Digital Video Camcorder

Mini **DV** Digital Video Cassette **SCD93/D99**
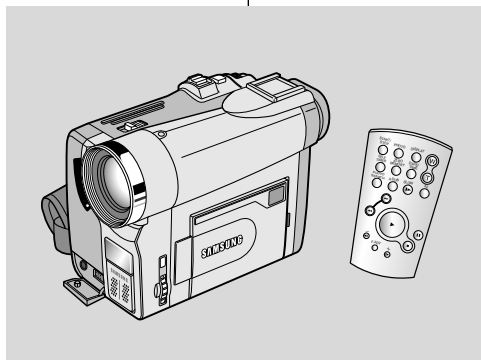
數位攝錄影機

Mini **DV** Digital Video Cassette **SCD93/D99**

AF   Auto Focus

CCD Charge Coupled Device

LCD Liquid Crystal Display

AF   自動對焦

CCD 電荷耦合器

LCD 液晶螢幕

Owner's Instruction Book

Before operating the unit, please read this instruction book thoroughly, and retain it for future reference.

SAMSUNG

ELECTRONICS

用戶說明書

在操作數位攝錄影機之前,請仔細閱讀本說明書,並將其保持好,以便將來查閱.

AD68-00656P

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Notes regarding the rotation of the LCD screen | 注意事項和安全說明

Please rotate the LCD screen carefully as illustrated.
Over rotation may cause damage to the inside of the hinge that connects the LCD screen to the Camcorder.

請按照插圖說明小心旋轉液晶螢幕。
過分旋轉液晶螢幕可能會損害液晶螢幕與數位攝影錄機之間的鉸鏈。

1. LCD screen closed.

1. 關閉時的液晶螢幕。

2. Standard recording using the LCD screen.
   ■ A LCD Monitor is opened applying a finger to LCD open knob.

2. 使用液晶螢幕的標準拍攝。
   ■ 用手指按打開鈕來打開液晶螢幕.

3. Recording when looking at the LCD screen from the top.

3. 從液晶螢幕上方俯視進行拍攝。

4. Recording when looking at the LCD screen from the front.

4. 從液晶螢幕前方正視進行拍攝。

5. Recording with the LCD screen closed.

5. 在液晶螢幕關閉的時候進行拍攝。
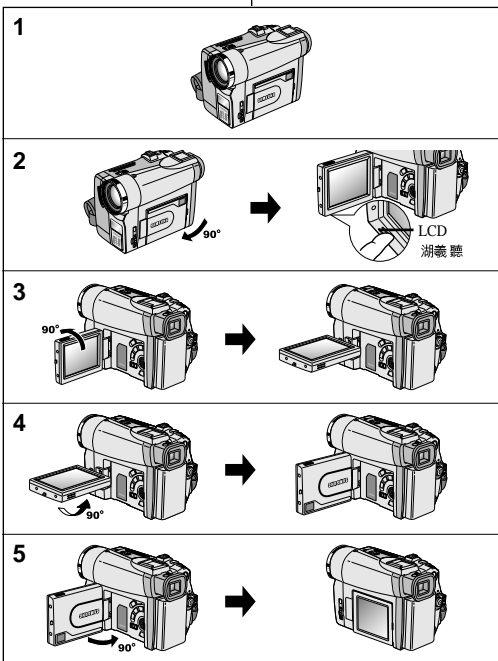
Notes and Safety Instructions　　注意事項和安全説明

Notices regarding COPYRIGHT　　　有關版權的注意事項

Television programs, video tapes, DVD titles, films, and other program materials may be copyrighted.
Unauthorized copying of copyrighted material may be against the law.

電視節目，錄影帶，DVD節目，影片和其他節目可能已受版權保護。
未經授權複製受版權保護的資料是違法行為。

Notes regarding moisture condensation　　有關結露的注意事項

1. A sudden rise in atmospheric temperature may cause condensation to form inside the camcorder.

for example:
- When you move the camcorder from a cold location to a warm location (e.g. from outside to inside during winter.)
- When you move the camcorder from a cool location to a hot location (e.g. from inside to outside during the summer.)

2. If the ■ (DEW) protection feature is activated, leave the camcorder for at least two hours in a dry, warm room with the cassette compartment opened and the battery pack removed.

1. 氣溫的突然升高會導致數位攝錄能機內部結露.

例如:
- 將數位攝錄雙功能機從寒冷的地方帶入溫暖的地方(如冬季室外將其攜帶入室內).
- 數位攝錄雙功能機從涼爽的地方帶入炎熱的地方(如夏季室內將其攜帶入室外).

2. 如果啟動了■ (DEW結露)保護功能,則請將數位攝錄影機放置在乾燥溫暖的室內至少兩個小時時,並打開影帶倉取出電池.

Notes regarding CAMCORDER　　　有關數位攝錄影機的注意事項

1. Do not leave the camcorder exposed to high temperature (above 60°C or 140°F).
   For example, in a parked car in the sun or exposed to direct sunlight.
2. Do not let the camcorder get wet.
   Keep the camcorder away from rain, sea water, and any other form of moisture. If the camcorder gets wet, it may get damaged.
   Faults caused by ingress of fluids may not be possible to repair.

1. 請不要把數位攝錄影機暴露於高溫下(60°C或140°F以上)
   例如:在陽光下停放的車內或陽光直射之下.

2. 請不要讓數位攝錄影機受潮.將數位攝錄影機遠離雨水,海水和任何形式的潮氣,如果受潮,數位攝錄影機便會受到損壞.有時,由受潮而產生的故障將無法修復.

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Notes and Safety Instructions

注意事項和安全說明

Notes regarding the battery pack

有關電池組的注意事項

- Make sure that the battery pack is fully charged before starting to record.
- To preserve battery power, keep your camcorder turned off when you are not operating it.
- If your camcorder is in CAM mode and it is left in STBY mode without being operated for more than 5 minutes with a tape installed, it will automatically turn itself off to protect against unnecessary battery discharge.
- Make sure that the battery pack is located correctly and firmly in place. Dropping the battery pack may damage it.
- A brand new battery pack is not charged.
  Before using the battery pack, you need to charge it completely.
- It is a good idea to use the viewfinder rather than the LCD when making long recordings, because the LCD uses up more battery power.

- 在開始錄製之前,保証電池組完全充飽電.
- 為了保存電池容量,請在不使用數位攝錄影機時關閉數位攝錄影機.
- 如果數位攝錄影機處在CAM照相機模式並保持在STBY(待機)模式下工作超過5分鐘,且裝入了錄影帶,機器就會自動關閉以止電池不必要的放電.
- 保証電池組已經牢固地安裝在其位,若電池組從高空摔落便會導致其損壞.
- 全新的電池組並不帶電,在使用電池組之前,請將電池組充飽電.
- 長時間錄製時,最好使用觀景器來代替液晶螢幕,因為液晶螢幕會消耗更多的電池電力.

 * When the battery reaches the end of its life, please contact your local dealer.
   The batteries have to be dealt with as chemical waste.

 * 在電池到達其使用壽命時,請與本地的經銷商聯繫,必須按化學廢品處理方式處理電池

Notes regarding the Video Head Cleaning

有關視頻磁頭清潔的注意事項

- To ensure normal recording and a clear picture, clean the video heads regularly.
  If a square block-shape distorts playback, or only a blue screen is displayed, the video heads may be dirty.
  If this happens, clean the video heads with a dry type cleaning cassette.
- Do not use a wet-type cleaning cassette. It may damage the video heads.

- 為了保証正常錄製清晰的畫面,請定期清潔視頻磁頭.如果出現馬賽克失真或在播放時只顯示藍幕,則說明可能是視頻磁頭較髒.
  如果發生這種情況,用乾式清潔帶清潔視頻磁頭.
- 不要使用溼式清潔帶,那樣有可能會損壞視頻磁頭.

Notes and Safety Instructions

注意事項和安全説明

Note regarding the LENS

有關鏡頭的注意事項

- Do not film with the camera lens pointing directly at the sun.
  Direct sunlight can damage the CCD(Charge Coupled Device).

- 拍攝時,請不要將攝影機鏡直接朝向太陽.
  陽光的直射會損壞CCD(電荷耦合器).

Notes regarding electronic viewfinder

有關電子觀景器注意事項

1. Do not position the camcorder such that the viewfinder is pointing towards the sun. Direct sunlight can damage the inside of the viewfinder. Be careful when placing the camcorder under sunlight or near a window exposed to sunlight.
2. Do not pick up the camcorder using the viewfinder.
3. Excessive force when pulling the viewfinder out may damage it.

1. 請不要將數位攝錄影機放置在觀景器朝向太陽的地方,陽光的直射會損壞觀景器的內部零件.
   在太陽下或靠近陽光照射的窗戶使用數位攝錄影機時請小心.
2. 不要從觀景器處握取數位攝錄影機
3. 觀景器過度旋轉會損壞觀景器.

Notes regarding 'Record' or 'Playback' using the LCD

有關使用液晶螢幕Record(拍攝或)Playback播放的注意事項

1. The LCD display has been manufactured using high precision tech-nology. However, there may be tiny dots (red, blue or green in color) that appear on the LCD display.
   These dots are normal and do not affect the recorded picture in any way.
2. When you use the LCD display under direct sunlight or outdoors, it maybe difficult to see the picture clearly.
   If this occurs, we recommend using the viewfinder.
3. Direct sunlight can damage the LCD monitor.

1. 液晶螢幕是採用尖端科技製造而成的,然而,液晶螢幕上可能會出現小點(紅色,藍色或綠色).
   這些小點屬於正常現象,不會影響錄製的影像.
2. 在陽光直射的條件下或戶外使用液晶螢幕時,很難看清影像.
   如果出現這種情況,我們建議使用觀景器.
3. 陽光直射會損壞液晶螢幕的顯示器.

Notes regarding the hand strap

有關手帶的注意事項

- To ensure a steady picture during filming, check that the hand strap is properly adjusted.
- Do not force your hand into the hand strap as you could damage it.

- 為了保証拍攝期間畫面的穩定,請檢查手帶是否已經被適當地調整好
- 要強迫將手伸入手帶內,那樣會損壞手帶.

Notes and Safety Instructions

注意事項和安全説明

Precautions regarding the Lithium battery

有關鋰電池的注意事項

1. The lithium battery maintains the clock function and user settings; even if the battery pack or AC adapter is removed.

2. The lithium battery for the camcorder lasts about 6 months under normal operation from time of installation.

3. When the lithium battery becomes weak or dead, the date/time indicator will display "---" when you set the DATE/TIME to ON.
In this case, replace the lithium battery with a new one (type CR2025).

4. There is a danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.

Warning: Keep the LITHIUM BATTERY out of reach of children. Should a battery be swallowed, consult a doctor immediately.

1. 即使取出的鋰電池或電源試配器,本機內的鋰電池仍會維持時鐘功能和使用者設定.

2. 從安裝之時起,本機內的鋰電池在正常操作下可使用約6個月.

3. 當鋰電池電量不足或耗盡時,若把,當您將日期/時間指示器設置為開時,會顯示 "---".
在此狀況下,請使用一顆新鋰電池(CR2025)進行更換.

4. 如果電池放置不正確,會引起爆炸的危險.
僅能使用相同型號的電池進行更換.

警告: 讓小孩遠離鋰電池.如果誤吞了電池,請立即送醫.

Getting to Know Your Camcorder

數位攝錄影機的基本常識

Features

- Digital data transfer function with IEEE1394
  By incorporating the IEEE 1394 (i.LINK™ : i.LINK is a serial data transfer protocol and inter connectivity system, used to transmit DV data) high speed data transport port, both moving and still images can be transferred to a PC, making it possible to produce or edit various images.
- USB interface for digital image data transfer
  You can transfer still images/movies to a PC using the USB interface without an add-on card.
- PHOTO
  The PHOTO function lets you capture an object as a still along with sound, while in Camera mode.
- 800x Digital zoom
  Allows you to magnify an image up to 800 times its original size.
- Color TFT LCD
  A high-resolution color TFT LCD gives you clean, sharp images as well as the ability to review your recordings immediately.
- Electronic Image Stabilizer (EIS)
  The EIS compensates for any handshake, reducing unstable images particularly at high magnification.
- Various digital effects
  The DSE (Digital Special Effects) allows you to give your films a special look by adding various special effects.
- Back Light Compensation (BLC)
  The BLC function compensates for the bright background behind a subject you're recording.
- Program AE
  The Program AE enables you to alter the shutter speed and aperture to suit the type of scene/action to be filmed.
- Digital Still Camera function
  Using Memory Stick, you can easily record and playback standard still images.
- MJPEG Recording
  MJPEG recording makes it possible to record video onto a Memory Stick.
- Mega-pixel CCD
  Your camcorder incorporates a 1.33mega-pixel CCD. High-resolution still images can be recorded to a Memory Stick.
- Built-in Flash
  You can take natural-looking flash pictures with appropriate illumination using the built-in Flash.
- Smart Shoe (SCD99 only)
  Allows the Samsung VL-S1FL Video Light/Flash or ZM-EC1 Gun Zoom Mic (both optional) to be easily attached and powered by the camcorder's own power source.

特點

- 使用IEEE1394的數位數據傳輸
  通過結合IEEE1394(i.LINK™: i.LINK是一種串行數據傳輸協議和互連性系統, 用於傳送DV數據)高速數據傳輸端口,可將動態影像和靜態影像傳輸到電腦上, 使得製作或編輯各類影像成為可能.
- 用於數位影像數據傳輸的USB接口
  您可以使用USB接口將靜態照片傳輸到電腦上,而不用外接卡.
- PHOTO(拍照)
  PHOTO(拍照)功能可以讓您在CAMERA(照相機)模式拍攝有聲的靜態照片.
- 800x 數位變焦
  允許您將要拍攝的畫面放大到原始大小的800倍
- Color TFT LCD(彩色TFT液晶螢幕)
  高畫質的彩色液晶螢幕可以為您提供清晰明亮的影像以及即時查看拍攝效果的能力.
- EIS(防手振功能)
  EIS可補償因手持拍攝時手抖而引起的影像晃動,尤其是在較高的放大倍數下, 它可以減少影像的晃動.
- 各種數位特效
  DSE(Digital Special Effects 數位特殊效果)允許您通過添加各種特殊效果來讓攝影別具一格.
- BLC(Back Light Compensation逆光補償)
  BLC功能可以補償物體後面的明亮背景.
- Program AE(自動程式曝光)
  Program AE 可以幫助您調整快門速度和光圈,以適應被攝場景動作類型.
- 數位靜態照相機功能
  使用記憶卡您可以輕易地拍攝或播放標準的靜態照片
- MJPEG 錄影
  MJPEG 錄影可以將影片錄製在記憶卡上.
- 百萬畫素的CCD
  本機安裝了1.33百萬畫素的CCD.
  高畫質的靜態照片可儲存在記憶卡上.
- 內置閃光燈
  您可利用內置的閃光燈在暗處拍攝照片
- 智能熱靴(僅限SCD99)
  VL-S1FL 太陽燈/閃光燈或指向式縮放麥克風可以輕易地安裝在它的上方,並由本攝錄影機提供電力.

ENGLISH

Getting to Know Your Camcorder

數位攝錄影機的基本常識

Accessories Supplied with camcorder
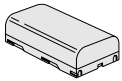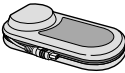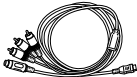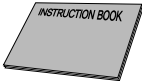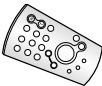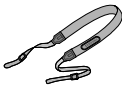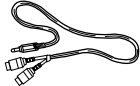
隨數位攝錄影機所提供的配件

Make sure that the following basic accessories are supplied with your digital video camera.

請確認已隨數位攝錄影機提供了下列基本配件.

Basic Accessories

1. Lithium Ion Battery pack

2. AC Power Adapter

3. AC Cord

4. Multi-AV Cable (AUDIO/VIDEO/S-VIDEO)

5. Instruction Book

6. Lithium batteries for Remote Control and Clock. (TYPE: CR2025, 2 EA)

7. Remote Control

8. Shoulder strap

9. USB cable

10. Software CD

11. Memory Stick

12. USB Audio Cable

1. 鋰離子電池組	2. 交流電源適配器	3. 交流電源線
4. 多功能AUDIO/VIDEO(音頻/視頻/S-端子)線	5. 説明書 INSTRUCTION BOOK	6. 遙控器及時鐘用鋰電池(類型:CR2025,2EA)
7. 遙控器	8. 肩帶	9. USB線
10. 軟体CD	11. 記憶卡	12. USB 音頻電纜

基本配件

1. 鋰離子電池組

2. 交流電源適配器

3. 交流電源線

4. 多功能AUDIO/VIDEO (音頻/視頻/S-端子)線

5. 説明書

6. 遙控器及時鐘用鋰電池 (類型:CR2025,2EA)

7. 遙控器

8. 肩帶

9. USB 線

10. 軟体CD

11. 記憶卡

12. USB音頻電纜

Getting to Know Your Camcorder

數位攝錄影機的基本常識

Front & Left View

正視圖和左視圖

1. 鏡頭
2. 遙控感應器
3. 內置閃光燈
4. 外接麥克風插孔
5. 多功能A/V插孔
6. 內置麥克風
7. 觀景器
8. TFT LCD顯示器
9. 手動對焦/自動對焦按鈕
10. 手對對焦轉盤
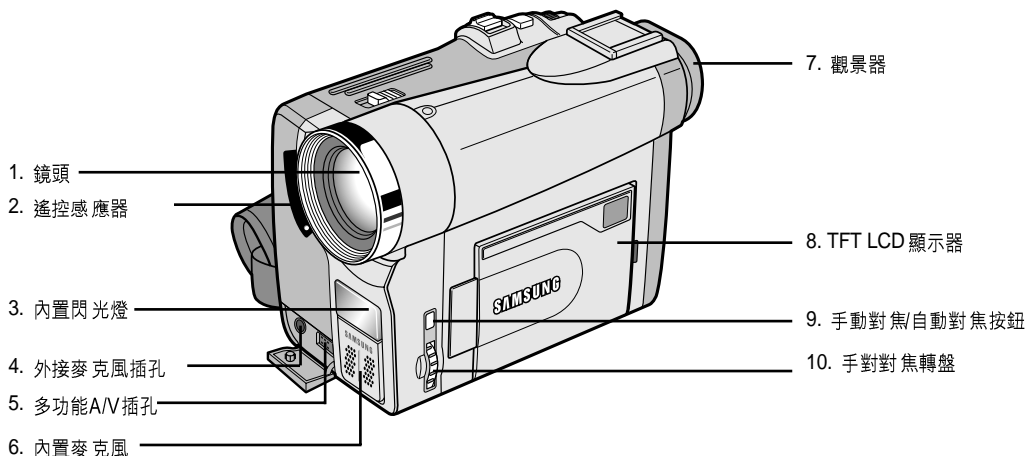
1. Lens	7. View Finder (see page 32)
2. Remote Sensor	8. TFT LCD Monitor (see page 31)
3. Built-in Flash (see page 52)	9. MF/AF button (see page 63)
4. External MIC in	10. MF Dial
5. Multi-AV Jack (see page 70)	
6. Internal MIC	

1. 鏡頭
2. 遙控感應器
3. 內置閃光燈(見52頁)
4. 外接麥克風插孔
5. 多功能A/V插孔(見70頁)
6. 內置麥克風
7. 觀景器(見32頁)
8. TFT LCD顯示器(見31頁)
9. 手動對焦/自動對焦按鈕(見63頁)
10. 手對對焦轉盤

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Getting to Know Your Camcorder

數位攝錄影機的基本常識

Left Side View

左視圖

2. EASY.Q((簡易)按鈕/多幅放映(M.PLAY)

3. 混合記錄按鈕

4. 顯示按鈕

1. 功能按鈕

5. 喇叭

7. 慢速快門(拍攝)(見61頁)/ 順序播放(存儲器播放)(見95頁)

6. 模式轉換(錄影帶/記憶卡)
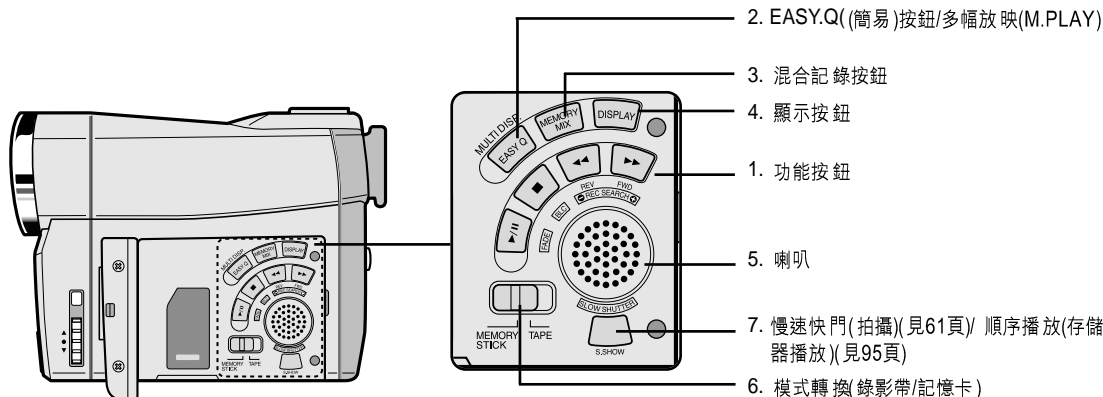
1. Function buttons

PLAYER	CAMERA	M.PLAY
▶/❚❚: (PLAY/STILL)	FADE (see page 65)	▶/❚❚ : (MJPEG PLAY/STILL)
■ : (STOP)	BLC (see page 64)	-
◀◀ : (REW)	REC SEARCH –	REV (see page 94)
▶▶ : (FF)	REC SEARCH +	FWD (see page 94)

2. EASY.Q button (CAM) /
   MULTI DISP. (M.PLAY)
3. MEMORY MIX button
   (see page 50)
4. DISPLAY button
   (see page 19)
5. Speaker
6. Mode Switch (MEMORY
   STICK/TAPE)
7. SLOW SHUTTER (CAM)
   (see page 61) / S.SHOW
   (M.PLAY) (see page 95)

1. 功能按鈕

放映機	攝影機	照片播放
▶/❚❚ : (PLAY/STILL) (播放/靜止)	FADE (淡入淡出) (見65頁)	▶/❚❚ (MJPEG 播放/暫停)
■ : (STOP) (停止)	BLC (逆光補償) (見64頁)	-
◀◀ : (REW) (快倒)	REC SEARCH - (拍攝記錄搜索)	後退(見94頁)
▶▶ : (FF) (快進)	REC SEARCH + (拍攝記錄搜索+)	前進(見94頁)

2. EASY.Q(簡易)按鈕(CAM)/
   多幅放映(M.PLAY)
3. 混合記錄按鈕(見50頁)
4. 顯示按鈕(見19頁)
5. 喇叭
6. 模式轉換(錄影帶/記憶卡)
7. 慢速快門(拍攝)(CAM)(見61頁)/
   順序播放(存儲器播放)
   (M.PLAY)(見95頁)

Getting to Know Your Camcorder

數位攝錄影機的基本常識

Right & Top View

右視圖和頂視圖

1. 變焦手柄
2. PHOTO(拍照按鈕)
3. 智能熱靴
4. 焦距調整旋鈕
5. MENU(菜單)按鈕
6. MENU菜單)選擇器
   (菜單選擇/音量)
7. 鋰電池蓋
8. 影帶取出鍵
9. 手帶扣
10. USB接口
11. DV接口
12. 耳機插孔

1. Zoom lever (see page 45)

2. PHOTO button
   (see page 68)

3. Smart Shoe (see page 100)
   (SCD99 only)

4. FOCUS Adjustment knob
   (see page 32)

5. MENU button (see page 35)
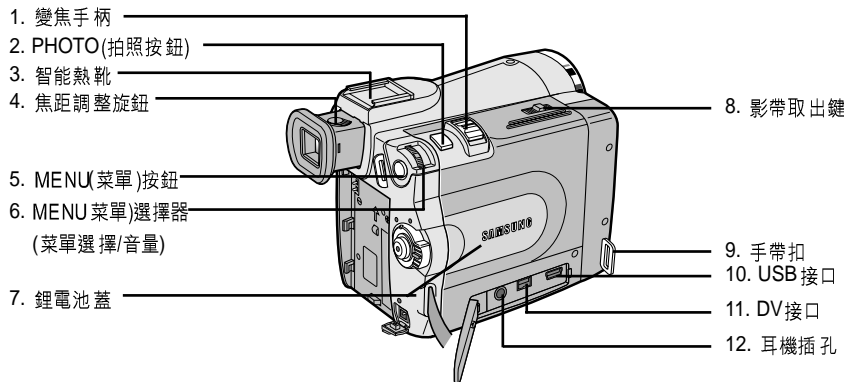
6. MENU Selector
   (MENU SELECT/VOLUME)
   (see page 35)

7. Lithium Battery Cover
   (see page 21)

8. TAPE EJECT

9. Hook for hand strap

10. USB Jack (see page 78)

11. DV in/out Jack
    (see page 76)

12. EARPHONE Jack

1. 變焦手柄(見45頁)

2. PHOTO拍照按鈕(見68頁)

3. 智能熱靴(僅限SCD99)
   (見100頁)

4. 焦距調整旋鈕(見32頁)

5. MENU(菜單)按鈕(見35頁))

6. MENU(菜單)選擇器(菜單選
   擇/音量)(見35頁)

7. 鋰電池蓋(見21頁)

8. 影帶取出鍵

9. 手帶扣

10. USB接口(見78頁)

11. DV輸出/輸入接口(見76頁)

12. 耳機插孔

Getting to Know Your Camcorder

數位攝錄影機的基本常識

Rear & Bottom View

後視圖和底視圖

2. 潛湍諶

1. MENU(菜單) 按鈕

3. CAM(攝影機) 指示

4. PLAYER(放映機) 指示

5. START/STOP
   開始/停止按鈕

6. 莨埭羲壽

7. 充電指示燈

8. DC((直流)接口

9. 記憶卡 插槽

11. 電池倉 開關

10. 三腳架 插座
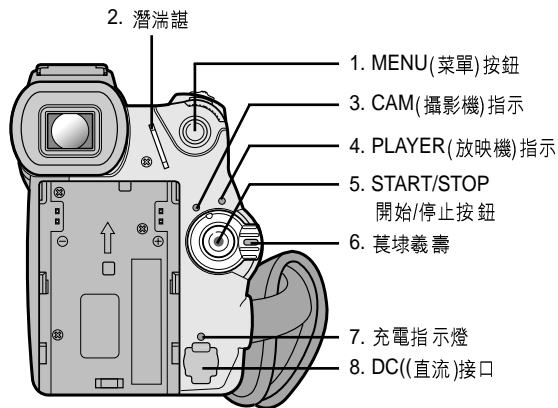
1. MENU button	7. Charging indicator	1. MENU(菜單) 按鈕	7. 充電指示燈
2. Hook for shoulder strap	8. DC Jack (see page 23)	2. 肩帶扣	8. DC(直流)接口(見23頁)
3. CAM indicator	9. Memory Stick Slot (see page 82)	3. CAM(攝影機) 指示	9. 記憶卡 插槽(見82頁)
4. PLAYER indicator	10. Tripod receptacle	4. PLAYER(放映機)指示	10. 三腳架 插座
5. START/STOP button	11. Battery Release	5. START/STOP(開始/停止 按鈕	11. 電池倉 開關
6. Power Switch (see page 28)		6. 功能開關(見28頁)	

Getting to Know Your Camcorder

數位攝錄影機的基本常識

Remote control

遙控器

1. PHOTO (陳座)
2. START/STOP (義宪/礿砦)
3. SELF TIMER (赵陳隅奀)
4. ZERO MEMORY (錨莫暮碼)
5. PHOTO SEARCH (陳扞砦翘封坷)
6. A.DUB (釉厱釉)
7. ▶▶ (FF) (辦輔)
8. ◀◀ (REW) (辦給)
9. ▶ (PLAY) (畦溫)
10. 源碼

18. 珆彡
17. 曹蝴
16. X2
15. DATA/TIME (酌/奀潔)
14. ▶ (SLOW) (鞣溫)
13. ▐▐ (STILL) (嗆砦)
12. ■ (STOP) (礿砦)
11. F.ADV (祭輔)
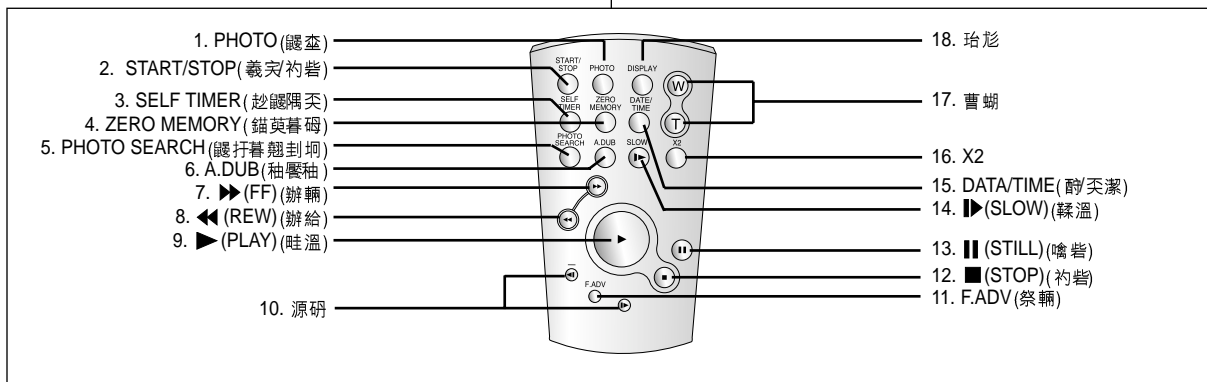
1. PHOTO	10. Direction (◀▐ , ▐▶)
2. START/STOP	(see page 72)
3. SELF TIMER (see page 20)	11. F. ADV (see page 73)
4. ZERO MEMORY	12. ■ (STOP)
(see page 74)	13. ▐▐ (STILL)
5. PHOTO Search	14. ▐▶ (SLOW) (see page 72)
(see page 68)	15. DATE/TIME
6. A.DUB (see page 66)	16. X2 (see page 73)
7. ▶▶ (FF)	17. Zoom
8. ◀◀ (REW)	18. Display
9. ▶ (PLAY)	

1. PHOTO (拍照)	9. ▶ (PLAY) (播放)
2. START/STOP (開始/停止)	10. 方向(◀▐ , ▐▶)
3. SELF TIMER (自拍定時	(見72頁)
器)(見20頁)	11. F.ADV (步進)(見73頁)
4. ZERO MEMORY (歸零記憶	12. ■ (STOP) (停止)
點)(見74頁)	13. ▐▐ (STILL) (暫停)
5. PHOTO SEARCH	14. ▐▶ (SLOW) (慢放)
(拍攝記錄搜尋)(見68頁)	(見72頁)
6. A.DUB (自動配音)(見66頁)	15. DATA/TIME (日期/時間)
7. ▶▶ (FF) (快轉)	16. X2(見73頁)
8. ◀◀ (REW) (快倒)	17. 變焦
	18. 顯示

Getting to Know Your Camcorder | 數位攝錄影機的基本常識

OSD (On Screen Display in CAM and PLAYER modes) | OSD(攝影和放映模式下的螢幕顯示)

1. Battery level (see page 26)
2. Easy mode (see pages 62)
3. DSE (Digital Special Effects) mode (see page 48)
4. Program AE (see page 42)
5. White Balance mode (see page 44)
6. BLC (Back Light Compensation) (see page 64)
7. Manual focus (see page 63)
8. Shutter speed and EXPOSURE (see page 60)
9. Zoom position (see page 45)
10. Memory Mix (see page 50)
11. DATE/TIME (see page 56)
12. USB (see page 78)
13. WL. REMOTE (see page 38)
14. WIND CUT (see page 55)
15. Audio recording mode (see page 54)
16. Zero memory indicator (see page 74)
17. Remaining Tape (measured in minutes)
18. Tape Counter
19. Operating mode
20. Record speed mode
21. PHOTO mode
22. Self recording and waiting timer (see page 20)
23. EIS (see page 47)
24. Volume control (see page 34)
25. Audio playback channel (see page 67)
26. DV IN(DV data transfer mode) (see page 77)
27. DEW (see page 7)
28. Message Line
29. FLASH mode (see page 52)
30. SLOW SHUTTER (see page 61)

OSD in CAM mode
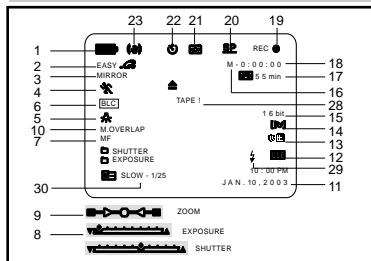
OSD in PLAYER mode
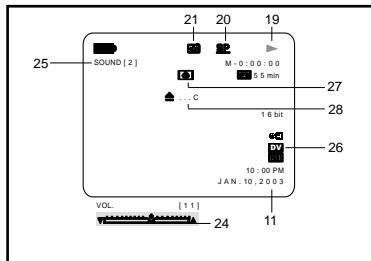
1. 電池電量(見26頁)
2. Easy (簡易) 模式(見62頁)
3. DSE (Digital Special Effects數位特殊效果)模式 (見48頁)
4. Program AE(自動程式曝光)(見42頁)
5. White Balance(白平衡)模式(見44頁)
6. BLC (Back Light Compensation逆光補償) (見64頁)
7. 手動對焦(見63頁)
8. 快門速度和EXPOSURE (曝光)(見60頁)
9. 變焦位置(見45頁)
10. 混合記錄(見50頁)
11. DATE/TIME(日期/時間)(見56頁)
12. USB (見78頁)
13. 遙控 (見38頁)
14. WIND CUT(風聲消除)(見55頁)
15. 音頻錄製模式(見54頁)
16. 歸零點記憶指示器(見74頁)
17. Remaining Tape(剩餘的錄影帶)(以分鐘計)
18. Tape Counter (錄影帶計數器)
19. 操作模式
20. 錄製速度模式
21. PHOTO (拍照模式)
22. 自拍和等待定時器(見20頁)
23. EIS (電子防手振)(見47頁)
24. 音量控制(見34頁)
25. 音頻播放頻道(見67頁)
26. DV IN(DV數據傳輸模式)(見77頁)
27. DEW((結露)(見7頁)
28. Message Line(訊息行)
29. 閃光燈模式(見52頁)
30. 慢速快門(見 61頁)

Getting to Know Your Camcorder | 數位攝錄影機的基本常識

OSD (On Screen Display in M.REC/M.PLAY modes) | OSD((M.REC記憶卡拍攝及M.PLAY記憶卡播放模式下的螢幕顯示)

A. Folder number-file number (see page 83)
B. Image counter
  - Current still image/Total number of recordable still images.
C. CARD (MEMORY STICK) indicator
D. Image recording and loading indicator
E. Photo Quality (see page 84)
F. ERASE PROTECTION indicator (see page 97)
G. Print Mark (see page 96)
H. SLIDE SHOW (see page 95)
I. MJPEG SCREEN SIZE (see page 86)
J. Image Size (see page 85)
K. Continuous Shot (see page 87)
L. Remaining Memory (MJPEG)

OSD in M.REC mode

A. 文件夾編號-文件號(見83頁)
B. 影像統計
  - 當前靜態照片號/保存的所有靜態照片數
C. 記憶卡提示
D. 錄製及加載影像提示
E. 影像品質(見84頁)
F. 防止意外刪除提示(見97頁)
G. 列印標記(見96頁)
H. 順序播放(見95頁)
I. MJPEG螢幕尺寸(見86頁)
J. 影像尺寸(見85頁)
K. 連續拍攝(見87頁)
L. 剩餘記錄(MJPEG)

OSD in M.PLAY mode

Turning the OSD on/off (On Screen Display) | 打開/關閉OSD(螢幕顯示)

● Turning OSD on/off

  Press the DISPLAY button on the left side panel.
  - Each press of the button toggles the OSD function on and off.
  - When you turn the OSD off,
    In CAM mode: The STBY, REC, EASY.Q modes are always displayed on the OSD,
    even when the OSD is turned OFF. A key input will be displayed for 3 seconds then turn off.
    In PLAYER mode: When you press any Function button, the function is displayed on the OSD for 3 seconds before it turns off.

● 打開/關閉螢幕顯示
  按下左側面DISPLAY(顯示)按鈕.
  - 每次按下該按鈕,都會在打開/關閉螢幕顯示功能之間進行一次切換.
  - 當您關閉螢幕顯示
    在CAMERA攝影機模式下:螢幕顯示總是顯示STBY(待機),REC(錄製),EASY.Q(簡易)模式,甚至當螢幕顯示是關閉的狀態.按下按鈕後會出現3秒鐘的狀況顯示後才關閉.
    在PLAYER放映模式下:按下任何的功能鍵時,在螢幕顯示關閉之前仍會出現該狀態約3秒鐘.

● Turning the DATE/TIME on/off
  - The DATE/TIME is not affected when the OSD function is switched ON or OFF.
  - To turn the DATE/TIME on or off, access the menu and change the DATE/TIME mode. (see page 56)
  - You may also use the Quick Menu to turn the DATE/TIME ON or OFF. (see page 58) (only in CAM/M.REC mode)

● 打開/關閉DATE/TIME(日期/時間)
  - 打開或關閉螢幕顯示功能時,日期/時間不會受到影響.
  - 若要打開或關閉日期/時間,請進入菜單的DATE/TIME模式來更改(見56頁)
  - 您也可使用快捷菜單來打開/關閉日期/時間(見58頁)(只能在CAM(攝影機),M.REC(照片錄製)模式下)

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Preparation

準備

How to use the Remote Control

如何使用遙控器

Battery Installation for the Remote Control

- � You need to insert or replace the lithium battery when :
  - You purchase the camcorder.
  - The remote control doesn't work.
- � Ensure that you insert the lithium cell correctly, following the + and - markings.
- ✖ Be careful not to reverse the polarity of the battery.
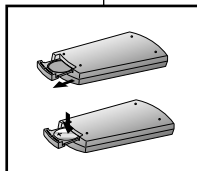
遙控電池的安裝

- ✖ 遇到下列情況之一時,必須裝入或更換鋰電池:
  - 剛購買本機後
  - 遙控器不能正常工作時.
- ✖ 按照+和-的正負標記,正確的裝入鋰電池.
- ✖ 注意不要顛倒鋰電池的正負極性.

