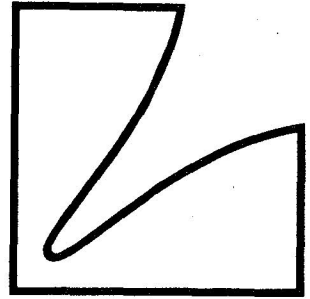
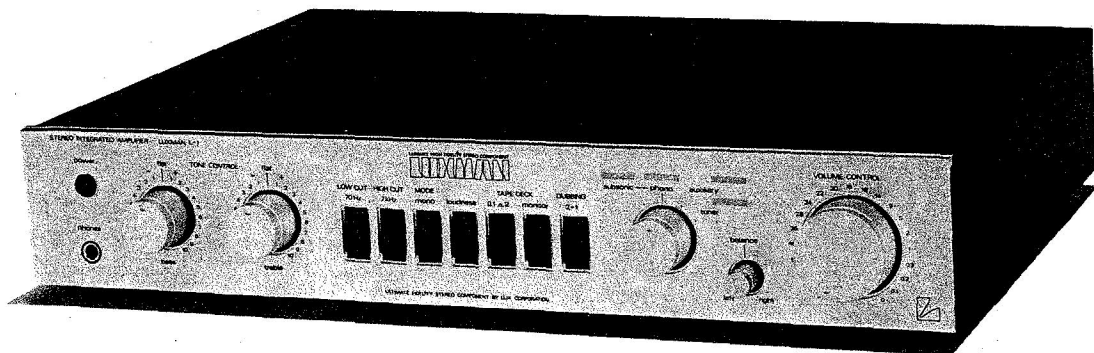


# SERVICE MANUAL



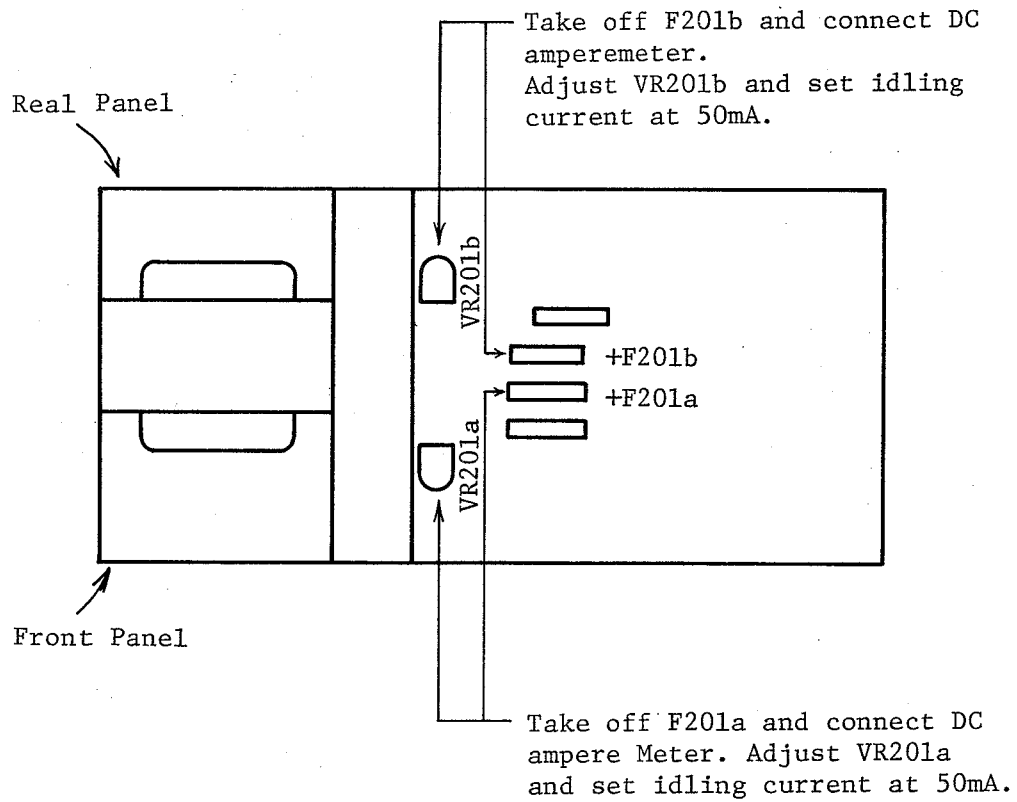
## SOLID STATE STEREO **L-1** INTEGRATED AMPLIFIER (L-1A)



