



Service Manual

Nakamichi

PA-5 PA-5E

Power Amplifier



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1. GENERAL

1.1. Voltage Selector

Voltage selector is installed on the rear panel for Other version of the Nakazichi PA-5.
This voltage selector can select 110 V, 120 V, 220 V or 240 V at customer's disposal.

1.2. Packing Materials, Owner's Manual and Auxiliary Parts

Part No.	Description	Qty
OF03904A	Outer Carton PA-5	1
OF03906A	Outer Carton PA-5E	1
OF03903A	Inner Carton PA-5	1
OF03905A	Inner Carton PA-5E	1
OF03908A	Packing	2
OD04531A	Owner's Manual (English)	1
OD04530A	Owner's Manual (English/German/French)	1
OB90137A	Power Cord PA-5 (U.S.A. & Others)	1
OB90139A	Power Cord PA-5 (Australia)	1
OB90138A	Power Cord PA-5E (Europe)	1
OB90154A	Power Cord PA-5E (Switzerland)	1
OB90140A	Power Cord PA-5E (UK)	1
OF03887A	Power Cord Band	1
OB90164A	Fuse 6A PA-5 (U.S.A., Canada & Others)	1
OB90166A	Fuse T2.5A PA-5 (Australia) & PA-5E	1

2. PARTS LOCATION FOR ELECTRICAL ADJUSTMENT

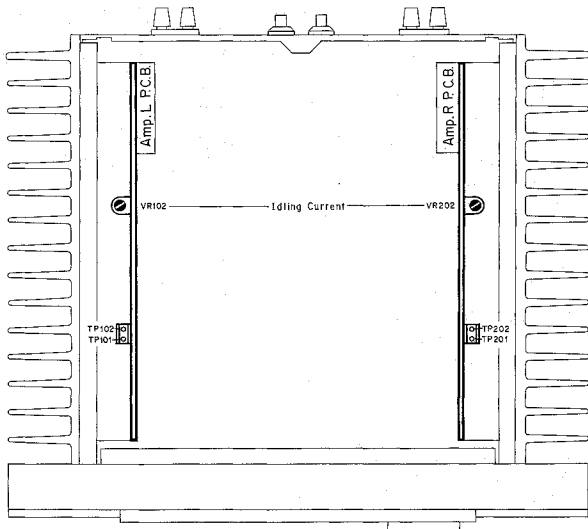


Fig. 2

3. ELECTRICAL ADJUSTMENTS

3.1. Preparation for Adjustment

- (1) Insert shorting pins into the Input Jacks.
- (2) Remove loads of the speaker terminals.
- (3) Before starting adjustment, allow twenty minutes or more after power is turned ON. In this case, the Tape Cover must be installed.

3.2. Idling Current Adjustment

- (1) Connect a DC voltmeter between TP101 and TP102 (TP201 and TP202) on the Amp. L (R) P.C.B. Assy.
- (2) Adjust VR102 (VR202) to obtain 40 mV on the DC voltmeter (Idling current: 40 mA).
- (3) Remove shorting pins from the Input Jacks.

4. MECHANISM ASS'Y AND PARTS LIST

Schematic Ref. No.	Part No.	Description	Qty	Schematic Ref. No.	Part No.	Description	Qty
		Synthesis Serial No.: B20701001 -		A01	HA04920A HA04921A	Front Panel Assy PA-5 Front Panel Assy PA-5E Serial No.: B20701001 -	1 1
01	HA04920A	Front Panel Assy PA-5	1				
	HA04921A	Front Panel Assy PA-5E	1				
02	BA0588A	Clipping LED P.C.B. Assy	2	01	0K04754A	Sub Front Panel	1
03	BA05687A	Power LED P.C.B. Assy	1	02	0H04681A	Lens A	2
04	0J05097A	Front Chassis	1	03	0E04753A	Front Panel PA-5	1
05	0B17004A	Power Switch	1		0H04766A	Front Panel PA-5E	1
06	0J05095A	Cushion A	2	04	HA04849A	Power Switch Knob Assy	1
07	BA05897A	Limitier F.C.B. Assy PA-5 (U.S.A. & Canada)	1	05	0J05000B	Power Switch Spring	1
	BA05898A	Limitier F.C.B. Assy PA-5 (Australia & Others) & PA-5E	1	06	0H04652B	Power Switch Guide	1
				07	0H04653B	Lens B	1
				L01	0E00866A	M2.6x4 @ Binding	5
08	0H04769A	Heat Sink LF	1				
09	0J05096A	Cushion B	2				
10	0H04768A	Side Cover L	1				
11	0H04760A	Heat Sink LR	1				
12	0J05101A	Upper Channel L	1				
13	0J05099A	Lower Channel L	1				
14	0J05103A	P.C.B. Holder	2				
15	BA05868A	Amp. L P.C.B. Assy	1				
16	0H04762A	Top Cover	1				
17	0J05094A	Cushion C	4				
18	0J05098A	Ground Plate	1				
19	0B12253A	Diode Bridge 15G4B41	1				
20	0B50061A	Power Transformer PA-5 (U.S.A. & Canada)	1				
	0B50062A	Power Transformer PA-5 (Others)	1				
	0B50062A	Power Transformer PA-5 (Australia & PA-5E)	1				
21	0B40366A	Electrolytic Capacitor 47000uF 80V	2				
22	0H04765A	Bottom Chassis	1				
23	0J05104A	Leg	4				
24	0H04761A	Heat Sink RF	1				
25	0H04764A	Side Cover R	1				
26	0H04762A	Heat Sink RR	1				
27	0J05100A	Lower Channel R	1				
28	0J05102A	Upper Channel R	1				
29	BA05696A	Amp. R P.C.B. Assy	1				
30	0M04377B	Caution Label	1				
31	HA04925A	Rear Panel Assy PA-5 (U.S.A.)	1				
	HA04923A	Rear Panel Assy PA-5 (Others)	1				
	HA04924A	Rear Panel Assy PA-5 (Australia)	1				
	HA04925A	Rear Panel Assy PA-5E	1				
	HA04954A	Rear Panel Assy PA-5 (Canada)	1				
32	0B70049A	Voltage Selector PA-5 (Others)	1				
33	0B08515A	Insu-Lock	20				
L01	0E00921A	BT 3x3 @ Binding (Black Chromate)	7				
L02	0E00668A	BT 3x8 @ Binding	8				
L03	0E00857A	BT 3x6 @ Binding	2				
L04	0E00896A	M3x6 @ Binding	2				
L05	0E00970A	M3x4 @ Binding (Black Chromate)	14				
L06	0E00688A	BT 3x12 @ Binding	4				
L07	0E03290A	M4x15 @ Binding (Bronze)	29				
L08	0E03030A	M3x6 @ Binding (Nickel)	4				
L09	0E00713A	M3x6 @ Trias (Bronze)	9				
L10	0E0325A	M4x8 @ Binding (Gold Plated)	5				
L11	0E03287A	M4x6 @ Binding (Gold Plated)	4				
L12	0E03335A	M5x6 @ Binding (Black Chromate)	4				
L13	0E03296A	M4x4 @ Binding (Black Chromate)	7				
L14	0E00852A	BT 4x12 @ Binding (Black Chromate)	4				
L15	0E03336A	Nut Hex. M5 (Black Chromate)	4				
L16	0E00594A	M3x8 @ Binding (Bronze)	4				
L17	0E00818A	M3x8 @ Binding (Black Chromate) (PA-5 (Others))	2				
-	0E00752A	Eyelet 2x3 PA-5 (Canada)	2				

