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SAFETY INFORMATION

1. Parts that have special safety characteristics are identified by the  symbol on schematics or by special notes on the parts list. Use only replacement parts that have critical characteristics recommended by the manufacturer.

2. Make leakage current or resistance measurements to determine that exposed parts are acceptably insulated from the supply circuit before returning the unit to the customer.

Use the following checks to perform these measurements:

A. Leakage Current Hot Check-With the unit completely reassembled, plug the AC line cord directly into a 120V AC outlet. (Do not use an isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards Institute (ANSI) C101.1 "Leakage Current for Appliances" and Underwriters Laboratories (UL) UL6500 / UL60065 / IEC 60065 paragraph 9.1.1. With the unit AC switch first in the ON position and then in OFF position, measure from a known earth ground (metal waterpipe, conduit, etc.) to all exposed metal parts of the unit (antennas, handle bracket, metal cabinet, screwheads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis. Any current measured must not exceed 0.5 milliamp. Reverse the unit power cord plug in the outlet and repeat test. ANY MEASUREMENTS NOT WITHIN THE LIMITS SPECIFIED HEREIN INDICATE A POTENTIAL SHOCK HAZARD THAT MUST BE ELIMINATED BEFORE RETURNING THE UNIT TO THE CUSTOMER.

B. Insulation Resistance Test Cold Check-(1) Unplug the power supply and connect a jumper wire between the two prongs of the plug. (2) Turn on the power switch of the unit. (3) Measure the resistance with an ohmmeter between the jumpered AC plug and each exposed metallic cabinet part on the unit. When testing 3 wire products, the resistance measured to the product enclosure should be between 2 and infinite M_Ωhms. Also, the resistance measured to exposed input/output connectors should be between 4 and infinite M_Ωhms. When testing 2 wire products, the resistance measured to exposed input/output connectors should be between 4 and infinite M_Ωhms. If it is not within the limits specified, there is the possibility of a shock hazard, and the unit must be repaired and rechecked before it is returned to the customer.

CAUTION: The Bose® 3•2•1 Series II Home Entertainment System contains no user-serviceable parts. To prevent warranty infractions, refer servicing to warranty service stations or factory service.

PROPRIETARY INFORMATION

THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION OF BOSE CORPORATION WHICH IS BEING FURNISHED ONLY FOR THE PURPOSE OF SERVICING THE IDENTIFIED BOSE PRODUCT BY AN AUTHORIZED BOSE SERVICE CENTER OR OWNER OF THE BOSE PRODUCT, AND SHALL NOT BE REPRODUCED OR USED FOR ANY OTHER PURPOSE.

WARRANTY

The Bose® 3•2•1 and 3•2•1GS Series II Home Entertainment Systems are covered by a limited 1-year transferable warranty.

PRODUCT DESCRIPTION

The 3•2•1 Series II Home Entertainment System is the replacement for the 3•2•1 and 3•2•1GS Series I Home Entertainment Systems. It uses the same system concept of a console with a dedicated bass module with TrueSpace™ signal processed surround sound from 2 satellite arrays.

The console will play video DVDs, DVD-R and DVD+R discs, audio CDs, Video CDs, CD-R and CD-RWs, and MP3 CDs. MP3 disc tracks must be burned in a single closed session. The MP3 disc format must be ISO9660 and each file must have an “.mp3” extension and have no other periods in the filename.

The bass module electronics house some signal processing, power supplies and amplification for the console. The console and bass module are not compatible with the 3•2•1 Series I console and bass module. They cannot be used to replace the other Series components. The speaker arrays are the same as currently used on the 3•2•1 and 3•2•1GS systems. The system includes an enhanced universal type IR remote control similar to that used on the 3•2•1GS Series I system. The remote is non-repairable.

The 3•2•1 Series II uses standard 3•2•1 arrays with a cloth grille. The arrays are graphite in color. The 3•2•1GS Series II systems use the Gemstone™ arrays in both graphite and silver. The array cable color matches the array color. The console for both 321 and 321GS systems is graphite with a silver front bezel. The bass module is graphite, as is the IR remote control.

ACCESSORIES

The Bose 3•2•1 and 3•2•1GS Series II Home Entertainment Systems shelf speakers are compatible with Bose mounting accessories, including the UB-20 wall brackets, UFS-20 floor stands and UTS-20 table stands.

SPECIFICATIONS

System Specifications:

Power Rating:

US/Canada:	120VAC, 60 Hz, 300W
Europe/UK/Aus:	220-240VAC, 50/60 Hz, 300W
Japan:	100VAC, 50/60 Hz, 300W
Dual Voltage:	115/230VAC, 50/60 Hz, 300W

Console Inputs:

VIDEO, CAB/SAT, AUX

Video Outputs:

Composite Video, S-Video, Component Video

External Antennas:

FM, 75 Ohm F-Connector (PAL, Europe)
AM Loop, 2.5 mm mono connector

Maximum Ambient Temperature:

45 degrees C

Low Frequency Cut-off (typical):

Arrays:	3•2•1 Array Cube: 180 Hz
Bass Module:	3•2•1GS Array Cube: 212 Hz 45 Hz

Woofer Impedance:

1.5 Ohms nominal DC resistance single woofer

Weights:

3•2•1 Series II Packed System:	47.9 lb (21.7 kg)
3•2•1GS Series II Packed System:	44.1 lb (20.0 kg)
Console:	6.8 lb (3.08 kg)
Bass Module:	24.9 lb (11.77 kg)
3•2•1 Arrays, each:	3.0 lb (1.40 kg)
3•2•1GS Arrays, each:	1.1 lb (0.50 kg)
IR Remote Control (batteries installed):	0.44 lb (0.20 kg)

Dimensions:

Console:	13.8 x 10.0 x 3.2 inches (34.9 x 25.3 x 8.2 cm)
Bass Module:	14 x 7.5 x 20.1 inches (35.6 x 18.4 x 51.1 cm)
Bass Module internal volume:	1205 cubic inches (19.7 liters)
3•2•1 Arrays:	7.9 x 5.3 x 3.4 inches (200 x 134 x 86 mm)
3•2•1GS Arrays:	5.6 x 2.6 x 4.2 inches (142 x 65 x 106 mm)
IR Remote:	9.0 x 2.6 x 1.2 inches (229.6 x 64.8 x 31.2 mm)

Distortion and Noise:

-78 dB THD+N, unweighted, 22-22 kHz for a 1 kHz signal at -1 dB
-90 dB THD+N, unweighted, 22-22 kHz for a 1 kHz signal at -10 dB

Dynamic Range:

-90 dB THD+N, unweighted,
22-22 kHz for a 1 kHz signal at -60 dB

Distortion:

< 0.1% @ 0.5 W

Output Noise:

< 400 mVrms, A-weighted

SPECIFICATIONS

System Specifications (continued):

Noise when Muted:	< 400 uVrms, A-weighted
DC Offset:	< 50 mVdc, all channels
Channel Balance:	+/- 1.5 dB for all volume settings
Channel Separation:	> 40 dB @ 1 kHz, > 30 dB @ 10 kHz, stereo mode
Console Specifications:	
Compression Formats Supported for discs inserted into the DVD/CD drive:	AC-3, MP3, DTS, MPEG-1 (VCD), MPEG-2
Compression Formats NOT Supported for discs inserted into the DVD/CD drive:	SACD Format (Sony), MLP
Digital Formats Supported for sources connected to the digital inputs:	AC-3, DTS, AAC (Japan only), PCM
Analog Input Characteristics:	
Maximum source signal for ADC full scale:	2 Vrms
Minimum source signal for ADC full scale:	200 mVrms
Input Impedance:	100k Ohms nominal +/- 10%
Input Coupling:	AC coupled to remove source DC offset
Output level from FM (mono, 75 kHz dev):	0.3 Vrms nominal
Output level from AM (30% mod, 100 dBuV):	0.2 Vrms nominal
Source Impedance at 1 kHz:	1560 Ohms nominal, +/- 10%
Output Coupling:	AC
S/PDIF Coaxial Input Characteristics:	
Sampling Rates Accommodated:	38 kHz, 44.1 kHz, 48 kHz
Number of bits recognized:	16, 20 and 24
Input Impedance:	75 Ohms +/- 10%
Error Checking and Handling:	Implements full error checking and handling, considering CRC, validity bit, loss of lock, parity error, and bi-phase error.
Input Coupling:	AC

SPECIFICATIONS

Console Specifications (continued):

Optical S/PDIF Input Characteristics:

Sampling Rates Accommodated: 38 kHz, 44.1 kHz and 48 kHz
Number of bits recognized: 16, 20 and 24
Error Checking and Handling: Implements full error checking and handling, considering CRC, validity bit, loss of lock, parity error, and bi-phase error.

Input Connector: TOSLINK

Volume Control:

0 dB to full attenuation in 100 steps (100 - 0 indicated). 0 volume causes the amplifiers to mute.

Film EQ:

Selectable on or off

Tone Controls:

Treble Control: Range of -12 to +12 dB in 11 steps
Bass Control: Range of -12 to +12 dB in 18 steps

FM Tuner Performance (per IHF-T-200):

Channel Spacing: US/Can/Dual Voltage: 200 kHz
Euro/UK/Aus: 50 kHz
Japan: 100 kHz

Band Limits:

US/Can/Dual Voltage: 87.7 MHz - 107.9 MHz
Euro/UK/Aus: 87.50 MHz - 108.00 MHz
Japan: 76.00 MHz - 90.00 MHz

De-emphasis:

US/Can/Dual Voltage: 75 usec
Euro/UK/Aus/Japan: 50 usec

Mono Sensitivity (30dB (S+N+D)/(N+D)):

US/Can/Dual Voltage: (98 MHz) 15dBf nom/17.5 dBf limit
Euro/UK/Aus/Japan: 20 dBf nom / 25 dBf limit
Euro/UK/Aus: (98 MHz) 16.0 dBf nom / 18.5 dBf limit
Japan: (83 MHz) 15.0 dBf nom / 17.5 dBf limit

50 dB Stereo Quieting Sensitivity:

US/Can/Dual Voltage (98 MHz): 38 dBf nom / 41.5 dBf limit
Euro/UK/Aus (98 MHz): 39.0 dBf nom / 42.5 dBf limit
Japan (83 MHz): 38 dBf nom / 41.5 dBf limit

Signal to Noise Ratio @ 65 dBf:

38 dBf nom / limit 69 dB mono, 70 nom / limit 65 dB stereo

Mono 0.3% / limit 0.6%, stereo 0.4% / limit 0.8%

Capture Ratio @ 45 dBf:

2.0 dB nominal / limit 3.0 dB

AM Rejection @ 45 dBf:

60 dB nominal / 50 dB limit

SPECIFICATIONS

Console Specifications (continued):

Adjacent Chan Selectivity (200 kHz):	13 dB nominal / 10 dB limit @ 45 dBf
Alternate Chan Selectivity (400 kHz):	
US/Can/Dual/Japan:	70 dB nom/65 dB limit @ 45 dBf
Euro/UK/Aus:	75 dB nom/70 dB limit @ 45 dBf
Image Rejection:	
US/Can/Dual/Japan:	45 dB nominal / 40 dB limit
Euro/UK/Aus:	Meets FTZ (Fernmelde Technischer Zentralamt) requirement
RF Intermodulation:	65 dB nominal / 55 dB limit
Sub-carrier Product Rejection (at speaker):	55 dB nominal / 45 dB limit
Frequency Response relative to ideal deemphasis:	30 Hz to 15 kHz +/- 1.0 dB nominal, +/- 2.0 dB limit
Stereo Channel Separation @ 1 kHz:	35 dB nominal / 25 dB limit
Auto Stop Level (seek):	30 dBf +/-5
Mono/Stereo Threshold:	40 dBf +/-5
AM Tuner Performance (per IHF-T-100):	
Channel Spacing:	
US/CAN/DUAL:	10 kHz
Euro/UK/Aus/Japan:	9 kHz
Band Limits:	
US/CAN/Dual:	530 kHz - 1710 kHz
Euro/UK/Aus:	522 kHz - 1611 kHz
Japan:	531 kHz - 1629 kHz
Usable Sensitivity (mono, 1080 kHz):	48 dB nominal / 54 dB limit
Adjacent Channel Selectivity:	23 dB nominal / 18 dB limit
Alternate Channel Selectivity:	30 dB nominal / 25 dB limit
Image Rejection:	40 dB nominal / 35 dB limit
Auto Stop Level:	58 dBuV/m +/- 5 dB
Signal to Noise Ratio:	50 dB nominal / 45 dB limit
Distortion (30% modulation):	1.0% nominal / 1.4% limit
Frequency Response:	220 Hz: -3 dB nominal / -6 dB limit 2.0 kHz: -3 dB nominal / -6 dB limit

ELECTROSTATIC DISCHARGE SENSITIVE (ESDS) DEVICE HANDLING

This unit contains ESDS devices. We recommend the following precautions when repairing, replacing or transporting ESDS devices:

- Perform work at an electrically grounded work station.
- Wear wrist straps that connect to the station or heel straps that connect to conductive floor mats.
- Avoid touching the leads or contacts of ESDS devices or PC boards even if properly grounded. Handle boards by the edges only.
- Transport or store ESDS devices in ESD protective bags, bins, or totes. Do not insert unprotected devices into materials such as plastic, polystyrene foam, clear plastic bags, bubble wrap or plastic trays.

PART LIST NOTES

1. This part is not normally available from Customer Service. Approval from the Field Service Manager is required before ordering.
2. The individual parts located on the PCBs are listed in the Electrical Part List.
3.  This part is critical for safety purposes. Failure to use a substitute replacement with the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards.
4. This part is referenced for informational purposes only. It is not stocked as a repair part. Refer to the next higher assembly for a replacement part.

FREQUENTLY ORDERED ITEMS

Main Assemblies	Part Number
CONSOLE ASSY, DVD, 120V, GRAPHITE, REGION 1	270900-11119
ASSEMBLY, BASS MODULE, 120V, GRAPHITE	273031-11119
Arrays	Part Number
ARRAY ASSY, 321 II, GRAPHITE	255198-001
ARRAY ASSY, 321GS II, GRAPHITE	269990-001
ARRAY ASSY, 321GS II, SILVER	269990-003
Remote Control	Part Number
REMOTE, IR, 3.2.1 SERIES II	270618-001
BATTERY, CARBON, AA SIZE (2 REQUIRED)	147538
Accessory Kits	Part Number
ACCESSORY KIT W/REMOTE, 321 II US, GRAPHITE	273041-011
ACCESSORY KIT W/REMOTE, 321GS II, US, GRAPHITE	273041-111
ACCESSORY KIT W/REMOTE, 321GS II, US, SILVER	273041-311
Cables	Part Number
CABLE, BASS MODULE, 13 PIN, GRAPHITE	269997-001
CABLE, STANDARD ARRAY, 9 PIN, GRAPHITE	255123-001
CABLE, GEMSTONE™ ARRAY, 9 PIN, GRAPHITE	269984-001
CABLE, GEMSTONE ARRAY, 9 PIN, SILVER	269984-003
CABLE, AUDIO, DUAL RCA	185931-01
CABLE, VIDEO, 6', YL	183200
Antennas	Part Number
ANTENNA, FM DIPOLE, 75 OHM, F CONN	148589
ANTENNA, ASSY, AM, CD 20	199824-002
Line Cord	Part Number
LINE CORD, 120V, POL, DET, GRAPHITE	260082-001
Owner's Guide	Part Number
GUIDE, OWNERS, 3-LANG 321 II	274559
Feet	Part Number
BUMPER, RECESSED, FOOT, .88" (QTY 4 FEET PER STRIP, USED ON THE BASS MODULE)	142839
FOOT, CLEAR, .312 X 0.85 (QTY 4 FEET PER STRIP, USED ON THE ARRAYS)	178321-04
Other	Part Number
DVD, SETUP AND DEMO, 321 II, NTSC	277723
Extended Length Cables	Part Number
SYSTEM CABLE, 25 FOOT, GRAPHITE	281528-001
ARRAY CABLE, 40 FOOT, 321 II, GRAPHITE	262070-001
ARRAY CABLE, 40 FOOT, 321 II, SILVER	262070-003
ARRAY CABLE, 40 FOOT, 321GS II, GRAPHITE	282301-001
ARRAY CABLE, 40 FOOT, 321GS II, SILVER	282301-003

PACKAGING PART LIST

3•2•1 Series II Home Entertainment System (see Figure 1)

Item Number	Description	Part Number	Qty per System	Note
1	COMMITMENT LETTER	251001	1	
2	SHEET, QUICKSTART, GLOBAL	274561	1	
3	ACCESSORY KIT, 321 II US, GRAPHITE	273041-011	1	
	ACCESSORY KIT, 321 II GS, US, GRAPHITE	273041-111	1	
	ACCESSORY KIT, 321 II GS, US, SILVER	273041-311	1	
4	LINE CORD, 120V, POL, DET, GRAPHITE	260082-001	1	 3
5	BAG, POLY, 13.5 x 35 x 9.5 x 2.5 mil	114522	1	
6	PACKING, TOP, EPS, CONSOLE	276335	1	
7	CONSOLE ASSY, DVD, 120V, GRAPHITE, REGION 1	270900-11119	1	
8	PACKING, TOP-BTM, EPS, BASS MODULE	276334	2	
9	PACKING, TOP-BTM, EPS, SAT	276336	1	
10	ARRAY ASSY, 321 II, GRAPHITE	255198-001	2	
	ARRAY ASSY, 321 II GS, GRAPHITE	269990-001	2	
	ARRAY ASSY, 321 II GS, SILVER	269990-003	2	
11	ASSEMBLY, BASS MODULE, 120V, GRAPH	273031-11119	1	US/Can
	ASSEMBLY, BASS MODULE, 115/230V, GRAPH	273031-61119	1	Dual Voltage
12	CARTON, RSC, 321 II	276333	1	
	CARTON, RSC, 321 II GS	277060	1	
13	GUIDE, OWNERS, 3-LANG 321 II	274559	1	
14	CARD, REGISTRATION	278529-001	1	
15	SHEET, SLIP, COMPONENT AUDIO	255805	1	
16	ADDRESS PAGE, BOSE	259434	1	
17	BAG, POLY, 14.38 x 9.87 x 2 mil	103351	1	
18	CARD, 3.2.1 UPDATE	268158	1	
19	DVD, SETUP AND DEMO, 321 II, NTSC	277723	1	
-	ADAPTOR, 120/230V, POLARIZED	147013	1	Dual Voltage
-	SHEET, INSTRUCTION, ADAPTOR	147751	1	Dual Voltage

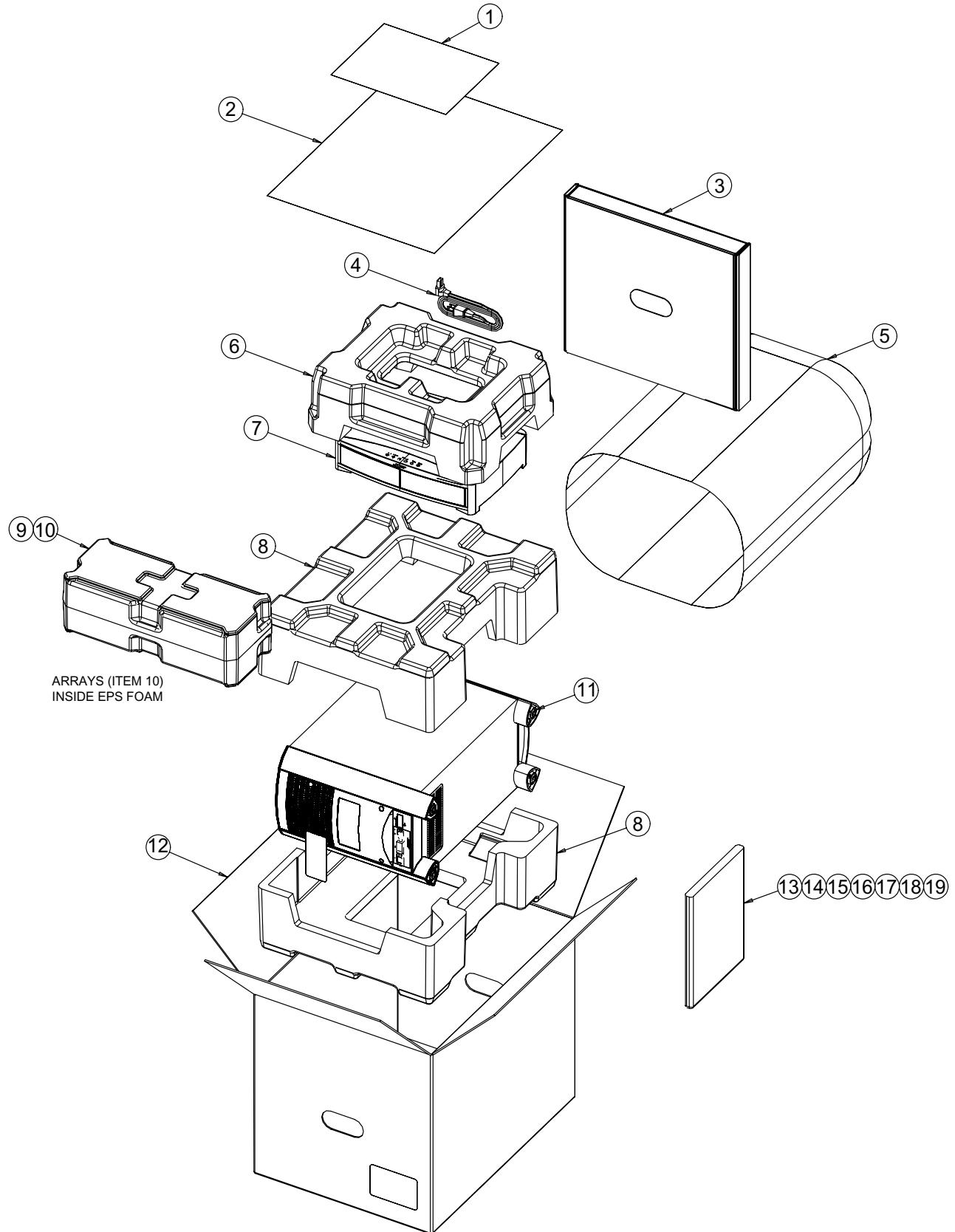


Figure 1. 3•2•1 Series II Home Entertainment System Packaging View

PACKAGING PART LIST

3•2•1 Series II Home Entertainment System Accessory Kit (see Figure 2)