## L-1, L-1A Alignment Point

### Bias Adjustment

1. Turn on the Power Switch and wait 3 minutes for warm-up.
2. Set the VOLUME CONTROL to Minimum.





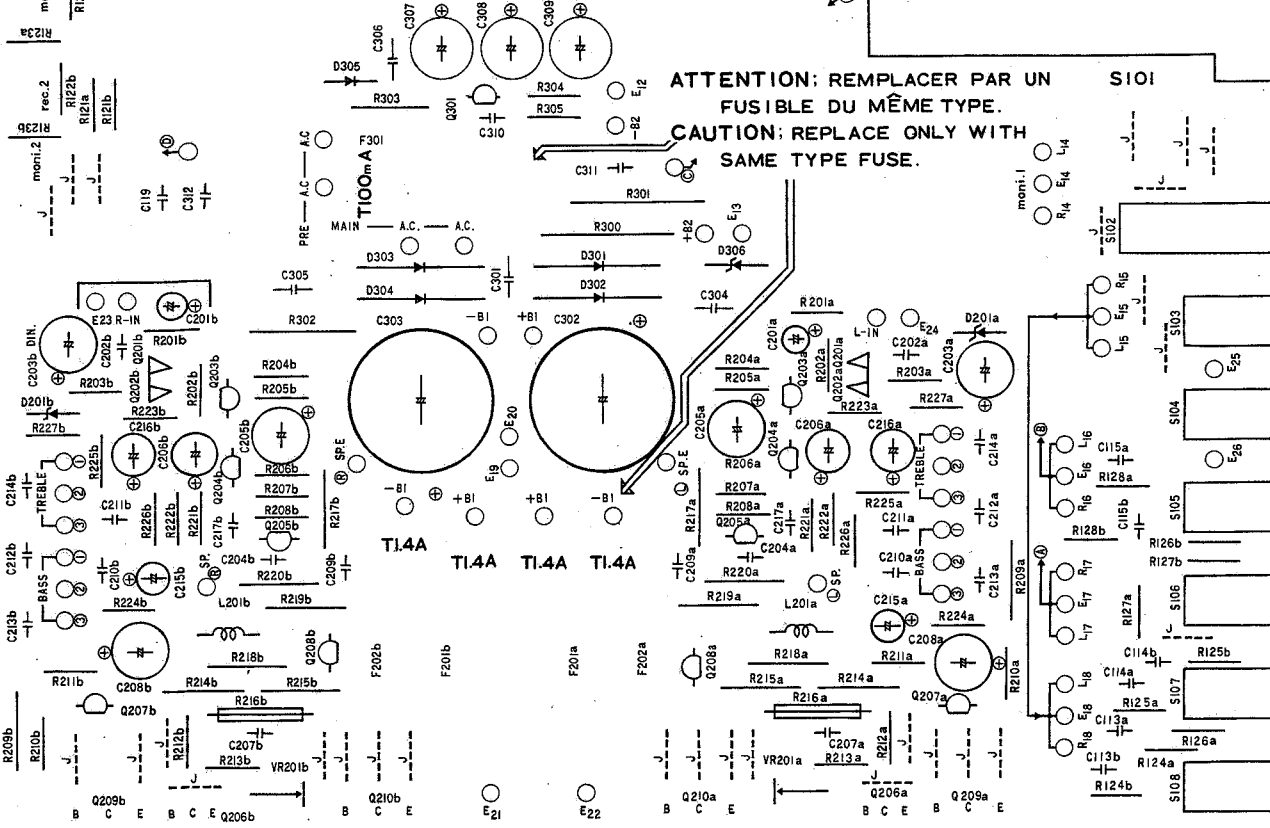
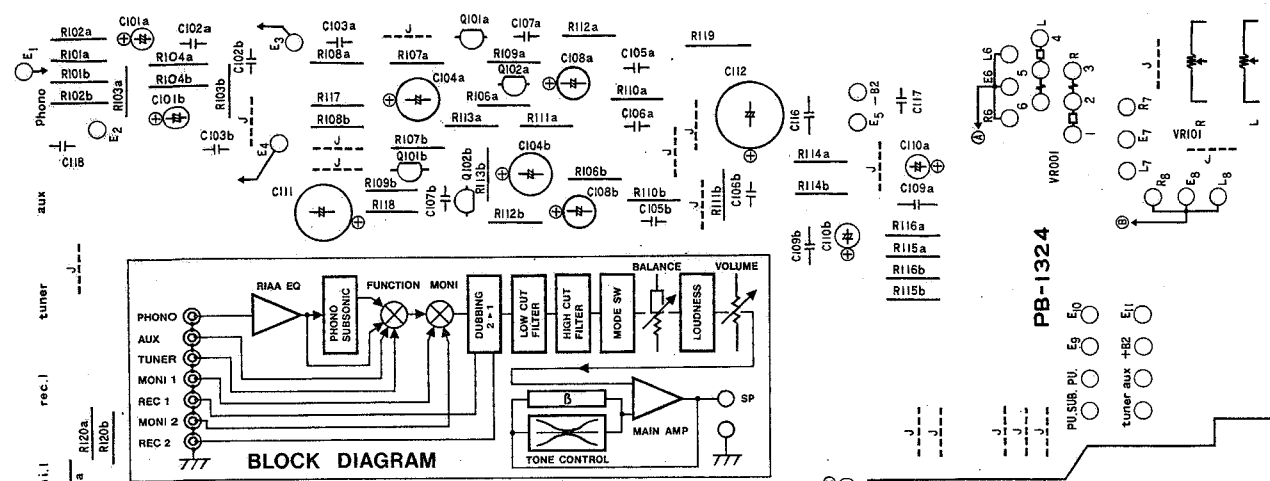
Ref. No.	DESCRIPTION	L-1(U)	L-1(S)	L-1(E)	L-1(J)	L-1(A)
1	Input Selector Knob	WH1106	WH1106	WH1106	WH1101	WH1106
2	Volume Control Knob	WH1105	WH1105	WH1105	WH1100	WH1105
3	Balance, Knob	WH1115	WH1115	WH1115	WH1116	WJ1143
4	Push Button	WA1142-1	WA1142-1	WA1142-1	WA1142-1	WJ1142-1
5	"	"	"	"	"	"
6	"	"	"	"	"	"
7	"	"	"	"	"	"
8	"	WJ1142-2	WJ1142-2	WJ1142-2	WJ1142-2	"
9	"	WJ1142-3	WJ1142-3	WJ1142-3	WJ1142-3	"
10	"	WJ1142-1	WJ1142-1	WJ1142-1	WJ1142-1	"
11	Treble Knob	WH1106	WH1106	WH1106	WH1101	WH1106
12	Bass Knob	"	"	"	WH1101	WH1106
13	Power Switch Knob	WJ1133	WJ1133	WJ1133	WJ1133	WJ1133
