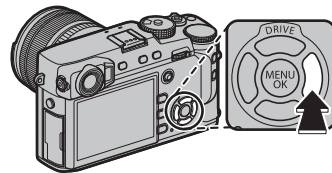













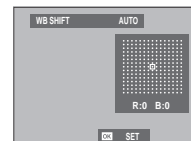
White Balance



For natural colors, choose a white balance option that matches the light source. Press the function (**Fn5**) button to display the options shown below, then press the selector up or down to highlight an option and press **MENU/OK** to select.




Option	Description
AUTO	White balance adjusted automatically.
 1	Measure a value for white balance (📖 62).
 2	
 3	
	Selecting this option displays a list of color temperatures (📖 62); highlight a temperature and press MENU/OK to select the highlighted option and display the fine-tuning dialog.

Option	Description
	For subjects in direct sunlight.
	For subjects in the shade.
	Use under "daylight" fluorescent lights.
	Use under "warm white" fluorescent lights.
	Use under "cool white" fluorescent lights.
	Use under incandescent lighting.
	Reduces the blue cast typically associated with underwater lighting.



- White balance is adjusted for flash lighting only in **AUTO** and  modes. Turn the flash off using other white balance options (📖 78).
- Results vary with shooting conditions. Play pictures back after shooting to check colors.
- White balance options can also be accessed using  **IMAGE QUALITY SETTING > WHITE BALANCE** (📖 89).

 **Custom White Balance**

Choose  to adjust white balance for unusual lighting conditions. White balance measurement options will be displayed; frame a white object so that it fills the display and press the shutter button all the way down to measure white balance (to select the most recent custom value and exit without measuring white balance, press **DISP/BACK**, or press **MENU/OK** to select the most recent value and display the fine-tuning dialog).

- If **“COMPLETED!”** is displayed, press **MENU/OK** to set white balance to the measured value.
- If **“UNDER”** is displayed, raise exposure compensation (📖 57) and try again.
- If **“OVER”** is displayed, lower exposure compensation (📖 57) and try again.

 **Color Temperature**

Color temperature is an objective measure of the color of a light source, expressed in Kelvin (K). Light sources with a color temperature close to that of direct sunlight appear white; light sources with a lower color temperature have a yellow or red cast, while those with a higher color temperature are tinged with blue. You can match color temperature to the light source as shown in the following table, or choose options that differ sharply from the color of the light source to make pictures “warmer” or “colder.”

◀ Choose for redder light sources
or “colder” pictures

Choose for bluer light sources ▶
or “warmer” pictures

2,000 K

Candlelight

Sunset/sunrise

5,000 K

Direct sunlight

Shade

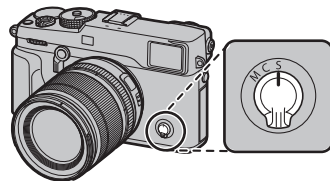
15,000 K

Blue sky

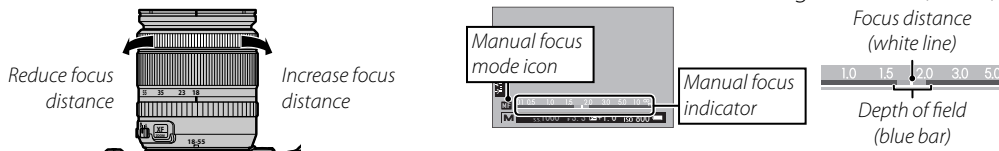
Focus Mode

Use the focus mode selector to choose how the camera focuses (note that regardless of the option selected, manual focus will be used when the lens is in manual focus mode).

- **S** (single AF): Focus locks while the shutter button is pressed halfway. Choose for stationary subjects.
- **C** (continuous AF): Focus is continually adjusted to reflect changes in the distance to the subject while the shutter button is pressed halfway. Use for subjects that are in motion. Eye-detection AF is not available.
- **M** (manual): Focus manually using the lens focus ring. Rotate the ring left to reduce the focus distance, right to increase. The manual focus indicator indicates how closely the focus distance matches the distance to the subject in the focus brackets (the white line indicates the focus distance, the blue bar the depth of field, or in other words the distance in front of and behind the focus point that appears to be in focus); you can also check focus visually in the viewfinder or LCD monitor. Choose for manual control of focus or in situations in which the camera is unable to focus using autofocus (📖 77).



More on Photography and Playback



- ❖ Use **📷 BUTTON/DIAL SETTING > FOCUS RING** (📖 112) to reverse the direction of rotation of the focus ring.
- ❖ To use autofocus to focus on the subject in the selected focus area (📖 67), press the **AF-L** button (the size of the focus area can be chosen with the rear command dial). In manual focus mode, you can use this feature to quickly focus on a chosen subject using either single or continuous AF according to the option chosen for **📷 AF/MF SETTING > INSTANT AF SETTING** (📖 93).

Focus Mode

- ◆ The camera can show focus distance in meters or feet. Use **SCREEN SETTING > FOCUS SCALE UNITS** (📖 111) to choose the units used.
- ◆ If **ON** is selected for **AF/MF SETTING > PRE-AF** (📖 91), focus will be adjusted continuously in modes **S** and **C** even when the shutter button is not pressed.

■ The Focus Indicator

The focus indicator turns green when the subject is in focus and blinks white when the camera is unable to focus. Brackets (“ () ”) indicate that the camera is focusing and are displayed continuously in mode **C**. **MF** is displayed in manual focus mode.



Focus indicator

● Checking Focus

To zoom in on the current focus area (📖 67) for precise focus, press the center of the rear command dial. Press the center of the rear command dial again to cancel zoom. In manual focus mode, zoom can be adjusted by rotating the rear command dial when **STANDARD** or **FOCUS PEAK HIGHLIGHT** is selected for **AF/MF SETTING > MF ASSIST** (📖 93), while if **ON** is selected for **AF/MF SETTING > FOCUS CHECK** (📖 93), the camera will automatically zoom in on the selected focus area when the focus ring is rotated. Focus zoom is not available in focus mode **C** or when **AF/MF SETTING > PRE-AF** (📖 91) is on or an option other than **SINGLE POINT** is selected for **AF MODE** (📖 66).