Self
Timer

Self Record using the Remote Control

When you use the Self Timer function on the remote control, the recording begins automatically in 10 seconds.

1. Set the camcorder to CAM mode.

2. Press the SELF TIMER button until the appropriate indicator is displayed in the viewfinder.

3. Press the START/STOP button to start the timer.
   - Self Timer starts counting down from 10 with a beep sound.
   - In the last one second of the countdown, the beep sound gets faster, then recording starts automatically.
   - If you want to cancel the Self Timer function before recording, press the SELF TIMER button.

4. Press START/STOP again when you wish to stop recording.

使用遙控器的SELF RECORD自拍定時器

當使用遙控器上Self Timer(自拍定時器)功能時,本機將在10秒鐘後自動開始錄製.

1. 把本機設置為CAM攝影機模式.

2. 按下SELF TIMER(自拍定時器)按鈕,直到LCD或觀景器中顯示相應的指示標誌.

3. 按下START /STOP(開始/停止)按鈕啟動自拍器.
   - 蜂鳴音響後,10秒鐘後開始拍攝或錄影.
   - 倒時計時的最後1秒蜂鳴音會越快,然後開始拍攝.
   - 如果您想取消自拍時再次按下自拍定時器按鈕.

4. 當您希望停止記錄時,再次按START/STOP(開始/停止)

Preparation

準備

Lithium Battery Installation

鋰電池的安裝

� The lithium battery maintains the clock function and preset contents of the memory; even if the battery pack or AC power adapter is removed.

✣ The lithium battery for the camcorder lasts about 6 months under normal operation from the time of installation.

✣ When the lithium battery becomes weak or dead, the date/time indicator will display "---" when you set the DATE/TIME to ON.
When this occurs, replace the lithium battery with CR2025 type.

✣ 即使取出了鋰電池或電源試配器,本機內的鋰電池仍會維持時鐘功能和使用者設定.

✣ 在正常操作下,從安裝之時起,本機內的鋰電池可使用約6個月.

✣ 當鋰電池電量不足或耗盡時,若把電源開關設置於日期/時間指示標誌會閃爍"---".
在此狀況下,請使用一顆新鋰電池(CR2025)進行更換.

1. While pressing the hole with a pen, open the lithium battery cover from the camcorder.

2. Insert the lithium battery with the $\oplus$ side facing upwards.

3. Slide the lithium battery cover in the direction of the arrow until it clicks.

1. 用筆尖在孔中按下,打開鋰電池蓋.

2. 把鋰電池的正極($\oplus$)朝上插入電池座中.

3. 按照箭頭方向滑動鋰電池蓋,直到發出一聲"喀".
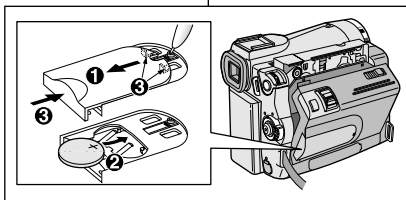
Notes

■ The lithium battery must be inserted in the correct direction.
■ Do not pick up the battery using tweezers or other metal tools - this will cause a short circuit.
■ Do not recharge, disassemble, heat or immerse the battery in water, to avoid the risk of explosion.

Warning: Keep the LITHIUM BATTERY out of the reach of the children.
Should any battery be swallowed, consult a doctor immediately.

注意

■ 鋰電池必須按正確方向插入.
■ 不要用鑷子或其他金屬工具拾取鋰電池,因為會引起短路.
■ 不要放電,分解,加熱或在水中浸泡,以避免發生爆炸.

警告 : 讓小孩遠離鋰電池.
如果誤吞了電池,請立即送醫.

Preparation

準備

Adjusting the Hand Strap

調整手帶

It is very important to ensure that the Hand strap has been correctly adjusted before you begin your recording.

The hand strap enables you to :

- Hold the camcorder in a stable, comfortable position.
- Press the Zoom and START/STOP button without having to change the position of your hand.

在開始 拍攝之前,重要的 是要保証手 帶的正確的 調整.

手帶使您能夠:

- 穩定而 舒適地握住 本機.
- 不需改 變手的位置,便可 按下ZOOM變焦,START /STOP(開始/停止) 按鈕.

Hand strap

a. Pull open the Hand Strap cover and release the Hand Strap.
b. Adjust its length and stick it back onto the Hand Strap cover.
c. Close the Hand Strap cover again.

手帶

a. 拉開手 帶護罩,鬆開手 帶.
b. 整手帶 的長度,再將其 粘回手帶護 罩上.
c. 重新蓋上 手帶護罩
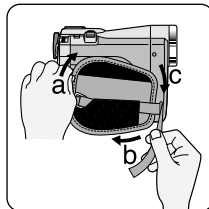
Shoulder Strap

The Shoulder Strap enables you to carry your camcorder around in complete safety.

1. Insert the end of strap into the Shoulder Strap hook on the camcorder.
   Insert the other end of strap into ring inside hand strap.
2. Thread each end into the buckle, adjust the length of the strap and then pull it tight in the buckle.
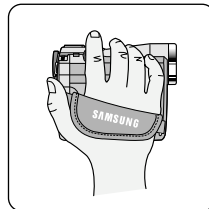
肩帶

在出遊 時,您可以 使用肩帶方 便而安全的 攜帶本機.

1. 把肩帶 的末端插到 機身上肩帶 扣內.
   把肩帶 的另一端插 入手持帶內 的環中.
2. 把各端 穿入帶扣中,調整帶 長,然後在 帶 扣中將其拉緊.

Preparation

準備
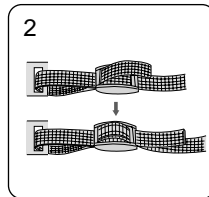
Connecting a Power Source

連接電源

There are two types of power source that can be connected to your camcorder.
- The AC Power Adapter and AC cord : used for indoor recording.
- The Battery Pack : used for outdoor recording.

本機可以使用兩種電源.
- 交流電源適配器和交流線,適用於室內拍攝.
- 電池組:適用於室外拍攝.

To use the AC Power adapter and DC Cable

使用交流電源適配器和直流電源線

1. Connect the AC Power adapter to the AC cord.
2. Connect the AC cord to a wall socket.

> **Note**

- The plug and wall socket type may differ according to your resident country.
3. Connect the DC cable to the DC jack socket of the camcorder. (When the battery is attached on the set, you should keep outside the projection of the DC cable.)
4. Set the camcorder to each mode by holding down the tab on the power switch and turning it to the CAM or PLAYER mode.

1. 將交流電源適配器和交流線相連.
2. 將交流電源適配器與牆上電源插座相連

> 注意

- 按照居住區域的不同,插頭和牆上的電源插座類型可能會有所不同.

3. 將直流線與本機的直流插孔相連. (當電池組在本機上時,您不要使用直流線).
4. 按住功能開關的旋鈕,將電源開關推到CAM(攝影機), PLAYER(放映機)等模式,便可以為本機設置各種模式.

To select the CAMCORDER mode

選擇攝影機模式

- If you want to use this unit as a camcorder, set the mode switch to TAPE position.
- If you want to use this unit as a DSC (Digital Still Camera), set the mode switch to MEMORY STICK position.

- 若您想使用攝影機的功能,請將模式設置為錄影帶的位置.
- 若您想使用DSC(數位照相機)的功能,請將模式設置記憶卡位置.

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Preparation

準備

Using the Lithium Ion Battery Pack

使用鋰離子電池組

✽ The amount of continuous recording time available depends on :
  - The type and capacity of the battery pack you are using.
  - How often the Zoom function is used.
    It is recommended that you have several batteries available.

✽ 連續拍攝時間的長短取決於.
  - 所使用的電池組的型號和容量.
  - 使用ZOOM(變焦)拍攝能的頻繁程度.
    建議您準備幾個備用電池組.

Charging the Lithium Ion Battery Pack

對鋰離子電池組充電

1. Attach the battery pack to the camcorder.
2. Connect the AC Power adapter to an AC cord and connect the AC cord to a wall socket.
3. Connect the DC cable to the DC jack socket on the camcorder.
4. Turn the Camera power switch to off, and the charging indicator will start to flash, showing that the battery is charging.

1. 將電池組安裝到本機內.
2. 將交流電源適配器與交流電源線相連, 並將交流電源線插入到牆上的電源插座 中.
3. 將直流電源線與本機的直流插孔相連
4. 關閉本機的功能開關,充電指示燈開始 閃爍,表明電池正在充電.
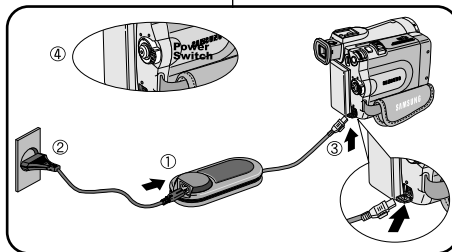
Blinking time	Charging rate
Once per second	Less than 50%
Twice per second	50% ~ 75%
Three times per second	75% ~ 90%
Blinking stops and stays on	90% ~ 100%
On for a second and off for a second	Error - Reset the battery pack and the DC cable

閃爍次數	充電率
1秒1次	低於50%
1秒2次	50% ~ 75%
1秒3次	75% ~ 90%
閃爍停止,充電指示燈一直亮著	90 ~ 100%
亮1秒,滅1秒	故障-重裝電池組和直流電源線

5. When the battery is fully charged, disconnect the battery pack and the AC Power adapter from the camcorder.
   - Even with the power switched off, the battery pack will still discharge if it is left connected to the camcorder.

5. 在充電完畢時,從本機上取下交流電源試配器和電池.
   - 如果電池組仍與機身相連,即使電源開關已經斷電, 電池仍會放電.

Notes

注 意
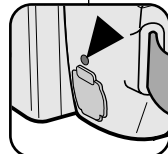
- The battery pack may have some charge in it at the time of purchase.
- To prevent reduction in the life and capacity of the battery pack, always remove it from the camcorder after it is fully charged.

- 在購買電池組時,電池組可能已經充了一些電.
- 為了防止電池組壽命和容量下降,在充飽電後,應將電池組與從本機 中取出.

Preparation

準備

Using the Lithium Ion Battery Pack

使用鋰離子電池組

Table of continuous recording time based on model and battery type.

基於不同電池型號和類型的連續錄影時間表

- � If you close the LCD screen, it switches off and the viewfinder switches on automatically.
- ✜ The continuous recording times given in the table above are approximations.
  Actual recording time depends on usage.

- ✜ 如果合上液晶螢幕,螢幕會自動關閉而且觀景器會自動打開.
- ✜ 本表所列出的連續錄影時間為一近似值.

Time Battery	Charging time	Continuous recording time	
		LCD ON	Viewfinder ON
SB-L110	Approx. 1hr 40min	Approx. 1hr 20min	Approx. 2hr
SB-L220	Approx. 3hr 30min	Approx. 3hr	Approx. 4hr 10min

電池 萇喀	充電時間	連續錄影時間	
		LCD(開啟液晶螢幕	開啟觀景器
SB-L110	約1小時40分鐘	約1小時20分鐘	約2小時
SB-L220	約3小時30分	約3小時	約4小時10分鐘

Notes

- ■ The battery pack should be recharged in an environment of between 32°F (0°C) and 104°F (40°C).
- ■ The battery pack should never be charged in a room temperature that is below 32°F (0°C).
- ■ The life and capacity of the battery pack will be reduced if it is used in temperatures below 32°F (0°C) or left in temperatures above 104°F (40°C) for a long period, even when it is fully recharged.
- ■ Do not put the battery pack near any heat source (fire or flames, for example).
- ■ Do not disassemble, process, pressure, or heat the Battery Pack.
- ■ Do not allow the + and - terminals of the battery pack to be short-circuited. It may cause leakage, heat generation, induce fire and overheating.
- ■ When using SB-L220 Battery, use of Viewfinder is inconvenient. The use of LCD Monitor is preferable.

注意

- ■ 電池組應在室溫32℉(0℃)到104℉(40℃)的環境下充電.
- ■ 電池在低於室溫32℉(0℃)的時候請勿充電或更換電池.
- ■ 如果在溫度低於32℉(0℃)或高於104℉(40℃)的條件下長期使用電池組,即使是充飽電,電池組壽命和容量也會降低.
- ■ 不要將電池組放置靠近熱源處(例如火或火焰).
- ■ 不要分解,處理,擠壓或者加熱電池組.
- ■ 不允許電池組的+正-負極造成短路,這會引起漏電,發熱起火或過熱.
- ■ 使用SB-L220型電池時,不方便使用觀景器,推薦使用液晶螢幕.

Preparation

準備

Battery level display

• The battery level display indicates the amount of power remaining in the battery pack.

a. Fully charged

b. 20~40% used

c. 40~80% used

d. 80~95% used

e. Completely used (flickers)
(The camcorder will turn off soon, change the battery as soon as possible)

電池電量顯示標誌

• 電池電量顯示標誌可指示電池組的剩餘電量

a. 已充飽電

b. 已使用20~40%

c. 已使用40~80%

d. 已使用80~95%

e. 電量完全用盡(閃爍)
(本機即將關閉,請盡快充電)

a
b
c
d
e

✂ Please refer to the table on page 25 for approximate continuous recording times.

✂ The recording time is affected by environmental temperature and conditions.
The recording time becomes very short in a cold environment.
The continuous recording times in the operating instructions are measured using a fully charged battery pack at 77°F(25°C).
As the environmental temperature and conditions may differ when you actually use the camcorder, the remaining battery time may not be the same as the approximate continuous recording times given in these instructions.

✂ 有關連續錄製的時間,請參見第25頁中近似的時間表.

✂ 錄製時間受溫度和環境條件的影響.在低溫環境下,拍攝時間將變得十分短.
本使用說明書中的連續拍攝時間是在使用完全充飽電的電池,且在77℉(25℃)的條件下測量的.由於您在使用本機時,實際的環境有可能各異,因此實際的連續拍攝時間也會不同於表上列出的近似時間.

Tips for Battery Identification

A charge mark is provided on the battery pack to help you remember whether it has been charged or not. Two colors are provided (red and grey)-you may choose which one indicates charged and which indicates discharged.

電池識別方式

電池組上提供了充電識別標記,它可以讓您識別是否已經充過電.
有兩顏色(紅色和灰色)-您可以選擇任意一種作為已充完電或已電的標記.

Preparation

準備

Inserting and Ejecting a Cassette

插入和退出影帶

✂ When inserting a tape or closing a cassette holder, do not apply excessive force.
This may cause a malfunction.

✂ Do not use any tapes other than Mini DV cassettes.

✂ 插入影帶或關上影帶倉時,不得用力過猛,否則可能會導致故障.

✂ 不得使用不是DV影帶的錄影帶.

1. Connect a power source and slide the TAPE EJECT switch and open the cassette door.
   - The cassette holding mechanism rises automatically.
2. Insert a tape into the cassette holder with the tape window facing outward and the protection tab toward the top.
3. Press the area labelled PUSH on the cassette holding mechanism until it clicks into place.
   - The cassette is loaded automatically.
4. Close the cassette door.
   - Close the door completely until you can hear a "click".

1 **2**

3 **4**
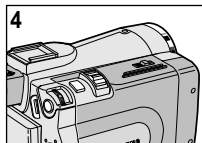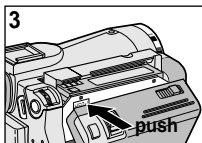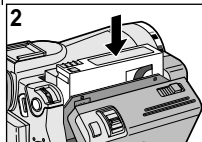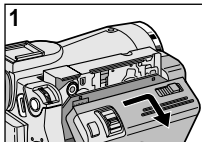
push

1. 連接電源並推動 TAPE EJECT(錄影帶打開/退出)開關來打開影帶倉蓋.
   - 影帶架會自動抬起
2. 將錄影帶插入影帶架,並讓錄影帶觀察窗朝外和保護標籤朝上.
3. 推動影帶架的 PUSH(推)標記,直到影帶架自動卡到位.
   - 錄影帶會自動裝上.
4. 關上影帶倉蓋.
   - 完全蓋上影帶倉蓋直到聽到一聲"喀"為止.

Note

注意

When you have recorded something that you wish to keep, you can protect it so that it will not be accidentally erased.

a. Protecting a tape :
   Push the safety tab on the cassette so that the hole is uncovered.

b. Removing the tape protection :
   If you no longer wish to keep the recording on the cassette, push the write-protect tab back so that it covers the hole.

• How to store a tape

a. Avoid places with magnets or magnetic interference.

b. Avoid humidity and dust prone places.

c. Keep the tape in an upright position and avoid storing it in direct sunlight.

d. Avoid dropping or knocking your tapes.

a. SAVE

b. REC

當您拍攝完一捲錄影帶並希望保存下來時,請將它設置為保護狀態,以防止其中的內容被意外的抹除掉.

a. 保護錄影帶:
   推動錄影帶上的安全保護標籤讓小孔不被蓋住.

b. 取消錄影帶的保護:
   如果不想保存錄影帶的內容時,請推回安全保護標籤讓小孔蓋住.

• 如何保存錄影帶

a. 不得與磁性物品一同放置,也不得置於磁場中.

b. 不得放置在溼度高,塵土多的地方.

c. 請將錄影帶直立放置,並且讓其遠離陽光的照射.

d. 祥不得讓錄影從高處掉落或受到撞擊.

Basic Recording

基本拍攝技術

Making your First Recording

首次拍攝

1. Connect a Power source to the camcorder. (see page 23)
   (A battery pack or a AC power adapter)
   ■ Insert a cassette. (see page 27)

2. Remove the LENS CAP.

3. Set the power switch to the CAM position.
   ■ Open the LCD monitor.
   ■ Set the mode switch to the TAPE position.
     Make sure that STBY is displayed.
   ■ If the protection tab of the cassette is open, STOP and PROTECTION! will be displayed.
   ■ Make sure the image you want to record appears in the LCD monitor or viewfinder.
   ■ Make sure the battery level indicates that there is enough remaining power for your expected recording time.

4. To start recording, press the START/STOP button.
   ■ REC is displayed in the LCD.
     To stop recording, press the START/STOP button again.
   ■ STBY is displayed in the LCD.
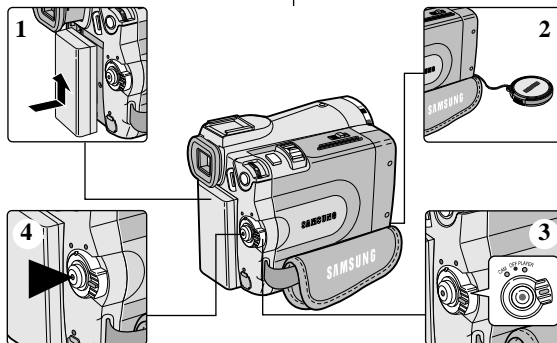
1. 將本機 連接電源(見23頁)(電池組 或電源 適配器)
   ■ 插入錄影帶(見27頁)

2. 打開鏡頭蓋,並將其掛在手帶上.

3. 將本機設置為CAM(攝影機模式).
   ■ 打開液晶螢幕.
   ■ 將模式按鈕設置為TAPE(錄 影帶)模式.確認顯示STBY(待 機).
   ■ 饍如果錄影帶的安全保護標 籤時會出現STOP和 PROTECTION!.
   ■ 請確定您要拍攝的畫面已經出現在液晶螢幕或觀景器上.
   ■ 確定電池電量的指示燈顯示有足夠的電量用於拍攝.

4. 饍如要開始拍攝,請按下START/STOP(開始/停止)按鈕.
   ■ 液晶螢幕會顯示出REC(拍攝)標誌.如果要停止拍攝,再次按下 START/STOP(開始/停止)按鈕即可.
   ■ 液晶螢幕將會顯示STBY(待機)標誌.

Basic Recording

基本拍攝技術

When a cassette is loaded and the camcorder is left in the STBY mode for more than 5 minutes without being used,
it will switch off automatically.
To use it again, push the START/STOP button or set the Power switch to OFF and then back to CAM.
This Auto Power off feature is designed to save battery power.

當裝入 錄影帶時,本機處 於STBY(待機)模式,如5分鐘未 拍攝,機器自動斷電.
如需再 次使用,則請推動START/STOP(開始/停止)按鈕或 將POWER開關切換 到OFF(關閉),然後再 切換回CAM(攝影機)位置.
這種自動關閉電源 的省電功能是為了節省 電池電量而設計的.

Record Search (REC SEARCH)

拍攝記 錄搜索(REC SEARCH)

✂ You can view a recording using the REC SEARCH +, – function in STBY mode. REC SEARCH – enables you to play the recording backwards and REC SEARCH + enables you to play it forwards, for as long as you keep each button pressed down.
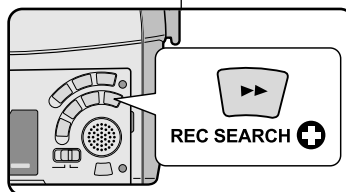
✂ 您可以 在STBY(待機)模式時,使用REC SEARCH + , – 功能來 查看拍攝記 錄. 只要您 按下相應的 鍵,本機會 照您所按的 方向播放拍攝記錄,其中REC SEARCH + 可以向前播放,REC SEARCH – 可以 向後播放.

✂ If you press the REC SEARCH – button in STBY mode, your camcorder will play in reverse for 3 seconds and return to the original position automatically.
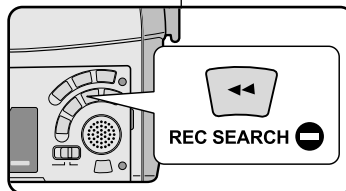
✂ 餚如果 在STBY(待機)模式下 按REC SEARCH – (向後搜 索)按鈕,本機會 自動 向後播 放3秒鐘後,再自動回到原來的 位 置.

Note

Mosaic shaped picture distortion may appear on the screen while in Record Search mode.

注意

在REC SEARCH(拍攝記 錄搜索)模式下,螢幕會 出現馬 賽克狀的失 真.

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Basic Recording

基本拍攝技術

Hints for Stable Image Recording

拍攝穩定畫面須知

- While recording, it is very important to hold the camcorder correctly.
- Fix the LENS cap firmly by clipping it to the hand strap. (refer to the figure)

- 拍攝時,正確的握持本機是非常重要.
- 將鏡頭蓋鎖在手帶上牢牢地固定住.(參見圖示)

Recording with the LCD monitor

1. Hold the camcorder firmly using the hand strap.
2. Place your right elbow against your side.
3. Place your left hand under or beside the LCD to support and adjust it. Do not touch the built-in microphone.
4. Choose a comfortable, stable position for the shots that you are taking.
   You can lean against a wall or on a table for greater stability.
   Do not forget to breathe gently.
5. Use the LCD frame as a guide to determine the horizontal plane.
6. Whenever possible, use a tripod.
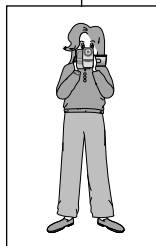
使用LCD液晶螢幕拍攝

1. 使用手帶緊緊地握住本機.
2. 將右肘貼緊身體.
3. 將左手放在液晶螢幕下方或側面,支撐住並調液晶螢幕. 注意不能觸及麥克風
4. 選擇一個舒適穩定的姿勢來進行拍攝.您可以靠在牆壁 或桌面上,以提高穩定度.在拍攝時,請保持均勻柔和的呼 吸.
5. 將液晶螢幕框用作確保水平的基準.
6. 盡可能地使用三腳架

Recording with the Viewfinder

1. Hold the camcorder firmly using the hand strap.
2. Place your right elbow against your side.
3. Place your left hand under the camcorder to support it.
   Be sure not to touch the built-in microphone.
4. Choose a comfortable, stable position for the shots that you are taking. You can lean against a wall or on a table for greater stability.
   Do not forget to breathe gently.
5. To view an object through the viewfinder, pull it out until you hear the 'click' sound.
   Excessive force may cause damage to the viewfinder.
6. Place your eye firmly against the viewfinder eyecup.
7. Use the viewfinder frame as a guide to determine the horizontal plane.
8. Whenever possible, use a tripod.

使用觀景器拍攝

1. 使用手帶緊緊地握住本機.
2. 將右肘貼緊身體.
3. 將左手放在本機下方支撐機器.注意不能觸及麥克風.
4. 選擇一個舒適穩定的姿勢來進行拍攝.您可以靠在牆壁 或桌面上,以提高穩定度.在拍攝時,請保持均勻柔和的呼 吸.
5. 若要透過觀景器拍攝時,請把觀景器拔出直聽到一聲茌 冝為止,用力過度會損傷觀景器.
6. 將眼睛緊貼觀景器的眼罩.
7. 將觀景器的框用作確保水平的基準.
8. 盡可能地使用三腳架

Basic Recording

基本拍攝技術

Adjusting the LCD

調整液晶螢幕

� Your camcorder is equipped with a 2.5 inch color Liquid Crystal Display(LCD) screen, which enables you to view what you are recording or playing back directly.

✂ Depending on the conditions under which you are using the camcorder (indoors or outdoors for example), you can adjust ;
  ■ BRIGHT SELECT
  ■ BRIGHT ADJUST
  ■ COLOR ADJUST

✂ 本機裝備有一個2.5英吋的彩色液晶螢幕,它能夠幫助您直接觀看正拍攝的影像或重放映的影像.

✂ 根據您使用本機的條件(例如室內或室外),您可以進行以下的調整:
  ■ BRIGHT SELECT(亮度選擇)
  ■ BRIGHT ADJUST(亮度調整)
  ■ COLOR ADJUST(顏色調整)

1. Set the POWER switch to CAM position.
   ■ In the PLAYER mode, you may only setup the LCD while the tape is playing.

2. Open the LCD screen, and the LCD switches on.

3. Press the MENU button.

4. Move the MENU SELECTOR so that VIEWER is highlighted and then push the MENU SELECTOR.

5. Move the MENU SELECTOR so that LCD ADJUST is highlighted.

6. Push the MENU SELECTOR to enter the sub-menu.

7. Move the MENU SELECTOR so that it highlights the menu item you want to adjust (BRIGHT SELECT, BRIGHT ADJUST, COLOR ADJUST).

1. 將POWER(電源)開關切換到CAM(攝影機)模式.
   ■ 在PLAYER(放映)模式下,只有在播放錄影帶時才能設置液晶螢幕.

2. 打開液晶螢幕,並將開關撥至LCD(液晶螢幕)處.

3. 按MENU(菜單)按鈕.

4. 移動MENU SELECTOR(菜單選擇器),以便VIEWER(取景器)高亮度顯示,然後按下MENU SELECTOR(菜單選擇器)按鈕.

5. 移動MENU SELECTOR(菜單選擇器)以使LCD ADJUST(調整液晶螢幕) 高亮度顯示.

6. 按下MENU SELECTOR(菜單選擇器)按鈕,進入子菜單.

7. 移動MENU SELECTOR(菜單選擇器),讓您希望調整的項目以高亮度顯示. BRIGHT SELECT(亮度選擇),BRIGHT ADJUST(亮度調整), COLOR ADJUST(顏色調整)

```
        CAM MODE
☐ INITIAL
☐ CAMERA
☐ A/V
☐ MEMORY
☐ VIEWER   ○ LCD ADJUST
           ○ DATE/TIME
           ○ TV DISPLAY
```

```
        CAM MODE
☐ VIEWER SET

☐ LCD ADJUST
☐ DATE / TIME
☐ TV DISPLAY
```

* 躺燮衾SCD99

```
        CAM MODE
☐ VIEWER SET

☐ LCD ADJUST

  ○ BRIGHT SELECT ······ NORMAL
  ○ BRIGHT ADJUST ········ [ 1 8 ]
  ○ COLOR ADJUST ········· [ 1 8 ]
```

```
        CAM MODE
☐ LCD ADJUST

☐ BRIGHT SELECT

  ○ NORMAL
  ○ SUPER
  ○ BACK LIGHT
```

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Basic Recording

基本拍攝技術
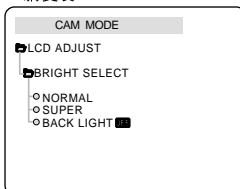
8. Push the MENU SELECTOR button again.
   - You may select NORMAL, SUPER or BACK LIGHT **OFF** (SCD99 only) in the BRIGHT SELECT feature and push the MENU SELECTOR to save the setting.
     - When you use the LCD BACK LIGHT **OFF** mode in a dark location or indoors, viewing the image may be difficult. (SCD99 only).
   - Use the MENU SELECTOR to adjust the value of BRIGHT ADJUST and COLOR ADJUST.
   - You can set values for BRIGHT ADJUST between 00 ~ 35 and COLOR ADJUST between 00 ~ 35.
9. Press the MENU button to finish the setting.

8. 再按下MENU SELECTOR(菜單選擇器)按鈕.
   - 可在BRIGHT SELECT(亮度選擇)功能中選擇NORMAL(標準)SUPER(超亮), 或BACK LIGHT **OFF** (僅限SCD99)並按MENU SELECTOR(菜單選擇器)按鈕以保存設置.
     當您在屋內或黑暗的地方使用BACK LIGHT **OFF** 模式時,觀看影像會較困難.(僅限 SCD99)
     - 使用MENU SELECTOR(菜單選擇器)調節BRIGHT ADJUST(亮度調整)和COLOR ADJUST(顏色調整)值.
   - 使用MENU SELECTOR(菜單選擇器)調節BRIGHT ADJUST(亮度調整)和COLOR ADJUST(顏色調整)值.
   - 可將BRIGHT ADJUST(亮度調整)值設置在00~35之間, COLOR ADJUST(顏色調整)值設置在00~35之間.

9. 按下MENU(菜單)按鈕以完成設置.

Using the VIEWFINDER

使用VIEWFINDER(觀景器)

� The VIEWFINDER will not work when the LCD is open.
✱ In order to bring it into focus, pull the viewfinder forward until you here a click.

✱ 只要液晶螢幕處於開啟狀態,觀景器就會關閉.
✱ 要使用觀景器,向前拉出觀景器直到聽到荅荅一聲.

Adjusting the Focus

Use the focus adjustment knob of the VIEWFINDER to focus the picture. (refer to figure)

調整焦距

使用觀景器的焦距調整旋鈕對影像進行對焦 (請參考圖示)

Basic Recording

基本拍攝技術

Playing back a tape you have recorded on the LCD

在液晶螢幕上播放拍攝的錄影帶

� You can monitor the playback picture on the LCD monitor.

✤ Make sure that the battery pack is in place.

✤ 您可以液晶螢幕上觀看播放的影像.

✤ 請確定已裝好電池組.

1. Set the mode switch to TAPE.

2. Hold down the power switch tab and turn it to the PLAYER position.
   - A confirmation sound beeps.

3. Insert the tape you wish to view. (see page 27)

4. Open the LCD screen.
   Adjust the angle of the LCD screen and set the brightness or color if necessary.

5. Press the ◀◀ (REW) button to rewind the tape to the starting point.
   - To stop rewinding, press the ■ (STOP) button.
   - The camcorder stops automatically after rewinding is complete.

6. Press the ▶/❙❙ (PLAY/STILL) button to start playback.
   - You can view the picture you recorded on the LCD.
   - To stop the PLAY operation, press the ■ (STOP) button.

1. 將模式開關置於TAPE(錄影帶)模式.

2. 按下電源開關的突起部分,將電源開關切到 PLAYER(放映機)位置.
   - 蜂鳴提示音

3. 插入要看的錄影帶(見27頁).

4. 打開液晶螢幕.
   調整液晶螢幕的角度並根據需要設置亮度及色彩.

5. 按下 ◀◀ (REW)快倒按鈕將錄影帶倒回起始點.
   - 如需停止快倒 按下 ■(STOP)(停止)按鈕即可.
   - 在倒帶時,如到其起始點時會自動停止.

6. 按下▶/❙❙(PLAY/STILL)(播放/暫停)按鈕開始
   - 您可以在液晶螢幕上看到已錄製的影像.
   - 如要停止放映,按下■STOP(停止)按鈕即可.

Notes

- You can also view the picture on a TV screen, after connecting the camcorder to a TV or VCR. (see page 70)
- Various functions are available in playback mode. (see page 72)

注意

- 將本機與電視或錄影機連接時,您也可以在電視機上觀看影片.(見70頁).
- 在播放模式下您可使用多項功能(見72頁).

Basic Recording

基本拍攝技術
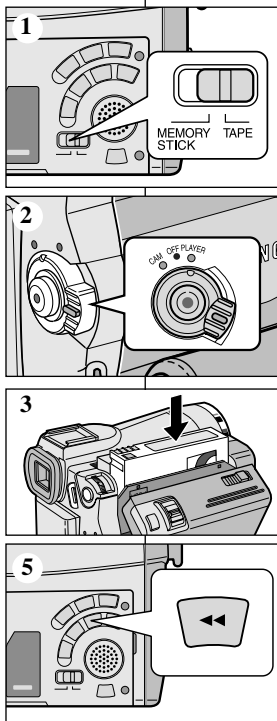
Adjusting the LCD during PLAY

- ✽ You can adjust the LCD during playback.
- ✽ The adjustment method is the same procedure as used in CAM mode. (see page 31)

在PLAY(播放)期間調整液晶螢幕

- ✽ 您可在播放過程中調整液晶螢幕.
- ✽ 調整方法與CAM照相機模式下的操作相同(見31頁).

Controlling Sound from the Speaker

控制揚聲器的聲音

The Speaker works in PLAYER mode only.

揚聲器只在PLAYER(放映)模式工作.

- ■ When you use the LCD screen for playback, you can hear recorded sound from the built-in Speaker.
  - Follow the instructions below to decrease or mute speaker volume in the PLAYER mode.
  - Take the following steps to lower the volume or mute the sound while playing a tape on the camcorder.
- 1. Set the power switch to PLAYER mode.
- 2. Press ▶/Ⅱ (PLAY/STILL) to play the tape.
- 3. When you hear sounds once the tape is in play, use the MENU SELECTOR to adjust the volume.
  - ■ A volume level display will appear on the LCD. Levels may be adjusted from anywhere between 00 to 19. You will not hear any sound when the volume is set on 00.
  - ■ If you close the LCD while playing, you will not hear sound from the speaker.

■ 當您在播放中使用液晶螢幕時,還可以用內置Speaker揚聲器聽取錄製的聲音.
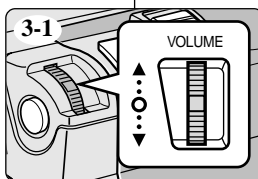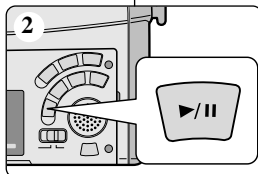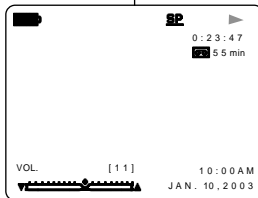
- 按照以下的說明在PLAYER放映模式下降低揚聲器音量或使其處於靜音的狀態.
- 在播放攝錄影機中的錄影帶時,請採取以下步驟降低音量或使其處於靜音的狀態.

1. 將功能開關設置為PLAYER(放映)模式.
2. 按下 ▶/Ⅱ (PLAY/STILL)(播放/停止) 以播放錄影帶.
3. 在聽到播放錄影帶的聲音時,請使用MENU SELECTOR(菜單選擇器)調整音量.
   - ■ 液晶螢幕上將會出現音量顯示器。您將可以在00~19之間調整音量。在音量被置於00時,您將不會聽到任何聲音。
   - ■ 如果在播放時關閉了液晶螢幕,就不會再聽到揚聲器的聲音。

2

▶/Ⅱ

3-1

VOLUME

<3-2>

SP ▶
0 : 2 3 : 4 7
55 min

VOL.   [11]   10 : 00AM
JAN . 10 , 2003

Notes

- ■ When the cable is connected to the Multi AV jack, you cannot hear sound from the speaker and cannot adjust the volume.
- ■ If a cable is connected to the Multi AV jack, you can hear sound from the speaker when AV IN/OUT MODE on MENU is set to AV IN or S-VIDEO IN.
- ■ You can hear sound from speaker by removing the connected cable from the Multi AV jack.
- ■ The speaker turns off when you use earphones.

