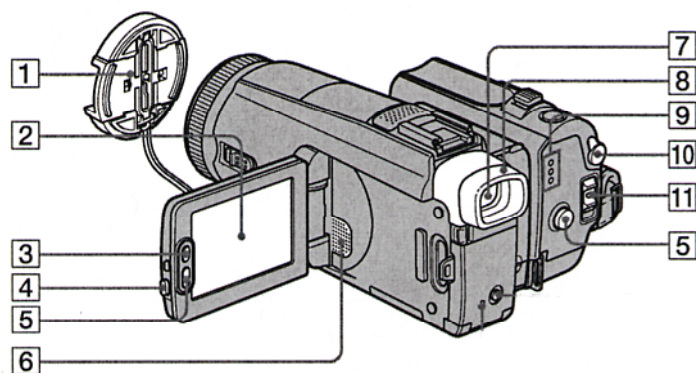


Sony Digital Video Camera Recorder  
Documentation  
Knapp Media Center

**BEFORE YOU BEGIN**  
Basic Parts and Controls of the Camera



- 1** Lens cap
- 2** LCD/Touch panel screen
- 3** LCD BACKLIGHT
- 4** OPEN button
- 5** REC START/STOP
- 6** Speaker
- 7** Viewfinder

- 8** Eyecup
- 9** CAMERA-TAPE, CAMERA-MEMORY, PLAY/EDIT mode lamps
- 10** ♪ (headphones) jack (green)  
When you use headphones, the speaker on your camcorder is silent.
- 11** POWER switch

## HOW TO SUPPLY POWER TO THE CAMERA

### ❖ BATTERY PACK (NP-FF71)

#### ➤ To install

- 1 Push the tab in back of the camera below the eyepiece to open the lid of the battery compartment. (See Figure 1)
- 2 Slide the battery pack in the direction of the arrow until it clicks. (Barcode should be facing down.) (See Figure 2)
- 3 Close lid of compartment until it clicks.

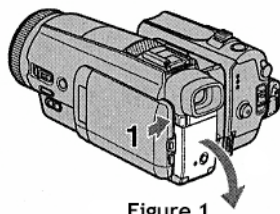


Figure 1

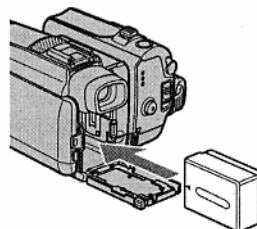


Figure 2

➤ **To remove**

- 1 Set POWER switch to (CHG) OFF (Located behind the cassette compartment).
- 2 Open the battery compartment lid. (See **To Install** on page 1 for more information.)
- 3 Unlatch the battery release tab located on the right side of the battery compartment and remove the battery pack. (See Figure 3)

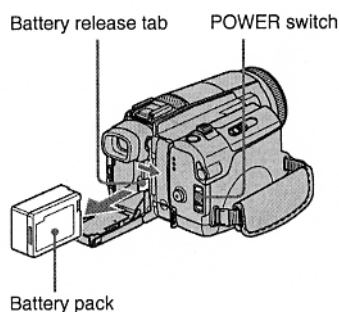


Figure 3

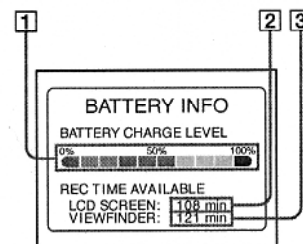
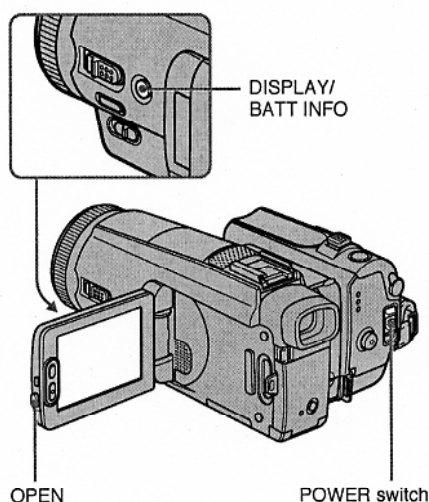
❖ **BATTERY LIFE**

When recording, the supplied battery pack (NP-FF71) can last approximately 230 minutes with the LCD screen closed. If you wish to keep the LCD screen open, the battery pack will last approximately 190 minutes. Frequent zooming, recording start/stop, and turning the power on/off may shorten the battery life.

