



# SERVICE MANUAL

**906**

**916**

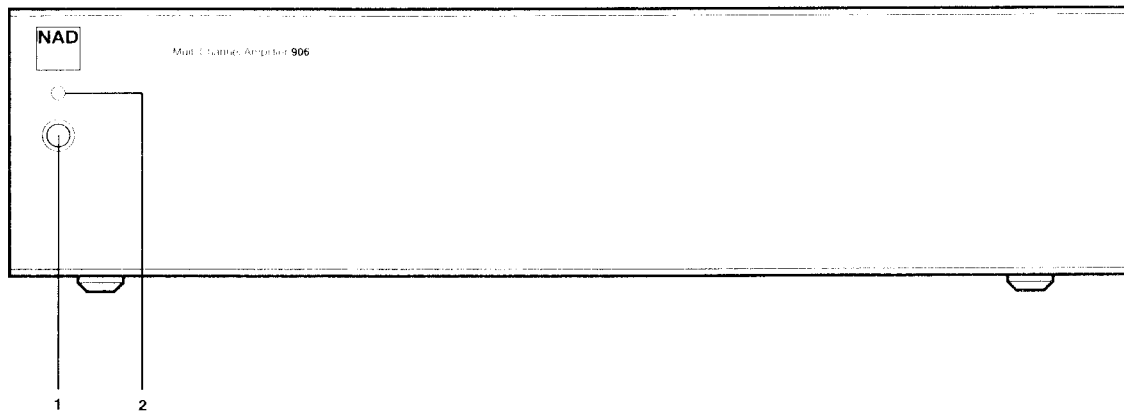
**MULTI CHANNEL  
AMPLIFIER**

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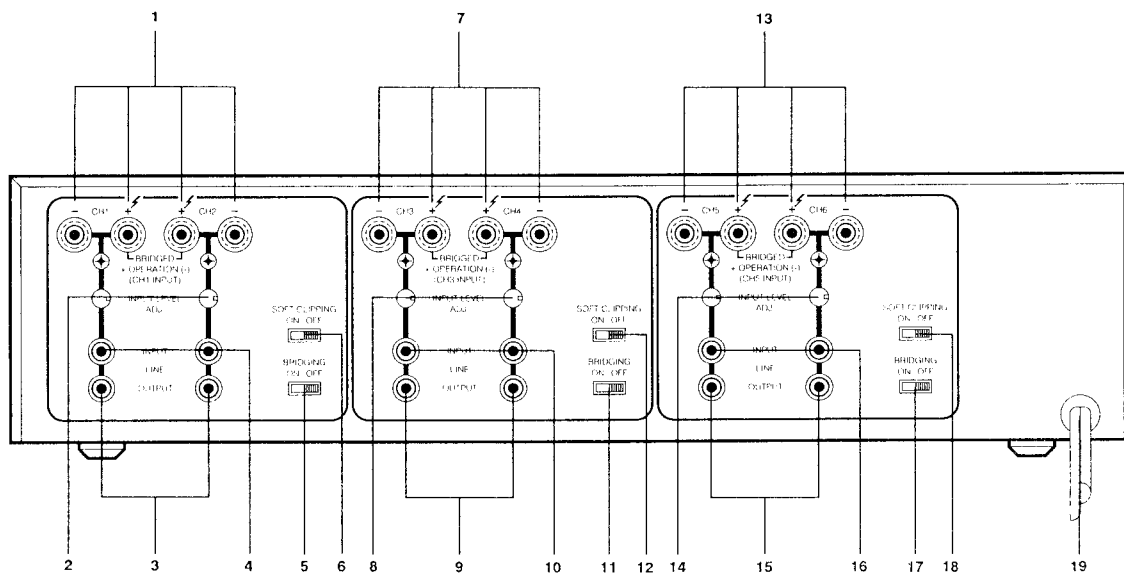
# FRONT/REAR PANEL VIEW

## FRONT PANEL



1. Power Button
2. Power LED

## REAR PANEL CONNECTIONS



- |                          |              |                          |              |
|--------------------------|--------------|--------------------------|--------------|
| 1. Speaker Terminals     | (CH 1, CH 2) | 13. Speaker Terminals    | (CH 5, CH 6) |
| 2. Input Level Adj.      | (CH 1, CH 2) | 14. Input Level Adj.     | (CH 5, CH 6) |
| 3. Line Output           | (CH 1, CH 2) | 15. Line Output          | (CH 5, CH 6) |
| 4. Input                 | (CH 1, CH 2) | 16. Input                | (CH 5, CH 6) |
| 5. Bridging On/Off       | (CH 1, CH 2) | 17. Bridging On/Off      | (CH 5, CH 6) |
| 6. Soft Clipping On/Off  | (CH 1, CH 2) | 18. Soft Clipping On/Off | (CH 5, CH 6) |
| 7. Speaker Terminals     | (CH 3, CH 4) | 19. AC Line Cord         |              |
| 8. Input Levels Adj.     | (CH 3, CH 4) |                          |              |
| 9. Line Output           | (CH 3, CH 4) |                          |              |
| 10. Input                | (CH 3, CH 4) |                          |              |
| 11. Bridging On/Off      | (CH 3, CH 4) |                          |              |
| 12. Soft Clipping On/Off | (CH 3, CH 4) |                          |              |

## SPECIFICATION

Measured in accordance with EIA Standard RS-490 (IHF A -202)  
NAD-906 Multi-Channel Amplifier