注意

- ■ 當電線接到AV插孔時,您將聽不到來自揚聲器的聲音,並且不能調節音量。
- ■ 但是當MENU(菜單)上的AV IN/OUT MODE被設置為AV IN(輸入)或S-VIDEO IN 時,即使電線已插入 AV插孔,您也聽不到聲音 .
- ■ 您可以將連接線從A/V插孔拔出以聽取揚聲器的聲音。
- ■ 當您使用耳機時揚聲器會關閉。

Advanced Recording

高級拍攝技巧

Use of various Functions

使用各種功能

● Setting menu items

MENU	SUB MENU	Available mode			
		CAMERA	PLAYER	Memory REC.	Memory PLAY
INITIAL	CLOCK SET	✔	✔	✔	✔
	WL.REMOTE	✔	✔	✔	✔
	BEEP SOUND	✔	✔	✔	✔
	SHUTTER SOUND		✔	✔	
	DEMONSTRATION	✔			
CAMERA	PROGRAM AE	✔			
	WHT. BALANCE	✔		✔	
	D. ZOOM	✔			
	EIS	✔			
	DSE SELECT	✔			
	MEMORY MIX	✔			
	FLASH SELECT	✔		✔	
A/V	REC MODE	✔	✔		
	PHOTO SEARCH		✔		
	PHOTO COPY		✔		
	AUDIO MODE	✔	✔		
	AUDIO SELECT		✔		
	WIND CUT	✔	✔		
	AV IN/OUT		✔		
MEMORY	PHOTO QUALITY		✔	✔	
	IMAGE SIZE		✔	✔	
	MJPEG SIZE		✔	✔	
	CONTINUOUS SHOT			✔	
	PRINT MARK				✔
	PROTECT				✔
	FILE NO.		✔	✔	✔
	DELETE				✔
	FORMAT				✔
VIEWER	LCD ADJUST	✔	✔	✔	✔
	DATE/TIME	✔	✔	✔	✔
	TV DISPLAY	✔	✔	✔	✔

● 設置菜單項目

菜單	子菜單	襯恁耀宅			
		CAMERA (攝影機)	PLAYER (放影機)	Memory REC	Memory PLAY
INITIAL (初始)	CLOCK SET (時鐘設置)	✔	✔	✔	✔
	WL.REMOTE (遙控)	✔	✔	✔	✔
	BEEP SOUND (蜂鳴音)	✔	✔	✔	✔
	SHUTTER SOUND（快門聲)		✔	✔	
	DEMONSTRATION (自動展示)	✔			
CAMERA 照相機 模式	PROGRAM AE(自動程式曝光)	✔			
	WHT.BALANCE (白平衡)	✔		✔	
	D.ZOOM (數位變焦)	✔			
	EIS （電子防手振功能）	✔			
	DSE SELECT(數位特殊效果選擇)	✔			
	MEMORY MIX (混合記錄)	✔			
	FLASH SELECT (閃光燈選擇)	✔		✔	
A/V (音頻)	REC MODE (拍攝模式)	✔	✔		
	PHOTO SEARCH (拍照記錄搜索)		✔		
	PHOTO COPY (拍照拷貝)		✔		
	AUDIO MODE(音頻模式)	✔	✔		
	AUDIO SELECT (音頻選擇)		✔		
	WIND CUT(風聲消除)	✔	✔		
	AV IN/OUT		✔		
MEMORY (存儲器)	PHOTO QUALITY (照片品質)		✔	✔	
	IMAGE SIZE(影像尺寸)		✔	✔	
	MJPEG SIZE(MJPEG尺寸)		✔	✔	
	CONTINUOUS SHOT(連續拍攝)			✔	
	PRINT MARK (列印標記)				✔
	PROTECT (保護)				✔
	FILE NO.(文件號碼)		✔	✔	✔
	DELETE(刪除)				✔
	FORMAT(格式化)				✔
VIEWER (取景器)	LCD ADJUST (調整液晶螢幕)	✔	✔	✔	✔
	DATE/TIME (日期/時間)	✔	✔	✔	✔
	TV DISPLAY (電視顯示)	✔	✔	✔	✔

● Set the camcorder to CAM or PLAYER mode and M.REC or M.PLAY mode

1. Press the MENU button.
   The MENU OSD is displayed. The cursor (HIGHLIGHT) indicates the feature you are currently adjusting.
2. Use the MENU SELECTOR and push the MENU SELECTOR on the right side panel to select and activate the item.
3. You can exit the menu mode by pressing the MENU button.

● 將本機設置為CAM(攝影機)或PLAYER(放映機),MREC,M.PLAY模式。

1. 按下MENU(菜單)按鈕。顯示MENU OSD(菜單螢幕顯示)。
   游標(高亮度顯示) 將為您指示目前正在調整的功能。
2. 使用MENU SELECTOR(菜單選擇器)按鈕並按下左側面板的MENU SELECTOR(菜單選擇器) 按鈕,以選擇和啟動該選項.
3. 您可通過按MENU(菜單)按鈕,退出菜單模式.

Advanced Recording

高級拍攝技巧

● Availability of functions in each mode

Operating Mode \ Requested Mode	Digital functions				Digital special effects
	EIS	D.ZOOM	PHOTO (TAPE)	SLOW SHUTTER	
EIS		O	O	△	O
D.ZOOM	O		O	* △	O
PHOTO	✕	✕		✕	✕
SLOW SHUTTER	✕	✕	O		✕
Digital Special Effects	O	O	O	✕	

O : The requested function will work in this operating mode.

✕ : You can not change the requested mode.

△ : The operating function will be released and the requested one will work.

* : The operating function will be released and the requested one will work.

(the data during the operating mode will be backed up)

Notes

■ When a menu item on the LCD is marked with an ⊠ , that item cannot be activated.

■ When you select an item that cannot be changed, an error message will be displayed.

● 在各模式下的實用性功能

	數位 功能				數位 特殊 果
	EIS	D.ZOOM	PHOTO (TAPE)	SLOW SHUTTER	
EIS (電子防手振)		O	O	△	O
D.ZOOM (數位變焦)	O		O	* △	O
PHOTO(拍照)	✕	✕		✕	✕
SLOW SHUTTER (慢速快 門)	✕	✕	O		✕
數位特殊效果	O	O	O	✕	

O :要求的 模式將在操 作模式下進 行

✕ :您不能 改變要求的 模式

△ :操作模 式將退出,並進行 要求模式

* :操作模 式將被釋放,並進行 要求模式.

(數據輸 入進行時數 據將被備份)

注意

■ 鐉如果 在液晶螢幕 上的某個菜 單項目有 ⊠ ,則該選 項不能動作.

■ 鐉如果 您選擇了一 個不能更改 的選項,則會顯 示錯誤訊息.

Advanced Recording

高級拍攝技巧

● CLOCK SET

- �֎ CLOCK setup works in CAM, PLAYER, M.REC and M.PLAY modes.
- ✷ The DATE/TIME is automatically recorded onto a tape. Before recording, please set the DATE/TIME.

1. Press the MENU button.
   - ■ The menu list will appear.
2. Move the MENU SELECTOR to highlight INITIAL and push the MENU SELECTOR.
3. Use the MENU SELECTOR to select CLOCK SET from the submenu.
4. Push the MENU SELECTOR to enter SETTING mode.
   - ■ A blinking item indicates the item to be changed. The year will blink first.
5. Using the MENU SELECTOR, change the year setting.
6. Push the MENU SELECTOR.
   - ■ The month will blink.
7. Using the MENU SELECTOR, change the month setting.
8. Push the MENU SELECTOR.
   - ■ The day will blink.
9. You can set the day, hour and minute following the same procedure for setting the year and month.
10. Push the MENU SELECTOR after setting the minutes.
    - ■ The word COMPLETE! will appear, and a few seconds later, the menu screen will automatically return to the sub menu.
11. To exit, push the MENU button.

```
      CAM MODE
□ INITIAL   ○ CLOCK SET
□ CAMERA    ○ WL. REMOTE ······
□ A/V       ○ BEEP SOUND ······
■ MEMORY    ○ SHUT. SOUND ······
□ VIEWER    ○ DEMO ·············
```

```
      CAM MODE
▶ INITIAL SET

□ CLOCK SET        SET TIME!
○ WL.REMOTE
○ BEEP SOUND ·············
□ SHUTTER SOUND ··········
□ DEMONSTRATION ··········
```

```
      CAM MODE
▶ INITIAL SET

□ CLOCK SET



        10:00AM
      JAN.1,2003
```
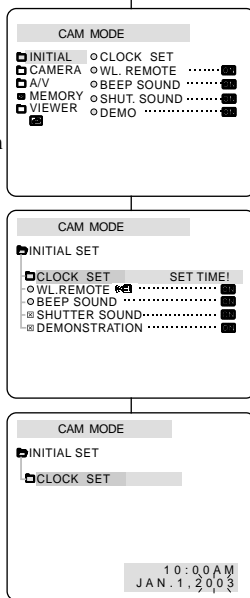
● CLOCK SET(時鐘設置)

- ✷ 可以在CAM攝影機及PLAYER放映機,M.REC,M.PLAY模式下使用時鐘設置功能.
- ✷ DATE/TIME(日期/時間)會自動錄製到錄影帶上.在錄影或拍照之前,請先設置日期/時間.

1. 按MENU(菜單)按鈕.
   - ■ 之後會出現菜單選項.
2. 移動MENU SELECTOR(菜單選擇器)以便高亮度顯示INITIAL(初始)並按下MENU SELECTOR(菜單選擇器)鈕.
3. 使用MENU SELECTOR(菜單選擇器),從子菜單中選擇CLOCK SET(時鐘設置).
4. 按MENU SELECTOR(菜單選擇器)按鈕進入SETTING(設置)模式.
   - ■ 閃爍的項目即為可更改的項目,首先從年份開始閃爍.
5. 使用MENU SELECTOR(菜單選擇器)改變年份設置.
6. 按MENU SELECTOR(菜單選擇器)按鈕.
   - ■ 月份開始閃爍.
7. 使用MENU SELECTOR(菜單選擇器)改變月份設置.
8. 按MENU SELECTOR(菜單選擇器)按鈕.
   - ■ 酌日期開始閃爍.
9. 按照設置年份及月份相同的步驟來設置日期,小時及分鐘.
10. 請在設置完分鐘後按MENU SELECTOR(菜單選擇器)按鈕.
    - ■ 之後,會出現笏COMPLETE! (完成!)的字樣,幾秒鐘後,菜單螢幕將自動返回到子菜單.
11. 螫若要退出,請按MENU(菜單)按鈕.

Advanced Recording

高級拍攝技巧

● WL. REMOTE

  �48 The WL.REMOTE function works in CAM, PLAYER, M.REC, M.PLAY modes.
  �48 The WL.REMOTE option allows you to enable or disable the remote control for use with the camcorder.

1. Press the MENU button.
   ■ The menu list will appear.

2. Move the MENU SELECTOR to highlight INITIAL and push the MENU SELECTOR.

3. Use the MENU SELECTOR to select WL.REMOTE from the submenu.

4. Push the MENU SELECTOR to enable or disable the remote control.
   The setting switches between ON/OFF each time you push the MENU SELECTOR.

5. To exit, press the MENU button.
   ■ If you set the remote to OFF in the menu and try to use it, the remote icon will blink for 3 seconds and disappear on the LCD.

```
        CAM MODE
□ INITIAL  ○ CLOCK SET
□ CAMERA   ○ WL. REMOTE ·······
□ A/V      ○ BEEP SOUND ·······
■ MEMORY   ○ SHUT. SOUND ·······
□ VIEWER   ○ DEMO ·············
```

```
        CAM MODE
▷ INITIAL SET
□ CLOCK SET
○ WL.REMOTE ⦿▣ ·············
○ BEEP SOUND ··············
▣ SHUTTER SOUND ············
▣ DEMONSTRATION ···········
```
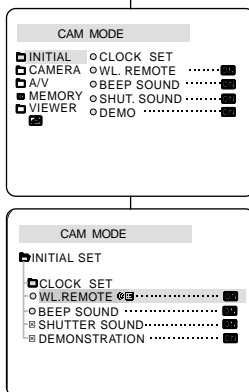
● WL. REMOTE (遙控)

  �48 可以在CAM攝影機及PLAYER放映機,M.REC,M.PLAY模式下使用遙控功能.

  �48 WL. REMOTE(遙控)選項可以幫助您使用或停用遙控器來操作攝錄影機.

1. 按MENU(菜單)按鈕.
   ■ 之後會出現菜單選項.

2. 移動MENU SELECTOR(菜單選擇器)以便高亮度顯示INITIAL(初始)並按下MENU SELECTOR(菜單選擇器)按鈕.

3. 使用MENU SELECTOR(菜單選擇器),從子菜單中選擇WL.REMOTE(遙控).

4. 按MENU SELECTOR(菜單選擇器)按鈕以使用或停用遙控器.
   每次按MENU SELECTOR(菜單選擇器)按鈕時,設置都會在ON/OFF(開/關)之間進行切換.

5. 繁若要退出,請按MENU(菜單)按鈕.
   ■ 如果您在菜單中遙控器設置為OFF(關閉)並試圖使用遙控器那麼遙控器的標誌會持續閃爍3秒鐘,而後在液晶螢幕上消失.

Advanced Recording

高級拍攝技巧

● BEEP SOUND

❆ The BEEP SOUND function works in CAM, PLAYER, M.REC, M.PLAY modes.

❆ Use the MENU to setup the BEEP SOUND function.
Select whether or not you want to hear a beep sound whenever you change a setup value.

1. Press the MENU button.
   ■ The menu list will appear.

2. Move the MENU SELECTOR to highlight INITIAL and push the MENU SELECTOR.

3. Use the MENU SELECTOR to select BEEP SOUND from the submenu.

4. Push the MENU SELECTOR to enable or disable the BEEP SOUND.
   The setting switches between ON/OFF each time you push the MENU SELECTOR.
   ■ You will hear a Beep Sound when you select the ON setup.
   ■ When you press the START/STOP button to start recording, the BEEP SOUND is automatically set to OFF so you can't hear it any longer.

5. To exit, press the MENU button.

```
         CAM MODE
☐ INITIAL   ○ CLOCK  SET
☐ CAMERA   ○ WL.REMOTE ··········
☐ A/V       ○ BEEP SOUND ·········
☐ MEMORY   ○ SHUT SOUND ·········
☐ VIEWER   ○ DEMO ················
   ☐
```

```
         CAM MODE
☐ INITIAL SET

  ○ CLOCK  SET
  ○ WL.REMOTE ··············
  ○ BEEP SOUND ···············
  ☐ SHUTTER SOUND ············
  ☐ DEMONSTRATION ············
```
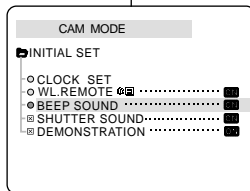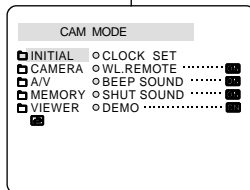
● BEEP SOUND（蜂鳴音）

❆ 可以在 CAM攝影機 及PLAYER放映機,M.REC,M.PLAY模式下使用BEEP SOUND(蜂鳴音).

❆ 使用 MENU(菜單)來設置BEEP SOUND(蜂鳴音)功能.您可以選擇在改變設置時是否發出蜂鳴音.

1. 按MENU(菜單)按鈕.
   ■ 之後會出現菜單選項.

2. 移動MENU SELECTOR(菜單選擇器)以便高亮度顯示INITIAL(初始)並按下MENU SELECTOR(菜單選擇器)按鈕.

3. 使用MENU SELECTOR(菜單選擇器),從子菜單中選擇BEEP SOUND(蜂鳴音).

4. 按MENU SELECTOR(菜單選擇器)按鈕以使用或停用BEEP SOUND(蜂鳴音)功能.
   每次按MENU SELECTOR(菜單選擇器)按鈕時,設置都會在ON/OFF(開/關)之間進行切換.
   ■ 當您設置為ON(開)時,便可以聽到蜂鳴音.
   ■ 在您按下START/STOP按鈕開始拍攝時,蜂鳴音會自動設置為OFF(關),拍攝時您就不會聽到蜂鳴音.

5. 若要退出,請按MENU(菜單)按鈕.

Advanced Recording

高級拍攝技巧

● SHUTTER SOUND

⌘ You can hear SHUTTER SOUND only when the PHOTO function is working.

⌘ Determines whether or not you wish to hear a SHUTTER SOUND when using the DSC feature.

1. Set the mode switch to MEMORY STICK.

2. Set the power switch to CAM mode.

3. Press the MENU button.
   ■ The menu list will appear.

4. Move the MENU SELECTOR to highlight INITIAL and push the MENU SELECTOR.

5. Use the MENU SELECTOR to select SHUTTER SOUND from the submenu.

6. Push MENU SELECTOR to switch between ON and OFF.

7. To exit, press the MENU button.

```
┌─────────────────────────────┐
│   M.REC MODE          ▭    │
│ □ INITIAL   ○ CLOCK  SET   │
│ □ CAMERA   ○ WL.REMOTE ···· ▢│
│ ⊠ A/V      ○ BEEP SOUND ···· ▢│
│ □ MEMORY   ○ SHUT.SOUND ···· ▢│
│ □ VIEWER   ○ DEMO ·········· ▢│
│ ▥                           │
│                             │
└─────────────────────────────┘
```

```
┌─────────────────────────────┐
│   M.REC MODE          ▭    │
│ ▣ INITIAL SET              │
│                             │
│ □ CLOCK  SET               │
│ ○ WL.REMOTE ◖▢ ·········· ▢│
│ ○ BEEP SOUND ··············▢│
│ ○ SHUTTER SOUND ···········▢│
│ ▣ DEMONSTRATION ···········▢│
│                             │
└─────────────────────────────┘
```
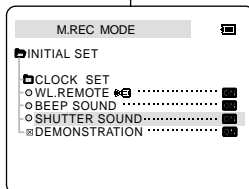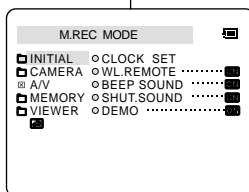
● SHUTTER SOUND（快門音）

⌘ 只有在PHOTO(拍照)功能工作時,才能聽到快門音.

⌘ 使用數位相機功能時可決定是否要有快門音.

1. 將本機設置MEMORY STICK記憶卡模式.

2. 將功能開關切換至CAM(攝影機)模式.

3. 按MENU(菜單)按鈕.
   ■ 之後會出現菜單選項.

4. 移動MENU SELECTOR(菜單選擇器)以便高亮度顯示INITIAL(初始)並按下MENU SELECTOR(菜單選擇器)按鈕.

5. 使用MENU SELECTOR(菜單選擇器),從子菜單中選擇SHUTTER SOUND(快門音).

6. 按MENU SELECTOR(菜單選擇器)按鈕以便在ON(開)和OFF(關)之間切換.

7. 若要退出,請按MENU(菜單)按鈕.

Advanced Recording

高級拍攝技巧

● DEMONSTRATION

✹ Demonstration automatically shows you the major functions that are included with your camcorder so that you may use them more easily.

✹ The DEMONSTRATION function may only be used in the CAM mode without a tape inserted in the camcorder.

✹ The demonstration operates repeatedly until the DEMONSTRATION mode switched OFF.

1. Set the camcorder to CAM mode.
2. Press the MENU button.
   ■ The menu list will appear.
3. Move the MENU SELECTOR to highlight INITIAL.
4. Select DEMONSTRATION from the submenu and push the MENU SELECTOR.
5. To activate the DEMONSTRATION, set DEMONSTRATION ON.
   ■ Press the MENU button to quit the menu.
   ■ The DEMONSTRATION will begin.
6. To end the DEMONSTRATION, set the DEMONSTRATION to OFF.

```
        CAM MODE
□ INITIAL    ○ CLOCK SET
□ CAMERA     ○ WL. REMOTE ········▢
□ A/V        ○ BEEP SOUND ········▢
□ MEMORY     ▣ SHUT. SOUND ·······▢
□ VIEWER     ○ DEMO ···············▢
  ◢
```

```
        CAM MODE
▣ INITIAL SET

□ CLOCK SET
○ WL.REMOTE ◖▥ ··············▢
○ BEEP SOUND ···············▢
○ SHUTTER SOUND ············▢
○ DEMONSTRATION ············▢
```

Notes

■ The DEMONSTRATION function only works without a TAPE installed.

■ The DEMONSTRATION mode is automatically activated when the camcorder is left idle for more than 10 minutes after switching to the CAM mode (no tape is inserted in the camcorder).

■ If you press other buttons (FADE, BLC, PHOTO, EASY) during the DEMONSTRATION mode, the DEMONSTRATION stops temporarily and resumes 10 minutes later if you do not operate any other functions.

● DEMONSTRATION（自動展示）

✹ 自動展示功能將會自動向您展示攝錄影機的主要功能,以便您能夠簡易地使用這些功能.

✹ DEMONSTRATION（自動展示)只能在CAM攝影機模式下使用,而且在展示狀態下,請不要在攝錄影機內放入錄影帶.

✹ 展示功能將反覆操作直到您將DEMONSTRATION(自動展示)模式切換到OFF(關閉).

1. 將本機設置為CAM攝影機模式.
2. 按MENU(菜單)按鈕.
   ■ 之後會出現菜單選項.
3. 移動MENU SELECTOR(菜單選擇器)以便高亮度顯示INITIAL(初始).
4. 從子菜單中選擇DEMONSTRATION(自動展示),並按MENU SELECTOR(菜單選擇器).
5. 若要開始展示,請將DEMONSTRATION(自動展示)設置ON(開).
   ■ 按下按MENU(菜單)按鈕以退出菜單.
   ■ 展示開始.
6. 若要關閉DEMONSTRATION(自動展示),將DEMONSTRATION(自動展示)設置為OFF(關)即可.

注意

■ 只有在沒有裝入錄影帶的情況下自動展示的功能才會運作.

■ 在本機切換到CAM(攝影機模式)並且沒有裝入錄影帶後閒置超過10分鐘, DEMONSTRATION(自動展示)會自動啟動.

■ 在自動展示模式期間,如果您按下其他鍵FADE(淡入淡出),BLC(逆光補償),PHOTO(拍照),EASY(簡易),自動展示會暫停,但是如果您在10分鐘內不使用其他功能的話,此功能將會再自動重新開始.

Advanced Recording

高級拍攝技巧

● PROGRAM AE

✪ The PROGRAM AE(automatic exposure) function works in CAM mode only.

✪ The PROGRAM AE mode allows you to adjust shutter speeds and apertures to suit different recording conditions.

✪ They give you creative control over the depth of field.

■ AUTO mode

- Automatically balances the exposure between the subject and the background.
- To be used in normal conditions.
- The shutter speed automatically varies from 1/60 to 1/250 per second, depending on the scene.

■ SPORTS mode (✖)

- For recording people or objects moving quickly.

■ PORTRAIT mode (👪)

- For focusing on the background of the subject, when the background is out of focus.
- The PORTRAIT mode is most effective when used outdoors.
- The shutter speed automatically varies from 1/60 to 1/1000 per second.

■ SPOTLIGHT mode (🔆)

- For recording correctly when there is only light on the subject and not the rest of the picture.

■ SAND/SNOW mode (⛷)

- For recording when people or objects are darker than the background because of reflected light from sand or snow.

■ High S. SPEED (High Shutter Speed) mode (🎾)

- For recording fast-moving subjects such as players in golf or tennis games.

● PROGRAM AE（自動程式曝光)

✪ 只可以在CAM攝影機模式下才能使用PROGRAM AE(自動程式曝光)功能.

✪ PROGRAM AE（自動程式曝光)模式允許您按照不同的拍攝條件調整快門速度和光圈.

✪ 這樣,您就能對景深進行有創意的控制

■ AUTO（自動)模式

- 使被攝物體與背景之間自動平衡.
- 可以正常條件下使用.
- 根據被拍攝的場景,快門速度可在每秒1/60秒至1/250秒之間自動改變.

■ SPORTS（運動)模式 (✖)

- 拍攝快速移動的人或物體.

■ PORTRAIT（人像)模式 (👪)

- 使拍攝人物的背景呈現模糊的氣氛.
- 在室外拍攝時較有效果.
- 快門速度可在1/60秒至1/1000秒範圍內自動改變.

■ SPOTLIGHT（聚光燈)模式 (🔆)

- 在拍攝主題的光線較亮,而四周背景的光線較暗的情況下,使用該模式可以得到正確的曝光.

■ SAND/SNOW（雪地和沙灘)模式 (⛷)

- 在雪地和沙灘的背景之下,拍攝的主題會比較暗,使用此模式可得到正確的曝光.

■ High S.SPEED（High Shutter Speed)(高速快門)模式 (🎾)

- 用於拍攝快速移動的物體,例如高爾夫或網球運動員的比賽姿態.

Advanced Recording

高級拍攝技巧

Setting the PROGRAM AE

設置自動程式曝光

1. Press the MENU button.
   - The menu list will appear.

2. Move the MENU SELECTOR to highlight CAMERA and push the MENU SELECTOR.

3. Select PROGRAM AE from the submenu.

4. Push the MENU SELECTOR to enter the sub-menu.

5. Using the MENU SELECTOR, select the PROGRAM AE mode.
   - Push the MENU SELECTOR to confirm the PROGRAM AE mode.
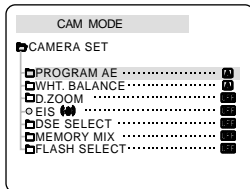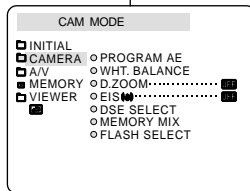
6. To exit, press the MENU button.

```
        CAM MODE
□ INITIAL
□ CAMERA  ○ PROGRAM AE
□ A/V     ○ WHT. BALANCE
■ MEMORY  ○ D.ZOOM··········· ▒▒
□ VIEWER  ○ EIS▦▦··········· ▒▒
   ▦      ○ DSE SELECT
          ○ MEMORY MIX
          ○ FLASH SELECT
```

```
        CAM MODE
▣ CAMERA SET

□ PROGRAM AE ················ ▦
□ WHT. BALANCE ·············· ▦
□ D.ZOOM ···················· ▦
○ EIS ▦▦ ···················· ▦
□ DSE SELECT ················ ▦
□ MEMORY MIX ················ ▦
□ FLASH SELECT ·············· ▦
```

```
        CAM MODE
▣ CAMERA SET

▣ PROGRAM AE

○ AUTO ···················· ▦
  SPORTS ·················· ▦
  PORTRAIT ················ ▦
  SPOTLIGHT ··············· ●
  SAND / SNOW ············· ▦
  HIGH S. SPEED ··········· ▦
```

1. 按下MENU(菜單)按鈕.
   - 顯示菜單列表.

2. 移動MENU SELECTOR(菜單選擇器)選擇 CAMERA(攝影機)然後按下MENU SELECTOR(菜單選擇器)按鈕.

3. 從子菜單中選擇PROGRAM AE(自動程式曝光)

4. 然後按ENTER(確認)進入子菜單.

5. 移動MENU SELECTOR(菜單選擇 器), 選擇PROGRAM AE(自動程式 曝光)模式.
   - 按MENU SELECTOR(菜單選 擇器),確認PROGRAM AE(自 動程式曝光)模式.

6. 繁若要退出,按下MENU(菜單)按鈕即可.
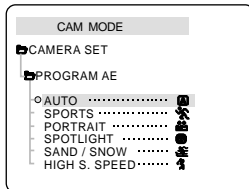
Notes

- The P.AE function will not operate in EASY mode.
- When recording with a PROGRAM AE mode, the Flash function and Video Light Auto function (optional) do not work.

注意

- 在EASY(簡易)模式下,不能使用PROGRAM AE(自動程式曝光).
- 在透過自動程式曝光模式錄製時,閃光燈功能及太陽燈自動功能不 能操作.(選購)

Advanced Recording

高級拍攝技巧

● WHT. BALANCE (WHITE BALANCE)

✵ The WHITE BALANCE function works in CAM or M.REC mode only.

✵ The WHITE BALANCE is a recording function that preserves the unique image color of the object in any recording condition.

✵ You may select the appropriate WHITE BALANCE mode to obtain good quality image color.

■ AUTO (🄰) : This mode is generally used to control the WHITE BALANCE automatically.

■ HOLD (♨) :This fixes the current WHITE BALANCE value.

■ INDOOR (✿) : This controls the WHITE BALANCE according to the indoor ambience.

   - Under halogen or studio/video lighting

   - Subject is of one dominant color

   - Close ups

■ OUTDOOR (✳) : This controls the WHITE BALANCE according to the outdoor ambient light.

   - In daylight, especially for close ups and where the subject is of one dominant color.

```
        CAM MODE
 INITIAL
 CAMERA   ○ PROGRAM AE
 A/V      ○ WHT. BALANCE
 MEMORY   ○ D.ZOOM
 VIEWER   ○ EIS
          ○ DSE SELECT
          ○ MEMORY MIX
          ○ FLASH SELECT
```

1. Set the camcorder to CAM mode.

2. Press the MENU button.

  ■ The menu list will appear.

3. Move the MENU SELECTOR to highlight CAMERA and push the MENU SELECTOR.

4. Select WHT.BALANCE from the submenu.

5. Push the MENU SELECTOR to enter the sub-menu.

6. Using the MENU SELECTOR, select the WHITE BALANCE mode.

  ■ Push the MENU SELECTOR to confirm the WHITE BALANCE mode.

7. To exit, press the MENU button.

Notes

```
        CAM MODE
 CAMERA SET

 PROGRAM AE
 WHT. BALANCE
 D.ZOOM
 EIS
 DSE SELECT
 MEMORY MIX
 FLASH SELECT
```

■ The WHT.BALANCE function will not operate in EASY mode.

■ Turn the digital zoom off (if necessary) to set a more accurate white balance.

■ Reset the white balance if lighting conditions change.

■ During normal outdoor recording, setting to AUTO may provide better results.

```
        CAM MODE
 CAMERA SET
   WHT. BALANCE

   ○ AUTO          🄰
     HOLD          ♨
     INDOOR        ✿
     OUTDOOR       ✳
```

● WHITE BALANCE（白平衡）

✵ 只可以在CAM攝影機,M.REC模式下才能使用WHT.BALANCE(白平衡)模式.

✵ 此功能可以在任何條件下保持被攝體色彩的拍攝功能.

✵ 您可選擇合適的白平衡模式來獲取優良品質的影像色彩.

■ AUTO (自動)（🄰）:該模式可自動控制白平衡.

■ HOLD(保持)（♨）:該模式可以固定當前的白平衡值.

■ INDOOR(室內)（✿）:該模式可以按照室內的環境控制白平衡.

   - 在鹵素燈或攝影棚照明燈下.

   - 物體有很重的色彩.

   - 近拍時.

■ OUTDOOR(室外)（✳）:該模式可以按照室外的環境控制白平衡.

   - 在白天,特別是拍近拍或物體有很鮮豔的色彩.

1. 將本機設置為CAM(攝影機模式).

2. 按下MENU(菜單)按鈕.

  ■ 顯示菜單列表.

3. 移動MENU SELECTOR(菜單選擇器)選擇CAMERA(攝影機) 然後按下MENU SELECTOR(菜單選擇器)按鈕.

4. 從子菜單中選擇WHT.BALANCE(白平衡).

5. 然後按MENU SELECTOR(菜單選擇器)進入子菜單.

6. 移動MENU SELECTOR(菜單選擇器), 選擇WHITE BALANCE(白平衡)模式.

  ■ 按MENU SELECTOR(菜單選擇器),確認WHITE BALANCE(白平衡)模式.

7. 繁若要退出,按下MENU(菜單)按鈕即可.

注意

■ 在EASY(簡易)模式下,不能使用白平衡功能.

■ 關閉數位變焦(如有必要)以設置精確的白平衡.

■ 如已設置好了白平衡但更改了照明條件時,請重新設定白平衡.

■ 在室外正常拍攝期間,將其設置為AUTO(自動)模式,將能獲得更好的效果.

Advanced Recording

高級拍攝技巧
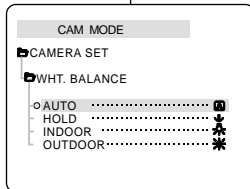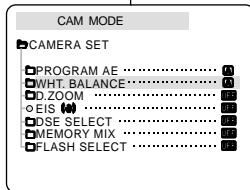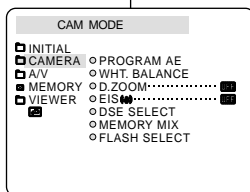
Zooming In and Out with DIGITAL ZOOM

✵ Digital Zoom works in CAM mode only.

採用DIGITAL ZOOM(數位變焦)推進和拉遠

✵ 只有在CAM攝影機模式下使用DIGITAL ZOOM(數位變焦)功能.

Zooming In and Out

✵ Zooming is a recording technique that lets you change the size of the subject in a scene.
For more professional looking recordings, do not use the zoom function too often.
✵ You can zoom using variable zoom speeds.
✵ Use these features for different shots. Please note that over-use of the zoom feature can lead to unprofessional looking results and a reduction of battery usage time.

Zooming In and Out(推進和拉遠)

✵ 變焦是一種拍攝技術,它可以幫助您改變場景中被攝物体的大小.為了得到更接近的專業水準的拍攝效果,請不要過多地使用變焦功能.
✵ 您可以使用可變變焦速度來進行拍攝.
✵ 可以對不同的拍攝使用此功能,請注意,過多地使用變焦會使拍攝效果顯得不夠專業.而且會耗電.

1. Move the zoom lever slightly for a gradual zoom, move it further for a high-speed zoom.
Your zooming is monitored on the OSD.

2. T(Telephoto) side: Subject appears closer.

3. W(Wide angle) side: Subject appears farther away.

1. 如需逐步變焦,請稍稍移動變焦手柄即可;如需快速變焦,則請稍大力一點的移動變焦手柄.您可在螢幕上監視變焦的情況.

2. T (Telephoto 望遠) 側:讓被攝体看起來近一點.

3. W (Wide angle 廣角) 側: 讓被攝体看起來遠一點.
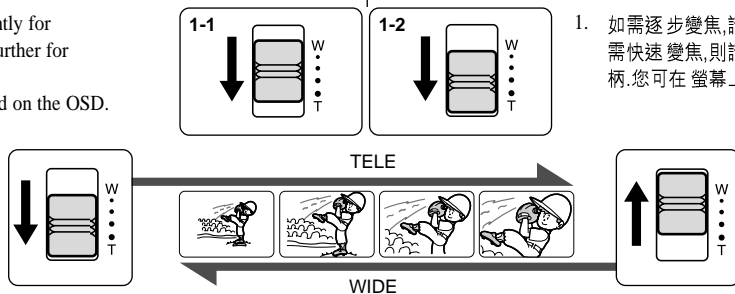
TELE

WIDE

Note

You can record a subject that is a minimum of 1 m (about 3.2 feet) away from the lens surface in the TELE position, or about 10 mm (about 0.5 inch) away in the WIDE position.

注意

您可在TELE(望遠)的位置上,拍攝離鏡頭距離為1公尺的物体;在廣角位置約可拍攝約10毫米的物体.

Advanced Recording

高級拍攝技巧

Digital Zoom

Digital Zoom （數位變焦）

※ Zooming more than 12x is achieved digitally.

※ The picture quality may deteriorate depending on how much you zoom in on the subject.

※ We recommend that you use the EIS feature with DIGITAL ZOOM for picture stability. (see page 47)

※ 超過12x(12倍)的變焦 是以數位方式執行的.

※ 影像的 品質會依據 推近物體程 度的加大而 下降.

※ 我們建議您在使用DIGITAL ZOOM數位變焦功能的同時,使用 EIS(防手振)功能來保證影像的穩定性.(見47頁)

```
        CAM MODE
□ INITIAL
□ CAMERA  ○ PROGRAM AE
□ A/V      ○ WHT. BALANCE
■ MEMORY  ○ D.ZOOM··············
□ VIEWER  ○ EIS
          ○ DSE SELECT
          ○ MEMORY MIX
          ○ FLASH SELECT
```

```
        CAM MODE
□ CAMERA SET

□ PROGRAM AE ···············
□ WHT. BALANCE ···········
□ D.ZOOM ·····················
□ EIS ··························
□ DSE SELECT ·············
□ MEMORY MIX ············
□ FLASH SELECT ·········
```

```
        CAM MODE
□ CAMERA SET

□ D . ZOOM
  ○ OFF
    100x
    200x
    400x
    800x
```

1. Set the camcorder to CAM mode.

2. Press the MENU button.
   ■ The menu list will appear.

3. Move the MENU SELECTOR to CAMERA and push the MENU SELECTOR.

4. Select D.ZOOM from the submenu.

5. Push the MENU SELECTOR to setup the 100x, 200x, 400x, 800x digital zoom function or to turn the feature OFF.

6. To exit, press the MENU button.

1. 將本機 設置為CAM(攝影機 模式).

2. 按下MENU(菜單)按鈕.
   ■ 顯示菜 單列表.

3. 移動MENU SELECTOR(菜單選 擇器)選擇 CAMERA(攝影機) 然後按 下MENU SELECTOR(菜單選 擇器)按鈕.

4. 從子菜 單選擇D.ZOOM(數位變焦).

5. 然後按MENU SELECTOR(菜單選 擇器)以設置 100x,200x,400x,800x數位變 焦功能或將 該功能設 置為OFF(關閉).

6. 若要退 出,按下 MENU(菜單)按鈕即 可.

Advanced Recording

高級拍攝技巧

● EIS (Electronic Image Stabilizer)

✤ The EIS function works in CAM mode only.
✤ EIS (Electronic Image Stabilizer) is a function that compensates for any shaking or hand movement while holding the camcorder (within reasonable limits).
✤ It provides more stable pictures when:
  ■ Recording with the zoom
  ■ Recording a small object close-up
  ■ Recording and walking at the same time
  ■ Recording through the window of a vehicle

● EIS (電子防手振功能)

✤ 只可以在CAM攝影機模式下才能使用EIS(防手振功能).
✤ EIS(防手振功能)是一種可以用來補償握住本機時手會抖動或物體移動的功能(要在合理的限度內).
✤ 在下列的情況下,它能提供更為穩定的畫面:
  ■ 使用變焦長鏡頭時.
  ■ 對近距離的小物品拍攝時.
  ■ 一邊走一邊拍攝時.
  ■ 透過車窗拍攝時.

1. Set the camcorder to CAM mode.
2. Press the MENU button.
   ■ The menu list will appear.
3. Move the MENU SELECTOR highlight to CAMERA and push the MENU SELECTOR.
   ■ The sub menu list will appear.
4. Move the MENU SELECTOR to activate the EIS function, push the MENU SELECTOR.
   ■ The EIS menu is changed to ON.
   ■ If you do not want to use the EIS function, set the EIS menu to OFF.
5. To exit, press the MENU button.

```
CAM MODE
▢ INITIAL
▢ CAMERA   ○ PROGRAM AE
▢ A/V      ○ WHT. BALANCE
■ MEMORY   ○ D.ZOOM········
▢ VIEWER   ○ EIS●······
           ○ DSE SELECT
           ○ MEMORY MIX
           ○ FLASH SELECT
```

```
CAM MODE
▣ CAMERA SET

▢ PROGRAM AE ···············
▢ WHT. BALANCE ···············
▢ D.ZOOM ···············
▢ EIS ●) ···············
▢ DSE SELECT ···············
▢ MEMORY MIX ···············
▢ FLASH SELECT ···············
```

1. 將本機設置為CAM(攝影機模式).
2. 按下MENU(菜單)按鈕.
   ■ 顯示菜單列表.
3. 移動MENU SELECTOR(菜單選擇器)選擇CAMERA(攝影機)然後按下MENU SELECTOR(菜單選擇器)按鈕.
   ■ 顯示菜單列表.
4. 然後轉動MENU SELECTOR(菜單選擇器)以啟動EIS(防手振功能),並按MENU SELECTOR(菜單選擇器).
   ■ EIS(防手振功能)將更換到ON(開)
   ■ 如果您不想使用此功能時,請將EIS菜單設置OFF(關).
5. 鶖若要退出,按下MENU(菜單)按鈕即可.

