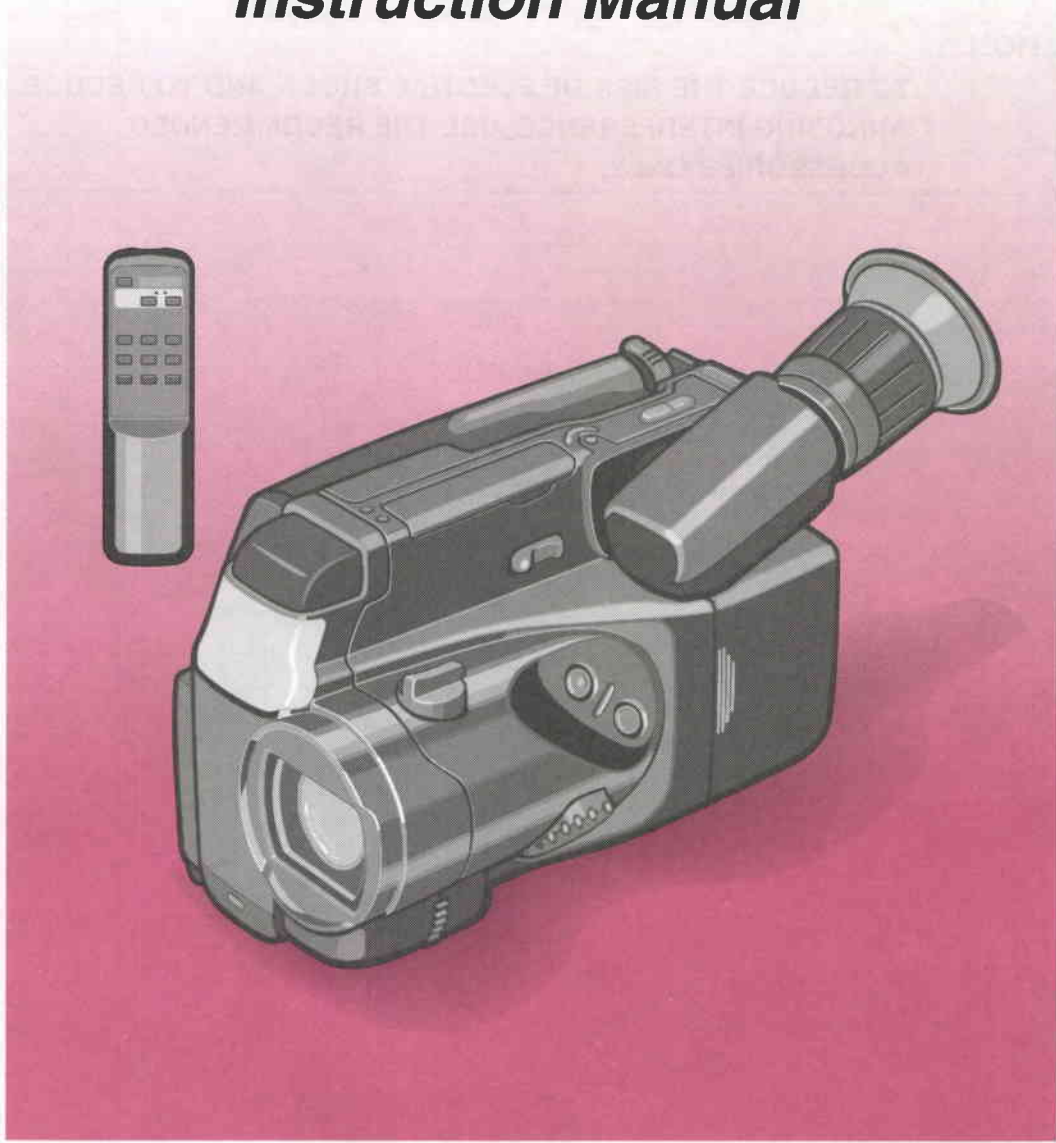


# Canon

# UC100

## 8mm Video Camcorder Instruction Manual



Introduction

Basic Operation

Advanced Functions

Additional Information

**E** ENGLISH  
PAL

## Important Usage Instructions

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**CAUTION:**

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

**WARNING:**

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

**CAUTION:**

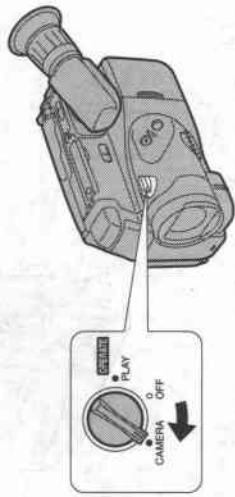
TO REDUCE THE RISK OF ELECTRIC SHOCK AND TO REDUCE ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

# Handy Recording and Playback Guide

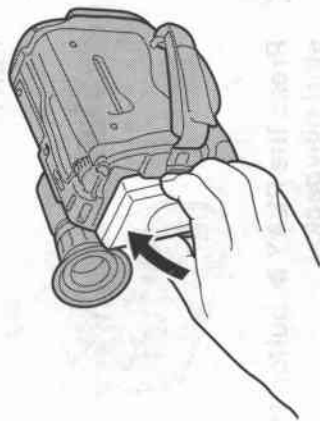


## Recording

For more information, refer to "Basic Recording," "Power Sources," "Cassettes" and "Preparing the Camera."

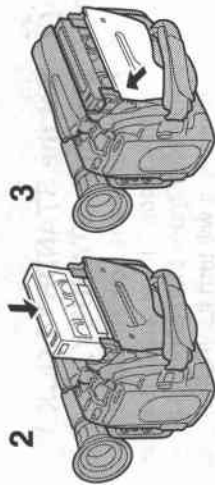


**2** Set the OPERATE switch to CAMERA.



**1** Charge the battery pack and attach it to the camera.

- You can also power the camera directly from a mains outlet.



**4** Load the cassette.

- Press the **▲** (eject) button to open the cassette compartment. Press the **▶** (push) mark to close it.



**5** Fasten the grip belt.

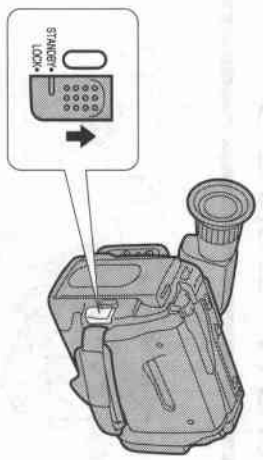
Continued...

# Playback



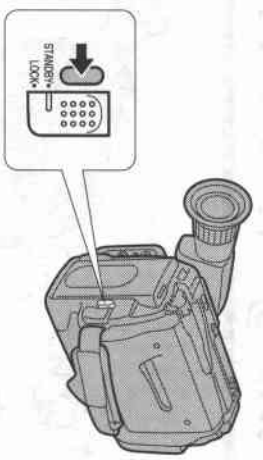
You can play back your recordings in the viewfinder right away. See "Playback" for details.

For playback on a TV, see "Playback Connection."



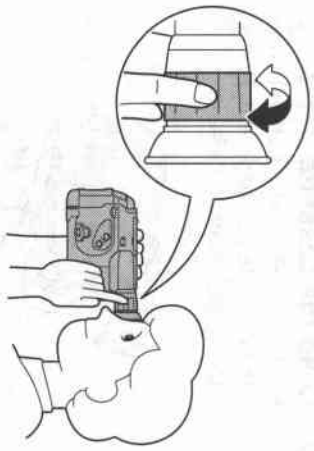
## 6 Set the STANDBY/LOCK switch to STANDBY.

- The camera is now in "record pause mode." If you leave it in this mode for more than about five minutes, it will turn itself off.



## 8 Press the start/stop button to begin recording.

- You can stop and start recording as often as you like by pressing the start/stop button.
- Set the STANDBY/LOCK switch to LOCK to save battery power when not recording.



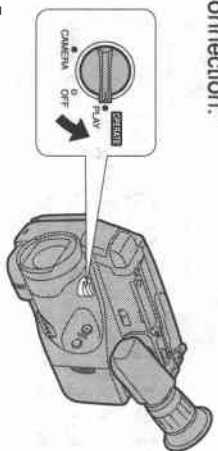
## 7 Adjust the viewfinder.

- Turn the viewfinder focusing ring until the viewfinder displays are clearly focused.

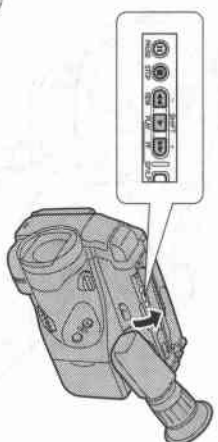


### When you have finished using the camera:

- Set the OPERATE switch to OFF.
- Unload the cassette.
- Detach the battery pack.



## 1 Set the OPERATE switch to PLAY.



## 2 Press the PLAY button to start playback.

- To end playback, press the STOP button.
- To wind the tape forwards, stop playback and press the FF button.
- To wind the tape backwards, stop playback and press the REW button.

# Thank you for choosing a Canon

First, we'd like to thank you for buying this Canon camcorder. Its advanced technology makes it very easy to use — you will soon be making high-quality home videos which will give you pleasure for years to come.

To get the most out of your new camcorder, you should read this manual thoroughly — there are many sophisticated features which will add to your recording enjoyment.

To get started, you will need to read these sections:

"Basic Recording"

"Power Sources"



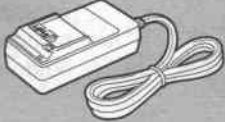






"Cassettes"

"Preparing the Camera"

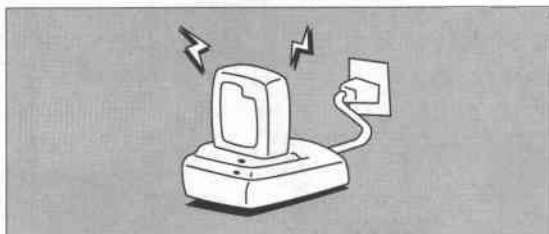
Then you can go on to find out about the more advanced features.

As well as using the alphabetical index, you can look up the different parts and functions in the sections called "Nomenclature" and "Viewfinder Displays." There's also a "Troubleshooting" section in case you run into any problems.

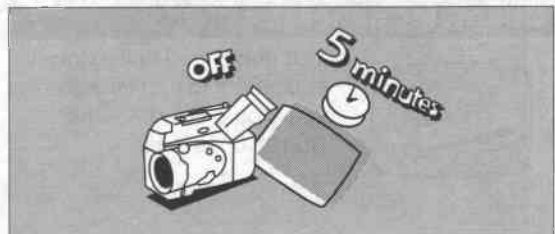
Check that this package contains the following accessories:

WL-60 Wireless Controller 	Two R6 AA batteries 	CA-R200 Compact Power Adapter 
DC-100 DC Coupler 	BP-E77K Battery Pack 	Lithium battery 
C-150 AV Cable (Asia and Oceania) 	PC-150 SCART Cable (Europe) 	SS-300 Shoulder Strap 

And while you are finding out how your camcorder works, remember:



The battery pack must be charged before it can power the camcorder.



The camcorder turns off automatically if you leave it in record pause mode for more than about five minutes.

# Introducing the UC100

## Video light



The UC100's built-in video light brightens up your recordings at the touch of a switch. Recording in low light (or no light) has never been easier.

## 12X zoom



From wide-angle to 12X telephoto — the UC100 makes it easy to get just the shot you want, with a variable-speed rotary zoom control and convenient viewfinder graphics.

## Wide adapter



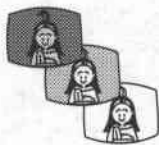
The integral converter lens gives you an extrawide perspective, ideal for all kinds of indoor scenes, as well as outdoor panoramas.

## Program AE



The UC100 puts advanced recording techniques at your fingertips with four specialised exposure programs, designed for a wide variety of lighting situations.

## Fade



Add an atmospheric touch to your video productions with smooth fades, synchronised with the soundtrack.

## Character generator



You don't need any extra equipment to add titles to your home videos — the UC100 does it all.

## Remote control



The supplied wireless controller operates both recording and playback from as far away as 4 metres (13 feet).

## Macro autofocus



With fast and accurate focusing down to a single centimetre ( $\frac{1}{4}$  inch), you can zoom in to make the smallest details fill the screen.

## High-speed shutter



For advanced image control, choose from seven fast shutter settings. A top speed of 1/10000 second lets you capture even the quickest action.

## Easy editing



As well as versatile record search and review functions, the UC100 is equipped with a LANC remote control terminal, allowing easy connection to editing equipment.

## Handy power supply



Connect the camera directly to a mains outlet for indoor recording; charge a battery pack and you can take it anywhere. There's even an optional car battery adapter.

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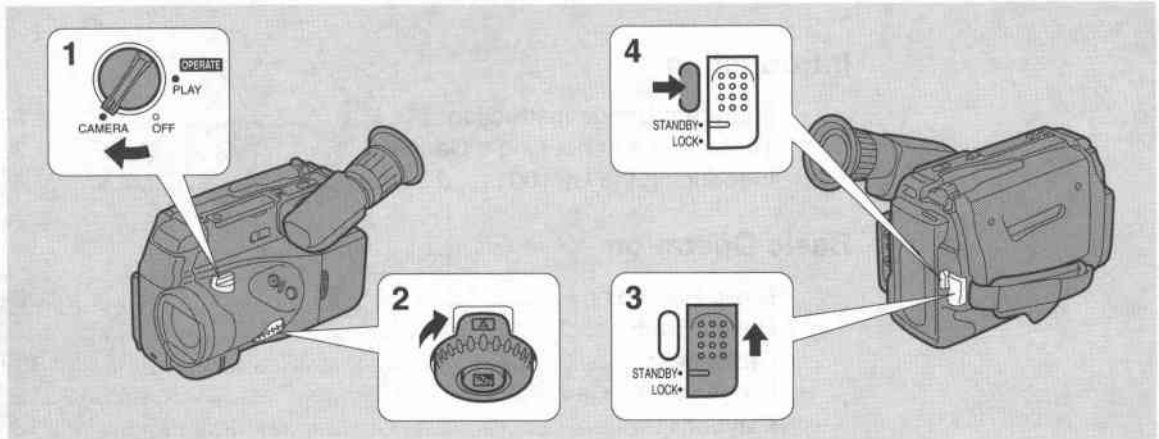
## Advanced Functions

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# Basic Recording



## Before you start recording:

Complete the following steps:

- Attach a power source (p. 7).
- Load a cassette (p. 11).
- Adjust the viewfinder and fasten the grip belt (p. 12).

