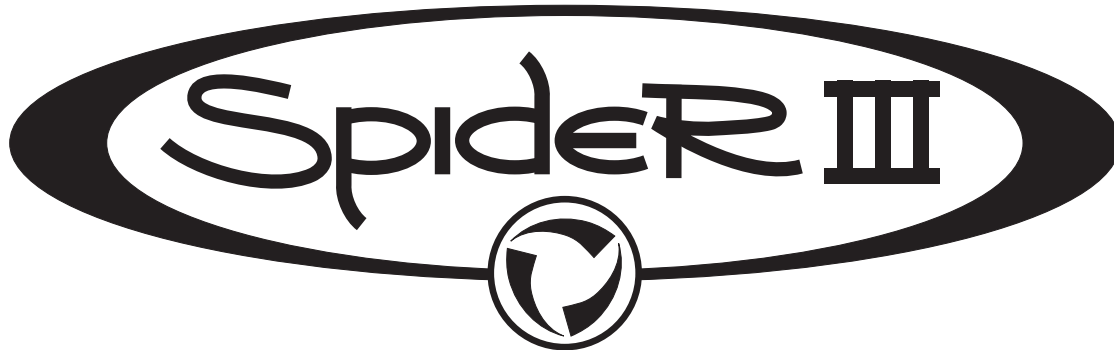
7. FBV Pedal: Press the pedal forward to click the toe-switch, turning the pedal from Volume to Wah.

Saving with FBV Shortboard: To prepare for saving, it's a good idea to browse through the various factory-stored preset sounds to decide which you can do without. Make a note of their Bank number and Channel letter so you can save your own sounds there instead.

Save: Step on the FX LOOP switch until "NAME EDIT" is displayed. The Shortboard's COMP and MOD switches then select one of the characters of the channel name so you can edit it. The DELAY and REVERB switches choose from the available letters, numbers and symbols. The Bank Up and Bank Down switches then pick a Bank you'd like to save within.

Complete the Save: Press the A, B, C or D switch to store to that Channel Memory in the chosen Bank. The display will show "SAVING". Congratulations, you're all done!

LINE 6



Pilot's Guide
Manuel de pilotage
Pilotenhandbuch
Pilotenhandboek
Manual del Piloto

40-00-0099

Electroponic Limited Edition available @ www.line6.com

Rev B

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**You should read these Important Safety Instructions.
Keep these instructions in a safe place.**



Before using your Spider III, carefully read the applicable items of these operating instructions and the safety suggestions.

1. Obey all warnings on the amp and in the Spider III Manual.
2. Connect only to AC power outlets rated 100-120V or 200-240V 47-63Hz (depending on voltage range of the unit; refer to back panel).
3. Do not perform service operations beyond those described in the Spider III Manual. Service is required when the apparatus has been damaged in any way, such as:
 - power-supply cord or plug is damaged
 - liquid has been spilled or objects have fallen into the apparatus
 - the unit has been exposed to rain or moisture
 - the unit does not operate normally or changes in performance in a significant way
 - the unit is dropped or the enclosure is damaged.
4. The bottom of the metal chassis can get hot during operation. Do not touch during operation or shortly after.
5. Do not place near heat sources, such as radiators, heat registers, or appliances which produce heat. Keep the rear of the unit at least three inches from walls or other items that might block heat radiation.
6. Do not block any of the ventilation openings or use in an enclosed space.
7. Guard against objects or liquids entering the enclosure. Do not use or place unit near water.
8. Do not step on power cords. Do not place items on top of power cords so that they are pinched or leaned on. Pay particular attention to the cord at the plug end and the point where it connects to the amp.
9. Unplug the amp when not in use for extended periods of time. Unplug the amp during lightning storms.
10. Clean only with a damp cloth.
11. Do not defeat the safety purpose of the grounding type plug. A grounding type plug has two blades and a third grounding prong. The third prong is provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
12. Only use attachments/accessories specified by the manufacturer.
13. Prolonged listening at high volume levels may cause irreparable hearing loss and/or damage. Always be sure to practice “safe listening.”