Notes

■ It is recommended that you deactivate the shake compensation function when using a tripod.
■ If you use the EIS function, the picture quality may deteriorate.
■ While setting the EIS to ON, the WIDE, STROBE(DSE function) mode do not work.

注意

■ 建議您在使用三腳架時,停用此功能.
■ 如果您在用三腳架時使用EIS功能時,影像畫質會較差.
■ 當設置EIS為ON開時,WIDE,STROBE模式不起作用.

Advanced Recording

高級拍攝技巧

● DSE(Digital Special Effects) SELECT

✤ The DSE function works in CAM mode only.
✤ The digital effects enable you to give a creative look to your recording by adding various special effects.
✤ Select the appropriate digital effect for the type of picture that you wish to record and the effect you wish to create.
✤ There are 8 DSE modes.

a. ART mode
This mode gives the images a coarse effect.

b. MOSAIC mode
This mode gives the images a mosaic effect.

c. SEPIA mode
This mode gives the images a reddish-brown pigment.

d. NEGA mode
This mode reverses the colors of the images, creating a negative image.

e. MIRROR mode
This mode cuts the picture in half, using a mirror effect.

f. BLK & WHT mode
This mode changes the images to black and white.

g. WIDE [16:9] mode
Produce images in the WIDE [16:9] format for Playback on wide screen TVs.

h. STROBE mode
This effect converts on-screen action to a series of still images, giving an effect similar to slow-motion.

● DSE （Digital Special Effects 數位特殊效果)選擇

✤ 只可以在CAM攝影機模式下才能使用DSE(數位特殊效果).
✤ 數位特效可為您拍攝的影像增添各種效果,並使拍攝的影片更具創意.
✤ 依照您的創意,選擇合適的數位特殊效果類型.
✤ 有8種DSE模式.

a. ART(藝術)模式
該模式將賦於影像一種粗粒的效果.

b. MOSAIC(馬賽克)模式
該模式將賦於影像馬賽克的效果

c. SEPIA(復古)模式
該模式將賦於影像紅褐色的效果

d. NEGA(負片)模式
該模式將賦於影像反轉為負片的效果.

e. MIRROR(鏡射)模式
該模式將賦於影像對半剪切,以產生鏡像的效果.

f. BLK & WHT(黑白)模式
該模式將影像轉黑白的效果.

g. WIDE [16:9](電影)模式
該模式會蓋住上下部份,以提供電影寬銀幕的效果.

h. STROBE(慢動作)模式
該模式會使螢幕上的一系列螢幕上的一系列靜態圖片產生類似慢動作的效果
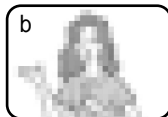
Advanced Recording

高級拍攝技巧

Selecting an effect

選擇數位特殊效果

1. Set the camcorder to CAM mode.

2. Press the MENU button.
   ■ The menu list will appear.

3. Move the MENU SELECTOR to highlight CAMERA and push the MENU SELECTOR.

4. Select DSE SELECT from the submenu.

5. Push the MENU SELECTOR to enter the sub-menu.

6. Using MENU SELECTOR, select the DSE mode.
   ■ Push the MENU SELECTOR to confirm the DSE mode.

7. To exit, press the MENU button.

```
        CAM  MODE
 □ INITIAL
 □ CAMERA  ○ PROGRAM AE
 □ A/V      ○ WHT. BALANCE
 ■ MEMORY  ○ D.ZOOM ·················
 □ VIEWER  ○ EIS
            ○ DSE SELECT
            ○ MEMORY MIX
            ○ FLASH SELECT
```

```
        CAM  MODE
 ▣ CAMERA SET

 □ PROGRAM AE ·················
 □ WHT. BALANCE ···············
 □ D.ZOOM ······················
 ○ EIS
 □ DSE SELECT ··················
 □ MEMORY MIX ·················
 □ FLASH SELECT ···············
```

```
        CAM  MODE
 ▣ CAMERA SET
 ▣ DSE SELECT

 ○ OFF
   ART
   MOSAIC
   SEPIA
   NEGA
   MIRROR
   BLK&WHT
```

1. 將本機設置為CAM(攝影機模式).

2. 按下MENU(菜單)按鈕.
   ■ 顯示菜單列表.

3. 移動MENU SELECTOR(菜單選擇器)選擇 CAMERA(攝影機)然後按下MENU SELECTOR(菜單選擇器)按鈕.

4. 從子菜單中選擇DSE SELECT(選擇數位特效).

5. 然後按MENU SELECTOR(菜單選擇器)進入子菜 單.

6. 並按MENU SELECTOR(菜單選擇器)選擇您要的 數位特效模式.
   ■ 按MENU SELECTOR(菜單選擇器)按鈕以確 定該模式.

7. 繁若要退出,按下MENU(菜單)按鈕即可.

Notes

■ The DSE function will not operate in EASY mode.
■ While setting the WIDE or STROBE to ON, the EIS function does not work.

注意

■ 在EASY(簡易)模式下,不能使用DSE功能.
■ 當設置WIDE,或STROBE模式為ON開時,EIS不起 作用.
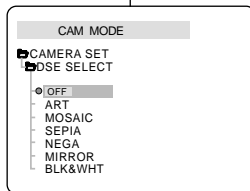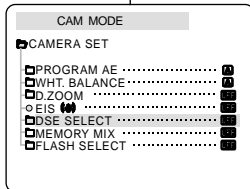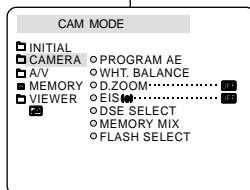
Advanced Recording

高級拍攝技巧

● MEMORY MIX

- �֎ The MEMORY MIX function works in CAM mode only.
- �֎ You can superimpose a still image you have recorded on the Memory Stick on top of the moving image you are recording.
- ✷ You can record the superimposed images on a tape.
- ✷ Select from 4 types of Memory Mix effects:

■ M. CHROMA (Memory chroma key)
  - You can swap a blue area of a still image such as a picture frame with a moving image.

■ M.LUMI (Memory luminance key)
  - You can swap a brighter area of a still image such as a handwritten illustration or title with a moving image.
    Make your own title or illustration by drawing or writing on a white piece of paper. Adjust the mix level in the light area of the still image.

■ C. LUMI (Camera luminance key)
  - Superimpose the currently recording image on top of a still image, which becomes its background.
    Shoot the subject against a brighter background.
    The brighter area of the moving image will be a swapped with a still image.

■ M.OVER LAP (Memory overlap)
  - You can make a moving image fade in on top of a still image recorded on the Memory Stick as the overlap function.

● MEMORY MIX（混合記錄）

- ✷ 混合記錄功能僅可在CAM(攝影機)模式下工作.
- ✷ 您可用在記憶卡上的靜態照片重疊加在拍攝的錄影的畫面上.
- ✷ 您可在錄影帶上記錄一透明圖層式的影像.
- ✷ 可從4種混合記錄的效果中進行選擇.

■ M.CHROMA(以記憶卡內照片為前景式色彩混合)
  - 您可以先用背景有藍底的靜態照片(如外圍為相框式.中間為藍色背景)拍攝存在記憶卡內,再與動態影片作混合.

■ M.LUMI(以記憶卡內照片為前景式的亮度透明混合)
  - 您可以先拍攝含有較暗部位(如在白紙上的黑字)的照片,利用此照片可調整的透明度來使較亮的部位變透明作為前景,然後與拍攝的影片作混合.您可以利用此功能來製作抬頭字幕..

■ C.LUMI(以要錄影的畫面為前景式亮度透明混合)
  - 先拍攝一張照片重疊在畫面上作為背景,然後再以要拍攝的主題來調整透明度,使較亮的部位變透明作為前景,來與照片作混合.

■ M.OVER LAP(與記憶卡內照片作相互混合重疊)
  - 使用此功能您可先用一張記憶卡的靜態照片與動態影相互重疊.

Advanced Recording

高級拍攝技巧

Recording Superimposed images on a tape

在錄影帶上拍攝混合圖層式影片

- ✽ Insert a tape for recording into your camcorder.
- ✽ Insert a Memory Stick is recorded still images into your camcorder.

- ✽ 先在本機上放入錄影帶.
- ✽ 然後在本機內放入含有要進行混合的照片之記憶卡.

1. Set the camcorder to CAM mode.
2. Press the MENU button.
   ■ The menu list will appear.
3. Move the MENU SELECTOR to highlight CAMERA and push the MENU SELECTOR.
4. Select MEMORY MIX from the submenu and push the MENU SELECTOR.
5. Move the MENU SELECTOR to select the desired MEMORY MIX mode and push the MENU SELECTOR.
   ■ Your currently recording image is combined with the last recorded image.
6. Press the ▶▶ (FWD)/ ◀◀ (REV) buttons to select the still image you want to superimpose.
7. Move the MENU SELECTOR to adjust the mix level
   ■ Push the MENU SELECTOR to confirm the MEMORY MIX mode.
8. To exit, press the MENU button.
   ■ Your selected MEMORY MIX mode is flashed in the display.
9. Press the MEMORY MIX button.
   ■ The still image is superimposed on the moving image.
   ■ Each time you press the MEMORY MIX button, your selection is activated (display lights continuously) or de activated (display flashes)
10. Press the START/STOP button to start recording.
    ■ The superimposed images are recorded onto the tape.

```
           CAM MODE
□ INITIAL
□ CAMERA  ○ PROGRAM AE
□ A/V     ○ WHT. BALANCE
■ MEMORY  ○ D.ZOOM·············
□ VIEWER  ○ EIS▮▮▮···········
          ○ DSE SELECT
          ○ MEMORY MIX
          ○ FLASH SELECT
```

```
           CAM MODE
▶ CAMERA SET

  □ PROGRAM AE ················
  □ WHT. BALANCE ···············
  □ D.ZOOM ····················
  □ EIS ▮▮▮ ···················
  □ DSE SELECT ················
  □ MEMORY MIX ················
  □ FLASH SELECT ···············
```

```
           CAM MODE        STBY
▶ CAMERA SET          [07/07]

  ▶ MEMORY MIX
    ▮▮
    M.CHROMA
    M.LUMI
    C.LUMI
  ○ M.OVERLAP ▶○─□─────●
```

1. 將本機設置為CAM(攝影機模式).
2. 按下MENU(菜單)按鈕.
   ■ 顯示菜單列表.
3. 移動MENU SELECTOR(菜單選擇器)選擇 CAMERA(攝影機)然後按下MENU SELECTOR(菜單選擇器)按鈕.
4. 從子菜單中選擇MEMORY MIX(混合記錄) 然後按下MENU SELECTOR(菜單選擇器)按鈕.
5. 移動MENU SELECTOR(菜單選擇器)來選擇所要的模式.
   ■ 您目前觀景器或液晶螢幕內的影像會與記憶卡內的最後一張照片重疊.
6. 按左側 ▶▶ (前進)/ ◀◀ (倒退)來選擇記憶卡內您要重疊的照片.
7. 轉動MENU SELECTOR(菜單選擇器)來調整重疊透明的程度.
   ■ 調整好後按MENU SELECTOR(菜單選擇器)來確認此模式.
8. 若要退出,按下MENU(菜單)按鈕即可.
   ■ 您選擇的混合模式會出現在螢幕上閃爍.
9. 按下左側MEMORY MIX鍵.
   ■ 要進行混合的靜態照片會出現在螢幕.
   ■ 每次按下MEMORY MIX鍵都會在啟動或關閉此功能間切換.
10. 最後按開始/停止按鈕開始錄影.
    ■ 混合的影像可被拍攝在影帶內.

Note

■ If you turn the position of the power switch, select your still image for MEMORY MIX again.

注意

■ 饍如果您轉動了電源開關,要從新選擇要混合的靜態照片.

Advanced Recording

高級拍攝技巧

Using the Built - in Flash

使用內置閃光燈

�khi You can take natural looking flash pictures with appropriate illumination using the built-in flash or attaching the VL-S1FL video Light/ Flash (optional) to the camcorder's Smart shoe (SCD99 only; see page 100), whether they are night scenes, in doors or in other dark places.
  ■ OFF : The flash does not fire.
  ■ ⚡🅰 (Auto) : The flash comes on depending on the brightness of the subject.
  ■ ⚡ (Flash on) : The flash comes on regardless of the brightness of the subject.
  ■ ⚡◀▶ (Red-eye reduction auto: built-in flash only) : The flash pre-fires automatically before the main firing to reduce the red-eye phenomenon.

● FLASH SELECT

  ✖ The FLASH SELECT function works in CAM and M.REC mode.

1. Set the camcorder to CAM mode.
2. Press the MENU button.
  ■ The menu list will appear
3. Move the MENU SELECTOR to highlight CAMERA and push the MENU SELECTOR.
4. Select FLASH SELECT from the submenu and push the MENU SELECTOR.
5. Using the MENU SELECTOR, Select the FLASH SELECT mode.
  ■ Push the MENU SELECTOR to confirm the FLASH SELECT mode.
6. To exit, press the MENU button.

Warning! ■ Do not fire the flash with the flash bulb covered with your hand.
  ■ Do not fire the flash close to people's eyes.

Notes

■ While using the following functions, you cannot use the FLASH function:
  - PROGRAM AE, SHUTTER SPEED, EXPOSURE, STROBE (DSE function), SLOW SHUTTER, CONTINUOUS SHOT, MEMORY MIX
  - When you are recording movies onto a tape.
■ If the flash is forced to fire (Flash on) in a bright location, the effect of flash photography may sometimes not be obtained.
■ When ⚡◀▶ (Red-eye reduction auto) is set, the flash fires twice-once to perform red-eye reduction and the second flash main firing for taking the photograph.
  It takes about 1.5 second between the flash firing for red-eye reduction and the main firing.

```
┌─────────────────────────┐
│        CAM MODE         │
│ ▭ INITIAL               │
│ ▭ CAMERA  ○ PROGRAM AE  │
│ ▭ A/V     ○ WHT. BALANCE│
│ ▭ MEMORY  ○ D.ZOOM      │
│ ▭ VIEWER  ○ EIS         │
│           ○ DSE SELECT  │
│           ○ MEMORY MIX  │
│           ○ FLASH SELECT│
└─────────────────────────┘
```

```
┌─────────────────────────┐
│        CAM MODE         │
│ ▭ CAMERA SET            │
│                         │
│ ▭ PROGRAM AE ·········· │
│ ▭ WHT. BALANCE ········ │
│ ▭ D.ZOOM ·············· │
│ ○ EIS ················· │
│ ▭ DSE SELECT ·········· │
│ ▭ MEMORY MIX ·········· │
│ ▭ FLASH SELECT ········ │
└─────────────────────────┘
```

```
┌─────────────────────────┐
│        CAM MODE         │
│ ▭ CAMERA SET            │
│                         │
│ ▭ FLASH SELECT          │
│   ○ AUTO                │
│   ○ FLASH ON            │
│   RED EYE REDUCTION     │
└─────────────────────────┘
```

✖ 無論 在夜 景,室內或其 他光線 較暗的 地方,使用 巾置 閃光燈 或安裝 智能 熱靴 (僅限SCD99：見100頁)上的VL-S1FL太陽 燈/閃光 燈(選購),來得 到適 當的照 明可以拍 攝出清 晰自然 的照 片來.
  ■ 關閉：閃光 燈不會 亮起.
  ■ ⚡🅰 (自動)：光線 較暗 時,閃光燈會 自動亮起.
  ■ ⚡ (閃光 燈打開)：不管光線 如何,閃光燈都 會亮起.
  ■ ⚡◀▶ (消除 紅眼)(僅限內置閃燈)：為了 減少 被攝人 的紅眼 現象,閃光 燈會 先小閃 一下再 正式亮起.

● 閃光 燈選擇

  ✖ FLASH SELECT(閃光 燈選 擇 功能 在CAM和M.REC 模 式工作.

1. 將本 機設 置為CAM(攝影 機模式).
2. 按下ME NU(菜單)按鈕.
  ■ 顯示 菜單 列表.
3. 移動ME NU SELECTOR(菜單 選擇器)選擇CAMERA(攝影 機)然後 按下ME NU SELECTOR(菜單 選擇器)按鈕.
4. 從子菜單 中選擇FLASH SELECT(閃光 燈選擇 然後 按下 MENU SELECTOR(菜單 選擇器)按鈕.
5. 轉動ME NU SELECTOR(菜單 選擇器)來選 擇所要 的閃光 燈模式.
  ■ 按下ME NU SELECTOR(菜單 選擇器)來確認此 模式.
6. 若要 退出,按下ME NU(菜單) 按鈕 即可.

警告!! ■ 不要 用擋 住閃光 燈.
  ■ 閃光 燈不能在靠 近人的眼晴 周圍拍 照.

注意

■ 使用 下列 功能 不能使用閃光 燈:
  - 自動程式 曝光,快門 速度,曝光,慢動 作(屬數 位特效 功能 之一),慢速 快門,連續 拍攝,混合 記錄 等
  - 當您 在錄 影帶拍 攝時,
■ 如果 在明亮的 地方強行 使用閃光燈(閃光 燈打開),拍攝 出來 的效果 可能較 不好.
■ 如果 設定了 ⚡◀▶ (消除 紅眼),在拍 攝時,小閃 或先閃 一下 跟 著主 閃才 正式亮 起,兩者 間隔 的時間 約有1.5 秒.

Advanced Recording

高級拍攝技巧
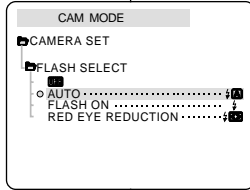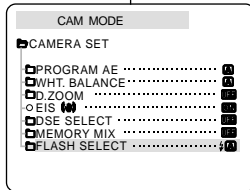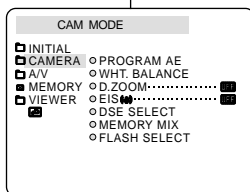
● REC MODE

⛐ The REC MODE function works in both CAM and PLAYER modes.

⛐ This camcorder records and plays back in SP (standard play) mode and in LP (long play) mode.

- SP (standard play): This mode permits 60 minutes of recording time with a DVM60 tape.
- LP (long play): This mode permits 90 minutes of recording time with a DVM60 tape.
- See AV IN/OUT select on page 75.

1. Set the camcorder to CAM or PLAYER mode.

2. Press the MENU button.
   - The menu list will appear.

3. Move the MENU SELECTOR to highlight A/V and push the MENU SELECTOR.

4. Select REC MODE from the submenu and push the MENU SELECTOR.
   - The REC MODE toggles between SP and LP with each press.

5. To exit, press the MENU button.

```
        CAM MODE
□ INITIAL
□ CAMERA
□ A/V        ○ REC MODE ········· SP
□ MEMORY     ○ PHOTO SEARCH
□ VIEWER     ○ COPY [■←■]
    🔲        ○ AUDIO MODE ··· 12 bit
             ○ AUDIO SELECT
             ○ WIND CUT [M] ······ 🔲
             ○ AV IN/OUT ········ OUT
```

```
        CAM MODE
▶A / V SET

○ REC MODE ·················· SP
▣ PHOTO SEARCH
▣ PHOTO COPY ············ [■←■]
○ AUDIO MODE ············· 12 bit
○ AUDIO SELECT ········· SOUND[1]
▣ WIND CUT [M] ················
▣ AV IN/OUT ················· OUT
```

Notes

- We recommend that you use this camcorder to play back the tapes that you recorded on this camcorder.
  Playing back a tape recorded in other equipment may produce mosaic shaped distortion.
- When you record a tape in SP and LP modes, or LP mode only, the playback picture may be distorted or the time code may not be written properly between scenes.
- Record using SP mode for best picture and sound quality.

● REC MODE(錄製模式)

⛐ 可以在CAM攝影機模式和PLAYER(放映模式)下使用REC MODE(錄製模式)

⛐ 在SP(標準播放)模式和LP(長時間播放)模式下,本機的拍攝和播放:

- SP(標準播放)模式:該模式可以支援型號為DVM60的錄影帶作60分鐘的拍攝
- LP(長時間播放): 該模式可以支援型號為DVM60的錄影帶作90分鐘的拍攝.
- 關於AV輸入/輸出 見75頁.

1. 將本機設置為CAM(攝影機模式)或PLAYER(放映機).

2. 按下MENU(菜單)按鈕.
   - 顯示菜單列表.

3. 移動MENU SELECTOR(菜單選擇器)選擇 A/V,)然後按下MENU SELECTOR(菜單選擇器)按鈕.

4. 從子菜單選擇REC MODE(拍攝模式), 並按MENU SELECTOR(菜單選擇器).
   - 每按下一次,REC MODE(拍攝模式)都會在SP及 LP 之間切換.

5. 若要退出,按下MENU(菜單)按鈕即可.

注意

- 我們建議在播放時採用同一類型的機器所拍攝的錄影帶.播放時如果採用不同類型的攝錄影機可能會產生馬賽克的失真.
- 如果您同時以SP和LP模式來錄製影帶,或僅以LP模式來錄製,可能會產生影像扭曲或時間代碼不能正確的寫入影帶中.
- 為了獲得最佳的影像和音質,請使用SP(標準播放)模式.
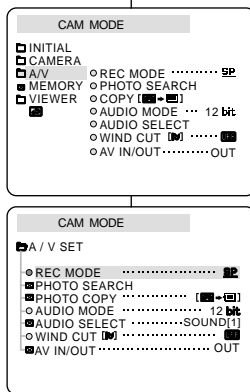
Advanced Recording

高級拍攝技巧

● AUDIO MODE

✲ The AUDIO MODE function works in CAM and PLAYER modes.

✲ This camcorder records sound in two ways. (12bit, 16bit)

■ 12bit : You can record two 12bit stereo sound tracks.
The original stereo sound can be recorded onto the
MAIN (SOUND1) track.
Additional stereo sound can be dubbed onto the SUB
(SOUND2) track.

■ 16bit : You can record one high quality stereo sound using the
16bit recording mode.
Audio dubbing is not possible when using this mode.

● AUDIO MODE(音頻模式)

✲ 可以在CAM攝影機模式和PLAYER(放映模式)下使用AUDIO MODE(音頻模式).

✲ 本機可以使用兩種音頻模式.(12位元,16位元)

■ 12位元:可以錄製兩個12位元的立體音軌.
原始立體聲可錄製在MAIN(主)(SOUND 1)音軌上.
附加的立體聲可錄製在SUB(副)(SOUND 2)音軌上.

■ 16位元:您可使用16位元錄製高品質的立體聲,使用此模式時,
不能再使用音頻配音.

1. Set the camcorder to CAM mode.

2. Press the MENU button.
■ The menu list will appear.

3. Move the MENU SELECTOR to highlight A/V and
push the MENU SELECTOR.

4. Select the AUDIO MODE from the menu and push
the MENU SELECTOR.
■ The AUDIO MODE toggles between 12bit-16bit
with each push.

5. To exit, press the MENU button.
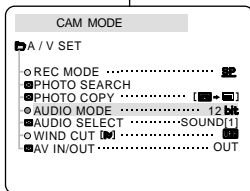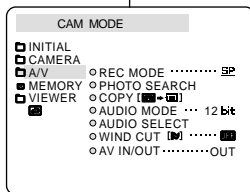
```
CAM MODE
□ INITIAL
□ CAMERA
□ A/V          ○ REC MODE ········ SP
■ MEMORY    ○ PHOTO SEARCH
□ VIEWER     ○ COPY [▣◆▣]
              ○ AUDIO MODE ··· 12 bit
              ○ AUDIO SELECT
              ○ WIND CUT [M] ······ ▢▢
              ○ AV IN/OUT ········OUT
```

```
CAM MODE
▣A / V SET

○REC MODE ·················· SP
■PHOTO SEARCH
○PHOTO COPY ········· [▣◆▣]
○AUDIO MODE ············· 12 bit
■AUDIO SELECT ·······SOUND[1]
○WIND CUT [M] ··············· ▢▢
■AV IN/OUT ····················· OUT
```

1. 將本機設置為CAM(攝影機模式).

2. 按下MENU(菜單)按鈕.
■ 顯示菜單列表

3. 移動MENU SELECTOR(菜單選擇器)選擇A/V,然
後按下MENU SELECTOR(菜單選擇器)按鈕.

4. 從子菜單中選擇AUDIO MODE(音頻模式),然後按
MENU SELECTOR(菜單選擇器).
■ 每按下一次,AUDIO MODE(音頻模式)都會在
12位元 及 16位元 之間切換

5. 繁若要退出,按下MENU(菜單)按鈕即可.

Advanced Recording

高級拍攝技巧

● WIND CUT

❀ The WIND CUT function works in CAM and PLAYER modes.
❀ The WIND CUT function minimizes wind noise or other noise while recording.
- When the wind cut is on, it is possible other low sounds will be eliminated along with the sound of the wind.

1. Set the camcorder to CAM mode.

2. Press the MENU button.
■ The menu list will appear.

3. Move the MENU SELECTOR to highlight A/V and push the MENU SELECTOR.

4. Select WIND CUT from submenu.

5. This feature toggles ON/OFF each time you push the MENU SELECTOR.
■ [M] is shown in the display when you turn the WIND CUT on.

6. To exit, press the MENU button.

Notes

■ Make sure WIND CUT is set to off when you want the microphone to be as sensitive as possible.
■ Use the WIND CUT when recording in windy places such as the beach or near buildings.

```
┌─────────────────────────────┐
│        CAM MODE             │
├─────────────────────────────┤
│ ▢ INITIAL                   │
│ ▢ CAMERA                    │
│ ▢ A/V      ○ REC MODE ⋯⋯ SP │
│ ▢ MEMORY   ○ PHOTO SEARCH   │
│ ▢ VIEWER   ○ COPY [■←□]     │
│ ▣          ○ AUDIO MODE ⋯ 12 bit│
│            ○ AUDIO SELECT   │
│            ○ WIND CUT [M] ⋯⋯│
│            ○ AV IN/OUT ⋯⋯ OUT│
└─────────────────────────────┘
```

```
┌─────────────────────────────┐
│        CAM MODE             │
├─────────────────────────────┤
│ ▣ A / V SET                 │
│ ○ REC MODE ⋯⋯⋯⋯⋯⋯⋯ SP       │
│ ▣ PHOTO SEARCH              │
│ ▣ PHOTO COPY ⋯ [■←□]        │
│ ○ AUDIO MODE ⋯⋯⋯⋯ 12 bit    │
│ ▣ AUDIO SELECT ⋯⋯ SOUND[1]  │
│ ○ WIND CUT [M] ⋯⋯⋯⋯⋯⋯       │
│ ▣ AV IN/OUT ⋯⋯⋯⋯⋯⋯ OUT      │
└─────────────────────────────┘
```

● WIND CUT(風聲消除)

❀ 可以在CAM攝影機模式和PLAYER(放映模式)下使用WIND CUT(風聲消除)功能.
❀ WIND CUT(風聲消除)功能可把錄製時的風切聲或其它噪音最小化.
- 甲、當WIND CUT(風聲消除)功能啟動時,會連同一些較小的聲音一道消除了.

1. 將本機設置為CAM (攝影機模式).

2. 按下MENU(菜單)按鈕.
■ 顯示菜單列表

3. 移動MENU SELECTOR(菜單選擇器)選擇A/V,然後按下MENU SELECTOR(菜單選擇器)按鈕.

4. 從子菜單中選擇WIND CUT(風聲消除),

5. 每按一下MENU SELECTOR(菜單選擇器),該功能都會在ON/OFF(開關)之間切換.
■ 當您打開WIND CUT(風聲消除)時,將會顯示

6. 繁若要退出,按下MENU(菜單)按鈕即可.

注意

■ 若要麥克風盡量的靈敏,請將WIND CUT(風聲消除)功能關閉.
■ 在風大的地方如海邊或高大建築物附近拍攝時,請使用WIND CUT(風聲消除).

Advanced Recording

高級拍攝技巧

● DATE/TIME

    ✵ The DATE/TIME function works in CAM, PLAYER, M.REC and M.PLAY modes.

    ✵ The date and time are automatically recorded on a special data area of the tape.

1. Press the MENU button.
    ■ The menu list will appear.
2. Move the MENU SELECTOR to highlight VIEWER and push the MENU SELECTOR.
3. Move the MENU SELECTOR to highlight DATE/TIME.
4. Push the MENU SELECTOR to select the sub-menu.
5. Using the MENU SELECTOR, select the DATE/TIME mode.
    ■ You can choose to display - the OFF, DATE, TIME, DATE/TIME
       - OFF
       - DATE only
       - TIME only
       - DATE & TIME
    ■ To return to the previous menu, highlight the DATE/TIME in the middle of the menu and push the MENU SELECTOR.
6. To exit, press the MENU button.

> **Notes**

■ The DATE/TIME is not affected by the OSD ON/OFF (DISPLAY) button.
■ The DATE/TIME will read "- - -" in the following conditions.
    - During playback of a blank section of a tape.
    - If the tape was recorded before setting the DATE/TIME in the Camera's memory.
    - When the lithium battery becomes weak or dead.
■ Before you can use the DATE/TIME function, you must set the Clock. See CLOCK SET on page 37.

```
        CAM MODE
□ INITIAL
□ CAMERA
□ A/V
□ MEMORY
□ VIEWER  ○ LCD ADJUST
          ○ DATE / TIME ········ ▣
          ○ TV DISPLAY ········ ▣
```

```
        CAM MODE
▣ VIEWER SET
  □ LCD ADJUST
  □ DATE / TIME ················· ▣
  └ ○ TV DISPLAY ················· ▣
```

```
        CAM MODE
▣ VIEWER SET
  ▣ DATE / TIME

     DATE
     TIME
   ○ DATE&TIME
```

● DATE/TIME(日期/時間)

    ✵ 可以在CAM (攝影機)及PLAYER(放映機),M.REC(照片錄製),和 M.PLAY(照片播放)模式下使用DATE/TIME(日期/時間)功能.

    ✵ DATE/TIME(日期/時間)可以在錄影帶中的特定區域內進行自動錄製.
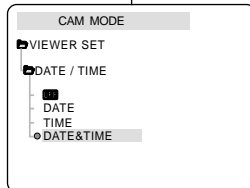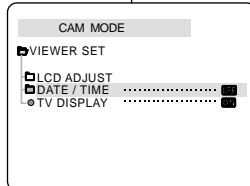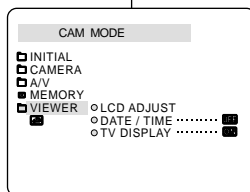
1. 按MENU(菜單)按鈕.
    ■ 之後會出現菜單選項.
2. 移動MENU SELECTOR(菜單選擇器)以便高亮度顯示 VIEWER(取景器)並按下MENU SELECTOR(菜單選擇 器)按鈕.
3. 移動MENU SELECTOR(菜單選擇器), 以便高亮度顯示 DATE/TIME(日期/時間).
4. 按MENU SELECTOR(菜單選擇器),以選擇子菜單.
5. 按MENU SELECTOR(菜單選擇器)按鈕以選擇 DATE/TIME(日期/時間)模式.
    ■ 您可以選擇-OFF(關閉),DATE(日期),TIME(時 間),DATE/TIME(日期/時間).
       - OFF
       - 只DATE
       - 只TIME
       - DATE日期和時間TIME
    ■ 若要返回上一層菜單,請選擇菜單中的 DATE/TIME(日期/時間),並按MENU SELECTOR(菜單選擇器).
6. 繁若要退出,按下MENU(菜單)按鈕即可.

> **注意**

■ DATE/TIME(日期/時間)不受螢幕顯示開關按鈕的影響.
■ 在下列情形下, DATE/TIME(日期/時間)會只顯示"- - -"
    - 在播放錄影帶的空白段時.
    - 如果本機設置DATE/TIME(日期/時間)之前,錄影帶 已拍攝完畢.
    - 在鋰電池電量不足或沒電時.
■ 在使用DATE/TIME(日期/時間)功能之前,必須先設置時鐘,參見第37頁 CLOCK SET.

Advanced Recording

高級拍攝技巧

● TV DISPLAY

⌘ The TV DISPLAY function works in CAM, PLAYER, M.REC and M.PLAY modes.

⌘ You can select the output path of the OSD (On Screen Display).

■ OFF: The OSD appears in the LCD screen only.

■ ON: The OSD appears in the LCD screen, View Finder and TV.

■ Use the DISPLAY button located at the left side of the camcorder to turn ON/OFF all of the OSD displayed on the LCD/View Finder/TV.

1. Set the camcorder to CAM, PLAYER, M.REC and M.PLAY mode.

2. Press the MENU button.

■ The menu list will appear.

3. Move the MENU SELECTOR to highlight VIEWER and push the MENU SELECTOR.

4. Select the TV DISPLAY mode in list, push the MENU SELECTOR.

■ The DISPLAY mode switches between ON/OFF with each push.

5. To exit, press the MENU button.
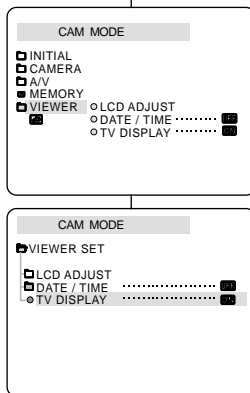
● TV DISPLAY(電視顯示)

⌘ 可以在 CAM(攝影機)及 PLAYER(放映機),M.REC(照片錄製),和 M.PLAY(照片播放)模式下使用TV DISPLAY(電視顯示).

⌘ 您可選擇OSD(螢幕顯示)的輸出路徑.

■ OFF(關):螢幕顯示只出現在液晶螢幕上.

■ ON (開): 螢幕顯示同時會出現在液晶螢幕觀景器及電視上.

■ 使用本機左側的DISPLAY(顯示)按鈕可以開或關在液晶螢幕/觀景器/電視的OSD(螢幕顯示).

1. 將本機設置為CAM(攝影機)及 PLAYER(放映機),M.REC(照片錄製),和M.PLAY(照片播放)模式

2. 按MENU(菜單)按鈕.

■ 之後會出現菜單選項.

3. 移動MENU SELECTOR(菜單選擇器)以便高亮度顯示VIEWER(取景器)並按下MENU SELECTOR(菜單選擇器)按鈕.

4. 從列表中選擇TV DISPLAY(電視顯示)模式,並按下MENU SELECTOR(菜單選擇器)按鈕.

■ 每按下一次 DISPLAY(顯示)模式就會在 ON/OFF之間切換一次.

5. 若要退出,按下MENU(菜單)按鈕即可.

CAM MODE

□ INITIAL
□ CAMERA
□ A/V
■ MEMORY
□ VIEWER ○LCD ADJUST
○DATE / TIME
○TV DISPLAY

CAM MODE

▶VIEWER SET

□ LCD ADJUST
□ DATE / TIME
○ TV DISPLAY

Advanced Recording

高級拍攝技巧

Using Quick Menu(Navigation Menu)

使用快捷菜單(導航菜單)

❆ Quick menu is available only in CAM and M.REC mode.

❆ Quick menu is used to adjust camera functions by simply using the MENU SELECTOR button.
This feature is useful for when you want to make simple adjustments without having to access menus and submenus.

■ DATE/TIME (see page 56)
- Each time you select DATE/TIME and push the MENU SELECTOR, it will be displayed in order of DATE - TIME - DATE/TIME - OFF.

■ WL.REMOTE( ) (see page 38)
- Each time you select WL.REMOTE and push the MENU SELECTOR, the WL.REMOTE is switched to either enabled ( ) or disabled ( ).

■ EIS ( ) (see page 47)
- Each time you select EIS and push the MENU SELECTOR, the EIS icon is displayed or set to OFF.

■ DSE (Digital Special Effect) (see page 48)
- Each time you select DSE and push the MENU SELECTOR, the DSE preset values are applied or set to OFF.
DSE values will not switch between On and Off if they have not been preset in the menu.

■ PROGRAM AE (see page 42)
- Each time you select PROGRAM AE and push the MENU SELECTOR, you can choose between the preset PROGRAM AE values and AUTO. You can't choose between Auto and PROGRAM AE values if the values have not been preset in the regular menu.

MIRROR

10:00AM
JAN.10,2003
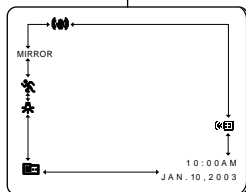
(CAM mode)

❆ 只可以在CAM攝影機和M.REC模式下才能使用快捷菜單.

❆ 通過簡單地使用MENU SELECTOR(菜單選擇器),即可使用快捷菜單來選用攝錄影機的功能.
在您要作簡單的調節時,不必在主菜單或子菜單中來回選擇,是一個有用的功能.

■ DATE/TIME(日期/時間)(見56頁)
- 王、在您選擇DATE/TIME(日期/時間)並按MENU SELECTOR(菜單選擇器)時,本機會按DATE-TIME-DATE/TIME-OFF 的順序進行顯示.

■ WL.REMOTE(遙控)( )(見38頁)
- 在您選擇WL.REMOTE(遙控),並按MENU SELECTOR(菜單選擇器)時,都會在啟用( )或禁用( )之間切換一次.

■ EIS (電子防振功能) ( )(見47頁)
- 癸、在您每次選擇EIS(防振功能)並按MENU SELECTOR(菜單選擇器)時,系統都會顯示EIS標誌或將其設置為OFF(關閉).

■ DSE (數位特殊效果)(見48頁)
- 在您每次選擇DES 並按MENU SELECTOR(菜單選擇器)時,系統都會應用預設好的值或將其關閉OFF.除非為DSE預設好了值,否則無法在ON和OFF之間切換.