You may also want to install the lithium battery (p. 10) in order to set the date and time display (p. 19).

## To record:

### 1. Set the OPERATE switch to CAMERA.

- The built-in lens cover opens.

### 2. Turn the Program AE selector to **A**.

### 3. Set the STANDBY/LOCK switch to STANDBY.

- The operation indicator lights up and "PAUSE" appears in the viewfinder — the camera is now in "record pause mode."
- **WIDE** flashes and lights up in the viewfinder to show that the built-in wide adapter is set to the WIDE ANGLE position (see p.17).

### 4. Press the start/stop button to begin recording.

- The tally lamp flashes rapidly and "REC" appears in the viewfinder.

### 5. Press the start/stop button again to pause recording.

- The camera returns to record pause mode and "PAUSE" reappears in the viewfinder.
- You can stop and restart recording as often as you like by pressing the start/stop button.
- The camera will turn itself off if you leave it in record pause mode for more than about five minutes. To return to record pause mode, set the STANDBY/LOCK switch to LOCK and then back to STANDBY, or set the OPERATE switch to OFF and then back to CAMERA.

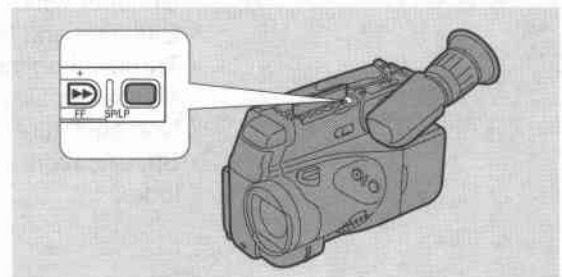
### 6. Return the STANDBY/LOCK switch to LOCK.

- As long as the OPERATE switch is set to the CAMERA position, you can use the STANDBY/LOCK switch to turn the camera on and off. This makes it easy to save battery power, and prevents accidental operation of the start/stop button.
- When you use the OPERATE switch to turn the camera off, manual settings you have made, such as shutter speed and zoom position, are erased from the memory. Using the STANDBY/LOCK switch does not cancel these settings.

## When you have finished recording:

- Unload the cassette.
- Set the OPERATE switch to OFF.
- Disconnect the power source.

## Selecting the tape speed



You have a choice of two recording speeds:

- Standard Play (SP) for maximum quality
- Long Play (LP) for double recording time

You can change the tape speed by pressing the SP/LP button. ("SP" or "LP" is displayed in the viewfinder.) Change tape speed in record pause mode — changing during recording will cause noise on the tape.

The camera automatically selects the appropriate speed for playback.



# Power Sources

Before operating your camera, you will need to use the CA-R200 Compact Power Adapter to:

- provide power from a mains outlet
- or
- charge a battery pack

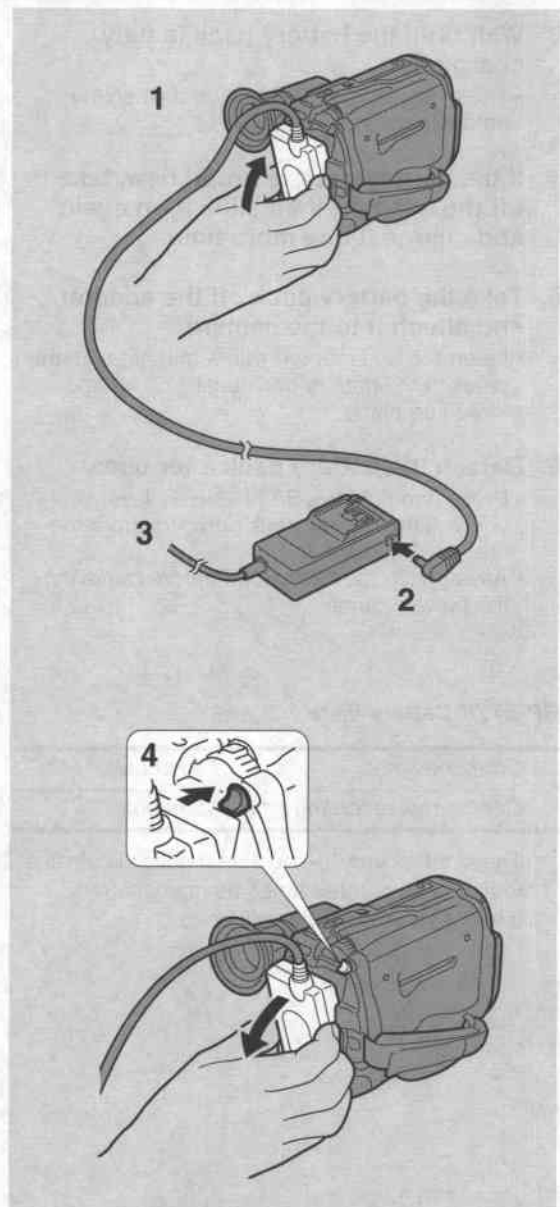
## Notes:

- The CA-R200 Compact Power Adapter converts current from a household mains outlet (100–240 V AC, 50–60 Hz) to the 6 V DC current used by your camera.
- If the adapter is used next to a TV, it may cause the TV to emit noise — move the adapter away from the TV or the aerial cable.
- See the CA-R200 instruction manual for further details.

## Connecting the camera to a mains outlet

Use the CA-R200 Compact Power Adapter and the DC-100 DC Coupler to provide your camera with instant power from a mains outlet.

- 1. Insert the DC coupler in the camera's power source compartment.**
  - Insert the lower end first, then press in the DC coupler until it clicks and locks into place.
- 2. Connect the DC coupler to the adapter.**
- 3. Plug the adapter into a mains outlet.**
- 4. Detach the DC coupler after use.**
  - Press and hold the BATT EJECT lever while you pull the DC coupler outwards from the top.
  - Always turn the camera off before removing the power source.



## Charging and attaching the battery pack

You will have to charge the battery pack before you can use it. A brand new battery pack must be charged twice before use. Use the CA-R200 Compact Power Adapter.

**1. Slide the battery pack onto the adapter as shown.**

- The guide on the adapter fits into the slot on the battery pack.
- Make sure the DC coupler is not connected.

**2. Plug the adapter into a mains outlet.**

- The CHARGE/REFRESH indicator flashes red to show that charging is in progress.

**3. Wait until the battery pack is fully charged.**

- The indicator glows steadily red when the battery pack is fully charged.

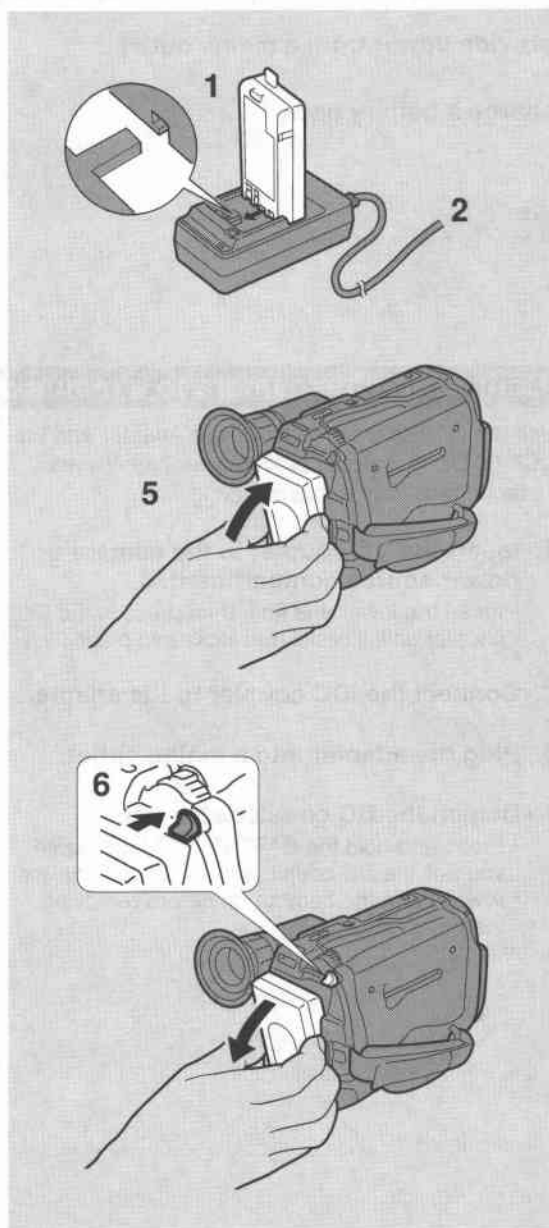
**4. If the battery pack is brand new, take it off the adapter, then slide it on again and charge it one more time.**

**5. Take the battery pack off the adapter and attach it to the camera.**

- Insert the end marked with a triangle first, then press in the battery pack until it clicks and locks into place.

**6. Detach the battery pack after use.**

- Press and hold the BATT EJECT lever while you pull the battery pack outwards from the top.
- Always turn the camera off before removing the power source.



### **BP-E77K Battery Pack**

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*Charging time:* 70 minutes

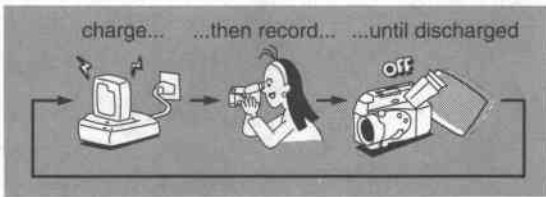
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*Continuous recording time:* 45 minutes

---

These times vary — the safest policy is always to have two or three times as many battery packs as you think you will need.

## Battery pack notes




### Charge the battery pack before you use it...

- You should charge a brand new battery pack twice before using it for the first time — a single charge may not be enough. Charge it completely (until the adapter's charge indicator glows steadily), then disconnect it and charge it again. Normally, you should not "double charge" the battery pack in this way.
- The battery pack will naturally discharge itself over time. You should charge it the same day you plan to use it, or the day before.
- The battery pack becomes warm during use (and during charging). Wait for it to cool before charging or using it again.
- See the adapter instructions for details.

### ...save power while you are recording...

- You will get more recording time from your battery pack if you turn the camera off between shots, instead of leaving it in record pause mode.
- Recording time will be shorter than usual at low temperatures. You can use the battery pack between 0° and 40°C (32°–104°F), but it works best between 10° and 30°C (50°–86°F).

### ...and don't recharge it until it is exhausted.

- The camera flashes a  warning when the charge has almost run out. After a few more minutes' use, the camera turns off automatically. You can now either recharge or store the battery pack.

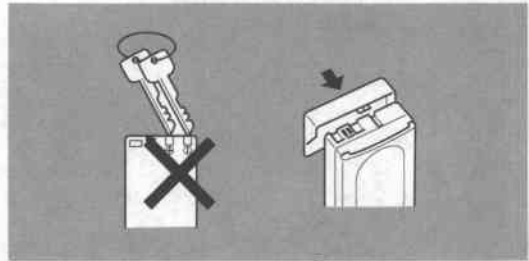
### Disconnect the battery pack when you are not using it.

- Even when it is turned off, the camera will continue to slowly drain power from the battery pack. This means the battery pack will be discharged beyond the normal level if you leave it attached for a long time.

### Keep the terminals clean.

- The camera, adapter or battery pack will not work properly if the terminals are dirty. Check them before use, and wipe them with a dry cloth or tissue if necessary.

## DANGER!



### Always attach the terminal cover.

- Do not allow any metal objects to touch the terminals. The battery pack contains a great deal of energy and short-circuiting it may cause a fire. Attach the terminal cover whenever you are not using the battery pack.

### Treat the battery pack with care.

- Keep it away from fire (or it might explode).
- Do not try to disassemble or modify it.
- Do not drop or knock it.
- Do not get it wet.

### Remember, it may start to give you less recording time...

- If you recharge it without first completely discharging it.
- If you leave it attached to the camera (or a video light) for more than a week.
- If you don't use it for three months or more.

### ...but you should be able to "refresh" it.

- The CA-R200 Compact Power Adapter has a refresher function which restores battery packs to full capacity (see p. 10).
- If this does not improve the battery pack's performance, it has reached the end of its life and must be replaced.

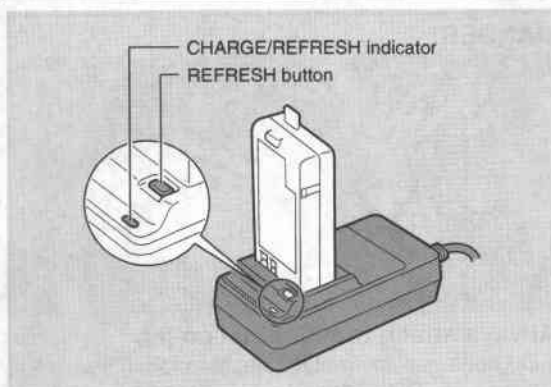
## Specifications

### BP-E77K Battery Pack

Battery type	Rechargeable nickel cadmium battery
Rated voltage	6 V DC
Operating temperature	0°–40° C (32°–104° F)
Battery capacity	1100 mAh
Dimensions	22.5 X 47 X 90 mm (7/8 X 1 7/8 X 3 5/8 in)
Weight	150 g (5 1/4 oz)

- Weight and dimensions are approximate.
- The specifications and appearance of the battery pack are subject to change without notice.

## Refreshing the battery pack



If the battery pack starts to give less recording time, use the adapter's refresher function to restore it to full capacity. The adapter will first discharge the battery pack, and then recharge it.

### 1. Attach the battery pack to the adapter and plug it into an AC outlet.

- See p. 8.

### 2. Press the REFRESH button.

- The flashing CHARGE/REFRESH indicator changes colour from red to green, to show that discharging is in progress. When the battery pack is discharged, the indicator begins to flash red again and recharging begins.

### 3. Remove the battery pack when discharging/recharging has finished.

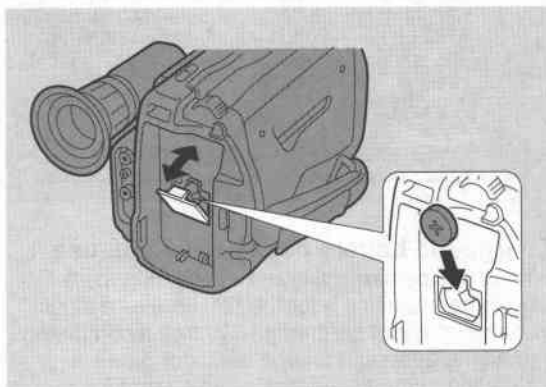
- The indicator glows steadily red when recharging is completed.
- If you only want to discharge the battery pack, there is no need to plug in the adapter. In this case, you can remove the battery pack when the CHARGE/REFRESH indicator stops flashing green.

