

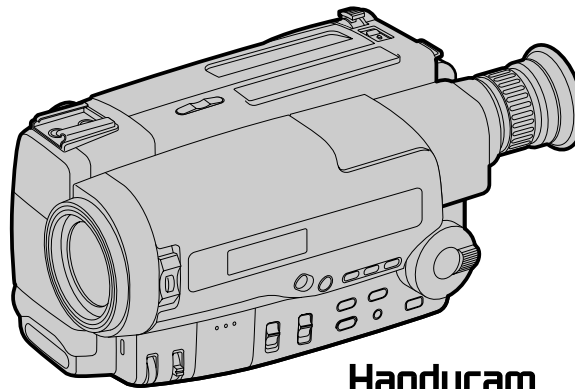
Video Camera Recorder

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+~+îóî ~íòôîû†ú†^ëë %+îìó,,ó +òò+ †ú+ ô óòëî ,ìëî+úâî,ìó
ô ó~âòú, ì+òúóπ~ââ úíó,ó%òú,ó ë óòú†,ëú, â,,ó %îñl ·û%û~ëì òò †,óí.



Handycam
CCD-TR620E

Video 8

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

© 1997 by Sony Corporation

English

Welcome!

Congratulations on your purchase of this Sony Handycam® camcorder. With your Handycam, you can capture life's precious moments with superior picture and sound quality. Your Handycam is loaded with advanced features, but at the same time it is very easy to use. You will soon be producing home video that you can enjoy for years to come.



WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

NOTICE ON THE SUPPLIED AC POWER ADAPTOR FOR CUSTOMERS IN THE UNITED KINGDOM

A moulded plug complying with BS1363 is fitted to this equipment for your safety and convenience.

Should the fuse in the plug supplied need to be replaced, a 5 AMP fuse approved by ASTA or BSI to BS1362 (i.e., marked with  or ) must be used.

If the plug supplied with this equipment has a detachable fuse cover, be sure to attach the fuse cover after you change the fuse. Never use the plug without the fuse cover. If you should lose the fuse cover, please contact your nearest Sony service station.

εὐχρηστικὸν

Νῦν ὁ ὀψώνιος!

Ἐπὶ τῆς ἀγορᾶς ταύτης εὐχρηστικὸν ὀψώνιον ἔχον ἡμεῖς ἀναγορεύομεν ὡς ἄριστον εὐχρηστικὸν ὀψώνιον. Μετὰ τὴν ἀγορὰν ταύτην, οὐ μόνον ἀλλὰ καὶ ἰσχυρὰ ἔσονται ὑποθέσεις ἀπολαύσεως τοῦ ὀψώνιου. Ἡ ἀγορὰ ταύτην εὐχρηστικὸν ὀψώνιον ἔχει, ἀλλὰ καὶ ἰσχυρὰ ἔσονται ὑποθέσεις ἀπολαύσεως τοῦ ὀψώνιου. Ἡ ἀγορὰ ταύτην εὐχρηστικὸν ὀψώνιον ἔχει, ἀλλὰ καὶ ἰσχυρὰ ἔσονται ὑποθέσεις ἀπολαύσεως τοῦ ὀψώνιου. Ἡ ἀγορὰ ταύτην εὐχρηστικὸν ὀψώνιον ἔχει, ἀλλὰ καὶ ἰσχυρὰ ἔσονται ὑποθέσεις ἀπολαύσεως τοῦ ὀψώνιου.

εὐχρηστικὸν ὀψώνιον

Νῦν ὁ ὀψώνιος, ἀλλὰ καὶ ἰσχυρὰ ἔσονται ὑποθέσεις ἀπολαύσεως τοῦ ὀψώνιου. Ἡ ἀγορὰ ταύτην εὐχρηστικὸν ὀψώνιον ἔχει, ἀλλὰ καὶ ἰσχυρὰ ἔσονται ὑποθέσεις ἀπολαύσεως τοῦ ὀψώνιου. Ἡ ἀγορὰ ταύτην εὐχρηστικὸν ὀψώνιον ἔχει, ἀλλὰ καὶ ἰσχυρὰ ἔσονται ὑποθέσεις ἀπολαύσεως τοῦ ὀψώνιου.

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Before you begin

Using this manual

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àðòóî,áó,†ìèâ %†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, %,ììòí ùíó,ó%òú,â èáíóèâì* %îñ ú âì ìèèáòâ â~èòíâìì'ì íó%âíâè.
 èâ Â% úâí, í+í ç' ì+~ìâúâ ~èú+ú, %,ììòâ ùíó,ó%òú,óè ~íóòíú+ùè ó,†ú. †òò+ †ú, ó ó,â .úâ íóíâ ç+~âè íó%âíè, òòòíóú â, ì+ ìèèì. ò+ìâí. ç+~âè ,è%âóí+íâ '.
 àó%âí, CCD-TR620E èòòóí, áúâúòñ , èíí.òú +ùè,ì'ì ^âíñì. ç èìóí òíú~+â ì+èíâìó,†ìèâ íó%âíè ùí+â', †âúòñ ì+ èòòíí+ì. à.~â +âíè~èñ , †.óúâ ~âúíó ùí+â+ì', úâíóúâ, í+í ì+ò èíâ "íóí.íó CCD-TR620E".
 äó,%† ç' ·ù%âúâ ~èú+ú, ùíó,ó%òú,ó, ù~èú',+èúâ, ~úó ííóóíè è ùòú+ìó. íè ì+ ,è%âóí+íâ â óóí+â+ì' â+,ì+,ì'ìè·ùí,†ìè. ò èì. ìòú+ìó,èúâ , 'íí.~+úâí, POWER , óóíóèâìèâ CAMERA.
 òòíè ì+ èòòíí+ì ùí+â', †âúòñ áì+í ♪, ç' íóèâúâ òí~+ú, áúííâ ì'è â,ùíó,óè òè,,ì+í %îñ óó%ú,â è%âíèñ ç+~âè +.óú'.

Types of differences

íèò' †âíè~èè

CCD-	TR501E	TR502E	TR620E
Optical Zoom éóúè~âóíèè ú †ìòòóí+úó	15X	15X	15X
Digital Zoom ñèù ó,óè ú †ìòòóí+úó	—	30X*	30X*
Wide Mode òè óíó'í †ìì'è âèèì	—	●	●
Steady Shot ìòúóè~è, †ñ ò'âíí†	—	—	●

* 180xinsomearea/* ç ìâíóóó 'ì †èòí+ì 180-í +úí'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 èíâ~†ìèâ óó òèòúâí+í
 ^,âúíó,,ó úâíâ,è%âíèñ

èèòúâì' ^, áúíó,,ó úâíâ, è%âíèñ óúíè~†. úòñ , â+,èòèíóóúè óú óú +ì'. Ñíñ ò óòíóú † ç+~èì â+òèòâè óó úâíâ, èáó ù, ç+í ìâó.ìó%èíó èòòóí, áó,†ú. úâíâ, èáó , óòíó, †ìì'è ì+ òèòúâíâ PAL.
 òòíè ç' ìóúèúâ èòòóí, áó,†ú. úâíâ, èáó ì+ óòíó, â òèòúâí' SECAM , ç+í óòí+%.ò·èúòñ ò âó. †âó, †úâí, íó%† PAL/SECAM (óòíóí. íú ~ú†, è%âóí+íâ † èâ,,óúó, íâí+ ì+ óòíó, â òèòúâí' 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

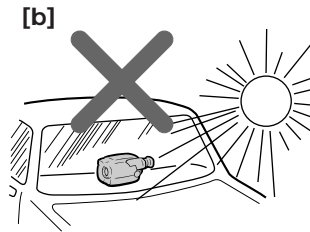
íâíâ, ÈÄÈòì·À ò ó,, †ìì', íÈìòùÈì.í',
 ,È%Áóíâíú· È% ù,,Èâ ì+úâ È+í' íó,,úó·ú.
 Á+·È·âì· †, úó ðíèì ò †, óí.
 çÁó †, óíó·ì+íâ+òÈò. Ù+íÈì ì+úâ È+íó,
 íóÈáú ò óóÈ, ó Â·Èú, ùòíó, Èíì á+íóí+ó.
 †, úó ðíóí ô †, Â.

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 ÓÈìòóóÈ òó ù·ó%ú Á+
 , È%Áóí+íâ ÓÈ

- çÂ%óóúòì+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
 ìâÈò ò †, ìóóóÈ †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+ òóíì·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.

èó%â ÈÈíóâ á+òÈòÈ ìâ íóÈáú··ú.
 óóíó áíúÈ ó, †íó, ÂðíÈ á+òÈò, ÈíÈ
 , óóò ÓÈâ, Â%ÁÈÄ ìâ , *óóííí. ùòí Èâ-á+
 ìâÈò ò †, ìóóóÈ, È%Áóí+íâ , , È%Áóíâíú·
 Èú.%.

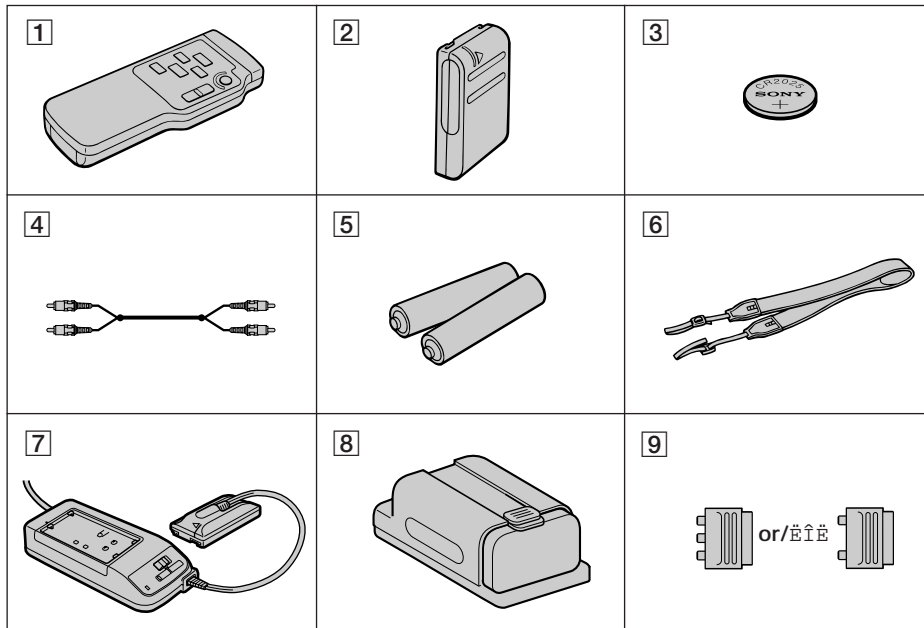
Before you begin

Checking supplied accessories

1
1

Check that the following accessories are supplied with your camcorder.

1
1
1
1



- | | |
|---|--|
| <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)
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)
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 1 1 1</p> <p>2 1 1 1</p> <p>3 1 1 1</p> <p>4 1 1 1</p> <p>5 1 1 1</p> <p>6 1 1 1</p> <p>7 1 1 1</p> <p>8 1 1 1</p> <p>9 1 1 1</p> |
|---|--|

Getting started

Charging and installing the battery pack

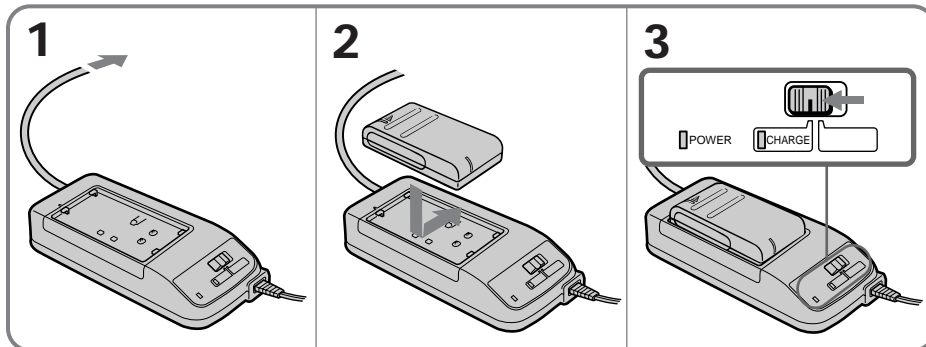
Before using your camcorder, you first need to charge and install the battery pack. To charge the battery pack, use the supplied AC power adaptor.

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-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

ë ÓÍ òíÛÈ·· ·†Ú† ÂÈÍÈ CCD-TR501E/TR502E

Á†Ú† ÂÈÌ·È ·ÍÓÍ	íÈÒÈ~ÌÓÁ , ÂÍñ Á†ÒÈÒÈ* *	çÂÔ Â '- ,ÌÓÁ, ÂÍñ Á†ÒÈÒÈ***
NP-33(Ò ÈÍ†„†ÁÓñ)	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


CCD-TR620E


Á†Ú† ÂÈÌ·È ·ÍÓÍ	íÈÒÈ~ÌÓÁ , ÂÍñ Á†ÒÈÒÈ* *	çÂÔ Â '- ,ÌÓÁ, ÂÍñ Á†ÒÈÒÈ***
NP-33(Ò ÈÍ†„†ÁÓñ)	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.

- ** 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, Ú †ÌÓÓÚ†~È. È
, ÍÍ.~†ÁÚÁ/, *ÍÍ.~†ÁÚÁ ÒÈÛ†ÍÈÁ.
èÁ†Í,Ì·È Ò ÓÍ òíÛÈ·· ·†Ú† ÂÈÌÓ„Ó
·ÍÓÍ† ÍÓÈÁÛ··Ú, ÍÓ Ó~Á.
- *** è È·ÍÈÁÈÛÁÍ,ÌÓÁ, ÂÍñ ÌÁÔ Â ',ÌÓ„Ó
,ÓÓÔ ÓÈÁ,Â%ÁÍÈñ, ÓÓÍÁ~ÁÍÈÈ.

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.

Ç†ÈÌÓ!
àÓÓÓÍ,ÁÚÈÚÁ Á† fl%·†Ú† ÂÈÌÓ„Ó·ÍÓÍ†
ÓÓÍÌÓÓÚ,, 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%ÓÓÍÌÓÓÚ,,
ÈÓÓÓÍ,ÁÓ,†Í (.ÍÓÍ †Á ñÈÁÍ).
èÓ,ÚÓ Ì†ñÁ† fl%Í†, ÒÍÛ~†Á~†ÓÙÈ~ÌÓ
ÓÓÚ†, ~ÂÈÒñ ÁÍÍÓÓÙÈ Ò È,Ó%ÈÛ Í ÒÌÈÈÁÍÈ.
ÁÍÍÓÓÙÈ. è%Í†ÍÓ ÓÁ, ÒÍ†~†Í, Ì†ñ ÁÍÍÓÓÚ.
·†Ú† ÂÈ ÍÓÈÁÛ··Ú, ,ÓÓÓÚ†ÌÓ, ÍÁÍ†, ÁÓÍÈ
Ç· ÓÓÍÌÓÓÚ, ÈÓÓÓÍ, ÁÚÁÚÁ Á† fl%·†Ú† ÂÈ
È òíÓ, †ÁÁ ÓÓÍÌÓÓÚ, Á† fl%ÈÚÁ.
ÑÍñ †Á fl%ÍÈ·†Ú† ÂÈ ÒÌÈÈÛÁ Í†ÓÓÁÛÈ 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†~†ÍÛ··ÓÚ Ò ÌÈ„†Ú,
ÈÍ%ÈÍ†ÚÓ  È Í †òÌ†ñ Ì†ÍÓÓ~Í†.

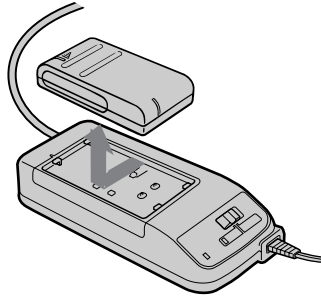
Charging and installing the battery pack

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
ÒÚ 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 ÒÓÓÍÂ 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 , ÒÓÍÓÈÂÌÈÂ VTR (DC OUT) È ÓÚÓÓÂÈÌÈÚÂ ÒÂÚÂ, ÒÈ Ò Ó, Ó%. è ÈÌÂ ÌÓ ~Â ÂÂ ÌÈÌÓÓÓ, ÌÓ,, ÓÓ%ÓÓÂÈÌÈÚÂ ÒÂÚÂ, ÒÈ Ò Ó, Ó% È ÓÓflÚ. ÛÒÚ†ÌÓ, ÈÚÂ ÒÂÍÂÍÚÓ , ÒÓÍÓÈÂÌÈÂ 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

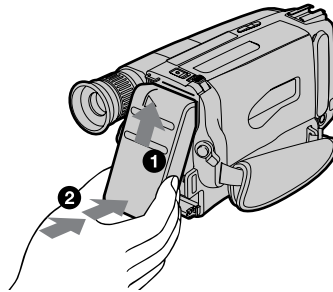
á† fl%Í† È ÛÒÚ†ÌÓ, Í†
· †Ú† ÂÈÌÓ„Ó · ÍÓÍ†

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†ÈÌÈÚÁ · †Ú† ÂÈÌ·È · ÍÓÍ, Ú†Í, ~ÚÓ· ÓÌ · Í ì†ÂÈÌÓ Ó ÈÓÓÁÈÈÌÁÌ. ì·ÂÈÚÁÓ, , ~ÚÓ· Ç· ÛÒÍ· †ÌÈ%, ÓÈÌÓÈ ~ÁÍ·ÓÍ. ì·ÂÈÚÁÓ, , ~ÚÓ Ç· %, †È%· ÛÒÍ· †ÌÈ ~ÁÍ·ÓÍ.
è ÈÍ ÁÓÈÚÁ ì†ÂÈÌÓ · †Ú† ÂÈÌ·È · ÍÓÍ Í , ÈÈ·ÁÓÍ†ÌÁ Â.



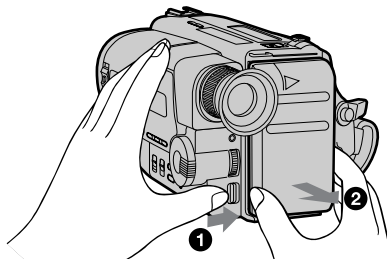
Note on installing the NP-98 battery pack ÈÌÁ~†ÌÈÁ ÓÚÌÓÈÈÚÁÍ, ÌÓ · †Ú† ÂÈÌÓ„Ó · ÍÓÍ† NP-98 àÒÓÍ, ÁÚÈÚÁ , ÈÈ·ÁÓÍ†ÌÁ Û, ÓÍÁ, Í† Ó ÈÓÓ%ìfl, ÈÈ·ÓÈÒÍ†ÚÁÍ, .

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

è ÈÌÁ~†ÌÈÁ Í · †Ú† ÂÈÌÓÍÛ · ÍÓÍÛ ÇÁ ÓÁ ÁÌÓÓÈÚÁ , ÈÈ·ÁÓÍ†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 ÒìflÚÈfl · †Ú† ÂÈÌÓ„Ó · ÍÓÍ† è%, ÈÌ·ÚÁ BATT, † Á†ÚÁÍ ÓÓÚflÌÈÚÁ Á† ÌÈÈÌ. ~ †ÒÚ. · †Ú† ÂÈÌÓ„Ó · ÍÓÍ†.



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

Ç· ÍÓÈÁÚÁ, Á, ìflÌÛ. ì† %ÁÌÓÍÒÚ †^È. ÛÛÍÍ^ÈÈ, ÈÌÁ. ~ÈÌÒfl, %, ìÌÒÈ, ÈÈ·ÁÓÍ†ÌÁ Â. (ÇÚ .28)

Inserting a cassette

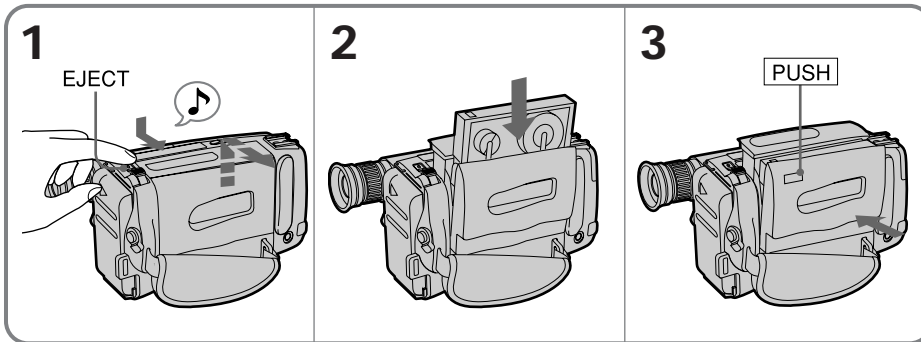
ÇÒÚ†, Í† Í†ÒÒÁÚ°

Make sure that a power source is installed.

- (1) While pressing the small blue button, slide EJECT in the direction of the arrow. The cassette compartment automatically opens.
- (2) Insert a cassette (not supplied) with the window facing out.
- (3) Press the PUSH mark on the cassette compartment to close it. The cassette compartment automatically closes.

Ì·Â%ÉÚÁÒ, ~ÚÒ ÈÒÚÓ~ÌÈÍ ÒÈÚ†ÌÈÌ ÚÒÚ†ÌÒ, ÍÁÌ.

- (1) Ç†ÈÈ†††† Í†ÍÁÌ, ÍÚ. ÒÈÌ. . ÍÌÒÓÍÚ, Ò%, ÈÌ, ÚÁ EJECT, Ì†Ò †, ÍÁÌÈÈ ÒÚ ÁÍÈÈ. ÉÚÒÁÍ Í†ÒÒÁÚ° †, ÚÓÍ†ÚÈ~ÁÒÍÈ ÓÚÍ °, †ÁÚÒ†.
- (2) ÇÒÚ†, ÚÁ Í†ÒÒÁÚÚ (ÌÁ Ò ÈÍ†, †ÁÚÒ†) ÓÍÓ~ÍÓÍ, Ó· †~ÁÌÌ·Ì Ì† ÚÈÚ.
- (3) Ç†ÈÈÈÚÁ ÍÁÚÍÚ PUSH Ì† ÓÚÒÁÍÁ Í†ÒÒÁÚ° %†††Á„ Ó Á†Í °ÚÈ†. ÉÚÒÁÍ Í†ÒÒÁÚ° †, ÚÓÍ†ÚÈ~ÁÒÍÈ Á†Í °, †ÁÚÒ†.



To eject the cassette

While pressing the small blue button, slide EJECT in the direction of the arrow.

To prevent accidental erasure

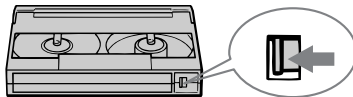
Slide the tab on the cassette to expose the red mark.

If you insert the cassette with the red mark exposed and close the cassette compartment, the beeps sound for a while. If you try to record with the red mark exposed, the [] and [] indicators flash, and you cannot record.

To re-record on this tape, slide the tab back out covering the red mark.

ÑÍ††, °Ú†ÍÈÈ, †ÌÈ† Í†ÒÒÁÚ° Ç†ÈÈ†††† Í†ÍÁÌ, ÍÚ. ÒÈÌ. . ÍÌÒÓÍÚ, Ò%, ÈÌ, ÚÁ EJECT, Ì†Ò †, ÍÁÌÈÈ ÒÚ ÁÍÈÈ.

ÑÍ†† Ò Á%ÓÚ, †~ÁÌÈÈ ÒÍÚ~†ÈÒ„ Ó ÓÚÈ †ÌÈ† ÈÁ Á%, ÈÌ, ÚÁ ÍÁÒÁÒÓÓÍ Ì† Í†ÒÒÁÚÁ, ~ÚÓ· ÓÒ†, ÈÍ†Ò, Í †ÒÍ††† ÍÁÚÍ†. ÒÒÍÈ Ç° , ÓÚ†, ÈÚÁ Í†ÒÒÁÚÚ Ò È , °ÓÚ†, ÍÁÌÌÒÈ Í †ÒÍÒÈ ÍÁÚÍÁ È Á†Í ÓÁÚÁ ÓÓÓÁÍ Í†ÒÒÁÚ° , ÚÓ Á†Á, Ú~ÈÚ ÁÚÍÁ Ì~È ÒÈ„ Í†Í. ÓÒÍÈ Ç° ÓÓÓ·Ú†ÁÚÁÒ, Á†ÒÈÒ°, †Ú, Ò È , °ÓÚ†, ÍÁÌÌÒÈ Í †ÒÍÒÈ ÍÁÚÍÁ, , È%ÓÈÓÍ†ÚÁÍÁ ·Ú%ÓÚ ÍÈ„ †Ú, ÈÌ%ÈÍ†ÚÓ ° [] È [], È Ç° ÍÁ ÒÍÒÈÁÚÁ Ò ÈÁ, ÁÓÚÈ Á†ÒÈÒ. ÑÍ†† ÓÁ ÁÁ†ÒÈÒÈ Ì† %†ÌÌÚ. ÍÁÌÍÚ ÓÁ Á%, ÈÌ, ÚÁ ÍÁÒÁÒÓÓÍ Ì†Á†%, ~ÚÓ· Á†Í °Ú, Í †ÒÍÚ. ÍÁÚÍÚ.



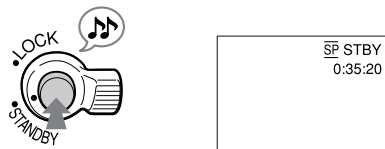
To stop recording momentarily [a]

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

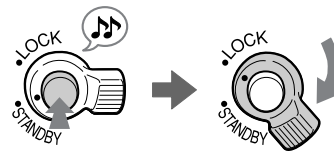
When you record from the beginning of the tape, run the tape for about 15 seconds before starting the actual recording. This prevents the camcorder from missing any start-up scenes when you play back the tape.

Νίηλ , ΑίΑίί0E 000+10, 1E Α+0E0E [a]
 ϕ+E1E0A 00η0, START/STOP. ϕ
 , E%0E0ί+0A1A E1E1+00 "REC" EΑ1A1E0η 1+
 E1E1+00 "STBY" (ΑE1E1 „000, 1000E) .

