

Service Manual

ORDER NO.
RRV3492

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-516-K

VSX-516-S

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

Model	Type	Power Requirement	The voltage can be converted by the following method.
VSX-516-K	SPWXJ	AC 110 V/120 to 127 V/220 V/240 V	With the voltage selector
VSX-516-S	SFLXJ	AC 110 V/120 to 127 V/220 V/240 V	With the voltage selector
VSX-516-S	YPWXJ	AC 240 V	_____
VSX-516-S	NAXJ5	AC 220 V	_____

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

Model No.	Order No.	Remarks
VSX-516-K/ KUCXJ	RRV3329	

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

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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 ∇ mark on product are used for disassembly.

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

● 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.)

● 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 56×10^1 \rightarrow 561 RD1/4PU $\begin{matrix} \boxed{5} & \boxed{6} & \boxed{1} \\ \boxed{J} \end{matrix}$

47k Ω \rightarrow 47×10^3 \rightarrow 473 RD1/4PU $\begin{matrix} \boxed{4} & \boxed{7} & \boxed{3} \\ \boxed{J} \end{matrix}$

0.5 Ω \rightarrow R50 RN2H $\begin{matrix} \boxed{R} & \boxed{5} & \boxed{0} \\ \boxed{K} \end{matrix}$

1 Ω \rightarrow 1R0 RS1P $\begin{matrix} \boxed{1} & \boxed{R} & \boxed{0} \\ \boxed{K} \end{matrix}$

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

5.62k Ω \rightarrow 562×10^1 \rightarrow 5621 RN1/4PC $\begin{matrix} \boxed{5} & \boxed{6} & \boxed{2} & \boxed{1} \\ \boxed{F} \end{matrix}$

■ CONTRAST TABLE

VSX-516-K/SPWXJ, VSX-516-S/SFLXJ, YPWXJ, NAXJ5 and VSX-516-K/MYXJ5 are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.					Remarks
			VSX-516-K /MYXJ5	VSX-516-K /SPWXJ	VSX-516-S /SFLXJ	VSX-516-S /YPWXJ	VSX-516-S /NAXJ5	
P9-4		PCB ASSEMBLIES MAIN ASSY	XWK3230	XWK3231	XWK3231	XWK3231	XWK3231	
P11-1	NSP	COMPLEX ASSY	XWK3210	XWK3211	XWK3211	XWK3212	XWK3212	
P11-2		└ FRONT DISPLAY ASSY	XWZ4052	XWZ4052	XWZ4052	XWZ4052	XWZ4052	
P9-10		└ R.ENCODER ASSY	XWZ4055	XWZ4055	XWZ4055	XWZ4055	XWZ4055	
P9-11		└ PRIMARY ASSY	XWZ4073	XWZ4074	XWZ4074	XWZ4075	XWZ4075	
		└ REGULATOR ASSY	XWZ4116	XWZ4077	XWZ4077	XWZ4077	XWZ4077	
P9-3	NSP	AMP ASSY	XWK3220	XWK3221	XWK3221	XWK3221	XWK3221	
P9-13		└ POWER PACK ASSY	XWZ4083	XWZ4084	XWZ4084	XWZ4084	XWZ4084	
		└ TRAMS2 ASSY	XWZ4092	XWZ4091	XWZ4091	XWZ4091	XWZ4091	
P11-4		USB IN ASSY	XWK3247	XWK3248	XWK3248	XWK3248	XWK3248	
P9-5		USB ASSY	AWX8704	Not used	Not used	Not used	Not used	
P7-1	NSP	PACKING SECTION FM Antenna	ADH7030	ADH7030	ADH7030	Not used	Not used	
P7-5		Battery (R6) 2P (JE)	XEX3002	XEX3002	XEX3002	Not used	XEX3002	
P7-7		Operating Instructions (English/Italian)	XRE3121	Not used	Not used	Not used	Not used	
P7-7		Operating Instructions (Spanish/English)	Not used	XRB3058	XRB3058	XRB3058	Not used	
P7-8		Operating Instructions (Dutch/Spanish)	XRC3223	Not used	Not used	Not used	Not used	
P7-8		Operating Instructions (Chinese)	Not used	Not used	Not used	Not used	XRC3229	
P7-9		Operating Instructions (French/German)	XRC3224	Not used	Not used	Not used	Not used	
P7-9		Operating Instructions (Chinese/Spanish)	Not used	Not used	XRC3228	Not used	Not used	
P7-10		Remote Control	XXD3102	XXD3103	XXD3103	XXD3103	XXD3103	
P7-14		Packing Case	XHD3589	XHD3597	XHD3598	XHD3598	XHD3599	
P7-15		Battery Cover	XZN3139	AZN7933	AZN7933	AZN7933	AZN7933	
P7-16		Label (WEEE)	ARW7322	Not used	Not used	Not used	Not used	
P7-17	NSP	Warranty Card	ARY7065	Not used	Not used	Not used	ARY7046	
	\triangle	AC power Cord	Not used	ADG7100	ADG7104	Not used	Not used	
	\triangle	AC power Cord	Not used	Not used	XDG3034	Not used	Not used	
	\triangle	AC power Cord	Not used	ADG7062	ADG7062	Not used	Not used	
		J-Shape Plug	Not used	AKX7008	AKX7008	AKX7008	AKX7008	
		Power Plug Adapter	Not used	AKX7022	Not used	Not used	Not used	