Item Number	Description	Part Number	Note
1	CARTON, DIE CUT, ACCESSORY KIT, 321 II	276337	
2	CABLE, AUDIO, DUAL RCA	185931-01	
3	ANTENNA, FM DIPOLE, 75 OHM, F CONN	148589	
4	CABLE, VIDEO, 6', YL	183200	
5	REMOTE, IR, 321 II	270618-001	
6	ANTENNA, ASSY, AM, CD 20	199824-002	
7	BAG, POLY, 3 X 3 MIL	194392	4
8	BATTERY, CARBON, AA SIZE	147538	
9	CABLE, STANDARD ARRAY, 9 PIN, GRAPHITE	255123-001	
	CABLE, GEMSTONE™ ARRAY, 9 PIN, GRAPHITE	269984-001	
	CABLE, GEMSTONE ARRAY, 9 PIN, SILVER	269984-003	
10	BUMPER, RECESSED, FOOT, .88"	142839	
11	FOOT, CLEAR, .312 X 0.85	178321-04	
12	CABLE, BASS MODULE, 13 PIN, GRAPHITE	269997-001	
13	PACKING, INSERT, ACCESSORY KIT, 321 II	276338	

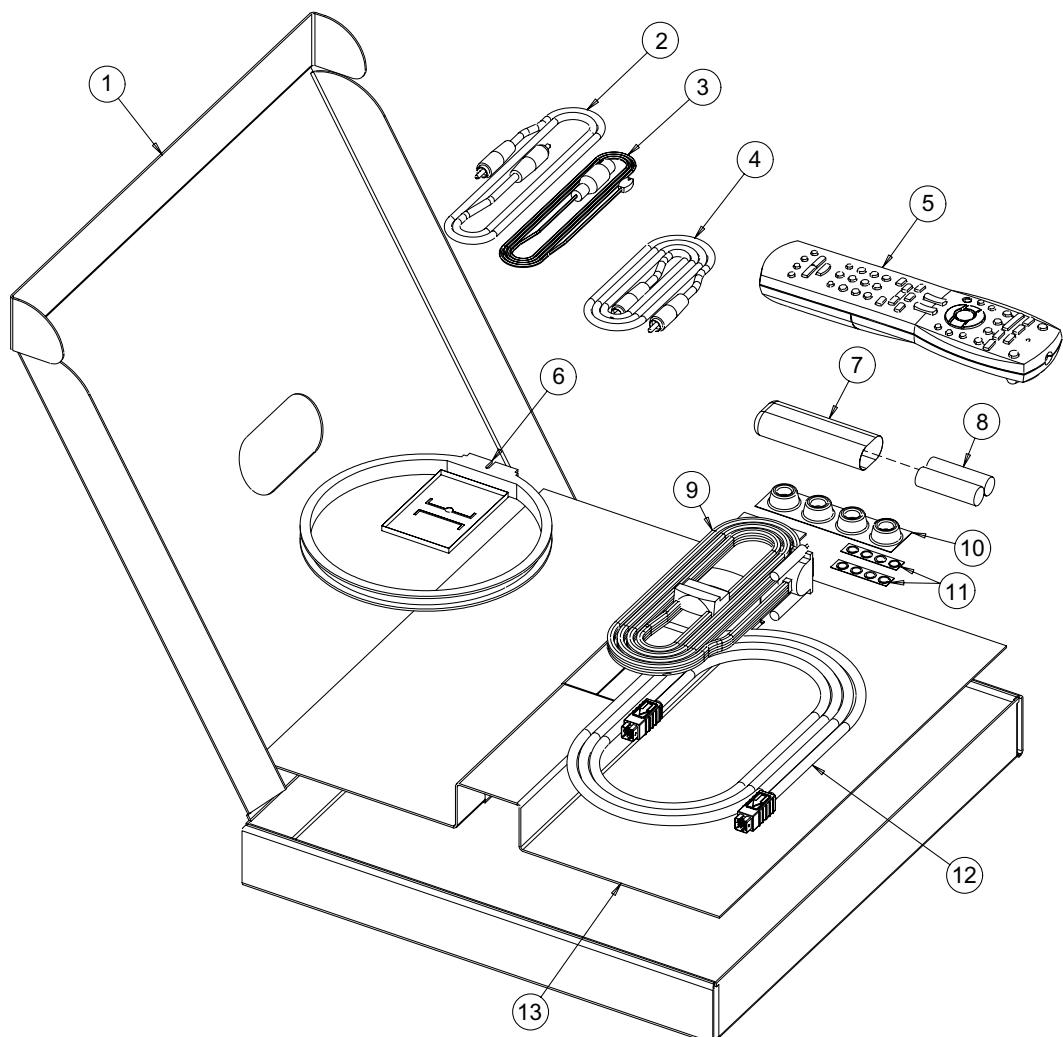


Figure 2. Accessory Kit Exploded View

MAIN PART LIST

3•2•1 Series II Console Assembly (see Figure 3)

Item Number	Description	Part Number	Qty.	Note
1	COVER, GATE (USED TO COVER RECESSS IN THE TOP COVER, ITEM 3 BELOW)	270910-001	1	
2	PRESSURE SENSITIVE ADHESIVE, DIE-CUT (USED TO SECURE ITEM 1 TO ITEM 3)	276995-001	1	
3	COVER, CONSOLE, DVD, GRAPHITE	270909-001	1	
4	SHIELD, UPPER, COVER	270911-001	1	
5	GASKET, EMI (FM ANTENNA CONNECTOR)	276947-001	1	
6	PCB ASSY, TUNER, PROGRAMMED, US	274257-001	1	2
7	DRIVE, DVD-ROM, 1712, XQ1B10	270013-002	1	
8	CABLE, RIBBON, ATAPI, 40 POS, 260 MM	270918-280	1	
9	CABLE, POWER, DVD, 265 MM	270917-265	1	
10	BRACKET, DVD, GRAPHITE	270904-001	1	
11	SCREW, M3-0.5 x 8, DOME WASHER	271671-001	4	
12	HEATSINK, DSP	270920-001	1	
13	CABLE, TUNER, 13 COND, FFC	271573-120	1	
14	CABLE, BUTTON, 135 MM	270914-135	1	
15	CABLE, DISPLAY, FFC, SHIELD, 5 POS, 110 MM	270601-05110	1	
16	GASKET, EMI (BOSE LINK CONNECTOR)	279058-001	1	
17	PCB ASSY, MAIN, PROGRAMMED, STANDARD	274256-101	1	2
18	TAPE, SHIELDING (NOT USED IN LATER UNITS)	279013-001	1	
19	SHIELD, LOWER, BASE	270902-001	1	
20	LABEL, INPUT/OUTPUT, CONSOLE	272176-001	1	
21	BASE, CONSOLE, DVD, GRAPHITE	270901-001	1	
22	FOOT, RUBBER, 12.7 DIA. x 2.38 THICK	260465	4	
23	SCREW, # 8-11, COMBO DRIVE	271670-036	6	
24	DISPLAY, VACUUM FLUORESCENT (VFD)	275866-001	1	
25	CABLE, IR, 32 MM	270915-032	1	
26	PAD, SWITCH	270916-001	1	
27	BUTTON PCB (PART OF MAIN PCB ASSY)	-	1	
28	IR RECEIVER PCB (PART OF MAIN PCB ASSY)	-	1	
29	SCREW, TAPP, 8-11 x .625, PAN, X SQ. EN	250817-10	3	
30	BEZEL, INNER	270905-001	1	
31	PIN, EJECTOR, DVD	271619-001	1	
32	OUTER BEZEL ASSY, CONSOLE	277514-001	1	
33	NAMEPLATE, 29 MM, DIAMOND CUT	279015-001	1	
34	DVD BEZEL SUB-ASSEMBLY, CONSISTS OF: BEZEL, DVD SPRING, TORSION LENS, DVD	282440-001 270912-001 273650 270913-001	1 4 4 4	

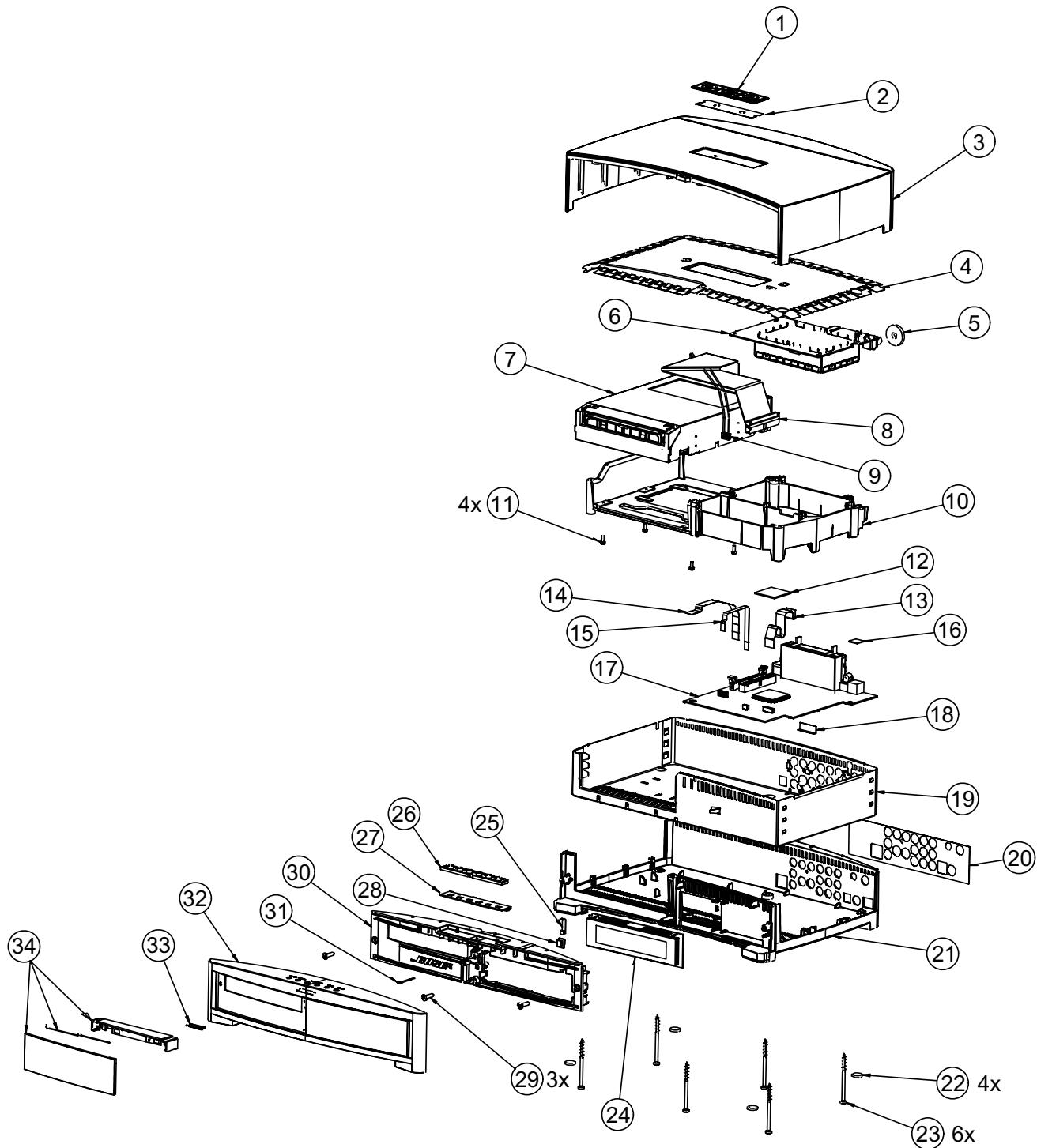


Figure 3. 3•2•1 Series II Console Exploded View

MAIN PART LIST

Bass Module (see Figure 4)

Item Number	Description	Part Number	Qty.	Note
1	FOAM TAPE, .32" W	255202	2 ft.	
2	SCREW, TAPP, 8-11 x .5, PAN, ASY, SQ	250817-08	6	
3	BRACKET, COVER, AMP	255179	1	
4	SCREW, MACH, SEMS, WSHR, 10-32 x 0.5	264824-08	4	
5	TRANSFORMER, EI, 100V, 50/60HZ (120V SYSTEMS)	261278-102	1	! 3
	TRANSFORMER, EI, 115/230V, 50/60HZ, R90 (DUAL VOLTAGE SYSTEMS)	261277-102		
6	ENCLOSURE, REAR, GRAPHITE (120V)	267187-301	1	
	ENCLOSURE, REAR, GRAPHITE (DUAL VOLT)	278055-321		
7	SCREW, 6-32 x 1/2 THREAD ROLLING	258492-08	4	
8	CABLE, INPUT / OUTPUT, DIGITAL	275179-190	1	
9	SCREW, TT, 8-32 x 0.5, PAN, XREC/SQ	255191-08	4	
10	PAD, FOAM, .25" x .75" x .06"	278144-001	3	
11	PCB ASSY, INPUT / OUTPUT (120V SYSTEMS)	270927-001	1	2
	PCB ASSY, INPUT / OUTPUT (DUAL VOLT)	270927-006		
12	CABLE, ARRAY, 10 CONDUCTOR	271561-190	1	
13	BRACKET, INPUT / OUTPUT PCB	267182-001	1	
14	SCREW, TAPP, 6-13 x .5, PANN	172783-08	2	
15	BRACKET, HEATSINK	267183-001	1	
16	PCB ASSY, DSP, PROGRAMMED	274824-001	1	2
17	PAD, THERMAL, DIODE	267968-075	1	

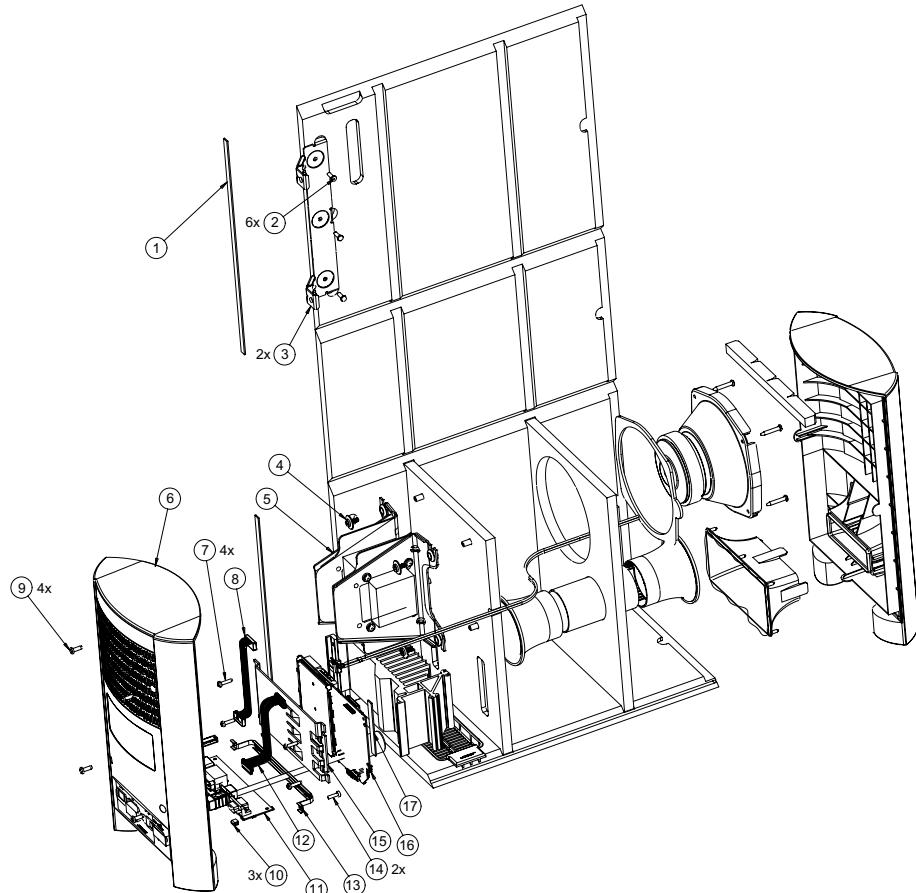


Figure 4. Bass Module Exploded View

MAIN PART LIST

Standard 3•2•1 Array Assembly (see Figure 5)

Item Number	Description	Part Number	Qty per Array	Note
1	GRILLE, ARRAY, GRAPHITE	255196-001	1	
2	NAMEPLATE, BOSE® LOGO	255177-001	1	

Note: Only the parts listed above are replaceable.

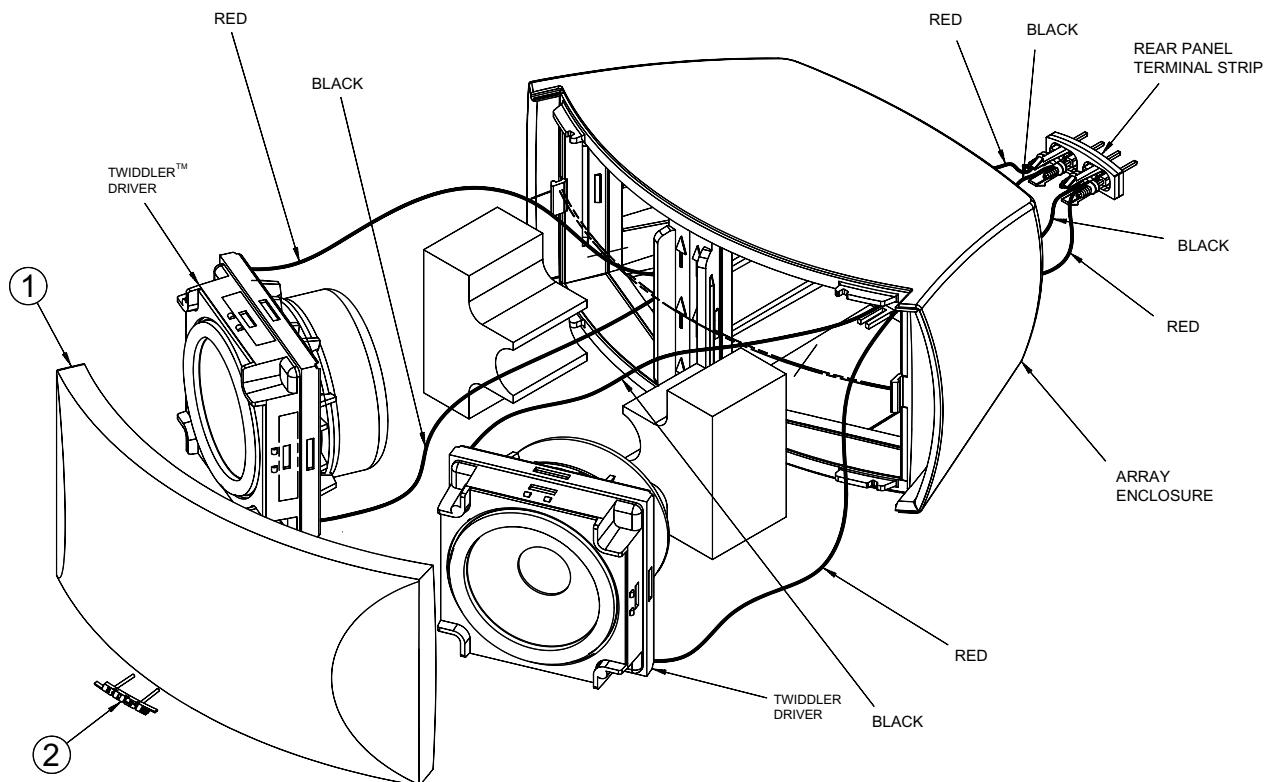


Figure 5. Standard 3•2•1 Array Assembly Exploded View

MAIN PART LIST

3•2•1 GS Array Assembly (see Figure 6)

Item Number	Description	Part Number	Qty per Array	Note
1	TWIDDLE DRIVERS ASSY, 50MM	273244-001	2	
2	GRILLE, METAL, ARRAY, GRAPHITE GRILLE, METAL, ARRAY, SILVER	273748-001 273748-003	1	
3	NAMEPLATE, BOSE, ARRAY	269981-001	1	
4	FOAM, GRILLE, ARRAY	272036-001	4	
5	SCREW, HILO, 4-16 x .375, PAN, XREC	181621-06	8	

