

NAD

SERVICE MANUAL

NAD-1000 CONTENTS

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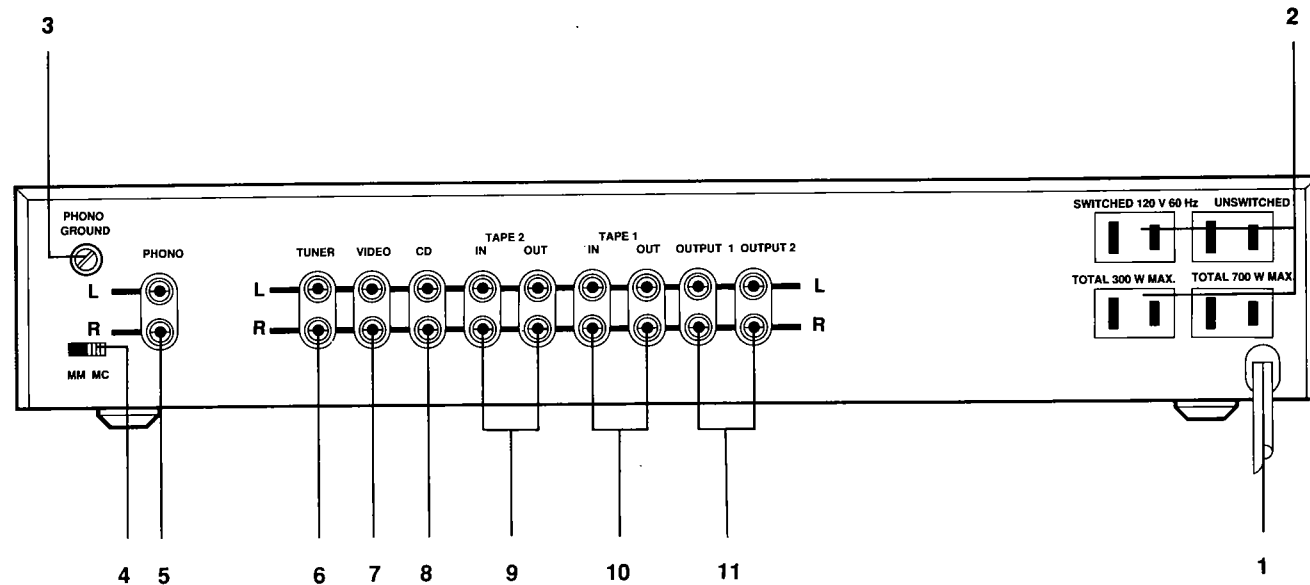
MONITOR SERIES

1000

STEREO PREAMPLIFIER

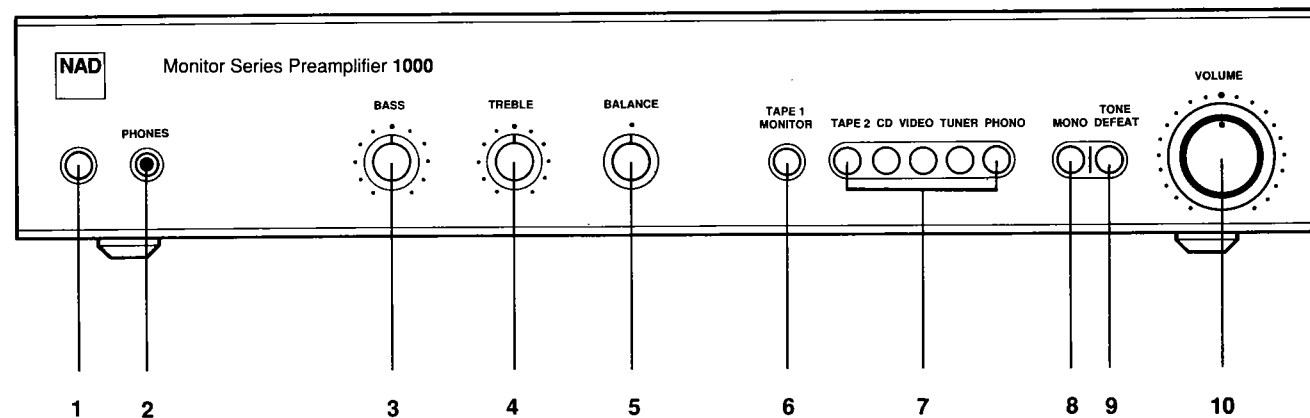
REAR PANEL CONNECTIONS

- | | | |
|-------------------------|--------------------|------------------------|
| 1. AC LINE CORD | 2. AC OUTLETS | 3. PHONO GROUND |
| 4. MM/MC SELECTOR | 5. PHONO INPUT | 6. TUNER INPUT |
| 7. VIDEO SOUND INPUT | 8. CD INPUT | 9. TAPE 2 INPUT/OUTPUT |
| 10. TAPE 1 INPUT/OUTPUT | 11. PREAMP OUTPUTS | |



FRONT PANEL CONNECTIONS

- | | | | |
|----------------|-------------------|-------------------|-----------|
| 1. POWER | 2. PHONES | 3. BASS | 4. TREBLE |
| 5. BALANCE | 6. TAPE 1 MONITOR | 7. INPUT SELECTOR | 8. MONO |
| 9. TONE DEFEAT | 10. VOLUME | | |



NAD 1000 MONITOR SERIES PREAMPLIFIER SPECIFICATIONS

Measured in accordance with EIA Standard RS-490 (IHF A-202).

