## Inserting Memory Cards

The camera has no internal memory; instead, pictures are stored on optional SD, SDHC, and SDXC memory cards (sold separately). The camera can be used with two cards, one in each of its two slots. Movies are recorded only to the card in the first slot, which supports UHS-II.
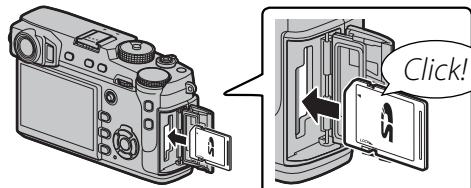
1 Open the memory card slot cover.

① ②

 Do not open the memory card slot cover when the camera is on. Failure to observe this precaution could damage image files or memory cards.

2 Insert a memory card.
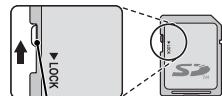
Holding the memory card in the orientation shown, slide it in until it clicks into place at the back of the first slot (if you are using two cards, insert the second card into second slot).

Click!

 Be sure card is in the correct orientation; do not insert at an angle or use force.

 SD/SDHC/SDXC memory cards can be locked, making it impossible to format the card or to record or delete images.

Write-protect switch

Before inserting a memory card, slide the write-protect switch to the unlocked position.
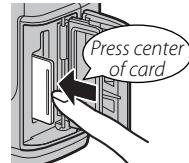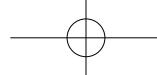
3 Close the memory card slot cover.

Removing Memory Cards

Before removing memory cards, *turn the camera off* and open the memory card slot cover.

To remove a memory card, press it in and release it slowly. The card can then be removed by hand. When a memory card is removed, the card could be ejected too quickly. Use your finger to hold it and gently release the card.

Press center of card

Using Two Cards
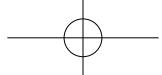
At default settings, the card in the second slot is used only if the card in the first slot is full (**SEQUENTIAL**). This can be changed using D **SAVE DATA SETTING** > **CARD SLOT SETTING (STILL IMAGE)** (P 116).

Option	Description	Display
SEQUENTIAL (default)	The card in the second slot is used only when the card in the first slot is full. ❧ If the second slot is selected for D **SAVE DATA SETTING** > **SWITCH SLOT (SEQUEN-TIAL)**, recording will start on the card in the second slot and switch to the first slot when the card in the second slot is full.	1 2
BACKUP	Each picture is recorded twice, once to each card.	1 2
RAW/JPEG	As for **SEQUENTIAL**, except that the RAW copy of pictures taken with **RAW + FINE** or **NOR-MAL + RAW** selected for H **IMAGE QUALITY SETTING** > **IMAGE QUALITY** will be saved to the card in the first slot and the JPEG copy to the card in the second slot.	1 2 R J

◖◗ Movies

Regardless of the option selected for **CARD SLOT SETTING (STILL IMAGE)**, movies will be recorded to the card in the first slot; if **SEQUENTIAL** is selected, movies will be recorded to the card in the first slot even after recording has moved on to the card in the second slot.

First Steps

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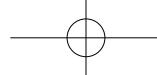
■ **Compatible Memory Cards**

FUJIFILM and SanDisk SD, SDHC, and SDXC memory cards have been approved for use in the camera; UHS-II cards can be used in the first slot. A complete list of approved memory cards is available at *http://www.fujifilm.com/support/digital_cameras/compatibility/*. Operation is not guaranteed with other cards. The camera can not be used with *xD-Picture Cards* or **M**ulti**M**edia**C**ard (MMC) devices.

⚠ **Memory Cards**

- *Do not turn the camera off or remove the memory card while the memory card is being formatted or data are being recorded to or deleted from the card.* Failure to observe this precaution could damage the card.
- Format memory cards before first use, and be sure to reformat all memory cards after using them in a computer or other device. For more information on formatting memory cards, see page 107.
- Memory cards are small and can be swallowed; keep out of reach of children. If a child swallows a memory card, seek medical assistance immediately.
- miniSD or microSD adapters that are larger or smaller than the standard dimensions of an SD/SDHC/SDXC card may not eject normally; if the card does not eject, take the camera to an authorized service representative. Do not forcibly remove the card.
- Do not affix labels to memory cards. Peeling labels can cause camera malfunction.
- Movie recording may be interrupted with some types of SD/SDHC/SDXC memory card. Use a UHS speed class 1 card or better for movies and burst photography.
- Formatting a memory card in the camera creates a folder in which pictures are stored. Do not rename or delete this folder or use a computer or other device to edit, delete, or rename image files. Always use the camera to delete pictures; before editing or renaming files, copy them to a computer and edit or rename the copies, not the originals. Renaming the files on the camera can cause problems during playback.
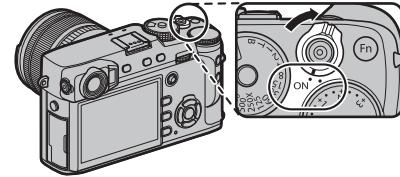
Turning the Camera on and Off

Rotate the **ON/OFF** switch to **ON** to turn the camera on. Select **OFF** to turn the camera off.

