

Service Manual

Pioneer

ORDER NO.
RRV2403

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-D859TX VSX-D859TXG

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

Type	Model		Power Requirement	The voltage can be converted by the following method.
	VSX-D859TX	VSX-D859TXG		
BXJI	○	○	AC110V/120-127V/220V/240V	With the voltage selector
HLXJI	—	○	AC220-230V	AC240V, *

* : Alter the wiring of the Power-supply block at the primary winding of Power-transformer referring to the "Line Voltage Selection" described in Service Manual.

● This service manual should be used together with the following manual(s):

Model No.	Order No.	Remarks
VSX-35TX/KUXJI/CA	RRV2351	

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1. CONTRAST OF MISCELLANEOUS PARTS

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

● 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.

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

● Reference 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 $\rightarrow$ $56 \times 10^1 \rightarrow$ 561 RD1/4PU $\boxed{5}\boxed{6}\boxed{1}J$

47k $\rightarrow$ $47 \times 10^3 \rightarrow$ 473 RD1/4PU $\boxed{4}\boxed{7}\boxed{3}J$

0.5 $\rightarrow$ R50 RN2H $\boxed{R}\boxed{5}\boxed{0}K$

1 $\rightarrow$ 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 $\rightarrow$ $562 \times 10^1 \rightarrow$ 5621 RN1/4PC $\boxed{5}\boxed{6}\boxed{2}\boxed{1}F$

■ CONTRAST TABLE

VSX-35TX/KUXJI/CA, VSX-D859TX/BXJI, VSX-D859TXG/BXJI and VSX-D859TXG/HLXJI are constructed the same except for the following:

Ref. No.	Mark	Symbol and Description	Part No.				Remarks
			VSX-35TX /KUXJI/CA	VSX-D859TX /BXJI	VSX-D859TXG /BXJI	VSX-D859TXG /HLXJI	
P5- 1		PCB ASSEMBLIES					
		FM/AM TUNER UNIT	AXQ7231	AXQ7228	AXQ7228	AXQ7232	
P5- 5	NSP	MAIN ASSY	AWK7591	AWK7610	AWK7610	AWK7608	
P5-12		└ MAIN CONTROL ASSY	AWX7560	AWX7607	AWX7607	AWX7605	
P5-12		└ DSP ASSY	AWX7561	AWX7595	AWX7595	AWX7595	
P5- 2	NSP	COMPLEX ASSY	AWK7592	AWK7611	AWK7611	AWK7604	
P5- 6		└ EX I/O(7.1CH I/O) ASSY	AWX7568	AWX7597	AWX7597	AWX7597	
P5-12		└ A- CONNECTION ASSY	AWX7566	AWX7584	AWX7584	AWX7584	
P5-15		└ REGULATOR ASSY	AWX7562	AWX7806	AWX7806	AWX7806	
P5-15		└ PRIMARY ASSY	AWX7563	AWX7608	AWX7608	AWX7596	
		└ VOL-SEL ASSY	Not used	AWX7609	AWX7609	Not used	No. 1
P5- 4	NSP	POWER ASSY	AWK7593	AWK7605	AWK7605	AWK7605	
P5-10		└ INPUT ASSY	AWX7573	AWX7600	AWX7600	AWX7600	
		└ SP/PS ASSY	AWX7571	AWX7598	AWX7598	AWX7598	
		└ FAN DRIVER ASSY	Not used	AWX7599	AWX7599	AWX7599	No. 2
P5- 7	NSP	FRONT ASSY	AWK7594	AWK7609	AWK7609	AWK7609	
P6- 3		└ COMPOSITE ASSY	AWX7581	AWX7621	AWX7621	AWX7621	
P7- 1		└ V-AMP ASSY	AWX7578	AWX7723	AWX7723	AWX7723	
		└ DISPLAY ASSY	AWX7574	AWX7606	AWX7606	AWX7606	
		└ P- SW ASSY	Not used	AWX7593	AWX7593	AWX7593	No. 3
P3- 2		PACKING SECTION					
P3- 3		FM Antenna	ADH7004	ADH7004	ADH7004	ADH7005	
P3- 3		Operating Instructions (English)	ARB7222	ARB7226	ARB7226	ARB7226	
P3- 3		Operating Instructions (Spanish)	Not used	ARC7299	ARC7299	Not used	
P3- 3		Operating Instructions (Chinese)	Not used	ARC7300	ARC7300	ARC7300	
P3- 4		Remote Control Unit	AXD7266	AXD7273	AXD7273	AXD7273	
P3- 8	NSP	Packing Case	AHD7860	AHD7862	AHD7863	AHD7864	
P3-11		Warranty Card	ARY7007	Not used	Not used	Not used	
		Spacer	Not used	AHB7052	AHB7052	AHB7052	No. 4
		CAUTION 220V LABEL	Not used	ARR1003	ARR1003	Not used	No. 5

