

**Advanced Operation Manual** 

LYT1366-001B

This manual includes the advanced operations of the camera.

To read the contents, use the table of the contents on the left, or click the major titles below.

- **ADVANCED RECORDING**
- **ADVANCED PLAYBACK**
- MANAGING FILES
- PLAY LIST
- PRINTING
- MENU SETTINGS

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### Zoom



Use the zoom function for close-up or wide-angle shooting. You can zoom in up to 10x by using the optical zoom.

#### To zoom in

Slide the zoom lever towards [T] (telephoto).

#### To zoom out

Slide the zoom lever towards [W] (wide-angle).

The further you slide the zoom lever, the quicker the zoom action becomes.

 Zoom magnification over 10x is done through digital image processing, and is therefore called digital zoom. Digital zooming is possible up to 200x. Set [ZOOM] to [40X] or [200X].

# NOTES:

- Focusing may become unstable during zooming. In this case, set the zoom before
  recording and lock the focus by using the <u>manual focus</u>, then zoom in or out during
  recording.
- During digital zoom, the quality of image may suffer.
- Macro shooting is possible as close as approx. 5 cm (2") to the subject when the zoom lever is set all the way to [W].
- When you zoom into a subject close to the lens, the camera may automatically zoom out depending on the distance to the subject. In this case, set [TELE MACRO] to [ON].





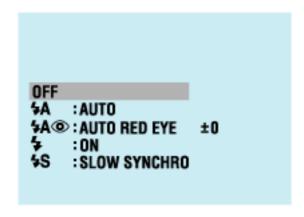
### **Flash**



You can use the flash for still image recording. The flash mode can be changed as required.

- Set the power switch to .
- Press MODE to select ...
- 3 Press ( ( ). The menu appears.
- Press △

  to select the desired flash mode.



OFF: The flash does not fire.

[‡A AUTO]: The flash fires automatically when the surroundings are dark.

**\$A** AUTO RED-EYE: The flash fires automatically but reduces the red-eye phenomenon of the subject's eyes.

4 ON: The flash fires regardless of the shooting condition.

**\$**SLOW SYNCHRO: The flash fires regardless of the shooting condition. The shutter speed becomes slower in this mode, so the background can be also brightened.

- [] = Factory preset
- Fress ►II. The selected mode indicator appears.

#### To adjust the flash brightness

Press > after selecting a flash mode in step 4, then select the desired setting by pressing  $\triangle \nabla$ .

• The adjustment range is -3 to +3.

# NOTES:

- The flash does not fire during continuous shooting.
- If the flash is not bright enough, set [GAIN] to [160].







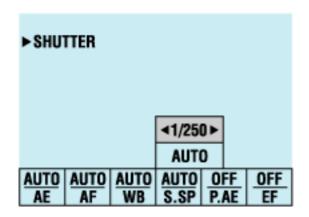
# **Manual Settings in MSET Menu**

MODE: #4/

You can use manual recording functions easily by selecting items in the MSET menus.

# How To Select a Menu Item

- Press and hold ▷ (▲ / M) so that M is displayed.
- 3 Press ▽ (MSET). The menu appears.
- 4 Press ⟨ ▷ to select a desired item from the MSET menu, then press ►Ⅱ.



There are 6 items in the MSET menu.

AE: Manual Exposure

**AF: Manual Focus** 

WB: White Balance

S. SP: Shutter Speed

P. AE: Program AE

EF: Effect

- 5 Press △▽ (or ⟨ ▷) to select a setting, then press ►Ⅱ.
- 6 Press ▽ (MSET). The menu disappears.
- NOTES:
- While recording is in progress, [S. SP], [P. AE] and [EF] cannot be set even if 
   (MSET) is pressed.
- It is not possible to set [P. AE] and [S. SP] simultaneously.



# Manual Exposure



### Manual exposure is recommended in the following situations:

- When shooting using reverse lighting or when the background is too bright.
- When shooting on a reflective natural background such as at the beach or when skiing.
- When the background is overly dark or the subject is bright.
- Select [AE] in the MSET menu. (How To Select a Menu Item)
- If [AUTO] is selected, press 🛆. (video mode only)
- 3 To brighten the image, press ▷. To darken the image, press ∢.

Adjustment range

For video recording: -6 to +6 or AUTO (automatic exposure) For still image recording: -2.0 to +2.0 (EV)

- Press ►II. The setting is completed.
- 5 Press ▽ (MSET) to close the MSET menu.

### To lock the exposure

After step 5, press and hold If for over 2 seconds. The I indicator appears.

### NOTES:

- You cannot use the manual exposure at the same time when [P. AE] is set to [SPOTLIGHT] or [SNOW], or with <u>backlight compensation</u>.
- If the adjustment does not cause any visible change in brightness, set [GAIN UP] to [ON].



# Manual Focus



The camera's Full Range AF system offers continuous focusing ability from close-up to infinity. However, the correct focus may not be obtained depending on the shooting condition. In this case, use the manual focus mode.

- Select [AF] in the MSET menu. (How To Select a Menu Item)
- If [AUTO] is selected, press △, then press ►II.
- Press to focus on a further subject. ( PA)
- When the focus level cannot be adjusted any further or closer, [▲] or [♣] will blink.
- Press ►II. The setting is completed.

#### To return to automatic focus

Select [AUTO] in step 2.

#### Manual focus is recommended in situations listed below;

- When two subjects overlap in the same scene.
- When illumination is low.\*
- When the subject has no contrast (difference in brightness and darkness), such as a flat, one-color wall, or a clear, blue sky.\*
- When a dark object is barely visible in the display.\*
- When the scene contains minute patterns or identical patterns that are regularly repeated.
- When the scene is affected by sunbeams or light reflecting off the surface of a body of water.
- When shooting a scene with a high-contrast background.
- \* The following low-contrast warnings appear blinking: ▲, ◄, ▶, and ♣.

# White Balance



The white balance is usually adjusted automatically for correctness of the color reproduction under various lighting. However, you can also select the following modes according to the shooting situations.

- Select [WB] in the MSET menu. (How To Select a Menu Item)
- Press △▽ to select the desired mode.
- MWB: For adjusting the white balance manually depending on the light source. (Manual White Balance Adjustment)
- FINE: When shooting outdoors on a sunny day.
- CLOUD: When shooting outdoors on a cloudy day.
- # HALOGEN: When a video light or similar type of lighting is used.
- 3 Press ►II. The setting is completed.

### To return to automatic white balance

Select [AUTO] in step 2.

#### **Manual White Balance Adjustment**

- Select [MWB] in WB menu.
- Hold a sheet of plain white paper in front of the subject. Adjust zoom or position yourself so that the white paper fills the screen.
- 3 Press and hold ►II until ♣ begins blinking then stops blinking.

