JVC

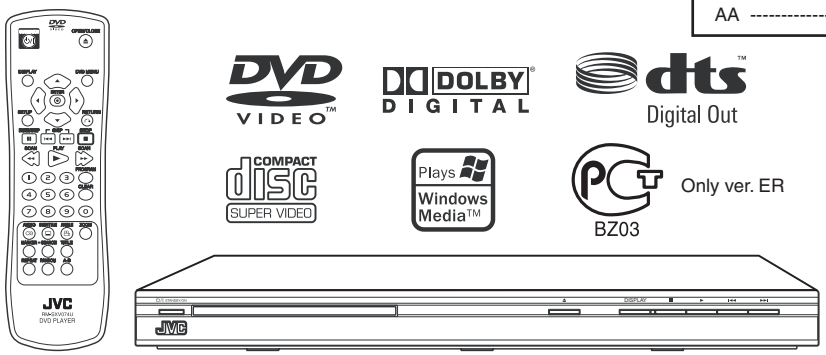
SERVICE MANUAL

DVD PLAYER

XV-N350BEU, XV-N350BEY, XV-N350BEK, XV-N350BER, XV-N350BAG, XV-N352SEU, XV-N352SEY, XV-N352SEK, XV-N352SER, XV-N352SAG, XV-N352SAS, XV-N352SAA

Area Suffix

EU	--------	Western Europe
EY	--------	Northern Europe
EK	----------	U.K.
ER	----	Russian Federation
AG	----------	Universal Asia
AS	----------	Saudi Arabia
AA	----------	Australia



Only ver. ER

BZ03

XV-N350BEU,XV-N350BEY,XV-N350BEK,XV-N350BER,XV-N350BAG,XV-N352SEU,
XV-N352SEY,XV-N352SEK,XV-N352SER,XV-N352SAG,XV-N352SAS,XV-N352SAA [D7P1]

This model is designed based on "XV-N450B,XV-N452S" without Divx specification.
Only a difference part and a parts list are mentioned in this service manual.
Please refer to another service manual XV-N450B, XV-N452S (issue number: YD118 2007/6) about the part which is not mentioned in this service manual.
A Printed circuit board and a Standard schematic diagram of an SCART board please refer to issue number : YD122.

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No.YD123
2007/6

SPECIFICATION

		XV-N350BEU,XV-N350BEY,XV-N350BEK,XV-N350BER, XV-N352SEU,XV-N352SEY,XV-N352SEK,XV-N352SER	XV-N350BAG,XV-N352SAG, XV-N352SAS,XV-N352SAA
General			
Power requirements		AC 220-240 V, 50/60 Hz	AC 110-240 V, 50/60 Hz
Power consumption		8 W	
Dimensions (Approx.)		430 x 35 x 201 mm (17 x 1.4 x 7.9 inches) (W x H x D) without foot	
Net weight (Approx.)		1.6 kg (3.5 lbs)	
Operating temperature		5 °C to 35 °C (41 °F to 95 °F)	
Operating humidity		5 % to 90 %	
Outputs			
VIDEO OUT		1.0 V (p-p), 75 Ω, sync negative, RCA jack × 1 / SCART (TO TV)	1.0 V (p-p), 75 Ω, sync negative, RCA jack × 1
S-VIDEO OUT		-	(Y) 1.0 V (p-p), 75 Ω,negative sync, Mini DIN 4-pin × 1 (C) 0.3 V (p-p),75 Ω
COMPONENT VIDEO OUT		(Y) 1.0 V (p-p), 75 Ω,negative sync, RCA jack × 1, (Pb)/(Pr) 0.7 V (p-p),75 Ω, RCA jack x 2	
AUDIO OUT		2.0 Vrms (1 KHz, 0 dB), 600 Ω, RCA jack (L, R) × 1 / SCART (TO TV)	2.0 Vrms (1 KHz, 0 dB), 600 Ω, RCA jack (L, R) × 1
DIGITAL OUT (COAXIAL)		0.5 V (p-p), 75 Ω, RCA jack × 1	
System			
Laser Power	For DVD	Wavelength : 653 to 663 nm Output : 1.0 mW	
	For CD	Wavelength : 770 to 810 nm Output : 0.4 mW	
Signal system		PAL/NTSC	
Frequency response		DVD (PCM 96 kHz): 8 Hz to 44 kHz DVD (PCM 48 kHz): 8 Hz to 22 kHz CD: 8 Hz to 20 kHz	
Signal-to-noise ratio		More than 90 dB (ANALOG OUT connectors only)	
Harmonic distortion		Less than 0.02%	
Dynamic range		More than 95 dB (DVD/CD)	
Accessories			
Video cable (1), Audio cable (1), Remote control (1), Batteries (2)			

Note:

Design and specifications are subject to change without prior notice.

