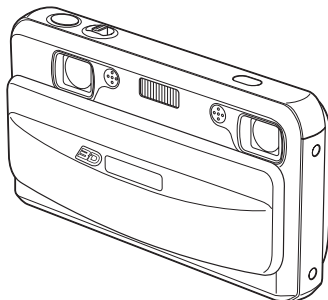# FUJIFILM

BL00963-200 **EN**

DIGITAL CAMERA
FINEPIX
REAL 3D W1

Owner's Manual

Thank you for your purchase of this product. This manual describes how to use your FUJIFILM REAL 3D **W1** digital camera and the supplied software. Be sure that you have read and understood its contents before using the camera.

For information on related products, visit our website at
http://www.fujifilm.com/products/index.html

Before You Begin

First Steps

Basic Photography and Playback

More on Photography

More on Playback

Movies

Connections

Menus

Technical Notes

Troubleshooting

Appendix

For Your Safety

IMPORTANT SAFETY INSTRUCTIONS

- **Read Instructions**: All the safety and operating instructions should be read before the appliance is operated.
- **Retain Instructions**: The safety and operating instructions should be retained for future reference.
- **Heed Warnings**: All warnings on the appliance and in the operating instructions should be adhered to.
- **Follow Instructions**: All operating and use instructions should be followed.

Installation

Power Sources: This video product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company. For video products intended to operate from battery power, or other sources, refer to the operating instructions.

Grounding or Polarization: This video product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

Alternate Warnings: This video product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding type plug.

Overloading: Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

Ventilation: Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the video product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the video product on a bed, sofa, rug, or other similar surface.

This video product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to. This video product should never be placed near or over a radiator or heat register.

Attachments: Do not use attachments not recommended by the video product manufacturer as they may cause hazards.

Water and Moisture: Do not use this video product near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.

Power-Cord Protection: Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
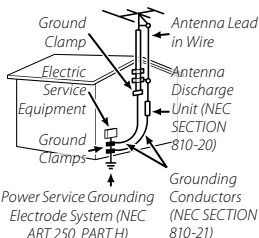
Accessories: Do not place this video product on an unstable cart, stand, tripod, bracket, or table. The video product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the video product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

Antennas

Outdoor Antenna Grounding: If an outside antenna or cable system is connected to the video product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE

- Ground Clamp
- Antenna Lead in Wire
- Electric Service Equipment
- Antenna Discharge Unit (NEC SECTION 810-20)
- Ground Clamps
- Power Service Grounding Electrode System (NEC ART 250. PART H)
- Grounding Conductors (NEC SECTION 810-21)

Power Lines: An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits,

or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

Use

Cleaning: Unplug this video product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Object and Liquid Entry: Never push objects of any kind into this video product through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the video product.

Lightning: For added protection for this video product receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the video product due to lightning and power-line surges.

Service

Servicing: Do not attempt to service this video product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

Damage Requiring Service: Unplug this video product from the wall outlet

and refer servicing to qualified service personnel under the following conditions:
• When the power-supply cord or plug is damaged.
• If liquid has been spilled, or objects have fallen into the video product.
• If the video product has been exposed to rain or water.
• If the video product has been dropped or the cabinet has been damaged.
If the video product does not operate normally follow the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the video product to its normal operation.

When the video product exhibits a distinct change in performance—this indicates a need for service.

Replacement Parts: When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

Safety Check: Upon completion of any service or repairs to this video product, ask the service technician to perform safety checks to determine that the video product is in proper operating condition.

Be sure to read these notes before use

Safety Notes

• Make sure that you use your camera correctly. Read these safety notes and your *Owner's Manual* carefully before use.
• After reading these safety notes, store them in a safe place.

About the Icons

The icons shown below are used in this document to indicate the severity of the injury or damage that can result if the information indicated by the icon is ignored and the product is used incorrectly as a result.

⚠ **WARNING**	This icon indicates that death or serious injury can result if the information is ignored.
⚠ **CAUTION**	This icon indicates that personal injury or material damage can result if the information is ignored.

The icons shown below are used to indicate the nature of the instructions which are to be observed.

⚠	Triangular icons tell you that this information requires attention ("Important").
🚫	Circular icons with a diagonal bar tell you that the action indicated is prohibited ("Prohibited").
❗	Filled circles with an exclamation mark indicate an action that must be performed ("Required").

⚠ **WARNING**

Unplug from power socket	***If a problem arises, turn the camera off, remove the battery, and disconnect and unplug the AC power adapter***. Continued use of the camera when it is emitting smoke, is emitting any unusual odor, or is in any other abnormal state can cause a fire or electric shock. Contact your FUJIFILM dealer.
🚫	***Do not allow water or foreign objects to enter the camera***. If water or foreign objects get inside the camera, turn the camera off, remove the battery, and disconnect and unplug the AC power adapter. Continued use of the camera can cause a fire or electric shock. Contact your FUJIFILM dealer.

⚠ WARNING

⊘ *Do not use in the bathroom or shower*
<u>***Do not use the camera in the bathroom or shower***</u>. This can cause a fire or electric shock.

⊘ *Do not disassemble*
<u>***Never attempt to change or take apart the camera. (Never open the casing.) Do not use the camera when it has been dropped or the casing is damaged***</u>. This can cause a fire or electric shock. Contact your FUJIFILM dealer.

⊘ <u>***Do not change, heat or unduly twist or pull the connection cord and do not place heavy objects on the connection cord***</u>. These actions could damage the cord and cause a fire or electric shock. If the cord is damaged, contact your FUJIFILM dealer.

⊘ <u>***Do not place the camera on an unstable surface***</u>. This can cause the camera to fall or tip over and cause injury.

⊘ <u>***Never attempt to take pictures while in motion***</u>. Do not use the camera while you are walking or driving a vehicle. This can result in you falling down or being involved in a traffic accident.

⊘ <u>***Do not touch any metal parts of the camera during a thunderstorm***</u>. This can cause an electric shock due to induced current from the lightning discharge.

⊘ <u>***Do not use the battery except as specified***</u>. Load the battery as shown by the indicator.

⊘ <u>***Do not heat, change or take apart the battery. Do not drop or subject the battery to impacts. Do not store the battery with metallic products***</u>. Any of these actions can cause the battery to burst or leak and cause fire or injury as a result.

⊘ <u>***Use only the battery or AC power adapters specified for use with this camera. Do not use voltages other than the power supply voltage shown.***</u> The use of other power sources can cause a fire.

⊘ <u>***If the battery leaks and fluid gets in contact with your eyes, skin or clothing, flush the affected area with clean water and seek medical attention or call an emergency number right away***</u>.

⊘ <u>***Do not use the AC power adapter to charge batteries other than those specified here***</u>. The supplied AC power adapter is for use only with the type of battery supplied with the camera. Using the adapter to charge conventional batteries or other types of rechargeable batteries can cause the battery to leak fluid, overheat or burst.

❶ <u>***When carrying the battery, install it in a digital camera or keep it in the hard case. When storing the battery, keep it in the hard case. When discarding, cover the battery terminals with insulation tape***</u>. Contact with other metallic objects or batteries could cause the battery to ignite or burst.

⚠ WARNING

❶ <u>***Keep memory cards out of the reach of small children***</u>. Because memory cards are small, they can be swallowed by children. Be sure to store memory cards out of the reach of small children. If a child swallows a memory card, seek medical attention or call an emergency number.

⚠ CAUTION

⊘ <u>***Do not use this camera in locations affected by oil fumes, steam, humidity or dust***</u>. This can cause a fire or electric shock.

⊘ <u>***Do not leave this camera in places subject to extremely high temperatures***</u>. Do not leave the camera in locations such as a sealed vehicle or in direct sunlight. This can cause a fire.

❶ <u>***Keep out of the reach of small children***</u>. This product could cause injury in the hands of a child.

⊘ <u>***Do not place heavy objects on the camera***</u>. This can cause the heavy object to tip over or fall and cause injury.

⊘ <u>***Do not move the camera while the AC power adapter is still connected. Do not pull on the connection cord to disconnect the AC power adapter***</u>. This can damage the power cord or cables and cause a fire or electric shock.

⊘ <u>***Do not cover or wrap the camera or the AC power adapter in a cloth or blanket***</u>. This can cause heat to build up and distort the casing or cause a fire.

❶ <u>***When you are cleaning the camera or you do not plan to use the camera for an extended period, remove the battery and disconnect and unplug the AC power adapter***</u>. Failure to do so can cause a fire or electric shock.

⊟ <u>***When charging ends, unplug the AC power adapter from the power socket***</u>. Leaving the adapter plugged into the power socket can cause a fire.

⊘ <u>***Using a flash too close to a person's eyes may temporarily affect the eyesight***</u>. Take particular care when photographing infants and young children.

❶ <u>***When a memory card is removed, the card could come out of the slot too quickly. Use your finger to hold it and gently release the card***</u>.

⚠ <u>***Request regular internal testing and cleaning for your camera***</u>. Build-up of dust in your camera can cause a fire or electric shock. Contact your FUJIFILM dealer to request internal cleaning every two years. Please note that this service is not free of charge.

The Battery and Power Supply

The following describes the proper use of the battery and how to prolong its life. Incorrect use can shorten battery life or cause leakage, overheating, fire, or explosion.

The battery is not charged at shipment. Charge the battery before use. Keep the battery in its case when not in use.

Notes on the Battery

The battery gradually loses its charge when not in use. Charge the battery one or two days before use.

Battery life can be extended by turning the camera off when not in use.

Battery capacity decreases at low temperatures; a depleted battery may not function at when cold. Keep a fully charged spare battery in a warm place and exchange as necessary, or keep the battery in your pocket or other warm place and insert it in the camera only when shooting. Do not place the battery in direct contact with hand warmers or other heating devices.

Charging the Battery

Charge the battery using the supplied AC power adapter (pg. 6). Charging times will increase at ambient temperatures below +10°C (+50°F) or above +35°C (+95°F). Do not attempt to charge the battery at temperatures above 40°C (+104°F); at temperatures below 0°C (+32°F), the battery will not charge.

Do not attempt to recharge a fully charged battery. The battery does not however need to be fully discharged before charging.

The battery may be warm to the touch immediately after charging or use. This is normal.

Battery Life

At normal temperatures, the battery can be recharged about 300 times. A noticeable decrease in the length of time the battery will hold a charge indicates that it has reached the end of its service life and should be replaced.

Storage

Performance may be impaired if the battery is left unused for extended periods when fully charged. Run the battery flat before storing it.

If the camera will not be used for an extended period, remove the battery and store it in a dry place with an ambient temperature of from +15°C to +25°C (+59°F to +77°F). Do not store in locations exposed to extremes of temperature.

Cautions: Handling the Battery

• Do not transport or store with metal objects such as necklaces or hairpins.
• Do not expose to flame or heat.
• Do not disassemble or modify.
• Charge with designated devices only.
• Dispose of used batteries promptly.
• Do not drop or subject to strong physical shocks.

• Do not expose to water.
• Keep the terminals clean.
• The battery and camera body may become warm to the touch after extended use. This is normal.

AC power adapters

Use only FUJIFILM AC power adapters designated for use with this camera. Other adapters could damage the camera.

• The AC power adapter is for indoor use only.
• Be sure the DC plug is securely connected to the camera.
• Turn the camera off before disconnecting the adapter. Disconnect the adapter by the plug, not the cable.
• Do not use with other devices.
• Do not disassemble.
• Do not expose to high heat and humidity.
• Do not subject to strong physical shocks.
• The AC power adapter may hum or become hot to the touch during use. This is normal.
• If the AC power adapter causes radio interference, reorient or relocate the receiving antenna.

Using the Camera

To ensure that images are recorded correctly, do not subject the camera to impact or physical shocks while images are being recorded.

Electrical Interference

This camera may interfere with hospital or aviation equipment. Consult with hospital or airline staff before using the camera in a hospital or on an aircraft.

Liquid Crystal

In the event that the monitor is damaged, care should be taken to avoid contact with liquid crystal. Take the urgent action indicated should any of the following situations arise:

• **If liquid crystal comes in contact with your skin**, clean the area with a cloth and then wash thoroughly with soap and running water.
• **If liquid crystal enters your eyes**, flush the affected eye with clean water for at least 15 minutes and then seek medical assistance.
• **If liquid crystal is swallowed**, rinse your mouth thoroughly with water. Drink large quantities of water and induce vomiting, then seek medical assistance.

Take Test Shots

Before taking photographs on important occasions (such as at weddings or before taking the camera on a trip), take a test shot and view the result in the monitor to ensure that the camera is functioning normally. FUJIFILM Corporation can not accept liability for damages or lost profits incurred as a result of product malfunction.

For Your Safety

NOTICES

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Please read the "Safety Notes" (pages iii–v) and make sure you understand them before using the camera.

Perchlorate Material—special handling may apply. See http://www.dtsc.ca.gov/hazardouswaste/perchlorate*.*

For Customers in the U.S.A.

Tested To Comply With FCC Standards
FOR HOME OR OFFICE USE

FCC Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAUTION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.
You are cautioned that any changes or modifications not expressly approved in this manual could void the user's authority to operate the equipment.

Notes on the Grant

To comply with Part 15 of the FCC Rules, this product must be used with a FUJIFILM-specified ferrite-core A/V cable, USB cable, and DC supply cord.

For Customers in Canada

CAUTION: This Class B digital apparatus complies with Canadian ICES-003.

EC Declaration of Conformity

We
Name:　　　　　FUJIFILM Electronic Imaging Europe GmbH
Address:　　　　Benzstrasse 2
　　　　　　　　　 47533 Kleve, Germany
declare that the product
Product Name:　FUJIFILM DIGITAL CAMERA REAL 3D W1
Manufacturer's Name:　FUJIFILM Corporation
Manufacturer's Address: 7-3, AKASAKA 9-CHOME, MINATO-KU, TOKYO 107-0052 JAPAN
conforms to the following Standards:
Safety:　　EN60065: 2002 + A1: 2006
EMC:　　　EN55022: 1998 + A1: 2000 + A2: 2003 Class B
　　　　　　 EN55024: 1998 + A1: 2001 + A2: 2003
　　　　　　 EN61000-3-2: 2006
　　　　　　 EN61000-3-3: 1995 + A1: 2001 + A2: 2005
following the provision of the EMC Directive (2004/108/EC) and Low Voltage Directive (2006/95/EC).

CE

Kleve, Germany　　*August 1, 2009*
Place　　　　　**Date**　　　　　**Signature, Managing Director**

vi

About This Manual

Before using the camera, read this manual and the warnings on pages ii–vii. For information on specific topics, consult the sources below.

Memory Cards

Pictures can be stored in the camera's internal memory or on optional SD and SDHC memory cards. In this manual, SD memory cards are referred to as "memory cards." For more information, see page 9.

Camera Q & A

Find items by task.

Camera Setup

Question	Key phrase	See page
How do I set the camera clock?	Date and time	11
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How do I keep the display from turning off automatically?	Auto power off	85
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	Silent mode	16
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What are the parts of the camera called?	Parts of the camera	2
What do the icons in the display mean?	Displays	3
How do I use the menus?	Menus	57
What's behind that flashing icon or error message?	Messages and displays	98
How much charge is left in the battery?	Battery level	14

Sharing Pictures

Question	Key phrase	See page
Can I print pictures on my home printer?	Printing pictures*	45
Can I copy my pictures to my computer?	Viewing pictures on a computer	50
Can I copy pictures to a hand-held device?	Infrared (IR)	54

* For information on printing **3D** pictures, visit *http://fujifilm.com/3d/print/*.

Taking Pictures

Question	Key phrase	See page
How do I take **3D** photographs?	Taking **3D** photographs	13
How do I take **2D** photographs?	Taking **2D** photographs	19
How do I shoot movies in **3D** or **2D**?	Recording movies	41
How many pictures can I take?	Memory capacity	104
How can I make good portraits?	Intelligent Face Detection	64
Can I choose my own settings for different scenes?	Scene position	27
How do I shoot close-ups?	Close-ups (macro mode)	22
How do I keep the flash from firing?	Flash mode	23
How do I stop my subjects' eyes glowing red when I use the flash?		
How do I "fill-in" shadows on back-lit subjects?		
How do I take a series of pictures in a single burst?	Continuous mode	65
How do I take a group portrait that includes the photographer?	Self-timer mode	25
How do I frame pictures with the subject off to one side?	Focus lock	20
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Question	Key phrase	See page
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How do I view my pictures on TV?	Viewing pictures on TV	44

Table of Contents

🚫 **Caution: Using the FinePix REAL 3D W1**

2D display is recommended for young children (up to the age of about six) whose visual system is still maturing and for individuals with notable differences in vision between their two eyes, who may find it difficult or impossible to observe the **3D** effect. Should you experience fatigue or discomfort while viewing **3D** images, cease use immediately. A ten-minute break is recommended about once every half hour. Switch to **2D** immediately if **3D** images still appear double after you have adjusted parallax. Individuals with a history of photosensitive epilepsy or heart disease or who are unwell or suffering from fatigue, insomnia, or the affects of alcohol should refrain from viewing **3D** images. Viewing **3D** images while in motion may cause fatigue or discomfort.

