

# Video Camera Recorder

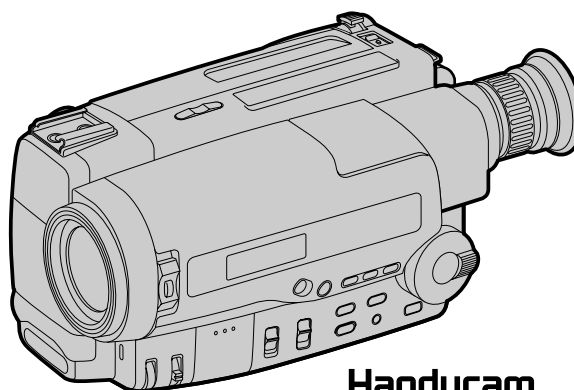
---

## Operating Instructions

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

àìòú ûí^ëñl ôó ~ íòôîû†ú†^ëë

èâ â% î+~†íóî ~ íòôîû†ú†^ëë %†ìòó,ó †òò† †ú† ô óòëî ,ìëî†úâî,ìó  
ô ó~âòú, ì+òúóπ~ââ úíó,ó%òú,ó ëòòú†,ëú, â,,ó %îñl ·û%û~ëì òò †,óí.



**Handycam**  
CCD-TR620E

## Video 8

CCD-TR501E/TR502E/TR620E **8**

© 1997 by Sony Corporation

CCD-TR501E/TR502E/TR620E 3-859-127-13.E/R



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**Before you begin**

**Using this manual**

èÄ Å% ì+~†îÖî †·óú·

àðòóî, áó, †ìèè Å†ììó, ó úíó, ó%òú, †

The instructions in this manual are for the three models listed below. Before you start reading this manual and operating the unit, check your model number by looking at the bottom of your camcorder. The CCD-TR620E is the model used for illustration purposes. Otherwise, the model name is indicated in the illustrations. Any differences in operation are clearly indicated in the text, for example, "CCD-TR620E only". As you read through this manual, buttons and settings on the camcorder are shown in capital letters.

e.g. Set the POWER switch to CAMERA. As indicated with  in the illustrations, you can hear the beep sound to confirm your operation.

àìòù ùí·èè, %†ììóî ùíó, ó%òú, à èáíóèáì· %îí ù áì ìèèàòà à·èóíàìì·ì íó%áíè. èÄ Å% úáí, í+í ç· ì+~ìáúá ~èú+ú, %†ììóá ùíó, ó%òú, ó è·íóóíù+ùè ó, †ú, †òò+ †ú, ó ó, à, úá íóíá ç+~àè íó%áíè, òòóíóú à, ì+ ìèèì. ò+ìáì, ç+~àè, è%áóí+íá ·. àó%áí, CCD-TR620E èòóóí, áúáóí, èíí, òú +ùè, ì·ì ^áíí. ç èìóí òíù~†á ì+èíáìó, †ìèè íó%áíè ùí+á·, †áúóí ì+ èòóí+ì. à.··à †áíè~èí, †·óúá ~áúíó ùí+á+ì·, úáíóúá, í+í ì+ò èíá "íóí, íó CCD-TR620E". äó, %† ç· ·ù%áúá ~èú+ú, ùíó, ó%òú, ó, ù~èú·, +èúá, ~óó ííóóíè è ùóú+ìó, íè ì+ è%áóí+íá á óóí+á+ì· á+, ì+, ì·è·ùí, †ìè. ò èì. ìòú+ìó, èúá, ·íí. ~+úáí, POWER, óóíóèèáìèà CAMERA. òòíè ì+ èòóí+ì ùí+á·, †áúóí áì+í ì, ç· íóèáúá òí·+ú, áúííá ì·è á, ùíó, óè òè, ì+í %îí óó%ú, à è%áíèí ç+~àè †·óú·.

**Types of differences**

íèò· †áíè~èè

| CCD-  | TR501E | TR502E | TR620E |
|---|--------|--------|--------|
| <b>Optical Zoom</b><br>éóúè~àóíèè ú †ìòòóí+úó | 15X    | 15X    | 15X    |
| <b>Digital Zoom</b><br>ñèù ó, óèù †ìòòóí+úó   | —      | 30X*   | 30X*   |
| <b>Wide Mode</b><br>òè óíó·í †ìì·è àèèì       | —      | ●      | ●      |
| <b>Steady Shot</b><br>ìòúóè~è, †í ò·áíí†      | —      | —      | ●      |

\* 180xinsomearea/\* ç ìáíóóó ·ì †èòì+ì 180-í †úì·è

**Note on TV colour systems**

TV colour systems differ from country to country. To view your recordings on a TV, you need a PAL system-based TV. When you want to use a SECAM system-based TV, you will need a PAL/SECAM transcoder (as this is a PAL system-based camcorder).

è èíá~†ìèèá óó òèòóúáì+í ^, áúíó, ó úáíá, è%áíèí

èèòóúáì· ^, áúíó, ó úáíá, è%áíèí óúíè~†. úóí, á+, èòèíóóúè óú óú †ì·. ñíí ò óóíóú † ç+~èì á+òèòàè óó úáíá, èáó ù, ç+í ìáó·ìó%èíó èòóóí, áó, †ú, úáíá, èáó, óòíó, †ìì·è ì+ òèòóúáìá PAL. òòíè ç· ìóúèúá èòóóí, áó, †ú, úáíá, èáó ì+ óòíó, à òèòóúáì· SECAM, ç+í óóí+è·èúòí ò áó. †áó, †úáí, íó%† PAL/SECAM (óòóíóí, íú ~ú+ è%áóí+íá † èá, óóó, íáì+ ì+ óòíó, à òèòóúáì· PAL ).

## Using this manual

àððóí, áó, †ìèâ ‡ììó,,ó  
 ùíó, ó%óó, †

### Precaution on copyright

Television programmes, films, video tapes, and other materials may be copyrighted. Unauthorized recording of such materials may be contrary to the provision of the copyright laws.

è Â%óóúâ ÂÈÀÈÄ Ó· †, úó ðíóí ô †, Â

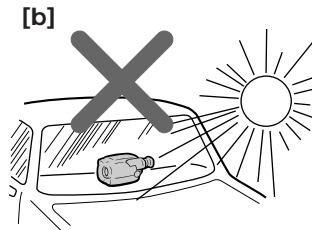
íâíâ, ÈÄÈóì·À ò ó,, †ìì·, íÈìóùÈí·í·,  
 È%Áóíâíú· È ‡ ù,, ÈÄ ì+úâ È+í· íó,, ùó··ú.  
 Á+·È·âì· †, úó ðíèì ò †, óí.  
 çÁó †, óíó·ì+íâ+òÈò. Ù+íÈì ì+úâ È+íó,  
 íóÈáú ò óóÈ, ó Â·Èú, ùóíó, Èíí Á+íóí+ó·  
 †, úó ðíóí ô †, Â.

### Precautions on camcorder care

- Do not let the camcorder get wet. Keep the camcorder away from rain and sea water. It may cause a malfunction and sometimes the malfunction cannot be repaired. **[a]**
- Never leave the camcorder under temperatures above 60 °C (140 °F), such as in a car parked in the sun or under direct sunlight. **[b]**

è Â%óóúó ÓÈìóóúÈ òó ù·ó%ú Á+  
 , È%Áóí+íâ ÓÈ

- çÁ%óóóóí+Èúâ, ~úó··, È%Áóí+íâ †  
 óó+íó, Èí+ò, íóí ÓÈ. Ñâ ÈÈúâ  
 , È%Áóí+íâ ù òó%+í, ~Á óó %óÈ%í È  
 íó ðíóÈ, ó%·. ùóó íóÈáú ò È, ÂðóÈ í  
 ìÀÈò ò †, ìóóúÈ †òò+ †ú+ †, íóóó †í ìâ  
 , òâ,, ‡+ íóÈáú··ú, Èòò †, íâì+. [a]
- çÈíó,, ‡+ ìâ óóó+ †, ííèúâ, È%Áóí+íâ ù,  
 íâóóâ ò úâíóâ †úú ÓÈ ò, ~Â 60°è (140°F),  
 í+í ì+ò Èíâ , , †, úóíó·Èíâ,  
 óóó+íó, íâìíóí ì+ òóí+í·Â ÈíÈ óó%  
 ò íí·íÈ òóíâ·ì·íÈ ìú·+íÈ. [b]



Contents of the recording cannot be compensated if recording or playback is not made due to a malfunction of the camcorder, video tape, etc.

éó%â ÈÈíóâ Á+òÈòÈ ìâ íóÈáú··ú.  
 óóíó ÁíúÈ ó, †íó, ÂðíÈ Á+òÈò, ÈíÈ  
 , óóò ÓÈâ, Â%ÁÈÄ ìâ , \*óóííí. ùóí ÈÄ-Á+  
 ìÀÈò ò †, ìóóúÈ, È%Áóí+íâ ·, , È%Áóíâíú·  
 Èú.%.

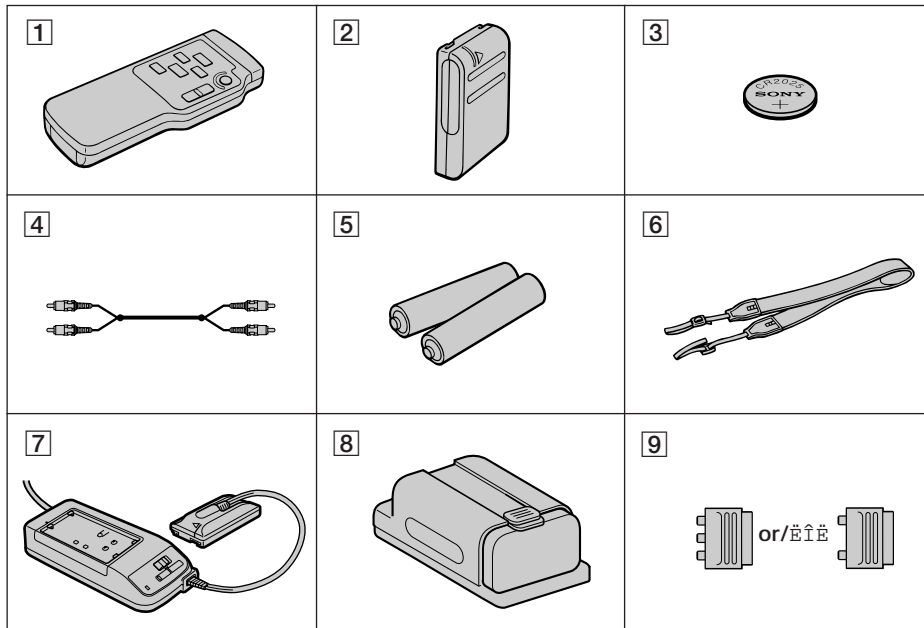
Before you begin

## Checking supplied accessories

ε̂ ó,â í† ô ëî†,†âî° 1  
ô ëî†%îâëîóóúâë

Check that the following accessories are supplied with your camcorder.

ε̂ ó,â úá ì†îë~ëâ òîâ%ó.~ë1  
ô ëî†%îâëîóóúâë, ô ëî†,†âî° 1 í ç†-âë  
,ë%âóí†îâ â.



- |   |  |
|---|--|
| <p>1 Wireless Remote Commander (1) (p. 21, 79)</p> <p>2 NP-33 Battery Pack (1) (p. 7)</p> <p>3 CR2025 Lithium Battery (1) (p. 49)<br/>Already installed in the camcorder.</p> <p>4 A/V connecting cable (1) (p. 19)</p> <p>5 R6 (size AA) battery for Remote Commander (2) (p. 79)</p> <p>6 Shoulder strap (1) (p. 81)</p> <p>7 AC-V16/V16A/V17/V17A AC power adaptor (1) (p. 7, 23)<br/>AC-V17A AC power adaptor is not available in the United Kingdom.</p> <p>8 Battery case (1) (p. 24)</p> <p>9 21-pin adaptor (1) (p. 19)</p> | <p>1 ÁÁòò ó,ó%ì°è óóî,ú %ëóú†ì^ëóììó,ó úó †,îâîëî (1) (óú . 21, 79)</p> <p>2 Á†ú† âëî°è·íóí NP-33(1) (óú . 7)</p> <p>3 äëúëâ,†ì·†ú† âëí† CR2025 (1) (óú . 49)<br/>ìââ úóú†íó,îâî†, ,ë%âóí†îâ â.</p> <p>4 ëóâ%ëîëúáî,î°è í†·âî, †ú%ëó/,ë%âó (1) (óú . 19)</p> <p>5 Á†ú† âëí† R6 ( †áîâ óí ää) %îíí óúî,ú† %ëóú†ì^ëóììó,óúó †,îâîëî (2) (óú . 79)</p> <p>6 ëîâ~â,óë óâîâî, (1) (óú . 81)</p> <p>7 ëáúâ,óë †%†óúâ óâ äî. úóí† AC-V16/V16A/V17/V17A (1) (óú . 7, 23)<br/>AC-V17A îâ ëòóóí,áúáúóí, ëóâ%ëîâîìóí äó óíâ,óú,â</p> <p>8 Á†ú† âëî†í†îâ † (1) (óú . 24)</p> <p>9 21-~ú° ,íó,°è †%†óúâ (1) (óú . 19)</p> |
|---|--|

## Getting started

# Charging and installing the battery pack

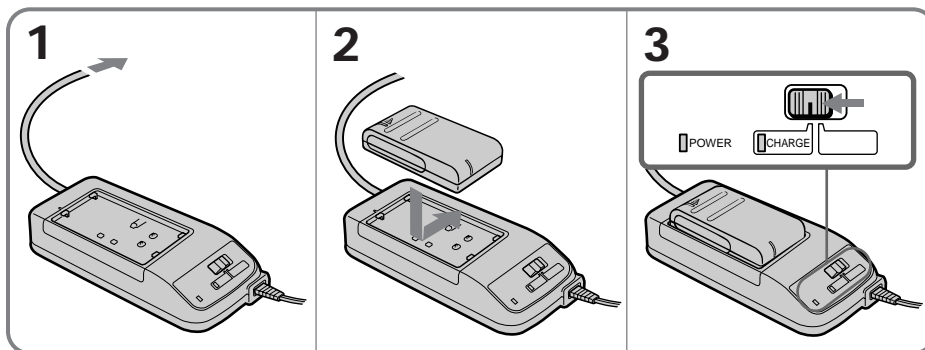
Before using your camcorder, you first need to charge and install the battery pack. To charge the battery pack, use the supplied AC power adaptor.

## Charging the battery pack

Charge the battery pack on a flat place without vibration.

- (1) Connect the AC power adaptor to the mains.
- (2) Align the right side of the battery pack with the line on the AC power adaptor, then slide the battery pack in the direction of the arrow.
- (3) Set the selector to CHARGE. The CHARGE lamp (orange) lights up. Charging begins.

When charging is completed, the CHARGE lamp goes out. Unplug the unit from the mains, and then remove the battery pack and install it on the camcorder.



## Charging Time

| Battery pack     | Charging time* |
|------------------|----------------|
| NP-33 (supplied) | 60             |
| NP-67            | 105            |
| NP-66H/68        | 125            |
| NP-78            | 170            |
| NP-98            | 215            |

\* Approximate minutes to charge an empty battery pack using the supplied AC power adaptor (Lower temperatures require a longer charging time.)

## Getting started

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| NP-66H/68        | 125            |
| NP-78            | 170            |
| NP-98            | 215            |

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Getting started

Getting started

## Charging and installing the battery pack

á† fl%Í† È ÛÒÚ†ÌÓ, Í†  
·†Ú† ÂÈÌÓ„Ó ·ÍÓÍ†

### Battery life CCD-TR501E/TR502E


| Battery pack     | Typical recording time** | Continuous recording time*** |
|------------------|--------------------------|------------------------------|
| NP-33 (supplied) | 55                       | 100                          |
| NP-67            | 90                       | 175                          |
| NP-66H/68        | 105                      | 195                          |
| NP-78            | 135                      | 255                          |
| NP-98            | 175                      | 330                          |

### CCD-TR620E

| Battery pack     | Typical recording time** | Continuous recording time*** |
|------------------|--------------------------|------------------------------|
| NP-33 (supplied) | 50                       | 95                           |
| NP-67            | 90                       | 160                          |
| NP-66H/68        | 100                      | 185                          |
| NP-78            | 130                      | 240                          |
| NP-98            | 175                      | 315                          |

- \*\* Approximate minutes when recording while you repeat recording start/stop, zooming and turning the power on/off. The actual battery life may be shorter.
- \*\*\* Approximate continuous recording time indoors.

### Important! Use the battery completely before re-charging!

Before you recharge the battery, make sure the battery has been used up (discharged) completely. Repeated charging while some capacity remains causes a lowering of battery capacity. However, the original battery capacity can be recovered if you use the battery completely and charge it fully again. To use up the battery, remove the cassette and turn the POWER switch to CAMERA with the battery attached, and leave the camcorder until the  indicator and the red lamp flash rapidly in the viewfinder.


### È ÓÍ ÒÍÛÈ·· ·†Ú† ÂÈÍÈ CCD-TR501E/TR502E

| Á†Ú† ÂÈÌ·È           | ÍÈÒÈ~ÌÓÁ           | çÂÔ Â '-               |
|----------------------|--------------------|------------------------|
| ·ÍÓÍ                 | , ÂÍñ<br>Á†ÒÈÒÈ* * | ,ÌÓÁ, ÂÍñ<br>Á†ÒÈÒÈ*** |
| NP-33 ( Ò ÈÍ†„†ÁÓÓñ) | 55                 | 100                    |
| NP-67                | 90                 | 175                    |
| NP-66H/68            | 105                | 195                    |
| NP-78                | 135                | 255                    |
| NP-98                | 175                | 330                    |

### CCD-TR620E

| Á†Ú† ÂÈÌ·È           | ÍÈÒÈ~ÌÓÁ           | çÂÔ Â '-               |
|----------------------|--------------------|------------------------|
| ·ÍÓÍ                 | , ÂÍñ<br>Á†ÒÈÒÈ* * | ,ÌÓÁ, ÂÍñ<br>Á†ÒÈÒÈ*** |
| NP-33 ( Ò ÈÍ†„†ÁÓÓñ) | 50                 | 95                     |
| NP-67                | 90                 | 160                    |
| NP-66H/68            | 100                | 185                    |
| NP-78                | 130                | 240                    |
| NP-98                | 175                | 315                    |

- \*\* è È·ÍÈÁÈÛÁÍ,Ì†ñ Ò Ó%ÍÈÈÛÁÍ,ÌÓÓÚ, ,  
ÍÈÍÛÚ† Ò È Á†ÒÈÒÈ, ÍÓ„%† Ç· ÓÓ,ÚÓ ñÁÚÁ  
Ì†~†ÍÓ/ÓÓÚ†ÌÓ, Á†ÒÈÒÈ, Û †ÌÓÓÚ†~È. È  
, ÍÍ.~†ÁÚÁ/, \*ÍÍ.~†ÁÚÁ ÒÈÛ†ÍÈÁ.  
èÁ†Í,Ì·È Ò ÓÍ ÒÍÛÈ·· ·†Ú† ÂÈÌÓ„Ó  
·ÍÓÍ† ÍÓÈÁÛ···, ÍÓ Ó~Á.
- \*\*\* è È·ÍÈÁÈÛÁÍ,ÌÓÁ, ÂÍñ ÌÁÔ Â',ÌÓ„Ó  
,ÓÓÔ ÓÈÁ,Â%ÁÍÈñ, ÓÓÍÁ~ÁÍÈÈ.

Ç†ÈÌÓ!  
àÓÓÓÍ,ÁÚÈÚÁ Á† fl%·†Ú† ÂÈÌÓ„Ó·ÍÓÍ†  
ÓÓÍÍÓÓÚ,, Ò ÂÈ%Á, ~ÁÍ Ò ÈÓÚÓÈÛ, Í  
Á„Ó Á† fl%ÍÁ!  
èÁ Â%Á† fl%ÍÓÈ·†Ú† ÂÈÌÓ„Ó·ÍÓÍ†  
Û·Á%ÈÚÁÓ,, ~ÚÓÁ„Ó Á† fl%ÓÓÍÍÓÓÚ.,  
ÈÓÓÓÍ,ÁÓ,†Í (.ÍÓÍ †Á ñÈÁÍ).  
èÓ,ÚÓ Ì†ñÁ† fl%Í†, ÒÍÛ~†Á~†ÓÙÈ~ÌÓ  
ÓÓÚ†, ~ÂÈÒñ ÁÍÍÓÓÚÈ Ò È,Ó%ÈÛ Í ÒÌÈÈÁÍÈ.  
ÁÍÍÓÓÚÈ. è%Í†ÍÓ ÓÁ, ÒÍ†~†Í, Ì†ñ ÁÍÍÓÓÚ.  
·†Ú† ÂÈ ÍÓÈÁÛ···, ÓÓÓÚ†ÌÓ, ÍÁÍ†, ÁÓÍÈ  
Ç· ÓÓÍÍÓÓÚ, ÈÓÓÓÍ, ÁÚÁÚÁ Á† fl%·†Ú† ÂÈ  
È ÒÍÓ, †ÁÁ ÓÓÍÍÓÓÚ, Á† fl%ÈÚÁ.  
ÑÍñ †Á fl%ÍÈ·†Ú† ÂÈ ÒÌÈÈÛÁ Í†ÓÓÁÛ È  
ÓÁ Â%, ÈÌ, ÚÁ ÓÁ ÁÍÍ.~†ÚÁÍ, POWER,  
ÓÓÍÓÈÁÍÈÁ CAMERA Ò È ÓÓ%ÓÓÁ%ÈÍÁÍÍÓÈ  
·†Ú† ÂÈ ÈÓÓÚ†, ÚÁ, È%ÁÓÍ†ÍÁ Û  
, ÍÍ.~ÁÍÍÓÈ %Ó ÚÁÍ ÓÓ, ÓÓÍ†,  
È%ÓÈÓÍ†ÚÁÍÁ Ì†~ÍÛÛ··ÓÓ Ò ÌÈ„†Ú.  
ÈÍ%ÈÍ†ÚÓ  È Í †ÒÌ†ñ Ì†ÍÓÓ~Í†.



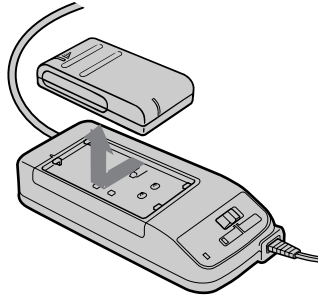
## Charging and installing the battery pack

á† fl%Í† È ÛÒÚ†ÌÓ, Í†  
·†Ú† ÂÈÌÓ,,Ó ·ÍÓÍ†

### To remove the battery pack

Slide the battery pack in the direction of the arrow.

ÑÍfl ÒÌflÚÈfl ·†Ú† ÂÈÌÓ,,Ó ·ÍÓÍ†  
è Â%, ÈÌ, ÚÂ ·†Ú† ÂÈÌ'È ·ÍÓÍ, Ì†Ò †, ÍÂÌÈÈ  
ÓÚ ÂÍÈÈ.



### Notes on charging the battery pack

- The POWER lamp will remain lit for a while even if the battery pack is removed and the mains lead is unplugged after charging the battery pack. This is normal.
- If the POWER lamp does not light, set the selector to VTR (DC OUT) and disconnect the mains lead. After about one minute, reconnect the mains lead and set the selector to CHARGE again.
- You cannot operate the camcorder using the AC power adaptor while charging the battery pack.

- è ÈÌÂ~†ÌÈfl ÒÓ Á† fl%ÍÂ ·†Ú† ÂÈÌÓ,,Ó ·ÍÓÍ†
- ä†ÍÒÓ~Í† POWER ·Ù%ÂÚ ÌÂÍÓÓÓ ÓÂ, ÂÍfl Ò, ÁÚÈÚ, Òfl, %†ÈÂ ÂÒÈÈ ·†Ú† ÂÈÌ'È ·ÍÓÍ ÒÌflÚ È ÒÂÚÂ, ÒÈ Ò Ó, Ó% ÓÚÍÍ. ~ÂÌ ÓÓÓÍÂ Á† fl%ÍÈ ·†Ú† ÂÈÌÓ,,Ó ·ÍÓÍ†. ùÓÓfl, ÍflÂÚÒfl ÌÓ Ì†Í, Ì'Í.
- ÓÓÍÈ Í†ÍÒÓ~Í† POWER ÌÂ Á†,,Ó †ÂÚÒfl, ÛÒÚ†ÌÓ, ÈÚÂ ÒÂÍÂÍÚÓ , ÓÓÍÓÈÂÌÈÂ VTR (DC OUT) È ÓÚÓÓÂÈÌÈÚÂ ÒÂÚÂ, ÒÈ Ò Ó, Ó%. è ÈÌÂ ÌÓ ~Â ÁÂ ÌÈÌÓÓÓ, ÌÓ,, ÓÓ%ÓÓÂÈÌÈÚÂ ÒÂÚÂ, ÒÈ Ò Ó, Ó% È ÓÓflÚ. ÛÒÚ†ÌÓ, ÈÚÂ ÒÂÍÂÍÚÓ , ÓÓÍÓÈÂÌÈÂ CHARGE.
- Ç' ÌÂ ÍÓÈÂÚÂ ÛÒ †, ÍflÚ, È%ÁÓÍ†ÍÂ ÒÈ Ò ÈÒÓÓÍ, ÁÓ, †ÌÈÂÍ ÒÂÚÂ, Ó,,Ó †%†ÓÚÂ † ÓÂ ÂÍ. ÚÓÍ†, Ó, ÂÍfl Á† fl%ÍÈ ·†Ú† ÂÈÌÓ,,Ó ·ÍÓÍ†.

Getting started

èÓ%,,ÓÓÓ, Í† Í Ì†~†Í†† ·ÓÓ†

## Charging and installing the battery pack

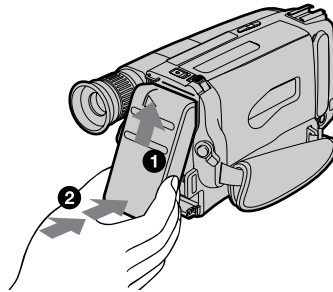
á† fl%Í† È ÛÒÚ†ÌÓ, Í†  
· †Ú† ÂÈÌÓ„Ó · ÍÓÍ†

### Installing the battery pack

ìÒÚ†ÌÓ, Í† · †Ú† ÂÈÌÓ„Ó · ÍÓÍ†

- (1) Insert the top of the battery pack into the top of the battery mounting surface.
- (2) Push the battery pack so that it attaches firmly. Make sure that you hear clicks twice. Attach the battery pack to the camcorder securely.

- (1) ÇÒÚ†, ÚÁ, Â ìÌÈÈ ÍÓÍÁ^ · †Ú† ÂÈÌÓ„Ó · ÍÓÍ†, , Â ìÌ. ~ †ÒÚ. · †Ú† ÂÈÌÓÈ ÛÒÚ†ÌÓ, Ó~ÌÓÈ ÓÓ, Â ìÌÓÓÙÈ.
- (2) Ç†ÈÌÈÙÁ · †Ú† ÂÈÌ·È · ÍÓÍ†, Ú†Í†, ~ÚÓ· ÓÌ · Í† ÂÈÌÓ Ó ÈÓÓÁÈÈÌÁÌ. ì·ÁÈÙÁÓ, , ~ÚÓ· Ç· ÛÒÍ· †ÍÈ%, ÓÈÌÓÈ ~ÁÍ·ÓÍ. ì·ÁÈÙÁÓ, , ~ÚÓ Ç· %, †ÈÈ· ÛÒÍ· †ÍÈ ~ÁÍ·ÓÍ.  
è ÈÍ ÁÓÈÙÁ ì†ÂÈÌÓ · †Ú† ÂÈÌ·È · ÍÓÍ Í , ÈÈÁÓÍ†ÌÁ Â.



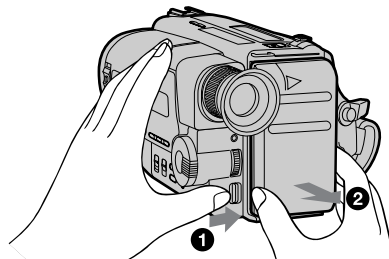
**Note on installing the NP-98 battery pack** ÈÌÁ~†ÌÈÁ ÓÚÌÓÈÈÙÁÍ, ÌÓ · †Ú† ÂÈÌÓ„Ó · ÍÓÍ† NP-98 àÒÓÍ, ÁÙÈÙÁ , ÈÈÁÓÍ†ÌÁ Û, ÓÍÁ, Í† Ó ÈÓÓ%ìfl, ÈÈÓÈÒÍ†ÙÁÍ, .

**Note on the battery pack**  
Do not carry the camcorder by grasping the battery pack.

è ÈÌÁ~†ÌÈÁ Í · †Ú† ÂÈÌÓÍÙ · ÍÓÍÙ ÇÁ ÓÁ ÁÌÓÓÈÙÁ , ÈÈÁÓÍ†ÌÁ Û, Û%Á ÈÈ, †fl ÁÁ Á† · †Ú† ÂÈÌ·È · ÍÓÍ.

**To remove the battery pack**  
Slide BATT, and then pull the lower part of the battery pack.

ÑÍfl ÒìflÙÈfl · †Ú† ÂÈÌÓ„Ó · ÍÓÍ† è%, ÈÌ. ÚÁ BATT, † Á†ÙÁÍ ÓÓÙflÈÙÁ Á† ÌÈÈÌ. ~ †ÒÚ. · †Ú† ÂÈÌÓ„Ó · ÍÓÍ†.



You can look at the demonstration of the functions available with this camcorder. (p. 28)

Ç· ÍÓÈÁÙÁ, Á„ ìflÌÙÙ. ì† %ÁÌÓÌÓÙ †^È. ÛÙÍÍ^ÈÈ, ÈÌÁ. ~ÈÌÒfl, %, †ìÌÓÈ, ÈÈÁÓÍ†ÌÁ Â. (Ç .28)




Basic operations

Camera recording

εὐχρηστικὰ, ἐπιβεβαιώστε ὅτι ἡ μπαταρία

ἔχει φορτισθῆ ὀρθῶς, ὅτι ἡ ἡμερομηνία

Make sure that a power source and a cassette is inserted and that the START/STOP MODE switch is set to .

When you use the camcorder for the first time, power on it and reset the date and time to your time (p. 51) before you start recording. The date is automatically recorded for 10 seconds after you start recording (AUTO DATE feature). This feature works only once a day.

Before you record one-time events, you may want to make a trial recording to make sure that you are using the camcorder correctly.

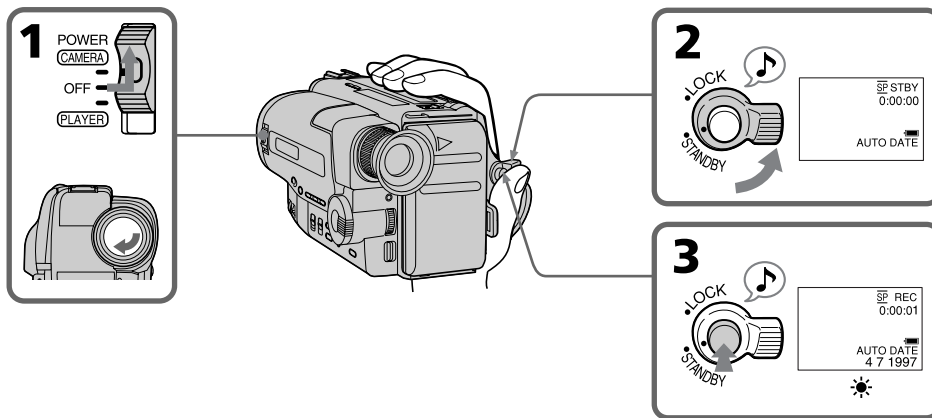
- (1) While pressing the small green button on the POWER switch, set it to CAMERA.
- (2) Turn STANDBY up. The "STBY" indicator appears in the viewfinder.
- (3) Press START/STOP. The camcorder starts recording and the "STBY" indicator changes to the "REC" indicator.

You can also select Recording mode, SP (standard play) mode or LP (long play) mode. Set REC MODE in the menu system according to the length of your planned recording before you start.

ὀρθῶς, ἐπιβεβαιώστε ὅτι ἡ μπαταρία ἔχει φορτισθῆ ὀρθῶς, ὅτι ἡ ἡμερομηνία ἔχει ἰσορροπευθῆ ὀρθῶς. Πρὶν ἀρχίζειτε τὴν εἰσαγωγὴν τῆς ταινίας, ἐπιβεβαιώστε ὅτι ἡ μπαταρία ἔχει φορτισθῆ ὀρθῶς. Ἡ ἡμερομηνία εἰσαγωγῆς εἰς τὴν ταινία εἰς τὴν διάρκεια τῆς εἰσαγωγῆς τῆς ταινίας (αὐτοματικὴ ἡμερομηνία εἰσαγωγῆς) λειτουργεῖ μόνο ἓξ ἑκατὸν δευτερόλεπτα ἑκάστη ἡμέρα. Πρὶν ἀρχίζειτε τὴν εἰσαγωγὴν τῆς ταινίας, ἐπιβεβαιώστε ὅτι ἡ μπαταρία ἔχει φορτισθῆ ὀρθῶς. Ἡ ἡμερομηνία εἰσαγωγῆς εἰς τὴν ταινία εἰς τὴν διάρκεια τῆς εἰσαγωγῆς τῆς ταινίας (αὐτοματικὴ ἡμερομηνία εἰσαγωγῆς) λειτουργεῖ μόνο ἓξ ἑκατὸν δευτερόλεπτα ἑκάστη ἡμέρα.

- (1) Πρὶν πατήσετε τὸ μικρὸν πράσινο κουμπί τοῦ διακόπτη ΠΡΩΤΟΒΟΗΘΕΙΑΣ, ἐπιβεβαιώστε ὅτι ἡ μπαταρία ἔχει φορτισθῆ ὀρθῶς.
- (2) Ἐπιβεβαιώστε τὸν ἠχογράφημα. Ὁ δείκτης "STBY" ἐμφανίζεται ἐν τῷ ὄραμα τοῦ ὄραματόφρακτος.
- (3) Πατήστε τὸν ΠΡΩΤΟΒΟΗΘΕΙΑΣ/ΔΙΑΚΟΠΤΗ. Ἡ εἰσαγωγὴ τῆς ταινίας ἀρχίζει καὶ ὁ δείκτης "STBY" ἀλλάζει εἰς τὸν δείκτη "REC".

Ἔτσι, ἐπιβεβαιώστε ὅτι ἡ μπαταρία ἔχει φορτισθῆ ὀρθῶς, ὅτι ἡ ἡμερομηνία ἔχει ἰσορροπευθῆ ὀρθῶς. Πρὶν ἀρχίζειτε τὴν εἰσαγωγὴν τῆς ταινίας, ἐπιβεβαιώστε ὅτι ἡ μπαταρία ἔχει φορτισθῆ ὀρθῶς. Ἡ ἡμερομηνία εἰσαγωγῆς εἰς τὴν ταινία εἰς τὴν διάρκεια τῆς εἰσαγωγῆς τῆς ταινίας (αὐτοματικὴ ἡμερομηνία εἰσαγωγῆς) λειτουργεῖ μόνο ἓξ ἑκατὸν δευτερόλεπτα ἑκάστη ἡμέρα.



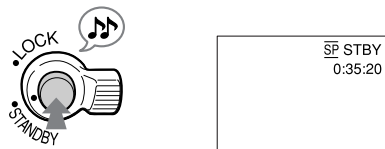
**To stop recording momentarily [a]**

Press START/STOP again. The "REC" indicator in the viewfinder changes to the "STBY" indicator (Standby mode).

**To finish recording [b]**

Press START/STOP. Turn STANDBY down, and set the POWER switch to OFF. Then, eject the cassette and remove the battery pack.

[a]



**Note on standby mode**

If you leave the camcorder for 5 minutes or more with a cassette inserted in Standby mode, the camcorder goes off automatically. This prevents wearing down the battery and wearing out the tape. To resume Standby mode, turn STANDBY down once and turn it up again. To start recording, press START/STOP.

**Notes on the recording mode**

- This camcorder records and plays back in SP (standard play) mode and in LP (long play) mode. The playback quality in LP mode, however, will not be as good as that in SP mode.
- When a tape recorded on this camcorder in LP mode is played back on other types of 8 mm camcorders or VCRs, the playback quality may not be as good as that on this camcorder.

**Note on recording**

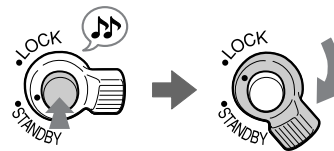
When you record from the beginning of the tape, run the tape for about 15 seconds before starting the actual recording. This prevents the camcorder from missing any start-up scenes when you play back the tape.

Nñfl , ÁIÁIÏ0È 00Ú+Ì0, ÍÈ Á+0E0È [a]  
ç+ÈIÈÚÁ 00flÚ, START/STOP. Ç  
, È%0È0Í+ÚÁÍÁ ÈI%ÈI+Ú0 "REC" ÈÁIÁIÈÚ0fl Ì+  
ÈI%ÈI+Ú0 "STBY" ( ÁÈÈI „00Ú,Ì00ÚÈ) .

**[b]**

Nñfl 0Í0Ì~+ÌÈfl Á+0E0È [b]  
ç+ÈIÈÚÁ START/STOP. èó,Á ÌÈÚÁ STANDBY  
, ÌÈÁ È Ú0Ú+Ì0, ÈÚÁ, \*ÍÍ, ~+ÚÁÍ, POWER,  
00Í0ÈÁIÈÁ OFF. á+ÚÁÍ, \*Ú0ÍÍÈÚÁ Í+00ÁÚ0 È  
Ú%+ÌÈÚÁ ·+Ú+ ÁÈÌ·È·Í0Í.

