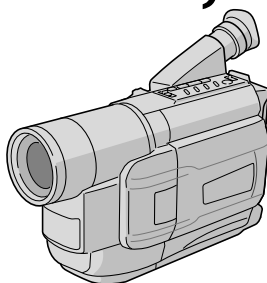


JVC

SERVICE MANUAL

COMPACT VHS CAMCORDER

GR-FXM383EG, SXM28EG, SXM58EG, SXM780A



S VHS VHS
625 PAL

Super VHS
Super VHS ET

Regarding service information other than these sections, refer to the GR-FXM38EG, SXM48EG service manual (No. 86655). Also, be sure to note important safety precautions provided in the service manual.

SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-SXM78EA/SXM48EA/SXM780A/SXM480A/SXM280A/SXM180A/SX140A)*

Camcorder		Pickup	: 1/6" format CCD
General		Lens	: 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
Format	: S-VHS/VHS PAL standard	Viewfinder	: Electronic viewfinder with 0.5" black/white CRT
Power source	: DC 11 V (Using AC Adapter) DC 6 V (Using battery pack)	White balance adjustment	: Auto/Manual adjustment
Power consumption		LCD monitor	: 3" diagonally measured, LCD panel/TFT active matrix system (GR-SXM78EA/SXM780A/SXM480A only)
Viewfinder on	: 4.0 W (GR-SXM78EA/SXM48EA/SXM780A/SXM480A/SXM280A/SXM180A only) 3.7 W (GR-SX140A only)	(Applicable models only)	: 2.5" diagonally measured, LCD panel/TFT active matrix system (GR-SXM48EA/SXM280A/SXM180A only)
LCD monitor* on	: 4.5 W (GR-SXM78EA/SXM48EA/SXM780A/SXM480A/SXM280A/SXM180A only)	Speaker	: Monaural
Video light**	: 3.0 W	(Applicable models only)	
* Applicable models only.		Connectors	
** GR-SXM78EA/SXM48EA/SXM780A/SXM480A/SXM280A only.		Video	: 1 V (p-p), 75 Ω unbalanced, analogue output (via Video output connector)
Signal system	: PAL-type	Audio	: 300 mV (rms), 1 k Ω analogue output (via Audio output connector)
Video recording system		Digital	: ϕ 3.5 mm, 4-pole, mini-head jack (GR-SXM78EA/SXM780A only)
Luminance	: FM recording	S-Video	: Y : 1 V (p-p), 75 Ω , analogue output C : 0.30 V (p-p), 75 Ω , analogue output
Colour	: Converted sub-carrier direct recording Conforms to VHS standard		
Cassette	: S VHS / VHS cassette	AC Adapter	
Tape speed		Power requirement	: AC 110 V — 240 V~, 50 Hz/60 Hz
SP	: 23.39 mm/sec.	Output	: DC 11 V , 1 A
LP	: 11.70 mm/sec.		
Recording time (max.)		Optional Accessories	
SP	: 60 minutes	• Battery Packs BN-V12U, BN-V20U, BN-V400U	
LP	: 120 minutes (with EC-60 cassette)	• Compact S-VHS (S VHS) Cassettes SE-C45/30	
Operating temperature	: 0°C to 40°C	• Compact VHS (VHS) Cassettes EC-60/45/30	
Operating humidity	: 35% to 80%	• Remote Control Unit RM-V700U	
Storage temperature	: -20°C to 50°C	• Active Carrying Bag CB-V7U	
Weight	: Approx. 910 g (GR-SXM78EA/SXM48EA/SXM780A/SXM480A/SXM280A only) Approx. 900 g (GR-SXM180A only) Approx. 850 g (GR-SX140A only)	Some accessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.	
Dimensions (W x H x D)	: 200 mm x 112 mm x 118 mm (GR-SXM78EA/SXM48EA/SXM780A/SXM480A/SXM280A/SXM180A only) 200 mm x 112 mm x 115 mm (GR-SX140A only) (with the LCD monitor* closed and with the viewfinder fully tilted downward)	Specifications shown are for SP mode unless otherwise indicated. E & O.E. Design and specifications subject to change without notice.	

* Applicable models only.

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5. PARTS LIST (5-1 to 5-6)

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The following table indicate main different points between models GR-FXM38EG-X and GR-FXM383EG-X.

ITEM	MODEL	GR-FXM38EG-X	GR-FXM383EG-X
BODY COLOR		SILVER	MOLD BRACK
DC LIGHT		Not Used	Used

The following table indicate different parts number between models GR-FXM38EG-X and GR-FXM383EG-X.

