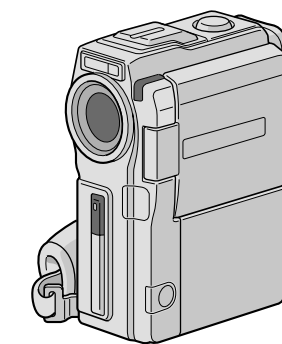


# JVC

## SERVICE MANUAL

### DIGITAL VIDEO CAMERA

# GR-DVX8EA, DVX80A/A-S GR-DVX9EA, DVX90A/A-S



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-DVX9EA, DVX90A/AS)*

Camcorder	
<b>For General</b>	
Power supply	: DC 6.3 V $\text{---}$ (Using AC Power Adapter/Charger) DC 7.2 V $\text{---}$ (Using battery pack)
Power consumption	: Approx. 4.9 W
LCD monitor off, viewfinder on	: Approx. 5.8 W
LCD monitor on, viewfinder off	: 51 mm x 125 mm x 97 mm (with the LCD monitor closed and the viewfinder pushed back in)
Dimensions (W x H x D)	: Approx. 515 g (without cassette, MultiMediaCard and battery) Approx. 590 g (incl. cassette, MultiMediaCard and battery)
Weight	: 0°C to 40°C
Operating temperature	: 35% to 80%
Operating humidity	: -20°C to 50°C
Storage temperature	: 1/4" CCD (Progressive Scan)
Pickup	: F 1.8, f = 3.8 mm to 38 mm, 10:1 power zoom lens
Lens	: $\phi$ 27 mm
Filter diameter	: 2.5" diagonally measured, LCD panel/TFT active matrix system
LCD monitor	: Electronic viewfinder with 0.44" colour LCD
Viewfinder	: Monaural
Speaker	
<b>For Digital Video Camera</b>	
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.
<b>For Digital Still Camera</b>	
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  $\Omega$ , analogue  
Audio output : 300 mV (rms), 1 k $\Omega$ , analogue, stereo  
DV Input/output : 4-pin, IEEE 1394 compliant  
Headphone output :  $\phi$ 3.5 mm, stereo

#### AC Power Adapter/Charger AA-V51EA, AA-V51A or AA-V51A-S

Power requirement : AC 110 V to 240 V $\sim$ , 50 Hz/60 Hz  
Power consumption : 23 W  
Output : DC 7.2 V  $\text{---}$ , 0.77 A  
Charge : DC 6.3 V  $\text{---}$ , 1.8 A  
VTR : 68 mm x 45 mm x 110 mm  
Dimensions (W x H x D)  
Weight : Approx. 270 g  
AA-V51EA : Approx. 260 g  
AA-V51A : Approx. 260 g  
AA-V51A-S

#### Docking Station CU-V502E

#### 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  $\Omega$ , analogue  
C : 0.29 V (p-p), 75  $\Omega$ , analogue  
Input : Y : 0.8 V (p-p) - 1.2 V (p-p), 75  $\Omega$ , analogue  
C : 0.2 V (p-p) - 0.4 V (p-p), 75  $\Omega$ , analogue

VIDEO  
Video output : 1 V (p-p), 75  $\Omega$ , analogue  
Video input : 0.8 V (p-p) - 1.2 V (p-p), 75  $\Omega$ , analogue  
AUDIO  
Audio output : 300 mV (rms), 1 k $\Omega$ , analogue, stereo  
Audio input : 300 mV (rms), 50 k $\Omega$ , analogue, stereo  
JLIP (EDIT) :  $\phi$ 3.5 mm, 4-pole, mini-head jack (compatible with RC-5325 plug)  
PC (DIGITAL STILL) :  $\phi$ 2.5 mm, 3-pole  
External microphone input : 506  $\mu$ V (rms), high impedance unbalanced with  $\phi$ 3.5 mm (stereo) connector  
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

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The following table indicate main different points between models GR-DVX8EG, DVX8EA, DVX80A, DVX80A-S, DVX10EG, DVX9EA, DVX90A and GR-DVX90A-S.

