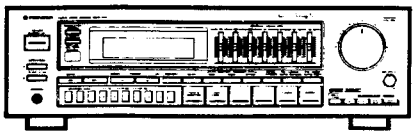
PIONEER®
The future of sound and vision.

Service Manual



ORDER NO.
ARP2060

AUDIO/VIDEO STEREO RECEIVER

VSX-3700S
VSX-3600

MODELS VSX-3700S AND VSX-3600 HAVE FOLLOWING VERSIONS :

Type	Applicable model		Power requirement	Destination
	VSX-3700S	VSX-3600		
KUC	O	O	AC120V only	U.S.A. and Canada
SD	–	O	AC110V,120-127V,220V,240V (swltchable)	Kingdom of Saudi Arabia and General market
YPW	–	O	AC240V only	Australia

- **This manual is applicable to the VSX-3700S/KUC, VSX-3600/KUC, SD and YPW types.**
- **As to the VSX-3600/KUC, SD and YPW types, refer to pages 42-44.**
- **The " S " at the end of the model number indicates that a programable remote control unit is supplied.**

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PIONEER ELECTRONICS AUSTRALIA PTY. LTD. 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911
YV JUNE 1990 Printed in Japan.

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).
When servicing or handling circuit boards and other components which contain lead in in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

1. SAFETY INFORMATION

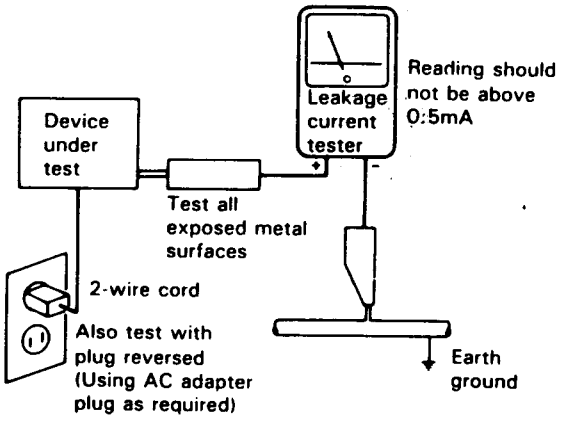
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.
The use of a substitute replacement component which dose not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. SPECIFICATIONS

Amplifier Section

[Front] (only front channels driven)

Continuous Average Power Output is 100 watts* per channel, min., at 8 ohms from 20 Hertz to 20,000 Hertz with no more than 0.05 % total harmonic distortion.**

Continuous Power Output (only rear channels driven)**
Rear: 1 kHz, T.H.D. 0.08%, 8 Ω ..... 15 W + 15 W
Dynamic power output (with EIA test signal)
2/4/8 Ω ..... 230 W/200 W/150 W
Input (Sensitivity/ Impedance)
PHONO ..... 2.5 mV/47 kΩ
CD, VDP/CDV, VCR/TAPE 1, TAPE 2 ..... 150 mV/47 kΩ
Phono Overload Level (T.H.D. 0.01 %, 1,000 Hz)
PHONO ..... 130 mV
Output Level
TAPE REC ..... 150 mV/2.2 kΩ
Frequency Response
PHONO (RIAA Equalization) ..... 20 Hz to 20,000 Hz ±0.5 dB
CD, VDP/CDV, VCR/TAPE 1, TAPE 2
..... 10 Hz to 70,000 Hz $^{+0.5}_{-3.0}$ dB
Signal-to-Noise Ratio (IHF, short circuited, A network)
PHONO ..... 72 dB
CD, VDP/CDV, VCR/TAPE 1, TAPE 2 ..... 97 dB
Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]
PHONO ..... 75 dB
CD, VDP/CDV, VCR/TAPE 1, TAPE 2 ..... 80 dB
Graphic Equalizer frequency band ..... 60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz, ±8 dB

FM Tuner Section

Frequency range ..... 87.5 MHz to 108 MHz
Usable Sensitivity ..... 10.8 dBf, IHF (0.95 μV/75 Ω)
50 dB Quieting Sensitivity
MONO ..... 15.3 dBf (1.6 μV/75 Ω)
STEREO ..... 37.1 dBf (19.5 μV/75 Ω)
Signal-to-Noise Ratio
MONO ..... 80 dB (at 85 dBf)
STEREO ..... 76 dB (at 85 dBf)
Distortion
STEREO ..... 0.3 % (1 kHz)
Alternate Channel Selectivity ..... 55 dB (400 kHz)
Stereo Separation ..... 35 dB (1 kHz)
Frequency Response ..... 30 Hz to 15 kHz (±1 dB)
Antenna Input ..... 300 Ω balanced, 75 Ω unbalanced

AM Tuner Section

Frequency range
U.S. and Canadian models ..... 530 kHz to 1,700 kHz
Australian model ..... 531 kHz to 1,602 kHz
Multi-voltage model
With 10 kHz step ..... 530 kHz to 1,700 kHz
With 9 kHz step ..... 531 kHz to 1,602 kHz
Sensitivity
IHF, Loop antenna ..... 300 μV/m
Selectivity ..... 20 dB
Signal-to-Noise Ratio ..... 50 dB
Antenna ..... AM Loop Antenna

VIDEO Section

Input (Sensitivity/Impedance)
VCR, VDP/CDV ..... 1 Vp-p/75 Ω
Output (Level/Impedance)
VCR, MONITOR ..... 1 Vp-p/7[illegible] Ω
Frequency Response
VCR, VDP/CDV → MONITOR ..... 5 Hz - 10 MHz $^{+0}_{-3}$ dB
Signal to Noise Ratio ..... 55 dB
Isolation ..... 55 dB

Miscellaneous

Power Requirements
U.S., Canadian model ..... AC 120 Volts, 60 Hz
Australian model ..... a.c. 240 Volts ~, 50/60 Hz
Multi-voltage models ..... ~AC 110 V/ 120 V~127 V/ 220 V/ 240 V (switchable), 50/60 Hz
Power Consumption
U.S., Canadian models ..... 390 W (UL), 500 VA (CSA)
Australian model ..... 600 W
Multi-voltage models ..... 625 W
In standby condition ..... 3 W
AC Outlets (Except for Australian model)
SWITCHED x 2 ..... TOTAL 100 W MAX
UNSWITCHED x 1 ..... 200 W MAX
Dimentions ..... 420 (W) X 125 (H) X 330 (D) mm
16-9/16(W) X 4-15/16 (H) X 13 (D) in
Weight (without package) ..... 8.5 kg (18 lb 12 oz)

Furnished Parts

FM T-type Antenna 1
AM Loop Antenna 1
Remote control unit 1
Dry cell battery
VSX-3700S: size "AA" (LR6/AM-3) Alkaline 2
VSX-3600: size "AA" (R6/UM-3) 2
Operating Instructions 1
VSX-3700S: Template 1

** Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*

*** Measured By Audio Spectrum Analyzer.*

NOTE:
Specifications and design subject to possible modification without notice due to improvements.

3. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

- *Parts without part number cannot be supplied.*
- *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.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

Parts list of Exterior and packing

Mark	No.	Description	Parts No.
	1	KNOB	AAB1119
	2	KNOB	AAB1133
	3	KNOB(S.S. PUSH)	AAD1660
	4	KNOB	AAD1661
	5	KNOB(SPEAKER)	AAD1662
	6	KNOB(TUNER FUNCTION)	AAD1663
	7	KNOB(STATION)	AAD1665
	8	KNOB(SURROUND)	AAD1808
	9	KNOB(FUNCTION)	AAD1818
	10	PANEL	AAK1981
	11	PLATE	AAK1982
	12	NAME PLATE(METAL)	AAM1029
	13	STATION SASH	AAP1111
	14	EQUALIZER SASH	AAP1120
	15	COMPLEX ASSEMBLY	AWZ2987
	16	SP SW ASSEMBLY	
	17	SCREW	ABA−298
	18	SCREW(STEEL)	ABA1009
	19	SCREW	ABA1054
	20	SCREW	ABA1082
⚠	21	COIL SPRING	ABH1064
	22	AC POWER CORD	ADG1057
	23	FM ANTENNA	ADH1004
	24	REAR AMP ASSEMBLY	
	25	PCB SPACER	
	26	PCB SUPPORT	
	27	PVC PLATE	
	28	PCB SUPPORT	
	29	PCB SUPPORT	
	30	BARRIER	
	31	MICA SHEET	AEE1014
	32	CLAMPER	
	33	AM−3 DRY CELL	
	34	FRONT PAD	AHA1336
	35	REAR PAD	AHA1337
	36	PACKING CASE	AHD1889
	37	CONTROL ASSEMBLY	AWZ2990
	38	SHEET	AHG1016
	39	TERMINAL SCREW	
⚠	40	3P AC OUTLET	AKP1053
	41	FRONT PANEL	AMB1661
	42	INSULATOR ASSEMBLY	AMR1434
	43	INSULATOR ASSEMBLY	AMR1435
	44	CHASSIS	
	45	REAR PANEL	
	46	METAL BONNET	AZN1783
	47	PCB SUPPORT	
	48	PLATE	
	49	HEAT SINK	
	50	OPERATING INSTRUCTIONS(E)	ARB1258
	51	PCB SUPPORT	
	52	TRANS ASSEMBLY	
	53	VIDEO/SURR ASSEMBLY	AWZ2992
	54	REMOTE CONSOLE UNIT	AXD1150
	55	SCREW	BBT30P060FZK
	56	SCREW	BPZ26P080FMC
	57	SCREW	CBZ30P060FZK
	58	MOTR VOL ASSEMBLY	
	59	SCREW	PMZ30P060FCU
	60	SCREW	VCZ30P060FCU
	61	CERAMIC CAPACITOR	CKDYB471K50
⚠	62	FUSE(8A, FU1)	AEK1002
⚠	63	FUSE(4A, FU3, FU4)	AEK−125
	64	LOOP ANTENNA	ATB1005
⚠	65	TRANSISTOR Q1,Q2	2SC3281
⚠	66	TRANSISTOR Q3,Q4	2SA1302
⚠	67	TRANSISTOR Q5	2SC3180N
⚠	68	TRANSISTOR Q6	2SA1263N
⚠	69	POWER TRANSFORMER	ATS1280
	70	DELAY CONT ASSEMBLY	AWX1045