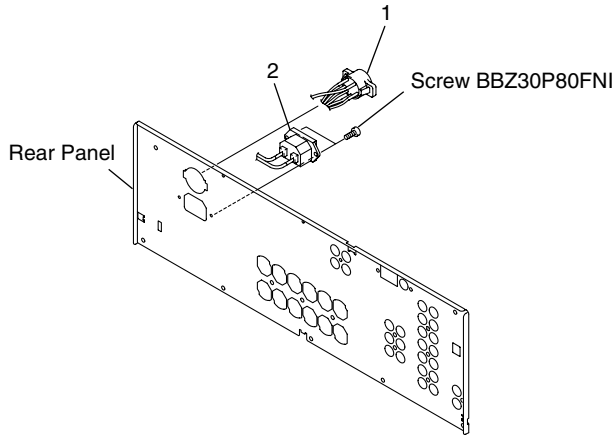
Ref. No.	Mark	Symbol and Description	Part No.					Remarks
			VSX-516-K /MYXJ5	VSX-516-K /SPWXJ	VSX-516-S /SFLXJ	VSX-516-S /YPWXJ	VSX-516-S /NAXJ5	
		Caution Card 220V Caution Card SD SB Caution Ccard SB	Not used Not used Not used	XRR3001 Not used Not used	XRR3001 ARM7063 ARM7064	Not used Not used Not used	Not used Not used Not used	
		EXTERIOR SECTION						
P9-2		FM/AM Tuner Unit	AXX7170	AXX7211	AXX7211	AXX7211	AXX7211	
P9-18	⚠	Transformer	XTS3102	XTS3090	XTS3090	XTS3090	XTS3090	
P9-19	⚠	Fuse (6.3 A)	REK1027	REK1030	REK1030	REK1030	REK1030	
	⚠	Fuse (3.15 A)	Not used	REK1027	REK1027	REK1027	REK1027	
P9-20		Fuse Card	AAX7493	Not used	Not used	AAX7493	AAX7493	FU2, FU3
P9-20	NSP	Fuse Card	Not used	XAX3218	XAX3218	Not used	Not used	
P9-21	⚠	AC Power Cord	VDG1080	Not used	Not used	XDG3017	VDG1088	
P9-22		11P F.F.C/30V	XDD3189	XDD3189	XDD3189	XDD3189	XDD3189	
P9-23		19P F.F.C/30V	XDD3190	XDD3190	XDD3190	XDD3190	XDD3190	
P9-25		7P F.F.C/30V	XDD3191	XDD3191	XDD3191	XDD3191	XDD3191	
P9-26		10P F.F.C/30V	XDD3196	XDD3196	XDD3196	XDD3196	XDD3196	
P9-27		17P F.F.C/30V	Not used	XDD3203	XDD3203	XDD3203	XDD3203	
P9-28		25P F.F.C/30V	XDD3201	Not used	Not used	Not used	Not used	
P9-31		R Panel 516	XNC3414	XNC3415	XNC3432	XNC3433	XNC3416	
P9-36	⚠	Cord Stopper	CM-22B	Not used	Not used	CM-22B	CM-22B	
P9-37		Insulator	PNW2766	PNW2766	PNW2766	Not used	Not used	
P9-39		Bonnet S V3 (box)	Not used	Not used	XZN3184	XZN3184	XZN3184	
P9-40	NSP	Label	VRW1629	VRW1629	VRW1629	VRW1629	Not used	
P9-41		ICP Label (PAP)	XAX3121	Not used	Not used	Not used	Not used	
P9-46		Screw	BBZ30P080FTB	BBZ30P080FTB	BBZ30P080FNI	BBZ30P080FNI	BBZ30P080FNI	
	⚠	Voltage Selector	Not used	AKX-507	AKX-507	Not used	Not used	No.1
	⚠	AC Inlet ASSY	Not used	ADX7395	ADX7395	Not used	Not used	No.2
	NSP	CCC S&E Label	Not used	Not used	Not used	Not used	DRW2310	Rear Panel
	NSP	SISIR Label 516SF	Not used	Not used	XAX3578	Not used	Not used	Rear Panel
	NSP	DF Label	Not used	Not used	AAX7960	Not used	Not used	Rear Panel
		FRONT PANEL SECTION						
P11-6		JOG Knob V3S	XAB3046	XAB3046	XAB3048	XAB3048	XAB3048	
P11-7		VOL Knob V3S	XAB3049	XAB3049	XAB3051	XAB3051	XAB3051	
P11-8		Standby BTN 515S	XAD3202	XAD3202	XAD3203	XAD3203	XAD3203	
P11-11	NSP	F Panel ASSY	XXG3249	XXG3251	XXG3252	XXG3252	XXG3252	
P11-12		Tuner BTN V3K	XAD3230	XAD3230	Not used	Not used	Not used	
P11-12		Tuner BTN V3SN	Not used	Not used	XAD3248	XAD3248	XAD3248	
P11-13		SUB BTN	XAD3231	XAD3231	XAD3249	XAD3249	XAD3249	
P11-14		Func BTN	XAD3232	XAD3232	XAD3250	XAD3250	XAD3250	
P11-15		Listen BTN V3K	XAD3233	XAD3233	Not used	Not used	Not used	
P11-16		JOG Button	XAD3240	XAD3240	XAD3251	XAD3251	XAD3251	
P11-16		JOG Button V3SN	Not used	Not used	XAD3252	XAD3252	XAD3252	
P11-17		Pioneer badge B	XAM3006	XAM3006	VAM1129	VAM1129	VAM1129	
P11-18		FRT Panel	XMB3227	XMB3230	XMB3231	XMB3231	XMB3231	
P11-21		4P Shielded Cable	XDX3028	Not used	Not used	Not used	Not used	

