BassLink T

Powered Subwoofer System

SERVICE MANUAL

Infinity Systems, Inc.
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Woodbury, New York 11797

Rev0 7/2004

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Basslink T Specifications

Output Power (14.4V supply)	250W RMS
Type of Amplifer	AB
Frequency response:	20Hz – 120Hz
Maximum input signal:	4.0V
Maximum sensitivity:	50mV to 4V Line-level input 1V to 16V High-level input
Input Impedance	20K Ω
Idle Current	<800mA
Signal to Noise	>100dB (A-weighted ref to full power)
Crossover Type	Fixed LP @ 12dB per octave
Crossover Range	Variable 70 – 170 Hz
Min Current Draw (Idle)	1.13A
Remote Current Draw	<30mA
Max Current Draw	26A
DC Offset	<30mV
Bass Boost	-6dB to +3dB @ 40Hz
Auto Turn-On	2 -10min (Time to turn Off)
Operating Voltage	10 – 16 VDC
Dimensions:	40 3/8 x 6 7/16 x 14 3/8” (L x W x D) (1026mm x 164mm x 366mm)
Fuse:	30A

Infinity continually strives to update and improve existing products, as well as create new ones. The specifications and details in this and related JBL publications are therefore subject to change without notice.

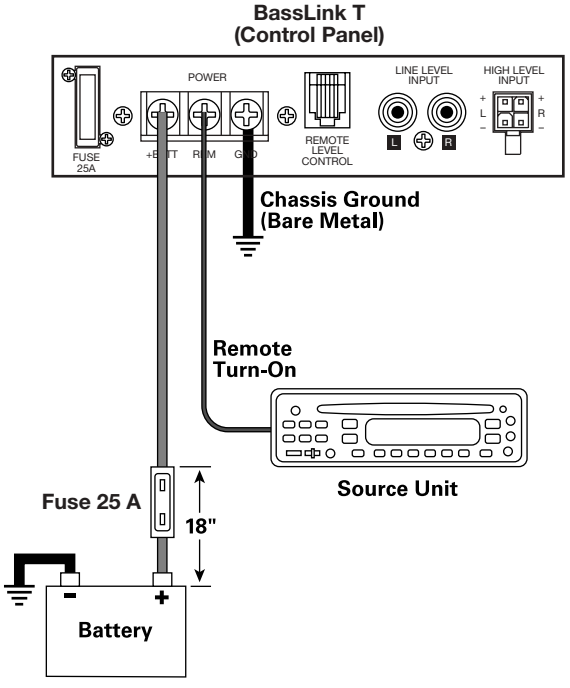
Power Connections

Connect power to BassLink T, as shown in Figure 6. Also observe these installation tips:

- Use at least #10 AWG wire for the +BATT (+12 Vdc) and GND (ground) connections. If needed, use at least a #20 AWG wire for the REM (remote) connection.
- Route all power wires through a grommet in the vehicle's firewall. If a factory grommet is unavailable, install one.
- Connect a short GND wire from BassLink T to the nearest bare metal surface. For a good connection, scrape away paint from the metal surface and use a screw with a lock (star) washer.
- Install a fuse holder with a 25 A fuse within 18" of the battery's positive (+) terminal (see Figure 6).
- The REM connection requires +5 to +12 Vdc signal to turn on BassLink T. Most head units with preamp outputs provide this remote voltage signal. For speaker-level applications, a remote connection is preferred but not required, since BassLink T's Auto Turn-On feature will sense voltage on the speaker wires to automatically turn on BassLink T.

IMPORTANT: *To enable BassLink T's Auto Turn-On feature, set the AUTO TURN-ON switch to the AUTO position (see Figure 12 on page 7).*

Figure 6. Power connections for BassLink T.

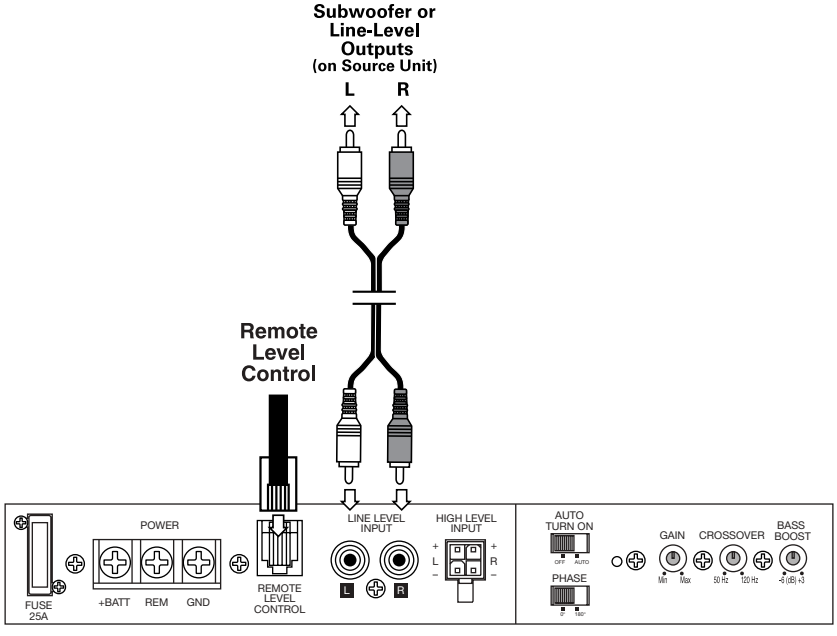


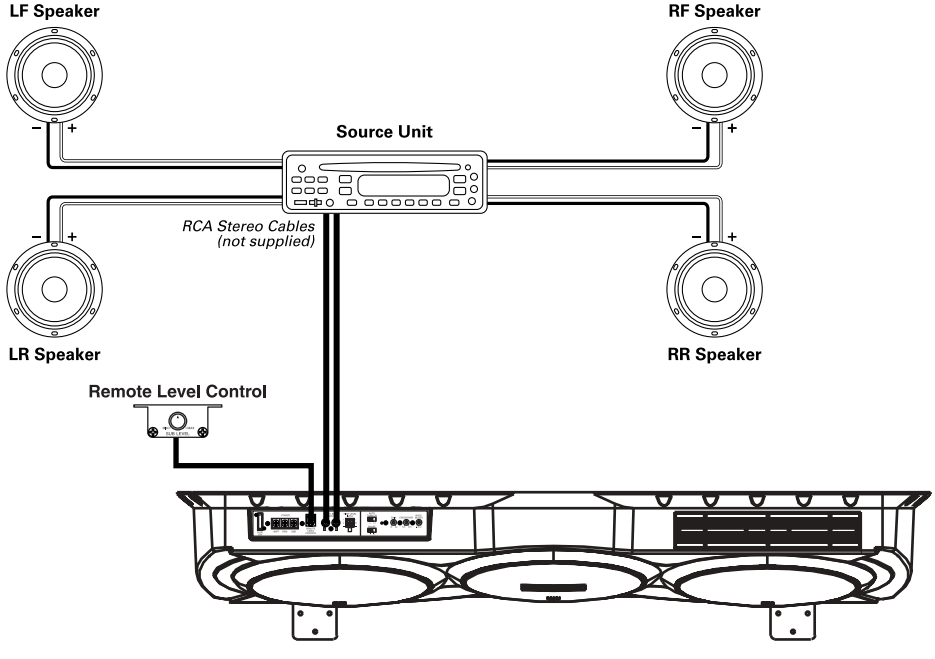
Applications

BassLinkT is equipped with two line-level (RCA) inputs and two speaker-level inputs.

To help you plan your installation, we have included two system applications in Figures 7 and 8 on pages 4 and 5. For more system ideas, see your authorized Infinity car audio dealer.

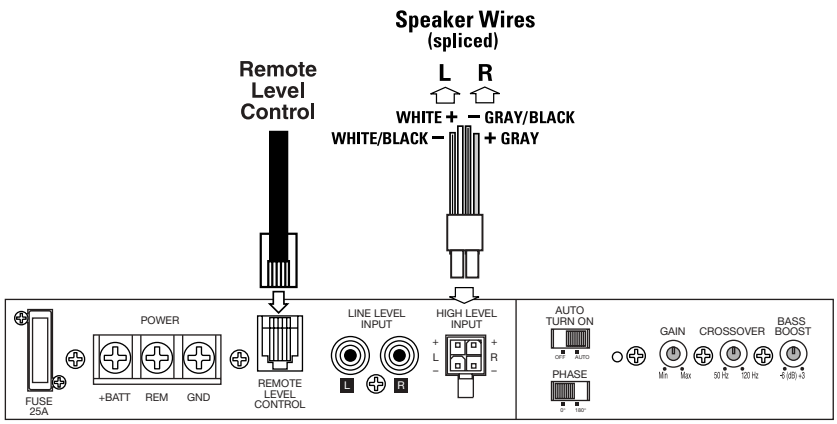
Figure 7. BassLinkT audio connections for a head unit with two line-level or subwoofer (RCA) outputs.

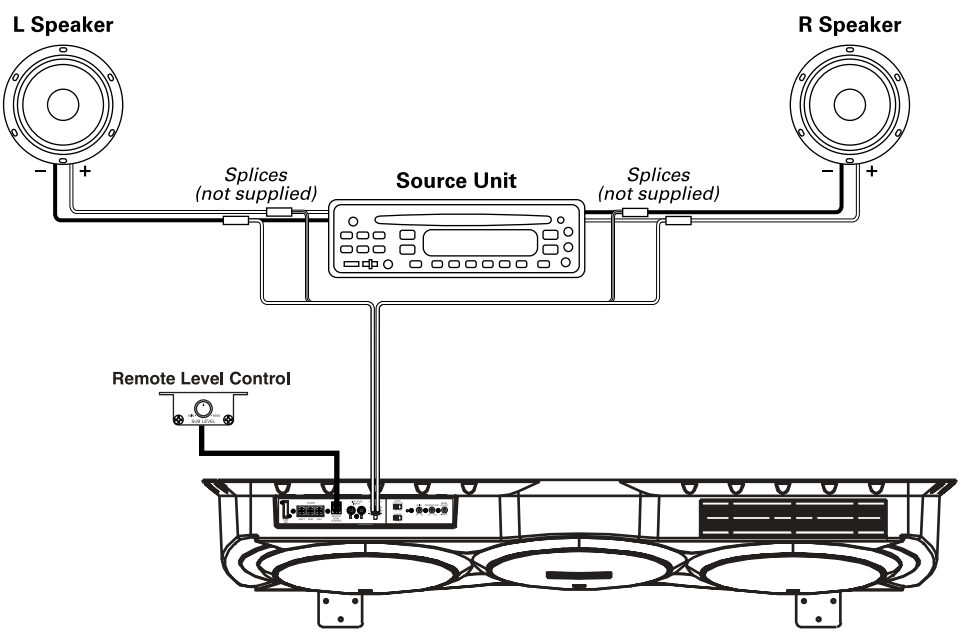




APPLICATIONS (CONTINUED)

Figure 8. BassLinkT audio connections for a head unit equipped with two speaker-level outputs.





Controls and Functions

BassLink T provides several controls and indicators that simplify sonic integration with virtually any vehicle's unique acoustic properties. They are located on the top control panel, as shown in Figure 12.

GAIN Control: Use this control to adjust the relative volume (loudness) of BassLink T with respect to the other speakers in the vehicle.

CROSSOVER: Use this control to adjust the amount of high-frequency information present in BassLink T's output. A lower value means more of the high frequencies are filtered out.

BASS BOOST: Use this control to correct any perceived peak or dip in the bass response (typically around 40Hz in most vehicles). Set the control to any value between –6dB and +3dB, according to your preference.

PHASE Control: Use this switch to reverse the phase of BassLink T's output with respect to its input. Choose the position (0° or 180°) that sounds the best.