# NOTES:

- In step 2, it may be difficult to focus on the white paper. In such a case, adjust with manual focusing.
- A subject can be shot under various types of lighting conditions indoors (natural, fluorescent, candlelight, etc.). Because the color temperature is different depending on the light source, the subject tint will differ depending on the white balance settings. Use this function for a more natural result.
- Once you adjust white balance manually, the setting is retained even if the power is turned off or the battery is removed.







# Shutter Speed



You can adjust the shutter speed manually.

- Select [S. SP] in the MSET menu. (How To Select a Menu Item)
- Press \( \rightarrow \) to select the desired mode.

The shutter speed can be selected from 1/2 to 1/4000 second.

1/2 1/4 1/8 1/15 1/30	Slow shutter speed can blur the subject to give the impression of flowing motion.
1/60 (NTSC) 1/50 (PAL)	The shutter speed is fixed at 1/60 (or 1/50) second. Black bands that usually appear when shooting a TV screen become narrower.
1/100 (NTSC) 1/120 (PAL)	The shutter speed is fixed at 1/100 (or 1/120) second. The flickering that occurs when shooting under a fluorescent light or mercury-vapor lamp is reduced.
1/250 1/500 1/1000* 1/2000* 1/4000*	Fast shutter speed allows fast-moving subject to be captured one frame at a time vividly. Use these settings when an automatic adjustment does not work well by SPORTS mode in <a href="Program AE">Program AE</a> .

<sup>\*</sup> Not available for still image recording. If the flash is used, 1/500 is also not available.

- 3 Press ►II. The setting is completed.
- Press ▽ (MSET) to close the MSET menu.

### To return to automatic shutter speed

Select [AUTO] in step 2.

# Program AE



You can use program AE settings for specific shooting situations.

- Select [P. AE] in the MSET menu. (How To Select a Menu Item)
- Press △
   to select the desired mode.

SPORTS: Fast shutter speed allows fast-moving subject to be captured one frame at a time vividly. The shutter speed is set at 1/250 to 1/4000 second automatically.

SNOW: Compensates for subjects that may appear too dark when shooting in extremely bright surroundings such as in the snow.

SPOTLIGHT: Compensates for subjects that may appear too bright when shooting under extremely strong direct lighting such as spot lights.

- TWILIGHT: Makes evening scenes look more natural.
- Press ►II. The setting is completed.

### To turn off the program AE function

Select [OFF] in step 2.











You can add special effects to your recording images.

- Select [EF] in the MSET menu. (How To Select a Menu Item)
- Press to select the desired mode.
- SEPIA: The image has a brownish tint like old photos.
- B/W MONOTONE: The image becomes black and white like old movies.
- CLASSIC FILM\*: The image has an old movie atmosphere by the effect of skipping frames.
- STROBE\*: The image looks like a series of consecutive snapshots.
- \* Not available for still image recording.
- 3 Press ►II. The setting is completed.
- Press 

  (MSET) to close the MSET menu.

#### To turn off the effect

Select [OFF] in step 2.







### **Backlight Compensation**

MODE: ♣4/ 🗖

Backlight Compensation brightens the subject quickly. With simple operation, dark portions of the subject are brightened by increasing the exposure.

- Set the power switch to .
- $m{2}$  Press and hold igr> ( $m{A}/m{M}$ ) so that  $m{M}$  is displayed.
- 3 Press 🛆 ( ) so that the 🦣 indicator appears.

### To cancel backlight compensation

Press  $\triangle$  ( $\nearrow$ ) twice so that the  $\nearrow$  indicator disappears.







### **Spot Exposure Control**

MODE: #4/

Selection of a spot metering area enables more precise exposure compensation. You can select one of the three metering areas.

- Set the power switch to .
- $\nearrow$  Press and hold  $\nearrow$  ( $\cancel{A}/\cancel{M}$ ) so that  $\cancel{M}$  is displayed.
- Press 🛆 (📆) twice so that the 💽 indicator appears.
- The spot metering area frame ( ) appears at the center.
- 4 Press 4 to select the desired spot metering area frame.
- 5 Press ►II. The setting is completed.

### To lock the exposure

After step 4, press and hold If for over 2 seconds. The I indicator appears.

### To cancel spot exposure control

Press  $\triangle$  ( ) once so that the indicator disappears.

# NOTES:

- Spot exposure control may not be possible when some other functions are activated.
- Depending on the shooting location and condition, optimum result may not be attained.



### **Index Display**



You can view multiple files stored in a recording medium at a time. This browsing capability makes it easy to locate a particular file you want.

# Index Display of Video Files

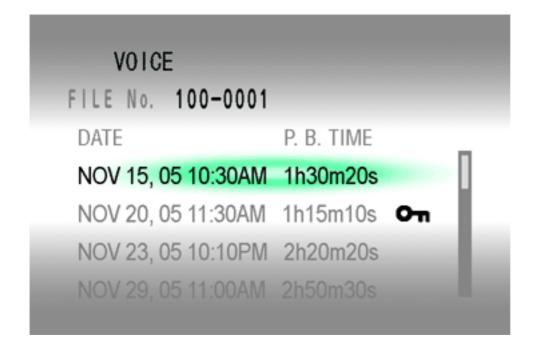
- Slide the zoom lever to [W] while playback is paused.
- The display switches to the index screen.



- 2 Move the frame to the desired file by pressing  $\triangle \nabla \langle \rangle$ .
- Pressing INFO displays the selected <u>file information</u>.
- 3 Press ►II to start playback.
- Index Display of Still Image Files
- Slide the zoom lever to [W] when a recorded image is displayed.
- The display switches to the index screen.



- 2 Move the frame to the desired file by pressing  $\triangle \nabla \langle \rangle$ .
- Pressing INFO displays the selected file information.
- 3 Press ►II. The selected file is displayed.
- Playback List of Voice Files
- Slide the zoom lever to [W] while playback is paused.
- The display switches to the playback list.



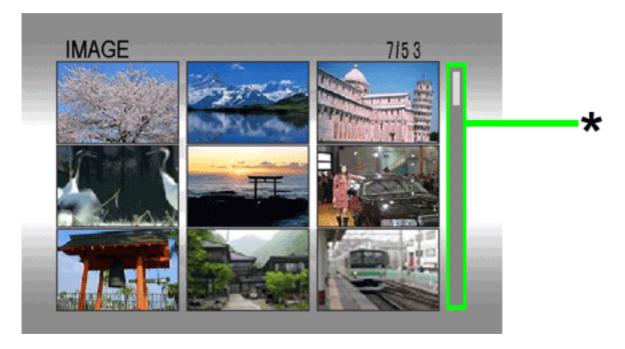
(The display format of date and time differs depending on the country where this product is sold.)