## Recording and recharge times


Battery pack	BP-E77K	BP-E722
Normal recording	45 min.	1 hr. 30 min.
With video light	25 min.	50 min.
Discharge	4 hr.	8 hr.
Recharge	1 hr. 10 min.	2 hr. 10 min.
Total refresh charge	5 hr. 10 min.	10 hr. 10 min.

- These times are approximate.

## Installing the lithium battery



Even when the camera is turned off, it can remember the date and time and other settings. Its memory is powered by a CR2025 lithium battery with a life span of about a year.

The  mark flashes in the viewfinder if you have not installed the lithium battery, or if it is almost exhausted.

### 1. Remove the cover from the lithium battery compartment.

- If you are replacing an old battery, take it out by pressing it slightly downwards and then pulling it outwards from the top edge.

### 2. Place the new battery in the compartment with the + side facing outwards.

- Do not pick up the battery using tweezers or other metal tools — this may cause a short circuit.
- Wipe the battery with a clean, dry cloth to ensure proper contact.

### 3. Click the cover back into place.

### 4. Reset the date and time and title.

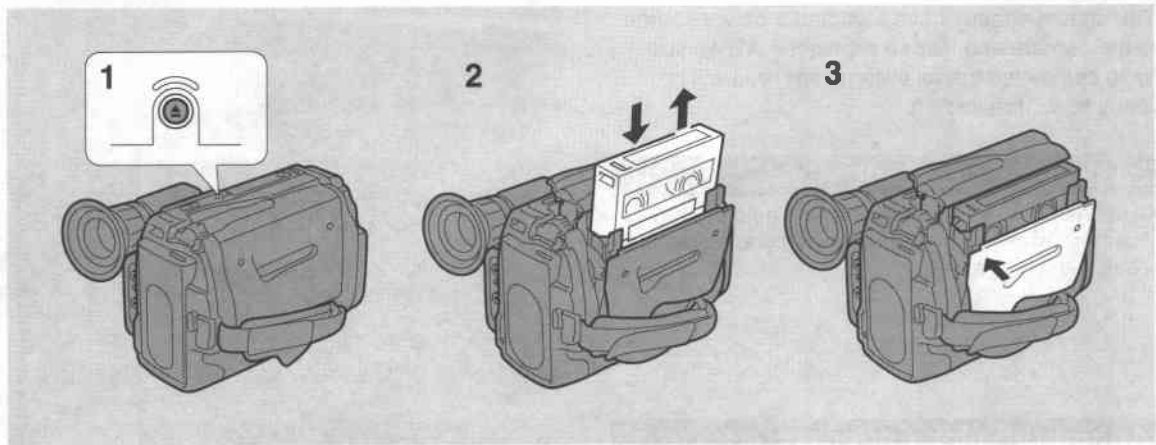
### WARNING!

The battery used in this device may present a fire or chemical burn hazard if mistreated. Do not recharge, disassemble, heat above 100°C (212°F) or incinerate. Replace the battery with a Sanyo CR2025, Panasonic CR2025 or Duracell DL2025B. Use of another battery may present a risk of fire or explosion. The used battery should be handed back to the supplier for safe disposal.

### Cautions:

- Keep the battery out of reach of children — if it is swallowed, contact a physician immediately.
- Do not disassemble, heat, or immerse the battery in water, to avoid the risk of explosion.



# Cassettes



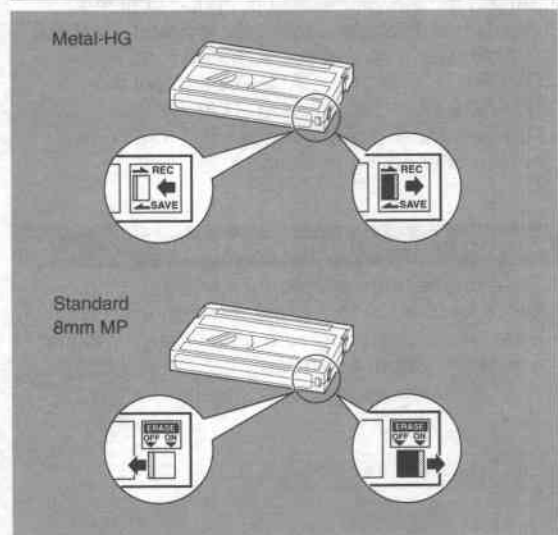
Use video cassettes with the  mark (P5 type).

## Loading and unloading


Cassettes can be loaded and unloaded with the camera turned off, as long as a power source is attached.

1. Press the  (eject) button and wait for the cassette compartment to open.
2. Load/unload the cassette.
  - Insert the cassette gently with the window facing out.
  - Remove the cassette by pulling it straight out.
3. Press the  mark on the compartment until it clicks, and wait for it to close.
  - Never push down the top of the compartment.

## Preventing accidental erasure



To protect your recordings from accidental erasure, slide the red switch on the cassette to the SAVE or ERASE OFF position (covering the hole).

When this cassette is loaded, the  mark will flash in the viewfinder if you turn the OPERATE switch to CAMERA.

If you want to record on the cassette again, push the red switch on the cassette back to the REC or ERASE ON position.

## Notes:

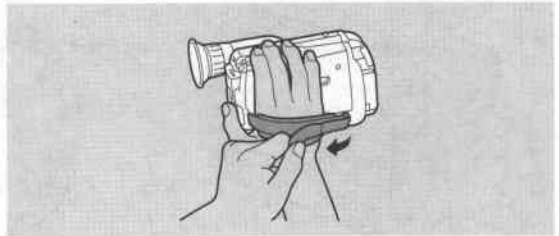
- Do not interfere with the compartment while it is opening or closing automatically.
- After loading a cassette, use record search (p. 26) to find the point where you want to start recording.
- Do not leave the cassette in the camera after use — return it to its case and store it in a cool, clean, dry place.
- The holes in the back of the cassette are used for transferring information — do not cover them.

# Preparing the Camera

You should already have attached a power source to the camera and loaded a cassette. When you have completed the following steps, you will be ready to start recording.

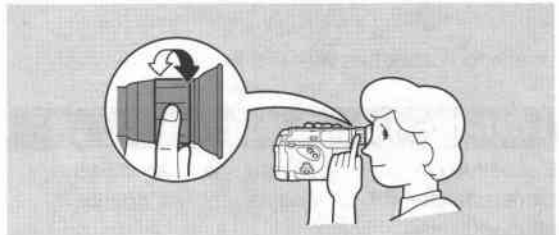
## Fasten the grip belt

- Release the Velcro fastening and hold the camera with your right hand while you adjust the belt with your left.



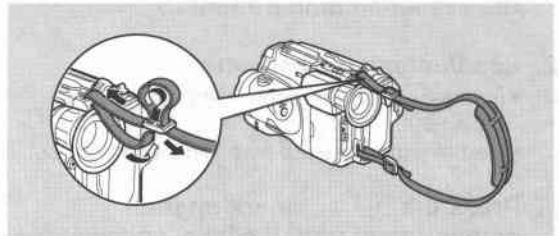
## Adjust the viewfinder

- Adjust the viewfinder to suit your eyesight by turning the viewfinder focusing ring until the viewfinder displays are clearly focused. First put the camera in record pause mode (turn the OPERATE switch to CAMERA and set the STANDBY/LOCK switch to STANDBY).
- The viewfinder rotates through 90° to give a choice of shooting positions.

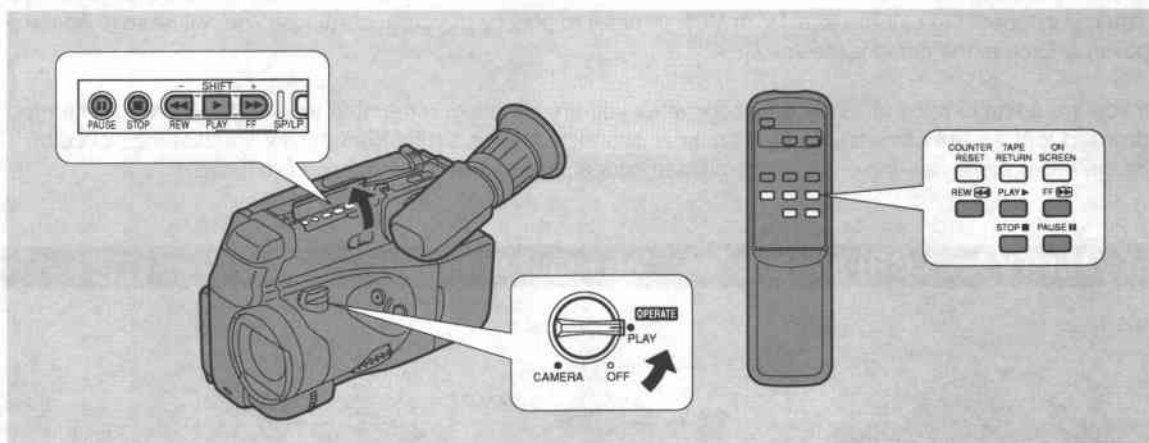


## Attach the shoulder strap

- For extra security and portability, attach the shoulder strap before using the camera.
- Pass the ends through the attachment bars and adjust the length as shown.



# Playback



You can use the viewfinder screen for instant, on-the-spot playback.

To play back your recordings on a TV, see p. 14.

To use the wireless controller, see p. 18.

## 1. Attach a power source and set the OPERATE switch to PLAY.

- The operation indicator lights up.
- The viewfinder (and connected TV screen) appear black.

## 2. Load the cassette.

## 3. Press the PLAY ► button to start playback.

- To end playback, press the STOP ■ button.
- To wind the tape forwards, stop playback and press the FF ►► button.
- To wind the tape backwards, stop playback and press the REW ◀◀ button.

## Special playback

### Still playback

Press the PAUSE ■■ button. To resume normal playback, press it again, or press the PLAY ► button. The camera automatically goes into stop mode after about five minutes' still playback.

### Fast forward playback

To play back the recording at about 9 times normal speed, press and hold the FF ►► button during normal playback.

### Rewind playback

For reverse playback at about 7 times normal speed, press and hold the REW ◀◀ button during normal playback.

## High-speed search

To play back the recording at about 19 times normal speed, press and hold the FF ►► button during normal fast forward.

For reverse playback at about 19 times normal speed, press and hold the REW ◀◀ button during normal rewind.

## Tape return

Use the wireless controller's TAPE RETURN button to quickly return to a scene you want to see again:

## 1. Press the COUNTER RESET button during playback if you come across a scene you want to watch again later.

- The tape counter is reset to 0:00:00.

## 2. When you have ended playback, press the TAPE RETURN button.

- The tape rewinds and stops when the counter nears 0:00:00.
- You can cancel tape return by pressing the STOP ■ button.

## 3. Start playback.

### Notes:

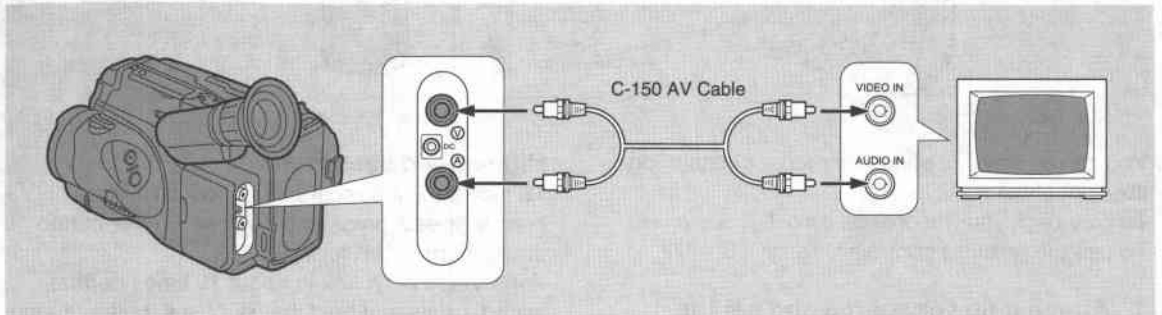
- These special playback speeds are for recordings made in SP mode (see p. 6).
- Noise bars appear on the screen during special playback and the sound track cannot be heard. On certain TVs the picture may roll and divide, or appear in black and white, and the high-speed search picture may not be visible.
- During still playback, the picture flickers, and fast action scenes may appear blurred.
- The tape counter is reset when a cassette is loaded.

# Playback Connection

You can connect the camera to a TV or VCR in order to play back your recordings. You will need to attach a power source to the camera (see p. 7).

If you are going to use the TV as a monitor while you are shooting, remember to keep the TV volume turned down as long as the camera's audio terminal is connected. If the sound from the TV speakers is picked up by the microphone, an unpleasant high-pitched squeal, called feedback, may be produced.

## If your TV (or VCR) has audio/video input terminals:



### 1. Connect the camera to the TV (or VCR).

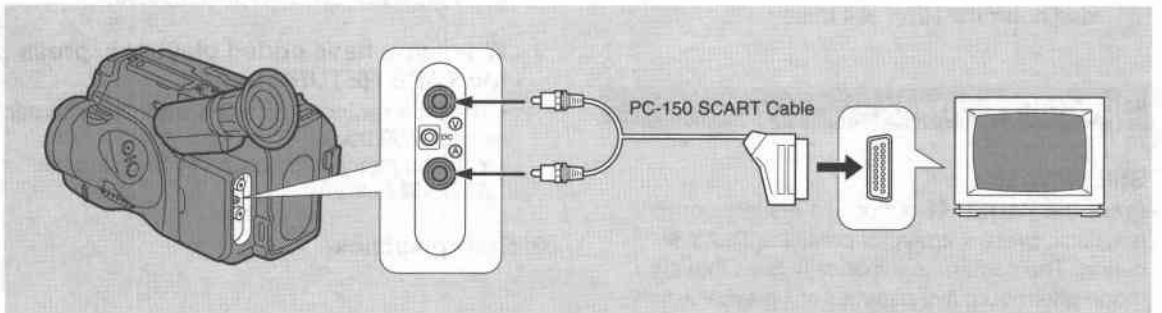
- Use the C-150 AV Cable. Connect the black or white plug to the black audio terminal (A). Connect the yellow plug to the yellow video terminal (V).