NOTE: *Depending on BassLink T's orientation and location in a vehicle, reversing the phase may (or may not) increase or decrease the amount of perceived upper bass being reproduced.*

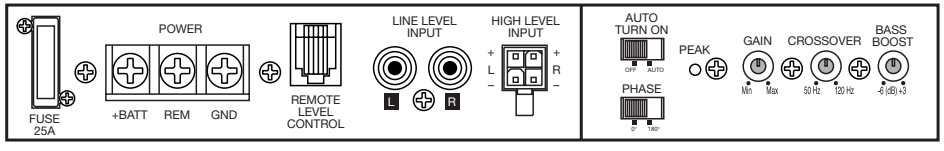
AUTO TURN-ON: For speaker-level connections, use this switch to activate (or deactivate) BassLink T's automatic turn-on circuit.

REMOTE LEVEL CONTROL: Use this RJ11 jack to connect the Remote Level Control (see page 6).

PEAK LED: This indicator glows red when the subwoofer is at maximum output. Be sure to monitor this indicator during BassLink T setup (see *Tuning BassLink T*). When properly tuned, the PEAK LED should light momentarily during high-level bass transients. Avoid adjustments that cause the PEAK LED to remain lit for extended periods.

POWER LED: This indicator will glow blue when BassLink T is operational.

Figure 12. BassLink T control panel.



Tuning BassLink T

1. Unplug the RJ11 cable that connects the Remote Level Control to BassLink T.

2. Make sure the head unit is off and its volume control is set to minimum.

3. On BassLink T's top panel, initially set all controls to their midpoint positions, as shown in Figure 12. On BassLink T's top panel, initially set PHASE to 0°.

4. Turn on the head unit and play a favorite music track that has substantial bass. Set the head unit's volume control to 75 percent of the total output (approximately 3 o'clock on rotary controls).

5. Adjust the GAIN control clockwise until the PEAK LED (on BassLink T's top panel) begins to flash with each bass note but doesn't stay lit continuously.

6. Listen to your system, making a mental note of the amount of upper bass being reproduced.

7. Switch the PHASE control to 180° and listen again for upper bass content. There may be more upper bass, less upper bass, or no change at all. The position that provides the most upper bass is correct, but choose either setting according to your taste.

8. Adjust the CROSSOVER control clockwise or counterclockwise until you hear only low-frequency information. For example, you should NOT hear any vocals coming from BassLink T when seated in the normal listening position.

9. Adjust the BASS-BOOST control clockwise or counterclockwise to suit your taste.

10. Recheck the PEAK LED to make sure it's flashing in time with the bass but is not lit continuously. If it is lit continuously, adjust the GAIN control counterclockwise until the PEAK LED only flashes.

11. Reconnect the RJ11 cable between the Remote Level Control and BassLink T. You may then use the Remote Level Control to adjust the level of the bass to suit your taste and/or different program material.

NOTE: *In most cases, the above steps will provide satisfactory tuning. However, the actual process may require several readjustments of each control, since the settings will interact with each other. If necessary, consult your authorized Infinity car audio dealer for help in tuning your system.*

TROUBLESHOOTING

- **PROBLEM:**
  POWER LED is not lit.

  CAUSES and SOLUTIONS:
  1. Fuse is blown and needs replacement.
  2. Head unit is not functioning properly. Check remote voltage, and power, ground or remote connections.

- **PROBLEM:**
  POWER LED is lit but there is no bass.

  CAUSES and SOLUTIONS:
  1. Inputs are not connected. Check connections.
  2. Head-unit fader control is not set properly. Adjust head-unit fader control to feed audio signals to BassLink T.

- **PROBLEM:**
  BassLink T sounds muddy or distorted.

  CAUSES and SOLUTIONS:
  1. Gain is set too high and PEAK LED is lit constantly. Readjust GAIN control (see *Tuning BassLink T* on page 7).
  2. Bass is set too high. Readjust BASS BOOST control (see *Tuning BassLink T* on page 7).
  3. Head-unit output is distorted or blown. See your authorized Infinity car audio dealer.

- **PROBLEM:**
  No output from BassLink T when head-unit fader control is set to front or rear.

  CAUSE and SOLUTION:
  Input connections are improperly wired. Verify all connections (see *Applications,* starting on page 4).

- **PROBLEM:**
  BassLink T turns on before head unit is completely on and produces a "thump" sound.

  CAUSE and SOLUTION:
  For speaker-level connections, BassLink T is receiving a false turn-on signal. On BassLink T's top panel, slide AUTO TURN-ON to OFF and use the Remote (REM) connection.

- **PROBLEM:**
  BassLink T's POWER LED remains on after head unit is turned off.

  CAUSE and SOLUTION:
  For speaker-level connections, this is normal operation when AUTO TURN-ON is set to ON. BassLink T will remain on another 5 to 10 minutes after sensing that audio signals are not present before shutting down.

- **PROBLEM:**
  BassLink T produces a loud humming noise with the system OFF when using speaker-level inputs.

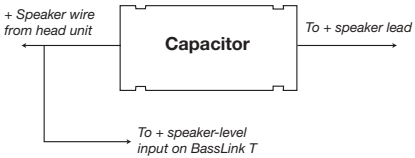
  CAUSE and SOLUTIONS:
  This problem is caused by a feedback loop between your speakers and the high-level inputs of BassLink T.

  Choose one of the following solutions:

  1. Connect a wire from the REMOTE terminal on BassLink T to the remote turn-on of your head unit or to the vehicle's accessory circuit. On the control panel, slide the AUTO-ON switch to the OFF position.

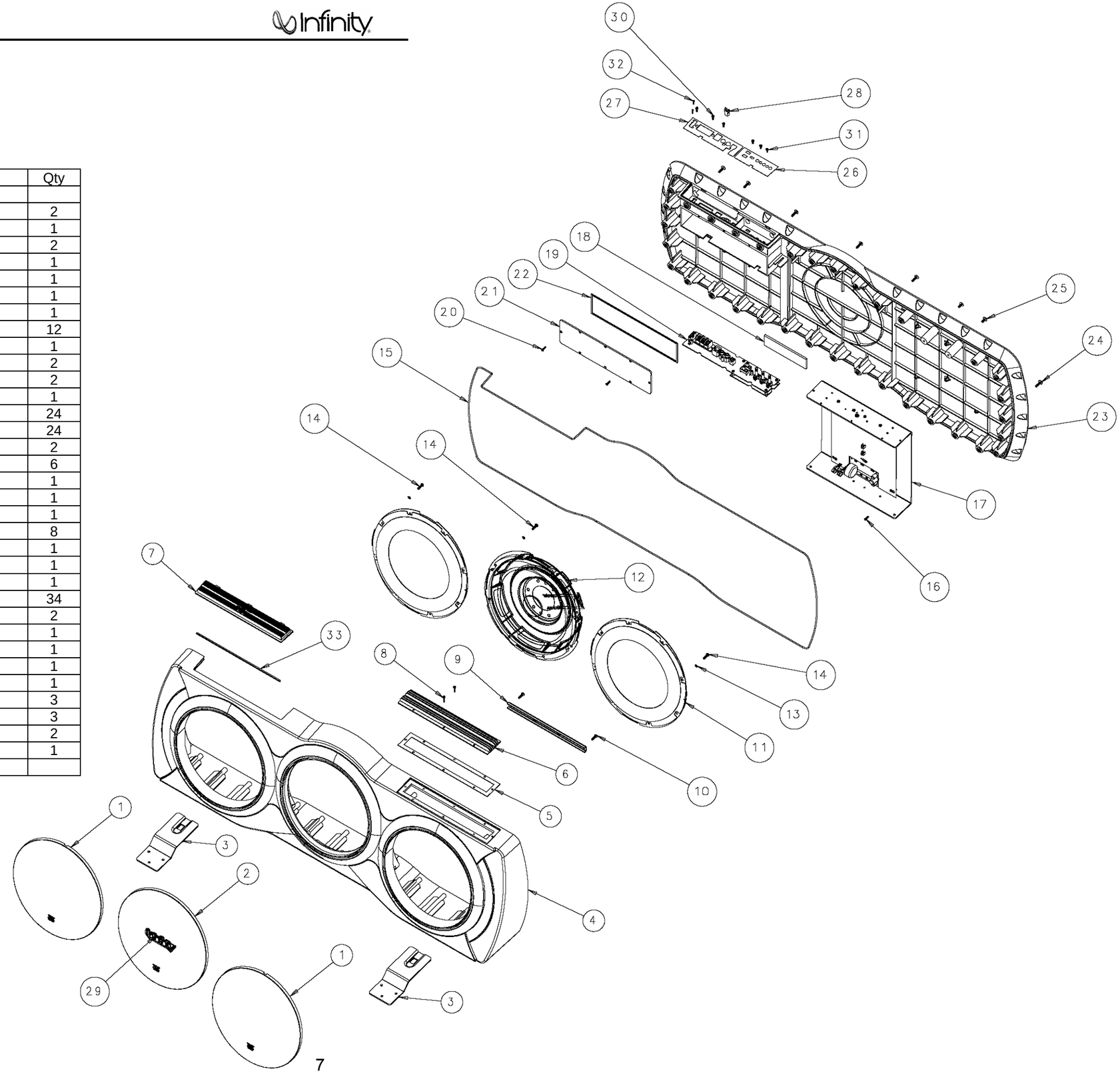
  2. Connect the supplied capacitors between each of the speaker outputs of the head unit and the speaker's positive lead. Connect each positive lead of BassLink T's high-level inputs to the head-unit side of the capacitors. Use one capacitor per speaker input channel.

Figure 10. Connecting supplied capacitors.



BASSLINK T EXPLODED VIEW

Ref #	Part Number	Description	Qty
1	329-000-05012-0BA	Front grille	2
2	329-100-05013-0BA	Grille ass'y	1
3	321-FE-05006-0BA	Bracket stand	2
4	243-100-05017-0BA	Front cabinet	1
5	333-EVA-05024-0BA	EVA gasket	1
6	323-AL-05016-0BA	Heatsink extrusion	1
7	309-ABS-05005-0BA	Control Cover Ass'y	1
8	352-DM3219C376	Screw	12
9	352-FE-05014-0LA	U-bracket	1
10	352-AM04014C326	Screw	2
11	PR-255007	10" passive driver	2
12	F25X12PR-01DW	10" woofer	1
13	355-L06025	Spring washer m4	24
14	352-AM04014C326	Screw 4*14	24
15	336-EVA-05045-0BA	EVA gasket	2
16	352-AM03010D065	Screw	6
17	011-7525-00488	Trunk sub amp	1
18	333-EVA-05026-0BA	EVA gasket	1
19	051-B00488B	Jack tone pcb ass'y	1
20	352-GM03010F055	Screw	8
21	309-ABS-05002-0BA	Sealing cover ass'y	1
22	333-EVA-05023-0BA	EVA gasket	1
23	247-100-05011-0BA	Rear cover	1
24	352-HM04016B190	Screw	34
25	351-HM04010A217	Machine screw	2
26	315-PC-05019-0TA	PC trim plate	1
27	315-PC-05020-0TA	PC trim plate	1
28	327-010-05000-0BA	Door latch	1
29	316-ABS-05006-0BA	Infinity logo	1
30	352-AM03010D065	Screw	3
31	351-AM03008A079	Machine screw	3
32	352-AM02010D006	Screw	2
33	333-EVA-05021-0BA	EVA gasket	1



DISASSEMBLY PROCEDURE FOR BASSLINK T (ACCESS TO AMPLIFER, DRIVERS)

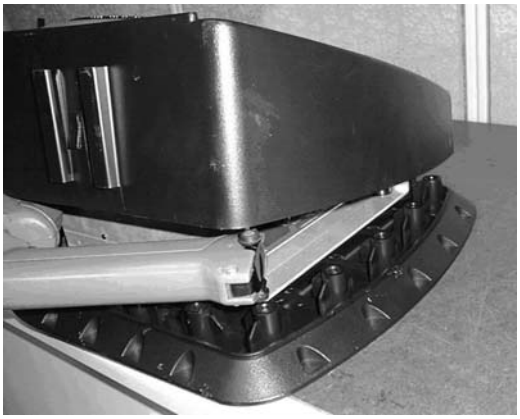
1) On a protected work surface, stand the unit up so the back panel is facing you.
2) Remove the (12) Phillips screws holding the black heatsink to the enclosure. Do not remove the heatsink at this time.
3) Remove the (36) Phillips screws holding the back panel to the main enclosure. Note in the area of the heatsink, two screws are shorter, machine screws.
4) Carefully separate the back panel from the main enclosure; try not to damage the O-ring that may be adhered to both sides of the enclosure, preventing its separation. Note the LED wires from the heatsink area routed to the amplifier; unplug the 2 lead connection at female connector M2 on the amplifier. Set the heatsink and LED w/ wires aside.
5) Unplug the woofer wires from the terminals.
6) Completely separate the two enclosure halves.

