



INTERMEZZO 2.6

POWERED LOUDSPEAKER

SERVICE MANUAL



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REV 0 5/00

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Specifications

Frequency Response:	50Hz – 20kHz (± 1.5 dB) 40Hz – 22kHz (± 3 dB)
Impedance	8 ohms
Sensitivity	90 dB (1 watt @ 1 meter)
Max Amp Power	150 watts *
Internal Amp Output:	250 watts RMS (with 0.1% THD @ 100Hz)
2nd- and 3rd-Order Harmonic Distortion: (20Hz – 20kHz @ 95dB SPL)	<1%
Crossover Frequency	2800 Hz – 24 dB/Octave

AURAL SWEEP TEST SPECIFICATIONS:

A. System Aural Sweep Test	7.0V 40 Hz to 22kHz (SEE PAGE 8)
B. L.F. Aural Sweep Test	6.0V Input 40 Hz to 3 kHz
C. H.F. Aural Sweep Test	3.0V Input 2 kHz to 22kHz

Features	R.A.B.O.S.; High Pass filter On/Off; Shelf/Stand Placement Selector; Bass Level Control
Dimensions:	15 x 9 3/4 x 11 1/2" (381 x 248 x 292mm)
Weight	54 lbs./24.6 kg (Sold in Pairs)

OPTIONAL ACCESSORIES

Floor Stand: #FS-ITM/IL

Wall Bracket: We recommend Omnimount® Model 75WB (Black or White)

*The maximum recommended amplifier power rating will ensure proper system headroom to allow for occasional peaks. We do not recommend sustained operation at these maximum power levels.

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

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Detailed Specifications

Intermezzo 2.6 Specifications

LINE VOLTAGE	Yes/No	Hi/Lo Line	Nom.	Unit	Notes
US 120vac/60Hz	Yes	108-132	120	Vrms	Normal operation, MOMS required
EU 230vac/50-60Hz	Yes	207-264	230	Vrms	Normal operation, MOMS required

Parameter	Specification	Unit	QA Test Limits	Conditions	Notes
Amp Section					
Type (Class AB, D, other)	AB	--	--	HC-BASH Power Supply	
Load Impedance (speaker)	3 Ohms	--	--	Nominal	Z-curve required
Rated Output Power	250 Watts		250	1 input driven	
THD@ Rated Power	0.1 %		0.8	22k filter	P=250w
THD @ 1 Watt	0.3 %		1	22k filter	
Polarity	0 deg.		0° ±20	In phase at 50Hz	.250 faston (+).....205 faston (-)
DC Offset	10 mV-DC		20	@ Speaker Outputs	
Damping factor	>50	DF	--		
Input Sensitivity					
Input Frequency	100	Hz	100	Nominal Freq.	1 input driven
Line Input	N/A	mVrms	±2dB	To Rated Power	1 input driven
Speaker/Hi Level Input	6	Vrms	±2dB	To Rated Power	(-20dB below Line In)...1 input driven
Signal to Noise					
SNR-A-Weighted	100	dBA	90	relative to rated power	A-Weighting filter
SNR-unweighted	70	dBr	70	relative to rated power	22k filter
SNR rel. 1W-unweighted	60	dBr	55	relative to 1W Output	22k filter
Residual Noise Floor	2	mVrms	3	Volume @max, using RMS reading	DMM/VOM (or A/P)
Residual Noise Floor	1.5	mVrms(max)	2	Volume @max, w/ A/P Swept Bandpass Measurement (Line freq. + harmonics)	
Input Impedance					
Speaker/Hi Level Input	4.7k	ohms	N/A	Nominal	
Active Filters					
Low Pass (fixed or variable)					
Low Pass filter (point or range)	5k	Hz	±2dB		
Slope	24	dB/Octave	--		
Q	0.707	Damping	--		
Hi Pass Filter					
High Pass filter (point or range)	80	Hz	±2dB		Can be defeated with HPF Bypass Switch
Slope	12	dB/Octave	--		
Q	0.707	Damping	--		
Parametric EQ (RABOS)					
Frequency Pot					
Frequency Pot	yes	--			
Range	20-80	Hz	20-80	21 detent pot (0.1 oct. steps)	
Notch Filter Level Pot					
Notch Filter Level Pot	yes	dB/Octave	--		
Range	0 to -10	dB	±2dB	21 detent pot (0.5dB steps)	
Notch Filter Width(Q) Pot					
Notch Filter Width(Q) Pot	yes	dB/Octave	--		
Range	0.1-0.5	octave	functional	21 detent pot (5steps/0.1 octave)	
RABOS Remote Connector					
RABOS Remote Connector	yes	--	functional		
Notch Filter					
Frequency	500	Hz	TBD		
Limiters (yes/no)					
Limiters (yes/no)	Yes				
Features					
Hi Pass Filter Bypass Switch					
Hi Pass Filter Bypass Switch	yes	--	functional		push-button type
Free-Standing Bookshelf Switch					
Free-Standing Bookshelf Switch	yes	--	functional		push-button type (AKA: 2pi/4pi)
Shelving EQ: Frequency					
Shelving EQ: Frequency	300	Hz	--		
Bass Shelving EQ: Boost/Cut					
Bass Shelving EQ: Boost/Cut	-3	dB	±2dB		
Variable Bass Level Control					
Variable Bass Level Control	yes	--	functional		
Bass Shelving EQ: pot Taper (lin/log)					
Bass Shelving EQ: pot Taper (lin/log)	lin	--	functional		
Bass Shelving EQ: Frequency					
Bass Shelving EQ: Frequency	100	Hz	--		
Bass Shelving EQ: Boost/Cut					
Bass Shelving EQ: Boost/Cut	±6	dB	±2dB		
Signal Sensing (ATO)					
Auto-Turn-On (yes/no)					
Auto-Turn-On (yes/no)	yes	--	functional		
ATO Input Frequency					
ATO Input Frequency	1k	Hz	functional		
ATO Level					
ATO Level	40	mV	functional	40mV@1kHz into Speaker Input	
ATO Bandwidth					
ATO Bandwidth	5k	Hz	functional	ATO-LPF for noise immunity	
ATO Turn-on time					
ATO Turn-on time	5	ms	functional	Amp connected and AC on, then input signal applied	
Auto Mute/ Turn-OFF Time					
Auto Mute/ Turn-OFF Time	15	minutes	functional	T before muting, after signal is removed	
Power on Delay time					
Power on Delay time	3	sec.	4	AC Power Applied	
Transients/Pops					
ATO Transient					
ATO Transient	10	mV-peak	N/A	@ Speaker Outputs	
Turn-on Transient					
Turn-on Transient	100	mV-peak	1v-pp	@ Speaker Outputs	AC Line cycled from OFF to ON
Turn-off Transient					
Turn-off Transient	100	mV-peak	1v-pp	@ Speaker Outputs	AC Line cycled from ON to OFF

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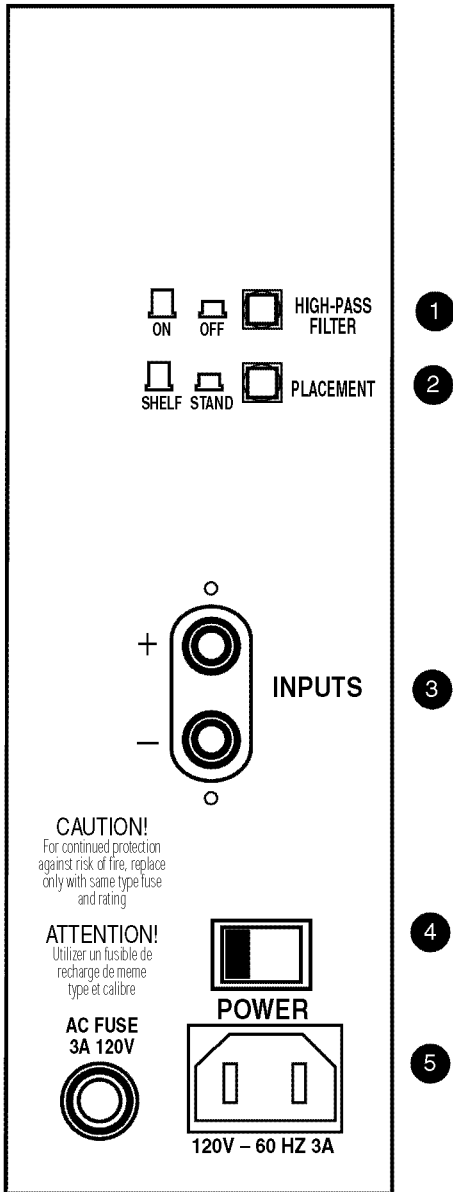
Detailed Specifications (Cont.)

Parameter	Specification	Unit	QA Test Limits	Conditions	Notes
Efficiency					
Stand-by Input Power	10	Watts	15	@ nom. line voltage	
AC Power Cons. @1W	N/A	Watts	N/A	@ nom. line voltage	
Power Cons. @rated power	312	Watts	N/A	@ nom. line voltage	
Efficiency	80%	%	70	@ nom. line voltage	
Protection					
Short Circuit Protection	yes		functional	Direct short at output	
Thermal Protection	yes			@ 1/8 max unclipped Power	
DC Offset Protection	yes			DC present at Speaker Out leads	Relay or crowbar (for driver/fire protection)
Line Fuse Rating	3	Amps		Type-T or Slo Blo	External fuse with UL/SEMKO rated holder

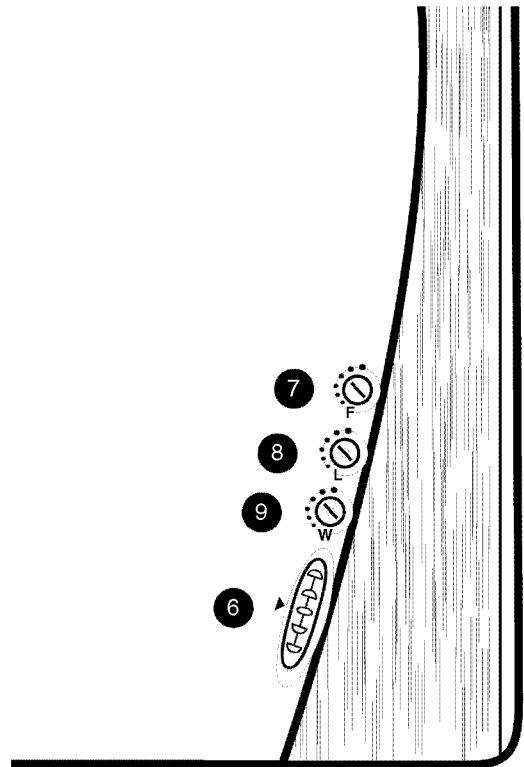
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CONTROLS AND CONNECTIONS

Rear Panel



Front Panel



- 1 High-Pass Filter
- 2 Placement Selector
- 3 Speaker Input
- 4 Power Switch
- 5 AC-Cord Input

- 6 Woofer Level Control
- 7 Center-Frequency Adjustments
- 8 R.A.B.O.S. Level
- 9 Bandwidth Adjustment

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High-Pass Filter 1

When set to "On," this control limits the low frequencies that the Intermezzo 2.6 will reproduce and allows you to use your processor's/receiver's bass-management settings for an ideal blend with a subwoofer.

