

S-VHS Movie Camera  
S-VHS 攝錄影機

NV-M9000EN

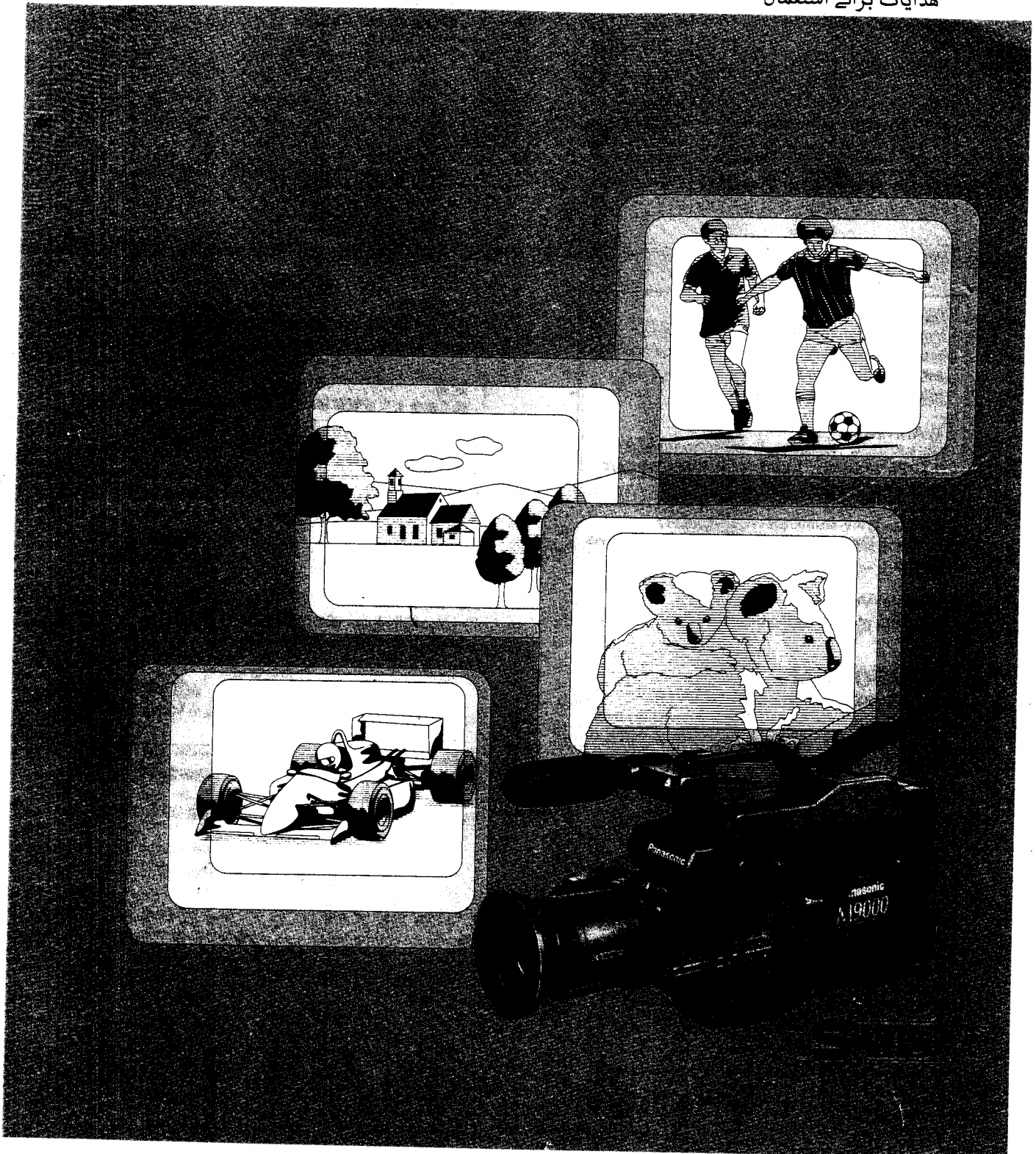
Operating Instructions

使用說明書

ओपरेशन के लिए अनुदेश

هدایات برای استعمال

# Panasonic



Before attempting to connect, operate or adjust this product, please read these instructions completely.  
安裝、操作或調整機件前，請先詳細閱讀本說明。

VQT4837-1

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Please read these Operating Instructions carefully-especially the cautions on page 110 and thereafter-before using the Movie Camera for the first time. Keep these Operating Instructions handy for later reference, in case you want to look up something in the future.

**Cautions:**

Injury or material damage resulting from any kind of use that is not in accordance with the operating procedures explained in the Operating Instructions are the sole responsibility of the user.

**HQ (High Quality) Picture System**

Video recorders carrying the HQ symbol mark feature the new VHS High Quality Picture System. This system assures complete compatibility with VTRs that use the conventional VHS system.

**Information for Your Safety****您的安全信息****IMPORTANT**

Your attention is drawn to the fact that recording of pre-recorded tapes or discs or other published or broadcast material may infringe copyright laws.

**WARNING**

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

**S-VHS Movie NV-M9000EN/NV-M9000EN3**

- The rating plate is on the bottom side of the Movie Camera.

**AC Adaptor VW-AM10**

- The rating plate is on the bottom side of the unit.

**FOR YOUR SAFETY****■ DO NOT REMOVE THE OUTER COVER.**

To prevent electric shock, do not remove the cover. No user serviceable parts inside. Refer servicing to qualified service personnel.

**CAUTION**

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the equipment manufacturer. Discard used batteries according to manufacturer's instructions.

Video cassettes recorded in the S-VHS mode can be played back on this Movie Camera and on other S-VHS VTRs (Video Tape Recorders). However, they cannot be played back on VHS VTRs. For more details, see page 18.

首次使用本攝錄影機之前，請仔細閱讀這些使用說明—特別是第112頁及以後的注意事項。請將本使用說明書保存好以備參考，在您將來要查詢某處時特別有用。

**注意：**

如果未遵守本使用說明書所介紹的操作步驟進行操作，則由此產生的事故或部件損壞將純屬用戶的責任。

**HQ (高畫質) 影像系統**

帶有HQ標誌的錄影機表示具有新的VHS高品質影像系統。此系統保證可和傳統的VHS系統相互使用。

**重要事項**

請注意，對原影帶，影像盤，其它出版物或廣播材料進行錄影時，可能會引起侵犯版權的問題。

**警告**

為了減少火災或電擊事故，請勿讓本機淋雨或受潮。

**S-VHS攝錄影機 NV-M9000EN/NV-M9000EN3**

- 額定銘牌位於攝錄影機的底側。

**交流轉接器 VW-AM10**

- 額定銘牌位於轉接器的底側。

**爲了您的安全****■請勿拿掉外殼**

爲了防止電擊事故，請勿拿掉外殼。內部沒有用戶可維修的部件。請將維修工作委託給專業維修人員。

**注意事項**

如果電池更換不當，則有爆炸的危險。請只更換與製造廠家推薦的相同或同等的型號。並根據製造廠家的指示扔掉用過的電池。

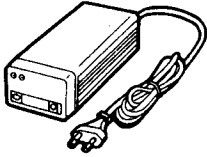

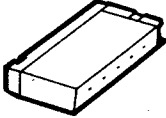
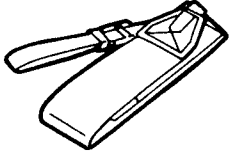
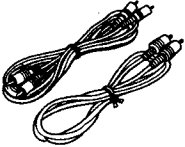

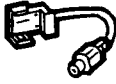
以S-VHS系統錄製的錄影帶可放影於本攝錄影機和其它S-VHS錄放影機。然而，它們不能放影於VHS錄放影機。有關細節，請參看第18頁。

# Checklist for the Standard Accessories

## 標準附件檢查一覽表

स्टैंडर्ड एक्सेसरीज़ की सूची

معیاری منسلکات کی چیک لسٹ

1. 	2. 	3. 	4. 
5. 	6. 	7. 	

### ENGLISH

#### 1. AC Adaptor

For supplying power to the Movie Camera or for charging the Battery Pack

#### 2. DC Input Cable

For connection to the AC Adaptor

#### 3. Battery Pack

For supplying power to the Movie Camera

#### 4. Shoulder Strap

#### 5. Audio/Video Cable

For connection to a TV set

#### 6. S-Video Cable

For connection to a TV set

#### 7. Battery Pack Charging Connector

To recharge the Battery Pack, connect it to the AC Adaptor with this connector.

**CAUTION: TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES.**

Information for your safety.

### 中文

#### 1. 交流轉接器

對攝錄影機供電或對電池組充電。

#### 2. 直流輸入纜線

連接至交流轉接器。

#### 3. 電池組

對攝錄影機供電。

#### 4. 肩用背帶

#### 5. 音頻 / 影像纜線

連接至電視機

#### 6. S 影像纜線

連接至電視機

#### 7. 電池組充電連接器

對電池組充電時，用該連接器將電池組連接至交流轉接器。

**注意事項：**為了減少火災或電擊危險和惱人的干擾，請只使用這裏推薦的附件。

您的安全信息。

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## 拍攝

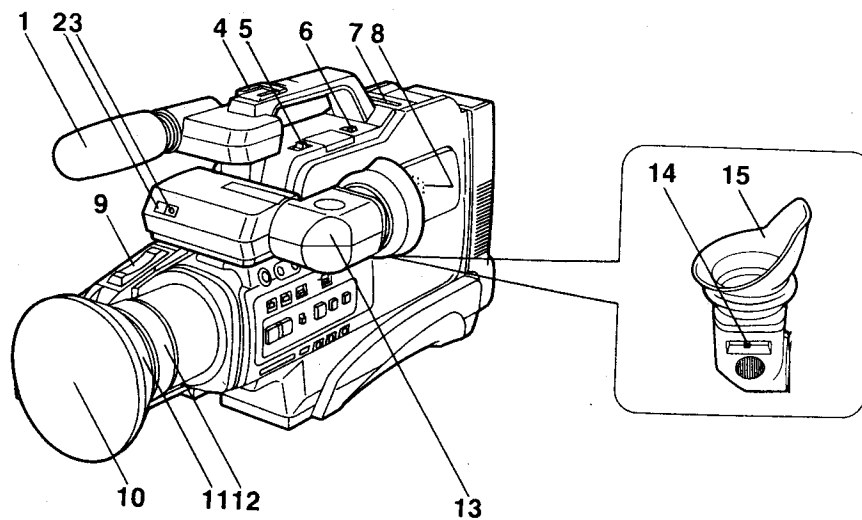
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## ENGLISH

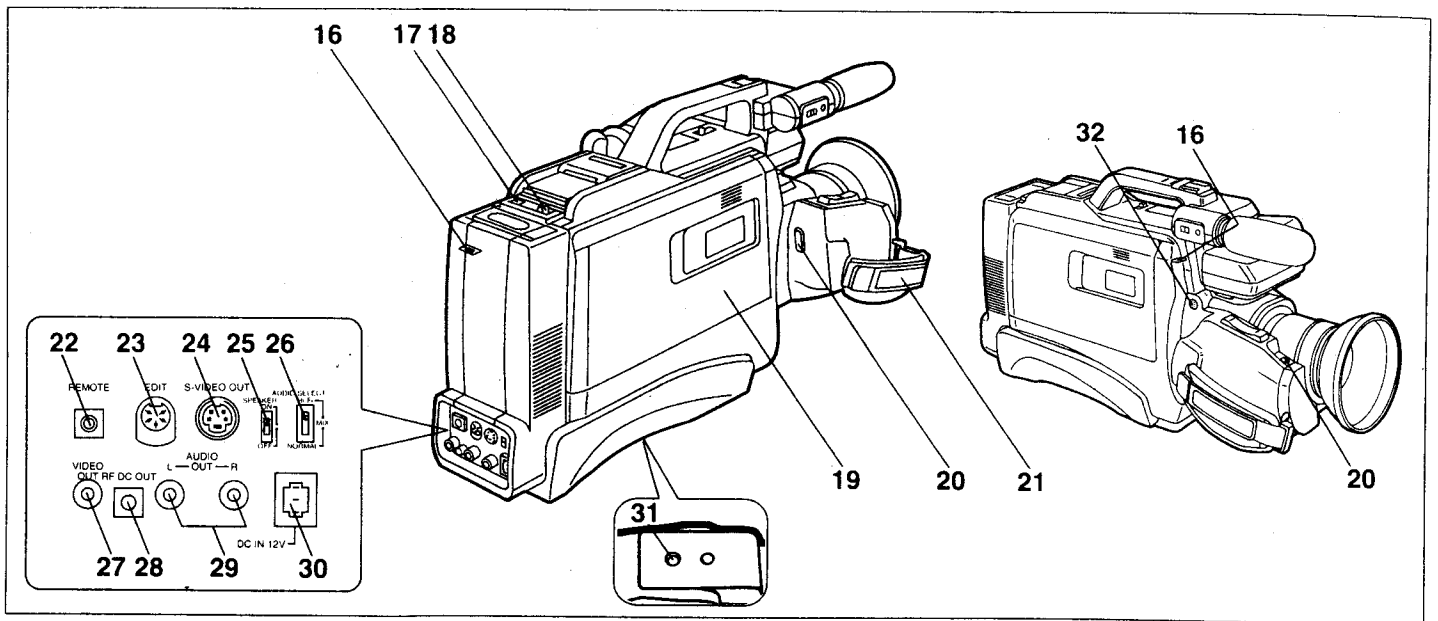
### Controls and Functions

- 1 **Stereo Microphone**
- 2 **White Balance Sensor Window**
- 3 **Tally Lamp**  
It is lit during shooting to inform the people in front of the Movie Camera that shooting is under way.
- 4 **Accessory Shoe**  
Some optional accessories (External Microphone, etc.) can be attached to this Accessory Shoe.
- 5 **Operation Switch [OPERATE]**  
For turning the Movie Camera on and off.
- 6 **S-VHS System Selector Switch [S-VHS ON/AUTO/OFF]**  
The selected recording system can be selected by sliding the [S-VHS ON/AUTO/OFF] Switch to the corresponding position.
- 7 **CAMERA/VTR Selector Cover [CAMERA/VTR]**
- 8 **Built-in Speaker**
- 9 **Zoom Buttons**  
Press these buttons to gradually zoom in and out.
- 10 **Lens Cap**
- 11 **Lens Hood**
- 12 **Focus Ring**  
After selecting the manual focusing mode with the [FOCUS] Button, adjust the focus to the desired subject by turning this ring.
- 13 **Viewfinder**  
The subject in front of the camera can be seen on the viewfinder screen.
- 14 **Eyepiece Corrector**  
Adjust the Eyepiece Corrector to your eyesight so that the picture and indications in the Viewfinder become as clear and sharp as possible.
- 15 **Eyecup**

## 中文

### 控制器和功能

- 1 立體聲麥克風
- 2 白色平衡感應窗
- 3 指揮燈  
拍攝中會亮起，以提醒攝錄影機前面的人拍攝正在進行。
- 4 附件座  
某些選購附件（外部麥克風等）可裝入該附件座。
- 5 操作開關 [OPERATE]  
可打開或關閉攝錄影機。
- 6 S-VHS系統選擇開關 [S-VHS ON/AUTO/OFF]  
將 [S-VHS ON/AUTO/OFF] 開關滑動至相應的位置，便可選擇錄影系統。
- 7 攝錄影機/錄放影機選擇器蓋 [CAMERA/VTR]
- 8 內置揚聲器
- 9 變焦鈕  
按這些鈕可逐漸拉入或推出目標物。
- 10 鏡頭蓋
- 11 鏡頭護罩
- 12 聚焦環  
用 [FOCUS] 鈕選擇手動聚焦方式後，用該環對目標物聚焦。
- 13 電子尋像器  
可在電子尋像器上看到攝錄影機前面的目標物。
- 14 目鏡校正器  
調整目鏡校正器至您的視野，使得電子尋像器中的畫面和指示盡可能清晰可見。
- 15 眼罩



## ENGLISH

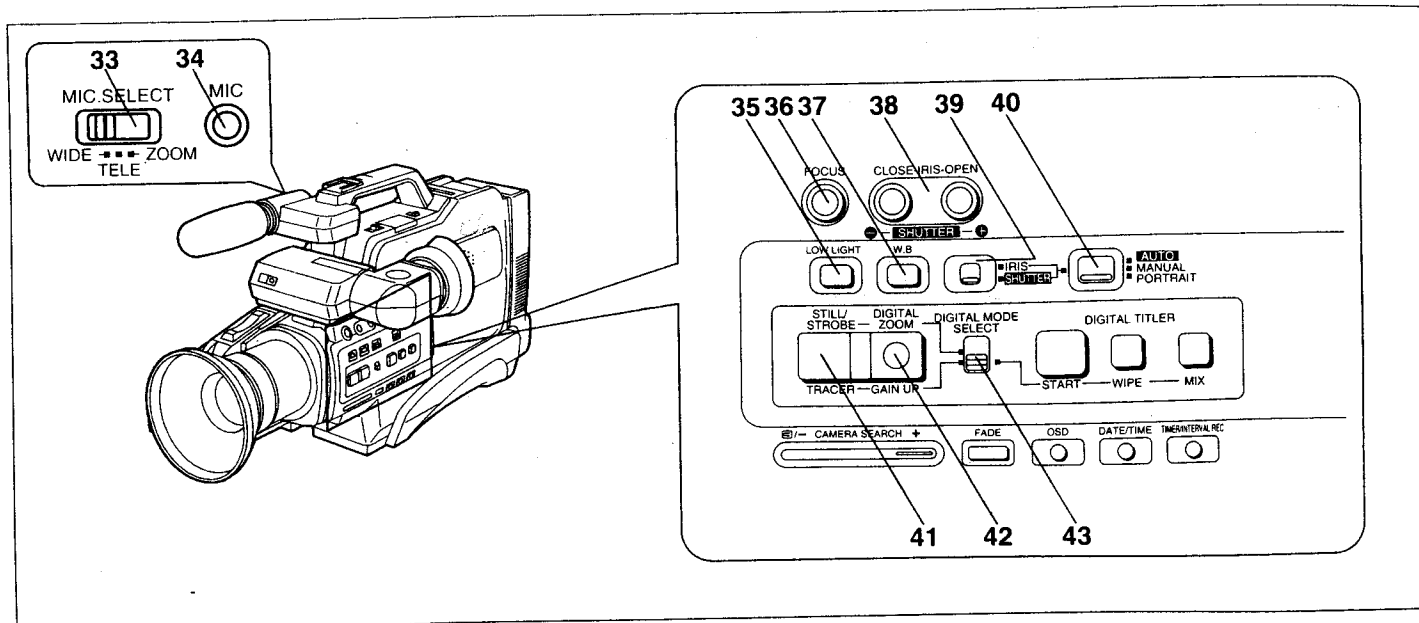
### Controls and Functions (cont'd)

- 16 Shoulder Strap Holders**
- 17 Tape Eject Button [TAPE EJECT]**  
To insert or take out a video cassette, press this button.
- 18 Battery Pack Eject Lever [BATT.EJECT]**  
Slide this lever when removing the Battery Pack.
- 19 Cassette Compartment**  
Insert a video cassette into this compartment.
- 20 Start/Stop Button**  
Press this button to start and stop shooting a scene.
- 21 Grip Belt**
- 22 Remote Control Socket [REMOTE]**
- 23 Edit Socket [EDIT]**  
Connect an Editing Controller, etc. to this socket.
- 24 S-Video Output Socket [S-VIDEO OUT]**
- 25 Speaker On/Off Switch [SPEAKER ON/OFF]**
- 26 Audio Selector Switch [HiFi/MIX/NORMAL]**
- 27 Video Output Socket [VIDEO OUT]**
- 28 RF DC Output Socket [RF DC OUT]**
- 29 Audio Output Socket [AUDIO OUT]**
- 30 DC Input Socket [DC IN 12 V]**  
Connect the DC Input Cable to this socket.
- 31 Tripod Receptacle**  
When using a tripod for stable shooting, attach the screw of the tripod to this receptacle.
- 32 Character Generator Socket [CHAR. GEN]**  
Connect a Character Generator (optional) to this socket.

## 中文

### 控制器和功能 (續前)

- 16 肩用背帶**
- 17 磁帶排出鈕 [TAPE EJECT]**  
要插入或排出磁帶時，按該鈕。
- 18 電池組排出桿 [BATT. EJECT]**  
要取出電池組時，滑動該桿。
- 19 磁帶室**  
將錄影帶插入本磁帶室。
- 20 開始 / 停止鈕**  
按該鈕可開始或停止拍攝。
- 21 扣抓皮帶**
- 22 遙控插孔 [REMOTE]**
- 23 新式編輯插孔 [EDIT]**  
將編輯控制器等連接至該插孔。
- 24 S 影像輸出插孔 [S-VIDEO OUT]**
- 25 揚聲器開關 [SPEAKER ON/OFF]**
- 26 音頻選擇開關 [HiFi/MIX/NORMAL]**
- 27 影像輸出插孔 [VIDEO OUT]**
- 28 RF 直流輸出插孔 [RF DC OUT]**
- 29 音頻輸出插孔 [AUDIO OUT]**
- 30 直流輸入插孔 [DC IN 12V]**  
連接直流輸入纜線至此插孔。
- 31 三腳架安裝孔**  
使用三腳架進行穩定的拍攝時，請將三腳架的螺絲安裝至該孔。
- 32 字符發生器插孔 [CHAR. GEN]**  
將字符發生器 (選購附件) 連接至該插孔。



## ENGLISH

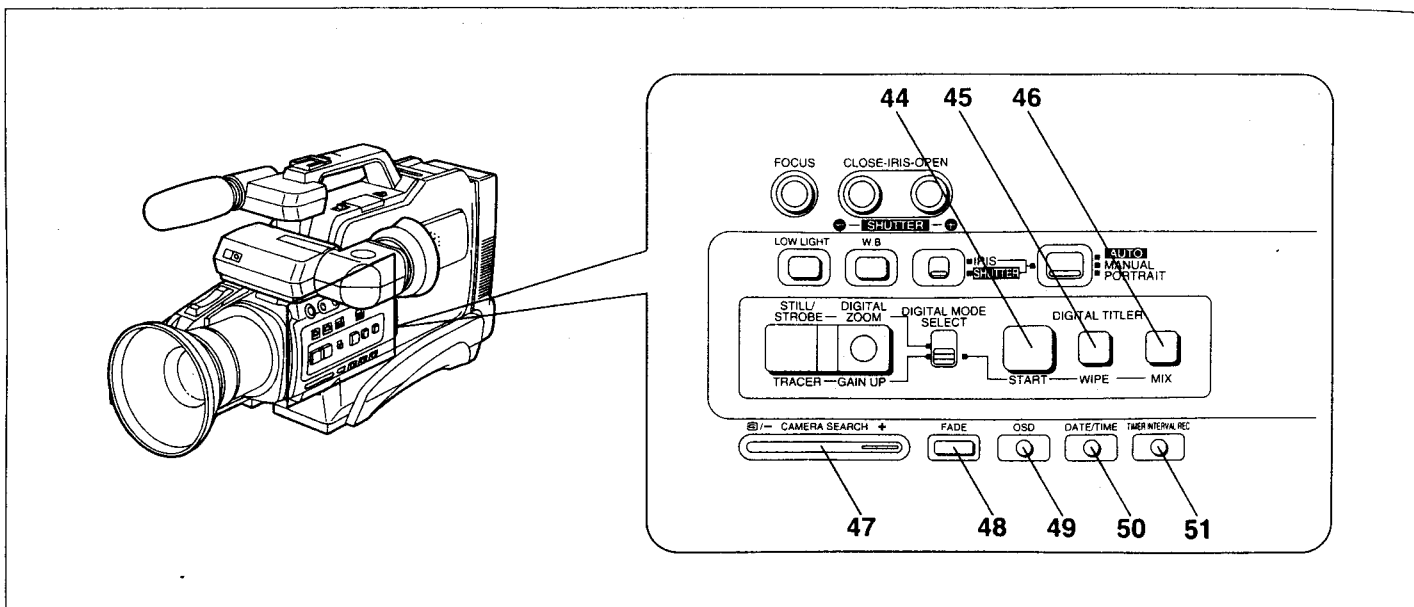
### Controls and Functions (cont'd)

- 33 Microphone Mode Selector Switch [MIC.SELECT WIDE/TELE/ZOOM]**
- 34 External Microphone Socket [MIC]**
- 35 Low Light Button [LOW LIGHT]**  
For shooting evening scenes and other scenes in low light conditions.
- 36 Focus Button [FOCUS]**  
Press this button to select manual focus adjustment for shooting.
- 37 White Balance Button [W.B]**  
Press this button to select manual white balance adjustment.
- 38 Iris Close Open/Shutter -/+ Button**  
The F Number and the shutter speed can be adjusted manually by pressing these buttons.
- 39 Selector Switch for the Iris/Shutter Speed Adjustment Function [IRIS/SHUTTER]**  
The Iris Adjustment Function and the High-Speed Shutter Adjustment Function can be selected with this switch.
- 40 Mode Select Switch [AUTO/MANUAL/PORTRAIT]**  
Use this selector switch to select the automatic, manual or portrait shooting mode.
- 41 Still/Strobe/Tracer Button [STILL/STROBE]/[TRACER]**  
Depending on the setting of the [DIGITAL MODE SELECT] Switch, this button can be pressed for shooting still pictures and pictures with strobe effect or with an intentional after-image effect.
- 42 Digital Zoom/Gain Up Button [DIGITAL ZOOM]/[GAIN UP]**  
Depending on the setting of the [DIGITAL MODE SELECT] Switch, this button can be pressed to increase the power of the power zoom function or to increase the sensitivity when shooting in the dark.
- 43 Digital Mode Selector Switch [DIGITAL MODE SELECT]**  
Use this switch to select the desired Digital Shooting Function.

## 中文

### 控制器和功能 (續前)

- 33 麥克風方式選擇開關 [MIC.SELECT WIDE/TELE/ZOOM]**
- 34 外部麥克風插孔 [MIC]**
- 35 低光線開關 [LOW LIGHT]**  
用於拍攝夜景和其它低光線條件的場面。
- 36 聚焦鈕 [FOCUS]**  
拍攝時，按該鈕可選擇手動聚焦調整。
- 37 白色平衡鈕 [W. B]**  
按該鈕可選擇手動白色平衡調整。
- 38 光圈開關 / 快門 -/+ 鈕**  
按這些鈕可手動調整 F 數字和快門速度。
- 39 光圈 / 快門速度調整功能選擇開關**  
用該選擇開關可選擇光圈調整功能和快門速度調整功能。
- 40 狀態選擇開關 [AUTO/MANUAL/PORTRAIT]**  
用該選擇開關可選擇自動、手動或照片拍攝方式。
- 41 靜止 / 頻閃 / 跟蹤鈕 [STILL/STROBE]/[TRACER]**  
取決於 [DIGITAL MODE SELECT] 開關的設定，可按此鈕拍攝靜止畫面或帶有頻閃效果或希望的重影效果畫面。
- 42 數位變焦 / 增益鈕 [DIGITAL ZOOM]/[GAIN UP]**  
取決於 [DIGITAL MODE SELECT] 開關的設定，可按此鈕增加動力變焦功能的動力，或增加黑暗中拍攝的靈敏度。
- 43 數位方式選擇開關 [DIGITAL MODE SELECT]**  
使用本開關可選擇希望的數位拍攝功能。



## ENGLISH

### Controls and Functions (cont'd)

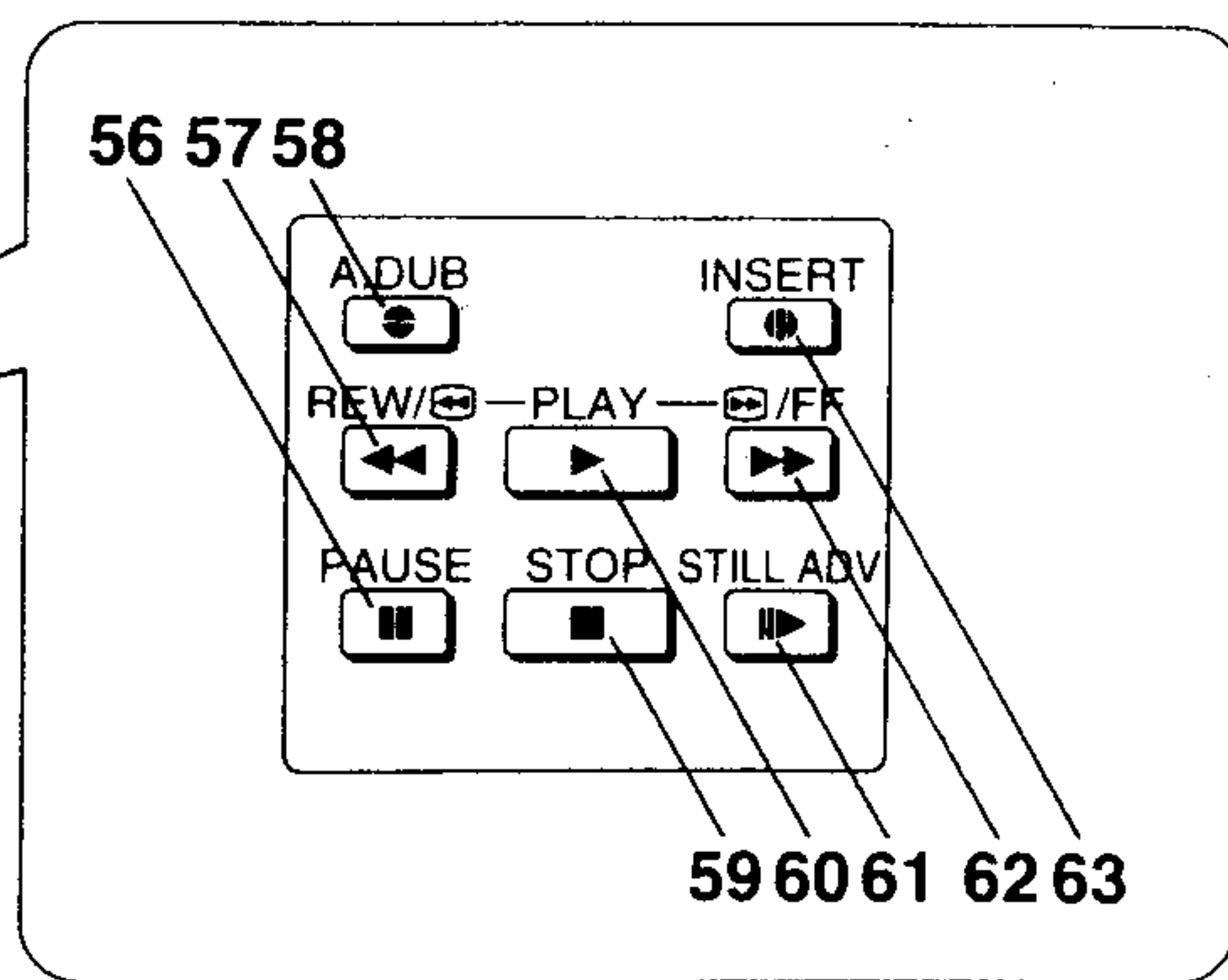
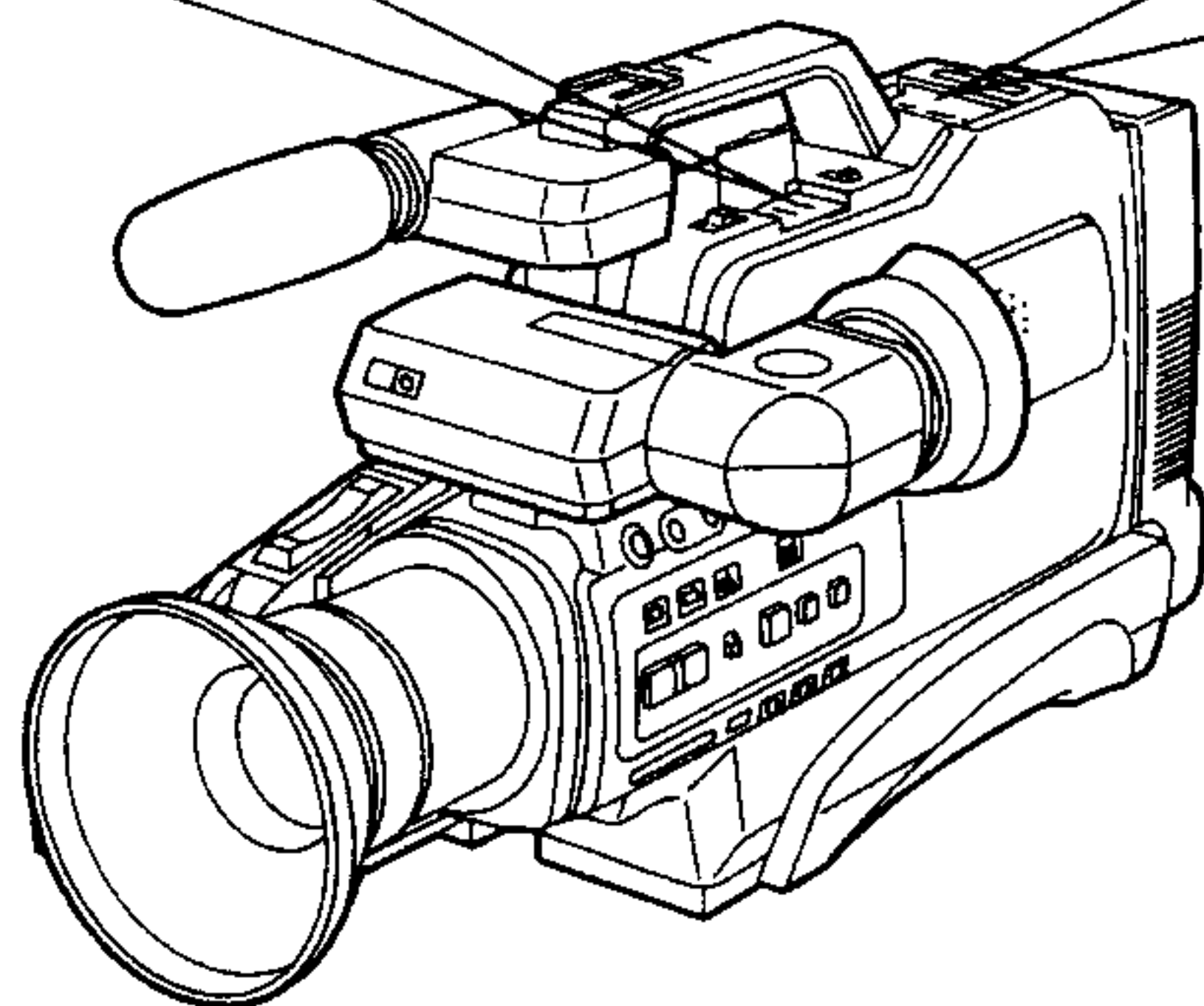
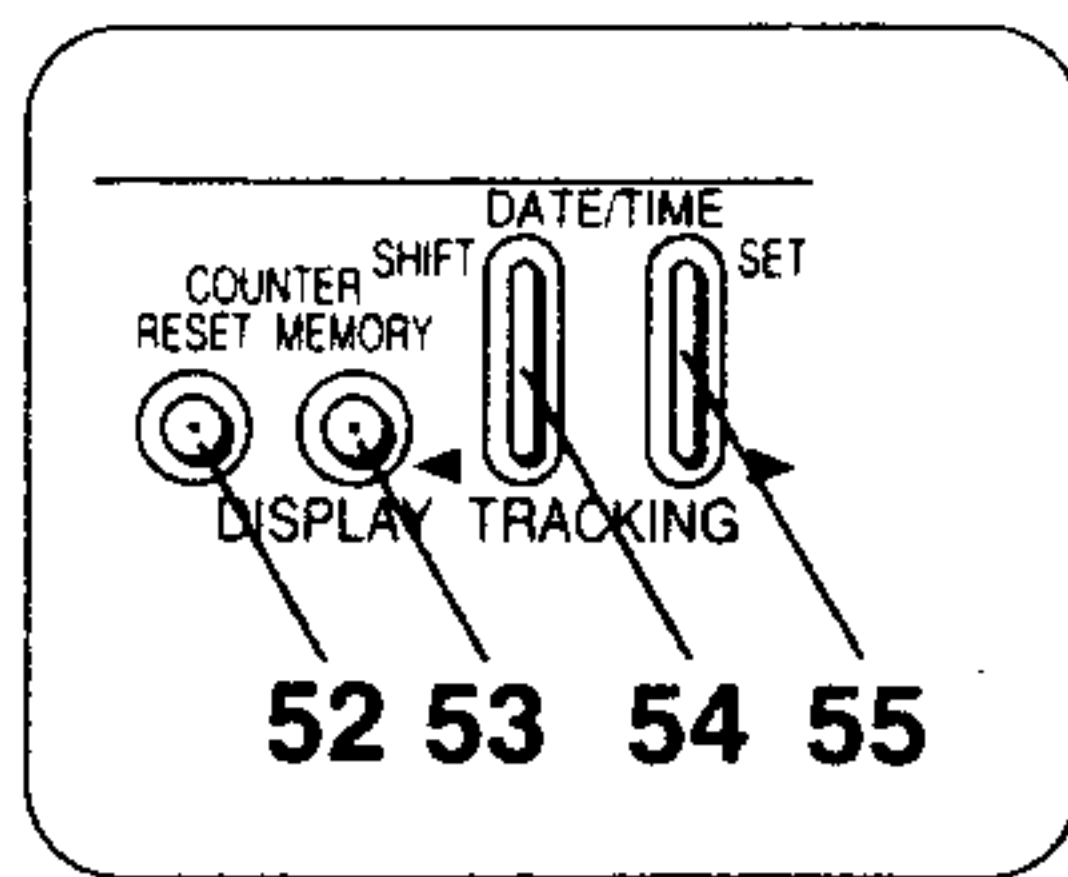
- 44 Digital Start Button [START]**  
To start the Digital Wipe Function or the Digital Mix Function, press this button.
- 45 Digital Wipe Button [WIPE]**  
Press this button for a horizontal wipe transition from a moving picture to a still picture from the memory, or vice-versa.
- 46 Digital Mix Button [MIX]**  
Press this button to gradually fade over from the moving picture to a still picture from the memory, or vice-versa, or to combine the two pictures.
- 47 Camera Search Button [CAMERA SEARCH +]**  
Keep these buttons pressed to play back recorded scenes at high speed in reverse direction or at normal speed in forward direction.  
To check the last few seconds of the last recorded scene, press the [CAMERA SEARCH] Button briefly.
- 48 Fade Button [FADE]**  
Press this button to fade out a scene and to fade in the following scene for a soft scene-to-scene transition.
- 49 On-Screen Display Button [OSD]**  
Press this button to make the indications in the Viewfinder disappear.
- 50 Date/Time Button [DATE/TIME]**  
Press this button to make the time and/or date appear in the Viewfinder and superimpose them onto the picture during shooting.
- 51 Interval Button [TIMER/INTERVAL REC]**  
Press this button to activate the Self-Timer and Interval Shooting Functions.

