

# Pioneer

## Service Manual

ORDER NO.  
**RRV4533**

AV Receiver

# VSX-524-K

## VSX-5241

**THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).**

Model	Type	Power Requirement	Remarks
VSX-524-K	CUXEVSM	AC 120 V	
VSX-5241	CUXEVSM	AC 120 V	

**This service manual should be used together with the following manual(s).**

Model No.	Order No.	Remarks
VSX-523-K/CUXESM	RRV4418	

**For SPECIFICATIONS and PANEL FACILITIES, refer to the operating instructions.**

**PIONEER CORPORATION** 1-1, Shin-ogura, Saiwai-ku, Kawasaki-shi, Kanagawa 212-0031, Japan  
**PIONEER ELECTRONICS (USA) INC.** P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.  
**PIONEER EUROPE NV** Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium  
**PIONEER ELECTRONICS ASIACENTRE PTE. LTD.** 253 Alexandra Road, #04-01, Singapore 159936

# 1. CONTRAST OF MISCELLANEOUS PARTS

NOTES: ● Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.

● The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

● Screws adjacent to  $\nabla$  mark on product are used for disassembly.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

● Nos. indicate the pages and Nos. in the service manual for the base model.

● 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 x 10<sup>1</sup> → 561 ..... RD1/4PU  $\boxed{5}$   $\boxed{6}$   $\boxed{1}$  J

47kΩ → 47 x 10<sup>3</sup> → 473 ..... RD1/4PU  $\boxed{4}$   $\boxed{7}$   $\boxed{3}$  J

0.5Ω → R50 ..... RN2HR  $\boxed{5}$   $\boxed{0}$  K

1Ω → 1R0 ..... RS1P  $\boxed{1}$   $\boxed{R}$   $\boxed{0}$  K

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

5.62kΩ → 562 x 10<sup>1</sup> → 5621 ..... RN1/4PC  $\boxed{5}$   $\boxed{6}$   $\boxed{2}$   $\boxed{1}$  F

## CONTRAST TABLE

VSX-523-K/CUXESM, VSX-524-K/CUXEVSM and VSX-5241/CUXEVSM are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-523-K /CUXESM	VSX-524-K /CUXEVSM	VSX-5241 /CUXEVSM	Remarks
<b>PCB ASSEMBLIES</b>						
NSP		1..PCB TTL ASSY MAIN	7025HK1211010-IL	7025HK1311080	7025HK1311020	
	P48-1	2..MAIN ASSY	7028073311010-IL	70280733110Q0	70280733110Q0	
	P48-3	2..OPTCO ASSY	7028073313010-IL	70280733130J0	70280733130J0	
	P48-12	2..REG ASSY	7028073312010-IL	70280733120L0	70280733120L0	
	P48-13	2..WG ASSY	7028073315010-IL	7028073315040	7028073315040	
	P48-14	2..G-L ASSY	7028073316010-IL	7028073316040	7028073316040	
	P48-15	2..G-R ASSY	7028073317010-IL	7028073317040	7028073317040	
NSP		1..PCB TTL ASSY DMAIN	7025HK1211012-IL	7025HK1311082	7025HK1311022	
	P48-2	2..D-MAIN ASSY	7028073351010-IL	70280733510E0	70280733510E0	
NSP		1..PCB TTL ASSY FRONT	7025HK1211011-IL	7025HK1311081	7025HK1311021	
	P48-4	2..FUSB ASSY	7028073323010-IL	70280733230N0	70280733230N0	
	P48-5	2..CONCT ASSY	7028073325010-IL	7028073325040	7028073325040	
	P48-8	2..INSEL ASSY	7028073324010-IL	7028073324040	7028073324040	
	P48-9	2..FRONT ASSY	7028073321010-IL	70280733210Q0	70280733210Q0	
	P48-10	2..HPMIC ASSY	7028073322010-IL	70280733220N0	70280733220N0	
NSP		1..PCB TTL ASSY CPU	7025HK1211013-IL	7025HK1311083	7025HK1311023	
	P48-6	2..CPU ASSY	7028073331010-IL	70280733310R0	70280733310R0	
NSP		1..PCB TTL ASSY AMP5	7025HK1211014-IL	7025HK1311084	7025HK1311024	
	P48-7	2..AMP5 ASSY	7028073341010-IL	70280733410J0	70280733410J0	
NSP		1..PCB TTL ASSY SMPS	7025HK1211015-IL	7025HK1311085	7025HK1311025	
$\Delta$	P48-11	2..SMPS ASSY	7028073361010-IL	70280733610DA	70280733610DA	
<b>PACKING SECTION</b>						
	P45-5	Quick Start Guide	5707000007800-IL	5707000008970S	5707000008960S	
	P45-6	Operating Instructions (CD-ROM)	6517000001280-IL	6517000001740S	6517000001730S	
NSP		Operating Instructions_VSX-523 (En) (pdf)	ARB7517	Not used	Not used	
NSP		Operating Instructions_VSX-523 (Frca) (pdf)	ARC8192	Not used	Not used	
NSP		Operating Instructions_VSX-523 (Es) (pdf)	ARC8193	Not used	Not used	
NSP		Operating Instructions_VSX-823 (En) (pdf)	ARB7518	Not used	Not used	
NSP		Operating Instructions_VSX-823 (Frca) (pdf)	ARC8194	Not used	Not used	
NSP		Operating Instructions_VSX-823 (Es) (pdf)	ARC8195	Not used	Not used	
NSP		Operating Instructions_VSX-524 (En) (pdf)	Not used	ARB7546	Not used	
NSP		Operating Instructions_VSX-524 (Frca) (pdf)	Not used	ARC8305	Not used	
NSP		Operating Instructions_VSX-524 (Es) (pdf)	Not used	ARC8306	Not used	
NSP		Operating Instructions_VSX-5241 (En) (pdf)	Not used	Not used	ARB7547	
NSP		Operating Instructions_VSX-5241 (Frca) (pdf)	Not used	Not used	ARC8307	
NSP		Operating Instructions_VSX-5241 (Es) (pdf)	Not used	Not used	ARC8308	

