DSC-H200
User Guide

Use this manual if you encounter any problems, or have any questions about the camera.
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How to use this User Guide

Selecting a topic to display

1. Click a title in the side bar on the left of the browser window. The title’s topic list appears in the right pane.
2. Click a topic title in the list.

Descriptions appear in the right pane.
Changing the font size
Change the font size by changing the setting of your web browser. For how to change the font size setting, refer to the Help of your web browser.

Searching a topic by keyword
Enter the keyword in the search window, then click the [Search] button.

Returning to a previous page
Use the browser's back button to return to a previously viewed page, or use the breadcrumb trail navigation (A) to display the desired page.

Printing out a page
Click the [Print] button to print out the page you are viewing.
Marks and notations used in this User Guide

In this User Guide, the sequence of operations is shown by arrows (→) (A). Operate the camera in the order indicated.

- Icons in the operating procedure sentences appear when the camera is in its default settings.
- The default setting is indicated by ☑.
- ★ indicates information that is useful to know.
Names of parts

1. Mode dial: SCN (Scene Selection)/⁻يتها (Intelligent Auto)/P (Program Auto)/M (Manual Exposure Shooting)/Ś (Sweep Panorama)/ vidéo (Movie Mode)

2. Shutter button

3. For shooting: W/T (zoom) lever
   For viewing: ² (Playback zoom) lever/ ² (Index) lever

4. Self-timer lamp/Smile Shutter lamp/AF illuminator

5. Lens

6. Speaker

7. Hook for shoulder strap

8. ⁻ (flash pop-up) button

9. Flash

10. Microphone

11. USB / A/V OUT terminal
12 LCD screen
13 (In-Camera Guide/Delete) button
14 Access lamp
15 Control button
   MENU on: ▲ / ▼ / ◀ / ◁
   MENU off: DISP/O²
16 MENU button
17 (Playback) button
18 ON/OFF (Power) button/ ON/OFF (Power) lamp
19 Battery/Memory card cover
20 Memory card slot
21 Battery insertion slot
22 Tripod socket hole
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List of shooting mode icons

List of viewing mode icons

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<thead>
<tr>
<th>Display</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>🌋️</td>
<td>Battery charge remaining</td>
</tr>
<tr>
<td>⚠️</td>
<td>Low battery warning</td>
</tr>
<tr>
<td>📷</td>
<td>Image size/Panorama image size/Movie size</td>
</tr>
<tr>
<td>📷</td>
<td>Scene Selection</td>
</tr>
<tr>
<td>📷</td>
<td>Shooting mode</td>
</tr>
<tr>
<td>📷</td>
<td>Scene Recognition icon</td>
</tr>
<tr>
<td>📷</td>
<td>White Balance</td>
</tr>
<tr>
<td>📷</td>
<td>Metering Mode</td>
</tr>
<tr>
<td>📷</td>
<td>Vibration warning</td>
</tr>
<tr>
<td>📷</td>
<td>Picture Effect</td>
</tr>
<tr>
<td>📷</td>
<td>Scene Recognition</td>
</tr>
<tr>
<td>📷</td>
<td>Bracket Shooting</td>
</tr>
<tr>
<td>📷</td>
<td>Bracket Setting</td>
</tr>
<tr>
<td>📷</td>
<td>DRO</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Display</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi-Mid-Lo</td>
<td>Soft Skin Effect</td>
</tr>
<tr>
<td>( )</td>
<td>Smile Detection Sensitivity indicator</td>
</tr>
<tr>
<td>× 1.4</td>
<td>Zoom scaling</td>
</tr>
</tbody>
</table>

## Display | Indication

- Tracking focus
- Anti Blink
- AE/AF lock
- ISO400 ISO number
- NR NR slow shutter
- 125 Shutter speed
- F4.0 Aperture value
- +2.0EV Exposure Compensation
- AF range finder frame indicator
- REC Recording folder
- Standby Recording a movie/Movie standby
- 0:12 Recording time (m:s)

### Display | Indication

- Recording folder
- Number of recordable images
- Recordable time
- Recording media (Memory card, internal memory)
- Eye-Fi mode display
- AF Illuminator
- Flash mode
- Red-eye reduction
- Flash charging

### Display | Indication

- Self-timer
<table>
<thead>
<tr>
<th>Display</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Write Date</td>
<td></td>
</tr>
<tr>
<td>Face detection</td>
<td></td>
</tr>
<tr>
<td>Database file full/Database file error</td>
<td></td>
</tr>
<tr>
<td>Destination</td>
<td></td>
</tr>
<tr>
<td>Histogram</td>
<td></td>
</tr>
<tr>
<td>AF range finder frame</td>
<td></td>
</tr>
<tr>
<td>Spot metering cross-hairs</td>
<td></td>
</tr>
</tbody>
</table>

### List of viewing mode icons

1. Battery charge remaining
2. Low battery warning
3. Image size/Panorama image size/Movie size
4. Protect

- **DPOF**: Print order (DPOF)
- **×2.0**: Playback zoom
- **View mode**

1. **Display**

<table>
<thead>
<tr>
<th>Display</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-0012</td>
<td>Folder-file number</td>
</tr>
<tr>
<td>2013-1-1 9:30 AM</td>
<td>Recorded date/time of the playback image</td>
</tr>
</tbody>
</table>

2. **Display**

<table>
<thead>
<tr>
<th>Display</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>101-0012</td>
<td>Folder-file number</td>
</tr>
<tr>
<td>2013-1-1 9:30 AM</td>
<td>Recorded date/time of the playback image</td>
</tr>
<tr>
<td>Display</td>
<td>Indication</td>
</tr>
<tr>
<td>---------</td>
<td>------------</td>
</tr>
<tr>
<td>12/12</td>
<td>Playback folder</td>
</tr>
<tr>
<td>12/12</td>
<td>Image number/Number of images recorded in selected date range, folder</td>
</tr>
<tr>
<td></td>
<td>Playback media (Memory card, internal memory)</td>
</tr>
<tr>
<td></td>
<td>Eye-Fi mode display</td>
</tr>
<tr>
<td></td>
<td>Changing folders</td>
</tr>
<tr>
<td></td>
<td>Metering Mode</td>
</tr>
<tr>
<td></td>
<td>Flash mode</td>
</tr>
<tr>
<td></td>
<td>White Balance</td>
</tr>
<tr>
<td>ISO400</td>
<td>ISO number</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Display</th>
<th>Indication</th>
</tr>
</thead>
<tbody>
<tr>
<td>+2.0EV</td>
<td>Exposure Compensation</td>
</tr>
<tr>
<td>500</td>
<td>Shutter speed</td>
</tr>
<tr>
<td>F4.0</td>
<td>Aperture value</td>
</tr>
<tr>
<td></td>
<td>Playback</td>
</tr>
<tr>
<td></td>
<td>Playback bar</td>
</tr>
<tr>
<td>00:00:12</td>
<td>Counter</td>
</tr>
<tr>
<td></td>
<td>Histogram</td>
</tr>
<tr>
<td></td>
<td>Volume</td>
</tr>
</tbody>
</table>
Using the shoulder strap

Attach the shoulder strap and lens cap strap to prevent the camera from damage by being dropped.
Using the internal memory

On image data stored in the internal memory
The camera has approximately 55 MB of internal memory. You can record images on the internal memory when there is no memory card inserted in the camera.

When a memory card is inserted
[Recording]: Images are recorded on the memory card.
[Playback]: Images on the memory card are played back.
[Menu, Settings, etc.]: Various functions can be performed on images on the memory card.

When there is no memory card inserted
[Recording]: Images are recorded using the internal memory.
- You cannot record movies to the internal memory when the movie image size is [1280x720(Fine)] or [1280x720(Standard)].
[Playback]: Images stored in the internal memory are played back.
[Menu, Settings, etc.]: Various functions can be performed on images in the internal memory.

On image data stored in the internal memory
We recommend that you copy (back up) data using one of the following methods.

To copy (back up) data on a hard disk of your computer
Without a memory card inserted in the camera, import the images into a computer. [Details]

To copy (back up) data on a memory card
Prepare a memory card with sufficient free capacity, then copy the images in the internal memory to the memory card. [Details]

Notes
- You cannot transfer image data on a memory card to the internal memory.
- By making a USB connection between the camera and a computer with a USB cable, you can transfer data stored in the internal memory to a computer. However you cannot transfer data on a computer to the internal memory.
In-Camera Guide

This camera contains an internal function guide. This allows you to search the camera's functions according to your needs. You can use the selected function after reading the guide.

1. Press the MENU button.
2. Select the desired MENU item using ▲ / ▼ on the control button.
3. Press the ? (In-Camera Guide) button. The operation guide for the MENU item you have selected in step 2 is displayed.
4. Use ▲ / ▼ to switch among summary, operation and detail screens.
   • When [Use this function] is displayed on the screen, select it to switch to that mode.
   • If you press the ? (In-Camera Guide) button when the MENU screen is not displayed, you can search the guide using keywords or icons.

Notes
• ? (In-Camera Guide) button is not available in Easy Mode.
• Depending on the selected functions, the operation guide and details may not be displayed.
Using the control button

Moving the selection frame on the MENU screen, etc.

Selecting an image to be played back

The following functions are located on the up/down/right/left side of the control button: DISP (Display Setting), Self-Timer, Smile Shutter, and Flash. Press the control button toward each icon to enter the setup screen for each function. Press the up/down/right/left side of the control button following the screen to move the selection frame. Press in the center of the control button to set the selected item.

Moving the selection frame on the MENU screen, etc.
Press the up/down/right/left side of the control button to move the selection frame.

Selecting an image to be played back
Press the right or left side of the control button to play back the next/previous image.
Using MENU items (Shooting)

You can select the various shooting functions easily from the MENU button.

1. Press the ON/OFF (Power) button and set the camera to shooting mode.
2. Press the MENU button to display the Menu screen.

3. Select the desired menu item with ▲ / ▼ / ◀ / ► on the control button.

4. Press the MENU button to close the Menu screen.
Using MENU items (Viewing)

You can select the various viewing functions easily from the MENU button.

1. Press the \( \text{(Playback)} \) button to switch to playback mode.

2. Press the MENU button to display the Menu screen.

3. Select the desired menu item with \( \uparrow / \downarrow / \leftarrow / \rightarrow \) on the control button.

4. Press \( \bullet \) on the control button.
Changing camera settings

You can change the settings on the [Settings] screen.

1. Press the MENU button to display the Menu screen.

2. Select (Settings) with ▲ / ▼ on the control button, then press ● to display the setup screen.

3. Select the desired category by using ▲ / ▼ / ◀ / ▶, then press ● to display the setup screen.

4. Select the desired setting, then press ●.

Notes
- [Shooting Settings] appears only when settings have been entered from shooting mode.
- [Memory Card Tool] appears only when a memory card is inserted in the camera, while [Internal Memory Tool] appears only when a memory card is not inserted.
Shooting still images

1. Set the mode dial to \( \text{Intelligent Auto} \), then press the ON/OFF (Power) button.

2. Hold the camera steady as illustrated.

3. Press the shutter button halfway down to focus. When the image is in focus, a beep sounds and the \( \text{ } \) indicator lights.

- The shortest shooting distance is approximately 20 cm (0.66 ft.) (W), 200 cm (6.56 ft.) (T) (from the lens).
- Macro mode may be automatically set for some shooting conditions.

4. Press the shutter button fully down. Do not put your fingers on the flash or lens when shooting.
If you shoot a still image of a subject that is difficult to focus on

- When the camera cannot focus on the subject automatically, the AE/AF lock indicator changes to slowly flashing and the beep does not sound. Either recompose the shot or change the focus setting. [Details]
- Focusing may be difficult in the following situations:
  - It is dark and the subject is distant.
  - The contrast between the subject and the background is poor.
  - The subject is seen through glass.
  - The subject is moving quickly.
  - There is reflective light or shiny surfaces.
  - The subject is backlit or there is a flashing light.

Related Topic

Viewing still images
Still Image Size / Panorama Image Size / Movie Size
Zoom

You can enlarge the image when shooting. The camera’s optical zoom function can enlarge images up to 26×.

1. Turn the W/T (zoom) lever.
   Turn the W/T (zoom) lever to the T side to zoom in, W side to zoom out.

   - When the zoom scale exceeds 26×, set [Digital Zoom]. [Details]

Notes

- Zoom is locked to the W side in Sweep Panorama mode.
- The operating sound of the lens is recorded when the zoom function operates while shooting a movie.
Shooting movies

1. Set the mode dial to (Movie Mode), then press the ON/OFF (Power) button.

2. Press the shutter button to start recording.

3. Press the shutter button again to stop recording.

Notes
- The operating sound of the lens may be recorded when the zoom function operates while shooting a movie.

Related Topic
- Zoom
- Movie shooting scene
- Picture Effect
**List of mode dial functions**

Set the mode dial to the desired function.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>i</td>
<td>(Intelligent Auto)  Allows you to shoot still images with the settings adjusted automatically.</td>
</tr>
<tr>
<td>P</td>
<td>(Program Auto)  Allows you to shoot with the exposure adjusted automatically (both the shutter speed and the aperture value (F value)). Also you can select various settings using the menu.</td>
</tr>
<tr>
<td>M</td>
<td>(Manual Exposure Shooting)  Allows you to shoot after adjusting the exposure manually (both the shutter speed and the aperture (F value)).</td>
</tr>
<tr>
<td></td>
<td>(Sweep Panorama)  Allows you to shoot a panorama image after composing images.</td>
</tr>
<tr>
<td></td>
<td>(Movie Mode)  Allows you to change the setting for movie recording.</td>
</tr>
<tr>
<td>SCN</td>
<td>(Scene Selection)  Allows you to shoot with preset settings according to the scene.</td>
</tr>
</tbody>
</table>

**Related Topic**

- Intelligent Auto
- Program Auto
- Scene Selection
- Manual Exposure Shooting
- Shooting panoramic images
- Shooting movies
Intelligent Auto

Allows you to shoot still images with the settings adjusted automatically.

1. Set the mode dial to \( i \) (Intelligent Auto).
2. Shoot with the shutter button.

Scene Recognition

Scene Recognition operates in Intelligent Auto mode. This function lets the camera automatically recognize the shooting conditions and shoot the image.

Related Topic

Scene Recognition
Functions available for each shooting mode
MENU items available for each shooting mode
Program Auto

Allows you to shoot with the exposure adjusted automatically (both the shutter speed and the aperture value). Also you can select various settings using the menu.

1. Set the mode dial to P (Program Auto).
2. Shoot with the shutter button.

Related Topic

Functions available for each shooting mode
MENU items available for each shooting mode
## Picture Effect

Allows you to shoot a still image with original texture, according to the desired effect.

1. Set the mode dial to P (Program Auto) or M (Manual Exposure Shooting).

2. MENU → (Picture Effect) → desired mode
   - If you want to select another Picture Effect mode, select from MENU.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Does not use the Picture Effect.</td>
</tr>
<tr>
<td>Toy camera</td>
<td>Allows you to shoot images with effects such as tunnel effect, high contrast, or color cast as if they were shot with a toy camera. You can change the color hue using MENU → [Color hue].</td>
</tr>
<tr>
<td>Pop Color</td>
<td>Allows you to shoot a pop art-like colorful image with emphasis on the color tone.</td>
</tr>
<tr>
<td>Partial Color</td>
<td>Allows you to shoot an image that makes a strong impression by leaving a specified color on portions of a monochrome image. You can select the color to extract using MENU → [Extracted Color].</td>
</tr>
<tr>
<td>Soft High-key</td>
<td>Allows you to shoot soft, clear images with an emphasis on brightness.</td>
</tr>
</tbody>
</table>
Use the following procedures to add effects to panoramic images and movies.

When
(Sweep Panorama) mode is selected:
MENU → [Panorama Shooting Scene] → [Picture Effect] → desired mode

- [Toy camera] cannot be used for [Panorama Shooting Scene].

When
(Movie Mode) is selected:
MENU → [Movie shooting scene] → [Picture Effect] → desired mode

- [Toy camera] cannot be used for [Movie shooting scene].

**Related Topic**

- Color hue
- Extracted Color
- Functions available for each shooting mode
- MENU items available for each shooting mode
- Panorama Shooting Scene
- Movie shooting scene
### Scene Selection

Allows you to shoot with preset settings according to the scene.

