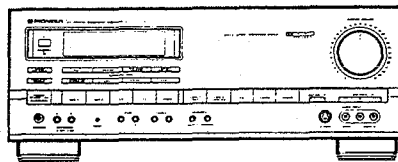


Service Manual

PIONEER
The Art of Entertainment



ORDER NO.
ARP2560

AV DIGITAL SURROUND AMPLIFIER

VSA-D801S

VSA-701S

VSA - D801S AND VSA - 701S HAVE THE FOLLOWING :

Type	Model		Power Requirement	Remarks
	VSA - D801S	VSA - 701S		
SD	○	○	AC110V, 120V - 127V, 220V, 240V (Switchable)	
HE	—	○	AC220 - 230V, 240V (Switchable)*	
HB	—	○	AC220 - 230V, 240V (Switchable)*	

* Change the connection of the power transformer's primary wiring.

- This manual is applicable to the following : VSA - D801S/SD and VSA - 701S/SD.
- For VSA - 701S/SD, refer to page 87.
- For the following : VSA - 701S/HE and HB, refer to the service manual ARP2561 for VSA - 701S.
- Ce manuel pour le service comprend les explications de réglage en français.
- Este manual de servicio trata del método ajuste escrito en español.

CONTENTS

1. EXPLODED VIEWS, PACKING AND PARTS LIST	2	5. AJUSTES	79
2. BLOCK DIAGRAM	5	6. IC INFORMATION	80
3. SCHEMATIC AND PCB CONNECTIONS DIAGRAMS	6	7. REMOTE CONTROL UNIT	82
4. PCB PARTS LIST	73	8. FOR VSA - 701S/SD TYPE	87
5. ADJUSTMENTS	79	9. DISASSEMBLY	93
5. REGLAGES	79	10. PANEL FACILITIES	94
		11. SPECIFICATIONS	99

1. EXPLODED VIEWS, PACKING AND PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.	Mark	No.	Description	Parts No.
	1	MASTER VOL ASSY	AAB1119	NSP	48	HEAT SINK	ANH1379
	2	BALANCE BUTTON	AAD2282		49	OPE. INSTRUCTIONS (ENGLISH)	ARB1382
	3	ACRYLIC PANEL	AAK2312		50	.....
	4	SP BUTTON (PLS)	AAD2211				
	5	FL FILTER	AAK2313	●	51	FL. U-COM ASSEMBLY	AWK1552
	6	PANEL BASE	AMB2003		52	REMOTE CONSOLE UNIT (CU-VSA019)	AXD1271
Δ	7	VOLTAGE SELECTOR (S1)	AKX-507		53	SCREW	BPZ26P080FMC
Δ	8	VOLTAGE SELECTOR (S2)	AKX1004		54	SCREW	FBT40P060FZK
	9	VOLTAGE SELECTOR (S3)	AKX1004		55	SCREW	VMZ30P060FCU
NSP	10	SPACER	AEC1360				
NSP	11	BARRIER (PVC)	AEC1412	Δ	56	FUSE (4A, FU1)	AEK-125
NSP	12	BARRIER (PVC)	AEC1440	Δ	57	FUSE (4A, FU2)	AEK-125
	13	SCREW	ABA1006	Δ	58	FUSE (4A, FU3, 4)	AEK-125
	14	SCREW	ABA1024	Δ	59	FUSE (1.25A, FU5, 6)	AEK-120
	15	NAME PLATE (METAL)	AAM1029	Δ	60	FUSE HOLDER	AKR1001
	16	SCREW	ABA-298	Δ	61	TRANSISTOR (Q1)	2SC3281
	17	SCREW (STEEL)	ABA1009	Δ	62	POWER TRANSISTOR (Q10)	2SA1803
	18	SCREW	ABA1018	Δ	63	TRANSISTOR (Q2)	2SC3281
	19	SCREW (STEEL)	ABA1053	Δ	64	TRANSISTOR (Q3)	2SA1302
	20	SCREW	ABA1054	Δ	65	TRANSISTOR (Q4)	2SA1302
	21	SCREW	ABA1082	Δ	66	TRANSISTOR (Q5)	2SC3182N
Δ	22	AC POWER CORD	ADG1051	Δ	67	TRANSISTOR (Q6)	2SA1265N
NSP	23	PCB MOULD	AMR2115	Δ	68	POWER TRANSISTOR (Q7)	2SC4688
NSP	24	PCB HOLDER	AEC1097	Δ	69	POWER TRANSISTOR (Q8)	2SC4688
	25	MICA SHEET	AEC1140	Δ	70	POWER TRANSISTOR (Q9)	2SA1803
NSP	26	PCB SUPPORT	AEC1215	Δ	71	POWER TRANSFORMER (T1)	ATS1427
NSP	27	PCB HINGE	AEC1407	NSP	72	TRANS TERMINAL ASSEMBLY	AWZ4268
	28	MICA SHEET	AE11014				
Δ	29	CORD STOPPER	AEC-882	●	73	SP SW ASSEMBLY	AWZ4289
NSP	30	ALKALINE (LR6, AA)	AEX1007	●	74	REG (5.6V) ASSEMBLY	AWZ4267
				●	75	REG (12V) ASSEMBLY	AWZ4266
	31	FRONT REAR PAD	AHA1503	●	76	VOLUME ASSEMBLY	AWZ4387
	32	PACKING CASE	AHD2287	●	77	DSP ASSEMBLY	AWZ4294
	33	PACKING SHEET	AHG1021	●	78	CONNECTION ASSEMBLY	AWZ4385
NSP	34	TERMINAL SCREW	AKE-031	●	79	AUDIO FUNCTION ASSEMBLY	AWZ4383
	35	FRONT PANEL	ANB1518	●	80	A/V FUNCTION ASSEMBLY	AWZ4384
	36	RIVET (PLASTIC)	AMR1066				
NSP	37	PCB MOULD	AMR1525		81	S TERM ASSEMBLY	AWQ1017
	38	FOOT	AMR2414	NSP	82	PRE OUT ASSEMBLY	AWZ4386
NSP	39	CHASSIS	ANA1178	●	83	POWER SUPPLY ASSEMBLY	AWZ4381
NSP	40	REAR PANEL	ANC1898	●	84	REAR SP CENTER SP ASSEMBLY	AWZ4382
	41	METAL BONNET (MTL)	ANE1373	NSP	85	FRONT SP ASSEMBLY	AWZ4261
Δ	42	MYLAR CAPACITOR (C15-C17)	CQMA104K250				
NSP	43	PCB HOLDER A	ANG-516	●	86	AMP ASSEMBLY	AWZ4286
NSP	44	SUB TRANS HOLDER	ANG1393	NSP	87	PCB HOLDER	ANG1726
NSP	45	POWER ASSEMBLY HOLDER -F	ANG1575	NSP	88	BINDER	AEC-093
NSP	46	PCB HOLDER	ANG1670				
NSP	47	POWER ASSEMBLY HOLDER -R	ANG1683				

Mark	No.	Description	Parts No.
	C956, 966, 969, 970		CEAS470M25
	C971, 974		CEAS471M10
	C968		CKDYF103Z50
	C958, 959, 967		CKPUYF103Z25

RESISTORS

R989	RD1/2PMF561J
R964, 967	RD1/2PM151J
Other Resistors	RD1/8PM□□□J

OTHERS

SOCKET (DIN)	AKP1064
CN951 CONNECTOR (6P)	KPE6

FRONT SP ASSEMBLY

OTHERS

SPEAKER TERMINAL 8-P	AKE1011
----------------------	---------

REG (12V) ASSEMBLY

SEMICONDUCTORS

IC54 REGULATOR IC	NJM78M12FAS
IC55 REGULATOR IC	NJM79M12FA

CAPACITORS

C52, 53	CEAS101M35
C56, 57	CKCYF103Z50

REG (5.6V) ASSEMBLY

SEMICONDUCTORS

IC52	M5237L
IC53 REGULATOR IC	NJM78M56FAS

Q51	2SA1306
-----	---------

CAPACITORS

C76	CEAS010M50
C55	CEAS101M35
C51	CEAS470M16
C54	CKCYF103Z50
C58	CKCYX104M25

RESISTORS

R83	RD1/4PMF221J
R84	RD1/4PM363J
R51	RS1LMF100J
Other Resistors	RD1/8PM□□□J

TRANS TERMINAL ASSEMBLY

TRANS TERMINAL assembly has no service parts.

Mark	No.	Description	Parts No.
------	-----	-------------	-----------

AMP ASSEMBLY

SEMICONDUCTORS

IC161, 162	PREDRIVER-IC	UPC1270H
------------	--------------	----------

Q107, 108		2SA1145
Q103, 104, 201		2SA1240

DUAL TRANSISTOR		2SA1306
Q115, 116, 204		2SA970
Q105, 106		2SC1845
Q101, 102		

Q117, 118, 206		2SC2240
Q161-164		2SC2458
Q111, 112, 203		2SC2603
Q109, 110, 202		2SC2705
Q113, 114, 205		2SC3298

D197, 198		D5SB20F
D101-108, 111-114, 117-122, 161		HSS104-02

166, 199, 200, 204-206		
D109, 110, 115, 116, 201		RD10ESB

ZENER DIODE		RD4.3ESB
D202, 203	ZENER DIODE	

RELAIES

RY199		ASR-112
RY198		ASR1035

COILS

L102-104	COIL	ATH1004
----------	------	---------

CAPACITORS

C200 (0.01/AC250V)		ACG1005
C198 (8200/DC71V)		ACH1224
C199 (8200/DC71V)		ACH1225
C113, 114		CCCSL050C500
C105-108		CCCSL101J50

C212, 222		CCCSL101K500
C117-120		CCCSL151K500
C109, 110		CCCSL220K500
C204, 205		CCCSL470J50
C207		CCCSL560K500

C169, 170		CCCSL680J50
C123, 124		CEANP010M100
C175, 176, 211		CEANP2R2M50
C173, 174		CEAS100M100
C161, 201, 203		CEAS2R2M50

C101, 102		CEAS4R7M50
C111, 112, 208		CEAS470M16
C209		CEAS470M25
C167, 168		CEHAQ101M10
C162		CEHAQ2R2M50

C121, 122, 210		CFTXA473J50
C115, 116, 206, 213		CKCYB102K50
C103, 104		CKCYB122K50
C125, 126, 165, 166, 202		CKCYB222K50
C171, 172		CKCYX333M25

Mark	No.	Description	Parts No.
RESISTORS			
	R177, 178	(0.22/2W)	ACN-131
	R145, 146, 218	(0.33/5W)	ACN1087
	R147, 148, 220, 225		RD1/4PMF100J
	R129-136, 214-217		RD1/4PMF101J
	R153-156, 179-182, 221, 222		RD1/4PMF222J
	R139-142, 233, 234		RD1/4PMF4R7J
	R210		RD1/4PMF470J
	R121, 122		RD1/4PMF680J
	R208		RD1/4PM123J
	R115, 116		RD1/4PM152J
	R207		RD1/4PM431J
	R117, 118		RD1/4PM473J
	R111-114		RFA1/4PS391J
	R137, 138, 143, 144, 227-232		RFA1/4PS4R7J
	R127, 128		RFA1/4PS470J
	R151, 152		RS1LMF100J
	R198, 199		RS1PMF681J
	R197		RS2LMF103J
	Other Resistors		RD1/8PM□□□J