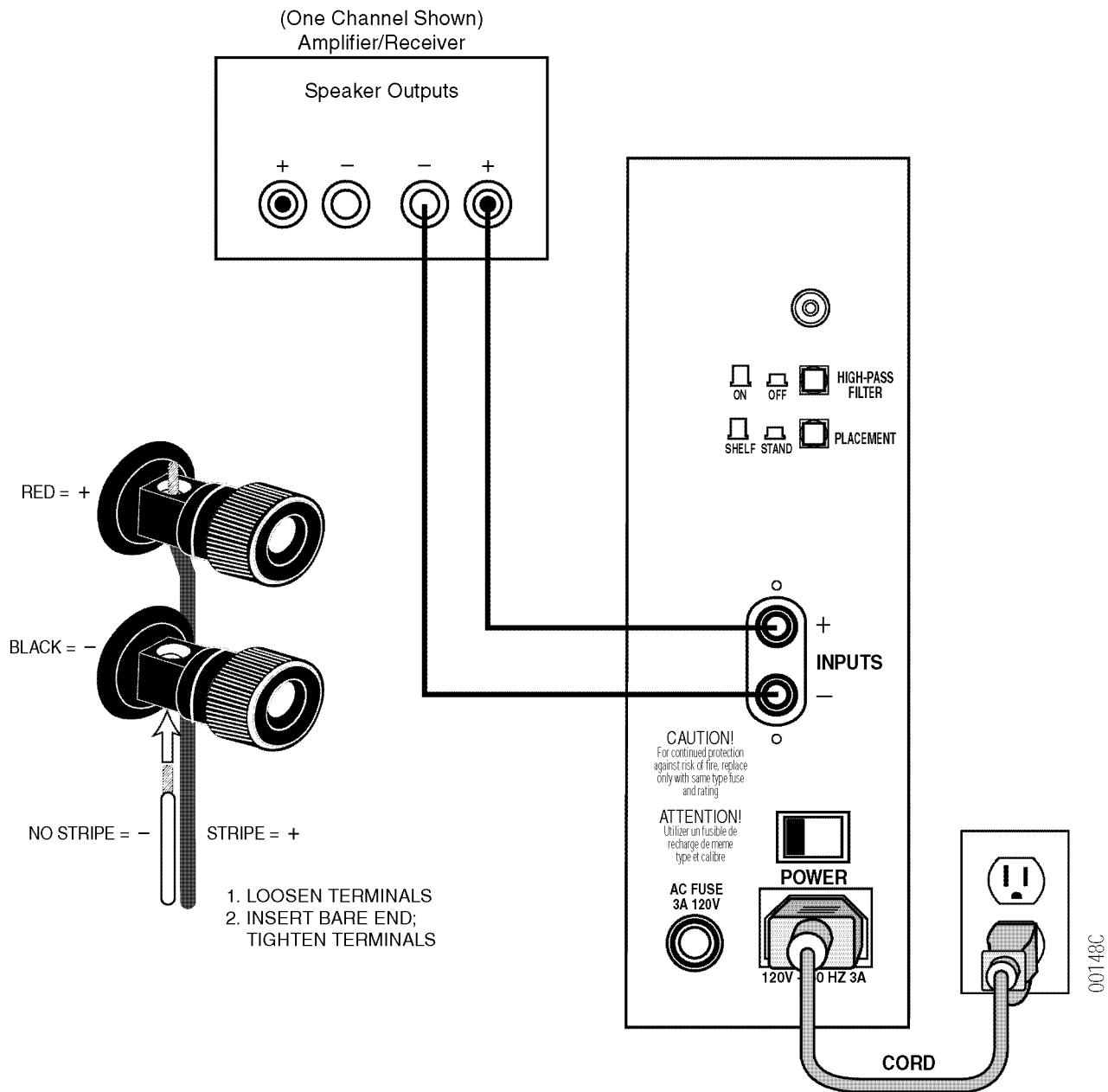
When set to "Off," the Intermezzo 2.6 will reproduce the entire frequency range. Use this setting only if your system does not include a subwoofer.

Placement Selector 2

This control optimizes the performance of the Intermezzo 2.6 based on whether it is placed on a speaker stand or on a shelf.

If you place the Intermezzo 2.6 on a shelf or inside a wall unit/entertainment center, set this control to "Shelf."

If you place the Intermezzo 2.6 on a floor stand, set the control to "Stand."



Operation

The operation of the Intermezzo 2.6 loudspeaker system, and the proper settings for the Room Adaptive Bass Optimization System, or R.A.B.O.S., is thoroughly covered in the Owner's guide, part #335714-001.

For service purposes, the R.A.B.O.S. system is canceled when all three front panel controls (F) (L) (W) are turned fully CW, and the Shelf/Stand Placement Selector switch should be set to the "STAND" position.

The only other control of concern is the Main Level Control on the front panel, which operates like a traditional potentiometer.

SYSTEM AURAL SWEEP TEST

Equipment needed:

- Function/signal generator/sweep generator
- Integrated Amplifier
- Multimeter
- Speaker cables

General Sweep Function (UUT = Unit Under Test)

1. Turn the RABOS level control on the front of the UUT to "0". Depress both "High-Pass Filter" and "Placement" buttons on the rear faceplate.
2. Connect one pair of speaker cables to the input terminals on UUT. Cables should be connected to an integrated amplifier fed by the signal generator.
3. Turn on signal generator and adjust so that *speaker level* output at the amplifier is **7.0V, 50 Hz**.
4. Plug in and turn on UUT with the power switch; LED on the Level control should light – Red initially and Green after step #5 is followed.
5. Turn up the RABOS level control on the front of the UUT to "10". (Maximum). Woofer should be driving close to maximum excursion at this point.

Driver Function

1. Remove driver from cabinet; (See Page 10), detach + and - wire clips.
2. Check DC resistance of woofer; it should be 3.4 ohms $\pm 10\%$.
3. Connect a pair of speaker cables to driver terminals. Cables should be connected to an integrated amplifier fed by a signal generator. Turn on generator and adjust so that speaker level output is **5.0V**.
4. Sweep generator from 20Hz to 1kHz. Listen to driver for any rubbing, buzzing, or other unusual noises.



Left

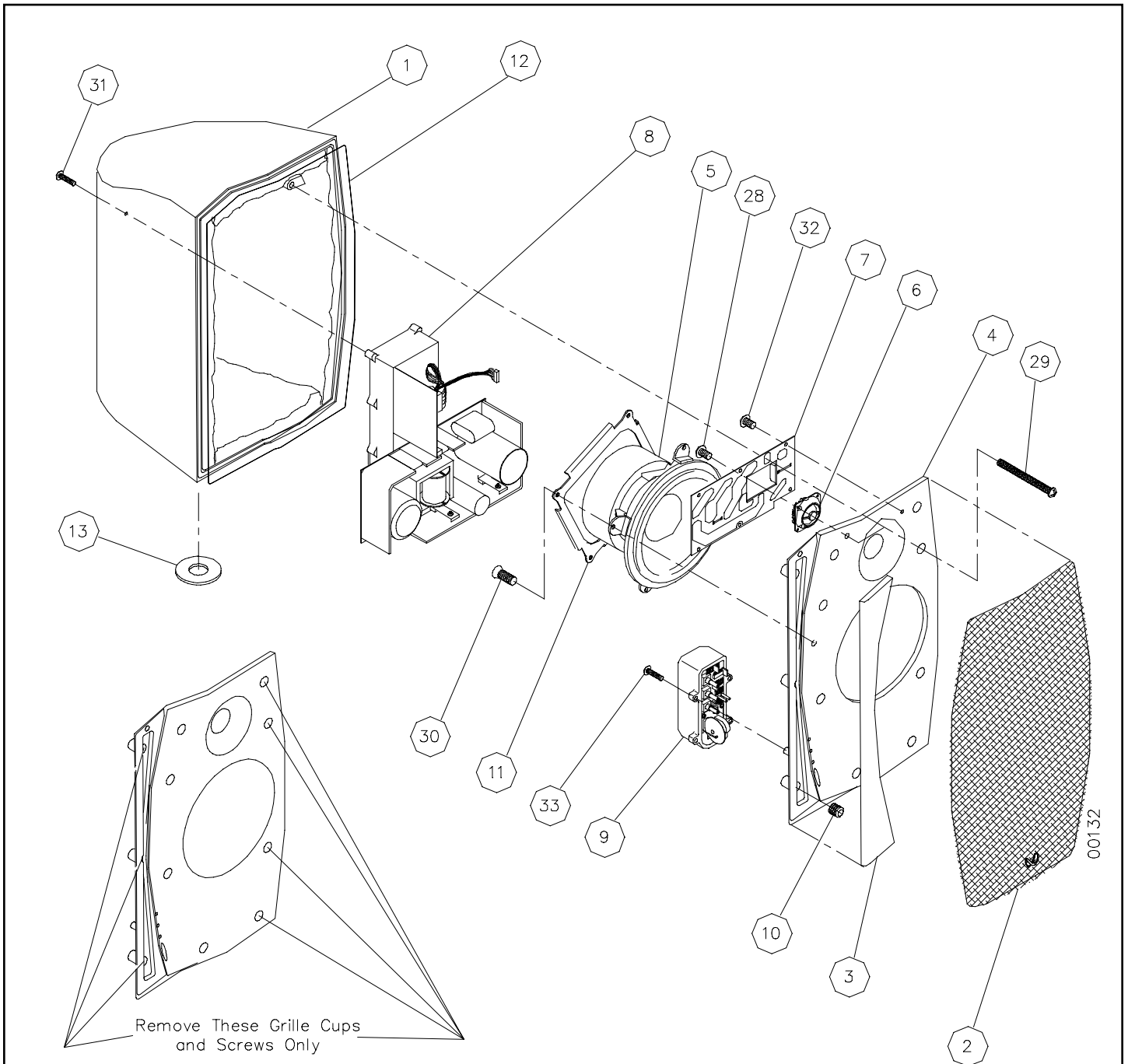
Right

INTERMEZZO 2.6 L/R MECHANICAL/PACKAGING PARTS LIST

1	Cabinet	Intermezzo 2.6 L/R (Not for Sale)	
2	Grille	(R/L) (Pair) Blue	335453-050
		(R/L) (Pair) Gray	335453-040
		(R/L) (Pair) Burgundy	335453-060
3	Side Trim Panels	(R/L) (Pair) (Black)	335452-030
		(R/L) (Pair) (Cherry)	335452-020
		(R/L) (Pair) (Maple)	335452-010
4	Front Baffle	(R)	335277-001
		(L)	335277-002
5	Low Frequency Transducer	6 ½" (165mm) C.M.M.D. Neodymium, shielded DC Resistance 3.3 ohms ± 10%	335320-001
6	High Frequency Transducer	1" (25mm) C.M.M.D. Neodymium, Shielded DC Resistance 3.4 ohms ± 10%	335225-002
7	Hi-Pass Crossover network	(L)	335458-002
		(R)	335458-001
8	Amp assembly		335460-001
9	Rabos Control Assembly	(R)	335457-001
		(L)	335457-002
10	Grille retainers (11)		333249-003
11	Woofers Protector Ring		336219-001
12	Rear Base Gasket		331106-001
13	Rubber feet (4)		335459-001
14	Power cord		W10032
15	Outer Carton		335736-001
16	Top Foam Pad		335737-001
17	Bottom Foam Pad		335737-002
18	Owner's manual		335714-001
19	Warranty Card		335841-001
20	Survey Card		335868-002
21	RABOS Complete kit		335852-001
22	RABOS Test CD		335855-001
23	RABOS Sound Level Meter		335368-001
24	RABOS Key (Screwdriver)		091-00121-000
25	RABOS Q-Finder		335856-001
26	RABOS Pouch		335853-001
27	9 Volt Battery		75045
28	Screw (tweeter) (4)	PPH 6-32 x 3/8" ZNC	10811
29	Screw (front baffle) (7)	PPH 8-32 x 2 ¼" ZNC	900202-036
30	Screw (woofer) (4)	FPH 8-32 x .5 ZNC	901702-008
31	Screw (amplifier) (8)	PPH 6-32 x .5" BLK	900301-008
32	Screw (network) (6)	PPH 6-32 x 3/8" ZNC	10811
33	Screw (RABOS Controls) (4)	PPH 6-32 x .5" BLK	900301-008

