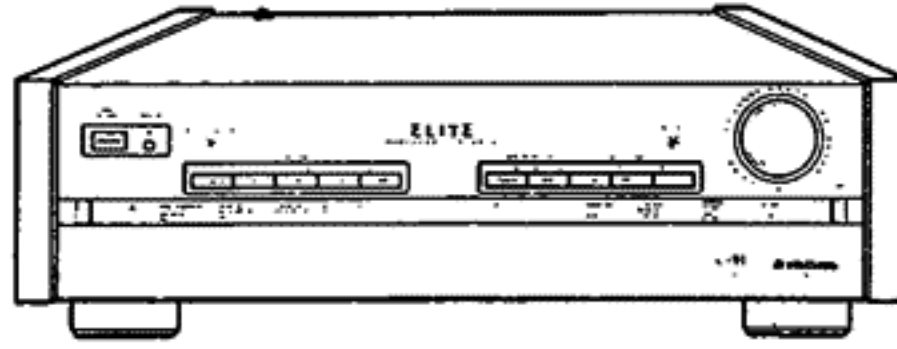


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Service Manual



**ORDER NO.
ARZ1636**

STEREO CONTROL AMPLIFIER

C-91

AF assembly (AWZ2078)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC417,IC418	LC4966
	IC407-IC410	M5201P
	IC405,IC406	M5220P
	IC412,IC413	M74LS42P
	IC403,IC404	NJM5534DD
	IC401,IC411,IC414-IC416	μ PD6362C
	Q433	RN1201
	Q432	RN2201
	Q431	2SA1115
	Q417-Q420	2SA1145
	Q409-Q412,Q423,Q424,Q436, Q437	2SA992
	Q405-Q408,Q421,Q422,Q429, Q430,Q434,Q435	2SC1845
	Q413-Q416	2SC2705
	Q438-Q441	2SC2878
	Q427,Q428	2SJ74
	Q425,Q426	2SK170
	Q401-Q404	2SK246
	D409-Q412	AEL-398
	D422,D423 Zener diode	RD15EB
	D417 Zener diode	RD8.2EB
	D413,D416	S5566
	D419-D421	1S1555
	D401-D408	11DF2FD

RELAYS

Mark	Symbol & Description	Part No.
	RY401-RY409 Relay	ASR1018

CAPACITORS

Mark	Symbol & Description	Part No.
	C427,C428 (1 μ F/200V)	ACE-217
	C405-C408,C425,C426 (220pF/100V)	ACE1014
	C423,C424,C569-C572 (47pF/100V)	ACE1023
	C431,C432 (0.027 μ F/100V)	ACE1031
	C401-C404 (470 μ F/50V)	ACH1052
	C417-C420 (330/50V)	ACH1089
	C457,C458,C493-C497,C499, C500	CEAS100M25
	C567,C568	CEAS470M16
	C413-C416	CEXA100M50
	C409-C412	CEXA331M50
	C421,C422,C429,C430	CEYANP220M50
	C433-C436,C441,C442, C459-C464	CEYA100M50
	C445-C452	CEYA2R2M50
	C453-C456	CEYA3R3M50
	C437,C438	CEYA4R7M50

Mark	Symbol & Description	Part No.
	C138,C139	CEXA220M50
	C121,C122	CEYANP330M50
	C131,C132	CKCYF103Z50
	C103,C104 Mica capacitor	CMA151J500
	C101,C102 Mica capacitor	CMA181J500
	C115,C116	CQSXA122J160

RESISTORS

Mark	Symbol & Description	Part No.
	R135,R136,R145,R146	RDR1/2PM□□□F
	R137,R138,R141,R142	RDR1/2PM□□□J
	R131-R134,R161-R164	RD1/4PMFL680J
	R152	RD1/4PM100J
	R153-R159	RD1/8PM□□□J
	Other resistors	RDR1/4PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 2P (PHONO)	AKB1001

Control assembly (AWZ1055)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC304,IC305	M74LS42P
	IC301	PDE012
	IC302,IC303	PDO012A
	Q301,Q302	2SC2458
	D301-D306	1SS131

COILS

Mark	Symbol & Description	Part No.
	X301 Ceramic resonator	ASS-046
	L301 Inductor (1mH)	ATH-098

CAPACITORS

Mark	Symbol & Description	Part No.
	C305,C306	CCDCH101J50
	C301,C304	CEANL470M16
	C307-C310	CEAS100M25
	C302,C303	CKDYB103K50
	C313	CKDYB103K500
	C311,C312	CKDYF103Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R301 Resistor array	RA4S103J
	R310 Resistor array	RAB8103J
	Other resistors	RD1/8PM□□□J

Mark	Symbol & Description	Part No.
	C443,C444	CFTXA823J50
	C498	CKDYB102K50
	C501,C502	CKDYB103K50
	C481,C482	CKDYB331K50
	C439,C440 Mica capacitor	CMA101J500

RESISTORS

Mark	Symbol & Description	Part No.
	R497 Resistor array	RA8S103J
	R502 Resistor array	RA9S103J
	R465,R466	RD1/2PM822J
	R469-R496,R498,R499,R503, R504,R535-R542,R573-R580	RD1/8PM□□□J
△	R553,R554	RS1LMF221J
	Other resistors	RDR1/4PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 4P (TAPE1, AUDIO ADAP, VCR1)	AKB-115
	Terminal 6P	AKB-117
	Terminal 6P	AKB1005
	Terminal 6P	AKB1066

Video assembly (AWZ2046)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC708	LC7570
	IC709	PD0012A
	IC707	TC4011BP
	IC701-IC706	TC4066BP
	IC710	TC4069UBP
	Q716	RN1201
	Q721,Q722	RN1203
	Q787,Q788	RN2203
	Q714,Q715,Q718,Q720,Q726, Q729-Q736,Q747,Q749,Q751, Q752,Q766,Q781, Q783,Q785	2SA1115
	Q704	2SA1145
	Q739,Q745	2SA1346
	Q708,Q742	2SA985A
	Q741	2SC2275
	Q717,Q719,Q723-Q725,Q737, Q743,Q748,Q750,Q753-Q765, Q767-Q774,Q776-Q779,Q786	2SC2603
	Q702	2SC2705
	Q713,Q744,Q780,Q782,Q784	2SC2878
	Q728,Q738,Q740,Q746	2SC3400
	Q706,Q710,Q712	2SD838A
	Q701,Q703,Q705,Q707,Q709, Q711	2SK246

Mark	Symbol & Description	Part No.
	D713 Zener diode	RD13EB
	D714 Zener diode	RD13ESB3
	D721-D723 Zener diode	RD18EB
	D753 Zener diode	RD2.7ESB
	D709,D710 Zener diode	RD20ESB2

	D729,D730 Zener diode	RD4.3ESB1
	D750 Zener diode	RD5.6ESB2
	D743 Zener diode	RD6.2EB
	D712 Zener diode	RD6.2ESB2
	D711 Zener diode	RD6.8ESB2
	D724-D726,D731-D733, D735-D742,D744,D746,D751, D752	1SS252
	D715-D718	10E2FD
	D701-D708,D747	S5566

COILS

Mark	Symbol & Description	Part No.
	L701-L704 Inductor (100 μ H)	ATH-050
	L712 Inductor (5.6 μ H)	ATH-065
	L708 Inductor (15 μ H)	ATH-075
	L705,L711 Inductor (10 μ H)	ATH-078
	L714 Inductor (47 μ H)	ATH-082
	L716,L717 Inductor (1mH)	ATH-098
	L710 Inductor (33 μ H)	ATH-100
	L706,L707,L713 Inductor (56 μ H)	ATH-104
	DL701 Delay cable	ATL-034

CAPACITORS

Mark	Symbol & Description	Part No.
	C717 (47000 μ F/5.5V)	ACH1070
	C745	CCCCH121J50
	C740,C742	CCCCH330J50
	C764	CCCCH470J50
	C763	CCCCH680J50
	C749,C787,C794	CCCSL101J50
	C739,C785	CCCSL221J50
	C743,C793	CCCSL270J50
	C747,C759,C768,C771	CCCSL330J50
	C766	CCCSL390J50
	C781	CEAS010M50
	C718,C719,C723,C744,C754, C792,C796	CEAS100M25
	C722	CEAS100M50
	C708,C710,C724,C725,C738, C751,C760,C783,C784	CEAS101M10
	C748,C750,C769,C772,C776, C777	CEAS101M16
	C703-C706,C712	CEXA101M25
	C729,C732,C733,D736, C773-C775	CEAS102M10
	C791	CEAS102M6
	C713	CEAS101M25
	C711	CEAS102M25

5. SCHEMATIC DIAGRAM

- RESISTORS:**
Indicated in Ω , 1/4W, and 1/8W, $\pm 5\%$ tolerance unless otherwise noted; k: k Ω , M: M Ω , (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ tolerance
- CAPACITORS:**
Indicated in capacity (μ F/voltage (V) unless otherwise noted; p: pF. Indicated without voltage is 50V except electrolytic capacitor.
- VOLTAGE, CURRENT:**
Signal voltage at W + W, Ω output (1 kHz)
DC voltage (V) at no input signal Value in () is DC voltage at rated power.