- ✓ Press △▽ to select the desired file.
- Pressing INFO displays the selected <u>file information</u>.
- 3 Press ►II to start playback.

# How to Use the Scroll Bar

You can use the vertical scroll bar to find the desired files quickly. The scroll bar is useful when <u>deleting files</u>, <u>creating play list</u>, <u>setting DPOF</u>, etc.

Slide the zoom lever towards [W] to select the scroll bar\* in the index display.



- Press △▽ to display the next or previous page.
- If you press and hold △▽, the high speed search starts.
- If you find the desired file, slide the zoom lever towards [T], then select the file.







### Various Playback Features



### Still playback (Pause)

Press | during normal playback.

To resume normal playback, press ► II again.

### Search playback

During normal playback, press ▷ ( ▶ ) for forward search, or ◀ (◄ ) for reverse search.

- Each press of the button increases the search speed for each direction. (-60x to +60x)
- To resume normal playback, press ►Ⅱ.

### Locating the start point of the file or skip the file

Press ( ) to locate the start point of the next file. Pressing ( ) repeatedly skips files in forward direction.

Press  $\triangle$  ( $\bowtie$ ) to locate the start point of the current file. Pressing  $\triangle$  ( $\bowtie$ ) repeatedly skips files in reverse direction.

• If 

(►►) or 

(►►) is pressed during normal playback or search, playback resumes after locating the start point of a file.

#### Frame-by-frame playback

While playback is paused, press (▶) (▶) or (◄).

- Each press of button advances or reverses the still picture frame by frame.
- To resume normal playback, press

#### Slow motion playback

While playback is paused, press  $\triangleright$  ( $\blacktriangleright$ ) or  $\triangleleft$  ( $\blacktriangleleft$ ) for over 2 seconds.

### **Playback Zoom**



You can magnify the playback image up to 5x.

- During playback, at the point you want to zoom in, press ►II to pause playback.
- Slide the zoom lever towards [T] to zoom in.
- The full view of the image is displayed in the small screen on the lower right side. The
   \* mark indicates the center point of the magnified area.
- Press  $\triangle \nabla \langle \rangle$  to move to the magnified area you want to view.
- To zoom out, slide the zoom lever towards [W].
- When the zoom is set all the way to [W] (wide-angle) side, sliding the zoom lever to [W] switches the display to the <u>index screen</u>.







# Wipe or Fader Effect

You can view videos with various effects of scene transition.

- Set the power switch to **.** Press MENU. The menu appears. Press △

  to select [

  WIPE/FADER], then press 

  II. Press 🛆 🔽 to select a desired effect. Wh FADER-WHITE: Fade in or out with a white screen. Bk FADER-BLACK: Fade in or out with a black screen. RW FADER-B.W: Fade in to a color screen from a black and white screen, or fade out from color to black and white. WIPE-CORNER: Wipe in on a black screen from the upper right to the lower left corner, or wipe out from lower left to upper right, leaving a black screen. WIPE-WINDOW: The scene starts in the center of a black screen and wipes in toward the corners, or comes in from the corners, gradually wiping out to the center. WIPE-SLIDE: Wipe in from right to left, or wipe out from left to right. WIPE-DOOR: Wipe in as the two halves of a black screen open to the left and right, revealing the scene, or wipe out and the black screen reappears from left and right to cover the scene. WIPE-SCROLL: The scene wipes in from the bottom to the top of a black screen, or wipes out from top to bottom, leaving a black screen.
- WIPE-SHUTTER: Wipe in from the center of a black screen toward the top and bottom, or wipe out from the top and bottom toward the center leaving a black screen.

- 6 Press ►II. The setting is completed.
- Press MENU to close the menu.
- The selected wipe or fader effect works when playback starts and ends.

### To turn off the effect

Select [OFF] in step 5.







### **Playback Effect**



You can view videos with special image effects.

- Set the power switch to .
- Press MENU. The menu appears.
- Press △▽ to select [☐ EFFECT], then press ►□.
- 5 Press △▽ to select a desired effect.
- SEPIA: The image has a brownish tint like old photos.
- B/W MONOTONE: The image becomes black and white like old movies.
- CLASSIC FILM: The image has an old movie atmosphere by the effect of skipping frames.
- STROBE: The image looks like a series of consecutive snapshots.
- 6 Press ►II. The setting is completed.
- Press MENU to close the menu.

#### To turn off the effect

Select [OFF] in step 5.







### **Playback Zoom**

MODE:

You can magnify the playback image up to 5x.

- Display the playback screen of a still image.
- If the index screen is displayed, slide the zoom lever to [T].
- Slide the zoom lever towards [T] to zoom in.
- The full view of the image is displayed in the small screen on the lower right side. The \* mark indicates the center point of the magnified area.
- Press △▽◁▷ to move to the magnified area you want to view.
- To zoom out, slide the zoom lever towards [W].
- When the zoom is set all the way to [W] (wide-angle) side, sliding the zoom lever to [W] switches the display to the index screen.







# **Image Rotation**

You can rotate a still image clockwise or counterclockwise.

- Display the playback screen of a still image.
- If the index screen is displayed, slide the zoom lever to [T].
- Press ▽ to rotate 90° clockwise.
- Each time you press ♥, the image rotates clockwise (90°→180°→270°→0°).

Press \_ to rotate 90° counterclockwise.

• Each time you press △, the image rotates counterclockwise (270°→180°→90°→0°).







# **Playback Effect**

MODE:

You can view still images with special image effects.

- Set the power switch to .
- Press MODE to select ...
- Press MENU. The menu appears.
- 4 Press △▽ to select [Æ EFFECT], then press ►Ⅱ.
- 5 Press △▽ to select a desired effect.
- SEPIA: The image has a brownish tint like old photos.
- B/W MONOTONE: The image becomes black and white like old photos.
- 6 Press ►II. The setting is completed.
- Press MENU to close the menu.

#### To turn off the effect

Select [OFF] in step 5.







### **Voice Playback Functions**



### **Changing playback speed**

You can adjust the playback speed by setting [PLAYBACK SPEED] to [FASTPLAY] or [SLOWPLAY].

### Search playback

During normal playback, press ▶ (▶) for forward search, or 〈 (◄) for reverse search. To resume normal playback, press ▶Ⅱ.

### Locating the start point of the file or skip the file

Press  $\nabla$  (**)** to locate the start point of the next file. Pressing  $\nabla$  (**)** repeatedly skips files in forward direction.

Press  $\triangle$  ( $\bowtie$ 4) to locate the start point of the current file. Pressing  $\triangle$  ( $\bowtie$ 4) repeatedly skips files in reverse direction.







## **Viewing File Information**

MODE: ₩/ 1 1 1

You can view the file information in playback mode.

#### Information on video files

Press INFO while video playback is paused. File information appears.