### 2. Set the TV/VIDEO selector on the television to VIDEO.

### 3. If you are connecting the camera to a VCR, set the input selector on the VCR to LINE.

- See your VCR instruction manual for details.

## If your TV (or VCR) has a SCART terminal:



### 1. Connect the camera to the TV (or VCR).

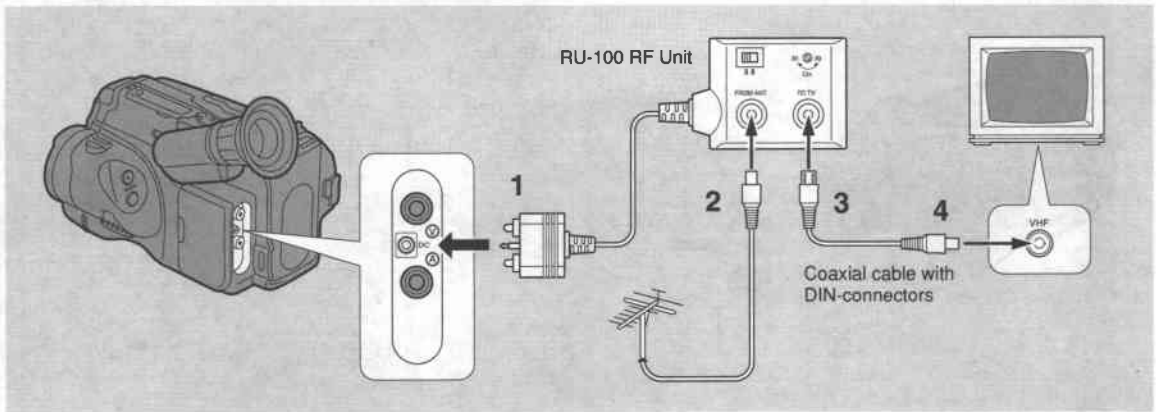
- Use the PC-150 SCART Cable. Connect the white plug to the black audio terminal (A). Connect the yellow plug to the yellow video terminal (V).

### 2. If you are connecting the camera to a VCR, set the input selector on the VCR to LINE.

- See your VCR instruction manual for details.



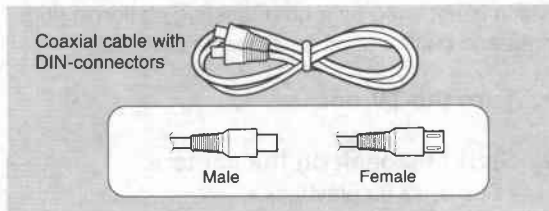
## If your TV does not have audio/video input terminals (Europe):



If your TV is already hooked up to a VCR, you can connect the camera to the VCR instead of the TV. Follow the instructions on p. 14.

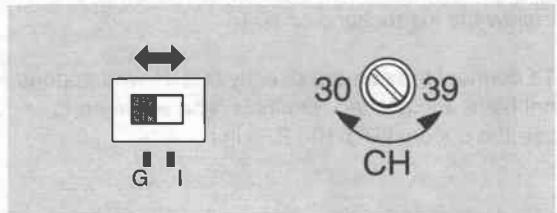
To connect the camera directly to a TV which does not have audio/video terminals, you will need to use the optional RU-100 RF Unit.

### Connecting the RF unit



1. Connect the RF unit to the camera.
2. Connect the aerial cable to the **FROM ANT.** terminal on the RF unit.
3. Connect the "female" DIN-connector on the coaxial cable to the **TO TV** terminal on the RF unit.
4. Connect the "male" connector to the aerial input on the TV.
5. Set both the TV and the RF unit to the video channel.

### Selecting the video channel



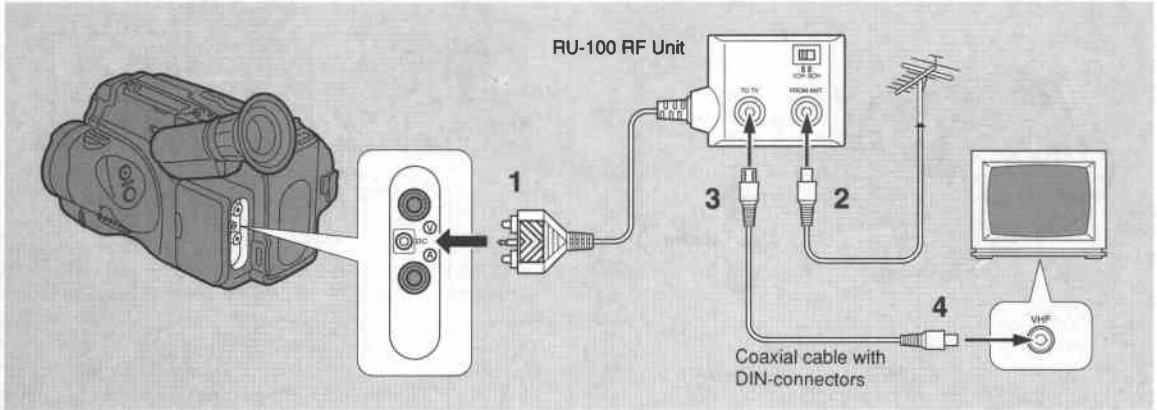
The video channel is the channel (somewhere between 30 and 39) which is not used by a broadcasting station in your area and can be used for cassette playback.

1. Turn the TV on.
2. Start playback on the camera.
  - See p. 13 for playback.
3. Set the **G/I** selector on the RF unit.
  - Use a flat screwdriver.
  - In continental Europe, set it to G.
  - In the UK, Hong Kong and South Africa, set it to I.
  - If it is not set properly, you will be able to see the picture, but not hear the sound.
4. Set the **TV** and the **CH** selector on the RF unit to the video channel.
  - For example, if the video channel in your area is channel 33, tune the TV to channel 33 and set the selector to 33 (using a flat screwdriver). Adjust it by turning until the picture is clear.
  - The selector is factory-set to channel 32.

### To watch a TV programme

Turn the camera off or disconnect it from the RF unit when you want to watch a broadcast programme. If you leave the camera connected and turned on, the RF unit will automatically select the camera signal instead of the broadcast signal.

## If your TV does not have audio/video input terminals (Australia):



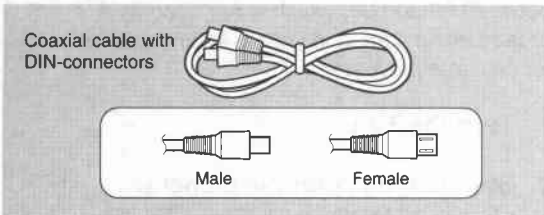
16

Basic Operation

If your TV is already hooked up to a VCR, you can connect the camera to the VCR instead of the TV. Follow the instructions on p. 14.

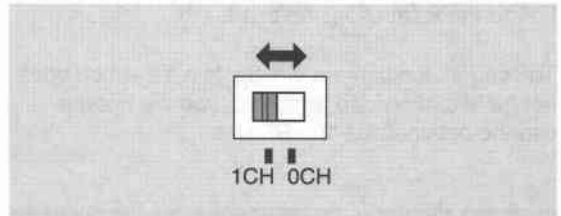
To connect the camera directly to a TV which does not have audio/video terminals, you will need to use the optional RU-100 RF Unit.

### Connecting the RF unit



1. Connect the RF unit to the camera.
2. Connect the aerial cable to the FROM ANT. terminal on the RF unit.
3. Connect the "female" DIN-connector on the coaxial cable to the TO TV terminal on the RF unit.
4. Connect the "male" connector to the aerial input on the TV.
5. Set both the TV and the RF unit to the video channel.

### Selecting the video channel



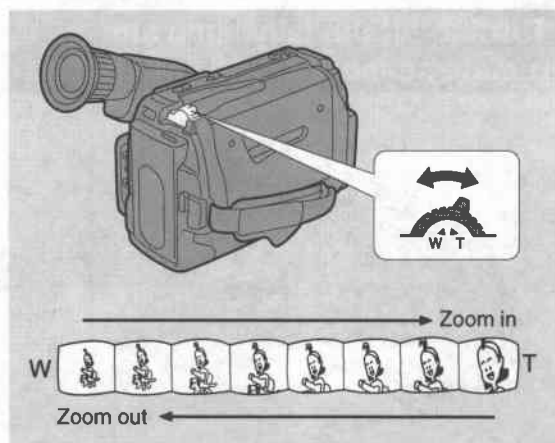
The video channel is the channel (either 0 or 1) which is not used by a broadcasting station in your area and can be used for cassette playback.

1. Turn the TV on.
2. Start playback on the camera.
  - See p. 13 for playback.
3. Set the TV and the selector on the RF unit to the video channel.
  - For example, if the video channel in your area is channel 0, tune the TV to channel 0 and set the selector to 0CH (using a flat screwdriver).

### To watch a TV programme

Turn the camera off or disconnect it from the RF unit when you want to watch a broadcast programme. If you leave the camera connected and turned on, the RF unit will automatically select the camera signal instead of the broadcast signal.

# Zooming



The camera's 12X zoom lens allows you to choose the best picture angle for each scene:

- Turn the zoom control towards W to zoom out to wide-angle.
- Turn it towards T to zoom in to telephoto.

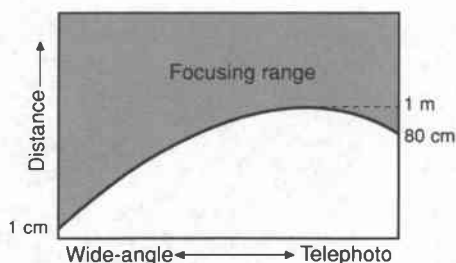
You can also control the speed of zooming:

- Move the control slightly to zoom slowly.
- Turn it further to zoom more quickly. (The further you turn the zoom control, the faster the zoom speed.)

The T and W buttons on the wireless controller adjust the picture angle, but not the zoom speed:

- Press W to zoom out to wide-angle.
- Press T to zoom in to telephoto.

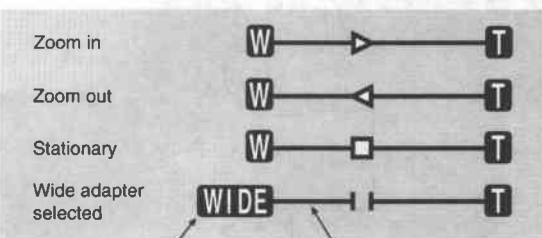
## Minimum focusing distance



When you are shooting at the widest angle, you can bring the camera as close as 1 cm ( $\frac{3}{8}$  inch) and the subject should still be clearly focused. At the furthest telephoto position, however, the subject will be out of focus if it is any closer than 80 cm (2 feet 8 inches).

This change in the minimum focusing distance is shown in the diagram.

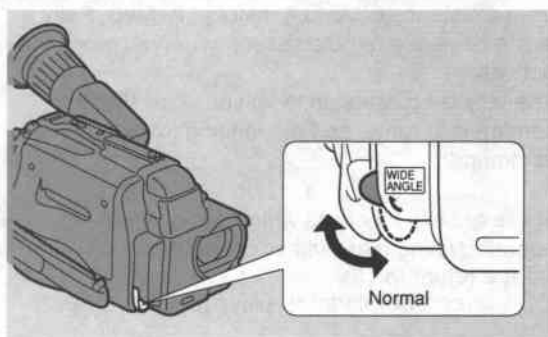
## Viewfinder displays



This display flashes if the wide adapter is already selected when the camera is turned on.

The zoom operates inside this wide-angle range when the wide adapter is selected.

## Wide adapter



This built-in adapter gives an extrawide picture angle.

### 1. Move the wide adapter switch to the WIDE ANGLE position.

- **WIDE** appears in the viewfinder.
- If the zoom position is already inside the wide-angle range, its setting does not change. If the zoom is currently outside the wide-angle range, it automatically moves all the way back to the widest angle.

### 2. Make your recording.

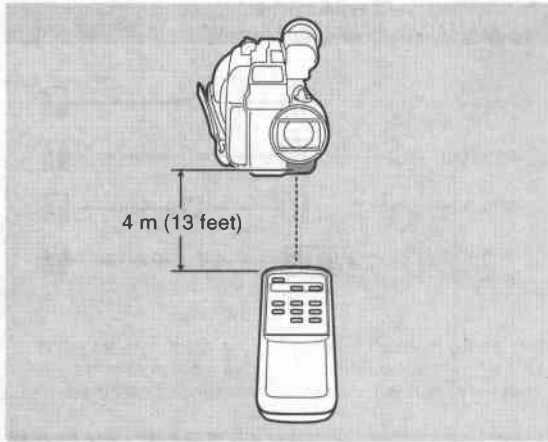
- The zoom operates normally inside the wide-angle range, but telephoto recording is not possible.

### 3. Return the wide adapter switch to its previous position.

#### Notes:

- Overuse of the zoom may make recordings seem too busy. It is generally better to use it sparingly, or in order to reframe between shots.
- Even slight hand movements will be noticeable during telephoto recording. Use a tripod for better results.
- To prevent dust getting inside the adapter, do not leave it halfway between the WIDE ANGLE position and the normal position.

# Wireless Controller



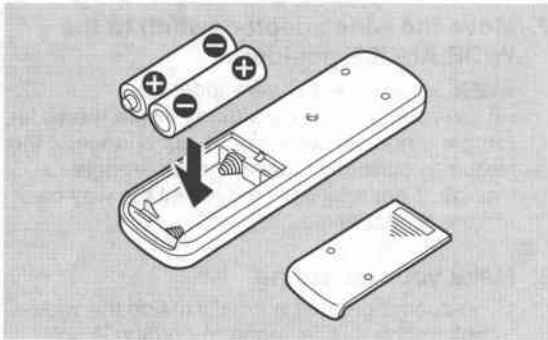
The wireless controller can operate the camera from a distance of up to 4 metres (13 feet). Point it at the camera's remote sensor while you press the buttons.

The tally lamp lights up to let you know that the camera is in range and responding to your commands.