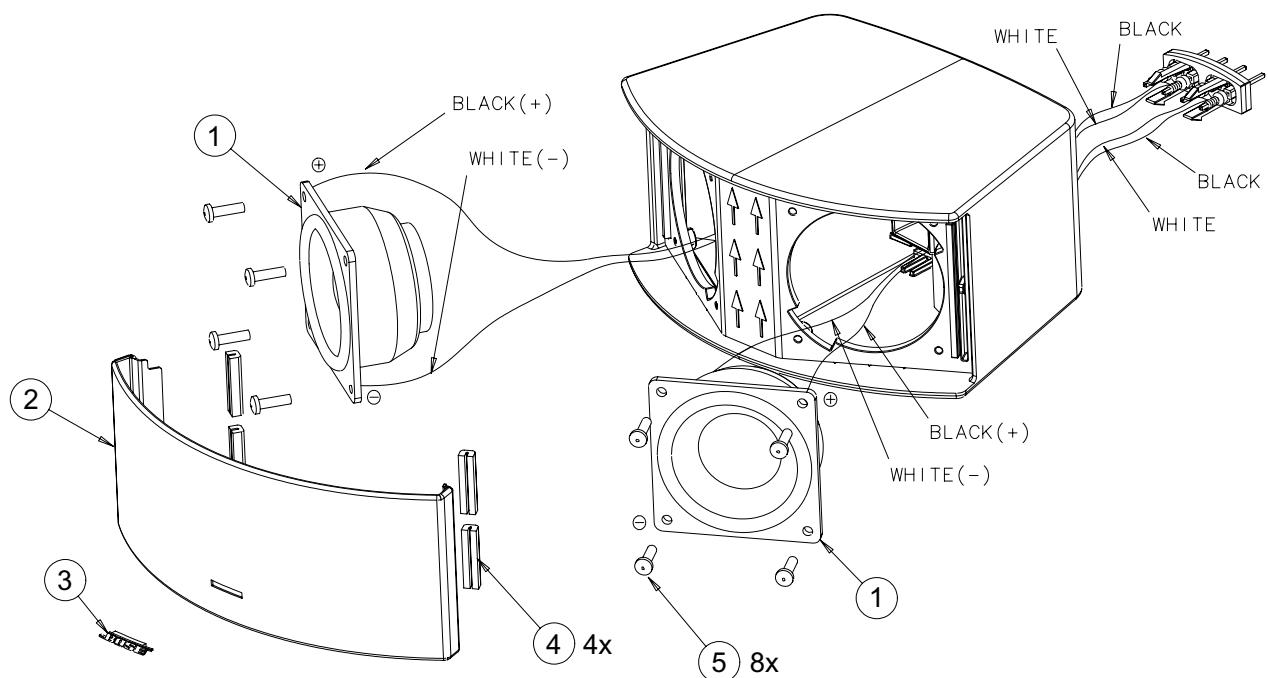


Figure 6. 3•2•1 GS Array Assembly Exploded View

ELECTRICAL PART LIST

Console Main PCB Assembly

Resistors

Reference Designator	Description	Part Number	Note
JP1	JUMPER, CHIP, 0603	196042	
R4	33.2K, 0603, 1/10W, 1%	191465-3322	
R8	1K, 0603, 1/10W, 1%	191465-1001	
R10	9.09K, 0603, 1/10W, 1%	191465-9091	
R11	39.2K, 0603, 1/10W, 1%	191465-3922	
R13	9.09K, 0603, 1/10W, 1%	191465-9091	
R14	18.2K, 0603, 1/10W, 1%	191465-1822	
R15	1K, 0603, 1/10W, 1%	191465-1001	
R17	33.2K, 0603, 1/10W, 1%	191465-3322	
R19	1K, 0603, 1/10W, 5%	199403-102	
R20	499 OHM, 0603, 1/10W, 1%	191465-4990	
R21	499 OHM, 0603, 1/10W, 1%	191465-4990	
R22	499 OHM, 0603, 1/10W, 1%	191465-4990	
R30	10K, 0603, 1/10W, 1%	191465-1002	
R33	1K, 0603, 1/10W, 5%	199403-102	
R35	10K, 0603, 1/10W, 1%	191465-1002	
R36	13K, 0603, 1/10W, 1%	191465-1302	
R37	3.74K, 0603, 1/10W, 1%	191465-3741	
R40	39.2K, 0603, 1/10W, 1%	191465-3922	
R42	4.7K, 0603, 1/10W, 5%	199403-472	
R43	4.7K, 0603, 1/10W, 5%	199403-472	
R44	22 OHM, 0603, 1/10W, 5%	199403-220	
R3200	5.6K, 0603, 1/10W, 5%	199403-562	
R3202	5.6K, 0603, 1/10W, 5%	199403-562	
R3203	10K, 0603, 1/10W, 1%	191465-1002	
R3204	10K, 0603, 1/10W, 5%	199403-103	
R3206	5.6K, 0603, 1/10W, 5%	199403-562	
R3207	10K, 0603, 1/10W, 5%	199403-103	
R3215	5.6K, 0603, 1/10W, 5%	199403-562	
R3216	5.6K, 0603, 1/10W, 5%	199403-562	
R3217	5.6K, 0603, 1/10W, 5%	199403-562	
R4000	1.00K, 0805, 1/10W, 1%	133625-1001	
R4001	1.00K, 0805, 1/10W, 1%	133625-1001	
R4003	1.00K, 0805, 1/10W, 1%	133625-1001	
R4005	1.00K, 0805, 1/10W, 1%	133625-1001	
R4006	1.00K, 0805, 1/10W, 1%	133625-1001	
R4008	1.00K, 0805, 1/10W, 1%	133625-1001	
R4009	100K, 0603, 1/10W, 1%	191465-1003	
R4010	100K, 0603, 1/10W, 1%	191465-1003	
R4013	100K, 0603, 1/10W, 1%	191465-1003	
R4014	100K, 0603, 1/10W, 1%	191465-1003	
R4016	100K, 0603, 1/10W, 1%	191465-1003	
R4024	100K, 0805, 1/10W, 5%	133626-1045	
R4025	100K, 0805, 1/10W, 5%	133626-1045	
R4038	22 OHM, 0805, 1/10W, 5%	133626-2205	
R4090	1.00K, 0805, 1/10W, 1%	133625-1001	

ELECTRICAL PART LIST

Console Main PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R4091	1.00K, 0805, 1/10W, 1%	133625-1001	
R4099	10K, 0603, 1/10W, 1%	191465-1002	
R4100	1.00K, 0805, 1/10W, 1%	133625-1001	
R4101	1.00K, 0805, 1/10W, 1%	133625-1001	
R4102	1.00K, 0805, 1/10W, 1%	133625-1001	
R4103	1.00K, 0805, 1/10W, 1%	133625-1001	
R4104	100K, 0603, 1/10W, 1%	191465-1003	
R4105	100K, 0603, 1/10W, 1%	191465-1003	
R4106	100K, 0603, 1/10W, 1%	191465-1003	
R4107	100K, 0603, 1/10W, 1%	191465-1003	
R4108	100K, 0603, 1/10W, 1%	191465-1003	
R4109	100K, 0603, 1/10W, 1%	191465-1003	
R4110	100K, 0603, 1/10W, 1%	191465-1003	
R4111	100K, 0603, 1/10W, 1%	191465-1003	
R4112	100K, 0603, 1/10W, 1%	191465-1003	
R4113	100K, 0603, 1/10W, 1%	191465-1003	
R4114	100K, 0603, 1/10W, 1%	191465-1003	
R4115	100K, 0603, 1/10W, 1%	191465-1003	
R4116	100K, 0603, 1/10W, 1%	191465-1003	
R4117	100K, 0603, 1/10W, 1%	191465-1003	
R4118	100K, 0603, 1/10W, 1%	191465-1003	
R4119	1.00K, 0805, 1/10W, 1%	133625-1001	
R4120	100K, 0603, 1/10W, 1%	191465-1003	
R4121	150 OHM, 0805, 1/10W, 5%	133626-1515	
R4122	150 OHM, 0805, 1/10W, 5%	133626-1515	
R4200	2.21K, 0603, 1/10W, 1%	191465-2211	
R4201	10K, 0603, 1/10W, 5%	199403-103	
R4202	1K, 0603, 1/10W, 1%	191465-1001	
R4217	10K, 0603, 1/10W, 1%	191465-1002	
R4218	30K, 0603, 1/10W, 5%	199403-303	
R5000	75 OHM, 0603, 1/10W, 5%	199403-750	
R5001	75 OHM, 0603, 1/10W, 5%	199403-750	
R5002	75 OHM, 0603, 1/10W, 5%	199403-750	
R5003	10K, 0603, 1/10W, 5%	199403-103	
R5004	4.75K, 0603, 1/10W, 1%	191465-4751	
R6200	10K, 0603, 1/10W, 5%	199403-103	
R6201	1K, 0603, 1/10W, 5%	199403-102	
R6210	1K, 0603, 1/10W, 5%	199403-102	
R6212	1K, 0603, 1/10W, 5%	199403-102	
R6213	1K, 0603, 1/10W, 5%	199403-102	
R6214	10K, 0603, 1/10W, 1%	191465-1002	
R6215	1K, 0603, 1/10W, 5%	199403-102	
R6314	10K, 0603, 1/10W, 5%	199403-103	
R6315	499 OHM, 0603, 1/10W, 1%	191465-4990	
R6317	499 OHM, 0603, 1/10W, 1%	191465-4990	
R6319	499 OHM, 0603, 1/10W, 1%	191465-4990	

ELECTRICAL PART LIST

Console Main PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R6500	100 OHM, 0603, 1/10W, 5%	199403-101	
R6501	100 OHM, 0603, 1/10W, 5%	199403-101	
R6502	10K, 0603, 1/10W, 5%	199403-103	
R6503	100 OHM, 0603, 1/10W, 5%	199403-101	
R6504	2.21K, 0603, 1/10W, 1%	191465-2211	
R6505	10K, 0603, 1/10W, 1%	191465-1002	
R6506	1.00K, 0805, 1/10W, 5%	133626-1025	
R6510	2.21K, 0603, 1/10W, 1%	191465-2211	
R6511	100 OHM, 0603, 1/10W, 5%	199403-101	
R6512	100 OHM, 0603, 1/10W, 5%	199403-101	
R6513	100 OHM, 0603, 1/10W, 5%	199403-101	
R6514	100 OHM, 0603, 1/10W, 5%	199403-101	
R6521	100 OHM, 0603, 1/10W, 5%	199403-101	
R6522	100 OHM, 0603, 1/10W, 5%	199403-101	
R6523	100 OHM, 0603, 1/10W, 5%	199403-101	
R6524	100 OHM, 0603, 1/10W, 5%	199403-101	
R6700	330 OHM, 2ES, 0805, 1/10W, 5%	133626-3315	
R6701	330 OHM, 2ES, 0805, 1/10W, 5%	133626-3315	
R6704	1K, 0603, 1/10W, 5%	199403-102	
R6705	330 OHM, 2ES, 0805, 1/10W, 5%	133626-3315	
R6706	330 OHM, 2ES, 0805, 1/10W, 5%	133626-3315	
R6707	330 OHM, 2ES, 0805, 1/10W, 5%	133626-3315	
R6718	20.0K, 0805, 1/10W, 5%	133626-2035	
R6719	20.0K, 0805, 1/10W, 5%	133626-2035	
R6809	30K, 0603, 1/10W, 5%	199403-303	
R6810	4.7K, 0603, 1/10W, 5%	199403-472	
R6811	2.21K, 0603, 1/10W, 1%	191465-2211	
R6812	2.21K, 0603, 1/10W, 1%	191465-2211	
R6813	100 OHM, 0603, 1/10W, 5%	199403-101	
R6815	10K, 0603, 1/10W, 1%	191465-1002	
R6816	30K, 0603, 1/10W, 5%	199403-303	
R6818	10K, 0603, 1/10W, 1%	191465-1002	
R6819	22 OHM, 0805, 1/10W, 5%	133626-2205	
R7000	10K, 0603, 1/10W, 5%	199403-103	
R7001	100 OHM, 0603, 1/10W, 5%	199403-101	
R7002	100 OHM, 0603, 1/10W, 5%	199403-101	
R7003	1.5K, 0603, SMD, 1/10W, 5%	199403-152	
R7004	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R7005	1.5K, 0603, 1/10W, 5%	199403-152	
R7007	15K, 0603, 1/10W, 5%	199403-153	
R7008	1K, 0603, 1/10W, 5%	199403-102	
R7009	100 OHM, 0603, 1/10W, 5%	199403-101	
R7010	100 OHM, 0603, 1/10W, 5%	199403-101	
R7013	1K, 0603, 1/10W, 5%	199403-102	
R7014	1K, 0603, 1/10W, 5%	199403-102	
R7015	4.7K, 0603, 1/10W, 5%	199403-472	

ELECTRICAL PART LIST

Console Main PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R7019	1K, 0603, 1/10W, 5%	199403-102	
R7020	2.21K, 0603, 1/10W, 1%	191465-2211	
R7021	13K, 0603, 1/10W, 5%	199403-133	
R7022	13K, 0603, 1/10W, 5%	199403-133	
R7258	100 OHM, 0603, 1/10W, 5%	199403-101	
R7259	187 OHM, 0603, 1/10W, 1%	191465-1870	
R7260	187 OHM, 0603, 1/10W, 1%	191465-1870	
R7261	100 OHM, 0603, 1/10W, 5%	199403-101	
R7753	100 OHM, 0603, 1/10W, 5%	199403-101	
R7754	100 OHM, 0603, 1/10W, 5%	199403-101	
R7758	10K, 0603, 1/10W, 5%	199403-103	
R7759	100 OHM, 0603, 1/10W, 5%	199403-101	
R7760	330 OHM, 2ES, 0805, 1/10W, 5%	133626-3315	
R8000	75 OHM, 0603, 1/10W, 5%	199403-750	
R8001	75 OHM, 0603, 1/10W, 5%	199403-750	
R8002	75 OHM, 0603, 1/10W, 5%	199403-750	
R8004	75 OHM, 0805, 1/10W, 5%	133626-7505	
R8005	75 OHM, 0805, 1/10W, 5%	133626-7505	
R8006	75 OHM, 0805, 1/10W, 5%	133626-7505	
R8007	470 OHM, 0603, 1/10W, 5%	199403-471	
R8008	470 OHM, 0603, 1/10W, 5%	199403-471	
R8012	100 OHM, 0603, 1/10W, 5%	199403-101	
R8013	39.2K, 0603, 1/10W, 1%	191465-3922	
R8014	33.2K, 0603, 1/10W, 1%	191465-3322	
R8015	100 OHM, 0603, 1/10W, 5%	199403-101	
R8016	100 OHM, 0603, 1/10W, 5%	199403-101	
R8017	100 OHM, 0603, 1/10W, 5%	199403-101	
R8018	22 OHM, 0603, 1/10W, 5%	199403-220	
R8625	110 OHM, 0603, 1W, 5%	199403-111	
R8626	100 OHM, 0603, 1/10W, 5%	199403-101	
R8627	1 OHM, 0805, 1/10W, 5%	133626-1R05	
R9104	10K, 0603, 1/10W, 1%	191465-1002	
R9105	4.99K, 0603, 1/10W, 1%	191465-4991	
R9106	10K, 0603, 1/10W, 1%	191465-1002	
R9107	10K, 0603, 1/10W, 1%	191465-1002	
R9108	4.99K, 0603, 1/10W, 1%	191465-4991	
R9109	10K, 0603, 1/10W, 1%	191465-1002	
R9110	2.21K, 0603, 1/10W, 1%	191465-2211	
R9111	1K, 0603, 1/10W, 1%	191465-1001	
R9112	4.99K, 0603, 1/10W, 1%	191465-4991	
R9113	4.99K, 0603, 1/10W, 1%	191465-4991	
R9200	4.70 OHM, 0603, 1/10W, 1%	191465-4R70	
R9201	14K, 0603, 1/10W, 1%	191465-1402	
R9202	3.24K, 0603, 1/10W, 1%	191465-3241	
R9203	14K, 0603, 1/10W, 1%	191465-1402	
R9204	14K, 0603, 1/10W, 1%	191465-1402	

ELECTRICAL PART LIST

Console Main PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R9205	3.24K, 0603, 1/10W, 1%	191465-3241	
R9206	14K, 0603, 1/10W, 1%	191465-1402	
R9207	14K, 0603, 1/10W, 1%	191465-1402	
R9208	3.24K, 0603, 1/10W, 1%	191465-3241	
R9209	14K, 0603, 1/10W, 1%	191465-1402	
R9210	14K, 0603, 1/10W, 1%	191465-1402	
R9211	3.24K, 0603, 1/10W, 1%	191465-3241	
R9212	14K, 0603, 1/10W, 1%	191465-1402	
R9213	150 OHM, 0805, 1/10W, 5%	133626-1515	
R9214	150 OHM, 0805, 1/10W, 5%	133626-1515	
R9752	100 OHM, 0603, 1/10W, 5%	199403-101	
R9756	100 OHM, 0603, 1/10W, 5%	199403-101	
R9757	22 OHM, 0603, 1/10W, 5%	199403-220	

Capacitors

Reference Designator	Description	Part Number	Note
C2	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C4	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C5	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C7	330uF, EL, 105C, 50V, 20%	258490-331B24H	
C10	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C12	2200pF, 0603, X7R, 50V, 10%	191470-222	
C15	0.10uF, 0603, 16V, 5%	258498-104	
C16	0.1uF, 0805, X7R, 50V	133624	
C17	680pF, 0603, X7R, 50V, 10%	191470-681	
C18	330uF, EL, 105C, 50V, 20%	258490-331B24H	
C19	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C20	0.47uF, 1812, X7R, 50V, 20%	258418-4743	
C21	0.47uF, 1812, X7R, 50V, 20%	258418-4743	
C22	0.10uF, 0603, 16V, 5%	258498-104	
C23	0.10uF, 0603, 16V, 5%	258498-104	
C24	470pF, 0603, COG, 50V, 5%	188454-471	
C25	0.47uF, 1812, X7R, 50V, 20%	258418-4743	
C26	1000uF, EL, 105C, 25V, 20%	258490-102B25E	
C27	0.047uF, 0603, X7R, 25V, 5%	196999-473	
C28	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C29	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C30	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C31	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C32	330uF, EL, SMD, 105C, 10V, 20%	256772-331A	
C33	1800pF, 0603, X7R, 50V, 10%	191470-182	
C45	0.10uF, 0603, 16V, 5%	258498-104	
C46	330uF, EL, SMD, 105C, 10V, 20%	256772-331A	
C47	0.10uF, 0603, 16V, 5%	258498-104	
C50	2200pF, 0603, X7R, 50V, 10%	191470-222	

ELECTRICAL PART LIST

Console Main PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C51	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C52	680pF, 0603, X7R, 50V, 10%	191470-681	
C53	1000uF, EL, 105C, 25V, 20%	258490-102B25E	
C55	0.10uF, 0603, 16V, 5%	258498-104	
C56	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C57	0.10uF, 0603, 16V, 5%	258498-104	
C58	0.47uF, 1812, X7R, 50V, 20%	258418-4743	
C59	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C74	330pF, 0805, COG, 50V, 5%	133622-331	
C75	330pF, 0805, COG, 50V, 5%	133622-331	
C76	330pF, 0805, COG, 50V, 5%	133622-331	
C77	330pF, 0805, COG, 50V, 5%	133622-331	
C78	330pF, 0805, COG, 50V, 5%	133622-331	
C101	0.047uF, 0603, X7R, 25V, 5%	196999-473	
C107	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C108	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C3200	0.047uF, 0603, X7R, 25V, 5%	196999-473	
C4000	180pF, 0805, COG, 50V, 5%	133622-181	
C4001	180pF, 0805, COG, 50V, 5%	133622-181	
C4002	180pF, 0805, COG, 50V, 5%	133622-181	
C4003	180pF, 0805, COG, 50V, 5%	133622-181	
C4004	180pF, 0805, COG, 50V, 5%	133622-181	
C4005	180pF, 0805, COG, 50V, 5%	133622-181	
C4007	180pF, 0805, COG, 50V, 5%	133622-181	
C4008	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4009	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4010	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4011	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4012	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4013	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4014	180pF, 0805, COG, 50V, 5%	133622-181	
C4015	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4016	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4017	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4018	0.10uF, 0603, 16V, 5%	258498-104	
C4019	330uF, EL, SMD, 105C, 10V, 20%	256772-331A	
C4020	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4021	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4022	180pF, 0805, COG, 50V, 5%	133622-181	
C4023	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4024	4.7uF, EL, 85C, 35V, 20%	177902-4R7V	
C4025	180pF, 0805, COG, 50V, 5%	133622-181	
C4026	180pF, 0805, COG, 50V, 5%	133622-181	
C4028	22uF, EL, 85C, 20%, 16V	177902-220C	
C4029	22uF, EL, 85C, 20%, 16V	177902-220C	
C4034	2200pF, 0805, X7R, 50V, 10%	133623-222	

ELECTRICAL PART LIST

Console Main PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C4035	2200pF, 0805, X7R, 50V, 10%	133623-222	
C4036	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C4037	0.047uF, 0805, X7R, 50V, 10%	133623-473	
C4039	100pF, 0805, COG, 50V, 5%	133622-101	
C4040	100pF, 0805, COG, 50V, 5%	133622-101	
C4041	100pF, 0805, COG, 50V, 5%	133622-101	
C4042	100pF, 0805, COG, 50V, 5%	133622-101	
C4043	100pF, 0805, COG, 50V, 5%	133622-101	
C4044	100pF, 0805, COG, 50V, 5%	133622-101	
C4045	220pF, 0805, COG, 50V, 5%	133622-221	
C4046	220pF, 0805, COG, 50V, 5%	133622-221	
C4047	220pF, 0805, COG, 50V, 5%	133622-221	
C4048	220pF, 0805, COG, 50V, 5%	133622-221	
C4049	220pF, 0805, COG, 50V, 5%	133622-221	
C4050	100pF, 0603, COG, 50V, 5%	188454-101	
C4051	220pF, 0805, COG, 50V, 5%	133622-221	
C4199	0.10uF, 0603, 16V, 5%	258498-104	
C5000	150pF, 0603, COG, 50V, 5%	188454-151	
C5002	270pF, 0603, COG, 50V, 5%	188454-271	
C5004	150pF, 0603, COG, 50V, 5%	188454-151	
C5006	270pF, 0603, COG, 50V, 5%	188454-271	
C5008	150pF, 0603, COG, 50V, 5%	188454-151	
C5010	270pF, 0603, COG, 50V, 5%	188454-271	
C5012	100pF, 0805, COG, 50V, 5%	133622-101	
C5013	100pF, 0805, COG, 50V, 5%	133622-101	
C5014	100pF, 0805, COG, 50V, 5%	133622-101	
C5015	150pF, 0805, COG, 50V, 5%	133622-151	
C5016	150pF, 0805, COG, 50V, 5%	133622-151	
C5017	150pF, 0805, COG, 50V, 5%	133622-151	
C5018	150pF, 0805, COG, 50V, 5%	133622-151	
C5019	150pF, 0805, COG, 50V, 5%	133622-151	
C5020	150pF, 0805, COG, 50V, 5%	133622-151	
C6200	0.10uF, 0603, 16V, 5%	258498-104	
C6201	1000pF, 0603, X7R, 50V, 10%	191470-102	
C6202	0.10uF, 0603, 16V, 5%	258498-104	
C6203	1000pF, 0603, X7R, 50V, 10%	191470-102	
C6204	0.10uF, 0603, 16V, 5%	258498-104	
C6206	0.10uF, 0603, 16V, 5%	258498-104	
C6207	1000pF, 0603, X7R, 50V, 10%	191470-102	
C6208	0.10uF, 0603, 16V, 5%	258498-104	
C6209	1000pF, 0603, X7R, 50V, 10%	191470-102	
C6210	0.10uF, 0603, 16V, 5%	258498-104	
C6211	1000pF, 0603, X7R, 50V, 10%	191470-102	
C6212	0.10uF, 0603, 16V, 5%	258498-104	
C6213	0.10uF, 0603, 16V, 5%	258498-104	
C6215	0.10uF, 0603, 16V, 5%	258498-104	