## 中文

### 控制器和功能(續前)

- 44 數位開始鈕[START]**  
按該鈕可開始數位消除功能或數位混合功能。
- 45 數位消除鈕[WIPE]**  
按該鈕可從運動的畫面水平消除轉換為記憶器中的靜止畫面或者相反。
- 46 數位混合鈕[MIX]**  
按該鈕可從運動的畫面水平逐漸淡化為記憶器中的靜止畫面或者相反，或者混合兩畫面。
- 47 攝錄影機尋影鈕[CAMERA SEARCH+]**  
持續按這些鈕可高速反向或正常速度正向放影錄過的場面。要檢查上一場面的最後幾秒鐘時，請快速按[CAMERA SEARCH]鈕。
- 48 淡化鈕[FADE]**  
按該鈕可淡出畫面或淡入下一畫面，以獲得柔和的畫面轉換。
- 49 螢幕顯示鈕[OSD]**  
按該鈕可使得電子尋像器中的指示消失，並啟動磁帶計時器記憶功能。
- 50 日期/時間鈕[DATE/TIME]**  
拍攝中按該鈕可使得電子尋像器中出現的時間和/或日期疊加至畫面上。
- 51 間隔鈕[TIMER/INTERVAL REC]**  
按該鈕可啟動自定時和間隔拍攝功能。





## ENGLISH

### Controls and Functions (cont'd)

- 52 Reset Button [RESET]**  
Press this button to reset the tape counter to "0000".
- 53 Memory Button [MEMORY/DISPLAY]**  
Press this button to activate the Tape Counter Memory Function.
- 54 Tracking/Date/Time Shift Button [DATE/TIME SHIFT • TRACKING]**  
1) Press it to advance to the next item during the setting of the time and date.  
2) Press it when you want to adjust the tracking manually.
- 55 Tracking/Date/Time Set Button [DATE/TIME SET • TRACKING]**  
1) Press it to change the figures during the setting of the time and date.  
2) Press it when you want to adjust the tracking manually.
- 56 Pause Button [PAUSE]**  
Press this button during playback to be able to watch a still picture.
- 57 Rewind/Review Button [REW/□]**  
Press this button to rewind the tape.
- 58 Audio Dubbing Button [A.DUB]**  
Press this button to add new sound on a recorded tape with the Audio Dubbing Function.
- 59 Stop Button [STOP]**  
Press this button to stop the playback.
- 60 Play Button [PLAY]**  
Press this button to start the playback.
- 61 Still Advance Button [STILL ADV]**  
After pressing the Pause Button, press this button to advance the still picture frame by frame.
- 62 Fast Forward/Cue Button [□/FF]**  
Press this button to wind the tape forward.
- 63 Insert Button [INSERT]**  
Press this button to insert new scenes on a previously recorded cassette tape.

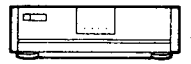
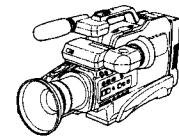
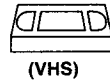
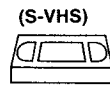
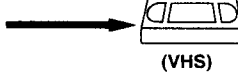
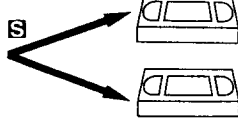
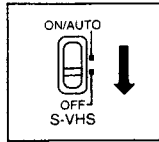
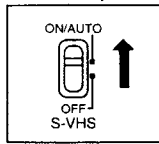
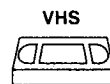
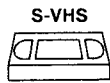
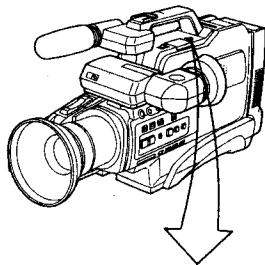
## 中文

### 控制器和功能 (續前)

- 52 重新鈕 [RESET]**  
按該鈕可將磁帶計時器復位為 "0000"。
- 53 記憶鈕 [MEMORY/DISPLAY]**  
按該鈕可啟動磁帶計時器記憶功能。
- 54 軌迹調整/日期/時間轉換鈕 [DATE/TIME SHIFT • TRACKING]**  
1) 設定時間和日期時，按該鈕可前進到下一項目。  
2) 在您想手動調整軌迹時可按該鈕。
- 55 軌迹調整/日期/時間設定鈕 [DATE/TIME SET • TRACKING]**  
1) 在設定時間和日期時按該鈕可改變數字。  
2) 想手動調整軌迹時請按該鈕。
- 56 暫停鈕 [PAUSE]**  
放影中按該鈕，可觀看靜止畫面。
- 57 倒帶 / 倒帶尋影鈕 [REW/□]**  
按該鈕可倒帶。
- 58 音頻複製鈕 [A. DUB]**  
按該鈕可利用音頻複製功能將新的聲音加到原有的錄影上。
- 59 停止鈕 [STOP]**  
按該鈕可停止放影。
- 60 放影鈕 [PLAY]**  
按該鈕可開始放影。
- 61 靜止步進鈕 [STILL ADV]**  
按了暫停鈕後，按該鈕可使畫面一幕幕前進。
- 62 快進 / 快進尋影鈕 [□ / FF]**  
按該鈕可正向快速導帶。
- 63 插入鈕 [INSERT]**  
按該鈕可將新的畫面插入至原來的磁帶上。

**S VHS**  
625

VHS  
PAL



**S VHS**

**S VHS**

**VHS**

**VHS**

ENGLISH

## S-VHS Format

### ■ About the S-VHS Format

The S-VHS video format is the new video system that fulfills the exceedingly high demands and expectations of today's video-information age. It is newly developed based on the VHS video format established throughout the world for home use, and it employs a wealth of latest technology to provide higher resolution and picture quality. The newly developed, high-performance S-VHS video cassette tapes enable the S-VHS format to realize truly epoch-making improvements in overall picture quality and clarity.

This S-VHS Movie Camera allows high picture quality recording and playback by using the video cassettes carrying the S-VHS logo as well as conventional VHS recording and playback on the video cassettes bearing the VHS logo.

## Compatibility of VTRs and Tapes

### ■ When recording

When using an S-VHS video cassette for recording, the recording format (S-VHS or VHS) can be selected as follows with the [S-VHS ON/AUTO/OFF] Switch.

"S"                    S-VHS format  
No indication        VHS format

- The Indication "S" is displayed in the Viewfinder.

### ■ When Playing Back

- Tapes recorded in the S-VHS format can be played back on this Movie Camera or on other S-VHS VTRs. (However, they cannot be played back on VHS VTRs.)
- Tapes recorded in the VHS format can be played back on VHS VTRs as well as on this Movie Camera and on other S-VHS VTRs.
- The video format in which the video cassette was recorded will automatically be detected and selected for playback.
- If the setting of the [S-VHS ON/AUTO/OFF] Switch is changed during shooting, some picture distortion will occur at that tape position during playback.

中文

## S-VHS系統

### ■關於S-VHS系統

S-VHS影像系統是一新的影像系統，可滿足當今影像信息時代的極高要求和期望。它是在世界通用的家用VHS影像系統的基礎之上新近開發的，採用了大量最新技術以提供高析像度和高畫質。新開發的高性能S-VHS錄影帶使得S-VHS系統在整體畫質和清晰度上實現了真正劃時代的改進。

本S-VHS攝錄影機可使用帶S-VHS標記的錄影帶進行高畫質的錄影和放影，也可使用帶VHS標記的錄影帶進行標準VHS錄影和放影。

## 錄放影機和磁帶的兼容性

### ■錄影時

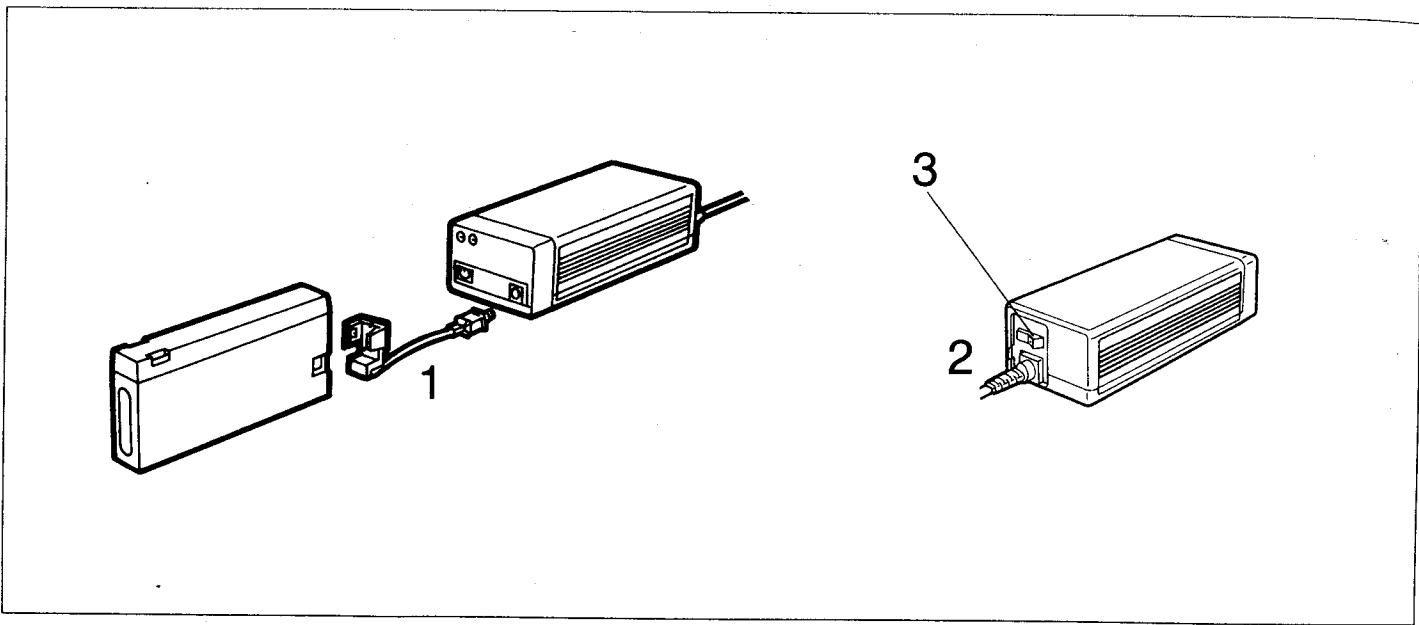
使用S-VHS錄影帶錄影時，可按下示用[S-VHS ON/AUTO/OFF]開關選擇錄影系統(S-VHS或VHS)。

"S" : S-VHS系統  
無指示 : VHS系統

- "S" 指示被顯示於電子尋像器中。

### ■放影時

- 以S-VHS系錄製的磁帶可放影於本攝錄影機或其它S-VHS錄放影機。(然而，它們不能放影於VHS錄放影機。)
- 以VHS系錄製的磁帶可放影於VHS錄放影機以及本攝錄影機和其它S-VHS錄放影機。
- 錄影帶的錄影系統將被自動檢測並選擇用於放影。
- 如果拍攝中改變了[S-VHS ON/AUTO/OFF]開關的設定，則在放影時，在磁帶的那一部位將出現畫面變形。
- 當交流轉接器被連接至攝錄影機且攝錄影機被關閉，則可同時對兩個電池組進行充電——一個連接至交流轉接器，另一個插入攝錄影機。然而，同時充電所需的時間是分別充電所需時間的兩倍。
- 請在10°C—35°C的溫度範圍內對電池組充電。



## ENGLISH

### Using the Battery Pack

#### ■ Charge the Battery Pack

- 1 Connect the Battery Pack and the AC Adaptor with the Battery Pack Charging Connector.
- 2 Connect the Power Cable of the AC Adaptor to the Mains.
- 3 Turn the AC Adaptor on.

#### Notes:

- When the AC Adaptor is connected to the Movie Camera and the Movie Camera is turned off, it is possible to charge two Battery Packs simultaneously—one connected to the AC Adaptor and the other inserted into the Movie Camera. However, charging them at the same time takes twice as long as charging them separately.
- Charge the Battery Pack within a temperature range of 10°C–35°C.
- Charging 2 Battery Packs simultaneously takes twice as long as charging 1 Battery Pack alone.

#### Charging Indication Lamp:

When charging is started, the red lamp lights up. When about 45 minutes of charging time remain, the lamp will change to green. The Charging Indicator will go out about 100 minutes after charging starts. However, the Battery Pack should be charged at least 3 hours for extended use.

#### Operation Time:

With a fully charged Battery Pack (VW-VBF2E), the Movie Camera can be used (in record mode only) continuously for approx. 110 minutes at 25°C. However, depending on how often the various functions listed below are used, and depending on the shooting conditions, the actual operation time may be considerably shorter.

- Shooting start/stop
  - Auto focus
  - Zoom function
  - Playback, fast forward, rewind, and other operations
  - Digital functions
  - Use of the Movie Camera in low temperature
- Therefore, it is recommended to take along a charged spare Battery Pack.

## 中文

### 使用電池組

#### ■對電池組充電

- 1 用電池組充電連接器將電池組和交流轉接器連接起來。
- 2 將交流轉接器的電源線連接至電源插座。
- 3 打開交流轉接器。

#### 注意：

- 當交流轉接器被連接至攝錄影機且攝錄影機被關閉，則可同時對兩個電池組進行充電——一個連接至交流轉接器，另一個插入攝錄影機。然而，同時充電所需的時間是分別充電所需時間的兩倍。
- 請在10°C–35°C的溫度範圍內對電池組充電。
- 同時對兩個電池組充電需要兩倍於對一個電池組充電所需的時間。

#### 充電指示燈：

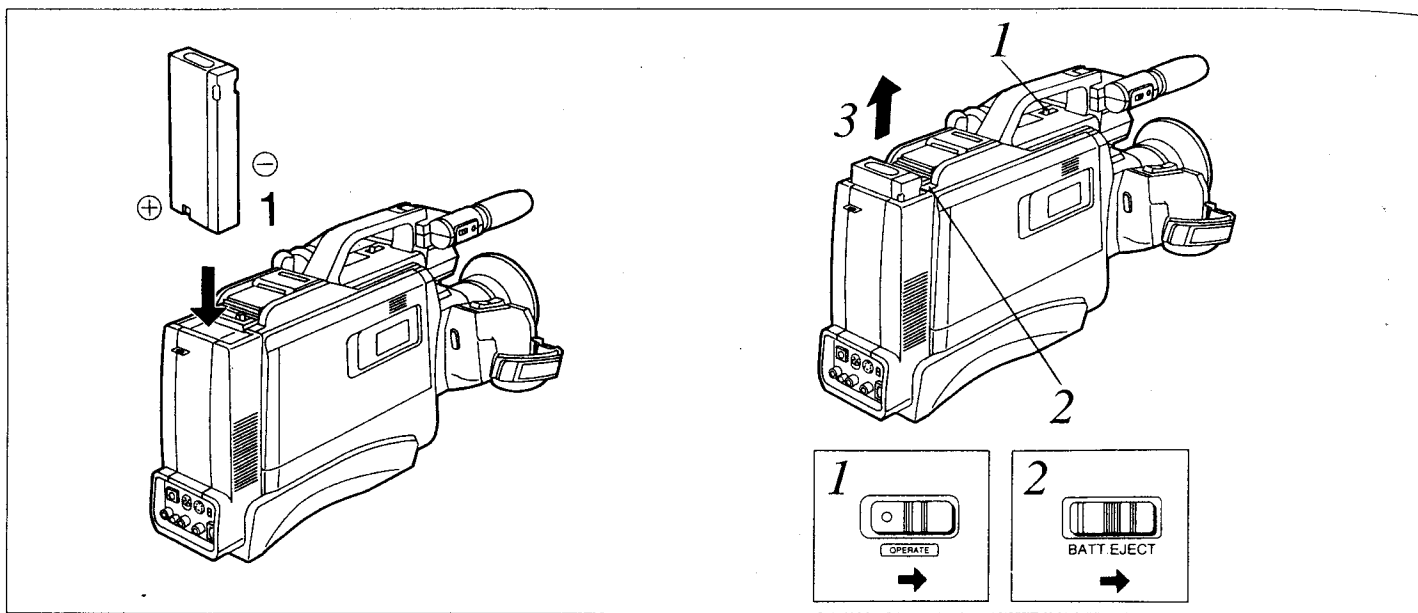
充電開始後，紅燈會亮。充電時間還剩下大約45分鐘時，燈將變成綠色。

充電開始後經過大約100分鐘，充電指示燈將熄滅。然而，電池組應至少被充電3小時以保證長時間使用。

#### 操作時間：

使用充足電的電池組(VW-VBF2E)，攝錄影機在25°C時可連續拍攝大約110分鐘。然而，取決於下列所列舉的各種功能的使用頻度和拍攝條件，實際的錄影時間可能會大大縮短。

- 拍攝開始/停止
  - 自動聚焦
  - 變焦功能
  - 放影、快進、倒帶和其它操作
  - 數位功能
  - 攝錄影機在低溫下使用
- 因此，建議您帶一備用電池組。



## ENGLISH

### Using the Battery Pack (cont'd)

#### ■ How to Insert the Battery Pack

- 1 Insert the Battery Pack until it locks with a click.

#### Note:

Insert the Battery Pack with its + side facing the rear of the Movie Camera.

#### ■ How to Remove the Battery Pack

- 1 Turn the Movie Camera off.
- 2 Slide.
- 3 Pull out the Battery Pack.

#### Caution:

If the Battery Pack is removed during recording or playback, the tape remains wound around the video head cylinder and could become damaged.

This is also the case during the loading and unloading of the tape.

## 中文

### 使用電池組 (續前)

#### ■ 如何插入電池組

- 1 插入電池組，直至“咔嗒”到位。

#### 注意：

插入電池組時請將其“+”面朝著攝錄影機的後面。

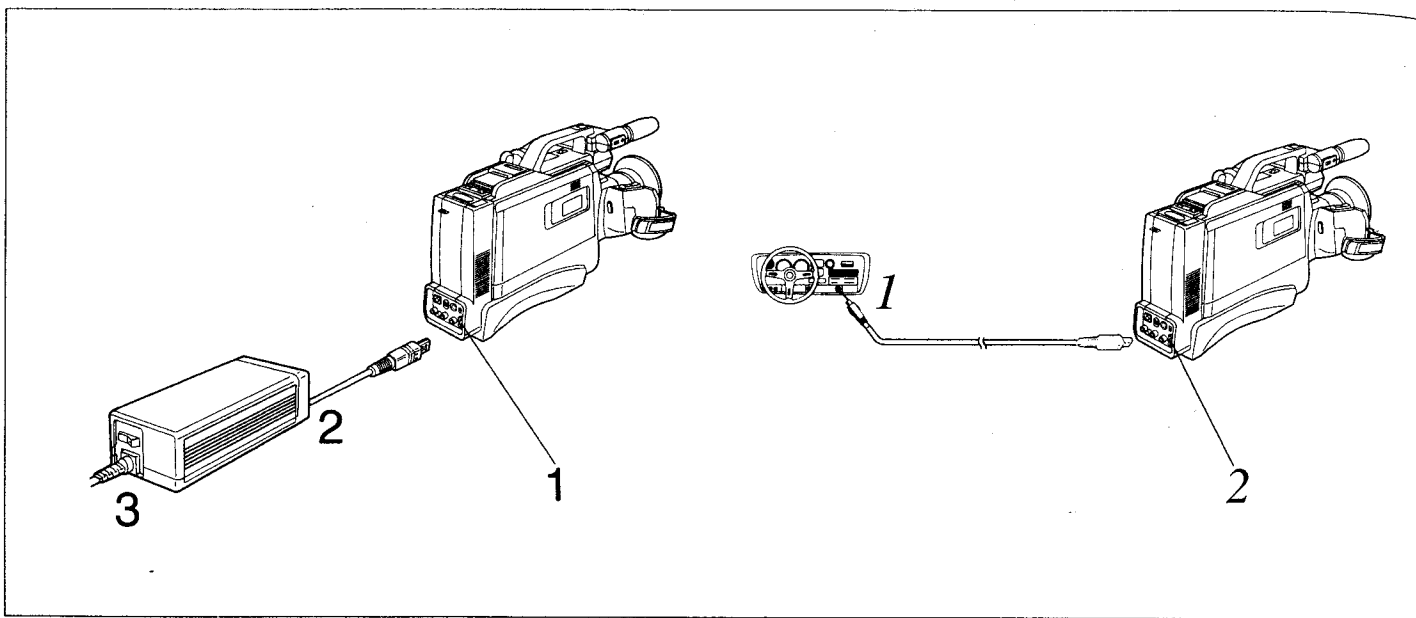
#### ■ 如何取出電池組

- 1 關閉攝錄影機。
- 2 滑動。
- 3 拉出電池組。

#### 注意：

- 在錄影或放影中途，如果電池組被取出，則磁帶將纏在磁頭磁鼓上並將被損壞。

在裝卸磁帶時也存在以上問題。



## ENGLISH

### Using the AC Adaptor or the Car Battery Cord (optional)

#### ■ How to Use the AC Adaptor

- 1 Connect the DC Input Cable to the DC Input Socket on the Movie Camera.
- 2 Connect the other end of the cable to the DC Output Socket on the AC Adaptor.
- 3 Connect the Mains Cable of the AC Adaptor to the mains.

#### Note:

When the Movie Camera is turned off, the charging of the Battery Pack inserted into the Movie Camera starts.

#### ■ How to Use the Car Battery Cord (optional)

- 1 Start the engine and then plug the Car Battery Cord into the Cigarette Lighter Socket.
- 2 Connect the other end of the cord to the DC Input Socket on the Movie Camera.

#### Notes:

- The Car Battery Cord can only be used with 12 V DC negative-grounded vehicles.
- Do not start the car engine while the Movie Camera is powered by the car battery.

## 中文

### 使用交流轉接器或汽車蓄電池纜線 (選購附件)

#### ■ 如何使用交流轉接器

- 1 將直流輸入纜線連接至攝錄影機的直流輸入插孔上。
- 2 將纜線的另一端連接至交流轉接器的直流輸出插孔上。
- 3 將交流轉接器的電源線連接至電源插座。

#### 注意：

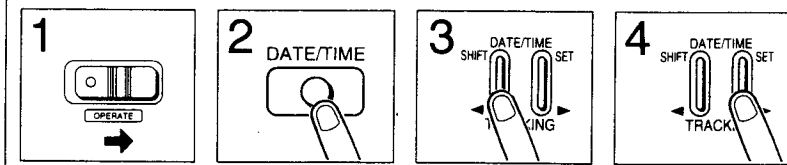
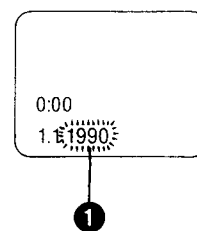
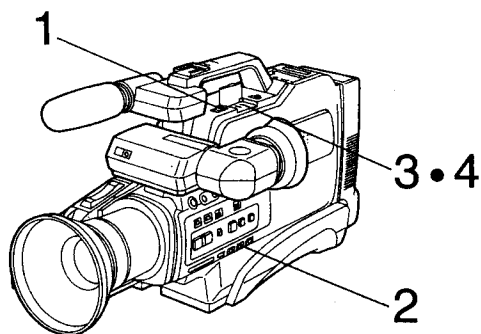
攝錄影機被關閉後，便開始對插入攝錄影機內的電池組進行充電。

#### ■ 如何使用汽車蓄電池纜線 (選購附件)

- 1 啓動發動機並將汽車蓄電池纜線插頭插入打火機插孔。
- 2 將纜線的另一端連接至攝錄影機的直流輸入插孔。

#### 注意：

- 汽車蓄電池纜線只能用於12伏直流負極接地的汽車上。
- 用汽車蓄電池給攝錄影機供電時，請勿啓動汽車發動機。



## ENGLISH

### Setting the Clock

#### How to Set the Date and Time

At the time of purchase, the clock does not show the correct time and must first be adjusted.

- 1 Turn the Movie Camera on.
- 2 Press.
- 3 Keep pressed for more than about 2 seconds.
  - The year portion ❶ of the Date/Time Indication starts to flash.
  - The flashing portion of the Date/Time Indication can be changed with the [SHIFT] Button in the following order:

→Year→Month→Day→Hour→Minute→" "→

#### 4 Press to change the figures.

Year: 1990→1991→.....→2089→1990→...  
 Month: 1→2→.....→12→1→...  
 Day: 1→2→.....→31→1→...  
 Hour: 0→1→.....→23→0→...  
 Minute: 00→01→.....→59→00→...

- Repeat procedures 3 and 4 until all items have been set correctly.
- Once the date and time are set, press the [SHIFT] Button in response to an accurate time source so that the clock begins to function.

## 中文

### 設定時鐘

#### 如何設定日期和時間

剛購買的時候，時鐘顯示的時間會不正確，需要加以調整。

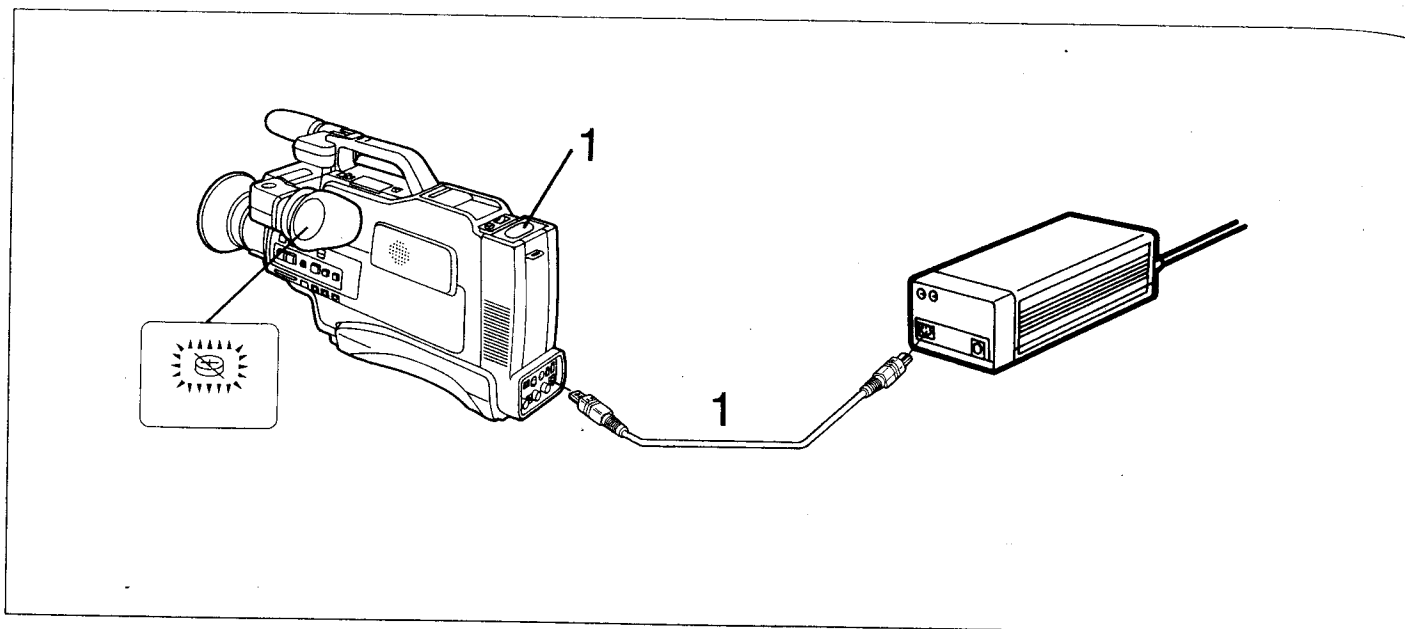
- 1 打開攝錄影機。
- 2 按。
- 3 持續按住該鈕 2 秒鐘以上。
  - 日期 / 時間指示的年的部分 ❶ 將開始閃動。
  - 每按一次 [SHIFT] 鈕，要被設定的項目將按下列順序閃動。

→年→月→日→小時→分鐘→" "→

#### 4 按鈕改變數字。

年 : 1990→1991→.....→2089→1990→...  
 月 : 1→2→.....→12→1→...  
 日 : 1→2→.....→31→1→...  
 小時 : 0→1→.....→23→0→...  
 分鐘 : 00→01→.....→59→00→...

- 重複步驟 3 和 4 直至所有項目都被設定好。
- 時間和日期設定後，請對應一精確時間信號按 [SHIFT] 鈕，以使時鐘可開始運行。



**ENGLISH**

**Setting the Clock (cont'd)**

■ **The Built-in lithium battery**

**Power Back-up System for the Clock**

A built-in rechargeable lithium battery maintains the operation of the built-in clock when the Movie Camera is turned off. When the Movie Camera is in operation, this battery is recharged automatically.

However, if the Movie Camera is not used for a very long time, the lithium battery can become exhausted. In this case, the Indication "⊙" in the Viewfinder flashes and the date and time return to the initial Indication "1.1.1990".

■ **How to Recharge the Built-In Lithium Battery**

If the Indication "⊙" in the Viewfinder flashes for approx. 10 seconds when turning the Movie Camera on, the lithium battery needs to be recharged as follows:

**1 Connect the Movie Camera to the AC Adaptor or insert the Battery Pack into the Movie Camera.**

**2 Leave the Movie Camera for 20 hours.**  
The Movie Camera does not need to be turned on.

• When the lithium battery is fully charged, it can maintain the operation of the clock for approx. one year.

**中文**

**設定時鐘 (續前)**

■ **內置鋰電池**

**時鐘用電源備用系統。**

內置充電式鋰電池可在攝錄影機關閉時維持內置時鐘的運行。當攝錄影機被操作時，該電池被自動充電。然而，當很長時間不用攝錄影機後，鋰電池將被耗盡。這時，電子尋像器中的“⊙”指示將閃動，日期和時間將回到初始指示“1.1.1990”。

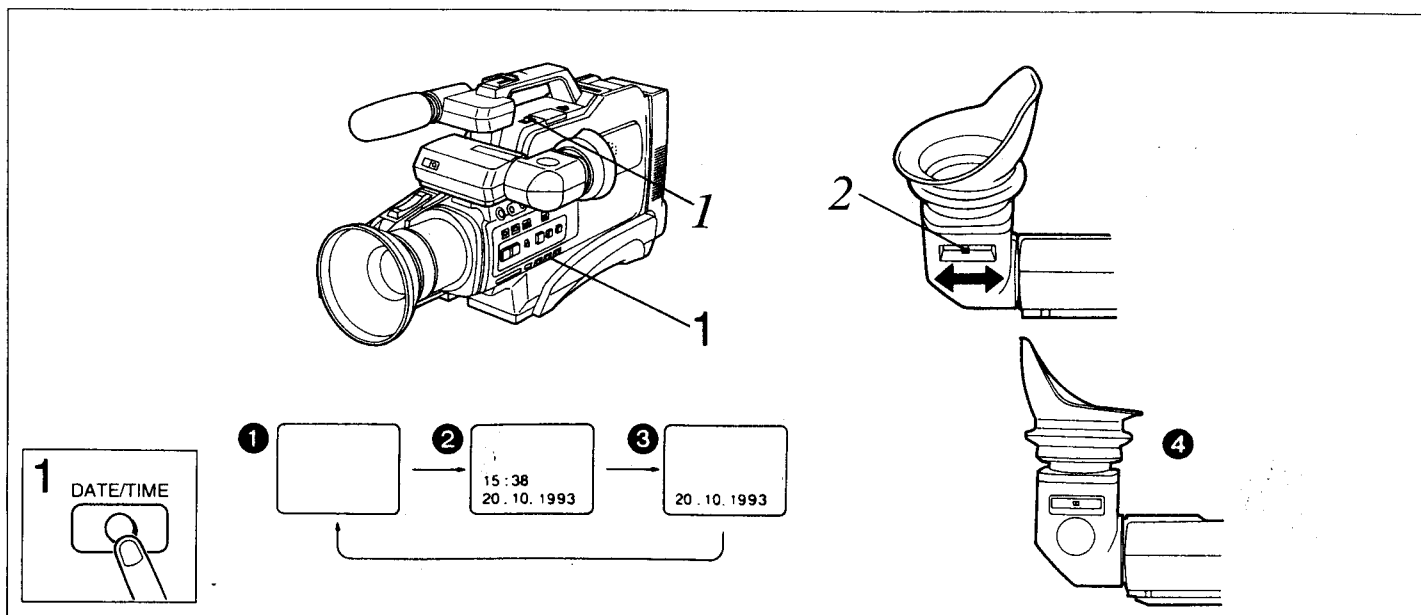
■ **如何對內置鋰電池充電**

打開攝錄影機後如果電子尋像器中的“⊙”指示閃動10秒鐘，則鋰電池需要按如下方法充電：

**1 將攝錄影機連接至交流轉接器或將電池組插入攝錄影機。**

**2 放置20個小時。**  
不需打開攝錄影機。

• 鋰電池被完全充好電後，可維持時鐘運行大約一年。



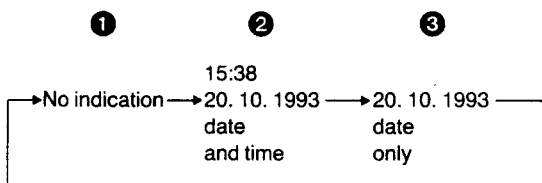
## ENGLISH

### Recording the Date and Time during Shooting

During shooting, the Date/Time Indication displayed in the Viewfinder will also be recorded.

#### 1 Press.

- At each press of the [DATE/TIME] Button, the Date/Time Indication in the Viewfinder can be changed in the following order:



- Press the [DATE/TIME] Button to select the desired indication.

### Adjusting the Eyepiece Corrector

#### 1 Turn the Movie Camera on.

#### 2 Slide the control until the indications in the Viewfinder can be seen clearly.

- With the Eyepiece Corrector Control, the Eyepiece can be adjusted to your eyesight.

#### Notes:

- Do not apply any pressure to the Viewfinder except when folding it up, raising, lowering and folding down.
- For viewing the picture in the Viewfinder with the left eye, remove the Eyecup and attach it with its longer side facing left ④.

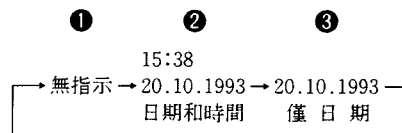
## 中文

### 拍攝中錄製日期和時間

拍攝時，電子尋像器中的日期 / 時間指示也將被錄製。

#### 1 按。

- 每按一次 [DATE/TIME] 鈕，電子尋像器中的日期 / 時間指示將按下列順序變化。



- 按 [DATE/TIME] 鈕選擇希望的指示。

### 調整目鏡校正器

#### 1 打開攝錄影機。

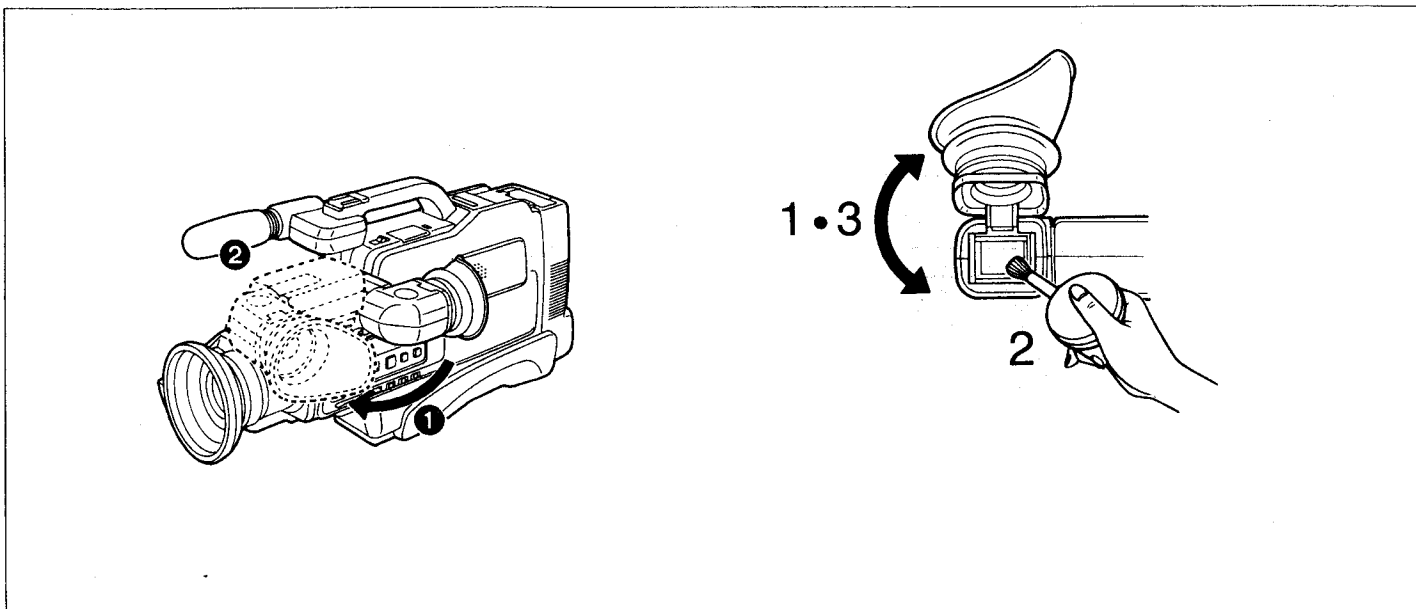
#### 2 滑動控制鈕直至電子尋像器中的指示清晰可見。

- 利用目鏡校正器控制，目鏡可被調整至您的視野。

#### 注意：

- 除了將電子尋像器向上折、抬起、放下或向下折之外，請勿對其施加壓力。
- 要用左眼觀看電子尋像器中的畫面時，請取下眼罩，然後將其長邊對著左邊後裝上 ④。





## ENGLISH

### Viewfinder

#### ■ Setting the Viewfinder to its Shooting Position

Turn the Viewfinder backward by 90° so that the Eyecup faces backward.