There are two functions which can only be operated using the wireless controller:

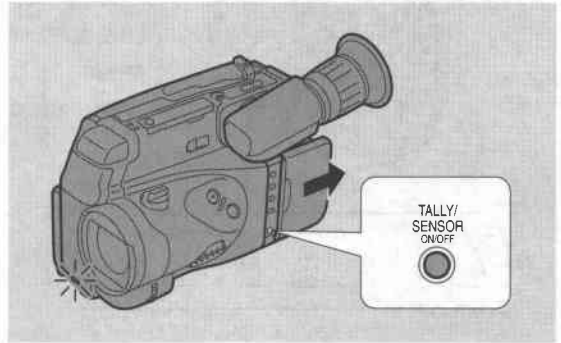
- Tape return (p.13)
- On-screen viewfinder displays (p. 36)

## Inserting batteries



Insert two AA batteries, following the  $\oplus$  and  $\ominus$  markings. Be careful not to reverse the polarity of the batteries.

## Turning off the tally lamp and remote sensor



The tally lamp flashes continuously while the camera is recording. It can be turned off to prevent light being reflected into the lens during macro recording, or when shooting through glass.

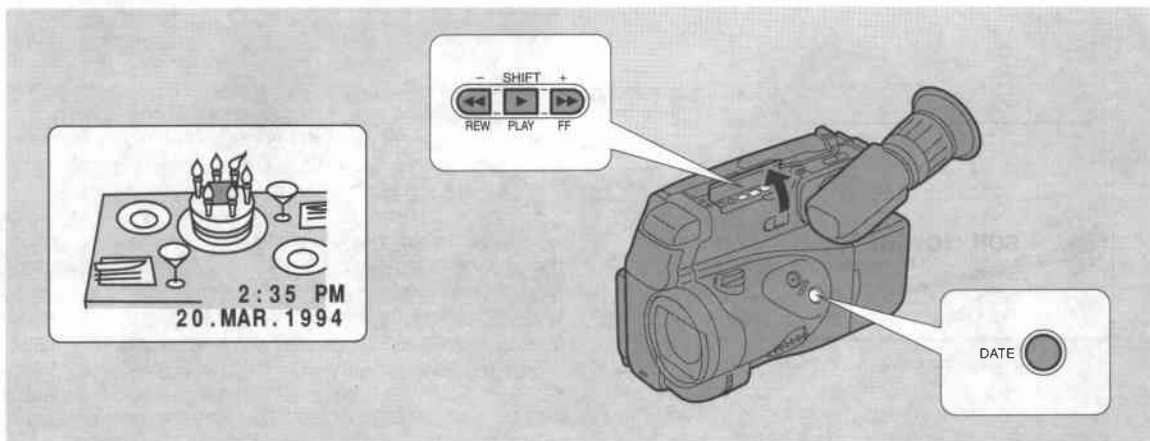
Turning off the remote sensor prevents accidental operation by other Canon wireless controllers being used nearby.

1. **Press the TALLY/SENSOR ON/OFF button to turn off the tally lamp and the remote sensor.**
  - "T/S OFF" appears in the viewfinder.
2. **Press the button again to turn the lamp and sensor on.**

### Notes:

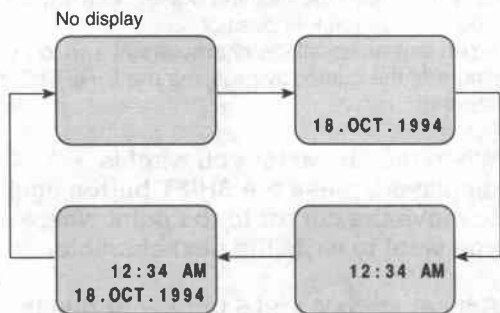
- Sunlight or fluorescent light falling on the sensor may shorten the controller's operating distance by interfering with its infrared signals.
- The camera may have difficulty picking up the remote control signals at extremely close range.
- Do not leave the controller exposed to direct sunlight, or in hot or humid places.
- When changing exhausted batteries, replace them all at once.

# Date and Time



You can add the date and/or time to the scene you are recording.

The date and time display changes as shown each time you press the DATE button. The display which you can see in the viewfinder will be superimposed on the scene when you start recording.



If you have not set the date and time, “—:—:—” appears in the viewfinder when you press the DATE button. This will not be recorded.

## Correction

### Date and Time

Page 19

According to the instructions in the “Date and Time” section of this manual, the date/time display changes each time you press the DATE button. This is not correct — pressing the DATE button simply turns the display on and off.

To select the display style which will appear in the viewfinder and in your recording, use the SHIFT button. (The SHIFT button is located underneath the small cover on top of the camera.) Each time you press it, the display style changes (date only → time only → date and time). When the time only is displayed, seconds will be shown as well as hours and minutes. The camera will remember which display style you have selected even when it is turned off.

The display can be set to any year between 1994 and 2020.

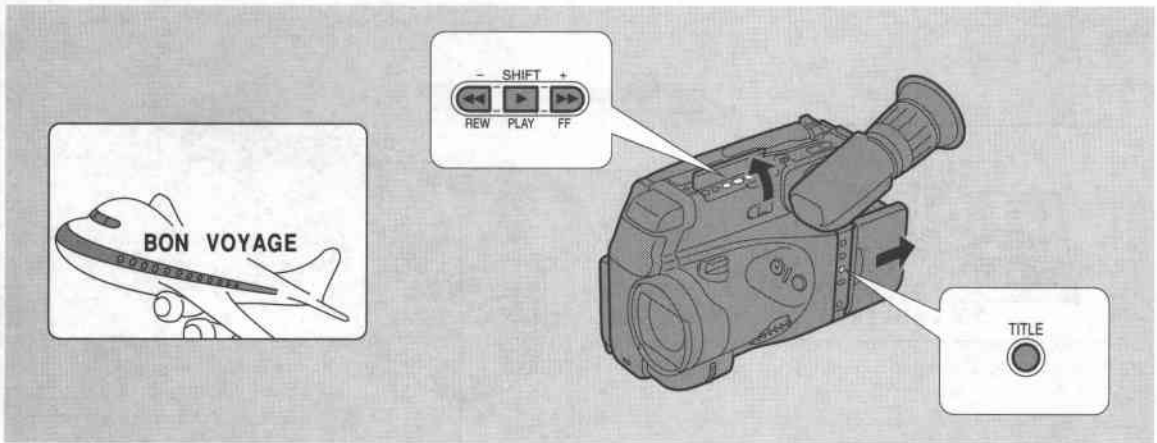
We hope you will not be inconvenienced by the mistakes in this section of the manual.

## Setting the date and time

Set the date and time display when you first start using your camera. As long as you have installed the lithium battery (p. 10), the camera’s internal clock will continue to work even when the main power source is removed.

1. Set the OPERATE switch to CAMERA.
2. Press and hold the DATE button until the year display in the viewfinder starts flashing.
3. Press the + or – buttons to scan the year display, then press the SHIFT button to set it.
  - Press + or – once to scan a year at a time. Press and hold to scan quickly.
  - As soon as the year display is set, the month display starts flashing instead.
4. Scan and set the months, days and hours in the same way.
5. Scan the minutes and then press the DATE button to set the display and start the clock.

# Titles

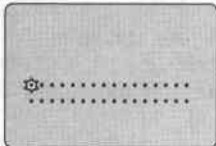


You can write your own titles and store them in the camera's memory in order to add them to your recordings. Remember to install the lithium battery first (see p. 10).

The title stored in the memory is displayed in the viewfinder when you press the TITLE button. If you start recording now, it will be superimposed on the scene.

Press the button again to cancel the display. If it does not appear in the viewfinder, it will not be recorded.

## Writing a title



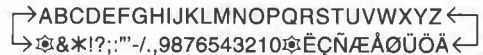
These lines appear in the viewfinder while you are writing a title.


Enter your title in the camera's memory before you start recording. The title can be one or two lines of up to 16 characters each.

1. Set the OPERATE switch to CAMERA.
2. Press and hold the TITLE button until the title lines appear in the viewfinder.
  - If you have already entered a title in the memory, it will be displayed in the viewfinder.
  - The first dot (or character) flashes to show where the cursor (the insertion point) is located.
3. Press the SHIFT button to move the cursor to the point where you want to start the title.
  - Press once to move the cursor one space right. Press and hold to move it quickly.

### 4. Press the + and – buttons to scan the list of title characters.

- Press once to scan one at a time. Press and hold to scan quickly.
- You can choose from the following characters:



- If you choose the flashing dot , nothing will be recorded at this position.
- You can erase all the characters at and to the right of the cursor by pressing the C.RESET button.

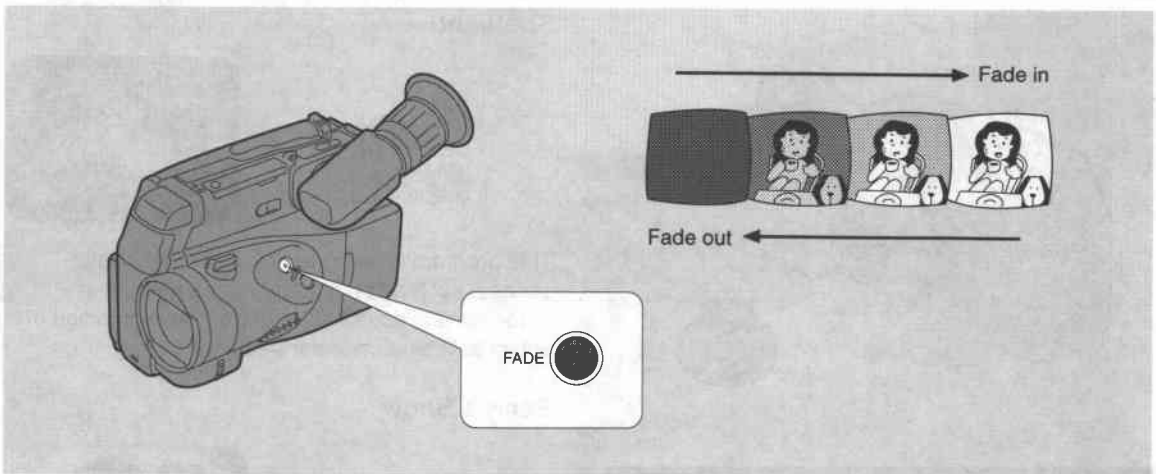
### 5. When the character you want is displayed, press the SHIFT button again to move the cursor to the point where you want to write the next character.

### 6. Repeat steps 4 and 5 until your title is complete, then press the TITLE button to enter the title in the memory.

#### Note:

- If it takes you longer than about five minutes to write a title, the camera may turn itself off before you have finished. You can prevent this by removing the cassette before you begin.

# Fade



## Fade in

To make the scene gradually appear from a blank screen:

1. Make sure the camera is in record pause mode.
2. Press and hold the FADE button until the scene disappears completely from the viewfinder.
3. Press the start/stop button to begin recording.
4. Release the FADE button.
  - The scene gradually reappears in the viewfinder.

## Fade out

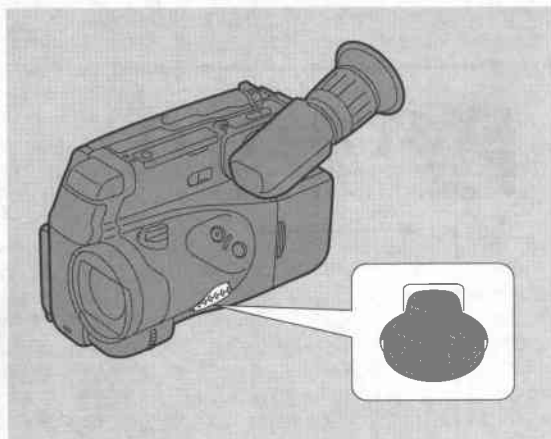
To make the scene gradually disappear:

1. Press and hold the FADE button during recording.
2. When the scene has completely disappeared, press the start/stop button to end recording.
3. Release the FADE button.


### Notes:


- The sound fades together with the image.
- Title and date and time displays do not fade.

# Exposure Control



## Program AE

In normal recording conditions, you can leave the Program AE selector set to  (auto). However, the camera also has four special exposure programs, designed to give the best possible pictures in difficult situations.

Rotate the selector to choose the appropriate program before you start recording. Reset it to  when you have finished.

## Sports



This program is useful for recording high-speed sports scenes in brightly lit conditions. Normal playback will be slightly jerky, but you will get clear images which can be analysed frame by frame during slow or still playback on a VCR.

## Portrait



Use this program outdoors to make the subject stand out from a softened foreground and background. It works well for still-lives and close-ups. The effect is most noticeable when the zoom position is between the middle range and the telephoto end. Focus manually for maximum accuracy.

## Spotlight



This program is designed for recording spotlight scenes, such as on a stage. The exposure is automatically adjusted for glare-free recordings of subjects lit by a concentrated light source.


## Sand & Snow



Use this program in places where the background is so bright that the subject appears underexposed in the viewfinder — a sunny beach or ski resort, for example.


## Backlight compensation



If the subject is brightly lit from behind, it may appear underexposed and lacking in detail. To compensate for this backlighting effect, press and hold the  button. Monitor the exposure in the viewfinder, and release the button when the compensation is no longer needed.

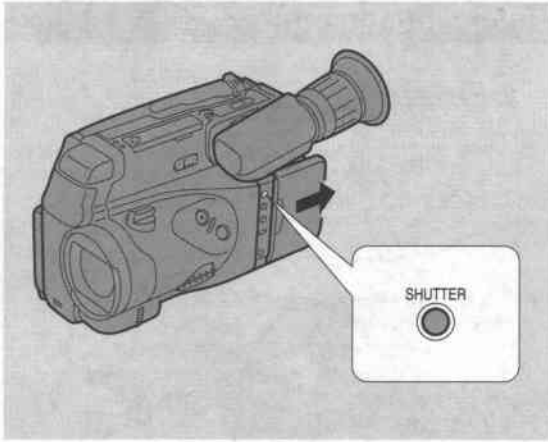
If there is very strong backlighting, use the video light (see p. 24).

## Notes:

- The high-speed shutter can only be used when the selector is set to .
- Avoid switching AE settings during recording, as the brightness of the image may change suddenly.
- Smear or flicker may occur when using Program AE in some types of lighting.



# High-Speed Shutter



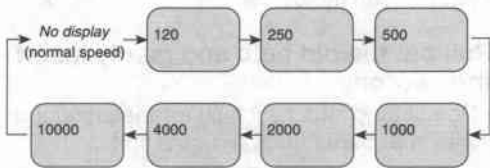
The shutter speed is usually set automatically, but you also have the option of seven fast shutter speeds, which are useful when recording very fast or very bright subjects.