◆ Press the ▶ button to start playback. Press the shutter button halfway to return to shooting mode.

◆ The camera will turn off automatically if no operations are performed for the length of time selected for **⚡ POWER MANAGE-MENT** > **AUTO POWER OFF** (📖 114). To reactivate the camera after it has turned off automatically, press the shutter button halfway or turn the **ON**/**OFF** switch to **OFF** and then back to **ON**.

ⓘ Fingerprints and other marks on the lens or viewfinder can affect pictures or the view through the viewfinder. Keep the lens and viewfinder clean.
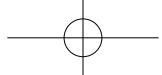
🔋 Battery Level

After turning the camera on, check the battery level in the display.

Indicator	Description
▥▥▥▥	Battery partially discharged.
▭▥▥▥	Battery about 80% full.
▭▭▥▥	Battery about 60% full.
▭▭▭▥	Battery about 40% full.
▭▭▭▭	Battery about 20% full.
▭▭▭▭ (red)	Low battery. Charge as soon as possible.
▭▭▭▭ (blinks red)	Battery exhausted. Turn camera off and recharge battery

Basic Setup

A language-selection dialog is displayed the first time the camera is turned on.

1 Choose a language.

Highlight a language and press **MENU/OK**.

◆ Press **DISP/BACK** to skip the current step. Any steps you skip will be displayed the next time the camera is turned on.
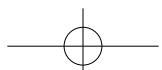
2 Set the date and time.

Press the selector left or right to highlight the year, month, day, hour, or minute and press up or down to change. To change the order in which the year, month, and day are displayed, highlight the date format and press the selector up or down. Press **MENU/OK** to exit to shooting mode when settings are complete.

◆ If the battery is removed for an extended period, the camera clock will be reset and the language-selection dialog will be displayed when the camera is turned on.

Changing Basic Settings
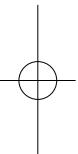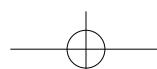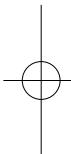
To change the language or reset the clock:

 1 Display the desired option.

Display the setup menu and select D **USER SETTING** > 言語/LANG. to change the language or **DATE/TIME** to reset the clock (📖 106).

 2 Adjust settings.

To choose a language, highlight the desired option and press **MENU/OK**. To set the clock, press the selector left or right to highlight the year, month, day, hour, or minute and press up or down to change, then press **MENU/OK** once the clock has been set to your satisfaction.

First Steps
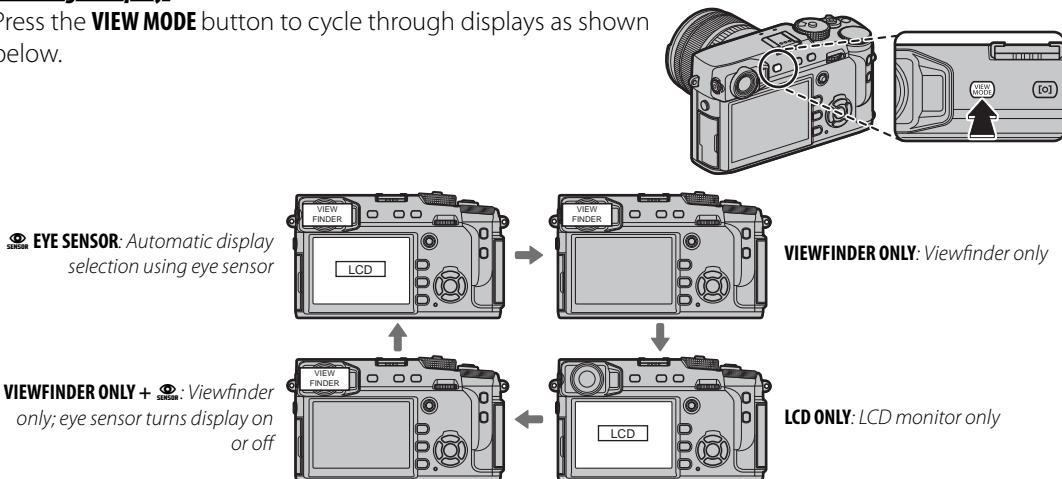
Display Settings

The camera is equipped with a hybrid optical/electronic viewfinder (OVF/EVF) and an LCD monitor (LCD).
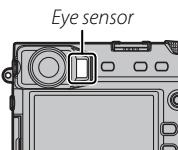
Choosing a Display

Press the **VIEW MODE** button to cycle through displays as shown below.