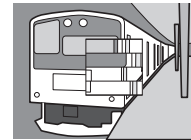
MF Assist

The **AF/MF SETTING > MF ASSIST** (📖 93) option can be used to check focus when pictures are framed in the LCD monitor or electronic viewfinder in manual focus mode.

◆ The **MF ASSIST** menu can be displayed by pressing and holding the center of the rear command dial.

The following options are available:

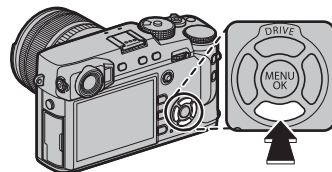
- **FOCUS PEAK HIGHLIGHT:** Highlights high-contrast outlines. Rotate the focus ring until the subject is highlighted.
- **DIGITAL SPLIT IMAGE:** Displays a split image in the center of the frame. Frame the subject in the split-image area and rotate the focus ring until the three parts of the split image are correctly aligned.



Autofocus Options (AF Mode)

To choose the AF mode for focus modes **S** and **C**, press the function button (**Fn6**) to display the options shown below, then press the selector up or down to highlight an option and press **MENU/OK** to select.

- **[] SINGLE POINT:** The camera focuses on the subject in the selected focus point (☞ 68). The number of focus points available can be selected using **[] AF/MF SETTING > NUMBER OF THE FOCUS POINTS** (☞ 91). Use for pin-point focus on a selected subject.
 - **[] ZONE:** The camera focuses on the subject in the selected focus zone (☞ 69). Focus zones include multiple focus points (7×7, 5×5, or 3×3), making it easier to focus on subjects that are in motion.
 - **[] WIDE/TRACKING:** In focus mode **C**, the camera tracks focus on the subject in the selected focus point while the shutter-release button is pressed halfway (☞ 70). In focus mode **S**, the camera automatically focuses on high-contrast subjects; the areas in focus are shown in the display. The camera may be unable to focus on small objects or subjects that are moving rapidly.
- ◆ AF mode options can also be accessed using **[] AF/MF SETTING > AF MODE** (☞ 91).

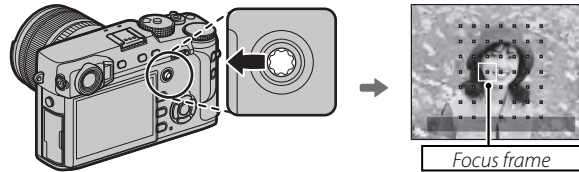


Focus-Point Selection

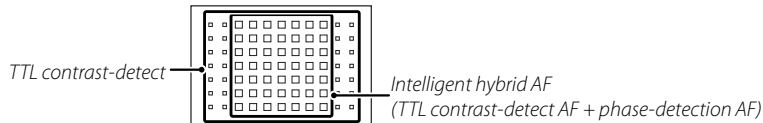
Use the focus stick (focus lever) to choose a focus point for autofocus. The procedure for selecting the focus point varies with the option chosen for AF mode (📖 66).

- ◆ Focus-area selection can also be used to choose the focus point for manual focus and focus zoom.
- ◆ The focus-area grid is reduced to 9×7 at an aspect ratio of **1:1** (📖 88).

Tilt the focus stick to position the focus frame, or press the center of the stick to return to the center focus point.

**Available Focus Points**

Fewer focus points are available for intelligent hybrid AF, which combines phase-detection with TTL contrast-detect AF.



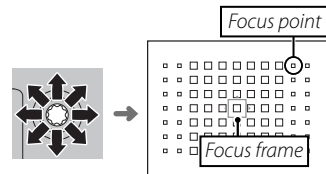
The Focus Point Display

The focus stick (focus lever) can be used to display available focus points.

◆ Focus-area selection can also be accessed using **AF/MF SETTING > FOCUS AREA** (📖 91).

■ **Single Point AF**

Press the center of the focus stick to display the focus points (“+”) and focus frame. Use the stick to position the focus frame over the desired focus point, or press the center of the stick to return to the center point.



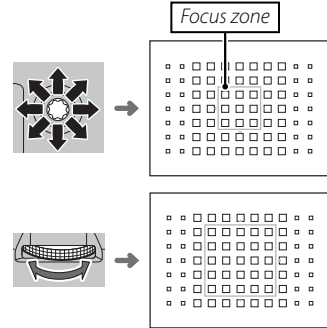
To choose the size of the focus frame, rotate the rear command dial. Rotate the dial left to reduce the frame by up to 50%, right to enlarge it by up to 150%, or press the center of the dial to restore the frame to its original size. Press **MENU/OK** to put your selection into effect.



■ Zone AF

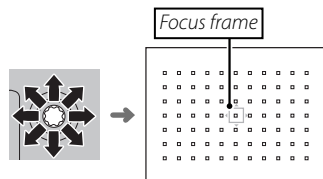
Press the center of the focus stick to display the focus zone. Use the stick to position the zone or press the center of the stick to return the zone to the center of the display.

To choose the number of focus frames in the zone, rotate the rear command dial. Rotate the dial right to cycle through zone sizes in the order 3×3, 5×5, 7×7, 3×3..., left to cycle through zone sizes in reverse order, or press the center of the dial to select a zone size of 3×3. Press **MENU/OK** to put your selection into effect.



■ Tracking (Focus Mode C Only)

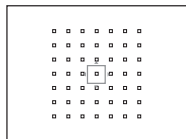
Press the center of the focus stick to display the focus frame. Use the stick to position the focus frame, or press the center of the stick to return the frame to the center of the display. Press **MENU/OK** to put your selection into effect. The camera will track focus on the subject while the shutter button is pressed halfway.



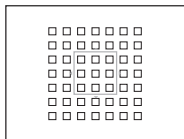
ⓘ Manual focus-frame selection is not available when wide/tracking is selected in focus mode **S**.

● Burst Mode Focus-Frame Selection

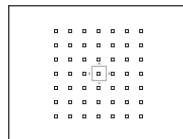
When continuous high-speed (**8.0 fps**) is selected for drive mode, the number of focus frames available in focus mode **C** drops.



Single point



Zone



Wide/Tracking

Long Time-Exposures (T/B)

Select a shutter speed of **T** (time) or **B** (bulb) for long time-exposures.