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

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

EXPLODED VIEWS

EXTERIOR SECTION (SPWXJ and SFLXJ types)



CONTRAST OF PCB ASSEMBLIES

AF MAIN ASSY

XWK3231 and XWK3230 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWK3230	XWK3231	
	IC5001	LC72725M	Not used	*
	R5010, 5011	RS1/16S473J	Not used	
	R5012, 5013	RS1/16S102J	Not used	
	R9024	Not used	RS1/16S472J	
	R9026	RS1/16S0R0J	RS1/16S751J	
	R9042-9044	RS1/16S103J	Not used	
	C103-114, 181, 182, 185-192, 197, 198	CCSRCH101J50	Not used	
	C5011	CEJQ100M50	Not used	
	C5013, 5014	CCSRCH270J50	Not used	
	C5015	CEJQ470M16	Not used	
	C5016	CKSRYP103K50	Not used	
	C5017	CCSRCH561J50	Not used	
	C5020	CKSRYP472K50	Not used	
	X5001	ASS7004	Not used	
	CN109	XKP3055	XKP3054	
	CN112	CKS3390	CKS3382	

* Refer to KUCXJ type on the service manual RRV3329.

UF PRIMARY ASSY

XWZ4074, XWZ4075 and XWZ4073 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ4073	XWZ4074	XWZ4075	
	D58	MTZJ5.1B	MTZJ5R1(B)	MTZJ5R1(B)	
	T51	ATT7040	XTT3006	XTT3006	
	J8807	ZWX-STD.JW-0R58	Not used	Not used	
	J8808	Not used	ZWX-STD.JW-0R58	ZWX-STD.JW-0R58	
	H53-56	Not used	AKR7001	Not used	
	S51	Not used	XKX3005	Not used	

PF REGULATOR ASSY

XWZ4077 and XWZ4116 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ4116	XWZ4077	
D813 IC807 R802 R819 C816 C817		MTZJ6.2B TA7805S RS2LMF221J RS1/16S0R0J CEAT101M10 CKSRYB103K25	Not used Not used Not used Not used Not used Not used	

CF POWER PACK ASSY

XWZ4084 and XWZ4083 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ4083	XWZ4084	
R707, 708 R709 R710 CN812 CN813 CN815 CN817		RD1/4PU124J Not used Not used XKP3067 CKS3390 XKM3006 Not used	RD1/4PU104J RS1LMF472J RS1LMF472J Not used Not used XKM3005 CKS3382	 *

* Refer to KUCXJ type on the servise manual RRV3329.