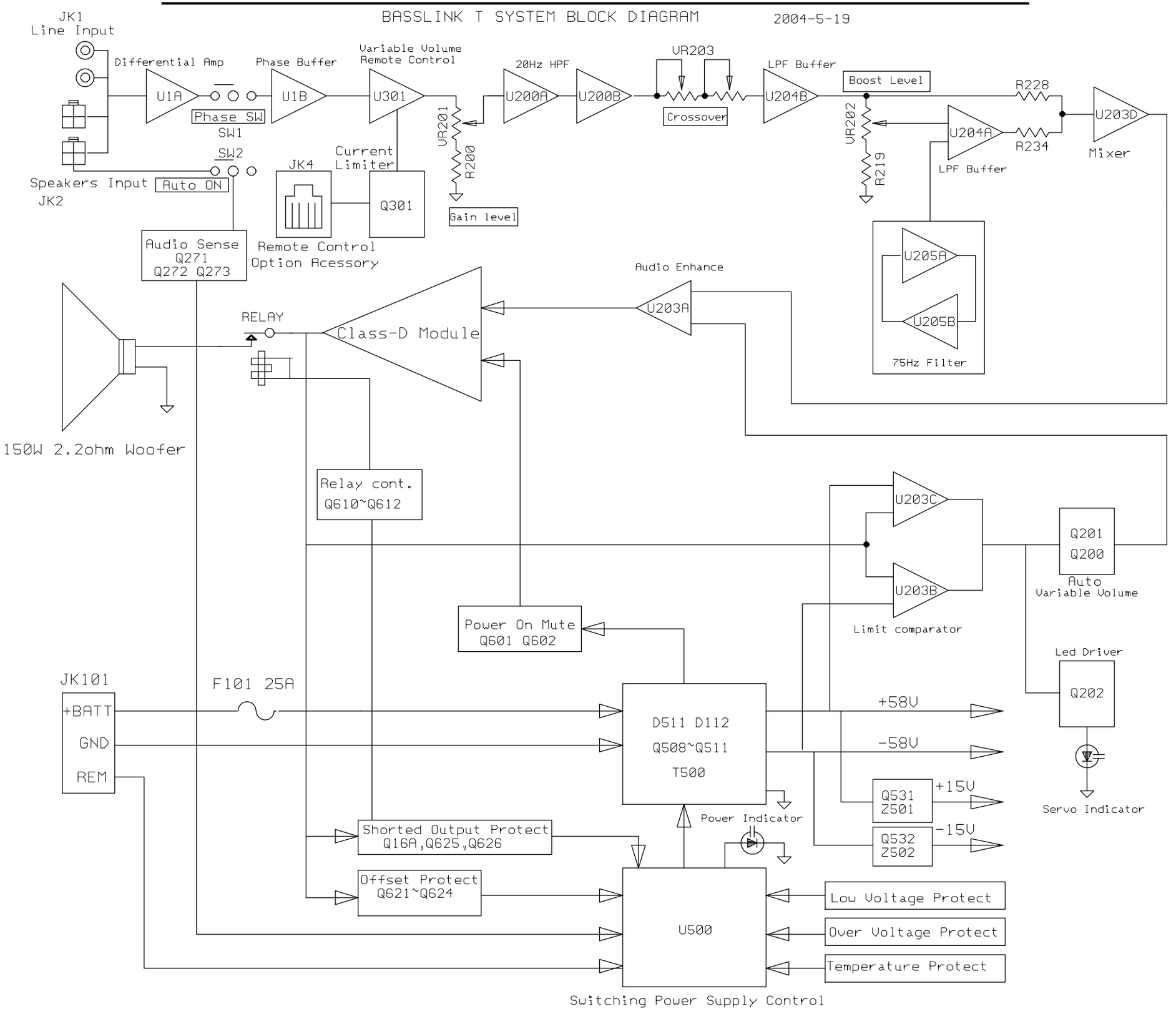
SERVICING THE INPUT/PREAMP SECTION

7) Remove the (8) Phillips screws holding the cover plate to the enclosure.
8) With a wood chisel or similar tool, carefully pry the plastic cover away from the cup, working around the perimeter, until the cover is detached. If the cover is damaged during this procedure, order part# 309-ABS-05002.

REASSEMBLY

9) If the cover to input/preamp section was detached, apply a bead of silicon sealer or similar adhesive around the perimeter of the cover, in the sealing groove. Without this adhesive, there may be an air leak which would affect performance. Press the cover into place.
10) Attach the woofer wires.
11) Before the enclosure can come together, connecting the heatsink/LED wire presents a challenge if not correctly done. The LED wire must thread through the enclosure, the small hole in the aluminum heatsink plate, and back into the M2 connector on the amplifier. The position in which this is best achieved is with Basslink T laying flat side down on a surface, woofer side up. Partially bring the enclosure halves together, and work through the remaining gap near the heatsink end. See illustration.
12) Make sure the O-ring around the perimeter of the enclosure is intact and in place. Make sure the two shorter machine screws are used in the back panel, in the area near the heatsink.
13) Replace all enclosure and heatsink screws.



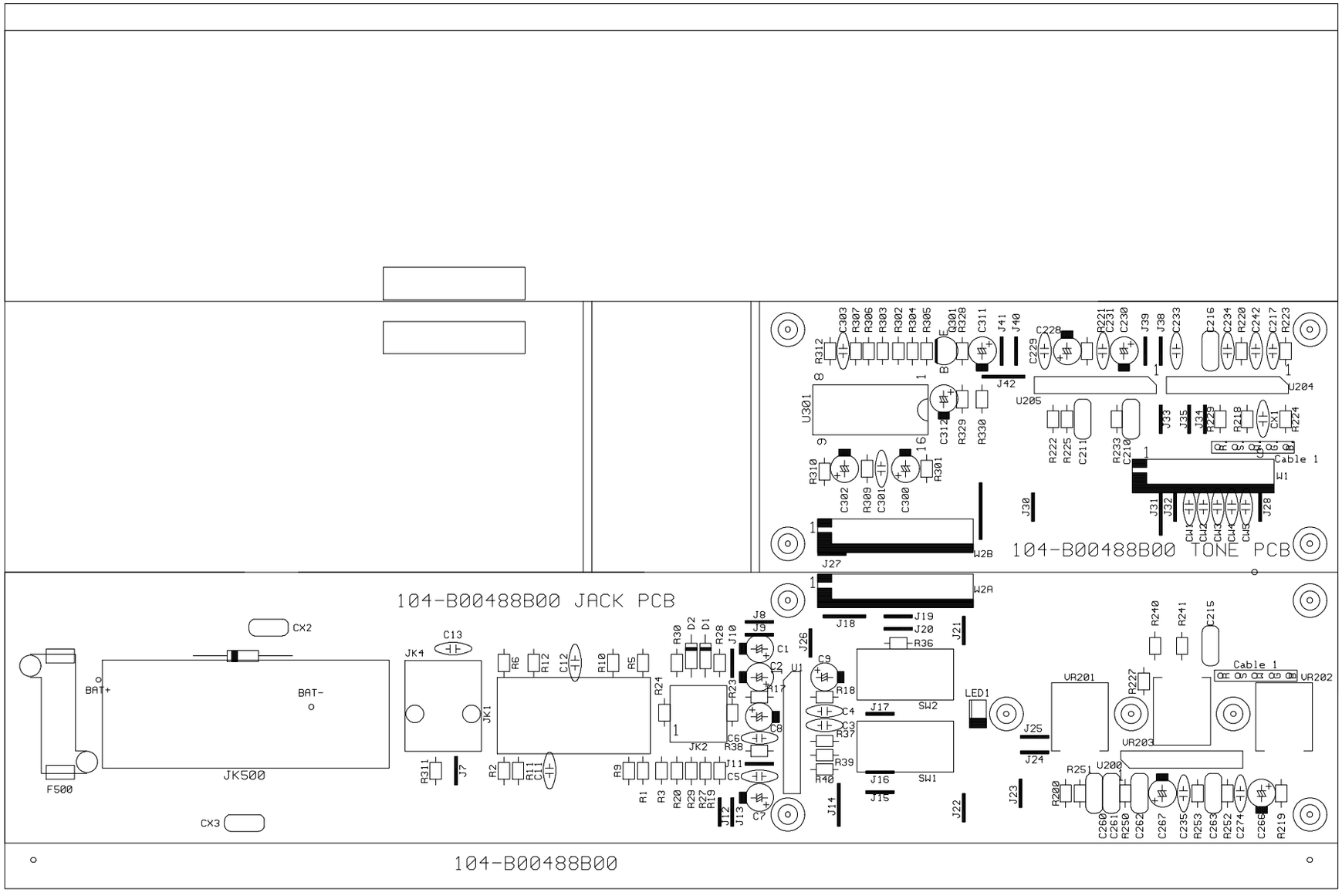

BASSLINK T SYSTEM BLOCK DIAGRAM
2004-5-19
JK1
Line Input
Differential Amp
U1A
Phase SW
SW1
Phase Buffer
U1B
Variable Volume
Remote Control
U301
20Hz HPF
U200A
U200B
VR203
Crossover
LPF Buffer
U204B
Boost Level
R228
U203D
Mixer
U204A
R234
LPF Buffer
VR202
R219
VR201
R200
Gain level
SW2
Auto ON
Speakers Input
JK2
JK4
Current
Limiter
Q301
Remote Control
Option Acessory
Audio Sense
Q271
Q272 Q273
U205A
U205B
75Hz Filter
Audio Enhance
U203A
RELAY
Class-D Module
150W 2.2ohm Woofer
Relay cont.
Q610~Q612
U203C
U203B
Limit comparator
Q201
Q200
Auto
Variable Volume
Power On Mute
Q601 Q602
Led Driver
Q202
Servo Indicator
JK101
+BATT
GND
REM
F101 25A
D511 D112
Q508~Q511
T500
+58V
-58V
Q531
Z501
+15V
Q532
Z502
-15V
Power Indicator
Shorted Output Protect
Q16A,Q625,Q626
Offset Protect
Q621~Q624
U500
Low Voltage Protect
Over Voltage Protect
Temperature Protect
Switching Power Supply Control