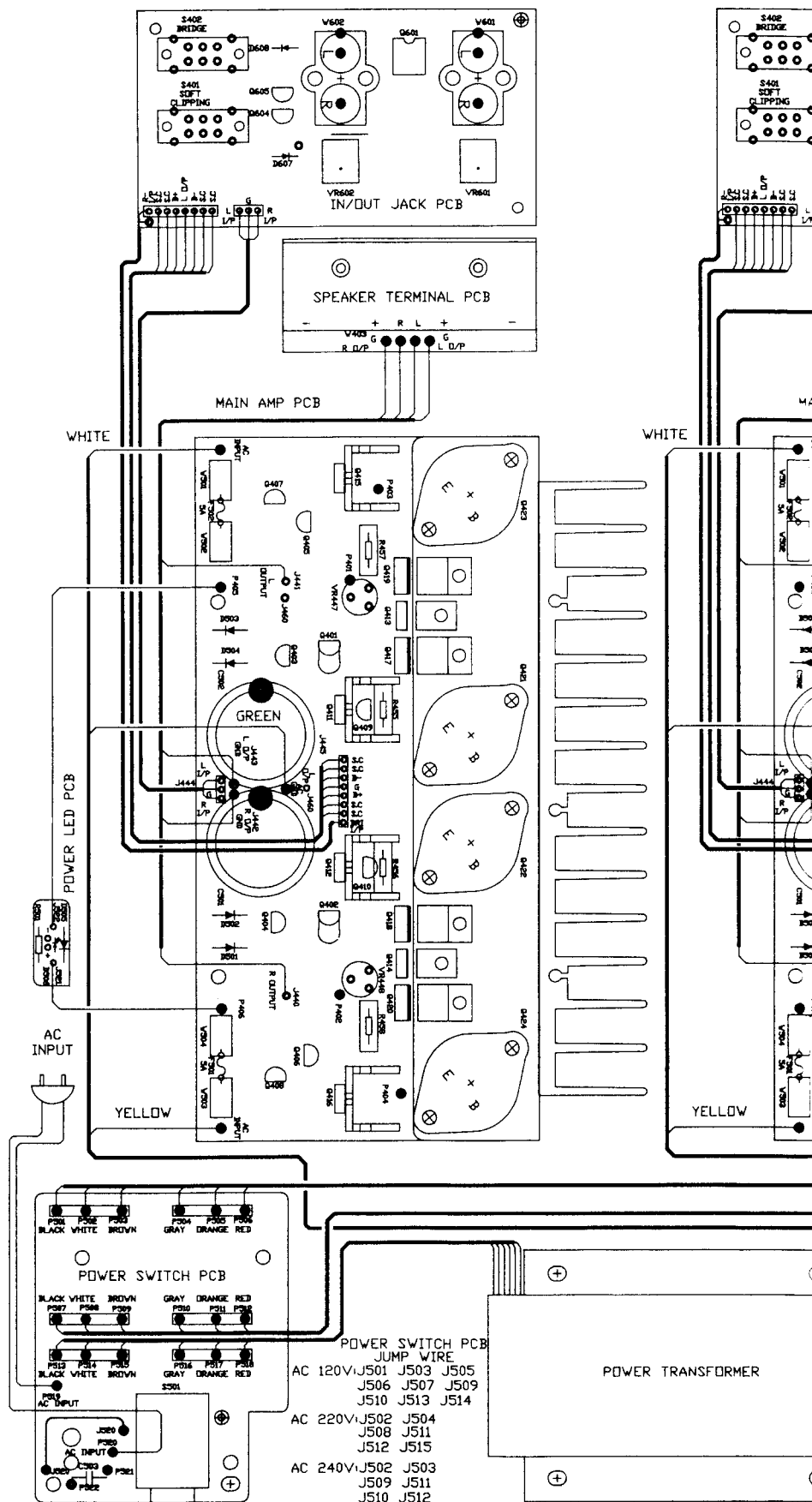
Continues RMS. power output into 8/4 ohms load, Both channels driven .....	> 30/35 W
Continues RMS. power output into 8 ohms load, (BRIDGED mode) .....	> 90 W
Rated distortion (THD. 20Hz. - 20kHz.) .....	< 0.04%
Slew factor .....	> 50
Slew rate .....	35V / uSEC.
Damping factor (ref. 8 ohm, 1kHz) .....	> 100
Input impedance .....	10k ohm // 220 pf
Input sensitivity (for 1W output) .....	185 mV
(for rated power) .....	1000mV
Voltage gain .....	24.5 dB
Frequency responce (-3 dB) .....	< 10 Hz / 100kHz
(20 Hz - 20k Hz).....	< -0.2 dB
S/N Ratio (A-weighted) .....	> 100 dB
(un-weighted) .....	> 90 dB
THD. (ref. 250mW output) .....	< 0.04%
SMPTE IMP. (ref. 250mW output) .....	< 0.04%

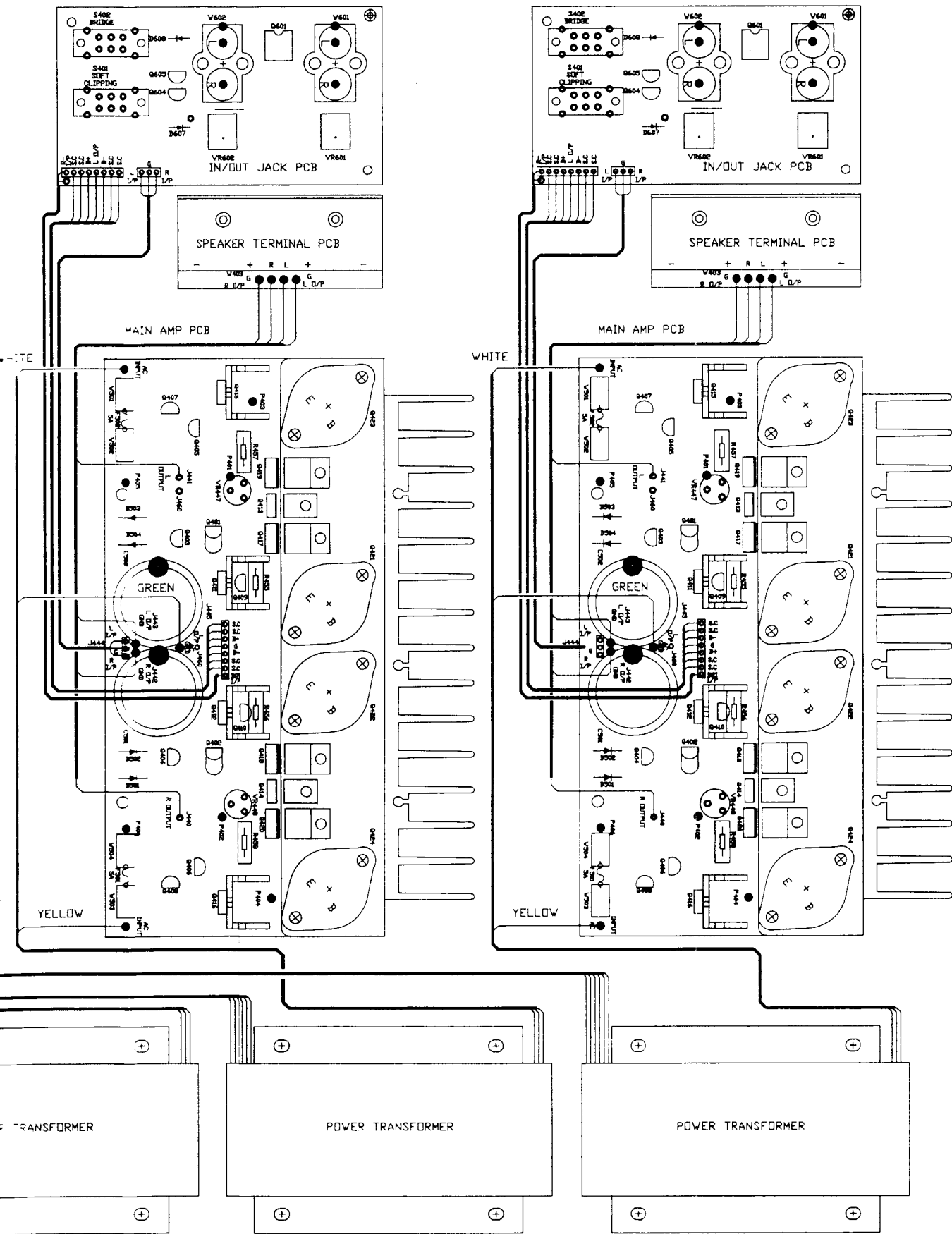
### PHYSICAL SPECIFICATIONS

Width * Height * Depth .....	435 * 108 * 381 mm
Net Weight .....	13 kg
Shipping Weight .....	14 kg