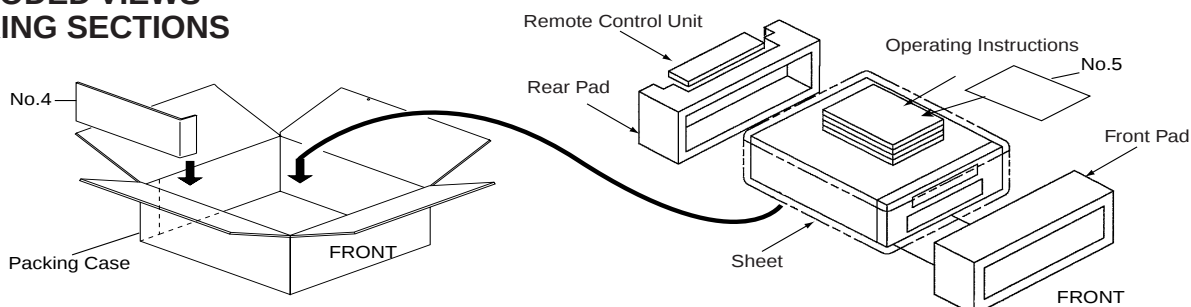
Ref. No.	Mark	Symbol and Description	Part No.				Remarks
			VSX-35TX /KUXJI/CA	VSX-D859TX /BXJI	VSX-D859TXG /BXJI	VSX-D859TXG /HLXJI	
P5-18	⚠	EXTERIOR SECTION Power Transformer	ATS7284	ATS7287	ATS7287	ATS7285	No.6
P5-19	⚠	Fuse (FU4, FU5:)	REK1112 (2.5A)	REK1025 (T2.0A)	REK1025 (T2.0A)	REK1025 (T2.0A)	
P5-21	⚠	Fuse (FU1:)	VEK1029 (10A)	DEK1045 (10A)	DEK1045 (10A)	AEK-106 (T4.0A)	
		Fuse (FU2, FU3)	Not used	AEK-107 (T5.0A)	AEK-107 (T5.0A)	Not used	
P5-26	NSP	AC Cord Stopper	CM-22C	AEC7317	AEC7313	CM-22B	
P5-27		AC Power Cord	VDG1075	ADG7040	ADG7040	VDG1076	
P5-30		Under Base	ANA7113	ANA7102	ANA7102	ANA7102	
P5-31		Rear Panel	ANC7910	ANC7914	ANC7937	ANC7938	
P5-33		Bonnet	AZN7835	AZN7835	AZN7836	AZN7836	
P5-35	⚠	Trans Shield	ANG7293	ANG7294	ANG7294	ANG7294	
		Bottom Plate	Not used	ANF7020	ANF7020	ANF7020	No. 8
		Fan Motor	Not used	AXM7012	AXM7012	AXM7012	No. 9
		Stabilizer	Not used	ANG7310	ANG7310	ANG7310	No.10
	⚠	Locking Card Spacer	Not used	AEC7160	AEC7160	AEC7160	
		Voltage Selector	Not used	AKX-507	AKX-507	Not used	No.11
	⚠	AC Plug Adapter	Not used	AKX7011	AKX7011	Not used	No.12
	⚠	HEAT SINK SECTION					
		Thermistor	Not used	AEX7004	AEX7004	AEX7004	No.13
		FRONT PANEL SECTION					
P7- 9		4P Flexible Cable/60V	ADD7238	Not used	Not used	Not used	No.14 No.15 No.16
P7-13		Door Stay	AAH7063	AAH7063	AAH7064	AAH7064	
P7-14		Door	AMB7692	ANB7223	ANB7222	ANB7222	
P7-15		Door Hinge L	AMR7291	AMR7291	AMR7292	AMR7292	
P7-16		Door Hinge R	AMR7293	AMR7293	AMR7294	AMR7294	
P7-17		Volume Knob (MASTER)	AAB7193	AAB7193	AAB7210	AAB7210	
P7-18		Rotary Knob (INPUT SELECTOR)	AAB7226	AAB7226	AAB7227	AAB7227	
P7-19		Digital Cap	AAD7576	AAD7576	AAD7580	AAD7580	
P7-20		Volume Ring	AAK7623	AAH7623	AAH7016	AAH7016	
P7-21		Window	AAK7769	AAK7765	AAK7732	AAK7732	
P7-22		Door Sheet	AAK7783	AAK7776	AAK7777	AAH7777	
P7-24		Cusion Circle	AED7044	AED7044	AED7045	AED7045	
P7-25		Front Panel	AMB7691	ANB7228	ANB7229	ANB7229	
P7-26		Panel Base	AMB7695	AMB7695	AMB7696	AMB7696	
P7-30		Damper Assy	AXA7089	AXA7088	AXA7088	AXA7088	
P7-31		Name Plate	PAM1776	PAM1776	PAM1779	PAM1779	
	POWER Button	Not used	AAD7442	AAD7491	AAD7491		
	FL Sheet	Not used	Not used	AAK7735	AAK7735		
	Spacer D7EX	Not used	AEB7213	AEB7213	AEB7213		

