

- 2 Start the computer. Log in to an account with administrator privileges before proceeding.
- 3 Exit any applications that may be running and insert the installer CD in a CD-ROM drive.

Windows 7/Windows Vista

If an AutoPlay dialog is displayed, click **SETUP.EXE**. A “User Account Control” dialog will then be displayed; click **Yes** (Windows 7) or **Allow** (Windows Vista).

The installer will start automatically; click **Install MyFinePix Studio** and follow the on-screen instructions to install MyFinePix Studio.

If the Installer Does Not Start Automatically

If the installer does not start automatically, select **Computer** or **My Computer** from the Start menu, then double-click the **FINEPIX** CD icon to open the FINEPIX CD window and double-click **setup** or **SETUP.EXE**.

- 4 If prompted to install Windows Media Player or DirectX, follow the on-screen instructions to complete installation.
- 5 Remove the installer CD from the CD-ROM drive when installation is complete. Store the installer CD in a dry location out of direct sunlight in case you need to re-install the software.

Installation is now complete. Proceed to “Connecting the Camera” (📖 71).

Macintosh: Installing FinePixViewer

- 1 Confirm that the computer meets the following system requirements:

CPU	PowerPC or Intel (Core 2 Duo or better)*
OS	Pre-installed copies of Mac OS X version 10.3.9–10.6 (visit http://www.fujifilm.com/support/digital_cameras/compatibility/ for more information). Mac OS X version 10.7 and later not supported.
RAM	256 MB or more (1 GB or more)*
Free disk space	A minimum of 200 MB required for installation with 400 MB available when FinePixViewer is running
Video	800 × 600 pixels or more with thousands of colors or better
Other	Built-in USB port recommended. Operation is not guaranteed with other USB ports.

* Recommended when displaying HD movies.

- 2 After starting the computer and quitting any applications that may be running, insert the installer CD in a CD-ROM drive and double-click **Installer for Mac OS X**.
- 3 An installer dialog will be displayed; click **Installing FinePixViewer** to start installation. Enter an administrator name and password when prompted and click **OK**, then follow the on-screen instructions to install FinePixViewer. Click **Exit** to quit the installer when installation is complete.

4 Remove the installer CD from the CD-ROM drive. Note that you may be unable to remove the CD if Safari is running; if necessary, quit Safari before removing the CD. Store the installer CD in a dry location out of direct sunlight in case you need to re-install the software.

5 Mac OS X 10.5 or earlier: Open the “Applications” folder, start Image Capture, and select **Preferences...** from the Image Capture application menu. The Image Capture preferences dialog will be displayed; choose **Other...** in the **When a camera is connected, open** menu, then select **FPVBridge** in the “Applications/FinePixViewer” folder and click **Open**. Quit Image Capture.

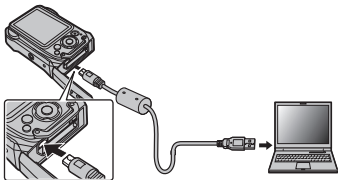
Mac OS X 10.6: Connect the camera and turn it on. Open the “Applications” folder and start Image Capture. The camera will be listed under **DEVICES**; select the camera and choose **FPVBridge** from the **Connecting this camera opens** menu and click **Choose**. Quit Image Capture.


Installation is now complete. Proceed to “Connecting the Camera” (📖 71).

Connecting the Camera

- 1 If the pictures you wish to copy are stored on a memory card, insert the card into the camera.
 - ◆ Windows users may require the Windows CD when starting the software for the first time.
 - ① Loss of power during transfer could result in loss of data or damage to internal memory or the memory card. Charge the battery before connecting the camera.

- 2 Turn the camera off and connect the supplied USB cable as shown, making sure the connectors are fully inserted. Connect the camera directly to the computer; do not use a USB hub or keyboard.



- ① Be sure the battery-chamber cover is open before attempting to open or close the connector cover.
- 3 Press the  button for about a second to turn the camera on and follow the on-screen instructions to copy pictures to the computer. To exit without copying pictures, click **Cancel**.

For more information on using the supplied software, start the application and select the appropriate option from the **Help** menu.

- ① If a memory card containing a large number of images is inserted, there may be a delay before the software starts and you may be unable to import or save images. Use a memory card reader to transfer pictures.
- ① Make sure that the computer does not display a message stating that copying is in progress and that the indicator lamp is out before turning the camera off or disconnecting the USB cable (if the number of images copied is very large, the indicator lamp may remain lit after the message has cleared from the computer display). Failure to observe this precaution could result in loss of data or damage to internal memory or the memory card.
- ① Disconnect the camera before inserting or removing memory cards.
- ① In some cases, it may not be possible to access pictures saved to a network server using the supplied software in the same way as on a standalone computer.
- ① The user bears all applicable fees charged by the phone company or Internet service provider when using services that require an Internet connection.

 **Disconnecting the Camera**

After confirming that the indicator lamp is out, follow the on-screen instructions to turn the camera off and disconnect the USB cable.

 **Uninstalling the Supplied Software**

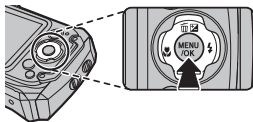
Only uninstall the supplied software when it is no longer required or before beginning reinstallation. After quitting the software and disconnecting the camera, drag the “FinePixViewer” folder from “Applications” into the Trash and select **Empty Trash** in the **Finder** menu (Macintosh), or open the control panel and use “Programs and Features” (Windows 7/Windows Vista) or “Add or Remove Programs” (Windows XP) to uninstall MyFinePix Studio. Under Windows, one or more confirmation dialogs may be displayed; read the contents carefully before clicking **OK**.

Menus

Using the Menus: Shooting Mode

Using the Shooting Menu

To display the shooting menu, press **MENU/OK** in shooting mode. Highlight items and press the selector right to view options, then highlight an option and press **MENU/OK**. Press **DISP/BACK** to exit when settings are complete. The options available vary with the shooting mode selected.



Shooting Menu Options

SHOOTING MODE

(defaults to )

Choose a shooting mode according to the type of subject (🗨 24).

ISO

(defaults to **AUTO**)

Control the camera's sensitivity to light. Higher values can reduce blur; note, however, that mottling may appear in pictures taken at high sensitivities.



Option	Description
AUTO	Sensitivity is adjusted automatically in response to shooting conditions.
3200/1600/800/400/200/100	Sensitivity is set to the specified value, which is shown in the display.

 **IMAGE SIZE**
(defaults to **L** 4:3)

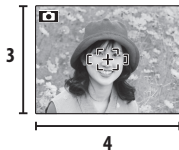
Choose the image size and aspect ratio at which pictures are recorded. Large pictures can be printed at large sizes with no drop in quality, while small pictures require less memory, allowing more pictures to be recorded.


 **Size Versus Aspect Ratio**
Size

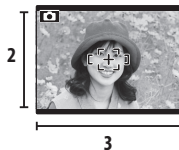
Option	Prints at sizes up to
L	34×25 cm (13.5×10 in.)
M	24×18 cm (9.5×7 in.)
S	17×13 cm (7×5 in.)

Aspect ratio

4:3: Pictures have the same proportions as the camera display.



3:2: Pictures have the same proportions as a frame of 35 mm film.



16:9: Suited for display on High Definition (HD) devices.

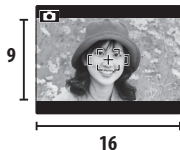


IMAGE QUALITY(defaults to **N**)

Choose how much image files are compressed.

Option	Description
FINE	Low compression. Select for higher image quality.
NORMAL	High compression. Select this option to store more pictures.

FINEPIX COLOR(defaults to **STD**)







Enhance contrast and color saturation or take pictures in black and white.

Option	Description
STD STANDARD	Standard contrast and saturation. Recommended in most situations.
CHROME	Vivid contrast and color. Choose for vivid shots of flowers or enhanced greens and blues in landscapes.
B&W	Take pictures in black and white.
SEPIA	Take pictures in sepia.

- ◆ Settings other than **STD STANDARD** are shown by an icon in the LCD monitor.
- ◆ Depending on the subject, the effects of **CHROME** may not be visible in the LCD monitor.

WB WHITE BALANCE**(defaults to AUTO)**







For natural colors, choose a setting that matches the light source.