A faster than usual shutter speed can also be used creatively in order to narrow the depth of field and throw the background out of focus.

## 1. Put the camera in record pause mode.

## 2. Press the SHUTTER button to change the shutter speed.

- Each time you press the button, the viewfinder display changes as follows:



## 3. Make your recording.

## 4. Press the SHUTTER button again to return to the normal shutter speed.

- The display disappears from the viewfinder.

## Which shutter speed?

Select the shutter speed which suits the speed and brightness of the subject:

### 1/2000 to 1/10000 second



To record outdoor sports on a clear day so that you can freeze the action clearly.

Normal playback will be slightly jumpy, but on a VCR with a noise-free still playback function, you will get clear images which can be analysed frame by frame.

### 1/250 to 1/1000 second




To record outdoor action on a cloudy day, or for a more stable picture when shooting from a moving car.

### 1/120 second

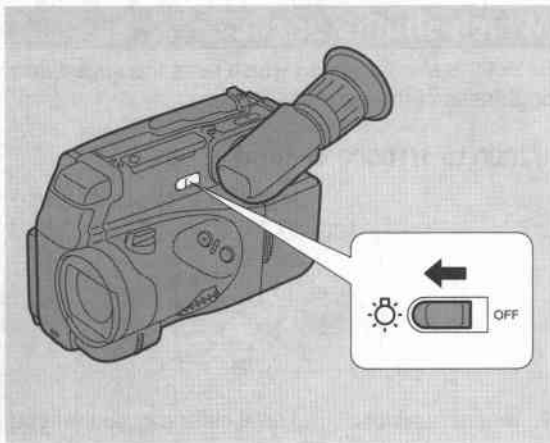


To reduce the exposure level when shooting very bright scenes, or to give more stable pictures when shooting indoor sports.


## Notes:

- High speeds need more light than the normal shutter speed (1/50 second).
- The shutter setting is cancelled if you move the OPERATE switch from the CAMERA position, or if you move the Program AE selector from .

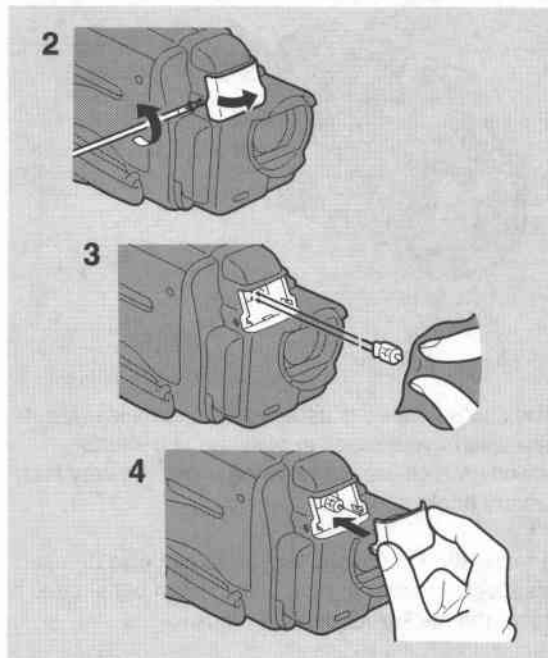
# Video Light



The built-in video light allows you to make clear, colourful recordings of poorly lit indoor scenes. You can even record in complete darkness.

- 1. Slide the light switch to the  position to turn on the video light.**
  - The light will only turn on during recording or in record pause mode.
- 2. Make your recording.**
- 3. When you have finished using the light, slide the switch back to the OFF position.**

## Replacing the bulb



Use a Canon Halogen Bulb 5.7V 4W.

- 1. Turn the camera off and give the bulb time to cool down.**
- 2. Remove the bulb protector.**
  - First loosen the screw.
- 3. Pull out the old bulb and gently insert the new one.**
  - Do not touch the new bulb (or the protector) with your bare hands — use a soft cloth.
- 4. Replace the bulb protector.**
  - Don't forget to tighten the screw.

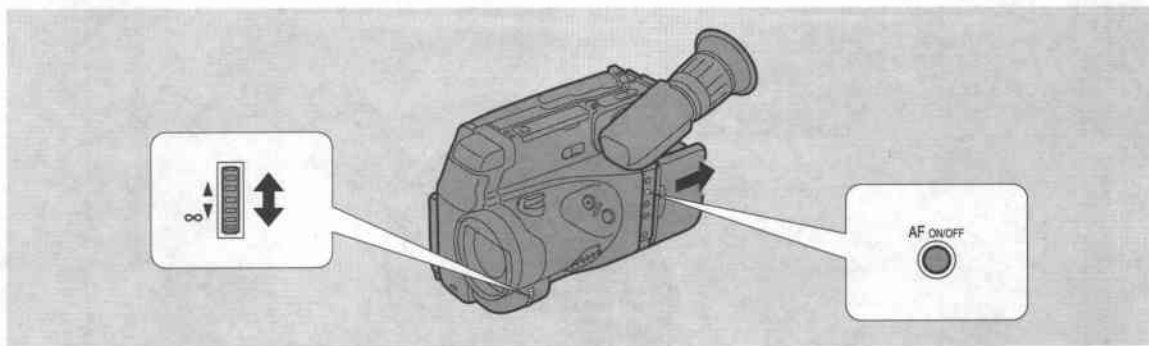
### WARNING

Be careful not to touch the bulb during or immediately after use; it becomes very hot.

### Notes:

- The light has a range of about 2 metres (6½ feet).
- Not all of the scene will be illuminated during wide-angle recording.
- The BP-E77K Battery Pack provides enough power for about 25 minutes' use (see p. 10). For longer recordings you may prefer to use a power adapter.
- The light becomes hot during use — keep it away from plastic or flammable materials, and do not touch it.
- Do not knock the light, especially during use.

# Focusing



The camera has two different ways of focusing: autofocus and manual focus.

## Autofocus

When you turn the camera on, it starts focusing automatically — all you have to do is point the camera, and whatever is in the centre of the viewfinder will usually be in sharp focus. (See p. 17 for the minimum focusing distances.) You can adjust the focus without turning autofocus off by turning the focus wheel — autofocus starts again as soon as you release it.

## Manual focus

Sometimes you will get better results by turning off autofocus and using manual focus instead.

- 1. Use the zoom control to set the picture angle.**
  - If you use the zoom after manual focusing, the picture may go out of focus.
- 2. Press the AF ON/OFF button to switch from auto to manual focus.**
  - “AF OFF” appears in the viewfinder.
  - The focus remains locked at the point set by autofocus.
- 3. Use the focus wheel to set the focus.**
  - Turn it downwards (towards ∞) to move the focus further away. Turn it upwards to bring the focus nearer.
- 4. Press the AF ON/OFF button again to return to autofocus.**

Manual focus will probably work better than autofocus when shooting:



Subjects not in the centre of the viewfinder



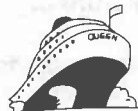
Several subjects in the viewfinder at different distances



Subjects behind wet or dirty glass



Rapidly moving subjects



Slanted subjects



Subjects with horizontal stripes



Subjects without much contrast (such as a white wall)



Subjects which reflect too much light (such as shiny car exteriors)



Dark subjects

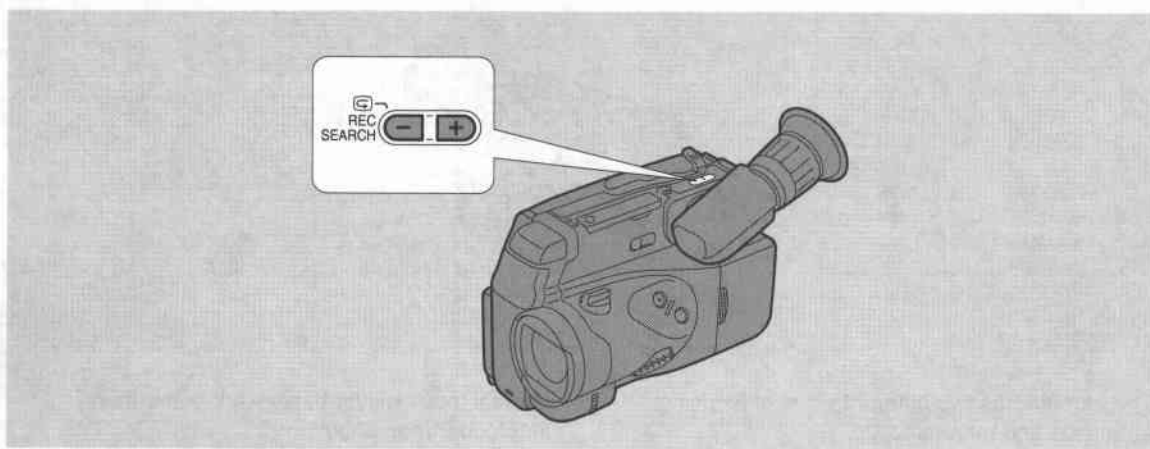


Night scenes

### Note:

- The manual focus setting is cancelled if you move the OPERATE switch from the CAMERA position.

# Record Search and Record Review





## Record search

When the camera is in record pause mode, you can use record search to play the tape forwards or backwards to find the point where you want to start or restart recording. This is useful when you want to add a new scene to a previously used cassette. By using record search, you can ensure a smooth, noise-free join between the new scene and the old one.

1. **Make sure the camera is in record pause mode.**
2. **Press and hold the REC SEARCH + or – button while you check the picture in the viewfinder.**
  - The + button plays the recording forwards and the – button plays it backwards.
3. **Release the button when you find the point where you want to start recording.**
  - The record search picture pauses briefly and then the camera returns to record pause mode.

## Record review

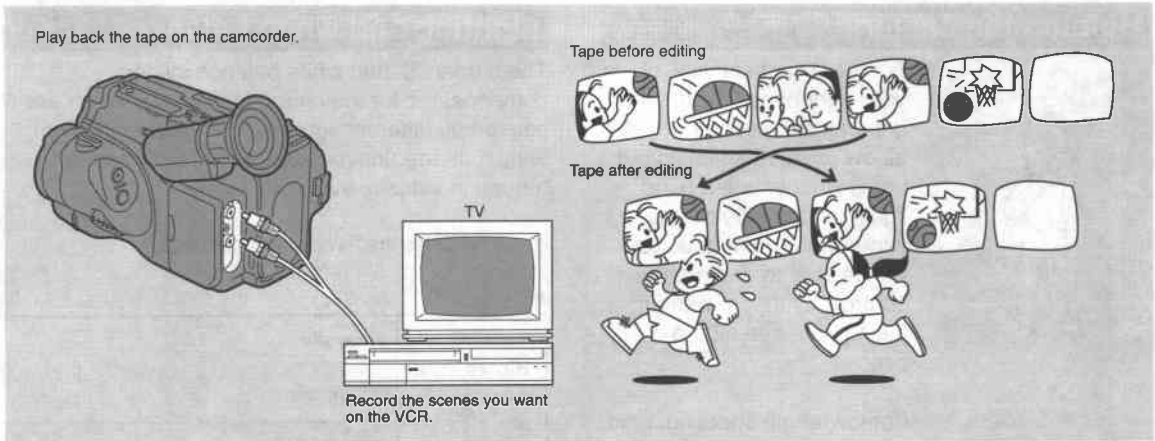
When the camera is in record pause mode, you can use record review to play back the last few seconds of your recording and then return automatically to record pause mode. You can quickly make sure that a scene has recorded properly and then go on to shoot the next scene, without producing any noise in the picture.

1. **Make sure the camera is in record pause mode.**
2. **Press and release the  (record review) button while you check the picture in the viewfinder.**
  - The camera rewinds the tape and plays back the last few seconds.
  - The camera returns to record pause mode at the point where you pressed the  button.

### Note:

- Noise or skew (picture distortion) may appear on the screen during record search and record review.

# Editing to a VCR



By connecting the camera to another VCR, you can edit your recordings in order to remove unwanted scenes — or combine different shots to create your own video production.

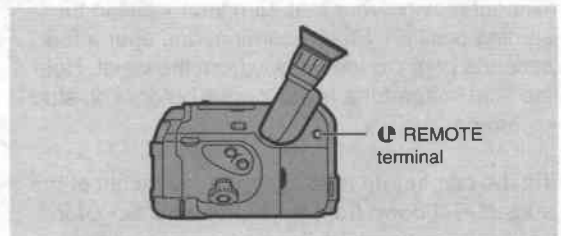
## Preparations

1. **Connect the camera to the VCR.**
  - See “Playback Connection” on p. 14.
2. **Turn the TV on.**
  - Be sure to set it to the video channel, or set the TV/VIDEO selector to VIDEO.
3. **Turn on the VCR and load a blank cassette.**
  - See your VCR instruction manual for details.
4. **Set the VCR’s input selector to LINE, and put it in record pause mode.**
5. **Set the camera’s OPERATE switch to PLAY, and load your recorded cassette**

## Basic editing

1. **Find a point on your recorded cassette slightly ahead of the section you want to copy.**
2. **Start to play it back while you monitor the picture on the TV.**
3. **Start recording on the VCR as soon as the section you want to copy appears on the screen.**
4. **Pause the VCR at the end of the section you want to copy, then stop playback on the camera.**
5. **Repeat steps 1 to 4 until your edited recording is complete.**

## REMOTE terminal



☪ (LANC) stands for Local Application Control Bus System. The ☪ REMOTE terminal allows you to connect the camera to equipment such as the VE-100 Video Editor (p. 31). Some buttons on other editing equipment may operate differently from those on the camera.

### Note:

- The quality of the edited tape will be slightly lower than that of the original.

# Making Better Videos

## Holding the camera



For maximum stability, place your right hand through the grip belt and keep your right elbow pressed against your body. Rest your left hand lightly on the side of the camera. With practice, you will be able to operate the controls by touch, without taking your eye off the action.



For low-angle shooting, hold the camera as shown and use your thumb to operate the START/STOP button.



To prevent any unwanted movement, you can mount the camera on a tripod, and operate it with the wireless controller

## Camera moves



Use pans to record a landscape or follow a moving subject. Decide the area you want to cover and stand facing the end of your panning angle. Without moving your feet, turn your waist to the starting position. Start recording, and after a few seconds begin to turn slowly from the waist. Hold the final image for a few seconds before you stop recording.

