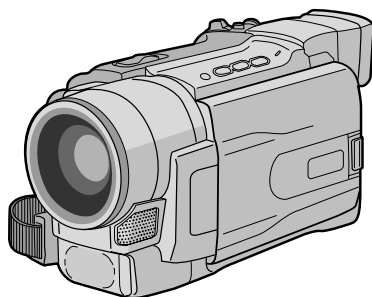


JVC

SERVICE MANUAL

数字式视频摄像机

GR-DVL970ED,DVL1170ED



Mini DV PAL
DSC
DIGITAL
STILL CAMERA

Regarding service information other than these sections, refer to the GR-DVL765EG service manual (No. 86670). Also, be sure to note important safety precautions provided in the service manual.

规格 (The specifications shown pertain specifically to the model GR-DVL320,DVL520,DVL525,DVL925,DVL970,DVL1170)

摄像机：中国制		数字静像照相机 (仅用于 GR-DVL1170/DVL970/DVL925/DVL525)	
整体		存储媒体	: SD 内存卡/多媒体卡
供电	: 直流 11.0 V (使用交流电源适配器时) 直流 7.2 V (使用电池时)	压缩系统	: 静止影像: JPEG (兼容) 活动影像: MPEG4 (兼容)
功率消耗		文件规格	: 3 种模式 (1280 X 960 像素*, 1024 X 768 像素, 640 X 480 像素)
液晶显示器关闭, 取景器打开	: 约 4.5 W (GR-DVL1170/DVL970)	图像质量	: 2 种模式 [FINE (优质) / STANDARD (标准)]
	: 约 4.3 W (GR-DVL925/DVL525/DVL520/DVL320)	大约可存储图像数	见第 27 页
液晶显示器打开, 取景器关闭	: 约 5.7 W (GR-DVL1170/DVL970)		* 仅用于 GR-DVL1170/DVL970
	: 约 5.3 W (GR-DVL925/DVL525/DVL520/DVL320)	接口	
摄像灯	: 约 2.8 W (GR-DVL1170/DVL970)	S-视频	
	: 约 3.5 W (GR-DVL925/DVL525/DVL520/DVL320)	输出	: Y : 1 V (p-p), 75 Ω, 模拟输出 C : 0.29 V (p-p), 75 Ω, 模拟输出
尺寸 (宽×高×深)	: 79 mm × 89 mm × 184 mm (GR-DVL1170/DVL970) 79 mm × 89 mm × 167 mm (GR-DVL925/DVL525/DVL520/DVL320) (液晶显示器被关闭和取景器被推回时。)	输入 (仅用于 GR-DVL1170)	: Y : 0.8 V (p-p) - 1.2 V (p-p), 75 Ω, 模拟输入 C : 0.2 V (p-p) - 0.4 V (p-p), 75 Ω, 模拟输入
重量	: 主机约 580 g (GR-DVL1170) 主机约 570 g (GR-DVL970/DVL925) 主机约 560 g (GR-DVL525/DVL520) 主机约 550 g (GR-DVL320)	音频/视频	
工作温度	: 0°C 至 40°C	视频输出	: 1 V (p-p), 75 Ω, 模拟输出
工作湿度	: 35% 至 80%	视频输入 (仅用于 GR-DVL1170)	: 0.8 V (p-p) - 1.2 V (p-p), 75 Ω, 模拟输入
保存温度	: -20°C 至 50°C	音频输出	: 300 mV (rms), 1 kΩ, 模拟输出, 立体声
成像	: 1/3.8" CCD (GR-DVL1170/DVL970) 1/4" CCD (GR-DVL925/DVL525/DVL520/DVL320)	音频输入 (仅用于 GR-DVL1170)	: 300 mV (rms), 50 kΩ, 模拟输入, 立体声
镜头	: F1.8, f = 3.8 mm 至 38 mm, 10:1 电动变焦镜头 (GR-DVL1170/DVL970) F1.8, f = 3.6 mm 至 36 mm, 10:1 电动变焦镜头 (GR-DVL925/DVL525/DVL520/DVL320)	数据视频	
滤镜直径	: ø37 mm	输出	: 4 芯, 符合 IEEE 1394
液晶显示器	: 对角线长度 3.5", 液晶板面/TFT 活性母岩系统 (GR-DVL1170/DVL925/DVL520) 对角线长度 2.5", 液晶板面/TFT 活性母岩系统 (GR-DVL970/DVL525/DVL320)	输入	: 4 芯, 符合 IEEE 1394
取景器	: 电子取景器带有 0.24" 黑白显示器	USB (仅用于 GR-DVL1170/DVL970/DVL925/DVL525)	: 5 芯
扬声器	: 单声道	PC (仅用于 GR-DVL520/DVL320)	: ø2.5 mm, 3 极
数字摄像机		EDIT (仅用于 GR-DVL1170/DVL970/DVL925/DVL525)	: ø3.5 mm, 2 极
制式	: DV 制式 (SD 模式)	JLIP (仅用于 GR-DVL520/DVL320)	: ø3.5 mm, 4 极
信号制式	: PAL 标准		
摄像/放像制式	: 视频: 数据构成记录 音频: PCM 数据记录 32 kHz 4- 频道 (12-BIT), 48 kHz 2- 频道 (16-BIT)	交流电源适配器: 中国制 (监制·检验: 日本 JVC 公司)	
录像带	: Mini DV 录像带	电源	: 交流 110 V ~ 240 V~, 50 Hz/60 Hz
走带速度	: SP: 18.8 mm/秒 LP: 12.5 mm/秒	输出	: 直流 11 V, 1 A
最长录像时间 (使用 80 分钟录像带)	: SP: 80 分钟 LP: 120 分钟		