OTHERS

CN29 CONNECTOR (9P) SCREW (STEEL)	KPC9 ABA1009
--------------------------------------	-----------------

SP SW ASSEMBLY

SWITCH

S251 PUSH SWITCH	SUJ6LYXS
------------------	----------

RESISTORS

R252, 253	RS2LMF331J
-----------	------------

OTHERS

JACK (PHONES) CN20 JUMPER CONNECTOR	AKN1002 KPC6
--	-----------------

DSP ASSEMBLY

SEMICONDUCTORS

IC1302	LH5P832N-10T
IC1202, 1204, 1206, 1209	M5238PF
IC1201, 1203, 1205, 1207, 1208	NJM4558DXP
IC1303 REGULATOR IC	NJM78M05FAS
IC1210 E-SW IC	TC9162N

IC1301 YSS215	
---------------	--

D1271-1275, 1301-1305	HSS104-02
-----------------------	-----------

COILS

F1201, 1202	ATF1071
F1301, 1302	ATF1102

L1301-1305	ATX1008
------------	---------

Mark	No.	Description	Parts No.
CAPACITORS			
	C1203, 1204, 1233, 1234, 1237, 1238, 1252, 1256		CCSQCH101J50
	C1305, 1306		CCSQCH300J50
	C1211, 1212, 1221, 1222		CCSQCH330J50
	C1215, 1216, 1225, 1226		CCSQCH391J50
	C1255		CEANP2R2M50
	C1201, 1202, 1205, 1206, 1219, 1220, 1229, 1230, 1232, 1271, 1272		CEAS100M50
	C1273		CEAS101M10
	C1317, 1318		CEAS101M16
	C1318		CEAS101M16
	C1236, 1239, 1240, 1257		CEAS220M25
	C1312		CEAS221M10
	C1307		CEAS4R7M50
	C1301, 1309		CEAS470M10
	C1319, 1321		CEAS470M16
	C1231, 1251		CEJA100M35
	C1235, 1253		CEJA220M25
	C1254		CFTXA274J50
	C1338		CKDYB561K50
	C1302, 1311, 1314, 1323		CKSQYB102K50
	C1213, 1214, 1223, 1224		CKSQYB272K50

C1217, 1218, 1227, 1228	CKSQYB682K50
C1324, 1325	CKSQYF103Z50
C1274, 1308	CKSQYF104Z50
C1303, 1310, 1313, 1320, 1322, 1326-1330, 1332-1337	CKSQYF473Z50
C1315, 1316	CQSA332J50

RESISTORS

R1307	RD1/2PMF100J
R1321-1331	RS1/10S00J
R1227, 1228, 1243, 1244, 1261, 1271, 1272, 1302	RS1/10S101J
R1235-1242, 1204-1306	RS1/10S102J
R1231-1234, 1251, 1252, 1254, 1256-1260, 1273, 1274, 1303, 1311, 1312	RS1/10S103J

R1201, 1202, 1245, 1246, 1255	RS1/10S104J
R1301	RS1/10S105J
R1253	RS1/10S152J
R1275	RS1/10S200J
R1203	RS1/10S332J

R1204-1206	RS1/10S332J
R1207, 1208	RS1/10S682J
R1211-1216, 1221-1226	RS1/10S822J

Other Resistors	RD1/8PM□□□J
-----------------	-------------

OTHERS

X1301 (11.2MHZ)	ASS1031
-----------------	---------

Mark	No.	Description	Parts No.
POWER SUPPLY ASSEMBLY			
SEMICONDUCTORS			
	IC51	REGULATOR IC	NJM78M56FAS
	Q64		XDC124ES
	Q61, 65, 66		XDC143ES
	Q54, 56, 57, 59		2SA1048
	Q60		2SA1145
	Q51, 52, 62, 63, 91		2SC2458
	D73		D3SBA20 (A)
	D52-55, 60, 68, 91		HSS104-02
	D61	ZENER DIODE	HZS6A1L
	D58	ZENER DIODE	RD5.1ESB
	D62	ZENER DIODE	RD6.2ESB
	D67	ZENER DIODE	RD8.2ESB
	D63-66, 69-72		S5566
RELAY			
	RY51		ASR1027
COIL & TRANSFORMER			
	L51	LINE FILTER	ATF1006
	T51	POWER TRANSFORMER	ATT1015
CAPACITORS			
Δ	C72, 73	(0.01/AC400V)	ACG1002
	C71	(0.01/AC250V)	ACG1005
	C68, 69	(4700/DC42V)	ACH1203
	C61		CEAS100M50
	C75		CEAS101M35
	C65		CEAS102M25
	C66		CEAS102M35
	C59, 62		CEAS221M16
	C67		CEAS222M35
	C74		CEAS470M10
	C63		CEAS470M16
	C60, 64, 70		CKCYB103K50
RESISTORS			
	R66		RD1/2PM132J
	R200		RD1/2PM432J
	R81		RD1/4PMFL470J
	R75		RD1/4PMF101J
	R80		RD1/4PMF4R7J
	R79		RD1/4PM332J
	R56, 57		RS1LMFR22J
	R55		RS2LMFR22J
	Other Resistors		RD1/8PM□□□J
OTHERS			
	JACK (CONTROL)		AKN1006
	AC OUTLET (3P)		AKP1053
	CN17	CONNECTOR (13P)	KPE13

Mark	No.	Description	Parts No.
REAR SP CENTER SPASSEMBLY			
SEMICONDUCTORS			
	Q251, 252		XDC143ES
	D251, 252		HSS104-02
RELAIIES			
	RY251, 252		ASR1035
COILS			
	L251, 252	COIL	ATH1004
CAPACITORS			
	C253, 254		CFTXA473J50
RESISTORS			
	R255-258		RD1/4PMF100J
	R259, 260		RS1LMF681J
	Other Resistors		RD1/8PM□□□J
OTHERS			
	PIN JACK 3P		AKB1120
	SPEAKER TERMINAL 4-P (REAR SP)		AKE-109
	SPEAKER TERMINAL 4-P (CENTER SP)		AKE1026
	CN25	CONNECTOR (4P)	KPE4
AUDIO FUNCTION ASSEMBLY			
SEMICONDUCTORS			
	IC801	OP-AMP-IC	M5220P
	IC803	OP-AMP IC	NJM4558DXP
	IC802	E-SW IC	TC9164N
CAPACITORS			
	C805, 806		CCSQCH221J50
	C847		CCSQCH471J50
	C807, 808		CCSLSL101J50
	C801, 802		CEAS100M50
	C819, 820		CEAS101M16
	C815, 816, 841, 842		CEAS2R2M50
	C845, 846		CEAS470M25
	C809, 810		CEAS470M16
	C817, 818, 843, 844		CKSQYF103Z50
	C813, 814		CQMA242J50
	C811, 812		CQMA822J50
RESISTORS			
	R847-849		RS1/10S102J
	R839-842		RS1/10S104J
	R829, 830, 837, 838		RS1/10S222J
	R815, 816, 845, 846		RS1/10S224J
	R811, 812		RS1/10S303J
	R803, 804, 819, 820, 823, 824, 827, 828, 835, 836		RS1/10S331J

Mark	No.	Description	Parts No.
	R809, 810		RS1/10S394J
	R813, 814		RS1/10S471J
	R801, 802, 817, 818, 821, 822, 825, 826, 831-834		RS1/10S474J
	R805, 806		RS1/10S563J
	R807, 808		RS1/10S681J

OTHERS

CN	PIN JACK 6P (TAPE1/TUNER)	AKB1140
CN	PIN JACK 4P (TAPE2)	AKB1181
CN	PIN JACK 4P (CD/PHONO)	AKB1201
CN11	CONNECTOR (7P)	KPE7

A/V FUNCTION ASSEMBLY

SEMICONDUCTORS

IC881	VIDEO SWITCH	LA7951
IC882	E-SW IC	NJM2233BS
IC851	E-SW IC	TC9163N

Q881, 882		2SC2458
-----------	--	---------

D851, 852		1SS352
-----------	--	--------

CAPACITORS

C873		CCSQCH471J50
C886, 891, 896, 897, 881-885, 892, 893		CEAS101M16
C888-890		CEAS471M6
C871, 872, 887, 898-900		CKSQYB103K50

RESISTORS

R890, 894		RD1/2PM151J
R904, 905, 907-911		RS1/10S000J
R901, 902		RS1/10S101J
R875-877, 885-887, 898		RS1/10S102J
R888, 892, 896		RS1/10S103J

R891, 895		RS1/10S122J
R903, 906		RS1/10S151J
R863, 864, 871, 872		RS1/10S222J
R853, 854, 857, 858, 861, 862, 869, 870		RS1/10S331J
R851, 852, 855, 856, 859, 860, 865-868, 873, 874		RS1/10S474J

R889, 893, 897		RS1/10S680J
R881-884		RS1/10S750J

OTHERS

	PIN JACK 3P	AKB1102
	PIN JACK 1P	AKB1145

CONNECTION ASSEMBLY

SEMICONDUCTORS

IC304	OP-AMP-IC	M5220P
-------	-----------	--------

Mark	No.	Description	Parts No.
CAPACITORS			
	C325, 326		CCSQCH331J50
	C323, 324		CEAS101M25
	C321, 322		CEAS4R7M50
	C315		CEAS470M16
	C318		CKSQYF473Z50

RESISTORS

R351, 352		RS1/10S242J
R347-350		RS1/10S104J
R345, 346		RS1/10S122J
R353, 354		RS1/10S102J
R343, 344		RS1/10S821J

OTHERS

CN14	CONNECTOR (6P)	KPE6
CN15	CONNECTOR (9P)	KPE9

PRE OUT ASSEMBLY

CAPACITORS

C591		CFTXA824J50
------	--	-------------

RESISTORS

All Resistors		RD1/8PM□□□J
---------------	--	-------------

OTHERS

CN	PIN JACK 1P	AKB1139
CN	PIN JACK 2P	AKB1171

VOLUME ASSEMBLY

SEMICONDUCTORS

IC561, 564	OP-AMP IC	M5220L
IC501, 521, 523		NJM4558DXP
IC524	OP-AMP IC	NJM4558LD
IC503	MECHANISM DRIVER IC	TA8409S
IC522, 525, 562	E-VR IC	TC9154AP

IC563	E-TONE CONTROL IC	TC9184P
-------	-------------------	---------

Q501		XDC124ES
------	--	----------

D521-526		HSS104-02
D561-566		HSS104-02
D506	ZENER DIODE	RD3.3ESB2
D501, 502	ZENER DIODE	RD5.1ESB2

CAPACITORS

C567, 568		CCSQCH121J50
C507, 508, 559, 560		CCSQCH331J50
C525, 526, 535, 536, 542, 549		CCSQCH470J50
C511		CEANP101M10
C565, 566		CEAS010M50