14	Function Indicators	WE1092	WE1092	WE1092	WE1092	-----
15	Headphone Jack	AJ0016	AJ0016	AJ0016	AJ0016	AJ0016
16	Input Terminal	AT5019	AT5019	AT5019	AT5019	AT5019
17	"	"	"	"	"	"
18	"	"	"	"	"	"
19	GND Terminal	AG0100	AG0100	AG0100	AG0100	AG0100
20	Input Terminal	AT5018	AT5018	AT5018	AT5018	AT5018
21	"	"	"	"	"	"
22	"	"	"	"	"	"
23	"	"	"	"	"	"
24	DIN Connector	-----	AS0185	AS0185	-----	AS0185
25	Speaker Terminal	AT0124	AT0124	AT0124	AT0124	AT0124
26	"	"	"	"	"	"
27	AC Cord	BK0018	BK0022	BK0022	BK0015	BK0022
28	AC Outlet	AC0050	-----	AC0051	AC0055	-----
29	Fuse Holder	AH0001	-----	-----	-----	-----
30	Front Panel	WA1206	WA1206	WA1206	WA1206	WA1210
31	Bonnet	UG1027	UG1027	UG1027	UG1027	UG1027
32	Leg	WN0007	WN0007	WN0007	WN0007	WN0007
33	Rear Panel	UC1183	UC1178	UC1179	UC1177	UC1180