1. Set the mode dial to **SCN** (Scene Selection).
2. Select the desired mode → **○** on the control button.
   - If you want to select another Scene Selection mode, select from MENU.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🤖 (Soft Skin)</td>
<td>Allows you to shoot faces for smoothness.</td>
</tr>
<tr>
<td>🤖 (Soft Snap)</td>
<td>Allows you to shoot images with a softer atmosphere for portraits and flowers, etc.</td>
</tr>
<tr>
<td>🏞️ (Landscape)</td>
<td>Allows easy shooting of distant scenes by focusing in the distance. Shoots a clear sky,</td>
</tr>
<tr>
<td></td>
<td>trees and flowers in vivid colors.</td>
</tr>
<tr>
<td>🤖 (Night Portrait)</td>
<td>Allows you to shoot sharp images of people with a night view in the background, without</td>
</tr>
<tr>
<td></td>
<td>compromising the atmosphere. Pop up the flash to use this mode.</td>
</tr>
<tr>
<td>🌙 (Night Scene)</td>
<td>Allows you to shoot night scenes at far distance without losing the dark atmosphere of the</td>
</tr>
<tr>
<td></td>
<td>surroundings.</td>
</tr>
<tr>
<td>ISO (High Sensitivity)</td>
<td>Allows you to shoot images without a flash under low light conditions, reducing blur.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>(Gourmet)</td>
<td>Allows you to shoot food arrangements in delicious and bright colors.</td>
</tr>
<tr>
<td>(Pet)</td>
<td>Allows you to shoot images of your pet with the best settings.</td>
</tr>
<tr>
<td>(Beach)</td>
<td>Allows you to shoot scenes on the beach in bright and vivid colors even under the sunlight.</td>
</tr>
<tr>
<td>(Snow)</td>
<td>Allows you to record clear images preventing sunken colors in snowy scenes or other places where the whole screen appears white.</td>
</tr>
<tr>
<td>(Fireworks)</td>
<td>Allows you to record fireworks in all their splendor.</td>
</tr>
</tbody>
</table>
Notes

- When you shoot images using 🌃 (Night Portrait), 🌙 (Night Scene) or 🎆 (Fireworks) modes, the shutter speed is slower and the images tend to blur. To prevent blurring, the use of a tripod is recommended.

Related Topic

Functions available for each shooting mode
MENU items available for each shooting mode
Shooting panoramic images

Allows you to create a panoramic image from composite images.

1. Set the mode dial to (Sweep Panorama).
2. Select a shooting direction using ▲ / ▼ / ◀ / ▶ (up/down/left/right) of the control button.
3. Align the camera with the end of the subject to be shot and press the shutter button fully.
4. Pan the camera to the end of the guide (A), following the indicator on the screen.

💡 Tips for shooting a panoramic image

Pan the camera in an arc at a constant velocity in the direction indicated on the screen. Subjects at rest are more suited for panoramic shots than moving subjects. Radius as short as possible.
Vertical direction

Horizontal direction

- First press the shutter button halfway so that you can lock the focus and exposure. Then press the shutter button fully down and pan or tilt the camera.
- If a section with greatly varied shapes or scenery is concentrated along a screen edge, the image composition may fail. In such a case, adjust the frame composition so that the section is in the center of the image, then shoot again.

To shoot a 360 degree panoramic image

This camera is equipped with a panorama shooting function, capable of shooting a nearly 360 degree panoramic image. Shoot a panoramic image by selecting MENU → set [Panorama Image Size] to [360°]. Recorded panoramic images can be scrolled normally when played on the camera.

- Select a shooting direction using ◀/▶ on the control button. You cannot shoot a panoramic image in a vertical direction with [Panorama Image Size] set to [360°].
- The image actually recorded may not cover 360 degrees, depending on the subject or the way it is shot.

Notes

- If you cannot pan the camera across the entire subject within the given time, a gray area occurs in the composite image. If this happens, move the camera faster to record a full panoramic image.
- Since several images are stitched together, the stitched part will not be recorded smoothly.
- When the whole angle of panoramic shooting and the AE/AF locked angle are very different in brightness, color and focus, the shooting will not be successful. If this happens, change the AE/AF locked angle and shoot again.
- You cannot create panoramic images in the following situations:
  - You pan the camera too quickly or too slowly.
  - There is too much camera shake.

Related Topic

Scrolling panoramic images for display
Still Image Size / Panorama Image Size / Movie Size
Functions available for each shooting mode
MENU items available for each shooting mode
Panorama Shooting Scene
Picture Effect
Manual Exposure Shooting

You can shoot at your favorite exposure by manually setting the shutter speed and aperture value.

1. Set the mode dial to M (Manual Exposure Shooting).

2. Press on the control button.

3. Press ▲ / ▼ to select the desired shutter speed, and press ◀ / ► to select the aperture (F value).
   - Select a shutter speed from 1/1500 seconds to 30 seconds.
   - When zoom is set fully to W, you can select an aperture of F3.1 (when used with the Internal ND (Neutral Density) Filter).
     When zoom is set fully to T, you can select an aperture of F5.9 (when used with the Internal ND (Neutral Density) Filter).

4. Press the shutter button to shoot the image.

Setting the shutter speed and aperture (F value)
The difference between the settings and the proper exposure as judged by the camera appears as an Exposure Compensation value on screen.

A: Shutter speed/aperture (F value)
B: Exposure Compensation value
   - 0EV is the value judged as the most suitable by the camera.
   - When the shutter speed is one second or slower, the shutter speed is indicated by [“], for example, [1”].
   - When you set the shutter speed slower, using a tripod is recommended to prevent the effects of vibration.
   - When the shutter speed becomes slower than a certain speed, the NR slow shutter function is activated automatically to reduce image noise, and NR appears on the screen.
   - If you select slow shutter speeds, it takes time to process the data.

Notes
- If proper exposure is not obtained by your settings, the setting value indicators on the screen will flash when the shutter button is pressed halfway down. You can shoot in this condition, but exposure readjustment is recommended.
- You cannot select the shutter speed and aperture (F value) when the self-timer is set to [Self-portrait One Person] or [Self-portrait Two People].

Related Topic
Functions available for each shooting mode
Viewing still images

1. Set the camera to playback mode.
2. Select an image with the control button.

💡 Viewing images taken with a different camera

If the camera detects images not registered in the Image Database File on the memory card, a registration screen with the message "Files found which were not recognized Import files" will be displayed. To view unregistered images, register them by selecting [OK].
### Playback zoom

Enlarges the image being played back.

1. Set the camera to playback mode.

2. Turn the W/T (zoom) lever to the T side during still image playback. The image is enlarged to twice the previous size, at the center of the image.

3. Adjust the position using on the control button. The frame in the lower left of the image shows which part of the total image is being displayed.

4. Change the zoom scale with the W/T (zoom) lever. Turn the W/T (zoom) lever to the T side to zoom in, W side to zoom out. Press on the control button to cancel playback zoom.

#### To save enlarged images

You can save an enlarged image by using the trimming function. Press MENU → [Retouch] → [Trimming (Resize)].
**Image Index**

- Displaying images of the desired folder
- Viewing images with the Calendar

Displays multiple images at the same time.

1. Set the camera to playback mode.

2. Turn the W/T (zoom) lever to the W side (.erase) to display the image index screen. Turn the lever again to display an index screen with more images. Turn the lever yet again to view images with the Calendar while playing back in [Date View].

3. To return to the single-image screen, select an image with the control button, then press .

---

### Displaying images of the desired folder

Select the left side bar with the control button, then select the desired folder with / .

---

### Viewing images with the Calendar

When [View Mode] is set to [Date View] and the screen display is in index mode, turn the W/T (zoom) lever to the W side (.erase) to view images in the Calendar.

- To select the month you want to display, select / with the control button, then the desired month.
- To view images in selected date in index mode, select the date with the control button and press .
- To cancel the calendar display and return to the index screen, select (erase) using the control button, then press .

---

[54]
Deleting images

Allows you to select unwanted images for deletion.
You can also delete images from the MENU button. [Details]

1. Set the camera to playback mode.
2. □ (Delete) button → desired mode →  on the control button

<table>
<thead>
<tr>
<th>All in This Folder</th>
<th>Deletes all images in the selected date range or folder at once.</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Images on This Date</td>
<td>Allows you to select and delete multiple images.</td>
</tr>
<tr>
<td>Multiple Images</td>
<td>After step 2, select an image to be deleted, then press  .</td>
</tr>
<tr>
<td></td>
<td>To cancel the selection, press  again to cancel the  mark.</td>
</tr>
<tr>
<td></td>
<td>MENU → [OK] →</td>
</tr>
<tr>
<td>This Image</td>
<td>Deletes the currently displayed image.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Cancels the deletion.</td>
</tr>
</tbody>
</table>

💡 You can switch between index and single-image mode when selecting images
Turn the W/T (zoom) lever to the T side (Q) in index mode to return to single-image mode, and turn the lever to the W side (W) in single-image mode to return to index mode.

Notes
- When the internal memory is used to record images, View Mode is set to Folder View and still images and movies are displayed in the same folder.

Related Topic
Delete
Viewing movies

1. Set the camera to playback mode.
2. Select a movie with the control button.
3. Press ⊓.
   The playback bar appears, and a movie playback starts.

On the movie viewing screen
Select the image you want to display using ◀ / ▶ on the control button, and press ⊓.
The Playback bar appears, you can check a playback position of a movie.

### Control button | Action during playback
---|---
● | Play/Pause
▶ | Fast forward
▼ | Fast rewind
▼ | Displays the control screen.
   Adjust the volume with ▲ / ▼ on the control button, then press ⊓.

**Notes**
- You may not be able to play back some images shot using other cameras.

**Related Topic**
View Mode
Scrolling panoramic images for display

You can scroll panoramic images by pressing the center button on the control button while panoramic images are being displayed.

A: Shows the displayed area of the whole panoramic image

<table>
<thead>
<tr>
<th>Control button</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>● on the control button</td>
<td>Starts scrolling playback/pauses scrolling playback</td>
</tr>
<tr>
<td>▲ / ▼ / ◀ / ◁ on the control button</td>
<td>Scrolls images</td>
</tr>
<tr>
<td>W side of W/T (zoom) lever</td>
<td>Displays the whole image</td>
</tr>
</tbody>
</table>

- Panorama images recorded using another camera may not scroll correctly when played.
### Functions available for each shooting mode

- **Functions available in REC modes**
- **Functions available in Scene Selection**
- **Functions available in Picture Effect**

In the table below, a check mark indicates a function that can be changed, while — indicates function that cannot be changed. The icons below [Flash] and [Self-Timer] indicate the available modes.

#### Functions available in REC modes

<table>
<thead>
<tr>
<th>Mode</th>
<th>Flash</th>
<th>Self-Timer</th>
<th>Face Detection</th>
<th>Smile Shutter</th>
<th>Tracking focus</th>
<th>Cont. Shooting Settings/Bracket Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intelligent Auto)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Program Auto)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Manual Exposure Shooting)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Sweep Panorama)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Movie Mode)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* [Bracket Setting] cannot be selected.

#### Functions available in Scene Selection

<table>
<thead>
<tr>
<th>Mode</th>
<th>Flash</th>
<th>Self-Timer</th>
<th>Face Detection</th>
<th>Smile Shutter</th>
<th>Tracking focus</th>
<th>Cont. Shooting Settings/Bracket Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Soft Skin)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>(Soft Snap)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>(Landscape)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓²</td>
</tr>
<tr>
<td>(Night Portrait)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>(Night Scene)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>—</td>
</tr>
<tr>
<td>(High ISO)</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>—</td>
</tr>
</tbody>
</table>
### Functions available in Picture Effect

<table>
<thead>
<tr>
<th>Functions</th>
<th>Flash</th>
<th>Self-Timer</th>
<th>Face Detection</th>
<th>Smile Shutter</th>
<th>Tracking focus</th>
<th>Cont. Shooting Settings/Bracket Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off (Off)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Toy camera</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Pop Color</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Partial Color</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Soft High-key</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

* *1 [Bracket Setting] cannot be selected.

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### MENU items available for each shooting mode

#### MENU items available in Scene Selection/Picture Effect mode

In the table below, a check mark indicates settings that can be changed, while – indicates settings that cannot be changed. A setting may be fixed or restricted depending on the shooting mode. For details, see each topic.

<table>
<thead>
<tr>
<th>Menu items</th>
<th>i</th>
<th>P</th>
<th>M</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panorama Shooting Scene</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Movie shooting scene</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Scene Selection</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Picture Effect</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Easy Mode</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color hue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extracted Color</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft Skin Effect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Still Image Size *</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Panorama Image Size</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Movie Size</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Exposure Compensation</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>ISO</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>White Balance</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Focus</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Metering Mode</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Cont. Shooting Settings</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Bracket Setting</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Scene Recognition</td>
<td>✓</td>
<td></td>
<td>–</td>
</tr>
<tr>
<td>Smile Detection Sensitivity</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Face Detection</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>DRO</td>
<td>✓</td>
<td>✓</td>
<td>–</td>
</tr>
<tr>
<td>Anti Blink</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-Camera Guide</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
* In [Advanced Flash] mode, the maximum still image size you can select is [5M].

**MENU items available in Scene Selection/Picture Effect mode**

The icons below SCN or ☑ indicate the available modes.

<table>
<thead>
<tr>
<th>Menu items</th>
<th>SCN</th>
<th>☑ (Still images)</th>
<th>☑ (Panoramic images)</th>
<th>☑ (Movies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Panorama Shooting Scene</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>Movie shooting scene</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>✓</td>
</tr>
<tr>
<td>Scene Selection</td>
<td>✓</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Picture Effect</td>
<td>—</td>
<td>✓</td>
<td>—</td>
<td>✓</td>
</tr>
<tr>
<td>Easy Mode</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Color hue</td>
<td>—</td>
<td>✓</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Extracted Color</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>Soft Skin Effect*2</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Still Image Size</td>
<td>✓</td>
<td>✓</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Panorama Image Size</td>
<td>—</td>
<td>—</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>Movie Size</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>✓</td>
</tr>
<tr>
<td>Exposure Compensation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>ISO</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>White Balance*1</td>
<td>ISO</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Focus</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Metering Mode</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Cont. Shooting Settings</td>
<td>—</td>
<td>✓</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Bracket Setting</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Scene Recognition</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Smile Detection Sensitivity</td>
<td>—</td>
<td>ISO</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Face Detection*3</td>
<td>ISO</td>
<td>✓</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>DRO</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Anti Blink</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>In-Camera Guide</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Settings)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
*1 [Flash] cannot be selected for [White Balance] when Scene Selection is set to ISO (High Sensitivity).
*2 [Off] cannot be selected for [Soft Skin Effect] when Scene Selection is set to Soft Skin.
*3 [Off] cannot be selected for [Face Detection] when Scene Selection is set to Soft Skin or Snap.
Tracking focus

The camera tracks the subject and adjusts the focus automatically even when the subject is moving.

1. Point the camera at the subject, and press ● on the control button.
   The target frame appears.

2. Place the target frame over the subject you want to focus on, and press ●.
   Tracking begins.

3. Press the shutter button to shoot the image.

Tracking a face

If you use the tracking focus function while the Face Detection function is activated, you can select a face to be given priority and register that face with the camera.

Notes

- When you use the Digital Zoom, the tracking focus function is not available
- Tracking focus will automatically be canceled when the subject disappears from the screen or has failed to be tracked.

Related Topic

Face Detection
Functions available for each shooting mode

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DISP (Display Setting)

- **Histogram**

1. Press DISP (Display Setting) on the control button.
2. Select the desired mode with the control button.

<table>
<thead>
<tr>
<th></th>
<th>Displays only images.</th>
</tr>
</thead>
<tbody>
<tr>
<td>![OFF] (OFF)</td>
<td><img src="image1.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Displays the information. Exif data for the recorded image and the histogram are also displayed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>![Detailed Info] (Detailed Info)</td>
<td><img src="image2.png" alt="Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Displays the information.</th>
</tr>
</thead>
<tbody>
<tr>
<td>![ON] (ON)</td>
<td><img src="image3.png" alt="Image" /></td>
</tr>
</tbody>
</table>

**Histogram**

A histogram is a graph showing the brightness of an image. The graph display indicates a bright image when skewed to the right side (A), and a dark image when skewed to the left side (B).

1. Press DISP (Display Setting) on the control button, then select [Detailed Info].
Notes

- The histogram also appears when playing back a single image, but you cannot adjust the exposure.
- The histogram does not appear when:
  - Recording/playing back movies
  - Viewing vertical orientation images
  - Rotating still images
  - Shooting/viewing in [iSweep Panorama]
- The histogram may not appear for images recorded using other cameras.
Flash

1. Press the flash unit pop-up button to raise the flash.
   - When the flash unit is not raised, the flash mode is set to (Off) automatically. You cannot change the setting.
2. Press (Flash) on the control button.
3. Select the desired mode with the control button.