Νίηλ 0101~+1Eηλ Α+0E0E [b]

ϕ+E1E0A START/STOP. e0, A 1E0A STANDBY
 , 1EΑ E 000+10, E0A , *1E ~+0A1A , POWER ,
 0010EΑ1EΑ OFF. α+0A1A , *00111E0A 1+00A00 E
 0%+1E0A ·+0+ ΑE1·E·101.

[b]



e E1A~+1EΑ 1 ΑE1E0 „000, 1000E
 001E ϕ· 000+, 1ηA0A , E%Α0ί+1A 0 1+ 5 1E100
 E1E·01AΑ 00, 00+, 1A110E 1+00A00E , ΑE1E1A
 „000, 1000E, 00 , E%Α0ί+1A + , *1E ~E00η
 + 001+0E~Α01E. 000 0 Α%00, +~+A0 +A η%10
 +0+ ΑE E EΑ100 1A10· . Νίηλ , 0A0· 10, 1A1Eη
 ΑE1E1+ „000, 1000E 0%E1 +A 00, A 1E0A
 STANDBY , 1EΑ E 010, + 00, A 1E0A A, 0 , , A 1.
 Νίηλ 1+~+1+ Α+0E0E 1+E1E0A START/STOP.

e E1A~+1Eηλ 1 ΑE1E1+1 Α+0E0E

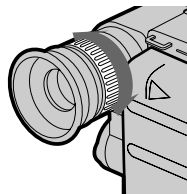
- Ν+11+ηλ , E%Α0ί+1A + Α+0E0 , +A0 E
 , 000 0EΑ, 0%E0 , ΑE1E1A SP (00+1E%+ 010, 0
 , 000 0EΑ, Α%Α1Eηλ) E1E , ΑE1E1A LP
 (0%1E1A10, 0, 000 0EΑ, %Α1Eηλ) .
 e%1+10, 1+~A00, 0, 000 0EΑ, Α%Α1Eηλ ,
 ΑE1E1A LP ·0%Α0 1A 0+1E1 10 0~E1, 1+1 ,
 ΑE1E1A SP .
 • 001E 1A10+ · 1+ Α+0E0+1+ , ΑE1E1A LP 1+
 %+110E , E%Α0ί+1A Α E , 000 0EΑ, 0%E00η 1+
 % 0 , E1 0E0+1 8~11 , E%Α0ί+1A E1E αϕα,
 1+~A00, 0, 000 0EΑ, Α%Α1Eηλ 10EΑ0· 0· 1A
 0+1E1 10 0~E1, 1+1 0 E , 000 0EΑ, Α%Α1Eη
 1+ %+110E , E%Α0ί+1A A .

e E1A~+1EΑ 1 0 0^A000 Α+0E0E
 001E ϕ· 0 0EΑ, 0%E0A Α+0E0 , 0 0+10, 0 1+~+1+
 1A10· , %+E0A , 0A10E1000. 1A10A
 0A 1A00E0 , 0η 01010 15 0A101E %0 1+~+1+
 Α+0E0E. 000 0 Α%01 +1η1A0 , E%Α0ί+1A 00
 0 00001+ 1+~+1 , 1· 1 0 . EΑ00 , 0· A11E , 10 , %+
 ϕ· 0%Α0A , 000 0EΑ, 0%E0 , 1A100 .

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 ÎÁÍÛ·

- è~ÁÚ~ÈÍ ÎÁÍÛ· ÚÍ+Á·, †ÁÚ, ÁÎÎ Á+ÒÈÒÈ ÈÌÈ, ÁÎÎ, ÓÓ ÈÁ, Á%ÁÌÈÎ. àÓÓÓÍ, 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 ÎÁÍÛ+ Á+ÒÈÒ+Ï+ , ÓÓ~ÁÚ+ÌÈÈ ÁÈÈÍÓ, SP È LP, Ò~ÁÚ~ÈÍ ÎÁÍÛ· Û%ÁÚ ÓÓÍ+Á·, †Ú. ÌÁÓ †, ÈÍ, ÌÓÁ, ÁÎÎ Á+ÒÈÒÈ. ÒÒÍÈ Ç· Ì+ÏÁ Á, †ÁÚÁÓ. Ó ÓÈÁ, ÁÓÚÈ ÍÓÍÛ+È ÎÁÍÛ· Ó ÈÒÒÓÍ, ÁÓ, †ÌÈÁÍ Ò~ÁÚ~ÈÍ+ , ÁÍÁÌÈ ÓÓ, †+ÒÍÓ ÚÍÓ, Ó%ÓÚ, Û, , °ÓÓÍÎÈÚÁ Á+ÒÈÒ, , Ó%ÍÓÍ È ÚÓÍ 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+ ÈÓÛÍ+1, ÁÚÍÁ Ì·È ÒÈ, Ì+Í Á, Û~ÈÚ, ÍÓ, %+ Ç· Ì+~ÈÍ+ÁÚÁ Á+ÒÈÒ, , †%, † ÁÚÍÁ Ì·1 ÒÈ, Ì+Ï+ Á, Û~+Ú, ÍÓ, %+ Ç· Á+Í+Ì~È, †ÁÚÁ Á+ÒÈÒ, , ÓÓ%Ú, Á È%ÎÎ ÚÁÍ 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+ ÎÁÍÛ. 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

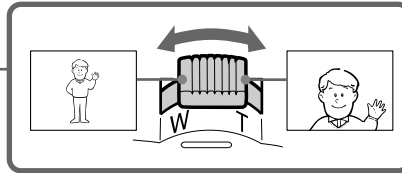
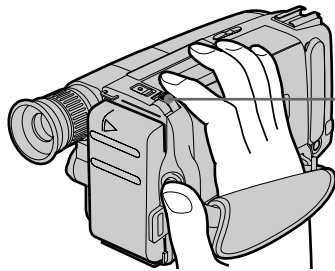
The clock is set at the factory to London time for United Kingdom and to Paris time for the other European models. You can reset the clock. The AUTO DATE feature shows the date automatically once a day. However, the date may automatically appear more than once a day when:

- 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 1 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, 00Α0010 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 0Α1010%.

α0001, Α0, +10Α 0011^00 1+ΑΑ%+
 , Ε%Α01+1Α *

0+ΑΑ%, Ε%Α01+1Α * fl, 1fl Α00fl 0Α110~Α0101
 0 0Α101 Α+0000, 1000 * 0 0Α, 01fl Α0 0+1
 0Α1Α1fl, +Α1Α 0. Α10+, 1+% Α. 0Α
 Α10000 Α. 1fl 0Α 000 0 0Α101, Α010 10000Α,
 ~00. 0+ 0 Α+0000, *, 1fl%Α10 . 01ΑΑ
 0 00Α0001+1, 10.
 00 01+ "T": %fl 0Α1Α000 (0. Α10
 0 0. 100+Α00fl)
 00 01+ "W": %fl 0 010, 00, 1+ 0 Α100
 (0. Α10 0%+1fl Α00fl)

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, 01Α, 1+ %fl
 1Α%1Α110, 0 1+ΑΑ%+, Ε%Α01+1Α *.

α0, %+ 0* 0101+Α0Α 0. Α10, 00001, Α0fl
 1+ΑΑ%, Α001Α 0Α1Α000
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 001000 0, 10, 0, Α1fl 1 +01Α, 0 1+ΑΑ%+,
 Α001Α 0Α1Α000, 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%00fl 1+
 +000fl 100 0100 8001 00 00, Α 110000
 0. Α100, +, 00100Α100 0Α1Α000, 010 1 01,
 00100Α100 0 010, 00, 1+.

Basic operations

010, 1* Α 00Α +* 00

Camera recording

á+ôëð. ò óóíó~ , , ë%âóí+íâ °

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 ëíâ~+ìëñ í ^èù ó,óíù ú +ìòòóí+úó û
- úóí, íó CCD-TR502E/TR620E

- í +ìòòóí+úó ·óíââ, ~âí 15x, òóâ%+ì , ^èù ó,óí ëòóóí+ìèëë, ë í+~âòú, ó ëáó. +ëâíëñ û1ú%~+âúòñ óó íâ â ç+~â, ó % ,ëëâíëñ , óúó óíù í. òðíë ç' íâ 1óúëúâ ëòóóí, áó, +ú. ^èù ó, óë ú +ìòòóí+úó , ûòú+íó, ëúâ D ZOOM , óóíóëâíëâ OFF , òëòúâíâ íâì. .
- è + , +ñ óúó óí+ [a] ëí%ëí+úó + ô ë, ó%ìó, ó ú +ìòòóí+úó + óóí+â' , +âú áóíù ^èù ó, óë ú +ìòòóí+^ëë + íâ, +ñ óúó óí+ [b] óóí+â' , +âú áóíù óóúë~âðíóë ú +ìòòóí+^ëë. òðíë ç' ûòú+íó, ëúâ ûòúí^ë. D ZOOM ì+ OFF, úó áóí+ [a] ëò~ââíâú.



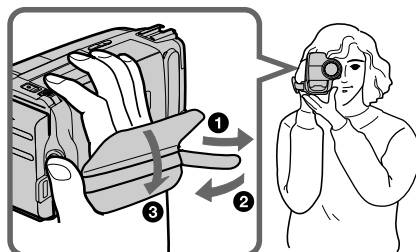
Hints for better shooting

ëó, âú° %îñ íû~-âë
ò·âííë

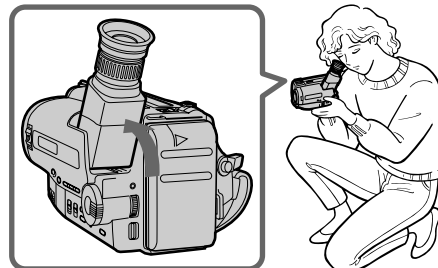
For hand-held shots, you'll get better results by holding the camcorder according to the following suggestions:

Ñíñ í+% ó, ô ë ú%â ëë, +ìëë, ë%âóí+íâ ° ,
ûí+1, ç' óóíù~ëúâ íû~ëâ áâúí, ú+ú' ,
âðíë ·ú%âúâ %â ë+ú, , ë%âóí+íâ ú ,
òóóú, áúòú, ëë óó òíâ%û. ~ëíë úí+â+ìëñíë:

[a]



[b]



Hints for better shooting

εὐ, ἄϋ· %ίη ἱϋ~ -ἄε ὀ· ἄίίε

- 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].

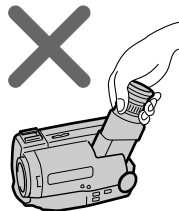
Place the camcorder on a flat surface or use a tripod

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]



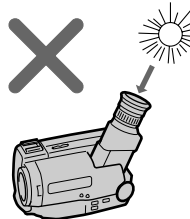
- Ἄ ἔεῦἄ, ἔἄοί+ἱἄ ὕ ἱ ἄοίό ἔ ἄ+ἱ ἄοῦἄ ἄἄ ὀ ὀοίό... ἄἱἄἱἱό, ὀ ἄ+ἱ, +ὑ+ ὕ+ἱ, ~ὑό·· ḡ· ἱό, ἱἔ ἱἄ, ἱό ἱ+ἱἔοῦἱἔ ὀ, +ὑ. ἄ, ὕἱἱὑό +ἱἔ ὀ ὀοίό... ὀἱ, ~ὀ, ὀ ὀ+ἱ, ^+ [a].
- ἔ+ὀὀοίόἔἔἔἔἄ ḡ+ ὀ +, 'ἔ ἱοίόῦ. ὀ· ὀἱὑ ὀῦ ὀἄ-ἱ.
- ἔ+ὀὀοίόἔἔἔἔἄ ḡ+ ἱἄ, ὕ. ὕἱὑ ὀο% , ἔἄοί+ἱἄ ὀἔ %ἱἱ ἄἄ ὀο%ἄ ἔἱἔ.
- ḡ+ἔἄἔἱό ὀ ἔοἱόἱἔἔἄ ḡ+ , ἱ+ἄ ἱ ὀἱὑἱἱ ὕ , ἔἄοἔἱ+ὑἄἱἱ.
- ἄοοἱ, ἄῦἔἄ, ἔἄἔ ἱὑ. +ἱἱὑ, ἱ+~ἄοῦ, ἄ ὕἱό, ὀ%ὀῦ, + %ἱἱ ὀ ἄἔἄἱἄἱἔἱἱ ἄἄ ἔἄοἱὑ+ἱ, ἱ, ἄ ἱ %ἱἱ ἄ+ὀἔἱ ἔἄ ἱἔἄἱ, ὀ ὀοἱἔἄἱἔἱἱ [b].

ἔ+ὀὀοί+ , +ἔῦἄ , ἔἄἄοί+ἱἄ ὕ ἱ+ ὀἱὀοίόἔ ὀ ὀ, ἄ ἱἱὀὀῦἔ ἔἱἔ ἔὀὀοἱ, ἄῦἔῦἄ ὕ ἄἱὀ, ὕ ἔὑ+ +ἔῦἄὀ. +ὀὀοἱ, +ὑ, ἔἄἄοί+ἱἄ ὕ ἱ+ ὀῦοἱἄ ἔἱἔ ἱ. ὀἔ% ὕ, ὀἔ ὀἱὀοίόἔ ὀ ὀ, ἄ ἱἱὀὀῦἔ ἱ+ ὀο%ἱο%ἱ ἄἔ, 'ὀοῦἄ. ὀοἱἔ ḡ· ἔἱἄἄῦἄ ὕ ἄἱὀ, ὕ %ἱἱ ὕὀῦὀ+ὀ+ḡ+ , ὕ ὀ ḡ· ὕ+ἱἔἄ ἱὀἔἄῦἄ ἔὀὀοἱ, ἄ ὀ, +ὑ, ἄἄ ὀ, ἔἄἄοί+ἱἄ ὀἔ. ἔ ἔ ὀ ἔἱ ἄὀἱἄἱἔἔ ὕ ἄἱὀ, ἔ ἱἄ ὕἔ ἱ· Sony ὕ· ἄἔῦἄὀ, , ~ὑό %ἱἔἱ+ , ἔἱὑ+ ὕ ἄἱὀ, ἔ ἱἄἱἄἄ 6, 5 ἱἱ. ḡ ὀ ὀῦἔ, ἱὀἱ ὀἱὑ~+ἄ ḡ· ἱἄ ὀἱὀἔἄῦἄ ἱ+ἔἄἔἱὀ ἔὀὀἄἔἱἔῦ, ὕ ἄἱὀ, ὕ ἔ, ἔἱὑ ἱὀἔἄῦ ὀ ὀ, ἄἔῦ, ἔἄἄοί+ἱἄ ὕ.

ἔ ἄἔἄοῦἄ ἄἔἄἱἔἱἱ ἱ, ἔἄἄἔἱ+ὑἄἱ.

- ḡ ἄ ὀο%ἱἔἱ+ἔῦἄ, ἔἄἄοί+ἱἄ ὕ ἄ+ , ἔἄἄἔἱ+ὑἄἱ, [c].
- ḡ ἄ +ὀὀοἱ+ , +ἔῦἄ, ἔἄἄοί+ἱἄ ὕ ὕ+ἱ, ~ὑό·· , ἔἄἄἔἱ+ὑἄἱ. ·· ἱἔ ἱ+ὀ +, ἱἄἱ· ὀ ἱἱό ἱ+ ὀοἱἱ·ἄ. ḡἱὑ ἄἱἱἔἄ ~+ὀῦἔ, ἔἄἄἔἱ+ὑἄἱἱ ἱὀ, ὕὑ··ὑ, ὀ ὀ, ἄἔἄἱ·. ἄῦ%·ὑἄ ὀὀῦ ὀἔἱ· ὀ ἔ +ὀὀοἱἔἄἱἔἄ , ἔἄἄοί+ἱἄ · ὀο% ὀοἱἱ·ἄἱ ἔἱἔ, ὀἄἱἄ ὀἱἱ+ [d].

[d]



Checking the recorded picture

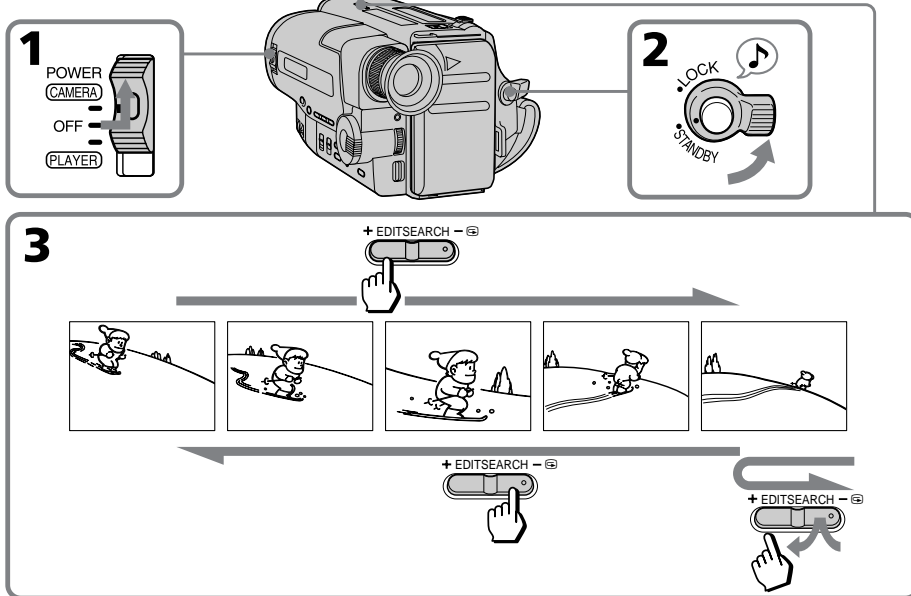
è ó, Â Í† Á† ÔÈÒ† ÌÌÓ, „ Ó
ÈÁÓ. † ÈÂÌÈfl

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).

àòóí, ÁÙfl EDITSEARCH, Ç´ íóÈÁÚÁ
ÒÁ Àòíóú Áú, ÓóóíÁ&Ì. Á† ÔÈÒ† ÌÌÓ, Ò^ÀÌÙ
ÈÌÈ ò ó, Â ÈÚ. Á† ÔÈÒ† ÌÌÓÁ ÈÁÓ. † ÈÂÌÈÈÁ,
, È&ÓÈÍ† ÚÁÍÁ.

- (1) Ç† ÈÈÈ† fl Ì† ÍÁÌ, ÍÙ. ÁÁÍÁÌÙ. ÍÌÓÓÍÙ Ì†
, *ÍÌ. ~† ÚÁÍÁ POWER, ÙÓÚ† ÌÌÓ, ÈÚÁ Á, „ Ó,
ÓÓÍÓÈÂÌÈÈÁ CAMERA.
- (2) èó, Â ÌÈÚÁ STANDBY, , Á 1.
- (3) ÇÁÌ† &ÓÍ, Ó Ì† ÈÌÈÚÁ ÓÚÓ ÓÌÙ - (⊖) ÍÌÓÓÍÈ
EDITSEARCH; óóóíÁ&ÌÈÈÁ ÌÁÓÍÓÍ†, ÍÓ
ÒÁÍÙÌ&Ì. Á† ÔÈÒ† ÌÌÓÈ ~† ÓÚÈ. ·Ù&ÚÙ
, ÓÓÓ ÓÈÁ, Á&ÁÌ* (ÒÁ Àòíóú Á† ÔÈÒÈ).
ÑÁ ÈÈÚÁ ÓÚÓ ÓÌÙ - ÍÌÓÓÍÈ EDITSEARCH
&ÓÚÁ1 ÓÓ, ÓÓÍ†, È&ÁÓÍ† ÍÁ † ÍÁ, Á ÌÁÚÓfl
Í ÈÁÍ† ÁÍÓÈ Ò^ÀÍÁ. èÓÓÍÁ&Ìflfl Á† ÔÈÒ† ÌÌ† fl
~† ÓÚ. ·Ù&ÁÚ, ÓÓÓ ÓÈÁ, Á&ÁÌ†. ÑÍfl
ò ó&, ÈÈÂÌÈÈfl, ÓÁ Á&Á ÈÈÚÁ ÓÚÓ ÓÌÙ +
(ÍÓÍÙ† ÈÌ* È ÓÓÈÓÍ).



To stop playback
Release EDITSEARCH.

ÑÍfl ÓÓÚ† ÌÌÓ, †, óóó ÓÈÁ, Á&ÁÌÈfl
Ç† ÈÈÈÚÁ 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.

ÑÍfl Ì† ~† Í† ÓÁ ÁÁ† ÔÈÒÈ
Ç† ÈÈÈÚÁ START/STOP. èÁ ÁÁ† ÔÈÒ.
Ì† ~ÈÌ† ÁÚÓfl ÓÚ ÓÓÓÍÁ&ÌÈÈÁ Á† ÔÈÒ† ÌÌÓÈ ÓÓ~ÍÈ
ÈÌÈ ÓÚ ÓÓ~ÍÈ, „ &Á Ç* ÓÚÓÓÚÈÈÈ
EDITSEARCH. è Á&ÓÓÍÓÚ ÁÍÓ, ~ÚÓ. Ç* ÌÁ
, *ÓÓÍÍÙÌÈ Ì† ÓÓÁÚÙ, È ÓÁ Á1 Ó& ÌÁÈ&Ó
ÓÓÓÍÁ&ÌÈÈ Ò^ÀÍÓÈ, ÍÓÓÓ Ù. Ç* Á† ÔÈÒ† ÌÌÈ, È
ÓÍÁ&Ù. ~ÁÈ Ò^ÀÍÓÈ, ÍÓÓÓ Ù. Ç*
Á† ÔÈÒ*, † ÁÚÁ, ·Ù&ÁÚ ÓÍ†, Ì* Ì.

Connections for playback

εὐχόμενα ἔστιν ἵνα ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης.

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.

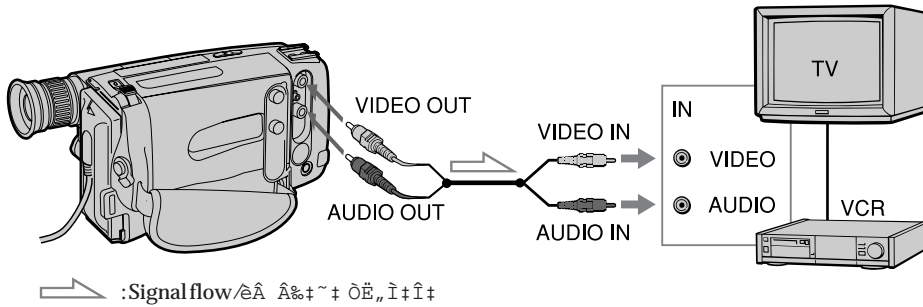
Ὁ ἄριστος ἄνθρωπος ἔστιν ὁ ἀποστολὴ ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης.

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.

Ὁ ἄριστος ἄνθρωπος ἔστιν ὁ ἀποστολὴ ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης.

Ὁ ἄριστος ἄνθρωπος ἔστιν ὁ ἀποστολὴ ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης.



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

Ὁ ἄριστος ἄνθρωπος ἔστιν ὁ ἀποστολὴ ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης.



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

Ὁ ἄριστος ἄνθρωπος ἔστιν ὁ ἀποστολὴ ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης.

Basic operations εὐχόμενα ἔστιν ἵνα ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης, ὡς καὶ ἡ ἀποστολή ἡμετέρας ἐπιχείρησης.

Playing back a tape

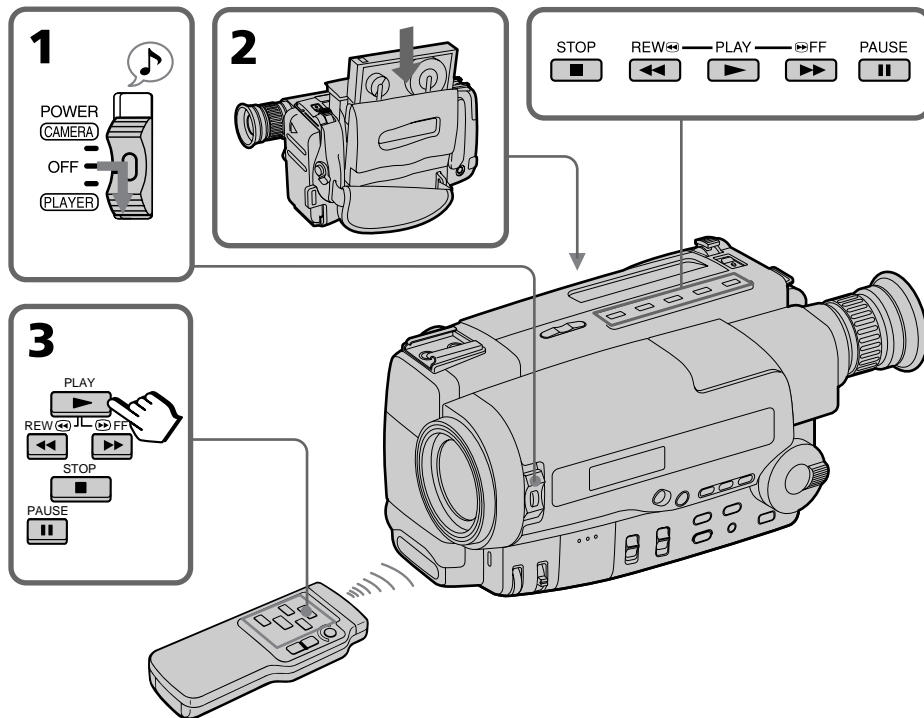
ÇÓÒÔ ÓĚÁ, Â%ÂĪĚÁ ĨÂĪÚ°

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° ĨÓĚÁÚÁ, °ÓÓĪĚÚ. ĨÓĪÚ ÓĪ.Ī°Ě Ô ÓÓĪÚ, °ÓÔ ÓĚÁ, Ó%ĚĪÓ, ÓĚÁÓ° ±ĚÂĪĚĤ, ,Ě%ÓĚÓĪ±ÚÁĪÁ. Ç° Ú±ĪĚÁ ĨÓĚÁÚÁ Ó%ÂĪ±Ú. Ô ÓÓĪÚ Ĩ± ĩ ±ĪÁ ÚÁĪÁ,ĚÁÓ ±ÓÓĪÁ ÓÓ%ĪĪ. ~ÂĪĚĤ,Ě%ÁÓĪ±ĪÁ ° Ĩ ÚÁĪÁ,ĚÁÓ ŮĚĪĚ äçá.