📁 **File Formats**

3D pictures are recorded in one of two new formats: multi-picture format for photographs (pg. 18, 102) and 3D movie file format for movies (pg. 41, 102). **2D** images are recorded in existing formats.

Introduction

Symbols and Conventions

The following symbols are used in this manual:

N **Caution**: This information should be read before use to ensure correct operation.

◆ **Note**: Points to note when using the camera.

▥ **Tip**: Additional information that may be helpful when using the camera.

Menus and other text in the camera monitor are shown in bold. In the illustrations in this manual, the monitor display may be simplified for explanatory purposes.

Supplied Accessories

The following items are included with the camera:

NP-95 rechargeable battery

AC-5VC AC power adapter

Owner's Manual (this manual)

Software for FinePix CD
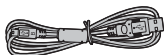
USB cable
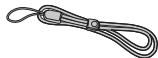
Strap

Attaching the Strap

Attach the strap as shown.

N **Caution**

To ensure that you do not drop the camera, wear the strap on your wrist.
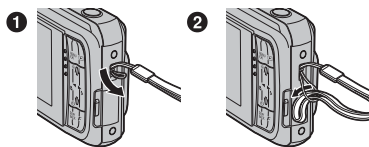
Parts of the Camera

For more information, refer to the page listed to the right of each item.

Selector button

Move cursor up
☼ (monitor brightness) button (see below)
🗑 (delete) button (pg. 18)

Move cursor left
🌷 (macro) button (pg. 22)

Move cursor right
⚡ (flash) button (pg. 23)

Move cursor down
⏱ (self-timer) button (pg. 25)
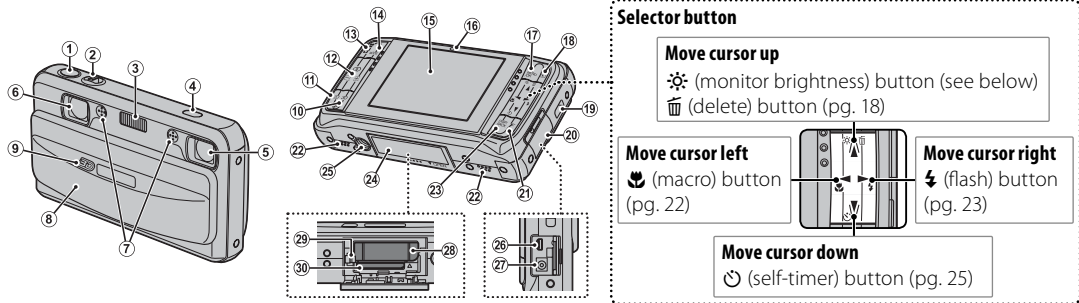
1 Shutter button..17	**11** **2D** button..19	**21** 𝐹 (photo mode) button..................57
2 Zoom control..................... 14, 37, 38, 42	**12** ⑂ (parallax) button..........................13	**22** Speaker..43
3 Flash..23	**13** 🎥/📷 button.....................................41	**23** **DISP** (display)/**BACK** button 15, 36
4 Infrared port...................................54	**14** **MODE** button....................................13	**24** Battery-chamber cover.........................4
5 Left lens	**15** Monitor.. 3	**25** Tripod mount
6 Right lens	**16** Indicator lamp...6, 17	**26** USB and A/V connector.......44, 45, 52
7 Microphone.....................................41	**17** **MENU/OK** button..11	**27** Connector for AC power adapter.... 6
8 On/off switch and lens cover..........10	**18** ▶ (playback) button....................18, 36	**28** Battery chamber...4
9 Illuminator......................................80	**19** Strap eyelet.. 1	**29** Battery latch..4
Self-timer lamp...26	**20** Terminal cover...........................44, 45, 52	**30** Memory card slot.......................................8
10 **3D** button...13		

🔲 **Tip: Monitor Brightness**
Pressing the ☼ button briefly increases monitor brightness, making the display easier to see in bright light. Normal brightness is restored when a photograph is taken.

2

Camera Displays

The following indicators may appear during shooting and playback:

■ *Shooting*

1	Image quality.................................60
2	Image size..59
3	Sensitivity.......................................59
4	Continuous shooting mode...........65
5	Macro (close-up) mode....................22
6	Flash mode.......................................23
7	Silent mode 16
8	Intelligent Face Detection indicator.. 64
9	Shooting mode................................57
10	3D/2D mode indicator...................13
11	Battery level....................................14
12	Quick AF.................................... 12, 67

13	Self-timer indicator 25
14	Metering 66
15	White balance..................................60
16	Date and time..........................11, 80
17	Number of available frames........104
18	FINEPIX color 61
19	Bright monitor indicator.......................... 2
20	Focus warning 16, 98
21	Blur warning.............................23, 98
22	Parallax display................................13
23	Internal memory indicator*................ 7
24	Focus frame..16, 20
25	Exposure compensation....................58

* **⓫**: indicates that no memory card is inserted and that pictures will be stored in the camera's internal memory (pg. 7).
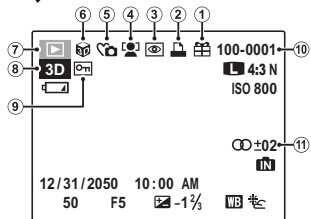
■ *Playback*

1	Gift image.................................36, 56
2	DPOF print indicator...........................47
3	Red-eye removal indicator 71
4	Intelligent Face Detection indicator.. 64
5	Silent mode indicator..........................16

6	3D image...18
7	Playback mode indicator 36
8	3D/2D mode indicator....................36
9	Protected image...73
10	Frame number..83
11	Parallax display...13

Note: The indicators actually displayed during shooting and playback vary with camera settings.

Inserting the Battery

Insert the battery in the camera as described below.

1 Open the battery-chamber cover.

 Note

Be sure the camera is off before opening the battery-chamber cover.

 Cautions

- Do not open the battery-chamber cover when the camera is on. Failure to observe this precaution could result in damage to image files or memory cards.
- Do not use excessive force when handling the battery-chamber cover.

2 Insert the battery.

Insert the battery with the terminals first and the arrow aligned with the arrow next to the battery chamber. Slide the bat-

tery into the camera, keeping the battery latch pressed to one side as shown below. Confirm that the battery is securely latched.

Arrow
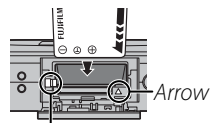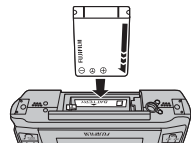
Battery latch

 Caution

Insert the battery in the correct orientation. *Do* **not** *use force or attempt to insert the battery upside down or backwards.* The battery will slide in easily in the correct orientation; the camera will not turn on if the battery is inserted incorrectly.

3 Close the battery-chamber cover.
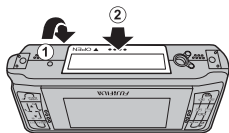
Removing the Battery
After turning the camera off, open the battery-chamber cover, press the battery latch to the side, and slide the battery out of the camera as shown.

Battery latch
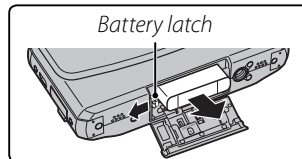
Caution
Turn the camera off before removing the battery.

Cautions
• Do not affix stickers or other objects to the battery. Failure to observe this precaution could make it impossible to remove the battery from the camera.
• Do not short the battery terminals. The battery could overheat.
• Read the cautions on page v.
• Use only batteries designated for use with this camera. Failure to observe this precaution could result in product malfunction.
• Do not remove the labels from the battery or attempt to split or peel the outer casing.
• The battery gradually loses its charge when not in use. Charge the battery one or two days before use.

Charging the Battery

The battery is not charged at shipment. Charge the battery before use.

1 Connect the AC power adapter.

Connect the supplied AC power adapter to the camera as shown.
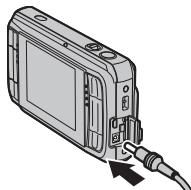
� Tips: Using an AC power adapter

- The AC power adapter can also be used to power the camera. Use to prevent unexpected loss of power during extended playback or when the camera is connected to a computer or TV.
- If the camera is powered by an AC power adapter, demo mode slides will be displayed when the camera is turned on. Demo mode can be disabled using the 🎬 **DEMO MODE** option in the setup menu (pg. 81).

2 Plug the adapter in.

Plug the AC power adapter into a power outlet. The indicator lamp will glow red while the battery charges (if the indicator lamp does not light, check that the battery is correctly inserted). Charging is complete when the lamp turns off.

Indicator lamp
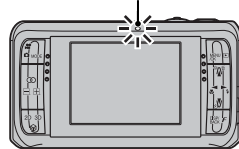
🔋 The Indicator Lamp

The indicator lamp shows battery charge status as follows:

Indicator lamp	Battery status
On (red)	Battery charging
Off	Battery fully charged
Blinks (red)	Battery fault

The indicator lamp also shows focus, flash, exposure, and recording status (pg. 17).

Inserting a Memory Card

Although the camera can store pictures in internal memory, optional SD memory cards (sold separately) can be used to store additional pictures.

When no memory card is inserted, ⬛ appears in the monitor and internal memory is used for recording and playback. Note that because camera malfunction could cause internal memory to become corrupted, the pictures in internal memory should periodically be transferred to a computer and saved on the computer hard disk or on removable media such as CDs or DVDs. The pictures in internal memory can also be copied to a memory card (see page 74). To prevent internal memory from becoming full, be sure to delete pictures when they are no longer needed.

When a memory card is inserted as described below, the card will be used for recording and playback.

■ *Compatible Memory Cards*
SanDisk SD and SDHC memory cards have been approved for use in the camera. A complete list of approved memory cards is available at *http://www.fujifilm.com/products/digital_cameras/index.html*. Operation is not guaranteed with other cards. The camera can not be used with *xD-Picture Cards* or MultiMediaCard (MMC) devices.

⚠ **Caution**
SD memory cards can be locked, making it impossible to format the card or to record or delete images. Before inserting an SD memory card, slide the write-protect switch to the unlocked position.
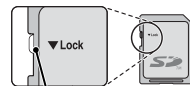
Write-protect switch

■ *Inserting a Memory Card*

1 Open the battery-chamber cover.

Note

Be sure the camera is off before opening the battery-chamber cover.
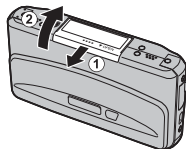
2 Insert the memory card.

Holding the memory card in the orientation shown below, slide it in until it clicks into place.
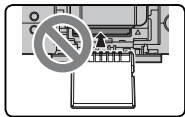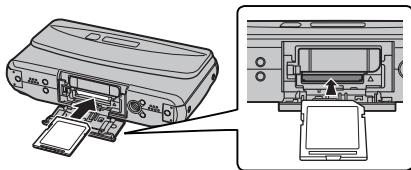
Be sure card is in correct orientation; do not insert at an angle or use force.

3 Close the battery-chamber cover.
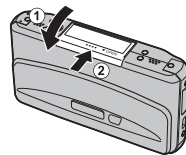
Removing Memory Cards

After confirming that the camera is off, press the card in and then release it slowly. The card can now be removed by hand.
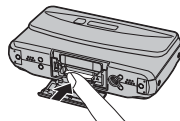
Cautions

- The memory card may spring out if you remove your finger immediately after pushing the card in.
- Memory cards may be warm to the touch after being removed from the camera. This is normal and does not indicate a malfunction.

⚠ Cautions

• ***Do not turn the camera off or remove the memory card while the memory card is being formatted or data are being recorded to or deleted from the card***. Failure to observe this precaution could damage the card.

• Format memory cards before first use or after using them in a computer or other device. For more information on formatting memory cards, see page 85.

• Memory cards are small and can be swallowed; keep out of reach of children. If a child swallows a memory card, seek medical assistance immediately.

• miniSD or microSD adapters that are larger or smaller than the standard dimensions of an SD card may not eject normally; if the card does not eject, take the camera to an authorized service representative. Do not forcibly remove the card.

• Do not affix labels to memory cards. Peeling labels can cause camera malfunction.

• Movie recording may be interrupted with some types of SD memory card. Use a card with a class 4 write speed (4 MB/s) or better when shooting movies.

• The data in internal memory may be erased or corrupted when the camera is repaired. Please note that the repairer will be able to view pictures in internal memory.

• Formatting a memory card or internal memory in the camera creates a folder in which pictures are stored. Do not rename or delete this folder or use a computer or other device to edit, delete, or rename image files. Always use the camera to delete pictures from memory cards and internal memory; before editing or renaming files, copy them to a computer and edit or rename the copies, not the originals.

First Steps

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Turning the Camera on and Off

Shooting Mode

To turn the camera on, open the lens cover as shown below. The camera turns off when the lens cover is closed.

Camera on *Camera off*
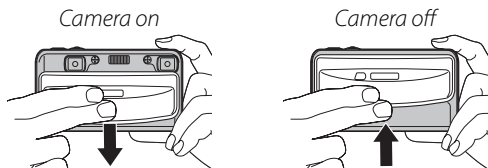
◙ **Tip: Switching to Playback Mode**

Press the ▶ button for about a second to start playback. Press the shutter button halfway to return to shooting mode.

◊ **Caution**

Pictures can be affected by fingerprints and other marks on the lenses. Keep the lenses clean.

Playback Mode

To turn the camera on and begin playback without opening the lens cover, press the ▶ button for about a second.
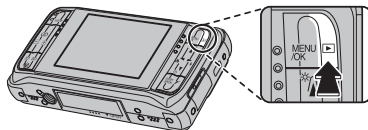
To turn the camera off, open and close the lens cover.

◙ **Tip: Switching to Shooting Mode**

To exit to shooting mode, press the shutter button halfway. Press the ▶ button to return to playback.

◙ **Tip: Auto Power Off**

The camera will turn off automatically if no operations are performed for the length of time selected in the ⊠ **AUTO POWER OFF** menu (pg. 85; note that **OFF** is not available when ◻⊟ **QUICK AF** is selected for ⊠ **POWER MANAGEMENT**). To turn the camera on, close and reopen the lens cover or press the ▶ button for about a second.

Basic Setup

A language-selection dialog is displayed the first time the camera is turned on. Set up the camera as described below (for information on resetting the clock or changing languages, see page 80).

1 Choose a language.

START MENU
言語/LANG.
日本語　ENGLISH　FRANCAIS
DEUTSCH　ESPAÑOL　ITALIANO
中文简　繁體　한글
PORTUGUÊS　NEDERLANDS　ไทย

OK SET　BACK NO

1.1 Press the selector up, down, left, or right to highlight a language.

1.2 Press **MENU/OK**.

2 Set the date and time.

DATE / TIME NOT SET

2011
2010
YY. MM. DD　2009　1. 1 12:00
2008　　　AM
2007

OK SET　BACK NO
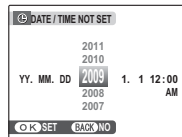
2.1 Press the selector left or right to highlight the year, month, day, hour, or minute and press up or down to change. To change the order in which the year, month, and day are displayed, highlight the date format and press the selector up or down.

2.2 Press **MENU/OK**.

First Steps

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3 Choose power management options.

POWER MANAGEMENT
POWER SAVE
QUICK AF
Power saving for longer
battery life
SET BACK NO
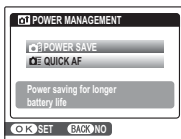
3.1 Press the selector up or down to highlight one of the following options:

- **POWER SAVE**: Save battery power.
- **QUICK AF**: Reduce focusing time, ensuring a quick shutter response.

3.2 Press **MENU/OK**.

Tip: The Camera Clock

If the battery is removed for an extended period, the camera clock will be reset and the language-selection dialog will be displayed when the camera is turned on. If the battery is left in the camera for about two hours, the battery can be removed for about six hours without resetting clock, language selection, or power management options.

Taking **3D** Pictures in Auto Mode

This section describes how to take **3D** pictures in **AUTO** mode.

1 Turn the camera on.
Fully open the lens cover.

2 Select **AUTO** mode.
Press the **MODE** button to display the mode selection menu.
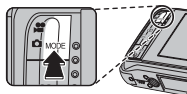
Press the selector up or down to highlight **AUTO** and press **MENU/OK**.

> AUTO
> **AUTO**
> Automatic mode
> setting according to
> shooting conditions.
>
> AUTO
> SP
> M
> A
> P
> ADV. 2D
> ADV. 3D
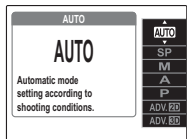
3 Select **3D**.
Press the **3D** button. **3D** will be displayed in the monitor.

2D (3D)

> 3D
> [+]
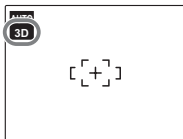
◆ Parallax (pg. 103)
The appearance of **3D** images can be adjusted using the ∞ (⊞ and ⊟) buttons. The percentage is displayed in the monitor. Press the shutter button to take a picture at the current setting, or press the **3D** button to reset parallax.