<table>
<thead>
<tr>
<th>Flash Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adv (Advanced Flash)</td>
<td>Flash to a farther distance by increasing the upper limit value of ISO sensitivity.</td>
</tr>
<tr>
<td>Auto (Auto)</td>
<td>Flash automatically operates in dark locations or when there is a backlight.</td>
</tr>
<tr>
<td>On (On)</td>
<td>Flash always operates.</td>
</tr>
<tr>
<td>SL (Slow Synchro)</td>
<td>Flash always operates. The shutter speed is slow in a dark place to clearly shoot background that is out of flash light.</td>
</tr>
</tbody>
</table>

*When “White circular spots” appears in flash photos*

These spots are caused by particles (dust, pollen, etc.) floating close to the lens. When they are accentuated by the camera’s flash, they appear as white circular spots.

**How can the “White circular spots” be reduced?**

- Light the room and shoot the subject without flash.
- If you select (High Sensitivity) mode in Scene Selection, [Flash] is automatically set to [Off].

**Notes**

- The flash strobos twice. The first flash adjusts the light quantity.
- While charging the flash, is displayed.
- You cannot use the flash during burst shooting.
- Adv (Advanced Flash) can be selected only in [Intelligent Auto] mode. When Adv (Advanced Flash) is selected, the maximum size of [Still Image Size] is [5M]. If [Still Image Size] is set to larger than [5M], [Still Image Size] is set to [5M] automatically.
- When shooting with the flash and the zoom is set to W, the shadow of the lens may appear on the screen, depending on the shooting conditions. If this happens, set the zoom to T and shoot with the flash again.
- When not using the flash, keep the flash down.

**Related Topic**

Functions available for each shooting mode
Self-Timer

Automatic shooting with Self-portrait timer

1. Press \( \text{(Self-Timer)} \) on the control button.
2. Select the desired mode with the control button.

| Off (10sec) | Sets the self-timer to a 10-second delay. When you press the shutter button, the self-timer lamp flashes and a beep sounds until the shutter operates. To cancel, press Off again. |
| (Self-portrait One Person) | Sets the self-timer to Self-portrait timer. When the camera detects the specified number of faces, a beep sounds, and the shutter operates 2 seconds later. |
| (Self-portrait Two People) | Sets the self-timer to a 2-second delay. |

Tips for preventing blur

If your hands or body move while holding the camera and pressing the shutter button, “Camera shake” occurs. Camera shake occurs frequently under low-light or slow shutter speed conditions, such as those encountered in \( \text{(Night Portrait)} \) or \( \text{(Night Scene)} \) mode.

To reduce camera shake, set the self-timer to a 2-second delay and brace your arms against your sides after pressing the shutter button.

Automatic shooting with Self-portrait timer

Point the lens at yourself so that the selected number of faces is reflected in the screen. The shutter operates automatically. Do not move your camera after the beep sounds.
Related Topic
Functions available for each shooting mode

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### Smile Shutter

When the camera detects a smile, the shutter is released automatically.

1. Press ☺ (Smile Shutter) on the control button.
2. Wait for a smile to be detected.
   - When a smile is detected and the smile level exceeds the point on the indicator, the camera records images automatically.
3. To stop shooting, press ☺ (Smile Shutter) again.

#### Tips for better capturing of smiles

1. **Do not cover the eyes with bangs. Do not obscure the face by hat, mask, sunglasses, etc.**
2. **Try to orient the face in front of the camera and be as level as possible. Keep the eyes narrowed.**
3. **Give a clear smile with an open mouth. The smile is easier to detect when the teeth are showing.**
   - The shutter operates when any person whose face is being detected smiles.
   - If a smile is not detected, select MENU → [Smile Detection Sensitivity], then set the value to [Slight Smile].

#### Notes
- Shooting using the Smile Shutter ends automatically when either the memory card or internal memory becomes full.
- Smiles may not be detected correctly depending on the conditions.
You cannot use the digital zoom function.

Related Topic
Smile Detection Sensitivity
Functions available for each shooting mode
MENU items available for each shooting mode
### Movie shooting scene

You can select the movie shooting mode when the camera is set to [Movie Mode].

1. MENU → (Movie shooting scene) → desired mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Auto)</td>
<td>Allows you to shoot movies with the settings adjusted automatically. [Details]</td>
</tr>
<tr>
<td>(Picture Effect)</td>
<td>Allows you to shoot movies with an original texture according to the desired effect.</td>
</tr>
</tbody>
</table>

**Related Topic**

Picture Effect
Panorama Shooting Scene

Allows you to shoot with preset settings according to the scene when the camera is in [Sweep Panorama] mode.

1. MENU → (Panorama Shooting Scene) → desired mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sweep Panorama</strong></td>
<td>Shoots a regular panoramic image.</td>
</tr>
<tr>
<td><strong>Picture Effect</strong></td>
<td>Allows you to shoot a panoramic image with an original texture according to the desired effect.</td>
</tr>
</tbody>
</table>

Related Topic

Picture Effect
Easy Mode

Scene Recognition

Allows you to shoot still images using the minimum necessary functions. The text size increases and indicators become easier to see.

1. Set the mode dial to i (Intelligent Auto).
2. MENU → EASY (Easy Mode) → on the control button.
3. [OK] →
4. Shoot with the shutter button.
   - To end Easy Mode, MENU → [Exit Easy Mode]

Notes
- The battery power may decrease faster because the screen brightness increases automatically.

Scene Recognition

Scene Recognition operates in Easy Mode. This function lets the camera automatically recognize the shooting conditions and shoot an image.

For details, see “Scene Recognition”. [Details]

Shooting functions available in Easy Mode (Shooting)

| Still Image Size | MENU → [Still Image Size] → on the control button → desired mode →
| Self-Timer       | on the control button → desired mode
| Flash            | on the control button → desired mode
| Smile Shutter    | on the control button

Select between [Large] or [Small] size.
Select between [10sec] or [Off] mode.
Select between [On] or [Auto] mode.
Color hue

When you select [Toy camera] in Picture Effect, adjust the color hue.

1. MENU → (Color hue) → desired mode

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Normal)</td>
<td>Adds a normal hue and darkens the surroundings.</td>
</tr>
<tr>
<td>(Cool hue)</td>
<td>Adds a cool bluish hue and darkens the surroundings.</td>
</tr>
<tr>
<td>(Warm hue)</td>
<td>Adds a warm reddish hue and darkens the surroundings.</td>
</tr>
<tr>
<td>(Green hue)</td>
<td>Adds a green filter-like hue and darkens the surroundings.</td>
</tr>
<tr>
<td>(Magenta hue)</td>
<td>Adds a magenta filter-like hue and darkens the surroundings.</td>
</tr>
</tbody>
</table>

Notes

- It is recommended that you shoot a test image in advance for some subjects.

Related Topic

Picture Effect

MENU items available for each shooting mode
### Extracted Color

When you select [Partial Color] in Picture Effect, select the color to extract.

1. **MENU → 📷 (Extracted Color) → desired mode**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>📷 (Red)</td>
<td>Extracts red only.</td>
</tr>
<tr>
<td>📷 (Green)</td>
<td>Extracts green only.</td>
</tr>
<tr>
<td>📷 (Blue)</td>
<td>Extracts blue only.</td>
</tr>
<tr>
<td>📷 (Yellow)</td>
<td>Extracts yellow only.</td>
</tr>
</tbody>
</table>

### Notes
- Images may not retain the selected color, depending on the subject.

### Related Topic
- **Picture Effect**
- MENU items available for each shooting mode
Soft Skin Effect

When the Face Detection function is activated, sets whether to use the Soft Skin Effect, and the effect level.

1. MENU ➔ (Soft Skin Effect) ➔ desired mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Does not use the Soft Skin Effect.</td>
</tr>
<tr>
<td>Lo</td>
<td>Adds light, moderate or strong Soft Skin Effect.</td>
</tr>
<tr>
<td>Mid</td>
<td>Adds light, moderate or strong Soft Skin Effect.</td>
</tr>
<tr>
<td>Hi</td>
<td>Adds light, moderate or strong Soft Skin Effect.</td>
</tr>
</tbody>
</table>

**Notes**
- The [Soft Skin Effect] may not be visible depending on the subject.

**Related Topic**
- MENU items available for each shooting mode
Still Image Size / Panorama Image Size / Movie Size

- Image size when shooting still images
- Image size in Easy Mode
- Image size when shooting Sweep Panorama
- Image size when shooting movies

The image size determines the size of the image file that is recorded when you take an image. The larger the image size, the more detail will be reproduced when the image is printed on large-format paper. The smaller the image size, the more images can be recorded.

**Image size when shooting still images**

1. MENU → [Still Image Size] → desired size

<table>
<thead>
<tr>
<th>Still Image Size (Horizontal × Vertical)</th>
<th>Usage guidelines</th>
<th>Number of images</th>
<th>Printing</th>
</tr>
</thead>
<tbody>
<tr>
<td>20M (5184 × 3888)</td>
<td>For prints up to A3+ size</td>
<td>Less</td>
<td>Fine</td>
</tr>
<tr>
<td>10M (3648×2736)</td>
<td>For prints up to A3 size</td>
<td>More</td>
<td>Rough</td>
</tr>
<tr>
<td>5M (2592×1944)</td>
<td>For prints from 10×15 cm up to A4 size</td>
<td></td>
<td></td>
</tr>
<tr>
<td>800 VGA (640×480)</td>
<td>For e-mail attachments</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10M (5184×2920)</td>
<td>For viewing on a high-definition TV and printing up to A3 size</td>
<td>Less</td>
<td>Fine</td>
</tr>
<tr>
<td>2M (1920×1080)</td>
<td>For viewing on a high-definition TV</td>
<td>More</td>
<td>Rough</td>
</tr>
</tbody>
</table>

**Notes**
- When you print still images recorded at a 16:9 aspect ratio or panorama images, both edges may be cut off.

**Image size in Easy Mode**

1. MENU → [Still Image Size] → desired size
Large Shoots images in [20M] size.
Small Shoots images in [5M] size.

Image size when shooting Sweep Panorama

1. MENU → STD (Panorama Image Size) → desired size

<table>
<thead>
<tr>
<th>(Standard)</th>
<th>Shoots images using standard size.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Horizontal: 4912 × 1080)</td>
<td></td>
</tr>
<tr>
<td>(Vertical: 3424 × 1920)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(Wide)</th>
<th>Shoots images using wide size.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Horizontal: 7152 × 1080)</td>
<td></td>
</tr>
<tr>
<td>(Vertical: 4912 × 1920)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(360°)</th>
<th>Shoots 360-degree images.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Horizontal: 11520 × 1080</td>
<td></td>
</tr>
</tbody>
</table>

Image size when shooting movies

The larger the size of the movie image, the higher the image quality. The higher the amount of data used per second (average bit-rate), the smoother the playback image.

Movies shot with this camera are recorded in MPEG-4 format, at approximately 30 frames/sec, in progressive mode, with AAC audio, mp4 format.

1. MENU → VEGA (Movie Size) → desired size

<table>
<thead>
<tr>
<th>Movie Size</th>
<th>Average bit-rate</th>
<th>Usage guidelines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1280x720(Fine)</td>
<td>9 Mbps</td>
<td>Shoots highest quality movies for display on High Definition TV.</td>
</tr>
<tr>
<td>1280x720(Standard)</td>
<td>6 Mbps</td>
<td>Shoots standard quality movies for display on High Definition TV.</td>
</tr>
<tr>
<td>VGA</td>
<td>3 Mbps</td>
<td>Shoots an image size suitable for WEB upload.</td>
</tr>
</tbody>
</table>

Notes
- A telephoto image results if [VGA] image size is selected when shooting movies.
Exposure Compensation

You can adjust the exposure manually in 1/3 EV steps in a range of –2.0 EV to +2.0 EV.

1. MENU → [Exposure Compensation] → desired Exposure Compensation setting

Adjusting the exposure for better looking images

A: Overexposure (too much light)
B: Correct exposure
C: Underexposure (too little light)

- When the image shot is overexposed, adjust [Exposure Compensation] to the minus side.
- When the image shot is underexposed, adjust [Exposure Compensation] to the plus side.

Notes
- If you shoot a subject in extremely bright or dark conditions, or when you use the flash, the exposure adjustment may not be effective.

Related Topic
MENU items available for each shooting mode
ISO

Adjusts the luminous sensitivity when the camera is set to Program Auto. In Movie mode, [ISO] is fixed to [Auto].

1. MENU → ISO (ISO) → desired mode

<table>
<thead>
<tr>
<th>ISO mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO (Auto)</td>
<td>Sets the ISO sensitivity automatically.</td>
</tr>
<tr>
<td>80, 100, 200, 400, 800, 1600, 3200</td>
<td>You can reduce image blurring in dark locations or with moving subjects by increasing the ISO sensitivity (select a larger number).</td>
</tr>
</tbody>
</table>

💡 Adjusting ISO Sensitivity (Recommended Exposure Index)

ISO sensitivity is a speed rating for recording media that incorporates an image sensor that receives light. Even when the exposure is the same, images differ depending on the ISO sensitivity.

High ISO sensitivity

Records a bright image even in dark locations while increasing shutter speed to reduce blur. However, the image tends to be noisy.

Low ISO sensitivity

Records a smoother image. However, when the exposure is insufficient, the image may be darker.

Related Topic

MENU items available for each shooting mode
White Balance

To capture a basic white color in [One Push Set] mode

Adjusts color tones according to the surrounding light conditions. Use this function if the image color appears unnatural.

1. MENU → \( \text{WB} \) (White Balance) → desired mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Auto)</td>
<td>Adjusts the white balance automatically so that the colors appear natural.</td>
</tr>
<tr>
<td>(Daylight)</td>
<td>Adjusts for outdoors conditions on a fine day, evening views, night scenes, neon signs, fireworks, etc.</td>
</tr>
<tr>
<td>(Cloudy)</td>
<td>Adjusts for a cloudy sky or a shady location.</td>
</tr>
<tr>
<td>(Fluorescent White Balance 1)</td>
<td>[Fluorescent White Balance 1]: Adjusts for white fluorescent lighting.</td>
</tr>
<tr>
<td>(Fluorescent White Balance 2)</td>
<td>[Fluorescent White Balance 2]: Adjusts for natural white fluorescent lighting.</td>
</tr>
<tr>
<td>(Fluorescent White Balance 3)</td>
<td>[Fluorescent White Balance 3]: Adjusts for daylight fluorescent lighting.</td>
</tr>
<tr>
<td>(Incandescent)</td>
<td>Adjusts for places under incandescent lamp, or under bright lighting, such as in a photo studio.</td>
</tr>
<tr>
<td>(Flash)</td>
<td>Adjusts for flash conditions.</td>
</tr>
<tr>
<td>(One Push)</td>
<td>Adjusts the white balance depending on the light source. Use this mode when [Auto] and other settings do not provide accurate colors.</td>
</tr>
<tr>
<td>(One Push Set)</td>
<td>Memorizes the basic white color which will be used in [One Push] mode. [Details]</td>
</tr>
</tbody>
</table>

Effects of lighting conditions

The apparent color of the subject is affected by the lighting conditions. The color tones are adjusted automatically, but you can adjust color tones manually using the White Balance function.

Daylight (White as Standard)
Cloudy (Bluish)

Fluorescent (Green-tinged)

Incandescent (Reddish)

Notes
- When shooting with a flash in other than [Flash] mode, [White Balance] is set to [Auto].
- When [Flash] is [On] or [Slow Synchro], the white balance can only be adjusted to [Auto], [Flash], [One Push] or [One Push Set].

To capture a basic white color in [One Push Set] mode

1. Frame a white object such as a piece of paper filling the screen under the same lighting conditions as you will shoot the subject.
2. MENU → AUTO (White Balance) → [One Push Set] → [One Push Set] on the control button

The screen momentarily turns black, and when the white balance has been adjusted and stored in the memory, the recording screen is displayed again.

Notes
- If the indicator flashes while shooting, the white balance is either not set or cannot be set. Use automatic white balance.
- Do not shake or strike the camera while [One Push Set] is in progress.
- When flash mode is set to [On] or [Slow Synchro], the white balance is adjusted to the condition with the flash emitting.

Related Topic

MENU items available for each shooting mode
Focus

**Focusing on subjects near the edge of the screen**
You can change the focus method. Use the menu when it is difficult to get the proper focus in auto focus mode.

AF stands for “Auto Focus,” a function that adjusts the focus automatically. The selected AF range finder frame appears on the screen.