REF. NO.	STOCK NO.	DESCRIPTION	REF. NO.	STOCK NO.	DESCRIPTION
S101	SR0143	Input Selector Switch	F301	BF0074	ULCS-MF61M-0.5A (UC,UZ)
S108	SP0165	Low Cut Switch	F301	BF0201	5x20 0.1A(T) (S,E)
S107	SP0165	High Cut Switch	F301	BF0117	MF60NR-3A (J)
S106	SP0165	Mode Switch	F301	BF0308	MF51NR-0.5A (T-1L)
S105	SP0165	Loudness Switch			
S104	SP0165	Moni 1-2, Select Sw	F201ab	-----	----- (UC,UZ)
S103	SP0165	Tape Monitor Sw	F201ab	BF0079	ULCS-MF61M-3A (E)
S102	SP0165	Dubbing Switch	F201ab	BF0117	MF60NR-3A (J)
S001ab	SP0167	Power Switch (E)(S)	F201ab	BF0303	MF51NR-3A (L-1A)
S001ab	SP0166	Power Switch (J)(U)	F202ab	-----	----- (UC,UZ)
VR101ab	RV0258	Volume Control		BF0198	5x20 1.4A(T) (S)
VR001ab	RV0260	Balance Control		BF0079	ULCS-MF61M-3A (E)
	RV0259	Treble		BF0117	MF60NR-3A (J)
	RV0259	Bass		BF0303	MF51NR-3A (L-1A)
	PT2484	Power Transformer (U)			
	PT2482	" " (S)			
	PT2483	" " (E)			
	PT2499	" " (J)			
	PT2491	" " L-1A			
Q210	TR0290	Power TR 2SA1135 (E,S,J)			
209	TR0291	" 2SC2665 (E,S,J)			
Q210	TR0329	" 2SA1102 (U)			
209	TR0330	" 2SC2577 (U)			
P.L.	AL0056	Orange L-1			
	AL0057	Green L-1			
	AL0058	12V 75mA L-1A			

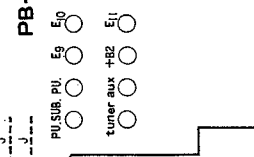
SYMBOL NO.	STOCK NO.	DESCRIPTION	SYMBOL NO.	STOCK NO.	DESCRIPTION
C101ab	CE0788	3.3uF 50WV E	C205ab	CE0844	220uF 35WV E
102ab	CC0005	33pF 50WV C	206ab	CE0820	47uF 16WV E
103ab	CC0007	100pF 50WV C	207ab	CK0140	0.047uF 50WV C
104ab	CE0810	47uF 10WV E	208ab	CE0842	47uF 35WV E
105ab	CQ1427	2200pF 50WV S	209ab	CQ1321	0.047uF 50WV MY
106ab	CQ1439	6200pF 50WV S	210ab	CQ1311	0.0068uF 50WV MY
107ab	CC0038	5pF 50WV C	211ab	CQ1319	0.033uF 50WV MY
108ab	CE0820	47uF 16WV E	212ab	CQ1323	0.068uF 50WV MY
109ab	CQ1325	0.1uF 50WV MY	213ab	CQ1308	0.0039uF 50WV MY
110ab	CE0786	1uF 50WV E	214ab	CQ1317	0.022uF 50WV MY
111	CE0821	100uF 16WV E	215ab	CE0827	4.7uF 25WV E
112	CE0858	100uF 50WV E	216ab	CE0818	22uF 16WV E
113ab	CQ1320	0.039uF 50WV MY	217ab	CQ1301	0.001uF 50WV MY
114ab	CQ1308	0.039uF 50WV MY	301	CK0203	0.01uF 500WV C
115ab	CQ1319	0.033uF 50WV MY	302	CE1017	3300uF 35WV E L-1A
117	CK0159	0.1uF 25WV C		CE1015	4700uF 35WV E L-1
118	CK0158	0.047uF 25WV C	303	CE1017	3300uF 35WV E L-1A
119	CK0158	0.047uF 25WV C		CE1015	4700uF 35WV E L-1
201ab	CE0788	3.3uF 50WV E	306	CK0203	0.01uF 500WV C
202ab	CC0008	150pF 50WV C	307	CE0858	100uF 50WV E
203ab	CE0832	100uF 25WV E	308	CE0858	100uF 50WV E
204ab	CC0006	47pF 50WV C	309	CE0858	100uF 50WV E
			310	CC0007	100pF 50WV C
			311	CK0158	0.047uF 25WV C
			312	CK0158	0.047uF 25WV C

