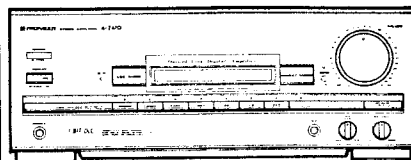


# Service Manual

**PIONEER**  
The Art of Entertainment



ORDER NO.  
ARP2157

STEREO AMPLIFIER

# A-Z470

MODEL A-Z470 HAS FOLLOWING VERSIONS :

Type	Power requirement	Export destination
HE	AC220V, 240V(switchable) *	European continent
HB	AC220V, 240V(switchable) *	United Kingdom
HEWZIW	AC220V, 240V(switchable) *	Germany and Italy

\* : Change the primary wiring.

- This manual is applicable to the A-Z470/HE, HB and HEWZIW types.
- As to the HB and HEWZIW types, refer to page 46.
- This product is a component of a system. As to the system composition, refer to the system manual.
- This product does not function properly when independent ; to avoid malfunctions, be sure to connect it to the prescribed system component, otherwise damage may result.
- Ce manuel pour le service comprend les explications de réglage en français.
- Este manual de servicio trata del método ajusto escrito en español.

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FV JAN. 1991 Printed in Japan.

# 1. SPECIFICATIONS

## Amplifier Section

Continuous Power Output (DIN) .....	70 W + 70 W
	(1 kHz, T.H.D. 1 %, 8 Ω)
Music power (DIN) .....	110 W + 110 W (1 kHz, T.H.D. 1 %, 8 Ω)
D/A converter section	
Signal-to-Noise Ratio .....	More than 96 dB (EIAJ)
Dinamic range .....	More than 94 dB (EIAJ)
Frequency range .....	25 Hz to 20 kHz
Total Harmonic Distortion (1 kHz, 35 W, 8 Ω)..No more than 0.06 %**	
Input sensitivity	
PHONO (MM) .....	2.5 mV
MIC .....	0.25 mV
VCR .....	150 mV
LD .....	250 mV
Output level	
DAT, VCR .....	150 mV
MUTING .....	-∞

## Power Supply/Miscellaneous

Power requirements .....	a.c.240 Volts~, 50/60 Hz
Power consumption .....	360 W
AC outlets switched (x 1) .....	50 W
Dimensions .....	360 (W) x 343 (D) x 135.5 (H) mm
Weight (without package) .....	8.6 kg

## Accessories

Operating instructions .....	1
Remote control unit .....	1
Dry cell batteries "AAA" (IEC R03/UM-4) .....	2

\*\* Measured By Audio Spectrum Analyzer.

# 2. EXPLODED VIEWS, PACKING AND PARTS LIST

## NOTES:

- *Parts without part number cannot be supplied.*
- *Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*
- *The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*

## 2.1 PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	VOL KNOB(VOLUME)	AAB1117		50	PLATE	AMR2133
	2	ROTARY KNOB(MIC LEVEL, BALANCE)	AAB1130		51	SASH	
	3	POWER BUTTON	AAD1595		52	CHASSIS	
	4	BOTTUN L(LSS MODE)	AAD1596		53	REAR PANEL	
	5	BUTTON L(DIRECT MODE)	AAD1597		54	BOTTOM PLATE	
	6	KIN BUTTON(MUTING, LSS SET))	AAD1682		55	BONNET CASE	ANE1208
	7	FUNCTION BUTTON	AAD1968		56	TRANS. HOLDER	
	8	BUTTON S(SPEAKERS)	AAD1970		57	HEAT SINK HOLDER	
	9	LENS L	AAK1757		58	VOLUME HOLDER	
	10	LENS S	AAK1758		59	HOLDER	
	11	LENS	AAK1759		60	HOLDER A	
	12	SHEET			61	HEAT SINK	
	13	SHEET			62	HEAT SINK	
	14	PVC SHEET			63	GROUND PLATE	
	15	PANEL	AAK2116		64	SHIELD CASE	
	16	.....			65	SHIELD COVER	
	17	NAME PLATE(PLASTIC)			66	OPERATING INSTRUCTIONS (Dutch, Swedish, Spanish, Portuguese)	ARC1249
	18	NAME PLATE			67	OPERATING INSTRUCTIONS (English, German, French, Italian)	ARE1181
	19	FUSE CARD			68	WARRANTY CARD	
	20	SCREW (STEEL)	ABA-283		69	.....	
	21	SCREW	ABA-298		70	DAC ASSEMBLY	AWK1385
	22	SCREW (STEEL)	ABA1009		71	MIC ASSEMBLY	
	23	SCREW (STEEL)	ABA1011		72	HEAD PHONE ASSEMBLY	
	24	SCREW	ABA1018		73	SUB TRANS ASSEMBLY	
	25	SCREW (STEEL)	ABA1047		74	POWER VR ASSEMBLY	
	26	SCREW (STEEL)	ABA1050		75	RELAY ASSEMBLY	
	27	SCREW (STEEL)	ABA1072		76	SP TERMINAL ASSEMBLY	
	28	SCREW	ABA1098		77	FUSE ASSEMBLY	
	29	SPRING	ABH1032		78	DISPLAY ASSEMBLY	AWZ3361
△	30	AC POWER CORD	ADG1019	●	79	AF ASSEMBLY	AWZ3403
	31	RUBBER CUSHION		●	80	POWER ASSEMBLY	AWZ2747
	32	.....		●	81	STANDBY ASSEMBLY	AWZ3505
	33	NYLON RIVET	AEC-510	●	82	DSP ASSEMBLY	AWK1445
	34	STRAIN RELIEF	AEC-882		83	REMOTE CONTROLLER (CU-AZ020)	AXD1194
	35	PCB SUPPORT			84	SCREW	BBZ26P060FMC
	36	CUSHION			85	SCREW	BBZ26P080FMC
	37	PCB SPACER			86	NUTS	NK90FZB
	38	.....			87	FOOT(PLASTIC)	RXA1276
	39	BATTERY (R03, AAA)			88	.....	
	40	FRONT PAD	AHA1272	△	89	FU1 FUSE(T2.5A)	AEK-403
	41	REAR PAD	AHA1273	△	90	FU2 FUSE(T2A)	AEK-017
	42	PACKING CASE	AHD2008	△	91	FU3 FUSE(T1.6A)	AEK-405
	43	LITERATURE BAG			92	FU4 FUSE(T1.6A)	AEK-405
	44	PACKING SHEET	AHG1016		93	FU5 FUSE(T2.5A)	AEK-403
	45	TERMINAL SCREW			94	T1 POWER TRANSFORMER	ATS1335
	46	MOUNTING PLATE			95	BATTERY COVER	AZN2072
	47	FRONT PANEL ASSY	AMB1761				
	48	PCB MOULD					
	49	LEG ASSY(S)					

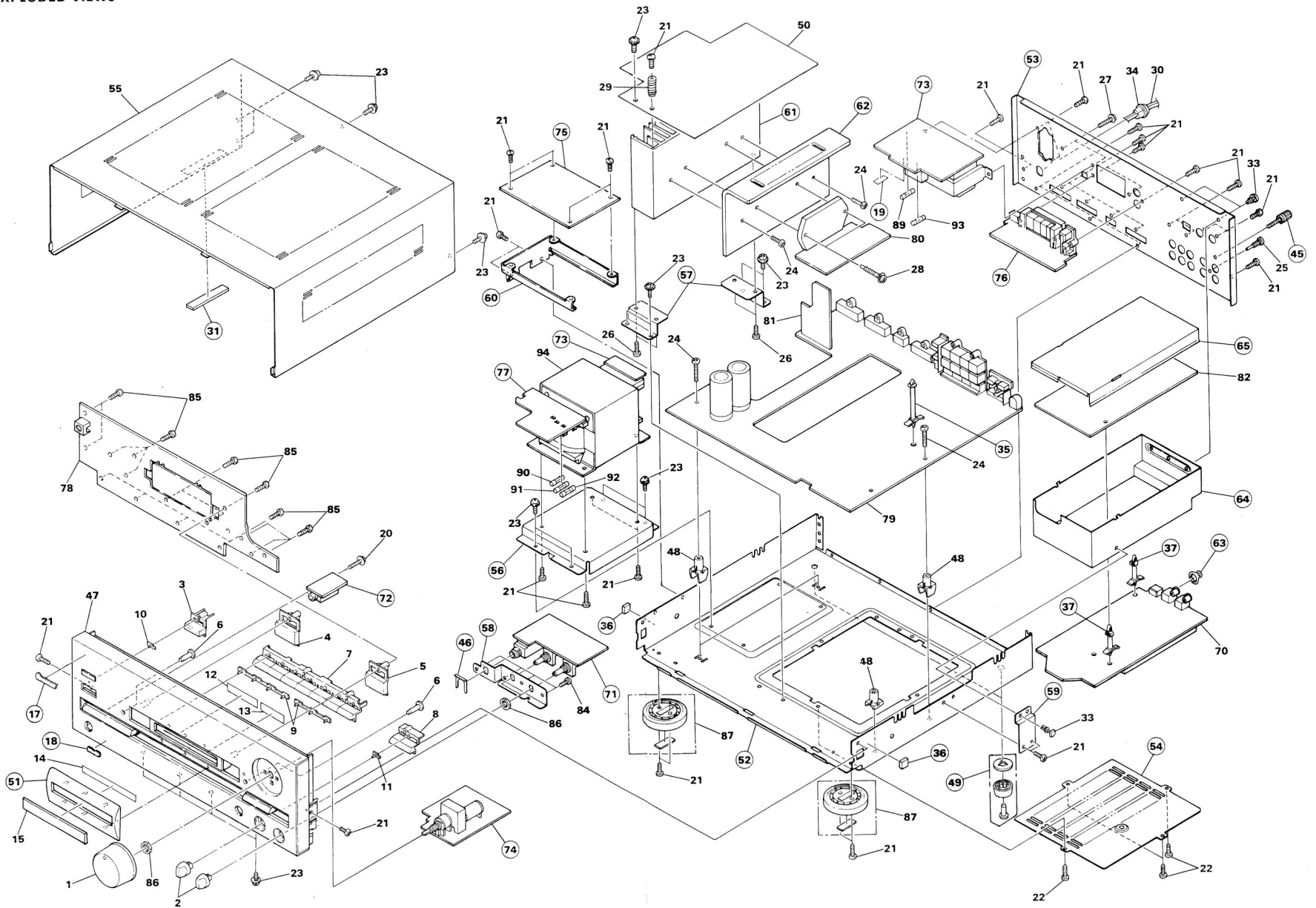
2. 2 EXPLODED VIEWS

A

B

C

D



1

2

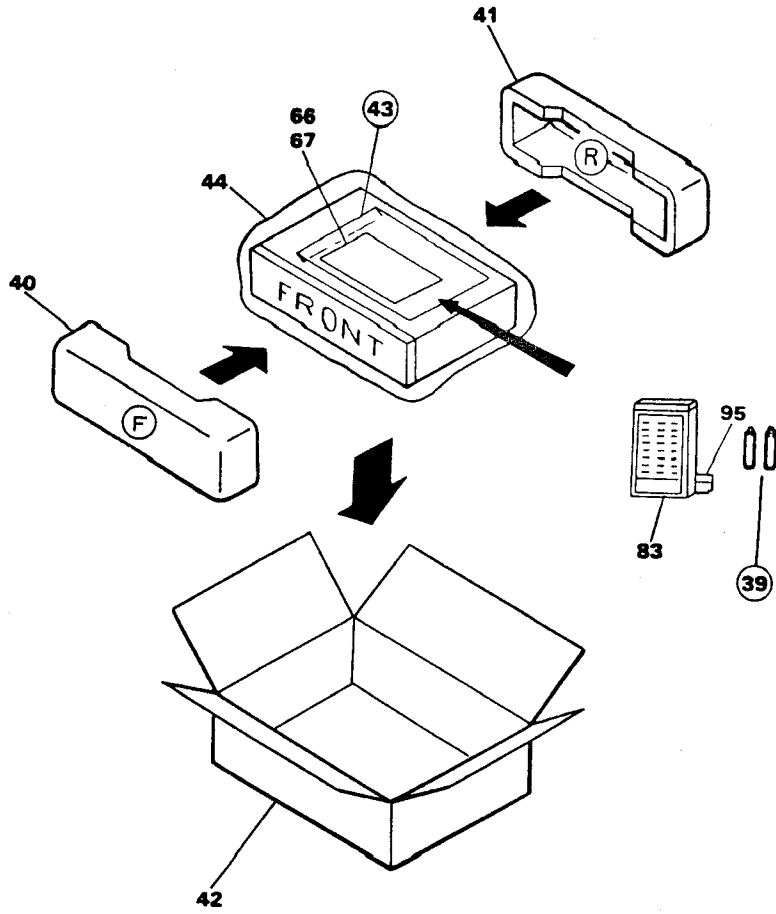
3

4

5

6

2.3 PACKING



A

B

C

D

### 3. P.C.B's PARTS LIST

**NOTES:**

- Parts without part number cannot be supplied.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

**Ex.1** When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	56 × 10 <sup>1</sup>	561	.....	RD1/4PS	5	6	1	J
47kΩ	47 × 10 <sup>3</sup>	473	.....	RD1/4PS	4	7	3	J
0.5Ω	0R5		.....	RD2H	0	R	5	K
1Ω	010		.....	RD1P	0	1	0	K

**Ex.2** When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	562 × 10 <sup>1</sup>	5621	.....	RD1/4SR	5	6	2	1	F
--------	-----------------------	------	-------	---------	---	---	---	---	---

Mark	Symbol & Description	Part No.	Mark	Symbol & Description	Part No.
<b>DAC ASSEMBLY (AWK1385)</b>			C810	ELECTR.CAPACITOR	CEAS010M50
<b>SEMICONDUCTORS</b>			C811	AUDIO FILM CAPACITOR	CFTXA224J50
IC801	LOGIC IC	TC74HCU04AP	C812	ELECTR.CAPACITOR	CEAS470M10
IC802	DIGITAL I.F. IC	PD0037	C813	CERAMIC CAPACITOR	ACG1021
IC803	IC DIGITAL FILTER	PD0060	C814	CERAMIC CAPACITOR	CCDCH220J50
IC804	LOGIC IC	TC74HC32AP	C815	ELECTR.CAPACITOR	CEAS101M10
IC805	D/A CONVERTER	SAA7350GP	C816	CERAMIC CAPACITOR	ACG1022
IC806,IC807	IC	NJM072D-E	C818	ELECTR.CAPACITOR	CEAS101M10
IC808	OP AMP IC	RC4558DXP	C819	MICA CAPACITOR	CMA220J500
Q801,Q802	TRANSISTOR	RN2203	C820	ELECTR.CAPACITOR	CEAS470M10
Q804,Q805	TRANSISTOR	2SC2458	C821,C822	CERAMIC CAPACITOR	CKDYX473M16
Q806,Q807	TRANSISTOR	2SC2878	C823	CERAMIC CAPACITOR	ACG1021
Q808,Q809	TRANSISTOR	RN1203	C824	ELECTR.CAPACITOR	CEAS010M50
Q810	TRANSISTOR	RN2203	C825	ELECTR.CAPACITOR	CEAS101M10
Q811	TRANSISTOR	RN2201	C826	CERAMIC CAPACITOR	ACG1021
Q812	TRANSISTOR	RN2203	C827	CERAMIC CAPACITOR	CKDYX473M16
D801-D810	DIODE	HSS104-02	C828	ELECTR.CAPACITOR	CEAS470M10
D811	ZENER DIODE	RD6.2ESB	C829	CERAMIC CAPACITOR	CKDYX473M16
<b>COIL</b>			C830	ELECTR.CAPACITOR	CEAS470M10
L801	AXIAL INDUCTOR	LAU330K	C831,C832	CERAMIC CAPACITOR	ACG1019
L803	BEAD FILTER	ATX1008	C833,C834	CERAMIC CAPACITOR	CCDSL390J50
L804	FERRITE BEAD	ATX1008	C835	CERAMIC CAPACITOR	ACG1019
L807,L808	AXIAL INDUCTOR	LAU010M	C836	CERAMIC CAPACITOR	CKDYB471K50
L809	FERRITE BEAD	ATX1008	C837,C838	CERAMIC CAPACITOR	CCDSL390J50
L810-L813	AXIAL INDUCTOR	LAU010M	C839,C840	CERAMIC CAPACITOR	CKDYX473M16
L814	FERRITE BEAD	ATX1008	C841,C842	ELECTROLYTIC CAPACIT	CEAS470M10
L817	AXIAL INDUCTOR	LAU010M	C843	CERAMIC CAPACITOR	CKDYX473M16
L818	FERRITE BEAD	ATX1008	C844,C845	CERAMIC CAPACITOR	CKDYB222K50
L819,L820	AXIAL INDUCTOR	LAU010M	C847	ELECTR.CAPACITOR	CEAS101M10
L821,L822	AXIAL INDUCTOR	LAU220K	C848	CERAMIC CAPACITOR	CKDYX473M16
L823-L826	AXIAL INDUCTOR	LAU010M	C849-C852	ELECTROLYTIC CAPACIT	CEAS470M10
L827	FERRITE BEAD	ATX1008	C853,C854	CERAMIC CAPACITOR	CKDYX473M16
<b>CAPACITORS</b>			C855-C858	CERAMIC CAPACITOR	ACG1017
C805	CERAMIC CAPACITOR	CKDYX473M16	C859,C860	MYLOR FILM CAPACITOR	CQMA102J50
C806	CERAMIC CAPACITOR	ACG1021	C861,C862	PL.STYRENE CAPACITOR	CQSA101J50
C807	ELECTR.CAPACITOR	CEAS010M50	C863,C864	ELECTROLYTIC CAPACIT	CEYA2R2M50
C808	CERAMIC CAPACITOR	ACG1021	C865,C866	MYLOR FILM CAPACITOR	CQMA683J50
C809	ELECTR.CAPACITOR	CEAS101M10	C867,C868	CERAMIC CAPACITOR	ACG1018
			C869,C870	ELECTROLYTIC CAPACIT	CEYA2R2M50
			C871-C876	ELECTR.CAPACITOR	CEAS470M10

Mark	Symbol & Description	Part No.
<b>RESISTORS</b>		
	R870-R873 CARBON FILM RESISTOR Other resistors	RD1/4PM390J RD1/8PM□□□J
<b>OTHERS</b>		
	DIGITAL JACK 1-P PHOTO SENSOR MODULE CN1 CONNECTOR(11P) CN5 CONNECTOR(8P) T801 OSC TRANSFORMER	AKB1073 AKX1015 KPE11 KPE8 ATX1003
<b>MIC ASSEMBLY</b>		
<b>SEMICONDUCTORS</b>		
	IC601 OP-AMP IC Q601,Q602 TRANSISTOR D601,D602 DIODE	RC4558DXP 2SC2458 HSS104-02
<b>CAPACITORS</b>		
	C601 ELECTROLYTIC CAPACIT C602 CERAMIC CAPACITOR C603 ELECTROLYTIC CAPACIT C604 CERAMIC CAPACITOR C605 AUDIO FILM CAPACITOR  C606 CERAMIC CAPACITOR C607 ELECTROLYTIC CAPACIT C608 ELECTR.CAPACITOR C609,C610 ELECTR.CAPACITOR C611 CERAMIC CAPACITOR  C612,C613 ELECTROLYTIC CAPACIT	CEJA220M16 ACG1019 CEJA3R3M50 ACG1017 CFTXA474J50  CKCYB681K50 CEJA100M25 CEJA010M50 CEAS470M10 CKCYF103Z50  CEJA100M25
<b>RESISTORS</b>		
	R614,R615 CARBON FILM RESISTOR VR601 VARIABLE(100K-X1) VR602 VARIABLE( 10K-X1) Other resistors	RD1/4PM390J ACS1026 ACS1025 RD1/8PM□□□J
<b>OTHERS</b>		
	JACK	AKN1017
<b>HEAD PHONE ASSEMBLY</b>		
<b>CAPACITORS</b>		
	C451 CERAMIC CAPACITOR	CKDYX104M25
<b>RESISTORS</b>		
△	R453-R456 METAL OXIDE RESISTOR	RS2LMF331J
<b>OTHERS</b>		
	JACK	AKN1010
<b>SUB TRANS ASSEMBLY</b>		
<b>SEMICONDUCTORS</b>		
△	D191,D192 ZENER DIODE	RD6.2ESB3
<b>CAPACITORS</b>		
△	C191,C192 CKA (0.01/AC400V)	ACG1003
<b>OTHERS</b>		
△	AC SOCKET 1-P SOCKET 8-P RY191 RELAY T191 POWER TRANSFORMER	AKP1034 AKP1045 ASR1024 ATT1115

Mark	Symbol & Description	Part No.
<b>POWER VR ASSEMBLY</b>		
<b>SEMICONDUCTORS</b>		
	IC651 OP-AMP IC	RC4558DXP
<b>CAPACITORS</b>		
	C651,C652 ELECTR.CAPACITOR C653 ELECTR.CAPACITOR C654 ELECTROLYTIC CAPACIT C655 CERAMIC CAPACITOR C656 ELECTROLYTIC CAPACIT C657,C658 CERAMIC CAPACITOR C661,C662 ELECTR.CAPACITOR	CEAS100M25 CEAS470M10 CEYA470M25 CKCYX103M25 CEYA470M25 CCCSL390J50 CEAS100M50
<b>RESISTORS</b>		
	R659-R661 CARBON FILM RESISTOR VR651 VARIABLE RESISTOR Other resistors	RD1/4PM390J ACX1027 RD1/8PM□□□J
<b>OTHERS</b>		
	CN2 CONNECTOR(15P)	KPE15
<b>◎DISPLAY ASSEMBLY (AWZ3361)</b>		
<b>SEMICONDUCTORS</b>		
	IC701 SYSTEM CONTROL IC Q701-Q704 TRANSISTOR Q705 TRANSISTOR Q711 TRANSISTOR Q712,Q713 TRANSISTOR  Q716 TRANSISTOR Q717,Q718 TRANSISTOR Q719 TRANSISTOR Q720 TRANSISTOR Q721-Q723 TRANSISTOR  D701,D702 DIODE D703 LED(RED) D704-D706 DIODE D707,D708 LED(RED) D710-D715 LED(RED)  D719-D721 DIODE D722 LED(RED) D723 DIODE D725,D726 LED D727 LED  D728 LED(RED) D729 LED D730,D731 DIODE	PD5160A DTA124ES DTA143ES DTC124ES 2SC2458  DTC124ES 2SC2458 2SA1048 2SC2458 2SA1048  HSS104-02 AEL1099 HSS104-02 AEL1099 AEL1099  HSS104-02 AEL1099 HSS104-02 AEL1091 AEL1074  AEL1038 AEL1091 HSS104-02
<b>SWITCHES</b>		
	S701-S710 SWITCH S712-S714 SWITCH	ASG1029 ASG1029
<b>COIL</b>		
	L701 AXIAL INDUCTOR	LAU101K
<b>CAPACITORS</b>		
	C701 CERAMIC CAPACITOR C702 ELECTR.CAPACITOR C703,C704 CERAMIC CAPACITOR C705 CERAMIC CAPACITOR C706 ELECTR.CAPACITOR	CKCYX473M25 CEAS221M10 CKCYX103M25 CKCYB102K50 CEAS010M50