4.1. Synthesis

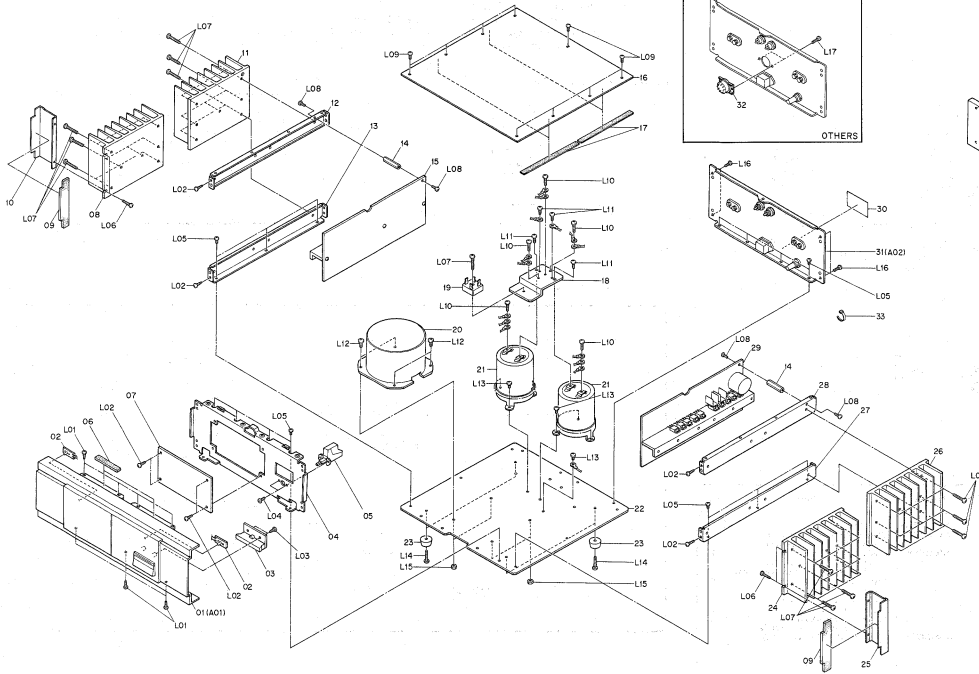


Fig. 4.1

4.2. Front Panel Assy (A01)

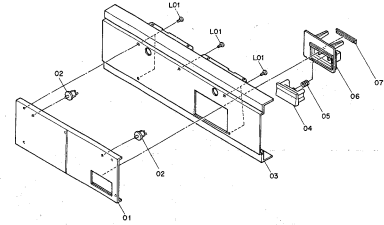


Fig. 4.2

4.3. Rear Panel Assy (A02)

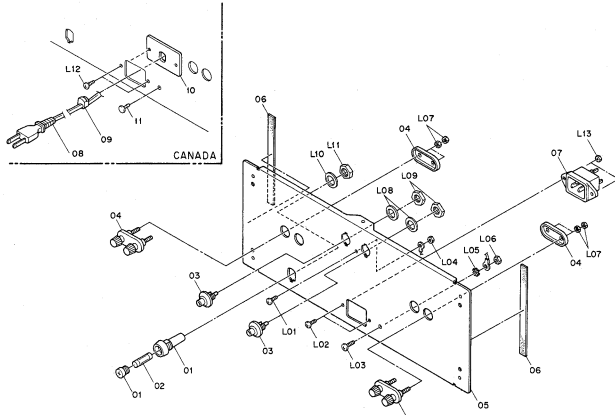


Fig. 4.3

Schematic Ref. No.	Part No.	Description	Q'ty	Schematic Ref. No.	Part No.	Description	Q'ty
A02	HA04926A	Rear Panel Assy PA-5 (U.S.A.)	1	L04	0E00972A	Nut Hex. M3	1
	HA04923A	Rear Panel Assy PA-5 (Others)	1	L05	0E00078A	Washer 4mm Toothed-Lock	1
	HA04924A	Rear Panel Assy PA-5 (Australia)	1	L06	0E00506A	Nut Hex. M4	1
	HA04925A	Rear Panel Assy PA-5E (Australia)	1	L07	—	Nut for Speaker Output Terminal	8
HA04954A	Rear Panel Assy PA-5 (Canada)	1	L08	—	Washer for Pin Jack	2	
01	0B90093A	Fuse Holder PA-5 (U.S.A., Canada & Others)	1	L09	—	Nut for Pin Jack	2
	0B90094A	Fuse Holder PA-5 (Australia) & PA-5E	1	L10	—	Washer for Fuse Holder	1
	0B90164A	Fuse 6A PA-5 (U.S.A., Canada & Others)	1	L11	—	Nut for Fuse Holder	1
	0B90166A	Fuse T2.5A PA-5 (Australia) & PA-5E	1	L12	0E00921A	BT3x8 Binding (Black Chromate) PA-5 (Canada)	2
03	0B81364A	Pin Jack	2	L13	0E00507A	Nut Hex. M3 PA-5 (U.S.A.)	2
	0B81365A	Speaker Output Terminal	2				
	0H04710A	Rear Panel PA-5 (U.S.A.)	1				
	0H04756A	Rear Panel PA-5 (Others)	1				
05	0H04757A	Rear Panel PA-5 (Australia)	1				
	0H04758A	Rear Panel PA-5E	1				
	0H04759A	Rear panel PA-5 (Canada)	1				
	0H04768A	Rear Panel Assy PA-5E	2				
06	0G05105A	Rear Panel Cushion	1				
	0B90092A	AC Inlet PA-5 (U.S.A.)	1				
	0B90087A	AC Inlet PA-5 (Australia) & Others) & PA-5E	1				
08	0B90156A	Power Cord PA-5 (Canada)	1				
	0B90157A	Cord Bushing PA-5 (Canada)	1				
	10	0H04775A	Bushing Holder PA-5 (Canada)	1			
	11	0G05108A	Plug PA-5 (Canada)	1			
	L01	0E00594A	M3x8 Binding (Bronze)	1			
	L02	0E00818A	M3x8 Binding (Black Chromate)	2			
	L03	0E03055A	M4x8 Binding (Black Chromate)	1			
		0E03056A	M4x8 Binding (Black Chromate)	1			

5. MOUNTING DIAGRAMS AND PARTS LIST

- Notes: 1. Mounting diagram shows a dip side view of the printed circuit board.
 2. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
 3. Abbreviation for part name:

TR - Transistor, SID - Silicon Diode, ZD - Zener Diode
 RK - Carbon Resistor, RM - Metal Film Resistor, RF - Fail Safe Type Resistor, RC - Cement Resistor
 CE - Electrolytic Capacitor, CM - Mylar Capacitor, C - Mica Capacitor