- The angular part of the Viewfinder can be turned upward and downward by 90° each.
- To be able to watch the picture in the Viewfinder without holding the Viewfinder close to the eye, swing up the Eyecup.
- By pulling on the Viewfinder it can be extended further outside to a position that is most comfortable for shooting.

#### ■ Returning the Viewfinder to its Original Position

- ① Turn it forward toward the Lens.
- ② Retract the Viewfinder by pushing it back toward its base.

### Cleaning

#### 1 Swing up the eyecup.

#### 2 Remove dust with a blower brush.

#### 3 Swing down the eyecup.

- Clean the lens only with a blower brush (used for photo cameras) or special lens cleaning tissue (used for glasses and cameras).
- Wipe the Movie Camera with a clean, dry cloth. Never use cleaning fluid or other chemicals.

#### ■ Cautions for Cleaning

Do not use benzine, thinner or other chemicals for cleaning, because they could change the colour and damage the surface of the camera body.

When using a chemically treated cloth for cleaning, carefully follow the instructions for its use.

## 中文

### 電子尋像器

#### ■ 設定電子尋像器至拍攝位置

將電子尋像器轉回90度，使眼罩對着後面。

- 電子尋像器可朝前或朝後各旋轉90度。
- 要想在眼睛不接近電子尋像器的情況下觀看電子尋像器中的畫面時，請轉上眼罩。
- 拉出電子尋像器，則其可更朝外伸展至最適合拍攝的位置。

#### ■ 將電子尋像器收回至最初位置

- ① 向鏡頭方向旋轉。
- ② 將電子尋像器向基部按，將其收回。

### 清掃

#### 1 挪開眼罩。

#### 2 用吹風刷去掉灰塵。

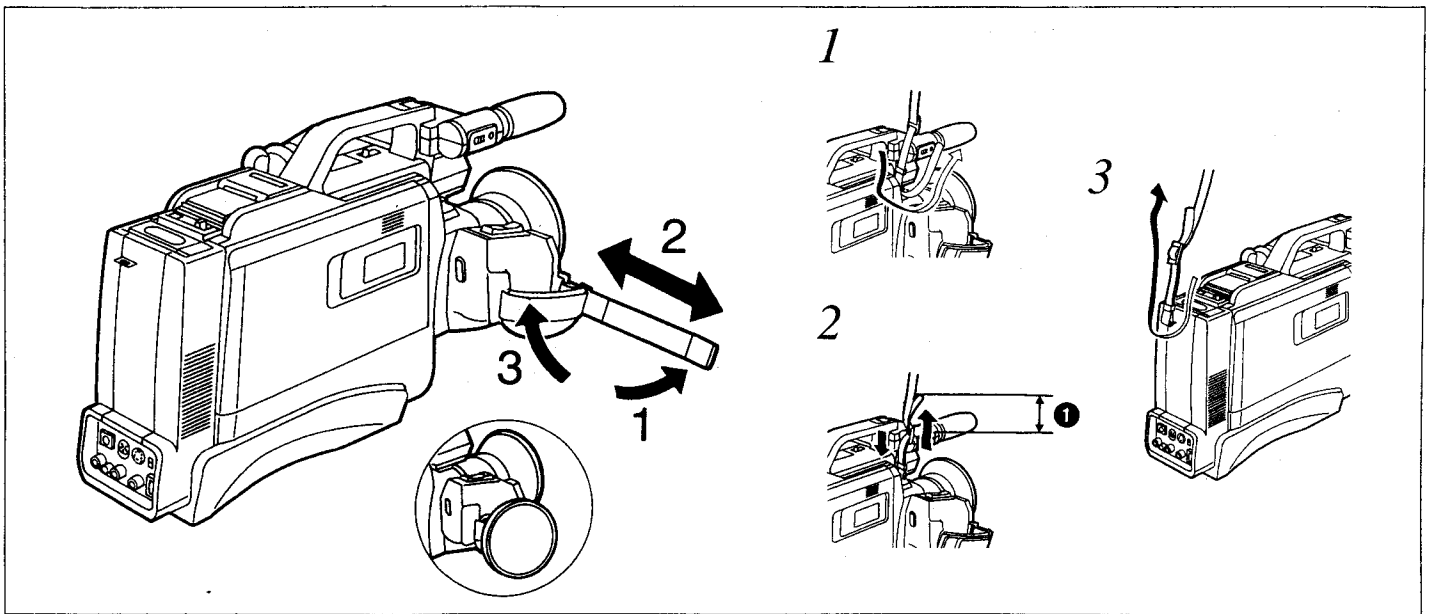
#### 3 挪回眼罩。

- 請只使用吹風刷（照相機用）或特殊鏡頭紙（眼鏡或照相機用）擦拭鏡頭。
- 請用清潔、乾燥的布擦拭攝錄影機。絕不能使用洗滌液或其它化學品。

#### ■ 清掃時的注意事項

請勿使用苯、溶劑或其它化學品清洗，否則將引起攝錄影機機身表面變色或損壞。

使用化學處理過的布清掃時，請仔細閱讀其使用說明。



## ENGLISH

### Adjusting the Grip Belt

#### ■ Adjusting the Length of the Grip Belt

The length of the Grip Belt should be adjusted so that the Grip fits comfortably into the palm of your hand and the Start/Stop Button and the [W] and [T] Zoom Buttons can easily be pressed with the fingertips.

- 1 Unfasten the velcro tape closure.
- 2 Adjust the length to the size of your hand.
- 3 Fasten the velcro tape closure.

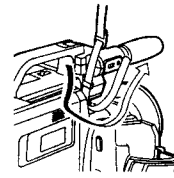
#### Note:

Attach the Lens Cap to the Grip Belt. (Hook the clip part on the back of the Lens Cap onto the Grip Belt.)

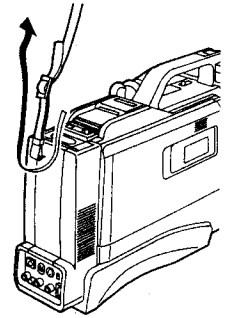
### Attaching the Shoulder Strap

- 1 Pull the end of the Shoulder Strap through the Shoulder Strap Holder.
- 2 Securely attach the end of the Shoulder Strap. (● More than 2 cm)
- 3 Attach the other side in the same way.

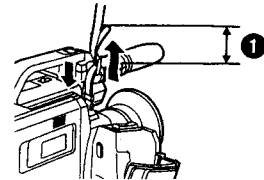
1



3



2



## 中文

### 調整扣抓皮帶

#### ■調整扣抓皮帶的長度

扣抓皮帶長度的調整應使得手掌握持舒適，且能便利地用指尖按開始/停止鈕和 [W] 鈕以及 [T] 鈕。

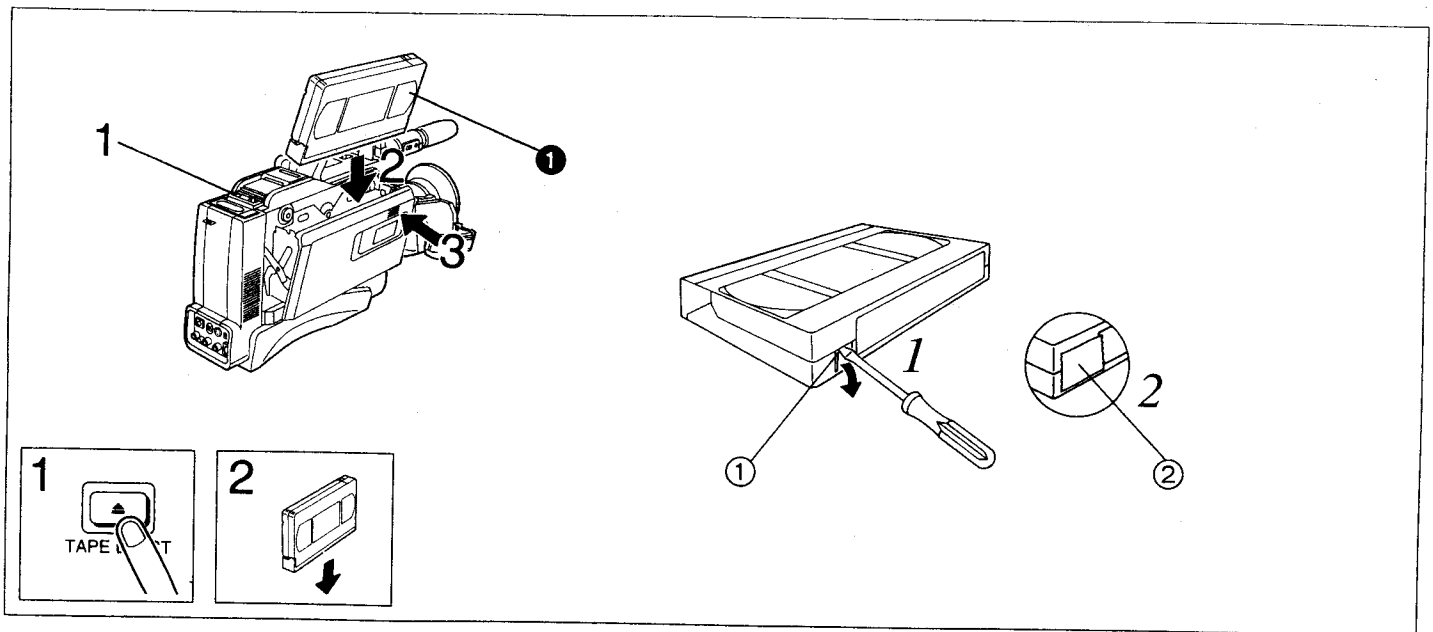
- 1 放鬆扣抓皮帶的 Velcro 截止帶。
- 2 根據您的手掌大小調整皮帶長度。
- 3 拽緊 Velcro 截止帶。

#### 注意：

將鏡頭蓋裝至扣抓皮帶。(將鏡頭蓋後部的鉗夾部分鉤在扣抓皮帶上。)

### 安裝肩用背帶

- 1 將肩用背帶的一端穿過肩用背帶連接器。
- 2 牢固扎緊肩用背帶的那端 (●長於 2 公分)。
- 3 按同樣方法扎緊肩用背帶的另一端。



## ENGLISH

### Inserting the Video Cassette

#### ■ How to Insert the Video Cassette

- Use only **S**VHS/VHS Video Cassettes.

- 1 Press.**
  - After a few seconds before the Cassette Compartment Cover opens.
- 2 Insert the video cassette with the cassette window ① facing outside.**

- 3 Close the Cover until it locks with a click.**

#### ■ How to Eject the Video Cassette

Make sure that power is supplied to the Movie Camera.

- 1 Press the [TAPE EJECT] Button.**
- 2 Pull out the Video Cassette.**
- 3 Close the Cover until it locks with a click.**

#### ■ Preventing Accidental Erasure of Recordings

When recording on a previously recorded tape, the previously recorded contents will be erased and replaced by the new recording. An important recording can be protected against accidental erasure, by breaking out the tab ①. If the tab is removed, recording on this Video Cassette is no longer possible.

#### ■ How to Break off the Tab

- 1 Break off the tab with a screwdriver in the direction of the arrow.**

#### ■ How to Record Again onto a Video Cassette with Removed Tab

- 2 Cover the hole firmly with two layers of adhesive tape ②.**

## 中文

### 插入錄影帶

#### ■如何插入錄影帶

- 僅能使用 **S**VHS/VHS 磁帶。

- 1 按。**
  - 要等數秒鐘，磁帶室蓋才開啓。
- 2 使錄影帶的窗口 ① 朝上，將其插入。**
- 3 關上蓋，直至其“咔嗒”合上。**

#### ■如何取出錄影帶

確認攝錄影機有電源供電。

- 1 按 [TAPE EJECT] 鈕。**
- 2 拉出錄影帶。**
- 3 關上蓋，直至其“咔嗒”合上。**

#### ■防止錄影的意外抹消

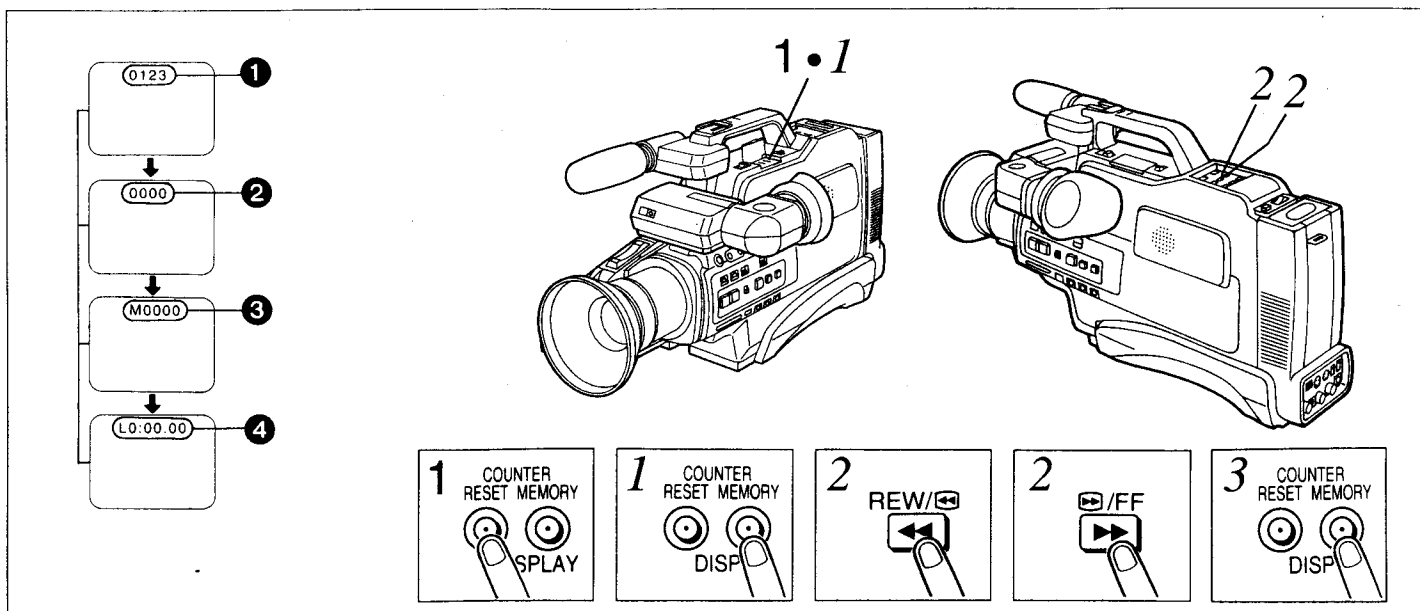
如果用已經錄過影的磁帶進行拍攝，則先前的錄影內容將被抹消，而被新的內容所取代。將保險片 ① 折斷後，便可保護重要的錄影不被意外抹消。如果保險片折斷，則該錄影帶便不再能被錄影。

#### ■如何折斷保險片

- 1 朝箭頭方向用起子折斷保險片。**

#### ■如何再次利用已被折斷保險片的磁帶錄影

- 2 用膠帶 ② 將該孔牢固地封上兩層。**



## ENGLISH

### Using the Tape Counter Indication

The Tape Counter Indication ①.

#### ■ How to Reset the Tape Counter to "0000"...

- 1 Press.  
The Tape Counter is reset to "0000" ②.

#### ■ How to Search for the Tape Position "0000" After Shooting or Playback...

- 1 Press.  
•The "M" Indication ③ appears in the Viewfinder next to the Tape Counter Indication.

- 2 Press one of the two Buttons.  
•The tape stops automatically at about the point where the Tape Counter reads "M 0000".

#### ■ How to Make the Lap Time Counter Indication Appear

- 3 Press again.  
The Lap Time Counter Indication "L 0:00.00" (real time) ④ appears.  
•The Lap Time Counter counts up only during recording.

#### Note:

- When fast forward or rewind to "M 0000" position, the tape counter may not read exactly "M 0000" when the tape stops. This is not a malfunction.

#### ■ To Cancel the Memory Function...

Press the [MEMORY/DISPLAY] Button twice.

## 中文

### 使用磁帶計時器指示

磁帶計時器指示 ①。

#### ■如何將磁帶計時器復位至 "0000"...

- 1 按。  
磁帶計時器被復位至 "0000" ②。

#### ■拍攝或放影之後，如何對磁帶計時器位置 "0000" 尋影...

- 1 按...  
•電子尋像器中 "M" 指示 ③ 將緊接着磁帶計時器指示出現。

- 2 按兩個鈕中的一個。  
•磁帶將自動停止在磁帶計時器讀數為 "M 0000" 的位置前後。

#### ■經過時間的顯示

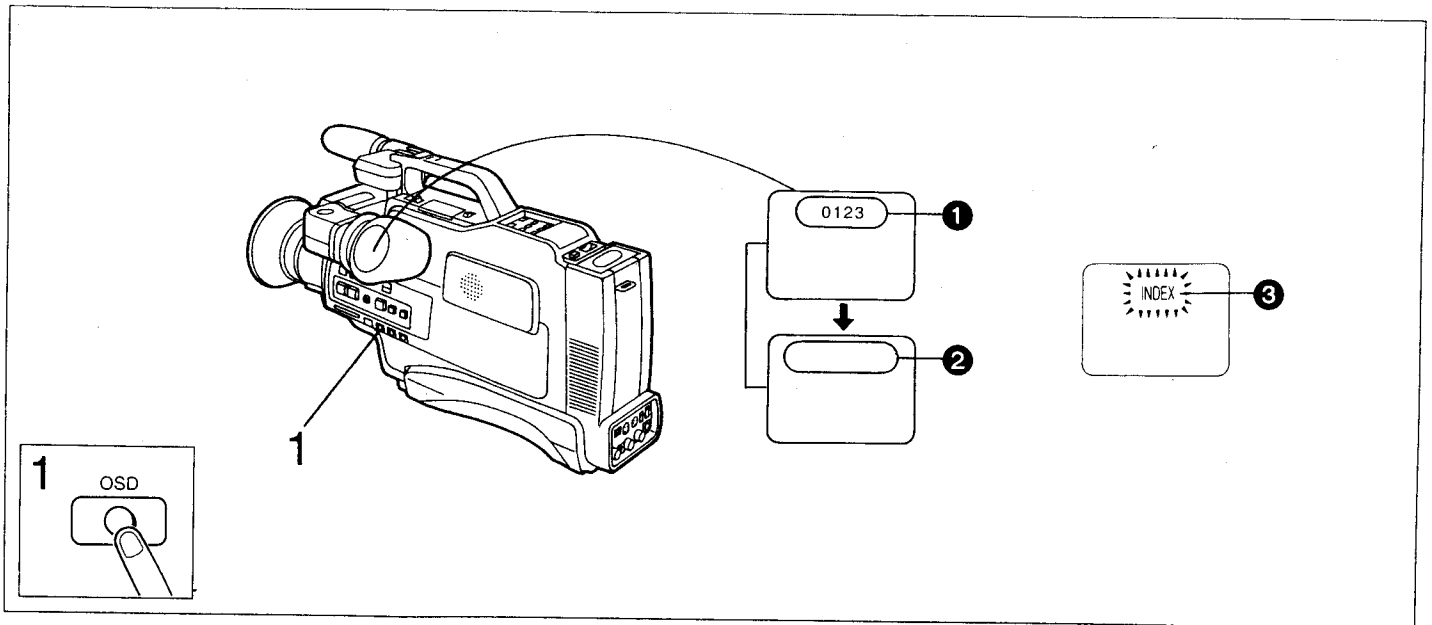
- 3 再按一次。  
經過時間計時器指示 "L 0:00.00" (實際時間) ④ 將出現。  
•經過時間計時器的指示僅在錄影時計數。

#### 注意：

- 磁帶快進或倒帶至 "M 0000" 位置時，磁帶停止後也許磁帶計時器不能精確指示 "M 0000"。但這不屬於故障。

#### ■取消記憶功能...

按 [MEMORY/DISPLAY] 鈕。



## ENGLISH

### Using the On-Screen Display Function

#### How to Turn off the Indications in the Viewfinder

##### 1 Press.

- The indications in the Viewfinder disappear (2) except the Warning and Alarm Indications, the Date/Time Indication and the Manual White Balance Indications.

#### To Return to the Initial Mode...

Press the [OSD] Button again.

### Index Signals (VISS)

The index signals make possible the use of the VHS Index Search or the Intro Scan Function when playing back the tape on a VTR equipped with these functions.

#### An index signal is recorded automatically in the following cases:

- When shooting is started for the first time after attaching the Battery Pack.
- When shooting is restarted after exchanging the cassette.

In each of these cases, the "INDEX" Indication (3) in the Viewfinder flashes for a few seconds.

- For the correct functioning of the VHS Index Search and Intro Scan Functions on the VTR, the index signals should be at intervals of not less than 2 minutes.

## 中文

### 使用螢幕顯示功能

#### 如何關掉電子尋像器中的指示

##### 1 按。

- 除了警告和報警指示、日期/時間指示和手動白色平衡指示之外，電子尋像器中的其它指示將消失 (2)。

#### 要回到最初狀態時...

再按 [OSD] 鈕一次。

### 索引信號 (VISS)

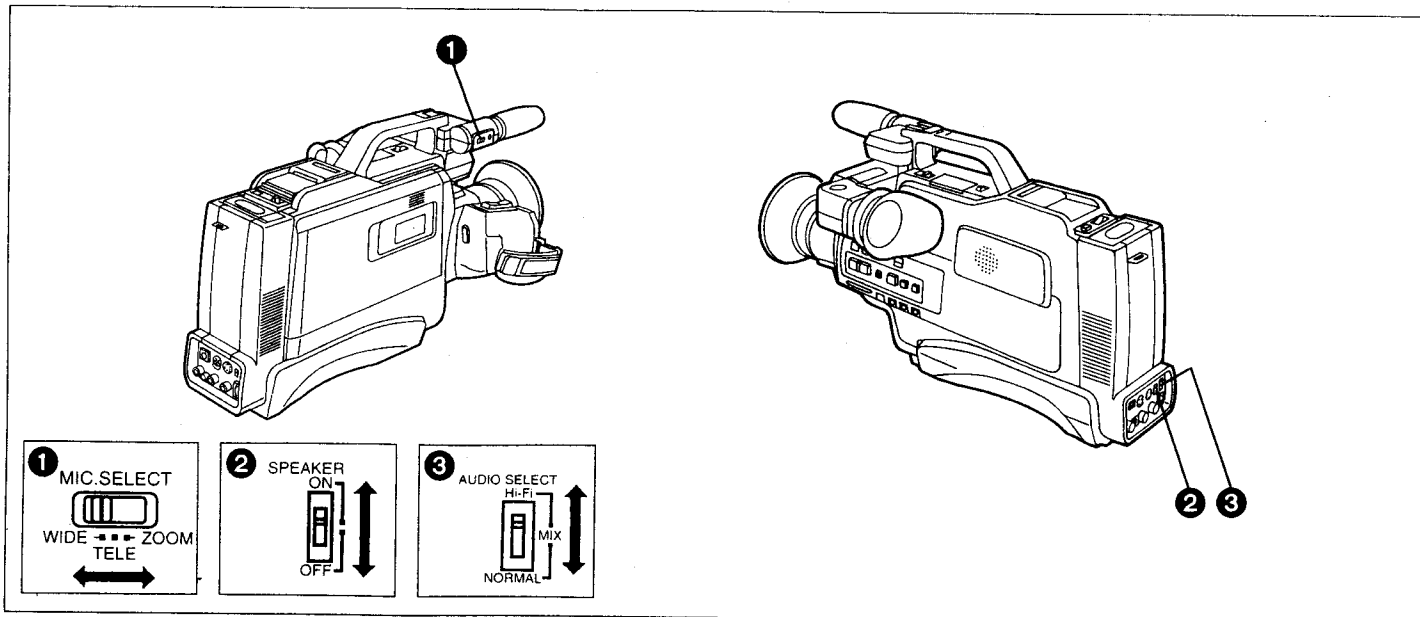
索引信號使您在具備 VHS 索引尋影或片頭掃描功能的錄放影機上放影磁帶時，可利用這些功能。

在下列場合，索引信號將被自動錄製：

- 安裝電池組後首次開始拍攝時。
- 更換磁帶後重新開始拍攝時。

在上述場合下，電子尋像器中的 "INDEX" 指示 (3) 將閃動數秒鐘。

- 為了使錄放影機上的 VHS 索引尋影和片頭掃描功能正確地工作，請將索引信號至少間隔 2 分鐘。



## ENGLISH

### The Sound That Is Being Recorded

#### ■ The Sound Recorded with the Stereo Microphone

This Movie Camera is equipped with a stereo zoom microphone. Depending on the setting of the Microphone Mode Selector Switch ①, the sound will be recorded with different effect.

**WIDE:** The sound will be recorded with stereo effect.

**TELE:** The sound will be recorded with tele effect. Compared with the "WIDE" setting, the microphone directivity is stronger and the sound from distant subjects can be received louder and more distinctly.

**ZOOM:** The zoom control of the microphone is coupled with the Zoom Buttons. When pressing the [W] Zoom Button, the sound will be recorded with stereo effect. When pressing the [T] Zoom Button, the microphone directivity becomes stronger and the sound from distant subjects can be received louder and more distinctly.

• For normal shooting, set the Microphone Mode Selector Switch to "WIDE".

#### ■ To Listen to the Sound during Recording or Playback

When the Speaker On/Off Switch ② is set to "ON", it is possible to listen to the sound during recording or playback. When it is set to "OFF", the sound cannot be heard.

#### ■ The Sound Recorded with the Audio Dubbing Function

For playback, select the desired sound with the [HiFi/MIX/NORMAL] Switch ③.

**HiFi:** The original sound (sound before performing audio dubbing) alone can be heard.

**MIX:** The original and the dubbed sound can be heard mixed together.

**NORMAL:** The dubbed sound alone can be heard.

#### ■ The Sound Recorded with the Insert Editing

For playback, select the desired sound with the [HiFi/MIX/NORMAL] Switch ③.

**HiFi:** The inserted sound alone can be heard.

**MIX:** The original and the inserted sound can be heard mixed together.

**NORMAL:** The original sound (sound before performing insert editing) alone can be heard.

## 中文

### 正被錄製的聲音

#### ■ 利用立體聲麥克風錄製聲音

本攝錄影機配備有立體聲變焦麥克風。取決於麥克風方式選擇開關 ① 的設定，聲音將以不同的效果錄製。

**WIDE:** 聲音將以立體聲效果錄製。

**TELE:** 聲音將以遠距離效果錄製。與 "WIDE" 設定相比，麥克風的方向性更強，遠處的聲音更大、更清晰。

**ZOOM:** 麥克風的變焦控制與變焦鈕連動。按 [W] 變焦鈕時，帶立體聲效果的聲音將被錄製。按 [T] 變焦鈕時，麥克風的方向性更強，遠處的聲音更大、更清晰。

• 正常拍攝時，請將麥克風方式選擇開關設定至 "WIDE"。

#### ■ 在錄影或放影中要聽聲音時

將揚聲器開關 ② 設定至 "ON" 時，便可在錄影或放影中聽到聲音。當其被設定至 "OFF" 時，將聽不到聲音。

#### ■ 用音頻複製功能錄製的聲音。

放影時，請用音頻選擇開關 ③ 選擇希望的聲音。

**HiFi:** 僅能聽到原來的 (進行音頻複製之前) 聲音。

**MIX:** 原來的聲音和複製的聲音一起出現。

**NORMAL:** 僅能聽到複製的聲音。

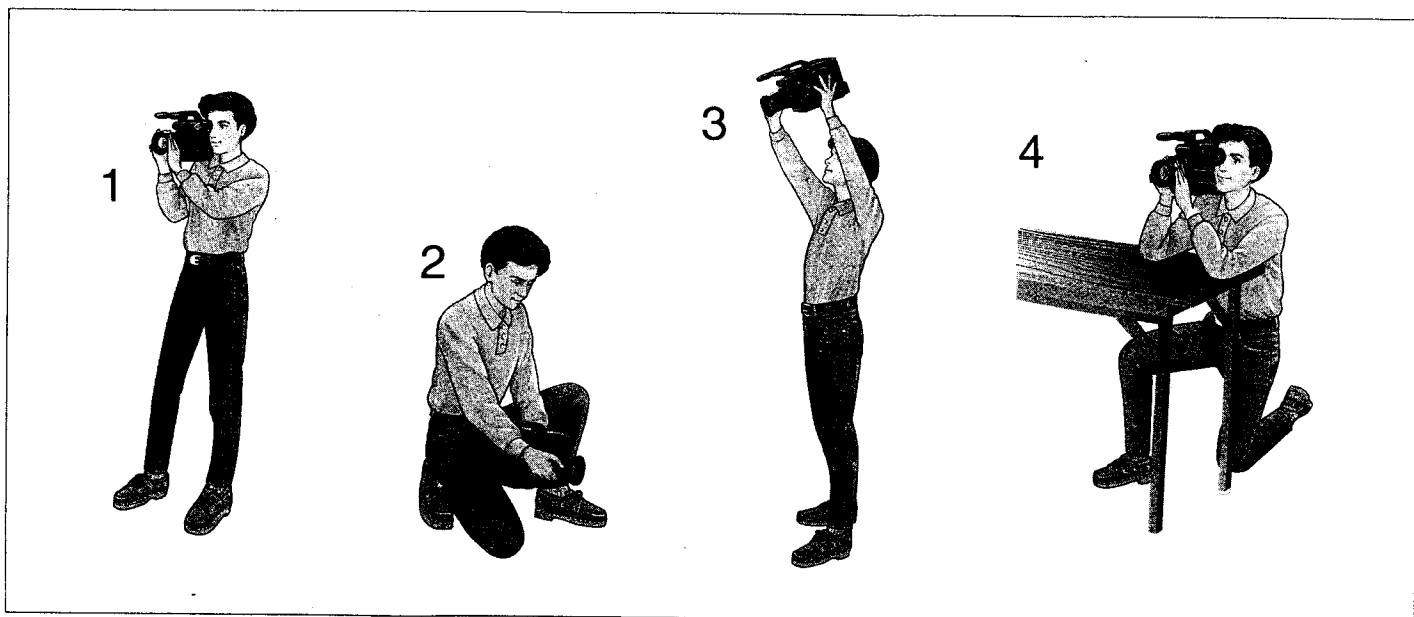
#### 用插入編輯功能錄製的聲音

放影時，請用 [Hi-Fi / MIX / NORMAL] ③ 開關選擇希望的聲音。

**Hi-Fi:** 只能聽到插入的聲音。

**MIX:** 可以聽到原來的和插入的混合聲音。

**NORMAL:** 只能聽到原來的聲音 (進行插入之前的聲音)。



## ENGLISH

### Holding the Movie Camera for Shooting

#### 1 Normal Shooting.

- When walking while shooting, keep both eyes open so that you can see where you are going and what is happening around you.
- Place the Movie Camera on your right shoulder and hold it firmly with both hands.
- Hold the Eyecup of the Viewfinder as close as possible to your right or left eye.
- Take a firm stance with the legs slightly apart.
- For stable images, it is recommended to use a tripod (optional) whenever possible. (See page 134.)

#### 2 Low-Angle Shooting.

Adjust the angle of the Viewfinder according to the position in which the Movie Camera is held.

- If the Movie Camera is not held firmly in stable position, the picture in the Viewfinder cannot be watched properly.
- For easier long-angle shooting, the Start-/Stop Button on the front of the Movie Camera can be used.

#### 3 Shooting from a high position.

#### 4 For More Stable Pictures.

- Stabilize the Movie Camera by resting your elbows on a table or another stable horizontal surface.

## 中文

### 握持攝錄影機用於拍攝

#### 1 正常拍攝

- 如果走動時拍攝，則請睜開兩眼以便看清前面以及周圍的情況。
- 將其放置於右肩，用兩手牢固地支撐住。
- 將目鏡盡可能靠近您的右眼或左眼。
- 將兩腿稍張開，使步架穩定。
- 爲了獲得穩定的畫面，建議您盡可能使用三腳架（選購附件）（第134頁）。

#### 2 低角度拍攝

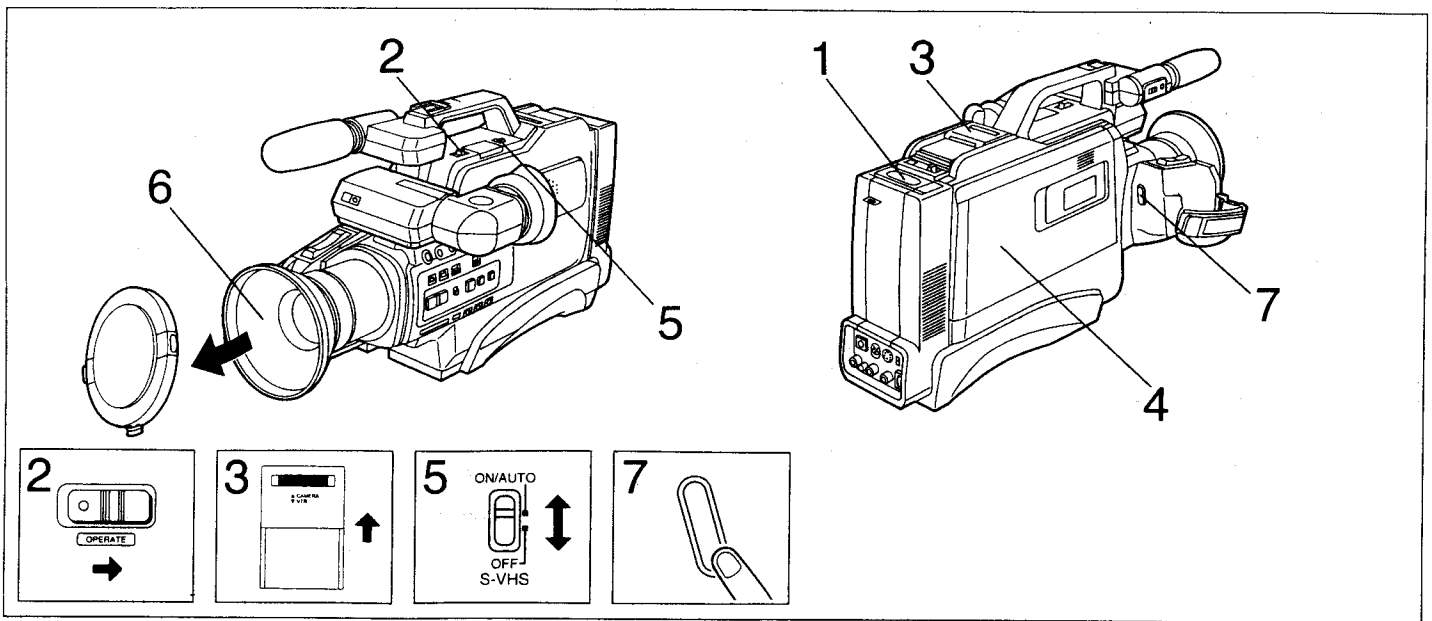
根據攝錄影機被掌握的位置調整電子尋像器的角度。

- 如果攝錄影機未處於穩定的位置，則電子尋像器中將不能出現合適的畫面。
- 爲了便於拍攝長焦距鏡頭，可使用攝錄影機前部的開始/停止鈕。

#### 3 從高處拍攝

#### 4 爲了獲得更穩定的畫面

- 可將手臂放在桌子上或其它穩定水平物體上，以穩定攝錄影機。



## ENGLISH

### Shooting

- 1 Attach the charged Battery Pack.**
- 2 Turn the Movie Camera on.**
- 3 Slide to "CAMERA".**
- 4 Insert a cassette with intact erasure prevention tab.**
  - A few seconds after closing the Cassette Compartment, the Movie Camera will be in the shooting pause mode.
- 5 Slide to "ON/AUTO" or "OFF".**
  - In the "ON/AUTO" position, the S-VHS recording system is selected and the "S" Indication is lit. Playback will not be possible on a normal VHS VTR.
  - In the "OFF" position, the "S" Indication is not lit.
- 6 Remove the Lens Cap.**
- 7 Press the Start/Stop Button.**
  - **To Pause the Shooting...**  
Press the Start/Stop Button.
  - **To Shoot the Next Scene(s)...**  
Press the Start/Stop Button again.
  - **To Stop the Shooting...**  
Press the Start/Stop Button to pause the shooting and then turn the Movie Camera off.