- OTHERS:**
Signal route
Adjusting point
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.
X marked capacitors and resistors have parts numbers.
The underlined indicates the switch position.

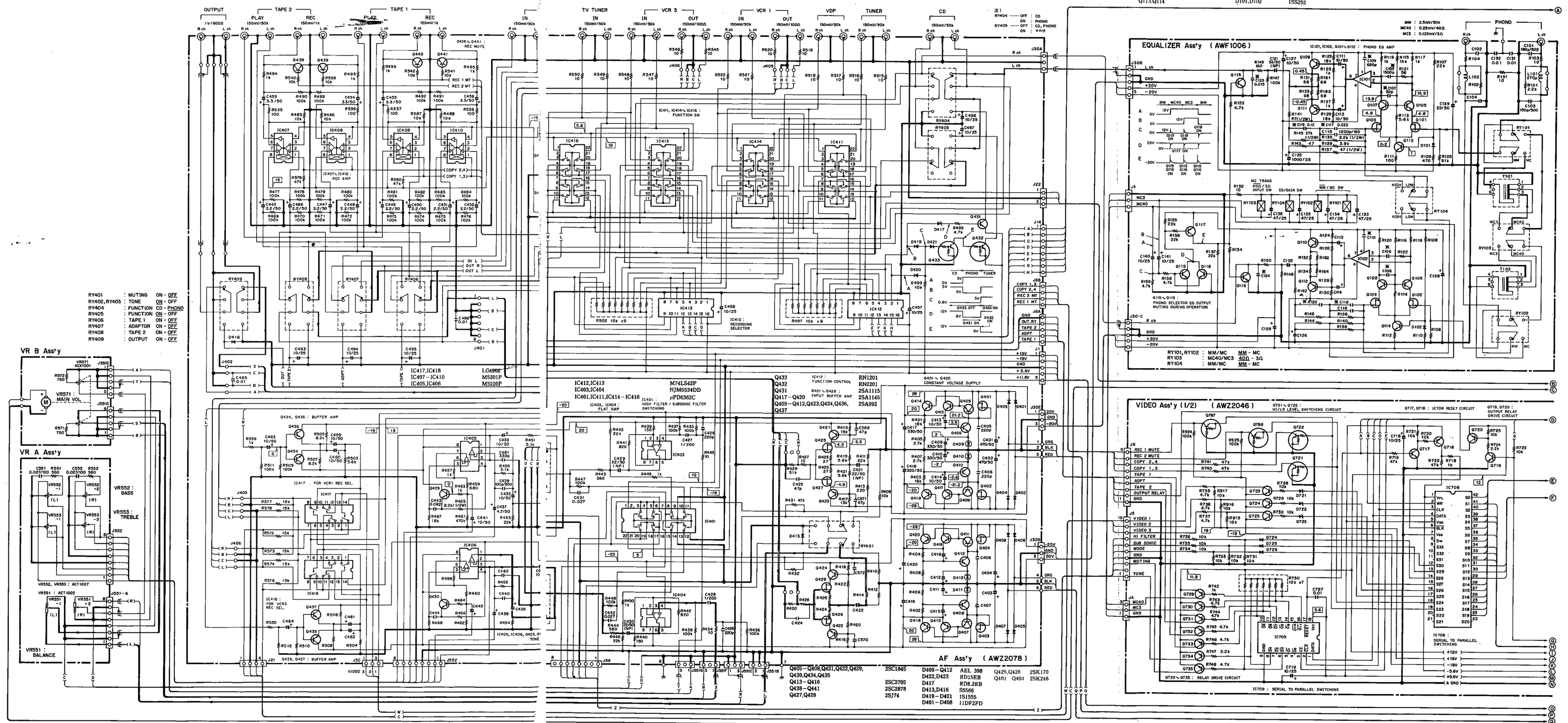
This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

- SWITCH**
S1: Power switch ON - OFF

- S341: V. D.P.
- S342: VIDEO 1
- S343: VIDEO 2
- S344: VIDEO 3
- S345: V AUX
- S346: CD
- S347: PHONO
- S348: TUNER
- S349: TAPE 1
- S350: TAPE 2
- S351: RECSEL
- S352: AUDIO ADAPTOR
- S353: VIDEO ADAPTOR
- S354: ENHANCER
- S355: HIGH CUT
- S356: SUBSONIC FILTER
- S357: MODE
- S358: DUBBING
- S359: PHONO SELECTOR
- S360: MUTE
- S361: VIDEO FUNCTION
- S362: STAND-BY

- S391: TONE

The underlined indicates the switch position.



IC101, IC102	NJM5534DD	Q109, Q110	2SC2325
Q117	2SA1115	Q118, Q119	2SC2603
Q111, Q112	2SA965	Q115, Q116	2SC2878
Q105 - Q108, Q113, Q114	2SC1845	Q101, Q104	2SK369
		D101, D102	1SS252

Q405 - Q416, Q421, Q422, Q423, Q430, Q434, Q435	2SC1845	D409 - Q412	AE1 398	Q425, Q426	2SK170
Q413 - Q416	2SC2705	D417	RD15B	Q401, Q401	2SK246
Q438 - Q441	2SC2878	D413, D416	SS566		
D419 - D421	2S774	D419 - D421	1S1555		
D401 - D408		D401 - D408	11DZPFD		

Mark	Symbol & Description	Part No.
	C752,C753	CEAS220M16
	C756	CEAS221M10
	C728,C731,C735	CEAS221M16
	C761	CEAS331M16
	C714,C801	CEAS332M25
	C780	CEAS4R7M50
	C737,C741,C788,C789	CEAS470M10
	C758,C770	CEAS470M16
	C727,C730,C734,C778	CEAS470M25
	C709,C726,C757	CEAS471M10
	C701,C702	CEAS471M35
	C707	CEHAQ101M10
	C715,C716	CEHAQ101M25
	C746,C762	CKCYF102Z50
	C755,C765,C767,C782,C797	CKCYF103Z50
	C720,C721	CKCYF473Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R750 Resistor array	RA7S103J
	R795,R800,R835,R883,R887, R891	RD1/2PM□□□J
	R779,R781,R789,R791,R901, R903	RD1/4PM□□□J
⚠	R867	RFA1/4PL680J
⚠	R912-R914	RFA1/4PS□□□J
⚠	R904	RS1LMF4R7J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 3P (VIDEO1, VIDEO3)	AKB-134
	Terminal 3P (V ADAPTOR)	AKB1067
	Terminal 1P (MON.)	AKB1068
	Mini jack (REMOTE CONTROL)	AKN-207
	5P DIN socket (RF.MOD)	AKP-081

Video assembly (AWQ1004)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC601-IC606	CX-894
	IC608,IC609	TC4053BP
	IC607	TC4066BP
	Q601,Q602,Q605,Q606,Q609, Q610	2SA1048
	Q619	2SA965
	Q613,Q615,Q617	2SC2235
	Q603,Q604,Q607,Q608,Q611, Q612,Q620	2SC2458
	Q614,Q616,Q618	2SK246

Mark	Symbol & Description	Part No.
	D602,D604,D606 Zener diode	RD13ESB2
	D607 Zener diode	RD5.1ESB1
	D608-D619	1SS252
	D601,D603,D605	11E2
	D620	RD6.8ESB2

CAPACITORS

Mark	Symbol & Description	Part No.
	C619,C620,C625,C626,C631, C632	CCCSL330J50
	C622,C628,C634	CEAS101M10
	C601,C603,C605,C607,C609, C611,C613,C615,C617,C624, C630,C636,C642	CEAS101M16
	C621,C627,C633	CEAS102M10
	C637-C640	CEAS330M25
	C623,C629,C635	CEAS331M16
	C602,C604,C606,C608,C610, C612,C614,C616,C618	CEAS470M16
	C641	CEAS470M25
	C643,C644	CKDYX473M25

RESISTORS

Mark	Symbol & Description	Part No.
	R670 Resistor array	RA6S104J
	R609,R610,R615,R616,R623, R624,R629,R630,R637,R638, R643,R644	RD1/2PM□□□J
	R649	RD1/4PM222J
⚠	R650	RS1LMF4R7J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	4P Mini DIN socket (VCR1, VCR3, TV/AUX IN, MONITOR OUT)	AKP1016

SW.A assembly (AWZ1056)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	D349,D351,D353,D355,D357, D368-D372	AEL-451
	D341-D348,D359-D366, D373-D381	AEL1004
	D350,D352,D354,D356,D358	AEL1005

SWITCHES

Mark	Symbol & Description	Part No.
S341 - S362	Tact switch (MUTE, VIDEO ADAP- TOR, TAPE1, V/AUX, V.D.P, VIDEO1, CD, TAPE2, ENHANCER, MODE, VIDEO FUNCTION, DUBING, HI CUT, REC SEL, PHONO, VIDEO2, VIDEO3, TUNER, AUDIO ADAPTOR, SUB- SONIC FILTER, PHONO SELECTOR, STAND BY)	ASG-711