EYE SENSOR: *Automatic display selection using eye sensor*

VIEWFINDER ONLY: *Viewfinder only*

VIEWFINDER ONLY + 🔲 : *Viewfinder only; eye sensor turns display on or off*

**LCD ONLY**: *LCD monitor only*
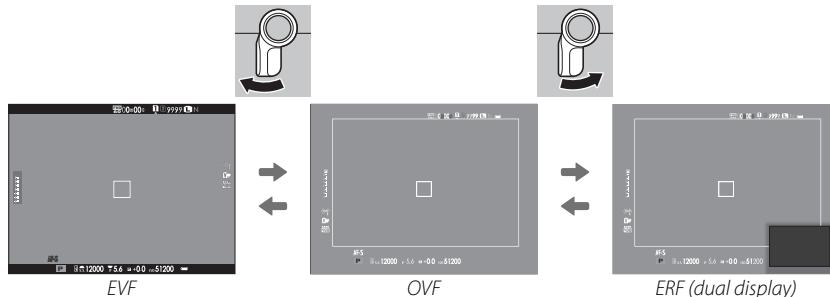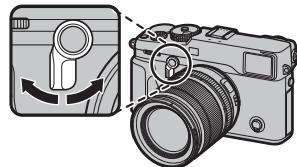
The Eye Sensor

The eye sensor turns the viewfinder on when you put your eye to the viewfinder and turns it off when you take your eye away (note that the eye sensor may respond to objects other than your eye or to light shining directly on the sensor). If automatic display selection is enabled, the LCD monitor will turn on when the viewfinder turns off.

Eye sensor

The Viewfinder Selector
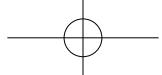
Use the viewfinder selector to switch between the electronic viewfinder (EVF), the optical viewfinder (OVF), and a dual optical viewfinder/electronic range finder (ERF) display.

EVF	*OVF*	*ERF (dual display)*

The OVF Display

Keep the selector pressed up to choose the optical viewfinder display zoom ratio.

⚙️ The Hybrid (EVF/OVF/ERF) Viewfinder
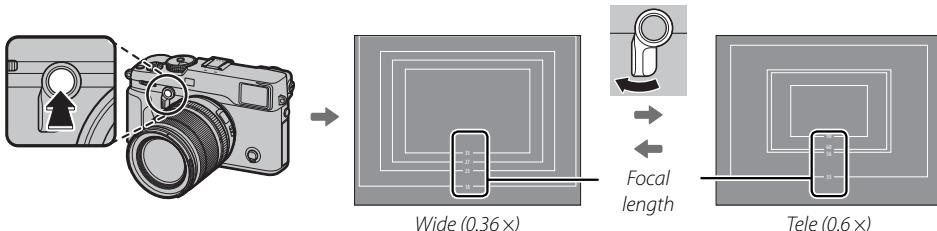
The features of the different displays are described below.

| Display	Description
OVF	The optical display is sharp and free of blur so that your subject's expression is always visible. In addition, the OVF shows the area just outside the frame, making it easier to compose shots on the fly. Because the viewfinder window is a slight distance from the lens, the area visible in photographs may however differ slightly from the display in the viewfinder due to parallax.
EVF	The live view display gives you a preview of the final picture (including depth of field, focus, exposure, and white balance) with exactly the same frame coverage.
ERF (dual display)	As for the optical viewfinder but with a focus preview. A magnified view of an area of the frame including the current focus position is shown at the bottom right corner of the display.

Bright Frame Simulation
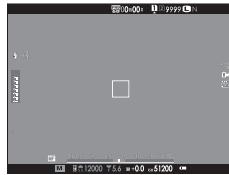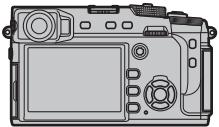
The angle of view covered by the bright frame in the OVF display varies with the focal length of the lens. Pressing a function button (by default, **Fn2**) displays a bright frame simulation that shows the area covered by the bright frame at different focal lengths.

❧ Keep the viewfinder selector pressed up to toggle between the bright frames for maximum and minimum aperture.

*Wide (0.36 ×)*　　　*Focal length*　　　*Tele (0.6 ×)*
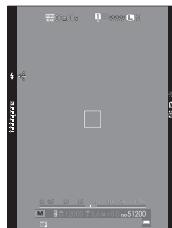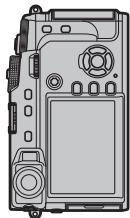
The Viewfinder Display

When **ON** is selected for **Z SCREEN SETTING** > **EVF AUTOROTATE DISPLAYS** (📖 110), the indicators in the viewfinder automatically rotate to match camera orientation.
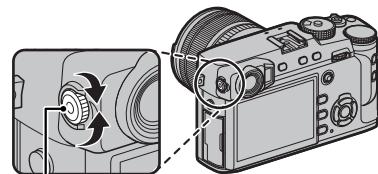

⬇ *Orientation changed from "wide" to "tall"*

① The display in the LCD monitor is unaffected.