FILE: File name

FOLDER: Folder name

DATE/TIME: Date and time of the recording

PB TIME: Playback time (length of the file)

QUALITY: Image quality

PROTECT: File protection status

• If you press INFO in the index screen, selected file information is displayed.

To turn off the file information display, press INFO again.

### Information on still image files

Press INFO while a still image is displayed. File information appears.

FILE: File name

FOLDER: Folder name

DATE/TIME: Date and time of the recording

SIZE: Image size

QUALITY: Image quality

PROTECT: File protection status

• If you press INFO in the index screen, selected file information is displayed.

To turn off the file information display, press INFO again.

### Information on voice files

Press INFO while voice playback is paused. File information appears.

FILE: File name

FOLDER: Folder name

DATE/TIME: Date and time of the recording

PB TIME: Playback time (length of the file)

QUALITY: Sound quality

PROTECT: File protection status

• If you press INFO in the playback list, selected file information is displayed.

To turn off the file information display, press INFO again.







### **Protecting Files**

MODE: ₩/ 1 1 1

You can protect files from the accidental erasure.

- Set the power switch to **.**.
- Select the file type (video, still image or voice) by pressing MODE.
- Press MENU. The menu appears.
- 4 Press △▽ to select [O¬ PROTECT], then press ▶Ⅱ.

### To protect the currently displayed file

- 5 Press △▽ to select [ CURRENT], then press ► II.
- 6 Press △▽ to select [EXECUTE], then press ►Ⅱ.
- You can select the previous or next file with < >.
- To release protection, select the protected file, then perform step 5 and 6.

### To protect by selecting multiple files

- 5 Press △▽ to select [♣ FILE SELECT], then press ►Ⅱ.
- The index screen appears.
- 6 Press △▽ ⟨▷ to select the file you want to protect, then press ►Ⅱ.
- The mo mark appears on the file.
- To protect other files, repeat step 6.
- The scroll bar can also be used with the zoom lever and  $\triangle \nabla$ .
- 7 Press MENU.

- Press △▽ to select [QUIT], then press ►II.
- The selected files are protected.
- To release protection, select the protected file in step 6.

### To protect all files

- 5 Press △▽ to select [♣ PROTECT ALL], then press ▶Ⅱ.
- 6 Press △

  to select [EXECUTE], then press ►II.
- All files are protected.

### To release protection of all files

- 5 Select [ CANCEL ALL], then press
- 6 Press △

  to select [EXECUTE], then press ►II.

### **Q** CAUTION:

 Do not remove the recording medium or perform any other operation (such as turning off the power) during protection. Also, be sure to use the provided AC adapter, as the recording medium may be corrupted if the battery becomes exhausted during protection. If the recording medium becomes corrupted, format it.







### **Deleting Files**

MODE: ₩/ 10 / 0

You can delete unnecessary files.

- Deleting by the m button
- Set the power switch to .
- Select the file type (video, still image or voice) by pressing MODE.
- $\bigcirc$  Display the desired file by pressing  $\bigcirc$ , then press  $\bigcirc$ .
- You can also select the file in the index display.
- 4 Press △▽ to select [EXECUTE], then press ▶Ⅱ.
- NOTE:
- If you press during recording mode, the file recorded most recently will be deleted. However, if the recording mode (video, still image or voice) is switched or the power is turned off and on again after recording, you cannot delete the file.
- Deleting on the menu screen
- Set the power switch to 🛌.
- Select the file type (video, still image or voice) by pressing MODE.
- 3 Press MENU. The menu appears.
- 4 Press △▽ to select [m DELETE], then press ▶Ⅱ.

- 5 Press △▽ to select [🏠 CURRENT], then press ►Ⅱ.
- 6 Press △▽ to select [EXECUTE], then press ►II.
- You can select the previous or next file with

#### To delete by selecting multiple files

- 5 Press △▽ to select [ FILE SELECT], then press
- The index screen appears.
- 6 Press △ ▽ ⟨ ▷ to select the file you want to delete, then press ► | |.
- The scroll bar can also be used with the zoom lever and △ ▽.
- To delete other files, repeat step 6.
- Press MENU.
- Press △▽ to select [EXECUTE AND QUIT], then press ►Ⅱ.
- The selected files are deleted.

#### To delete all files

- 5 Press △▽ to select [ DELETE ALL], then press ► II.
- 6 Press △

  to select [EXECUTE], then press ►II.
- To cancel deletion, select [CANCEL], then press ►Ⅱ.

### NOTES:

- Protected files cannot be deleted. To delete them, release protection first.
- Once files are deleted, they cannot be restored. Check files before deleting.

## 🚺 CAUTION:

Do not remove the recording medium or perform any other operation (such as turning

off the power) during deletion. Also, be sure to use the provided AC adapter, as the recording medium may be corrupted if the battery becomes exhausted during deletion. If the recording medium becomes corrupted, format it.







## Formatting a Recording Medium

MODE: ₩/ 🗖 / 🖢

You can format (initialize) a recording medium in the CF or SD slot. Before using a recording medium with this camera for the first time, you have to format it. This enables stable speeds and operation when accessing the recording medium. Be aware that all files and data including protected files will be erased.

- Set the power switch to 📵 or 🕞.
- Press MENU. The menu appears.
- 3 Press △▽ to select [ MEMORY CARD SETTING], then press ► II.
- 4 Press △▽ to select [# FORMAT], then press ►Ⅱ.
- 5 Press △▽ to select [CF SLOT] or [SD SLOT], then press ▶Ⅱ.

CF SLOT: CF card SD SLOT: SD card

- 6 Press △

  to select [EXECUTE], then press ►II.
- To cancel the formatting, select [CANCEL], then press ►□.

## CAUTION:

 Do not remove the recording medium or perform any other operation (such as turning off the power) during format. Also, be sure to use the provided AC adapter, as the recording medium may be corrupted if the battery becomes exhausted during format. If the recording medium becomes corrupted, <u>format</u> it again.

### NOTE:

 Do not format the recording medium on the PC. Make sure to format the recording medium on the camera.







## **Cleaning Up a Recording Medium**

MODE: ₩/ 🗖 / 🖢

Writing speed of recording media tends to become slow after long period of repeated use. To regain the speed, execute cleanup periodically. The cleanup function is equivalent to "Defragmentation" of PC's function.

# NOTE:

Make sure to use the provided AC adapter for the power supply when cleaning up a recording medium.

- Set the power switch to 📵 or 🕞.
- If the AC adapter is not connected to the camera, a warning message appears. In this
  case, connect the AC adapter.
- Press MENU. The menu appears.
- 3 Press △▽ to select [ MEMORY CARD SETTING], then press ► II.
- 4 Press △▽ to select [ # CLEAN UP], then press ►[ ].
- 5 Press △▽ to select [CF SLOT] or [SD SLOT], then press ▶Ⅱ.