C569, 570		CEAS100M50
C512		CEAS101M16

Mark	No.	Description	Parts No.
	C561, 562		CEAS2R2M50
	C503, 504, 509, 510, 521, 522, 527, 528, 531, 532, 540, 543, 547, 550-552, 579, 580		CEAS4R7M50
	C501, 502		CEAS470M10
	C585		CKSQYB102K50
	C505, 506, 523, 524, 533, 534, 541, 544, 545, 548		CKSQYB103K50
	C539, 546		CKSQYB471K50
	C563, 564, 581, 582, 586, 587		CKSQYF103Z50
	C571, 572, 577, 578		CQMA153J50
	C575, 576		CQMA272J50
	C573, 574		CQMA823J50
RESISTORS			
	VR501 (100k A5×2)		ACX1075
	R517		RD1/2PM470J
	R501, 502		RD1/4PM681J
	R599		RS1/10S000J
	R527, 528, 537-539, 543, 547-549, 561, 562, 569, 570, 585-590		RS1/10S102J
	R525, 526, 542		RS1/10S103J
	R567, 568		RS1/10S104J
	R505, 506		RS1/10S112J
	R583, 584		RS1/10S154J
	R559, 560		RS1/10S222J
	R577, 578		RS1/10S223J
	R529, 530, 544		RS1/10S224J
	R523, 524, 541		RS1/10S332J
	R571, 572		RS1/10S362J
	R531, 532, 545, 579, 580		RS1/10S392J
	R503, 504, 521, 522, 540, 563, 564		RS1/10S473J
	R565, 566		RS1/10S474J
	R508		RS1/10S561J
	R518, 519		RS1/10S562J
	R575, 576		RS1/10S564J
	R533, 534, 546		RS1/10S623J
	R581, 582		RS1/10S821J
	R573, 574		RS1/10S823J
	Other Resistors		RD1/8PM□□□J
OTHERS			
	CN16 CONNECTOR (9P)		KPE9
	CN18 CONNECTOR (9P)		KPE9

5. ADJUSTMENTS

DOLBY LEVEL ADJUSTMENT (FOR VSA - 701S ONLY)

Set the switches as follows :

- SURROUND MODE : STUDIO
- DELAY TIME : 20m Sec.
- INPUT SELECTOR : CD

1. Input a signal of 1kHz at 300mV to the Lch side of the CD terminal.
2. Adjust the input level so that Pin ⑮ of the CN1901 connector becomes 300mVrms (=0dB).
3. Adjust VR1901 so that the output level of Pin ① (DELAY OUT) of the CN1901 connector becomes $-0.5dB \pm 1dB$.

5. REGLAGES

REGLAGE DU NIVEAU DOLBY (POUR VSA - 701S SEULEMENT)

Régler les commandes de la manière suivante :

- MODE AMBIOPHONIQUE : STUDIO
- TEMPS DE RETARD : 20m Sec.
- SELECTEUR D'ENTREE : CD

1. Appliquer un signal de 1kHz à 300mV au côté Lch de la borne CD.
2. Régler le niveau d'entrée de manière qu'il soit égal à 300mVeff à la broche ⑮ du connecteur CN1901 (=0dB).
3. Régler VR1901 de manière que le niveau de sortie à la broche ① (SORTIE RETARD) du connecteur CN1901 soit égal à $-0,5dB \pm 1dB$.

5. AJUSTES

AJUSTE DE NIVEL DOLBY (SOLO PARA VSA - 701S)

Ajuste los interruptores de la manera siguiente :

- MODE DE SONIDO ENVOLVENTE : ESTUDIO
- TIEMPO DE RETARDO : 20 mseg.
- SELECTOR DE ENTRADA : CD

1. Ingrese una señal de 1 kHz en 300mV al lado del canal L (izquierdo) del terminal CD.
2. Ajuste el nivel de entrada de modo que el contacto ⑮ del conector CN1901 se convierta en 300mV de valor eficaz (=0dB).
3. Ajuste la VR1901 de modo que el nivel de salida del contacto ① (SALIDA DE RETARDO) del conector CN1901 se convierta en $-0,5dB \pm 1dB$.

Manufactured under license from Dolby Laboratories Licensing Corporation.
DOLBY and the double-D symbol \square are trademarks of Dolby Laboratories Licensing Corporation.

DOL. PRO. MOD. assembly
Ensemble DOL. PRO. MOD.
Conjunto DOL. PRO. MOD.

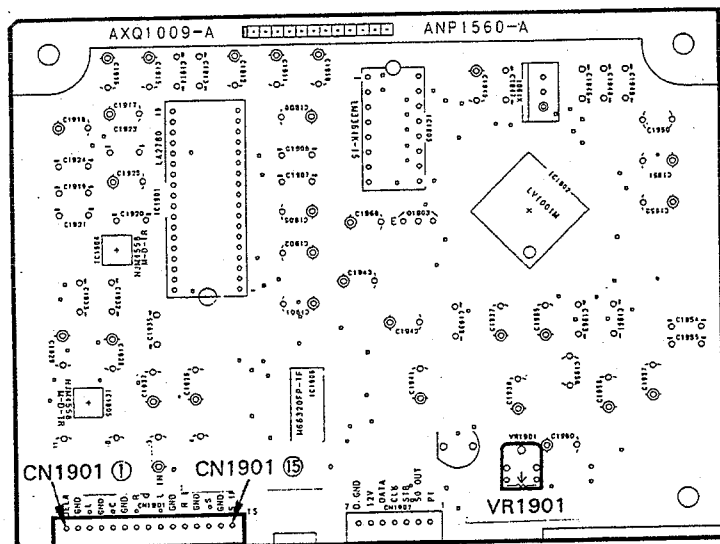


Fig. 5-1 Adjustment Points
Fig. 5-1 Emplacements de réglage
Fig. 5-1 Puntos de ajuste

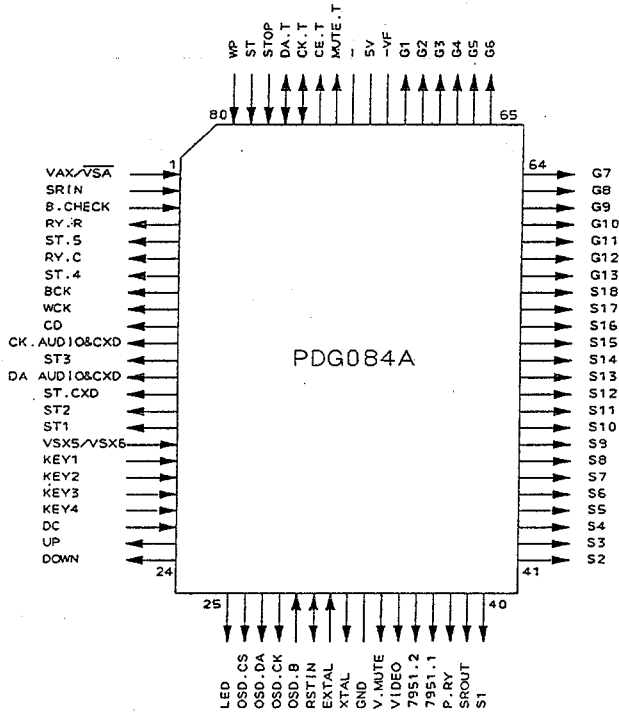
6. IC INFORMATION

- The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDG084A (IC601)

- System Control Micro-computer
- Pin Assignment

(Top View)



● Pin Function

No.	Terminal Name	I/O	Description
1	VSX/VSA	I	Port for switching between VSX and VSA.
2	SR IN	I	Remote control signal input from the SR IN terminal or the light receiving unit.
3	B-Check	I	Remote control signal input from the MR IN terminal. The system detects remote control operation SUB ROOM when the signal is input.
4	RY-Rear	O	Rear relay ON/OFF
5	ST. 5	O	Strobe to operate the rear electronic VR.
6	RY-Center	O	Center relay ON/OFF
7	ST. 4	O	Strobe to operate the front balance and tone.
8	BCK	O	DSD IC bit clock

No.	Terminal Name	I/O	Description
9	WCK	O	DSP IC word clock
10	CD	O	DSP IC data
11	CK. AUDIO & CXD	O	Clock for the audio system and the port expander.
12	ST. 3	O	Strobe to operate the surround and center electronic VRs.
13	DA. AUDIO & CXD	O	Data for the audio system and the port expander.
14	ST. CXD	O	Strobe for the port expander.
15	ST. 2	O	Strobe for subfunction, multiroom VR and analog ground SW.
16	ST. 1	O	Strobe for main function and DSP surround SW.
17	VSX5/VSX6	I	Port for switching between VSX-5 and VSX-6.
18	KEY IN 1	I	KEY MATRIX return input
19	KEY IN 2	I	
20	KEY IN 3	I	
21	KEY IN 4	I	
22	DC	I	Detection of the VR position (VR MAX : 5V, VR MIN : 0V) of AUDIO SOURCE CONTROL and conversion of A/D.
23	UP	O	VR : UP when using remote control.
24	DOWN	O	VR : DOWN when using remote control.
25	LED	O	VR knob LED ON/OFF during remote control operation.
26	OSD. CS	O	NC
27	OSD. DA	O	
28	OSD. CK	O	
29	OSD. BLUE	I	
30	RST IN	I/O	Reset
31	EXTAL	I	Oscillator IN/OUT
32	XTAL	O	

No.	Terminal Name	I/O	Description
33	GND	—	GND
34	V. MUTE	O	To the MUTE terminal of LA7951 used for MUTE and FUNCTION of the video signal.
35	VIDEO	O	Switches between VIDEO and TV when front video input is added.
36	LA7951. 2	O	2-bit control terminal of LA7951 (video function).
37	LA7951. 1	O	
38	P. RY	O	Power relay and turning the standby LED to ON/OFF.
39	SR OUT	O	Sends SR signal of multiple devices during AUDIO SOURCE CONTROL.
40	SEG1/KEY1	O	Display segment and KEY MATRIX output.
41	SEG2/KEY2	O	
42	SEG3/KEY3	O	
43	SEG4/KEY4	O	
44	SEG5/KEY5	O	
45	SEG6/KEY6	O	
46	SEG7/KEY7	O	
47	SEG8/KEY8	O	
48	SEG9/KEY9	O	
49	SEG10/KEY10	O	
50	SEG11/KEY11	O	
51	SEG12/KEY12	O	
52	SEG13/KEY13	O	
53	SEG14/KEY14	O	
54	SEG15/KEY15	O	
55	SEG 16	O	Display segment
56	SEG 17	O	
57	SEG 18	O	

No.	Terminal Name	I/O	Description
58	GRID 13	O	NC
59	GRID 12	O	
60	GRID 11	O	
61	GRID 10	O	Display grid
62	GRID 9	O	
63	GRID 8	O	
64	GRID 7	O	
65	GRID 6	O	
66	GRID 5	O	
67	GRID 4	O	
68	GRID 3	O	
69	GRID 2	O	
70	GRID 1	O	
71	-VF	—	FL negative voltage -VFDP
72	+5V(VDD)	—	Positive power supply
73	—	—	NC
74	MUTE. T	O	
75	CE. T	O	
76	CK. T	I/O	
77	DA. T	I/O	
78	STOP (TUNED)	I	Control signal sent from IC when performing tuning. The TUNED FL indicator lights up when the system detects the signal.
79	STEREO	I	Signal sent from IC when the system is in the STEREO mode. The STEREO indicator lights up when the system detects the signal.
80	AC Wake Up	I	AC short break detection report