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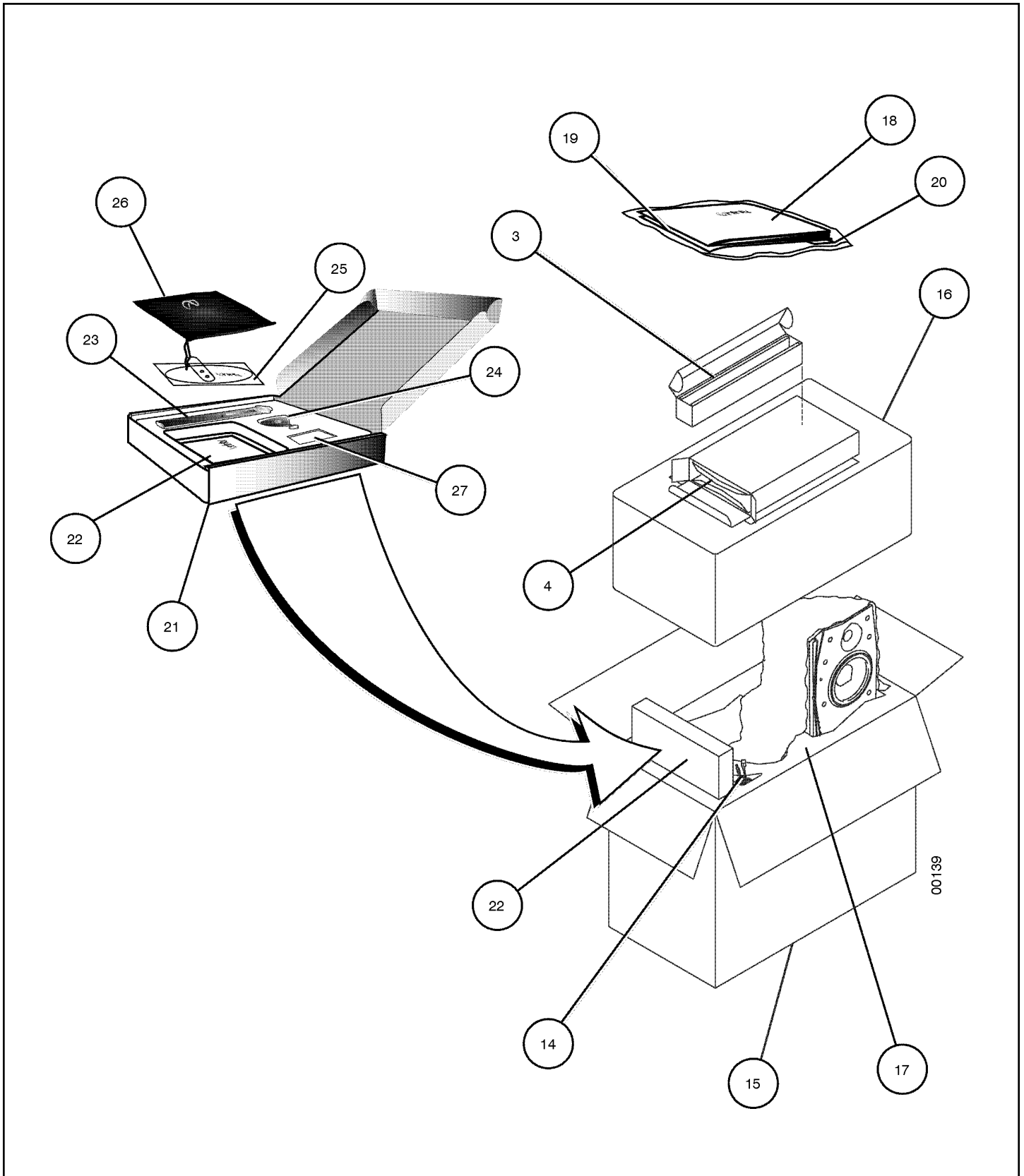
Exploded View



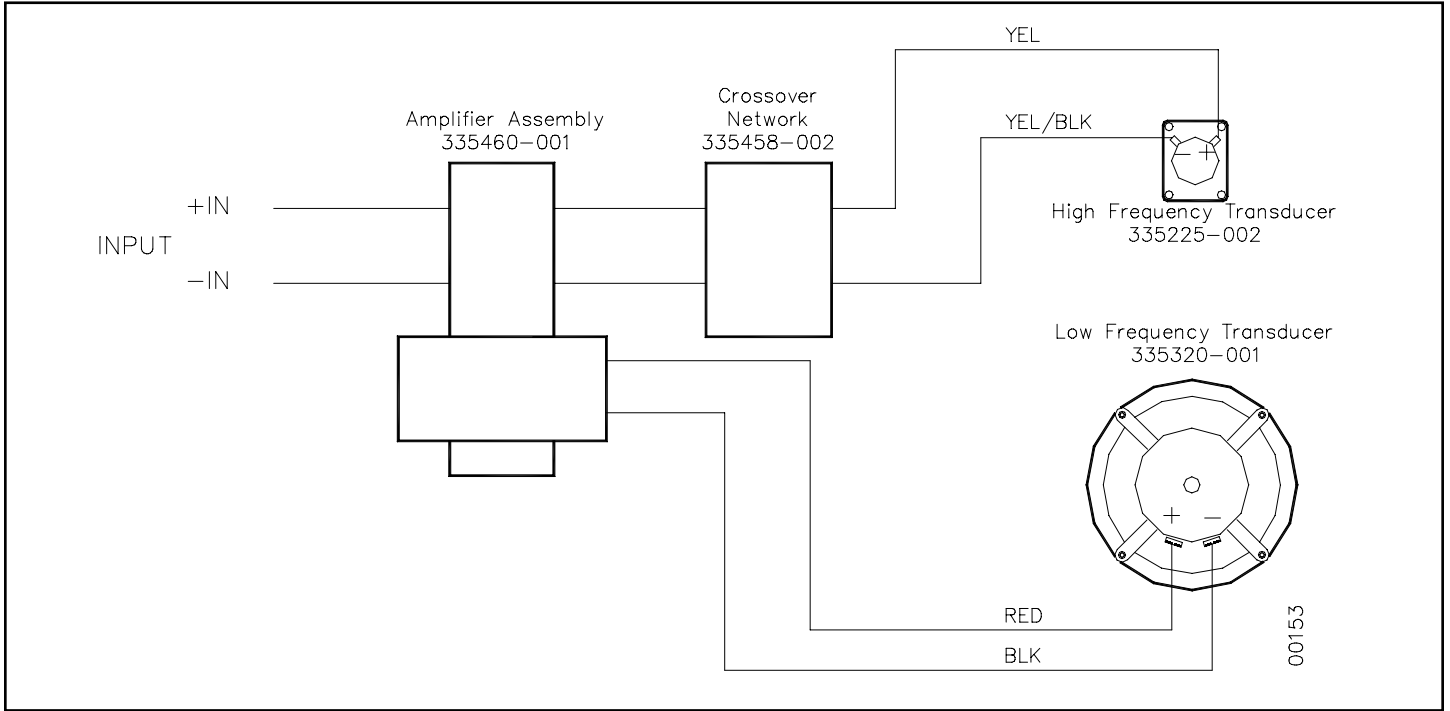
TO SERVICE THE INTERMEZZO 2.6

- 1) Remove the grille and side panel.
- 2) Extract (7) of the rubber grille retainers shown in the illustration; this can be accomplished by carefully pulling them out of their cavities with long-nosed pliers or similar tool.
- 3) Remove the (7) Phillips screws that are now exposed.
- 4) Carefully lift the front baffle, with drivers, network, and RABOS controls attached, off the cabinet.
- 5) To service the amplifier, remove the (8) Phillips screws at the rear of the enclosure, and push the amplifier assembly out the front.

