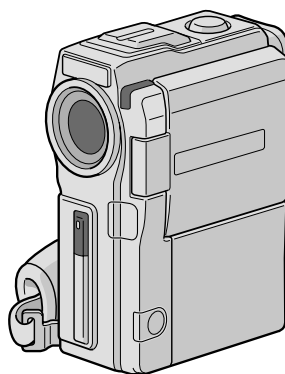


# JVC

## SERVICE MANUAL

### DIGITAL VIDEO CAMERA

# GR-DVM80U



Mini **DV** NTSC

Regarding service information other than these sections, refer to the GR-DVM90U service manual (No. 86565). Also, be sure to note important safety precautions provided in the service manual.

### SPECIFICATIONS *(The specifications shown pertain specifically to the model GR-DVM80U)*

#### Camcorder

##### For General

|                                |   |
|--------------------------------|---|
| Power supply                   | : DC 6.3 V $\text{---}$ (Using AC Power Adapter/Charger)<br>DC 7.2 V $\text{---}$ (Using battery pack)                    |
| Power consumption              |   |
| LCD monitor off, viewfinder on | : Approx. 4.4 W   |
| LCD monitor on, viewfinder off | : Approx. 5.2 W   |
| Dimensions (W x H x D)         | : 51 mm x 125 mm x 97 mm (2-1/16" x 4-15/16" x 3-7/8")<br>(with the LCD monitor closed and the viewfinder pushed back in) |
| Weight                         | : Approx. 500 g (1.1 lbs)<br>(without cassette and battery)<br>Approx. 575 g (1.3 lbs)<br>(incl. cassette and battery)    |
| 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)   |
| Pickup                         | : 1/4" CCD (Progressive Scan)   |
| Lens                           | : F 1.8, f = 3.8 mm to 38 mm, 10:1 power zoom lens  |
| Filter diameter                | : $\phi$ 27 mm  |
| LCD monitor                    | : 2.5" diagonally measured, LCD panel/TFT active matrix system  |
| Viewfinder                     | : Electronic viewfinder with 0.44" color LCD  |
| Speaker                        | : Monaural  |

##### For Digital Video Camera

|  |   |
|--|---|
| Format   | : DV format (SD mode)   |
| Signal format                                      | : NTSC standard   |
| Recording/Playback format                          | : Video: Digital component recording<br>: Audio: PCM digital recording, 32 kHz 4-channel (12-bit),<br>48 kHz 2-channel (16-bit) |
| Cassette   | : Mini DV cassette  |
| Tape speed   | : SP: 18.8 mm/s<br>LP: 12.5 mm/s  |
| Maximum recording time<br>(using 80 min. cassette) | : SP: 80 min.<br>LP: 120 min.   |

##### For Connectors

|                  |   |
|------------------|---|
| Video output     | : 1 V (p-p), 75 $\Omega$ , analog             |
| Audio output     | : 300 mV (rms), 1 k $\Omega$ , analog, stereo |
| DV Input/output  | : 4-pin, IEEE 1394 compliant                  |
| Headphone output | : $\phi$ 3.5 mm, stereo                       |

#### AC Power Adapter/Charger AA-V51U

|                        |   |
|------------------------|---|
| Power requirement      |   |
| U.S.A. and Canada      | : AC 120 V $\sim$ , 60 Hz                               |
| Other countries        | : AC 110 V to 240 V $\sim$ , 50 Hz/60 Hz                |
| Power consumption      | : 23 W  |
| Output                 |   |
| Charge                 | : DC 7.2 V $\text{---}$ , 0.77 A                        |
| VTR                    | : DC 6.3 V $\text{---}$ , 1.8 A                         |
| Dimensions (W x H x D) | : 68 mm x 45 mm x 110 mm (2-11/16" x 1-13/16" x 4-3/8") |
| Weight                 | : Approx. 254.5 g (0.57 lbs)                            |

#### Docking Station CU-V503U

##### For General

|                        |   |
|------------------------|---|
| Dimensions (W x H x D) | : 55 mm x 36 mm x 107 mm (2-3/16" x 1-7/16" x 4-1/4") |
| Weight                 | : Approx. 89.9 g (0.2 lbs)                            |

##### For Connectors

|                           |   |
|---------------------------|---|
| S-Video                   | : Y: 1 V (p-p), 75 $\Omega$ , analog output<br>C: 0.29 V (p-p), 75 $\Omega$ , analog output |
| Video                     | : 1 V (p-p), 75 $\Omega$ , analog output  |
| Audio                     | : 300 mV (rms), 1 k $\Omega$ , analog output  |
| JLIP/EDIT                 | : $\phi$ 3.5 mm, 4-pole, mini-head jack (compatible with RC-5325 plug)                      |
| PC                        | : $\phi$ 2.5 mm, 3-pole   |
| External microphone input | : 506 $\mu$ V (rms), high impedance unbalanced with $\phi$ 3.5 mm (stereo)                  |

*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-DVM90U and GR-DVM80U.

| ITEM            | MODEL | GR-DVM90U | GR-DVM80U |
|-----------------|-------|-----------|-----------|
| DSC             |       | Used      | Not used  |
| STROBE          |       | Used      | Not used  |
| DOCKING STATION |       | CU-V502U  | CU-V503U  |
| MULTIMEDIA CARD |       | Used      | Not used  |

The following table indicate different parts number between models GR-DVM90U and GR-DVM80U.