ELECTRICAL PART LIST

Console Main PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C6216	0.10uF, 0603, 16V, 5%	258498-104	
C6219	0.01uF, 0603, X7R, 50V, 10%	191470-103	
C6221	0.10uF, 0603, 16V, 5%	258498-104	
C6225	22uF, 1411, TANT, 6.3V, 20%	188588-226	
C6226	22uF, 1411, TANT, 6.3V, 20%	188588-226	
C6300	100pF, 0805, COG, 50V, 5%	133622-101	
C6504	180pF, 0603, COG, 50V	188454-181	
C6505	0.10uF, 0603, 16V, 5%	258498-104	
C6700	330pF, 0805, COG, 50V, 5%	133622-331	
C6701	330pF, 0805, COG, 50V, 5%	133622-331	
C6702	330pF, 0805, COG, 50V, 5%	133622-331	
C6703	330pF, 0805, COG, 50V, 5%	133622-331	
C6705	330pF, 0805, COG, 50V, 5%	133622-331	
C6706	330pF, 0805, COG, 50V, 5%	133622-331	
C6708	0.10uF, 0603, 16V, 5%	258498-104	
C6710	1000pF, 0603, X7R, 50V, 10%	191470-102	
C6807	100pF, 0603, COG, 50V, 5%	188454-101	
C6808	100pF, 0603, COG, 50V, 5%	188454-101	
C6809	22uF, EL, 85C, 20%, 16V	177902-220C	
C6810	100pF, 0603, COG, 50V, 5%	188454-101	
C7000	0.10uF, 0603, 16V, 5%	258498-104	
C7001	27pF, 0603, COG, 50V, 5%	188454-270	
C7002	27pF, 0603, COG, 50V, 5%	188454-270	
C7003	0.10uF, 0603, 16V, 5%	258498-104	
C7004	0.10uF, 0603, 16V, 5%	258498-104	
C7005	0.10uF, 0603, 16V, 5%	258498-104	
C7006	0.10uF, 0603, 16V, 5%	258498-104	
C7007	0.10uF, 0603, 16V, 5%	258498-104	
C7008	0.10uF, 0603, 16V, 5%	258498-104	
C7009	0.10uF, 0603, 16V, 5%	258498-104	
C7010	0.10uF, 0603, 16V, 5%	258498-104	
C7011	0.10uF, 0603, 16V, 5%	258498-104	
C7012	0.10uF, 0603, 16V, 5%	258498-104	
C7013	0.10uF, 0603, 16V, 5%	258498-104	
C7014	0.10uF, 0603, 16V, 5%	258498-104	
C7015	0.10uF, 0603, 16V, 5%	258498-104	
C7016	0.10uF, 0603, 16V, 5%	258498-104	
C7017	0.10uF, 0603, 16V, 5%	258498-104	
C7018	0.10uF, 0603, 16V, 5%	258498-104	
C7019	0.10uF, 0603, 16V, 5%	258498-104	
C7020	0.10uF, 0603, 16V, 5%	258498-104	
C7021	0.10uF, 0603, 16V, 5%	258498-104	
C7022	0.10uF, 0603, 16V, 5%	258498-104	
C7023	0.10uF, 0603, 16V, 5%	258498-104	
C7024	0.10uF, 0603, 16V, 5%	258498-104	
C7026	22uF, 1411, TANT, 6.3V, 20%	188588-226	

ELECTRICAL PART LIST

Console Main PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C7250	0.10uF, 0603, 16V, 5%	258498-104	
C7251	0.10uF, 0603, 16V, 5%	258498-104	
C7252	0.10uF, 0603, 16V, 5%	258498-104	
C7254	0.10uF, 0603, 16V, 5%	258498-104	
C7255	0.10uF, 0603, 16V, 5%	258498-104	
C7256	0.10uF, 0603, 16V, 5%	258498-104	
C7257	0.10uF, 0603, 16V, 5%	258498-104	
C7258	0.10uF, 0603, 16V, 5%	258498-104	
C7259	47uF, EL, 85C, 16V, 20%	177902-470C	
C7260	0.10uF, 0603, 16V, 5%	258498-104	
C7261	0.10uF, 0603, 16V, 5%	258498-104	
C7262	0.10uF, 0603, 16V, 5%	258498-104	
C7263	0.10uF, 0603, 16V, 5%	258498-104	
C7264	0.10uF, 0603, 16V, 5%	258498-104	
C7265	0.10uF, 0603, 16V, 5%	258498-104	
C7266	0.10uF, 0603, 16V, 5%	258498-104	
C7267	0.10uF, 0603, 16V, 5%	258498-104	
C7268	0.10uF, 0603, 16V, 5%	258498-104	
C7269	0.10uF, 0603, 16V, 5%	258498-104	
C7270	0.10uF, 0603, 16V, 5%	258498-104	
C7271	0.10uF, 0603, 16V, 5%	258498-104	
C7272	0.10uF, 0603, 16V, 5%	258498-104	
C8001	0.047uF, 0603, X7R, 25V, 5%	196999-473	
C8002	0.01uF, 0603, X7R, 50V, 10%	191470-103	
C8003	0.01uF, 0603, X7R, 50V, 10%	191470-103	
C8004	0.01uF, 0603, X7R, 50V, 10%	191470-103	
C8005	33pF, 0603, COG, 50V, 5%	188454-330	
C8006	0.01uF, 0603, X7R, 50V, 10%	191470-103	
C8013	0.10uF, 0603, 16V, 5%	258498-104	
C8014	10uF, EL, 85C, 16V, 20%	177902-100C	
C8016	0.10uF, 0603, 16V, 5%	258498-104	
C8017	0.10uF, 0603, 16V, 5%	258498-104	
C8018	33pF, 0603, COG, 50V, 5%	188454-330	
C8019	100pF, 0805, COG, 50V, 5%	133622-101	
C8020	100pF, 0805, COG, 50V, 5%	133622-101	
C8021	100pF, 0805, COG, 50V, 5%	133622-101	
C8436	0.10uF, 0603, 16V, 5%	258498-104	
C8437	1000pF, 0603, X7R, 50V, 10%	191470-102	
C8621	100pF, 0805, COG, 50V, 5%	133622-101	
C8622	100pF, 0805, COG, 50V, 5%	133622-101	
C8625	0.01uF, 0603, X7R, 50V, 10%	191470-103	
C9102	0.10uF, 0603, 16V, 5%	258498-104	
C9200	0.10uF, 0603, 16V, 5%	258498-104	
C9201	10uF, EL, 85C, 16V, 20%	177902-100C	
C9202	0.10uF, 0603, 16V, 5%	258498-104	

ELECTRICAL PART LIST

Console Main PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C9203	220pF 0603, COG, 50V, 5%	188454-221	
C9204	220pF, 0603, COG, 50V, 5%	188454-221	
C9205	470pF, 0603, X7R, 50V, 10%	191470-471	
C9206	220pF, 0603, COG, 50V, 5%	188454-221	
C9207	220pF, 0603, COG, 50V, 5%	188454-221	
C9208	470pF, 0603, X7R, 50V, 10%	191470-471	

Inductors

Reference Designator	Description	Part Number	Note
L1	INDUCTOR, 300uH	180504	
L17	INDUCTOR, 300uH	180504	
L5000	CERAMIC, 1812, 5%, 1.0uH	263452-1R0J	
L5001	CERAMIC, 1812, 5%, 1.0uH	263452-1R0J	
L5002	CERAMIC, 1812, 5%, 1.0uH	263452-1R0J	
L5003	CERAMIC, 1812, 5%, 1.0uH	263452-1R0J	
L5004	CERAMIC, 1812, 5%, 1.0uH	263452-1R0J	
L5005	CERAMIC, 1812, 5%, 1.0uH	263452-1R0J	

Ferrite Beads

Reference Designator	Description	Part Number	Note
FB6200	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	
FB7000	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	
FB7001	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	
FB7002	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	
FB7250	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	
FB7251	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	
FB7252	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	
FB7253	BEAD, FERRITE, 0805, 1.5A, 330 OHM	267539-331	

Diodes

Reference Designator	Description	Part Number	Note
D1	SCHOTTKY, 40V, 3A, SMB	193847-001	
D17	SCHOTTKY, 40V, 3A, SMB	193847-001	
D4000	DUAL, SOT-23, BAV99	147239	
D4202	DUAL, SOT-23, BAV99	147239	
D5000	DUAL, SOT-23, BAV99	147239	
D5001	DUAL, SOT-23, BAV99	147239	
D5002	DUAL, SOT-23, BAV99	147239	
D5003	DUAL, SOT-23, BAV99	147239	
D6302	DUAL, SOT-23, BAV99	147239	
D6500	DUAL, SOT-23, BAV99	147239	
D6701	DUAL, SOT-23, BAV99	147239	

ELECTRICAL PART LIST

Console Main PCB Assembly

Diodes (continued)

Reference Designator	Description	Part Number	Note
D6702	DUAL, SOT-23, BAV99	147239	
D6703	DUAL, SOT-23, BAV99	147239	
D6704	DUAL, SOT-23, BAV99	147239	
D6705	DUAL, SOT-23, BAV99	147239	
D6800	DUAL, SOT-23, BAV99	147239	
D6801	DUAL, SOT-23, BAV99	147239	
D7000	DUAL, SOT-23, BAV99	147239	
D7001	DUAL, SOT-23, BAV99	147239	
D8000	DUAL, SOT-23, BAV99	147239	
D8001	DUAL, SOT-23, BAV99	147239	
D8002	DUAL, SOT-23, BAV99	147239	
D8600	DUAL, SOT-23, BAV99	147239	

Transistors

Reference Designator	Description	Part Number	Note
Q1	SENSOR, IR, SMT	270841-001	
Q2	BPLR, P, 40V, 200mA, SOT23	148596	
Q3	BPLR, N, 50V, 100mA, SOT23	146817	
Q4	BPLR, P, 40V, 200mA, SOT23	148596	
Q5	BPLR, N, 40V, 200mA, SOT23	146819	
Q3200	BPLR, N, 50V, 100mA, SOT23	146817	
Q4000	BPLR, P, 40V, 200mA, SOT23	148596	
Q4201	P, 50V, 2SA1341	146818	
Q4202	BPLR, N, 4.7K, SOT23	192603	
Q4208	BPLR, P, 40V, 200mA, SOT23	148596	
Q4209	BPLR, P, 40V, 200mA, SOT23	148596	
Q5000	BPLR, N, 40V, 200mA, SOT23	146819	
Q6300	BPLR, N, 50V, 100mA, SOT23	146817	
Q6301	BPLR, N, 50V, 100mA, SOT23	146817	
Q6302	P, 50V, 2SA1341	146818	
Q6503	N, SOT-23, MMBT4403	260354-001	
Q6504	BPLR, N, 4.7K, SOT23	192603	
Q6802	BPLR, P, 40V, 200mA, SOT23	148596	
Q6803	BPLR, N, 40V, 200mA, SOT23	146819	
Q6804	BPLR, N, 40V, 200mA, SOT23	146819	
Q6805	BPLR, P, 40V, 200mA, SOT23	148596	
Q9100	BPLR, N, 40V, 200mA, SOT23	146819	
Q9101	BPLR, N, 40V, 200mA, SOT23	146819	
Q9102	BPLR, N, 40V, 200mA, SOT23	146819	

ELECTRICAL PART LIST

Console Main PCB Assembly

Integrated Circuits

Reference Designator	Description	Part Number	Note
VR1	VREG, POS, D2 PAK, LD1086, 3.3V	260638-33	
VR2	VREG, POS, D2 PAK, LD1086, 1.8V	260638-18	
U2	VOLT REG, 3.3V, 3.5A, SMPS	193846-001	
U3	COUNTER, BINARY, 8-BIT, TSSOP	256115-002	
U17	VOLT REG, 3.3V, 3.5A, SMPS	193846-001	
U19	9V VOLTAGE REGULATOR	258167-09	
U4000	AUDIO MATRIX, SO28	177984-2	
U6200	SDRAM, 128 MBIT, 166 MHZ	267336-001	
U6203	FLASH, 4 MBYTE, TSSOP	268889-001	
U6204	16 BIT BUS BUFFER, 74LCX16245	267613-001	
U6205	16 BIT BUS BUFFER, 74LCX16245	267613-001	
U6802	HEX BUFFER, CMOS	267619-001	
U7002	RESET, SC70	267095-001	
U7003	CS98200	266925-001	
U8001	S/PDIF RCVR, AK4112B	270223	
U8002	QUAD, SOIC	193858-004	
U8405	OP AMP, DUAL, HI CURRENT	256741-001	
U8406	QUAD OP AMP, TLO74D, SOIC	186112	
U9100	OP AMP, DUAL, HI CURRENT	256741-001	
U9200	DAC, 192 KHZ, 24 BIT, AK4382	267548-001	
U9201	OP AMP, DUAL, HI CURRENT	256741-001	

Miscellaneous

Reference Designator	Description	Part Number	Note
J1	CONN, SMT, LIF, 4 POS, SIDE	255130-004	
J2	CONN, SMT, LIF, 4 POS, SIDE	255130-004	
J3	CONN, SMT, LIF, 9 POS, SIDE	255130-009	
J100	CONN, 13-PIN SOCKET, R-ANGLE	270581-001	
J201	CONN, RCA BLOCK, W/GRND FLANGE	270583-001	
J202	CONN, DIN, 9 POS, SINGLE	269854-001	
J3200	CONN, HEADER, 40 PIN	256105-001	
J3202	CONN, HEADER, 4 POS	148591-04	
J6000	CONN, HEADER, 13 POS, TOP-ENTRY, SMT	253356-T13	
J6500	CONN, HEADER, 5 POS, TOP ENTRY, SMD	253356-T05	
J6700	CONN, HEADER, 9 POS, TOP ENTRY, SMD	253356-T09	
J8000	CONN, OPTICAL, JFJ2001	258421-001	
T8600	TRANSFORMER, PULSE	254185-001	
K5000	RELAY, FLAT, POLARIZED	267094-001	
K5001	RELAY, FLAT, POLARIZED	267094-001	
Y7000	CRYSTAL, 27 MHZ, 30 PPM, HC-49/U/S	256102-005	
Y8000	CRYSTAL, 11.2896 MHZ, HC49S, SMD	197225	
XJ1	SHIELD, SUPPORT, 13P, SQR, CONN	278839-001	

ELECTRICAL PART LIST

Console Tuner PCB Assembly

Resistors

Reference Designator	Description	Part Number	Note
R2000	1K, 0603, 1/10W, 5%	199403-102	
R2001	120 OHM, 0603, 1/10W, 5%	199403-121	
R2002	150 OHM, 0603, 1/10W, 5%	199403-151	
R2003	100K, 0603, 1/10W, 5%	199403-104	
R2004	47K, 0603, 1/10W, 5%	199403-473	
R2005	2.32K, 0603, 1/10W, 1%	191465-2321	
R2006	499 OHM, 0603, 1/10W, 1%	191465-4990	
R2007	2.32K, 0603, 1/10W, 1%	191465-2321	
R2008	330 OHM, 0603, 1/10W, 1%	191465-3300	
R2009	1.18K, 0603, 1/10W, 1%	191465-1181	
R2010	22 OHM, 0603, 1/10W, 5%	199403-220	
R2011	4.75K, 0603, 1/10W, 1%	191465-4751	
R2012	100 OHM, 0603, 1/10W, 5%	199403-101	
R2013	17.8K, 0603, 1/10W, 1%	191465-1782	
R2014	51 OHM, 0603, 1/10W, 5%	199403-510	
R2015	2.32K, 0603, 1/10W, 1%	191465-2321	
R2016	3.01K, 0603, 1/10W, 1%	191465-3011	
R2017	5.1K, 0603, 1/10W, 5%	199403-512	
R2018	5.1K, 0603, 1/10W, 5%	199403-512	
R2019	51 OHM, 0603, 1/10W, 5%	199403-510	
R2020	13K, 0603, 1/10W, 1%	191465-1302	
R2021	17.8K, 0603, 1/10W, 1%	191465-1782	
R2022	3.32K, 0603, 1/10W, 1%	191465-3321	
R2023	3.32K, 0603, 1/10W, 1%	191465-3321	
R2024	2.21K, 0603, 1/10W, 1%	191465-2211	
R2025	2.21K, 0603, 1/10W, 1%	191465-2211	
R2026	4.75K, 0603, 1/10W, 1%	191465-4751	
R2027	5.62K, 0603, 1/10W, 1%	191465-5621	
R2028	5.62K, 0603, 1/10W, 1%	191465-5621	
R2030	68.1K, 0603, 1/10W, 1%	191465-6812	
R2031	4.75K, 0603, 1/10W, 1%	191465-4751	
R2032	3.01K, 0603, 1/10W, 1%	191465-3011	
R2033	33.2K, 0603, 1/10W, 1%	191465-3322	
R2073	1K, 0603, 1/10W, 5%	199403-102	
R2074	1K, 0603, 1/10W, 5%	199403-102	
R2075	100 OHM, 0603, 1/10W, 5%	199403-101	
R2076	2.2K, 0603, 1/10W, 5%	199403-222	
R2077	6.81K, 0603, 1/10W, 1%	191465-6811	
R2078	3.01K, 0603, 1/10W, 1%	191465-3011	
R2079	2.0K, 0603, 1/10W, 5%	199403-202	
R2080	3.32K, 0603, 1/10W, 1%	191465-3321	
R2081	1K, 0603, 1/10W, 1%	191465-1001	
R2082	1K, 0603, 1/10W, 5%	199403-102	
R2083	51 OHM, 0603, 1/10W, 5%	199403-510	
R2084	1K, 0603, 1/10W, 1%	191465-1001	
R2085	3.32K, 0603, 1/10W, 1%	191465-3321	

ELECTRICAL PART LIST

Console Tuner PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R2090	100K, 0603, 1/10W, 5%	199403-104	
R2200	2.0K, 0603, 1/10W, 5%	199403-202	
R2201	2.0K, 0603, 1/10W, 5%	199403-202	
R2202	2.0K, 0603, 1/10W, 5%	199403-202	
R2203	2.0K, 0603, 1/10W, 5%	199403-202	
R7000	1.5K, 0603, 1/10W, 5%	199403-152	
R7001	1K, 0603, 1/10W, 5%	199403-102	
R7003	100 OHM, 0603, 1/10W, 5%	199403-101	
R7004	100 OHM, 0603, 1/10W, 5%	199403-101	
R7006	100 OHM, 0603, 1/10W, 5%	199403-101	
R7007	100 OHM, 0603, 1/10W, 5%	199403-101	
R7008	17.8K, 0603, 1/10W, 1%	191465-1782	
R7009	10K, 0603, 1/10W, 5%	199403-103	
R7011	2.21K, 0603, 1/10W, 1%	191465-2211	
R7012	2.21K, 0603, 1/10W, 1%	191465-2211	
R7013	100 OHM, 0603, 1/10W, 5%	199403-101	
R7014	100 OHM, 0603, 1/10W, 5%	199403-101	
R7015	100 OHM, 0603, 1/10W, 5%	199403-101	
R7016	100 OHM, 0603, 1/10W, 5%	199403-101	
R7017	100 OHM, 0603, 1/10W, 5%	199403-101	
R7018	51 OHM, 0603, 1/10W, 5%	199403-510	

Capacitors

Reference Designator	Description	Part Number	Note
C17	10uF, EL, 85C, 16V, 20%	177902-100C	
C28	10uF, EL, 85C, 16V, 20%	177902-100C	
C29	.047uF, 0805, X7R, 50V, 10%	133623-473	
C30	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2000	12pF, 0805, COG, 50V, 5%	133622-120	
C2001	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2002	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2003	9.1pF, 0603, COG, 50V	188454-9R1	
C2004	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2005	2.2uF, EL, 85C, 35V, 20%	177902-2R2V	
C2006	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2007	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2008	47uF, EL, 85C, 16V, 20%	177902-470C	
C2009	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2010	.47uF, 1206, X7R, 16V, 10%	181998-474	
C2011	47uF, EL, 85C, 16V, 20%	177902-470C	
C2012	1uF, EL, 85C, 50V, 20%	177902-010H	
C2013	180pF, 0603, COG, 50V	188454-181	
C2014	1uF, EL, 85C, 50V, 20%	177902-010H	
C2015	1uF, EL, 85C, 50V, 20%	177902-010H	
C2016	.47uF, EL, 85C, 50V, 20%	177902-R47H	

ELECTRICAL PART LIST

Console Tuner PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C2017	22uF, EL, 85C, 16V, 20%	177902-220C	
C2018	560pF, 0603, X7R, 50V, 10%	191470-561	
C2019	47uF, EL, 85C, 16V, 20%	177902-470C	
C2020	.01uF, 0603, X7R, 50V, 10%	191470-103	
C2021	10uF, EL, 85C, 16V, 20%	177902-100C	
C2022	10uF, EL, 85C, 16V, 20%	177902-100C	
C2023	10uF, EL, 85C, 16V, 20%	177902-100C	
C2024	.047uF, 0805, X7R, 50V, 10%	133623-473	
C2025	3.3uF, EL, 85C, 35V, 20%	177902-3R3V	
C2026	.047uF, 0603, X7R, 25V, 5%, 10%	196999-473	
C2027	.047uF, 0603, X7R, 25V, 5%, 10%	196999-473	
C2073	.047uF, 0603, X7R, 25V, 5%, 10%	196999-473	
C2094	100uF, EL, 85C, 16V, 20%	177902-101C	
C2095	.047uF, 0603, X7R, 25V, 5%	196999-473	
C2096	2.2uF, EL, BP, 85C, 50V, 20%	147522-2R2	
C2097	.01uF, 0603, X7R, 50V, 10%	191470-103	
C2098	1000pF, 0603, X7R, 50V, 10%	191470-102	
C2099	1000pF, 0603, X7R, 50V, 10%	191470-102	
C2100	.047uF, 0603, X7R, 25V, 5%	196999-473	
C2200	100pF, 0603, COG, 50V, 5%	188454-101	
C7000	.047uF, 0805, X7R, 50V, 10%	133623-473	
C7001	1000pF, 0603, X7R, 50V, 10%	191470-102	
C7002	47pF, 0603, COG, 50V, 5%	188454-470	
C7003	.047uF, 0603, X7R, 25V, 5%	196999-473	
C7004	47pF, 0603, COG, 50V, 5%	188454-470	
C7006	.047uF, 0603, X7R, 25V, 5%	196999-473	
C7007	10uF, EL, 85C, 16V, 20%	177902-100C	

Inductors

Reference Designator	Description	Part Number	Note
L2000	INDUCTOR, AXONALR, 1000uH, 40A	260363-102	
L7000	INDUCTOR, 0805, 470nH	191469-471J	

Diodes

Reference Designator	Description	Part Number	Note
D2075	DUAL, SOT-23, BAV99	147239	

ELECTRICAL PART LIST

Console Tuner PCB Assembly

Transistors

Reference Designator	Description	Part Number	Note
Q2000	P, 50V, 2SA1341	146818	
Q2001	BPLR, N, 25V, 30MA, SOT-23	187601-001	
Q2002	JFET, N, 20V, 20mA, TO-92	148590-E	
Q2073	BPLR, N, 40V, 200mA, SOT23	146819	
Q7000	P, 50V, 2SA1341	146818	
Q7001	BPLR, N, 50V, 100mA, SOT23	146817	

Integrated Circuits

Reference Designator	Description	Part Number	Note
U18	VOLT REG, SMD, POS, SOT89, +10V	258167-10	
U19	VOLT REG, SMD, POS, SOT89, +5V	258167-05	
U2000	AM/FM TUNER, MFP-30S	254561-001	
U2074	PLL FREQ SYNTH, MFP-24	199693	
U7000	EEPROM, SO-8, 24C01A	184044	
U7001	MICRO, ST72324, TQFP, 32K, FLASH	268457-001	

Miscellaneous

Reference Designator	Description	Part Number	Note
J1	CONN, HEADER, 13P, TOP-ENTRY, SMT	253356-T13	
J2000	CONN, AM ANTENNA	179266	
J2001	CONNECTOR, FM, SHIELDED, US	258434-001	
FM-TNR2000	TUNER, FM	258513-001	
SHLD-TNR20	SHIELD, FENCE, TUNER	256743	
T2000	TUNER, AM, FRONT END	195359	
T2001	FILTER, AM-IF, QUINTIPLE TUNED	254114-001	
T2002	DETECTOR, FM SINGLE TUNED	254564-001	
CF2000	FILTER, CER, BANDPASS, FGD, 280 KHZ	253037-002	
CF2001	FILTER, CER, BANDPASS, FGD, 220 KHZ	253037-001	
Y7000	XTAL, 14.4 MHZ, 30PF, HC49S, SMD	267620-005	