- (1) Ç±ĚĚĪ±Ĥ Ĩ±ĪÂĪ ĨŮ. ÁÁĪÂĪŮ. ĨĪÓÓĪŮ Ĩ±, °ĪĪ. ~±ÚÁĪÁ POWER, ÔÁ Â%,ĚĪ.ÚÁ Â,,Ó, ÓÓĪÓĚÂĪĚÁ PLAYER.
- (2) ÇÓŮ±, ÚÁ Á±ÓĚÔ±ĪŮ. Ĩ±ÓÓÁŮ ÓĪÓ-ĪÓĪ, Ó° ±~ÂĪĪ°Ī Ĩ± ÓĚŮ.
- (3) Ç±ĚĪĚÚÁ ► %ĪĤ Ĩ±~Ī±, °ÓÔ ÓĚÁ, Â%ÂĪĚĤ.



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

ŨĪĤ ÓÓŮ±ĪÓ, ±, °ÓÔ ÓĚÁ, Â%ÂĪĚĤ Ĩ±ĚĪĚÚÁ ■.
ŨĪĤ ŮÓĪÓ ÂĪĪÓĚ ÓÁ ÂĪÓŮĪĚ ĨÂĪÚ° Ĩ±Á±% Ĩ±ĚĪĚÚÁ ◀◀.
ŨĪĤ ŮÓĪÓ ÂĪĪÓĚ ÓÁ ÂĪÓŮĪĚ ĨÂĪÚ°, ÓÁ Â% Ĩ±ĚĪĚÚÁ ▶▶.

Playing back a tape

çòðò óĕá, Ā&ĀîĕĀ îĀîŭ°

Using the Remote Commander

You can control playback using the supplied Remote Commander.

Before using the Remote Commander, insert the R6 (size AA) batteries.

To erase the indicators

Press DISPLAY to erase the viewfinder screen indicators on the TV. To display the indicators, press again.

Various playback modes

To view a still picture (Playback pause)

Press **II** during playback. To resume playback, press **II** or **▶**.

To locate a scene (Picture Search)

Keep pressing **◀◀** or **▶▶** during playback. To resume normal playback, release the button.

To monitor the high-speed picture while advancing the tape or rewind (Skip Scan)

Keep pressing **◀◀** while rewinding or **▶▶** while advancing the tape.

To resume normal playback, press **▶**.

Notes on playback

- Streaks appear and the sound is muted in the various playback modes.
- When playback pause mode lasts for 5 minutes or more, the camcorder automatically enters stop mode.

Note on the lens cover

The lens cover does not open when the POWER switch is set to PLAYER. Do not open the lens cover manually. It may cause malfunction.

àðòóî, áó, †îĕĀ òŭî, ŭ†
 %ĕòŭ†îĕòîîò, ò ŭò †, îĀîĕĒ
 ç° îóĕĀŭĀ ŭò †, îĒŭ. , òòò óĕĀ, Ā&ĀîĕĀî ò
 ĕòòóî, áó, †îĕĀî ò ĕî†, †Āîò, ò òŭî, ŭ†
 %ĕòŭ†îĕòîîò, ò ŭò †, îĀîĕĒ.
 ĕĀ Ā&ĕòòóî, áó, †îĕĀî òŭî, ŭ†
 %ĕòŭ†îĕòîîò, ò ŭò †, îĀîĕĒ, òŭ†, . ŭĀ
 . †ŭ† ĀĕĒĒĒĒĒ (†ĀĒĀ òĒĀĀ).

ŒĒĒ òŭĕ †îĕĒ ~ í †îî° Ē ĕĒĕĒ†ŭó ò,
 ç†ĕĒĕĒĒ ĒĒòóîŭ DISPLAY %ĒĒ òŭĕ †îĕĒ
 ĕĒĕĒ†ŭó ò, î† ~ í †ĒĀ, ĕ&òĕîŭĀĒĒ. ŒĒĒ
 òŭó. †ĕĒĒĒĒ ĕĒĕĒ†ŭó ò, î†ĕĒĕĒĒ ĀĀ òîò, †.

ĕ†ĀĒĕ~î°Ā ĀĕĕĒ°, òòò óĕĀ, Ā&ĀîĕĒ
 ŒĒĒ ò òòîóŭ † îĀòó%, ĕĕĒò, ò ĕĀ. †ĕĒĒĒĒ
 (ò†ŭĀ†, òòò óĕĀ, Ā&ĀîĕĒ)
 ç†ĕĒĕĒĒ ĒĒòóîŭ **II**, ò, ĀĒĒ
 , òòò óĕĀ, Ā&ĀîĕĒ. ŒĒĒ, òĀó·îó, îĀîĕĒ
 , òòò óĕĀ, Ā&ĀîĕĒ î†ĕĒĕĒĒ ĒĒòóîŭ **II** ĕĒĕ **▶**.

ŒĒĒ òŭ° òĒ†îĕĒ ĕĀ†ĀĒó, ò ŭ †, îĀîŭ†
 (òĕĕĒĒ ĕĀó. †ĕĒĒĒĒ)
 ŒĀ ĕ†ŭ. î†ĕ†ŭĕĒ ĒĒòóîŭ **◀◀** ĕĒĕ **▶▶**, ò
 , ĀĒĒ, òòò óĕĀ, Ā&ĀîĕĒ. ŒĒĒ, òĀó·îó, îĀîĕĒ
 îó î†î, îó, ò, òòò óĕĀ, Ā&ĀîĕĒ òŭòòŭĕŭ.
 ĒĒòóîŭ.

ŒĒĒ îóîŭ òĒĒ ĕĀó. †ĕĒĒĒĒ î†, °òóîòĕ
 òĒò òðŭĕ, ò, ĀĒĒ òðóĒ Āîîòĕ ĒĀ ĀîóŭĒĕ
 , ĒĀ Ā&ĕĒĕ Ē†Ā†% (òĕĕĒĒ ĒĀŭó%òĒ ò ò, òĒ†)
 ŒĀ ĕ†ŭ. î†ĕ†ŭĕĒ ĒĒòóîŭ **◀◀**, ò, ĀĒĒ
 ĒĀ ĀîóŭĒĕ îĀîŭ° Ē†Ā†% ĕĒĕĒ ĒĒòóîŭ **▶▶**, ò
 , ĀĒĒ ĒĀ ĀîóŭĒĕ îĀîŭ°, ĒĀ Ā&. ŒĒĒ
 , òĀó·îó, îĀîĕĒ îó î†î, îó, ò
 , òòò óĕĀ, Ā&ĀîĕĒ î†ĕ†ŭ. ĒĒòóîŭ **▶**.

ĕ ĕĒĀ~†îĕĒ í , òòò óĕĀ, Ā&ĀîĕĕĒ.
 • ç †ĀĒĕ~î° ĀĕĕĒ†Ē, òòò óĕĀ, Ā&ĀîĕĒ î†
 ~ í †ĒĀ îó, ŭŭ òŕĒ, ĕŭ, òĒ òòîóó° ĕĀ, ŭĒ
 . ŭ&Āŭ ò ĕ, îŭ ĀĒ.
 • òòîĕ ò†ŭĀ†, òòò óĕĀ, Ā&ĀîĕĒ ò ò&óĒĕ†ĀŭòĒ
 òĒòîó 5 ĒĕĒŭŭ ĕĒĕ . òĒ, -Ā, , ĕ&ĀóĒ†ĒĀ †
 †, ŭóĒ†ŭĕ~ĀóĒĕ ĒĀ ĀĒó&ĕŭ , ĀĕĕĒĒ
 òŭ†îò, †.

ĕ ĕĒĀ~†îĕĒ í í °-íĀ ó·ĀĒŭĕ, †
 ä °-í† ò·ĀĒŭĕ, † ĒĀ òŭĒ °, †ĀŭòĒ, ĀòĒĕ
 , °ĒĒ~†ŭĀĒ. POWER ŭòŭ†îó, ĒĀĒ ,
 òòîóĕĀĒĕĀ PLAYER. çĀ òŭĒ °, †ĕŭĀ í °-íŭ
 ó·ĀĒŭĕ, †, ŭ~îŭ. . ŭŭó îóĕĀŭ ò ĕ, Āòŭĕ í
 ĒĀĕòò †, îóòŭĕ.

Basic operations
òŭîò, î†Ā òĀĀ †ĕĕĒ

Advanced operations

Using alternative power sources

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.

ìòó, Â ÑÀìòó, ó, ÷ìì·Â óóÂ ÷ÈÈ

àòòóî, Áó, ÷ìÈÄ ÷î, ÚÄ ì÷-
ÚÈ, ì° ì Èòóó~ìÈíó, ÒÈú÷ìÈñ

ç· íóÈÁÚÄ, ·È ÷ú, î, ·óÈ ÈÄ òíÄ·ó. ÑÈÈ Òòóó~ìÈíó, ÒÈú÷ìÈñ ÷÷-ÄÈ, È·Áóí÷íÄ ·: ÷ú÷ ÄÈì·È·íóí, ÒÁÚÄ, ÓÄ ÒÈú÷ìÈÄ, ÑÁíó~ì·Ä·÷ú÷ ÄÈíÈÈ ÷, Úóíó·Èí, ì·È ÷ííóíòíñóó 12/24 ç. ç··È ÷ÈÚÄ ì÷ìÄÈ÷~ÈÈ Èòóó~ìÈí ÒÈú÷ìÈñ, Á÷, ÈòÈíóóÈ óóóó, ó, „·Ä ç· ìóóÈÚÄ Èòóóí, Áó, ÷ú, ç÷-ó, È·Áóí÷íÄ ó.

ÀÄòóó àòóó~ìÈí òÈú÷ìÈñ àòóóí, ÁóÁì·Ä ÒÈì÷ìÄÈíóóÈ

çóóíÄ- ÑÁíó È~Ä- èÈí÷, ÷Áí·È ÑÁìÈÈ ÓíñóÁÚ, ÓÁÚÄ, ÓÈ ÷÷óóÁ ÓÄ Áì. Úóí÷

çíÄ Á÷ú÷ ÄÈì·È Á÷ú÷ ÄÈì·È·íóí ÓóíÄ- ·íóí (ÚÈò÷Ni-Cd)

ÑÁìÈñ óÁíó~ìñ Ì+ñ Á÷ú÷ ÄÈìñ Ì÷íÄ ÷ ÷÷÷ ÄÈí÷ Sony LR6 (÷ÁíÄ ÓíÄÄ)

ç÷, Úó- Á, Úóíó·Èí, ì·È Áíóí óóóó. Úóí÷ Sony íó·ÈíÄ ÷ííóíòíñóó 12 DCP-77 çÈÈÈ 24 ç

èÈíÄ~÷ìÈÄ íÈòóó~ìÈí÷ì ÒÈú÷ìÈñ ÈóóÁ·ÈìÄÈÄ Èòóó~ìÈíó, ÒÈú÷ìÈñ ÈíÈ òíñÚÈÄ·÷ú÷ ÄÈìó, ó·íóí÷, ó, ÁíñÁ÷òÈòÈ ÈíÈ, óòò óÈÁ, Ä·ÄìÈñ íóÈÁÚ óó, Ä·ÈÚ, òó÷, ÌÄìò, ÌÄìóó. ÒòíÈ ÷÷íóÄ òíó~Èóóñ, òòòó÷ìò, ÈÚÄ Èòóó~ìÈí ÒÈú÷ìÈñ ÌÄíÄ·ÈíÄìó.



ç÷óóóñ~ÈÈ Áì÷í Úí÷Á·, ÷ÁÚ, ~óó ÷÷ìñ ò Ó·Úí~Èñ ñ, ññÁóóñ Óó·ÈììóÈ ò Èì÷ìÄÈíóóó. È·Áóó Ó·Úí~ÈÈ Sony. ÒòíÈ ç· Óóíóó÷ÁÚÄ, È·Áóó Ó·Úí~ÈÈ, Sony, óó ì· ÁíóíÄì·óÁì, ~óó· ç· Óóíóó÷ìÈ ò Èì÷ìÄÈíóóÈ òó Áì÷íóí "GENUINE VIDEO ACCESSORIES."

Using alternative power sources

àððóí, áó, ÷íËÄ ÷í, ÙÄ ì÷ÚË, ì·
ËðÓó~ìËíó, ðËú÷ìËí

Using the mains

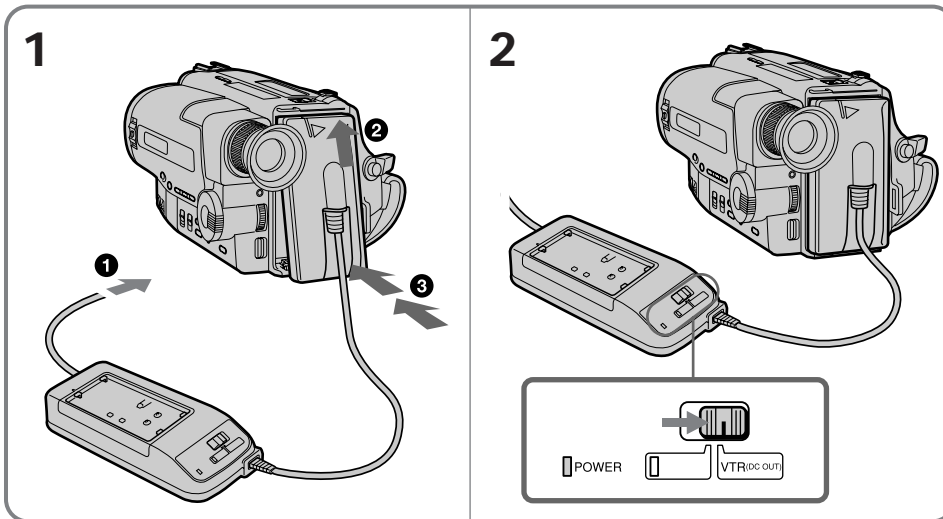
To use the supplied AC power adaptor:

- (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 ÷íÄíÚ Ë~ÄóíóË ðÄúË

Ñííí Ëððóí, áó, ÷íËí ð Ëí÷, ÷Äíó, ð ðÄúÄ, ó, ð
÷%÷óÚÄ ÷ ðÄ Äí. Úóí÷:

- (1) àó%ðóÄ%ËíËúÄ ð ó, ó% ÷íÄíÚ ðËú÷ìËí í
÷íÄíÚ Ë~ÄóíóË ðÄúË. Çóú÷, ÙÄ, Ä ìËË
íóíÄ^ ðóÄ%ËíËúÄí, ìóË ðí÷óúËí· ðÄúÄ, ó, ð
÷%÷óÚÄ ÷ ðÄ Äí. Úóí÷, , Ä ìí. ~÷óú,
·÷÷ ÄËíóË Ùóú÷íó, ó~íóË ðó, Ä ìíóóúË.
ç÷ËíËúÄ ì÷ ðóÄ%ËíËúÄí, ìò, ðí÷óúËíò,
ú÷í, ~úó· ðí÷ ð ËðóÄ%ËíËí÷ð. ì÷ÄËíó.
ì·Ä%ËúÄó, , ~úó ç· %÷, ÷Ë%· Ùðí·~÷íË
~Äí~óí.
- (2) ìðú÷íó, ËúÄ ðÄíÄíúó , 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.

àèðÑééíðèðÛòçàò
Ñ÷íí·Ë ÷ò÷ ÷÷ ìÄ óóíí. ~÷Äúðí óú
ËðÓó~ìËí÷ ðËú÷ìËí ðÄ Äí. Úóí÷, ðóí÷ ðí
ðó%ðóÄ%ËíÄí í ÷íÄíÚ Ë~ÄóíóË ðÄúË, %÷ËÄ
ÄóíË ð÷í ÷ò÷ ÷÷ óóíí. ~Äí.

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- ~ìËË Á†òËËË	ç ÁíííúË Á- , íËË Á†òËËË
TR501E/ TR502E	80 min.	150 min.
TR620E	70 min.	135 min.

è ÈíÄ~†ìËí

- ç°-Áò È, Á&Áíì°Á ò óíË òíúË · · †ú† ÁÁí ò°ÁíÄí° ò È·íËËËÁí, íó. è óí òíúË · · †ú† ÁÁí íËËÁú · · ú. íó ó~Á, Á†, ÈòËíòóúË óú úòíó, ÈÈ 1 †ìÄíËí · †ú† ÁÁí %ó òóíúóíË È óú úÁíóÄ †úú · .
- ç° íÄ %óíËí° Èððóí, áó, †ú, · †ú† ÁÈìú. í†íÄ ú, 1óíó%ì° 1 úòíó, Èí1.

Ñííí òíííúËí · †ú† ÁÈìóË í†íÄ ·

Á†ú† ÁÈì†íí†íÄ † òíËí†Áúòíí ú†íËí ÈÄ ò· †Áóí, í†íË · †ú† ÁÈì°È·íóí. è È Á†íÄíÄ · †ú† ÁÁí íÄ Á†·ú%, úÄ, ° íúú, ÈÄ, È&Áóí†íÄ · · †ú† ÁÈìú, í†íÄ ú%íí ò Á&óú, †~ÁíËíí† ú~ÁíËË, †·óúÄ.

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

àððóí, ÁúËúÄ · íóí òóóú. úóí† DCP-77 Sony (íÄ ò Èí†, †Áúòí). è&óóÁ&ÈíËúÄ ìú · íóí† òóóú. úóí† í, ìÄ&úòË, † Áúíó, ò ò Èíú È, †úÁíí†, úóíó·Èíí (12 ç ÈíË 24 ç). è&óóÁ&ÈíËúÄ · íóí òóóú. úóí† í úúú†ìó, ó~ìËË òó, Á 1ìóóúË · †ú† ÁÈ, È&Áóí†íÄ · .

Ñííí òíííúËí · íóí† òóóú. úóí† Áíóí òóóú. úóí† òíËí†Áúòíí ú†íËí ÈÄ òóóóó·óí, í†íË · †ú† ÁÈì°È·íóí.

Advanced operations

ìóó, Á -Áíúó, ó, †íí°Á óóÄ †°ÈÈ

Changing the mode settings

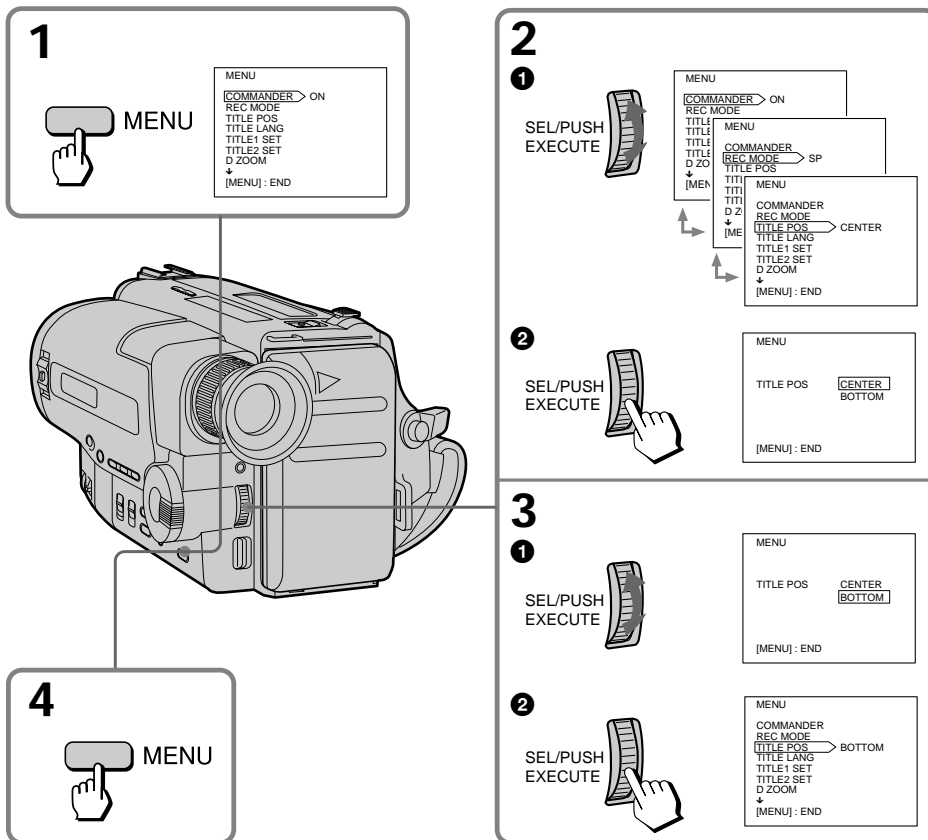
Αλλάζοντας τις ρυθμίσεις λειτουργίας

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 στοιχείο, 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 ÆÇÈÉÊËÌÍÎÏ ÑÒÓÔÕÖ×ØÙÚÛÜÝÞßàáâãäå æçèéêëìíîï ðñòóôõö÷øùúûüýþÿ

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··Ó ÂÊËÏ ÌÍÊËÒÈ ÙÒÛÜÝÖ,ÍË

ìòúþìó,íë æíñ âêëïó, camera è player

COMMANDER <ON/OFF>

- Ç··Â ËÚÁ ON Ò È ÈÒÒÓÍ,ÁÓ,†ìÈÈ Ò ÈÏ†,†ÂÏÓ,ÓÍ,ÈÁÓÍ†ÏÁ Â ÒÛ†,Û† æÈÛ†Ï^ÈÓÏÏÓ,ÓÛ ð,†ÂÏÈñ.
- Ç··Â ËÚÁ OFF, ÂÏÈÈ ÒÛ†,Û† æÈÛ†Ï^ÈÓÏÏÓ,ÓÛ ð,†ÂÏÈñ ÏÁ ÈÒÒÓÍ,ÁÓÁÓñ.

BEEP* <ON/OFF>

- Ç··Â ËÚÁ ON, ~Ó·· ÁÛÏÏÁ Ì^·Â ÒÈ,,ì†ì^ Á,Û^†ìÈ, ÍÓ,,æ† Ç^ Ì†^ÈÏ†ÂÛÁ/ ÒÛ†ì†,†È,†ÂÛÁÂ†ÒÈÒ, È Û.æ.
- Ç··Â ËÚÁ OFF, ÂÏÈÈ Ç^ ÏÁ ÌÓÓÈÛÁ ÒÏ^†Û, ÁÛÏÏÁ Ì^È Á,ÛÍÓ,ÒÈ ÒÈ,,ì†ì.

ìòúþìó,íë ÓÓÍ,ÍÓ æíñ âêëï† CAMERA

REC MODE* <SP/LP>

- Ç··Â ËÚÁ SP æíñ Á†ÒÈÒÈ, ÂÊËÏÁ SP (Û†ì' ÛÍÓ,Ó,ÓÓ ÒÈÁ,Â'Èñ).
- Ç··Â ËÚÁ LP æíñ Á†ÒÈÒÈ, ÂÊËÏÁ LP (Û'ÈÏÁÏÏÓ,Ó,ÓÓ ÒÈÁ,Â'Èñ).

TITLE POS* <CENTER/BOTTOM>

- Ç··Â ËÚÁ CENTER æíñ †ÒÒÓÍÓÈÂÏÈñ Ì†'ÈÒÈ, ^ÂÏÛ Á ÈÁÓ· †ÈÂÏÈñ.
- Ç··Â ËÚÁ BOTTOM æíñ †ÒÒÓÍÓÈÂÏÈñ Ì†'ÈÒÈ, ÌÈÁÛ ÈÁÓ· †ÈÂÏÈñ.

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

Ç··Â ËÚÁ ÏÁ^Í Ò Â',† ÈÚÁÏ,ÌÓ ÙÒÛÜÝÖ,†ÂÏÏ^ Ì†'ÈÒÈÒÈ.

TITLE1 SET*/TITLE2 SET*

á†ÒÓÏÈÏ†ìÈÁ Ç†^È ÒÓ·Û,ÂÏÏ^ Ì†'ÈÒÈÒÈ.

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

- Ç··Â ËÚÁ ON æíñ †ÍÛÈ,ÈÁ†^ÈÈ ^ÈÛ Ó,ÒÈ Û †ÏÛÓÍ†^ÈÈ.
- Ç··Â ËÚÁ OFF æíñ, ^ÍÏ.~ÂÏÈñ ^ÈÛ Ó,ÒÈ Û †ÏÛÓÍ†^ÈÈ. ÇÈ'ÁÓÍ†ÏÁ †,ÓÁ, †ÛÈÛÓñ Í Û †ÏÛÓÍ†^ÈÈ 15.

Advanced operations

ìòó,Â -Âìòó,Ó,†ì†^·Â ÓÓÁ †^ÈÈ

Changing the mode settings

ÀÁÏÄÏÄÏÈÄ ÄÈËÏÏ 1 ÛÖÚÏÏÓ,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 ÏÏ+Ò. ÌÏÏÓÓ~Í+Ä+ÒÈÒÈ Í+ÏÄ ÓÈ/·+Ú+ ÄÈÏÓ„Ó·ÍÓÍ+, †ÒÒÓÍÓÈÄÏÏ+fl Ì+ÓÄ ÄÈÏÄÈÓÓÓ ÓÏÄ †ÒÓ+ †Ú+.
- é· ·~ÏÓ , ··È †ÈÚÄ ON.

AUTO DATE* <ON/OFF>

- Ç· ·Ä ÈÚÄ ON %Ïfl Ä+ÒÈÒÈ %+Ú· , ÚÄ~ÄÏÈÄ 10 ÓÄÏÏÈÈÓÓÓÏÄ ÚÓ„Ó, Í+Í· ·Í+ Ì+~+Ú+Ä+ÒÈÒÈ..
- Ç· ·Ä ÈÚÄ OFF, ~ÚÓ· · ÌÄ Ä+ÒÈÒÈ· ,+Ú· %+ÚÚ.

CLOCK SET*

Ñ+ÚÚ ÈÏÈ , ÄÏfl.