1 2 3 4 5 6

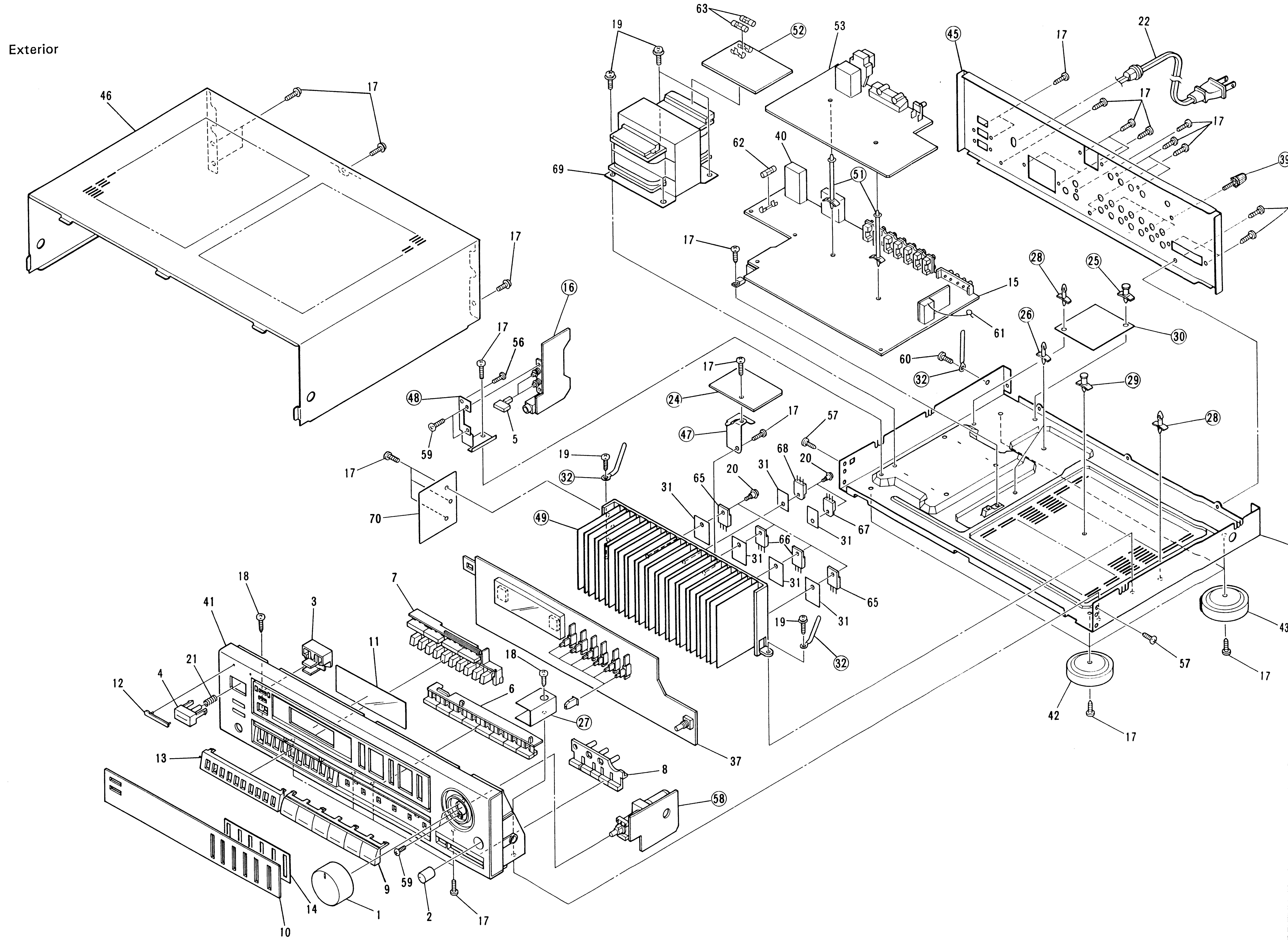
Exterior

A

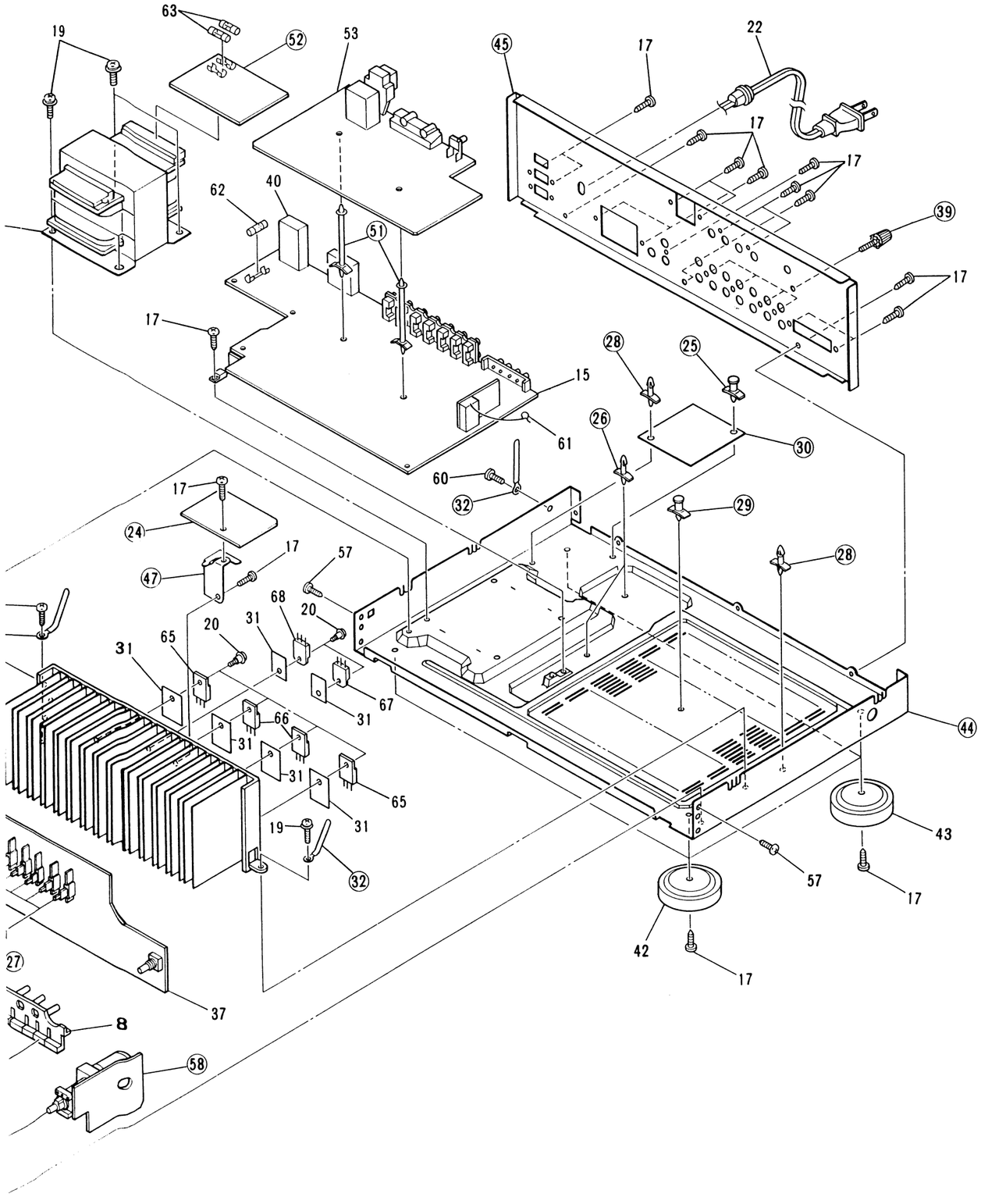
B

C

D



1 2 3 4 5 6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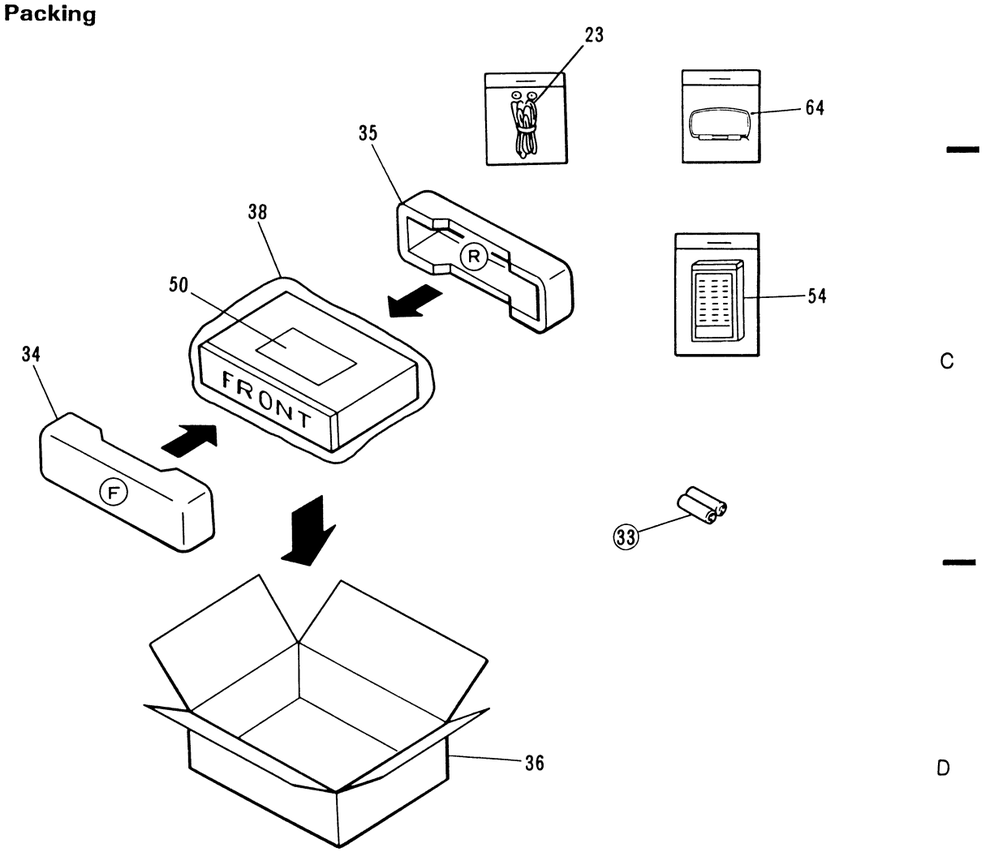
Packing


23
64
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R
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54
FRONT
34
F
33
36

4. SCHEMATIC DIAGRAM AND P.C.BOARDS CONNECTION DIAGRAM

1. RESISTORS:
Indicated in Ω, ¼W, ⅛W, ±5% tolerance unless otherwise noted k : kΩ, M : MΩ, (F) : ±1%, (G) : ±2%, (K) : ±10% (M); ±20% tolerance

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

3. VOLTAGE, CURRENT:
: Signal voltage at (W + W 8Ω)output (1kHz)
: DC voltage (V) at no input signal
Value in ( ) is DC voltage at rated power.
⇦ mA : DC current at no input signal

4. OTHERS:
➡ : Signal route.
⊘ : Adjusting point.
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.
※ marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

SWITCHES:

SP SWITCH assembly

S570 SP A ON-OFF / SP-B ON-OFF

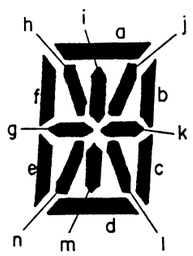
CONTROL assembly

S401	FREQ UP	S421	TAPE2
S402	FREQ DOWN	S422	10
S403	2	S423	9
S404	1	S424	8
S405	FM	S426	7
S406	AM	S427	6
S407	MEMORY	S428	5
S408	MEMORY SCAN	S429	4
S409	POP	S430	3
S410	ROCK	S432	V-SEL
S411	OTHER	S433	POWER
S413	CD	S434	S.S
S414	TUNER	S435	DOLBY
S415	PHONO	S436	SIM.
S416	AUTO/MONO	S437	STUDIO
S417	AUTO/MANUAL	S438	SURR.
S418	DIRECT ACCESS	S439	DELAY TIME
S419	VDP		
S420	VCR/TAPE1		

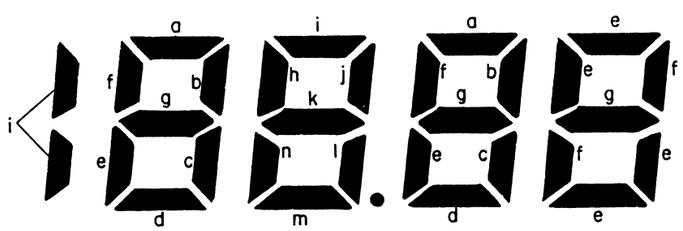
S1 9k - 10k (VSX-3600/SD ONLY)

S2 LINE VOLTAGE SELECTOR (VSX-3600/SD ONLY)
110V-127V / 220V-240V

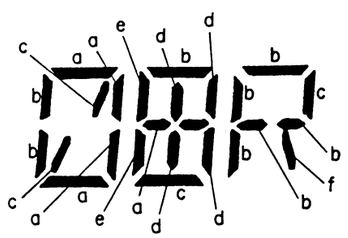
S3 LINE VOLTAGE SELECTOR (VSX-3600/SD ONLY)
110V / 120-127V / 220V /240V