RESISTORS

Mark	Symbol & Description	Part No.
R342, R343	Resistor array	RA4S391J
R346	Resistor array	RA5S391J
	Other resistors	RD1/8PM□□□J

SW.B assembly**SWITCH**

Mark	Symbol & Description	Part No.
S391	Tact switch (TONE)	ASG-711

VR.A assembly**CAPACITORS**

Mark	Symbol & Description	Part No.
C551, C552	Polyester capacitor	CQMXA273J100

RESISTORS

Mark	Symbol & Description	Part No.
VR551	Variable resistor (50k × 2)	ACT1002
VR552, VR553	Variable resistor (10k × 2)	ACT1007
R551, R552		RDR1/4PM561J

VR.B assembly**RESISTORS**

Mark	Symbol & Description	Part No.
VR571	Variable resistor (15k × 2)	ACX1017
R571, R572		RDR1/4PM751J

Terminal assembly**CAPACITORS**

Mark	Symbol & Description	Part No.
	C798 - C800	CKCYF473Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R911	RD1/8PM750J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 1P (VIDEO2 OUT, VIDEO2 IN)	AKB1004

VR assembly**SEMICONDUCTOR**

Mark	Symbol & Description	Part No.
	D745	1SS252

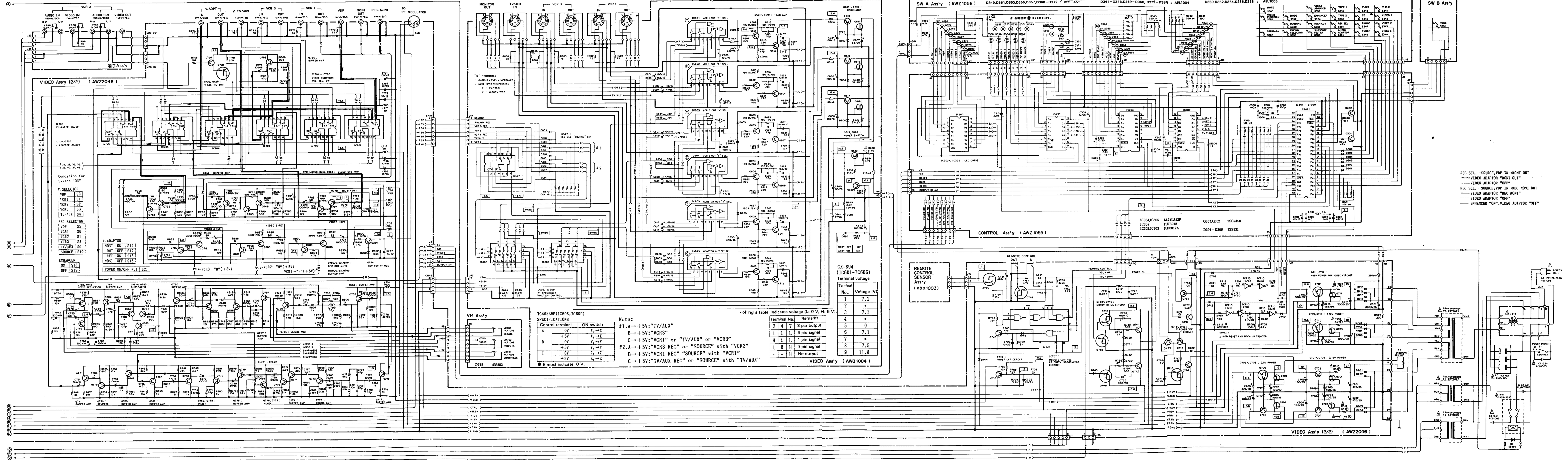
RESISTORS

Mark	Symbol & Description	Part No.
	VR701 - VR703 Variable resistor (1k)	ACT1003

Fuse assembly**COIL**

Mark	Symbol & Description	Part No.
⚠	L715 Line filter	ATF-163

IC601-IC606 CX-894 0B01,0B02,0B05,0B06,0B09, 25A1048 D602,D604,D606 RD13E82
 IC608,IC609 0B10 0B10 D607 RD5,TE581
 IC607 TC4068BP 0B19 25A865 D608-D618 1SS252
 0B13,0B15,0B17 25C2235 D601,D603,D605 11E2
 0B03,0B04,0B07,0B08,0B11, 25C2458
 0B12,0B20 0B14,0B16,0B18 25K246



Condition for Switch "ON"

V. SELECTOR	S0
VCR1	S1
VCR2	S2
VCR3	S3
TV/AUX	S4
REC SELECTOR	
VDP	S5
VCR1	S6
VCR2	S7
VCR3	S8
TV/AUX	S9
SOURCE	S10
ENHANCER	
ON	S18
OFF	S19

TC4053BP (IC608, IC609) SPECIFICATIONS

Control terminal	ON switch
A	0V X ₀ → X
	+5V X ₁ → X
B	0V Y ₀ → Y
	+5V Y ₁ → Y
C	0V Z ₀ → Z
	+5V Z ₁ → Z

Note:
 #1, A → +5V: "TV/AUX"
 B → +5V: "VCR3"
 C → +5V: "VCR1" or "TV/AUX" or "VCR3"
 #2, A → +5V: "VCR3 REC" or "SOURCE" with "VCR3"
 B → +5V: "VCR1 REC" "SOURCE" with "VCR1"
 C → +5V: "TV/AUX REC" or "SOURCE" with "TV/AUX"
 ● E must indicate 0 V.

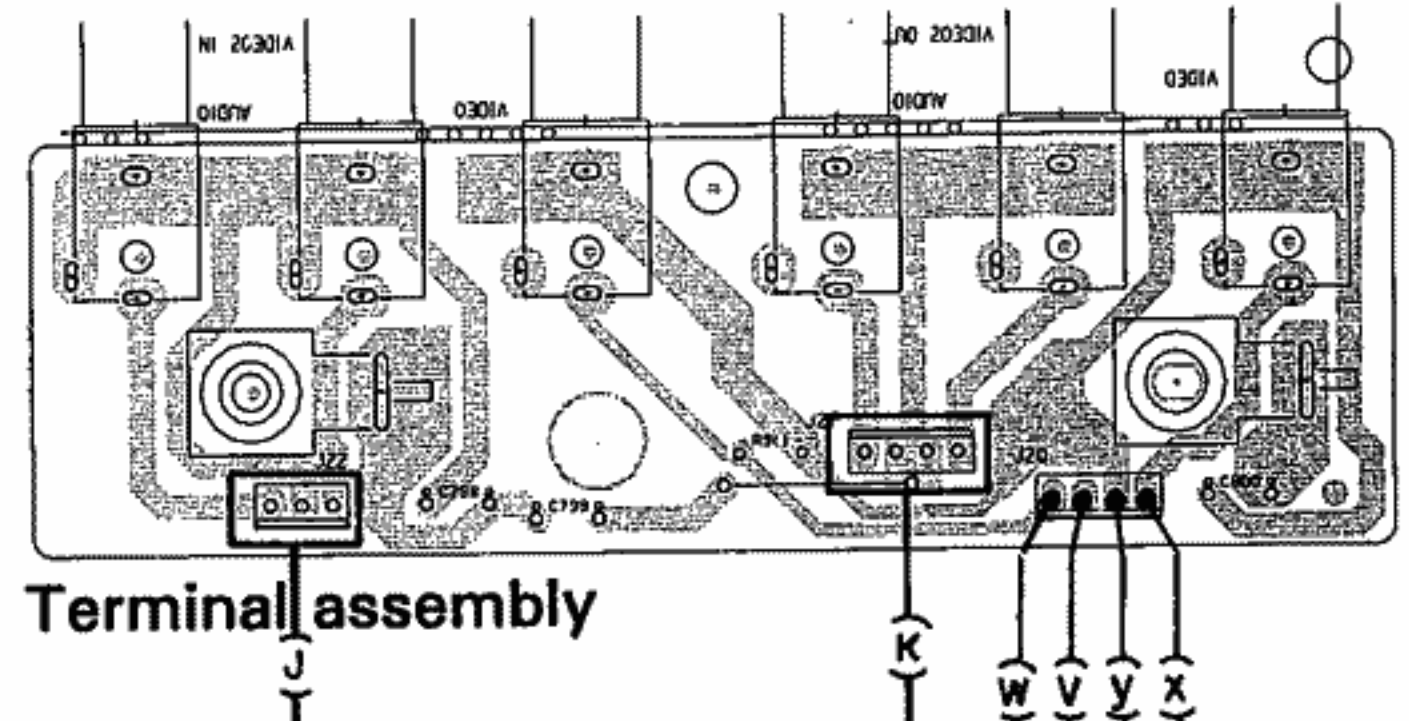
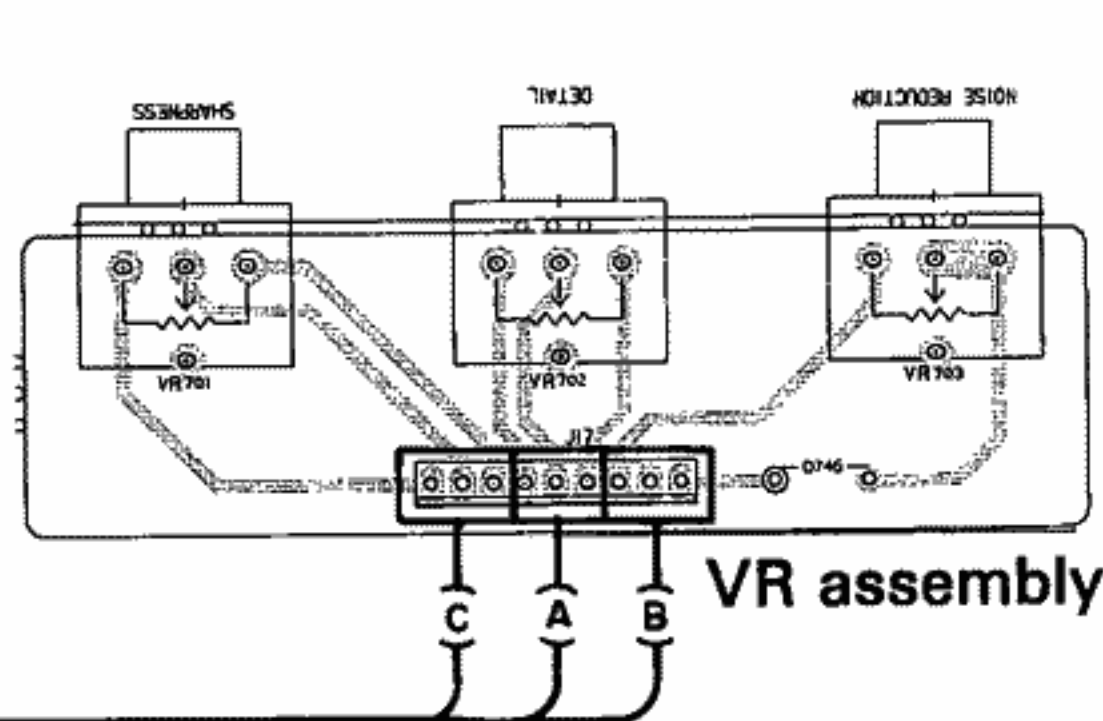
CX-894 (IC601-IC606) Terminal voltage