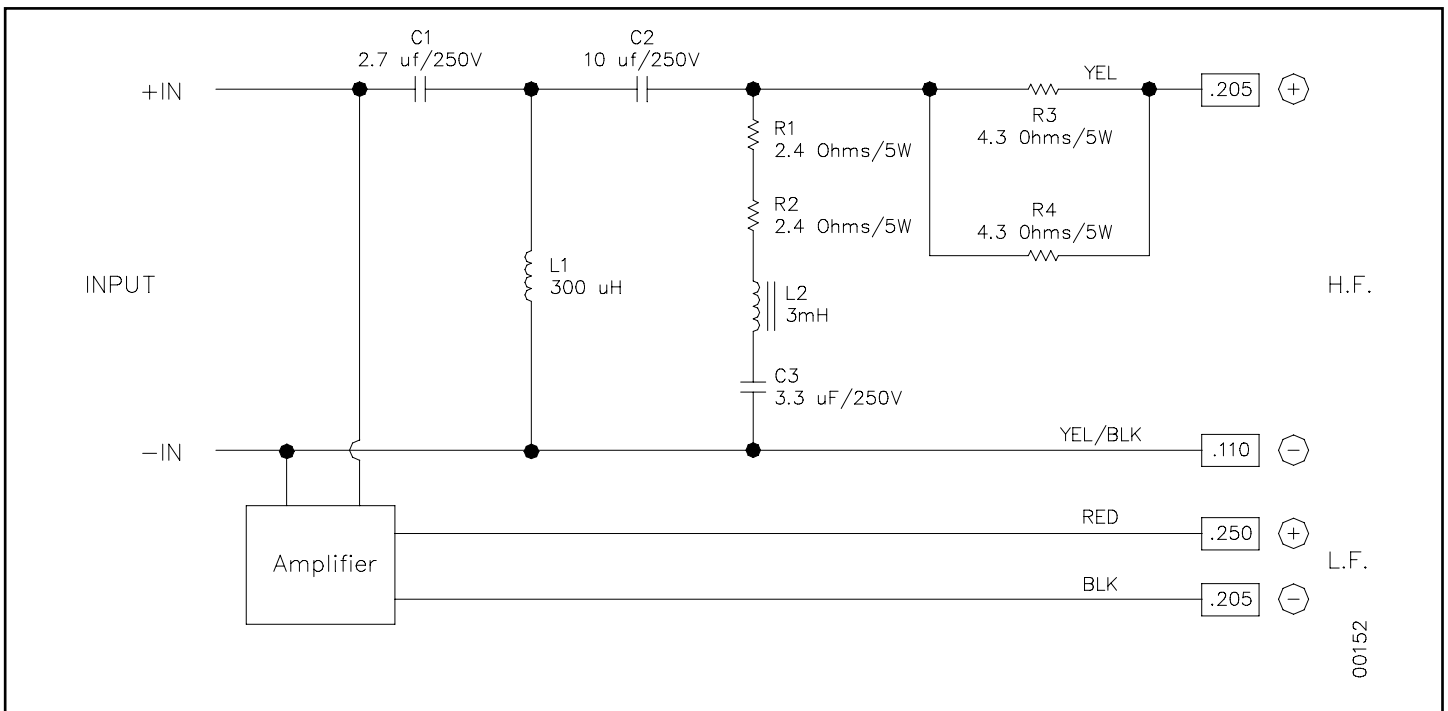
Packaging



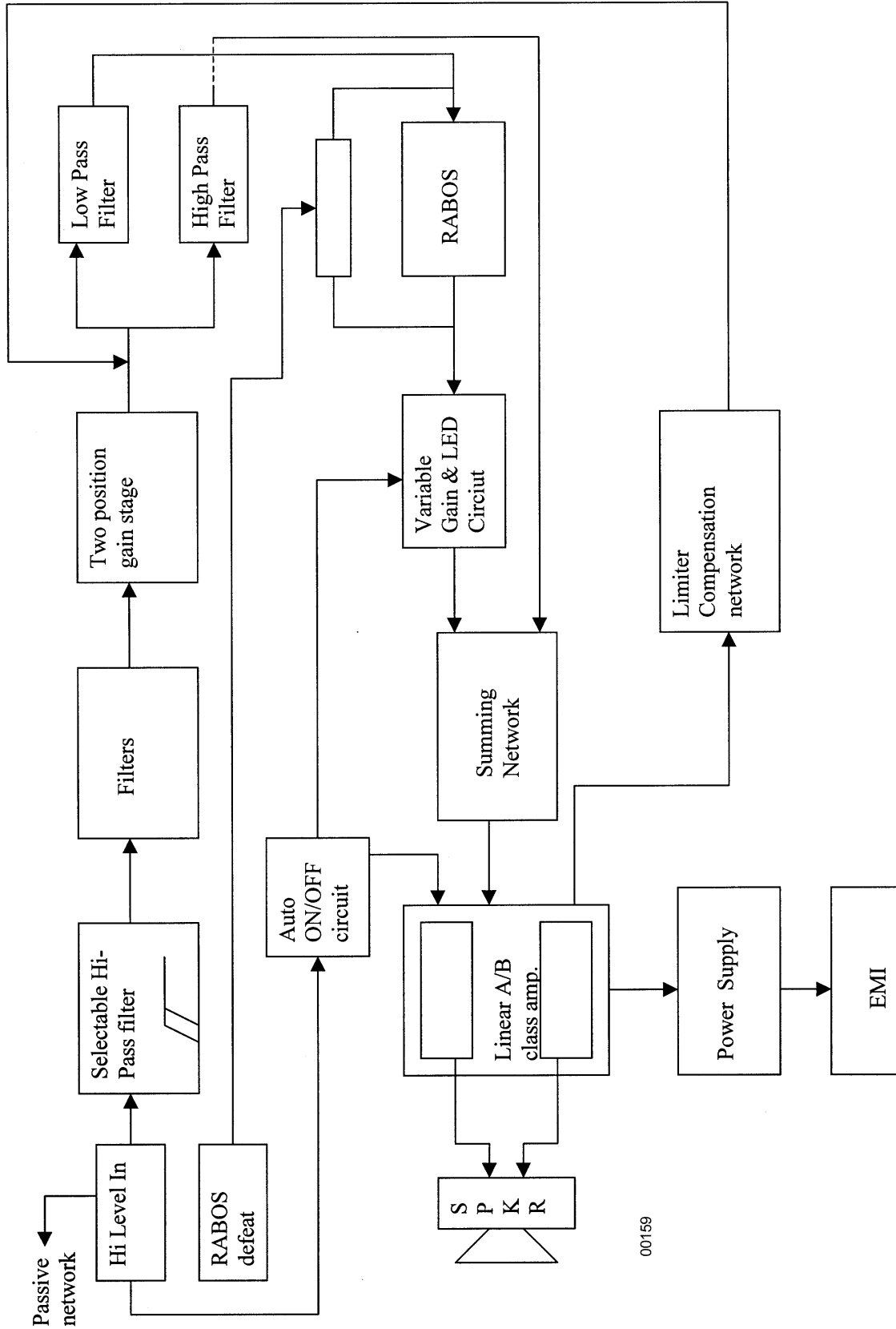
Wiring Diagram



Intermezzo 2.6 Hi-Pass Schematic



Amplifier Block Diagram



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Intermezzo 2.6 Electrical Parts List

Part #	Designator	Qty	Description
PCB, AMPLIFIER			
Semiconductors			
UA0009	U1	1	OPAMP, QUAD 14P DIL TL074/084
DS0001	D1 - D11	11	RECT, 100mA 75V SIGNAL 1N4148T
UV0010	U2	1	VREG, +15V 500MA LM7815CT
UV0011	U3	1	VREG, -15V 500MA LM7915CT
QB0017	Q2,Q6	2	TRANS, NPN 150V 0.6A 2N5551TR
QB0018	Q1,Q5	2	TRANS, PNP 150V 0.6A 2N5401TR
QM0034	Q4,Q8	2	MOSFET, IRF9540 TO220AB
QM0036	Q3,Q7	2	MOSFET, IRF530 TO220
QM0054	Q9	1	JFET, N-CH J113 TO92
Capacitors			
CC0025	C15,C16,C17,C18	4	CAP, CA 1000PF 100V 10%
CC0080	C13,C14	2	CAP, CA 220P 100V 10%
CC0082	C7,C8	2	CAP, CA .1UF 50V 20%
CC0097	C4,C5	2	CAP, C 10P 50V 10
CE0003	C6	1	CAP, E 2.2UF 50V 20% 105C
CE0013	C9,C10	2	CAP, E 47UF 50V 20% 5MMLS
CE0018	C11,C12	2	CAP, E 100UF 25V 20% 5MMLS
CE0106	C19,C20	2	CAP, E 22UF 35V BP 8X11 5MMLS
CE0116	C1	1	CAP, E 2.2UF 50V BP 6X11 5MMLS
CF0092	C2,C3	2	CAP, F 1000PF 100V 5% 5MMLS
Resistors			
RC0273	R19,R20,R35,R36	4	RES, ZERO OHM 1/4W
RM0001	R12-R15,R28,R29,R30,R31	8	RES, MF 1K 1/4W 1%
RM0002	R1,R2,R5,R6,R22,R38,R41,R42	8	RES, MF 10K 1/4W 1%
RM0021	R7,R8,R23,R24	4	RES, MF 1.82K 1/4W 1%
RM0024	R17,R18,R33,R34	4	RES, MF 2.21K 1/4W 1%
RM0027	R21,R37	2	RES, MF 33.2K 1/4W 1%
RM0029	R9,R10,R25,R26	4	RES, MF 3.01K 1/4W 1%
RM0144	R43	1	RES, MF 47.5K 1/4W 1%
RM0180	R16,R32	2	RES, MF 4.99K 1/4W 1%
RP0059	R11,R27	2	POT, 2K 8MM TOP ADJ/COVER
RX0048	R39,R40	2	RES, MO 330R 1W 5%
Miscellaneous			
JH0016	J7	1	CNCTR, HEADER 2PIN .100CTR
JH0074	J13,J14	2	CNCTR, HEADER 8PIN LOCKING .1C
MM0025	J9,J10	2	MISC, PC MT SCREW TERM 6-32
MT0003	J1	1	TERM, FASTON MALE PCMT 250X032
MT0023	J3,J6	2	TERM, FASTON MALE PCMT 187X032
MT0036	J2	1	TERM, FASTON MALE PCMT 205X032

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Intermezzo 2.6 Electrical Parts List (Cont.)

PCB, CONTROL			
Part #	Designator	Qty	Description
Semiconductors			
UA0009	U1,U2	2	OPAMP, QUAD 14P DIL TL074/084
UF0012	U4	1	FOTO, 6PIN 4N35
DZ0013	Z1	1	ZENER, 500MW 5.6V 5% 1N5232B
Capacitors			
CE0003	C35,C36	2	CAP, E 2.2UF 50V 20% 105C
CF0014	C13,C15	2	CAP, F 3300PF 63V 5% 5MMLS
CF0035	C4	1	CAP, F .022UF 100V 5% 5MMLS
CF0045	C6,C18,C19	3	CAP, F .1UF 63DC 5% 5MMLS
CF0055	C2,C16	2	CAP, F .22UF 63V 10% 5MMLS
CF0087	C8,C9	2	CAP, F .015UF 100V 5% 5MMLS
CF0088	C5,C10,C11	3	CAP, F .01UF 100V 5% 5MMLS
CF0105	C17	1	CAP, F .15UF 63V 5% 5MMLS
CF0118	C20,C21	2	CAP, F .33UF 63V 10% 5MMLS
CF0134	C3	1	CAP, F 8200PF 100V 5% 5MMLS
CF0144	C37	1	CAP, F .082UF 63DC 5% 5MMLS
CF0147	C14	1	CAP, F 5600PF 50V 5% 5MMLS
CF0149	C7	1	CAP, F 560PF 63V 10% 5MMLS
CF0104	C12	1	CAP, F 1UF 63V 5% 5MMLS
RC0273	C1	1	RES, ZERO OHM 1/4W
Resistors			
RM0001	R37	1	RES, MF 1K 1/4W 1%
RM0002	R11,R16,R17,R23,R24, R26,R32,R40-R42	10	RES, MF 10K 1/4W 1%
RM0011	R2,R3	2	RES, MF 100K 1/4W 1%
RM0012	R30	1	RES, MF 100 ohms 1/4W 1%
RM0016	R15,R20,R27,R34,R36	5	RES, MF 13K 1/4W 1%
RM0024	R22	1	RES, MF 2.21K 1/4W 1%
RM0027	R29	1	RES, MF 33.2K 1/4W 1%
RM0034	R25	1	RES, MF 4.32K 1/4W 1%
RM0035	R74	1	RES, MF 4.75K 1/4W 1%
RM0038	R12	1	RES, MF 56.2K 1/4W 1%
RM0039	R9,R38,R39	3	RES, MF 5.11K 1/4W 1%
RM0042	R8,R31	2	RES, MF 681 ohms 1/4W 1%
RM0066	R21	1	RES, MF 221 ohms 1/4W 1%
RM0114	R6,R35	2	RES, MF 22.1K 1/4W 1%
RM0119	R13,R18,R28	3	RES, MF 27.4K 1/4W 1%
RM0258	R7	1	RES, MF 221K 1/4W 1%
RM0265	R10	1	RES, MF 130K 1/4W 1%
RM0298	R4,R5	2	RES, MF 37.4K 1/4W 1%
RM0379	R19	1	RES, MF 23.2K 1/4W 1%
RX0001	R1,R43	2	RES, MO 1K 1W 5%
Miscellaneous			
JC0064	J4	1	DC POWER JACK 2MM DIA
JC0081	J3	1	CNCTR, 10PIN (5X2) .1CTR
JC0094	J2	1	CNCTR, 2PIN GOLD PC MT
JH0074	J1	1	CNCTR, HEADER 8PIN LOCKING .1C
MM0025	J5	1	MISC, PC MT SCREW TERM 6-32

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Intermezzo 2.6 Electrical Parts List (Cont.)