SECTION 1
PRECAUTION

1.1 Safety Precautions

(1) This design of this product contains special hardware and many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Services should be performed by qualified personnel only.

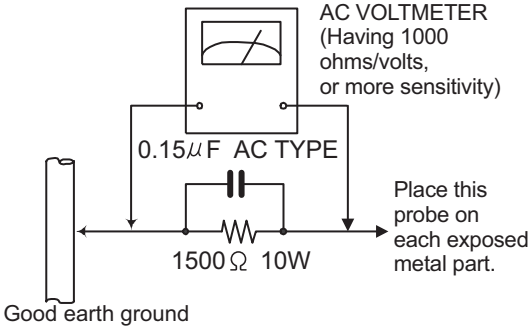
(2) Alterations of the design or circuitry of the product should not be made. Any design alterations of the product should not be made. Any design alterations or additions will void the manufacturers warranty and will further relieve the manufacture of responsibility for personal injury or property damage resulting therefrom.

(3) Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the Parts List of Service Manual. Electrical components having such features are identified by shading on the schematics and by (⚠) on the Parts List in the Service Manual. The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement parts shown in the Parts List of Service Manual may create shock, fire, or other hazards.

(4) The leads in the products are routed and dressed with ties, clamps, tubings, barriers and the like to be separated from live parts, high temperature parts, moving parts and/or sharp edges for the prevention of electric shock and fire hazard. When service is required, the original lead routing and dress should be observed, and it should be confirmed that they have been returned to normal, after reassembling.

(5) Leakage shock hazard testing)
After reassembling the product, always perform an isolation check on the exposed metal parts of the product (antenna terminals, knobs, metal cabinet, screw heads, headphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.Do not use a line isolation transformer during this check.

- Plug the AC line cord directly into the AC outlet. Using a "Leakage Current Tester", measure the leakage current from each exposed metal parts of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground. Any leakage current must not exceed 0.5mA AC (r.m.s.).
- Alternate check method
  Plug the AC line cord directly into the AC outlet. Use an AC voltmeter having, 1,000 ohms per volt or more sensitivity in the following manner. Connect a 1,500 ohm 10W resistor paralleled by a 0.15 F AC-type capacitor between an exposed metal part and a known good earth ground.
  Measure the AC voltage across the resistor with the AC voltmeter.
  Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Voltage measured any must not exceed 0.75 V AC (r.m.s.). This corresponds to 0.5 mA AC (r.m.s.).



1.2 Warning

(1) This equipment has been designed and manufactured to meet international safety standards.

(2) It is the legal responsibility of the repairer to ensure that these safety standards are maintained.

(3) Repairs must be made in accordance with the relevant safety standards.

(4) It is essential that safety critical components are replaced by approved parts.

(5) If mains voltage selector is provided, check setting for local voltage.

1.3 Caution

Burrs formed during molding may be left over on some parts of the chassis.
Therefore, pay attention to such burrs in the case of preforming repair of this system.

1.4 Critical parts for safety

In regard with component parts appearing on the silk-screen printed side (parts side) of the PWB diagrams, the parts that are printed over with black such as the resistor (▬), diode (▮) and ICP (●) or identified by the "⚠" mark nearby are critical for safety. When replacing them, be sure to use the parts of the same type and rating as specified by the manufacturer. (Except the JC version)

1.5 Preventing static electricity

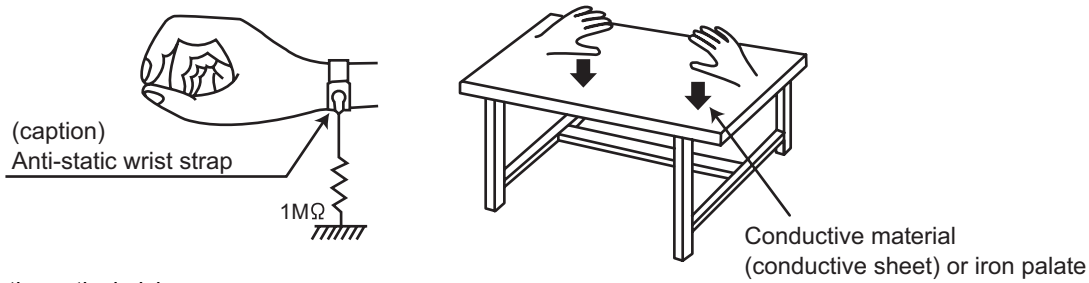
Electrostatic discharge (ESD), which occurs when static electricity stored in the body, fabric, etc. is discharged, can destroy the laser diode in the traverse unit (optical pickup). Take care to prevent this when performing repairs.

