



# **INTERMEZZO**

## **1.2s Subwoofer**

### **Service Manual**



Infinity Systems, Inc  
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REV 4 5/2005

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## **Specifications**

<b>Frequency Response:</b>	23Hz - 130Hz ( $\pm 3$ dB) 30Hz - 130Hz ( $\pm 1.5$ dB)
<b>Subwoofer Amplifier Output:</b>	850 watts continuous (In to $8\Omega$ from 20Hz-100Hz with no more than 0.1% THD) 2,600 watts peak
<b>2nd- and 3rd- Order Harmonic Distortion:</b>	<1% (20Hz - 130Hz, @ 95dB SPL)
<b>Crossover Frequencies:</b>	50Hz - 130Hz (continuously variable) 24dB/Octave
<b>Dimensions (H x W x D):</b>	15-1/4" x 18-1/4" x 13-3/4" (387mm x 464mm x 349mm)
<b>Weight:</b>	60 lb (27.3kg)

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

## Detailed Specifications

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

Parameter	Specification	Unit	QA Test Limits	Condit ions	Notes
<b>Amp Section</b>					
Type (Class AB, D, other)	AB	---		HC-BASH Power Supply	
Load Impedance (speaker)	8	Ohms		Nominal	Resistor Load
Rated Output Power	1000	Watts	850	@30Hz, THD 15%, Limiter defeated	
THD@ 680W	1	%	5	22k filter, 30Hz, LPF "Off"	
THD @ 1 Watt	0.05	%	0.3	22k filter, 30Hz, LPF "Off"	
Polarity (Input vs Output)	0	deg.	0' ±20	@30Hz; LPF "Off"; Phase "0"	.250 faston (+).....205 faston (-)
DC Offset	1	mV-DC	1.5	@ Speaker Outputs	
Damping factor	> 50	DF			
<b>Input Sensitivity</b>					
Input Frequency	30	Hz	30	Nominal Freq.	1 input driven
Line Input	44	dBr	±2	STO 1 Watt, @30Hz	LPF "Off", Gain Max., L-ch input only
Speaker/Hi Level Input	16	dBr	±2	STO 1 Watt, @30Hz	LPF "Off", Gain Max., L-ch input only
<b>Signal to Noise</b>					
SNR-A-Weighted	100	dBA	90	relative to 680W output	A-Weighting filter
SNR-unweighted	90	dBr	80	relative to 680W output	22k filter
SNR rel. 1W-unweighted	70	dBr	60	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	mVrms(max)	3	Volume @max, w/ A/P Swept Bandpass Measurement (Line freq. + harmonics)	
<b>Input Impedance</b>					
Line Input	10k	ohms		Nominal	
Speaker/Hi Level Input	1k	ohms		Nominal	
<b>Active Filters</b>					
<b>Low Pass (fixed or variable)</b>					
Frequency	79-176	Hz			
Slope	24	dB/Octave			
Q	0.5	Damping			
<b>Low Pass (fixed or variable)</b>					
Frequency	24	Hz			
Slope	6	dB/Octave			
Q	0.7	Damping			
<b>Subsonic filter (HPF)</b>					
Frequency	12	Hz			
Slope	12	dB/Octave			
Q	0.7	Damping			
<b>Line Out Filter (HPF)</b>					
Frequency	80	Hz	switchable	Low level output to satellites	switchable
Slope	12	dB/Octave			
Q	0.7	Damping			
<b>High Level Out Filter (HPF)</b>					
Frequency	yes	--	switchable	Passive; 330uF, 100V capacitor	
<b>Parametric EQ (BOS)</b>					
Frequency Pot	yes	--		21 detent pot (0.1 oct. steps)	
Range	20-80	Hz	functional		
Level Pot	yes	--	--	21 detent pot (0.5dB steps)	
Range	0 to -14	dB	functional		
Width(Q) Pot	yes	--	--	21 detent pot (5steps/0.1 octave)	
Range	0.05-0.5	octave	functional		
<b>Features</b>					
Main Power On/Off Switch	rocker	--	functional	Locate at amp plate	
Polarity Switch	push button	--	functional	Locate at amp plate	"0": Out; "180": In
High Level High Pass Switch	push button	--	functional	Locate at amp plate	SP, rated 10A @120V/240V, or more
Low Pass Filter Switch	push button	--	functional	Locate at amp plate	"ON": Out; "OFF": In
RABOS bypass switch	mini DC jack		functional	Locate at amp plate	O.D.: 5.0mm; I.D.: 2.1mm

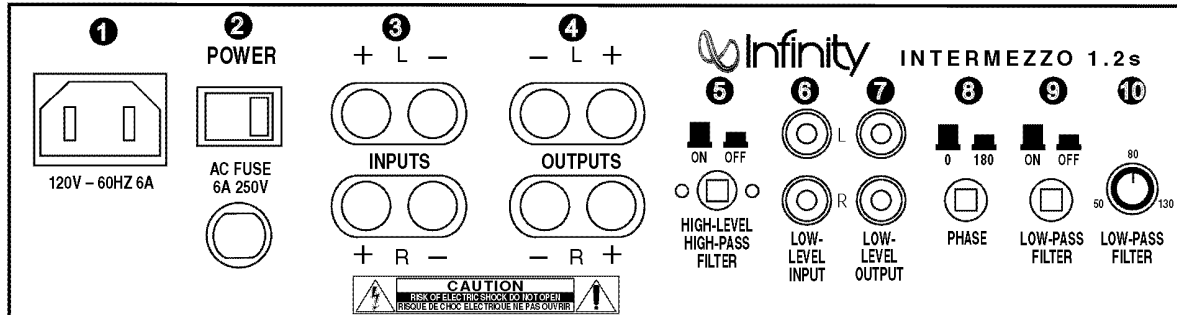
## Detailed Specifications (Cont.)

Parameter	Specification	Unit	QA Test Limits	Conditions	Notes
Limit er					
Output power limited to	680	Watts	650	THD < 5%	
Output Volume Control					
Volume Control Pot	10k	ohm		Locate at front, illuminated	
Taper (lin/log)	A-taper	--		D-shaft pot for knob fitting	
@minimum setting	no output	dB			
Input /Output Configur ation					
Line In (L,C,R,AC3,Mono)	L,R	--		RCA phono jack, gold plated	
Spkr/Hi Level In (L,C,R,mono)	L,R	--		Binding posts, gold plated	
Line Outputs (L,C,R)	L,R	--		RCA phono jack, gold plated	High pass filtered, 2nd order
Hi Level Out	L,R	--		Binding posts, gold plated	High pass filtered, 1st order, passive
Signal Sensing (ATO)					
Auto-Turn-On (yes/no)	yes	--		Under the condition that bias power never exceed 15W	
ATO Input Frequency	30	Hz			
ATO Level	8/100	mV	15/120	@30Hz into single Line/Speaker Input	LPF "On", BOS "Off"
ATO Bandwidth	300	Hz	350	ATO-LPF for noise immunity	LPF "On", BOS "Off"
ATO Turn-on time	5	ms	10	Amp connected and AC on, then input signal applied	
Auto Mute/ Turn-OFF Time	15	minutes	20	Time before muting, after signal is removed	
Power on Features					
Power on Delay time	2	sec.	3	AC Power Applied	
Power on LED	yes	--		Bi-color LED located at front	
Normal On	green	color			
ATO	red	color		"Active": green; "Standby": red	
Transients/Pops					
ATO Transient	10	mV-peak	N/P	@ Speaker Outputs	
Turn-on Transient	100	mV-peak	1V-pp	@ Speaker Outputs	AC Line cycled from OFF to ON
Turn-off Transient	100	mV-peak	1V-pp	@ Speaker Outputs	AC Line cycled from ON to OFF
Efficiency					
Stand-by Input Power	1.5	Watts	3	@ nom. line voltage	
AC Power Cons.@1W	35	Watts	40	@ nom. line voltage	
Power Cons.@680W	930	Watts	1000	@ nom. line voltage	
Efficiency @680W	73	%	68		
Protection					
Short Circuit Protection		--	functional	Direct short at output	
Thermal Protection		--	functional	@1/8 max unclipped Power	
DC Offset Protection		--	functional	DC present at Speaker Out leads	
ESD Protection		--	functional	ESD 15kV test apply to all input terminals	
Line Fuse Rating	6	Amps		Type-T or Slo Blo	External fuse w/ UL/SEMKO holder

# Controls and Connections

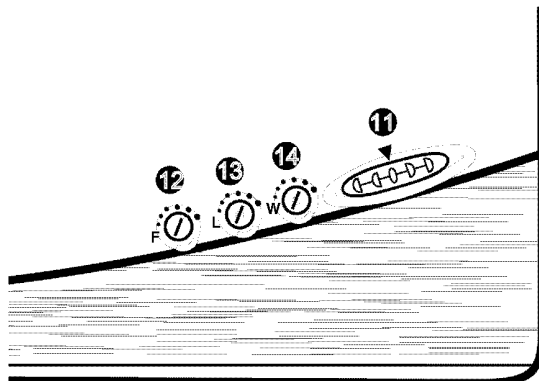
## CONTROLS AND CONNECTIONS

Rear Panel



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Front Panel



- 1 AC-Cord Input
- 2 Power Switch
- 3 Speaker-Level Inputs
- 4 Speaker-Level Outputs
- 5 High-Level High-Pass Filter Switch
- 6 Low-Level-Input Connectors
- 7 Low-Level-Output Connectors
- 8 Phase Switch
- 9 Low-Pass Filter Switch
- 10 Variable Low-Pass Filter Adjustment
- 11 Subwoofer-Level Control
- 12 Center-Frequency Adjustment
- 13 R.A.B.O.S. Level
- 14 Bandwidth Adjustment

## Controls and Connections (Cont.)

The Infinity Intermezzo 1.2s offers unprecedented flexibility for connecting the system to any type of audio or home-theater system. Consult the table at right to determine which system description most closely matches your own, then follow the hook-up method corresponding to that system.

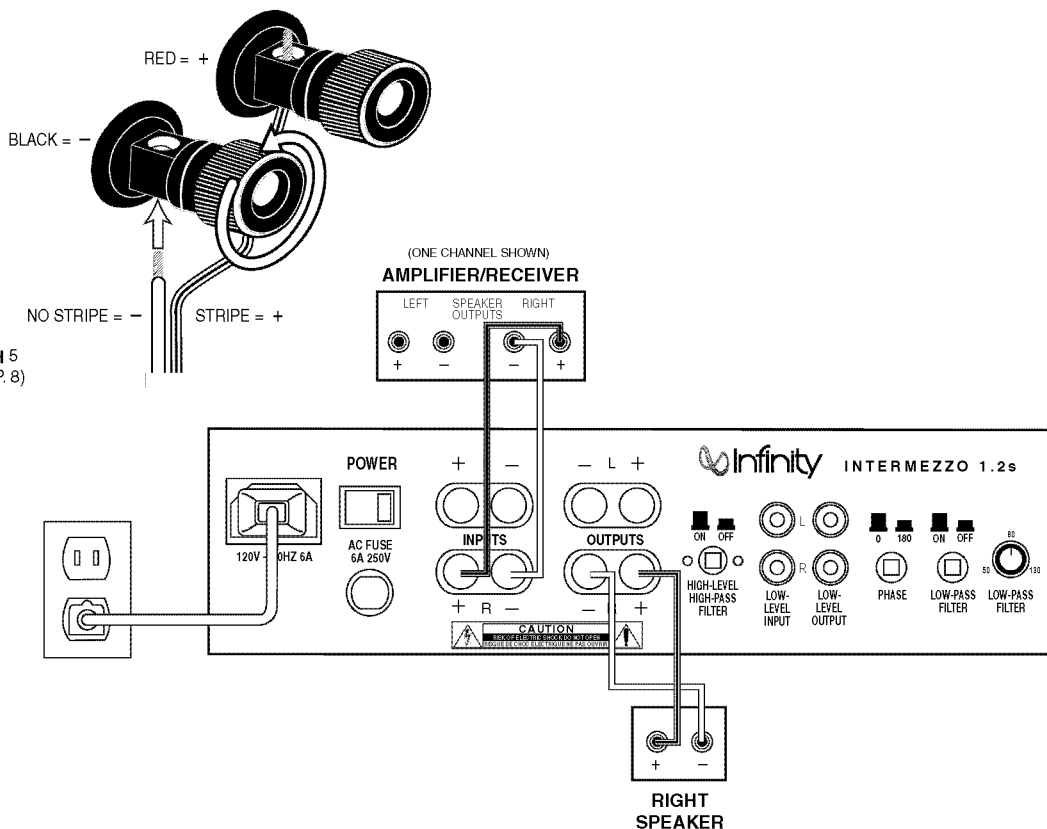
If none of these system configurations seem to match yours, consult your dealer or Infinity customer service for direction on how best to hook up your system.

For Methods 2, 3a, 3b and 4, make sure all bass-management features are properly set. The Audio channels should all be set to **Small** or **High-Pass** and the subwoofer set to **On**.

System Type	Connection Methods
2-Channel receiver or integrated amplifier that has no subwoofer output or Pre-out/Main-In connectors	1
2-Channel receiver or integrated amplifier with preamp output and input connectors	2
2-Channel system with separate preamplifier and power amplifier	2
Dolby® Pro Logic® with THX, Dolby Digital, or DTS® receiver with a filtered subwoofer (or LFE) output connector	3a
Dolby Digital or DTS processor with separate power amplifiers or multichannel amplifier	3b
Non-THX certified Dolby Pro Logic receiver with full-range subwoofer outputs	4

### Method 1

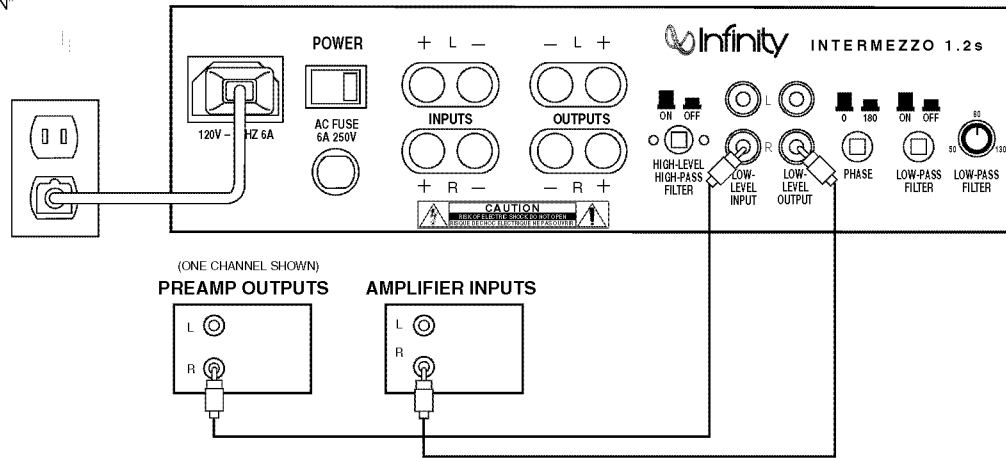
1. LOOSEN TERMINALS
2. INSERT BARE END; TIGHTEN TERMINALS
3. SET **LOW-PASS FILTER** 9 TO "ON"
4. SET **HIGH-PASS SWITCH** 5 TO "ON" OR "OFF" (SEE P. 8)



# Controls and Connections (Cont.)

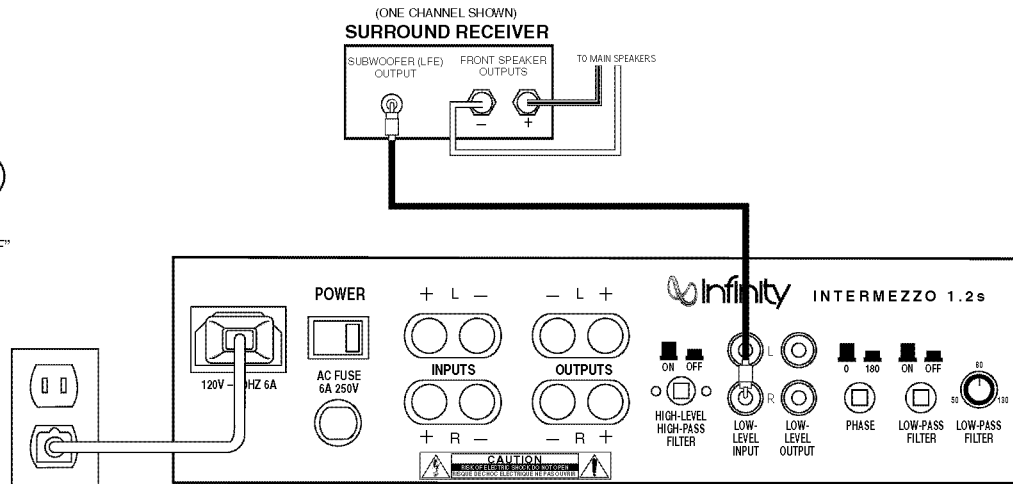
**Method 2**

SET LOW-PASS FILTER ③ TO "ON"



**Method 3a**

SET LOW-PASS FILTER ③ TO "OFF"



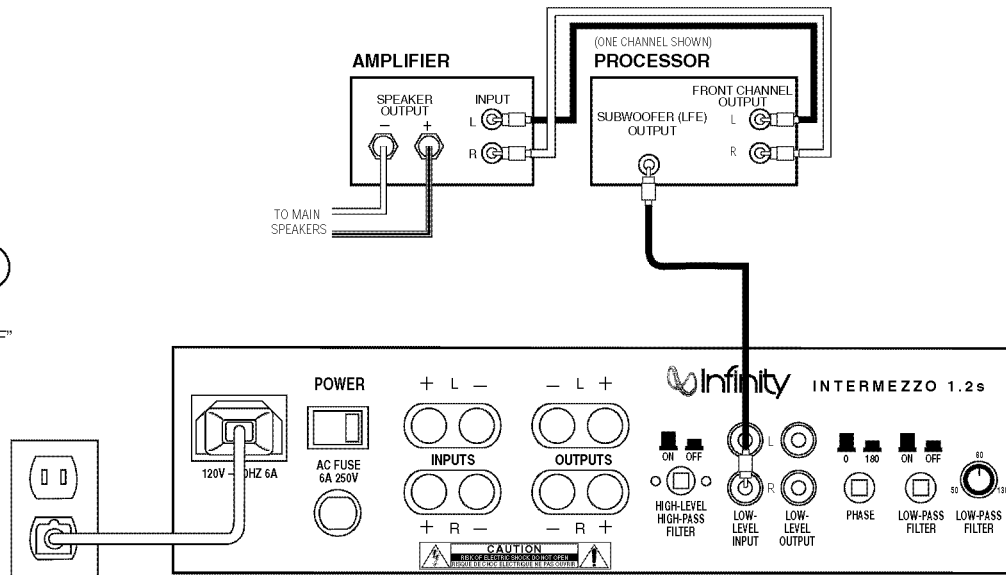
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# Controls and Connections (Cont.)

