

Service Manual

ORDER NO.
RRV3594

DVD/CD RECEIVER

XV-DV161

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

Model	Type	Power Requirement	Region No.	Remarks
XV-DV161	WLXJ	AC 220 V to 240 V	3	
XV-DV161	TDXJ/RB	AC 110 V to 240 V	2	
XV-DV161	TDXJ/RA	AC 110 V to 240 V	1	
XV-DV161	NTXJ	AC 220 V	3	
XV-DV161	LFXJ	AC 110 V	3	
XV-DV161	GDRXJ	AC 110 V to 220 V	4	

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

Model No.	Order No.	Remarks
XV-DV370/KUCXJ	RRV3592	

● **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 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

CAUTION : CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO THE BEAM.

注意：打開時會有 CLASS 3B 可見和不可見雷射輻射，請勿受雷射束輻射。

VRW2159

XV-DV161/LFXJ : VRW2159

CAUTION CLASS 3B VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO THE BEAM.
ATTENTION RADIATIONS LASER VISIBLES ET INVISIBLES DE CLASSE 3B QUAND OUVERT. ÉVITEZ TOUT EXPOSITION AU FAISCEAU.
ADVARSEL KLASSE 3B SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGA UDSÆTTELSE FOR STRÅLING.
VARNING KLASSE 3B SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. UNDVIK ATT UTSÄTTA DIG FÖR STRÅLEN.
VORSICHT BEI GEÖFFNETER ABDECKUNG IST SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG DER KLASSE 3B IM GERÄTEINNEREN VORHANDEN. NICHT DEM LASERSTRAHLAUSSETZEN!
PRECAUCIÓN CUANDO SE ABRE HAY RADIACIÓN LASER DE CLASE 3B VISIBLE E INVISIBLE. EVITE LA EXPOSICIÓN A LOS RAYOS LASER.
VARO! AVATTAESSA OLET ALTTIINA NÄKYVÄLLE JA NÄKYMÄTTÖMÄLLE LUOKAN 3B LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VRW2257-A

XV-DV161/WLXJ, GDRXJ, NTXJ, TDXJ/RA, TDXJ/RB : VRW2257

Additional Laser Caution

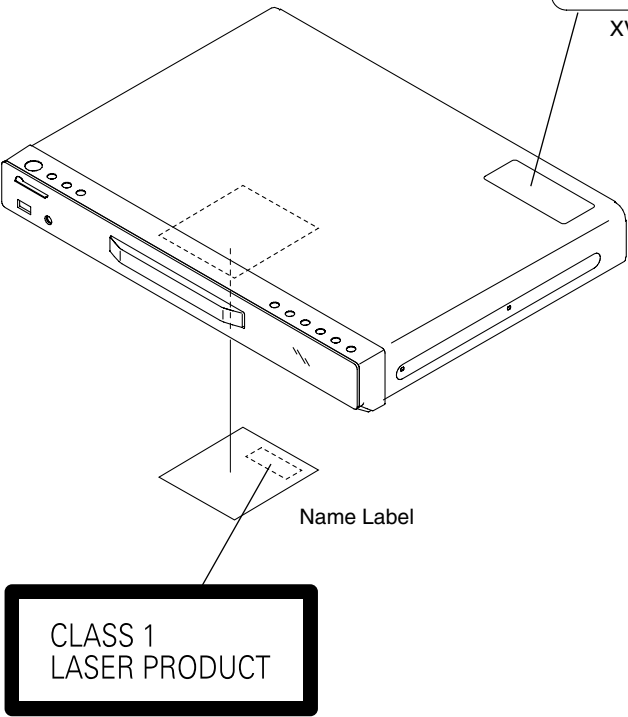
1. Laser Interlock Mechanism
- Loading switch (S101 on the LOAB Assy) is used for interlock mechanism of the laser.
- When this switch turned ON in SW2 (CLOSE) side (OPEN signal is 0 V and CLOSE signal is 3.5 V), a laser becomes the status which can completely oscillation.
- Furthermore, the laser completely oscillates in the disc judgment and disc playback.
- When player is power ON state and laser diode is not completely oscillating, 780 nm laser diode is always oscillating by half power.
 - Laser diode is driving with Q307 (650 nm LD) and Q308 (780 nm LD) on the DVD MAIN 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.

2. 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 25 on the service manual RRV3592.