PHONO INPUT

Input impedance (R and C)	MM and MC:	47 kΩ + 200 pF
Input sensitivity ref. 0.5 V	1 kHz MM:	1.5 mV
	MC:	0.1 mV
Input overload at 20 Hz/1 kHz/20 kHz	MM:	20 mV/200 mV/1700 mV
	MC:	1.3 mV/13 mV/100 mV
Signal/Noise ratio (A-weighted with cartridge connected)	MM:	76 dB ref. 5 mV
	MC:	76 dB ref. 0.5 mV
THD (20 Hz - 20 kHz) and IM dist.		<0.04%
RIAA accuracy		±0.5 dB

LINE LEVEL INPUTS (CD, Video, Tuner, Tape)

Input impedance (R and C)	20 kΩ + 450 pF
Input sensitivity ref. 0.5 V	80 mV
Maximum input signal	>10 V
Signal/Noise ratio, A-weighted (20 Hz - 20 kHz in tone defeat mode)	96 dB ref. 0.5 V
Frequency response	±0.2 dB
Infrasonic filter (fixed)	-3 dB at 10 Hz 18 dB/octave
THD	0.01%

LINE LEVEL OUTPUTS

Output impedance	Pre-amp	220 ohms
	Tape	Source Z + 3200 ohms
	Phones	120 ohms
Maximum output level	Pre-amp	>12 V
	Tape	>10 V
	Phones	>8 V into 600 ohms >250 mV into 8 ohms