DF TRANS2 ASSY

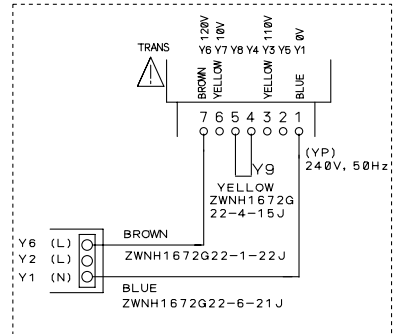
XWZ4091 and XWZ4092 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ4092	XWZ4091	
IC853		AEK7021	AEK7018	

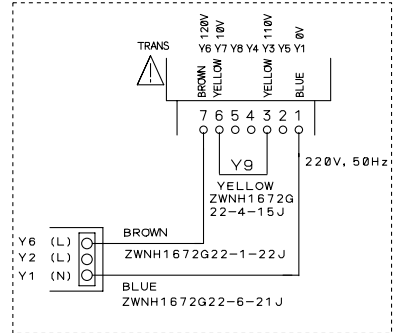
2. SCHEMATIC DIAGRAM

2.1 PRIMARY ASSY

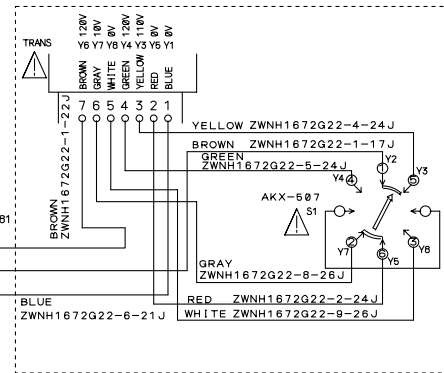
/YP MODEL



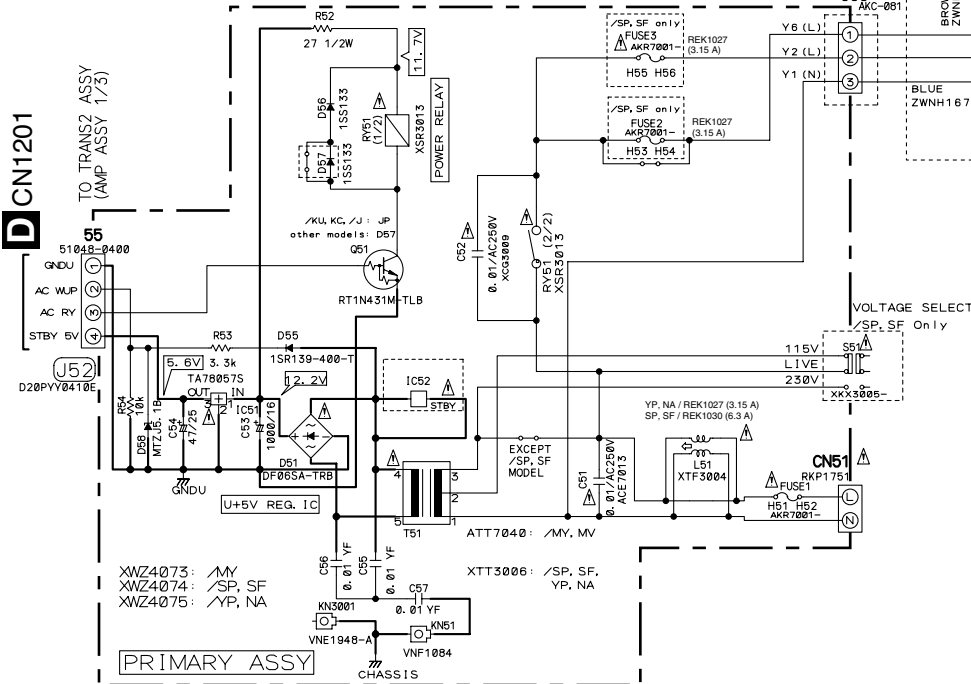
/NA MODEL



/SP, SF MODEL



UF PRIMARY ASSY (SPWXJ, SFLXJ : XWZ4074) (YPWXJ, NAXJ5 : XWZ4075)



NOTE FOR FUSE REPLACEMENT

CAUTION -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS ONLY.