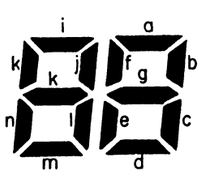
G11-G7



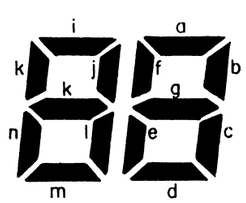
G2,G5,G6



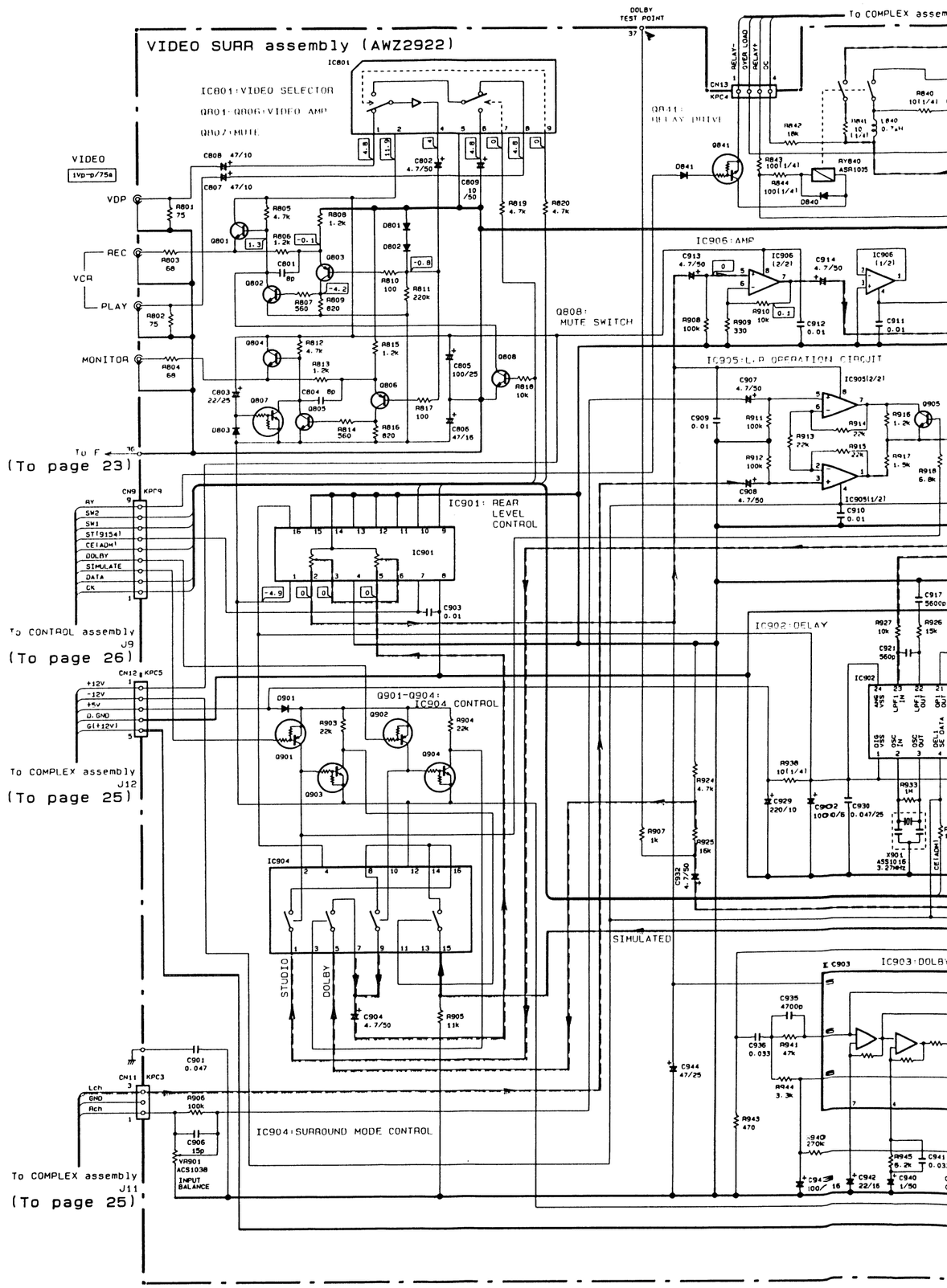
G4

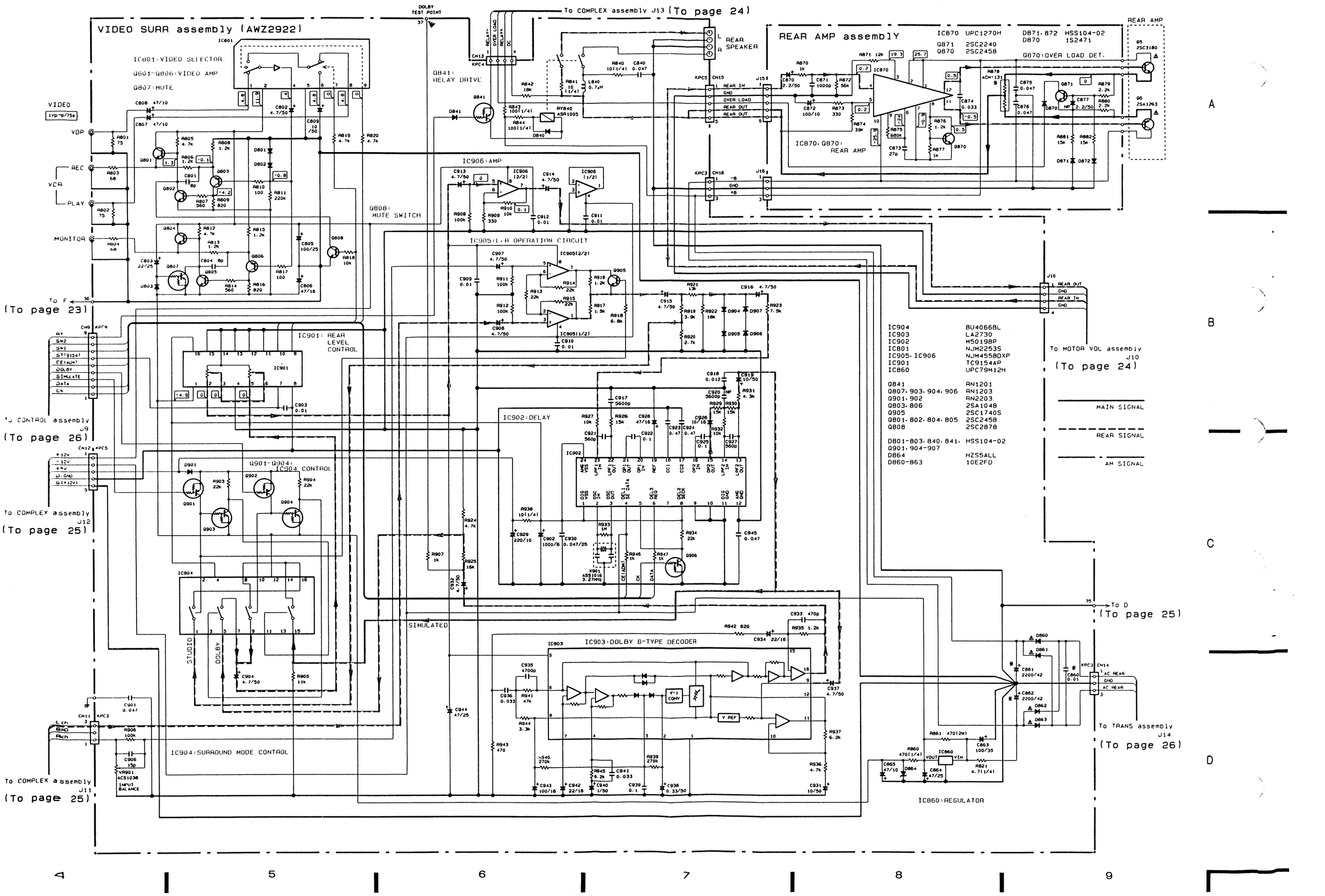


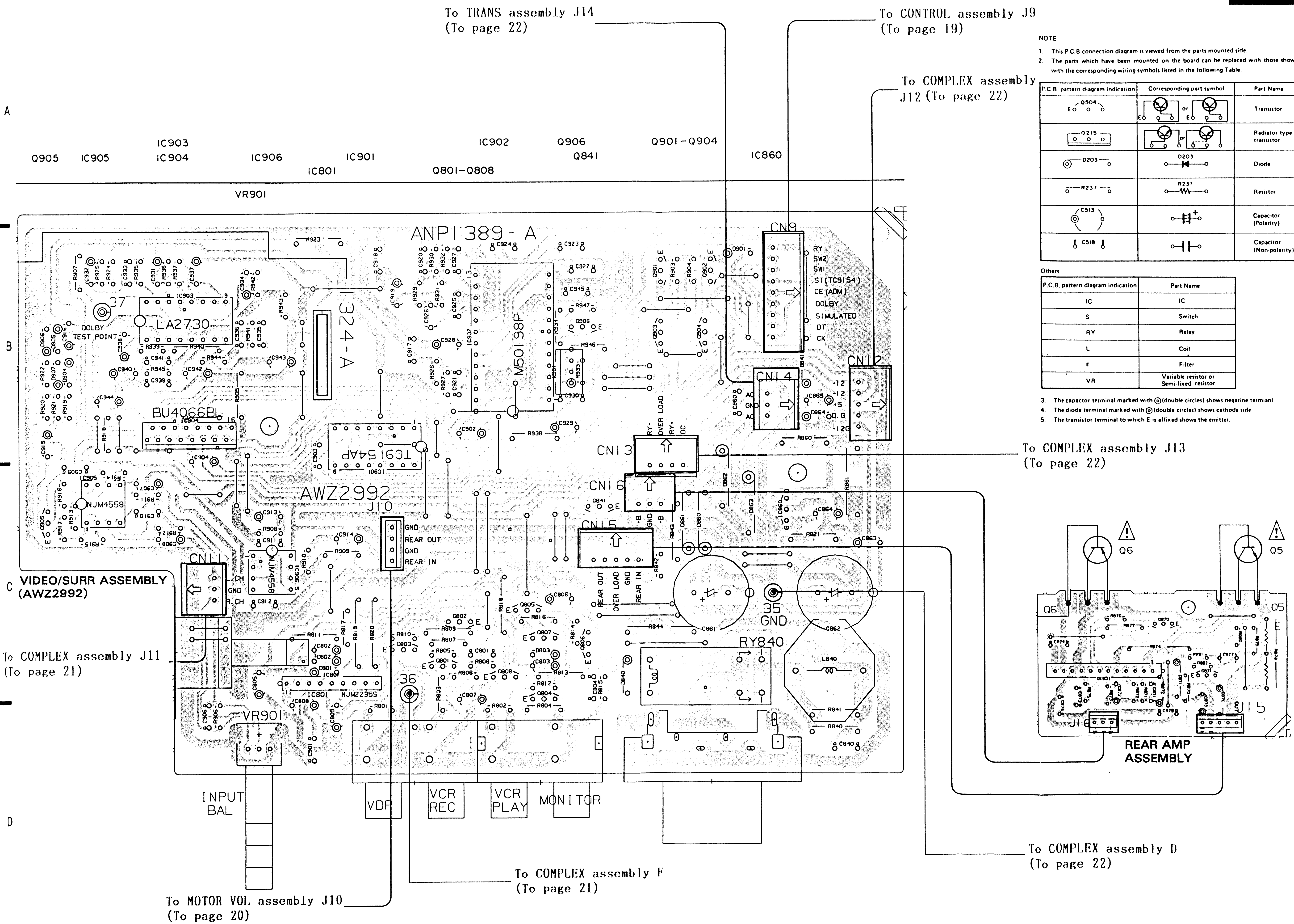
G3



G1




VIDEO SURR assembly (AWZ2922)
IC801:VIDEO SELECTOR
Q801-Q806:VIDEO AMP
Q807:MUTE
VIDEO
1VP-D/75Ω
VDP
REC
VCR
PLAY
MONITOR
To F
(To page 23)
Q808:
MUTE SWITCH
Q841:
RELAY DRIVE
DOLBY
TEST POINT
37
To COMPLEX assembly J13 (To page 24)
REAR
SPEAKER
REAR AMP assembly
IC870 UPC1270H
Q871 2SC2240
Q870 2SC2458
D871,872 HSS104-02
D870 1S2471
Q870:OVER LOAD DET.
IC870,Q870:
REAR AMP
REAR AMP
Q5 2SC3180
Q6 2SA1263
REAR IN
GND
OVER LOAD
REAR OUT
REAR OUT
GND
+B
IC906:AMP
IC905:L.R OPERATION CIRCUIT
IC901: REAR
LEVEL
CONTROL
IC902:DELAY
IC903:DOLBY B-TYPE DECODER
IC904:SURROUND MODE CONTROL
Q901-Q904:
IC904 CONTROL
SIMULATED
STUDIO
DOLBY
To CONTROL assembly
J9
(To page 26)
To COMPLEX assembly
J12
(To page 25)
To COMPLEX assembly
J11
(To page 25)
To MOTOR VOL assembly
J10
(To page 24)
To D
(To page 25)
To TRANS assembly
J14
(To page 26)
IC860:REGULATOR
IC904 BU4066BL
IC903 LA2730
IC902 M50198P
IC801 NJM2253S
IC905,IC906 NJM4558DXP
IC901 TC9154AP
IC860 UPC79M12H
Q841 RN1201
Q807,903,904,906 RN1203
Q901,902 RN2203
Q803,806 2SA1048
Q905 2SC1740S
Q801,802,804,805 2SC2458
Q808 2SC2878
D801-803,840,841, HSS104-02
Q901,904-907
D864 HZS5ALL
D860-863 10E2FD
MAIN SIGNAL
REAR SIGNAL
AM SIGNAL



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.

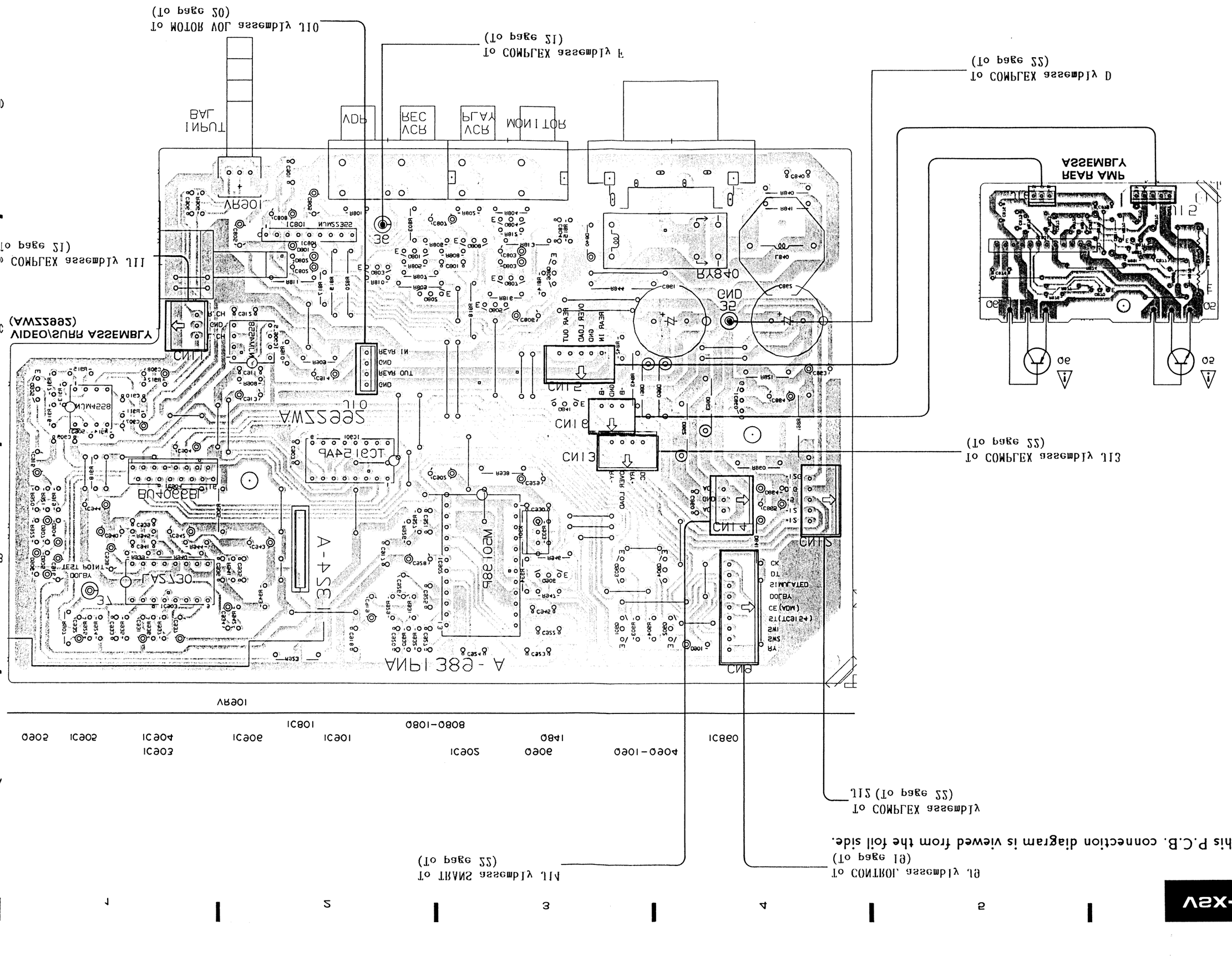
P.C.B pattern diagram indication	Corresponding part symbol	Part Name
Q504		Transistor
Q215		Radiator type transistor
D203	D203	Diode
R237	R237	Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

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 termianl.
4. The diode terminal marked with ◎ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

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



/SD, /YPW ONLY
To COMPLEX assembly 18
(To page 22)

To VIDEO/SURROUND assembly J10
(To page 11)

DELAY CONT ASSEMBLY (AWX1045)

MOTOR VOL ASSEMBLY

SP SWITCH ASSEMBLY

COMPLEX ASS
(AWZ2987)

CONTROL ASSEMBLY (AWZ2990)

/SD, /YPW CUT

VR311 - VR317

VR302

Q402 Q403

IC401

Q401

IC303
Q301

VR311 VR

2 SERIAL F E MODULE ASSEMBLY
(AXQ1002)

IC304

IC301

/YPW Model ONLY

/SD Model ONLY

To VIDEO/SURROUND assembly CN9
(To page 12)

To VIDEO/SURROUND assembly CN14
(To page 12)

To VIDEO/SURROUND assembly CN13
(To page 11)

PLEX ASSEMBLY
2987)

TRANS ASSEMBLY

POWER TRANSFORMER

/YPW ONLY

125V 4A

To VIDEO/SURROUND assembly 35
(To page 12)

AC POWER CORD
AC120V/60Hz

/SD,/YPW CUT

CAUTION FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACEMENT FUSES SHOULD BE OF THE SAME TYPE AND RATINGS ONLY

ATTENTION POUR LES PRECAUTIONS CONTINUELLES CONTRE L'INCENDIE LES FUSIBLES A REMPLACER DOIVENT ETRE DE MEME TYPES ET NORMES QUE L'EQUIPEMENT.

