

Pioneer

Service Manual

ORDER NO.
RRV4512

AV Receiver

VSX-424-K VSX-524-K

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

Model	Type	Power Requirement	Remarks
VSX-424-K	SYXEV8	AC 220 V to 230 V	
VSX-524-K	AXEV5	AC 220 V	
VSX-524-K	PWXEV	AC 220 V to 240 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.

1. CONTRAST OF MISCELLANEOUS PARTS

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.
- Screws adjacent to ∇ 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%).

560 Ω \rightarrow 56 x 10¹ \rightarrow 561 RD1/4PU $\boxed{5}$ $\boxed{6}$ $\boxed{1}$ J
 47k Ω \rightarrow 47 x 10³ \rightarrow 473 RD1/4PU $\boxed{4}$ $\boxed{7}$ $\boxed{3}$ J
 0.5 Ω \rightarrow R50 RN2HR $\boxed{5}$ $\boxed{0}$ K
 1 Ω \rightarrow 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).

5.62k Ω \rightarrow 562 x 10¹ \rightarrow 5621 RN1/4PC $\boxed{5}$ $\boxed{6}$ $\boxed{2}$ $\boxed{1}$ F

CONTRAST TABLE

VSX-523-K/CUXESM, VSX-424-K/SYXEV8, VSX-524-K/AXEV5 and VSX-524-K/PWXEV are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-523-K /CUXESM	VSX-424-K /SYXEV8	VSX-524-K /AXEV5	VSX-524-K /PWXEV	Remarks
PCB ASSEMBLIES							
NSP		1..PCB TTL ASSY MAIN	7025HK1211010-IL	7025HK1311030	7025HK1311070	7025HK1311060	
	P48-1	2..MAIN ASSY	7028073311010-IL	70280733110J0	70280733110R0	70280733110M0	
	P48-3	2..OPTCO ASSY	7028073313010-IL	70280733130J0	70280733130J0	70280733130J0	
	P48-12	2..REG ASSY	7028073312010-IL	70280733120J0	70280733120L0	70280733120L0	
	P48-13	2..WG ASSY	7028073315010-IL	7028073315040	7028073315040	7028073315040	
	P48-14	2..G-L ASSY	7028073316010-IL	7028073316040	7028073316040	7028073316040	
	P48-15	2..G-R ASSY	7028073317010-IL	7028073317040	7028073317040	7028073317040	
NSP		1..PCB TTL ASSY DMAIN	7025HK1211012-IL	7025HK1311032	7025HK1311072	7025HK1311062	
	P48-2	2..D-MAIN ASSY	7028073351010-IL	70280733510E0	70280733510E0	70280733510E0	
NSP		1..PCB TTL ASSY FRONT	7025HK1211011-IL	7025HK1311031	7025HK1311071	7025HK1311061	
	P48-4	2..FUSB ASSY	7028073323010-IL	70280733230N0	70280733230N0	70280733230N0	
	P48-5	2..CONCT ASSY	7028073325010-IL	7028073325040	7028073325040	7028073325040	
	P48-8	2..INSEL ASSY	7028073324010-IL	7028073324040	7028073324040	7028073324040	
	P48-9	2..FRONT ASSY	7028073321010-IL	70280733210N0	70280733210N0	70280733210N0	
	P48-10	2..HPMIC ASSY	7028073322010-IL	70280733220N0	70280733220N0	70280733220N0	
NSP		1..PCB TTL ASSY CPU	7025HK1211013-IL	7025HK1311033	7025HK1311073	7025HK1311063	
	P48-6	2..CPU ASSY	7028073331010-IL	70280733310S0	70280733310X0	70280733310V0	
NSP		1..PCB TTL ASSY AMP5	7025HK1211014-IL	7025HK1311034	7025HK1311074	7025HK1311064	
	P48-7	2..AMP5 ASSY	7028073341010-IL	70280733410J0	70280733410J0	70280733410J0	
NSP		1..PCB TTL ASSY SMPS	7025HK1211015-IL	7025HK1311035	7025HK1311075	7025HK1311065	
Δ	P48-11	2..SMPS ASSY	7028073361010-IL	70280733610FA	70280733610T0	70280733610T0	
PACKING SECTION							
	P45-5	Quick Start Guide	5707000007800-IL	5707000008980S	Not used	5707000009020S	
		Operating Instructions (Zhcn)	Not used	Not used	5707000009040S	Not used	
	P45-6	Operating Instructions (CD-ROM)	6517000001280-IL	6517000001750S	Not used	Not used	
NSP		Operating Instructions_VSX-523 (En) (pdf)	ARB7517	Not used	Not used	Not used	
NSP		Operating Instructions_VSX-523 (Frcn) (pdf)	ARC8192	Not used	Not used	Not used	
NSP		Operating Instructions_VSX-523 (Es) (pdf)	ARC8193	Not used	Not used	Not used	
NSP		Operating Instructions_VSX-823 (En) (pdf)	ARB7518	Not used	Not used	Not used	
NSP		Operating Instructions_VSX-823 (Frcn) (pdf)	ARC8194	Not used	Not used	Not used	
NSP		Operating Instructions_VSX-823 (Es) (pdf)	ARC8195	Not used	Not used	Not used	
NSP		Operating Instructions_VSX-424 (En) (pdf)	Not used	ARB7549	Not used	Not used	
NSP		Operating Instructions_VSX-424 (Fr) (pdf)	Not used	ARC8315	Not used	Not used	
NSP		Operating Instructions_VSX-424 (Es) (pdf)	Not used	ARC8316	Not used	Not used	
NSP		Operating Instructions_VSX-424 (De) (pdf)	Not used	ARC8317	Not used	Not used	