➤ **Checking status of battery pack - Battery info**

- 1 Set the POWER switch to (CHG) OFF.
- 2 Press OPEN to open the LCD panel. (See Figure 4)
- 3 Press DISPLAY/BATT INFO. (See Figure 4)

*The battery charge level and remaining battery time are displayed for about 7 seconds. If you keep pressing DISPLAY/BATT INFO, the indicators will be displayed for about 20 seconds.*



- 1 Battery charge level: Displays approximate remaining amount of power left in the battery pack.
- 2 Approximate possible recording time using the LCD panel.
- 3 Approximate possible recording time using the viewfinder.

Figure 4

### ➤ How to charge batteries

- 1 Install battery pack into the camcorder. (See **To Install** cited on page 1 for more information.)
- 2 Insert the AC adaptor into the DC IN jack located between the battery and cassette compartments. Make sure the ▲ mark on the DC plug is facing the battery compartment lid. (See Figure 5)
- 3 Connect one end of the power cord to the AC adaptor.
- 4 Connect the other end of the power cord to a wall outlet.
- 5 Slide the POWER switch up to (CHG) OFF. The CHG lamp will light up, indicating the charging has begun.

*Note: The CHG lamp flashes when the battery pack is not properly installed or when something is wrong with the battery pack. It will take approximately 170 minutes to charge a fully discharged battery.*

- 6 When charging ends, the (CHG) light will turn off. Disconnect the DC IN jack and AC adaptor.

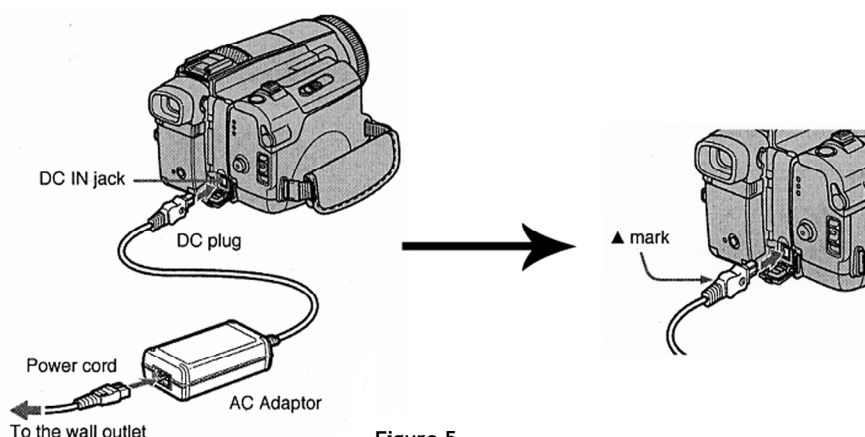


Figure 5

### ❖ POWER CORD

*You can also supply power to the camera with electricity instead of batteries by using the AC adaptor. Connect the AC adaptor in the same way you would when charging the battery pack. The DC IN jack can be found at the bottom between the battery pack and viewfinder. (See Figure 5)*

*Note: The AC adaptor can supply power from a wall outlet even if the battery pack is attached to the camcorder. DC IN jack has "source priority" meaning the battery cannot supply power as long as the power cord is connected to the DC IN jack, even when the power cord is not plugged into a wall outlet.*

## RECORDING BASICS

### ➤ Inserting the cassette

- 1 You can *\*only\** use a mini DV cassette. These should be available in the bookstore as well as many other retail stores.
- 2 Find the OPEN/EJECT switch on the topside of the camcorder. Slide the lever and open the lid. *Note: The cassette compartment automatically comes out and opens up.* (See Figure 6.1)



- 3 Insert the cassette with its window-side facing out. (See Figure 6.2)
- 4 Close the cassette compartment by pressing the PUSH sign on the cassette compartment. *Note: The PUSH sign may be hard to find. It is located on the side of the inner silver cassette compartment and written upside down.* (Refer to figure 6.3)
- 5 After the cassette compartment goes down completely, close the lid until it clicks.