1. CONTRAST OF MISCELLANEOUS PARTS

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

● The  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 → 56 × 10¹ → 561 RD1/4PU    J

47k Ω → 47 × 10³ → 473 RD1/4PU    J

0.5 Ω → R50 RN2H    K

1 Ω → 1R0 RS1P    K

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

5.62k Ω → 562 × 10¹ → 5621 RN1/4PC     F

■ CONTRAST TABLE

XV-DV161/WLXJ, TDXJ/RB, TDXJ/RA, NTXJ, LFXJ, GDRXJ and XV-DV370/KUCXJ are constructed the same except for the following :

Mark	Ref. No.	Symbol and Description	Part No.							Remarks
			XV-DV370/KUCXJ	XV-DV161/WLXJ	XV-DV161/TDXJ/RB	XV-DV161/TDXJ/RA	XV-DV161/NTXJ	XV-DV161/LFXJ	XV-DV161/GDRXJ	
NSP	P51- 2	PCB ASSEMBLIES DVD MAIN Assy	XWM3343	XWM3346	XWM3350	XWM3368	XWM3347	XWM3348	XWM3349	
	P51- 4	COMPLEX Assy	XWM3372	XWM3371	XWM3371	XWM3371	XWM3371	XWM3371	XWM3371	
	P51- 5	└ USB Assy	XWZ4259	XWZ4260	XWZ4260	XWZ4260	XWZ4260	XWZ4260	XWZ4260	
	P51- 5	└ KEY Assy	XWZ4261	XWZ4262	XWZ4262	XWZ4262	XWZ4262	XWZ4262	XWZ4262	
	P51- 6	└ LED Assy	XWZ4263	Not used	Not used	Not used	Not used	Not used	Not used	
	 P51- 9	POWER SUPPLY Unit	XWR3014	XWR3012	XWR3012	XWR3012	XWR3012	XWR3012	XWR3012	*1
NSP  NSP 	P51-10	FM/AM TUNER Unit	AXX7250	AXX7251	AXX7251	AXX7251	AXX7251	AXX7251	AXX7251	*1
	P49- 1	PACKING SECTION Power Cord	ADG7021	ADG1127	ADG1127	ADG1127	ADG1127	ADG7097	ADG1127	
	P49- 8	Power Cord	Not used	Not used	Not used	ADG1158	Not used	Not used	XDG3009	
	P49- 8	Warranty Card	ARY7045	Not used	Not used	ARY7025	XRY3004	Not used	Not used	
	P49-10	Polyethylen Bag(Warranty Card)	Not used	Not used	Not used	Not used	AHG7099	Not used	Not used	
	P49-10	Operating Instructions (English/French)	XRE3158	Not used	Not used	Not used	Not used	Not used	Not used	
	P49-10	Operating Instructions (English/Trad-Chinese)	Not used	XRE3159	Not used	Not used	Not used	XRE3159	Not used	
	P49-10	Operating Instructions (Arabic)	Not used	Not used	XRC3296	Not used	Not used	Not used	Not used	
	P49-10	Operating Instructions (English)	Not used	Not used	XRB3078	Not used	Not used	Not used	Not used	
	P49-10	Operating Instructions (English/Spanish)	Not used	Not used	Not used	XRE3160	Not used	Not used	XRE3160	
	P49-10	Operating Instructions (Thai)	Not used	Not used	Not used	Not used	XRC3295	Not used	Not used	
	P49-14	Setup Guide (English/French)	XRE3146	Not used	Not used	Not used	Not used	Not used	Not used	
	P49-14	Setup Guide (English/Trad-Chinese)	Not used	XRE3147	Not used	Not used	Not used	XRE3147	Not used	
	P49-14	Setup Guide (English/Arabic)	Not used	Not used	XRE3149	Not used	Not used	Not used	Not used	
	P49-14	Setup Guide (English/Spanish)	Not used	Not used	Not used	XRE3148	Not used	Not used	XRE3148	
	P49-14	Setup Guide (Thai)	Not used	Not used	Not used	Not used	XRC3285	Not used	Not used	
	P49-22	Packing Case	XHD3706	XHD3709	XHD3713	XHD3717	XHD3710	XHD3711	XHD3712	
	P49-22	Service Map (Thai)	Not used	Not used	Not used	Not used	XRY3005	Not used	Not used	
	P49-22	Power Plug Adapter	Not used	Not used	Not used	Not used	Not used	Not used	XKM3001	Accessories
NSP 		EXTERIOR SECTION								
	P51-18	3P Flexible Cable/60V (J1906)	XDD3229	Not used	Not used	Not used	Not used	Not used	Not used	
	P51-19	5P Flexible Cable/60V (J1905)	XDD3231	Not used	Not used	Not used	Not used	Not used	Not used	
	P51-19	3P Flexible Cable/60V (J1905)	Not used	XDD3230	XDD3230	XDD3230	XDD3230	XDD3230	XDD3230	
	P51-20	15P Flexible Cable/60V(J1904)	XDD3234	Not used	Not used	Not used	Not used	Not used	Not used	
NSP 	P51-20	13P Flexible Cable/60V(J1904)	Not used	XDD3233	XDD3233	XDD3233	XDD3233	XDD3233	XDD3233	

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

*1 : FM/AM TUNER UNIT has no service parts. POWER SUPPLY Unit has no service parts.