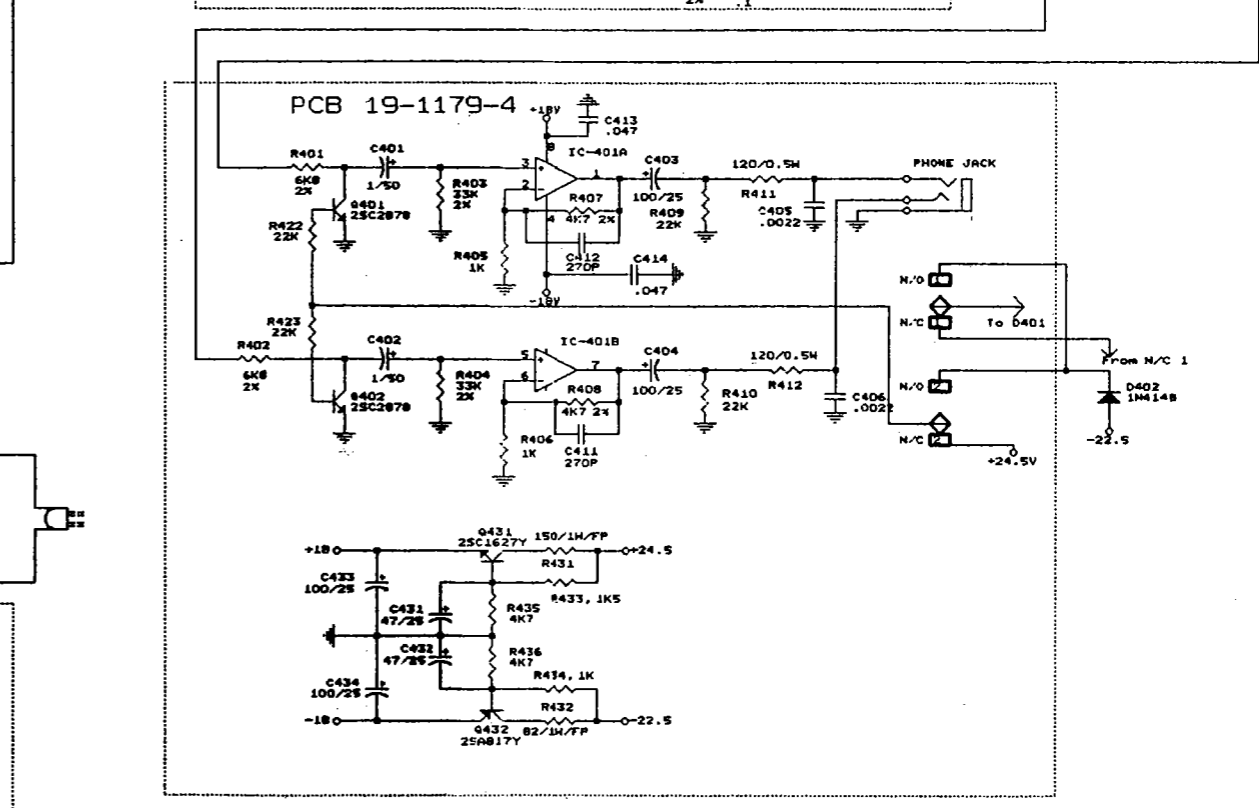
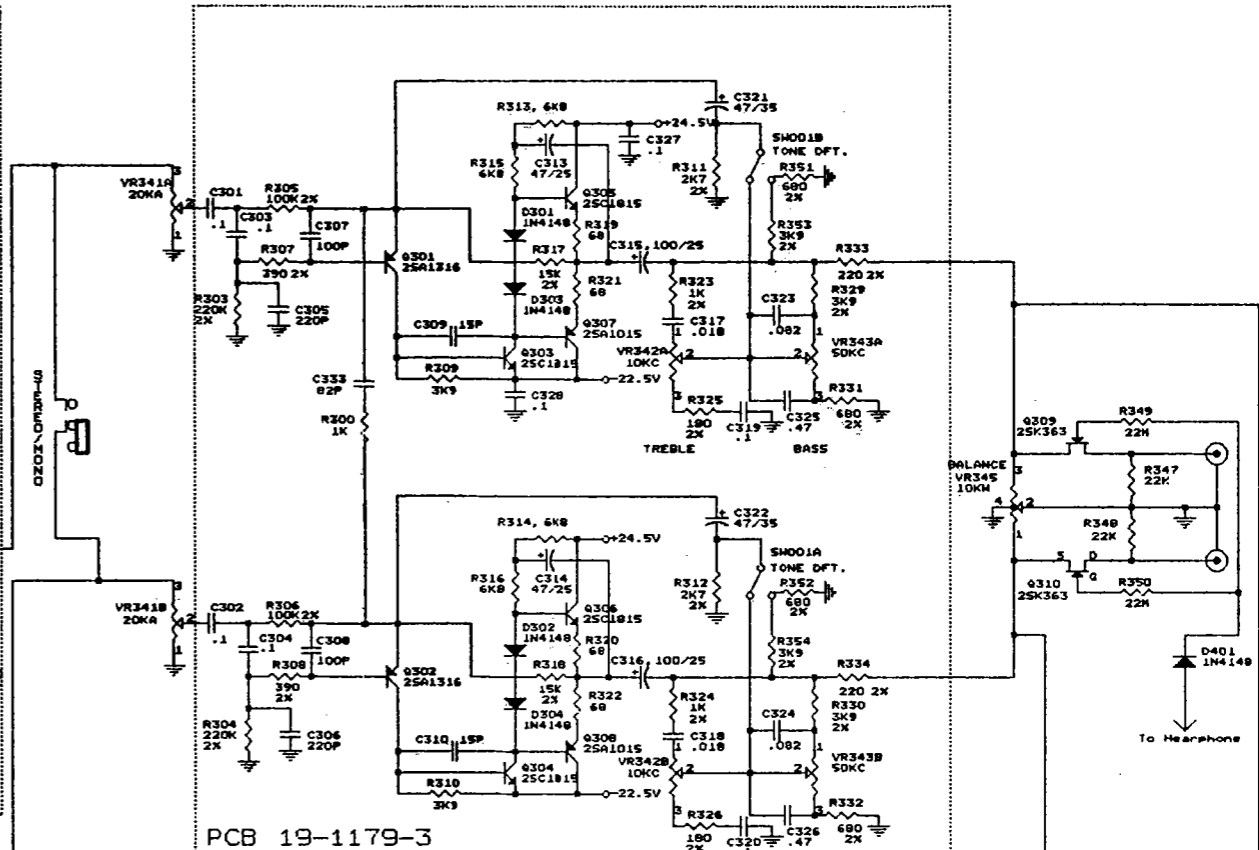