Part #	Designator	Qty	Description
MT0003	J7	1	TERM, FASTON MALE PCMT 250X032
MT0031	J6	1	TERM, FASTON MALE PCMT 205X020
SR0017	S1,S2	2	SWITCH, 2 POLE 2PDT
PCB, MAIN BOARD			
Semiconductors			
DZ0004	Z1	1	ZENER, 500mW 18V 5% 1N5248B
DZ0021	Z2,Z3,Z4,Z5	4	ZENER, 500MW 15V 5% 1N5245B
DS0001	D2,D10	2	RECT, 100mA 75V SIGNAL 1N4148T
DS0002	D5,D8,D9	3	RECT, 100MA 200V SIGNAL 1N3070
DR0086	D6,D7	2	RECT, 1A 600V ULTRAFast MUR160
QB0002	Q2	1	TRANS, NPN 40V .6A TO92 2N4401
QB0017	Q3	1	TRANS, NPN 150V 0.6A 2N5551TR
QB0018	Q6	1	TRANS, PNP 150V 0.6A 2N5401TR
DD0003	D4	1	RECT, 1A2 60V DIAC
DR0026	D3	1	RECT, 16A 200V CATHODE FEP16DT
DR0087	D1	1	RECT, 15A 200V ULTRA MUR1540
HC1011	U1	1	HYBRID, THK FILM HC BUCK CNTR
QM0004	Q4,Q5	2	MOSFET, IRF740 TO220AB
QM0020	Q1	1	MOSFET, IRF540 TO220AB
Capacitors			
CC0025	C2	1	CAP, CA 1000PF 100V 10%
CC0059	C3,C4,C5,C18	4	CAP, CA .1UF 100V 20%
CE0013	C12,C13	2	CAP, E 47UF 50V 20% 5MMLS
CE0098	C7	1	CAP, E 22UF 50V 20% 5X11 5MMLS
CF0019	C8,C9	2	CAP, F 4700PF 100V 5% 5MMLS
CC0124	C11	1	CAP, C .01UF 500V DISC .2LS
CE0040	C23	1	CAP, E 680UF 200V 30X35 85DEG
CE0110	C6	1	CAP, E 1000UF 100V 18X40
CF0020	C16	1	CAP, FY2 4700PF 250V 20%
CF0050	C21,C22,C24,C25	4	CAP, F .1UF 250V 10% 10MMLS
CF0146	C10	1	CAP, F 6.8UF 250V 10% 27MMLS
Resistors			
RC0217	R22	1	RES, CF 47K 1/2W 5%
RC0273	R31,R32,R35	3	RES, ZERO OHM 1/4W
RM0001	R23	1	RES, MF 1K 1/4W 1%
RM0002	R8	1	RES, MF 10K 1/4W 1%
RM0035	R11	1	RES, MF 4.75K 1/4W 1%
RM0039	R6	1	RES, MF 5.11K 1/4W 1%
RM0070	R12	1	RES, MF 301 ohms 1/4W 1%
RM0075	R15,R16,R18,R19	4	RES, MF 475 ohms 1/4W 1%
RM0111	R7	1	RES, MF 17.8K 1/4W 1%
RM0123	R5	1	RES, MF 36.5K 1/4W 1%
RM0198	R24	1	RES, MF 205K 1/4W 1%
RM0260	R10	1	RES, MF 1.0M 1/4W 1%
RM0339	R3,R13,R25,R34	4	RES, MF 10 ohms 0.6W 1% FLAMEPROOF
RM0340	R17,R20	2	RES, MF 22 ohms 1/4W 1% FLAMEPROOF
RX0072	R4	1	RES, MO 100 ohms 1W 5%
KS0020	R26	1	SURGISTOR, 10R 2A CL-110
RW0022	R1,R2	2	RES, WW 0.1 ohms 2W 5%

00154C

Intermezzo 2.6 Electrical Parts List (Cont.)

Part #	Designator	Qty	Description
Miscellaneous			
480007	J1	1	SUB, #18B 4" 1/4 STRIP/187X032
480029	J2	1	SUB, #18R 4" 1/4 STRIP/187X032
500104	T1	1	XFMR, POWER 100V HC TRAN ETD39 (ADD SHORT BETWEEN PINS 6 AND 7)
540134	L1	1	IND, 26UH 0.15R AIR CORE LITZ
BF0007	L2	1	BEAD, FERRITE
JH0074	J6	1	CNCTR, HEADER 8PIN LOCKING .1C
MM0025	J7,J8,J9,J10	4	MISC, PC MT SCREW TERM 6-32
MT0005		2	TERM, KWIKDISC .187 X.032 FEMA
MT0023	J4,J5	2	TERM, FASTON MALE PCMT 187X032
PCB, FEATURE			
Semiconductors			
UA0003	U2,U3	2	OPAMP, QUAD 14PIN DIL LM324N
UA0009	U1	1	OPAMP, QUAD 14P DIL TL074/084
DS0001	D1,D2,D3,D4,D5,D6,D7,D8,D9	9	RECT, 100mA 75V SIGNAL 1N4148T
DZ0003	Z2	1	ZENER, 500mW 13V 5% 1N5243B
DZ0021	Z1	1	ZENER, 500MW 15V 5% 1N5245B
QM0035	Q1	1	JFET, N-CH J111 TO92 TR
Capacitors			
CC0020	C1	1	CAP, CA 470PF 100V 5%
CC0025	C3	1	CAP, CA 1000PF 100V 10%
CC0072	C13	1	CAP, CA 100PF 100V 10%
CC0082	C2	1	CAP, CA .1UF 50V 20%
CC0108	C12	1	CAP, CA 22PF 50V 10
CE0013	C4	1	CAP, E 47UF 50V 20% 5MMLS
CE0103	C11	1	CAP, E 100UF 35V 85DEG 5MMLS
CF0088	C6,C7,C9,C10	4	CAP, F .01UF 100V 5% 5MMLS
Resistors			
RC0290	R9	1	RES, CF 9.1M 1/4W 5%
RM0001	R13	1	RES, MF 1K 1/4W 1%
RM0002	R11,R15,R27,R28,R29	5	RES, MF 10K 1/4W 1%
RM0003	R1,R18	2	RES, MF 15K 1/4W 1%
RM0011	R2,R22,R26	3	RES, MF 100K 1/4W 1%
RM0016	R24	1	RES, MF 13K 1/4W 1%
RM0024	R10	1	RES, MF 2.21K 1/4W 1%
RM0031	R7	1	RES, MF 3.32K 1/4W 1%
RM0075	R8	1	RES, MF 475 ohms 1/4W 1%
RM0079	R25	1	RES, MF 750 ohms 1/4W 1%
RM0085	R21	1	RES, MF 2K 1/4W 1%
RM0113	R12	1	RES, MF 20K 1/4W 1%
RM0136	R5	1	RES, MF 150K 1/4W 1%
RM0156	R20	1	RES, MF 392K 1/4W 1%
RM0171	R6	1	RES, MF 475K 1/4W 1%
RM0188	R23	1	RES, MF 499 ohms 1/4W 1%
RM0194	R16,R17,R19,R45	4	RES, MF 158K 1/4W 1%
RM0381	R14	1	RES, MF 21K 1/4W 1%

00154D

Intermezzo 2.6 Electrical Parts List (Cont.)

Part #	Designator	Qty	Description
Miscellaneous			
JH0061	J1	2	CNCTR, HEADER 5PIN
JH0074	J3	1	CNCTR, HEADER 8PIN LOCKING .1C
480028	J7	1	SUB, #18R 6" 1/4 STRIP/187X032
480046	J5,J6,J8	3	SUB, #18B 5" 1/4"STRIP/187X032
540124	L1	1	IND, CM CHOKE YT7271
PCB, AC/EMI FILTER PCB			
CF0057	C1,C2	2	CAP, FX .22UF 250V 10%
DB0009	D5	1	RECT, 6A 400V BRIDGE
KV0001	Z4	1	VARISTOR, 275V 100J .6W TERM, KWIKDISC .187 X.032 FEMA
MT0005		4	USED ON 480046 AND 480028
RC0004	R23	1	RES, CF 1M0 1/4W 5%
MISCELLANEOUS			
480119		2	SUB, #16B 20" 205X032/205X032 A; SPEAKER WIRE -; XOVER WIRE-;
480120		1	SUB, #16R 20" 250X032/250X032 A; SPEAKER WIRE+;
480126		1	SUB, #16R 20" 250X032/250X032M A; XOVER WIRE+;
810056		7	MET, HTSNK CLIP .9X.5X.2 FET C; 3PER USED ON D1,D3,Q1 ON MAIN BOARD; 4PER USED ON Q3,Q4,Q7,Q8 ON LINEAR BOARD
810066		2	MET, HTSNK CLIP HPS SERIES USED Q4,Q5 ON MAIN BOARD
810091		1	MET, HTSNK SEC 3FET RP5 USED ON MAIN BOARD
810092		1	MET, HTSNK PRI 2FET RP5 USED ON MAIN BOARD
FH0014		1	FUSE, HOLDER PANEL MT MINI USED ON THE PANEL
FS0029		1	FUSE, 3A 5MMX20MM SLOW BLO SCREW, #6-32X1/4 PAN PHIL ZNP 1PER USED ON 600078 BOARD; 6 USED ON
HS0004		7	MM0025 SCREW, #4-40X1/2 100 PHIL ZNP
HS0012		6	ON THE FRONT PANEL; SCREW, #6-1/2 TYPE B PP BLK
HS0062		7	USED ON FETS SCREW, #6-3/8 TYPE A PP BLK 7PER USED ON MZ0030; 1PER USED ON J5
HS0067		8	FEATURE SCREW, #4-24X3/8 HL PP ZNC
HS0072		2	USED ON J2
JC0071		1	INTERMEZZO 2.6 MAIN ENCLOSURE
JC0129		1	INTERMEZZO 2.6 MAIN PLATE
JC0071		1	CNCTR, FEM-FEM HARNESS 8PIN 9" USED ON FEATURE BOARD
JC0129		1	CNCTR, AC IEC SOCKET .250 2PIN ON THE FRONT PANEL;

00154E

Intermezzo 2.6 Electrical Parts List (Cont.)