FINAL ASSEMBLY <M2>

REF. NO.	ITEM	MODEL	GR-FXM38EG-X	GR-FXM383EG-X
101	CASSETTE COVER(M)ASSY		LY20694-002B	LY20694-010A
103	UPPER CASE(M)		LY10257-041A	LY10257-042A
125	TOP OPERATION UNIT		LY20614-014C	LY20614-010C
130	REAR UNIT		LY20615-005F	*LY20615-005E
135	FRONT COVER ASSY		LY20683-030A	LY20683-031A
135F	COVER(LIGHT)/DC LIGHT		LY30934-022A	LY32040-001A
135G	STICKER(A)		LY32058-001A	LY32058-002A
135J	SPACER(A)		—	LY30029-0B4A
△ 135K	CAUTION LABEL		—	YQ44341-6
139	SCREW		—	*QYSPSTU1725M
140	FRAME ASSY		LY20832-002B	LY20832-001B
140E	CONTACT(LIGHT),X2		—	YQ43810-1-1
140F	E-SI C WIRE C-F		—	WJM0259-001A
142	SCREW		QYSPSPU1720Z(.x2)	*QYSPSPU1720Z(.x1)

MONITOR ASSEMBLY <M5>

REF. NO.	ITEM	MODEL	GR-FXM38EG-X	GR-FXM383EG-X
△ 500	MONITOR ASSY		LY20836-002A	LY20836-003A
△ 501	MONITOR COVER ASSY		LY20834-002A	LY20834-003A
505	HINGE COVER(UPPER)		LY31939-001A	LY31939-003A

MAIN BOARD ASSEMBLY <01>

REF. NO.	ITEM	MODEL	GR-FXM38EG-X	GR-FXM383EG-X
PW1	MAIN BOARD ASSY		YB10356EA1-01	YB10356EG1-01
Q6306	MOS FET		—	SSM3K02F
R6306	MG RESISTOR		—	NRS12BK-R47W
R6307	MG RESISTOR		—	NRSA63J-104X
C6307	E CAPACITOR		—	NEA71CM-106X
CN6	CONNECTOR		—	QGA1201C2-02X

Notes : Mark — is not used.

Mark : * reference model was also changed.

The following table indicate main different points between models GR-SXM48EG-X, GR-SXM28EG-F, GR-SXM58EG-X, GR-SXM58EG-Y, GR-SXM58EG-Z and GR-SXM780A.

ITEM	MODEL	GR-SXM48EG-X	GR-SXM28EG-F	GR-SXM58EG-X	GR-SXM58EG-Y	GR-SXM58EG-Z	GR-SXM780A
DC LIGHT		Used	Not Used	Used	←	←	←
LCD MONITOR		2.5"	←	←	←	←	3"
DIGITAL TERMINAL		Not Used	←	Used	←	←	←
BATTERY PACK		BN-V11U-E	BN-V11U-F	BN-V20BU	←	←	BN-V11U-E
REMOTE CONTROL UNIT		Not Used	←	←	←	←	RM-V715U
CASSETTE ADAPTER		Optional	←	←	←	←	Provided

The following table indicate different parts number between models GR-SXM48EG-X, GR-SXM28EG-F, GR-SXM58EG-X, GR-SXM58EG-Y, GR-SXM58EG-Z and GR-SXM780A.

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

REF. NO.	ITEM	MODEL	GR-SXM48EG-X	GR-SXM28EG-F	GR-SXM58EG-X	GR-SXM58EG-Y	GR-SXM58EG-Z	GR-SXM780A
1	PACKING CASE		LY32545-002A	←	LY32545-001B	←	←	LY32563-003B
6	CONNECTOR		PEMC1174	←	←	←	←	—
7	GUARANTY CARD		—	BT-54008-2	—	—	—	—
8	WARRANTY CARD		BT-54013-2	—	BT-54013-2	←	←	—
13	BATTERY PACK		YQ10269E	YQ10269F	LY31199-001A	←	←	YQ10269E
16	BATTERY		—	—	—	—	—	AA(R6)
19	REMOTE CONTROL UNIT		—	—	—	—	—	LY42129-001A
20	BATTERY,X2		—	—	—	—	—	AAA(R03)
21	CASSETTE ADAPTER		—	—	—	—	—	YQ31963B-3
22	POLY BAG		—	—	—	—	—	YQ43446
23	S-VIDEO CABLE		QAM0004-003	←	←	←	←	—
24	SHEET(CON.PLUG)		—	—	—	—	—	LYT0609-001A
25	CONVERSION PLUG		—	—	—	—	—	PEMC1012-02
32	PC CONNECTION CABLE		—	—	QAM0384-001	←	←	←
34	CD ROM ASSY		—	—	LY32210-020B	←	←	←
36	SHEET(ATT.)		—	—	LYT0974-001A	←	←	←
38	SHEET(AGREMENT)		—	—	LYT0934-001A	←	←	←