■ PROGRAM AE(自動程式曝光)(見42頁)
- 在您每次選擇PROGRAM AE (自動程式曝光), 並按MENU SELECTOR(菜單選擇器)時,系統都會在預設的值和AUTO(自動)之間切換一次.但除非已在正常的的菜單中為PROGRAM AE (自動程式曝光)先預設好了值,否則無法在此模式中作切換

Advanced Recording

高級拍攝技巧

■ WHT. BALANCE (see page 44)
  - Each time you select WHT. BALANCE and push the MENU SELECTOR, you can choose between preset WHT.BALANCE values and AUTO.
    As in PROGRAM AE, you can't choose between Auto and WHT.BALANCE values it they have not been preset.

■ SHUTTER SPEED & EXPOSURE
  - You can set values for SHUTTER SPEED and EXPOSURE by selecting (▣) icon and pushing the MENU SELECTOR. For more information, see the next chapter.

■ WHT.BALANCE(白平衡)(見44頁)
  - 在您每次選擇WHT.BALANCE(白平衡), 並按MENU SELECTOR(菜單選擇器)時,系統都會在預設的值和AUTO(自動)之間切換一次.與PROGRAM AE 一樣,除非已在正常的菜單中為WHT.BALANCE(白平衡)先預設好了值,否則無法在此模式中作切換.

■ SHUTTER SPEED & EXPOSURE(快門速和曝光)
  - 在您每次選擇(▣)標誌,並按MENU SELECTOR(菜單選擇器)時,您可以為快門速度和曝光設置數值,有關詳細訊息請參見下一章.

Setting the Quick menu

1. Set the camcorder to CAM mode.

2. Move the MENU SELECTOR to select a function you want and then push the MENU SELECTOR to change the values.

設置快捷菜單

1. 將本機設置為CAM(攝影機模式).

2. 移動MENU SELECTOR(菜單選擇器)選擇所需的功能並按下MENU SELECTOR(菜單選擇器)按鈕以改變數值.

Note

■ Quick menu function will not operate in EASY mode.

注意

■ 可以在EASY(簡易)模式使用快捷菜單功能.

EIS

DSE —— MIRROR
PROGRAM AE —— ❄
WHT. BALANCE —— ♣
SHUTTTER
EXPOSURE —— ▣ SHUTTER
▣ EXPOSURE
▣

🔳 STBY
0 : 0 0 : 0 0

🔳 —— WL.REMOTE

1 0 : 0 0 A M
J A N . 1 0 , 2 0 0 3 —— DATE/TIME

Advanced Recording

高級拍攝技巧
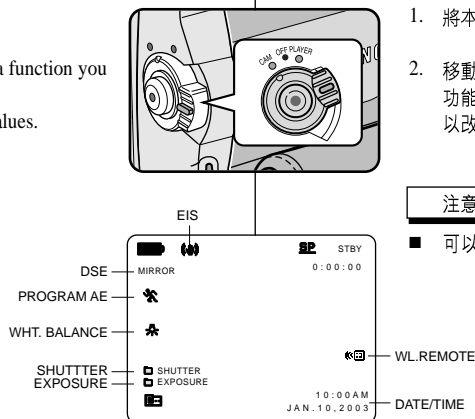
SHUTTER SPEED & EXPOSURE

- �֍ You can set SHUTTER SPEED and EXPOSURE in CAM/M.REC mode.
- �֍ SHUTTER SPEED and EXPOSURE values can only be set in the Quick Menu.
- ✖ SHUTTER SPEED and EXPOSURE are automatically switched and/or deactivated.

1. Set the power switch to CAM mode.
2. Move the MENU SELECTOR until you see icon(🔳) on, and then push the MENU SELECTOR.
   - ■ You see a screen on which you can select SHUTTER SPEED and EXPOSURE.
   - ■ Move the MENU SELECTOR to select the item you want and then push the MENU SELECTOR.
   - ■ SHUTTER SPEED can be set to 1/60, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000 or 1/10000.
   - ■ Only SHUTTER SPEED up to 1/250 are available when using a M.REC mode.
   - ■ EXPOSURE can be set between 00 and 29.
3. To exit from the setting screen, select the icon(🔳) and push the MENU SELECTOR.

Recommended Shutter speeds when recording

- ✖ Outdoor sports such as golf or tennis : 1/2000 or 1/4000.
- ✖ Moving cars or trains or other rapidly moving vehicles such as roller coasters : 1/1000, 1/500 or 1/250
- ✖ Indoor sports such as basketball : 1/100

Notes

- ■ If you want to use the selected shutter speed and exposure value, you should begin the recording with shutter speed and exposure adjustment screens displayed on the LCD.
- ■ If you manually change the shutter speed and exposure value when Auto-exposure option is selected, the manual changes will be applied first.
- ■ Image may not seem as smooth when a high shutter speed is set.
- ■ The camcorder returns to auto shutter setting and auto exposure setting when you change to the EASY, SLOW SHUTTER modes.
- ■ When recording with a SHUTTER SPEED of 1/1000 or higher, make sure the sun is not shining into the lens.
- ■ When recording with a SHUTTER SPEED or EXPOSURE, the Flash function does not work.

快門速度和曝光

- ✖ 只可以在CAM/M.REC模式下才能設置快門速度和曝光功能.
- ✖ 只能在快捷菜單才能設置快門速度和曝光值.
- ✖ 快門速度和曝光可以自動切換 和/或 禁用.

1. 將本機設置為CAM(攝影機模式).
2. 移動MENU SELECTOR(菜單選擇器)直到出現(🔳)標誌,然後按下 MENU SELECTOR(菜單選擇器).
   - ■ 您可以在螢幕上選擇快門速度和曝光.
   - ■ 轉動MENU SELECTOR(菜單選擇器)選擇需項目,然後按MENU SELECTOR(菜單選擇器).
   - ■ 可以將快門速度設定為 1/60,1/100,1/250,1/500,1/1000,1/2000,1/4000或1/10000秒.
   - ■ 當使用M.REC模式時,快門速度僅可以使用1/250
   - ■ 曝光可設置為00和29之間的任何值.
3. 驚若要退出選擇(🔳)標誌並按MENU SELECTOR(菜單選擇器).

錄影時推薦的快門速度

- ✖ 室外運動如高室外運動如高爾夫或網球:1/2000和1/4000.
- ✖ 移動中的轎車,火車或其他快速移動的車輛如過山車:1/1000,1/500或 1/250.
- ✖ 室內運動如籃球:1/100.

注意

- ■ 如果您要使用時,則依照顯示在液晶螢幕的快門速度及曝光值進行拍攝.
- ■ 如果您選擇了自動曝光選項時,又手動改變了快門速度及曝光值,那麼手 動的改變將首先生效.
- ■ 當設置成高速快門時,影像可能顯示不平滑.
- ■ 當您將改成EASY(簡易),SLOW SHUTTER(慢速快門)模式時,本機會自 動返回自動快門設置和自動和自動曝光設定.
- ■ 當使用SHUTTER SPEED(快門速度)為1/1000或更高來進行攝影時,確定 太陽光不要照射進鏡頭.
- ■ 在選用快門速度或曝光進行錄影時,閃光燈不能工作.

Advanced Recording

高級拍攝技巧

SLOW SHUTTER (Low Shutter Speed)

SLOW SHUTTER(慢速快門)

�8 The SLOW SHUTTER function works in CAM mode only.
�8 The shutter speed can be controlled, allowing you to record slow moving objects.

1. Set the power switch to CAM mode.

2. Press the SLOW SHUTTER button.

3. Each time you press the SLOW SHUTTER button, SHUTTER SPEED is changed to 1/30, 1/15, 1/8, off.

4. To exit, press the SLOW SHUTTER button.

�8 只可以在CAM攝影機模式下才能使用SLOW SHUTTER(慢速快門)功能.
�8 可以控制快門速度,這樣就能允許您拍攝慢速移動的物體.

1. 將本機設置為CAM(攝影機模式).

2. 按下SLOW SHUTTER(慢速快門)按鈕.

3. 在您每次按下SLOW SHUTTER(慢速快門)按鈕時,快門速度會在1/30秒,1/15秒,1/8秒和OFF(關)之間進行切換.

4. 若要退出,按下SLOW SHUTTER(慢速快門)按鈕即可.
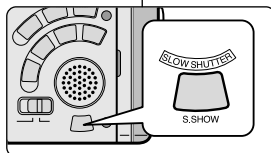
Notes

- When using "SLOW SHUTTER" the image takes on a slow motion like effect.
- The SLOW SHUTTER function will not operate in EASY mode.
- While using the SLOW SHUTTER function, you cannot use the following functions:
  - PROGRAM AE, EIS, Digital Zoom, SHUTTER SPEED, EXPOSURE, DSE, MEMORY MIX, Flash
- When using "SLOW SHUTTER" function, the focus is adjusted slowly and sometimes the white dots will appear on the screen, this is not a fault.

注意

- 在使用此功能時,影像會有慢速的效果.
- SLOW SHUTTER(慢速快門)功能不能與EASY(簡易)一同使用
- 在使用慢速快門時,您無法使用下列功能
  - 自動程式曝光,EIS電子防手振,數位變焦,快門速度,曝光,數位特效,混合記錄閃光燈.
- 當使用慢速快門功能時,對焦會會較緩慢,而且有時螢幕會出現白點,這不是故障.

Advanced Recording

高級拍攝技巧

EASY Mode (for Beginners)

EASY(簡易)模式(適用於初學者)

❀ The EASY mode allows a beginner to easily make good guality video recordings.
  ■ The EASY mode only operates in CAM mode.

1. Set the power switch to CAM mode.

2. By pressing the EASY button, all functions on the camera will be set to off and the recording settings will be set to the following basic modes:
  ■ Battery level, recording mode, counter, DATE/TIME, and EIS ((⬦)) will be displayed.
  ■ The word "EASY.Q" will appear on the LCD at the same time.
    However, the DATE/TIME will only be seen if it has been previously set. (see page 56)

3. Press START/STOP to start recording.
  ■ Recording will begin using the basic automatic settings.

4. Pressing the EASY button again turns the EASY mode off.
  ■ The camera will return to the settings that were set prior to activating EASY mode.

EASY Q

■■■ (⬦)   ⬚P   STBY
EASY 🔄   0 : 0 0 : 0 0
                          ⬚ 5 5 min

                          1 0 : 0 0 AM
                          JAN.10,2003
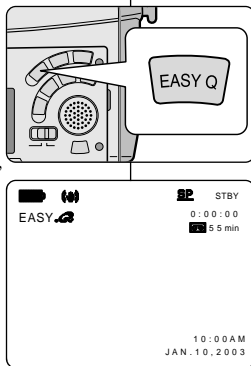
❀ EASY(簡易)模式可以幫助初學者拍攝好畫面
  ■ 只可以在CAM攝影機模式下使用EASY(簡易)模式

1. 將電源開關轉至CAM(攝影機)模式.

2. 通過按下EASY(簡易)按鈕,攝錄影機上所有的功能將會被設置OFF(關閉),且拍攝的設定也將被設置以下基本模式:
  ■ 螢幕上將會顯示電池電量,錄影模式,計數器,DATE/TIME,EIS. (⬦)
  ■ EASY.Q(簡易)字樣將會同時出現在液晶螢幕上.
    然而,只有在預先設置了DATE/TIME(日期/時間)的情況下,才會見到日期/時間.(見56頁).

3. 按START/STOP(開始/停止)按鈕開始拍攝.
  ■ 拍攝會採用基本的自動設置開始拍攝.

4. 再次的按下EASY(簡易)按鈕時,將會關閉簡易模式.
  ■ 本機會回到設定簡易模式之前的狀態.

| Notes |

■ In EASY mode, certain functions are not available, such as MENU, BLC, MF/AF.
  - If you want to use these functions, you must first switch the EASY mode off.
■ The EASY mode settings are deleted when the battery pack is removed from the camcorder and therefore must be reset when a battery pack has been replaced.

| 注意 |

■ 在EASY(簡易)模式下,某些功能不可用,如MENU,BLC,MF/AF.
  - 如果您想要使用這些功能,必須先將EASY(簡易)模式關閉.
■ 如果將電池組從本機卸下時,EASY(簡易)模式就會被取消,因此更換電池後,必須要重新設置.

Advanced Recording

高級拍攝技巧

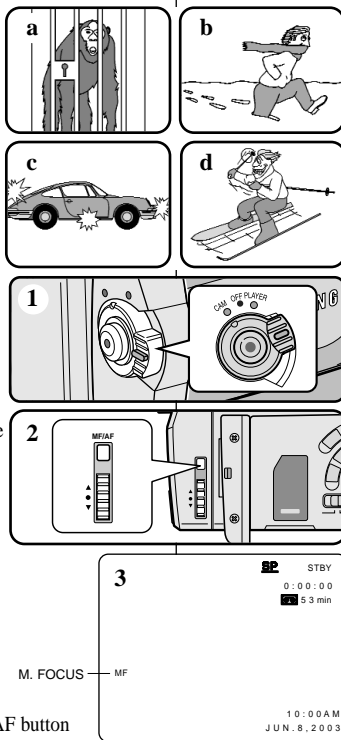## MF/AF (Manual Focus/Auto Focus)

MF/AF(手動對焦/自動對焦)

�instruction The MF/AF function works in CAM, M.REC mode only.

✻ 只有在 CAM 攝影機,M.REC 模式下才能使用 MF/AF(手動/自動對焦) 功能.

✻ In most situations, it is better to use the automatic focus feature, as it enables you to concentrate on the creative side of your recording.

✻ Manual focusing may be necessary under certain conditions that make automatic focusing difficult and/or unreliable.

✻ 在大部份的情況下最好使用自動對焦功能, 因為它能幫您集中精神在拍攝的創意上.

✻ 在某些的特定的條件下,自動對焦很難或不 可靠時,請使用手動對焦.

Auto Focusing

✻ If you are inexperienced in the use of camcorders, we recommend that you make use of Auto Focus.

自動對焦

✻ 如果您對本機的使用不太熟悉,我們建議您 使用自動對焦模式.

Manual Focusing

✻ In the following cases you may obtain better results by adjusting the focus manually.

a. A picture containing several objects, some close to the camcorder, others further away.
b. A person enveloped in fog or surrounded by snow.
c. Very shiny or glossy surfaces like a car.
d. People or objects moving constantly or quickly like an athlete or a crowd.

1. Set the power switch to CAM mode.
2. Frame the picture with the zoom control.
   ■ If you use the zoom after manual focusing, the picture may go out of focus.
3. Press the MF/AF button to switch to manual focus.
   ■ M. FOCUS(MF) appears in the display.
4. Turn the MF dial up or down until the object is in focus.
   ■ Zoom out a little if focusing is difficult.
5. To return to AF(Auto Focus: [A]), press the MF/AF button again.

手動對焦
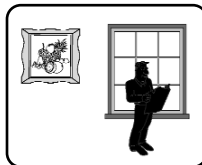
✻ 在下列情況下拍攝時,採用手動對焦可獲得 更好的結果.

a. 畫面中的物體前後遠近較複雜時.
b. 人物被霧氣包圍或四面皆雪時.
c. 表面太亮,例如汽車等.
d. 不停移動的人物或物体,如拍攝運動員或人群時.
1. 將電源開關轉至 CAM(攝影機)模式.
2. 使用變焦鏡頭選取好要拍攝的畫面.
   ■ 如果在手動對焦後再使用變焦鏡頭,則可能 會對焦不準.
3. 按手動對焦/自動對焦(MF/AF)按鈕,切換到手動 對焦.
   ■ 顯示 MF (手動對焦)
4. 上下移動手動對焦轉盤,直到物体處於焦距內.
   ■ 鐟如果很難對焦,請稍稍推遠一點.
5. 若要回到 AF(自動對焦 [A]),再次按下(MF/AF) 按鈕即可.

M. FOCUS — MF

Advanced Recording

高級拍攝技巧

BLC (Back Light Compensation)

BLC(逆光補償)

✄ BLC works in CAM/M.REC mode.

✄ Back lighting exists when the subject is
darker than the background:
- The subject is in front of a window.
- The person to be recorded is wearing
  white or shiny clothes and
  is placed against a bright background;
  the person's face is too dark to
  distinguish his/her features.
- The subject is outdoors and the background is overcast.
- The light sources are too bright.
- The subject is against a snowy background.

* BLC off

* BLC on

✄ 可以在CAM(攝影機)或M.REC(照片錄
製)下使用BLC(逆光補償)功能.
✄ 當被攝物體比背景暗時,則是逆光狀態.
例如:
- 被攝物位於窗前.
- 被攝物體身著白色衣服,後方是明亮
  背景,人物的臉孔較暗不易辨認時.
- 被攝物處於室外,背景是明亮的天空
  時.
- 光源太亮.
- 被攝物體背四周是白雪時.
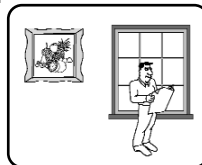
1. Set the power switch to CAM mode.

2. Press the BLC button.
- Normal - BLC - Normal
- BLC enhances the subject.

BLC
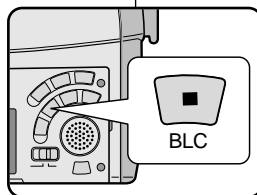
1. 將本機設置為CAM(攝影機模式).

2. 按下BLC(逆光補償)按鈕.
- Normal - BLC - Normal
  (正常-逆光補償-正常)
- BLC(逆光補償)有助於增強被攝體的曝光量.

Note

■ The BLC function will not operate in EASY mode.

注意

■ 在EASY(簡易)模式下,不能使用BLC(逆光補償)功能.

Advanced Recording

高級拍攝技巧

Fade In and Out

Fade In and Out(淡入和淡出)

�֍ The FADE function works in CAM mode only.
✖ You can give your recordings a professional look by using special effects such as fading in at the beginning of a sequence or fading out at the end of a sequence.

✖ 只可以在CAM攝影機模式下才能使用Fade In and Out(淡入和淡出)功能.
✖ 為了讓影片有專業的水準,可以使用此效果,例如在一段影片的開始啟用淡入的手法,在結束時採用淡出的手法.

To Start Recording

1. Before recording, hold down the FADE button.
   The picture and sound gradually disappear (fade out).
2. Press the START/STOP button and at the same time release the FADE button. Recording starts and the picture and sound gradually appear (fade in).

To Stop Recording
(use FADE IN / FADE OUT)

3. When you wish to stop recording, hold down the FADE button. The picture and sound gradually disappear (fade out).
4. When the picture has disappeared, press the START/STOP button to stop recording.

a. FADE OUT
   (Approx. 4 seconds)

b. FADE IN
   (Approx. 4 seconds)

開始拍攝

1. 開始拍攝時,請按下FADE(淡化)鍵.
   影像和聲音會逐漸消失(淡出).

2. 按下START/STOP(開始/停止)按鈕,同時鬆開FADE(淡化)鍵, 影像和聲音會逐漸顯現(淡入).

停止拍攝(使用淡入/淡出)

3. 當您要停止拍攝時,按下FADE(淡化)鍵.
   影像和聲音會逐漸消失(淡出).

4. 等影像和聲音會消失後, 按下START/STOP(開始/停止)按鈕,停止拍攝.

按FADE鍵　　　a. FADE OUT (淡出)　　　逐漸消失

a. FADE OUT (淡出)
   約4秒鐘

逐漸顯現　　　b. FADE IN (淡入)　　　鬆開FADE鍵
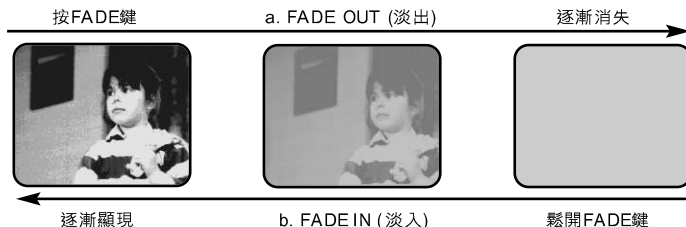
b. FADE IN(淡入)
   約4秒鐘

Advanced Recording

高級拍攝技巧

Audio dubbing

�֍ The AUDIO DUBBING function only works in PLAYER Mode.
�֍ You can add sound to the original sound on a pre-recorded tape, recorded in SP mode with 12bit sound.
✷ Use the internal and external microphones or other audio equipment.
✷ The original sound will not be erased.

Dubbing sound

1. Set the camcorder to PLAYER mode.
   ■ If you want to use an external microphone, connect the microphone to the external MIC input jack on the camcorder.
   ■ When you wish to dub using the External A/V input, connect the Multi-AV cable to the camcorder by inserting the Multi-AV cable into the Multi-AV Jack at the front side of the camcorder.
     - Press the MENU button, move the MENU SELECTOR to highlight A/V and push the MENU SELECTOR.
     - Move the MENU SELECTOR to highlight AV IN/OUT and push the MENU SELECTOR to select AV IN/OUT.
     - Move the MENU SELECTOR to highlight AV IN (or S-VIDEO IN) and push the MENU SELECTOR to select AV IN (or S-VIDEO IN).
2. Press the ▶/Ⅱ (PLAY/STILL) button and find the timeframe of the scene to be dubbed.
3. Press the ▶/Ⅱ (PLAY/STILL) button to pause the scene.
4. Press the A.DUB button on the Remote Control.
   ■ A.DUB will be displayed on the LCD.
   ■ The camcorder is in a ready-to-dub state for dubbing.
5. Press the ▶/Ⅱ (PLAY/STILL) button to start dubbing.
   ■ Press the ■ (STOP) button to stop the dubbing.

Notes

■ You can not use the audio dubbing function while playing a write protected video tape.
■ When you wish to dub using the External A/V input, you must connect the Multi-AV cable to the audio system from which you wish to record.
■ When adding sound using the built-in microphone, make sure not to connect any cables to the camcorder.
■ You can not dub sound on a pre-recorded tape in LP mode or 16 bit mode.

Audio (L) Audio (R)

AV IN

Audio dubbing (音頻配音)

✷ 只有在PLAYER播放模式下才可使用Audio dubbing (音頻配音)功能.
✷ 您可以在拍好的影帶中為原音加上配音,該配音在12位元的SP(標準播放)模式下錄製.
✷ 可以使用內建麥克風和外接麥克風或其他音頻設備.
✷ 不會抹除原音.

配音

1. 將本機設置為PLAYER(放映機模式).
   ■ 如果您想使用外接麥克風,請將外接麥克風接到本機的麥克風輸入插孔中.
   ■ 如果您使用外接A/V輸入配音,請將Multi-A /V線連接到本機前方的A/V輸入插孔中.
     - 按下MENU(菜單)按鈕,轉動MENU SELECTOR(菜單選擇器)選擇A/V,按MENU SELECTOR(菜單選擇器).
     - 轉動MENU SELECTOR(菜單選擇器)高亮顯示AV IN/OUT,選擇A/V IN (或S-VIDEO輸入).
     - 轉動MENU SELECTOR(菜單選擇器)使AV/IN(輸入)(或S-VIDEO輸入)高亮顯示,並按MENU SELECTOR(菜單選擇器)以選擇AV IN/OUT(輸入/輸出)
2. 按下▶/Ⅱ (PLAY/STILL)(播放/暫停)按鈕,並找到要配音的影片開頭.
3. 按下▶/Ⅱ (PLAY/STILL)(播放/暫停)按鈕以暫停.
4. 按下遙控器上的A.DUB(音頻配音)按鈕.
   ■ 螢幕上會顯示A.DUB.
   ■ 本機處於配音準備就緒狀態.
5. 按下▶/Ⅱ (PLAY/STILL)(播放/暫停)按鈕開始配音.
   ■ 按下■ (STOP)(停止)按鈕,停止配音.

注 意

■ 在有保護的錄影帶,不能使用配音功能.
■ 如果您想使用External A/V(外接A/V)輸入配音,則必須使用Multi-A /V (音頻/視頻)線將本機連結到要進行錄製的音頻設備上.
■ 在使用內有建麥克風,確定不要連接其他電纜線到本機上.
■ 您不能在先期錄製的LP(長時間播放)或16 bit模式下進行配音.
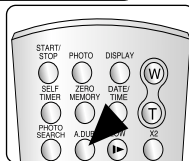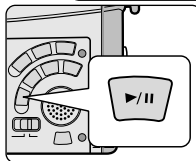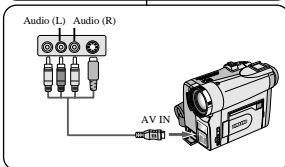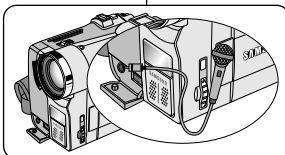
Advanced Recording | 高級拍攝技巧

Dubbed audio Playback | 播放音頻配音

1. Insert the dubbed tape and press MENU button.

2. Move the MENU SELECTOR to highlight A/V.

3. Push the MENU SELECTOR to enter the sub-menu.

4. Use the MENU SELECTOR to select AUDIO SELECT from the submenu.

5. Push the MENU SELECTOR to enter the sub-menu.

6. Using the MENU SELECTOR, select the AUDIO playback channel.
    - Push the MENU SELECTOR to confirm the audio playback channel.
        - SOUND1 : play the original sound.
        - SOUND2 : play the dubbed sound.
        - MIX(1+2) : play back SOUND1 and 2 equally mixed.

7. To exit, press the MENU button.

8. Press the ▶/II (PLAY/STILL) button to playback the dubbed tape.

```
    PLAYER MODE
  A / V SET
● REC MODE ·················· ᴽᴾ
□ PHOTO SEARCH
■ PHOTO COPY ··········· [■◄□]
● AUDIO MODE ············· 12 bit
□ AUDIO SELECT ········SOUND[1]
□ WIND CUT [▥] ·················
□ AV IN/OUT ···················· OUT
```

```
    PLAYER MODE
  A / V SET
 AUDIO SELECT
○ SOUND [ 1 ]
  SOUND [ 2 ]
  MIX [ 1 + 2 ]
```
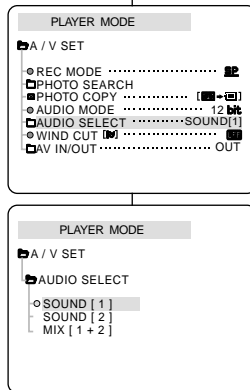
1. 插入已配音的錄影帶並按下MENU(菜單)按鈕.

2. 移動MENU SELECTOR(菜單選擇器)以便選擇 A/V.

3. 按下MENU SELECTOR(菜單選擇器)按鈕進入子 菜單.

4. 使用MENU SELECTOR(菜單選擇器)在子菜單中 選擇AUDIO SELECT(音頻選擇).

5. 按MENU SELECTOR(菜單選擇器)按鈕以進入子 菜單.

6. 使用MENU SELECTOR(菜單選擇器),選擇AUDIO 播放聲道.
    - 按MENU SELECTOR(菜單選擇器)按鈕確認音頻播放聲道.
        - SOUND1(聲道 1):播放原音.
        - SOUND2(聲道 2):重放配音.
        - MIX(1+2)㐧[混音 1+2]:播放均等混合的聲道1和2.

7. 鷘若要退出,按下MENU(菜單)按鈕即可.

8. 按▶/II (PLAY/STILL)(播放/暫停)按鈕播放配音錄影帶.

Note

- When you playback added sound (SOUND2 or MIX mode), you may experience loss of sound quality.

注 意

- 在您播放添加的聲音(SOUND2或MIX模式),會感到音質略為下降.

Advanced Recording

高級拍攝技巧

PHOTO Image Recording

拍攝照片

1. Press the PHOTO button lightly (about halfway down) and hold it.
   - The still picture appears on the LCD monitor.
   - If you do not wish to record, release the button.

2. Press the PHOTO button fully down.
   - The still picture is recorded for about 6~7 seconds.

3. After the PHOTO has been recorded, the camcorder returns to STBY mode.

PHOTO

1. 輕輕地 按下PHOTO(拍照)按鈕(按下約 一半)並且保持該狀態.
   - 螢幕上出現靜止的 畫面.
   - 如您不 想拍攝,鬆開按 鈕即可.

2. 完全按 下PHOTO(照相)按鈕.
   - 靜止照 片會被拍下,大約需6~7秒的時 間來寫入.

3. 照片拍完後,本機會 回到STBY(待機)狀態.

Searching for a PHOTO picture

照片搜 索

�championThe PHOTO SEARCH works in PLAYER mode only.

✿ 只有在 PLAYER(放映機)模式下,才能使用PHOTO SEARCH(拍照記搜 索)功能 .

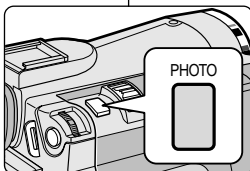1. Press the MENU button. (or press the PHOTO SEARCH button on the remote control.)
   - The MENU list will appear.

2. Move the MENU SELECTOR to highlight A/V.

3. Push the MENU SELECTOR to enter the sub-menu.

4. Select PHOTO SEARCH from the sub-menu and push the MENU SELECTOR.

5. Search the PHOTO using the ▶▶ (FF) and ◀◀ (REW) buttons.
   - The PHOTO search process appears on the LCD while you are searching.
   - After completing the search, the camcorder displays the still image.

6. To exit, press the ■ (STOP) button.

```
PLAYER MODE
□ INITIAL
■ CAMERA
□ A/V        ○ REC MODE ·········· SP
□ MEMORY  ○ PHOTO SEARCH
□ VIEWER  ○ COPY [■←■]
             ○ AUDIO MODE ··· 12 bit
             ○ AUDIO SELECT
             ○ WIND CUT [■] ······ ■■
             ○ AV IN/OUT ········ OUT
```

```
PLAYER MODE
◘ A / V SET
○ REC MODE ····················· SP
◘ PHOTO SEARCH
○ PHOTO COPY ·············· [■←■]
○ AUDIO MODE ··············· 12 bit
○ AUDIO SELECT ······· SOUND[1]
○ WIND CUT [■] ·····················
◘ AV IN/OUT ····················· OUT
```
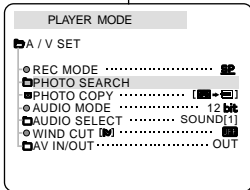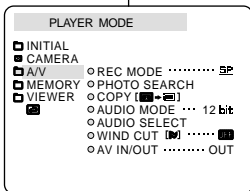
1. 按下MENU(菜單)按鈕或 在遙控器上 按下PHOTO SEARCH按鈕).
   - 顯示菜單列表

2. 移動MENU SELECTOR(菜單選 擇器)選擇A/V.

3. 然後按 下MENU SELECTOR(菜單選 擇器)按鈕,進入子菜單

4. 從子菜 單選擇PHOTO SEARCH(拍照記搜索)並按 MENU SELECTOR(菜單選擇器).

5. 在搜索 照片時請使用 ▶▶ (FF)(快轉)和 ◀◀ (REW)(快倒)按鈕.
   - 在您搜 索時,螢幕上 會出現照片 搜索過程.
   - 在完成 搜索後,本機會 顯現出照片 .

6. 繁若要 退出,按下 ■ (停止)按鈕即 可.

Advanced Recording

高級拍攝技巧

Various Recording Techniques

各種拍攝技巧

✂ In some situations different recording techniques may be required for more dramatic results.

✂ 在某些情況下採用各種拍攝姿勢會得到更顯著的效果.

Note

注　意

Please rotate the LCD screen carefully as excessive rotation may cause damage to the inside of the hinge that connects the LCD screen to the Camcorder.

請小心的旋轉液晶螢幕,因為過分旋轉液晶螢幕可能會損害液晶螢幕與本機之間的鉸鏈。

1. General recording.

2. Downward recording.

Making a recording with a top view of the LCD screen.
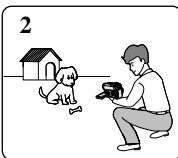
3. Upward recording.

Making a recording viewing the LCD screen from below.
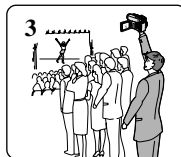
4. Self recording.

Making a recording viewing the LCD screen from the front.

5. Recording with the Viewfinder.

■ In circumstances where it is difficult to use the LCD monitor, the viewfinder can be used as a convenient alternative.

1. 一般拍攝

2. 俯視拍攝

從上向下俯視液晶螢幕進行拍攝.

3. 仰視拍攝

從下向上仰視液晶螢幕進行拍攝.

4. 自拍

從前方看著液晶螢幕進行拍攝.

5. 利用觀景器拍攝.

■ 在難以使用液晶螢幕的情況下,可使用觀景器來拍攝.

Playback

播放

Tape Playback

錄影帶播放

✵ The playback function works in PLAYER mode only.

✵ 只有在PLAY(播放)模式下才能使用播放功能.

Playback on the LCD

在液晶螢幕上播放

✵ It is practical to view a tape using the LCD when in a car or outdoors.

✵ 在車內或室外可以利用液晶螢幕觀看錄影帶.

Playback on a TV monitor

電視上播放

✵ To play back a tape, the television must have a compatible color system.

✵ We recommend that you use the AC Power Adapter as the power source for the camcorder.

✵ 電視要播放錄影帶,電視要有相同彩色制式,如NTSC,PAL.

✵ 我們建議使用交流電源適配器作為電源.

Connecting to a TV which has Audio/Video input jacks

將本機與有A/V輸入插孔的電視機相連

1. Connect the camcorder and TV with the Multi-AV cable.
   - The yellow plug : Video
   - The white plug : Audio(L)
   - The red plug : Audio(R) - STEREO only
     - If you connect to a monaural TV or VCR, connect the yellow plug (Video) to the video input of the TV or VCR and the white plug (Audio L) to the audio input of the TV or VCR.
2. Set the power switch on the camcorder to PLAYER mode.
3. Turn on the TV and set the TV/VIDEO selector on the TV to VIDEO.
   - Refer to the TV or VCR user's manual.
4. Play the tape back.

Video input-Yellow
Audio input (left)-White
Audio input (right)-Red
S-VIDEO input
TV
Camcorder
A/V OUT

1. 使用A/V線將本機與有A/V輸入插孔的電視機相連
   - 黃色插頭:VIDEO(視頻)
   - 白色插頭:AUDIO(L)[音頻左].☜
   - 紅色插頭:AUDIO(R)[音頻右].☜
     - 如果是連接只有單聲道的電視機或錄影機,將黃色插頭插入電視或錄影機的VIDEO(視頻)端,並將白色插頭L插入AUDIO[音頻]端.
2. 將本機設置為PLAYER(放映機模式)
3. 打開電視機並把電視上的TV/VIDEO(電視/視頻)選擇置於VIDEO.
   - 請參照電視或錄影機的操作手冊.
4. 開始播放影帶.
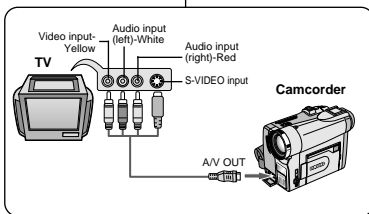
| Notes |

- You may use the S-VIDEO plug to obtain better quality pictures if you have an S-VIDEO connector on your TV.
- If you use a S-VIDEO plug, you will need to connect an audio cable.
- If you connect the cable to the Multi-AV Jack, you will not hear sound from the speakers.

| 注 意 |

- 錯如果電視機有S端子,則可用S-VIDEO線,來獲得較佳的畫質.
- 使用S-VIDEO線時仍須要插上音頻的線.
- 錯插上A/V線時,您不會聽到本機喇叭的聲音.

Playback

播放

Connecting to a TV which has no Audio and Video input jacks

連接到不帶A/V輸入插孔的電視機

- ✂ You can connect your camcorder to a TV through a VCR.

- ✂ 可透過錄影機將本機與沒有A/V輸入插孔的電視機相連

1. Connect the camcorder and VCR with the Multi-AV cable.
   - The yellow plug : Video
   - The white plug : Audio(L) - Mono
   - The red plug : Audio(R)
2. Connect a TV to the VCR.
3. Set the power switch on the camcorder to PLAYER mode.
4. Turn on both the TV and VCR.
   - Set the input selector on the VCR to LINE.
   - Select the channel reserved for your VCR on the TV set.
5. Play the tape back.

1. 使用A/V線將本機與錄影機A/V輸入插孔相連.
   - 黃色插頭:VIDEO(視頻)
   - 白色插頭:AUDIO(L)[音頻左]㊙
   - 紅色插頭:AUDIO(R)[音頻右]㊙
2. 將電視連接至錄影機.
3. 將本機設置為PLAYER(播放機)模式.
4. 打開電視機和錄影機.
   - 將錄影機上的輸入選擇開關置於LINE.
   - 把電視設為錄影機放映的頻道.
5. 開始播放影帶.

Playback

- ✂ You can play the recorded tape in PLAYER mode.

1. Connect a power source and set the power switch to PLAYER mode.
2. Insert the tape you wish to play back.
3. Using the ▶▶ (FF) and ◀◀ (REW) buttons, find the first position you wish to play back.
4. Press the ▶/Ⅱ (PLAY/STILL) button.
   - The images you recorded will appear on the TV after a few seconds.
   - If a tape reaches its end while being played back, the tape will rewind automatically.
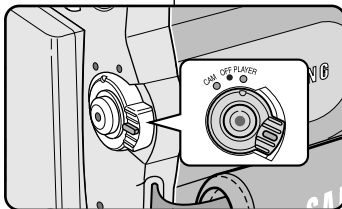
播放

- ✂ 可在PLAYER(播放機)模式播放錄好的影帶.

1. 連接電源, 將本機設置為PLAYER(播放機模式).
2. 插入要播放的錄影帶.
3. 使用▶▶ (FF)(快轉)和◀◀ (REW)(快倒)找到要播放片段的開頭.
4. 按下▶/Ⅱ (PLAY/STILL)(播放/暫停)按鈕.
   - 幾秒後,影片開始播放.
   - 饍如果影片放完後,會自動倒帶.

Note

- The playback mode (SP/LP) is selected automatically.