#### Note:

- If the Movie Camera is left in the shooting pause mode for more than 6 minutes, the shooting pause mode will be canceled and the Viewfinder will be turned off (recording lock mode). To resume shooting from this condition, turn the Movie Camera on again. If the Movie Camera is left in the recording lock mode for more than 48 hours, it will automatically switch off completely.

## 中文

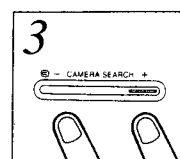
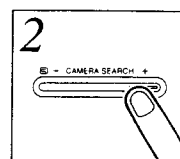
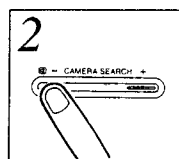
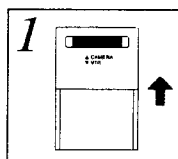
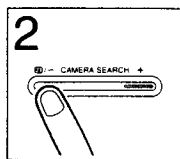
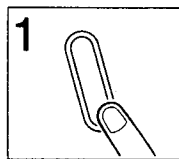
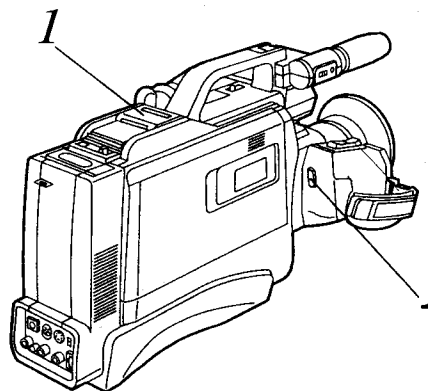
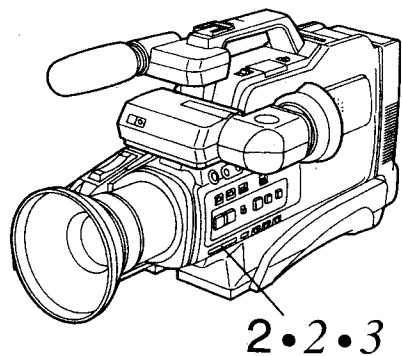
### 拍攝

- 1 裝上充過電的電池組。**
- 2 打開攝錄影機。**
- 3 並滑動至 "CAMERA"。**
- 4 插入保險片完整的磁帶。**
  - 關上磁帶室後經過數秒鐘，攝錄影機便進入拍攝暫停狀態。
- 5 滑動至 "ON/AUTO" 或 "OFF"。**
  - 在 "ON/AUTO" 位置時，將選擇 S-VHS 錄影系統，"S" 指示會亮，且磁帶不能通過普通 VHS 錄放影機放影。
  - 在 "OFF" 位置時，"S" 指示將不亮。
- 6 取下鏡頭蓋。**
- 7 按開始 / 停止鈕。**
  - **要暫停拍攝時...**  
按開始 / 停止鈕。
  - **要拍攝下一場面時...**  
再按開始 / 停止鈕一次。
  - **要停止拍攝時...**  
按開始 / 停止鈕使拍攝暫停，然後關閉攝錄影機。

#### 注意：

- 如果攝錄影機處於拍攝暫停狀態超過 6 分鐘，則拍攝暫停狀態將被取消，電子尋像器將被關閉（錄影鎖定狀態）。要從該狀態恢復拍攝時，請再打開攝錄影機。如果攝錄影機處於錄影鎖定狀態超過 48 小時，則將自動完全關閉。





## ENGLISH

### Checking the Recorded Scene

- 1 Press to pause the shooting.**
  - The "PAUSE" Indication appears in the Viewfinder.
- 2 Press briefly.**
  - The "CHK" Indication in the Viewfinder lights up, and the last 2-3 seconds of the last recorded scene will be played back in the Viewfinder. After that, Movie Camera is again in the shooting pause mode. ("CHK" means Check.)

#### Note:

During shooting, use this function to confirm from time to time that the recording has been performed correctly.

### Searching for a Previously Shot Scene (Camera Search)

- How to Search for a Point in a Recorded Scene  
After inserting the recorded video cassette:

- 1 Slide to "CAMERA".**
- 2 Keep pressed.**
  - While this button is kept pressed, the recorded scene will be played back at high speed in reverse direction.
- Or keep pressed.**
  - While this button is kept pressed, the recorded scene will be played back at normal speed in forward direction.
- 3 Release this button after reaching the desired point.**
  - The Movie Camera is put into the recording pause mode.

## 中文

### 檢查錄過的場面

- 1 按鈕暫停拍攝。**
  - "PAUSE" 指示將出現在電子尋像器中。
- 2 短暫地按。**
  - 電子尋像器中"CHK" 指示將亮起，最後拍攝過的最後 2-3 秒鐘將在電子尋像器中放影。然後，攝錄影機將再次進入拍攝暫停狀態。  
(CHK：表示檢查)

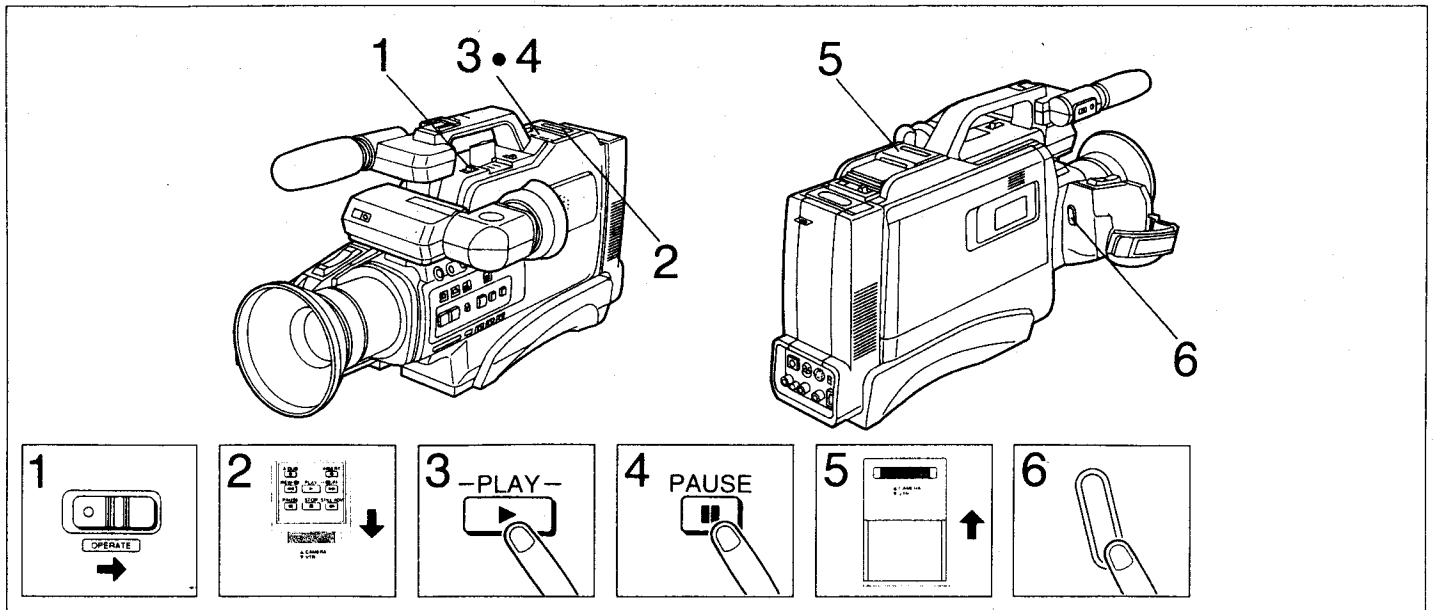
#### 注意：

在拍攝中，請不時地使用該功能以便確認拍攝是否滿意。

### 尋影先前拍攝的場面(攝錄影機尋影)

- 如何尋影拍攝過的場面中的某一點  
插入錄過的磁帶之後：

- 1 滑動至 "CAMERA"。**
- 2 持續按住該鈕。**
  - 持續按住該鈕時，錄過的場面將被高速反向放影。
- 或持續按住該鈕。**
  - 持續按住該鈕時，錄過的場面將被正常速度正向放影。
- 3 到達希望的點後，釋放該鈕。**
  - 畫面進入暫停狀態。



## ENGLISH

### Shooting with Clean Edits

This function makes it possible to achieve smooth transitions between a previously and a newly shot scene.

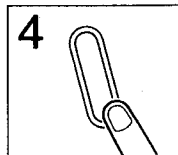
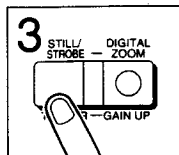
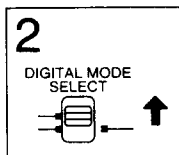
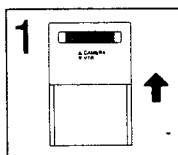
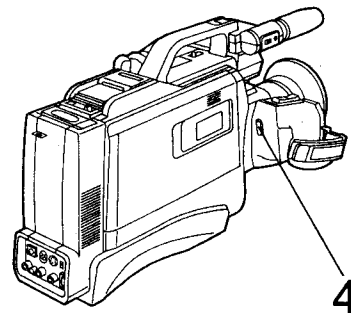
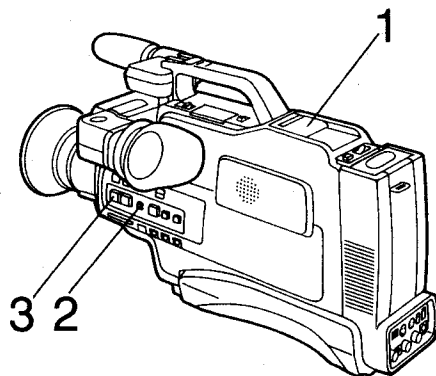
- 1 Turn the Movie Camera on.
- 2 Slide to "VTR".  
(“VTR” means Video Tape Recorder.)
- 3 Press.
- 4 Press after reaching the point where you want to add the next scene.  
(Thereby erasing the rest of the previously recorded scene.)
- 5 Slide to "CAMERA".
- 6 Press to start shooting the new scene.  
• The shooting starts.

## 中文

### 使用清潔編輯功能拍攝

該功能可在先前拍攝的與新拍攝的場面之間獲得平滑的過渡。

- 1 打開攝錄影機。
- 2 滑動至“VTR”。  
(VTR：表示錄放影機)
- 3 按。
- 4 在到達您要加入新場面的點處按該鈕。  
(從那點起將抹掉以前的錄影。)
- 5 滑動至“CAMERA”。
- 6 按該鈕開始拍攝新的場面。  
• 拍攝開始。



## ENGLISH

### Shooting a Still Picture

For recording a Still Picture of Any Desired Duration:

- 1 Slide to "CAMERA".
- 2 Slide up.
- 3 Press.
  - The image in the Viewfinder stands still.
  - By pressing the [STILL/STROBE] Button repeatedly, the mode can be changed in the following order:

→NORMAL→STILL→STROBE

- 4 Press.
  - The still picture in the Viewfinder will be recorded.

#### ■ To Cancel this Function...

Press the [STILL/STROBE] Button two times until normal movement in the Viewfinder is observed.

#### Hints for Shooting Still Pictures

- To prevent picture distortion, do not move or shake the Movie Camera during still picture shooting.
- Since the still picture is recorded from the digital image memory, the picture quality may be slightly inferior to that of normally recorded pictures.

## 中文

### 拍攝靜止畫面

拍攝希望的場面的靜止畫面：

- 1 滑向 "CAMERA"。
- 2 滑起。
- 3 按。
  - 電子尋像器中的畫面將靜止。
  - 反復按 [STILL/STROBE] 鈕，狀態將按下列順序變化：

→NORMAL (正常)→STILL (靜止)→STROBE (頻閃)

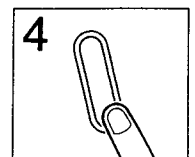
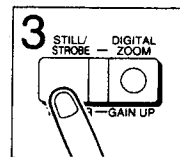
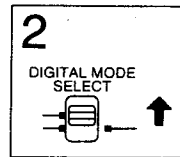
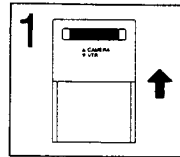
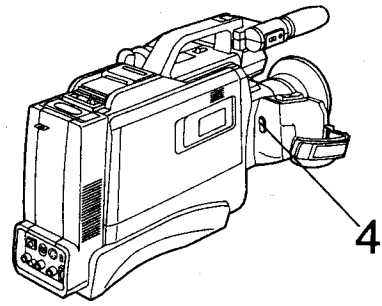
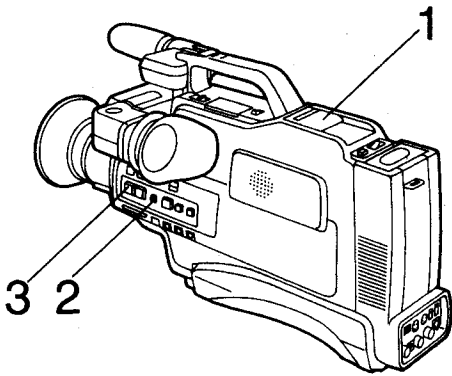
- 4 按。
  - 電子尋像器中靜止畫面將被錄製。

#### ■要取消該功能時...

按 [STILL/STROBE] 鈕二次，直至觀察到電子尋像器上出現正常運動。

#### 拍攝靜止畫面的提示

- 為了防止畫面變形，在拍攝靜止畫面時請勿移動或抖動攝錄影機。
- 由於靜止畫面是從數位畫面儲存器中錄製的，故畫質可能略遜於正常錄製的畫面。



## ENGLISH

### Shooting with Strobe Effect

For continuously recording 6 still images per second:

- 1 Slide to "CAMERA".
- 2 Slide up.
- 3 Press twice.
  - The picture in the Viewfinder will also have a strobe effect.
- 4 Press.
  - Continuous shooting with strobe effect is now possible.

#### ■ To Cancel this Function...

Press the [STILL/STROBE] Button until normal movement in the Viewfinder is observed.

#### Hints for Shooting Pictures with Strobe Effect

By combining the Strobe Function with the High-Speed Shutter, the strobe effect can be increased. (For outdoor shooting, the 1/250-second shutter speed is recommended.) (See page 70.)

#### Notes:

- When shooting under fluorescent lamps, the brightness of the picture may fluctuate.
- Since the strobe pictures are recorded from the digital image memory, the picture quality may be slightly inferior to that of normally recorded pictures.

## 中文

### 使用頻閃效果拍攝

連續地每秒鐘拍攝 6 幕靜止畫面：

- 1 滑向 "CAMERA"。
- 2 滑起。
- 3 按兩次。
  - 電子尋像器中的畫面將具有頻閃效果。
- 4 按。
  - 可連續地使用頻閃效果拍攝。

#### ■要取消該功能時...

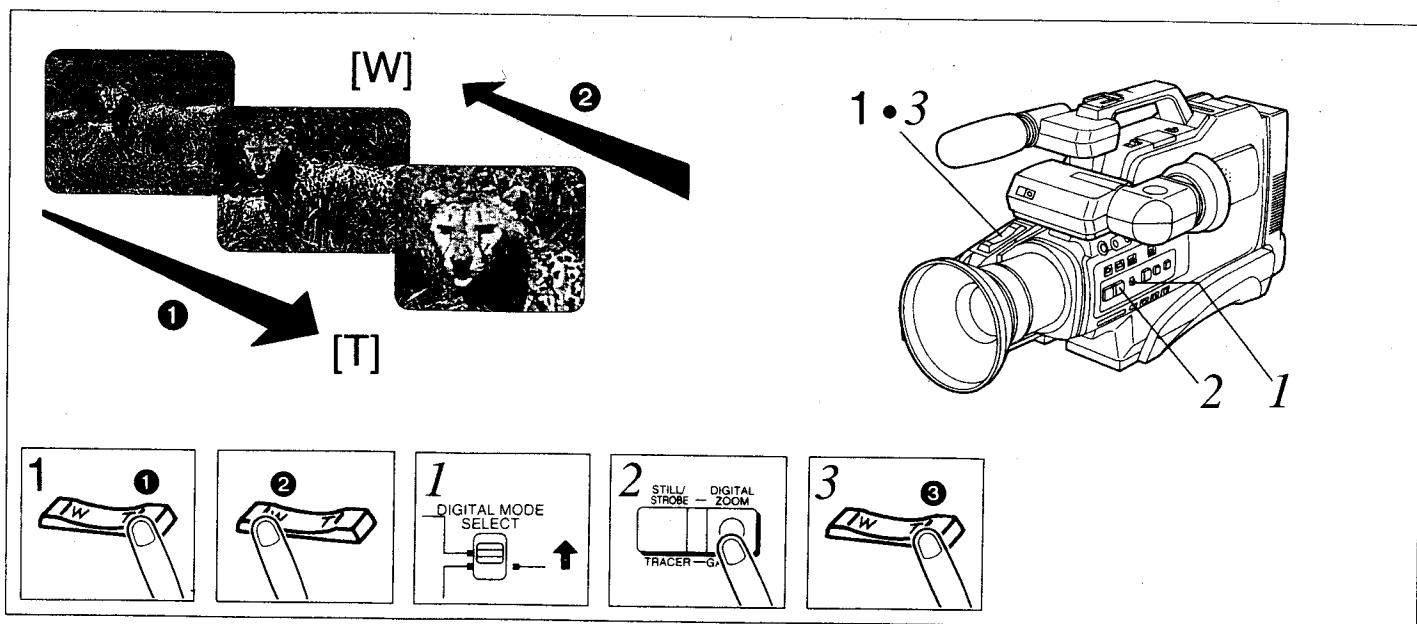
按 [STILL/STROBE] 鈕，直至觀察到電子尋像器上出現正常運動。

#### 使用頻閃效果拍攝的提示

將頻閃功能與高速快門結合使用時，可增強頻閃效果。(室外拍攝時，建議使用 1/250 秒的快門速度。)(參看第 70 頁)

#### 注意：

- 在螢光燈下拍攝時，畫面的亮度可能會不穩定。
- 由於頻閃畫面是從數位畫面儲存器中錄製的，故畫質可能略遜於正常錄製的畫面。



## ENGLISH

### Shooting with the Zoom Function

#### ■ Using the Power Zoom Function

To make your zoom shots more impressive and to achieve exactly the desired effect, do it like the professionals: before actually shooting, make a trial run of the zooming.

- 1 **Keep pressed for telephoto.**  
Zoom in (subject appears closer ①)

**Keep pressed for wide-angle.**  
Zoom out (subject appears further away ②)

#### ■ Using the Digital Zoom Function

The Digital Zoom Function makes it possible to zoom in on a subject and enlarge it by up to 100 times by using the [T] Zoom Button and the [DIGITAL ZOOM] Button.

- 1 **Slide up.**

- 2 **Press.**

- At one press, the "D.ZOOM 1" Indication appears in the Viewfinder; at a second press, the "D.ZOOM 2" Indication appears.

- 3 **Press ③.**

#### ■ To Cancel this Function...

Press the [DIGITAL ZOOM] Button.

- When the Digital Zoom Function is turned off, the zoom range is limited to  $\times 12$ .
- When the Digital Zoom Function is activated, the picture is magnified electronically and the zoom range is increased to  $\times 24$  (D.ZOOM 1) and  $\times 100$  (D.ZOOM 2).
- The Digital Zoom Function slightly decreases the picture resolution and fine picture details.

When shooting under very bright conditions, the after-image can be eliminated by selecting a shutter speed of 1/250 or 1/500 sec.

## 中文

### 使用變焦功能拍攝

#### ■ 使用動力變焦功能

為了使得變焦拍攝更有魅力並能獲得希望的效果，請像專業人員那樣：在實際拍攝之前，模仿進行試焦。

- 1 持續按住長焦鈕。  
拉進 (目標物變近 ①)  
持續按住廣角鈕。  
推出 (目標物變遠 ②)

#### ■ 使用數位變焦功能

使用 [T] 變焦鈕和 [DIGITAL ZOOM] 鈕，數位變焦功能可拉入一目標物，並將其放大至100倍。

- 1 滑起。

- 2 按。

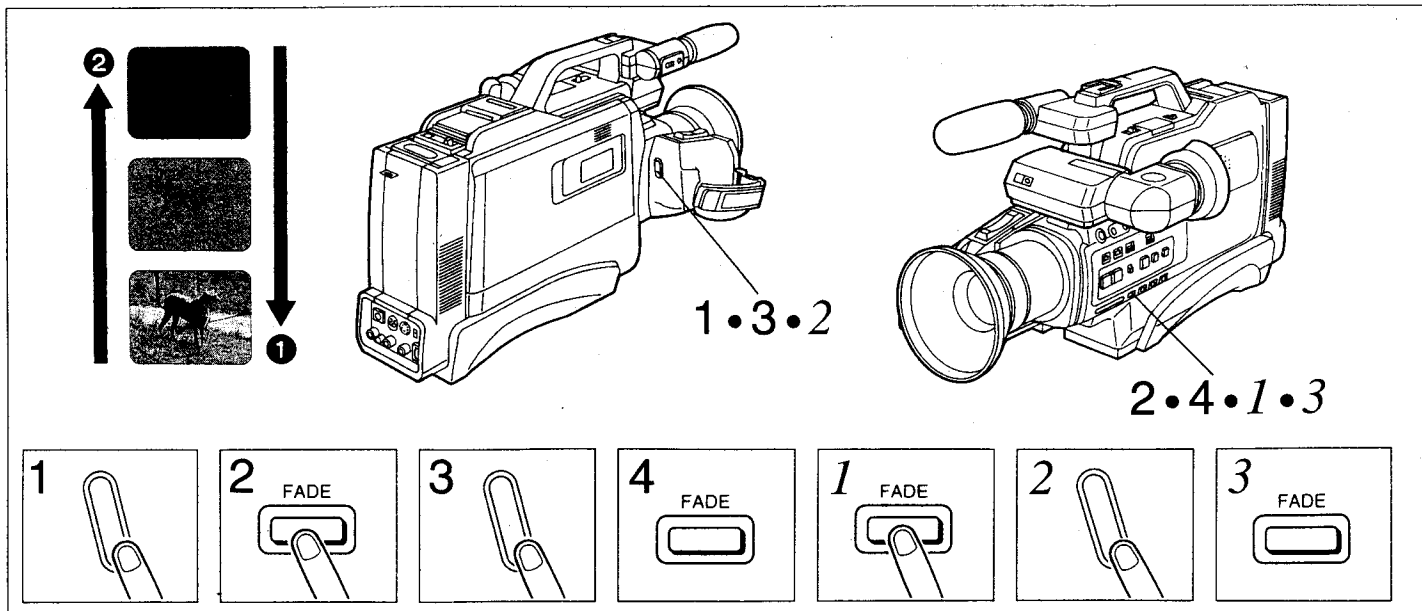
- 按一次時將顯示 "D.ZOOM 1"，再按一次時將顯示 "D.ZOOM 2"。

- 3 按 ③。

#### ■ 要取消該功能時...

按 [DIGITAL ZOOM] 鈕。

- 數位變焦功能關閉之後，變焦範圍將被限制在12倍以內。
- 啟動數位變焦功能後，畫面將被電子式放大且變焦範圍將增加至24倍 (D.ZOOM 1) 或100倍 (D.ZOOM 2)。
- 數位變焦功能將略微降低畫面的析像度和畫面細節。
- 在極其明亮的光線下拍攝時，可選擇1/250或1/500秒的快門速度消除重影。



## ENGLISH

### Shooting with the Fade Function

#### ■ How to Fade in ①

Fading in from black is very effective at the beginning of a movie and for soft transitions between scenes.

- 1 Press to pause the shooting.
- 2 Keep pressed.
- 3 After the picture in the Viewfinder has disappeared, press to start the shooting.
- 4 After about 3 seconds, release the button.

#### ■ How to Fade out ②

Fading out to black is convenient at the end of a scene to create a soft ending.

- 1 Keep pressed during shooting.
- 2 After the picture has disappeared, press to stop the shooting.
- 3 Release the button.

## 中文

### 使用淡化功能拍攝

#### ■如何淡入 ①

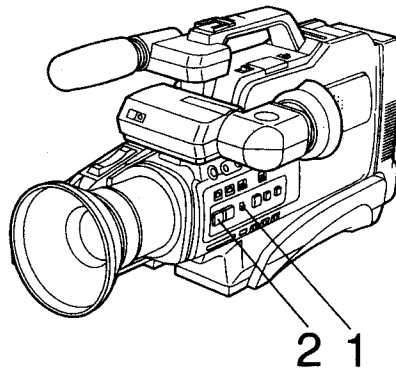
在節目的開始處，從暗處淡入則效果很好，也可用於場面之間的柔和過渡。

- 1 按鈕來暫停拍攝。
- 2 持續按該鈕。
- 3 在電子尋像器中的畫面消失後，按該鈕開始拍攝。
- 4 3秒鐘後，釋放該鈕。

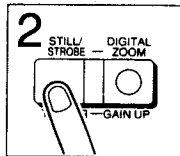
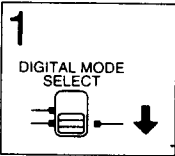
#### ■如何淡出 ②

淡出至黑暗可便利地用於節目結束處，創造柔和的結尾。

- 1 在拍攝中，持續按該鈕。
- 2 畫面消失後，按該鈕停止拍攝。
- 3 釋放該鈕。



TRACER



## ENGLISH

### Shooting with the After-Image Effect (Tracer Function)

This function can be used to emphasize the speed of movements in fast-action scenes.

- 1 Slide the Digital Mode Select Switch to downward.
- 2 Press the "TRACER" Button.
  - The "TRACER" Indication appears.

#### ■ To cancel this function...

Press the [TRACER] Button again or slide the Digital Mode Select Switch to upward.

## 中文

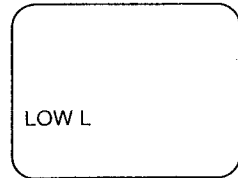
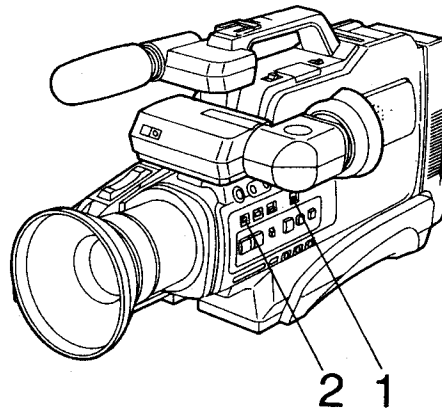
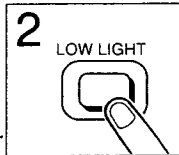
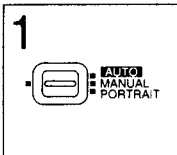
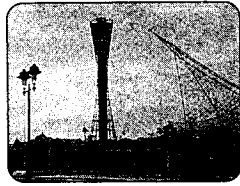
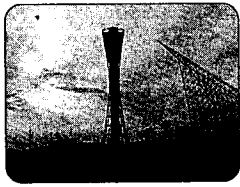
### 使用重影效果拍攝 (跟蹤功能)

該功能可用於增強快速運動場面的運動速度。

- 1 向下滑動數位方式選擇開關。
- 2 按 "TRACER" 鈕。
  - "TRACER" 指示將出現。

#### ■要取消該功能時...

再按 [TRACER] 鈕一次並向上滑動數位方式選擇開關。



## ENGLISH

### Shooting Sunsets or Other Evening Scenes (Low Light Function)

**1** Set to "MANUAL".

**2** Press.

- The "LOW L" indication appears.
- This increases the sensitivity compared to the "AUTO" setting of the Mode Selector Switch and assures stable images with relatively weak contrast.

#### Notes:

- Even if this mode is used for outdoor shooting in the daytime, the result will be almost the same as when the Mode Selector Switch is set to "AUTO".
- In the Portrait Mode, the Lowlight Function is activated. (See page 118.)

## 中文

### 拍攝夕陽或其它黃昏場面 (低光線功能)

**1** 設定至 "MANUAL"。

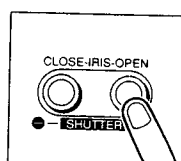
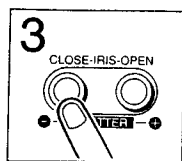
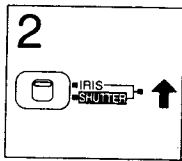
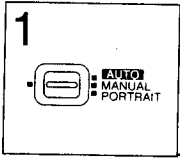
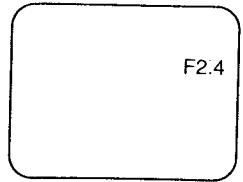
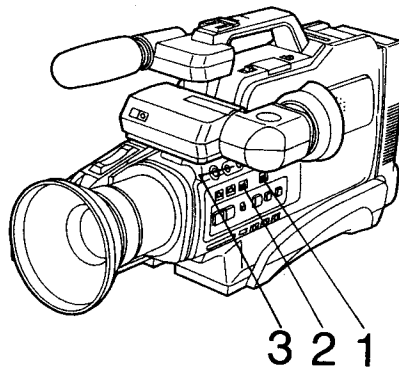
**2** 按。

- "LOW L" 指示將出現。
- 與狀態選擇開關的 "AUTO" 設定相比較，靈敏度將增加，且可保證較弱對比度下的穩定畫面。

#### 注意：

- 即使該功能使用於白天的室外拍攝條件，也將與狀態選擇開關設定至 "AUTO" 時的效果相同。
- 在照片方式下，低光線功能將被啟動。(參看第118頁。)





## ENGLISH

### Shooting Backlit Scenes (Iris Adjustment)

This function makes it possible to brighten up the subject when shooting a backlit scene.

- 1 Set the Mode Selector Switch to "MANUAL".
- 2 Set to "IRIS".
- 3 Press repeatedly the either button to select the desired F Number.
  - The F Number Indication appears.
  - The F Number can be changed in 18 steps:  
OP+G1, OP+G2, OPEN, F2, F2.4, F2.8, F3.4, F4, F4.8, F5.6, F6.8, F8, F9.6, F11, F14, F16, F19, CLOSE

#### ■ To Return to the Standard Iris Setting...

- Press the [IRIS OPEN] Button and [IRIS CLOSE] Button simultaneously for more than 1 second.
- Returning to the standard iris setting is also possible by setting the Mode Selector Switch to "AUTO".

#### Cautions for Shooting Backlit Subjects

- The sky may become whitish.
- In case of extremely strong backlight, it may not be possible to brighten up the subject sufficiently.
- When shooting with the sun striking the subject at an angle, star-shaped light reflexes may be recorded in the picture.

## 中文

### 拍攝背光場面 (光圈調整)

拍攝背光場面時，該功能可使目標物被照亮。

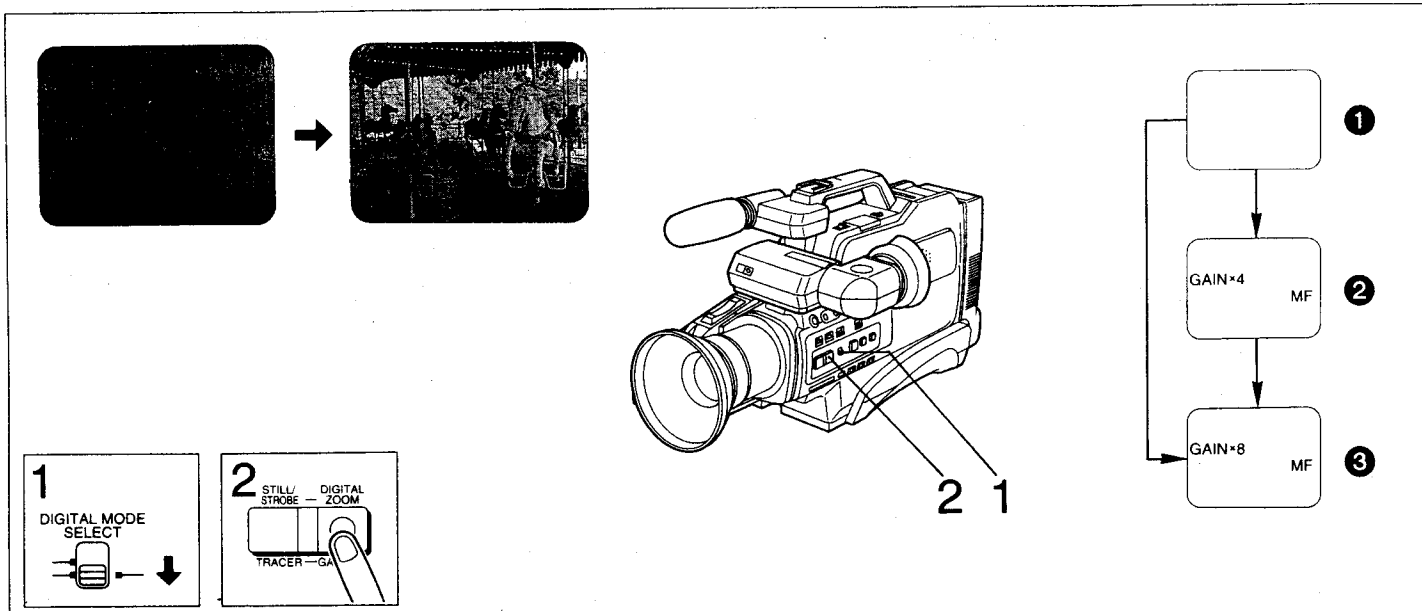
- 1 將狀態選擇開關設至 "MANUAL"。
- 2 設定至 "IRIS"。
- 3 反復按任一鈕以選擇希望的 F 數字。
  - F 數字指示將出現。
  - F 數字可按 18 級變化：  
OP+G1, OP+G2, OPEN, F2.4, F2.8, F3.4, F4, F4.8, F5.6, F6.8, F8, F9.6, F11, F14, F16, F19, CLOSE

#### ■ 要回到標準光圈設定時

- 同時按 [IRIS OPEN] 鈕和 [IRIS CLOSE] 鈕一秒鐘以上。
- 將狀態選擇開關設至 "AUTO" 也可回到標準光圈設定。

#### 拍攝背光目標物時的注意事項

- 天空將變得稍白。
- 背光極其強烈時，也許不能充分照亮目標物。
- 以某種角度拍攝太陽照射的目標物時，畫面上可能會留下星形反光。



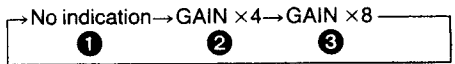
**ENGLISH**

**Shooting in the Dark High Sensitivity Function**

**1 Slide down.**

**2 Press.**

•By pressing the [GAIN UP] Button repeatedly, the degree of the sensitivity can be changed as follows:



- Notes:**
- Some after-image distortion will occur.
  - When the Digital Mode is activated, [STILL/STROBE] Button, [DIGITAL ZOOM] Button, and [TRACER] Button do not work.
  - When the High Sensitivity Function is activated, no other Digital Mode Function can be used.
  - The High-Speed Shutter Function and Iris Adjustment will be cancelled automatically.
  - In the High-Sensitivity Mode, the focus must be adjusted manually since the Movie Camera is automatically put into the Manual Focus Mode.

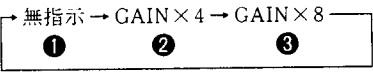
**中文**

**黑暗中拍攝 (高靈敏度功能)**

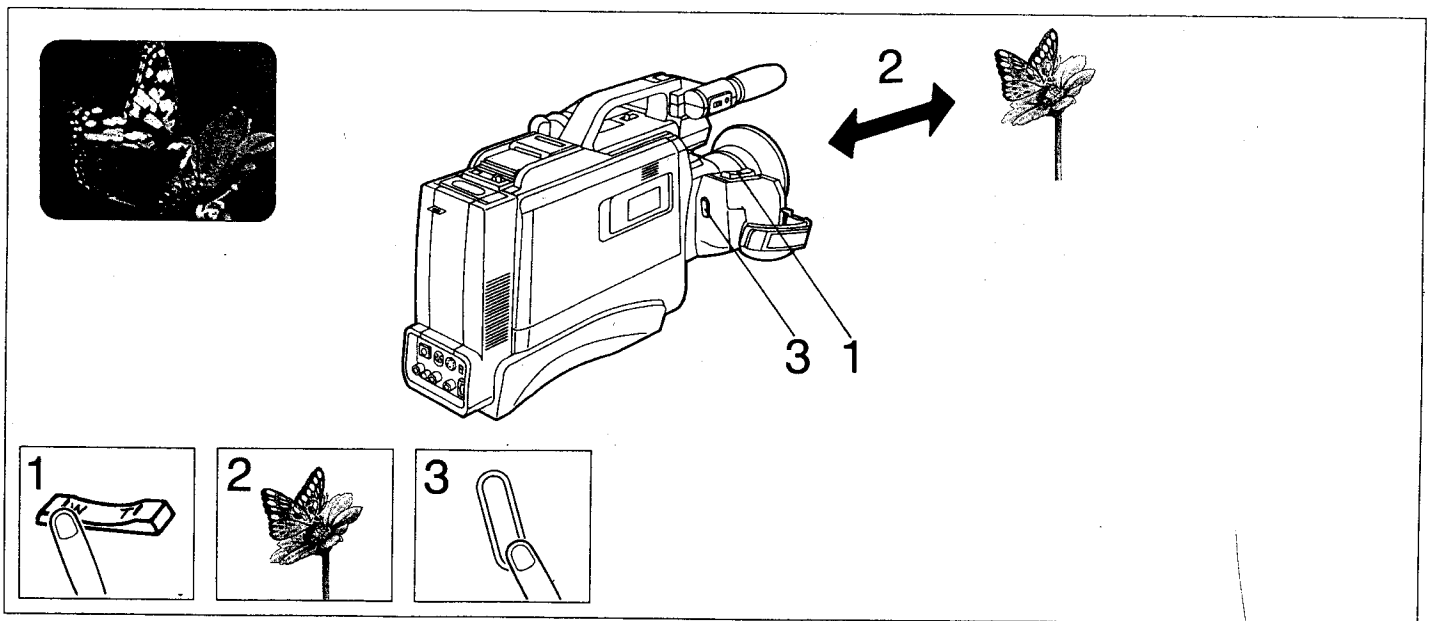
**1 向下滑動。**

**2 按。**

•反復按 [GAIN UP] 鈕，靈敏度將改變如下：



- 注意：**
- 將出現重影變形。
  - 數位方式被啟動之後，[STILL/STROBE] 鈕和 [DIGITAL ZOOM] 鈕將不起作用。
  - 高靈敏度功能被啟動後，其它數位方式功能將不起作用。
  - 高速快門功能和光圈調整功能將被自動取消。
  - 在高靈敏度方式下，必須手動調整焦距，因為攝錄影機被自動變至手動聚焦方式。



## ENGLISH

### Shooting with the Macro Function

The Macro Close-up Function makes it possible to shoot very small objects, photos, printed matter, insects and many other things.