FINAL ASSEMBLY <M2>

REF. NO.	ITEM	MODEL	GR-SXM48EG-X	GR-SXM28EG-F	GR-SXM58EG-X	GR-SXM58EG-Y	GR-SXM58EG-Z	GR-SXM780A
101	CASSETTE COVER(M)ASSY		LY20694-002B	*LY20694-011A	*←	*←	LY20694-009B	LY20694-002B
101E	STICKER(E)		—	LY43537-001A	—	—	LY43537-001A	—
103	UPPER CASE(M)		LY10257-044A	LY10257-043A	LY10257-045A	←	←	LY10257-049A
110	LOWER CASE ASSY		LY20684-023A	LY20684-022A	LY20684-023A	←	←	←
125	TOP OPERATION UNIT		LY20614-002C	LY20614-014C	LY20614-002C	←	←	←
127	STICKER(D)		—	—	—	—	—	LY32061-006A
130	REAR UNIT		LY20615-005F	*LY20615-005E	LY20615-007B	←	←	←
135	FRONT COVER ASSY		LY20683-033A	LY20683-030A	LY20683-029A	←	←	←
135F	DC LIGHT/COVER(LIGHT)		LY32040-001A	LY30934-022A	LY32040-001A	←	←	←
135G	STICKER(A)		LY32058-002A	LY32058-001A	LY32058-003A	←	←	←
135H	STICKER(C)		LY32060-004A	LY32060-005A	LY32060-004A	←	←	←
135J	SPACER(A)		LY30029-0B4A	—	LY30029-0B4A	←	←	←
135K	CAUTION LABEL		YQ44341-6	—	YQ44341-6	←	←	←
139	SCREW		—	*QYSPSTU1725M	*←	*←	*←	*←
140	FRAME ASSY		LY20832-001B	LY20832-002B	LY20832-001B	←	←	←
140E	CONTACT(LIGHT),X2		YQ43810-1-1	—	YQ43810-1-1	←	←	←
140F	E-SI C WIRE C-F		WJM0259-001A	—	WJM0259-001A	←	←	←
142	SCREW		QYSPSPU1720Z,(x2)	*QYSPSPU1720Z,(x1)	*←	*←	*←	*←

MONITOR ASSEMBLY <M5>

REF. NO.	ITEM	MODEL	GR-SXM48EG-X	GR-SXM28EG-F	GR-SXM58EG-X	GR-SXM58EG-Y	GR-SXM58EG-Z	GR-SXM780A
500	MONITOR ASSY		LY20836-001A	←	←	←	←	LY20836-004A
502	MONITOR CASE ASSY		LY32036-002A	←	←	←	←	LY32035-001A
502E	SPACER(A)		LY30029-0T7A	←	←	←	←	—
504	SHIELD CASE		LY32330-001A	←	←	←	←	LY32332-001A
518	LCD MODULE		QLD0176-001	←	←	←	←	QLD0213-001
519	LIGHT SCREEN		LY43392-001A	←	←	←	←	LY43391-001A
520	LAMP		QLL0110-001	←	←	←	←	QLL0111-001
521	HOLDER,X2		LY43393-001A	←	←	←	←	LY43394-001A
522	SHEET		LY43396-001A	←	←	←	←	LY43395-001A
523	DIFFUSION SHEET		LY43362-001A	←	←	←	←	LY43363-001A
527	SPACER(A)		—	—	—	—	—	LY30029-0R6A
528	LCD FRAME(3)		—	—	—	—	—	LY32333-001A
529	SPACER(A),X2		—	—	—	—	—	LY30029-0R5A