ELECTRICAL PART LIST

Bass Module DSP/Amplifier PCB Assembly

Resistors

Reference Designator	Description	Part Number	Note
R8	1.00K, 0805, 1/10W, 5%	133626-1025	
R9	3.30K, 0805, 1/10W, 5%	133626-3325	
R10	10.0K, 0805, 1/10W, 5%	133626-1035	
R12	1.00K, 0805, 1/10W, 5%	133626-1025	
R13	20.0K, 0805, 1/10W, 5%	133626-2035	
R14	1.69K, 0603, 1/10W, 1%	191465-1691	
R15	3.32K, 0603, 1/10W, 1%	191465-3321	
R16	49.9K, 0603, 1/10W, 1%	191465-4992	
R17	10K, 0603, 1/10W, 1%	191465-1002	
R18	100K, 0603, 1/10W, 5%	199403-104	
R19	56K, 0603, 1/10W, 5%	199403-563	
R20	10.0K, 0805, 1/10W, 5%	133626-1035	
R21	240K, 0603, 1/10W, 5%	199403-244	
R22	33.0K, 0805, 1/10W, 5%	133626-3335	
R23	10 OHM, 2512, 1W, 5%	181895-10R0	
R24	1 MEG, 1206, 1/4W, 5%	124895-1055	
R25	1 MEG, 1206, 1/4W, 5%	124895-1055	
R26	1 MEG, 1206, 1/4W, 5%	124895-1055	
R150	3.9K, ARRAY, SMT, 4 POS, 5%	186433-3924	
R151	7.87K, 0603, 1/10W, 1%	191465-7871	
R152	7.87K, 0603, 1/10W, 1%	191465-7871	
R162	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R163	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R164	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R165	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R250	3.9K, ARRAY, SMT, 4 POS, 5%	186433-3924	
R251	7.87K, 0603, 1/10W, 1%	191465-7871	
R252	7.87K, 0603, 1/10W, 1%	191465-7871	
R262	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R263	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R264	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R265	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R350	3.9K, ARRAY, SMT, 4 POS, 5%	186433-3924	
R351	7.87K, 0603, 1/10W, 1%	191465-7871	
R362	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R363	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R364	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R365	3.32 OHM, 0603, 1/10W, 1%	191465-3R32	
R450	15K, 0603, 1/10W, 5%	199403-153	
R451	47K, 0603, 1/10W, 5%	199403-473	
R452	4.7K, 0603, 1/10W, 5%	199403-472	
R453	1.69K, 0603, 1/10W, 1%	191465-1691	
R454	4.7K, 0603, 1/10W, 5%	199403-472	
R455	1.21K, 0603, 1/10W, 1%	191465-1211	
R456	240K, 0603, 1/10W, 5%	199403-244	
R457	240K, 0603, 1/10W, 5%	199403-244	

ELECTRICAL PART LIST

Bass Module DSP/Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R1001	510 OHM, ARRAY, SMT, 4 POS, 5%	186433-5114	
R1005	510 OHM, ARRAY, SMT, 4 POS, 5%	186433-5114	
R4200	4.7K, 0603, 1/10W, 5%	199403-472	
R4201	75 OHM, 0603, 1/10W, 5%	199403-750	
R4202	75 OHM, 0603, 1/10W, 5%	199403-750	
R4203	75 OHM, 0603, 1/10W, 5%	199403-750	
R4204	10K, 0603, 1/10W, 5%	199403-103	
R4300	1.8K, ARRAY, SMT, 4 POS, 5%	186433-1824	
R4301	1.8K, ARRAY, SMT, 4 POS, 5%	186433-1824	
R4302	1.8K, ARRAY, SMT, 4 POS, 5%	186433-1824	
R4500	100 OHM, 0603, 1/10W, 5%	199403-101	
R4501	100 OHM, 0603, 1/10W, 5%	199403-101	
R4503	100 OHM, 0603, 1/10W, 5%	199403-101	
R4505	100 OHM, 0603, 1/10W, 5%	199403-101	
R4600	1.21K, 0603, 1/10W, 1%	191465-1211	
R4602	47K, 0603, 1/10W, 5%	199403-473	
R4603	47K, 0603, 1/10W, 5%	199403-473	
R4604	47K, 0603, 1/10W, 5%	199403-473	
R4700	4.7K, 0603, 1/10W, 5%	199403-472	
R4701	75 OHM, 0603, 1/10W, 5%	199403-750	
R6000	3.3K, 0603, 1/10W, 5%	199403-332	
R6001	1.00K, 0805, 1/10W, 5%	133626-1025	
R6100	2.0K, 0603, 1/10W, 5%	199403-202	
R6101	10K, 0603, 1/10W, 5%	199403-103	
R6102	2.7K, 0603, 1/10W, 5%	199403-272	
R6103	300 OHM, 0603, 1/10W, 5%	199403-301	
R6104	75 OHM, 0603, 1/10W, 5%	199403-750	
R6105	75 OHM, 0603, 1/10W, 5%	199403-750	
R6500	330 OHM, 0603, 1/10W, 5%	199403-331	
R6502	1K, 0603, 1/10W, 5%	199403-102	
R7000	470 OHM, 0603, 1/10W, 5%	199403-471	
R7001	22 OHM, 0603, 1/10W, 5%	199403-220	
R7100	75 OHM, 0603, 1/10W,,5%	199403-750	
R7102	4.7K, 0603, 1/10W, 5%	199403-472	
R7103	4.7K, 0603, 1/10W, 5%	199403-472	
R7104	75 OHM, 0603, 1/10W, 5%	199403-750	
R7105	75 OHM, 0603, 1/10W, 5%	199403-750	
R7106	75 OHM, 0603, 1/10W, 5%	199403-750	
R7107	2.0K, 0603, 1/10W, 5%	199403-202	
R7108	75 OHM, 0603, 1/10W, 5%	199403-750	
R7109	75 OHM, 0603, 1/10W, 5%	199403-750	
R7110	75 OHM, 0603, 1/10W, 5%	199403-750	
R7111	75 OHM, 0603, 1/10W, 5%	199403-750	
R7112	75 OHM, 0603, 1/10W, 5%	199403-750	
R7113	75 OHM, 0603, 1/10W, 5%	199403-750	
R7114	75 OHM, 0603, 1/10W, 5%	199403-750	

ELECTRICAL PART LIST

Bass Module DSP/Amplifier PCB Assembly

Resistors (continued)

Reference Designator	Description	Part Number	Note
R7200	100K, 0603, 1/10W, 5%	199403-104	
R7201	10K, 0603, 1/10W, 5%	199403-103	
R7202	4.7K, 0603, 1/10W, 5%	199403-472	
R7203	4.7K, 0603, 1/10W, 5%	199403-472	
R7204	47 OHM, 0603, 1/10W, 5%	199403-470	
R7205	1M, 0603, 1/10W, 5%	199403-105	
R7206	10K, 0603, 1/10W, 5%	199403-103	
R7207	4.7K, 0603, 1/10W, 5%	199403-472	

Capacitors

Reference Designator	Description	Part Number	Note
C21	4700pF, 0603, X7R, 50V, 10%	191470-472	
C22	15000uF, EL, 105C, 25V, 20%	261614-153EB3	
C24	.022uF, 0603, X7R, 50V, 10%	191470-223	
C26	.047uF, 0805, X7R, 50V, 10%	133623-473	
C27	.047uF, 0805, X7R, 50V, 10%	133623-473	
C28	.047uF, 0805, X7R, 50V, 10%	133623-473	
C29	.047uF, 0805, X7R, 50V, 10%	133623-473	
C30	220uF, EL, SMD, 105C, 10V, 20%	256772-221A	
C31	220uF, EL, SMD, 105C, 10V, 20%	256772-221A	
C32	47uF, EL, SMD, 105C, 35V, 20%	255071-470V	
C33	1000pF, 0603, X7R, 50V, 10%	191470-102	
C34	.015uF, 0603, X7R, 50V, 10%	191470-153	
C35	.22uF, TANT, 35V, 20%, ASIZE	196981-V224A2	
C36	.1uF, 1206, X7R, 25V, 5%	131754-104	
C37	.01uF, 0603, X7R, 50V, 10%	191470-103	
C38	.047uF, 0603, X7R, 50V, 10%	191470-473	
C39	.047uF, 0603, X7R, 50V, 10%	191470-473	
C40	150pF, 0603, COG, 50V, 5%	188454-151	
C41	.047uF, 0603, X7R, 50V, 10%	191470-473	
C42	2.2uF, TANT, 10V, 20%, ASIZE	196981-A225A2	
C43	4700pF, 0603, X7R, 50V, 10%	191470-472	
C44	.047uF, 0603, X7R, 50V, 10%	191470-473	
C46	4700pF, 0603, X7R, 50V, 10%	191470-472	
C47	3300pF, 0805, X7R, 50V, 10%	133623-332	
C48	1.0uF, 1206, X7R, 25V, 15%	262063-105	
C49	1.0uF, 1206, X7R, 25V, 15%	262063-105	
C52	1.0uF, 1206, X7R, 25V, 15%	262063-105	
C53	1000pF, 0603, X7R, 50V, 10%	191470-102	
C56	47pF, 0603, COG, 50V, 5%	188454-470	
C57	47pF, 0603, COG, 50V, 5%	188454-470	
C58	470pF, 0603, X7R, 50V, 10%	191470-471	
C59	470pF, 0603, X7R, 50V, 10%	191470-471	
C60	470pF, 0603, X7R, 50V, 10%	191470-471	
C61	470pF, 0603, X7R, 50V, 10%	191470-471	

ELECTRICAL PART LIST

Bass Module DSP/Amplifier PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C62	2.2uF, FILM, 100V, 10%	260333-225A	
C150	100uF, EL, 85C, 25V, 20%	177902-101E	
C151	.047uF, 0805, X7R, 50V, 10%	133623-473	
C152	.01uF, 0603, X7R, 50V, 10%	191470-103	
C153	.01uF, 0603, X7R, 50V, 10%	191470-103	
C154	.01uF, 0603, X7R, 50V, 10%	191470-103	
C155	.01uF, 0603, X7R, 50V, 10%	191470-103	
C156	1uF, EL, 85C, 50V, 20%	177902-010H	
C157	1uF, EL, 85C, 50V, 20%	177902-010H	
C158	1000pF, 0805, COG, 50V, 5%	133622-102	
C159	1uF, EL, 85C, 50V, 20%	177902-010H	
C160	1uF, EL, 85C, 50V, 20%	177902-010H	
C161	1000pF, 0805, COG, 50V, 5%	133622-102	
C250	100uF, EL, 85C, 25V, 20%	177902-101E	
C251	.047uF, 0805, X7R, 50V, 10%	133623-473	
C252	.01uF, 0603, X7R, 50V, 10%	191470-103	
C253	.01uF, 0603, X7R, 50V, 10%	191470-103	
C254	.01uF, 0603, X7R, 50V, 10%	191470-103	
C255	.01uF, 0603, X7R, 50V, 10%	191470-103	
C256	1uF, EL, 85C, 50V, 20%	177902-010H	
C257	1uF, EL, 85C, 50V, 20%	177902-010H	
C258	1000pF, 0805, COG, 50V, 5%	133622-102	
C259	1uF, EL, 85C, 50V, 20%	177902-010H	
C260	1uF, EL, 85C, 50V, 20%	177902-010H	
C261	1000pF, 0805, COG, 50V, 5%	133622-102	
C350	100uF, EL, 85C, 25V, 20%	177902-101E	
C351	.047uF, 0805, X7R, 50V, 10%	133623-473	
C352	.01uF, 0603, X7R, 50V, 10%	191470-103	
C353	.01uF, 0603, X7R, 50V, 10%	191470-103	
C354	.01uF, 0603, X7R, 50V, 10%	191470-103	
C355	.01uF, 0603, X7R, 50V, 10%	191470-103	
C356	1uF, EL, 85C, 50V, 20%	177902-010H	
C357	1uF, EL, 85C, 50V, 20%	177902-010H	
C358	1000pF, 0805, COG, 50V, 5%	133622-102	
C359	4700pF, 0603, X7R, 50V, 10%	191470-472	
C360	470pF, 0603, COG, 50V, 5%	188454-471	
C361	470pF, 0603, COG, 50V, 5%	188454-471	
C362	470pF, 0603, COG, 50V, 5%	188454-471	
C363	470pF, 0603, COG, 50V, 5%	188454-471	
C364	1000pF, 0805, COG, 50V, 5%	133622-102	
C365	.047uF, 0603, X7R, 50V, 10%	191470-473	
C1000	1000pF, 0603, X7R, 50V, 10%	191470-102	
C1001	1000pF, 0603, X7R, 50V, 10%	191470-102	
C1002	1000pF, 0603, X7R, 50V, 10%	191470-102	
C1003	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4000	22uF, EL, 85C, 16V, 20%	177902-220C	

ELECTRICAL PART LIST

Bass Module DSP/Amplifier PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C4001	.047uF, 0603, X7R, 50V, 10%	191470-473	
C4002	.047uF, 0603, X7R, 50V, 10%	191470-473	
C4003	.047uF, 0603, X7R, 50V, 10%	191470-473	
C4104	2200pF, 0603, X7R, 50V, 10%	191470-222	
C4105	2200pF, 0603, X7R, 50V, 10%	191470-222	
C4200	10uF, EL, 85C, 16V, 20%	177902-100C	
C4300	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4301	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4302	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4303	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4304	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4306	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4307	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4308	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4308	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4309	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4309	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4310	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4310	1000pF, 0603, X7R, 50V, 10%	191470-102	
C4400	.047uF, 0603, X7R, 50V, 10%	191470-473	
C4401	.047uF, 0603, X7R, 50V, 10%	191470-473	
C4500	68pF, 0603, COG, 50V, 5%	188454-680	
C4501	68pF, 0603, COG, 50V, 5%	188454-680	
C4600	.047uF, 0603, X7R, 25V, 5%	196999-473	
C4601	4700pF, 0603, X7R, 50V, 10%	191470-472	
C4602	.047uF, 0603, X7R, 25V, 5%	196999-473	
C6000	.047uF, 0603, X7R, 50V, 10%	191470-473	
C6100	.047uF, 0603, X7R, 50V, 10%	191470-473	
C6101	4700pF, 0603, X7R, 50V, 10%	191470-472	
C6102	1000pF, 0603, X7R, 50V, 10%	191470-102	
C6105	820pF, 0603, X7R, 50V, 10%	191470-821	
C6500	4700pF, 0603, X7R, 50V, 10%	191470-472	
C7000	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7001	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7002	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7003	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7004	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7005	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7006	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7007	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7008	22pF, 0603, COG, 50V, 5%	188454-220	
C7009	22pF, 0603, COG, 50V, 5%	188454-220	
C7011	150pF, 0603, COG, 50V, 5%	188454-151	
C7012	150pF, 0603, COG, 50V, 5%	188454-151	
C7108	4700pF, 0603, X7R, 50V, 10%	191470-472	
C7109	4700pF, 0603, X7R, 50V, 10%	191470-472	

ELECTRICAL PART LIST

Bass Module DSP/Amplifier PCB Assembly

Capacitors (continued)

Reference Designator	Description	Part Number	Note
C7110	.4700pF, 0603, X7R, 50V, 10%	191470-472	
C7111	.47pF, 0603, COG, 50V, 5%	188454-470	
C7114	.4700pF, 0603, X7R, 50V, 10%	191470-472	
C7115	.01uF, 0603, X7R, 50V, 10%	191470-103	
C7116	.01uF, 0603, X7R, 50V, 10%	191470-103	
C7200	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7300	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7301	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7302	.047uF, 0603, X7R, 50V, 10%	191470-473	
C7303	.047uF, 0603, X7R, 50V, 10%	191470-473	

Inductors / Ferrite Beads

Reference Designator	Description	Part Number	Note
L70	INDUCTOR, SMD, 20%, 100uH	256773-101	
FB50	INDUCTOR, CHIP, 0805, 400 OHM	188587-401	
FB70	BEAD, FERRITE, CHIP, 1806	256116-181	
FB4000	INDUCTOR, CHIP, 0805, 400 OHM	188587-401	

Diodes

Reference Designator	Description	Part Number	Note
D7	SMD, 10A, 200V, S10D	256405-200	
D8	SMD, 10A, 200V, S10D	256405-200	
D9	SMD, 10A, 200V, S10D	256405-200	
D10	SMD, 10A, 200V, S10D	256405-200	
D11	SCHOTTKY, 40V, 3A, SMB	193847-001	
D13	DUAL, SOT-23, BAV99	147239	
D14	SMD, 10A, 200V, S10D	256405-200	
D15	DUAL, SOT-23, BAW56	180738	
D450	ZEN, 5.1V, 225 MW, 5%, SOT-23	135247-5231	
D4502	DUAL, SOT-23, BAV99	147239	
D4503	DUAL, SOT-23, BAV99	147239	
DS6500	LED, SMD, GREEN	256781-002	
ZR1	ZENER, SOD-123, .5W, 5%, 13V	174265-5243	

ELECTRICAL PART LIST

Bass Module DSP/Amplifier PCB Assembly

Transistors

Reference Designator	Description	Part Number	Note
Q2	BPLR, N, 40V, 200mA, SOT23	146819	
Q3	BPLR, N, 40V, 200mA, SOT23	146819	
Q4	MOSFET, P, 60V, 17A, TO-220	271765-001	
Q5	BPLR, N, 40V, 200mA, SOT23	146819	
Q450	BPLR, N, 50V, 100mA, SOT23	146817	
Q451	BPLR, N, 50V, 100mA, SOT23	146817	
Q452	BPLR, PNP, 500MA, SOT23	189290-001	
Q6100	BPLR, N, 40V, 200mA, SOT23	146819	
Q6101	BPLR, N, 50V, 100mA, SOT23	146817	
Q7200	BPLR, N, 50V, 100mA, SOT23	146817	

Integrated Circuits

Reference Designator	Description	Part Number	Note
U100	VOLT REG, 3.3V, 1.5A	254196-001	
U101	VOLTAGE, REGULATOR, 3.3V	256094-03R3	
U150	POWER AMP, PSO-20, TDA8566TH	257975	
U250	POWER AMP, PSO-20, TDA8566TH	257975	
U350	POWER AMP, PSO-20, TDA8566TH	257975	
U4000	CODEC, 24-BIT, CS4228A-KS-TS	254192-003	
U4000	PAD, THERMAL, COMPLIANT	266954-001	
U4400	RCVR, DIG AUD, CS8415A, TSSOP	267616-002	
U6000	RESET, 3.3V, SOT23, 5-PIN	256123-001	
U6100	INVERTER, 5V, 74VCHU04	258464-004	
U7000	DSP, QFP 208, ADSP21065LKS_264	254191-003	
U7200	PROM, FLASH, 4 MBIT	260332-001	
U7300	SDRAM, 64 MBIT,2Mx32, 3.3V	254182-010	

Miscellaneous

Reference Designator	Description	Part Number	Note
F1	FUSE, 125V, 4A, SLO-BLO	273504-004000	 ³
RT1	PTC, TEMP SENSE, 16V, 125C, 20%	258497-125	 ³
T1	CHOKE, COMMON MODE, SMDH	276389-001	
Y7000	CRYSTAL, 33.333 MHZ, FUND, HC-49, SMD	266953-001	
J5	CONN, HEADER, INLINE, PCB MNT, 2P	133220-02	
J150	CONN, HEADER, RTANG, 2.5 MM, 10 POS	145402-10	
J350	CONN, THRU BOARD, TH, 4 POS	266952-04	
J7100	CONN, HEADER, 2.5 MM, THRU, 16 POS	270584-016	
SHLD1	SHIELD, FENCE	268777-001	
-	SHIELD, TOP, 0.3 THICK, W/O DIMPLE	268778-002	
-	SHIELD, BTM, 0.3 THICK	268781-001	

ELECTRICAL PART LIST

Bass Module Input/Output PCB Assembly

Capacitors

Reference Designator	Description	Part Number	Note
C1	2.2uF, EL, 85C, 50V, 20%	149947-2R2H	
C3	2.2uF, EL, 85C, 50V, 20%	149947-2R2H	
C4	2.2uF, EL, 85C, 50V, 20%	149947-2R2H	
C5	2.2uF, EL, 85C, 50V, 20%	149947-2R2H	
C6	4700uF, EL, 105C, 50V, SNAP	261614-472HB3	
C8	.01uF, 0805, X7R, 50V, 10%	133623-103	
C9	.01uF, 0805, X7R, 50V, 10%	133623-103	
C10	2.2uF, EL, 85C, 50V, 20%	149947-2R2H	

Miscellaneous

Reference Designator	Description	Part Number	Note
F1	FUSE, 2.50 AMPS, AXIAL	269855-02500	 3
J1	AC CONNECTOR	273692-001	 3
J2	CONN, HEADER, 5 POS, 8mm (Dual Voltage only)	178742-5	 3
J3	CONN, 13-PIN SOCKET, R-ANGLE	270581-001	 3
XJ3	BRACKET, SUPPORT, 13P, SQR, CONN	271639-001	
J4	CONN, D-SUB, R/A, 9 PIN, SOCKET	260917-09	 3
J5	CONN, HEADER, LOCKING, TOP, KEYED (120V only)	271897-002	 3
J6	CONN, HEADER, 2.5 MM, THRU,16 POS	270584-016	 3
J7	CONN, HEADER, PC MNT, KEYED	271899-010	 3
S1	SWITCH, DPDT, SLIDE, 250VAC, 5A (Dual Voltage only)	273602-001	 3
-	SCREW, HILO, 4-16 x .375, PAN, XREC	181621-06	

DISASSEMBLY PROCEDURES

Console Procedures

1. Outer Bezel Removal

1.1 Remove the DVD drawer bezel. To do this, you will need to either apply power to the console and press the EJECT button, or use the manual DVD drawer eject function. This is done by placing a small screwdriver into the front of the slot located in the bottom of the bezel sub-assembly and rapidly moving the screwdriver toward the rear of the console. This will press in the built-in eject pin and cause the DVD drawer to open.

1.2 Gently unclip the DVD drawer bezel from the front of the DVD drawer and lift it off.

1.3 Close the DVD drawer.

IMPORTANT NOTE: If you close the drawer manually with no power applied, it will not latch properly. Once you have repaired the unit, make sure to apply power to the console and cycle the drawer open and closed to properly latch it in place before returning it to the customer. Failure to do this will cause the drive to be damaged in shipment.