- 1 Keep pressed to zoom to the maximum wide-angle position.**
- 2 Approach the subject to the desired distance.**
  - The focus will be adjusted automatically (Auto Focus Mode).
- 3 Press.**
  - The shooting starts.

#### Hints for Shooting with the Macro Close-up Function

- To get more or less of the subject into the picture, change the distance between the lens and the subject; do not use the [W] or [T] Zoom Button.
- As the depth of field is very small in macro shooting, even slight camera movements can cause the subject to go out of focus. Therefore, it is recommended to use a tripod (optional).
- When the zoom lens is in its maximum telephoto position, the minimum shooting distance between lens and subject is 1.5 m.
- In macro close-up shooting, the subject can be approached down to a minimum distance of 4 cm between lens and subject. It is recommended to use the Auto Focus Mode. However, with a stable camera position (tripod, etc.), the Manual Focus Mode can also be used.

## 中文

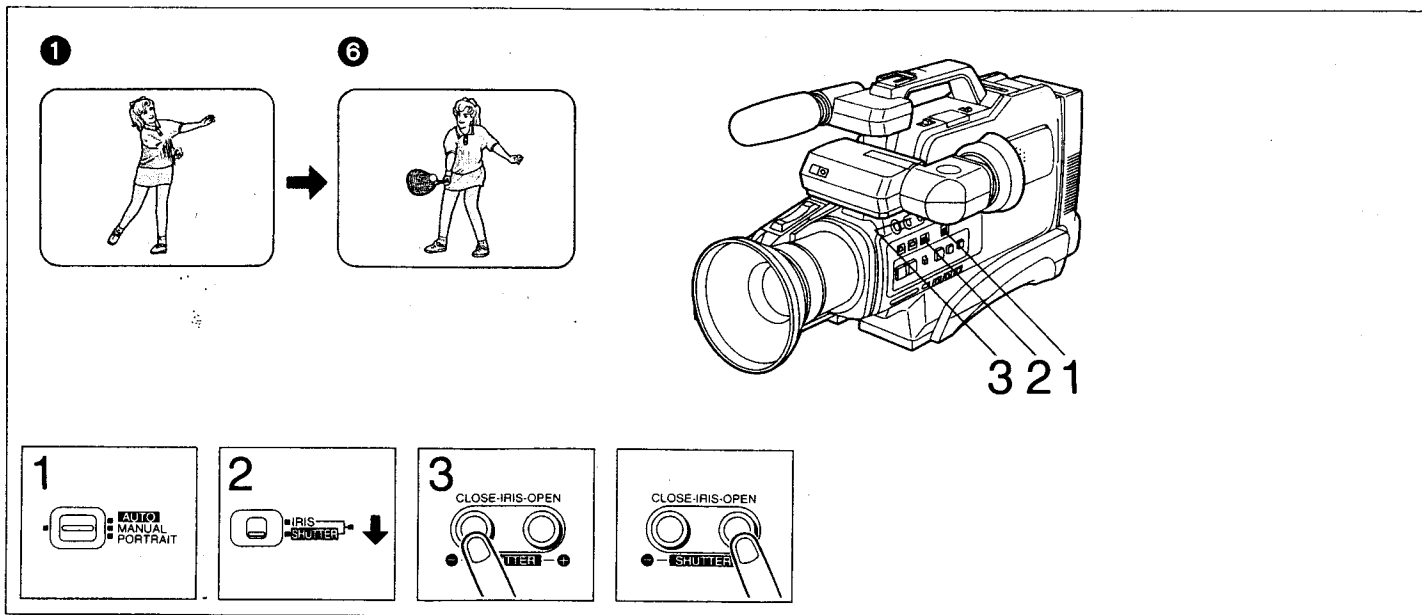
### 使用大特寫功能拍攝

本大特寫功能可用來拍攝小物體、像片、印刷的字符、昆蟲和許多其它物體。

- 1 持續按該鈕變焦至最廣角位置。**
- 2 接近物體至希望的距離。**
  - 焦距將被自動調整 (自動聚焦方式)。
- 3 按。**
  - 拍攝開始。

#### 使用大特寫功能拍攝的提示

- 要改變目標物的大小時，請改變鏡頭與物體之間的距離，勿使用 [W] 或 [T] 變焦鈕。
- 拍攝大特寫鏡頭時，因為景深很小，所以即使攝錄影機稍微移動，也會導致目標越出聚焦範圍。因此，建議您使用三腳架 (選購附件)。
- 將變焦鏡頭調至最大變焦位置時，鏡頭與物體之間的最小拍攝距離為 1.5m。
- 用大特寫功能拍攝時，目標物與鏡頭之間可接近的最小距離為 4cm。建議您使用自動聚焦方式。然而，攝錄影機位置穩定時 (三腳架等)，也可使用手動聚焦方式。

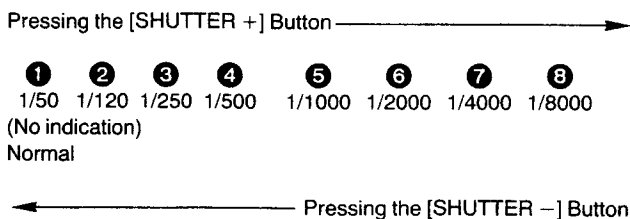


**ENGLISH**

### Shooting Fast-Moving Subjects (High-Speed Shutter Function)

A range of different high shutter speeds makes it possible to shoot scenes with fast movements. When scenes recorded with a high shutter speed are later played back on a VTR equipped with super still and super fine slow motion functions, still and slow motion playback with very sharp picture contours and brilliant details can be obtained.

- 1 Set to "MANUAL".
- 2 Set to "SHUTTER".
- 3 Press repeatedly either Button to select the desired shutter speed.
  - The shutter speed can be changed in 8 steps:



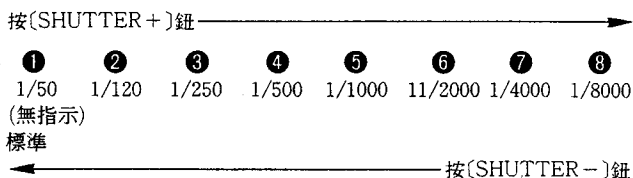
- Conditions for Shooting with the High-Speed Shutter**
- The subject must be brightly lit by sunlight or other strong illumination, with little shade.
  - When shooting under fluorescent lamps, the picture will be adversely influenced by flickering.
  - When the picture is played back in the normal playback mode, the picture movement may not be as smooth as normally.
  - The playback picture will be slightly darker than the picture recorded without using the High-Speed Shutter Function.

**中文**

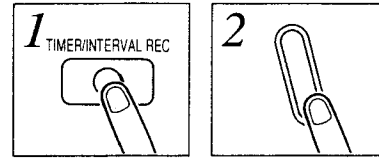
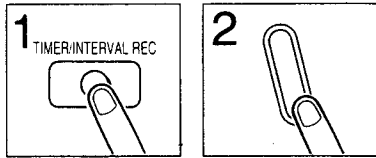
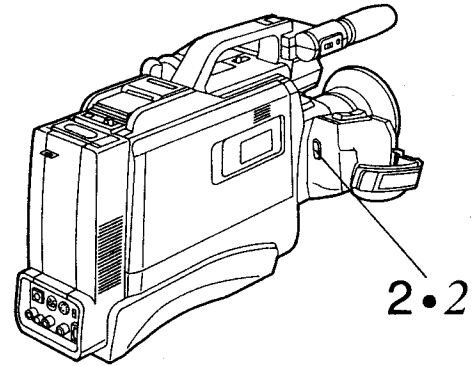
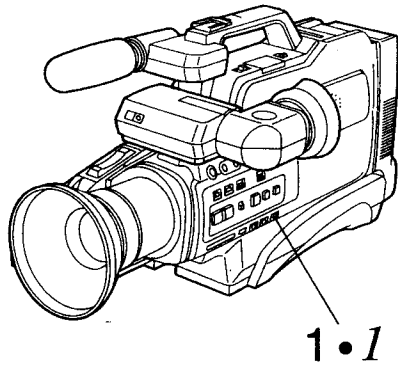
### 拍攝快速運動目標物 (高速快門功能)

數種不同的高快門速度可對快速運動場面進行拍攝。將使用高速快門拍攝的場面放影於配備有超靜止和超級超微慢動作功能的錄放影機時，靜止和慢動作畫面的輪廓將無比清晰，可實現卓越的細節表現。

- 1 設至 "MANUAL"。
- 2 設定至 "SHUTTER"。
- 3 反復按任一鈕以選擇希望的快門速度。
  - 快門速度可按 8 級變化：



- 用高速快門拍攝的條件**
- 物體必須被日光或其它強光源強烈照射，且不帶任何陰影。
  - 在螢光燈下拍攝時，畫面將會受光線閃動的影響。
  - 以正常放影方式播放畫面時，運動的畫面將不如正常拍攝時流暢。
  - 與未使用高速快門功能拍攝的畫面比較，放影的畫面將略顯暗淡。



## ENGLISH

### Self-Timer Recording and Interval Recording

#### ■ Self-Timer Recording

##### 1 Press during recording pause to select the desired recording mode.

- When the Timer/Interval Recording Button is pressed once, "SLF20" will appear in the Viewfinder, and when the button is pressed twice, "SLF" will appear in the Viewfinder.

##### 2 Press.

- The self-timer recording will start 10 seconds later.
- When "SLF20" is indicated, the recording will be made for 20 seconds.
- When "SLF" is indicated, the recording will be made until the tape reaches its end.

#### To stop the Self-Timer Recording Midway

Press the Start/Stop Button, and the self-timer recording will be cancelled.

#### ■ Interval Recording

This recording function automatically makes recordings of approx. 1 second duration at 1-minute intervals. (However, the initial recording will last for about 5 seconds.) The interval recording will continue for a maximum of 10 hours, after which the Movie Camera will turn itself off.

##### 1 Press three times during recording pause mode.

- "INT" will appear in the Viewfinder.

##### 2 Press.

#### To stop the Interval Recording Midway

Press the Start/Stop Button, and the interval recording will be cancelled.

## 中文

### 自定時攝影和間隔攝影

#### ■ 自定時攝影

##### 1 拍攝暫停狀態中按該鈕選擇希望的攝影狀態。

- 按了定時器 / 間隔攝影鈕一次之後, "SLF20" 指示將出現在電子尋像器中, 再按該鈕一次之後, "SLF" 指示將出現在電子尋像器中。

##### 2 按。

- 自定時攝影將在10秒鐘之後開始。
- "SLF20" 被指示時, 攝影將持續20秒鐘。
- "SLF" 被指示時, 攝影將持續到磁帶結束。

#### 要中途停止自定時攝影時

按開始 / 停止鈕, 自定時攝影將被取消。

#### ■ 間隔攝影

本攝影功能在每1分鐘間隔內自動攝影大約1秒鐘。(然而, 最初的攝影將持續大約5秒鐘。) 間隔攝影最長可持續10小時, 超過10小時則攝影機將自動關閉。

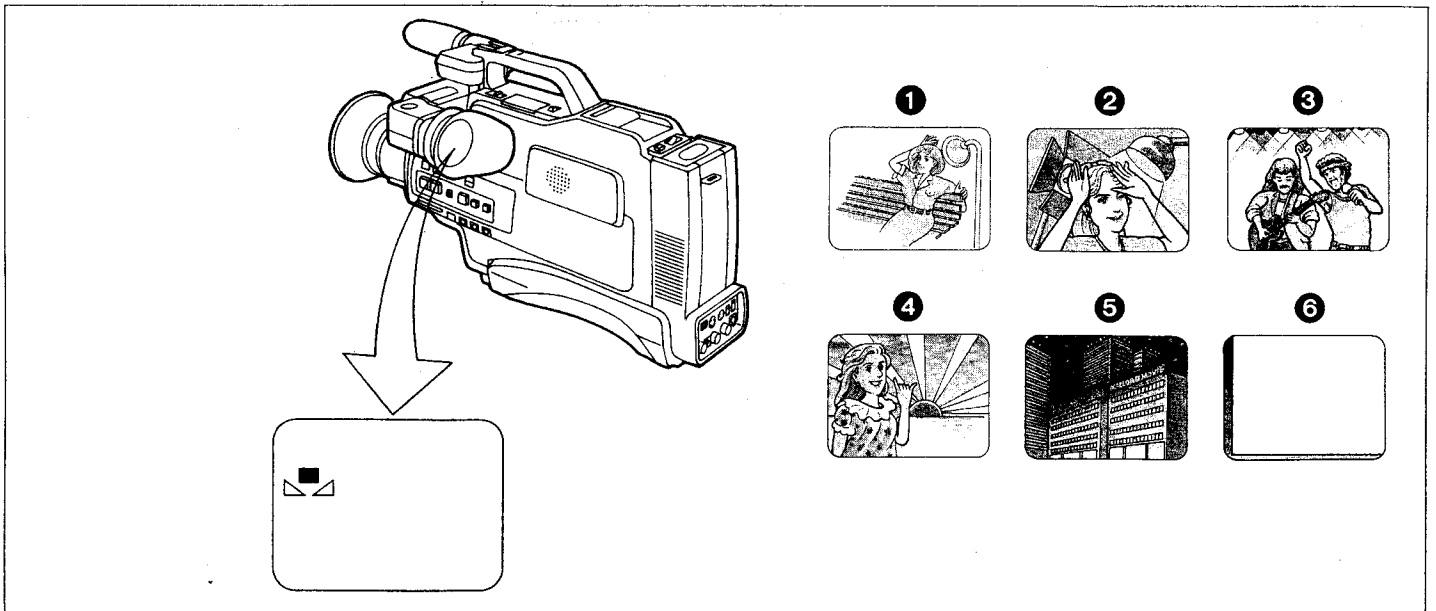
##### 1 拍攝暫停狀態中按該鈕3次。

- "INT" 指示將出現在電子尋像器中。

##### 2 按。

#### 要中途停止間隔攝影時。

按開始 / 停止鈕, 間隔攝影將被取消。



## ENGLISH

### Automatic White Balance Adjustment

To human eyes, white subjects appear as white even under different lighting conditions. A Movie Camera, however, would give these white subjects, depending on the colour of the light source, a reddish or bluish tint. To attain recordings with natural colours, it is necessary to adjust the sensor in the camera to the existing colour of the light. This adjustment is called white balance adjustment. This camera offers two modes for this adjustment: Automatic and Manual White Balance Adjustment.

The Automatic White Balance Adjustment Function provides satisfactory results with almost all subjects. (No operation is necessary.)

When the "W.B." Indication is displayed in the Viewfinder, the Movie Camera is not in the Auto White Balance Mode. In this case, press the [W.B.] Button to make the "W.B." Indication disappear.

• If the Movie Camera is moved from outdoors to indoors during shooting, the picture will initially take on a slightly reddish cast but it will gradually regain its natural colours.

• In the following shooting situations, the Auto White Balance Adjustment Mode may not provide satisfactory results; use the Manual White Balance Adjustment Mode instead:

- ① When shooting under mercury-vapor, sodium or some types of fluorescent lamps.
- ② When intense lighting is used, e.g. from a halogen lamp, or when the colour temperature of the light source is low.
- ③ When shooting under lighting conditions which change suddenly.
- ④ When shooting outdoors at sunrise or sunset.
- ⑤ When shooting under firework illumination at night outdoors.
- ⑥ When shooting a subject or background of a single colour.

## 中文

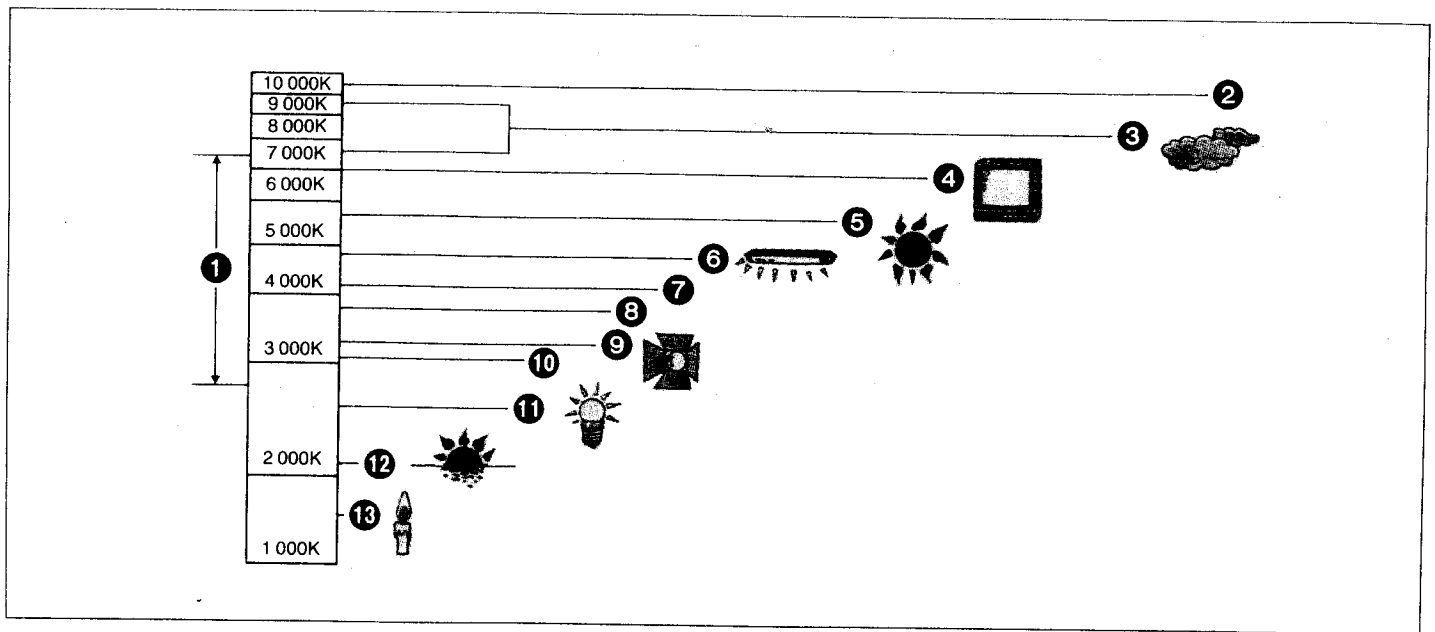
### 自動白色平衡調整

對於人眼，白色物體在不同光線條件下均為白色。而攝錄影機則可能根據光源的彩色記錄下淺藍色。為了錄製自然的色彩，必須根據現有的光源彩色調整攝錄影機的傳感器。這種調整被稱為白色平衡調整。本攝錄影機提供兩種調整方式：自動和手動白色平衡調整。自動白色平衡調整功能幾乎對所有目標物都能提供滿意的效果。(不需要任何操作。)

電子尋像器中顯示“W.B.”指示時，攝錄影機便不處於自動白色平衡方式。這時，請按 [W.B.] 鈕使得“W.B.”指示消失。

- 如果拍攝中將攝錄影機從室外移到室內，最初畫面會出現輕微紅色投光，然後逐漸恢復自然彩色。
- 在下列拍攝條件下，自動白色平衡調整也許不能提供滿意的結果，這時請使用手動白色平衡調整：

- ① 在水銀燈、鈉蒸氣燈或某些螢光燈下拍攝時。
- ② 使用強烈光源，例如鹵素燈拍攝，或光源的彩色溫度較低時。
- ③ 在光線會突變的條件下拍攝時。
- ④ 在室外日出或日落時拍攝時。
- ⑤ 在夜間室外的焰火光線下拍攝時。
- ⑥ 拍攝單一彩色物體或單一彩色背景前的物體時。



## ENGLISH

### Automatic White Balance Adjustment (Cont'd)

#### ■ What is the Colour Temperature of the Light Source

The colour temperature of the light source is measured in Kelvin (K). The higher the Kelvin value is, the more bluish the light is; the lower the value, the more reddish the light is. This is not directly related to the brightness.

- 1 Control range of the Auto White Balance
- 2 Blue sky
- 3 Cloudy sky
- 4 TV screen
- 5 Sunlight
- 6 White fluorescent light
- 7 2 hours after sunrise or before sunset
- 8 1 hour after sunrise or before sunset
- 9 Halogen light bulb
- 10 30 minutes after sunrise or before sunset
- 11 Incandescent electric light bulb
- 12 Sunrise or sunset
- 13 Candlelight

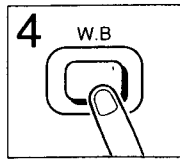
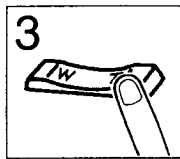
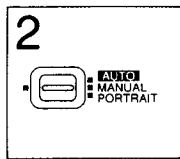
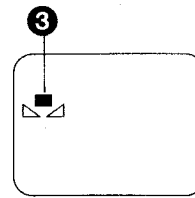
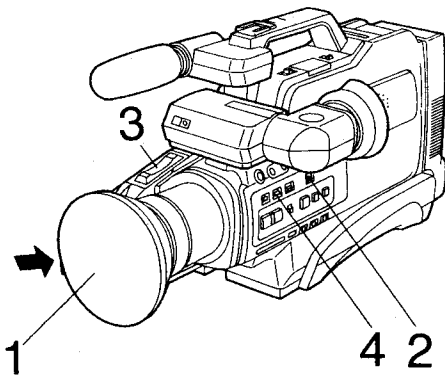
## 中文

### 自動白色平衡調整(續前)

#### ■ 何謂光源的彩色溫度

光源的彩色溫度用開爾文值 (K) 測定。開爾文值越高，則光線越發藍；開爾文值越低，則光線越發紅。這與亮度無直接關係。

- 1 自動白色平衡的控制範圍
- 2 藍色的天空
- 3 多雲天空
- 4 電視螢幕
- 5 陽光
- 6 白色螢光燈
- 7 日出後 2 小時或日落前 2 小時
- 8 日出後 1 小時或日落前 1 小時
- 9 鹵素燈泡
- 10 日出後 30 分鐘或日落前 30 分鐘
- 11 白熾燈泡
- 12 日出或日落
- 13 燭光



## ENGLISH

### Manual White Balance Adjustment

■ If there is only one light source:

- 1 Attach the Lens Cap to the Lens.
- 2 Set to "MANUAL".
- 3 Keep pressed until the screen in the Viewfinder becomes completely white.
- 4 Keep pressed for more than 1 second.  
The following indications in the Viewfinder inform about the state of the adjustment:
  - ① "☐" flashes slowly . . . . . Not adjusted
  - ② "☐" flashes rapidly. . . . . During adjustment
  - ③ "☐" is lit . . . . . Adjustment is finished  
The Movie Camera is now ready for shooting.

#### ■ Automatic Recall of the Previous White Balance Setting

- After turning the Movie Camera off and later on again, the "☐" Indication flashes slowly, however, the last previous white balance setting is still maintained. However, to ensure the best possible colour reproduction, adjust the white balance again.
- The last previous white balance setting is also maintained after pressing the [CAMERA SEARCH] Button to confirm the end of the previously recorded scene. But after removing the Battery Pack (or disconnecting the AC Adaptor from the Movie Camera) the last previous white balance setting is no longer maintained.
- When moving the Movie Camera from indoor to outdoor or vice versa, be sure to adjust the white balance, as the colour of the light has changed considerably.

## 中文

### 手動白色平衡調整

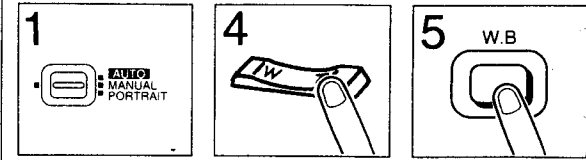
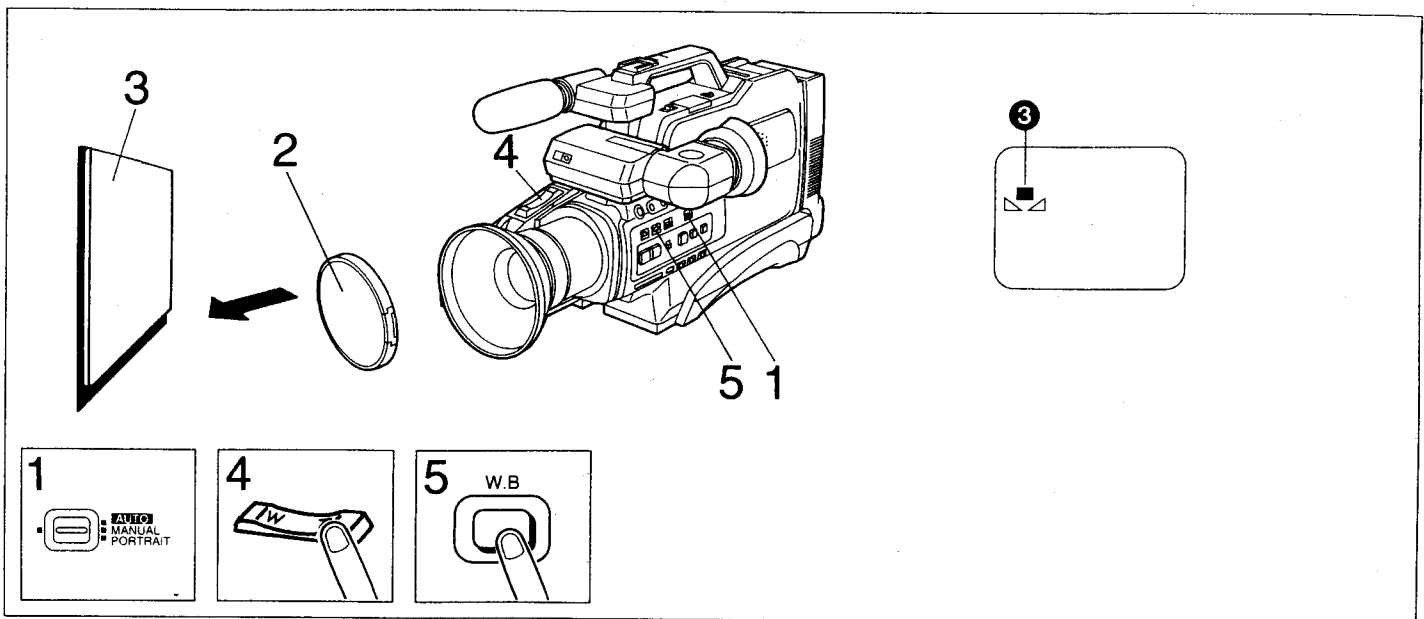
■如果只有一個光源：

- 1 將鏡頭蓋裝至鏡頭。
- 2 設至 "MANUAL"。
- 3 持續按該鈕，直至電子尋像器的螢幕完全變白。
- 4 按該鈕一秒鐘以上。  
電子尋像器中下列指示將表明調整的狀態：
  - ① "☐" 緩慢閃動……未調整
  - ② "☐" 快速閃動……調整中
  - ③ "☐" 指示亮……調整結束  
攝錄影機現在已可進行拍攝。

#### ■自動呼叫先前白色平衡設定。

- 將攝錄影機關閉後又打開時，"☐" 指示將緩慢閃動，然而，先前的白色平衡設定仍將被保持。然而，為了保證最佳的彩色再現，請重新調整白色平衡。先前白色平衡設定在按 [CAMERA SEARCH] 鈕確認剛錄過的場面終點時仍將被保持。但從攝錄影機取下電池組後（或從攝錄影機取下交流轉接器時），先前的白色平衡設定將不再被保持。
- 將攝錄影機從室內移至室外或者相反時，由於光線的彩色變化較大，請務必重新調整白色平衡。





**ENGLISH**

**Manual White Balance Adjustment (cont'd)**

■ If there are several light sources or if the illumination is weak (indoors, etc.):

- 1 Set to "MANUAL".
- 2 Remove the Lens Cap.
- 3 Point the Movie Camera at white paper or at another purely white object.
- 4 Keep pressed until the screen in the Viewfinder becomes completely white.
- 5 Keep pressed for more than 1 second.  
The following indications in the Viewfinder inform about the state of the adjustment:

- ① "☐" flashes slowly . . . . . Not adjusted
- ② "☐" flashes rapidly . . . . . During adjustment
- ③ "☐" is lit . . . . . Adjustment is finished  
The Movie Camera is now ready for shooting.

■ To Change Back to the Auto White Balance Adjustment Mode...

Press the [W.B] Button briefly. The "☐" Indication in the Viewfinder disappears.

**中文**

**手動白色平衡調整 (續前)**

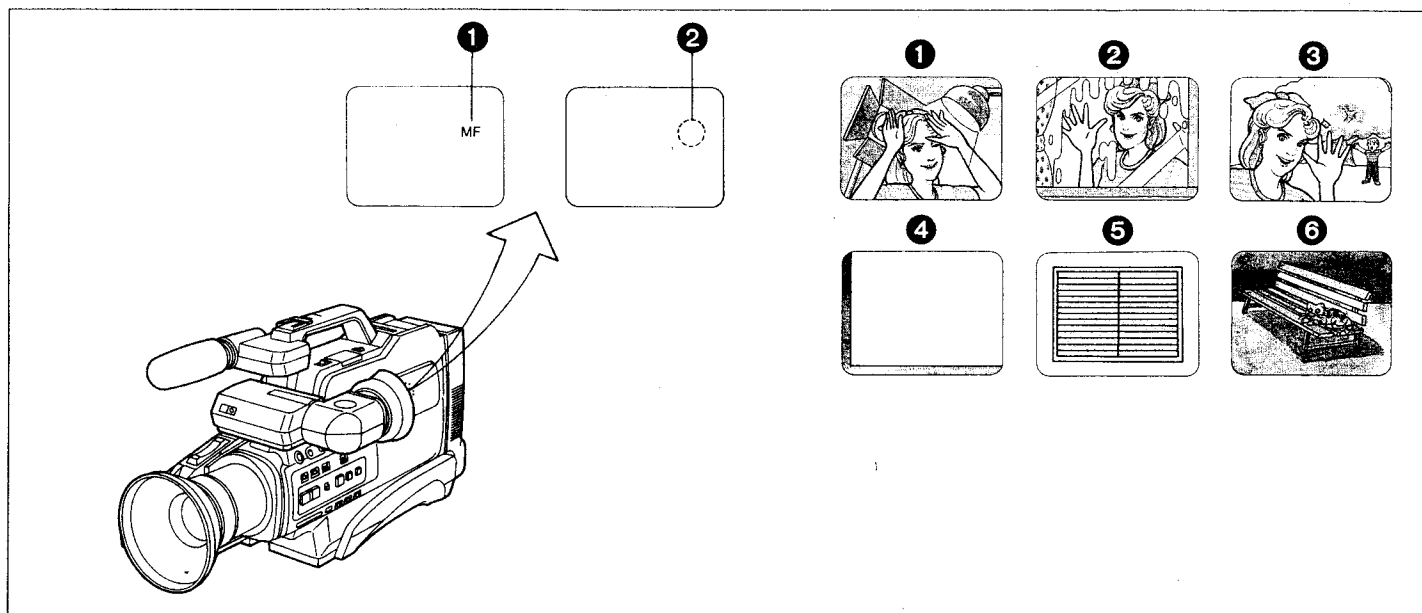
■ 如果有幾個光源或光線較暗 (室內等) :

- 1 設至 "MANUAL"。
- 2 取下鏡頭蓋。
- 3 將攝錄影機對準白紙或其它純白物體。
- 4 持續按該鈕，直至電子尋像器的螢幕完全變白。
- 5 按該鈕一秒鐘以上。

電子尋像器中下列指示將表明調整的狀態：

- ① "☐" 緩慢閃動 . . . . . 未調整
- ② "☐" 快速閃動 . . . . . 調整中
- ③ "☐" 指示亮 . . . . . 調整結束  
攝錄影機現在已可進行拍攝。

■ 要變回到自動白色平衡調整方式時...  
請快速按 [W.B] 鈕。電子尋像器中 "☐" 指示將消失。



## ENGLISH

### Automatic Focus Function

#### ■ No operation is necessary

This Movie Camera focuses automatically on almost all subjects.

When the "MF" Indication ① is not displayed in the Viewfinder, the Movie Camera is in the auto focus mode. ("MF" means Manual Focus)

- The focus will automatically be adjusted to the subject in the centre of the Viewfinder.

#### ■ When the "MF" Indication is displayed in the Viewfinder

①...

Press the [FOCUS] Button or set the Shooting Mode Selector switch to "AUTO" to activate the Auto Focus Mode.

- The "MF" Indication in the Viewfinder disappears ②.

In the following shooting situations, the Auto Focus Mode may not provide satisfactory results; use the Manual Focus Mode instead.

- ① Shiny surfaces. Subjects with backlighting or much light reflection.
- ② A subject behind dirty glass.
- ③ A subject with a part of it near the Movie Camera and another part far away from it.
- ④ A flat surface, e.g. a white wall.
- ⑤ A subject with horizontal stripes.
- ⑥ An oblique subject.

#### Others:

- A fast-moving subject.
- A subject with a dark surface.
- When using the Macro Close-up Function, special lenses, etc.

#### Note:

When zooming from wide-angle toward telephoto, the subject may slightly go out of focus depending on the shooting conditions.

## 中文

### 自動聚焦功能

#### ■ 無須任何操作

本攝錄影機可自動聚焦至幾乎所有目標物上。

電子尋像器中未顯示 "MF" 指示 ① 時，攝錄影機便處於自動聚焦狀態。

(MF：表示手動聚焦)

- 焦點將被自動調整至電子尋像器中心的物體。

#### ■ 電子尋像器中顯示 "MF" 指示時 ①...

請按 [FOCUS] 鈕或將狀態選擇開關設至 "AUTO" 以啟動自動聚焦方式。

- 電子尋像器中的 "MF" 指示將消失 ②。

在下列拍攝條件下，自動焦距方式也許不能提供滿意的結果，這時請使用手動聚焦。

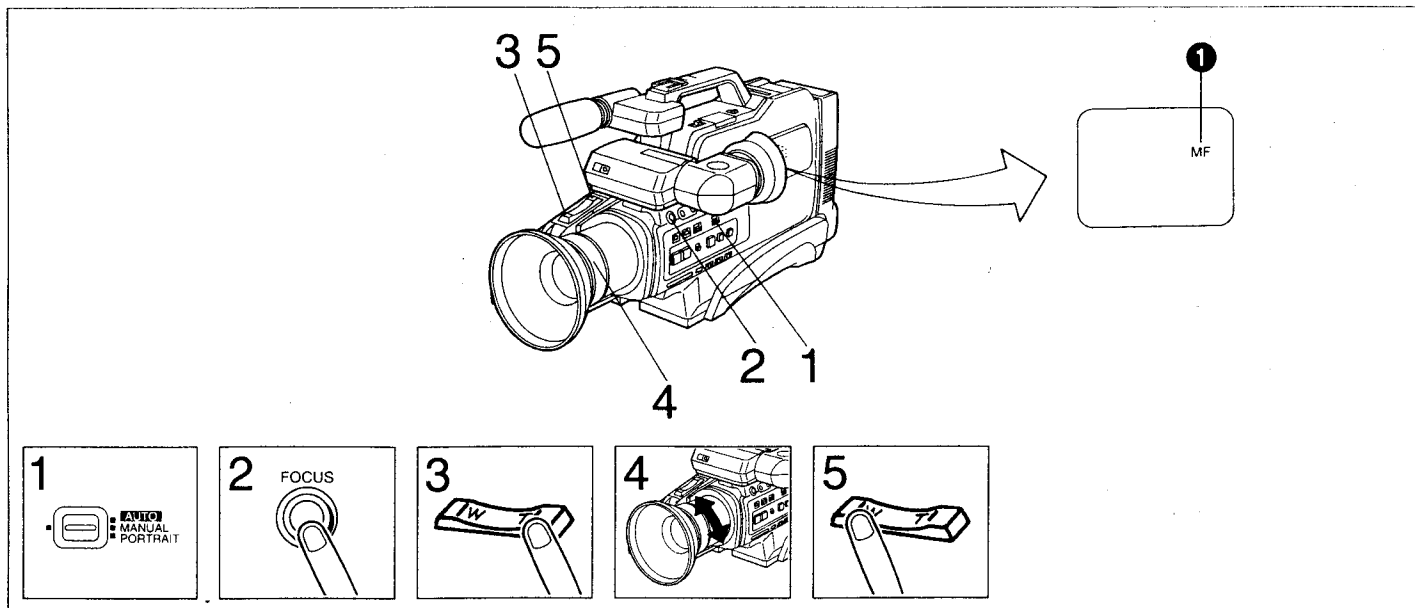
- ① 閃耀的表面。背光的物體或反光強烈時。
- ② 髒玻璃後面的物體。
- ③ 物體一部分靠近而另一部分却遠離攝錄影機時。
- ④ 平面物體如白牆等。
- ⑤ 帶水平條紋的物體。
- ⑥ 傾斜的物體。

#### 其它：

- 快速運動的物體。
- 有黑暗表面的物體。
- 使用大特寫功能、特殊鏡頭等時。

#### 注意：

從廣角位置向長焦位置變焦時，取決於拍攝條件，目標物可能會稍稍離開焦點。



## ENGLISH

### Manual Focus Function

**1 Set the Mode Selector Switch to “MANUAL”.**

**2 Press.**

- The “MF” Indication appears in the Viewfinder ①.