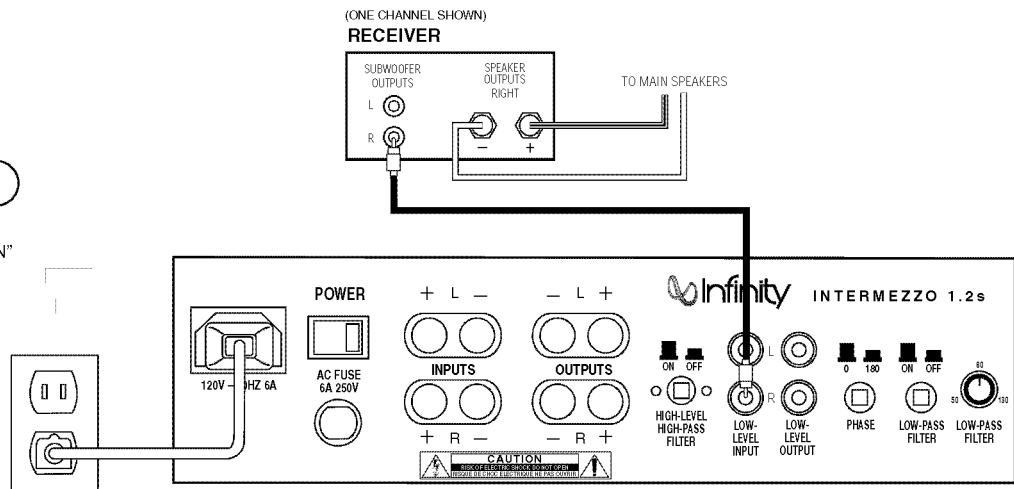
**Method 3b**

SET LOW-PASS FILTER **0** TO "OFF"



**Method 4**

SET LOW-PASS FILTER **0** TO "ON"



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## Operation

### OPERATION

#### Power On

Plug your subwoofer's AC cord into a wall outlet. Do not use the outlets on the back of the receiver.

Initially set the subwoofer's Level Control **11** to the "0" position.

Turn on your sub by pressing the power button **2** on the rear panel.

Turn on your entire audio system and start a CD or movie soundtrack at a moderate level.

#### Adjust Gain

Turn your subwoofer's Level Control **11** up to the "5" position (half way). If no sound emanates from the subwoofer, check the AC-line cord and input cables. Are the connectors on the cables making proper contact? Is the AC plug connected to a "live" receptacle? Has the power button **2** been pressed to the "On" position? (Note: The Level Control on the front panel will turn green when the power is on.) Once you have confirmed that the subwoofer is active, proceed by playing a CD, record or cassette. Use a selection that has ample bass information.

Set the overall volume control of the preamplifier or stereo to a comfortable level. Adjust the subwoofer's Level Control **11** until you obtain a pleasing blend of bass. Bass response should not overpower the room but rather be adjusted so there is a harmonious blend across the entire musical range. Many users have a tendency to set the subwoofer volume too loud, adhering to the belief that a subwoofer is there to produce lots of bass. This is not entirely true. A subwoofer is there to enhance bass, extending the response of the entire system so the bass can be felt as well as heard. However, overall balance must be maintained or the music will not sound natural. An experienced listener will set the volume of the subwoofer so its impact on bass response is always there but never obtrusive.

#### Crossover Adjustments

If you are using Method 1 as your connection method, you need to set the High-Level High-Pass Filter **5** to "On" or "Off." When on, this adjustment limits the low frequencies that your main speakers will reproduce. If you would like your main speakers to also reproduce frequencies below 80Hz, you may set this switch to "Off." If you are using speakers that do not reproduce low frequencies well, we recommend that you set the switch to "On."

**Low-Pass Filter Adjustment Control 10** - The Low-Pass Control determines the highest frequency at which the subwoofer reproduces sounds. If your main speakers can comfortably reproduce some low-frequency sounds, set this control to a lower frequency setting, between 50Hz - 100Hz. This will concentrate the subwoofer's efforts on the ultradeep bass sounds required by today's films and music. If you are using smaller bookshelf speakers that do not extend to the lower bass frequencies, set the Low-Pass Filter Adjustment Control to a higher setting, between 120Hz - 150Hz.

Note: This control will have no effect if the Low-Pass Filter Switch **9** is set to "Off." If you have a Dolby Digital or DTS processor/receiver, the Low-Pass Frequency is set by the processor/receiver. So you should leave the Low-Pass Filter Switch **9** in the "Off" position. Consult your owner's manual to learn how to view or change this setting.

#### Phase Control

The Phase Switch **8** determines whether the subwoofer speaker's piston-like action moves in and out with the main speakers, 0°, or opposite the main speakers, 180°. Proper phase adjustment depends on several variables such as room size, subwoofer placement and listener position. Adjust the phase switch to maximize bass output at the listening position.

#### Final Positioning

After correctly connecting the Intermezzo 1.2s and verifying that both the subwoofer and main speakers are playing, it is time to optimize the system for your particular listening room. Earlier, you placed the subwoofer in its general location. Finding the exact location for optimum performance sometimes only involves moving the speakers up to a few inches in any direction. We urge you, therefore, to experiment with placement until your speakers deliver their full potential.

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**The operation of the Intermezzo1.2s subwoofer with regards to 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# 336204-001. For service purposes, the R.A.B.O.S. system is canceled when all three front panel controls (F) (L) (W) are turned fully Clockwise. The only other control of concern is the Main Level Control on the front panel, which is a traditional potentiometer.**

## Mechanical/Packaging Parts List

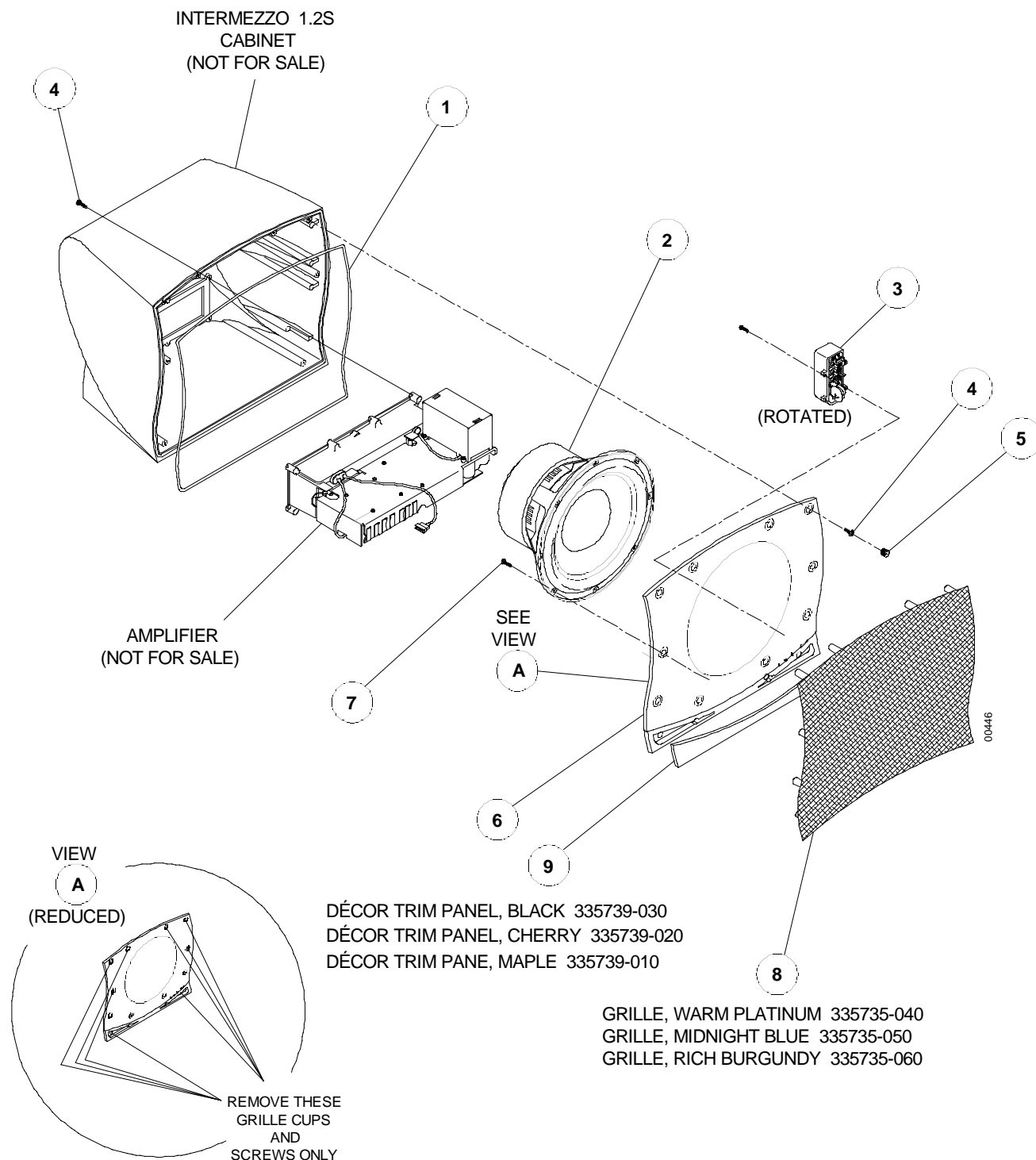
Ref No.	Description	Part Number
<b>MECHANICAL</b>		
1	GASKET, REAR	331106-001
2	12" Woofer C.M.M.D. Shielded, DCR 7.6 ohms ±10%,	335036-001
3	RABOS ASSEMBLY	336202-001
4	SCREW, 8-32 x .5 BLK, MS,PPH (16)	900201-008
5	GRILLE CUP (14)	333249-003
6	Front BAFFLE	335270-001
7	SCREW, 6-32 x .5 BLK, MS,PPH (12)	900301-008
	AMPLIFIER	(NOT FOR SALE)
8	GRILLE (See options below)	335735-040
9	DÉCOR TRIM PANEL (See options below)	335739-030

**PACKAGING**

10	RABOS KIT	335852-002
11	FOOT PAD (4)	335459-001
12	POWER CORD (15 ft)	336658-115
13	TOP END PAD	336213-001
14	BOTTOM END PAD	336213-002
15	CARTON	336504-001
16	OWNERS MANUAL	336204-001
17	WARRANTY CARD	335841-001
18	SURVEY CARD	335868-002

Description	Part Number
Grille, Warm Platinum	335735-040
Grille, Midnight Blue	335735-050
Grille, Rich Burgundy	335735-060
Décor Trim Panel, Black	335739-030
Décor Trim Panel, Cherry	335739-020
Décor Trim Panel, Maple	335739-010

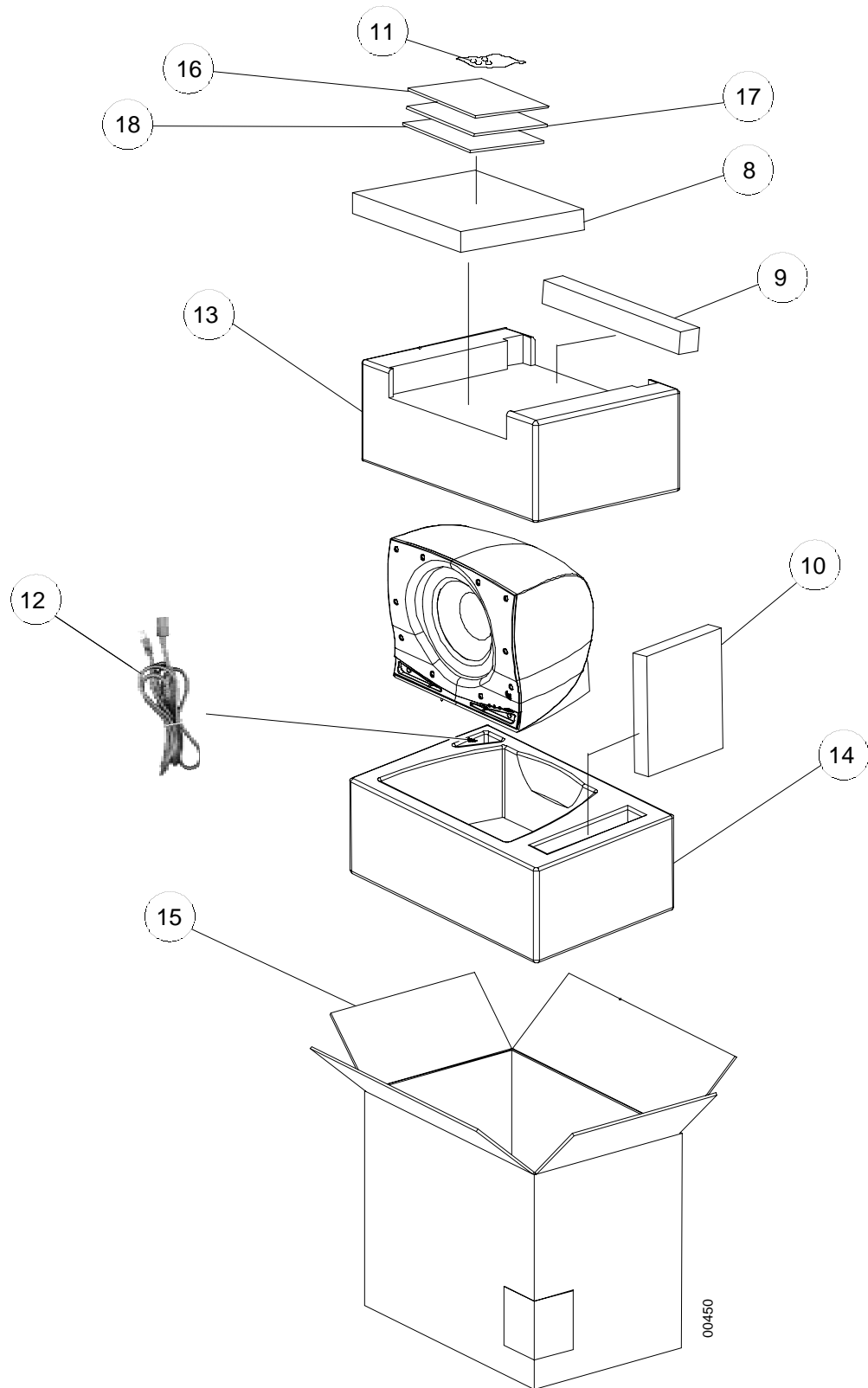
## Exploded View



### TO SERVICE THE INTERMEZZO 1.2s

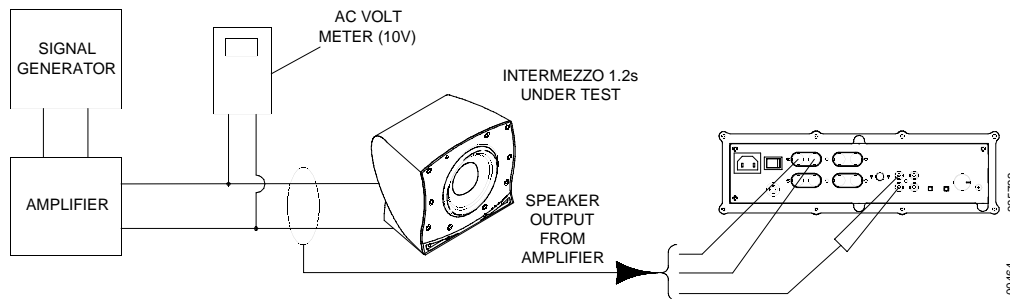
- 1) Remove the grille and side panel.
- 2) Extract (8) of the rubber grille retainers shown in view A above; this can be accomplished by carefully pulling them out of the cavities with long-nosed pliers or similar tool.
- 3) Remove the (8) Phillips screws that are now exposed.
- 4) Carefully lift the front baffle, with driver 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 View



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## Test Set Up and Procedure



The operation of the Intermezzo 1.2s subwoofer, 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 #336204-001.

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 (Clockwise).

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

### Equipment needed:

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

### General Unit Function (UUT = Unit Under Test)

#### Switch/Controls:

- MAIN LEVEL control full clockwise (0)
- LOW PASS FILTER knob full clockwise (130 Hz)
- LOW PASS FILTER button OFF (depressed)
- HIGH PASS FILTER button OFF (depressed)
- PHASE button - either position

- 1) From the signal generator, connect one line level (RCA) cable to the IM1.2s Low Level Input jacks (L/R) on the UUT. Use a Y-cable from a mono source if necessary to connect to both inputs.
- 2) Turn on generator, adjust to **140mV, 50 Hz**.
- 3) Plug AC power cord in UUT, turn power switch ON.
- 4) Red LED should ON (in the Level wheel at the front of the UUT). Turn up LEVEL control to full counterclockwise (10).
- 5) Green LED should ON; Bass response should be heard and felt.
- 6) Turn LEVEL control full clockwise (0). Turn power switch OFF.
- 7) Connect one pair of speaker cables to one set (either R or L) of the Speaker input terminals on UUT. Cables should be connected to an integrated amplifier fed by the signal generator.
- 8) Turn on signal generator and adjust so that speaker level output at the amplifier is **7.0V, 50 Hz**.
- 9) Turn power switch ON; turn LEVEL control full counterclockwise (10).
- 10) Bass response should be heard and felt.