7. REMOTE CONTROL UNIT [CU – VSA019 (AXD1271)] [CU – VSA020 (AXD1272)]

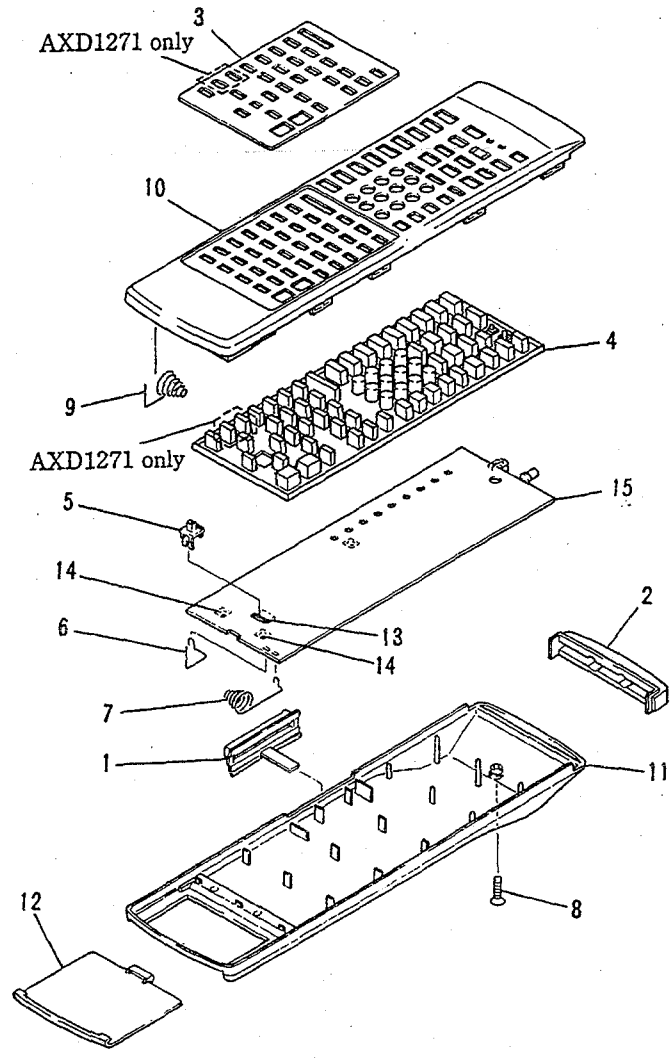
7.1 EXPLODED VIEW AND PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	PLATE (AXD1271)	AZA1370
	3	PLATE (AXD1272)	AZA1371
	4	RUBBER SHEET (AXD1271)	AZA1365
	4	RUBBER SHEET (AXD1272)	AZA1366
	5	KNOB	AZA1349
	6	TERMINAL (+)	AZB1327
	7	TERMINAL (-)	AZB1328
	8	SCREW	AZB1329
	9	TERMINAL (C)	AZB1330
	10	CASE (A)	AZN2089
	11	CASE (B)	AZN2090
	12	BATTERY COVER	AZN2091
	13	SLIDE SW	AZS1117
	14	TACT SW	AZS1118
NSP	15	P. C. BOARD	AZW1130



7.2 ELECTRICAL PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.
- 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%).

560 Ω \rightarrow 56 \times 10¹ \rightarrow 561 RD1/8PM \square \square \square J

47k Ω \rightarrow 47 \times 10³ \rightarrow 473 RD1/4PS \square \square \square J

0.5 Ω \rightarrow 0R5 RN2H \square \square \square K

1 Ω \rightarrow 010 RS1P \square \square \square K

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

5.62k Ω \rightarrow 562 \times 10¹ \rightarrow 5621 RN1/4PC \square \square \square \square F

Parts list of AXD1271 and AXD1272

Mark No.	Description	Parts No.
----------	-------------	-----------

SEMICONDUCTORS

IC1	μ -COM	ACM001-029
IC2	IC	AZC1564
IC3	LOGIC IC	MC74HC138F
Q1, 2	CHIP TRANSISTOR	2SC3052E
Q3, 4	TRANSISTOR	2SD1622
D1	DIODE	DWA010-TE
D10-17	LED	AZC1573
D2-6	DIODE	DWA010-TE
D7	LED	SLR-938C
D8	DIODE	SPS-503C-3
D9	LED	AZC1573

CAPACITORS

C1, 2	CERAMIC CAPACITOR	CCDSL330J50
C3	CERAMIC CAPACITOR	CCDSL221J50
C4	CERAMIC CAPACITOR	CKDYX104M25
C5	ELECT. CAPACITOR	CEAS470M10
C6	CERAMIC CAPACITOR	CKDYB103K50
C7	ELECT. CAPACITOR	CEAS221M10
C8	ELECT. CAPACITOR	CEAS4R7M50





RESISTORS

R7, 8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
	Other resistors	RD1/8PM \square \square \square J

OTHERS

X1	RESONATOR	AZC1570
----	-----------	---------

7.3 P. C. BOARD PATTERN (FOR AXD1271 AND AXD1272)

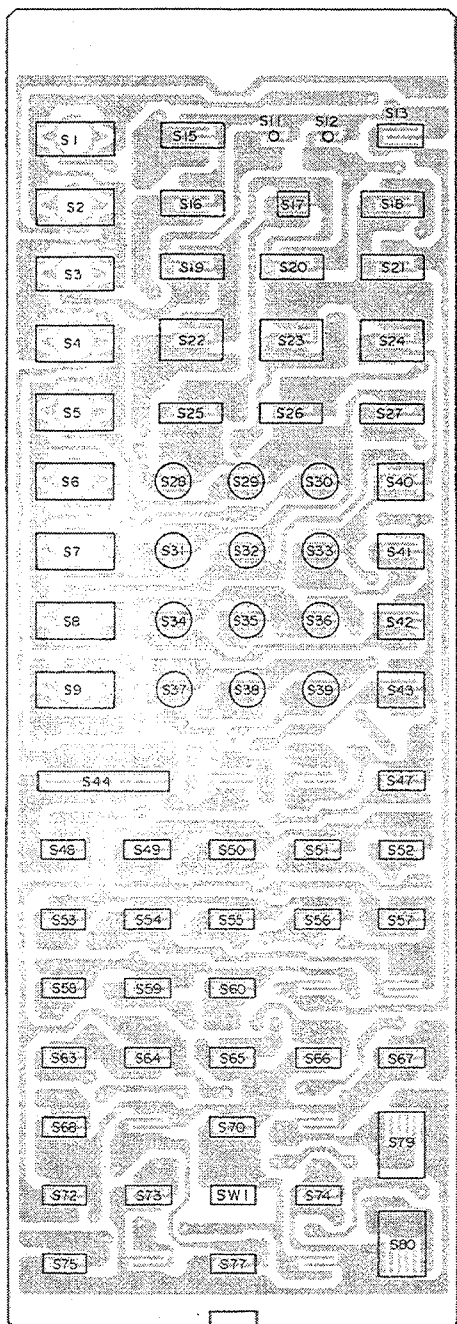
-  : Indicates a chip resistor.
-  : Indicates a chip capacitor.
-  : Indicates a chip transistor.
-  : Indicates a chip diode.

A

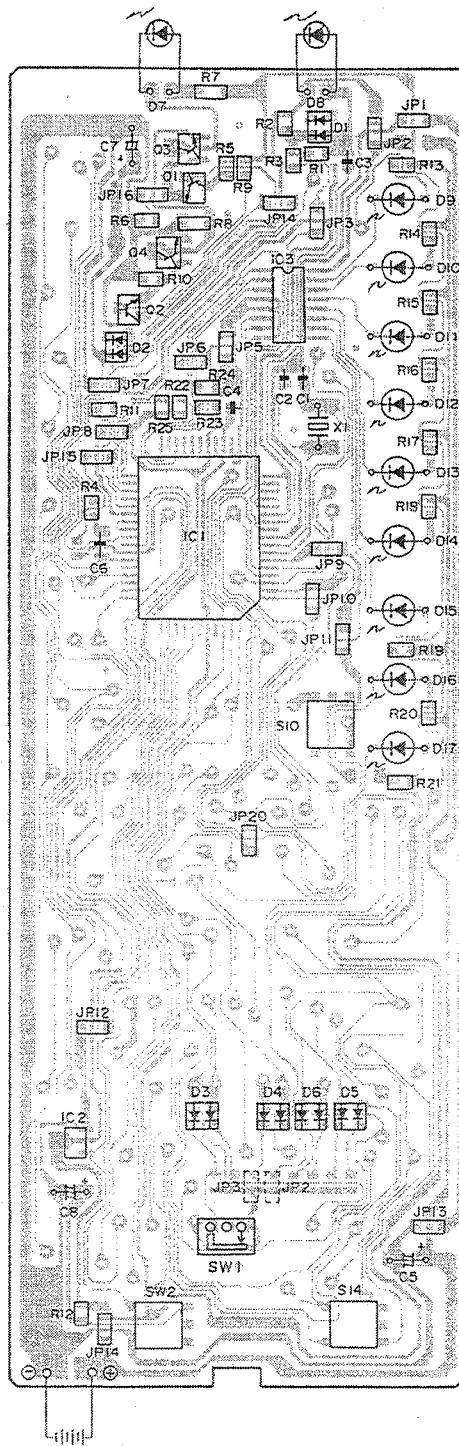
B

C

D



S68, S72 : AXD1271 ONLY



7.4 SCHEMATIC DIAGRAM (FOR AXD1271 AND AXD1272)

NOTE:

JP2 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

JP3 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning. This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

NOTE:

- : Indicates a chipresistor.
- : Indicates a chipcapacitor.
- ⊠ : Indicates a chiptransistor.
- ⊞ : Indicates a chipdiode.

Note:

1. When ordering service parts, be sure to refer to "PARTS LIST OF EXPLODED VIEWS" or "PCB PARTS LIST".
2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
3. RESISTORS:
Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.