Focusing the Viewfinder
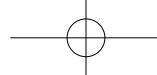
The camera is equipped with diopter adjustment in the range −4 to +2 m^{-1} to accommodate individual differences in vision. Rotate the diopter adjustment control until the viewfinder display is in sharp focus.


Diopter adjustment control
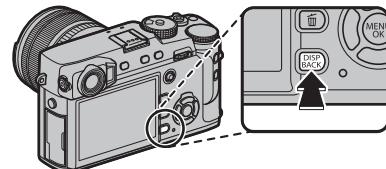
Adjusting Display Brightness

The brightness and hue of the viewfinder and LCD monitor can be adjusted using the options under **Z SCREEN SETTING**. Choose **EVF BRIGHTNESS** or **EVF COLOR** to adjust viewfinder brightness or hue (📖 110), **LCD BRIGHTNESS** or **LCD COLOR** to do the same for the LCD monitor (📖 110).

First Steps

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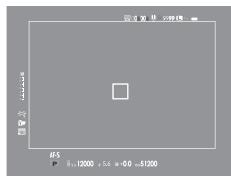
The DISP/BACK Button

The **DISP/BACK** button controls the display of indicators in the viewfinder and LCD monitor.

■ **Shooting: Optical Viewfinder**

Standard   *Information off*

■ **Shooting: Electronic Viewfinder**

*Standard*   *Information off*

■ **LCD Monitor: Shooting**
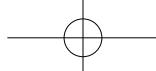
Standard   *Information off*

Info display

■ **Customizing the Standard Display**

To choose the items shown in the standard display:

1 Display standard indicators.

Press the **DISP/BACK** button until standard indicators are displayed.

2 Select **DISP. CUSTOM SETTING**.

Select B **SCREEN SET-UP** > **DISP. CUSTOM SETTING** (🖹 111) in the setup menu.

3 Choose a display.

Highlight **OVF** or **EVF/LCD** and press **MENU/OK**.

4 Choose items.

Highlight items and press **MENU/OK** to select or deselect.

Option	OVF	EVF	Option	OVF	EVF	Option	OVF	EVF
FRAMING GUIDELINE	☐	☐	INFORMATION BACKGROUND	—	☑	DUAL IS MODE	☑	☑
ELECTRONIC LEVEL	☐	☐	Expo. Comp. (Digit)	☐	☐	WHITE BALANCE	☑	☑
FOCUS FRAME	☑	☑	Expo. Comp. (Scale)	☑	☑	FILM SIMULATION	☑	☑
AF DISTANCE INDICATOR	☐	☐	FOCUS MODE	☑	☑	DYNAMIC RANGE	☑	☑
MF DISTANCE INDICATOR	☑	☑	PHOTOMETRY	☑	☑	FRAMES REMAINING	☑	☑
HISTOGRAM	☐	☐	SHUTTER TYPE	☑	☑	IMAGE SIZE/QUALITY	☑	☑
SHOOTING MODE	☑	☑	FLASH	☑	☑	MOVIE MODE & REC. TIME	☐	☑
APERTURE/S-SPEED/ISO	☑	☑	CONTINUOS MODE	☑	☑	BATTERY LEVEL	☑	☑
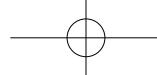
5 Save changes.

Press **DISP/BACK** to save changes.

6 Exit the menus.

Press **DISP/BACK** as needed to exit the menus and return to the shooting display.

❧ See page 8 for the locations of these items in the displays.

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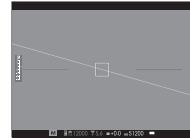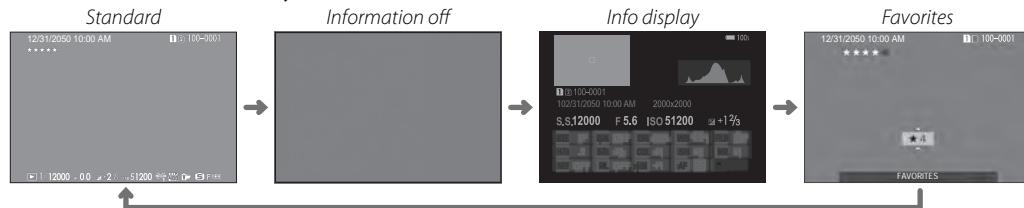
⚙ **Virtual Horizon**

Selecting **ELECTRONIC LEVEL** displays a virtual horizon. The camera is level when the two lines overlap.