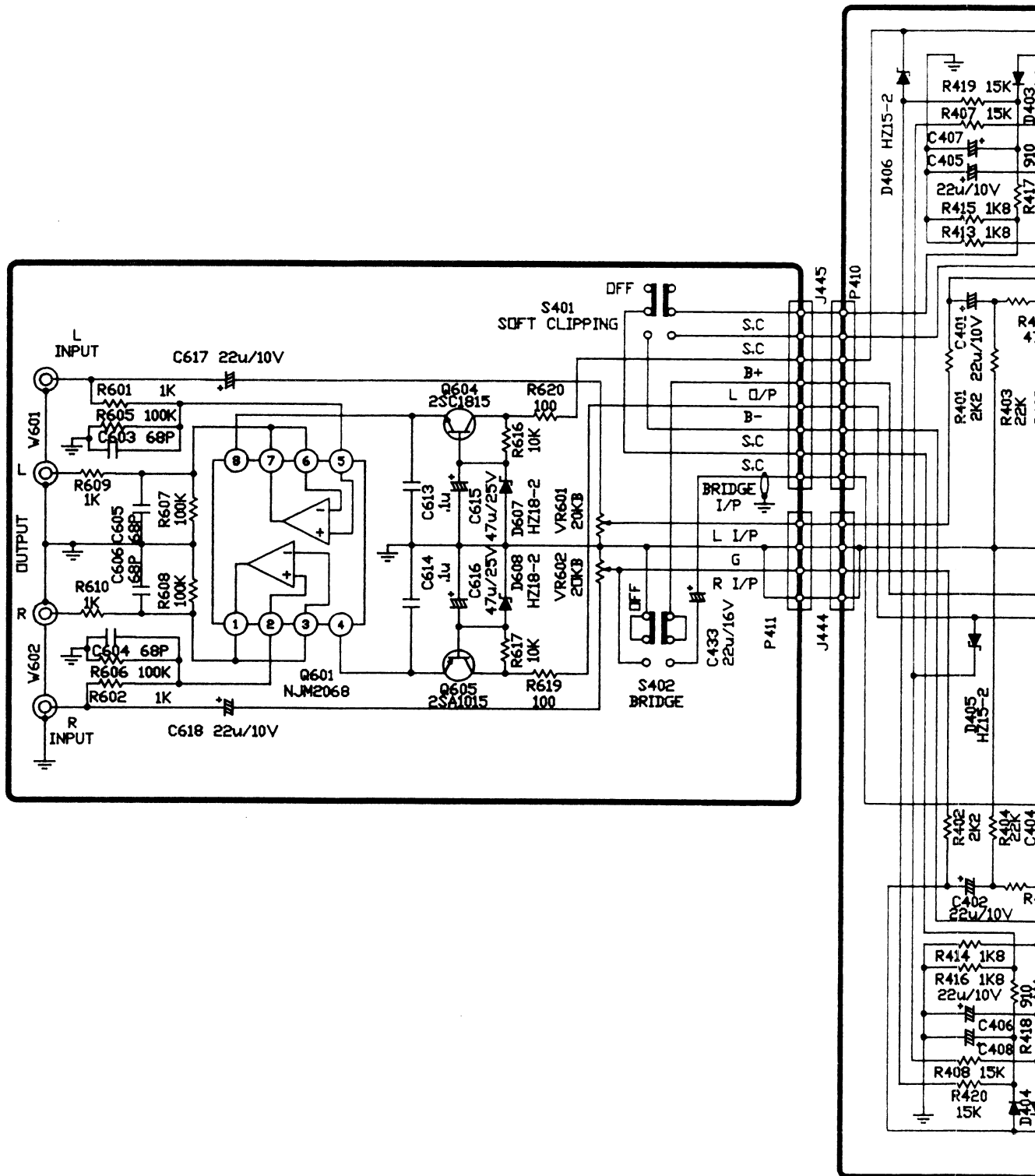
Specifications are those in effect at the time of printing. NAD reserves the right to change specifications