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-SXM48EG-X	GR-SXM28EG-F	GR-SXM58EG-X	GR-SXM58EG-Y	GR-SXM58EG-Z	GR-SXM780A
PW1	MAIN BOARD ASSY	YB10356EB1-01	YB10356EH1-01	YB10356EC1-01	←	←	YB10356EJ1-01
IC101	IC(MICRO C ROM)	UPD703039-038	←	UPD703039-039	←	←	←
IC105	IC(DIGITAL)	—	—	TC7S66FU	←	←	←
IC1801	IR DETECT UNIT	—	—	—	—	—	PIC-26043S
IC4002	IC	Z4C2973-32-X	—	Z4C2973-32-X	←	←	←
IC8001	IC	—	—	MAX3221CAE	←	←	←
Q6306	MOS FET	SSM3K02F	—	SSM3K02F	←	←	←
Q6621	PAIR TRANSISTOR	—	—	—	—	—	HN1C01FU/G/-X
Q6622	TRANSISTOR	—	—	—	—	—	2SA1577/QR/-X
D8001	ZENER DIODE	—	—	EMZ6.8N	←	←	←
R182	MG RESISTOR	—	—	NRSA63J-105X	←	←	←
R4013	MG RESISTOR	NRSA63J-102X	—	NRSA63J-102X	←	←	←
R6306	MG RESISTOR	NRS12BK-R47W	—	NRS12BK-R47W	←	←	←
R6307	MG RESISTOR	NRSA63J-104X	—	NRSA63J-0R0X	←	←	←
R6622	CMF RESISTOR	—	—	—	—	—	NRVA63D-104X
R6623	CMF RESISTOR	—	—	—	—	—	NRVA63D-473X
R6624	MG RESISTOR	—	—	—	—	—	NRSA63J-273X
R6625	MG RESISTOR	—	—	—	—	—	NRSA63J-822X
R6626	CMF RESISTOR	—	—	—	—	—	NRVA63D-273X
R6627	CMF RESISTOR	—	—	—	—	—	NRVA63D-183X
R8001	MG RESISTOR	—	—	NRSA63J-331X	←	←	←
R8002	MG RESISTOR	—	—	NRSA63J-0R0X	←	←	←
R8003	MG RESISTOR	—	—	NRSA63J-0R0X	←	←	←
C4024	CAPACITOR	NCF31EZ-104X	—	NCF31EZ-104X	←	←	←
C4044	CAPACITOR	NCB30JK-105X	—	NCB30JK-105X	←	←	←
C6307	E CAPACITOR	NEA71CM-106X	—	NEA71CM-106X	←	←	←
C6622	CAPACITOR	—	—	—	—	—	NCB21CK-105X
C8001	CAPACITOR	—	—	NCF31EZ-104X	←	←	←
C8002	CAPACITOR	—	—	NCF31EZ-104X	←	←	←
C8003	CAPACITOR	—	—	NCF31EZ-104X	←	←	←
C8004	CAPACITOR	—	—	NCF31EZ-104X	←	←	←
C8005	T CAPACITOR	—	—	NBE20JM-106X	←	←	←
C8006	CAPACITOR	—	—	NCF31EZ-104X	←	←	←
L501	MG RESISTOR	—	—	NRSA63J-0R0X	←	←	←
L8001	COIL	—	—	NQL365K-220X	←	←	←
CN6	CONNECTOR	QGA1201C2-02X	—	QGA1201C2-02X	←	←	←

MONITOR BOARD ASSEMBLY <07>

△ REF. NO.	ITEM MODEL	GR-SXM48EG-X	GR-SXM28EG-F	GR-SXM58EG-X	GR-SXM58EG-Y	GR-SXM58EG-Z	GR-SXM780A
PW	MONITOR BOARD ASSY	YB20913A	←	←	←	←	YB20913B
IC7603	IC	SN74AHC1G04K	←	←	←	←	—
Q7607	TRANSISTOR	DTC144EE	←	←	←	←	—
R7602	MG RESISTOR	NRSA63D-752X	←	←	←	←	NRSA63D-432X
R7607	MG RESISTOR	NRSA63D-822X	←	←	←	←	NRSA63D-153X
R7637	MG RESISTOR	NRSA63J-223X	←	←	←	←	NRSA63J-682X
R7640	MG RESISTOR	NRSA02J-182X	←	←	←	←	NRSA02J-122X
R7641	MG RESISTOR	NRSA02J-331X	←	←	←	←	NRSA02J-821X
R7642	MG RESISTOR	—	—	—	—	—	NRSA63J-0R0X
R7643	MG RESISTOR	—	—	—	—	—	NRSA63J-123X
R7644	MG RESISTOR	—	—	—	—	—	NRSA63J-123X
R7645	MG RESISTOR	NRSA63J-682X	←	←	←	←	NRSA63J-123X
R7646	MG RESISTOR	NRSA63J-392X	←	←	←	←	NRSA63J-222X
R7647	MG RESISTOR	—	—	—	—	—	NRSA63J-0R0X
R7648	MG RESISTOR	NRSA63J-103X	←	←	←	←	—
R7649	MG RESISTOR	—	—	—	—	—	NRSA63J-333X
R7650	MG RESISTOR	NRSA63J-103X	←	←	←	←	—
C7623	CAPACITOR	NCB31EK-682X	←	←	←	←	—
C7627	CAPACITOR	NCB31EK-103X	←	←	←	←	—
C7630	CAPACITOR	—	—	—	—	—	NCB31EK-103X
L7603	COIL	—	—	—	—	—	NQL38DK-220X
L7604	COIL	NQL38DK-220X	←	←	←	←	—

Notes : Mark ← is same as left.
Mark — is not used.