DEMO MODE* <ON/OFF>

- Ç· ·Ä ÈÚÄ ON, ~ÚÓ· · ÓÓfl,ÈÏ+Ò· %ÄÏÓÏÓÚ †^Èfl.
- Ç· ·Ä ÈÚÄ OFF, ~ÚÓ· · %ÄÏÓÏÓÚ †^Èfl ÌÄ ÓÓfl,ÏflÏ+Ò·.

è ÈÏÄ~ÏÈfl ÓÚÏÓÒÈÚÄÏ.ÏÓ ÄÈËÏ+

DEMO MODE

- DEMO MODE ÛÖÚÏÏÓ,ÏÄÏ , ÓÓÍÓÈÄÏÈÄ STBY Ì+Ä+,ÓÈÄ-ÈÄ„ÓÓÓ,ÈÚÄÏÄ, È %ÄÏÓÏÓÚ †^Èfl Ì+~ÏÄÚÓfl Ò ÈÏÄ ÌÓ ~Ä ÄÄ 10 ÌÈÏÏÓ ÓÓÓÏÄ ÚÓ„Ó, Í+Í Ç· ÛÖÚÏÏÓ,ÈÚÄ , ·ÍÏ· ~+ÚÄÏ. POWER , ÓÓÍÓÈÄÏÈÄ CAMERA ·ÄÄ ÛÖÚÏÏÓ,ÍÈ Ì+ÒÒÄÚ·. é· †ÈÚÈÚÄ,ÏÈÏ+ÏÈÄ, ~ÚÓ Ç· ÌÄ ÏÓÈÄÚÄ ,· †Ú· STBY ÄÈËÏ+ DEMO MODE , ÒÈÒÓÄÏÄ ÏÄÏ..
- Ç· ÌÄ ÒÏÓÈÄÚÄ ,· †Ú· DEMO MODE, ÄÏÈ , ÈÈÄÓÍ+ÏÄ Û· ÒÚ+,ÏÄÏ+ Í+ÒÒÄÚ+.
- ÓÓÏÈ Ç· ,ÒÚ+,ÈÚÄ Í+ÒÒÄÚÚ ,Ó , ÄÏfl %ÄÏÓÏÓÚ †^ÈÈ, ÚÓ %ÄÏÓÏÓÚ †^Èfl ·ÈÈÄÚ ÓÓÚÏÏÓ,ÏÄÏ+. Ç· ÏÓÈÄÚÄ ÓÓÚÏÏÓ,ÈÚ· Ä+ÒÈÒÈ, Í+Í Ó· ·~ÏÓ. DEMO MODE †,ÚÓÍ+ÚÈ~ÄÏÈÈ ,Ä ÏÄÚÒfl , ÓÓÍÓÈÄÏÈÄ STBY.

ÑÏfl ÚÓ„Ó, ~ÚÓ· · Ò †ÄÚ ,Ä„ÏflÏÛÚ. Ì+ %ÄÏÓÏÓÚ †^È.

ÄÄ,ÏÄÏÈÚÄ Í+ÒÒÄÚÚ, ÄÏÈÈ ÓÏ+,ÒÚ+,ÏÄÏ+.

Ç· ·Ä ÈÚÄ ON , DEMO MODE. éÓÚ ÈÚÄ ÈÏÈÈÏ+^È. ÏÄÏ.. Ç+~ÏÄÚÓfl

%ÄÏÓÏÓÚ †^Èfl.

ÓÓÏÈ Ç· , ·ÍÏ· ~+ÄÚÄ Í+ÏÄ Û· , ÄÈËÏ

DEMO MODE †,ÚÓÍ+ÚÈ~ÄÏÈÈ

,ÓÄ , †+ÄÚÓfl , ÓÓÍÓÈÄÏÈÄ STBY.

- * Ñ+ÏÏ·Ä ÛÖÚÏÏÓ,ÍÈ ÓÓ1 †Ïfl.ÚÓfl, %+ÈÄ ÏÓ„Ó, %+ ÒÏÈÏ+ÄÚÓfl ·+Ú+ ÄÈÏ·È·ÍÓÍ %Ó ÚÄ1 ÓÓ , ÓÓÍ+ ÛÖÚÏÏÓ,ÏÄÏ+ ÏÈÚÈÄ, fl ·+Ú+ ÄÈÏ+.

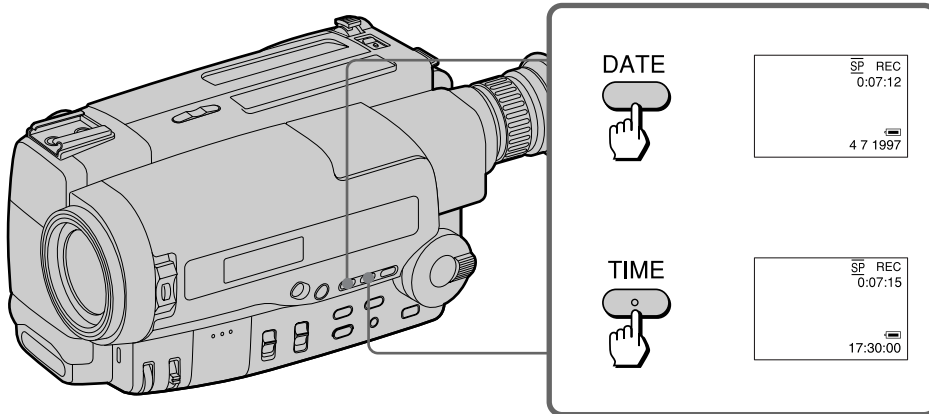
Recording with the date or time

á†ÔËÒ, Ò ‰†ÚÓÈ ËÏË
, ÆÏÆÏÆÏ

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 Æ‰ ÚÆÏ, Ì†Í Ç† Ì†~ÏÆÚÆ Á†ÔËÒ, ËÏË, Ó
, ÆÏÆ Æ†ÏËÒË Ì†ËÏËÚÆ DATE ËÏË TIME. Ç†
ÏÓËÆÚÆ Á†ÔËÒ†Ú, ‰†ÚÚ ËÏË, ÆÏÆ,
ÓÚÓ. †ËÆÏÏÓÆ Ì† ~† ÌÆ ÚÆÑ ËÏË,
, Ë‰ÓËÏ†ÚÆÏÆ, ÌÆÓÚÆ Ò ËÆÓ. †ËÆÏËÆÏ. Ç†
ÏÆ ÏÓËÆÚÆ Á†ÔËÒ†Ú, †Ú. ‰†ÚÚ Ë, ÆÏÆ
Ó‰ÏÓ, ÆÏÆÏÏÓ. æ ÓÏÆ ËÏ‰ËÏ†ÚÓ †‰†Ú† ËÏË
, ÆÏÆÏË, ÏËÏ†ÏÓË ËÏ‰ËÏ†ÚÓ Á†ÔËÒ†Ú, †Ú. ÒÆ
ÏÆ. Ú‰ÆÚ. Ó†Ó† ÚÓÚ†ÏÓ, ÏÆÏ† Ì† Á†, Ó‰Æ Ì†
, ÆÏÆ æÓÏ‰Ï† ðÏÆ ËÓÆ‰ËÏÆÏÏÓ, Ò
æÓ ÓÏÆ, ÓÚ, † Ë Ì†, ÆÏÆ è† ËË† ðÏÆ ‰, ËÏÆ
Æ, ÓÓÆÒÏËÏÏ Ï‰ÆÆÏÆ.



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.

ÑÏÆ ÒÓÚ†ÏÓ, † Á†ÔËÒË Ò ‰†ÚÓÈ ËÏË
, ÆÏÆÏÆÏ
Ç†ËÏËÚÆ DATE ËÏË TIME ÒÏÓ, †. æÏ‰ËÏ†ÚÓ
‰†Ú† ËÏË, ÆÏÆÏË ËÒ~ÆÆÏÆÚ. æ†ÔËÒ,
Ò Ó‰ÓÏËËÚÓÆ.

è ËÏÆ~†ËÆ
Ç† ÏÆ ÏÓËÆÚÆ Ì†ÏËËËÚ, Ì†‰ÓËÒ, , Ó, ÆÏÆ
Á†ÔËÒË ‰†Ú† ËÏË, ÆÏÆÏË.

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.

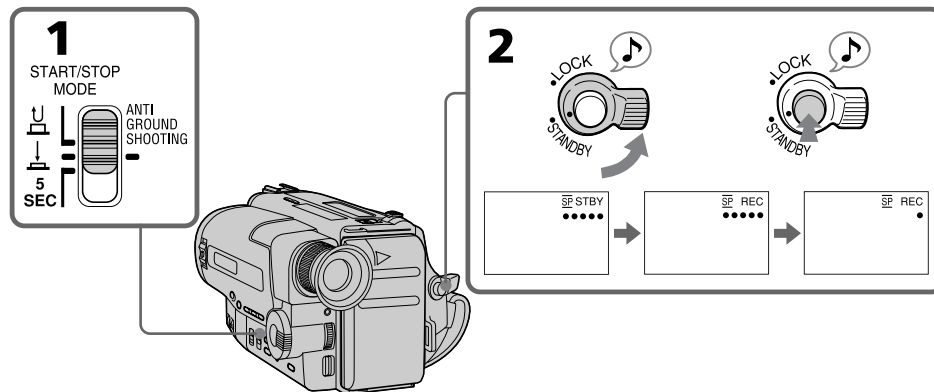
START/STOP MODE: Recording starts when you press START/STOP, and stops when you press it again (normal mode).

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 + ÈÏÄÄÚ Ä~Ä% , + ÄÈÈÏ+ ,
Í ÓÏÄ Ó~ÍÓ,,Ó ÄÈÈÏ+ Ä+ÓÚÓÍ+ / ÓÓÚ+ÏÓ, +. ùÛÈ
ÄÈÈÏ+ ÓÓÁ, ÓÍÏ. Ú Ç+ Ï òÏÏÚ, òÄ È.
ÍÓ ÓÚÍÈ Ì+È Ó,, ÓÓÄ%+ , ÏÏ , ÄÄÛÏ. Ú+ÚÄ
ÈÈ. Ú, È%ÁÓÓ Ó,, +ÏÏÛ.

(1) ÌÓÚ+ÏÓ, ÈÚÄ START/STOP MODE Ì+
ÈÄÏ+ÄÏ~È ÄÈÈÏ.

START/STOP MODE: Ì+~ÈÏ+ÄÚÓÏ, ÍÓ,,%+ Ç+
Ï+ÈÈÏ+ÄÚÄ ÏÍÓÓÏÛ START/STOP È
ÓÓÚ+Ï+ , ÏÈ, +ÄÚÓÏ, ÍÓ,,%+ Ç+ Ï+ÈÈÏ+ÄÚÄ ÄÄ
òÏÓ, + (Ó~Í~È ÄÈÈÏ).

ANTI GROUND SHOOTING:
ÇÈ%ÁÓÍ+ÏÄ + ò ÓÈÄ, Ó%ÈÚ Ä+ÒÈÒ, ÚÓÏ, ÍÓ,
ÍÓ,,%+ Ç+ ÈÄ ÈÈÈÚÄ START/STOP ,
Ï+È+ÚÓÏ òòòóóÏÏÈÈÈ, Ú+Ï, ~ÚÓ~ Ç+ ÏÓ,, ÏÈ
ÈÄ~ÄÈ+Ú, Ä+ÒÈÒÈ ÏÄÈÄÏ+ÚÄÏ, Ì~
~ÒÈÄÓ%ó, .

5 SEC: è È Ï+È+ÚÈÈ START/STOP
, È%ÁÓÍ+ÏÄ + ò ÓÈÄ, Ó%ÈÚ Ä+ÒÈÒ, ,
ÚÄ~ÄÏÈÄ 5 ÒÄÏÛÈ% , + Ä+ÚÄÏ
ÓÓÚ+Ï+ , ÏÈ, +ÄÚÓÏ + , ÚÓÏ+ÚÈ~ÄÒÍÈ.

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

Ä+ÒÈÒ. Ì+~ÈÏ+ÄÚÓÏ.

ÒòÏÈ Ç+ , ~È +ÄÚÄ ÄÈÈÏ 5 SEC, òÏÛ,
ÚÓ~ÄÏ ÓÓÏ, ÏÏ, ÚÓÏ , È%ÓÈÒÏ+ÚÄÏÄ. ÏÓ~ÍÈ
ÈÒ~ÄÄ+ , Ú ÈÄ +ò~ÄÚ+ òó Ó%ÏÓÈÄ+ òÄÏÛÈ%Ú,
Ï+Ï ÓÓÏ+Ä+ÏÓ Ì+ ÈÒÛÏÄ.

ÏÏÏ ò Ó%ÏÄÏÈÏ , ÄÏÄÏÈÄ Ä+ÒÈÒÈÈ ,
ÄÈÈÏÄ Ä+ÒÈÒÈÈ 5 SEC


èÏÓ, + Ï+ÈÈÈÚÄ START/STOP òÄ Ä% ÚÄÏ, Ï+Ï
òÄ ÚÓ~ÍÈ ÈÒ~ÄÄÏÛ. Ä+ÒÈÒ, ò Ó%ÏÓÈÈÈÚÓÏ Ä~Ä
ÓÍÓÓÓ 5 ÒÄÏÛÈ% ÓÚ ÏÓÏÄÏÛ+ Ï+È+ÏÈÏ START/
STOP.

Shooting with backlighting

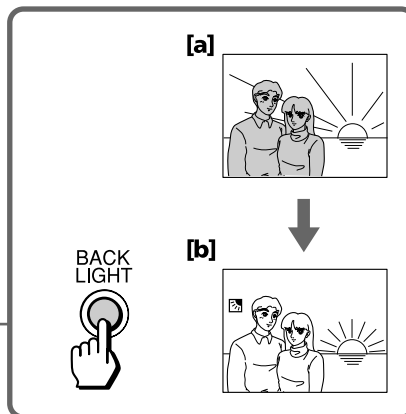
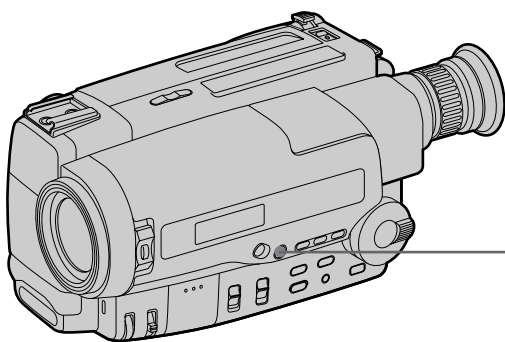
ε·Άΐΐ† ò Ά†%·ΐΆÈ òó%ò, ΆΐΐóÈ

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

òòΐÈ ç· òÈÈ†Άΐΐ ó· Άΐΐ ò Èòóó~ΐÈΐóΐ ò, Άΐΐ òòΆ†%È ó· Άΐΐ† ÈΐÈ ó· Άΐΐ ΐ† ò, Άΐΐóΐ òóΐΆ, Èòòóΐ, ΆΐΐΐΆ òòΐΐ^ÈÈ. BACK LIGHT.

Press BACK LIGHT. The  indicator appears in the viewfinder.


ç†ÈÈΐΐΆ BACK LIGHT. ç, È%òÈòΐ†ΐΐΐΆ òóñ, Èΐòñ Èΐ%Èΐ†ΐó .




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

- [a] ε· Άΐΐ ñ, ññΆΐòñ òÈÈ-ΐóΐ ΐΆΐΐ^ΐ ÈΆ-Ά† Ά†%ΐΆÈ òó%ò, ΆΐΐÈ.
- [b] ε· Άΐΐ òΐ†ΐò, Èΐòñ ñ ΐÈÈ ò ΐóΐòΐò†^ÈÈÈ Ά†%ΐΆÈ òó%ò, ΆΐΐÈ.

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.

εòòΐΆ ò· ΆΐΐÈ
çΆ Ά†·ΐ%· ΐΆ òΐΐΆÈΐΐ, òòòóòñÈÈΆ ΐ†ΐóÈ
Ά, òÈÈ ó, ΐÈ òòΐΆΐ ΐ†È†ΐÈñ BACK LIGHT
òΐò, †. àΐ%È††ΐó  Èò~ΆΆΐΆΐ. ç ò óΐÈ, ΐóΐ
òΐΐ~†Ά ÈΆó· †ÈΆΐÈΆ·ΐ%·Άΐ òÈÈ-ΐóΐ ñ ΐÈÈ
ò È ΐò ΐ†ΐ, ΐ^ΐ òòΐò, Èñ òò, Ά~ΆΐÈñ.

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.

- ùΐ† òòΐΐ^Èñ ΐ†ΐÈΆ ~òòΆΐΐÈ, ΐ† ò È òΐΆ%ΐ. ΐ_È òòΐò, Èñ ñ:
 - ç† òóΐΆ òΐΆ, †, ΐ†ò ÈΐΆ, ΐ† ΐ^Èΐóΐ ΐΐ ó ΐΆ
 - ç† òΐñÈÈ ò È òÈΐ, ΐóΐ òóΐΐΆ~ΐóΐ ò, Άΐΐ
 - ε· Άΐΐ ΐ† ñó%Èΐòñ ñ%óΐ ò Èòóó~ΐÈΐóΐ ò, Άΐΐ† ÈΐÈ ñ%óΐ òΆ ΐ†ΐóΐ, óΐ †È†. ΐÈΐ ò, Άΐ
 - ΆΆ†^È ó· Άΐΐ ΐ†· Άΐΐóΐ òóΐΆ.
- εòò·Άΐΐò, ΆòΐÈ ç· òÈÈ†Άΐΐ~Άΐó, Άΐ†, ΐóóó ΐÈ ò%·Άΐ, ñ ΐΐ, ò%·ΆÈ%ΐ, ò%·Άΐ†ΐΐΐ. ÈΆ~Άΐ†† ÈΐÈ òÈΐΐΐΐÈ~Άòΐó, ò, òΐóΐΐ†, Ά, ò ÈΐÈ ññ ñÈ^ó·ΐ%·Άΐ òΐ†ΐò, Èΐ. òñ ΐΐΐΐ^ΐ, ΆòΐÈ ç· ΐΆ·ΐ%·Άΐΐ Èòòóΐ, Άó, †ΐ. ΐΐΐ òòΐΐ^È.

Advanced operations 100, Ά -Άΐòΐ, ó, ††ΐ^· Ά óòÁ, †^ÈÈ

Fade-in and fade-out

Ç, Â%ÂÎËÄ Ê , °, 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.

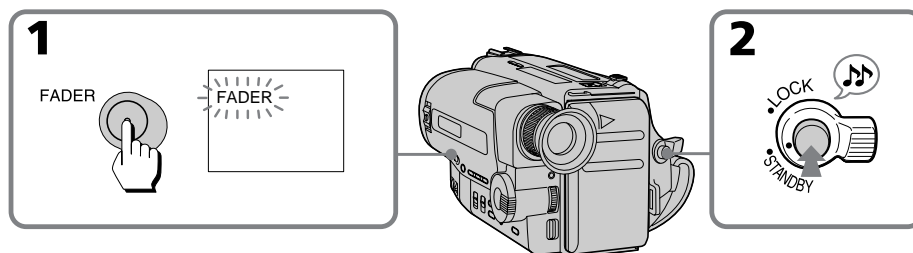
Ç· ÌÓÊÄÚÄ , , Ó%ËÚ, Ê , °, Ó%ËÚ.
ËÁÓ· †ÊÄÎËÄ, Ô Ê%†, †fl Ç†-ÂÊ Ä†ÔËÒË
Ô ÓÚÄÓÒËÒ††, Ì·Ê , Ê%.
è Ê , °, Â%ÂÎËË ÊÁÓ· †ÊÄÎËÄ ÓÓÓÚÄÓÄÌÍÓ
, Ó%ËÚÓfl ÓÚ ~Ä ÌÓ„Ó ÊÏË ÌÓÄ†Ê~ÄÓÍÓ„Ó ò
Ó%ÏÓ, ÄÍÄÌ·† Ì ÓÓ, °-ÄÏËÄÍ Ä, ÚÍ†.
è Ê , °, Â%ÂÎËË ÊÁÓ· †ÊÄÎËÄ ÓÓÓÚÄÓÄÌÍÓ
, °, Ó%ËÚÓfl %Ó ~Ä ÌÓ„Ó ÊÏË ÌÓÄ†Ê~ÄÓÍÓ„Ó ò
Ó%ÏÓ, ÄÍÄÌ·† Ì ÓÓÏËËÄÏËÄÍ Ä, ÚÍ†.

ÑÍfl , , Â%ÂÎËË ÊÁÓ· †ÊÄÎËËfl [a]

- (1) äÓ, %†, Ê%ÁÓÍ†ÍÄ † Ì†: Ó%ËÚÓfl , ÄËËÍÄ „ÓÓÓ, ÌÓÓÓË, Ì†ÊÏËÚÄ FADER. àì%ËÍ†ÚÓ FADER Ì†~ÌÄÚ ÌË„†Ú.
- (2) Ç†ÊÏËÚÄ START/STOP %fl Ì†~†Í† Ä†ÔËÒË. àì%ËÍ†ÚÓ FADER ÔÄ ÄÓÚ†ÍÄÚ ÌË„†Ú.

ÑÍfl , °, Â%ÂÎËË ÊÁÓ· †ÊÄÎËËfl [b]

- (1) ÇÓ , ÄÍfl Ä†ÔËÒË Ì†ÊÏËÚÄ FADER. àì%ËÍ†ÚÓ FADER Ì†~ÌÄÚ ÌË„†Ú.
- (2) Ç†ÊÏËÚÄ START/STOP %fl ÓÓÚ†ÍÓ, † Ä†ÔËÒË. àì%ËÍ†ÚÓ FADER ÔÄ ÄÓÚ†ÄÚ ÌË„†Ú, Ê Ä†ÔËÒ. ÓÓÚ†Í†, ÌË, †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 óóíó`.,. 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

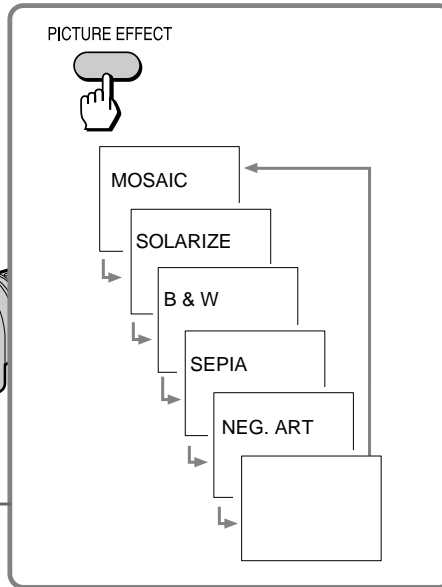
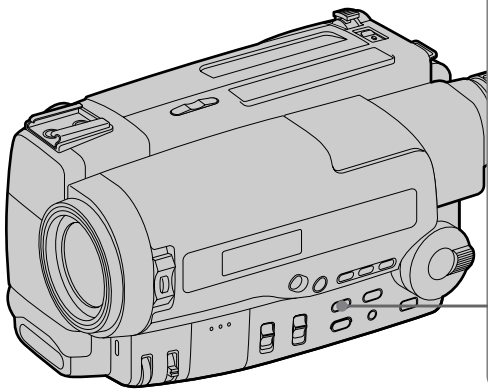
ç+òî+ê%âîëâ ~ùùáíú+îë
 éáó· †êâîëñ

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%ëúóññ, Æëëîâ „óóó, ìóóúë, ì+êîëúâ ííóóíú PICTURE EFFECT %ññ úó„ó, ~úó„·, ·. †ú. êâî+âî'è Æëëî ~ùùáíúó, éáó· †êâîëñ.



Advanced operations

ìóó, Æ -âîòú, ó, †î+î· Æ 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 Æëëîú ç+êëî+ëúâ ííóóíú PICTURE EFFECT, óóí+ êî%êí+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, †+âúóññ, ìó ì+î, ì'è Æëëî.

Using the wide mode function

ÀÒÓÔÎ, ÁÓ, †ÏËÄ ÛÛÏÏ^ËË
-Ë ÓÍÓÛÓ Ì†ÚÏÓ,, Ó ÄËËÏ†

- CCD-TR502E/TR620E only

- íóî, íó CCD-TR502E/TR620E

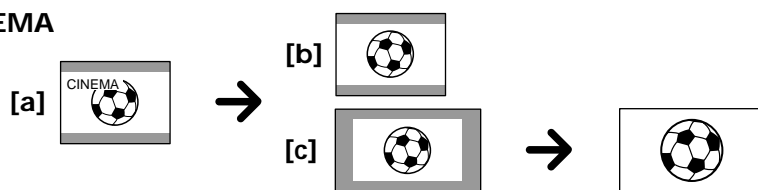
Selecting the desired mode

Ç··ó ÊÄÏ†ÄÏÓ,,ó ÄËËÏ†

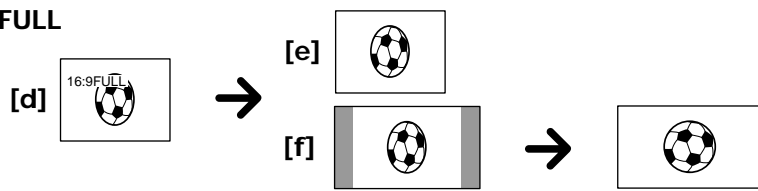
You can record a cinemalike picture (CINEMA) or a 16:9 wide picture to watch on the 16:9 wide-screen TV (16:9FULL).