BASSLINK T Electrical Parts List		
Part Numbers	Description	Reference Designators
POWER SUPPLY/AMPLIFIER PCB		
Resistors		
110-12102j52	resistor 1K 1/2W ±5% 52mm	RX1
110-14000j26	resistor 0Ω 1/4W ±5% 26mm	R525,530
110-16000j26	resistor 0Ω 1/6W ±5% 26mm	D603
110-16100j26	resistor 10Ω 1/6W ±5% 26mm	R521,523,613,500
110-16102j26	resistor 1K 1/6W ±5% 26mm	R519,541,542,502,560,629,605
110-16103j26	resistor 10K 1/6W ±5% 26mm	R285,294,508511,540,611,507,612,616,621,622,623, 625,626,627,600,601,604,606
110-16104j26	resistor 100K 1/6W ±5% 26mm	R517,618,624,603
110-16105j26	resistor 1M 1/6W ±5% 26mm	R422,420
110-16106j26	resistor 10M 1/6W ±5% 26mm	R421
110-16122j26	resistor 1.2K 1/6W ±5% 26mm	R295
110-16123j26	resistor 12K 1/6W ±5% 26mm	R234,513
110-16152j26	resistor 1.5K 1/6W ±5% 26mm	R550
110-16154j26	resistor 150K 1/6W ±5% 26mm	R80A
110-16182j26	resistor 1.8K 1/6W ±5% 26mm	R74A
110-16183j26	resistor 18K 1/6W ±5% 26mm	R274
110-16204j26	resistor 200K 1/6W ±5% 26mm	R237
110-16220j26	resistor 22Ω 1/6W ±5% 26mm	R526,527,528,529
110-16221j26	resistor 220Ω 1/6W ±5% 26mm	R76A,424,501
110-16222j26	resistor 2.2K 1/6W ±5% 26mm	R228,515
110-16223j26	resistor 22K 1/6W ±5% 26mm	R254,287,628,602
110-16333j26	resistor 33K 1/6W ±5% 26mm	R277,614
110-16393j26	resistor 39K 1/6W ±5% 26mm	R631
110-16432j26	resistor 4.3K 1/6W ±5% 26mm	R505
110-16433j26	resistor 43K 1/6W ±5% 26mm	R503
110-16471j26	resistor 470Ω 1/6W ±5% 26mm	R510,522,524
110-16472j26	resistor 4.7K 1/6W ±5% 26mm	R275,276,520
110-16473j26	resistor 47K 1/6W ±5% 26mm	R77A,257,273,290,14A
110-16474j26	resistor 470K 1/6W ±5% 26mm	R278
110-16511j26	resistor 510Ω 1/6W ±5% 26mm	R256,286
110-16512j26	resistor 5.1K 1/6W ±5% 26mm	R514
110-16562j26	resistor 5.6K 1/6W ±5% 26mm	R238,518,630
110-16681j26	resistor 680Ω 1/6W ±5% 26mm	R504,509
110-16682j26	resistor 6.8K 1/6W ±5% 26mm	R516,77C
110-16755j26	resistor 7.5M 1/6W ±5% 26mm	R293
116-141r00j26x	metal film resistor 1.00Ω 1/4W ± 5% MO 26mm	R615
116-142201j26x	metal film resistor 2.2K 1/4W ± 5% MO 26mm	R532,534
116-161132f26	metal film resistor 11.3K 1/6W ± 1% MO 26mm	R512
116-167871f26	metal film resistor 7.87K 1/6W ± 1% MF 26mm	R279
113-50r22j2z	cement resistor 0.22Ω 5W ±5%	R81A,82A
116-301000j52x	metal film resistor 100Ω 3W ± 5% 52mm	R539
116-303300jk2x	metal film resistor 330Ω 3W 5% 10mm	R531,533
Capacitors		
130-2b101k503	disc capacitor 100P 50V ± 10%	C214,253,CM1,CM2,CM3,CM4
130-2b221mj03	disc capacitor 220P 1000V ± 20%	C539
130-2f104z503	disc capacitor 0.1U 50V +80/-20%	C268,269,502,503,506,509,510,511,512,533,535,540, 611,621,623,624,625
130-3f222k503	disc capacitor 0.022uF 50V ± 10%	CX5
132-102ja03	mylar capacitor 0.001uF 100V ±5%	C62A,62B 420
132-103j503	mylar capacitor 0.001uF 100V ±5%	C252,270,271
132-103ja03	mylar capacitor 0.01uF 100V ±5%	C67
132-104ja03	mylar capacitor 0.1uF 100V ±5%	C10A,10B,522,524,526,528,537,538,600
132-273ja03	mylar capacitor 0.027uF 100V ±5%	C60A,66A66B
132-472j503	mylar capacitor 0.047uF 50V ±5%	C507
135-3106m50	electrolytic 10uF 50V ±20%	C272,273
135-3226m50	electrolytic 22U 50V ±20%	C264,508
135-3227m25	electrolytic 220U 25V ±20%	C504
135-3335m50	electrolytic 3.3uF 50V ±20%	C601
135-3337m16	electrolytic 330uF 50V ±20%	C612,622
135-3476m50	electrolytic 47uF 50V ±20%	C421,422,251,531,532,534,536

Part Numbers	Description	Reference Designators
POWER SUPPLY/AMPLIFIER PCB		
135-b227m35	electrolytic 220uF 35V ±20% 105□	C502A
136-3336m50	non-polar capacitor NP 85□ 33uF 50V	CX4
129-a105j633	metalize 1uF 63V ± 5% MSC	C505
132-334j504	mylar capacitor 0.33U 50V ± 5%	C500,501A
138-5108m801	electrolutic 1000uF 80 ± 20% ψ20*25	C521,523
138-5228m801	electrolutic 2200uF 80 ± 20% ψ25*30	C525,527
138-6338m351	electrolutic 3300uF 35 ± 20% ψ25*25	C501
Semiconductors		
192-027c1815gr	transistor 2SC1815GR NPN	Q201,404,405,406,501,503,513,514,601,610,611,612 ,622,624, 626
192-027c2235y	transistor 2SC2235Y NPN	Q16A
192-028a1015gr	transistor 2SA1015GR PNP	Q502,504,505,506,621,623,625,202,602
192-028a965y	transistor 2SA965Y PNP	Q500
197-031n4148	diode 100mA 75V SIGNAL 1N4148 ROHM	D201,202,503,550,552,611,612,613,601,52A
199-05001505j	zener diode 500mW 15V ROHM 52mm 1N5245B	Z501,502
199-15000625	zener diode 6.2V 12W 52mm	Z500
190-13494cn	IC TL494CN PWM	U500
190-16tl074cn	IC TL074CN ST QUAD OP-AMP	U203
190-99pc817c	IC PC817C OPTOCOUPLER	U501
192-027c1815gr	transistor 2SC1815GR NPN	Q200
192-161tip31c	transistor TIP31C SGS NPN	Q531
192-162tip32c	transistor TIP32C SGS PNP	Q532
192-16360nf06	transistor STP60NF06 SGS FET	Q508,509,510,511
195-10204ubd	LED 204-10UBD	LD500
197-141n4004	diode 1N4004	D50
197-301604gd	diode SF1604G-D	D511,512
197-30sf16	diode SF16	D600
Miscellaneous		
109-1ttc802j0	thermister TTC-802(js) NTC	TH1
120-1000003	inductor 10W AI YT-C3104-005 1CRHW 354708LTB	B500,501,502
122-11350j200	inductor R10*38 35uF ψ 2.0	L501
122-14106m130	inductor MIZI R251510 3*ψ 1.3 1.0mH	L500
123-11k5arh06	inductor BEAD CORE-TECh K5A RH 3.5*1.6*6	Q508,509,510,511
150-r36231504	power transformer RT36-6T:28T	T500
162-5002d001	wire 20mm 2PIN	
162-5002d002	wire 20mm 3PIN	
162-50122004	wire 120mm RED/WHT 2PIN	
171-u845h2ac	relay 845H-2A-C 12VDC	RL50
175-1c02v01	wire connector 2PIN PITCH=2.5mm	M2
175-1c08v01	wire connector 8PIN PITCH=2.5mm	M1
176-ft205	wire connector FASTON M#205	S+,-
176-trpcb1m4	wire connector PCB1M4	BAT+,-
162-5045d002	WIRE RED UL1015 450mm RED/BLK #205T0.8 #250/110 T0.5	
193-0s4211	insulator 42*11	CLASS-D-1
193-201612tr	insulator T0-220 16mm*12mm	
193-201815t2	insulator	
193-2m1813	insulator T0-220 18*13mm	Q508,509,510,511,531,532,D511,D512
236-AL-05001	AL holder	
323-AL-05013-0LA	HEAT SINK 250*240*61*3T SILVER	
333-SPG-05036-0BA	SPONGE 500*50*5T	
351-AM03005A015	SCREW M3*0.5P*5L BLK	TO PCB/CU HOLDER-6
351-AM03006A069	SCREW M3*6 BLK	
351-AM03007A368	SCREW M3*7 BLK	TO H-S/CU HOLDER-6
351-AM03008A079	SCREW M3*8 BLK	CONTROL PCB TO NYL SPACE-4
351-AM03012A090	SCREW M3*12 BLK	IC-HOLDER-1
351-AM03018A364	SCREW M3*18 BLK	CLASS-D-2
351-BM03014A093	SCREW M3*14 BLK	HEAT SINK TO IC HOLDER-4
351-FM04006A220	SCREW M4*6 NI	
355-P0407236	SPRING WASHER M4 ID4.2* OD7.0*T1.0	
361-FE-05000	IC HOLDER 69*12*4*1.5T	
361-FE-05003-0LA	IC HOLDER 25*12*4*1.5T	TO IC-1
362-CU-05004-0YA	CU SPACER M3*8H	
362-CU-05010	CU SPACER M3*11.8H	