Mark	Symbol & Description	Part No.
C707	CEA (47000/5.5V)	ACH1070
C708	ELECTR.CAPACITOR	CEAS4R7M50
C709,C710	CERAMIC CAPACITOR	ACG1021
C711	CERAMIC CAPACITOR	CKCYX473M25
<b>RESISTORS</b>		
R742	RESISTOR ARRAY 100K	RA5T104J
R744	RESISTOR ARRAY(100K)	RA6T104J
R761	RESISTOR ARRAY (10K)	RA4T104J
	Other resistors	RD1/8PM□□□J
<b>OTHERS</b>		
X701	CERAMIC RESONATOR SOCKET(10P)	ASS1025
	REMOTE RECEIVER UNIT	AKP1044
		AXX1010
<b>RELAY ASSEMBLY</b>		
<b>SEMICONDUCTORS</b>		
Q451	TRANSISTOR	DTC124ES
Q452,Q453	TRANSISTOR	2SD438
Q454	TRANSISTOR	DTC124ES
Q455,Q456	TRANSISTOR	2SD438
D451-D460	ZENER DIODE	RD12ESB3
<b>COILS</b>		
L451,L452	COIL	ATH1004
<b>CAPACITORS</b>		
C461-C464	MYLOR FILM CAPACITOR	CQMA104J50
<b>RESISTORS</b>		
R461-R464	CARBON FILM RESISTOR	RD1/4PMFL100J
R474-476	METAL OXIDE RESISTOR	RS2LMF102J
	Other resistors	RD1/8PM□□□J
<b>OTHERS</b>		
CN451	CONNECTOR(7P)	KPC7
RY451-RY455	RELAY	ASR-112
<b>SP TERMINAL ASSEMBLY</b>		
<b>SWITCHES</b>		
S451	SWITCH	ASH1015
<b>CAPACITORS</b>		
C465	ELECTROLYTIC CAPACIT	CEANP4R7M100
<b>OTHERS</b>		
	PIN JACK(2P)	AKB1039
	SPEAKER TERMINAL 8-P	AKE-111
CN453	JUMPER CONNECTOR	KPC8
<b>POWER ASSEMBLY (AWZ2747)</b>		
<b>SEMICONDUCTORS</b>		
IC401	AUDIO IC	STK4211-5P
<b>CAPACITORS</b>		
C401,402	CERAMIC CAPACITOR	CKDYF472Z50
C403	ELECTR.CAPACITOR	CEAS4R7M50
C404	ELECTROLYTIC CAPACIT	CEHAQ4R7M50
C405,C406	CERAMIC CAPACITOR	CCDSL470J50
C407,C408	ELECTROLYTIC CAPACIT	CEYA101M50

Mark	Symbol & Description	Part No.
C409,410	CERAMIC CAPACITOR	CKDYB102K50
C411,C412	ELECTR.CAPACITOR	CEAS010M50
C413,C414	ELECTR.CAPACITOR	CEAS220M50
C415,C416	ELECTR.CAPACITOR	CEAS470M50
C417,C418	ELECTR.CAPACITOR	CEAS101M25
<b>RESISTORS</b>		
C423	ELECTR.CAPACITOR	CEAS470M50
C425,C426	CERAMIC CAPACITOR	CCDSL030C50
C427-C430	ELECTROLYTIC CAPACIT	CEYA220M50
<b>RESISTORS</b>		
R405,R406	CARBON FILM RESISTOR	RDR1/4PM563
R411-R414	CARBON FILM RESISTOR	RD1/2PM472J
R417,R418	CARBON FILM RESISTOR	RD1/4PMFL22
R419	CARBON FILM RESISTOR	RD1/2PM102J
R420	CARBON FILM RESISTOR	RD1/4PMFL10
R421	CARBON FILM RESISTOR	RD1/4PMFL47
R422	CARBON FILM RESISTOR	RD1/4PMFL10
	Other resistors	RD1/8PM□□□
<b>FUSE ASSEMBLY</b>		
<b>CAPACITORS</b>		
C390	MYLOR FILM CAPACITOR	CQMA104K250
<b>AF ASSEMBLY (AWZ3403)</b>		
<b>SEMICONDUCTORS</b>		
IC101	REGULATOR IC	UPC78M05H
IC102	REGULATOR IC	NJM78M56FA
IC103	REGULATOR IC	NJM79M05FA
IC104	REGULATOR IC	UPC78M12H
IC105	MECHANISM DRIVER IC	TA7291S
IC201	OP-AMP IC	RC4558DXP
IC202	LOGIC IC	TC4066BP
IC203	LOGIC IC	MC14052BCP
IC204	OP-AMP IC	M5218ALF
IC205	E-SW IC	LC4966
IC206	LOGIC IC	MC14052BCP
IC207	OP-AMP IC	RC4558DXP
IC208	OP-AMP IC	M5218ALF
Q101	TRANSISTOR	2SB560
Q102	TRANSISTOR	2SA970
Q103-Q105	TRANSISTOR	2SC2458
Q106	TRANSISTOR	2SD438
Q107,Q108	TRANSISTOR	DTC124ES
Q551	TRANSISTOR	2SA1048
Q552	TRANSISTOR	2SC2603
Q553	TRANSISTOR	2SA1048
D101	DIODE	RBV602
D102-D107	DIODE	S5566
D108	DIODE	RB152
D109	DIODE	HSS104-02
D110	ZENER DIODE	RD33ESB2
D111	ZENER DIODE	RD6.2ESB
D112,D113	DIODE	HSS104-02
D114	ZENER DIODE	RD3.0ESB1
D115	DIODE	HSS104-02



Mark	Symbol & Description	Part No.
D116	ZENER DIODE	RD4.7ESB
D117	DIODE	HSS104-02
D158	ZENER DIODE	RD12ESB3

### CAPACITORS

C101	CKA (0.01/AC250V)	ACG1005-A
C102,C103	CERAMIC CAPACITOR	CKDYF103Z50
C104,C105	ELECTROLYTIC CAPACIT	ACH1031
C106,C107	ELECTR.CAPACITOR	CEAS222M16
C108	ELECTR.CAPACITOR	CEAS471M50

C109	ELECTR.CAPACITOR	CEAS332M25
C110	ELECTR.CAPACITOR	CEHAQ101M50
C111,C112	ELECTR.CAPACITOR	CEAS101M50
C113	ELECTROLYTIC CAPACIT	CEHAQ220M50
C114	ELECTROLYTIC CAPACIT	CEHAQ470M50

C115	ELECTR.CAPACITOR	CEHAQ101M50
C116	ELECTROLYTIC CAPACIT	CEHAQ221M10
C117	ELECTR.CAPACITOR	CEAS100M25
C118	CERAMIC CAPACITOR	CKCYX103M25
C119	ELECTR.CAPACITOR	CEAS221M10

C120	ELECTR.CAPACITOR	CEAS010M50
C121	CERAMIC CAPACITOR	ACG1021-A
C160	ELECTR.CAPACITOR	CEAS101M50
C201,C202	CERAMIC CAPACITOR	ACG1017-A
C203,C204	ELECTR.CAPACITOR	CEAS2R2M50

C205,C206	ELECTR.CAPACITOR	CEAS3R3M50
C206	ELECTR.CAPACITOR	CEAS3R3M50
C207,C208	CERAMIC CAPACITOR	ACG1017-A
C209,C210	CERAMIC CAPACITOR	CKCYB152K50
C211,C212	CERAMIC CAPACITOR	CKCYB562K50

C213,C214	ELECTR.CAPACITOR	CEAS010M50
C215,C216	ELECTR.CAPACITOR	CEAS470M10
C217,C218	ELECTR.CAPACITOR	CEAS4R7M50
C219,C220	ELECTR.CAPACITOR	CEAS100M25
C221,C222	ELECTROLYTIC CAPACIT	CEYA470M50

C223,C224	ELECTR.CAPACITOR	CEAS100M25
C233-C236	ELECTR.CAPACITOR	CEAS100M25
C237	CERAMIC CAPACITOR	CKDYX104M25
C238	CERAMIC CAPACITOR	CKDYF473Z50
C239,C240	ELECTR.CAPACITOR	CEAS2R2M50

C241-C244	ELECTR.CAPACITOR	CEAS100M25
C245	ELECTR.CAPACITOR	CEASR22M50
C247,C248	ELECTROLYTIC CAPACIT	CEYA470M50

### RESISTORS

△	R101,R102	METAL OXIDE RESISTOR	RS2LMFR22J
△	R103	METAL OXIDE RESISTOR	RS2LMF222J
△	R105,R106	CARBON FILM RESISTOR	RD1/4PMF470J
△	R121,R122	METAL OXIDE RESISTOR	RS1LMF8R2J
△	R129	CARBON FILM RESISTOR	RD1/2PMFL2R2J

	R130,R131	CARBON FILM RESISTOR	RD1/2PM472J
	R132-R134	CARBON FILM RESISTOR	RD1/4PM100J
△	R135	CARBON FILM RESISTOR	RD1/4PM100J
△	R136	METAL OXIDE RESISTOR	RS3LMF2R2J
	R217,R218	CARBON FILM RESISTOR	RD1/4PM390J

△	R289,R290	CARBONFILM RESISTOR	RD1/8PM104J
	Other resistors		RD1/8PM□□□J

Mark	Symbol & Description	Part No.
<b>OTHERS</b>		
	PHONO JACK 4-P	AKB-115
	PIN JACK(6P)	AKB1123
	PLUG(10P)	AKM1037
	JACK	AKN-203
	SOCKET(4P)	AKP1046
	SOCKET(14P)	AKP1048
	SOCKET(15P)	AKP1049
	SOCKET(13P)	AKP1052
	SCREW	PBZ30P080FMC

### ●STANDBY ASSEMBLY (AWZ3505)

#### SEMICONDUCTORS

IC151	REGULATOR IC	NJM78M56FAS
Q152	TRANSISTOR	2SB560
Q554	TRANSISTOR	2SD438
D151-D154	DIODE	S5566
D156	ZENER DIODE	RD33ESB2

D157	ZENER DIODE	RD6.2ESB
------	-------------	----------

#### CAPACITORS

C151	ELECTROLYTIC CAPACIT	CEHAQ222M16
C152	ELECTROLYTIC CAPACIT	CEHAQ471M16
C153,C156	ELECTROLYTIC CAPACIT	CEHAQ221M50
C157	ELECTROLYTIC CAPACIT	CEHAQ220M50
C158	ELECTROLYTIC CAPACIT	CEHAQ470M50
C159	ELECTROLYTIC CAPACIT	CEHAQ221M10

#### RESISTORS

△	R151,R152	METAL OXIDE RESISTOR	RS3LMF122J
△	R153	METAL OXIDE RESISTOR	RS2LMF222J
△	R157	CARBON FILM RESISTOR	RD1/4PMFL4R7J
	Other resistors		RD1/8PM□□□J

### DSP ASSEMBLY (AWK1445)

#### SEMICONDUCTORS

IC901-IC903	OP-AMP IC	RC4558DXP
IC904	AD CONVERTER IC	TD6726N
IC905	DSP IC	PD0055
IC906,IC907	MEMORY IC	MB81464-12
IC908	CONTROL MCU	PDG071A

Q901	TRANSISTOR	DTA143ES
D901,D902	DIODE	HSS104-02

#### COILS, FILTERS

F901,F902	FILTER	ATF1071
L901-L903	AXIAL INDUCTOR	LAU330K
L904	AXIAL INDUCTOR	LAUR22M
L905,L906	AXIAL INDUCTOR	LAU220K
L999	AXIAL INDUCTOR	LAU330K

#### CAPACITORS

C901,C902	ELECTR.CAPACITOR	CEAS2R2M50
C903,C904	MYLOR FILM CAPACITOR	CQMA563J50
C905,C906	ELECTR.CAPACITOR	CEAS220M25
C907,C908	PL.STYRENE CAPACITOR	CQSA202J50
C909,C910	CERAMIC CAPACITOR	CCCSL151J50

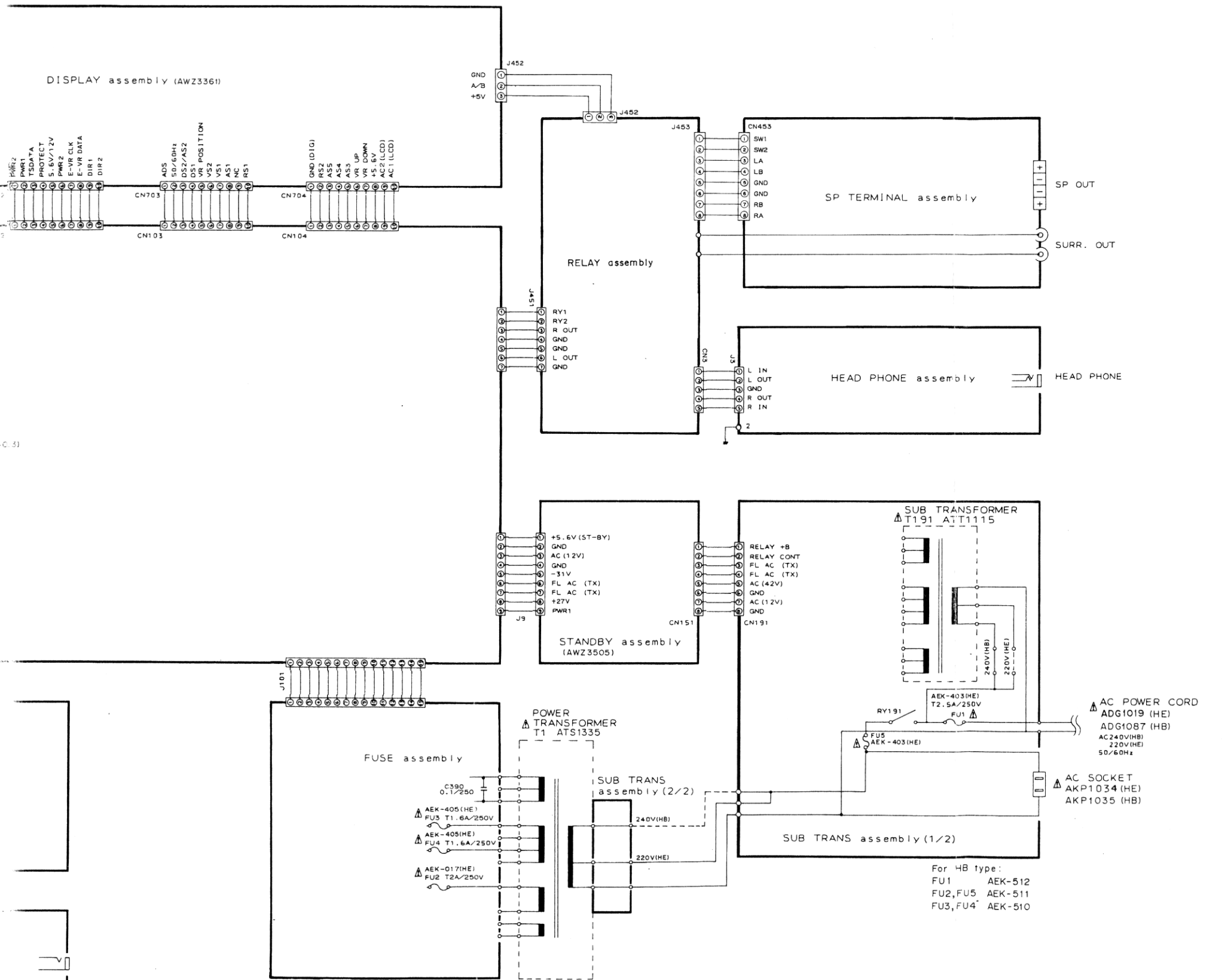
Mark	Symbol & Description	Part No.
C911,C912	CERAMIC CAPACITOR	CCCSL180J50
C913-C916	CERAMIC CAPACITOR	CKCYX473M25
C917,C918	ELECTROLYTIC CAPACIT	CEANP470M16
C919	CERAMIC CAPACITOR	CCDCH100D50
C920	CERAMIC CAPACITOR	CCDCH330J50
<b>C921</b>	<b>CERAMIC CAPACITOR</b>	<b>CKDYF473Z50</b>
C922	CERAMIC CAPACITOR	CCDCH100D50
C923	CERAMIC CAPACITOR	CKDYF473Z50
C924	ELECTR.CAPACITOR	CEAS470M10
C925	CERAMIC CAPACITOR	ACG1022
C926	ELECTR.CAPACITOR	CEAS470M25
C927	CERAMIC CAPACITOR	ACG1022
C928-C930	ELECTR.CAPACITOR	CEAS470M25
C931	ELECTR.CAPACITOR	CEAS010M50
C932	CERAMIC CAPACITOR	ACG1022
C933	ELECTR.CAPACITOR	CEAS101M16
C934	ELECTR.CAPACITOR	CEAS101M50
C935	CERAMIC CAPACITOR	CKDYF473Z50
C936	CERAMIC CAPACITOR	ACG1021
C937,C938	CERAMIC CAPACITOR	CCDCH100D50
C939	CERAMIC CAPACITOR	ACG1022
C940	CERAMIC CAPACITOR	ACG1022
C941	CERAMIC CAPACITOR	CKDYF473Z50
C943,C944	ELECTR.CAPACITOR	CEAS101M50
C945	CERAMIC CAPACITOR	CKDYF473Z50
C947,C948	CERAMIC CAPACITOR	ACG1021

**RESISTORS**

R952,R953	CARBON FILM RESISTOR	RD1/4PM390J
R955	RESISTOR ARRAY (10K)	RA7T103J
VR901	VR	VRTB6VS102
VR902	VR	VRTB6VS102
	Other resistors	RD1/8PM□□□J

**OTHERS**

CN6	CONNECTOR(15P)	KPE15
CN7	CONNECTOR(12P)	KPE12
X901	CRYSTAL RESONATOR	ASS1036
X902	CRYSTAL RESONATOR	ASS1035
X903	CRYSTAL RESONATOR	ASS1015



1. RESISTORS :  
Indicated in  $\Omega$ , 1/8, 1/4W,,  $\pm 5\%$  tolerance unless otherwise noted  
k; k $\Omega$ , M; M $\Omega$ , (F);  $\pm 1\%$ , (G);  $\pm 2\%$ , (K);  $\pm 10\%$ , (M);  
 $\pm 20\%$  tolerance.

2. CAPACITORS :  
Indicated in capacity ( $\mu$ F)/voltage(V) unless otherwise noted p;  
pF. Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT :  
 ; Signal voltage at 70 W + 70 W, 8 $\Omega$  output(1kHz).  
 ; DC voltage (V) at no input signal.  
 Value in ( ) is DC voltage at rated power.  
 ; DC current at no input signal.

4. OTHERS :  
 ; Signal route.  
 ; Adjusting point  
 The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.  
 \* marked capacitors and resistors have parts numbers.  
 This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

5. SWITCHES :  
DISPLAY ASSEMBLY

- |                 |                            |
|-----------------|----------------------------|
| S701 : POWER    | S708 : CD                  |
| S702 : LSS SET  | S709 : LD                  |
| S703 : LSS MODE | S710 : VCR                 |
| S704 : PHONO    | S712 : DIRECT MODE         |
| S705 : TUNER    | S713 : MUTING              |
| S706 : TAPE     | S714 : SPEAKERS A/B OR A+B |
| S707 : DAT      |                            |

