

**Pioneer**

# **Service Manual**

ORDER NO.  
RRV2117

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

# **VSX-21**

● Refer to the service manual RRV2104 for VSX-D608/KUXJI.

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

Type	Model	Power Requirement	Remarks
	VSX-21		
KUXJI/CA	○	AC120V	

# 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.  
 ● 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 ..... RSIP  $\boxed{1}\boxed{R}\boxed{0}K$

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

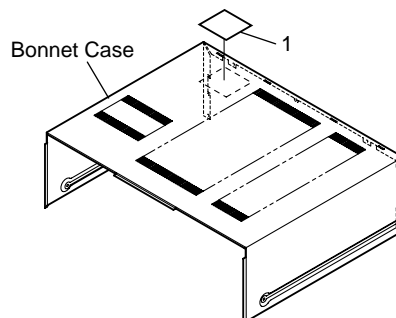
VSX-21/KUXJI/CA and VSX-D608/KUXJI are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.		Remarks
			VSX-D608 /KUXJI	VSX-21 /KUXJI/CA	
<b>ASSEMBLIES</b>					
P5-2	NSP	INPUT Assy	AWK7472	AWK7504	
P5-4	NSP	└ FRONT Assy	AWX7215	AWX7335	
		└ REAR SP Assy	AWX7250	Not used	
P5-5	NSP	AMP Assy	AWK7480	AWK7505	
		└ AMP Assy	AWX7223	AWX7336	
P5-4	NSP	EXCELLENT Assy	AWK7485	AWK7503	
P5-16		└ REAR SP Assy	Not used	AWX7338	
		└ FRONT LARGE Assy	AWX7288	AWX7337	
<b>PACKING</b>					
P3-3		Operating Instructions (English)	ARB7157	ARB7181	
P3-7	NSP	Warranty Card	ARY7023	ARY7007	
P3-13		Packing Case	AHD7692	AHD7700	
<b>EXTERIOR SECTION</b>					
P5-18	$\Delta$	Power Transformer (T1)	ATS7234	ATS7235	
P5-31		Rear Panel	ANC7724	ANC7769	
P5-46		Display Window	AAK7606	AAK7632	
P5-47		Front Panel	AMB7552	AMB7585	
P5-70		Insulator	AMR7198	PNW2766	
P5-71	$\Delta$	Fuse (FU701: 10A)	Not used	REK1087	Refer to KCXJI type
		DOC Label	Not used	VRW1726	No.1

- Notes: ● The numbers in the remarks column correspond to the numbers on "EXPLODED VIEWS".  
 ● For ASSEMBLIES, refer to "CONTRAST OF PCB ASSEMBLIES", "2. SCHEMATIC DIAGRAM" and "3. PCB CONNECTION DIAGRAM".

## ■ EXPLODED VIEWS

### ● EXTERIOR SECTION



## ■ CONTRAST OF PCB ASSEMBLIES

### **B**F FRONT ASSY

AWX7335 and AWX7215 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7215	AWX7335	
	D222, D223 S215	Not used Not used	1SS355 ASG1034	

### **D**F AMP ASSY

AWX7336 and AWX7223 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7223	AWX7336	
△	C1432, C1433 R1436, R1437 H751, H752	CFTYA104J50 RS1LMF4R7J Not used	Not used Not used AKR1004	*

\* : Refer to VSX-D608/KCXJI in the service manual RRV2104.

### **G**F FRONT LARGE ASSY

AWX7337 and AWX7288 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		AWX7288	AWX7337	
	R633, R634 R635, R636 CN628 631 PCB BINDER	Not used Not used Not used Not used	RD1/4PU223J RD1/4PU122J AKB7001 VEF1040	

## ■ PCB PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
------	-----	-------------	----------	------	-----	-------------	----------

### **H**F REAR SP ASSY

#### SEMICONDUCTORS

Q652	2SC1740S
Q651	KRA101M
D651, D652	1SS133

#### COIL

L651	AF CHOKE COIL	ATH1004
------	---------------	---------

#### RELAYS

△	RY651, RY652	ASR7001
---	--------------	---------

#### CAPACITOR

C651, C657, C658	CFTYA104J50
------------------	-------------

#### RESISTORS

△	R652	RD1/4LMF4R7J
	R655, R661, R662	RD1/4PU122J
	R653, R654, R656, R663, R664	RD1/4PU223J
△	R657-R659	RS1LMF4R7J
△	R651	RS2LMF271J

