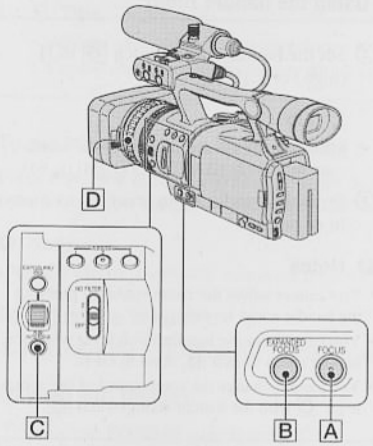
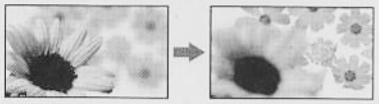
Adjusting the focus manually



You can adjust the focus manually for different recording conditions.
Use this function in the following cases.

- To record a subject behind a window covered with raindrops.
- To record horizontal stripes.
- To record a subject with little contrast between the subject and its background.
- When you want to focus on a subject in the background.



- To record a stationary subject using a tripod.

1 During recording or standby, press the FOCUS button A.

☞ appears.

2 Rotate the focus ring D and adjust the focus.

☞ changes to ▲ when the focus cannot be adjusted any farther. ☞ changes to 👤 when the focus cannot be adjusted any closer.

Tips

For focusing manually

- It is easier to focus on the subject when you use the zoom function. Move the power zoom lever towards T (telephoto) to adjust the focus, and then, towards W (wide angle) to adjust the zoom for recording.
- When you want to record a close-up image of a subject, move the power zoom lever towards W (wide angle) to fully magnify the image, then adjust the focus.

To restore automatic adjustment

Press the FOCUS button A once again. ☞ disappears and AUTO FOCUS is restored.

To use AUTO FOCUS temporarily (One push auto focus)

Record the subject while pressing and holding the PUSH AUTO FOCUS button C.
If you release the button, the setting returns to manual focusing.
Use this function to shift the focus on one subject to another. The scenes will shift smoothly.

Tip

- The focal distance information (for when it is dark and hard to adjust the focus) appears for about 3 seconds in the following cases. (It will not be displayed correctly if you are using a conversion lens (optional)).
  - When the focus mode is switched from automatic to manual.
  - When you rotate the focus ring.

To use the expanded focus (Expanded focus)

During standby, press the EXPANDED FOCUS button B.
[EXPANDED FOCUS] appears and the center of the screen is magnified by about 2.0 times (about 1.5 times during [PROG. SCAN]). It will be easier to confirm the focus setting during manual focusing. The screen returns to the original size when you push the button again.

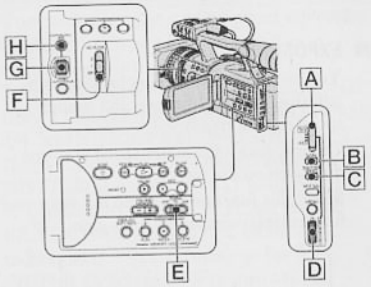
Note

- The image returns to the original size when you press the REC START/STOP button or the PHOTO/EXPANDED FOCUS button.

Tips

- You can select the type of a picture on EXPANDED FOCUS ([EXP.FOCUS TYPE] p. 71).
- Unless [REC CTL MODE] is set to [OFF], the following functions are disabled.
  - EXPANDED FOCUS button
  - ASSIGN button to which [ALLSCAN MODE] is assigned.

Adjusting the EXPOSURE/IRIS



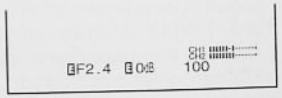
You can adjust the brightness of a picture with the EXPOSURE/IRIS dial G.
You can assign any one of [EXPOSURE1] (the default setting), [EXPOSURE2], [IRIS] and [AE SHIFT] to the EXPOSURE/IRIS dial G from the menu (p. 62).

Tips

- Even if you open the aperture more than F2.8 (i.e. make the iris value smaller, such as F1.6) during EXPOSURE/IRIS setting, changing the zoom from wide to telephoto will change the iris to F2.8.
- When the EXPOSURE/IRIS dial is set to [EXPOSURE1] or [EXPOSURE2], E appears next to the values that can be set with the dial.

■ EXPOSURE1 (the default setting)

You can adjust the display brightness by adjusting the iris and gain (the shutter speed remains fixed).
The iris, gain and shutter speed are displayed on the screen.
Select this function if you want to adjust the brightness in a wide range.



Note

- The GAIN button and the SHUTTER SPEED button are inactive.