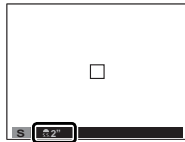
- ◆ Use of a tripod is recommended to prevent the camera from moving during the exposure.
- ◆ To reduce “noise” (mottling) in long time-exposures, select **ON** for **IMAGE QUALITY SETTING > LONG EXPOSURE NR** (📖 90). Note that this may increase the time needed to record images after shooting.

Time (T)

- 1 Rotate the shutter speed dial to **T**.



- 2 Rotate the front command dial to choose a shutter speed.



- 3 Press the shutter button all the way down to take a picture at the selected shutter speed. A count-down timer will be displayed while the exposure is in progress.



Bulb (B)

- 1 Rotate the shutter speed dial to **B**.



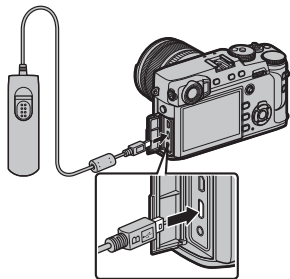
- 2 Press the shutter button all the way down. The shutter will remain open for up to 60 minutes while the shutter button is pressed; the display shows the time elapsed since the exposure started.



- ◆ Selecting an aperture of **A** fixes shutter speed at 30 s.

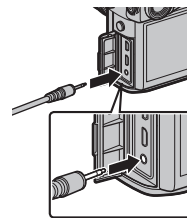
Using a Remote Release

An optional RR-90 remote release can be used for long time-exposures. See the manual provided with the RR-90 for more information.



Third-Party Remote Releases

Electronic releases from third-party suppliers can be connected via the microphone/remote release connector. A confirmation dialog will be displayed when a third-party release is connected; press **MENU/OK** and select **REMOTE** for **MIC/REMOTE RELEASE**.



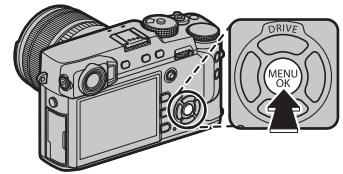
CHECK MIC/REMOTE RELEASE
SETTING

SET **SKIP**

The Self-Timer

Use the timer for self-portraits or to prevent blur caused by camera shake.

- 1 Press **MENU/OK** in shooting mode to display the shooting menu.



- 2 Select the **SHOOTING SETTING** tab (87), then highlight **SELF-TIMER** and press **MENU/OK**.

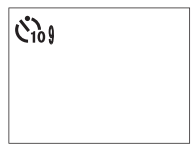
- 3 Press the selector up or down to highlight the desired option and press **MENU/OK** to select.

Option	Description
2 SEC	The shutter is released two seconds after the shutter button is pressed. Use to reduce blur caused by the camera moving when the shutter button is pressed.
10 SEC	The shutter is released ten seconds after the shutter button is pressed. Use for photographs in which you wish to appear yourself.
OFF	Self-timer off.

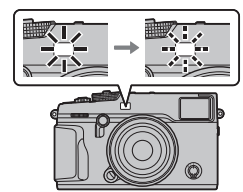
- 4 Press the shutter button halfway to focus.

① Stand behind the camera when using the shutter button. Standing in front of the lens can interfere with focus and exposure.

- 5 Press the shutter button the rest of the way down to start the timer. The display in the monitor shows the number of seconds remaining until the shutter is released. To stop the timer before the picture is taken, press **DISP/BACK**.



The self-timer lamp on the front of the camera will blink immediately before the picture is taken. If the two-second timer is selected, the self-timer lamp will blink as the timer counts down.

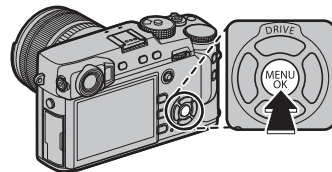


◆ The self-timer turns off automatically when the camera is turned off.

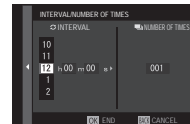
Interval Timer Photography

Follow the steps below to configure the camera to take photos automatically at a preset interval.

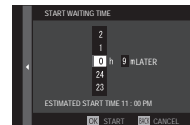
- 1 Press **MENU/OK** in shooting mode to display the shooting menu. Select the **SHOOTING SETTING** tab (☰ 87), then highlight **INTERVAL TIMER SHOOTING** and press **MENU/OK**.



- 2 Use the selector to choose the interval and number of shots. Press **MENU/OK** to proceed.



- 3 Use the selector to choose the starting time and then press **MENU/OK**. Shooting will start automatically.



- ① Interval timer photography can not be used at a shutter speed of **B** (bulb) or with multiple exposure photography. In burst mode, only one picture will be taken each time the shutter is released.
- 🔦 Use of a tripod is recommended.
- 🔦 Check the battery level before starting. We recommend using an optional AC-9V AC power adapter and CP-W126 DC coupler.
- 🔦 The display turns off between shots and lights a few seconds before the next shot is taken. The display can be activated at any time by pressing the shutter button.

Focusing and Taking Pictures

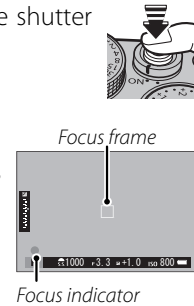
Press the shutter button halfway to focus and the rest of the way down to shoot.

1 Focus.

Frame the picture with your subject in the center of the display and press the shutter button halfway to focus.

◆ If the subject is poorly lit, the AF-assist illuminator may light (📖 91).

If the camera is able to focus, it will beep twice and the focus indicator and frame in focus will glow green. Focus and exposure will lock while the shutter button is pressed halfway.



If the camera is unable to focus, the focus frame will turn red, **!AF** will be displayed, and the focus indicator will blink white.

2 Shoot.

Smoothly press the shutter button the rest of the way down to take the picture.



Focus/Exposure Lock

To compose photographs with off-center subjects:

1 Focus: Position the subject in the focus frame and press the shutter button halfway to lock focus and exposure. Focus and exposure will remain locked while the shutter button is pressed halfway (AF/AE lock).



◆ Focus and exposure can also be locked with the **AF-L** and **AE-L** buttons, respectively (if **AE/AF LOCK** is selected for **FUNCTION/DIAL SETTING > AF-LOCK MODE**, pressing the **AF-L** button will lock both focus and exposure; 113).