1.4 On the bottom edge of the outer bezel assembly, lift the bezel edge away from the console slightly. Lift the top edge of the outer bezel assembly away from the console slightly. It should lift off and away from the console, revealing the button PCB, the IR PCB (located below the center of the button PCB) and the display PCB assembly.

2. Top Cover Removal

Re-assembly Note: When replacing the top cover, torque the top cover screws to no more than 5 inch/lbs. If you over-torque these screws, you will strip out the screw boss in the top cover.

2.1 Perform procedure 1.

2.2 Place the console onto a soft surface with the bottom facing upward. Using a Phillips-head screwdriver, remove the six screws that secure the top cover to the base.



DISASSEMBLY PROCEDURES

2.3 Grasp the console between the top and bottom of the unit, ensuring that you have a good grip on the unit, and carefully flip the console over onto its feet. Lift the top cover straight off.

3. Inner Bezel Sub-assembly Removal (includes Button PCB, IR Receiver PCB and Display PCB)

3.1 Perform procedure 2.

3.2 Unplug the inner bezel sub-assembly ribbon cables from J6500 and J6700 on the main PCB.

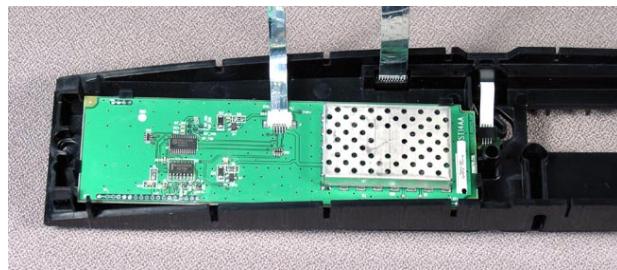
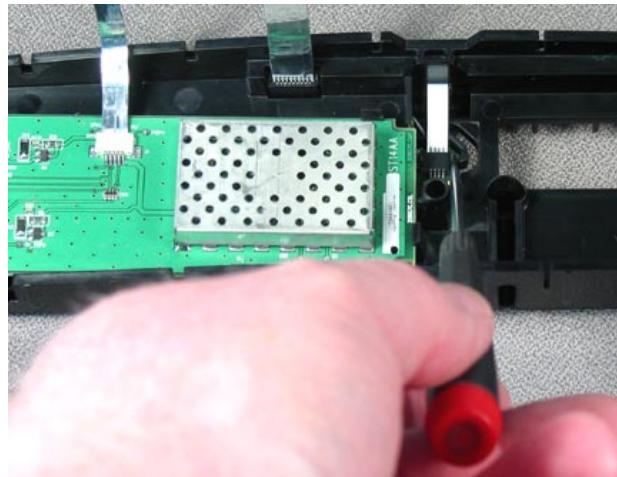
3.3 Using a Phillips-head screwdriver, remove the three screws that secure the bezel to the console. There is one screw at each end of the bezel and one in the center below the IR receiver.

3.4 Lift off the bezel. The button PCB, IR receiver PCB and display PCB will come off with the bezel.

3.5 The IR receiver PCB is connected to the button PCB by a ribbon cable. To remove it, unplug the ribbon cable at the button PCB end, and use a small flat-tip screwdriver to push back the small plastic arm that retains the PCB in the bezel. Lift out the PCB.

3.6 The button PCB is retained in the top of the bezel. To remove it, unplug the IR receiver PCB ribbon cable and the button PCB ribbon cable. Once the ribbon cable is unplugged, press upward on the ribbon cable connector on the underside of the bezel top edge. The button PCB should slide off of the bezel posts.

3.7 The display PCB assembly is located in the right side of the bezel. To remove it, lay the bezel face-down. Use a small flat-tip screwdriver to release the display PCB from the four retaining clips. Lift out the display PCB assembly. **Note:** The display PCB assembly is not repairable. You must replace it as an assembly if it is defective.



DISASSEMBLY PROCEDURES

4. Tuner PCB Removal

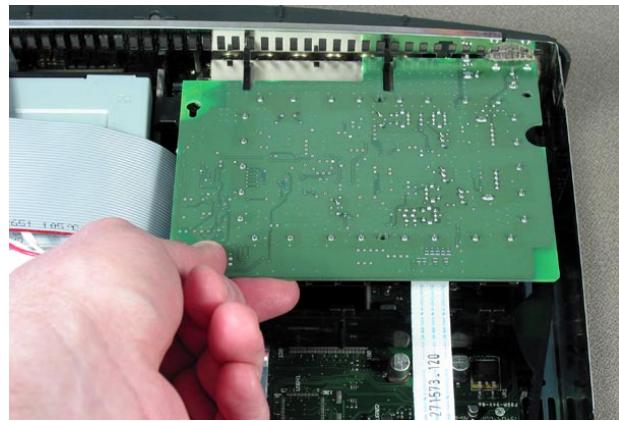
4.1 Perform procedure 2.

4.2 Lift up on the forward edge of the and slide it toward the front of the console until the PCB jacks clear the rear panel. Lift the PCB straight up.

4.3 Unplug the tuner PCB ribbon cable from J6000 on the main PCB.

Re-assembly Notes:

- Make sure that the RF gasket is in place on the FM antenna connector when re-installing the PCB assembly.
- Make sure that the FM RF connector is centered in the opening in the rear panel before tightening the top cover screws.



5. DVD/CD Drive Removal

5.1 Perform procedure 3.

5.2 Unplug the drive power cable from J3202 on the main PCB.

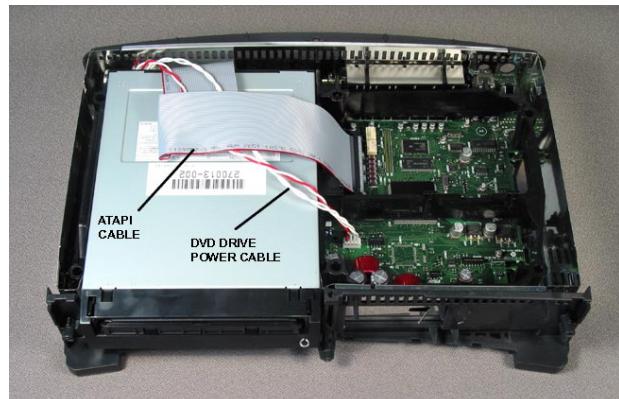
5.3 Unplug the ATAPI cable from J3200 on the main PCB.

5.4 Lift the drive and the drive mounting bracket out of the console.

Note: The drive mounting bracket is the plastic bracket that the drive is mounted to that also goes over the main PCB to support the tuner PCB.

5.5 Make a note of the distance the front of the drive overhangs the front edge of the bracket. You will need to align the new drive in the same way, within about 1/16" (2mm). Failure to do this will cause the DVD drive drawer bezel to not line up properly with the LCD display bezel on the front of the console when re-assembled.

5.6 Remove the four screws that secure the drive to the drive mounting bracket. Remove the DVD drawer eject pin from the manual eject hole in the front of the drive. Retain this pin for the new drive.



DISASSEMBLY PROCEDURES

Re-assembly Note: Be sure to install the DVD drawer eject pin into the manual eject hole in the front of the drive before re-installing the bezel assembly.

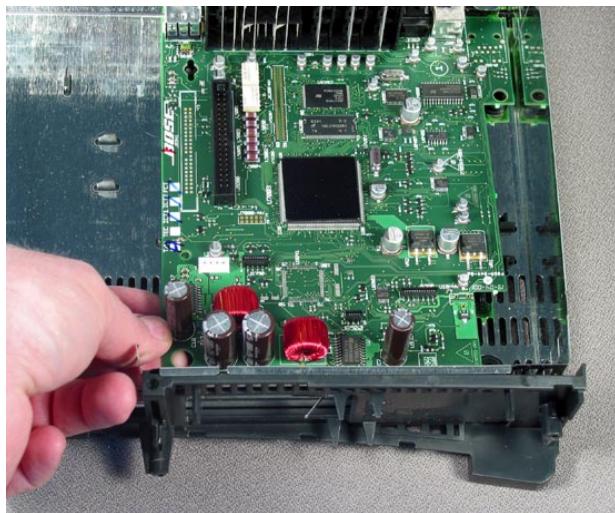
6. Main PCB Assembly Removal

6.1 Perform procedure 5.

6.2 Lift up the front edge of the main PCB assembly. Slide the PCB forward until the jacks clear the back panel. Lift out the PCB assembly.

Re-assembly Notes:

1. Make sure that the RF gasket is in place on top of the Bose Link connector when re-installing the PCB assembly.
2. When installing the main PCB, make sure it is over the locating pin at the front of the console.



Bass Module Procedures

1. Rear Enclosure Removal

1.1 Place the bass module on its side. Using a phillips-head screwdriver, remove the four screws that secure the rear enclosure to the bass module cabinet.

1.2 Lift the rear enclosure partially off of the bass module.

1.3 Unplug the transformer primary cable at J5 on the input/output PCB located on the back of the rear enclosure.

1.4 Unplug the two ribbon cables at J6 and J7 that run from the input/output PCB to the main PCB. Lift the rear enclosure away from the bass module cabinet.



2. Main PCB Removal

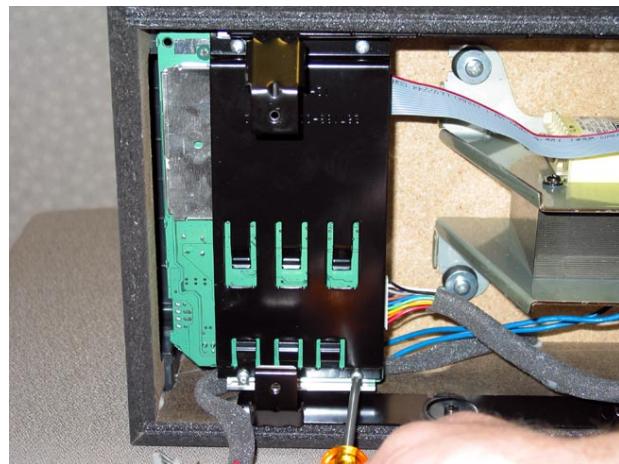
2.1 Perform procedure 1.

2.2 Unplug the woofer harness from the main PCB at J350. This harness plugs into the connector through the holes in the bottom of the main PCB.

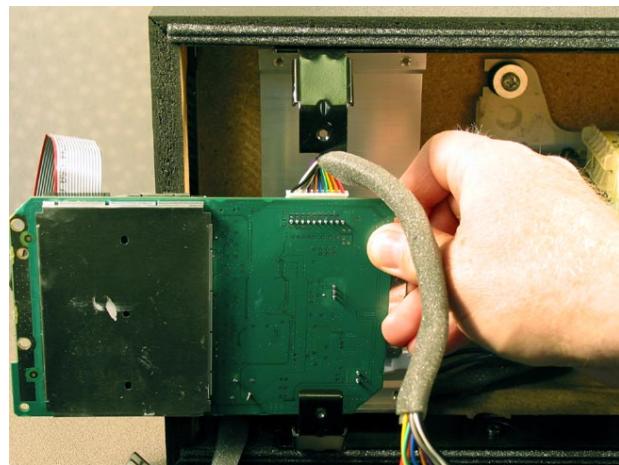


DISASSEMBLY PROCEDURES

2.3 Using a phillips-head screwdriver, remove the four screws that secure the heatsink bracket to the heatsink. Lift off the heatsink bracket.



2.4 Carefully lift the main PCB away from the heatsink. Unplug the power transformer secondary harness from the main PCB at J5. Rotate the main PCB clear of the cabinet until it is at about 90 degrees from the heatsink. At this point, you should be able to lift the PCB clear of the rear enclosure mounting brackets.



3. Power Transformer Removal

3.1 Perform procedure 2 to remove the amplifier/DSP PCB.

3.2 Using a phillips-head screwdriver, remove the four screws that secure the power transformer to the bass module cabinet.

3.3 Lift the power transformer out of the cabinet.

4. Input/Output Board Removal

4.1 Perform procedure 1 to remove the rear enclosure.

4.2 Using a phillips-head screwdriver, remove the two screws that secure the input/output board bracket to the rear enclosure. Lift off the bracket. Slide the input/output board out of the rear enclosure.



DISASSEMBLY PROCEDURES

Standard Satellite Array Procedures

Notes:

- The standard satellite arrays are non-repairable. These are the arrays that have the cloth grilles, and are physically larger than the Gemstone™ array.
- The only parts that can be replaced on the standard arrays are the grille and the nameplate. Refer to the photos at right for the following procedures.

1. Grille Removal

1.1 Wrap some masking tape around the shaft of a flat-tip screwdriver approximately 1/2" back from the end. This is needed to protect the plastic enclosure of the array.

1.2 Place the satellite array on its back on a bench. Use your thumb to press down on the array grille at the center of the curve near the side. At the same time, use the screwdriver to pry the end of the grille off of the array enclosure. Repeat this at the other end of the grille.

Re-Assembly Note: Align the grille so that the Bose® logo is facing the same direction as the arrows on the front of the array enclosure. Press the grille in place. It should latch to the enclosure at each end.

Gemstone Satellite Array Procedures

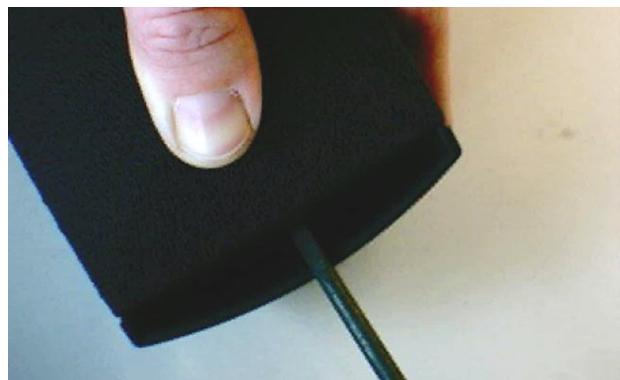
1. Grille Removal

1.1 Using a scribe or small flat-tip screwdriver, grasp the edge of the grille. Gently pull the grille away from the enclosure.

2. Driver Removal

2.1 Perform procedure 1.

2.2 Using a Phillips-head screwdriver, remove the four screws that secure the driver to the enclosure. Lift the driver out of the enclosure and cut the wires as close to the driver as possible.



TEST PROCEDURES

3•2•1 Series II Required Test Equipment and Cables

Note: In order to perform these tests you will need the bass module and the console, along with an IR remote control for the user interface tests. The bass module provides DC power to the console for all but the AM and FM tests, and also provides signal processing to the arrays.

1. Audio signal generator
2. Analog to S/PDIF converter
3. S/PDIF to optical converter
4. Abex test DVD (TDV-540A)
5. Video monitor
6. Composite video cable
7. S-video cable
8. Optical cable
9. Oscilloscope
10. Voltmeter
11. AM/FM signal generator
12. Model 3•2•1 Series II remote control, part number 270618-001
13. Test CDs as listed below or equivalent

Parameter	Nominal	Limit	Suggested Test Disc
Defect tracking (void)	1.0 mm	0.8 mm	Pierre Vernay, test CD #2
Defect tracking (black dot)	1.0 mm	0.8 mm	Abex test disc TCD-725R
Defect tracking (scratch)	1.6 mm	1.0 mm	Abex test disc TCD-721R
Defect tracking (fingerprint)	75 mm	65 mm	Abex test disc TCD-725R
Defect tracking (warped disc)	1.0 mm	0.7 mm	Abex test disc TCD-732RA
Defect tracking (eccentric disc)	210 mm	140 mm	Abex test disc TCD-714R

TEST PROCEDURES

1. Initial Product Test

Note: Before taking the unit apart or performing any repair process, an attempt to verify the customer complaint must be made.

1.1 Read any customer note included with the unit.

2. Verify Customer Complaint

2.1 Attempt to verify the customer complaint before opening the unit or performing any repairs. Customer complaint not verified, discuss with customer.

3. Check the software revision of the unit

Refer to the Bose® Service extranet web site at <http://serviceops.bose.com> for information regarding the latest software revision.

3.1 Console Software Revision

3.2 Console Variant Information

3.3 Bass Module Software Revision

3.4 Tuner PCB Sofware Revision

4. Verify Performance and all functions. Use the procedures below.

4.1 Tuner performance procedures

4.2 Input / Output performance procedures

4.3 CD / DVD performance procedures

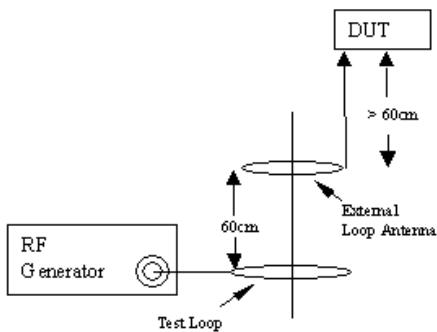
4.4 User Interface performance procedures

TEST PROCEDURES

AM Performance Tests

AM Tuner General Test Setup

Set up an AM loop antenna as shown.



Note: In order to perform these tests, you will need a test cable that allows the console to be powered up without the bass module attached. This cable connects to the 13 pin connector on the back of the media center. You will use this for the left and right audio outputs for these test procedures. Refer to the procedure on page 52 of this manual for information about building this cable.

1. AM Sensitivity Test

1.1 Set the RF generator output to 55 dBuV/M, 30% AM modulation, 1 kHz. Set the unit and the RF generator frequency to 1090 kHz.

1.2 Measure the output level at the left channel audio output. It should be between 70 and 320 mVrms at 1 kHz, with < 10% distortion.

2. AM Stop Level Test

2.1 Set the RF generator to 1080 kHz, AM modulation, 1 kHz, 30% modulation, 61 dBuV/M.

2.2 Place the unit into seek mode, and verify that it stops at 1080 kHz.

2.3 Switch the RF generator for a 51 dBuV/M field intensity and verify that the unit does not stop at 1080 kHz.

FM Performance Tests

Note: Make sure that the output impedance of the RF signal generator is matched to the console's 75 ohm FM antenna input impedance. If using a 50 to 75 ohm adapter, add the insertion loss (-5.7 dB) to the RF generator settings in the following tests.

3. FM Sensitivity Test

3.1 Set the RF generator to 98.1 MHz, 1 kHz mono modulation, pilot off, 75 kHz deviation, 20 dBf at the unit's FM antenna input.

3.2 Measure the distortion level at the right or left audio output. It should be $\leq 3.0\%$.

4. FM Stop Level Test

4.1 Set the RF generator to 98.7 MHz, 1 kHz mono modulation, pilot off, 75 kHz deviation, 38 dBf at the unit's FM antenna input.

4.2 Place the unit into seek mode and verify that it stops at 98.7 MHz.

4.3 Reduce the RF generator to 28 dBf.

4.4 Tune the unit to 98.1 MHz and place the unit into seek mode. Verify that the unit does not stop at 98.7 MHz.

TEST PROCEDURES

5. Inputs / Outputs Verification

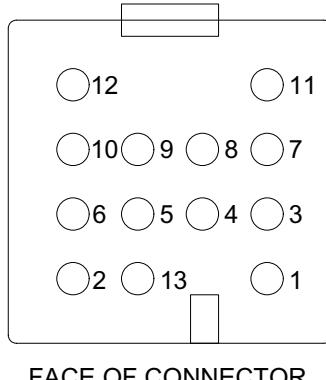
Test	Functional test for the...	Connect the media center...	To...	And select the media center source...	Listen/look for...
1	Analog audio inputs	AUX analog audio input...	An analog source...	AUX	A clean, undistorted audio output from the speakers
		CBL/SAT analog audio input...		CBL/SAT	
		TV analog audio input...		TV	
2	Digital (S/PDIF) and optical audio inputs	AUX digital audio input...	A digital (S/PDIF) source...	AUX	A clean, undistorted audio output from the speakers
		CBL/SAT digital audio input...		CBL/SAT	
		TV digital audio input...		TV	
		Optical input	The optical output of a source...	AUX	
3	S-video and composite video input	Composite video input...	To the composite video output of a source...	AUX	A clean, undistorted video output from the...
		S-video input...	To the S-video output of a source...		