**3 Press to zoom in on the subject to be focused.**

**4 Turn the Focus Ring to adjust the focus.**

**5 Press to zoom back as desired.**

#### ■ To Change back to the Auto Focus Mode...

Press the [FOCUS] Button or set the Shooting Mode Selector Switch to “AUTO”.

- The “MF” Indication disappears in the Viewfinder.

#### Note:

- When using the Manual Focus Mode, always adjust the lens with the Zoom [T] Button in the maximum tele setting. This will ensure that the subject remains precisely focused throughout the zoom range from the maximum tele to maximum wide-angle setting.

## 中文

### 手動聚焦功能

**1 將狀態選擇開關設至 “MANUAL”。**

**2 按。**

- 電子尋像器中將出現 “MF” 指示 ①。

**3 按該鈕拉近要拍攝的目標物。**

**4 旋轉聚焦環調整焦距。**

**5 按該鈕可變回到希望的角度。**

#### ■要變回到自動聚焦方式時...

按 [FOCUS] 鈕或將攝錄影機狀態選擇開關設至 “AUTO”。

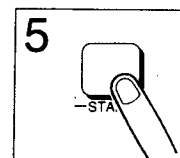
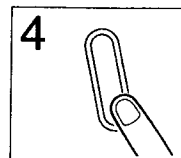
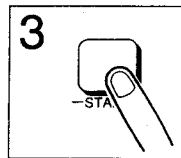
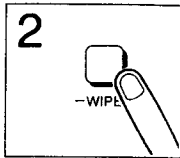
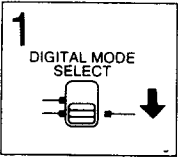
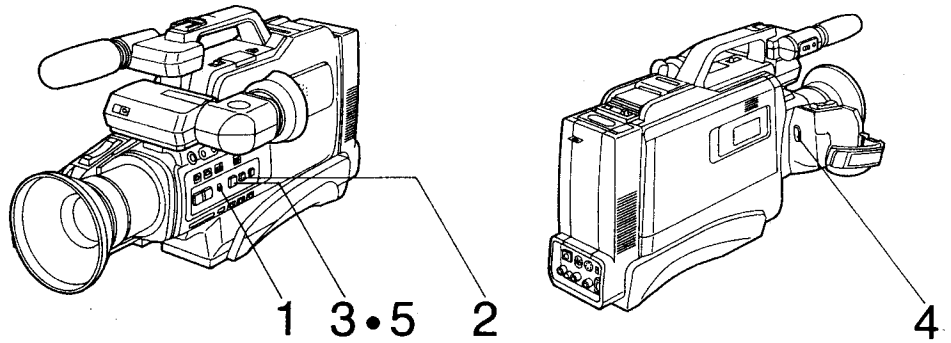
- 電子尋像器中 “MF” 指示將消失。

#### 注意：

- 使用手動聚焦方式時，請讓變焦 [T] 鈕處於其最大長焦距設定後再調整鏡頭。這可確保在最大長焦距和最大廣角範圍內變焦時，目標物被始終精確地聚焦。



D.WIPE



## ENGLISH

### Inserting a Still Picture with Wipe Editing (Digital Wipe)

#### Inputting a Still Picture into the Memory

When the Movie Camera is in the shooting pause mode:

- 1 Slide down.
- 2 Press.
  - Press this button while aiming the Movie Camera at the scene to be used for the still picture.
  - The image in the Viewfinder stands still for approx. 2 seconds and this still picture is input into memory.

#### Starting to Shoot a Scene with the Still Picture

In the shooting pause mode:

- 3 Press.
  - The still picture from the memory replaces the moving picture gradually, starting from the left side.
  - The Movie Camera should be aimed at the scene, which is to be shot following the recording of the still picture.
- 4 Press.
  - The still picture from the memory is now being recorded.
- 5 Press again.
  - The moving picture again replaces the still picture gradually, starting from the right side, and the shooting of the moving picture continues.

#### Canceling the Digital Wipe Function

Slide the Digital Mode Selector Switch up.

## 中文

### 利用消除編輯功能插入靜止畫面 (數位消除)

#### 輸入靜止畫面至儲存器

當攝錄影機處於拍攝暫停狀態時：

- 1 將其滑下。
- 2 按。
  - 將攝錄影機對準將作為靜止畫面的目標，按該鈕。
  - 電子尋像器中的畫面將靜止大約 2 秒鐘，該靜止畫面被輸入儲存器。

#### 利用靜止畫面，開始拍攝場面

在拍攝暫停狀態：

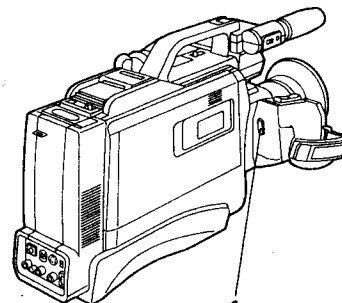
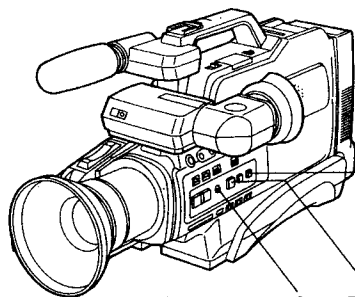
- 3 按。
  - 儲存器中的靜止畫面將從左邊起逐漸取代運動畫面。
  - 攝錄影機必須對準要緊接着靜止畫面拍攝的場面。
- 4 按。
  - 從儲存器來的靜止畫面被錄製。
- 5 再按一次。
  - 運動的畫面從右邊起逐漸取代靜止畫面。運動畫面的拍攝將繼續。

#### 取消數位消除功能

將數位方式開關滑上。

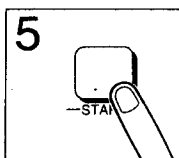
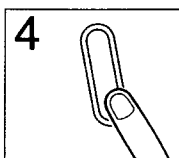
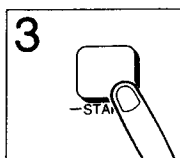
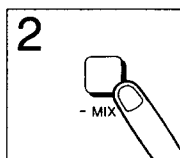
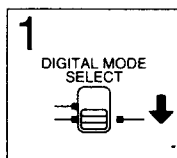


D.MIX



1 3•5 2

4



## ENGLISH

### Fading Over or Superimposing a Still Picture onto the Moving Picture (Digital Image Mix)

#### Inputting a Still Picture into Memory

When the Movie Camera is in the shooting pause mode:

**1 Slide down.**

**2 Press.**

- Press this button while aiming the Movie Camera at the scene to be used for the still picture.
- The image in the Viewfinder stands still for approx. 2 seconds and this still picture is input into memory.

#### Starting to Shoot a Scene with the Still Picture

In the shooting pause mode:

**3 Press.**

- The still picture from the memory replaces the moving picture gradually.
- If this button is pressed for 2 seconds, the still picture appears superimposed onto the moving picture.
- The Movie Camera should be aimed at the scene, which is to be shot following the recording of the still picture.

**4 Press.**

- The still picture from the memory is now being recorded.

**5 Press again.**

- The moving picture again replaces the still picture gradually, and the shooting of the moving picture continues.
- If the [MIX] Button was pressed for 2 seconds to superimpose the still picture, the superimposed still picture will disappear, and the shooting of the moving picture alone continues.

#### Canceling the Digital Mix Function

Slide the Digital Mode Selector Switch up.

## 中文

### 淡化或疊加一靜止畫面至運動的畫面 (數位畫面混合)

#### 輸入靜止畫面至儲存器

當攝錄影機處於拍攝暫停狀態時：

**1 滑下。**

**2 按。**

- 將攝錄影機對準將作為靜止畫面的目標，按該鈕。
- 電子尋像器中的畫面將靜止大約 2 秒鐘，該靜止畫面被輸入儲存器。

#### 利用靜止畫面，開始拍攝場面

在拍攝暫停狀態：

**3 按。**

- 儲存器中的靜止畫面將逐漸取代運動畫面。
- 如果持續按該鈕 2 秒鐘，則靜止畫面將疊加至運動的畫面。
- 攝錄影機必須對準要緊接著靜止畫面拍攝的場面。

**4 按。**

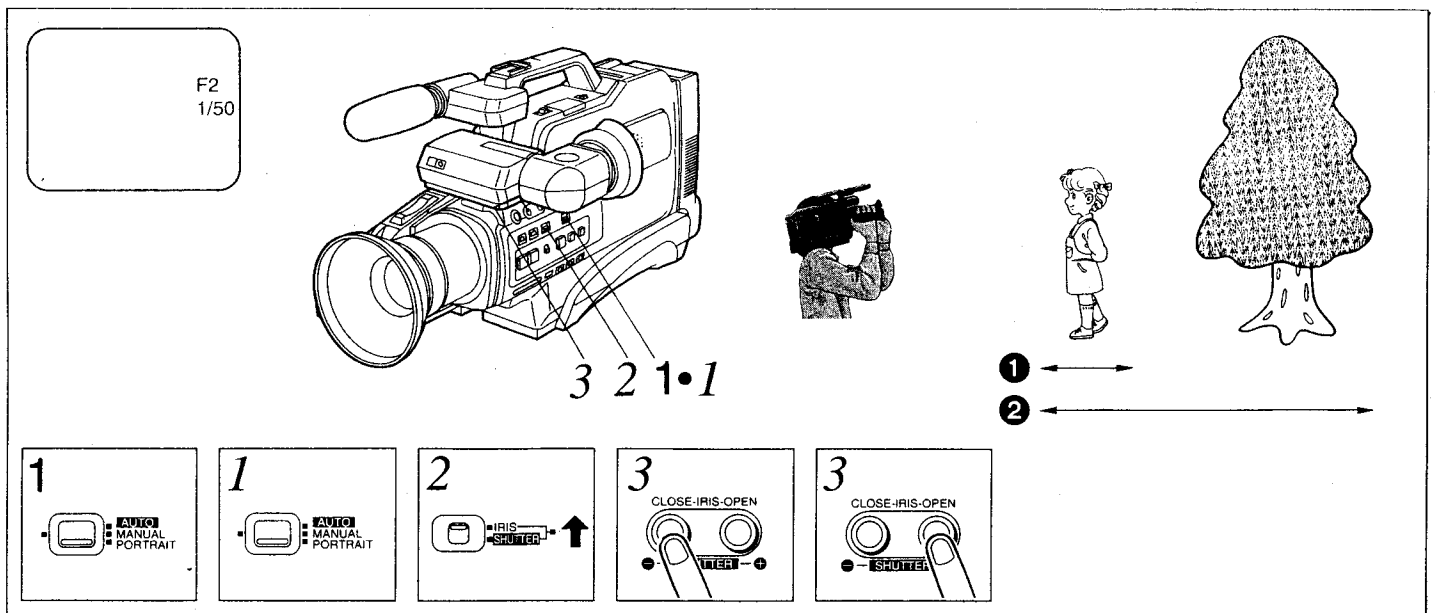
- 從儲存器來的靜止畫面被錄製。

**5 再按一次。**

- 運動的畫面逐漸取代靜止畫面。運動畫面的拍攝將繼續。
- 如果持續按 [MIX] 鈕 2 秒鐘以疊加靜止畫面，則疊加的靜止畫面將消失，運動畫面的拍攝將單獨繼續。

#### 取消數位混合功能

將數位方式開關滑上。



## ENGLISH

### Shooting a Portrait (Portrait Mode)

This function makes it possible to shoot a portrait with the face perfectly focused and the background blurred.

#### 1 Set to "PORTRAIT".

- The F Number Indication "OPEN" and Shutter Speed Indication appear.

#### ■ To Cancel this Function...

Set the Mode Selector Switch to "AUTO".

#### ■ Iris Priority Mode

Any of 15 F Number settings between "OPEN" and "F19" can be selected. The optimum shutter speed (between 1/50 and 1/1000 sec.) will automatically be selected according to the brightness of the subject and the selected F Number.

By setting the iris to or near the "OPEN" position, it is possible to shoot a portrait with the person perfectly focused and the background blurred.

- Opening the iris reduces the depth of field, i.e. the distance range within which the subject is sharp becomes smaller.
- Closing the iris increases the depth of field, i.e. the distance range within which the subject is sharp becomes larger.

① Depth of field with iris turned toward "OPEN"

② Depth of field with iris turned toward "F19"

#### 1 Set to "PORTRAIT".

#### 2 Set to "IRIS".

#### 3 Press either button repeatedly to select the desired F Number.

#### Notes:

- If the scene is too bright or too dark for proper exposure, the F Number Indication will change automatically.
- In the Portrait Mode, all functions can be used except the High-Speed Shutter Function. (See page 118.)

## 中文

### 拍攝照片 (照片方式)

利用該功能拍攝照片時，可使面部清晰聚焦，而使背景模糊。

#### 1 設定至 "PORTRAIT".

- F 數字指示 "OPEN" 和快門速度指示將出現。

#### ■ 要取消該功能時...

將狀態選擇開關設定至 "AUTO".

#### ■ 光圈優先方式

可選擇 "OPEN" 和 "F19" 之間 15 種 F 數字設定中的任一種。根據目標物的亮度和所選的 F 數字，最佳快門速度 (1/50 秒 ~ 1/1000 秒) 將被自動選擇。

將光圈設定至 "OPEN" 位置附近時，可在拍攝照片時，使面部清晰聚焦，而使背景模糊。

- 將光圈打大可減小景深，即保持目標物清晰的距離範圍將縮小。
- 將光圈減小可增加景深，即保持目標物清晰的距離範圍將擴大。

① 光圈轉向 "OPEN" 時的景深。

② 光圈轉向 "F19" 時的景深。

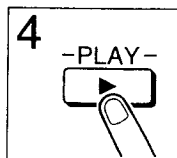
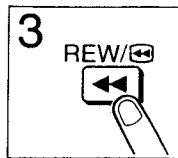
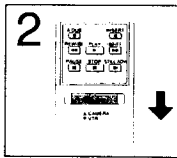
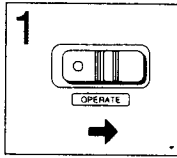
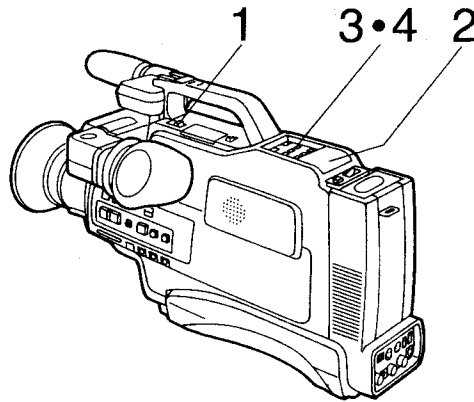
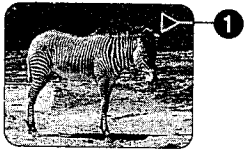
#### 1 設定至 "PORTRAIT".

#### 2 設定至 "IRIS".

#### 3 反復按任一鈕，選擇希望的光圈值。

#### 注意：

- 如果景物太亮或太暗以致不能適當曝光，則光圈值指示將自動改變。
- 在照片方式中，除了高速快門功能之外，所有功能均可使用。(參看第 118 頁。)



## ENGLISH

### Playback

The recorded tape can be played back in the Viewfinder or on a connected TV set.

#### ■ How to Play Back in the Viewfinder (Playback from the Beginning of the Tape)

- 1 Turn the Movie Camera on.
- 2 Slide toward "VTR".
- 3 Press.
  - The tape will stop automatically when it reaches its beginning.
- 4 Press.
  - The playback starts.
  - The Playback Indication "▷" ❶ appears in the Viewfinder.
  - The tape will be rewound automatically when it reaches its end.
  - When the [SPEAKER ON/OFF] Switch is set to "ON", the sound can be heard from the built-in speaker.

- To Stop the Playback...  
Press the [STOP] Button.

## 中文

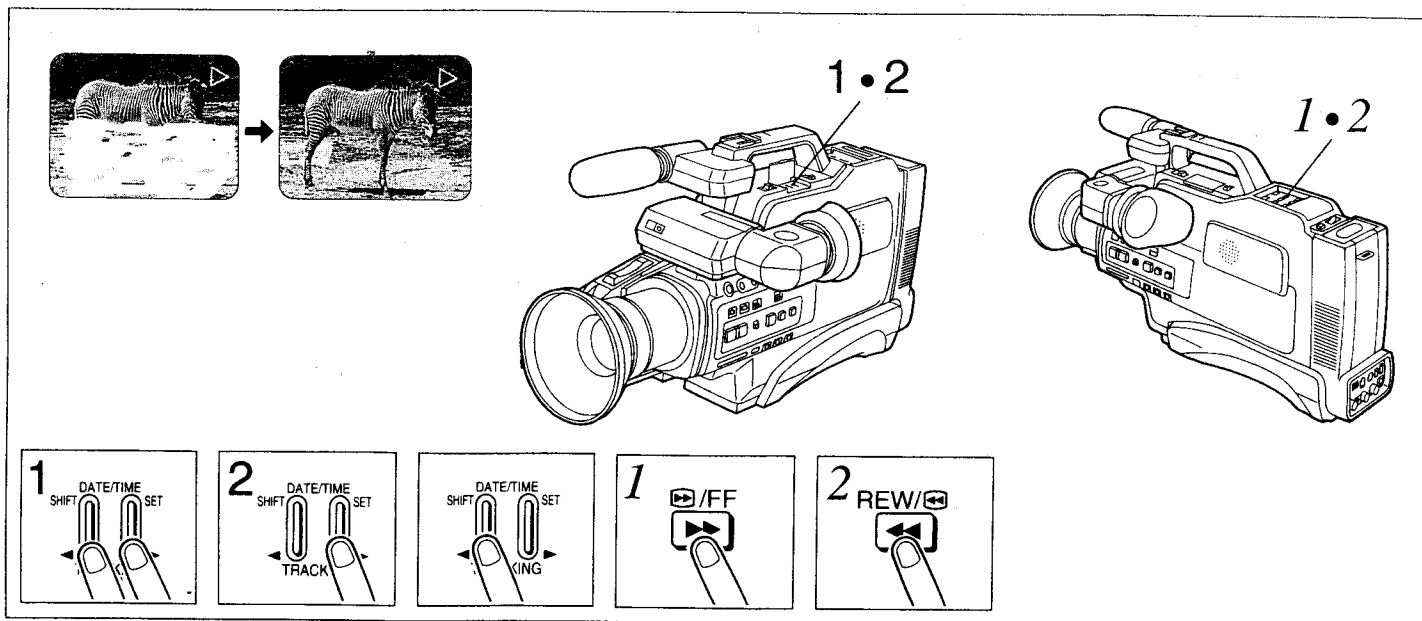
### 放影

可通過電子尋像器或連接電視機放影錄好的磁帶。

#### ■如何通過電子尋像器放影 (從磁帶的起點開始放影)

- 1 打開攝錄影機。
- 2 滑至“VTR”。
- 3 按。
  - 磁帶到達起點後，會自動停止。
- 4 按。
  - 放影開始。
  - 放影指示“▷” ❶ 將出現在電子尋像器上。
  - 磁帶到達終點後，會自動繞回。
  - 當 [SPEAKER ON/OFF] 開關被設至“ON”時，聲音將從內置揚聲器中發出。

- 要停止放影...  
按 [STOP] 鈕。



## ENGLISH

### Playback (cont'd)

#### ■ How to Adjust the Tracking

If the picture is distorted by noise bars during playback, the tracking needs to be adjusted.

- 1 Press both the [◀ TRACKING] and [TRACKING ▶] Buttons simultaneously.
- 2 Eliminate any noise bars by adjusting the tracking with the [◀ TRACKING] or [TRACKING ▶] Button.

•When playing back a video cassette which has been recorded on another movie camera or video tape recorder, it may not be possible to completely eliminate these noise bars.

#### ■ How to Rewind or Fast-forward the Tape

With the Movie Camera in the stop mode:

- 1 Press to wind the tape forward at high speed.
  - The tape will be rewound automatically when it reaches its end.
- 2 Press to rewind the tape at high speed.
  - The tape will stop automatically when it reaches its beginning.

## 中文

### 放影(續前)

#### ■如何進行軌迹調整

放影中如果畫面因雜波條紋而變形，則必須進行軌迹調整。

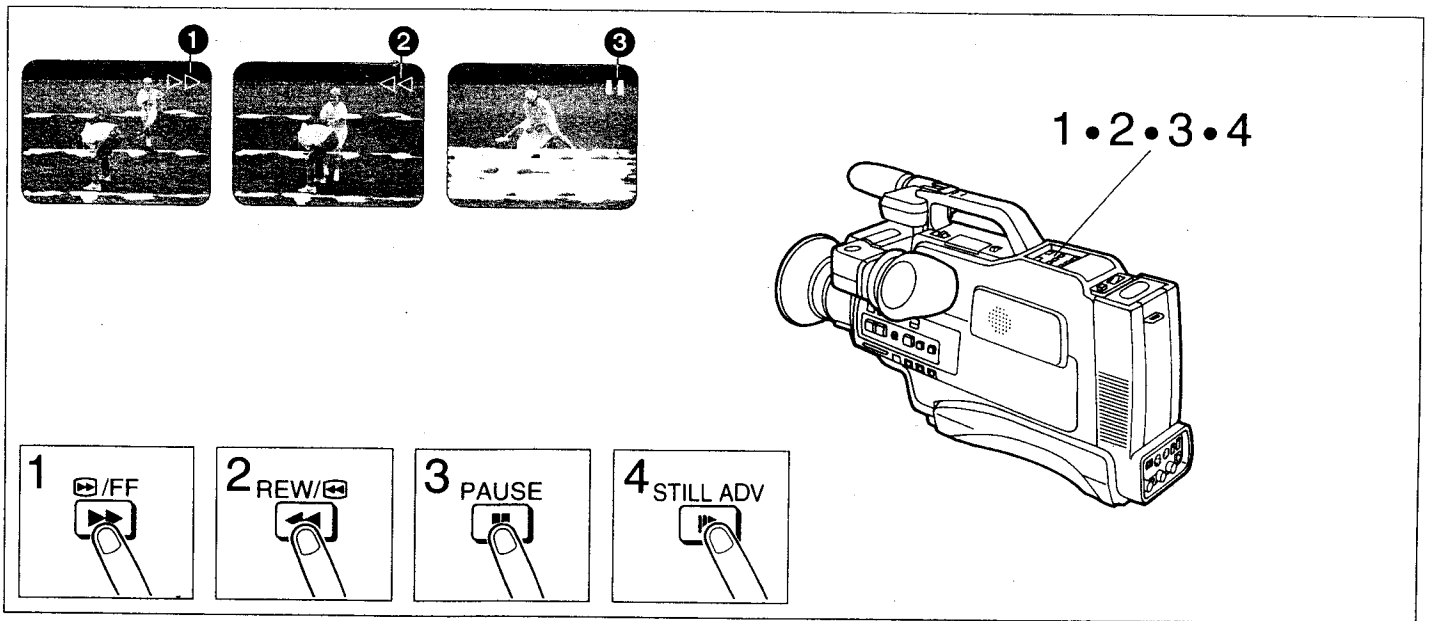
- 1 同時按 [◀TRACKING] 和 [TRACKING▶] 鈕。
- 2 用 [◀TRACKING] 或 [TRACKING▶] 鈕消除雜波條紋。
  - 放影在另一攝錄影機或錄放影機上錄製的錄影帶時，也許不能完全消除這些雜波條紋。

#### ■如何快進和倒帶

攝錄影機處於停止狀態時：

- 1 按該鈕可高速正向導帶。
  - 磁帶到達終點後會被自動繞回。
- 2 按該鈕可高速倒帶。
  - 磁帶到達起點後會自動停止。





## ENGLISH

### Playback (cont'd)

During Normal Playback

#### ■ For Cue Playback

- 1 Keep pressed.**
  - The Fast Forward/Cue Mode Indication "▷▷" ❶ appears in the Viewfinder.

#### ■ For Review Playback

- 2 Keep pressed.**
  - The Rewind/Review Mode Indication "◁◁" ❷ appears in the Viewfinder.

#### ■ For Still Playback

- 3 Press.**
  - The Still Mode Indication "||" ❸ appears in the Viewfinder.

#### ■ For Still Advance Playback

(During Still Playback)

- 4 Keep pressed.**

#### To Resume Normal Playback

Press the [PAUSE] Button again.

If the Movie Camera is left in the Still Playback Mode for about 6 minutes, it will switch over to the stop mode, to protect the tape and the video heads.

#### Note:

- The sound will be played back only during normal playback (if connected to a TV set).

## 中文

### 放影(續前)

在正常放影中。

#### ■ 快進尋影放影

- 1 持續按該鈕。**
  - 快進 / 快進尋影方式 "▷▷" ❶ 將出現在電子尋像器中。

#### ■ 倒帶尋影放影

- 2 持續按該鈕。**
  - 倒帶 / 倒帶尋影方式 "◁◁" 指示 ❷ 將出現在電子尋像器中。

#### ■ 靜止放影

- 3 按。**
  - 靜止方式 "||" 指示 ❸ 將出現在電子尋像器中。

#### ■ 靜止步進放影

(靜止放影中)

- 4 持續按該鈕。**

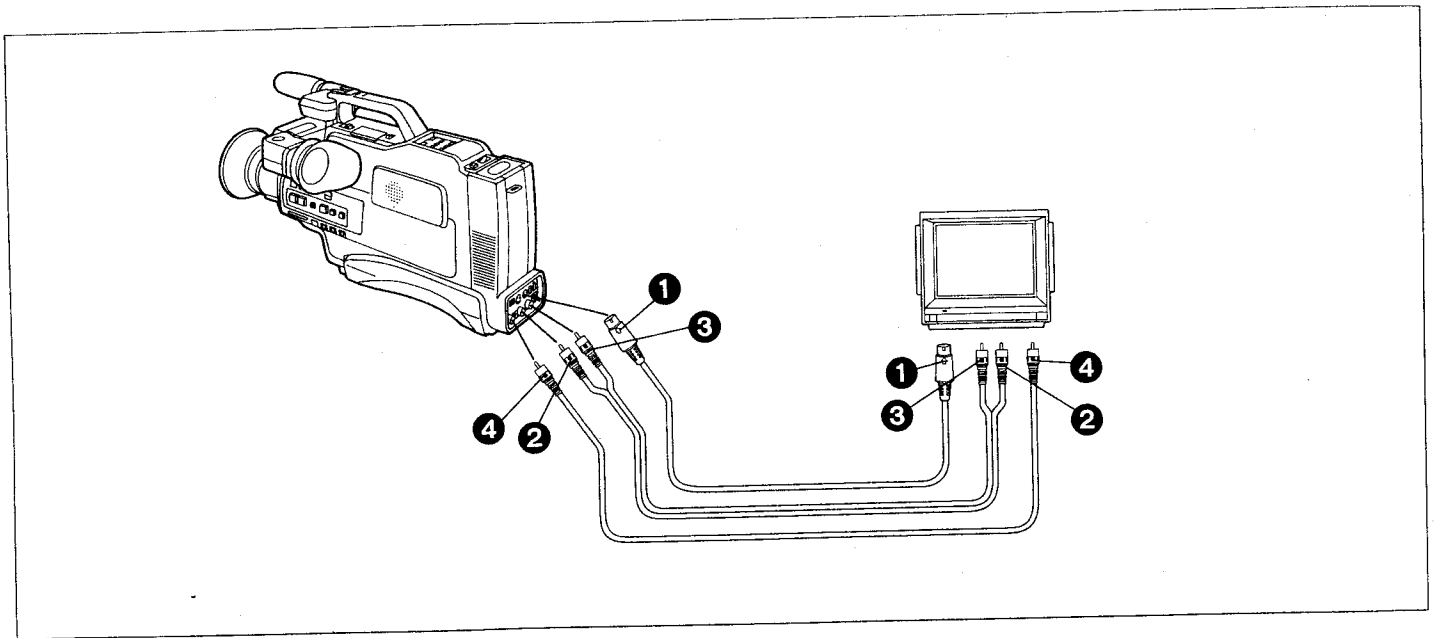
#### 要回到正常放影

請再按 [PAUSE] 鈕一次。

如果攝錄影機處於靜止放影狀態超過 6 分鐘，則將切換至停止狀態，以保護磁帶和影像磁頭。

#### 注意：

- 聲音僅在正常放影狀態（如果連接至電視機）時被播放。

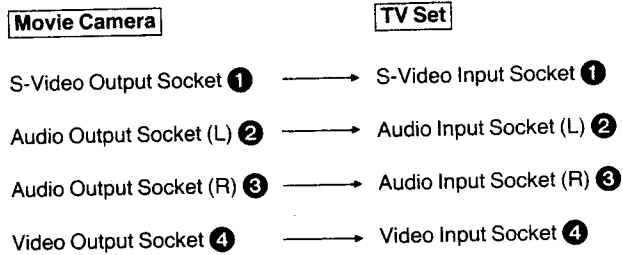


**ENGLISH**

**Playback via a TV Set (Connections)**

- Playback via a TV set with S-Video Input Socket
- Turn off the Movie Camera and the TV set.

**Connect the Movie Camera to the TV set.**  
 (S-Video Cable and Audio/Video Cable are supplied.)



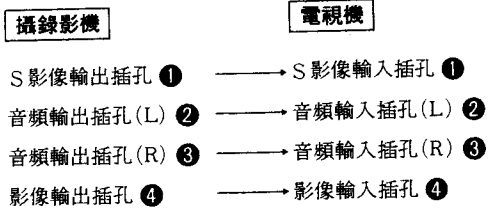
- Activate the Playback Operation  
 (See page 92.)

**中文**

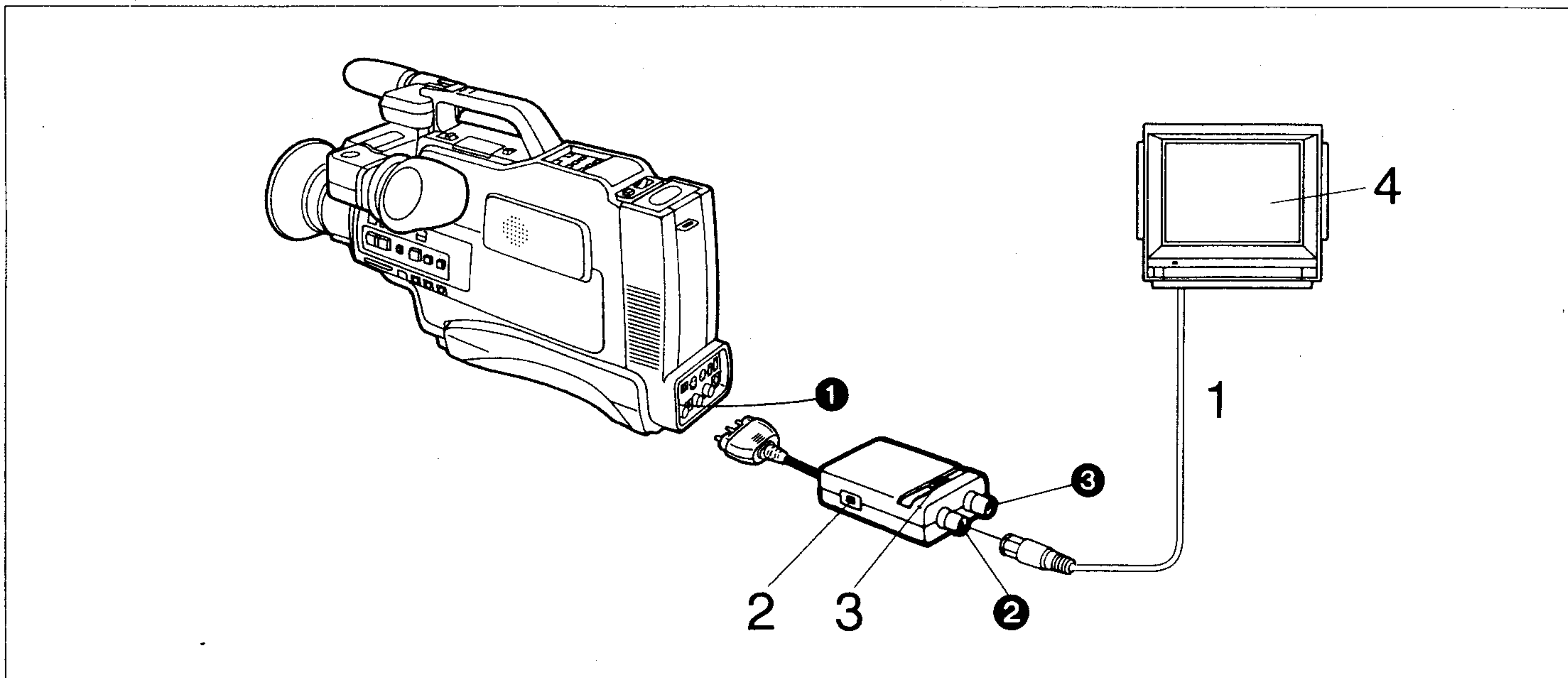
**通過電視機放影(連接)**

- 通過帶S影像輸入插孔的電視機放影。
- 關閉攝錄影機和電視機。

**連接攝錄影機至電視機。**  
 (S影像纜線和音頻/影像纜線已提供。)



- 啓動放影操作  
 (參看第92頁。)



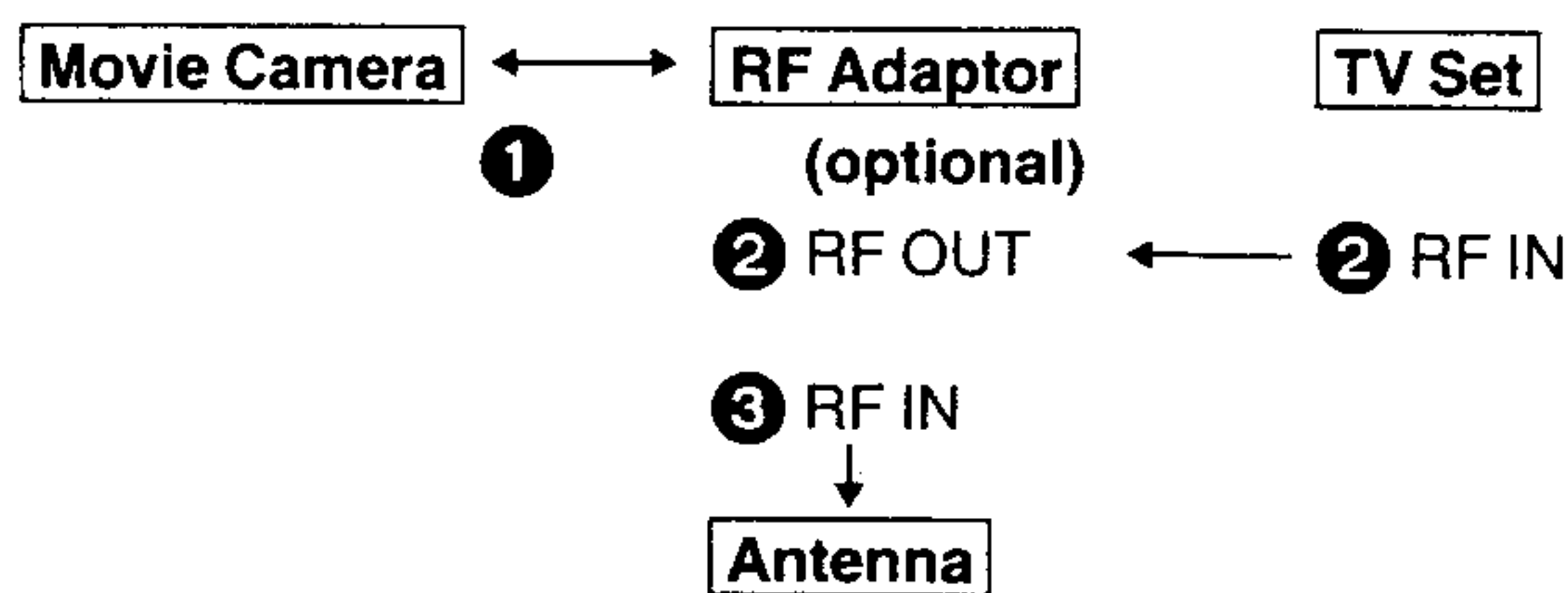
**ENGLISH**

**Playback via a TV Set (cont'd)**

■ **Playback via a TV Set without AV Socket**

- Turn off the Movie Camera and the TV set.

**1 Connect the Movie Camera to the TV set.**



**2 Set the PAL System Selector Switch to the "G" position.**

**3 Set the TV/VTR Selector Switch on the RF Adaptor to:**

- VTR: For playing back a video cassette.
- TV: For watching TV.