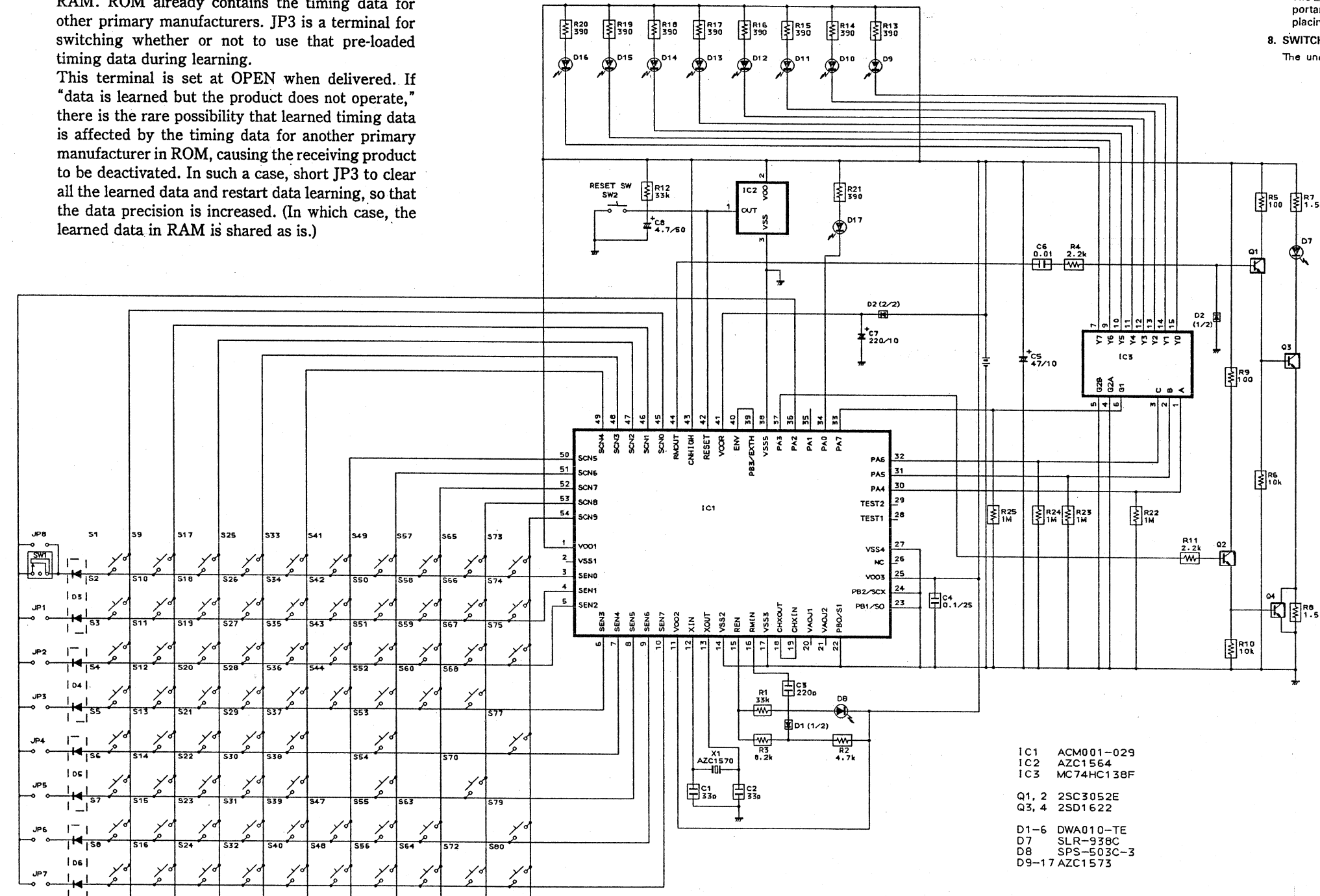
(Type 2)

4. CAPACITORS:
Unit: p:pF or μF unless otherwise noted.
Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.
5. COILS:
Unit: m:mH or μH unless otherwise noted.
6. VOLTAGE AND CURRENT:
⊞ : DC voltage (V) at no input signal unless otherwise noted.
⊞ mA or - mA : DC current at no input signal unless otherwise noted.

7. OTHERS:
⊙ : Adjusting point.
⊠ : The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SWITCHES (Underline indicates switch position):

- The underline indicates the switch position
- SW1 : CENT. BAL./REAR REAR BAL.
 - SW2 : RESET
 - S1 : VCR1
 - S2 : VCR2
 - S3 : LD
 - S4 : TV
 - S5 : CD
 - S6 : TUNER
 - S7 : DECK I
 - S8 : DECK II
 - S9 : DAT
 - S10 : MODE CHECK
 - S11 : LEARN
 - S12 : EDIT
 - S13 : MULTI COMMAND
 - S14 : M. CLEAR
 - S15 : POWER
 - S16 : M
 - S17 : REC
 - S18 : ←
 - S19 : → (SEARCH)
 - S20 : ←
 - S21 : →
 - S22 : ⏪
 - S23 : ⏩
 - S24 : ⏮
 - S25 : TV/VCR (+10)
 - S26 : SELECT (DISP)
 - S27 : TV FUNC (BAND)
 - S28 : 1
 - S29 : 2
 - S30 : 3
 - S31 : 4
 - S32 : 5
 - S33 : 6
 - S34 : 7
 - S35 : 8
 - S36 : 9
 - S37 : 10/0
 - S38 : 11/PGM
 - S39 : 12/CLEAR
 - S40 : CUSTOM (TV VOL+)
 - S41 : SCAN (TV VOL-)
 - S42 : FREQ CH (A)
 - S43 : FREQ CH (V)
 - S44 : AMP POWER
 - S47 : SLEEP
 - S48 : VCR1
 - S49 : VCR2
 - S50 : LD
 - S51 : TV
 - S52 : VIDEO
 - S53 : TAPE1/DAT
 - S54 : TAPE2/MONITOR
 - S55 : CD
 - S56 : TUNER
 - S57 : PHONO
 - S58 : SIMULATED STEREO
 - S59 : ACOUSTIC
 - S60 : VIDEO SIGNAL SELECT
 - S63 : SURR MODE
 - S64 : 3CH LOGIC
 - S65 : CENTER MODE
 - S66 : TEST TONE
 - S67 : MUTING
 - S68 : EFFECT + (AXD1271 ONLY)
 - S70 : CENTER +
 - S72 : EFFECT - (AXD1271 ONLY)
 - S73 : REAR L
 - S74 : REAR R
 - S75 : DELAY TIME
 - S77 : CENTER -
 - S79 : MASTER VOLUME +
 - S80 : MASTER VOLUME -



S6B, 72: AXD1271 ONLY

8. FOR VSA – 701S/SD TYPE

- NOTES:**
- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
 - The Δ 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.

8.1 CONTRAST OF MISCELLANEOUS PARTS

VSA – 701S/SD and VSA – D801S/SD have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		VSA – D801S/SD	VSA – D701S/SD	
⊙	DSP assembly	AWZ4294	.....
⊙	AMP assembly	AWZ4286	AWZ4718	
⊙	POWER SUPPLY assembly	AWZ4381	AWZ4388	
⊙	REAR SP CENTER SP assembly	AWZ4382	AWZ4389	
⊙	CONNECTION assembly	AWZ4385	AWZ4390	
⊙	VOLUME assembly	AWZ4387	AWZ4391	
⊙	FL. U-COM assembly	AWK1552	AWK1560	
	DOL. PRO. MOD assembly	.....	AXQ1009	
Δ	Q7 Transistor	2SC4688	.....
Δ	Q9 Transistor	2SA1803	.....
Δ	T1 Power transformer	ATS1427	ATS1425	
Δ	C15–C17 Mylar film capacitor	CQMA104K250	.....
Δ	C10–C14 Mylar film capacitor	.....	CQMA104K250	
	Panel base	AMB2003	AMB2004	
	Front panel	ANB1518	ANB1519	
NSP	PCB Spacer	.....	AEC1072	
NSP	Barrier (PVC)	AEC1412	.....
	Bonnet	ANE1373	ANE1374	
NSP	Heat sink	ANH1379	ANH1398	
	Packing case	AHD2287	AHD2288	
	Operating instructions (English)	ARB1382	ARB1381	
	Remote control unit (CU–VSA019)	AXD1271	.....
	Remote control unit (CU–VSA020)	.....	AXD1272	

POWER SUPPLY ASSEMBLY

POWER SUPPLY assembly (AWZ4388) and POWER SUPPLY assembly (AWZ4381) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4381	AWZ4388	
	C68, C69 (4700/DC42V)	ACH1203	.....
	C68, C69 (4700/DC35V)	.....	ACH1021	

AMP ASSEMBLY

AMP assembly (AWZ4254) and AMP assembly (AWZ4286) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4286	AWZ4718	
	IC161	UPC1270H	.....
	Q161, Q163	2SC2458	.....
	D161, D163, D165	HSS104–02	.....
	C161	CEAS2R2M50	.....
	C165	CKCYB222K50	.....
	C167	CEHAQ101M10	.....
	C169	CCCSL680J50	.....
	C171	CKCYX333M25	.....
	C173	CEAS100M100	.....
	C175	CEANP2R2M50	.....
	R161, R173	RD1/8PM102J	.....
	R163, R169	RD1/8PM563J	.....
	R165	RD1/8PM123J	.....
	R167	RD1/8PM272J	.....
	R171	RD1/8PM684J	.....
	R175	RD1/8PM122J	.....
	R177 (0.22/2W)	ACN – 131	.....
	R179, R181	RD1/4PMF222J	.....
	R183, R185	RD1/8PM153J	.....
	R187	RD1/8PM183J	.....
	R227, R229	RFA1/4PS4R7J	.....

REAR SP CENTER SP ASSEMBLY

REAR SP CENTER SP assembly (AWZ4389) and REAR SP CENTER SP assembly (AWZ4382) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4382	AWZ4389	
	Q252	XDC143ES	.....
	D252	HSS104–02	.....
	RY252	ASR1035	.....
	L252	ATH1004	.....
	C254	CFTXA473J50	.....
	R256, R258	RD1/4PMF100J	.....
	R259	RS1LMF681J	.....
	R267	RD1/8PM333J	.....
	R270	RD1/8PM222J	.....

CONNECTION ASSEMBLY

CONNECTION assembly (AWZ4390) and CONNECTION assembly (AWZ4385) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4385	AWZ4390	
	IC301, IC302	.....	NJM4558DXP	
	IC303	.....	TC9162N	
	IC304	M5220P	.....
	Q301	.....	2SC2458	
	Q302	.....	XDA124ES	
	Q303	.....	XDC124ES	
	Q304	.....	2SK246	
	C301—C304, C307—C309	.....	CEAS4R7M50	
	C305, C306	.....	CCSQCH680J50	
	C310, C313	.....	CKSQYB103K50	
	C311, C312	.....	CEAS470M16	
	C314	.....	CCSQCH471J50	
	C317	.....	CKSQYF103Z50	
	C318	CKSQYF473Z50	.....
	C319	.....	CEAS101M16	
	C320	.....	CFTXA473J50	
	C321, C322	CEAS4R7M50	.....
	C323, C324	CEAS101M25	.....
	C325, C326	CCSQCH331J50	.....
	R301, R302, R311, R312	.....	RS1/10S473J	
	R303	.....	RS1/10S104J	
	R304—R306	.....	RS1/10S223J	
	R307	.....	RS1/10S122J	
	R308	.....	RS1/10S152J	
	R309	.....	RS1/10S273J	
	R310	.....	RS1/10S182J	
	R313, R314, 317	.....	RS1/10S334J	
	R315, R318	.....	RS1/10S114J	
	R316	.....	RS1/10S113J	
	R319	.....	RS1/10S822J	
	R321, R322	.....	RS1/10S333J	
	R323, R324, R329	.....	RS1/10S102J	
	R325, R326	.....	RS1/10S224J	
	R327, R328	.....	RS1/8PM102J	
	R342	.....	RS1/8PM4R7J	
	R343, R344	RS1/10S821J	.....
	R345, R346	RS1/10S122J	.....
	R347—R350	RS1/10S104J	.....
	R351, R352	RS1/10S242J	.....
	R353, R354	RS1/10S102J	.....
	R358	.....	RS1/8PM104J	
	R359	.....	RS1/8PM475J	

VOLUME ASSEMBLY

VOLUME assembly (AWZ4391) and VOLUME assembly (AWZ4387) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWZ4387	AWZ4391	
	IC524	NJM4558LD	.....
	IC525	TC9154AP	.....
	D525, D526	HSS104-02	.....
	C553	.....	CEAS4R7M50	
	C540, C543, C547, C552	CEAS4R7M50	.....
	C541, C544, C545, C548	CKSQYB103K50	.....
	C542, C549	CCSQCH470J50	.....
	C546	CKSQYB471K50	.....
	VR501	ACX1075	ACX1074	
	R505, R506	RS1/10S112J	RS1/10S222J	
	R518, R519	RS1/10S562J	.....
	R531, R532	RS1/10S392J	RS1/10S472J	
	R540	RS1/10S473J	.....
	R541	RS1/10S332J	.....
	R542	RS1/10S103J	.....
	R543, R547-R549	RS1/10S102J	.....
	R544	RS1/10S224J	.....
	R545	RS1/10S392J	.....
	R546	RS1/10S623J	.....