Note that adjusting parallax reduces horizontal frame coverage. The new crop is shown by black borders in the display.

🔚 Tip: Auto Parallax
For automatic parallax adjustment, select **ON** for ∞ **AUTO PARALLAX CONTROL** (pg. 63). Parallax can still be adjusted manually when **ON** is selected.

⚠ Caution: Excessive Parallax
Too much parallax may make it impossible to perceive the 3D effect.

4 Check the battery level.

Check the battery level in the display.
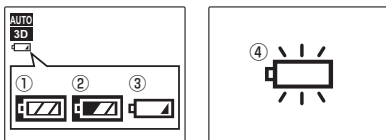
Indicator	**Description**
▪⟮▨⟯ (white)	Battery partially discharged.
▪⟮▰⟯ (white)	Battery more than half discharged.
▪▱ (red)	Low battery. Charge as soon as possible.
▱ (blinks red)	Battery exhausted. Turn camera off and charge battery.

5 Frame the picture.

Position the main subject in the focus frame and use the zoom control to frame the picture in the display.

Select **W** *to zoom out*   *Select* **T** *to zoom in*

Zoom indicator
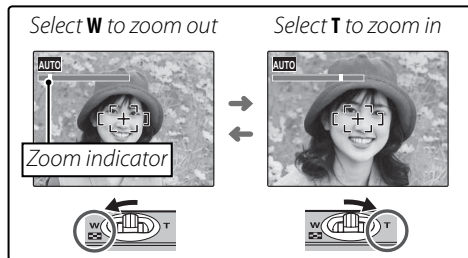
← Note: **3D**

The **3D** effect may not be visible at high zoom ratios, in subjects that are outside the suggested range (pg. 105), poorly lit or at the edge of the frame, or if the display is viewed from the side.
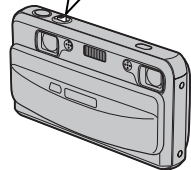
🔊 Tip: Focus Lock

Use focus lock (pg. 20) to focus on subjects that are not in the focus frame.

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✦ **Holding the Camera**

Hold the camera steady with both hands and brace your elbows against your sides. Shaking or unsteady hands can blur your shots.
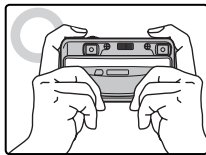
To avoid interfering with the **3D** effect and to prevent pictures that are out of focus or too dark (underexposed), keep your fingers and other objects well away from the lenses and flash. Note that the **3D** effect may not be visible if the display is viewed at an angle.
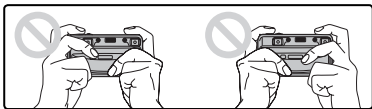
✦ **Shooting Information**

To choose the shooting information and guides displayed, press the **DISP/BACK** button.

Indicators displayed　　*Indicators hidden*
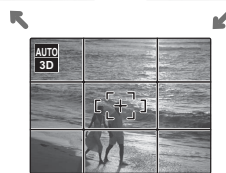
Best framing

Hiding indicators makes it easier to see the **3D** effect. To use best framing, position the main subject at the intersection of two lines or align one of the horizontal lines with the horizon. Use focus lock (pg. 20) to focus on subjects that will not be in the center of the frame in the final photograph.

Basic Photography and Playback

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▶ ❄ Silent Mode

In situations in which camera sounds or lights may be unwelcome, hold the **DISP/BACK** button down until ❄ is displayed.
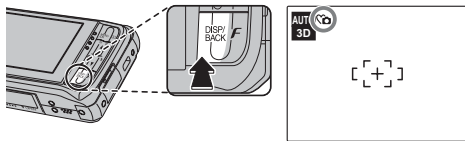
The speaker, flash, illuminator, and self-timer lamp turn off and flash and volume settings can not be adjusted (note that the flash will still fire when ◐❖ is selected in **SP** mode). To restore normal operation, press the **DISP/BACK** button until the ❄ icon is no longer displayed.

6 Focus.

Press the shutter button halfway to focus on the main subject in the focus frame.

Focus frame

Camera selects small focus frame and focuses on subject
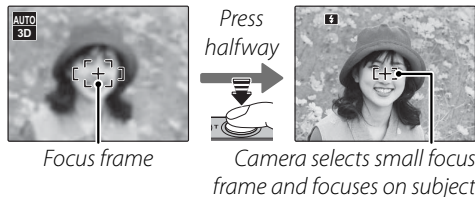
☞ Note

The lenses may make a noise when the camera focuses. This is normal.

If the camera is able to focus with both lenses, it will beep twice and the indicator lamp will glow green.

If the camera is unable to focus, the focus frame will turn red, **!AF** will be displayed, and the indicator lamp will blink green. Change the composition or use focus lock (pg. 20).

7 Shoot.

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

📖 **Tip: The Shutter Button**

The shutter button has two positions. Pressing the shutter button halfway (①) sets focus and exposure; to shoot, press the shutter button the rest of the way down (②).

Double beep ①

Click ②

Press halfway

Press the rest of the way down
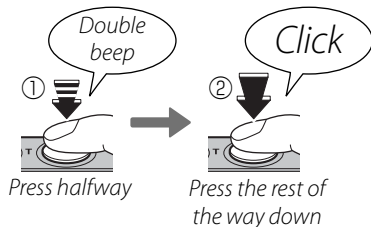
👉 **Note**

If the subject is poorly lit, the flash may fire when the picture is taken. For information on using the flash when lighting is poor, see page 23.

🔅 **The Indicator Lamp**

Indicator lamp

The indicator lamp shows camera status as follows (see page 6 for information on the charging display):

Indicator lamp	Camera status
Glows green	Focus locked.
Blinks green	Blur, focus, or exposure warning. Picture can be taken.
Blinks green and orange	Recording pictures. Additional pictures can be taken.
Glows orange	Recording pictures. No additional pictures can be taken at this time.
Blinks orange	Flash charging; flash will not fire when picture is taken.
Blinks red	Lens or memory error (internal memory or memory card full or not formatted, format error, or other memory error).

📖 **Tip: Warnings**

Detailed warnings appear in the display. See pages 98–101 for more information.

Basic Photography and Playback

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Viewing 3D Pictures

Pictures can be viewed in the monitor. When taking important photographs, take a test shot and check the results. **3D** pictures are stored in multi-picture (".mpo") format; JPEG copies can be recorded by selecting **MPO+JPEG** for the **3DREC** option in the setup menu.

1 Press the ▶ button.
The most recent picture will be displayed in the monitor. Pictures taken in **3D** are indicated by a 🔷 icon.

2 Press the **3D** button.
Press the **3D** button to view **3D** pictures in **3D** (**2D** pictures will still be displayed in **2D**).

3 View additional pictures.
Press the selector right to view pictures in the order recorded, left to view pictures in reverse order.

Press the shutter button to exit to shooting mode.

🗑 Deleting Pictures
To delete the picture currently displayed in the monitor, press the selector up (🗑). The following dialog will be displayed.

🗑 ERASE OK?

OK ◀ ▶ **CANCEL**

OK SET
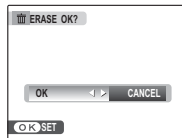
To delete the picture, press the selector left to highlight **OK** and press **MENU/OK**. To exit without deleting the picture, highlight **CANCEL** and press **MENU/OK**.

📖 Tip: The Playback Menu
Pictures can also be deleted from the playback menu (pg. 39).

Shooting and Viewing **2D** Pictures

*Taking Pictures in **2D***

To shoot pictures in **2D**, press the **2D** button in shooting mode and take pictures as described on pages 13–17. **2D** is displayed in the monitor and photographs are taken using the left lens and saved in JPEG (".jpg") format (Exif 2.2).
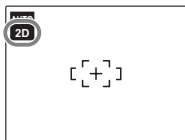
Note that the picture angle of photographs taken in **2D** differs from that of **3D** images.

*Viewing Pictures in **2D***

To view pictures in **2D**, press the **2D** button in playback mode and view pictures as described on page 18. Note that when **3D** pictures are viewed in **2D**, only the image recorded with the left lens will be displayed.

Images that were originally recorded in **2D** are indicated by the absence of a 🎁 icon.

Focus Lock

3D 2D

To compose photographs with off-center subjects:

1 Position the subject in the focus frame.

2 Focus.

Press the shutter button halfway to set focus and exposure. Focus and exposure (and in **3D** mode, parallax; pg. 13) will remain locked while the shutter button is pressed halfway (AF/AE lock).

Press halfway

Repeat steps 1 and 2 as desired to refocus before taking the picture.

3 Recompose the picture.

Keeping the shutter button pressed halfway, recompose the picture.

4 Shoot.

Press the shutter-release button the rest of the way down to take the picture.

Press the rest of the way down

Autofocus

Although the camera boasts a high-precision autofocus system, it may be unable to focus on the subjects listed below. If the camera is unable to focus using autofocus, use focus lock (pg. 20) to focus on another subject at the same distance and then recompose the photograph.

- Very shiny subjects such as mirrors or car bodies.

- Fast-moving subjects.
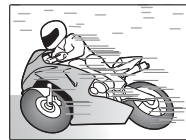
- Subjects photographed through a window or other reflective object.
- Dark subjects and subjects that absorb rather than reflect light, such as hair or fur.
- Insubstantial subjects, such as smoke or flame.
- Subjects that show little contrast with the background (for example, subjects in clothing that 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).

Auto Parallax

Although the camera boasts highly precise parallax control, auto parallax may not produce the desired results with the subjects listed under "Autofocus" (above) or with subjects outside the recommended range (particularly if the subject is close to the camera), repeating rectangular patterns such as venetian blinds or the windows in an office building, or straight lines such as poles or wires. Use focus lock (pg. 20) or adjust parallax manually (pg. 13).

More on Photography

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✿ Macro Mode (Close-ups)

For close-ups, press the selector left (✿).
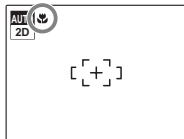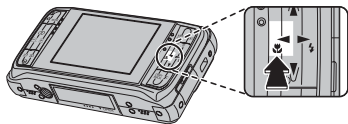
✿ *is displayed in macro mode.*

When macro mode is in effect, the camera focuses on subjects near the center of the frame. Use the zoom control to compose pictures (pg. 14).

To exit macro mode, press the selector left (✿).

☛ Notes

• Use of a tripod is recommended to prevent blur caused by camera shake.
• The flash may fail to light the entire subject at very short ranges. Increase the distance to the subject and try again.
• Macro mode is not available in twin camera mode (pg. 31). It is not available during **3D** shooting except in **ADV. 3D** mode (pg. 33).

$\frac{1}{2}$ **Using the Flash (Super Intelligent Flash)**

When the flash is used, the camera's *Super Intelligent Flash* system instantly analyzes the scene based on such factors as the brightness of the subject, its position in the frame, and its distance from the camera. Flash output and sensitivity are adjusted to ensure that the main subject is correctly exposed while preserving the effects of ambient background lighting, even in dimly-lit indoor scenes. Use the flash when lighting is poor, for example when shooting at night or indoors under low light.

1 Choose a flash mode.

Press the selector right ($\frac{1}{2}$). The flash mode changes each time the selector is pressed; in modes other than **AUTO**, the current mode is indicated by an icon in the display. Choose from the following options:

Mode	Description
AUTO (auto)	The flash fires when required. Recommended in most situations.
$\underset{\text{AUTO}}{\textcircled{\textbf{\textbullet}}}$ (auto with red-eye reduction)	As above, except that camera minimizes "red-eye" caused when light from the flash is reflected from the subject's retinas. Available in **3D** only.
$\frac{1}{2}$ (fill flash)	The flash fires whenever a picture is taken. Use for backlit subjects or for natural coloration when shooting in bright light.
$\textcircled{4}$ (off)	The flash does not fire even when the subject is poorly lit. $\textbf{!\large{o}}$ will appear in the monitor at slow shutter speeds to warn that pictures may be blurred. Use of a tripod is recommended.
S$\frac{1}{2}$ (slow sync)	Capture both the main subject and the background under low light (note that brightly lit scenes may be overexposed).
$\underset{\text{SLOW}}{\textcircled{\textbf{\textbullet}}}$ (slow sync with red-eye reduction)	As for slow sync, except that camera minimizes "red-eye." Available in **3D** only.

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2 Focus.

Press the shutter button halfway to focus. If the flash will fire, **⚡** will be displayed when the shutter button is pressed halfway. At slow shutter speeds, **!⚫** will appear in the display to warn that pictures may be blurred; use of a tripod is recommended.

3 Shoot.

Press the shutter button the rest of the way down to shoot.

⚠ Caution

The flash may fire several times with each shot. Do not move the camera until shooting is complete.

◉ Red-Eye Removal (2D)

When **😊 ON ◉ ON** is selected for Intelligent Face Detection (**2D** only; pg. 64), red-eye removal (◉) is available in auto (⚛), fill flash (◉⚡), and slow sync (⚛) modes. 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.

R **Using the Self-Timer**

The camera offers a ten-second timer that allows photographers to appear in their own photographs, and a two-second timer that can be used to avoid blur caused by the camera moving when the shutter button is pressed. The self-timer is available in all shooting modes.

1 Set the timer.

The current self-timer mode is displayed in the monitor. To choose a different setting, press the selector down (R). The selection changes each time the selector is pressed.
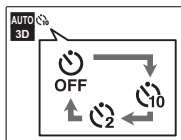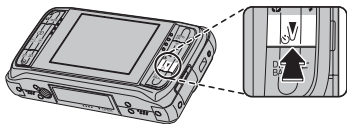
Choose from R *(self-timer off),* R *(10 s delay), or* R *(2 s delay)*

2 Focus.

Press the shutter button halfway to focus.

Q Caution

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

3 Start the timer.

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**.

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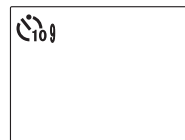
The self-timer lamp on the front of the camera will blink immediately before the picture is taken. If the two-second timer is selected, the self-timer lamp will blink as the timer counts down.
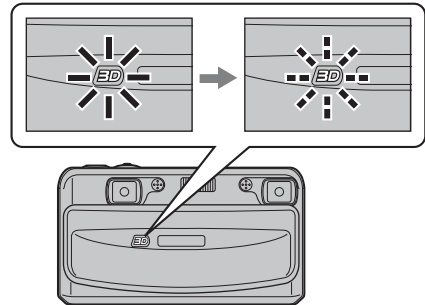
🕰 **Intelligent Face Detection (🔲)**

Because it ensures that the faces of portrait subjects will be in focus, Intelligent Face Detection (pg. 64) is recommended when using the self-timer for group portraits or self-portraits. To use the self-timer with Intelligent Face Detection, turn Intelligent Face Detection on, set the timer as described in Step 1, and then press the shutter button all the way down to start the timer. The camera will detect faces while the timer is counting down and adjust focus and exposure immediately before the shutter is released. Be careful not to move until the picture has been recorded.

🖝 **Note**

The self-timer turns off automatically when the picture is taken, a different shooting mode is selected, playback mode is selected, or the camera is turned off.

Shooting Mode

Choose a shooting mode according to the scene or type of subject. To select a shooting mode, press the **MODE** button to display the mode selection menu. Press the selector up or down to highlight the desired mode and press **MENU/OK**. The selected mode will be shown at the top left corner of the display. The following options are available:
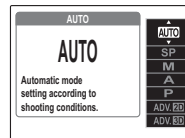
○ *AUTO*

Choose for crisp, clear snapshots (pg. 13). This mode is recommended in most situations.

SP *SCENE POSITION*

The camera offers a choice of "scenes," each adapted to particular shooting conditions or a specific type of subject. Selecting **SP** in the mode selection menu displays the options listed on the following page; press the selector up or down to highlight the desired scene and press **MENU/OK**.

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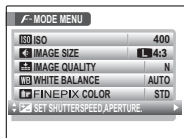| Scene	Description
⊕⚡ **NATURAL & ⚡**	Get good results with backlit subjects and other difficult lighting. The camera takes two shots: one without the flash and one with.
⊛ **NATURAL LIGHT**	Capture natural light indoors, under low light, or where the flash can not be used. The flash turns off and sensitivity is raised to reduce blur.
● **PORTRAIT**	Choose for soft-toned portraits with natural skin tones.
▲ **LANDSCAPE**	Choose for crisp, clear daylight shots of buildings and landscapes.
✖ **SPORT**	Choose when photographing moving subjects. ◘ **QUICK AF** is automatically selected for ⚏ **POWER MANAGEMENT** and priority is given to faster shutter speeds.
☾ **NIGHT**	Choose this mode for poorly lit twilight or night scenes. Sensitivity is automatically raised to reduce blur caused by camera shake.
☾ **NIGHT (TRIPOD)**	Choose this mode for slow shutter speeds when shooting at night. Use a tripod to prevent blur.
▲ **SUNSET**	Record the vivid colors in sunrises and sunsets.
❅ **SNOW**	Choose for crisp, clear shots that capture the brightness of scenes dominated by shining white snow.
☝ **BEACH**	Choose for crisp, clear shots that capture the brightness of sunlit beaches.
◆ **UNDERWATER**	Choose for vivid blues when taking photographs of subjects in an aquarium.
⅄ **PARTY**	Capture indoor background lighting under low-light conditions.
灬 **ANTI-BLUR**	Choose 灬 **ANTI-BLUR** (picture stabilization) mode for fast shutter speeds that reduce blur caused by camera shake or subject movement. Recommended for photographs of children and pets.