A

B

C

D

# 4. SCHEMATIC DIAGRAMS AND P.C.BOARD CONNECTION DIAGRAMS

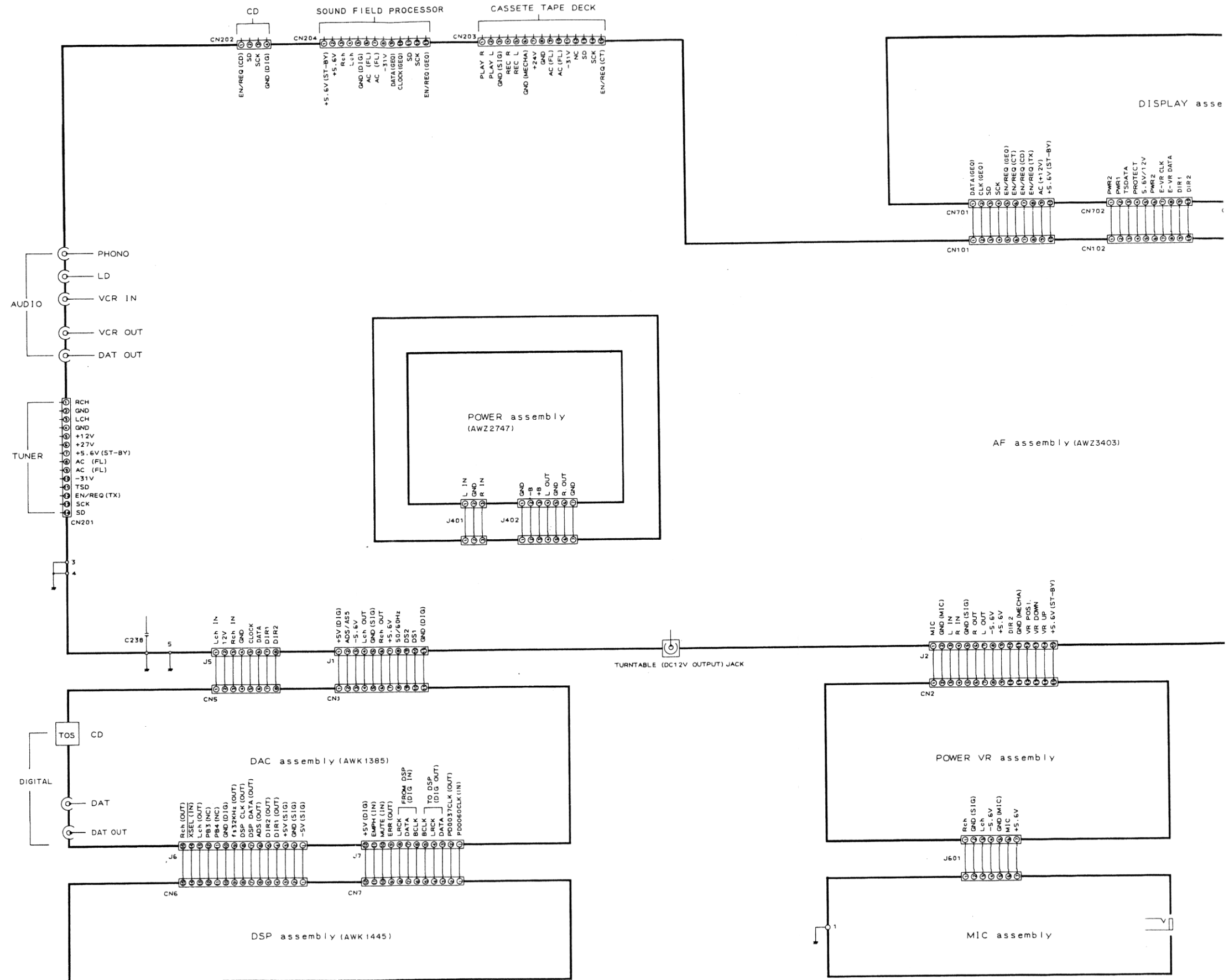
## 4.1 OVER ALL SCHEMATIC DIAGRAM

A

B

C

D



1

2

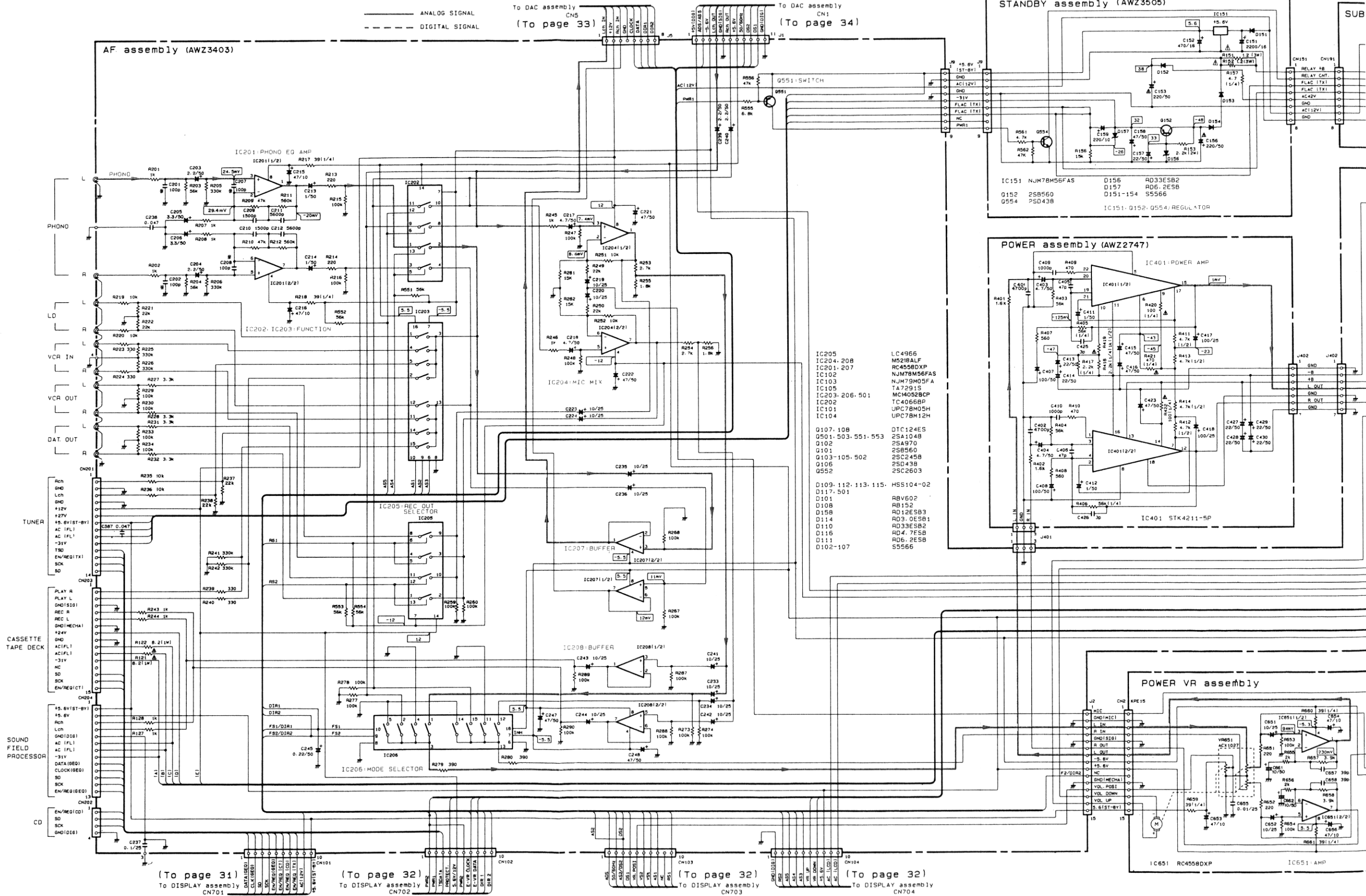
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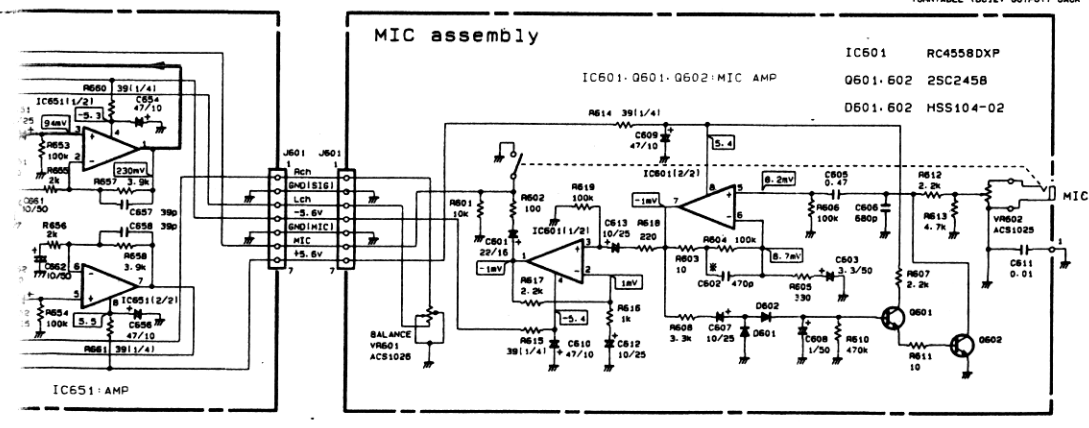
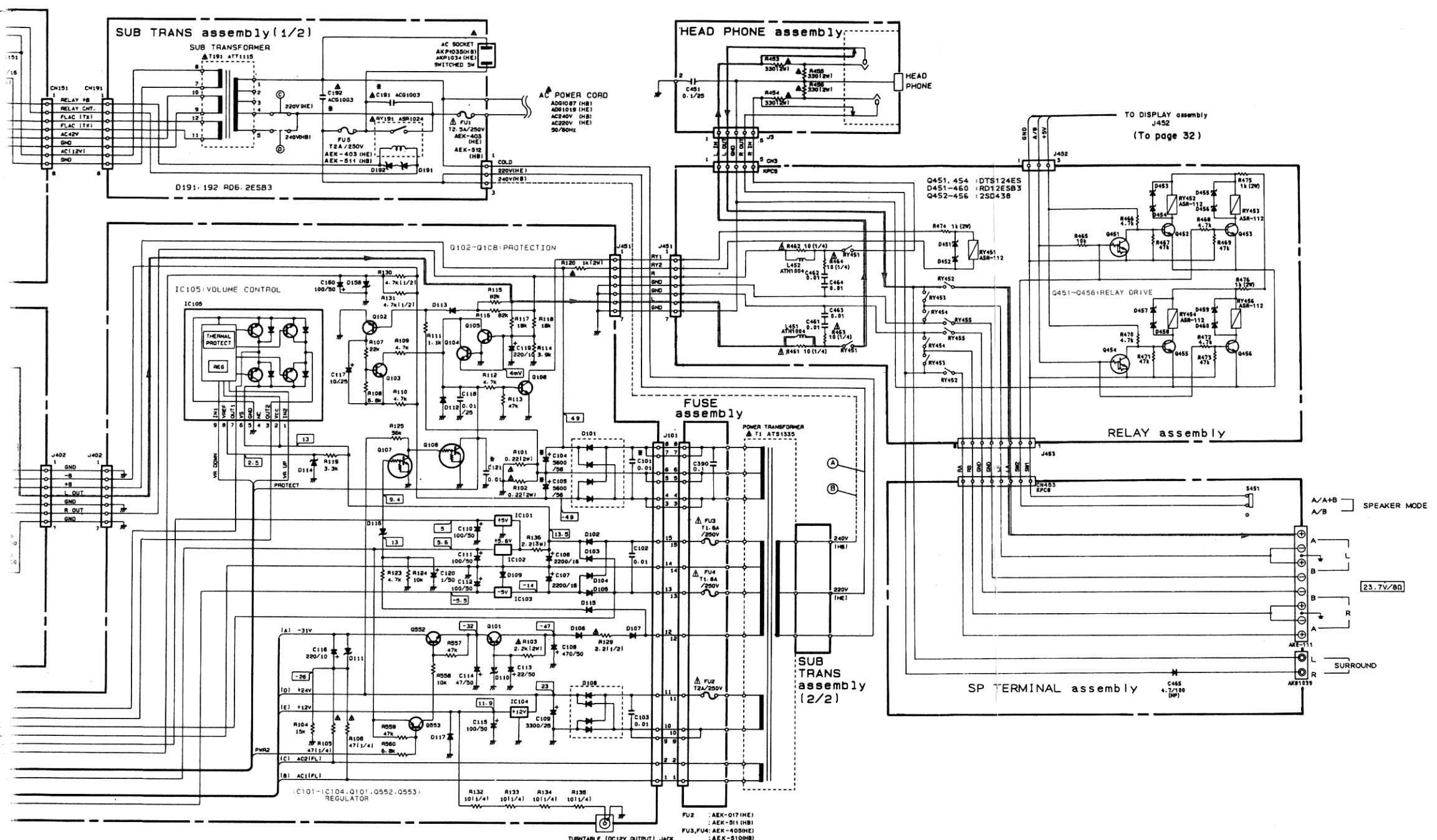
4

5

6

4.2 AF(AWZ3403), STANDBY(AWZ3505), SP TERMINAL, FUSE, POWER(AWZ2747), MIC, POWER VR, RELAY, SUB TRANS and HEAD PHONE assemblies





**Line Voltage Selection (HE, HB AND HEWZIW TYPES)**

Line voltage can be changed with the following steps.

1. Disconnect the AC power cord.
2. Remove the top cover.
3. Change the position of the connection wires to SUB TRANS ASSEMBLY (1/2) from SUB TRANS ASSEMBLY (2/2) as follows.

Voltage	Connection Wire(A)	Connection Wire(B)
220V	○	×
240V	×	○

○ : Be needed  
 × : Be needless

4. Change the position of the jumper wires (C) and (D) as follows. (SUB TRANS ASSEMBLY(1/2)).

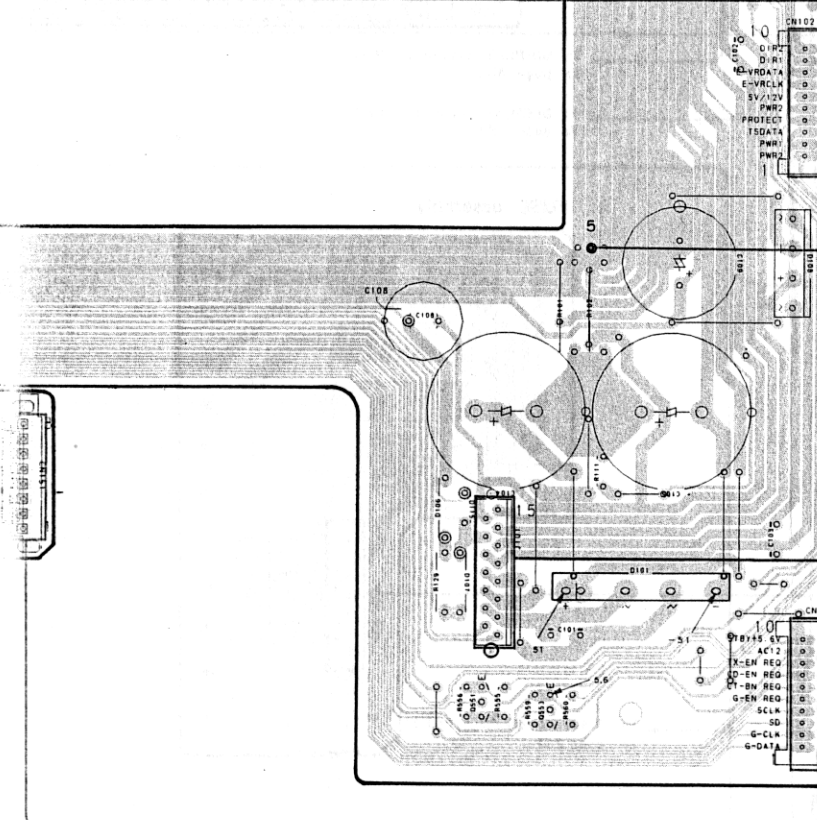
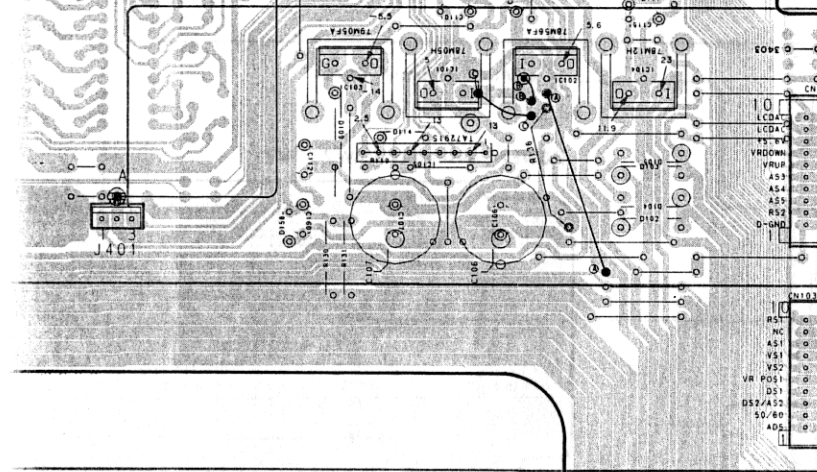
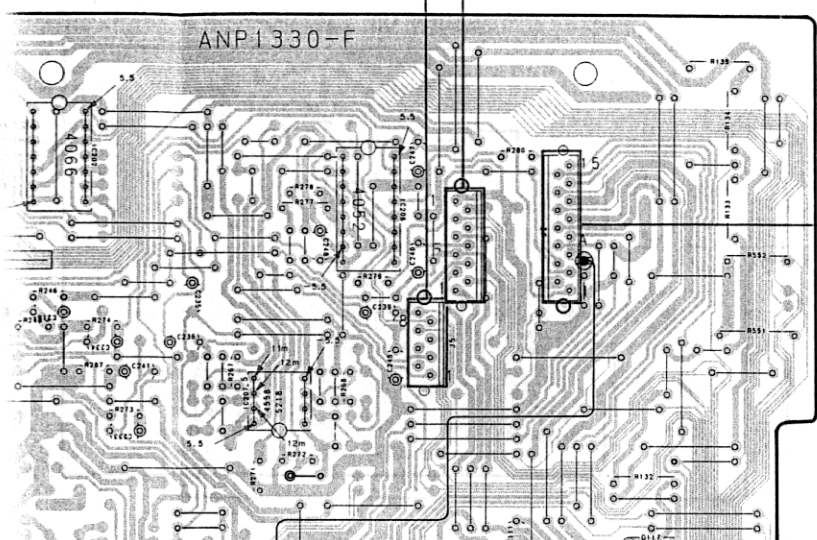
Voltage	Jumper Wire(C)	Jumper Wire(D)
220V	○	×
240V	×	○

○ : Be needed  
 × : Be needless

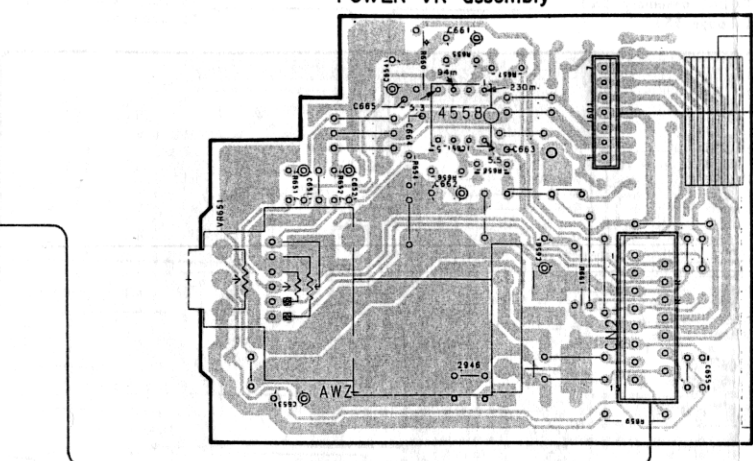
5. Stick the line voltage label on the rear panel.

Parts No.	Description
AXX-193	220V label
AXX-192	240V label

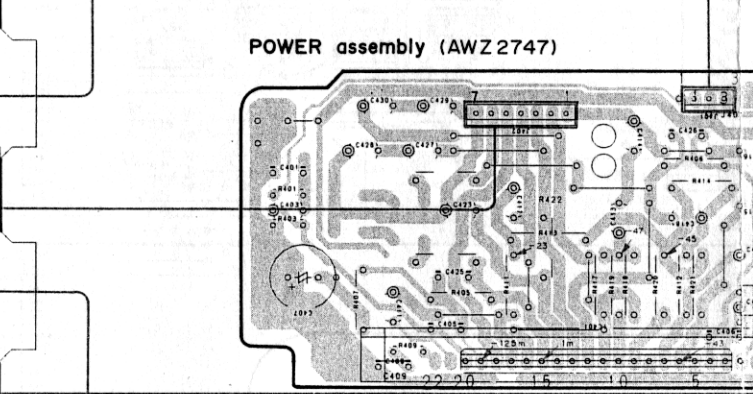
To DAC assembly CN5  
(To page 35)



To DAC assembly CN1  
(To page 35)

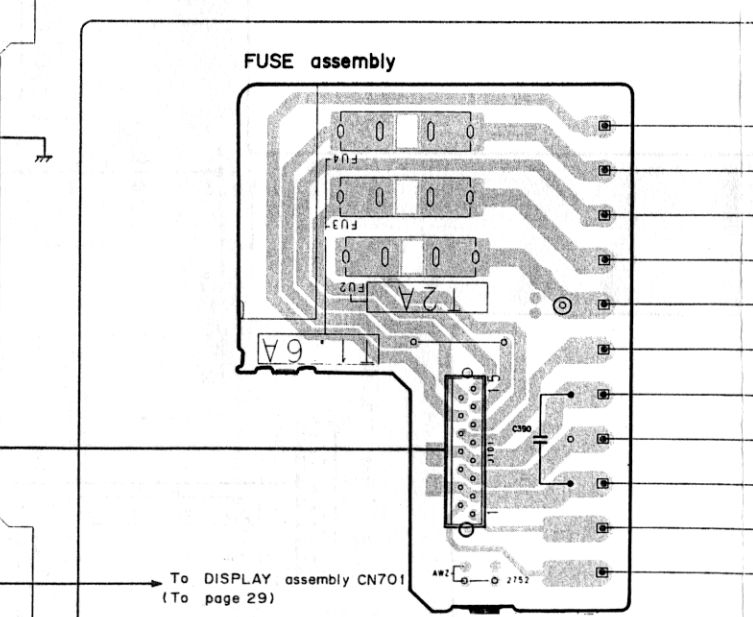


To DISPLAY assembly CN704  
(To page 30)



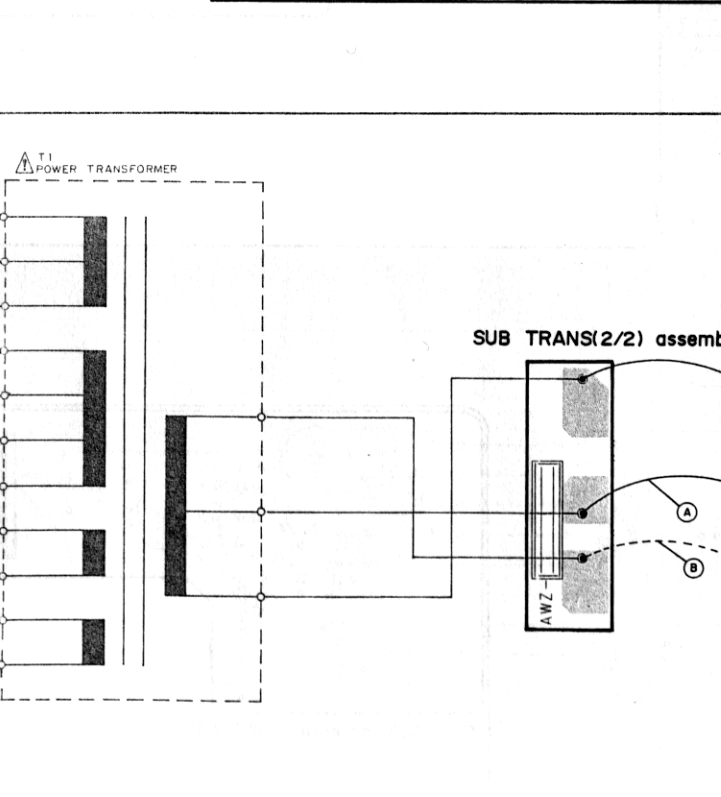
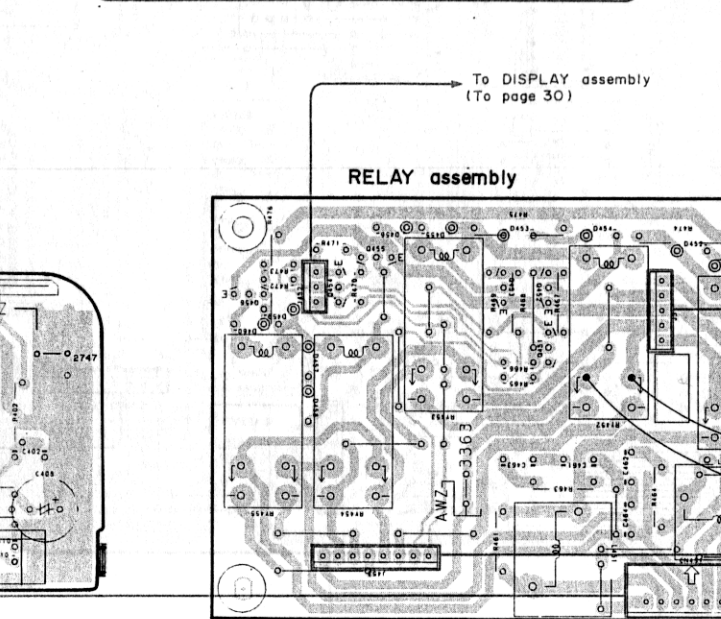
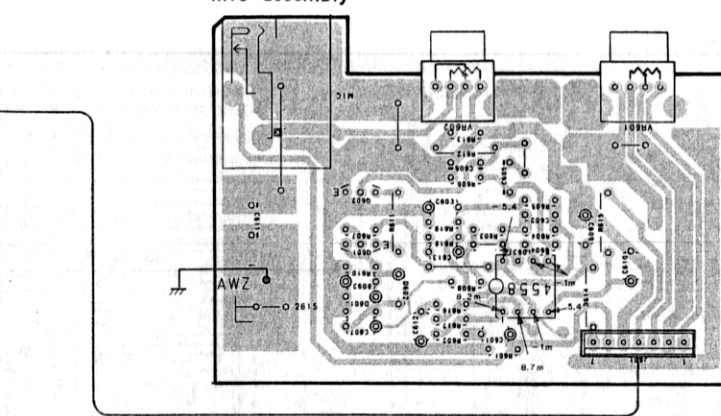
To DISPLAY assembly CN703  
(To page 30)