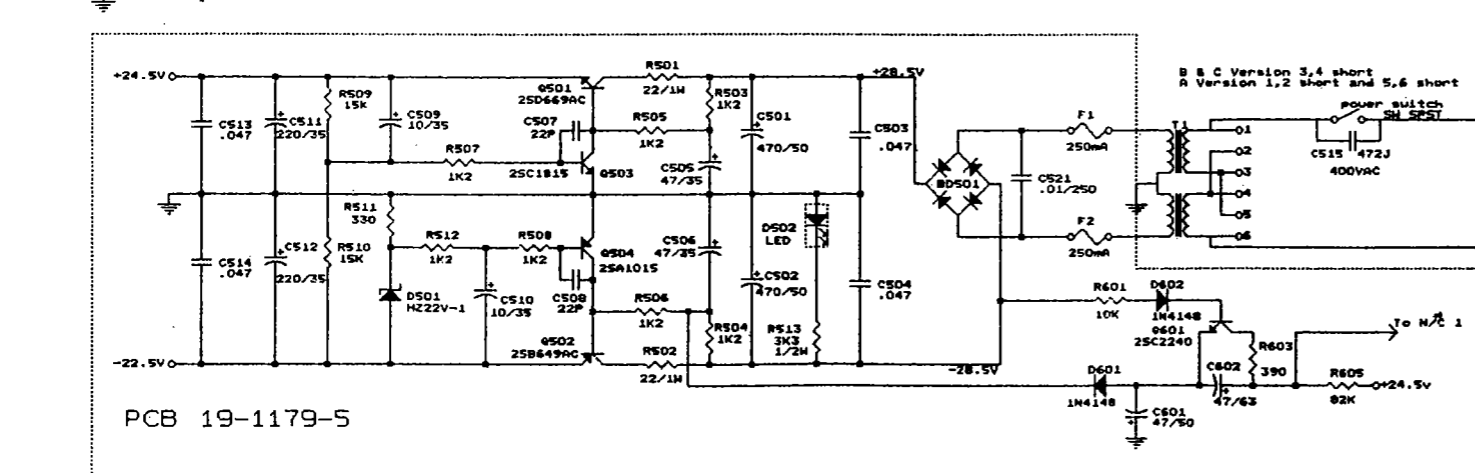