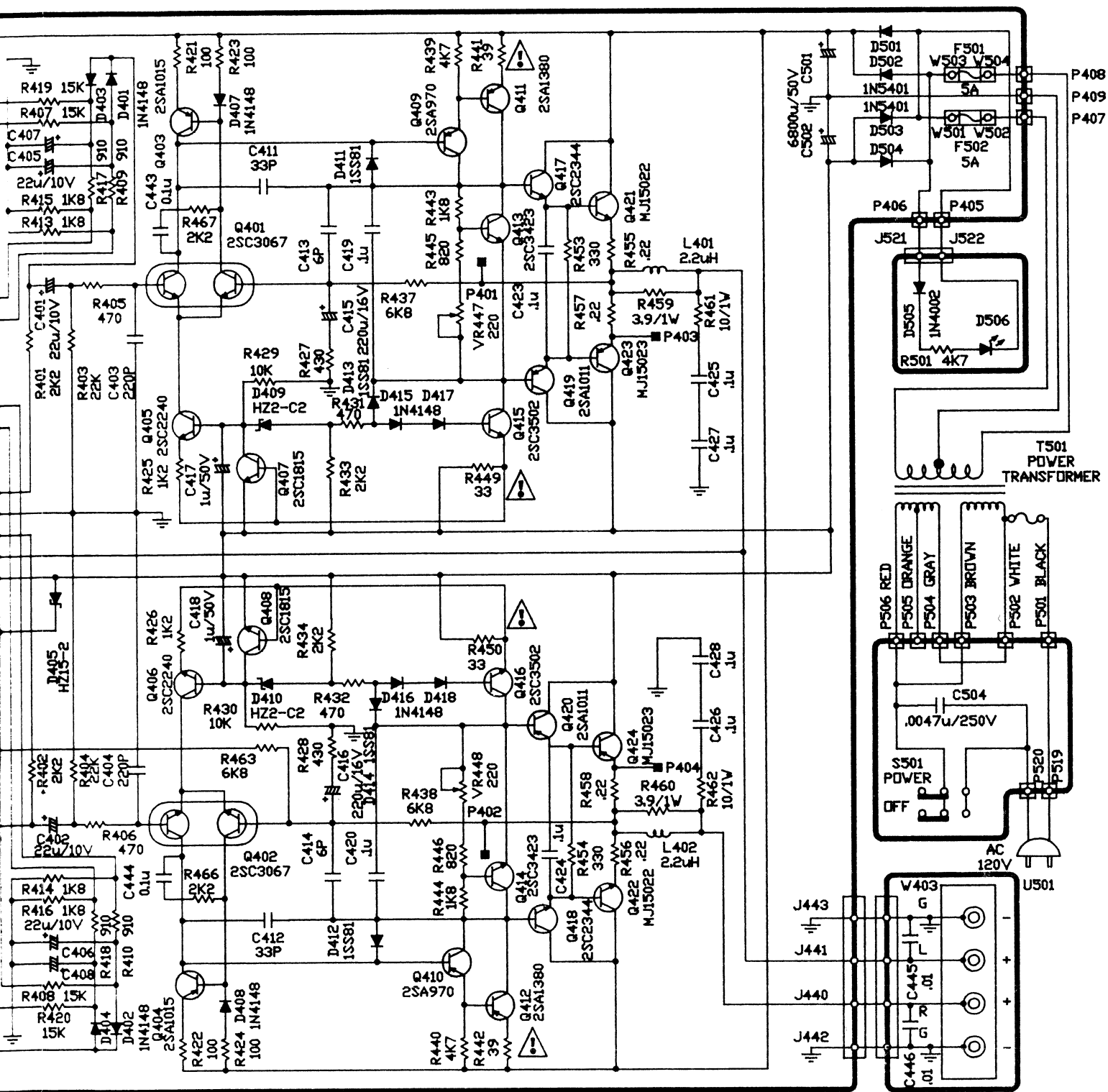
# WIRING DIAGRAM





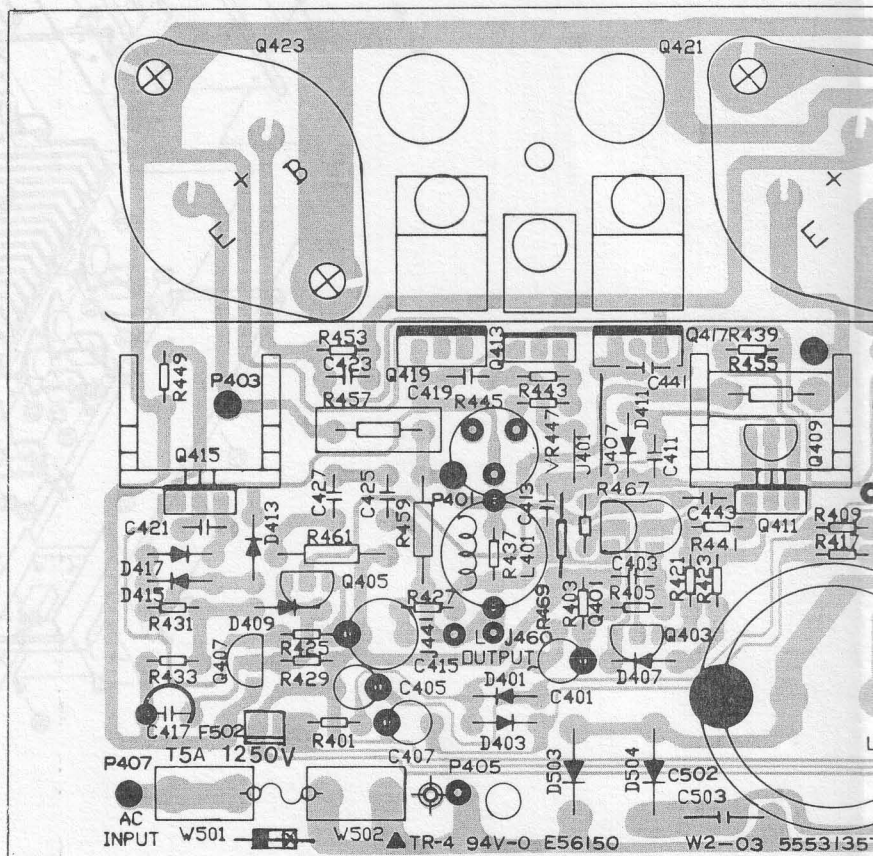
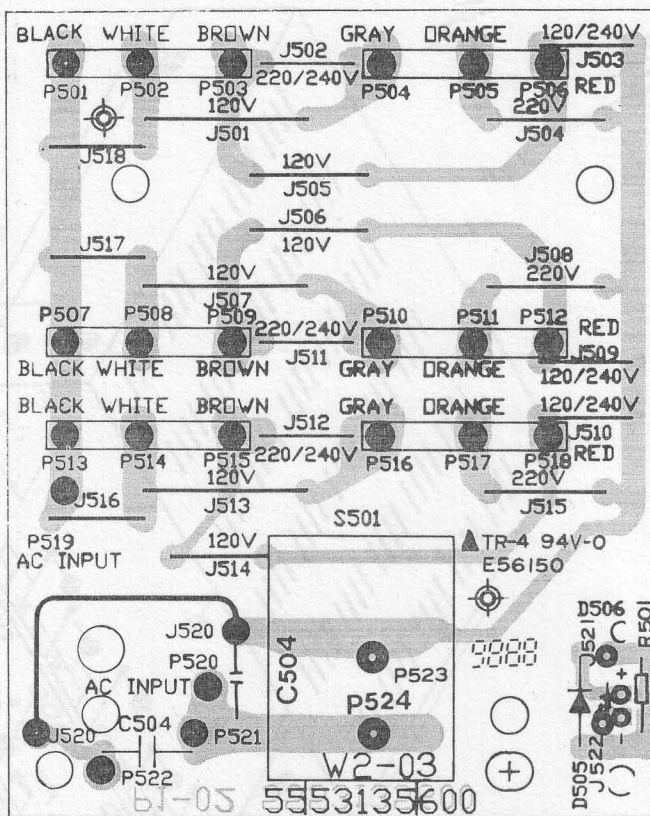
