PIONEER®
The Art of Entertainment

Service Manual

ORDER NO.
ARP2268

AUDIO/VIDEO STEREO RECEIVER

VSX-5900S

KU, SD

- **Refer to the service manual ARP2037, VSX−5700/KUC type.**

VSX−5900S HAS THE FOLLOWING :

Type	Power Requirement	Remarks
KU	AC120V only	
SD	AC110V, 120V−127V, 220V, 240V (switchable)	

- **This manual is applicable to the VSX−5900S/KU and SD types.**

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−5900S/KU and SD types are the same as the VSX−5700S/KUC type with the exception of the following sections.

Mark	Symbol & Description	Part No.			Remarks
		VSX−5700S/ KUC type	VSX−5900S/ KU type	VSX−5900S/ SD type	
⚠	S1 Voltage selector switch (AC110V−127V/220V−240V)	.....	.....	AKX1004	
⚠	S3 Voltage selector switch (AC110V/120V−127V/220V/240V)	.....	.....	AKX−507	
⚠	S4 Slide switch (50μS ⟷ 75μS)	.....	.....	ASH−004	
⚠	T1 Power transformer	ATS1275	ATS1275	ATS1276	
⚠	FU1 Fuse (8A/125V)	AEK1002	AEK1002	.....	
⚠	FU1 Fuse (4A/125V)	.....	.....	AEK−125	
⚠	FU2 Fuse (4A/125V)	.....	.....	AEK−125	
⚠	FU3, FU4 Fuse (6.3A/125V)	AEK−309	AEK−309	AEK−127	
⚠	AC Power cord	ADG1057	ADG1057	ADG1015	
	Display panel	AAK1934	AAK2167	AAK2167	
	Push rivet	.....	.....	AEP−319	
	Front panel	ANB1393	ANB1482	ANB1482	
	Screw	.....	.....	VMZ26P040FZK	
	Packing case	AHD1853	AHD2096	AHD2112	
	Operating instructions (English)	ARB1250	ARB1327	ARB1327	
	Operating instructions (Spanish)	.....	.....	ARC1286	
	Remote control unit (CU−VSX016)	AXD1149	.....	.....	
	Remote control unit (CU−VSX032)	.....	AXD1216	AXD1216	

NOTE :
The SCHEMATIC DIAGRAM and P.C.BOARDS CONNECTION DIAGRAM of VSX−5900S/SD type is the same as those of VSX−5700S/SD type.

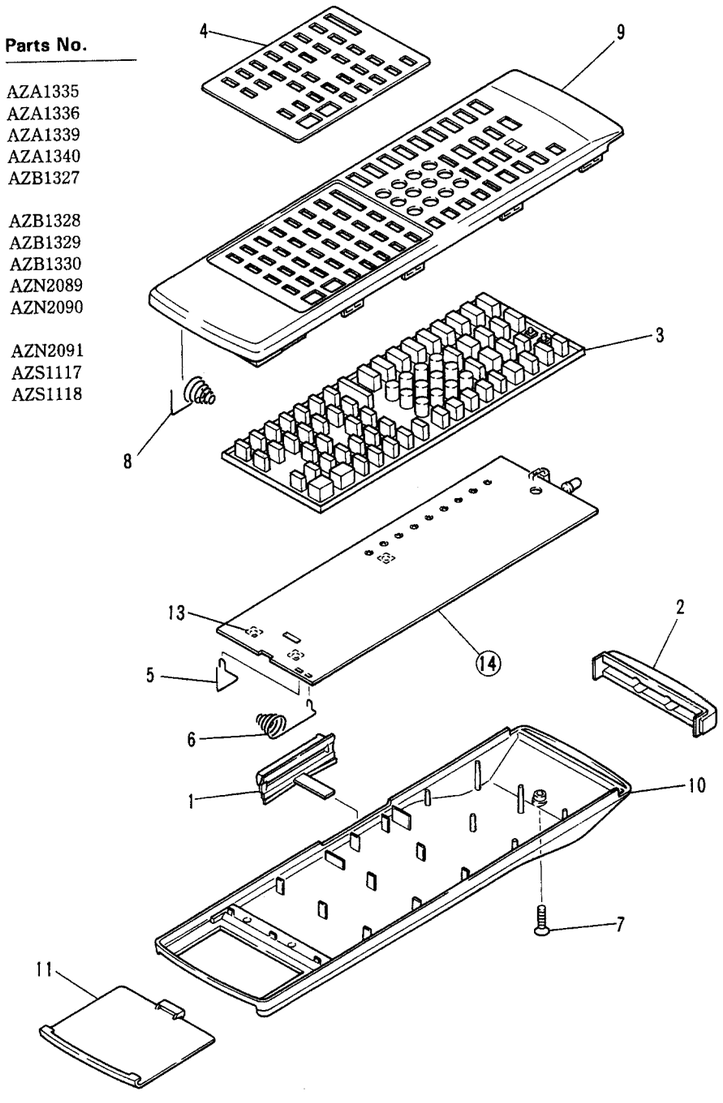
2. REMOTE CONTROL UNIT (CU-VSX032)