Line 6, Spider III, FBV, FBV Shortboard, FBV Express, FBV2 and Vetta are trademarks of Line 6, Inc. All other product names, trademarks, and artists' names are the property of their respective owners, which are in no way associated or affiliated with Line 6. Product names, images, and artists' names are used solely to identify the products whose tones and sounds were studied during Line 6's sound model development for this product. The use of these products, trademarks, images, and artists' names does not imply any cooperation or endorsement.

CAUTION: This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.



The exclamation point within a triangle means “caution!” Please read the information next to all caution signs.

CAUTION: To reduce the risk of fire or electric shock, do not remove screws. No user-serviceable parts inside. Refer servicing to qualified service personnel.



The lightning symbol within a triangle means “electrical caution!” It indicates the presence of information about operating voltage and potential risks of electrical shock.

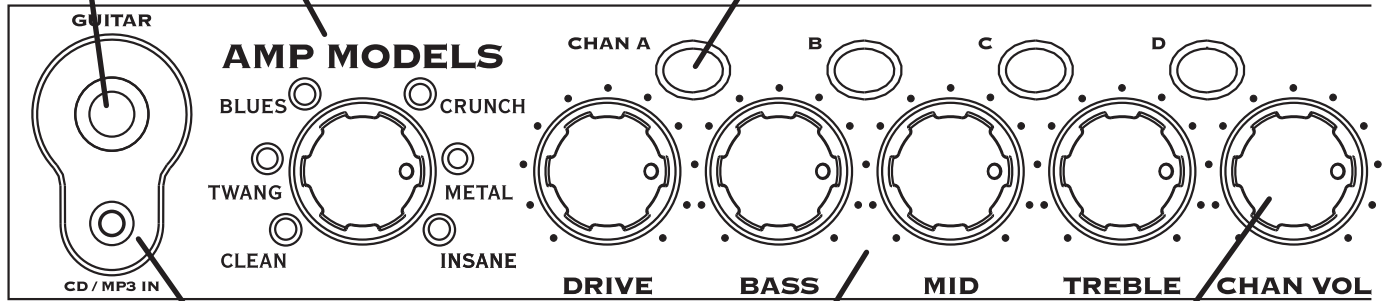


This symbol within a triangle means “caution! hot surface!” It is placed in areas that may become too hot to touch when device is in operation.

1 Plug In Here

2 **Amp Models**
Spin this knob to select one of twelve Amp Models. All the other Spider III controls will automatically be set to sound great with that Amp Model, so you can just play!

11 **Channel Memories**
Four programmable channels come pre-loaded with great factory presets. These buttons are also used when saving user presets. See **Saving** for more information.



3 **CD/MP3**
Plug in any audio source and it feeds directly into the Spider III's speaker or headphones so you can jam with your favorite music or drum machine. Use the device's output control to adjust its volume. Note: Start with the volume on your device at it's lowest setting and bring it up to the volume you desire.

4 **Tone Controls**
Drive is like the volume or gain knob on other amps; controls how much "dirt" you get in your sound. Bass, Mid, and Treble controls are customized for each Amp Model to give you optimal tonal control.

5 **Channel Volume**
This control helps you balance the volumes of different amp-and-effect setups that you store in your Spider III's channels. See 10 for the low-down on channels.