No.	Voltage (V)
1	7.1
2	*
3	7.1
4	*
5	0
6	7.1
7	*
8	7.5
9	11.8

* of right table indicates voltage (L: 0 V, H: 5 V).

REC SEL. --- SOURCE, VDP IN --- MONI OUT
 --- VIDEO ADAPTOR "MONI OUT"
 --- VIDEO ADAPTOR "OFF"
 REC SEL. --- SOURCE, VDP IN --- REC MONI OUT
 --- VIDEO ADAPTOR "REC MONI"
 --- VIDEO ADAPTOR "OFF"
 ENHANCER "ON", VIDEO ADAPTOR "OFF"

IC708	LC7570	Q716	RN1201	Q704	25A1145	Q302	25C2705	
IC709	PD0212A	Q721, Q722	RN1203	Q738, Q745	25A1346	Q713, Q744, Q780, Q782, Q784	25C2878	
IC707	TC4011BP	Q787, Q788	RN2203	Q708, Q742	25A985A	Q728, Q738, Q740, Q746	25C3400	
IC701-IC706	TC4068BP	Q714, Q715, Q718, Q720, Q726, Q728, Q736, Q747, Q749, Q751, Q752, Q766, Q781, Q783, Q785	25A1115	Q741	25C2275	Q717, Q719, Q723 - Q725, Q737, Q743, Q748, Q750, Q753 - Q755, Q761, Q765, Q767, Q769, Q771	25D836A 25K246	
IC710	TC4068BP			Q769, Q771	25C2803	Q701, Q703, Q705, Q707, Q709, Q711	25K246	
				Q772, Q773, Q774, Q775, Q776, Q777, Q778, Q779, Q780, Q781, Q782, Q783, Q784, Q785, Q786, Q787, Q788, Q789, Q790, Q791, Q792, Q793, Q794, Q795, Q796, Q797, Q798, Q799, Q800, Q801, Q802, Q803, Q804, Q805, Q806, Q807, Q808, Q809, Q810, Q811, Q812, Q813, Q814, Q815, Q816, Q817, Q818, Q819, Q820, Q821, Q822, Q823, Q824, Q825, Q826, Q827, Q828, Q829, Q830, Q831, Q832, Q833, Q834, Q835, Q836, Q837, Q838, Q839, Q840, Q841, Q842, Q843, Q844, Q845, Q846, Q847, Q848, Q849, Q850, Q851, Q852, Q853, Q854, Q855, Q856, Q857, Q858, Q859, Q860, Q861, Q862, Q863, Q864, Q865, Q866, Q867, Q868, Q869, Q870, Q871, Q872, Q873, Q874, Q875, Q876, Q877, Q878, Q879, Q880, Q881, Q882, Q883, Q884, Q885, Q886, Q887, Q888, Q889, Q890, Q891, Q892, Q893, Q894, Q895, Q896, Q897, Q898, Q899, Q900, Q901, Q902, Q903, Q904, Q905, Q906, Q907, Q908, Q909, Q910, Q911, Q912, Q913, Q914, Q915, Q916, Q917, Q918, Q919, Q920, Q921, Q922, Q923, Q924, Q925, Q926, Q927, Q928, Q929, Q930, Q931, Q932, Q933, Q934, Q935, Q936, Q937, Q938, Q939, Q940, Q941, Q942, Q943, Q944, Q945, Q946, Q947, Q948, Q949, Q950, Q951, Q952, Q953, Q954, Q955, Q956, Q957, Q958, Q959, Q960, Q961, Q962, Q963, Q964, Q965, Q966, Q967, Q968, Q969, Q970, Q971, Q972, Q973, Q974, Q975, Q976, Q977, Q978, Q979, Q980, Q981, Q982, Q983, Q984, Q985, Q986, Q987, Q988, Q989, Q990, Q991, Q992, Q993, Q994, Q995, Q996, Q997, Q998, Q999, Q1000	D713 D714 D715-D723 D753 D708, D710	RD13E8B RD5 RD18E8 RD2E58 RD6E582	D728, D730 RD4, 3E581 RD5, 3E582 D743 RD6, 2E58 D715 - D718 D701 - D708, D747	D724 - D726, D731 - D733, 15S252 D735 - D742, D744, D746, D751, D752 D752 D752 D715 - D718 10E2F0 5E586



