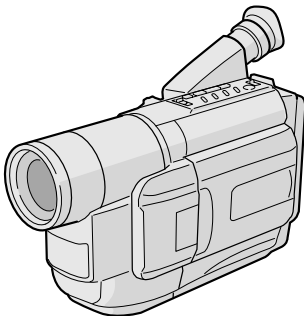


JVC

SERVICE MANUAL

COMPACT VHS CAMCORDER

GR-SXM247UM/347UM /747UM/947UM



Super VHS

Super VHS ET

Regarding service information other than these sections, refer to the GR-SXM330U, SXM930U service manual (No. 86595). Also, be sure to note important safety precautions provided in the service manual.

SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-SXM247, 347, 747UM)*





| Camcorder | | AC Adapter AP-V10U | |
|------------------------|--|--|---|
| General | | Power requirement | : AC 110 V to 240 V~, 50 Hz/60 Hz |
| Format | : S-VHS /VHS NTSC standard | Output | : DC 11 V --- , 1 A |
| Power source | : DC 11 V --- (Using AC Adapter) DC 6 V --- (Using battery pack) | Dimensions (W x H x D) | : 59 mm x 31 mm x 69 mm (2-3/8" x 1-1/4" x 2-3/4") |
| Power consumption | | Weight | : Approx. 130 g (0.29 lbs) |
| Viewfinder on | : 4.0 W | Optional Accessories | |
| LCD monitor on | : 4.5 W | • Battery Packs BN-V12U, BN-V20U, BN-V400U | |
| Video light | : 3.0 W | • A/V (Audio/Video) Cable | |
| Signal system | : NTSC-type | • S-Video Cable QAM0004-004 | |
| Video recording system | | • Compact S-VHS () Cassettes ST-C-40/30/20 | |
| Luminance | : FM recording | • Compact VHS () Cassettes TC-40/30/20 | |
| Color | : Converted sub-carrier direct recording Conforms to VHS standard | • Active Carrying Bag CB-V7U | |
| Cassette | :  /  cassette | <div>Some accessories are not available in some areas. Please consult your nearest JVC dealer for details on accessories and their availability.</div> | |
| Tape speed | | | |
| SP | : 33.35 mm/sec. (1-5/16 ips) | <div>Specifications shown are for SP mode unless otherwise indicated. E & O.E. Design and specifications subject to change without notice.</div> | |
| EP | : 11.12 mm/sec. (7/16 ips) | | |
| Recording time (max.) | | | |
| SP | : 40 minutes | | |
| EP | : 120 minutes (with TC-40) | | |
| 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) | | |
| Weight | : Approx. 910 g (2.0 lbs) (GR-SXM747UM only) Approx. 900 g (2.0 lbs) (GR-SXM347UM/SXM247UM only) | Dimensions (W x H x D) | : 206 mm x 112 mm x 118 mm (8-1/8" x 4-7/16" x 4-11/16") (with the LCD monitor closed and with the viewfinder full tilted downward) |
| | | Pickup Lens | : 1/4" format CCD 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 | : 3" diagonally measured, LCD panel/TFT active matrix system (GR-SXM747UM only) 2.5" diagonally measured, LCD panel/TFT active matrix system (GR-SXM347UM/SXM247UM only) |
| | | Speaker | : Monaural |
| | | Connectors | |
| | | Video | : 1 V (p-p), 75 Ω unbalanced, analog output (via Video output connector) |
| | | Audio | : 300 mV (rms), 1 kΩ analog output (via Audio output connector) |
| | | S-Video | : Y : 1 V (p-p), 75 Ω, analog output C : 0.29 V (p-p), 75 Ω, analog output |

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The following table indicate main different points between models GR-SXM930U, SXM947UM, SXM747UM, SXM330U, SXM347UM and GR-SXM247UM.

| ITEM \ MODEL | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM | GR-SXM247UM |
|---------------------|-------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| BODY COLOR | Silver | Silver | Silver | Metallic gray | Silver | Black |
| DSC | Used | Used | Not used | Not used | Not used | Not used |
| LCD MONITOR | 3" | 3" | 3" | 2.5" | 2.5" | 2.5" |
| PC CONNECTION CABLE | Provided | Provided | Optional | Optional | Optional | Optional |
| VIEW FINDER | Color | Color | Black/White | Black/White | Black/White | Black/White |
| ZOOM | 400X | 600X | 600X | 400X | 600X | 600X |

The following table indicate different parts number between models GR-SXM930U, SXM947UM, SXM747UM, SXM330U, SXM347UM and GR-SXM247UM.