Part #	Designator	Qty	Description
JC0163B		1	CNCTR, FEM-FEM HARNESS 8P 10" USED ON FEATURE BOARD
JC0168		4	CNCTR, SPEAKER CABLE 16" USED ON J1,J2,J6,J7;
MS0013		7	SILPAD, 1"X4" ADHESIVE 3PER USED ON MAIN BOARD; 4PER USED ON THE LINEAR BOARD
MZ0030		7	STANDOFF, 3/8" NYLON 4PC USED ON 600078 BOARD; 3 PC USED ON 620008 BOARD
MZ0037		3	STANDOFF, 13/16" LOCK BOTH END USED ON THE MEZZINE BOARD
SR0006		2	SWITCH, CAP FOR SR0005 FOR TV5 SWITCHES;
SR0032		1	SWITCH, ROCKER TV5 ON THE FRONT PANEL;
WI0043		1	WIRE, POWER CORD 15FT IEC
RABOS Assembly Right			
Semiconductors			
UA0009	U1	1	OPAMP, QUAD 14P DIL TL074/084
UA0010	U2	1	OPAMP, DUAL 8PIN DIL TL082
QB0002	Q3	1	TRANS, NPN 40V .6A TO92 2N4401
QM0035	Q1,Q2	2	JFET, N-CH J111 TO92 TR
DL0014	D1	1	LED, 3MM BICOLOR RED/GR
DS0001	D2,D3	2	RECT, 100mA 75V SIGNAL 1N4148T
Capacitors			
CE0115	C4,C5	2	CAP, E 1UF 63V 6X11 85C 5MMLS
CF0045	C1,C2,C3	3	CAP, F .1UF 63DC 5% 5MMLS
Resistors			
RC0148	R30	1	RES, CF 10M 1/4W 5%
RM0001	R27,R29	2	RES, MF 1K 1/4W 1%
RM0002	R1,R2,R4,R10,R15,R16,R24, R26,R37	9	RES, MF 10K 1/4W 1%
RM0003	R9,R14	2	RES, MF 15K 1/4W 1%
RM0012	R3	1	RES, MF 100 ohms 1/4W 1%
RM0024	R25	1	RES, MF 2.21K 1/4W 1%
RM0031	R36	1	RES, MF 3.32K 1/4W 1%
RM0042	R31	1	RES, MF 681 ohms 1/4W 1%
RM0080	R5,R11	2	RES, MF 825 ohms 1/4W 1%
RM0083	R35	1	RES, MF 1.5K 1/4W 1%
RM0120	R32	1	RES, MF 30.1K 1/4W 1%
RM0144	R33,R34	2	RES, MF 47.5K 1/4W 1%
RM0260	R28	1	RES, MF 1.0M 1/4W 1%
RM0271	R22	1	RES, MF 110K 1/4W 1%
RM0281	R8,R13	2	RES, MF 6.04K 1/4W 1
RM0313	R32	1	RES, MF 6.49K 1/4W 1%
RM0315	R19	1	RES, MF 2.67K 1/4W 1%
RM0369	R7,R12	2	RES, MF 340 ohms 1/4W 1%
RM0370	R21	1	RES, MF 9.31K 1/4W 1%
RM0377	R18	1	RES, MF 3.57K 1/4W 1%
RM0378	R23	1	RES, MF 549 ohms 1/4W 1%
RM0390	R33,R34	2	RES, MF 10.7K 1/4W 1%

00154F

Intermezzo 2.6 Electrical Parts List (Cont.)

Part #	Designator	Qty	Description
RP0088	R6	1	POT, C10K DUAL 12MM HOR SEL
RP0087	R17,R20	2	POT, A10K DUAL 12MM HOR SEL
Miscellaneous			
JH0061	J4	1	CNCTR, HEADER 5PIN
JH0074	J3	1	CNCTR, HEADER 8PIN LOCKING .1C
PCB, VOLUME			
MZ0036		1	STANDOFF, 14MM LED 2PIN FOR D1
RM0001	R3	1	RES, MF 1K 1/4W 1%
RM0321	R2	1	RES, MF 1.27K 1/4W 1%
RP0097	R1	1	POT, A10K SINGLE/BRKT D SHAFT SCREW, #6-19X3/8 HL PP ZNC
HS0073		2	USED ON THE RABOS RIGHT HOUSING; SCREW, #6-19X1 HL PP ZNC
HS0087		4	USED ON THE RABOS RIGHT HOUSING; CNCTR, FEM-MAL HARNESS 8P 10"
JC0163A		1	USED ON J3
MM0067		1	MISC, VOL GASKET R INTERMEZZO
MZ0035		4	STANDOFF, 3/8" EXP GROMMET FR
RP0098		1	POT, KNOB INT 2.6 LEVEL RIGHT, R1
RABOS Assembly Left			
Semiconductors			
UA0009	U1	1	OPAMP, QUAD 14P DIL TL074/084
UA0010	U2	1	OPAMP, DUAL 8PIN DIL TL082
QB0002	Q3	1	TRANS, NPN 40V .6A TO92 2N4401
QM0035	Q1,Q2	2	JFET, N-CH J111 TO92 TR
DL0014	D1	1	LED, 3MM BICOLOR RED/GR
DS0001	D2,D3	2	RECT, 100mA 75V SIGNAL 1N4148T
Capacitors			
CE0115	C4,C5	2	CAP, E 1UF 63V 6X11 85C 5MMLS
CF0045	C1,C2,C3	3	CAP, F .1UF 63DC 5% 5MMLS
Resistors			
RC0148	R30	1	RES, CF 10M 1/4W 5%
RM0001	R27,R29	2	RES, MF 1K 1/4W 1%
RM0002	R1,R2,R4,R10,R15,R16,R24,R26,R37	9	RES, MF 10K 1/4W 1%
RM0003	R9,R14	2	RES, MF 15K 1/4W 1%
RM0012	R3	1	RES, MF 100 ohms 1/4W 1%
RM0024	R25	1	RES, MF 2.21K 1/4W 1%
RM0031	R36	1	RES, MF 3.32K 1/4W 1%
RM0042	R31	1	RES, MF 681 ohms 1/4W 1%
RM0080	R5,R11	2	RES, MF 825 ohms 1/4W 1%
RM0083	R35	1	RES, MF 1.5K 1/4W 1%
RM0260	R28	1	RES, MF 1.0M 1/4W 1%
RM0271	R22	1	RES, MF 110K 1/4W 1%
RM0281	R8,R13	2	RES, MF 6.04K 1/4W 1
RM0313	R32	1	RES, MF 6.49K 1/4W 1%
RM0315	R19	1	RES, MF 2.67K 1/4W 1%

00154G

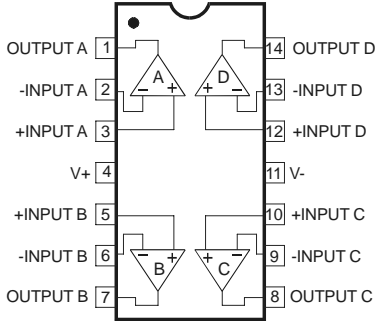
Intermezzo 2.6 Electrical Parts List (Cont.)

Part #	Designator	Qty	Description
RM0369	R7,R12	2	RES, MF 340 ohms 1/4W 1%
RM0370	R21	1	RES, MF 9.31K 1/4W 1%
RM0377	R18	1	RES, MF 3.57K 1/4W 1%
RM0378	R23	1	RES, MF 549 ohms 1/4W 1%
RM0390	R33,R34	2	RES, MF 10.7K 1/4W 1%
RM0001	R3	1	RES, MF 1K 1/4W 1%
RM0321	R2	1	RES, MF 1.27K 1/4W 1%
RP0099	R1	1	POT, C10K SINGLE/BRKT D SHAFT
RP0087	R17,R20	2	POT, A10K DUAL 12MM HOR SEL
RP0088	R6	1	POT, C10K DUAL 12MM HOR SEL
Miscellaneous			
JH0061	J4	1	CNCTR, HEADER 5PIN
JH0074	J3	1	CNCTR, HEADER 8PIN LOCKING .1C
PCB, VOLUME			
MZ0036		1	STANDOFF, 14MM LED 2PIN FOR D1 SCREW, #6-19X3/8 HL PP ZNC
HS0073		2	USED ON THE RABOS LEFT HOUSING; SCREW, #6-19X1 HL PP ZNC
HS0087		4	USED ON THE RABOS LEFT HOUSING;
JC0163A		1	CNCTR, FEM HARNESS 8P 10" FOR J3
MM0068		1	MISC, VOL GASKET L INTERMEZZO
MZ0035		4	STANDOFF, 3/8" EXP GROMMET FR
RP0100		1	POT, KNOB INT 2.6 LEVEL LEFT

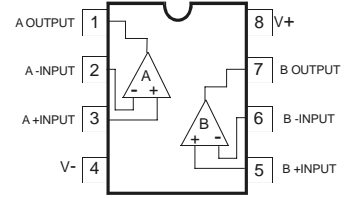
00154H

Integrated Circuit Diagrams

TL084, LM324



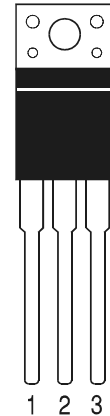
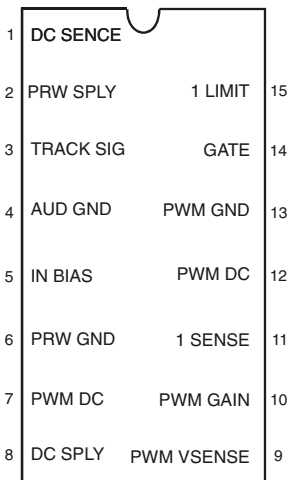
TL082



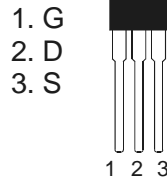
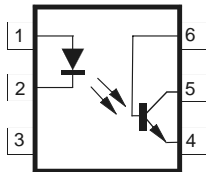
-15V REGULATOR
7915