5.1. Clipping LED P.C.B. Assy



Fig. 5.1

5.2. Power LED P.C.B. Assy

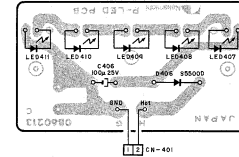


Fig. 5.2

5.3. Limiter P.C.B. Assy

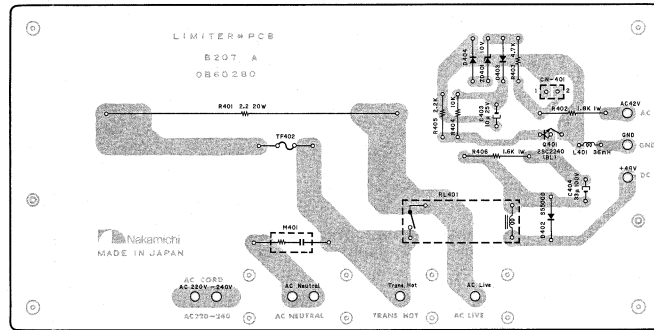


Fig. 5.3

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	
LED001	EA05688A	Clipping LED P.C.B. Assy	D406 410,411 408,409 C406	BA05687A	Power LED P.C.B. Assy	BA05897A	BA05897A	Limiter F.C.B. Assy PA-5 (U.S.A. & Canada)	
	0B60214A	LED Red		0B0213C	Power LED P.C.B. SID S500D		BA05898A	BA05898A	Limiter F.C.B. Assy PA-5 (Australia & Others) & PA-5E
	0B12280B	LED Cord		0B12252A	LED Green				
	0B2418A	LED Cord		0B01272A	CE 100u 25V		0B06280A	Limiter P.C.B. TR 25C2240 (BL)	
				0B2493A	Power LED Cord		0B06142A	TR 25C2240 (BL)	
				0J04998B	Power Reflector (1)		0B06232A	ZD 10V ED10E33	
				0M0910C	Sheet		D402	SID S5000D	
				0E00857A	BT3x6 Binding		D403,404	SID 15553	
							L401	0E03819C	
							R401	Inductor 60MH	
							R402	RC 2.2 20W K	
								RF 1.8K 1W J	

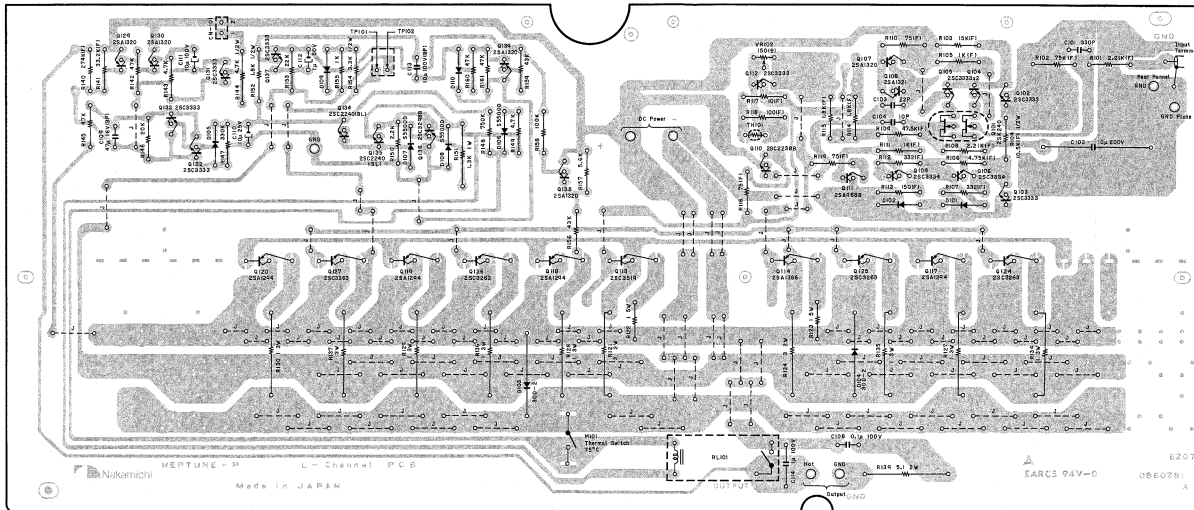


Fig. 5.4

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description		
R403	OB01846A	RK 4.7K 1/4W J	BA0968A	Amp. L.P.C.B. Assy	R108	OB09547A	RM 2.21K 1/4W F	R158	OB01889A	RK 100K 1/4W J	Q114	OB10136A	TR 2SA1386
R404	OB01888A	RK 10K 1/4W J	OB06281A	Amp. L.P.C.B. PCB	R109	OB22638A	RM 47.5K 1/4W F	C101	OB41541A	C 330P 100V J	Q117-120	OB10098A	TR 2SA1294 (4)
R405	OB06222A	RK 2.2K 1/4W J	OB06257A	FET 2SK240	R110,116	OB22632A	RM 75 1/4W F	C102	OB41538A	CM 150 200V K	Q124-127	TR 2SC3263 (4)	
R406	OB24091A	RF 1.6K 1W J	(GR. 100V)		119	119		C103	OB41539A	C 22P 50V J	TH101	OB19003A	Thermistor 102F
C403	OB01674A	CE 10u 25V	OB10103A	TR 2SC8333	R113	OB22633A	RM 150 1/4W F	C104	OB41538A	C 10P 50V J		OB09145B	Heat Sink (1)
C404	OB40341A	CE 33u 100V			R114,115	OB09559A	RM 1.8K 1/4W F	C108	OB4137A	CM 0.1u 100V J		OB0147B	Sheet A (1)
RL401	OB09083A	Relay 10A 250VAC			R117	OB22666A	RM 10 1/4W F	C109	OB40321A	CE 47u 16V (BP)		OB0175A	Sheet B (1)
M401	OB08442A	Spark Killer PA-5 (U.S.A. & Canada)			R118	OB22667A	RM 100 1/4W F	C110	OB41538A	CE 10u 25V		OB0138A	Mx5 @ Binding (Nickel) (11)
M401	OB08445A	Spark Killer PA-5 (Australia & Others) & PA-5E	OB10143A	TR 2SC3334	R121,124	OB24058A	RF 3 2W J	C111	OB40330A	CE 10u 100V			
			OB10102A	TR 2SA1320	R122,123	OB24064A	RC 1 SW K	C112	OB01400A	CE 1u 50V			
			Q108,109		R127-130	OB24092A	RF 1 SW K	C113	OB40371A	CE 10u 100V (BP)			
			130,138		134-137			C114	OB4159A	CM 1u 100V J			
			139		R139	OB24059A	RF 5.1 2W J	RL101	OB90083A	Relay 10A 250VAC			
TF2	OB08715A	Thermal Fuse 129	Q130	OB10142A	TR 2SA1321	R140	OB09752A	RM 274K 1/4W F	M101	OB90084A	Thermal Switch 75°C		
CN401	OB01366A	2P-8 Post	Q134,135	OB06142A	TR 2SC2240 (BL)	R141	OB09446A	RM 33.2K 1/4W F		OB1386A	2P-8 Post		
	OB09059A	Spark Killer Cover PA-5 (Australia & Others) & PA-5E	Q136	OB10145A	TR 2SC3298B	R142,145	OB05641A	RK 47K 1/4W J		OE00754A	Mx5 @ Pan (3)		
			D101,102	OB06181A	SID 13S53	150,151			Q110	OB10101A	TR 2SC2238B		
			103,109			R143,149			OB90173A	Heat Sink TO-220 (Nickel) (1)			
			110	OB06458A	SID 30D-2	R144	OB01846A	RK 4.7K 1/4W J		OE00966A	Mx5 @ Binding (Nickel) (1)		
D103,104	Q138		OB12252A	SID S5500D	R146	OB24062A	RF 4.7K 1/2W J		OE00972A	Nut Hex, M3 (1)			
D106,107	105				R147	OB09737A	RM 330K 1/4W J	Q111	OB10100A	TR 2SA968B (3)			
	VR102	OB32052A	Potentiometer 150		R148	OB09509A	RK 20K 1/4W J		OB90173A	Heat Sink TO-220 (Nickel) (1)			
	R101	OB32056A	RM 2.21K 1/4W F		R150	OB09522A	RK 2.2K 1/4W J		OE00966A	Mx5 @ Binding (Nickel) (1)			
	R102	OB09622A	RM 75K 1/4W F		R151	OB09755A	RK 750K 1/4W J		OB10173A	Nut Hex, M3 (1)			
	R103	OB09340A	RM 15K 1/4W F		R152	OB24081A	RF 1.8K 1/2W J		OE00966A	Mx5 @ Binding (Nickel) (1)			
	R104	OB22670A	RM 10.5K 1/2W F		R153	OB06155A	RK 22K 1/4W J		OB0972A	Nut Hex, M3 (1)			
	R105,111	OB09491A	RM 1K 1/4W F		R154	OB24089A	RF 5.3K 1/2W J		OB10137A	TR 2SC3519			
	R106	OB08424A	RM 4.75K 1/4W F		R155	OB01857A	RK 1K 1/4W J						
	R107,112	OB09760A	RM 332 1/4W F		R156,159	OB09760A	RF 43K 1/4W J						
					R157	OB01887A	RK 5.6K 1/4W J	Q113	OB10137A	TR 2SC3519			