/KUC,/SD ONLY

/SD,/YPW CUT

AWZ2987

ANPI388-A

I-323-A

VR151

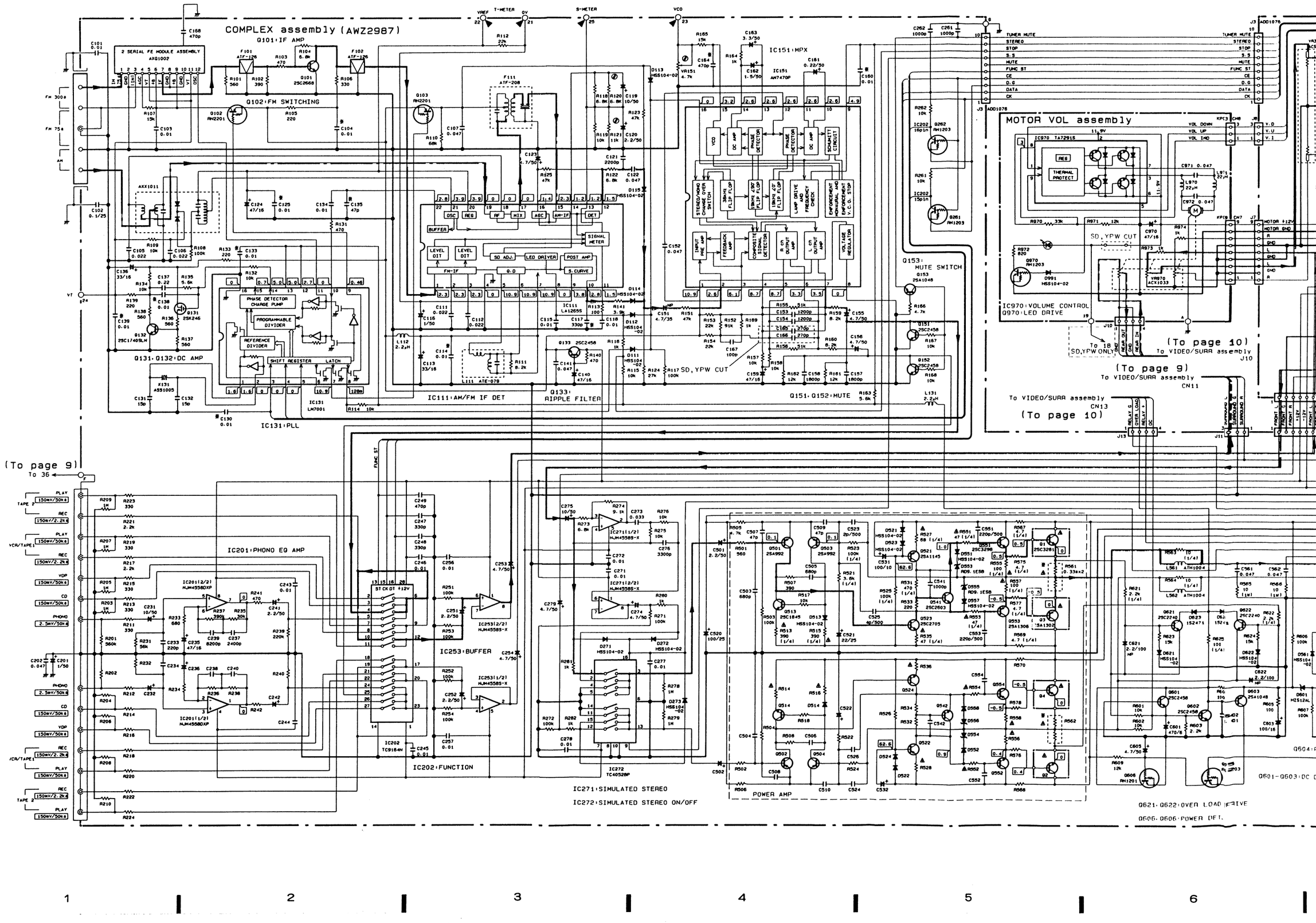
Q133 Q261 Q262 Q153 Q2 Q151 Q552 Q4 Q554 Q542 Q541 Q553 Q3 Q551 Q621 Q622 Q1 IC701
31 Q103 Q132 Q131 IC151 Q152 Q522 Q504 Q502 Q514 Q524 Q513 Q523 Q501 Q503 Q521
Q102 IC111 IC201 IC202 IC253 IC272 IC271 Q601-Q606
Q101 Q752 Q751

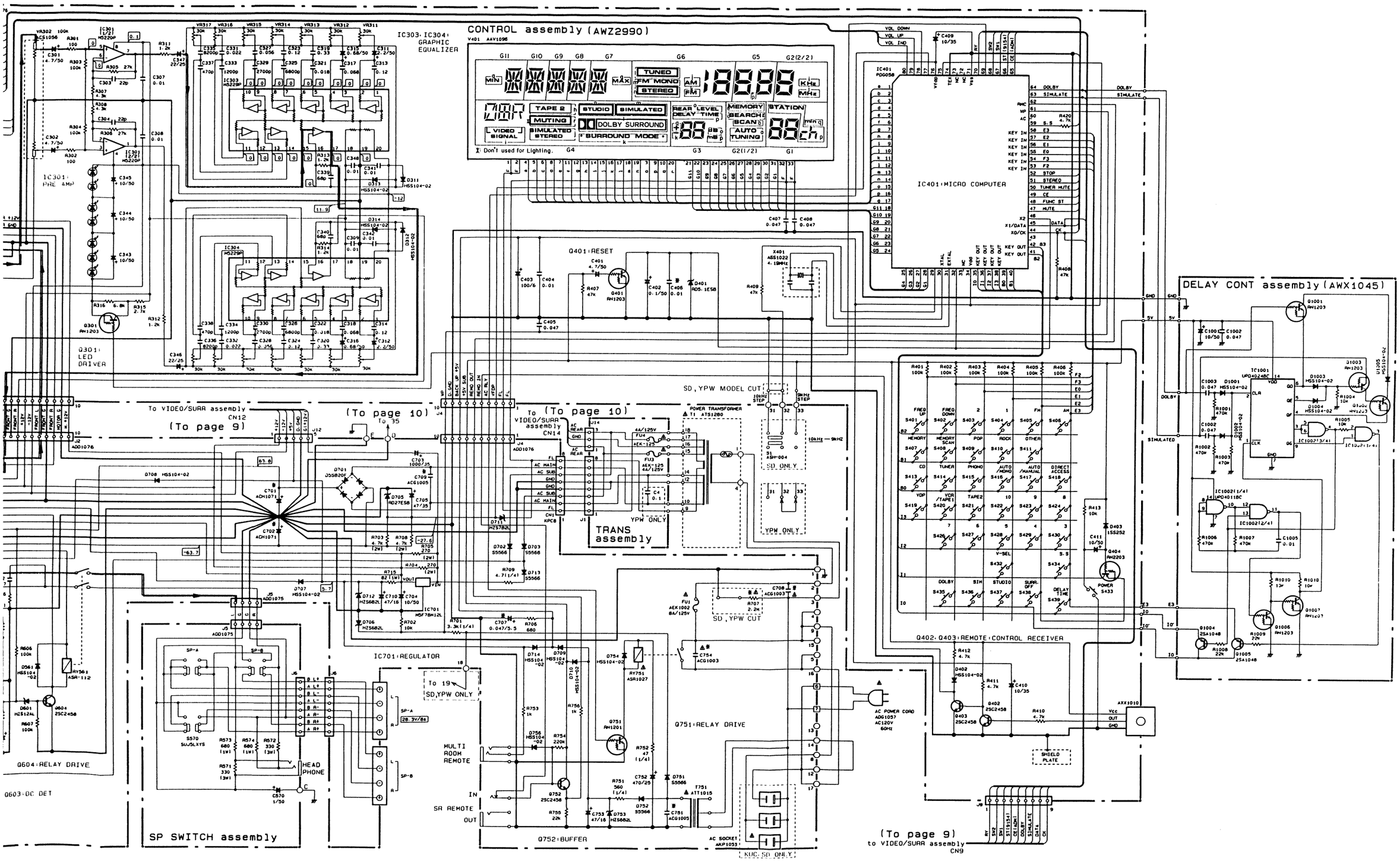
To MOTOR VOL assembly 19
(To page 19)
/SD,/YPW ONLY

To VIDEO/SURROUND assembly 36
(To page 11)

To VIDEO/SURROUND assembly CN11
(To page 11)

To VIDEO/SURROUND assembly CN12
(To page 12)


COMPLEX assembly (AWZ2987)
Q101:IF AMP
Q102:FM SWITCHING
Q131,Q132:DC AMP
IC131:PLL
IC111:AM/FM IF DET
Q133:
RIPPLE FILTER
IC151:MPX
Q151,Q152:MUTE
Q153:
MUTE SWITCH
SD,YPW CUT
MOTOR VOL assembly
IC970:VOLUME CONTROL
Q970:LED DRIVE
(To page 10)
To VIDEO/SUAR assembly
J10
(To page 9)
To VIDEO/SUAR assembly
CN11
To VIDEO/SUAR assembly
CN13
(To page 10)
To 18
SD,YPW ONLY
(To page 9)
To 36
IC201:PHONO EQ AMP
IC253:BUFFER
IC202:FUNCTION
IC271:SIMULATED STEREO
IC272:SIMULATED STEREO ON/OFF
POWER AMP
Q621,Q622:OVER LOAD DRIVE
Q606:POWER DET.
Q601-Q603:DC


CONTROL assembly (AWZ2990)
V401 AAV1096
IC303·IC304: GRAPHIC EQUALIZER
IC301: PRE AMP
Q301: LED DRIVER
IC401: MICRO COMPUTER
IC401 PD6058
Q401: RESET
X401 AS51022 4.19MHz
SD, YPW MODEL CUT
POWER TRANSFORMER T1 AT51280
TRANS assembly
SD ONLY
YPW ONLY
To VIDEO/SUAR assembly CN12
(To page 9)
(To page 10)
To 35
To VIDEO/SUAR assembly CN14
IC701: REGULATOR
SD, YPW CUT
Q751: RELAY DRIVE
Q752: BUFFER
Q604: RELAY DRIVE
Q603: DC DET
SP SWITCH assembly
SP-A
SP-B
HEAD PHONE
MULTI ROOM REMOTE
IN
SR REMOTE
OUT
To 19 SD, YPW ONLY
AC POWER CORD ADG1057 AC120V 60Hz
AC SOCKET AKP1053
KUC, SD ONLY
Q402·Q403: REMOTE CONTROL RECEIVER
AXX1010
SHIELD PLATE
(To page 9) to VIDEO/SUAR assembly CN9
DELAY CONT assembly (AWX1045)
IC1001 UPD4024BC
IC1002(1/4) UPD4011BC
IC1002(2/4)
IC1002(3/4)
IC1002(4/4)
SIMULATED
DOLBY
GND
5V

5. 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 ⚠ 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 × 10¹*	*561*	*RD1/4PS 5 6 1 J*
47kΩ	*47 × 10³*	*473*	*RD1/4PS 4 7 3 J*
0.5Ω	*0R5*		*RN2H 0 R 5 K*
1Ω	*010*		*RS1P 0 1 0 K*

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

5.62kΩ	*562 × 10¹*	*5621*	*RN1/4SR 5 6 2 1 F*

Mark	No.	Description	Parts No.
COMPLEX ASSEMBLY (AWZ2987)			
SEMICONDUCTORS			
	IC111	AM/FM IC	LA1265S
	IC131	PLL IC	LM7001
	IC151	MPX IC	AN7470P
	IC201	OP−AMP IC	NJM4558DXP
	IC202	E−SW IC	TC9164N
	IC253	OP−AMP IC	NJM4558S−X
	IC271	OP−AMP IC	NJM4558S−X
	IC272	LOGIC IC	TC4052BP
	IC701	REGULATOR IC	M5F78M12L
	Q101	TRANSISTOR	2SC2668
	Q102,103	TRANSISTOR	RN2201
	Q131	N−FET	2SK246
	Q132	TRANSISTOR	2SC1740SLN
	Q133	TRANSISTOR	2SC2458
	Q151,152	TRANSISTOR	2SC2458
	Q153	TRANSISTOR	2SA1048
	Q261,262	TRANSISTOR	RN1203
	Q501−504	TRANSISTOR	2SA992
	Q513,514	TRANSISTOR	2SC1845
	Q521,522	TRANSISTOR	2SA1145
	Q523,524	TRANSISTOR	2SC2705
	Q541,542	TRANSISTOR	2SC2603
	Q551,552	TRANSISTOR	2SC3298
	Q553,554	TRANSISTOR	2SA1306
	Q601,602	TRANSISTOR	2SC2458
	Q603	TRANSISTOR	2SA1048
	Q604	TRANSISTOR	2SC2458
	Q605	TRANSISTOR	RN1203
	Q606	TRANSISTOR	RN1201
	Q621,622	TRANSISTOR	2SC2240
	Q751	TRANSISTOR	RN1201
	Q752	TRANSISTOR	2SC2458
	D111−115	DIODE	HSS104−02
	D271−273	DIODE	HSS104−02
	D513,514	DIODE	HSS104−02
	D521−524	DIODE	HSS104−02
	D551,552	DIODE	HSS104−02
	D553−556	ZENER DIODE	RD9.1ESB
	D557,558	DIODE	HSS104−02
	D561	DIODE	HSS104−02
	D601	ZENER DIODE	HZS12AL
	D621,622	DIODE	HSS104−02
	D623,624	DIODE	1S2471
	D701	DIODE	D5SB20F
	D702,703	DIODE	S5566
	D705	ZENER DIODE	RD27ESB
	D706	ZENER DIODE	HZS6B2L
	D707−710	DIODE	HSS104−02
	D711	ZENER DIODE	HZS7B2L
	D712	ZENER DIODE	HZS6B2L
	D713	DIODE	S5566
	D714	DIODE	HSS104−02
	D751,752	DIODE	S5566
	D753	ZENER DIODE	HZS6B2L
	D754	DIODE	HSS104−02
	D756	DIODE	HSS104−02
FILTERS			
	F101,102	CERAMIC FILTER	ATF−126
	F111	CERAMIC FILTER	ATF−208
COILS			
	L111	COIL	ATE−079
	L112	AXIAL INDUCTOR	LAU2R2M
	L131	AXIAL INDUCTOR	LAU2R2M
	L561,562	COIL	ATH1004
RELAIES & TRANSFORMER			
	RY561	RELAY	ASR−112
	RY751	RELAY	ASR1027
⚠	T751	POWER TRANSFORMER	ATT1015