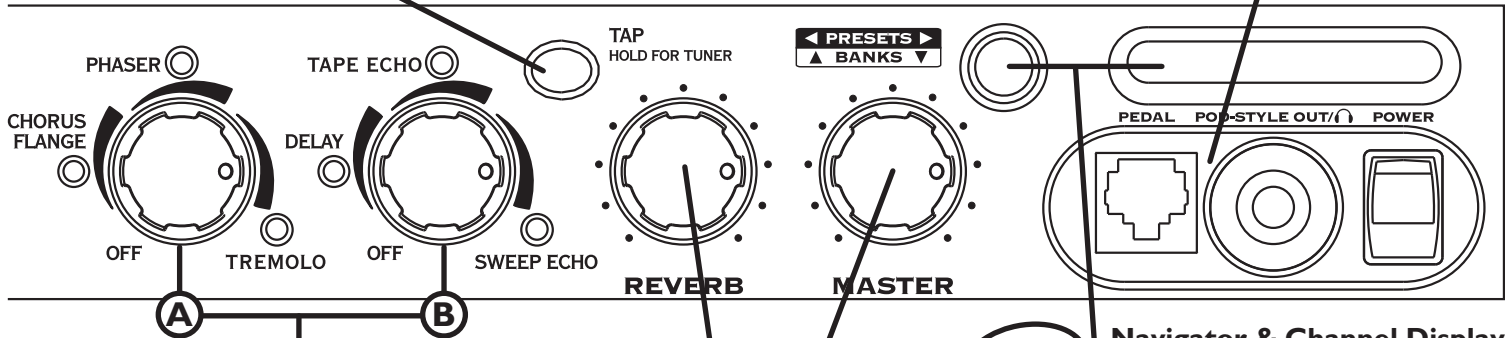
10

Foot Control & Headphone/Line Out

Plug in an FBV2 foot switch to scroll through the 4 channels or connect a Line 6 FBV Shortboard controller for channel switching, effects on/off control, wah/volume pedals, access to 32 more channel memories, a chromatic tuner, and tap tempo for delays. Consider the FBV Express for channel switching, tap tempo, wah/volume control and tuner capabilities. Listen in stereo with headphones, or use this as a direct out for recording! (If you need a stereo out, use a 1/4" TRS stereo-to-dual mono Y-adaptor cable).

9

TAP: Tap on the TAP button a few times to set the delay time. Also Tap button extra functions.

**6**

Smart Control FX

Spin one of these knobs to get great FX, fast and easy:

Knob A picks chorus/flange, phaser or tremolo, with a range of settings – from subtle to overpowering – for each effect. The LED shows the active effect.

Knob B picks delay, tape echo or sweep echo, with a range of mix settings from low to high. The LED shows the active effect and flashes the delay time. Tap the TAP button to change the delay time.

8

Master Volume

You can choose the overall volume of the amplifier, without affecting your tone.

7

Reverb

Dial up more or less virtual room.

12

Navigator & Channel Display

Navigate up and down to go through the various banks of presets (user, artist based, song based). Navigate left and right to select from different sounds in each of those banks. The display will indicate which preset you have selected both alphanumerically (e.g. 01A, 60S) and by name (e.g. Crunchzilla).

Welcome The Spider III...

Thank you for inviting Spider III home with you. This amp mines the tonal heritage of the past forty years of guitar amplifier design and matches it up with the kind of digital signal processing magic that will still be ahead of its time ten years from now.

Presets

Your new Spider III amplifier comes with a whopping 36 user presets and over 400 artist and song based presets that can be accessed through the Navigator.

User Presets are loaded with a good variety of great tones but are ready for you to tweak and leave your own musical imprint on. See Saving for more information. User presets are in Banks 1-9. Each bank contains 4 tones, ABCD on the display and will light the corresponding ABCD button on the front of the amp.

The Artist Presets were dialed in by a team of insane guitar slinging rock stars that cover a great range of styles. We sent an amp to each of them to create a bank of inspiring tone. Some chose to capture the tone of their records, some explored the insane range of tonal possibility that Spider III offers – whatever the

outcome, their work is at your disposal and is organized into banks by artist name. It is as if they came to your home and helped you dial in your amp.

Song Based Presets are based on the top 200 guitar rock songs of all time. These sounds are organized into banks by genre.

Amp Model Details

Clean

Red LED - Select this Amp Model and adjust the tone controls to get crisp, amazing clean tones, great warm jazz tones, and all the high-end shimmer you'll need with a generous amount of bottom end to boot. Then dial up a little chorus and delay to get the ultimate clean sound!