[b]



è ÈIÁ~+IÈÁ Í ÁÈÈIÚ „00Ú,Ì00ÚÈ  
00IÈ ç· 00Ú+, ÌflÁÚÁ, È%AOI+IA Ú Ì+ 5 ÌÈIÚÚ  
ÈIÈ·0ÍÁÁ 00,0Ú+, ÍÁIÏ0È Í+00ÁÚ0È, ÁÈÈIÁ  
„00Ú,Ì00ÚÈ, Ú0, È%AOI+IA +, \*ÍÍ. ~ÈÚ0fl  
+ Ú0Í+ÚÈ~Á0ÍÈ. Ú00 0 Á%0Ú, +~+ÁÚ +Á fl%ÍÚ  
·+Ú+ ÁÈ È ÈÁI00 ÍÁÍÚ·. Nñfl, 0Á0·Ì0, ÍÁIÈfl  
ÁÈÈI+ „00Ú,Ì00ÚÈ 0%ÈI +Á 00,Á ÌÈÚÁ  
STANDBY, ÌÈÁ È 0Í0, + 00,Á ÌÈÚÁ Á„0, ,Á 1.  
Nñfl Ì+~+Í+ Á+0E0È Ì+ÈIÈÚÁ START/STOP.

**è ÈIÁ~+IÈfl Í ÁÈÈI+I Á+0E0È**

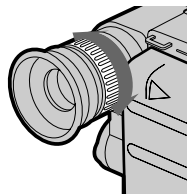
- N+ÌI+fl, È%AOI+IA + Á+0E0°, +ÁÚ È  
, 000 0ÈÁ, 0%ÈÚ, ÁÈÈIÁ SP (0Ú+Ì%+ ÚÍ0„0  
, 000 0ÈÁ, Á%ÁIÈfl) ÈIÈ, ÁÈÈIÁ LP  
(Ú%ÍÈIÁIÏ0„0, 000 0ÈÁ, %ÁIÈfl) .  
è%Ì+Í0, Í+~Á0Ú„0, 000 0ÈÁ, Á%ÁIÈfl,  
ÁÈÈIÁ LP ·Ú%ÁÚ ÌÁ Ú+ÍÈI 10 0~ÈI, Í+Í,  
ÁÈÈIÁ SP.  
• 00IÈ ÍÁÍÚ+ ·Í+ Á+0E0+Ì+ , ÁÈÈIÁ LP Ì+  
%+ÌI0È, È%AOI+IA Á È, 000 0ÈÁ, 0%ÈÚ0fl Ì+  
% Ú„È1 ÚÈ0+1 8-ÍÍ, È%AOI+IA ÈIÈ áçÁ,  
Í+~Á0Ú„0, 000 0ÈÁ, Á%ÁIÈfl Í0ÈÁÚ ·Ú. ÌÁ  
Ú+ÍÈI 10 0~ÈI, Í+Í 0 È, 000 0ÈÁ, Á%ÁIÈÈ  
Ì+ %+ÌI0È, È%AOI+IA Á.

è ÈIÁ~+IÈÁ Í 0 0^Á00Ú Á+0E0È  
00IÈ ç· 0 0ÈÁ, 0%ÈÚÁ Á+0E0, 0 0+Í0„0 Ì+~+Í+  
ÍÁÍÚ·, %+ÈÚÁ, 0ÁÍ0ÈI00Ú. ÍÁÍÚÁ  
0Á ÁIÁ0ÚÈÚ, 0fl 0Í0Í0 15 0ÁÍÚÌ% %0 Ì+~+Í+  
Á+0E0È. Ú00 0 Á%01 +flÁÚ, È%AOI+IA Ú0Ú  
0 00Ú0Í+ Ì+~+Í. Ì·1 0. ÈÁÚ0, 0·ÁÍIÈ, Í0„%+  
ç· ·Ú%ÁÚÁ, 000 0ÈÁ, 0%ÈÚ. ÍÁÍÚÚ.

**To focus the viewfinder lens**

If the viewfinder is not in focus at all or when you use the camcorder after someone else has used it, focus the viewfinder lens. Turn the viewfinder lens adjustment ring so that the indicators in the viewfinder come into sharp focus.


ÑÎÎ ÛÓÍÛÒÈ Ó, ÌÈ Ó· ÁÍÚÈ, †, È%ÒÈÒÍ+ÚÁÎÎ ÒÒÍÈ, È%ÒÈÒÍ+ÚÁÎÎ, ÓÓ· Á ÌÀ ÒÒÓÍÛÒÈ Ó, †Ì, ÈÌÈ, ÁÒÍÈ Ç· ÈÒÒÓÍ, ÁÚÁÚÁ, È%ÁÓÍ+ÏÁ Û ÓÒÓÍÁ ÚÓ, Ó, Í+Í ÁÁ ÈÒÒÓÍ, ÁÓ, †Í ÍÚÓ-ÚÓ % Û, ÒÈ, ÚÓ ÒÒÓÍÛÒÈ ÛÈÚÁ Ó· ÁÍÚÈ, È%ÒÈÒÍ+ÚÁÎÎ. èÓ, Á ÌÈÚÁ Á, ÛÍÈ Ó, Ó~ÌÓÁ ÍÓÍ, °Ó Ó· ÁÍÚÈ, †, È%ÒÈÒÍ+ÚÁÎÎ Û+Í, ~ÚÓ· ÈÌÈÈÍ+ÚÓ °, , È%ÒÈÒÍ+ÚÁÎÎ ·· ÌÈ ~ÁÚÍÓ ÒÒÓÍÛÒÈ Ó, †Ì·.



**Notes on the tape counter**

- The tape counter indicates the recording or playback time. Use it as a guide. There will be a time lag of several seconds from the actual time. To set the counter to zero, press COUNTERRESET.
- If the tape is recorded in SP and LP modes mixed, the tape counter shows incorrect recording time. When you intend to edit the tape using the tape counter as a guide, record in same (SP or LP) mode.

**Note on beep sound**

As indicated with  in the illustrations, a beep sounds when you turn the power on or when you start recording and two beeps sound when you stop recording, confirming the operation. Several beeps also sound as a warning of any unusual condition of the camcorder. Note that the beep sound is not recorded on the tape. If you do not want to hear the beep sound, set BEEP to OFF in the menu system.

è ÈÍÁ~+ÌÈÎ Í Ò~ÁÚ~ÈÍÛ ÍÁÍÛ·

- è~ÁÚ~ÈÍ ÍÁÍÛ· ÚÍ+Á·, †ÁÚ, ÁÎÎ Á+ÒÈÒÈ ÈÌÈ, ÁÎÎ, ÓÓ ÈÁ, Á%ÁÌÈÎ. àÒÒÓÍ, ÁÚÈÚÁ Á, Ó, Í+~ÁÓÚ, Á ÚÍÓ, Ó%ÓÚ, †. èÛ~ÁÓÚ, ÚÁÚ ÓÓÓÚ, †ÌÈÁ ÓÓ, ÁÍÁÌÈ Ì+ ÌÁÓÍÓÍ, ÍÓ ÒÁÍÛÈ% ÓÚ Û+ÍÚÈ~ÁÓÍÓ, Ó, ÁÍÁÌÈ. ÑÎÎ ÛÓÓ+ÍÓ, ÌÈ Ò~ÁÚ~ÈÍ+ Ì+ ÍÚÍ, Ì+ÈÌÈÚÁ ÍÍÓÓÍÛ COUNTER RESET.
- ÒÒÍÈ ÍÁÍÛ+ Á+ÒÈÒ+Í+ , ÓÓ~ÁÚ+ÌÈÈ ÁÈÈÍÓ, SP È LP, Ò~ÁÚ~ÈÍ ÍÁÍÛ· Û%ÁÚ ÓÓÍ+Á·, †Ú. ÌÁÓ †, ÈÍ, ÌÓÁ, ÁÎÎ Á+ÒÈÒÈ. ÒÒÍÈ Ç· Ì+ÏÁ Á, †ÁÚÁÓ. Ó ÓÈÁ, ÁÓÚÈ ÍÓÍÛ+È ÍÁÍÛ· Ó ÈÒÒÓÍ, ÁÓ, †ÌÈÁÍ Ò~ÁÚ~ÈÍ+ , ÁÍÁÌÈ ÓÓ, †+ÒÍÓ ÚÍÓ, Ó%ÓÚ, Û, , °ÓÍÏÈÚÁ Á+ÒÈÒ, , Ó%ÍÓÍ È ÓÓÍ ÈÁ ÁÈÈÍÁ (SP ÈÌÈ LP).

è ÈÍÁ~+ÌÈÈ Í ÁÚÍÁ ÌÓÍÛ Á, ÚÍÓ, ÓÍÛ ÒÈ, Ì+ÏÛ à+Í ÚÍ+Á+ÍÓ Ò ÓÓÍÓ· . Ì+ ÈÓÛÍÍ+1, ÁÚÍÁ Ì·È ÒÈ, Ì+Í Á, Û~ÈÚ, ÍÓ, %+ Ç· Ì+~ÈÍ+ÁÚÁ Á+ÒÈÒ, , †%, † ÁÚÍÁ Ì·1 ÒÈ, Ì+Í Á, Û~+Ú, ÍÓ, %+ Ç· Á+Í+Ì~È, †ÁÚÁ Á+ÒÈÒ, , ÓÓ%Ú, Á È%Î ÛÁÍ Ò+Í·Í †·ÓÓÚ. ÇÁÓÍÓÍ, ÍÓ ÁÚÍÁ Ì··1 ÒÈ, Ì+ÍÓ, Û+ÌÈÁ Á, Û~ÈÚ, Í+~ÁÓÚ, Á Ó Á%ÓÓ ÁÈ%ÁÌÈÎ Í+ÍÓ, Ó~ÌÈ·Ó ÌÁÍÓ Ì+Í, ÍÓ, Ó ÓÓÓÓÎÈÎ, È%ÁÓÍ+ÏÁ °. á+ÏÁÚ, ÚÁ, ~ÚÓ ÁÚÍÁ Ì·È Á, ÚÍÓ, ÓÈ ÒÈ, Ì+Í ÌÁ Á+ÒÈÒ, †ÁÚÓÎ Ì+ ÌÁÍÛ. ÒÒÍÈ Ç· ÌÁ ÌÓÚÈÚÁ ÓÍ·+Ú, ÁÚÍÁ Ì·È ÒÈ, Ì+Í, ÚÓ ÛÓÓ+ÍÓ, ÈÚÁ BEEP, ÓÓÍÓÈÁÌÈÁ OFF, ÒÈÒÚÁÏÁ ÌÁÌ·.

## Camera recording

α+0Ε0, 0 0010~ , Ε%Α01+1Α °

### Note on the AUTO DATE feature

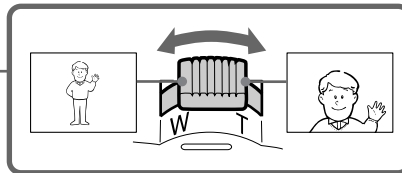
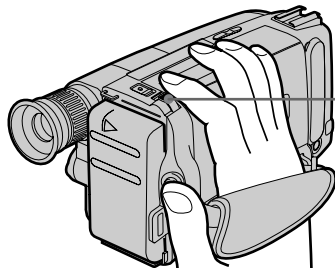
The clock is set at the factory to London time for United Kingdom and to Paris time for the other European models. You can reset the clock. The AUTO DATE feature shows the date automatically once a day. However, the date may automatically appear more than once a day when:

- you reset the date and time.
- you eject and insert the tape again.
- you stop recording within 10 seconds.

### Using the zoom feature

Zooming is a recording technique that lets you change the size of the subject in the scene. For more professional-looking recordings, use the zoom sparingly.

- "T" Side: for telephoto (subject appears closer)
- "W" Side: for wide-angle (subject appears farther away)



### Zooming speed (Variable speed zooming)

Turn the power zoom lever fully for a high-speed zoom. Turn it lightly for a relatively slow zoom.

### When you shoot a subject using a telephoto zoom

If you cannot get a sharp focus while in extreme telephoto zoom, move the power zoom lever to the "W" side until the focus is sharp.

You can shoot a subject that is at least about 80 cm (about 2 5/8 feet) away from the lens surface in the telephoto position, or 1 cm (about 1/2 inch) in the wide-angle position.

ε 01Α~+10Α ί 0011^00 AUTO DATE  
 0+0° 000+10, 1Α1° 1+ Α+, 0%Α 1+, Α1fl  
 α01%01+ %fl 10%Α1Α0 ε0Α%01Α110, 0  
 α0 01Α, 00, + 0 1+, Α1fl ε+ 00+ %fl % 0,, 01  
 Α, 00Α00101 10%Α1Α0. 0° 100Α0Α  
 0Α Α000+10, 00, ~+0°. 1011^00 AUTO DATE  
 +·00+Α0 0%01 +Α, %Α1, . 0%1+10, %+0+  
 100Α0 00fl, 00, 0fl ·01ΑΑ 0%10, 0 +Α+, %Α1, ,  
 Α010:  
 - 0° 0Α Α000+10, 00Α %+00 0, Α1fl.  
 - 0°, "0011Α0Α 1Α100 0, 00+, 00Α ΑΑ 010, +.  
 - 0° 000+10, 00Α Α+000, 0 Α%Α1+1 10 0Α101%.

α0001, Α0, +100Α 0011^00 1+ΑΑ%+  
Ε%Α01+1Α °

0+ΑΑ%, Ε%Α01+1Α ° fl, 1flΑ00fl 0Α110~Α0101  
 0 0Α101 Α+0000, 1000 ° 0 0Α, 0flΑ0 0+1  
 0Α1Α1fl, +Α1Α 0· Α10+, 1+% Α. 0Α  
 Α10000 Α· 1fl00Α ~001 0 0Α101, Α010 10000Α,  
 ~00· 0+· 0 Α+0000, °, 1fl%Α10· 01ΑΑ  
 0 00Α00001+1, 10.  
 000 01+ "T": %fl 0Α1Α0000 (0· Α10  
 0 0· 100+Α00fl)  
 000 01+ "W": %fl 0 010, 00, 1+ 0· Α100  
 (0· Α10 0%+1flΑ00fl)

010 000, 1+ΑΑ%+, Ε%Α01+1Α ° (1+ΑΑ%  
 0 +Α100 010 000. .)  
 001000. 00, Α 100Α ~+°, 0 0, 0%10, 0  
 0 +10001+00 +%fl ·00 0,, 0 1+ΑΑ%+  
 , Ε%Α01+1Α °. 00, Α 100Α Α, 001Α, 1+ %fl  
 1Α%1Α110, 0 1+ΑΑ%+, Ε%Α01+1Α °.

α0, %+ 0° 0101+Α0Α 0· Α10, 00001, Α0fl  
 1+ΑΑ%, Α001Α 0Α1Α0000  
 0010 0° 1Α 100Α0Α 0010~00. ~Α1000  
 001000 0, 10, 0, Α1fl 1 +01Α, 0 1+ΑΑ%+,  
 Α001Α 0Α1Α0000, 00 0Α Α1Α~+00Α ~+°,  
 0 0, 0%10, 00 +10001+00 +, 000 010 "W" %0  
 0Α1 00, 001+ 1Α 0010~00Α ~Α1000  
 001000 0, 10.  
 0° 100Α0Α 0 00Α, Α000 0· Α100 0 Α%1Α0+,  
 1000 ° 0 01Α1, ~Α0 1Α Α 1+10%0%00fl 1+  
 +000fl100 0100 8001 00 00, Α 110000  
 0· Α100, +, 00100Α1000 0Α1Α0000, 010 1 01,  
 00100Α1000 ° 010, 00, 1+.

Basic operations  
010, 1· Α 00Α +· 00

## Camera recording

á†ôĚð. ò óóíó~ , , Ě%ÁÓí†íĀ °

### Notes on digital zoom

#### - CCD-TR502E/TR620E only

- More than 15x zoom is performed digitally, and the picture quality deteriorates as you go toward the " T " side. If you do not want to use the digital zoom, set D ZOOM to OFF in the menu system.
- The right side [a] of the power zoom indicator shows the digital zooming zone, and the left side [b] shows the optical zooming zone. If you set D ZOOM to OFF, the right [a] zone disappears.

è ĚíĀ~†íĚñ í ^Ěù ó,óíŮ ú †ìòòóí†úó Ů

- Ůóí, íó CCD-TR502E/TR620E
- í †ìòòóí†úó ·óíĀĀ, ~Āí 15x, òóĀ%†ì , ^Ěù ó,óí Ěòóóí†íĀĚĚ, Ě í†~ĀòŮ,ó ĚĀó. †ĚĀĚĚñ Ů1Ů%~†ĀŮòñ óó íĀ Ā ç†~Ā,ó % ,ĚĚĀĚĚñ , òŮó óíŮ í. òòíĚ ç' ĪĀ 1.0ŮĚŮĀ Ěòóóí,Āó,†Ů. ^Ěù ó,óĚ Ů †ìòòóí†úó , ŮòŮ†íó,ĚŮĀ D ZOOM , òóíóĚĀĚĚĀ OFF , òĚòŮĀĪĀ ĪĀĪ. .
- è †, †ñ ŮŮó óí† [a]ĚĪ%Ěí†úó † ô Ě,ó%ìó,ó Ů †ìòòóí†úó † óóí†Ā', †ĀŮ ĀóíŮ ^Ěù ó,óĚ Ů †ìòòóí†^ĚĚ † ĪĀ, †ñ ŮŮó óí† [b] óóí†Ā', †ĀŮ ĀóíŮ óóŮĚ~ĀóíóĚ Ů †ìòòóí†^ĚĚ. òòíĚ ç' ŮòŮ†íó,ĚŮĀ ŮŮíí^Ě. D ZOOM Ī† OFF, Ůó Āóí† [a] Ěò~ĀĀĪĀŮ.



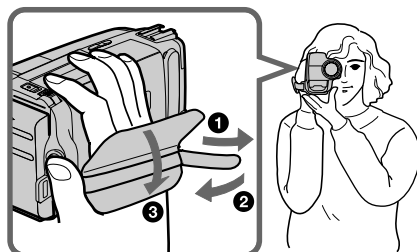
## Hints for better shooting

ëó, ĀŮ° %îñ ĪŮ~-ĀĚ ò·ĀĪĪĚ

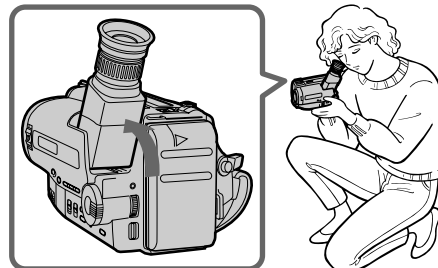
For hand-held shots, you'll get better results by holding the camcorder according to the following suggestions:

Ńñí í†% ó, ô Ě Ů%Ā ĚĚ, †ĪĚĚ, Ě%ÁÓí†íĀ ° , Ůí†1, ç' óóíŮ~ĚŮĀ ĪŮ~ĚĀ ĀĀŮĪ, Ů†Ů', ĀóíĚ ·Ů%ĀŮĀ %Ā Ě†Ů, Ě%ÁÓí†íĀ Ů , òóóŮ, ĀŮòŮ, ĚĚ òó óíĀ%Ů. ~ĚĪĚ Ůí†Ā†íĚñĪĚ:

[a]



[b]





## Hints for better shooting

εὐ, ἀϋ° %ίη ιϋ~ -ἀε ὀ· ἀίίε

- Hold the camcorder firmly and secure it with the grip strap so that you can easily manipulate the controls with your thumb**[a]**.
- Place your right elbow against your side.
- Place your left hand under the camcorder to support it.
- Place your eye firmly against the viewfinder eyecup.
- Use the viewfinder frame as a guide to determine the horizontal plane.
- You can record in a low position to get an interesting recording angle. Lift the viewfinder up for recording from a low position**[b]**.

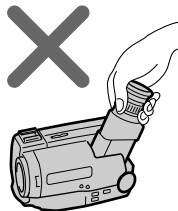
### Place the camcorder on a flat surface or use a tripod

Try placing the camcorder on a table top or any other flat surface of suitable height. If you have a tripod for a still camera, you can also use it with the camcorder. When attaching a non-Sony tripod, make sure that the length of the tripod screw is less than 6.5 mm (9/32 inch). Otherwise, you cannot attach the tripod securely and the screw may damage the camcorder.

### Cautions on the viewfinder

- Do not pick up the camcorder by the viewfinder **[c]**.
- Do not place the camcorder so as to point the viewfinder toward the sun. The inside of the viewfinder may be damaged. Be careful when placing the camcorder under sunlight or by a window **[d]**.

**[c]**



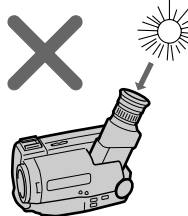
- Ἄ ἔεῦᾶ, ἔᾶόί+ίᾶ ὕ ί ᾶόίό ἔ ᾶί ᾶόεῦᾶ ᾶ ὀ ὀόίό... ᾶίᾶίίό, ὀ ᾶ+1, +ὔ+ ὔ+ί, ~ὔό· ° ḡ· ίό, ίε ίᾶ, ίό ί+ίεόὔίε ὀ, +ὔ. ᾶ, ὕίηιὔό +ίε ὀ ὀόίό... ὀί, ~ό, ὀ ὀ+ί, ^+ **[a]**.
- ἔ+ὀόόίόεεῦᾶ ḡ+ ὀ +, 'ε ίόίόὔ. ὀ· ὀίὔ ὀὔ ὀᾶ-η.
- ἔ+ὀόόίόεεῦᾶ ḡ+ ἱᾶ, ὕ. ὕίὔ ὀό% , ἔᾶόί+ίᾶ ὀ ε %ίη ᾶ ὀό%ᾶ ἔίε.
- ḡ+ἔᾶίό ὀ εοίόίεῦᾶ ḡ+ ~, ἱ+ᾶ ί ὀίὔίη ὕ , ἔᾶόεοί+ὔᾶίη.
- ᾶὀὀί, ᾶὔεῦᾶ, ἔᾶε ἱὔ. +ίἱὔ, ἱ+~ᾶὀὔ, ᾶ ὕίό, ὀ%ὀὔ, + %ίη ὀ ᾶᾶίᾶίεη ἱ, ὀ ἔᾶὀὔ+ί, ἱ, ὀ ὀί+ί.
- ḡ· ίόεᾶῦᾶ ᾶ+ὀεὀ°, +ὔ. ἔᾶ ἱεᾶίό, ὀ ὀόίόεᾶίεη %ίη ὀὀἱὔ~ᾶίεη εἱῦᾶ ᾶόίό, ὀ ὕ, ἱ+ ᾶ+ὀεὀε. εὀ%ἱεἱεῦᾶ, ἔᾶὀεοί+ὔᾶί, , , ᾶ 1 %ίη ᾶ+ὀεὀε ἔᾶ ἱεᾶίό, ὀ ὀόίόεᾶίεη **[b]**.

ε+ὀόόί+, +εῦᾶ, ἔᾶᾶόί+ίᾶ ὕ ἱ+ ὀίὀόίόε ὀό, ᾶ 1 ἱὀὀὔε ἔίε εὀὀόί, ᾶὔεῦᾶ ὕ ᾶἱὀ, ὕ εὔ+ +εῦᾶὀ. +ὀὀόίό, +ὔ, ἔᾶᾶόί+ίᾶ ὕ ἱ+ ὀὔὀίᾶ ἔίε ἱ. ὀε% ὕ, ὀε ὀίὀόίόε ὀό, ᾶ 1 ἱὀὀὔε ἱ+ ὀό%1ὀ%η~ᾶε, 'ὀὀῦᾶ. ὀὀίε ḡ· ἔἱᾶᾶῦᾶ ὕ ᾶἱὀ, ὕ %ίη ὕὀὀὔ+ὀὀ+ +ὔ+ , ὕ ὀ ḡ· ὕ+ίεᾶ ἱόεᾶῦᾶ εὀὀόί, ᾶὀ, +ὔ. ᾶ ὀ, ἔᾶᾶόί+ίᾶ ὀε. ε ἔ ὀ ἔί ᾶὀᾶίεε ὕ ᾶἱὀ, ἔ ἱᾶ ὕε ἱ· Sony ὕ·ᾶᾶῦᾶὀ, ~ὔό%ἱεἱ+ , εἱὔ+ ὕ ᾶἱὀ, ἔ ἱᾶἱᾶ ᾶ, 5 ἱἱ. ḡ ὀ ὀὔε, ἱὀἱ ὀἱὔ~+ᾶ ḡ· ἱᾶ ὀἱόεᾶῦᾶ ἱ+ἔᾶεἱὀ ὀ εὀὀᾶᾶεἱεῦ, ὕ ᾶἱὀ, ὕ ε, εἱὔ ἱόεᾶῦ ὀὀ, ᾶᾶῦ, ἔᾶᾶόί+ίᾶ ὕ.

ε ᾶᾶὀὀῦᾶ ᾶεᾶίεη ἱ , ἔᾶὀεοί+ὔᾶί.

- ḡᾶ ὀό%ἱεἱ+εῦᾶ, ἔᾶᾶόί+ίᾶ ὕ ᾶ+ , ἔᾶὀεοί+ὔᾶί, **[c]**.
- ḡᾶ +ὀὀόί+, +εῦᾶ, ἔᾶᾶόί+ίᾶ ὕ ὕ+ί, ~ὔό· , ἔᾶὀεοί+ὔᾶί. · ἱε ἱ+ὀ +, ἱᾶἱ· ὀ ηἱό ἱ+ ὀὀίᾶ·ᾶ. ḡἱὔ ᾶἱἱᾶ ~+ὀὔε, ἔᾶὀεοί+ὔᾶίη ἱό, ὕὔ· ὕ, ὀό, ᾶεᾶἱ·. ᾶὔ%· ὕᾶ ὀὀὔ ὀεἱ· ὀ ε +ὀὀόίόεᾶίεᾶ , ἔᾶᾶόί+ίᾶ · ὀό% ὀὀίᾶ·ᾶἱ ἔίε , ὀᾶἱᾶ ὀίἱ+ **[d]**.

**[d]**



# Checking the recorded picture

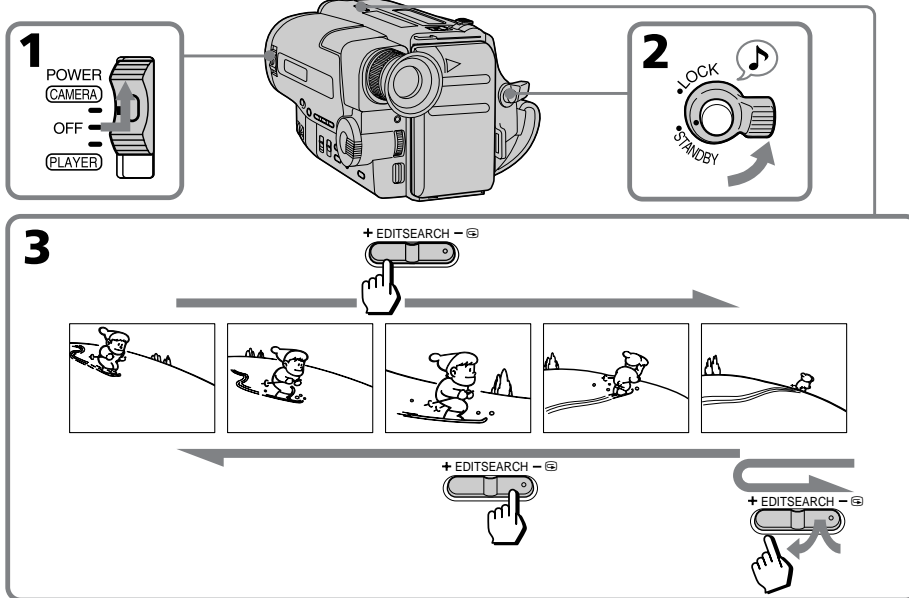
ε̂ ο̂, Α̂ Ι̂ † Α̂ † Ο̂ Ε̂ Ο̂ † Ι̂ Ι̂ Ο̂, „Ο̂  
Ε̂ Α̂ Ο̂. † Ε̂ Α̂ Ι̂ Ε̂ fl

Using EDITSEARCH, you can review the last recorded scene or check the recorded picture in the viewfinder.

- (1) While pressing the small green button on the POWER switch, set it to CAMERA.
- (2) Turn STANDBY up.
- (3) Press the - (⊖) side of EDITSEARCH momentarily; the last few seconds of the recorded portion plays back (Rec Review). Hold down the - side of EDITSEARCH until the camcorder goes back to the scene you want. The last recorded portion is played back. To go forward, hold down the + side (Edit Search).

α̂ ο̂ ο̂ Ι̂, Α̂ fl EDITSEARCH, ς̂ † Ι̂ Ο̂ Ε̂ Α̂  
Ο̂ Α̂ Α̂ Ο̂ Ι̂ Ο̂ Α̂ Σ̂, Ο̂ Ο̂ Ι̂ Α̂ Σ̂ Ι̂. Α̂ † Ο̂ Ε̂ Ο̂ † Ι̂ Ι̂ Ο̂, Ο̂ Α̂ Ι̂ Ο̂  
Ε̂ Ι̂ Ε̂ Ο̂ ο̂, Α̂ Ε̂ Σ̂. Α̂ † Ο̂ Ε̂ Ο̂ † Ι̂ Ι̂ Ο̂ Α̂ Ε̂ Α̂ Ο̂. † Ε̂ Α̂ Ι̂ Ε̂ Α̂,  
Ε̂ Σ̂ Ο̂ Ε̂ Ο̂ Ι̂ † Ο̂ Α̂ Ι̂ Α̂.

- (1) ς̂ † Ε̂ Ι̂ Ε̂ Ι̂ fl Ι̂ † Ι̂ Α̂ Ι̂, Ι̂ Ο̂. Α̂ Α̂ Ι̂ Α̂ Ι̂ Ο̂. Ι̂ Ι̂ Ο̂ Ο̂ Ι̂ Ι̂ †  
, † Ι̂ Ι̂. ~ † Ο̂ Α̂ Ι̂ Α̂ POWER, Ο̂ Ο̂ Σ̂ † Ι̂ Ο̂, Ε̂ Σ̂ Α̂ Α̂, Ο̂,  
Ο̂ Ο̂ Ι̂ Ο̂ Ε̂ Α̂ Ι̂ Ε̂ Α̂ CAMERA.
- (2) ε̂ ο̂, Α̂ Ι̂ Ε̂ Α̂ Ι̂ Ε̂ Α̂ STANDBY, „ Α̂ Ι̂.
- (3) ς̂ Α̂ Ι̂ † Σ̂ Ο̂ Ι̂, Ο̂ Ι̂ † Ε̂ Ι̂ Ε̂ Α̂ Ι̂ Ε̂ Α̂ Ο̂ Ο̂ Ο̂ Ι̂ Ο̂ - (⊖) Ι̂ Ι̂ Ο̂ Ο̂ Ι̂ Ε̂  
EDITSEARCH; Ο̂ Ο̂ Ο̂ Ι̂ Α̂ Σ̂ Ι̂ Ε̂ Α̂ Ι̂ Α̂ Ο̂ Ι̂ Ο̂ Ι̂, Ι̂ Ο̂  
Ο̂ Α̂ Ι̂ Ο̂ Ι̂ Σ̂ Α̂ † Ο̂ Ε̂ Ο̂ † Ι̂ Ι̂ Ο̂ Ε̂ ~ † Ο̂ Ο̂ Ε̂. Ο̂ Σ̂ Ο̂ Ο̂  
, Ο̂ Ο̂ Ο̂ Ε̂ Α̂, Α̂ Σ̂ Α̂ Ι̂ \* (Ο̂ Α̂ Α̂ Ο̂ Ι̂ Ο̂ Α̂ † Ο̂ Ε̂ Ο̂ Ε̂).  
Ν̂ Α̂ Ε̂ Ε̂ Α̂ Ι̂ Ο̂ Ο̂ Ο̂ Ο̂ Ι̂ Ο̂ - Ι̂ Ι̂ Ο̂ Ο̂ Ι̂ Ε̂ EDITSEARCH  
Σ̂ Ο̂ Ο̂ Α̂ Ι̂ Ο̂ Ο̂, Ο̂ Ο̂ Ι̂ †, Ε̂ Σ̂ Α̂ Ο̂ Ι̂ † Ι̂ Α̂ † Ι̂ Α̂, Α̂ Ι̂ Α̂ Ο̂ Ι̂  
Ι̂ Ε̂ Α̂ Ι̂ † Α̂ Ι̂ Ο̂ Ε̂ Ο̂ Α̂ Ι̂ Α̂. ε̂ ο̂ ο̂ Ι̂ Α̂ Σ̂ Ι̂ fl Α̂ † Ο̂ Ε̂ Ο̂ † Ι̂ Ι̂ fl  
~ † Ο̂ Ο̂. Ο̂ Σ̂ Α̂ Ο̂, Ο̂ Ο̂ Ο̂ Ε̂ Α̂, Α̂ Σ̂ Α̂ Ι̂ †. Ν̂ Ι̂ fl  
Ο̂ Ο̂ Σ̂, Ε̂ Ε̂ Α̂ Ι̂ Ε̂ fl, Ο̂ Α̂ Σ̂ Α̂ Ε̂ Ε̂ Α̂ Ι̂ Ο̂ Ο̂ Ο̂ Ο̂ Ι̂ Ο̂ †  
( Ι̂ Ο̂ Ι̂ † Ε̂ Ι̂ \* Ε̂ Ο̂ Ο̂ Ε̂ Ο̂ Ι̂ ).



**To stop playback**  
Release EDITSEARCH.

**To begin re-recording**  
Press START/STOP. Re-recording begins from the last recorded point or the point you released EDITSEARCH. Provided you do not eject the tape, the transition between the last scene you recorded and the next scene you record will be smooth.

Ν̂ Ι̂ fl Ι̂ † Ι̂ Ι̂ Ο̂ † Ι̂ Ο̂, †, Ο̂ Ο̂ Ο̂ Ε̂ Α̂, Α̂ Σ̂ Α̂ Ι̂ Ε̂ fl  
ς̂ † Ε̂ Ι̂ Ε̂ Α̂ EDITSEARCH.

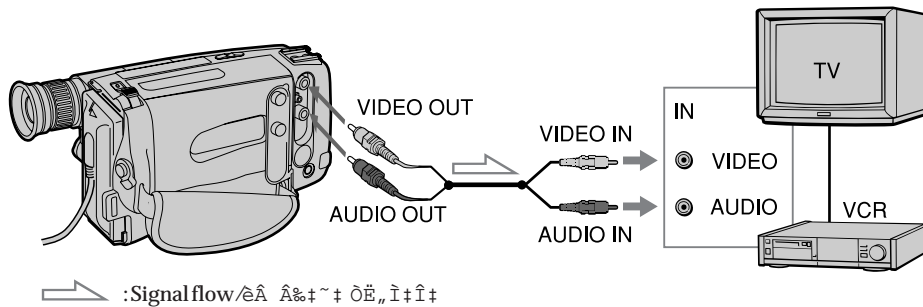
Ν̂ Ι̂ fl Ι̂ † ~ † Ι̂ † Ο̂ Α̂ Α̂ † Ο̂ Ε̂ Ο̂ Ε̂  
ς̂ † Ε̂ Ι̂ Ε̂ Α̂ Ι̂ Ε̂ Α̂ START/STOP. ε̂ Α̂ Α̂ † Ο̂ Ε̂ Ο̂.  
Ι̂ † ~ Ε̂ Ι̂ † Α̂ Ο̂ Ι̂ Ο̂ Ο̂ Ο̂ Ι̂ Α̂ Σ̂ Ι̂ Ε̂ Α̂ † Ο̂ Ε̂ Ο̂ † Ι̂ Ι̂ Ο̂ Ε̂ Ο̂ Ο̂ Ι̂ Ε̂  
Ε̂ Ι̂ Ε̂ Ο̂ Ο̂ Ο̂ Ι̂ Ε̂, „ Σ̂ Α̂ ς̂ Ο̂ Σ̂ Ο̂ Ο̂ Ο̂ Ο̂ Ε̂ Ι̂ Ε̂  
EDITSEARCH. ε̂ Α̂ Σ̂ Ο̂ Ο̂ Ι̂ Ο̂ Α̂ Ι̂ Ο̂, ~ Ο̂ Ο̂. ς̂ † Ι̂ Α̂  
, ~ Ο̂ Ο̂ Ι̂ Ι̂ Ο̂ Ι̂ Ε̂ Ι̂ † Ο̂ Ο̂ Α̂ Ο̂ Ο̂, Ε̂ Ο̂ Α̂ Α̂ Ο̂ Σ̂ Ι̂ Α̂ Ε̂ Σ̂ Ο̂  
Ο̂ Ο̂ Ο̂ Ι̂ Α̂ Σ̂ Ι̂ Ε̂ Α̂ Ε̂ Ο̂ Α̂ Ι̂ Ο̂ Ε̂, Ι̂ Ο̂ Ο̂ Ο̂ Ο̂. ς̂ † Α̂ † Ο̂ Ε̂ Ο̂ † Ι̂ Ε̂, Ε̂  
Ο̂ Ι̂ Α̂ Σ̂ Ο̂. ~ Α̂ Ε̂ Ο̂ Α̂ Ι̂ Ο̂ Ε̂, Ι̂ Ο̂ Ο̂ Ο̂ Ο̂. ς̂ †  
Α̂ † Ο̂ Ε̂ Ο̂, † Α̂ Ο̂ Α̂, Ο̂ Σ̂ Α̂ Ο̂ Ι̂ †, Ι̂ † Ι̂.