注意

- SP或LP播放模式會自動選擇

Playback

播放

Various Functions while in PLAYER mode

✼ The PLAY/STILL, STOP, FF, REW buttons are located on the camcorder and the Remote Control.

✼ The F.ADV(Frame advance), X2, SLOW buttons are located on the Remote Control only.

✼ To prevent tape and head-drum wear, your camcorder will automatically stop if it is left in STILL or SLOW modes for more than 3 minutes.

Playback pause

✼ Press the ▶/❙❙ (PLAY/STILL) button during Playback.

✼ To resume playback, press the ▶/❙❙ (PLAY/STILL) button.

Picture search (Forward/Reverse)

✼ Press the ▶▶ (FF) or ◀◀ (REW) buttons once during Playback or Still mode.
To resume normal playback, press the ▶/❙❙ (PLAY/STILL) button.

✼ Keep pressing ▶▶ (FF) or ◀◀ (REW) buttons during Playback or Still mode.
To resume normal playback, release the button.

Slow playback (Forward/Reverse)

✼ Forward Slow Playback
  ■ Press the SLOW button on the remote control during Playback.
  ■ To resume normal playback, press the ▶/❙❙ (PLAY/STILL) button.

✼ Reverse Slow Playback
  ■ Press the ◀❙❙ (−) button during Forward Slow Play back.
  ■ To resume forward slow playback, press the ❙❙▶ (+) button.
  ■ To resume normal playback, press the ▶/❙❙ (PLAY/STILL) button.
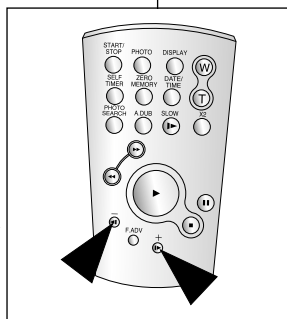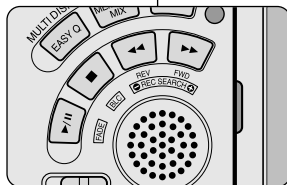
PLAYER(播放機)模式下的各種功能

✼ 本機及遙控器上有PLAY/STILL(放映/暫停),STOP(停止),FF(快轉),REW(快倒)等按鈕.

✼ 以下按鈕只出現在遙控器上:F.ADV(單張前進),X2(倍放),SLOW(慢放)按鈕.

✼ 為了防止影帶和磁鼓磨損,在暫停或慢放模式下超過3分鐘就會自動終止.

播放暫停

✼ 在播放期間,請按下 ▶/❙❙ (PLAY/STILL)(播放/暫停)按鈕來暫停.

✼ 如需繼續播放,請再按下▶/❙❙ (PLAY/STILL)(播放/暫停)按鈕.

圖像搜索(快轉／快倒)

✼ 在PLAYER(播放)模式和暫停模式期間,按下▶▶(FF)(快轉)或◀◀ (REW)(快倒)按鈕來進行搜索.如需恢復正常播放再按下▶/❙❙ PLAY/STILL (播放/暫停)按鈕即可.

✼ 在PLAYER(播放機)模式和STILL(暫停)模式期間,持續按住▶▶ (FF)(快轉)或◀◀ (REW)(快倒)按鈕進行搜索.如需恢復正常播放釋放按鈕即可.

慢放(向前/向後)

✼ 向前慢放
  ■ 在播放期間按下遙控器SLOW(慢放)按鈕.
  ■ 如需恢復正常播放,按下▶/❙❙ (PLAY/STILL)(播放/暫停)按鈕.

✼ 向後慢放
  ■ 在向前慢放期間按下 ◀❙❙ (−)按鈕.
  ■ 鐟如需恢復向前播放,按下 ❙❙▶ (+)按鈕.
  ■ 鐟如需恢復正常播放,按下▶/❙❙ (PLAY/STILL)(播放/暫停)按鈕.

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Playback

播放

Frame advance (To play back frame by frame)

- Press the F.ADV button on the Remote Control while in Still mode.
  The F.ADV function works in still mode only.
- To resume normal playback, press the ▶/Ⅱ (PLAY/STILL) button.
  �぀ Forward frame advance
    - Press the F.ADV button on the remote control in Still mode.
  ✀ Reverse frame advance
    - Press ◀Ⅱ (−) the button on the remote control to change the direction in F.ADV mode.
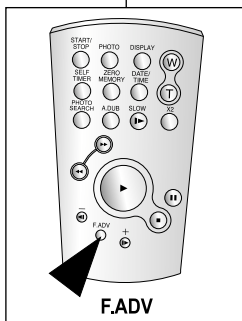   - Press the F.ADV button on the remote control.

F.ADV

X2 Playback (Forward/Reverse)

- ✀ Forward X2 Playback
  - Press the X2 button on the Remote Control during Playback.
  - To resume normal playback, press the ▶/Ⅱ (PLAY/STILL) button.
- ✀ Reverse X2 Playback
  - Press ◀Ⅱ (−) the button during during Forward X2 Playback
  - To resume normal playback, press the ▶/Ⅱ (PLAY/STILL) button.

Reverse playback

- ✀ To playback in reverse at normal speed, press the ◀Ⅱ (−) button during normal forward playback.
- ✀ Press the ▶/Ⅱ (PLAY/STILL) or Ⅱ▶ (+) button to return to normal forward playback.

Notes

- Mosaic shaped distortion may appear on the screen while in some of the various playback modes.
  - Mosaic shaped distortion or noise may be experienced when you play back tapes recorded in LP which contain various playback functions.
- Sound will only be heard during normal SP or LP playback.

逐張播放

- 在STILL(暫停)模式下,按下遙控器上的F.ADV(逐張播放)按鈕.
  只有在STILL(暫停)模式下才能使用.
- 儻如需恢復正常播放,按下 ▶/Ⅱ (PLAY/STILL)(播放/暫停)按鈕即可.
  ✀ 向前執行逐張播放
    - 在STILL(暫停)模式下,按下遙控器上的F.ADV(逐張播放)按鈕.
  ✀ 反向執行逐張播放
    - 在在F.ADV(逐張播放)模式下,按下遙控器上的◀Ⅱ(−)按鈕以改變逐張播放的方向.
    - 按下遙控器上的F.ADV(逐張播放)按鈕

X2 播放(快轉/快倒)

- ✀ 快轉X2播放
  - 在播放過程中按下遙控器上的X2按鈕.
  - 如欲恢復正常播放,按下 ▶/Ⅱ (PLAY/STILL)(播放/暫停)按鈕即可.
- ✀ 快倒X2播放
  - 在X2播放過程中按下遙控器上的◀Ⅱ(−)按鈕.
  - 如欲恢復正常播放,按下 ▶/Ⅱ(PLAY/STILL)(播放/暫停)按鈕即可.

快倒播放

- ✀ 要在正常速度下進行快倒播放,在正常放映過程中按 ◀Ⅱ(−)按鈕.
- ✀ 按 ▶/Ⅱ (PLAY/STILL)(播放/暫停)按鈕或 Ⅱ▶ (+)按鈕,恢復正常播放

注意

- 在某些播放模式下,螢幕上可能會出現馬賽克狀的失真.
  - 包含LP(長時間播放)拍攝影帶播放時也可能會有馬賽克狀的失真或噪音.
- 只有在正常SP(標準播放)或LP(長時間播放)的播放時,才能聽到聲音.

Playback

播放

ZERO MEMORY

ZERO MEMORY(歸零點記憶)

�band The ZERO MEMORY function works in both CAM and PLAYER modes.
✲ You can mark a point on a tape that you want to return to following playback.

1. Press the ZERO MEMORY button on the remote control during playback or before recording at the point you wish to return to.
   ■ The time code is changed to a tape counter that is set to zero and stored in a memory with the count M 0:00:00 (Zero memory indicator).
   ■ If you want to cancel the zero memory function, press the ZERO MEMORY button again.

2. Finding the zero position.
   ■ When you have finished playback, fast forward or rewind the tape.
     - The tape stops automatically when it reaches the zero position.
   ■ When you have finished recording, press the power switch on the PLAYER and press the ◀◀ (REW) button.
     - The tape stops automatically when it reaches the zero position.

3. The tape counter with the M (Zero memory indicator) disappears from the display and the tape counter changes to the time code.

Notes

■ In the following situations, ZERO MEMORY mode may be cancelled automatically:
   - At the end of the section marked with the ZERO MEMORY function.
   - When the tape is ejected.
   - When you remove the battery pack or power supply.
■ The zero memory may not function correctly where there is a break between recordings on the tape.

✲ 只有在CAM(攝影機)和PLAYER(放映機)模式下才能使用 ZERO MEMORY(歸零點記憶)功能.
✲ 您可以在影帶上標記一個要返回以連續播放的點.

1. 在播放或拍攝期間,請在要返回的點上按下遙控器上ZERO MEMORY(歸零點記憶)按鈕.
   ■ 時間代碼更改為錄影帶計數器,而該錄影帶計數器將置於歸零點 記憶 M 0:00:00(歸零點記憶指示器)
   ■ 如果您想取消歸零點記憶,再次按下ZERO MEMORY(歸零點記 憶)按鈕即可.

2. 找到歸零點位置
   ■ 在錄影帶播放完畢時,快轉或快倒錄影帶.
     - 在影帶播放到盡頭時,會自動停止.

   ■ 在完成拍攝時,請按下功能開關切換到PLAYER(放映機),並按 下◀◀ (REW)(快倒)按鈕.
     - 在影帶播放到盡頭時,會自動停止.

3. 帶有 M (歸零點記憶指示器)的錄影帶計數器從螢幕上消失,錄影帶 計數器變成時間代碼.

注 意

■ 在以下狀況下,歸零點記憶模式可能會自動取消:
   - 在標有歸零記憶功能的片段結尾.
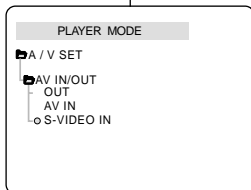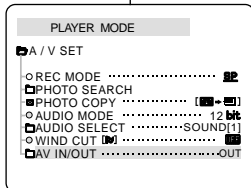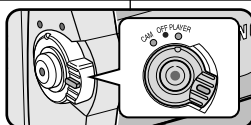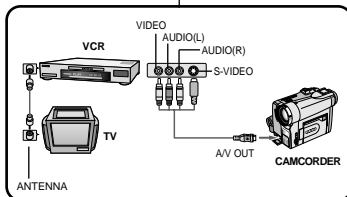   - 退出錄影帶
   - 在取出電池組或切斷電源.
■ 在錄影帶上有中斷的地方,歸零點可能不會正常工作.

Recording in PLAYER mode

在播放模式中錄製

Recording in PLAYER mode

在PLAYER(播放)模式模製

✂ You can use this camcorder as a recorder.
✂ You can record a tape from VCR or TV.

1. Connect the camcorder and VCR or TV with the Multi-AV cable.
2. Set the power switch of the camcorder to PLAYER mode.
3. Turn on the VCR or TV.
4. Insert the blank tape with protection tab closed into the camcorder.
   ■ If you want to record from a connected VCR, insert a recorded VHS tape into the VCR.
5. Push the MENU button, move the MENU SELECTOR to highlight A/V and push the MENU SELECTOR.
6. Move the MENU SELECTOR to highlight AV IN/OUT and push the MENU SELECTOR to select AV IN/OUT.
7. Move the MENU SELECTOR to highlight AV IN or S-VIDEO IN and push the MENU SELECTOR.
   ■ "AV IN" and picture appear on the LCD monitor.
   ■ OUT : Releases the INPUT mode
   ■ AV IN : When signals are received from the Audio/Video input jacks
   ■ S-VIDEO IN : When signals are received from the the S-video (S-Jack plug) and Audio inputs
8. Press the START/STOP button to set the camcorder to REC PAUSE mode.
   ■ "PAUSE" on the LCD monitor.
9. Select the TV program or playback the VHS tape.
10. Press START/STOP button to start recording.
    ■ If you want to pause recording for a while, press the START/STOP button again.
11. To stop recording, press the ■ (STOP) button.

Notes

■ When you record the images being played back on analog VCR, if they are not being played back in normal speed, (for example, more than double speed or slow playback), only gray image appears on the camcorder.
■ If you want to see the camcorder picture with a TV, set AV IN/OUT menu to OUT.

✂ 可將本機當成一台錄影機使用.
✂ 您可從錄影機或電視機的電視節目中錄製成影片.

1. 使用AV線連接本機與錄影機或電視.
2. 將本機置於PLAYER(放映機)模式.
3. 打開錄影機或電視.
4. 將空白DV帶放入本機內,注意影帶的保護標籤要處於閉合的狀態.
   ■ 如果您要從連接的錄影機來錄製的話,請把要轉拷的VHS錄影帶放入影機內.
5. 按MENU(菜單)按鈕,移動MENU SELECTOR(菜單選擇器)以便高亮度顯示AV,並按下MENU SELECTOR(菜單選擇器)按鈕.
6. 轉動MENU SELECTOR(菜單選擇器), 以便高亮度顯示AV IN/OUT以選中AV IN/OUT.
7. 轉動MENU SELECTOR(菜單選擇器), 以選擇AV IN/OUT或S-VIDEO IN,並按下MENU SELECTOR(菜單選擇器)
   ■ AV IN及影像會出現在螢幕.
   ■ 取消輸入模式.
   ■ AV IN : 視頻和音頻信號輸入時使用.
   ■ S-VIDEO IN : S-端子信號輸入時使用.
8. 按下START/STOP(開始/停止)按鈕,將本機置為REC PAUSE(錄製暫停) 模式.
   ■ PAUSE 暫停標誌會出現在螢幕上.
9. 選擇好電視節目或播放VHS錄影帶.
10. 按下START/STOP(開始/停止)按鈕,開始錄製.
    ■ 如想暫停一下,則再按下START/STOP(開始/停止)按鈕.
11. 繁若要停止錄製,按下■STOP(停止)按鈕.

注 意

■ 當您錄製VHS錄影帶所播放的影片時,如果以不正常速度播放(如大於2倍速度或以慢速時間播放)時,本機會顯示灰色圖面.
■ 如果您想用電視查看本機的影像時,請將AV IN/OUT菜單設置為OUT.

VIDEO
AUDIO(L)
AUDIO(R)
S-VIDEO
VCR
TV
A/V OUT
CAMCORDER
ANTENNA

CAM OFF PLAYER

PLAYER MODE
A / V SET
○REC MODE .... SP
PHOTO SEARCH
PHOTO COPY .... [■◄-■]
○AUDIO MODE .... 12 bit
AUDIO SELECT .... SOUND[1]
○WIND CUT .... [■]
AV IN/OUT .... OUT

PLAYER MODE
A / V SET
AV IN/OUT
OUT
AV IN
S-VIDEO IN

IEEE 1394 Data Transfer

IEEE 1394 數據傳輸

Transferring IEEE1394 (i.LINK)-DV standard data connections

傳送IEEE 1394 (i.LINK)-DV 標準數據連接

Connecting to a DV device

✵ Connecting with other DV standard products.
  ■ A standard DV connection is quite simple.
    If a product has a DV port, you can transfer data by connecting to the DV port using the correct cable.
    !!! Please be careful since there are two types of DV ports, (4pin, 6pin). This camcorder has a 4pin terminal.
✵ With a digital connection, video and audio signals are transmitted in digital format, allowing high quality images to be transferred.

與DV設備連接

✵ 與其他DV標準產品連接
  ■ DV標準連接非常簡單,如果產品有DV端口,則可以使用一條合適的纜線與其他設備的DV端口連接這樣就可進行數據傳輸.
    !!! 務必注意,有兩種 DV端口(4針型,6針型).本機是採4針型端口.
✵ 利用數位連接裝置.視頻與音頻號以數位形式傳輸,可以提高影像傳輸的品質.

Connecting to a PC

✵ If you want to transmit data to a PC, you must install a IEEE 1394 add-on card onto the PC. (Not supplied)
  ■ Turn off the power of both the camcorder and the PC before connecting.
  ■ Optional software necessary.
✵ The frame rate recorded for video capturing is dependent on the capacity of the PC.

與電腦設備連接

✵ 如果您要在電腦作傳輸時,電腦要先安裝IEEE 1394外接卡(未提供).
  ■ 在連接前,切斷本機和電腦的電源.
  ■ 需要選配軟体.
✵ 畫面截取的速率取決於電腦的性能.
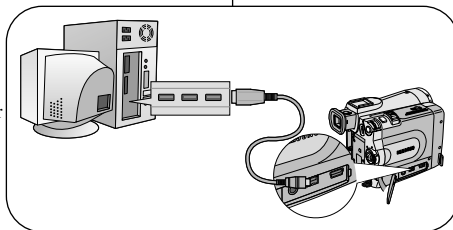
● System requirements

■ CPU : faster Intel® Pentium III™ 450Mhz compatible.
■ Operating system : Windows® 98SE, ME, 2000, XP, Mac OS (9.1~10.2)
■ Main memory : more than 64 MB RAM
■ IEEE1394 add-on card or built in IEEE1394 card

● 系統要求

■ CPU Intel® Pentium III™ 450Mhz 以上相容.鎈
■ 操作系統:Windows® 98SE, ME, 2000, XP, Mac OS (9.1~10.2)
■ 記憶體:大於64 MB RAM
■ IEEE1394卡或內建IEEE 1394卡

Notes

■ When you transmit data from the camcorder to another DV device, some functions may not work. If this occurs, please reconnect the DV cable or turn the power OFF and ON again.
■ Operation may not work correctly, depending on the software you are using, and the specifications of your PC and its settings.
  - See your PC instruction manual for details.
■ When you transmit data from the camcorder to PC, PC function button is available in PLAYER mode only.
■ Do not use the camcorder and IEEE1394 together as this will cause IEEE1394 to shut off.
■ Do not disconnect the DV cable while data is being transferred to the PC.

注 意

■ 在您使用本機向另一台DV設備傳輸時,可能不能使用某些功能.此時請重新連接DV線,或者在關閉電源後重新打開.
■ 取決於您正在使用的軟體和您的電腦規格與設定,可能不能正常工作.
  - 有關詳情,請參見電腦說明書.
■ 在本機傳送數送數據到電腦時,PC功能鍵只在放映模式起作用.
■ 不能同時使用攝影機和IEEE1394,否則會引起IEEE1394當機
■ 當數據正在傳送時,不要切斷電電纜線.

IEEE 1394 Data Transfer

IEEE 1394 數據傳輸

Recording with a DV connection cable

使用DV電纜線連接錄製

1. Set the mode switch to TAPE.

2. Set the power switch to PLAYER mode.

3. Connect the DV cable (not supplied) from the DV IN/OUT port of the camcorder to the DV IN/OUT port of the other DV device.
   - Make sure that DV appears on the screen.

4. Press the START/STOP button to begin REC PAUSE mode.
   - PAUSE is displayed on the OSD.

5. Start playback on the other DV device while you monitor the picture.

6. Press the START/STOP button to start recording.
   - If you want to pause recording momentarily, press the START/STOP button again.

7. To stop recording, press the ■ (STOP) button.
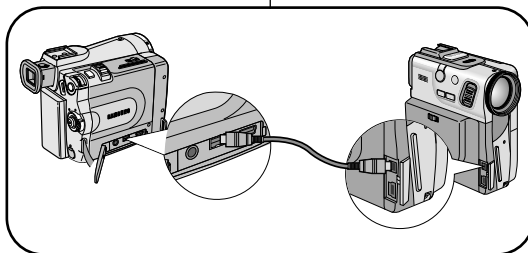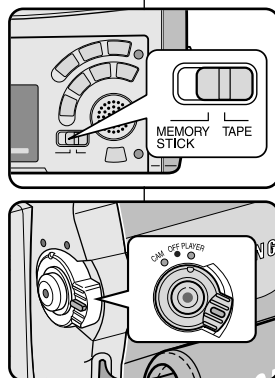
1. 將本機設置為TAPE(影帶模式).

2. 將本機設置為PLAYER(放映機模式).

3. 將DV電纜線(未提供)從本機DV輸出/輸入端口連接到另一台DV設備的DV輸出/輸入端口.
   - 確認螢幕上出現了DV.

4. 按下START/STOP(開始/停止)按鈕進入REC PAUSE(錄影暫停模式.
   - PAUSE(暫停)標誌將會在螢幕上顯示.

5. 在您監視影像的同時,請啟動另一台DV的播放

6. 按下START/STOP(開始/停止)按鈕開始錄製.
   - 如果您想立即暫停錄製,請再按下START/STOP(開始/停止)按鈕.

7. 如需停止錄製,請按下 ■ (STOP)(停止)按鈕.

Notes

注　意

- When using this camcorder as a recorder, the pictures that appear on a monitor may seem uneven, however recorded pictures will not be affected.
- Operation is not guaranteed for all the recommended computer environments mentioned above.

- 當將本機作為錄影機時,顯示器上的影像可能不穩定,但是錄製的影像不會受到影響.
- 本操作只能在以上提及的推薦環境中進行.

USB interface

USB接口

● Transferring a Digital Image through a USB Connection

�含 You can easily transfer still images/movies from a camera, tape to a PC without additional add-on cards via a USB connection.

✂ You can transfer an image to a PC via a USB connection.

✂ If you transfer data to a PC, you need to install the software (Driver, Editing software) supplied with the camcorder.

● 通過一個USB的連接傳輸數位影像

✂ 透過USB連接,可以非常方便的從本機向電腦傳送照片/影像,而不須另附加外接插卡.

✂ 您可透過USB連接傳送影像.

✂ 如果利用USB傳輸數據,您要先安裝USB驅動程式,編輯軟体.

System Requirements

- CPU : Intel® Pentium II™ 400MHz processor compatible or better
- Operating system : Windows® 98SE/ME/ 2000/XP
- RAM : 64 MB or more
- CD-ROM: 4x CD-ROM drive
- VIDEO : 65,000-color or better video display card
- Available USB port
- Hard Disc : 4GB (8GB recommended)

系統要求

- CPU Intel® Pentium II™ 400MHz 以上相容
- 操作系統:Windows® 98SE/ME/2000/XP
- 記憶體:大於64MB RAM
- CD-ROM:4X CD ROM光碟機
- 65,000色或以上
- 可用之USB端口
- 4GB上硬碟建議8GB以上

Notes

- Intel® Pentium II™ is a trademark of the Intel Corporation.
- Windows® is a registered trademark of the Microsoft® Corporation.
- All other brands and names are property of their respective owners.
- Operations are not guaranteed for all of the recommended computer environments mentioned above.

注 意

- Intel® Pentium II™ 為Intel公司的商標
- Windows® 為Microsoft® 公司的註冊商標.
- 其他品牌和名稱都屬於各自的所有者.
- 本操作只能在以上提及的推薦環境中進行.

USB interface

USB接口

Installing DVC Media 6.0 Program

安裝DVC Media 6.0程式

�övDo not connect the camcorder to PC before installing the program.
✖If another camera or scanner is connected, please disconnect it in advance.

✖在安裝該程式之前請不要將本機與電腦作連接.
✖如果已連接了另一台攝錄影機或掃描器,則先請將其切斷連接

Program installation

安裝程式

1. Insert the software CD into CD-ROM drive.
   - Installation selection screen appears in the monitor.
2. If the installation selection screen does not appear after inserting the CD click "Run" on the Windows "Start" menu and execute SETUP.EXE file to begin installation.
   - When CD-ROM drive is set to "D:drive", type "D:\setup.exe" and press Enter.
3. Click one of the icons listed below to install the selected software. (The program automatically check and install the driver which the PC is needed)
   ■ DVC Driver: USB PC CAMERA Driver (Capture driver, Twain driver)
   ■ DVC Media 6.0: PC Application program
   ■ Photo Edition: Editing Software
   ■ MS Formatter: Using when you format Memory Stick on your PC

1.

1. 將CD-ROM放入光碟機
   - 電腦螢幕上會出現安裝選擇畫面
2. 如果不自動執行時,請按莃}始 ->執行->輸入 X:\setup.exe來啟動安裝.
   - 如果您的光碟機代號為D時,把X換作D 涙\setup.exe .
3. 單擊下方選項(該程式會自動安裝所需的軟体).
   ■ DVC driver(DVC驅動程式): USB PC CAMERA Driver(USB PC照相機驅動程式,Twain驅動程式)
   ■ DVC Media 6.0:電腦應用程式.
   ■ Photo Edition(照片編輯軟体)
   ■ MS格式化程式:在您格式化電上的記憶卡中使用.

Using the "PC camera" function

使用PC照相機功能

✖You can use this camcorder as a PC CAMERA.
   It is possible to use your camcorder with Web sites that require video & chat functions.
✖When you connect to a Web site that can provide video and chat functions, you can use your camcorder for such functions.
✖Using the camcorder with PC installed Net-meeting program, you can conduct video conference.
✖The screen size of PC CAMERA is 160 × 120 Pixel. (320 × 240)

1. Set the mode switch to Tape or Memory Stick, set the power switch to CAM.
2. Connect one end of the USB cable to the USB jack on the camcorder and the other end to the USB connector on your computer.

✖您可將本機作為PC照相機使用.
✖利用本功能可連接網站作視訊聊天使用.
✖可利用裝有NET-MEETING的電腦作視訊會議.
✖PC照相機的螢幕尺寸160X120畫素.(320x240)

1. 將本機設置為TAPE(錄影帶模式)或Memory stick.將電源開關設為 CAM(攝影機)模式.
2. 請把USB纜線的一端連上本機的USB接口,另一端插入電腦的USB端口.

Notes

注 意

■ DVC Media 6.0 User's Manual is included on the accompanying CD in Adobe's Portable Document Format (PDF). The user's manual can be viewed using Acrobat Reader software, which is also included on the CD. (The Acrobat Reader is a freeware product of adobe systems, Inc.)

■ 隨機提供的光機提供的光碟片中包含有Adobe公司的PDF製作的DVC Media 6.0用戶手冊.
   可使用Acrobat Reader軟体查看光碟中的用戶手冊.
   (Acrobat Reader為ADOBE公司免費提供的軟體產品)

USB interface

USB接口

Connecting to a PC

1. Connect a USB cable to the USB port on the PC.
2. Connect the other end of the USB cable into the proper terminal on the camcorder. (USB jack)
3. Connect the audio cable to the Line input jack of the PC.
   If the PC has no Line input jack, connect the audio cable to the MIC input jack. There is a possibility you'll here some audio noise if you use the MIC jack.

連接至電腦

1. 將USB纜線插入電腦的USB端口.

2. USB纜線的另一端連上本機的USB接口.

3. 連接音頻電纜線到電腦的LINE IN輸入插孔,如果沒有的話可插在MIC輸入插孔,但可能會出現嗡聲噪音.

Notes

■ If you disconnect the USB cable from the PC or the camcorder while transferring, the data transmission will stop and the data may be corrupted.
■ If you connect the USB cable to a PC via a USB HUB or simultaneously connect the USB cable along with other USB devices, the camcorder may not work properly.
  - If this occurs, remove all USB devices from the PC and reconnect the camcorder.
■ DV(IEEE1394) connection is encouraged with PC for transmission of more vivid image quality at the time of moving picture transmission.
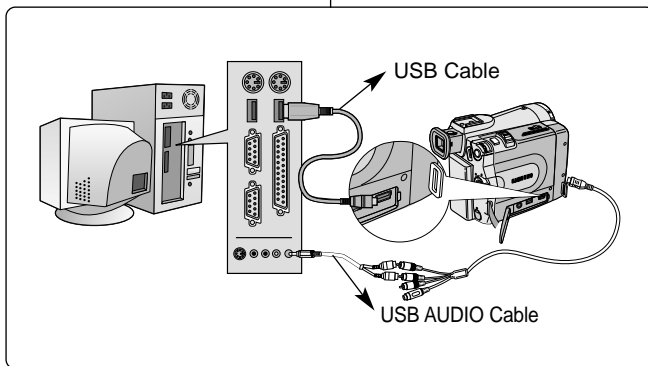
注　意

■ 如果在傳輸途中把USB纜線從一端拔掉時,會立即停止傳輸且數據會受到破壞.
■ 如果您使用USB HUB連接本機或同時相連時,那麼本機無法正常工作.
  - 如果發生上述狀況時,請先移除電腦上所有的USB設備,並重新連接本機.
■ 傳輸影片時,建議用DV(IEEE1394)與電腦連接以獲得更佳的影像品質.

USB Cable

USB AUDIO Cable

Digital Still Camera mode

數位照相機模式

MEMORY STICK

記憶卡

� The Memory Stick stores and manages still images or moving images recorded by the camera.

✂ 記憶卡儲存和管理照相機所拍的照片或影片.

Memory Stick Functions

記憶卡的功能

Terminal Protection tab

✂ Recording still images and MJPEG movie
✂ Viewing still images and MJPEG movie
   ■ Single
   ■ Slide show
   ■ Multi display
✂ Protecting images against accidental erasure
✂ Deleting images recorded on a Memory Stick
✂ Print marking still images
✂ Formatting a Memory Stick

✂ 錄製靜態照片和MJPEG影片.
✂ 觀看靜態照片和MJPEG影片
   ■ 單張播放
   ■ 順序播放
   ■ 多幅畫面
✂ 防止照片被意外刪除
✂ 刪除錄製在記憶卡上的影像照片
✂ 照片的列印標記
✂ 格式化記憶卡

Notes

注　意

■ You can use most of the camera's functions when recording to the Memory Stick.
■ " ▶▶▶ 🖾 " appears on the screen while recording to the Memory Stick.
■ While recording or loading an image, do not eject or insert the Memory Stick.
   - Inserting or ejecting a Memory Stick while recording or loading an image can cause data corruption.
■ If you want to save all images on the Memory Stick, set the write protect tab on the Memory Stick to LOCK.

■ 您可使用大部份的數位相機功能來錄製到記憶卡上.
■ 在錄製到記憶卡上時 ▶▶▶ 🖾 會出現在螢幕上.
■ 在錄製或記錄照片時,不要取出或裝入記憶卡
   - 在錄製或記錄照片時取出或裝入記憶卡或造成數據損壞
■ 如果您保存記憶卡內所有的圖像,請將記憶卡上保護標簽置於鎖定.

MEMORY STICK ™

● "Memory Stick" and **MEMORY STICK™** are trademarks of Sony Corporation.
● All other product names mentioned herein may be the trademarks or registered companies of their respective companies.
   Furthermore, "™"and "®" are not mentioned in each case in this manual.
● "Memory Stick PRO" can not be used with this unit.

MEMORY STICK ™

● Memory stick和 **MEMORY STICK™** SONY公司的商標.
● 此處所提到其他產品名稱為其各自公司的註冊商標.此外本手冊中不是隨處都提到"TM" 和 "®".
● 本機不使用"Memory Stick PRO".

Digital Still Camera mode

數位照相機模式

Inserting and ejecting the Memory Stick

插入和取出記憶卡

- ● Inserting the Memory Stick
1. Turn the Power switch to OFF.
2. Insert the Memory Stick into the Memory Stick slot located beneath the camcorder, in the direction of the arrow.

- ● Ejecting the Memory Stick
1. Turn the Power switch to OFF.
2. Push the Memory Stick, it will move out of the camcorder automatically.
3. Pull out the Memory Stick.
- �є Do not attempt to pull the Memory Stick out without first pushing it in.

Notes

- ■ If you set the camcorder to M.PLAY mode, the last recorded image appears.
  - If there are no recorded images on the Memory Stick, "NO STORED IMAGE!" will display on the screen.
- ■ Do not turn the power off while recording, loading, erasing or formatting.
- ■ Please turn the power off before you insert or eject the Memory Stick. You could lose data on the Memory Stick.

- ■ Do not allow metal substances to come in contact with the terminals of the Memory Stick.
- ■ Do not bend, drop or apply strong shock to Memory Stick.
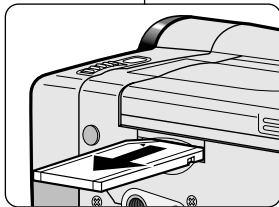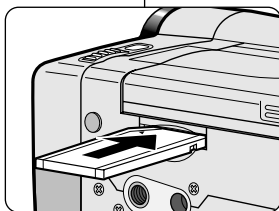- ■ After pulling the Memory Stick out from the camcorder, please keep the Memory Stick in a soft case to prevent static shock.
- ■ The stored contents may be changed or lost as a result of misuse, static electricity, electric noise or repair. Save important images separately.
- ■ Samsung is not responsible for data loss due to misuse.
- ■ If the USB cable is connected to the camcorder, the ▶▶ (FWD), ◀◀ (REV), ■ , S.SHOW, MULTI-DISPLAY buttons are not available in M.PLAY mode.

- ● 插入記憶卡
1. 將電源開關置於關閉
2. 按箭頭方向將記憶卡插入本機的記憶卡插槽中.

- ● 取出記憶卡
1. 將電源開關置於關閉.
2. 按下記憶卡,它會自動彈出.
3. 取出記憶卡..
- �є 在未按下記憶卡一下之前,不要試圖拉出記憶卡.

注 意

- ■ 如果您將電源開關置於M.PLAY照片播放模式,會出現最後一張錄製的照片.
  - 如果在記憶卡上沒有照片,"NO STORED IMAGE!"(沒有儲存影像!)會顯現在螢幕上.
- ■ 在錄製,輸入,刪除或格式化時,請不要關閉電源或更改模式.
- ■ 在插入或取出記憶卡時請關閉電源.否則您可能會丟失卡上的資料.

- ■ 不要讓金屬物質與記憶卡的端子接觸.
- ■ 不要彎曲,掉落或重擊記憶卡.
- ■ 取出記憶卡後,請放入軟布包中以防止靜電觸擊.
- ■ 由於使用錯誤,或靜電,磁干擾或修理,可能會使儲存的內容被改變或遺失.請另保存重要的照片. 等黃悵湍笭猁腔芋裿岊.
- ■ 三星對於因錯誤使用而造成資料的遺失將不負責.
- ■ 如果使用USB電纜線連接本機時,▶▶ (快轉) ◀◀ (倒帶),(順序播放),(多幅畫面顯示)■ 按鈕在 M.PLAY(照片播放)模式不能使用.

Digital Still Camera mode

數位照相機模式

Structure of folders and files on the Memory Stick

記憶卡上的文件夾和文件的結構

❈ The still images that you recorded are saved in JPEG file format on the Memory Stick.

❈ The moving images that you recorded are saved in MJPEG file format on the Memory Stick.

❈ Each file has a file number and all files are assigned to a folder.

■ A file number from DCAM0001 to DCAM9999 is sequentially assigned to each recorded image.

■ Each folder is numbered from 100SSDVC to 999SSDVC and recorded on the Memory Stick.
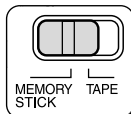
```
        ┌─┐
        └─┐ DCIM
          └─┐ 100 SSDVC
            ├─ DCAM 0001
            └─ DCAM 0002
              ⋮
          └─┐ 101SSDVC
```

*M. PLAY

```
000-0000
       └─ File number
     ── Folder number
```

❈ 錄製的靜態照片會以JPEG格式儲存在記憶卡上.

❈ 錄製的動態影片會以MJPEG文件格式儲存在記憶卡上.

❈ 每個文件都有一個文件號碼且都分配在同個文件夾.

■ 每張照片被按順序分配從 DCAM0001到 DCM9999的文件號碼.

■ 每個文件夾的編號從100SSDVC 到 999SSDVC記錄在記憶卡上.

Image Format

影像格式

❈ Still image

■ Images are compressed in JPEG (Joint Photographic Experts Group) format.

■ The number of pixels are 1280 × 960, 640 × 480 in each mode.

❈ Moving Image

■ Images are compressed in MJPEG (Motion Joint Photographic Experts Group) format.

■ The number of pixels are 320 × 240, 160 × 120 in each mode.

❈ 靜態照片

■ 照片會以JPEG格式壓縮.

■ 每個畫素為1280X960,640X480.

❈ 動態影片

■ 影像以MJPEG格式壓縮.

■ 每個畫素為320X240或160X120.

Selecting the CAMCORDER mode

選擇攝錄影機模式

❈ You can use this camcorder as a Digital Still Camera (DSC).

❈ You have to set the mode switch to MEMORY STICK position to use this camcorder as a Digital Still Camera.

■ M.REC mode (Memory RECORD mode)
1. Set the mode switch to MEMORY STICK.
2. Set the power switch to CAM.

■ M.PLAY mode (Memory PLAYBACK mode)
1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER.
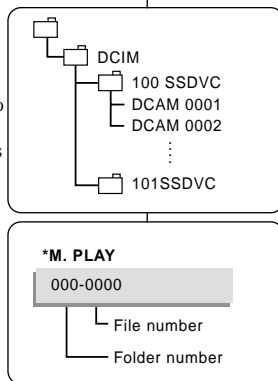
+ : M.REC mode

+ : M.PLAY mode

❈ 可將本機設置為數位相機(DSC).

❈ 若要將本機設置為數位相機,則必須將模式開關置於記憶卡位置.

■ M.REC照片錄製模式(記憶錄製模式)
1. 將模式開關置於MEMORY STICK 記憶卡位置.
2. 將電源模式置於CAM攝影機模式.

■ M.PLAY照片播放模式(記憶播放模式)
1. 將模式開關置於MEMORY STICK 記憶卡位置.
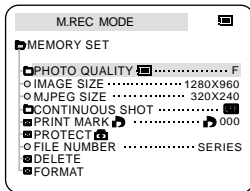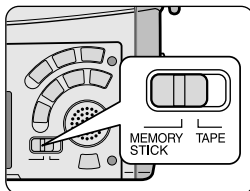2. 將電源模式置於PLAYER放映機模式.

Digital Still Camera mode

數位照相機模式

Selecting the image quality

選擇照片畫質

✤ You can select the quality of a still image to be recorded.