**4 Select an unused TV programme position (channel).**

- Follow the tuning procedure outlined in the instruction booklet for your TV set to re-tune your TV set to the UHF transmission channel 36. The camera picture now appears on the TV screen.
- If in doubt, consult your local video dealer.

■ **Activate the Playback Operation**

(See page 92.)

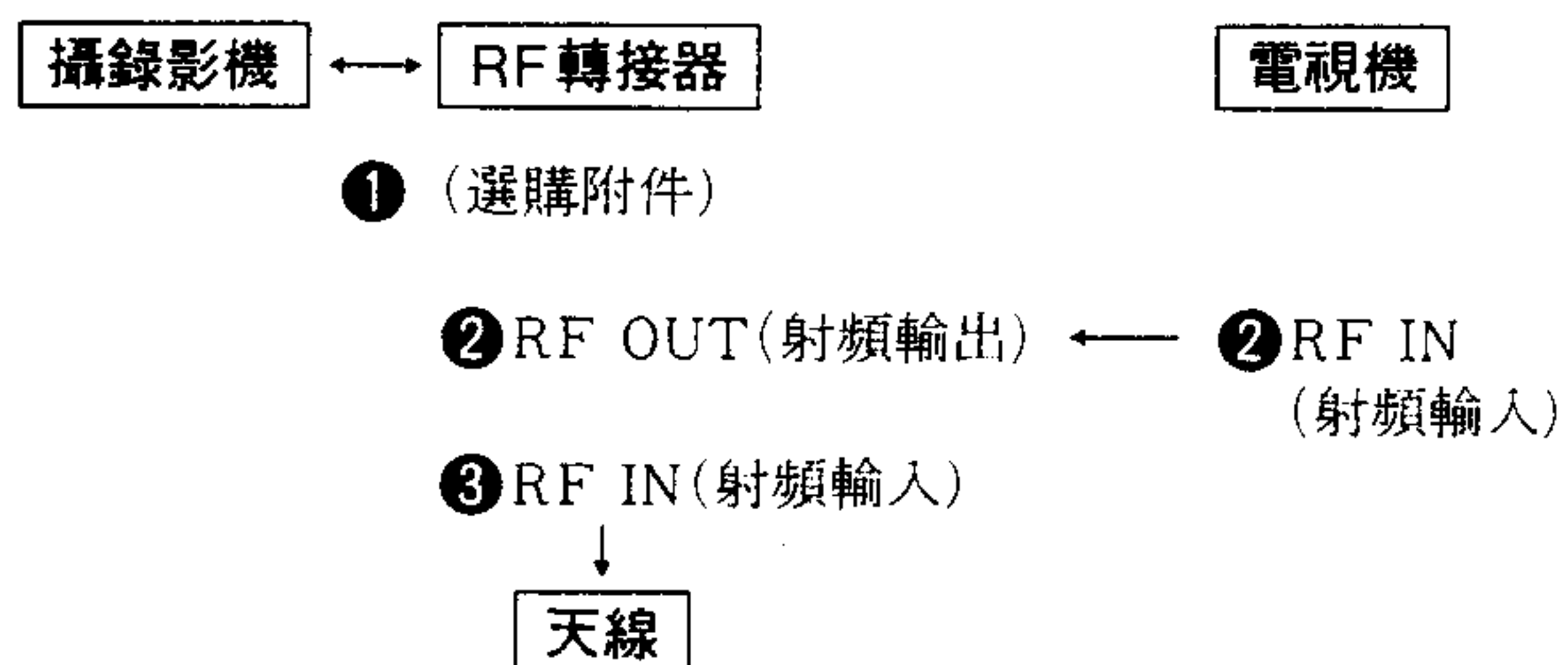
**中文**

**通過電視機放影 (續前)**

■ **通過未配備 AV 插孔的電視機放影**

- 關掉攝錄影機和電視機。

**1 連接攝錄影機至電視機。**



**2 將 PAL 系統選擇開關設至 "G" 位置。**

**3 設定 RF 轉接器上的電視機/錄放影機選擇開關：**

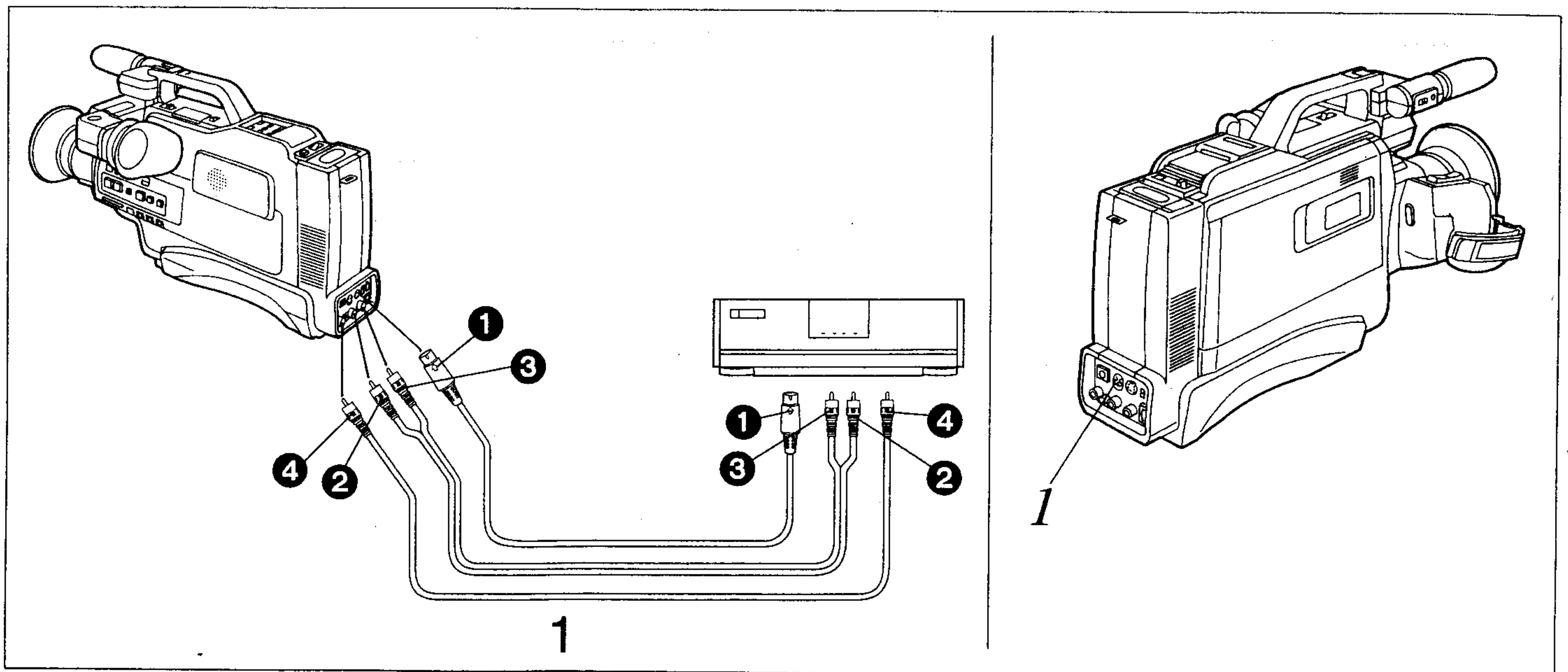
- VTR：用於放影錄影帶。
- TV：用於觀看電視。

**4 選擇未使用的電視節目位置 (頻道)。**

- 請遵照您的電視機使用說明書中的調諧步驟，重新調諧電視機至 UHF 發射頻道 36。攝錄影機的畫面將出現在電視螢幕上。
- 如有疑問，請洽詢原經銷商。

■ **啟動放影操作。**

(參看第 92 頁)



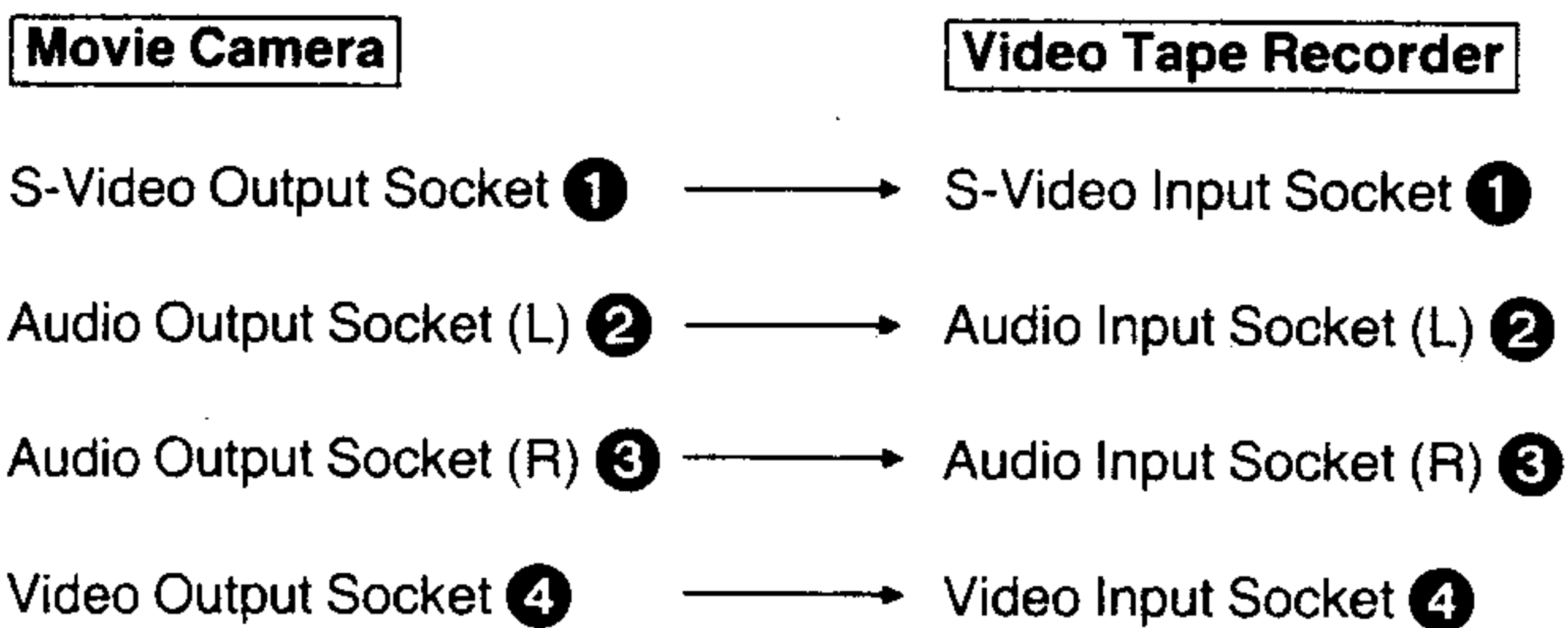
## ENGLISH

### Copying (Dubbing)

#### ■ Connections

#### 1 Connect the Movie Camera to a VTR.

Using the Supplied S-Video Cable and Audio/Video Cable



#### ■ Operations

- | Movie Camera  | Video Tape Recorder (VTR)  |
|---|--|
| 1. Insert a recorded video cassette into the Movie Camera.  | 4. Insert a video cassette with intact erasure prevention tab into the VTR.  |
| 2. Press the [PLAY] Button (and if necessary the [FF] or [REW] Button) to locate the scene from where the dubbing is to start). | 5. Press the Record Button to start recording.   |
| 3. Press the [PAUSE] Button at the point where the dubbing is to start.   | 7. Press the Pause/Still Button at the exact position where the recording is to end.<br>•The VTR is now in the recording pause mode. |
| 6. Press the [PAUSE] Button to start the playback.  | 9. Press the Pause/Still Button again to resume recording.   |
| 8. Locate on the Movie Camera the beginning of the next scene to be dubbed, and press the [PAUSE] Button at that point.         |  |

• Repeat the operation steps 6 to 9 for each additional scene to be dubbed.

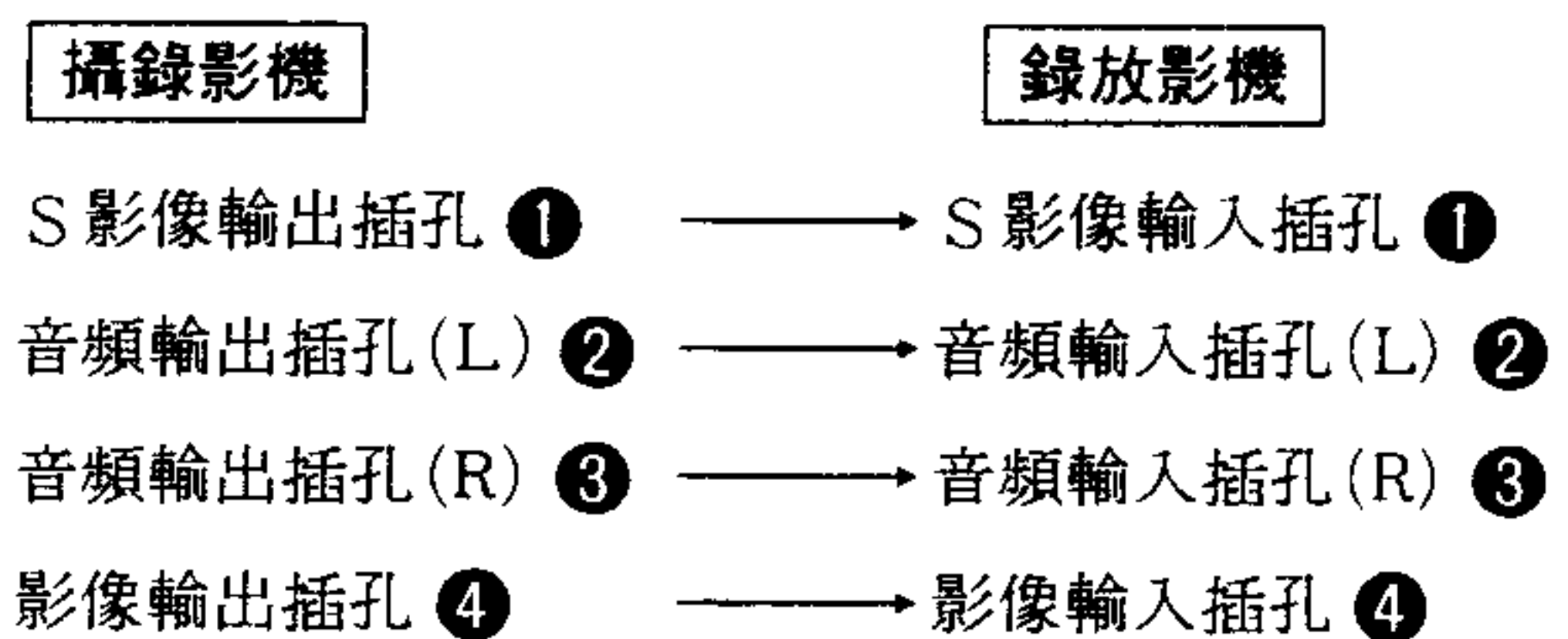
## 中文

### 拷貝(複製)

#### ■ 連接

#### 1 將攝錄影機連接至錄放影機。

使用提供的 S 影像纜線和音頻 / 影像纜線



#### ■ 操作

- | 攝錄影機   | 錄放影機  |
|--|---|
| 1. 將有內容的錄影帶插入攝錄影機。                               | 4. 將保險片完整的磁帶插入錄放影機。                           |
| 2. 按 [PLAY] 鈕 (如有必要請按 [FF] 和 [REW] 鈕) 找到想開始複製的點。 | 5. 按錄影鈕開始錄影。                                  |
| 3. 在要開始複製的點按 [PAUSE] 鈕。                          | 7. 在想結束錄影的精確位置按暫停 / 靜止鈕。<br>• 錄放影機現在進入錄影暫停狀態。 |
| 6. 按 [PAUSE] 開始放影。                               | 9. 再按一次錄放影機的暫停 / 靜止鈕, 重新開始錄影。                 |
| 8. 在攝錄影機上確定要複製下一場面的開始位置, 並在該位置按 [PAUSE] 鈕。       |   |

• 對每一要拷貝的場面重複步驟 6 至 9。

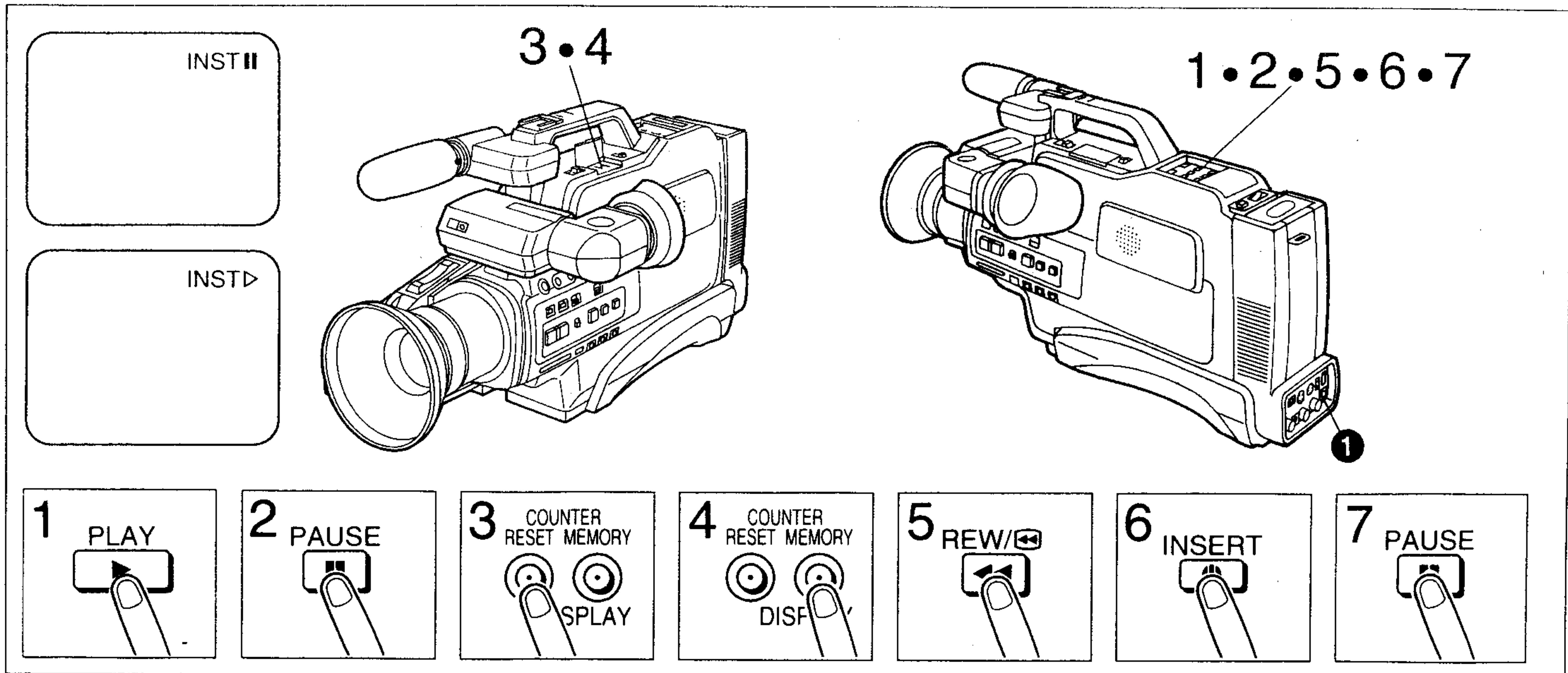
#### 1 編輯插孔

將編輯控制器 (選購附件) 連接至該插孔和配備有編輯插孔的錄放影機, 則可獲得高精度和快速的編輯。

#### 1 Edit Socket

By connecting an Editing Controller (optional) to this socket as well as to a VTR equipped with Edit Socket, highly precise and speedy editing becomes possible.





## ENGLISH

### Insert Editing

Replacing pictures and sound on a recorded tape with new scenes and sound.

- 1 Press.
- 2 Press.
  - Play back the tape to locate the point where the Insert Editing is to finish, and press the Pause Button at that point.
- 3 Press.
- 4 Press.
  - The indication "M 0000" appears in the Viewfinder.
- 5 Press.
  - Rewind the tape to locate the point where the Insert Editing is to start, and release the button at that point.
- 6 Press.
- 7 Press again.
  - The Insert Editing starts.

The Insert Editing will automatically finish at the point where the counter indicates "M 0000".

• To stop the Insert Editing midway, press the Pause Button.

#### ■ When playing back a cassette tape on which insert editing has been performed...

Use the Audio Selector Switch ❶ to select the sound to be played back. (See page 42.)

## 中文

### 插入編輯

用新的場面和聲音取代磁帶上原有畫面和聲音。

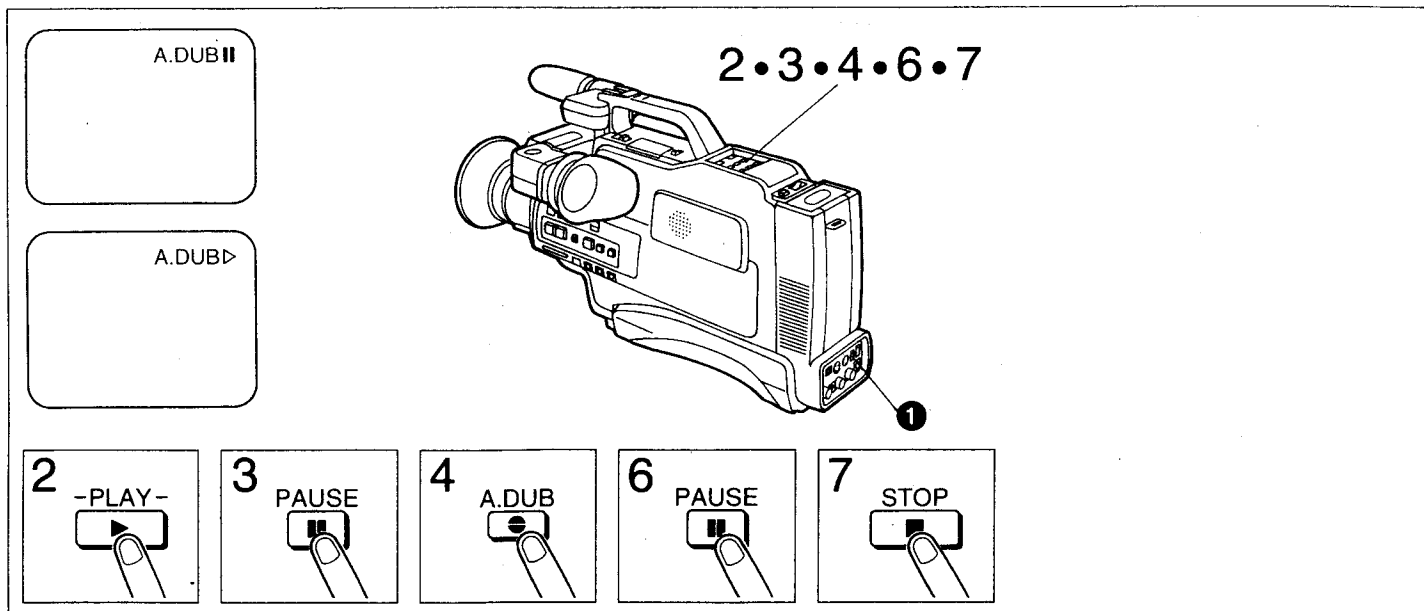
- 1 按。
- 2 按。
  - 放影磁帶找到要結束插入編輯的點，並在該點按暫停鈕。
- 3 按。
- 4 按。
  - "M0000" 指示將出現在電子尋像器和液晶顯示屏上。
- 5 按。
  - 繞回磁帶至要開始插入編輯的點，並在該點釋放此鈕。
- 6 按。
- 7 再按一次。
  - 插入編輯開始。

在計時器指示 "M0000" 的點處，插入編輯將自動停止。

• 要中途停止插入編輯時，請按暫停鈕。

#### ■ 放影進行過插入編輯的磁帶時...

使用音頻選擇開關 ❶ 選擇要播放的聲音。(參看第42頁。)



## ENGLISH

### Audio Dubbing

Audio Dubbing can be performed by using the stereo microphone or an external microphone.

#### 1 Insert the recorded cassette.

- Insert a video cassette with intact tab.  
If the tab is removed, cover the hole with adhesive tape.  
(See page 36.)

#### 2 Press.

- Play back the tape to locate the point where you want to start the Audio Dubbing.

#### 3 Press.

#### 4 Press.

#### 5 Operate the audio source unit.

#### 6 Press again.

- The Audio Dubbing starts.

#### 7 Press.

- The Audio Dubbing stops.

#### ■ When playing back a cassette tape on which audio dubbing has been performed...

Use the Audio Selector Switch ① to select the sound to be played back. (See page 42.)

## 中文

### 音頻複製

使用立體聲麥克風和外部麥克風均可進行音頻複製。

#### 1 插入有內容的磁帶。

- 插入保險片完整的磁帶。如果保險片被折斷，則請貼上膠帶。  
(參看第36頁。)

#### 2 按。

- 放影磁帶找到要開始音頻複製的點。

#### 3 按。

#### 4 按。

#### 5 操作音響設備。

#### 6 再按一次。

- 音頻複製開始。

#### 7 按。

- 音頻複製停止。

#### ■ 放影進行過音頻複製的磁帶時...

使用音頻選擇開關 ① 選擇要播放的聲音。(參看第42頁。)

## VITC signals

This Movie Camera is equipped with a built-in VITC Generator and it automatically records VITC signals (Vertical Interval Time Code). It can count up continuously from 0 to a maximum of 24 hours. Using a VITC Editing Controller System (optional), cassette tapes recorded with VITC signals can be edited more conveniently and with frame-by-frame precision.

### Note:

For actual editing, refer to the Operating Instructions of the VITC Editing Controller System.

- A built-in lithium battery ensures that the last time code value reached before the recording was interrupted is always retained in memory. Thus when camera recording is resumed later, the time code sequence continues from the point where it was halted, even if the Movie Camera was switched off.

### Cautions for Shooting with VITC Time Code

To ensure that the desired scenes can be found during editing, the time code must be recorded continuously without any gaps.

1. Provide a blank leader portion at the beginning of each video cassette by leaving the Lens Cap on the Lens and starting to shoot. Continue shooting like this for at least 20 seconds.
2. Each time you start the Movie Camera, small jumps may appear in the time code. These jumps would make editing of the first frames of a scene difficult. Therefore, get into the habit of always starting the camera approx. 5 seconds before the actions you wish to record actually start.
3. Do not wind the tape in the video cassette forwards or backwards after taking a shot. The successive shots must be recorded in continuous sequence.
4. Do not use the Camera Search or Rec Review Function.
5. Never make new recordings over parts of a previously recorded cassette.

## VITC信號

本攝錄影機配備有內置VITC發生器，可自動錄製VITC信號（垂直間隔時間碼）。它可從0至最大24小時連續計時。使用VITC編輯控制系統（選購附件）時，錄有VITC信號的磁帶可獲得更便利的編輯且可實現1幕幕的編輯精度。

### 注意：

有關實際的編輯操作，請參照VITC編輯控制器系統的使用說明書。

- 內置鋰電池可保證錄影中斷前的時間碼值一直保持在存儲器中。這樣，即使攝錄影機被關閉，當攝錄影機恢復錄影時，時間碼可從中斷處連續下去。

### 攝錄影機錄製VITC時間碼的注意事項

為了保證編輯時可找到希望的場面，時間碼必須連續錄製，不可中斷。

1. 給每一磁帶提供一引導部分。讓鏡頭蓋蓋在鏡頭上並開始錄影。使攝錄影機進行這種操作至少20秒鐘。
2. 每次啟動攝錄影機時，時間碼會有稍許跳動。這種跳動會使得第一幕場面的編輯較為困難。因此請形成習慣：在要拍攝的動作實際開始之前，請先用攝錄影機空拍5秒鐘。
3. 拍攝好一場面之後，請勿快進或倒帶。接續的拍攝必須以連續順序進行。
4. 請勿使用攝錄影機尋影或錄影倒帶尋影功能。
5. 絕不能對已錄好的原作磁帶部分疊加新錄影。

## 注意事項

使用本攝錄影機和附件之前，請閱讀這些注意事項。

### 影像磁頭堵塞

影像磁頭是這樣一種工具，攝錄影機通過它們在錄影時將影像信號放置於磁帶上，在放影時從磁帶上讀出影像信號。當這些磁頭經過長期使用而變髒和堵塞時，信號就再不會被正確地錄製，放影的畫面也會因此而變形。如果磁帶放影中聲音播放正常，但看不到畫面或畫面嚴重失真。當出現諸如此類的情況時，請讓專業維修人員為您檢查本攝錄影機。

本攝錄影機配備有磁頭堵塞檢測功能。當磁頭被堵塞時，“⊗”指示將在電子尋像器中出現。由於磁頭上的髒物可能因為磁帶的運動而擲掉，因此該指示可能有時候出現，而在下次錄影開始時又消失。當從錄影暫停狀態下開始拍攝時，磁頭堵塞檢測功能將被啟動。然而，在更換磁帶，或放影了磁帶某一部分之後立刻開始拍攝時，不會啟動該功能。

### 如果攝錄影機內凝聚濕氣

熱空氣和冰冷的物體接觸時便會凝聚濕氣（露水），例如冬天溫暖房間的窗戶。在下列情況下，攝錄影機內可能會凝聚濕氣，並且損害磁帶和影像磁頭。

- 攝錄影機置於剛打開暖氣的房間內時。
- 攝錄影機置於充滿水蒸汽或潮濕的房間內時。
- 攝錄影機從寒冷的環境中移到充分加熱過的房間內時。
- 將攝錄影機從涼爽的環境，例如有冷氣的房間或汽車中，突然移到溫度高且濕氣重的地方時。
- 當攝錄影機內凝聚濕氣時，電子尋像器上的“DEW”指示將閃動，數秒鐘後，本機將自動關掉，以保護磁帶和影像磁頭。  
請過一會兒再打開本攝錄影機，並確認“DEW”標記不再出現。然後，須等待大約1小時才能再使用本攝錄影機。取決於環境條件，有時需要數小時才能再使用本攝錄影機。
- 由於濕氣是逐漸凝聚的，故當環境改變時，可能需要大約10~15分鐘，本攝錄影機才會自動關掉。
- 在特別寒冷的地方，濕氣可能會凝聚成霜。遇到這種情況時，就需要更長的時間讓霜先融化，然後再蒸發掉。
- 當您將本攝錄影機從很冷的地方，例如滑雪場，帶進暖氣房間內時，請用塑料袋或類似的東西包住，以防止攝錄影機內凝聚濕氣。

### 攝錄影機的注意事項

本機運行異常（例如冒烟或出現異味）時，請立即停止使用，並洽詢專業維修人員。

#### ■使用注意事項：

- 請勿拆卸或重新組裝本機。本機內某些部件具有高電壓。拆卸或重新組裝本機將極其危險，可能會引起本機的嚴重損壞。
- 勿將任何物體放入本機內。  
請勿將任何金屬物體或可燃物插入本機的任何孔內（磁帶等等）。如果有液體倒入本機內，則請立即停止使用，並洽詢專業維修人員。使用本機時如果有異物在內，則可能引起故障或電擊。  
如果小孩接觸過本機，則應引起注意。
- 絕不能將鏡頭對準太陽，否則會導致CCD圖像傳感器的永久損壞。這種損壞會引起畫面質量的降低或使得拍攝完全不能進行。因此在拍攝和其它操作中必須注意這一點。
- 請避免本機的強烈振動或沖擊。  
使用中的沖擊將導致畫面變形。
- 在暴風雨中，特別是處於開闊地時請勿使用本機，否則將非常危險。在暴風雨中的室內使用本機時，請務必從電源插頭拔掉交流轉接器。
- 使用本機時勿使磁帶室朝下，否則將引起不均勻繞帶、鬆弛或損壞磁帶。
- 移動本機時，請勿將電子尋像器作為移動手柄使用。



## 注意事項(續前)

### ■環境注意事項：

- 在有水或其它液體可能濺到本機的地方，請勿使用本機。
- 請勿在非常靠近電視機或收音機的地方使用本機，否則會影響畫面和聲音接收。
- 將本機遠離強電場，否則將影響本機的正常功能且引起畫面變形。
- 將本機遠離產生高溫的物體，如暖氣機。
- 請勿在很髒的地方將錄影帶插入本機或取出。
- 在水中不能使用本機。如果不慎將本機掉入水中（或其它液體中），則請拔掉交流轉接器，從水中取出攝錄影機，並洽詢專業維修人員。

### ■連接時的注意事項：

- 在連接之前，請確認整個系統都被關閉，且連接纜線無損壞。
- 請勿將連接纜線暴露於高溫、化學物品中或有銳角的物體，也請勿過度地彎曲纜線。

### ■放置和運輸時的注意事項：

- 請勿將本機放置於暴露在直射陽光下的地方（例如夏天封閉的車內）或靠近暖氣機。過熱將使機身變形或引起本機的其他損壞。
- 本機運輸時的填充物的設計實現了本機的最佳保護。請保存好以備以後運輸時使用。  
放置本機和磁帶時請避免磁化的物體，例如帶有馬達和電池的玩具等。
- 請勿將本機放置於高溫或高濕的地方，例如封閉的汽車內，或具有蒸汽和油煙的地方。  
如果本機長時間處於潮濕場所，則可能會發霉且損壞鏡頭。
- 請勿讓本機與橡膠或塑料物品長期接觸，否則將引起機身變形或變色。

### ■使用之後：

- 請務必裝好鏡頭蓋。
- 當本機連接至交流轉接器時，請在拔掉交流轉接器之前關掉本機。
- 打算長期不使用本機時，在關掉本機之前請取出磁帶。
- 長期不使用本機時，請不時地打開本機，以防止發生故障。

## 電池組的注意事項

電池組的功能取決於化學反應。使用時請注意下列各點。

- 在低溫下充電時，電池組的使用時間將縮短。
- 重新充電時，請只使用特別設計的交流轉接器或電池充電器。
- 請在10℃～35℃的溫度範圍內封電池組充電。  
高溫或低溫時，電池組將不能充足電。
- 請勿對已充足電的電池組重新充電。
- 如果充電正常的電池組的使用時間太短以致無法實際使用，則表明電池組的使用壽命已結束。請更換新的電池組。
- 在本機操作或電池組充電過程中，電池組可能會發熱，但屬於正常現象。
- 不使用電池組時，請將其從攝錄影機或交流轉接器中取出。
- 請勿將連接器短路，也請勿拆卸或重新組裝電池組。
- 請勿將耗盡的電池組投入火中。

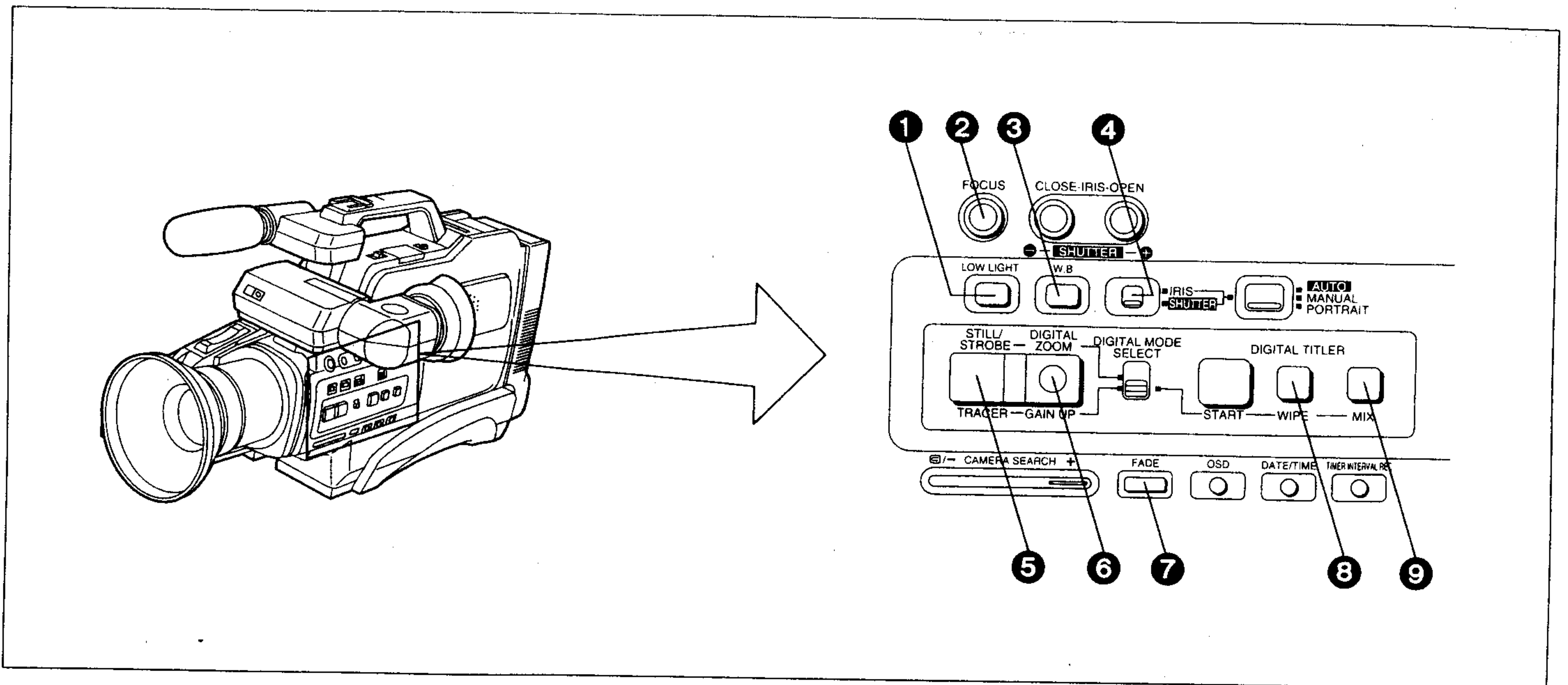
### ■放置電池組的注意事項：

- 放置電池組時請勿與金屬物體接觸，否則會引起電池組的連接器短路並將電池組耗盡。
- 請勿將電池組放置於高溫處，例如汽車的儀表盤中，或其它暴露於直射陽光的場所。

## 交流轉接器的注意事項

- 在連接交流轉接器至電源插座之前，請確認額定銘牌上的電壓符合您當地的電源電壓。
- 不使用交流轉接器時，請將其從電源上拔下。
- 請勿將交流轉接器用於除了給攝錄影機供電或給電池組充電之外的場合。
- 拔掉電源線時，請握住插頭，而不要拉扯電線。
- 如果在使用交流轉接器時收聽收音機，則收音機的接收可能受影響。這時，請讓收音機遠離交流轉接器。
- 請勿將重物放置於交流轉接器上。
- 在清掃交流轉接器之前，請確認其已從交流電源插座上取下。