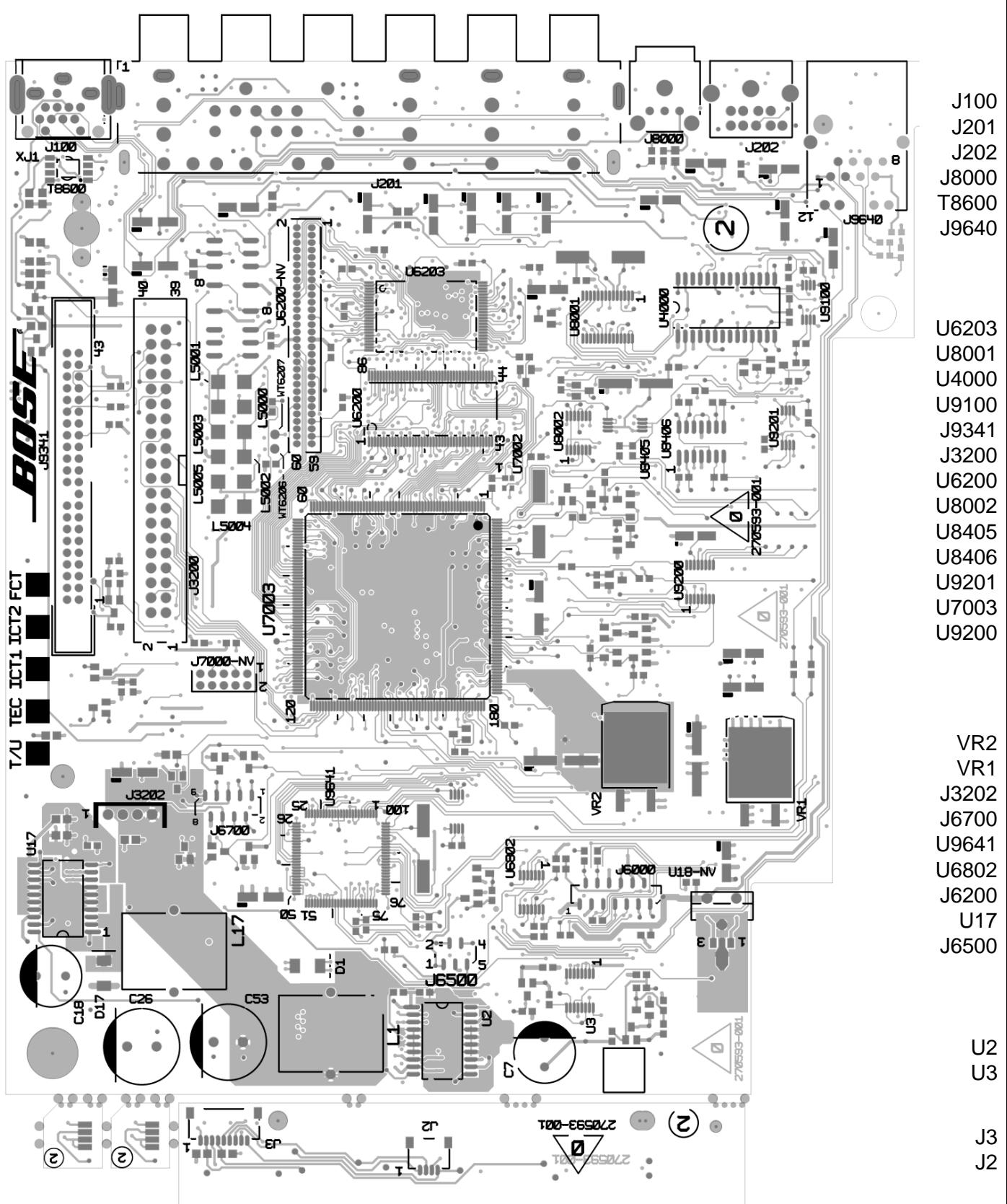
6. CD Performance Test

6.1 The media center should be able to play the test discs in the following table.

Parameter	Nominal	Limit	Suggested Test Disc
Defect tracking (void)	1.0 mm	0.8 mm	Pierre Vernay, test CD #2
Defect tracking (black dot)	1.0 mm	0.8 mm	Abex test disc TCD-725R
Defect tracking (scratch)	1.6 mm	1.0 mm	Abex test disc TCD-721R
Defect tracking (fingerprint)	75 mm	65 mm	Abex test disc TCD-725R
Defect tracking (warped disc)	1.0 mm	0.7 mm	Abex test disc TCD-732RA
Defect tracking (eccentric disc)	210 mm	140 mm	Abex test disc TCD-714R

TEST PROCEDURES

7. User Interface Tests	Console Test Cable Fabrication
<p>7.1 Press each button on the console control panel and ensure its operation.</p> <p>7.1.1 With the media center off, connect an external video source to the UUT's external video inputs. Verify that the video appears on the video monitor. Do this for both the composite and S-Video outputs on the media center.</p> <p>7.1.2 Press the POWER button on the console control panel. Ensure that the unit turns on.</p> <p>7.1.3 To ensure remote operation, select at least one function (i.e. FM/AM) and ensure the unit responds appropriately to the remote control.</p> <p>7.1.4 Press the VOLUME UP (+) and then the VOLUME DOWN (-) button on the console control panel. Ensure that the unit responds appropriately.</p> <p>7.1.5 With the radio tuned to a station, press and hold the ENTER button on the console control panel. The display shows PRESET # SET. Continue holding the ENTER button to save the preset.</p> <p>7.1.6 Press either SOURCE button. Ensure, with each press, that the display cycles through the various sources.</p> <p>7.1.7 Press the STOP/EJECT button. Ensure the DVD/CD drawer opens, and then press it once more to shut the drawer.</p> <p>7.1.8 Press the POWER button. Ensure that the unit shuts off.</p>	<p>Items Needed: 3•2•1 Series II cable, P/N: 269997-001 1 - Red center female RCA jack 1 - White center female RCA jack</p> <p>Procedures: Note: Refer to the diagram below for the pinout of the system cable thirteen pin connector.</p> <p>1. Cut one end off of the system cable, about 4 feet back from the connector.</p> <p>2. Using an Ohmmeter, determine which wires connect to pins 8 and 9 of the 13 pin connector. Strip the insulation from those wires and connect the white RCA jack, with pin 9 connected to the RCA jack's center pin and pin 8 connected to the shell. This will be the left audio output from the media center.</p> <p>3. Using an Ohmmeter, determine which wires connect to pins 10 and 12 of the thirteen pin connector. Strip the insulation from those wires and connect the red RCA jack, with pin 12 connected to the RCA jack's center pin and pin 10 connected to the shell. This will be the right audio output from the media center.</p> <p>4. Using an Ohmmeter, determine which wires connect to pins 1 and 2 of the thirteen pin connector. Strip the insulation from those wires. This will be the DC voltage input to the media center. To power the media center without having to connect to a bass module, connect pins 1 and 2 of the thirteen pin connector to a DC power supply capable of outputting 30 Vdc, 3A minimum. Connect the positive side of the power supply to pin 1, and the GND side to pin 2.</p> 