Green LED - We developed this Amp Model to emulate those late 60's and early 70's clean tones. It started off as an Amp Model based on a 1973 Hiwatt custom 100. We extended the tone control range and tightened up the low end. Hit an open A chord and let that big sweet tone ring!

Twang

Red LED - This Amp Model draws on our analysis of mid 60's Fender amps, including the blackface '65 Twin Reverb and blackface '64 Deluxe Reverb. We wanted an Amp Model that has that classic glassy high end tone, with some snap and bite for some serious chick'n pick'n. Things don't get too crunchy until reaching the top range of the Drive knob.

Green LED - This Amp Model is based on a number of vintage tweed amps. We evaluated a '53 Fender tweed Deluxe, '58 Fender tweed Bassman and a '60 Gibson Explorer to create a swingin' Rockabilly tone. Add some reverb and a slap echo and Be-bop-alu-la!

Blues

Red LED - What would happen if we based a model on three helpings of '65 Marshall JTM-45, one scoop of '58 Fender Bassman, a schmeer of '63 Fender Vibroverb and a dash of Supro for good measure? The biggest, fattest down home Blues amp ever heard. This Amp Model slides between gritty swamp-infected cleans to syrupy smooth, walloping drive tones. It's time to get down and dirty!

Green LED - Ready, steady...GO! This Amp Model is based on a fawn Vox AC-30 amplifier with an updated and expanded tone control circuit. We wanted to capture that early British pop rock tone that the Beatles and the Stones are so well known for.

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Crunch

Red LED - This sound was crafted during our studies of the '68 Marshall Plexi 50 Watt. This type of Marshall amp was used by a number of early metal bands. Check out albums like British Steel, Number of the Beast and Black Out. Crunch provides a wider range of tone control settings than the original Marshall amp had. This Amp Model will allow you to bump up the mids even at the highest Drive settings.

Green LED - Plexi On Fire! This Amp Model is based on a '68 Marshall Plexi 100 watt with a few added extras; The combination of a Variac and the jumpered input channels creates that infamous brown sound that will feel like flames are shooting out the input jack! "Come on Dave... Give me a break!"

Metal

Red LED - This Amp Model is based on the Mesa Dual Rectifier. For Spider III, we made careful enhancements to this classic tone. The resulting Amp Model has a definite modern flavor. This monster truck of tone delivers a tight bottom end that's big, powerful, tight and fast. Use this Amp Model to get a tight and punchy, high gain Metal sound.

Green LED - This sound was created to be an aggressive high gain Amp Model with a unique Mid control that will sweep through an entire spectrum of tone on one knob. The Mid knob for this Amp Model changes the character of the distortion. When set to minimum, the distortion exhibits Fuzz pedal characteristics. When the Mid is set to noon, it mimics the creamy modern high gain amp tones. And when the Mid knob is turned up to max, it's very much reminiscent of that Class A sound. Of course, then there are all the places in-between...

Insane

Red LED - This model is our "dialed in for shredding" version of the Mesa Dual Rectifier red channel. It combines the intensity and impact of Metal Red, but delivers more midrange and teeth for that bone-crushing, brain piercing insane grind.

Green LED - Our goal with Insane was to provide you with as much input gain distortion as possible short of complete meltdown. You get an obscene helping of distortion, while still retaining tonal definition and character. As a result, you get way more bottom end and cabinet character than other small amps. Crank up the Drive control and prepare to dominate!

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Smart Control FX:

Great amp tone is only part of a great guitar sound. Effect processing – whether it's stomp boxes or rack gear – is also a big part of the story. Your Spider III packs the power of several of these tone shapers in its Smart Control FX section.

The delay knob gives you a trio of delay effect choices: a standard delay, tape echo, and a sweep echo. The modulation effect knob lets you choose between chorus/flange, phaser, and tremolo, and for each of these effects you can choose anything from a subtle hint of processing to total tone-mangling overkill. While turning the knob, Spider III adjusts all the individual aspects of the effect automatically to give you the range of sounds you're looking for, without having to mess with multiple knobs and switches to get your tone. So you can spend your time making music instead.