CF SLOT: CF card SD SLOT: SD card

- 6 Press △

  to select [EXECUTE], then press ►II.
- To cancel clean up, select [CANCEL], then press ►Ⅱ.
- When clean up is finished, [CLEANING UP COMPLETED] appears. Press ►II to complete the operation.
- It may take for a while until cleanup is completed.

# CAUTION:

Do not remove the recording medium or perform any other operation (such as turning off







## **Copying/Moving Still Image Files**

MODE:

You can copy or move still image files between recording media in CF and SD slots using the on-screen display.

#### Before proceeding to following steps,

- Make sure that recording media are inserted in both CF and SD slots.
- Make sure that enough free space is left in the copy/move destination medium.
- Set the power switch to 📵 or 🕞.
- Press MENU. The menu appears.
- 3 Press △▽ to select [ MEMORY CARD SETTING], then press ► II.
- Press △▽ to select [ COPY/MOVE], then press ► II.
- 5 Press △▽ to select [COPY] or [MOVE], then press ►Ⅱ.

COPY: Files are copied to the destination medium while leaving original files in the source medium.

MOVE: Files are moved to the destination medium while deleting original files (except readonly files) in the source medium.

6 Press ( ) to select the direction of copy/move, then press ▼. (SD→CF or CF→SD)

#### To copy or move by selecting files

- Press ⟨ | > to select [FILE], then press ► | |.
- The index display appears.
- Press △▽◁▷ to select a desired file, then press ►Ⅱ.
- The check mark () appears on the selected file.

- To select other files, repeat this step.
- The scroll bar can also be used with the zoom lever and  $\triangle \nabla$ .
- Press MENU to return to the previous screen.
- ness △▽ to select [EXECUTE], then press ►Ⅱ.
- File transfer starts.
- To stop the file transfer, press ►II, then select [EXECUTE] and press ►II.
- 12 When [COPYING COMPLETED] appears, press ▶Ⅱ to finish the operation.

#### To copy or move all still image files in the recording medium

- Press () to select [ALL].
- Press △▽ to select [EXECUTE], then press ►Ⅱ.
- If you want to cancel, select [CANCEL], then press ►□.
- File transfer starts.
- To stop the file transfer, press ►□, then select [EXECUTE] and press ►□.
- 10 When [COPYING COMPLETED] appears, press ►II to finish the operation.







## **Resetting the File Number**

MODE: ₩/ 1 1

By resetting the file number (name), a new folder will be made. The new files you are going to make will be stored in the new folder. It is convenient to separate the new files from previously recorded files.

- Set the power switch to 
  or 
  .
- Press MENU. The menu appears.
- Press △▽ to select [ MEMORY CARD SETTING], then press ► II.
- 4 Press △▽ to select [ RESET], then press
- 5 Press △▽ to select the file type (video, still image or voice), then press ►Ⅱ.
- 6 Press △

  to select [EXECUTE], then press ►II.
- 7 Press ►II.
- The new folder (such as [101JVCSO]) will be made and the file number will start again from the new number (such as "PIC\_0001.JPG").



# **Play List Functions**



## What is "Play List"?

You can create a play list by collecting previously recorded video files. (Creating Play List)

By playing back the play list, you can view your original video clips. (Playing Back Play List)

Created play lists can be modified or deleted. (Modifying Play Lists)

Dubbing to an external device using a play list is possible. (Dubbing Using Play List)







# **Creating Play List**

MODE:

You can create a play list by collecting previously recorded video files.

- Set the power switch to .
- 2 Press MODE to select 4.
- Press MENU. The menu appears.
- 4 Press △▽ to select [4 PLAY LIST], then press ►Ⅱ.
- 5 Press △▽ to select [🎤 EDIT], then press ▶Ⅱ.

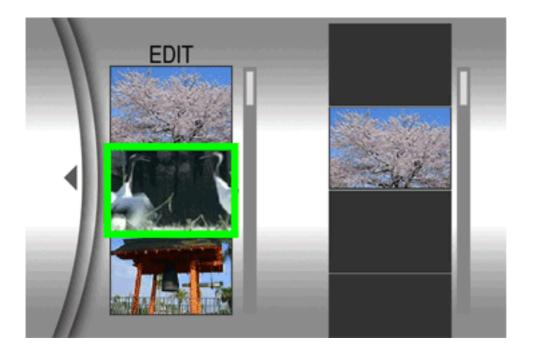


6 Press △▽ to select [NEW LIST], then press



(The display format of date and time differs depending on the country where this product is sold.)

Press to scroll upward or downward the thumbnail images of recorded files, and select a file to be added to a play list.



- The <u>scroll bar</u> can also be used with the zoom lever and △▽.
- Press > II. The frame for selecting an inserting point appears.
- Press to scroll upward or downward the thumbnail of images in a play list, and select a position where you want to insert the selected file.
- The scroll bar can also be used with the zoom lever and △▽.

- Press | The selected file is added to a play list.
- To add other files, repeat steps 7 to 10.
- Press MENU. The confirmation screen appears.
- Press △▽ to select [SAVE AND QUIT], then press ▶Ⅱ.
- To return to the edit screen, select [CANCEL].
- If you do not want to save the play list, select [DELETE AND QUIT].

#### To check the play list by playing back the video

You can check the play list before saving it.

- After step 10, select a thumbnail image of the play list with .
- Press △▽ to select a scene you want to check.
- 3 Press ►II. The playback of the play list starts from the selected scene.
- The playback stops at the end of the play list automatically.

#### To check only the scene transition

- After step 10, select a scene transition with .
- If a scene is selected, press once more to select the scene transition bar.
- Press △▽ to select a scene transition you want to check.
- Press ►II to start playback of the selected scene transition.

#### To delete the added file from the play list

- After step 10, select a thumbnail image of the play list with .
- Press 🛆 🗢 to select the file you want to delete, then press 📺.

## **Playing Back Play List**



By playing back the play list, you can view your original video clips.

- Set the power switch to .
- Press MENU. The menu appears.
- 4 Press △▽ to select [4 PLAY LIST], then press ►Ⅱ.
- Press △▽ to select [■ PLAY LIST CONTENTS], and press ►Ⅱ. The table of play lists appears.
- 6 Press △▽ to select a list you want to play back.



(The display format of date and time differs depending on the country where this product is sold.)

- The scroll bar can also be used with the zoom lever and △▽.
- 7 Press ►II to start playback.

- During playback of play list, "P" mark appears on the top left corner of the screen.
- If you slide the zoom lever towards [W] while playback is paused, the index screen for play list appears. You can see the contents of the play list and select the desired scene. To return to playback screen, slide the zoom lever to [T].
- You can use various playback functions during playback.
- To stop playback, press ►II.
- To return to the normal playback mode, select [ALL SCENES] in step 6.