M *MANUAL*

In this mode, you choose both shutter speed and aperture. If desired, exposure can be altered from the value suggested by the camera.
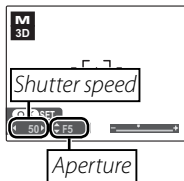
1 Press the $\mathcal{F}$ button to display the $\mathcal{F}$-mode menu.

2 Press the selector up or down to highlight **☒ SET SHUTTERSPEED, APERTURE.**.

> | $\mathcal{F}$ MODE MENU | |
> |---|---|
> | **☒ ISO** | 400 |
> | **☒ IMAGE SIZE** | **L** 4:3 |
> | **☒ IMAGE QUALITY** | N |
> | **☒ WHITE BALANCE** | AUTO |
> | **☒ FINEPIX COLOR** | STD |
> | **☒ SET SHUTTERSPEED APERTURE.** | ► |

3 Press **MENU/OK**. Shutter speed and aperture will be displayed.

> **M**
> **3D**
>
> *Shutter speed*
>
> *Aperture*

4 Press the selector up or down to choose the aperture, left or right to choose the shutter speed.

5 Press **MENU/OK** to return to shooting mode.

6 Take pictures.

> **◐ The Exposure Indicator**
> The amount the picture will be under- or over-exposed at current settings is shown by the exposure indicator.
>
> **M**
> **3D**
>
> $[\,^+_{\,\,}]$
>
> OK SET
> ◄ 50► ◆ F5

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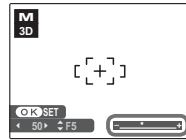
A *APERTURE PRIORITY AE*

In this mode, you choose the aperture while the camera adjusts shutter speed for optimal exposure.

1 Press the **F** button to display the **F**-mode menu.

2 Press the selector up or down to highlight ☒ **SETTING APERTURE**.

F MODE MENU	
ISO ISO	400
IMAGE SIZE	L 4:3
IMAGE QUALITY	N
WHITE BALANCE	AUTO
FINEPIX COLOR	STD
SETTING APERTURE	
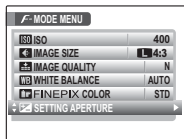
3 Press **MENU/OK**. Exposure compensation and aperture will be displayed.

Exposure compensation
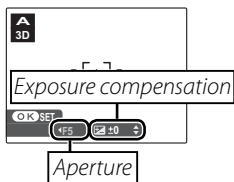
Aperture

4 Press the selector up or down to choose exposure compensation, left or right to choose the aperture.

5 Press **MENU/OK** to return to shooting mode.

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

⚠ **Caution**
If the subject is outside the metering range of the camera, the shutter speed display will show "---". Press the shutter button halfway to measure exposure again.

P *PROGRAM AE*

In this mode, the camera sets aperture and shutter speed automatically. Exposure can be adjusted using the **⚡ EXP. COMPENSATION** option in the **F**-mode menu.

⚠ **Caution**

If the subject is outside the metering range of the camera, the shutter speed and aperture displays will show "---". Press the shutter button halfway to measure exposure again.

ADV.**2D** *TWIN CAMERA*

The camera simultaneously takes two **2D** pictures—one with each lens—with different options selected for each. Selecting **ADV.2D** in the mode selection menu displays the following options; press the selector up or down to highlight an option and press **MENU/OK**.
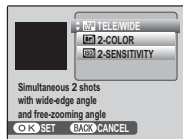
- **⚏ TELE/WIDE**: Zoom for the left lens can be adjusted using the zoom control. The right lens is zoomed all the way out (pg. 32).
- **▣ 2-COLOR**: The two pictures use different settings for FINEPIX color (pg. 32).
- **ISO 2-SENSITIVITY**: The camera sets sensitivity separately for each lens (pg. 32).
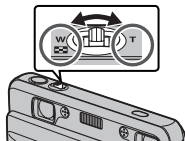
⚠ **Caution: ADV.2D Mode**

In **ADV.2D** mode, the camera displays the view through the left lens only. Be careful not to obstruct the right lens during shooting.
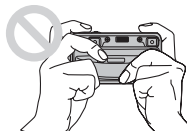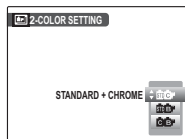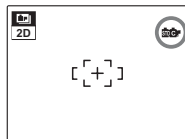
W **TELE/WIDE**

Zoom for the left lens can be adjusted using the zoom control. The right lens is zoomed all the way out.

2-COLOR

Select the desired combination of color options using the **2-COLOR SETTING** option in the shooting menu (pg. 63).

The selected combination is shown by an icon in the display.

ISO **2-SENSITIVITY**

If lighting permits, sensitivity is set higher for the right lens than for the left (the maximum value for the left lens is ISO 400, that for the right lens ISO 1600; note that the same value may be used for both lenses if the subject is brightly lit).

	Sensitivity	
Lighting	**Left lens**	**Right lens**
Dark	ISO 400	ISO 1600
↑	ISO 100	ISO 400
Bright	ISO 100	ISO 100

Higher sensitivities permit faster shutter speeds. If you pan the camera to follow a moving object, the background in the shot taken with the right lens will be less blurred than in the shot taken with the left, producing different speed effects. If lighting is poor, the shot taken with the right lens will be less blurred, while the shot taken with the left lens will have less noise.

ADV.**3D** *ADVANCED 3D*

This mode offers greater **3D** flexibility than **AUTO** mode. The camera takes two shots with the left lens and combines them to form a **3D** picture. Selecting **ADV.3D** in the mode selection menu displays the options listed below; press the selector up or down to highlight an option and press **MENU/OK**.

- **INTERVAL 3D SHOOTING**: The camera automatically takes the two shots at a fixed interval (pg. 35).
- **INDIVID. SHUTTER 3D**: One shot is taken each time you press the shutter button (pg. 34).
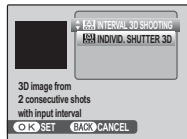
⌖ INDIVID. SHUTTER 3D

Use this option to combine two shots taken from different angles to create a **3D** picture. Use in macro mode, to create **3D** pictures of distant object, and in other situations in which the desired results can not be achieved in **AUTO** mode.
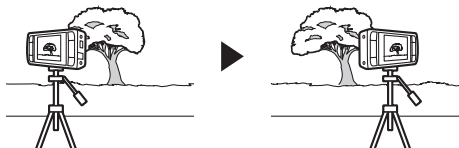
1 Choose the order in which the shots will be taken (left first or right first) using the ☰ **TURN** option in the shooting menu (pg. 63).
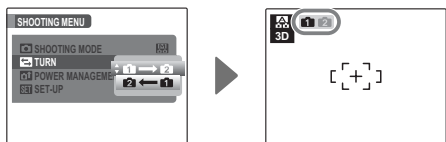
First shot shown by ❶

2 Take the first shot.

####👈 **Note**

To exit without taking the second shot, press **DISP/BACK** or turn the camera off. Note that the camera will turn off and shooting will be cancelled if no operations are performed for the length of time selected for ⏻ **AUTO POWER OFF** (pg. 85).

3 The first shot will be superimposed on the view through the lens. Using the first shot as a guide, reposition the camera and take the second shot to create a **3D** picture. Note that the 3D effect may not be visible if the parallax between the two positions is too great; the best results will be achieved if the distance the camera is moved between the two shots is between 1⁄30th and 1⁄50th of the distance to the subject.

☷ **INTERVAL 3D SHOOTING**

Use this option to take **3D** pictures of distant objects from a moving vehicle.
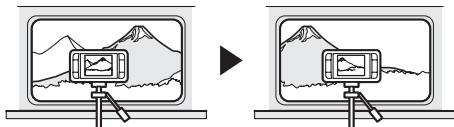
1 Select the delay between the two shots using the ☷ **3D INTERVAL TIME** option in the shooting menu (pg. 63). Choose shorter delays for less distant objects or faster-moving vehicles (the best results will be achieved if the distance the camera moves between the two shots is between $\frac{1}{30}$th and $\frac{1}{50}$th of the distance to the subject). The 3D effect may not be visible if the parallax between the two shots is too great or if another object is between the camera and your subject.
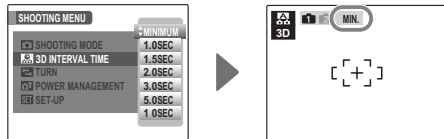

2 Choose the order in which the shots will be taken (left first or right first) using the ☷ **TURN** option in the shooting menu (pg. 63). Choose the order that matches the direction of motion.
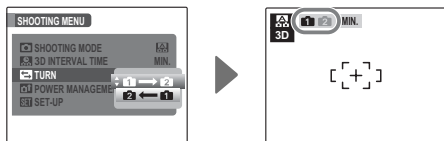

First shot shown by ❶

3 Take the first shot. A timer is displayed after the first shot; the second shot is taken when the timer reaches zero. No operations can

be performed while the timer is active; if the camera is turned off before the second shot is taken, no picture will be recorded.

More on Photography

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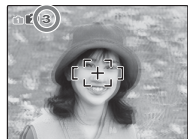
Playback Options

To view the most recent picture in the monitor, press the ▶ button.
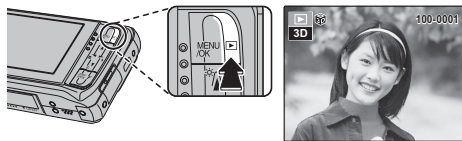
Press the selector right to view pictures in the order recorded, left to view pictures in reverse order. Keep the selector pressed to scroll rapidly to the desired frame.
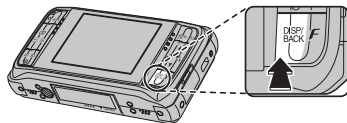
◐ Switching Between 3D and 2D

Press the **2D** button to view **3D** pictures in **2D**, the **3D** button to view **3D** pictures in **3D** (**2D** pictures are always displayed in **2D**). In **3D** playback, press the ⊞ and ⊟ buttons to adjust parallax.

◐ Choosing a Display Format

Press the **DISP/BACK** button to cycle through playback display formats as shown below.

*Indicators displayed*   *Indicators hidden*

Sort by date

Hide indicators for improved **3D** viewing.

☞ Note

Pictures taken using other cameras are indicated by a ⊞ ("gift image") icon during playback.

Playback Zoom

Select **T** to zoom in on pictures displayed in single-frame playback; select **W** to zoom out. When the picture is zoomed in, the selector can be used to view areas of the image not currently visible in the display.

Zoom indicator

Navigation window shows portion of image currently displayed in monitor
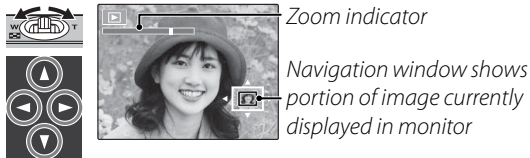
Press **DISP/BACK** to exit zoom.

✦ **Note**
Playback zoom is not available with cropped copies saved at a size of **640** or copies created with **RE-SIZE** (pg. 77).

⚠ **Caution: 3D Playback**
3D pictures are best viewed with the camera held horizontally. The 3D effect may not be visible at high zoom ratios or when the monitor is viewed at an angle. If **3D** pictures appear blurred even after parallax is adjusted, select **2D** playback.

✸ **Intelligent Face Detection (2D Only)**
Pictures taken with Intelligent Face Detection (pg. 64) are indicated by a 😊 icon. Press the ⊞ button to zoom in on the subject selected with Intelligent Face Detection. You can then use the zoom control to zoom in and out.

More on Playback

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▦ *Multi-Frame Playback*

To change the number of images displayed, select ▦ (**W**) when a picture is shown full-frame in the monitor.

Select ▦ (W) to increase the number of pictures displayed to five, nine, or a hundred.

*Select **T** to reduce the number of images displayed.*

Use the selector to highlight images and press **MENU/OK** to view the highlighted image full frame. In the nine- and hundred-frame displays, press the selector up or down to view more pictures.

Sort by Date

Choose sort-by-date mode to view pictures taken on a selected date.

1 Press **DISP/BACK** until the sort-by-date screen is displayed.

2 Use the selector up or down to highlight a date. Keep the selector pressed to scroll rapidly to the desired date.

3 Press the selector left or right to scroll through the pictures taken on the highlighted date. Keep the selector pressed to scroll rapidly to the desired frame.
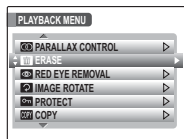
🗑 Deleting Pictures

The 🗑 **ERASE** option in the playback menu can be used to delete still pictures and movies, increasing the amount of space available on the memory card or in internal memory (for information on deleting pictures in single-frame playback, see page 18). *Note that deleted pictures can not be recovered. Copy important pictures to a computer or other storage device before proceeding.*
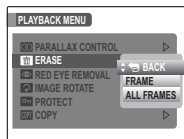
1 Press **MENU/OK** to display the playback menu.

2 Press the selector up or down to highlight 🗑 **ERASE**.

> **PLAYBACK MENU**
> 📷 PARALLAX CONTROL ▷
> 🗑 ERASE ▷
> 👁 RED EYE REMOVAL ▷
> 🔄 IMAGE ROTATE ▷
> 🔒 PROTECT ▷
> 📋 COPY ▷

3 Press the selector right to display delete options.

> **PLAYBACK MENU**
> 📷 PARALLAX CONTROL ▷
> 🗑 ERASE ↩ BACK
> 👁 RED EYE REMOVAL FRAME
> 🔄 IMAGE ROTATE ALL FRAMES
> 🔒 PROTECT
> 📋 COPY ▷

4 Press the selector up or down to highlight **FRAME** or **ALL FRAMES**.

**5** Press **MENU/OK** to display options for the selected item (pg. 40).

📖 Tips: Deleting Pictures

• When a memory card is inserted, pictures will be deleted from the memory card; otherwise, pictures will be deleted from internal memory.

• Protected pictures can not be deleted. Remove protection from any pictures you wish to delete (pg. 73).

• If a message appears stating that the selected images are part of a DPOF print order, press **MENU/OK** to delete the pictures.

More on Playback

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■ **FRAME: *Deleting Selected Images***

Selecting **FRAME** displays the dialog shown at right.
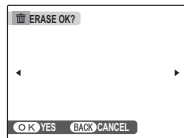
Press the selector left or right to scroll through pictures and press **MENU/OK** to delete the current picture (the picture is deleted immediately; be careful not delete the wrong picture).

Press **DISP/BACK** to exit when all the desired pictures have been deleted.
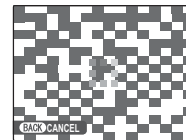
■ **ALL FRAMES: *Deleting All Images***

Selecting **ALL FRAMES** displays the confirmation shown at right.
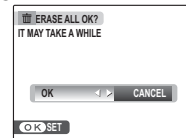
Highlight **OK** and press **MENU/OK** to delete all unprotected pictures.

The dialog shown at right is displayed during deletion. Press **DISP/BACK** to cancel before all pictures have been deleted (any pictures deleted before the button was pressed can not be recovered).

🎥 Recording Movies

Shoot short movies. **3D** movies are recorded in 3D movie format (pg. 102), **2D** movies in motion JPEG format with stereo sound recorded via the built-in microphone (be careful not to cover the microphone during recording).

1 Press the 🎥/📷 button.

Display shows time available
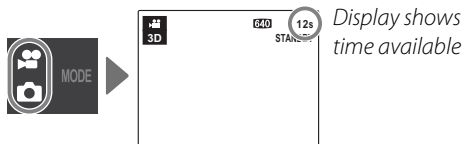
2 Press **3D** to record movies in **3D**, **2D** to record movies in **2D**. The current mode is shown in the monitor.
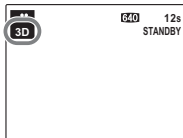

☛ Auto Parallax

If **ON** is selected for 📷 **AUTO PARALLAX CONTROL** (pg. 63), parallax will be adjusted automatically when the shutter button is pressed halfway. If **OFF** is selected, adjust parallax manually before recording begins (pg. 13).

✎ Choosing the Frame Size

To choose the frame size when recording movies to a memory card, press the **F** button and select **QUALITY**. Choose **640** (640×480 pixels) for better quality, **320** (320×240 pixels) for longer movies (if no memory card is inserted, movies will be recorded at a frame size of **320**). Press **MENU/OK** to return to movie recording mode.

Movies

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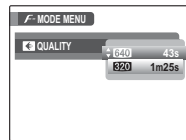
3 Frame the scene using the zoom control.

Zoom indicator
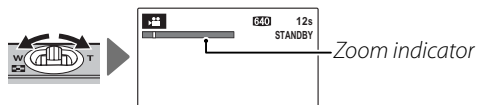
Zoom can not be adjusted once recording begins.