To DISPLAY assembly CN702  
(To page 29)

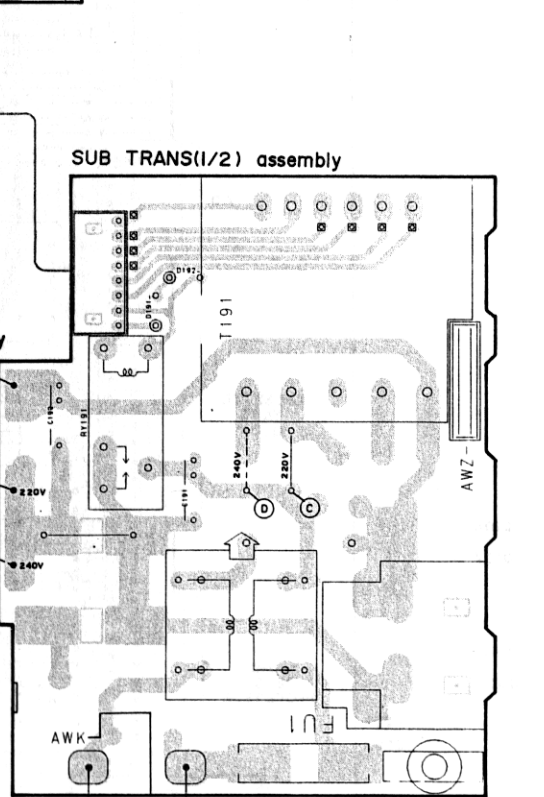
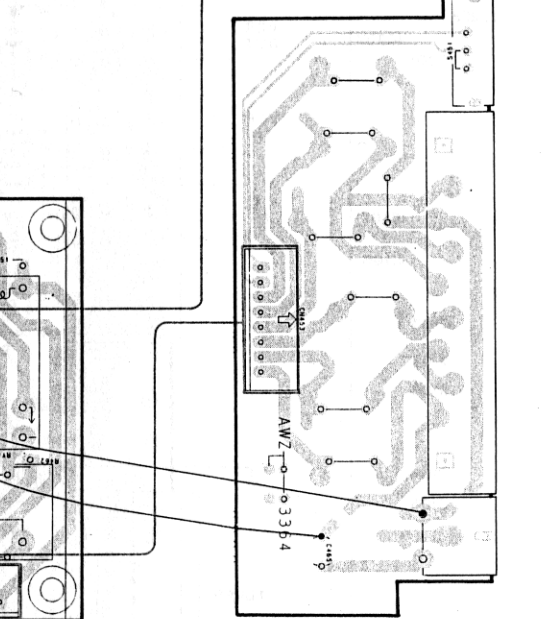
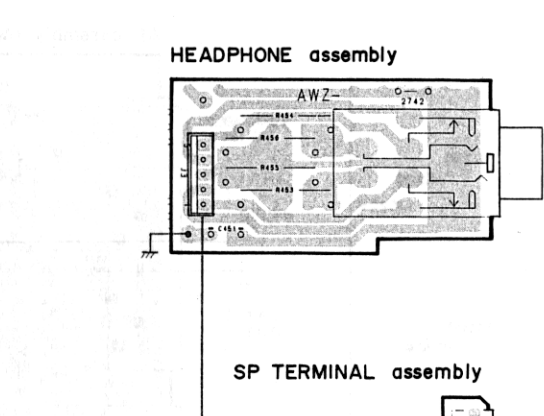


To DISPLAY assembly CN701  
(To page 29)

To DISPLAY assembly  
(To page 30)



To DISPLAY assembly  
(To page 30)



AC POWER CORD  
AC 220V  
AC 240V  
50/60Hz

4

5

6

7

8

9

4

5

6

7

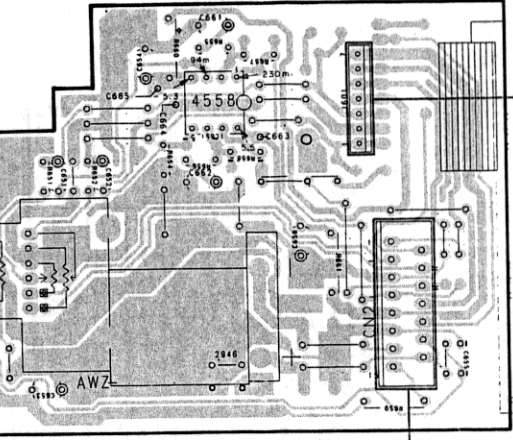
8

9

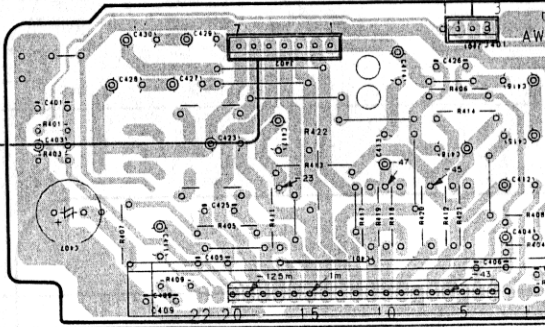
AF assembly (AWZ3403)

ANP1330-F

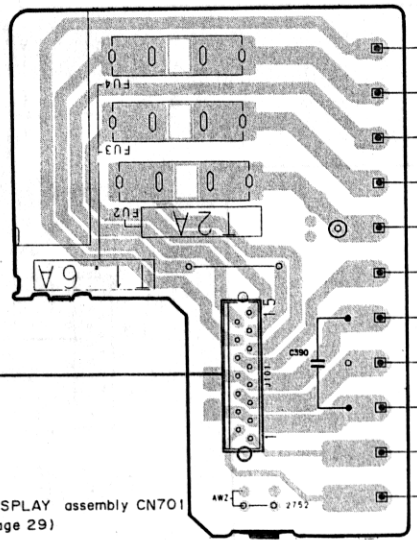
POWER VR assembly



POWER assembly (AWZ2747)



FUSE assembly



- TURNTABLE DC 12V
- PHONO
- DAT OUT
- VCR OUT
- VCR IN
- LD IN
- TUNER
- CD
- CASSETTE TAPE DECK
- SOUND FIELD PROCESSOR

- IC201
- IC202
- IC206
- IC205
- IC204
- IC203
- IC207
- IC208
- IC101
- IC105
- Q103
- Q102
- Q106
- Q104
- Q105
- Q108
- Q107
- Q101
- Q552
- Q551
- Q553

To DAC assembly CN5 (To page 35)

To DAC assembly CN1 (To page 35)

To DISPLAY assembly CN704 (To page 30)

To DISPLAY assembly CN703 (To page 30)

To DISPLAY assembly CN702 (To page 29)

To DISPLAY assembly CN701 (To page 29)

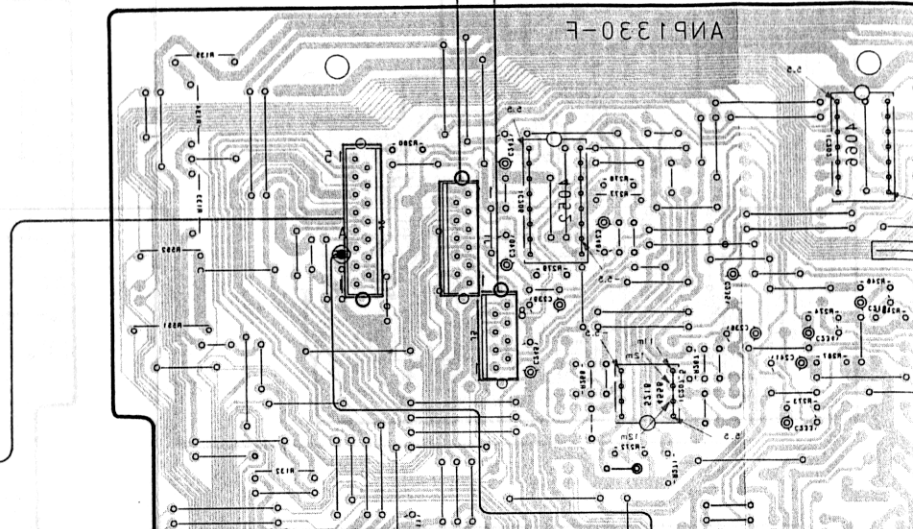
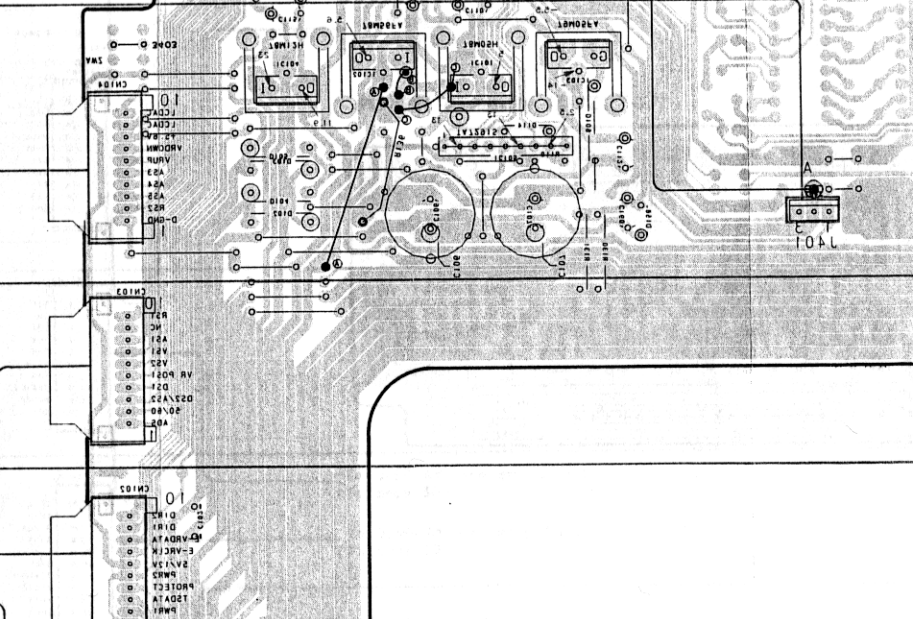
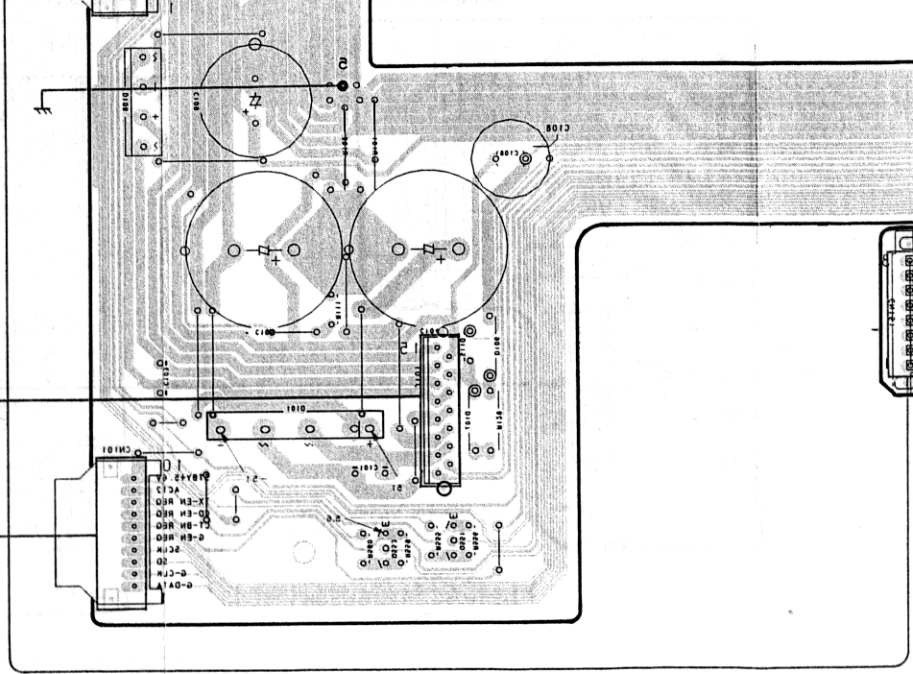
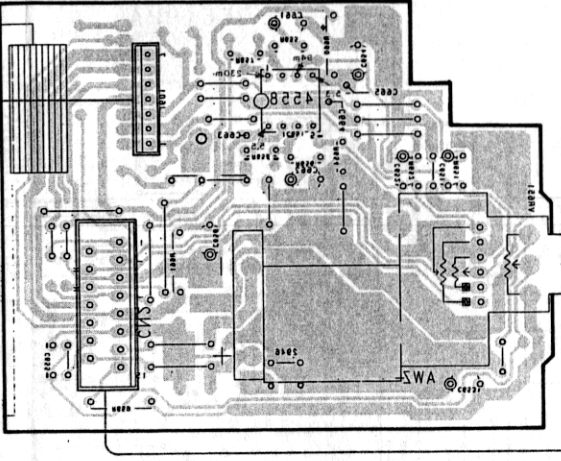
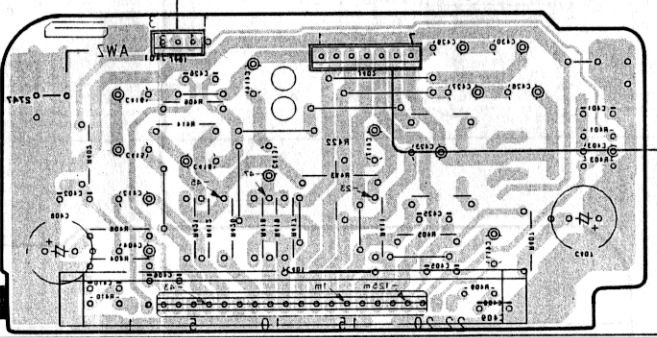
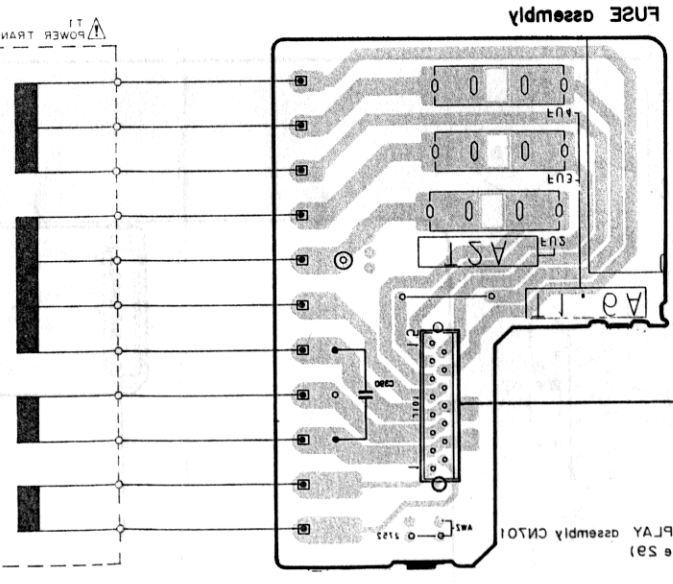
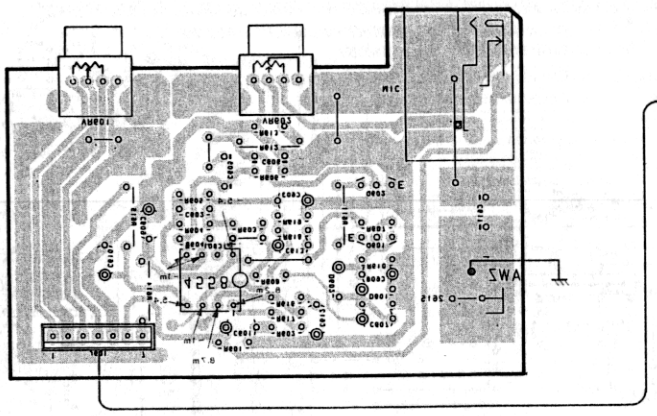
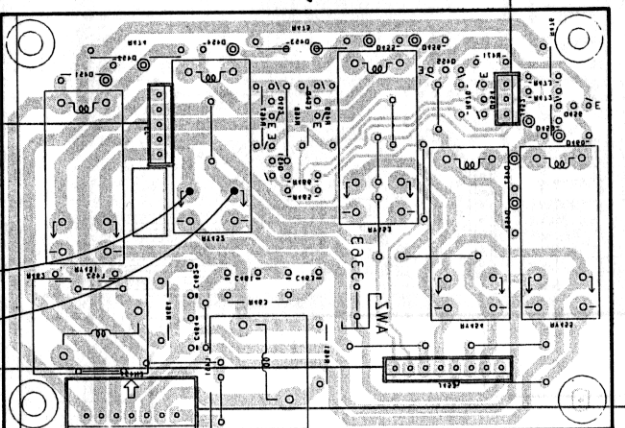
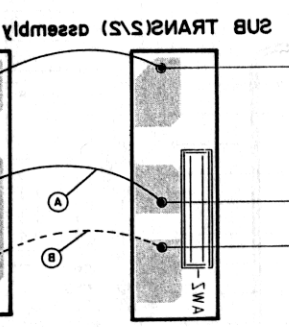
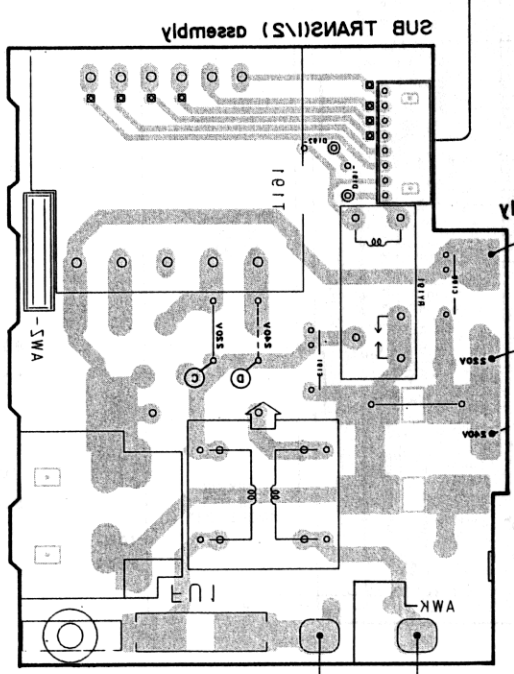
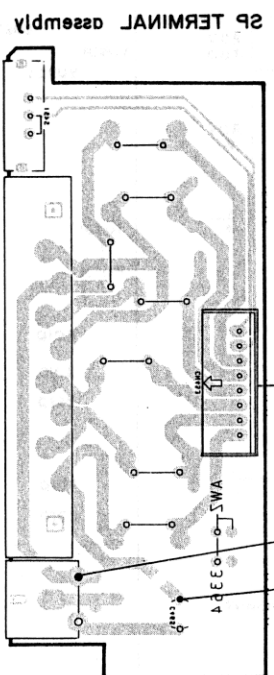
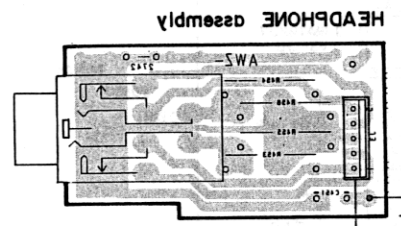


A

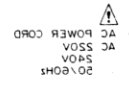
B

C

D

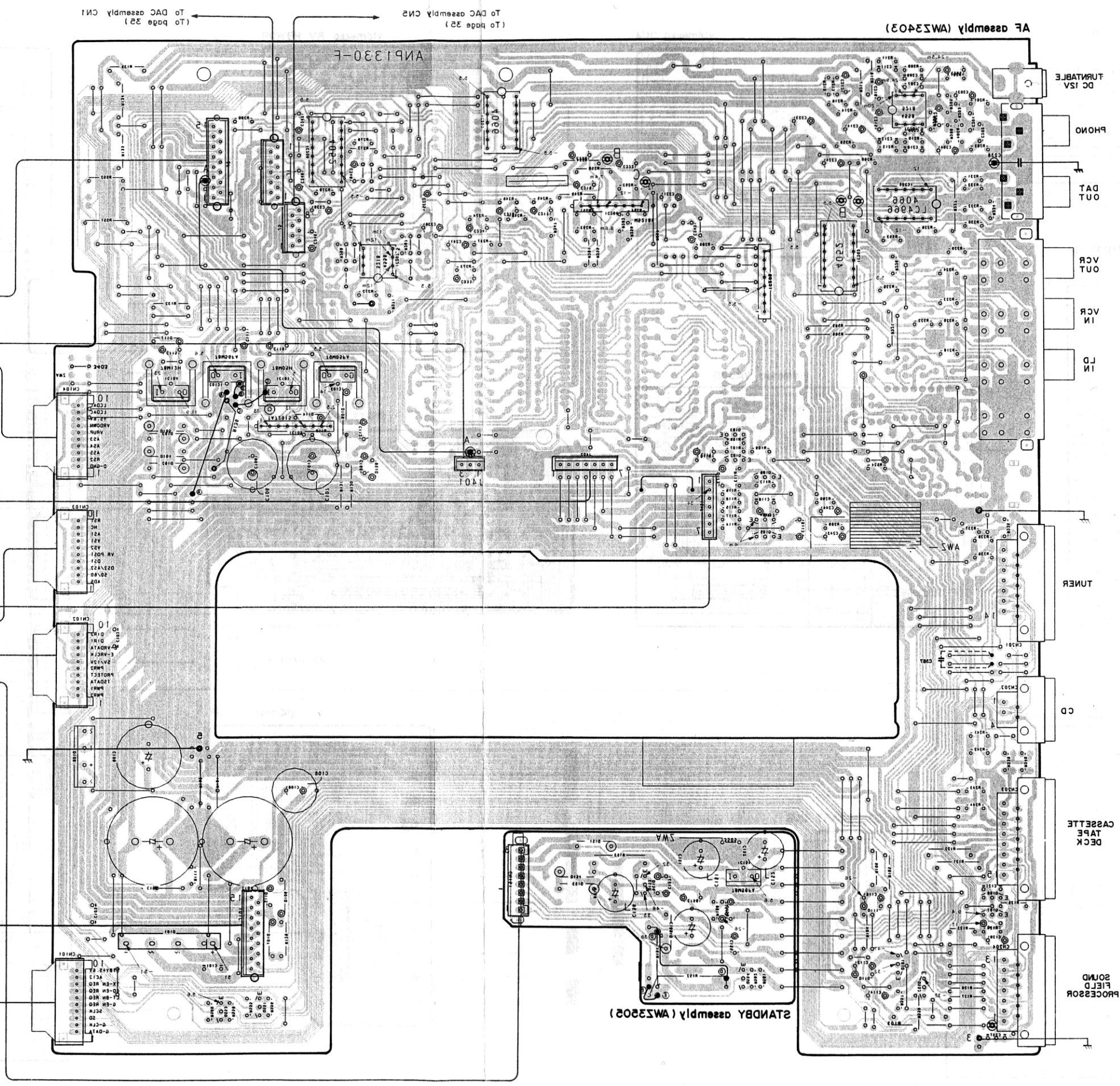


This P.C.B. connection diagram is viewed from the foil side.



