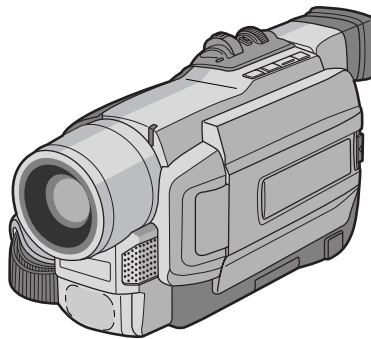


# JVC

## SERVICE MANUAL

### DIGITAL VIDEO CAMERA

# GR-DVL510KR,815KR,915KR



Mini DV NTSC  
DSC  
DIGITAL  
STILL CAMERA

Regarding service information other than these sections, refer to the GR-DVL510U,815U,915U service manual (No. 86601). Also, be sure to note important safety precautions provided in the service manual.

### SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-DVL310/510/815/915)*

Camcorder	
<b>For General</b>	
Power supply	: DC 11.0 V $\overline{\text{=}}$ (Using AC Adapter) DC 7.2 V $\overline{\text{=}}$ (Using battery pack)
Power consumption	
LCD monitor off, viewfinder on	: Approx. 4.3 W
LCD monitor on, viewfinder off	: Approx. 5.3 W
Video light	: Approx. 3.5 W
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)
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)
Operating temperature	: 0°C to 40°C (32°F to 104°F)
Operating humidity	: 35% to 80%
Storage temperature	: -20°C to 50°C (-4°F to 122°F)
Pickup	: 1/4" CCD
Lens	: F 1.8, f = 3.6 mm to 36 mm, 10:1 power zoom lens
Filter diameter	: $\phi$ 37 mm
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)
Viewfinder	: Electronic viewfinder with 0.44" color LCD (GR-DVL915/DVL815) Electronic viewfinder with 0.24" black/white LCD (GR-DVL510/DVL310)
Speaker	: Monaural
<b>For Digital Video Camera</b>	
Format	: DV format (SD mode)
Signal format	: NTSC 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 (GR-DVL915/DVL815/DVL510 only)

Storage media	: SD Memory Card/MultiMediaCard
Compression system	: JPEG (compatible)
File size	: VGA (640 x 480 pixels)
Picture quality	: 2 modes (FINE/STANDARD)
Approximate number of storable images with memory card [8 MB] (provided with GR-DVL510 only)	
FINE	: 100
STANDARD	: 200
with memory card [16 MB] (provided with GR-DVL915/DVL815 only)	
FINE	: 200
STANDARD	: 400
with memory card [32 MB] (optional)	
FINE	: 400
STANDARD	: 800
with memory card [64 MB] (optional)	
FINE	: 800
STANDARD	: 1600

#### For Connectors

<b>S-Video</b>	
Output	: Y : 1 V (p-p), 75 $\Omega$ , analog C : 0.29 V (p-p), 75 $\Omega$ , analog
Input (GR-DVL915 only)	: Y : 0.8 V (p-p) - 1.2 V (p-p), 75 $\Omega$ , analog C : 0.2 V (p-p) - 0.4 V (p-p), 75 $\Omega$ , analog
<b>AV</b>	
Video output	: 1 V (p-p), 75 $\Omega$ , analog
Video input (GR-DVL915 only)	: 0.8 V (p-p) - 1.2 V (p-p), 75 $\Omega$ , analog
Audio output	: 300 mV (rms), 1 k $\Omega$ , analog, stereo
Audio input (GR-DVL915 only)	: 300 mV (rms), 50 k $\Omega$ , analog, stereo
<b>DV</b>	
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)	: $\phi$ 2.5 mm, 3-pole
EDIT (GR-DVL915/DVL815/DVL510 only)	: $\phi$ 3.5 mm, 2-pole
JLIP (GR-DVL310 only)	: $\phi$ 3.5 mm, 4-pole

#### AC adapter AP-V10KR

Power requirement	: AC 110 V to 220 V $\sim$ , 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.