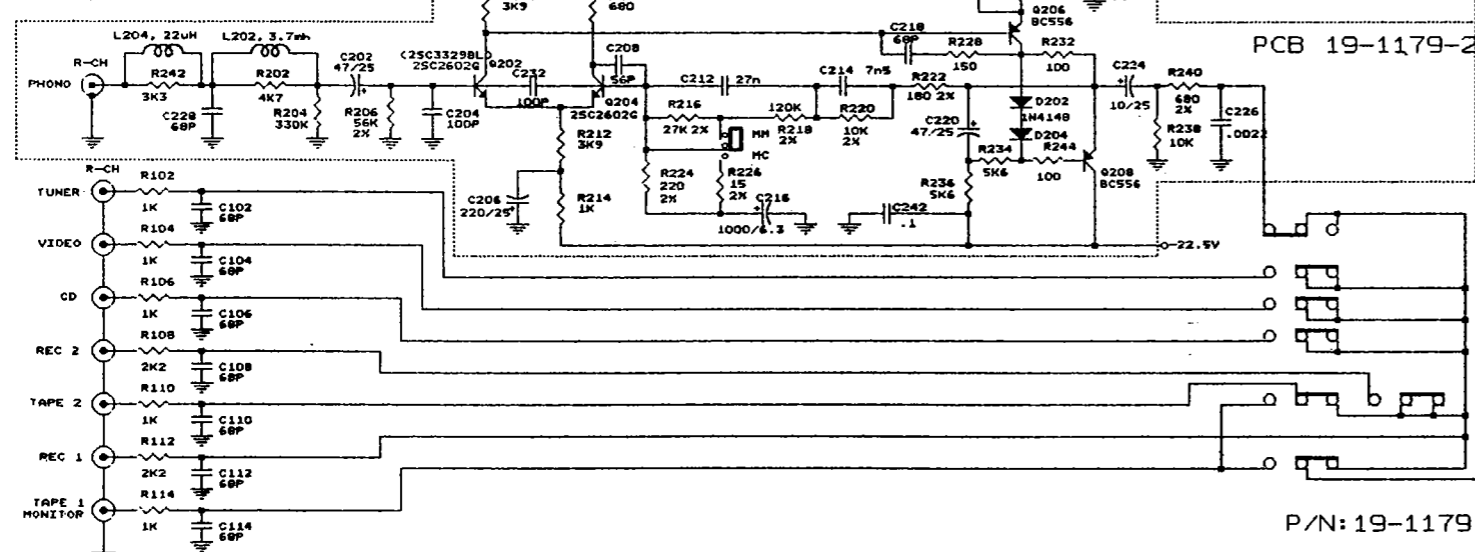
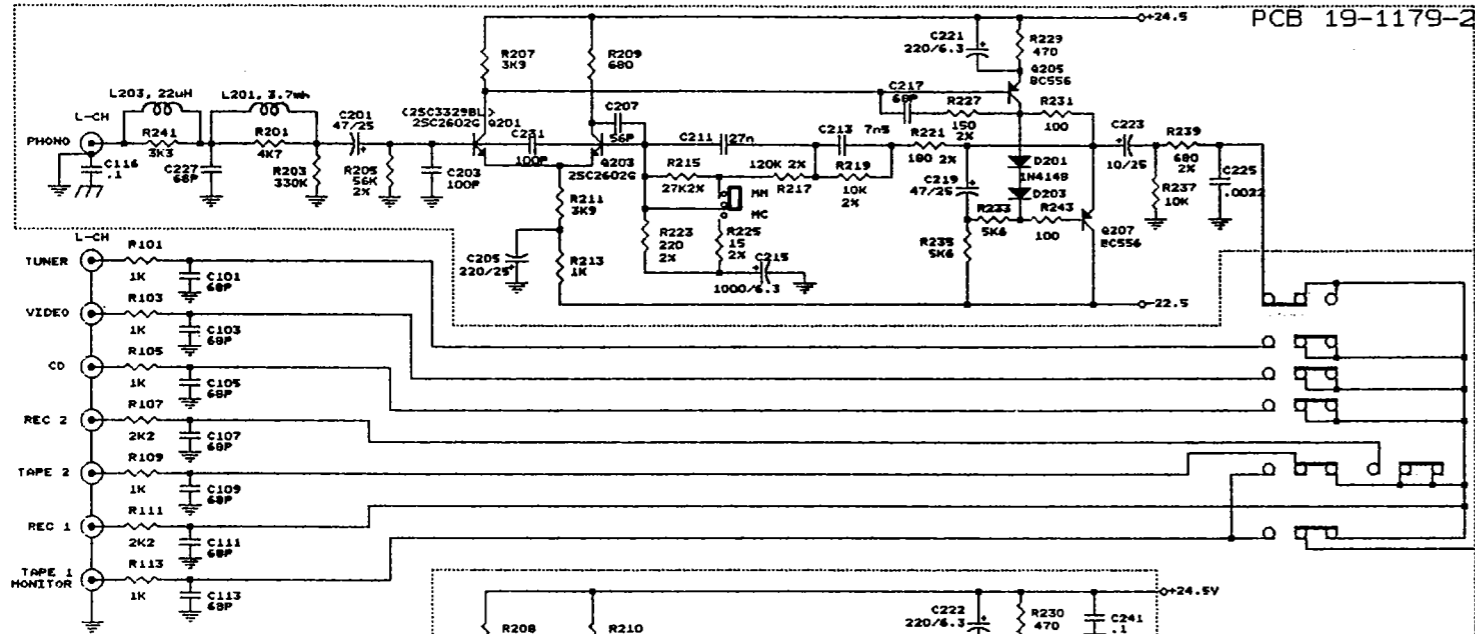
CONTROLS