+15V REGULATOR
7815

BASH CONTROLLER, U1

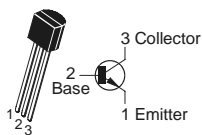


4N35

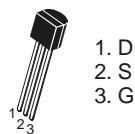


IRF9540, IRF530, IRF540, IRF740, MOSFET

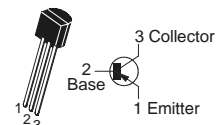
2N4401, 2N5551



J111, J113



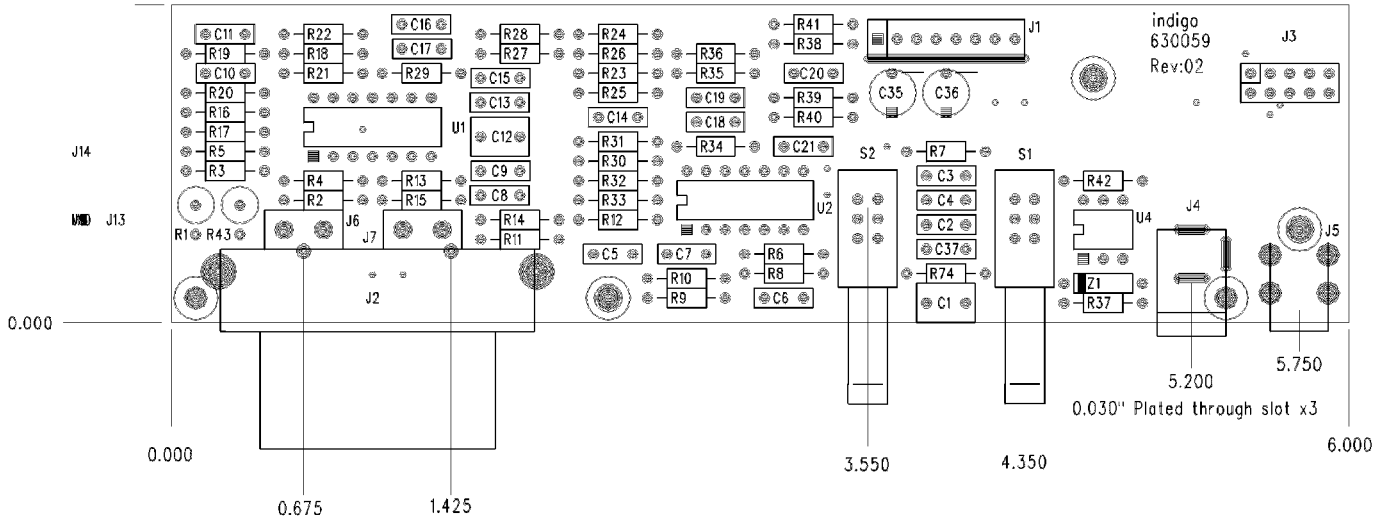
2N5401



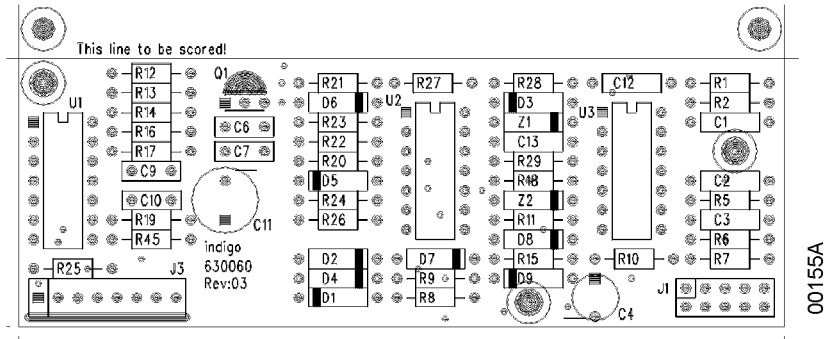
00151

Printed Circuit Board Diagrams

CONTROL PCB

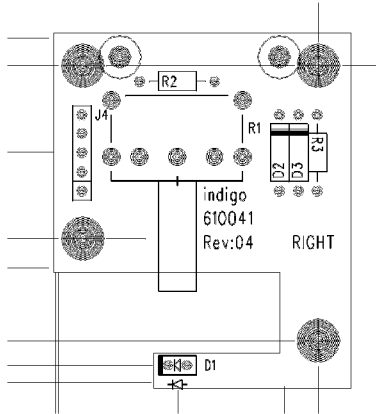


FILTER PCB

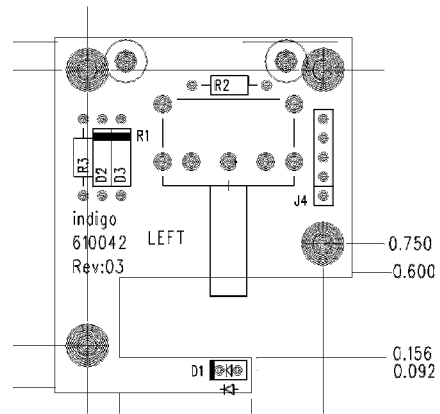


Printed Circuit Board Diagrams (Cont.)

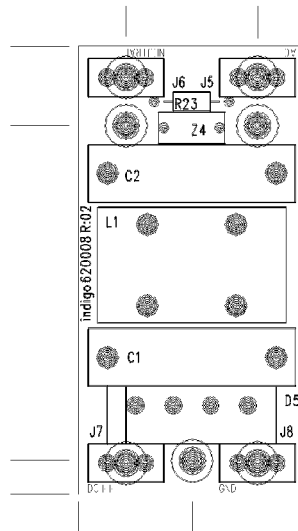
RIGHT - GAIN CTRL. PCB



LEFT - GAIN CTRL. PCB



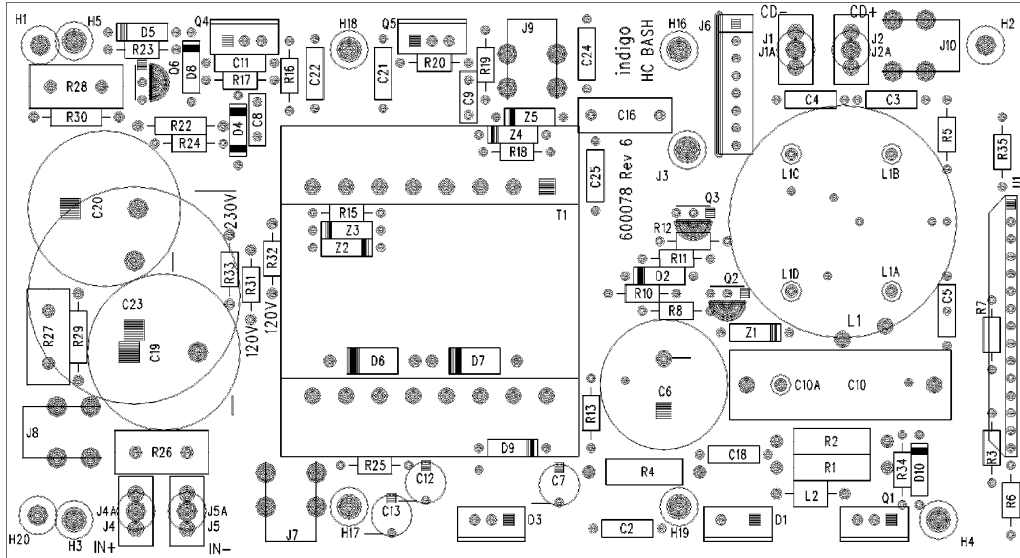
AC FILTER PCB



00155B

Printed Circuit Board Diagrams (Cont.)

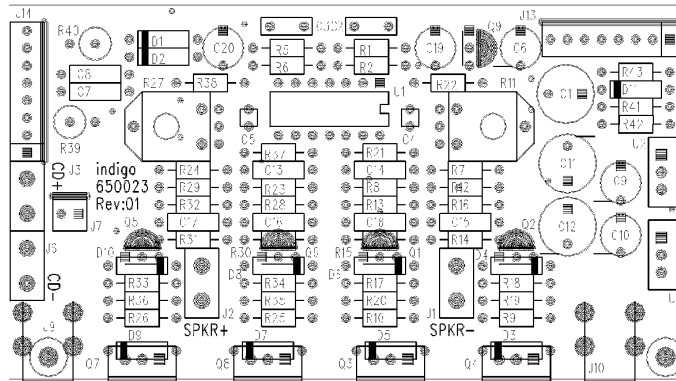
MAIN PCB



REV	REVISION HISTORY	DATE
A	First trial	Sep 30 99
B	Add C24,C25,L2,Q6	Nov 8 99
3	Add D10,R34 PRODUCTION RELEASE	Nov 23 99
4	Add 5 Mounting holes H16,H17,H18,H19,H20	Jan 7 2000
5	Add R35 Change hole size J7,J8,J9,10	Feb 29 2000
6	Connect pin 6 & 7	Mar 23 2000

5.475" 6.000"

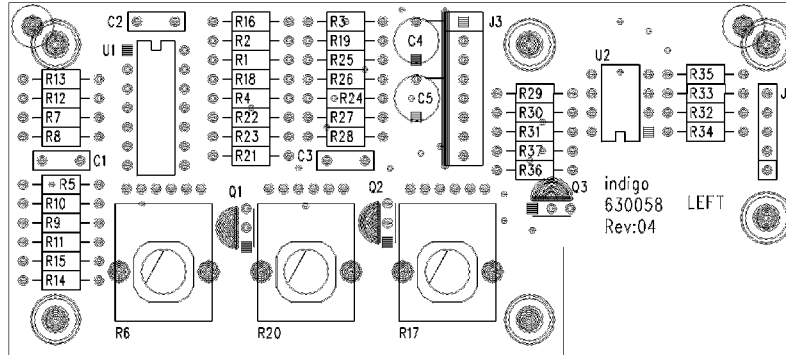
AMPLIFIER PCB



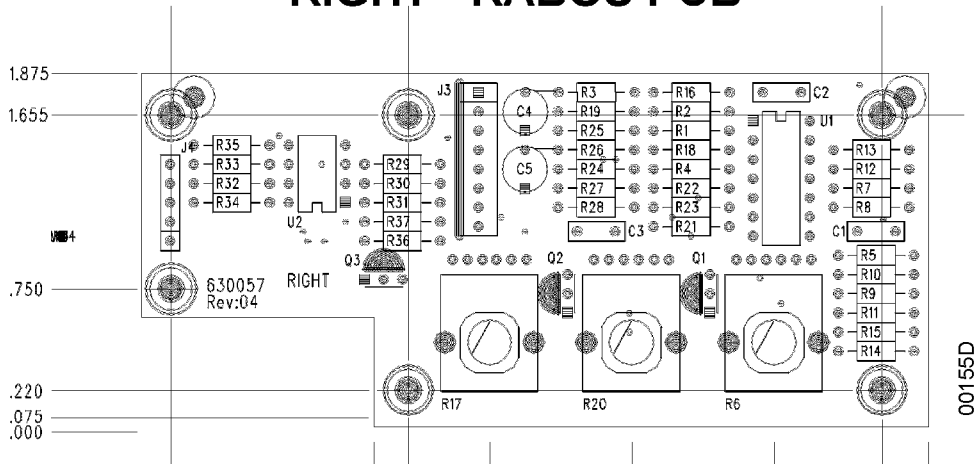
00155C

Printed Circuit Board Diagrams (Cont.)