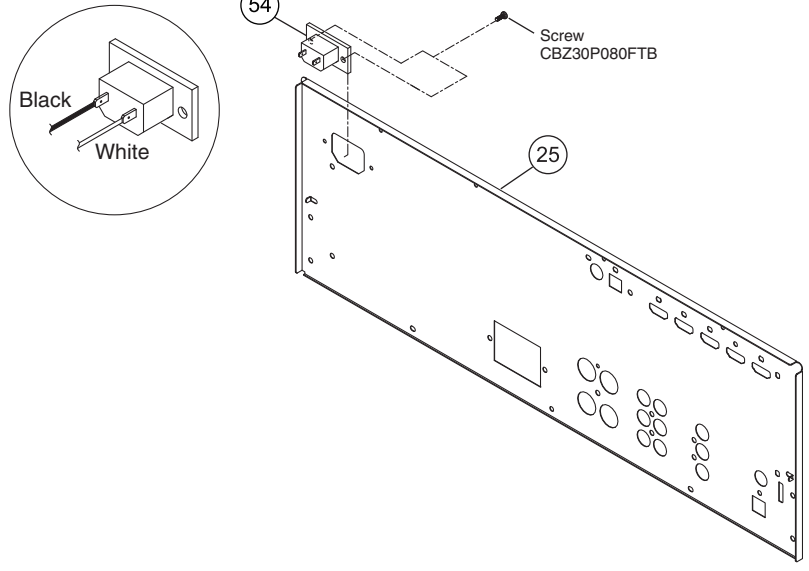
Mark	No.	Symbol and Description	VSX-523-K /CUXESM	VSX-424-K /SYXEVB	VSX-524-K /AXEV5	VSX-524-K /PWXEV	Remarks
NSP		Operating Instructions_VSX-424 (It) (pdf)	Not used	ARC8318	Not used	Not used	
NSP		Operating Instructions_VSX-424 (NI) (pdf)	Not used	ARC8319	Not used	Not used	
NSP		Operating Instructions_VSX-424 (Ru) (pdf)	Not used	ARC8320	Not used	Not used	
NSP		Operating Instructions_VSX-824 (En) (pdf)	Not used	ARB7548	Not used	Not used	
NSP		Operating Instructions_VSX-824 (Fr) (pdf)	Not used	ARC8309	Not used	Not used	
NSP		Operating Instructions_VSX-824 (Es) (pdf)	Not used	ARC8310	Not used	Not used	
NSP		Operating Instructions_VSX-824 (De) (pdf)	Not used	ARC8311	Not used	Not used	
NSP		Operating Instructions_VSX-824 (It) (pdf)	Not used	ARC8312	Not used	Not used	
NSP		Operating Instructions_VSX-824 (NI) (pdf)	Not used	ARC8313	Not used	Not used	
NSP		Operating Instructions_VSX-824 (Ru) (pdf)	Not used	ARC8314	Not used	Not used	
	P45-7	Box, Gift	6007212370000-IL	6007212580060S	6007212370270S	6007212580080S	
	P45-8	Cushion, Snow	6230213384000-IL	6230213384100S	6230213384100S	6230213384100S	
NSP	P45-10	Warranty Card	ARY7172	ARY7158	ARY7137	Not used	
⚠		AC Power Cord	Not used	L068250160020-IL	Not used	Not used	
		Tuner Isolator	Not used	Not used	L170200060010-IL	Not used	No.12
		EXTERIOR SECTION					
⚠	P48-16	Power Trans	8200960611280-IL	8200960611290S	8200960611310-IL	8200960611290S	
⚠	P48-17	Cord Assy	L068125101710-IL	Not used	L068250101710-IL	L068250751710-IL	
	P48-24	Front Panel	3067215871001S	3067215871140S	3067215871150S	3067215871150S	
	P48-25	Back Chassis	3207214566000-IL	3207214566140S	3207214566310S	32072145660E0S	
	P48-27	Foot	4000210391000-IL	4000210391010S	4000210391010S	4000210391010S	
	P48-30	Cushion	4050211605000-IL	Not used	Not used	Not used	
	P48-30	Cushion Foot	Not used	4050211605000SV	4050211605000SV	4050211605000SV	
	P48-31	Screw Cover	4050211745100-IL	Not used	Not used	Not used	
	P48-31	SP Screw Cushion	Not used	4050211745100SV	4050211745100SV	4050211745100SV	
	P48-33	Stopper	4380040162010-IL	Not used	4380040162010-IL	4380040162010-IL	
	P48-37	Button	5090213741100-IL	Not used	Not used	Not used	
	P48-38	5 Key Button	5090214561000-IL	5090214561200S	5090214561200S	5090214561200S	
	P48-39	10 Key Button	5090214571000-IL	5090214571200S	5090214571200S	5090214571200S	
⚠		Socket,Power AC	Not used	G430040560021-IL	Not used	Not used	No.54