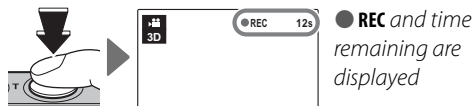**4** Press the shutter button all the way down to start recording.

● **REC** *and time remaining are displayed*

📝 Tip
There is no need to keep the shutter button pressed during recording.

👈 Note
Focus is set when recording begins; exposure and white balance are adjusted automatically throughout recording. The color and brightness of the image may vary from that displayed before recording begins.
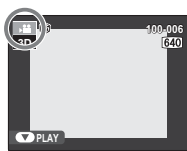
5 Press the shutter button halfway to end recording. Recording ends automatically when the movie reaches maximum length or memory is full.
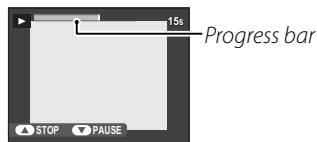
⚠ Caution
The indicator lamp lights while movies are being recorded. Do not open the battery chamber cover during shooting or while the indicator lamp is lit. Failure to observe this precaution could prevent the movie from being played back.

▶ Viewing Movies

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

Operation	Description
Start/pause playback	**Press the selector down** to start playback. Press again to pause.
End playback/ delete	**Press the selector up** to end playback. If playback is not in progress, pressing the selector up will delete the current movie.
Advance/ rewind	**Press the selector right** to advance, **left** to rewind. If playback is paused, the movie will advance or rewind one frame each time the selector is pressed.
Adjust volume	**Press MENU/OK** to pause playback and display volume controls. Press the selector up or down to adjust the volume; press **MENU/OK** again to resume playback.

Progress is shown in the monitor during playback.

*Progress bar*

▧ Tip: Viewing Movies on a Computer
Copy movies to the computer before viewing.

◥ Cautions
• Do not cover the speaker during playback.
• Vertical or horizontal streaks may appear in movies containing very bright subjects. This is normal and does not indicate a malfunction.

Movies

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Viewing Pictures on TV

Connect the camera to a TV and tune the television to the video channel to show pictures to a group. The optional A/V cable connects as shown below. Turn the camera off before connecting the cable.

Connect yellow plug to video-in jack

Insert into A/V cable connector

Connect white plug to audio-in jack
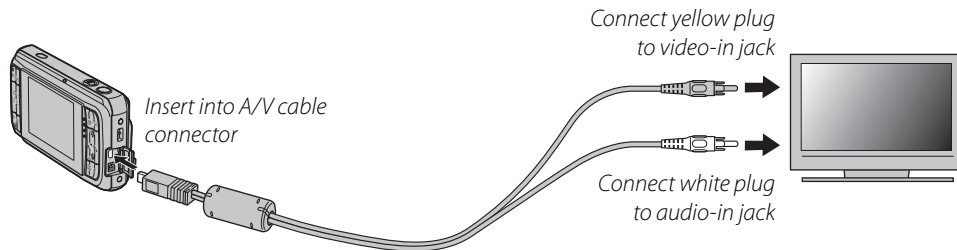
Press ▶ for about a second to turn the camera on. The camera monitor turns off and pictures are played back on the TV, with **3D** images displayed in **2D**. Note that the camera volume controls have no effect on sounds played on the TV; use the television volume controls to adjust the volume.

☛ Note
Image quality drops during movie playback.

◊ Caution
When connecting the cable, be sure the connectors are fully inserted.

Connections

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Printing Pictures via USB (**2D** Only)

If the printer supports PictBridge, the camera can be connected directly to the printer and pictures can be printed without first being copied to a computer. Note that depending on the printer, not all the functions described below may be supported.
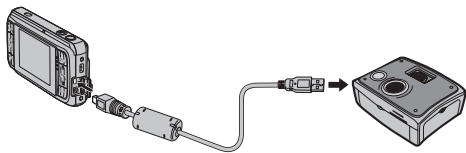
PictBridge

🔹 Printing in **3D**

3D pictures in MPO format can not be printed via direct USB connection, although JPEG copies created when **MPO+JPEG** is selected for **MPO** **3DREC** can be printed in **2D** (pg. 84). For information on **3D** prints, visit *http://fujifilm.com/3d/print/*.

Connecting the Camera

1 Connect the supplied USB cable as shown and turn the printer on.

2 Press the ▶ button for about a second to turn the camera on. **⇆ USB** will be displayed in the monitor, followed by the PictBridge display shown below at right.

⇆ USB		**PICTBRIDGE** TOTAL: 00000 ◻ 00 SHEETS ◀▶ FRAME OK OK DISP SET
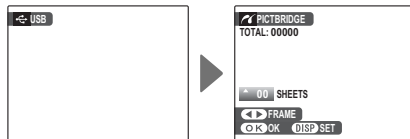
✦ Notes

- Print pictures from internal memory or a memory card that has been formatted in the camera.
- Default printer page size and print quality settings are used when printing via direct USB connection.

Connections

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Printing Selected Pictures

1 Press the selector left or right to display a picture you wish to print.
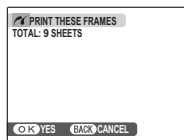
Note

To print one copy of the current picture, proceed directly to Step 3.

2 Press the selector up or down to choose the number of copies (up to 99). Repeat steps 1–2 to select additional pictures.

3 Press **MENU/OK** to display a confirmation dialog.

> **PRINT THESE FRAMES**
> **TOTAL: 9 SHEETS**
>
> **OK YES** **BACK CANCEL**

**4** Press **MENU/OK** to start printing.

📖 **Tip: Printing the Date of Recording**

To print the date of recording on pictures, press **DISP/BACK** in steps 1–2 to display the PictBridge menu (see "Printing the DPOF Print Order," below). Press the selector up or down to highlight **PRINT WITH DATE** and press **MENU/OK** to return to the PictBridge display (to print pictures without the date of recording, select **PRINT WITHOUT DATE**). To ensure that the date is correct, set the camera clock before taking pictures. Note that the **PRINT WITH DATE** option is only available with printers that support date printing.

During Printing

The message shown at right is displayed during printing. Press **DISP/BACK** to cancel before all pictures are printed (depending on the printer, printing may end before the current picture has printed).

> **PRINTING**
>
> **BACK CANCEL**
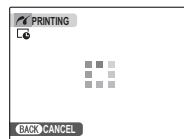
If printing is interrupted, press ▶ to turn the camera off and then on again.
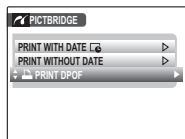
Disconnecting the Camera

Confirm that the above message is not displayed and turn the camera off. Disconnect the USB cable.
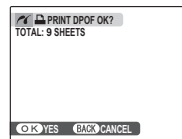
Printing the DPOF Print Order

To print the print order created with P **PRINT ORDER (DPOF)** in the playback F-mode menu (pg. 69):

1 In the PictBridge display, press **DISP/ BACK** to open the PictBridge menu.

2 Press the selector up or down to highlight P **PRINT DPOF**.

> PICTBRIDGE
> PRINT WITH DATE
> PRINT WITHOUT DATE
> PRINT DPOF

3 Press **MENU/OK** to display a confirmation dialog.

> PRINT DPOF OK?
> TOTAL: 9 SHEETS
>
> OK YES   BACK CANCEL

4 Press **MENU/OK** to start printing.

Connections

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Creating a DPOF Print Order

The **PRINT ORDER (DPOF)** option in the playback **F**-mode menu can be used to create a digital "print order" for PictBridge-compatible printers (pg. 47) or devices that support DPOF.

DPOF

DPOF (Digital Print Order Format) is standard that allows pictures to be printed from "print orders" stored in internal memory or on a memory card. The information in the order includes the pictures to be printed and the number of copies of each picture.

■ **WITH DATE 🖼 / WITHOUT DATE**

To modify the DPOF print order, select **PRINT ORDER (DPOF)** in the playback **F**-mode menu and press the selector up or down to highlight **WITH DATE 🖼** or **WITHOUT DATE**.

WITH DATE 🖼: *Print date of recording on pictures.*

WITHOUT DATE: *Print pictures without date.*

Press **MENU/OK** and follow the steps below.

1 Press the selector left or right to display a picture you wish to include in or remove from the print order.

2 Press the selector up or down to choose the number of copies (up to 99). To remove a picture from the order, press the selector down until the number of copies is 0.

Total number of prints
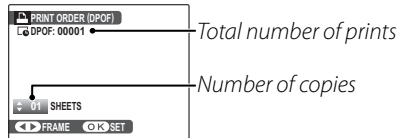
Number of copies

📓 **Tip: Intelligent Face Detection**

If the current picture was created with Intelligent Face Detection (pg. 64), pressing ⊞ sets the number of copies to the number of faces detected.

3 Repeat steps 1–2 to complete the print order. Press **MENU/OK** to save the print order when settings are complete, or **DISP/BACK** to exit without changing the print order.

4 The total number of prints is displayed in the monitor. Press **MENU/OK** to exit.
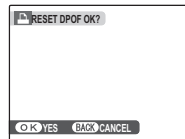
The pictures in the current print order are indicated by a 🖴 icon during playback.

■ **RESET ALL**

To cancel the current print order, select **RESET ALL** in the 🖴 **PRINT ORDER (DPOF)** menu. The confirmation shown at right will be displayed; press **MENU/OK** to remove all pictures from the order.

👉 **Notes**

- Remove the memory card to create or modify a print order for the pictures in internal memory.
- Print orders can contain a maximum of 999 pictures.
- If a memory card is inserted containing a print order created by another camera, the message shown at right will be displayed. Pressing **MENU/OK** cancels the print order; a new print order must be created as described above.
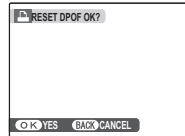
Viewing Pictures on a Computer

The supplied FinePixViewer software can be used to copy pictures to a computer, where they can be stored, viewed, organized, and printed. Before proceeding, install FinePixViewer as described below. *Do **NOT** connect the camera to the computer until installation is complete*.

Installing FinePixViewer

1 Confirm that the computer meets the following system requirements:

OS	Preinstalled versions of Windows Vista, Windows XP Home Edition (Service Pack 2), or Windows XP Professional (Service Pack 2)
CPU	• **Windows Vista**: 800 MHz Pentium 4 or better (3 GHz Pentium 4 or better recommended) • **Windows XP**: 800 MHz Pentium 4 or better (2 GHz Pentium 4 or better recommended)
RAM	• **Windows Vista**: 512 MB or more (1 GB or more recommended) • **Windows XP**: 512 MB or more
Free disk space	A minimum of 450 MB required for installation with 600 MB available when FinePixViewer is running (15 GB or more recommended under Windows Vista, 2 GB or more recommended under Windows XP)
Video	800 × 600 pixels or more with 16-bit color or better (1,024 × 768 pixels or more with 32-bit color recommended)
Other	• Built-in USB port recommended. Operation is not guaranteed with other USB ports. • Internet connection (56 kbps or faster recommended) required to use FinePix Internet Service; Internet connection and e-mail software required to use e-mail option.

Caution
For information about Windows 7, visit *http://www.fujifilm.com/support/download/camera/software/*. Other versions of Windows are not supported. Operation is not guaranteed on home-built computers or computers that have been upgraded from earlier versions of Windows.

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 Vista**
> If an AutoPlay dialog is displayed, click **SETUP.exe**. A "User Account Control" dialog will then be displayed; click **Allow**.

The installer will start automatically; click **Installing FinePixViewer** and follow the on-screen instructions to install FinePixViewer. Note that the Windows CD may be required during installation.

> **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 When prompted, remove the installer CD from the CD-ROM drive and click **Restart** to restart the computer. Store the installer CD in a dry location out of direct sunlight in case you need to re-install the software. The version number is printed at the top of the CD label for reference when updating the software or contacting customer support.

Installation is now complete. Proceed to "Connecting the Camera" on page 52. Note that the Windows CD may be required when the camera is connected for the first time.

Connections

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Connecting the Camera

1 If the pictures you wish to copy are stored on a memory card, insert the card into the camera (pg. 7). If no card is inserted, pictures will be copied from internal memory.

⚠ **Caution**

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.
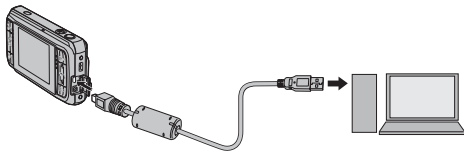
3 Press the ▶ button for about a second to turn the camera on. FinePixViewer will start automatically and the "Save Image Wizard" will be displayed. Follow the on-screen instructions to copy pictures to the computer. To exit without copying pictures, click **Cancel**.

⚠ **Caution**

If FinePixViewer does not start automatically, the software may not be correctly installed. Disconnect the camera and reinstall the software.

For more information on using FinePixViewer, select **How to Use FinePixViewer** in the FinePixViewer **Help** menu.

☞ **Note**
The camera will not turn off automatically while connected to a computer.

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⚠ Cautions

- Use only memory cards that have been formatted in the camera and contain pictures taken with the camera. If a memory card containing a large number of images is inserted, there may be a delay before FinePixViewer starts and FinePixViewer may be unable to import or save images. Use a memory card reader to transfer pictures.
- Make sure the indicator lamp is out before turning the camera off or disconnecting the USB cable. Failure to observe this precaution could result in loss of data or damage to internal memory or the memory card.
- Disconnect the camera before inserting or removing memory cards.
- In some cases, it may not be possible to access pictures saved to a network server using FinePixViewer in the same way as on a standalone computer.
- 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.

Updating FinePixViewer

The latest version of FinePixViewer can be downloaded from *http://www.fujifilm.com/.*

Uninstalling FinePixViewer

Only uninstall FinePixViewer before reinstalling the software or when it is no longer required. After quitting FinePixViewer and disconnecting the camera, open the control panel and use "Programs and Features" (Windows Vista) or "Add or Remove Programs" (Windows XP) to uninstall FinePixViewer, FinePix Resource, and FinePix Studio. Under Windows, one or more confirmation dialogs may be displayed; read the contents carefully before clicking **OK**.

Connections

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IR Communication

Still pictures can be copied from the camera to any device that supports high-speed infrared or IrSimple, including the optional FinePix REAL 3D V1 digital viewer. The camera can receive still pictures from devices that support high-speed infrared or IrSimpleShot™ (IRSS™). Before sharing pictures, match the **◖◗ IR COMMUNICATION** option in the camera setup menu to the infrared transmission type used by the other device (pg. 81). For details, see the manual provided with the device.

To share pictures, place the camera about 5 to 20 cm from the other device with the infrared ports pointing directly at each other. The ports should be at no more than a 15 ° angle. Be sure both devices are on.
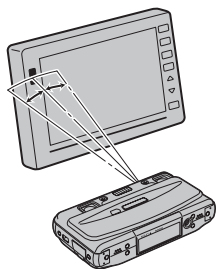
Maximum angle: approximately 15 °

⚠ Caution
Make sure that there are no obstacles between the two devices and that the infrared ports are correctly aligned and are not in direct sunlight or directly under a fluorescent light. Remote controls and other infrared devices and equipment that generates electrical noise may interfere with transmission.

◈ Tips
- For information on supported infrared devices, consult the compatibility information for this camera at the following website: *http://fujifilm.com/products/digital_cameras/support/ir.html*.
- **3D** images can only be transmitted to supported devices. Play images back in **2D** before transmitting them to other devices.

Sending Pictures to Other Devices

1 Press the *F* button and select 📶 **IR COMMUNICATION** in the *F*-mode menu. Pictures are displayed as shown below.
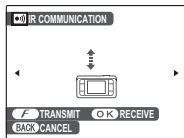
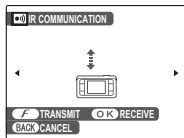**2** Press the selector left or right to display a picture you wish to send.

3 Press the *F* button to begin transmission.
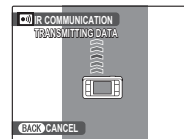
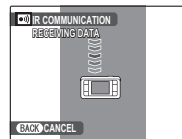**TRANSMISSION COMPLETED** will appear in the monitor when transmission is complete.

Connections

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Receiving Pictures from Other Devices

1 Press the $\boldsymbol{F}$ button and select **IR COMMUNICATION** in the $\boldsymbol{F}$-mode menu.

2 On the sending device, select the picture to be transmitted.

3 Press **MENU/OK** on the receiving device to begin transmission.

DATA RECEIVED will appear in the monitor when transmission is complete. Pictures received from other devices are indicated by a ("gift") icon during playback.

Cautions

• If an error is displayed during transmission, press **MENU/OK** to retransmit the picture or press **DISP/BACK** to cancel.

• Image size may be reduced for transmission. **L**- and **M**-size pictures are converted to size **S** (pg. 59).

• Movies can not be shared via infrared. **3D** pictures displayed in **2D** are converted to JPEG for transmission; otherwise, **3D** pictures are transmitted in **3D** format.