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

| REF NO. | ITEM            | MODEL | GR-DVM90U    | GR-DVM80U    |
|---------|-----------------|-------|--------------|--------------|
| 1       | PACKING CASE    |       | LY31717-001A | LY31717-002A |
| △ 6     | DOCKING STATION |       | LY20590-001A | LY20590-003A |
| 8       | CD ROM          |       | LY31133-013A | LY31133-015A |
| 9       | MULTIMEDIA CARD |       | QAM0262-002  | —            |
| 35      | SHEET(ATT.)     |       | LYT0584-007A | —            |

**FINAL ASSEMBLY <M2>**

| REF NO. | ITEM            | MODEL | GR-DVM90U      | GR-DVM80U    |
|---------|-----------------|-------|----------------|--------------|
| △ 101   | LOWER CASE ASSY |       | LY20576-001B   | LY20576-003B |
| 106     | ARM ASSY        |       | * LY20601-001B | ←            |
| 114     | ZOOM UNIT       |       | LY31680-001A   | LY31680-002B |
| 115     | MICROPHONE      |       | * LY31671-001B | ←            |
| 121     | CASS.COVER ASSY |       | LY20602-001A   | LY20602-003A |
| 121A    | PLATE(HINGE)    |       | LY31675-001A   | —            |
| 121B    | BRACKET(HINGE)  |       | LY42261-001A   | —            |
| 121C    | SHAFT(C)        |       | LY30014-009A   | —            |
| 121E    | COVER(C.C)      |       | LY20599-001A   | LY20599-002A |
| 123     | GRIP BELT       |       | * LY31745-001B | ←            |
| 134     | SUB OPE ASSY    |       | LY31684-001A   | —            |
| 135     | CAMERA OPE UNIT |       | LY20600-001A   | LY20600-003A |
| 140     | SPACER(A)       |       | LY30029-054B   | LY30029-054C |

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

| REF NO. | ITEM              | MODEL | GR-DVM90U      | GR-DVM80U    |
|---------|-------------------|-------|----------------|--------------|
| 141     | SHEET             |       | —              | LY42406-001A |
| 146     | FRONT COVER ASSY  |       | LY20581-001D   | LY20581-003D |
| 146C    | WINDOW(STB)       |       | LY42278-001A   | —            |
| 147     | FRONT COVER2      |       | * LY31761-002B | ←            |
| 168     | SPECIAL SCREW     |       | * LY30018-0B9A | ←            |
| 176     | SPECIAL SCREW     |       | LY30018-060A   | —            |
| 180     | SCREW, X3         |       | QYSPSPT1720R   | LY30018-043B |
| 197     | SPECIAL SCREW, X5 |       | LY30018-070A   | LY30018-049A |
| 204     | SCREW, X2         |       | QYSPSPT1730R   | QYSPSPT1735R |
| 228     | HEAT TAPE         |       | * LY42756-001B | ←            |

#### MECHANISM ASSEMBLY <M3>

| REF NO. | ITEM           | MODEL | GR-DVM90U      | GR-DVM80U |
|---------|----------------|-------|----------------|-----------|
| 413     | MOTOR BKT ASSY |       | * LY30448-001G | ←         |

#### ELECTRONIC VIEWFINDER ASSEMBLY <M4>

| REF NO. | ITEM    | MODEL | GR-DVM90U      | GR-DVM80U |
|---------|---------|-------|----------------|-----------|
| 300     | VF UNIT |       | * LY31749-001C | ←         |

#### MONITOR ASSEMBLY <M5>

| REF NO. | ITEM               | MODEL | GR-DVM90U      | GR-DVM80U     |
|---------|--------------------|-------|----------------|---------------|
| △ 500   | MONITOR ASSY       |       | LYH20164-001B  | LYH20164-002B |
| △ 504   | MONITOR COVER ASSY |       | LY20585-001A   | LY20585-003A  |
| 504C    | SPECIAL SCREW, X2  |       | * LY30018-057A | ←             |

#### MAIN BOARD ASSEMBLY <01>

| REF NO. | ITEM            | MODEL | GR-DVM90U   | GR-DVM80U   |
|---------|-----------------|-------|-------------|-------------|
| PW      | MAIN BOARD ASSY |       | YB10284B-02 | YB10284C-02 |

#### MDA BOARD ASSEMBLY <02>

| REF NO. | ITEM        | MODEL | GR-DVM90U | GR-DVM80U |
|---------|-------------|-------|-----------|-----------|
| R4850   | MG RESISTOR |       | * —       | ←         |

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

**MMC BOARD ASSEMBLY <06>**

| REF NO. | ITEM           | MODEL | GR-DVM90U | GR-DVM80U |
|---------|----------------|-------|-----------|-----------|
| PW3     | MMC BOARD ASSY |       | YB10288A3 | YB10288B3 |

**STROBE BOARD ASSEMBLY <07>**

| REF NO. | ITEM              | MODEL | GR-DVM90U | GR-DVM80U |
|---------|-------------------|-------|-----------|-----------|
| PW      | STROBE BOARD ASSY |       | YB10249C  | -         |

**AUDIO VF BOARD ASSEMBLY <08>**

| REF NO. | ITEM                | MODEL | GR-DVM90U    | GR-DVM80U    |
|---------|---------------------|-------|--------------|--------------|
| PW1     | AUDIO VF BOARD ASSY |       | YB10285B2-02 | YB10285C2-02 |

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

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S40895-03