# TABLE OF CONTENTS

DIFFERENT TABLE ..... 1 to 2

**5. PARTS LIST (5-1 to 5-5)**

5.1 PACKING AND ACCESSORY ASSEMBLY <M1> ..... 5-1

5.2 FINAL ASSEMBLY <M2> ..... 5-3

The following table indicate main different points between models GR-DVL510U, GR-DVL510KR, GR-DVL815U, GR-DVL815KR, GR-DVL915U and GR-DVL915KR.

ITEM \ MODEL	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
AC ADAPTER	AP-V10U	AP-V10KR	AP-V10U	AP-V10KR	AP-V10U	AP-V10KR
REMOTE CONTROL UNIT	RM-V715U	←	RM-V716U	RM-V717U	RM-V716U	RM-V717U

The following table indicate different parts number between models GR-DVL510U ,GR-DVL510KR, GR-DVL815U, GR-DVL815KR, GR-DVL915U and GR-DVL915KR.

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

REF. NO. \ MODEL	ITEM	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
1	PACKING CASE	LY32095-009A	←	LY32095-006A	LY32095-005A	LY32095-005A	←
8	Q.CARD(JCA)	YU10350	—	YU10350	—	YU10350	—
9	WARRANTY INF.	BT-51005-4	—	BT-51005-4	—	BT-51005-4	—
10	REGIST.CARD	BT-51020-2	—	BT-51020-2	—	BT-51020-2	—
12	AC ADAPTER	LY20739-001A	LY20688-010A	LY20739-001A	LY20688-010A	LY20739-001A	LY20688-010A
17	REMOTE CONTROL UNIT	LY42129-001A	←	LY20543-002A	LY20750-001A	LY20543-002A	LY20750-001A
19	LENS CAP	LY42182-001A	—	LY42182-001A	—	LY42182-001A	—
20	POLY BAG	*QPGA017-03005	QPA01703005	*QPGA017-03005	QPA01703005	QPGA017-03005	←
25	CORE FILTER	—	QQR0490-002	—	QQR0490-002	—	QQR0490-002
26	POWER CORD	—	QMPS130-190-JC	—	QMPS130-190-JC	—	QMPS130-190-JC

**FINAL ASSEMBLY <M2>**

REF. NO. \ MODEL	ITEM	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
101	LOWER CASE ASSY	*LY20706-003B	LY20706-003C	*LY20706-003B	LY20706-003C	*LY20706-002A	LY20706-002C
101C	COVER(JACK)	*LY32099-001B	LY32099-001C	*LY32099-001B	LY32099-001C	*LY32099-001B	LY32099-001C
102	ARM ASSY	*LY20697-001A	LY20697-001B	*LY20697-001A	LY20697-001B	*LY20697-001A	LY20697-001B
143	SPECIAL SCREW	*LY30018-084A,(X2)	LY30018-084A,(X1)	*LY30018-084A,(X2)	LY30018-084A,(X1)	*LY30018-084A,(X2)	LY30018-084A,(X1)
146	SPECIAL SCREW	*LY30018-084A,(X2)	LY30018-084A,(X3)	*LY30018-084A,(X2)	LY30018-084A,(X3)	*LY30018-084A,(X2)	LY30018-084A,(X3)
138	CAP(HOOD)ASSY	—	LY42182-002A	—	LY42182-002A	—	LY42182-002A
138A	SPRING	—	LY31627-001A	—	LY31627-001A	—	LY31627-001A
151	SPECIAL SCREW	—	LY30018-023A	—	LY30018-023A	—	LY30018-023A
158	SPECIAL SCREW	LY30018-090A	←	*LY30018-090A	LY30018-0D6A	*LY30018-090A	LY30018-0D6A

**ELECTRONIC VIEWFINDER ASSEMBLY <M4>**

REF. NO. \ MODEL	ITEM	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
300	VF ASSY	LY20744-001A	LY20744-004A	LY20712-001A	LY20712-004A	LY20712-001A	LY20712-004A
314	LABEL(VF)	LY43041-002A	←	LY43041-002A	—	LY43041-002A	—

