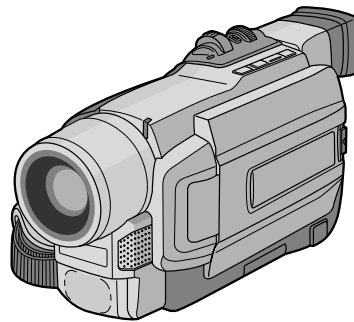


JVC

SERVICE MANUAL

DIGITAL VIDEO CAMERA

GR-DVL310KR, DVL317KR



Mini DV NTSC

Regarding service information other than these sections, refer to the GR-DVL310U service manual (No. 86602). Also, be sure to note important safety precautions provided in the service manual.

SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-DVL310U/510U/815U/915U)*

Camcorder		For Digital Still Camera (GR-DVL915/DVL815/DVL510 only)	
For General		Storage media	: SD Memory Card/MultiMediaCard
Power supply	: DC 11.0 V $\overline{\text{=}}$ (Using AC Adapter) DC 7.2 V $\overline{\text{=}}$ (Using battery pack)	Compression system	: JPEG (compatible)
Power consumption		File size	: VGA (640 x 480 pixels)
LCD monitor off, viewfinder on	: Approx. 4.3 W	Picture quality	: 2 modes (FINE/STANDARD)
LCD monitor on, viewfinder off	: Approx. 5.3 W	Approximate number of storable images	
Video light	: Approx. 3.5 W	with memory card [8 MB] (provided with GR-DVL510 only)	
Dimensions (W x H x D)	: 83 mm x 97 mm x 188 mm (3-5/16" x 3-7/8" x 7-7/16") (with the LCD monitor closed and the viewfinder pushed down)	FINE	: 100
Weight	: Approx. 610 g (1.4 lbs) (GR-DVL915) Approx. 600 g (1.4 lbs) (GR-DVL815) Approx. 590 g (1.3 lbs) (GR-DVL510/DVL310)	STANDARD	: 200
Operating temperature	: 0°C to 40°C (32°F to 104°F)	with memory card [16 MB] (provided with GR-DVL915/DVL815 only)	
Operating humidity	: 35% to 80%	FINE	: 200
Storage temperature	: -20°C to 50°C (-4°F to 122°F)	STANDARD	: 400
Pickup	: 1/4" CCD	with memory card [32 MB] (optional)	
Lens	: F 1.8, f = 3.6 mm to 36 mm, 10:1 power zoom lens	FINE	: 400
Filter diameter	: ϕ 37 mm	STANDARD	: 800
LCD monitor	: 3.5" diagonally measured, LCD panel/TFT active matrix system (GR-DVL915) 3" diagonally measured, LCD panel/TFT active matrix system (GR-DVL815) 2.5" diagonally measured, LCD panel/TFT active matrix system (GR-DVL510/DVL310)	with memory card [64 MB] (optional)	
Viewfinder	: Electronic viewfinder with 0.44" color LCD (GR-DVL915/DVL815) Electronic viewfinder with 0.24" black/white LCD (GR-DVL510/DVL310)	FINE	: 800
Speaker	: Monaural	STANDARD	: 1600
For Digital Video Camera		For Connectors	
Format	: DV format (SD mode)	S-Video	
Signal format	: NTSC standard	Output	: Y : 1 V (p-p), 75 Ω , analog C : 0.29 V (p-p), 75 Ω , analog
Recording/Playback format	: Video: Digital component recording Audio: PCM digital recording, 32 kHz 4-channel (12-bit), 48 kHz 2-channel (16-bit)	Input (GR-DVL915 only)	: Y : 0.8 V (p-p) - 1.2 V (p-p), 75 Ω , analog C : 0.2 V (p-p) - 0.4 V (p-p), 75 Ω , analog
Cassette	: Mini DV cassette	AV	
Tape speed	: SP: 18.8 mm/s LP: 12.5 mm/s	Video output	: 1 V (p-p), 75 Ω , analog
Maximum recording time (using 80 min. cassette)	: SP: 80 min. LP: 120 min.	Video input (GR-DVL915 only)	: 0.8 V (p-p) - 1.2 V (p-p), 75 Ω , analog
		Audio output	: 300 mV (rms), 1 k Ω , analog, stereo
		Audio input (GR-DVL915 only)	: 300 mV (rms), 50 k Ω , analog, stereo
		DV	
		Output	: 4-pin, IEEE 1394 compliant
		Input	: 4-pin, IEEE 1394 compliant
		USB (GR-DVL915/DVL815/DVL510 only)	: 5-pin
		PC (DIGITAL PHOTO) (GR-DVL310 only)	: ϕ 2.5 mm, 3-pole
		EDIT (GR-DVL915/DVL815/DVL510 only)	: ϕ 3.5 mm, 2-pole
		ILIP (GR-DVL310 only)	: ϕ 3.5 mm, 4-pole
		AC adapter AP-V10U	
		Power requirement	
		U.S.A. and Canada	: AC 120 V \sim , 60 Hz
		Other countries	: AC 110 V to 240 V \sim , 50 Hz/60 Hz
		Output	: DC 11 V $\overline{\text{=}}$, 1 A
		Dimensions (W x H x D)	: 59 mm x 31 mm x 84 mm (2-3/8" x 1-1/4" x 3-5/16")
		Weight	: Approx. 130 g (0.29 lbs.)