Tilt the camera up to exaggerate the height of the subject. Tilt down from the top of a building, for example, as an introduction to subjects at the bottom.

Remember that any camera movement or change in picture angle should have a definite purpose. Avoid unnecessary or half-hearted movements.

## Lighting and white balance

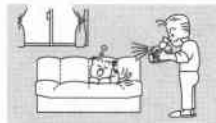
The camera's auto white balance system compensates for the changes in colour which are caused by different light sources. Although slight variations are unavoidable, colours will appear natural in virtually every situation:

 indicates auto white balance range.

Bluish light ↑	Blue sky
	TV screen
White light ↓	Cloudy sky
	Sunlight
	White fluorescent light
	Two hours after sunrise or before sunset
	One hour after sunrise or before sunset
	Electric halogen light
↓ Reddish light	Thirty minutes after sunrise or before sunset
	White electric light bulb
	Sunrise, sunset
	Candlelight



Try to record with light from a single source. Correct white balance cannot be obtained for two types of lighting at once.



Use the video light for bright, lifelike colours when shooting indoors.

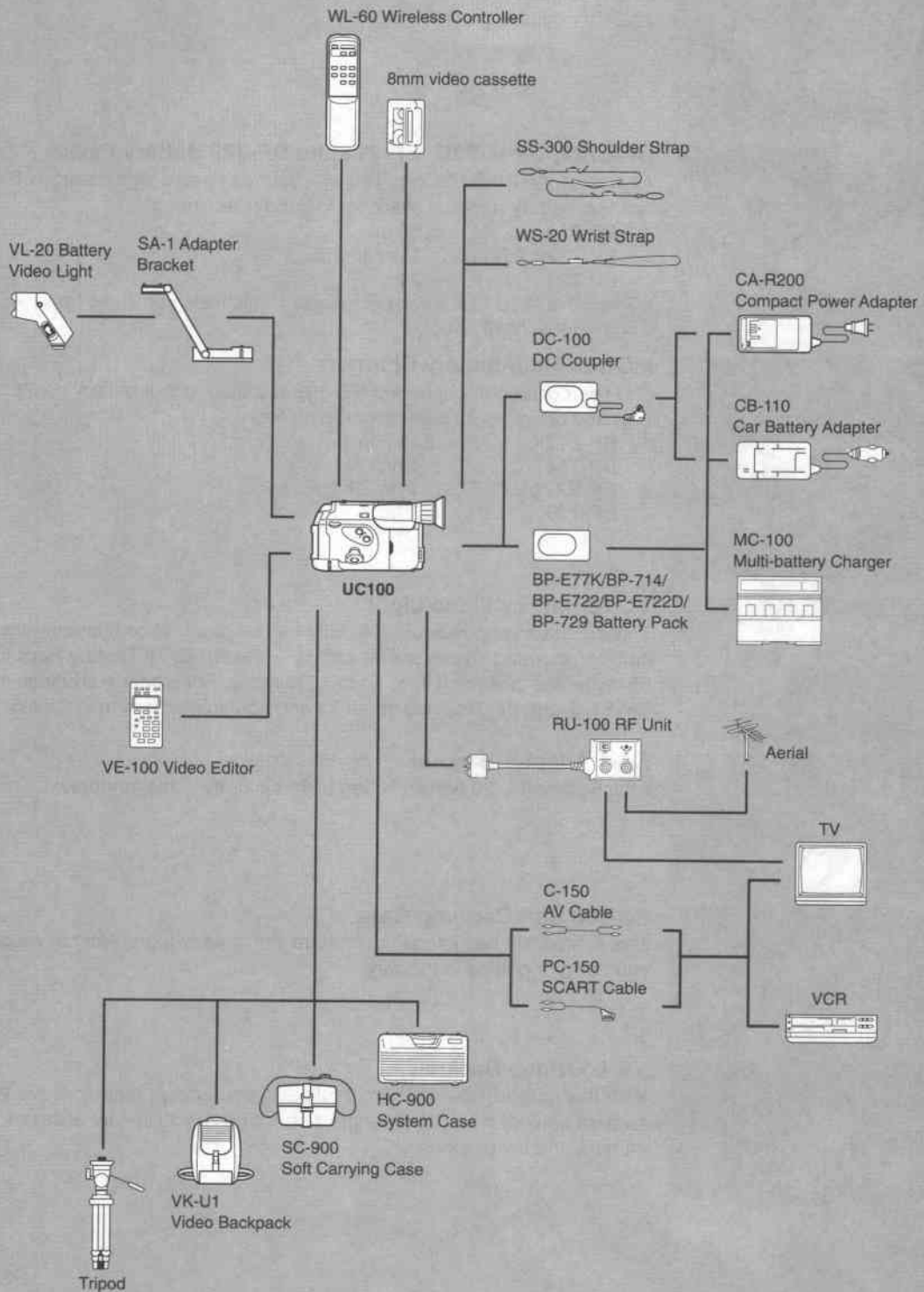


Make sure to have the sun behind you when you are recording outside. Avoid very bright light, as it can cause unattractive shadows.

### Notes:

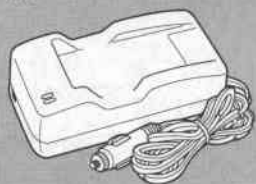
- When you are using a tripod, be careful not leave the viewfinder exposed to bright sunlight or it will melt. (The light is concentrated by the viewfinder lens.)
- Make sure that the fastening screw of the tripod is no longer than 6.5 mm (1/4 inch), or it will damage the camera.

# UC100 Video System



# Optional Accessories

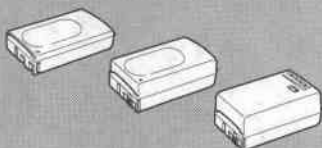
CB-110



## CB-110 Car Battery Adapter

Power your camera or recharge battery packs on the move. The car battery adapter plugs into your car's cigarette lighter socket and runs off a 12/24 V negative ground battery.

BP-E77K/ BP-714    BP-E722/ BP-729    BP-E722D



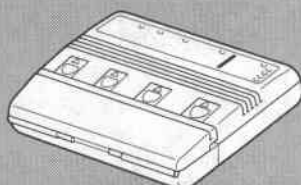
## BP-E722, BP-E722D, BP-714 and BP-729 Battery Packs

As well as the BP-E77K supplied with your camera, a whole range of optional battery packs is available for longer recordings:

- BP-714 ..... 60 min.
- BP-E722/E722D ..... 1 hr. 30 min.
- BP-729 ..... 2 hr.

- The BP-E722D has a five-LED display which lets you know how much charge you have left.

MC-100



## MC-100 Multi-battery Charger

The microcomputer-controlled MC-100 takes up to four battery packs at a time and dramatically cuts recharge times:

- BP-E77K ..... 45 min.
- BP-714 ..... 1 hr.
- BP-E722/E722D ..... 1 hr. 30 min.
- BP-729 ..... 2 hr.

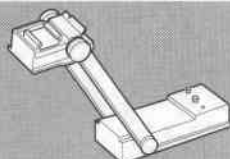
VL-20



## VL-20 Battery Video Light

This compact yet powerful video light can be used for both indoor and outdoor shooting. There are no cables — the BP-E77K Battery Pack fits neatly inside, powering it for up to 15 minutes. For longer recordings, the BP-E722 and BP-729 give about 35 and 45 minutes' use respectively.

SA-1



## SA-1 Adapter Bracket

Attaches the VL-20 Battery Video Light securely to the camera.

SC-900



## SC-900 Soft Carrying Case

This lightweight bag keeps the camera within easy reach without weighing you down or getting in the way.

VK-U1



## VK-U1 Video Backpack

With this rugged, go-anywhere backpack, you'll never have to leave your camera behind. It has a full-length zipper to give you instant access to the camera and accessories.



WS-20



### **WS-20 Wrist Strap**

Provides an extra measure of protection for active shooting.

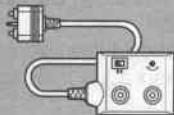
HC-900



### **HC-900 System Case**

This solid, lockable case provides safe and stylish protection for the camera and its accessories during transportation and storage.

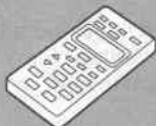
RU-100




### **RU-100 RF Unit**

This optional converter allows the camera to be connected to the aerial terminal of any TV. It can be a useful accessory while travelling, as you may need it if you want to connect the camera to a TV in your hotel room.

VE-100



### **VE-100 Video Editor**

This easy-to-use editor controls the camera and a video recorder simultaneously for fast, accurate assembly editing. Not only does it link up to any  (LANC) terminal, it can even learn the remote control signals used by most VCRs.

# Cautions and Maintenance

## Cautions

### Avoid high temperatures and high humidity.

- Do not leave the camera inside a car in hot weather, for example.
- Be careful of heat radiating from video lighting equipment.
- Do not take the camera into a humid room.

### Avoid sudden changes in temperature.

- If you take the camera from a cold place to a warm place, condensation may form on the lens and internal parts (see p. 33).

### Do not point the lens at strong light sources.

- Never point it at the sun, and do not leave it aimed at a bright subject.
- Be especially careful when leaving the camera on a tripod.

### Avoid magnetic or electric fields.

- Do not use the camera close to power plants, TV towers, TV sets, audio equipment or electric motors, as this may cause noise in the picture or a camera malfunction.

### Do not expose the camera to water.

- Cover the camera when you are recording in light rain or mist.
- There is a risk of electric shock if water gets inside the camera — contact qualified service personnel as soon as possible.

### Always cover the lens.

- Sand and dust can damage the lens — be especially careful on windy days. When you have finished recording, close the built-in lens cover by setting the OPERATE switch to OFF.

### Handle the camera gently.

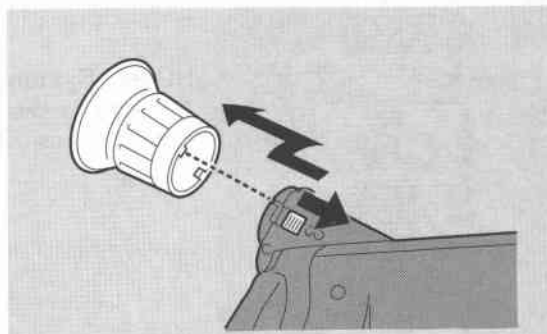
- Vibration or shock can cause damage.

### Do not disassemble the camera.

- This is very dangerous as there is a risk of electric shock — if the camera does not function properly, take it to qualified service personnel.

## Maintenance

### Viewfinder



- Clean the viewfinder screen using a blower brush. First, remove the eyepiece. Press and hold the RELEASE switch, pull the eyepiece out, turn it anticlockwise, and slide it off. To reattach it, align the mark on the eyepiece with the line on its base, then push it on so that it clicks back into place.

### Camera body and lens

- Use a soft, dry cloth to clean the camera body or lens. Never use chemically treated cloth or volatile solvents such as paint thinner.

### Video heads

- Clean the video heads only when necessary, preferably using Canon's CC-8 Video Head Cleaning Cassette.
- Do not use a wet-type cleaning cassette as this can cause damage.

### Storage

If you do not intend to use the camera for some time, store it in an area which is free of dust and moisture, and where the temperature is no higher than 30°C (86°F).

After storage, check each part and function of your camera to make sure everything is still working properly.

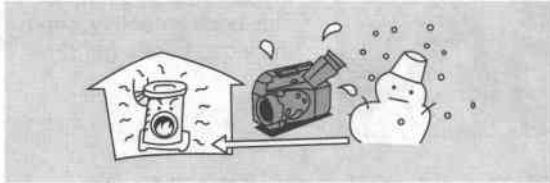
### Note:

- These cautions also apply to cassettes.

## Condensation

Condensation may form on the camera when it is moved from a cold place to a warm place. Using the camera while condensation is present can damage both the tape and the camera.

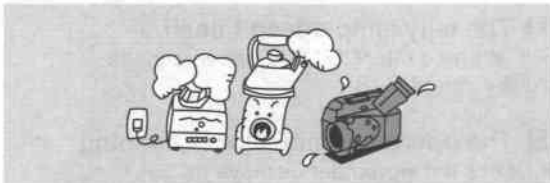
Condensation may become a problem:



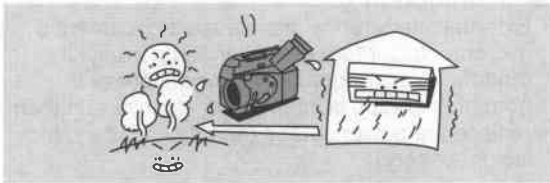
When you bring the camera from a cold place to a warm room



When a cold room is heated rapidly



When the camera is left in a humid room




When the camera is taken from an air-conditioned room to a warm, humid place

### Protecting the camera from condensation

- Before you bring the camera to a warm or humid place where condensation is likely to be a problem, unload the cassette and put the camera in a plastic bag. Wait until the camera reaches room temperature before you take it out of the bag.

### What happens when condensation is detected

- The operation indicator flashes and the  mark flashes in the viewfinder. If there is a cassette in the camera, it stops automatically and "EJECT" flashes in the viewfinder.
- The camera may not detect the condensation immediately — the condensation warning may not start flashing for 10 to 15 minutes.
- You cannot load a cassette when condensation is detected.

### What you should do

- Remove the cassette, leave the cassette compartment open, and turn the camera off.
- Leave it in a dry place until the condensation evaporates. After the DEW warning stops flashing, wait at least another hour before trying to use the camera.

## Using the camera abroad

### Power sources

- You can use the compact power adapter to operate your camera and charge battery packs in any country where the electricity supply is between 100 and 240 V AC, 50–60 Hz.

### TV playback

- Although you can always play back your recordings in the viewfinder, your camera can only be connected to TVs which use its PAL system. This TV system is used in the following countries:  
Algeria, Australia, Austria, Bangladesh, Belgium, Brunei, China, Denmark, Finland, Hong Kong, Iceland, India, Indonesia, Ireland, Italy, Jordan, Kenya, Kuwait, Liberia, Malaysia, Malta, Mozambique, the Netherlands, New Zealand, North Korea, Norway, Oman, Pakistan, Portugal, Qatar, Sierra Leone, Singapore, South Africa, Spain, Sri Lanka, Swaziland, Sweden, Switzerland, Tanzania, Thailand, Turkey, Uganda, United Arab Emirates, United Kingdom, Germany, Yemen, former Yugoslavia, Zambia.