Other Resistors

RS1/10S□□□J

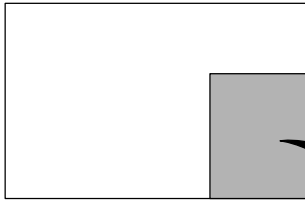
#### OTHERS

JA653	3P PIN JACK	AKB7101
CN652	SPEAKER TERMINAL 6P	AKE7037
CN651	12P PLUG	AKM7007

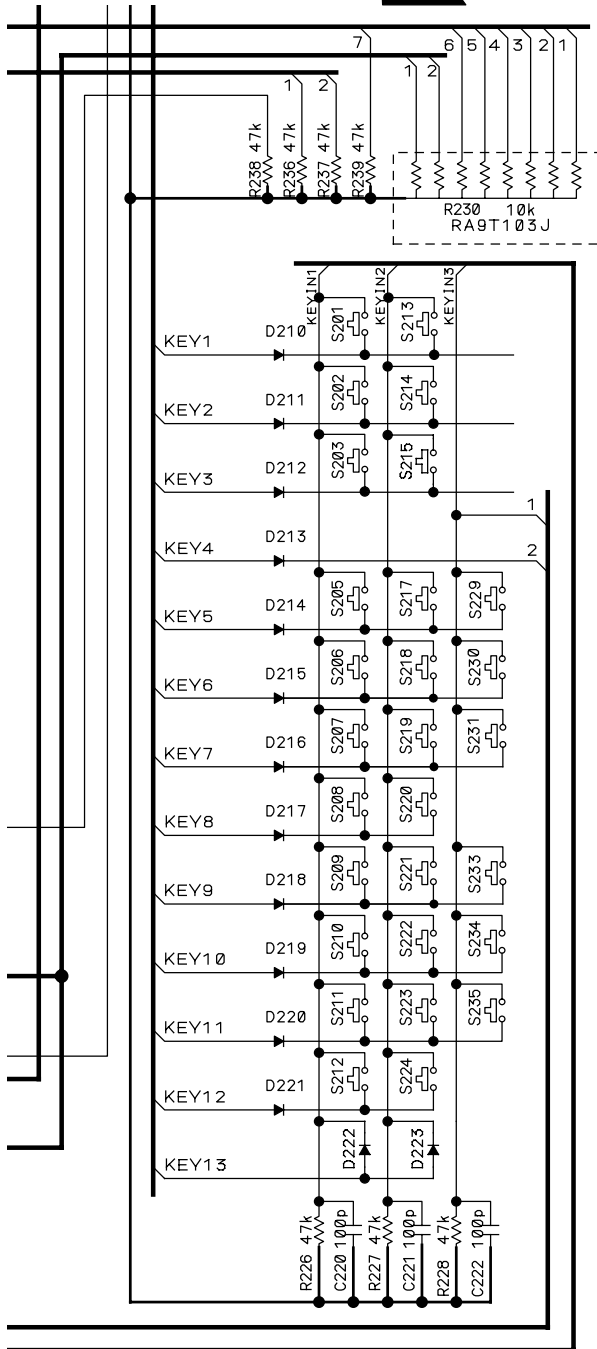
## 2. SCHEMATIC DIAGRAM

Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"

### 2.1 FRONT ASSY



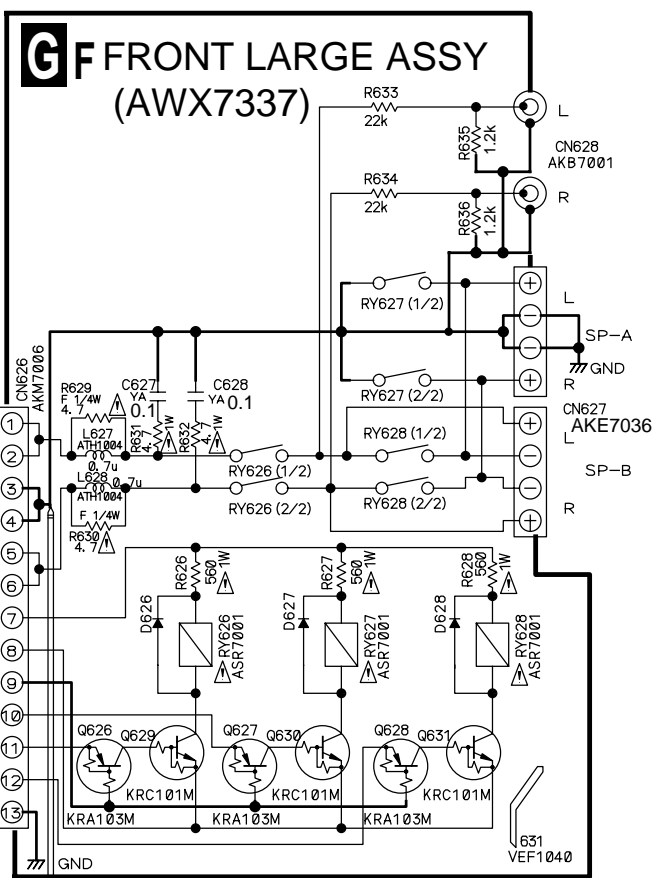
### B F FRONT ASSY (AWX7335)