1. **MENU** → <Image> (Focus) → desired mode

<table>
<thead>
<tr>
<th>AF Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Multi AF)</td>
<td>Focuses on a subject in all ranges of the finder frame automatically. When you press the shutter button halfway down in still image shooting mode, a green frame is displayed around the area that is in focus. When the Face Detection function is active, AF operates with priority on faces.</td>
</tr>
<tr>
<td>(Center AF)</td>
<td>Focuses on a subject in the center of the finder frame automatically. Using the AF lock function together, you can compose the image the way you want.</td>
</tr>
<tr>
<td>(Spot AF)</td>
<td>Focuses on an extremely small subject or a narrow area automatically. Using the AF lock function together, you can compose the image the way you want. Hold the camera steady so as not to misalign the subject and the AF range finder frame.</td>
</tr>
</tbody>
</table>

**Notes**
- When you use [Digital Zoom] or [AF Illuminator], the AF range finder frame is disabled and appears in a dotted line. In this case, the camera works to focus on the subjects at the center of the screen.
- If the tracking focus is activated, the camera focuses with priority on the subject to be tracked.
Focusing on subjects near the edge of the screen

If the subject is out of focus, do as follows:

1. Recompose the shot so that the subject is centered in the AF range finder (A), and press the shutter button halfway to focus on the subject (AF lock).

2. When the AE/AF lock indicator (B) stops flashing and remains on, return to the fully composed shot, and press the shutter button fully down.

Related Topic

Tracking focus

MENU items available for each shooting mode
Metering Mode

Selects the metering mode that sets which part of the subject to measure to determine the exposure.

1. MENU → (Metering Mode) → desired mode

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>[ ] (Multi)</td>
<td>Divides into multiple regions and measures each region. The camera determines a well-balanced exposure (Multi-pattern metering).</td>
</tr>
<tr>
<td>[ ] (Center)</td>
<td>Measures the center of the image, and determines the exposure based on the brightness of the subject there (Center-weighted metering).</td>
</tr>
<tr>
<td>[ ] (Spot)</td>
<td>Align the spot metering cross hairs (A) on the subject to meter one part of the subject (Spot metering). This function is useful when the subject is backlit or when there is strong contrast between the subject and the background.</td>
</tr>
</tbody>
</table>

Related Topic

MENU items available for each shooting mode
Cont. Shooting Settings

You can select Single Shooting or Continuous Shooting as the shooting mode.

1. **MENU →** (Cont. Shooting Settings) → desired mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Single Shooting)</td>
<td>The camera shoots a single image.</td>
</tr>
<tr>
<td>(Continuous Shooting)</td>
<td>The camera shoots up to 100 frames and up to approximately 0.8 frames per second when you continue to hold down the shutter button.</td>
</tr>
</tbody>
</table>

**Notes**
- [Flash] is set to [Off].
- When recording with the self-timer, a series of up to 5 images is recorded.
- The recording interval becomes longer, depending on the setting for the image size.
- [Focus], [White Balance], and [Exposure Compensation] are adjusted for the first image, and these settings are also used for the other images.
- When the internal memory or a memory card is full, the burst stops.

**Related Topic**

**MENU items available for each shooting mode**
## Bracket Setting

You can set the type of the bracket shooting. In bracket shooting mode, you can record a series of 3 images with the setting changed. You can select the most suitable image afterwards.

1. MENU → (Bracket Setting) → desired mode

<table>
<thead>
<tr>
<th>Setting</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Does not use the bracket shooting.</td>
</tr>
<tr>
<td>±0.3 (EXP ±0.3)</td>
<td>Records a series of 3 images with the exposure shifted in the following order: standard, dark, and bright. The larger the bracket step value, the larger the shift of the exposure value.</td>
</tr>
<tr>
<td>±0.7 (EXP ±0.7)</td>
<td></td>
</tr>
<tr>
<td>±1.0 (EXP ±1.0)</td>
<td></td>
</tr>
<tr>
<td>(White Balance)</td>
<td>Records a series of 3 images with the white balance shifted in the following order: current color tone, toward blue, and toward red. When you set [White Balance] to other than [Auto], the color tone is shifted based on the selected white balance.</td>
</tr>
</tbody>
</table>

### Notes
- You cannot select [White Balance] when the mode dial is set to **SCN** (Scene Selection).

### Related Topics
- Functions available for each shooting mode
- MENU items available for each shooting mode
**Scene Recognition**

**Advanced mode**

The camera automatically detects shooting conditions, and then takes the shot. When motion is detected, the ISO sensitivity is increased according to the movement to reduce subject blur. When the camera is set to Intelligent Auto mode, you can select [Advanced] mode, in which the camera automatically shoots two images.

In Scene Recognition, the position of an icon displayed on the screen is different depending on the circumstances. It depends on whether the camera recognizes a scene or a condition. If the camera recognizes a scene, icons and guides such as ![Portrait](Portrait), ![Infant](Infant), ![Night Portrait](Night Portrait), ![Night Scene](Night Scene), ![Backlight Portrait](Backlight Portrait), ![Backlight](Backlight), ![Landscape](Landscape), ![Macro](Macro), ![Spotlight](Spotlight) or ![Low Light](Low Light) are displayed on the first line. If the camera recognizes a condition, icons such as ![Tripod](Tripod) or ![Move](Move) are displayed on the second line. The camera may recognize both a scene and a condition, or just one.

1. **MENU** → **SCN** (Scene Recognition) → desired mode

<table>
<thead>
<tr>
<th><strong>SCN</strong> (Auto)</th>
<th>When the camera recognizes the scene, it switches to the optimal settings and shoots the image.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCN</strong> (Advanced)</td>
<td>When the camera recognizes the scene, it switches to the optimal settings. When the camera recognizes ![Night Scene](Night Scene), ![Night Portrait](Night Portrait), <img src="Backlight" alt="Backlight" /> or ![Backlight Portrait](Backlight Portrait), it automatically changes the settings and shoots another image.</td>
</tr>
<tr>
<td><strong>SCN</strong> (Advanced)</td>
<td>- When you shoot two images consecutively, the + mark on the <strong>SCN</strong> icon will turn green.</td>
</tr>
<tr>
<td><strong>SCN</strong> (Advanced)</td>
<td>- When [Anti Blink] is displayed, two images are taken automatically and the image with eyes open is selected automatically. [Details]</td>
</tr>
</tbody>
</table>

**Notes**

- The Scene Recognition function does not operate when you shoot images using digital zoom.
- The available flash settings are [Advanced Flash], [Auto] and [On].
- These scenes may not be recognized depending on the situation.
- In Tracking focus mode, ![Portrait](Portrait), ![Infant](Infant), ![Night Portrait](Night Portrait) or ![Backlight Portrait](Backlight Portrait) are not recognized.
- If the environment causes vibrations to be transferred to the camera when ![Tripod](Tripod) and ![Night Scene](Night Scene) conditions are recognized at the same time, the ![Tripod](Tripod) conditions may not be recognized.
- Sometimes a slow shutter results when ![Tripod](Tripod) and ![Night Scene](Night Scene) conditions are recognized at the same time. Keep the camera still while shooting.
**Advanced mode**

In [Advanced] mode, the camera shoots two images consecutively with the settings differing as follows when it recognizes (Night Scene), (Night Portrait), (Backlight) or (Backlight Portrait) scenes, which tend to blur, or when (Night Scene) and (Tripod) conditions are recognized at the same time. You can select the desired image from the two images shot.

<table>
<thead>
<tr>
<th>First Image*</th>
<th>Second Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shoots in Slow Synchro</td>
<td>Shoots with sensitivity increased and shake reduced</td>
</tr>
<tr>
<td>Shoots in Slow Synchro with the face which the flash strobes on as a guide</td>
<td>Shoots with sensitivity increased with the face as a guide and shake reduced</td>
</tr>
<tr>
<td>Shoots in Slow Synchro</td>
<td>Shoots with a slower shutter speed without increasing sensitivity</td>
</tr>
<tr>
<td>Shoots with flash</td>
<td>Shoots with the brightness and contrast of the background adjusted</td>
</tr>
<tr>
<td>Shoots with the face which the flash strobes on as a guide</td>
<td>Shoots with the brightness and contrast of the face and the background adjusted</td>
</tr>
</tbody>
</table>

* When [Flash] is set to [Auto].

**What is the Anti Blink function?**

When set to [Advanced], the camera automatically shoots two images consecutively* when it recognizes (Portrait) or (Infant). The camera will select, display, and record an image in which the eyes are not blinked automatically. If the eyes are closed in both images, the message “Blinked eye detected” is displayed. * Except when the flash strobes/when the shutter speed is slow.

**Related Topic**

MENU items available for each shooting mode

---

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Smile Detection Sensitivity

Sets the sensitivity of the Smile Shutter function for detecting smiles.

1. MENU → 😊 (Smile Detection Sensitivity) → desired mode

<table>
<thead>
<tr>
<th>🧙‍♂️ (Big Smile)</th>
<th>😊 (Normal Smile)</th>
<th>😊 (Slight Smile)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Detects a big, normal or slight smile.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes

- Smiles may not be detected correctly depending on the conditions.

Related Topic

Smile Shutter

MENU items available for each shooting mode
Face Detection

When the Face Detection function is used, the camera detects the faces of your subjects and adjusts the focus, flash, exposure, white balance and red-eye reduction settings automatically.

1. MENU → (Face Detection) → desired mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Off)</td>
<td>Cannot use Face Detection.</td>
</tr>
<tr>
<td>(Auto)</td>
<td>Selects the face the camera is to automatically focus on.</td>
</tr>
<tr>
<td>(Child Priority)</td>
<td>Detects and shoots with priority on children’s faces.</td>
</tr>
<tr>
<td>(Adult Priority)</td>
<td>Detects and shoots with priority on adult faces.</td>
</tr>
</tbody>
</table>

Notes

- [Off] is not available when [Self-Timer] is set to [Self-portrait One Person] or [Self-portrait Two People].
- You can select [Face Detection] only when the focus mode is set to [Multi AF] and the metering mode is set to [Multi].
- The Face Detection function does not operate when you use the digital zoom.
- Up to 8 faces of your subjects can be detected.
- Adults and children may not be recognized correctly depending on the conditions.
- During Smile Shutter shooting, [Face Detection] is automatically set to [Auto] even if it is set to [Off].

Related Topic

Anti Blink
Tracking focus

MENU items available for each shooting mode
DRO

The camera analyzes the shooting scene and automatically corrects the brightness and contrast to improve the image quality. DRO stands for “Dynamic Range Optimizer,” a function that automatically optimizes the difference between light and dark parts of an image.

1. MENU → (REC Mode) → P (Program Auto) → DRO (DRO) → desired mode

<table>
<thead>
<tr>
<th>DRO (Off)</th>
<th>Does not adjust.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRO Standard</td>
<td>Adjusts the brightness and contrast of the images automatically.</td>
</tr>
<tr>
<td>DRO plus</td>
<td>Adjusts image brightness and contrast automatically and strongly.</td>
</tr>
</tbody>
</table>

Notes

- Depending on shooting conditions, it may not be possible to obtain correction effects.
- Only [ISO AUTO] or values from [ISO 80] to [ISO 800] can be set for the ISO value when [DRO plus] is set.
Anti Blink

When Scene Selection is set to [Soft Snap] and the subject blinks while you are shooting an image, the camera automatically shoots two images consecutively. The camera will automatically select, display and record images in which the eyes are not blinking.

1. **MENU → (Anti Blink) → desired mode**

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>✅ (Auto)</td>
<td>When Face Detection is active, the Anti Blink function operates so that images with the subject’s eyes open are recorded.</td>
</tr>
<tr>
<td>✗ (Off)</td>
<td>Does not use the Anti Blink function.</td>
</tr>
</tbody>
</table>

**Notes**
- Anti Blink does not function in the following situations:
  - When using the flash
  - During burst shooting
  - When the Face Detection function does not work
  - When the Smile Shutter function is activated
- Sometimes the Anti Blink function does not work depending on the situation.
- When the Anti Blink function is set to [Auto] but only images with the subject’s eyes closed are recorded, the message “Blinked eye detected” is displayed on the screen. Shoot again as necessary.

**Related Topic**

Scene Selection
### MENU items available for each view mode

<table>
<thead>
<tr>
<th>Menu items</th>
<th>Memory card</th>
<th>Internal Memory</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Date View</td>
<td>Folder view</td>
</tr>
<tr>
<td></td>
<td>Folder view</td>
<td>Folder view</td>
</tr>
<tr>
<td></td>
<td>(Still)</td>
<td>(Movie)</td>
</tr>
<tr>
<td>(Beauty Effect)</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>(Retouch)</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>(Delete)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Slideshow)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(View Mode)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Protect)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Print (DPOF)</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>(Rotate)</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>(In-Camera Guide)</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>(Settings)</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

**Notes**
- Only the items that are available for each mode are displayed on the screen.
# Beauty Effect

Allows you to apply the Beauty Effect to retouch the still image of a person and make it look better, for example, retouching for smoother skin, larger eyes, and whiter teeth.

You can set the effects from level 1 to 5. An image on which the Beauty Effect is used is saved as a new file. The original image is retained as is.

1. Set the camera to playback mode.
2. MENU → (Beauty Effect) → on the control button.
3. Select a face you want to use the Beauty Effect for.
4. Select the desired effect and perform retouching according to the operation method in each mode.

<table>
<thead>
<tr>
<th>Effect</th>
<th>Description</th>
<th>Instructions</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Skin Toning)</td>
<td>Retouch the image to change the skin color to the desired effect.</td>
<td>① Select the desired base skin color using ▲ / ▼ and press ●. ② Increase or decrease the color using ▲ / ▼.</td>
</tr>
<tr>
<td>(Skin Smoothing)</td>
<td>Retouch the image to remove age spots and wrinkles from the skin.</td>
<td>Increase or decrease the effect using ▲ / ▼.</td>
</tr>
<tr>
<td>(Shine Removal)</td>
<td>Retouch the image to suppress the oily skin look.</td>
<td>Increase or decrease the effect using ▲ / ▼.</td>
</tr>
<tr>
<td>(Eye Widening)</td>
<td>Retouch the image to enlarge the eyes.</td>
<td>Increase or decrease the effect using ▲ / ▼.</td>
</tr>
<tr>
<td>(Teeth Whitening)</td>
<td>Retouch the image to whiten the teeth.</td>
<td>Increase or decrease teeth whiteness using ▲ / ▼.</td>
</tr>
</tbody>
</table>

**Notes**

- You cannot use [Beauty Effect] for the following images:
  - Panoramic images
  - Movies
- You cannot use the Beauty Effect on an extremely small facial image.
- To use the Beauty Effect on two or more faces, select the same image again after the effect has been applied once and then use the effect on another face.
- The Beauty Effect may not work properly for some images.
Retouch

Retouches a recorded image and saves it as a new file. The original image is retained.

1. Set the camera to playback mode.
2. MENU → (Retouch) → desired mode → on the control button
3. Perform retouching according to the operation method in each mode.

![Trimming (Resize)](image)

Records a zoomed playback image.

1. Turn the W/T (zoom) lever to the T ( ) side to zoom in, and to the W side to zoom out.
2. Set the zoom point with the control button.
3. MENU → select an image size to save →
4. [OK] →
   - The quality of trimmed images may deteriorate.
   - The image size that you can trim may vary depending on the image.

![Unsharp masking](image)

Sharpens the image within a chosen frame.

Select the area (frame) of the desired image to retouch with the control button → MENU.

- Depending on the image, sufficient correction may not be applied and the image quality may deteriorate.

Notes
- You cannot retouch the panoramic images or movies.
Delete

Allows you to select unwanted images for deletion.
You can also delete image using \( \text{Delete} \) button [Details].

1. Set the camera to playback mode.
2. MENU → \( \text{Delete} \) → desired mode → \( \bullet \) on the control button
3. [OK] → \( \bullet \)

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \text{All in This Folder} )</td>
<td>Deletes all still images and movies in the selected date range or folder at once.</td>
</tr>
<tr>
<td>( \text{All Images on This Date} )</td>
<td>Allows you to select and delete multiple images.</td>
</tr>
<tr>
<td>( \text{(Multiple Images)} )</td>
<td>After step 2, select an image to be deleted, then press ( \bullet ).</td>
</tr>
<tr>
<td></td>
<td>To cancel the selection, press ( \bullet ) again to cancel the ( \checkmark ) mark.</td>
</tr>
<tr>
<td>( \text{(This Image)} )</td>
<td>Deletes the currently displayed image in single-image mode.</td>
</tr>
</tbody>
</table>

Notes

- When the internal memory is used to record images, View Mode is set to Folder View and still images and movies are displayed in the same folder.

Related Topics
Deleting images
Slideshow

Continuous Playback

1. Set the camera to playback mode.

2. MENU → (Slideshow) → desired slideshow → on the control button

Slideshow with music

Images are automatically played back in succession.