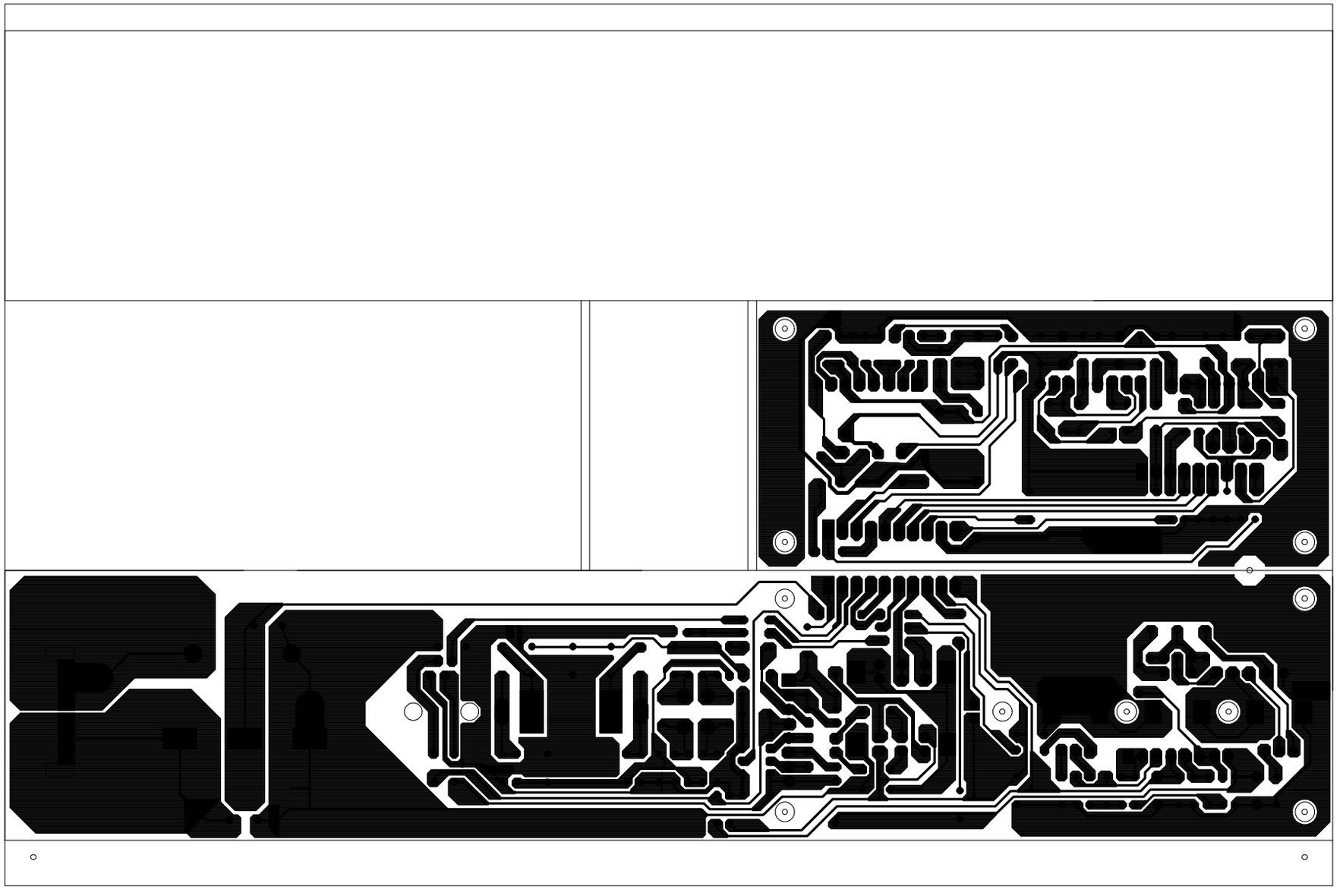
Part Numbers	Description	Reference Designators
INPUT/PREAMP PCB		
362-NYL-05006-0WA	HOLDER(NYLON)10H(MAE-10T;HAKUTO-10)WHT	
Resistors		
110-16102j26	resistor 1K 1/6W ±5% CF 26mm	R219,222,233
110-16103j26	resistor 10K 1/6W ±5% CF 26mm	R229,23,24,302,307,309,312,330,5,6
110-16104j26	resistor 100K 1/6W ±5% CF 26mm	R301,36
110-16123j26	resistor 12K 1/6W ±5% CF 26mm	R227
110-16151j26	resistor 150Ω 1/6W ±5% CF 26mm	R311,310
110-16153j26	resistor 15K 1/6W ±5% CF 26mm	R252,218,328,304
110-16154j26	resistor 150K 1/6W ±5% CF 26mm	R329
110-16204j26	resistor 200K 1/6W ±5% CF 26mm	R27,28,29,30
110-16222j26	resistor 2.2K 1/6W ±5% CF 26mm	R37,38,39,40
110-16223j26	resistor 22K 1/6W ±5% CF 26mm	R240,241,250
110-16243j26	resistor 24K 1/6W ±5% CF 26mm	R225
110-16302j26	resistor 3K 1/6W ±5% CF 26mm	R200
110-16303j26	resistor 30K 1/6W ±5% CF 26mm	R305
110-16333j26	resistor 33K 1/6W ±5% CF 26mm	R253
110-16392j26	resistor 3.9K 1/6W ±5% CF 26mm	R224
110-16393j26	resistor 39K 1/6W ±5% CF 26mm	R223
110-16472j26	resistor 4.7K 1/6W ±5% CF 26mm	R1,2,19,20
110-16474j26	resistor 470K 1/6W ±5% CF 26mm	R220
110-16511j26	resistor 510Ω1/6W ±5% CF 26mm	R303,306
110-16513j26	resistor 51K 1/6W ±5% CF 26mm	R10,11,12,9,17,18
110-16683j26	resistor 68K 1/6W ±5% CF 26mm	R251
110-16752j26	resistor 7.5K 1/6W ±5% CF 26mm	R221
129-a104j633	metalize 0.1U 63V ± 5% MSC	C211
129-a224j633	metalize 0.22uF 63V ± 5% MSC	C215,260,261,262,263,210
129-a823j633	metalize 0.082U 63V ± 5% MSC	C216
115-v503b103	variable resistor RV09AC-40-30K-B50K	VR201,202
115-v503b204	variable resistor RV09A02-40-30K-B50K	VR203
Capacitors		
130-2b101k503	disc capacitor 100P 50V ± 10%	C242,CW1,CW2,CW3,CW4,CW5,C11,12
130-2b102k503	disc capacitor 1000P 50V ± 10%	CX1
130-2b221k503	disc capacitor 220P 50V ± 10%	C3,4
130-2f104z503	disc capacitor 0.1U 50V +80/-20%	C229,231,233,234,235,274,301,303,5,6,CX2
132-103j503	mylar capacitor 0.01U 50V ± 5%	C217,13
135-3105m50	electolytic 1U 50V ± 20%	C311
135-3106m50	electolytic 10uF 50V ± 20%	C228,230,300,302
135-3475m50	electolytic 4.7U 50V ± 20%	C312
137-3106m50	electolytic 10uF 50V ± 20%	C7,8,9,266,267
137-3226m50	electolytic 22uF 50V ± 20%	C2
135-0108m25	electolytic 1000U 25V ± 20%	CX3
137-3226m50	electolytic 22uF 50V ± 20% 85□	C1
Semiconductors		
192-027c1815gr	transistor 2SC1815GR NPN	Q301
197-031n4148	diode 100mA 75V SIGNAL 1N4148 ROHM	D1,2
190-06m13700n	IC NJM13700N JRC DUAL OP-AMP	U301
190-06m45581	IC NJRC NJM4558LD DUAL OP-AMP	U1,200,204,205
195-10204hd	LED 3mm FOR STANDBY	LED1
197-306a20	diode 6A 200V 6A20	DXXX
Miscellaneous		
154-1025a800	fuse 25A 32V ATC UL/CSA	F500
155-9f30240	fuse holder F30240100P	
162-50048002	wire 45mm 9PIN PITCH=2.5mm	W2
162-80098001	wire 90mm 26AWG	
162-80659001	wire 650mm	W1
162-a0802001	wire UL1015 12AWG 800mm RED/BLK	
174-020123bg	RCA PIN JACK JK020123BG	JK1
174-535913sg	DC JACK SL035913SG	JK500
174-9mjd0604	M/JACK D/S 6P4C 6U"	JK4
175-9h04v01	wire connector 4PIN PITCH=4.2mm	JK2

Part Numbers	Description	Reference Designators
CLASS-D 300 ASS'Y		
180-s570050	switch SS70050-0202-10T-NN	SW1,2
359-FIB-00001	fiber washer ψ12*1.5 adhesive	
362-NYL-05005-0WA	LED spacer(nylon) ψ4*10.5H	LED1
Resistors		
118-12061001j	SMD resistor 1.00K 1206 5%	R2
118-12061002j	SMD resistor 10.0K 1206 5%	R25,29,30,30B,7,9
118-120610r0j	SMD resistor 10.0Ω1206 5%	R20,20B,22,23
118-12062002j	SMD resistor 20.0K 1206 5%	R26
118-12062201j	SMD resistor 2.20K 1206 5%	R6,13,16,31,33,34,35,36,37,38,39,40,41,42,43,44,45,46,32
118-12062204j	SMD resistor 2.20M 1206 5%	R4
118-12062701j	SMD resistor 2.70K 1206 5%	R10
118-12063000j	SMD resistor 300.0Ω1206 5%	R24
118-12063301j	SMD resistor 3.3K 1206 5%	R1,14,15,27,28
118-12063902j	SMD resistor 39.0K 1206 5%	R3
118-12064700j	SMD resistor 470Ω1206 5%	R8,11,21
118-12064701j	SMD resistor 4.7K 1206 5%	R5,12
141-c0101k50	SMD capacitor 100pF 50V 10%1206 NP0	C4
141-c0220k50	SMD capacitor 22pF 50V 10%1206 SMT NP0	C5
141-c0561k50	SMD capacitor 560pF 50V 10%1206 NPO	C6
141-c5104m50	SMD capacitor 1206 Y5V 0.1uF 50V ± 20%	C2,3,7,8,9,10,11,15
141-c7223k50	SMD capacitor 0.022uF 50V 10% 1206 X7R	C13
141-d7104ka0	SMD capacitor 0.1uF 100V 10% 1210 X7R	C12,14,18,19
Capacitors		
132-104kb04a	mylar capacitor 0.1uF 200V ± 10% PITCH 10mm	C20
132-105kb50	mylar capacitor 1uF 250V ± 10%	C40
Semiconductors		
190-16tl072dts	IC TL072CDT SGS THOMSON DUAL OP-AMP	IC1
192-09124126qs	SMD transistor 2SC2412K-T1460/R ROHM	Q1,4
192-09139066rs	SMD transistor 2SC3906K-T146R ROHM	Q2,8
192-091sc4672	SMD transistor 2SC4672 ROHM	Q5B
192-09210376qs	SMD transistor 2SA1037K-T146Q/R ROHM	Q7,9
192-09215146rs	SMD transistor 2SA1514K-T146R ROHM	Q3
192-1682n5401	Transistor 2N5401 AI-PNP 350V 500mA T0-92	Q6B
197-03rls4148s	SMD diode RLS4148-TE11 ROHM	D1,2,3,4,5,5B,6,20
199-15000563s	SMD ZENER 5.6V 5% PHILIPS BAX84-CV6	Z1,2
199-15001203s	SMD ZENER 12V 5% PHILIPS BAX84-C12	Z3,4,5,6
192-232irf9640	transistor IRF9640 IR P-CH TO220 MOSFET	Q10,10B
192-233irf640	transistor IRF640 IR N-CH TO-220 MOSFET	Q11
122-13151k0190	inductor CHOKE SA-500-280	L1
122-14300k4	inductor ferrite core LD1215*300KU ± 10%	L2
Capacitors		
128-e106ma01-s	non-polar electrolytic 10uF 100V 20%	C16,17
132-104kb04a	mylar capacitor 0.1uF 200V ± 10% PITCH 10mm	C20
132-105kb50	mylar capacitor 1uF 250V ± 10%	C40

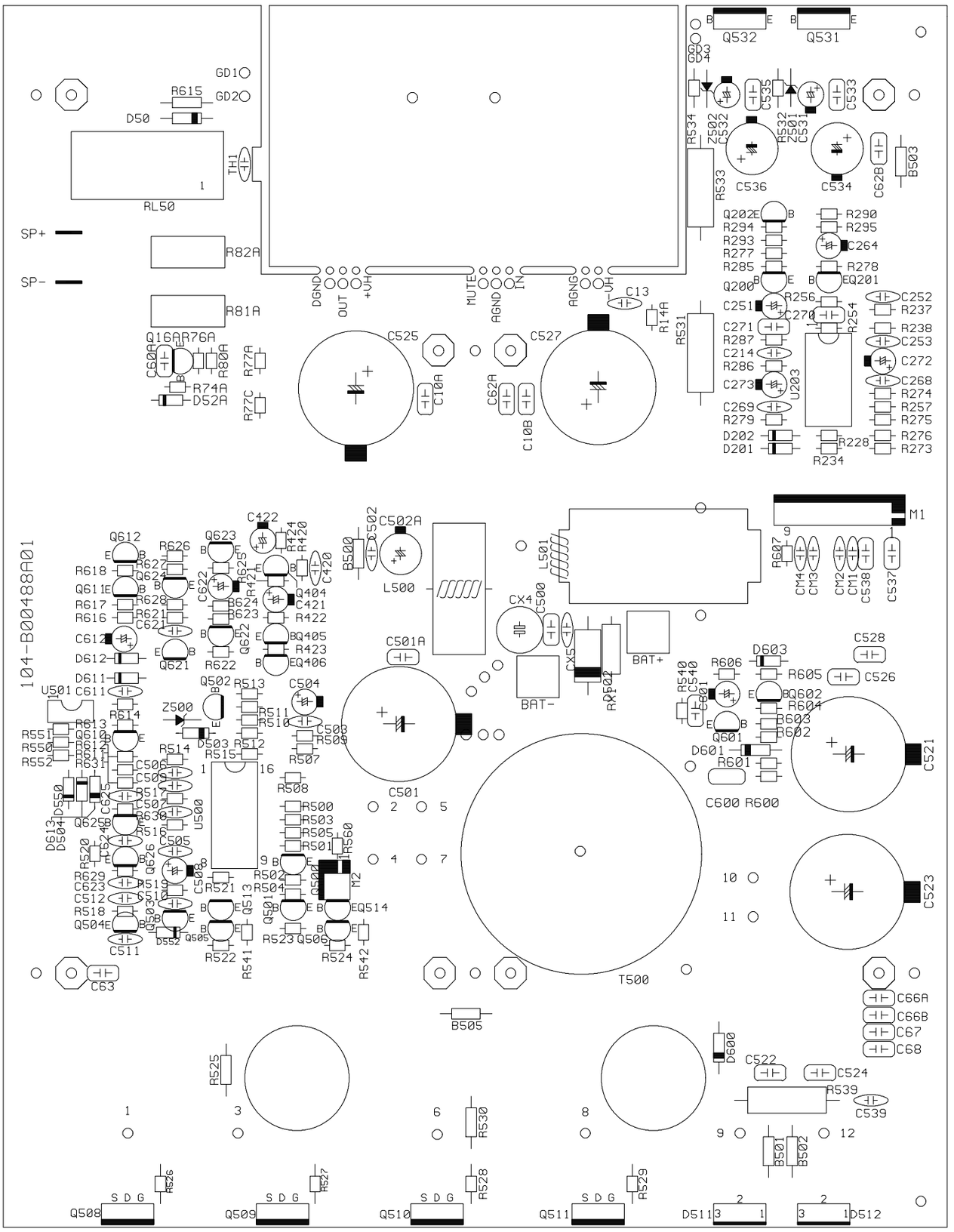


yyhsu victor	DRAW.	yyhsu victor	DSGN.		APVD.		