FL U-COM ASSEMBLY

FL U-COM assembly (AWK1560) and FL U-COM assembly (AWK1552) have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		AWK1552	AWK1560	
	IC601	PDG084A	PDG083A	
	D629-D633	.....	HSS104-02	
	S644, S648, S652, S656, S660	ASG1034	.....
	R631	RD1/8PM222J	.....

8.2 PCB PARTS LIST

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.
- 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%).

560 Ω \rightarrow 56 \times 10¹ \rightarrow 561 RD1/8PM \square \square \square J
 47k Ω \rightarrow 47 \times 10³ \rightarrow 473 RD1/4PS \square \square \square J
 0.5 Ω \rightarrow 0R5 RN2H \square \square \square K
 1 Ω \rightarrow 010 RSIP \square \square \square K

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

5.62k Ω \rightarrow 562 \times 10¹ \rightarrow 5621 RN1/4PC \square \square \square F

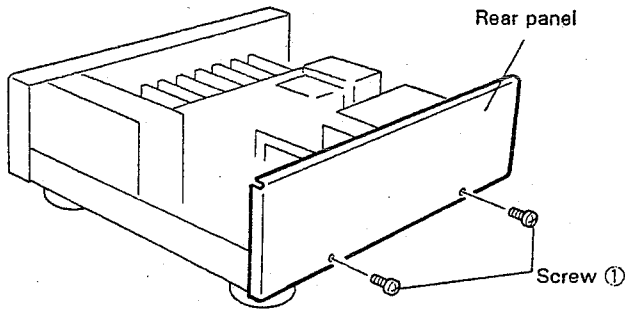
Mark No.	Description	Parts No.	Mark No.	Description	Parts No.
DOL. PRO. MOD. ASSEMBLY			C1928, 1929	ELECT. CAPACITOR	CEAS220M16
SEMICONDUCTORS			C1930, 1931	ELECT. CAPACITOR	CEAS2R2M50
IC1901	DOLBY PROLOGIC IC	LA2780	C1932	AUDIO FILM CAPACITOR	CFTXA153J50
IC1902	DOLBY SURREUND IC	LV1001M-A	C1933	AUDIO FILM CAPACITOR	CFTXA103J50
IC1903	DRAM IC	LM3364K-15	C1934	CHIP CAPACITOR	CCSQCH681J50
IC1904, 1905	OP-AMP IC	NJM4558M-D	C1935	AUDIO FILM CAPACITOR	CFTXA104J50
IC1906	PORT-EXPANDER IC	M66320FP	C1936	ELECT. CAPACITOR	CEAS471M16
Q1901	TRANSISTOR	DTA143EK	C1937	ELECT. CAPACITOR	CEAS4R7M50
Q1902	DIGITAL TRANSISTOR	DTC143EK	C1938	CHIP CAPACITOR	CCSCH102J50
Q1903	TRANSISTOR	2SD438	C1939	AUDIO FILM CAPACITOR	CFTXA223J50
D1901-1905	DIODE	1SS226	C1940	CHIP CAPACITOR	CCSQCH151J50
CAPACITORS			C1941-1943	ELECT. CAPACITOR	CEAS221M16
C1901	ELECT. CAPACITOR	CEAS470M25	C1944	CERAMIC CAPACITOR	CKSQYF104Z50
C1902	ELECT. CAPACITOR	CEAS101M10	C1945	ELECT. CAPACITOR	CEASR22M50
C1903, 1904	ELECT. CAPACITOR	CEAS100M50	C1946	AUDIO FILM CAPACITOR	CFTXA683J50
C1905	ELECT. CAPACITOR	CEYAR33M50	C1947	MYLAR FILM CAPACITOR	CQMA392J50
C1906	CHIP CAPACITOR	CCSQCH681J50	C1948	MYLAR FILM CAPACITOR	CQMA472J50
C1907, 1908	AUDIO FILM CAPACITOR	CFTXA104J50	C1949	AUDIO FILM CAPACITOR	CFTXA333J50
C1909, 1910	ELECT. CAPACITOR	CEYA2R2M50	C1950	ELECT. CAPACITOR	CEANP100M35
C1911	ELECT. CAPACITOR	CEASR15M50	C1951	ELECT. CAPACITOR	CEAS010M50
C1912	ELECT. CAPACITOR	CEYA3R3M50	C1952	ELECT. CAPACITOR	CEAS100M50
C1913, 1914	AUDIO FILM CAPACITOR	CFTXA154J50	C1953	CHIP CERAMIC C.	CCSQCH471J50
C1915	ELECT. CAPACITOR	CEYA3R3M50	C1954	MYLAR FILM CAPACITOR	CQMA562J50
C1916	ELECT. CAPACITOR	CEASR15M50	C1955	MYLAR FILM CAPACITOR	CQMA682J50
C1917, 1918	ELECT. CAPACITOR	CEANL2R2M50	C1956	ELECT. CAPACITOR	CEANPR33M50
C1919	AUDIO FILM CAPACITOR	CFTXA473J50	C1957, 1958	ELECT. CAPACITOR	CEAS100M50
C1920	AUDIO FILM CAPACITOR	CFTXA104J50	C1959	CHIP CAPACITOR	CCSQCH681J50
C1921	AUDIO FILM CAPADITOR	CFTXA334J50	C1960	ELECT. CAPACITOR	CEAS100M50
C1922	CHIP CAPACITOR	CCSQCH681J50	C1961	AUDIO FILM CAPACITOR	CFTXA154J50
C1923, 1924	AUDIO FILM CAPACITOR	CFTXA104J50			
C1925	ELECT. CAPACITOR	CEYAR33M50			
C1926, 1927	ELECT. CAPACITOR	CEAS100M50			

<u>Mark No.</u>	<u>Description</u>	<u>Parts No.</u>
C1962	CHIP CAPACITOR	CCSQCH151J50
C1963	AUDIO FILM CAPACITOR	CFTXA223J50
C1964	CHIP CAPACITOR	CCSCH102J50
C1965	ELECT. CAPACITOR	CEAS4R7M50
C1966	CERAMIC CAPACITOR	CKSQYF104Z50
C1967	CERAMIC CAPACITOR	CKSQYB103K50
C1968	ELECT. CAPACITOR	CEAS221M10
C1970	CERAMIC CAPACITOR	CKSQYB562K50
C1971-1973	CHIP CAPACITOR	CCSQCH101J50
RESISTORS		
VR1901	VR (4.7k)	ACP1045
	Other resistors	RS1/10S□□□J
OTHERS		
X1901	CRYSTAL RESONATOR (8.00MHz)	ASS1015

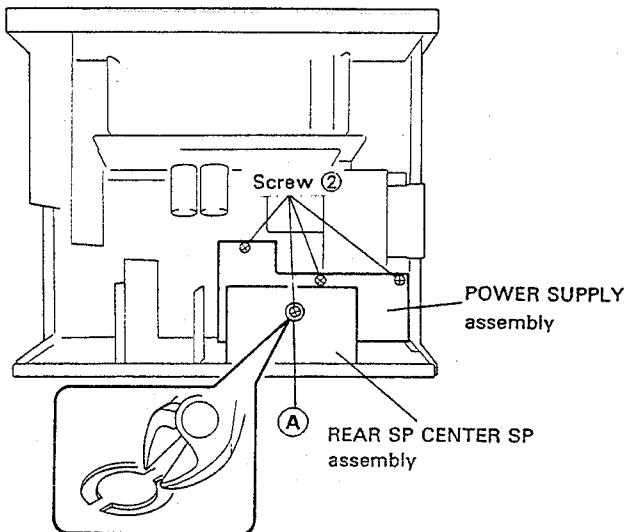
9. DISASSEMBLY

9.1 POWER SUPPLY ASSEMBLY

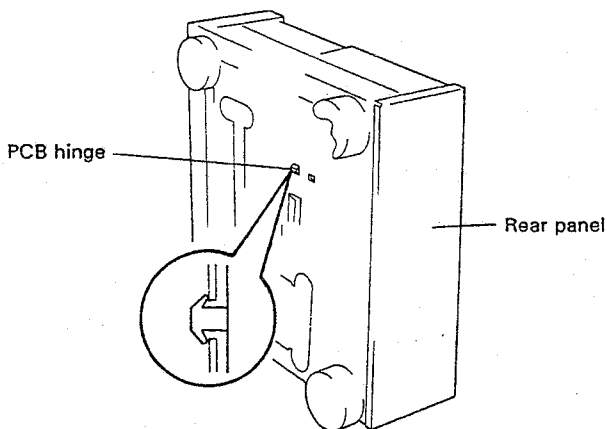
1. Remove the bonnet case (7 screws).
2. Remove the screws on the rear panel. (two screws ①)



3. Use nippers to cut at (A) in the REAR SP CENTER SP assembly.
4. Remove the screws on the POWER SUPPLY assembly. (four screws ②)



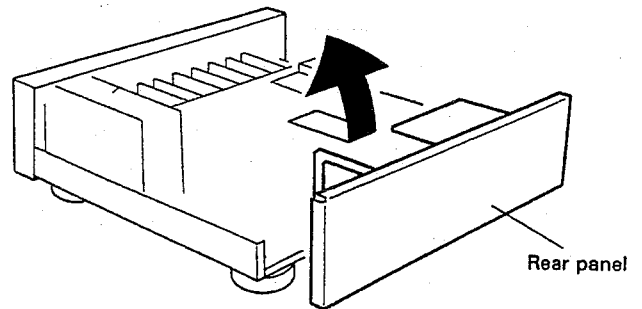
5. Stand the unit upright, and use fine-nosed pliers to press in the PCB hinge on the rear panel.