# SCHEMATIC DIAGRAM

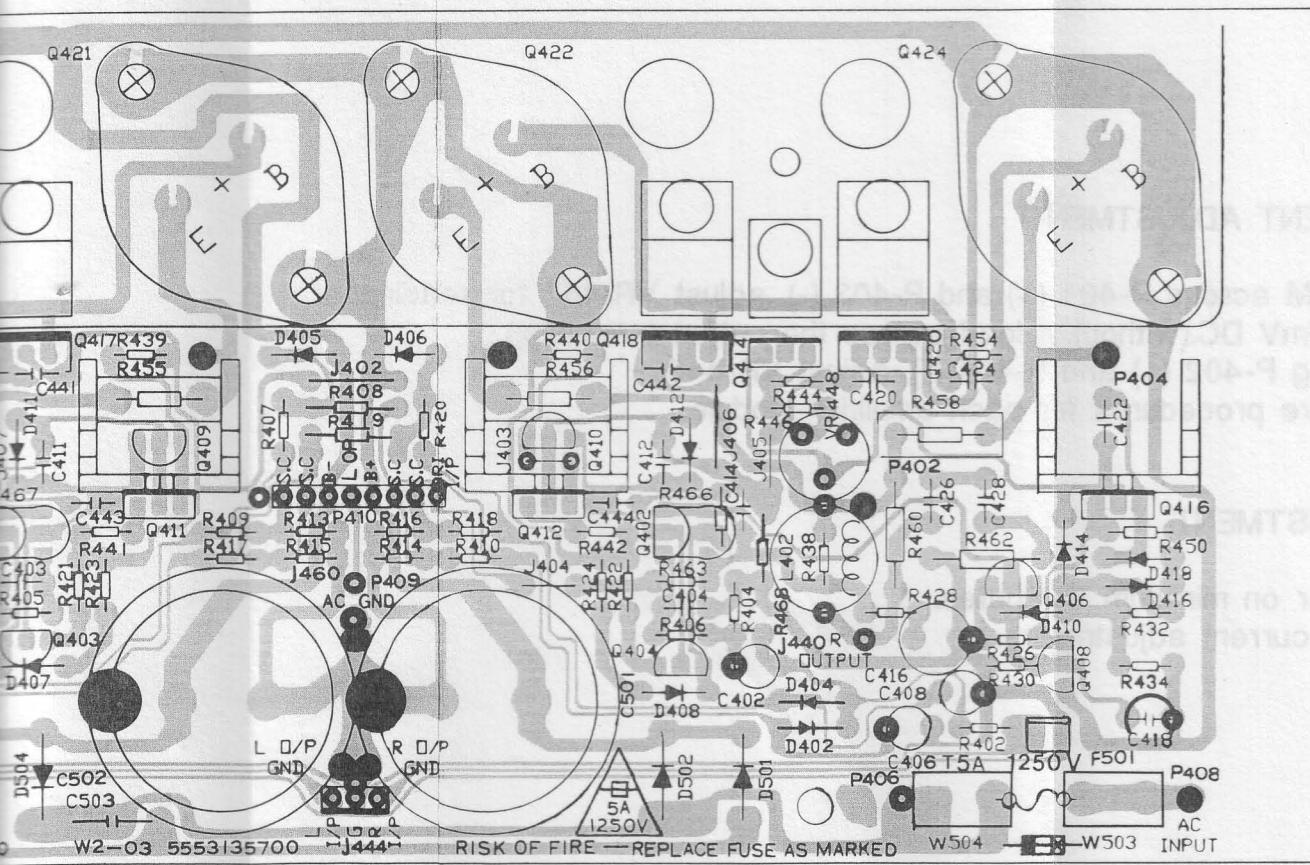
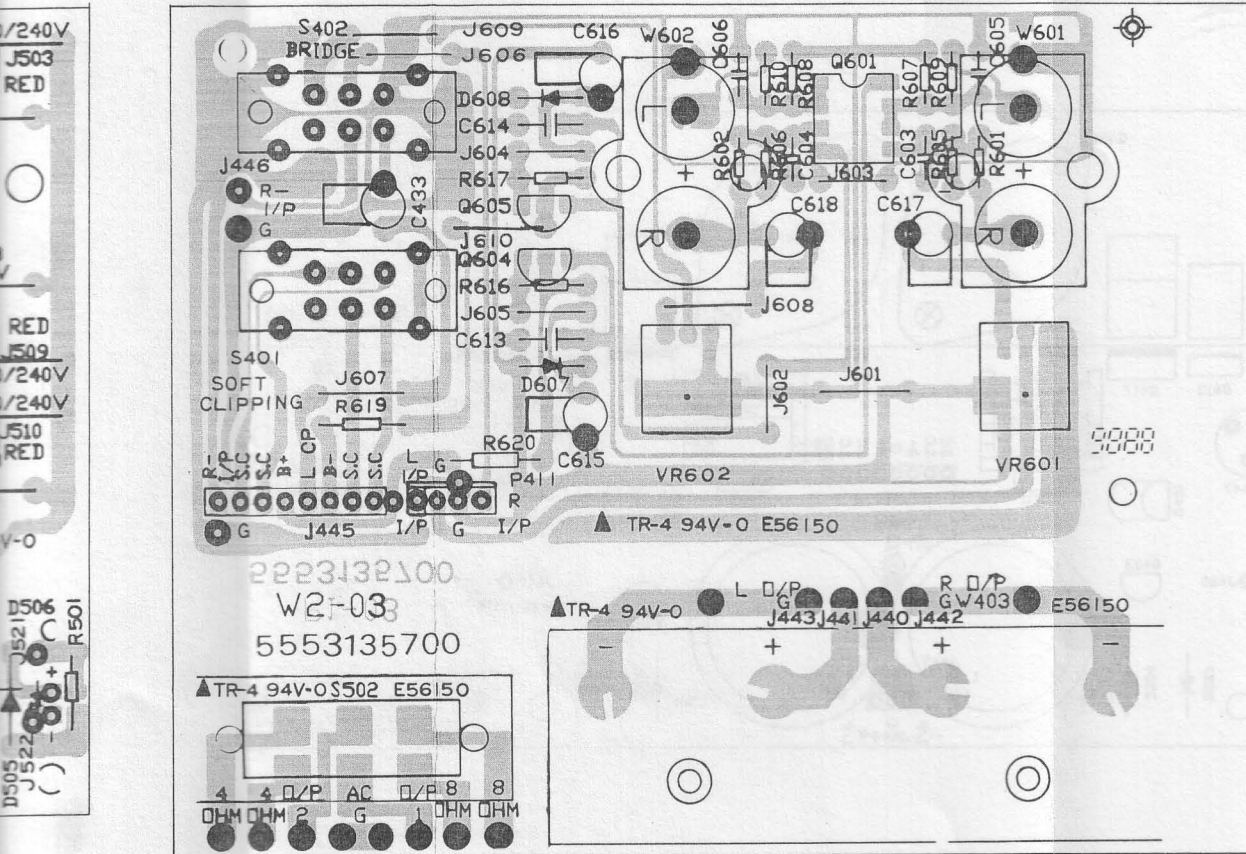