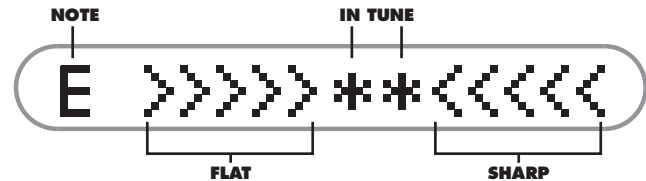
Tap Button “Extra” Functions

The Tap Tempo button, in addition to setting the speed of your delay effects, also lets you access a few extra Spider III features: a Tuner, Distortion Boost and a built-in Noise Gate (the tuner and the boost are also accessible via the optional FBV Shortboard). When

you hold down the Tap Tempo button, you can use some of Spider III's knobs to access these extra features.

Tuner Mode

Press and hold the TAP button or TAP footswitch for 2 seconds or more and you get instant digital tuner. The volume is muted during tuning so you won't hear anything coming out of the amp. Press any button to exit Tuner Mode. If there is no FBV Shortboard connected, the LCD on the front panel of the Spider III will work as the tuner display.



Distortion Boost

Press and hold the Tap button as you turn the Drive knob up past twelve o'clock. As you do this, Spider III's Channel A LED comes on. This gives the kind of extra 'dirt' that you'd expect from a Distortion pedal with the distortion control set low and the output control set high. It boosts your guitar signal before it reaches the Amp Model, so that you hit the model harder and get a more distorted sound. Enabling this is the same as kicking on Stomp on the FBV Shortboard.

Noise Gate

Press and hold Tap as you turn the Reverb knob up past twelve o'clock, and you turn on a built-in Noise Gate, which helps to cut down on hiss and noise. When you do this, the Channel D LED comes on to indicate that the Gate is on.

Saving

Once you've dialed up your own killer sound you're probably going to want to save it so you can get to it another time. To prepare for saving, it's a good idea to browse through the various factory-stored user preset

sounds to decide which user preset you can live without. Make a note of its Bank number and Channel letter so you can save your new tone there instead.

To save from a User Preset (Banks 1 thru 9) press and hold the lit channel memory button for 1 second. The LED will start to blink. You may wish to keep the same name or you can use the Navigator to name your patch. Press left and right to select the cursor position and up and down to select a letter, number or character. When you have the name you want press left until the cursor is under the bank number and then press up or down to select the bank you would like to save within. To complete a Save operation, press the ABCD button you wish to save to.

When you select an Artist or Song Based Preset, the ABCD channel LEDs will turn off to indicate that you have recalled a factory preset. If you'd like to copy this preset to a user location (banks 1-9), press and hold any of the ABCD buttons for 1 second. One of the LEDs will blink, and then follow the same instructions as saving from a User Preset.

Special Hidden Functions

When you select an Amp Model, Spider III automatically sets its tone controls and effects to match that Amp Model. You can disable the auto-FX selection (but not tone control auto-selection) by powering up Spider III with the Channel D button held. The auto-selection is re-enabled next time you power up.

Want to know where your Spider III's controls are set in the programmed channels? Hold – and keep holding – the Tap button. Now, before you do anything else, turn the Amp Models knob. This activates Spider III's "Compare" mode. Now turn any knob other than Amp Model and Master Volume, and the channel lights will tell you whether you need to turn that knob up (Channel A lights) or down (Channel D lights) to match the stored setting. The Channel B & C lights will be lit at the same time once the knob position matches the stored setting exactly.

You can reset your Spider III's programmable channels to their factory-programmed states by holding down the Channel A button as you turn on the power. Warning: This will erase ALL custom sounds you might have created. Ask yourself, "Do I really want to do this?" If your answer is yes, then go for it!