## Connections for playback

Connect the camcorder to your VCR or TV to watch the playback picture on the TV screen. When monitoring the playback picture by connecting the camcorder to your TV, we recommend you to use mains for the power source.

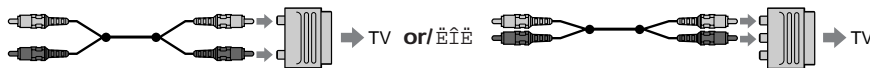
### Connecting directly to a VCR/TV with Video/Audio input jack

Open the jack cover. With using the supplied A/V connecting cable, connect the camcorder to the LINE IN inputs on the TV or VCR connected to the TV. Set the TV/VCR selector on the TV to VCR. When connecting to the VCR, set the input selector on the VCR to LINE.



### If your TV/VCR has a 21-pin connector (EUROCONNECTOR)

Use the supplied 21-pin adaptor.



### To connect to a VCR or TV without Video/Audio input jacks

Use an RFU adaptor (not supplied).

## Connections for playback

Connect the camcorder to your VCR or TV to watch the playback picture on the TV screen. When monitoring the playback picture by connecting the camcorder to your TV, we recommend you to use mains for the power source.

### Connecting directly to a VCR/TV with Video/Audio input jack

Open the jack cover. With using the supplied A/V connecting cable, connect the camcorder to the LINE IN inputs on the TV or VCR connected to the TV. Set the TV/VCR selector on the TV to VCR. When connecting to the VCR, set the input selector on the VCR to LINE.

If your TV/VCR has a 21-pin connector (EUROCONNECTOR)  
 Use the supplied 21-pin adaptor.

To connect to a VCR or TV without Video/Audio input jacks  
 Use an RFU adaptor (not supplied).

## Playing back a tape

## ÇÓÒÔ ÓËÁ, Â%ÂÏËÄ ÎÂÏÚ°

You can monitor the playback picture in the viewfinder. You can also monitor a picture on a TV screen, after connecting the camcorder to a TV or VCR.

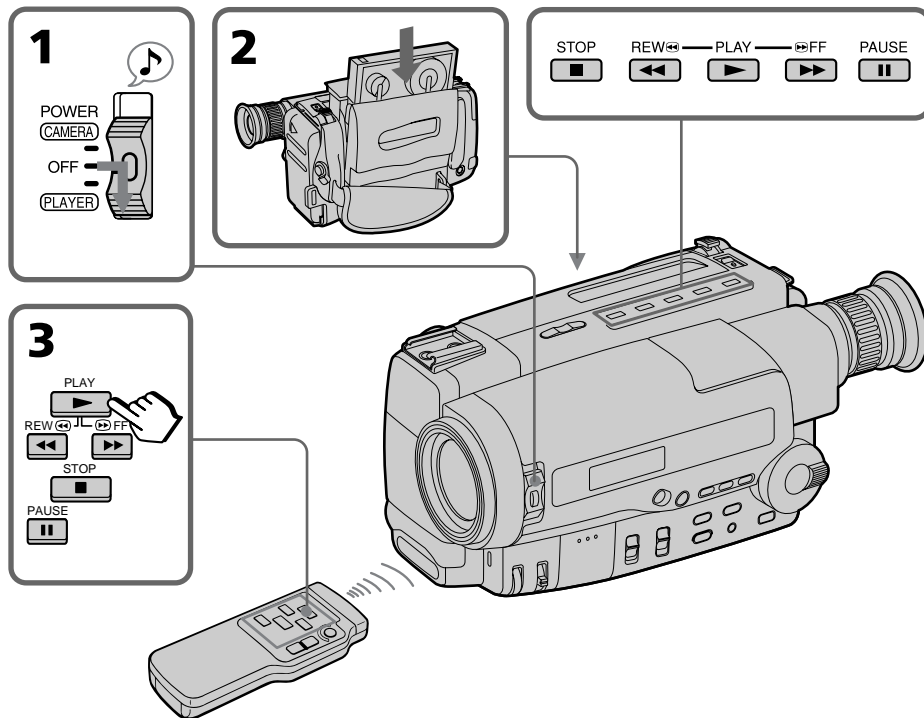
- (1) While pressing the small green button on the POWER switch, set it to PLAYER.
- (2) Insert the recorded tape with the window facing out.
- (3) Press ► to start playback.

Ç° ÎÓËÄÚÄ, °ÓÓÏËÛ. ÍÓÏÚ ÓÏ.Ï°È  
Ô ÓÓÏÚÓ, °ÓÓ ÓËÁ, Ó%ËÏÓ, ÓËÁÓ· ±ËÂÏËÎ, ,  
Ë%ÓËÓÏ+ÚÄÏÄ. Ç° Ú+ÍËÄ ÎÓËÄÚÄ Ó%ÄÏ+Ú.  
Ô ÓÓÏÚÓ Ì± ~Í ±ÏÄ ÚÄÏÄ, ËÁÓ ±ÓÓÏÄ  
ÓÓ%ÏÏ. ~ÄÏËÎ, Ë%ÄÓÏ+ÏÄ ° Í ÚÄÏÄ, ËÁÓ Ú  
ËÏË äçá.

(1) Ç±ËËÏ+Î Ï+ÏÄÏ, ÏÚ. ÄÄÏÄÏÚ. ÏÏÓÓÏÚ Ì±  
, °ÏÏ. ~±ÚÄÏÄ POWER, ÔÄ Ä%, ÈÏ. ÚÄ Ä,, Ó,  
ÓÓÏÓËÄÏËÄ PLAYER.

(2) ÇÓÚ±, ÚÄ Ä+ÓËÓ+ÏÏÚ. Ï±ÓÓÄÚÓ ÓÏÓ-ÍÓÏ,  
Ó· ±~ÄÏÏ°Ï Ì± ÚËÚ.

(3) Ç±ËÏËÚÄ ► %ÏÏ Ï±~Ï±  
, °ÓÓ ÓËÁ, Â%ÄÏËÎ.



To stop playback, press ■.  
To rewind the tape, press ◀◀.  
To fast-forward the tape, press ▶▶.

ÑÏÎ ÓÓÚ+ÏÓ, ±, °ÓÓ ÓËÁ, Â%ÄÏËÎ Ì±ËÏËÚÄ  
■  
ÑÏÎ ÚÓÏÓ ÄÏÏÓË ÓÄ ÄÏÓÓÏË ÎÄÏÚ° Ï±Ä±%  
Ï±ËÏËÚÄ ◀◀.  
ÑÏÎ ÚÓÏÓ ÄÏÏÓË ÓÄ ÄÏÓÓÏË ÎÄÏÚ° , ÓÄ Ä%  
Ï±ËÏËÚÄ ▶▶.



**Advanced operations**

**Using alternative power sources**

ìòó, Æ - Æìòóó, ó, †ìì· Æ óóÀ †·ÈÈ

àòòóí, Áó, †ìÈÄ †í, ÚÄ ì†-  
ÚÈ, ì° ì Èòóó~ìÈíó, ÒÈú†ìÈñ

You can choose any of the following power sources for your camcorder: battery pack, the mains, alkaline battery and 12/24 V car battery. Choose the appropriate power source depending on where you want to use your camcorder.

| Place      | Power source                        | Accessory to be used      |
|------------|-------------------------------------|---------------------------|
| Indoors    | Mains                               | Supplied AC power adaptor |
| Outdoor    | Battery pack                        | Battery pack (Ni-Cd type) |
|            | LR6 (size AA) Sony alkaline battery | Battery case              |
| In the car | 12 V or 24 V car battery            | Sony DC pack DCP-77       |

**Note on power sources**

Disconnecting the power source or removing the battery pack during recording or playback may damage the inserted tape. If this happens, restore the power supply again immediately.



This mark indicates that this product is a genuine accessory for Sony video product. When purchasing Sony video products, Sony recommends that you purchase accessories with this "GENUINE VIDEO ACCESSORIES" mark.

ç· íóÈÄÚÄ, ·È †ú, ì, ·óÈ ÈÄ òíÄ·ó, ~ÈÈì Èòóó~ìÈíó, ÒÈú†ìÈñ Æìñ ç†·ÆÈ, Æ·Áóí†íÄ ·: ·†ú† ÆÈì·È·íóí, ÒÄÚÄ, ÓÄ ÒÈú†ìÈÄ, ~Áíó~ì·Ä·†ú† ÆÈíÈÈ È †, Úóíó·Èí, ì·È †ííóíóíñóó 12/24 ç. ç··È †ÈÚÄ ì†·íÄÈ†·ÈÈ Èòóó~ìÈí ÒÈú†ìÈñ, Á†, ÈòÈíóóÈ óóóó, ó, „Æ·ç· ìóóÈÚÄ Èòóóí, Áó, †ú, ç†·ó, Æ·Áóí†íÄ ó.

ÀÄóóó àòóó~ìÈí àòóóí, ÁÚÄì·Ä ÒÈú†ìÈñ Ò Èì†·íÄÈíóóÈ

ç óóíÄ- ùíÁíÚ È·Ä- è Èí†, †Áí·È Òíñ Óíñ ÓÁÚ, ÒÈ †·óóÁ ÓÄ Áí. Úóí†

çíÄ Á†ú† ÆÈì·È Á†ú† ÆÈì·È·íóí ÓóíÄ- ·íóí (ÚÈò†Ni-Cd) Òíñ

óÁíó~ìñ Á†ú† ÆÈì† Ó·†ú† ÆÈí† Sony LR6 ( †ÁíÄ ÓíÄÄ)

ç†, Úó- Á, Úóíó·Èí, ì·È Áíóí óóóó. Úóí† Sony íó·ÈíÄ †ííóíóíñóó 12 DCP-77 ç ÈíÈ 24 ç

è ÈíÄ~†ìÈÄ í Èòóó~ìÈí†ì ÒÈú†ìÈñ éóóóÆÈìÄÈÄ Èòóó~ìÈíó, ÒÈú†ìÈñ ÈíÈ òíñÚÈÄ·†ú† ÆÈìó, ó·íóí†, ó, Áíñ Á†òÈòÈ ÈíÈ, óòò óÈÁ, Æ·ÁíÈñ íóÈÄÚ óó, Æ·ÈÚ, óó†, ìÄìò, ìÄìóó. ÒòíÈ Ú†íóÄ òíó·Èóóñ, óòòó†ìò, ÈÚÄ Èòóó~ìÈí ÒÈú†ìÈñ ìÄíÄ·íÄìò.



ç†óóóñ·ÈÈ Áì†í Úí†Á·, †ÁÚ, ~óó Æ·íì†ñ Ò Ó·Úí·Èñ ñ, ññÁóóñ Óó·íÈìóÈ Ò Èì†·íÄÈíóóó. Æ·Áóó Ó·Úí·ÈÈ Sony. ÒòíÈ ç· Óóíóó†ÁÚÄ, Æ·Áóó Ó·Úí·ÈÈ, Sony, óó ì· ÁíóíÄì·óÁì, ~óó· ç· Óóíóó†íÈ Ò Èì†·íÄÈíóóÈ òó Áì†íóí "GENUINE VIDEO ACCESSORIES."

## Using alternative power sources

àððóí, áó, ÷íËÄ ÷í, ÚÄ ì÷ÚË, ì·  
ËðÓó~ìËíó, ðËÚ÷ìËí

### Using the mains

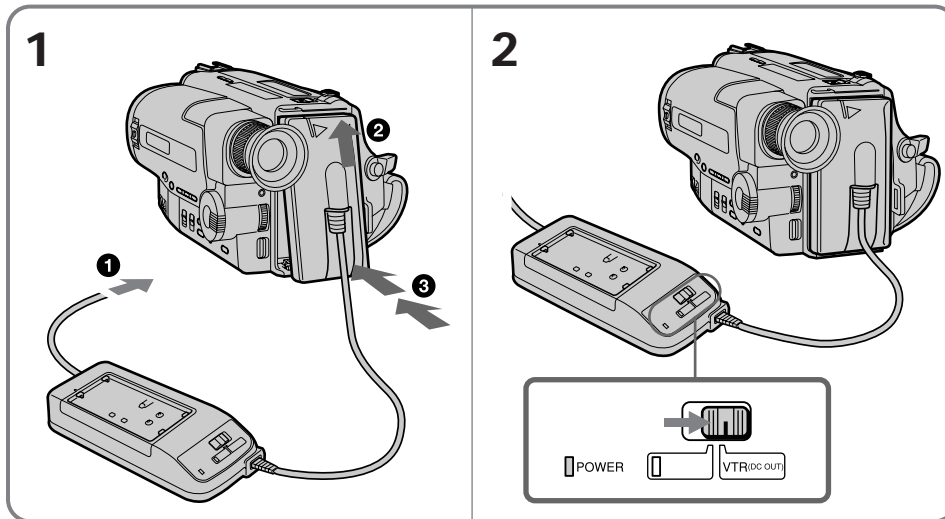
To use the supplied AC power adaptor:

- (1) Connect the mains lead to the mains. Insert the top of the connecting plate of the AC power adaptor into the top of the battery mounting surface. Push the connecting plate so that it attaches firmly. Make sure that you hear clicks twice.
- (2) Set the selector to VTR (DC OUT).

### àððóí, áó, ÷íËÄ ÷íËíÚ Ë~ÄóíóË ðÄÚË

Ñííí Ëððóí, áó, ÷íËí ð Ëí÷, ÷Äíó, ð ðÄÚÄ, ó, ð  
÷%÷ÓÚÄ ÷ ÓÄ Äí. Úóí÷:

- (1) àó%ðóÄ%ËíËÚÄ ð ó, ó% ÷íËíÚ ðËÚ÷ìËí í  
÷íËíÚ Ë~ÄóíóË ðÄÚË. ÇÓÚ÷, ÚÄ, Ä ìËË  
íóíÄ^ ðóÄ%ËíËÚÄí, ìóË ðí÷ÓÚËí· ðÄÚÄ, ó, ð  
÷%÷ÓÚÄ ÷ ÓÄ Äí. Úóí÷, , Ä ìí. ~÷ÓÚ,  
·÷÷ ÄËíóË ÚÓÚ÷íó, ó~íóË ðó, Ä ìíóóË.  
ç÷ËíËÚÄ ì÷ ÓóÄ%ËíËÚÄí, ìÚ, ðí÷ÓÚËíÚ,  
Ú÷í, ~Úó· ðí÷ ð ËðóÄ%ËíËí÷ð. ì÷ÄËíó.  
ì·Ä%ËÚÄÓ, , ~Úó ç· %÷, ÷Ë%· Úóí·~÷íË  
~Äí~óí.  
(2) ìðÚ÷íó, ËÚÄ ðÄíËíÚó , ðóíóËÄíËÄ VTR  
(DC OUT).



### WARNING

The mains lead must only be changed at qualified service shop.

### PRECAUTION

The set is not disconnected from the AC power source (mains) as long as it is connected to the mains, even if the set itself has been turned off.

àèðÑíìàèðÛÑòçàò  
èÄÚÄ, óË ð ó, ó% ðíÄ%ÓÄÚ Ä÷íÄííÚ, Úóí, íó,  
ì÷ÓÚÄ ðíóË í, ÷íËÚË^Ë ó, ÷ííó, ð  
ó·ðíÚËË, ÷íËí.

àèðÑééíòèðÛòçàò  
Ñ÷íí·Ë ÷ò÷÷ ÷÷ ìÄ ÓÓíí, ~÷ÄÚðí ÓÚ  
ËðÓó~ìËí÷ ðËÚ÷ìËí ðÄ Äí. Úóí÷, ðóí÷ ðí  
óó%ðóÄ%ËíÄí í ÷íËíÚ Ë~ÄóíóË ðÄÚË, %÷ËÄ  
ÄóíË ð÷í ÷ò÷÷ ÷÷ ÓÓíí, ~Äí.

Advanced operations

ìðó, Ä -Äíðó, ó, ÷í·Ä·Ä ÓÄÄ ÷·ËË

## Using alternative power sources

αὐτοῦ, ἴσως, ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης

### Notes on the POWER lamp

- The POWER lamp will remain lit for a while even if the unit is unplugged after use. This is normal.
- If the POWER lamp does not light, set the selector to VTR (DC OUT) and disconnect the mains lead. After about one minute, reconnect the mains lead.

### To remove the adaptor

The adaptor is removed in the same way as the battery pack.

## Using alkaline batteries

Use the supplied battery case and six LR6 (size AA) Sony alkaline batteries (not supplied).

- Remove the battery holder from the battery case.
- Insert six new alkaline batteries into the battery holder, following the marking on the holder to be sure the batteries are installed in the correct direction.
- Insert the battery holder with the alkaline batteries.
- Insert the battery case with the alkaline batteries to the battery mounting surface of the camcorder in the same way as the battery pack.

ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης

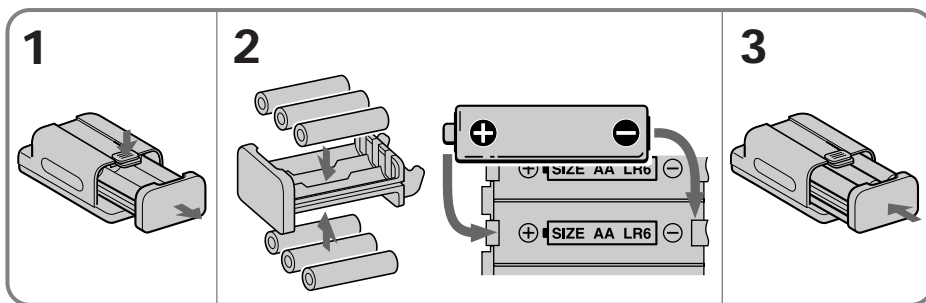
- ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης
- ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης
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ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης

ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης

αὐτοῦ, ἴσως, ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης

- ἢ ἀπὸ τῆς ἀποθήκης, ἢ ἀπὸ τῆς ἀποθήκης
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## Using alternative power sources

àððóí, áó, †ìËÄ †í, úÄ ì†úË, ì° 1  
Èðúó~ìËíó, òËú†ìËí

### Battery life

Using Sony alkaline batteries at 25 °C (77 °F)

| CCD-           | Typical recording time | Continuous recording time |
|----------------|------------------------|---------------------------|
| TR501E /TR502E | 80 min.                | 150 min.                  |
| TR620E         | 70 min.                | 135 min.                  |

### Notes

- The above battery lives are estimates. The battery life may be shorter depending on the storage condition of the battery before being purchased and temperature.
- You may not use the battery case in cold environment.

### To remove the battery case

The battery case is removed in the same way as the battery pack.

When you replace the batteries, be sure to remove the battery case from the camcorder to prevent malfunction.

## Using a car battery

Use Sony DCP-77 DC pack (not supplied). Connect the cord of the DC pack to the cigarette lighter socket of the car (12 V or 24 V). Connect the DC pack to the battery mounting surface of the camcorder.

### To remove the DC pack

The DC pack is removed in the same way as the battery pack.

### è óí òíúË · · †ú† ÁÁí

è Èððóí, áó, †ìËÄ†ìËí · · †ú† ÁÁí Sony  
ò È 25°è (77°F)

| CCD-              | ç ÁíííúËË-<br>~ìóË Á†òËòË | ç ÁíííÄò Á-<br>, ìóË Á†òËòË |
|-------------------|---------------------------|-----------------------------|
| TR501E/<br>TR502E | 80 min.                   | 150 min.                    |
| TR620E            | 70 min.                   | 135 min.                    |

### è ÈíÄ~†ìËí

- ç · · Áò È, Á&Áìì · Á ò óíË òíúË · ·  
· †ú† ÁÁí ó~ÁíÄì · ò È · íËËËúÁí, ìó. è óí  
òíúË · · †ú† ÁÁí ìóËÁú · · ú. ìó ó~Ä,  
Á†, ÈòËíóóúË óú úóíó, ÈÈ 1 †ìÄíËí · †ú† ÁÁí  
%ò óóíúóíË È óú úÁíóÄ †úú ·  
· ç · ìÄ %óíËì · Èððóí, áó, †ú. · †ú† ÁÈìú.  
í†íÄ ú, ìóíó%ì° 1 úóíó, Èí1.

### Ñííí òíííúËí · †ú† ÁÈìóË í†íÄ ·

Á†ú† ÁÈì†íí í†íÄ † òíËí†Áúóíí ú†íËí ÈÄ  
ó · †Áóí, í†íË · †ú† ÁÈì · È · íóí.  
è È Á†íÄíÄ · †ú† ÁÁí ìÄ Á† · ú%, úÄ, · ìúú, ÈÄ  
, È&Áóí†íÄ · · †ú† ÁÈìú, í†íÄ ú%íí  
ò Á&óú, † · ÁíËí ì† ú · ÁíËÈ, † · óúÄ.

àððóí, áó, †ìËÄ †, úóíó · Èí, ìó, ò  
†íííúíúííúó †

àððóí, ÁúËúÄ · íóí óóóú. úóí† DCP-77 Sony (ìÄ  
ò Èí†, †Áúóí). èó&óóÁ&ÈíËúÄ ìú · íóí†  
óóóú. úóí† í, ìÄ&úòË, † Áúíó, ò  
ò Èíú È, †úÁííí †, úóíó · Èíí (12 ç ÈíË 24 ç).  
èó&óóÁ&ÈíËúÄ · íóí óóóú. úóí† í  
úúú†ìó, ó~ìóË óó, Á ììóóúË · †ú† ÁÈ  
, È&Áóí†íÄ · ·.

Ñííí òíííúËí · íóí† óóóú. úóí†  
Áíóí óóóú. úóí† òíËí†Áúóíí ú†íËí ÈÄ  
óóóó · óí, í†íË · †ú† ÁÈì · È · íóí.

Advanced operations

ìóó, Á · Áíúó, ó, †ìí · Á óóÄ † · ÈÈ

# Changing the mode settings

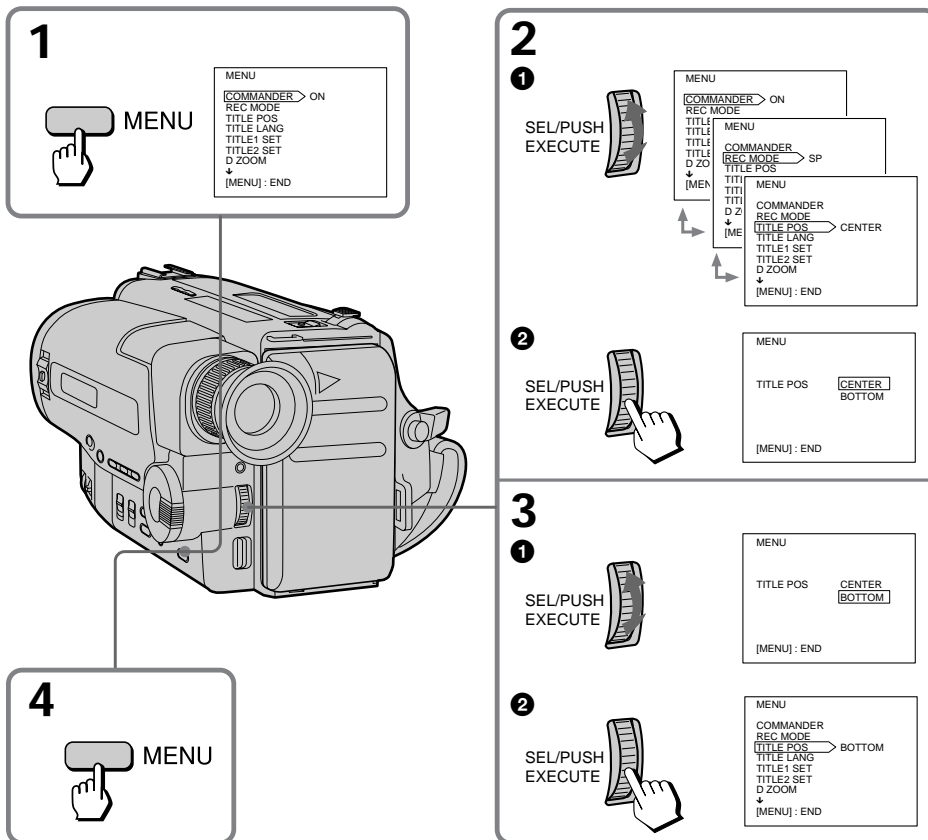
Αλλάζοντας τις ρυθμίσεις λειτουργίας

You can change the mode settings to further enjoy the features and functions of the camcorder.

- (1) Press MENU to display the menu.
- (2) Turn the control dial to select the desired item, and press the dial.
- (3) Turn the control dial to select the desired mode, and press the dial.
- (4) Press MENU to erase the menu display.

Μπορείτε να αλλάξετε τις ρυθμίσεις λειτουργίας για να απολαύσετε περισσότερο τα χαρακτηριστικά και τις λειτουργίες της βινταγιέρας.

- (1) Πατήστε το κουμπί MENU για να εμφανιστεί το μενού.
- (2) Περάστε τον τροχό ελέγχου για να επιλέξετε το επιθυμητό αντικείμενο, και πατήστε τον τροχό.
- (3) Περάστε τον τροχό ελέγχου για να επιλέξετε τον επιθυμητό τρόπο, και πατήστε τον τροχό.
- (4) Πατήστε το κουμπί MENU για να σβήσει το μενού.



## Changing the mode settings

ÀÁÂÃÄÅ ÆÇÈÉÊËÌÍÎÏÐ ÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäåæçèéêëìíîïðñ

### Selecting the mode setting of each item

#### Items for both CAMERA and PLAYER modes

##### COMMANDER <ON/OFF>

- Select ON when using the supplied Remote Commander for the camcorder.
- Select OFF when not using the Remote Commander.

##### BEEP\* <ON/OFF>

- Select ON so that beeps sound when you start/stop recording, etc.
- Select OFF when you do not want to hear the beep sound.

#### Items for CAMERA mode only

##### REC MODE\* <SP/LP>

- Select SP to record a tape in SP (standard play) mode.
- Select LP to record a tape in LP (long play) mode.

##### TITLE POS\* <CENTER/BOTTOM>

- Select CENTER to centre the title in the picture.
- Select BOTTOM to position the title at the bottom of the picture.

##### TITLE LANG\* <ENGLISH/FRANÇAIS/ESPAÑOL/PORTUGUÊS/DEUTSCH/NEDERLANDS/ITALIANO>

Select the language of the preset titles.

##### TITLE1 SET\*/TITLE2 SET\*

Store your own titles.

##### D ZOOM\* <ON/OFF> (CCD-TR502E/TR620E only)

- Select ON to activate digital zooming.
- Select OFF to not use the digital zoom. The camcorder goes back to 15x zoom.

Ç·.À ÊÛÄ ON Ò Ë ÈÒÓÍ.ÁÓ,†ÈÈ Ò È†,†ÁÏ,Ó Í,È&Aacute;Í†ÏÄ Á ÔÛ†,Ú† %ÈÛ†Ï^ÈÛÏÏ,Ó Û ð †,†Ä†È†.

ìòú†ìò,íè %í† Æèèïó, camera è player

COMMANDER <ON/OFF>

- Ç·.À ÊÛÄ ON Ò Ë ÈÒÓÍ.ÁÓ,†ÈÈ Ò È†,†ÁÏ,Ó Í,È&Aacute;Í†ÏÄ Á ÔÛ†,Ú† %ÈÛ†Ï^ÈÛÏÏ,Ó Û ð †,†Ä†È†.
- Ç·.À ÊÛÄ OFF, ÁÒÍÈ ÔÛ†,Ú† %ÈÛ†Ï^ÈÛÏÏ,Ó Û ð †,†Ä†È† ÏÄ ÈÒÓÍ.ÁÓÁÓ†.

BEEP\* <ON/OFF>

- Ç·.À ÊÛÄ ON, ~Ó·. ÁÛÏÏÄ Ì^À ÒÈ,,ì†ì^ Á,Û^†ÈÈ, ÍÓ,,%† Ç^ Ì^È†ÄÛÄ/ ÓÛ†ì†,†È,†ÄÛÄ†ÒÈÛ. È Û.%.
- Ç·.À ÊÛÄ OFF, ÁÒÍÈ Ç^ ÏÄ ÌÓÛÈÛÄ Ò†^†. ÁÛÏÏÄ Ì^È Á,ÛÍÓ,ÒÈ ÒÈ,,ì†ì.

ìòú†ìò,íè ÓÓ†,ÍÓ %í† Æèèï† camera

REC MODE\* <SP/LP>

- Ç·.À ÊÛÄ SP %í† Á†ÒÈÛÈ, ÆèèïÄ SP (Û†ì%† ÛÍÓ,Ó,ÓÓ ÒÈÁ,Æ&Aacute;È†).
- Ç·.À ÊÛÄ LP %í† Á†ÒÈÛÈ, ÆèèïÄ LP (Û%†È†ÏÏ,Ó,ÓÓ ÒÈÁ,Æ&Aacute;È†).

TITLE POS\* <CENTER/BOTTOM>

- Ç·.À ÊÛÄ CENTER %í† †ÒÓÍÓÈÄ†È† Ì†%ÒÈÛÈ, ^ÄÛ Ä ÈÁÓ. †ÈÄ†È†.
- Ç·.À ÊÛÄ BOTTOM %í† †ÒÓÍÓÈÄ†È† Ì†%ÒÈÛÈ, ÌÈÁÛ ÈÁÓ. †ÈÄ†È†.

##### TITLE LANG\* <ENGLISH/FRANÇAIS/ESPAÑOL/PORTUGUÊS/DEUTSCH/NEDERLANDS/ITALIANO>

Ç·.À ÊÛÄ ÏÄ^Í Ò Æ,,† ÊÛÄ†,ìò ÛÛ†ìò,†Ä†ì^ Ì†%ÒÈÛÈ.

TITLE1 SET\*/TITLE2 SET\*

á†ÓÓ†È††ÈÄ Ç†^È† ÓÓ·Û,Ä†ì^ Ì†%ÒÈÛÈ.

D ZOOM\* <ON/OFF> (ÓÓ†,ÍÓ CCD-TR502E/TR620E)

- Ç·.À ÊÛÄ ON %í† †ÍÛÈ,ÈÁ†^ÈÈ ^ÈÛ Ó,ÒÈ Û †ÏÛÓ†^ÈÈ.
- Ç·.À ÊÛÄ OFF %í†,^†. ~Ä†È† ^ÈÛ Ó,ÒÈ Û †ÏÛÓ†^ÈÈ. ÇÈ&Aacute;Í†ÏÄ †,ÓÄ, †ÛÈÛÓ† Í Û †ÏÛÓ†^ÈÈ 15†.

Advanced operations

ìòó,Ä -Ä†òó,ó,†ì^ Á ÓÄ†^ÈÈ

## Changing the mode settings

ÀÁÏÄÏÄÏÈÄ ÄÈËÏÏ 1 ÛÖÛÏÏÓ,ÓÍ

### REC LAMP\* <ON/OFF>

- Select OFF when you do not want the camera recording/battery lamp at the front of the unit to light up.
- Normally select ON.

### AUTO DATE\* <ON/OFF>

- Select ON to record the date for 10 seconds after recording has started.
- Select OFF to not record the date.

### CLOCK SET\*

Reset the date or time.

### DEMO MODE\* <ON/OFF>

- Select ON to make the demonstration appear.
- Select OFF to make the demonstration not appear.

#### Notes on DEMO MODE

- DEMO MODE is set to STBY at the factory and the demonstration starts about 10 minutes after you set the POWER switch to CAMERA without inserting a cassette. Note that you cannot select STBY of DEMO MODE in the menu system.
- You cannot select DEMO MODE when a cassette is inserted in the camcorder.
- If you insert a cassette during the demonstration, the demonstration stops. You can start recording as usual. DEMO MODE automatically returns to STBY.

#### To look at the demonstration at once

Eject the cassette, if inserted. Select ON of DEMO MODE. Erase the menu display. The demonstration will begin. When you turn off the camcorder once, DEMO MODE automatically returns to STBY.

- \* These settings are retained even when the battery is removed, as long as the lithium battery is in place.

### REC LAMP\* <ON/OFF>

- Ç· ·Ä ÈÚÄ OFF, ÄÏÈ Ç· ÌÄ 1ÓÚÈÚÄ, ~ÚÓ· ·Ä+„Ó ÷Ï÷Ò. Ì÷ÏÒÓ~Í÷ Ä÷ÒÈÒÈ Í÷ÏÄ ÒÈ/·÷Ú÷ ÄÈÏÓ„Ó·ÏÓÍ÷, ÷ÒÒÓÏÒÈÄÏÏ÷÷Ï Ì÷ÒÄ ÄÈÏÄÈÒÓÓ ÒÏÄ ÷ÒÓ÷ ÷Ú÷.
- é· ·~ÏÓ , ··È ÷ÈÚÄ ON.

### AUTO DATE\* <ON/OFF>

- Ç· ·Ä ÈÚÄ ON %ÏÏ Ä÷ÒÈÒÈ %÷Ú· , ÚÄ~ÄÏÈÄ 10 ÒÄÏÏÈÈÒÒÒÏÄ ÚÓ„Ó, Í÷Í· ·Ï÷ Ì÷~÷Ú÷ Ä÷ÒÈÒÈ.
- Ç· ·Ä ÈÚÄ OFF, ~ÚÓ· · ÌÄ Ä÷ÒÈÒÈ·, ÷Ú, %÷ÚÚ.

### CLOCK SET\*

ÑÏÚÛ ÈÏÈ , ÄÏÏ.

### DEMO MODE\* <ON/OFF>

- Ç· ·Ä ÈÚÄ ON, ~ÚÓ· · ÒÓÏ, ÈÏ÷Ò, %ÄÏÓÏÒÛ ÷^ÈÏ.
- Ç· ·Ä ÈÚÄ OFF, ~ÚÓ· · %ÄÏÓÏÒÛ ÷^ÈÏ ÌÄ ÒÓÏ, ÏÏÏ÷Ò, .

è ÈÏÄ~÷ÏÈÏ ÒÛÏÒÒÈÚÄÏ, ÏÒ ÄÈÈÏ÷

#### DEMO MODE

- DEMO MODE ÛÖÛÏÏÓ, ÏÄÏ, ÒÓÏÒÈÄÏÈÄ STBY Ì÷ Ä÷, ÇÈÄ-ÈÄ„ÓÓ, ÈÚÄÏÄ, È %ÄÏÓÏÒÛ ÷^ÈÏ Ì÷~ÏÄÛÒÏÏ ÒÈÏÄ ÏÒ~Ä ÄÄ 10 ÏÈÏÏÛ ÒÒÒÏÄ ÚÓ„Ó, Í÷Í Ç· ÛÖÛÏÏÓ, ÈÚÄ , ·ÏÏ. ~÷ÚÄÏ, POWER , ÒÓÏÒÈÄÏÈÄ CAMERA ·ÄÄ ÛÖÛÏÏÓ, ÏÈ Ï÷ÒÒÄÛ·. é· ÷ÈÈÚÄ, ÏÈÏ÷ÏÈÄ, ~ÚÓ Ç· ÌÄ ÏÒÈÄÚÄ , ·· ÷Ú, STBY ÄÈÈÏ÷ DEMO MODE , ÒÈÒÓÄÏÄ ÏÄÏ. .
- Ç· ÌÄ ÒÏÒÈÄÚÄ , ·· ÷Ú, DEMO MODE, ÄÏÈ , ÈÈÄÓÏ÷ÏÄ Û , ÒÛ÷, ÏÄÏ÷ Ï÷ÒÒÄÛ÷.
- ÒÒÏÈ Ç· , ÒÛ÷, ÈÚÄ Ï÷ÒÒÄÛÛ , Ò , ÄÏÏ %ÄÏÓÏÒÛ ÷^ÈÈ, ÚÓ %ÄÏÓÏÒÛ ÷^ÈÏ ·ÈÄÛ ÒÒÛ÷ÏÒ, ÏÄÏ÷. Ç· ÏÒÈÄÚÄ ÒÒÛ÷ÏÒ, ÈÚ, Ä÷ÒÈÒ, Ï÷Í Ò· ·~ÏÓ. DEMO MODE ÷, ÚÓÏ÷ÛÈ~ÄÏÈÈ , Ä ÏÄÛÒÏ , ÒÓÏÒÈÄÏÈÄ STBY.

ÑÏÏ ÚÓ„Ó, ~ÚÓ· · Ò ÷ÄÛ , Ä„ ÏÏÏÛÛ. Ì÷

%ÄÏÓÏÒÛ ÷^ÈÈ.

ÄÄ, ÏÄÏÈÚÄ Ï÷ÒÒÄÛÛ, ÄÏÈÈ ÒÏ÷, ÒÛ÷, ÏÄÏ÷.

Ç· ·Ä ÈÚÄ ON , DEMO MODE. éÓÚ ÈÚÄ

ÈÏÈÈÏ÷^ÈÈ. ÏÄÏ. . Ç÷~ÏÄÛÒÏ

%ÄÏÓÏÒÛ ÷^ÈÏ.

ÒÒÏÈ Ç· , ·ÏÏ. ~÷ÄÚÄ Ï÷ÏÄ Û , ÄÈÈÏ

DEMO MODE ÷, ÚÓÏ÷ÛÈ~ÄÏÈÈ

, ÒÄ, ÷~÷ÄÛÒÏ , ÒÓÏÒÈÄÏÈÄ STBY.

- \* Ñ÷ÏÏ·Ä ÛÖÛÏÏÓ, ÏÈ ÒÒÏ ÷ÏÏ. ÛÒÏ, %÷ÈÄ ÏÓ„Ó, %÷ ÒÏÈÏ÷ÄÛÒÏ ·÷Ú÷ ÄÈÏ·È·ÏÓÍ %Ó ÚÄÏ ÒÒ , ÒÓÏ÷ ÛÖÛÏÏÓ, ÏÄÏ÷ ÏÈÈÈÄ, ÏÏ ·÷Ú÷ ÄÈÏ÷.