✤ 您可以選擇錄製照片的畫質

Select the photo quality

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to the CAM mode.
3. Press the MENU button.
   ■ The menu list will appear.
4. Move the MENU SELECTOR to highlight MEMORY.
5. Push the MENU SELECTOR to enter the sub-menu.
6. Move the MENU SELECTOR to highlight PHOTO QUALITY in the submenu.
7. Push the MENU SELECTOR.
8. Using the MENU SELECTOR, select the image quality.
   ■ Push the MENU SELECTOR to confirm the image quality.
   ■ If you exit the sub-menu without pushing the MENU SELECTOR, the quality mode is not changed.
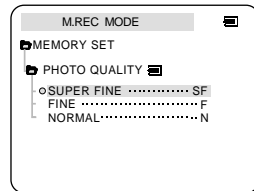9. To exit, press the MENU button.

```
MEMORY    TAPE
STICK
```

```
M.REC MODE
□ INITIAL
□ CAMERA
□ A/V          ○ PHOTO QUALITY
□ MEMORY   ○ IMAGE SIZE
□ VIEWER    ○ MJPEG SIZE
                ○ CONTINUOUS SHOT
                ○ PRINT MARK
                ○ PROTECT
                ○ FILE NO.
                ○ DELETE
                ○ FORMAT
```

```
M.REC MODE
MEMORY SET

○ PHOTO QUALITY ··············· F
○ IMAGE SIZE ·············· 1280X960
○ MJPEG SIZE ············· 320X240
■ CONTINUOUS SHOT ···········
■ PRINT MARK ··············· 000
■ PROTECT
■ FILE NUMBER ············· SERIES
■ DELETE
■ FORMAT
```

選擇照片畫質

1. 將本機模式開關設置為MEMORY STICK 記憶卡.
2. 並將電源開關設為CAM攝影機模式
3. 按下MENU(菜單)按鈕.
   ■ 顯示菜單列表
4. 移動MENU SELECTOR(菜單選擇器)以選擇MEMORY(記憶).
5. 然後推動MENU SELECTOR(菜單選擇器)按鈕,進入子菜單.
6. 撥動MENU SELECTOR(菜單選擇器)選擇子菜單的PHOTO QUALITY(照片畫質)
7. 推動MENU SELECTOR(菜單選擇器)
8. 使用MENU SELECTOR(菜單選擇器)選擇畫質.
   ■ 後按MENU SELECTOR(菜單選擇器)按鈕以確認.

```
M.REC MODE
MEMORY SET

PHOTO QUALITY

○ SUPER FINE ············· SF
└ FINE ····················· F
└ NORMAL ····················· N
```

■ 如果退出子菜單而沒有按MENU SELECTOR(菜單選擇器)確認按鈕,品質模式不會改變
9. 若要退出,按下MENU(菜單)按鈕即可.

● Number of images on the Memory Stick

● 依記憶卡及照片的畫質可拍張數

QUALITY	Still Image Size	8MB	16MB
SUPER FINE	1280 × 960 640 × 480	Approx.12 Approx.49	Approx.24 Approx.99
FINE	1280 × 960 640 × 480	Approx.24 Approx.99	Approx.49 Approx.199
NORMAL	1280 × 960 640 × 480	Approx.49 Approx.199	Approx.99 Approx.399

畫質	照片大小	8MB	16MB
超精細	1280 × 960 640 × 480	約12張 約49張	約24張 約99張
精細	1280 × 960 640 × 480	約24張 約99張	約49張 約199張
普通	1280 × 960 640 × 480	約49張 約199張	約99張 約399張

- The actual number that you can record varies depending on the image size.

- 可拍攝的實際張數取決影像的大小.

Digital Still Camera mode

數位照相機模式

Selecting the recording image size

數位照相機模式

✼ Select the image size of still image to be recorded.

✼ 選擇錄製靜態照片影像大小

1. Set the mode switch to MEMORY STICK.

2. Set the power switch to the CAM mode.

3. Press the MENU button.
   ■ The menu list will appear

4. Use the MENU SELECTOR to highlight MEMORY and push the MENU SELECTOR.

5. Select IMAGE SIZE from the submenu and push the MENU SELECTOR.
   ■ The IMAGE SIZE toggles between 1280 × 960 and 640 × 480 with each push.
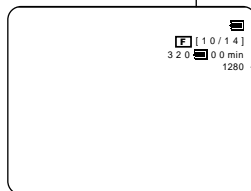
6. To exit the menu, press the MENU button.

```
M.REC MODE
INITIAL
CAMERA
A/V          PHOTO QUALITY
MEMORY   IMAGE SIZE
VIEWER    MJPEG SIZE
             CONTINUOUS SHOT
             PRINT MARK
             PROTECT
             FILE NO.
             DELETE
             FORMAT
```

```
M.REC MODE
MEMORY SET
PHOTO QUALITY ............... F
IMAGE SIZE ············1280X960
MJPEG SIZE ············· 320X240
CONTINUOUS SHOT
PRINT MARK ············· 000
PROTECT
FILE NUMBER··············· SERIES
DELETE
FORMAT
```

```
F [ 1 0 / 1 4 ]
3 2 0    0 0 min
       1280  ── Image Size
```

1. 將本機模式開關設置為MEMORY STICK記憶卡.

2. 並將電源開關設為CAM攝影機模式.

3. 按下MENU(菜單)按鈕.
   ■ 顯示菜單列表

4. 轉動MENU SELECTOR(菜單選擇器)以選擇 MEMORY(記憶).然後按下MENU SELECTOR(菜單選擇器)按鈕.

5. 由子菜單選擇IMAGE SIZE(影像大小),並轉動 MENU SELECTOR(菜單選擇器).
   ■ 每轉一次,IMAGE SIZE在 1280x960和 640x480 之間切換.

6. 若要退出,按下MENU(菜單)按鈕即可.

Note

■ Still images that are recorded at an image size of 1280 × 960 on your camcorder, may not playback properly on other digital devices as the device may not support recordings made with this image size.

注 意

■ 若在本機上以1280x960大小拍攝的照片有時不能在不支持1280x960尺寸的其他DV上正常播放.

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Digital Still Camera mode | 數位照相機模式

Selecting the moving picture size

1. Set the mode switch to MEMORY STICK position.

2. Set the power switch to CAM mode.

3. Press the MENU button.

4. Move the MENU SELECTOR to highlight MEMORY.

5. Push the MENU SELECTOR to enter the sub-menu.

6. Move the MENU SELECTOR to highlight MJPEG SIZE.

7. Push the MENU SELECTOR button.
   - The MJPEG SIZE toggles between 320 × 240 - 160 × 120 with each push.

```
M.REC MODE
INITIAL
CAMERA
A/V           PHOTO QUALITY
MEMORY        IMAGE SIZE
VIEWER        MJPEG SIZE
              CONTINUOUS SHOT
              PRINT MARK
              PROTECT
              FILE NO.
              DELETE
              FORMAT
```

```
M.REC MODE
MEMORY SET
PHOTO QUALITY ............... F
IMAGE SIZE ............ 1280X960
MJPEG SIZE ............ 320X240
CONTINUOUS SHOT ...........
PRINT MARK ......... 000
PROTECT
FILE NUMBER ........... SERIES
DELETE
FORMAT
```

選擇錄製動態影片影像大小
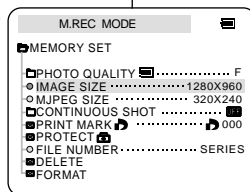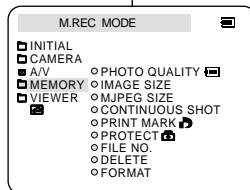
1. 將本機模式開關設置為MEMORY STICK記憶卡

2. 並將電源開關設為CAM攝影機模式.

3. 按下MENU(菜單)按鈕.

4. 轉動MENU SELECTOR(菜單選擇器)以選擇 MEMORY(記憶)

5. 然後按下MENU SELECTOR(菜單選擇器)按鈕,進入子菜單.

6. 轉動MENU SELECTOR(菜單選擇器)選擇MJPEG SIZE(尺寸).

7. 並轉動MENU SELECTOR(菜單選擇器).
   - 每轉一次,MJPEG SIZE在320x240和160x120之間切換.

● Maximum recording time of moving picture

MJPEG SIZE	Maximum recording time
320 × 240	15 seconds
160 × 120	60 seconds

● 動態影片最大錄製時間

| MJPEG 大小	最大錄製時間
320x240	15 秒
160x120	60 秒
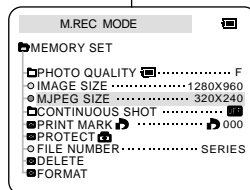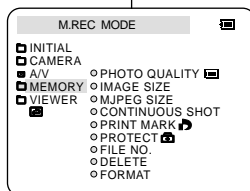
Digital Still Camera mode

數位照相機模式

Recording images continuously

連續拍攝錄製

❆ You can record still images continuously.
❆ Select one of the three modes described below before recording.
  ■ NORMAL(⊡) : Your camcorder records up to 2 still images in 1280 × 960 size or 6 still images in 640 × 480 size at about 0.7sec intervals.
  ■ HIGH SPEED (⊡HS) : Your camcorder records up to 9 still images in 640 × 480 size at about 0.07sec intervals.
    - Recording image size is 640 × 480 only.
  ■ MULTI SCENE (6, 9): Your camcorder records 6 or 9 still images at about 0.4sec intervals and displays the images on a single page divided into six or nine boxes. Still images are recorded in 640 × 480 size.
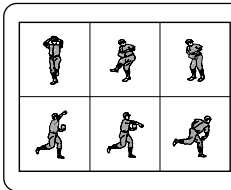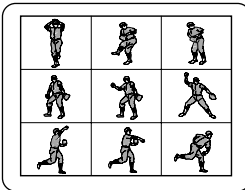
❆ 您可錄製連續拍攝靜態照片

❆ 在錄製之前,選擇下述三種中之一種模式:
  ■ NORMAL(正常)(⊡)
    本機以約0.7秒的間隔1280x960大小錄製多達2個靜態照片或以640x480大小錄製6個靜態照片.
  ■ HIGH SPEED (高速)(⊡HS):
    本機以約0.7秒的間隔以640x480大小錄製9個靜態照片.
    - 錄製大小為640x480.
  ■ MULTI SCENE(多重畫面):(6, 9): 本機以約0.4的間隔以錄製6或9個靜態照片,並在一頁上分成6個或9個顯示框.錄製大小為640x480.

M.REC MODE
□ INITIAL
□ CAMERA
□ A/V   ○ PHOTO QUALITY
■ MEMORY ○ IMAGE SIZE
□ VIEWER   ○ MJPEG SIZE
              ○ CONTINUOUS SHOT
              ○ PRINT MARK
              ○ PROTECT
              ○ FILE NO.
              ○ DELETE
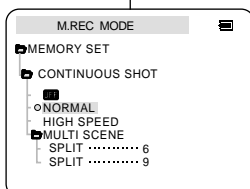   ○ FORMAT

Select the CONTINUOUS SHOT

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to the CAM mode.
3. Press the MENU button and move the MENU SELECTOR to highlight MEMORY.
4. Move the MENU SELECTOR to highlight CONTINUOUS SHOT in the submenu.
5. Push the MENU SELECTOR.
6. Using the MENU SELECTOR, select the continuous shot.
   ■ Push the MENU SELECTOR to confirm the continuous shot.
   ■ If you exit the sub-menu without pushing the MENU SELECTOR, the continuous shot mode is not changed.
7. To exit, press the MENU button.

M.REC MODE
MEMORY SET

○ PHOTO QUALITY .... F
○ IMAGE SIZE 1280X960
○ MJPEG SIZE 320X240
■ CONTINUOUS SHOT ....
■ PRINT MARK 000
■ PROTECT
■ FILE NUMBER .... SERIES
■ DELETE
■ FORMAT

選擇連續拍攝

1. 將本機模式開關設置為MEMORY STICK記憶卡.
2. 並將電源開關設為CAM攝影機模式.
3. 按下MENU(菜單)按鈕,並轉動MENU SELECTOR(菜單選擇器)以選擇MEMORY(記憶).
4. 然後轉動MENU SELECTOR(菜單選擇器)按鈕,使子菜單的CONTINUOUS SHOT(連續拍攝)高亮度顯示.
5. 轉動MENU SELECTOR(菜單選擇器).
6. 使用MENU SELECTOR(菜單選擇器)選擇連續拍攝.
   ■ 按下MENU SELECTOR(菜單選擇器)按鈕以確認
   ■ 如果退出子菜單而沒有按下MENU SELECTOR(菜單選擇器)確認按鈕,則連續拍攝模式不會改變.
7. 若要退出,按下MENU(菜單)按鈕即可.

M.REC MODE
MEMORY SET

CONTINUOUS SHOT

○ NORMAL
  HIGH SPEED
MULTI SCENE
  SPLIT 6
  SPLIT 9

Notes

■ When selecting NORMAL
  - Recording continues up to the maximum number of still images whilst pressing PHOTO button fully down. Release PHOTO button to STOP recording.
■ During recording images continuously, the flash does not work.
■ The number of images you can record continuously varies depending on the image size and the capacity of the Memory stick.

注 意

■ 在選擇NORMAL(正常)時
  - 在按下PHOTO鍵期間,可連續拍攝直至最大的可拍攝數量,鬆開PHOTO鍵即停止錄製.
■ 在連續拍攝時,閃光燈無法動作.
■ 連續拍攝依影像大小和記憶卡容量不同而不同.

Digital Still Camera mode

數位照相機模式

Setting the File Number

設置文件號碼

❆ The images you take are automatically assigned file numbers from 0001 to 9999.

❆ Set the image file numbers so that they reset each time a Memory Stick is formatted, or so that they count up continuously.

■ SERIES
- Numbering is continuous between the Memory Sticks, so that the first file number assigned on a new Memory Stick is 1 more than the last file number assigned on the previous Memory Stick.
- When the file number are set to SERIES, each image taken is assigned a different number, avoiding duplication of numbers. This is convenient when you want to manage your images on a PC.
- We recommend keeping the file numbers set to SERIES.

■ RESET
When the Memory Stick is formatted, the file number resets to its default value (100-0001).
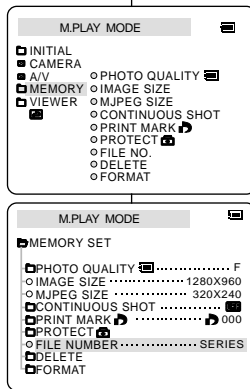If the Memory Stick already contains files, the next available number is assigned.

1. Set the mode switch to MEMORY STICK position.

2. Set the power switch to CAM or PLAYER mode.

3. Press the MENU button and move the MENU SELECTOR to highlight MEMORY.

4. Push the MENU SELECTOR to enter submenu.

5. Select FILE NUMBER from the sub-menu and push the MENU SELECTOR.
   ■ The FILE NUMBER toggles between SERIES and RESET with each push.

6. To exit, press the MENU button.

❆ 在記憶卡上儲存相片時會自動從0001-9999依順序給照片加上文件號碼.

❆ 設置文件號碼,以便在每次格式化記憶卡後能重新編號或繼續編號.

■ 系列性(SERIES)
- 記憶卡編為連續性,新的記憶卡的號碼為上一個記憶卡最後一個號碼順序加1的號碼.
- 在文件號碼設置為SERIES(系列性)時,所拍攝的照片被分配不同的號碼,以避免重複,在電腦上作管理比較方便.
- 我們建議文件號碼設置到SERIES(系列)

■ RESET重置:
在記憶卡被格式化時,文件號碼被重設為初始值(100-0001).

1. 將本機模式開關設置為MEMORY STICK記憶卡.

2. 並將電源開關設為CAM攝影機或PLAYER(放映)模式.

3. 按下MENU(菜單)按鈕,並轉動MENU SELECTOR(菜單選擇器)以選擇MEMORY(記憶).

4. 然後轉動MENU SELECTOR(菜單選擇器)按鈕,進入子菜單.

5. 從子菜單中選擇FILE NUMBER(文件號碼),並轉動MENU SELECTOR(菜單選擇器).
   ■ 每轉一次,文件號碼在SERIES和RESET之間切換.

6. 若要退出,按下MENU(菜單)按鈕即可.

```
        M.PLAY MODE              📼
 🔲 INITIAL
 🔲 CAMERA
 🔲 A/V       ○ PHOTO QUALITY 🔲
 🔲 MEMORY    ○ IMAGE SIZE
 🔲 VIEWER    ○ MJPEG SIZE
   📼         ○ CONTINUOUS SHOT
             ○ PRINT MARK 🔖
             ○ PROTECT 🔒
             ○ FILE NO.
             ○ DELETE
             ○ FORMAT
```

```
        M.PLAY MODE              💾
 🔲 MEMORY SET

 🔲 PHOTO QUALITY 🔲 ·············· F
 ○ IMAGE SIZE ·············· 1280X960
 ○ MJPEG SIZE ·············· 320X240
 🔲 CONTINUOUS SHOT ··········· 🔲
 🔲 PRINT MARK 🔖 ·············· 🔖 000
 🔲 PROTECT 🔒
 ○ FILE NUMBER ·············· SERIES
 🔲 DELETE
 🔲 FORMAT
```

Digital Still Camera mode

數位照相機模式

Recording Still images to a Memory Stick in M.REC Mode.

在M.REC照片錄製模式將靜態照片錄製到記憶卡上

�james Audio cannot be recorded with still images onto the Memory Stick.

✁ 記憶卡可錄製靜態照片但不能錄製聲音.

Recording images to a Memory Stick

1. Set the mode switch to MEMORY STICK.

2. Set the power switch to CAM.

3. Press the PHOTO button lightly (about halfway down) and hold it.
   ■ During autofocus photo mark (<img>) flashes in the display as the camcorder adjusts the focus and is continuously displayed when the camcorder is ready to take the still image.
   ■ If you do not wish to record, release the pressure from the button.

4. Press the PHOTO button fully down.
   ■ The still image is recorded to the Memory Stick.
   ■ While the camcorder is recording the still image, " ▶▶▶ " appears on the screen.

Notes

■ The remote controller's PHOTO button has no halfway setting.
   Press the button fully and the camcorder immediately takes the image.

■ Do not turn the power off, eject a Memory Stick or remove the battery pack during recording.
   The Memory Stick or its data may be damaged.

■ If focusing is difficult with the autofocus mode when using the PHOTO function, focus manually.

錄製影像到記憶卡上

1. 將本機模式開關設置為MEMORY STICK記憶卡.

2. 並將電源開關設為CAM攝影機模式.

3. 輕輕按下一半PHOTO按鈕並保持.
   ■ 在本機進行自動對焦時,拍攝標誌(<img>)會閃爍時,當如不再閃爍而持續出現在螢幕時表示可開始拍攝.
   ■ 如果不想拍攝,鬆開拍照按鈕.

4. 完全按下PHOTO拍照按鈕.
   ■ 照片會錄製到記憶卡上.
   ■ 錄製照片時," ▶▶▶ "會出現在螢幕上.

注 意

■ 遙控器的PHOTO拍照按鈕沒下一半的裝置,當按下按鈕時本機立即拍攝.

■ 拍攝完在作記錄儲存時,不要關閉電源,取出記憶卡或取下電池組,否則會破壞記憶卡或其數據.

■ 如果使用PHOTO(拍照)功能時,很難自動對焦時,請改為手動對焦.

MEMORY STICK TAPE

CAM OFF PLAYER

PHOTO

▶▶▶ ▣

F [0 9 / 2 4]

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Digital Still Camera mode

數位照相機模式

Recording an image from a cassette as a still image.

從錄影帶影片中複製靜態照片

❏ You can record a still image from a cassette onto a Memory Stick.

❏ If you want to recorded multiple still images from a cassette to a Memory Stick, use the COPY function. (see page 91)

❏ The still images date/time will reflect the date and time the copies are made.

❏ The image size of a still image recorded from cassette onto a Memory Stick will be 640 × 480.

1. Set the mode switch to TAPE.

2. Set the power switch to PLAYER mode.

3. Play back the cassette.

4. Press the PHOTO button lightly (about halfway down), when the image you want to record appears.
   ■ The camcorder is set to playback pause (STILL) mode.
   ■ If you do not wish to record, release the PHOTO button, select the image again.

5. Press the PHOTO button fully down.
   ■ The still image is recorded to the Memory Stick.
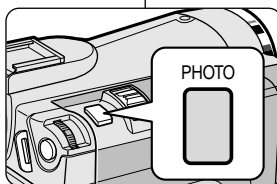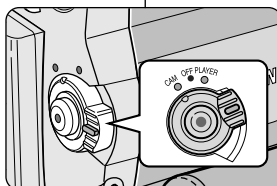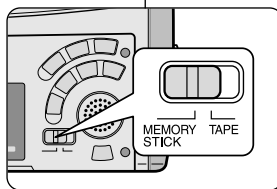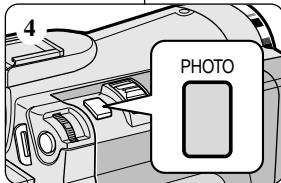   ■ While the camcorder is recording the still image, " ▶▶▶ " appears on the screen.

❏ 您可透過本功能將錄影帶影片上複製靜態照片到記憶卡上.

❏ 如果您想錄影帶影片上複製多個靜態照片到記憶卡上時,使用 COPY(複製)功能(見91頁).

❏ 靜態照片的日期/時間是以複製進行的時間作為其 日期和時間.

❏ 由錄影帶影片上複製靜態照片到記憶卡的影像大 小為640X480.
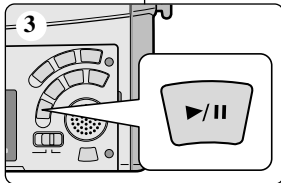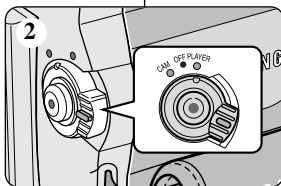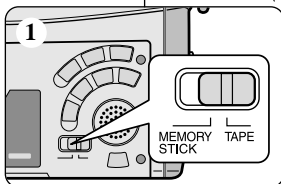
1. 設置模式開關到TAPE(影帶).

2. 將本機設置為PLAYER(播放機)模式.

3. 重放錄影帶

4. 在出現您想錄製的畫面時,輕按下PHOTO(拍照) 按鈕(約按一半),並保持住.
   ■ 本機會處於PAUSE(暫停)模式.
   ■ 如果不想錄製時,開PHOTO按鈕並重新選擇 畫面.

5. 完全按下PHOTO按鈕.
   ■ 靜態照片被複製到記憶卡上.
   ■ 本機在錄製靜態照片時," ▶▶▶ " 會出現在螢幕上.

Digital Still Camera mode

數位照相機模式

Copying still images from a cassette to Memory Stick

從錄影帶上靜態照片複製到記憶卡

�macs You can copy still images recorded with PHOTO function on a cassette onto a Memory Stick.
- The still images date/time will reflect the date and time the copies are made.
- The image size of a still image copied from tape to Memory Stick will be 640 × 480.
- Before operation
  - Insert a recorded tape into your camcorder and rewind the tape.
  - Insert a Memory Stick into your camcorder.

✻ 您可透過本功能將錄影帶上的靜態照片複製到記憶卡上.
- 靜態照片的日期/時間是以複製進行的時間作為其日期和時間.
- 由錄影帶上複製靜態照片到記憶卡的影像大小為640X480.
- 在操作前
  - 將錄影帶放入本機中,並倒好帶.
  - 插入記憶卡到本機內.

```
PLAYER MODE
□ INITIAL
■ CAMERA
□ A/V        ○ REC MODE ········· SP
□ MEMORY     ○ PHOTO SEARCH
□ VIEWER     ○ COPY [■◀▶■]
🖼           ○ AUDIO MODE ··· 12 bit
             ○ AUDIO SELECT
             ○ WIND CUT [M] ······■
             ○ AV IN/OUT ········· OUT
```

1. Set the mode switch to TAPE.

2. Set the power switch to the PLAYER mode.

3. Press the MENU button.

4. Move the MENU SELECTOR to highlight A/V and push the MENU SELECTOR.
   - The submenu will appear.

```
PLAYER MODE
▶ A / V SET
○ REC MODE ················· SP
○ PHOTO SEARCH
□ PHOTO COPY ··········· [■◀▶■]
○ AUDIO MODE ················· 12 bit
□ AUDIO SELECT ·········SOUND[1]
○ WIND CUT [M] ·················
□ AV IN/OUT ······················ OUT
```

5. Move the MENU SELECTOR to highlight PHOTO COPY and push the MENU SELECTOR.
   - All still images that recorded on a cassette will be copied to a Memory Stick.

6. The camcorder automatically performs the photo search to find still images and copying starts.

```
PHOTO COPY  SP   ▶
            0 : 10 : 35 : 02
            [ 15 / 4 4 ]
                        640

NOW SEARCH ...
```

7. Press ■ (STOP) button to stop copying.
   - Copying stops when the cassette is finished or Memory Stick is full.

1. 設置模式開關到TAPE(影帶).

2. 將本機設置為PLAYER(播放機)模式.

3. 按下MENU(菜單)按鈕.

4. 轉動MENU SELECTOR(菜單選擇器)以選擇A/V, 然後按下MENU SELECTOR(菜單選擇器)按鈕.
   - 會出現子菜單.

5. 轉動MENU SELECTOR(菜單選擇器)以選擇 PHOTO COPY(照片複製), 然後按下MENU SELECTOR(菜單選擇器)按鈕.
   - 錄製在錄影帶上的全部靜態照片會被複製到記憶卡上

6. 本機會自動查找照片,以找到靜態照片並開始複製.

7. 按下■ STOP(停止)按鈕以停止複製
   - 在錄影帶到達終點或記憶卡已滿,則複製會停止.
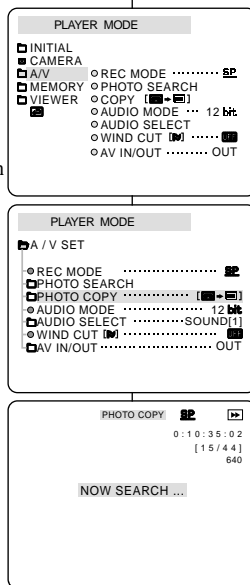
Digital Still Camera mode

數位照相機模式

MJPEG RECORDING

MJPEG 錄製

✵ Audio cannot be recorded onto the Memory Stick.

✵ 聲音不能錄製到記憶卡上.

Saving the pictures captured by a camera as a moving picture file onto MEMORY STICK

將本機截取的影像作為影片儲存在記憶卡上

1. Insert the MEMORY STICK into your camcorder.
2. Set the mode switch to MEMORY STICK position.
3. Set the power switch to CAM mode.
4. Press the START/STOP button.
   ■ When MJPEG SIZE in the menu setting is set to 320 × 240, the maximum recording time is 15 seconds. however, when MJPEG SIZE in the menu settings is set to 160 × 120, the maximum recording time is 60 seconds.
   ■ You can record a camera still image onto the memory stick by pressing the Photo button instead of the START/STOP button.
5. Press the START/STOP button to stop the recording.
   ■ The camcorder starts to write the moving picture to the Memory Stick when recording is finished.
   ■ While the camcorder is writing the moving picture, " ▶▶▶ " appears on the screen.
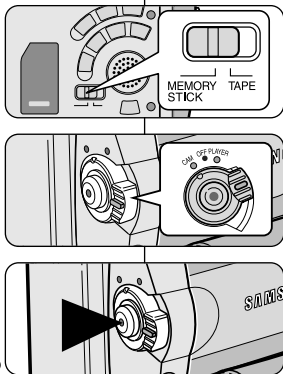
1. 插入記憶卡到本機內.

2. 將本機模式開關設置為MEMORY STICK記憶卡.

3. 並將電源開關設為CAM攝影機模式.

4. 按START/STOP(開始/停止)按鈕.
   ■ 在菜單中設置MJPEG SIZE(尺寸)為320X240 時,最長錄製時間為15秒.但如設置為160X120 時,最長錄製時間為60秒.
   ■ 您可按PHOTO(拍照)按鈕,而不按 START/STOP(開始/停止)按鈕來錄製至記憶 卡上.

5. 按START/STOP(開始/停止)按鈕停止錄製.
   ■ 在錄製完成時本機開始寫入至記憶卡內
   ■ 在寫入時,螢幕會出現

Notes

■ The moving picture images that you recorded are saved in *.avi file format on the Memory Stick.
■ You can record the moving picture images as 320 × 240 pixel or 160 × 120 pixel.
■ The file that you recorded are saved in a following folder.

注　意

■ 您錄製的影像以 *.AVI 的格式儲存在記憶卡上.
■ 您可以以320X240或160X120來錄製影像.
■ 您錄製的文件保存在以下的目錄中.

DCIM
100 SSDVC
DCAM 0001
DCAM 0002
⋮
101SSDVC
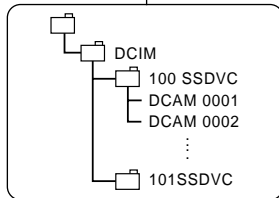
Digital Still Camera mode

數位照相機模式

- The moving picture images on a Memory Stick are smaller size and lower definition than one on Tape.

- There could be any broken or mosaic pictures while playing the MJPEG moving picture images, but it is not malfunction.

- You can transfer MJPEG file to PC through DVC Media 6.0 using USB port on your PC.
  And then, play MJPEG file with a moving picture player program like a Microsoft Windows Media Player.
  (DVC Media 6.0 is included in the CD that is supplied).

- The following functions are not allowed in M.REC Mode.
  - EIS (Electronic Image Stabilizer), Digital Zoom, Fade, Program AE, Digital Effect, Slow Shutter

- While you record in Memory Stick, do not turn the power off, eject a Memory Stick or remove the battery pack.
  The Memory Stick or its data maybe damaged.

- Moving images recorded on the Memory Stick may not play on other manufacturer's camcorders.

- The MJPEG file recorded by another camcorder might not be allowed to play by this camcorder.

- 記憶卡上的影片比錄影帶的影像要小且解像度較低.

- 在播放MJPEG影片時,可能會出現破裂或馬賽克的現象,但不是故障.

- 使用電腦的USB端口,可透過DVC Media6.0傳送MJPEG影片至電腦,然後用影像播放軟體來播放MJPEG影片
  譬如 Microsoft Windows Media Player.
  (DVC Media6.0包含在隨機附贈的CD內)

- 在M.REC(照片錄製)模式中不允許使用以下功能:
  - EIS防手振),DIGITAL ZOOM(數位變焦),FADE IN/OUT(淡入/出),PROGRAM AE(自動程式曝光),DIGITAL EFFECT(數位特效),SLOW SHUTTER(慢速快門).

- 在記憶卡錄製中,不要關閉電源,取出記憶卡或取出電池組,否則會破壞記憶卡或其中的數據.

- 錄製在記憶卡中的影片可能無法在其他廠牌的攝錄影播放.

- 其他廠牌所拍攝的MJPEG影片可能無法在本機播放.

Digital Still Camera mode

數位照相機模式

Viewing Still images/Moving pictures

觀看靜態照片/動態影片

✂ You can playback and view still images/moving pictures recorded on the Memory Stick.
✂ There are 3 ways to view recorded images.
  ■ Single images/Moving pictures
  ■ Slide show : To view all images automatically and in consecutive order.
  ■ Multi display : To view 6 images at once.
✂ You cannot hear the sound.

To view a Single image

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER mode.
  ■ The last still image/moving picture recorded apears in the display.
    - If there are no recorded still images/moving pictures on the Memory Stick, NO STORED IMAGE! and ▣ will display on the screen.
3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the desired still images/moving pictures.
  ■ To view the next still image/moving picture: press the ▶▶ (FWD) button.
  ■ To view the previous still image/moving picture: press the ◀◀ (REV) button.
  ■ Pressing ▶▶ (FWD) when you are on the last still image/ moving picture will take you to the first still image and pressing ◀◀ (REV) when you are on the first still image/moving picture will take you to the last still image/moving picture.
  ■ Keep pressing ▶▶ (FWD) or ◀◀ (REV) to search for an still image/moving picture quickly.
  ■ Moving picture: Pressing ▶/Ⅱ (PLAY/STILL) plays back the moving picture and will show first scene as a still image when playback ends.
    - Pressing ▶/Ⅱ (PLAY/STILL) during playback will stop the moving picture and the scene is shown as a still image. Pressing ▶/Ⅱ (PLAY/STILL) again will restart the playback.

Notes

■ There could be some broken or mosaic pictures displayed while playing the MJPEG moving pictures. This is not a fault.
■ It is possible that moving pictures that you recorded in the Memory Stick might not playback in other brands of camcorder.
■ The MJPEG file recorded by another camcorder might not playback in this camcorder.
■ Memory Stick with large file sizes may take additional time to replay.
■ You can transfer MJPEG file to PC through DVC Media 6.0 using USB port on your PC. And then, play MJPEG file with a moving picture player program like a Microsoft Windows Media Player.
(DVC Media 6.0 is included in the CD supplied)

94

▣
[0 4 / 0 6]
1280 X 960 — Image Size

100 - 0004

still image

MJPEG ▶/Ⅱ ▣
DCAM0002.AVI 0 0 / 1 5 sec — Playback time/ Time of recorded picture
320 — MJPEG Size
— File number

moving picture

MEMORY STICK TAPE

✂ 您可觀看錄製在記憶卡上的照片/動態影片.
✂ 觀看錄製的影像有3種方式:
  ■ 單張的照片/動態影片.
 ■ 順序播放:自動按順序連續播放所有的影像.
  ■ 多重畫面播放:同時顯現6幅畫面.
✂ 您將聽不到聲音

繁若要觀看單張影像

1. 將本機模式開關設置為MEMORY STICK記憶卡.
2. 並將電源開關設為PLAYER模式.
  ■ 出現最後錄製的影像.
    - 如果在記憶卡上沒有影像時," NO STORED IMAGE!" 和"▣"顯現在螢幕上.
3. 使用 ▶▶ (快轉) 和 ◀◀ (快倒)按鈕,搜索所要的照片和影像.
  ■ 若要觀看下一張:按 ▶▶ (快轉)按鈕

■ 若要觀看上一張,再按 ◀◀ (快倒)按鈕.
■ 要觀看最後一張時,按住 ▶▶ (快轉)按鈕到第一個畫面. 在觀看第一張後,再按◀◀ (快倒)按鈕會轉到最後一張照片.
■ 按住 ▶▶(快轉) 和 ◀◀ (快倒) 按鈕可快速查看影像.
■ 動態影片:按 ▶/Ⅱ (播放/暫停)按鈕可開始放映影片,結束後回復為第一個靜態影像畫面.
    - 在放映時,再按 ▶/Ⅱ (播放/暫停)按鈕會停止播放,回復為靜態影像畫面,再次按下▶/Ⅱ (播放/暫停)按鈕會重新開始播放.

注 意

■ 在播放MJPEG影片時,可能會出現破裂或馬賽克的現象,但不是故障.
■ 錄製在記憶卡中的影片可能無法在其他廠牌的攝錄影放.
■ 其他廠牌所拍攝的MJPEG影片可能無法在本機播放.
■ 當您觀看大容量的影片檔時,可能會花費比較長的時間.
■ 使用電腦的USB端口,可透過DVC Media6.0傳送 MJPEG影片至電腦,然後用影像播放軟體 來播放MJPEG影片鐼如 Microsoft Windows Media Player.
(DVD Media 6.0包含在隨機附贈的CD內)
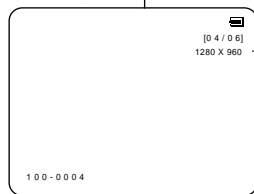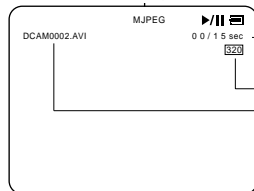
Digital Still Camera mode

數位照相機模式

To view a slide show

1. Set the mode switch to MEMORY STICK.

2. Set the power switch to PLAYER mode.
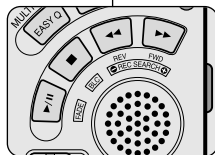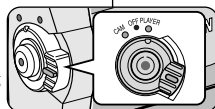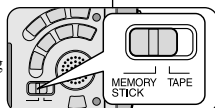   - The last recorded still image/moving picture appears

3. Press the S.SHOW button.
   - All images will be played back consecutively for 3~4 seconds each.

4. To stop the slide show, press the S.SHOW button again.

To view the Multi Display

1. Set the mode switch to MEMORY STICK.

2. Set the power switch to PLAYER mode.
   - The last recorded still image/moving picture appears.

3. To view six stored still image/moving picture on single screen, press the MULTI DISP. button.
   - A selection mark (▶) appears under the still image/moving picture.
   - Moving pictures will be displayed with the first scene as a still image, indicated by a picture mark (▭).
   - Move the MENU SELECTOR to select a still image/moving picture.
   - To display the previous six images, press the ◀◀ (REV).
   - To display the next six images, press the ▶▶ (FWD).

4. To return to single playback mode, press the MULTI DISP. button again.
   - The still image/moving picture you have marked fills the whole display.
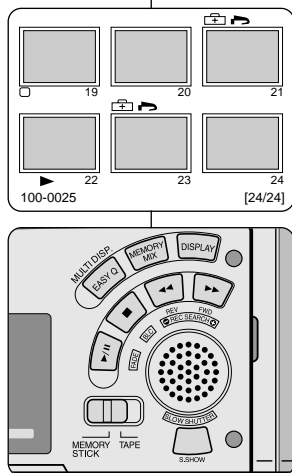
若要觀看順序播放

1. 將本機模式開關設置為MEMORY STICK記憶卡.

2. 並將電源開關設為PLAYER模式.
   - 出現最後錄製的影像

3. 按(順序播放)按鈕.
   - 全部照片會每隔3~4秒播放一張.

4. 若要停止順序播放,再次按下(順序播放)按鈕.

若要觀看多重畫面

1. 將本機模式開關設置為MEMORY STICK記憶卡.

2. 並將電源開關設為PLAYER模式.
   - 出現最後錄製的影像.