### Sweep Function

- 1) Follow steps 1-3 above, using a sweep generator as a signal source – adjust the generator to **100mV, 50 Hz**.
- 2) Sweep generator from 20Hz to 300Hz. Listen for any rattles, clicks, buzzes or any other noises. If any unusual noises are heard, test woofer according to the instructions below.

### Driver Function

- 1) Remove woofer from the enclosure; (instructions in exploded view on page 12);
- 2) Check DC resistance of woofer; it should be **7.6 ohms ±10%**,
- 3) Connect a pair of speaker cables to woofer 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 **6.0V**.
- 4) Sweep generator from 20Hz to 1kHz. Listen to driver for any rubbing, buzzing, or other unusual noises.



# Service Bulletin

Service Bulletin INF2001-04 Rev2 – May 2005

Warranty labor rate: MINOR repair

To: All Infinity Service Centers

Model: Interlude and Intermezzo IL50, IL60, IL100s, IL120s, IM1.2s, IM4.1t

Subject: No Output

**In the event you receive an Interlude or Intermezzo loudspeaker with the complaint: “There is no output, and the LED on the volume control does not light, red or green”, check the item listed below:**

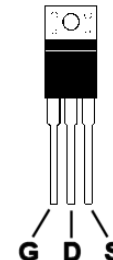
1) Check the line fuse to make sure it’s not damaged. Replace if necessary

IL50, IL100s	3A	Infinity part# FS0022
IL60, IL120s	4A	Infinity part# FS0026
IM1.2s, IM4.1t	6A	Infinity part# FS0027

**If the fuse is intact, or the unit still does not function, check the power supply portion of the amplifier circuit, described below:**

- Refer to the Exploded view page for detailed instructions on amplifier removal from the enclosure.
- Remove all connectors and screws necessary to detach the Power Supply PCB from the main chassis heatsink. Squeeze the heads of the plastic standoffs with long-nosed pliers to detach the PCB from the heatsink.
- Refer to the illustration on page 2. Check the DC resistance of following parts, in circuit, with a DMM:

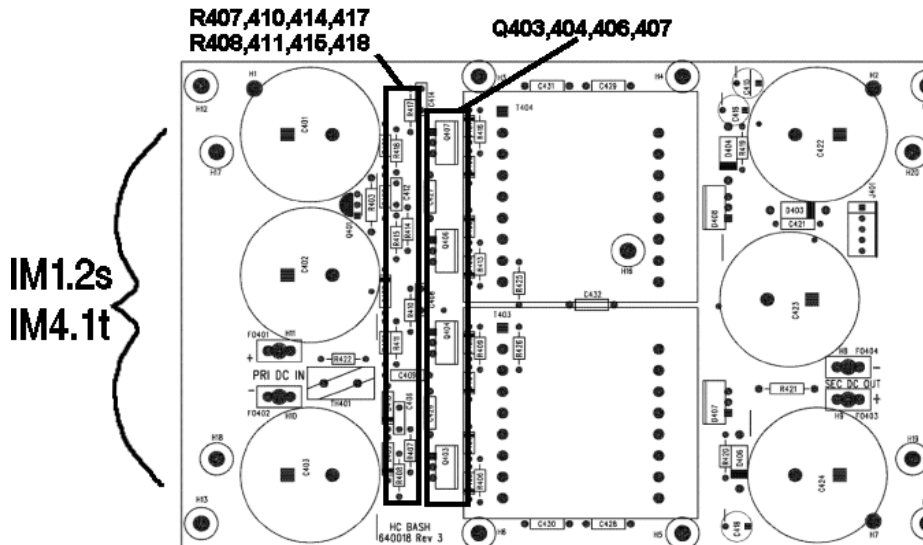
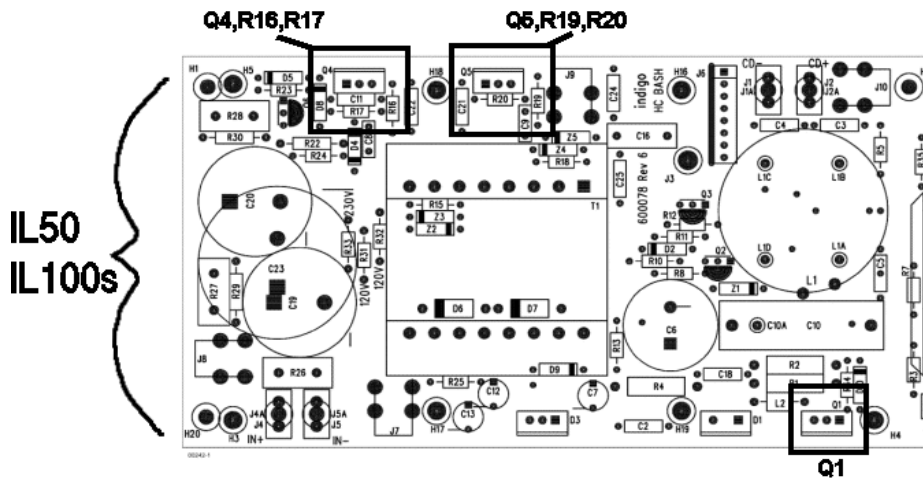
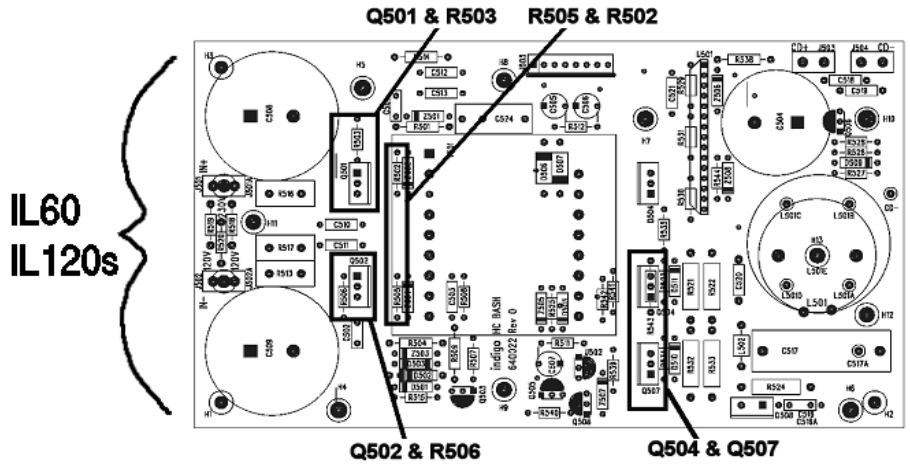
IL120s IL60	IRF740 MOSFETS <b>Q501, Q502</b> Infinity part# QM0055	D to S or S to D G to S or S to G D to G or G to D	Should measure >28K ohms* Should measure >400 ohms Should measure >28K ohms*
	22 Ohm 0.6W Resistors <b>R506, R503</b> Infinity part# RM0340	Should measure 22 ohms ±1%	
	422 Ohm 1/4 watt Resistors <b>R505, R502</b> Infinity part# RM0397	Should measure 422 ohms ±1%	
IL50 IL100s	IRF740 MOSFETS <b>Q4, Q5</b> Infinity part# QM0055	D to S or S to D G to S or S to G D to G or G to D	Should measure >28K ohms* Should measure >400 ohms Should measure >28K ohms*
	22 Ohm 0.6W Resistors <b>R17, R20</b> Infinity part# RM0340	Should measure 22 ohms ±1%	
	475 Ohm 1/4 watt Resistors <b>R16, R19</b> Infinity part# RM0075	Should measure 475 ohms ±1%	
IM1.2s IM4.1t	IRF740 MOSFETS <b>Q403,404,406,407</b> Infinity part# QM0055	D to S or S to D G to S or S to G D to G or G to D	Should measure >28K ohms* Should measure >400 ohms Should measure >28K ohms*
	22 Ohm 0.6W Resistors <b>R407,410,414,417</b> Infinity part# RM0340	Should measure 22 ohms ±1%	
	365 Ohm 1/4 watt Resistor <b>R408,411,415,418</b> Infinity part# RM0072	Should measure 365 ohms ±1%	



\* The two transistor leads should be shorted together before these measurements are taken; the DMM leads will “charge” the circuit and the value may change, but should match the values above. Very low values that do not change indicate a shorted MOSFET.

- Replace any defective parts above that show measured values lower than normal.
- Reconnect J505 or J6 multicolor ribbon cable connector; remount the Power supply PCB; reconnect J501/502 or J4/J5 black/red Faston connectors.
- All models except IM1.2S, IM4.1t: **temporarily DO NOT connect the pair of black/red “CD±” leads on the linear PCB).** Isolate the ends so they are not touching each other, or any conductive material. (For models IM1.2S, IM4.1t procedure is finished; replace amplifier).

- 8) Connect the subwoofer amplifier to an AC power source; turn the unit ON. Measure the DC voltage at the “CD±” wires; it should be 10-20 volts.
- 9) If it is 25 volts or greater, turn the amplifier OFF, disconnect from the power source, and replace:  
 IL120S, IL60: **Q504, Q507** IRF640 on the Power Supply PCB, Infinity part# QM0015.  
 IL50, IL100s: **Q1** IRF540 on the Power Supply PCB, Infinity part# QM0020.
- 10) If the voltage is normal, turn the amplifier OFF, disconnect from the power source, and reconnect the “CD±” leads.
- 11) Finish reassembling the amplifier, remount the heatsink, replace the amplifier in the cabinet and test the subwoofer.

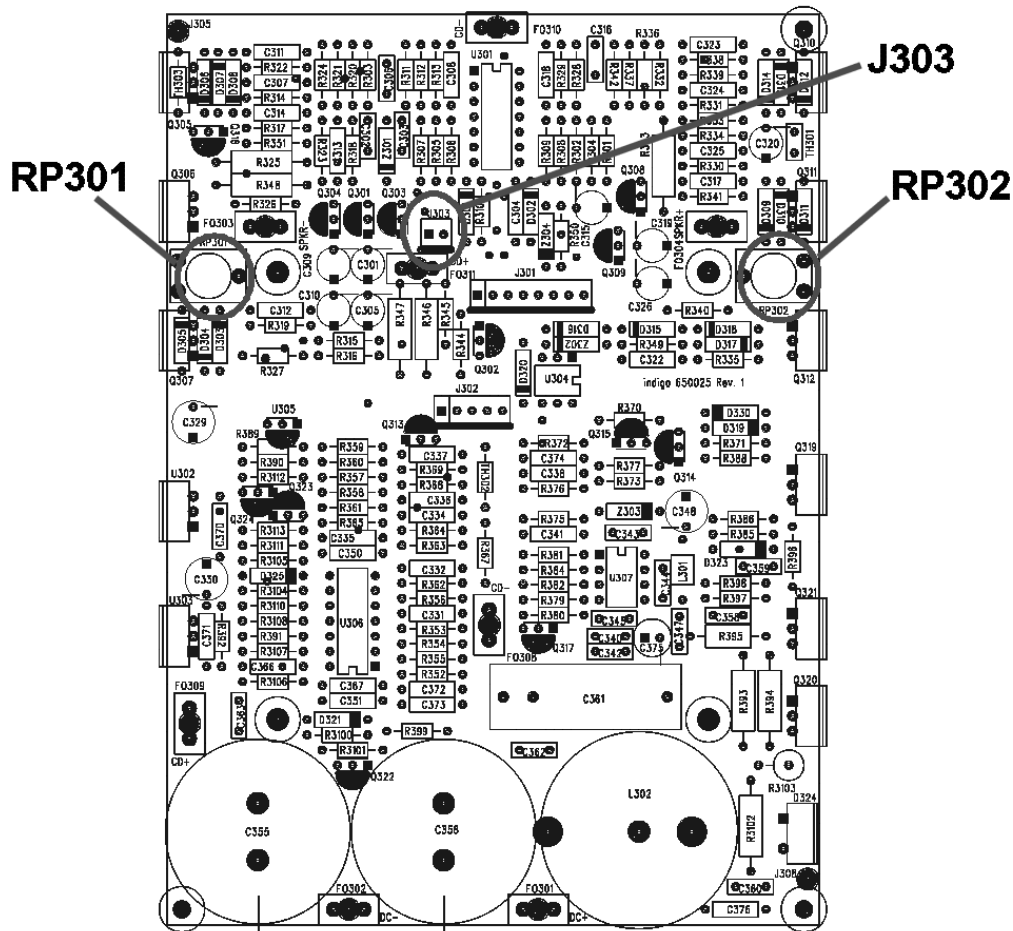




## IM 1.2s ADJUST BIAS PROCEDURE

(Mandatory when any output MOSFET transistors Q305,310,320,321,306,307,311,312 are replaced)

1. Amplifier should be unplugged and OFF.
2. Remove Amp assembly from cabinet, following the instructions on Page 12.
3. Identify the Linear board assembly (PCB with the output transistors)
4. Adjust RP301 and RP302 fully Counter Clockwise. See diagram below.
5. Apply 120 VAC power to unit; turn power switch ON.
6. Verify LED illuminates on the front gain control dial, unless you have disconnected the plug.
7. Connect voltmeter set to DC millivolt range to twin pins on terminal J303, on Linear board.
8. Verify initial voltage is less then 0.1 mV.
9. Adjust RP301 Clockwise until voltmeter reads **0.3 mV** + the initial current from step #8.
10. Adjust RP302 Clockwise until voltmeter now reads **0.6 mV** + the initial current from step #8.
11. Turn amplifier OFF. Disconnect AC power to unit.
12. Remove voltmeter from terminal J303.
13. Replace amp assembly back into cabinet.



## Electrical Parts List

Part#	Reference Designator	Qty	Description
<b>Linear Amplifier/Regulator Board</b>			
Semiconductors			
DS0001	D301,D302,D303,D304,D305, D306, D307,D308,D309,D310, D311,D312, D313,D314,D315, D316,D317,D318, D319,D320, D321,D323,D325,D330	24	RECT, 100mA 75V SIGNAL 1N4148T
DR0085	D324	1	RECT, 8A 400V TO220AC MUR860
QB0002	Q314,Q315,Q317	3	TRANS, NPN 40V .6A TO92 2N4401
QB0017	Q303,Q308,Q322,Q323	4	TRANS, NPN 150V 0.6A 2N5551TR
QB0018	Q302,Q304,Q309,Q313,Q316,Q324	6	TRANS, PNP 150V 0.6A 2N5401TR
QB0033	Q319	1	TRANS, NPN 250V 1A TO220 TIP47
QM0015	Q305,Q310,Q320,Q321	4	MOSFET, IRF640 TO220AB
QM0032	Q306,Q307,Q311,Q312	4	MOSFET, IRF9640 T0220AB
QM0035-S	Q301	1	JFET, J111 SELECTED TR ONLY
UA0003	U306	1	OPAMP, QUAD 14PIN DIL LM324N
UA0009	U301	1	OPAMP, QUAD 14P DIL TL074/084
UF0013	U304	1	FOTO, 6PIN MOC3012
UP0004	U307	1	PWM, 8PIN DIL UC3842N
UV0007	U303	1	VREG, LINEAR TO220 LM7905CT
UV0013	U302	1	VREG, +5V 100MA TO220 LM7805CT
DZ0018	U305	1	ZENER, 2.5-37V SHUNT TL431CLP
DZ0002	Z303	1	ZENER, 500mW 12V 5% 1N5242B
DZ0021	Z301,Z302	2	ZENER, 500MW 15V 5% 1N5245B
DZ0034	Z304	1	ZENER, 500MW 10V 5% 1N5240B
Capacitors			
CC0020	C335,C366	2	CAP, CA 470PF 100V 5%
CC0040	C313,C324,C331	3	CAP, CA 4700PF 100V 10%
CC0059	C311,C312,C322,C323,C372,C373	6	CAP, CA .1UF 100V 20%
CC0065	C337,C367	2	CAP, CA 2200P 100V 10%
CC0079	C343	1	CAP, C .1UF 50V 20% 5MMLS
CC0082	C350,C351,C370,C371	4	CAP, CA .1UF 50V 20%
CC0087	C332,C338	2	CAP, CA .01UF 100V 20%
CC0108	C307,C317	2	CAP, CA 22PF 50V 10
CE0018	C329,C330	2	CAP, E 100UF 25V 20% 5MMLS
CE0098	C301,C309,C310,C319,C320	5	CAP, E 22UF 50V 20% 5X11 5MMLS
CE0103	C348	1	CAP, E 100UF 35V 85DEG 5MMLS
CE0106	C305,C315,C326	3	CAP, E 22UF 35V BP 8X11 5MMLS
CF0008	C342	1	CAP, F 2200PF 100V 5% 5MMLS
CF0035	C306,C316	2	CAP, F .022UF 100V 5% 5MMLS
CF0045	C302,C303	2	CAP, F .1UF 63DC 5% 5MMLS
CC0032	C358	1	CAP, C 2200PF 600V 10% BULK
CC0017	C340	1	CAP, C 330PF 100V 10% 5MMLS BU
CC0021	C360,C362,C363	3	CAP, C 470PF 1KV 10% BULK
CC0072	C341	1	CAP, CA 100PF 100V 10%
CC0078	C344	1	CAP, C .22UF 50V 10% .2LS BULK
CC0095	C345,C347	2	CAP, C 470P 100V 5
CE0121	C355,C356	2	CAP, E 470UF 200V 20% 30X25