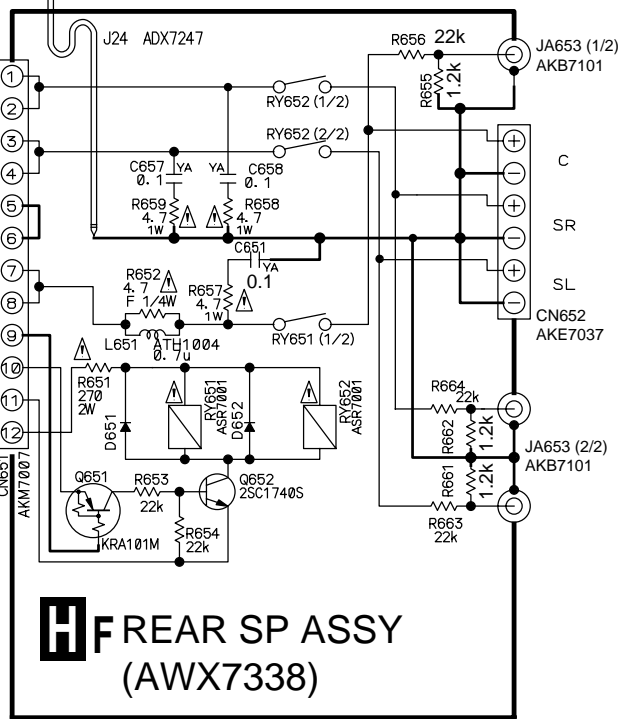
- FRONT ASSY
- S201 : SIGNAL SELECT
  - S202 : MIDNIGHT
  - S203 : DIGITAL NR
  - S205 : - ] BASS
  - S206 : + ]
  - S207 : - ] TREBLE
  - S208 : + ]
  - S209 : SPEAKERS
  - S210 : LOUDNESS
  - S211 : DIRECT
  - S212 : TAPE2 MONITOR
  - S213 : □□ / DTS
  - S214 : DSP MODE
  - S215 : RE-EQ
  - S217 : DVD/LD
  - S218 : TV/SAT
  - S219 : CD
  - S220 : FM/AM
  - S221 : VCR 1
  - S222 : VCR 2
  - S223 : MD/TAPE1
  - S224 : VIDEO
  - S229 : CLASS
  - S230 : MEMORY
  - S231 : MPX MODE
  - S233 : - ] STATION/FREQUENCY
  - S234 : + ]
  - S235 : TUNING SELECT
  - S250 : MASTER VOLUME

- NOTE-
1. RESISTORS  
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.  
Rated power: 1/10W unless otherwise noted.  
Tolerance: (J)±5% unless otherwise noted.
  2. CAPACITORS  
Unit: p-pF or μF unless otherwise noted.  
Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.  
Rated Voltage: 50V expect for electrolytic capacitors.  
JA:CEJA
  3. DIODES  
Indicated in 1SS355-TRB.

## 2.2 FRONT LARGE and REAR SP ASSEMBLIES



**E** CN687



**F** CN692

--- NOTE ---  
 1. RESISTORS  
 Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.  
 Rated power: 1/4W unless otherwise noted.  
 Tolerance: (J)±5% unless otherwise noted.  
 2. CAPACITORS  
 Unit: p-pF or μF unless otherwise noted.  
 Ratings:  
 Capacity (μF)/Voltage (V) unless otherwise noted.  
 Rated Voltage: 50V expect for electrolytic capacitors.  
 3. DIODES  
 Indicated in 1SS133-T

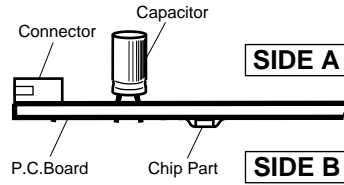
# 3. PCB CONNECTION DIAGRAM

## NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.
3. The parts mounted on this PCB include all necessary parts for several destination.

Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

## 4. Viewpoint of PCB diagrams



## 3.1 REAR SP ASSY

### H F REAR SP ASSY