Ç· íÓËÄÚÁ Ä†ÓËÒ·, †Ú, ËÁÓ· †ÊÄÏËÄ Í†Í, ÍËÏÓÚÁ†Ú Ä (CINEMA) ÈÏË -Ë ÓÍÓÛÓ Ì†ÚÏÓÄ ËÁÓ· †ÊÄÏËÄ 16:9%Ï† ÓÓÏÓÚ †Ï† -Ë ÓÍÓ~Í †ÏÏÓÏ ÚÁÏÄ, ËÁÓ 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 ÓÓÏÓÒ· ÓÓÏ, Ï†, ÚÓ† Ò, Ä 1Ú È ÒÏËÁÚ ~Í †Ï† È, , È%ÓËÓÏ†ÚÁÏÄ [a] È Ó·~Ï'È ÚÁÏÄ, ËÁÓÓÏÏ'È ~Í †Ï [b], , Ï†%ËÚ, Í†Í -Ë ÓÍËË. Ç· Ú†ÍËÄ ÍÓËÄÚÁ ÓÏÓÚ ÁÚ, ËÁÓ· †ÊÄÏËÄ ·ÄÄ ~Ä Ì·1 ÓÓÏÓÒ Ì† -Ë ÓÍÓ~Í †ÏÏÓÏ ÚÁÏÄ, ËÁÓ 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· †ÊÄÏËÄ, , È%ÓËÓÏ†ÚÁÏÄ [d] ÈÏË Ì† ÏÓ Ì†Í, ÏÓÏ ÚÁÏÄ, ËÁÓ Ä [e] ·Û%ÁÚ ÒË†ÚÓ ÓÓ,,ó ËÁÓÏÚ†ÏË. Ç· ÍÓËÄÚÁ ÓÏÓÚ ÁÚ. ÏÓ Ì†Í, ÏÓÄ ËÁÓ· †ÊÄÏËÄ Ì† -Ë ÓÍÓ~Í †ÏÏÓÏ ÚÁÏÄ, ËÁÓ Ä [f].

Focusing manually

ιόίϋòē ó, í†, ũ~ìϋ.


Focusing manually

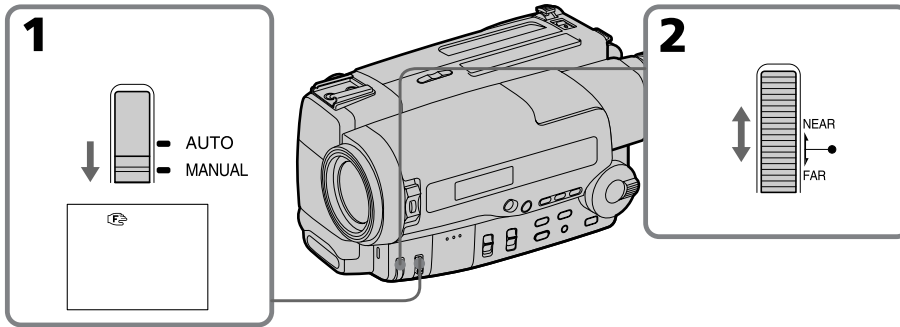
When focusing manually, first focus in telephoto before recording, and then reset the shot length.


- (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.

εϋ~ì†fl ùóíϋòē ó, í†


è ē ũ~ìòē ùóíϋòē ó, í† òòá, † òá à& Á†òēò, ., °òíìēϋ, ùóíϋòē ó, íϋ, àēēíá úáíáùóó, † á†úáí ùòó†ìó, ēϋ. †òóóflēá &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·° , °òíìēϋ, ùóíϋòē ó, íϋ ì†·ìēēìēē ó·áíú. èó, à ìēúá &ēòí, òúó óíϋ FAR, ~úó·° , °òíìēϋ, 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.

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

è·áíí†, óúìòòēúáí, ìó úáíì·ì ìáòó†ì ç·òóíìflēúá ò·áííú, òóíóéàìēē ~ē óíó„ò ũ„ì† òòóíá ùóíϋòē ó, íē, òóíóéàìēē 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 Á₁ ÂËËÍÓ, PROGRAM AE (†, ÚÓÍ†ÚË~ÂÓÍÓË Ò· ÂÍÍË), ÒÓÓÚ, ÁÚÓÚ, ËË Ò Ç† ÂË ÒËÚÚ†^ËËË. ÒÓÍË Ç· ËÒÓÓÍ, ÁÚÁÚÁ PROGRAM AE, Ç· ÌÓËÁÚÁ Á+ÔÁ~†ÚÍÁÚ, ·, ·ÒÓÍÓÓÍÓ ÓÓÚÍÓÁ %ÂËÓÚ, ËÁ ËËË ÌÓ~Ì·Á, Ë%·.

Selecting the best mode

Select the best mode by using the following examples.

Ç· ·Ó Ì†ËËÛ~·Á,, Ó ÂËËË†

Ç· ·Á ËÚÁ Ì†ËËÛ~·ËË ÂËËË, 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

eÂËËË ÒÓÓ Ú†

- ËÓÓ ÚË, Ì·Á Ò·ÂÌ·, ÌÁ ÒÓÍÁ~ÂÍËÏ, Ì†Ó ËÍÁ, ÚÚÚ·ÓÍ, ÚÁÌËËË, „ÓÍ, Û ËÍË Í·ËË
- ä†ì%~†ÚÚ 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

eÂËËË, ·ÒÓÍÓÓÍÓ ÓÓÚÍÓ,, Ó Á+Ú, Ó †

- ÇÁÍ†₁Ë, Ó, ÁÏÏ Ë,, ·, „ÓÍ, Û ËÍË ÚÁÌËËË, ₁Ó Ó~Ú, ÓÓ,, Ó%Ú Ò ~ÁÚÍËË Á+ÔÁ~†ÚÍÁËËÁË ÏÏ~†
- ÇÓÓÓ ÓËÁ, Á%ÁÍËÁ ÓÓ Á%ÁÍÁËË·₁ Ò·ÂÌ Ò, ·ÒÓÍÓÓÍÓ ÓÓÚÍ·ËË %, ËËÁËËÏËË Ò ~ÁÚÍËË, ÁÁÍËË ËÁÓ· †ËÁËËÁË

Twilight mode

- Recording night views, neon signs or fireworks

eÂËËË ÓÚÍÁ ÁÍ

- á†ÔËË, ÌÓ~Ì·₁, Ë%Ó,, ÌÁÓÍÓ,,₁ ÁÍ†† ËÍË ÛÁËÁ, Á ÍÓ,

Using the PROGRAM AE function

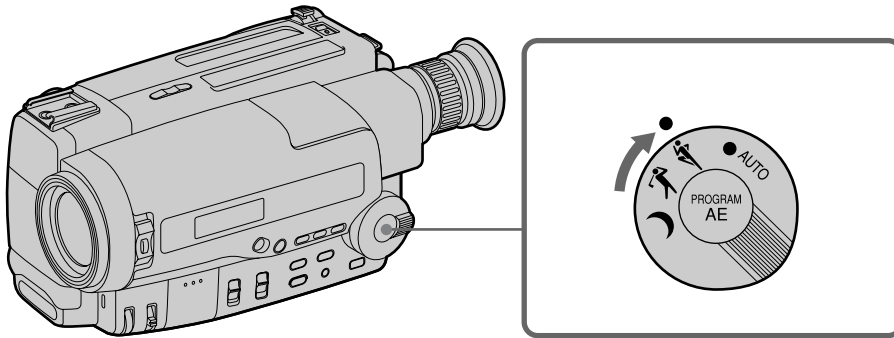
αὐτοματὸν ἄλλαξιμον ἔλεγχον ἀποκλειάζετε
PROGRAM AE

Using the PROGRAM AE function

While the camcorder is in Standby mode, set the mark of the desired mode to ● mark above the PROGRAM AE dial.

αὐτοματὸν ἄλλαξιμον ἔλεγχον ἀποκλειάζετε
PROGRAM AE

Σύμφωνα με το επιθυμητό πρόγραμμα, τοποθετήστε το σημείο ● πάνω στο πρόγραμμα AE. Το πρόγραμμα AE θα ενεργοποιηθεί.



Returning to automatic mode

Turn PROGRAM AE until the PROGRAM AE indicator disappears.

Σύμφωνα με το επιθυμητό πρόγραμμα, τοποθετήστε το σημείο ● πάνω στο πρόγραμμα AE. Το πρόγραμμα AE θα ενεργοποιηθεί.

Note on shutter speed

The shutter speed in each PROGRAM AE mode is as follows:

Sports mode - between 1/50 to 1/500

High-speed shutter mode - 1/4000

Twilight mode - 1/50


AUTO mode - 1/50 (or 1/100 when the Steady Shot is on - CCD-TR620E only)

Οι ταχύτητες κλείδασης για κάθε πρόγραμμα AE είναι οι εξής:
 Πρόγραμμα AE αθλητισμού: μεταξύ 1/50 και 1/500
 Πρόγραμμα AE υψηλής ταχύτητας: 1/4000
 Πρόγραμμα AE ηλιοεξοφάνης: 1/50
 Πρόγραμμα AE αυτοματ.: 1/50 (ή 1/100 όταν είναι ενεργό το Steady Shot - μοντέλο CCD-TR620E)

Releasing the STEADY SHOT function

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.

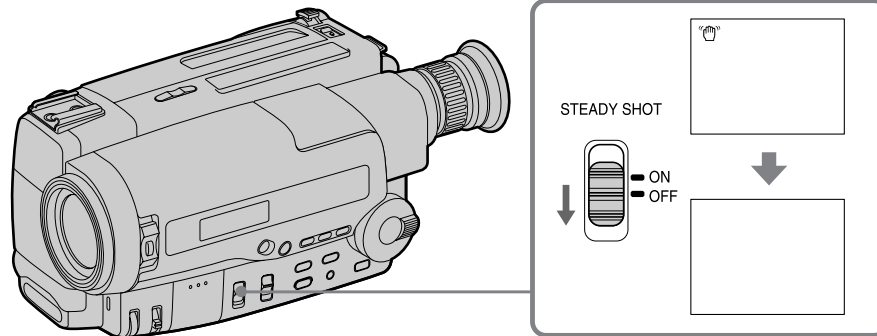
Set STEADY SHOT to OFF. The  indicator goes off.

- íóî, íó CCD-TR620E

ăó, %† ç* ò óĕă, óĕĕŭă ò' âííŭ, óŃŃ, íŃăŭŃŃ ĒîĕĒí†ŭó . ŭŭó ŭí†ă*, †ăŭ, ~ŭó ŭŭîí^ĒŃ ŭŭóŭĒ~Ē, óĒ ò' âííĒ †. ōŭ†ăŭ %îŃ íóíóăîŭ†^ĒĒĒ % óĒ†îĒŃ, ĒĒăŌí†îă *

ç* íŌĒăŭă ōŭîî, ~Ēŭ, ŭŭîí^Ē, ŭŭóŭĒ~Ē, óĒ ò' âííĒ, âŌîĒ ç†î îă ŭ â. ŭăŭŭŭŭ Ēŭŭŭŭŭ, áŭ, †ŭ, ~ŭŭ ŭŭîí^Ē. . çă Ēŭŭŭŭŭ, áŭĒŭă ŭŭîí^Ē. ŭŭóŭĒ~Ē, óĒ ò' âííĒ ò Ē ò' âííă îăŭŭ%, ĒĒîŭŭ, ŭŭ. âíŭ† ò ŭŭŭŭŭŭ. . ŭ âîŭ, Ē.

îŭŭ†îŭ, Ēŭă STEADY SHOT î† OFF.
ăîĕĒí†ŭó  ŭŭ, †ŭîăŭ.





To activate the SteadyShot function again

Set STEADY SHOT to ON.

ŃîŃŃ †îŭĒ, Ēă†^ĒĒ ŭŭîíĒĒ ŭŭóŭĒ~Ē, óĒ ò' âííĒ ŭîŭ, †
îŭŭ†îŭ, Ēŭă STEADY SHOT î† 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.

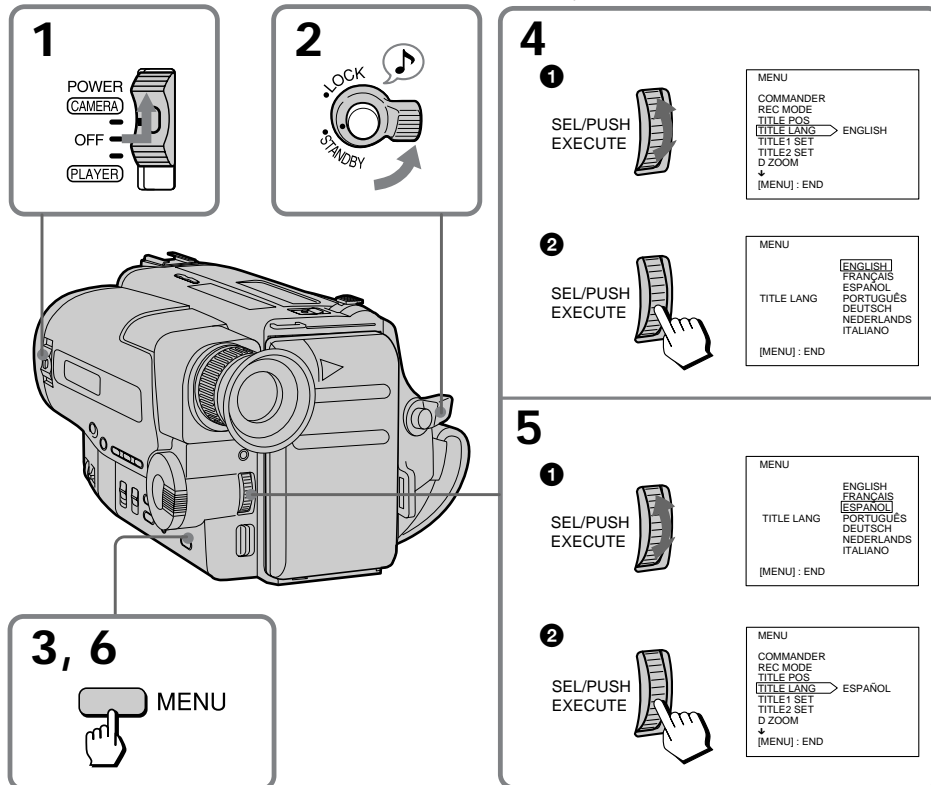
- Ē Ēîă~†îĒŃ í ŭŭîí^ĒĒ ŭŭóŭĒ~Ē, óĒ ò' âííĒ
- îŭîí^ĒŃ ŭŭóŭĒ~Ē, óĒ ò' âííĒ îă ŭîŭăŭ ōŭŭŭ âíŭĒ ŭ, †ŭ, ~ăăîă îŭă % óĒ†îĒă, ĒĒăŌí†îă *
- Ē Ē, íî, ~ăîĒĒ ĒîĒ, †îî, ~ăîĒĒ ŭŭîí^ĒĒ STEADY SHOT ~íŭŭŭăĒ^ĒŃ îŭăăŭ íŭîă. †ŭ, ŭŃ.
- ŭŭîĒ ç*, †ŭŭîŃŃăŭă â†ŭĒŭ, , âĒĒîă 16:9, ŭŭîí^ĒŃ ŭŭóŭĒ~Ē, óĒ ò' âííĒ îă †. ōŭ†ăŭ, † ĒîĕĒí†ŭó  îĒ, †ăŭ.

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.



Ç†ÎÔÊÂÎËÄ Ì†%ÔËÒË

Ç† ÎÔÊÂÛÄ, ··È †Ú, ÈÄ, ÓÓ.ÏÈ
 Ô Ä%, † ÈÛÄÏ.ÏÓ ÛÓÚ†ÏÓ, ÌÄÏÏ·¹ Ì†%ÔËÒÄÈ È
 %, Û¹, ÓÓÄ%†ÏÏ·¹ Ç†ÏÈ, Ì†%ÔËÒÄÈ, %ÏÏ
 Ì†ÎÔÊÂÏÏÈ Ë¹ Ì† ÈÄÓ· †ÈÄÏÈÄ, Ó, ÄÏÏ
 Ä†ÔËÒÈ. ä†È%·È †Ä, ÏÓ, %† Ç† Ì†ÈÈÏ†ÄÛÄ
 TITLE, Ô Ä%, † ÈÛÄÏ.ÏÓ ÛÓÚ†ÏÓ, ÌÄÏÏ·Ä
 Ì†%ÔËÒÈ ÓÓÏ, ÏÏ. ÛÓÏ Ó%Ï† Ä† % Û, ÓÈ. Ç†
 Û†ÏÈÄ ÏÓÈÄÛÄ, ·· †Ú, ÏÄ·Ï Ì È ÓÓÏÔÈÄÏÈÄ
 Ì†%ÔËÒÄÈ, òÈÛÄÏÄ ÏÄÏ.

Ç··Ó ÏÄ·Ï†

- (1) ÌÒÚ†ÏÓ, ÈÛÄ, ·ÏÏ.~†ÛÄÏ. POWER, ÓÓÏÔÈÄÏÈÄ CAMERA.
- (2) èó, Ä ÌÈÛÄ STANDBY, , Ä ¹.
- (3) Ç†ÈÈÛÄ MENU %ÏÏ ÓÓÓ· †ÈÄÏÏÈ ÏÄÏ.
- (4) èó, Ä ÌÈÛÄ Ä, ÛÏÈ Ó, Ó·Ï·È %ÈÓÏ %ÏÏ, ···Ó † ÛÓÚ†ÏÓ, ÏÈ TITLE LANG, † Ä†ÛÄÏ Ì†ÈÈÛÄ %ÈÓÏ.
- (5) èó, Ä ÌÈÛÄ %ÈÓÏ ÛÓ †, ÏÄÏÏÈ %ÏÏ, ···Ó † ÈÄÏ†ÄÏÓ, Ó ÏÄ·Ï†, † Ä†ÛÄÏ Ì†ÈÈÛÄ %ÈÓÏ.
- (6) Ç†ÈÈÛÄ MENU %ÏÏ ÓÛÈ †ÏÈÏ ÈÏ%ÈÏ†^ÈÈ ÏÄÏ.

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.

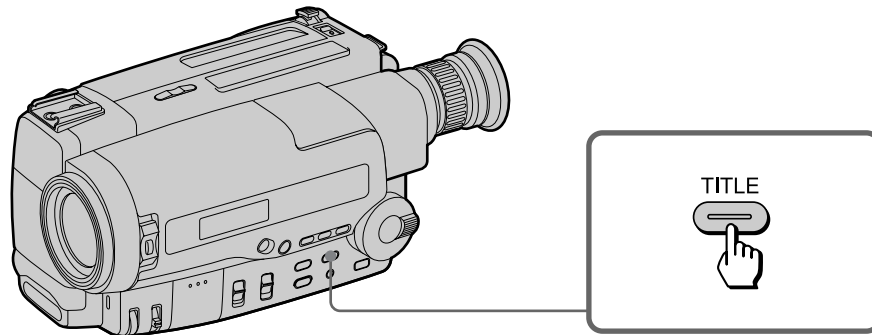
ãÒÓÍ, ÁÓ, †ËÊ Ì†%ÔËÏË

ÑÎÎ Ì†ÎÓÊÀÎËÊ ÒÚ Ì†~†Î†

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

ÑÎÎ Ì†ÎÓÊÀÎËÊ, Ò Ó^ÁÒÒÁ Á†ÔËÏË

- (1) çÁÓ%ÎÓÍ †ÚÌÓ Ì†ÊËÏ†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†ÊËÏÚÁ TITLE. ç†%ÔËÏË. ËÒ~ÁÁÌÁÚ.
- (3) ç†ÊËÏÚÁ START/STOP %ÎÎ Ì†~†Î† Á†ÔËÏË.
- (4) ç†ÊËÏÚÁ TITLE, ÍÓ, %† ç' ÓÓÊÁÎ†ÁÚÁ Ì†ÎÓËËÚ, Ì†%ÔËÏË, .
- (5) ç†ÊËÏÚÁ TITLE, ÍÓ, %† ç' Á†1ÓÚËÚÁ, 'íî, ~ËÚ, Ì†%ÔËÏË, .



Superimposing a title

ç+îóêâîëâ î+øëðë

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

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

[a]



[b]



ç+øëðë ^ëíîë~âðíë ëáíâîñ. ùðñ
 òíâø. ~ëí ó. çáóî:
 àðíó%î+ñ î+øëðë, 1 → àðíó%î+ñ î+øëðë, 2
 → HELLO! → HAPPY BIRTHDAY → HAPPY
 HOLIDAYS → CONGRATULATIONS! → OUR
 SWEET BABY → WEDDING → VACATION →
 THE END

òðíë ç· î+êíáúâ TITLE ò ë óóó. çê+âíóë
 ëî%ëí+^ëë "THE END", î+øëðë ëò~ááîú.

òðíë ç· î+êíáúâ TITLE ó%ëî çá, î+øëðë
 î+~íúú óóó. çê+ú, òñ ò "HELLO!" ëíë ò
 ç+^âë ó ë,,ëí+í. íòë î+øëðë.

ç+øëðë óóó. çê+. ùðñ î+ñá'íá, íóóó ^ë
 ç· , · çíë , òëóúáíá íâî. .

òðíë ç· îá á+íáðíë , ò+íñú, í+íë1-íë·ó
 ó ë,,ëí+í. î·1 á+òëðë
 àî%ëí+^ëñ î+øëðë î+~íáúòñ ò "HELLO!" .

è ëíá~+íëñ óúíóóëúáí, íó î+øëðë

• ç· îá íóëáúâ , · çú, î+øëðë, ,ó, áíñ
 á+òëðë.

• ç úó, áíñ, íó,,%+ ëáó. çê+âíëâ , ,ó%ëúòñ
 ëíë , ,ó%ëúòñ, î+øëðë. íá , ,ó%ëúòñ ë íá
 , ,ó%ëúòñ.

• ç· îá íóëáúâ á+òëðë , çú, î+øëðë, ë ç+úú
 ëíë , áíñ ó%íó, áíáííó.

• ç úó, áíñ, íó,,%+ óóó. çê+áúòñ íâî ,
 î+øëðë íá á+òëðë , ç. ùðñ.

ñíñ , ·ó ç òóíóëâíëñ î+øëðë

(1) ç+êíëúâ ííóóíú MENU %íñ óóó. çê+âíëñ
 íâî. .

(2) èó,á íëúâ %ëðí úò ç, íâíëñ %íñ úó,,ó,
 ~úó. · , · çú, TITLE POS, ç á+úáí
 î+êíëúâ %ëðí.

(3) èó,á íëúâ %ëðí úò ç, íâíëñ %íñ úó,,ó,
 ~úó. · , · çú, CENTER [a] ëíë BOTTOM
 [b], ç á+úáí î+êíëúâ %ëðí.

(4) ç+êíëúâ ííóóíú MENU %íñ úó,,ó, ~úó. ·
 óúâ áú, ëí%ëí+^ë. íâî. .

Advanced operations

íóó,á -áíòú,ó,+íí·á óóá +^ëë

Making your own titles

Όό·ού, άίί ° 1 ί+%οέοάέ

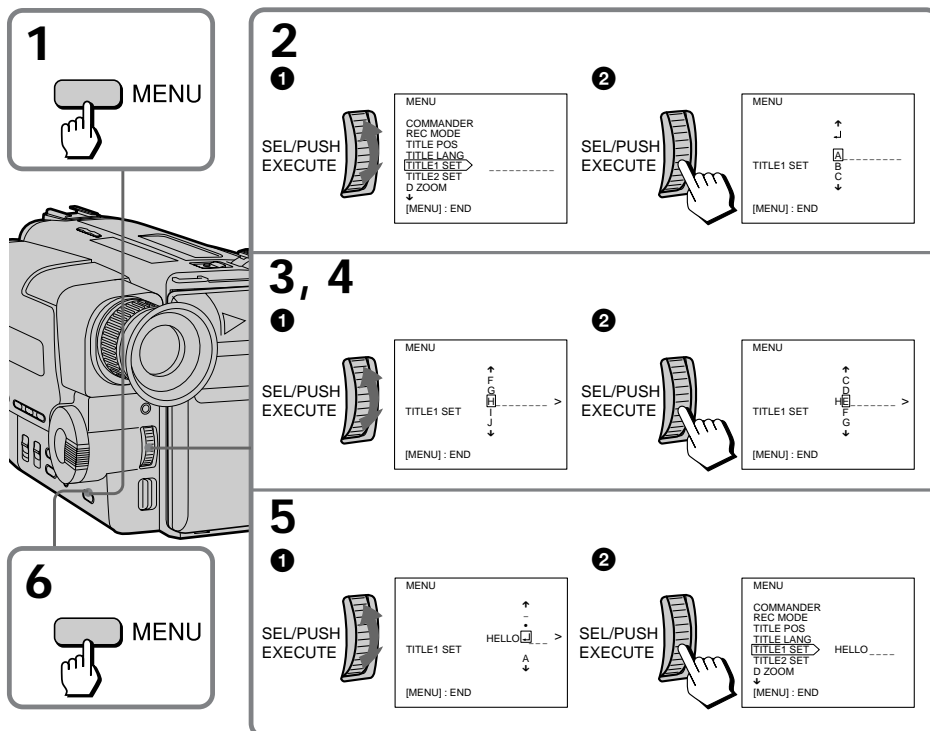
You can make two titles of up to 22 characters each, and store them in memory. We recommend to eject the cassette before you begin so that the power is not turned off on the way.

- (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· ίοέάά όόά+ú, %, á ì+%οέοέ έά 22 άί+ίό, ί+έ%+ñ έ ά+ìάούέ έ1, ό+ίνú. .

εάίόίάί%úάúοñ ό ά%, + έúάί, ίό, ·ίúú, ί+όόάúú, ~úó··, ό ó^άόά όόά%+ίέñ ì+%οέοάέ όέú+ίέά ίά, ·ίί, ~έίόó. .

- (1) άό,%, ,έ%άόί+ίά + ì+ìό%έúóñ, άέέίά „ούó, ίόóúέ, ì+έίέúά MENU %ίñ óúó· +έάίέñ ίάί. .
- (2) έó, ά ίέúά ά, úíέ ό, ό~ì·έ%έóί %ίñ , ·ó + TITLE1 SET έίέ TITLE2 SET, + ά+úάί ì+έίέúά %έóί. .
- (3) έó, ά ίέúά ά, úíέ ό, ό~ì·έ%έóί %ίñ , ·ó + έάί+άίό, ό άί+ί+, + ά+úάί ì+έίέúά %έóί. .
- (4) έó, úó ηέúά όúìíú 3 %ó úά1 όó , όόί+ ç· ίά ά+ίόί~έúά ì+%οέó. .
- (5) έó, ά ίέúά %έóί, ~úó··, ·· +ú, ↵, + ά+úάί ì+έίέúά %έóί. ç+%οέó, ·ú%άú ά+ìάόάί+, ό+ίνú. .
- (6) ç+έίέúά MENU %ίñ όúέ +ίέñ έί%έί+^έέ ίάί. .