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

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The following table indicate main different points between models GR-DVL310U, GR-DVL310KR and GR-DVL317KR.

ITEM \ MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
LCD MONITOR	2.5"	←	3.0"
AC ADAPTER	AP-V10U	AP-V10KR	←

The following table indicate different parts number between models GR-DVL310U ,GR-DVL310KR and GR-DVL317KR.

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

△ REF. NO	ITEM \ MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
1	PACKING CASE	LY32095-007A	←	LY32095-001A
7	SHEET(AGREMENT)	LYT0378-003A	←	—
8	Q.CARD(JCA)	YU10350	—	—
9	WARRANTY INF.	BT-51005-4	—	—
10	REGIST.CARD	BT-51020-2	—	—
△ 12	AC ADAPTER	LY20739-001A	LY20688-010A	←
19	LENS CAP	LY42182-001A	—	—
20	POLY BAG	*QPGA017-03005	QPA01703005	←
21	CORE FILTER	—	QQR0490-002	←
26	POWER CORD	—	QMPS130-190-JC	←
27	PC CABLE	QAM0084-001	←	—
28	CORE FILTER	QQR0490-002	←	—

FINAL ASSEMBLY <M2>

△ REF. NO	ITEM \ MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
101	LOWER CASE ASSY	*LY20706-001B	LY20706-001C	←
101C	COVER(JACK)	*LY32099-001B	LY32099-001C	←
102	ARM ASSY	*LY20697-001A	LY20697-001B	←
107	COVER(AJUST)	LY32092-007A	←	LY32092-004A
115	UPPER CASE ASSY	LY20707-001B	←	LY20717-001C
139	CAP(HOOD)ASSY	—	LY42182-002A	←
139A	SPRING	—	LY31627-001A	←
143	SPECIAL SCREW	*LY30018-084A,(X2)	LY30018-084A,(X1)	←
146	SPECIAL SCREW	*LY30018-084A,(X2)	LY30018-084A,(X3)	←
151	SPECIAL SCREW	*—	LY30018-023A	←
158	SPECIAL SCREW	*LY30018-090A	←	LY30018-0D6A

ELECTRONIC VIEWFINDER ASSEMBLY <M4>

△ REF. NO	ITEM \ MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
300	VF ASSY	LY20744-001B	LY20744-004A	←
314	LABEL(VF)	LY43041-002A	—	—