3. 按下MULTI DISP(多幅)按鈕,在螢幕上可觀看6個影像.
   - 選擇標記(▶) 出現在影像下方.
   - 動態影片會以靜態圖片的方式出現在第一個畫面,下面有一個(▭)標誌.
   - 轉動MENU SELECTOR(菜單選擇器)選擇影像.
   - 鱉若要顯示前6個影像時,按 ◀◀ (快倒).
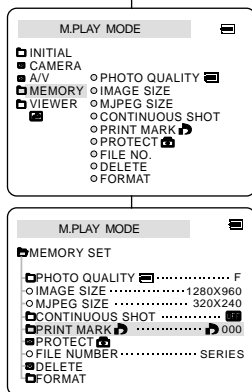   - 鱉若要顯示後6個影像時,按 ▶▶ (快轉).

4. 返回播放模式時,再按下MULTI DISP.(多幅)按鈕.
   - 您標記的影像會充滿整螢幕.

Digital Still Camera mode

數位照相機模式

Marking still images for printing

在照片上做列印標記

※ This camcorder supports the DPOF (Digital Print Order Format) print format.

※ You can automatically print still images recorded on a Memory Stick with a printer supporting DPOF.

※ There are 2 ways to make a PRINT MARK.
  - THIS FILE: You can set a print mark on the photo image displayed on the LCD.
  - ALL FILES: To print 1 copy each of all of the stored still images.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER.
   - The last recorded image appears.
3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image that you want to mark.
4. Press the MENU button.
5. Move the MENU SELECTOR to highlight MEMORY and push the MENU SELECTOR.
   - The MEMORY SET submenu will appear.
6. Move the MENU SELECTOR to highlight PRINT MARK, push the MENU SELECTOR.
7. Use the MENU SELECTOR to select either THIS FILE or ALL FILES and push the MENU SELECTOR.
8. Use the MENU SELECTOR to select the quantity and push the MENU SELECTOR.

Notes

- When you setup the PRINT MARK option to ALL FILES, 999 files from the current file are set to 1 or 0.
- The ALL FILES option may require extended operation time depending on the number of stored still images.
- You cannot write print marks on moving pictures.

※ 本機支援DPOF(數位列印順序格式)的列印格式.

※ 您可透過支援DPOF的印表機列印錄製在記憶卡上的照片.

※ 有兩種製作列印標記的方式:
  - THIS FILE當前照片:您可將顯示在液晶螢幕上的照片設置列印標記.
  - ALL FILES全部照片:對於儲存的照片,每張照片列印一份.

1. 將本機模式開關設置為MEMORY STICK記憶卡.
2. 並將電源開關設為PLAYER模式.
   - 出現最後錄製的影像.
3. 使用▶▶ (快轉) 和 ◀◀ (快倒)鈕,查找需要做標記的照片.
4. 按下MENU(菜單) 按鈕.
5. 移動MENU SELECTOR(菜單選擇器)以選擇MEMORY(記憶), 然後按下MENU SELECTOR(菜單選擇器)按鈕.
   - 會出MEMORY SET(記憶卡設置)子菜單.
6. 轉動MENU SELECTOR(菜單選擇器)以選擇PRINT MARK(列印標記), 然後按下MENU SELECTOR(菜單選擇器)按鈕.
7. 使用MENU SELECTOR(菜單選擇器)以選擇THIS FILE(當前照片)或 ALL FILES(全部照片), 然後按下MENU SELECTOR(菜單選擇器) 按鈕.
8. 使用MENU SELECTOR(菜單選擇器)以選擇數量, 然後按下MENU SELECTOR(菜單選擇器).

注 意

- 在您設置了列印標記選項至全部照片時,將從目前照片開始列印儲存的999張照片,並將目前的照片設置為0或1號.
- 根據儲存的照片數量,全部照片的選項可能需要較長的操作時間.
- 動態影片不能作列印標記.

```
        M.PLAY MODE              ▭
☐ INITIAL
☐ CAMERA
☐ A/V         ○ PHOTO QUALITY ▭
☐ MEMORY      ○ IMAGE SIZE
☐ VIEWER      ○ MJPEG SIZE
🖼            ○ CONTINUOUS SHOT
              ○ PRINT MARK ⏏
              ○ PROTECT 🔒
              ○ FILE NO.
              ○ DELETE
              ○ FORMAT
```

```
        M.PLAY MODE              ▭
☐MEMORY SET
☐PHOTO QUALITY ▭ ·········· F
○IMAGE SIZE ·········1280X960
○MJPEG SIZE ········· 320X240
☐CONTINUOUS SHOT
☐PRINT MARK ⏏ ············ 000
○PROTECT 🔒
○FILE NUMBER ········· SERIES
☐DELETE
☐FORMAT
```

Digital Still Camera mode

數位照相機模式

Protection from accidental erasure

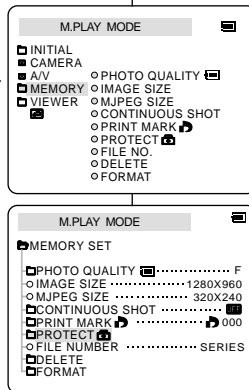## 防止意外刪除

�֍ You can protect important still images/moving pictures from accidental erasure.
- If you execute FORMAT, all still images/moving pictures including protected images will be erased.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER.
   - The last recorded still image/moving picture appears.
   - If there are no recorded still images/moving pictures on the Memory Stick, NO STORED IMAGE! and 🖃 will display on the screen.
3. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image/moving picture that you want to protect.
4. Press the MENU button.
5. Move the MENU SELECTOR to highlight MEMORY and push the MENU SELECTOR.
   - The submenu of MEMORY SET will appear.
6. Move the MENU SELECTOR to highlight PROTECT and push the MENU SELECTOR.
7. Push the MENU SELECTOR to set PROTECT to ON or OFF.
   - THIS FILE : protects the currently selected file from erasure.
8. Using the ▶▶ (FWD) and ◀◀ (REV) buttons, search for the still image/moving picture that you wish to protect.
9. To exit the menu, press the MENU button.

```
M.PLAY MODE              🖃
□ INITIAL
■ CAMERA
■ A/V        ○ PHOTO QUALITY 🖃
□ MEMORY     ○ IMAGE SIZE
□ VIEWER     ○ MJPEG SIZE
🖃           ○ CONTINUOUS SHOT
             ○ PRINT MARK 🖶
             ○ PROTECT 🔒
             ○ FILE NO.
             ○ DELETE
             ○ FORMAT
```

```
M.PLAY MODE              🖃
🔒 MEMORY SET

□ PHOTO QUALITY 🖃 ············· F
○ IMAGE SIZE ············ 1280X960
○ MJPEG SIZE ·········· 320X240
□ CONTINUOUS SHOT ········· 🖃
□ PRINT MARK 🖶 ········ 🖶 000
□ PROTECT 🔒
○ FILE NUMBER ··········· SERIES
□ DELETE
□ FORMAT
```

1. 將本機模式開關設置為 MEMORY STICK 記憶卡.
2. 並將電源開關設為 PLAYER 模式.
   - 出現最後錄製的影像.
   - 譱如果在記憶卡上沒有影像,"NO STORED IMAGE!" 和 🖃 會顯現在螢幕上.
3. 使用 ▶▶ (快轉) 和 ◀◀ (快倒) 鈕,查找需要保護的照片.
4. 按下 MENU(菜單) 按鈕.
5. 轉動 MENU SELECTOR(菜單選擇器) 以選擇 MEMORY(記憶), 然後按下 MENU SELECTOR(菜單選擇器) 按鈕.
   - 會出 MEMORY SET(記憶卡設置) 子菜單.
6. 轉動 MENU SELECTOR(菜單選擇器) 以選擇 PROTECT(保護), 然後按下 MENU SELECTOR(菜單選擇器) 按鈕.
7. 使用 MENU SELECTOR(菜單選擇器) 選擇將保護設置為 ON(開) 或 OFF(關)..
   - THIS FILE(當前照片):保護當前選擇的照片不被刪除.
8. 使用 ▶▶ (快轉) 和 ◀◀ (快倒) 鈕,查找需要保護的照片或影片.
9. 繁要退出菜單,按 MENU(菜單) 按鈕.

Note

- If the write protect tab on the Memory Stick is set to LOCK, you cannot carry out image protection.

注 意

- 繁若記憶卡上的防寫標籤被設置為羏 LOCK(鎖定) 時,則無法執行保護.

Digital Still Camera mode

數位照相機模式

Deleting Still images/Moving pictures

刪除靜態照片/動態影片

�8 You can erase the still images/moving pictures recorded on the Memory Stick.

�8 If you want to delete protected still images/moving pictures, you must first deactivate the image protection.

�8 An image which has been deleted cannot be recovered.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER.
3. Using the ►► (FWD) and ◄◄ (REV) buttons, search for the still image/moving picture that you want to delete.
4. Press the MENU button.
5. Move the MENU SELECTOR to highlight MEMORY and push the MENU SELECTOR.
   ■ The MEMORY SET submenu will appear.
6. Move the MENU SELECTOR to highlight DELETE and push the MENU SELECTOR.
   ■ Using the MENU SELECTOR, select either THIS FILE or ALL FILES and push the MENU SELECTOR.
   ■ THIS FILE: deletes only the file currently selected.
   ■ ALL FILES : deletes all files stored in the Memory Stick.
7. A box will appear to verify whether you wish to delete the still image/moving picture.
   ■ Using the MENU SELECTOR, select the item.
   ■ EXECUTE : deletes the selected still images/ moving pictures.
   ■ CANCEL : does not delete the selected still images/moving pictures and returns to the previous menu.

�8 您可刪除錄製在記憶卡的照片/動態影片.

�8 如果要刪除已保護的照片時,請先取消保護.

�8 刪除的照片不能恢復.
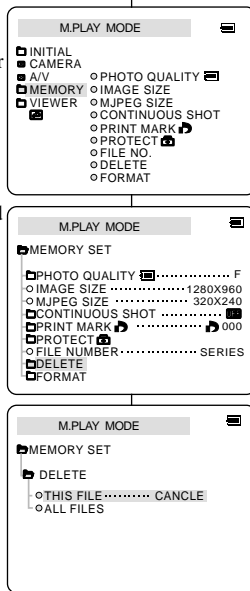
1. 將本機模式開關設置為MEMORY STICK記憶卡.
2. 並將電源開關設為PLAYER模式
3. 使用►► (快轉) 和 ◄◄ (快倒)鈕,查找需要刪除的照片/動態影片.
4. 按下MENU(菜單) 按鈕.
5. 轉動MENU SELECTOR(菜單選擇器)以選擇 MEMORY(記憶)然後,按下MENU SELECTOR (菜單選擇器).
   ■ 顯堤琊MEMORY SET(湔揣抙离) 赹粘等.
6. 轉動MENU SELECTOR(菜單選擇器)以選擇 DELETE(刪除),然後按下MENU SELECTOR (菜單選擇器).
   ■ 使用MENU SELECTOR(菜單選擇器), 以選擇 THIS FILE (當前照片)或ALL FILES(全部照片), 然後按下MENU SELECTOR(菜單選擇器).
   ■ THIS FILE(當前照片):只刪除當前選擇的影像.
   ■ ALL FILES(全部照片); 刪除儲存在記憶卡的全部影像.
7. 會出現一個框框以驗証是否想刪照片.
   ■ 使用MENU SELECTOR(菜單選擇器) 以選擇所要的選項.
   ■ EXECUTE(確定):刪除所選擇的照片.
   ■ CANCEL(取消):不刪除所選擇的照片並返回到上一菜單.

```
M.PLAY MODE                          ▭
▯ INITIAL
▪ CAMERA
▪ A/V          ○ PHOTO QUALITY ▣
▪ MEMORY       ○ IMAGE SIZE
▪ VIEWER       ○ MJPEG SIZE
▯               ○ CONTINUOUS SHOT
                ○ PRINT MARK ▯
                ○ PROTECT ▯
                ○ FILE NO.
                ○ DELETE
                ○ FORMAT
```

```
M.PLAY MODE                          ▭
▯ MEMORY SET

▯ PHOTO QUALITY ▣ ·············· F
○ IMAGE SIZE ················1280X960
○ MJPEG SIZE ··············· 320X240
▯ CONTINUOUS SHOT ············ ▯
▯ PRINT MARK ▯ ············· ▯ 000
▯ PROTECT ▯
○ FILE NUMBER ············· SERIES
▯ DELETE
▯ FORMAT
```

```
M.PLAY MODE                          ▭
▯ MEMORY SET

▯ DELETE
   ○ THIS FILE ·········· CANCLE
   ○ ALL FILES
```

Note

■ If you try to delete a protected image, "PROTECT!" appears on the screen.

注 意

■ 饎如果您想刪除保護的照片時,紕PROTECT! 神保護!虓出現在螢幕上.

Digital Still Camera mode

數位照相機模式

Formatting the Memory Stick

格式化記憶卡

�StillimagesStillimages You can use the MEMORY FORMAT functions to completely delete all still images/moving pictures and options on the Memory Stick, including protected still images/moving pictures.
✿ The format function restores the Memory Stick to its initial state.
✿ The Memory Stick supplied with this camcorder has been formatted already.

✿ 您可使用MEMORY FORMAT格式化來完全刪除記憶卡上的全部影像和選項,包括保護的照片/動態影片.

✿ 格式化功能將記憶卡回復到初始狀態.
✿ 隨本機附送的記憶卡已經格式化.

Attention

✿ If you execute the MEMORY FORMAT function, all still images/moving pictures will be erased completely and erased still images/moving pictures cannot be recovered.

注意

✿ 如果您執行格式化後,所有的照片/動態影片會被完全刪除,且不能恢復.

1. Set the mode switch to MEMORY STICK.
2. Set the power switch to PLAYER mode.
3. Press the MENU button.
4. Move the MENU SELECTOR to highlight MEMORY and push the MENU SELECTOR.
   ■ The sub menu will appear.
5. Select FORMAT from the list and push the MENU SELECTOR.
6. "ALL FILES ARE DELETED! FORMAT REALLY?" appears on the screen.
7. Using the MENU SELECTOR, select the item.
   ■ NO : To return to previous menu
   ■ YES : To start formatting.
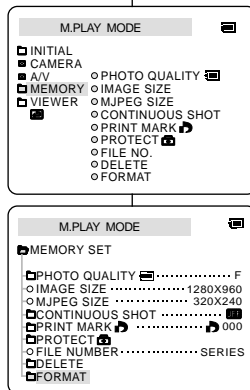8. Push the MENU SELECTOR.
9. To exit the menu, push the MENU button.

```
       M.PLAY MODE          ▣
□ INITIAL
□ CAMERA
■ A/V        ○ PHOTO QUALITY  ▣
□ MEMORY     ○ IMAGE SIZE
□ VIEWER     ○ MJPEG SIZE
▣           ○ CONTINUOUS SHOT
            ○ PRINT MARK 
            ○ PROTECT 
            ○ FILE NO.
            ○ DELETE
            ○ FORMAT
```

```
       M.PLAY MODE          ▣
□ MEMORY SET

□ PHOTO QUALITY ▣ ·············· F
○ IMAGE SIZE ············1280X960
○ MJPEG SIZE ··········· 320X240
□ CONTINUOUS SHOT ········· ▣
□ PRINT MARK       ▸ 000
□ PROTECT 
○ FILE NUMBER ············ SERIES
□ DELETE
□ FORMAT
```

1. 將本機模式開關設置為MEMORY STICK記憶卡.
2. 並將電源開關設為PLAYER模式.
3. 按下MENU(菜單)按鈕.
4. 轉動MENU SELECTOR(菜單選擇器)以選擇 MEMORY(記憶), 然後按下MENU SELECTOR(菜單選擇器)按鈕.
   ■ 會出現子菜單
5. 從列表中選擇FORMAT(格式化), 然後按下MENU SELECTOR(菜單選擇器)按鈕.
6. ALL FILES ARE DELETED! FORMAT REALLY? (喀全部文件要被刪除!真的格式化嗎?)會出現在螢幕上.
7. 使用MENU SELECTOR(菜單選擇器)選擇項目:
   ■ NO(否):返回上一菜單.
   ■ YES(是):開始格式化.
8. 按下MENU SELECTOR(菜單選擇器)按鈕.
9. 要退出菜單,按MENU(菜單)按鈕.

Note

■ If you want to format the Memory Stick on your PC, use only the "Memory Stick formatter" supplied with the software CD.

注 意

■ 如果您要利用電腦格式化記憶卡,只能使用有格式化記憶卡的蹦 Memory Stick formatter 苃嗞迏{式.

Smart Shoe (SCD99 only)

智能熱靴(僅限SCD99)

Using the Smart

使用智能熱靴

- �֍ You can use to attach an optional accessory to the camcorder's Smart Shoe.
- ✖ The accessory is powered by the camcorder's power supply.
- ✖ Turn the camcorder's power off before attaching/removing the accessory to the Smart Shoe.
- ✖ Types of optional accessories for Smart Shoe.
  - ■ VL-S1FL   Video Light/Flash
  - ■ ZM-EC1   Gun Zoom Mic
  - ex) Using the VL-S1FL Video Light/Flash(optional)

- ✖ 可將選配的附件連接到智能熱靴.
- ✖ 附件是由本機來提供電源.
- ✖ 在連接附件至本機智能熱靴前,要先切斷本機的電源.
- ✖ 智能熱靴可選配的附件類型:
  - ■ VL-S1FL   太陽燈/閃光燈
  - ■ ZM-EC1   指向式縮放麥克風
  - 例如:使用VL-S1FL 太陽燈/閃光燈(選購)
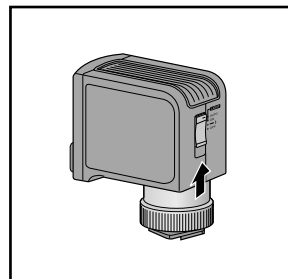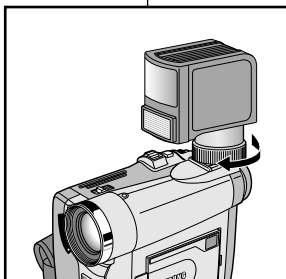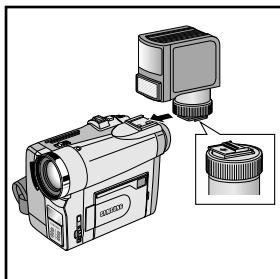
1. Slide the VL-S1FL(Video Light/Flash) onto the Smart Shoe and tighten with shoe lock.
   - ■ Slide the VL-S1FL onto the camcorder until it clicks securely into place.
   - ■ Make sure that the accessory does not come disconnected when turning the shoe lock.

2. Set the camcorder to CAM or M.REC mode.

3. Move the Video Light's power switch to AUTO or ON.

1. 將VL-SIEL太陽燈/閃光燈裝到智能熱靴上,用底托鎖扣緊.
   - ■ 將VL-SIEL太陽燈/閃光燈裝上直到鎖緊.
   - ■ 保証在轉緊時,附件不會斷開.

2. 將本機置為錄影或拍攝模式.

3. 把太陽燈的電源開關切到自動或開啟.

Smart Shoe (SCD99 only)

智能熱靴(僅限SCD99)

VL-S1FL Video Light/Flash

Attach the Video Light/Flash to a camcorder when recording in dark places.
When recording a PHOTO, you can take natural-looking flash pictures with appropriate illumination using the Flash.
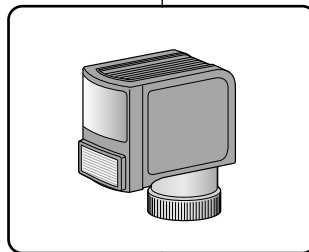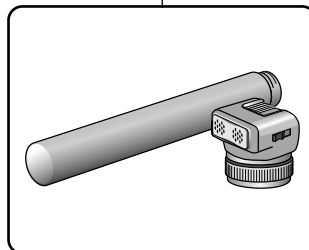
VL-S1FL 太陽燈/閃光燈

在較暗的地方拍攝時,將VL-SIEL連接到本機上.
拍攝照片時,可使用閃光燈來供適當的照明拍攝較自然的照片.

ZM-EC1 Gun Zoom Mic

This is a highly sensitive microphone that can be switched between functioning as a directional microphone (Gun mode) or variable microphone (Zoom mode).

ZM-EC1 指向式縮放麥克風

這一個高精密的麥克風,可用作定向式的可用作定向式或可伸縮式的麥克風.

Maintenance

維護

After finishing a recording

完成拍攝後

�֍ At the end of a recording you must remove the power source.
✤ When recording with a Lithium Ion Battery Pack, leaving the pack on the camcorder can reduce the life span of the battery.
Hence, it should be removed from the camcorder.

✤ 結束拍攝後,必須立即關閉電源.
✤ 使用鋰離子電池拍攝時,將電池組留在本機上會造成電量縮短,因此要把電池組取下.

1. Slide the TAPE EJECT switch in the direction of the arrow.
   ■ Opening the cassette door ejects the tape automatically.
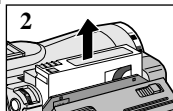   ■ Please wait while the tape is completely ejected.
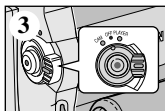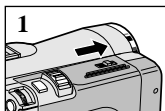
2. After removing the tape, close the door and store the camcorder in a dust free environment.
   ■ Dust and other foreign materials can cause block-shaped noise or jerky images.

3. Set the power switch to the OFF mode.

4. Disconnect the power source or remove the Lithium Ion Battery Pack.
   ■ Hold down the BATTERY RELEASE button and slide the battery pack in the direction of the arrow.

1. 將TAPE EJECT(錄影帶打開/退出)開關沿著箭頭方向滑開.
   ■ 打開影帶倉門,會自動退出影帶.
   ■ 請等到影帶倉完全退出為止.

2. 取出影帶後,關閉影帶倉並將本機置放在無塵的環境中.
   ■ 灰塵和其他異物會造成干擾或抖動的畫面.

3. 將功能開關置於OFF(關)模式.

4. 斷開電源,或取出電池組.
   ■ 按住BATTERY RELEASE(電池盒開關)按鈕,按箭頭所示方向滑開電池組.

Maintenance

維護

## Cleaning and Maintaining the Camcorder

清潔與維護數位攝錄影機

Cleaning the Video Heads

清潔磁頭

To ensure normal recording and clear pictures, clean the video heads when the playback pictures display square block-shaped noise or distortion, or a blue screen appears.

為保証正常拍攝和影像清晰請在播放中如出現干擾或失真或出現藍幕時,請清潔磁頭.

1. Set the power switch to PLAYER mode.

2. Insert the cleaning tape.

3. Press the ▶/❙❙ (PLAY/STILL) button.

4. Press the ■ (STOP) button after 10 seconds.
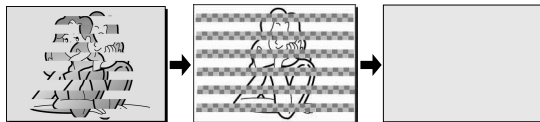
1. 將本機設置為PLAYER(放映機機模式).

2. 插入清潔帶.

3. 按下▶/❙❙ (PLAY/STILL) (播放/暫停)按鈕.

4. 10秒鐘後按下■ (STOP) (停止)按鈕.

Notes

注 意

■ Check the quality of the picture using a videocassette.
  If the picture quality has not improved, repeat the operation.
  If the problem continues, contact your local authorized service center.
■ Clean the video heads with a dry type cassette cleaner.

■ 用放映錄影帶來檢查清潔後的影像品質.
  如果影像仍然不好,則請重複清潔磁頭的動作.
  如果還存在問題,請向當地的客服中心連繫.
■ 請使用乾式清潔帶清潔磁頭.

Maintenance

維護

Using Your Camcorder Abroad

在國外使用攝錄影機

❈ Each country or region has its own electric and color systems.
❈ Before using your camcorder abroad, check the following items.

❈ 每個國家或地區都有自己的電源和彩色制式.
❈ 在國外使用本機之前,應檢查以下項目.

Power sources

■ You can use your camcorder in any country or area with the supplied AC Power Adapter within 100V to 240V, 50/60 Hz.
■ Use a commercially available AC plug Adapter, if necessary, depending on the design of the local wall outlet.

電源

■ 只要您所到的國家或地區的電源處在100V到240V,50/60Hz電源範圍內,您就可以通過隨機提供的交流電源適配器來使用本機.
■ 如有必要,根據當地牆上的設計,使用市場上銷售的交流插頭適配器.

Color system

■ You can view your recording in the viewfinder.
However, to view it on a television or copy it to a videocassette recorder, the television or VCR must be NTSC-compatible and have the appropriate audio/video jacks.
Otherwise, you may need to use a transcoder.

彩色制式

■ 您可以從觀景器中觀看錄製好的影片圖像.
不過,要想在電視機上觀看錄製的影像或將其複製到影帶式錄影機上,電視機或錄影帶式攝錄影機必須與NTSC制式兼容,並配備有相應的音頻/視頻插孔.
否則,您需要配備一台彩色變碼器.

● PAL-compatible Countries/Regions
Australia, Austria, Belgium, Bulgaria, China, CIS, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Great Britain, Holland, Hong Kong, Hungary, India, Iran, Iraq, Kuwait, Libya, Malaysia, Mauritius, Norway, Romania, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Syria, Thailand, Tunisia, etc.
● NTSC-compatible Countries/Regions
Bahamas, Canada, Central America, Japan, Korea, Mexico, Philippines, Taiwan, United States of America, etc.

● 與PAL制式兼容的國家/地區
澳大利亞奧地利,比利時,保加利亞中國,獨聯體各國,捷克共和國,丹麥,埃及,芬蘭,法國,德國,希臘,英國,荷蘭,香港,匈牙利,印度,伊朗,伊拉克,科威特,利比亞,馬來西亞,毛里求斯,挪威,羅馬尼亞,沙烏地阿拉伯,新加坡,斯洛伐克共和國,西班牙,瑞典,瑞士,敘利亞,泰國,突尼斯等.
● 與NTSC制式兼容的國家/地區
巴哈馬,加拿大,中美洲,日本,墨西哥,菲律賓,韓國,台灣,美國等.

Note

You can make recordings with your camcorder and view pictures on the LCD from anywhere in the world.

注 意

您可以用本機在世界任何地方攝影,並利用液晶螢幕觀看播放的影像.

Troubleshooting 故障排除

Troubleshooting

�694 Before contacting a Samsung authorized service center, perform the following simple checks.
They may save you the time and expense of an unnecessary call.

Self Diagnosis Display

Display	Blinking	Informs that...	Action
▭	slow	the battery pack is almost discharged.	Change to a charged one.
TAPE END!	slow	When the remaining time on the tape is about 2 minutes.	Prepare a new one.
TAPE END!	no	the tape reached its end.	Change to a new one.
TAPE!	slow	there is no tape in camcorder.	Insert a tape.
PROTECTION!	slow	the tape is record protected.	If you want to record, release the protection.
▲ ····D L C R	slow	the camcorder has some mechanical fault.	1. Eject the tape. 2. Set to OFF. 3. Detach the battery. 4. Reattach the battery. * If unresolved contact your local service representative.
◉	slow	moisture condensation has formed in the camcorder.	see below.

Moisture Condensation

�694 If the camcorder is brought directly from a cold place to a warm place, moisture may condense inside the camcorder, on the surface of the tape, or on the lens. In this condition, the tape may stick to the head drum and be damaged or the unit may not operate correctly.
To prevent possible damage under these circumstances, the camcorder is fitted with a moisture sensor.

�694 If there is moisture inside the camcorder, ◉ (DEW) is displayed. If this happens, none of the functions except cassette ejection will work.
Open the cassette compartment and remove the battery.
Leave the camcorder for at least two hours in a dry warm room.

故障排除

�694 在與三星授權的客服中心連繫之前,完成以下簡單的檢查.
這樣會節省您的時間和不必要的開支.

自行診斷顯示

顯示	閃爍	訊息	故障排除措施
▭	慢	電池組的電力幾乎完全耗盡	換上已充飽電電池組.
TAPE END!	慢	錄影的剩餘時間約為2分鐘時	準備一盒新的錄影帶.
TAPE END!	無	錄影帶已用盡	換上新的錄影帶.
TAPE!	慢	本機內無錄影帶	插入錄影帶.
PROTECTION!	慢	錄影帶受到防寫保護	如要錄製,請取消保護.
▲ ....D L C R	慢 慢	本機發生機械故障	1. 退出影帶. 2. 設置OFF(關). 3. 取出電池. 4. 重新裝入電池. * 如果故障沒有解決,則應與當地客戶中心連繫.
◉		本機內發結露現象	見下文

結露

�694 如果將本機從寒冷場所直接帶入溫暖場所,濕氣有可能在本機內部,錄影帶表面或鏡頭上形成冷凝水在此情況下,錄影帶可能會黏在磁頭磁鼓上而受損,或者使本機操作不正常.
為防止在此情況下導致可能的損壞,本機裝有濕度感應器.

�694 如果本機內有濕氣時,則會顯示 ◉ DEW(結露). 如果發生此情形,那麼不能使用除了影帶退出外的其他功能.
打開影帶倉,取出電池.
將本機放置於乾燥溫暖的室內至少約2小時或2小時以上.

Troubleshooting

故障排除

Self Diagnosis Display in M.REC/M.PLAY mode

Display	Blinking	Informs that...	Action
MEMORY STICK!	slow	There is no Memory stick in the camcorder.	Insert a Memory Stick.
MEMORY FULL!	slow	There is not enough memory to record.	Change to a new Memory Stick. Erase recorded image.
NO STORED IMAGE!	slow	There are no images recorded on the Memory Stick.	Record new images.
WRITE PROTECT!	slow	The Memory Stick is record protected.	Release the write protect tab on the Memory Stick.
PROTECT!	slow	When you try to delete to protected image.	Cancel the protect of image.
READ ERROR!	slow	The camera can not playback.	Format a Memory Stick or insert Memory Stick recorded on this camcorder.
WRITE ERROR!	slow	The camera can not record.	Format a Memory Stick or change to a new Memory Stick.
NOT FORMATTED!	slow	The Memory Stick needs to format.	Format a Memory Stick.
NOW DELETE...	slow	When progressing FILE DELETE.	Wait until Delete has finished.
NOW FORMAT...	slow	When progressing MEMORY FORMAT.	Wait until formatting has finished.
NOW COPY...	slow	When progressing FILE COPY.	Wait until copying has finished.

在M.REC/M.PLAY(照片錄製/照片播放)模式自行診斷顯示

顯示	閃爍	訊息	故障排除措施
MEMORY STICK!	慢	本機內無記憶卡.	插入記憶卡.
MEMORY FULL!	慢	記憶卡已滿.	更換新卡或刪除一些照片.
NO STORED IMAGE!	慢	記憶卡內無照片.	拍攝一些照片.
WRITE PROTECT!	慢	記憶卡受到保護,防止錄製.	去除記憶卡的防寫保護.
PROTECT!	慢	您試圖刪掉已保護的照片.	取消照片的保護.
READ ERROR!	慢	照相機不能放映.	格式化記憶卡或插入本機所拍攝的記憶卡.
WRITE ERROR!	慢	照相機不能錄製.	格式化記憶卡或插入新的記憶卡.
NOT FORMATTED!	慢	記憶卡需要格式化.	格式化記憶卡.
NOW DELETE...	慢	在進行刪除中	等到刪除結束.
NOW FORMAT...	慢	在進行格式化中.	等到格式化結束.
NOW COPY...	慢	在進行複製中.	等到複製結束.

Troubleshooting

故障排除

� If these instructions do not solve your problem, contact your nearest Samsung authorized service center.

✁ 饍如果故障沒有解決,則應請與經三星授權的當地客服中心連繫.

Symptom	Explanation/Solution
You cannot switch the camcorder on.	Check the battery pack or the AC Power Adapter.
START/STOP button does not operate while recording.	Check the POWER switch is set to CAM. You have reached the end of the cassette. Check the record protection tab on the cassette.
The camcorder goes off automatically.	You have left the camcorder set to STBY for more than 5 minutes without using it. The battery pack is fully exhausted.
The battery pack is quickly exhausted.	The atmospheric temperature is too low. The battery pack has not been charged fully. The battery pack is completely dead, and cannot be recharged, Use another battery pack.
When you see a blue screen during playback.	The video heads may be dirty. Clean the head with a cleaning tape.
A vertical strip appears on the screen when recording a dark background.	The contrast between the subject and the background is too great for the camcorder to operate normally. Make the background bright to reduce the contrast or use the BLC function while you are recording brighter.
The image in the viewfinder is blurred.	The Viewfinder lens has not been adjusted. Adjust the viewfinder control lever until the indicators displayed on the viewfinder come into sharp focus.
Auto focus does not work.	Check the M.FOCUS menu. Auto focus does not work in the Manual Focus mode.
Play, FF or REW button does not work.	Check the POWER switch. Set the power switch to PLAYER. You have reached the beginning or end of the cassette.
When you see a broken block image during the RECORD SEARCH.	This is normal operation and it is not a failure or defect.

故障現象	原因/排除方法
無法開啟本機	請檢查電池組或交流電源適配器.
拍攝時無法操縱 START/STOP 按鈕	請檢查電源開關將其設為CAM位置;影帶已到終點;請檢查影帶防寫保護標籤.
本機會自動關機	本機於待機狀態,閒置未用超過5分鐘;電池組已用盡.
電池組很快用盡	環境溫過低. 電池組充電不足;電池組已報廢,無法充電,請使用另一顆電池組.
播放時看到藍幕	磁頭髒污.用清潔帶清潔磁頭.
在拍攝時,暗部背景出現垂直條紋.	被攝體與背景的對比過大,使本機無法正常操作,提高背景亮度,減少反差或使用BLC(逆光補償)功能.
觀景器中的影像不清楚	觀景器未調整.調整觀景器控制手柄,直到觀景器的影像清晰為止.
自動對焦功能失靈	檢查手動對焦菜單.在手動對焦模式下,自動對焦不起作用.
播放,快轉和快倒按鈕失靈	檢查POWER開關,將電源開關設置於PLAYER(播放);影帶已到達最開頭或最尾端.
RECORD SEARCH(拍攝記錄搜索)過程中,看到方格狀影像	這屬於正常現象並非故障或缺陷.

Specifications

Model name: SCD93/D99

System

Video signal	NTSC
Video recording system	2 rotary heads, Helical scanning system
Audio recording system	Rotary heads, PCM system
Usable cassette	Digital video tape (6.35mm width): Mini DV cassette
Tape speed	SP: approx. 18.81mm/s LP: approx. 12.56mm/s
Tape recording time	SP: 60 minutes (when using DVM 60),
	LP: 90 minutes (when using DVM 60)
FF/REW time	Approx. 150 sec. (using DVM60 tape)
Image device	CCD (Charge Coupled Device)
Lens	F2.0 12x(Optical), 800x(Digital) Electronic zoom lens
Filter diameter	Ø30

LCD monitor/Viewfinder

Size/dot number	2.5inchs 123k(SCD93 only),
	211k(SCD99 only)
LCD monitor Method	TFT LCD
Viewfinder	0.24" B/W LCD(SCD93 only),
	Color LCD(SCD99 only)

Connectors

Video output	1Vp-p (75Ω terminated)
S-video output	Y: 1Vp-p, 75Ω, C: 0. 286Vp-p, 75Ω
Audio output	-7.5dBs (600Ω terminated)
DV input/output	4pin special in/out connector
USB output	Mini-B type connector
External mic	Ø3.5 stereo
Earphone	Ø3.5 stereo

General

Power source	DC 8.4V, Lithium Ion Battery Pack 7.4V
Power source type	Lithium Ion Battery Pack,
	Power supply (100V~240V) 50/60Hz
Power consumption (Recording)	5.9W(LCD), 4.7W(VIEWFINDER)
Operating temperature	0˚~40˚C (32˚F~104˚F)
Storage temperature	-20˚C ~ 60˚C (-4˚F ~ 140˚F)
External dimension	Length 126.5mm, Height 93.5mm, Width 75mm
Weight	512g (Except for Lithium Ion Battery Pack and tape)
Built-in MIC	Omni-directional stereo condenser microphone
Remote control	Indoors: greater than 15m (straight line),
	Outdoors: about 5m (straight line)

• These technical specifications and design may be changed without notice.

技術規格

型號: SCD93/D99

系統

影像訊號	NTSC
影像錄製系統	2個旋轉頭螺旋掃描系統
音頻錄製系統	旋轉頭,PCM系統
可使用錄影帶	數位視頻錄影帶(寬約6.35MM):DV影帶
錄影帶速度	標準播放: 約18.81mm/秒
	長時播放: 約12.56mm/秒
影帶錄製時間	標準播放: 60分鐘(使用DVM60時)
	長時播放: 90分鐘(使用DVM60時)
快轉/快倒時間	約150秒(使用DVM60時)
影像設備	CCD(電荷耦合器)
鏡頭	F2.0 12x(光學放大倍數),800X(數位放大倍數)
濾光鏡直徑	Ø30

液晶螢幕觀景器

大小/點數	2.5英吋(123K,SCD93), (211K,SCD99)
液晶螢幕方式	TFT液晶螢幕
觀景器	0.24LCD黑白(SCD93), 彩色(SCD99)

連接輸入出

視頻輸出	1Vp-p (75Ω 端口)
S-VIDEO輸出	Y: 1Vp-p, 75Ω, C: 0.286Vp-p, 75Ω
音頻輸出	-7.5dBs (600Ω 端口)
DV(數位視頻輸出/輸入)	4針專用連接器
USB輸出	小型B型連接器
外接麥克風	Ø3.5立體聲
耳機	Ø3.5立體聲

概述

電源	DC8.4V鋰離子電池組7.4V
電源種類	鋰離子電池組,電源(100V-240V)50/60Hz
功耗(拍攝)	5.9W(液晶螢幕),4.7W(VIEWFINDER)(觀景器)
操作溫度	0˚C ~ 40˚C(32˚F ~ 104˚F)
儲存溫度	-20˚C ~ 60˚C(-4˚F ~ 140˚F)
外形尺寸	長度126.5mm 高度93.5mm 寬度75mm
重量	512g(不含錄影帶,電池組)
內置麥克風	全向性立體聲電容式麥克風
遙控	室內:大於15公尺直線距離.
	室外:大於5公尺直線距離.

• 本產品的規格和設計可能會修改,恕不另行通知.

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