Making your own titles

ēóÁ%+îĒĀ Ç+Ē1 ŌŌ·ŌŪ,Āîî°1
î+‰ŌĒŌĒĒ

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.

ŊîĤ ŌŪĒ +îĒĤ ŌŌÁ%+îîŌĒ Ç+îĒ
î+‰ŌĒŌĒĒ

Ç+ĒĒĒĒĒ îîŌŌîŪ MENU, , °·Ā ĒŪĀ î+‰ŌĒŌ, ,
îŌŪŌ Ū. Ç· îŌŪĒŪĀ ŌŪĀ ĀŪ, , +Ā+ŪĀî
î+ĒĒĒĒĒ %ĒŌî. Ç··Ā ĒŪĀ ↵, Ō+îŌî îĀ, Ōî
ŌŌîŌĒĀîĒĒ, + Ā+ŪĀî î+ĒĒĒĒĒ %ĒŌî.
ÇĀ, °·Ē +ĒŪĀ ŌŪŌŪŌĀ îĀŌŪŌ %îĤ ŌŪĒ +îĒĤ
ĒĀ Ō,,îĒŪ+. Ç Ō ŌŪĒ, îŌî ŌîŪ+Ā ŌŪŌŪŌĀ îĀŌŪŌ
·Ū%ĀŪ Ā+îĀŌĀîŌ, Ō+îĤŪ, î+î î+‰ŌĒŌ.

ŊîĤ ĒĀîĀîĀîĒĒĒ ŌŌÁ%+îîŌĒ Ç+îĒĒ
î+‰ŌĒŌĒĒ

Ç ŌŪîŪĀ 2, °·Ā ĒŪĀ TITLE1 SET ĒĒĒ TITLE2
SET, Ā+,ĒŌĒîŌŌŪĒ ŌŪŪŌ,,Ō, î+îŪ. î+‰ŌĒŌ.
Ç· îŌŪĒĒĒ ĒĀîĀîĒĒ, , +Ā+ŪĀî î+ĒĒĒĒĒ %ĒŌî.
Ç··Ā ĒŪĀ ĒĀî+Āî·Ā Āî+îĒ ŌŌĤŪ, .

ŌŌîĒ Ç·, ,ĀîĒ 22 Āî+î+ , ŌŪîŪĀ 4
Ç+‰ŌĒŌ. Ō +ĀŪ ĒĀ Ā+ŌŌîĒî+ĀŪŌĤ (Ē Ç·
îŌĒĀŪĀ Ō ŌŌŌŪĒŪ, ŌŪîŪŪ 5).

ŌŌîĒ ŌŌÁ%+îĒĀ î+‰ŌĒŌĒĒ Ā+îĒĒ+ĀŪ ·ŌîĀĀ 5
îĒîŪŪ Ō Ē, ŌŪ+, îĀîîŌĒ î+ŌŌĀŪĀ
ŌŌîĒ ĀĒĒî „ŌŪŌ, îŌŌŪĒ ·Ū%ĀŪ Ō Ō%ŌîĒ+Ū. ŌĤ
·ŌîĀĀ 5 îĒîŪŪ Ō Ē, ŌŪ+, îĀîîŌĒ î+ŌŌĀŪĀ,
ŌĒŪ+îĒĀ, °îî. ~ĒŪŌĤ +, ŪŌî+ŪĒ~ĀŌîĒ.
ŌŌîĒ Ō Ē ŌŌÁ%+îĒĒ î+‰ŌĒŌĒĒ, °îî. ~ĒŪŌĤ
ŌĒŪ+îĒĀ, ŪŌŪ+îŌ, ĒŪĀ, °îî. ~ŪĀĀ, POWER
Ōî+~+î+, ŌŌîŌĒĀîĒĒĒ OFF, + Ā+ŪĀî,
ŌŌîŌĒĀîĒĒĒ CAMERA. ēóÁ%+îî+Ĥ Ç+îĒ
î+‰ŌĒŌ. ŌŌŪ+îĀŪŌĤ, Ō+îĤŪĒ.

Ā·ŌŪ ŌĀ Ō Ō%,ĒĒĀîĒĒĒ Āî+îŌ,
ŊĀ ĒĒŪĀ %ĒŌî î+Ē+Ū·î.

Ç··Ā ĒŪĀ ŌŪŌŪŌĀ îĀŌŪŌ
ēóÁ%+îĒĀ ŌŪŌŪŌ,,Ō îĀŌŪ+. ēîŌ Ō Ē +,îĒ, +ĀŪŌĤ
îĀî+îŪ.

Editing onto another tape

αόϊύê ì † % û „ û .
îâîúú

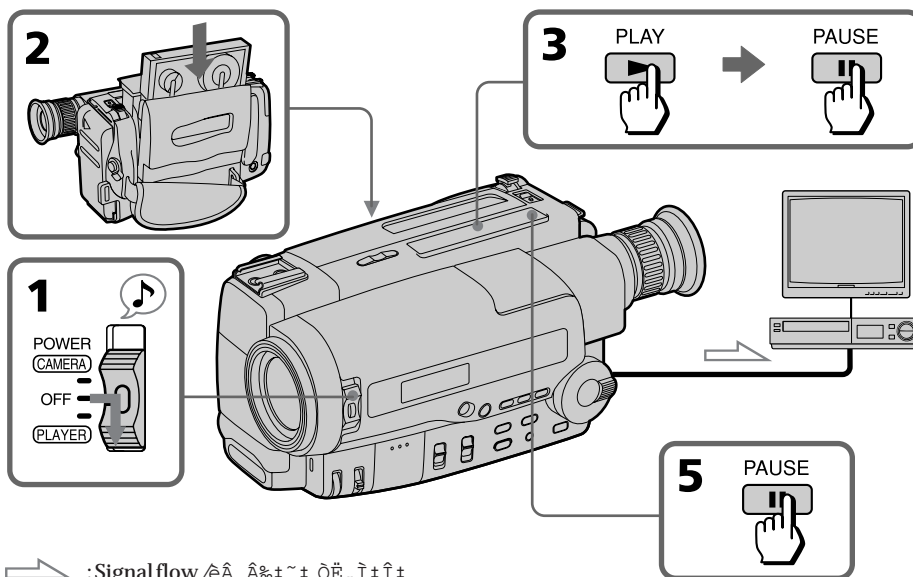
You can create your own video programme by editing with any other 8 mm, Hi8 Hi8, VHS VHS, S-VHS S-VHS, VHS-C VHSC, S-VHS-C S-VHSC or Betamax VCR that has video/audio inputs.

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· íóêáúá ðóá%+ú. ç+~ú ðó·ðú, âîú. , ê%áóó ó, †îú ðúúâî íóú+ê+ ò óóíó~ . . % û „, ó äçà úêð+ 8 8 îî, Hi8 Hi8, VHS VHS, S-VHS S-VHS, VHS-C VHSC, S-VHS-C S-VHSC êîê ß Betamax, íóúó `È Èíááú, íó%` , ê%áó/ †ú%êð.

- (1) ìóú+íó, êúá , `íî, ~+úâî. POWER ì† PLAYER.
- (2) çóú+, , úá ~êðú. îâîúú (êîê îâîúú, íóúó ú. ç· íóúêúá óá áá+òêò+ú.) , äçà È , ðú+, , úá á+òêò+îúú. îâîúú , , ê%áóí+íá ú.
- (3) çóðð óêá, ó%êúá á+òêò+îúú. îâîúú , , ê%áóí+íá á %ó úá í óó , óóí+ ç· íá ó· ì+ úêêúá úó~íú , , íóúó óê ç· íóúêúá ì+~+ú. íóú+ê, † á+úâî ì+êîêúá **II** %îñ , , á%âîêñ, ê%áóí+íá ` , , áêêí ò+úá` , óóó óêá, á%âîêñ.
- (4) ç+ê%êúá ì+ äçà úó~íú ì+~+í+ á+òêòê È , , á%êúá äçà , , áêêí ò+úá` á+òêòê.
- (5) ê%íó, áíáîúú ì+êîêúá **II** ì+ , , ê%áóí+íá á È ì+ äçà %îñ ì+~+í+ íóú+ê+.



To edit more scenes
Repeat steps 3 to 5.

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

Ñîñ íóú+ê+ % û „, È í ò`âî
éó, úó ñêúá ðúúíú` ò 3 óó 5.

Ñîñ óóú+íó, íê íóú+ê+
ç+êîêúá **■** È ì+ , ê%áóí+íá á, È ì+ äçà.

Additional Information

Changing the lithium battery in the camcorder

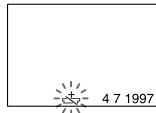
Additional Information

Additional Information

Your camcorder is supplied with a 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.)

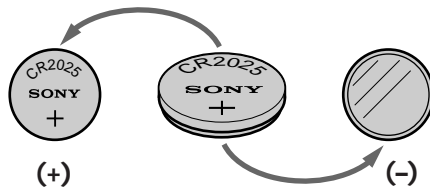
Additional Information



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.

- Do not touch the positive (+) terminal of the battery with your fingers or other metal objects. This may cause a short-circuit and damage the battery.
- Do not touch the negative (-) terminal of the battery with your fingers or other metal objects. This may cause a short-circuit and damage the battery.
- Do not touch the battery terminals with your fingers or other metal objects. This may cause a short-circuit and damage the battery.
- Do not touch the battery terminals with your fingers or other metal objects. This may cause a short-circuit and damage the battery.



Additional Information

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. çÁ ÔÂ ÂÁ+ ñÈ+Ú, , îÂ
+Â·È +Ú, È îÂ · ÖÖ+Ú, ·+Ú+ ÂÈÍÛ , Ó,,Óî .

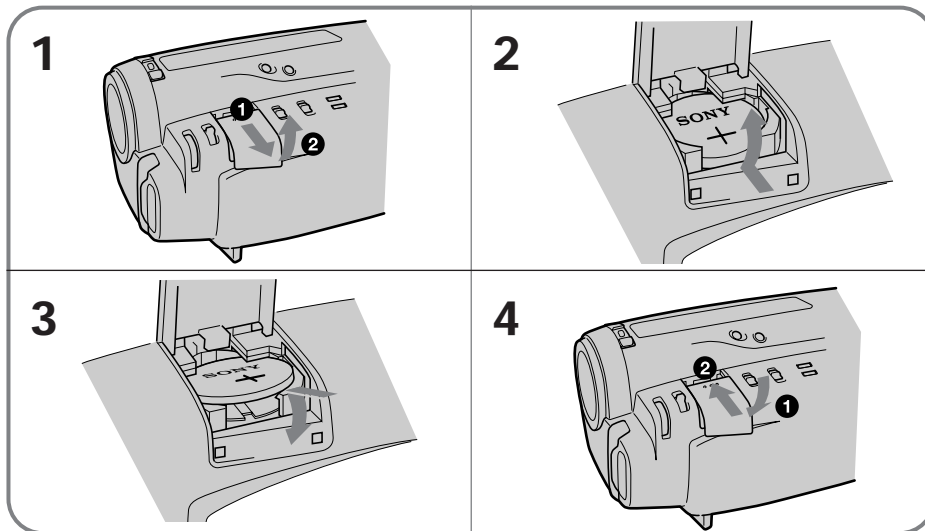
Changing the lithium battery

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~îÈí
ÔÈÚ+îÈñ Ô ÈÖÓÂ%ÈîÂîí·í. àî+~Á ç+í
Ô È%ÂÚÖñ ÔÂ ÂÚÓÚ+î+ ,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 ÈÂ%Â È+ÚÁîñ.
(3)ìÖÚ+îÓ,ÈÚÁ îÓ,Û, îÉÚÊÂ,Û, ·+Ú+ ÂÈÍÛ
ÖÓíÓÈÈÚÁî,îÓÈ (+) ÖÓÓ ÓíÓÈ, Ó ·+~ÂîíÓÈ
î+ ÛÈÚ.
(4)á+í ÓÈÚÁ í ·-íÚ. á+ÚÁî ÔÂ 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

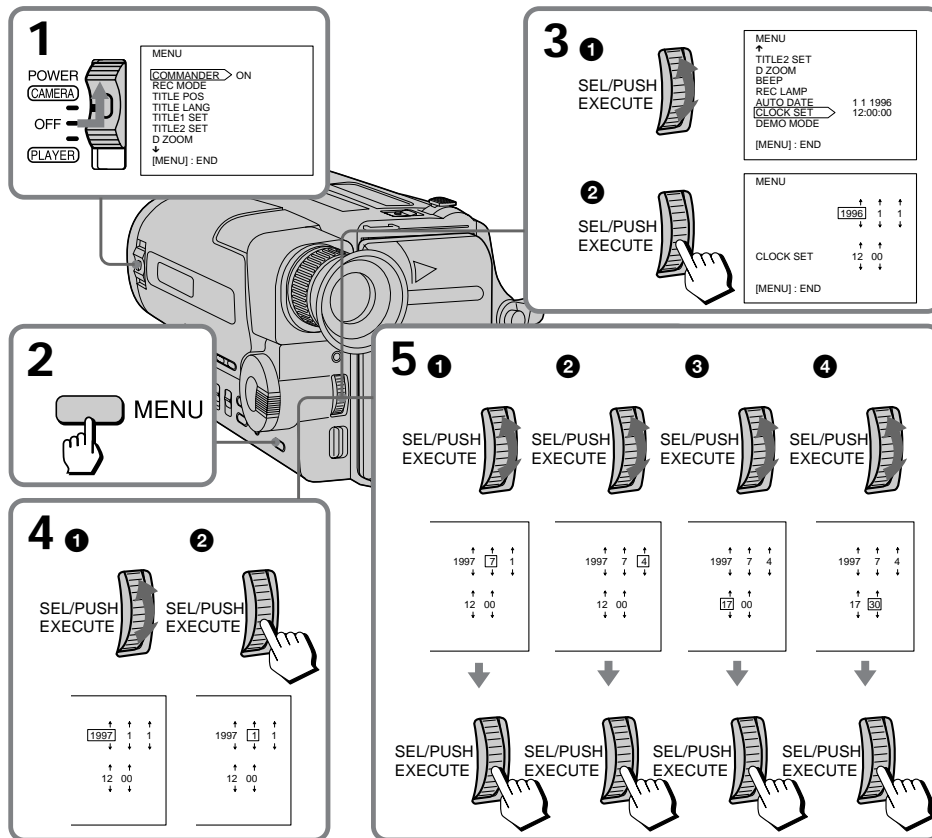
Επαναφορά ημερομηνίας και ώρας

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 erase the menu display.

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

- (1) Βεβαιωθείτε ότι ο διακόπτης POWER είναι στην 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 το έτος που θέλετε, 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 αφαιρεθεί η οθόνη του μενού.



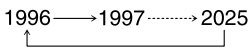
Additional information: ΠΡΟΣΟΧΗ: Ημερομηνία και ώρα

Resetting the date and time

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.

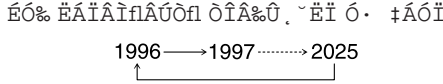
The year indicator changes as follows:



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

Ñîfl ÊðÒ †, îĀîĒfl ŪðŪ†îŒ, íĒ ‰†Ū° Ē , ĀîĀîĒ
Ēó, Ūó ĒŪĀ ŐŪîíŪ° 4 Ē 5.

Ñîfl Ő Ó, Ā íĒ Ő Ā‰, † ĒŪĀî, îŒ
ŪðŪ†îŒ, îĀîî' 1 ‰†Ū° Ē , ĀîĀîĒ
ç†ĒîĒŪĀ DATE ‰fl ŐŪŒ. †ĒĀîĒfl Ēî‰Ēî†ŪŒ †
‰†Ū°. ç†ĒîĒŪĀ TIME ‰fl ŐŪŒ. †ĒĀîĒfl
Ēî‰Ēî†ŪŒ †, ĀîĀîĒ. ŐŐîĒ ç° ì†ĒîĀŪĀ ŪŪ ĒĀ
Ő†îŪ. îîŒŒŪŒ ŐîŒ, †, Ēî‰Ēî†ŪŒ ĒŒ~ĀĀîĀŪ.



Ē ĒîĀ~†îĒĀ í Ēî‰Ēî†ŪŒ Ū , ĀîĀîĒ
çŐŪ ŐĀîî'Ā ~†Œ° ~ŪŒĒ, Ē‰ĀŐî†îĀ '°
†.ŐŪ†.Ū , 24~†ŒŐ, Őî ĀĒîĀ.

Playback modes

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.

ĒĀĒĒî , ŐŐŒ ŐĒĀ, Ā‰ĀîĒfl (SP/LP) , °.Ē †ĀŪŒfl
†, ŪŐî†ŪĒ~ĀŐîĒ , ŐŐŪŪ, ĀŪŪŪ, ĒĒ Ő ŪŒ ì†ŪŐî
Ā†ŐĒŐĒ , , íŐŪŒ Őî'î† Ā†ŐĒŐ†î† îĀîŪ†.
Ē‰î†î†, ì†~ĀŐŪŪ, ŐĀ†ŐĒŐ†îŒŐ, ŐĒĀ. †ĒĀîĒfl ,
ĀĒĒîĀ LP - Ū‰ĀŪ îĀ Ū†îŐĀ 1Ő Ő~ĀĀ, ì†î ,
ĀĒĒîĀ SP.

ĀîŐŐŪ †îî'Ā 8-îî , Ē‰ĀŐîĀîŪ°
ç° îĀ îŐĒĀŪĀ, ŐŐŒ ŐĒĀ, Ő‰ĒŪ. îĀîŪ° ,
Ā†ŐĒŐ†îĀ'Ā , ‰ Ū, ŐĒ ŐĒŪĀîĀ ^, ĀŪîŒ, Ő
ŪĀîĀ, Ē‰ĀîĒfl. ì†î ì†î ŐĒŪŪĀî' ^, ĀŪîŒ, Ő
ŪĀîĀ, Ē‰ĀîĒfl ŐŪîĒ~†. ŪŒfl , Ā†, ĒŐĒîŐŪĒĒ ŐŪ
ŐŪ †î° , ŪŒ , ŐĀîŐĒîŐ ç° îĀ ŐîŐĒĀŪĀ
, ŐŐŒ ŐĒĀ, Ő‰ĒŪ. ĒîŐŪŪ †îî'Ā
Ő Ā‰, † ĒŪĀî, îŒ Ā†ŐĒŐ†îĀ'Ā îĀîŪ° .
ĒîŐŪŪ ĒŪĀ ŐŐŒŐŐî , †Ā‰ĀîĀ "ĀŐŐŐî, ĀŐ, †îĒĀ
ç†~ĀĒ , Ē‰ĀŐî†îĀ ° Ā† , †îĒ~ĀĒ" ‰fl
Ő Ő, Ā íĒĒ ŐĒŪŪĀî' ^, ĀŪîŒ, Ő ŪĀîĀ, Ē‰ĀîĒfl
ĒîŐŪŪ †îî'Ā , ŐŐŪŪŪ ŐŪ, .

Tips for using the battery pack

ëó, Âú° òó Èðòóí, Áó, †ìÈ.
· †ú † ÂÈìó,, ó · îóí †

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.

ç%†ìòí †Â%ÂîÂ òóí†Á†ìó, í†í ç° íóÈÁÚÁ Èòóóí, Áó, †ú, ì†Èîú~Èì ó· †Áóí ç†· †ú † ÂÈì·È · îóí.

èó,, óúó, í † · †ú † ÂÈìó,, ó · îóí †

çÒÂ,, %† ìóóÈÚÁ ò òó· óÈ %óóóí ìÈÚÁí, ì·Á · îóíÈ àíÂÈÚÁ %óóú†úó~ìóÁ íóíÈ~Áòú, ó Á† fl%†, · †ú † ÂÈì·ì · îóí†ì, ~úó· ÈíÁú, , óÁíóÈìóóú, , °óóíìÈú, ò·Áííó óú 2 %ó 3 †Á.

ë óí òíúÈ· · †ú † ÂÈìó,, ó · îóí † fl, ìflÁúòfl · óíÁÁ íó óúíÈí, ìóíó%ì·ì · Ûòíó, Èflì

ùùÀíúÈ, ìóóú, · †ú † ÂÈìó,, ó · îóí † òìÈÈ†Áúòfl È Á† fl% · Û%Áú ÈÁ †òìó%ó, †ì · °ú ÁÁ, ÁóíÈ ç° ò ÓÈÁ, Ó%ÈÚÁ Á†ÓÈò, , ìóíó%ì·ì · Ûòíó, Èflì.

Ñîfl òóì †ìÁìÈfl Á† fl%† · †ú † ÂÈìó,, ó · îóí † äó,, %† Á†ÓÈò, ìÁ ò ÓÈÁ, Ó%ÈÚófl, Óó, Á ìÈÚÁ STANDBY, ìÈÁ %îfl òóì †ìÁìÈfl Á† fl%† · †ú † ÂÈìó,, ó · îóí †.

áÂÈ%ú ò^Âì†ìÈ íóÈÁú · °ú, ò%Áí†ì óí†, ì·È ÓÁ Áìó%, %†ÈÁ ÁòíÈ Á†ÓÈò, óóú†ìó, ìÁì† È ì†~†ú† Óóíú. çó, Áîfl ÓóÁÈ~ÈóìÈ ó, †ìÈfl ó·Áíú†, , °·ó †ú,, ì† ÈíÈ ò óòíóú †~Á ÁÁ ó·ÁíúÈ, , È%óÈòí†úÁîfl, ó·ÁíúÈ, ÓÁ Á%, È,, †Áúòfl †, úóí†úÈ~ÁóíÈ È · †ú † ÂÈì·È · îóí Èòóóí. ÁúÁúòfl. Á†ú † ÂÈì·È · îóí ú†íÈÁ Èòóóí, ÁúÁúòfl, íó,, %†, óú†, ìflÁúòfl È , °ìÈí†Áúòfl ì†òòÁú†.

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 a 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 a 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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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 flow 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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Á† ìÈìÈ. èó'ÚóíÚ ç†ì òíÁÈÚÁÚ Á† ìÈÈÚ.
·†Ú† ÀÈì·È·îóí ìÁòòò ÁÈóó, Áììò òÁ ÁÈ
Èòòóí, Áó, †ìÈÁì, ÈÈÁóí†ìÁ .

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86°F). è È·òíÁÁ ìÈÁìòÈ ÚÁìòÁ †ÚÚ Á
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Additional Information

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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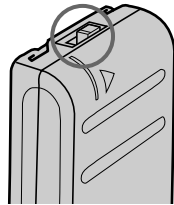
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Tips for using the battery pack

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.

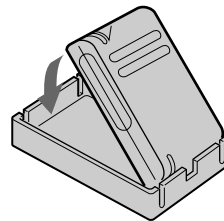
[a]



• 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).
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- Do not expose the battery case to any mechanical shock.
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- 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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Maintenance information and precautions

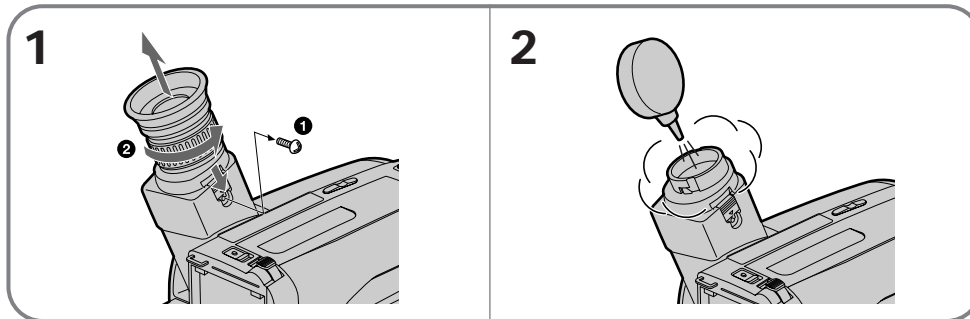
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Removing dust from inside the viewfinder

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- (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.

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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 ÁóíÁìÈñ óíúíñ †
- (1) éó, íÁóóÈÁ í†ì†, íú Ì† óíúíñ Á ò
 - íÁúíóÈ Ì† íó óóðÁ.
 - (2) éó, Á ÌÈÁ óíúíñ, Ì†ò †, íÁìÈÈ óó ÁíÈÈ.
 - (3) ìóó†íó, ÈÁ, ÈìÛ.



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

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Maintenance information and precautions

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† 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, ò ñ ñ Ë ÙÁ ÒÁ Ò Ì Ù ÓÓ Ò Ò Ù, , Ë ÷ Á Ó Ì † Ì Á Ù. Ò Ò Ì Ë Ç* È Ò Ó Ó Ì, Á Ù Á Ù Á, Ë ÷ Á Ó Ì † Ì Á Ù Ù ì † Ó Á Ò ~ † Ì Ó Ì Ó ñ Ë Á È Ì È, Ò* Ì, Ì Ó Ì Ì Á Ó Ù Á, Ù Ó Ò Á ÷ Ì ñ Ë Ù Á Á Á Ó Ù Ó Á Ò Ì † È Ì È Ò* Ì È. ì Á Ò Ó Ì È Ì È Ò* Ì, Ì Ó, Ù Ó, 'Á, † Ù, Ì Á È Ó Ó †, Ì Ó Ó Ù, , È, Ì Á Ì Ó Ó Ó * Ì Ó Ì Ù ~ † ñ Ì Á È Ò Ó †, Ì Ó Ó Ù, Ì Á Ó Ó ÷ Ì Á È È Ù Á Ì Ó Ì Ù Ù.