Option	Description
AUTO	White balance adjusted automatically.
	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.

- ◆ Results vary with shooting conditions. Play pictures back after shooting to check colors in the LCD monitor.

CONTINUOUS(defaults to **OFF**)

Capture motion in a series of pictures.

Option	Description
 FINAL	The camera takes up to 40 shots while the shutter button is pressed and records the last 12 pictures.
 FINAL	
 FINAL	
 CONTINUOUS	The camera takes up to 12 pictures while the shutter button is pressed.
 CONTINUOUS	
 CONTINUOUS	
OFF	One photograph is taken each time the shutter button is pressed.



- ◆ Focus and exposure are determined by the first frame in each series.
- ◆  **IMAGE SIZE** is fixed at **S**.
- ◆ The flash turns off automatically. The previously selected flash mode is restored when **OFF** is selected for  **CONTINUOUS**.
- ◆ Frame rate varies with shutter speed.
- ◆ The number of pictures that can be recorded depends on the memory available.
- ◆ Only one photo is taken if the self-timer is used.


FACE DETECTION

Choose whether the camera automatically detects and sets focus and exposure for human portrait subjects ( 36).

AF MODE



This option controls how the camera selects the focus area. Regardless of the option selected, the camera will focus on the subject in the center of the LCD monitor when macro mode is on.


Option	Description
 CENTER	The camera focuses on the subject in the center of the frame.
 TRACKING	Position the subject in the center focus area and press the selector left. Focus will track the subject as it moves through the frame.

◆ Note that in  mode, the camera focuses continuously, increasing the drain on the battery, and that the sound of the camera focusing may be audible.

MOVIE AF MODE(defaults to )

This option controls how the camera selects the focus area for movies.

Option	Description
 CENTER	The camera focuses on the subject in the center of the frame.
 CONTINUOUS	The camera continuously adjusts focus to reflect changes in the distance to subjects near the center of the frame.

◆ Note that in  mode, the camera focuses continuously, increasing the drain on the battery, and that the sound of the camera focusing may be audible.

MOVIE MODE(defaults to )

Choose a frame size for movies ( 59).

LED ILLUMINATOR(defaults to **OFF**)

Choose whether the LED (📖 2) lights to illuminate nearby subjects when lighting is poor.

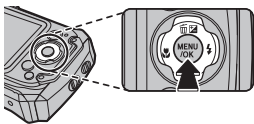
Option	Description
ON	The LED lights during shooting.
OFF	LED off.

- ❖ The LED will not light when **ON** is selected for **SILENT MODE** in the setup menu (📖 91).
- ❖ Selecting **ON** increases the drain on the battery. Select **OFF** when the LED is not in use.
- ❖ **LED ILLUMINATOR** is automatically reset to **OFF** when the camera is turned off.
- ❖ The LED turns off if no operations are performed for a short period. Operating any of the camera controls reactivates the LED.

Using the Menus: Playback Mode

Using the Playback Menu

To display the playback menu, press **MENU/OK** in playback mode. Highlight items and press the selector right to view options, then highlight an option and press **MENU/OK**. Press **DISP/BACK** to exit when settings are complete.



Playback Menu Options

PHOTOBOOK ASSIST

Create books from your favorite photos ( 49).

IMAGE SEARCH


Search for pictures ( 48).

ERASE

Delete all or selected pictures ( 47).


 **EDIT**

Create a retouched copy of the current picture.

- 1 Display the desired picture.
- 2 Select  **EDIT** in the playback menu and choose from the following options:

Option	Description
CROP	Crop the copy.
ASPECT RATIO	Choose the aspect ratio.
BRIGHTNESS	Adjust brightness.
CONTRAST	Adjust contrast.
COLOR	Choose positive values for “warmer” colors, negative values for “cooler” colors.
SEPIA	Convert the copy to sepia or black and white.
FACE MOSAIC	If the original was taken with Intelligent Face Detection, a mosaic effect can be applied to up to four faces. If Intelligent Face Detection was off or no faces were detected, the mosaic effect will be applied to the center of the image.

- 3 Press **MENU/OK** to create a retouched copy (in some cases, additional options will be displayed; adjust settings as desired and press **MENU/OK** to save the copy).


-  Retouched copies can not be further retouched, cropped, or rotated.
-  Retouched copies are 640 × 480 pixels in size.

 **MOVIE EDIT**

Edit movies.



MOVIE TRIMMING

Remove opening or ending footage to create an edited copy of the current movie.

- 1 Display the desired movie.
- 2 Select  **MOVIE EDIT** > **MOVIE TRIMMING** in the playback menu. To remove footage from the start of the copy, proceed to Step 3; otherwise, proceed to Step 4.
- 3 Press the selector down to begin playback and press it down again when the new opening frame is reached.
- 4 Press **MENU/OK**. To remove footage from the end of the copy, proceed to Step 5; otherwise, proceed to Step 6 (to exit without creating an edited copy, press **DISP/BACK**).
- 5 Press the selector down to begin playback and press it down again when the new closing frame is reached.
- 6 Press **MENU/OK** to save the copy.

MOVIE JOIN

Add existing footage to the end of the current movie to create an edited copy.

- 1 Display the desired movie.
 - 2 Select  **MOVIE EDIT** > **MOVIE JOIN** in the playback menu.
 - 3 Press the selector left or right to highlight a movie.
 - 4 Press **MENU/OK** to add the highlighted footage to the end of the current movie and save the resulting copy, or press **DISP/BACK** to exit without creating a copy.
-  Both movies must have been recorded at the same frame size and frame rate.

MARK FOR UPLOAD TO

Select pictures for upload to YouTube or Facebook using MyFinePix Studio (Windows only).

■ Selecting Pictures for Upload

1 Select **YouTube** to choose movies for upload to YouTube, **FACEBOOK** to choose photos and movies for upload to Facebook.

2 Press the selector left or right to display pictures and press **MENU/OK** to select or deselect. Press **DISP/BACK** to exit when all the desired pictures are selected.

◆ Only movies can be selected for upload to YouTube.

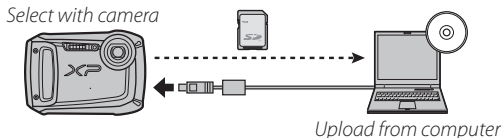
◆ During playback, selected pictures are indicated by  **YouTube** or  **FACEBOOK** icons.

■ RESET ALL: Deselecting All Pictures

Choose **RESET ALL** to deselect all pictures. If the number of pictures affected is very large, a message will be displayed while the operation is in progress. Press **DISP/BACK** to exit before the operation is complete.

■ Uploading Pictures (Windows Only)



Selected pictures can be uploaded using the **YouTube/Facebook Upload** option in MyFinePix Studio.



For information on installing MyFinePix Studio and connecting the camera to a computer, see "Viewing Pictures on a Computer" (📖 67).


SLIDE SHOW




View pictures in an automated slide show. Choose the type of show and press **MENU/OK** to start. Press **DISP/BACK** at any time during the show to view on-screen help. The show can be ended at any time by pressing **MENU/OK**.

Option	Description
NORMAL	Press selector left or right to go back or skip ahead one frame. Select FADE-IN for fade transitions between frames.
FADE-IN	
NORMAL 	As above, except that camera automatically zooms in on faces selected with Intelligent Face detection.
FADE-IN 	
MULTIPLE	Display several pictures at once.
SCRAP BOOK VIEW	Display multiple pictures in random positions and sizes.
SELECT BGM	Choose background music.

 The camera will not turn off automatically while a slide show is in progress.



RED EYE REMOVAL

If the current picture is marked with a  icon to indicate that it was taken with Intelligent Face Detection, this option can be used to remove red-eye. The camera will analyze the image; if red-eye is detected, the image will be processed to create a copy with reduced red-eye.

- 1 Display the desired picture.
 - 2 Select  **RED EYE REMOVAL** in the playback menu.
 - 3 Press **MENU/OK**.
- ◆ Red eye may not be removed if the camera is unable to detect a face or the face is in profile. Results may differ depending on the scene. Red eye can not be removed from pictures that have already been processed using red-eye removal or pictures created with other devices.
 - ◆ The amount of time needed to process the image varies with the number of faces detected.
 - ◆ Copies created with  **RED EYE REMOVAL** are indicated by a  icon during playback.