SYMBOL NO.	STOCK NO.	DESCRIPTION	SYMBOL NO.	STOCK NO.	DESCRIPTION
R101ab	RB0414	56k 0.25W <sup>+5%</sup> RD25S	R213ab	RB0364	470 0.25W 5% RD25S
102ab	RB0340	47 " " " "	214ab	RS2512L	100 0.5W 10% flame prf.
103ab	RB0444	1M " " " "	215ab	RS2512L	100 " " " "
104ab	RB0436	470k " " " "	216ab	RG0090	0.33 2W " cement
106ab	RB0366	560 " " " "	217ab	RS2510L	68 0.5W 5% flame prf.
107ab	RB0412	47k " " " "	218ab	RS2501L	10 0.5W " "
108ab	RB0370	820 " " " "	219ab	RS2501L	10 0.5W " "
109ab	RB0420	100k " " " "	220ab	RS2524L	1k 0.5% " "
110ab	RB0410	39k " " " "	221ab	RB0412	47k 0.25W " RD25S
111ab	RB0438	560k " " " "	222ab	RB0394	8.2k " " " "
112ab	RB0374	1.2k " " " "	223ab	RB0364	470 " " " "
113ab	RB0394	8.2k " " " "	224ab	RB0394	8.2k " " " "
114ab	RB0360	330 " " " "	225ab	RB0376	1.5k " " " "
115ab	RB0436	470k " " " "	226ab	RB0378	1.8k " " " "
116ab	RB0428	220k " " " "	227ab	RB0360	330 " " " "
117ab	RB0400	15k " " " "	R300	RS2952	150 2.0W " flame prf.
118	RB0410	39k " " " "	301	RS2952	150 2.0W " "
119	RS1281	100 0.33W " flame prf.	302	RS2716	3.3k 1.0W " "
120ab	RB0444	1M 0.25W <sup>+5%</sup> RD25S	303	RS2512	100 0.5W 10% "
121ab	RB0444	1M " " " "	304	RB0410	39k 0.25W 5% "
124ab	RB0444	1M " " " "	305	RB0372	1k 0.25W 5% "
125ab	RB0444	1M " " " "			
126ab	RB0392	6.8k " " " "	SYMBOL NO.	STOCK NO.	DESCRIPTION
127ab	RB0392	6.8k " " " "	D201ab	TD0065	zener WZ-192
128ab	RB0398	12k " " " "	D301	TD0105	S3V20
201ab	RB0372	1k " " " "	302	TD0105	S3V20
202ab	RB0414	56k " " " "	303	TD0105	S3V20
203ab	RB0396	10k " " " "	304	TD0105	S3V20
204ab	RB0356	220 " " " "	305	TD0003	1N4003
207ab	RB0356	220 " " " "	306	TD0025	WZ090 zener
208ab	RB0374	1.2k " " " "	L201ab	LA1004	Choke Coil
209ab	RS2525L	1.2k 0.5W 10% flame prf.			
210ab	RB0380	2.2k 0.25W 5% RD25S			
211ab	RB0388	4.7k 0.25W 5% "			
212ab	RB0378	1.8k 0.25W " "			