購買時，請務必向鎖售商店索取保修卡，並確認卡上具有所需的所有信息。



**ENGLISH**

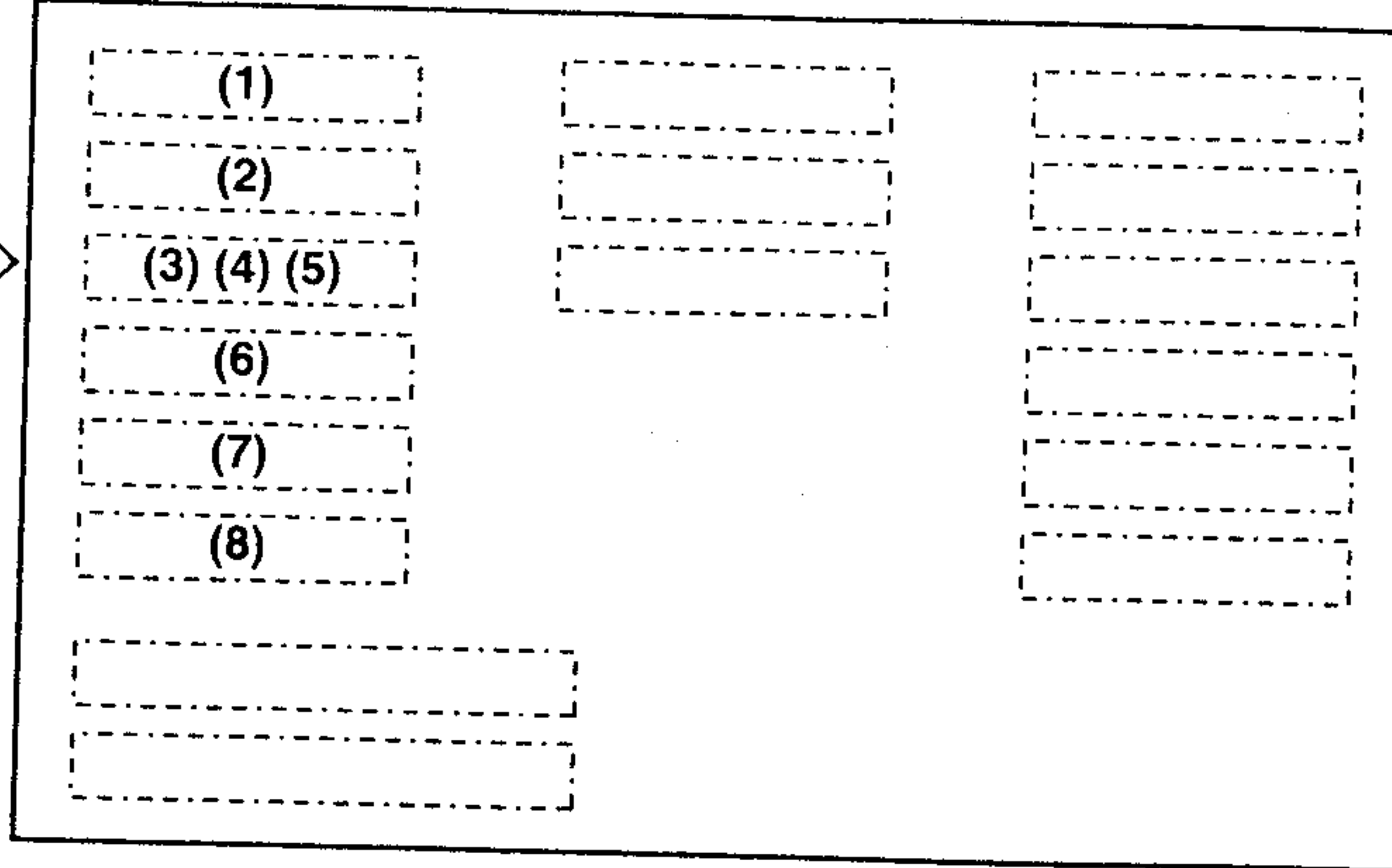
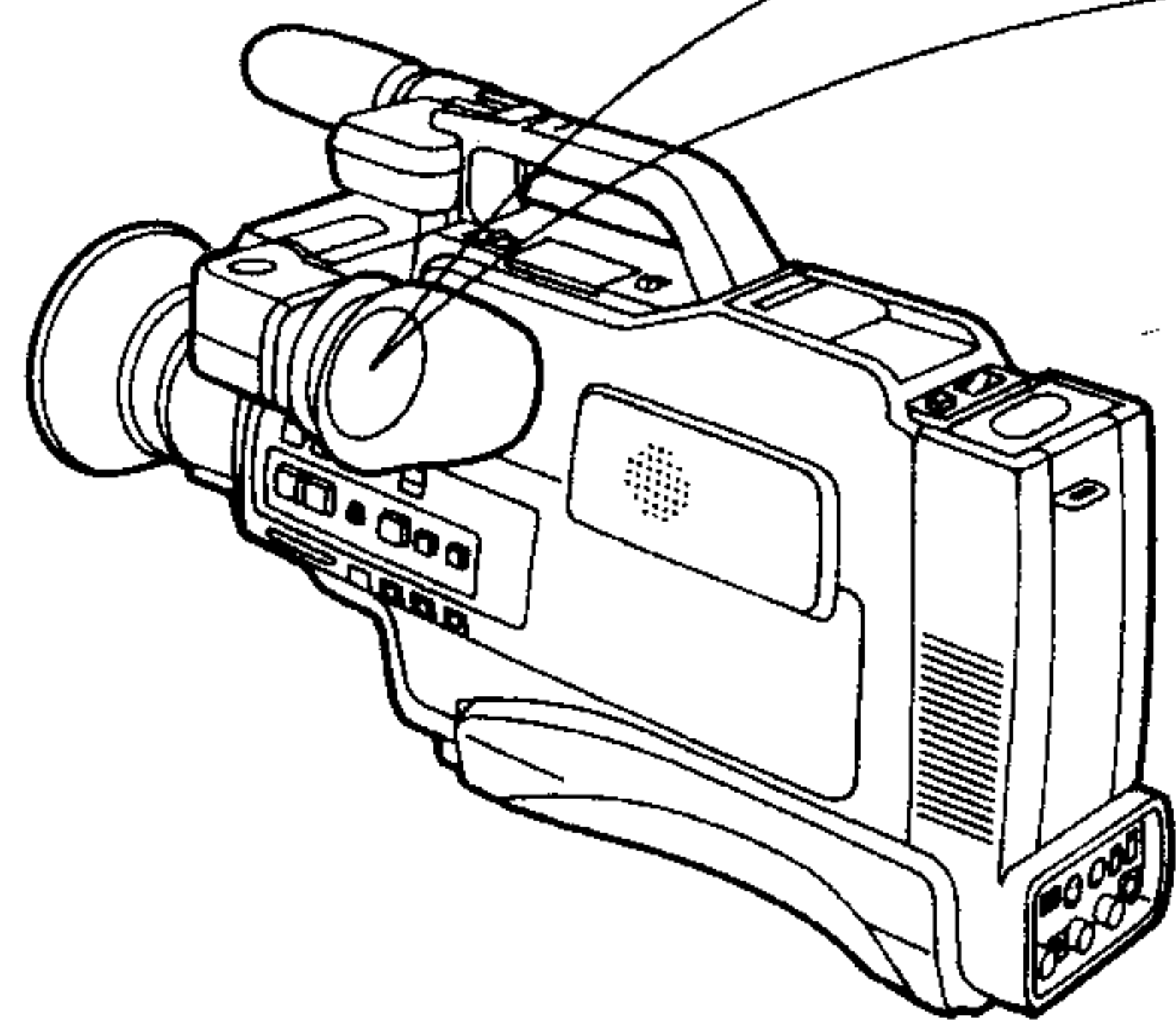
**Possible Use of the Functions Buttons in the Different Operation Modes**

Operations Buttons	Mode Selector Switch		
	AUTO	MANUAL	PORT-RAIT
① [LOW LIGHT] Button	No	Yes	Yes
② [FOCUS] Button	No	Yes	Yes
③ [W.B] Button	No	Yes	Yes
④ [IRIS/SHUTTER] Switch	IRIS	Yes	Yes
	SHUT-TER	Yes	No
⑤ [STILL/STROBE]/[TRACER] Button	Yes	Yes	Yes
⑥ [DIGITAL ZOOM]/[GAIN UP] Button	Yes	Yes	Yes
⑦ [FADE] Button	Yes	Yes	Yes
⑧ [WIPE] Button	Yes	Yes	Yes
⑨ [MIX] Button	Yes	Yes	Yes

**中文**

**在各種操作狀態下可能使用的功能鈕**

操作鈕	狀態選擇開關		
	AUTO	MANUAL	PORT-RAIT
① [LOW LIGHT] 鈕	否	可	可
② [FOCUS] 鈕	否	可	可
③ [W.B] 鈕	否	可	可
④ [IRIS/SHUTTER] 開關	IRIS	可	可
	SHUT-TER	可	否
⑤ [STILL/STROBE]/[TRACER] 鈕	可	可	可
⑥ [DIGITAL ZOOM]/[GAIN UP] 鈕	可	可	可
⑦ [FADE] 鈕	可	可	可
⑧ [WIPE] 鈕	可	可	可
⑨ [MIX] 鈕	可	可	可



## ENGLISH

### Indications in the Viewfinder



#### (1) Recording System indications


"S" S-VHS system recording

- When the "S" Indication is not visible the recording is made in the VHS system.
- The recording system can be changed by sliding the [S-VHS ON/AUTO/OFF] Switch.

#### (2) Manual White Balance Indications

In the Manual White Balance Adjustment Mode:

- " " Indication flashes slowly ..... Adjustment is not made.
- " " Indication flashes rapidly ..... While adjustment is being performed.

" " Indication is lit. .... The adjustment has been completed.  
In the Automatic White Balance Adjustment Mode (initial mode), none of these indications is lit.

#### (3) Tracer Indication

"TRACER"

When the [TRACER] Button is pressed, the "TRACER" Indication appears.

#### (4) Digital Wipe Indication

"D.WIPE"

- When the [WIPE] Button is pressed, the "D.WIPE" Indication appears.

#### (5) Digital Mix Indication

"D.MIX"

- When the [MIX] Button is pressed, the "D.MIX" Indication appears.

#### (6) High Sensitivity Indication

At every press of the [GAIN UP] Button, the indication changes in the following order:

→ no indication → "GAIN × 4" → "GAIN × 8" →

#### (7) Low Light Indication

"LOW L"

- When the [LOW LIGHT] Button is pressed, the "LOW L" Indication appears.

#### (8) Self-Timer and Interval Indications

At every press of the [TIMER/INTERVAL REC] Button, the indication changes in the following order:

→ no indication → "SLF20" → "SLF" → "INT" →

## 中文

### 電子尋像器中指示


#### (1) 錄影系統指示


"S" : S-VHS系統錄影


- 看不到 "S" 指示時，錄影將以 VHS 系統進行。
- 滑動 [S-VHS ON/AUTO/OFF] 開關，便可改變錄影系統。

#### (2) 手動白色平衡指示

手動白色平衡調整方式時：

" " 指示緩慢閃動……未調整。

" " 指示快速閃動……正在調整。

" " 指示亮……調整已完成。

自動白色平衡調整方式（最初方式）時無指示。

#### (3) 跟蹤指示

"TRACER"

按 [TRACER] 後，"TRACER" 指示將出現。

#### (4) 數位消除指示

"D.WIPE"

- 按 [WIPE] 鈕後，"D.WIPE" 指示將出現。

#### (5) 數位混合指示

"D.MIX"

- 按 [MIX] 鈕後，"D.MIX" 指示將出現。

#### (6) 高靈敏度指示

每按一次 [GAIN UP] 鈕，指示將按下述順序改變：

→ 無指示 → "GAIN × 4" → "GAIN × 8" →

#### (7) 低光線指示

"LOW L"

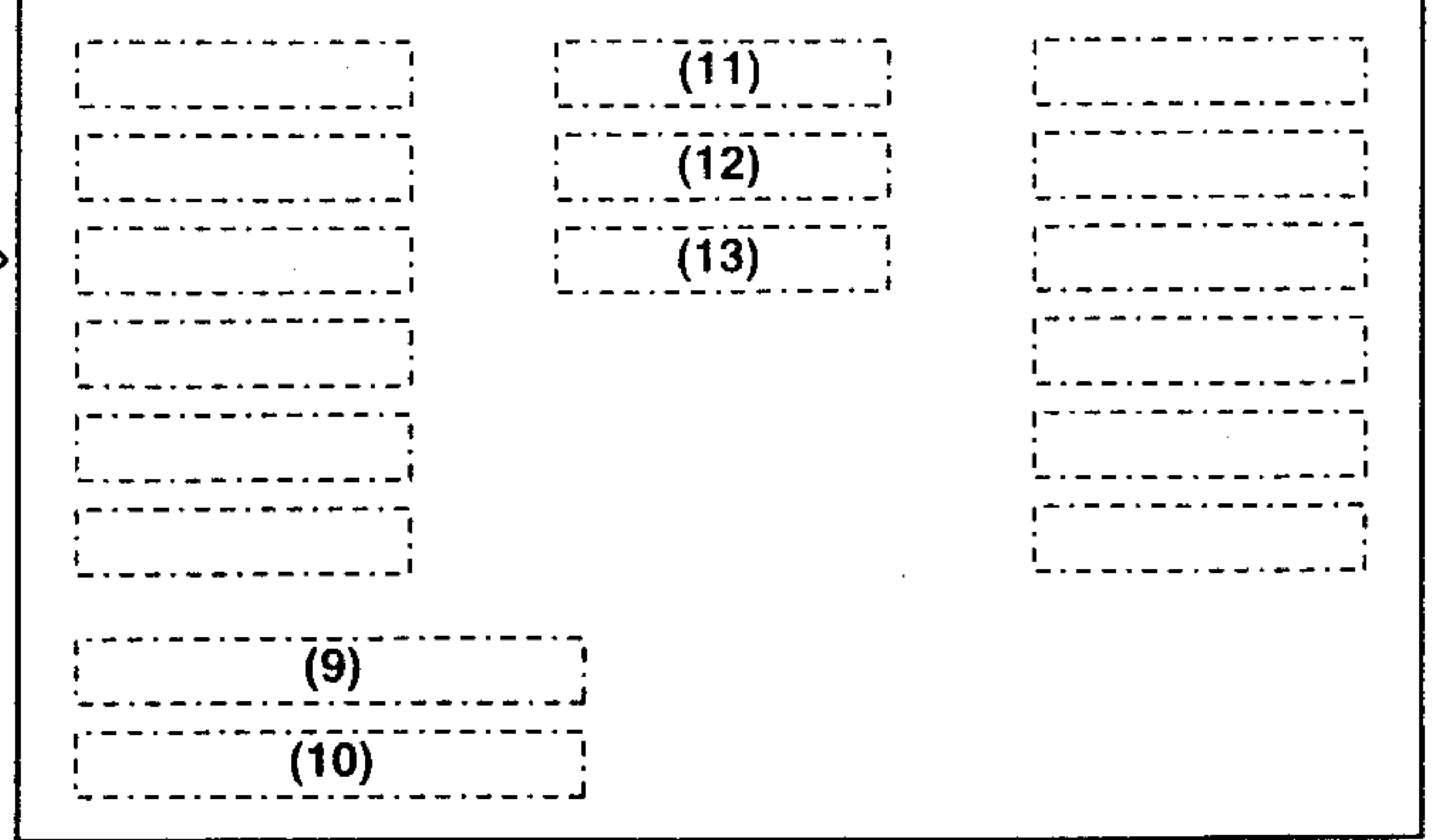
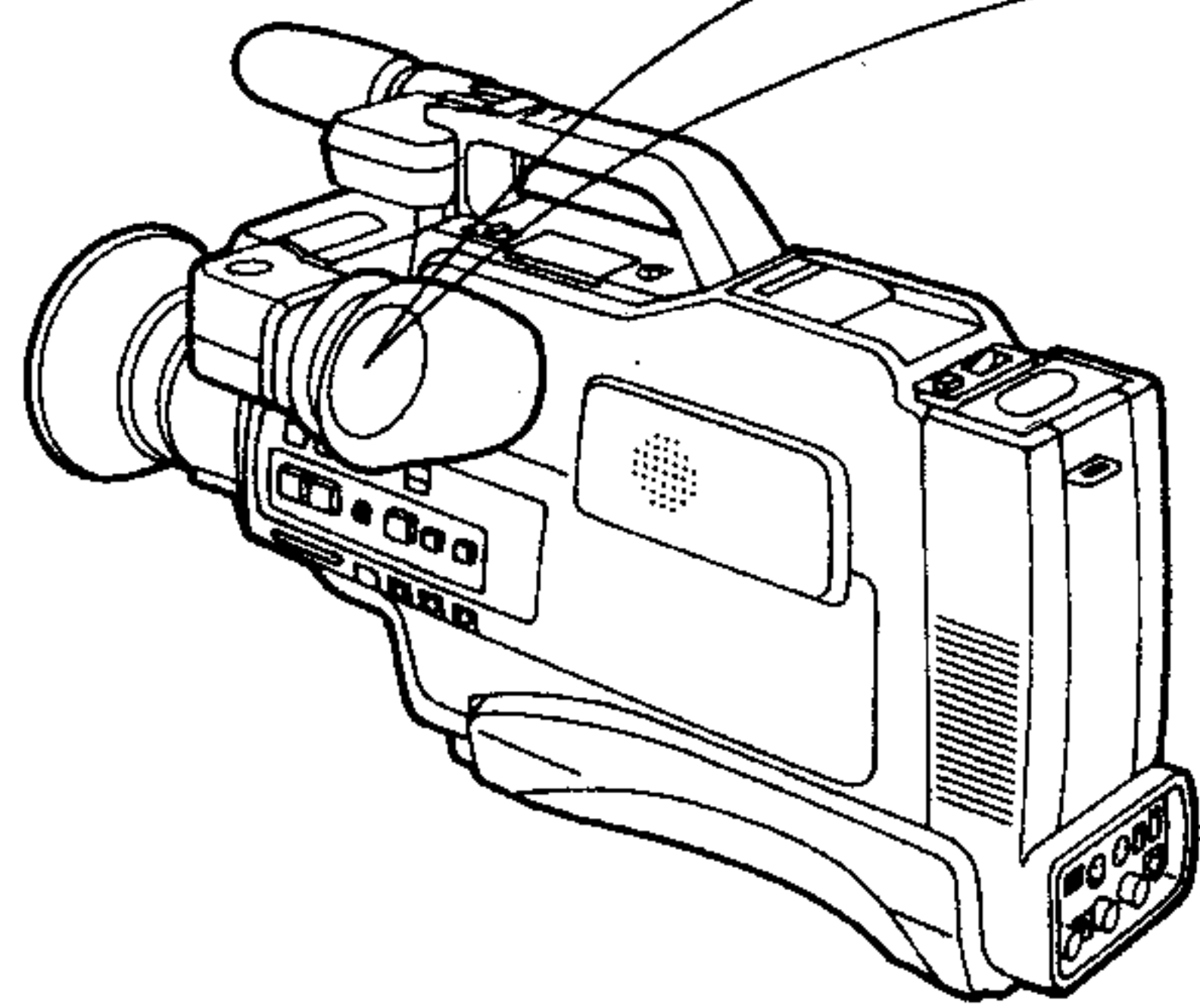
- 按了 [LOW LIGHT] 鈕後，"LOW L" 指示將出現。

#### (8) 自定時和間隔指示

每按一次 [TIMER/INTERVAL REC] 鈕，指示將按下述順序改變：

→ 無指示 → "SLF20" → "SLF" → "INT" →





## ENGLISH

### Indications in the Viewfinder (cont'd)

#### (9) Time Indication

"12:30"

- The current time (hour and minute) is displayed. The time must initially be set.
- The time is shown in the 24-hour clock system.
- It is possible to display the date alone, or the time and date together.

#### (10) Date Indication

"15.10.1993"

- The year, month, and day are displayed. The date must initially be set.

#### (11) Remaining Battery Power/Index Indication

"E----F"

- The "—" indications begin to disappear from right to left as the power of the Battery Pack is being used up.

"INDEX"

- This indication flashes when a recording is started and it indicates that an index signal is being recorded.

#### (12) Tape Counter/Elapsed Tape Time Indication

"M 0123"

- To be able to play back a certain scene at a later time, press the [MEMORY/DISPLAY] Button at the beginning of that scene. When the [FF] Button or the [REW] Button is later pressed, it is possible to easily locate this scene.

("M" means Memory.)

"L 0:00.00"

- The Lap Time Counter counts up only during recording.
- When a cassette tape is ejected, the Lap Time Counter is automatically reset to "L 0:00.00".

#### (13) Warning/Alarm Indications

The following indications are displayed to inform about the conditions of the Movie Camera.

"DEW", "⊗", "⊘", "⊙", "⊚" and "END".

## 中文

### 電子尋像器中指示 (續前)

#### (9) 時間指示

"12:30"

- 現在時刻 (小時和分鐘) 被顯示。時間必須事先設定。
- 時間顯示為24小時制。
- 可單獨顯示日期, 也可同時顯示時間和日期。

#### (10) 日期指示

"15.10.1993"

- 年、月、日被顯示。日期必須事先設定。

#### (11) 剩餘電池電力 / 索引指示

"E----F"

- 隨着電池電力的耗盡, "—" 指示會逐漸消失。

"INDEX"

- 拍攝開始後, 該指示閃動, 且表明索引信號正被錄製。

#### (12) 磁帶計時器 / 經過磁帶時間指示

"M0123"

- 要過後放影一指定的場面時, 請在那場面的開始處按[MEMORY] 鈕。過後再按 [FF] 或 [REW] 鈕時, 可容易地找到該場面。

("M": 表示記憶。)

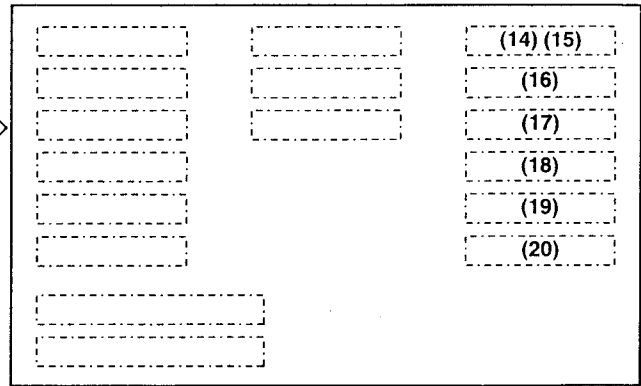
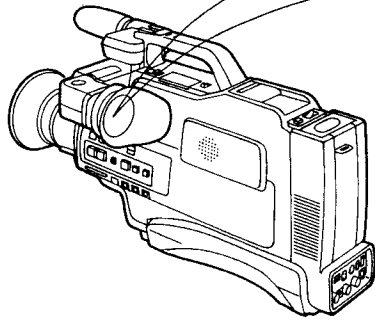
"L0:00.00"

- 經過磁帶時間指示僅在錄影時計時。
- 當取出磁帶時, 經過磁帶時間指示將自動復位到 "L0:00.00"。

#### (13) 警告 / 報警指示

下列指示將被顯示, 以告知攝錄影機的有關狀態。

"DEW", "⊗", "⊘", "⊙", "⊚" and "END".



## ENGLISH

### Indications in the Viewfinder (cont'd)

#### (14) Tape Running Indications

Depending on the operation being currently performed by the Movie Camera, one of the following indications appears.

- "▷" During Playback Camera Search (in forward direction)
- "||" During Still Playback
- "◀◀" Rewind/Review Mode Camera Search (in reverse direction)
- "▷▷" Fast Forward/Cue Mode
- INST ▷ Insert Editing mode
- INST || Insert Editing Pause mode
- A.DUB ▷ Audio Dubbing mode
- A.DUB || Audio Dubbing Pause mode

#### (15) Shooting Mode Indications

- "REC" During Shooting
- "PAUSE" During Shooting Pause
- "CHK" During Rec Review

#### (16) Magnification Ratio Indication

- It appears when the Movie Camera is turned on.

#### (17) F Number Indication

The desired F Number can be selected by repeatedly pressing the [IRIS CLOSE] or [IRIS OPEN] Button.  
OP + G1, OP + G2, OPEN, F2, F2.4, F2.8, F3.4, F4, F4.8, F5.6, F6.8, F8, F9.6, F11, F14, F16, F19, CLOSE

#### (18) Shutter Speed Indications

The desired shutter speed can be selected by repeatedly pressing the [SHUTTER -] or [SHUTTER +] Button. The numbers in the Shutter Speed Indication show fractions of a second, e.g. 1/120 = 1/120th of a second.  
1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000  
● The initial shutter speed is 1/50 sec. (no indication).

#### (19) Manual Focus Indication

"MF" ("MF" means Manual Focus.)  
Pressing the [FOCUS] Button will turn the Automatic Focus Mode on or off. The "MF" Indication indicates that the Manual Focus Mode is selected.  
● Initially, the Auto Focus Mode is selected ("MF" Indication is off).

#### (20) Digital Zoom Indication

"D.ZOOM 1", "D.ZOOM 2"  
● Turn the Digital Zoom Function on or off by pressing the [DIGITAL ZOOM] Button. "D.ZOOM 1" or "D.ZOOM 2" is indicated when it is turned on. ("D" means Digital.)

## 中文

### 電子尋像器中指示 (續前)

#### (14) 磁帶走帶指示

取決於攝錄影機當前的操作狀態，下列指示之一將出現。

- "▷" 放映中  
攝錄影機尋影(正方向)
- "||" 靜止放映中
- "◀◀" 倒帶 / 倒帶尋影狀態  
攝錄影機尋影(反方向)
- "▷▷" 快進 / 快進尋影狀態
- "INST ▷" 插入編輯狀態
- "INST ||" 插入編輯暫停狀態
- "A.DUB ▷" 音頻複製狀態
- "A.DUB ||" 音頻複製暫停狀態

#### (15) 拍攝狀態指示

- "REC" 拍攝中
- "PAUSE" 拍攝暫停中
- "CHK" 錄影尋影中

#### (16) 放大比率指示

- 攝錄影機打開後將出現。

#### (17) F 數字指示

反復按 [IRIS CLOSE] 或 [IRIS OPEN] 鈕，可選擇希望的 F 數字。  
OP + G1, OP + G2, OPEN, F2, F2.4, F2.8, F3.4, F4, F4.8, F5.6, F6.8, F8, F9.6, F11, F14, F16, F19, CLOSE

#### (18) 快門速度指示

反復按 [SHUTTER -] 或 [SHUTTER +] 鈕，可選擇希望的快門速度。  
快門速度顯示的數字為秒的分數。即：1/120 = 1/120 秒。  
1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000  
● 最初方式為 1/50 秒 (無指示)。

#### (19) 手動聚焦指示

"MF" (MF 表示手動聚焦。)  
按 [FOCUS] 鈕將打開或關閉自動聚焦方式。  
"MF" 指示將在手動聚焦方式時亮起。  
● 初始時，自動聚焦方式將被選擇 ("MF" 指示不亮)。

#### (20) 數位變焦指示

"D.ZOOM 1", "D.ZOOM 2"  
● 按 [DIGITAL ZOOM] 鈕可打開或關掉數位變焦功能。  
打開時，將顯示 "D.ZOOM 1" 或 "D.ZOOM 2"。  
("D": 表示數位。)

## 規格

NV-M9000EN/NV-M9000EN3

您的安全信息

電源：	直流12.0伏
電力消耗：	錄影狀態；9.3瓦（電池操作）

錄影系統： 4 旋轉磁頭，螺旋掃描系統  
 磁帶速度： 23.39mm/秒  
 磁帶規格： S-VHS/VHS磁帶  
 錄影 / 放影時間： 240分，用NV-E240磁帶  
 快進 / 倒帶時間： 12分以內，用NV-E180磁帶

### 影像

電視系統： CCIR；625線，50幕，PAL彩色信號  
 調制系統： 亮度；FM方位錄影  
 彩色信號；轉化副載波相轉換錄影

輸出電平：  
 影像輸出 (PHONO)； 1.0Vp-p, 75歐, 不平衡式  
 S 影像輸出端子； 1.0Vp-p, 75歐, 不平衡式

### 音頻

輸入電平： 麥克風輸入 (M3)； -70分貝,  
 輸出電平： 音頻輸出 (PHONO)； -8分貝, 4.7千歐或以上 不平衡  
 音頻軌迹： 1 軌迹 (僅標準單聲), 2 聲道 (Hi-Fi 音響立體聲) 47千歐, 不平衡式

圖像傳感器： 1/3英寸 CCD 圖像傳感器  
 鏡頭： 12：1 帶數字智能自動聚焦的可變速控制電動變焦鏡頭

聚焦長度 5.6-67mm  
 F1.6  
 自動光圈 / 手動光圈  
 濾光鏡直徑49mm

尋像器： 0.7英寸電子尋像器  
 標準亮度： 1400勒克司  
 最低亮度： 1 勒克司 (數碼增益方式)  
 影像水平折像彩色： S-VHS；大於400線 (S 影像輸出)  
 VHS；大於250線

信號 / 雜波比：  
 影像； 大於43分貝  
 音頻 (Hi-Fi)；大於47分貝  
 (標準)； 大於43分貝

音頻頻率響應：  
 Hi-Fi；50-20000赫茲  
 (標準)；80-8000赫茲

操作溫度： 0℃~40℃  
 操作濕度： 10%~80%  
 重量： 大約2.7公斤 (不含電池組)  
 尺寸： 130(寬)×245(高)×476(深)mm

VW-AM10E

您的安全信息

電源：	交流100-240伏，50-60赫茲 (自動電壓調整)
電力消耗：	44瓦
直流輸出：	直流12伏1.8安 (VHF 攝錄影機) 直流12伏1.5安 (電池組充電)

重量： 大約0.62公斤  
 尺寸： 80(寬)×54(高)×196(深)mm

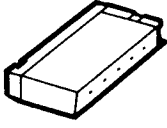
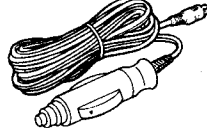
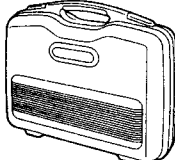

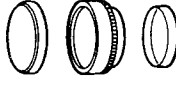


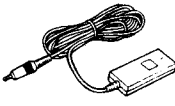

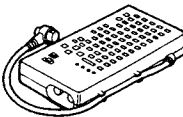
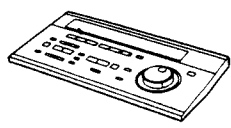
重量和尺寸為近似值。  
 規格可不預先通知而自行變更。

## Optional Accessories

選購附件

ऐच्छुक एक्सेसरीज

اختیاری منسلکات

<p>1. VW-VBF2E</p> 	<p>2. VW-ACM10E</p> 	<p>3. VW-SHM20E</p> 	<p>4. VW-LF49E</p> 	<p>5. VW-LT2E</p> 
<p>6. VW-LW2E</p> 	<p>7. VZ-CT55E</p> 	<p>8. VW-RM1E</p> 	<p>9. VW-RF7E</p> 	<p>10. VW-CG5E</p> 
<p>11. VW-EC310E</p> 				

### ENGLISH

1. Battery Pack
2. Car Battery Cord
3. System Case
4. Filter Kit
5. Tele Conversion Lens
6. Wide Conversion Lens
7. Standard Tripod
8. Pause Remote Control
9. RF-Adaptor
10. Character Generator
11. Editing Controller

**Note:**

Before using the Character Generator (optional), make sure that a backup battery is inserted in it.

### 中文

1. 電池組
2. 汽車蓄電池纜線
3. 系統攜帶箱
4. 濾光鏡組件
5. 長焦鏡頭
6. 廣角鏡頭
7. 標準三腳架
8. 暫停遙控
9. RF(射頻)轉接器
10. 字符發生器
11. 編輯控制器

**注意：**

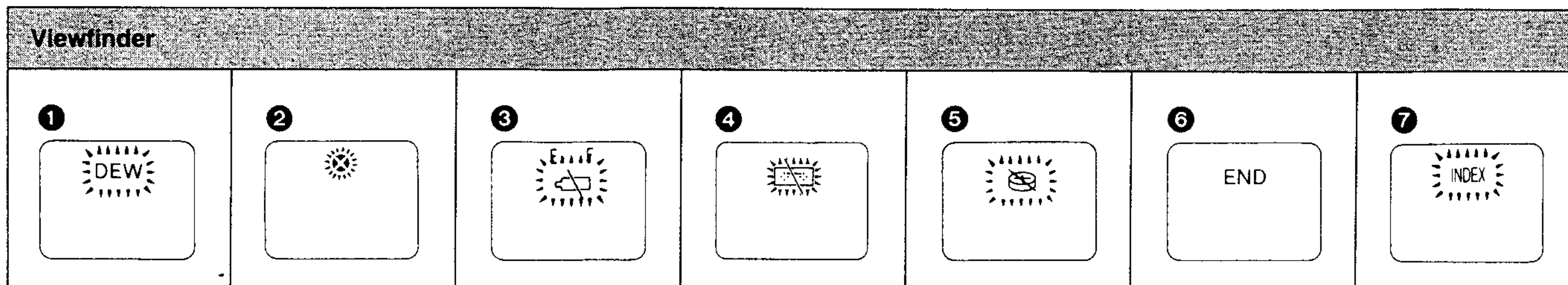
在使用字符發生器（選購附件）前，必需先插入備用電池。

## Warning/Alarm Indications in the Viewfinder

### 電子尋像器中的警告/報警指示

व्यूफ़ाइन्डर में चेतावनी/ चेतावनी के उपदेश

ویوفائینڈر میں وارننگ/الارم کی انڈیکیشنز



### ENGLISH

These indications are displayed in the Viewfinder to inform you about the conditions of the Movie Camera.

- 1** When condensation has formed inside the Movie Camera, the "DEW" Indication flashes and a few seconds later, the Movie Camera will turn itself off.  
Press the [TAPE EJECT] Button, remove the video cassette and wait until the "DEW" Indication disappears.
- 2** Video Head Clogging.  
Consult qualified service personnel.  
(See page 110.)
- 3** The "—" Indications begin to disappear one after another as the power of the Battery Pack weakens.  
When the last bar has disappeared, the Battery Indication "E---F" will flash.  
When a Battery Pack is inserted, this indication initially always shows "E---F", regardless of the Battery Pack's charging condition.
- 4** There is no video cassette inside, or the tab of the inserted video cassette is broken out.  
The indication flashes to warn that shooting is not possible. Insert a video cassette with intact tab. If the tab is broken out, seal the hole with adhesive tape.
- 5** When the Lithium Battery (for the Auto Date Function, etc.) is exhausted, this indication will flash for 10 seconds after the Movie Camera has been turned on.
- 6** During shooting: The tape has reached its end. Replace the video cassette with a new one whose tab is intact.
- 7** It appears few seconds while an index signal is being recorded.

### 中文

下列的指示均會顯示在電子尋像器上，以便讓您知道攝錄影機的操作狀態。

- 1** 攝錄影機內部凝聚濕氣時，"DEW" 指示將會閃動，且數秒鐘後，攝錄影機將自動關掉。  
請按 [TAPE EJECT] 鈕取出磁帶，並等待直至 "DEW" 指示消失。
- 2** 影像磁頭堵塞。  
送交專業維修人員。  
(參看第112頁。)
- 3** 隨着電池電力的耗盡，"—" 指示會逐漸消失。  
最後的"—" 消失後，電池指示 "E---F" 將閃動。  
請更換充足電的電池組。  
請更換充足電的電池組。當插入剛充過電的電池組時，無論電池組的充電狀況如何，該指示最初將顯示 "E---F"。
- 4** 表示未插入磁帶，或磁帶的保險片不完整，該指示閃動，警告您無法進行錄影。  
請插入保險片完整的磁帶。如果磁帶的保險片被折斷，則請用膠帶纏住孔。
- 5** 當鋰電池（用於自動日期功能等）耗盡時，打開攝錄影機後，該指示將閃動大約10秒鐘。
- 6** 拍攝過程中，磁帶已走到盡頭。請更換保險片完整的新磁帶。
- 7** 索引信號被錄製時，該指示將短暫出現。