Using the Menus: Shooting Mode

The $\mathbf{\mathit{F}}$-mode and shooting menus contain settings for a wide range of shooting conditions.

Using the $\mathbf{\mathit{F}}$-Mode Menu

1 Press the $\mathbf{\mathit{F}}$ button to display the $\mathbf{\mathit{F}}$-mode menu.

> **F-MODE MENU**
> | ISO | AUTO ► |
> | IMAGE SIZE | 4:3 |
> | IMAGE QUALITY | N |
> | FINEPIX COLOR | STD |

2 Press the selector up or down to highlight the desired menu item.

3 Press the selector right to display options for the highlighted item.

> **F-MODE MENU**
> AUTO
> 4:3
> IMAGE QUALITY   FINE
> STD   ▸NORMAL

4 Press the selector up or down to highlight the desired option.

5 Press **MENU/OK** to select the highlighted option.

F-Mode Menu Options

| Menu item	Description	Options	Default
🕪 **ISO**	Adjust ISO sensitivity (pg. 59). Choose higher values when the subject is poorly lit.	**AUTO** / **1600** / **800** / **400** / **200** / **100**	**AUTO**
🖼 **IMAGE SIZE**	Choose image size and aspect ratio (pg. 59).	**L 4:3** / **L 3:2** / **M 4:3** / **S 4:3**	**L 4:3**
📇 **IMAGE QUALITY**	Choose image quality (pg. 60).	**F** / **N**	**N**
🖬 **WHITE BALANCE**	Adjust color for different light sources (pg. 60).	**AUTO**/☀/☀/🌫/🌫/🌫/⚘/◨	**AUTO**
🎨 FINEPIX **COLOR**	Shoot pictures in standard or saturated color or in black-and-white (pg. 61).	**STD**/🎨ꜰ/🎨ꜰ	**STD**
🖾 **SET SHUTTERSPEED, APERTURE.**	Adjust exposure for bright, dark, or high-contrast scenes in modes **M** (pg. 29).	—	—
🖾 **SETTING APERTURE**	Adjust exposure for bright, dark, or high-contrast scenes in modes **A** (pg. 30).	—	—
🖾 **EXP. COMPENSATION**	Adjust exposure for bright, dark, or high-contrast scenes in mode **P** (pg. 31).	—	—

👉 Note
Some options are not available in all shooting modes.

⬛ ISO

Control the camera's sensitivity to light. Higher values can be used to reduce blur when lighting is poor; note, however, that mottling may appear in pictures taken at high sensitivities. If **AUTO** is selected, the camera will adjust sensitivity automatically in response to shooting conditions.

Settings other than **AUTO** are shown by an icon in the display.
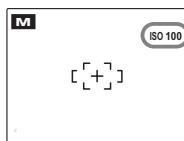
☛ Note
Sensitivity is not reset when the camera is turned off.

⬛ IMAGE SIZE

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

Option	Prints at sizes up to
L 4:3	31 × 23 cm (12.2 × 9.1 in.)
L 3:2	31 × 21 cm (12.2 × 8.1 in.)
M 4:3	22 × 16 cm (8.6 × 6.5 in.)
S 4:3	17 × 13 cm (6.8 × 5.1 in.)

The number of pictures that can be taken at current settings (pg. 104) is shown to the right of the image quality icon in the display.

☛ Note
Image quality is not reset when the camera is turned off or another shooting mode is selected.

Menus

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Using the Menus: Shooting Mode

🎞 IMAGE QUALITY
Choose how much image files are compressed. Select **FINE** (low compression) for higher image quality, **NORMAL** (high compression) to increase the number of pictures that can be stored.

🎚 WHITE BALANCE
For natural colors, choose a setting that matches the light source (for an explanation of "white balance," see the Glossary on page 103).

Option	Description
AUTO	White balance adjusted automatically.
☀	For subjects in direct sunlight.
🏠	For subjects in the shade.
🌗₁	Use under "daylight" fluorescent lights.
🌗₂	Use under "warm white" fluorescent lights.
🌗₃	Use under "cool white" fluorescent lights.
💡	Use under incandescent lighting.
🐟	For underwater subjects in an aquarium.

If **AUTO** does not produce the desired results (for example, when taking close-ups), choose the option that matches the light source.

☞ Notes
- Auto white balance is used with the flash. Turn the flash off (pg. 23) to take pictures at other settings.
- Results vary with shooting conditions. Play pictures back after shooting to check colors in the monitor.

FINEPIX **COLOR**

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

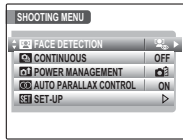| Option	Displayed in
F-**STANDARD**	Standard contrast and saturation. Recommended in most situations.
F-**CHROME**	Vivid contrast and color. Choose for vivid shots of flowers or enhanced greens and blues in landscapes. Not available in **SP** mode.
F-**B&W**	Take pictures in black and white.

Settings other than *F*-**STANDARD** are shown by an icon in the monitor.

◀ **Notes**

• FINEPIX **COLOR** is not reset when the camera is turned off or another shooting mode is selected.

• Depending on the subject, the effects of *F*-**CHROME** may not be visible in the monitor.

Menus

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Using the Shooting Menu

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

> **SHOOTING MENU**
> FACE DETECTION
> CONTINUOUS — OFF
> POWER MANAGEMENT
> AUTO PARALLAX CONTROL — ON
> SET-UP

2 Press the selector up or down to highlight the desired menu item.

3 Press the selector right to display options for the highlighted item.

> **SHOOTING MENU**
> FACE DETECTION
> CONTINUOUS — OFF
> POWER MANAG — POWER SAVE
> AUTO PARALLA — QUICK AF
> SET-UP
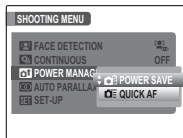
4 Press the selector up or down to highlight the desired option.

5 Press **MENU/OK** to select the highlighted option.

Shooting Menu Options

Menu item	Description	Options	Default
⊡ SCENE POSITION	Choose a scene for **SP** mode (pg. 27).	◎✦/◉/●/▲/✹/✦ᶜ/✦ᶜ/⛷/❄/✦▲/◈/▽/ⅷⅲⅰ	◎✦
⊡ SHOOTING MODE (twin camera mode)	Choose a **2D** shooting mode for **ADV.2D** mode (pg. 31).	⊞/⊟/⊡	⊞
⊡ SHOOTING MODE (advanced **3D**)	Choose a **3D** shooting mode for **ADV.3D** mode (pg. 33).	⊠/⊟	⊠
⊡ FACE DETECTION	Choose whether the camera automatically detects and sets focus and exposure for human portrait subjects. Can be combined with red-eye removal (pg. 64).	⊡/⊡/OFF	⊡
⊡ CONTINUOUS	Shoot a series of pictures (pg. 65).	⊡/⊡/OFF	OFF
⊡ 2-COLOR SETTING	Choose color reproduction options for pictures recorded using **⊡ 2-COLOR** (pg. 32).	⊡/⊡/⊡	⊡
⊡ 3D INTERVAL TIME	Choose the time lag for pictures recorded with **⊡ INTERVAL 3D SHOOTING** (pg. 35).	**MIN./1.0/1.5/2.0/3.0/5.0/10**	**MIN.**
⊡ TURN	Choose the order in which pictures are taken in **ADV.3D** mode (pg. 34, 35).	❶→❷/❷←❶	❶→❷
⊡ PHOTOMETRY	Choose how the camera meters exposure (pg. 66).	⊡/⊡/⊡	⊡
⊡ 2D AF MODE	Choose how the camera selects a focus area (pg. 66).	⊡/⊞	⊡
⊡ POWER MANAGEMENT	Optimize camera performance for increased battery life or quick focus (pg. 67).	⊡/⊡	⊡
⊡ AUTO PARALLAX CONTROL	Choose **ON** for auto **3D** parallax adjustment (pg. 13).	**ON/OFF**	**ON**
⊡ SET-UP	Perform basic camera setup such as choosing a language and setting the time and date (pg. 78).	⊡/⊡/⊡/⊡/⊡	—

← Note

Some options are not available in all shooting modes.

Menus

☻ FACE DETECTION (**2D** Only)

Intelligent Face Detection allows the camera to automatically detect human faces and set focus and exposure for a face anywhere in the frame for shots that emphasize portrait subjects. Choose for group portraits (in vertical or horizontal orientations) to prevent the camera from focusing on the background. Intelligent Face Detection also offers a red-eye removal option for removing "red-eye" effects caused by the flash.

- **☻ ON ◉ ON**: Intelligent Face Detection and red-eye removal on. Use with the flash.
- **☻ ON ◉ OFF**: Intelligent Face Detection on; red-eye removal off.
- **OFF**: Intelligent Face Detection and red-eye removal off.

◧ Tip: Red-Eye Removal

When red-eye removal is on, pictures are processed to reduce red-eye before being recorded. Select **ON** for ◉ **SAVE ORG IMAGE** in the setup menu (pg. 80) to save unprocessed copies of pictures created with red-eye removal.

◧ Tip: Intelligent Face Detection

The selected face is indicated by a green border (note that, in some shooting modes, exposure is adjusted for the current shooting mode and may not be optimized for the selected subject). If more than one face is detected, the

Green border

camera will select the face closest to the center of the frame; other faces are indicated by white borders (note that some time may be required for face detection if the number of faces is very large). Intelligent Face Detection is recommended when using the self-timer for group- or self-portraits (pg. 26).

When a picture taken with Intelligent Face Detection is displayed, the camera can automatically select faces for red-eye removal (pg. 71), playback zoom (pg. 37), slide shows (pg. 69), printing (pg. 48), and cropping (pg. 76).

⚠ **Cautions**

- If no face is detected when the shutter button is pressed halfway (pg. 17), the camera will focus on the subject at the center of the display and red-eye will not be removed.
- If the subject moves as the shutter button is pressed, their face may not be in the area indicated by the green border when the picture is taken.

🔁 **CONTINUOUS**

Capture motion in a series of pictures.

- **TOP 40** (HIGH SPEED): The camera takes up to 40 pictures at high speed while the shutter button is pressed. Not available in **3D**.
- **TOP 40**: The camera takes up to 40 pictures while the shutter button is pressed.
- **OFF**: The camera takes one picture each time the shutter button is pressed.

☛ **Notes**

- The flash turns off automatically. The previously-selected flash mode is restored when **OFF** is selected for 🔁 **CONTINUOUS**.
- Frame rate varies with shutter speed.

Menus

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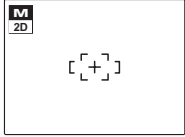
▣ PHOTOMETRY

Choose how the camera meters exposure when Intelligent Face Detection (pg. 64) is off.

- **▣ MULTI**: Automatic scene recognition is used to adjust exposure for a wide range of shooting conditions.
- **[•] SPOT**: The camera meters lighting conditions at the center of the frame. Recommended when the background is much brighter or darker than the main subject. Can be used with focus lock (pg. 20) to meter off-center subjects.
- **[ ] AVERAGE**: Exposure is set to the average for the entire frame. Provides consistent exposure across multiple shots with the same lighting, and is particularly effective for landscapes and portraits of subjects dressed in black or white.

▣ 2D AF MODE (ℤ️ Only)

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 monitor when macro mode is on (pg. 22).

- **▣ CENTER**: The camera focuses on the subject in the center of the frame. This option can be used with focus lock.

- **▦ MULTI**: When the shutter button is pressed halfway, the camera detects high-contrast subjects near the center of the frame and selects the focus area automatically (if the focus frame is not displayed, select **▣ CENTER** and use focus lock; pg. 20).

Press halfway

Focus frame
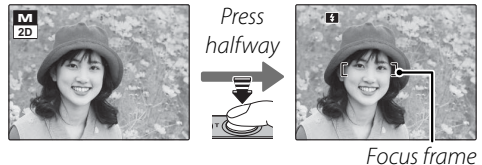
POWER MANAGEMENT

Optimize camera performance for increased battery life or quick focus response.

- **POWER SAVE**: Monitor refresh rate is reduced. If no operations are performed for 10 s, the monitor will dim automatically to save power. This option is recommended when the camera is used for extended periods at high temperatures to prevent mottled vertical streaks from appearing in photographs.
- **QUICK AF**: Reduces focusing time, ensuring a quick shutter response. The monitor dims to save power only if no operations are performed for 30 s. An icon appears in the display.

Notes

- **POWER SAVE** does not take effect when Intelligent Face Detection is on.
- If **OFF** is selected for **AUTO POWER OFF**, changing the option selected for **POWER MANAGEMENT** resets **AUTO POWER OFF** to **5 MIN** (pg. 85).

Using the Menus: Playback Mode

The *F*-mode and playback menus are used to manage the pictures in internal memory or on the memory card.

Using the *F*-Mode Menu

1 Press the ▶ button to enter playback mode (pg. 36).

2 Press the *F* button to display the *F*-mode menu.
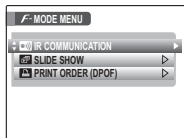
> **F-MODE MENU**
> IR COMMUNICATION
> SLIDE SHOW   ▷
> PRINT ORDER (DPOF) ▷

3 Press the selector up or down to highlight the desired menu item.

4 Press the selector right to display options for the highlighted item.

> **F-MODE MENU**
> IR COMMUNICATION   NORMAL
> SLIDE SHOW   NORMAL
> PRINT ORDER (DPOF) FADE-IN
>   FADE-IN
>   MULTIPLE
>   3D FADE
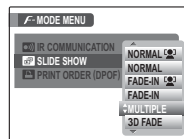
5 Press the selector up or down to highlight the desired option.

6 Press **MENU/OK** to select the highlighted option.

F-Mode Menu Options

Option	Description
IR COMMUNICATION	Copy pictures to other devices via infrared (pg 54).
SLIDE SHOW	View pictures in a slide show.
PRINT ORDER (DPOF)	Select pictures for printing on DPOF- and PictBridge-compatible devices (pg. 47, 48).

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. When a movie is displayed, movie playback will begin automatically, and the slide show will continue when the movie ends. The show can be ended at any time by pressing **MENU/OK**.

Option	Displayed in
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.
3D FADE	**3D** images fade in from **2D** to **3D**.

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

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Using the Playback Menu

1 Press ▶ to enter playback mode.

2 Press **MENU/OK** to display the playback menu.
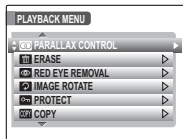
> PLAYBACK MENU
> PARALLAX CONTROL
> ERASE
> RED EYE REMOVAL
> IMAGE ROTATE
> PROTECT
> COPY

3 Press the selector up or down to highlight the desired menu item.

4 Press the selector right to display options for the highlighted item.

> PLAYBACK MENU
> PARALLAX CONTROL
> ERASE   BACK
> RED EYE REMOVAL FRAME
> IMAGE ROTATE   ALL FRAMES
> PROTECT
> COPY
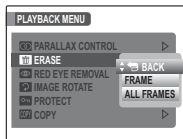
5 Press the selector up or down to highlight the desired option.

6 Press **MENU/OK** to select the highlighted option.

Playback Menu Options

The following options are available:

Option	Description
PARALLAX CONTROL	Create copies of 3D pictures with modified parallax (pg. 71).
ERASE	Delete all or selected pictures (pg. 39).
RED EYE REMOVAL	Create copies with reduced red eye (pg. 71).
IMAGE ROTATE	Rotate pictures (pg. 72).
PROTECT	Protect pictures from accidental deletion (pg. 73).
COPY	Copy pictures between internal memory and a memory card (pg. 74).
CROP	Create cropped copies of pictures (pg. 76).
RESIZE	Create small copies of pictures (pg. 77).
SET-UP	Perform basic camera setup (pg. 78).

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c **PARALLAX CONTROL (3D Only)**

If the current picture is marked with a 🔲 icon to indicate that it was taken in **3D**, this option can be used to create a copy with modified parallax. Press ⊞ or ⊟ to adjust parallax (pg. 13), then select c **PARALLAX CONTROL** in the playback menu and press **MENU/OK** to create a copy with modified parallax.
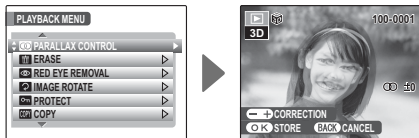
b **RED EYE REMOVAL (2D Only)**

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 redeye. The camera will analyze the image; if red-eye is detected, the image will be processed to create a copy with reduced red-eye.
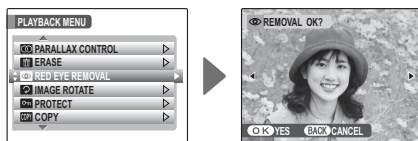
◆ **Notes**

- 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 b **RED EYE REMOVAL** are indicated by a b icon during playback.

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₂ IMAGE ROTATE (₂ᴅ Only)

By default, pictures taken in tall orientation are displayed in wide orientation. Use this option to display pictures in the correct orientation in the monitor. It has no effect on pictures displayed on a computer or other device.
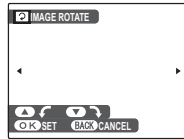
→ Notes

- **3D** images and protected pictures can not be rotated. Remove protection before rotating **2D** images (pg. 73).
- The camera may not be able to rotate pictures created with other devices.