PACKING AND ACCESSORY ASSEMBLY <M1>

| REF. NO. | ITEM \ MODEL | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM | GR-SXM247UM |
|-----------------|---------------------|-------------------|--------------------|--------------------|-------------------|--------------------|--------------------|
| 1 | PACKING CASE | LY32179-005A | LY32054-0B5A | LY32054-0B3A | LY32179-004A | LY32054-0B1A | LY32054-0A8A |
| △ 5 | IB(EN) | LYT0705-001A | LYT0732-001A | LYT0731-001A | LYT0689-001A | LYT0731-001A | ← |
| △ | IB(SP) | — | LYT0732-002A | LYT0731-002A | — | LYT0731-002A | ← |
| 7 | REGIST.CARD | BT-51020-2 | — | — | BT-51020-2 | — | — |
| 14 | CORE FILTER | QQR0491-002 | — | — | — | — | — |
| 15 | PC CONNECTION CABLE | QAM0084-001 | ← | — | — | — | — |
| 16 | REMOTE CONTROL UNIT | LY42129-001A | ← | ← | ← | ← | — |
| 18 | AAA(R03)BATTERY | Used | Used | Used | Used | Used | Not used |
| 19 | CD ROM | * LY31133-001B | LY32210-007A | — | — | — | — |
| 20 | POLY BAG | * LY30023-010A | — | — | — | — | — |
| 22 | SOFT WARE PERM. | YU30843-4 | ← | — | — | — | — |
| △ 25 | IB(SOFT)(EN)/(SP) | LYT0309-001B | LYT0309-006A | — | — | — | — |
| 26 | SHEET(INSTALL) | LYT0309-004A | ← | — | — | — | — |

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

FINAL ASSEMBLY <M2>

| REF. NO. | MODEL ITEM | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM | GR-SXM247UM |
|----------|---------------------|------------------|----------------|--------------|------------------|----------------|--------------|
| 101 | LOWER CASE ASSY | LY20684-009A | ← | LY20684-008A | ← | ← | LY20684-007A |
| 102 | COVER(JACK) | * LY31945-001B | LY31945-001C | ← | * LY31945-001B | LY31945-001C | ← |
| 104 | FRONT COVER ASSY | LY20683-015A | LY20683-020A | ← | LY20683-005B | LY20683-020A | LY20683-019A |
| 104K | STICKER(C) | LY32060-003A | ← | ← | ← | ← | LY32060-001A |
| 105 | CASS.COVER(M)ASSY | LY20694-002A | ← | ← | LY20694-004A | LY20694-002A | LY20694-001B |
| 106 | UPPER CASE(M) | LY10257-018A | LY10257-032A | LY10257-031A | LY10257-015A | LY10257-030A | LY10257-040A |
| 109 | TOP OPE UNIT | LY20614-008B | ← | LY20614-009B | LY20614-012B | LY20614-009B | LY20614-010B |
| 114 | STICKER(D) | LY32061-004A | ← | LY32061-005A | ← | ← | ← |
| 115 | SCREW | * QYSLSF2060D,X5 | QYSLSF2060D,X4 | ← | * QYSLSF2060D,X5 | QYSLSF2060D,X4 | ← |
| 121 | SCREW,X3 | * QYSLSF2050Z | QYSLSF2050D | ← | * QYSLSF2050Z | QYSLSF2050D | ← |
| 136 | SCREW/SPECIAL SCREW | * QYSLSF2060D | LY42981-001A | ← | * QYSLSF2060D | LY42981-001A | ← |
| 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-SXM930U | GR-SXM947UM/747UM | GR-SXM330U | GR-SXM347UM | GR-SXM247UM |
|----------|---------------|---------------|-------------------|------------|-------------|---------------|
| 257 | CCD BASE ASSY | LYH40018-006A | ← | ← | ← | LYH40047-001A |