5.5. Amp. R.F.C.B. Assy

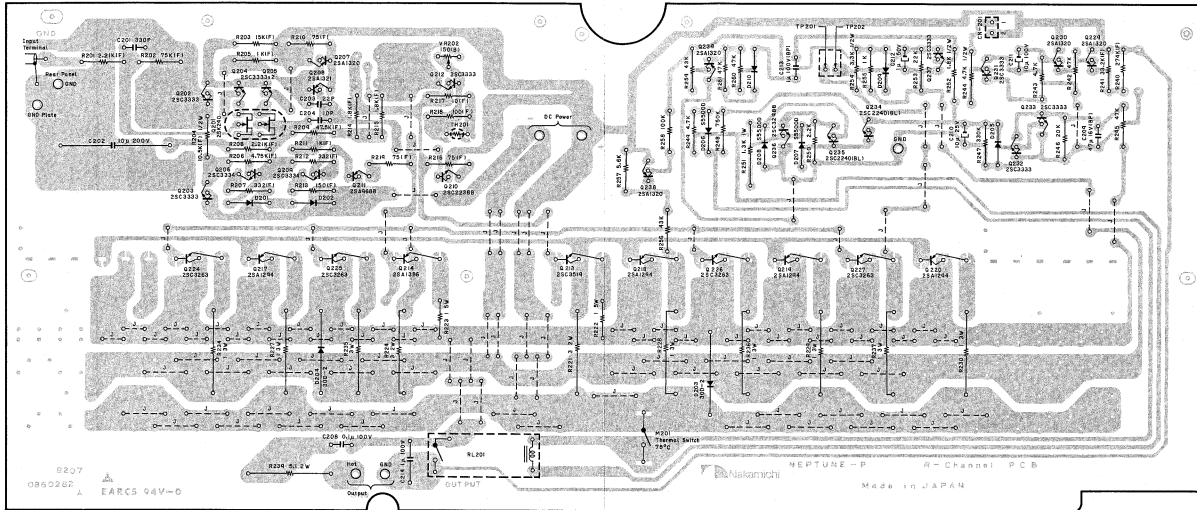
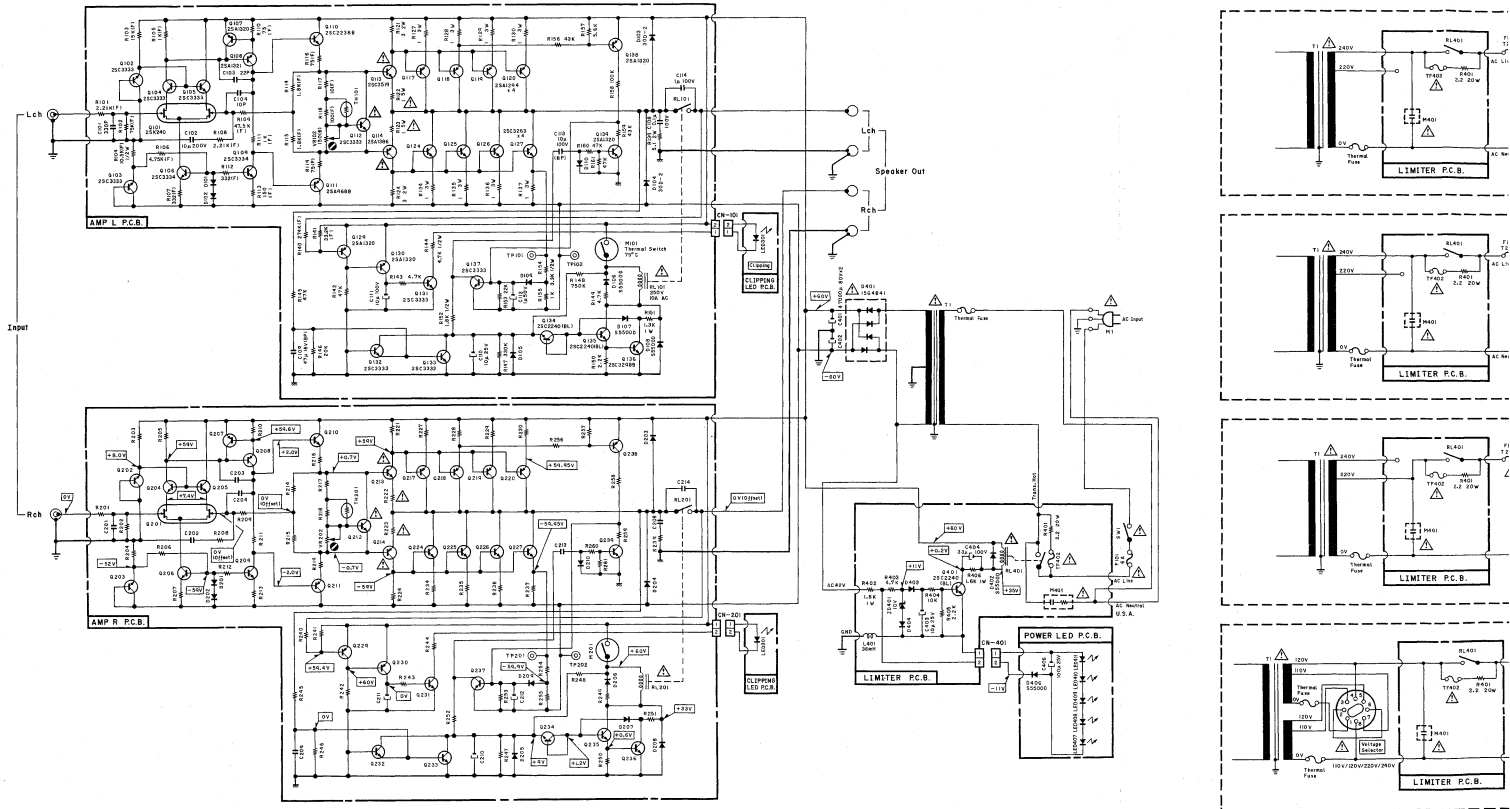


