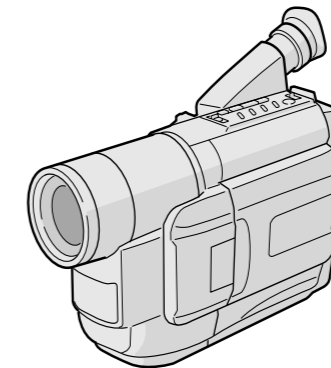


# JVC

## SERVICE MANUAL

### COMPACT VHS CAMCORDER

# GR-FXM270A/A-S, SXM57EG, SXM470A/A-S, SXM770A



**DXC**  
DIGITAL  
STILL CAMERA

**S-VHS** VHS  
625 PAL

**Super VHS**  
**Super VHS ET**

Regarding service information other than these sections, refer to the GR-FXM37EG, SXM607EG service manual (No. 86589). Also, be sure to note important safety precautions provided in the service manual.

### SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-SXM770A)*

Camcorder		Digital	
<b>General</b>		<b>Operating temperature</b>	: 0°C to 40°C
<b>Format</b>	: S-VHS/VHS PAL standard	<b>Operating humidity</b>	: 35% to 80%
<b>Power source</b>	: DC 11 V $\overline{\text{---}}$ (Using AC Adapter) DC 6 V $\overline{\text{---}}$ (Using battery pack)	<b>Storage temperature</b>	: -20°C to 50°C
<b>Power consumption</b>		<b>Weight</b>	: 930 g
<b>Viewfinder on</b>	: 4.7 W	<b>Dimensions</b>	: 200 mm x 112 mm x 118 mm (with the LCD monitor closed and with the viewfinder full tilted downward)
<b>LCD monitor on</b>	: 5.4 W	<b>Pickup</b>	: 1/4" format CCD
<b>Video light</b>	: 3.0 W	<b>Lens</b>	: F1.6, f = 3.9 mm to 62.4 mm, 16:1 power zoom lens with auto iris and macro control, filter diameter 40.5 mm
<b>Signal system</b>	: PAL-type	<b>Viewfinder</b>	: Electronic viewfinder with 0.5" black/white CRT
<b>Video recording system</b>		<b>White balance adjustment</b>	: Auto/Manual adjustment
<b>Luminance</b>	: FM recording	<b>LCD monitor</b>	: 3" diagonally measured, LCD panel/TFT active matrix system
<b>Colour</b>	: Converted sub-carrier direct recording Conforms to VHS standard	<b>Speaker</b>	: Monaural
<b>Cassette</b>	: <b>S-VHS</b> / <b>VHS</b> cassette	<b>Connectors</b>	
<b>Tape speed</b>		<b>JLIP/EDIT</b>	: $\phi$ 3.5 mm, 4-pole, mini-head jack (compatible with RC-5325 plug)
<b>SP</b>	: 23.39 mm/sec.	<b>Video</b>	: 1 V (p-p), 75 $\Omega$ unbalanced, analogue output (via Video output connector)
<b>LP</b>	: 11.70 mm/sec.	<b>Audio</b>	: 300 mV (rms), 1 k $\Omega$ analogue output (via Audio output connector)
<b>Recording time (max.)</b>			
<b>SP</b>	: 60 minutes		
<b>LP</b>	: 120 minutes (with EC-60 cassette)		
<b>D.S.C. format</b>			
<b>Recording format</b>	: Digital data storage (based on JPEG)		
<b>Recording medium</b>	: Built-in flash memory, 2.Mbyte		
<b>Number of storable shots</b>			
<b>FINE mode</b>	: approx. 30 shots		
<b>STANDARD mode</b>	: approx. 60 shots		
<b>Image size</b>	: 640 x 480 pixels (when captured on a PC)		
		<b>AC Adapter AP-V10A</b>	
		<b>Power requirement</b>	: AC 110 V to 240 V $\sim$ , 50 Hz/60 Hz
		<b>Output</b>	: DC 11 V $\overline{\text{---}}$ , 1 A
		<b>Dimensions</b>	: 59 mm x 31 mm x 84 mm (W x H x D)
		<b>Weight</b>	: Approx. 140 g (not including Power Cord)
		<b>Optional Accessories</b>	
			<ul style="list-style-type: none"> <li>• Battery Packs BN-V12U, BN-V20U, BN-V400U</li> <li>• Compact S-VHS (<b>S-VHS</b>) Cassettes SE-C45/30</li> <li>• Compact VHS (<b>VHS</b>) Cassettes EC-60/45/30</li> <li>• Remote Control Unit RM-V700U</li> <li>• Active Carrying Bag CB-V7U</li> </ul>
			Some accessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.
			<i>Specifications shown are for SP mode unless otherwise indicated. E &amp; O.E. Design and specifications subject to change without notice.</i>