## Electrical Parts List (Cont.)

Part#	Reference Designator	Qty	Description
CF0146	C361	1	CAP, F 6.8UF 250V 10% 27MMLS
CC0059	C304	1	CAP, CA .1UF 100V 20%
Resistors			
RC0004	R399	1	RES, CF 1M0 1/4W 5%
RC0006	R349	1	RES, CF 10K 1/4W 5%
RC0061	R350	1	RES, CF 4K7 1/4W 5%
RC0083	R303	1	RES, CF 100K 1/4W 5%
RC0087	R323,R326,R327,R339,R340,R341	6	RES, CF 330R 1/4W 5%
RC0116	R3107	1	RES, CF 330K 1/4W 5%
RC0127	R3106	1	RES, CF 30K 1/4W 5%
RC0128	R376	1	RES, CF 33K 1/4W 5%
RC0135	R363	1	RES, CF 150K 1/4W 5%
RC0273	R313,R395	2	RES, ZERO OHM 1/4W
RM0001	R344,R370,R371,R372,R3101	5	RES, MF 1K00 1/4W 1%
RM0002	R377,R380	2	RES, MF 10K0 1/4W 1%
RM0003	R312,R329	2	RES, MF 15K0 1/4W 1%
RM0011	R352,R353,R354,R364,R3104,R3105	6	RES, MF 100K 1/4W 1%
RM0024	R315,R317,R331,R333	4	RES, MF 2K21 1/4W 1%
RM0031	R320,R321,R336,R337,R369	5	RES, MF 3K32 1/4W 1%
RM0035	R3108	1	RES, MF 4K75 1/4W 1%
RM0037	R367	1	RES, MF 51K1 1/4W 1%
RM0039	R304	1	RES, MF 5K11 1/4W 1%
RM0043	R319,R322,R335,R338,R384	5	RES, MF 6K81 1/4W 1%
RM0065	R373	1	RES, MF 200R 1/4W 1%
RM0069	R390,R391	2	RES, MF 274R 1/4W 1%
RM0071	R389,R392	2	RES, MF 332R 1/4W 1%
RM0073	R324,R342	2	RES, MF 392R 1/4W 1%
RM0079	R3112,R3113	2	RES, MF 750R 1/4W 1%
RM0082	R368	1	RES, MF 1K21 1/4W 1%
RM0083	R345	1	RES, MF 1K50 1/4W 1%
RM0084	R3100	1	RES, MF 1K65 1/4W 1%
RM0089	R382	1	RES, MF 2K43 1/4W 1%
RM0093	R316,R318,R332,R334	4	RES, MF 4K53 1/4W 1%
RM0113	R308,R309,R375,R381	4	RES, MF 20K0 1/4W 1%
RM0114	R361	1	RES, MF 22K1 1/4W 1%
RM0118	R351	1	RES, MF 210R 1/4W 1%
RM0120	R358,R360,R362	3	RES, MF 30K1 1/4W 1%
RM0139	R314,R330	2	RES, MF 267K 1/4W 1%
RM0148	R302,R307	2	RES, MF 6K34 1/4W 1%
RM0165	R357	1	RES, MF 24K9 1/4W 1%
RM0180	R311,R328,R355,R356,R359,R379	6	RES, MF 4K99 1/4W 1%
RM0276	R365	1	RES, MF 294K 1/4W 1
RM0304	R305,R306	2	RES, MF 7K87 1/4W 1%
RM0336	R385	1	RES, MF 47R 0.6W 1% FLAMEPROOF
RM0339	R396,R397	2	RES, MF 10R 0.6W 1% FLAMEPROOF
RM0365	R386	1	RES, MF 100R 1/4W 1% FLAMEPRF
RX0072	R3102	1	RES, MO 100R 1W 5%
RX0074	R325,R343	2	RES, MO 4K7 1W 5
RX0097	R348	1	RES, MO 3K9 2W 5%
RC0005	R388	1	RES, CF 10K 1/2W 5%

## Electrical Parts List (Cont.)

Part#	Reference Designator	Qty	Description
RC0229	R3103	1	RES, CF 200K 1/2W 5%
RP0056	RP301,RP302	2	POT, 5K 8MM HOR TOP ADJ/COVER
RW0022	R346,R347,R393,R394	4	RES, WW 0R1 2W 5%
RC0006	R310	1	RES, CF 10K 1/4W 5%
Miscellaneous			
480022	FO310	1	SUB, #18B 6 1/4 STRIP/187X032
480028	FO309	1	SUB, #18R 6 1/4 STRIP/187X032
480084		1	SUB, #18G 4 187X032/#6 RING
540130	L302	1	IND, CM CHOKE 150UH ELYTONE
BF0007	L301	1	BEAD, FERRITE
JH0008	J302	1	CNCTR, HEADER 5PIN .100CTR
JH0016	J303	1	CNCTR, HEADER 2PIN .100CTR
JH0074	J301	1	CNCTR, HEADER 8PIN LOCKING .1C
KS0017	TH302,TH303	2	THERMISTOR, 100K @ 25C NTC BUL
KS0019	TH301	1	THERMISTOR, PTH9L04BD22TS2F510
MT0003	FO304	1	TERM, FASTON MALE PCMT 250X032
MT0005		2	TERM, KWIKDISC .187 X.032 FEMA USED ON ONE END OF 480022 AND 48028
MT0023	FO301,FO302,FO308,FO311	4	TERM, FASTON MALE PCMT 187X032
MT0036	FO303	1	TERM, FASTON MALE PCMT 205X032
MS0017		12	MISC, CERAMIC PLATE TO-220 Used on D324, Q305, Q306, Q307, Q310, Q311, Q312, Q319, Q320, Q321, U302, U303.
810066		12	MET, HTSNK CLIP HPS SERIES Used on D324, Q305, Q306, Q307, Q310, Q311, Q312, Q319, Q320, Q321, U302, U303.
HS0079		1	SCREW, #6-32X1.25 FL SLOT NYL used on L302
JN0003		1	NUT, HEX NYLON #6-32 used on L302
<b>PCB, POWER SUPPLY BOARD</b>			
Semiconductors			
DR0086	D403,D404,D406	3	RECT, 1A 600V ULTRAFast MUR160
DS0002	D409,D410	2	RECT, 100MA 200V SIGNAL 1N3070
DR0084	D407,D408	2	RECT, 8A 600V ULTRAF MUR1660CT
QM0055	Q403,Q404,Q406,Q407	4	MOSFET, IRF740 TO220AB IR ONLY
QB0014	Q401	1	TRANS, PNP TO92 MPSA92TR
DD0003	Q402	1	RECT, 1A2 60V DIAC
DZ0021	Z401,Z402,Z403,Z404,Z405,Z406,Z407, Z408	8	ZENER, 500MW 15V 5% 1N5245B
Resistors			
RC0082	R403	1	RES, CF 100K 1/2W 5%
RC0138	R422	1	RES, CF 200K 1/4W 5%
RM0001	R401	1	RES, MF 1K00 1/4W 1%
RM0012	R405	1	RES, MF 100R 1/4W 1%
RM0071	R406, R409, R413, R416	4	RES, MF 332R 1/4W 1%
RM0072	R408, R411, R415, R418	4	RES, MF 365R 1/4W 1%
RM0198	R402	1	RES, MF 205K 1/4W 1%
RM0340	R407,R410,R414,R417,R419,R420,R425, R426	8	RES, MF 22R 1/4W 1% FLAMEPROOF

## Electrical Parts List (Cont.)

Part#	Reference Designator	Qty	Description
RX0046	R421	1	RES, MO 47K 1W 5%
Capacitors			
CC0040	C409	1	CAP, CA 4700PF 100V 10%
CC0087	C421	1	CAP, CA .01UF 100V 20%
CE0013	C415,C416,C418	3	CAP, E 47UF 50V 20% 5MMLS
CF0093	C406,C408,C412,C414	4	CAP, F 4700PF 100V 5% 5MMLS
CE0040	C401,C402,C403,C422,C423,C424	6	CAP, E 680UF 200V 30X35 85DEG
CF0050	C426, C427, C430, C431	4	CAP, F .1UF 250V 10% 10MMLS
CF0143	C428	1	CAP, FY1 4700PF 250V 20%
DNI	C428, C429	2	
Miscellaneous			
500113	T403,T404	2	XFMR, POWER 1000W YT ETD44 3F3
JH0008	J401	1	CNCTR, HEADER 5PIN .100CTR
KS0021	TH401	1	SURGISTOR, 4R 8A 70J SL154R008
MT0023	FO401,FO402,FO403,FO404	4	TERM, FASTON MALE PCMT 187X032
810066		6	MET, HTSNK CLIP HPS SERIES USED ON D407,D408,Q403,Q404,Q406,Q407
810096		1	MET, HTSNK PRIMARY LF SERIES USED ON Q403,Q404,Q406,Q407
810099		1	MET, HTSNK DIODE LF SERIES USED ON D407,D408
HN0006		4	NUT, HEX KEP #6-32 ZNP USED ON THE PRIMARY AND DIODE HEATSINKS
HS0060		4	SCREW, #6-32X3/8 PAN PHIL BLK USED ON THE PRIMARY AND DIODE HEATSINKS
<b>PCB, EMI Filter Board</b>			
Semiconductors			
DR0038	D502,D503,D504,D505	4	RECT, 1A 400V GENERAL 1N4002
DS0001	D512	1	RECT, 100mA 75V SIGNAL 1N4148T
QB0002	Q501	1	TRANS, NPN 40V .6A TO92 2N4401
DB0006	D501	1	RECT, 8A 400V BRIDGE
UV0007	U502	1	VREG, LINEAR TO220 LM7905CT
UV0013	U501	1	VREG, +5V 100MA TO220 LM7805CT
DZ0012	Z502,Z503	2	ZENER, 500MW 3.9V 5% 1N5228B
Resistors			
RC0004	R501	1	RES, CF 1M0 1/4W 5%
RX0083	R503	1	RES, MO 150R 3W 5
Capacitors			
CC0059	C507	1	CAP, CA .1UF 100V 20%
CE0003	C505,C506	2	CAP, E 2.2UF 50V 20% 105C
CE0103	C503,C504	2	CAP,E 100UF 35V 85DEG
CF0057	C501,C502	2	CAP,FX.22UF 250V 10%
Miscellaneous			

## Electrical Parts List (Cont.)

Part#	Reference Designator	Qty	Description
480090		1	SUB, #18R 9 187X032/1/4STRP
480097		1	SUB, #18B 9 187X032/1/4STRP
540124	L501	1	IND, CHOKE CM
500103	T501	1	XFMR, 60HZ 24V 1.1VA
810088		1	MET, HTSNK 1X2 BRIDGE For D501
JH0008	J502	1	CNCTR, HEADER 5PIN .100CTR
KV0001	Z501	1	VARISTOR, 275V 100J .6W
MT0023	FO503,F0504	2	TERM,FASTON MALE PCMIT 187X032
SR0038	SW502	1	RELAY, SPST TV-5 5AMP 24V
HN0006		1	NUT, KEP 1/4AF 6-32 ZNP
HS0009		1	SCREW, 6-32 1/2 100 PHIL ZNP
<b>PCB, Input/Feature Board</b>			
Semiconductors			
UA0003	U104	1	OPAMP, QUAD 14PIN DIL LM324N
UA0009	U101,U102,U103	3	OPAMP, QUAD 14P DIL TL074/084
UF0012	U100	1	FOTO, 6PIN 4N35
DR0038	D113,D114,D115,D116,D117,D118	6	RECT, 1A 400V GENERAL 1N4002
DS0001	D100, D101, D102, D103, D104, D105, D106, D107, D108, D109, D110, D111, D112, D119, D120, D121,D122, D123, D124	19	RECT, 100mA 75V SIGNAL 1N4148T
DS0001	D119, D120, D123, D124, D125, D126	6	RECT, 100mA 75V SIGNAL 1N4148T
QB0017	Q102	1	TRANS, NPN 150V 0.6A 2N5551
QM0035-S	Q100,Q101,Q103	3	JFET, J111 SELECTED TR ONLY
DZ0013	Z100	1	ZENER, 500MW 5.6V 5% 1N5232B
Capacitors			
CC0024	C127,C129	2	CAP, CA 1000PF 100V 10%
CC0072	C125,C130	2	CAP, CA 100PF 100V 10%
CC0082	C122, C126	2	CAP, CA .1UF 50V 20%
CE0003	C123,C124	2	CAP, E 2.2UF 50V 20% 105C
CE0098	C118, C119, C131, C132	4	CAP, E 22UF 50V 20% 5X11 .2LS
CE0103	C128	1	CAP, E 100UF 35V 85DEG
CE0116	C103,C104	2	CAP, E 2.2UF 50V BIPOLAR 6X11
CF0128	C108, C110	2	CAP, F .033UF 100V 5% 5MMLS
CF0045	C111,C112	2	CAP, F .1UF 63DC 5% 5MMLS
CF0088	C114,C115,C116,C117	4	CAP, F .01UF 100V 5% 5MMLS
CF0092	C120,C121	2	CAP, F 1000P 63V 5% .2LS
CF0099	C136	1	CAP, F 0.68UF 63V 5% 5MMLS
CF0112	C102, C105, C135	3	CAP, F 100PF 63V 5% 5MMLS
CF0125	C107, C109	2	CAP, F .068UF 100V 5% 5MMLS
CE0138	C100,C101	1	CAP, E 330UF 100V BP 18X35
dni	C106, C113, C131, C133, C134	5	(Do Not Insert)
Resistors			
RC0003	R176	1	RES, CF 1K0 1/4W 5%
RC0004	R162,R163	2	RES, CF 1M0 1/4W 5%
RC0006	R153, R154, R155, R156, R157, R160, R161, R169, R172, R174, R175, R177	12	RES, CF 10K 1/4W 5%
RC0037	R159,R164	2	RES, CF 2K0 1/4W 5%

## Electrical Parts List (Cont.)

Part#	Reference Designator	Qty	Description
RC0039	R165,R170,R173	3	RES, CF 2K2 1/4W 5%
RC0083	R149,R150,R158	3	RES, CF 100K 1/4W 5%
RC0111	R143,R148	2	RES, CF 680R 1/4W 5%
RC0115	R167	1	RES, CF 47K 1/4W 5%
RC0135	R168	1	RES, CF 150K 1/4W 5%
RC0273	R126,R130,R135,R141,R146	5	RES, ZERO OHM 1/4W
RC0277	R171	1	RES, CF 5M6 1/4W 5%
RC0281	R166	1	RES, CF 510K 1/4W 5%
RM0001	R151,R152	2	RES, MF 1K00 1/4W 1%
RM0002	R110,R111,R112	3	RES, MF 10K0 1/4W 1%
RM0011	R104, R105, R106, R107, R116	5	RES, MF 100K 1/4W 1%
RM0019	R115	1	RES, MF 1K30 1/4W 1%
RM0075	R137	1	RES, MF 475R 1/4W 1%
RM0091	R108,R109	2	RES, MF 3K65 1/4W 1%
RM0106	R113	1	RES, MF 14K0 1/4W 1%
RM0113	R118,R119,R120	3	RES, MF 20K0 1/4W 1%
RM0115	R114	1	RES, MF 23K7 1/4W 1%
RM0142	R139,R144	2	RES, MF 287K 1/4W 1%
RM0195	R133	1	RES, MF 187K 1/4W 1%
RM0110	R122,R124,R127,R128	4	RES, MF 17K4 1/4W 1%
RM0269	R136	1	RES, MF 93K1 1/4W 1%
RM0290	R142,R147	2	RES, MF 143K 1/4W 1
RM0351	R117	1	RES, MF 9K53 1/4W 1%
RP0105	R123	1	POT, B50K QUAD KNURL SHAFT
RM0403	R101, R103	2	RES, MF 54K9 1/4W 1%
RC0192	R100, R102	2	RES, CF 2K0 1/2W 5%
dni	R121, R125, R129, R131, R134, R138, R140, R145	8	(Do Not Insert)
Miscellaneous			
JC0052	J101	1	CNCTR, RCA QUAD JACK
JC0064	J105	1	DC POWER JACK 2MM DIA
JC0176	J100	1	8X BINDING POSTS GOLD KNURL
JH0008	J102	1	CNCTR, HEADER 5PIN .100CTR
JH0074	J103,J104	2	CNCTR, HEADER 8PIN LOCKING .1C
SR0006		2	SWITCH, CAP FOR SR0005 USED ON S101 & S102
SR0017	S101,S102	2	SWITCH, 2 POLE 2PDT
SR0041	S100	1	DPST PUSH SWITCH TV-8
SR0042		1	SWITCH CAP, 8.8X10.5MM CYL BLK

### PCB, RABOS

#### Semiconductors

UA0009	U200	1	OPAMP, QUAD 14P DIL TL074/084
UA0010	U201	1	OPAMP, DUAL 8PIN DIL TL082
QB0017	Q204	1	TRANS, NPN 150V 0.6A 2N5551TR
QM0035-S	Q201,Q202,Q205	3	JFET, J111 SELECTED TR ONLY
QB0017	Q200	1	TRANS, NPN 150V 0.6A 2N5551