MONITOR ASSEMBLY <M5>

△ REF. NO	ITEM \ MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
△ 500	MONITOR ASSY	LYH20246-007A	LYH20246-009A	LYH20246-006A
△ 501	MONITOR COVER ASSY	LY20702-001B	←	LY20721-001B
501H	WINDOW	LY32087-001B	←	LY32121-001B
501J	EARTH MON	—	—	LY42386-001A
501K	EL(WINDOW)	—	—	LY42193-001A
502	MONITOR CASE	LY10264-001A	←	LY20598-001A
502A	EARTH MON(2)	—	—	LY42388-001A
503	HOLDER	LY20674-001A	←	LY20567-001A
508	BACK LIGHT	QLL0093-001	←	QLL0094-001
509	LCD MODULE	QLD0154-001	←	QLD0118-001
510	SPACER(A)	*LY30029-063A	—	—
516	HOLDER	—	—	LY20566-001B

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

MAIN BOARD ASSEMBLY <01>

△ REF. NO	MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
PW	MAIN BOARD ASSY	YB10313A-02	YB10313E-04	←
IC1001	IC	UPD703039F1-A01	UPD703039F1-A02	←
R6124	MG RESISTOR	—	NRSA6AJ-102W	←
C1008	CAPACITOR	NCBA1CK-103W	←	—
C1013	CAPACITOR	NCBA1CK-103W	←	—
C1018	CAPACITOR	NCBA1CK-103W	←	—
C1024	CAPACITOR	NDCA1HJ-100W	—	—
C1025	CAPACITOR	NDCA1HJ-100W	—	—
C1041	CAPACITOR	—	NCFA1AZ-104W	←
C6130	CAPACITOR	—	NCBA1AK-104W	←
C6134	CAPACITOR	—	NCBA1AK-104W	←
X1001	C OSCILLATOR	NAX0424-001X	NAX0474-001X	←

MONITOR BOARD ASSEMBLY <02>

△ REF. NO	MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
PW1	MONITOR BOARD ASSY	YB10324E1-03	←	YB10324A1-03
Q7605	TRANSISTOR	—	—	DTA144EE
Q7606	TRANSISTOR	—	—	DTA144EE
R7612	MG RESISTOR	NRVA63D-223X	←	NRVA63D-682X
R7621	MG RESISTOR	NRSA63J-0R0X	←	—
R7622	MG RESISTOR	—	—	NRSA63J-223X
R7623	MG RESISTOR	—	—	NRSA63J-223X
R7624	MG RESISTOR	—	—	NRVA63D-223X
R7625	MG RESISTOR	—	—	NRVA63D-223X
C7636	CAPACITOR	—	—	NCF31CZ-104X
L7605	COIL	NQL315K-100X	←	—
L7606	COIL	—	—	NQL315K-100X
OT1	SHIELD SHEET	*—	LY43119-001A	←

LCD BL BOARD ASSEMBLY <03>

△ REF. NO	MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
PW2	LCD BL BOARD ASSY	YB10324B2-02	←	YB10324A2-02
IC751	IC	—	—	MIP805
D751	DIODE	—	—	1SS376
R751	MG RESISTOR	—	—	NRSA63J-104X
C751	CAPACITOR	—	—	NBE20JM-106X
C752	CAPACITOR	—	—	NBE20JM-106X
C753	CAPACITOR	—	—	NCB31HK-222X
C754	CAPACITOR	—	—	NCB31HK-222X
L751	COIL	—	—	NQLZ011-681X
L752	COIL	—	—	NQL315K-100X
CN754	CONNECTOR	—	—	QGF0505F2-06X
△ F751	FUSE	—	—	NMFZ007-R20X-K

JACK BOARD ASSEMBLY <06>

△ REF. NO	MODEL	GR-DVL310U	GR-DVL310KR	GR-DVL317KR
PW1	JACK BOARD ASSY	*YB10314A1-01	YB10314A1-02	←
HD1	HOLDER(J.PWB)	*LY32086-001A	LY32086-001B	←
OT2	SPACER-B,X2	*—	LY30017-023A	←

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



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