To rotate a picture, play the picture back and select **₂ IMAGE ROTATE** in the playback menu.

1 Press the selector down to rotate the picture 90° clockwise, up to rotate the picture 90° counterclockwise.

2 Press **MENU/OK** to confirm the operation (to exit without rotating the picture, press **DISP/BACK**).

The next time the picture is played back, it will automatically be rotated.

☑ **PROTECT**

Protect pictures from accidental deletion. The following options are available.

■ **FRAME**

Protect selected pictures.

1 Press the selector left or right to display the desired picture.
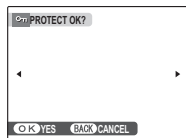
Picture not protected   *Protected picture*
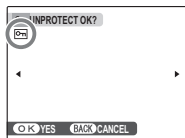
2 Press **MENU/OK** to protect the picture. If the picture is already protected, pressing **MENU/OK** will remove protection from the image.

3 Repeat steps 1–2 to protect additional images. Press **DISP/BACK** to exit when the operation is complete.

■ **SET ALL**

Press **MENU/OK** to protect all pictures, or press **DISP/BACK** to exit without changing picture status.
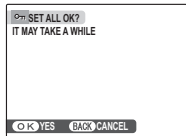
■ **RESET ALL**

Press **MENU/OK** to remove protection from all pictures, or press **DISP/BACK** to exit without changing picture status.
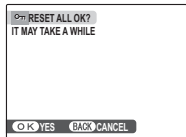
If the number of pictures affected is very large, the display at right will appear in the monitor while the operation is in progress. Press **DISP/BACK** to exit before the operation is complete.
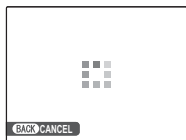
⚠ **Caution**

Protected pictures will be deleted when the memory card or internal memory is formatted (pg. 85).

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COPY **COPY**
Copy pictures between internal memory and a memory card.

1 Press the selector up or down to highlight ⓜ **INTERNAL MEMORY ➡ ⓢ CARD** (copy from internal memory to the memory card) or ⓢ **CARD ➡ ⓜ INTERNAL MEMORY** (copy from a memory card to internal memory).

2 Press the selector right to display options for the highlighted item.

> **COPY**
> ⓜ INTERNAL MEMORY ➡ FRAME
> ⓢ CARD ➡ ⓜ INTER ALL FRAMES
> OK YES   BACK CANCEL
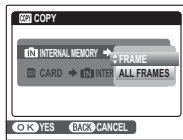
3 Press the selector up or down to highlight **FRAME** or **ALL FRAMES**.

4 Press **MENU/OK**.

📖 **Tip: Copying Pictures Between Memory Cards**
To copy pictures between two memory cards, insert the source card and copy the pictures to internal memory, then remove the source card, insert the destination card, and copy the pictures from internal memory.

■ **FRAME**

Copy selected frames.

COPY OK?

100-0001

◀ ▶

OK YES BACK CANCEL
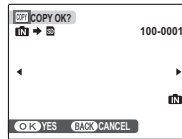
1 Press the selector left or right to display the desired picture.

2 Press **MENU/OK** to copy the picture.

3 Repeat steps 1–2 to copy additional images. Press **DISP/BACK** to exit when the operation is complete.

■ **ALL FRAMES**

Press **MENU/OK** to copy all pictures, or press **DISP/BACK** to exit without copying pictures.

COPY ALL OK?

100-0001

IT MAY TAKE
A WHILE

◀ ▶

OK YES BACK CANCEL
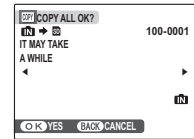
⚠ **Cautions**

• Copying ends when the destination is full.
• DPOF print information is not copied (pg. 48).

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✂ CROP

To create a cropped copy of a picture, play the picture back and select ✂ **CROP** in the playback menu (pg. 70).

1 Use the zoom control to zoom in and out and use the selector to scroll the picture until the desired portion is displayed (to exit to single-frame playback without creating a cropped copy, press **DISP/BACK**).

Zoom indicator

Navigation window shows portion of image currently displayed in monitor
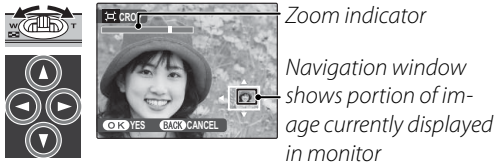
If the size of the final copy will be **640**, **OK** will be displayed in yellow.

📖 Tip: Intelligent Face Detection (2D Only)

If the picture was shot with Intelligent Face Detection (pg. 64), 😃 will be displayed in the monitor. Press the ⊞ button to zoom in on the selected face.

2 Press **MENU/OK**. A confirmation dialog will be displayed.
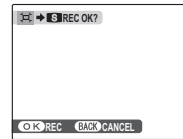
Copy size (**M**, **S**, or **640**) is shown at the top. Larger crops produce larger copies; all copies have an aspect ratio of 4 : 3.

3 Press **MENU/OK** to save the cropped copy to a separate file.

⬛ **RESIZE**

To create a small copy of a picture, play the picture back and select ⬛ **RESIZE** in the playback menu (pg. 70).

1 Press the selector up or down to highlight **640 STANDARD** or **320 SMALL**.

2 Press **MENU/OK** to select the highlighted option.

**3** Press **MENU/OK** to copy the picture at the selected size.

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 up or down to highlight 🔧 **SET-UP**.

1.3 Press the selector right to display the setup menu.

SET-UP	
◀ 🔘 📷1 📷2 📷3 📷4 ▶	
📷 IMAGE DISP.	1.5 SEC
🔢 FRAME NO.	CONT.
📷 SAVE ORG IMAGE	OFF
💡 ILLUMINATION	ON
🔍 DIGITAL ZOOM	OFF
3D 3DREC	MPO+JPEG
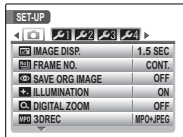
2 Choose a page.

2.1 Press the selector left or right to choose a page.

SET-UP	
◀ 🔘 📷1 📷2 📷3 📷4 ▶	
📷 FORMAT	▷
言語 言語/LANG.	ENGLISH
🕐 AUTO POWER OFF	2 MIN
🕐 TIME DIFFERENCE	✈
🎨 BACKGROUND COLOR	▷
ℹ️ GUIDANCE DISPLAY	ON

2.2 Press the selector down to enter the menu.
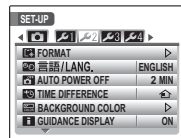
3 Adjust settings.

3.1 Press the selector up or down to highlight a menu item.

SET-UP	
FORMAT	▷
言語/LANG.	ENGLISH
AUTO POWER OFF	2 MIN ▶
TIME DIFFERENCE	🏠
BACKGROUND COLOR	▷
GUIDANCE DISPLAY	ON

3.2 Press the selector right to display options for the highlighted item.

SET-UP	
FORMAT	▷
言語/LANG.	
AUTO POWER OFF	5 MIN
TIME DIFFERENCE	2 MIN
BACKGROUND COLOR	OFF
GUIDANCE DISPLAY	ON
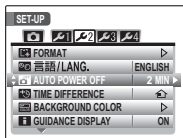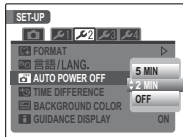
3.3 Press the selector up or down to highlight an option.

3.4 Press **MENU/OK** to select the highlighted option.

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Setup Menu Options

	Menu item	Description	Options	Default
O	**IMAGE DISP.**	Choose how long pictures are displayed after shooting (pg. 82).	**3 SEC** / **1.5 SEC** / **ZOOM** / **OFF**	**1.5 SEC**
	FRAME NO.	Choose how files are named (pg. 83).	**CONT.** / **RENEW**	**CONT.**
	SAVE ORG IMAGE	Choose whether to save unprocessed copies of pictures taken using red-eye removal.	**ON** / **OFF**	**OFF**
	ILLUMINATION	If **ON** is selected, the shooting indicator will light when the camera is turned on. It will also light after a picture is taken to let the subjects know that shooting is complete.	**ON** / **OFF**	**ON**
	DIGITAL ZOOM	Enable or disable digital zoom (pg. 84).	**ON** / **OFF**	**OFF**
	3DREC	Choose **MPO+JPEG** to save JPEG copies of **3D** images (pg. 84).	**MPO+JPEG** / **MPO**	**MPO+JPEG**
🔧	**DATE/TIME**	Set the camera clock (pg.11).	—	—
	OPERATION VOL.	Adjust the volume of camera controls.	🔊 (high) / 🔉 (mid) /	🔉
	SHUTTER VOLUME	Adjust the volume of the shutter sound.	🔈 (low) / 🔇 **OFF** (mute)	
	SHUTTER SOUND	Choose the sound made by the shutter.	♪1 / ♪2	♪1
	PLAYBACK VOLUME	Adjust the volume for movie playback (pg. 84).	—	**7**
	LCD BRIGHTNESS	Control the brightness of the display (pg. 84).	—	**0**
🔧	**FORMAT**	Format internal memory or memory cards (pg. 85).	—	—
	言語/LANG.	Choose a language (pg.11).	See page 107	**ENGLISH**
	AUTO POWER OFF	Choose the auto power off delay (pg. 85).	**5 MIN** / **2 MIN** / **OFF**	**2 MIN**
	TIME DIFFERENCE	Set the clock to local time (pg. 86).	🏠 / ✈	🏠
	BACKGROUND COLOR	Choose a color scheme for menus and cursors.	—	—
	GUIDANCE DISPLAY	Choose whether to display tool tips.	**ON** / **OFF**	**ON**

	Menu item	Description	Options	Default
	📹 **VIDEO SYSTEM**	Choose a video mode for connection to a TV (pg. 44).	**NTSC** / **PAL**	—
	📶 **IR COMMUNICATION**	Choose a standard for infrared transmission: **STANDARD** for use with cameras, printers, or digital viewers, **IrSS** for use with TVs (pg. 54).	**STD** / **IrSS**	**STD**
	🔲 **3D LEVEL**	Choose the amount of 3D effect in the setup menu.	**OFF** / **LEVEL 1**–**3**	**LEVEL 1**
🔧3	📷 **3D CAUTION DISP**	Disable **3D** to prevent fatigue or display a warning after 30 minutes of use (pg. 87).	**ON** / **OFF** / **NOT 3D**	**ON**
	🔧 **OPT AXIS CONTROL**	Align the optical axes of the twin lenses (pg. 87).	—	**0**
	🔄 **RESET**	Reset all settings except 🕐 **DATE/TIME**, 🕐 **TIME DIFFERENCE**, 🎨 **BACKGROUND COLOR**, and 📹 **VIDEO SYSTEM** to default values. A confirmation dialog will be displayed, press the selector left or right to highlight **OK** and press **MENU/OK**.	—	—
🔧4	🎬 **DEMO MODE**	If **ON** is selected when the camera is powered by an AC power adapter, a demo will play when the camera is turned on. Press the shutter button to exit demo mode.	**ON** / **OFF**	**ON**

🖼 IMAGE DISP.

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

• **3 SEC**/**1.5 SEC**: Pictures are displayed for the specified time before being recorded to the memory card. Colors may differ from those in the final picture.
• **ZOOM (CONTINUOUS)**: Pictures are displayed until the **MENU/OK** button is pressed. Pictures can be zoomed in to check fine details. Not available in 🔴✦ or **ADV.2D** mode or when an option other than **OFF** is selected for 🖼 **CONTINUOUS** (pg. 65).
• **OFF**: Pictures are not automatically displayed after shooting.

B **FRAME NO.**

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. B **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.

Frame number

| ▶ | 100-0001 |

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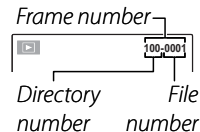
- **CONTINUOUS**: Numbering continues from the last file number used or the first available file number, whichever is higher. Choose this option to reduce the number of pictures with duplicate file names.
- **RENEW**: Numbering is reset to 0001 after formatting or when a new memory card is inserted.

☛ **Notes**

- If the frame number reaches 999-9999, the shutter release will be disabled (pg. 100).
- Selecting R **RESET** (pg. 81) resets B **FRAME NO.** to **CONTINUOUS** but does not reset frame numbering.
- Frame numbers for pictures taken with other cameras may differ.

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Q DIGITAL ZOOM (2D Only)

If **ON** is selected, selecting **T** at the maximum optical zoom position will trigger digital zoom, further magnifying the image. To cancel digital zoom, zoom out to the minimum digital zoom position and select **W**.

Zoom indicator

Zoom indicator, **DIGITAL ZOOM** *off*

Zoom indicator, **DIGITAL ZOOM** *on*

Optical zoom

Optical zoom | Digital zoom
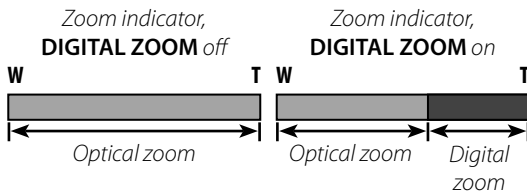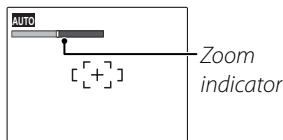
⚠ **Caution**

Digital zoom produces lower quality images than optical zoom.

MPO 3DREC

Choose **MPO** to save **3D** images in multi-picture (MPO) format, **MPO+JPEG** to save a JPEG copy in addition to the multi-picture file. For information on file formats, see the Glossary on page 102.

☞ **Note**

MPO files can not be printed in **2D** (pg. 45). The supplied FinePixViewer is required to view MPO files on a computer (pg. 50).

◀ PLAYBACK VOLUME

Press the selector up or down to choose volume for movie playback and press **MENU/OK** to select.
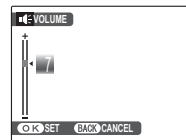
☼ LCD BRIGHTNESS

Press the selector up or down to choose display brightness and press **MENU/OK** to select.
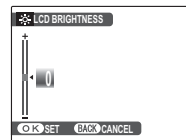
***E* FORMAT**

Format internal memory or a memory card. If a memory card is inserted in the cam-era, this option will format the memory card. If no memory

card is inserted, 🔲 will be displayed in the format dialog and this option will format internal mem-ory. Press the selector left to highlight **OK** and press **MENU/OK** to begin formatting.
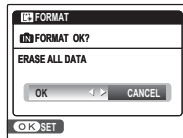
⚠ **Cautions**

- All data—including protected pictures—will be de-leted. Be sure important files have been copied to a computer or other storage device.
- Do not open the battery-chamber cover during for-matting.

🖽 AUTO POWER OFF

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 the camera will turn off au-tomatically after five minutes if **🗗 QUICK AF** is selected for **🖸 POWER MANAGEMENT** or if the camera enters standby while in movie mode). Re-gardless of the option selected, the camera will not turn off automatically when connected to a printer (pg. 45) or computer (pg. 50) or when a slide show is in progress (pg. 69).

📖 **Tip: Reactivating the Camera**

To reactivate the camera after it has turned off auto-matically, open the lens cover or press the ▶ button for about a second (pg. 10).

F **TIME DIFFERENCE**

When traveling, use this option to switch the camera clock instantly from your home time zone to the local time at your destination.

1 Specify the difference between local time and your home time zone.

1.1 Press the selector up or down to highlight **LOCAL**.

1.2 Press the selector right to display the time difference.

> **TIME DIFFERENCE**
> 12/31/2050 10:00 AM
> 12/31/2050 10:00 AM
>
> 00 : 00
>
> SET CANCEL
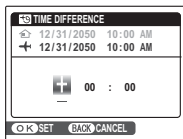
1.3 Press the selector left or right to highlight **+**, **–**, hours, or minutes; press up or down to edit. The minimum increment is 15 minutes.

1.4 Press **MENU/OK** when settings are complete.

2 Switch between local time and your home time zone.

To set the camera clock to local time, highlight **LOCAL** and press **MENU/OK**. To set the clock to the time in your home time zone, select **HOME**. If **LOCAL** is selected, **+** will be displayed in the monitor for three seconds after the camera enters shooting mode, and the date will be displayed in yellow.

> AUTO
>
> [+]
>
> 12/31/2050 10:00 AM
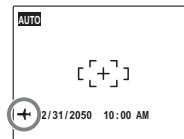
After changing time zones, check that the date and time are correct.

ꙮ **3D CAUTION DISP**

To prevent fatigue, **3D** can be disabled or a warning can be displayed after prolonged use.

- **ON**: **3D** enabled, but a warning is displayed after 30 minutes of continuous use (measured from when this option is selected or the start of **3D** display).
- **OFF**: **3D** enabled with no warning displayed after prolonged use.
- **NOT 3D DISP**: **3D** disabled.