Fig. 5.5

Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description	Schematic Ref. No.	Part No.	Description
	BA05969A	Amp. R.F.C.B. Assy	R205	OB08547A	RM 2.21K 1/4W F	R258	0B01889A	RK 100K 1/4W J	Q214	OB10136A	TR 2SA1386
Q201	OB08082A	Amp. R.F.C.B.	R209	OB22638A	RM 47.5K 1/4W F	C201	0B11041A	C 330F 100V J	Q217-220	OB10008A	TR 2SA1294 (4)
	OB06257A	FET 2SK240 (GR. BL. V)	R210,216	OB22632A	RM 75 1/4W F	C202	0B41536A	CM 10u 200V K	Q234-227	OB10098A	TR 2SC2263 (4)
Q202-205	OB10103A	TR 2SC3333 (9)	R213	OB22633A	RM 150 1/4W F	C203	0B41539A	C 22F 50V J	TH201	OB10003A	Thermistor 102F
212,231			R214,215	OB08559A	RM 1.8K 1/4W F	C204	0B41538A	C 10P 50V J		OB90146B	Heat Sink (1)
232,233			R217	OB22567A	RM 10 1/4W F	C208	0B41537A	CM 0.1u 100V J		OB90147R	Sheet A (1)
Q206,209	OB10143A	TR 2SC3334	R218	OB22567A	RM 100 1/4W F	C209	OB40331A	CE 47u 16V (BP)		OB90175A	Sheet B (1)
Q207,229	OB10102A	TR 2SA1320	R221,224	OB24058A	RF 3 2W J	C210	OB01674A	CE 10u 25V		OB90138A	Mx5.10 @ Binding (Nickel) (11)
230,238			R222,223	OB24094A	RF 1 5W K	C211	OB40330A	CE 10u 100V			
239			R227,230	OB24092A	RF 1 3W J	C212	OB01405A	CE 1u 50V			
Q208	OB10142A	TR 2SA1321	R239	OB24059A	RF 5.1 2W J	C213	OB40371A	CE 10u 100V (BP)			
Q234,235	OB06142A	TR 2SC2240 (BL)	R240	OB08752A	RM 274K 1/4W F	C214	OB41619A	CM 1u 100V J			
Q236	OB10145A	TR 2SC3398B	R241	OB08446A	RM 32.2K 1/4W F	RL201	OB90083A	Relay 10A 250V AC			
D201,202	OB06181A	SID 1S853	R242,245	OB08061A	RK 47K 1/4W J	M201	OB90084A	Thermal Switch 75°C			
205,209			260,261	OB01846A	RK 4.7K 1/4W J		OB13866A	2PS Post			
210			R243,249	OB24062A	RF 4.7K 1/2W J		OB00754A	Mx5 @ Fan (Nickel)			
D203,204	OB06428A	SID 30D-2	R246	OB08509A	RK 20K 1/4W J	Q210	OB10101A	TR 2SC2238B			
D206,207	OB10252A	SID S800D	R247	OB08727A	RK 330K 1/4W J		OB90173A	Heat Sink TO-220			
208			R248	OB08509A	RK 20K 1/4W J		OE00966A	Mx5 @ Binding (Nickel) (1)			
YR492	OB23052A	Potentiometer 150	R249	OB08755A	RK 750K 1/4W J		OE00972A	Nut Hex. M3 (1)			
R201	OB22592A	RM 2.21K 1/4W F	R251	OB24090A	RF 1.3K 1W J	Q211	OB10100A	TR 2SA968B (1)			
R202	OB08062A	RM 75K 1/4W F	R252	OB24081A	RF 1.8K 1/2W J		OB90173A	Heat Sink TO-220			
R203	OB08340A	RM 15K 1/4W F	R253	OB08015A	RK 22K 1/4W J		OE00966A	Mx5 @ Binding (Nickel) (1)			
R204	OB22670A	RM 10.5K 1/2W F	R254	OB24089A	RF 3.3K 1/2W J		OE00972A	Nut Hex. M3 (1)			
R205,211	OB08491A	RM 1K 1/4W F	R255	OB01887A	RK 1K 1/4W J	Q213	OB10137A	TR 2SC3519			
R206	OB08424A	RM 4.75K 1/4W F	R256,259	OB08750A	RK 43K 1/4W J						
R207,212	OB08760A	RM 332 1/4W F	R257	OB01887A	RK 5.6K 1/4W J						

6. SCHEMATIC DIAGRAM



Notes: 1. Diode is 1SS53, 1S1555, or 1SS176 unless otherwise specified.
 2. Voltages shown in are typical value with no input signal at 60 Hz.

Fig. 6

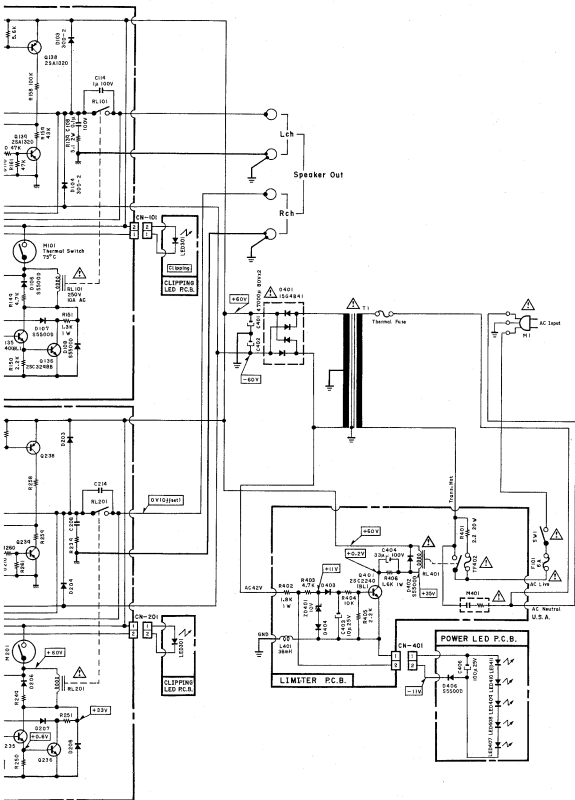
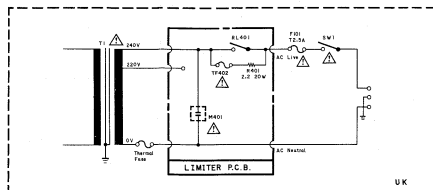
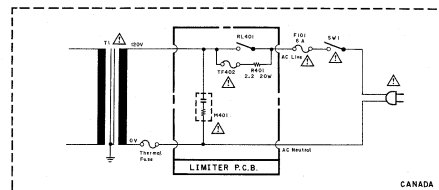