Notes : ●The numbers in the remarks column correspond to the numbers on the “ EXPLODED VIEWS ”.

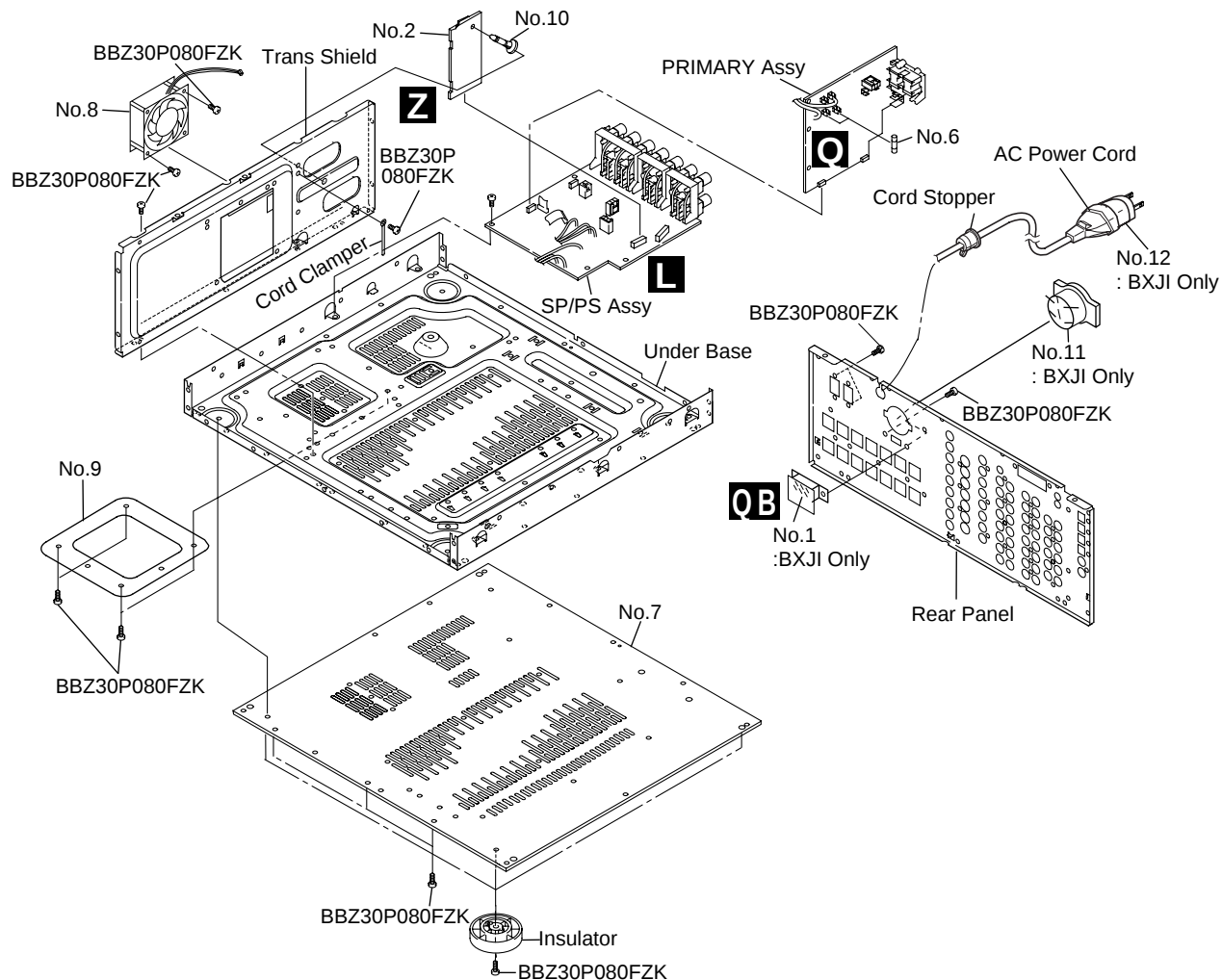
● For PCB ASSEMBLIES, Refer to “CONTRAST OF PCB ASSEMBLIES”, “2. PCB CONNECTION DIAGRAM” and “3. SCHEMATIC DIAGRAM”.