## Electrical Parts List (Cont.)

Part#	Reference Designator	Qty	Description
Resistors			
RC0148	R210	1	RES, CF 10M 1/4W 5%
RM0001	R207,R208	2	RES, MF 1K00 1/4W 1%
RM0002	R200,R201,R214,R216,R220, R225,R228, R229,R230, R233	10	RES, MF 10K0 1/4W 1%
RM0003	R219, R224	2	RES, MF 15K0 1/4W 1%
RM0012	R215	1	RES, MF 100R 1/4W 1%
RM0024	R203	1	RES, MF 2K21 1/4W 1%
RM0031	R231	1	RES, MF 3K32 1/4W 1%
RM0076	R204	1	RES, MF 562R 1/4W 1%
RM0078	R209	1	RES, MF 680R 1/4W 1%
RM0080	R217,R223	2	RES, MF 825R 1/4W 1%
RM0091	R211	1	RES, MF 3K65 1/4W 1%
RM0260	R232	1	RES, MF 1M0 1/4W 1%
RM0271	R206	1	RES, MF 110K 1/4W 1%
RM0281	R222,R227	2	RES, MF 6K04 1/4W 1
RM0315	R212	1	RES, MF 2K67 1/4W 1%
RM0369	R221,R226	2	RES, MF 340R 1/4W 1%
RM0370	R202	1	RES, MF 9K31 1/4W 1%
RM0402	R234	1	RES, MF 11K5 1/4W 1%
RP0087	R205,R213	2	POT, A10K DUAL 12MM HOR SEL
RP0088	R218	1	POT, C10K DUAL 12MM HOR SEL
Capacitors			
CE0003	C203,C204	2	CAP, E 2.2UF 50V 20% 105C
CF0045	C200,C201,C202	3	CAP, F .1UF 63DC 5% 5MMLS
CE0003	C210,C211	2	CAP, E 2.2UF 50V 20% 105C
CF0045	C204,C205,C206,C207,C208	5	CAP, F .1UF 63DC 5% 5MMLS
Miscellaneous			
JH0074	J200	1	CNCTR, HEADER 8PIN LOCKING .1C
<b>PCB, Volume Board</b>			
RC0273	R237	1	RES, ZERO OHM 1/4W
RP0097	R235	1	POT, A10K SINGLE/BRKT D SHAFT
RX0096	R236	1	RES, MO 2K2 1W 5%
RP0106		1	POT, KNOB INT 1.2 LEVEL
HS0047		4	SCREW, #6-32X3/4 PAN PHIL BLK TO MOUNT VOLUME BOARD TO RABOS BOARD
MM0070		1	MISC, GASKET Used on RABOS Housing
MZ0034		4	STANDOFF, 3/8 SPACER NYLON
MZ0036		1	STANDOFF, 14MM LED 2PIN
RABOS CUP 1.2		1	INTERMEZZO 1.2 RABOS HOUSING
C0186		1	CNCTR, FEM-FEM HARN 8P 18 SHIELD
MM0075		1	MISC, RUBBER GROMMET RABOS HSG FOR SEALING RABOS HOUSING
DL0014	D200	1	LED, 3MM BICOLOR RED/GR



## Electrical Parts List (Cont.)

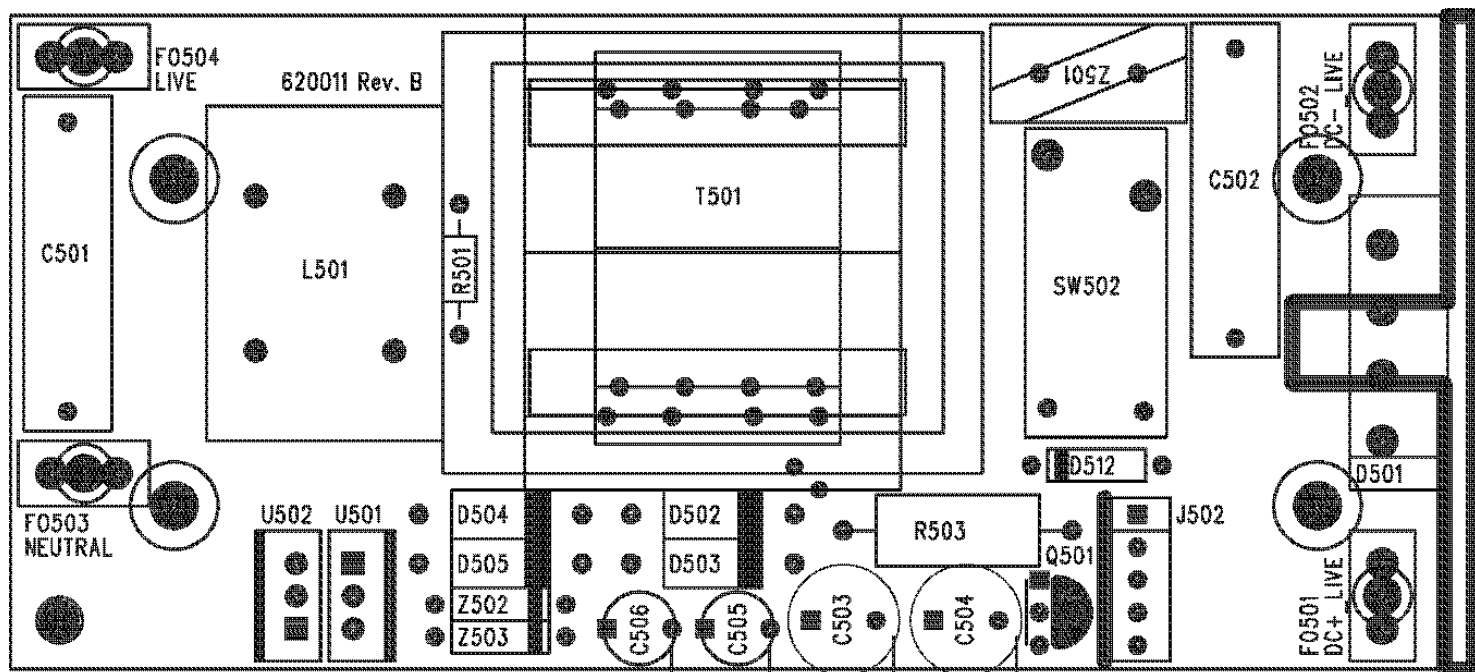
Part#	Reference Designator	Qty	Description
<b>Miscellaneous</b>			
480033		3	SUB, #18R 4 1/4 187X032/187X032 1PC. IEC LIVE TO FUSE HOLDER; 1PC. FUSE HOLDER TO SWITCH; IPC. IEC NEUTRAL TO SWITCH
480104		1	SUB, #16X2 24 205X032/250X032 SPEAKER WIRE
930052		1	CUP ENCLOSURE
930053		1	U-BRACKET
FH0006		1	FUSE, HOLDER PANEL MT
FS0027		1	FUSE, 6A 250V 1.25X.25 GLASS
HS0047		12	SCREW, #6-32 3/4 PAN PHIL BLK 4PCS. USED TO MOUNT LINEAR BOARD; 4 PCS USED TO MOUNT POOWER SUPPLY; 4 PCS USED TO SCREW VOLUME BOARD ONTO RABOS BOARD
HS0057		3	SCREW, #8-32X1/2 PAN PHIL BLK USED TO ATTACH U-BRACKET TO ENCLOSURE
HS0060		14	SCREW, #6-32 X 3/8 PP BLACK 4PCS USED TO MOUNT EMI PCB IN HOUSING; 4 PCS USED TO MOUNT EMI HOUSING U-BRACKET; 6 PCS TO SECURE PANEL TO ENCLOSURE
HS0078		2	SCREW, #4 HI-LOW PAN PHIL BLK USED TO SECURE RABOS BOARD IN HOUSING
INTERMEZZO 1.2H		1	INTERMEZZO 1.2 MAIN ENCLOSURE
INTERMEZZO 1.2P		1	INTERMEZZO 1.2 MAIN PANEL
JC0079		1	CNCTR, 5PIN FEM-FEM HARNESS 7 J401 ON POWER SUPPLY TO J302 ON LINEAR
JC0129		1	CNCTR, AC IEC SOCKET .250 2PIN
JC0179		1	CNCTR, 5-PIN FEM-FEM HARNESS SHIELDED 14 J502 ON EMI TO J102 ON FEATURE
JC0180		1	CNCTR, 8-PIN FEM-FEM HARNESS SHIELDED 18 J104 ON FEATURE TO J200 ON RABOS
JC0181		1	CNCTR, 8-PIN FEM-FEM HARNESS SHIELDED 18 J103 ON FEATURE TO J301 ON LINEAR
JC0182		1	2-CONDUCTOR AC LAMP CORD 8 4X187X032
MZ0042		4	STANDOFF, 3/8 #6-32 NYLON HEX USED TO MOUNT LINEAR BOARD
SR0032		1	SWITCH, ROCKER TV5
HS0054		7	SCREW, #4-1/2 TYPE AB PP BLK 6 PCS. USED TO SECURE BINDING POSTS TO PANEL; 1 PC. USED TO SECURE RCA JACKS TO PANEL
HS0088		1	SCREW, #8-32X1.3/4 PAN PHIL BL USED TO MOUNT U BRACKET TO ENCLOSURE

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## Electrical Parts List (Cont.)

<b>Part#</b>	<b>Reference Designator</b>	<b>Qty</b>	<b>Description</b>
HS0090		2	SCREW, M3X16MM PAN PHIL BLK TO ALIGN SR0041
HW0004		8	WASHER, SPLIT #6 ZNP TO MOUNT POWER SUPPLY AND LINEAR BOARD
HW0040		1	WASHER, FLAT #8 NYLON 3/8 USED TO MOUNT U BRACKET TO ENCLOSURE
MM0071		1	MISC, CUP GASKET INTERMEZZO 1.2
MM0073		1	MISC, RUBBER GROMMET FOR 5PIN FOR SEALING ENCLOSURE OF THE 5PIN CABLE HOLE
MM0074		1	MISC, RUBBER GROMMET 2X8 PIN FOR SEALING ENCLOSURE OF 2X8 PIN CABLE
MZ0003		4	STANDOFF, 6-32 3/8 ROUND AL 4PC TO SUPPORT POWER SUPPLY
MZ0043		2	STANDOFF, .12ID .25OD .37L PVC TO ALIGN SR0041
RP0057		1	POT, KNOB CR00-20MB-16H