ë Á Ù Á, Ò È † ÷ † Ó Ù Á Ò Á Á Ì. Ù Ó Ì †
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- Ç Á Ó, È. † È Ù Á Ó Á Ù Á, Ó È - Ì Ù Ó Á Á Ì. Ù Ó Ì † (Ó Á Ù Á, Ó È Ò Ó, Ç ÷) È Ì Á Ì † ÷ È Ù Á Ù ñ È Á Ì ' Á Ò Á ÷ Á Ù ' Ì † Ì Á, Ò. ù Ó Ó Ì Ó È Á Ù Ó Ó, Á ÷ È Ù, Ó Á Ù Á, Ó È - Ì Ù È Ì Ó È Á Ù Ó È, Á Ò Ù È Ì Ó Ó È † Ù È Ì È Ó Ó † È Á Ì È. ~ Ì Á Ì Ù È ~ Á Ó Ì È Ì Ù Ó Ó Ì .
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Maintenance information and precautions

- The unit becomes warm while in use. This is normal.
- Do not place the unit in locations that are:
 - Extremely hot or cold
 - Dusty or dirty
 - Very humid
 - Vibrating

Notes on dry batteries

To avoid possible damage from battery leakage or corrosion, observe the following:

- Be sure to insert the batteries in the correct direction.
- Dry batteries are not rechargeable.
- Do not use a combination of new and old batteries.
- Do not use different types of batteries.
- The batteries slowly discharge when not in use.
- Do not use a battery that is leaking.

If battery leakage occurred

- Wipe off the liquid in the battery case carefully before replacing the batteries.
- If you touch the liquid, wash it off with water.
- If the liquid gets into your eyes, wash your eyes with a lot of water and then consult a doctor.

The battery charger for this camcorder is designed to charge Sony Ni-Cd batteries and should only be used for such purpose, or for the purpose of charging batteries that are compatible therewith and allow it to function safely. This battery charger should not be used with Ni-MH batteries as it may cause excessive rise in temperature of Ni-MH batteries.

Sony does not warrant the compatibility or safety of this battery charger for use with batteries other than Sony Ni-Cd batteries. Before using this battery charger for charging batteries other than Sony Ni-Cd batteries, confirmations should be obtained from the battery manufacturer that such batteries are compatible with this charger and may be used safely therewith.

If any difficulty should arise, unplug the unit and contact your nearest Sony dealer.

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- ÀÒÓ† †Ú ÒÚ†ÌÒ, ÈÚÒÈ ÙÁÒÏ† ì, Ó, ÂÏÈ ÈÒÒÓ†, ÁÓ, †ÈÈÈ. ùÚÓ È, ÈÈÁÚÓÈ ÌÒ Ì†È Ì†È.
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è ÈÌÁ~†ÈÈÈ ÓÚÌÓÒÈÙÁ†, ÌÒ ÒÙÌÈÌ. †Ú† ÁÁÌ ÇÓ ÈÁ. ÁÈ†ÈÈÁ, ÓÁÌÓÈÌÓ, Ó ÓÓ, ÁÈ%ÁÈÈÈ, ÓÌÁ%ÓÚ, ÈÁ ÚÚÁ†ÈÈÁ. †Ú† ÁÁÌ ÈÈÈ ÌÓ ÓÁÈÈ ÓÓ. Ì. %†ÈÙÁ ÒÌÁ%Ù. ~ÁÁ.

- é. ÈÌÁ†ÚÁÌ, ÌÓ, ÓÚ†, ÚÁ. †Ú† ÁÈÈÈ, Ó †, ÈÈ, ÌÓÌ Ì†Ó †, ÌÁÌÈÈ.
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- ÇÁ ÈÒÓÓ†, ÁÙÈÙÁ ÌÓÌ. ÈÈ†^È. ÈÁ ÌÓ, † È ÓÚ† †. †Ú† ÁÁÌ.
- ÇÁ ÈÒÓÓ†, ÁÙÈÙÁ †ÁÌÈ~Ì† Á ÚÈÓ. †Ú† ÁÁÌ.
- Á†Ú† ÁÈÈÈ ÓÌÁ, Ì† †Á ÈÈ†. ÚÒÈ, ÌÓ, %† ÓÈÈ ÌÁ ÈÒÓÓ†, ÁÙ, ÚÒÈ.
- ÇÁ ÈÒÓÓ†, ÁÙÈÙÁ. †Ú† ÁÈÈÙ, ÌÓÓÓ †È Ó ÚÚÁ†ÁÙ.

- ÒÓÈÈ ÒÌÙ~ÈÚÒÈ ÙÚÁ†È† ÈÁ. †Ú† ÁÁÌ
- Ì†ÚÁÌ, ÌÓ, †Ú ÈÙÁ ÈÈ%ÌÓÓÚ, †Ú† ÁÈÈÓÈ Ì†ÌÁ Á ÓÁ Á%Á†ÁÌÓÈ. †Ú† ÁÁÌ.
- ÓÓÈÈ Ç† Ú Ó, †ÈÈ ÈÈ%ÌÓÓÚ, ÚÓ ÒÌÓÈÙÁ ÁÁ, Ó%ÓÈ.
- ÓÓÈÈ ÈÈ%ÌÓÓÚ ÓÓÓ†È†, Ç†~È, Ì†Á†, ÚÓ Ó ÒÌÓÈÙÁ Ç† È, Ì†Á†. ÓÌ. ÈÈ ÌÓÈÈ~Á-ÓÚ, ÓÌ, Ó%, †Á†ÚÁÌ. †ÚÈÙÁÓ, Ì, †~Ù.

á† ÈÌÁÒÁ ÚÓÚ ÓÈÓÚ, Ó †ÌÙÌÙÈÈÚÓ Ì†. †Ú† ÁÁÌ %ÈÈ%ÌÌÓÈ, È%ÁÓ††Á. Ó Á%Ì†Á†~ÁÌÓ %ÈÈÁ† ÈÈÈÈÈÈÁ†, -Ì†ÈÈÁ, †. †Ú† ÁÁÌ Ni-Cd ÚÈ Ì† Sony È %ÓÈÈÈÓ. †Ú. ÈÒÓÓ†, ÁÓ, †ÌÓ ÚÓ†, ÌÓ, †ÚÈÌ Á†ÈÈ, ÈÈÈ, ^Á†È Á† ÈÈÈ. †Ú† ÁÁÌ, ÌÓÓÓ † Á ÈÈ, ÈÈ, ÚÒÈ ÓÓ, ÌÁÓÚÈÈ† ÈÈ Ó, †~ÁÙÓÓÈÈÈÙÚ† ÈÈ È Ó. ÁÓÓÁ~È, †, Ú. ÁÁÓÓ†ÓÈÓÁ ÚÙÈ†~ÈÓÈÈ Ó, †ÈÈÁ ÚÓÚ ÓÈÓÚ, †. Ñ†ÌÌÓÁ Á† ÈÌÁÒÁ ÚÓÚ ÓÈÓÚ, Ó †ÌÙÌÙÈÈÚÓ Ì†. †Ú† ÁÁÌ ÌÁ ÒÌÁ%ÓÚÁÙ ÈÒÓÓ† ÁÓ, †Ú. %ÈÈ Á† ÈÈÈ. †Ú† ÁÁÌ Ni-MH, Ú†È Ì†È ~ÚÓ ÌÓÈÁÙ Ó È, ÁÓÚÈ Ì† ÁÁÌÁ ÌÓÈÙ ÓÓ, ~ÁÈÈ. ÚÁ†ÓÁ †Ú† †Ú† ÁÁÌ Ni-àç. ÌÈ Ì† Sony ÌÁ „† †ÈÈÈ ÚÁÙ ÓÓ, ÌÁÓÚÈÈÓÓÚ, ÈÈÈ. ÁÁÓÓ†ÓÈÓÓÚ %†ÌÌÓ, ÓÁ† ÈÈÈ, Ó ÚÓÚ ÓÈÓÚ, † †ÌÙÌÙÈÈÚÓ Ì†. †Ú† ÁÁÌ Ó ÈÈÈÈÈÈ, ÓÓ, †Ú† ÁÈÈ†ÈÈ, ÓÚÈÈ~Ì† ÈÈ ÓÚ ÌÈÈÁ†. -Ì†ÈÈÁ, †. †Ú† ÁÁÌ Ni-Cd ÚÈ Ì† Sony. èÁ Á%ÈÒÓÓ†, ÁÓ, †ÈÈÁ† %†ÌÌÓ, ÓÁ† ÈÈÈÈ, Ó ÚÓÚ ÓÈÓÚ, † †ÌÙÌÙÈÈÚÓ-Ì†. †Ú† ÁÁÌ %ÈÈÁ† ÈÈÈÈ% Ó, ÈÈ, ÓÚÈÈ~Ì† ÓÚ ÌÈÈÁ†. -Ì†ÈÈÁ, †. †Ú† ÁÁÌ Ni-Cd ÚÈ Ì† Sony, %ÓÈÈÈÓ. †Ú. ÓÓÈÙ~ÁÌÓ ÓÓ%Ú, Á È%ÁÈÈÁ ÓÚ ÈÁ, ÓÚÓ, ÈÙÁ†ÁÈ. †Ú† ÁÁÌ, ~ÚÓ. †Ú† ÁÈÈÈ ÈÈ, ÈÈ, ÚÒÈ ÓÓÌÁÓÚÈÈ† ÈÈ Ó %†ÌÌ† Á† ÈÈÈ. Ì† ÚÓÚ ÓÈÓÚ, ÓÈ ÈÈ Ó, ÚÓ Ò ÈÈÈ. ÁÁÓÓ†ÓÈÓ ÈÒÓÓ†, ÁÓ, †Ú, ÓÈÈ.

Ç ÒÈÙ† Á Ú Ó%ÌÓÓÚÁÈ ÓÚÓÓÁ%ÈÈÈÙÁ †ÒÓ† †Ú È Ó. †ÚÈÙÁÓ, Ç†~Á. ÌÈÈÈ~È~ÁÁ †, ÁÌÙÓÓÚ, Ó Sony.

Additional Information

Using your camcorder abroad

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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.

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

Operation

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

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

Picture

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

Trouble check

Others

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

Continued to the next page

Additional information

NO. 011101A, 1st Edition

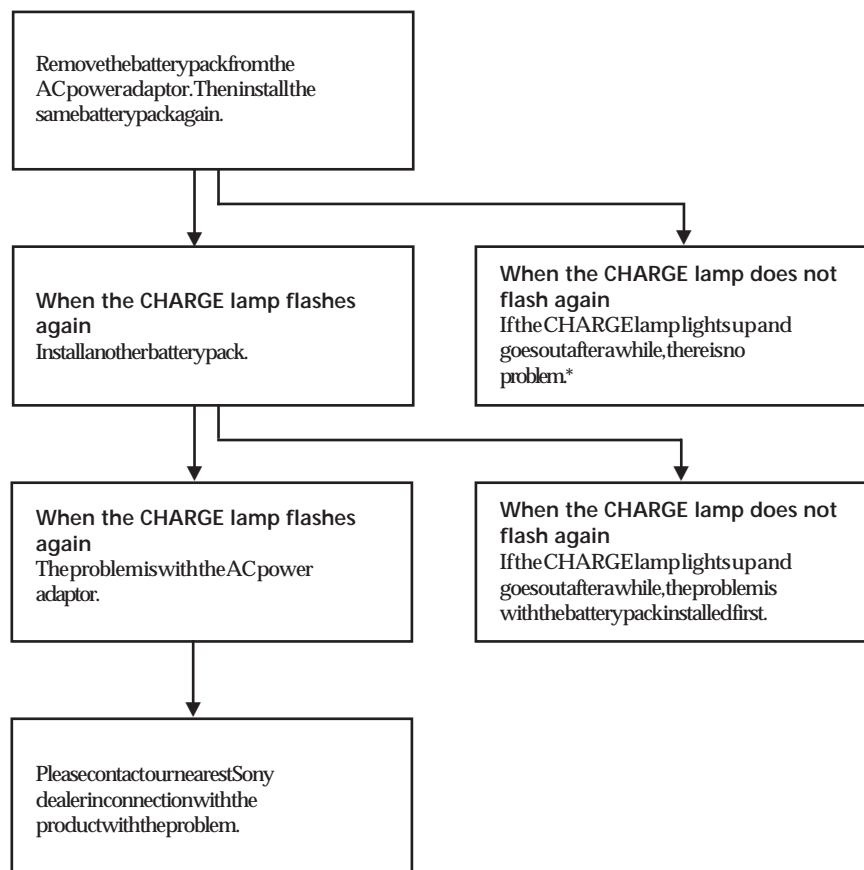
Trouble check

AC power adaptor

Symptom	Cause and/or Corrective Actions
The POWER lamp does not light.	• Set the selector to VTR (DC OUT) and disconnect the mains lead. After about one minute, try again. (p. 9)
The CHARGE lamp flashes.	• See the following chart.

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.

è Ó, Á Í† ÌÀÈÒÓ †, ÌÓÓÚÀÈ

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

è ó,â í† ìâëòò †, ìóóúâë

è ó~ââ

è ÈÁì†í	è È~Èì† È/ÈìÈ%ÂÈòú, Èñ óó úòú †ìÀìÈ.
è Èí†,,†Áì·È Òúí,ú %Èòú†ì·Èóììó,,ó úò †, íÀìÈñ ìÀ †·óú†Áú.	<ul style="list-style-type: none"> • COMMANDER Ûòú†ìó, íÀì , ÓóíóÈÀìÈÁ OFF. → ìòú†ìó, ÈúÁ Á,,ó, ÓóíóÈÀìÈÁ ON. (òú . 27) • óúó-úó ò Á,, †È%†Áú Òúú, Èìù †í †òì·ì ìù~†ì. → ìóú †ìÈúÁ ò Á,, †%Û. • Á†ú† ÂÈíÈ ,òú†, íÀì· Ò ìÁò †, Èí, ìóÈ Óóíñ ìóóú... → çóú†, ,úÁ·†ú† ÂÈíÈ, òó·ì.%†ñ ò †, Èí, ìú. Óóíñ ìóóú, . (òú . 79) • á† ñ%·†ú† ÁÁí ÈÁ †òìó%ó, †ì. → çóú†, ,úÁ ìó, *Á. (òú . 79)
á†ò· ìÈíòñ, È%óÈòí†úÁì, .	• εúóóÁ%ÈìÈúÁ óíòíñ È ó~ÈòúÈúÁ ó··ÁíúÈ, ,È%óÈòí†úÁìñ. (òú . 60)

(ò ó%óìÈÀìÈÁ òìÀ%úÁú)

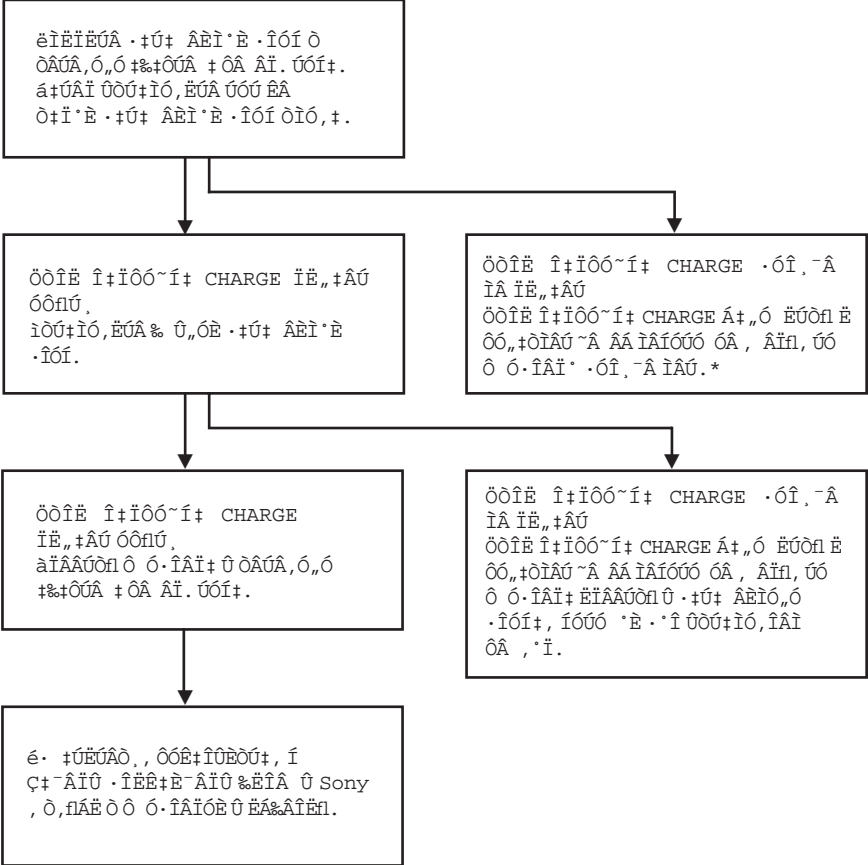
Additional Information

è ó, Â í† ìÄËòò †, ìóóúÄè

èÄúÄ, óÈ †%†óúÄ òÄ ÄìÄìÄìò, ò úóí†

è ÄÄì†í	è È~Èì† È/ÈìÈ %ÄÈòú, Èì òó úóú †ìÄìÈ.
ä†ìóó~í† POWER ìÄ „ò Èú.	• ìóú†ìò, ÈúÄ òÄìÄíóó , òóíóÈÄìÈÄ VTR (DC OUT) È óúóóÄ%ÈìÈúÄ òÄúÄ, óÈ ò ó, ó%. óÄ ÄÄ ó%ìú ìÈìúúú òíó, † òó%òóÄ%ÈìÈúÄ òÄúÄ, óÈ ò ó, ó%. (óú . 9)
äÈ„†Äú ì†ìóó~í† CHARGE.	• èìóú ÈúÄ òíÄ%ù, ~ù. ú†. ìÈ^ù.

äó, %† ìÈ„†Äú ì†ìóó~í† CHARGE
 è ó, Â Èú, òó òíÄ%ù, ~ÄÈ ú†. ìÈ^Ä.



* òòìÈ ç' Èòòóì. ÄúÄúÄ .†ú† ÄÈì'È .íóí, íóóó 'È ç' úóí. íó ~úó ìúòÈìÈ, ÈìÈ íóóó 'È .†ì óòú†, ìÄì ì† %ìÈúÄì, ìóÄ , Äìì, úó ì†ìóóì† CHARGE ìóÈÄú ìÈ„†ú, ò È òÄ , óÈ Ä† ì%ìÄ. ùúó ìÄ ùì†Ä', †Äú ì† ò ó. ìÄìú. èó, úó ÈúÄ ò ó^Ä%ù ù Ä† ì%ìÈ ò úÄì ÈÄ ò†ì'ì .†ú† ÄÈì'ì .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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ĪĀĪĪĒ~ĀŌĪĒĀ ĩ† †ĪŪĀ ĒŌŪĒĪĒ

ÇĒ%ĀŌĪ†ĪĀ †

ēĒŌŪĀĪ†

ēĒŌŪĀĪ†, Ē%ĀŌĀ†ŌĒŌĒ
 Ñ, Ā, †~†. ĒĀŌfl „ŌĪŌ, íĒ,
 Ī†íŌĪĪŌ-ŌŪ ō~Ī††
 †Ā, Ā ŪĪ†, ŌĒŌŪĀĪ† ōĀ
 ēĒŌŪĀĪ† †Ū%ĒŌĀ†ŌĒŌĒ
 Ç † †. ĒĀŌfl „ŌĪŌ, íĒ,
 ŌĒŌŪĀĪ† ōĀ
 ÇĒ%ĀŌŌĒ, Ī††
 ñ, ĀŪŌ, ŌĒŌĒ, Ī†Ī PAL,
 ŌŪ†Ī%† Ū ŌŌ āāāē
 āŌŌŌĪ, ĀŪĀĪĀ Ī†ŌŌĀŪ*
 ā†ŌŌĀŪ* 8-ĪĪ, Ē%ĀŌŪŌ Ī†Ū†
 (ŌŪ†Ī%† Ū8ĪĪ)
 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 ŌĪĪĒĒ, Ē%ŌĒŌĪ†ŪĀĪ.
 (~Ā ĪŌ. ĀĪĒĒ)
 ē. ĀĪŪĒ,
 āŌĪ. ĒĪĒ Ō, †ĪĪĒĒ Ō. ĀĪŪĒ,
 Ō Ō Ē, Ō%ĪĪ
 Ū †ĪŌŪŌĪ†ŪŌ ŌĪ,
 CCD-TR501E:
 15-Ī †ŪĪĒĒ (ēŌŪĒ~ĀŌĪĒĒ)
 CCD-TR502E/TR620E:
 15-Ī †ŪĪĒĒ (ēŌŪĒ~ĀŌĪĒĒ),
 30-Ī †ŪĪĒĒ* (ñĒŪ Ō, ŌĒ)
 F1, 4-2, 4
 ÑĒ†ĪĀŪ ŪĒĪ. Ū † 37 ĪĪ
 ĪŌfŪŌĪŌĀ †ŌŌŪŌñĪĒĪĀ
 f= 4, 1-61, 5 ĪĪ
 ē ĒĒŌŌŌĪ, 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

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†† 180-
 Ī †ŪĪĒĒ

ÇĪŌ%ĪĒĀ Ē , *ĪŌ%ĪĒĀ „ĪĀĀ%†

ÇĒ%ĀŌ, *ĪŌ%
 ĪŌĪŌ, ĪĀĀ%Ō, 1 Ç ŌŌ%ŌĒĪŌĒ
 †ĪŌĪĒŪŪ%Ā, 75 ēĪ,
 ĪĀŌĒĪĪŪ Ē~ĪŌĀ
 ĀŪ%ĒŌ, *ĪŌ%
 āŌĪŌŪŌĪĒ~ĀŌĪŌĀ ŪŌĪŌ, ĪĀĀ%Ō
 327 Īç (Ō Ē ŌŌĪŌĪŌ
 ŌŌŌ ŌŪĒ, ĪĀĪĒĒ 47 íēĪ),
 ŌŌĪŌĀ ŌŌŌ ŌŪĒ, ĪĀĪĒĀ ĪĀĪĀĀ
 2, 2 íēĪ
 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%ĪĒĒ Ī†Ō†† ĪĒĀĪĒĀĪ
 ŌŪ2, 5 %Ō 3 Ç ŌŌŪ. ŪŌĪ†,
 ŌŌĪŌĀ ŌŌŌ ŌŪĒ, ĪĀĪĒĀ 6, 8
 íēĪ (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†ĪĀ†††
 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 ĪĒĒ ĪĒĪ ŌŪŌĪ,
 ĪŌĪŌŪŌĪĒ~ĀŌĪĒĒ ŪĒŌ
 ē ĒĪ†, †ĀĪĒĀ
 Ō ĒĪ†%ĪĀĒĪŌŌŪĒ
 ēĪ. ŌŪ. 6.

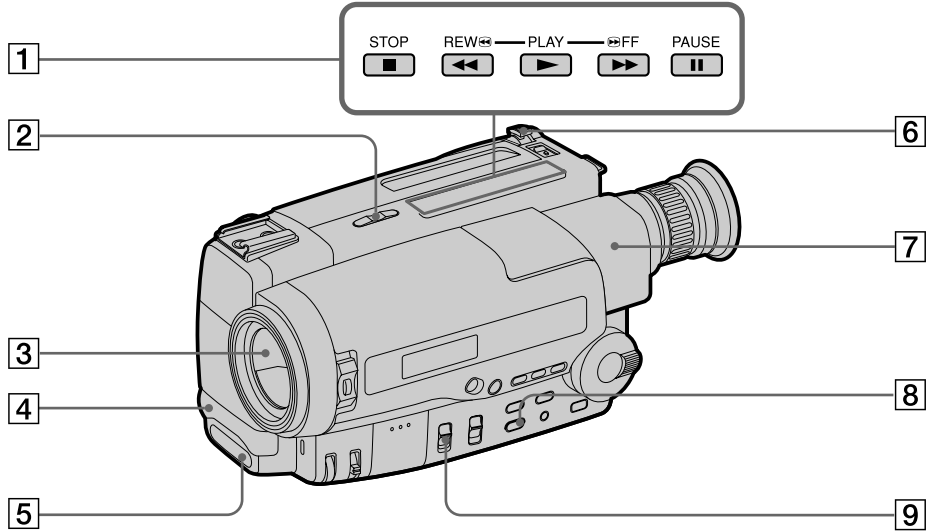
ēĀŪĀ, ŌĒ †%†ŌŪĀ

Ī Ā.Ō, †ĪĒ† Ī ĒŌŪŌ~ĪĒĪŪ
 ŌĒŪ†ĪĒ†
 110 - 240 Ç ŌĀ ĀĪ. ŪŌĪ†, 50/
 60 Ē[^]
 ēŌŪ Ā. Ī†ĪĀ††† ĪŌ~ĪŌŌŪ,
 AC-V16/V17: 20 ÇŪ
 AC-V16A/V17A: 22 ÇŪ
 Ç *ĪŌ%ĪŌĀ Ī†Ō†† ĪĒĀĪĒĀ
 ēĪĀĀ%Ō DC OUT , †.Ō~ĀĪ
 ĀĒĒĪĀ
 7, 5 Ç; 1, 8 Ā
 ēĪĀĀ%Ō %†††† flĪĒĒ
 .†Ū† ĀĒĪŌ, Ō. ĪŌĪ†
 10 Ç; 1, 1 Ā, ĀĒĒĪĀ Ā† flĪĒĒ
 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 ŪĪĒ†† Ē ŪĀĪĒĒ~ĀŌĪĒĀ
 Ī† †ĪŪĀ ĒŌŪĒĒĒ ĪŌ, ŌŪ. ŪŪ.
 ēĀĪĀĪĀĪ. ĀĀ Ū, Ā%ŌĪĪĀĪĒ†.