1.5.1 Grounding to prevent damage by static electricity

Static electricity in the work area can destroy the optical pickup (laser diode) in devices such as DVD players.
Be careful to use proper grounding in the area where repairs are being performed.

(1) Ground the workbench
Ground the workbench by laying conductive material (such as a conductive sheet) or an iron plate over it before placing the traverse unit (optical pickup) on it.

(2) Ground yourself
Use an anti-static wrist strap to release any static electricity built up in your body.



(3) Handling the optical pickup
- In order to maintain quality during transport and before installation, both sides of the laser diode on the replacement optical pickup are shorted. After replacement, return the shorted parts to their original condition. (Refer to the text.)
- Do not use a tester to check the condition of the laser diode in the optical pickup. The tester's internal power source can easily destroy the laser diode.

1.6 Handling the traverse unit (optical pickup)

(1) Do not subject the traverse unit (optical pickup) to strong shocks, as it is a sensitive, complex unit.
(2) Cut off the shorted part of the flexible cable using nippers, etc. after replacing the optical pickup. For specific details, refer to the replacement procedure in the text. Remove the anti-static pin when replacing the traverse unit. Be careful not to take too long a time when attaching it to the connector.
(3) Handle the flexible cable carefully as it may break when subjected to strong force.
(4) I t is not possible to adjust the semi-fixed resistor that adjusts the laser power. Do not turn it.

1.7 Precautions of the safe use of battery

- Store the battery in a place where children cannot reach.If a child accidentally swallows the battery, consult a doctorimmediately.
- Do not recharge, short, disassemble or heat the battery or dispose of it in a fire.
  Doing any of these things may cause the battery to give off heat, crack, or start a fire.
- Do not leave the battery with other metallic materials.Doing this may cause the battery to give off heat, crack, or start a fire.
- When throwing away or saving the battery, wrap it in tape and insulate; otherwise, the battery may start to give off heat, crack, or start a fire.
- Do not poke the battery with tweezers or similar tools.Doing this may cause the battery to give off heat, crack, or start a fire.
- Dispose of batteries in the proper manner, according to federal, state, and local regulations.

1.8 Important for laser products

1.CLASS 1 LASER PRODUCT

2.CAUTION : VISIBLE AND/OR INVISIBLE CLASS 1M LASER RADIATION WHEN OPEN.
DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

3.CAUTION : There are no serviceable parts inside the Laser Unit. Do not disassemble the Laser Unit. Replace the complete Laser Unit if it malfunctions.

4.CAUTION : The laser products uses visible and / or invisible laser radiation and is equipped with safety switches which prevent emission of radiation when the drawer is open and the safety interlocks have failed or are defeated. It is dangerous to defeat the safety switches.

5.CAUTION : If safety switches malfunction, the laser is able to function.

6.CAUTION : Use of controls, adjustments or performance of procedures other than those specified here in may result in hazardous radiation exposure.

⚠ ***CAUTION*** **Please use enough caution not to see the beam directly or touch it in case of an adjustment or operation check.**

CAUTION : VISIBLE AND/OR INVISIBLE CLASS 1M LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.	**VARNING :** Synlig och osynlig laserstråling när den öppnas och spärren är urkopplad. Betrakta ej strålen.
ADVARSEL : Synlig og usynlig laserstråling når maskinen er åben eller interlocken fejler. Undgå direkte eksponering til stråling.	**VARO :** Avattaessa ja suojalukitus ohitettuna tai viallisena olet alttiina näkyvälle ja näkymätttömälle lasersäteilylle. Vältä säteen kohdistumista suoraan itseesi.

SECTION 2
SPECIFIC SERVICE INSTRUCTIONS

Please refer to " XV-N450BUC, XV-N452SUC, XV-N452SUM (issue number : No.YD118 2007/6) " about this section.

SECTION 3
DISASSEMBLY

Please refer to " XV-N450BUC, XV-N452SUC, XV-N452SUM (issue number : No.YD118 2007/6) " about this section.

SECTION 4
ADJUSTMENT

Please refer to " XV-N450BUC, XV-N452SUC, XV-N452SUM (issue number : No.YD118 2007/6) " about this section.

SECTION 5
TROUBLESHOOTING

Please refer to " XV-N450BUC, XV-N452SUC, XV-N452SUM (issue number : No.YD118 2007/6) " about this section.

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