2 Recompose: Keep the shutter button pressed halfway or keep the **AF-L** or **AE-L** button pressed.

◆ Focus and/or exposure will remain locked while the **AF-L** or **AE-L** button is pressed, whether or not the shutter button is pressed halfway. If **AE&AF ON/OFF SWITCH** is selected for **FUNCTION/DIAL SETTING > AE/AF-LOCK MODE** (113), focus and/or exposure lock when the button is pressed and remain locked until the button is pressed again.



3 Shoot: Press the button all the way down.

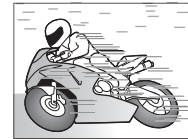


◆ The roles of the **AE-L** and **AF-L** buttons can be reversed using **FUNCTION/DIAL SETTING > AE-L/AF-L BUTTON SETTING** (113).

Autofocus

Although the camera boasts a high-precision autofocus system, it may be unable to focus on the subjects listed below.

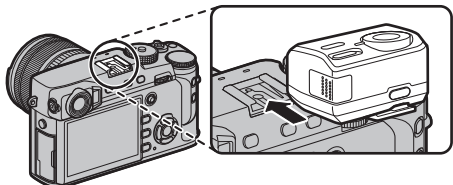
- Very shiny subjects such as mirrors or car bodies.
- Fast-moving subjects.
- Subjects photographed through a window or other reflective object.
- Dark subjects and subjects that absorb rather than reflect light, such as hair or fur.
- Insubstantial subjects, such as smoke or flame.
- Subjects that show little contrast with the background (for example, subjects in clothing that is the same color as the background).
- Subjects positioned in front of or behind a high-contrast object that is also in the focus frame (for example, a subject photographed against a backdrop of highly contrasting elements).



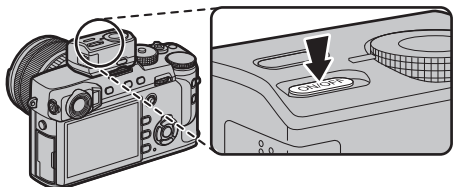
Flash Photography

Use an optional flash unit for additional lighting when shooting at night or indoors under low light.

- 1 Remove the hot shoe cover and slide the flash onto the hot shoe as shown, stopping when it clicks into place.



- 2 Turn the flash on.




- ◆ For more information, see the documentation provided with the flash unit.

- 3 Choose a flash mode in the **FLASH SETTING > FLASH MODE** menu (87).

Mode	Description
AUTO (AUTO FLASH)/ AUTO (RED EYE REDUCTION)*	The flash fires when required. Recommended in most situations.
⚡ (FORCED FLASH)/ ⚡ (FORCED FLASH)*	The flash fires whenever a picture is taken. Use for backlit subjects or for natural coloration when shooting in bright light.
⚡ (SLOW SYNCHRO)/ SLOW (RED EYE & SLOW)*	Capture both the main subject and the background under low light (note that brightly lit scenes may be overexposed).
⚡ (2ND CURTAIN SYNC.)/ REPR (2ND CURTAIN SYNC.)*	The flash fires immediately before the shutter closes.
⚡ (COMMANDER)	The built-in flash can be used to control optional remote flash units.
⓪ (SUPPRESSED FLASH)	The flash does not fire even when the subject is poorly lit. A tripod is recommended.

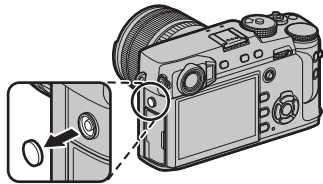
* Red-eye removal is available in these modes when Intelligent Face Detection is active (92) and red-eye removal is on (98). Red-eye removal minimizes “red-eye” caused when light from the flash is reflected from the subject’s retinas as shown in the illustration at right.



- ① Depending on the distance to the subject, some lenses may cast shadows in photos taken with the flash.
- ❖ Lowering the flash turns the flash off (Ⓜ) and prevents it firing even when the subject is poorly lit; use of a tripod is recommended. Lower the flash where flash photography is prohibited or to capture natural lighting under dim light. We also recommend that you lower the flash when the camera is off.
- ❖ If  is displayed when the shutter button is pressed halfway, the flash will fire when the photo is taken.
- ❖ Except in commander mode, the flash may fire several times with each shot. Do not move the camera until shooting is complete.

●● The Sync Terminal

Use the sync terminal to connect flash units that require a sync cable.



●● Flash Sync Speed






The flash will synchronize with the shutter at shutter speeds of $\frac{1}{250}$ s or slower.

●● Optional Flash Units

The camera can also be used with optional FUJIFILM shoe-mounted flash units (📖 132). Do not use third-party flash units that apply over 300V to the camera hot shoe.

●● Flash Mode and Shooting Mode

The flash modes available vary with the shooting mode (📖 153):

Flash mode	P	S	A	M				
AUTO	✓				✓	✓		✓
	✓	✓	✓	✓	✓	✓		✓
$\frac{1}{2}$ SLOW	✓		✓		✓	✓		✓
$\frac{1}{2}$ REFR	✓	✓	✓	✓	✓	✓		✓
$\frac{1}{2}$ EC	✓	✓	✓	✓	✓	✓		✓
Ⓜ	✓	✓	✓	✓	✓	✓		✓

* Wireless remote photography.

Recording Pictures in RAW Format

To record raw, unprocessed data from the camera image sensor, select a **RAW** option for image quality in the shooting menu as described below. JPEG copies of RAW images can be created using **PLAY BACK MENU > RAW CONVERSION**, or RAW images can be viewed on a computer using the RAW FILE CONVERTER application (📖 81, 123).

- 1 Press **MENU/OK** in shooting mode to display the shooting menu. Select the **IMAGE QUALITY SETTING** tab (📖 87), then highlight **IMAGE QUALITY** (📖 88) and press **MENU/OK**.
- 2 Highlight an option and press **MENU/OK**. Select **RAW** to record only RAW images, or **FINE+RAW** or **NORMAL+RAW** to record both JPEG copy together with the RAW images. **FINE+RAW** uses lower JPEG compression ratios for higher-quality JPEG images, while **NORMAL+RAW** uses higher JPEG compression ratios to increase the number of images that can be stored.

The Function Buttons

To toggle RAW image quality on or off for a single shot, assign **RAW** to a function button (📖 51). If a JPEG option is currently selected for image quality, pressing the button temporarily selects the equivalent JPEG+RAW option. If a JPEG+RAW option is currently selected, pressing the button temporarily selects the equivalent JPEG option, while if **RAW** is selected, pressing the button temporarily selects **FINE**. Taking a picture or pressing the button again restores the previous setting.