Notes : The numbers in the remarks column correspond to the numbers on the "EXPLODED VIEWS".
For PCB ASSEMBLIES, Refer to "CONTRAST OF PCB ASSEMBLIES".

EXPLODED VIEWS

EXTERIOR SECTION (VSX-424-K/SYXEV8)

A

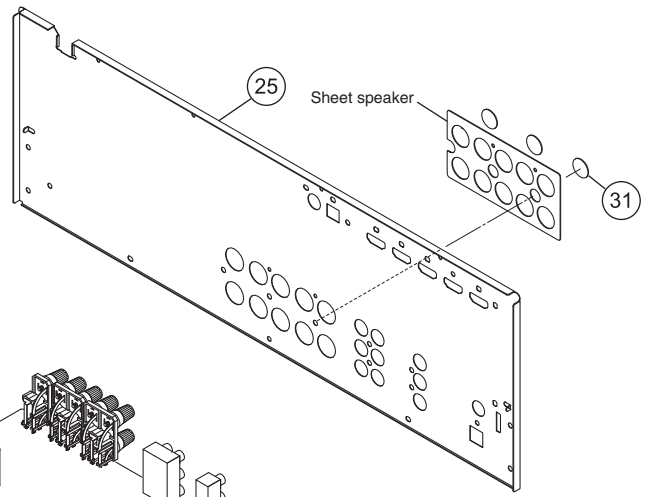
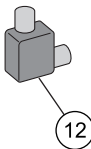