Treble	±7 dB at 10 kHz
Bass	±10 dB at 50 Hz

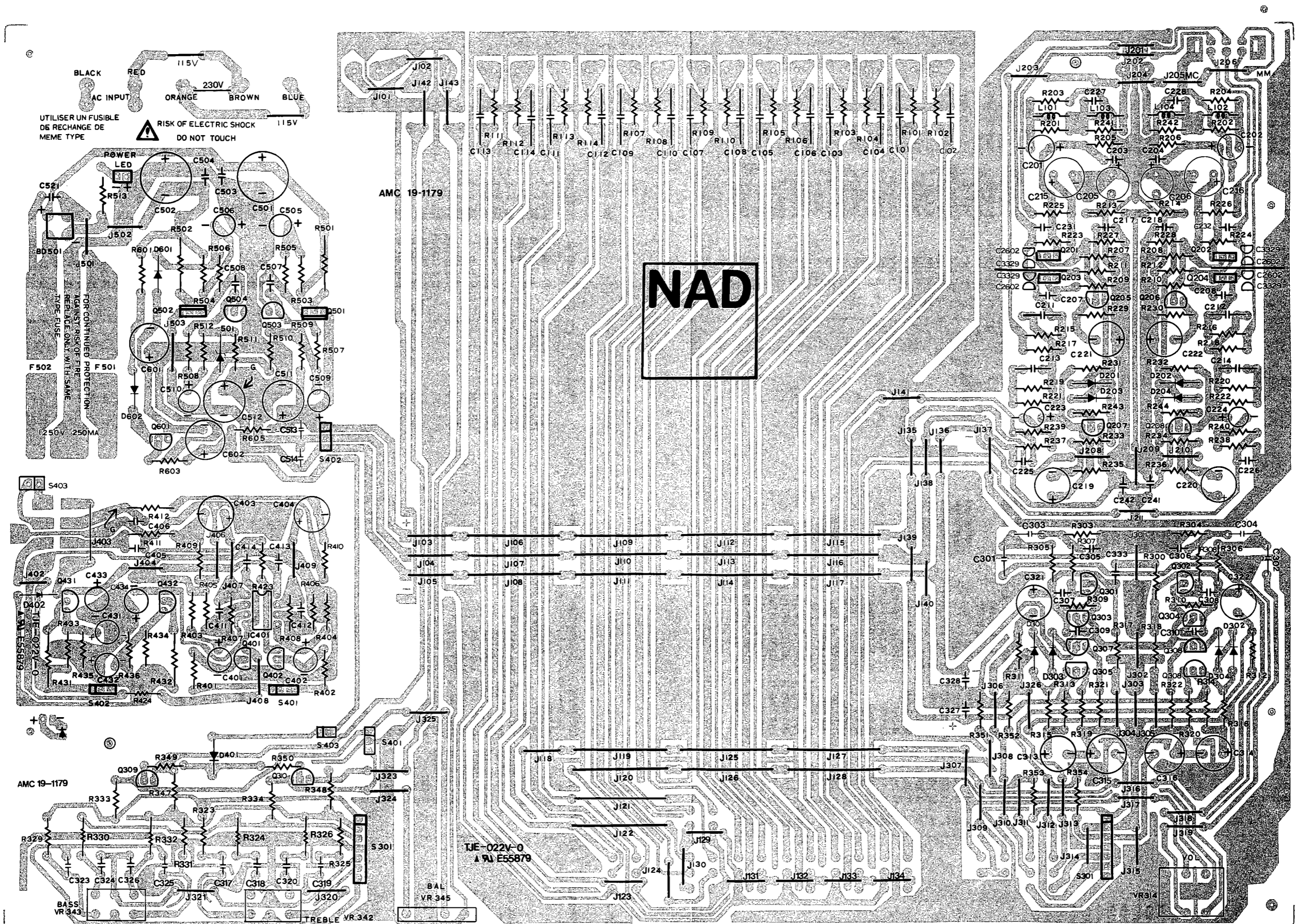
PHYSICAL SPECIFICATIONS

Dimensions (Length x Width x Depth)	43.0 x 26.3 x 8.1 cm (16.0 x 10.5 x 3.25 in.)
Net Weight	3.7 kg (8lb 1 oz.)
Shipping Weight	4.4 kg (9lb 11 oz.)
Power Consumption	17 W at 120, 220 or 240 VAC 50/60 Hz

SCHEMATIC DIAGRAM



PCB LAYOUT AND COMPONENT LOCATION



NAD-1000 PARTS LIST

REV: D DATE: 10-04-90

Table with columns: SYMBOL NO., Q'TY, I/D, PART NO., DESCRIPTION, SPACIFICATION, V/No. Contains parts like MONITOR SERIES, MECHANISM, POWER, etc.

NAD-1000 PARTS LIST

REV: D DATE: 10-04-90

Table with columns: SYMBOL NO., Q'TY, I/D, PART NO., DESCRIPTION, SPACIFICATION, V/No. Contains parts like POWER SW, LEAD WIRE, UL LABEL, etc.

NAD-1000 PARTS LIST

REV: D DATE: 10-04-90

Table with columns: SYMBOL NO., Q'TY, I/D, PART NO., DESCRIPTION, SPACIFICATION, V/No. Contains parts like POLYLONE, CARTON, TAPPING SCREW, etc.

NAD-1000 PARTS LIST

REV: D DATE: 10-04-90

Table with columns: SYMBOL NO., Q'TY, I/D, PART NO., DESCRIPTION, SPACIFICATION, V/No. Contains parts like RES. M. P., CAP. EL., COIL, DIODE, etc.

SYMBOL NO.	Q'TY	I/D	PART NO.	DESCRIPTION	SPACIFICATION	V/No.
R311,R312	2		16-1/4MA272G	RES. M. F.	2K7,1/4W,+2%	
R307,R308	2		16-1/4MA391G	RES. M. F.	390,1/4W,+2%	
R329,R330	2		16-1/4MA392G	RES. M. F.	3K9,1/4W,+2%	
R353,R354	2		16-1/4MA392G	RES. M. F.	3K9,1/4W,+2%	
R331,R332	2		16-1/4MA681G	RES. M. F.	680,1/4W,+2%	
R351,R352	2		16-1/4MA681G	RES. M. F.	680,1/4W,+2%	
C315,C316	2		17-2.5BR107ML	CAP. EL.	100uF/25V,+20%,L.L.	
C313,C314	2		17-2.5BR476ML	CAP. EL.	47uF/25V,+20%,L.L.	
C321,C322	2		17-3.5BR476ML	CAP. EL.	47uF/35V,+20%,L.L.	
C309,C310	2		17-5DR150J	CAP.	MC.C.,15pF/50V,+5%	
C325,C326	2		17-5FR474J	CAP.	M.PE.,0.47uF/50V,+5%	
C327,C328	2		17-5FR104J	CAP.	M.PE.,0.1uF/50V,+5%	
C319,C320	2		17-5FR104J	CAP.	M.PE.,0.1uF/50V,+5%	
C317,C318	2		17-5FR183J	CAP.	M.PE.,18nF/50V,+5%	
C323,C324	2		17-5FR823J	CAP.	M.PE.,82nF/50V,+5%	
C307,C308	2		17-5SR101J	CAP. SR	P.S.,100pF/50V,+5%	
C301-C304	4		17-5PR104J	CAP.	P.P.,0.1uF/50V,+5%	
C305,C306	2		17-5SR221J	CAP. SR	P.S.,220pF/50V,+5%	
C333.	2		17-5SR820J	CAP. SR	P.S.,82pF/50V,+5%	