Note :

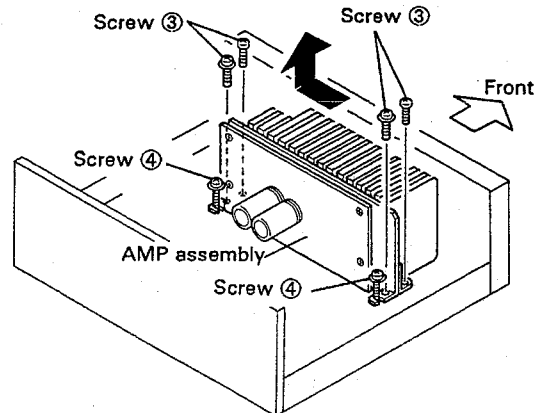
Avoid shorting the unit by using an insulation sheet or similar between transformer TP and other assemblies when positioning the unit securely.

6. Return the unit to its original position. Pull the rear panel toward the operator and securely place it so that the side with the POWER SUPPLY assembly buttons are visible.

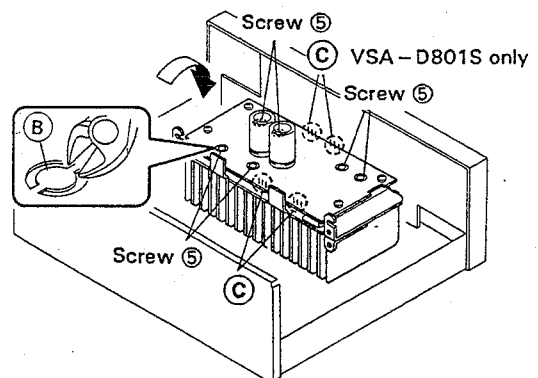


9.2 AMP ASSEMBLY

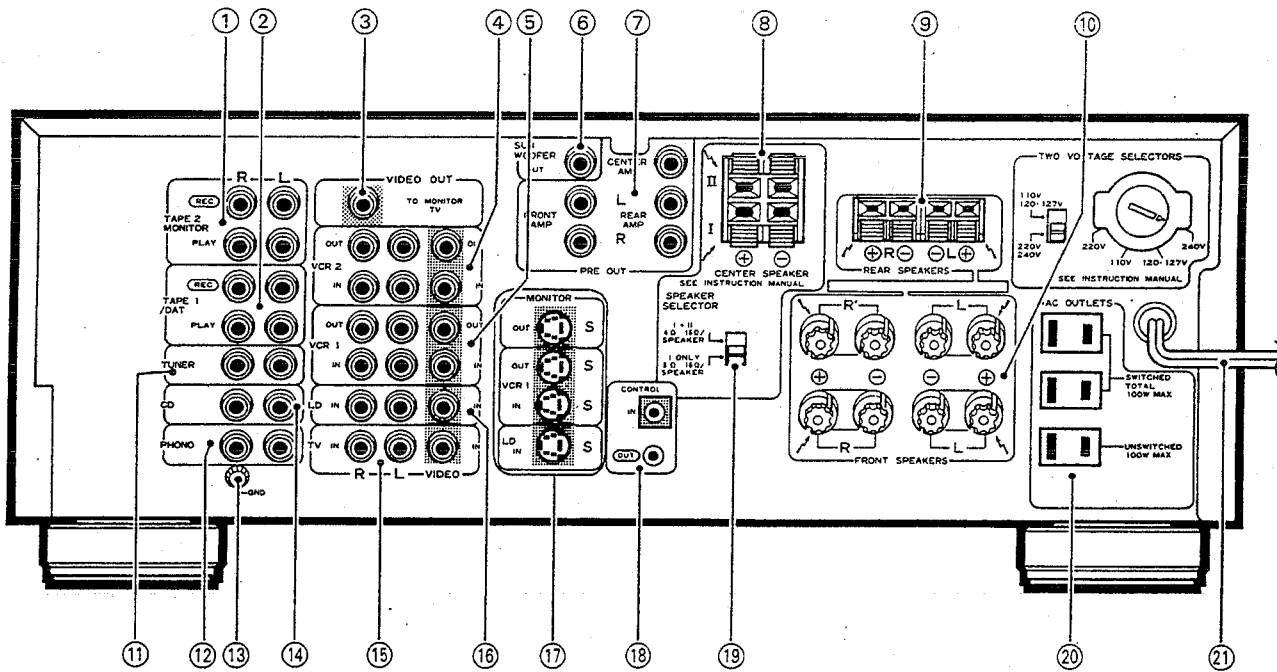
1. Remove the four heat sink locking screws ③ and loosen the two regular screws ④.
2. Cut the binder with nippers.



3. Cut the AMP assembly at (B) with nippers and then remove the six screws ⑤.
4. Remove the transistor solder at (C) (four locations).



10. PANEL FACILITIES



① TAPE 2 MONITOR jacks

Connect the second cassette deck to these jacks.

Connecting for Recording

The tape recording jack (REC) on the cassette deck should be connected to the REC side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 MONITOR jack on the amplifier with a pin plug connecting cord.

② TAPE 1/DAT jacks

Use these to connect the cassette deck or DAT (digital audio tape) deck.

Connecting for Recording

The tape recording jack (REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

Connecting for Playback

Connect the PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the amplifier with a pin plug connecting cord.

③ VIDEO OUT (TV MONITOR) jack

Connect to monitor TV or to TV sets with video input terminals for watching program materials from a VCR 1, 2 or LD player connected to this unit.

④ VCR 2 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 1 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program materials from the video component connected to the VCR 1 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for copying, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for copying, connect its AUDIO OUTPUT jacks here.

⑤ VCR 1 jacks

[VIDEO OUT]

When copying program material from the video component connected to the VCR 2 or LD jacks, connect to the VIDEO INPUT jacks of the VCR used for recording.

[AUDIO OUT (L, R)]

When copying program material from the video component connected to the VCR 2 or LD jacks, or when recording music from an audio component source, connect to the AUDIO INPUT jacks of the VCR used for recording.

[VIDEO IN]

When monitoring the video image from a VCR used for playing, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When monitoring the audio channel from a VCR used for playing, connect its AUDIO OUTPUT jacks here.

⑥ SUB WOOFER OUT jack

If you want to boost the low frequencies, or you want to use the unit in a 3D system, connect to a sub woofer power amplifier.

⑦ PRE OUT jacks

[FRONT AMP]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

[CENTER AMP]

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

[REAR AMP]

When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

⑧ CENTER SPEAKER terminals

Connect the center speaker to these terminals. (See ⑯)

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. Use center speakers of impedance $8\ \Omega - 16\ \Omega$.

⑨ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

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. Use rear speakers of impedance $8\ \Omega - 16\ \Omega$.

⑩ FRONT SPEAKERS terminals

A: Connect to the first set of speakers.

B: Connect to the second set of speakers.

Speaker lead wire preparation and connection.

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. Use speakers of impedance $8\ \Omega - 16\ \Omega$.

⑪ TUNER input jacks

Connect to the output jacks of the tuner.

⑫ PHONO input jacks

Connect to the output cables from a turntable.

⑬ GND terminal

Connect the turntable ground lead to this terminal.

⑭ CD input jacks

Connect to the output jacks of a compact disc player.

⑮ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

[VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

[AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

⑯ LD jacks

[VIDEO IN]

When watching the video image from an LD player, connect its VIDEO OUTPUT jacks here.

[AUDIO IN (L, R)]

When playing back the audio channel from an LD player, connect its AUDIO OUTPUT jacks here.

⑰ S (connector) video jacks

When used in conjunction with a VCR, Video disc player (LaserDisc player) or TV monitor equipped with S video jacks, connect to these jacks.

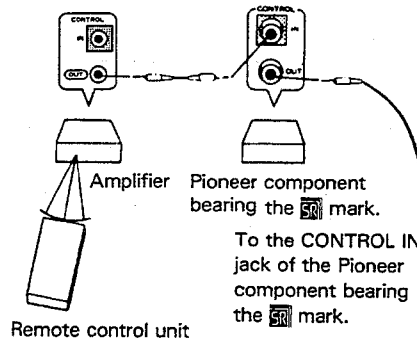
⑱ CONTROL IN/OUT jacks

IN: Connect this jack to other Pioneer components (main unit or remote control unit) when using those components to control this unit.

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

NOTE:

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



⑲ CENTER SPEAKER SELECTOR Switch

This switch changes the speaker impedance for when only one center speaker is connected, or two speakers are connected.

When only one speaker is connected:

Be sure to set the switch to "1 ONLY" (down side), and always connect a speaker with impedance of 8 to 16 ohms to the 1 terminal.

When two speakers are connected:

Be sure to set the switch to "1 + II" (up side), and always use speakers with an impedance of 4 to 16 ohms.

NOTE:

Switch the SPEAKER SELECTOR when the unit power supply is at STANDBY. Do not switch the selector when the power supply is at ON.

⑳ AC OUTLETS

[SWITCHED TOTAL 100 W MAX]

Power supplied through these outlets is turned on and off by the amplifier's POWER switch. Total electrical power consumption of connected equipment should not exceed 100 W.

[UNSWITCHED 100 W MAX]

Power flows continually to this outlet, regardless of whether the amplifier is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 100 W.

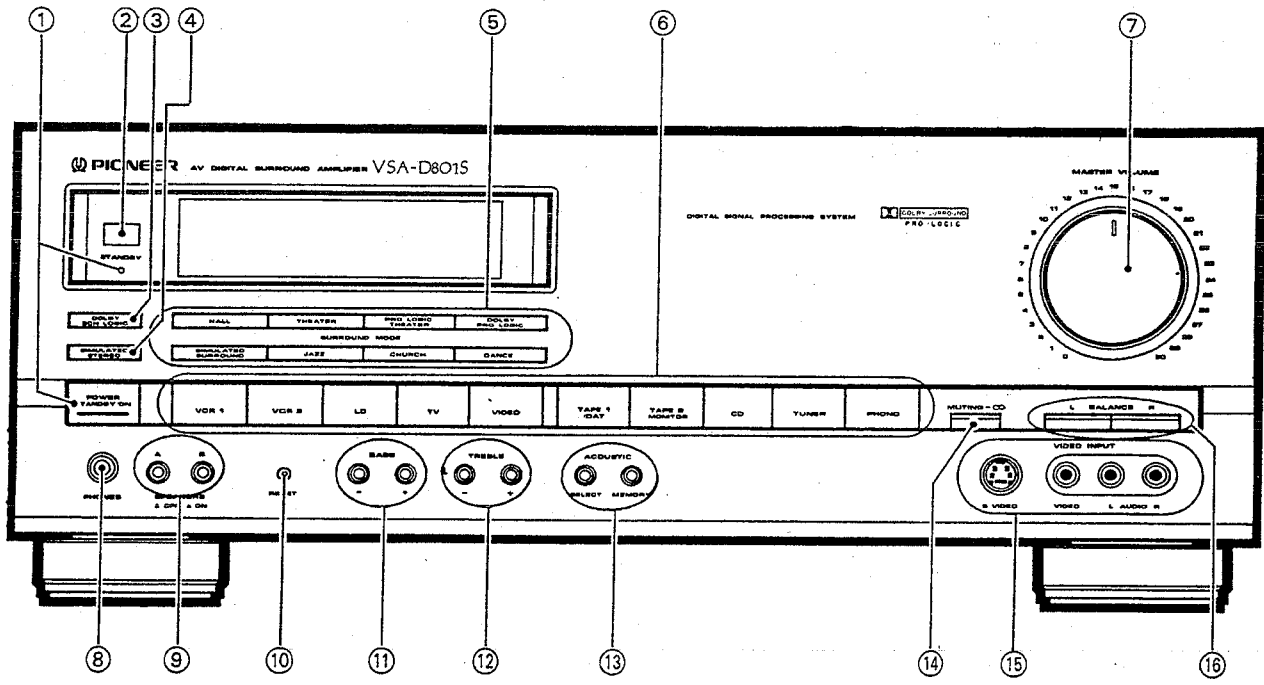
NOTE:

- This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.
- Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk. This can cause the amplifier to malfunction.