# JVC

VICTOR COMPANY OF JAPAN, LIMITED  
VIDEO DIVISION

S40894

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The following table indicate main different points between models GR-FXM37EG, FXM270A/A-S, SXM607EG, SXM57EG, SXM470A/A-S and GR-SXM770A.

ITEM \ MODEL	GR-FXM37EG	GR-FXM270A	GR-FXM270A-S	GR-SXM607EG	GR-SXM57EG	GR-SXM470A	GR-SXM470A-S	GR-SXM770A
AC ADAPTER	AP-V10EG	AP-V10A	AP-V101-S	AP-V10EG	AP-V10EG	AP-V10A	AP-V10A-S	AP-V10A
BATTERY PACK	BN-V11U	BN-V11U	BN-V11U	BN-V20BU	BN-V20BU	BN-V11U	BN-V11U	BN-V11U
BODY COLOR	Mold Black	Silver	Silver	Silver	Light Gold	Silver	Silver	Silver
CASSETTE ADAPTER	Optional	Provided	Provided	Optional	Optional	Provided	Provided	Provided
CONVERSION PLUG	Optional	Provided	Provided	Optional	Optional	Provided	Provided	Provided
DC LIGHT	Not used	Used	Used	Used	Used	Used	Used	Used
DSC	Not used	Not used	Not used	Not used	Not used	Not used	Not used	Used
LCD MONITOR	2.5"	2.5"	2.5"	3"	2.5"	3"	3"	3"
NIGHT SCOPE	Not used	Used	Used	Used	Used	Used	Used	Used
PC CONNECTION CABLE	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Provided
S CABLE, S-VIDEO CABLE	Optional	Optional	Optional	Provided	Provided	Provided	Provided	Provided
S-VHS ON/OFF	Not used	Not used	Not used	Used	Used	Used	Used	Used
ZOOM	400X	600X	600X	400X	400X	600X	600X	600X

The following table indicate different parts number between models GR-FXM37EG, FXM270A/A-S, SXM607EG, SXM57EG, SXM470A/A-S and GR-SXM770A.

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

REF. NO.	ITEM \ MODEL	GR-FXM37EG	GR-FXM270A	GR-FXM270A-S	GR-SXM607EG	GR-SXM57EG	GR-SXM470A	GR-SXM470A-S	GR-SXM770A
1	PACKING CASE	LY32179-002A	LY32054-077A	LY32054-027A	LY32179-004A	←	LY32054-085A	LY32054-030A	LY32054-011A
4	POLY BAG	QPA02003506	←	←	←	←	←	←	YQM30061-3
7	WARRANTY CARD	BT-54013-1	-	-	BT-54013-1	←	-	-	-
△ 9	POWER CORD	QMPL120-190-JR	←	QMPS110-190-JR	QMPL120-190-JR	←	←	QMPS110-190-JR	QMPL120-190JR
△ 10	AC ADAPTER	LY20688-001A	LY20688-003A	LY20688-004A	LY20688-001A	←	LY20688-003A	LY20688-004A	LY20688-003A
△ 11	BATTERY PACK	YQ10629E	←	←	LY31199-001A	←	YQ10629E	←	←
13	SOFT WARE PERM.	-	-	-	-	-	-	-	YU30843-7-1
14	CORE FILTER	QQR0491-002,X3	←	←	QQR0491-002,X4	←	←	←	QQR0491-002,X5
15	S CABLE, S-VIDEO CABLE	-	-	-	QAM0004-003	←	←	←	←
16	REMOTE CONTROL UNIT	-	-	-	LY42129-001A	←	LY20543-002A	←	←
17	AAA(R03)BATTERY, X2	Not used	Not used	Not used	Used	Used	Used	Used	Used
18	ADAPTER PLUG	-	-	-	QAM0302-001	←	-	-	-
19	CONNECTOR,CABLE ADAPTER	PEMC1174	-	-	-	-	-	-	-

Note: Mark - is not used. Mark ← is same as left.