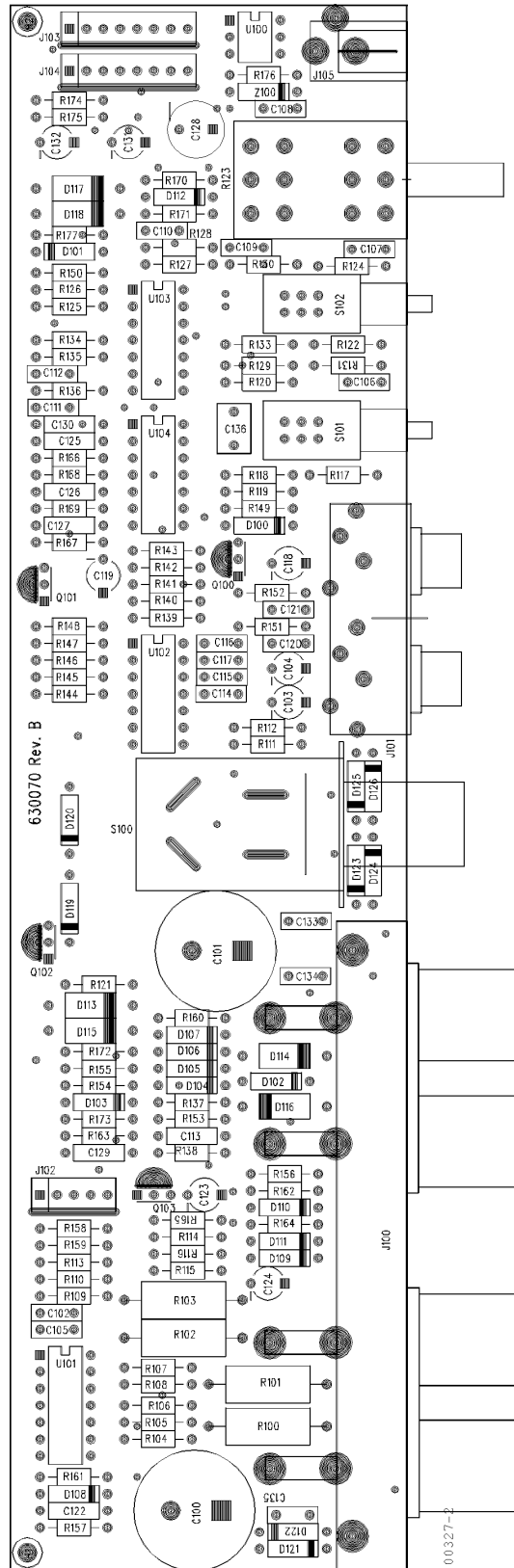
# AC Filter



00327-1

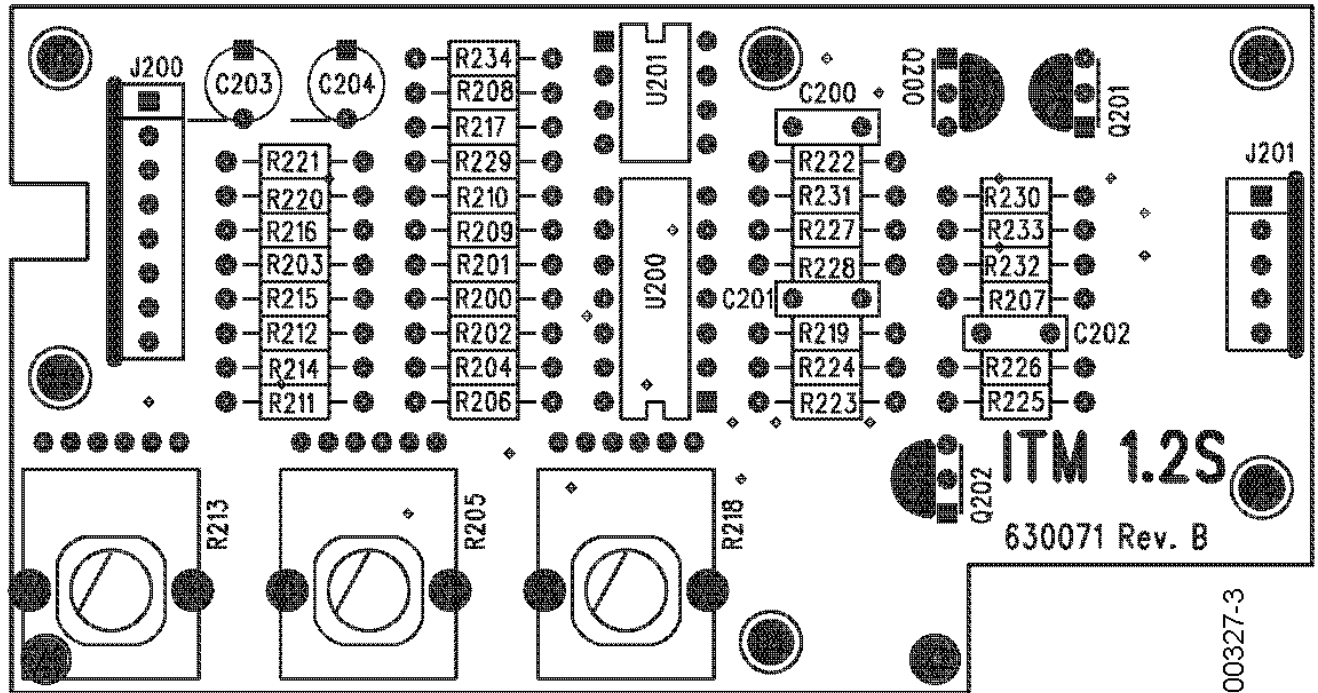
## INFINITY INTERMEZZO AC FILTER

# Feature



INFINITY INTERMEZZO 1.2S FEATURE

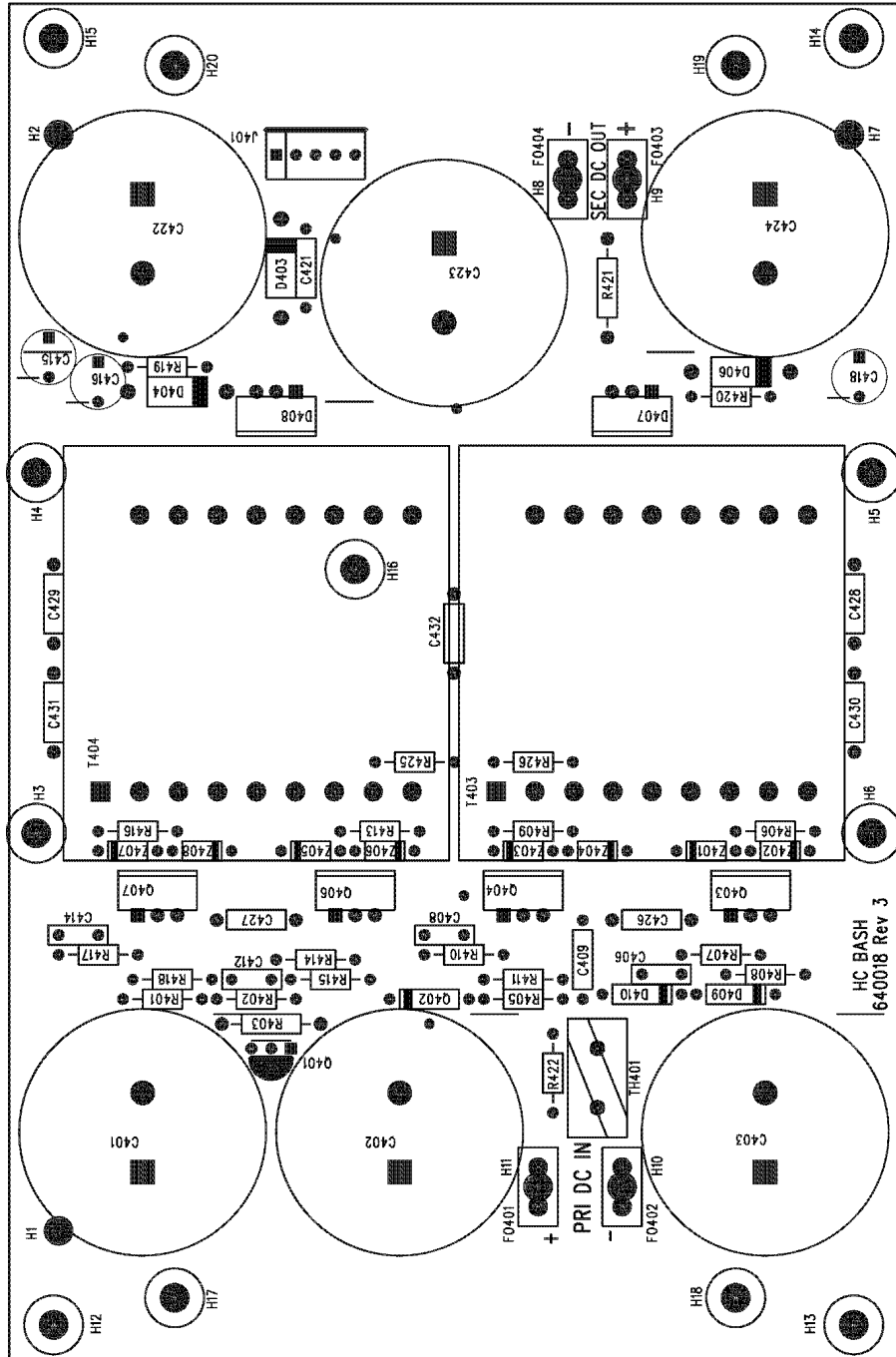
# RABOS



# INFINITY INTERMEZZO 1.2S RABOS

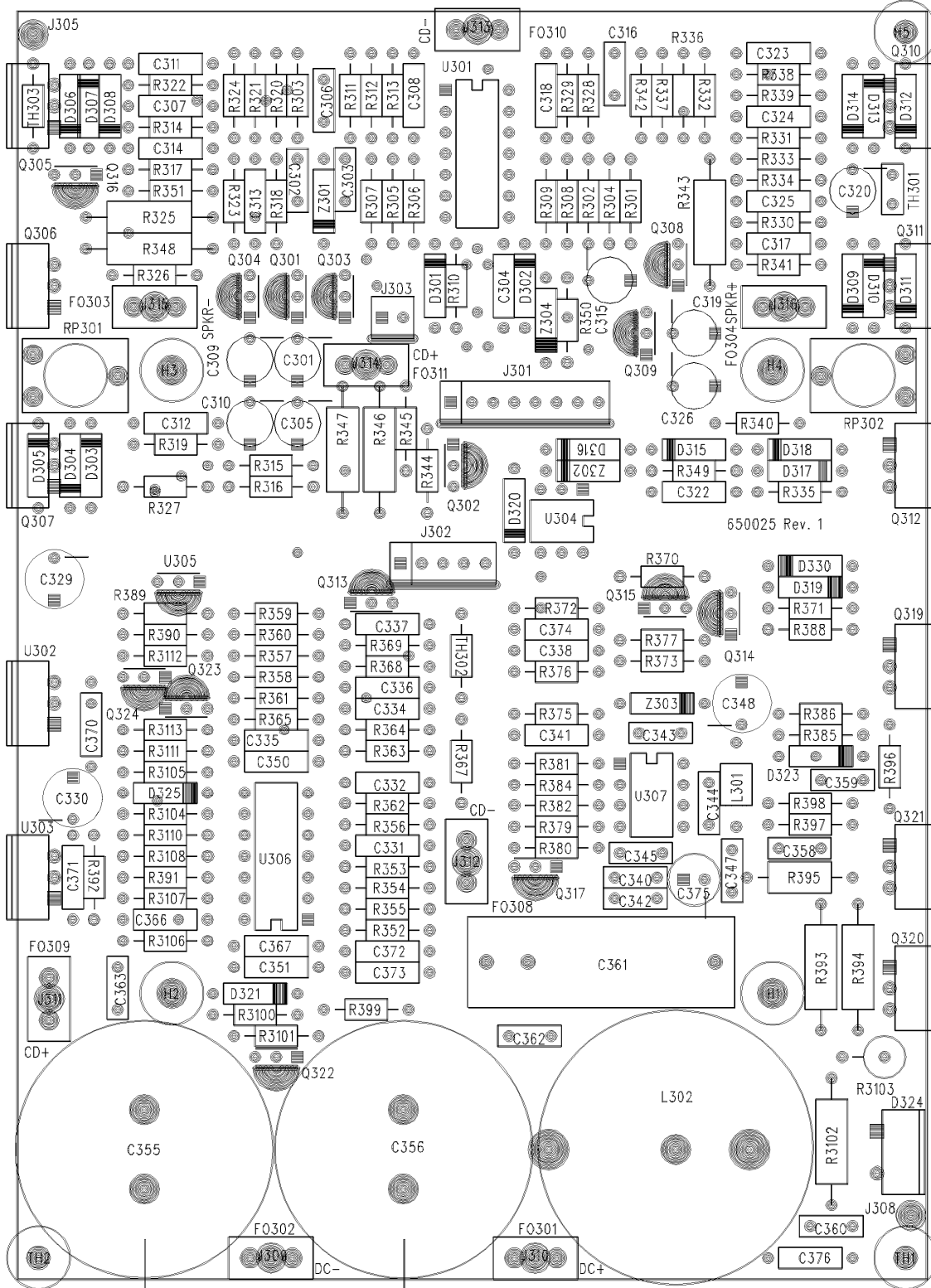
# Power Supply

1000 WATT POWER SUPPLY



# Linear Board

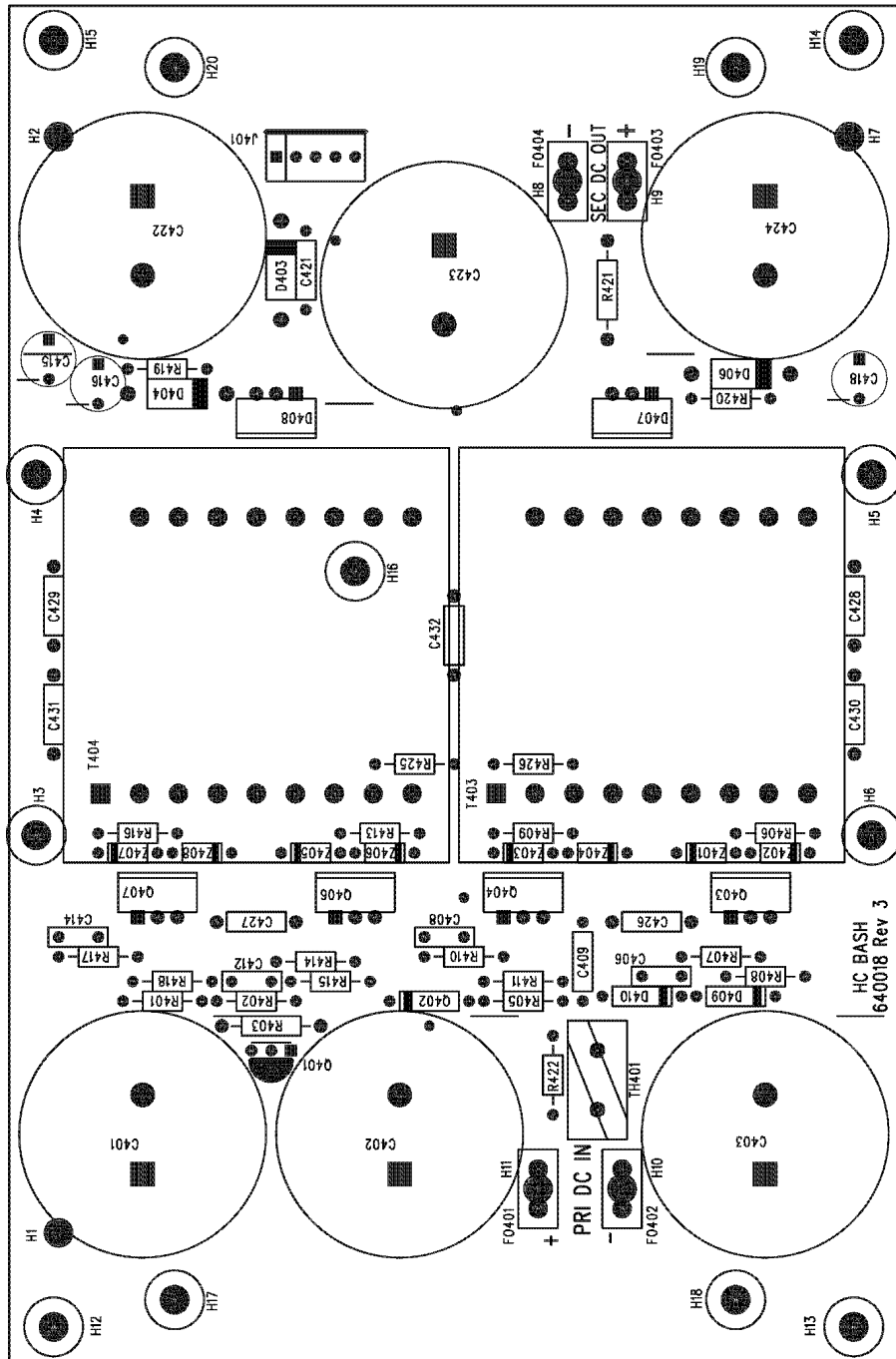
## INFINITY 1.2s & Prelude Linear Board



00323-5

# Power Supply

1000 WATT POWER SUPPLY

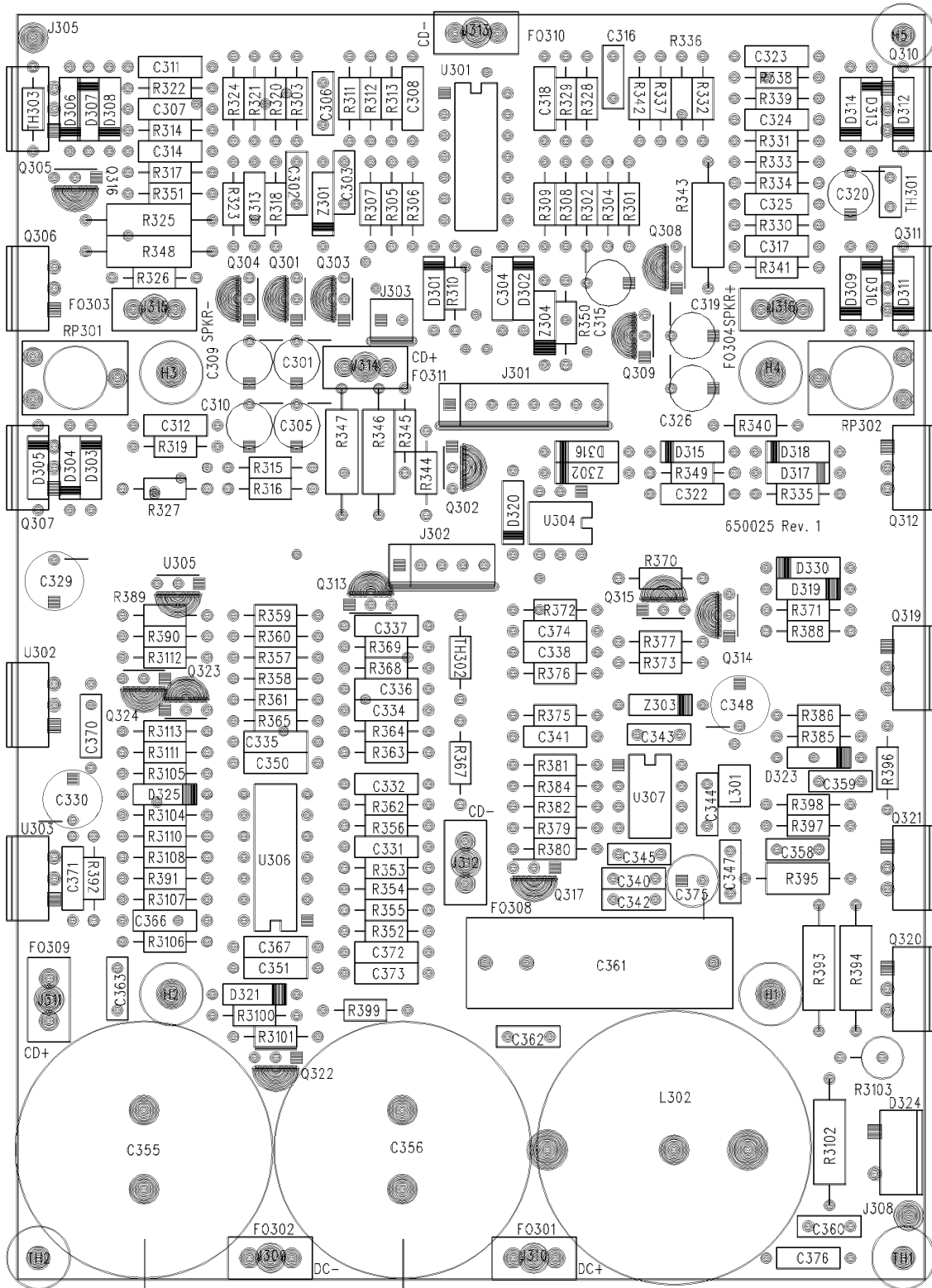


00327-4



# Linear Board

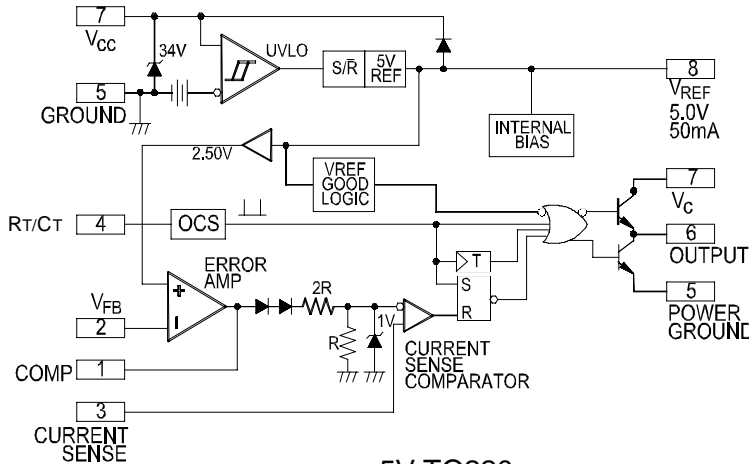
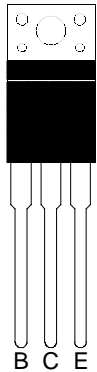
## INFINITY 1.2s & Prelude Linear Board



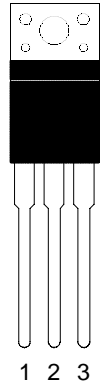
00323-5

# Integrated Circuit Diagrams

TRANS, 250V  
TO220, TIP47  
Q319

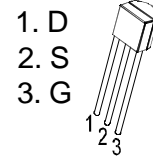


-5V TO220,  
7905CT,  
REGULATOR  
U303, 502

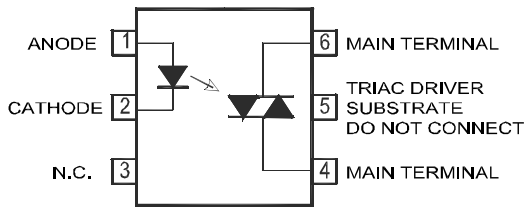


+5V TO220,  
7805CT  
REGULATOR  
U302, 501

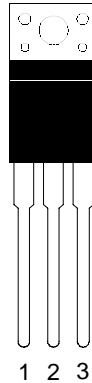
JFET, J111,  
Q100,101,103,201,  
202, 205, 301



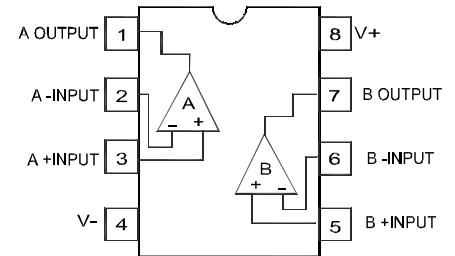
FOTO, MOC3012, 4N35  
U304, 100



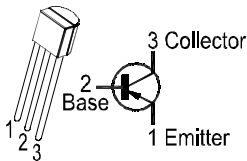
1. INPUT  
2. GROUND  
3. OUTPUT



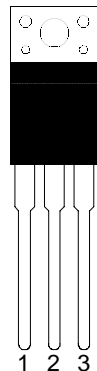
OPAMP, DUAL 8  
PIN, TLO82  
U201



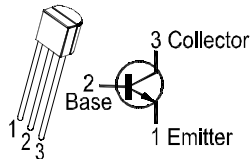
TRANS, PNP, 2N5401TR,  
TO92, MPSA92TR  
Q302, 304, 309, 313  
316, 324, 401