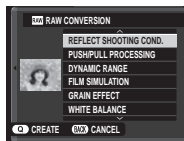
Creating JPEG Copies of RAW Pictures

RAW pictures store information on camera settings separately from the data captured by the camera image sensor. Using **PLAY BACK MENU > RAW CONVERSION** (📖 102), you can create JPEG copies of RAW pictures using different options for the settings listed below. The original image data are unaffected, allowing a single RAW image to be processed in a multitude of different ways.

- 1 Press **MENU/OK** during playback to display the playback menu, then press the selector up or down to highlight **PLAY BACK MENU > RAW CONVERSION** (📖 101) and press **MENU/OK** to display the settings listed in the table at right.

◆ These options can also be displayed by pressing **Q** button during playback.

- 2 Press the selector up or down to highlight a setting and press the selector right to select. Press the selector up or down to highlight the desired option and press **MENU/OK** to select and return to the settings list. Repeat this step to adjust additional settings.



- 3 Press the **Q** button to preview the JPEG copy and press **MENU/OK** to save.

Setting	Description
REFLECT SHOOTING COND.	Create a JPEG copy using the settings in effect at the time the photo was taken.
PUSH/PULL PROCESSING	Adjust exposure by -1 EV to +3 EV in increments of 1/3 EV.
DYNAMIC RANGE	Enhance details in highlights for natural contrast (📖 89).
FILM SIMULATION	Simulate the effects of different types of film (📖 60).
GRAIN EFFECT	Add a film grain effect (📖 89).
WHITE BALANCE	Adjust white balance (📖 61).
WB SHIFT	Fine-tune white balance (📖 61).
HIGHLIGHT TONE	Adjust highlights (📖 89).
SHADOW TONE	Adjust shadows (📖 89).
COLOR	Adjust color density (📖 89).
SHARPNESS	Sharpen or soften outlines (📖 89).
NOISE REDUCTION	Process the copy to reduce mottling (📖 89).
LENS MODULATION OPTIMIZER	Improve definition by adjusting for diffraction and the slight loss of focus at the periphery of the lens (📖 90).
COLOR SPACE	Choose the color space used for color reproduction (📖 90).

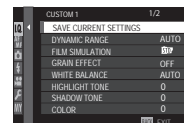
Saving Settings

Save up to 7 sets of custom camera settings for commonly-encountered situations. Saved settings can be recalled using **IMAGE QUALITY SETTING > SELECT CUSTOM SETTING** (90).

1 Press **MENU/OK** in shooting mode to display the shooting menu. Select the **IMAGE QUALITY SETTING** tab (87), then highlight **EDIT/SAVE CUSTOM SETTING** (90) and press **MENU/OK**.

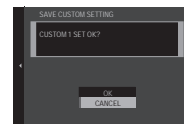


2 Highlight a custom settings bank and press **MENU/OK** to select. Adjust the following as desired and press **DISP/BACK** when adjustments are complete: **DYNAMIC RANGE**, **FILM SIMULATION**, **GRAIN EFFECT**, **WHITE BALANCE**, **COLOR**, **SHARPNESS**, **HIGHLIGHT TONE**, **SHADOW TONE**, and **NOISE REDUCTION**.



◆ To replace the settings in the selected bank with the settings currently selected with the camera, select **SAVE CURRENT SETTINGS** and press **MENU/OK**.

3 A confirmation dialog will be displayed; highlight **OK** and press **MENU/OK**.



Using a Mount Adapter

When M-mount lenses are attached using an optional **FUJIFILM M MOUNT ADAPTER**, the camera processes pictures as they are taken to maintain image quality and correct for a variety of effects.

Pressing the function button on the mount adapter displays **LENS MOUNT ADAPTOR SETTING** options.

- ◆ Mount adapter settings can also be accessed using **SHOOTING SETTING > MOUNT ADAPTER SETTING** (📖 97).
- ◆ Before checking focus, set the focus mode selector to **M** (📖 63).

Bright Frame Brightness

Adjust the brightness of the bright frame in the OVF display. Use the **BRIGHT FRAME BRIGHTNESS** option to adjust the brightness of the bright frame in the OVF display.

Lens Registration

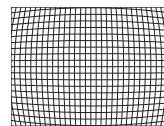
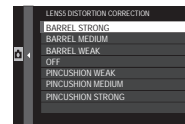
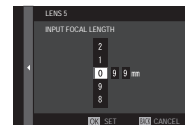
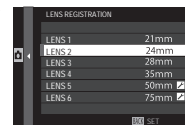
■ Choosing a Focal Length

If the lens has a focal length of 21, 24, 28, or 35 mm, choose a matching option in the **LENS MOUNT ADAPTOR SETTING** menu.

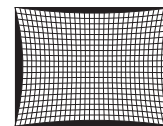
For other lenses, select option 5 or 6 and use the selector to enter the focal length.

■ Distortion Correction

Choose from **STRONG**, **MEDIUM**, or **WEAK** options to correct **BARREL** or **PINCUSHION** distortion.



Barrel distortion

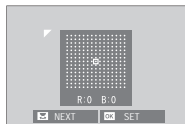


Pincushion distortion

- ◆ To determine the amount required, adjust distortion correction while taking photos of graph paper or other objects featuring repeating vertical and horizontal lines, such as the windows in a high-rise.

■ Color Shading Correction

Color (shading) variations between the center and edges of the frame can be adjusted separately for each corner.

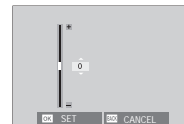


To use color shading correction, follow the steps below.

- 1 Rotate the rear command dial to choose a corner. The selected corner is indicated by a triangle.
 - 2 Use the selector to adjust shading until there is no visible difference in color between the selected corner and the center of the image. Press the selector left or right to adjust colors on the cyan–red axis, up or down to adjust colors on the blue–yellow axis.
- ◆ To determine the amount required, adjust color shading correction while taking photos of blue sky or a sheet of gray paper.

■ Peripheral Illumination Correction

Choose from values between -5 and $+5$. Choosing positive values increases peripheral illumination, while choosing negative values reduces peripheral illumination. Positive values are recommended for vintage lenses, negative values to create the effect of images taken with an antique lens or a pinhole camera.