PROTECT

Protect pictures from accidental deletion.

- 1 Select  **PROTECT** in the playback menu.
 - 2 Highlight one of the following options and press **MENU/OK**:
 - **FRAME**: Protect selected pictures. Press the selector left or right to view pictures and press **MENU/OK** to select or deselect. Press **DISP/BACK** when the operation is complete.
 - **SET ALL**: Protect all pictures.
 - **RESET ALL**: Remove protection from all pictures.
- ① Protected pictures will be deleted when the memory card or internal memory is formatted ( 92).

 **CROP**

Create a cropped copy of the current picture.

- 1 Display the desired picture.
 - 2 Select  **CROP** in the playback menu.
 - 3 Use the zoom control to zoom in and out and use the selector to scroll the picture until the desired portion is displayed.
 - 4 Press **MENU/OK** to display a confirmation dialog.
 - 5 Press **MENU/OK** again to save the cropped copy to a separate file.
- ◆ Larger crops produce larger copies; all copies have an aspect ratio of 4:3. If the size of the final copy will be **640**, **YES** will be displayed in yellow.

 **RESIZE**

Create a small copy of the current picture.



- 1 Display the desired picture.
 - 2 Select  **RESIZE** in the playback menu.
 - 3 Highlight a size and press **MENU/OK** to display a confirmation dialog.
 - 4 Press **MENU/OK** to save the resized copy to a separate file.
- ◆ The sizes available vary with the size of the original image.






IMAGE ROTATE

Rotate pictures taken in tall orientation so that they are displayed in tall orientation in the LCD monitor.

- 1 Display the desired picture.
 - 2 Select  **IMAGE ROTATE** in the playback menu.
 - 3 Press the selector down to rotate the picture 90° clockwise, up to rotate it 90° counterclockwise.
 - 4 Press **MENU/OK**. The picture automatically be displayed in the selected orientation whenever it is played back on the camera.
- ◆ Protected pictures can not be rotated. Remove protection before rotating pictures (📖 86).
 - ◆ The camera may not be able to rotate pictures created with other devices.

COPY

Copy pictures from internal memory to a memory card.

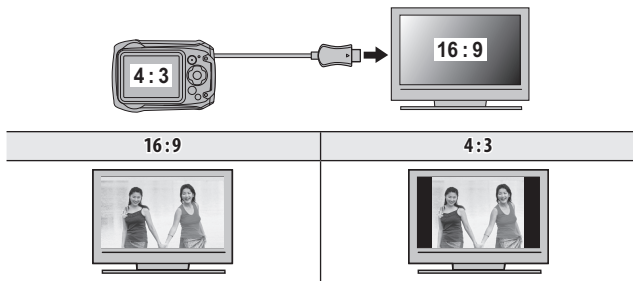
- 1 Select  **COPY** in the playback menu.
 - 2 Highlight one of the following options and press the selector right:
 -  **INTERNAL MEMORY** →  **SD CARD**: Copy pictures from internal memory to a memory card.
 -  **SD CARD** →  **INTERNAL MEMORY**: Copy pictures from a memory card to internal memory.
 - 3 Highlight one of the following options and press **MENU/OK**:
 - **FRAME**: Copy selected pictures. Press the selector left or right to view pictures and press **MENU/OK** to copy the current picture.
 - **ALL FRAMES**: Copy all pictures.
- ◆ Copying ends when the destination is full.
 - ◆ DPOF print information is not copied (📖 65).

PRINT ORDER (DPOF)

Select pictures for printing on DPOF- and PictBridge-compatible devices (📖 65).

DISP ASPECT

Choose how High Definition (HD) devices display pictures with an aspect ratio of 4:3 (this option is available only when an HDMI cable is connected). Select **16:9** to display the image so that it fills the screen with its top and bottom cropped out, **4:3** to display the entire image with black bands at either side.



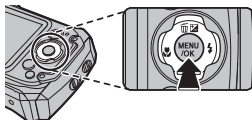
- ◆ Photographs with an aspect ratio of 16:9 are displayed full screen, those with an aspect ratio of 3:2 in a black frame.

The Setup Menu

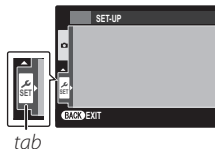
Using the Setup Menu

1 Display the setup menu.

- 1.1 Press **MENU/OK** to display the menu for the current mode.



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



- 1.3 Press the selector down to highlight .

- 1.4 Press the selector right to place the cursor in the setup menu.

2 Adjust settings.

Highlight items and press the selector right to view options, then highlight an option and press **MENU/OK**. Press **DISP/BACK** to exit when settings are complete.

Setup Menu Options**🕒 DATE/TIME**

Set the camera clock (🗨️ 18).

🕒 TIME DIFFERENCE

(defaults to 🏠)

Switch the camera clock instantly from your home time zone to the local time at your destination when traveling. To specify the difference between local time and your home time zone:

- 1 Highlight **↔ LOCAL** and press the selector right.
- 2 Use the selector to choose the time difference between local time and your home time zone in increments of 15 minutes.
- 3 Press **MENU/OK**.

To switch between local time and your home time zone, highlight **↔ LOCAL** or **🏠 HOME** and press **MENU/OK**.

Option	Description
🏠 HOME	Switch to the time currently selected for 🕒 DATE/TIME (see above).
↔ LOCAL	Switch to local time. If this option is selected, ↔ and the time and date will be displayed in yellow for three seconds each time the camera is turned on.

🗨️ 言語/LANG.(defaults to **ENGLISH**)


Choose a language (🗨️ 121).

🔇 SILENT MODE(defaults to **OFF**)

Select **ON** to disable the speaker, flash, and LED illuminator in situations in which camera sounds or lights may be unwelcome (note that the flash will still fire in **🚨** mode).

RESET

Reset all settings except  **DATE/TIME**,  **TIME DIFFERENCE**, and  **VIDEO SYSTEM** to default values.

- 1 Highlight  **RESET** and press the selector right to display a confirmation dialog.
- 2 Highlight **OK** and press **MENU/OK**.

FORMAT

If a memory card is inserted in the camera, this option will format the memory card. If no memory card is inserted, this option will format internal memory. Select **OK** to begin formatting.

- ⓘ All data—including protected pictures—will be deleted from the memory card or internal memory. Be sure important files have been copied to a computer or other storage device.
- ⓘ Do not open the battery cover during formatting.

IMAGE DISP.

(defaults to **1.5 SEC**)

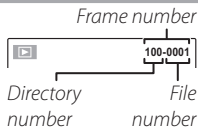
Choose how long pictures are displayed in the LCD monitor after shooting.

Option	Description
3 SEC	Pictures are displayed for three seconds (3 SEC) or 1.5 seconds (1.5 SEC).
1.5 SEC	Colors may differ slightly from those in the final image.
ZOOM (CONTINUOUS)	Pictures are displayed until the MENU/OK button is pressed.
OFF	Pictures are not displayed after shooting.

- ◆ **OFF** has no effect in continuous shooting mode.

FRAME NO.(defaults to **CONT.**)


New pictures are stored in image files named using a four-digit file number assigned by adding one to the last file number used. The file number is displayed during playback as shown at right. **FRAME NO.** controls whether file numbering is reset to 0001 when a new memory card is inserted or the current memory card or internal memory is formatted.




Option	Description
CONTINUOUS	Numbering continues from the last file number used or the first available file number, whichever is higher. Choose this option to reduce the number of pictures with duplicate file names.
RENEW	Numbering is reset to 0001 after formatting or when a new memory card is inserted.

- ❖ If the frame number reaches 999-9999, the shutter release will be disabled (📖 112).
- ❖ Selecting **RESET** (📖 92) sets **FRAME NO.** to **CONTINUOUS** but does not reset the file number.
- ❖ Frame numbers for pictures taken with other cameras may differ.

OPERATION VOL. (defaults to)

Adjust the volume of the sounds produced when camera controls are operated. Choose  OFF (mute) to disable control sounds.

SHUTTER VOLUME (defaults to)

Adjust the volume of the sounds produced when the shutter is released. Choose  OFF (mute) to disable the shutter sound.

SOUND (defaults to)

Choose the sounds used for the shutter, at startup, and for camera controls.

PLAYBACK VOLUME (defaults to **7**)

Adjust the volume for movie playback.