1. MENU → (Slideshow) → desired slideshow → on the control button

Continuous Playback

1. Select the desired image for playing with the control button.

2. MENU → (Slideshow) → [Continuous Playback] →

<table>
<thead>
<tr>
<th>Control button</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>○</td>
<td>Stop</td>
</tr>
<tr>
<td>▲</td>
<td>Sets the display settings.</td>
</tr>
<tr>
<td>▼</td>
<td>Displays the volume control screen.</td>
</tr>
<tr>
<td></td>
<td>○ Adjust the volume with ▲ / ▼ on the control button, then press ○.</td>
</tr>
<tr>
<td>◄</td>
<td>Rewinds image.</td>
</tr>
<tr>
<td>►</td>
<td>Forwards image.</td>
</tr>
</tbody>
</table>

Viewing panoramic images during continuous playback

The whole panoramic image is displayed for 3 seconds. You can scroll a panoramic image by pressing ○.

Slideshow with music

1. MENU → (Slideshow) → [Slideshow with music] → on the control button

Displays the setting screen.

2. Select a desired setting.

3. [Start] → ○

4. Press ○ to end the slideshow.
**Notes**
- [Slideshow with music] is not available for panoramic images.

### Playback Selection
Selects the group of images to be shown.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✅</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>This Date</td>
</tr>
<tr>
<td></td>
<td>Folder</td>
</tr>
</tbody>
</table>

### Effects
Selects the playback speed and mood for slideshows.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✅</td>
<td>Simple</td>
</tr>
<tr>
<td></td>
<td>Nostalgic</td>
</tr>
<tr>
<td></td>
<td>Stylish</td>
</tr>
<tr>
<td></td>
<td>Active</td>
</tr>
</tbody>
</table>

### Music
Specifies the music to be played during slideshows. You can select more than one background music track. Press ▼ on the control button to display the volume control screen, then press ▲ / ▼ to adjust the volume.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✅</td>
<td>Music1</td>
</tr>
<tr>
<td></td>
<td>Music2</td>
</tr>
<tr>
<td></td>
<td>Music3</td>
</tr>
<tr>
<td></td>
<td>Music4</td>
</tr>
<tr>
<td></td>
<td>Muting</td>
</tr>
</tbody>
</table>

**Notes**
- The movies are played back without their audio.

### Interval
Sets the screen switching interval. The setting is fixed to [Auto] when [Simple] is not selected as the [Effects].

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 sec</td>
</tr>
<tr>
<td></td>
<td>3 sec</td>
</tr>
<tr>
<td></td>
<td>5 sec</td>
</tr>
<tr>
<td></td>
<td>10 sec</td>
</tr>
<tr>
<td></td>
<td>Auto</td>
</tr>
</tbody>
</table>
Selecting background music

You can transfer a desired music file from your CDs or MP3 files to the camera to play back during a slideshow. To transfer music, install the "Music Transfer" software to your computer. [Details]

Related Topic

"Music Transfer"
View Mode

▼ Displaying the Calendar
Allows you to select the display format for images.

1. Set the camera to playback mode.

2. MENU → (View Mode) → desired mode → on the control button

| (Date View) | Displays images by date. |
| (Folder view (Still)) | Displays still images. |
| (Folder view (Movie)) | Displays movies. |

Notes
• When the internal memory is used to record images, View Mode is set to Folder View and still images and movies are displayed in the same folder.

Displaying the Calendar

1. MENU → (View Mode) → [Date View] → on the control button

2. Turn the W/T (zoom) lever to the W side ( ) repeatedly until the Calendar is displayed.

   Use the control button to select ( ) then select the month you want to display. Select the date and press ( ) to view images of the selected date in index mode.
Protect

To cancel protection

Protects recorded images against accidental erasure. The mark is displayed for registered images.

1. Set the camera to playback mode.

2. MENU → (Protect) → desired mode → on the control button

<table>
<thead>
<tr>
<th>(This Image)</th>
<th>Protects the currently displayed image in single-image mode.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Multiple Images)</td>
<td>You can select and protect multiple images.</td>
</tr>
<tr>
<td></td>
<td>After step 2, select an image to be protected, then press .</td>
</tr>
<tr>
<td></td>
<td>To cancel the selection, press again to cancel the mark.</td>
</tr>
<tr>
<td></td>
<td>MENU → [OK] →</td>
</tr>
</tbody>
</table>

Notes

- When the internal memory is used to record images, View Mode is set to Folder View and still images and movies are displayed in the same folder.

To cancel protection

Select the image for which you want to cancel protection, and unlock it by pressing on the control button as the same procedure to protect it. The indicator disappears, and the protection is released.

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Print (DPOF)

Clearing the DPOF mark

DPOF (Digital Print Order Format) is a function that allows you to specify the images of the memory card that you want to print out later. The DPOF (Print order) mark is displayed for registered images.

1. Set the camera to playback mode.

2. MENU → DPOF → desired mode → on the control button

<table>
<thead>
<tr>
<th>DPOF (This Image)</th>
<th>Orders printing the currently displayed image in single-image mode.</th>
</tr>
</thead>
<tbody>
<tr>
<td>DPOF (Multiple Images)</td>
<td>You can select and order multiple images to be printed.</td>
</tr>
<tr>
<td></td>
<td>After step 2, select an image to be printed, then press .</td>
</tr>
<tr>
<td></td>
<td>To cancel the selection, press  again to cancel the mark.</td>
</tr>
<tr>
<td></td>
<td>MENU → [OK] →</td>
</tr>
</tbody>
</table>

Notes

- The DPOF (Print order) mark cannot be added to the following images:
  - Movies
  - Images in the internal memory
- You can add a DPOF (Print order) mark to a maximum 999 images.

Clearing the DPOF mark

Select the image to clear the DPOF registration, then press on the control button in the same procedure as when making a DPOF mark. The DPOF mark disappears and the DPOF registration is cleared.

Related Topic

Printing still images

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**Rotate**

Rotates a still image. Use this to display a horizontal orientation image in vertical orientation.

1. Set the camera to playback mode.
2. MENU → (Rotate) →  on the control button

**Notes**
- You cannot rotate the following images:
  - Movies
  - Protected still images
- You may not be able to rotate images shot with other cameras.
- When viewing images on a computer, the image rotation information may not be reflected, depending on the software.
AF Illuminator

The AF illuminator supplies fill light to focus more easily on a subject in dark surroundings. The AF illuminator emits red light allowing the camera to focus easily when the shutter button is pressed halfway, until the focus is locked. The \( \text{\textbullet} \text{\textbullet} \) indicator appears at this time.

1. Set the camera to shooting mode.
2. MENU \( \rightarrow \) \( \) (Settings) \( \rightarrow \) \( \) (Shooting Settings) \( \rightarrow \) [AF Illuminator] \( \rightarrow \) desired mode \( \rightarrow \)

<table>
<thead>
<tr>
<th></th>
<th>Sets whether to use the AF illuminator automatically in dark surroundings.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td></td>
</tr>
<tr>
<td>Off</td>
<td></td>
</tr>
</tbody>
</table>

Notes

- Focus is achieved as long as the AF illuminator light reaches the subject, regardless of whether light fails to reach the center of the subject.
- You cannot use the AF illuminator in the following situations:
  - In movie mode
  - In [Sweep Panorama]
  - When [ ] (Landscape), [ ] (Night Scene), [ ] (Pet) or [ ] (Fireworks) mode is selected in Scene Selection.
  - When [Self-Timer] is set to [Self-portrait One Person] or [Self-portrait Two People].
- When you use the AF illuminator, the normal AF range finder frame is disabled and a new AF range finder frame is displayed by a dotted line. AF operates with priority on subjects located near the center of the frame.
- The AF illuminator emits very bright light. Although there is no health hazard, do not look directly into the AF illuminator emitter at close range.
Grid Line

With reference to the grid lines, you can easily set a subject in a horizontal/vertical position.

1. Set the camera to shooting mode.

2. MENU → (Settings) → (Shooting Settings) → [Grid Line] → desired mode →

<table>
<thead>
<tr>
<th></th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Displays the grid lines. The grid lines are not recorded.</td>
<td>Does not display the grid lines.</td>
</tr>
</tbody>
</table>
Disp. Resolution

Adjusts the image quality on the screen for shooting.

1. Set the camera to shooting mode.

2. MENU → (Settings) → (Shooting Settings) → [Disp. Resolution] → desired mode

- **High**: Displays the image on the screen in high image quality.
- **Standard**: Displays the image on the screen in standard image quality.

**Notes**
- The battery power may decrease faster when [Disp. Resolution] is set to [High].
- In Sweep Panorama and Movie Mode, [Disp. Resolution] is set to [High].
Digital Zoom

Total zoom scale when using Smart zoom (including optical zoom 26×)

Selects the digital zoom mode. The camera enlarges the image using optical zoom (up to 26×). When the zoom scale is exceeded, the camera uses either smart or precision digital zoom.

1. Set the camera to shooting mode.

2. MENU → (Settings) → (Shooting Settings) → [Digital Zoom] → desired mode

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart (S)</td>
<td>Enlarges the image digitally within the range where the image will not be distorted, according to the image size (Smart zoom).</td>
</tr>
<tr>
<td>Precision (P)</td>
<td>Enlarges all image sizes by the total zoom scale of approximately 52×, including the optical zoom 26×. However, note that the image quality deteriorates when the optical zoom scale is exceeded (Precision digital zoom).</td>
</tr>
<tr>
<td>Off</td>
<td>Does not use the digital zoom.</td>
</tr>
</tbody>
</table>

Notes

- [Digital Zoom] is not available in the following situations:
  - In [Sweep Panorama]
  - When the Smile Shutter function is activated.
  - When [Self-Timer] is set to [Self-portrait One Person] or [Self-portrait Two People].
- The smart zoom is not available when you record movies or the image size is set to [20M] or [16:9(15M)].
- The Face Detection function does not operate in the range of [Digital Zoom].

Total zoom scale when using Smart zoom (including optical zoom 26×)

The supported zoom ratio differs depending on the image size.

<table>
<thead>
<tr>
<th>Size</th>
<th>Total zoom scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>10M</td>
<td>Approx. 36×</td>
</tr>
<tr>
<td>5M</td>
<td>Approx. 52×</td>
</tr>
<tr>
<td>VGA</td>
<td>Approx. 210×</td>
</tr>
<tr>
<td>16:9(2M)</td>
<td>Approx. 70×</td>
</tr>
</tbody>
</table>
Red Eye Reduction

The flash strobes two or more times before shooting to reduce the red-eye phenomenon when using flash.

1. Set the camera to shooting mode.
2. MENU → (Settings) → (Shooting Settings) → [Red Eye Reduction] → desired mode

- **Auto** When the Face Detection function is activated, the flash strobes automatically to reduce the red-eye phenomenon.
- **On** The flash always strobes to reduce the red-eye phenomenon.
- **Off** Does not use Red Eye Reduction.

**What causes the red-eye phenomenon?**

Pupils become dilated in dark environments. The flash light is reflected off the blood vessels at the back of the eye (retina) (A), causing the “red-eye” phenomenon.

**Other ways to reduce red-eye**

- Select ISO (High Sensitivity) mode in Scene Selection. (The flash is set to [Off] automatically.)

**Notes**

- To avoid blurring of images, hold the camera firmly until the shutter is released. It usually takes a second until the shutter is released, and also be sure not to allow the subject to move during this period.
- Red Eye Reduction may not produce the desired effects. It depends on individual differences and conditions, such as the distance to the subject or if the subject looked away from the pre-strobe.
- If you do not use the Face Detection function, Red Eye Reduction does not work, even when you select [Auto].
- [Red Eye Reduction] is set to [Off] in the following situations:
  - When (Night Scene), ISO (High Sensitivity), (Gourmet), (Pet) or (Fireworks) mode is selected in Scene Selection.
  - When the Smile Shutter function is activated.
Blink Alert

When an image with the subject’s eyes closed is recorded while Face Detection is activated, the message “Blinked eye detected” is displayed.

1. Set the camera to shooting mode.

2. MENU → (Settings) → (Shooting Settings) → [Blink Alert] → desired mode →

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Sets whether to display the “Blinked eye detected” message.</td>
</tr>
<tr>
<td>Off</td>
<td></td>
</tr>
</tbody>
</table>
Write Date

Sets whether to record a shooting date on the still image.

1. Set the camera to shooting mode.
2. MENU → (Settings) → (Shooting Settings) → [Write Date] → desired mode →

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>On (✓)</td>
<td>Records a shooting date. When [On] is selected, the mark will appear on the screen while shooting. However, in some shooting modes that cannot record dates on images, the mark will disappear.</td>
</tr>
<tr>
<td>Off</td>
<td>Does not record a shooting date.</td>
</tr>
</tbody>
</table>

Notes

- You cannot record dates in the following situations:
  - In movie mode
  - When shooting panoramic images
  - In burst shooting mode
  - In [Easy Mode]
- If you shot images with the date once, you cannot delete the date from the images later.
- The dates are doubly printed, if you set the camera to superimpose the dates when printing.
- The recorded time of the image cannot be superimposed on the image.
### Beep

Selects the sound produced when you operate the camera.

1. **MENU** → **(Settings)** → ** japan** (Main Settings) → **[Beep]** → desired mode →

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shutter on</td>
<td>Turns on the shutter sound when you press the shutter button.</td>
</tr>
<tr>
<td>On</td>
<td>Turns on the beep/shutter sound when you press the control button/shutter button.</td>
</tr>
<tr>
<td>Off</td>
<td>Turns off the beep/shutter sound.</td>
</tr>
</tbody>
</table>

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Panel Brightness

You can select the screen brightness from level 1 to 5. The screen becomes brighter as the number rises. When you use the camera in bright outside light, select a higher number to see the screen easier.

1. MENU →  Settings →  (Main Settings) → [Panel Brightness] → desired mode

Notes
- The brighter the screen, the faster the battery runs out.
- The screen grows dark if you do not operate the camera while the power is on.
Language Setting

Selects the language to be used in the menu items, warnings and messages.

1. MENU → (Settings) → (Main Settings) → [Language Setting] → desired mode →

▲ Back to top
### Display color

Sets the color of the screen display.

1. **MENU** → ![Settings] → ![Main Settings] → [Display color] → desired mode →  ●

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Sets the background color of the screen.</td>
</tr>
<tr>
<td>White</td>
<td></td>
</tr>
<tr>
<td>Pink</td>
<td></td>
</tr>
</tbody>
</table>
Initialize

 Initializes the settings to the default setting. Even if you execute this function, the images are retained.

1. MENU → [Settings] → [Main Settings] → [Initialize] → [OK] → 

**Notes**
- Be sure not to remove the batteries while initializing.
Function Guide

You can select whether or not the function guide is displayed when you operate the camera.

1. MENU → (Settings) → (Main Settings) → [Function Guide] → desired mode →

<table>
<thead>
<tr>
<th></th>
<th>On</th>
<th>Off</th>
</tr>
</thead>
</table>
| Sets whether to display the function guide.
**Video Out**

Sets the video signal output according to the TV color system of the connected video equipment. The TV color systems differ depending on the country and region. To view images on a TV screen, check the TV color system of the country or region of use. [Details]

1. MENU ➔ (Settings) ➔ (Main Settings) ➔ [Video Out] ➔ desired mode ➔

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td>Sets the video output signal to NTSC mode (e.g., for the USA, Japan).</td>
</tr>
<tr>
<td>PAL</td>
<td>Sets the video output signal to PAL mode (e.g., for Europe, China).</td>
</tr>
</tbody>
</table>

▲ Back to top
USB Connect Setting

Sets how to make a USB connection when connecting the camera to a computer, etc.

1. MENU → (Settings) → (Main Settings) → [USB Connect Setting] → desired mode →

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mass Storage</td>
<td>Establishes a Mass Storage connection between the camera and a computer or other USB device.</td>
</tr>
<tr>
<td>PTP/MTP</td>
<td>When you connect the camera to a computer, the AutoPlay Wizard appears, and the still images in the recording folder on the camera are imported to the computer. (with Windows 7, Windows 8, Windows Vista, Windows XP, Mac OS X)</td>
</tr>
</tbody>
</table>

Notes

- When [USB Connect Setting] is set to [PTP/MTP], you cannot export movies to a computer. To export movies to a computer, set [USB Connect Setting] to [Mass Storage].

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LUN Setting

Sets USB connection mode when connecting the camera to a computer, etc.

1. MENU → (Settings) → (Main Settings) → [LUN Setting] → desired mode →

<table>
<thead>
<tr>
<th>Multi</th>
<th>Images both on the memory card and in the internal memory are displayed. Select this setting when you connect the camera to a computer.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>When the memory card is inserted into the camera, the images on the memory card are displayed; when it is not inserted, the images in the internal memory are displayed. Select this setting in cases where the images of both the memory card and the internal memory are not displayed when the camera is connected to a device other than a computer.</td>
</tr>
</tbody>
</table>
Download Music

You can change background music tracks using "Music Transfer".