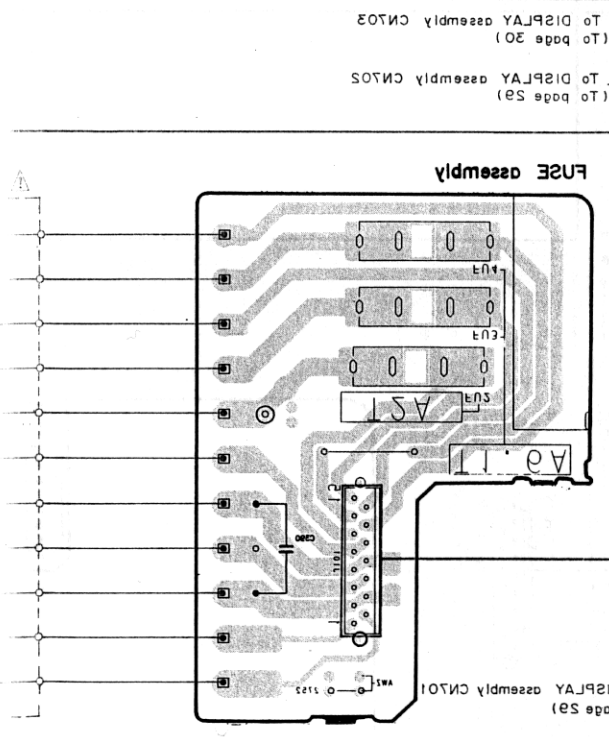
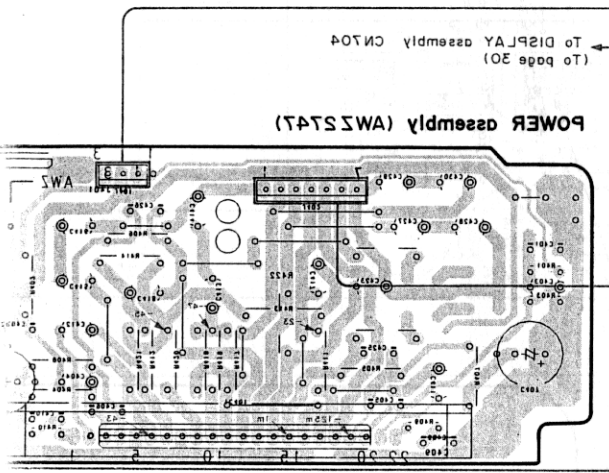
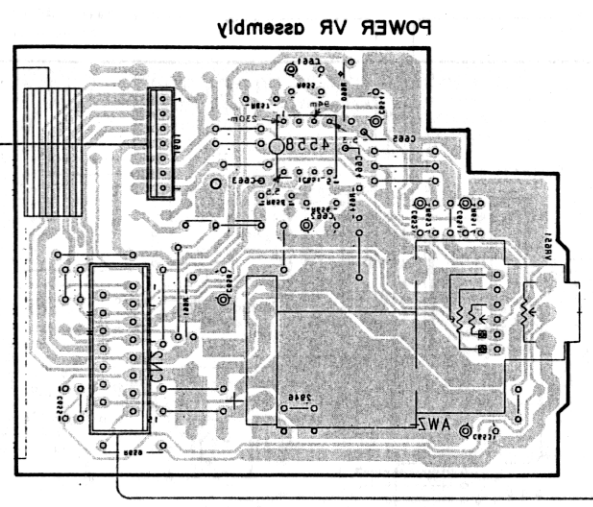
0921 0922  
 0923 0925  
 0101 0102  
 0103 0104  
 0105 0106  
 0108 0109  
 IC108 IC109  
 IC101  
 IC508 IC509  
 IC503  
 IC504 IC505  
 IC502  
 IC501

A  
 B  
 C  
 D



To DAC assembly C12  
 (To page 32)

To DAC assembly C11  
 (To page 32)



To DISPLAY assembly C104  
 (To page 30)

To DISPLAY assembly C103  
 (To page 30)

To DISPLAY assembly C105  
 (To page 30)

To DISPLAY assembly C101  
 (To page 30)

1 2 3 4 5

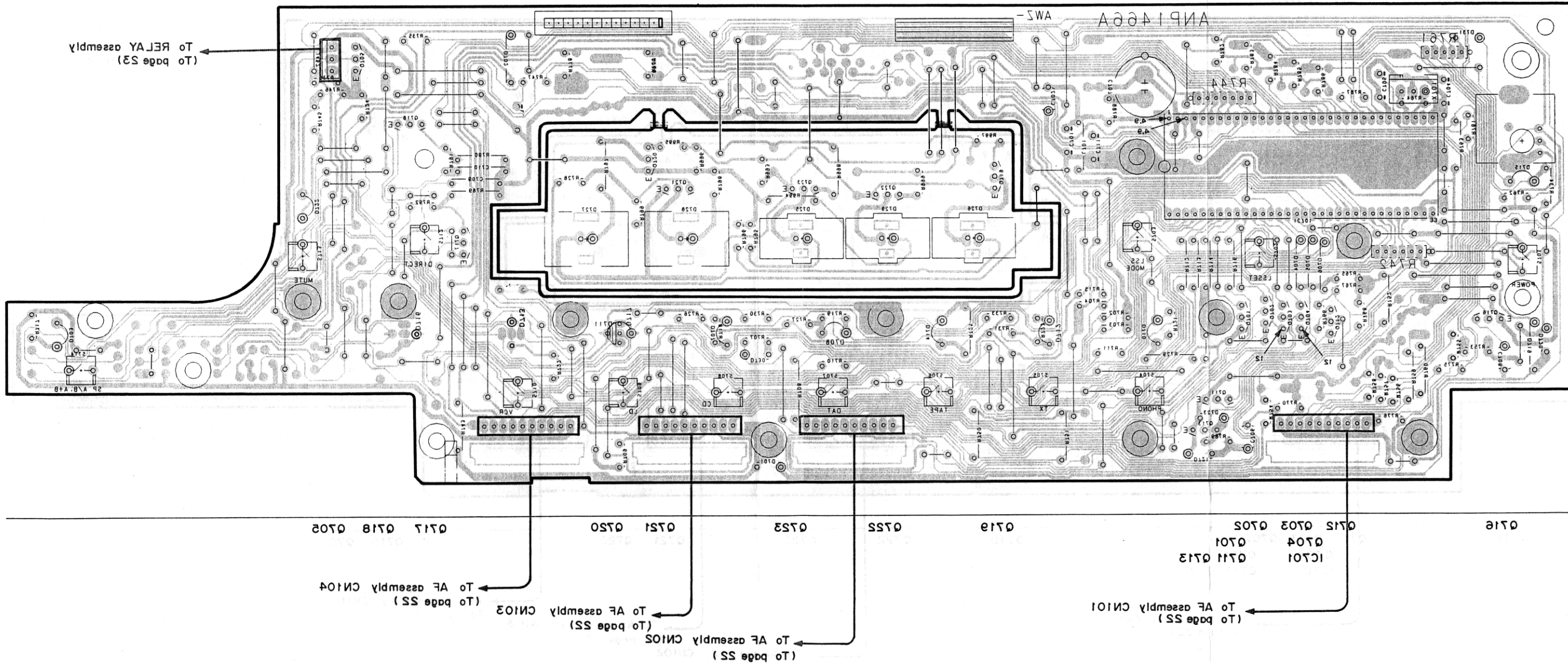
1 2 3 4 5

e

e

This P.C.B. connection diagram is viewed from the foil side.

DISPLAY assembly (AW3361)



4.3 DISPLAY (AWZ3361) assembly

NOTE

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

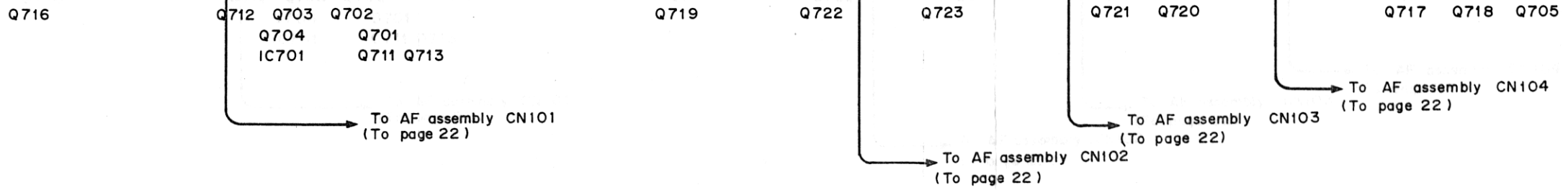
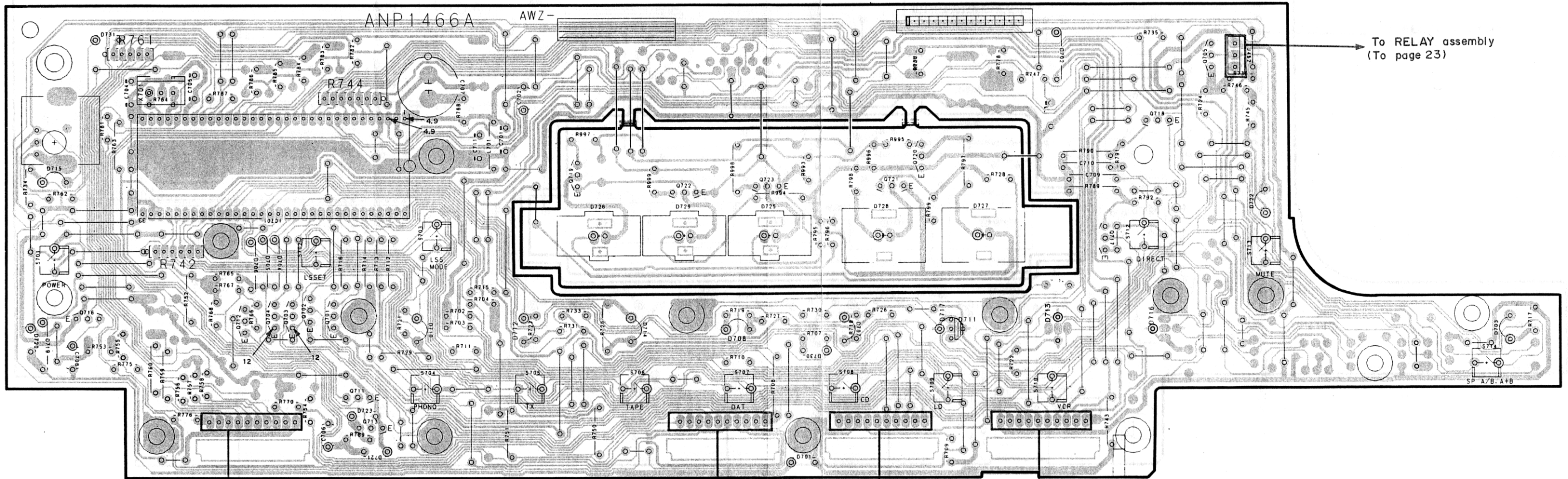
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

DISPLAY assembly (AWZ3361)



1 2 3 4 5 6

DISPLAY assembly (AWZ3361)

A

B

C

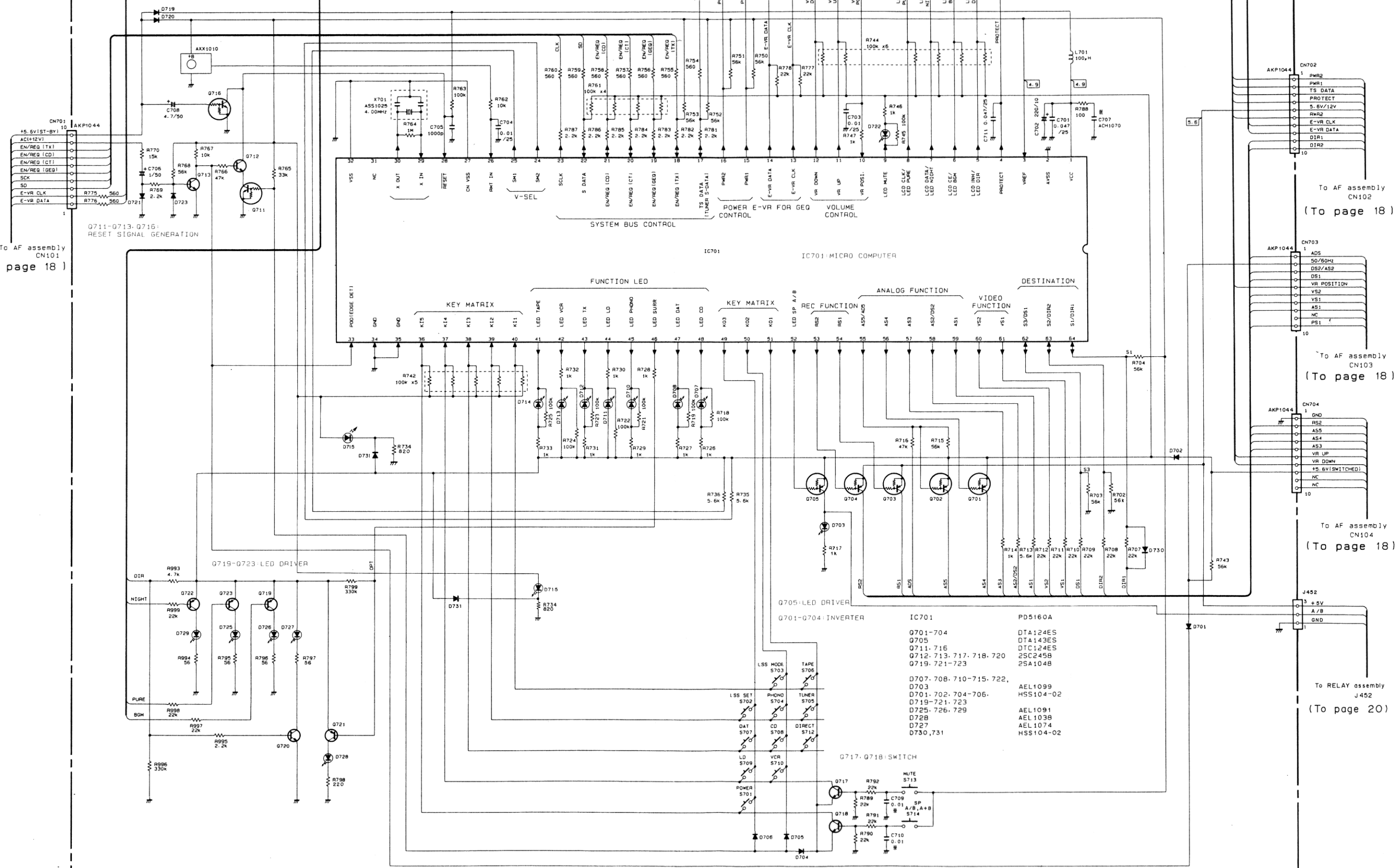
D

A

B

C

D



To AF assembly  
CN101  
(To page 18)

To AF assembly  
CN102  
(To page 18)

To AF assembly  
CN103  
(To page 18)

To AF assembly  
CN104  
(To page 18)

To RELAY assembly  
J452  
(To page 20)

1 2 3 4 5 6

4.4 DAC(AWK1385) assembly

DAC assembly (AWK1385)

A

B

C

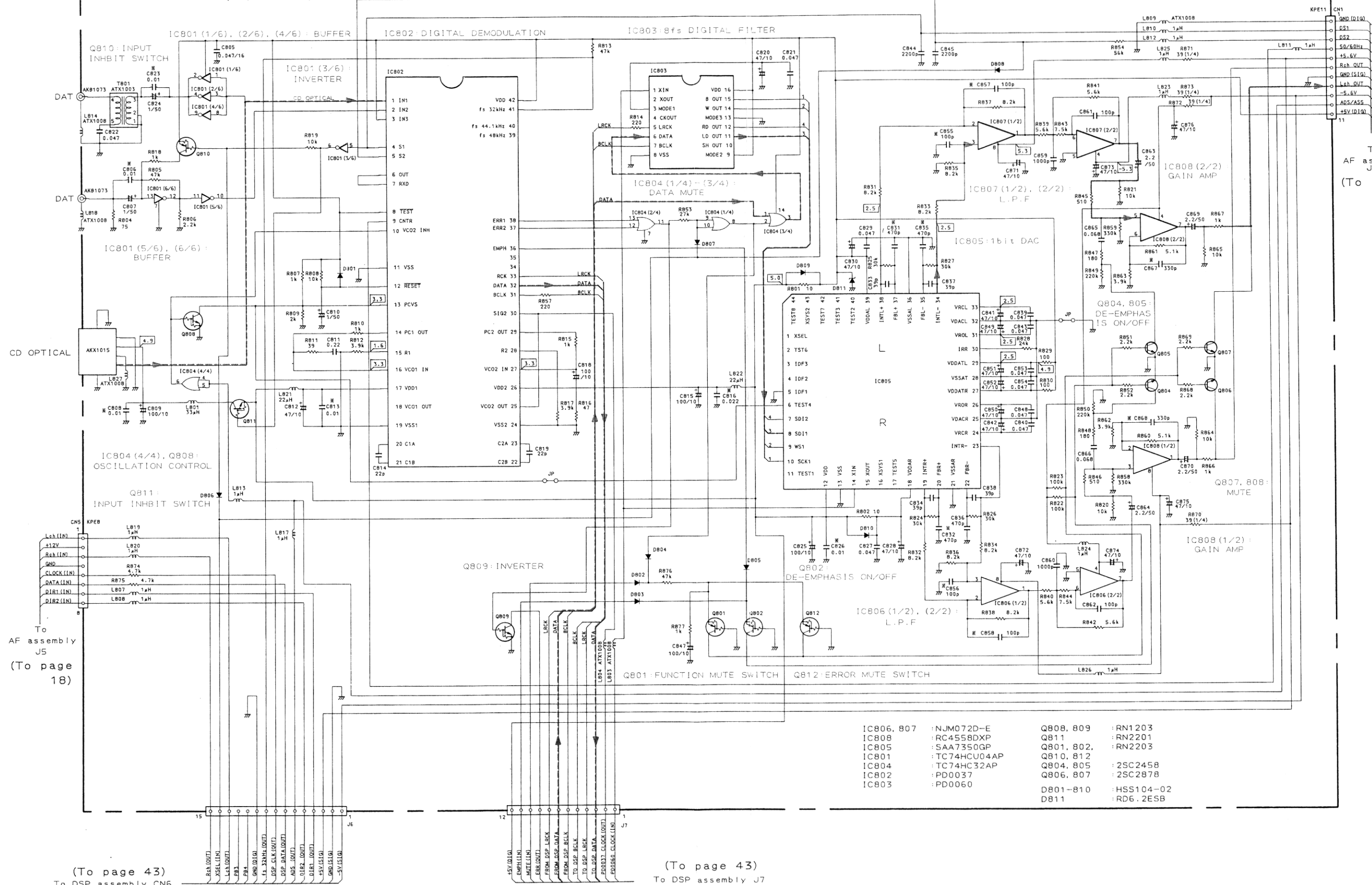
D

A

B

C

D



To AF assembly J1 (To page 18)

To AF assembly J5 (To page 18)

(To page 43) To DSP assembly J7

(To page 43) To DSP assembly CN6

IC806, 807	: NJM072D-E	Q808, 809	: RN1203
IC808	: RC4558DXP	Q811	: RN2201
IC805	: SAA7350GP	Q801, 802,	: RN2203
IC801	: TC74HC04AP	Q810, 812	
IC804	: TC74HC32AP	Q804, 805	: 2SC2458
IC802	: PD0037	Q806, 807	: 2SC2878
IC803	: PD0060	D801-810	: HSS104-02
		D811	: RD6.2ESB

1 2 3 4 5 6

A

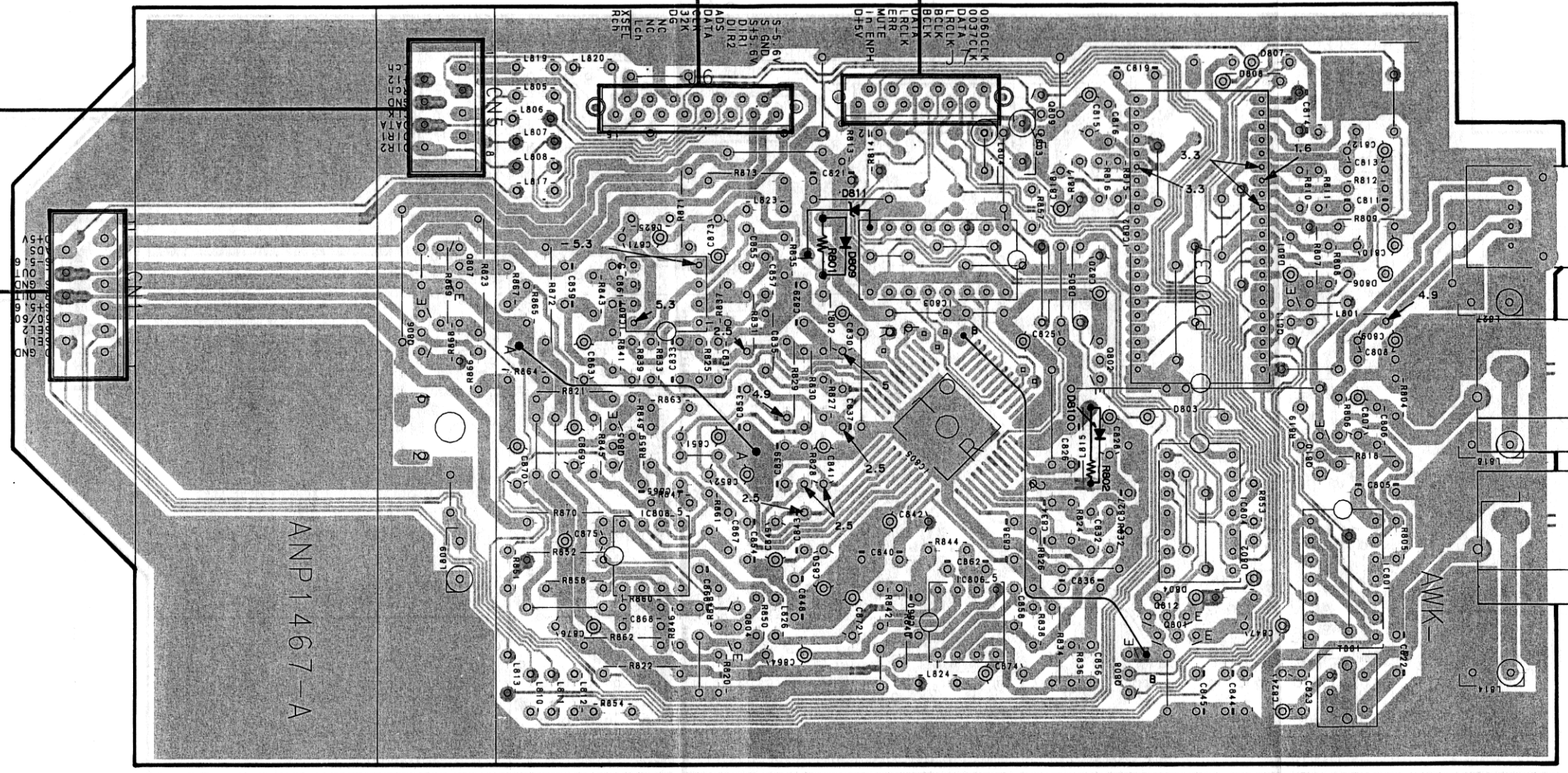
DAC assembly (AWK1385)