- ◆ To determine the amount required, adjust peripheral illumination correction while taking photos of blue sky or a sheet of gray paper.

PhotoBook Assist

Create books from your favorite photos.

Creating a PhotoBook

1 Select **NEW BOOK** for **PLAY BACK MENU > PHOTOBOOK ASSIST** (📖 101) and choose from the following options:

- **SELECT FROM ALL:** Choose from all available pictures.
- **SELECT BY IMAGE SEARCH:** Choose from pictures matching selected search conditions.
 - ❖ Neither photographs 640 or smaller nor movies can be selected for photobooks.

2 Scroll through the images and press the selector up to select or deselect. To display the current image on the cover, press the selector down. Press **MENU/OK** to exit when the book is complete.

- ❖ The first picture selected becomes the cover image. Press the selector down to select a different image for the cover.

3 Highlight **COMPLETE PHOTOBOOK** and press **MENU/OK** (to select all photos or all photos matching the specified search conditions for the book, choose **SELECT ALL**). The new book will be added to the list in the photo-book assist menu.

- ① Books can contain up to 300 pictures.
- ① Books that contain no photos are automatically deleted.

Viewing Photobooks

Highlight a book in the photobook assist menu and press **MENU/OK** to display the book, then press the selector left or right to scroll through the pictures.

Editing and Deleting Photobooks

Display the photobook and press **MENU/OK**. The following options will be displayed; select the desired option and follow the on-screen instructions.

- **EDIT:** Edit the book as described in “Creating a PhotoBook” (📖 85).
- **ERASE:** Delete the book.

Photobooks

Photobooks can be copied to a computer using MyFinePix Studio software (📖 123).

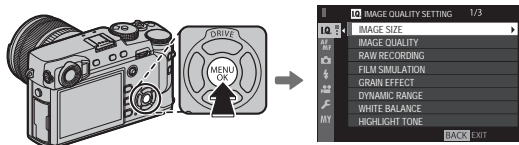
Menus

Using the Menu: Shooting Mode

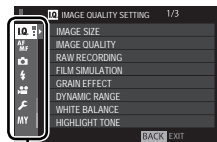
The shooting menu is used to adjust settings for a wide range of shooting conditions. Frequently-used options can be saved to a personalized custom menu (“my menu”).

Using the Shooting Menu

- 1 Press **MENU/OK** in shooting mode to display the menus.



- 2 Press the selector left to highlight the tab for the current menu.



Tab

- 3 Press the selector down to highlight the tab (IQ, AF, S, F, M, or MY) containing the desired item.



- 4 Press the selector right to place the cursor in the menu.



- 5 Press the selector up or down to highlight the desired item.



- 6 Press the selector right to view options for the highlighted item.



- 7 Press the selector up or down to highlight the desired option.



- 8 Press **MENU/OK** to select the highlighted option.



- 9 Press **DISP/BACK** to return to the shooting display.

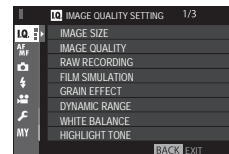


- Use the front command dial to scroll through the menus a page at a time.

Menus

IMAGE QUALITY SETTING

To adjust shooting settings that affect image quality, press **MENU/OK** in the shooting display and select the **IQ** (**IMAGE QUALITY SETTING**) tab (87).

**IMAGE SIZE**

Choose the size and aspect ratio at which still pictures are recorded.

Aspect Ratio

Pictures with an aspect ratio of 3:2 have the same proportions as a frame of 35 mm film, while an aspect ratio of 16:9 is suited to display on High Definition (HD) devices. Pictures with an aspect ratio of 1:1 are square.

Option	Image size	Option	Image size
L 3:2	6000×4000	S 3:2	3008×2000
L 16:9	6000×3376	S 16:9	3008×1688
L 1:1	4000×4000	S 1:1	2000×2000
M 3:2	4240×2832		
M 16:9	4240×2384		
M 1:1	2832×2832		

IMAGE SIZE is not reset when the camera is turned off or another shooting mode is selected.

IMAGE QUALITY

Choose a file format and compression ratio. Select **FINE** or **NORMAL** to record JPEG images, **RAW** to record RAW images, or **FINE+RAW** or **NORMAL+RAW** to record both JPEG and RAW images. **FINE** and **FINE+RAW** use lower JPEG compression ratios for higher-quality JPEG images, while **NORMAL** and **NORMAL+RAW** use higher JPEG compression ratios to increase the number of images that can be stored.

RAW RECORDING

Choose whether to compress RAW images.

Option	Description
UNCOMPRESSED	RAW images are not compressed.
LOSSLESS COMPRESSED	RAW images are compressed using a reversible algorithm that reduces file size with no loss of image data. The images can be viewed in RAW FILE CONVERTER (123) or other compatible software.

FILM SIMULATION

Simulate the effects of different types of film (📖 60).

GRAIN EFFECT

Add a film grain effect.

DYNAMIC RANGE

Control contrast. Choose lower values to increase contrast when shooting indoors or under overcast skies, higher values to reduce loss of detail in highlights and shadows when photographing high-contrast scenes. Higher values are recommended for scenes that include both sunlight and deep shade, for such high-contrast subjects as sunlight on water, brightly-lit autumn leaves, and portraits taken against a blue sky, and for white objects or people wearing white; note, however, that mottling may appear in pictures taken at higher values.

- ◆ If **AUTO** is selected, the camera will automatically choose either **#100 100%** or **#200 200%** according to the subject and shooting conditions. Shutter speed and aperture will be displayed when the shutter button is pressed halfway.
- ◆ **#200 200%** is available at sensitivities of ISO 400 and above, **#400 400%** at sensitivities of ISO 800 and above.

WHITE BALANCE

Adjust colors to match the light source (📖 61).

HIGHLIGHT TONE

Adjust the appearance of highlights.

SHADOW TONE

Adjust the appearance of shadows.

COLOR

Adjust color density.

SHARPNESS

Sharpen or soften outlines.

NOISE REDUCTION

Reduce noise in pictures taken at high sensitivities.

Using the Menu: Shooting Mode

LONG EXPOSURE NR

Select **ON** to reduce mottling in long time-exposures (☰ 71).

LENS MODULATION OPTIMIZER

Select **ON** to improve definition by adjusting for diffraction and the slight loss of focus at the periphery of the lens.