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A	GR-FXM270A-S	GR-SXM607EG	GR-SXM57EG	GR-SXM470A	GR-SXM470A-S	GR-SXM770A
21	CASSETTE ADAPTER	-	YQ31963A-3 or YQ31963B-3	←	-	-	YQ31963A-3 or YQ31963B-3	←	←
22	AA(R6)BATTERY	Not used	Used	Used	Not used	Not used	Used	Used	Used
△ 23	CONVERSION PLUG	-	PEMC1012-02	PEMC1012	-	-	PEMC1012-02	PEMC1012	PEMC1012-02
24	SHEET (CON.PLUG)	-	LYT0609-001A	←	-	-	LYT0609-001A	←	←
25	CABLE ASSY (EDITING)	-	-	-	-	-	PEAC0428-150	-	PEAC0428-150
26	PC CONNECTION CABLE	-	-	-	-	-	-	-	QAM0084-001
27	CD ROM	-	-	-	-	-	-	-	LY31133-001B
28	POLY BAG	-	-	-	-	-	-	-	LY30023-010A
29	SHEET (INSTALL)	-	-	-	-	-	-	-	LYT0309-004A
30	SHEET (AGREEMENT)	-	-	-	-	-	-	-	LYT0378-003A
31	SPACER (PACKING)	-	-	-	* -	-	LY43032-001A	←	←

### FINAL ASSEMBLY <M2>

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG	GR-SXM470A/A-S	GR-SXM770A
101	LOWER CASE ASSY	LY20684-005A	LY20684-006A	LY20684-008A	←	←	LY20684-009A
101F	SCREW	*QYSLSF2060D	QYSLSF2050Z	*QYSLSF2060D	QYSLSF2050Z	←	←
104	FRONT COVER ASSY	LY20683-013A	LY20683-007B	LY20683-014A	LY20683-009B	LY20683-007B	LY20683-007A
104E	COVER (LIGHT)/DC LIGHT	LY30934-020A	LY32040-001A	←	←	←	←
104F	SPACER (A)	-	LY30029-0B4A	←	←	←	←
104H	CAUTION LABEL	-	YQ44341-6	←	←	←	←
104J	STICKER (A)	LY32058-001A	LY32058-002A	←	←	←	←
104K	STICKER (C)	LY32060-001A	LY32060-002A	←	←	←	←
105	CASS.COVER (M) ASSY	LY20694-002A	←	←	LY20694-003A	LY20694-002A	←
106	UPPER CASE (M)	LY10257-005B	LY10257-021A	LY10257-001A	LY10257-003A	LY10257-022A	LY10257-023A
109	TOP OPE UNIT	LY20614-014B	LY20614-002B	←	LY20614-003B	LY20614-002B	LY20614-005B
111	REAR UNIT	LY20615-004A	←	LY20615-001A	←	←	←
114	STICKER (D)	LY32061-003A	LY32061-001A	←	←	←	LY32061-004A
121	SCREW, X3	*QYSLSF2060D	QYSLSF2050Z	*QYSLSF2060D	QYSLSF2050Z	←	←
130	FRAME ASSY	LY20678-002A	LY20678-001A	←	←	←	←
130E	CONTACT (LIGHT), X2	-	YQ43810-1-1	←	←	←	←
130F	E-SI C WIRE C-F	-	WJM0167-001A	←	←	←	←
136	SCREW/SPECIAL SCREW	*QYSLSF2060D	LY42981-001A	*QYSLSF2060D	LY42981-001A	←	←
138	SCREW	* -	QYSLSF2060D	←	←	←	←
154	HOLDER (DSC P.)	-	-	-	-	-	LY20645-001A
155	SCREW	-	-	-	-	-	QYSLSF2060D
156	FPC(DSC)ASSY	-	-	-	-	-	LY42875-001A
156A	S.SHEET(DSC FPC)	-	-	-	-	-	LY42876-001A
157	INSULATOR	-	-	-	-	-	YU40341