ITEM \ MODEL	GR-DVX8EG	GR-DVX8EA	GR-DVX80A	GR-DVX80A-S	GR-DVX10EG	GR-DVX9EA	GR-DVX90A	GR-DVX90A-S
AC ADAPTER CHARGER	AA-V51EG	AA-V51EA	AA-V51A	AA-V51AS	AA-V51EG	AA-V51EA	AA-V51A	AA-V51AS
A/V RCA CABLE	Optional	Provided	←	←	Optional	Provided	←	←
CONNECTOR, CABLE ADAPTER	Provided	Optional	←	←	Provided	Optional	←	←
CONVERSION PLUG	Optional	←	Provided	←	Optional	←	Provided	←
DOCKING STATION	CU-V503E	←	←	←	CU-V502E	←	←	←
DSC	Not used	←	←	←	Used	←	←	←
DV	Output only	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, DVX8EA, DVX80A, DVX80A-S, DVX10EG, DVX9EA, DVX90A and GR-DVX90A-S.

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

REF NO. \ MODEL	GR-DVX8EG	GR-DVX8EA	GR-DVX80A	GR-DVX80A-S	GR-DVX10EG	GR-DVX9EA	GR-DVX90A	GR-DVX90A-S
1 PACKING CASE	LY32032-002A	LY31717-009A	LY31717-007A	←	LY32032-003A	LY31717-015A	LY31717-013A	←
△ 5 AC ADAPTER CHARGER	LY20603-002B	LY20603-005B	LY20603-009A	LY20603-004A	LY20603-002B	LY20603-005B	LY20603-009A	LY20603-004A
△ 6 DOCKING STATION	LY20590-005A	←	←	←	LY20590-004A	←	←	←
8 CD ROM	LY31133-015A	←	←	←	*LY31133-013A	LY31133-013B	←	←
9 MULTIMEDIA CARD	-	-	-	-	QAM0262-002	←	←	←
34 WARRANTY CARD	BT-54013-1	BT-56001-2	-	-	BT-54013-1	BT-56001-2	-	-
35 CONNECTOR, CABLE ADAPTER	PEMC1000-01-02	-	-	-	PEMC1000-01-02	-	-	-
37 SER.NET CARD	-	BT-56002-2	-	-	-	BT-56002-2	-	-
38 SHEET (CON. PLUG)	-	-	LYT0609-001A	←	-	-	LYT0609-001A	←
40 A/V RCA CABLE	-	YQ31953A	←	←	-	YQ31953A	←	←
41 S CABLE, S-VIDEO CABLE	-	QAM0004-004	←	←	-	QAM0004-004	←	←
△ 42 CONVERSION PLUG	-	-	PEMC1012-02	PEMC1012	-	-	PEMC1012-02	PEMC1012

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-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
△ 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
225	BRACKET (BASE) 2		* LY42291-001A	LY42291-001B	* LY42291-001A	LY42291-001B

**MONITOR ASSEMBLY <M5>**

REF. NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX8EA	GR-DVX80A/A-S	GR-DVX10EG	GR-DVX9EA	GR-DVX90A/A-S
△ 500	MONITOR ASSY		LYH20164-004C	←	LYH20164-006B	LYH20164-008A	LYH20164-005C	LYH20164-007B
△ 504	MONITOR COVER ASSY		LY20585-006A	←	LY20585-007A	LY20585-008A	LY20585-004A	LY20585-005A

**MAIN BOARD ASSEMBLY <01>**

REF NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
PW	MAIN BOARD ASSY		YB10284E-02	YB10284G-01	YB10284H-01	YB10284F-02

**CCD BOARD ASSEMBLY <03>**

REF NO.	ITEM	MODEL	GR-DVX8EG	GR-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
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-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
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-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
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-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
PW3	MMC BOARD ASSY	YB10288B3-01	←	YB10288A3-01	←

**STROBE BOARD ASSEMBLY <07>**

REF NO.	ITEM \ MODEL	GR-DVX8EG	GR-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
PW	STROBE BOARD ASSY	-	-	YB10249C	←

**AUDIO VF BOARD ASSEMBLY <08>**

REF NO.	ITEM \ MODEL	GR-DVX8EG	GR-DVX8EA/80A/A-S	GR-DVX10EG	GR-DVX9EA/90A/A-S
PW1	AUDIO VF BOARD ASSY	YB10285C2-02	YB10285E2	YB10285D2	←

**SECTION 6 AC POWER ADAPTER**

**CABINET ASSEMBLY <MA>**

REF NO.	ITEM \ MODEL	GR-DVX8EG	GR-DVX8EA	GR-DVX80A	GR-DVX80A-S	GR-DVX10EG	GR-DVX9EA	GR-DVX90A	GR-DVX90A-S
△ 3	POWER CORD	YQ10531-006	PTY20290-020	YQ21032-007	PTY10067-036	YQ10531-006	PTY20290-020	YQ21032-007	PTY10067-036

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