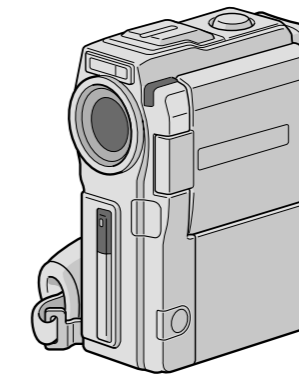


JVC

SERVICE MANUAL

DIGITAL VIDEO CAMERA

GR-DVX80ED/SH/DVX90ED/SH



Mini DV PAL
DSC
DIGITAL
STILL CAMERA

Regarding service information other than these sections, refer to the GR-DVX8EG, DVX10EG service manual (No. 86575). Also, be sure to note important safety precautions provided in the service manual.

SPECIFICATIONS (The specifications shown pertain specifically to the model GR-DVX90ED/SH)

Camcorder	
For General	
Power supply	: DC 6.3 V (Using AC Power Adapter/Charger) DC 7.2 V (Using battery pack)
Power consumption	: Approx. 4.9 W LCD monitor off, viewfinder on : Approx. 5.8 W LCD monitor on, viewfinder off
Dimensions (W x H x D)	: 51 mm x 125 mm x 97 mm (with the LCD monitor closed and the viewfinder pushed back in)
Weight	: Approx. 515 g (without cassette, MultiMediaCard and battery) Approx. 590 g (incl. cassette, MultiMediaCard and battery)
Operating temperature	: 0°C to 40°C
Operating humidity	: 35% to 80%
Storage temperature	: -20°C to 50°C
Pickup	: 1/4" CCD (Progressive Scan)
Lens	: F1.8, f = 3.8 mm to 38 mm, 10:1 power zoom lens
Filter diameter	: ø27 mm
LCD monitor	: 2.5" diagonally measured, LCD panel/TFT active matrix system
Viewfinder	: Electronic viewfinder with 0.44" colour LCD
Speaker	: Monaural
For Digital Video Camera	
Format	: DV format (SD mode)
Signal format	: PAL standard
Recording/Playback format	: Video: Digital component recording : Audio: PCM digital recording, 32 kHz 4-channel (12-bit), 48 kHz 2-channel (16-bit)
Cassette	: Mini DV cassette
Tape speed	: SP: 18.8 mm/s LP: 12.5 mm/s
Maximum recording time (using 80 min. cassette)	: SP: 80 min., LP: 120 min.
For Digital Still Camera	
Storage media	: MultiMediaCard
Compression system	: JPEG (compatible)
File size	: 2 modes (XGA: 1024 x 768 pixels/VGA: 640 x 480 pixels)
Picture quality	: 2 modes (FINE/STANDARD)
Approximate number of storable images (with the provided MultiMediaCard [8 MB], with Sound Effects pre-stored)	: FINE : 46 (VGA), 21 (XGA) STANDARD : 133 (VGA), 64 (XGA)
(with an optional MultiMediaCard [4 MB])	: FINE : 26 (VGA), 12 (XGA) STANDARD : 76 (VGA), 36 (XGA)

(with an optional MultiMediaCard [8 MB])	
FINE	: 54 (VGA), 24 (XGA)
STANDARD	: 155 (VGA), 75 (XGA)
For Connectors	
Video output	: 1 V (p-p), 75 Ω, analogue
Audio output	: 300 mV (rms), 1 kΩ, analogue, stereo
DV Input/output	: 4-pin, IEEE 1394 compliant
Headphone output	: ø3.5 mm, stereo

AC Power Adapter/Charger AA-V51SH or AA-V51ED	
Power requirement	: AC 110 V to 240 V~, 50 Hz/60 Hz
Power consumption	: 23 W
Output	
Charge	: DC 7.2 V, 0.77 A
VTR	: DC 6.3 V, 1.8 A
Dimensions (W x H x D)	: 68 mm x 45 mm x 110 mm
Weight	: Approx. 330 g
AA-V51SH	: Approx. 330 g
AA-V51ED	: Approx. 260 g