LCD BRIGHTNESS (defaults to **AUTO**)

Control the brightness of the display.

Option	Description
AUTO	Display brightness is automatically adjusted during shooting in response to ambient lighting conditions. Brightness is not adjusted during playback.
MANUAL	Press the selector up or down to adjust brightness and then press MENU/OK . Choose from values between -5 and +5.

LCD MODE (defaults to **ON**)



Choose whether the display automatically dims to save power in shooting mode. This option does not take effect during playback.

Option	Description
 POWER SAVE ON	The display dims to save power if no operations are performed for a few seconds. Normal brightness can be restored by pressing the shutter button halfway.
 POWER SAVE OFF	Automatic dimming off.

AUTO POWER OFF (defaults to **2 MIN**)

Choose the length of time before the camera turns off automatically when no operations are performed. Shorter times increase battery life; if **OFF** is selected, the camera must be turned off manually. Note that in some situations the camera turns off automatically even when **OFF** is selected.

DUAL IS MODE (defaults to **CONTINUOUS**)

Choose whether image stabilization is performed at all times when the camera is in shooting mode ( **CONTINUOUS**), or only when the shutter button is pressed halfway ( **SHOOTING ONLY**). Choose **OFF** to turn image stabilization off when using a tripod.

RED EYE REMOVAL

(defaults to **ON**)

Choose **ON** to remove red-eye effects caused by the flash when shooting with Intelligent Face Detection.

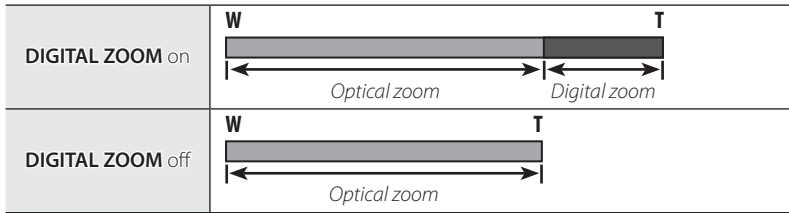
◆ Red-eye reduction is performed only when a face is detected.

DIGITAL ZOOM

(defaults to **OFF**)

If **ON** is selected, selecting **T** at the maximum optical zoom position will trigger digital zoom, further magnifying the image.

The Zoom Indicator



① Digital zoom produces lower quality images than optical zoom.

MOVIE ZOOM TYPE (defaults to **Opt**)

Choose the type of zoom available during movie recording: **Di** DIGITAL or **Opt** OPTICAL.

Movies recorded using digital zoom may be slightly “grainy”.

SAVE ORIGINAL IMAGE (defaults to **OFF**)

Choose **ON** to save unprocessed copies of pictures taken using **RE** RED EYE REMOVAL, **PRO** PRO LOW-LIGHT, or **D-R** D-RANGE PRIORITY.

AUTOROTATE PB (XP150/XP160 Only) (defaults to **ON**)

Choose **ON** to automatically rotate “tall” (portrait-orientation) pictures during playback.

GUIDANCE DISPLAY (defaults to **ON**)

Choose whether to display tool tips.

VIDEO SYSTEM (defaults to **NTSC**)




Choose a video mode for connection to a TV. SECAM is not supported.

Option	Description
NTSC	Select this mode for connection to video devices in North America, the Caribbean, parts of Latin America, and some East Asian countries.
PAL	Select this mode for connection to video devices in the United Kingdom and much of Europe, Australia, New Zealand, and parts of Asia and Africa.

DATE DATE STAMP

(defaults to **OFF**)

Stamp the time and/or date of recording on photographs as they are taken.

Option	Description
 + 	Stamp new photographs with the date and time of recording.
	Stamp new photographs with the date of recording.
OFF	Do not stamp the time and date on new photographs.

- ① Time and date stamps can not be deleted. Turn **DATE** **DATE STAMP** off to prevent time and date stamps appearing on new photographs.
- ① If the camera clock is not set, you will be prompted to set the clock to the current date and time (📖 18).
- ① We recommend that you turn the DPOF “print date” option off when printing images with a time and date stamp (📖 65).
- ① Time and date stamps do not appear on movies or panoramas.

GPS DEMONSTRATION (XP150/XP160 Only)

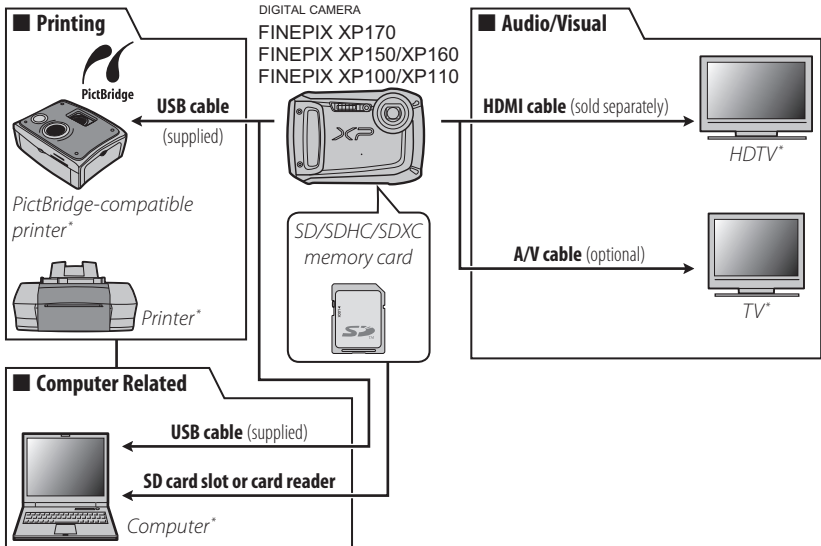
(defaults to **OFF**)

Choose **ON** for a GPS demo. This option should normally be left **OFF**.

Technical Notes

Optional Accessories


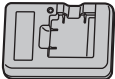
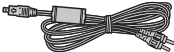
The camera supports a wide range of accessories from FUJIFILM and other manufacturers.



* Available separately.

Accessories from FUJIFILM

The following optional accessories are available from FUJIFILM. For the latest information on the accessories available in your region, check with your local FUJIFILM representative or visit http://www.fujifilm.com/products/digital_cameras/index.html.

Rechargeable Li-ion batteries	NP-50: Additional large-capacity NP-50 rechargeable batteries can be purchased as required. Note that the NP-50 may record fewer photos per charge than the NP-50A.	
Battery chargers	BC-45W: Replacement battery chargers can be purchased as required. The BC-45W charges NP-50A and NP-50 batteries in about 150 minutes at +20°C (+68°F).	
A/V cable	AV-C1: Use for viewing pictures on TV.	

Caring for the Camera

To ensure continued enjoyment of the product, observe the following precautions.

Storage and Use

If the camera will not be used for an extended period, remove the battery and memory card. Do not store or use the camera in locations that are:

- exposed to rain, steam, or smoke
- very humid or extremely dusty
- exposed to direct sunlight or very high temperatures, such as in a closed vehicle on a sunny day
- extremely cold
- subject to strong vibration
- exposed to strong magnetic fields, such as near a broadcasting antenna, power line, radar emitter, motor, transformer, or magnet
- in contact with volatile chemicals such as pesticides
- next to rubber or vinyl products

■ **Condensation**

Sudden increases in temperature, such as occur when entering a heated building on a cold day, can cause condensation inside the camera. If this occurs, turn the camera off and wait an hour before turning it on again. If condensation forms on the memory card, remove the card and wait for the condensation to dissipate.

Cleaning

Use a blower to remove dust from the protective glass covering the lens and LCD monitor, then gently wipe with a soft, dry cloth. Any remaining stains can be removed by wiping gently with a piece of FUJIFILM lens-cleaning paper to which a small amount of lens-cleaning fluid has been applied. Care should be taken to avoid scratching the protective glass or LCD monitor. The camera body can be cleaned with a soft, dry cloth. Do not use alcohol, thinner, or other volatile chemicals.

Traveling

Keep the camera in your carry-on baggage. Checked baggage may suffer violent shocks that could damage the camera.

Troubleshooting

Problems and Solutions

Water in the Camera

Problem	Solution
Water in the camera	The battery-chamber cover was not fully closed before the camera was immersed, or was opened under water: Take the camera to a FUJIFILM-authorized service technician for repairs. Do not turn the camera on.