NOTE

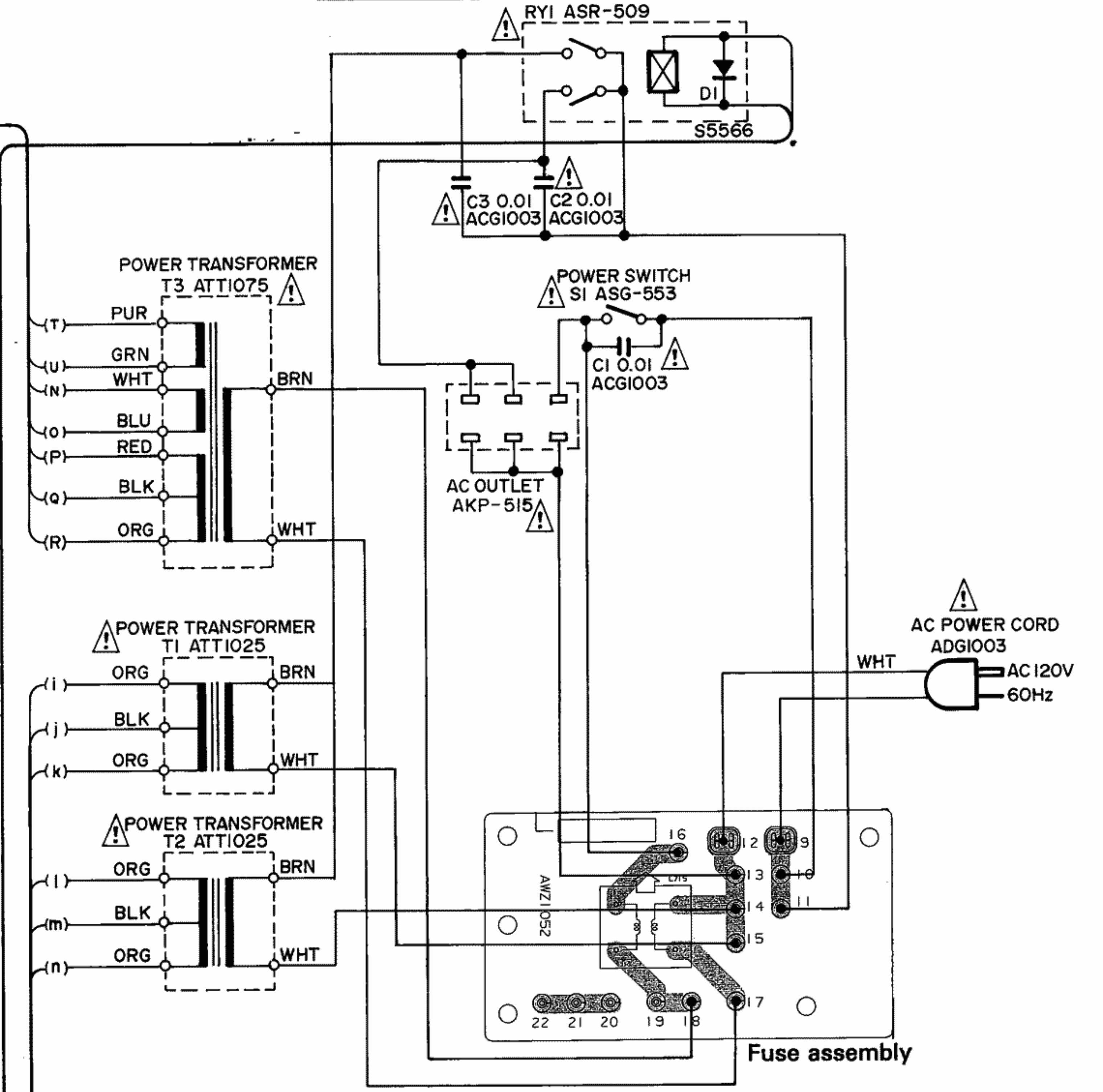
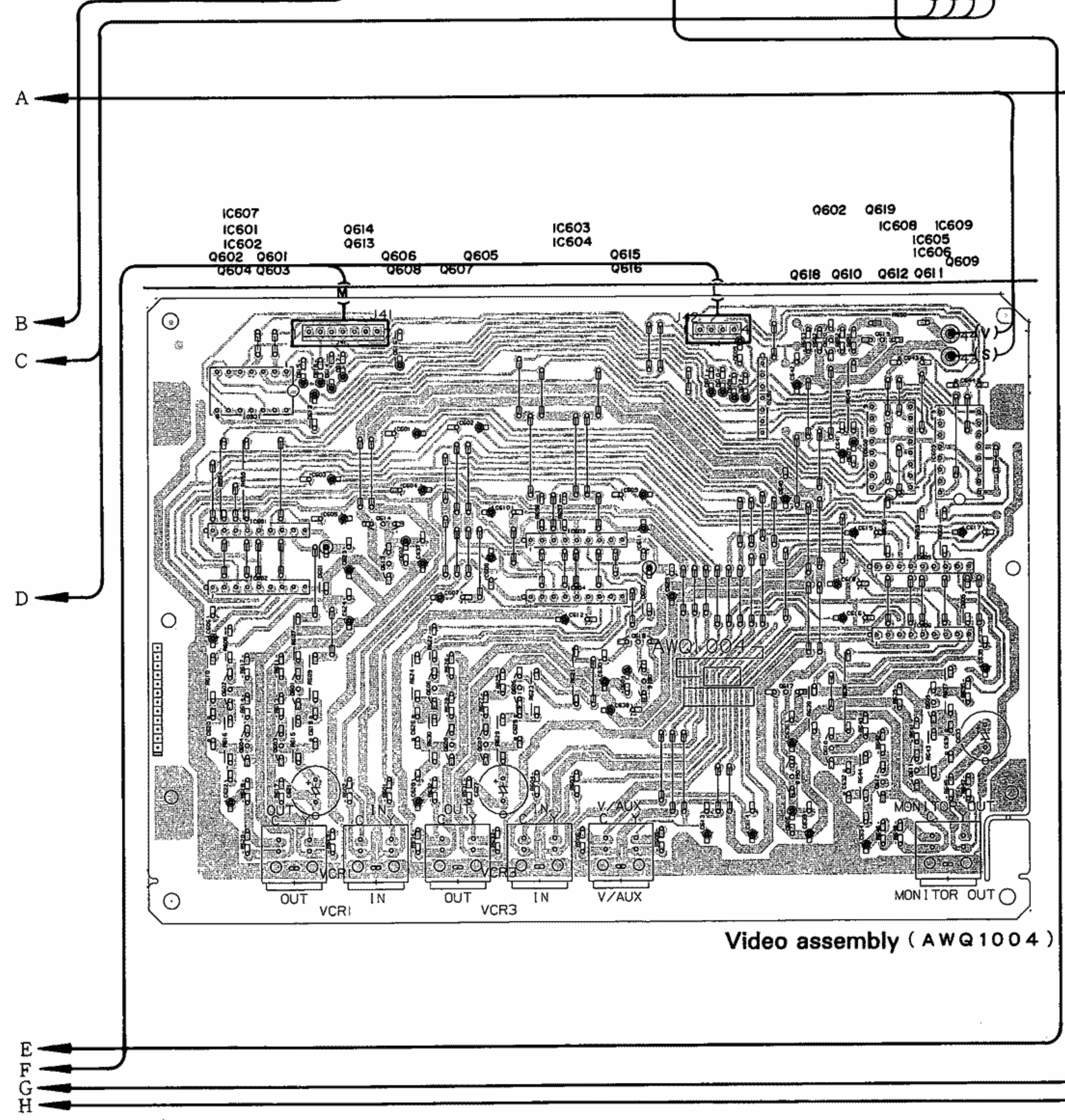
1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

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

Others

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

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

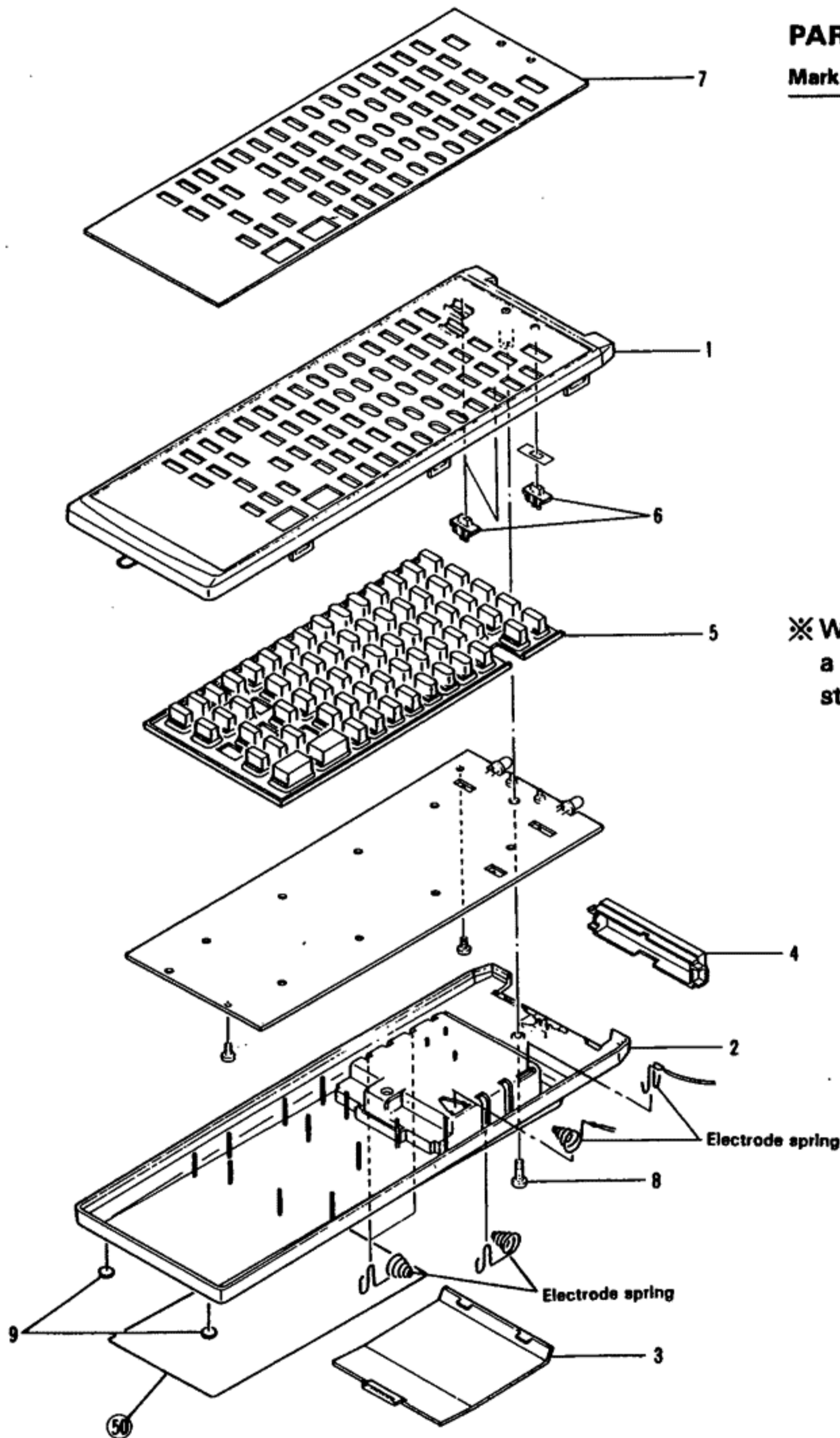


7. PROGRAMMABLE REMOTE CONTROL UNIT (AXD1063)

7.1 EXPLODED VIEWS AND PARTS LIST

NOTES:

- Parts without part number cannot be supplied.
- The \triangle 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 EXPLODED VIEWS

Mark	No.	Parts No.	Description
	1	AZH1033	Case (A)
	2	AZH1034	Case (B)
	3	AZH1035	Case (C)
	4	AZN1400	Filter
	5	AZA1088	Rubber switch
	6	AZS1042	Knob (AUDIO/VIDEO /AUX, USE/LEARN, DAT/TAPE)
	7	AZA1134	Name plate
	8	AZB1124	Screw
	9	AZN1401	Foot
	50		Rear name plate

※ When replacing the case No.2 (B) (AZH1034) by a new one, remove all electrode springs and install them into the new case (B).