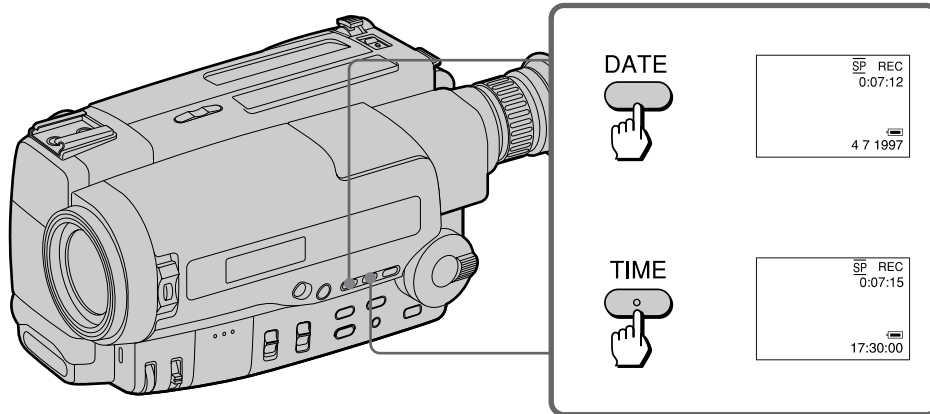
## Recording with the date or time

á†ÔËÒ, Ò ‰†ÚÓÈ ËËÈ  
, ÂÏÂÏÂÏ

Before you start recording or during recording, press DATE or TIME. You can record the date or time displayed in the viewfinder with the picture. You cannot record the date and time at the same time. Except for the date or time indicator, no indicator is recorded.

The clock is set at the factory to London time for United Kingdom and to Paris time for the other European models.

èÀ Â‰ ÚÂÏ, Ì†Í Ç† Ì†~ÌÂÚÂ Á†ÔËÒ, ËËÈ, Ó  
, ÂÏÂ Ì†ÔËÒÈ Ì†ÈÏÈÚÂ DATE ÈËÈ TIME. Ç†  
ÏÓÈÂÚÂ Á†ÔËÒ†Ú, ‰†ÚÓ ÈËÈ, ÂÏÂ,  
ÓÚÓ. †ÈÂÏÏÓÂ Ì† ~Í †ÌÂ ÚáÑ ÈËÈ,  
, È‰ÓÈÏ†ÚÂÏÂ, ÌÂÓÚÂ Ò ÈÁÓ. †ÈÂÏÈÂÏ. Ç†  
ÌÂ ÏÓÈÂÚÂ Á†ÔËÒ†Ú, †Ú. ‰†ÚÓ È, ÂÏÂ  
Ó‰ÏÓ, ÂÏÂÏÏÓ. á ÓÏÂ ÈÏÈÈÏ†ÚÓ †‰†Ú† ÈËÈ  
, ÂÏÂÏÈ, ÏÈÏ†ÏÓÈ ÈÏÈÈÏ†ÚÓ Á†ÔËÒ†Ú, †Ú. ÒÏ  
ÌÂ .Ú‰ÁÚ. Ó†Ó† ÚÓÚ†ÏÓ, ÌÂÏ† Ì† Á†, Ó‰Á Ì†  
, ÂÏÂ áÓÏÈÓÏ† ‰ÏÏÈ ÓÓÂÈÏÂÏÏÏ, Ó  
áÓ ÓÏÂ, ÓÚ, † È Ì†, ÂÏÂ è† ÈÈ† ‰ÏÏÈ ‰, ÈÏ  
Â, ÓÓÂÈÓÏÈÏ ÏÓÈÁÏÈ.



### To stop recording with the date or time

Press DATE or TIME again. The date or time indicator disappears. The recording continues.

#### Note

You cannot superimpose a title during recording the date or time.

ÑÏÏ ÓÓÚ†ÏÓ, † Á†ÔËÒÈ Ò ‰†ÚÓÈ ËËÈ  
, ÂÏÂÏÂÏ  
Ç†ÈÏÈÚÂ DATE ÈËÈ TIME ÒÏÓ, †. àÏÈÈÏ†ÚÓ  
‰†Ú† ÈËÈ, ÂÏÂÏÈ ÈÒ~ÂÁÏÂÚ. á†ÔËÒ,  
Ò Ó‰ÓÏÈÈÚÓÏ.

è ÈÏÂ~†ÈÂ  
Ç† ÌÂ ÏÓÈÂÚÂ Ì†ÔËÒÈÚ, Ì†‰ÓÈÒ, , Ó, ÂÏÂ  
Á†ÔËÒÈ ‰†Ú† ÈËÈ, ÂÏÂÏÈ.

## Selecting the START/STOP mode

## START/STOP

Your camcorder has two modes besides normal start/stop mode. These modes enable you to take a series of quick shots resulting in a lively video.

- (1) Set START/STOP MODE to the desired mode.

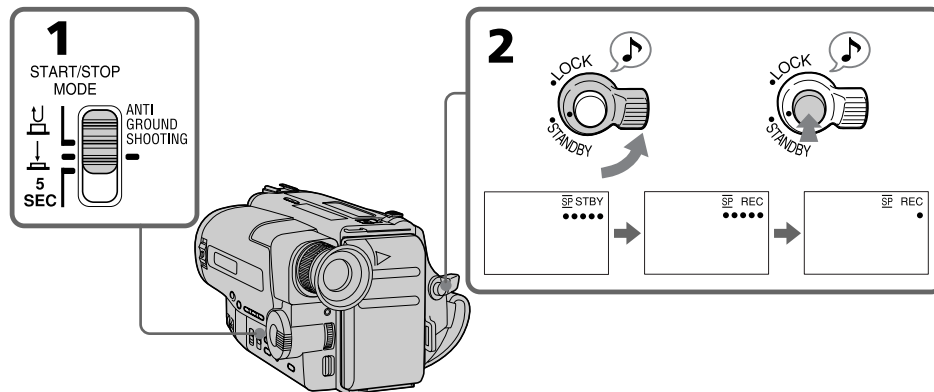
**START/STOP MODE**: Recording starts when you press START/STOP, and stops when you press it again (normal mode).

**ANTI GROUND SHOOTING**: The camcorder records only while you press down START/STOP so that you can avoid recording unnecessary scenes.

**5 SEC**: When you press START/STOP, the camcorder records for 5 seconds and then stops automatically.

- (2) Turn STANDBY up and press START/STOP. Recording starts.

If you selected 5 SEC, five dots appear in the viewfinder. The dots disappear at a rate of one per second as illustrated below.



### To extend the recording time in 5 SEC mode

Press START/STOP again before all the dots disappear. Recording continues for about 5 seconds from the moment you press START/STOP.

Ç+ , È%ÁÓÍ+ÏÄ + ÈÏÄÄÚÄ~Ä% , + ÄÈÈÏ+ ,  
Í ÓÏÄ Ó·~ÍÓ,,Ó ÄÈÈÏ+ Ä+ÓÓÓÍ+ / ÓÓÓ+ÍÓ, +. ùÛÈ  
ÄÈÈÏ· ÓÓÁ, ÓÍÏ. Ú Ç+ Ï ÒÏÏÚ, ÒÄ È.  
ÍÓ ÓÓÍÈ Ì+ % Ó, , ÓÓÁ%+ , ÏÏ , ÄÄÛÏ. Ú+ÚÄ  
ÈÈ. Ú. , È%ÁÓÓ Ó,, +ÏÏÛ.

- (1) ÌÓÓ+ÍÓ, ÈÚÄ START/STOP MODE Ì+  
ÈÄÏ+ÄÏ·È ÄÈÈÏ.

**START/STOP MODE**: Ì+~ÈÏ+ÄÚÓÏ, ÍÓ,,%+ Ç·  
Ï+ÈÈÏ+ÄÚÄ ÏÍÓÓÏÛ START/STOP È  
ÓÓÓ+Ï+ , ÏÈ, +ÄÚÓÏ, ÍÓ,,%+ Ç· Ï+ÈÈÏ+ÄÚÄ ÄÄ  
ÒÍÓ, + (Ó·~Ï·È ÄÈÈÏ).

**ANTI GROUND SHOOTING**:  
ÇÈ%ÁÓÍ+ÏÄ + Ó ÓÈÁ, Ó%ÈÚ Ä+ÓÈÒ, ÚÓÏ, ÍÓ,  
ÍÓ,,%+ Ç· %Ä ÈÈÈÚÄ START/STOP ,  
Ï+È+ÚÓÏ ÓÓÓÓÓÏÏÈÈÈ, Ú+Ï, ~ÚÓ· Ç· ÏÓ,, ÏÈÈ  
ÈÄ·ÄÈ+Ú, Ä+ÓÈÒÈ ÏÄÈÄÏ+ÚÄÏ, Ì· Ì  
~ÓÈÁÓ%ó, .

**5 SEC**: è È Ï+È+ÚÈÈ START/STOP  
, È%ÁÓÍ+ÏÄ + Ó ÓÈÁ, Ó%ÈÚ Ä+ÓÈÒ, ,  
ÚÄ~ÄÏÈÄ 5 ÓÄÏÛÏ%, + Ä+ÚÄÏ  
ÓÓÓ+Ï+ , ÏÈ, +ÄÚÓÏ + , ÚÓÏ+ÚÈ~ÄÓÍÈ.

- (2) èÓ, Ä ÏÈÈÚÄ STANDBY , , Ä Ì È Ï+ÈÈÈÚÄ  
START/STOP.

á+ÓÈÒ. Ì+~ÈÏ+ÄÚÓÏ.

ÒÓÏÈ Ç· , ·È +ÄÚÄ ÄÈÈÏ 5 SEC, ÓÏÛ,  
ÚÓ~ÄÏ ÓÓÏ, ÏÏ, ÚÓÏ , , È%ÓÈÒÏ+ÚÄÏÄ. ÏÓ~ÏÈÈ  
ÈÒ~ÄÄ+ , Ú ÈÄ +Ò~ÄÚ+ ÓÓ Ó%ÏÓÈÄ+ ÓÄÏÛÏ%Û,  
Ï+Ï ÓÓÏ+Ä+ÍÓ Ì+ ÈÓÛÏÄ.

ÏÏÏ Ó Ó%ÏÄÏÈÏ , ÄÏÄÏÈÄ Ä+ÓÈÒÈÈ ,  
ÄÈÈÏÄ Ä+ÓÈÒÈÈ 5 SEC


èÏÓ, + Ï+ÈÈÈÚÄ START/STOP ÓÄ Ä% ÚÄÏ, Ï+Ï  
, ÓÄ ÚÓ~ÏÈÈÈÈÚÓÏ. á+ÓÈÒ, Ó Ó%ÏÓÈÈÈÚÓÏ Ä~Ä  
ÓÍÓÍÓ 5 ÓÄÏÛÏ% ÓÛ ÍÓÏÄÏÛ+ Ï+È+ÏÈÏ START/  
STOP.

# Shooting with backlighting

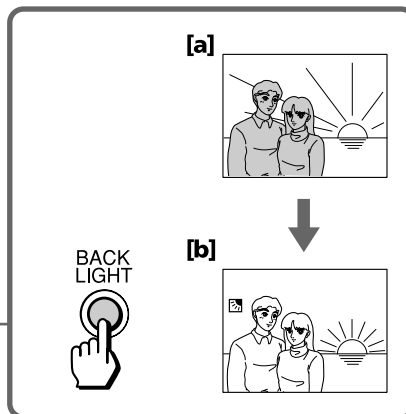
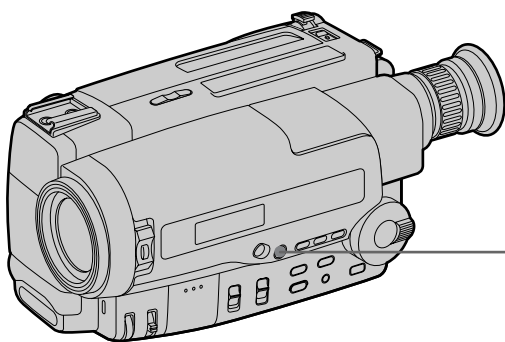
ε·Αΐΐϯ ò Áϯ%·ΙΑÈ  
 ÔÓ%ò, ΑΐΐÓÈ

When you shoot a subject with the light source behind the subject or a subject with a light background, use the BACK LIGHT function.

òòìÈ ϯ· òìÈì+ÁÚÁ ó··ÁΐÚ ò ÈòÚó~ìÈΐÓΐ ò, ÁÚϯ ÒÓÁϯÈ ó··ÁΐÚϯ ÈΐÈ ó··ÁΐÚ ìϯ ò, ÁΐΐÓΐ ÙòΐÁ, Èòòóΐ, ÁÙÈÚÁ ÙÙΐΐ^ÈÈ. BACK LIGHT.

Press BACK LIGHT. The  indicator appears in the viewfinder.


ϯ+ÈΐÈÚÁ BACK LIGHT. ϯ, È%òÈòΐ+ÚÁΐÁ ÒÓñ, ÈÚòñ Èΐ%Èΐ+Úó .



- [a] Subject is too dark because of backlight.
- [b] Subject becomes bright with backlight compensation.

- [a] ε··ÁΐÚ ñ, ññÁÚòñ òìÈ-ΐÓΐ ÚÁΐΐ·ΐ ÈÁ-Áϯ Áϯ%·ΙΑÈ ÒÓ%ò, ÁΐΐÈ.
- [b] ε··ÁΐÚ ÒÚ+ΐÓ, ÈÚòñ ñ ìÈΐ ò ΐÓΐÒÁΐò+^ÈÁÈ Áϯ%·ΙΑÈ ÒÓ%ò, ÁΐΐÈ.


### After shooting

Be sure to release this adjustment condition by pressing BACK LIGHT again. The  indicator disappears. Otherwise, the picture will be too bright under normal lighting condition.

εòòΐÁ ò··ÁΐΐÈ

### This function is also effective under following conditions:

- On snow e.g. at the ski resort
- At the beach under strong sunshine
- A subject with a light source nearby or a mirror reflecting light
- A white subject against a white background. Especially when you shoot a person wearing shiny clothes made of silk or synthetic fiber, his or her face tends to become dark if you do not use this function.

ϯÁÁ+·Ù%. ÚÁ ÒΐÁΐÈÚ. ÒòòÚòñìÈÁ Ù+ΐÓÈ Á, ÙΐÈ ó, ìÈ ÒÚÚÁΐ ì+È+ÚÈñ BACK LIGHT Òΐò, ϯ. àì%Èΐ+Úó  Èò~ÁÁΐÁÚ. ϯ ò ÓÚÈ, ΐÓΐ òΐÚ~+Á ÈÁó· ϯÈÁΐÈÁ·Ù%ÁÚ ÒΐÈ-ΐÓΐ ñ ìÈΐ ò È ΐó ì+ΐ, ì·ΐ Ùòΐó, Èñ òò, Á~ÁΐÈñ.

ùÚ+ ÙÙΐΐ^Èñ Ù+ΐÈÁ ~ÙÙÁΐÚÈ, ìϯ ò È òΐÁ%Ù. ~È Ùòΐó, Èñ ñ:

- ϯ+ ÙòΐÁ òΐÁ,, ϯ, ìò ÈΐÁ, ìϯ ì·ÈΐÓΐ ΐÚ ó ÚÁ
  - ϯ+ òΐñÈÁ ò È òÈΐ, ìóΐ òóΐΐÁ~ΐóΐ ò, ÁÚÁ
  - ε··ÁΐÚ ì+ϱ%ÈÚòñ ñ%óΐ ò ÈòÚó~ìÈΐÓΐ ò, ÁÚϯ ÈΐÈ ñ%óΐ òÁÁ ì+ΐóΐ, ÓÚ ϯÈ+. ~Èΐ ò, ÁÚ
  - ÁÁΐ·È ó··ÁΐÚ ìϯ··ÁΐÓΐ ÙòΐÁ.
- εòò·Áΐΐó, ÁòìÈ ϯ· òìÈì+ÁÚÁ ~Áΐó, Áΐ+, ΐÓÚó ~È Ò%ÁÚ, ñ ìÚ, Ò%ÁÈ%Ù, ò%Áΐ+ìΐÙ. ÈÁ ~Áΐΐ+ ÈΐÈ òÈΐÚÁÚÈ~Áòΐó, ò, òΐóΐΐ+, Á, ò ÈΐÈ ññ ìÈ^ó·Ù%ÁÚ ÒÚ+ΐÓ, ÈÚ. òñ ÚÁΐΐ·ΐ, ÁòìÈ ϯ· ìÁ·Ù%ÁÚÁ Èòòóΐ, Áó, ϯÚ. ~ÚÚ ÙÙΐΐ^È. .

Advanced operations

ìòó, Á -Áΐòó, ó, ì+ΐ·Á òóÁ ϯ·ÈÈ

## Fade-in and fade-out

Ç, Â%ÂÎËÄ È , °, Â%ÂÎËÄ  
ËÁÓ. †ÊÄÎËfl

You can fade in or out to give your recording a professional appearance. When fading in, the picture gradually fades in from black while the sound increases. When fading out, the picture gradually fades to black while the sound decreases.

### When fading in [a]

- (1) While the camcorder is in Standby mode, press FADER. The FADER indicator starts flashing.
- (2) Press START/STOP to start recording. The FADER indicator stops flashing.

### When fading out [b]

- (1) During recording, press FADER. The FADER indicator starts flashing.
- (2) Press START/STOP to stop recording. The FADER indicator stops flashing, and then recording stops.

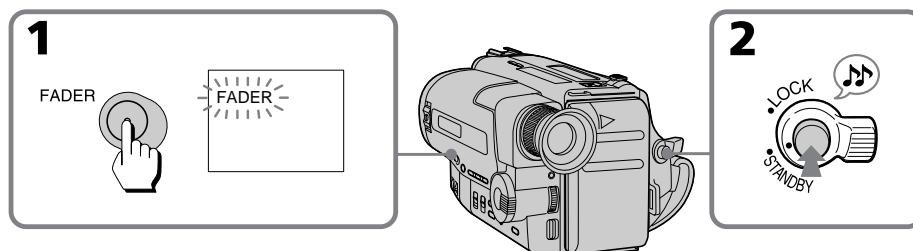
Ç· ÌÓÊÄÚÄ , , Ó%ËÚ, È , °, Ó%ËÚ.  
ËÁÓ· †ÊÄÎËÄ, Ó È%†, †fl Ç†-ÂÈ Á†ÔÈÒÈ  
Ô ÓÚÄÓÒÈÒÌ†Ì, Ì·È , È%.  
è È , Â%ÂÎËÈÈ ÈÁÓ· †ÊÄÎËÄ ÓÓÓÚÄÓÄÌÍÓ  
, Ó%ËÚÓfl ÓÚ ~Ä ÌÓ„Ó ÈÏÈ ÌÓÄ†È~ÄÓÍÓ„Ó ò  
Ó%ÌÓ, ÄÌÄÌÌ·Ì ÓÓ, °-ÄÌÈÄÌ Á, ÚÍ†.  
è È , °, Â%ÂÎËÈÈ ÈÁÓ· †ÊÄÎËÄ ÓÓÓÚÄÓÄÌÍÓ  
, °, Ó%ËÚÓfl %Ó ~Ä ÌÓ„Ó ÈÏÈ ÌÓÄ†È~ÄÓÍÓ„Ó ò  
Ó%ÌÓ, ÄÌÄÌÌ·Ì ÓÓÌÈÈÄÌÈÄÌ Á, ÚÍ†.

ÑÌfl , , Â%ÂÎËÈfl ÈÁÓ· †ÊÄÎËÈfl [a]

- (1) äÓ„%†, È%ÁÓÍ†ÌÄ †Ì†1Ó%ËÚÓfl , ÄÈÈÌÄ „ÓÓÓ, ÌÓÓÓÈ, Ì†ÈËÈÚÄ FADER. àÌ%ÈÍ†ÚÓ FADER Ì†~ÌÄÚ ÌÈ„†Ú. .
- (2) Ç†ÈËÈÚÄ START/STOP %fl Ì†~†Í† Á†ÔÈÒÈ. àÌ%ÈÍ†ÚÓ FADER ÓÄ ÄÓÚ†ÌÄÚ ÌÈ„†Ú. .

ÑÌfl , °, Â%ÂÎËÈfl ÈÁÓ· †ÊÄÎËÈfl [b]

- (1) ÇÓ , ÄÌfl Á†ÔÈÒÈ Ì†ÈËÈÚÄ FADER. àÌ%ÈÍ†ÚÓ FADER Ì†~ÌÄÚ ÌÈ„†Ú. .
- (2) Ç†ÈËÈÚÄ START/STOP %fl ÓÓÚ†ÌÓ, † Á†ÔÈÒÈ. àÌ%ÈÍ†ÚÓ FADER ÓÄ ÄÓÚ†ÄÚ ÌÈ„†Ú, È Á†ÔÈÒ. ÓÓÚ†Ì†, ÌÈ, †ÄÚÓfl.







## Enjoying picture effect

ç·îî†ê%âîëâ “ùùâíú†ïë  
ëáó· †êâîëfl

### Selecting picture effect

ç·ó “ùùâíú† ëáó· †êâîëfl

You can make pictures like those of television with the Picture Effect function.

ç· íóëâúâ ò%âî†ú, ëáó· †êâîëâ, òúëíâ  
úâ₁, ~úó ôâ â%†.ú óó úâíâ,ê%âîë. ò  
òóíó~, ., ùùíí^ëë “ùùâíúó, ëáó· †êâîëfl.

[a]



[b]



[c]



#### MOSAIC [a]

The picture is mosaic.

#### MOSAIC [a]

àáó· †êâîëâ ·ù%âú íóá†ë~âóíëí.

#### SOLARIZE [b]

The light intensity is more clear, and the picture looks like a painting.

#### SOLARIZE [b]

ù íóóú, ò, âú† ·ù%âú ·óíââ flòíóë, ë  
ëáó· †êâîëâ ·ù%âú, „, ífl%âú, í†í í† úëí†.

#### B&W

The picture is monochrome (black and white).

#### B & W

àáó· †êâîëâ ·ù%âú íóíó₁ óí†úë~âóíëí  
(~â ìó-âî·í).

#### SEPIA

The picture is sepia.

#### SEPIA

àáó· †êâîëâ ·ù%âú, ^, âúâ òâôëfl.

#### NEG. ART [c]

The colour of the picture is reversed.

#### NEG. ART [c]

ñ, âú ëáó· †êâîëfl ·ù%âú ìâ,, †úë, ì·í.

## Enjoying picture effect

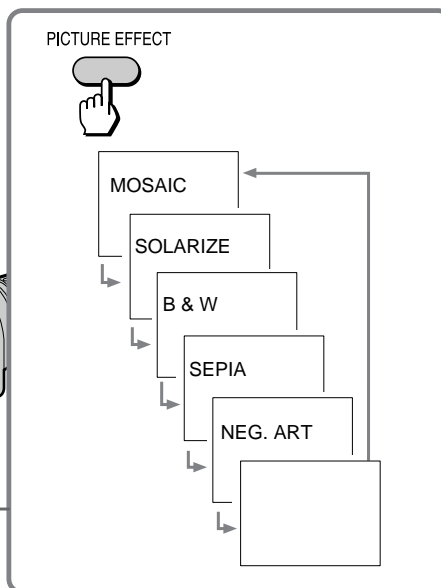
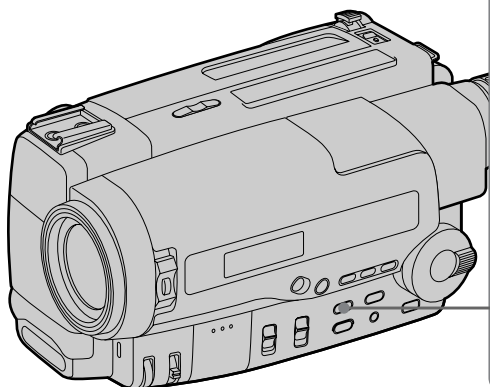
ç+òî+ê%âîëâ ~ùùáíú+îë  
 éáó· †êâîëñ

## Using picture effect function

While the camcorder is in Standby mode, press PICTURE EFFECT to select the desired Picture Effect mode.

àðòóî, áó, †îëâ ùùîí^ëë  
 ~ùùáíúó, éáó· †êâîëñ

çúó, âññ, íó„%†, ë%áóí+îâ † ì+1ó%ëúóñ ,  
 âëëîâ „óóó, ìóóúë, ì+êîëúâ ííóóíú  
 PICTURE EFFECT %ññ úó„ó, ~úó· , ·. †ú.  
 êâî+âî'è âëëî ~ùùáíúó, éáó· †êâîëñ.



Advanced operations

ìóó, â -âîòú, ó, †î+î·â óóâ †^ëë

## Returning to normal mode

Press PICTURE EFFECT until the Picture Effect indicator disappears.

## Note on the picture effect

When you turn the power off, the camcorder returns automatically to normal mode.

çóá, †ú í ìó ì+î, ìóíú âëëîú  
 ç+êëî+ëúâ ííóóíú PICTURE EFFECT, óóí+  
 êî%ëí+úó ~ùùáíúó, éáó· †êâîëñ ìâ  
 ëò~ââîâú.

è ëîâ~+îëâ í ~ùùáíú+î éáó· †êâîëñ  
 óóíë ç' , íî. ~ëúâ óëú+îëâ, ,ë%áóí+îâ †  
 , óá, †+âúóñ , ìó ì+î, ì'è âëëî.

# Using the wide mode function

ÀÒÓÍ, ÁÓ, ÌËÄ ÙÛÍ^ËË  
-Ë ÓÍÓÙÓ ÌÛÍÓ,, Ó ÄËËË

- CCD-TR502E/TR620E only

- íóí, íó CCD-TR502E/TR620E

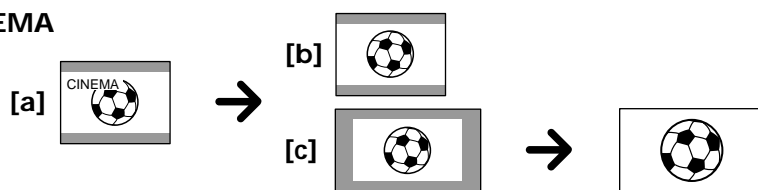
## Selecting the desired mode

Ç··ó ÊÄË+ÄËÓ,,ó ÄËËË

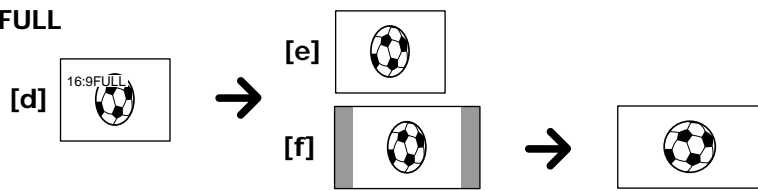
You can record a cinemalike picture (CINEMA) or a 16:9 wide picture to watch on the 16:9 wide-screen TV (16:9FULL).

Ç· íóÊÄËÄ+óËò·, +ú, ÊÁó· +ÊÄËËÄ í+í, íËíóú+ú Ä (CINEMA) ÈËË -Ë ÓÍÓÙÓ ÌÛÍÓÄ ÊÁó· +ÊÄËËÄ 16:9%ííí Ò ÓÍÓÛ +Ë +Ë -Ë ÓÍÓ~í +Ëíóí ÚÄËÄ, ÊÁó Ä 16:9 (16:9FULL).

### CINEMA



### 16:9FULL



### CINEMA

Black bands appear at the top and the bottom of the screen. The viewfinder [a] and a normal TV screen [b] look wide. You can also watch the picture without black bands on a wide-screen TV [c].

### CINEMA

óÄ Ì·Ä ÓÓÍÓò· ÓÓíí, ííí, ÚÓí Ò, Ä 1Ù È ÒËËÁÚ ~í +Ë+ È , , È%ÓËÓí+ÚÄËÄ [a] È Ó·~ì·È ÚÄËÄ, ÊÁËÓíì·È ~í +ì [b], , ííí%ËÚ, í+í -Ë ÓÍËË. Ç· Ú+ÍËÄ ÍÓËÄÚÄ ÓÍÓÛ ÁÚ, ÊÁó· +ÊÄËËÄ ·ÄÄ ~Ä Ì·1 ÓÓÍÓò Ì+ -Ë ÓÍÓ~í +Ëíóí ÚÄËÄ, ÊÁó Ä [c].

### 16:9FULL

The picture in the viewfinder [d] or on a normal TV [e] is horizontally compressed. You can watch the picture of normal images on a wide-screen TV [f].

### 16:9FULL

àÁó· +ÊÄËËÄ , , È%ÓËÓí+ÚÄËÄ [d] ÈËË Ì+ ÍÓ Ì+í, ÌÓí ÚÄËÄ, ÊÁó Ä [e] ·Ú%ÁÚ ÒË+ÚÓ Óó ,,ó ÊÁÓíÚ+ËË. Ç· ÍÓËÄÚÄ ÓÍÓÛ ÁÚ. ÍÓ Ì+í, ÍÓÄ ÊÁó· +ÊÄËËÄ Ì+ -Ë ÓÍÓ~í +Ëíóí ÚÄËÄ, ÊÁó Ä [f].



# Focusing manually

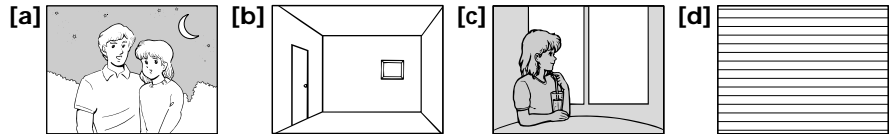
ή ρόιϋòè ó, í†, ù~ìϋ.

## When to use manual focus

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

è È Èòóóí, Áó, †ìÈÈ Ù~ìóÈ  
ùóíϋòÈ ó, íÈ

ç òíÀ&ù, ~Èì òíϋ~†íì ç· íóÈÁÙÁ òóíϋ~Èù,  
îϋ~ÈÁ ÁÁùî, ú†ù, óú Á, ùîÈ ó, †,  
ùóíϋòÈ ó, íϋ, ù~ìϋ..



- Insufficient light [a]
- Subjects with little contrast — walls, sky, etc. [b]
- Too much brightness behind the subject [c]
- Horizontal stripes [d]
- Subjects through frosted glass
- Subjects beyond nets, etc.
- Bright subject or subject reflecting light
- Shooting a stationary subject when using a tripod


- çÁ&òóù†úó~ì†íì óò, Á~Àìòóù, [a]
- é· Áíú· òó òí†· ·ì íóíϋ †òóí - òúÁî·, ìÁ·óÈù.%. [b]
- èîÈ-íóí òÈî, ì†íì íóóù, òóÁ†È ó· Áíú† [c]
- Éó ÈÁóíϋ†î, ì·Á òóíóò· [d]
- è· Áí†· ó· Áíú† ~Á ÁÁ ì†úó, óÁ òúÁííó
- é· Áíú ì†ìó&Èùòíì Á† òÁùíóÈ Èù.%.  
• ù íÈÈ ó· Áíú ÈîÈ ó· Áíú, óú †È†, ~ÈÈ ò, Áù
- è· Áí†· ìÁòó%, ÈÈìó, ó ó· Áíú ò Èòóóí, Áó, †ìÈÁí ú Áíó,, È

## Focusing manually

ιόίϋòē ó, í†, ũ~ìϋ.


### Focusing manually

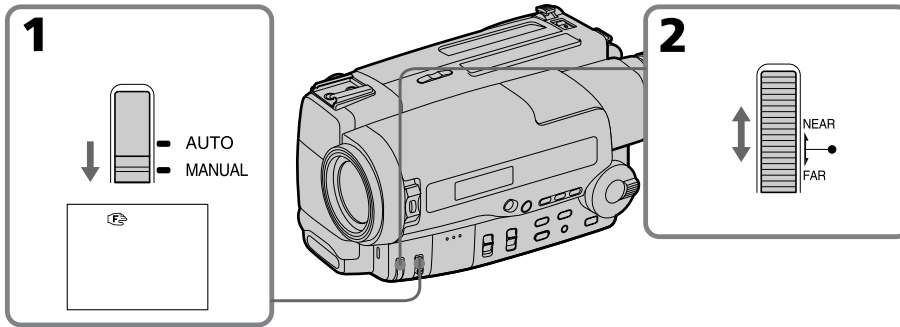
When focusing manually, first focus in telephoto before recording, and then reset the shot length.


- (1) Set FOCUS to MANUAL. The  indicator appears.
- (2) Turn the focus dial to focus on the subject. Turn to the NEAR side to focus on a nearer object. Turn to the FAR side to focus on a farther object.

### ēϋ~ì†fl ùóíϋòē ó, í†


è ē ũ~ìòē ùóíϋòē ó, í† òòá, † òá à& Á†òēò, ., °òóììēϋ, ùóíϋòē ó, íϋ, àēēíá úáíáùóó, † á†úáí ùòó†ìó, ēϋ. †òòóóñìēá &ífl ò·áííē.

- (1) ìòó†ìó, ēúá FOCUS ì† MANUAL. àófl, ēϋòfl ēì&éí†úó .
- (2) èó, à ìēúá &ēòí ùóíϋòē ó, íē &ífl úó„ò, ~úó·° òùóíϋòē ó, †ú. ó·áíú. èó, à ìēúá &ēòí, òúó óíϋ NEAR, ~úó·° , °òóììēϋ, ùóíϋòē ó, íϋ ì†·ìēēìēē ó·áíú. èó, à ìēúá &ēòí, òúó óíϋ FAR, ~úó·° , °òóììēϋ, ùóíϋòē ó, íϋ ì† &†ì, ìēē ó·áíú.



**To return to the autofocus mode**  
Set FOCUS to AUTO. The  indicator goes out.

**Shooting in relatively dark places**  
Shoot at wide-angle after focusing in the telephoto position.

Ñîfl, óá, †ú† í àēēíϋ †, úóí†úē~àòíóē ùóíϋòē ó, íē ìòó†ìó, ēϋ, FOCUS ì† AUTO. àì&éí†úó  èò·ááíáú.

è·áíí†, óúìòòēúáí, ìó úáíí·ì ìáòó†ì ç·òóíìñēúá ò·áííú, òóíóéáìēē ~ē óíó„ò ũ, ì† òòóíá ùóíϋòē ó, íē, òóíóéáìēē úáíáùóó.

## Using the PROGRAM AE function

ÀÒÔÓÎ.ÁÓ, †ÌËÄ  
ÛÛÌÍ^ËË PROGRAM AE

You can select from three PROGRAM AE (Auto Exposure) modes to suit your shooting situation. When you use PROGRAM AE, you can capture high-speed action or night views.

Ç· ÌÓËÁÚÁ, ·· †Ú, Ó%ËÌ ËÁ Ú Á<sub>1</sub> ÂËËÍÓ, PROGRAM AE (†, ÚÓÍ†ÚË~ÂÓÍÓË Ò· ÂÍÍË), ÒÓÓÚ, ÁÚÓÚ, ËË Ò Ç† ÂË ÒËÛÚ†^ËËË. ÒÓÍË Ç· ËÒÓÓÍ, ÁÚÁÚÁ PROGRAM AE, Ç· ÌÓËÁÚÁ Á+ÔÁ~†ÚÍÁÚ, ·, ÒÓÍÓÓÍÓ ÓÓÚÍÓÁ %ÂËÓÚ, ËÁ ËËË ÌÓ~Ì·Á, %·.

### Selecting the best mode

Select the best mode by using the following examples.

Ç· ·Ó Ì†ËËÛ~^Á, Ó ÂËËÍ†

Ç· ·Á ËÚÁ Ì†ËËÛ~^ËË ÂËËÍ, ËÒÓÓÍ, ÁÚÏ ÒÍÁ%Ú, ^ËÁ Ò ËÍÁ ·.



#### Sports mode

- Outdoor sports scenes such as football, tennis, golf or skiing
- A landscape in a moving car

#### eÂËËÍ ÒÓÓ Ú†

- ËÓÓ ÚË, Ì·Á Ò·ÂÌ·, ÌÁ ÒÓÍÁ~ÂÍËÏ, Ì†Ó ËÍÁ, ÛÛ·ÓÍ, ÚÁÌËË, „ÓÍ, Û ËÍË Í·ËË
- ä†ì%~†ÚÛ ËÁ %, ËËÛ~Á, ÒÓÏ †, ÚÓÍÓ·ËÏÏ

#### High-speed shutter mode

- A golf swing or a tennis match in fine weather with the ball captured clearly
- Playing back certain scenes with high-speed movements in clear, sharp picture

#### eÂËËÍ, ·ÒÓÍÓÓÍÓ ÓÓÚÍÓ, Ó Á+Ú, Ó †

- ÇÁÍ†<sub>1</sub>Ë, Ó, ÁÏÏ %·, „ÓÍ, Û ËÍË ÚÁÌËË, ÌÓ Ó~Ú, ÓÓ, Ó%Ú Ò ~ÁÚÍËÍ Á+ÔÁ~†ÚÍÁËËÁÏ ÌÏ~†
- ÇÓÓÓ ÓËÁ, Á%ÁÍËÁ ÓÓ Á%ÁÍÁÏ· Ì Ò·ÂÌ Ò, ·ÒÓÍÓÓÍÓ ÓÓÚÍ·Ë %, ËËÁËËÏË Ò ~ÁÚÍËÍ, ÁÁÍËÍ ËÁÓ· †ËÁËËÁÏ

#### Twilight mode

- Recording night views, neon signs or fireworks

#### eÂËËÍ ÓÚÍÁ ÁÍ

- á†ÔËË, ÌÓ~Ì·<sub>1</sub>, %Ó, ÌÁÓÍÓ, ·<sub>1</sub> ÁÍ†† ËÍË ÛÁËÁ, Á ÍÓ,






## Releasing the STEADY SHOT function

## εÚÍÎ, ~ÂÎËÂ ÛÛÎÍ^ËË STEADY SHOT


### - CCD-TR620E only

When you shoot, the  indicator appears. This indicates that the SteadyShot function is working and the camcorder compensates for camera-shake.