# Add/Delete Files in Play List



You can edit existing play lists by adding or deleting files.

- Set the power switch to .
- Press MENU. The menu appears.
- 4 Press △▽ to select [4 PLAY LIST], then press
- 5 Press △▽ to select [♣ EDIT], then press ▶Ⅱ.



- 6 Press △▽ to select the play list you want to edit, then press ►Ⅱ.
- To add or delete files, follow the steps 7 to 12 in Creating Play List.







## Changing Play List Name



The default name of play list is its creation date and time. You can change the name on the keyboard screen as you like.

- Set the power switch to 🛌.
- 🖊 Press MODE to select 🎎.
- Press MENU. The menu appears.
- Press △

  to select [

  PLAY LIST], then press ►II.
- 5 Press △▽ to select [♣ RENAME], then press ►Ⅱ. The table of play lists appears.
- 6 Press △▽ to select a play list whose name you want to change.
- The scroll bar can also be used with the zoom lever and  $\triangle \nabla$ .
- The thumbnail appears on the upper right side.
- Press ►II. The keyboard screen appears.
- Press to select the desired letter, then press
- Repeat this process to complete the name.
- You can change the character types (capital letters, small letters or marks) by selecting [A/a/@].
- To correct a letter, select [←] or [→] and press ►□ to move the cursor to the letter, then select [CLEAR] and press | I.
- 🤥 Press △▽◁▷ to select [←], then press ►Ⅱ.
- To cancel the setting, select [CANCEL], and press ►□.







# Deleting Play List



You can delete unnecessary play lists.

- Press MENU. The menu appears.
- Press △▽ to select [← PLAY LIST], then press ►Ⅱ.
- 5 Press △▽ to select [m DELETE], then press ▶II. The table of play lists appears.
- Press △
   to select a play list you want to delete.
- The thumbnail appears on the upper right side.
- To delete all play lists at once, select [DELETE ALL].
- Press |
- Press △▽ to select [EXECUTE], and press ▶Ⅱ. The selected play list is deleted.
- To cancel the setting, select [CANCEL], and press ►□.
- Original files are not deleted even if you delete the play list.





## **Dubbing Using Play List**



Dubbing to an external device using a play list is possible.

- Connect the camera and your VCR with the S-Video/Audio/Video cable. For details, refer to "Connecting to a TV or VCR" in the instruction manual (printed edition).
- 2 Set the VCR to the recording standby mode.
- Set the power switch to .
- Press MODE to select 4.
- 5 Press MENU. The menu appears.
- 6 Press △▽ to select [4 PLAY LIST], then press
- Press △▽ to select [■ PLAY LIST CONTENTS], and press ▶Ⅱ. The table of play lists appears.
- Press △▽ to select a list you want to dub.
- The scroll bar can also be used with the zoom lever and  $\triangle \nabla$ .
- Press . Screen for dubbing appears.
- Press △▽ to select [START PLAYBACK], then press ►Ⅱ. Playback on the camera starts.
- The black screen is displayed for 5 seconds.
- While the black screen is displayed for 5 seconds, start recording on the VCR. (Refer to your VCR's instruction manual.)
- To stop dubbing, stop recording on the VCR while the black screen is displayed for 5 seconds. Then stop playback on the camera.

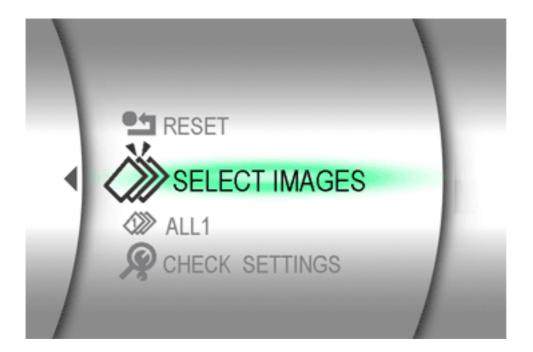
## **DPOF Print Setting**

MODE:

This camera is compatible with DPOF (Digital Print Order Format). You can set which images to be printed and the number of prints with this camera. This feature is useful to print with a DPOF-compatible printer or bring a recording medium to photo lab for print.

#### To print by selecting a still image

- Set the power switch to .
- Press MODE to select
- 3 Press MENU. The menu appears.
- Press △▽ to select [▶ DPOF], then press ▶Ⅱ. The DPOF menu screen appears.
- 5 Press △▽ to select [※ SELECT IMAGES], then press ▶Ⅱ.



6 Press △▽ ⟨ ▷ to select the desired file, then press ► II.



- The scroll bar can also be used with the zoom lever and △▽.
- If you slide and hold the zoom lever towards [T], the preview screen of the still image is displayed.
- Press ⟨ ▷ to select the number of prints (max. 15 prints), then press ► Ⅱ.
- To set print information for other images, repeat steps 6 and 7.
- Press MENU to finish the setting.
- To cancel the selection, select the same image in step 6.

### NOTE:

The DPOF setting is available up to 999 images.

#### To print all still images (One print for each)

- Display the DPOF menu screen. (To print by selecting a still image)
- Press △▽ to select [ ALL 1], then press ►Ⅱ.
- 3 Press △▽ to select [EXECUTE], then press ►□.
- Press It to finish the setting.

#### To confirm the DPOF setting

- Display the DPOF menu screen. (To print by selecting a still image)
- Press △▽ to select [🏿 CHECK SETTINGS], then press ►II.
- If necessary, change the number of prints for the desired file by following the steps 6 to 7 in To print by selecting a still image.
- 4 Press MENU to return to the previous menu.

#### To reset the DPOF setting

- Display the DPOF menu screen. (To print by selecting a still image)
- 🖊 Press 🛆 🗢 to select [🖭 RESET], then press 💵
- 3 Press △▽ to select [EXECUTE], then press ►II.
- 4 Press ►II to close the menu.







## **Direct Printing with a PictBridge Printer**

MODE:

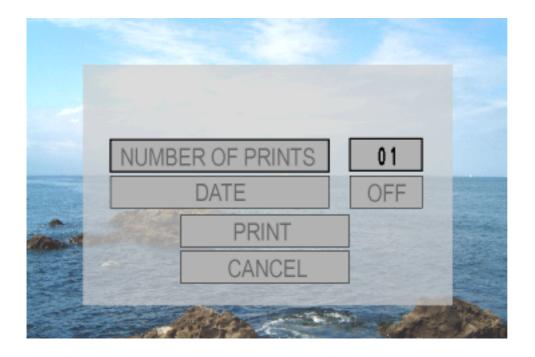
If your printer is compatible with PictBridge, still images can be printed easily by connecting the camera with USB cable directly to the printer. <a href="DPOF setting">DPOF setting</a> can also be used.