7.2 ELECTRICAL 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 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.
- 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	56×10^1	561.....	RD1/4PS $\text{\textcircled{5}}$ $\text{\textcircled{6}}$ $\text{\textcircled{1}}$ J
47k Ω	47×10^3	473.....	RD1/4PS $\text{\textcircled{4}}$ $\text{\textcircled{7}}$ $\text{\textcircled{3}}$ J
0.5 Ω	0R5.....		RN2H $\text{\textcircled{0}}$ $\text{\textcircled{5}}$ K
1 Ω	010.....		RS1P $\text{\textcircled{0}}$ $\text{\textcircled{1}}$ $\text{\textcircled{0}}$ K

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

5.62k Ω	562×10^1	5621.....	RN1/4SR $\text{\textcircled{5}}$ $\text{\textcircled{6}}$ $\text{\textcircled{2}}$ $\text{\textcircled{1}}$ F
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SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC01	PD5068 - A
	IC02	AZC1045
	IC03	AZC1046
	IC04	AZC1047
	IC05	AZC1048
	Q01, Q02	AZC1050
	Q03, Q04	AZC1051
	Q05	AZC1052
	D01, D02, D07 - D14	AZC1056
	D03 - D06	AZC1049
	PHD01	AZC1055
	LED01, LED02	AZC1054
	IED01, IED02	AZC1053

SWITCH

Mark	Symbol & Description	Part No.
	S01 Slide switch (AUDIO/VIDEO/AUX)	AZC1079
	S02, S03 Slide switch (USE/LEARN, DAT/TAPE)	AZC1080
	S04 Tact switch (RESET)	AZC1081

CAPACITORS

Mark	Symbol & Description	Part No.
	C01 (200P)	AZC1058
	C02 (33P)	AZC1059
	C03, C04 (0.001 μ F)	AZC1062
	C05, C06 (20P)	AZC1060
	C07 Electrolytic capacitor (4.7/6V)	CEAS4R7M6
	C08 (0.01)	AZC1061
	C09 Electrolytic capacitor (100 /6V)	CEAS101M6
	C10 Electrolytic capacitor (100/6V)	CEAS101M6
	C11 (0.01)	AZC1063

RESISTORS

Mark	Symbol & Description	Part No.
	R01 (8.2K)	AZC1064
	R02 (4.7K)	AZC1065
	R03, R08 (33K)	AZC1066
	R04 (220K)	AZC1067
	R05, R17, R39 (10K)	AZC1068
	R06 (82K)	AZC1069
	R07, R11, R30 - R38 (100K)	AZC1073
	R09 (6.8K)	AZC1070
	R10 (56K)	AZC1071
	R12 (1M)	AZC1072
	R13, R16 (680 Ω)	AZC1075
	R14 (3.9 Ω)	AZC1078
	R15 (10 Ω)	AZC1076
	R18, R22 - R29 (47K)	AZC1077
	R19 - R21 (2.2K)	AZC1074

OTHERS

Mark	Symbol & Description	Part No.
	X1 Resonator (8MHz)	AZC1057

7.2 ELECTRICAL 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 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.
- 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	56 $\times 10^1$	561.....	RD1/4PS $\text{\textcircled{5}}$ $\text{\textcircled{6}}$ $\text{\textcircled{1}}$ J
47k Ω	47 $\times 10^3$	473.....	RD1/4PS $\text{\textcircled{4}}$ $\text{\textcircled{7}}$ $\text{\textcircled{3}}$ J
0.5 Ω	0R5.....		RN2H $\text{\textcircled{0}}$ $\text{\textcircled{R}}$ $\text{\textcircled{5}}$ K
1 Ω	010.....		RSIP $\text{\textcircled{0}}$ $\text{\textcircled{1}}$ $\text{\textcircled{0}}$ K

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

5.62k Ω	562 $\times 10^1$	5621.....	RN1/4SR $\text{\textcircled{5}}$ $\text{\textcircled{6}}$ $\text{\textcircled{2}}$ $\text{\textcircled{1}}$ F
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SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC01	PD5088-A
	IC02	AZC1045
	IC03	AZC1046
	IC04	AZC1047
	IC05	AZC1048
	Q01, Q02	AZC1050
	Q03, Q04	AZC1051
	Q05	AZC1052
	D01, D02, D07-D14	AZC1056
	D03-D06	AZC1049
	PHD01	AZC1055
	LED01, LED02	AZC1054
	IED01, IED02	AZC1053

SWITCH

Mark	Symbol & Description	Part No.
	S01 Slide switch (AUDIO/VIDEO/AUX)	AZC1079
	S02, S03 Slide switch (USE/LEARN, DAT/TAPE)	AZC1080
	S04 Tact switch (RESET)	AZC1081

CAPACITORS

Mark	Symbol & Description	Part No.
	C01 (200P)	AZC1058
	C02 (33P)	AZC1059
	C03, C04 (0.001 μ F)	AZC1062
	C05, C06 (20P)	AZC1060
	C07 Electrolytic capacitor (4.7/6V)	CEAS4R7M6
	C08 (0.01)	AZC1061
	C09 Electrolytic capacitor (100 /6V)	CEAS101M6
	C10 Electrolytic capacitor (100/6V)	CEAS101M6
	C11 (0.01)	AZC1063

RESISTORS

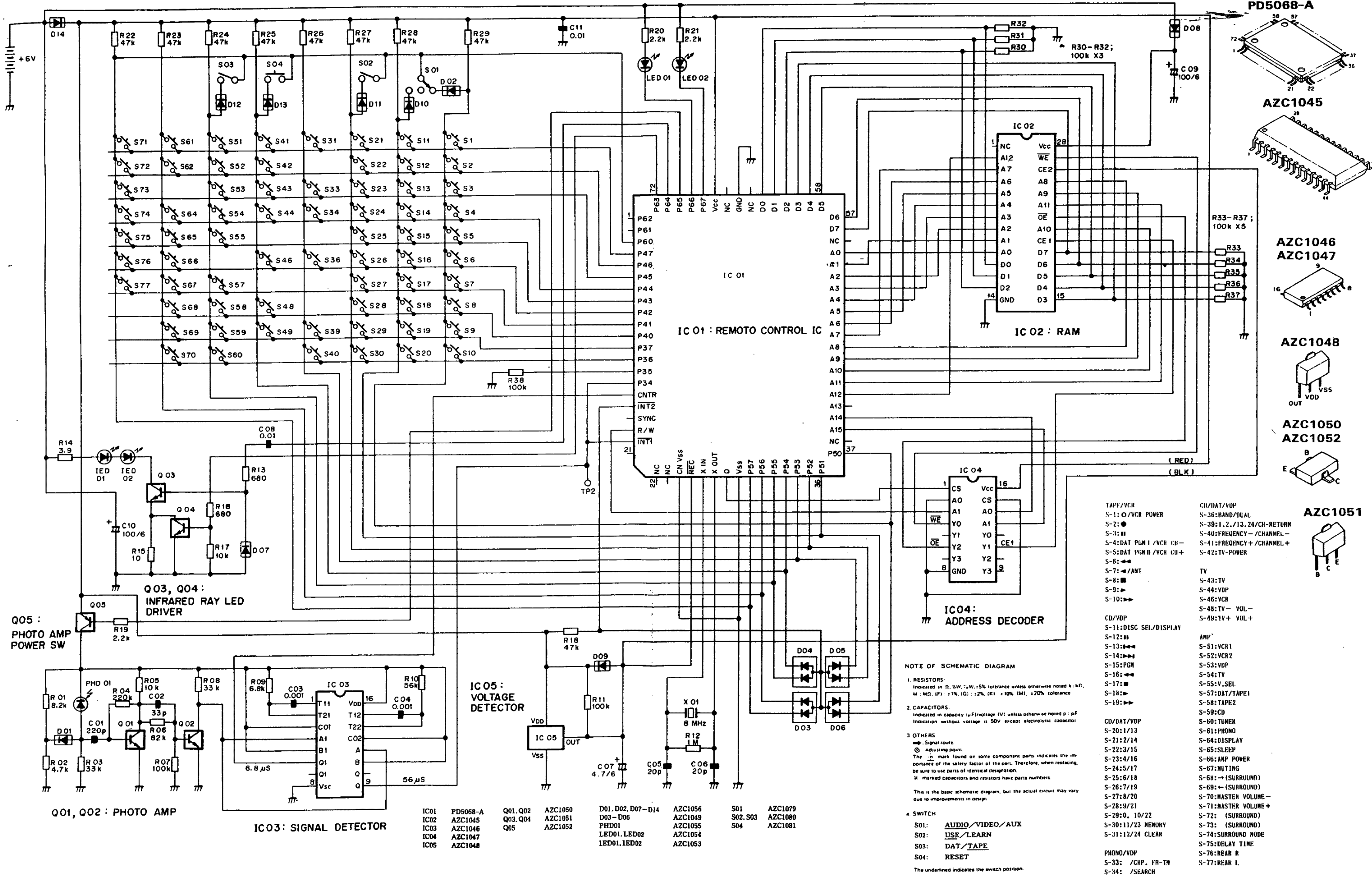
Mark	Symbol & Description	Part No.
	R01 (8.2K)	AZC1084
	R02 (4.7K)	AZC1065
	R03, R08 (33K)	AZC1066
	R04 (220K)	AZC1067
	R05, R17, R39 (10K)	AZC1088
	R06 (82K)	AZC1069
	R07, R11, R30-R38 (100K)	AZC1073
	R09 (6.8K)	AZC1070
	R10 (56K)	AZC1071
	R12 (1M)	AZC1072
	R13, R16 (880 Ω)	AZC1075
	R14 (3.9 Ω)	AZC1078
	R15 (10 Ω)	AZC1076
	R18, R22-R29 (47K)	AZC1077
	R19-R21 (2.2K)	AZC1074