B

C

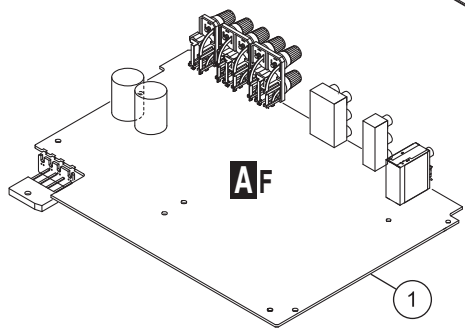
PACKING SECTION (VSX-524-K/AXEV5)

EXTERIOR SECTION (VSX-524-K/AXEV5)



D

E



F

CONTRAST OF PCB ASSEMBLIES

A F MAIN ASSY

7028073311010-IL, 70280733110J0, 70280733110R0 and 70280733110M0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073311010-IL	70280733110J0	70280733110R0	70280733110M0	Remarks
	IC401-IC403, IC406 601 TUNER,FM/AM X1200 CRYSTAL (14.32 MHz) X1201 CRYSTAL (17.734 MHz) JA101 TER,BOARD SCREW 4P	J121458001010-IL E903004100781S E80014R318080-IL Not used G612405E0200Y-IL	J121458000050-IL E903104100781S Not used E80017R734410-IL G612405E0200Y-IL	J121458001010-IL E903004100781S E80014R318080-IL Not used Not used	J121458000050-IL E903004100781S E80014R318080-IL E80017R734410-IL G612405E0200Y-IL	
	JA101 TER,BOARD SCREW 8P JA102 TER,BOARD PUSH 6P JA102 TER,BOARD SCREW 2P R510, R587	Not used G596601SA010Y-IL Not used C000033065520-IL	Not used G596601SA010Y-IL Not used C060033065060-IL	G614108V1010M-IL Not used G611201A0200Y-IL C000033065520-IL	Not used G596601SA010Y-IL Not used C060033065060-IL	

The mounting positions of the additional parts are described in the circuit diagram and PCB diagram of the parent manual.

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 and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

D F FUSB ASSY

Although 7028073323010-IL and 70280733230N0 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

E F CONCT ASSY

Although 7028073325010-IL and 7028073325040 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

F F CPU ASSY

7028073331010-IL, 70280733310S0, 70280733310X0 and 70280733310V0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073331010-IL	70280733310S0	70280733310X0	70280733310V0	Remarks
	IC203	8952523000010-IL	8952523000010-IL	8952VS5240010	8952VS5240010	

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

G F AMP5 ASSY

Although 7028073341010-IL and 70280733410J0 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

H F INSEL ASSY

Although 7028073324010-IL and 7028073324040 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

I F FRONT ASSY

7028073321010-IL and 70280733210N0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073321010-IL	70280733210N0	Remarks
	IC701 V701 DISPLAY,FLT R779, R780	J127163150020-IL K530126600011-IL C060001063050-IL	J127197044010-IL K530122400010S C0602R2063050-IL	

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

J F 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 F SMPS ASSY

7028073361010-IL, 70280733610FA and 70280733610T0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073361010-IL	70280733610FA	70280733610T0	Remarks
⚠	FU101 FUSE GLASS TUBE 20mm (T8AL/250V)	N751508001160-IL	Not used	Not used	
⚠	FU101 FUSE GLASS TUBE 20mm (T6.3AL/250V)	Not used	N751506301160-IL	N751506301160-IL	
⚠	CN9100 CN.WAFER 7.92mm	L108396030010-IL	Not used	L108396030010-IL	

The mounting positions of the additional parts are described in the circuit diagram and PCB diagram of the parent manual.

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

L F REG ASSY

Although 7028073312010-IL, 70280733120J0 and 70280733120L0 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

WG ASSY

There is no service parts.

G-L ASSY

There is no service parts.

G-R ASSY

There is no service parts.