MOSFET, IRF640/740,  
IRF9640, TO220AB  
Q305, 310, 320, 321  
306, 307, 311, 312,  
403, 404, 406, 407

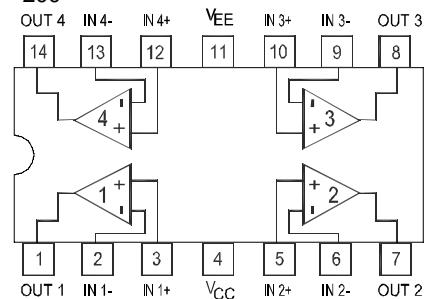


TRANS, NPN, TO92, 2N4401, 2N5551TR,  
2N5551, 2N555,  
Q314, 315, 317, 303, 308, 322, 323  
501, 102, 204, 200



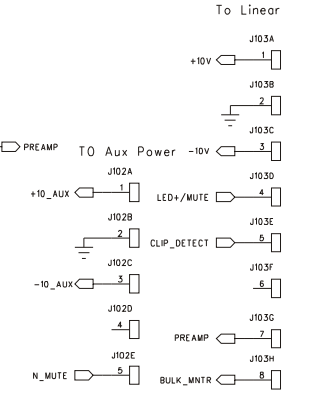
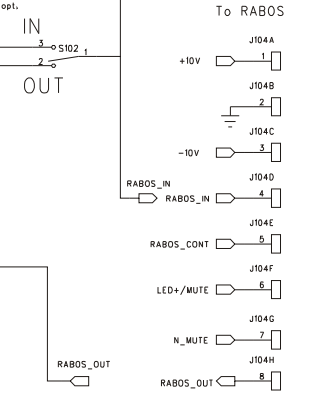
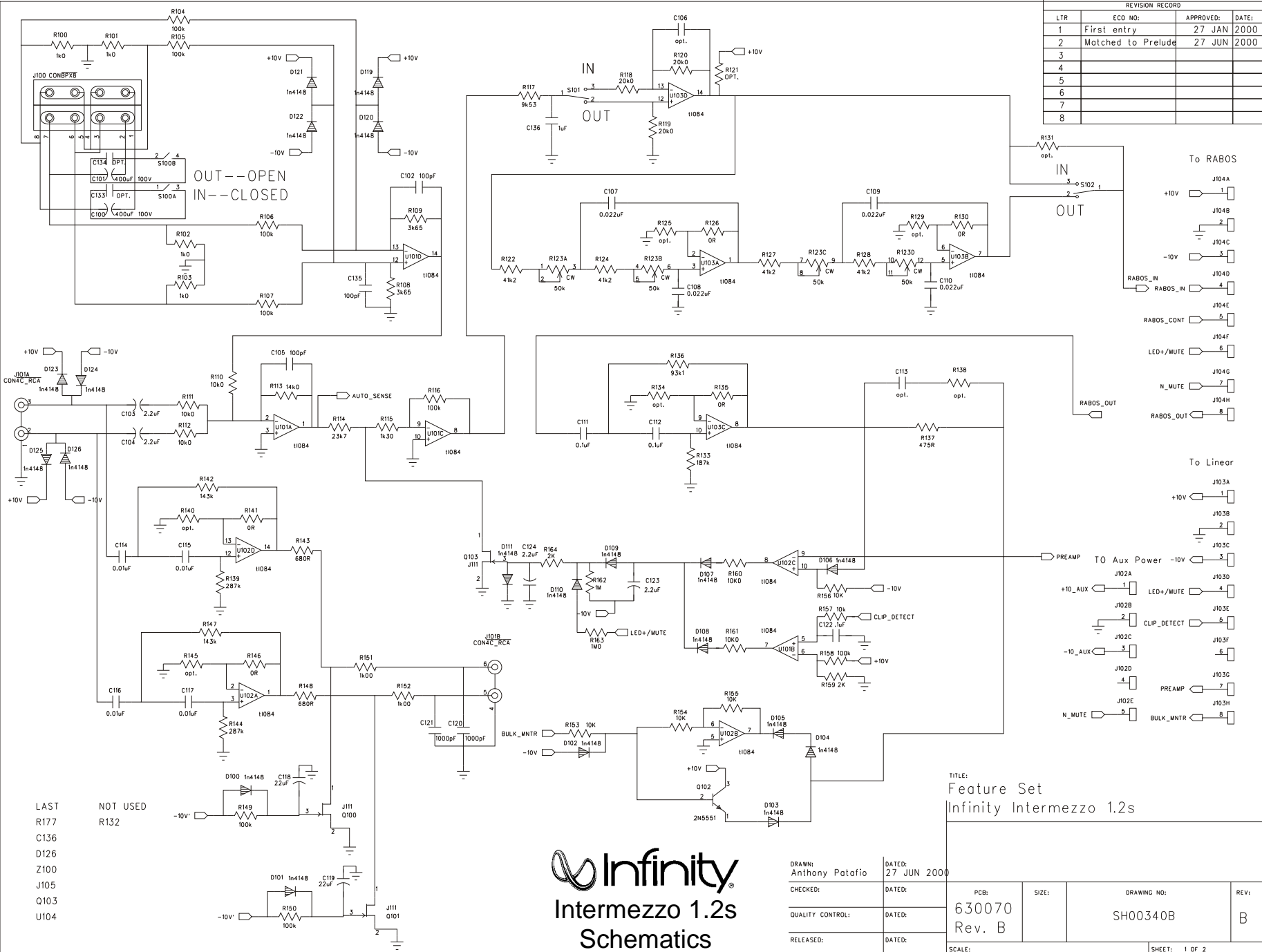
1. G  
2. D  
3. S

OPAMP, QUAD, 14 PIN,  
LM324N, TL074/84  
U306, 301, 104, 101, 102, 103,  
200



00462

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
1	First entry		27 JAN 2000
2	Matched to Prelude		27 JUN 2000
3			
4			
5			
6			
7			
8			



- LAST  
R177  
C126  
D126  
Z100  
J105  
O103  
U104
- NOT USED  
R132

TITLE:  
Feature Set  
Infinity Intermezzo 1.2s

DRAWN: Anthony Patafo	DATED: 27 JUN 2000	PCB: 630070	SIZE:	DRAWING NO: SH00340B	REV: B
CHECKED:	DATED:	Rev. B			
QUALITY CONTROL:	DATED:				
RELEASED:	DATED:				

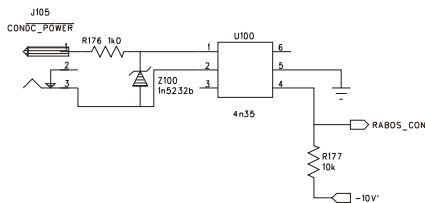
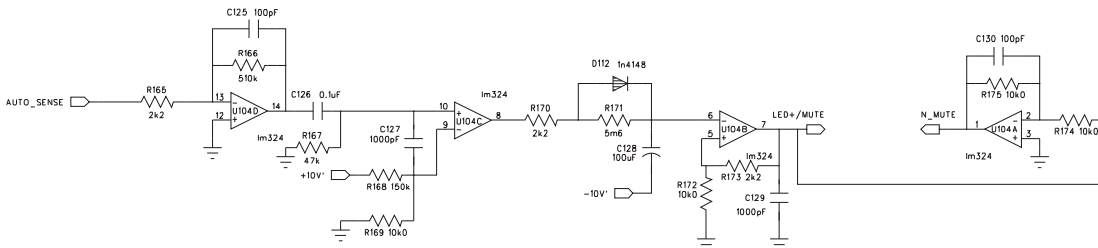
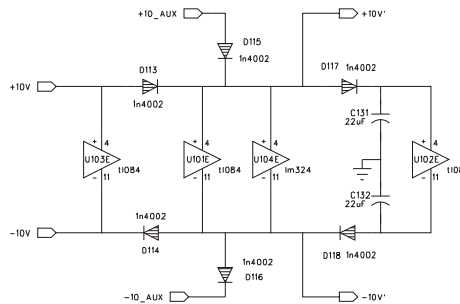
SCALE: SHEET: 1 OF 2



REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
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2	Matched to Prelude		27 JUN 2000
3			
4			

# Infinity

## Intermezzo 1.2s Schematics



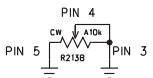
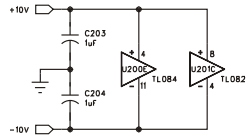
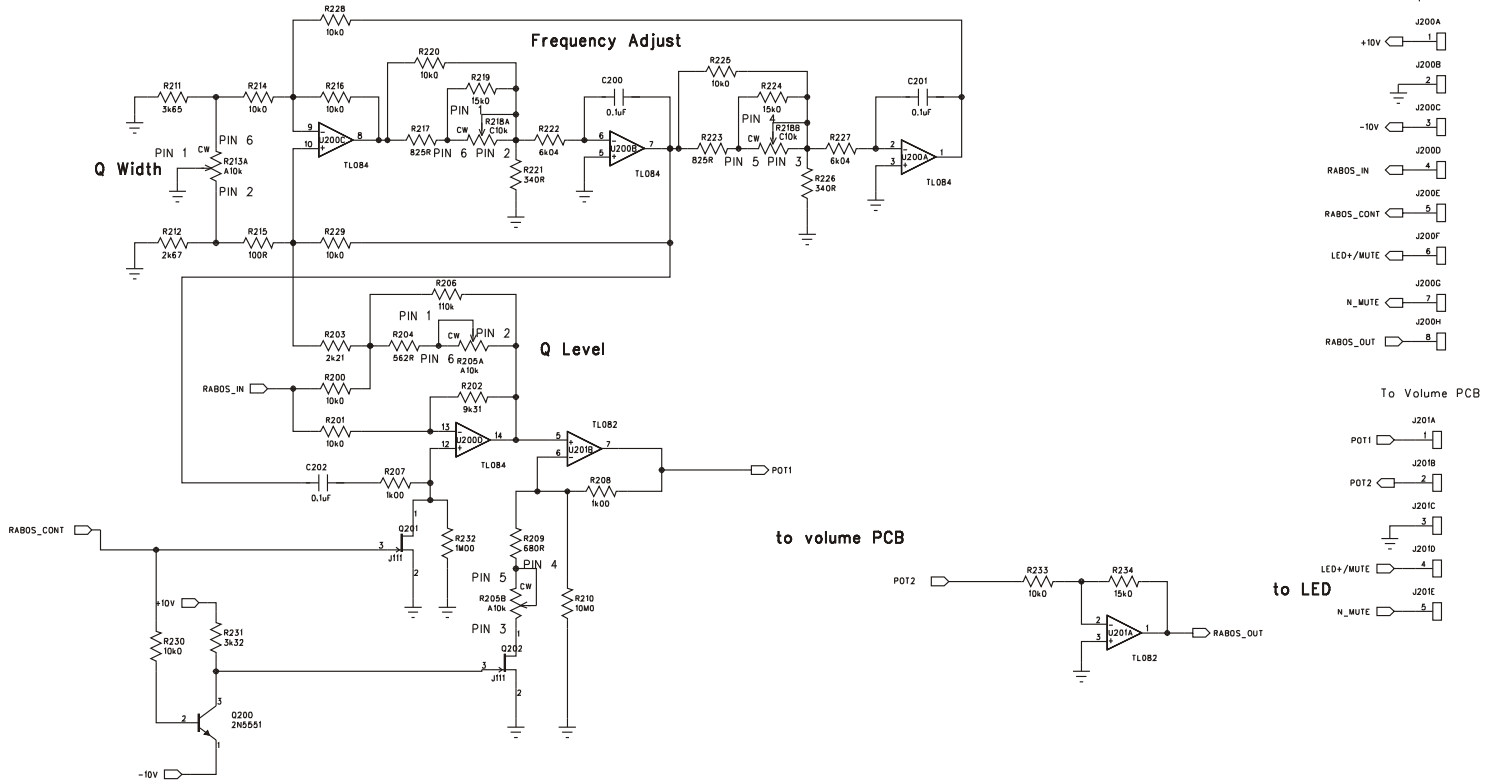
TITLE:  
Feature Set  
Infinity Intermezzo 1.2s

DRAWN: Anthony Patafio	DATED: 27 JUN 2000				
CHECKED:	DATE:	PCB: 630070	SIZE:	DRAWING NO: SH00340B	REV: B
QUALITY CONTROL:	DATE:	Rev. B			
RELEASED:	DATE:	SCALE:	SHEET: 2 OF 2		

# Infinity

## Intermezzo 1.2s Schematics

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
1	First Entry		27 JAN 2008
2	Gain Change		27 JUN 2008
3			
4			



- LAST NOT USED
- R234
- C204
- J201
- Q202
- U201

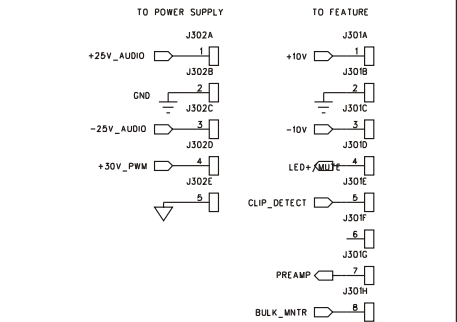
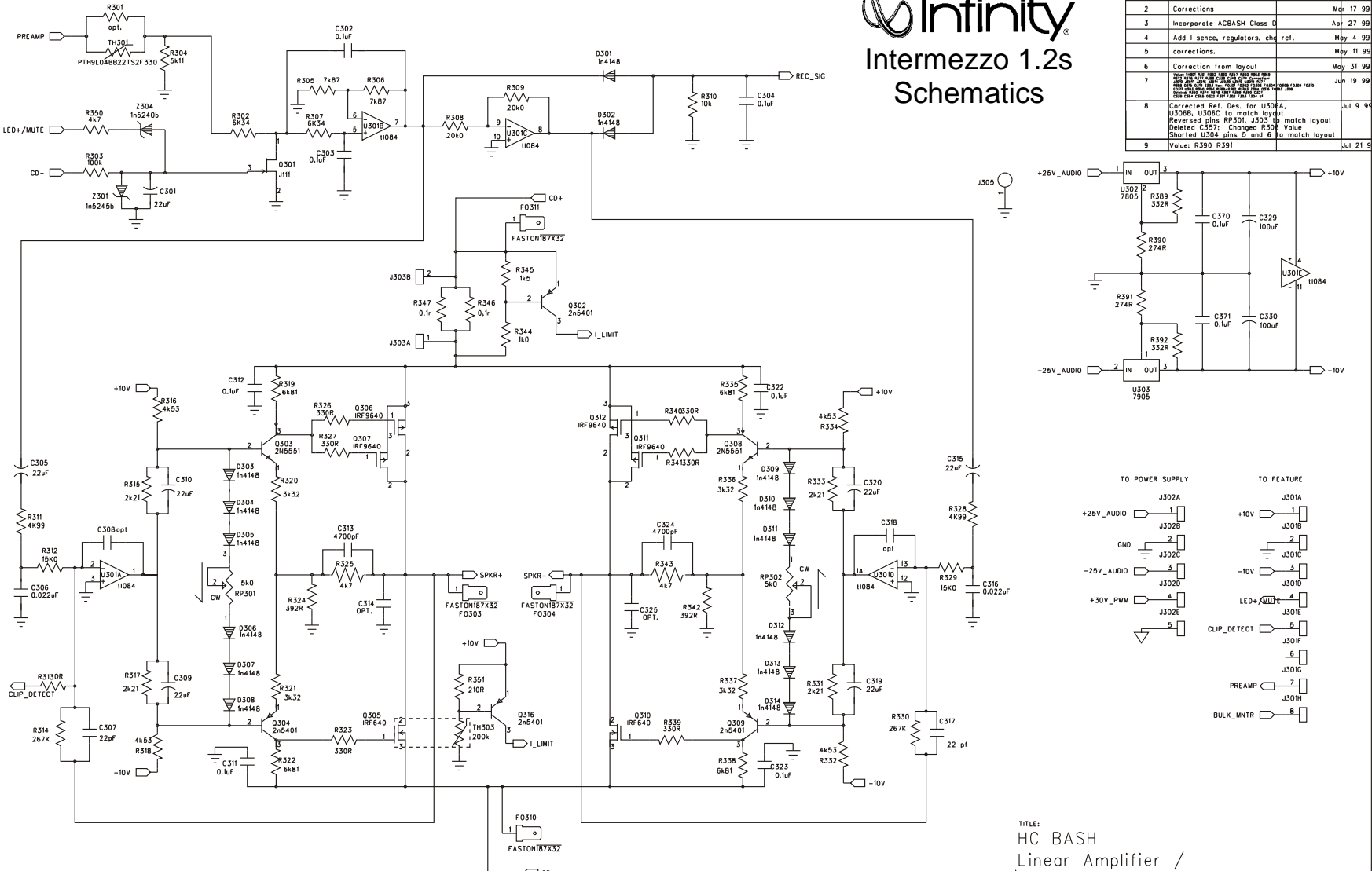
TITLE:  
**RABOS**  
Infinity Intermezzo 1.2s

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CHECKED:	DATED:	QUALITY CONTROL:	DATED:	RELEASED:	DATED:
SCALE:				SHEET: 1 OF 1	

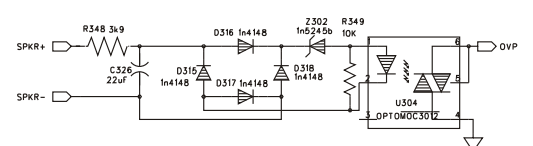
# Infinity

## Intermezzo 1.2s Schematics

REVISION RECORD			
LTR	ECD NO:	APPROVED:	DATE:
1	First Entry		Mar 19 99
2	Corrections		Mar 17 99
3	Incorporate ACBASH Class D		Apr 27 99
4	Add I sense, regulators, chg rel.		May 4 99
5	corrections.		May 11 99
6	Correction from layout		May 31 99
7	Corrected Ref. Des. for U306A, U306B, U306C to match layout Reversed pins RP501, J305 to match layout Deleted C352; Changed R301 Value Shorted U304 pins 5 and 6 to match layout		Jun 19 99
8			Jul 9 99
9	Value: R390 R391		Jul 21 99



