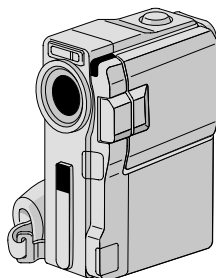


# JVC

## SERVICE MANUAL

### DIGITAL VIDEO CAMERA

# GR-DVM55UM, DVM75UM



Mini DV NTSC  
DSC  
DIGITAL  
STILL CAMERA

Regarding service information other than these sections, refer to the GR-DVM55U/DVM75U service manual (No. 86615). Also, be sure to note important safety precautions provided in the service manual.

### SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-DVM55U/DVM75U)*

Camcorder	
<b>For General</b>	
Power supply	: DC 11.0 V $\approx$ (Using AC Adapter) DC 7.2 V $\approx$ (Using battery pack)
Power consumption	
LCD monitor off, viewfinder on	: Approx. 4.4 W (GR-DVM75), Approx. 4.0 W (GR-DVM55)
LCD monitor on, viewfinder off	: Approx. 5.2 W (GR-DVM75), Approx. 4.8 W (GR-DVM55)
Dimensions (W x H x D)	: 97 mm x 120 mm x 51 mm (3-7/8" x 4-3/4" x 2-1/16") (with the LCD monitor closed and the viewfinder pushed back in)
Weight	: Approx. 500 g (1.1 lbs) (GR-DVM75) Approx. 470 g (1.1 lbs) (GR-DVM55)
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	: $\phi$ 27 mm
LCD monitor	: 2.5" diagonally measured, LCD panel/TFT active matrix system
Viewfinder	: Electronic viewfinder with 0.44" colour LCD
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.
<b>For Digital Still Camera (GR-DVM75 only)</b>	
Storage media	: SD Memory Card/MultiMediaCard
Compression system	: Still image: JPEG (compatible) Moving image: MPEG4 (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 memory card [8 MB], with Sound Effects pre-stored)	
FINE	: 40 (VGA), 20 (XGA)
STANDARD	: 130 (VGA), 60 (XGA)
(with an optional memory card [16 MB])	
FINE	: 100 (VGA), 40 (XGA)
STANDARD	: 290 (VGA), 140 (XGA)
(with an optional memory card [32 MB])	
FINE	: 210 (VGA), 90 (XGA)
STANDARD	: 610 (VGA), 290 (XGA)
(with an optional memory card [64 MB])	
FINE	: 430 (VGA), 190 (XGA)
STANDARD	: 1230 (VGA), 600 (XGA)

For Connectors	
<b>AV</b>	
Video output	: 1 V (p-p), 75 $\Omega$ , analog
Video input (GR-DVM75 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-DVM75 only)	: 300 mV (rms), 50 k $\Omega$ , analog, stereo
Headphone output (GR-DVM75 only)	: Stereo
<b>DV</b>	
Input/output	: 4-pin, IEEE 1394 compliant

AC adapter AP-V10U	
<b>Power requirement</b>	
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 $\approx$ , 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)

Jack Box	
<b>For General</b>	
Dimensions (W x H x D)	: 52 mm x 22 mm x 73 mm (2-1/16" x 7/8" x 2-7/8")
Weight	: Approx. 35 g (0.78 lbs)
<b>For Connectors</b>	
USB (GR-DVM75 only)	: Type B
EDIT (GR-DVM75 only)	: $\phi$ 3.5 mm, 2-pole
<b>S-Video</b>	
Output	: Y : 1 V (p-p), 75 $\Omega$ , analog C : 0.29 V (p-p), 75 $\Omega$ , analog
Input (GR-DVM75 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
JLIP (GR-DVM55 only)	: $\phi$ 3.5 mm, 4-pole
PC (DIGITAL PHOTO) (GR-DVM55 only)	: $\phi$ 2.5 mm, 3-pole

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-DVM55U and GR-DVM55UM.

ITEM	MODEL	GR-DVM55U	GR-DVM55UM
AC ADAPTER		AP-V10U	AP-V10EN

The following table indicate main different points between models GR-DVM75U and GR-DVM75UM.

ITEM	MODEL	GR-DVM75U	GR-DVM75UM
AC ADAPTER		AP-V10U	AP-V10EN

The following table indicate different parts number between models GR-DVM55U and GR-DVM55UM.

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

△ REF. NO.	ITEM	MODEL	GR-DVM55U	GR-DVM55UM
1	PACKING CASE		LY31717-023A	—
8	Q.CARD(JCA)		YU10350	—
9	WARRANTY INF.		BT-51005-4	—
10	REGIST.CARD		BT-51020-2	—
11	CD ROM		LY32210-002A	*LY32210-002B
△ 12	AC ADAPTER		LY20739-001A	LY20688-011A
14	JACK BOX		LY32142-002A	*LY32142-002B
23	CORE FILTER		QQR0918-002	QQR0491-002
△ 28	POWER CORD		—	QMPS150-190-JR
29	S VIDEO CABLE		—	QAM0004-003
30	CORE FILTER		—	QQR0491-002
31	MINI DV TAPE		—	M-DV30MEBU

**FINAL ASSEMBLY <M2>**

△ REF. NO.	ITEM	MODEL	GR-DVM55U	GR-DVM55UM
101	LOWER CASE		LY10287-002A	*LY10287-002B
130	CASSETTE COVER		LY10288-002A	*LY10298-001B
155	SPACER(A)		LY30029-0J2B	*LY30029-0J2C
216	SPACER(A)		LY30029-0H7A	*LY30029-0H7C
220	FRONT COVER ASSY		LY20731-002C	*LY20731-002D
229	SCREW		QYSPSGT1735Z	*QYSPSGT1730Z

**MAIN BOARD ASSEMBLY <01>**

△ REF. NO.	ITEM	MODEL	GR-DVM55U	GR-DVM55UM
PW	MAIN BOARD ASSY		YB10318A-01	*YB10318A-02
R1413	MG RESISTOR		—	*NRSA6AJ-331W
R6014	MG RESISTOR		—	*NRSA63J-0R0X
C3001	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3005	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3008	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3035	CAPACITOR		NDCA1HJ-330W	*NDCA1HJ-180W
C3050	CAPACITOR		—	*NCBA1CK-103W
C3501	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3502	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3503	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3701	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4305	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4307	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4310	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4315	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4324	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4331	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C6003	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C6122	CAPACITOR		NCBA1CK-223W	*NCBA1AK-333W
OT7	SPACER(A)		—	*LY30029-0Q4A
SD3	SHIELD SHEET		—	*LY43181-001A

Notes : Mark — is not used.