Docking Station CU-V502ED	
For General	
Dimensions (W x H x D)	: 55 mm x 36 mm x 107 mm
Weight	: Approx. 89.9 g
For Connectors	
Output	: Y : 1 V (p-p), 75 Ω, analogue C : 0.29 V (p-p), 75 Ω, analogue
Input	: Y : 0.8 V (p-p) - 1.2 V (p-p), 75 Ω, analogue C : 0.2 V (p-p) - 0.4 V (p-p), 75 Ω, analogue
VIDEO	
Video output	: 1 V (p-p), 75 Ω, analogue
Video input	: 0.8 V (p-p) - 1.2 V (p-p), 75 Ω, analogue
AUDIO	
Audio output	: 300 mV (rms), 1 kΩ, analogue, stereo
Audio input	: 300 mV (rms), 50 kΩ, analogue, stereo
JLIP (EDIT)	: ø3.5 mm, 4-pole, mini-head jack (compatible with RC-5325 plug)
PC (DIGITAL STILL)	: ø2.5 mm, 3-pole
External microphone input	: 506 μV (rms), high impedance unbalanced with ø3.5 mm (stereo)
PRINTER	: For an optional video printer equipped with a PRINT DATA connector

Specifications shown are for SP mode unless otherwise indicated. E & O.E. Design and specifications subject to change without notice.

JVC

VICTOR COMPANY OF JAPAN, LIMITED
VIDEO DIVISION

S40894

TABLE OF CONTENTS

DIFFERENT TABLE	1 to 3
5. PARTS LIST	
5.1 PACKING AND ACCESSORY ASSEMBLY <M1>	5-1
5.2 ELECTRICAL PARTS LIST	
MAIN BOARD ASSEMBLY <01>	5-3
MMC BOARD ASSEMBLY <06>	5-14
AUDIO VF BOARD ASSEMBLY <08>	5-14

The following table indicate main different points between models GR-DVX8EG, DVX80ED, DVX80SH, DVX10EG, DVX90ED and GR-DVX90SH.

ITEM \ MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
AC ADAPTER CHARGER	AA-V51EG	AA-V51ED	AA-V51SH	AA-V51EG	AA-V51ED	AA-V51SH
A/V RCA CABLE	Optional	Provided	←	Optional	Provided	←
CONNECTOR, CABLE ADAPTER	Provided	Optional	←	Provided	Optional	←
DOCKING STATION	CU-V503E	CU-V503ED	←	CU-V502E	CU-V502ED	←
DSC	Not used	←	←	Used	←	←
DV	Output only	Input/Output	←	←	Input/Output	←
MULTIMEDIA CARD	Not used	←	←	Used	←	←
S CABLE, S-VIDEO CABLE	Optional	Provided	←	Optional	Provided	←
STROBE	Not used	←	←	Used	←	←

Note: Mark ← is same as left.

The following table indicate different parts number between models GR-DVX8EG, DVX80ED, DVX80SH, DVX10EG, DVX90ED and GR-DVX90SH.

PACKING AND ACCESSORY ASSEMBLY <M1> Note: As for IB (INSTRUCTIONS) and CORE FILTER, refer to sec. 5.

REF. NO.	ITEM \ MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
1	PACKING CASE	LY32032-002A	LY31717-010A	←	LY32032-003A	-	LY31717-016A
△ 5	AC ADAPTER CHARGER	LY20603-002B	LY20603-007B	LY20603-008A	LY20603-002B	LY20603-007B	LY20603-008A
△ 6	DOCKING STATION	LY20590-005A	LY20590-008A	←	LY20590-004A	LY20590-006A	←
8	CD ROM	LY31133-015A	←	←	* LY31133-013A	LY31133-013B	←
9	MULTIMEDIA CARD	-	-	-	QAM0262-002	←	←
34	WARRANTY CARD	BT-54013-1	BT-59011-2	-	BT-54013-1	BT-59011-2	-
35	CONNECTOR, CABLE ADAPTER	PEMC1000-01-02	-	-	PEMC1000-01-02	-	-
37	GUARANTY CARD	-	BT-59012-1	-	-	BT-59012-1	-
40	A/V RCA CABLE	-	YQ31953A	←	-	YQ31953A	←
41	S CABLE, S-VIDEO CABLE	-	QAM0004-004	←	-	QAM0004-004	←

Note: Mark - is not used. Mark ← is same as left. Mark * reference model was also changed.