Mark	No.	Description	Parts No.
CAPACITORS			
	C101	CERAMIC CAPACITOR (0.01μ)	ACG1021
	C102	CERAMIC CAPACITOR	CKDYX104M25
	C103,104	CERAMIC CAPACITOR	ACG1021
	C105,106	CERAMIC CAPACITOR	CKDYF223Z50
	C107	CERAMIC CAPACITOR	CKDYF473Z50
	C111,112	CERAMIC CAPACITOR	CKDYF223Z50
	C113	ELECTR.CAPACITOR	CEAS330M16
	C114	CERAMIC CAPACITOR	ACG1021
	C115	CERAMIC CAPACITOR	CKDYF103Z50
	C116	ELECTR.CAPACITOR	CEAS010M50
	C117	CERAMIC CAPACITOR (330p)	ACG1018
	C118	CERAMIC CAPACITOR	CKDYF103Z50
	C119	ELECTR.CAPACITOR	CEAS100M50
	C120	ELECTR.CAPACITOR	CEAS2R2M50
	C121	CERAMIC CAPACITOR	CKDYB222K50
	C122	CERAMIC CAPACITOR	CKDYF473Z50
	C123	ELECTR.CAPACITOR	CEAS4R7M50
	C124	ELECTR.CAPACITOR	CEAS470M16
	C125	CERAMIC CAPACITOR	ACG1021
	C130	CERAMIC CAPACITOR	ACG1021
	C131,132	CERAMIC CAPACITOR	CCDCH150J50
	C133	CERAMIC CAPACITOR	ACG1021
	C134	CERAMIC CAPACITOR	CKDYF103Z50
	C135	CERAMIC CAPACITOR (47p)	ACG1016
	C136	ELECTR.CAPACITOR	CEAS330M16
	C137	AUDIO FILM CAPACITOR	CFTXA224J50
	C138,139	CERAMIC CAPACITOR	ACG1021
	C140	ELECTR.CAPACITOR	CEAS470M16
	C141	CERAMIC CAPACITOR	CKDYF473Z50
	C151	ELECTR.CAPACITOR	CEANP4R7M35
	C152	CERAMIC CAPACITOR	CKDYF473Z50
	C153,154	MYLOR FILM CAPACITOR	CQMA122J50
	C155,156	ELECTR.CAPACITOR	CEAS4R7M50
	C157,158	CERAMIC CAPACITOR	CKDYB182K50
	C159	ELECTR.CAPACITOR	CEAS470M16
	C160	CERAMIC CAPACITOR	ACG1021
	C161	ELECTR.CAPACITOR	CEASR22M50
	C162	ELECTROLYTIC CAPACITOR	CEAS1R5M50
	C163	ELECTR.CAPACITOR	CEAS3R3M50
	C164	CAPACITOR (470p)	ACE1039
	C168		CKDYB471K50
	C165,166	CERAMIC CAPACITOR	CCDSL271J50
	C167	CERAMIC CAPACITOR	CCCSL101J50
	C201	ELECTR.CAPACITOR	CEAS010M50
	C202	CERAMIC CAPACITOR	CKDYX473M25
	C231,232	ELECTR.CAPACITOR	CEAS100M50
	C233,234	CERAMIC CAPACITOR	CCCSL221J50
	C235,236	ELECTR.CAPACITOR	CEAS470M16
	C237,238	MYLOR FILM CAPACITOR	CQMA242J50
	C239,240	MYLOR FILM CAPACITOR	CQMA822K50
	C241,242	ELECTR.CAPACITOR	CEAS2R2M50
	C243−246	CERAMIC CAPACITOR	CKDYF103Z50
	C247,248	CERAMIC CAPACITOR	CKCYB331K50
	C249	CERAMIC CAPACITOR	CKCYB471K50
	C251,252	ELECTR.CAPACITOR	CEAS2R2M50
	C253,254	ELECTR.CAPACITOR	CEAS4R7M50
	C256,257	CERAMIC CAPACITOR	CKDYF103Z50
	C261,262	CERAMIC CAPACITOR	CKCYB102K50
	C271,272	CERAMIC CAPACITOR	CKDYF103Z50
	C273	AUDIO FILM CAPACITOR	CFTXA333J50
	C274	ELECTR.CAPACITOR	CEAS4R7M50
	C275	ELECTR.CAPACITOR	CEAS100M50
	C276	MYLOR FILM CAPACITOR	CQMA332J50
	C277,278	CERAMIC CAPACITOR	CKDYF103Z50
	C279	ELECTR.CAPACITOR	CEAS4R7M50
	C501,502	ELECTR.CAPACITOR	CEAS2R2M50
	C503,504	MYLOR FILM CAPACITOR	CQMA381J50
	C505,506	CERAMIC CAPACITOR	CKDYB681K50
	C507−510	CERAMIC CAPACITOR	CCCSL470J50
	C520	ELECTR.CAPACITOR	CEAS101M25
	C521,522	ELECTR.CAPACITOR	CEAS220M25
	C523,524	CERAMIC CAPACITOR	CCCSL020C500
	C525,526	CERAMIC CAPACITOR	CCCSL040C500
	C531,532	ELECTR.CAPACITOR	CEAS101M10
	C541,542	CERAMIC CAPACITOR	CKDYB102K50
	C551−554	CERAMIC CAPACITOR	CCCSL221K500
	C561,562	AUDIO FILM CAPACITOR	CFTXA473J50
	C601	ELECTROLYTIC CAPACITOR	CEAS471M6
	C602	CERAMIC CAPACITOR	CKDYF103Z50
	C603	ELECTR.CAPACITOR	CEAS101M16
	C605	ELECTR.CAPACITOR	CEAS4R7M50
	C621,622	ELECTROLYTIC CAPACITOR	CEANP2R2M100
	C701,702	ELECTROLYTIC CAPACITOR	ACH1071
	C703	ELECTROLYTIC CAPACITOR	CEAS102M35
	C704	ELECTR.CAPACITOR	CEAS100M50
	C705	ELECTROLYTIC CAPACITOR	CEAS470M35
	C707	CEA(47000/5.5V)	ACH1037
⚠	C708	CKA(0.01/AC400V)	ACG1003
	C709	CKA(0.01/AC250V)	ACG1005
	C710	ELECTR.CAPACITOR	CEAS470M16
	C751	CKA(0.01/AC400V)	ACG1005
	C752	ELECTROLYTIC CAPACITOR	CEAS471M25

Mark	No.	Description	Parts No.
	C753	ELECTR.CAPACITOR	CEAS470M16
⚠	C754	CKA(0.01/AC400V)	ACG1003
RESISTORS			
	VR151	VR(4.7K)	ACP1024
⚠	R513−516	FUSLIBLE RESISTOR	RFA1/4PS391J
	R521,522	CARBON FILM RESISTOR	RD1/4PM362J
	R523−526	CARBON FILM RESISTOR	RD1/4PM104J
⚠	R527,528	CARBON FILM RESISTOR	RD1/4PMF680J
	R531,532	CARBON FILM RESISTOR	RD1/4PM471J
⚠	R535,536	FUSLIBLE RESISTOR	RFA1/4PS470J
⚠	R551−554	FUSLIBLE RESISTOR	RFA1/4PS470J
⚠	R555−558	CARBON FILM RESISTOR	RD1/4PMFL101J
⚠	561,562	RESISTOR(0.33,5W)	ACN−139
⚠	R563,564	CARBON FILM RESISTOR	RD1/4PMF100J
⚠	R565,566	METAL OXIDE RESISTOR	RS1PMF100J
⚠	R567−570	FUSLIBLE RESISTOR	RFA1/4PS4R7J
⚠	R575−578	FUSLIBLE RESISTOR	RFA1/4PS4R7J
	R621,622	CARBON FILM RESISTOR	RD1/4PMF222J
	R625	CARBON FILM RESISTOR	RD1/4PMF101J
	R701	CARBON FILM RESISTOR	RD1/4PM332J
	R703	METAL OXIDE RESISTOR	RS2LMF472J
	R704,705	METAL OXIDE RESISTOR	RS2LMF271J
	R707	RESISTOR(2.2M,1/2W)	ACN−209
	R708	METAL OXIDE RESISTOR	RS2LMF472J
	R709	CARBON FILM RESISTOR	RD1/4PMFL4R7J
	R715	METAL OXIDE RESISTOR	RS1PMF820J
	R751	CARBON FILM RESISTOR	RD1/2PM561J
	R752	CARBON FILM RESISTOR	RD1/2PM470J
		Other resistors	RD1/8PM□□□J
OTHERS			
		ANTENNA TERMINAL 4−P	AKA1009
		PHONO JACK 4−P	AKB1101
		PHONO JACK 6−P	AKB1121
		SPEAKER TERMINAL 8−P	AKE−111
		JACK 2−P	AKN1006
		JACK	AKN1020
*		2 SERIAL FE MODULE	AXQ1002
		AM RF TUNING BLOCK	AXX1011
	CN1	JUMPER CONNECTOR	KPC8
	X131	CRYSTAL RESONATOR	ASS1005

* Component parts of 2 Serial FE module(AXQ1002) are not supplied in service

SP SWITCH ASSEMBLY

SWITCH

S570	PUSH SWITCH	SUJ5LXYS

CAPACITOR

C570	ELECTR.CAPACITOR	CEAS010M50

RESISTORS

⚠	R571,572	METAL OXIDE RESISTOR	RS3LMF331J
⚠	R573,574	METAL OXIDE RESISTOR	RS1LMF681J

OTHER

	JACK	AKN1002

REAR AMP ASSEMBLY

SEMICONDUCTORS

IC870	PREDRIVER−IC	UPC1270H
Q870	TRANSISTOR	2SC2458
Q871	TRANSISTOR	2SC2240
D870	DIODE	1S2471
D871,872	DIOCE	HSS104−02

CAPACITORS

C870	ELECTR.CAPACITOR	CEAS2R2M50
C871	CERAMIC CAPACITOR	CKDYB102K50
C872	ELECTROLYTIC CAPACITOR	CEHAQ101M10
C873	CERAMIC CAPACITOR	CCCSL270J50
C874	MYLOR FILM CAPACITOR	CQMA333J50
C875,876	CERAMIC CAPACITOR	CKDYF473Z50
C877	ELECTR.CAPACITOR	CEANP2R2M50

RESISTORS

R878	RESISTOR(0.22,2W)	ACN−131
	Other resistors	RD1/8PM□□□J

Mark	No.	Description	Parts No.
CONTROL ASSEMBLY (AWZ2990)			
SEMICONDUCTORS			
	IC301	OP−AMP IC	M5220P
	IC303,304	AUDIO IC	M5229P
	IC401	AMP CONTROL UCOM	PDG058
	Q301	TRANSISTOR	RN1203
	Q401	TRANSISTOR	RN1203
	Q402,403	TRANSISTOR	2SC2458
	Q404		RN2203
	D311−314	DIODE	HSS104−02
	D401	ZENER DIODE	RD5.1ESB
	D402	DIODE	HSS104−02
	D403		1SS252
SWITCHES			
	S401−411	SWITCH	ASG1034
	S413−424	SWITCH	ASG1034
	S426−430	SWITCH	ASG1034
	S432−439	SWITCH	ASG1034
CAPACITORS			
	C301,302	ELECTR.CAPACITOR	CEAS4R7M50
	C303,304	CERAMIC CAPACITOR	CCCSL220J50
	C307−309	CERAMIC CAPACITOR	CKDYF103Z50
	C311,312	ELECTR.CAPACITOR	CEJA2R2M50
	C313,314	AUDIO FILM CAPACITOR	CFTXA124J50
	C315,316	ELECTROLYTIC CAPACITOR	CEJAR68M50
	C317,318	AUDIO FILM CAPACITOR	CFTXA683J50
	C319,320	AUDIO FILM CAPACITOR	CFTXA334J50
	C321,322	AUDIO FILM CAPACITOR	CFTXA183J50
	C323,324	AUDIO FILM CAPACITOR	CFTXA124J50
	C325,326	MYLOR FILM CAPACITOR	CQMA682K50
	C327,328	AUDIO FILM CAPACITOR	CFTXA563J50
	C329,330	MYLOR FILM CAPACITOR	CQMA272J50
	C331,332	AUDIO FILM CAPACITOR	CFTXA223J50
	C333,334	MYLOR FILM CAPACITOR	CQMA122J50
	C335,336	MYLOR FILM CAPACITOR	CQMA822K50
	C337,338	MYLOR FILM CAPACITOR	CQMA471K50
	C339,340	CERAMIC CAPACITOR	CCDSL680J50
	C341,342	CERAMIC CAPACITOR	CKDYF103Z50
	C343−345	ELECTR.CAPACITOR	CEAS100M50
	C346,347	ELECTR.CAPACITOR	CEAS220M25
	C348	CERAMIC CAPACITOR	CKDYF103Z50
	C401	ELECTROLYTIC CAPACITOR	CEJA4R7M50
	C402	ELECTROLYTIC CAPACITOR	CEJA0R1M50
	C403	ELECTR.CAPACITOR	CEJA101M6
	C404	CERAMIC CAPACITOR	CKDYF103Z50
	C405	CERAMIC CAPACITOR	CKDYF473Z50
	C406	CERAMIC CAPACITOR	ACG10021
	C407,408	CERAMIC CAPACITOR	CKDYF473Z50
	C409,410	ELECTROLYTIC CAPACITOR	CEJA100M35
	C411		CEAS100M50
RESISTORS			
	VR302	VARIABLE RESISTOR	ACS1056
	VR311−317	VR	ACU1023
		Other resistors	RD1/8PM□□□J
OTHERS			
	X401	CERAMIC OSCILLATOR	ASS1022
	V401	FL TUBE	AAV1096
		FL SPACER	AEB1120
		REMOTE RECEIVER UNIT	AXX1010

TRANS ASSEMBLY

No parts are supplied with the TRANS ASSEMBLY

VIDEO/SURR ASSEMBLY (AWZ2992)

SEMICONDUCTORS

	IC801	E−SW IC	NJM2235S
	IC860	REGULATOR IC	UPC79M12H
	IC901	E−VR IC	TC9154AP
	IC902	IC	M50198P
	IC903	DOLBY−B IC	LA2730
	IC904	LOGIC IC	BU4066BL
	IC905,906	OP−AMP IC	NJM4558DXP
	Q801,802	TRANSISTOR	2SC2458
	Q803	TRANSISTOR	2SA1048
	Q804,805	TRANSISTOR	2SC2458
	Q806	TRANSISTOR	2SA1048
	Q807	TRANSISTOR	RN1203
	Q808	TRANSISTOR	2SC2878
	Q841	TRANSISTOR	RN1201
	Q901,902	TRANSISTOR	RN2203
	Q903,904	TRANSISTOR	RN1203
	Q905	TRANSISTOR	2SC1740S
	Q906	TRANSISTOR	RN1203

