

Service Manual

ORDER NO.
RRV2947

DVD/CD RECEIVER

XV-DV323

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

Model	Type	Power Requirement	Region No.	Remarks
XV-DV323	LFXJ	AC110-120V	3	
XV-DV323	MLXJ/NC	AC220-230V	3	
XV-DV323	YLXJ/NC	AC240V	3	

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

Model No.	Order No.	Remarks
XV-DV740/KUCXJ	RRV2946	

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

SAFETY INFORMATION



This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual. Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

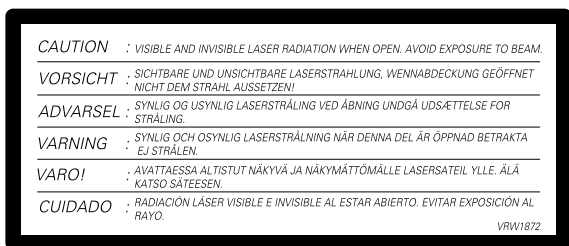
WARNING !

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

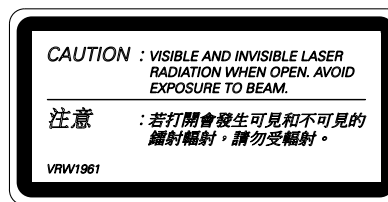
LASER DIODE CHARACTERISTICS

FOR DVD : MAXIMUM OUTPUT POWER : 5 mW
WAVELENGTH : 650 nm
FOR CD : MAXIMUM OUTPUT POWER : 7 mW
WAVELENGTH : 780 nm

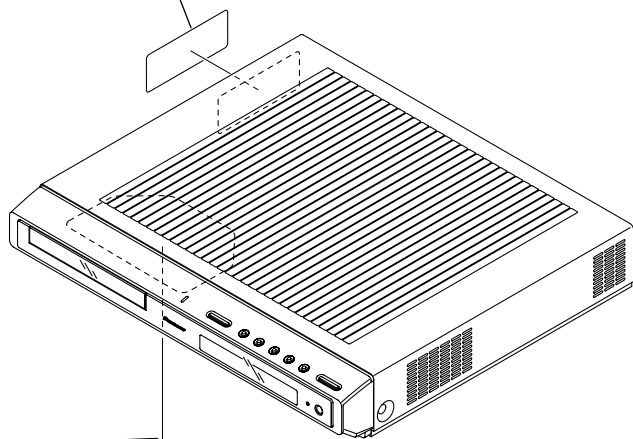
LABEL CHECK



VRW1872
(MLXJ/NC and YLXJ/NC Types)



VRW1961
(LFXJ Type)



Name Label

CLASS 1
LASER PRODUCT

Additional Laser Caution

- Laser Interlock Mechanism**
 - Loading switch (S101 on the LOAB Assy) is used for interlock mechanism of the laser.
 - When this switch turned ON in SW2 (CLOSE) side (OPEN signal is 0V and CLOSE signal is 3.5V), a laser becomes the status which can completely oscillation.
 - Furthermore, the laser completely oscillates in the disc judgment and disc playback.
 - When player is power ON state and laser diode is not completely oscillating, 780nm laser diode is always oscillating by half power.
 - Laser diode is driving with Q201 (650nm LD) and Q211 (780nm LD) on the DVDM Assy.
 - Therefore, when short-circuit between the emitter and collector of these transistors or the base voltage is supplied for transistors turn on, the laser oscillates. (failure mode)
 - In the test mode *, there is the mode that the laser oscillates except for the disc judgment and playback. LD ON mode in the test mode oscillates with the laser forcibly.
 - The interlock mechanism mentioned above becomes invalid in this mode.
- When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

* : Refer to page 78 on the service manual RRV2946.

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.
- 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 $\boxed{5} \boxed{6} \boxed{1} J$
 47k Ω \rightarrow 47×10^3 \rightarrow 473 RD1/4PU $\boxed{4} \boxed{7} \boxed{3} J$
 0.5 Ω \rightarrow R50 RN2H $\boxed{R} \boxed{5} \boxed{0} K$
 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 562×10^1 \rightarrow 5621 RN1/4PC $\boxed{5} \boxed{6} \boxed{2} \boxed{1} F$

■ CONTRAST TABLE

XV-DV323/LFXJ, MLXJ/NC, YLXJ/NC and XV-DV740/KUCXJ are constructed the same except for the following :