Power and Battery

Problem	Solution
The camera does not turn on.	<ul style="list-style-type: none">• The battery is exhausted: Charge the battery or insert a fully-charged spare battery (📖 7, 9).• The battery is inserted incorrectly: Reinsert in the correct orientation (📖 10).• The battery-chamber cover is not latched: Latch the battery-chamber cover (📖 12).
The battery runs down quickly.	<ul style="list-style-type: none">• The battery is cold: Warm the battery by placing it in a pocket or other warm place and reinsert it in the camera immediately before taking a picture.• There is dirt on the battery terminals: Clean the terminals with a soft, dry cloth.• SR is selected for shooting mode: Select 📷 mode to reduce the drain on the battery (📖 24).• 🔍 TRACKING is selected for 📷 AF MODE: Select a different AF mode (📖 79).• The battery has been charged many times: The battery has reached the end of its charging life. Purchase a new battery.• 🔌 PERMANENTLY ON is selected for LOCATION SEARCH: Select 📶 WHEN SWITCHED ON or OFF (📖 31).• TRACKING DATA is on: Turn TRACKING DATA off (📖 34).

Problem	Solution
The camera turns off suddenly.	Charge the battery or insert a fully-charged spare battery (📖 7, 9).
Charging does not start.	Reinsert the battery in the correct orientation and make sure that the charger is plugged in (📖 7).
Charging is slow.	Charge the battery at room temperature (📖 vi).
The charging lamp lights, but the battery does not charge.	<ul style="list-style-type: none"> • There is dirt on the battery terminals: Clean the terminals with a soft, dry cloth. • The battery has been charged many times: The battery has reached the end of its charging life. Purchase a new battery. If the battery still fails to charge, contact your FUJIFILM dealer. • The battery is too hot or too cold: Wait for the battery temperature to stabilize (📖 7).



Menus and Displays





Problem	Solution
Menus and displays are not in English.	Select ENGLISH for  言語/LANG. (📖 18, 91).

Shooting






Problem	Solution
No picture is taken when the shutter button is pressed.	<ul style="list-style-type: none"> • Memory is full: Insert a new memory card or delete pictures (📖 11, 47). • Memory is not formatted: Format the memory card or internal memory (📖 92). • There is dirt on the memory card contacts: Clean the contacts with a soft, dry cloth. • The memory card is damaged: Insert a new memory card (📖 11). • The battery is exhausted: Charge the battery or insert a fully-charged spare battery (📖 7, 9). • The camera has turned off automatically: Turn the camera on (📖 16). • The indicator lamp was orange when you attempted to record a panorama: Wait until the indicator lamps turns off (📖 3).

Problem	Solution
The LCD monitor goes dark after shooting.	The LCD monitor may darken while the flash charges. Wait for the flash to charge (📖 41).
The camera does not focus.	<ul style="list-style-type: none"> • The subject is close to the camera: Select macro mode (📖 40). • The subject is far away from the camera: Cancel macro mode (📖 40). • The subject is not suited to autofocus: Use focus lock (📖 37).
Macro mode is not available	Choose a different shooting mode (📖 24).
GPS	<ul style="list-style-type: none"> • The camera is slow to acquire GPS data: Some time may be needed to acquire GPS data immediately after the camera or LOCATION SEARCH is turned on or if the camera has been unable to acquire GPS data for an extended period. • Location data are incorrect: Select OFF for GPS DEMONSTRATION (📖 98).
Intelligent Face Detection is not available.	Choose a different shooting mode (📖 24).
No face is detected.	<ul style="list-style-type: none"> • The subject's face is obscured by sunglasses, a hat, long hair, or other objects: Remove the obstructions. • The subject's face occupies only a small area of the frame: Change the composition so that the subject's face occupies a larger area of the frame (📖 36). • The subject's head is tilted or horizontal: Ask the subject to hold their head straight. • The camera is tilted: Keep the camera level (📖 20). • The subject's face is poorly lit: Shoot in bright light.
Wrong subject is selected.	The selected subject is closer to the center of the frame than the main subject. Recompose the picture or turn face detection off and frame the picture using focus lock (📖 37).



Problem	Solution
The flash does not fire.	<ul style="list-style-type: none"> • The flash is not available in the current shooting mode: Choose a different shooting mode (📖 24). • The battery is exhausted: Charge the battery or insert a fully-charged spare battery (📖 7, 9). • The camera is in continuous mode: Select OFF for  CONTINUOUS (📖 78). • The camera is in silent mode: Turn silent mode off (📖 91). • The flash is off (🔇): Choose a different flash mode (📖 41).
Some flash modes are not available.	<ul style="list-style-type: none"> • The desired flash mode is not available in the current shooting mode: Choose a different shooting mode (📖 24). • The camera is in silent mode: Turn silent mode off (📖 91).
The flash does not fully light the subject.	<ul style="list-style-type: none"> • The subject is not in range of the flash: Position the subject in range of the flash (📖 121). • The flash window is obstructed: Hold the camera correctly (📖 20).
Pictures are blurred.	<ul style="list-style-type: none"> • The protective glass covering the lens is dirty: Clean the glass (📖 102). • The protective glass covering the lens is blocked: Keep objects away from the lens (📖 20). • !AF is displayed during shooting and the focus frame is displayed in red: Check focus before shooting (📖 110). •  is displayed during shooting: Use the flash or a tripod (📖 42).
Pictures are mottled.	<ul style="list-style-type: none"> • A slow shutter speed is selected at high temperatures: This is normal and does not indicate a malfunction. • The camera has been used continuously at high temperatures or a temperature warning is displayed: Turn the camera off and wait for it to cool down.
Vertical lines appear in pictures.	The camera has been used continuously at high temperatures. Turn the camera off and wait for it to cool down.

Problem	Solution
"Smear" in the form of vertical purple or white lines appears in the display.	Vertical purple or white lines may appear after the camera has been used continuously at high temperatures or when a very bright object is in the frame; this phenomenon is common to all CCD image sensors and does not indicate a malfunction. These lines are recorded in movies but do not appear in photographs. Avoid framing bright objects when filming movies.
Sounds made by the camera are recorded with movies.	<ul style="list-style-type: none"> •  CONTINUOUS is selected for  MOVIE AF MODE: Select a different AF mode ( 79). • Zoom was adjusted during shooting: Do not adjust zoom during shooting. • Intelligent Face Detection is on: Turn Intelligent Face Detection off ( 36).

Playback

Problem	Solution
Pictures are grainy.	The pictures were taken with a different make or model of camera.
Playback zoom is unavailable.	The current picture is a resized copy with a size of 640 .
No sound in movie playback.	<ul style="list-style-type: none"> • Playback volume is too low: Adjust playback volume ( 94). • The microphone was obstructed: Hold the camera correctly during recording ( 20, 58). • The speaker is obstructed: Hold the camera correctly during playback ( 60).
Selected pictures are not deleted.	Some of the pictures selected for deletion are protected. Remove protection using the device with which it was originally applied ( 86).
File numbering is unexpectedly reset.	The battery-chamber cover was opened while the camera was on. Turn the camera off before opening the battery-chamber cover ( 16).





Connections/Miscellaneous




Problem	Solution
No picture or sound.	<ul style="list-style-type: none"> • The camera is not properly connected: Connect the camera properly (📖 61). • An A/V cable was connected during movie playback: Connect the camera once movie playback has ended. • Input on the television is set to “TV”: Set input to “VIDEO”. • The camera is not set to the correct video standard: Match the camera  VIDEO SYSTEM setting to the TV (📖 97). • The volume on the TV is too low: Adjust the volume.
No color	Match the camera  VIDEO SYSTEM setting to the TV (📖 97).
The computer does not recognize the camera.	Be sure the camera and computer are correctly connected (📖 71).
Pictures can not be printed.	<ul style="list-style-type: none"> • The camera is not properly connected: Connect the camera correctly (📖 63). • The printer is off: Turn the printer on.
Only one copy is printed/ the date is not printed.	The printer is not PictBridge compatible.
The camera is unre- sponsive.	<ul style="list-style-type: none"> • Temporary camera malfunction: Remove and reinsert the battery (📖 9). • The battery is exhausted: Charge the battery (📖 7) or insert a fully-charged spare battery (📖 9).
The camera does not function as expected.	Remove and reinsert the battery (📖 9). If the problem persists, contact your FUJIFILM dealer.
No sound.	Turn silent mode off (📖 91).