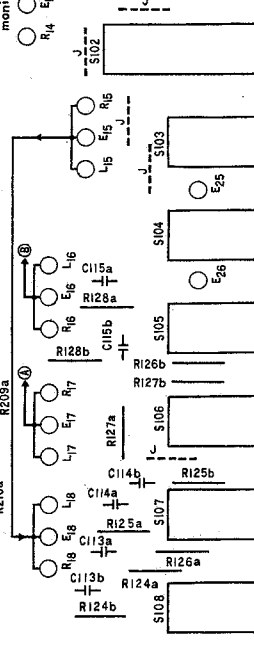
SYMBOL NO.	STOCK NO.	DESCRIPTION	SYMBOL NO.	STOCK NO.	DESCRIPTION
Q101ab	TR0320	TR 2SA992	Q205ab	TR0323	TR 2SC1845
102ab	TR0323	TR 2SC1845	207ab	TR0194	TR 2SD667
201ab	TR0254	TR 2SA798	208ab	TR0195	TR 2SB647
203ab	TR0198	TR 2SC1815	Q301	TR0320	TR 2SA992
204ab	TR0198	TR 2SC1815			

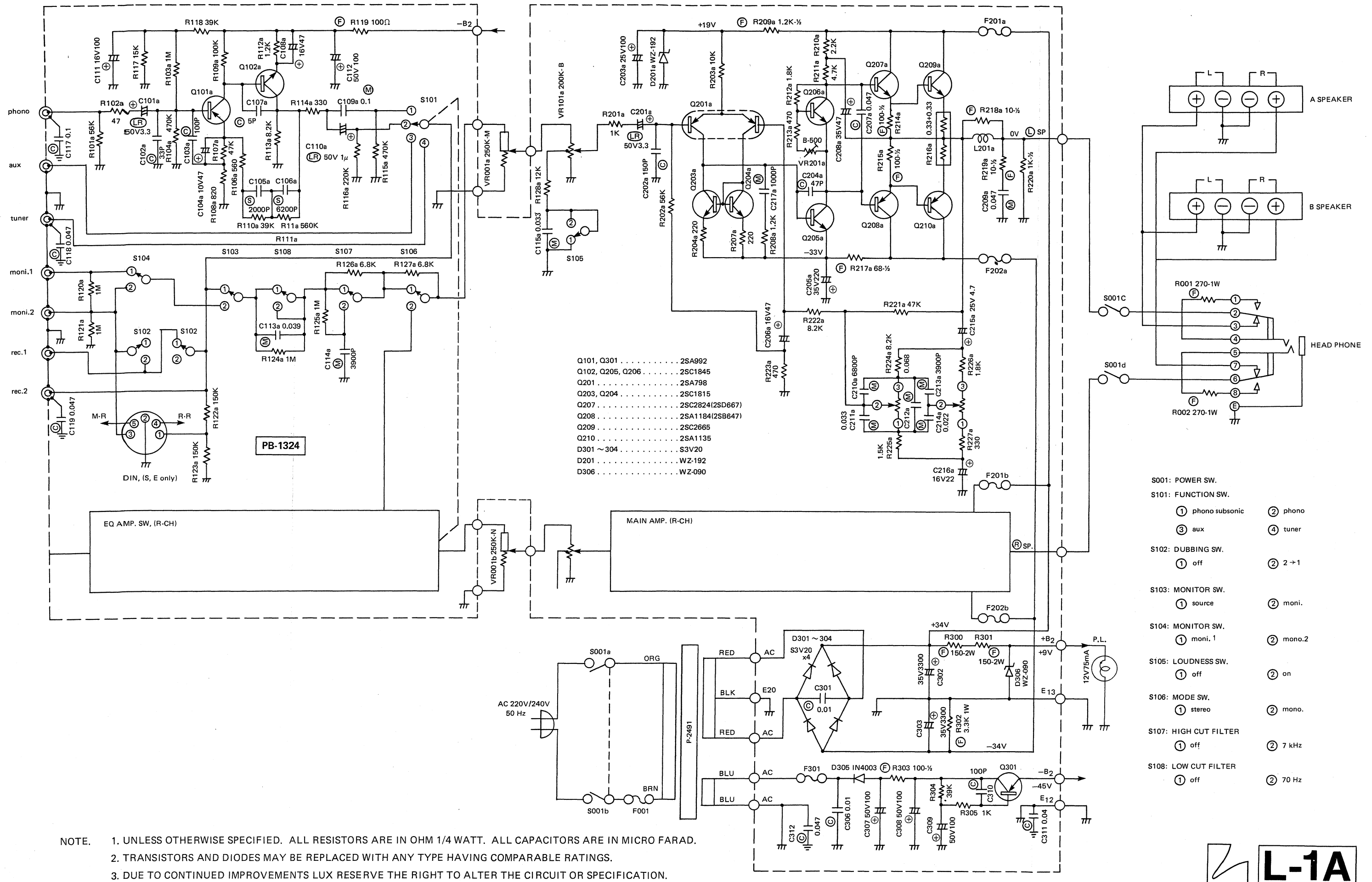


**PB-1324**

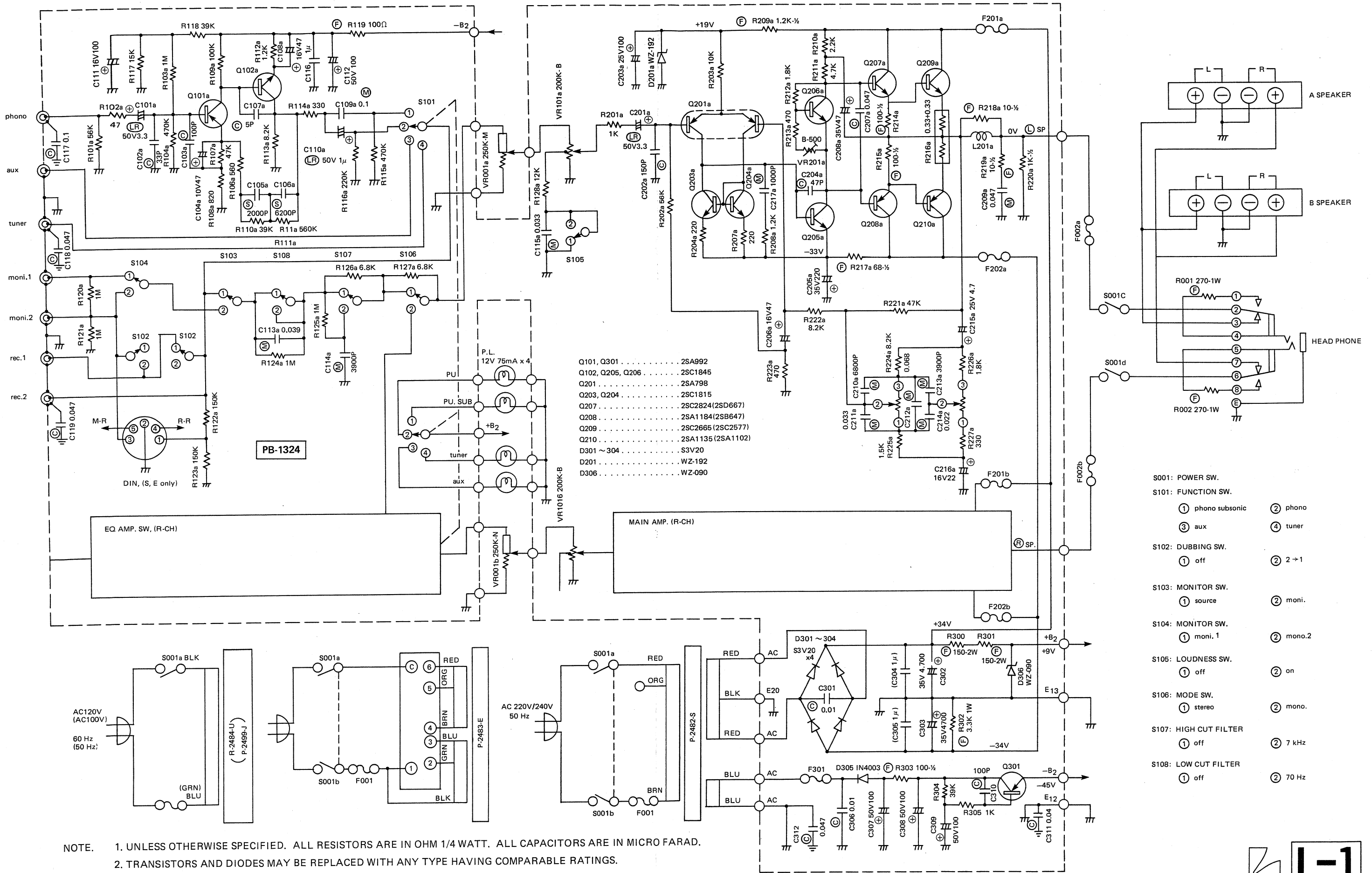


**ATTENTION: REMPLACER PAR UN FUSIBLE DU MÊME TYPE. CAUTION: REPLACE ONLY WITH SAME TYPE FUSE.**









NOTE. 1. UNLESS OTHERWISE SPECIFIED, ALL RESISTORS ARE IN OHM 1/4 WATT. ALL CAPACITORS ARE IN MICRO FARAD.  
 2. TRANSISTORS AND DIODES MAY BE REPLACED WITH ANY TYPE HAVING COMPARABLE RATINGS.  
