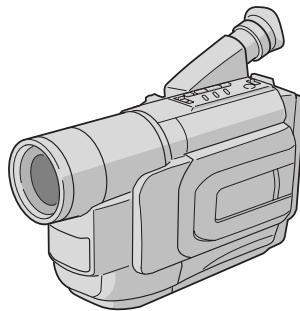


# JVC

## SERVICE MANUAL

### COMPACT VHS CAMCORDER

# GR-FX12EK



**Compact VHS**



Regarding service information other than these sections, refer to the GR-FX12EG service manual (No.86590). Also, be sure to note important safety precautions provided in the service manual.

## SPECIFICATIONS

Camcorder	
<b>General</b>	
Format	: S-VHS (GR-SXM47/SX22 only)/VHS PAL standard
Power source	: DC 11 V  (Using AC Adapter) DC 6 V  (Using battery pack)
Power consumption	
Viewfinder on	: 4.0 W (GR-SXM47/FXM37 only) 3.7 W (GR-SX22/FX12 only)
LCD monitor on*	: 4.5 W (GR-SXM47/FXM37 only)
Video light**	: 3.0 W
* Models equipped with LCD monitor only. **GR-SXM47/SX22 only.	
Signal system	: PAL-type
Video recording system	
Luminance	: FM recording
Colour	: Converted sub-carrier direct recording Conforms to VHS standard
Cassette	:  /  cassette
Tape speed	
SP	: 23.39 mm/sec.
LP	: 11.70 mm/sec.
Recording time (max.)	
SP	: 60 minutes
LP	: 120 minutes (with EC-60 cassette)
Operating temperature	: 0°C to 40°C

Operating humidity	: 35% to 80%
Storage temperature	: -20°C to 50°C
Weight	: Approx. 900 g (GR-SXM47/FXM37 only) Approx. 730 g (GR-SX22 only) Approx. 720 g (GR-FX12 only)
Dimensions (W x H x D)	: 200 mm x 112 mm x 118 mm (GR-SXM47/FXM37 only) 200 mm x 112 mm x 115 mm (GR-SX22/FX12 only) (with the LCD monitor* closed and with the viewfinder full tilted downward) *Models equipped with LCD monitor only.
Pickup	: 1/4" format CCD
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
Viewfinder	: Electronic viewfinder with 0.5" black/white CRT
White balance adjustment	: Auto/Manual adjustment
LCD monitor (models equipped with LCD monitor only)	: 2.5" diagonally measured, LCD panel/TFT active matrix system
Speaker (models equipped with LCD monitor only)	: Monaural

### Connectors

JLIP/EDIT	: ø3.5 mm, 4-pole, mini-head jack (compatible with RC-5325 plug)
Video	: 1 V (p-p), 75 Ω unbalanced, analogue output (via Video output connector)
Audio	: 300 mV (rms), 1 kΩ analogue output (via Audio output connector)
S-Video (GR-SXM47/SX22 only)	: Y: 1 V (p-p), 75 Ω, analogue output C: 0.29 V (p-p), 75 Ω, analogue output

### AC Adapter AP-V10EG

Power requirement	: AC 110 V to 240 V~, 50 Hz/60 Hz
Output	: DC 11 V , 1 A
Dimensions (W x H x D)	: 59 mm x 31 mm x 84 mm
Weight	: Approx. 140 g (not including Power Cord)

### Optional Accessories

- Battery Packs BN-V11U, BN-V12U, BN-V400U
- Compact S-VHS () Cassettes SE-C45/30
- Compact VHS () Cassettes EC-60/45/30
- Active Carrying Bag CB-V7U
- Cassette Adapter C-P7U

Some accessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.

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-FX12EG and GR-FX12EK.

ITEM	MODEL	GR-FX12EG	GR-FX12EK
AC CORD		CEE TYPE	UK TYPE
QUEST CARD		NOT USED	USED

The following table indicate different parts number between models GR-FX12EG and GR-FX12EK.

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

REF NO.	ITEM	MODEL	GR-FX12EG	GR-SX22EA
4	POLY BAG		QPA02003506	YQM30061-3
7	WARRANTY CARD		BT-54013-1	—
	GURANTY CARD		—	BT-54008-2
9	POWER CORD		QMPL120-190-JR	QMPP110-190-JR
13	Q.CARD (JUK)		—	LYT0194-001B

## MAIN BOARD ASSEMBLY <01>

REF NO.	ITEM	MODEL	GR-FX12EG	GR-FX12EK
PW	MAIN BOARD ASSEMBLY		* YB10310EF-04	←
IC101	IC(MICRO C ROM)		* UPD703039-030	←
	IC(MICRO C ROM)		* UPD70F3040-030	←
IC3002	IC		* SN74AHC1G04K-X	←
IC4004	IC		* MM1385NN-X	←
D4001	ZENER DIODE		* UDZS5.1B-X	←
D4002	ZENER DIODE		* UDZS5.1B-X	←
R4011	MG RESISTOR		* —	←
R4012	MG RESISTOR		* —	←
R4013	MG RESISTOR		* —	←
R4014	MG RESISTOR		* —	←
R4015	MG RESISTOR		* NRSA63J-103X	←
R4016	MG RESISTOR		* NRSA63J-103X	←
R4017	MG RESISTOR		* NRSA63J-103X	←
R4018	MG RESISTOR		* NRSA63J-103X	←
R4021	MG RESISTOR		* NRSA63J-0R0X	←
R4022	MG RESISTOR		* NRSA63J-0R0X	←
R5205	MG RESISTOR		* NRSA63J-102X	←
R5206	MG RESISTOR		* NRSA63J-102X	←
R5207	MG RESISTOR		* NRSA63J-102X	←
C4052	CAPACITOR		* NCB21CK-105X	←
C4053	CAPACITOR		* NCF31EZ-104X	←
CN4	CONNECTOR,(1-2)L.MTR		* QGA1201F2-06X	←
SD1	SHIELD PLATE		* LY43082-001A	←

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



**JVC**

VICTOR COMPANY OF JAPAN, LIMITED  
VIDEO DIVISION

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