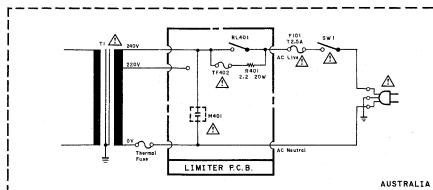
Fig. 6



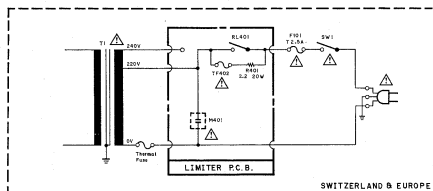
UK



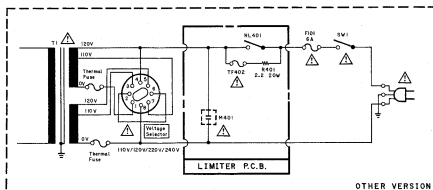
CANADA




AUSTRALIA



SWITZERLAND & EUROPE



OTHER VERSION

WARNING:
Parts marked with the symbol  have critical characteristics.
Use **ONLY** replacement parts recommended by the manufacturer.

It is recommended that the unit be operated from a suitable DC supply or batteries during initial check-out procedures.

CAUTION:
Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamp, or if the resistance from chassis to either side of the power cord is less than 240 k ohms, the unit is defective.
WARNING — DO NOT return the unit to the customer until the problem is located and corrected.

7. WIRING DIAGRAM

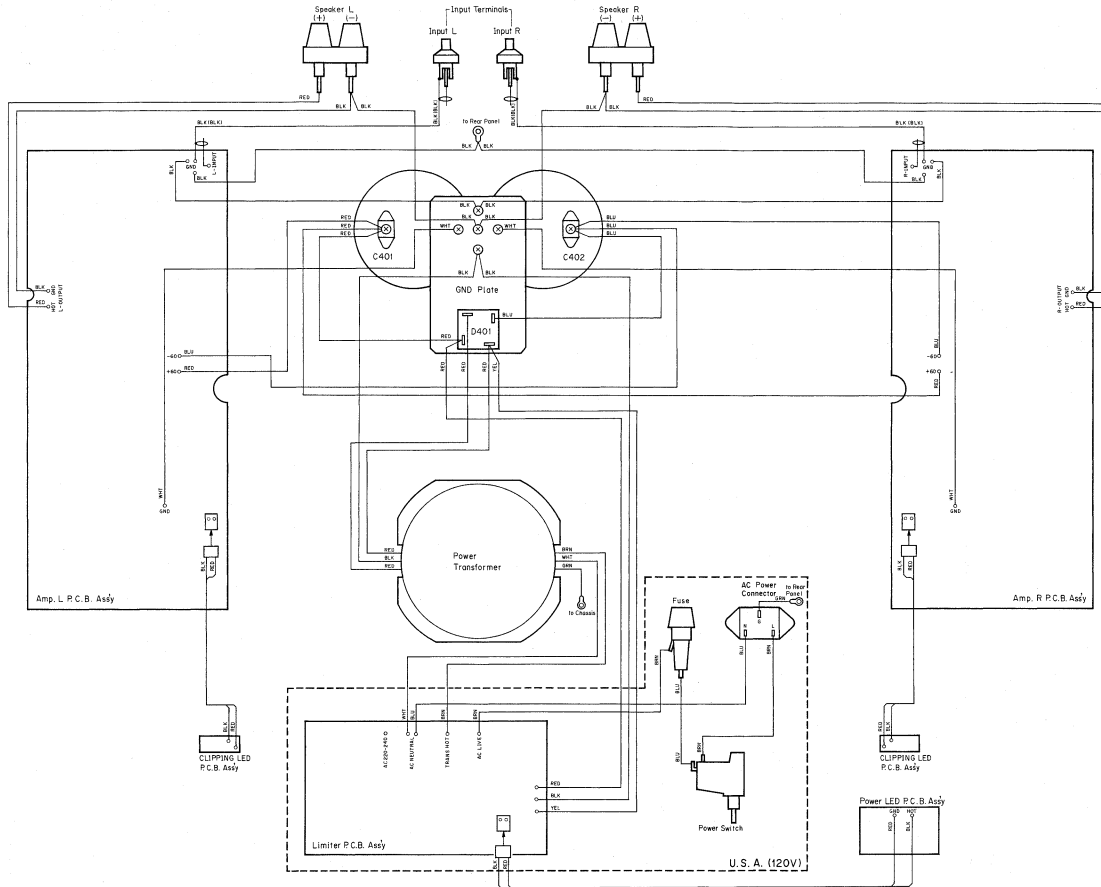
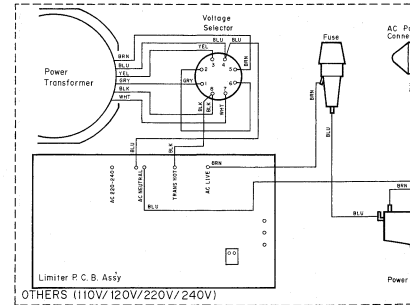
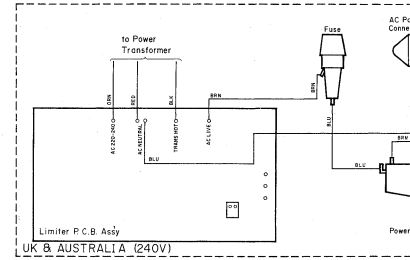
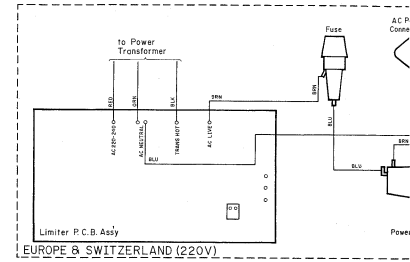
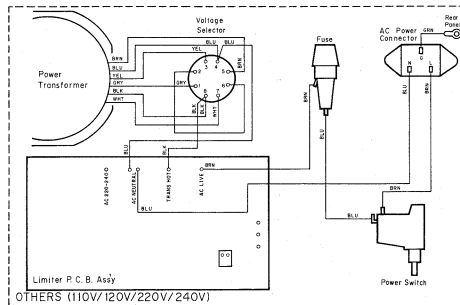
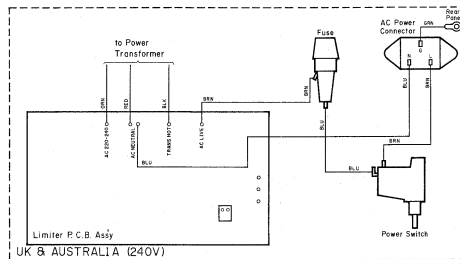
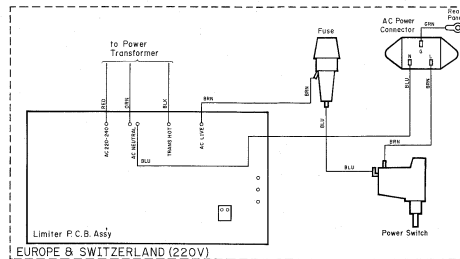
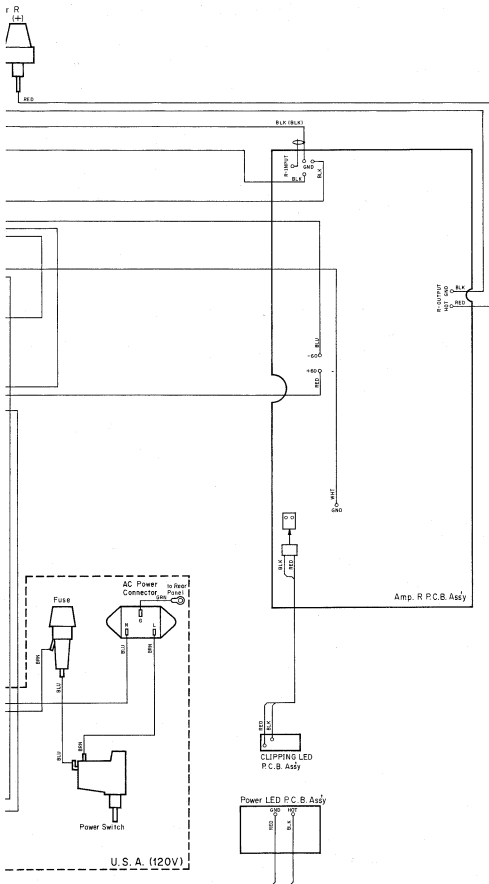
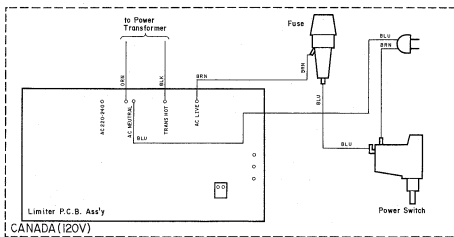
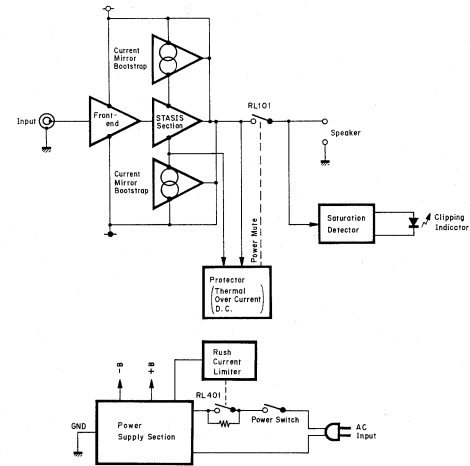