Problem	Solution
Time and date stamps	<ul style="list-style-type: none">• Time and date stamps are not correct: Set the camera clock (📖 18).• Time and date stamps appear on photographs: Time and date stamps can not be deleted. To prevent stamps appearing on new photographs, select OFF for DATE DATE STAMP (📖 98).
FinePixViewer can not be installed or does not start.	FinePixViewer does not support Mac OS X version 10.7 or later. Use one of the applications supplied with Mac OS X or purchase other software.






Warning Messages and Displays

The following warnings are displayed in the LCD monitor:

Warning	Description
 (red)	Low battery. Charge the battery (📖 7) or insert a fully-charged spare battery (📖 9).
 (blinks red)	Battery exhausted. Charge the battery (📖 7) or insert a fully-charged spare battery (📖 9).
	Slow shutter speed. Pictures may be blurred; use the flash or a tripod.
!AF (displayed in red with red focus frame)	The camera can not focus. Try one of the following solutions: <ul style="list-style-type: none">• Use focus lock to focus on another subject at the same distance, then recompose the picture (📖 37).• Use macro mode to focus when taking close-ups (📖 40).
!AE Aperture or shutter speed displayed in red	The subject is too bright or too dark and the picture will be over- or under-exposed. If the subject is dark, use the flash (📖 41).
FOCUS ERROR	
TURN OFF THE CAMERA AND TURN ON AGAIN	Camera malfunction or moving parts of lens obstructed. Turn the camera off and then on again, taking care not to touch the lens. If the message persists, contact a FUJIFILM dealer.
LENS CONTROL ERROR	
CARD NOT INITIALIZED	<ul style="list-style-type: none">• The memory card or internal memory is not formatted or the memory card was formatted in a computer or other device: Format the memory card or internal memory using the  FORMAT option in the camera setup menu (📖 92).• The memory card contacts require cleaning: Clean the contacts with a soft, dry cloth. If the message is repeated, format the card (📖 92). If the message persists, replace the card.• Camera malfunction: Contact a FUJIFILM dealer.
PROTECTED CARD	The memory card is locked. Unlock the card (📖 11).
BUSY	The memory card is incorrectly formatted. Use the camera to format the card (📖 92).

Warning	Description
	Turn the camera off and wait for it to cool. If no action is taken, the camera will turn off automatically.
CARD ERROR	The memory card is not formatted for use in the camera. Format the card (📖 92).
	The memory card contacts require cleaning or the memory card is damaged. Clean the contacts with a soft, dry cloth. If the message is repeated, format the card (📖 92). If the message persists, replace the card.
	Incompatible memory card. Use a compatible card (📖 14).
	Camera malfunction. Contact a FUJIFILM dealer.
 MEMORY FULL	The memory card or internal memory is full and pictures can not be recorded or copied. Delete pictures or insert a memory card with more free space.
 MEMORY FULL	
INTERNAL MEMORY IS FULL INSERT A NEW CARD	
WRITE ERROR	<ul style="list-style-type: none"> • Memory card error or connection error: Reinsert the card or turn the camera off and then on again. If the message persists, contact a FUJIFILM dealer. • Not enough memory remaining to record additional pictures: Delete pictures or insert a memory card with more free space. • The memory card or internal memory is not formatted: Format the memory card or internal memory (📖 92).
READ ERROR	<ul style="list-style-type: none"> • The file is corrupt or was not created with the camera: The file can not be viewed. • The memory card contacts require cleaning: Clean the contacts with a soft, dry cloth. If the message is repeated, format the card (📖 92). If the message persists, replace the card. • Camera malfunction: Contact a FUJIFILM dealer.

Warning	Description
FRAME NO. FULL	The camera has run out of frame numbers (current frame number is 999-9999). Format the memory card and select RENEW for  FRAME NO. in the setup menu. Take a picture to reset frame numbering to 100-0001, then select CONTINUOUS for  FRAME NO. ( 93).
PRESS AND HOLD THE DISP BUTTON TO DEACTIVATE SILENT MODE	An attempt was made to choose a flash mode or adjust the volume with the camera in silent mode. Exit silent mode before choosing a flash mode or adjusting the volume ( 91).
TOO MANY FRAMES	A search has returned more than 5,000 results, or more than 999 frames were selected for deletion. Perform a different search or select fewer pictures.
PROTECTED FRAME	An attempt was made to delete a protected picture. Remove protection and try again ( 86).
 CAN NOT CROP	 pictures can not be cropped.
CAN NOT CROP	The picture is damaged or was not created with the camera.
 CANNOT EXECUTE	
 CANNOT EXECUTE	An attempt was made to create a resized copy at a size equal to or larger than the original. Choose a smaller size.
 CANNOT EXECUTE	
CAN NOT ROTATE	An attempt was made to rotate a picture that can not be rotated.
 CAN NOT ROTATE	Movies can not be rotated.
CANNOT EXECUTE	Retouch and red-eye removal are not available with movies, pictures taken with other cameras, or pictures that can not be played back.
 CANNOT EXECUTE	

Warning	Description
NO CARD	No memory card inserted when  COPY is selected in the playback menu. Insert a memory card.
 NO IMAGE  NO IMAGE	The source selected for  COPY contains no images. Select a different source.
DPOF FILE ERROR	The DPOF print order on the current memory card contains more than 999 images. Copy the pictures to internal memory and create a new print order.
CAN NOT SET DPOF  CAN NOT SET DPOF	The picture can not be printed using DPOF. Movies can not be printed using DPOF.
COMMUNICATION ERROR	A connection error occurred while pictures were being printed or copied to a computer or other device. Confirm that the device is turned on and that the USB cable is connected.
PRINTER ERROR	Printer out of paper or ink, or other printer error. Check printer (see printer manual for details). To resume printing, turn the printer off and then turn it back on.
PRINTER ERROR RESUME?	Printer out of paper or ink, or other printer error. Check printer (see printer manual for details). If printing does not resume automatically, press MENU/OK to resume.
CANNOT BE PRINTED	An attempt was made to print a movie, a picture not created with the camera, or a picture in a format not supported by the printer. Movies and some pictures created with other devices can not be printed; if the picture is a still picture created with the camera, check the printer manual to confirm that the printer supports the JFIF-JPEG or Exif-JPEG format. If it does not, the pictures can not be printed.

Appendix

Tips and Tricks

The following tips and tricks will help you get the most from your camera.



Battery Performance

Choose the following settings for improved battery performance:

- **LOCATION SEARCH** (📖 32, 53): **OFF**
- **TRACKING DATA** (📖 32, 53): **OFF**
- **FACE DETECTION** (📖 78): **OFF**
- **AF MODE** (📖 79): **CENTER**
- **LED ILLUMINATOR** (📖 80): **OFF**
- **LCD MODE** (📖 95): **POWER SAVE ON**
- **DUAL IS MODE** (📖 95): **OFF**



The Self-timer

- **To prevent blur** caused by the camera moving when the shutter button is pressed, use the two-second timer.
- **To take a group portrait that includes the photographer**, use the group timer. The timer will not start until the person who has pressed the shutter button appears in the frame.




 **Intelligent Face Detection**

When **ON** is selected for  **FACE DETECTION** (📖 78), you can:

Shooting

- **Zoom in on faces** when **ZOOM (CONTINUOUS)** is selected for  **IMAGE DISP.** (📖 92).

Playback

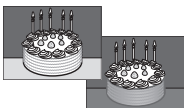
- **Remove red-eye** by selecting **ON** for  **RED EYE REMOVAL** (📖 96).
- **Zoom in on faces** during slide shows (📖 85) or by pressing the selector down during playback.
- **Search for faces** using  **IMAGE SEARCH** (📖 48).
- **Crop** the background from portraits using  **CROP** (📖 87).

Printing

- **Print** one copy for each person in the photo.