**MONITOR ASSEMBLY <M5>**

REF. NO. \ MODEL	ITEM	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
510	SPACER(A)	*LY30029-063A	—	—	—	—	—

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

**MAIN BOARD ASSEMBLY <01>**

△ REF. NO.	ITEM	MODEL	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
PW	MAIN BOARD ASSY		YB10317B-03	YB10317F-04	YB10317B-03	YB10317F-04	YB10317A-02	YB10317E-04
R3905	MG RESISTOR		—	—	—	—	*—	NRSA63J-0R0X
R8013	MG RESISTOR		*NRSA6AJ-821W	—	*NRSA6AJ-821W	—	*NRSA6AJ-821W	—
C1008	CAPACITOR		*NCBA1CK-103W	—	*NCBA1CK-103W	—	NCBA1CK-103W	←
C1013	CAPACITOR		*NCBA1CK-103W	—	*NCBA1CK-103W	—	NCBA1CK-103W	←
C1018	CAPACITOR		*NCBA1CK-103W	—	*NCBA1CK-103W	—	NCBA1CK-103W	←
C1024	CAPACITOR		*NDCA1HJ-100W	—	*NDCA1HJ-100W	—	*NDCA1HJ-100W	—
C1025	CAPACITOR		*NDCA1HJ-100W	—	*NDCA1HJ-100W	—	*NDCA1HJ-100W	—
C1041	CAPACITOR		—	NCFA1AZ-104W	—	NCFA1AZ-104W	—	NCFA1AZ-104W
C1301	CAPACITOR		*NCBA1AK-104W	—	*NCBA1AK-104W	—	NCBA1AK-104W	←
C6130	CAPACITOR		—	NCBA1AK-104W	—	NCBA1AK-104W	—	NCBA1AK-104W
C6134	CAPACITOR		—	NCBA1AK-104W	—	NCBA1AK-104W	—	NCBA1AK-104W
C8030	CAPACITOR		*NDCA1HJ-150W	—	*NDCA1HJ-150W	—	*NDCA1HJ-150W	—
X1001	C OSCILLATOR		*NAX0424-001X	NAX0474-001X	*NAX0424-001X	NAX0474-001X	*NAX0424-001X	NAX0474-001X

**MONITOR BOARD ASSEMBLY <02>**

△ REF. NO.	ITEM	MODEL	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
R7104	MG RESISTOR		NRSA63J-0R0X	←	*—	NRSA63J-0R0X	—	—
C7616	CAPACITOR		*NCB31HK-102X	NCB31EK-103X	*NCB31HK-102X	NCB31EK-103X	*NCB31HK-102X	NCB31EK-103X
C7640	CAPACITOR		*—	NCB31EK-103X	*—	NCB31EK-103X	*—	NCB31EK-103X
CN766	SD CARD CONNECTR		*NNZ0052-001X	NNZ0058-001X	*NNZ0052-002X	NNZ0058-001X	*NNZ0052-002X	NNZ0058-001X

**JACK BOARD ASSEMBLY <06>**

△ REF. NO.	ITEM	MODEL	GR-DVL510U	GR-DVL510KR	GR-DVL815U	GR-DVL815KR	GR-DVL915U	GR-DVL915KR
PW1	JACK BOARD ASSY		*YB10314B1-01	YB10314B1-02	*YB10314B1-01	YB10314B1-02	*YB10314B1-01	YB10314B1-02
HD1	HOLDER(J.PWB)		*LY32086-001A	LY32086-001B	*LY32086-001A	LY32086-001B	*LY32086-001A	LY32086-001B
OT2	"SPACER-B,X2"		*—	LY30017-023A	*—	LY30017-023A	*—	LY30017-023A

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



**JVC**

VICTOR COMPANY OF JAPAN, LIMITED  
VIDEO DIVISION

S40894