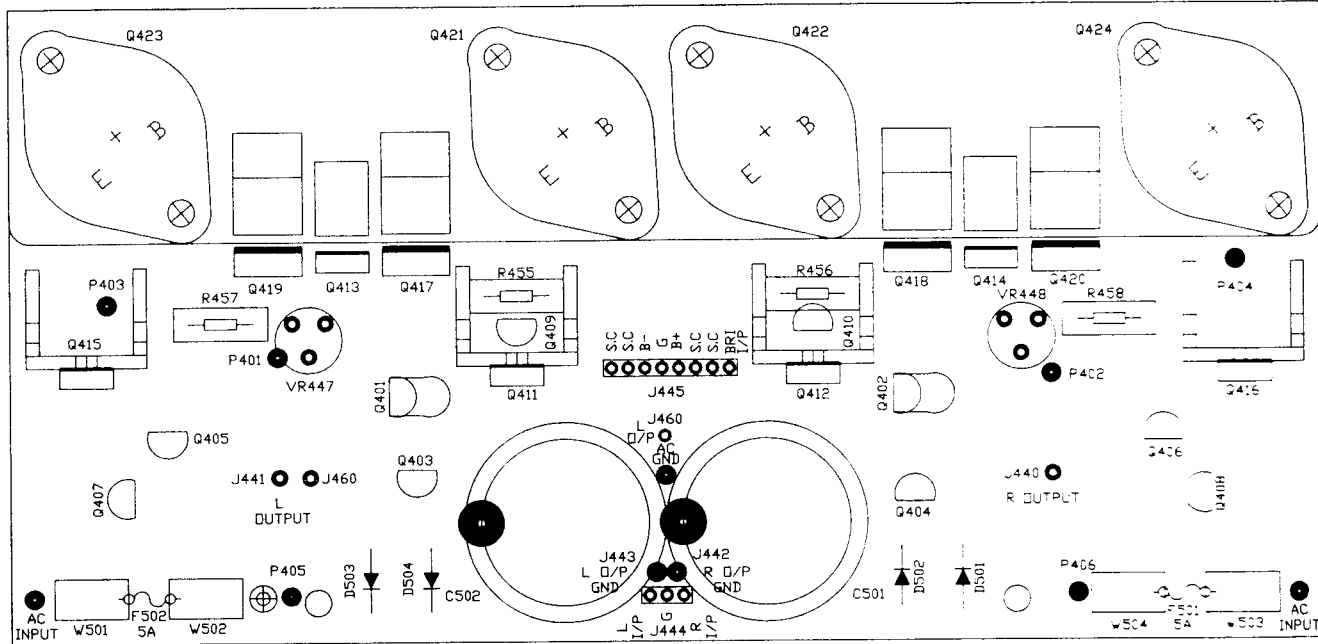


# PCB LAYOUT (PARTS SIDE)





## AMPLIFIER ADJUSTMENT



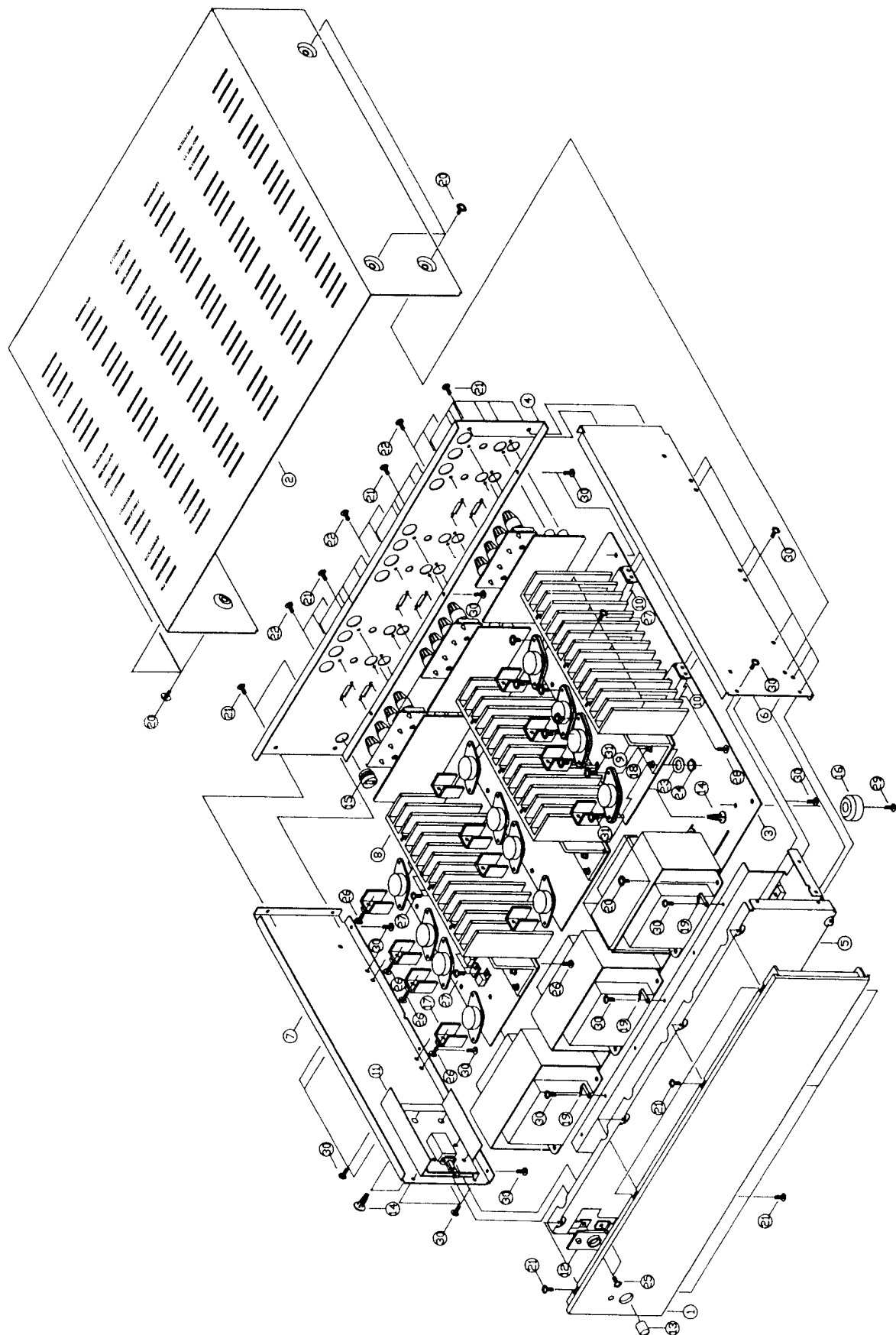
### A. IDLE CURRENT ADJUSTMENT

1. Connect DMM across P-401 (+) and P-403 (-), adjust VR-447 for reading of 5mV +/- 0.5mV DC.(without a load across the output terminals.)
2. Repeat, using P-402 (+) and P-404 (-), adjust VR-448.
3. Repeat above procedures for each amplifier module.

### B. FINAL ADJUSTMENT

1. Leave power on minimum 5 minutes.
2. Repeat idle current adjustments.

# EXPLODED VIEW



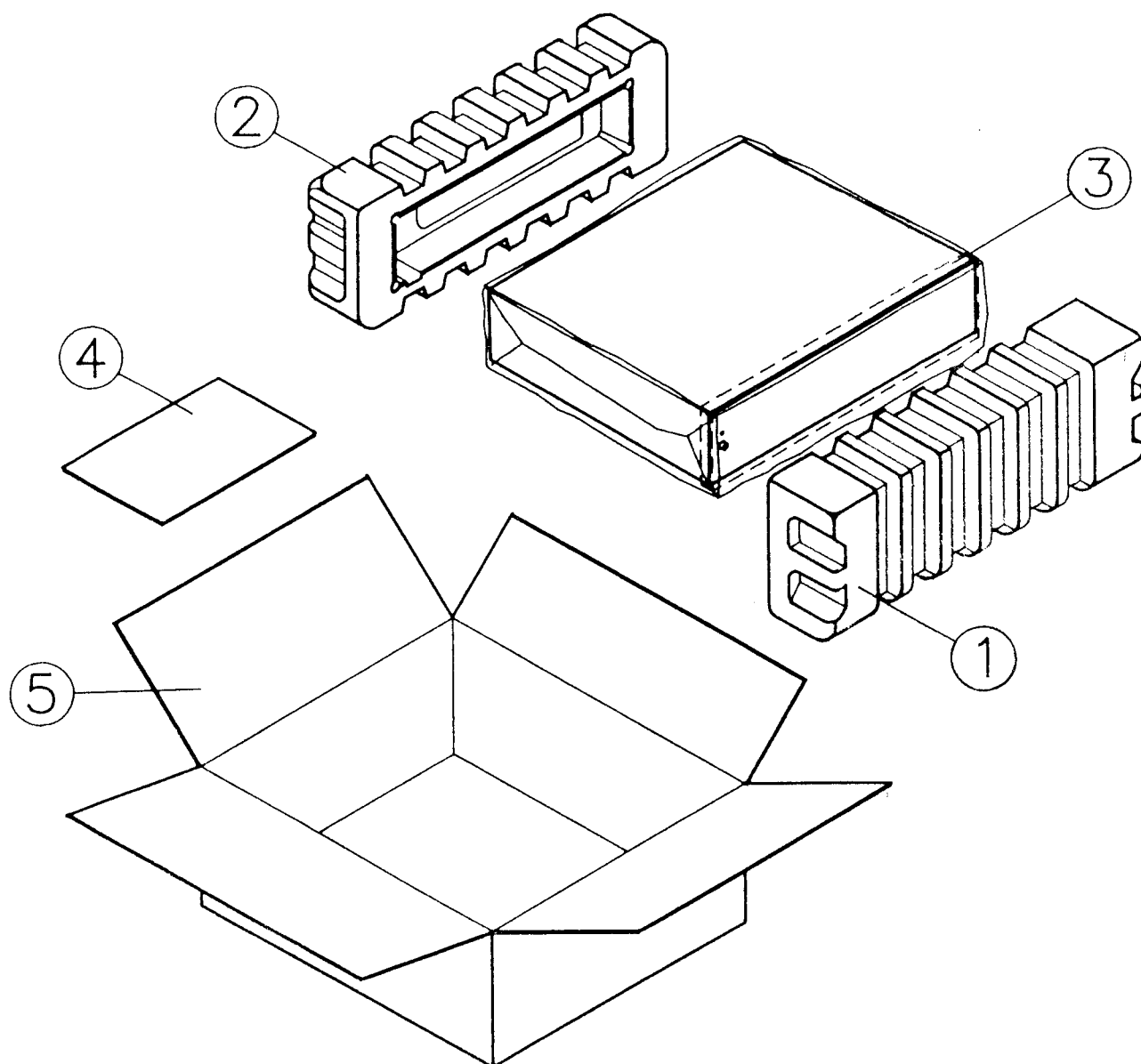
## EXPLODED PARTS LIST

NO.	PART NO.	DESCRIPTION	Q'TY
1	5541215000	FRONT PANEL	1
2	5541003200	TOP COVER	1
3	5547137500	CHASSIS	1
4	5547137700	BACK PLATE	1
5	5547137600	TRS. BRACKET	1
6	5547138000	FRAME (R)	1
7	5547137900	FRAME (L)	1
8	5545309600	HEAT SINK	3
9	5545309700	HEAT SINK P	3
10	5547137800	HEAT SINK BRACKET	2
11	5547533100	POWER SW, BRACKET	1
12	5542226100	POWER BEZEL	1
13	5541539000	PUSH BUTTON	1
14	5547530460	HOLDER-PCB	8
15	5547501200	CORD BUSHING	1
16	5547802120	RUBBER FOOT	4
17	5545306910	HEAT SINK S	12
18	5547528700	TRANSISTOR WASHER	24
19	5540100200	WIRE CLAMP	3
20	7190550003	MACHINE SCREW M4.0x6 W/W Zn-BLK	18
21	7033161156	TAPPING SCREW M3x8 Zn-BLK	30
22	7001120216	MACHINE SCREW M2.5x4 Zn-BLK	12
23	7101200302	WASHER TOOTH LOCK M3.0, Zn	24
24	7076170012	NUT M3.0 Zn	24
25	7001170612	MACHINE SCREW M3.0x6 Zn	2
26	7033161152	TAPPING SCREW M3.0x8 TS2 Zn	18
27	7033161452	TAPPING SCREW M3.0x10 TS2 Zn	39
28	7033251652	TAPPING SCREW M3.0x12 TS2 Zn	6
29	7000305022	TAPPING SCREW M3.0x10 W/W TS2 Zn	4
30	7033160652	TAPPING SCREW M3.0x6 TS2 Zn	39
31	7006171612	MACHINE SCREW M3.0x12 W/SPW Zn	24