Mark	No.	Symbol and Description	VSX-523-K /CUXESM	VSX-524-K /CUXEVSM	VSX-5241 /CUXEVSM	Remarks
	P45-7	Box, Gift	6007212370000-IL	60072125800C0S	6007212580050S	
	P45-8	Cushion, Snow Video Cable	6230213384000-IL Not used	6230213384100S Not used	6230213384100S L063202010050-IL	
		<b>EXTERIOR SECTION</b>				
	P48-24	Front Panel	3067215871001S	3067215871050S	3067215871040S	
	P48-25	Back Chassis	3207214566000-IL	32072145660H0S	32072145660G0S	
	P48-27	Foot	4000210391000-IL	4000210391010S	4000210391010S	
	P48-30	Cushion	4050211605000-IL	Not used	Not used	
	P48-30	Cushion Foot	Not used	4050211605000SV	4050211605000SV	
	P48-31	Screw Cover	4050211745100-IL	Not used	Not used	
	P48-31	SP Screw Cushion	Not used	4050211745100SV	4050211745100SV	
	P48-37	Button	5090213741100-IL	Not used	Not used	
	P48-38	5 Key Button	5090214561000-IL	5090214561200S	5090214561200S	
	P48-39	10 Key Button	5090214571000-IL	5090214571200S	5090214571200S	

Notes : For PCB ASSEMBLIES, Refer to "CONTRAST OF PCB ASSEMBLIES".

## **CONTRAST OF PCB ASSEMBLIES**

### **A** F MAIN ASSY

7028073311010-IL and 70280733110Q0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073311010-IL	70280733110Q0	Remarks
	IC401-IC403, IC406 R510, R587	J121458001010-IL C000033065520-IL	J121458000050-IL C060033065060-IL	

Note: This list is not complete. Only components that are available as service part are listed!

### **B** F D-MAIN ASSY

7028073351010-IL and 70280733510E0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073351010-IL	70280733510E0	Remarks
	IC2001	8952523000020-IL	8952VS5240020	

Note: This list is not complete. Only components that are available as service part are listed!

### **C** F OPTCO ASSY

Although 7028073313010-IL and 70280733130J0 are different in part number, there is no difference in the circuit and the component parts.

### **D** F FUSB ASSY

Although 7028073323010-IL and 70280733230N0 are different in part number, there is no difference in the circuit and the component parts.

### **E** F CONCT ASSY

Although 7028073325010-IL and 7028073325040 are different in part number, there is no difference in the circuit and the component parts.

## F CPU ASSY

7028073331010-IL and 70280733310R0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073331010-IL	70280733310R0	Remarks
	IC203	8952523000010-IL	8952VS5240010	

Note: This list is not complete. Only components that are available as service part are listed!

## G AMP5 ASSY

Although 7028073341010-IL and 70280733410J0 are different in part number, there is no difference in the circuit and the component parts.

## H INSEL ASSY

Although 7028073324010-IL and 7028073324040 are different in part number, there is no difference in the circuit and the component parts.

## I FRONT ASSY

7028073321010-IL and 70280733210Q0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073321010-IL	70280733210Q0	Remarks
	IC701	J127163150020-IL	J127197044010-IL	
	V701 DISPLAY,FLT	K530126600011-IL	K530122400010S	

Note: This list is not complete. Only components that are available as service part are listed!

## J HPMIC ASSY

7028073322010-IL and 70280733220N0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073322010-IL	70280733220N0	Remarks
	IC902	J121458001010-IL	J121458000050-IL	

Note: This list is not complete. Only components that are available as service part are listed!

## K SMPS ASSY

Although 7028073361010-IL and 70280733610DA are different in part number, there is no difference in the circuit and the component parts.

## L REG ASSY

Although 7028073312010-IL and 70280733120L0 are different in part number, there is no difference in the circuit and the component parts.

## WG ASSY

There is no service parts.

## G-L ASSY

There is no service parts.

## G-R ASSY

There is no service parts.