EXPLODED VIEWS

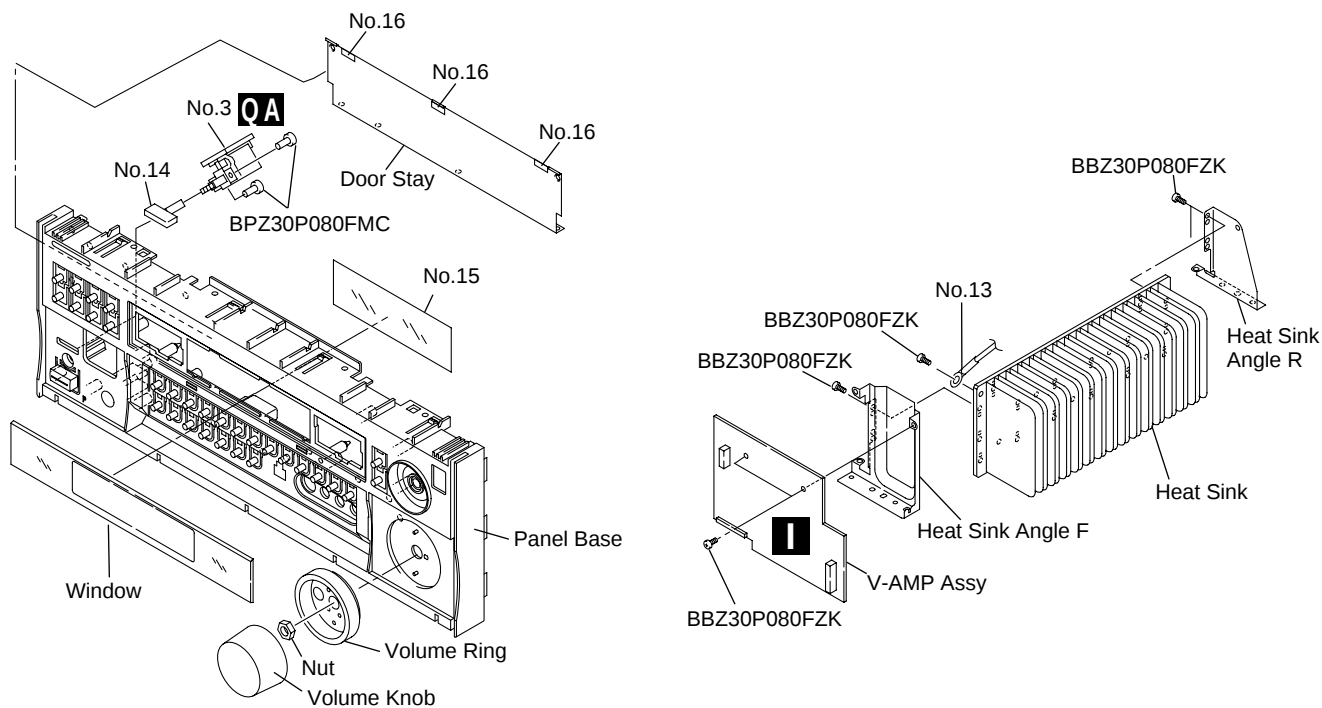
PACKING SECTIONS



● EXTERIOR SECTION



● FRONT PANEL and HEAT SINK SECTIONS



■ CONTRAST OF PCB ASSEMBLIES

AF FM/AM TUNER UNIT

AXQ7228, AXQ7232 and AXQ7231 are constructed the same except for the following:

Mark	Symbol and Description	Part No.			Remarks
		AXQ7231	AXQ7228	AXQ7232	
	BN201	AKA7003	AKA7003	AKA7002	
	Q601	Not used	Not used	2SC2412K	
	Q602	Not used	Not used	DTC124EK	
	D101	Not used	Not used	UDZS6.8B	
	D601	Not used	Not used	HVU187	
	L601	Not used	Not used	LCTA270J2520	
	L602	Not used	Not used	LAU2R2J	
	F203	ATF7026	ATF1155	ATF1155	
	F601	Not used	Not used	ATF7025	
	C101	CKSRYB103K50	CKSRYB103K50	Not used	
	C103, C104, C609	Not used	Not used	CKSRYB102K50	
	C206	CCSRCH100D50	CCSRCH100D50	CCSRCH120J50	
	C209	CKSRYB223K50	CKSRYB223K50	Not used	
	C210	CEJA470M16	CEJA470M16	CEJQ470M16	
	C211	CEJA1R0M50	CEJA1R0M50	CEJQ1R0M50	
	C215	CKSRYB681K50	CKSRYB681K50	CKSRYB471K50	
	C216, C217	CKSRYB153K50	CKSRYB123K50	CKSRYB103K50	
	C244, C611	Not used	Not used	CKSRYB223K50	
	C601, C602	CKSRYB103K50	CKSRYB103K50	Not used	
	C603	CKSRYB223K50	CKSRYB223K50	CKSRYB392K50	
	C604, C610, C615	Not used	Not used	CKSRYB103K50	
	C605	Not used	Not used	CCSQCH680J50	
	C606	Not used	Not used	CKSRYB561K50	
	C607, C608	Not used	Not used	CKSRYB182K50	
	C614	Not used	Not used	CCSRCH101J50	
	R101	Not used	Not used	RS1/16S0R0J	
	R102, R225, R243	RS1/16S0R0J	RS1/16S0R0J	Not used	
	R103	RS1/10S331J	RS1/10S331J	RS1/10S221J	
	R104	RS1/10S391J	RS1/10S391J	RS1/10S221J	
	R105, R605	Not used	Not used	RS1/16S222J	
	R201	RS1/16S391J	RS1/16S391J	Not used	
	R202	RS1/16S221J	RS1/16S221J	RS1/16S101J	
	R212	RS1/16S392J	RS1/16S392J	RS1/16S512J	
	R216	RS1/16S123J	RS1/16S123J	RS1/16S103J	
	R218, R219	RS1/16S102J	RS1/16S102J	RS1/16S681J	
	R222	RS1/16S472J	RS1/16S472J	RS1/16S103J	
	R227	RS1/16S103J	RS1/16S103J	RS1/16S183J	
	R601	Not used	Not used	RS1/16S561J	
	R602, R604	Not used	Not used	RS1/16S221J	
	R603	Not used	Not used	RS1/16S472J	
	R606	Not used	Not used	RS1/16S121J	
	R607	Not used	Not used	RS1/16S473J	
	0001 FM FRONT END	AXF7003	AXF7003	AXF7005	
	0002 MW RF TUNING BLOCK	AXX7071	AXX7071	AXX7072	

IF V-AMP ASSY

AWX7723 and AWX7578 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7578	AWX7723	
	CN2201 3P PLUG	Not used	KM250MA3	

VSX-D859TX, VSX-D859TXG

BF 7.1CH I/O ASSY

AWX7597 and AWX7568 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7568	AWX7597	
	C1101- C1124, C1161- C1165 C1167, C1168 C1151- C1158 C1166	Not used Not used Not used Not used	CCSQCH101J50 CCSQCH101J50 CCSQCH331J50 CCSQCH471J50	

CF INPUT ASSY

AWX7600 and AWX7573 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7573	AWX7600	
	Q1001, Q1002 D1051 C1051 C1001- C10012 R1013- R1016, R1051 R1017, R1018 CN1002 6P SOCKET JA1004 2P PIN JACK JA1051 MULI ROOM JACK	2SC2878 1SS133 CGCYX103M16 Not used RD1/4PU102J RD1/4PU473J KP200TA6L AKB7046 AKN7014	Not used Not used Not used CCCSL221J50 Not used Not used Not used Not used Not used	

EF A-CONNECTION ASSY

AWX7584 and AWX7566 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7566	AWX7584	
	IC503 IC1551 D1551 C1509, C1510 C1551- C1553 C1554, C1555 C1556, C1557 R1551 R1552, R1553 R1554, R1555 CN1552 9P SOCKET CN1554 6P PLUG	NJM4558MD M62429FP UDZS5.1B Not used CEAT100M50 CCSQCH101J50 CEAT1R0M50 RS3LMF391J RS1/10S102J RS1/10S103J AKP7068 KM200TA6	UPC4570G2 Not used Not used CCSQCH221J50 Not used Not used Not used Not used Not used Not used Not used Not used	

F COMPOSITE ASSY

AWX7621 and AWX7581 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7581	AWX7621	
	IC731 D731 C732, C733 C734, C735 C736 C737 R733- R735	NJM2279M DAN202K CKSQYB473K50 CEAT101M10 CKSQYB473K50 CCSQCH470J50 RS1/10S102J	Not used Not used Not used Not used Not used Not used Not used	