You can release the SteadyShot function when you do not need to use the SteadyShot function. Do not use the SteadyShot function when shooting a stationary object with a tripod.

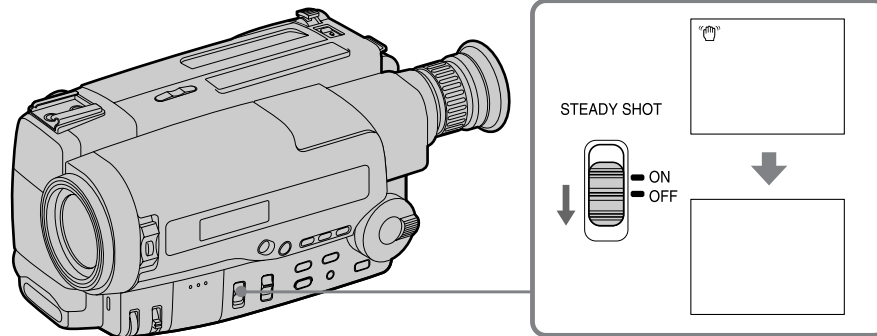
Set STEADY SHOT to OFF. The  indicator goes off.

### - ίόί, ίό CCD-TR620E

αό, %† ç\* ò óεά, óεεúá ò·áííú, òφη, ηηάúφη εìεεí†úó . ùúó úí†á\*, †áú, ~úó ÛÛÎÍ^ËË ÛÛÓÓË~Ë, óε ò·áííË †·óú†áú %íη ίóίóáìò†^ËË % óε†ìËη, Èε.άóí†íá \*.

ç\* ίóεάúá óúíí, ~Éú, ÛÛÎÍ^ËË, ÛÛÓÓË~Ë, óε ò·áííË, áðíË ç†í íá ú á·úáúðη Èððóí, áó, †ú, ~úú ÛÛÎÍ^ËË. . çá Èððóí, áúεúá ÛÛÎÍ^ËË. ÛÛÓÓË~Ë, óε ò·áííË ò È ò·áííá ìáðó%, ÈÈìó, ò ó··áíú† ò ððóíó~, . ú áìó, È.


ìòú†ìó, Èúá STEADY SHOT ì† OFF.  
àìεεí†úó  òó, †òìáú.




### To activate the SteadyShot function again

Set STEADY SHOT to ON.

### Notes on the steady shot

- The SteadyShot will not correct excessive camera-shake.
- When you switch the SteadyShot function on or off, the exposure may fluctuate.
- When you record in 16:9FULL mode, the SteadyShot function does not work and the  indicator flashes.

Ñíη †íúË, Èá†^ËË ÛÛÎÍËË ÛÛÓÓË~Ë, óε ò·áííË òìó, † ìòú†ìó, Èúá STEADY SHOT ì† ON.

- ε Èíá~†ìËη ί ÛÛÎÍ^ËË ÛÛÓÓË~Ë, óε ò·áííË
- ìúíí^Ëη ÛÛÓÓË~Ë, óε ò·áííË ìá òìóεáú óúíó áíúË ó, †ú, ~ ááíá ìóá% óε†ìËá, Èε.άóí†íá \*.
- ε È, íí, ~áíËË ÈíË, ·íí, ~áíËË ÛÛÎÍ^ËË STEADY SHOT ~íòðóáË^Ëη ìóεáú ίóíá·†ú, φη.
- òðíË ç\*, ·òóíηηáúá á†òÈð, , áÈÈíá 16:9, ÛÛÎÍ^Ëη ÛÛÓÓË~Ë, óε ò·áííË ìá †·óú†áú, † Èìεεí†úó  ìË, †áú.

## Superimposing a title

You can select from eight preset titles and two titles you made to superimpose it on the picture during recording. Each time you press TITLE, the preset titles appear one by one. You can also select the language and position of the titles in the menu system.

### Selecting the language

- (1) Set the POWER switch to CAMERA.
- (2) Turn STANDBY up.
- (3) Press MENU to display the menu.
- (4) Turn the control dial to select TITLE LANG, then press the dial.
- (5) Turn the control dial to select the desired language, then press the dial.
- (6) Press MENU to erase the menu display.

**1**

POWER  
CAMERA  
OFF  
PLAYER

**2**

LOCK  
STANDBY

**3, 6**

MENU

**4**

**1**

SEL/PUSH EXECUTE

|                      |
|----------------------|
| MENU                 |
| COMMANDER            |
| REC MODE             |
| TITLE POS            |
| TITLE LANG → ENGLISH |
| TITLE1 SET           |
| TITLE2 SET           |
| D ZOOM               |
| [MENU] : END         |

**2**

SEL/PUSH EXECUTE

|              |
|--------------|
| MENU         |
| [ENGLISH]    |
| FRANÇAIS     |
| ESPAÑOL      |
| PORTUGUÊS    |
| DEUTSCH      |
| NEDERLANDS   |
| ITALIANO     |
| [MENU] : END |

**5**

**1**

SEL/PUSH EXECUTE

|              |
|--------------|
| MENU         |
| ENGLISH      |
| FRANÇAIS     |
| [ESPAÑOL]    |
| PORTUGUÊS    |
| DEUTSCH      |
| NEDERLANDS   |
| ITALIANO     |
| [MENU] : END |

**2**

SEL/PUSH EXECUTE

|                      |
|----------------------|
| MENU                 |
| COMMANDER            |
| REC MODE             |
| TITLE POS            |
| TITLE LANG → ESPAÑOL |
| TITLE1 SET           |
| TITLE2 SET           |
| D ZOOM               |
| [MENU] : END         |

Advanced operations

## Superimposing a title

ç† ÎÓÊÀÎËÊ Ì†%ÔËÏË

### Using titles

#### To superimpose from the beginning

- (1) Set the POWER switch to CAMERA.
- (2) Turn STANDBY up.
- (3) Press TITLE repeatedly until the desired title appears. The title flashes.
- (4) Press START/STOP to start recording.
- (5) Press TITLE when you want to turn off the title.

#### To superimpose on the way of recording

- (1) Press TITLE repeatedly until the desired title appears. The title flashes.
- (2) When the title stops flashing, press TITLE. The title disappears.
- (3) Press START/STOP to start recording.
- (4) Press TITLE when you want superimpose the title.
- (5) Press TITLE when you want to turn off the title.

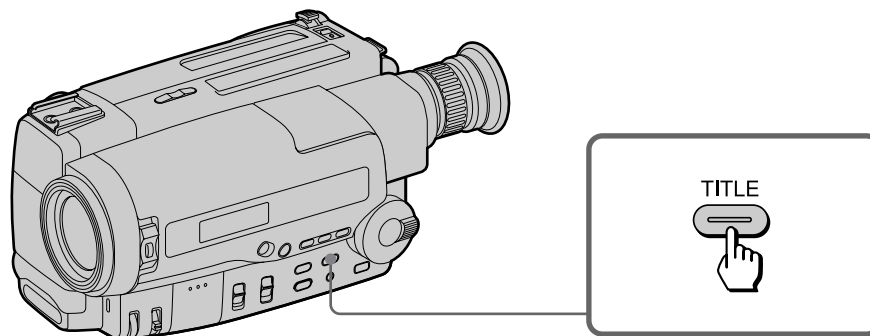
àÒÓÍ, ÁÓ, †ËÊ Ì†%ÔËÏË

ÑÎÎ Ì† ÎÓÊÀÎËË ÓÚ Ì†~†Î†

- (1) ìðú†ìò, ëúá, 'íí, ~†ú†í, POWER, ÒÓÍÓÊÀÎËÊ CAMERA.
- (2) ëó, Á ÌËÚÁ STANDBY, , Á 1.
- (3) çÁÓ%ÌÓÍ †ÚÌÓ Ì†ÊËË†ËÚÁ TITLE, ÓÓÍ† ÌÁ ÓÓÎ, ËÚÒÎ ÊÁÎ†ÁÎ†Î Ì†%ÔËÏË, . ç†%ÔËÏË, ·Û%ÁÚ ÌË, †Ú, .
- (4) ç†ÊËËÚÁ START/STOP %ÎÎ Ì†~†Î† Á†ÔËÏË.
- (5) ç†ÊËËÚÁ TITLE, ÍÓ, %† ç† Á†1ÓÚËÚÁ, 'íí, ~ËÚ, Ì†%ÔËÏË, .

ÑÎÎ Ì† ÎÓÊÀÎËË, Ò Ó^ÁÒÒÁ Á†ÔËÏË

- (1) çÁÓ%ÌÓÍ †ÚÌÓ Ì†ÊËË†ËÚÁ TITLE, ÓÓÍ† ÌÁ ÓÓÎ, ËÚÒÎ ÊÁÎ†ÁÎ†Î Ì†%ÔËÏË, . ç†%ÔËÏË, ·Û%ÁÚ ÌË, †Ú, .
- (2) äó, %† Ì†%ÔËÏË. ÒÁ ÁÒÚ†ÌÁÚ ÌË, †Ú, , Ì†ÊËËÚÁ TITLE. ç†%ÔËÏË. ËÒ~ÁÁÌÁÚ.
- (3) ç†ÊËËÚÁ START/STOP %ÎÎ Ì†~†Î† Á†ÔËÏË.
- (4) ç†ÊËËÚÁ TITLE, ÍÓ, %† ç† ÓÓÊÁÎ†ÁÚÁ Ì†ÎÓËËÚ, Ì†%ÔËÏË, .
- (5) ç†ÊËËÚÁ TITLE, ÍÓ, %† ç† Á†1ÓÚËÚÁ, 'íí, ~ËÚ, Ì†%ÔËÏË, .



## Superimposing a title

ç+îóêâîèâ î+øëðè

### Titles cycle as follows

Original title 1 → Original title 2 → HELLO! → HAPPY BIRTHDAY → HAPPY HOLIDAYS → CONGRATULATIONS! → OUR SWEET BABY → WEDDING → VACATION → THE END

When you press TITLE with "THE END" displayed, the titles disappear. When you press TITLE once again, the titles begin from "HELLO!" or your original title.

The titles are displayed in the language you selected in the menu system.

### If you have not stored any original titles

The titles begin from "HELLO!".

### Notes on titles

- You cannot select a title during recording.
- While the picture is fading in or fading out, a title does not fade in or out.
- You cannot record a title and the date or time at the same time.
- While the menu is displayed, the titles are not recorded.

### To select the title position

- Press MENU to display the menu.
- Turn the control dial to select TITLE POS, then press the dial.
- Turn the control dial to select CENTER [a] or BOTTOM [b], then press the dial.
- Press MENU to erase the menu display.

[a]



[b]



ç+øëðè ^ëíîè~âðíè ëáíâîñ. ùðñ  
òíâø. ~ëí ó. çáóí:  
àðíó:î+ñ î+øëðè, 1 → àðíó:î+ñ î+øëðè, 2  
→ HELLO! → HAPPY BIRTHDAY → HAPPY  
HOLIDAYS → CONGRATULATIONS! → OUR  
SWEET BABY → WEDDING → VACATION →  
THE END

òðíè ç· î+êíâúâ TITLE ò ë óóó. ç+âíóè  
èíëëí+^èè "THE END", î+øëðè èò~âáíú.  
òðíè ç· î+êíâúâ TITLE ó%èì ç+â, î+øëðè  
î+~íúú óóó. ç+ú, òñ ò "HELLO!" ëíè ò  
ç+~âè ó è,,èí+í. íòè î+øëðè.  
ç+øëðè óóó. ç+ú. ùðñ î+ñá'íâ, íóóó ~è  
ç·, ·. ç+èè, òèóúâíâ íâì. .

òðíè ç· îâ á+íâðíè, ò+íñú. í+íè1-íè·ó  
ó è,,èí+í. î·1 á+òèðèè  
àíëëí+^èè î+øëðèèè î+~íâúòñ ò "HELLO!" .

è ëíâ~+íèñ óúíóðèúâí, ò î+øëðèèè  
ç· îâ íóèâúâ, ·. ç+ú. î+øëðè, ,ó, áíñ  
á+òèðèè.

- ç úó, áíñ, íó,,%+ ëáó. ç+êíèèâ, ,ó%èúòñ  
èíèè, ,ó%èúòñ, î+øëðè. íâ, ,ó%èúòñ è íâ  
, ,ó%èúòñ.
- ç· îâ íóèâúâ á+òèðè, ç+ú. î+øëðè, è ç+úú  
èíèè, áíñ ó%íó, áíâííó.
- ç úó, áíñ, íó,,%+ óóó. ç+êíâúòñ íâì, ,  
î+øëðèèè íâ á+òèðè, ç. ùðñ.

ñíñ, ·.ó ç· òóíóèâíèñ î+øëðèèè

- ç+êíèèúâ ííóóíú MENU %íñ óóó. ç+êíèèñ  
íâì. .
- èó,â íèúâ %èðí úò ç, íâíèñ %íñ úó,,ó,  
~úó. ·, ·. ç+ú. TITLE POS, ç+á+úâí  
î+êíèèúâ %èðí.
- èó,â íèúâ %èðí úò ç, íâíèñ %íñ úó,,ó,  
~úó. ·, ·. ç+ú. CENTER [a] ëíèèèè  
[b], ç+á+úâí î+êíèèúâ %èðí.
- ç+êíèèúâ ííóóíú MENU %íñ úó,,ó, ~úó. ·  
óúâ áú. èíëëí+^èè. íâì. .

Advanced operations

íóó,â -âíðú,ó,+í+â óóâ ç+èè

# Making your own titles

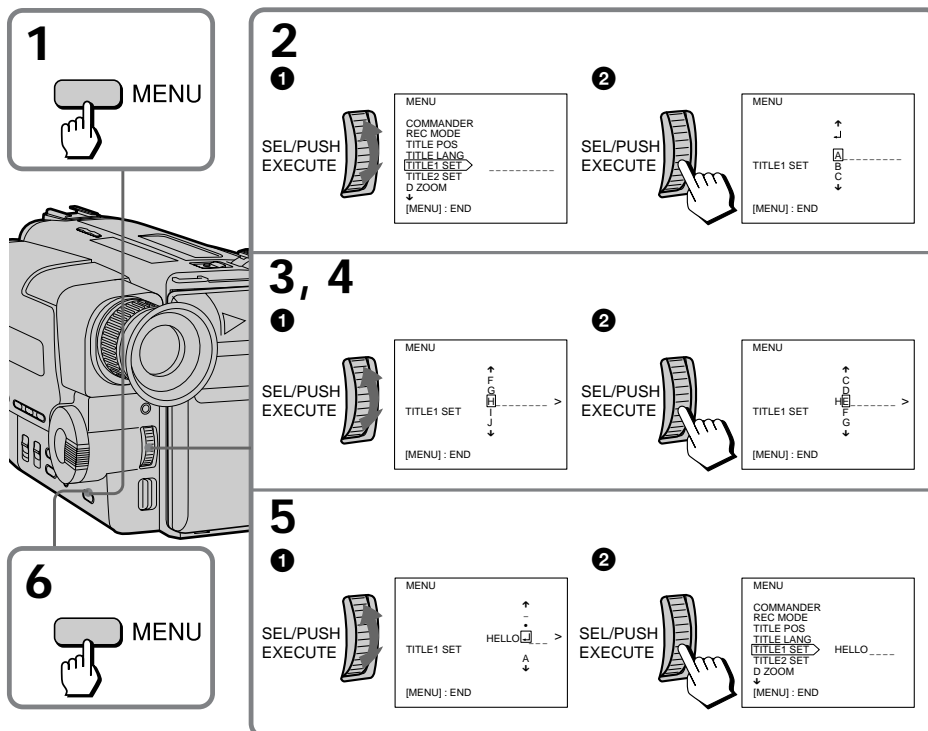
Όό·ού, άίί ° 1 ί+%οέοάέ

You can make two titles of up to 22 characters each, and store them in memory. We recommend to eject the cassette before you begin so that the power is not turned off on the way.

- (1) While the camcorder is in Standby mode, press MENU to display the menu.
- (2) Turn the control dial to select TITLE1 SET or TITLE2 SET, then press the dial.
- (3) Turn the control dial to select the desired character, then press the dial.
- (4) Repeat step 3 until you finish the title.
- (5) Turn the dial to select ↵, then press the dial. The title is stored in memory.
- (6) Press MENU to erase the menu display.

ç· ίοέάúά όόά%+ú, %, á ì+%οέοέ έά %ί+ίό, ί+έ%+ñ έ ά+ìάούέ έ1, ό+ίνú. .

- (1) άό,%, έ%άοί+íá + ì+ìό%έúόñ, άέέíá „ούό, ίόούέ, ì+έíέúά MENU %ίñ όού· +έάíέñ íáì. .
- (2) έό, á ìέúά á, úíέ ό, ό~ì~έ%έοί %ίñ , ·ό + TITLE1 SET έíέ TITLE2 SET, + ά+úά ì+έíέúά %έοί.
- (3) έό, á ìέúά á, úíέ ό, ό~ì~έ%έοί %ίñ , ·ό + έάí+άíό, ό άí+í+, + ά+úά ì+έíέúά %έοί.
- (4) έό, úό ìέúά όúìíú 3 %ό úά1 όό , όόί+ ç· ìá ά+ίόí~έúά ì+%οέό. .
- (5) έό, á ìέúά %έοί, ~úó··, ·· +ú, ↵, + ά+úά ì+έíέúά %έοί. ç+%οέό, ·ú%άú ά+ìάόάí+, ό+ίνú. .
- (6) ç+έíέúά MENU %ίñ όúέ +ìέñ έì%έí+^έέ íáì. .



## Making your own titles

ÖÓÁ%+ÏËÄ Ç+`E1 ÖÖ·ÖÚ,ÄÏÏ`1  
Ï+%-ÖËÖÄË

### To erase the title you have made

Press MENU, select the title you want to erase, and press the dial. Select ↵ at the leftmost character, then press the dial.

Do not select the blank to erase a character. Otherwise, the blank is stored as a title in memory.

### To change the title you have made

In step 2, select TITLE1 SET or TITLE2 SET, depending on which title you want to change, then press the dial. Select the desired characters again.

### If you enter 22 characters in step 4

The title is stored immediately (and you can skip step 5).

### If it takes more than 5 minutes to make a title with a cassette inserted

If the Standby mode lasts for more than 5 minutes with a cassette inserted, the power is turned off automatically.

If the power is turned off while you are making a title, set the POWER switch to OFF once, then to CAMERA. The title you have made remains stored in memory.

### Advancing the characters rapidly

Keep pressing the dial.

### Making a blank

Select a blank. It is counted as a character.

ÑÏfl ÖÚË +ÏËfl ÖÓÁ%+ÏÏÖË Ç+ÏË  
Ï+%-ÖËÖË

Ç+ËÏËÛÄ ÌÏÖÓÏÛ MENU, ,`··Ä ËÛÄ Ï+%-ÖËÖ, ,  
ÍÓÓÓ Û. Ç· 1ÓÚËÛÄ ÖÚÄ ÄÛ, , +Ä+ÛÄÏ  
Ï+ËÏËÛÄ %ËÖÏ. Ç··Ä ËÛÄ ↵, ò+ÏÓÏ ÌÄ, ÖÏ  
ÖÓÏÖÄÏËË, + Ä+ÛÄÏ Ï+ËÏËÛÄ %ËÖÏ.  
ÇÄ, ··Ë +ËÛÄ ÖÛÖÓÄ ÌÄÖÓÓ %Ïfl ÖÚË +ÏËfl  
ËÄ Ö,,ÏËÛ+. Ç Ö ÖË,ÏÓÏ ÖÏÛ·+Ä ÖÛÖÓÄ ÌÄÖÓÓ  
·Û%ÄÛ Ä+ÏÄÖÄÏÖ, ò+Ïfl, Ì+Ï Ï+%-ÖËÖ, .

ÑÏfl ËÄÏÄÏÄÏËfl ÖÓÁ%+ÏÏÖË Ç+ÏË  
Ï+%-ÖËÖË

Ç ÖÛÏÏÛÄ 2, ··Ä ËÛÄ TITLE1 SET ËÏË TITLE2  
SET, Ä+,ËÖËÏÖÖË ÖÚ ÖÓ,,Ó, Ì+ÏÛ. Ï+%-ÖËÖ.  
Ç· 1ÓÚËÛÄ ËÄÏÄÏËÛ, , +Ä+ÛÄÏ Ï+ËÏËÛÄ %ËÖÏ.  
Ç··Ä ËÛÄ ËÄÏ+ÄÏ·Ä ÄÏ+ÏË ÖÓfl, .

ÖÖÏË Ç·, ,ÄÏË 22 ÄÏ+Ï+, ÖÛÏÏÛÄ 4  
Ç+%-ÖËÖ, ò +ÄÛ ËÄ Ä+ÖÓÏËÏ+ÄÛÖfl (Ë Ç·  
ÏÖËÄÛÄ Ö ÖÓÛÖËÛ, ÖÛÏÏÛÄ 5).

ÖÖÏË ÖÓÁ%+ÏËÄ Ï+%-ÖËÖË Ä+ÏËÏ+ÄÛ ·ÓÏÄÄ 5  
ÏËÏÛÛ Ö Ë, ÖÛ+, ÌÄÏÏÖË Ì+ÖÖÄÛÄ  
ÖÖÏË ÄËËÏ „ÓÓÓ,ÏÖÖË·Û%ÄÛ Ö Ö%ÓÏË+Û, Öfl  
·ÓÏÄÄ 5 ÏËÏÛÛ Ö Ë, ÖÛ+, ÌÄÏÏÖË Ì+ÖÖÄÛÄ,  
ÖËÛ+ÏËÄ, ·ÏÏ. ~ËÛÖfl +, ÛÓÏ+ÛË~ÄÖÏË.  
ÖÖÏË Ö Ë ÖÓÁ%+ÏËË Ï+%-ÖËÖË, ·ÏÏ. ~ËÛÖfl  
ÖËÛ+ÏËÄ, ÛÖÛ+ÏÖ, ËÛÄ, ·ÏÏ. ~+ÛÄÏ, POWER  
ÖÏ+~+Ï+, ÖÓÏÖÄÏËËÄ OFF, + Ä+ÛÄÏ,  
ÖÓÏÖËÄÏËÄ CAMERA. ÖÓÁ%+ÏÏ+fl Ç+ÏË  
Ï+%-ÖËÖ, ÖÖÛ+ÏÄÛÖfl, ò+ÏflÛË.

Ä·ÖÚ ÖÄ Ö Ö%, ËËÄÏËÄ ÄÏ+ÏÓ,  
ÑÄ ËËÛÄ %ËÖÏ Ï+Ë+Û·Ï.

Ç··Ä ËÛÄ ÖÛÖÓÄ ÌÄÖÓÓ  
ÖÓÁ%+ÏËÄ ÖÛÖÓÓ,,Ó ÌÄÖÛ+. ËÏÖ Ö Ë +, ÏË, +ÄÛÖfl  
ÏÄÏ+ÏÛ.

## Editing onto another tape

αόιύε ι † % ũ,,ũ.  
ίâιúú

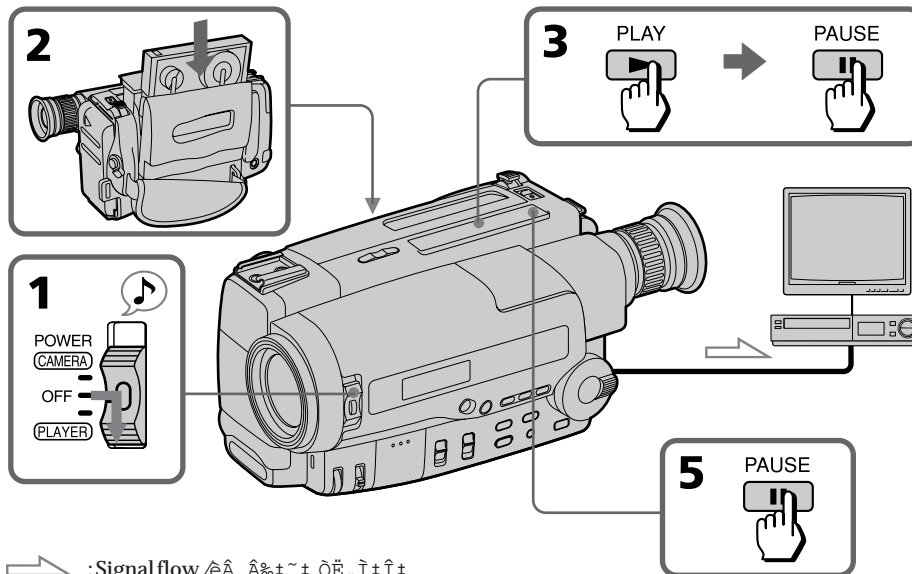
You can create your own video programme by editing with any other 8 mm, Hi8 Hi8, VHS VHS, S-VHS S-VHS, VHS-C VHSC, S-VHS-C S-VHSC or Betamax VCR that has video/audio inputs.

After connecting the camcorder to the VCR,

- (1) Set the POWER switch to PLAYER.
- (2) Insert a blank tape (or a tape you want to record over) into the VCR and insert your recorded tape into the camcorder.
- (3) Play back the recorded tape on the camcorder until you locate the point where you want to start editing, then press **II** to put the camcorder in playback pause mode.
- (4) On the VCR, locate the recording start point and put the VCR in recording pause mode.
- (5) Press **II** on the camcorder and VCR simultaneously to start editing.

ç· ίόεâúá όόά%+ú. ç+~ũ όό·óú,âιιũ.  
,έ%âóó ó, †ιιũ όúúâι ίόιú+ê† ό όóιό~..  
% ũ,,ó,,ό άçà ũêó† 8 8 ιι, Hi8 Hi8, VHS VHS,  
S-VHS S-VHS, VHS-C VHSC, S-VHS-C S-VHSC êιê  
B Betamax, ίόúó `È Èιââũ, ιό%\*, έ%âó/  
†ũ%êó.

- (1) ιόú+ιό,έúâ ,`ίι,~†úâι. POWER ι†  
PLAYER.
- (2) çóú+, ,úâ ~êóú. íâιúú (êιê íâιúú,  
ίόúó ũ. ç· ιόúéúâ óâ áâ+óêó+ú.) , άçà  
ê ,óú+, ,úâ á+óêó+ιιũ. íâιúú ,  
,έ%âóι+ιâ ũ.
- (3) çóóó óéâ,ó%éúâ á+óêó+ιιũ. íâιúú ,  
,έ%âóι+ιâ á%ó úâι óó , όóι† ç· íâ  
ó·ι† ũêéúâ ũó~íũ, , ίόúó óê ç· ιόúéúâ  
ι†~+ú. ίόιú+ê, † á+úâι ι+êιéúâ **II**%ιι  
, ,â%âιêη, έ%âóι+ιâ ` , áêêι ό+úâ`  
,óóó óéâ,â%âιêη.
- (4) ç+ê%éúâ ι† άçà ũó~íũ ι†~†ι† á+óêóê ê  
, ,â%éúâ άçà , áêêι ό+úâ` á+óêóê.  
(5) ε%ιό, áιâιιό ι†êιéúâ **II** ι†  
,έ%âóι+ιâ á ê ι† άçà %ιι ι†~†ι†  
ιόιú+ê†.



↗ :Signal flow /εâ á%†~† όê,,ι†ι†

**To edit more scenes**  
Repeat steps 3 to 5.

**To stop editing**  
Press **■** STOP on both the camcorder and VCR.

Ŋίηι ίόιú+ê† % ũ,,έι ό~âι  
έó,úó ηêúâ όũιúú\* ό 3 όó 5.

Ŋίηι όóú+ιό, ίê ίόιú+ê†  
ç+êιéúâ **■** ê ι† ,έ%âóι+ιâ á, ê ι† άçà.



**Additional Information**

# Changing the lithium battery in the camcorder

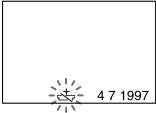
Νόοοίηέυάη, ήην έήύό ήη^έην

άηΐάηη έέύέά, όέ  
·ήηη άέίέ, , έέάόίηΐά ά

Your camcorder is supplied with lithium battery installed. When the lithium battery becomes weak or dead, the indicator flashes in the viewfinder for about 5 seconds when you set the POWER switch to CAMERA. In this case, replace the battery with a Sony CR2025 lithium battery. Use of any other battery may present a risk of fire or explosion. Discard used batteries according to the manufacturers instructions.

The lithium battery for the camcorder lasts for about one year under normal operation. (The lithium battery that comes installed at the factory may not last one year.)

ç+η, έέάόίηΐά η όηη·έάηη ύóóηό, ήάηόέ έέύέά, όέ·ήηη άέίέ. όόίέ έέύέά, ήη·ήηη άέίηη όóηΐάύ όηη·όέ έέέ όόίήόóó, ηά ήέάηίόέ, έέέέήηύó η·ύέάύ έέ, ηύ, , έέ·όέόήηύάήά. έ έ·ήέάέύάή, ήό, ύά~άηέά 5 όάήύή, ήό, η·ç· ύóóηήό, έύά, ηή·~ήηη. POWER, όόίόέάηέά CAMERA. ç·ήόή όήύ~ηά άηΐάηέύά·ήηη άέήύ ήη έέύέά, ή·ήηη άέήύ Sony CR2025. άόόή άό, ηέά η·όέ·ήηη άέίέ ήόέάύ ό έ, άóύέ ή έόήύ, όόόήηΐάηάηέην ήέέ, ά·, η. άέή, έέ·έ ύέύά έόόή, άό, ηή·ά·ήηη άέίέ, όóóó, άύóó, έέ ό έήóó ήή·έή άη, όέη·έά, όóó, έύάήη. άέύέά, ήη·ήηη άέήηη ηέην, έέάόίηΐά·ήηη άέήηη έ·ήέάέύάή, ήό, ύά~άηέά 1, , όέη·ό έ ήό ήηη, ή·ή· ήóήó, έην ηήόόήύηη·έέ. (άέύέά, όέ·ήηη άέίέ, ήóóó ήη·ήηη ύóóηήό, ήάηη ήη άη, όέά, ήόέάύ ήά η, ηέύέ, ήη·όέήη, , όέ.)



- Notes on lithium battery**
- Keep the lithium battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.
  - Wipe the battery with a dry cloth to assure a good contact.
  - Do not hold the battery with metal tweezers, otherwise a short-circuit may occur.
  - The lithium battery has positive (+) side and negative (-) side as illustrated. **Be sure to insert the lithium battery with the positive side facing out.**

- έ έήά~ήέην όό ήέύέά, όέ·ήηη άέήά ή ήέύά ήέύέά, ή·ήηη άέήύ, ήάóóá, ήά ηέóóóóήόή ηέην ηέάάέ. ç όήύ~ηά ό ό, ήηη, ηέην·ήηη άέήέ ήάήάήάηήό ό· ηέύέάó, ή, η·ή.
- έ όύ έύά·ήηη άέήύ όóήέ ήήηη, ηέην ήό, , ηύó· ό·άόά~έύ, ήό ό·έέ ήόήύήύ.
- çά ηά έέύά·ήηη άέήύ όόήό, ήάύηήέ~άόήó, ό όέή·άύη, έήη·ά ήόέάύ ό όέάόέύέ ήό όύήόά άη·ήηηέά.
- έ· ηέύέά, ήέήηέά, ηύό ήέύέά, ήη·ήηη άέήηη έήάάύ όόήόέέύάή, ή·έ (+) έ όύ έ·ήηη, ή·έ (-) όόή, ό·, ήήήόήηάηήό ήη έóóήήά. çά άη·ύέ, ύά ύóóηήό, έύ, ήέύέά, ή·ήηη άέήύ ήηή, ηύó· όόή, ό· ήηη άέήά όóóó, άύóó, ό, ηέέ όόή, ό·ή ήη, έέάόίηΐά ά.



Additional Information Νόοοίηέυάη, ήην έήύό ήη^έην

## Changing the lithium battery in the camcorder

á+íÁî+ îÉÚÊÂ,ÓÈ ·+ú+ ÂÈÍÈ ,  
,È%ÂÓí+íÂ Â

### WARNING

The battery may explode if mistreated. Do not recharge, disassemble, or dispose of in fire.

èèÖÑìèèÖÑöçàö  
ÖÖîÈÖ ·+ú+ ÂÈÍÓÈ îÁÖ +,Èí,ìóó· +~+ú,Öñ,  
Óî+ îÓÈÂ,Áó ,+ú,Öñ. çÂ ÓÂ ÂÁ+ ñÈ+ú, , îÂ  
+Â·È +ú, È îÂ · ÖÖ+ú, ·+ú+ ÂÈÍÛ, Ó,,Óî, .

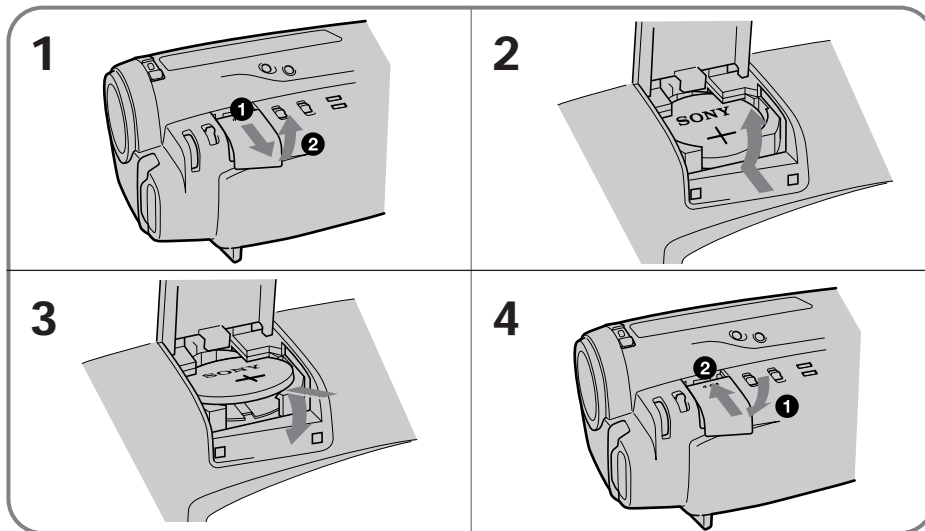
## Changing the lithium battery

á+íÁî+ îÉÚÊÂ,ÓÈ ·+ú+ ÂÈÍÈ

When replacing the lithium battery, keep the battery pack or other power source attached. Otherwise, you will need to reset the date and time.

è È Á+íÁîÂ îÉÚÊÂ,ÓÈ ·+ú+ ÂÈÍÈ%Â ÈÈÚÁ  
·+ú+ ÂÈÍ·È ·íÓí ÈíÈ% Ú,,ÓÈ ÈÖÓÚ~íÈí  
ÔÈÚ+îÈñ Ô ÈÖÓÂ%ÈîÂîí·í. àî+~Â ç+í  
Ô È%ÂÚÖñ ÓÂ ÂÚÚ+ì+ ,îÈ, +ú, %+ÚÚÈ , Âíñ.  
**(1)**èÂ Â%, Èì, ÚÁ í ·-íÚ È ÖÓÓñîÈÚÁ ÂÂ  
,,Â 1.  
**(2)**ç+ÈíÈÚÁ ·+ú+ ÂÈÍÛ Ó%Èì +Á È , \*ú+~ÈÚÁ  
ÂÂ ÈÁ%Â È+ÚÁíñ.  
**(3)**ìÖÚ+íÓ, ÈÚÁ îÓ, Û, îÉÚÊÂ, Û, ·+ú+ ÂÈÍÛ  
ÖÓíÓÈÈÚÁí, îÓÈ (+) ÖÓÓ ÓíÓÈ, Ó· +~ÂîíÓÈ  
ì+ ÛÈÚ.  
**(4)**á+í ÓÈÚÁ í ·-íÚ. á+ÚÁí ÓÂ Â%, Èì, ÚÁ  
í ·-íÚ, ÖÓí+ Óî+ îÂ Á+~ÂííîÁÚÖñ.

- (1) Slide the cover, and then pull it up.
- (2) Push the battery in once and pull it out from the holder.
- (3) Install the new lithium battery with the positive (+) side facing out.
- (4) Close the cover. Then slide the cover until it clicks.