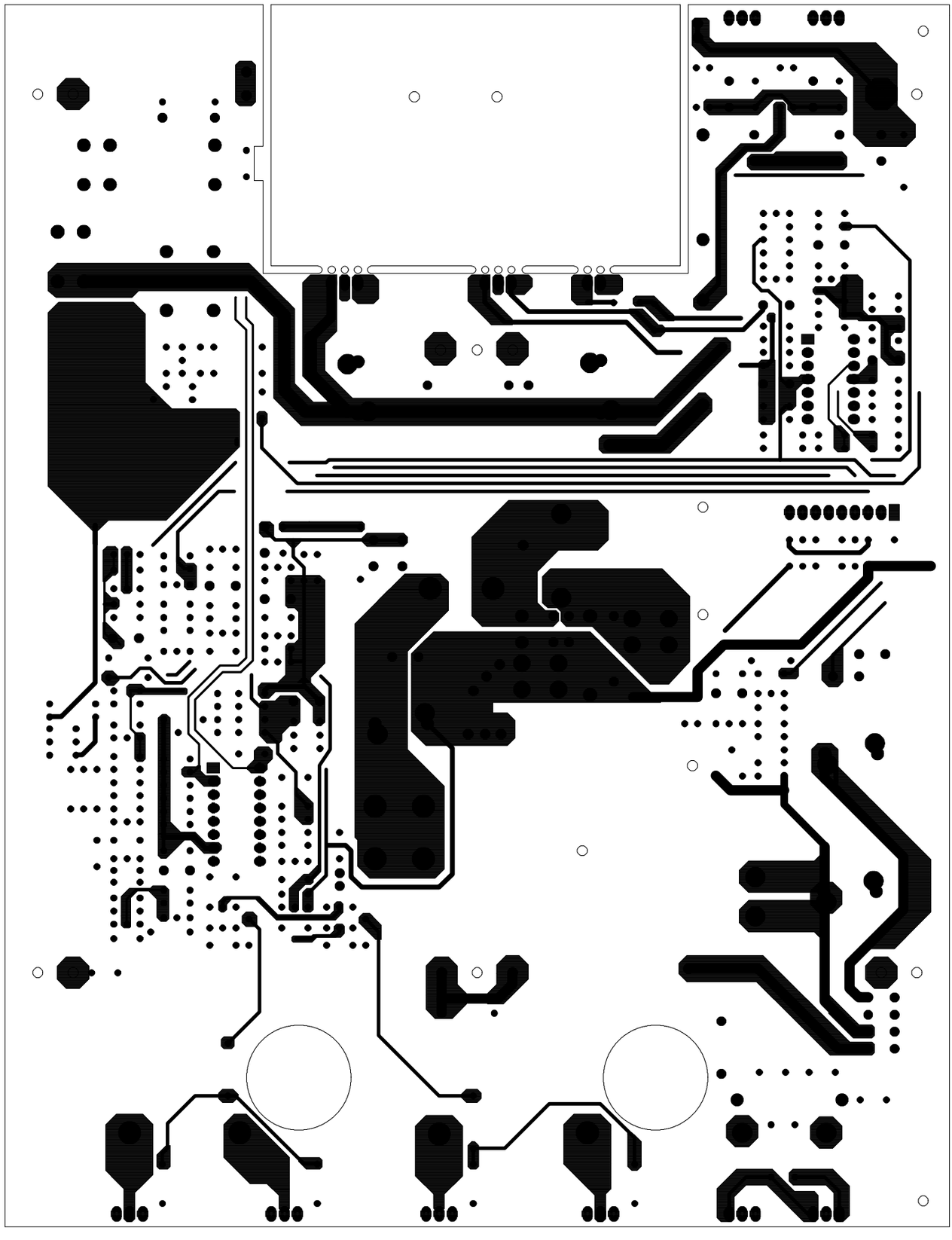
FILENAME : bstrkj6.pcb	REVISION: 0	Feb 24'2004
MODEL NO. basstruck	1	W2A/B 10p was 9p. W1 9p was 8p. R3/J26-28 added
MATERIAL : 94v0	2	D502.CX1-CX3.CW1-CW5 ADDED.
LAYER SILK SCREEN	3	



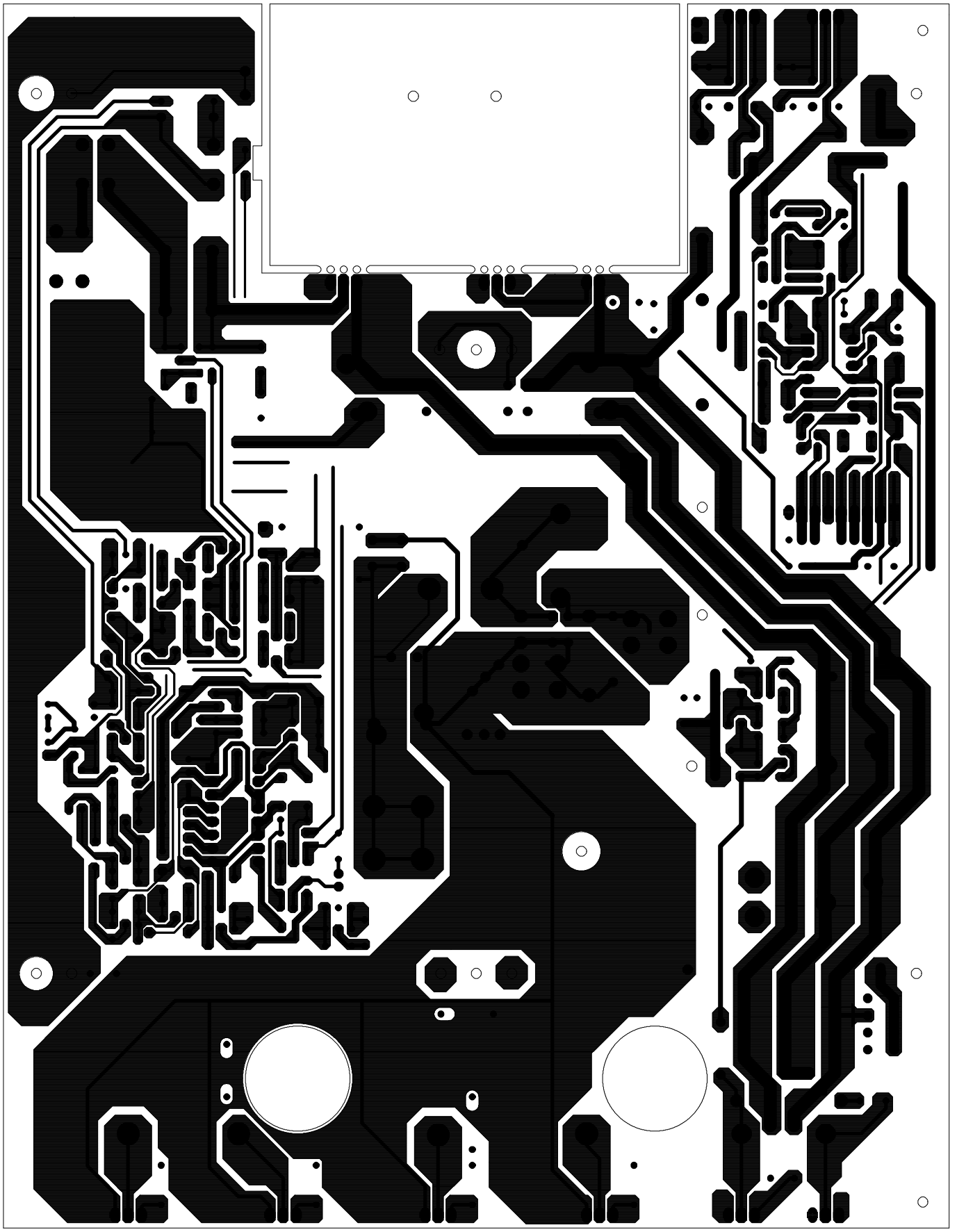
yyhsu victor	DRAW.	yyhsu victor	DSGN.		APVD.		FILENAME : bstrkj6.pcb	REVISION: 0 Feb 24'2004
							MODEL NO. basstruck	1
							MATERIAL : 94v0	2
							LAYER SOLDER PATTERN	3



yyhsu	DRAW.	yyhsu	DSGN.		APVD.		FILENAME : bstrkdg5.pcb	REVISION: 0 Jan 8'2004
							MODEL NO. 104-B00488A01	1
							MATERIAL : fr4 1.6t 1/1oz	2
							LAYER SILK SCREEN	3

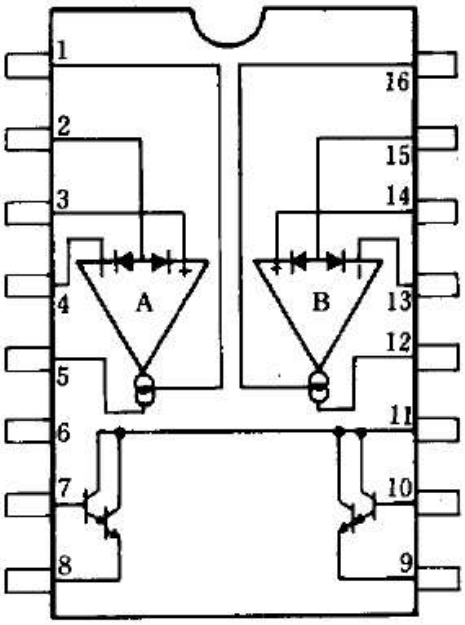


yyhsu	DRAW.	yyhsu	DSGN.		APVD.		FILENAME : bstrkdg5.pcb	REVISION: 0 Jan 8´2004
							MODEL NO. 104-B00488A01	1
							MATERIAL : fr4 1.6t 1/1oz	2
							LAYER COMP PATTERN	3



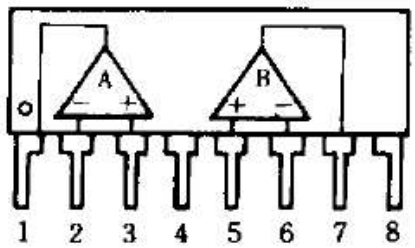
yyhsu	DRAW.	yyhsu	DSGN.		APVD.		FILENAME : bstrkdg5.pcb	REVISION: 0 Jan 8'2004
							MODEL NO. 104-B00488A01	1
							MATERIAL : fr4 1.6t 1/1oz	2
							LAYER SOLDER PATTERN	3