◆ The virtual horizon may not be displayed if the camera lens is pointed up or down.
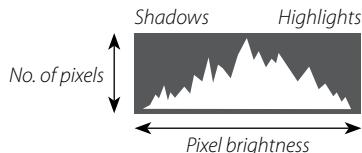
■ **Viewfinder/LCD Monitor: Playback**

Standard　　　　　*Information off*　　　　　*Info display*　　　　　*Favorites*

⚙ **Histograms**

Histograms show the distribution of tones in the image.   Brightness is shown by the horizontal axis, the number of pixels by the vertical axis.

Shadows　　　*Highlights*

No. of pixels

Pixel brightness

Optimal exposure: Pixels are distributed in an even curve throughout the tone range.
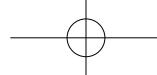
Overexposed: Pixels are clustered on the right side of the graph.

Underexposed: Pixels are clustered on the left side of the graph.
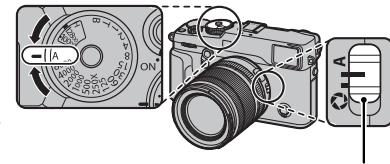
Basic Photography and Playback
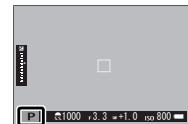
Program AE (P)

To allow the camera to adjust both shutter speed and aperture for optimal exposure, set shutter speed and aperture to **A**. **P** will appear in the display.

① If the subject is outside the metering range of the camera, the shutter speed and aperture displays will show "– – –".
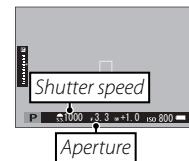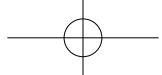
Aperture mode switch
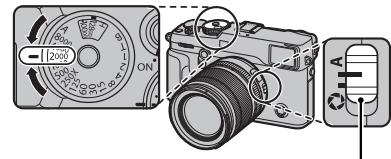
Shutter-Priority AE (S)

To adjust shutter speed manually while letting the camera se-
lect aperture for optimal exposure, set aperture to **A** and use the
shutter speed dial (if **A** is currently selected for shutter speed,
press the dial lock release while rotating the shutter speed dial).
**S** will appear in the display.
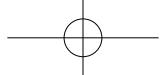
Aperture mode switch

◆ Shutter speed can also be adjusted in increments of ⅓ EV by rotating
the front command dial. Shutter speed can be adjusted even while
the shutter button is pressed halfway.

① If the correct exposure can not be achieved at the selected shutter
speed, aperture will be displayed in red when the shutter button is
pressed halfway. Adjust shutter speed until the correct exposure is
achieved.

① If the subject is outside the metering range of the camera, the aper-
ture display will show "– – –".

Aperture-Priority AE (A)

To adjust aperture manually while letting the camera select shutter speed for optimal exposure, rotate the shutter speed dial to **A** and adjust aperture as desired. **A** will appear in the display.

Aperture mode switch

- ◗ Aperture can be adjusted even while the shutter button is pressed halfway.

- ⚀ If the correct exposure can not be achieved at the selected aperture, the shutter speed will be displayed in red when the shutter button is pressed halfway. Adjust aperture until the correct exposure is achieved.

- ⚀ If the subject is outside the metering range of the camera, the shutter speed display will show "– – –".

◗▶ Previewing Depth of Field
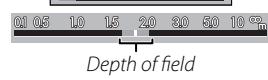
When ⚙ **PREVIEW DEPTH OF FIELD** is assigned to a function button (🔲 51), pressing the button stops aperture down to the selected setting, allowing depth of field to be previewed in the display.
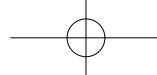
Depth of field can also be previewed using the depth-of-field indicator in the standard display (🔲 33). Press **DISP/BACK** to cycle through display modes until standard indicators are displayed.

Depth of field

- ◗ Use the ⚙ **AF/MF SETTING** > **DEPTH-OF-FIELD SCALE** option (🔲 94) to choose how depth of field is displayed. Choose **FILM FORMAT BASIS** to help you make practical assessments of depth of field for pictures that will be viewed as prints and the like, **PIXEL BASIS** to help you assess depth of field for pictures that will be viewed at high resolutions on computers or other electronic displays.
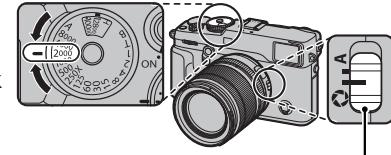
Manual Exposure (M)

Exposure can be altered from the value suggested by the camera by setting both shutter speed and aperture to values other than **A** (if **A** is currently selected for shutter speed, press the dial lock release while rotating the shutter speed dial). **M** will appear in the display.