# Resetting the date and time

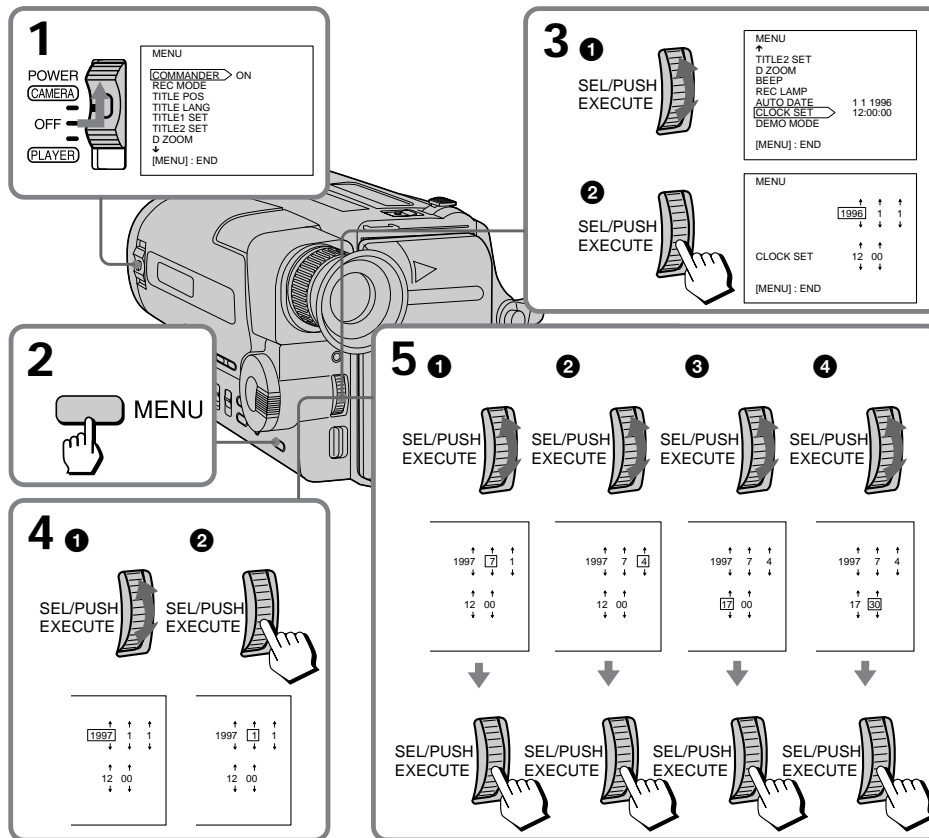
# Επαναφορά ημερομηνίας και ώρας

You can reset the date and time in the menu system.

- (1) Set the POWER switch to CAMERA.
- (2) Press MENU to display the menu.
- (3) Turn the control dial to select CLOCK SET, then press the dial.
- (4) Turn the control dial to select the desired year, then press the dial.
- (5) Set the month, day, hour, and minutes by turning the control dial and pressing the dial.
- (6) Press MENU to reset the menu display.

Στο σύστημα μενού μπορείτε να επαναφέρετε την ημερομηνία και την ώρα.

- (1) Βεβαιωθείτε ότι ο διακόπτης POWER είναι στη θέση CAMERA.
- (2) Πατήστε το κουμπί MENU για να εμφανιστεί το μενού.
- (3) Περιστρέψτε τον χειριστή για να επιλέξετε το CLOCK SET, και πατήστε τον χειριστή.
- (4) Περιστρέψτε τον χειριστή για να επιλέξετε τον επιθυμητό χρόνο, και πατήστε τον χειριστή.
- (5) Ρυθμίστε τον μήνα, την ημέρα, την ώρα και τα λεπτά περιστρέφοντας τον χειριστή και πατώντας τον χειριστή.
- (6) Πατήστε το κουμπί MENU για να επαναφερθεί η οθόνη του μενού.



Additional information: Επαναφορά ημερομηνίας και ώρας

## Resetting the date and time

ìòú+ìò, í+ %+ú° È , ÁÏÀÏÈ

**To correct the date and time setting**  
Repeat steps 4 and 5.

**To check the date and time**  
Press DATE to display the date indicator. Press TIME to display the time indicator. When you press the same button again, the indicator goes out.

**The year indicator changes as follows:**

1996 → 1997 ..... 2025

**Note on the time indicator**  
The internal clock of this camcorder operates on a 24-hour cycle.

Ñífl ÈòÒ †, íÁÏÈfl Ùòú+ìò, íÈ %+ú° È , ÁÏÀÏÈ  
èó, úó ÈÚÀ ÒÙííú° 4 È 5.

Ñífl Ò Ó, Á ÍÈ Ò Á%, † ÈÚÁÏ, ÌÒ  
Ùòú+ìò, íÁÏÈ' 1 %+ú° È , ÁÏÀÏÈ  
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%+ú°. ç+ÈÏÈÚÁ TIME %ífl ÓÓÓ. †ÈÁÏÈfl  
ÈÏÈÈÍ+ÚÓ †, ÁÏÀÏÈ. ÒÒÏÈ ç° Ì+ÈÏÁÚÁ ÚÓ ÈÁ  
Ò+ÍÙ. ííÒÓÍÙ Òìò, †, ÈÏÈÈÍ+ÚÓ ÈÒ~ÁÁÏÁÚ.

ÉÓ% ÈÁÏÁÏÈfl ÁÚÒfl ÒíÁ%Ù. ~ÈÏ Ó. †ÁÓí:  
1996 → 1997 ..... 2025

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çÒú ÓÁÏÈ'Á ~+ò° ~úÓÈ, È%ÁÓÍ+ÏÁ '°  
†. Óú+ú, 24-~+òó, òí ^ÈííÁ.

## Playback modes

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, ÓÒÒ ÓÈÁ, Â%ÁÏÈfl

The playback mode (SP/LP) is selected automatically according to the format in which the tape has been recorded. The quality of the recorded picture in LP mode, however, will not be as good as that in SP mode.

**Foreign 8 mm video**  
You may not play back tapes recorded on a different TV colour system. Because the TV colour systems differ from country to country, you may not be able to play back foreign pre-recorded tapes. Refer to the list of "Using your camcorder abroad" to check the TV colour system of foreign countries.

èÁÈÈÏ, ÓÒÒ ÓÈÁ, Â%ÁÏÈfl (SP/LP), °. È †ÁÚÒfl  
†, ÚÓÍ+ÚÈ~ÁÓÍÈ, ÓÓÓ, ÁÚÓ, ÈÈ Ò ÚÓ Ì+ÚÓÍ  
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ÁÈÈÏÁ LP. Ò%ÁÚ ÌÁ Ú+íÓÁ ÌÓ Ó-ÁÁ, í+í,  
ÁÈÈÏÁ SP.

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Ó Ó, Á ÍÈ ÒÈÓÚÁí ^, ÁÚÍÓ, Ó ÚÁíÁ, È%ÁÏÈfl  
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## Tips for using the battery pack

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This section shows you how you can get the most out of your battery pack.

### Preparing the battery pack

#### Always carry additional batteries

Have sufficient battery pack power to do 2 to 3 times as much recording as you have planned.

#### Battery life is shorter in cold environment

Battery efficiency is decreased, and the battery will be used up more quickly, if you are recording in a cold environment.

#### To save battery power

Turn **STANDBY** down when not recording to save battery power.

A smooth transition between scenes can be made even if recording is stopped and started again.

While positioning the subject, selecting an angle, or looking through the viewfinder lens, the lens moves automatically and the battery is used. The battery is also used when a cassette is inserted or removed.

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Additional Information

## Tips for using the battery pack

### When to replace the battery

While you are using your camcorder, the remaining battery indicator decreases gradually as battery power is used up.



When the remaining battery indicator reaches the lowest point, the indicator appears and starts flashing.

When the indicator changes from slow flashing to rapid flashing while you are recording, set the POWER switch to OFF on the camcorder and replace the battery pack. Leave the tape in the camcorder to obtain smooth transition between scenes before and after the battery pack has been replaced.

### Notes on the remaining battery indicator

- The remaining battery indicator of the camcorder may indicate different remaining capacity from that of the battery pack with its own indicator (not supplied). The indicator on the battery pack is more accurate.
- While you are using the battery case, the remaining battery indicator does not indicate correctly.

### Notes on the rechargeable battery pack

#### CAUTION

Never leave the battery pack in temperatures above 60°C (140°F), such as in a car parked in the sun or under direct sunlight.

While you are using your camcorder, the remaining battery indicator decreases gradually as battery power is used up.

When the remaining battery indicator reaches the lowest point, the indicator appears and starts flashing.

When the indicator changes from slow flashing to rapid flashing while you are recording, set the POWER switch to OFF on the camcorder and replace the battery pack. Leave the tape in the camcorder to obtain smooth transition between scenes before and after the battery pack has been replaced.

When the remaining battery indicator reaches the lowest point, the indicator appears and starts flashing. When the indicator changes from slow flashing to rapid flashing while you are recording, set the POWER switch to OFF on the camcorder and replace the battery pack. Leave the tape in the camcorder to obtain smooth transition between scenes before and after the battery pack has been replaced.

- The remaining battery indicator of the camcorder may indicate different remaining capacity from that of the battery pack with its own indicator (not supplied). The indicator on the battery pack is more accurate.
- While you are using the battery case, the remaining battery indicator does not indicate correctly.

When the remaining battery indicator reaches the lowest point, the indicator appears and starts flashing.

When the indicator changes from slow flashing to rapid flashing while you are recording, set the POWER switch to OFF on the camcorder and replace the battery pack. Leave the tape in the camcorder to obtain smooth transition between scenes before and after the battery pack has been replaced.

## Tips for using the battery pack

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·†Ú‡ ÂÈìó, ò·íóí‡

### The battery heats up

During charging or recording, the battery pack heats up. This is caused by energy that has been generated and a chemical change that has occurred inside the battery pack. This is not a cause for concern and is normal.

### Battery pack care

- Remove the battery pack from the camcorder after using it, and keep it in a cool place. When the battery pack is installed to the camcorder, a small amount of current flows to the camcorder even if the POWER switch is set to OFF. This shortens battery life.
- The battery pack is always discharging even when it is not in use after charging. Therefore, you should charge the battery right before using the camcorder.

### How to use the switch on the battery pack

When the switch is supplied with the battery pack ( [a] on page 57), you can use it to find whether the battery pack is charged or not. Set the switch to the "nomark" position when charging is completed. Set the switch to the "red mark" position when the battery is used up (or in whichever direction you want to remind yourself).

### The life of the battery pack

If the battery indicator flashes rapidly just after turning on the camcorder with a fully charged battery pack, the battery pack should be replaced with a new fully charged one.

### Charging temperature

You should charge batteries at temperatures from 10°C to 30°C (from 50°F to 86°F). Lower temperatures require a longer charging time.

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·†Ú‡ ÂÈì·È·íóí íÁòóó ÁÈóó, Áííò óÁ ÁÈ  
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## Tips for using the battery pack

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### Notes on charging

#### A brand-new battery

A brand-new battery pack is not charged. Before using the battery pack, charge it completely.

#### Before recharging a used battery pack

- Make sure to use up the battery before recharging.
- If recording is completed before the indicator appears in the viewfinder, you should remove the tape, turn the POWER switch to CAMERA, turn STANDBY up, and leave the camcorder until the indicator flashes rapidly.
- Charging the usable battery causes a lowering of battery capacity. Battery capacity can be recovered if you fully discharge and charge the battery again.

#### After long storage

Recharge the battery pack after a long period of storage. If the battery pack is charged fully but not used for a long time (about one year), it becomes discharged. Charge it again, but in this case the battery life will be shorter than normal. After several charging and discharging cycles, the battery life will recover its original capacity.

### Notes on the terminals

If the terminals (metal parts on the back) are not clean, the battery charge duration will be shortened.

When the terminals are not clean or when the battery pack has not been used for a long time, repeatedly install and remove the battery pack a few times. This improves the contact condition. Also, wipe the + and - terminals with a soft cloth or paper.

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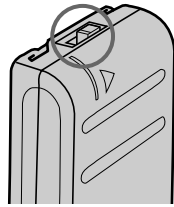


## Tips for using the battery pack

### Be sure to observe the following

- To prevent an accident caused by a short circuit, do not allow metal objects such as a necklace to touch the battery terminals. When carrying the battery pack, attach to the terminal cover. [b]
- Keep the battery pack away from fire.
- Keep the battery pack dry.
- Do not open or try to disassemble the battery pack.
- Do not expose the battery pack to any mechanical shock.

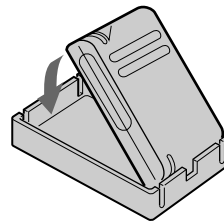
[a]



• To prevent an accident caused by a short circuit, do not allow metal objects such as a necklace to touch the battery terminals. When carrying the battery pack, attach to the terminal cover. [b]

- Keep the battery pack away from fire.
- Keep the battery pack dry.
- Do not open or try to disassemble the battery pack.
- Do not expose the battery pack to any mechanical shock.

[b]



## Notes on the battery case

- Use only with alkaline batteries. You cannot use the battery case with manganese batteries or R6 (size AA) rechargeable NiCd batteries.
- Using with Sony alkaline batteries is preferable.
- Battery life is remarkably shorter in a cold environment (lower than 10 °C/50 °F).
- Keep the metal part clean. If it gets dirty, wipe it with a soft cloth.
- Do not disassemble or convert the battery case.
- Do not expose the battery case to any mechanical shock.
- During recording, the battery case heats up. This is not cause for concern.
- Prevent the electrode in the battery case from coming in contact with a metal object.
- If you will not use the battery case for a long time, detach the battery case from the camcorder and remove the batteries from the battery case.

• Use only with alkaline batteries. You cannot use the battery case with manganese batteries or R6 (size AA) rechargeable NiCd batteries.

- Using with Sony alkaline batteries is preferable.
- Battery life is remarkably shorter in a cold environment (lower than 10 °C/50 °F).
- Keep the metal part clean. If it gets dirty, wipe it with a soft cloth.
- Do not disassemble or convert the battery case.
- Do not expose the battery case to any mechanical shock.
- During recording, the battery case heats up. This is not cause for concern.
- Prevent the electrode in the battery case from coming in contact with a metal object.
- If you will not use the battery case for a long time, detach the battery case from the camcorder and remove the batteries from the battery case.

Additional information



# Maintenance information and precautions


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## Moisture condensation

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 camcorder may not operate correctly. To prevent possible damage under these circumstances, the camcorder is furnished with moisture sensors. Please take the following precautions.

### Inside the camcorder

When the  and  indicators flash, moisture has condensed inside the camcorder. If this happens, no other function except for tape ejection will work.

Eject the tape, turn off the camcorder and leave it with the cassette compartment open for at least one hour. The camcorder can be used again if the  indicator does not appear when the power is turned on again.

### On the lens

If moisture condenses on the lens, no indicator appears, but the picture becomes dim. Turn off the power and do not use the camcorder for about one hour.




### How to prevent moisture condensation

When bringing the camcorder from a cold place to a warm place, put the camcorder in a plastic bag and allow it to adapt to room conditions over a period of time.

- (1) Be sure to tightly seal the plastic bag containing the camcorder.
- (2) Remove the bag when the air temperature inside it has reached the temperature surrounding it (after about one hour).

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ó%ëí ~†ò. çë%áóí+íá † òíó, † íóéáú· †ú.  
ëòóóí, áó, †í†, áóíë ëíëëí+úó  íá  
óófl, éúófl, íó, %† óëú+íéá· ú%áú, íí. ~áíó  
óóflú, .

ç† ó· áíúë, á  
òòîë , î†, † óíóí%âìòë ó, †í†ò, î†  
ó· áíúë, á, úó íëí†í†fl ëíëëí+^ëfl  
óófl, íflú, òfl íá· ú%áú, íó éáó· †éáíéá  
óú†íó, éúófl úúóíí· í. éúíí, ~éúá óëú+íéá ë  
íá ëòóóí, áúéúá , ë%áóí+íá † , úá~áíéá  
ó%ìó„ó ~†ò†.

ä†í ó á%óó, †úéú, íóí%âìò†^ë,  
, î†, ë  
è ë , íáòâìëë , ë%áóí+íá † ò 1óíó%ìó„ó  
íáòú† , úáóíóá óóíóééúá , ë%áóí+íá † ,  
òòîë~úéíáíó, †è ó†íáú ë %†éúá áë  
, óáíóëìóóú, †%†óúë ó, †ú, òfl í íóíí†úí· í  
úòíó, éflí , úá~áíéá óó á%áíáííó„ó óá èó%†  
, áíáíë.

- (1) çá á†· ú%áú „á íáúë~íó á†, flá†ú.  
óòîë~éúíáíó, †è ó†íáú, óó%á é†· ëë  
, ë%áóí+íá †.
- (2) ëíëíëúá ó†íáú, íó, %† úáíóá †úú † , íúú ë  
íá„ó%óóúë, íáú úáíóá †úú †  
óí úë†, -áë ò á% (ò éíá íó òòúóófl  
ó%ëí ~†ò).



## Maintenance information and precautions

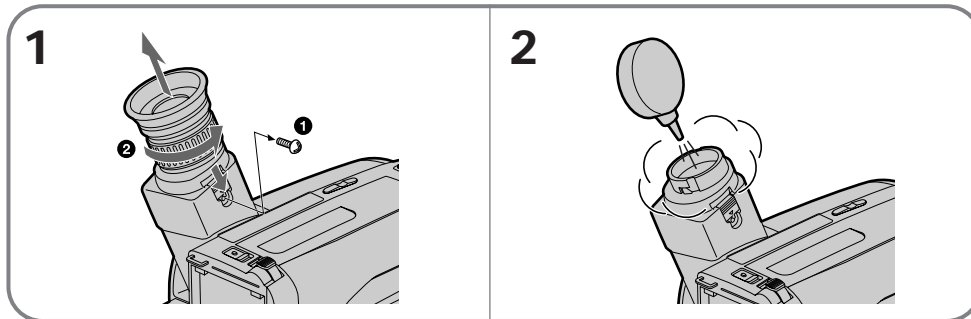
àìÛó Ì†^Èñ òó Û₁ó%Û Á†  
†òò† †úóÏ È ò Â%òóóó óÈìóóÛÈ

### Removing dust from inside the viewfinder

ì%†íÀìÈÄ Ò°îÈ ÈÀìÛú È  
,È%óÈòí†úÁíñ

- (1) Remove the screw with a screwdriver (not supplied). Then, while sliding the RELEASE knob, turn the eyecup in the direction of the arrow and pull it out.
- (2) Clean the surface with a commercially available blower.

- (1) εìÈìÈÛÁ ,ÈìÛ ò óóìó . . óó, Á úíÈ (ìÀ ò Èí†, †ÁÚòñ). á†úÁí, òÁ Â%, È,, †ñ Û~Û RELEASE, òó, Á ÌÈÛÁ óíÛíñ , ì†ò †, ÌÀìÈÈ óó ÁíÈÈ òìÈìÈÛÁ Á,, ó.
- (2) ε~ÈóóÛÈÛÁ òó, Á ììóóú, ò Ó%ó, ó~ì°ì Ûóó òÈòó, óì, ò Èó· ÁÚÁì·ì íóííÁ ~ÀóíÈì óóóó·óì.

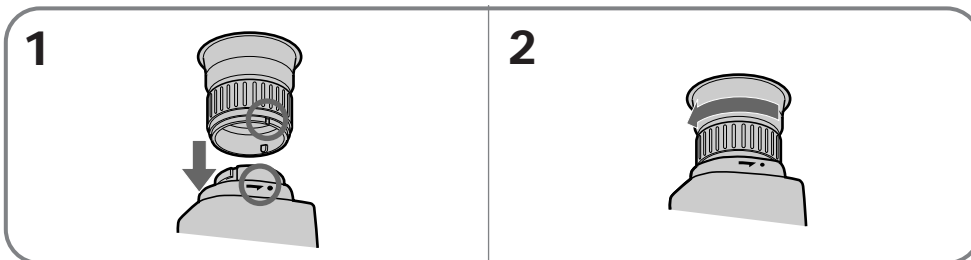


### To reattach the eyecup

- (1) Align the groove on the eyecup with the mark on the barrel.
- (2) Turn the eyecup in the direction of the arrow.
- (3) Replace the screw.

Ñíñ ò Èí ÁòíÀìÈñ óíÛíñ †

- (1) εó, ÌÀóóÛÈÛÁ Ì†ì†, ÌÛ Ì† óíÛíñ Á ò · ÌÁÚíóÈ Ì† íó óóòÁ.
- (2) εó, Á ÌÈÛÁ óíÛíñ , ì†ò †, ÌÀìÈÈ óó ÁíÈÈ.
- (3) ìóó†ìó, ÈÛÁ , ÈìÛ.



### Caution

Do not move any other screws. You may remove only the screw to remove the eyecup.

è Â%óóóÁ ÁÈÀìÈÄ

çÁ òìÈìÈÛÁ Ì†íÈÄ-ìÈ·ó% Û,, ÈÄ , ÈìÛ° . ç° ÌóÈÄÛÁ òìñú, úóí, íó , ÈìÛ %íñ òìñúÈñ óíÛíñ †.

## Maintenance information and precautions

àìÛó Ì†^Èñ Òó Û₁ó%Û Á†  
†òò† †úóì È ò Â%òóóó óÈìóóúÈ

### Precautions

#### Camcorder operation

- Operate the camcorder using 6.0V (battery pack), or 7.5V (AC power adaptor).
- For DC or AC operation, use only the recommended accessories.
- Should any solid object or liquid fall into the casing, unplug the camcorder and have it checked by your nearest Sony dealer before operating it any further.
- Avoid rough handling or mechanical shock. Be particularly careful of the lens.
- Keep the POWER switch set to OFF when not using the camcorder.
- Do not wrap up the camcorder and operate it since heat may build up internally.
- Keep the camcorder away from strong magnetic fields or mechanical vibration.

#### On handling tapes

Do not insert anything in the small holes on the rear of the cassette. These holes are used to sense the type of tape, thickness of tape, and if the recording tab is out or in.

#### Camcorder care

- When the camcorder is not to be used for a long time, disconnect the power source and remove the cassette. Periodically turn on the power, operate the camera and player sections and play back a tape for about 3 minutes.
- Clean the lens with a soft brush to remove dust. If there are fingerprints on the lens, remove them with a soft cloth.
- Clean the camcorder body with a soft dry cloth, or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent which may damage the finish.

### è Â%òóóó óÈìóóúÈ

ê†·óú† ò , È%Áóí†íÀ ÒÈ

- ùíòòíÛ†úÈ ÛÈÚÁ , È%Áóí†íÀ Û Èòòóí. Áóñ 6,0 Ç (·ú† ÂÈì·È·íóí) ÈíÈ 7,5 Ç (ÒÁÚÁ, ÓÈ †%+óóÁ ÒÁ Áí. Úóí†).
- Ñíñ †·óú· óóóóó. Úóí† ÈíÈ ÒÁ Áí. Úóí† Èòòóí. ÁÛÈÚÁ Úóí. íó ÁíóíÁí%ÚÁí·Á Ò Èí†%íÀÈìóóúÈ.
- Ç òíÛ~†Á Òóó†%†ìÈñ í†íÈ₁-ìÈ·óú, Á %₁ Ò Â%íÀÚó, ÈíÈ ÈÈ%íóóúÈ , ÌÛÛ . íó Úóó† í†íÀ , óúíí. ~ÈÚ. , È%Áóí†íÀ Û È Ò Ò, Á ÈÚ. ÁÁ , ·íÈÈ+È·Áí † , ÁìÛóó, Á Sony ÒÁ Â% %†í. íÀÈ·ÁÈ ~íóòíÛ†ú†^ÈÁÈ.
- àÁ·Á. , †ÈÚÁ „ Û·ó, óó· †~ÁìÈñ ò , È%Áóí†íÀ ÒÈ ÈíÈ íÀ₁+ìÈ~Áòíó, ó Û%† Ìó„ó , ÓÁ%ÁÈòó, Èñ. ÁÚ%. ÚÁ óóó·Áììò óóóó óÈì· ò ó· ÁíúÈ, óí.
- ÑÁ ÈÈÚÁ , ·íí. ~†ÚÁí. POWER , ÓóíóÈÁìÈÈ OFF, ÁòíÈ , È%Áóí†íÀ † íÀ Èòòóí. ÁÚÁóñ.
- ÇÁ Á†, Ò †~È, †ÈÚÁ , È%Áóí†íÀ Û È ÌÁ †·óú†ÈÚÁ Û†íÈì ó· †Áóí ò ÌÁÈ, Óóòíóí, ÌÛ , ÌÛÛ È í†íÀ · íóÈÁÚ Óó%ìñÛ, Òñ ÚÁíÒÁ †ÚÛ †.
- ÑÁ ÈÈÚÁ , È%Áóí†íÀ Û , %†íÈ óó ÒÈí. Ì·₁ Ì† , ÌÈÚì·₁ ÓóíÁÈ ÈíÈ íÀ₁+ìÈ~ÁòíÈ₁ , È· †~ÈÈ.

éúíóòÈÚÁí, Ìó ó· †~ÁìÈñ ò íÀìú†íÈ ÇÁ , óú†, ÌñÈÚÁ ÌÈí†íÈ ò Â%íÀÚó, , í†íÀì ÌÈÁ óó, Á óúÈñ Ì† Á†%ìÁÈ òóó òíÁ í†òòÁÚ· . ÚúÈ óó, Á óúÈñ Èòòóí. ÁÛ. Úóñ %íñ óó Â%ÁíÁìÈñ ÚÈò† íÀìú· , Úóí·Èì· íÀìú· È Ì†íÈ~Èñ íÀòÁóóí† Á†òÈòÈ.

ì₁ó% Á† , È%Áóí†íÀ ÒÈ

- òòíÈ , È%Áóí†íÀ † íÀ ·Ú%ÁÚ Èòòóí. Áó, †Ú, Òñ %ìÈÚÁí, ÌóÁ , Áíñ, óúíí. ~ÈÚÁ Èòóó~íÈí ÒÈÚ†ìÈñ È ÈÁ, íÁíÈÚÁ í†òòÁÚ. èÁ Èó%È~ÁòíÈ , íí. ~†ÈÚÁ ÒÈÚ†ìÈÁ, ò ÓÈÁ, Ó%ÈÚÁ ÓÓÁ †~ÈÈ Ò , È%Áóí†íÀ ÒÈ È ÒÁí~ÈÁÈ òíÁÈÁ † È , Óóò ÓÈÁ, Ó%ÈÚÁ íÀìúú Óó ñ%í† 3 ÌÈìÚÚ.
- é~È· †ÈÚÁ ó· ÁíúÈ, Ìñ, íóÈ íÈòóó~íóÈ %íñ Û%†íÀìÈñ ò·íÈ. ÓòíÈ Ì† Óó, Á ÌìóóúÈ ó· ÁíúÈ, † ÈíÁ. Úóñ óóóÁ~†úíÈ ò†í. ^Á, , Û%†íÈÚÁ Èì ò óóíó· , Ìñ, íóÈ Ûí†íÈ.
- é~È· †ÈÚÁ íó ÚÚò , È%Áóí†íÀ · Ìñ, íóÈ ÒÚíóÈ Ûí†ì. . ÈíÈ ÈÁ Ìñ, íóÈ Ûí†ì. , , òíÁ, í† òíó~ÁììòÈ , Ìñ, íóí† †óó, ó Á íó. ^Á, ò ò Â%óó, †. ÇÁ Èòòóí. ÁÛÈÚÁ ÌÈí†íÈ₁ †óó, ó ÈÚÁíÁÈ, Óóòíóí, ÌÛ ~úó íóÈÁÚ Óó, Â%ÈÚ, ÓÚ%ÁííÚ.

Additional information

## Maintenance information and precautions

à ì ù ó ì † ^ ë ñ ó ó ù ì ó ÷ ù á †  
† ò ò † † ú ó ì ë ò á ÷ ò ò ú ó ó ë ì ò ò ú ë

- Do not let sand get into the camcorder. When you use the camcorder on a sandy beach or in a dusty place, protect it from the sand or dust. Sand or dust may cause the unit to malfunction, and sometimes this malfunction cannot be repaired.

### AC power adaptor Charging

- Attach the battery pack firmly.
- Repeated charging while some capacity remains causes a lowering of battery capacity. However the original battery capacity can be recovered if you use the battery completely and charge it fully again.
- Place the battery pack on a flat surface without vibration during charging.
- The battery pack will get hot during charging. This is normal.

### Others

- Unplug the unit from the mains when not in use for a long time. To disconnect the mains lead, pull it out by the plug. Never pull the cord itself.
- Do not operate the unit with a damaged cord or if the unit has been dropped or damaged.
- Do not bend the AC power cord (mains lead) forcibly, or put a heavy object on it. This will damage the cord and may cause a fire or an electrical shock.
- Be sure that nothing metallic comes into contact with the metal parts of the connecting plate. If this happens, a short may occur and the unit may be damaged.
- Always keep the metal contacts clean.
- Do not disassemble the unit.
- Do not apply mechanical shock or drop the unit.
- While the unit is in use, particularly during charging, keep it away from AM receivers and video equipment because it will disturb AM reception and video operation.

- ÇÁ ÓÓÁ, òíñëúÁ òÁòíú óóò+òú, , Ë%ÁÓÍ+ÌÁ Ù. òòíë Ç\* ÈÒÓÓÍ, ÁÚÁÚÁ, Ë%ÁÓÍ+ÌÁ Ù ì † ÓÁÒ~ † ÌÓÍ ÓÓñÈÁ ÈÌÈ, ò\* Ì. ÌÓÍ ÌÁÓÚÁ, ÚÓ ò Á%Ó ì † ÌñÈÚÁ ÁÁ ÓÚ ÓÁÒÍ+ ÈÌÈ ò\* ÌÈ. ëÁÒÓÍ ÈÌÈ ò\* Ì, ÌÓ,, ÚÚ, 'Á, †Ú, ÌÁÈÒ ì †, ÌÓÓÚ, , È, ÌÁÍÓÓÚ \* ì ÓÍÚ~ ñ ì ÁÈÒ ì †, ÌÓÓÚ, ÌÁ ÓÓ% ÌÁÈÈÚ ÁÍÓÍÚÚ.

ëÁÚÁ, òÈ †% † ÓÚÁ ÒÁ ÁÌ. ÚÓÍ †  
á † ñ% † †

- è ÈÒÓÁ% ÈÌÈÚÁ Ì †% ÁÈÌÓ . †Ú † ÁÈÌ' È . ÌÓÍ.
- è ò, ÚÓ Ì † ñ Á † ñ% Ì † ò È ÓÓÚ †, ~ ÁÈÒ Ì ÁÍÓÓÚ ÓÈ ÁÍÓÓÚÈ ò È, Ó% ÈÚ Í ò Ì È ÈÁÌÈ, ÁÍÓÓÚÈ . †Ú † ÁÈÌÓ, ò . ÌÓÍ †. È% Ì † ÌÓ, ÒÁ, ò Ì † ~ † Ì, Ì † ñ ÁÍÓÓÚ. . †Ú † ÁÈÌÓ, ò . ÌÓÍ † ÌÓÈÁÚ . 'Ú, , ò ÓÓÚ † ÌÓ, Ì Á Ì †, ÁÒ ÌÈ Ç\* ÓÓ Ì ÌÓÓÚ, . % ó ÌÓÍ † † ÈÒÓÓÍ, ÁÚÁÚÁ ÁÍÓÓÚ, . †Ú † ÁÈÌÓ, ò . ÌÓÍ †, † ÓÓÚÓÍ ÓÓ Ì ÌÓÓÚ. . Á † ñ% ÈÚÁ Á, ò.
- è † ÁÍÁÓÚÈÚÁ . †Ú † ÁÈÌ' È . ÌÓÍ Ì † ÓÍÓÓÍÓÈ ÓÓ, Á ì ÌÓÓÚÈ . ÁÁ, È. † ^ ÈÈ, ò, Á ñ ñ Á † ñ% ÌÈ. ùÓ ñ, ÌñÁÚÒñ Ì ò Ì † Ì. Ì.

è Ó~ ÁÁ

- è ÚÓÓÁ% ÈÌÈÚÁ †ÓÓ † ÚÓ ÓÚ ~ ÌÁÍÚ È ~ ÁÓÍÓÈ ÓÁÚÈ, ÁÒ ÌÈ ò Ì ÌÁ ÈÒÓÓÍ, ÁÚÁÚÒñ, ÚÁ ~ ÁÌÈÁ % ÌÈÚÁ Ì, ÌÓ, ò, ÁÍÁÌÈ. Ñññ ÓÓÚÓÁ% È Ì Á ÌÈñ ÓÁÚÁ, ò, ò ò ò, Ó% †, 'Ú † ÈÚÁ Á, ò Á † † Á' ÁÌ. ÇÈÍÓ, % ÌÁ ùñ ÌÈÚÁ Á † ò Ì ò, Ó%.
- ÇÁ ~ ÍÓÓÍÚ+ÚÈ ÙÈÚÁ †ÓÓ † ÚÓ ò ÓÓ, ÁÈ% Á Ì Ì' Ì - Ì Ù ÓÍ ÈÌÈ ÈÁ, ÁÒ ÌÈ †ÓÓ † Ú . ' Ì Ù ÓÍÁ Ì ÈÌÈ ÓÓ, ÁÈ% Á Ì.
- ÇÁ ò, È. † ÈÚÁ ÓÁÚÁ, òÈ - Ì Ù ÒÁ ÁÌ. ÚÓÍ † ( ÓÁÚÁ, òÈ ò ò, Ó% ) È ÌÁ Ì †% ÈÚÁ ùñ ÈÁ Ì' Á ò Á% ÌÁÚ' Ì † ÌÁ, ò. ùÓ ÓÍÓÈÁÚ ÓÓ, Á% ÈÚ, ÓÁÚÁ, òÈ - Ì Ù È ÌÓÈÁÚ ò È, ÁÓÚÈ Í ÓÓÈ † Ù ÈÌÈ ÓÓ † ÈÁÌÈ. ~ ÌÁÍÚ È ~ ÁÓÍÈ Ì ÓÓÍÓÍ.
- è ÌÁ% ÈÚÁ Á † ÚÁ Ì, ~ ÚÓ . ' Ì È Ì † Ì ÈÁ ÌÁÚ+ Ì ÌÈ ~ ÁÓÍÈÁ ò Á% ÌÁÚ' Ì Á ò È Ì Ó% ÈÌÈ, ÌÓÍÚ+ ÌÚ ò ÌÁÚ+ Ì ÌÈ ~ ÁÓÍÈÈÈ % ÁÚ+ Ì ñ ÌÈ ÓÓÁ% ÈÌÈÚÁ Ì, ÌÓÈ ò Ì † ÓÚÈ Ì' . Òò ÌÈ ~ ÚÓ ò ÓÈÁÓÈ% ÁÚ, ÚÓ ÌÓÈÁÚ, ÓÁ Ì È Ì ÌÚÚ, ÌÓ ÓÚÍÓÁ Á † Ì' Ì † Ì ÈÁ È † òÓ † † Ú ÌÓÈÁÚ . ' Ú, ÓÓ, ÁÈ% Á Ì.
- ÇÓÁ, % † ÓÓ% % Á ÈÈ, † ÈÚÁ ÌÁÚ+ Ì ÌÈ ~ ÁÓÍÈÁ ÌÓÍÚ+ ÌÚ, ~ ÈÓÓÚÁ.
- ÇÁ † Á . È † ÈÚÁ † ÓÓ † † Ú.
- ÇÁ ÓÓ%, Á „ † ÈÚÁ † ÓÓ † † Ú ÌÁ Ì † ÌÈ ~ ÁÓÍÈÈ Ù% † † Ì È ÌÁ Ó ÌñÈÚÁ Á, ò.
- Óò ÌÈ † ÓÓ † † Ú Ì † Ì Ó% ÈÚÓñ, ~ ÍÓÓÍÚ+ Ú † ^ ÈÈ, ÓÓÓ. Á Ì ÌÓ, ÁÈÈ ÌÁ Á † ñ% ÌÈ, % Á ÈÈÚÁ Á, ò , % † ÌÈ ÓÚ ò ÈÁ Ì ÌÈÍÓ, ÁÁ È , Ë% ÁÓÓ. ò Ù% ò, † ÌÈñ, ÓÓÓÍÚ ~ ÚÓ ÓÍ ÌÓÈÁÚ Ì † Ù ~ ÈÚ, ò ÈÁ Ì ÁÁ È † . ÓÓÚ , Ë% ÁÓ † ÓÓ † † ÚÚ ' .



# Using your camcorder abroad

àòòóî, áó, †ìèâ ç†-âè  
, è%âóí†iâ ° á† ù.âèóí

Each country or area has its own electricity and TV colour systems. Before using your camcorder abroad, check the following points.

## Power sources

You can use your camcorder in any country or area with the supplied AC power adaptor within 110V to 240V AC, 50/60Hz.

## Difference in colour systems

This camcorder is a PAL system-based camcorder. If you want to view the playback picture on a TV, it must be a PAL system-based TV or a SECAM system-based TV with a PAL-SECAM transcoder. Check the following list.

### PAL system

Australia, Austria, Belgium, China, Denmark, Finland, Germany, Great Britain, Holland, Hong Kong, Italy, Kuwait, Malaysia, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, Thailand, etc.

### PAL M system

Brazil

### PAL N system

Argentina, Paraguay, Uruguay

### NTSC system

Bahamas Islands, Bolivia, Canada, Central America, Chile, Colombia, Ecuador, Jamaica, Japan, Korea, Mexico, Peru, Surinam, Taiwan, the Philippines, the U.S.A., Venezuela, etc.

### SECAM system

Bulgaria, Czech Republic, France, Guyana, Hungary, Iran, Iraq, Monaco, Poland, Russia, Slovak Republic, Ukraine, etc.

ä+è%+fl òú †ì† èîè ó.†+òú. èíâáú ò, ó.  
óó.óú, àìù. òèòúâìù ~íâíú è~âóíóè òâúè è  
òèòúâìù ^, áúìò,, ó úâíâ, è%âìèfl. èâ è%  
èòòóí, áó, †ìèâ ç†-âè, è%âóí†iâ ° á†  
ù.âèóí ò ó, á. úâ òíâ%ù. èâ òúííúˆ:

## àòóó~ìèíè òèú†ìèfl

çˆ íòèâúâ èòòóí, áó, †ú. ç†-ù, è%âóí†iâ ù  
, í. .òè òú †ìâ èîè ó.†+òúè ò ò èí†,, †âíˆí  
òâúâ, ˆí †%+òúâ òí òâ âí. úóí†, ò â%âí†+  
óú 110 ç%ó 240 ç òâ âí. úóí†, 50/60 éˆ.