 **Pro Tips**

- To photograph the same scene both with and without the flash, select **NATURAL &** for **SHOOTING MODE** (☞ 25). Use multi-frame playback (☞ 46) to compare the two shots.
- To photograph subjects that are in motion, select **TRACKING** for **AF MODE** (☞ 79).
- To photograph poorly-lit subjects close to the camera, select **ON** for **LED ILLUMINATOR** (☞ 80).
- To fine-tune brightness of a photograph, select **PROGRAM AE** (☞ 25) for **SHOOTING MODE**, choose an appropriate white balance option (☞ 77), and adjust exposure compensation (☞ 39).



Internal Memory/Memory Card Capacity

The following table shows the recording time or number of pictures available at different image sizes. All figures are approximate; file size varies with the scene recorded, producing wide variations in the number of files that can be stored. The number of exposures or length remaining may not diminish at an even rate. A limited number of test pictures can be taken when no memory card is inserted.

■ FinePix XP150/XP160

Medium ☐		Internal memory (approx. 47 MB)		4 GB		8 GB	
		FINE	NORMAL	FINE	NORMAL	FINE	NORMAL
Photographs	L 4:3	7	14	650	1220	1290	2420
	L 3:2	7	16	720	1400	1430	2760
	L 16:9	9	18	810	1560	1610	3100
	M 4:3	14	28	1250	2450	2480	4840
	M 16:9	19	37	1660	3130	3280	6200
	S 4:3	34	57	2900	4900	5740	9690
	S 16:9	50	71	4260	6120	8420	12110
Movies	FULL HD 1920 ¹	—		34 min.		51 min.	
	HD 1280 ¹	—		69 min.		104 min.	
	640 ²	1 min. 39 sec.		147 min.		222 min.	
	HS 640 × 480 ³	—		69 min.		146 min.	
	HS 320 × 240 ³	—		192 min.		291 min.	
	HS 320 × 240 ³	—		96 min.		145 min.	

1 Use a **CLASS 4** card or better. Individual movies can not exceed 29 minutes in length. FULL HD and HD movies can not be recorded to internal memory.

2 Individual movies can not exceed 115 minutes in length.

3 Use a **CLASS 4** card or better. Individual movies can not exceed 30 seconds in length.

■ FinePix XP170/XP100/XP110

Medium		Internal memory (approx. 95 MB)		4 GB		8 GB	
		FINE	NORMAL	FINE	NORMAL	FINE	NORMAL
Photographs	L 4:3	15	29	650	1220	1290	2420
	L 3:2	17	33	720	1400	1430	2760
	L 16:9	20	37	810	1560	1610	3100
	M 4:3	31	59	1250	2450	2480	4840
	M 16:9	41	76	1660	3130	3280	6200
	S 4:3	70	120	2900	4900	5740	9690
	S 16:9	104	150	4260	6120	8420	12110
Movies	FULL HD 1920 ¹	—		34 min.		51 min.	
	HD 1280 ¹	—		69 min.		104 min.	
	640 ²	3 min. 11 sec.		147 min.		222 min.	
	HS 640 × 480 ³	—		69 min.		146 min.	
	HS 320 × 240 ³	—		192 min.		291 min.	
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2 Individual movies can not exceed 115 minutes in length.

3 Use a **CLASS 4** card or better. Individual movies can not exceed 30 seconds in length.

Specifications

System

Model	Digital Camera FinePix XP170, XP150/XP160, XP100/XP110
Effective pixels	14.4 million
CCD	½ ₂₃ -in. square pixel CMOS with primary color filter
Storage media	<ul style="list-style-type: none">Internal memorySD/SDHC/SDXC memory cards <p>XP150/XP160: approx. 47 MB XP170/XP100/XP110: approx. 95 MB</p>
File system	Compliant with Design Rule for Camera File System (DCF), Exif 2.3, and Digital Print Order Format (DPOF)
File format	<ul style="list-style-type: none">Still pictures: Exif 2.3 JPEG (compressed)Movies: MOV (H.264)
Image size (pixels)	<ul style="list-style-type: none">L 4:3: 4,320 × 3,240L 16:9: 4,320 × 2,432L 3:2: 4,320 × 2,880M 4:3: 3,072 × 2,304M 16:9: 3,072 × 1,728S 4:3: 2,048 × 1,536S 16:9: 1,920 × 1,080
Lens	Fujinon 5 × optical zoom lens, F3.9 (wide angle) – F4.9 (telephoto)
Focal length	f=5.0 mm–25.0 mm (35-mm format equivalent: 28 mm–140 mm)
Digital zoom	<ul style="list-style-type: none">4:3: Approx. 6.8 × (up to 34 × when combined with optical zoom)16:9: Approx. 5.1 × (up to 25 × when combined with optical zoom)
Aperture	F3.9/F6.2 (wide angle), F4.9/F8.0 (telephoto)
Focus range (distance from front of lens)	Approx. 60 cm (2.0 ft.)–infinity (wide angle); 1.0 m (3.3 ft.)–infinity (telephoto) <ul style="list-style-type: none">Macro: approx. 9 cm–80 cm/3.5 in.–2.6 ft. (wide angle); 40 cm–80 cm/1.3 ft.–2.6 ft. (telephoto)

System	
Sensitivity	Standard output sensitivity equivalent to ISO 100, 200, 400, 800, 1600, 3200; AUTO
Metering	256-segment through-the-lens (TTL); MULTI
Exposure control	Programmed AE
Exposure compensation	-2 EV – +2 EV in increments of 1/3 EV
Image stabilization	Optical stabilization
Shutter speed (combined mechanical and electronic shutter)	<ul style="list-style-type: none"> • AUTO mode: 1/4 s – 1/2,000 s • Other modes: 4 s – 1/2,000 s
Continuous	<ul style="list-style-type: none"> • : up to 3 fps; max. 12 frames • : up to 5 fps; max. 12 frames • : up to 10 fps; max. 12 frames • : up to 3 fps; last 12 frames recorded • M: up to 5 fps; last 12 frames recorded • H: up to 10 fps; last 12 frames recorded
Focus	<ul style="list-style-type: none"> • Mode: Single AF, continuous AF • Focus-area selection: CENTER, TRACKING • Autofocus system: Contrast-detect TTL AF
White balance	Auto, direct sunlight, shade, daylight fluorescent, warm white fluorescent, cool white fluorescent, incandescent
Self-timer	Off, 2 sec., 10 sec.,  (COUPLE TIMER),  (GROUP TIMER)

System

Flash Auto flash; effective range when sensitivity is set to **AUTO** is approx. 70 cm–3.1 m/2.3 ft.–10.2 ft. (wide angle), 70 cm–2.7 m/2.3 ft.–8.9 ft. (telephoto); effective range in macro mode is approx. 30 cm–80 cm/1.0 ft.–2.6 ft.

Flash mode

Auto, fill flash, off, slow sync (red-eye removal off); auto with red-eye removal, fill flash with red-eye removal, off, slow sync with red-eye removal (red-eye removal on)

LCD monitor

2.7-in., 230 k-dot color LCD monitor; frame coverage approx. 96 %

Movies

- **HD 1920**: 1,920 × 1,080 (1080p), 30 fps
- **HD 1280**: 1,280 × 720 (720p), 30 fps
- **640**: 640 × 480 (VGA), 30 fps
- **HS 640×480**: 80 fps
- **HS 320×240**: 160 fps
- **HS 320×240**: 240 fps

Note: **HD**, **HD**, and **640** movies are recorded with monaural sound.