OTHERS

Mark	Symbol & Description	Part No.
	X1 Resonator (8MHz)	AZC1057

7.3 SCHEMATIC DIAGRAM

External Appearance of Transistors and ICs.



NOTE OF SCHEMATIC DIAGRAM

- RESISTORS:**
Indicated in Ω, kΩ, MΩ, 1% tolerance unless otherwise noted k: kΩ, M: MΩ, (F): 1%, (G): 2%, (K): 10% (IM): ±20% tolerance
- CAPACITORS:**
Indicated in capacity (μF) voltage (V) unless otherwise noted p: pF Indication without voltage is 50V except electrolytic capacitor
- 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.
* Impaired capacitors and resistors have parts numbers.
This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
- SWITCH:**
S01: AUDIO/VIDEO/AUX
S02: USE/LEARN
S03: DAT/TAPE
S04: RESET
The underlined indicates the switch position.

- | | |
|--|---|
| TAPE/VCR
S-1: O/VCR POWER
S-2: ●
S-3: ■
S-4: DAT PGM I /VCR CH-
S-5: DAT PGM II /VCR CH+
S-6: ◀
S-7: ▲/ANT
S-8: ■
S-9: ▶
S-10: ▶▶ | CD/DAT/VDP
S-36: BAND/DUAL
S-39: 1, 2, /13, 24/CH-RETURN
S-40: FREQUENCY - /CHANNEL -
S-41: FREQUENCY + /CHANNEL +
S-42: TV-POWER

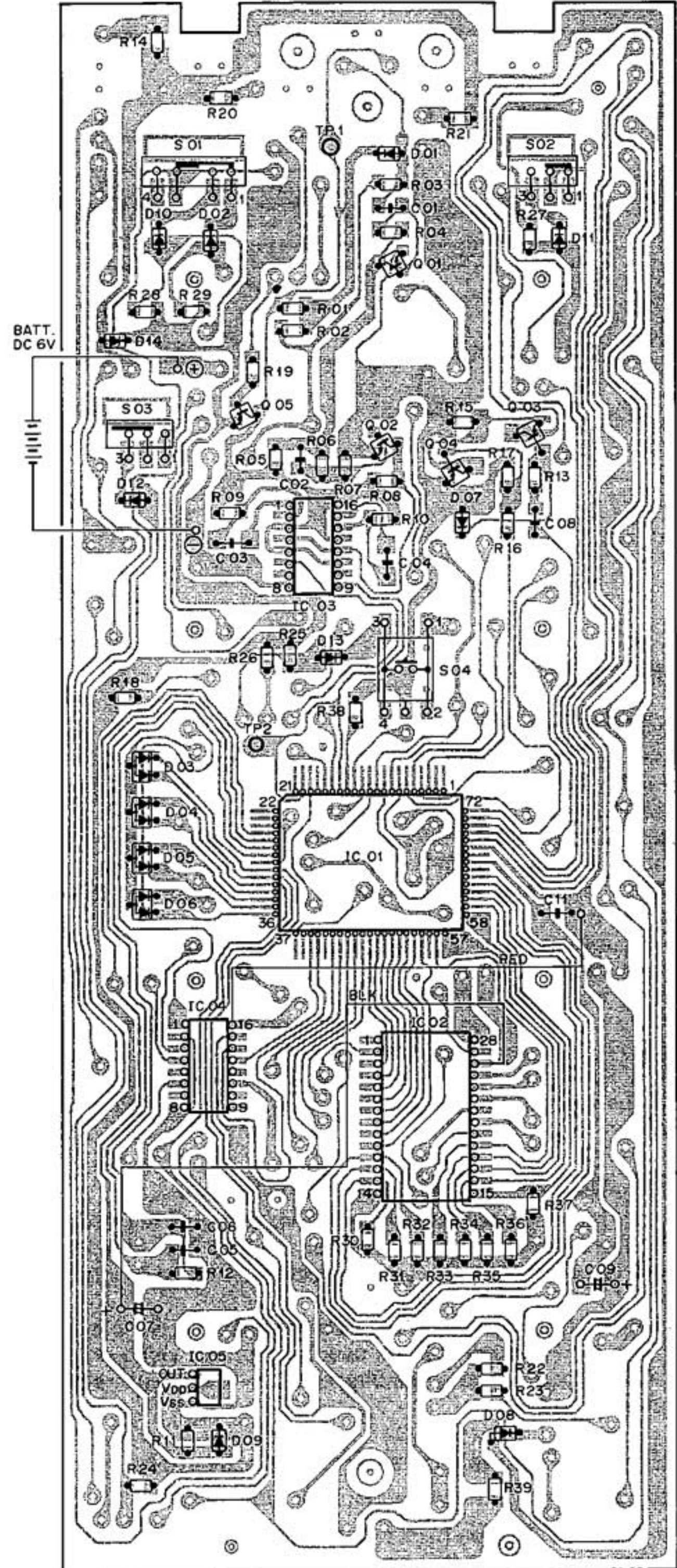
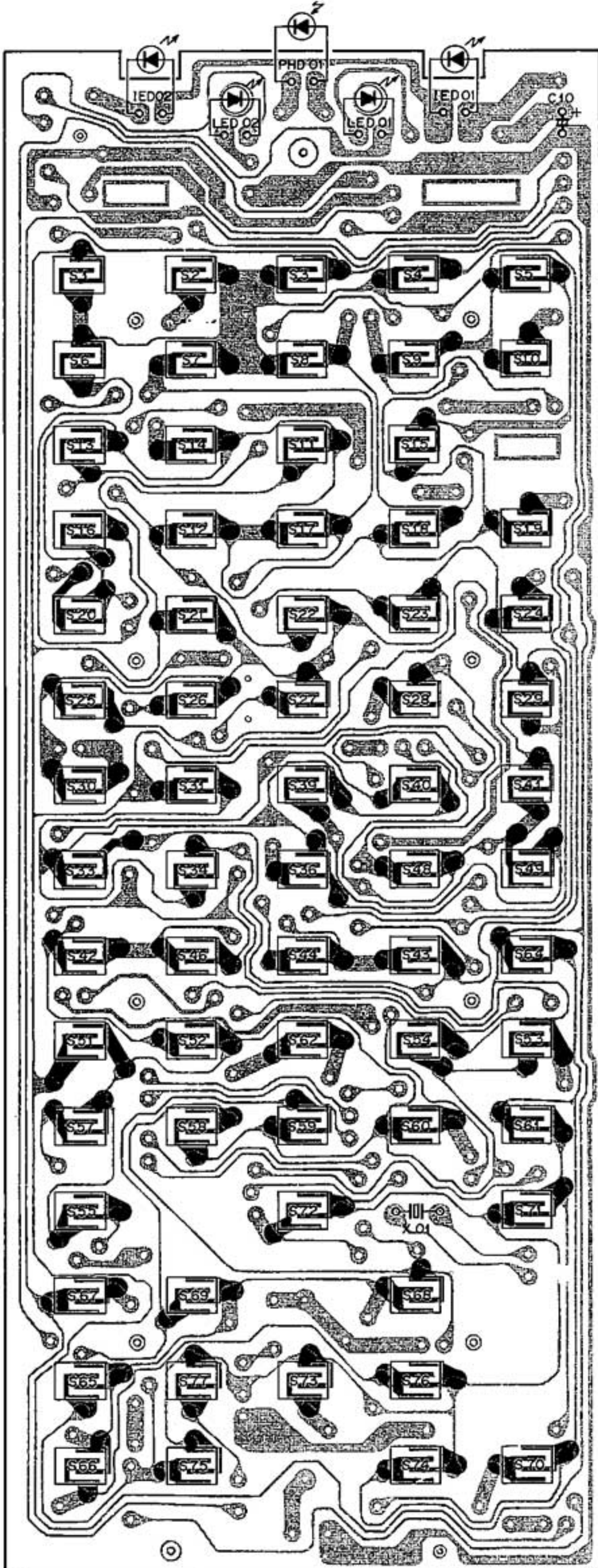
TV
S-43: TV
S-44: VDP
S-46: VCR
S-48: TV - VOL-
S-49: TV + VOL+ |
| CD/DAT/VDP
S-11: DISC SEL/DISPLAY
S-12: ■
S-13: ◀◀
S-14: ▶▶
S-15: PGM
S-16: ◀◀
S-17: ■
S-18: ▶
S-19: ▶▶ | AMP*
S-51: VCR1
S-52: VCR2
S-53: VDP
S-54: TV
S-55: V. SEL
S-57: DAT/TAPE I
S-58: TAPE2
S-59: CD
S-60: TUNER
S-61: PHONO
S-64: DISPLAY
S-65: SLEEP
S-66: AMP POWER
S-67: MUTE
S-68: → (SURROUND)
S-69: ← (SURROUND)
S-70: MASTER VOLUME-
S-71: MASTER VOLUME+
S-72: (SURROUND)
S-73: (SURROUND)
S-74: SURROUND MODE
S-75: DELAY TIME
S-76: REAR R
S-77: REAR L |