1. MENU → [Settings] → [Main Settings] → [Download Music] → 
   The message "Connect to PC" is displayed.

2. Make a USB connection between the camera and a computer, then start "Music Transfer".

3. Follow the instructions on the screen to change music files.
Empty Music

You can delete all the background music files stored in the camera. It can be used in cases such as when the background music files are damaged and cannot be played.

1. MENU → 设定 (Settings) → 選擇 (Main Settings) → 空白 (Empty Music) → OK → ●

Related Topic
"Music Transfer"
Eye-Fi

Transferring image data using the Eye-Fi card

Sets whether to use the upload function of an Eye-Fi card (commercially available), when you use the Eye-Fi card with this camera. [Eye-Fi] is displayed only when the Eye-Fi card is inserted in the camera.

1. MENU → (Settings) → (Main Settings) → [Eye-Fi] → desired mode →

- **On**: Uses the upload function. The Eye-Fi mode display icon on the screen will change depending on the communication mode of the Eye-Fi card.
  - Eye-Fi card is in standby mode. There is no image to be sent.
  - Eye-Fi card is in upload standby mode.
  - Eye-Fi card is in connecting mode.
  - Eye-Fi card is uploading images.
  - An error has occurred.

- **Off**: Does not use the upload function.

Notes

- As of December 2012, Eye-Fi cards are sold in the U.S.A., Canada, Japan and some countries in the European Union.
- For more information on the Eye-Fi card, contact the manufacturer or seller of Eye-Fi cards directly.
- Eye-Fi cards are permitted only in the countries and regions in which they were purchased. You may be held liable due to local restrictions.
- The Eye-Fi card has a wireless LAN function. Do not insert the Eye-Fi card where wireless LAN is prohibited, such as while aboard an airplane. If the Eye-Fi card is inserted, set [Eye-Fi] to [Off]. When the uploading function of the Eye-Fi card is set to [Off], OFF is displayed on the screen.

Transferring image data using the Eye-Fi card

1. Set the wireless LAN access point settings or the transferring direction settings of the Eye-Fi card. For details, refer to the operating instructions supplied with the Eye-Fi card.
2. After the settings are finished, insert the Eye-Fi card into the camera, and shoot the images. The recorded images are automatically transferred via wireless LAN to a PC, etc.

Notes

- When uploading image data, [Power Save] is not available.
- If the (error) icon is displayed, eject and re-insert the Eye-Fi card, or turn the power of the camera off and on again. If the (error) icon is still displayed, the Eye-Fi card may be corrupted. For details, contact Eye-Fi, Inc.
- Wireless LAN communication may be interrupted by other communication devices. If data reception is insufficient, move the camera closer to the access point.
- Some Eye-Fi cards have an “Endless Memory Mode.” This product does not support “Endless Memory Mode.” Make sure that Eye-Fi cards that you insert into this product have “Endless Memory Mode” turned off. For details on setting “Endless Memory Mode”, refer to the operating instructions supplied with the Eye-Fi card.
Power Save

Sets the length of time until the screen goes dark and the time until the camera turns off.
If you do not operate the camera for a certain period of time while the power is on, the screen goes dark
and the camera later turns off automatically to prevent wearing down the batteries (Auto power-off
function).

1. MENU → (Settings) → (Main Settings) → [Power Save] → desired mode → ●

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max</td>
<td>Saves battery power better than when set to [Standard]. If the camera is not operated for a certain period of time, the power turns off automatically. In shooting mode, the screen automatically goes dark before the power turns off.</td>
</tr>
<tr>
<td>✔️ Standard</td>
<td>If the camera is not operated for a certain period of time, the power turns off automatically. In shooting mode, the screen automatically goes dark before the power turns off. It takes longer before the power turns off than when set to [Max].</td>
</tr>
<tr>
<td>Off</td>
<td>Does not use the Auto power-off function.</td>
</tr>
</tbody>
</table>

Notes

- The camera does not turn off automatically in the following situations:
  - During slideshow
  - During playing back movies
  - During Eye-Fi connection
**Format**

Formats the memory card or the internal memory. When you use a memory card with this camera for the first time, it is recommended to format the card using the camera for stable performance of the memory card before shooting. Note that formatting permanently erases all data on the memory card, and is unrecoverable. Save precious data on a computer, etc.

1. **MENU** → (Settings) → (Memory Card Tool) or (Internal Memory Tool) → [Format] → [OK] →

**Notes**
- Note that formatting permanently erases all data including even protected images.
Create REC.Folder

Creates a folder in a memory card for recording images. Images are recorded in the newly created folder until you create another folder or select another recording folder.

1. MENU →  (Settings) →  (Memory Card Tool) → [Create REC.Folder] → [OK] →

On folders

After a new folder is created, you can change the storage destination folder. [Details]

Notes
- This item is not displayed when the internal memory is used to record images.
- When you insert a memory card that was used with other equipment into the camera and shoot images, a new folder may be automatically created.
- Up to 4,000 images can be stored in one folder. When the folder capacity is exceeded, a new folder is automatically created.
Change REC.Folder

Changes the folder in the memory card that is currently used for recording images.

1. MENU → (Settings) → (Memory Card Tool) → [Change REC.Folder]

2. Select a folder with ↓ / ↑ on the control button.

3. [OK] → ●

**Notes**

- This item is not displayed when the internal memory is used to record images.
- You cannot select a folder with a number that has only "MSDCF" or "ANV01" as a recording folder.
- You cannot move recorded images to another folder.
Delete REC.Folder

 Deletes a folder for recording images in a memory card.

1. MENU → (Settings) → (Memory Card Tool) → [Delete REC.Folder]
2. Select a folder with ← / → on the control button.
3. [OK] →

Notes
- This item is not displayed when the internal memory is used to record images.
- If you delete the folder set as the recording folder using [Delete REC.Folder], the folder that has the largest folder number is selected as the next recording folder.
- If a folder contains protected images, images other than protected images are deleted and the folder will remain.
- If a folder contains files that cannot be played back by the camera, you cannot delete a folder.
Copy

Copies all images in the internal memory to a memory card.

1. Insert a memory card with sufficient free capacity into the camera.
2. MENU → (Settings) → (Memory Card Tool) → [Copy] → [OK] →

Notes

- Make sure there is sufficient battery power. Otherwise, the battery power may run out when you attempt to copy image files, causing the copy to fail and possibly corrupt the data.
- Images cannot be copied individually.
- The original images in the internal memory are retained even after copying. To delete the contents of the internal memory, remove the memory card after copying, then format the internal memory ([Format] in [Internal Memory Tool]).
- A new folder is created on the memory card and all the data will be copied to it. You cannot choose a specific folder and copy images to it.
File Number

Selects the method used to assign file numbers to images.

1. MENU → 

<table>
<thead>
<tr>
<th>Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Series</td>
<td>Assigns numbers to files in sequence even if the recording folder or the memory card is changed. (When the replaced memory card contains a file with a number higher than the last assigned number, a number one higher than the largest number is assigned.)</td>
</tr>
<tr>
<td>Reset</td>
<td>Starts from 0001 each time the folder is changed. (When the recording folder contains a file, a number one higher than the largest number is assigned.)</td>
</tr>
</tbody>
</table>
Area Setting

Adjusts the time to the local time of a selected area.

1. MENU → (Settings) → (Clock Settings) → [Area Setting] → desired setting

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home</td>
<td>You use the camera in your area. When the currently set area differs from your home area, you must make the Area Setting.</td>
</tr>
<tr>
<td>Destination</td>
<td>You use the camera set to the time at your destination. Set the destination area.</td>
</tr>
</tbody>
</table>

Changing Area Setting

Setting a frequently visited destination lets you easily adjust the time when you visit that destination.

1. Select the area part for [Destination], then press .

2. Press / on the control button to select the desired area, then select Summer Time using / .
**Date & Time Setting**

Sets the date and time again.

1. **MENU** → **สอบถาม (Settings)** → **นาฬิกา (Clock Settings)** → [Date & Time Setting] → desired setting →

2. Set the numeric value and desired setting with ▲ / ▼ / ◀ / ◁ on the control button.

3. [OK] →

<table>
<thead>
<tr>
<th>Date &amp; Time Format</th>
<th>You can select the date and time display format.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer Time</td>
<td>You can select Summer Time [On]/[Off].</td>
</tr>
<tr>
<td>Date &amp; Time</td>
<td>You can set the date and time.</td>
</tr>
</tbody>
</table>
Viewing an image on a Standard Definition (SD) TV

You can view images recorded on the camera in standard picture quality by connecting the camera to a Standard Definition (SD) TV. Refer also to the operating instructions supplied with the TV.

1. Turn off both the camera and the TV.
2. Connect the USB / A/V OUT terminal (A) and the audio/video input jacks on the TV (B) using the dedicated A/V cable VMC-15CSR1 (sold separately) (C).

3. Turn on the TV and set the input.
4. Press ON/OFF (Power) button, then set the camera to playback mode. Images shot with the camera appear on the TV. Select the desired image with the control button.

Notes
* When using the camera abroad, it may be necessary to switch [Video Out]. [Details]
Recommended computer environment

The following computer environment is recommended when using the software “PlayMemories Home” (Windows) and “Music Transfer” (Windows/Mac) and when importing images via a USB connection.

<table>
<thead>
<tr>
<th>Windows</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OS (pre-installed)</td>
<td>Microsoft Windows XP&lt;sup&gt;1&lt;/sup&gt; SP3/Windows Vista&lt;sup&gt;2&lt;/sup&gt; SP2/Windows 7 SP1/Windows 8</td>
</tr>
<tr>
<td>CPU</td>
<td>Intel Pentium III 800 MHz or faster (For playing/editing the High Definition movies: Intel Core Duo 1.66 GHz or faster/Intel Core 2 Duo 1.66 GHz or faster)</td>
</tr>
<tr>
<td>Memory</td>
<td>Windows XP: 512 MB or more (1 GB or more is recommended.) Windows Vista/Windows 7/Windows 8: 1 GB or more</td>
</tr>
<tr>
<td>Hard Disk (Disk space required for installation)</td>
<td>Approximately 500 MB</td>
</tr>
<tr>
<td>Display</td>
<td>1,024×768 dots or more</td>
</tr>
</tbody>
</table>

<sup>1</sup> 64-bit editions and Starter (Edition) are not supported.

<sup>2</sup> Starter (Edition) is not supported.

<table>
<thead>
<tr>
<th>Mac</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>OS (pre-installed)</td>
<td>USB Connection: Mac OS X v10.5 to v10.8 Music Transfer: Mac OS X v10.5 to v10.8&lt;sup&gt;*&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>*</sup> Equipped with Intel processor

**Notes**

- Operation is not assured in an environment based on an upgrade of the operating systems described above or in a multi-boot environment.
- If you connect two or more USB devices to a single computer at the same time, some devices, including the camera, may not operate, depending on the types of USB devices you are using.
- Connecting the camera using a USB interface that is compatible with Hi-Speed USB (USB 2.0) allows advanced transfer (high speed transfer), as the camera is compatible with Hi-Speed USB (USB 2.0).
- When your computer resumes activity from suspend or sleep mode, communication between the camera and your computer may not recover at the same time.
“PlayMemories Home” (Windows)

Below are examples of the functions available when you use “PlayMemories Home.”

- “PlayMemories Home” allows you to import images shot with the camera to a computer for display. Make a USB connection between the camera and your computer, and click [Import].
- You can display images stored on a computer by shooting date in a calendar display.
- You can save and print images with the date.
- You can correct (Red Eye Correction, etc.) still images, and change the shooting date and time.
- You can upload images to a network service. (An Internet connection environment is required.)
- For other details, see (PlayMemories Home Help Guide).

**Notes**

- Mac does not support “PlayMemories Home.” Use the application bundled with the Mac to play back images.
Installing “PlayMemories Home” (Windows)

1. Using the Internet browser on your computer, go to the following URL, then click [Install] → [Run].
   www.sony.net/pm

2. Follow the instructions on the screen to complete the installation.
   - When the message to connect the camera to a computer is displayed, connect the camera and computer using the dedicated USB cable (supplied) (A).

Notes
- Log on as Administrator.
- It may be necessary to restart your computer. When the restart confirmation message appears, restart the computer following the instructions on the screen.
- DirectX may be installed depending on your computer’s system environment.
- Mac does not support “PlayMemories Home.” Use the application bundled with the Mac to play back images.
- If “PlayMemories Home” has already been installed on your computer, connect the camera with the computer and register your camera with “PlayMemories Home.” The available functions activate.
- If the software “PMB (Picture Motion Browser)”, supplied with models released before 2011, has already been installed on your computer, “PlayMemories Home” will overwrite it and will be installed. Although some “PlayMemories Home” functions differ from those of “PMB”, use “PlayMemories Home.”

Starting “PlayMemories Home” (Windows)

1. Double-click (PlayMemories Home) on the desktop.
   - To start “PlayMemories Home” from the Start menu, click [Start] → [All Programs] → (PlayMemories Home).
   - For Windows 8, select [PlayMemories Home] icon on the Start screen.

Accessing to “PlayMemories Home Help Guide” (Windows)

   - To start “PlayMemories Home Help Guide” from the Start menu, click [Start] → [All Programs] → [PlayMemories Home] → [PlayMemories Home Help Guide].
   - For Windows 8, select [PlayMemories Home Help Guide] from [Help] menu of “PlayMemories
“Music Transfer”

“Music Transfer” allows you to replace the Music files provided in the camera at the factory with your favorite tracks, and to delete and add Music files. You can also restore the tracks stored at the factory to your camera.

Download the software from the following URL and install it on your computer.

Windows: http://www.sony.co.jp/imsoft/Win/
Mac: http://www.sony.co.jp/imsoft/Mac/

- The following track types can be imported using “Music Transfer”:
  - MP3 files stored on the hard disk of your computer
  - Music CD tracks
  - Preset-music saved on the camera

Before starting up “Music Transfer”, perform MENU → (Settings) → (Main Settings) → [Download Music], and connect the camera to the computer.

For other details, see the help in “Music Transfer”.

Related Topic
- Download Music
- Empty Music
Software for Mac

For details on software for Macs, access the following URL:
http://www.sony.co.jp/imsoft/Mac/

Notes
• The available software varies depending on the area.
Connecting the camera to the computer

1. Insert the batteries with enough power remaining into the camera, then set the camera to playback mode.

2. Connect the camera to your computer using a dedicated USB cable (supplied) (A).
Importing images to a computer

“PlayMemories Home” allows you to easily import images. For details on “PlayMemories Home” functions, see the “PlayMemories Home Help Guide”.

Importing images to a Windows computer without using “PlayMemories Home”
When the AutoPlay Wizard appears after making a USB connection between the camera and a computer, click [Open folder to view files] → [OK] → [DCIM] or [MP_ROOT] → copy the desired images to the computer.

Importing images to a Mac computer without using “PlayMemories Home”
Connect the camera to your Mac computer. Double-click the newly recognized icon on the desktop → the folder in which the image you want to import is stored. Then drag and drop the image file on the hard disk icon.

Notes
- Press MENU → (Settings) → (Main Settings) → [USB Connect Setting] to [Mass Storage].
Disconnected the camera from the computer

Perform the procedures from step 1 to 2 below before:
- Disconnecting the cable.
- Removing a memory card.
- Inserting a memory card into the camera after copying images from the internal memory.
- Turning off the camera.

1. Click the disconnect icon (disconnect) on the tasktray.
   - With Windows 7 and Windows 8, click first, then click .

2. Click [Safely remove USB Mass Storage Device].

**Notes**
- Drag and drop the icon of the memory card or the drive icon to the “Trash” icon beforehand when you use a Mac computer, and the camera is disconnected from the computer.
- The disconnect icon may not appear when you use a Windows 7 computer. In this case, you can disconnect the camera from the computer without following the above steps.
Printing still images

You can print still images using the following methods.

- Printing directly using a printer which supports your memory card type.
  For details, see the operating instructions supplied with the printer.
- Printing using a computer
  You can import images to a computer using the “PlayMemories Home” software and print the images. You can print images with the date. For details, see the “PlayMemories Home Help Guide”.
- Printing at a shop
  You can take a memory card to a photo printing service shop. As long as the shop supports photo printing services conforming to DPOF, you can make a DPOF (Print order) mark on images in advance in playback mode so that you do not have to reselect them when you print them out at the shop. Before you take image data to a shop, always copy (back up) your data.

Notes

- When you print still images shot in [16:9] mode, both edges may be cut off.
- You cannot print panoramic images, depending on the printer.
If you have problems

If you experience trouble with the camera, try the following solutions.