Languages

Arabic, Bulgarian, Simplified Chinese, Traditional Chinese, Czech, Danish, Dutch, English, Farsi, Finnish, French, German, Greek, Hebrew, Hungarian, Indonesian, Italian, Japanese, Kazakh, Korean, Latvian, Lithuanian, Norwegian, Polish, Portuguese, Romanian, Russian, Serbian, Slovak, Spanish, Swedish, Thai, Turkish, Ukrainian, Vietnamese

Date map database was created
(XP150/XP160 only)

October 2010

Input/output terminals**A/V OUT**

(audio/video output)

NTSC or PAL output with monaural sound


Digital input/output

USB 2.0 High-Speed; shares A/V OUT connector, MTP/PTP

HDMI output

Micro HDMI connector

Specifications

Power supply/other		
Power supply	NP-50A rechargeable battery	
Battery life (approximate number of frames that can be taken with a fully-charged battery)	Battery type	Approximate number of frames
	NP-50A (type supplied with camera)	300
	CIPA standard, measured in  (auto) mode using battery supplied with camera and SD memory card.	
	Note: Number of shots that can be taken with battery varies with battery charge level and will decline at low temperatures.	
Camera dimensions (W×H×D)	102.7 mm × 71.3 mm × 27.4 mm/4.0 in. × 2.8 in. × 1.0 in., excluding projections	
Shooting weight	<ul style="list-style-type: none">• XP170/XP150/XP160: Approx. 205 g/7.2 oz., including battery and memory card• XP100/XP110: Approx. 195 g/6.8 oz., including battery and memory card	
Camera weight	<ul style="list-style-type: none">• XP170: Approx. 180 g/6.3 oz., excluding battery, accessories, and memory card• XP150/XP160: Approx. 185 g/6.5 oz., excluding battery, accessories, and memory card• XP100/XP110: Approx. 175 g/6.1 oz., excluding battery, accessories, and memory card	
Operating conditions	<ul style="list-style-type: none">• Temperature: -10 °C - +40 °C/+14 °F - +104 °F• Humidity: 10% - 80% (no condensation)	
Wireless transmitter (XP170 only)		
Standards	IEEE 802.11b/g/n (standard wireless protocol)	
Operating frequency	<ul style="list-style-type: none">• U. S. A., Canada, Taiwan: 2,412 MHz-2,462 MHz (11 channels)• Other countries: 2,412 MHz-2,472 MHz (13 channels)	
Access protocols	Infrastructure	

NP-50A rechargeable battery**Nominal voltage** DC 3.7 V**Nominal capacity** 1000 mAh**Operating temperature** 0 °C – +40 °C/+32 °F – +104 °F**Dimensions (W × H × D)** 35.4 mm × 40.0 mm × 6.6 mm/1.3 in. × 1.5 in. × 0.2 in.**Weight** Approx. 20 g/0.7 oz.**BC-50A battery charger****Rated input** 100 V–240 V AC, 50/60 Hz**Input capacity** 5.5 V (100 V/240 VA)**Rated output** 4.2 V DC, 550 mA**Supported batteries** NP-50A and NP-50 rechargeable batteries**Charging time** Approx. 180 minutes (+20 °C/+68 °F)**Operating temperature** 0 °C – +40 °C/+32 °F – +104 °F**Dimensions (W × H × D)** 48 mm × 94 mm × 26 mm/1.8 in. × 3.7 in. × 1.0 in., excluding projections**Weight** Approx. 65 g/2.2 oz., excluding battery



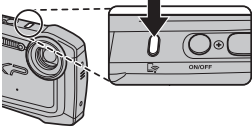


Weight and dimensions vary with the country or region of sale.


■ Notices

- Specifications subject to change without notice. FUJIFILM shall not be held liable for damages resulting from errors in this manual.
- Although the LCD monitor is manufactured using advanced high-precision technology, small bright points and anomalous colors may appear, particularly in the vicinity of text. This is normal for this type of LCD monitor and does not indicate a malfunction; images recorded with the camera are unaffected.
- Digital cameras may malfunction when exposed to strong radio interference (e.g., electric fields, static electricity, or line noise).
- Due to the type of lens used, some distortion may occur at the periphery of images. This is normal.

Uploading Pictures to a Smartphone (Tablet) (XP170 Only)

To upload pictures to a smartphone over a wireless network:

- 1 Start the **FUJIFILM Photo Receiver** app on your smartphone. For information on downloading the free **FUJIFILM Photo Receiver** app, visit:
<http://app.fujifilm-dsc.com/>
- 2 Display a still picture and press the  button on the camera and tap  icon on the smartphone (movies can not be selected for upload).

- 3 When the smartphone is detected, the camera will display a message. Verify the destination on both the camera and smartphone and press **MENU/OK**.

- 4 When upload is complete, the camera will display the message "TRANSMISSION COMPLETED". Press the selector left or right to view more images and press **MENU/OK** to upload additional still pictures, or press **DISP/BACK** to terminate the connection.


- ◆ Be sure that the battery is charged before beginning upload. Do not remove the battery, turn the camera off, or remove the memory card until upload is complete.
- ◆ If you are unable to upload still pictures, check the smartphone's settings.
- ◆ Personal information may be revealed by the titles, dates, GPS data (where applicable), and other information included with pictures. Verify the destination before beginning upload.
- ◆ The time needed for upload varies with file size and the distance to the destination. At default settings (recommended), **ON** is selected for  **WIRELESS SETTING > RESIZE IMAGE ON SENDING 3M** and images are resized to **3M** for upload (the setting can be changed from the setup menu).
- ◆ The camera may be unable to upload images created or modified on other devices.
- ◆ The camera can connect to only one smartphone at a time.
- ◆ Upload may not succeed depending on signal quality.
- ◆ The camera will end the connection to the smartphone automatically if no operations are performed for a set period.

Playback Menu Options



WIRELESS IMAGE TRANSFER

Upload pictures to a smartphone over a wireless network ( 125).

Setup Menu Options


WIRELESS SETTING

Adjust settings for connection to a smartphone over a wireless network.

- **NAME:** Enter a name for the camera (the default name is unique to the camera).
 - **RESIZE IMAGE ON SENDING **: Choose **ON** (the default setting, recommended in most circumstances) to resize larger images to  for upload, **OFF** to upload images at their original size. Resizing applies only to the copy uploaded to the smartphone; the original is not affected.
-

Problems and Solutions

Connections/Miscellaneous

Problem	Solution
Problem connecting or uploading pictures to smartphone.	<ul style="list-style-type: none">• The smartphone is too far away: Move the devices closer.• Nearby devices are causing radio interference: Move the camera and smartphone away from microwave ovens or cordless phones.
Can not upload images.	<ul style="list-style-type: none">• The smartphone is connected to another device: The smartphone and camera can connect to only one device at a time. End the connection and try again.• Are there several smartphones in the vicinity: Try connecting again. The presence of multiple smartphones can make connection difficult. <p>The current image is a movie or was created on another device and can not be uploaded to a smartphone.</p>
Smartphone will not display pictures.	Select ON for WIRELESS SETTING > RESIZE IMAGE ON SENDING  . Selecting OFF increases upload times for larger images; in addition, some phones may not display images over a certain size.

IMPORTANT: Read the following notices before using the camera's built-in wireless transmitter.

- ① This product, which contains encryption function developed in the United States, is controlled by the United States Export Administration Regulations and may not be exported or re-exported to any country to which the United States embargoes goods.
- **Use only as part of a wireless network.** FUJIFILM does not accept liability for damages resulting from unauthorized use. Do not use in applications requiring a high degree of reliability, for example in medical devices or other systems that may directly or indirectly impact human life. When using the device in computer and other systems that demand a greater degree of reliability than wireless networks, be sure to take all necessary precautions to ensure safety and prevent malfunction.
- **Use only in the country in which the device was purchased.** This device conforms to regulations governing wireless network devices in the country in which it was purchased. Observe all location regulations when using the device. FUJIFILM does not accept liability for problems arising from use in other jurisdictions.
- **Wireless data (images) may be intercepted by third parties.** The security of data transmitted over wireless networks is not guaranteed.
- **Do not use the device in locations subject to magnetic fields, static electricity, or radio interference.** Do not use the transmitter in the vicinity of microwave ovens or in other locations subject to magnetic fields, static electricity, or radio interference that may prevent reception of wireless signals. Mutual interference may occur when the transmitter is used in the vicinity of other wireless devices operating in the 2.4 GHz band.
- **The wireless transmitter operates in the 2.4 GHz band using DSSS and OFDM modulation.**

Wireless Network Devices: Cautions

- **This device operates on the same frequency as commercial, educational, and medical devices and wireless transmitters.** It also operates on the same frequency as licensed transmitters and special unlicensed low-voltage transmitters used in RFID tracking systems for assembly lines and in other similar applications.
- **To prevent interference with the above devices, observe the following precautions.** Confirm that the RFID transmitter is not in operation before using this device. Should you observe that the device causes interference in licensed transmitters used for RFID tracking, immediately choose a new operating frequency for this device to prevent additional interference. If you notice that this device causes interference in low-voltage RFID tracking systems, contact a FUJIFILM representative.

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http://www.fujifilm.com/products/digital_cameras/index.html