CAUTION:
DO NOT CONNECT MONITOR OR TV SET.

㉑ Power cord

VSA-D801S



① POWER STANDBY/ON switch/STANDBY 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 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 STANDBY indicator lights when the power is STANDBY, and goes out during ON.

[Timer ON/OFF possible]
 When the unit is switched ON, ON/OFF control can be performed by means of 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 Remote sensor

③ DOLBY 3CH LOGIC button

Select this setting when stereo-source regeneration and rear speakers are not connected and you wish to use the front L, front R, and center speakers to enjoy audio/visual material bearing the **DOLBY SURROUND** mark.

④ SIMULATED STEREO button

Press to produce a simulated stereo effect when listening to monaural sources (for example, normal AM or TV broadcasts).
 "SIMULATED STEREO" appears on the display section.

NOTE:

- This effect is not produced through the rear speakers.
- Use with the SURROUND MODE in the OFF.

⑤ SURROUND MODE selector buttons

See page 5 "SURROUND EFFECT".

⑥ INPUT SELECTOR buttons

- VCR 1:** Press when performing playback on a first VCR unit.
- VCR 2:** Press when performing playback on a second VCR unit.
- LD:** Press when performing playback on an LD player.
- TV:** Press when using a TV tuner connected to the TV jacks.
- VIDEO:** Press when performing playback on a VCR connected to VIDEO INPUT jacks on the front panel.
- TAPE 1/DAT:** Press when performing playback on a DAT or cassette deck.
- TAPE 2/MONITOR:** Press when performing playback on a second cassette deck or second DAT and when monitoring recording.
- CD:** Press when playing compact discs on a CD player.
- TUNER:** Press when listening to radio broadcasts.
- PHONO:** Press when playing records on turntable.

⑦ MASTER VOLUME control

Use it to simultaneously adjust the sound volume from the front, center and rear speakers.

⑧ PHONES jack

Connect the plug on your headphones to this jack. Set all SPEAKERS A and B switches to OFF if you want to cut the sound from speakers and listen to it only through the headphones.

⑨ **SPEAKERS buttons (A, B) OFF ON**

ON/OFF switches for the A and B speaker systems.

NOTE:

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

⑩ **RESET button**

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.

If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

⑪ **BASS control buttons**

Use to adjust the low-frequency level. Press the + button to increase the low-frequency level, and the - button to decrease it.

The TONE indicator appears on the display section.

When both buttons (-, +) of the BASS control are pressed simultaneously, the bass response will be set to the flat (normal) condition.

⑫ **TREBLE control buttons**

Use to adjust the high-frequency level. Press the + button to increase the high-frequency level, and the - button to decrease it.

The TONE indicator appears on the display section.

When both buttons (-, +) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition.

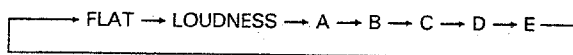
⑬ **ACOUSTIC buttons**

MEMORY:

Pressing this button will result in the memorization of the sound quality (tone control condition). Press again to cancel this mode.

SELECT:

- This button is used to preset the five acoustic memories (A-E).
- This button is also used to recall previously set sound quality settings. Each time you press the button, the sound quality setting advances in the order shown below.



FLAT: For flat (normal) frequency response.

LOUDNESS: Emphasizes the low- and high- frequency ranges. Produces a fuller sense of sound, particularly when listening at low volume.

A-E: Memorized acoustic memory settings.

⑭ **MUTING button**

Press to temporarily cut off the sound volume. The display section MUTING indicator will flash. When pressed again, the sound will return to its previous level.

⑮ **VIDEO INPUT jacks**

Video components such as a VCR or TV camera, etc. can be connected here.

⑯ **BALANCE buttons**

Use them to adjust the sound volume balance between left and right speakers.

L: Press to decrease the sound on the right side.

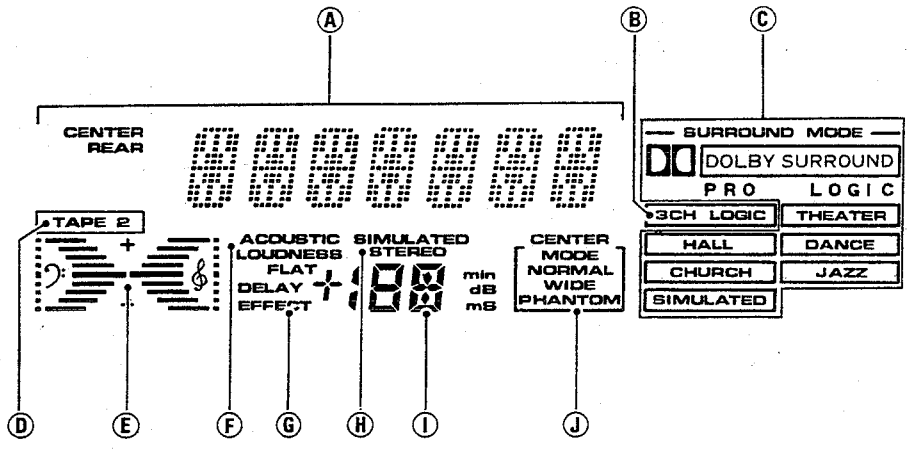
R: Press to decrease the sound on the left side.

Press L and R together to bring the volume balance back to center.

NOTE:

The left-right sound volume balance cannot be adjusted on the rear speakers.

DISPLAY SECTION



A CHARACTER/BALANCE display

- This displays the name of the component selected with the INPUT SELECTOR, etc.
- It also displays the rear level, center level and balance settings during adjustment.

B DOLBY 3CH LOGIC indicator

C SURROUND MODE indicators

D TAPE 2 indicator

Lights up when the INPUT SELECTOR is set to TAPE 2 MONITOR ON.

E TONE level indicator

Shows the settings of the BASS and TREBLE buttons.

F ACOUSTIC display

Shows the setting of the ACOUSTIC MEMORY.

G DELAY/EFFECT indicator

H SIMULATED STEREO indicator

I ACOUSTIC/DELAY TIME/EFFECT LEVEL/SLEEP TIME display

- Indicates delay time (ms) when using DOLBY PRO LOGIC SURROUND.
- Indicates rear level and center level (dB).
- Indicates sleep timer settings (min).
- Displays Acoustic memory letters A to E.
- Displays surround effect level from 10 to 100.

J CENTER MODE indicators

These display the center mode (NORMAL, WIDE, PHANTOM) during DOLBY PRO LOGIC SURROUND. With DOLBY 3CH LOGIC, NORMAL or WIDE center mode will be indicated.

11. SPECIFICATIONS

Amplifier Section

STEREO (FRONT)

Continuous average power output of 110 watts* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.05 % total harmonic distortion (front).**

Continuous power output (Front and center driven)	
Front.....	65 W + 65 W (1 kHz, T.H.D. 0.8 %, 8 Ω)
Center.....	65 W (1 kHz, T.H.D. 0.8 %, 8 Ω)
Rear.....	20 W + 20 W (1 kHz, T.H.D. 0.8 %, 8 Ω)
Dynamic Power (4 Ω/2 Ω).....	220 W/240 W
Total Harmonic Distortion (Front)	
20 Hz — 20 kHz, 110 W, 8 Ω.....	0.05%
Input (Sensitivity/Impedance)	
PHONO MM.....	2.5 mV/47 kΩ
CD, TAPE 1/DAT, TAPE 2, TUNER, LD, VCR 1, VCR 2, TV, VIDEO.....	150 mV/47 kΩ
Phono Overload Level (T.H.D. 0.1 %, 1 kHz)**	
PHONO MM.....	130 mV
Frequency Response	
PHONO MM.....	20 Hz to 20,000 Hz ±0.3 dB
CD, TAPE 1/DAT, TAPE 2, TUNER, LD, VCR 1, VCR 2, TV, VIDEO.....	5 Hz to 100,000 Hz ±½ dB
Output (Level/Impedance)	
TAPE 1/DAT REC, TAPE 2 REC.....	150 mV/2.2 kΩ
VCR 1 OUT, VCR 2 OUT.....	150 mV/2.2 kΩ
PRE OUT.....	1 V/2.2 kΩ
Tone Control	
BASS.....	±8 dB (100 Hz)
TREBLE.....	±8 dB (10 kHz)
Muting.....	— ∞
Loudness Contour	
.....	6 dB (100 Hz)
.....	3 dB (10 kHz)
Signal-to-Noise Ratio (IHF, short circuited, A network)	
PHONO MM.....	76 dB
CD, TAPE 1/DAT, TAPE 2, TUNER, LD, VCR 1, VCR 2, TV, VIDEO.....	97 dB

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

** Measured by Audio Spectrum Analyzer.

VIDEO Section

Input (Sensitivity/Impedance)	
VCR 1, VCR 2, LD, TV, VIDEO.....	1 Vp-p/75 Ω
Output (Level/Impedance)	
VCR 1, VCR 2, MONITOR.....	1 Vp-p/75 Ω
Frequency Response	
VCR 1, VCR 2, LD, TV, VIDEO → MONITOR... 5 Hz — 10 MHz ±½ dB	
Signal to Noise Ratio.....	60 dB

S-VIDEO Section

Input (Sensitivity/Impedance)	
LD, VIDEO, VCR 1.....	1 Vp-p/75 Ω (Luminance Signal) 0.286 Vp-p/75 Ω (Color Signal)
Output (Level/Impedance)	
VCR 1, MONITOR.....	1 Vp-p/75 Ω (Luminance Signal) 0.286 Vp-p/75 Ω (Color Signal)
Frequency Response	
LD, VCR 1 → MONITOR.....	5 Hz — 7 MHz ±½ dB
Signal to Noise Ratio.....	60 dB

Surround Section

Rear Frequency Response.....	30 Hz — 7,000 Hz ±½ dB
Delay Time (DOLBY PRO LOGIC SURROUND)	
Variable range.....	16 ms — 30 ms
Step.....	2 ms

Miscellaneous

Power requirements.....	AC 110 V/120 — 127 V/220 V/240 V (Switchable), 50/60 Hz
Power consumption.....	660 W
AC Outlets	
SWITCHED x 2.....	TOTAL 100 W MAX
UNSWITCHED x 1.....	100 W MAX
Dimensions.....	420 (W) x 162 (H) x 417 (D) mm 16-9/16 (W) x 6-3/8 (H) x 16-7/16 (D) in
Weight (without package).....	10.3 kg (22 lb 11 oz)

Furnished Parts

Remote control unit.....	1
Dry cell batteries	
(size "AA" (IEC LR6/AM-3) Alkaline).....	2
Operating Instructions.....	1

NOTE:

Specifications and the design are subject to possible modifications without notice due to improvements.