Continued ➡

To hide the zebra pattern

• Set the ZEBRA switch [E] to OFF.

Note

• The zebra pattern is not recorded on the tape.

Tip

• This is convenient for adjusting the brightness while a histogram (p. 71) is displayed.

Adjusting the gain

You can adjust the gain manually when shooting blackish or dark objects if you do not want the AGC (auto gain control) to be activated.

① During recording or standby, set the AUTO LOCK switch [A] to the center position to release the auto lock.

② Press the GAIN button [B].
The current gain value appears.

③ Adjust the gain by turning the SEL/PUSH EXEC dial [D].
The gain can be adjusted between 0dB and 18dB by every 3dB.

Tip

• The gain value can be stored temporarily by setting the AUTO LOCK switch [A] to HOLD after the manual adjustment.

To restore automatic adjustment

Press the GAIN button [B], or set the AUTO LOCK switch [A] to AUTO LOCK.

Note

• If you set the AUTO LOCK switch [A] to AUTO LOCK, other manually adjusted items (iris, shutter speed, white balance) also become temporarily automatic.

Adjusting the shutter speed

You can manually adjust and fix the shutter speed. Depending on the shutter speed, you can make the subject look still, or emphasize the fluidity of movement.

① During recording or standby, set the AUTO LOCK switch [A] to the center position to release the auto lock mode.

② Press the SHUTTER SPEED button [C].

③ Adjust the shutter speed by turning the SEL/PUSH EXEC dial [D].
You can set a shutter speed between 1/4 second and 1/10000 second.
The selected shutter speed appears on the screen. For example, if you select 1/100 second, [100] appears. The larger the number that appears on the screen, the faster the shutter speed.

Tips

• The shutter speed can be stored temporarily by setting the AUTO LOCK switch [A] to HOLD after the manual adjustment.

• When [PROG. SCAN] is set to [24] or [24A], you can adjust the shutter speed in the range of 1/3 second to 1/10000 second.

To restore automatic adjustment

Press the SHUTTER SPEED button [C], or set the AUTO LOCK switch [A] to AUTO LOCK.

Note

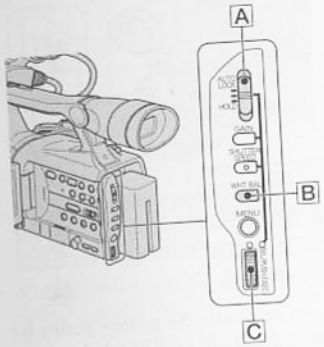
• If you set the AUTO LOCK switch [A] to AUTO LOCK, other manually adjusted items (iris, gain, white balance) also become temporarily automatic.

Tips

• It is difficult to focus automatically at a lower shutter speed. Manual focusing with your camcorder attached to a tripod is recommended.

• The picture may flicker or change colors under fluorescent lamps, sodium lamps, or mercury lamps.

Adjusting to Natural Color (White balance)



You can adjust the white balance according to the light of the recording environment. You can set two sets of white balance adjustment data separately in memory A and memory B for two different recording conditions with A and B. During recording, you can select the setup data with the SEL/PUSH EXEC dial. The setup data will be retained as long as it is not readjusted even if the power is disconnected.

1 During recording or standby, set the AUTO LOCK switch [A] to the center position to release the auto lock mode.

2 Press the WHT BAL button [B].

3 Display desired item by turning the SEL/PUSH EXEC dial [C], then press the dial.

The display changes. A → B → (Outdoor) → (Indoor)

Indicator	Shooting conditions
A (MEMORY A) B (MEMORY B)	• White balance values adjusted for light sources can be stored in memory A and memory B. Follow the steps below
(Outdoor)	• Recording a sunset/sunrise, just after sunset, just before sunrise, neon signs, or fireworks. • Under daylight color fluorescent lamps
(Indoor)	• Under the lighting condition that changes quickly • Under strong light such as in a photography studio • Under sodium lamps or mercury lamps

Tip

• You can change the white balance value for (Outdoor) by pressing and turning the SEL/PUSH EXEC dial when (Outdoor) is selected. The value can be set between -7(bluish) and +7 (reddish). The default value is 0.

To save the adjusted white balance value in memory A or B

① Select A or B according to step 3 of "Adjusting to Natural Color (White Balance)."

② Shoot something white (such as a sheet of paper) full-screen under the same lighting conditions as the subject.

③ Press the SEL/PUSH EXEC dial [C].
Pressing the dial switches between blinking A and B.
When the white balance is adjusted, A or B stops blinking and remains on. The adjusted value is now saved in the selected A or B memory.

Continued ➡