SYMBOL NO.	Q'TY	PARTS NO.	DESCRIPTION	SPECIFICATION
	1	5090306051	CHASSIS ASS'Y	
3F01	1	5541539000	PUSH KNOB	
5B01	1	5547137700	BACK PLATE	A1
5B01	1	5547137710	BACK PLATE	C
5B01L	2	7033161156	SCREW BRB M3.0x08 S-PC	
5B01R	2	7033161156	SCREW BRB M3.0x08 S-PC	
5C01	1	5547137500	CHASSIS	
5C01M	19	7033160652	SCREW BRB M3.0x06 S-ZN-CC	
5H01	3	5545309600	HEAT SINK	
5H01M	21	7033161452	SCREW BRB M3.0x10 S-ZN-CC	
5L01	1	5547137900	FRAME-L	
5L01M	3	7190550003	SCREW ISO PPW ZN-PC (BLK)	
5L01T	8	7033160652	SCREW BRB M3.0x06 S-ZN-CC	
5R01	1	5547138000	FRAME-R	
5R01M	3	7190550003	SCREW ISO PPW ZN-PC (BLK)	
5R01T	8	7033160652	SCREW BRB M3.0x06 S-ZN-CC	
5S01	2	5547137800	HEAT SINK BRACKET	
5S01M	6	7033251652	SCREW BRB M4.0x12 S-ZN-CC	
5T01	1	5541003200	TOP COVER	
5T02	1	5547137600	TRS. BRACKET	
5T03	3	5540100200	WIRE CLAMP, WITH TUBE	
5T03M	3	7033161652	SCREW BRB M3.0x12 S-ZN-CC	
6B01	1	5547501200	BUSHING POWER CORD	
6C01	4	5547802120	FOOT	
6C01M	4	7000305022	SCREW BTBW M3.0x10 S-ZN-CC	
6F01	1	5541215000	FRONT PANEL	
6F01M	8	7033161156	SCREW BRB M3.0x08 S-PC	
6F02	1	5542226100	POWER BEZEL	
6F02M	1	7033160652	SCREW BRB M3.0x06 S-ZN-CC	
6L01	2	5547530460	PCB SUPPORT	
6P01	2	5547530460	PCB SUPPORT	
6P02	2	5547530460	PCB SUPPORT	
6P03	2	5547530460	PCB SUPPORT	
6S01	1	5547533100	POWER SW. SHIELDER	
SS01M	2	7001170612	SCREW ISO PP M3.0x06 S-ZN-CC	
T501	3	5561320900	POWER TRANSFORMER	
T501M	12	7190550003	SCREW ISO PPW ZN-PC (BLK)	
U501	1	5556702121	POWER CORD W/PLUG BLK SP-12	A1
U501	1	5556702131	POWER CORD W/PLUG BLK PL-21	C
	1	5090506007	PCB BLOCK	
	1	5090406067	MAIN PCB ASS'Y	
	3	5090906158	MAIN AMP. PCB BLOCK	
5201	1	5545309700	HEAT SINK-P	
B401	1	5553135700	MAIN AMP. PCB (305x95)	
B401M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC	
C401, C402	2	5213222091	CAP. EL.	22UFM +/-20% 16V
C403, C404	2	5247122191	CAP. EL.	220PFK +/-10% 50V
C405-C408	4	5213222091	CAP. EL.	22UFM +/-20% 16V
C411, C412	2	5247033091	CAP. CERAMIC	33PFJ +/- 5% 50V
C413, C414	2	5247106091	CAP. CERAMIC	6PFD +/- 5% 50V
C415, C416	2	5213322191	CAP. EL.	220UFM +/-20% 16V
C417, C418	2	5213601091	CAP. EL.	1UFM +/-20% 50V
C419, C420	2	5222110491	CAP. POLYESTER	0.10MFJ +/-20% 50V
C423-C428	6	5222110491	CAP. POLYESTER	0.10MFJ +/-20% 50V
C501, C502	2	5210308100	CAP. EL. 25x50	6800UFM +/-20% 50V
C503	1	5272222301	CAP. METALLIZED P.E P=10	22000PFK +/-10% 250V
D401-D404	4	6613003030	DIODE SWITCHING ITT	1N4148
D405, D406	2	6615006242	DIODE SWITCHING HIT	HZ15-2-TA
D407, D408	2	6613003030	DIODE SWITCHING ITT	1N4148
D409, D410	2	6615019740	DIODE ZENER HIT	HZ2C2-TA
D411-D414	4	6613007141	DIODE SWITCHING HIT	1SS81 200V 1A T=52mm .1
D415-D418	4	6613003030	DIODE SWITCHING ITT	1N4148
D501-D504	4	6611000800	DIODE RECTIFIER GIT	1N5401 100V 3.0A G
F501, F502	2	5554307501	FUSE UL/CSA 5.2 x 20 SMT5	125V 5A MEDIUM BLOW A1
F501, F502	2	5554307500	FUSE UL/CSA 5.2 x 20 S5T5	250V 5A SEMKO C
L401, L402	2	5562000800	COIL SPRING	
P410	1	5556103308	CONNECTOR	
P411	1	5556102003	3P MALE WAFER	
Q401, Q402	2	6621034501	TR NPN HF	2SC3067G VCEO=120V IC=50mA
Q403, Q404	2	6623002050	TR PNP HF	2SA1015-Y TPE2 TAPING
Q405, Q406	2	6621016701	TR NPN HF	2SC2240-GR LOW NOISE
Q407, Q408	2	6621015332	TR NPN HF	2SA1815-Y TPE2
Q409, Q410	2	6623005000	TR PNP HF	2SA970-GR
Q411	1	6623003200	TR PNP HF	2SA1380D/E
Q411H	1	5545306910	HEAT SINK (S)	L=21
Q411M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC	
Q412	1	6623003200	TR PNP HF	2SA1380D/E
Q412H	1	5545306910	HEAT SINK (S)	L=21
Q412M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC	
Q413, Q414	2	6621034600	TR NPN HF	2SC3423-Y PC=1.2W HFE=120-24
Q415	1	6621016900	TR NPN HF	2SC3502D/E W/IS-126
Q415H	1	5545306910	HEAT SINK (S)	L=126
Q415M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC	
Q416	1	6621016900	TR NPN HF	2SC3502D/E W/IS-126
Q416H	1	5545306910	HEAT SINK (S)	L=126
Q416M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC	
Q417	1	6621035000	TR NPN HF	C RUD 3008 TS ZN-CC
Q417M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC	2SC2344-E M:IS-313A B:M
Q418	1	6621035000	TR NPN HF	
Q418M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC	2SC2344-E M:IS-313A B:M