To AF assembly J5  
(To page 22)

To AF assembly J1  
(To page 22)

To DSP assembly CN6  
(To page 42)

To DSP assembly CN7  
(To page 41)



DIGITAL IN  
CD OPTICAL DAT  
DIGITAL OUT  
DAT

B

C

- Q806 Q807
- Q805 IC807
- IC803 Q809 Q802 IC802 Q811 Q810
- IC805 IC806 Q808 IC804
- Q812
- Q801

- NOTE
- This P.C.B. connection diagram is viewed from the parts mounted side.
  - The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

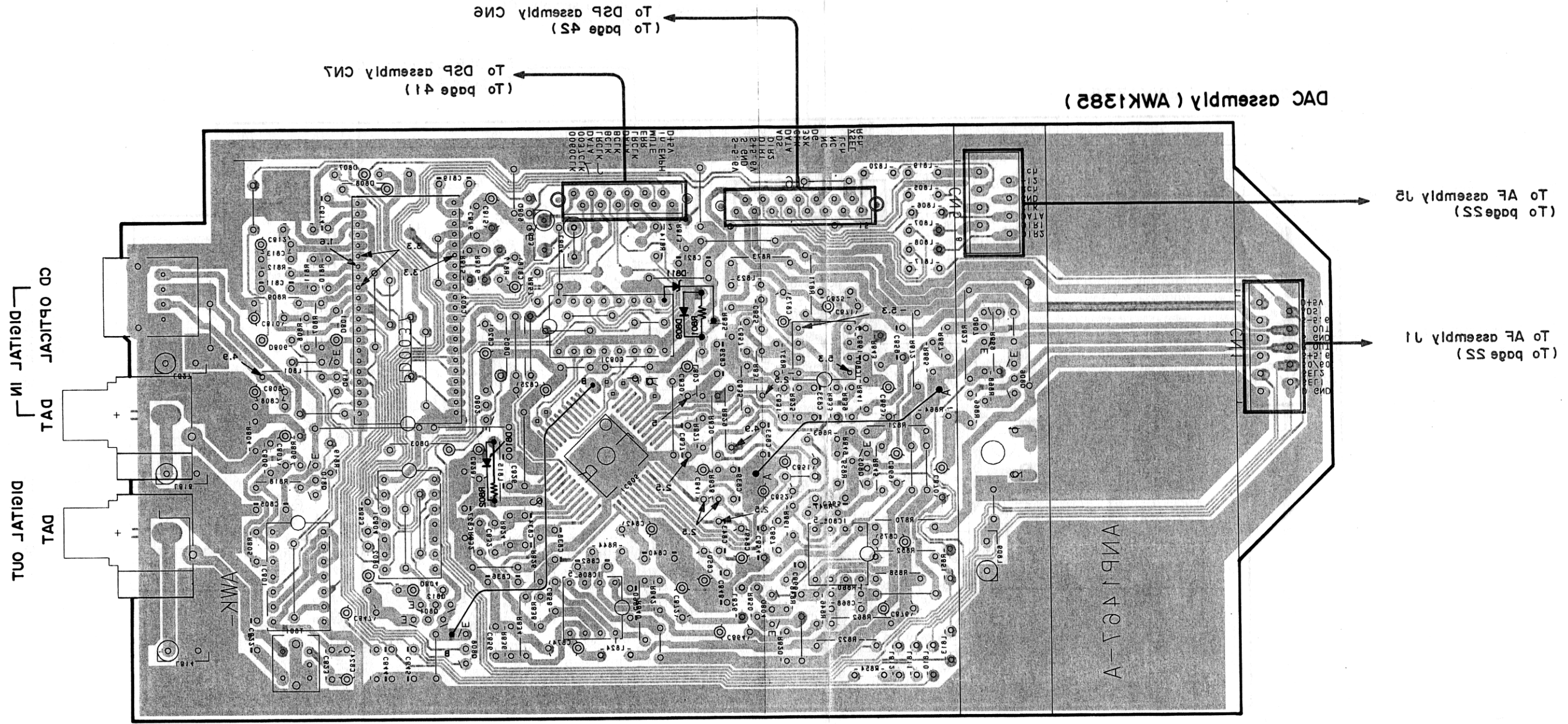
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

- The capacitor terminal marked with ⊕ (double circles) shows negative terminal.
- The diode terminal marked with ⊕ (double circles) shows cathode side.
- The transistor terminal to which E is affixed shows the emitter.

D

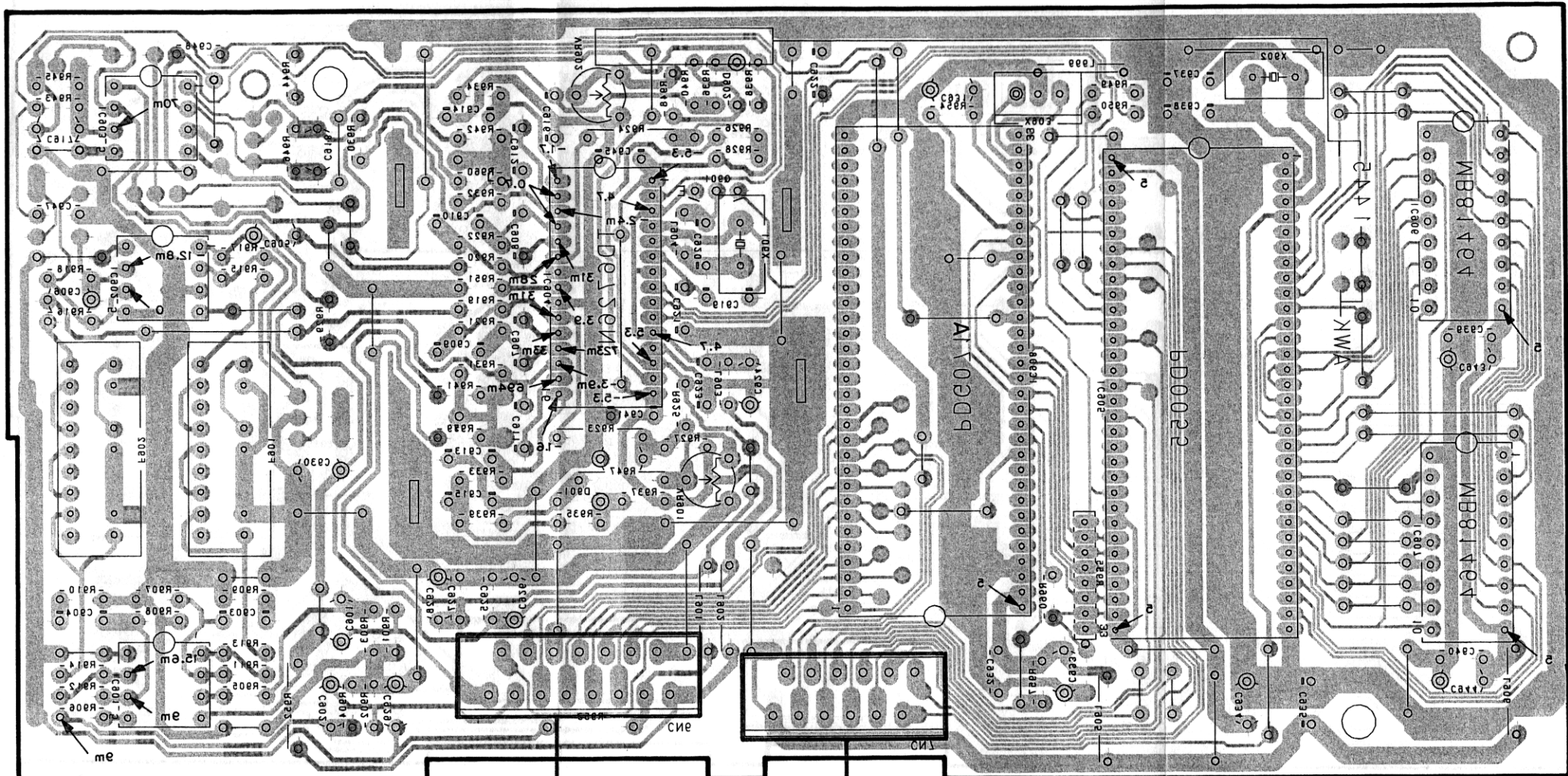
1 2 3 4 5 6



This P.C.B. connection diagram is viewed from the foil side.



DSP assembly (WK142)



(To page 32) To DAC assembly 19

(To page 32) To DAC assembly 17

This P.C.B. connection diagram is viewed from the foil side.

A

B

C

D

e

e

4

3

5

e

e

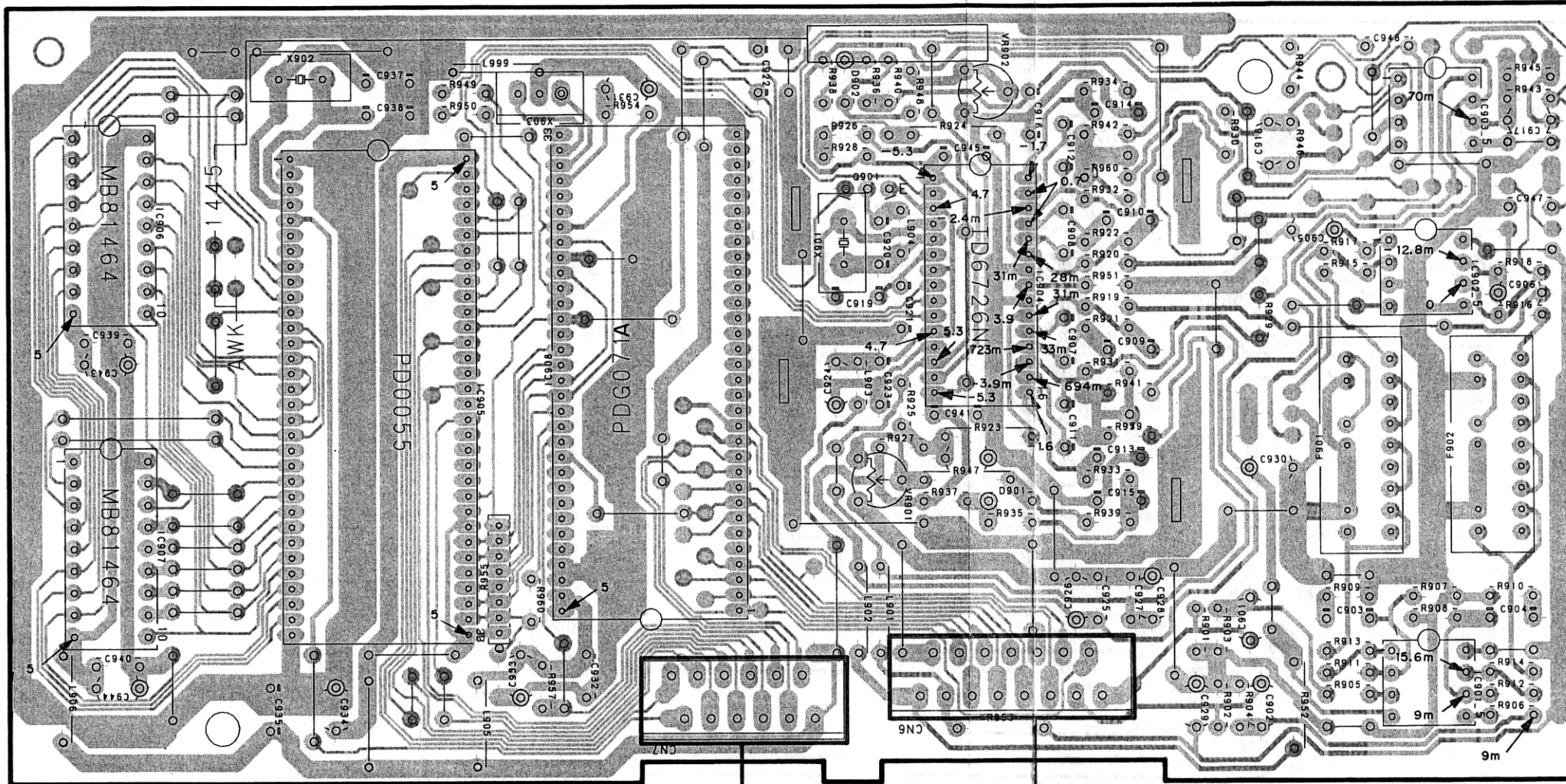
4

3

5

4.5 DSP(AWK1445) assembly

DSP assembly (AWK1445)



IC907  
IC906

IC905

IC908

VR901 VR902  
Q901 IC904

IC903  
IC902  
IC901

To DAC assembly J7  
(To page 35)

To DAC assembly J6  
(To page 35)

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

Others

P.C.B. pattern diagram indication	Part Name
	IC
	Switch
	Relay
	Coil
	Filter
	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with ⊙ (double circles) shows negative terminal.
4. The diode terminal marked with ⊙ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

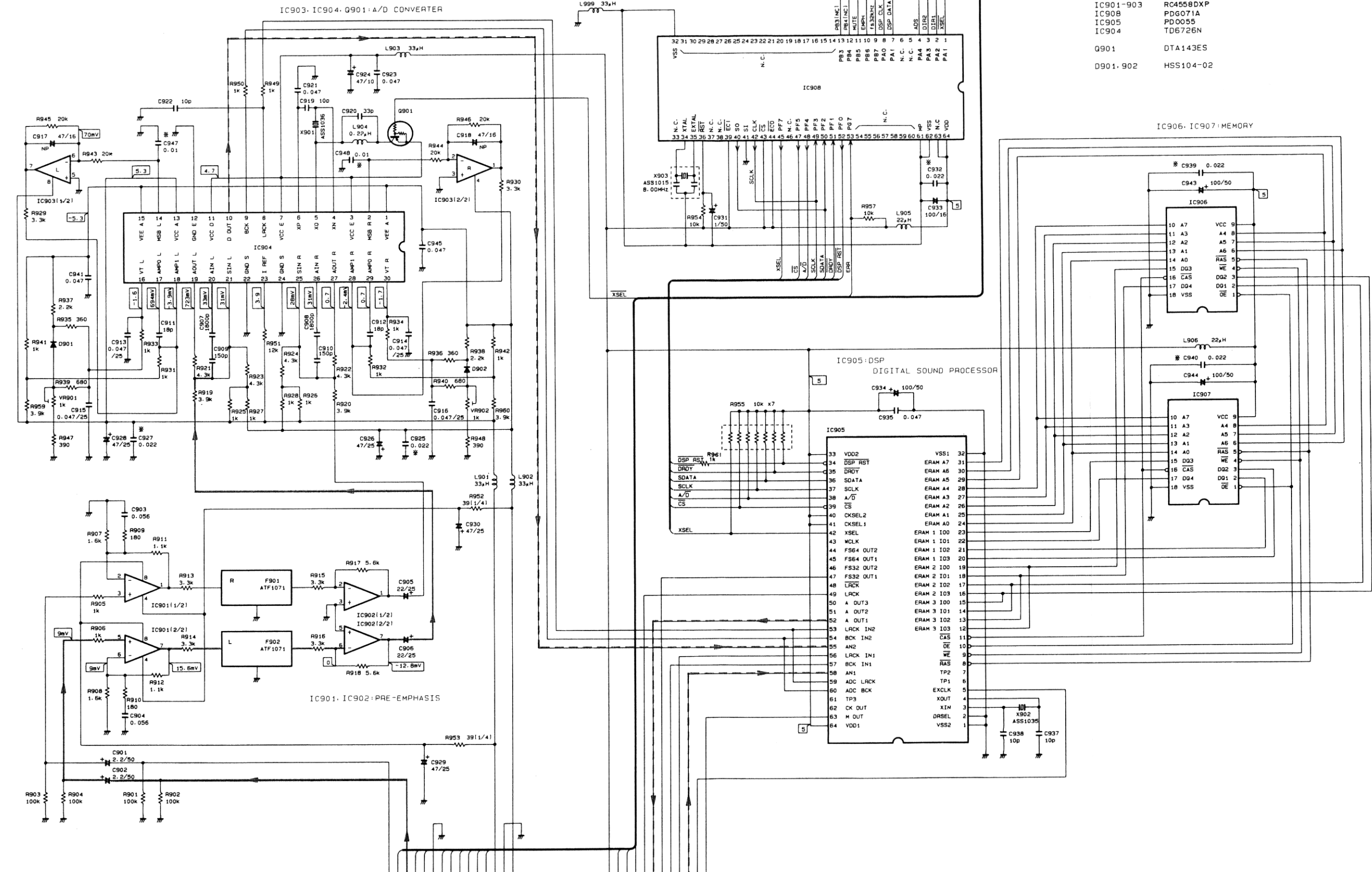
DSP assembly (AWK1445)

IC903, IC904, Q901: A/D CONVERTER

IC908: DSP CONTROL IC

- IC906, 907 MBB1464-12
- IC901-903 RC4558DXP
- IC908 PDG071A
- IC905 PD0055
- IC904 TD6726N
- Q901 DTA143ES
- D901, 902 HSS104-02

IC906, IC907: MEMORY



(To page 33)  
To DAC assembly J6

(To page 33)  
To DAC assembly J7

## 5. ADJUSTMENTS

1. If the SP-Z570(sound field processor) is connected to the A-Z470, disconnect them. (This makes DSP processing in the A-Z470 flat.)
2. Input 1kHz/600mV to LD INPUT AUDIO Lch and Rch, then turn function to LD, followed by turning the main VR into the center position.
3. Adjust the VR901(Rch) and VR902(Lch) until the distortion of the Lch and Rch is minimized(0.15% or less) at the speaker output.

## 5. RÉGLAGE

1. Si le SP-Z570(processeur de champ d'ambiance) est connecté au A-Z470, les déconnecter. (Ceci neutralise le traitement DSP dans le A-Z470.)
2. Enter 1kHz/600mV aux bornes gauche et droite d'entrée audio LD(LD INPUT AUDIO), mettre le sélecteur de fonction sur "LD", suivi du réglage de la résistance variable(VR) principale à la position centrale.
3. Régler VR901 (D) et VR902 (G) jusqu'à ce que la distorsion des canaux gauche et droit soit réduite (0,15% ou moins) à la sortie des haut-parleurs.

## 5. AJUSTE

1. Si el SP-Z570(procesador de campo sonoro) está conectado al A-Z470, desconéctelos. (De este modo el procedo DSP en el A-Z470 será plano.)
2. Introduzca 1kHz/600mV en los canales izquierdo y derecho de INPUT AUDIO del LD, cambie entonces la función a LD, y gire luego la VR principal a la posición central.
3. Ajuste la VR901 (canal derecho) y VR902 (canal izquierdo) hasta que la distorsión de los canales izquierdo y derecho se minimice(0.15% o menos) en la salida del altavoz.

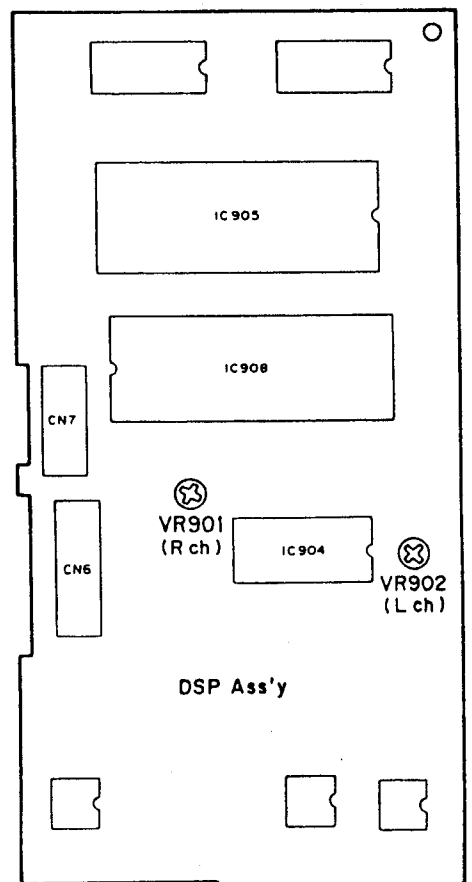


Fig. 5-1. Adjustment location

Fig. 5-1. Emplacements de réglage

Fig. 5-1. Puntos de ajustes

## 6. FOR HB AND HEWZIWI TYPES

### NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

### CONTRAST OF MISCELLANEOUS PARTS

The A-Z470/HB and HEWZIWI types are the same as the A-Z470/HE type with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		HE type	HB type	HEWZIWI type	
●	AF assembly	AWZ3403	AWZ3403	AWZ3406	
●	POWER assembly	AWZ2747	AWZ2747	AWZ2744	
	SP TERMINAL assembly	Non supply	Non supply	Non supply	
	POWER VR assembly	Non supply	Non supply	Non supply	
	HEAD PHONE assembly	Non supply	Non supply	Non supply	
	SUB TRANS assembly	Non supply	Non supply	Non supply	
	MIC assembly	Non supply	Non supply	Non supply	
⚠	AC power cord	ADG1019	ADG1087	ADG1012	
⚠	FU1 Fuse	AEK-403	AEK-512	AEK-403	
⚠	FU2 Fuse	AEK-017	AEK-511	AEK-017	
⚠	FU3,4 Fuse	AEK-405	AEK-510	AEK-405	
⚠	FU5 Fuse	AEK-403	AEK-511	AEK-403	
	PWB Screw	ABA-283	ABA-283	.....	
	Operating instructions (Dutch, Swedish, Spanish, Portuguese)	ARC1249	.....	.....	
	Operating instructions (English, German, French, Italian)	ARE1181	.....	.....	
	Operating instructions (English)	.....	ARB1291	.....	
	Operating instructions (German)	.....	.....	ARC1247	

**AF assembly (AWZ3406)**

The AF assembly(AWZ3406) is the same as the AF assembly(AWZ3403) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ3403	AWZ3406	
	C102, C103	CKDYF103Z50	CKDYF473Z50	
	C341-344, 347-349, 383, 386, 387	.....	CKDYF473Z50	
	C345, 346	.....	CQMA104K50	
	C351, 352	.....	ACG1020	
	C353, 354, 357, 358, 361, 362	.....	CKDYB331K50	
	C355, 356, 359, 360, 363, 364, 373-382	.....	ACG1018	
	C384, 385	.....	CKDYB391K50	
	R201, 202	RD1/8PM102J	RD1/8PM222J	