Aperture mode switch

❖ Shutter speed can also be adjusted in increments of ⅓ EV by rotating the front command dial.
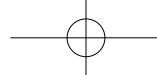
Exposure indicator

Exposure Preview

To preview exposure in the LCD monitor, select an option other than **OFF** for E **SCREEN SETTING** > **PREVIEW EXP./WB IN MAN-UAL MODE** (📖 110). Select **OFF** when using the flash or on other occasions on which exposure may change when the picture is taken.
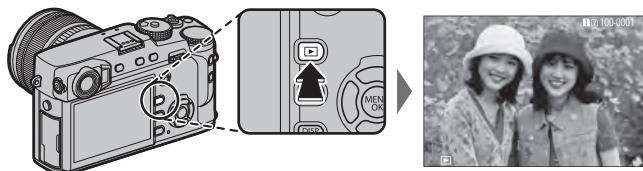
Viewing Pictures

Viewing Pictures Full Frame

Pictures can be viewed in the viewfinder or LCD monitor. When taking important pictures, take a test shot and check the results.

To view pictures full frame, press ▶.

Additional pictures can be viewed by pressing the selector left or right or rotating the front command dial. Press the selector or rotate the dial right to view pictures in the order recorded, left to view pictures in reverse order. Keep the selector pressed to scroll rapidly to the desired frame.

◆ Pictures taken using other cameras are marked with a 🎁 ("gift image") icon to warn that they may not display correctly and that playback zoom may not be available.

🔹 Favorites: Rating Pictures

To rate the current picture, press **DISP/BACK** and press the selector up and down to select from zero to five stars.

🔹 Two Memory Cards

If two memory cards are inserted, you can press and hold the ▶ button to choose a card for playback.

◆ You can also select a card using the 🖭 **PLAYBACK MENU** > **SWITCH SLOT** option (📖 102).

Viewing Photo Information

The photo information display changes each time the selector is pressed up.

Basic data

12/31/2050 10:00 AM
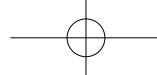
◆ Rotate the front command dial to view other images.

Zooming in on the Focus Point

Press the center of the rear command dial to zoom in on the focus point. Press again to return to full-frame playback.

Info display 1

100-0001
102/31/2050 10:00 AM   2000x2000
S.S.**12000**   F **5.6**   ISO **51200**   ⊞ +1 ²⁄₃

LENS   23.0mm
FOCAL LENGTH   F5.6
                                  23.0mm
COLOR SPACE   sRGB
                                  ON

S.S.**1/4000**   F **5.6**   ISO **400**   ⊞ +2¹⁄₃
                                      NEXT

Info display 2
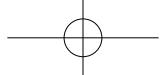
Playback Zoom

Rotate the rear command dial right to zoom in on the current picture, left to zoom out (to view multiple images, rotate the dial left when the picture is displayed full frame; P 42). When the picture is zoomed in, the selector can be used to view areas of the image not currently visible in the display. To exit zoom, press **DISP/BACK**, **MENU/OK**, or the center of the rear command dial.

Zoom indicator

Navigation window shows portion of image currently displayed
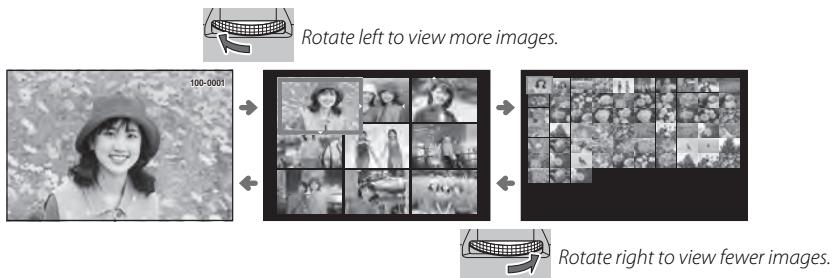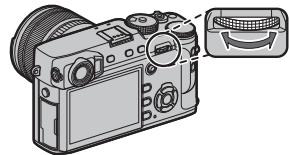
❧ The maximum zoom ratio varies with image size (P 88). Playback zoom is not available with cropped or resized copies saved at a size of **640** (P 102, 103).
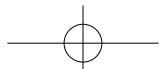
Multi-Frame Playback

To change the number of images displayed, rotate the rear command dial left when a picture is displayed full frame.

Rotate left to view more images.