## è†âíè~èfl, òèòúâì†+ì ^, áúìò,, ó úâíâ, è%âìèfl

Ñ†ìì†+fl, è%âóí†iâ † óòìò, †ì† ì† òèòúâíâ  
PAL. òòíè çˆ 10úèúâ ò òòíóú áú.  
, óòò óèâ, ó%èíòâ èáó. †èâìèâ ì†  
úâíâ, èáó â, òì %òíèâì .ˆú. óòìò, †ì ì†  
òèòúâíâ PAL èîè èâ ì† òèòúâíâ SECAM ò  
ú †ìòíó%â òí PAL-SECAM: è ó, á. úâ  
òíâ%ù. èè òèòòóí.

èèòúâì† PAL  
À, òú †ìèfl, À, òú èfl, Àâí,, èfl,  
çâíèíó. èú†ìèfl, èâ ì†ìèfl, èóí††ì%èfl,  
èóííóí,, Ñ†ìèfl, àòò†ìèfl, áú†ìèfl, áèú†è,  
áú, âèú, á†ì†èâèfl, çó, †fl áâí†ì%èfl,  
çó, À,, èfl, èó úú, †ìèfl, èèì,, †òú, ††èí†ì%,  
ìèìíflì%èfl, ò, à^èfl, ò, âè^† èfl, è% .

èèòúâì† PAL-M  
À †âèíèfl

èèòúâì† PAL-N  
À „âìúèì†, è† †,, †è, ì ù,, †è

èèòúâì† NTSC  
À†,, †ìòíèâ óòú ó, †, áóíè, èfl, çâíâòú~í†,  
ä†ì†%†, áóíúí.èfl, áó àfl, áâíòèí†, èâ ù,  
èú èì†ì, èòâ, ††è, †ì. . íèíèòòèìˆ,  
ñâìú †ì. ì†fl âíâ èí†, óèíè, ùí, †%ó,  
ùí†èí†, ùòòìèfl è% .

èèòúâì† SECAM  
Áóí,, † èfl, çâí,, èfl, è†è†ì†, à †í, à †ì,  
áóí†íó, èóí.ˆ†, èóòòèfl, èíó, †^í†fl  
èâòòú.íèí†, ìí †èì†, ì †ì^èfl, óâˆòí†fl  
èâòòú.íèí† è% .



## Trouble check

If you run into any problem using the camcorder, use the following table to troubleshoot the problem. Should the difficulty persist, disconnect the power source and contact your Sony dealer or local authorized Sony service facility.

### Camcorder

#### Power

| Symptom                                 | Cause and/or Corrective Actions   |
|---|---|
| The power is not on.                    | <ul style="list-style-type: none"> <li>• The battery pack is not installed.<br/>→ Attach the battery pack firmly by pushing the lower part of the battery pack until it clicks twice. (p. 10)</li> <li>• The battery is dead.<br/>→ Use a charged battery pack. (p. 7)</li> <li>• The AC power adaptor is not connected to mains.<br/>→ Connect the AC power adaptor to mains. (p. 23)</li> </ul> |
| The power goes off.                     | <ul style="list-style-type: none"> <li>• While being operated in CAMERA mode, the camcorder has been in the Standby mode for more than 5 minutes.<br/>→ Turn STANDBY down once and turn it up again. (p. 12)</li> <li>• The battery is dead.<br/>→ Use a charged battery pack. (p. 7)</li> </ul>  |
| The battery pack is quickly discharged. | <ul style="list-style-type: none"> <li>• The ambient temperature is too low. (p. 53)</li> <li>• The battery pack has not been charged fully.<br/>→ Charge the battery pack again. (p. 7)</li> <li>• The battery pack is completely dead, and cannot be recharged.<br/>→ Use another battery pack. (p. 22)</li> </ul>  |

#### Operation

| Symptom   | Cause and/or Corrective Actions   |
|---|---|
| START/STOP does not operate.                                    | <ul style="list-style-type: none"> <li>• The tape is stuck to the drum.<br/>→ Eject the cassette. (p. 11)</li> <li>• The tape has run out.<br/>→ Rewind the tape or use a new one. (p. 20)</li> <li>• The POWER switch is set to PLAYER.<br/>→ Set it to CAMERA. (p. 12)</li> <li>• The tab on the cassette is out (red).<br/>→ Use a new cassette or slide the tab. (p. 11)</li> </ul> |
| The cassette cannot be removed.                                 | <ul style="list-style-type: none"> <li>• The battery is dead.<br/>→ Use a charged battery pack or the AC power adaptor. (p. 7, 23)</li> </ul>   |
| No function except for cassette ejection works.                 | <ul style="list-style-type: none"> <li>• Moisture condensation has occurred.<br/>→ Remove the cassette and leave the camcorder for at least 1 hour. (p. 58)</li> </ul>  |
| The tape does not move when a tape transport button is pressed. | <ul style="list-style-type: none"> <li>• The POWER switch is set to CAMERA or OFF.<br/>→ Set it to PLAYER. (p. 20)</li> <li>• The tape has run out.<br/>→ Rewind the tape or use a new one. (p. 20)</li> </ul>  |

Continued to the next page

## Trouble check

| Symptom  | Cause and/or Corrective Actions  |
|--|--|
| The date or time indicator is flashing.                      | <ul style="list-style-type: none"> <li>The lithium battery is weak or dead.<br/>→ Replace the lithium battery with a new one. (p. 50)</li> <li>You pressed DATE and TIME together for more than 2 seconds. The camcorder is not malfunctioning.<br/>→ You may start recording. Flashing will stop soon.</li> </ul> |
| The date or time indicator disappears.                       | <ul style="list-style-type: none"> <li>Reset the date and time. (p. 51)</li> </ul>   |
| The SteadyShot function does not activate. (CCD-TR620E only) | <ul style="list-style-type: none"> <li>STEADY SHOT is set to OFF.<br/>→ Set STEADY SHOT to ON. (p. 42)</li> <li>The SteadyShot function does not work when the wide mode is set to 16:9FULL.</li> </ul>  |
| The autofocus function does not work.                        | <ul style="list-style-type: none"> <li>FOCUS is set to MANUAL.<br/>→ Set it to AUTO (p. 39)</li> <li>Shooting conditions are not suitable for autofocus.<br/>→ Set FOCUS to MANUAL to focus manually. (p. 39)</li> </ul>   |
| Recording stops in a few seconds.                            | <ul style="list-style-type: none"> <li>START/STOP MODE switch is set to <math>\frac{1}{2}</math> or 5 SEC.<br/>→ Set it to <math>\frac{1}{4}</math>. (p. 30)</li> </ul>  |
| The title display position shifts.                           | <ul style="list-style-type: none"> <li>There are unwanted blanks before or after the title.<br/>→ Delete them then select <math>\downarrow</math>.</li> </ul>  |
| The fader function does not work.                            | <ul style="list-style-type: none"> <li>The START/STOP MODE switch is set to 5 SEC or <math>\frac{1}{2}</math>.<br/>→ Set it to <math>\frac{1}{4}</math>. (p. 30)</li> </ul>  |

## Picture

| Symptom  | Cause and/or Corrective Actions   |
|--|---|
| The image on the viewfinder screen is not clear.   | <ul style="list-style-type: none"> <li>The viewfinder lens is not adjusted.<br/>→ Adjust the viewfinder lens. (p. 14)</li> </ul>  |
| A vertical band appears when a subject such as lights or a candle flame is shot against a dark background. | <ul style="list-style-type: none"> <li>The contrast between the subject and background is too high. The camcorder is not malfunctioning.<br/>→ Change locations.</li> </ul>   |
| The picture is "noisy".  | <ul style="list-style-type: none"> <li>The video heads may be dirty.<br/>→ Clean the heads using the Sony V8-25CLH cleaning cassette. (p. 59)</li> </ul>  |
| A vertical band appears when shooting a very bright subject.   | <ul style="list-style-type: none"> <li>The camcorder is not malfunctioning.</li> </ul>  |
| An unknown picture is displayed in the viewfinder.   | <ul style="list-style-type: none"> <li>If 10 minutes elapsed after you set the POWER switch to CAMERA without inserting a cassette, the camcorder automatically starts the demonstration.<br/>→ Insert the cassette, and the demonstration stops. You can make the demonstration not appear. (p. 28)</li> </ul> |

## Trouble check

### Others

| Symptom                                       | Cause and/or Corrective Actions  |
|---|--|
| The supplied Remote Commander does not work . | <ul style="list-style-type: none"><li>• COMMANDER is set to OFF.<br/>→ Set it to ON. (p. 27)</li><li>• Something is blocking the infrared rays.<br/>→ Remove the obstacle.</li><li>• The battery is not inserted with the correct polarity.<br/>→ Insert the battery with the correct polarity. (p. 79)</li><li>• The batteries are dead.<br/>→ Insert new ones. (p. 79)</li></ul> |
| There is dust in the viewfinder.              | <ul style="list-style-type: none"><li>• Detach the eyecup and clean the viewfinder lens. (p. 60)</li></ul>   |

Continued to the next page

Additional information

NO. 011101A, 111 1101 1111

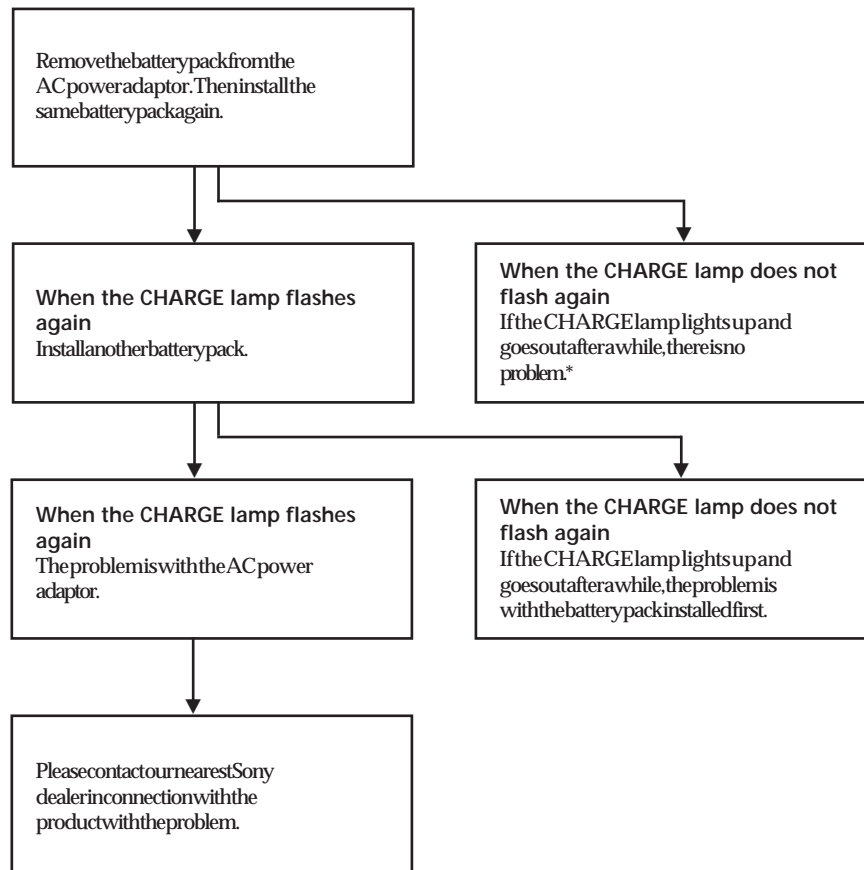
## Trouble check

### AC power adaptor

| Symptom                        | Cause and/or Corrective Actions   |
|--------------------------------|---|
| The POWER lamp does not light. | <ul style="list-style-type: none"><li>Set the selector to VTR (DC OUT) and disconnect the mains lead. After about one minute, try again. (p. 9)</li></ul> |
| The CHARGE lamp flashes.       | <ul style="list-style-type: none"><li>See the following chart.</li></ul>  |

#### When the CHARGE lamp flashes

Check through the following chart.



\* If you use a battery pack which you have just bought or which has been left unused for a long time, the CHARGE lamp may flash at the first charging. This does not indicate a problem. Repeat again to charge with the same battery pack.

ε̂ϑ̂δδ̂ί̂ε̂

ε̂ ς̂, â̂ ί̂ † î̂ä̂ë̂ò̂ê̂ †, î̂ó̂ó̂ú̂â̂è̂

òδ̂ί̂ε̂ ϑ̂ † δ̂, ς̂â̂ί̂é̂ί̂ † ò ς̂. î̂â̂ί̂ † ò è̂ è̂δδ̂ó̂ί̂, áó, † î̂é̂, è̂ε̂: áó̂ί̂ † î̂â̂ †, , ς̂δδ̂ó̂ί̂, áú̂ε̂ú̂áδ̂, ò î̂â̂ε̂: ú̂. ~ â̂ε̂ ú̂ †. î̂é̂ ^ â̂ε̂ ε̂: í̂ñ, ^ ñò̂ί̂ â̂ί̂ε̂ñ ò ς̂. î̂â̂ί̂ †.  
 òδ̂ί̂ε̂ ϑ̂ ù̂: î̂ó̂ó̂ú̂ε̂, ò â̂ â̂ á̂ òóú̂ †, ú̂çñ, ú̂ó óú̂δ̂ó̂â̂ε̂: î̂é̂ú̂á è̂òú̂ó~ î̂é̂í̂ òé̂ú̂ † î̂ε̂ñ è̂ ò, ñε̂é̂ú̂áδ̂, ò ε̂: é̂í̂á ò í̂ Sony è̂í̂ε̂ î̂á̂òú̂ί̂ ù̂ò̂ó̂ί̂ ò í̂ó̂í̂ ò â̂ε̂: è̂ñú̂é̂áí̂ ò ó̂ ò. ò î̂ú̂é̂ε̂, † î̂é̂. † ò ò † ú̂ú̂ † Sony.

ç̂ε̂: áó̂ί̂ † î̂â̂ †

ε̂é̂ú̂ † î̂é̂ä̂

|   |  |
|---|--|
| ε̂ é̂â̂ί̂ † í̂  | ε̂ è̂~è̂ί̂ † è̂/è̂í̂é̂ ε̂: â̂ε̂òú̂, è̂ñ ò ó̂ ú̂òú̂ † î̂â̂ί̂ε̂.   |
| ç̂â, í̂í, ~ † áú̂òñ ò é̂ú̂ † î̂é̂ä̂.  | <ul style="list-style-type: none"> <li>• á̂ † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ î̂â̂ ò è̂òó̂â̂ε̂: î̂â̂ί̂.</li> <li>→ ç̂ † ε̂: â̂é̂í̂ ò ó̂: òó̂â̂ε̂: î̂é̂ú̂, · † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ òóú̂â̂ί̂ † † è̂ † ú̂ é̂ñ î̂é̂í̂â̂ε̂ ~ † ú̂é̂ · † ú̂ † â̂é̂í̂'è̂, ò · í̂ó̂ί̂ †. (òú̂ . 10)</li> <li>• è̂ † â̂ ñε̂: é̂í̂çñ · † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂.</li> <li>→ àòó̂ó̂í̂, áú̂é̂ú̂ á † ñε̂: â̂ί̂'è̂ · † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂. (òú̂ . 7)</li> <li>• è̂ áú̂á, ò è̂ †: † ú̂ á̂. ú̂ó̂ί̂ † î̂â̂ òó̂: òó̂â̂ε̂: é̂í̂â̂ í̂ ~ î̂â̂ί̂ è̂ ^ áð̂í̂ò è̂ áú̂é̂.</li> <li>→ è̂ òó̂: òó̂â̂ε̂: î̂é̂ú̂á ò áú̂á, ò è̂ †: † ú̂ á̂. ú̂ó̂ί̂ † í̂ ~ î̂â̂ί̂ è̂ ^ áð̂í̂ò è̂ áú̂é̂. (òú̂ . 23)</li> </ul> |
| ç̂' í̂í, ~ † áú̂òñ ò é̂ú̂ † î̂é̂ä̂.   | <ul style="list-style-type: none"> <li>• ç̂ ó, â̂ í̂ñ ~ î̂ó̂ó̂í̂ ú̂ † ^ è̂é̂, â̂ é̂é̂í̂á camera, è̂ε̂: áó̂ί̂ † î̂â̂ † · í̂ †, â̂ é̂é̂í̂á, „òú̂, î̂ó̂ó̂ú̂ · ò í̂â̂ 5 î̂é̂í̂ú̂.</li> <li>→ è̂ ò, â̂ î̂é̂ú̂á ò â̂ á̂ í̂í, ~ † ú̂ á̂í, standby, î̂é̂á ò ε̂: é̂í̂ † á è̂ ò ó, â̂ î̂é̂ú̂á â̂, ò ò í̂ó, †, , â̂ 1. (òú̂ . 12)</li> <li>• á̂ † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ † á ñε̂: é̂í̂çñ.</li> <li>→ àòó̂ó̂í̂, áú̂é̂ú̂ á † ñε̂: â̂ί̂'è̂ · † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂, (òú̂ . 7)</li> </ul>  |
| á̂ † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ · ò ú̂ ó † á ñε̂: áú̂òñ.   | <ul style="list-style-type: none"> <li>• é̂ í̂ ú̂é̂ †, ~ † ñ ú̂ á̂ í̂ ó̂á † ú̂ † ò ò í̂é̂' í̂ó̂ί̂ î̂é̂áí̂ † ñ. (òú̂ . 53)</li> <li>• á̂ † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ î̂â̂ ò ó̂ í̂ó̂ó̂ú̂, . á̂ † ñε̂: á̂í̂.</li> <li>→ á † ñε̂: é̂ú̂á ò í̂ó, † · † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂. (òú̂ . 7)</li> <li>• á̂ † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ ò ó̂ í̂ó̂ó̂ú̂, . † á ñε̂: é̂í̂çñ è̂ î̂â̂ í̂ó̂é̂áú̂ · ú̂, ò â̂ á̂ † ñε̂: á̂í̂.</li> <li>→ àòó̂ó̂í̂, áú̂é̂ú̂ á ε̂: ú̂, ò è̂ · † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂. (òú̂ . 22)</li> </ul>   |
| ε̂ † · ò ú̂ †   |  |
| ε̂ é̂â̂ί̂ † í̂  | ε̂ è̂~è̂ί̂ † è̂/è̂í̂é̂ ε̂: â̂ε̂òú̂, è̂ñ ò ó̂ ú̂òú̂ † î̂â̂ί̂ε̂.   |
| ç̂â ù̂ú̂í̂'è̂ ò í̂é̂ ú̂ áú̂ í̂ í̂ó̂ó̂í̂ † start/stop.   | <ul style="list-style-type: none"> <li>• ä̂â̂í̂ú̂ † ò è̂í̂é̂òí̂ † í̂ · † † · † î̂ú̂.</li> <li>→ ç̂' ú̂ó̂í̂ í̂é̂ú̂á í̂ † ò ò áú̂. (òú̂ . 11)</li> <li>• ä̂â̂í̂ú̂ † á̂' í̂ó̂ί̂ ~ è̂í̂ † ò, .</li> <li>→ è̂ ä̂ á̂ í̂ó̂ú̂ † é̂ú̂á î̂â̂í̂ú̂ è̂í̂é̂ è̂òó̂ó̂í̂, áú̂é̂ú̂á î̂ó, ù̂. . (òú̂ . 20)</li> <li>• ç̂' í̂í, ~ † ú̂ á̂í, . power ù̂òú̂ † î̂ó, î̂â̂í, , ò ó̂ í̂ó̂é̂á̂í̂é̂ä̂ player.</li> <li>→ î̂ó̂ú̂ † î̂ó, é̂ú̂á, ò, ò ó̂ í̂ó̂é̂á̂í̂é̂ä̂ camóra. (òú̂ . 12)</li> <li>• ç̂ † í̂ † ò ò áú̂á î̂â̂ í̂á ò á ò ú̂í̂ † (í̂ † ò í̂ó, ò).</li> <li>→ àòó̂ó̂í̂, áú̂é̂ú̂á î̂ó, ù̂, í̂ † ò ò áú̂ú̂ è̂í̂é̂ ò â̂ ε̂, è̂í̂, ú̂á î̂á ò á ò ú̂ó̂í̂. (òú̂ . 11)</li> </ul>         |
| ä̂ † ò ò áú̂ † î̂â̂ í̂ó̂é̂áú̂ · ò ú̂, , î̂ú̂ú̂ † é̂á ε̂: á̂ è̂ † ú̂ á̂ í̂ñ.                                 | <ul style="list-style-type: none"> <li>• á̂ † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ † á ñε̂: é̂í̂çñ.</li> <li>→ àòó̂ó̂í̂, áú̂é̂ú̂ á † ñε̂: â̂ί̂'è̂ · † ú̂ † â̂é̂í̂'è̂ · í̂ó̂ί̂ è̂í̂é̂ ò áú̂á, ò è̂ †: † ú̂ á̂. ú̂ó̂ί̂ † (òú̂ . 7, 23)</li> </ul>   |
| ç̂â † · ò ú̂ † áú̂ í̂é̂ ò ε̂: í̂ † é̂á ù̂ú̂í̂'è̂ è̂, í̂ ó̂ í̂á, ^ ú̂ í̂ í̂é̂, † î̂é̂ñ í̂ † ò ò áú̂ †.       | <ul style="list-style-type: none"> <li>• è̂ é̂é̂á ò ~ í̂ † í̂ó̂í̂: â̂í̂ò † ^ è̂ñ, í̂ †, „è̂.</li> <li>→ ç̂' ì, ú̂á í̂ † ò ò áú̂ú̂ è̂ ò ò ú̂ †, , ú̂á, è̂ε̂: áó̂ί̂ † î̂â̂ ù̂ ò ó̂ í̂ † è̂í̂â̂é̂ í̂â̂ á̂ í̂ † 1 ~ † ò. (òú̂ . 58)</li> </ul>   |
| ä̂â̂í̂ú̂ † î̂â̂ ò â̂ á̂ í̂â̂ ^ áú̂òñ ò è̂ í̂ † è̂ † ú̂ é̂é̂ í̂ í̂ó̂ó̂í̂ ò â̂ á̂ í̂â̂ ^ á̂ í̂é̂ñ î̂â̂í̂ú̂ †. | <ul style="list-style-type: none"> <li>• è̂ ä̂ á̂ í̂í, ~ † ú̂ á̂í, . power ù̂òú̂ † î̂ó, î̂â̂í, , ò ó̂ í̂ó̂é̂á̂í̂é̂ä̂ camera è̂í̂é̂ off.</li> <li>→ î̂ó̂ú̂ † î̂ó, é̂ú̂á, ò ó̂ í̂ó̂é̂á̂í̂é̂ä̂ player. (òú̂ . 20)</li> <li>• ä̂â̂í̂ú̂ † á̂' í̂ó̂ί̂ ~ è̂í̂ † ò, .</li> <li>→ è̂ ä̂ á̂ í̂ó̂ú̂ † é̂ú̂á î̂â̂í̂ú̂ è̂í̂é̂ è̂òó̂ó̂í̂, áú̂é̂ú̂á î̂ó, ù̂. . (òú̂ . 20)</li> </ul>  |

(ò ó̂: ó̂ í̂é̂á̂í̂é̂ä̂ ò î̂â̂ε̂: ú̂áú̂)

Additional Information

è Ó, Á Í† ÌÀÈÒÓ †, ÌÓÓÚÀÈ

|  |   |
|--|---|
| è ÈÁÌ†Í  | è È~ÈÌ† È/ÈÌÈ %ÀÈÒÓ, ÈÌ ÓÓ ÙÓÓ †ÌÀÌÈ.   |
| àÈ,, †ÁÚ ÈÌ%ÈÍ†ÚÓ<br>%†Ú' ÈÌÈ, ÁÌÀÌÈ.  | <ul style="list-style-type: none"> <li>• àÈÚÈÁ, ††† ÁÈÍ† ÒÍ†. †† ÈÌÈ ÓÓÍÒÓÓ. †Á †ÈÁÌ†.</li> <li>→ á†ÌÀÌÈÚÁ ÌÈÚÈÁ, Ù. ††† ÁÈÍÚ Ì† ÌÓ, Ù. (ÓÚ . 50)</li> <li>• Ç' Ì†È†ÌÈ ÌÒÓÍÈ DATE È TIME, ÌÁÓÚÁ. ÓÍÁÁ, ~ÁÌ Ì† 2 ÓÁÍÚÌ%'. ÇÈ%ÁÓÍ†ÌÁ †, ÈÒÓ †, ÌÓÓÚÈ.</li> <li>→ Ç' ÍÓÈÁÚÁ Ì†~†Ú. Á†ÒÈÒ. àÈ,, †ÌÈÁ, ÒÍÓ Á Ó ÁÍ †ÚÈÚÒÌ.</li> </ul>                       |
| àÒ~ÁÁ†ÁÚ ÈÌ%ÈÍ†ÚÓ %†Ú' ÈÌÈ<br>, ÁÌÀÌÈ.   | <ul style="list-style-type: none"> <li>• èÌÓ, † ÙÓÓ†ÌÓ, ÈÚÁ %†ÚÈ È, ÁÌÌ. (ÓÚ . 51)</li> </ul>   |
| ÇÁ †ÍÚÈ, ÈÁÈ ÙÁÚÒÌ ÙÓÌÍ^ÈÌ<br>ÙÓÓÈ~È, ÓÈ Ò' ÁÌÍÈ (ÚÓÍ, ÍÓ<br>CCD-TR620E)   | <ul style="list-style-type: none"> <li>• ÌÙÌÍ^ÈÌ STEADY SHOT ÙÓÓ†ÌÓ, ÌÁÌ† Ì† OFF.</li> <li>→ ÌÓÓ†ÌÓ, ÈÚÁ STEADY SHOT Ì† ON. (ÓÚ . 42)</li> <li>• ÌÙÌÍ^ÈÌ ÙÓÓÓÈ~È, ÓÈ Ò' ÁÌÍÈ ÌÁ †. ÓÚ†ÁÚ, ÍÓ, %†<br/>È ÓÍÓÓ Ì†ÙÌ'È ÁÈÈÌ ÙÓÓ†ÌÓ, ÌÁÌ Ì† 16:9FULL.</li> </ul>   |
| ÌÙÌÍ^ÈÌ †, ÚÓÍ†ÚÈ~ÁÓÍÓÈ<br>ÚÓÍÓÈ Ó, ÌÈ ÌÁ †. ÓÚ†ÁÚ.  | <ul style="list-style-type: none"> <li>• è ÁÌÍ. ~†ÚÁÌ. FOCUS ÙÓÓ†ÌÓ, ÌÁÌ, ÓÓÍÓÈÁÌÈÁ MANUAL</li> <li>→ ÌÓÓ†ÌÓ, ÈÚÁ Á,, Ó, ÓÓÍÓÈÁÌÈÁ AUTO. (ÓÚ . 39)</li> <li>• ÌÓÍÓ, ÈÌ Ò' ÁÌÍÈ ÌÁ ÓÓ%ÌÓ%ÌÚ %Ì†† †, ÚÓÍ†ÚÈ~ÁÓÍÓÈ<br/>ÙÓÍÙÒÈ Ó, ÌÈ.</li> <li>→ ÌÓÓ†ÌÓ, ÈÚÁ FOCUS, ÓÓÍÓÈÁÌÈÁ MANUAL %Ì†† Ù~ÌÓÈ<br/>ÙÓÍÙÒÈ Ó, ÌÈ. (ÓÚ . 39)</li> </ul>                    |
| á†ÒÈÒ, ÓÓÓ†Ì†, ÌÈ, †ÁÚÒÌ<br>~Á ÁÁ ÌÁÓÍÓÍ, ÍÓ ÓÁÍÚÌ%.   | <ul style="list-style-type: none"> <li>• èÁ ÁÌÍ. ~†ÚÁÌ. START/STOP MODE ÙÓÓ†ÌÓ, ÌÁÌ,<br/>ÓÓÍÓÈÁÌÈÁ <u>↓</u> ÈÌÈ 5 SEC.</li> <li>→ ÌÓÓ†ÌÓ, ÈÚÁ Á,, Ó, ÓÓÍÓÈÁÌÈÁ <u>↓</u>. (ÓÚ . 30)</li> </ul>   |
| è%, ÈÌÙÓÓ ÓÓÍÓÈÁÌÈÁ<br>ÈÌ%ÈÍ†^ÈÈ Ì†%ÒÈÒÈ.  | <ul style="list-style-type: none"> <li>• Nó ÈÌÈ ÓÓÓÍÁ Ì†%ÒÈÒÈ ÈÌÁ. ÙÒÌ Ò Ó. ÁÍ.</li> <li>→ Ì%†ÌÈÚÁ ÈÌ, † Á†ÚÁÌ, . Á ÈÚÁ <u>↓</u>.</li> </ul>  |
| ÌÙÌÍ^ÈÌ ÓÍ†, ÌÓ,, Á%ÁÌÈÌ<br>ÈÁÓ. †ÈÁÌÈÌ ÌÁ †. ÓÚ†ÁÚ.   | <ul style="list-style-type: none"> <li>• èÁ ÁÌÍ. ~†ÚÁÌ. START/STOP MODE ÙÓÓ†ÌÓ, ÌÁÌ,<br/>ÓÓÍÓÈÁÌÈÁ 5SEC ÈÌÈ <u>↓</u>.</li> <li>→ ÌÓÓ†ÌÓ, ÈÚÁ Á,, Ó, ÓÓÍÓÈÁÌÈÁ <u>↓</u>. (ÓÚ . 30)</li> </ul>  |
| <b>àÁÓ. †ÈÁÌÈÁ</b>   |   |
| è ÈÁÌ†Í  | è È~ÈÌ† È/ÈÌÈ %ÀÈÒÓ, ÈÌ ÓÓ ÙÓÓ †ÌÀÌÈ.   |
| àÁÓ. †ÈÁÌÈÁ Ì† ~Í †ÌÁ<br>, È%ÒÈÒÍ†ÚÁÌ† ÌÁ ~ÁÚÍÓÁ.  | <ul style="list-style-type: none"> <li>• ÇÁ ÓÚ Á,, ÙÌÈ Ó, †Ì Ó. ÁÍÚÈ, È%ÒÈÒÍ†ÚÁÌ†.</li> <li>→ èÚ Á,, ÙÌÈ ÙÈÚÁ Ó. ÁÍÚÈ, È%ÒÈÒÍ†ÚÁÌ†. (ÓÚ . 14)</li> </ul>  |
| èÓÌ, Ì†ÁÚÒÌ, Á ÚÈÍ†Í. Ì††<br>ÓÓÍÓÓ†, ÁÓÍÈ Ù†ÌÈÁ Ó. ÁÍÚ',<br>Í†Í Ò, ÁÚ ÈÌÈ ÓÍ††† Ò, Á~È<br>ÒÌÈÌ†, ÙÒÌ Ì† ÚÁÌÌÓÍ ÙÓÌÁ. | <ul style="list-style-type: none"> <li>• èÌÈ-ÍÓÍ-ÓÍ. -ÓÈ ÍÓÍÚ †ÓÓ ÌÁÈ%Ó Ó. ÁÍÚÓÍ È ÙÓÍÓÍ.</li> <li>ÇÈ%ÁÓÍ†ÌÁ † †. ÓÚ†ÁÚ ÌÓ Ì††. ÌÓ.</li> <li>→ àÁÌÀÌÈÚÁ ÓÓÁÈ^È. Ò. ÁÌÍÈ.</li> </ul>   |
| àÁÓ. †ÈÁÌÈÁ "Á~ÙÌÍÁÌÓ".  | <ul style="list-style-type: none"> <li>• ÇÓÁÍÓÈÌÓ Á,, †ÁÌÁÌ', È%ÁÓ,, ÓÍÓ, ÌÈ.</li> <li>→ è~ÈÓÈÚÈÁ,, ÓÍÓ, ÌÈ, ÈÒÓÓÍ, ÁÙÌ %Ì†† ~ÚÓ,, Ó Ó~ÈÓÓÈÚÁÌ, ÌÓ.<br/>Í†ÓÓÁÚÚ V8-25CLH. (ÓÚ . 59)</li> </ul>  |
| ÇÁ ÚÈÍ†Í, Ì†† ÓÓÍÓÓ† ÓÓÌ, Ì†ÁÚÒÌ<br>Ò È Ò' ÁÌÍÁ Ó~ÁÌ, † ÌÈ ÌÓ. ÁÍÚÓ,,  | <ul style="list-style-type: none"> <li>• ÇÈ%ÁÓÍ†ÌÁ † ÌÁ Ì†, Ì†ÁÚÒÌ ÌÁÈÒÓ †, ÌÓÈ.</li> </ul>   |
| Ç, È%ÒÈÒÍ†ÚÁÌÁ ÓÓÓ. †È†ÁÚÒÌ<br>ÌÁÁÌ†ÍÓÍÓÁ ÈÁÓ. †ÈÁÌÈÁ.   | <ul style="list-style-type: none"> <li>• ÓÓÍÈ ÓÓÓÍÁ ÙÓÓ†ÌÓ, ÌÈ, 'ÍÍ. ~†ÚÁÌ†† POWER,<br/>ÓÓÍÓÈÁÌÈÁ CAMERA Ó Ó-ÍÓ 10 ÌÈÌÚÓ, † Í†ÓÓÁÚ† ÌÁ<br/>, ÓÚ†, ÌÁÌ†, È%ÁÓÍ†ÌÁ † †, ÚÓÍ†ÚÈ~ÁÓÍÈ Ì†~ÌÁÚ<br/>%ÁÍÓÍÓÓ †^È.</li> <li>→ ÇÓÓ†, ÚÁ Ì†ÓÓÁÚÓ, È%ÁÍÓÍÓÓ †^È ÌÓ ÁÍ †ÚÈÚÒÌ. Ç'<br/>ÍÓÈÁÚÁ Ò%ÁÍ†Ú, Ù†Í, ~ÚÓ. %ÁÍÓÍÓÓ †^È ÌÁ<br/>ÓÓÌ, Ì†††. (ÓÚ . 28).</li> </ul> |

è ó,â í† ìâëòò †, ìóòúâë

è ó~ââ

|   |   |
|---|---|
| è ÈÁì†í   | è È~Èì† È/ÈìÈ †ÂÈÒÚ, Èñ ÓÓ ÛÒÚ †ìÂìÈ.   |
| è Èí†, †Âì·È ÒÚí, Û<br>‡ÈÒÚ†ì·ÈÓììó, Ó Ûò †, íÂìÈñ<br>ìÂ †·ÓÚ†ÂÚ. | <ul style="list-style-type: none"> <li>• COMMANDER ÛÒÚ†ìó, íÂì, ÓÓíÓÈÂìÈÂ OFF.<br/>→ ìòú†ìó, ÈÚÁ Â, Ó, ÓÓíÓÈÂìÈÂ ON. (ÒÚ . 27)</li> <li>• óóó-óóò Ò Â, †È‡†ÂÚ ÒÚÚ, ÈìÙ †í †òì·ì ìÙ~†ì.<br/>→ ìóú †ìÈÚÁ Ò Â, †‡Û.</li> <li>• Â†Ú† ÂÈíÈ, òó†, íÂì· Ò ìÂò †, Èí, ìÓÈ ÓÓíñ ìóóú...<br/>→ ÇÓÚ†, , ÛÂ·†Ú† ÂÈíÈ, òó·ì. ‡ñ Ò †, Èí, ìÙ.<br/>ÓÓíñ ìóóú, . (ÒÚ . 79)</li> <li>• á† ñ‡·†Ú† ÂÁí ÈÁ †òìóó, †ì.<br/>→ ÇÓÚ†, , ÛÂ ìó, *Â. (ÒÚ . 79)</li> </ul> |
| á†ò· ìÈíòñ, È‡óÈòí†úâì, .   | • εóòóÂ‡ÈìÈÚÁ ÓíÙíñ È ó~ÈòúÈÚÁ ó· ÁíÚÈ, , È‡óÈòí†úâìñ.<br>(ÒÚ . 60)   |

(ò Ó‡óìÈÂìÈÂ òìÂ‡ÚÁÚ)

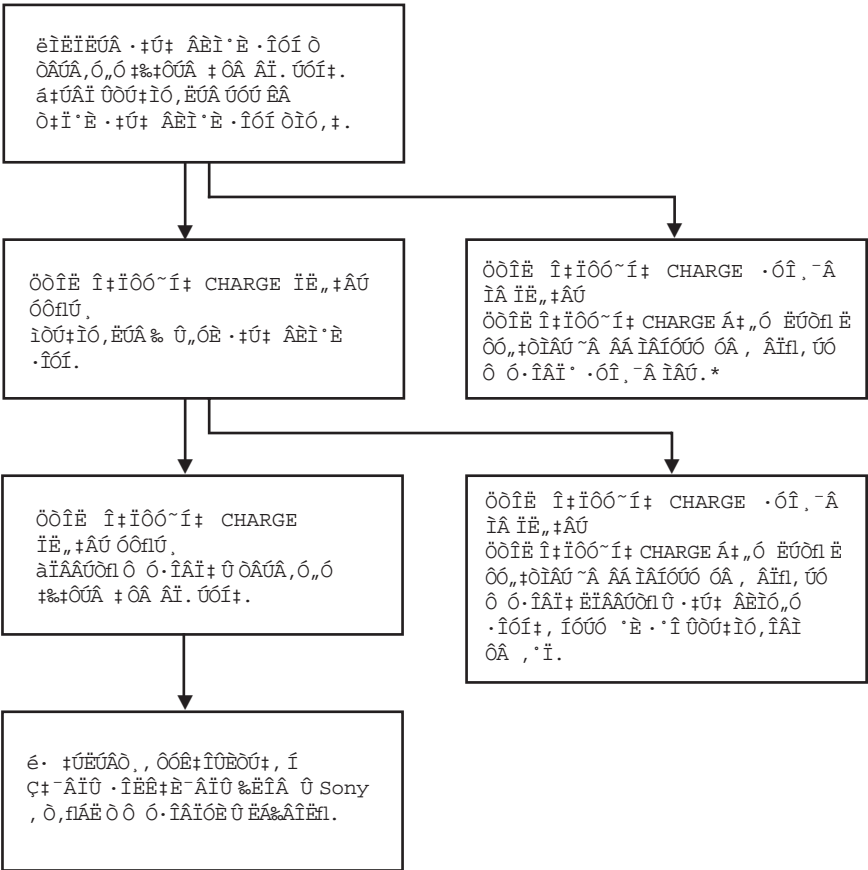
Additional Information

è ó,â í† ìâëòð †,ìóóúâè

èâúâ,óè †%†óúâ ôâ âïâïâïò,,ó úóí†

|                          |  |
|--------------------------|--|
| è èâí†í                  | è ë~ëí† ë/ëíë %âëòú,èí óó úóú †íâíë.   |
| â†íóó~í† POWER ìâ,,ó èú. | • ìóú†ìó,èúâ òâíâíúó , óóíóèâíëâ VTR (DC OUT) è óúóâ%èíëúâ óâúâ,óè ò ó,ó%. óâ ââ ó%ìú ìëíúóú òíó,† óó%óóâ%èíëúâ óâúâ,óè ò ó,ó%. (óú . 9) |
| âë,,†âú í†íóó~í† CHARGE. | • èíóú èúâ òíâ%ù,~ù. ú†.íë^ù.  |

**òòíë ç† íë,,†âú í†íóó~í† CHARGE**  
 è ó,â èú, óó òíâ%ù,~âë ú†.íë^â.



\* òòíë ç† èòóóí,âúâúâ .†ú† âëí^è .íóí, íóóó ^è ç† úóí,íó ~úó íúòëíë, èíë íóóó ^è .^í óóú†,íâí ì† %íëúâí,ìóâ , âíí, úó í†íóóí† CHARGE íóèâú íë,,†ú, ò è óâ ,óè á† í%íâ. úóú ìâ úí†â^,†âú ì† ò ó.íâíú. èó,úó èúâ ò ó^â%ù ù á† í%íë ò úâí èâ ò†í^í .†ú† âëí^í .íóíóí.