ELECTRONIC VIEWFINDER ASSEMBLY <M4>

| REF. NO. | MODEL ITEM | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM/247UM |
|----------|----------------|----------------|--------------|--------------|------------|-------------------|
| △ 300 | E.VF ASSY | LYH20242-001A | ← | - | - | - |
| 303 | SPACER(HOLDER) | * LY42221-001C | LY43013-001A | - | - | - |
| △ 350 | E.VF ASSY | - | - | LY20701-001A | ← | ← |

MONITOR ASSEMBLY <M5>

| REF. NO. | MODEL ITEM | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM | GR-SXM247UM |
|----------|-------------------|-----------------|---------------|---------------|---------------|---------------|---------------|
| △ 500 | MONITOR ASSY | * LYH20217-014A | LYH20217-014B | LYH20217-013B | LYH20217-015A | LYH20217-022B | LYH20217-025B |
| △ 501 | M.COVER ASSY | LY20679-008A | ← | LY20679-007A | LY20679-009A | LY20679-007A | LY20679-012A |
| 502 | M.CASE(3/2.5)ASSY | LY32035-001A | ← | ← | LY32036-001A | ← | ← |
| 504 | HINGE COVER(U) | LY31939-001A | ← | ← | LY31939-004A | LY31939-001A | LY31939-003A |
| 515 | HOLDER(3/2.5PWB) | LY20647-001A | ← | ← | LY20672-001B | ← | ← |
| 519 | BACK LIGHT | QLL0094-001 | ← | ← | QLL0093-001 | ← | ← |
| 520 | LCD MODULE | QLD0118-001 | ← | ← | QLD0176-001 | ← | ← |

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

MAIN BOARD ASSEMBLY <01>

| REF. NO. | ITEM \ MODEL | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM | GR-SXM247UM |
|----------|-----------------|--------------|--------------|--------------|--------------|--------------|--------------|
| PW | MAIN BOARD ASSY | YB10310UG-02 | YB10310UW-04 | YB10310UV-03 | YB10310UD-01 | YB10310UU-03 | YB10310VE-01 |

C-VF BL BOARD ASSEMBLY <06>

| REF. NO. | ITEM \ MODEL | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM/247UM |
|----------|--------------------|---------------|--------------|-------------|------------|-------------------|
| PW | C-VF BL BOARD ASSY | YB20901A | ← | — | — | — |
| R7562 | MG RESISTOR | *NRSA63J-470X | NRSA63J-360X | — | — | — |

MONITOR BOARD ASSEMBLY <07>

| REF. NO. | ITEM \ MODEL | GR-SXM930U | GR-SXM947UM/747UM | GR-SXM330U | GR-SXM347UM/247UM |
|-------------------|--------------------|---------------|-------------------|----------------|-------------------|
| PW | MONITOR BOARD ASSY | *YB20900A-01 | YB20900C | * YB20900B-01 | YB20900D |
| IC7501 | IC | *TC7WH34FK | — | * TC7WH34FK | — |
| R7511,R7512 | MG RESISTOR | NRSA63J-223X | ← | — | — |
| R7513 | MG RESISTOR | — | — | NRSA63J-103X | ← |
| R7514 | MG RESISTOR | NRSA63J-333X | ← | — | — |
| R7515 | MG RESISTOR | NRSA63J-562X | ← | NRSA63J-302X | ← |
| R7519 to R7521 | MG RESISTOR | * — | NRSA63J-0R0X | * — | NRSA63J-0R0X |
| C7502 | CAPACITOR | *NCB31EK-103X | — | * NCB31EK-103X | — |
| C7510 | CAPACITOR | NCB31EK-103X | ← | — | — |

DSC BOARD ASSEMBLY <08>

| REF. NO. | ITEM \ MODEL | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM/247UM |
|----------|----------------|------------|-------------|-------------|------------|-------------------|
| PW | DSC BOARD ASSY | YB20898B | ← | — | — | — |

E.VF BOARD ASSEMBLY <60>

| REF. NO. | ITEM \ MODEL | GR-SXM930U | GR-SXM947UM | GR-SXM747UM | GR-SXM330U | GR-SXM347UM/247UM |
|----------|-----------------|------------|-------------|--------------|------------|-------------------|
| PW | E.VF BOARD ASSY | — | — | LY41289-002A | ← | ← |

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