For TDXJ/RA type, Duty free model have XDG3033 instead of ADG1158. Operation of Power Cord change done by Japan side.

Mark	Ref. No.	Symbol and Description	Part No.							Remarks
			XV-DV370 /KUCXJ	XV-DV161 /WLXJ	XV-DV161 /TDXJ/RB	XV-DV161 /TDXJ/RA	XV-DV161 /NTXJ	XV-DV161 /LFXJ	XV-DV161 /GDRXJ	
NSP	P51-25	Rear Panel	XNC3499	XNC3501	XNC3508	XNC3512	XNC3505	XNC3506	XNC3507	
	P51-26	Diffusion Sheet	XAK3577	Not used	Not used	Not used	Not used	Not used	Not used	
	P51-27	Front Panel Assy	XXG3333	XXG3336	XXG3336	XXG3336	XXG3336	XXG3336	XXG3336	
	P51-29	Button	XAD3254	XAD3255	XAD3255	XAD3255	XAD3255	XAD3255	XAD3255	
NSP	P51-30	Display Window	XAK3590	XAK3591	XAK3591	XAK3591	XAK3591	XAK3591	XAK3591	
NSP	P51-31	Front Panel	XMB3273	XMB3272	XMB3272	XMB3272	XMB3272	XMB3272	XMB3272	
	P51-34	Tray Panel	XAK3573	XAK3576	XAK3576	XAK3576	XAK3576	XAK3576	XAK3576	
NSP	P51-38	Name Label	XAL3261	XAL3266	XAL3266	XAL3269	XAL3266	XAL3267	XAL3268	
NSP	P51-40	Energy Star Label	AA8022	Not used	Not used	Not used	Not used	Not used	Not used	
	P51-43	Screw	BSZ30P060FTC	Not used	Not used	Not used	Not used	Not used	Not used	
B		Laser Caution Label	Not used	VRW2257	VRW2257	VRW2257	VRW2257	VRW2159	VRW2257	*2

*2 : Refer to “ LABEL CHECK ” .

■ CONTRAST OF PCB ASSEMBLIES

BF DVD MAIN ASSY

XWM3346, XWM3350, XWM3368 and XWM3343 are constructed the same except for the following :

Mark	Symbol and Description	Part No.				Remarks
		XWM3343	XWM3346	XWM3350	XWM3368	
⚠	IC931	MT1392E/C-L	Not used	Not used	Not used	
	IC981	NJM2872BF05	Not used	Not used	Not used	
	Q933	RT1N144M	Not used	Not used	Not used	
	Q934	RT3P22M	Not used	Not used	Not used	
	D933	UDZS5R1(B)	Not used	Not used	Not used	
	L931, L936, L937 CHIP BEADS	ATL7010	Not used	Not used	Not used	
	L932, L933, L934, L935 COIL	ATH7022	Not used	Not used	Not used	
	JA931 HDMI CONNECTOR	AKP1318	Not used	Not used	Not used	
	CN5601 15P CONNECTOR	CKS3380	Not used	Not used	Not used	
	CN5601 13P CONNECTOR	Not used	CKS3378	CKS3378	CKS3378	
	R240, R247, R257, R266, R931, R973	RS1/16S0R0J	Not used	Not used	Not used	
	R248, R262, R263	RS1/16S330J	Not used	Not used	Not used	
	R264, R265, R267, R271	RAB4C330J	Not used	Not used	Not used	
	R906, R911	RS1/16S100J	Not used	Not used	Not used	
	R914	RS1/16S103J	Not used	Not used	Not used	
	R915, R970	RS1/16S102J	Not used	Not used	Not used	
	R933	RS1/16S561J	Not used	Not used	Not used	
	R934	RS1/16S5100F	Not used	Not used	Not used	
	R959, R961	RS1/16S472J	Not used	Not used	Not used	
	R960, R962	RS1/16S272J	Not used	Not used	Not used	
E	R966	RS1/16S473J	Not used	Not used	Not used	
	R5513	RD1/4PU393J	RD1/4PU473J	RD1/4PU104J	RD1/4PU393J	
	R5514	RD1/4PU683J	Not used	Not used	Not used	
	R5515	RD1/4PU333J	Not used	RD1/4PU103J	RD1/4PU513J	
	R5516	RD1/4PU153J	RD1/4PU473J	RD1/4PU473J	RD1/4PU473J	
F	R5536	RS1/16S221J	Not used	Not used	Not used	
	C931, C933, C935, C936, C942, C943, C944	CKSRYB104K16	Not used	Not used	Not used	
	C932, C953	CEAT470M35	Not used	Not used	Not used	
	C934, C956, C987	CKSRYB102K50	Not used	Not used	Not used	
	C945	CKSRYB562K50	Not used	Not used	Not used	
	C946, C951, C954, C955, C984, C985	CKSRYB104K16	Not used	Not used	Not used	
	C952	CEAT100M50	Not used	Not used	Not used	
	C982	CKSQYB225K10	Not used	Not used	Not used	
	C983	CKSQYB105K16	Not used	Not used	Not used	