Mark \* reference model was also changed.

**MDA BOARD ASSEMBLY <02>**

REF. NO.	ITEM	MODEL	GR-DVM55U	GR-DVM55UM
C4803	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4851	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4861	CAPACITOR		NCBA1HK-102W	*NCBA1CK-103W
C4862	CAPACITOR		NCBA1HK-102W	*NCBA1CK-103W
C4864	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X

**JUNCTION BOARD ASSEMBLY <06>**

REF. NO.	ITEM	MODEL	GR-DVM55U	GR-DVM55UM
PW2	JUNCTION BOARD ASSY		YB10323B2-01	*YB10323B2-02

**AUDIO BOARD ASSEMBLY <08>**

REF. NO.	ITEM	MODEL	GR-DVM55U	GR-DVM55UM
C2108	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2207	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2208	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2211	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2214	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2402	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X

**JACK BOARD ASSEMBLY <09>**

REF. NO.	ITEM	MODEL	GR-DVM55U	GR-DVM55UM
PW1	JACK BOARD ASSY		YB10323A1	*YB10323A1-01

The following table indicate different parts number between models GR-DVM75U and GR-DVM75UM.

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

REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
1	PACKING CASE		LY31717-022A	---
8	Q.CARD(JCA)		YU10350	---
9	WARRANTY INF.		BT-51005-4	---
10	REGIST.CARD		BT-51020-2	---
11	CD ROM		LY32210-004A	*LY32210-004B
△ 12	AC ADAPTER		LY20739-001A	LY20688-011A
14	JACK BOX		LY32142-001A	*LY32142-001B
△ 28	POWER CORD		---	QMPS150-190-JR
29	S VIDEO CABLE		---	QAM0004-003
31	MINI DV TAPE		---	M-DV30MEBU

**FINAL ASSEMBLY <M2>**

REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
△ 101	LOWER CASE ASSY		LY20727-001A	*LY20727-001B
155	SPACER(A)		LY30029-0J2B	*LY30029-0J2C
216	SPACER(A)		LY30029-0H7B	*LY30029-0H7C
220	FRONT COVER ASSY		LY20731-001C	*LY20731-001D
229	SCREW		QYSPSGT1735Z	*QYSPSGT1730Z
232	SCREW		QYSPSGT1735Z	*QYSPSGT1730Z

**MAIN BOARD ASSEMBLY <01>**

REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
PW	MAIN BOARD ASSY		YB10319A-01	*YB10319A-02
IC1001	IC		UPD703039F1-A08	*UPD703039F1-A10
IC1401	CSP IC ASSY		YQ44887A	*YQ44888A
R1413	MG RESISTOR		---	*NRSA6AJ-331W
R3902	MG RESISTOR		---	*NRSA6AJ-102W
R3903	MG RESISTOR		---	*NRSA6AJ-102W
R8080	MG RESISTOR		---	*NRSA6AJ-103W
C3001	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3005	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3008	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3035	CAPACITOR		NDCA1HJ-330W	*NDCA1HJ-180W
C3050	CAPACITOR		---	*NCBA1CK-103W
C3501	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3502	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3503	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3701	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3916	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C3920	CAPACITOR		NBE20JM-106X	*NCB11CK-105X
C4305	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4307	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4310	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4315	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4324	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4331	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X

Notes : Mark --- is not used.

Mark \* reference model was also changed.

△ REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
C6003	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8007	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8010	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8020	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8046	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8101	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8102	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8401	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C8405	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
OT7	SPACER(A)		—	*LY30029-0Q3A
OT8	SPACER(A)		—	*LY30029-0Q1A
SD3	SHIELD SHEET		—	*LY43181-001A

**MDA BOARD ASSEMBLY <02>**

△ REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
C4803	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4851	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C4861	CAPACITOR		NCBA1HK-102W	*NCBA1CK-103W
C4862	CAPACITOR		NCBA1HK-102W	*NCBA1CK-103W
C4864	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X

**AUDIO BOARD ASSEMBLY <08>**

△ REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
C2108	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2207	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2208	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2211	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2214	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2301	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2402	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X
C2751	T CAPACITOR		NBE20JM-106X	*NBE80JM-106X

**JUNCTION BOARD ASSEMBLY <06>**

△ REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
PW2	JUNCTION BOARD ASSY		YB10323A2-01	*YB10323A2-02

**STROBE BOARD ASSEMBLY <07>**

△ REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
C6507	CAPACITOR		NCZ1019-273X	*NCZ1008-473X

**JACK BOARD ASSEMBLY <09>**

△ REF. NO.	ITEM	MODEL	GR-DVM75U	GR-DVM75UM
PW1	JACK BOARD ASSY		YB10323A1	*YB10323A1-01

Notes : Mark — is not used. Mark \* reference model was also changed.



**JVC**

VICTOR COMPANY OF JAPAN, LIMITED  
VIDEO DIVISION

S40894