Identifying the parts

εὐρεῖτε τὰ μέρη τῆς κάμερας



- 1** Tape transport buttons (p. 20)
 - STOP
 - ◀◀ REW (rewind)
 - ▶▶ PLAY (playback)
 - ▶▶▶ FF (fast forward)
 - ⏸ PAUSE
 These buttons will function in **PLAYER** mode.
- 2** EDITSEARCH button (p. 18)
- 3** Lens cover
- 4** Built-in microphone
- 5** Remote sensor (p. 79, 80)
Aim the Remote Commander here for remote control.
- 6** Power zoom lever (p. 15)
- 7** Viewfinder (p. 14)
- 8** 16:9 WIDE button (CCD-TR502E/TR620E only) (p. 37)
- 9** STEADY SHOT button (CCD-TR620E only) (p. 42)

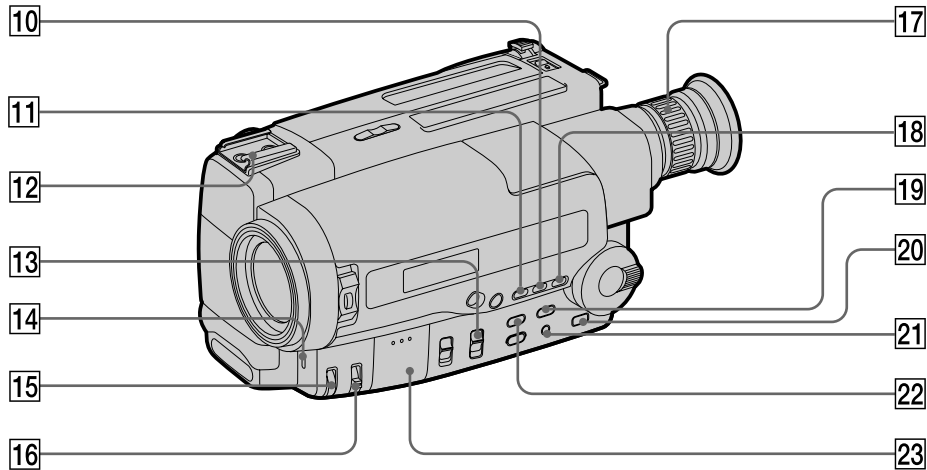
- 1** αἰθροῖσες ὁμάδεων μεταγωγῆς (ὄψ. 20)
 - STOP (ὁπότε ἀρῶνται)
 - ◀◀ REW (ὀπίσθεν ἀπομόλιση ὁμάδων ἀπομόλιση)
 - ▶▶ PLAY (, ὁπότε ὁμαλοῦνται ἀπομόλιση)
 - ▶▶▶ FF (ὀπίσθεν ἀπομόλιση ὁμάδων ἀπομόλιση)
 - ⏸ PAUSE (ὁπότε ἀρῶνται)
 Ἡ ἀπομόλιση ὁμάδων μεταγωγῆς ἐπιτελεῖται ὅταν ἡ κάμερα εἰσέλθει ἐν ἔργῳ **PLAYER**.
- 2** αἰθροῖσες EDITSEARCH (ὄψ. 18)
- 3** ἀποκάλυψη φατοῦ
- 4** εἰσῆληκτοὶ ἠχοῦ
- 5** Σημαντικὸ ἀπομακρυντικὸ σήμα (ὄψ. 79, 80)
Ἄνευ ἀπομακρυντικοῦ τηλεχειριστηρίου, ὁποῦ ἀπομακρυντικὸ σήμα εἰσέλθει ἐν ἔργῳ, ὁποῦ ἀπομακρυντικὸ σήμα εἰσέλθει ἐν ἔργῳ, ὁποῦ ἀπομακρυντικὸ σήμα εἰσέλθει ἐν ἔργῳ.
- 6** ἑλαστικὸ ἄκρο, ὁποῦ ἐπιτελεῖται ἡ ἐπιλογή τοῦ ἐπιπέδου ζουμ (ὄψ. 15)
- 7** ὀπίσθεν ἀπομόλιση φατοῦ (ὄψ. 14)
- 8** αἰθροῖσες 16:9 WIDE (ὄψ. 37)
(ὄψ. 37, ὁποῦ εἰσέλθει ἐν ἔργῳ CCD-TR502E/TR620E)
- 9** αἰθροῖσες STEADY SHOT (ὄψ. 42)
(ὄψ. 42, ὁποῦ εἰσέλθει ἐν ἔργῳ CCD-TR620E)

Additional Information

Προσέξτε τὰς ἐπισημασθεὶς ἀπομακρυντικὸ σήμα

Identifying the parts

εὐχρηστικότητα, λειτουργία

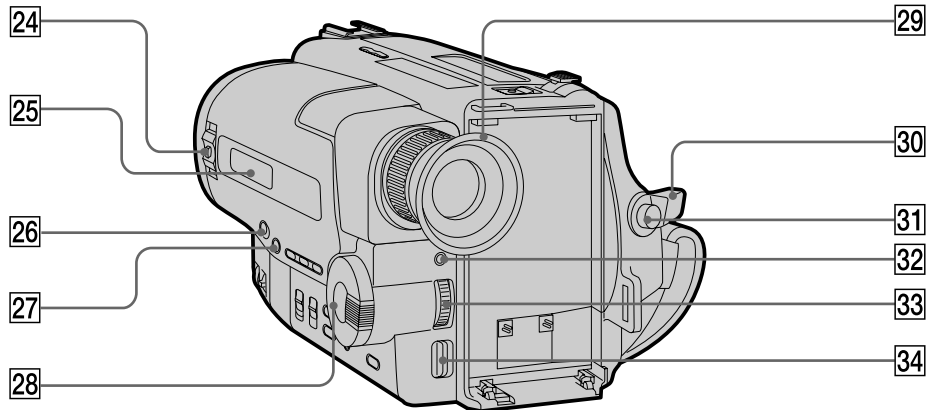





- 10 TIME button (p. 29)
- 11 DATE button (p. 29)
- 12 Accessory shoe
- 13 START/STOP MODE switch (p. 12, 30)
- 14 Recording lamp
- 15 Focus dial (p. 39)
- 16 FOCUS switch (p. 39)
- 17 Viewfinder adjustment ring (p. 14)
- 18 COUNTER RESET button (p. 14)
- 19 TITLE button (p. 43)
- 20 MENU button (p.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




- 10 εὐχρηστικότητα TIME (ὄψ . 29)
- 11 εὐχρηστικότητα DATE (ὄψ . 29)
- 12 Ἀντικείμενο ἔκθεσης ὑποδοχῆς, ἰσχύς ὁ ἔκθεσης ἰσχύος
- 13 εἰς ἄντικείμενο, ἰσχύς ἰσχύος, START/STOP MODE (ὄψ . 12, 30)
- 14 ἄντικείμενο ἰσχύος ἰσχύος
- 15 ἰσχύος ἰσχύος ὄψ . 39)
- 16 εἰς ἄντικείμενο, ἰσχύος ἰσχύος (ὄψ . 39)
- 17 ἰσχύος ἰσχύος ἰσχύος ἰσχύος ἰσχύος ἰσχύος (ὄψ . 14)
- 18 εὐχρηστικότητα COUNTER RESET (ὄψ . 14)
- 19 εὐχρηστικότητα TITLE (ὄψ . 43)
- 20 εὐχρηστικότητα MENU (ὄψ . 26)
- 21 εὐχρηστικότητα DISPLAY (ὄψ . 21)
- 22 εὐχρηστικότητα PICTURE EFFECT (ὄψ . 35)
- 23 εὐχρηστικότητα ἰσχύος ἰσχύος ἰσχύος ἰσχύος (ὄψ . 50)

Identifying the parts

εἰδέναι τὰ μέρη τῆς κάμερας



- 24 POWER switch (p. 12, 20)
- 25 Display window (p. 83)
- 26 FADER button (p. 32)
- 27 BACK LIGHT button (p. 31)
- 28 PROGRAM AE dial (p. 41)
- 29 Eyecup
- 30 STANDBY switch (p. 12)
- 31 START/STOP button (p. 12)
- 32  LANC control jack
 stands for Local Application Control Bus system. The  control jack is used for controlling the tape transport of video equipment and peripherals connected to it. This jack has the same function as the connectors indicated as CONTROL L or REMOTE.
- 33 Menu control dial (p. 26)
- 34 BATT (battery release) knob (p. 10)

- 24 Ç·íî, ~+úâî, POWER (öú . 12, 20)
- 25 εἶó-ίó %Èòòîâñ (öú . 83)
- 26 àìóóí+ FADER (öú . 32)
- 27 àìóóí+ BACK LIGHT (öú . 31)
- 28 ÑÈóí PROGRAM AE (öú . 41)
- 29 εἶúñ
- 30 èâ Áíî, ~+úâî, STANDBY (öú . 12)
- 31 àìóóí+ START/STOP (öú . 12)
- 32 Εἰἆἄó úó +, îâîÈñ  LANC
 óáî+~+Áú ÒÈóúÁîú í+î+î+ îÁóúîó,,ó úó +, îâîÈñ. Εἰἆἄó úó +, îâîÈñ  Èòóó-î ÁúÁúóñ %îñ íóíú óñ Á+ Óâ Áîâ-ÁîÈÁî îâîú*, ÈḂḂóó-ó ú%ó, +îÈñ È Óâ ÁùÈ ÈÈì'₁ úóú ÓÈóú,, Óó%íî ~Áîì'₁ îâîú. Ñ+îìóâ ,, îἆἆó Εἰἆἆú úí+íú. Èâ úúîí^È, í+í È +Á·Áî', Ó-Óáî+~Áîì'Á í+í CONTROL L ÈἰÈ REMOTE.
- 33 ÑÈóí úó +, îâîÈñ îâì. (öú . 26)
- 34 èú~í+ BATT (óò,ó-ÓÈ%ÀîÈñ ·+ú+ ÀÈìó,,ó ·íóí+) (öú . 10)

Additional Information
 Νόσσητῆσάτῃ τῆσ ἔπὸς τῆσ ἔπῃ

Identifying the parts

εὐρίθρο, ἡ ἀποστολέα

Remote Commander

ἡ ἀποστολέα, ἡ ἀποστολέα

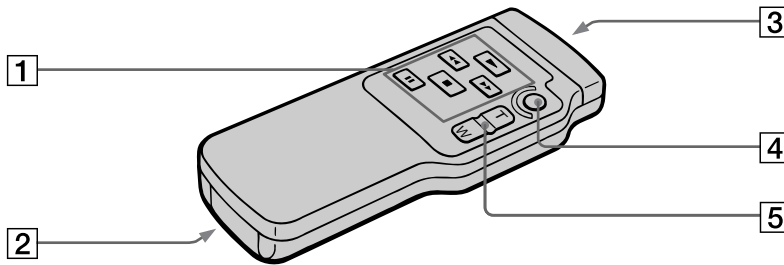
Using the Remote Commander

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

ἡ ἀποστολέα, ἡ ἀποστολέα, ἡ ἀποστολέα
 ἡ ἀποστολέα, ἡ ἀποστολέα
 ἡ ἀποστολέα, ἡ ἀποστολέα

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

ἡ ἀποστολέα, ἡ ἀποστολέα, ἡ ἀποστολέα
 ἡ ἀποστολέα, ἡ ἀποστολέα, ἡ ἀποστολέα
 ἡ ἀποστολέα, ἡ ἀποστολέα

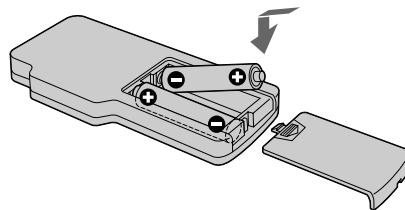


- 1 Tape transport buttons (p. 20)
- 2 R6 (size AA) battery holder (p. 80)
- 3 Transmitter
Point toward the remote sensor to control the camcorder after turning on the camcorder.
- 4 START/STOP button
- 5 Power zoom button
The zooming speed is unchangeable on the Remote Commander.

- 1 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα (ὄψ . 20)
- 2 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα (ὄψ . 80)
- 3 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα, ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
- 4 ἡ ἀποστολέα ἡ ἀποστολέα
- 5 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ 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 ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα
 ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα



Additional Information

ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα ἡ ἀποστολέα

Identifying the parts

εὐρετικὰ μέρη

Note on battery life

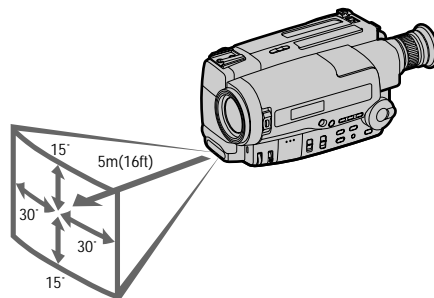
The batteries for the Remote Commander last about 6 months under normal operation. When the batteries become weak or dead, the Remote Commander does not work.

To avoid damage from possible battery leakage

Remove the batteries when you will not use the Remote Commander for a long time.

Remote control direction

Aim the Remote Commander to the remote sensor within the range as shown below.



Notes on the Remote Commander

- Keep the remote sensor away from strong light sources such as direct sunlight or illumination. Otherwise, the remote control may not be effective.
- Be sure that there is no obstacle between the remote sensor on the camcorder and the Remote Commander.
- This camcorder works at commander mode VTR 2. The commander modes (1, 2, and 3) are used to distinguish this camcorder from other Sony VCRs to avoid remote control misoperation. If you use another Sony VCR at commander mode VTR 2, we recommend you change the commander mode or cover the remote sensor of the VCR with black paper.

ὁ ἔλεγχος τοῦ ἀπομακρυσμένου εὐρετικὰ μέρους λειτουργεῖ περίπου 6 ἔτη κάτω ἀπὸ κανονικὴ λειτουργία. ὅταν τὰ μπαταρίες γίνουν ἀδύναμα ἢ ἀνεπαρκῆ, τὸ ἀπομακρυσμένο εὐρετικό μὴ λειτουργεῖ.

Γιὰ νὰ ἀποφύγετε τὸν κίνδυνο βλάβης ἀπὸ τὴν πιθανὴ διαρροὴ μπαταρίας, ἀφαιρῆτε τὶς μπαταρίες ὅταν μὴ χρησιμοποιεῖτε τὸ ἀπομακρυσμένο εὐρετικό μὴ γιὰ μακρὸ χρονεῖος.

Σημειώστε τὴν κατεύθυνση τοῦ ἀπομακρυσμένου εὐρετικὰ μέρους ὡς ἀποδεικνύεται ἐνδεῶς. ὁ ἀπομακρυσμένος εὐρετικός ἀποστολέας πρέπει νὰ ἀποβληθεῖ ἀκριβῶς ἐντὸς τοῦ πεδίου ἐμβλήματος, ὅπως ἀποδεικνύεται ἐνδεῶς.

- Ἐπιφυλάξτε τὸ ἀπομακρυσμένο εὐρετικό μέρος ἀπὸ τοὺς ἰσχυροὺς φωτισμοὺς, ὅπως τὸ ἥλιο ἢ τὸ φῶς τῶν λαμπυριῶν. Ἄλλωθι, τὸ ἀπομακρυσμένο εὐρετικό μὴ ἔχει ἀποτελεσματικὴ λειτουργία.
- Βεβαιώστε ὅτι ἔχει ἀφαιρηθεῖ ἕνα ὄργανο ἀπὸ τὸ ἀπομακρυσμένο εὐρετικό μέρος τοῦ camcorder καὶ τὸ ἀπομακρυσμένο εὐρετικό μέρος.
- Ὁ camcorder λειτουργεῖ ἐν ἑξῆς ἰσχύρι τοῦ ἀπομακρυσμένου εὐρετικὰ μέρους VTR 2. Οἱ ἰσχύρι τοῦ ἀπομακρυσμένου εὐρετικὰ μέρους (1, 2 καὶ 3) χρησιμοποιεῖται γιὰ νὰ ἀπομακρυνθεῖ ὁ camcorder ἀπὸ ἄλλους camcorder τοῦ Sony γιὰ νὰ ἀποφύγετε τὸν κίνδυνο ἀσυνεπῆς λειτουργίας τοῦ ἀπομακρυσμένου εὐρετικὰ μέρους. Ἐάν χρησιμοποιεῖτε ἄλλο camcorder τοῦ Sony ἐν ἑξῆς ἰσχύρι τοῦ ἀπομακρυσμένου εὐρετικὰ μέρους VTR 2, συστήνουμε νὰ ἀλλάξετε τὴν ἰσχύρι τοῦ ἀπομακρυσμένου εὐρετικὰ μέρους ἢ νὰ καλύψετε τὸ ἀπομακρυσμένο εὐρετικό μέρος τοῦ camcorder μὲν μαύρο χαρτί.

Identifying the parts

εὐὸὸάἰ†, †ἰἔἂ %ἂὔ†ἰἂἔ

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.

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.

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.

Attaching the shoulder strap

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

Νἱἢ ὀ ὀὸἰὸὔ † %ἂἰὸἰὸὔ † ^ἔἔ
 ς· ἰὸἔἂὔἂ ἰ†~†ὔ. %ἂἰὸἰὸὔ † ^ἔ. ὀὔἂἰ
 ὀὔὔ†ἰὸ, ἰἔ ὀἔὀὔἂἰ· ἰἂἰ. .
 ς· ὀ†ἰἔἂ ἰὸἔἂὔἂ ἰ†~†ὔ. %ἂἰὸἰὸὔ † ^ἔ.
 ὀὔὔἂἰ ὀἰἂ%ὔ. ^ἂἔ ὀὸἂ † ^ἔἔ.

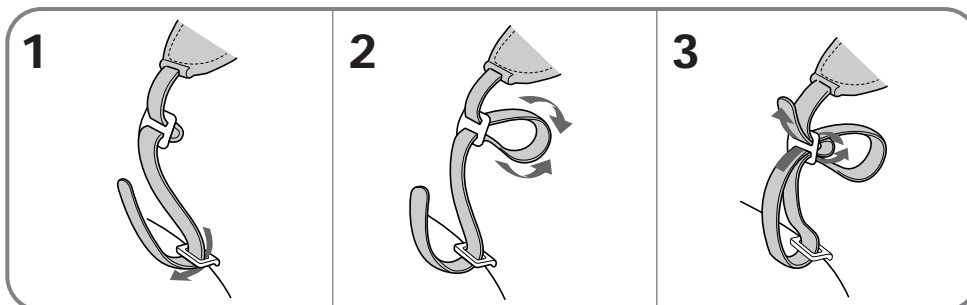
Νἱἢἢ , ἰὸ%†, %ἂἰὸἰὸὔ † ^ἔὸἰἰ·ἔ ἂἔἔἰ
 Demo

- (1) ς· ὀὔὀἰἰἔὔἂ ἰ†ὀὀἂὔ ἔ ὀὔὔ†ἰὸ, ἔὔἂ
 , ἰἰ. ~†ὔἂἰ. POWER , ὀὸἰὸἔἂἰἔἂ
 PLAYER.
- (2) ἔὸ, ἂ ἰἔὔἂ STANDBY , , ἂ 1.
- (3) ς†ἔἔἰ†ἢ ►, ὀὔὔ†ἰὸ, ἔὔἂ , ἰἰ. ~†ὔἂἰ.
 POWER , ὀὸἰὸἔἂἰἔἂ CAMERA.

Νἱἢἢ , ἰὸ%† ἔἂ %ἂἰὸἰὸὔ † ^ἔὸἰἰ, ὀ
 ἂἔἔἰ† Demo

- (1) ἰὸὔ†ἰὸ, ἔὔἂ , ἰἰ. ~†ὔἂἰ. POWER ,
 ὀὸἰὸἔἂἰἔἂ PLAYER.
- (2) ἔὸ, ἂ ἰἔὔἂ STANDBY , , ἂ 1.
- (3) ς†ἔἔἰ†ἢ ■, ὀὔὔ†ἰὸ, ἔὔἂ , ἰἰ. ~†ὔἂἰ.
 POWER , ὀὸἰὸἔἂἰἔἂ CAMERA.

ἔ ἔἰ ἂὸἰἂἰἔἂ ὀἰἂ~ἂ, ὀ, ὀ ἂἰἢἢ
 ἔ ἔἰ ἂὸἔὔἂ ὀ ἔἰ†, †ἂἰ·ἔ ὀἰἂ~ἂ, ὀἔ ἂἰἂἰ. ἰ
 ἰ . ~†ἰἰ %ἂἰ ὀἰἂ~ἂ, ὀ, ὀ ἂἰἢἢ (37) ἰ†ὀὔ .78).



Additional Information

Νὸὀὸἰἰἔὔἂἰ. ἰ†ἢ ἔἰὔὀ ἰ†~ἔἢ

Identifying the parts

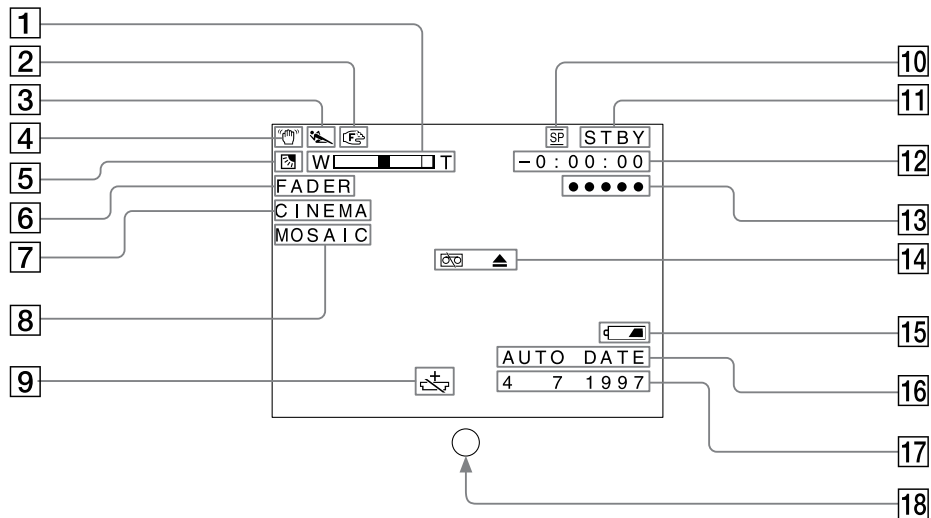
εὐὸὸÁÏ†, †ÏËÂ %ÁÛ†ÏÂÈ

Operation indicators

àÏËÏ†ÚÓ · †·ÓÚ·

In the viewfinder

ç , È%ÖÈÏ†ÚÂÏÂ



- | | |
|---|--|
| <ul style="list-style-type: none"> 1 Power zoom indicator (p. 15) 2 Manual focus indicator (p. 39) 3 PROGRAM AE indicator (p. 41) 4 SteadyShot indicator (CCD-TR620E only) (p. 42) 5 Back light indicator (p. 31) 6 FADER indicator (p. 32) 7 Wide mode indicator (CCD-TR502E/TR620E only) (p. 37) 8 Picture Effect indicator (p. 35) 9 Lithium battery indicator (p. 49) 10 SP/LP recording mode indicator (p. 12) 11 Tape transport mode (p. 12) | <ul style="list-style-type: none"> 1 àÏËÏ†ÚÓ ò È,Ó%ÏÓ,,ó Ú †ÏòòÏ†ÚÓ † (òÚ .15) 2 àÏËÏ†ÚÓ Ù~ÏÓÈ ÙòÏÛòÈ ó,ÏÈ (òÚ .39) 3 àÏËÏ†ÚÓ PROGRAM AE (òÚ . 41) 4 àÏËÏ†ÚÓ ÙòòóÈ~È,óÈ ò·ÁÏÏÈ (úóÏ,Ïó CCD-TR620E) (òÚ . 42) 5 àÏËÏ†ÚÓ Á†%ÏÂÈ Óó%ò,ÁÛÏÈ (òÚ . 31) 6 àÏËÏ†ÚÓ FADER (òÚ . 32) 7 àÏËÏ†ÚÓ ~È óÏó~Ï †ÏÏó,,ó ÁÈÈÏ† (úóÏ,Ïó èèD-TR502E/TR620E) (òÚ . 37) 8 àÏËÏ†ÚÓ ~ùùÁÏÏó, ÈÁÓ· †ÈÁÏÈÏ (òÚ .35) 9 àÏËÏ†ÚÓ ÏÈúÈÁ,óÈ ·†ú† ÁÈÏÈ (òÚ .49) 10 àÏËÏ†ÚÓ ÁÈÈÏ† Á†òÈòÈ SP/LP (òÚ .12) 11 èÁÈÈÏ òÂ ÁÏÂ~ÁÏÈÏ ÏÁÏÛ· (òÚ . 12) |
|---|--|

Warning indicators

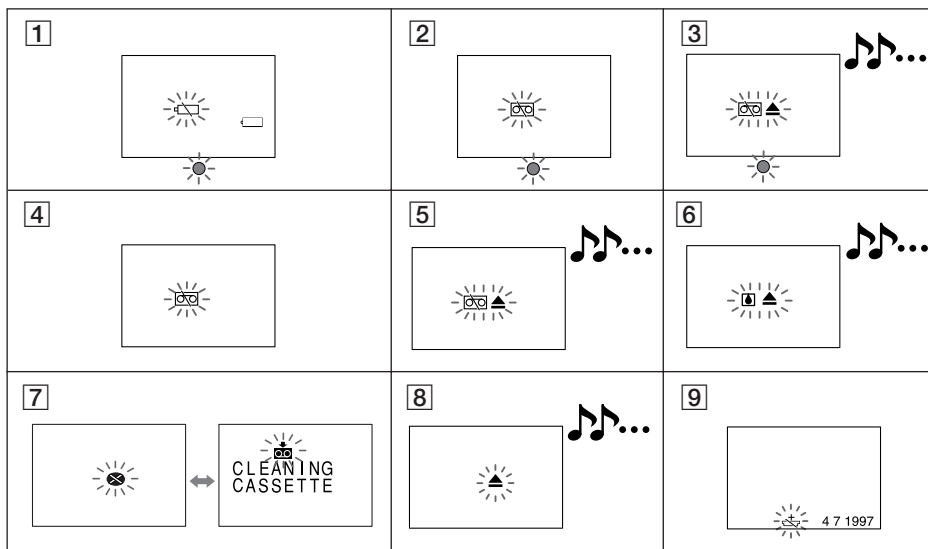
ΕΙΣΑΓΩΓΗ ΚΑΡΤΕΛΛΟΥ

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.

Αν ο δείκτης φωτός αναβοσβήνει αργά, αυτό σημαίνει ότι η μπαταρία είναι αδύναμη. Αν αναβοσβήνει γρήγορα, η μπαταρία είναι εκνευρισμένη. Η λωρίδα ταινίας είναι κοντά στο τέλος. Η λωρίδα ταινίας έχει τελειώσει. Δεν έχει εισαχθεί ταινία. Η λωρίδα ταινίας είναι κόκκινη. Η ταινία είναι υγρή. Η ταινία είναι βρώμενη. Η ταινία είναι βρώμενη. Η ταινία είναι βρώμενη.

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

♪: Όταν ο ήχος BEEP είναι ενεργός, μπορείτε να ακούσετε ήχο κρότου.



- 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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