Mark	No.	Description	Parts No.
	D801−803	DIODE	HSS104−02
	D840,841	DIODE	HSS104−02
	D860−863	DIODE	10E2FD
	D864	ZENER DIODE	HZS5ALL
	D901	DIODE	HSS104−02
	D904−907	DIODE	HSS104−02
COIL			
	L840	COIL	ATH1004
RELAY			
	RY840	RELAY	ASR1005
CAPACITORS			
	C801	CERAMIC CAPACITOR	CCCSL080D50
	C802	ELECTR.CAPACITOR	CEAS4R7M50
	C803	ELECTR.CAPACITOR	CEAS220M25
	C804	CERAMIC CAPACITOR	CCCSL080D50
	C805	ELECTR.CAPACITOR	CEAS101M25
	C806	ELECTR.CAPACITOR	CEAS470M16
	C807,808	ELECTR.CAPACITOR	CEAS470M10
	C809	ELECTR.CAPACITOR	CEAS100M50
	C840	MYLOR FILM CAPACITOR	CQMA473J50
	C860	CKA(0.01/AC250V)	ACG1005
	C861,862	ELECTROLYTIC CAPACITOR (2200/42v)	ACH1109
	C863	ELECTR.CAPACITOR	CEAS101M35
	C864	ELECTR.CAPACITOR	CEAS470M25
	C865	ELECTR.CAPACITOR	CEAS470M10
	C901	CERAMIC CAPACITOR	CKDYF473Z50
	C902	ELECTROLYTIC CAPACITOR	CEAS102M6
	C903	CERAMIC CAPACITOR	CKCYF473Z50
	C904	ELECTROLYTIC CAPACITOR	CEAS4R7M50
	C906	CERAMIC CAPACITOR	CCCSL150J50
	C907,908	ELECTR.CAPACITOR	CEAS4R7M50
	C909−912	CERAMIC CAPACITOR	CKDYF103Z50
	C913−916	ELECTR.CAPACITOR	CEAS4R7M50
	C917	MYLOR FILM CAPACITOR	CQMA562K50
	C918	MYLOR FILM CAPACITOR	CQMA123K50
	C919	ELECTR.CAPACITOR	CEAS100M50
	C920	MYLOR FILM CAPACITOR	CQMA562K50
	C921	MYLOR FILM CAPACITOR	CQMA561K50
	C922	AUDIO FILM CAPACITOR	CFTXA104J50
	C923,924	AUDIO FILM CAPACITOR	CFTXA474J50
	C925	AUDIO FILM CAPACITOR	CFTXA104J50
	C926	ELECTR.CAPACITOR	CEANP100M16
	C927	MYLOR FILM CAPACITOR	CQMA561K50
	C928	ELECTR.CAPACITOR	CEAS470M16
	C929	ELECTR.CAPACITOR	CEAS221M10
	C930	CERAMIC CAPACITOR	CKDYX473M25
	C931	ELECTR.CAPACITOR	CEAS100M50
	C932	ELECTR.CAPACITOR	CEAS4R7M16
	C933	CERAMIC CAPACITOR	CKDYB471K50
	C934	ELECTR.CAPACITOR	CEAS220M16
	C935	MYLOR FILM CAPACITOR	CQMA472J50
	C936	AUDIO FILM CAPACITOR	CFTXA333J50
	C937	ELECTR.CAPACITOR	CEAS4R7M50
	C938	ELECTR.CAPACITOR	CEASR33M50
	C939	AUDIO FILM CAPACITOR	CFTXA104J50
	C940	ELECTR.CAPACITOR	CEAS010M50
	C941	AUDIO FILM CAPACITOR	CFTXA333J50
	C942	ELECTR.CAPACITOR	CEAS220M16
	C943	ELECTR.CAPACITOR	CEAS101M16
	C944	ELECTR.CAPACITOR	CEAS470M25
	C945	CERAMIC CAPACITOR	CKCYF473Z50
RESISTORS			
	VR901	VARIABLE RESISTOR	ACS1038
	R821	CARBON FILM RESISTOR	RD1/4PMFL4R7J
	R840,841	CARBON FILM RESISTOR	RD1/4PMF100J
	R843,844	CARBON FILM RESISTOR	RD1/4PMF101J
	R860	CARBON FILM RESISTOR	RD1/4PMF471J
	R861	METAL OXIDE RESISTOR	RS2LMF471J
	R938	CARBON FILM RESISTOR	RD1/4PMF100J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X901	CERAMIC OSCILLATOR	ASS1016
	CN11	JUMPER CONNECTOR 3−P	KPC3
	CN12	JUMPER CONNECTOR 5−P	KPC5
	CN13	JUMPER CONNECTOR 4−P	KPC4
	CN14	JUMPER CONNECTOR 3−P	KPC3
	CN15	JUMPER CONNECTOR 5−P	KPC5
	CN16	JUMPER CONNECTOR 3−P	KPC3

Mark	No.	Description	Parts No.
	CN9	JUMPER CONNECTOR 9-P	KPC9
		PHONO JACK 2-P	AKB1118
		PHONO JACK 2-P	AKB1134
		SPEAKER TERMINAL 4-P	AKE1012

MOTOR VOL ASSEMBLY

SEMICONDUCTORS

	IC970		TA7291S
	Q970	TRANSISTOR	RN1203
	D991	DIODE	HSS104-02

COILS

	L971,972	AXIAL INDUCTOR	LAU220K

CAPACITOR

	C970	ELECTR.CAPACITOR	CEAS470M16
	C971,972	CERAMIC CAPACITOR	CKDYF473Z50

RESISTORS

	VR970	VARIABLE RESISTOR	ACX1033
		Other resistors	RD1/8PM□□□J

OTHERS

	CN7	JUMPER CONNECTOR 9-P	KPC9
	CN8	JUMPER CONNECTOR 3-P	KPC3

DELAY CONT ASSEMBLY (AWX1045)

SEMICONDUCTORS

	IC1001	TC4024BP
	IC1002	UPD4011BC
	Q1001,1002, 1006,1007	RN1203
	Q1003	RN2203
	Q1004,1005	2SA1048
	D1001-1005	HSS104-02

CAPACITORS

	C1001	CEAS100M50
	C1002-1004	CKDYX473M16
	C1005	CQMA103J50

RESISTORS

	R1001-1011	RD1/8PM□□□J

• DOLBY SURROUND:

Choose this setting for movies and music (especially Video Discs and video tapes bearing the DOLBY SURROUND mark) playback. Dolby Surround decodes the surround information in the source signal, providing a feeling of left-right and front -back movement matching the action on screen.

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When using DOLBY SURROUND, a delay time setting of 20 ms is usually appropriate.
If your rear speakers are very close to the listening position, try 25 ms or 30 ms; if they are some distance away try 15 ms.
Adjustment of input balance is required to obtain the correct DOLBY SURROUND effect. For the adjustment procedure, refer to "DOLBY SURROUND INPUT BALANCE ADJUSTMENT PROCEDURE"

6. ADJUSTMENTS

6.1 ADJUSTMENT OF THE FM TUNER SECTION

- Set the mode selector to FM BAND.
- Connect the wiring as shown in the Fig.6–2

Step No.	Adjustment title	FM SG (1kHz ± 75kHz dev.)		Reception frequency display	Adjustment location	Specifications
		Frequency (MHz)	Level (dB μ V)			
1	Center adjustment	98.0	60	98.0 MHz	L111	Adjust so that the DC voltage between the TP–21 and TP–22 becomes 0V ± 50mV.
2	VCO adjustment	Non-modulation	60	98.0 MHz	VR151	Adjust so that the output of the TP–23 becomes 76kHz ± 0.5kHz.
3	TUNED IND. Lighting level	98.0 *1 (Stereo modulation)	—	98.0MHz	R121	The R121 of the COMPLEX assembly has been mounted or removed at the time of adjustment in the production. Mount or remove R121 referring to the table below, and adjust it so that the indicators of TUNED start to light up at 24 dBμV (±15dB).
4	MPX DISTORTION adjustment	98.0*1 (L or R only)	60	98.0MHz	Output coil of front mode	Adjust the core with ±1/4 rotation to less than 1.5% from the highest sensitivity.

Input level	R121
The indicators of TUNED start lighting up at a larger input than 39 dBμV.	Remove
The indicators of TUNED start lighting up at less input than 9 dBμV.	Mount

*1 Stereo modulation : Main 1 kHz L+R ± 68.25 kHz dev.
Pilot 19 kHz ± 6.75 kHz dev.

6.2 ADJUSTMENT OF THE MW TUNER SECTION

- Set the mode selector to MW BAND.
- Connect the wiring as shown in the Fig.6–2
- **The values in ( ) are values of 10 kHz steps.**

Step No.	Adjustment title	AM SG (400Hz 30%MOD)		Reception frequency display	Adjustment location	Specifications
		Frequency (kHz)	Level (dB μ V)			
1	TUNED IND. Lighting level	999 (1000)	—	999kHz (1000kHz)	R120	The R120 of the COMPLEX assembly has been mounted or removed at the time of adjustment in the production. Mount or remove R120 referring to the table below, and adjust it so that the indicators of TUNED start to light up at less input than 65 dBμV

Input level	R120
The indicators of TUNED start linghting up a larger input than 65dBμV.	Remove

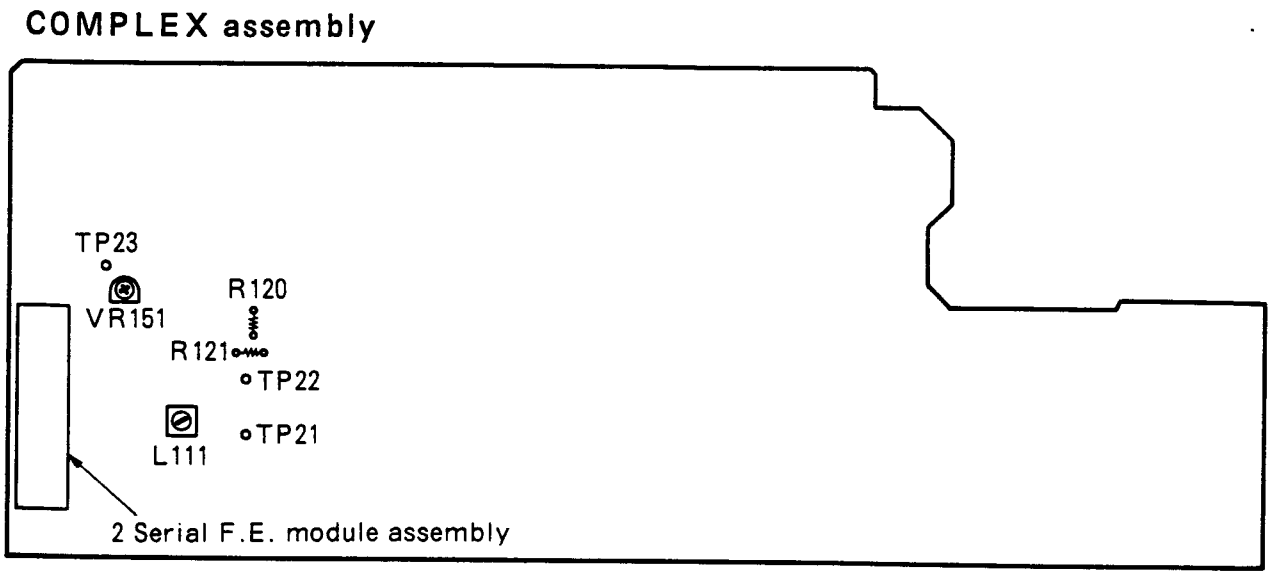


Fig. 6−1 adjustment point

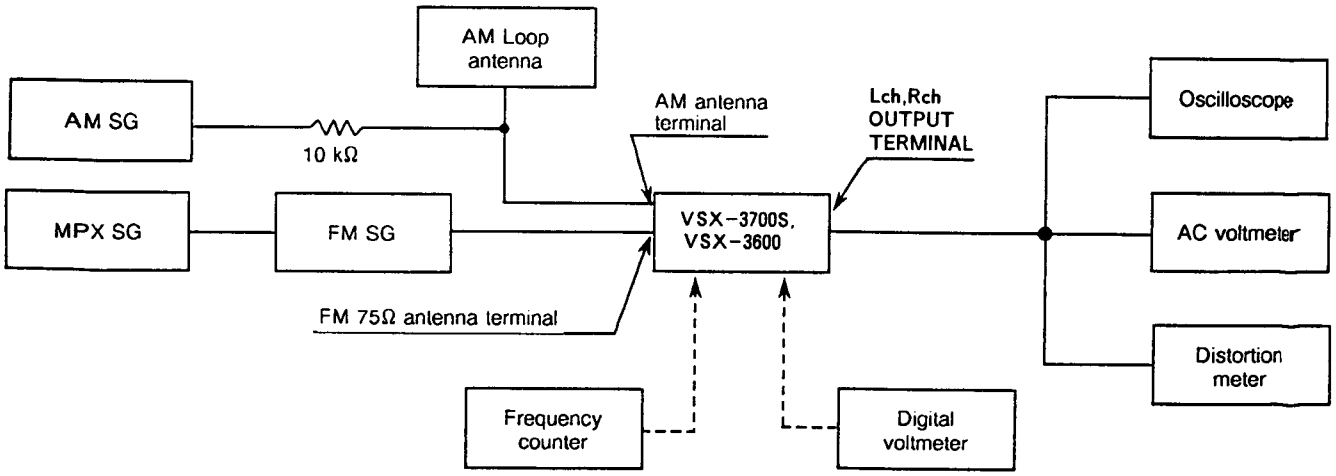


Fig. 6−2 MW and FM adjustment wiring diagram

7. IC INFORMATION

SYSTEM CONTROL MICRO COMPUTER (PDG058)

•Terminal function

No.	Terminal Name	I/O	Terminal function
1	a	DP	FL segment output (a)
2	b	DP	FL segment output (b)
3	c	DP	FL segment output (c)
4	d	DP	FL segment output (d)
5	e	DP	FL segment output (e)
6	f	DP	FL segment output (f)
7	g	DP	FL segment output (g)
8	h	DP	FL segment output (h)
9	i	DP	FL segment output (i)
10	j	DP	FL segment output (j)
11	k	DP	FL segment output (k)
12	l	DP	FL segment output (l)
13	m	DP	FL segment output (m)
14	n	DP	FL segment output (n)
15	o	DP	FL segment output (o)
16	p	DP	FL segment output (p)
17	q	DP	FL segment output (q)
18	G11	DP	FL grid output (G11)
19	G10	DP	FL grid output (G10)
20	G9	DP	FL grid output (G9)
21	G8	DP	FL grid output (G8)
22	G7	DP	FL grid output (G7)
23	G6	DP	FL grid output (G6)

No.	Terminal Name	I/O	Terminal function
24	G5	DP	FL grid output (G5)
25	G4	DP	FL grid output (G4)
26	G3	DP	FL grid output (G3)
27	G2	DP	FL grid output (G2)
28	G1	DP	FL grid output (G1)
29	9k/10k	I	Channel step frequency 9kHz (H)/10kHz (L) switching
30	XTAL	O	Connected to the 4.19MHz ceramic resonator
31	EXTAL	O	
32	$\overline{\text{RST}}$	I/O	RESET input
33	N.C.	–	Not connect
34	Vdd	5V	Connected to +5V supply voltage
35	KEY OUT	O	KEY MATRIX output
36	KEY OUT	O	KEY MATRIX output
37	KEY OUT	O	KEY MATRIX output
38	KEY OUT	O	KEY MATRIX output
39	KEY OUT	O	KEY MATRIX output
40	KEY OUT	O	KEY MATRIX output
41	KEY OUT	O	KEY MATRIX output
42	KEY OUT	O	KEY MATRIX output
43	N.C.	–	Not connect
44	X0/CK	O	SERIAL (FUNCTION/PLL CLOCK output
		I	Destination 91' model (H)/9\' model (L) switching