### OPTICAL BLOCK SECTION

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG,470A/A-S,770A
254	OPTICAL LPF	LY41757-001A	←	LY41370-001A	LY41757-001A
255	CCD SPACER	LY20346-001A	←	LY20086-001A	LY20346-001A
257	CCD BASE ASSY	LYH40018-003A	LYH40132-002A	LYH40018-004A	LYH40132-002A

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

**MECHANISM ASSEMBLY <M3>**

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG,470A/A-S,770A
400	MECHA(B)ASSY	YMA0030A-E	←	YMA0031A-E	←
406	CASS. GUIDE (R) ASSY	-	-	YQ44339A-7	←
406A	SW. LEVER (R)	-	-	YQ32162-1-3	←
406B	TORSION SPRING	-	-	YQ44340-1-4	←
407	SCREW	-	-	LY42819-001A	←
466	ROTARY ENCODER	QSW0888-001	←	QSW0888-002	←

**MONITOR ASSEMBLY <M5>**

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG	GR-SXM470A	GR-SXM470A-S	GR-SXM770A
△ 500	MONITOR ASSY	LYH20217-017A	LYH20217-007A	LYH20217-001A	LYH20217-004A	LYH20217-008A	LYH20217-008B	LYH20217-003A
△ 501	M.COVER ASSY	LY20679-005A	←	LY20679-001A	LY20679-003A	LY20679-002A	←	LY20679-006A
501B	WINDOW	LY32022-003A	←	LY32022-004A	LY32022-002A	←	←	←
502	M.CASE (2.5/3)ASSY	LY32036-001A	←	LY32035-001A	LY32036-001A	LY32035-001A	←	←
504	HINGE COVER (U)	LY31939-001A	←	←	LY31939-002A	LY31939-001A	←	←
515	HOLDER (2.5/3 PWB)	LY20672-001A	←	LY20647-001A	LY20672-001B	LY20647-001A	←	←
519	BACK LIGHT	QLL0093-001	←	QLL0094-001	QLL0093-001	QLL0094-001	←	←
520	LCD MODULE	QLD0154-001	QLD0176-001	QLD0118-001	QLD0176-001	QLD0118-001	←	←
522	STICKER (B)	LY32059-001A	←	LY32059-002A	←	←	←	←

**MAIN BOARD ASSEMBLY <01>**

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG	GR-SXM470A/A-S	GR-SXM770A
PW	MAIN BOARD ASSY	YB10310EH-01	YB10310EK-01	YB10310EB-01	YB10310ED-01	YB10310EL-01	YB10310EE-01

**CCD BOARD ASSEMBLY <02>**

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG,470A/A-S,770A
PW	CCD BOARD ASSY	YB20899A-01	YB20899D-01	YB20899A-01	YB20899D-01
R5304	MG RESISTOR	NRSA02J-105X	-	NRSA02J-105X	-
C5303	CAPACITOR	NCB21HK-102X	NCB21HK-222X	NCB21HK-102X	NCB21HK-222X

**MONITOR BOARD ASSEMBLY <07>**

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG	GR-SXM470A/A-S,770A
PW	MONITOR BOARD ASSY	YB20900B-01	←	YB20900A-01	YB20900B-01	YB20900A-01
R7511 R7512	MG RESISTOR	-	-	NRSA63J-223X	-	NRSA63J-223X
R7513	MG RESISTOR	NRSA63J-103X	←	-	NRSA63J-103X	-
R7514	MG RESISTOR	-	-	NRSA63J-333X	-	NRSA63J-333X
R7515	MG RESISTOR	NRSA63J-302X	←	NRSA63J-562X	NRSA63J-302X	NRSA63J-562X
C7510	CAPACITOR	-	-	NCB31EK-103X	-	NCB31EK-103X

**DSC BOARD ASSEMBLY <08>**

REF. NO.	MODEL ITEM	GR-FXM37EG	GR-FXM270A/A-S	GR-SXM607EG	GR-SXM57EG,470A/A-S	GR-SXM770A
PW	DSC BOARD ASSY	-	-	-	-	YB20898A

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