B F DVD MAIN ASSY

XWM3347, XWM3348, XWM3349 and XWM3343 are constructed the same except for the following :

Mark	Symbol and Description	Part No.				Remarks
		XWM3343	XWM3347	XWM3348	XWM3349	
⚠	IC931	MT1392E/C-L	Not used	Not used	Not used	
	IC981	NJM2872BF05	Not used	Not used	Not used	
	Q933	RT1N144M	Not used	Not used	Not used	
	Q934	RT3P22M	Not used	Not used	Not used	
	D933	UDZS5R1(B)	Not used	Not used	Not used	
	L931, L936, L937 CHIP BEADS	ATL7010	Not used	Not used	Not used	
	L932, L933, L934, L935 COIL	ATH7022	Not used	Not used	Not used	
	JA931 HDMI CONNECTOR	AKP1318	Not used	Not used	Not used	
	CN5601 15P CONNECTOR	CKS3380	Not used	Not used	Not used	
	CN5601 13P CONNECTOR	Not used	CKS3378	CKS3378	CKS3378	
	R240, R247, R257, R266, R931, R973	RS1/16S0R0J	Not used	Not used	Not used	
	R248, R262, R263	RS1/16S330J	Not used	Not used	Not used	
	R264, R265, R267, R271	RAB4C330J	Not used	Not used	Not used	
	R906, R911	RS1/16S100J	Not used	Not used	Not used	
	R914	RS1/16S103J	Not used	Not used	Not used	
	R915, R970	RS1/16S102J	Not used	Not used	Not used	
	R933	RS1/16S561J	Not used	Not used	Not used	
	R934	RS1/16S5100F	Not used	Not used	Not used	
	R959, R961	RS1/16S472J	Not used	Not used	Not used	
	R960, R962	RS1/16S272J	Not used	Not used	Not used	
	R966	RS1/16S473J	Not used	Not used	Not used	
	R5513	RD1/4PU393J	RD1/4PU393J	RD1/4PU333J	RD1/4PU103J	
	R5514	RD1/4PU683J	Not used	Not used	Not used	
	R5515	RD1/4PU333J	RD1/4PU223J	RD1/4PU123J	RD1/4PU104J	
	R5516	RD1/4PU153J	RD1/4PU473J	RD1/4PU473J	RD1/4PU473J	
	R5536	RS1/16S221J	Not used	Not used	Not used	
	C931, C933, C935, C936, C942, C943, C944	CKSRYB104K16	Not used	Not used	Not used	
	C932, C953	CEAT470M35	Not used	Not used	Not used	
	C934, C956, C987	CKSRYB102K50	Not used	Not used	Not used	
	C945	CKSRYB562K50	Not used	Not used	Not used	
	C946, C951, C954, C955, C984, C985	CKSRYB104K16	Not used	Not used	Not used	
	C952	CEAT100M50	Not used	Not used	Not used	
	C982	CKSQYB225K10	Not used	Not used	Not used	
	C983	CKSQYB105K16	Not used	Not used	Not used	

E F USB ASSY

XWZ4260 and XWZ4259 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ4259	XWZ4260	
	CN5906 15P CONNECTOR	CKS3380	Not used	
	CN5902 13P CONNECTOR	Not used	CKS3378	For CN5906
	CN5907 5P CONNECTOR	CKS3370	Not used	
	CN5903 3P CONNECTOR	Not used	CKS3368	For CN5907

G F KEY ASSY

XWZ4262 and XWZ4261 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ4261	XWZ4262	
	CN5908 5P CONNECTOR	CKS3370	Not used	
	CN5904 3P CONNECTOR	Not used	CKS3368	For CN5908
	CN5909 3P CONNECTOR	CKS3368	Not used	