FIG. 7





8. BLOCK DIAGRAM



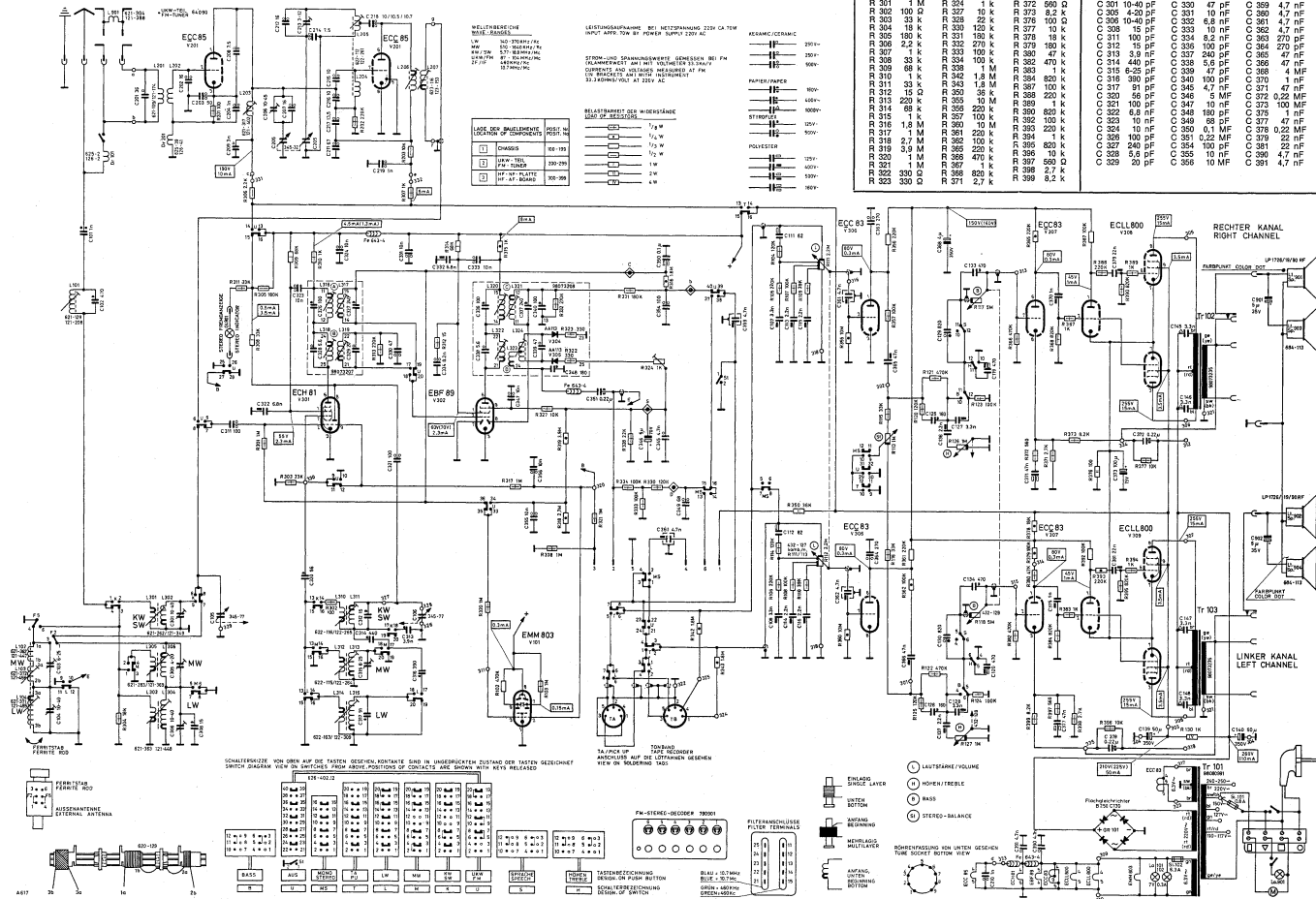
- Notes: 1. Table of wire colors
- | | | |
|--------------|--------------|-------------|
| BRN - Brown | GRN - Green | WHT - White |
| RED - Red | BLU - Blue | BLK - Black |
| ORN - Orange | VIO - Violet | |
| YEL - Yellow | GRY - Gray | |

2. Component side view of the P.C.B. is illustrated unless otherwise specified.
3. Wire tube color is shown in ().

Service-Schaltbild für **SCERZO 35 C**
MODERATO 33 C

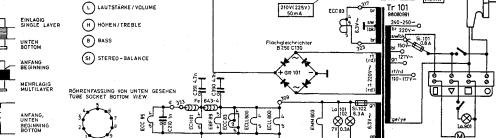
R- und C-Werte der gedruckten Platte rechts