**POWER assembly (AWZ2744)**

The POWER assembly(AWZ2744) is the same as the POWER assembly(AWZ2747) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2747	AWZ2744	
	C405, 406	CCDSL470J50	CCDSL221J50	
	C431, 432	.....	CCDSL101K500	
	C433, 434	.....	CCDSL101J50	
	C435, 436	.....	CKDYB331K50	
	R425	.....	RD1/8PM100J	

**SP TERMINAL assembly**

The SP TERMINAL assembly (HEWZIW type) is the same as the SP TERMINAL assembly (HE and HB types) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HE, HB types	HEWZIW type	
	C365, 366	.....	CFTXA103J50	
	C471-482	.....	CQMXA103J100	
	L353, 354	.....	ATH1002	

**POWER VR assembly**

The POWER VR assembly (HEWZIW type) is the same as the POWER VR assembly (HE and HB types) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HE, HB types	HEWZIW type	
	C663-665 C666, 667	..... .....	CKDYB103K50 CCDSL470J50	
	R700	.....	RD1/8PM100J	

**HEAD PHONE assembly**

The HEAD PHONE assembly (HEWZIW type) is the same as the HEAD PHONE assembly (HE and HB types) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HE, HB types	HEWZIW type	
	C369, 370	.....	CKDYX473M25	

**SUB TRANS assembly**

The SUB TRANS assembly (HB type) is the same as the SUB TRANS assembly (HE and HEWZIW types) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HE, HEWZIW types	HB type	
	AC socket (OUTLET 1P)	AKP1034	AKP1035	

**MIC assembly**

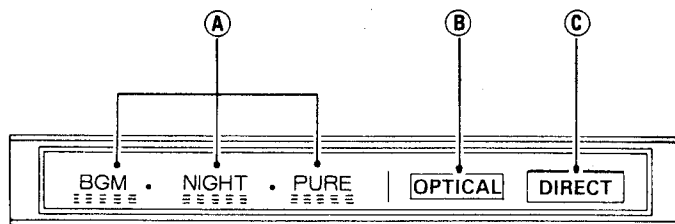
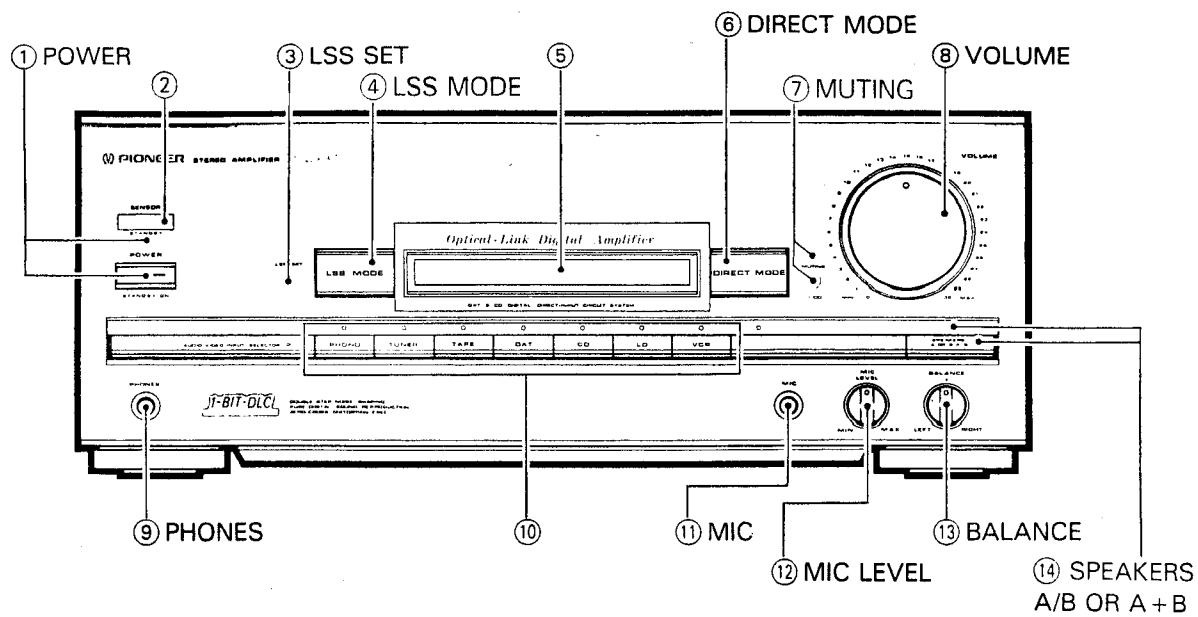
The MIC assembly (HEWZIW type) is the same as the MIC assembly (HE and HB types) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		HE, HB types	HEWZIW type	
	C371	.....	ACG1020	
	C372	.....	ACG1017	
	C604	ACG1017	ACG1020	
	L601	.....	LAUR56M	
	R351	.....	RD1/8PM222J	



# 7. PANEL FACILITIES

## Front panel and display section



A

B

C

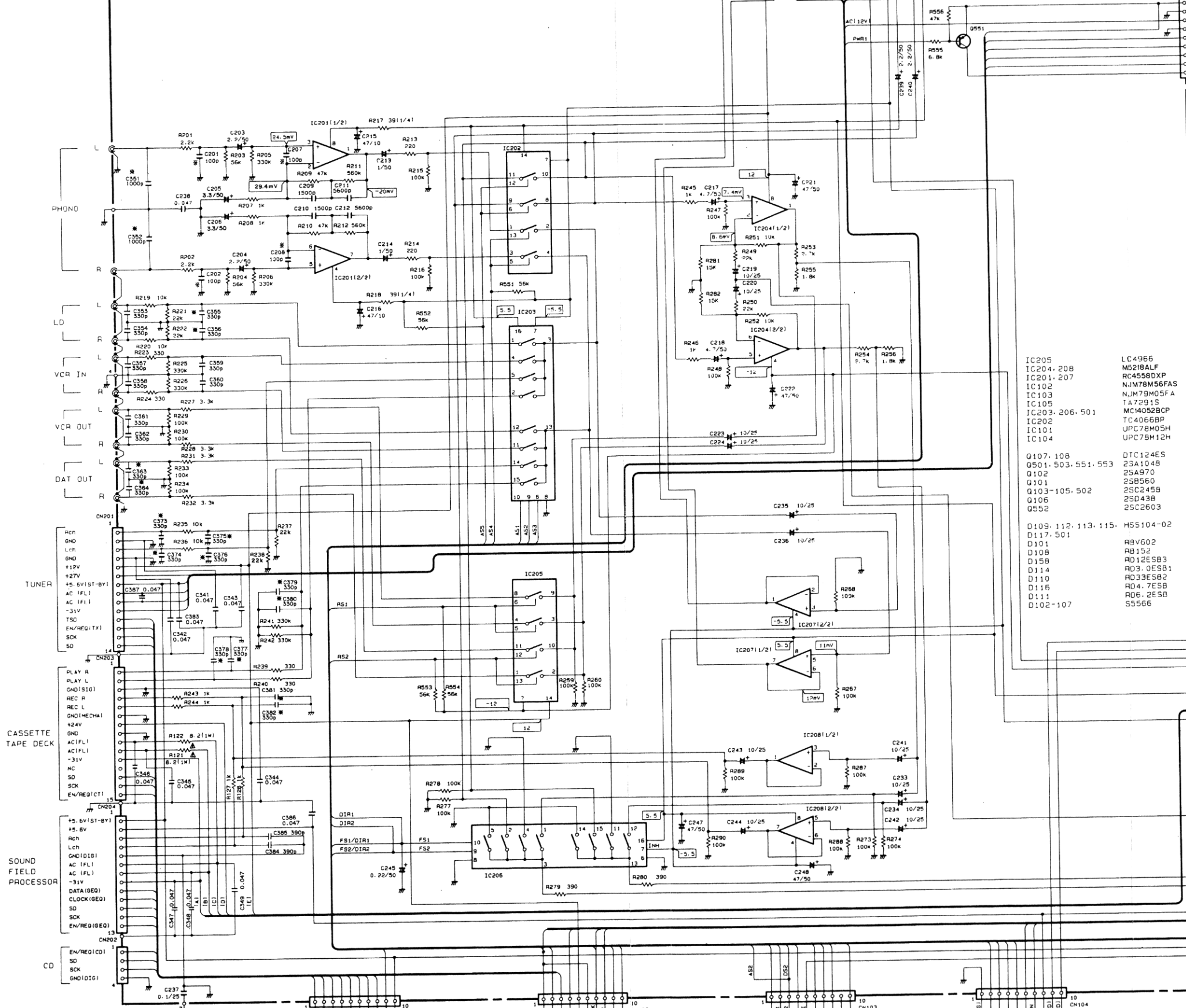
D

ANALOG SIGNAL  
DIGITAL SIGNAL

To DAC assembly  
CN5  
(To page 33)

To DAC assembly  
CN1  
(To page 34)

AF assembly (AWZ3406)



PHONO

R

LD

VCR IN

VCR OUT

DAT OUT

TUNER

PLAY R  
PLAY L  
REC R  
REC L  
GND(MECHA)  
+24V  
GND  
AC(FL)  
-31V  
TSD  
EN/REG(ITX)  
SCK  
SD

CASSETTE  
TAPE DECK

SOUND  
FIELD  
PROCESSOR

EN/REG(IC1)  
SD  
SCK  
GND(DIG)

EN/REG(IC2)  
SD  
SCK  
GND(DIG)

EN/REG(IC3)  
SD  
SCK  
GND(DIG)

EN/REG(IC4)  
SD  
SCK  
GND(DIG)

EN/REG(IC5)  
SD  
SCK  
GND(DIG)

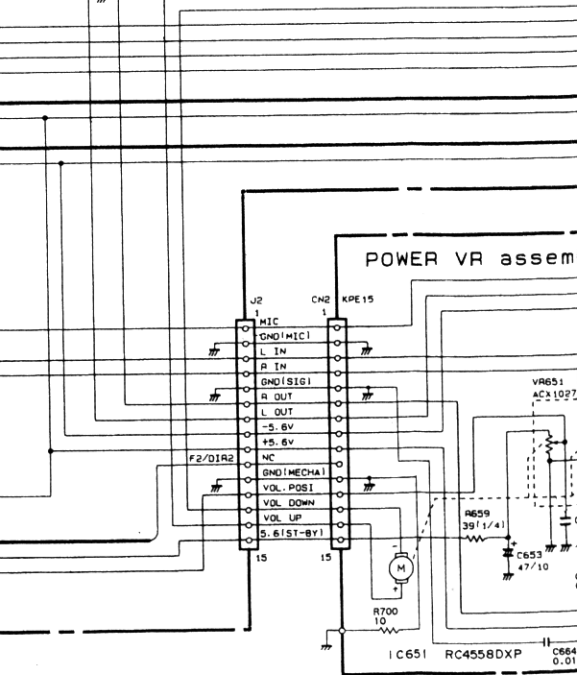
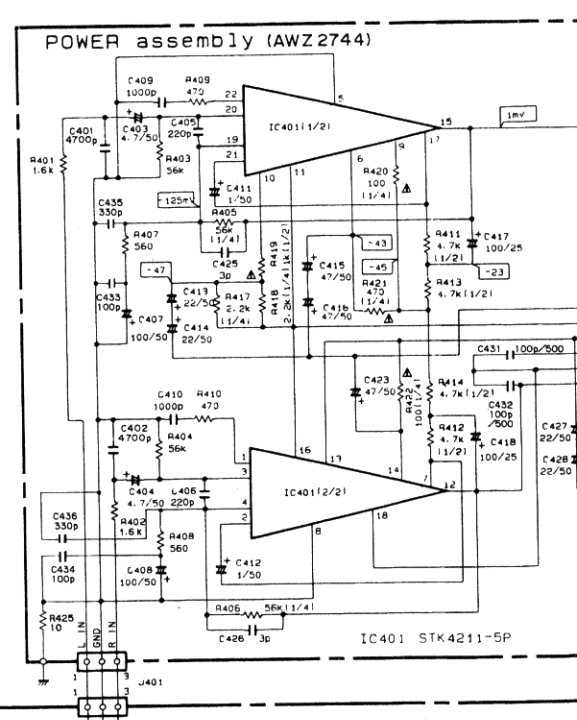
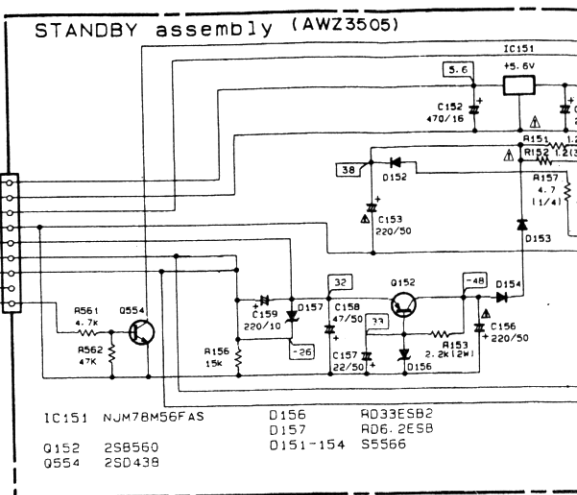
EN/REG(IC6)  
SD  
SCK  
GND(DIG)

(To page 31)  
To DISPLAY assembly  
CN701

(To page 32)  
To DISPLAY assembly  
CN702

(To page 32)  
To DISPLAY assembly  
CN703

(To page 32)  
To DISPLAY assembly  
CN704





4

5

6

7

8

9

4

5

6

7

8

9

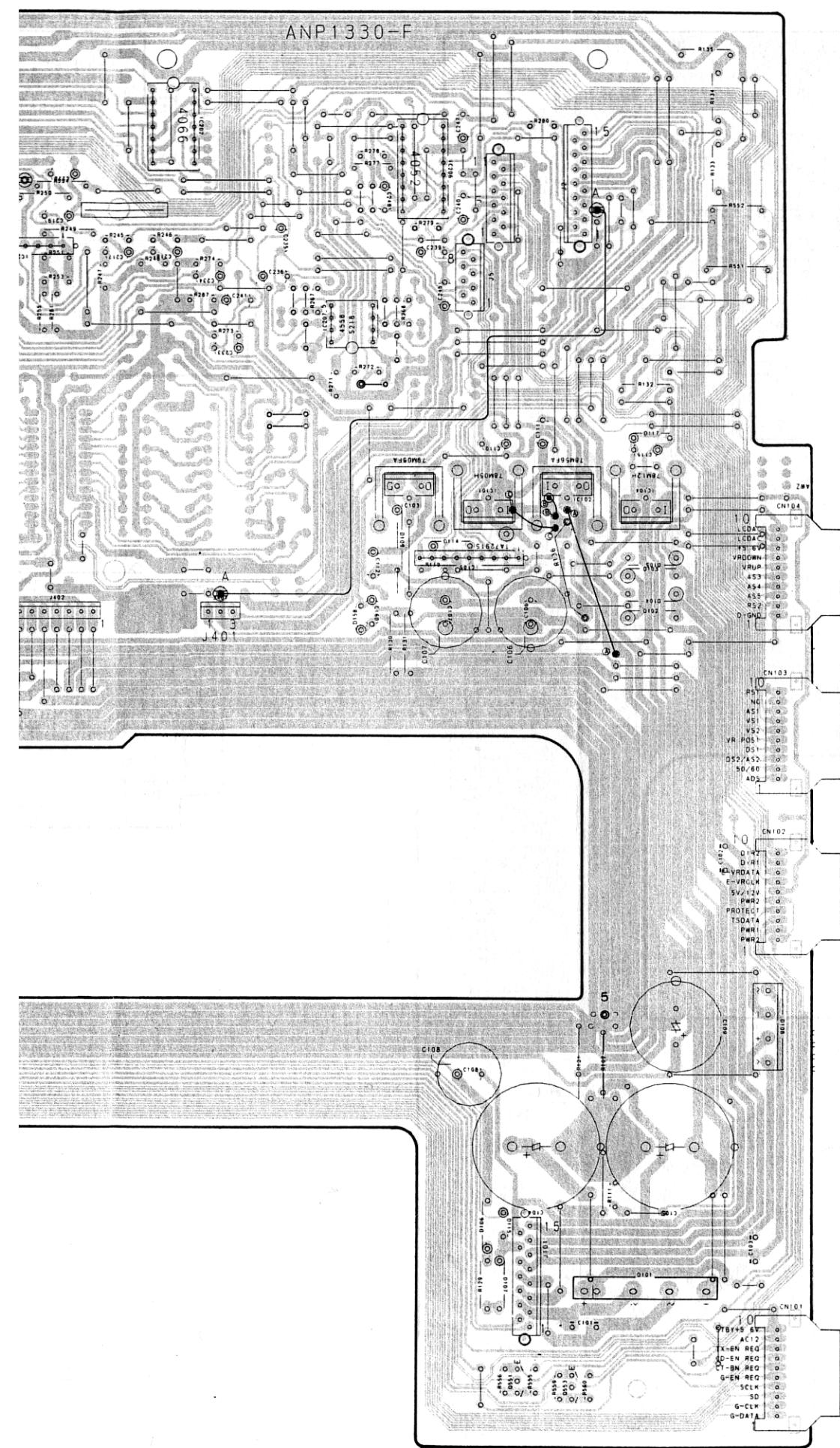
A

B

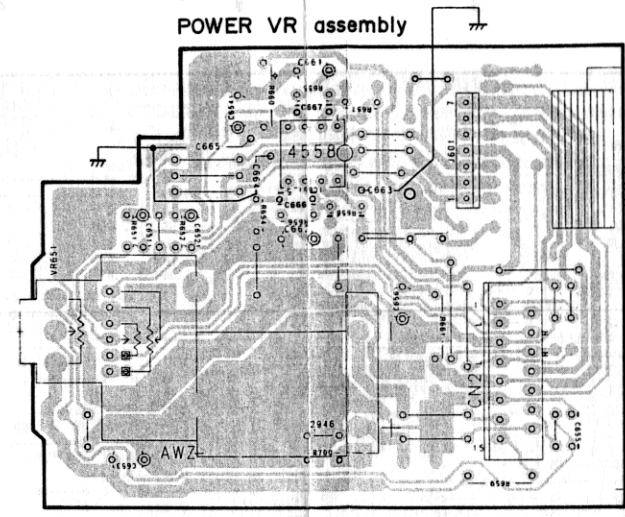
C

D

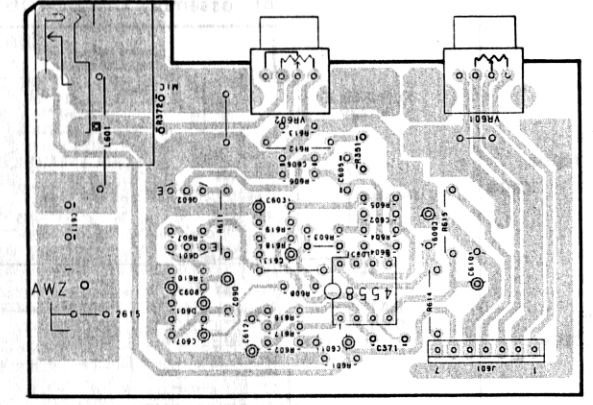
ANP1330-F



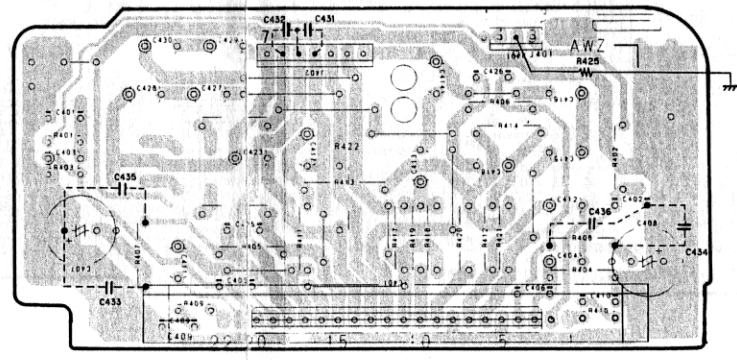
POWER VR assembly



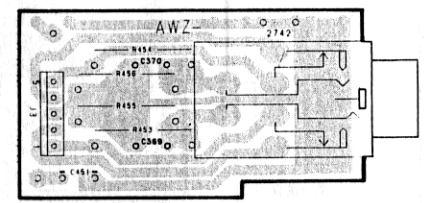
MIC assembly



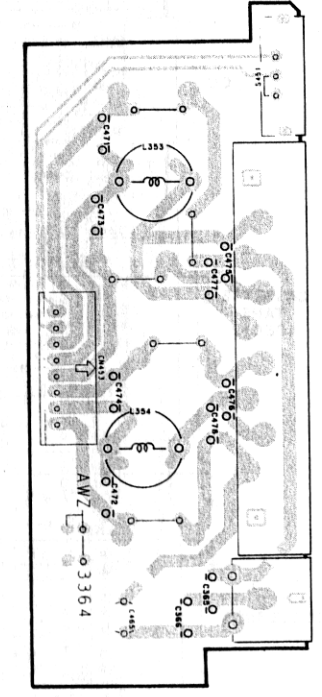
POWER assembly (AWZ2744)



HEADPHONE assembly



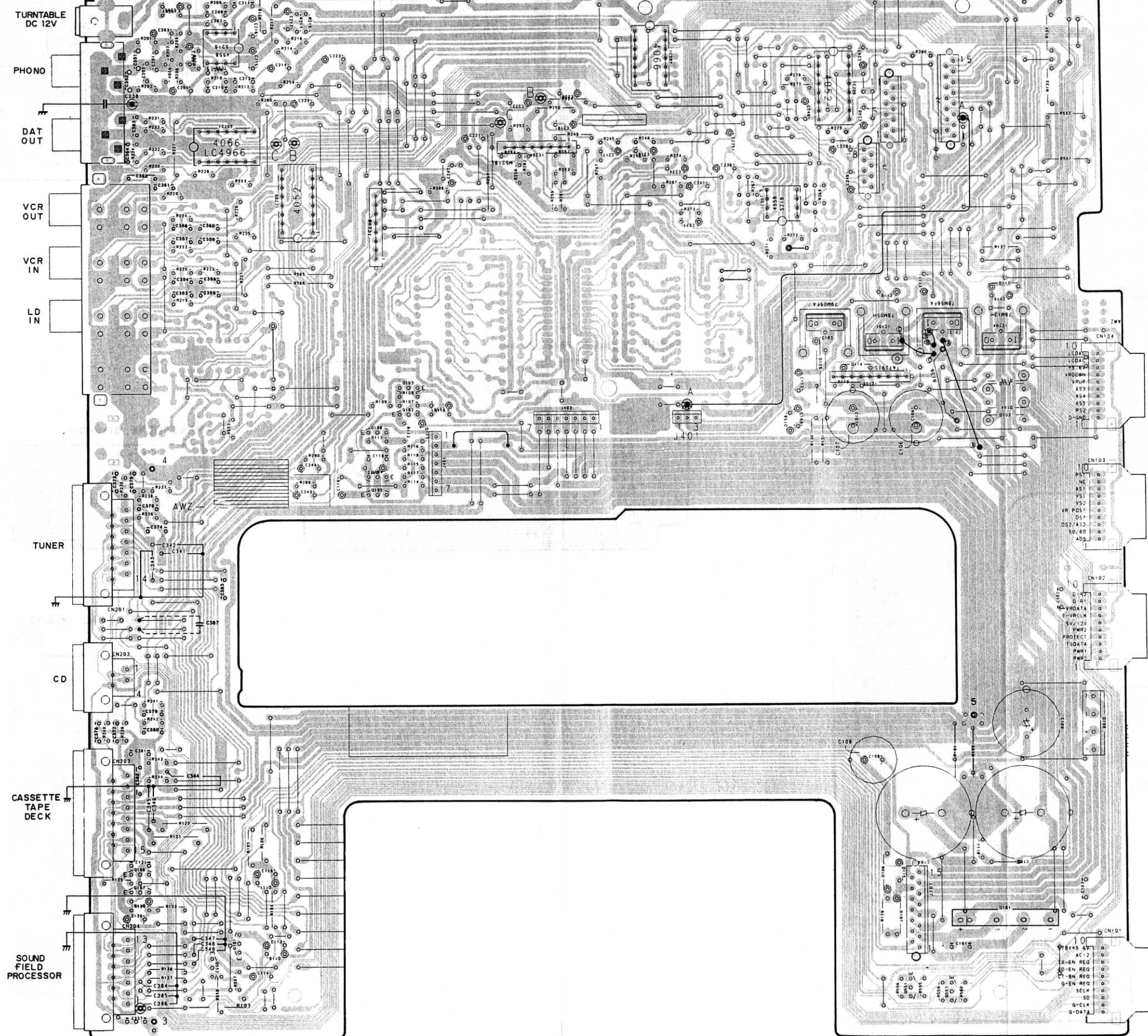
SP TERMINAL assembly



1 2 3 4 5 6

AF assembly (AWZ3406)