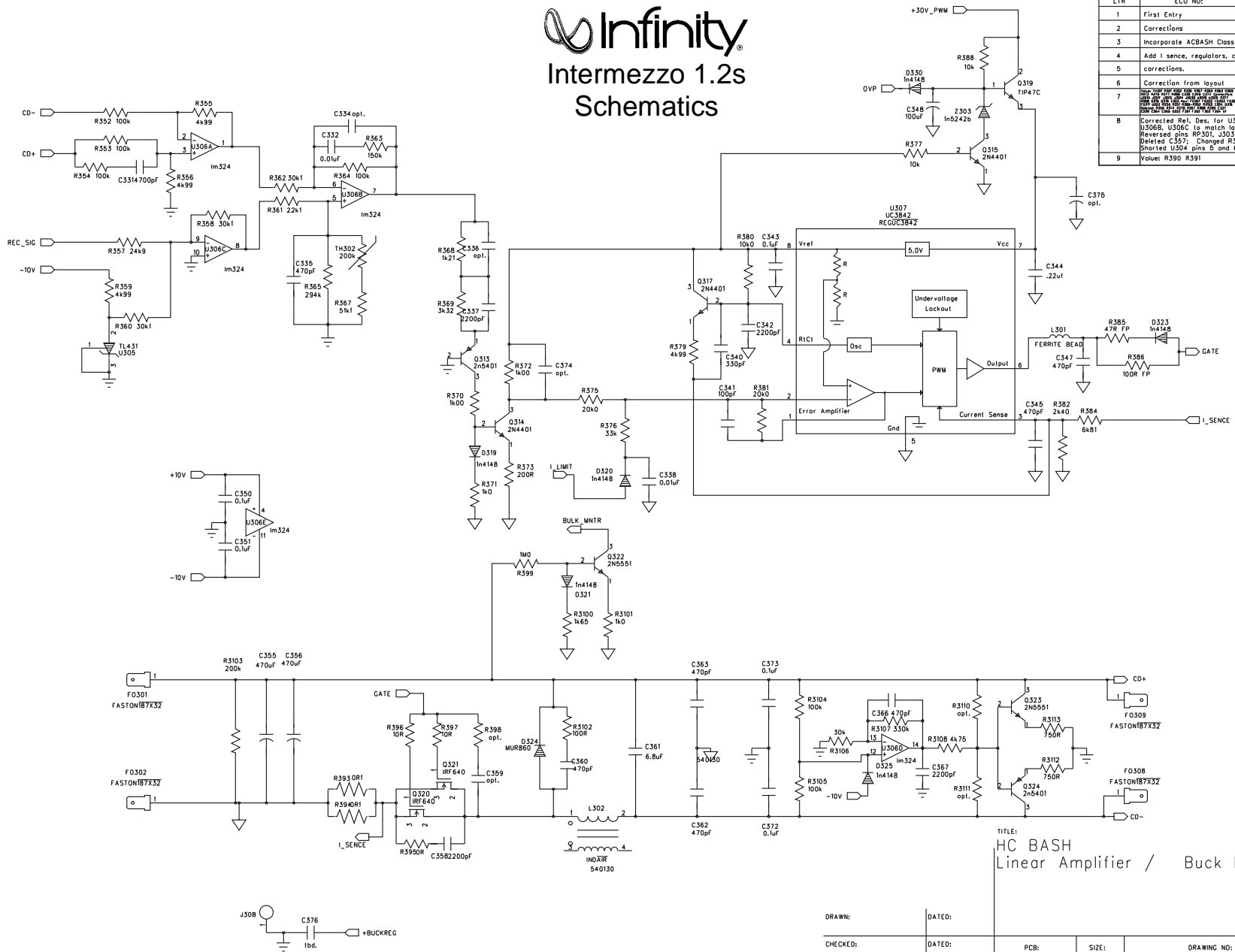
LAST	NOT USED
R5113	R366 R374 R578 R365 R387 R5109
C376	C321 C327 C328 C333 C339 C346 C349 C352-C354 C357 C364 C365 C368 C383
Q330	Q322 Q326-Q329
Q324	Q318
U307	
Z304	
TN303	
L302	
J308	J304 J306 J307



TITLE:  
HC BASH  
Linear Amplifier /  
Buck Regulator

DRAWN:	DATE:	PCB:	SIZE:	DRAWING NO:	REV:
CHECKED:	DATE:	650025		SH00360A	A
QUALITY CONTROL:	DATE:	Rev. 1			
RELEASED:	DATE:				
SCALE:				SHEET: 1 of 2	

# Infinity Intermezzo 1.2s Schematics



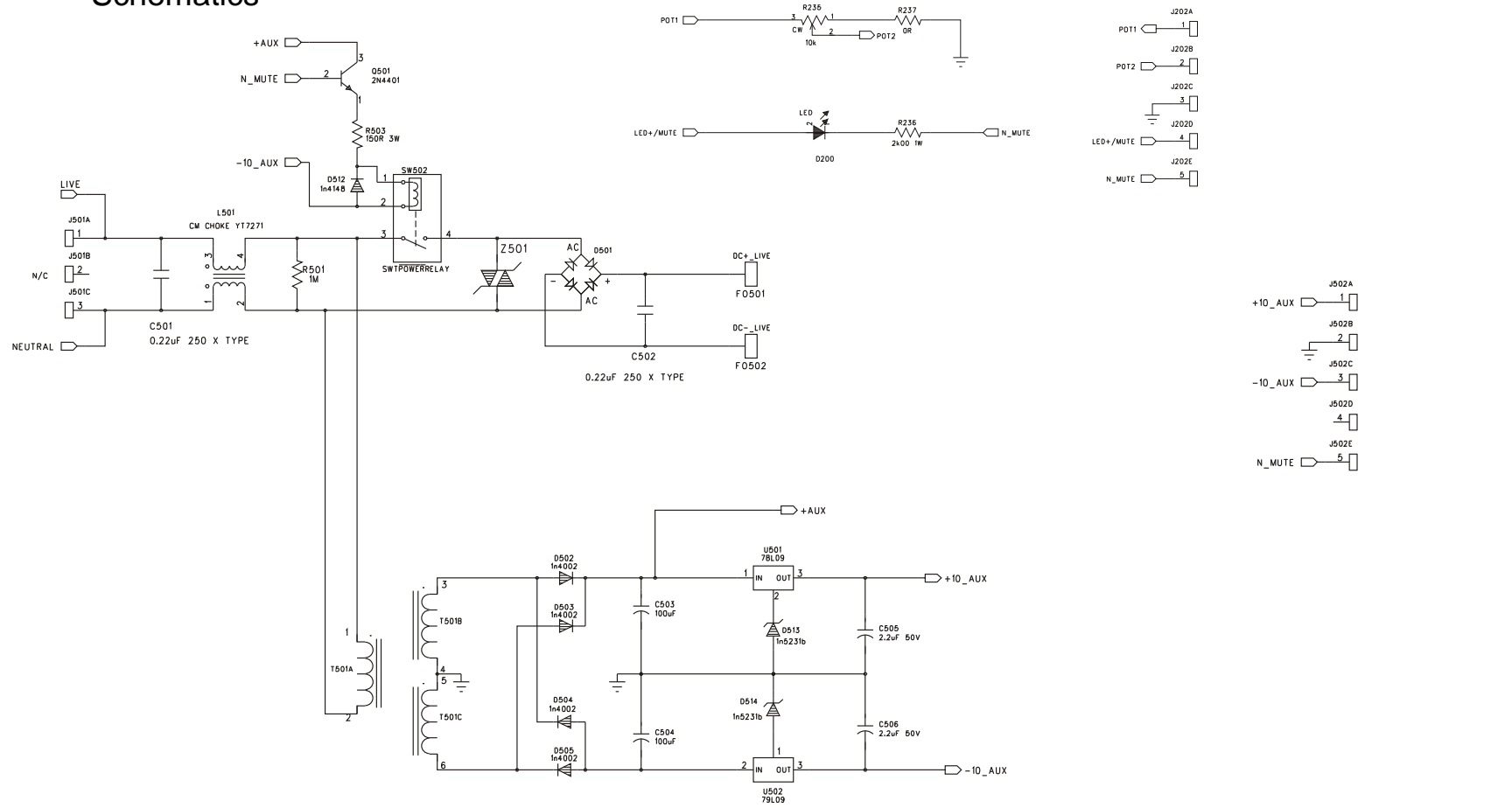
REVISION RECORD			
LTR	ECD NO:	APPROVED:	DATE:
1	First Entry		Mar 15 99
2	Corrections		Mar 17 99
3	Incorporate ACBASH Class D		Apr 27 99
4	Add 1 sense, regulators, chg ref.		May 4 99
5	corrections.		May 11 99
6	Correction from layout		May 31 99
7	Corrected Rel. Des. for U306A, U306B, U306C to match layout Reversed pins RP301, J303 to match layout Deleted C357; Changed R308 Value Shorted U304 pins 5 and 6 to match layout		Jun 19 99
8	Corrected Rel. Des. for U306A, U306B, U306C to match layout Reversed pins RP301, J303 to match layout Deleted C357; Changed R308 Value Shorted U304 pins 5 and 6 to match layout		Jul 9 99
9	Values R390 R391		Jul 21 99

TITLE:  
 HC BASH  
 Linear Amplifier / Buck Regulator

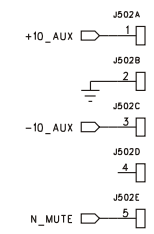
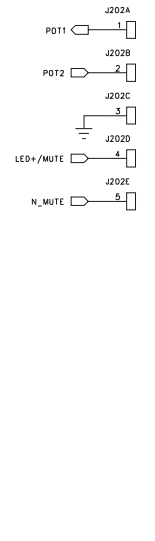
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CHECKED:	DATED:	650025		SH00360A	A
QUALITY CONTROL:	DATED:	Rev. 1			
RELEASED:	DATED:	SCALE:		SHEET: 2 of 2	

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DATE:
1	First Entry	27 JAN	2000
1			
1			
1			

# Intermezzo 1.2s Schematics



To RABOS Main PCB

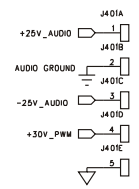
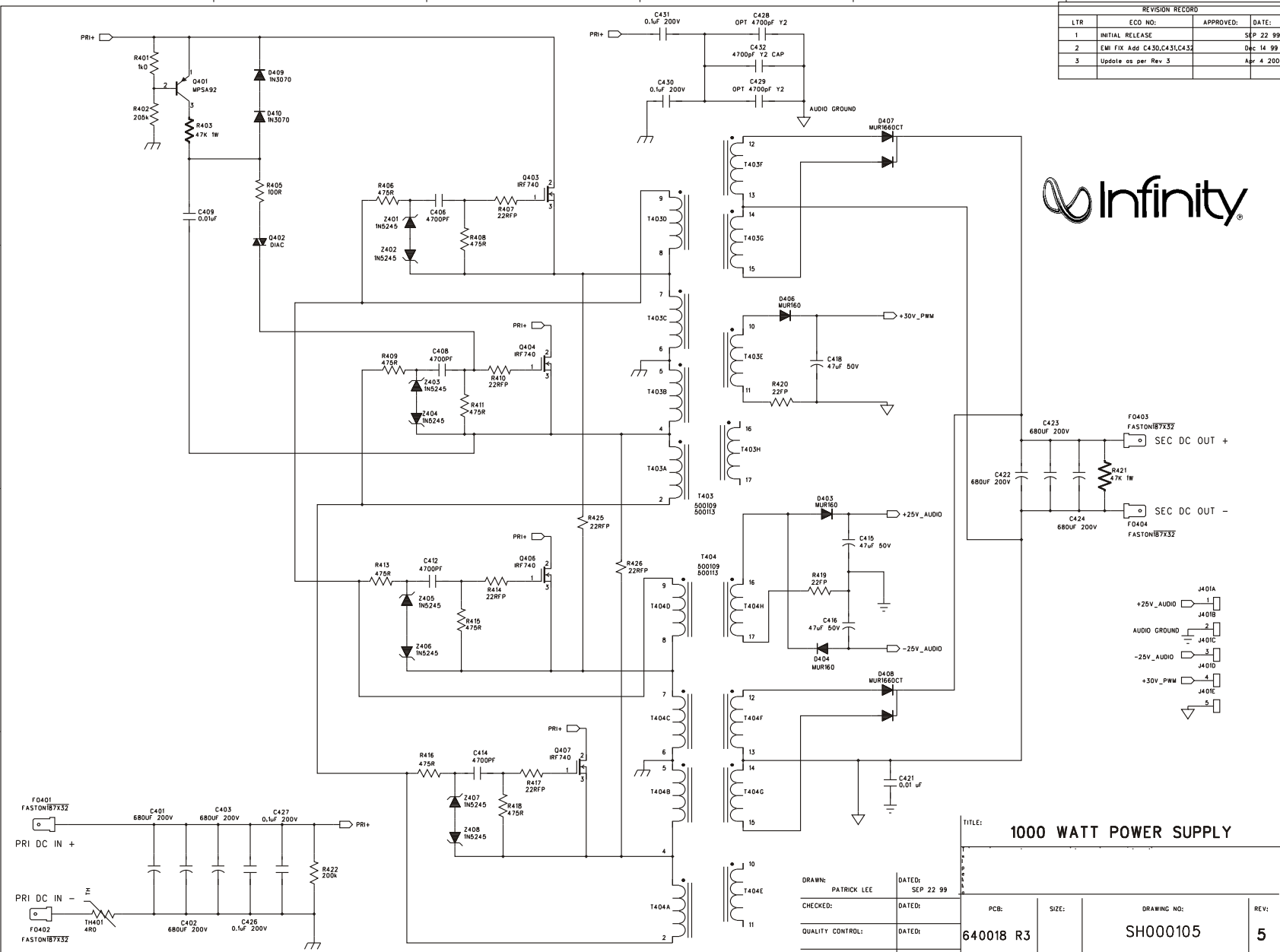


TITLE:  
AC Line Filter & RABOS Gain PCB  
Infinity Intermezzo 1.2s & 4.1t

DRAWN: Anthony Potofio	DATED: 27 JAN 200	PCB:	SIZE:	DRAWING NO:	REV:
CHECKED:	DATED:	620011		SH00370A	A
QUALITY CONTROL:	DATED:	Rev. B			
RELEASED:	DATED:	SCALE:	SHEET: 1 OF 1		



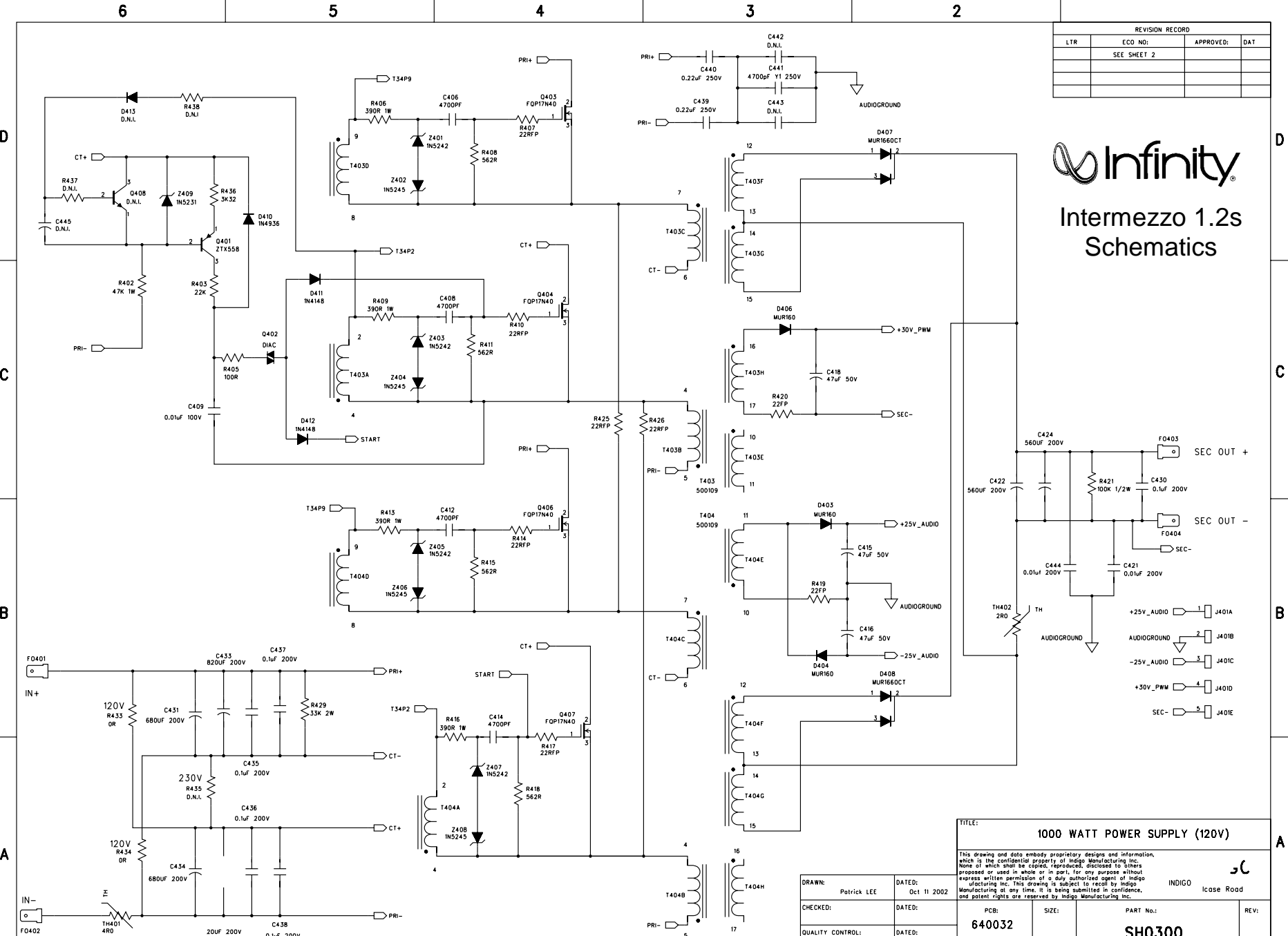
REVISION RECORD			
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1	INITIAL RELEASE		SEP 22 99
2	EMI FIX Add C430,C431,C432		Dec 14 99
3	Update as per Rev 3		Apr 4 2000



TITLE: 1000 WATT POWER SUPPLY			
DRAWN: PATRICK LEE	DATED: SEP 22 99	PCB: 640018 R3	SIZE:
CHECKED:	DATED:	DRAWING NO: SH000105	REV: 5
QUALITY CONTROL:	DATED:	sheet: 1 of 2	
RELEASED:	DATED:	SCALE:	

REVISION RECORD			
LTR	ECO NO:	APPROVED:	DAT
	SEE SHEET 2		

**Infinity**  
Intermezzo 1.2s  
Schematics



DRAWN: Patrick LEE		DATED: Oct 11 2002	
CHECKED:		DATED:	
QUALITY CONTROL:		DATED:	
RELEASED:		DATED:	
TITLE: 1000 WATT POWER SUPPLY (120V)		INDIGO Icase Road	
PCB: 640032	SIZE:	PART No. SH0300	REV: 0
SCALE:			