English

## Specifications

### Video camera recorder

#### System

**Video recording system**  
Two rotary heads, Helical scanning, FM system  
**Audio recording system**  
Rotary heads, FM system  
**Video signal**  
PAL colour, CCIR standards  
**Usable cassette**  
8 mm video format cassette (standard 8 mm)  
**Recording/Playback time**  
SP mode: 1 hour and 30 minutes (P5-90)  
LP mode: 3 hours (P5-90)  
**Fastforward/rewind time**  
Approx. 5 min. (P5-90)  
**Image device**  
CCD (Charge Coupled Device)  
**Viewfinder**  
Electronic viewfinder (Black and white)  
**Lens**  
Combined power zoom lens, CCD-TR501E: 15x (Optical)  
CCD-TR502E/TR620E: 15x (Optical), 30x\* (Digital)  
F1.4 – 2.4  
Filter diameter 37 mm (1 1/2 inches)  
**Focal distance**  
f = 4.1 – 61.5 mm (3/16 – 2 1/2 inches)  
When converted to a 35 mm still camera  
CCD-TR501E/TR502E: 39 – 585 mm (1 1/16 – 23 1/8 inches)  
CCD-TR620E: 47 – 705 mm (1 7/8 – 27 7/8 inches)  
**Colour temperature**  
Auto  
**Minimum illumination**  
CCD-TR501E/TR502E: 0.4 lux at F 1.4  
CCD-TR620E: 0.7 lux at F 1.4  
**Illumination range**  
CCD-TR501E/TR502E: 0.4 to 100,000 lux  
CCD-TR620E: 0.7 to 100,000 lux  
**Recommended illumination**  
More than 100 lux

\* 180x in some area

### Input and Output connectors

**Video output**  
Phono jack, 1 Vp-p, 75 ohm, unbalanced  
**Audio output**  
Monaural, Phono jack  
327 mV, (at load impedance 47 kilohm), impedance less than 2.2 kilohm  
**RFU DC OUT**  
Special minijack, DC 5 V  
**LANC control jack**  
Stereo mini-minijack (ø 2.5 mm)  
**MIC jack**  
Minijack, 0.388 mV, low impedance with 2.5 to 3 V DC output, impedance 6.8 kilohm (ø 3.5 mm)

#### General

**Power requirements**  
7.5 V (AC power adaptor)  
**Average power consumption**  
CCD-TR501E/TR502E: 3.3W  
CCD-TR620E: 3.5W  
**Operating temperature**  
0°C to 40°C (32°F to 104°F)  
**Storage temperature**  
-20°C to +60°C (-4°F to +140°F)  
**Dimensions (Approx.)**  
111 x 105 x 200 mm  
(4 3/8 x 4 1/8 x 7 7/8 inches) (w/h/d)  
**Mass (Approx.)**  
CCD-TR501E/TR502E: 770g (1 lb 11 oz)  
CCD-TR620E: 780g (1 lb 11 oz)  
Excluding the battery pack, lithium battery, cassette and shoulder strap  
CCD-TR501E/TR502E: 990g (2 lb 2 oz)  
CCD-TR620E: 1kg (2 lb 3 oz)  
Including the battery pack NP-33, lithium battery CR2025, cassette P5-90 and shoulder strap  
**Microphone**  
Electret condenser microphone, monaural type  
**Supplied accessories**  
See page 6.

### AC power adaptor

**Power requirements**  
110 – 240 V AC, 50/60Hz  
**Power consumption**  
AC-V16/V17: 20 W  
AC-V16A/V17A: 22 W  
**Output voltage**  
DC OUT in operation mode  
7.5 V, 1.8 A  
Battery charge terminal  
10 V, 1.1 A in charge mode  
**Application**  
Sony battery packs  
NP-33 (supplied), NP-67, NP-66H/68, NP-78, NP-98  
**Operating temperature**  
0°C to 40°C (32°F to 104°F)  
**Storage temperature**  
-20°C to +60°C (-4°F to +140°F)  
**Dimensions (Approx.)**  
166 x 43 x 75 mm (6 5/8 x 1 11/16 x 3 inches) (w/h/d) including projecting parts and controls  
**Mass (Approx.)**  
AC-V16: 420 g (15 oz)  
AC-V16A: 450 g (16 oz)  
AC-V17: 460 g (16 oz)  
AC-V17A: 490 g (17 oz)

Design and specifications are subject to change without notice.

Additional Information  
N00011E0A1, 1+1 8106 1+1 EN

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īĀĭĪĒ~ĀŌĪĒĀ ĭ† †ĪŪĀ ĒŌŪĒĪĒ

ÇĒ%ĀŌĪ†ĪĀ †

ēĒŌŪĀĪ†

ēĒŌŪĀĪ†, Ē%ĀŌĀ†ŌĒŌĒ  
 Ñ, Ā, †~†. ĒĀŌĭ, ŌĪŌ, ĪĒ,  
 Ī†ĪŌĪŌ-ŌŪ Ō~Ī††  
 †Ā, Ā ŪĪ†, ŌĒŌŪĀĪ† ōĀ  
 ēĒŌŪĀĪ† †Ū%ĒŌĀ†ŌĒŌĒ  
 Ç †~†. ĒĀŌĭ „ŌĪŌ, ĪĒ,  
 ŌĒŌŪĀĪ† ōĀ  
 ÇĒ%ĀŌŌĒ, Ī††  
 ñ, ĀŪŌ, ŌĒŌĒ, Ī†Ī PAL,  
 ŌŪ†Ī%† Ū ŌŌ āāāē  
 āŌŌŌĪ, ĀŪĀĪ\*Ā Ī†ŌŌĀŪ\*  
 ā†ŌŌĀŪ\* 8-ĪĪ, Ē%ĀŌŪŌ Ī†Ū†  
 (ŌŪ†Ī%† Ū 8ĪĪ)  
 Ç ĀĪ†Ā†ŌĒŌĒ/  
 , ŌŌŌ ŌĒĀ, Ā%ĀĪĒ†  
 ēĀĒĒĪ SP: 1 ~†Ō Ē 30 ĪĒĪŪŪ  
 (ē5-90)  
 ēĀĒĒĪ LP: 3 ~†Ō† (ē5-90)  
 Ç ĀĪ† ŌĀ ĀĪŌŪĪĒ, ŌĀ Ā%/  
 Ī†Ā†%  
 ē Ē. ĪĒĀ. 5 ĪĒĪ. (ē5-90)  
 ĪŌ ĪĒ Ō, †ŪĀĪ.  
 ĒĀŌ. †ĒĀĪĒ†  
 CCD (Ō Ē.Ō Ō Ā† fl%Ō, ŌĒ  
 Ō, flĀ, .)  
 ÇĒ%ŌĒŌĪ†ŪĀĪ.  
 ŪĪĀĪŪ ŌĪĪ\*Ē, Ē%ŌĒŌĪ†ŪĀĪ.  
 (~Ā ĪŌ. ĀĪ\*Ē)  
 ē. ĀĪŪĒ,  
 āŌĪ. ĒĪĒ Ō, †ĪĪ\*Ē Ō. ĀĪŪĒ,  
 Ō Ō Ē, Ō%Ī\*Ī  
 Ū †ĪŪŪŌĪ†ŪŌ ŌĪ,  
 CCD-TR501E:  
 15-Ī †ŪĪ\*Ē (ēŌŪĒ~ĀŌĪĒĒ)  
 CCD-TR502E/TR620E:  
 15-Ī †ŪĪ\*Ē (ēŌŪĒ~ĀŌĪĒĒ),  
 30-Ī †ŪĪ\*Ē\* (ñĒŪ Ō, ŌĒ)  
 F1, 4-2, 4  
 ÑĒ†ĪĀŪ ŪĒĪ. Ū † 37 ĪĪ  
 ĪŌĪŪŌĪŌĀ †ŌŪŌĪĪĒĪĀ  
 f= 4, 1-61, 5 ĪĪ  
 ē Ē ĒŌŌŌĪ. ĀŌ, †ĪĒĒ  
 ŌĀ ĀĪŌ%ĪĒĪ†% Ī††  
 ŪŌŪŌ†ŌŌ† †Ū† Ō 35-ĪĪ  
 ŌĪĀĪŌĒ  
 CCD-TR501E/TR502E:  
 39-585 ĪĪ  
 CCD-TR620E: 47-705 ĪĪ  
 ñ, ĀŪŌ, †† ŪĀĪŌĀ †ŪŪ †  
 Ā, ŪŌ  
 āĒĪĒĪ†Ī. Ī†† ŌŌ, Ā~ĀĪĪŌŌŪ.  
 CCD-TR501E/TR502E:  
 0, 4 Ī. ĪŌ† Ō Ē F1, 4  
 CCD-TR620E: 0, 7 Ī. ĪŌ† Ō Ē

74 F1,4

ÑĒ†Ō†ĀŌĪ ŌŌ, Ā~ĀĪĪŌŌŪĒ  
 CCD-TR501E/TR502E: ēŪ 0, 4  
 %Ō 100000 Ī. ĪŌŌ,  
 CCD-TR620E: ēŪ 0, 7 %Ō  
 100000 Ī. ĪŌŌ,  
 ēĀĪŌĪĀĪ%ŪĀĪ†††  
 ŌŌ, Ā~ĀĪĪŌŌŪ.  
 ĀŌĪĀĀ 100 Ī. ĪŌŌ,  
 \*Ç ĪĀĪŌŌŪ \*Ī †ĒŌĪ†Ī 180-  
 Ī †ŪĪ\*Ē

ÇĪŌ%Ī\*Ā Ē , \*ĪŌ%Ī\*Ā „ĪĀĀ%†

ÇĒ%ĀŌ, \*ĪŌ%  
 ĪŌĪŌ, ĪĀĀ%Ō, 1 Ç ŌŌ%, ŌĒĪŌĒ  
 †ĪŌĪĒŪŪ%Ā, 75 ēĪ,  
 ĪĀŌĒĪĪŪŪ Ē~ĪŌĀ  
 ĀŪ%ĒŌ, \*ĪŌ%  
 āŌĪŌŪŌĪĒ~ĀŌĪŌĀ ŪŌĪŌ, ĪĀĀ%Ō  
 327 Īç (Ō Ē ŌŌĪŌĪŌĪ  
 ŌŌŌ ŌŪĒ, ĪĀĪĒĒ 47 ĪēĪ),  
 ŌŌĪŌĪŌ ŌŌŌ ŌŪĒ, ĪĀĪĒĀ ĪĀĪĀĀ  
 2, 2 ĪēĪ  
 RFU DC OUT  
 ēŌĀ~Ē†Ī. ĪŌĀ ĪĒĪĒ, ĪĀĀ%Ō, 5Ç  
 ŌŌŪ. ŪŌĪ†  
 ēĪĀĀ%Ō ŪŌ †, ĪĀĪĒ† LANC  
 ēŪĀ ĀŌŪŌĪĒ~ĀŌĪŌĀ  
 ĪĒĪĒ, ĪĀĀ%Ō  
 (Ø 2, 5 ĪĪ)  
 ēĪĀĀ%Ō MIC  
 āĒĪĒ, ĪĀĀ%Ō, 0, 388 Īç,  
 ĪĒĀĪŌĀ ŌŌĪŌĀ  
 ŌŌŌ ŌŪĒ, ĪĀĪĒĀ  
 Ō, \*ĪŌ%Ī\*Ī Ī†Ō flĒĀĪĒĀĪ  
 ŌŪ2, 5 %Ō 3 Ç ŌŌŪ. ŪŌĪ†,  
 ŌŌĪŌĀ ŌŌŌ ŌŪĒ, ĪĀĪĒĀ 6, 8  
 ĪēĪ (Ø 3, 5 ĪĪ)

ē. ~ ĀĀ

Tpe-Ō, †ĪĒ† Ī ĒŌŪŌ~ĪĒĪŪ  
 ŌĒŪ†ĪĒ†  
 7, 5 Ç (ŌĀŪĀ, ŌĒ †%†ŌŪĀ )  
 ē Ā%Ī††† ŌŌŪ Ā. Ī††Ī†††  
 ĪŌ~ĪŌŌŪ.  
 ēēD-TR501E/TR502E: 3, 3 ÇŪ  
 CCD-TR620E: 3, 5 ÇŪ  
 ē†.Ō~†† ŪĀĪŌĀ †ŪŪ †  
 ēŪ 0°ē %Ō 40°ē  
 ĪĀĪŌĀ †ŪŪ †† †ĪĀĪĒ†  
 ēŪ -20°ē %Ō +60°ē  
 ē†ĀĪĀ \* (Ō Ē. ĪĒĀĒŪ.)  
 166 Ī 43 Ī 75 ĪĪ (-, /, „),  
 , ĪĪ. ~†† , \*ŌŪŪŌ†. ĒĒĀ  
 ~†ŌŪĒ Ē Ā, ŪĪ†ŪŌ \*  
 ÇĀŌ (Ō Ē. ĪĒĀĒŪ.)  
 Āē-v16: 420 „  
 Āē-v16Ā: 450 „  
 Āē-v17: 460 „  
 Āē-v17Ā: 490 „

ÇĀŌ (Ō Ē. ĪĒĀ.)  
 CCD-TR501E/TR502E: 770 „  
 CCD-TR620E: 780 „, ĪĀ  
 , ĪĪ. ~†† †Ū† ĀĒĪŌ, Ō. ĪŌĪ†,  
 ĪĒŪĒĀ, ŌĒ. †Ū† ĀĒĪĒ,  
 Ī†ŌŌĀŪ\* Ē ŌĪĀ~Ā, Ō, Ō ĀĪ†††  
 CCD-TR501E/TR502E: 990 „  
 CCD-TR620E: 1 Ī,  
 ÇĪĪ. ~†† †Ū† ĀĒĪ\*Ē. ĪŌĪ  
 NP-33, ĪĒŪĒĀ, Ū. †Ū† ĀĒĪŪ  
 CR2025, Ī†ŌŌĀŪŪ P5-90 Ē  
 ŌĪĀ~Ā, ŌĒ ĀĪĀĪ.  
 āĒĪ ŌŪŌĪ  
 ŪĪĀĪŪ ĀŪŌ, \*Ē  
 ĪŌĪ%ĀĪŌŌ Ī'ē ĪĒĪ ŌŪŌĪ,  
 ĪŌĪŌŪŌĪĒ~ĀŌĪĒĒ ŪĒŌ  
 ē ĒĪ†, †ĀĪ\*Ā  
 Ō ĒĪ†%ĪĀĒĪŌŌŪĒ  
 ēĪ. ŌŪ . 6.

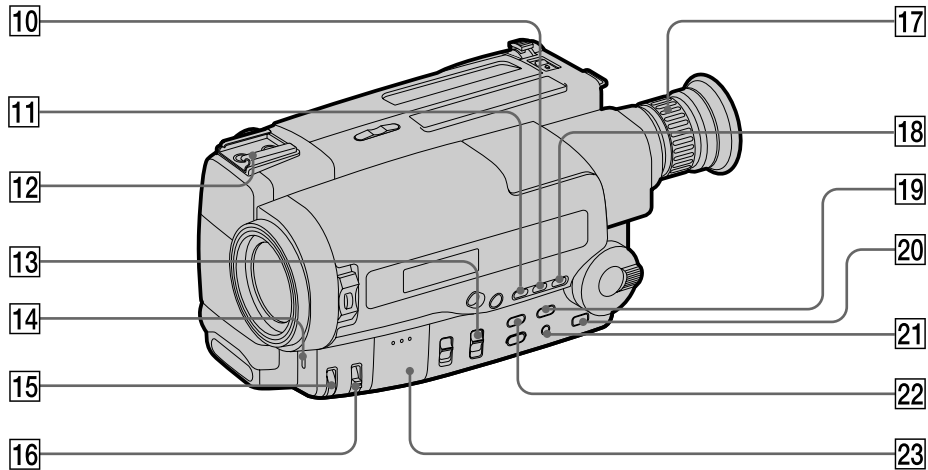
ēĀŪĀ, ŌĒ †%†ŌŪĀ

Ī Ā.Ō, †ĪĒ† Ī ĒŌŪŌ~ĪĒĪŪ  
 ŌĒŪ†ĪĒ†  
 110 - 240 Ç ŌĀ ĀĪ. ŪŌĪ†, 50/  
 60 Ē~  
 ēŌŪ Ā. Ī††Ī††† ĪŌ~ĪŌŌŪ,  
 AC-V16/V17: 20 ÇŪ  
 AC-V16A/V17A: 22 ÇŪ  
 Ç\*ĪŌ%ĪŌĀ Ī†Ō flĒĀĪĒĀ  
 ēĪĀĀ%Ō DC OUT , †.Ō~ĀĪ  
 ĀĒĒĪĀ  
 7, 5 Ç; 1, 8 Ā  
 ēĪĀĀ%Ō %††† flĒĪĒĒ  
 .†Ū† ĀĒĪŌ, Ō. ĪŌĪ†  
 10 Ç; 1, 1 Ā, ĀĒĒĪĀ Ā† flĒĪĒĒ  
 ē ĒĪĀĪĀĪĒĀ  
 Ā†Ū† ĀĒĪ\*Ā. ĪŌĪĒ Sony NP-  
 33 (Ō ĒĪ†, †ĀŪŌ†), NP-67, NP-  
 66H/68, NP-78, NP-98  
 ē†.Ō~†† ŪĀĪŌĀ †ŪŪ †  
 ēŪ 0°ē %Ō 40°ē  
 ĪĀĪŌĀ †ŪŪ †† †ĪĀĪĒ†  
 ēŪ -20°ē %Ō +60°ē  
 ē†ĀĪĀ \* (Ō Ē. ĪĒĀĒŪ.)  
 166 Ī 43 Ī 75 ĪĪ (-, /, „),  
 , ĪĪ. ~†† , \*ŌŪŪŌ†. ĒĒĀ  
 ~†ŌŪĒ Ē Ā, ŪĪ†ŪŌ \*  
 ÇĀŌ (Ō Ē. ĪĒĀĒŪ.)  
 Āē-v16: 420 „  
 Āē-v16Ā: 450 „  
 Āē-v17: 460 „  
 Āē-v17Ā: 490 „  
 āŌĪŌŪ ŪĪ~Ē†† Ē ŪĀĪĒĒ~ĀŌĪĒĀ  
 Ī† †ĪŪĀ ĒŌŪĒĒĒ ĪŌ, ŌŪ. ŪŪ.  
 ēĀĪĀĪĀĪ. \*ĀĀ Ū, Ā%ŌĪĪĀĪĒ†.



## Identifying the parts

εὐρεῖτε τὰ μέρη τῆς κάμερας



- 10 TIME button (p. 29)
- 11 DATE button (p. 29)
- 12 Accessory shoe
- 13 START/STOP MODE switch (p. 12, 30)
- 14 Recording lamp
- 15 Focus dial (p. 39)
- 16 FOCUS switch (p. 39)
- 17 Viewfinder adjustment ring (p. 14)
- 18 COUNTER RESET button (p. 14)
- 19 TITLE button (p. 43)
- 20 MENU button (p. 26)
- 21 DISPLAY button (p. 21)
- 22 PICTURE EFFECT button (p. 35)
- 23 Lithium battery compartment (p. 50)

- 10 ἀποκρίση TIME (ὄψ . 29)
- 11 ἀποκρίση DATE (ὄψ . 29)
- 12 Ἀποσύνδεση ἑξωτερικοῦ ἰσχυροῦ, ἰσχύς ἰσχυροῦ
- 13 ἐπιλογή ἀλλαγῆς λειτουργίας START/STOP MODE (ὄψ . 12, 30)
- 14 Ἴσχυροὶ ἀναβοήθη
- 15 Ἐπιλογή ἀλλαγῆς λειτουργίας FOCUS (ὄψ . 39)
- 16 ἐπιλογή ἀλλαγῆς λειτουργίας FOCUS (ὄψ . 39)
- 17 Ἐπιλογή ἀλλαγῆς λειτουργίας ἀλλαγῆς λειτουργίας ἀλλαγῆς λειτουργίας (ὄψ . 14)
- 18 ἀποκρίση COUNTER RESET (ὄψ . 14)
- 19 ἀποκρίση TITLE (ὄψ . 43)
- 20 ἀποκρίση MENU (ὄψ . 26)
- 21 ἀποκρίση DISPLAY (ὄψ . 21)
- 22 ἀποκρίση PICTURE EFFECT (ὄψ . 35)
- 23 ἐπιλογή ἀλλαγῆς λειτουργίας ἀλλαγῆς λειτουργίας ἀλλαγῆς λειτουργίας (ὄψ . 50)





## Identifying the parts

εὐρίθρο, ἡ ἀποστολὴ τοῦ ἀποστολέα

## Remote Commander

ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα

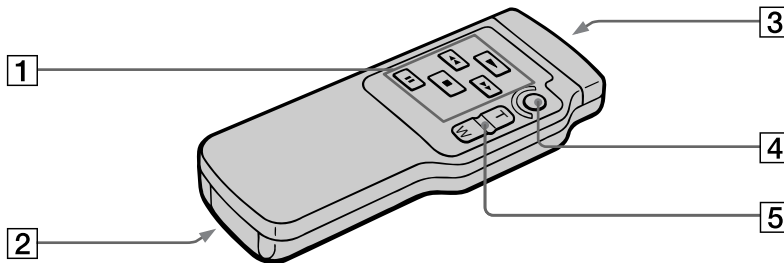
### Using the Remote Commander

Make sure that COMMANDER is set to ON in the menu system.

ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα

The buttons that have the same name on the Remote Commander as on the camcorder function identically.

ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα

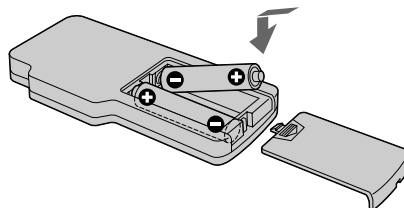


- 1 Tape transport buttons (p. 20)
- 2 R6 (size AA) battery holder (p. 80)
- 3 Transmitter  
Point toward the remote sensor to control the camcorder after turning on the camcorder.
- 4 START/STOP button
- 5 Power zoom button  
The zooming speed is unchangeable on the Remote Commander.

- 1 ἡ ἀποστολὴ τοῦ ἀποστολέα (ὄψ. 20)
- 2 ἡ ἀποστολὴ τοῦ ἀποστολέα (ἡ ἀποστολὴ τοῦ ἀποστολέα) (ὄψ. 80)
- 3 ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα
- 4 ἡ ἀποστολὴ τοῦ ἀποστολέα START/STOP
- 5 ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα

**To prepare the Remote Commander**  
Insert two R6 (size AA) batteries by matching the + and - on the batteries to the diagram inside the battery compartment.

ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα  
ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα



Additional Information

ἡ ἀποστολὴ τοῦ ἀποστολέα, ἡ ἀποστολὴ τοῦ ἀποστολέα





## Identifying the parts

εὐὸὸἄἵ†, †ἵἔἂ ἄἄ†ἵἂἔ

### To watch the demonstration

You can start the demonstration by setting in the menu system.

You can also start the demonstration by the following operation.

Νἱἢ ὀ ὀὀἰὸῦ † ἄἵἰὸἰὸῦ † ἄἔἔ  
 ς· ἰὸἔἂῦἂ ἵ†~†ῦ, ἄἵἰὸἰὸῦ † ἄἔ. ὀῦῦἂἱ  
 ὀῦῦ†ἰὸ, ἱἔ ὀἔὀῦἂἱ· ἱἂἱ, .  
 ς· ὕ†ἱἔἂ ἰὸἔἂῦἂ ἵ†~†ῦ, ἄἵἰὸἰὸῦ † ἄἔ.  
 ὀῦῦἂἱ ὀἱἂἄῦ. ἄἔ ὀὸἂ † ἄἔἔ.

### To enter Demo mode

- (1) Eject the cassette and set the POWER switch to PLAYER.
- (2) Turn STANDBY up.
- (3) While holding down ► set the POWER switch to CAMERA.

Νἱἢἢ , ἰὸῂ†, ἄἵἰὸἰὸῦ † ἄἔὀἱἰ·ἔ ἂἔἔἱ  
 Demo

- (1) ς· ὀἰἰἱἔῦἂ ἱ†ὀἂἄῦ ἔ ὀῦῦ†ἰὸ, ἔῦἂ  
 , ἱἱ. ~†ῦἂἱ, POWER, ὀὀἰὸἔἂἱἔἂ  
 PLAYER.
- (2) ἔὀ, ἂ ἱἔῦἂ STANDBY, , ἂ 1.
- (3) ς†ἔἔἱ†ἢ ►, ὀῦῦ†ἰὸ, ἔῦἂ, ἱἱ. ~†ῦἂἱ,  
 POWER, ὀὀἰὸἔἂἱἔἂ CAMERA.

### To exit Demo mode

- (1) Set the POWER switch to PLAYER.
- (2) Turn STANDBY up.
- (3) While holding down ■ set the POWER switch to CAMERA.

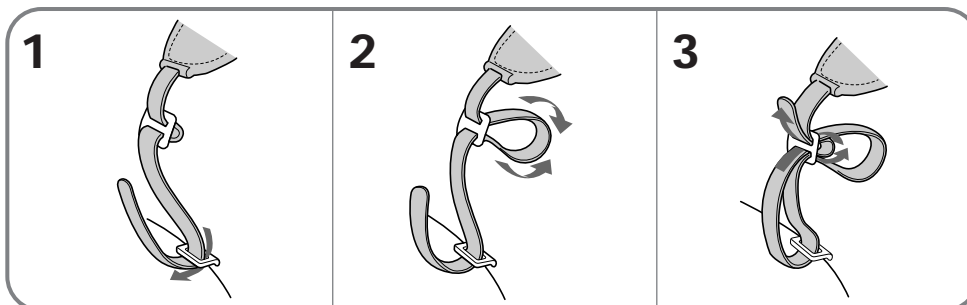
Νἱἢἢ , ἰὸῂ† ἔἂ ἄἵἰὸἰὸῦ † ἄἔὀἱἰ, ὀ  
 ἂἔἔἱ† Demo

- (1) ἰὸῦ†ἰὸ, ἔῦἂ, ἱἱ. ~†ῦἂἱ, POWER,  
 ὀὀἰὸἔἂἱἔἂ PLAYER.
- (2) ἔὀ, ἂ ἱἔῦἂ STANDBY, , ἂ 1.
- (3) ς†ἔἔἱ†ἢ ■, ὀῦῦ†ἰὸ, ἔῦἂ, ἱἱ. ~†ῦἂἱ,  
 POWER, ὀὀἰὸἔἂἱἔἂ CAMERA.

### Attaching the shoulder strap

Attach the supplied shoulder strap to the hooks for the shoulder strap (37) on page 78).

ἔ ἔἱ ἂὀἱἂἱἔἂ ὀἱἂ~ἂ, ὀ, ὀ ἂἱἢἢ  
 ἔ ἔἱ ἂὀἔῦἂ ὀ ἔἱ†, †ἂἱ·ἔ ὀἱἂ~ἂ, ὀἔ ἂἱἂἱ, ἱ  
 ἱ . ~†ἱἱ ἄἱἢ ὀἱἂ~ἂ, ὀ, ὀ ἂἱἢἢ (37) ἱ† ὀῦ .78).



Additional Information

Νὸὀὀἱἔῦἂἱ. ἱ†ἢ ἔἱῦὀ ἱ†~ἔἢ

## Identifying the parts

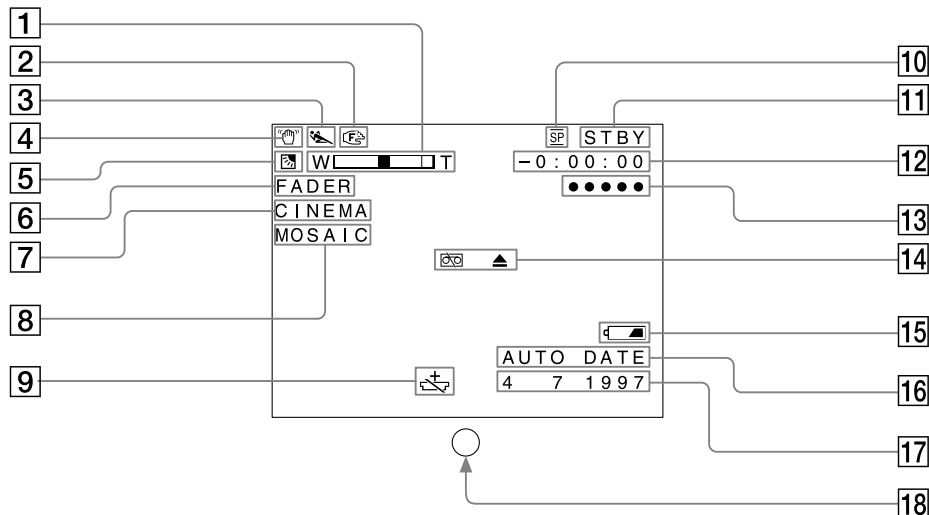
εὐὸὸἌἱ†, †ἱἔἌ %Ἀἰ†ἱἌἔ

## Operation indicators

ἁἱἔἱ†ἰό ° †·όύ°

### In the viewfinder

ç , ἔἔὸἔἱ†ἰἌἱἌ



- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>1 Power zoom indicator (p. 15)</li> <li>2 Manual focus indicator (p. 39)</li> <li>3 PROGRAM AE indicator (p. 41)</li> <li>4 SteadyShot indicator (CCD-TR620E only) (p. 42)</li> <li>5 Back light indicator (p. 31)</li> <li>6 FADER indicator (p. 32)</li> <li>7 Wide mode indicator (CCD-TR502E/TR620E only) (p. 37)</li> <li>8 Picture Effect indicator (p. 35)</li> <li>9 Lithium battery indicator (p. 49)</li> <li>10 SP/LP recording mode indicator (p. 12)</li> <li>11 Tape transport mode (p. 12)</li> </ul> | <ul style="list-style-type: none"> <li>1 ἁἱἔἱ†ἰό ὀ ἔ, ὀἔἱό, ὀ ἰἰὸὸἱ†ἰό † (ὄἰ . 15)</li> <li>2 ἁἱἔἱ†ἰό ἰἱἱἱἱἱἱἱ ὀ, ἱἔ (ὄἰ . 39)</li> <li>3 ἁἱἔἱ†ἰό PROGRAM AE (ὄἰ . 41)</li> <li>4 ἁἱἔἱ†ἰό ἰἰἱἱἱἱἱἱ, ὀἔ ὀ·Ἄἱἱἔ (ἰἱἱ, ἱἱἱ CCD-TR620E) (ὄἰ . 42)</li> <li>5 ἁἱἔἱ†ἰό Ἀ†ἱἌἔ ὀἔἂ, Ἀἰἱἔ (ὄἰ . 31)</li> <li>6 ἁἱἔἱ†ἰό FADER (ὄἰ . 32)</li> <li>7 ἁἱἔἱ†ἰό ἱἱ ὀἱὀἱ ἱἱἱἱ, ὀ Ἀἔἱἱ† (ἰἱἱ, ἱἱἱ ἔἔD-TR502E/TR620E) (ὄἰ . 37)</li> <li>8 ἁἱἔἱ†ἰό ἱἱἱἱἱἱἱ, ἔἈὀ· †ἔἈἱἔἱἱ (ὄἰ . 35)</li> <li>9 ἁἱἔἱ†ἰό ἱἱἱἱἱ, ὀἔ·†ἰ† Ἀἔἱἔ (ὄἰ . 49)</li> <li>10 ἁἱἔἱ†ἰό Ἀἔἱἱ† Ἀ†ὀἔἕἕ SP/LP (ὄἰ . 12)</li> <li>11 ἔἈἔἱἱ ὀἈ ἈἱἌ·Ἀἱἔἱἱ ἱἈἱἰ° (ὄἰ . 12)</li> </ul> |
|---|---|



# Warning indicators

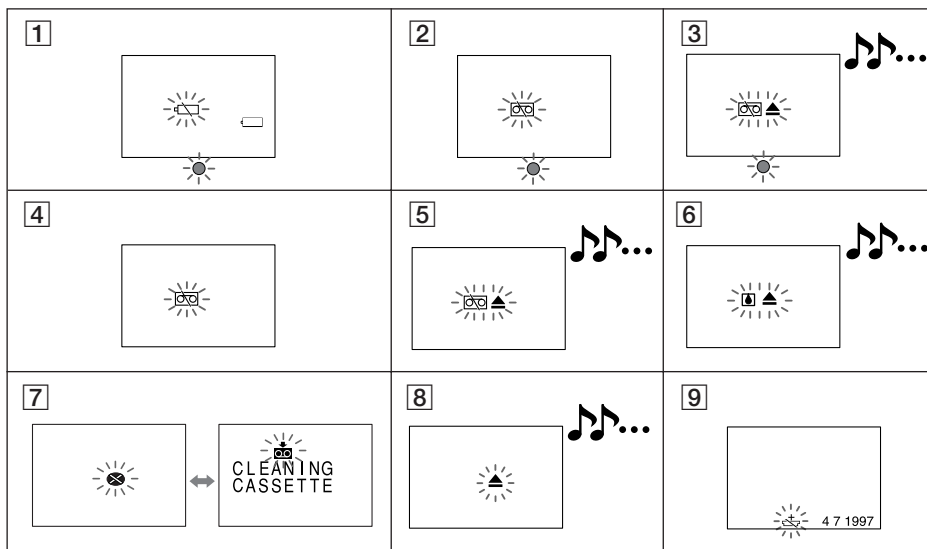
ΕΙΣΑΓΩΓΗ ΚΑΡΤΕΛΛΟΥ

The warning indicators and the recording lamp flash to inform you of the following situation. The illustrations below are the warning indicators of the viewfinder. The same indicators flash also in the display window.

ΕΙΣΑΓΩΓΗ ΚΑΡΤΕΛΛΟΥ  
 ΑΤΟΜΟΕΚΔΟΣΗ  
 ΟΙ ΑΣΤΕΡΟΙ  
 Ο ΑΣΤΕΡΟΣ  
 ΕΙΣΑΓΩΓΗ ΚΑΡΤΕΛΛΟΥ  
 ΟΙ ΑΣΤΕΡΟΙ

♪: You can hear the beep sound when BEEP is set to ON.

♪: ΟΙ ΑΣΤΕΡΟΙ  
 ΑΤΟΜΟΕΚΔΟΣΗ  
 ΟΙ ΑΣΤΕΡΟΙ



- 1 The battery is weak or dead.  
Slow flashing: The battery is weak.  
Fast flashing: The battery is dead.
- 2 The tape is near the end.
- 3 The tape has run out.
- 4 No tape has been inserted.
- 5 The tab on the tape is out (red). (p. 11)
- 6 Moisture condensation has occurred.  
(p. 58)  
▲ indicator appears only when the cassette is inserted.
- 7 The video heads may be contaminated.  
(p. 59)
- 8 Some other trouble has occurred.  
Disconnect the power source and contact your Sony dealer or local authorized facility.
- 9 The lithium battery is weak or is not installed. (p. 49)  
This indicator flashes just only after powering on.

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CCD-TR501E/TR502E/TR620E 3-859-127-13.E/R

Sony Corporation Printed in Japan

CCD-TR501E/TR502E/TR620E 3-859-127-13.E/R



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