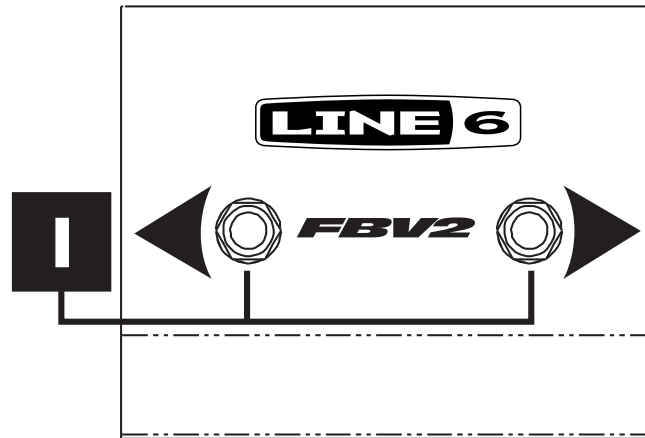
Using Your Feet

The FBV series of foot controllers includes the original FBV—with its extensive effects controls for the Line 6 Vetta amps—and the more-compact FBV Shortboard, which includes all the controls needed for the Spider III. Also available are the FBV Express for channel switching and tap and FBV2 for channel scroll. Note that the Line 6 Floor Board and FB4 foot controllers will not work with Spider III.

FBV footcontrollers come with an included RJ-45 cable. Connect this cable between the front panel of the Spider III and the side of the FBV. If you ever need a replacement cable, look for a Category 5, 10 Base-T or RJ-45 cable with male connectors on both ends. These can be found at almost any computer supply retailer.

FBV2

1. The FBV2 functions as a two button channel scroll foot switch. This foot switch allows you to scroll through the 4 channels (the A,B,C & D buttons) of your Spider III.

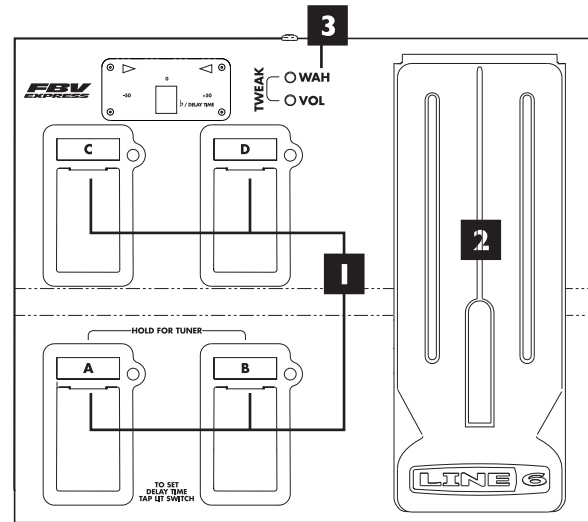


FBV Express

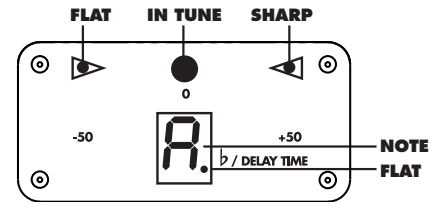
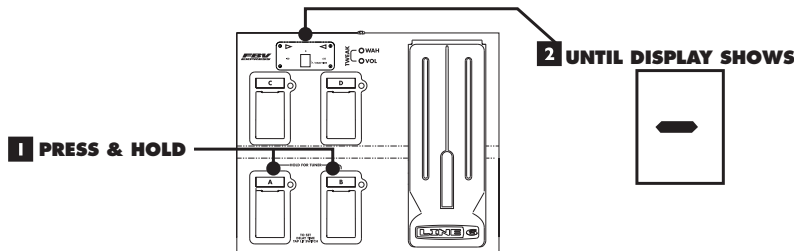
1. Channel A, B, C & D: Select from the four Channel Memories. You can also use your active channel to change your Tap Tempo setting. Just Tap the channel button twice to the drummer's beat and presto - you're locked in!