ANP1330-F



A

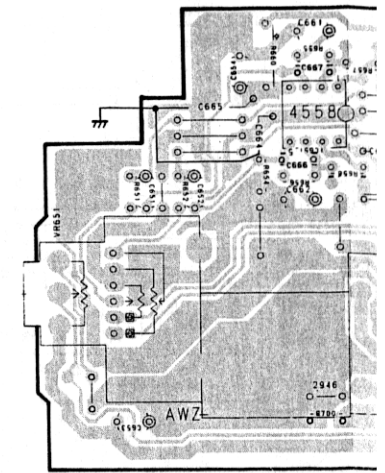
B

C

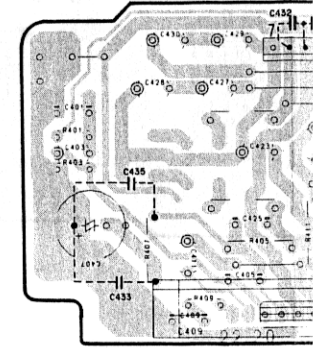
D

1 2 3 4 5 6

POWER VR assem



POWER assembly (AWZ2100)

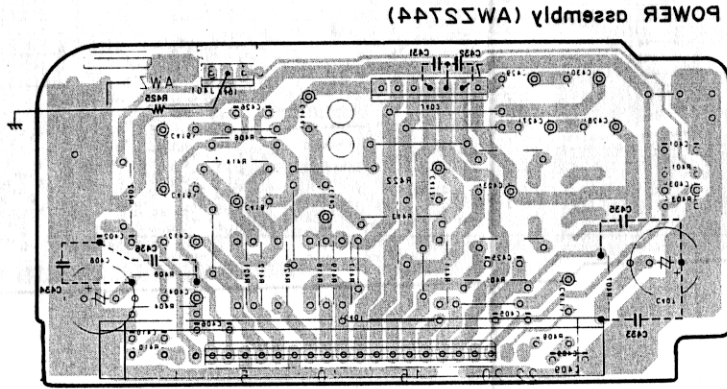
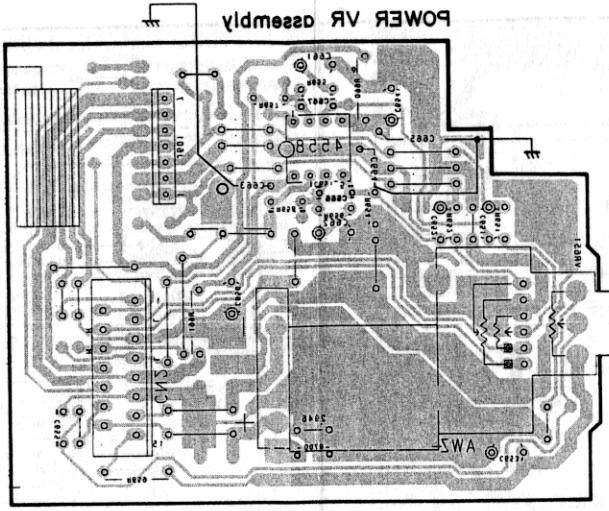
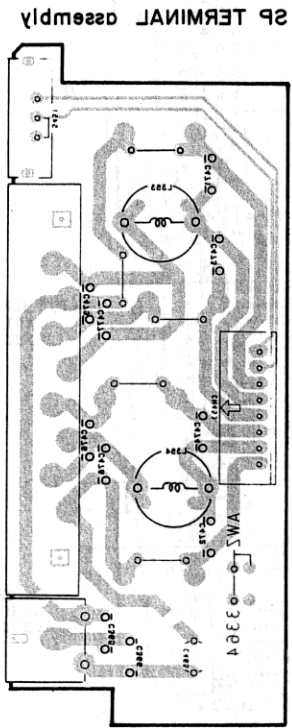
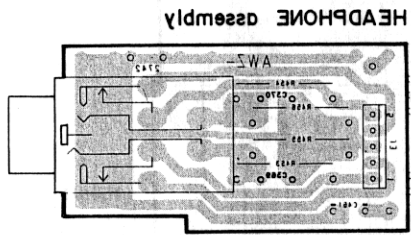
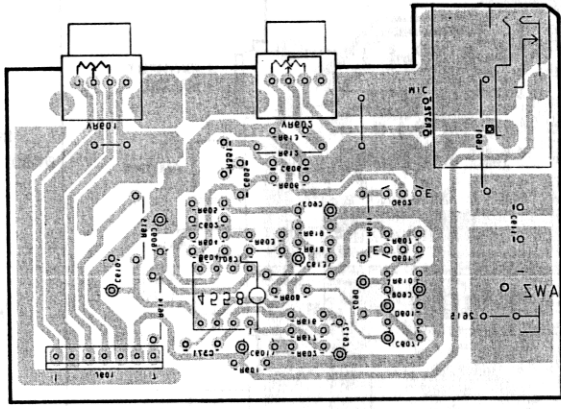


A

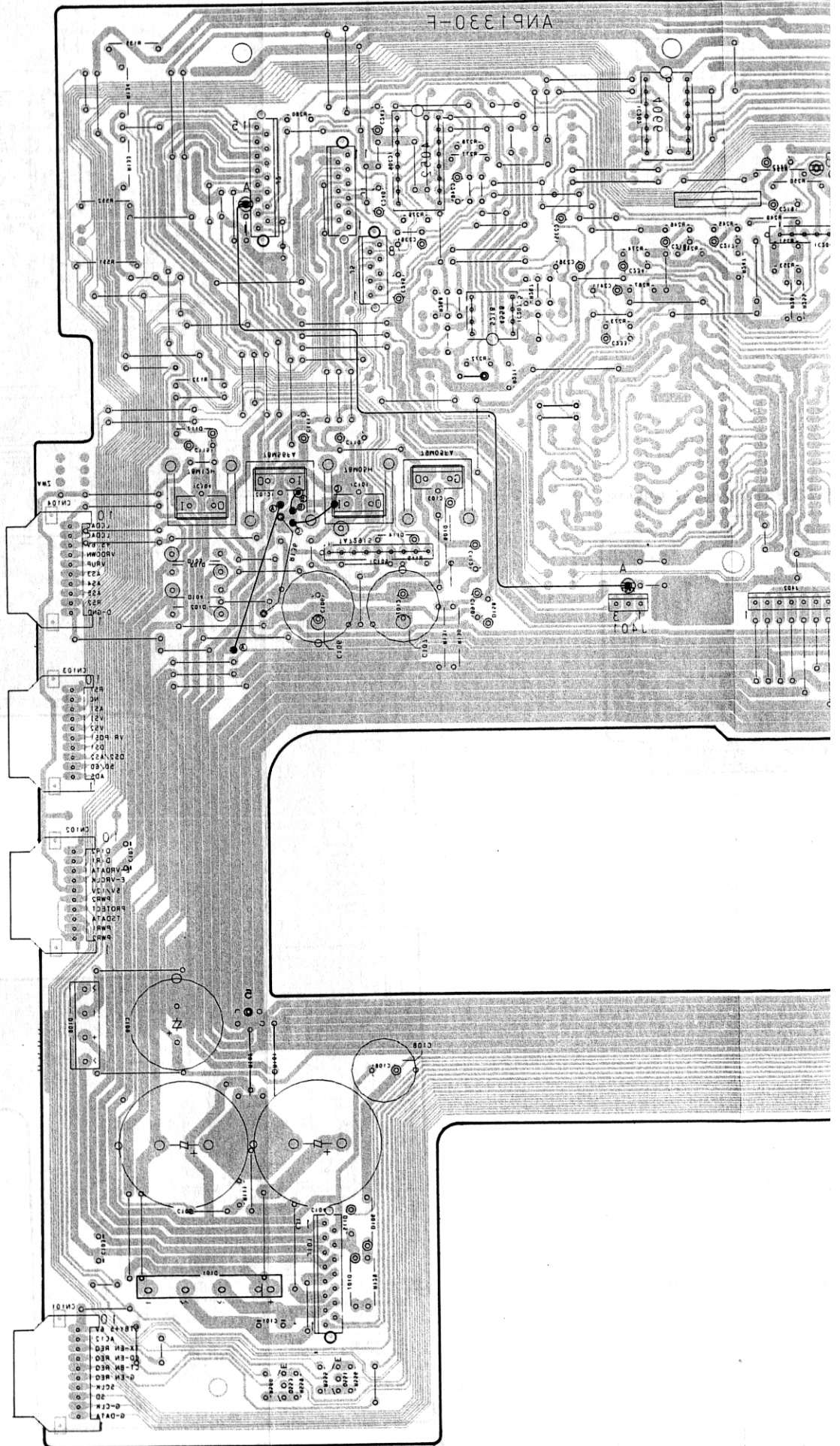
B

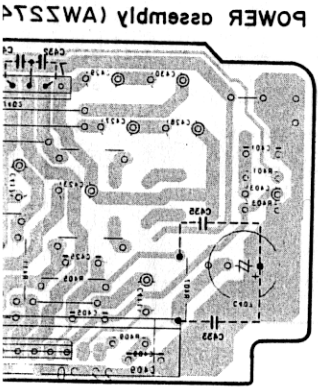
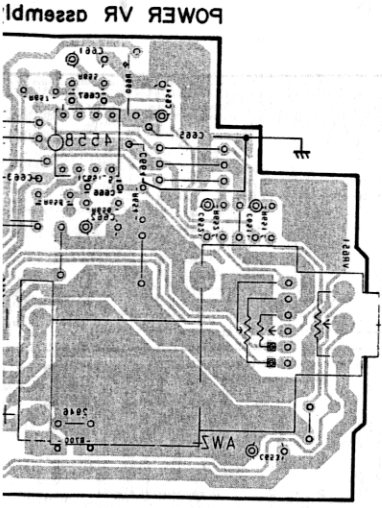
C

D

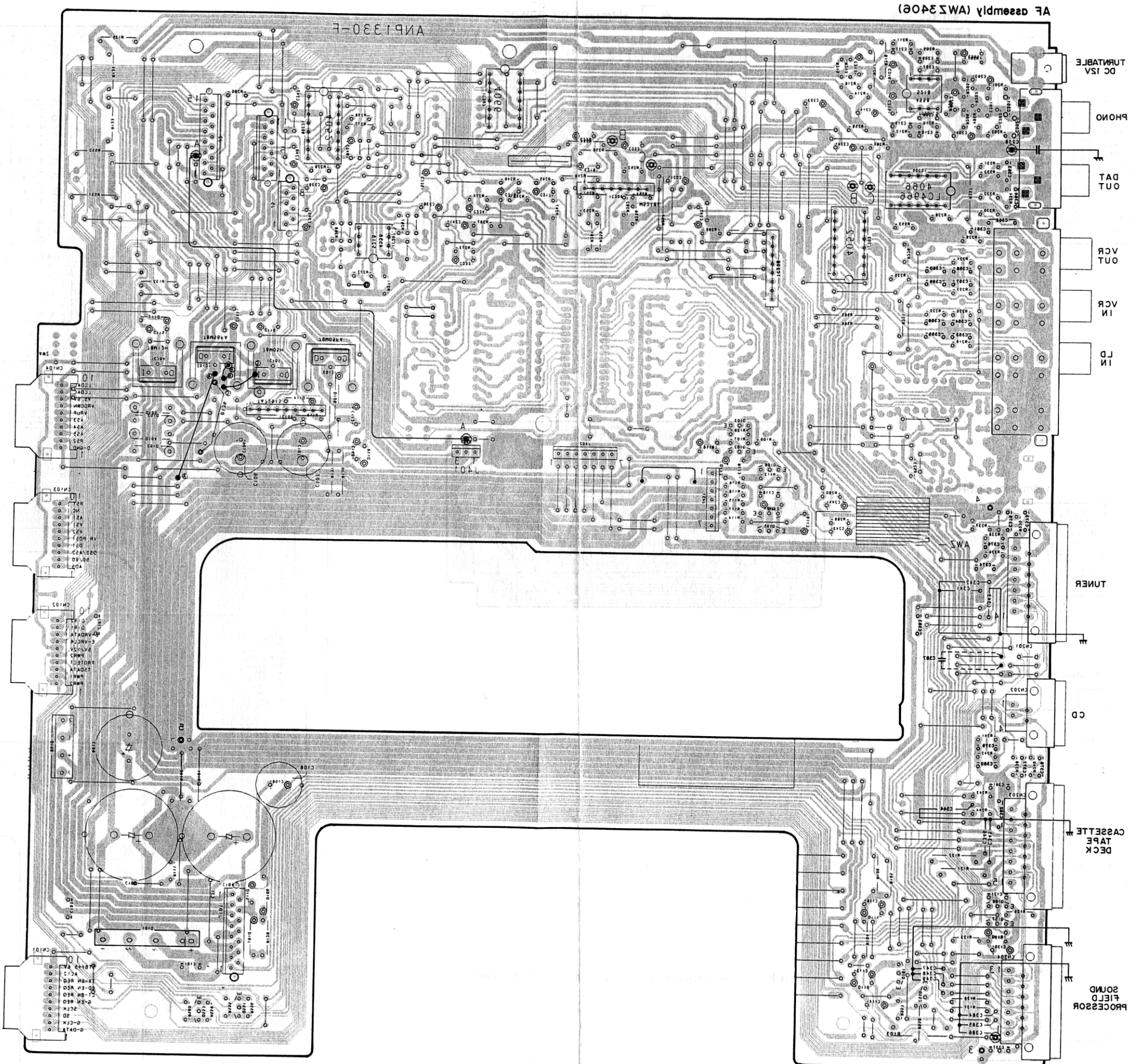


This P.C.B. connection diagram is viewed from the foil side.





iewed from the foil side.



- IC501
- IC505
- IC506
- IC502
- IC504
- IC503
- IC508
- IC501
- IC502
- 0102
- 0105
- 0108
- 0104
- 0102
- 0108
- 0107
- 0101
- 0223
- 0221
- 0223

A

B

C

D

6

2

4

3

5

1

6

2

4

3

5

1

**① POWER STANDBY/ON switch/indicator**

This is the switch for electric power.

**ON** .... When set to the ON position, power is supplied and the unit becomes operational.

**STANDBY** .... When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The indicator above the switch lights when the power is STANDBY, and goes out during ON.

**② Remote sensor**

**③ LSS SET button**

Use to operate the Listening Style Selector memory.

**④ LSS MODE button**

Use to call the Listening Style Selector.

**⑤ Display section**

**A** This shows the position of the listening style selector.

**B** This lights when you play a CD.

**C** This lights when you can select CD and DAT direct mode.

**⑥ DIRECT MODE button**

Use this when you want by-pass sound quality adjustment circuitry and listen to a CD or DAT in the direct mode.

**⑦ MUTING button/indicator**

Use when you want to temporarily cut sound during playback. Press again to return to the previous volume level.

**⑧ VOLUME control**

**⑨ PHONES jack**

For stereo headphones.

**NOTE:**

*There is no output from the speakers when headphones are plugged into PHONES jack.*

**⑩ Input selector buttons/indicators**

**[PHONO]**

Press to play records on a turntable connected to the PHONO input jacks.

**[TUNER]**

Press to listen to radio broadcast.

**[TAPE]**

Press to listen to cassette tape.

**[DAT]**

Press to listen to a DAT playing on a digital audio tape deck connected to the DAT jacks.

**[CD]**

Press to listen to compact disc.

**[LD]**

Press to play an LD on a video disc player connected to the LD input jacks.

**[VCR]**

Press to play a tape on a video cassette recorder connected to the VCR jacks.

**⑪ MIC (microphone) jack**

This is a standard jack for connecting a microphone.

**NOTE:**

*Microphone mixing is not possible when CD DIRECT or DAT DIRECT are ON.*

**⑫ MIC LEVEL control**

Used for adjusting the volume of microphone.

**⑬ BALANCE control**

Used for changing the balance between left and right channels. Usually sets this control to the center position.

**⑭ SPEAKERS button (A/ B OR A + B)/indicator**

When the SPEAKER MODE selector switch on the rear panel is set to the A/B (left), use this button to switch between sound from speakers A only, and sound from speakers B only.

When the SPEAKER MODE selector switch is set to the A/A + B (right), use this button to switch between sound from speakers A only, and sound from both speakers A and B.

Refer to page 20 No.⑤ concerning SPEAKER MODE selector switch.

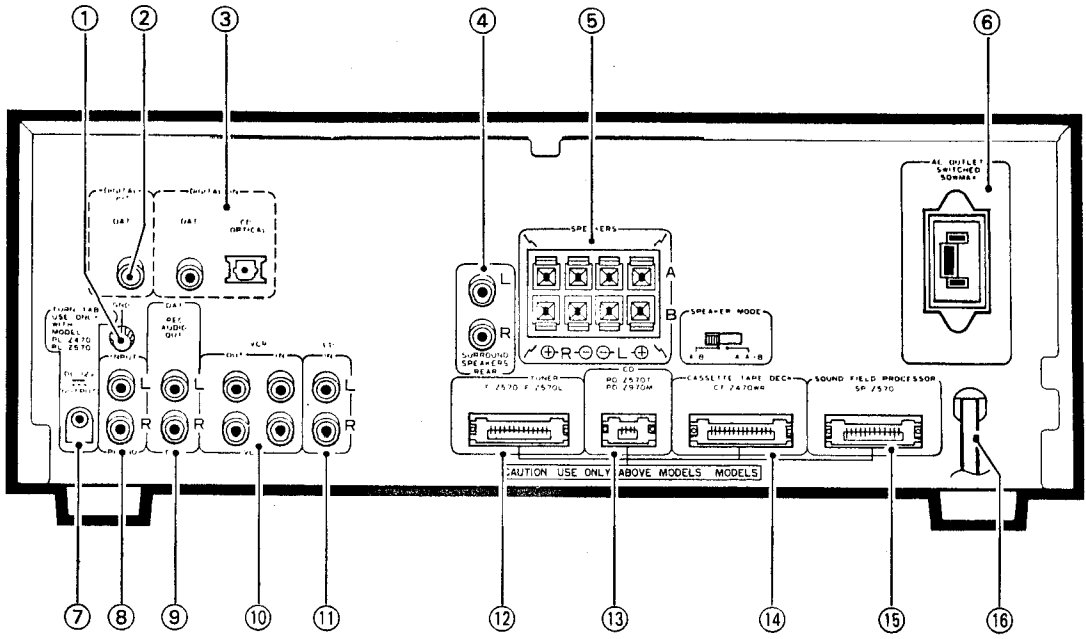
Rear panel SPEAKER MODE switch	SPEAKERS	
	Indicator off	Indicator lit
A/B	A	B
A/A + B	A	A + B

**NOTE:**

*If speakers A and B are not both connected, there will be no sound when the button is set for A + B.*



**REAR PANEL FACILITIES**



① **Ground terminal (GND)**

Connect this to the ground terminal on the turntable (except for PL-Z570/PL-Z470).

② **DIGITAL OUT (DAT)**

Outputs digital signal taken from CD player optical input.

A digital audio tape deck's digital input jack (coaxial cable input) can be connected here. Consult with your dealer to see if it's possible to connect your digital audio tape deck.

③ **DIGITAL IN jacks**

**[DAT]**

A digital audio tape deck's digital output jack (coaxial cable output) can be connected here.

Consult with your dealer to see if it's possible to connect your digital audio tape deck.

**[CD]**

Connect a CD player's OPTICAL OUT jack.

④ **SURROUND SPEAKERS jacks**

Connect the Surround speaker systems.

**NOTE:**

Connect a speaker system having a nominal impedance of 16  $\Omega$  or more.

⑤ **SPEAKERS terminals and SPEAKER MODE selector switch**

**A:** Connect to a first set of speakers.

**B:** Connect to a second set of speakers.

Set the selector switch to the A/B (left), and use the SPEAKERS button on the front panel to switch between sound from speakers A only, and sound from speakers B only.

If you set the selector switch to the A/A + B (right), use the SPEAKERS button on the front panel to switch between sound from speakers A only, and sound from both speakers A and B.

**NOTE:**

Connect a speaker system having a nominal impedance ranging from 8  $\Omega$  to 16  $\Omega$ .

⑥ **AC OUTLET (SWITCHED 50 W MAX)**

Power supplied through this outlet is turned on and off by the amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 50 W.

PD-Z570T or PD-Z970M CD player power cord can be connected.

**NOTE:**

Do not connect appliances with high power consumption such as heaters, irons, or television sets to the AC OUTLET in order to avoid overheating or fire risk.

This can cause the amplifier to malfunction.

⑦ **TURNTABLE (DC 12V OUTPUT) jack**

This jack supplies power to the turntable PL-Z470/PL-Z570.

⑧ **PHONO input jacks**

Connect the output cord of the turntable to these jacks.

⑨ **DAT REC OUT jacks**

Connect to audio input jacks of the digital audio tape deck.

⑩ **VCR jacks**

**IN:** Connect to the audio output jacks of VCR.

**OUT:** Connect to audio input jacks of VCR.

⑪ **LD input jacks**

Connect to the audio output jacks of the LD player.

⑫ **TUNER jack**

Connect the tuner cord here.

⑬ **CD jack**

Connect the compact disc player (PD-Z570T/ PD-Z970M) cord here.

⑭ **CASSETTE TAPE DECK jack**

Connect the cassette deck cord here.

⑮ **SOUND FIELD PROCESSOR jack**

Connect the sound field processor cord here.

⑯ **Power cord**

Connect this to the AC wall socket.