# Troubleshooting

Refer to this checklist first if you have any problems with your camera. Possible explanations are given below each problem on the list — turn to the page numbers in brackets for more information. Make sure that the camera is properly connected if you are using it with a TV or VCR.

Consult your dealer or service outlet if problems persist.

## ❓ The camera won't turn on.

- The battery pack is exhausted (p. 9).


## ❓ The camera doesn't work.

- You haven't turned it on (p. 6, 13).
- You haven't loaded a cassette (p. 11).
- The battery pack is exhausted, or not properly attached (p. 8, 9).


## ❓ The camera turned itself off.

- You left it in record pause mode for more than about five minutes (p. 6).
- The battery pack is exhausted (p. 9).

## ❓ The start/stop button doesn't work.

- The OPERATE switch isn't set to CAMERA (p. 6).
- The LOCK/STANDBY switch is set to LOCK (p. 6).
- You haven't loaded a cassette, or it is set for erasure prevention (p. 11).
- The tape has reached the end (  END appears in the viewfinder).

## ❓ The PLAY ► button doesn't work.

- The OPERATE switch isn't set to PLAY (p. 13).
- You haven't loaded a cassette (p. 11).
- The tape has reached the end (  END appears in the viewfinder).

## ❓ The video light won't turn on.

- The battery pack is exhausted (p. 9).
- The OPERATE switch isn't set to CAMERA (p. 6).
- The bulb is broken (p. 24).
- You haven't loaded a cassette (p. 11).

## ❓ The camera won't focus.

- The subject isn't suitable for autofocus (p. 25).
- The viewfinder lens needs adjusting (p. 12).
- The lens is dirty (p. 32).

## ❓ There's no picture in the viewfinder.

- The OPERATE switch isn't set to CAMERA (p. 6).

## ❓ The camera won't zoom in to the telephoto end.

- The wide adapter is selected (p. 17).

## ❓ There's a bright stripe on the screen.



- When you are recording in dark places, a bright light in the scene may cause a vertical bar, called smear, to appear on the screen.

## ❓ The playback picture is rough.



- If your recordings do not play back smoothly, clean the video heads (p. 32).

## ❓ There's no picture on the TV screen, even though the tape is moving.

- The video heads need cleaning (p. 32).
- The TV/VIDEO selector on the TV isn't set to VIDEO (p. 14).
- If the camera is connected using the RF unit, you haven't selected the video channel (p. 15, 16).

## ❓ The wireless controller doesn't work.

- The remote sensor is turned off. "T/S OFF" appears in the viewfinder (p. 18).

## ❓ The tally lamp doesn't flash.

- It is turned off. "T/S OFF" appears in the viewfinder (p. 18).

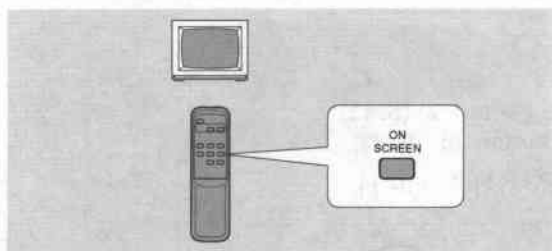
## ❓ The operation indicator is flashing.

- Check the viewfinder displays (p. 35).

## ❓ Malfunction


- External interference may cause the camera's microprocessor to malfunction temporarily. If random letters appear in the viewfinder or if normal operation is interrupted, remove and then replace the power source (and if necessary, the lithium battery).


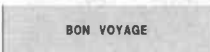












# Viewfinder Displays



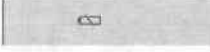





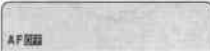
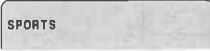







To display the date and time on a connected TV, press the DATE button. Press the TITLE button to see the title. These displays are recorded just as they appear on the screen.

Press the wireless controller's ON SCREEN button to see the other viewfinder displays on the TV screen. They will not be added to any recordings you make with the camera.

 indicates a flashing display.

-  Date and time (p. 19)
-  Title (p. 20)
-  Record pause mode (p. 6) or still playback (p. 13)
-  Recording (p. 6)
-  Playback (p. 13)
-  Fast forward (p. 13)
-  Fast forward playback (p. 13)
-  Rewind (p. 13)
-  Rewind playback (p. 13)
-  Playback is stopped (p. 13).
-  The camera is ejecting the tape (p. 11).
-  The safety mechanism is activated. Unload the cassette and turn the camera off. Turn it on again and reload the cassette.
-  Tape speed (p. 6)
-  No cassette is loaded, or the cassette is set for erasure prevention (p. 11).

-  The tape has reached the end.
-  Tape return (p. 13)
-  The battery pack is nearly exhausted (p. 8, 9).
-  The lithium battery is nearly exhausted, or not inserted properly (p. 10).
-  Condensation warning (p. 33)
-  Zoom display (p. 17)
-  The wide adapter is selected (p. 17).
-  Fast shutter speed (1/1000th of a second in this example) (p. 23)
-  Manual focus (p. 25)
-  Program AE (p. 22)
-  Portrait
-  Spotlight
-  Sand & Snow
-  Backlight compensation (p. 22)
-  The tally lamp and remote sensor are turned off (p. 18).

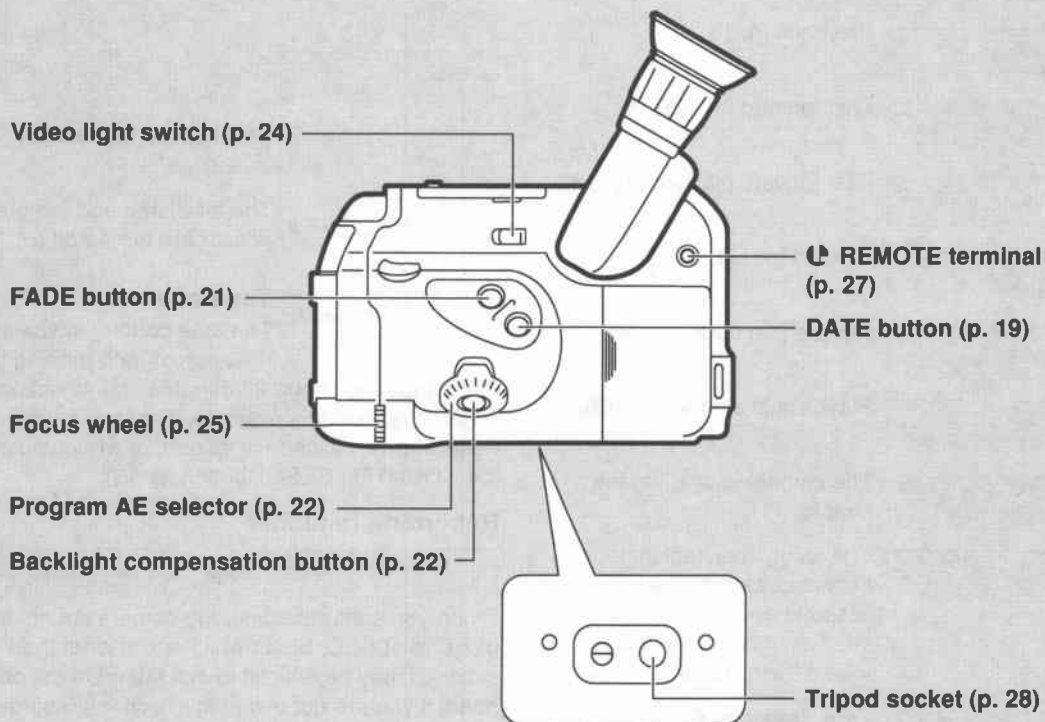
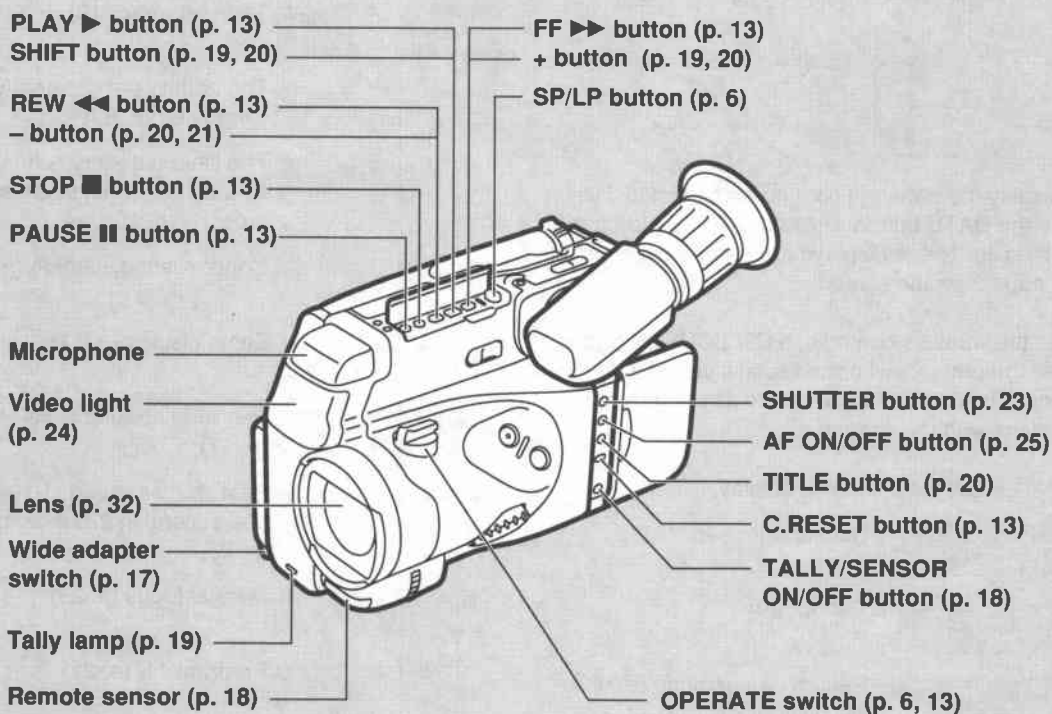
**Tape counter**  
The tape counter indicates the approximate running time of the tape — 1 hour, 23 minutes and 45 seconds (in SP mode) in this example. The tape counter is reset when a cassette is loaded, or when you press the COUNTER RESET button (p. 13).

## Recording reminder



When you start recording, the camera counts from 0SEC to 10SEC. Shots which are shorter than 10 seconds may be difficult to edit later. On the other hand, if you are not planning to edit the recording, remember that a shot which does not contain action should generally last no longer than 10 seconds.

# Nomenclature



Viewfinder focusing ring (p. 12)

Viewfinder (p. 12, 32)

Strap attachment bars (p. 12)

Battery pack (p. 8–10)

BATT EJECT lever (p. 7)

REC SEARCH + button (p. 26)

REC SEARCH – button (p. 26)

⏮ (record review) button (p. 26)

▲ (eject) button (p. 11)

Zoom control (p. 17)

Cassette compartment (p. 11)

Grip belt (p. 12)

Operation indicator (p. 6, 13, 34)

START/STOP button (p. 28)

Video terminal (p. 14)

DC output terminal

Audio terminal (p. 14)

Start/stop button (p. 6)

LOCK/STANDBY switch (p. 6)

Lithium battery compartment (p. 10)

Transmitter (p. 18)

START/STOP button (p. 6)

TAPE RETURN button (p. 13)

COUNTER RESET button (p. 13)

REW ⏮ button (p. 13)

PLAY ▶ button (p. 13)

STOP ■ button (p. 13)

ZOOM buttons (p. 17)

ON SCREEN button (p. 35)

FF ▶▶ button (p. 13)

PAUSE || button (p. 13)

# Specifications

## UC100

<b>Power supply (rated):</b>	6 V DC
<b>Power consumption:</b>	7 W (autofocus recording, not using the zoom)
<b>Television system:</b>	CCIR standard (625 lines, 50 fields) PAL colour signal
<b>Video recording system:</b>	2 rotary heads, helical scanning system Luminance signal: FM azimuth recording Chrominance signal: Converted subcarrier phase shift recording (8mm video standard)
<b>Audio recording system:</b>	Frequency multiplexing with the video signal by 2 rotary heads (1 channel)
<b>Image sensor:</b>	1/3-inch CCD (charge-coupled device), 320,000 pixels (300,000 effective pixels)
<b>Tape format:</b>	8mm video cassette, metal particle*
<b>Tape speed:</b>	SP: 20.05 mm/s LP: 10.03 mm/s
<b>Maximum recording time:</b>	3 hours (with a P5-90 cassette, in LP mode)
<b>Fast forward/rewind time:</b>	Approx. 6 minutes (with a P5-90 cassette)
<b>Lens:</b>	f/1.8 – 2.8, 12X power zoom, 5.2–62.4 mm; 3.6 – 7.2 mm with integral wide adapter
<b>Focusing system:</b>	TTL autofocus, manual focusing possible
<b>Minimum focusing distance:</b>	Wide-angle end: 1 cm (3/8 in) Telephoto end: 80 cm (2 ft 8 in) Intermediate zoom position: 1 m (3 ft 4 in)
<b>Minimum illumination:</b>	2 lux
<b>Recommended illumination:</b>	More than 100 lux
<b>Electronic viewfinder:</b>	0.5-inch monochrome CRT
<b>Microphone:</b>	Non directional electret condenser microphone
<b>Output level:</b>	Video terminal: 1 Vp-p/75 ohms, unbalanced Audio terminal: -10 dBV, less than 3 kohms, unbalanced
<b>Operating temperature range:</b>	0°–40°C (32°–104°F)
<b>Dimensions:</b>	118 X 117 X 199 mm (4 <sup>5</sup> / <sub>8</sub> X 4 <sup>5</sup> / <sub>8</sub> X 7 <sup>13</sup> / <sub>16</sub> in)
<b>Weight:</b>	840 g (1 lb 13 oz)

## Video light

<b>Central light intensity:</b>	Approx. 120 cd
<b>Illumination angle:</b>	Approx. 30°
<b>Central luminosity:</b>	Approx. 40 lux at 2 m (6 ft 6 in)
<b>Colour temperature:</b>	Approx. 3,200 K
<b>Power consumption:</b>	4 W (6 V)
<b>Required bulb:</b>	Canon Halogen Bulb 5.7V 4W
<b>Bulb life:</b>	Approx. 50 hours
<b>Power supply:</b>	Battery pack or DC coupler mounted on the camera

Weight and dimensions are approximate  
Errors and omissions excepted.  
Subject to change without notice.  
\*Canon recommends metal particle tape.



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