AC INPUT	10		19-1179-5	PCB-SUB	POWER CKT	
BD501	1		13-6027	SQUARE PIN	1.0x16mm	
Q501	1		30-RB153W	BRIDGE DIODE	RB153 UL	L264D017H01
Q502	1		30-2SD669AC	TR.	2SD669A(C), HITACH	
Q503	1		30-2SB649AC	TR.	2SB649A(C), HITACH	
Q601	1		30-2SC2240G	TR.	2SC2240GR, TOSHIBA	
Q504	1		30-2SA1015G	TR.	2SA1015GR, TOSHIBA	
Q503	1		30-2SC1815G	TR.	2SC1815GR, TOSHIBA	
D501	1		30-WZ22-2	ZENER DIODE	ZD-22V,1/2W,+5%	
D601,D602	2		30-1N4148	DIODE	1N4148	
F1,F2.	4		32S2014	CLAMPER	FUSE CLAMPER, CPF-011	
F1,F2.	2	A	32-2019	SGAO.25	250mA/125V,5x20mmT,SGA,UL	
F1,F2.	2	A1	32-2019	SGAO.25	250mA/125V,5x20mmT,SGA,UL	
F1,F2.	2	B	32-2020	218.250	250mA/250V,5x20mmT,SEMKO	
F1,F2.	2	B1	32-2020	218.250	250mA/250V,5x20mmT,SEMKO	
F1,F2.	2	C	32-2020	218.250	250mA/250V,5x20mmT,SEMKO	
F1,F2.	2	C1	32-2020	218.250	250mA/250V,5x20mmT,SEMKO	
R501,R502	2		16-1MK220J	RES. M.F.	22,1W,+5%,KINK	
R513.	1		16-1/2CA332J	RES. C.F.	3K3,1/2W,+5%,TAPE	
R601.	1		16-1/4CA103J	RES. C.F.	10K,1/4W,+5%	
R503-R508	7		16-1/4CA122J	RES. C.F.	1K2,1/4W,+5%	
R512	7		16-1/4CA122J	RES. C.F.	1K2,1/4W,+5%	
R509,R510	2		16-1/4CA153J	RES. C.F.	15K,1/4W,+5%	
R511.	1		16-1/4CA331J	RES. C.F.	330,1/4W,+5%	
R603.	1		16-1/4CA391J	RES. C.F.	390,1/4W,+5%	
R605.	1		16-1/4CA823J	RES. C.F.	82K,1/4W,+5%	
C515.	1		17-40CR472M	CAP.	4700pF/400V,+20%	
C509,C510	2		17-3.5BR106M	CAP.	10uF/35V,+20%	
C511,C512	2		17-3.5BR227M	CAP.	220uF/35V,+20%	
C501,C502	2		17-5BR477M	CAP.	470uF/50V,+20%	
C505,C506	2		17-3.5BR476M	CAP. EL.	47uF/35V,+20%	

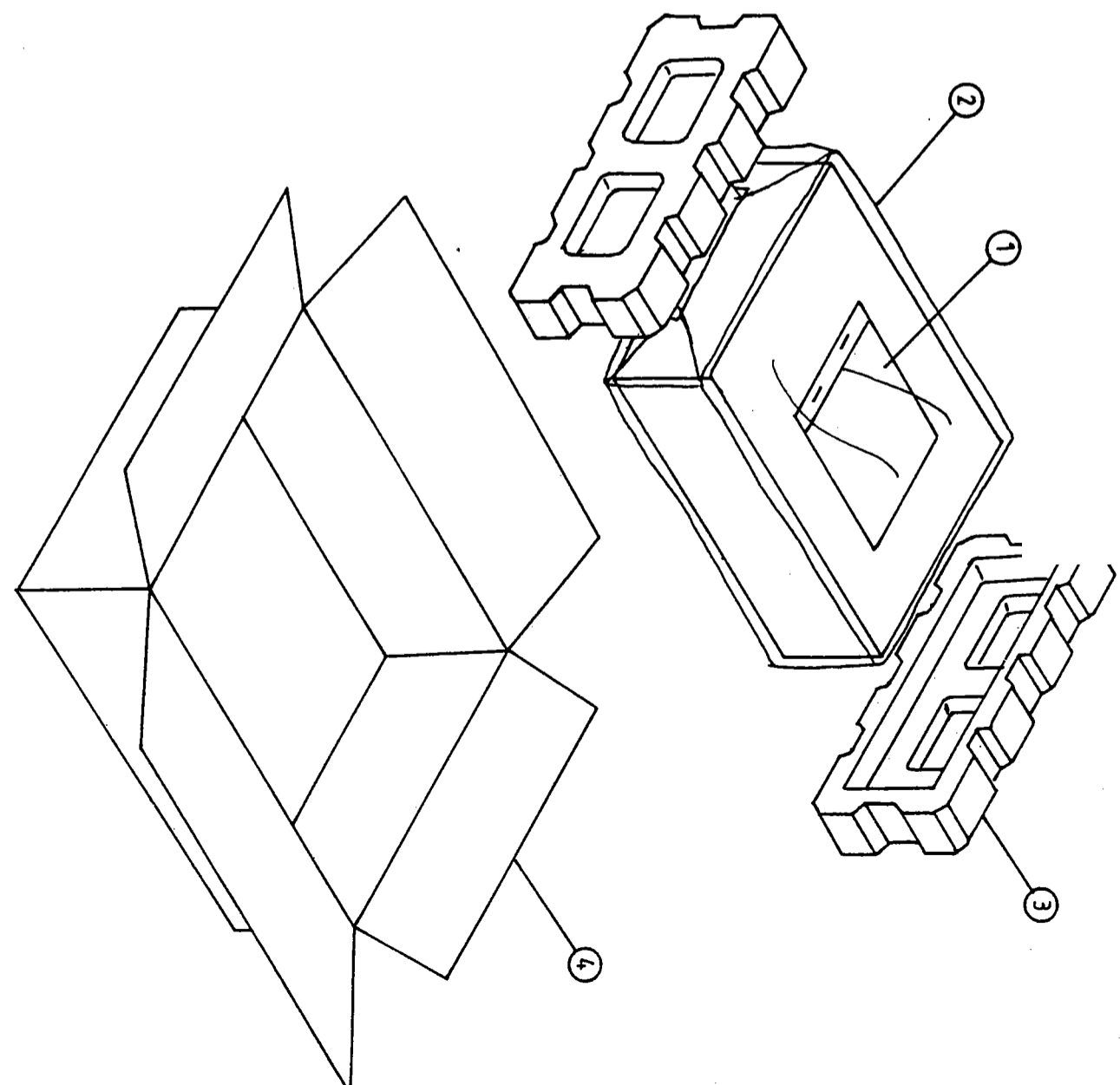
SYMBOL NO.	Q'TY	I/D	PART NO.	DESCRIPTION	SPACIFICATION	V/No.
C601.	1		17-5BR476M	CAP. EL.	47uF/50V,+20%	
C602.	1		17-6.3BR476M	CAP. EL.	47uF/63V,+20%	
C507,C508	2		17-5DR220J	CAP.	MC.C.,22pF/50V,+5%	
C521.	1		17-25FR103J	CAP.	M.PE.,10nF/250V,+10%	
C503,C504	4		17-5FR473J	CAP.	M.PE.,47nF/50V,+5%	
C513,C514	4		17-5FR473J	CAP.	M.PE.,47nF/50V,+5%	