# NOTE:

• After selecting [DIRECT PRINT] in the menu, connect the USB cable.

#### To print by selecting a still image

- Set the power switch to 🛌.
- 3 Press MENU. The menu appears.
- 4 Press △▽ to select [♣ DIRECT PRINT], then press ▶Ⅱ. A message [PLEASE CONNECT PRINTER] appears.
- 5 Connect the camera to the printer with USB cable.
- After a while, the print menu appears.
- 6 Press △▽ to select [SELECTED PRINT], then press ►II.
- Press () to select the desired file, then press
- ${\color{red} 8}$  Press  ${\color{red} \lozenge}{\color{black} \triangleright}$  to set the number of prints.



- The number of prints can be set from 1 to 99.
- Press △▽ to select [DATE], then press ⟨ ⟩ to select [ON] or [OFF].
- Select [ON] to print the date and [OFF] to not to print.
- Press to select [PRINT], then press

#### To cancel print setting

Press △▽ to select [CANCEL], then press ▶Ⅱ.

#### To stop printing after printing starts

- Press | The confirmation screen appears.
- Press △▽ to select [EXECUTE], then press ►Ⅱ.

#### To print using the DPOF setting

If the printer is compatible with DPOF, you can use the <u>DPOF setting</u>.

- Set the power switch to .
- 2 Press MODE to select ...
- 3 Press MENU. The menu appears.

- Press △

  to select [

  I

  DIRECT PRINT], then press 

  II. A message [PLEASE] CONNECT PRINTER] appears.
- Connect the camera to the printer with USB cable.
- After a while, the print menu appears.
- Press △▽ to select [DPOF PRINT], then press ►II.
- Press △▽ to select [PRINT], then press ▶Ⅱ. The images are printed.
- To confirm the DPOF setting, press △▼ to select [CHECK SETTINGS], then press ► II. After that, press MENU to return to the previous menu.

## NOTE:

 If the printer is not recognized, or to print again after direct printing with a PictBridge Printer, remove the USB cable, select [DIRECT PRINT] in the menu again, and then reconnect the cable.







# **Changing The Menu Settings**

MODE: ₩/ 🗖 / 🖢

You can change the menu settings to customize your camera. Access the desired menu screen by following the steps below, then change the various settings.

- Select the operation mode by setting the power switch to (recording) or (playback).
- Press MODE to select (video), (still image) or (voice).
- Press MENU. The menu screen appears.
- Press △

  to select the desired menu item.
- 5 Press ►II. The sub menu appears.
- When selecting the menu which has one more sub menu, repeat step 4 and 5.
- 6 Press △

  to select the desired setting.
- Press ►II. Selection is complete.
- To return to the normal screen, press MENU.

# NOTE:

• Even if the menu item is displayed, some item can not be set depending on the selected mode (video/still image/voice, recording/playback). In this case, it can not be advanced to sub menu or next menu.

#### Following menus are available:

Menu	Power switch	Mode lamp
Common Menus for All Modes	•/•	<b>#</b> / <b>6</b> / <b>9</b>
Video Recording Menus	•	**
Video Playback Menus	▶	**

Still Image Recording Menus	•	Ď
Still Image Playback Menus	▶	Ō
Voice Recording Menus	•	•
Voice Playback Menus	<b>•</b>	<b>.</b>

### To display the operation guide

Press INFO when the menu screen is displayed.

• To remove the operation guide, press INFO again.







### **Common Menus for All Modes**

MODE: ₩/ 1 1 1

[]=Factory-preset

### **M** BASIC SETTING



EXECUTE: Resets all settings to the factory-preset.

[CANCEL]: Returns to menu screen without executing reset.

### **DEMO MODE**

OFF: Disables the function.

[ON]: Activates demonstration mode and shows various features on the display.

Demonstration starts in the following cases:

- When the menu screen is closed after [DEMO MODE] is set to [ON].
- With [DEMO MODE] set to [ON], if there is no operation for about 3 minutes after the power switch is set to .
- Performing any operation during the demonstration stops the demonstration temporarily. If no operation is performed for more than 3 minutes after that, the demonstration will resume.

# NOTES:

- If a recording medium is in the camera, the demonstration cannot be turned on.
- [DEMO MODE] remains [ON] even if the camera power is turned off.

### **■**)) OPERATION SOUND

OFF: Turns off operation sound.

BEEP: The beep sounds when the power is turned on or off, and at the beginning and end of recording.

[MELODY]: Instead of a beep, a melody sounds when any operation is performed.

### \* MEMORY CARD SETTING

### **VIDEO MODE**

[CF SLOT]: The CF card is selected as a recording medium.

SD SLOT: The SD card is selected as a recording medium.

## MAGE MODE

[CF SLOT]: The CF card is selected as a recording medium.

SD SLOT: The SD card is selected as a recording medium.

### **UVOICE MODE**

[CF SLOT]: The CF card is selected as a recording medium.

SD SLOT: The SD card is selected as a recording medium.

### F FORMAT

[CF SLOT] / SD SLOT

 You have to format the provided removable hard disk or newly-purchased CF cards and SD cards with this camera before using them. This enables stable speeds and operation when accessing the recording medium.

After formatting, all files and data including protected files will be erased. (Formatting a Recording Medium)

### **ሐ** CLEAN UP

[CF SLOT] / SD SLOT

Writing speed of recording media tends to become slow after long period of repeated use. To regain the speed, execute cleanup periodically. The cleanup function is equivalent to "Defragmentation" of PC's function. (Cleaning Up a Recording Medium)

## COPY/MOVE

You can copy or move files between recording media in CF and SD slots. (<u>Copying/Moving Sill Image Files</u>)

### NO. RESET

VIDEO / IMAGE / VOICE

By resetting the file number, a new folder will be made. The new files you are going to make will be stored in the new folder. (Resetting the File Number)

# O DISPLAY

### **BRIGHT**

When this item is selected, the brightness control indicator appears. Adjust the brightness of the display using  $\langle \rangle$ , then press

### (I) DATE/TIME

OFF: The date/time does not appear.

[AUTO]: Displays the date/time for approx. 5 seconds when the power switch is set from OFF to .

ON: The date/time is always displayed.

### **■ SCENE COUNTER**

[OFF]: Disables the function.

ON: Displays the counter during video mode.

### **OCCUPY ADJUST**

Allows you to set the date/time. For actual operations and details, refer to "Date/Time Settings" in the instruction manual (printed edition).



## **Video Recording Menus**

Power switch: 
Mode lamp:

[] = Factory-preset



Select the desired picture quality.