COLOR SPACE

Choose the gamut of colors available for color reproduction.

Option	Description
sRGB	Recommended in most situations.
Adobe RGB	For commercial printing.

PIXEL MAPPING

Use this option if you notice bright spots in your pictures.

1 Press **MENU/OK** in the shooting display and select the **IMAGE QUALITY SETTING** tab (☰ 87).

2 Highlight **PIXEL MAPPING** and press **MENU/OK** to perform pixel mapping.

- ⓘ Results are not guaranteed.
- ⓘ Be sure the battery is fully charged before beginning pixel mapping.
- ⓘ Pixel mapping is not available when the camera temperature is elevated.
- ⓘ Processing may take a few seconds.

SELECT CUSTOM SETTING

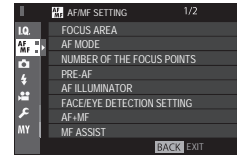
Recall settings saved with **EDIT/SAVE CUSTOM SETTING**.

EDIT/SAVE CUSTOM SETTING

Save settings (☰ 82).

AF/MF **AF/MF SETTING**

To adjust focus settings, press **MENU/OK** in the shooting display and select the **AF/MF** (**AF/MF SETTING**) tab (87).

**FOCUS AREA**

Choose the focus area (88). Focus-area selection can also be used to choose the focus point for manual focus and focus zoom.

AF MODE

Choose the AF mode for focus modes **S** and **C** (66).

NUMBER OF THE FOCUS POINTS

Choose the number of focus points available for focus-point selection in manual focus mode or when **SINGLE POINT** is selected for **AF MODE**.

Option	Description
77 POINTS (7 × 11)	Choose from 77 focus points arranged in a 7- by 11-point grid.
273 POINTS (13 × 21)	Choose from 273 focus points arranged in a 13- by 21-point grid.

PRE-AF

If **ON** is selected, the camera will continue to adjust focus even when the shutter-release button is not pressed halfway. Note that this increases the drain on the battery.

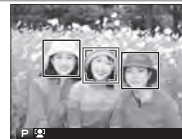
AF ILLUMINATOR

If **ON** is selected, the AF-assist illuminator will light to assist autofocus.

- ⓘ The camera may be unable to focus using the AF-assist illuminator in some cases. If the camera is unable to focus in macro mode, try increasing the distance to the subject.
- ⓘ Avoid shining the AF-assist illuminator directly into your subject's eyes.

FACE/EYE DETECTION SETTING

Intelligent Face Detection sets focus and exposure for human faces anywhere in the frame, preventing the camera from focusing on the background in group portraits. Choose for shots that emphasize portrait subjects. Faces can be detected with the camera in vertical or horizontal orientation; if a face is detected, it will be indicated by a green border. If there is more than one face in the frame, the camera will select the face closest to the center; other faces are indicated by white borders. You can also choose whether the camera detects and focuses on eyes when Intelligent Face Detection is on. Choose from the following options:



Option	Description
FACE ON/EYE OFF	Intelligent Face Detection only.
FACE ON/EYE AUTO	The camera automatically chooses which eye to focus on when a face is detected.
FACE ON/RIGHT EYE PRIORITY	The camera focuses on the right eye of subjects detected using Intelligent Face Detection.
FACE ON/LEFT EYE PRIORITY	The camera focuses on the left eye of subjects detected using Intelligent Face Detection.
FACE OFF/EYE OFF	Intelligent Face Detection and eye priority off.

- ◆ If the camera is unable to detect the subject's eyes because they are hidden by hair, glasses, or other objects, the camera will instead focus on faces.
- ⓘ In some modes, the camera may set exposure for the frame as a whole rather than the portrait subject.
- ⓘ If the subject moves as the shutter button is pressed, the face may not be in the area indicated by the green border when the picture is taken.

AF+MF

If **ON** is selected in focus mode **S**, focus can be adjusted manually by rotating the focus ring while the shutter button is pressed halfway. Both standard and focus peaking MF assist options are supported. Lenses with a focus distance indicator must be set to manual focus mode (MF) before this option can be used. Selecting MF disables the focus distance indicator. Set the focus ring to the center of the focus distance indicator, as the camera may fail to focus if the ring is set to infinity or the minimum focus distance.

AF + MF Focus Zoom

When **ON** is selected for **AF/MF SETTING > FOCUS CHECK** and **SINGLE POINT** selected for **AF MODE**, focus zoom can be used to zoom in on the selected focus area. Focus zoom is not available when **ZONE** or **WIDE/TRACKING** is selected for **AF MODE**. The zoom ratio (2.5× — 6×) can be selected using the rear command dial.

MF ASSIST

Choose how focus is displayed in manual focus mode (☰ 65).

Option	Description
STANDARD	Focus is displayed normally (focus peaking and digital split image are not available).
DIGITAL SPLIT IMAGE	A black-and-white (MONOCHROME) or color (COLOR) split-image display.
FOCUS PEAK HIGHLIGHT	The camera heightens high-contrast outlines. Choose a color and peaking level.

FOCUS CHECK

If **ON** is selected, the camera will automatically zoom in on the view through the lens when the focus ring is rotated in manual focus mode (☰ 64).

INTERLOCK SPOT AE & FOCUS AREA

Select **ON** to meter the current focus frame when **SINGLE POINT** is selected for **AF MODE** (☰ 66) and **SPOT** is selected for **PHOTOMETRY** (☰ 59).

INSTANT AF SETTING

Choose how the camera focuses when the **AF-L** button is pressed in manual focus mode (☰ 63).

Using the Menus: Shooting Mode

DEPTH-OF-FIELD SCALE

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.

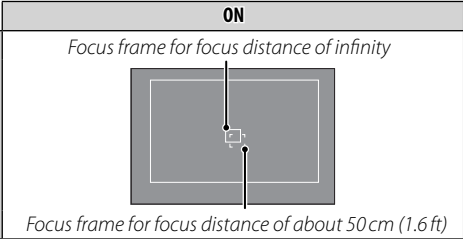
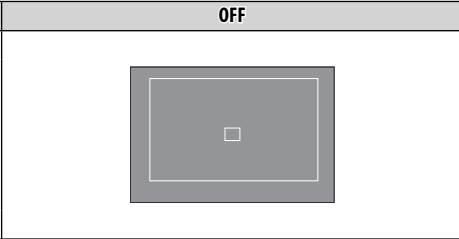
RELEASE/FOCUS PRIORITY

Choose how the camera focuses in focus mode **AF-S** or **AF-C**.