Rotate right to view fewer images.
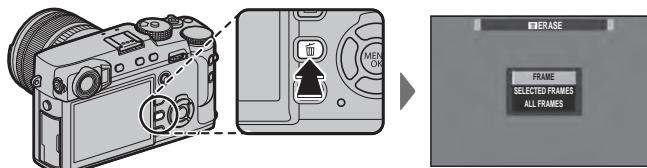
Use the selector to highlight images and press **MENU/OK** to view the highlighted image full frame (to zoom in on the selected image, rotate the rear command dial right when the picture is displayed full frame; 41). In the nine- and hundred-frame displays, press the selector up or down to view more pictures.

Deleting Pictures

To delete individual pictures, multiple selected pictures, or all pictures, press the 🗑 button when a picture is displayed full frame and choose from the options below. *Note that deleted pictures can not be recovered. Copy important pictures to a computer or other storage device before proceeding.*

Option	Description
FRAME	Press the selector left or right to scroll through pictures and press **MENU/OK** to delete the current picture (a confirmation dialog is not displayed).
SELECTED FRAMES	Highlight pictures and press **MENU/OK** to select or deselect (pictures in photobooks or print orders are shown by ▐). When the operation is complete, press **DISP/BACK** to display a confirmation dialog, then highlight **OK** and press **MENU/OK** to delete the selected pictures.
ALL FRAMES	A confirmation dialog will be displayed; highlight **OK** and press **MENU/OK** to delete all unprotected pictures. Pressing **DISP/BACK** cancels deletion; note that any pictures deleted before the button was pressed can not be recovered.

◆ Protected pictures can not be deleted. Remove protection from any pictures you wish to delete (🔲 103).
◆ Pictures can also be deleted from the menus using the **▣ PLAY BACK MENU** > **ERASE** option (🔲 102).
◆ If a message appears stating that the selected images are part of a DPOF print order, press **MENU/OK** to delete the pictures.
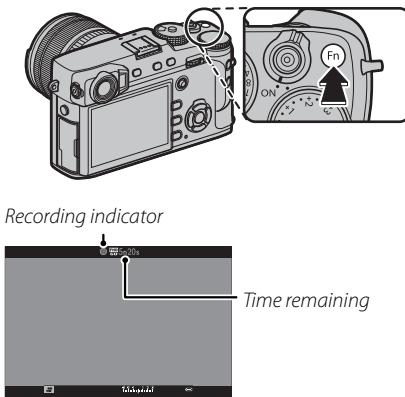
Basic Movie Recording and Playback

Recording Movies

The camera can be used to record short high-definition movies. Sound is recorded in stereo via the built-in microphone; do not cover the microphone during recording.

❶ Movies are recorded to the card in the first slot. Be sure a card is inserted in the first slot before proceeding.

1 Press the movie-record (**Fn1**) button to start recording.

Recording indicator

Time remaining

2 Press the button again to end recording. Recording ends automatically when the maximum length is reached or the memory card is full.

◆ Zoom can be adjusted while recording is in progress.

◆ Frame size and rate can be selected using 🎬 **MOVIE SETTING** > **MOVIE MODE** (📖 99). Focus mode is selected using the focus mode selector (📖 63); for continuous focus adjustment, select **C**, or choose **S** and enable Intelligent Face Detection (📖 92). Intelligent Face Detection is not available in focus mode **M**.

◆ During recording, exposure compensation can be adjusted by up to ±2 EV.

◆ The indicator lamp lights while movies are being recorded.
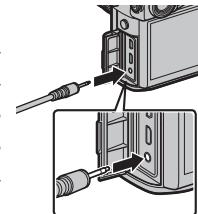
- If the lens is equipped with an aperture mode switch, select the aperture mode before beginning recording. If an option other than **A** is selected, shutter speed and aperture can be adjusted while recording is in progress.
- The microphone may pick up lens noise and other sounds made by the camera during recording.
- Vertical or horizontal streaks may appear in movies containing very bright subjects. This is normal and does not indicate a malfunction.

Depth of Field

Adjust aperture before recording begins. Choose low f-numbers to soften background details.
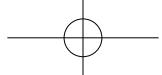
Using an External Microphone

Sound can be recorded with external microphones that connect using jacks 2.5 mm in diameter; microphones that require bus power can not be used. See the microphone manual for details.

❖ The dialog shown at right will be displayed when a microphone is connected to the microphone/remote release connector. Press **MENU/OK** and select **MIC/REMOTE RELEASE** > 🎤 **MIC**.

CHECK MIC/REMOTE RELEASE
SETTING
OK SET DISP SKIP

Basic Movie Recording and Playback

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Viewing Movies

During playback, movies are displayed as shown at right. The following operations can be performed while a movie is displayed:

Movie icon

Operation	Description
Start/pause playback	**Press the selector down** to start playback. Press again to pause. While playback is paused, you can press the selector left or right to rewind or advance one frame at a time.
End playback	**Press the selector up** to end playback.
Adjust speed	**Press the selector left or right** to adjust playback speed during playback.
Adjust volume	**Press MENU/OK** to pause playback and display volume controls. Press the selector up or down to adjust the volume; press **MENU/OK** again to resume playback. Volume can also be adjusted using B **SOUND SETTING** > **PLAYBACK VOLUME** (P 109).