Note: The IR Receiver PCB and the Button PCB are part of the Main PCB above

Figure 7. Console Main PCB Layer 1 Topside Etch Layout Diagram

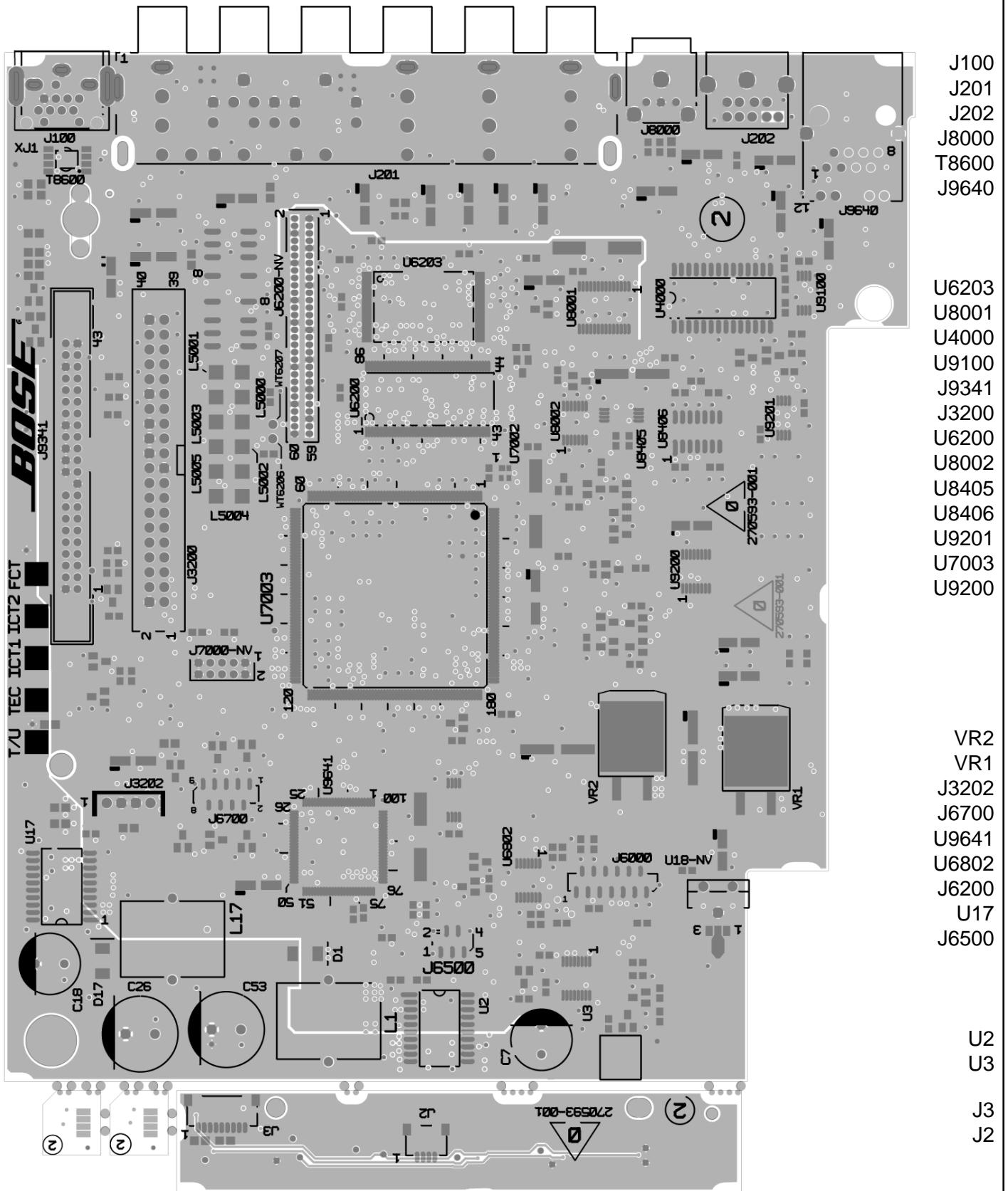


Figure 8. Console Main PCB Layer 2 Ground Plane Layout Diagram

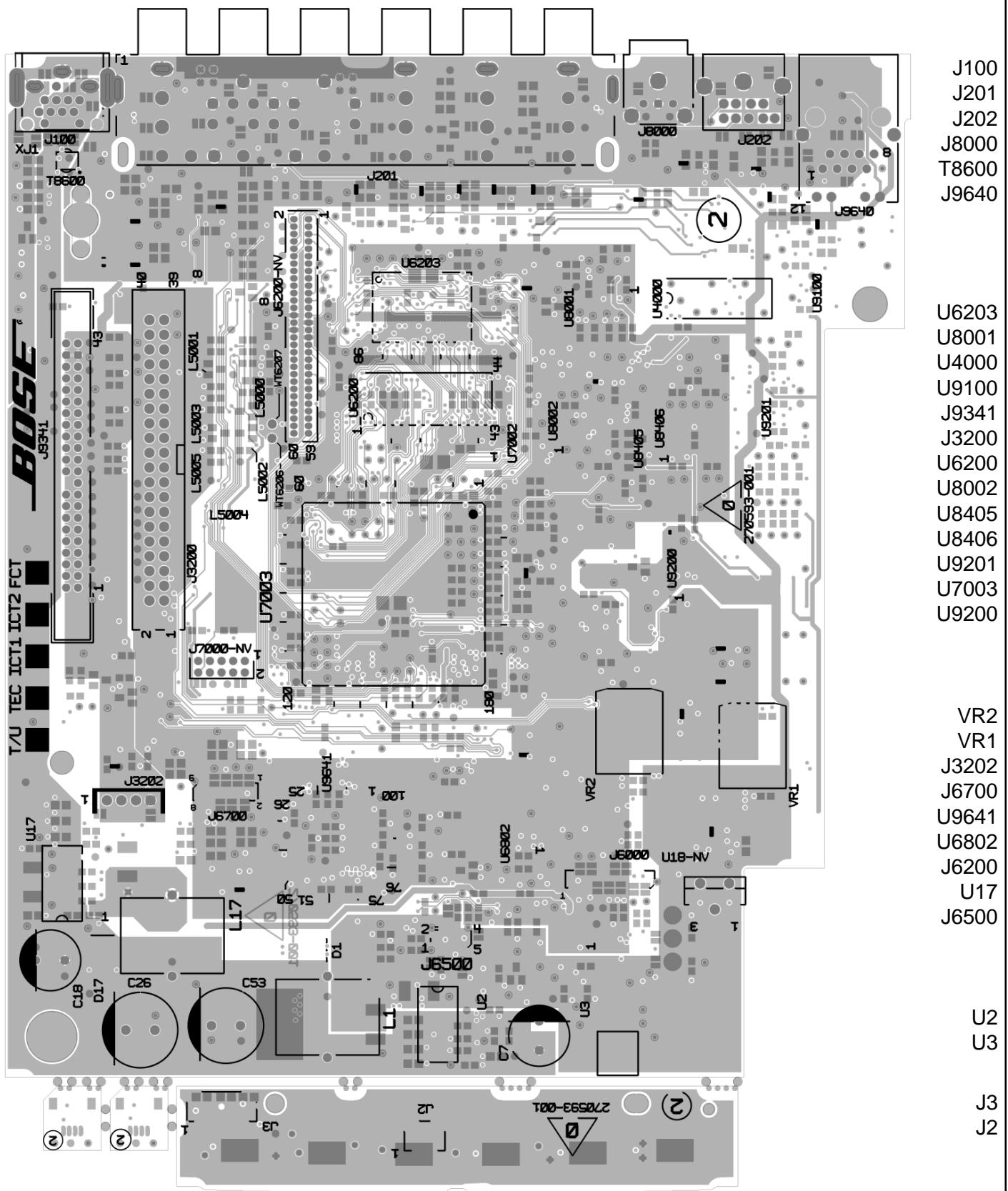


Figure 9. Console Main PCB Layer 3 Power Plane Layout Diagram

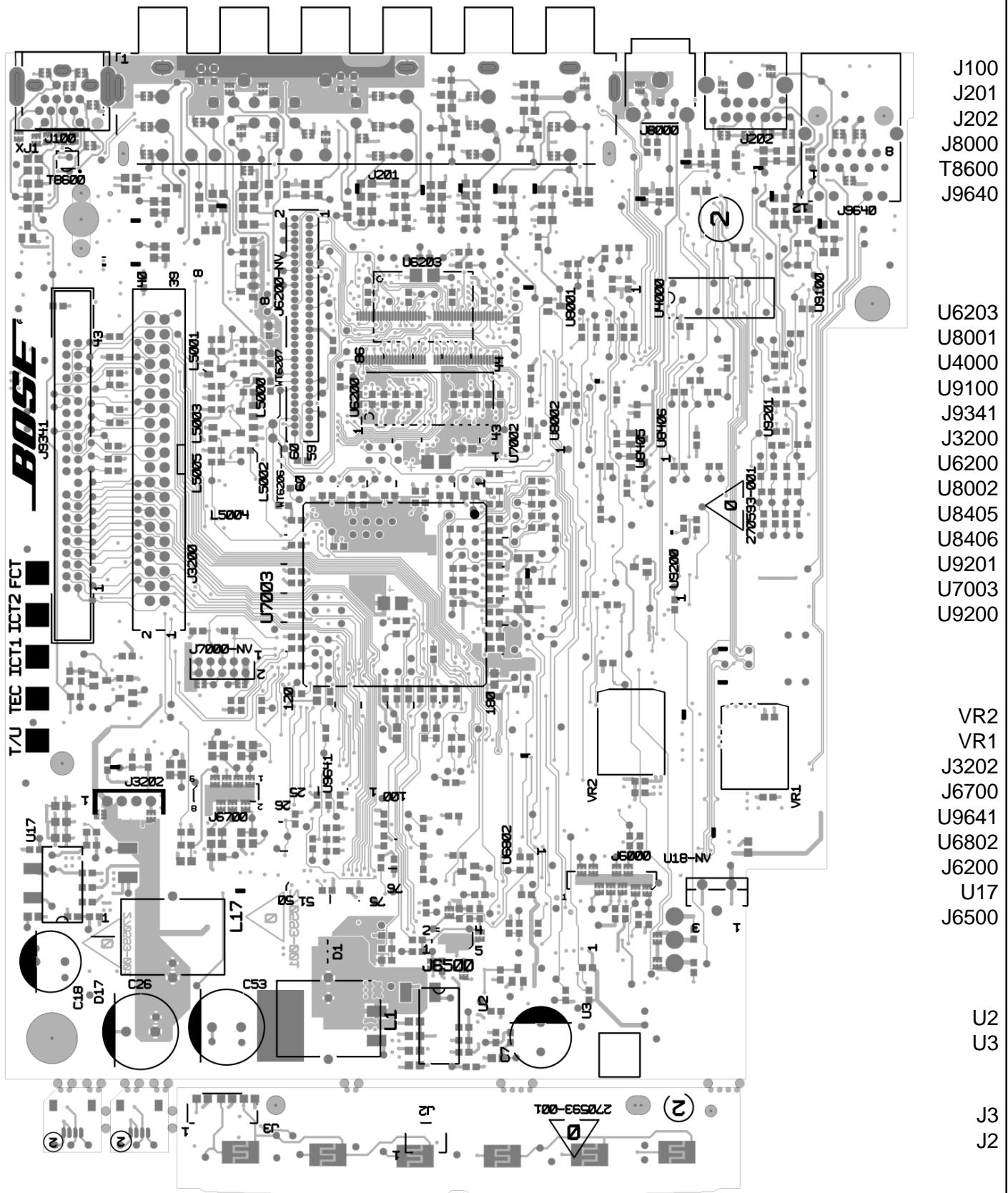


Figure 10. Console Main PCB Layer 4 Bottom Etch Layout Diagram

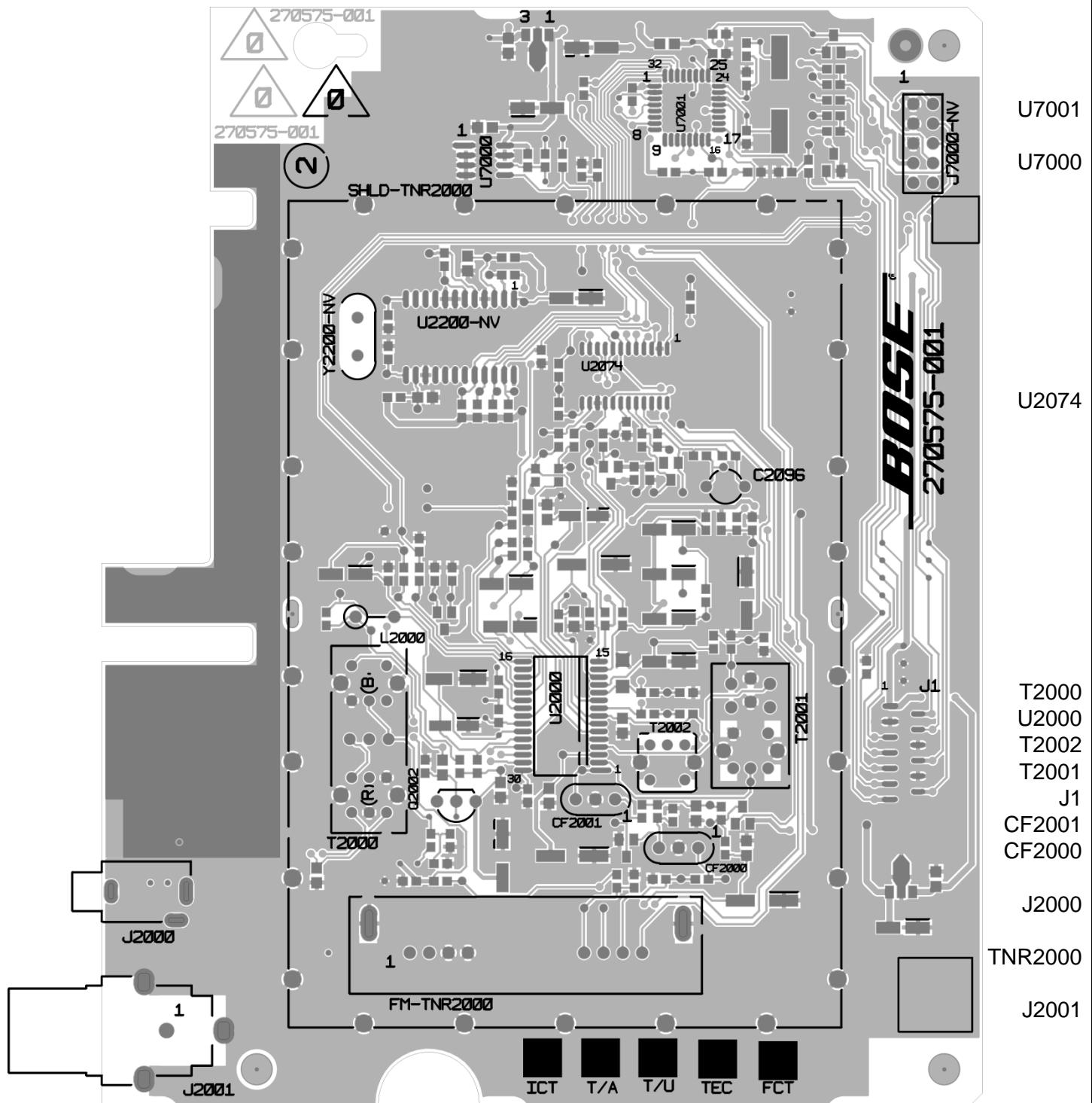


Figure 11. Console Tuner PCB Topside Etch Layout Diagram

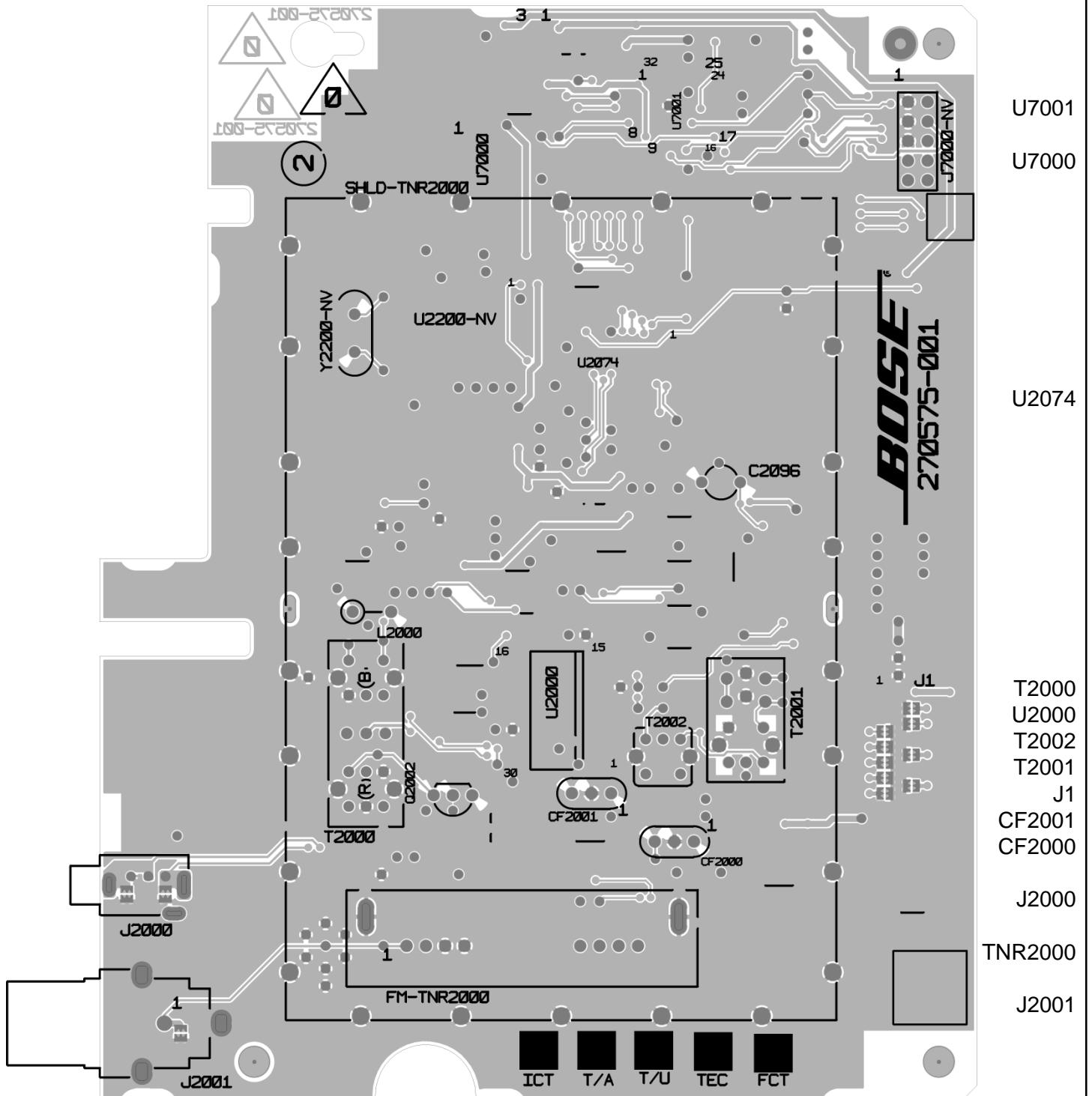


Figure 12. Console Tuner PCB Bottom Side Etch Layout Diagram

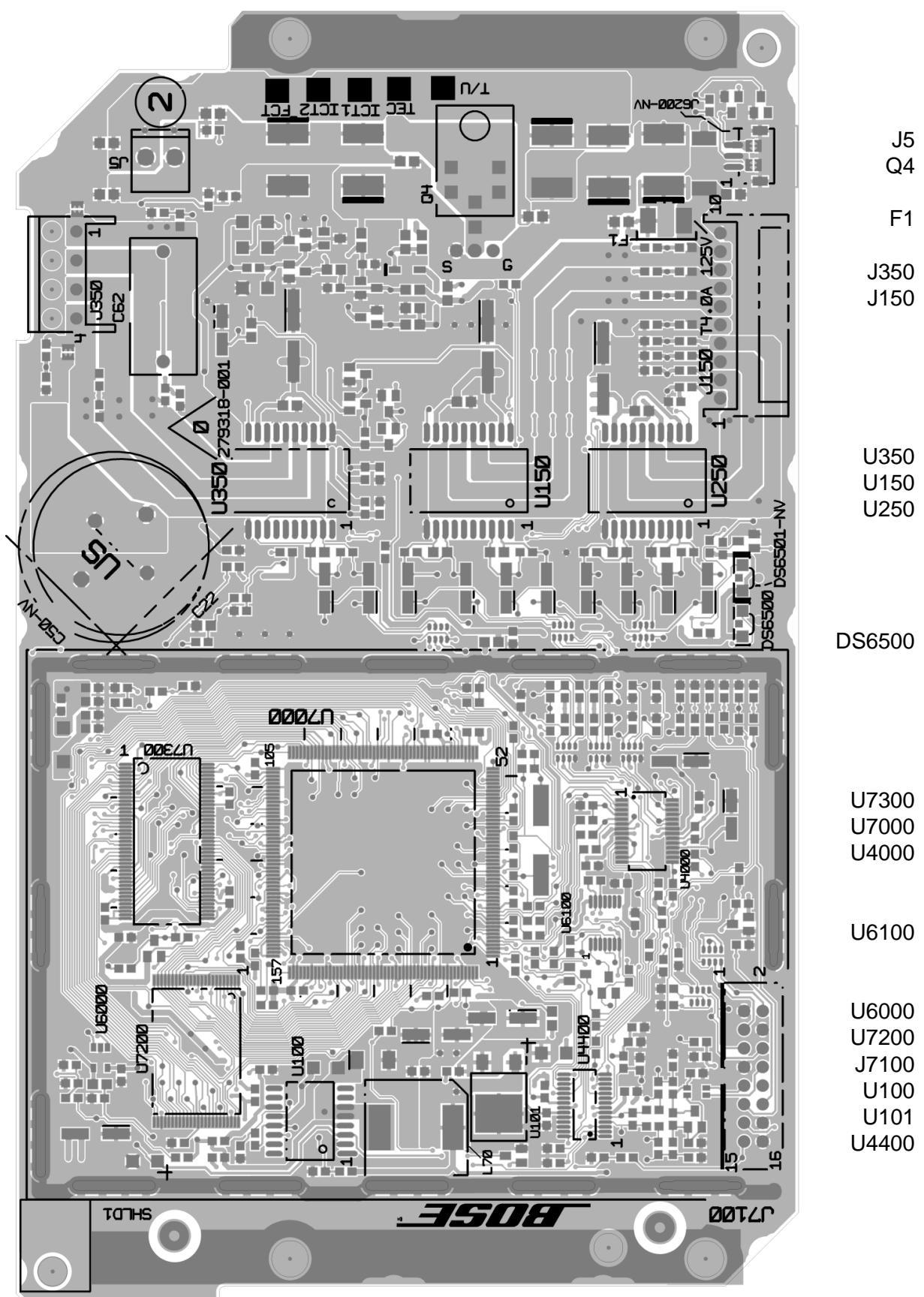


Figure 13. Bass Module DSP/Amplifier PCB Topside Etch Layout Diagram

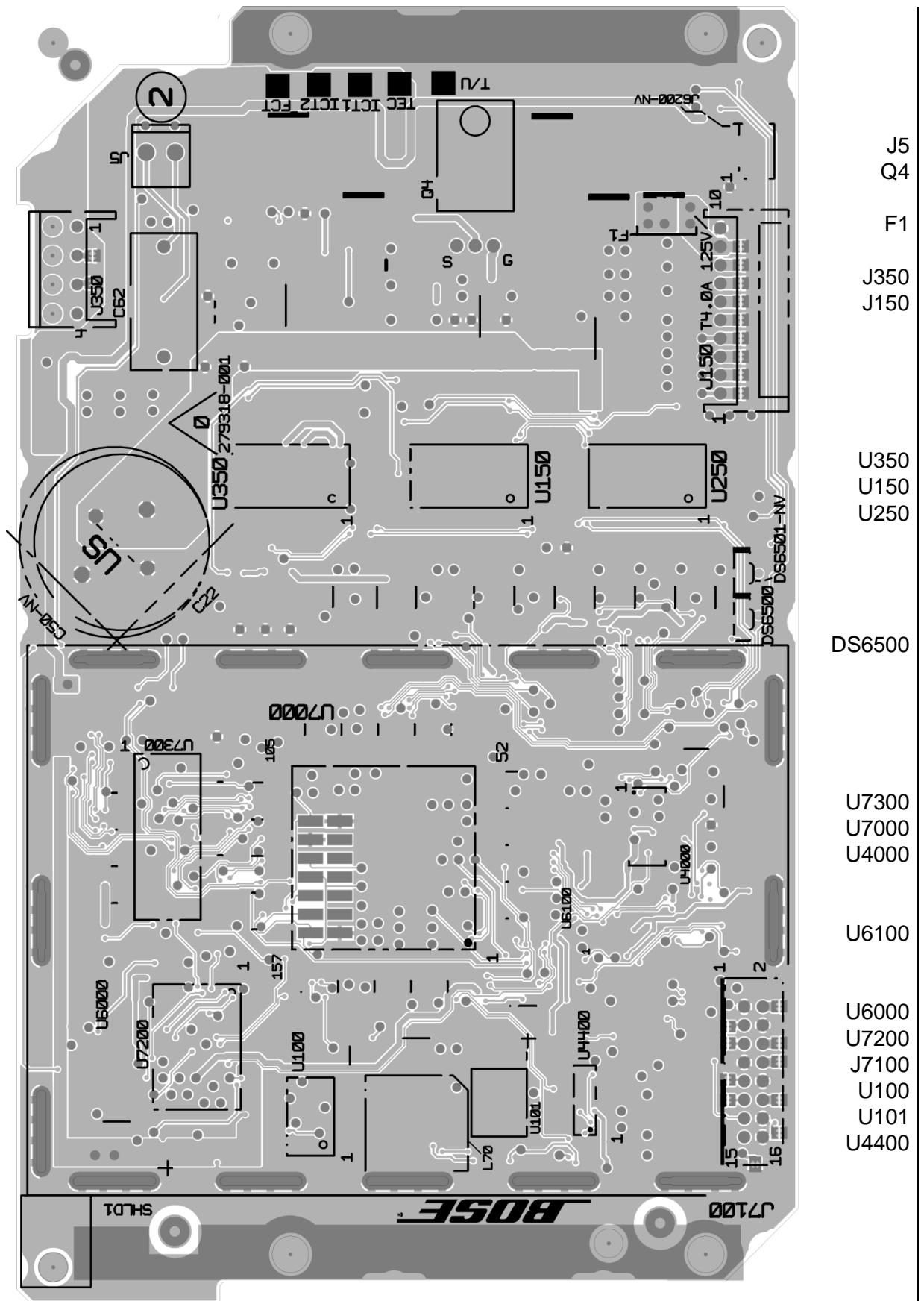


Figure 14. Bass Module DSP/Amplifier PCB Bottom Side Etch Layout Diagram

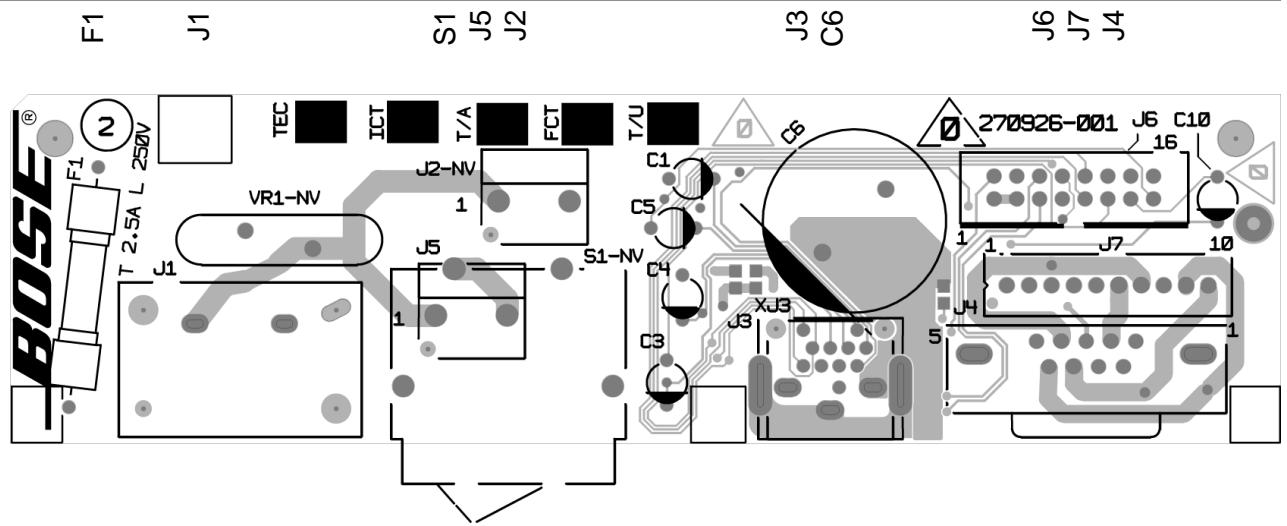


Figure 15. Bass Module Input/Output PCB Topside Etch Layout Diagram

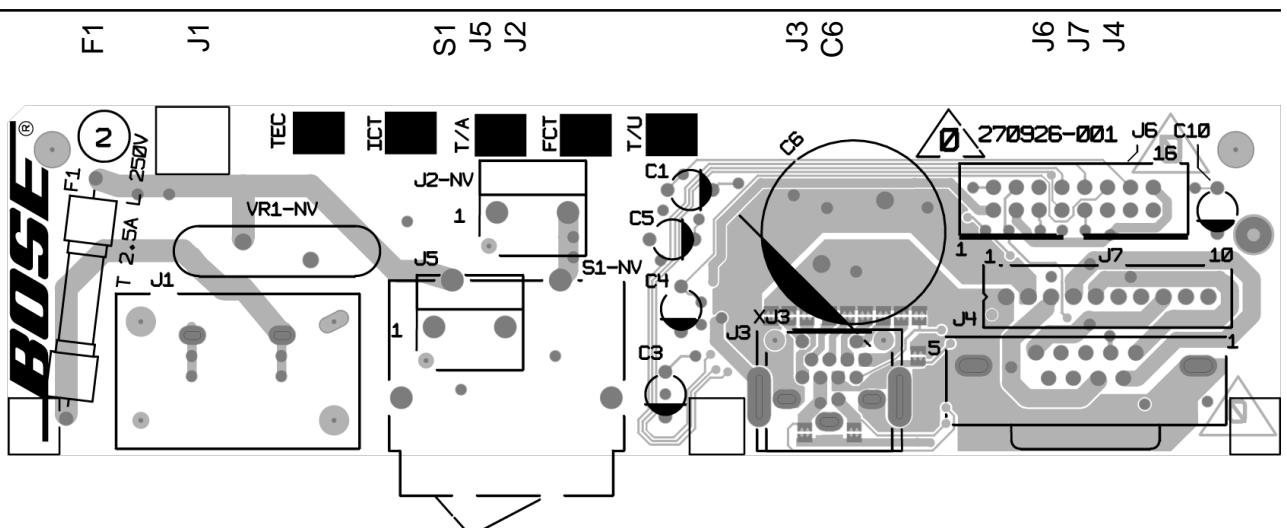


Figure 16. Bass Module Input/Output PCB Bottom Side Etch Layout Diagram

APPENDIX

Obtaining System Information from the Media Center Display

You can obtain system information directly from the media center display by pressing a few buttons. Follow the steps below.

- Connect the media center and bass module as instructed in the owner's guide.
- Connect the system to AC mains.
- With the media center turned off, press and hold the ENTER button on the media center.
- When holding down the ENTER button, pressing the ON/OFF button will bring up the console system information on the console display. For each additional press of the ON/OFF button, you will get additional information. See the list below.
- Once you are done viewing the information, press the POWER button to clear the display.

Video Format: Press the ON/OFF button down once. You should see the video format information, similar to VIDEO: NTSC COMPOSITE + S. This indicates the video format the console is set to.

Console Software Revision: Press the ON/OFF button a second time. You should see the console software revision, similar to CON: 01.01.05, which indicates that the console software revision is 01.01.05.

Console Variant Information: Press the ON/OFF button a third time. You should see the console variant information, similar to the following. CONSOLE VARIANT: 129.

Bass Module Software Revision: Press the ON/OFF button a fourth time. You should see the bass module software revision level, similar to BASS BOX SOFTWARE: 0101BF.

Tuner PCB Software Revision: Press the ON/OFF button a fifth time. You should see the tuner software revision level, similar to TUNER SOFTWARE: 01.00.BC.

Console Serial Number: Press the ON/OFF button a sixth time. You should see the console serial number level, similar to CONSOLE SERIAL #: 035666941400018AZ.

Console Main PCB Serial Number: Press the ON/OFF button a seventh time. You should see the main PCB serial number, similar to MAIN BOARD SERIAL #: xxxxxxxxxxxx274256xx0001.

Console Tuner PCB Serial Number: Press the ON/OFF button an eighth time. You should see the tuner PCB serial number, similar to TUNER BOARD SERIAL #: xxxxxxxxxxxx274257xx0001.

Console Region Code Setting: Press the ON/OFF button a ninth time. You should see the console region code setting, similar to DVD REGION CODE 1.

Console DVD Drive Software Revision and Hardware Information: Press the ON/OFF button a tenth time. You should see the DVD drive software level and drive information, similar to DVD DRIVE: 1B10 IBA DVD-ROM SD-M1712.

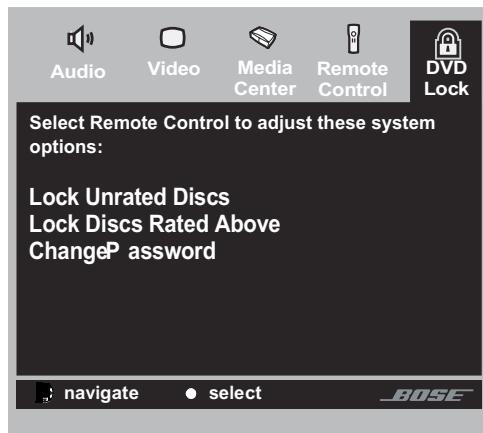
Console Main PCB Test Information: Press the ON/OFF button an eleventh time. You should see the test information for the console main PCB, similar to MAIN BD FUNCTIONAL: PASSED.

Console Tuner PCB Alignment Information: Press the ON/OFF button a twelfth time. You should see the tuner PCB alignment information, similar to TUNER BD ALIGNMENT: FF.

Console Serial Port (BoseLink Port) Information: Press the ON/OFF button a thirteenth time. You should see the serial port information, similar to SERIAL PORT: SMART SPEAKER.

DVD Lock options

The DVD Lock options allow you to restrict viewing of DVD videos with certain ratings. To activate this feature, you need to set a level of restriction and establish a password in the DVD Lock section of the System menu.



System Option	Settings	Description
Lock Unrated Discs	Off On	No restriction applies to unrated DVD movies. Restricts viewing access to unrated titles when password is set.
Lock Discs Rated Above	1 to 8	Helps prevent viewing discs above the selected number when a password is created.
Change Password	- - - -	Establishes a new four number code to restrict access to movies with certain ratings.

Setting a password and restriction level

Your password will help prevent unauthorized viewing of DVD videos that have a higher rating than your restriction level. There are 8 levels to choose from, matched to movie ratings set by the Motion Picture Association of America (MPAA).

1. Turn on your TV and select the correct TV input to view your 3•2•1 system.
2. Press the System button on your 3•2•1 remote control.
3. Using the right > and left < arrow buttons, highlight the DVD Lock option.
4. Press Enter or the down arrow key V.

Note: If you are using the DVD Lock option for the first time, enter a four-digit password. Then enter it again to confirm.

5. Enter your four-digit password.
6. Using the down V button, scroll down to Lock Discs Rated Above.
7. Press the right arrow > button to see the available settings.
8. Press the up arrow ^ or down arrow V button to find the rating you want.
9. Press Enter or the left arrow < button to save the setting.
10. Press Exit to dismiss the Settings menu.

Parental Control Setting	MPAA Rating	Audience Restriction
8		None
7	NC-17	Adult audiences
6	R	Mature audiences
5		Mature teenage audiences
4	PG-13	Teenage audiences
3	PG	Mature young audiences
2		Most audiences
1	G	General

Example: Choosing a Parental Control Setting of 4, restricts access to videos rated above PG-13. Videos with ratings above that may be viewed only after entering the password.

DVD Lock options (continued):

DVD Lock Bypass

If a customer forgets his DVD Lock password, or if you have a system in for repair that is locked and will not let you play a DVD without a password, you can bypass the DVD Lock feature by following the steps below.

1. Select a non-DVD source and press the SYSTEM button on the remote.
2. Navigate to the “DVD Lock” icon on the far right of the TV screen and press ENTER.
3. The system will then request the user to enter a password. On the remote control, punch in the bypass code, which is 2673. This is a backdoor password for entering this menu only, not for allowing discs to play.
4. After the bypass password is entered, you will be able to change settings in the “DVD Lock” menu.
5. If you want to be able to play discs of all ratings, select OFF for “Lock Unrated Discs” and “8” for “Lock Discs Rated Above.” This will allow for all discs to play.
6. If you wish to have the parental control engaged, refer to the table on the previous page for ratings restriction definitions and options.

3•2•1 Series II System Date of Manufacture Information

Console - The product label for the console is located on the bottom of the unit.

The date of manufacture is embedded in the serial number on the label. The following is an example:

Serial No. 035666941400014AZ

You will notice that there are four numbers underlined. This is the date of manufacture (DOM).

The way it is read is that the first digit underlined represents the year of manufacture. The 4 indicates 2004.

The next three digits are the Julian date for the day of the year. In this example, that would be the 140th day of the year.

Bass Module - The date of manufacture information is embedded into the product serial number in the same format as is used for the console. The product label for the bass module is located on the rear of the cabinet.

The date of manufacture is embedded in the serial number on the label. The following is an example:

Serial No. 034125941420677AS

You will notice that there are four numbers underlined. This is the date of manufacture (DOM).

The way it is read is that the first digit underlined represents the year of manufacture. The 4 indicates 2004.

The next three digits are the Julian date for the day of the year. In this example, that would be the 142nd day of the year.

GLOSSARY OF TERMS

Aspect Ratio - The shape of the rectangular picture in a TV set. It is the width of the picture relative to the height. Our standard TV picture, is 4 units wide by 3 units high, or 4:3 in aspect ratio. There are currently two standard TV aspect ratios in the U.S., 4:3 and 16:9.

Chapter - In DVD-Video, a division of a title. Technically called part of a title (PTT).

Component Video - A video signal split into three parts, luminance and two color signals (marked as YPbPr). It provides the highest resolution video, but cannot be processed by all television sets.

Composite Video - A single video signal that contains luminance, color and synchronization information. NTSC and PAL are examples of composite video systems.

Dolby Digital® - Also known as AC-3, a type of multi-channel surround sound format used on discs. Dolby Digital is a perceptual coding system for audio, developed by Dolby Laboratories and is accepted as an international standard. Dolby Digital is the most common means of encoding audio for DVD-Video and is the mandatory audio compression system for 525/60 (NTSC) discs.

DTS - A type of multi-channel surround sound format used on some CDs and DVDs.

DVD - An acronym that is most commonly known to mean Digital Video Disc or Digital Versatile Disc. The audio/video/data storage system based on 12 and 8 cm optical discs.

DVD Video - A standard for storing and reproducing audio and video on DVD-ROM discs, based on MPEG video, Dolby Digital and MPEG audio, and other proprietary data formats.

Letterbox - The projected aspect ratio of feature films is often 16:9 rather than the 4:3 aspect ratio of most TVs. Therefore, it is becoming common practice to transfer films to video with black borders at the top and bottom of the picture. The film becomes a "letterbox" within the video.

MPEG - A type of data compression used for audio or video storage on disc.

MP3 - MPEG Layer 3 audio. This is a compressed audio format that allows you to record many hours of music on a single CD.

NTSC - An acronym for National Television System Committee; the organization that developed both the American Black & White and Color television systems.

PAL - An acronym for Phase Alternate Line. This is one of several composite video systems. The PAL format is used extensively in Western Europe.

PCM - An uncompressed, digitally coded representation of an analog signal. This is the form of the digital audio signal used for both CD and laserdisc. It is a serial data stream that is coded for transmission or recording. PCM is also used for many other types of serial data communications.

S-Video - A video interface standard that carries separate luminance and chrominance signals, usually on a four-pin mini-DIN connector. Also called Y/C. The quality of S-video is significantly better than composite video since it does not require a comb filter to separate the signals. Most high-end televisions have S-video inputs.

Title - Numbered elements of the DVD contents, which may include more than one movie alone.

Track - Individual selections recorded on an audio tape or disc.

SERVICE MANUAL REVISION HISTORY

Date	Revision Level	Description of Change	Change Driven By	Pages Affected
8/04	00	Document released at revision 00.	Service manual initial release	All

3•2•1 and 3•2•1GS Series II Home Entertainment System (US/Canada Standard Versions, 120V and Dual Voltage)



3•2•1 Series II System



3•2•1GS Series II System

SPECIFICATIONS AND FEATURES SUBJECT TO CHANGE WITHOUT NOTICE



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