2. FBV Pedal: Press the pedal forward to click the toe-switch, turning the pedal from Volume to Wah.

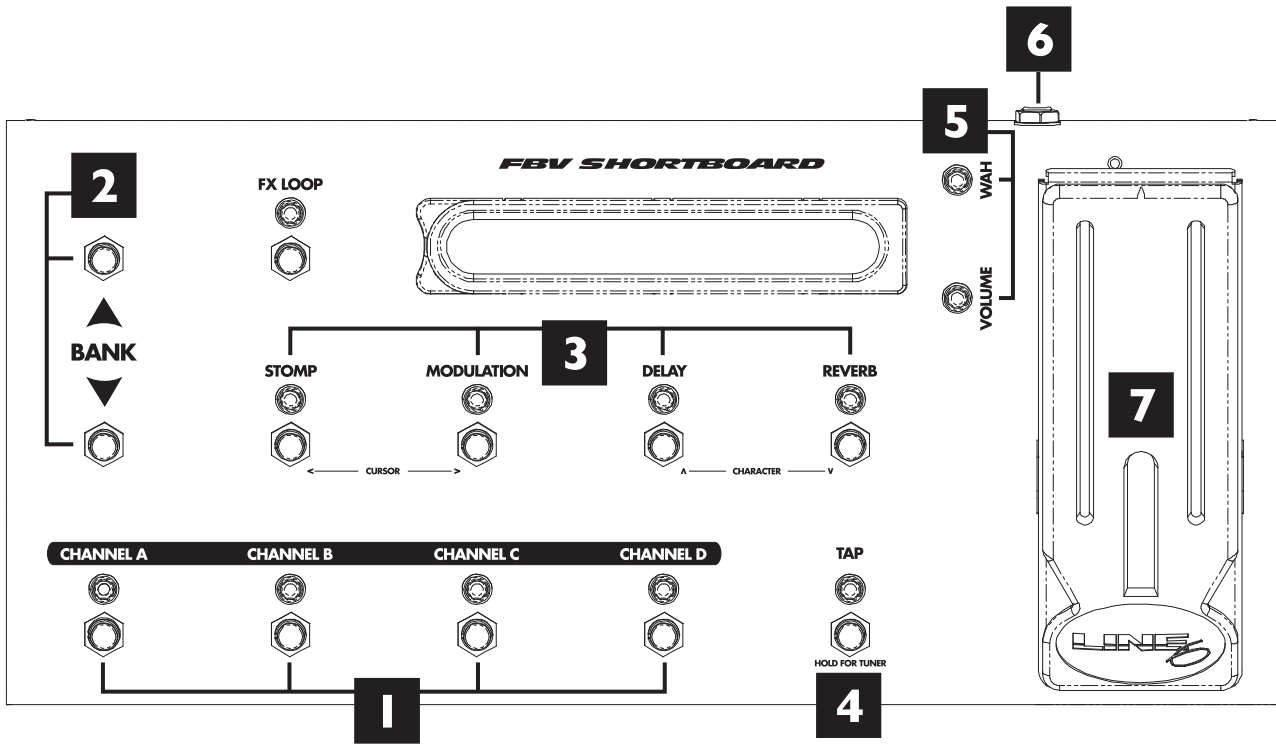
3. Wah and Volume Lights: These light to show that a pedal is ready to control Wah or Volume. **Note:** Press the pedal fully forward to click the toe-switch, switching the pedal to control Wah or Volume.



Using your FBV Express Tuner



3 DONE TUNING? PRESS ANY OF THE A,B,C OR D FOOTSWITCHES



FBV Shortboard

1. Channel A, B, C & D: Select from the four Channel Memories. **Note:** On the FBV Express, you can also use your active channel to change your Tap Tempo setting. Just Tap the channel button twice to the drummer's beat and presto - you're locked in!

2. Bank Up - Bank Down: The FBV Shortboard gives you 9 banks of 4 channels each. Bank 1 is the same 4 memories you get from the Spider III front panel A,B,C,D buttons when no FBV is connected.

3. STOMP/MOD/DELAY/REVERB: You guessed it! These switch the Spider III effects MOD, DELAY and REVERB on and off kinda like they were stomp boxes on a pedal board. STOMP engages the DISTORTION BOOST (see Tap Button extra functions)

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