1. Check the items under “Troubleshooting”, then check your camera.
2. Remove the batteries for one full minute. Then re-insert the batteries and turn on the camera.
3. Initialize the settings. [Details]
4. Consult your Sony dealer or local authorized Sony service facility.
   • Be aware that by sending the camera for repair, you give consent that the contents of the internal memory, music files may be checked.
   • Additional information on this product and answers to frequently asked questions can be found at our Customer Support Website.
   http://www.sony.net/
Batteries and power

The remaining-charge indicator is incorrect.

- This phenomenon occurs when you use the camera in an extremely hot or cold location.
- When using alkaline batteries (sold separately), the remaining-charge indicator may not be correct.
- The batteries are discharged. Insert new batteries or charged Nickel-Metal Hydride batteries (sold separately).
- When using the Nickel-Metal Hydride batteries (sold separately), the remaining-charge indicator may differ from the current one due to the memory effect, etc. Fully discharge and then charge the batteries to correct the display.

The batteries run down too quickly.

- You are using the camera in an extremely cold location.
- The batteries are dead. Replace them with new ones.
- When using the Nickel-Metal Hydride batteries (sold separately), charge them sufficiently. If the poles of batteries or the terminals of the camera are dirty, the batteries may not charge properly. Clean the poles and terminals with a cotton swab, etc.

Camera power is turned off automatically when you open the battery/memory card cover.

- This is not a malfunction. Turn off the camera before you open the battery/memory card cover.

Cannot turn on the camera.

- Insert the batteries correctly.
- The batteries are discharged. Insert new batteries or charged Nickel-Metal Hydride batteries (sold separately).
- The batteries are dead. Replace them with new ones.

The power turns off suddenly.

- When [Power Save] is set to [Standard] or [Max], if you do not operate the camera for a certain period of time while the power is on, the camera turns off automatically to prevent wearing down the batteries. Turn on the camera again.
- The batteries are discharged. Insert new batteries or charged Nickel-Metal Hydride batteries (sold separately).
Shooting still images/movies

Cannot record images.
- If images are recorded on the internal memory even when a memory card is inserted into the camera, make sure that the memory card is fully inserted into the camera.
- Check the free capacity of the internal memory or memory card. If it is full, do one of the following:
  - Delete unnecessary images. [Details] [Details]
  - Change the memory card.
- You cannot record images while charging the flash.
- When recording movies, it is recommended that you use the following memory cards:
  - “Memory Stick PRO Duo” (Mark2) media, “Memory Stick PRO-HG Duo” media or “Memory Stick Micro” (Mark2) media
  - SD memory card, SDHC memory card, microSD memory card or microSDHC memory card (Class 4 or faster)

Smile Shutter function does not work.
- No image is shot if a smiling face is not detected. [Details]

Anti-blur function does not work.
- The anti-blur function may not work properly when shooting night scenes.
- Shoot after pressing the shutter button halfway down.

The image is out of focus.
- The subject is too close. When shooting, make sure to position the lens farther away from the subject than the shortest shooting distance (approximately 20 cm (0.66 ft.) (W)/200 cm (6.56 ft.) (T) from the lens).
- (Night Scene), (Landscape) or (Fireworks) mode is selected in Scene Selection when shooting still images.

Zoom does not work.
- You cannot use the optical zoom in Sweep Panorama mode.
- You cannot use the Smart zoom depending on the image size. [Details]
- You cannot use the digital zoom in the following situations:
  - The Smile Shutter is working.
  - [Self-Timer] is set to [Self-portrait One Person] or [Self-portrait Two People].

Cannot select the Face Detection function.
- You can select Face Detection only when the focus mode is set to [Multi AF] and the metering mode is set to [Multi].
The flash does not work.
- You cannot use the flash in the following situations:
  - [Cont. Shooting Settings] is set to [Continuous Shooting]. [Details]
  - (Night Scene) mode, (High Sensitivity) mode or (Fireworks) mode is selected in Scene Selection.
  - Shooting in [Sweep Panorama]
  - Shooting in Movie Mode.
- Set the flash to [On] when Scene Selection mode is set to (Landscape), (Gourmet), (Pet), (Beach) or (Snow) mode. [Details]

Fuzzy white circular spots appear in images shot using the flash.
- Particles (dust, pollen, etc.) in the air reflected the flash light and appeared in the image. This is not a malfunction. [Details]

The close-up shoot function (Macro) does not work.
- The camera automatically adjusts the focus. Press and hold the shutter button halfway down. Focus adjustment may take some time when shooting a close subject.
- (Landscape), (Night Scene) or (Fireworks) mode is selected in Scene Selection.

The date and time are not displayed on the screen.
- While shooting, the date and time are not displayed. They are displayed only during playback.

The F value and shutter speed flash when you press and hold the shutter button halfway down.
- The exposure is incorrect. Correct the exposure. [Details]

The image colors are not correct.
- Adjust the White Balance. [Details]

White or purple streaks appear in bright areas of the subject, or the whole screen of the image becomes reddish.
- This phenomenon is called smearing. This is not a malfunction. Smearing is not recorded on still images, but is recorded as streaks or uneven colors on Sweep Panorama images or movies. (*Bright areas* refers to the sun or electric lights which are much brighter than surroundings.)

Noise appears in the image when you view the screen in a dark place.
- The camera is attempting to increase the visibility of the screen by temporarily brightening the image under conditions of low illumination. There is no effect on the recorded image.

The eyes of the subject come out red.
- Set [Red Eye Reduction] to [Auto] or [On]. [Details]
- Shoot the subject at a distance closer than the flash range using the flash.
- Light the room and shoot the subject.
Dots appear and remain on the screen.

- This is not a malfunction. These dots are not recorded.

Cannot shoot images in succession.

- The internal memory or memory card is full. Delete unnecessary images. [Details] [Details]
- The battery level is low. Insert new batteries or charged Nickel-Metal Hydride batteries (sold separately).

The same image is shot several times.

- Set [Cont. Shooting Settings] to [Single Shooting]. [Details]
- [Scene Recognition] is set to [Advanced].[Details]

The camera emits a sound when shaken.

- When you shake the camera without the power turned on, you may hear a sound. This is not a malfunction.

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Viewing images

Cannot play back images.
- Make sure that the memory card is fully inserted into the camera.
- The folder/file name has been changed on your computer.
- No guarantees are made for playing back, on this camera, files containing images which were processed on a computer or images which were shot using other cameras.
- The camera is in USB mode. Disconnect the USB connection. [Details]
- Use “PlayMemories Home” to play images stored on a PC with this camera. Use the application bundled with the Mac to play back the images.

The date and time are not displayed.
- The screen display is set to display images only. Press DISP (Display Setting) on the control button to display information. [Details]

Cannot hear music during slideshow.
- Slideshow is played back with [Continuous Playback]. Select [Slideshow with music] and play back.
- Transfer music files to the camera with “Music Transfer”. [Details]

The image does not appear on the TV.
- Check [Video Out] to see if the video output signal of the camera is set to the color system of your TV. [Details]
- Check whether the connection is correct. [Details]
Computers

Your computer does not recognize the camera.

- When the battery level is low, insert new batteries or charged Nickel-Metal Hydride batteries (sold separately).
- Set [USB Connect Setting] to [Mass Storage]. [Details]
- Use the dedicated USB cable (supplied).
- Disconnect the dedicated USB cable from both the computer and the camera, and connect it again firmly.
- Disconnect all equipment other than the camera, the keyboard and the mouse from the USB connectors of your computer.
- Connect the camera directly to your computer without passing through a USB hub or other device.

Cannot import images.

- Connect the camera and your computer correctly making a USB connection. [Details]
- When you shoot images with a memory card formatted by a computer, you may not be able to import the images to a computer. Shoot using a memory card formatted by the camera. [Details]

After making a USB connection, “PlayMemories Home” does not start automatically.

- Make the USB connection after the computer is turned on.

Cannot play back images on your computer.

- If you are using “PlayMemories Home”, refer to “PlayMemories Home Help Guide”. [Details]
- Consult the computer or software manufacturer.

The image and sound are interrupted by noise when you view a movie on a computer.

- You are playing back the movie directly from the internal memory or the memory card. Import the movie to your computer using “PlayMemories Home” and play it back. [Details]

Images once exported to a computer cannot be viewed on the camera.

- Export them to a folder recognized by the camera, such as “101MSDCF”, then play back in Folder view. [Details]
- Register the image in the Image Database File and play in [Date View]. [Details]
Memory card

**Cannot insert a memory card.**
- Insert the memory card in the correct direction.

**You have formatted a memory card by mistake.**
- All the data on the memory card is deleted by formatting. You cannot restore it.

**Images are recorded on the internal memory even when a memory card is inserted into the camera.**
- Make sure that the memory card is fully inserted into the camera.
Internal memory

Cannot play back or record images using the internal memory.
- There is a memory card inserted in the camera. Remove it.

Cannot copy the data stored in the internal memory to a memory card.
- The memory card is full. Copy to a memory card with sufficient capacity.

Cannot copy the data on the memory card or the computer to the internal memory.
- This feature is not available.
Printing

Images are printed with both edges cut off.

- Depending on your printer, all the edges of the image may be cut off. Especially when you print an image shot with the image size set to [16:9], the lateral end of the image may be cut off.

- When printing images using your printer, cancel the trimming or borderless settings. Consult the printer manufacturer as to whether the printer provides these functions or not.

- When having images printed at a digital print shop, ask the shop whether they can print the images without cutting off both edges.

Cannot print images with the date.

- Select MENU → (Settings) → (Shooting Settings) → [Write Date] → [On] to insert a date on the image. Make sure that once the date is inserted, you cannot remove that date from the image.

- Using "PlayMemories Home", you can insert the date on still images that have been recorded without a date. [Details]
Others

The lens gets fogged.
- Moisture condensation has occurred. Turn off the camera and leave it for about an hour before using it.

The camera turns off with the lens portion extended.
- Insert new batteries or charged Nickel-Metal Hydride batteries (sold separately).
- Do not attempt to force lens that has stopped moving.

The camera becomes warm when you use it for a long time.
- This is not a malfunction.

The Clock Set screen appears when you turn on the camera.
- Set the date and time again. [Details]
- The internal rechargeable backup battery has discharged. Insert batteries with enough power remaining, and set aside for 24 hours or more with the power left off.

The date or time is incorrect.
- The Area Setting is set to a different location than your current location. Change the setting by MENU → (Settings) → [Clock Settings] → [Area Setting]. [Details]
Messages

If the following messages appear, follow the instructions.

![Battery level low](image)

• The battery level is low. Insert new batteries or charged Nickel-Metal Hydride batteries (sold separately). Depending on the conditions of use or the type of battery, the indicator may flash even though there are still 5 minutes to 10 minutes of remaining battery time left.

System error. Turn on the device again.

• Turn the power off and then on again.

Internal memory error

• Turn the power off and then on again.

Reinsert the memory card.

• The inserted memory card cannot be used in the camera. [Details]
• The terminal section of the memory card is dirty.
• The memory card is damaged.

Incompatible type of memory card.

• The inserted memory card cannot be used in the camera. [Details]

Buffer overflow. Writing to the media was not completed in time.

• If you use a memory card that has been recorded and erased repeatedly, or that was formatted on a different camera, the data writing speed may be too slow. First back up any data on the card to a computer, and then reformat the card before using it. [Details]
• The writing speed of the memory card you are using is not sufficient for movie recordings. Use one of the memory cards listed below.
  - “Memory Stick PRO Duo” (Mark2) media, “Memory Stick PRO-HG Duo” media or “Memory Stick Micro” (Mark2) media
  - SD memory card, SDHC memory card, microSD memory card or microSDHC memory card (Class 4 or faster).

Cannot recognize the internal memory. Format and use again. Cannot recognize this memory card. Format and use again.

• Format the media again. [Details]
The memory card is locked. Check the tab.

- You are using the memory card with the write-protect switch, and the switch is set to the LOCK position. Set the switch to the recording position.

This is a read-only memory card.

- The camera cannot record or delete images on this memory card.

No images

- No images that can be played back have been recorded in the internal memory.
- No images that can be played back have been recorded in this folder of the memory card.

No still images

- The selected folder or date does not contain a file that can be played back in a slideshow.

File found which was not recognized

- You tried to delete a folder containing a file that cannot be played on this camera. Delete the file on a computer and then delete the folder.

Folder error. Cannot record to the selected folder. Please select a different folder.

- A folder with the same first three digit number already exists on the memory card (for example: 123MSDCF and 123ABCDE). Select another folder [Details], or create a new folder [Details].

Cannot create more folders

- A folder with a name beginning with “999” exists on the memory card. You cannot create any folders if this is the case.

Folder protected

- You tried to delete a folder that is protected as read-only on a computer.

Cannot display file

- An error occurred while the image was playing back.
  No guarantees are made for playing back, on this camera, files containing images which were processed on a computer or images which were shot using other cameras.

Read only folder

- You have selected a folder that cannot be set as a recording folder on the camera. Select another folder. [Details]

File protected

- Release the protection. [Details]

Image size over limit
● You are playing back an image with size that cannot be played back on the camera.

**Unable to detect face for retouch**
● You may not be able to retouch the image depending on the image.

(Vibration warning indicator)
● Camera shake may occur due to insufficient light. Use the flash, or mount the camera on a tripod to secure the camera.

**1280x720 (Fine) is not supported with this memory card.**
**1280x720 (Standard) is not supported with this memory card.**
● For recording movies, it is recommended that you use a memory card of 1 GB or larger.

**Turn the power off and on again**
● The lens malfunction.

**Maximum number of images already selected.**
● Up to 100 files can be selected when using [Multiple Images].
● You can add DPOF (Print order) marks to up to 999 files.

**Error Playing Music**
● Delete the Music file, or replace it with a normal Music file.
● Execute [Empty Music], then download a new Music file.

**Error Formatting Music**
● Execute [Empty Music].

**Operation cannot be executed in unsupported files.**
● Processing and other editing functions of the camera cannot be performed on image files that have been processed using a computer or images that were recorded with other cameras.

**Preparing image database file. Please wait.**
● The camera restores the date information, etc., in cases where images have been deleted on a PC, etc.
● The necessary Image Database File is created after the memory card is formatted.

**FULL**
● The number of images exceeds that for which date management in a database file by the camera is possible. To register additional images in the Image Database File, delete images in [Date View].

**ERROR**
● It is not possible to record to the camera’s Image Database File or play back using [Date View]. Use
“PlayMemories Home” to back up all images to a PC and use it to restore the memory card.

Image Database File error. Cannot recover data.

- Import all of the images to the computer using “PlayMemories Home”, and format the memory card.
  [Details]
  To view the images again with the camera, export the imported images to the camera with “PlayMemories Home”.

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Situations this camera has difficulty handling

The camera cannot take full advantage of some features under certain circumstances. When shooting under the following conditions, either recompose the shot or change the shooting mode, then shoot the images again.

**Low light conditions**
- Shooting panoramic images
- Tracking focus

**Overly bright conditions**
- Tracking focus

**Varying levels of brightness**
- Tracking focus

**Flickering lights**
- Shooting panoramic images

**Subjects too close to the camera**
- Shooting panoramic images

**Subjects too far from the camera**
- Shooting panoramic images

**Large moving subjects or subjects that move too quickly**
- Shooting panoramic images
- Tracking focus

**Subjects too small or too large**
- Tracking focus

**Background the same color as the subject**
- Tracking focus

**Scenes with little contrast, such as the sky or a sandy beach**
- Shooting panoramic images

**Scenes changing constantly, such as a waterfall**
- Shooting panoramic images
Precautions

- Internal memory and memory card back up
- On database files
- Do not use/store the camera in the following places
- On operating temperatures
- On moisture condensation
- On image data compatibility
- Notes on the screen and lens

**Internal memory and memory card back up**
Do not turn off the camera, remove the batteries, or remove the memory card while the access lamp is lit. Otherwise, the internal memory data or the memory card may be damaged. Be sure to make a backup copy to protect your data.

**On database files**
When you insert a memory card without a database file into the camera and turn on the power, part of the memory card capacity is used to automatically create a database file. It may take some time until you can perform the next operation.

**Do not use/store the camera in the following places**
- In an extremely hot, cold or humid place
  - In places such as in a car parked in the sun, the camera body may become deformed and this may cause a malfunction.
- Storing under direct sunlight or near a heater
  - The camera body may become discolored or deformed, and this may cause a malfunction.
- In a location subject to rocking vibration
- Near strongly magnetic place
- In sandy or dusty places
  - Be careful not to let sand or dust get into the camera. This may cause the camera to malfunction, and in some cases this malfunction cannot be repaired.

**On operating temperatures**
- Your camera is designed for use under the temperatures between 0°C and 40°C (32°F and 104°F). Shooting in extremely cold or hot places that exceed this range is not recommended.