No.	Terminal Name	I/O	Terminal function
45	X1/DATA	O	SERIAL (FUNCTION/PLL) DATA output
		I	Not used as input port
46	X2	I	Destination VSX (H)/ASX (L) switching
47	MUTE	O	MUTING ON (L)/OFF (H) output
48	FUNC ST	O	FUNCTION STB output
49	CE	O	PLL CE output
50	TUNER MUTE	O	TUNER MUTE output
51	STEREO	O	STEREO signal input
52	STOP	O	STOP signal input
53	KEY IN	O	KEY MATRIX input
54	KEY IN	O	KEY MATRIX input
55	KEY IN	O	KEY MATRIX input
56	KEY IN	O	KEY MATRIX input
57	KEY IN	O	KEY MATRIX input
58	KEY IN	O	KEY MATRIX input
59	S.S	O	SIMULATED STEREO ON (L)/OFF (H) output
60	N.C.	O	Not used (OPEN)
61	WP	I	WAKE UP input
62	RMC	I	REMOCON input
63	SIMU-LATE	O	SIMULATED SURROUND output
64	DOLBY	O	DOLBY SURROUND output
65	CE (ADM)	O	DELAY CE output
66	ST (9154)	O	REAR LEVEL STB output

No.	Terminal Name	I/O	Terminal function
67	SW1	O	VIDEO input VDP (L)/VCR (H) switching output
68	SW2	O	VIDEO MUTE output
69	DIMMER	O	SLEEP DIMMER output
70	RY	O	REAR POWER RELAY output
71	Vss	–	GND
72	N.C.	O	Not used (OPEN)
73	N.C.	–	Not connect
74	TEX	I	Not used (Connected to GND)
75	Vref	I	Connected to VDD
76	Vfdp	I	−24V negative input voltage for FDP
77	AC RELAY	N	AC RELAY output
78	VOL DOWN	N	VOLUME DOWN output (electrically acitivated)
79	VOL UP	N	VOLUME UP output (electrically acitivated)
80	VOL IND	N	VOLME indicator light (H)/light off (L)

I : CMOS input
O : CMOS output
N : Nch open drain output
P : Pch open drain output
UN : Nch open drain output with pull−up resistor
DP : Pch open drain output with pull−down resistor
UI : CMOS input with pull−up resistor
DI : CMOS input with pull−down resistor

8.4 P.C.BOARD PATTERN

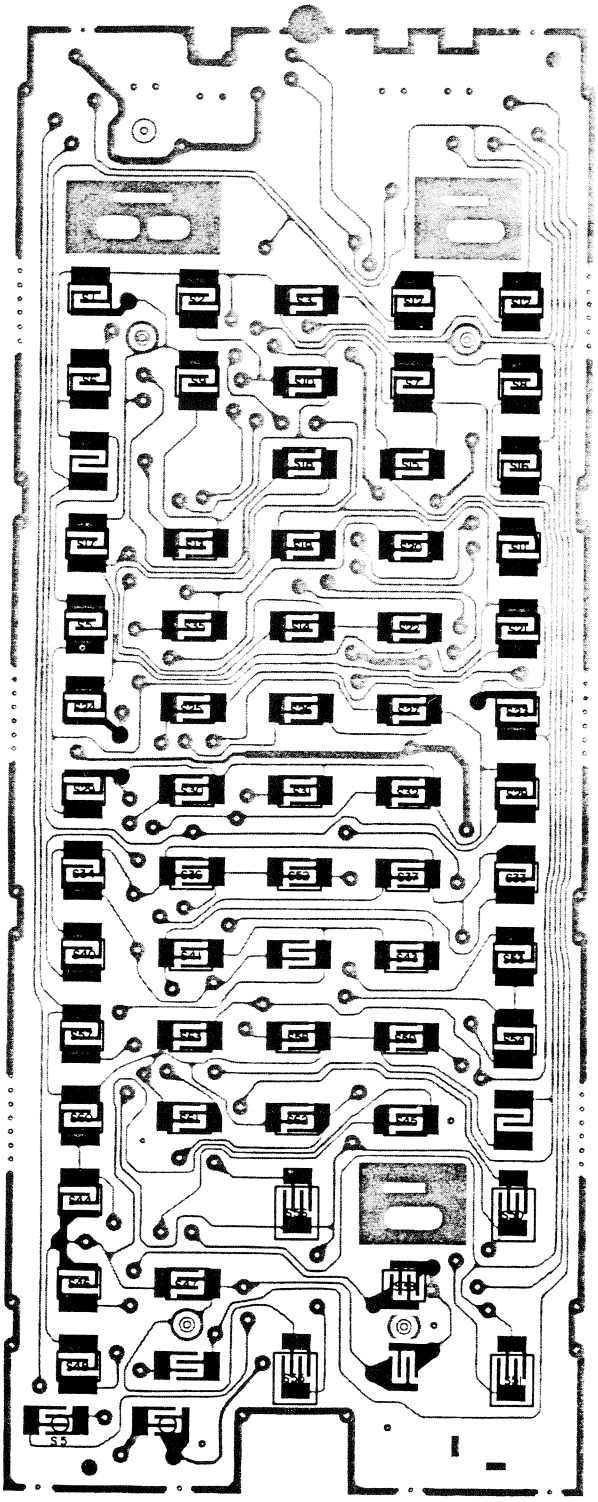
NOTE :

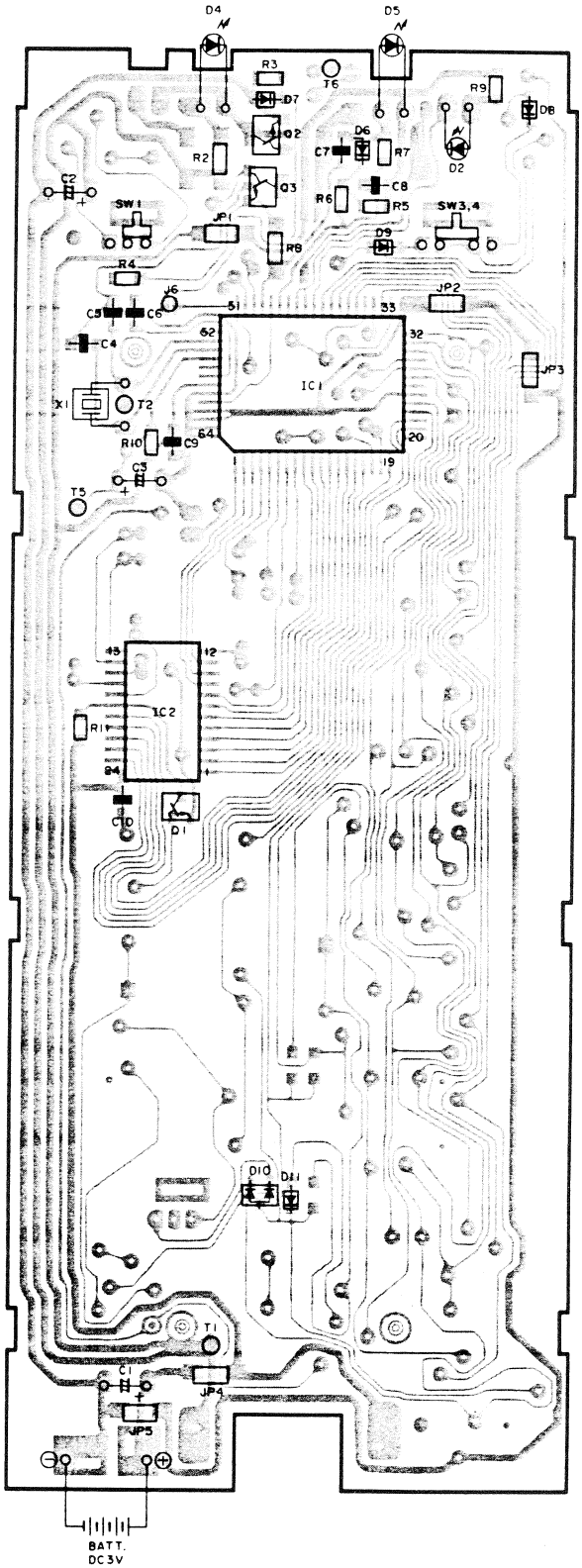
: Indicates a chip resistor.

: Indicates a chip capacitor.

: Indicates a chip transistor.

: Indicates a chip diode.





9. FOR VSX−3600/KUC, SD AND YPW TYPES

9.1 CONTRAST OF MISCELLANEOUS PARTS

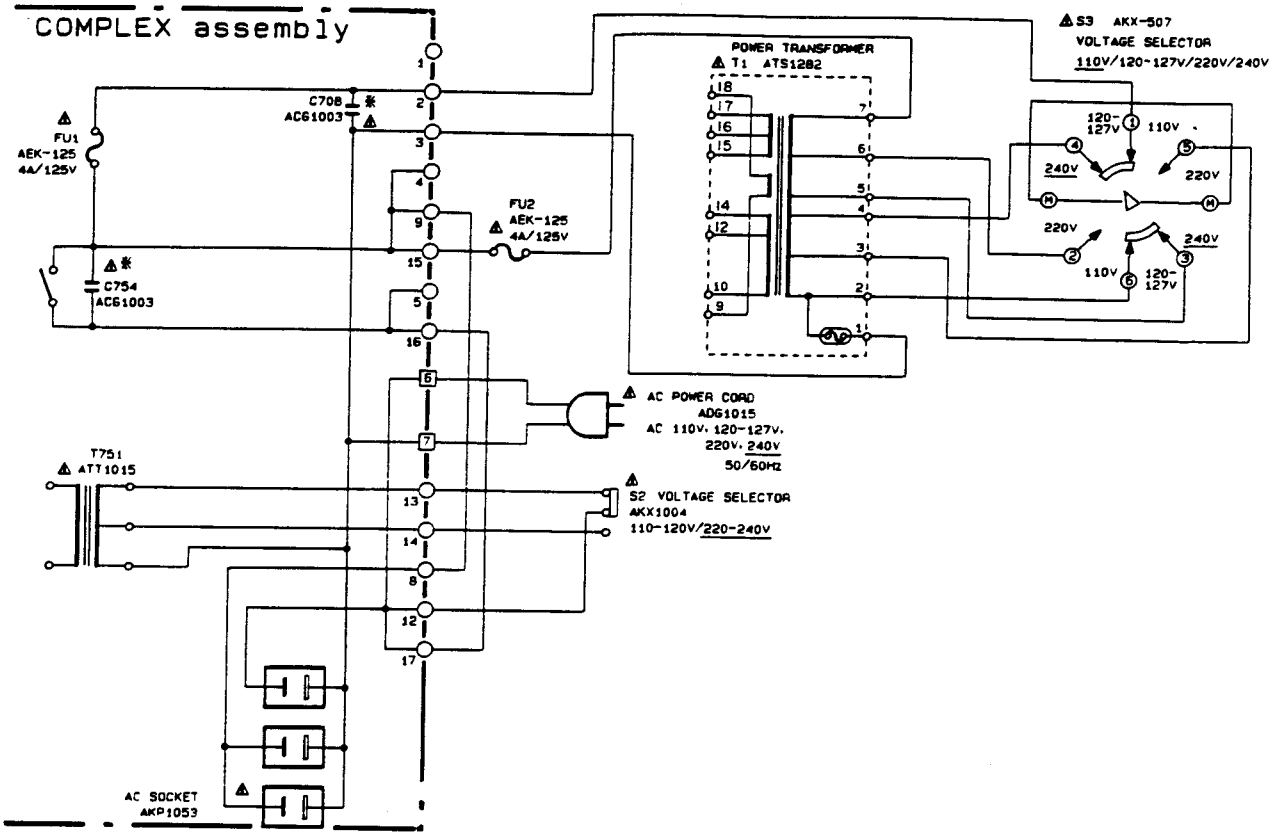
NOTES:

- *Parts without part number cannot be supplied.*
- *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.*
- *Parts marked by "◉" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.*

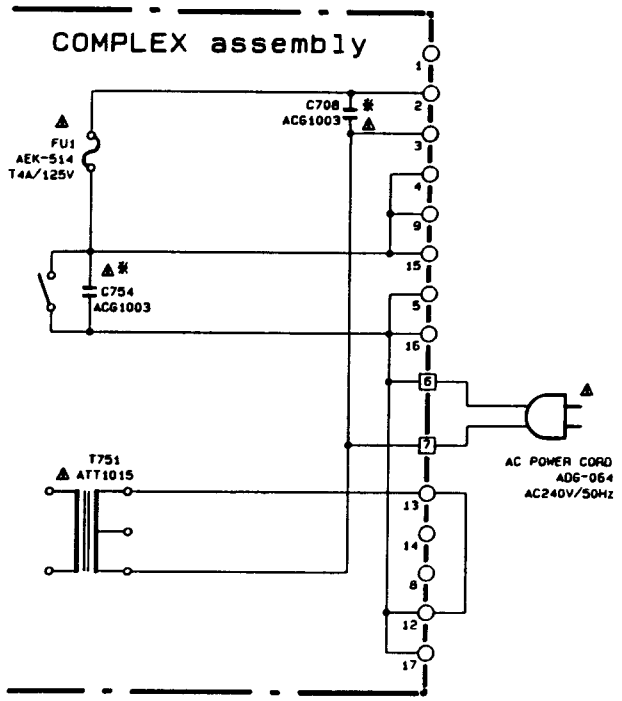
The VSX−3600/KUC, SD and YPW types are the same as the VSX−3700S/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.				Remarks
		VSX−3700S/ KUC type	VSX−3600/ KUC type	VSX−3600/ SD type	VSX−3600/ YPW type	
⚠	S1 Slide switch (9k/10k)	.....	.....	ASH−004	.....	
⚠	S2 Line voltage selector switch (AC110V−127V/220V−240V)	.....	.....	AKX1004	.....	
⚠	S3 Slide switch (AC110V/120V−127V/220V/240V)	.....	.....	AKX−507	.....	
⚠	T1 Power transformer	ATS1280	ATS1280	ATS1282	ATS1281	
⚠	FU1 Fuse (8A/125V)	AEK1002	AEK1002	.....	.....	
⚠	FU1 Fuse (4A/125V)	.....	.....	AEK−125	.....	
⚠	FU1 Fuse (T4A/125V)	.....	.....	.....	AEK−614	
⚠	FU2 Fuse (4A/125V)	.....	.....	AEK−125	.....	
⚠	FU3,FU4 Fuse (4A/125V)	AEK−125	AEK−125	AEK−125	.....	
⚠	FU3,FU4 Fuse (T4A/125V)	.....	.....	.....	AEK−514	
⚠	Fuse holder	.....	.....	AKR−038	.....	
	C4	.....	.....	.....	CQMXA104J100	
⚠	AC socket (3P OUTLET)	AKP1053	AKP1053	AKP1053	.....	
⚠	AC Power cord	ADG1057	ADG1057	ADG1015	ADG−064	
	Front panel	AMB1661	AMB1662	AMB1662	AMB1662	
	Screw	.....	.....	BMZ26P040FCU	.....	For S1
	Packing case	AHD1889	AHD1890	AHD1890	AHD1890	
	Operating Instructions (Spanish)	.....	.....	ARC1224	.....	
	Remote control unit	AXD1160	AXD1152	AXD1152	AXD1152	