SYMBOL NO.	Q'TY	PARTS NO.	DESCRIPTION	SPECIFICATION		
Q419	1	6623011600	TR PNP HF	2SA1011-E M:IS-313A B:M		
Q419M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC			
Q410	1	6623011600	TR PNP HF	2SA1011-E M:IS-313A B:M		
Q420M	1	7033161152	SCREW BRB M3.0x08 S-ZN-CC			
Q421	1	6622003100	TR PNP LF	MJ15022		
Q421N	2	7076170012	NUT ISO N3.0(2.4H) S-ZN-CC			
Q421P	2	7098160002	SPRING WASHER SW3 S-ZN-CC	D3.1xD5.9x0.7T		
Q421S	2	7006171612	SCREW ISO PB M3x12 S-ZN-CC			
Q421T	2	7101200302	WASHER TOOTH LOCK-EXT M3.0	M3.0 S-ZN-CC		
Q421W	2	5547528700	TRANSISTOR WASHER			
Q422	1	6622003100	TR PNP LF	MJ15022		
Q422N	2	7076170012	NUT ISO N3.0(2.4H) S-ZN-CC			
Q422P	2	7098160002	SPRING WASHER SW3 S-ZN-CC	D3.1xD5.9x0.7T		
Q422S	2	7006171612	SCREW ISO PB M3x12 S-ZN-CC			
Q422T	2	7101200302	WASHER TOOTH LOCK-EXT M3.0	M3.0 S-ZN-CC		
Q422W	2	5547528700	TRANSISTOR WASHER			
Q423	1	6624002000	TR PNP LF	MJ15023		
Q423N	2	7076170012	NUT ISO N3.0(2.4H) S-ZN-CC			
Q423P	2	7098160002	SPRING WASHER SW3 S-ZN-CC	D3.1xD5.9x0.7T		
Q423S	2	7006171612	SCREW ISO PB M3x12 S-ZN-CC			
Q423T	2	7101200302	WASHER TOOTH LOCK-EXT M3.0	M3.0 S-ZN-CC		
Q423W	2	5547528700	TRANSISTOR WASHER			
Q424	1	6624002000	TR PNP LF	MJ15023		
Q424N	2	7076170012	NUT ISO N3.0(2.4H) S-ZN-CC			
Q424P	2	7098160002	SPRING WASHER SW3 S-ZN-CC	D3.1xD5.9x0.7T		
Q424S	2	7006171612	SCREW ISO PB M3x12 S-ZN-CC			
Q424T	2	7101200302	WASHER TOOTH LOCK-EXT M3.0	M3.0 S-ZN-CC		
Q424W	2	5547528700	TRANSISTOR WASHER			
R401, R402	2	5142122290	RES. CARBON FILM	2K2	1/6W	
R403, R404	2	5142122390	RES. CARBON FILM	22K	1/6W	
R405, R406	2	5142147190	RES. CARBON FILM	470	1/6W	
R407, R408	2	5142115390	RES. CARBON FILM	15K	1/6W	
R409, R410	2	5142110290	RES. CARBON FILM	1K	1/6W	
R413, R416	4	5142118290	RES. CARBON FILM	1K8	1/6W	
R417, R418	2	5142110290	RES. CARBON FILM	1K	1/6W	
R419, R420	2	5142115390	RES. CARBON FILM	15K	1/6W	
R421, R424	4	5142110190	RES. CARBON FILM	100	1/6W	
R425, R426	2	5142112290	RES. CARBON FILM	1K2	1/6W	
R427, R428	2	5142147190	RES. CARBON FILM	470	1/6W	
R429, R430	2	5142110390	RES. CARBON FILM	10K	1/6W	
R431, R432	2	5142147190	RES. CARBON FILM	470	1/6W	
R433, R434	2	5142122290	RES. CARBON FILM	2K2	1/6W	
R437, R438	2	5142168290	RES. CARBON FILM	6K8	1/6W	
R439, R440	2	5142147290	RES. CARBON FILM	4K7	1/6W	
R441, R442	2	5133839096	RES. FUSEABLE	39	1/4W	
R443, R444	2	5142122290	RES. CARBON FILM	2K2	1/6W	
R445, R446	2	5142168190	RES. CARBON FILM	680	1/6W	
R449, R450	2	5133833096	RES. FUSEABLE	33	1/4W	
R453, R454	2	5142133190	RES. CARBON FILM	330	1/6W	
R455, R458	4	5136003200	RES. METAL PLATE CEMENT	0.22	5W	
R459, R460	2	5130339903	RES. METAL OXIDE FILM MINI	3.9	1W	
R461, R462	2	5130310003	RES. METAL OXIDE FILM MINI	10	1W	
R463	1	5142168290	RES. CARBON FILM	6K8	1/6W	
R464, R465	2	5142139090	RES. CARBON FILM	39	1/6W	
VR447, 448	2	5162160420	RES. VR PNO6FB221AR	220 OHM	F5x5	
W501-W504	4	5547032210	FUSE CLIP (5.2)			
C445, C446	3	5090906159	SPEAKER TERMINAL PCB BLOCK			
W403	2	5231810300	CAP. CERAMIC	.01uFZ	Z	50V
W403	1	5556205420	SPEAKER TERMINAL	A1		
W403	1	5556205420	SPEAKER TERMINAL	C		
C433	3	5090906161	IN/OUT JACK PCB BLOCK			
C603-C606	1	5213322091	CAP. EL.	22UFM	+/-20%	16V
C613, C614	4	5247068091	CAP. CERAMIC CC45	68PFJ	+/- 5%	50V
C615, C616	2	5236110491	CAP. POLYESTER	0.1UFK	+/-10%	50V
C617, C618	2	5213447091	CAP. EL.	47UFM	+/-20%	25V
D607, D608	2	5213222091	CAP. EL.	22UFM	+/-20%	16V
Q601	1	6644066700	DIODE ZENER	HZ18-2-TA		
Q604	1	6621015332	IC LINEAR	JRC2068		
Q605	1	6623002050	TR. NPN HF	2SC1815-Y	TPE2	
R601, R602	2	5142110290	TR. PNP HF	2SA1015-Y	TPE2 TAPING	
R605, R608	4	5142110490	RES. CARBON FILM	1K	1/6W	
R609, R610	2	5142110290	RES. CARBON FILM	100K	1/6W	
R616, R617	2	5142110390	RES. CARBON FILM	1K	1/6W	
R619, R620	2	5133810103	RES. FUSIBLE	10K	1/6W	
S401, S402	2	5554439900	SLIDE SWITCH	100	1/4W	
VR601, 602	2	5169010532	VR.	20KB	TT	RK09K1130008
W601, W602	2	5556207600	2P JACK-RCA			
B501	1	5090406068	POWER SWITCH PCB ASS'Y			
C504	1	5090906162	POWER SWITCH PCB BLOCK			
S501	1	5553135600	POWER SWITCH PCB (69x95)			
S501	1	5230102701	CAP. CERAMIC	4700PFM	+/-20%	400V
S501	1	5554440000	POWER SWITCH			
D505	1	5090906163	POWER LED PCB BLOCK			
D506	1	6611007230	DIODE RECTIFIER	1N4002	100V	1A T=26MM
R501	1	6618017300	DIODE LED	2MM	GREEN	
R501	1	5142147290	RES. CARBON FILM	4K7	1/6W	

## PACKING DIAGRAM



ITEM	PARTS NO.	PARTS NAME	Q'TY
1	9520910155	EPS PAD FRONT	1
2	6520910255	EPS PAD REAR	1
3	9530680155	EPE BAG	1
4	5535122552	OWNER'S MANUAL	1
5	9510910155	INNER CARTON	1