No.	Mark	Symbol and Description	Part No.				Remarks
			XV-DV740 /KUCXJ	XV-DV323 /LFXJ	XV-DV323 /MLXJ/NC	XV-DV323 /YLXJ/NC	
PCB ASSEMBLIES							
P9- 5	NSP	MAIN ASSY	XWM3253	XWM3240	XWM3240	XWM3240	
		└ CONTROL ASSY	XWZ3882	XWZ3863	XWZ3863	XWZ3863	
P9- 8	NSP	COMPLEX ASSY	XWM3256	XWM3247	XWM3246	XWM3246	
		└ POWER ASSY	XWZ3885	XWZ3872	XWZ3871	XWZ3871	
PACKING SECTION							
P7- 1	Δ	Power Cord	ADG7021	ADG7098	ADG1154	ADG1154	
P7- 8		Operating Instructions (English)	XR3037	XR3036	XR3036	XR3036	
P7-14		Operating Instructions (French)	XRC3147	Not used	Not used	Not used	
P7-17		Operating Instructions (Chinese)	Not used	XRC3145	XRC3145	XRC3145	
		Operating Instructions (English/French)	XRE3084	Not used	Not used	Not used	
P7-21	NSP	Operating Instructions (English/Chinese)	Not used	XRE3082	XRE3082	XRE3082	
		Packing Case	XHD3433	XHD3416	XHD3414	XHD3414	
P7-23		Warranty Card	ARY7045	Not used	Not used	Not used	
EXTERIOR SECTION							
P9- 4		FM/AM TUNER Unit	AXX7172	AXX7173	AXX7173	AXX7173	
P9-14	Δ	Power Transformer (AC110-120V)	XTS3075	XTS3075	Not used	Not used	
P9-14	Δ	Power Transformer (AC220-230V)	Not used	Not used	XTS3077	Not used	
P9-14	Δ	Power Transformer (AC240V)	Not used	Not used	Not used	XTS3078	
P9-15	Δ	Fuse (FU1 : 6.3A)	REK1069	REK1069	Not used	Not used	
P9-15	Δ	Fuse (FU1 : T2.5A)	Not used	Not used	REK1026	REK1026	
P9-16	Δ	Fuse (FU2 : 6.3A)	REK1069	REK1069	Not used	Not used	
P9-16	Δ	Fuse (FU2 : T5.0A)	Not used	Not used	REK1029	REK1029	
P9-24		Rear Panel	XNC3298	XNC3282	XNC3270	XNC3280	
P9-54		Name Label	XAX3456	XAX3475	XAX3454	XAX3454	
P9-55	NSP	Fuse Card	AAX2374	AAX2374	Not used	Not used	
P9-63	NSP	Energy Star Label	AAX8022	Not used	Not used	Not used	No. 1 No. 2 *1
		Push Rivet	Not used	Not used	XEC3034	XEC3034	
		Fan Barrier	Not used	Not used	XMR3089	XMR3089	
		Caution Label	Not used	VRW1961	VRW1872	VRW1872	
		SISIR Label	Not used	Not used	XAX3465	Not used	
	NSP	Black Label	Not used	XAX3394	Not used	Not used	
FRONT SECTION							
P11- 9		Front Panel	XMB3155	XMB3163	XMB3163	XMB3163	
P11-17		F.L Barrier	XEC3055	Not used	Not used	Not used	

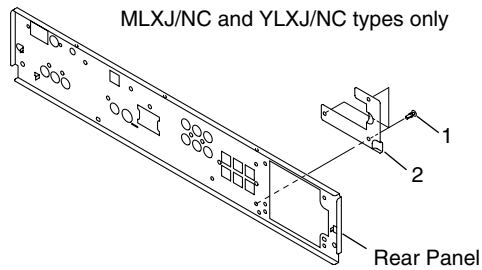
Notes : For PCB ASSEMBLIES, Refer to "CONTRAST OF PCB ASSEMBLIES".

The numbers in the remarks column correspond to the numbers on the "EXPLODED VIEWS".

*1 Refer to "LABEL CHECK".

■ EXPLODED VIEWS

■ EXTERIOR SECTION



■ CONTRAST OF PCB ASSEMBLIES

F CONTROL ASSY

XWZ3863 and XWZ3882 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3882	XWZ3863	
	IC3003, IC3051-IC3053, IC3055-IC3058 C3141, C3142 C3176 C3179 C3183	BA4558F CKSRYB223K50 CKSRYB123K50 CKSRYB563K16 CKSRYB183K25	NJM4558MD CKSRYB183K25 CKSRYB153K50 CKSRYB104K16 CKSRYB273K16	
	C3184, C3185 R3107, R3108 R3147 R3155, R3156 R3157, R3158	Not used RS1/16S432J RS1/16S104J RS1/16S471J RS1/16S562J	CKSRYB103K50 RS1/16S562J RS1/16S823J RS1/16S122J RS1/16S362J	
	R3184 R5539	RS1/16S682J Not used	RS1/16S822J RS1/16S473J	

J POWER ASSY

XWZ3872, XWZ3871 and XWZ3885 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ3885	XWZ3872	XWZ3871	
	Q52 D55	2SC4081 UDZS20B	2SC4081 UDZS20B	Not used Not used	
△	T2 TRANSFORMER	ATT7079	ATT7079	ATT7079	
△	R1 (2.2MΩ/ 1/2W) R55	RCN1080 RS1/16S222J	Not used RS1/16S222J	Not used Not used	
	R56	RS1/16S223J	RS1/16S223J	Not used	
△	AN1 1P AC INLET KN2 WRAPPING TERMINAL	XKP3042 VNF1084	XKP3042 Not used	XKP3041 Not used	