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The following table indicate main different points between models GR-DVL765EG-X, GR-DVL970ED and GR-DVL1170ED.

ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
LCD MONITOR		2.5"	←	3.5"
DV TERMINAL		OUTPUT ONLY	IN/OUT	←
MIC INPUT		Used	Not used	←
REMOTE CONTROL UNIT		RM-V717U	RM-V711U	←
TOTAL ZOOM RATIO		500X	700X	←
AC ADAPTER		AP-V12EG	AP-V12ED	←

The following table indicate different parts number between models GR-DVL765EG-X, GR-DVL970ED and GR-DVL1170ED.

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

REF. No.	ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
1	PACKING CASE		LY32567-021A	LY32567-017B	LY32567-019A
2	CUSHION		LY32568-001A	*LY32923-001C	*←
3	POLY BAG		LY30023-008A	*LY30023-022A	*←
8	SHEET(E.U.E)		LYT0889-010A	—	—
14	SER.NET CARD		—	BT-59012-1	←
24	AC ADAPTER		LY20847-001C	LY20847-002B	←
32	REMOTE CONTROL UNIT		LY20750-001A	YQ20922R	←
34	CD ROM ASSY		LY32210-023A	←	LY32210-038A
36	CAP(HOOD)ASSY/CAP(M)ASSY		LY43294-002A	*LY43322-002A	*←
38	WARRANTY CARD		BT-54013-2	BT-59011-2	←
39	ADAPTOR PLUG		QAM0302-001	—	—
40	CORE FILTER		QQR0919-002	*—	*—
43	LI BATTERY		—	CR2025	←
44	POLY BAG		—	QPA02503505P	←

FINAL ASSEMBLY <M2>

REF. No.	ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
101	UPPER CASE ASSY		LY20774-005B	*LY20774-005C	LY20797-004C
101A	TOP COVER		LY20775-001A	←	LY20776-001A
101E	COVER(SD)		LY32375-001A	*LY32375-001B	*←
101H	HOOK(UPPER)		LY43261-001A	*LY43261-001B	*←
101J	EARTH SHEET/BRACKET(EARTH)		LY43540-001A	*LY32886-001A	LY32887-001A
101M	SPECIAL SCREW,X2		LY30018-084A	←	LY30018-038A
113	FFC WIRE/E-CARD WIRE		QUQ105-1011AA	*WJT0079-001A	*←
120	STICKER(SIDE)		LY43566-005A	LY43566-003A	←
123	SPACER(A)		—	*LY30029-0Y5A	*←
125	FRONT COVER ASSY		LY32382-007A	LY32382-006A	←
130	REAR UNIT		LY10317-001A	*LY10317-001B	*←
140	LOWER CASE ASSY		LY20769-004D	LY20769-002E	LY20769-003E
140B	COVER(DC)		LY32364-001A	*LY32364-001B	*←
144	PLATE(ADJUST)		LY43256-001A	*LY43256-001B	*←
152	SPECIAL SCREW,X2		LY30019-026A	*LY30019-026B	*←
252	SPACER(A)		—	*LY30029-0Z7A	*←
253	SPACER(A)		—	*LY30029-0P8A	*←

ELECTRONIC VIEWFINDER ASSEMBLY <M4>

REF. No.	ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
321	CASE B(VF)		LY20767-001A	LY20767-001B	←
323	LEVER(VF)		LY43231-001A	LY43231-001B	←
324	LENS ASSY		LY32472-001A	LY32472-002A	←
333	HOLDER LCD(VF)		LY32347-001A	*LY32347-001B	*←

Notes : Mark ← is same as left.

Mark — is not used.

Mark * reference model was also changed.