BASSLINK T IC PINOUTS



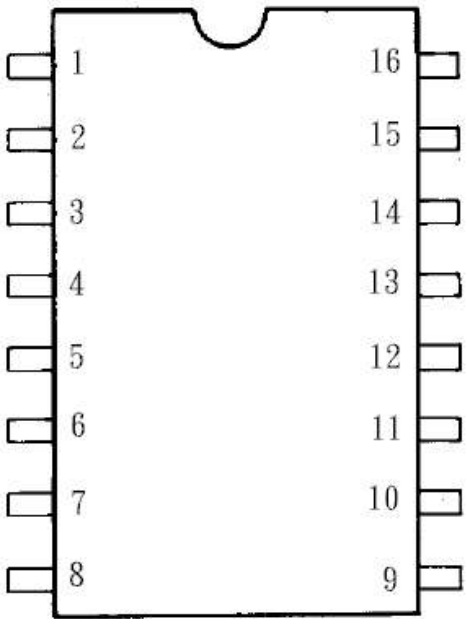
NJM137000N PINOUTS

1.Amp Bias Input A	9.Buffer Output B
2.Diode Bias A	10.Buffer Input B
3.+ Input	11.V+
4.- Input	12.Output B
5.Output A	13.-Input B
6.V-	14.+Input B
7.Buffer Input A	15.Diode Bias B
8.Buffer Output A	16.Amp Bias Input B



NJM4558L PINOUTS

1.A Output	5.B +Input
2.A -Input	6.B -Input
3.A +Input	7.B Output
4.V-	8.V+



TL494 PINOUTS

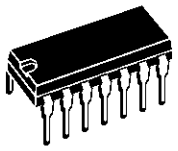
1.Err Amp 1 In+	9. E1
2.Err Amp 1 In-	10. E2
3.Feedback	11. C2
4.Dead-Time Ctrl	12. Vcc
5.Ct	13. Output Ctrl
6.Rt	14. Ref
7.Gnd	15. Err Amp 2 In-
8.C1	16. Err Amp 2 In+

SGS-THOMSON MICROELECTRONICS

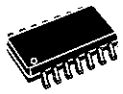
TL074
TL074A - TL074B

LOW NOISE J-FET QUAD OPERATIONAL AMPLIFIERS

- WIDE COMMON-MODE (UP TO V_{CC}^+) AND DIFFERENTIAL VOLTAGE RANGE
- LOW INPUT BIAS AND OFFSET CURRENT
- LOW NOISE e_n = 15nV/√Hz (typ)
- OUTPUT SHORT-CIRCUIT PROTECTION
- HIGH INPUT IMPEDANCE J–FET INPUT STAGE
- LOW HARMONIC DISTORTION : 0.01% (typ)
- INTERNAL FREQUENCY COMPENSATION
- LATCH UP FREE OPERATION
- HIGH SLEW RATE : 13V/µs (typ)



N
DIP14
(Plastic Package)



D
SO14
(Plastic Micropackage)

DESCRIPTION

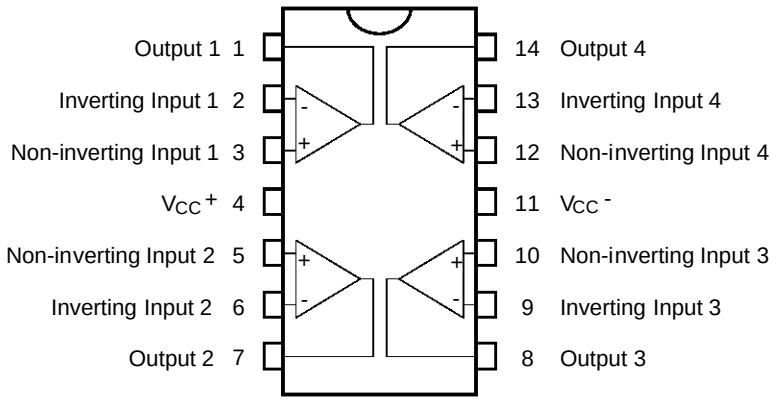
The TL074, TL074A and TL074B are high speed J–FET input quad operational amplifiers incorporating well matched, high voltage J–FET and bipolar transistors in a monolithic integrated circuit.

The devices feature high slew rates, low input bias and offset currents, and low offset voltage temperature coefficient.

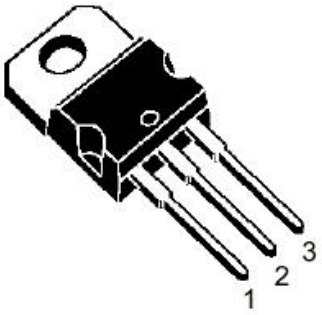
ORDER CODES

Part Number	Temperature Range	Package	
		N	D
TL074M/AM/BM	–55°C, +125°C	•	•
TL074I/AI/BI	–40°C, +105°C	•	•
TL074C/AC/BC	0°C, +70°C	•	•
Example : TL074IN			

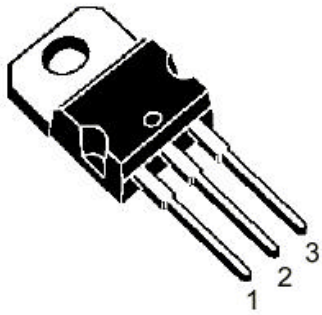
PIN CONNECTIONS (top view)



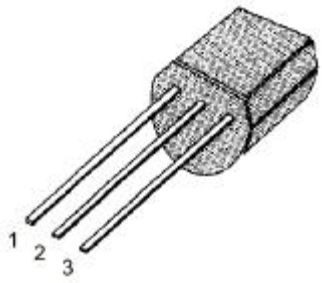
BASSLINK T TRANSISTOR PINOUTS



PARTS NAME	PINOUTS		
	1	2	3
IRF9640	Gate	Drain	Source
IRF640	Gate	Drain	Source
STP60NF06	Gate	Drain	Source



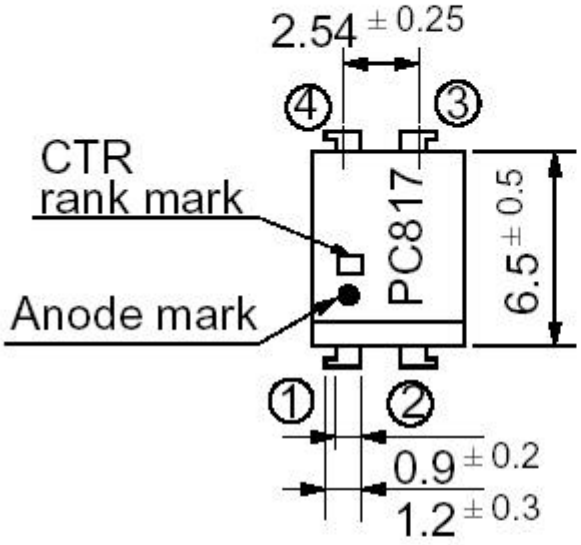
PARTS NAME	PINOUTS		
	1	2	3
TIP31C	base	Collector	Emiter
TIP32C	base	Collector	Emiter



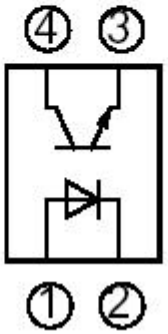
PARTS NAME	PINOUTS		
	1	2	3
2SA1015	Emiter	Collector	base
2SA965	Emiter	Collector	base
2SC1815	Emiter	Collector	base
2SC2235	Emiter	Collector	base
2N5401	Emiter	Base	Collector