 3. DUE TO CONTINUED IMPROVEMENTS LUX RESERVE THE RIGHT TO ALTER THE CIRCUIT OR SPECIFICATION.



**SPECIFICATIONS**

Power Output:	35W/35W(1kHz., with in 0.02% T.H.D.) 30W/30W(FTC rule, with no more than 0.02% total harmonic distortion)
Rated I.M.:	no more than 0.02% (35W/ch, 8 ohms, 60Hz:7kHz=4:1, tone cont. :flat)
Input Sensitivity:	2.2mV(phono) 135mV(aux)
Input Impedance:	50k ohms(phono) 50k ohms(aux)
Frequency Response:	phono; 20Hz-20kHz( $\pm 0.5$ dB) aux; 10Hz-100kHz( $\pm 1.5$ dB)
Signal-to-Noise Ratio: (IHF A weighted)	better than 80dB(phono) better than 100dB(aux)
Residual Noise:	0.5mV

Filters:	subsonic 30Hz(6dB/oct.) low cut 70Hz(6dB/oct.) high cut 7kHz(6dB/oct.)
Loudness:	+10dB at 100Hz(VR:-30dB)
Loudness:	+10dB at 100Hz(VR:-30dB)
Tone Control:	Bass; +8dB at 70Hz -10dB at 70Hz Treble; +8dB at 14kHz -10dB at 14kHz
Crosstalk at 1kHz:	-70dB(aux, monitor)
Phono Overload Voltage:	150mV
Power Consumption:	150W(8 ohms, at full power)
Dimensions:	438(W) $\times$ 306(D) $\times$ 84(H)mm (17-1/4" $\times$ 12-1/16" $\times$ 3-11/32")
Weight:	Net 7.5kgs(16.5lbs.) Gross 8.5kgs(18.7lbs.)

Specifications and appearance design subject to change without notice.

### CARACTERISTIQUES L-1A

Puissance de Sortie

30 watts minimum continus  
par canal sous charge, 8 ohms,  
les 2 canaux fonctionnant  
simultanément pour une DHT  
inférieure à 0.04%

Bande Passante

10Hz à 100,000Hz ( $\pm 1.5$ dB)

Facteur d'amortissement

65 (8 ohms)

Bruit Résiduel

moins de 0.5mV

Rapport Signal/Bruit

inférieur à 93dB(phono,10mV)