- | | | | |
|---------------|------------------|---------------------------|------------------|
| IC01 PD5068-A | Q01, Q02 AZC1050 | D01, D02, D07-D14 AZC1056 | S01 AZC1079 |
| IC02 AZC1045 | Q03, Q04 AZC1051 | D03-D06 AZC1049 | S02, S03 AZC1080 |
| IC03 AZC1046 | Q05 AZC1052 | PHD01 AZC1055 | S04 AZC1081 |
| IC04 AZC1047 | | LED01, LED02 AZC1054 | |
| IC05 AZC1048 | | LED01, LED02 AZC1053 | |

7.4 P.C.BOARD PATTERNS

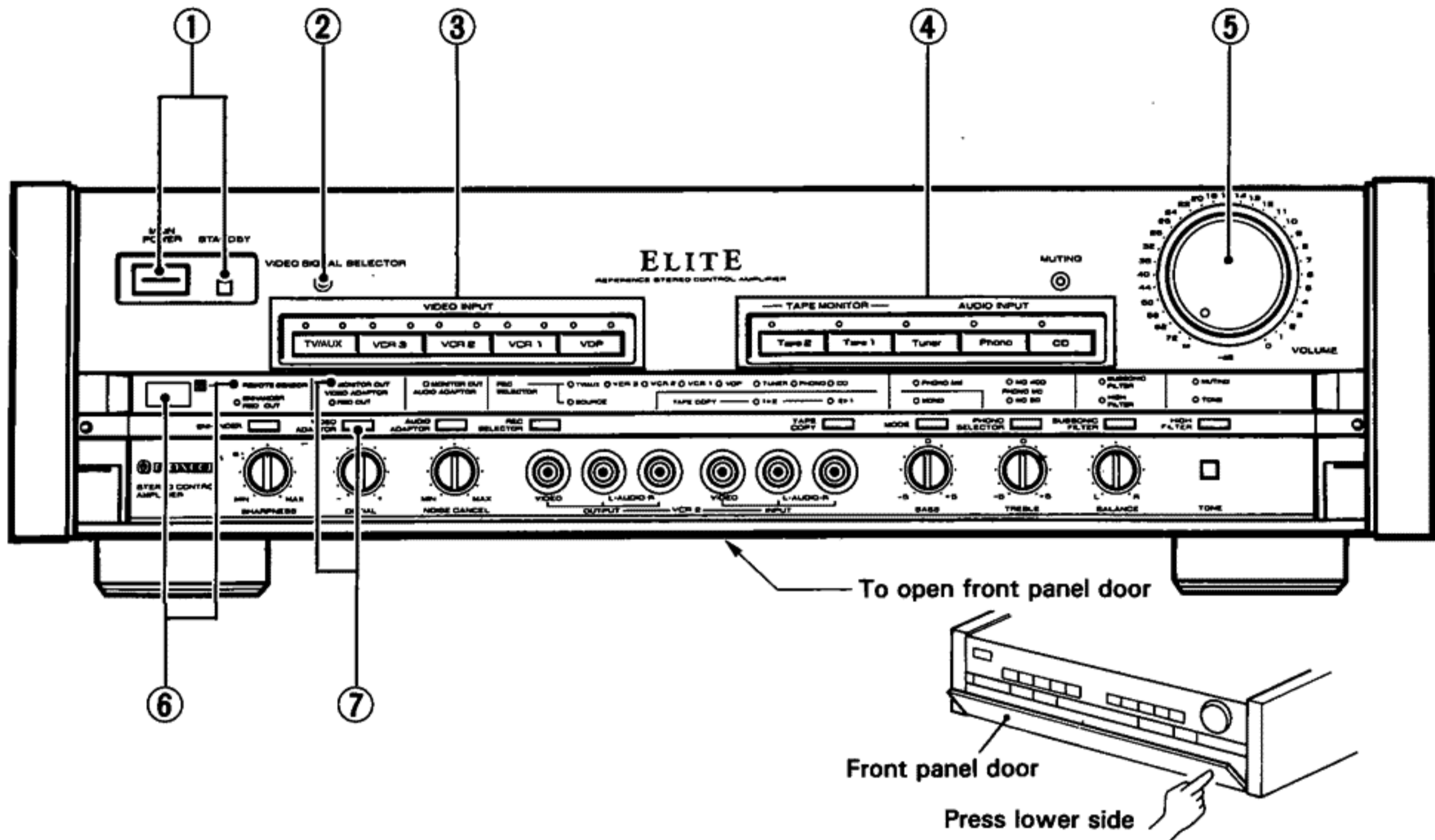
NOTE :

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



8. PANEL FACILITIES

FRONT PANEL



① MAIN POWER switch

STANDBY switch/indicator

- When the power switch is in the ON position, power can be turned ON/OFF to the amplifier and to the rear panel REMOTE CONTROL power outlets.
- Power is turned ON/OFF alternately with each press of the switch; when in the OFF (stand-by) position, the indicator will light (when in the ON position, the indicator will flash, then go out).
- The accessory remote control unit can be used to turn this switch ON/OFF, with the result that the remote control unit can be used from the listening position to control power not only to the amplifier, but also to those components connected to the rear panel REMOTE CONTROL power outlets.
- When not using the amplifier for an extended period of time, be sure to set the main power switch to the OFF position.

② VIDEO SIGNAL SELECTOR switch

Use to switch the video component's video signal regardless of the position of the input selector switch. The video indicators (green) above the input selector switch will light in order.

Even when listening to an audio component (record player, tuner, etc.), this switch can be used to perform video recording and playback while continuing to listen to the audio component playback.

③ VIDEO INPUT selector switches/indicators

Use to select the video component for playback.

- [VDP] — To play back the video disc player connected to the rear panel VDP terminals.
- [VCR1] — To play back the VCR connected to the rear panel VCR1 terminals.
- [VCR2] — To play back the VCR connected to the front panel VCR2 terminals.

- [VCR3] — To play back the VCR connected to the rear panel VCR3 terminals.
- [TV/AUX] — To use the TV tuner or video equipment connected to the rear panel TV/AUX terminals.

The red indication light during audio playback, while the green indicators light during video playback.

This switch is interlocked with the AUDIO INPUT selector.

④ AUDIO INPUT selector switches/indicators

Use to select the audio component for playback (the indicator will light).

- [CD]: For compact disc player.
- [Phono]: For turntable.
- [Tuner]: For listening to FM/AM broadcasts with a tuner.
- [Tape 1]: To use the tape deck connected to the rear panel Tape 1 terminals.
- [Tape 2]: To use the tape deck connected to the rear panel Tape 2 terminals.

The Tape 1 and 2 switches go ON or OFF alternately each time they are pressed, independently of the other switches.

⑤ VOLUME control

Use to adjust the sound volume. At the [∞] position, sound will not be heard, while at the [0] position, sound volume will be at its maximum.

⑥ REMOTE SENSOR/indicators

⑦ VIDEO ADAPTOR switch/indicator

Set to the ON position when using the component connected to the rear panel ADAPTOR terminals VIDEO IN and OUT.