2.1 EXPLODED VIEWS 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

Mark	No.	Description	Parts No.
	1	MODE CHECK KEY	AZA1335
	2	FILTER	AZA1336
	3	RUBBER SHEET	AZA1339
	4	PLATE	AZA1340
	5	TERMINAL (A, +)	AZB1327
	6	TERMINAL (B, −)	AZB1328
	7	SCREW	AZB1329
	8	TERMINAL (C)	AZB1330
	9	CASE (A)	AZN2089
	10	CASE (B)	AZN2090
	11	BATTERY CASE	AZN2091
	12	SLIDE SW	AZS1117
	13	TACT SW	AZS1118
	14	P.C.BOARD	



2.2 PCB'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.
	IC1	μ-COM	ACM001-017
	IC2	IC	AZC1564
	IC3	LOGIC IC	MC74HC138F
	Q1, 2	CHIP TRANSISTOR	2SC3052E
	Q3, 4	POWER TRANSFORMER	2SD1622
	D1	DIODE	DWA010
	D10-17	LED	AZC1573
	D2-6	DIODE	DWA010
	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	ELECTROLYTIC CAPACITOR	CEAS470M10
	C6	CERAMIC CAPACITOR	CKDYB103K50
	C7	ELECTROLYTIC CAPACITOR	CEAS221M10
	C8	ELECTROLYTIC CAPACITOR	CEAS4R7M50
RESISTORS			
	R7, 8	CARBON FILM RESISTOR	RD1/4PMFL1R5J
		Other resistors	RD1/8PM□□□J
OTHERS			
	X1	RESONATOR	AZC1570

2.3 SCHEMATIC DIAGRAM

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:

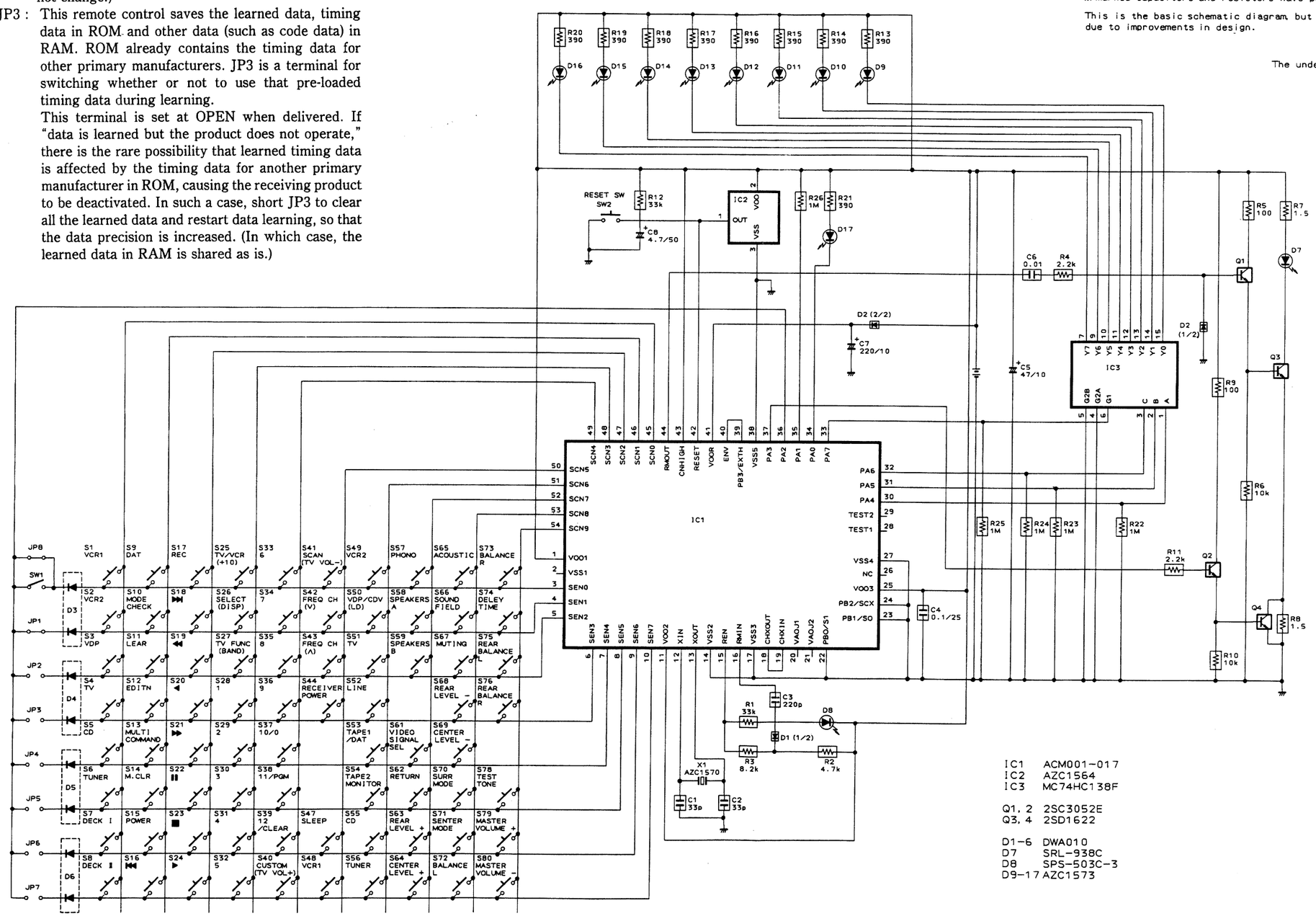
: Indicates a chipresistor.
: Indicates a chipcapacitor.
: Indicates a chiptransistor.
: Indicates a chipdiode.

1. RESISTORS:
Indicated in Ω, 1/4W, 1/8W, ±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 noed:pF
Indication without voltage is 50V except electrolytic capacitor.

3. 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 of 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.



The underline indicates the switch position

SW1 : NOT USED
SW2 : RESET
S1 : VCR1
S2 : VCR2
S3 : VDP
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.CLR
S15 : POWER
S16 : ⏮
S17 : REC
S18 : ⏭
S19 : ◀◀
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 (V)
S43 : FREQ CH (Λ)
S44 : RECEIVER POWER
S47 : SLEEP
S48 : VCR1
S49 : VCR2
S50 : VDP/CDV (LD)
S51 : TV
S52 : LINE
S53 : TAPE1/DAT
S54 : TAPE2/MONITOR
S55 : CD
S56 : TUNER
S57 : PHONO
S58 : SPEAKERS A
S59 : SPEAKERS B
S61 : VIDEO SIGNAL SEL
S62 : RETURN
S63 : REAR LEVEL +
S64 : CENTER LERVEL +
S65 : ACOUSTIC
S66 : SOUND FIELD
S67 : MUTING
S68 : REAR LEVEL -
S69 : CENTER LERVEL -
S70 : SURR MODE
S71 : CENTER MODE
S72 : BALANCE L
S73 : BALANCE R
S74 : DELEY TIME
S75 : REAR BALANCE L
S76 : REAR BALANCE R
S78 : TEST TONE
S79 : MASTER VOLUME +
S80 : MASTER VOLUME -

IC1 ACM001-017
IC2 AZC1564
IC3 MC74HC138F

Q1, 2 2SC3052E
Q3, 4 2SD1622

D1-6 DWA010
D7 SRL-938C
D8 SPS-503C-3
D9-17 AZC1573

2.4 P.C.BOARD PATTERN

: Indicates a chip resistor.

: Indicates a chip capacitor.

: Indicates a chip transistor.

: Indicates a chip diode.