D502	1		19-1179-L	PCB-SUB	FOR LED	
LED FIX	1		30-SB2021	L.R.DIODE	LED/SB2021,GRN	

D402	1		30-1N4148	DIODE	1N4148	
IC1	1		30-NJM2043D	IC	NJM2043(D), JRC	
Q432	1		30-2SA817Y	TR.	2SA817Y, TOSHIBA	
Q431	1		30-2SC1627Y	TR.	2SC1627Y, TOSHIBA	
Q401,Q402	2		30-2SC2878A	TR.	2SC2878A, TOSHIBA	
R431	1		16-1MK151J	RES.M.F.	150,1W,+5%,KINK	
R432	1		16-1MK820J	RES.M.F.	82,1W,+5%,KINK	
R411,R412	2		16-1/2CA121J	RES.C.F.	120,1/2W,+5%,TAPE	
R405,R406	3		16-1/4CA102J	RES.C.F.	1K,1/4W,+5%	
R434	3		16-1/4CA102J	RES.C.F.	1K,1/4W,+5%	
R433.	1		16-1/4CA152J	RES.C.F.	1K5,1/4W,+5%	
R409,R410	2		16-1/4CA223J	RES.C.F.	22K,1/4W,+5%	
R422,R423	2		16-1/4CA223J	RES.C.F.	22K,1/4W,+5%	
R435,R436	2		16-1/4CA472J	RES.C.F.	4K7,1/4W,+5%	
R403,R404	2		16-1/4MA333G	RES.M.F.	33K,1/4W,+2%	
R401,R402	2		16-1/4MA682G	RES.M.F.	68K,1/4W,+2%	
R407,R408	2		16-1/4MA472G	RES.M.F.	4K7,1/4W,+2%	
C431,C432	2		17-2.5BR476M	CAP. EL.	47uF/25V,+20%	
C433,C434	2		17-2.5BR107M	CAP. EL.	100uF/25V,+20%	
C403,C404	2		17-2.5BR107M	CAP. EL.	100uF/25V,+20%	
C401,C402	2		17-5BR105M	CAP. EL.	1uF/50V,+20%	
C405,C406	2		17-5FR222J	CAP.	M.PE.2n2F/50V,+5%	
C411,C412	2		17-5DR271J	CAP.	MC.C.,270pF/50V,+5%	
C413,C414	2		17-5FR473J	CAP.	M.PE.,47nF/50V,+5%	

ITEM	PARTS NUMBER	NAME	QTY
1	21-4041	OWNER'S MANUAL	1
2	26-0716	PE-BAG	1
3	34-1059	POLYLON	2
4	CT-5193	GIFT-BOX	1

PACKING LIST FOR NAD-1000



SERVICE MANUAL

1000
STEREO PREAMPLIFIER

NAD ELECTRONICS
LONDON