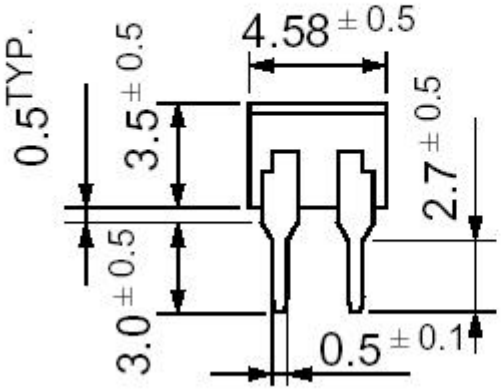
■ Outline Dimensions

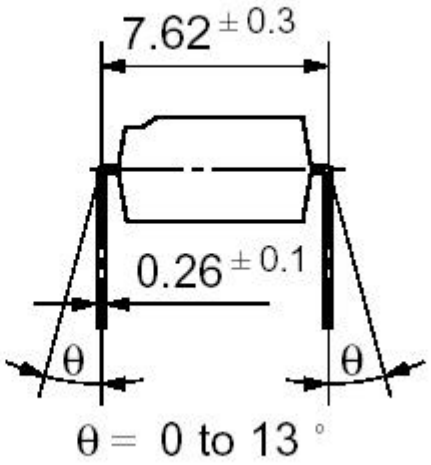
PC817



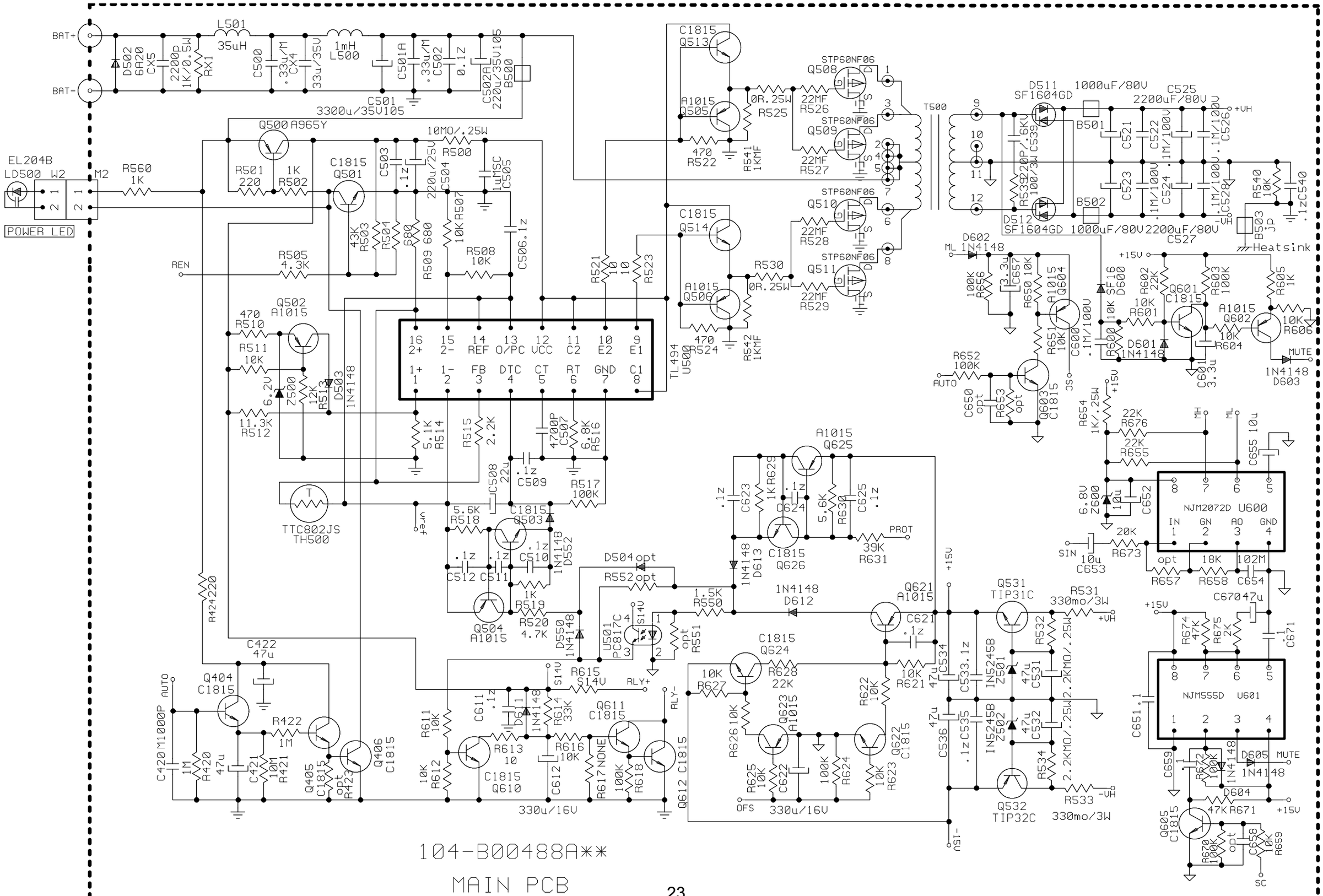
Internal connection diagram







① Anode
② Cathode
③ Emitter
④ Collector



104-B00488A**

MAIN PCB

Infinity

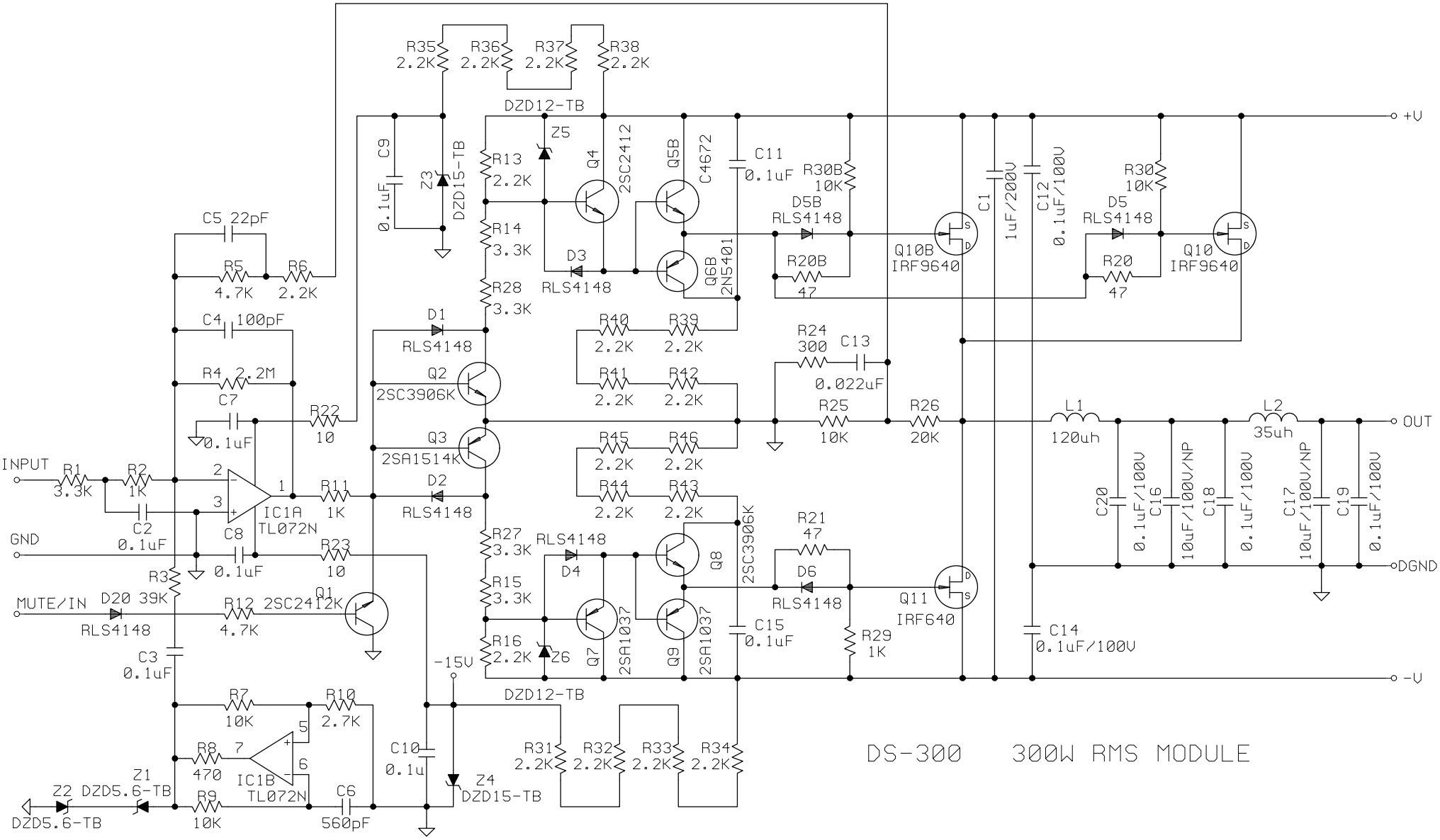
CLASS-D POWER AMP

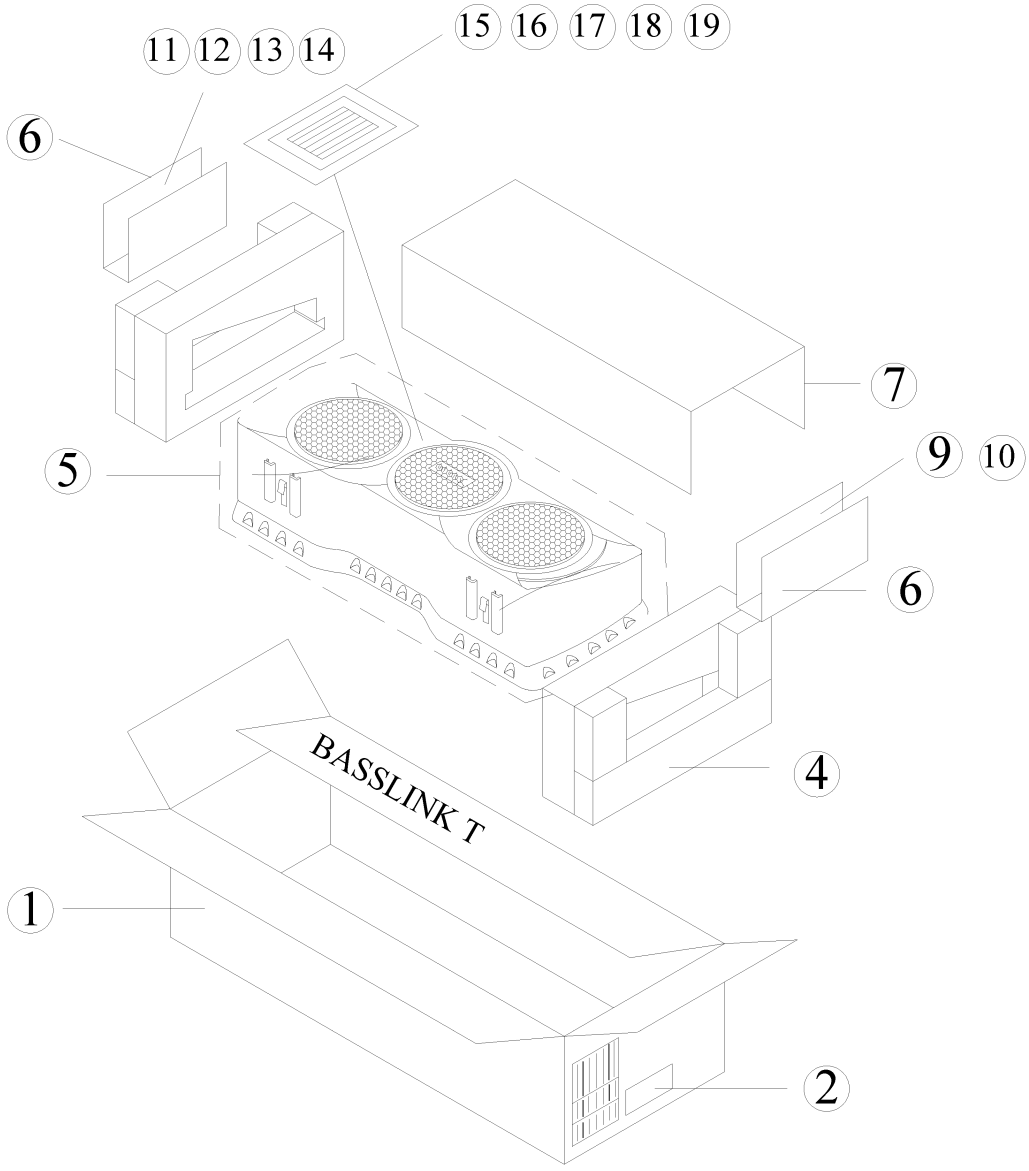
104-B00488A**
MAIN PCB

104-B00488B**
JACK PENEL PCB

104-B00488B00
GAIN CONTROL PCB

FILENAME :bstrkd5.sch	REVISION :		
MODEL NO.		SERIAL NO.	


R35 2.2K
R36 2.2K
R37 2.2K
R38 2.2K
DZD12-TB
Z5
C9 0.1uF
Z3 DZD15-TB
R13 2.2K
Q4 2SC2412
Q5B C4672
C11 0.1uF
R30B 10K
D5B RLS4148
C1 1uF/200V
C12 0.1uF/100V
R30 10K
D5 RLS4148
+V
C5 22pF
R5 4.7K
R6 2.2K
R14 3.3K
D3 RLS4148
Q6B 2N5401
R20B 47
Q10B IRF9640
R20 47
Q10 IRF9640
R28 3.3K
C4 100pF
D1 RLS4148
R40 2.2K
R39 2.2K
R24 300
C13 0.022uF
R4 2.2M
C7 0.1uF
Q2 2SC3906K
R41 2.2K
R42 2.2K
R22 10
R25 10K
R26 20K
L1 120uh
L2 35uh
OUT
Q3 2SA1514K
R45 2.2K
R46 2.2K
INPUT
R1 3.3K
R2 1K
C2 0.1uF
IC1A TL072N
C8 0.1uF
R11 1K
D2 RLS4148
R44 2.2K
R43 2.2K
C20 0.1uF/100V
C16 10uF/100V/NP
C18 0.1uF/100V
C17 10uF/100V/NP
C19 0.1uF/100V
GND
R23 10
R27 3.3K
RLS4148
D4
Q8 2SC3906K
R21 47
D6 RLS4148
DGND
R3
Q1
MUTE/IN
D20 39K
RLS4148
R12 2SC2412K 4.7K
R15 3.3K
R16 2.2K
Z6
Q7 2SA1037
Q9 2SA1037
C15 0.1uF
R29 1K
Q11 IRF640
C14 0.1uF/100V
C3 0.1uF
-15V
-V
DZD12-TB
R7 10K
R10 2.7K
R8 470
IC1B TL072N
C10 0.1u
R31 2.2K
R32 2.2K
R33 2.2K
R34 2.2K
Z1
Z2 DZD5.6-TB
R9 10K
C6 560pF
Z4 DZD15-TB
DZD5.6-TB
DS-300 300W RMS MODULE



Ref#	Part Number	Description	Qty
1	402-000-05167	Outer Carton	1
2	n/a	Label (Serial No.)	3
3	n/a	Label (CE mark)	1
4	n/a	Packing (EPE, left/right side)	1
5	n/a	Plastic bag	1
6	n/a	Packing (cardboard, left/right side)	2
7	n/a	Packing (top side)	1
8	n/a	Outer Carton	1
9	321-FE-05006-OBA	Bracket	2
10	371-000-05018	Screw kit	1
11	162-A400D001	Hi-level speaker cables	1
12	162-A5000001	Level Control Cable	1
13	165-540001200	RCA Cable pair	2
14	015-AA00-00110	Level Control	1
15	128-F108K1601	Capacitors 100µf 16V	2
16	154-K025A800	Fuse	1
17	405-000-00336	Warranty card	1
18	406-000-01006	Owner's manual	1
19	n/a	Plastic bag	1
20	n/a	Label	1