Option	Description
RELEASE	Shutter response is prioritized over focus. Pictures can be taken when the camera is not in focus.
FOCUS	Focus is prioritized over shutter response. Pictures can be only taken when the camera is in focus.

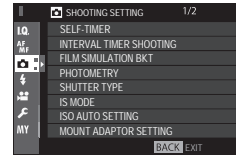
CORRECTED AF FRAME

If **ON** is selected, a second focus frame for focus distances of about 50 cm (1.6 ft) will be added to the display in the optical viewfinder. The focus frame for the current focus distance is displayed in green when the shutter button is pressed halfway.

	ON	OFF
Focus frame		

SHOOTING SETTING

To adjust shooting options, press **MENU/OK** in the shooting display and select the **(SHOOTING SETTING)** tab (📖 87).

**SELF-TIMER**

Take pictures with the self-timer (📖 73).

INTERVAL TIMER SHOOTING

Adjust settings for interval timer photography (📖 74).

FILM SIMULATION BKT

Choose film types for film simulation bracketing (📖 54, 60).

PHOTOMETRY

Choose how the camera meters exposure (📖 59).

Using the Menus: Shooting Mode

SHUTTER TYPE


Choose the shutter type. Choose the electronic shutter to mute the shutter sound.

Option	Description
MS MECHANICAL SHUTTER	Take pictures with the mechanical shutter.
ES ELECTRONIC SHUTTER	Take pictures with the electronic shutter.
MS MECHANICAL + ES ELECTRONIC	The camera chooses the shutter type according to shooting conditions.

- ◆ If **ES ELECTRONIC SHUTTER** or **MS MECHANICAL + ES ELECTRONIC** is selected, shutter speeds faster than $\frac{1}{4,000}$ s can be chosen by rotating the shutter speed dial to 8000 and then rotating the front command dial.
- ◆ When the electronic shutter is used, shutter speed and sensitivity are restricted to values of $\frac{1}{32,000}$ –1 s and ISO 12800–200 respectively, and long exposure noise reduction has no effect. In burst mode, focus and exposure are fixed at the values for the first shot in each burst.
- ⓘ Distortion may be visible in shots of moving subjects with electronic shutter, while banding and fog may occur in shots taken under fluorescent lights or other flickering or erratic illumination. When taking pictures with the shutter muted, respect your subjects' image rights and right to privacy.

IS MODE

Reduce blur. This option is available only with lenses that support image stabilization.

Option	Description
CONTINUOUS	Image stabilization on.
SHOOTING ONLY	Image stabilization enabled only when the shutter button is pressed halfway or the shutter is released.
OFF	Image stabilization off;  appears in the display (p. 8, 10). Recommended when using a tripod.

ISO AUTO SETTING

Choose the base sensitivity, maximum sensitivity, and minimum shutter speed for auto ISO sensitivity control, which is selected by rotating the ISO dial to **A**. Settings for **AUTO1**, **AUTO2**, and **AUTO3** can be adjusted separately.

Option	Default
DEFAULT SENSITIVITY	200
MAX. SENSITIVITY	800 (AUTO1)/1600 (AUTO2)/3200 (AUTO3)
MIN. SHUTTER SPEED	1/60

The camera automatically chooses a sensitivity between the default and maximum values. Sensitivity is only raised above the default value if the shutter speed required for optimal exposure would be slower than the value selected for **MIN. SHUTTER SPEED**.

- ◆ If the value selected for **DEFAULT SENSITIVITY** is higher than that selected for **MAX. SENSITIVITY**, **DEFAULT SENSITIVITY** will be set to the value selected for **MAX. SENSITIVITY**.
- ◆ The camera may select shutter speeds slower than **MIN. SHUTTER SPEED** if pictures would still be underexposed at the value selected for **MAX. SENSITIVITY**.

MOUNT ADAPTOR SETTING



Adjust settings for M-mount lenses connected using an optional **FUJIFILM M MOUNT ADAPTER** (📖 83).

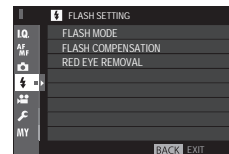
WIRELESS COMMUNICATION

Connect to a smartphone or tablet over a wireless network (📖 122).

- ◆ For more information, visit <http://fujifilm-dsc.com/wifi/>.

FLASH SETTING

To adjust flash-related settings, press **MENU/OK** in the shooting display and select the  (**FLASH SETTING**) tab ( 87).



FLASH MODE

Choose a flash mode ( 78).

FLASH COMPENSATION

Adjust flash brightness. Note that the desired results may not be achieved depending on shooting conditions and the distance to the subject.

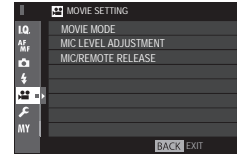
RED EYE REMOVAL

Choose **ON** to remove red-eye effects caused by the flash.

- ◆ Red-eye reduction is performed only when a face is detected.
- ◆ Red-eye removal is not available with RAW images.

MOVIE SETTING

To adjust options for movie recording, press **MENU/OK** in the shooting display and select the **MOVIE SETTING** tab (87).

**MOVIE MODE**

Select a frame size and rate for movie recording.

- **HD 1080/60 P**: 1920 × 1080 (60 fps)
- **HD 1080/50 P**: 1920 × 1080 (50 fps)
- **HD 1080/30 P**: 1920 × 1080 (30 fps)
- **HD 1080/25 P**: 1920 × 1080 (25 fps)
- **HD 1080/24 P**: 1920 × 1080 (24 fps)
- **HD 720/60 P**: 1280 × 720 (60 fps)
- **HD 720/50 P**: 1280 × 720 (50 fps)
- **HD 720/30 P**: 1280 × 720 (30 fps)
- **HD 720/25 P**: 1280 × 720 (25 fps)
- **HD 720/24 P**: 1280 × 720 (24 fps)

MIC LEVEL ADJUSTMENT

Adjust the microphone recording level.

MIC/REMOTE RELEASE

Specify whether the device connected to the microphone/remote release connector is a microphone or a remote release (45, 72).