FINAL ASSEMBLY <M2>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
△ 101	LOWER CASE ASSY		LY20576-004B	←	←	LY20576-005B	←	←
114	ZOOM UNIT		LY31680-002B	←	←	LY31680-003B	LY31680-001B	←
121	CASS.COVER ASSY		LY20602-003A	←	←	LY20602-001A	←	←
121A	PLATE(HINGE)		-	-	-	LY31675-001A	←	←
121B	BRACKET(HINGE)		-	-	-	LY42261-001A	←	←
121C	SHAFT(C)		-	-	-	LY30014-009A	←	←
121E	COVER(C.C)		LY20599-002A	←	←	LY20599-001A	←	←
△ 133	LABEL(UPPER)		LY41605-003A	LY41605-002A	←	LY41605-003A	LY41605-002A	←
134	SUB OPE ASSY		-	-	-	LY31684-001A	←	←
135	CAMERA OPE UNIT		LY20600-003A	←	←	LY20600-002A	LY20600-001A	←
141	SHEET		LY42406-001A	←	←	-	-	-
△ 146	FRONT COVER ASSY		LY20581-004E	LY20581-003D	←	LY20581-008A	LY20581-001D	←
146C	WINDOW(STB)		-	-	-	LY42278-001A	←	←
146H	COVER(AV)		LY42285-002A	←	←	LY42285-001A	LY42285-002A	←
176	SPECIAL SCREW		-	-	-	LY30018-060A	←	←
197	SPECIAL SCREW, X5		LY30018-049A	←	←	LY30018-070A	←	←
205	SPECIAL SCREW		* LY30018-060A	LY30018-0B7A	←	←	←	←
206	SPECIAL SCREW		* LY30018-060A	LY30018-0B7A	←	←	←	←
223	BASE(T.P.)		* LY31693-001A	LY31693-001B	←	* LY31693-001A	LY31693-001B	LY31693-001A
225	BRACKET(BASE)2		* LY42291-001A	LY42291-001B	←	* LY42291-001A	LY42291-001B	←

MONITOR ASSEMBLY <M5>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
△ 500	MONITOR ASSY		LYH20164-004C	LYH20164-006B	←	LYH20164-008A	LYH20164-007B	←
△ 504	MONITOR COVER ASSY		LY20585-006A	LY20585-007A	←	LY20585-008A	LY20585-005A	←

MAIN BOARD ASSEMBLY <01>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
PW	MAIN BOARD ASSY		YB10284E-02	YB10284G-01	←	YB10284H-01	YB10284F-02	←

CCD BOARD ASSEMBLY <03>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
WR1	E-SH C WIRE C-F		* WJR0017-001A	WJR0017-001C	←	* WJR0017-001A	WJR0017-001C	←

Note: Mark - is not used. Mark ← is same as left. Mark * reference model was also changed.

MONITOR BOARD ASSEMBLY <04>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
PW1	MONITOR BOARD ASSY		* YB10289B-01	YB10289C	←	* YB10289B-01	YB10289C	←
OT4	SPACER-A		* LY30016-0F6A	-	-	* LY30016-0F6A	-	-
OT5	SPACER-A		* LY30016-0P9A	-	-	* LY30016-0P9A	-	-

- PULL DOWN BOARD ASSEMBLY -

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
PW2	PULL DOWN BOARD ASSY		* YB20835C	-	-	* YB20835C	-	-
R7527	MG RESISTOR		* NRSA63J-221X	-	-	* NRSA63J-221X	-	-
WR1	THIN WIRE		* YU40017-020-1	-	-	* YU40017-020-1	-	-
WR2	THIN WIRE		* YU40017-050-4	-	-	* YU40017-050-4	-	-

MMC BOARD ASSEMBLY <06>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
PW3	MMC BOARD ASSY		YB10288B3-01	←	←	YB10288A3-01	←	←

STROBE BOARD ASSEMBLY <07>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
PW	STROBE BOARD ASSY		-	-	-	YB10249C	←	←

AUDIO VF BOARD ASSEMBLY <08>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
PW1	AUDIO VF BOARD ASSY		YB10285C2-02	YB10285E2	←	YB10285D2	←	←

SECTION 6 AC POWER ADAPTER

CABINET ASSEMBLY <MA>

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX80ED	GR-DVX80SH	GR-DVX10EG	GR-DVX90ED	GR-DVX90SH
△ 3	POWER CORD		YQ10531-006	PTY10067-037	PTY20290-021	YQ10531-006	PTY10067-037	PTY20290-021

Note: Mark - is not used. Mark ← is same as left. Mark * reference model was also changed.