R-Werte			C-Werte				
R 301	1 M	R 324	1 k	C 301	10-40 pF	C 330	47 pF
R 302	100 pF	R 327	10 k	C 305	4-20 pF	C 331	10 pF
R 303	33 k	R 329	22 k	C 308	15 pF	C 332	6,8 pF
R 304	18 k	R 330	10 k	C 311	10 pF	C 333	6,8 pF
R 305	180 k	R 331	330 k	C 312	15 pF	C 334	8,1 pF
R 306	2,2 k	R 332	270 k	C 313	10 pF	C 335	100 pF
R 307	1 k	R 333	180 k	C 314	440 pF	C 336	100 pF
R 308	33 k	R 334	100 k	C 317	10 pF	C 337	5,6 pF
R 309	68 k	R 335	1 k	C 318	10 pF	C 338	4,7 nF
R 310	1 k	R 342	1,8 M	C 319	390 pF	C 340	100 pF
R 313	20 k	R 343	1,8 M	C 320	91 pF	C 341	4,7 nF
R 314	69 k	R 350	38 k	C 321	56 pF	C 342	9,1 nF
R 317	1,8 M	R 351	220 k	C 322	100 pF	C 343	180 pF
R 318	3,9 k	R 352	220 k	C 323	100 pF	C 344	100 pF
R 319	1,8 M	R 353	220 k	C 324	100 pF	C 345	100 pF
R 320	1 M	R 354	10 M	C 325	100 pF	C 346	100 pF
R 321	330 k	R 355	220 k	C 326	100 pF	C 347	100 pF
R 322	330 k	R 356	470 k	C 327	340 pF	C 348	1,1 nF
R 323	330 k	R 357	500 Ω	C 328	9,6 pF	C 349	350 pF
R 325	330 k	R 358	330 k	C 329	29 pF	C 350	10 pF
R 326	330 k	R 359	820 k	C 330	29 pF	C 351	4,7 nF
R 327	330 k	R 371	2,7 k	C 331	29 pF	C 352	4,7 nF
R 328	330 k	R 372	560 Ω	C 332	29 pF	C 353	4,7 nF
R 329	330 k	R 373	8,2 k	C 333	29 pF	C 354	4,7 nF
R 330	330 k	R 374	100 Ω	C 334	29 pF	C 355	4,7 nF
R 331	330 k	R 375	10 k	C 335	29 pF	C 356	4,7 nF
R 332	330 k	R 376	10 k	C 336	29 pF	C 357	4,7 nF
R 333	330 k	R 377	10 k	C 337	29 pF	C 358	4,7 nF
R 334	330 k	R 378	10 k	C 338	29 pF	C 359	4,7 nF
R 335	330 k	R 379	10 k	C 339	29 pF	C 360	4,7 nF
R 336	330 k	R 380	10 k	C 340	29 pF	C 361	4,7 nF
R 337	330 k	R 381	10 k	C 341	29 pF	C 362	4,7 nF
R 338	330 k	R 382	470 k	C 342	29 pF	C 363	4,7 nF
R 339	330 k	R 383	470 k	C 343	29 pF	C 364	270 pF
R 340	330 k	R 384	820 k	C 344	29 pF	C 365	4,7 nF
R 341	330 k	R 385	820 k	C 345	29 pF	C 366	4,7 nF
R 342	1,8 M	R 386	100 k	C 346	29 pF	C 367	4,7 nF
R 343	1,8 M	R 387	100 k	C 347	29 pF	C 368	4,7 nF
R 344	1,8 M	R 388	220 k	C 348	29 pF	C 369	4,7 nF
R 345	1,8 M	R 389	220 k	C 349	29 pF	C 370	4,7 nF
R 346	1,8 M	R 390	220 k	C 350	29 pF	C 371	4,7 nF
R 347	1,8 M	R 391	220 k	C 351	29 pF	C 372	0,2 nF
R 348	1,8 M	R 392	100 k	C 352	29 pF	C 373	100 pF
R 349	1,8 M	R 393	100 k	C 353	29 pF	C 374	100 pF
R 350	38 k	R 394	100 k	C 354	29 pF	C 375	20 pF
R 351	220 k	R 395	100 k	C 355	29 pF	C 376	20 pF
R 352	220 k	R 396	100 k	C 356	29 pF	C 377	4,7 nF
R 353	220 k	R 397	500 Ω	C 357	29 pF	C 378	4,7 nF
R 354	10 M	R 398	2,7 k	C 358	29 pF	C 379	4,7 nF
R 355	220 k	R 399	8,2 k	C 359	29 pF	C 380	4,7 nF
R 356	470 k	R 399	8,2 k	C 360	29 pF	C 381	4,7 nF
R 357	500 Ω			C 361	29 pF	C 382	4,7 nF
R 358	330 k			C 362	29 pF	C 383	4,7 nF
R 359	820 k			C 363	29 pF	C 384	4,7 nF
R 371	2,7 k			C 364	29 pF	C 385	4,7 nF



SCHALTERSTÜCKE VON OBEN AUF DIE TASTEN GEZEIGT, SONSTIGE SIND IN UMSCHALTETER LAGE GEZEIGT

TA/BACK UP ANSCHLUSS FÜR DATENREKORDER



Im Laufe der Fertigungsreihe wurde der FM-Stereo-Decoder 790 902 eingebaut

Änderungen vorbehalten

9. SPECIFICATIONS

Continuous Average Power	100 W x 2 (8 ohms, both channels driven, 20-20,000 Hz, 0.1% THD)
Output (NEW IHF)	
Dynamic Power per Channel	150 W (8 ohms)
Dynamic Head Room	1.7 dB (8 ohms)
(New IHF)	
Power Bandwidth (Half	5 Hz - 50 kHz
Rated Power, 0.1% THD)	
Damping Factor (NEW IHF)	Greater than 60/60/60
20 Hz/1 kHz/20 kHz	
Input Sensitivity/Impedance	1.4 V/75 k ohms (rated power)
(New IHF)	140 mV (1 W output)
Frequency Response	20-20,000 Hz +0, -0.5 dB
(1 W, NEW IHF)	7-150,000 Hz +0, -3 dB
Signal to Noise Ratio	Better than 120 dB
(Input Shorted, Rated Power, IHF-A-WTD)	
Residual Noise Level	Less than 25 μ V
(IHF-A-WTD)	
Total Harmonic Distortion	Less than 0.1%
(Rated Power, 20-20,000 Hz)	
Intermodulation Distortion	Less than 0.1%
(Rated Power, 60 Hz: 7 kHz, 4:1)	
Stereo Separation	100/90/70 dB
(Input Shorted)	
100 Hz/1 kHz/10 kHz	
Output Complement	10 transistors per channel
Output Current Capability	12 A continuous, 35 A peak (per channel)
Power Supply	450 W toroidal transformer, 94,000 μ F total filter capacitance
Power Source	120, 220, 240, 110-120/220-240 V AC; 50/60 Hz (According to country of sale)
Power Consumption	450 W max.
Dimensions	435 (W) x 135 (H) x 368 (D) mm 17-1/8 (W) x 5-5/16 (H) x 14-1/2 (D) inches
Approximate Weight	16 kg; 35 lbs., 4 oz.

- Specifications and design are subject to change for further improvement without notice.
- STASIS manufactured under license from Threshold Corporation.
- STASIS is a trademark of Threshold Corporation.

Service Manual

Nakamichi PA-5, PA-5E

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