Mode (In order of the quality)	Size (pixels)	Bit rate
[[ u ] ULTRA FINE]	720 x 480 (NTSC) 720 x 576 (PAL)	8.5 Mbps
[F] FINE	720 x 480 (NTSC) 720 x 576 (PAL)	5.5 Mbps
[N]NORMAL	720 x 480 (NTSC) 720 x 576 (PAL)	4.2 Mbps
[E] ECONOMY	352 x 240 (NTSC) 352 x 288 (PAL)	1.5 Mbps

### **WIDE MODE**

OFF]: Disables the function.

D.WIDE: The zoom range is extended beyond the maximum optical zoom wide angle range. This mode's wide angle setting is equivalent to using a 0.8X wide conversion lens. Zooming is possible from 0.8X to 10X. This mode is suitable for shooting in a small room.

### **WIND CUT**

OFF]: Disables the function.

ON: Helps cut down on noise created by wind.

### MC GAIN UP

OFF: The image in the dark will be recorded with no picture brightness adjustment.

ON]: The image in the dark will be brightened. But the overall appearance may become grainy.



OFF: Disables the function.

[ON] ON]: Compensates for unstable images caused by camera-shake, particularly at high magnification.

# NOTES:

- Accurate stabilization may not be possible if hand shake is excessive, or depending on the shooting condition. In this case, the indicator blinks or goes out.
- Switch off this mode when recording with the camera on the tripod.

# By CAMERA SETTING

### **▲** ZOOM

10X: Only optical zoom is available up to 10X.

[40X]: Digital zoom is available up to 40X.

200X: Digital zoom is available up to 200X.

Zooming is possible to a maximum of 10X during still image recording.

### TELE MACRO

OFF]: Disables the function.

ON: You can shoot a subject as large as possible at a distance of approx. 60 cm (2 ft).







### **Video Playback Menus**

the scene.

Power switch: -Mode lamp: [] = Factory-preset PLAY LIST PLAY LIST CONTENTS / & EDIT / RENAME / TO DELETE For details, refer to Play List Functions. WIPE/FADER You can view videos with various effects of scene transition. (Wipe or Fader Effect) OFF]: Disables the function. Wh FADER-WHITE: Fade in or out with a white screen. Bk | FADER-BLACK: Fade in or out with a black screen. RW FADER-B.W: Fade in to a color screen from a black and white screen, or fade out from color to black and white. WIPE-CORNER: Wipe in on a black screen from the upper right to the lower left corner, or wipe out from lower left to upper right, leaving a black screen. WIPE-WINDOW: The scene starts in the center of a black screen and wipes in toward the corners, or comes in from the corners, gradually wiping out to the center. WIPE-SLIDE: Wipe in from right to left, or wipe out from left to right. WIPE-DOOR: Wipe in as the two halves of a black screen open to the left and right, revealing the scene, or wipe out and the black screen reappears from left and right to cover

WIPE-SCROLL: The scene wipes in from the bottom to the top of a black screen, or wipes out from top to bottom, leaving a black screen.

WIPE-SHUTTER: Wipe in from the center of a black screen toward the top and bottom, or wipe out from the top and bottom toward the center leaving a black screen.

### **EFFECT**

You can view videos with special image effects.

[IIII OFF]: Disables the function.

SEPIA: The image has a brownish tint like old photos.

B/W MONOTONE: The image becomes black and white like old movies.

CLASSIC FILM: The image has an old movie atmosphere by the effect of skipping frames.

STROBE: The image looks like a series of consecutive snapshots.

#### OTT PROTECT

[CH CURRENT] / FILE SELECT / PROTECT ALL / 3 CANCEL ALL

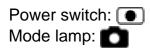
You can protect files from accidental erasure. (Protecting Files)

# 面DELETE

You can delete unnecessary files. (Deleting Files)



## **Still Image Recording Menus**



[] = Factory-preset





Select the desired image quality. ( :: fine, :: standard)

## IMAGE SIZE

1600 x 1200] / 1280 x 960 / 1024 x 768 / 640 x 480 (1004 x 1200) 1280 x 960 / 1024 x 768 / 1024 x 768

Select the desired image size.

### **SELF-TIMER**

# OFF] / 🐧 2SEC / 🐧 10SEC

By setting the self-timer, a still image is recorded 2 or 10 seconds after pressing recording start/stop button.

### CONTINUOUS SHOOTING

[IIII OFF]: Disables the function.

ON: Keeping the recording start/stop button pressed provides an effect similar to serial photography. (Interval between still images: approx. 0.3 seconds)

### ISO GAIN

[**80** 80] / **160** 160

Select the ISO sensitivity to the desired setting.

# **O** CAMERA SETTING

### **TELE MACRO**

OFF]: Disables the function.

ON: You can shoot a subject as large as possible at a distance of approx. 60 cm (2 ft).







# Still Image Playback Menus

Power switch: 
Mode lamp:

[] = Factory-preset



For details, refer to DPOF Print Setting.

## **DIRECT PRINT**

For details, refer to **Direct Printing with a PictBridge Printer**.

## **EFFECT**

You can view still images with special image effects.

OFF]: Disables the function.

SEPIA: The image has a brownish tint like old photos.

B/W MONOTONE: The image becomes black and white like old photos.

#### **OTI PROTECT**

[ CURRENT] / FILE SELECT / APPROTECT ALL / 3 CANCEL ALL

You can protect files from accidental erasure. (Protecting Files)

# 前DELETE

[ CURRENT] / P FILE SELECT / DELETE ALL

You can delete unnecessary files. (Deleting Files)

## **Voice Recording Menus**

Power switch: Mode lamp: 👤

[] = Factory-preset



Select the desired sound quality.

Mode (In order of the quality)	Recording mode	Bit rate
[48] FINE]	48 KHz	1.5 Mbps (1,536 Kbps)
16 STANDARD	16 KHz	512 Kbps
8 ECONOMY	8 KHz	256 Kbps

## **RECORDING LEVEL**

[ু HIGH] / ♪ MIDDLE / 🛂 LOW

Select the desired voice recording level. ( \*\* high, \*\* middle, \*\* low)

## **WIND CUT**

OFF]: Disables the function.

ON: Helps cut down on noise created by wind.







## **Voice Playback Menus**

Power switch: 
Mode lamp:

[] = Factory-preset

### **PLAYBACK SPEED**

[\* NORMAL]: Normal speed

\* FASTPLAY: Playback speed is 20% faster than normal speed.

SLOWPLAY: Playback speed is 20% slower than normal speed.

Select the desired voice playback speed.

#### **O**TI PROTECT

[CH CURRENT] / FILE SELECT / PROTECT ALL / 3 CANCEL ALL

You can protect files from accidental erasure. (Protecting Files)

# 面DELETE

[A CURRENT] / A FILE SELECT / A DELETE ALL

You can delete unnecessary files. (Deleting Files)