MONITOR ASSEMBLY <M5>

REF. No.	ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
500	MONITOR ASSY		LYH20246-043B	LYH20246-043C	LYH20246-042C
501	MONITOR COVER ASSY		LY20863-001B	←	LY20864-001C
501F	EARTH MON		LY43784-001A	←	LY43785-001A
501G	WINDOW(M.MEGA)		LY32704-001A	←	LY32704-002A
501H	PLATE		LY32706-001B	←	LY32707-001B
502	MONITOR CASE ASSY		LY20874-001A	←	LY20598-002A
504	HOLDER		LY20674-001A	←	LY20568-001A
506	BACK LIGHT		QLL0121-001	*QLL0133-001	QLL0136-001
507	LCD MODULE		QLD0154-001	←	QLD0203-001
511	SPACER(A)		—	*LY30029-0Y4A	—
512	SPACER(A)		—	—	LY30029-0Y6A

MAIN BOARD ASSEMBLY <01>

REF. No.	ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
PW	MAIN BOARD ASSY		YB10391QC	YB10391QE-03	YB10391EG-03

MONITOR BOARD ASSEMBLY <02>

REF. No.	ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
PW	MONITOR BOARD ASSY		YB10360PG-02	*YB10360PG-03	YB10360PI-02
R7612	CMF RESISTOR		NRVA63D-223X	←	NRVA63D-682X
R7624	CMF RESISTOR		—	—	NRVA63D-223X
R7625	CMF RESISTOR		—	—	NRVA63D-223X
R7636	MG RESISTOR		NRSA63J-101X	*NRSA63J-221X	NRSA63J-101X
R7637	MG RESISTOR		NRSA63J-101X	*NRSA63J-221X	NRSA63J-101X
R7638	MG RESISTOR		NRSA63J-101X	*NRSA63J-221X	NRSA63J-101X
R7651	CAPACITOR		—	—	NCB31HK-102X
C7636	CAPACITOR		—	—	NCF31CZ-104X
C7645	MG RESISTOR		—	*NRSA63J-103X	—
L7605	COIL		NQL365K-100X	←	—
L7606	COIL		—	—	NQL365K-100X

DSC BOARD ASSEMBLY <10>

REF. No.	ITEM	MODEL	GR-DVL765EG-X	GR-DVL970ED	GR-DVL1170ED
PW	DSC BOARD ASSY		YB20931F-01	YB20931G-02	YB20931C-02
IC8003	IC(MICRO C ROM)		MBV160TE90PTA29	MBV160TE90PTA30	MBV160TE90PTA27
IC8007	IC		MM1385EN	←	—
IC8301	IC		—	—	ISP1181ADGG-X
Q8001	DIGI TRANSISTOR		DTA114EE	←	—
R8020	MG RESISTOR		NRSA6AJ-0R0W	←	—
R8027	MG RESISTOR		NRSA6AJ-152W	←	—
R8028	MG RESISTOR		NRS181J-270X	←	—
R8029	MG RESISTOR		NRS181J-270X	←	—
R8030	MG RESISTOR		NRSA6AJ-105W	←	NRSA6AJ-0R0W
R8031	MG RESISTOR		NRSA6AJ-105W	←	NRSA6AJ-0R0W
R8036	MG RESISTOR		NRSA6AJ-105W	←	—
R8056	MG RESISTOR		—	—	NRSA6AJ-0R0W
R8074	MG RESISTOR		—	—	NRSA6AJ-473W
R8302	MG RESISTOR		—	—	NRS181J-220X
R8303	MG RESISTOR		—	—	NRS181J-220X
R8305	MG RESISTOR		—	—	NRSA6AJ-105W
R8306	MG RESISTOR		—	—	NRSA6AJ-103W
R8307	MG RESISTOR		—	—	NRSA6AJ-103W
R8308	MG RESISTOR		—	—	NRSA6AJ-103W
R8309	MG RESISTOR		—	—	NRSA6AJ-103W
R8311	MG RESISTOR		—	—	NRSA6AJ-0R0W
C8027	CAPACITOR		NCB30JK-105X	←	—
C8028	CAPACITOR		NCBA1AK-104W	←	—
C8029	T CAPACITOR		NBE20JM-106X	←	—
C8301	T CAPACITOR		—	—	NBE20JM-106X
C8305	CAPACITOR		—	—	NCBA1AK-104W
C8306	CAPACITOR		—	—	NCBA1AK-104W
C8307	CAPACITOR		—	—	NCBA1AK-104W
C8310	CAPACITOR		—	—	NCBA1AK-104W
C8311	CAPACITOR		—	—	NCBA1AK-104W
L8301	FERRITE BEAD		—	—	NQR0129-002X
X8002	C OSCILLATOR		NAX0398-001X	←	—
X8301	RESONATOR		—	—	NAX0522-001X

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