**\*\*REMEMBER:** You *must* close the cassette compartment first before closing the lid!!!

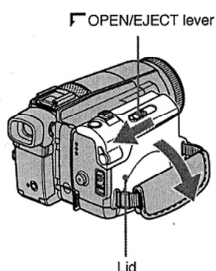


Figure 6.1

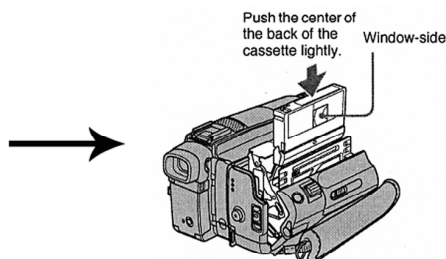


Figure 6.2

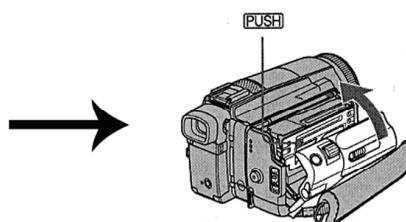


Figure 6.3

### ➤ How to start recording

- 1 Open the lens cap.
- 2 Prepare the power source and insert the cassette.
- 3 Slide the POWER switch down until the CAMERA-TAPE lamp lights up.  
**\*\*Make sure the camera is NOT on MEMORY!!** *Note: If MEMORY or PLAY/EDIT lamp lights up, continue to slide the POWER switch repeatedly until the CAMERA-TAPE lamp lights up.* (Refer to Figure 7)

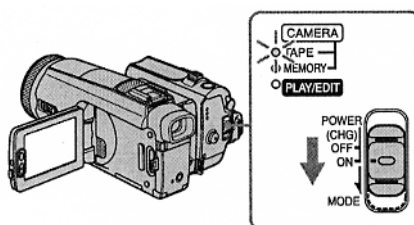


Figure 7

**\*\*Note:** If you wish to use the LCD panel while recording, proceed to step 4. If you wish to use the viewfinder, skip on to step 5.

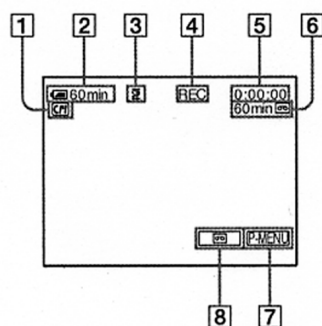
- 4 Press OPEN on the left side of the camera to open the LCD panel. The picture appears on the screen.
- 5 Press REC START/STOP. You know that the camcorder is recording because the [REC] indicator appears on the LCD screen. The camera recording lamp located on the front of the camcorder below the lens also lights up.
- 6 To stop recording, press REC START/STOP again.

➤ **Indicators displayed on the LCD screen during recording:**

*Note: These indicators are not recorded on the tape.*

**Indicators displayed during recording on a tape**

The indicators will not be recorded on the tape. Date/time and the camera settings data will not be displayed during recording.



**1 Indicators for Cassette Memory cassettes**

**2 Remaining battery**

The indicated time may not be correct depending on the environment of use. When you opened or closed the LCD panel, it takes about 1 minute to display the correct remaining battery time.

**3 Recording mode (SP or LP)**

**4 Recording status ([STBY] (standby) or [REC] (recording))**

**5 Time code or tape counter (hour: minute: second)**

**6 Recording capacity of the tape**

**7 Personal Menu button**

**8 END SEARCH/EDIT SEARCH/Rec review display switch button**

Figure 8

➤ **Zooming in and out**

- 1 Make sure the camera is set to Focus Auto. This is located on the side of camera next to the LCD screen. (See Figure 9)
- 2 Use functions [T] and [W] to zoom in and out. [T] zooms in. [W] zooms out.

*Note: The HC1000 has optical zoom of 12x with a digital zoom of 150x.*

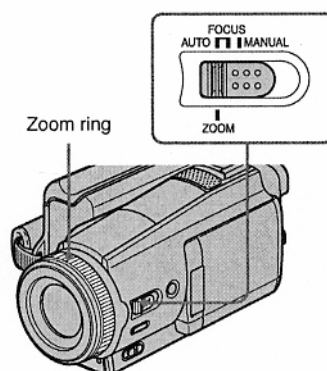







Figure 9

❖ **MANUAL FOCUS**

*Note:* Although we highly recommend that you use auto focus while recording, it is possible to use manual focus. If you wish to use manual focus, follow the directions below. Otherwise, skip to the next section.