Progress is shown in the display during playback.

Progress bar

Q Do not cover the speaker during playback.
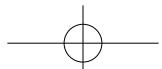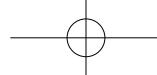
Playback Speed

Press the selector left or right to adjust playback speed during playback. Speed is shown by the *Arrow* number of arrows (▶ or ◀).
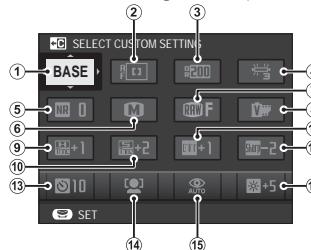
The Q (Quick Menu) Button

Using the Q Button

Press **Q** for quick access to selected options.

The Quick Menu Display
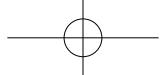
At default settings, the quick menu contains the following items.

① **SELECT CUSTOM SETTING**
② **AF MODE**
③ **DYNAMIC RANGE**
④ **WHITE BALANCE**
⑤ **NOISE REDUCTION**
⑥ **IMAGE SIZE**
⑦ **IMAGE QUALITY**
⑧ **FILM SIMULATION**

⑨ **HIGHLIGHT TONE**
⑩ **SHADOW TONE**
⑪ **COLOR**
⑫ **SHARPNESS**
⑬ **SELF-TIMER**
⑭ **FACE/EYE DETECTION SETTING**
⑮ **FLASH MODE**
⑯ **EVF/LCD BRIGHTNESS**

The quick menu shows the options currently selected for items ②—⑯, which can be changed as described on page 49. The **IMAGE QUALITY SETTING** > **SELECT CUSTOM SETTING** item (item ①) shows the current custom settings bank:
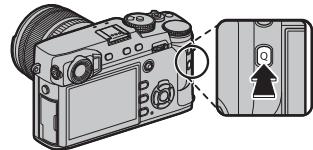
- **BASE**: No custom settings bank selected.
- **C 1** — **C7**: Select a bank to view the settings saved using the **IMAGE QUALITY SETTING** > **EDIT/SAVE CUSTOM SETTING** option (📖 82).
- **C1** — **C7**: The current custom settings bank.

Viewing and Changing Settings

1 Press **Q** to display the quick menu during shooting.
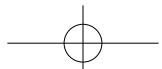
2 Use the selector to highlight items and rotate the rear command dial to change.

◆ Changes are not saved to the current settings bank (🕮 47). Settings that differ from those in the current settings bank (**C1** — **C7**) are shown in red.
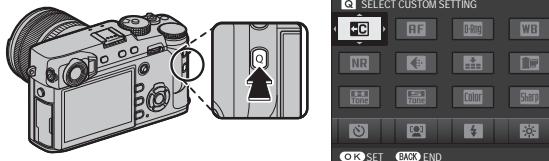
3 Press **Q** to exit when settings are complete.

Editing the Quick Menu

To choose the items displayed in the quick menu:

1 Press and hold the **Q** button during shooting.

2 The current quick menu will be displayed; use the selector to highlight the item you wish to change and press **MENU/OK**. You will be given the following choice of items to assign to the selected position:

- SELECT CUSTOM SETTING *
- DYNAMIC RANGE *
- WHITE BALANCE *
- NOISE REDUCTION *
- IMAGE SIZE
- IMAGE QUALITY
- FILM SIMULATION *

- GRAIN EFFECT *
- HIGHLIGHT TONE *
- SHADOW TONE *
- COLOR *
- SHARPNESS *
- SELF-TIMER
- FACE/EYE DETECTION SETTING

- PHOTOMETRY
- AF MODE
- FLASH MODE
- FLASH COMPENSATION
- MF ASSIST
- MOVIE MODE
- MIC LEVEL ADJUSTMENT

- EVF/LCD BRIGHTNESS
- EVF/LCD COLOR
- SHUTTER TYPE
- NONE

* Stored in custom settings bank.

◆ Select **NONE** to assign no option to the selected position. When **SELECT CUSTOM SETTING** is selected, current settings are shown in the quick menu by the label **BASE**.

3 Highlight the desired item and press **MENU/OK** to assign it to the selected position.

◆ The quick menu can also be edited using **D BUTTON/DIAL SETTING** > **EDIT/SAVE QUICK MENU** (📖 112).

The Q (Quick Menu) Button

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