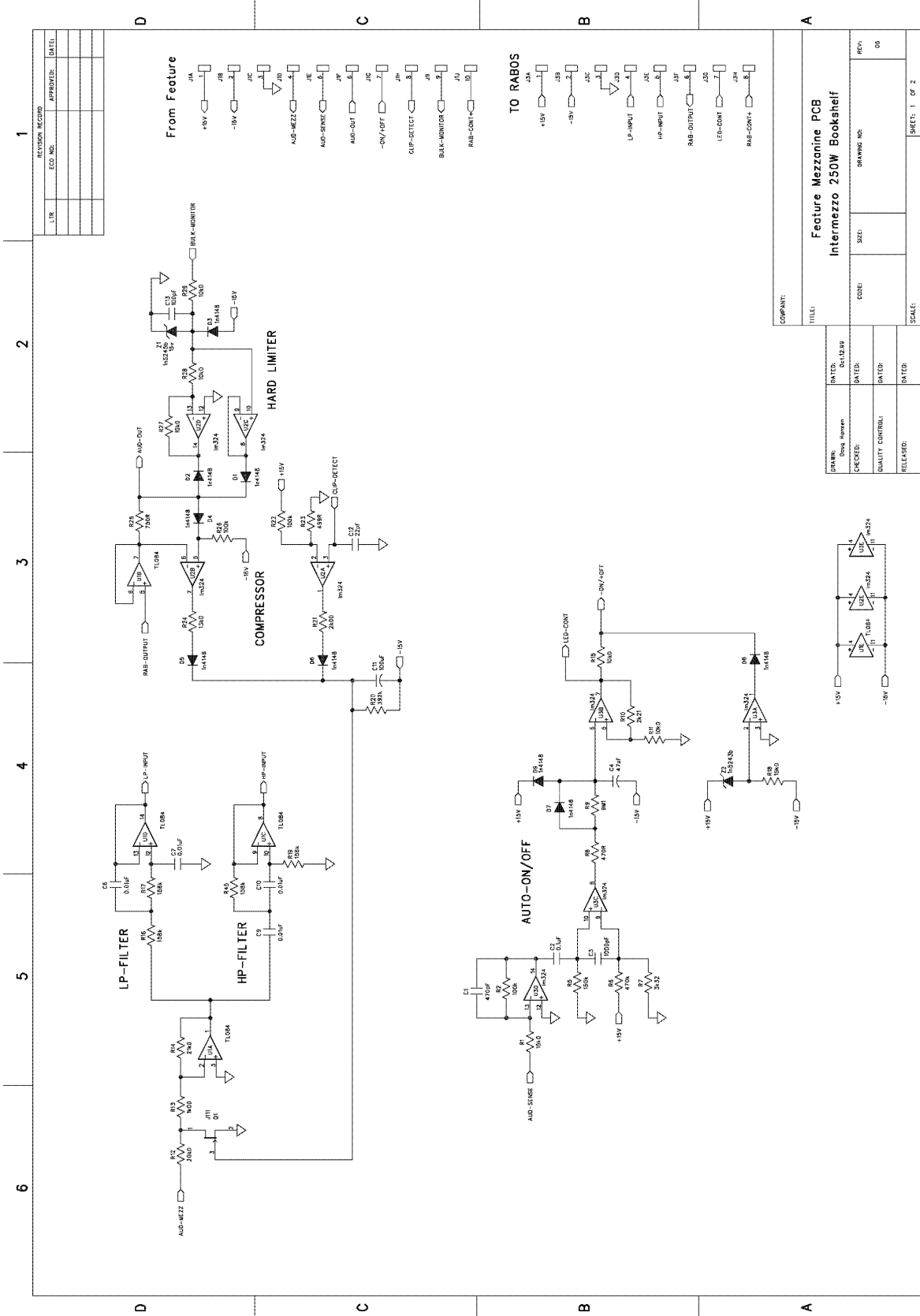
LEFT - RABOS PCB



RIGHT - RABOS PCB

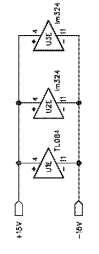


Schematics (Cont.)



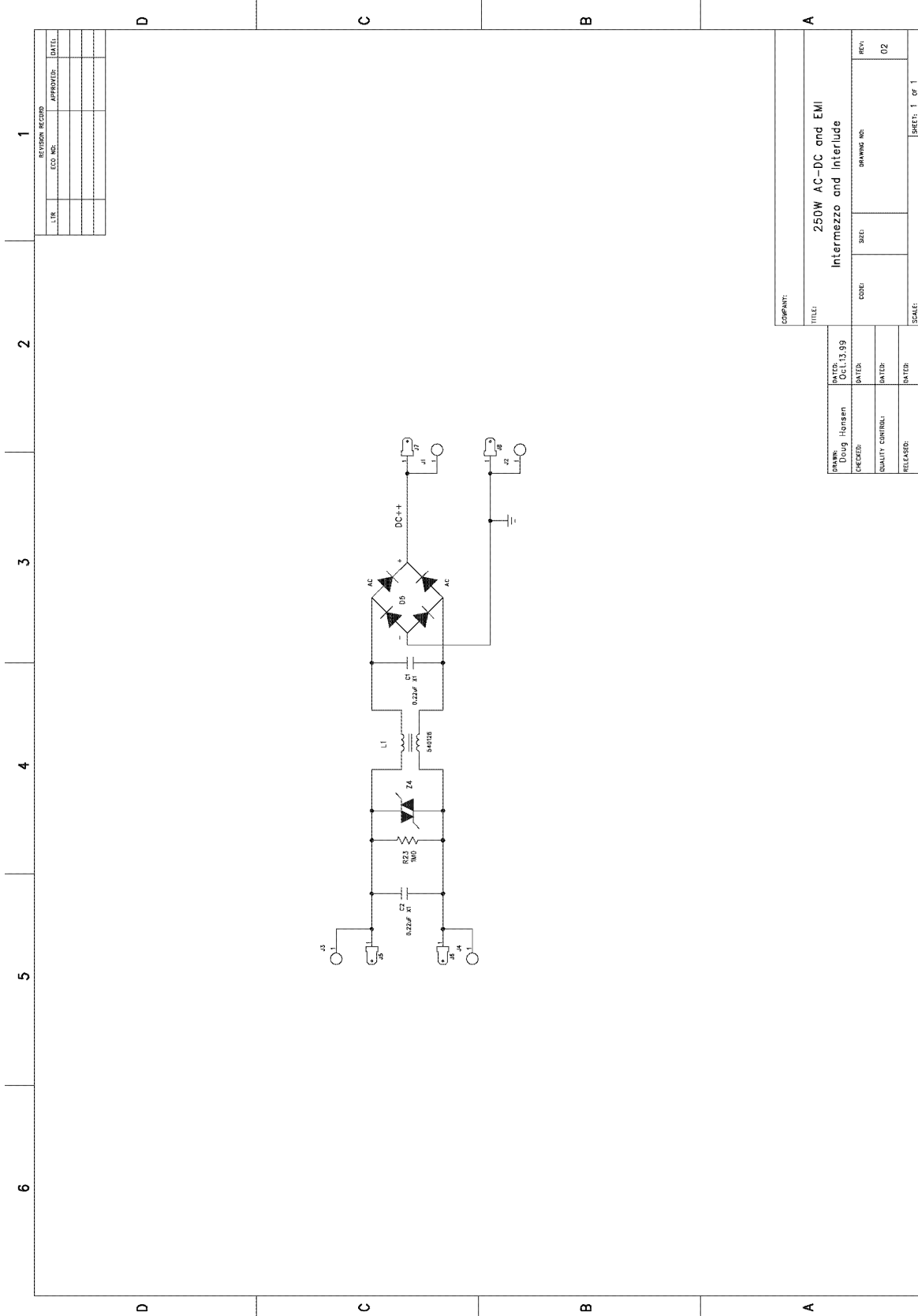
REV. NO.	DATE	APPROVED	DATE

COMPONENT:			
TITLE: Feature Mezzanine PCB			
Intermezzo 250W Bookshelf			
DATE: 04/12/89	CODE:	SIZE:	REV: 05
DESIGNED: Doug Morgan	DATE:	DRAWING NO:	
CHECKED:	DATE:		
QUALITY CONTROL:	DATE:		
RELEASED:	DATE:		
SCALE:			SHEET: 1 OF 2



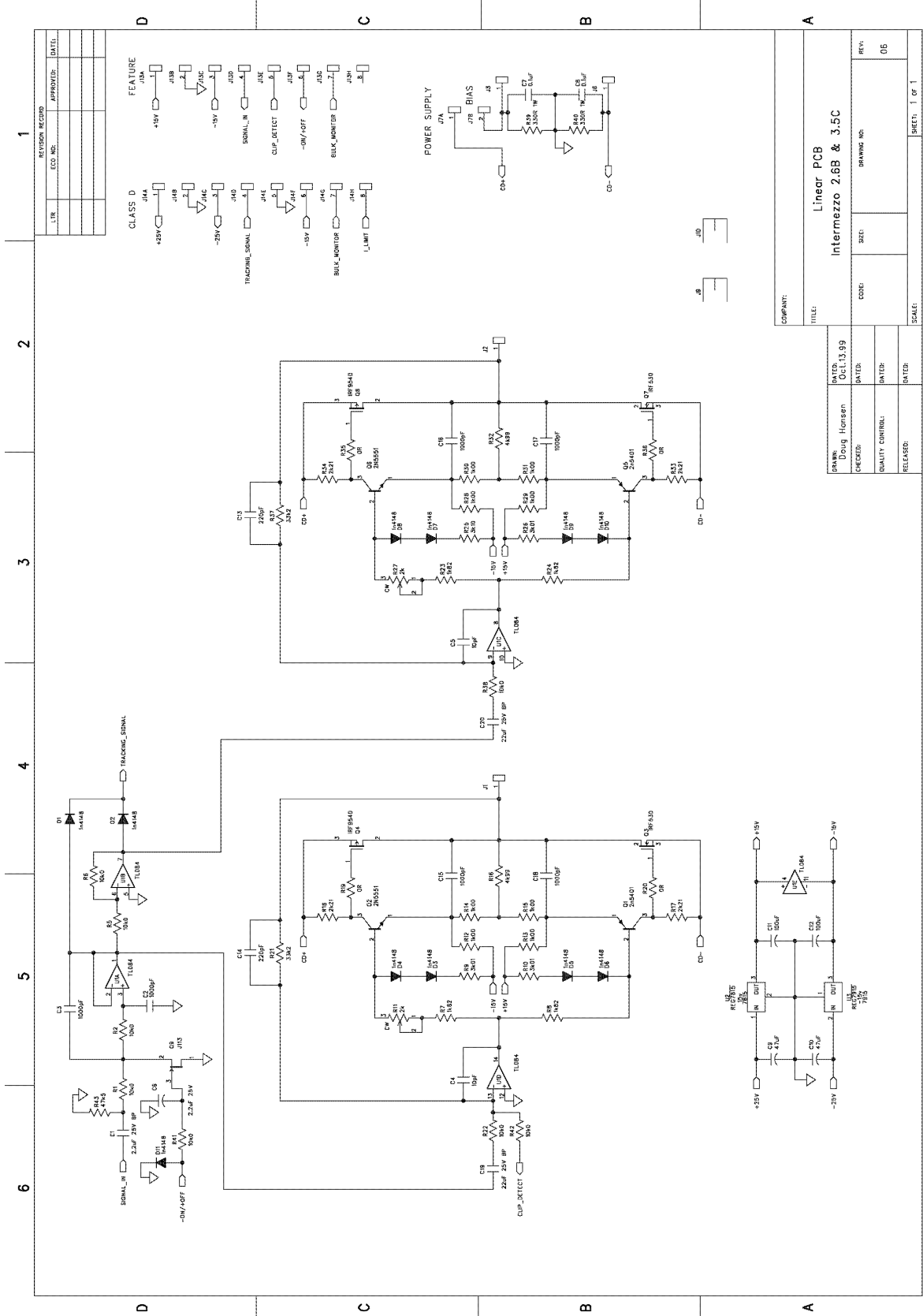
00147B

Schematics (Cont.)



00147C

Schematics (Cont.)



Schematics (Cont.)

1					
2					
3					
4					
5					
6					

REVISION RECORD

CLIK	ECO. NO.	APPROVED:	DATE:

COMPANY:

TITLE:

Robos Volume PCB
Intermezzo 250W Bookshelf

DRAWN: Doug Morgan	DATE: 06/12/89
CHECKED:	DATE:
QUALITY CONTROL:	DATE:
RELEASED:	DATE:

CODE: SIZE: DRAWING NO: REV: DC

SCALE: SHEET: 1 OF 1

00147E

Schematics (Cont.)