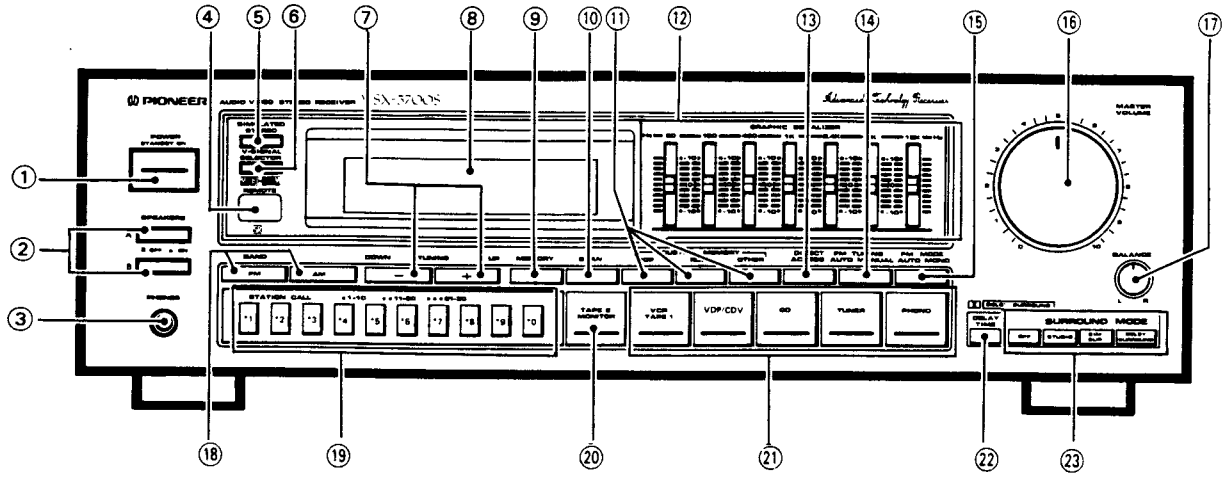
9.2 SCHEMATIC DIAGRAM (SD TYPE)



9.3 SCHEMATIC DIAGRAM (YPW TYPE)



10. PANEL FACILITIES



① POWER (STANDBY/ON) switch

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.

On the Australian and Multi-voltage models, the indicator above the MASTER VOLUME control knob lights during STANDBY.

- The accessory remote control unit can also be used to operate STANDBY/ON function of this switch.
- When not using the unit for a long period, disconnect the power cord.

[TIMER ON/OFF possible]

When the unit is switched ON, ON/OFF can be performed with the optional timer.

NOTE:

When the power is initially turned ON, muting will be applied to prevent sound from being output for about 5 seconds.

② SPEAKERS switches (▮OFF, ▬ON)

These are used to select the speaker through which you wish to listen.

A: When the speakers connected to A terminals are in use.

B: When the speakers connected to B terminals are in use.

- Turn both A and B speakers to OFF position when only the HEADPHONES are in use.

NOTE:

No sound will be heard through the speakers when both A and B switches are pressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

③ PHONES jack

Connect the plug on your headphones to this jack. To listen to a program through the headphones, set both SPEAKERS A and B switches to the OFF position.

④ Remote sensor window

⑤ SIMULATED STEREO switch

This turns monaural signals into simulated stereo sound. Use this when you wish to experience a sense of stereo presence with AM broadcasts, VCR or other monaural signal sources.

NOTE:

This function can also be used with stereo sources, but it will result in a different sound from the normal stereo sound.

⑥ V (Video) SIGNAL SELECTOR switch

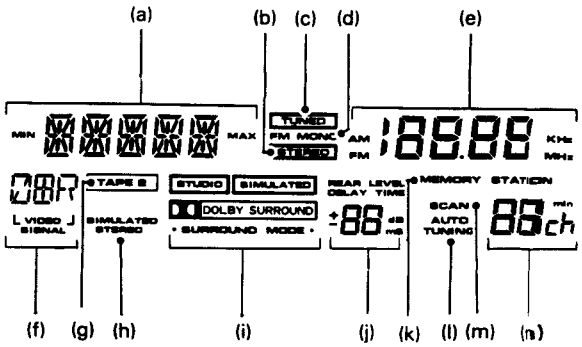
This lets you switch the video signal without switching the audio signal. This means that you can, for example, listen to a CD while watching a video disc.

⑦ TUNING switches (DOWN –, UP +)

UP: The FM or AM band is scanned in the direction of increasing frequency.

DOWN: The opposite operation to that of the UP switch takes place.

⑧ Operation display panel



(a) Displays function and custom memory name, as well as surround and rear level.

(b) STEREO indicator
Lights when a stereo FM broadcast is being received.

(c) TUNED indicator
Lights when a station is tuned.

(d) FM MONO indicator
Lights when the FM MONO mode is selected with the FM MODE AUTO/MONO switch.

(e) Frequency display

(f) VIDEO SIGNAL display
Displays the component selected with the V-SIGNAL SELECTOR switch.

(g) TAPE 2 indicator
Lights when the TAPE 2 MONITOR switch is ON.

(h) SIMULATED STEREO indicator

(i) SURROUND MODE indicator
Displays the surround mode selected with the SURROUND MODE switches.

(j) REAR LEVEL/DELAY TIME display
When REAR LEVEL is lit, it displays the surround rear level as compared to the front level. The offset value is 0 dB. A maximum of 20 dB, and a minimum of $-\infty$ is displayed.
When DELAY TIME is lit, it displays surround delay time settings.
(k) MEMORY indicator
(l) AUTO TUNING indicator
Lights when the FM TUNING AUTO/MANUAL switch is set to AUTO.
(m) SCAN indicator
Lights during station memory scan and custom memory scan operation.
(n) STATION display
Indicates channel (STATION CALL number) or sleep time.

⑨ MEMORY switch

When the unit is in the frequency display mode, pressing this switch will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode.
This switch is also used to input custom memory names .

⑩ SCAN switch

This switch is used for both station memory scan and custom memory scan.

⑪ CUSTOM MEMORY switches

You can use these switches to classify stations assigned to STATION CALL switches into different genres of music, depending on the material played on the station.
After classifying the stations, you can recall a particular genre and scan all the stations of that genre with memory scan until you find the desired one.

⑫ GRAPHIC EQUALIZER controls

The equalizer is divided into seven frequency ranges (60 Hz, 150 Hz, 400 Hz, 1 kHz, 2.4 kHz, 6 kHz, 15 kHz) to tailor music to the individual taste of the listener.

⑬ DIRECT ACCESS tuning switch

When this switch is pressed, the STATION CALL switches function as ten-key number switches for direct input of the desired reception frequency. Press again to cancel this mode.
If the input station falls outside of the receiver's tuning range, the display section will display a message: "UPPER" if the frequency is too high and "LOWER" if it is too low .

⑭ FM TUNING AUTO/MANUAL switch

Works during FM reception.
Use this switch to select either the AUTO mode or the MANUAL mode.
When the "AUTO TUNING" indicator is lit, the receiver is in the AUTO mode (see page 13).

⑮ FM MODE AUTO/MONO selector switch

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator is lighted.
Auto stereo mode:
Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.
Monaural mode:
When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

NOTE:
This switch has no effect on reception of AM broadcasts.

⑯ MASTER VOLUME control

Use to adjust volume level.

⑰ BALANCE control

Should normally be left in the center position. Adjust balance if the sound is louder from one of the speakers. If the right side is louder, turn toward the L position and if the left side is louder, turn toward the R position.

⑱ BAND Selector switches

These switches are used to select either AM or FM reception.
AM: Push this switch for AM reception.
FM: Push this switch for FM reception.

⑲ STATION CALL switches

These switches are used to preset and recall desired broadcasting stations.

⑳ TAPE 2 MONITOR switch

Press when listening to tape playback with the cassette deck 2.

㉑ Function switches

Use to select playback source.
[VCR/TAPE 1] — Press when performing playback on the cassette deck 1 or VCR.
[VDP/CDV] — Press when performing playback on a video disc player or CDV player, etc.
[CD] — Press when listening to compact disc playback with a CD player.
[TUNER] — Press when listening to AM or FM broadcasts with a tuner.
[PHONO] — Press when listening to record playback on a turntable.

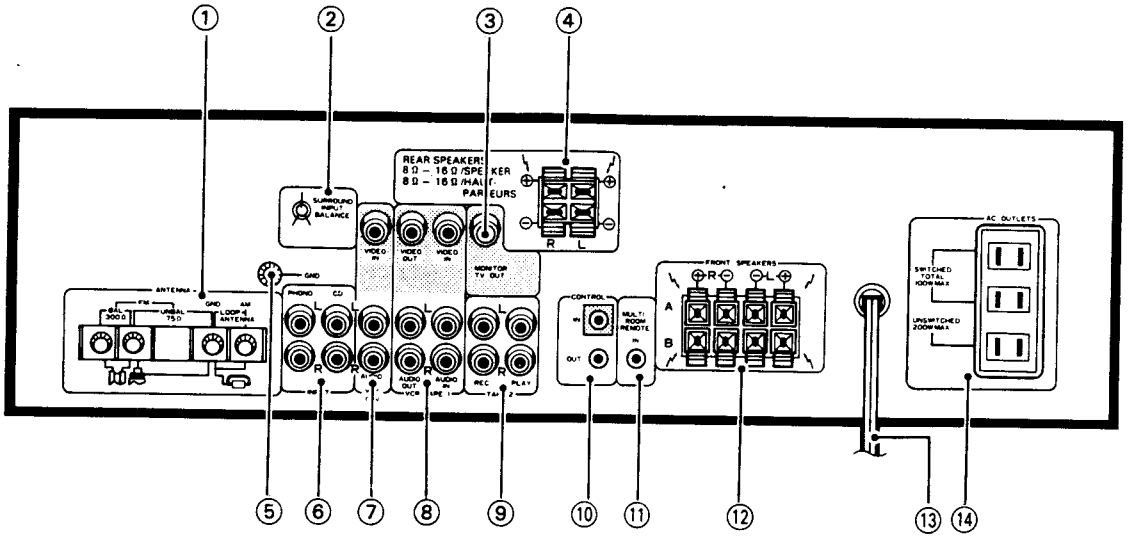
㉒ DELAY TIME switch

Operates when the SIMULATED or DOLBY SURROUND mode is ON.
For DOLBY SURROUND, 20 ms is standard.
DOLBY SURROUND:
15 ms → 20 ms → 25 ms → 30 ms
SIMULATED SURROUND:
5 ms → 10 ms → 15 ms → 20 ms → 25 ms → 30 ms → 35 ms

㉓ SURROUND MODE Switches

OFF:
To cancel the surround function.
STUDIO:
Enjoy the atmosphere of listening to music in a recording studio.
SIMULATED SURROUND:
Gives concert-hall presence to monaural sound (AM, TV, etc.).
With a monaural source, a much better surround effect is achieved if it is used together with SIMULATED STEREO.
DOLBY SURROUND:
Select this setting when watching video tapes or video discs bearing the DOLBY SURROUND mark.

• Illustration shows U.S. and Canadian models



① FM/AM ANTENNA terminals

Use these antenna terminals for receiving FM and AM broadcasts.

② SURROUND INPUT BALANCE control

This knob is for adjusting the balance of the DOLBY SURROUND input signal. To adjust, apply a monaural sound signal and rotate until the SURROUND (rear) sound becomes minimal.

③ MONITOR TV OUT jack

Connect to a monitor TV or a TV set with video input terminals.

④ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.
Use rear speakers of impedance 8 Ω to 16 Ω.

NOTE:

Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.

⑤ GND terminal

Connect to the ground lead of a turntable.

⑥ INPUT jacks

PHONO ..... Connect to the output cables from a turntable.
CD..... Connect to the output jacks of a compact disc player.

⑦ VDP/CDV jacks

Connect to a video disc player's video and audio output jacks.

⑧ VCR/TAPE 1 jacks

Connect to a VCR or cassette deck.
When connecting to a cassette deck, use only the L and R jacks. When connecting to a VCR, also connect the VIDEO IN, OUT jacks.

⑨ TAPE 2 jacks

Connect the cassette deck to these jacks.

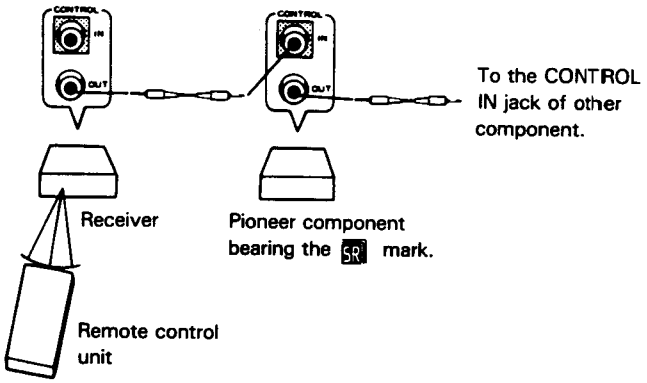
⑩ CONTROL IN/OUT jacks

IN: Connect to other Pioneer components to this jack when using those components to control this unit.

OUT: Connect to other Pioneer components to this jack when using the remote control of this unit to control the other components.

NOTE:

The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.



⑪ MULTI-ROOM REMOTE IN jack

Connect the adaptor (MR-100, sold separately) to this Multi-Room Remote IN jack. You can operate the unit by remote control via the adaptor. It is convenient when the unit is located in a separate room.

⑫ SPEAKERS terminals

A: Connect to a first set of speakers.
B: Connect to a second set of speakers.

NOTE:

- *Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*
- *No sound will be heard through the speakers when both A and B switches are pressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.*

⑬ Power cord

⑭ AC OUTLETS