- 1 Set the camera is set to MANUAL. This is located on the side of the camera next to the LCD screen. (See Figure 10) The symbol  will appear on the lower left of the screen indicating that the camera is set on manual focus.



- 2 Rotate the focus ring to adjust the focus. (See Figure 10) When the camera cannot focus any further, the  will change to . When the camera cannot adjust any closer, the  will change to .

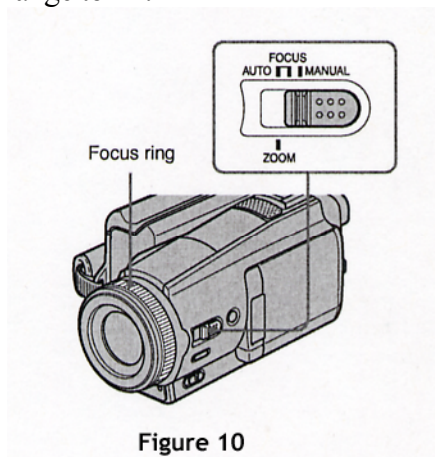


Figure 10

## ❖ SPECIAL FEATURES

### ➤ Adjusting the LCD screen

- The LCD panel in this camcorder can rotate up to 180 degrees. Before adjusting the LCD panel, make sure it is opened all the way (up to 90 degrees). (See Figure 11)

### ➤ Shooting with the mirror mode: Extend the viewfinder and then rotate the LCD panel 180 degrees. (See Figure 11)

- This feature allows the camera subject to view him- or herself on the LCD screen while the person taking the shot can look at the subject in the viewfinder. This is the only time when the viewfinder remains on while using the LCD screen.
- Auto focus will turn on when the screen is rotated 180 degrees.

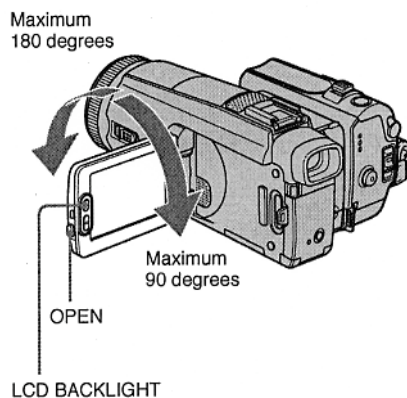



Figure 11

### ➤ Adjusting Exposure

The BACK LIGHT enables you to shoot the subject when there is strong light behind the subject. The BACK LIGHT will help prevent the subject from becoming shadowed.

- To activate the back light, press the BACK LIGHT button on the side of the camera. You may do this while you are recording or are in standby mode.
- To cancel back light, press BACK LIGHT again. (See Figure 12 pictured below)

\*Note: When the BACK LIGHT is turned on, the symbol:  will appear at the lower left of your screen.

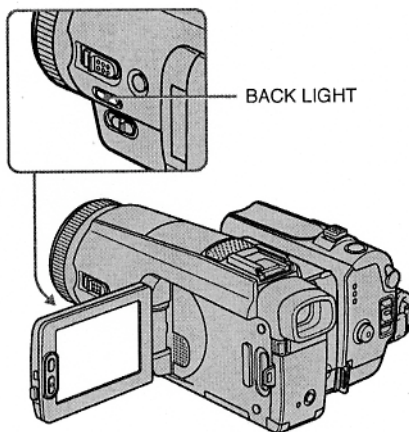






Figure 12

### ❖ MONITORING THE PLAYBACK PICTURE ON LCD/PLAYBACK TAPE

- 1 Slide the POWER switch down repeatedly to select the PLAY/EDIT mode.
- 2 Press OPEN to open the LCD panel. The controls for playback are displayed on the touch-screen LCD panel. Touch  to rewind the tape and  to fast-forward. Touch  to start playback and to pause playback. Press  to cancel playback.
- 3 Adjust the volume following the steps below.
  - Touch [P-MENU] on the LCD panel.
  - Touch [VOLUME].
  - Touch [ - ] (to turn down the volume) / [ + ] (to turn up the volume).
  - Touch [OK].

*Note: You can monitor the recorded tape either on the LCD screen or the viewfinder.*

### AFTER RECORDING

- 1 Close the lens cap.
- 2 Slide the POWER switch up to (CHG) OFF.
- 3 Close the LCD panel.
- 4 Eject the cassette.
- 5 Remove the power source.