**On moisture condensation**
- If the camera is brought directly from a cold to a warm location, moisture may condense inside or outside the camera. This moisture condensation may cause a malfunction of the camera.
- If moisture condensation occurs, turn off the camera and wait about an hour for the moisture to evaporate. Note that if you attempt to shoot with moisture remaining inside the lens, you will be unable to record clear images.
On image data compatibility

- The camera conforms with DCF (Design rule for Camera File system) universal standards established by JEITA (Japan Electronics and Information Technology Industries Association).
- Sony does not guarantee that the camera will play back images recorded or edited with other equipment, or that other equipment will play back images recorded with the camera.

Notes on the screen and lens

- The screen is manufactured using extremely high-precision technology so over 99.99% of the pixels are operational for effective use. However, some tiny black and/or bright dots (white, red, blue or green) may appear on the screen. These dots are a normal result of the manufacturing process and do not affect the recording.
- Exposing the screen or the lens to direct sunlight for long periods may cause malfunctions. Be careful when placing the camera near a window or outdoors.
- Do not press against the screen. The screen may be discolored and that may cause a malfunction.
- Images may trail across on the screen in a cold location. This is not a malfunction.
- Be careful not to bump the movable lens, and be careful not to apply force to it.
On the internal rechargeable backup battery

This camera has an internal rechargeable battery for maintaining the date and time and other settings regardless of whether the power is on or off. This rechargeable battery is continually charged as long as you are using the camera. However, if you use the camera for only short periods, it discharges gradually, and if you do not use the camera at all for about one month it becomes completely discharged. In this case, be sure to charge this rechargeable battery before using the camera. However, even if this rechargeable battery is not charged, you can still use the camera, but the date and time will not be indicated.

Charging method of the internal rechargeable backup battery
Insert the batteries with enough power remaining in the camera, and then leave the camera for 24 hours or more with the power off.
Batteries

On the battery
- Avoid rough handling, disassembling, modifying, physical shock, or impact such as hammering, dropping or stepping on the battery.
- Do not use a deformed or damaged battery.
- Do not mix a used battery together with a new battery or different types of batteries.
- Remove the batteries from the camera when you do not operate the camera for long periods, or when the batteries are dead.

About the remaining battery charge
A: High
B: Low
- A remaining charge indicator appears on the screen.
- It takes about one minute until the correct remaining charge indicator appears.
- The remaining charge indicator may not be correct under certain circumstances.
- When [Power Save] is set to [Standard] or [Max], if you do not operate the camera for a certain period of time while the power is on, the screen becomes dark, then the camera turns off automatically. (Auto power-off function)

Batteries you can and cannot use with your camera
In the table below, ✓ indicates the battery can be used, while — indicates the one cannot be used.

<table>
<thead>
<tr>
<th>Battery type</th>
<th>Supplied</th>
<th>Supported</th>
<th>Rechargeable</th>
</tr>
</thead>
<tbody>
<tr>
<td>LR6 (size AA) alkaline batteries*</td>
<td>✓</td>
<td>✓</td>
<td>—</td>
</tr>
<tr>
<td>HR 15/51: HR6 (size AA) Nickel-Metal Hydride batteries*</td>
<td>—</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lithium batteries</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Manganese batteries</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Ni-Cd batteries</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

* Before using batteries, read the following precaution for each type of battery.
As for unsupported batteries, operating performance cannot be ensured if voltage drops or other problems are caused by the nature of the battery.

### On alkaline batteries (supplied)
- Alkaline batteries cannot be charged.
- Alkaline batteries have a shorter life compared to the Nickel-Metal Hydride batteries. For this reason, the power may turn off even though the remaining-charge indicator shows sufficient battery life remaining.
- Battery performance differs greatly depending on the manufacturer and the type of battery, and in some cases the battery life may be extremely short. This is especially true at low temperatures, and you may not be able to shoot at temperatures below 5°C (41°F).
- Do not mix new and old batteries.
- The remaining-charge indicator may not display the correct information when using alkaline batteries.
- Due to characteristics of alkaline batteries, there is a large difference between the available shooting time and the available playback time. For this reason, the camera may turn off with the lens portion extended when you change the shooting mode. In this case, replace the batteries with new ones. Using the Nickel-Metal Hydride batteries allows you to shoot for longer periods of time.

### On Nickel-Metal Hydride batteries (sold separately)
- Do not peel off the external seals or damage the batteries. Never use batteries from which the seals have been partially or completely removed, or batteries that have been split in any way. These may cause leakage, explosion, or heat-up of the battery, and personal scald or injury may be caused. These may cause a malfunction of the battery charger.
- Do not carry or store the Nickel-Metal Hydride batteries with metallic objects. Since metallic objects may short the + and – ends, resulting in the risk of heating or fire.
- If the poles of the Nickel-Metal Hydride batteries are dirty, the batteries may not charge properly. Wipe them with a dry cloth, etc.
- At the time of purchase, or when the Nickel-Metal Hydride batteries have not been used for a long time, they may not full charge. This is typical of this type of battery, and is not a malfunction. If this happens, repeatedly using up the batteries fully, and then recharging them should correct the problem.
- If you recharge Nickel-Metal Hydride batteries before fully using up the existing charge, the low battery warning may be displayed sooner than expected. This is called the “memory effect.”* If this problem occurs, charging the batteries only after using up the existing charge will correct it.
  * The “memory effect” – the situation in which the capacity of the battery is temporarily lowered.
- To use up the batteries completely, put the camera in the slideshow mode and leave it that way until the batteries are used up.
- Do not mix new and used batteries.
- Do not expose the battery to water. The battery is not water-resistant.
Memory card

Note on using the memory card adaptor (sold separately)

“Memory Stick” media

When using “Memory Stick Duo” media with standard sized “Memory Stick” media slot

Notes on using “Memory Stick Micro” media (sold separately)

Memory card

<table>
<thead>
<tr>
<th>Memory card</th>
<th>Representation in User Guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory Stick PRO Duo</td>
<td>“Memory Stick Duo” media</td>
</tr>
<tr>
<td>Memory Stick PRO-HG Duo</td>
<td>“Memory Stick PRO-HG Duo” media</td>
</tr>
<tr>
<td>Memory Stick Duo</td>
<td>“Memory Stick Duo” media</td>
</tr>
<tr>
<td>Memory Stick Micro (M2)</td>
<td>“Memory Stick Micro” media</td>
</tr>
<tr>
<td>Memory Stick Micro (Mark2)</td>
<td>“Memory Stick Micro” media</td>
</tr>
<tr>
<td>SD memory card</td>
<td>SD card</td>
</tr>
<tr>
<td>SDHC memory card</td>
<td>SD card</td>
</tr>
<tr>
<td>microSD memory card</td>
<td>microSD memory card</td>
</tr>
<tr>
<td>microSDHC memory card</td>
<td>microSDHC memory card</td>
</tr>
</tbody>
</table>

- The following products have been tested and proven to operate with your camera.
  - “Memory Stick Duo” media: up to 32 GB
  - “Memory Stick Micro” media: up to 16 GB
  - SD card: up to 32 GB
  - microSD memory card: up to 32 GB
- When recording movies, it is recommended that you use the following memory cards:
  - MEMORY STICK PRO DUO (Mark2) (“Memory Stick PRO Duo” media)
  - MEMORY STICK PRO-HG DUO (“Memory Stick PRO-HG Duo” media)
  - MEMORY STICK MICRO (Mark2) (“Memory Stick Micro” media)
  - SD card (Class 4 or faster)
  - microSD memory card (Class 4 or faster)

Notes

- To ensure stable operation of the memory card, we recommend that you use this camera to format any memory card being used with this camera for the first time. Note that formatting will erase all data recorded on the memory card. This data cannot be restored. Be sure to back up any important data to a PC or other storage location.
- A memory card formatted with a computer is not guaranteed to operate with the camera.
- Data read/write speeds differ depending on the combination of the memory card and the equipment used.
- Data may be corrupted in the following cases:
  - When the memory card is removed or the camera is turned off during a read or write operations
  - When the memory card is used in locations subject to static electricity or electrical noise
- We recommend backing up important data.
- Do not attach a label on the memory card itself nor on a memory card adaptor.
- Do not touch the terminal section of the memory card with your hand or a metal object.
- Do not strike, bend or drop the memory card.
- Do not disassemble or modify the memory card.
- Do not expose the memory card to water.
- Do not leave the memory card within the reach of small children. They might accidentally swallow it.
- Insert a memory card that fits the memory card slot size. Otherwise, it will cause a malfunction.
- Do not use or store the memory card under the following conditions:
  - High temperature locations such as the hot interior of a car parked in direct sunlight
  - Locations exposed to direct sunlight
  - Humid locations or locations with corrosive substances present

**Note on using the memory card adaptor (sold separately)**
- When inserting a memory card into a memory card adaptor, make sure the memory card is inserted facing in the correct direction, then insert it all the way in. Incorrect insertion may result in a malfunction.
- When using “Memory Stick Micro” media or a microSD memory card, be sure to insert into the dedicated memory card adaptor.

**“Memory Stick” media**
The types of “Memory Stick Duo” media that can be used with the camera are listed in the table below. However, proper operation cannot be guaranteed for all “Memory Stick Duo” media functions.

<table>
<thead>
<tr>
<th>“Memory Stick” media type</th>
<th>Recording/Playback</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memory Stick Duo (without MagicGate)</td>
<td>✓*1</td>
</tr>
<tr>
<td>Memory Stick Duo (with MagicGate)</td>
<td>✓*2</td>
</tr>
<tr>
<td>MagicGate Memory Stick Duo</td>
<td>✓<em>1</em>2</td>
</tr>
<tr>
<td>Memory Stick PRO Duo</td>
<td>✓<em>2</em>3</td>
</tr>
<tr>
<td>Memory Stick PRO-HG Duo</td>
<td>✓<em>2</em>3*4</td>
</tr>
<tr>
<td>Memory Stick Micro (M2)</td>
<td>✓*2</td>
</tr>
<tr>
<td>Memory Stick Micro (Mark2)</td>
<td>✓<em>2</em>3</td>
</tr>
</tbody>
</table>

*1 High-speed data transfer using a parallel interface is not supported.
*2 “Memory Stick Duo” media, “MagicGate Memory Stick Duo” media, “Memory Stick PRO Duo” media, “Memory Stick PRO-HG Duo” media, “Memory Stick Micro” media and “Memory Stick Micro” (Mark2) media are equipped with MagicGate functions. MagicGate is copyright protection technology that uses encryption technology. Data recording/playback that requires MagicGate functions cannot be performed with the camera.
*3 [1280x720] size movies can be recorded.
*4 This camera does not support 8-bit parallel data transfer. It performs the same 4-bit parallel data transfer as the “Memory Stick PRO Duo” media.

**When using “Memory Stick Duo” media with standard sized “Memory Stick” media slot**
You can use the “Memory Stick Duo” media by inserting it into the “Memory Stick Duo” media Adaptor (sold separately).
## Notes on using “Memory Stick Micro” media (sold separately)

- This product is compatible with “Memory Stick Micro” media (“M2”). “M2” is an abbreviation for “Memory Stick Micro” media.
- To use a “Memory Stick Micro” media with the camera, be sure to insert the “Memory Stick Micro” media into an “M2” Adaptor as large as of Duo size. If you insert a “Memory Stick Micro” media into the camera without an “M2” Adaptor as large as of Duo size, you might not be able to remove it from the camera.
- Do not leave the “Memory Stick Micro” media within the reach of small children. They might accidentally swallow it.
On cleaning

Cleaning the lens and flash
Wipe the lens and flash with a soft cloth to remove fingerprints, dust, etc.

Cleaning the flash
Clean the flash surface before use. The heat of the flash emission may cause dirt on the flash surface to start smoking or burning. Wipe the flash surface with a soft cloth to remove dirt or dust, etc.

Cleaning the camera surface
Clean the camera surface with a soft cloth slightly moistened with water, then wipe the surface with a dry cloth. To prevent damage to the finish or casing:
- Do not expose the camera to chemical products such as thinner, benzine, alcohol, disposable cloths, insect repellent, sunscreen or insecticide.
- Do not touch the camera with any of the above on your hand.
- Do not leave the camera in contact with rubber or vinyl for a long time.

Copyright 2013 Sony Corporation
Number of still images

The number of still images may vary depending on the shooting conditions and the memory card. (Units: Images)

<table>
<thead>
<tr>
<th>Size</th>
<th>Internal memory Approx. 55 MB</th>
<th>Memory card formatted with this camera 2 GB</th>
<th>4 GB</th>
<th>8 GB</th>
<th>16 GB</th>
<th>32 GB</th>
</tr>
</thead>
<tbody>
<tr>
<td>20M</td>
<td>5</td>
<td>265</td>
<td>530</td>
<td>1050</td>
<td>2100</td>
<td>4300</td>
</tr>
<tr>
<td>10M</td>
<td>12</td>
<td>400</td>
<td>800</td>
<td>1600</td>
<td>3200</td>
<td>6400</td>
</tr>
<tr>
<td>5M</td>
<td>17</td>
<td>580</td>
<td>1150</td>
<td>2300</td>
<td>4650</td>
<td>9300</td>
</tr>
<tr>
<td>VGA</td>
<td>350</td>
<td>11500</td>
<td>23500</td>
<td>47000</td>
<td>94000</td>
<td>185000</td>
</tr>
<tr>
<td>16:9(15M)</td>
<td>7</td>
<td>330</td>
<td>660</td>
<td>1300</td>
<td>2600</td>
<td>5250</td>
</tr>
<tr>
<td>16:9(2M)</td>
<td>54</td>
<td>1800</td>
<td>3650</td>
<td>7300</td>
<td>14500</td>
<td>29000</td>
</tr>
</tbody>
</table>

Notes
- When the number of remaining shootable images is greater than 99,999, the “>99999” indicator appears.
- When an image shot with other cameras is played back on this camera, the image may not appear in the actual image size.
Recordable time of movies

The table below shows the approximate maximum recording times. These are the total times for all movie files. The recordable time may vary depending on the shooting conditions and the memory card. (h (hour), m (minute))

<table>
<thead>
<tr>
<th>Quality/Size</th>
<th>Internal memory</th>
<th>Memory card formatted with this camera</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Approx. 55 MB</td>
<td>2 GB</td>
</tr>
<tr>
<td>1280x720(Fine)</td>
<td>—</td>
<td>25 m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(20 m)</td>
</tr>
<tr>
<td>1280x720(Standard)</td>
<td>—</td>
<td>35 m</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(30 m)</td>
</tr>
<tr>
<td>VGA</td>
<td>2 m</td>
<td>1 h 5 m</td>
</tr>
<tr>
<td></td>
<td>(1 m)</td>
<td>(1 h 5 m)</td>
</tr>
</tbody>
</table>

The number in ( ) is the minimum recordable time.

Continuous shooting is possible for approximately 29 minutes (limited by product specifications). For [1280x720(Fine)] size movies, continuous shooting is possible for approximately 20 minutes (limited by 2 GB file size).

**Notes**
- The recordable time of movies varies because the camera is equipped with VBR (Variable Bit Rate), which automatically adjusts image quality depending on the shooting scene.
  When you record a fast-moving subject, the image is clearer but the recordable time is shorter because more memory is required for recording.
  The recordable time also varies depending on the shooting conditions, the subject or the image quality/size settings.
- You cannot record movies to the internal memory when the movie image size is [1280x720(Fine)] or [1280x720(Standard)].
On TV color systems

To view movies shot using this camera on a television, the camera and television must use the same color television system. Check the color TV system for the country or region where you are using the camera.

**NTSC system**
Bahama Islands, Bolivia, Canada, Central America, Chile, Colombia, Ecuador, Jamaica, Japan, Korea, Mexico, Peru, Surinam, Taiwan, the Philippines, the U.S.A., Venezuela, etc.

**PAL system**
Australia, Austria, Belgium, China, Croatia, Czech Republic, Denmark, Finland, Germany, Holland, Hong Kong, Hungary, Indonesia, Italy, Kuwait, Malaysia, New Zealand, Norway, Poland, Portugal, Romania, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Thailand, Turkey, United Kingdom, Viet Nam, etc.

**PAL-M system**
Brazil

**PAL-N system**
Argentina, Paraguay, Uruguay

**SECAM system**
Bulgaria, France, Greece, Guiana, Iran, Iraq, Monaco, Russia, Ukraine, etc.
License

Notes on the License
This camera comes with software that are used based on licensing agreements with the owners of that software. Based on requests by the owners of copyright of these software applications, we have an obligation to inform you of the following. Please read the following sections. Licenses (in English) are recorded in the internal memory of your camera. Establish a Mass Storage connection between the camera and a computer to read licenses in the “PMHOME” - “LICENSE” folder.

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Source code is provided on the web. Use the following URL to download it. http://www.sony.net/Products/Linux/

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  “Memory Stick Micro,” MagicGate, MagicGate
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