ꙮ **OPT AXIS CONTROL**

Reposition the lenses to vertically align their optical axes for **3D** photography. A setting of 0 is recommended in most circumstances; to choose a different setting, press the selector up or down and press **MENU/OK** to select. Positive values raise the left lens.
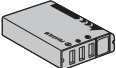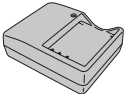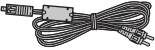
Optional Accessories

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

■ **Digital Viewers**

FinePix REAL 3D V1 (sold separately)

■ **Audio/Visual**

TV (available from third-party suppliers)

Audio/visual output

■ **Computer Related**

USB

Computer (available from third-party suppliers)

SD/SDHC memory card

SD card slot or card reader

■ **Printing**

USB

PictBridge

PictBridge-compatible printer (available from third-party suppliers)

Printer (available from third-party suppliers)

Technical Notes

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 battery	**NP-95** (supplied)	Additional NP-95 high-capacity rechargeable batteries can be purchased as required.	
Battery charger	**BC-65S**	The BC-65S can be used with AC 100 V–240 V, 50/60 Hz power sources and charges an NP-95 battery in about 210 minutes at +23 °C (+73 °F).	
A/V cable	**AVC-1**	Connect the camera to video devices.	

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

■ *Water and Sand*

Exposure to water and sand can also damage the camera and its internal circuitry and mechanisms. When using the camera at the beach or seaside, avoid exposing the camera to water or sand. Do not place the camera on a wet surface.

■ *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 lens and 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 lens or 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

Power and Battery

Problem		Possible cause	Solution	Page
Power supply	The camera does not turn on.	The battery is exhausted.	Insert a fresh or fully-charged spare battery.	4
		The battery is not in the correct orientation.	Re-insert the battery in the correct orientation.	4
		The battery-chamber cover is not latched.	Latch the battery-chamber cover.	5
		The AC power adapter is not connected properly.	Make sure that the AC power adapter is properly connected.	6
	The battery runs down quickly.	The battery is cold.	Warm the battery by placing it in a pocket or other warm place and re-insert it in the camera immediately before taking a picture.	v
		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.	—
		QUICK AF is selected for **POWER MANAGEMENT**.	Select **POWER SAVE** to reduce the drain on the battery.	67
	The camera turns off suddenly.	The battery is exhausted.	Insert a fresh or fully-charged spare battery.	4
		The AC power adapter has been disconnected.	Reconnect the AC power adapter.	6
Charging batteries	Charging does not start.	The battery is not correctly inserted.	Re-insert the battery in the camera.	—
		The battery is not in the correct orientation.	Re-insert the battery in the correct orientation.	4
		The AC power adapter is not correctly plugged into a power outlet.	Plug the adapter correctly into the power outlet.	6
	Charging is slow.	The temperature is low.	Charge the battery at room temperature.	—
	The indicator lamp lights, but the battery does not charge.	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.	108

Menus and Displays

Problem	Possible cause	Solution	Page
Menus and displays are not in English.	English is not selected for the 🈁 言語/LANG. option in the setup menu.	Select **ENGLISH**.	80

3D/**2D**

Problem	Possible cause	Solution	Page
3D is not selected when the **3D** button is pressed.	**NOT 3D DISP** is selected for 📷 **3D CAUTION DISP** .	Select **OFF** or **ON**.	87

Shooting

	Problem	Possible cause	Solution	Page
Taking pictures	No picture is taken when the shutter button is pressed.	Memory is full.	Insert a new memory card or delete pictures.	7, 39
		Memory is not formatted.	Format the memory card or internal memory.	85
		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.	7
		The battery is exhausted.	Insert a fresh or fully-charged spare battery.	4
		The camera has turned off automatically.	Turn the camera on.	10
	The monitor goes dark after shooting.	The flash has fired.	The monitor may darken while the flash charges. Wait for the flash to charge.	23
Focus	The camera does not focus.	The subject is close to the camera.	Select macro mode.	22
		The subject is far away from the camera.	Cancel macro mode.	
		The subject is not suited to autofocus.	Use focus lock.	20
Close-ups	Macro mode is not available.	Macro mode is not available in the current shooting mode.	Choose a different shooting mode.	27

Problem		Possible cause	Solution	Page
Flash	The flash does not fire.	The flash is not available in the current shooting mode.	Choose a different shooting mode.	27
		The camera is in silent mode.	Turn silent mode off.	16
		The battery is exhausted.	Insert a fresh or fully-charged spare battery.	4
		An option other than **OFF** is selected for **☑ CONTINUOUS**.	Turn **☑ CONTINUOUS** off.	65
		The flash is off (**⑤**).	Choose a different flash mode.	23
	Flash mode not available.	The desired flash mode is not available in the current shooting mode.	Choose a different shooting mode.	27
		The camera is in silent mode.	Turn silent mode off.	16
	The flash does not fully light the subject.	The subject is not in range of the flash.	Position the subject in range of the flash.	106
		The flash window is obstructed.	Hold the camera correctly.	15
Intelligent Face Detection	Face detection not available.	Intelligent Face Detection is not available in the current shooting mode.	Choose a different shooting mode.	27
	No face is detected.	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.	—
		The subject's head is at an angle or the subject is not facing the camera.	Ask the subject to face the camera and hold their head straight.	—
		The camera is tilted.	Hold the camera straight.	15
		The subject's face is poorly lit.	Shoot in bright light.	—
	Wrong subject 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.	20

Problem		Possible cause	Solution	Page
Problem images	Pictures are blurred.	The lens is dirty.	Clean the lens.	90
		The lens is blocked.	Keep objects away from the lens.	15
		!AF is displayed during shooting and the focus frame is displayed in red.	Check focus before shooting.	98
		!ȹ is displayed during shooting.	Use the flash or a tripod.	23
	Pictures are mottled.	Slow shutter speed selected when ambient temperature is high.	This is characteristic of CCD image sensors and does not indicate a malfunction.	29
	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.	—
Recording	Pictures are not recorded.	Power was interrupted during shooting.	Turn the camera off before connecting the AC power adapter. Leaving the camera on can result in corrupted files or damage to the memory card or internal memory.	—

Playback

	Problem	Possible cause	Solution	Page
Pictures	Pictures are grainy.	The pictures were taken with a different make or model of camera.	—	—
	Playback zoom unavailable.	The pictures were created using ⬛ **RESIZE** or with a different make or model of camera.	—	37
Movies	No sound in movie playback.	Playback volume is too low.	Adjust playback volume.	84
		The microphone was obstructed.	Hold the camera correctly during recording.	—
		The speaker is obstructed.	Hold the camera correctly during playback.	—
Deletion	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.	73

Connections

Problem		Possible cause	Solution	Page
TV	No picture or sound.	The camera is not properly connected.	Connect the camera correctly.	44
		An A/V cable was connected during movie playback.	Connect the camera once movie playback has ended.	43, 44
		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.	81
		The volume on the television is too low.	Adjust the volume.	—
	No color.	The camera is not set to the correct video standard.	Match the camera 🔲 **VIDEO SYSTEM** setting to the TV.	81
Computer	The computer does not recognize the camera.	The camera is not properly connected.	Connect the camera correctly.	52–53
PictBridge	Pictures can not be printed.	The camera is not properly connected.	Connect the camera correctly.	45
		The printer is off.	Turn the printer on.	—
	Only one copy is printed.	The printer is not PictBridge-compatible.	—	—
	The date is not printed.			
AC power adapter	Demo slides are displayed.	**ON** is selected for 🔲 **DEMO MODE**.	Press the shutter button to exit demo and select **OFF** for 🔲 **DEMO MODE**.	6, 81

Miscellaneous

Problem	Possible cause	Solution	Page
Nothing happens when the shutter button is pressed.	Temporary camera malfunction.	Remove and reinsert the battery or disconnect and reconnect the AC power adapter.	4–5, 6
	The battery is exhausted.	Insert a fresh or fully-charged spare battery.	4
The camera does not function as expected.	Temporary camera malfunction.	Remove and reinsert the battery or disconnect and reconnect the AC power adapter. If the problem persists, contact your FUJIFILM dealer.	4–5, 6, 108
No sound.	The camera is in silent mode.	Turn silent mode off.	16

Warning Messages and Displays

The following warnings are displayed in the monitor:

Warning	Description	Solution
▭ (red)	The battery is low.	Insert a fresh or fully-charged spare battery.
▭ (blinks red)	The battery is exhausted.	
📷	Slow shutter speed. Picture may be blurred.	Use the flash or mount the camera on a tripod.
!AF (displayed in red with red focus frame)	The camera can not focus.	• Use focus lock to focus on another subject at the same distance, then recompose the picture (pg. 20). • If the subject is poorly lit, try focusing at a distance of about 2 m (6.6 ft.). • Use macro mode to focus when taking close-ups.
Aperture or shutter speed shown in red	The subject is too bright or too dark. The picture will be over- or under-exposed.	If the subject is dark, use the flash.
FOCUS ERROR	Camera malfunction.	Turn the camera off and then on again, taking care not to touch the lens. If the message persists, contact a FUJIFILM dealer (pg. 108).
ZOOM ERROR		
LENS CONTROL ERROR		
NO CARD	No memory card inserted when 🖷 **COPY** is selected in the playback menu.	Insert a memory card.
CARD NOT INITIALIZED	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 (pg. 85).
	The memory card contacts require cleaning.	Clean the contacts with a soft, dry cloth. If the message is repeated, format the memory card (pg. 85). If the message persists, replace the memory card.
	Camera malfunction.	Contact a FUJIFILM dealer (pg. 108).
PROTECTED CARD	The memory card is locked.	Unlock the memory card (pg. 7).
BUSY	The memory card is incorrectly formatted.	Use the camera to format the memory card (pg. 85).

Warning	Description	Solution
CARD ERROR	The memory card is not formatted for use in the camera.	Format the memory card (pg. 85).
	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 memory card (pg. 85). If the message persists, replace the memory card.
	Incompatible memory card.	Use a compatible memory card.
	Camera malfunction.	Contact a FUJIFILM dealer (pg. 108).
🆂🅳 **MEMORY FULL** 🅸🅽 **MEMORY FULL** **INTERNAL MEMORY IS FULL** **INSERT A NEW CARD**	The memory card or internal memory is full; pictures can not be recorded or copied.	Delete pictures or insert a memory card with more free space.
WRITE ERROR	Memory card error or connection error.	Re-insert the memory card or turn the camera off and then on again. If the message persists, contact a FUJIFILM dealer (pg. 108).
	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 (pg. 85).
READ ERROR	The file is corrupt or was not created with the camera.	The file can not be played back.
	The memory card contacts require cleaning.	Clean the contacts with a soft, dry cloth. If the message is repeated, format the memory card (pg. 85). If the message persists, replace the memory card.
	Camera malfunction.	Contact a FUJIFILM dealer (pg. 108).

Troubleshooting

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Warning	Description	Solution
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 the 🖳 **FRAME NO.** option in the 🛠 **SET-UP** menu. Take a picture to reset frame numbering to 100-0001, then return to the 🖳 **FRAME NO.** menu and select **CONTINUOUS**.
TOO MANY FRAMES	Date for which more than 4,999 pictures exist selected in sort-by-date view.	Choose a different date.
🎬 CAN NOT EXECUTE	Red-eye removal can not be applied to the selected picture or movie.	—
🎞 CAN NOT EXECUTE		
PROTECTED FRAME	An attempt was made to delete or rotate a protected picture.	Remove protection before deleting or rotating pictures.
🆂🅳 NO IMAGE	The source device selected in the playback 🖹 **COPY** menu contains no pictures.	Select a different source.
🆘 NO IMAGE		
🔢 CAN NOT CROP	An attempt was made to crop a 🔢 picture.	These pictures can not be cropped.
CAN NOT CROP	The picture selected for cropping is damaged or was not created with the camera.	
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	The picture can not be printed using DPOF.	—
🎬 CAN NOT SET DPOF	Movies can not be printed using DPOF.	—
CAN NOT ROTATE	The picture can not be rotated.	—
🎬 CAN NOT ROTATE	Movies can not be rotated.	—

Warning	Description	Solution
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.
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?		Check printer (see printer manual for details). If printing does not resume automatically, press **MENU/OK** to resume.
CAN NOT 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 was 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.

Glossary

3D movie format: FUJIFILM has extended the generic Motion JPEG format to create an AVI movie file format that supports 3D. 3D movie files have the extension "*.AVI" and can be played back on the camera in 3D with stereo sound. When viewed in Windows Media Player, only the images recorded with the left lens will be displayed.

Digital zoom: Unlike optical zoom, digital zoom does not increase the amount of visible detail. Instead, details visible using optical zoom are simply enlarged, producing a slightly "grainy" image.

DPOF (**D**igital **P**rint **O**rder **F**ormat): A standard that allows pictures to be printed from "print orders" stored in internal memory or on a memory card. The information in the order includes the pictures to be printed and the number of copies of each picture.

EV (**E**xposure **V**alue): The exposure value is determined by the sensitivity of the image sensor and the amount of light that enters the camera while the image sensor is exposed. Each time the amount of light doubles, EV increases by one; each time the amount of light is halved, EV decreases by one. The amount of light entering the camera can be controlled by adjusting aperture and shutter speed.

Exif Print: A standard that allows information stored with pictures to be used for optimal color reproduction during printing.

JPEG (**J**oint **P**hotographic **E**xperts **G**roup): A compressed file format for color images. The higher the compression rate, the greater the loss of information and more noticeable drop in quality when the picture is displayed.

Motion JPEG: An AVI (**A**udio **V**ideo **I**nterleave) format that stores sound and JPEG images in a single file. Motion JPEG files can be viewed on a computer using Windows Media Player (requires DirectX 8.0 or later).

Multi-picture format: An image file format that allows multiple images to be stored in a single file. This camera stores 3D images in multi-picture files with the extension "*.MPO". In the supplied FinePixViewer software, MPO files are displayed as two JPEG images.

Appendix

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Parallax: Changes in the apparent position and orientation of a subject when viewed from different angles.

Point of convergence: The point where the optical axes of the two lenses intersect and parallax disappears.

Smear: A phenomenon specific to CCDs which causes white streaks to appear when very bright light sources, such as the sun or reflected sunlight, appear in the frame.

White balance: The human brain automatically adapts to changes in the color of light, with the result that objects that appear white under one light source still appear white when the color of the light source changes. Digital cameras can mimic this adjustment by processing images according to the color of the light source. This process is known as "white balance."

Internal Memory/Memory Card Capacity

The following table shows the recording time or number of available frames at different image qualities (the figures for the number of available frames assume that **MPO+JPEG** is selected for ⏺ **3DREC** as described on page 84; multiply these figures by about 1.5 for MPO-only files and by about 3 for 2D images). 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.

		■ 4:3		■ 3:2		▥ 4:3		⬛ 4:3		3D movie		2D movie	
		FINE	NORMAL	FINE	NORMAL	FINE	NORMAL	FINE	NORMAL	640	320	640	320
Size (pixels)		3648×2736		3648×2432		2592×1944		2048×1536		640×480	320×240	640×480	320×240
File size	MPO+JPEG	14.7 MB	7.4 MB	13.1 MB	6.6 MB	7.5 MB	3.8 MB	4.7 MB	2.4 MB				
	MPO	9.8 MB	4.9 MB	8.7 MB	4.4 MB	5.0 MB	2.5 MB	3.1 MB	1.6 MB		—		
	JPEG	4.9 MB	2.5 MB	4.4 MB	2.2 MB	2.5 MB	1.3 MB	1.6 MB	0.8 MB				
Internal memory (approx. 42 MB)		2	5	3	6	5	11	8	17	—	36 sec.	—	1 min. 10 sec.
SD card	512 MB	30	65	35	70	65	120	100	200	3 min.	7 min.	7 min.	13 min.
	1 GB	65	130	75	140	130	260	200	410	7 min.	14 min.	14 min.	27 min.
	2 GB	130	260	150	290	260	520	410	810	14 min.	28 min.	28 min.	54 min.
SDHC card	4 GB	260	530	300	590	530	1040	830	1630	28 min.*	56 min.*	56 min.*	108 min.*
	8 GB	530	1070	600	1200	1060	2090	1680	3270	57 min.*	113 min.*	113 min.*	215 min.*
	16 GB	1070	2120	1200	2380	2110	4150	3330	6500	114 min.*	224 min.*	224 min.*	433 min.*

* Total length of all movie files. Individual movies can not exceed 2 GB, regardless of capacity of memory card.

Specifications

System	
Model	FinePix REAL 3D W1
Effective pixels	10 million
CCD	Two ½.₃-in. CCDs
Storage media	• Internal memory (approx. 42 MB) • SD/SDHC memory cards (see page 7)
File system	Compliant with Design Rule for Camera File System (DCF), Exif 2.2, multi-picture format (MPO), and Digital Print Order Format (DPOF)
File format	• **Still pictures (3D)**: MPO+JPEG or MPO • **Still pictures (2D)**: Exif 2.2 JPEG (compressed) • **Movies (3D)**: Stereo AVI with 2 image channels • **Movies (2D)**: Motion JPEG AVI
Image size (pixels)	• **L** **4:3**: 3,648×2,736 • **L** **3:2**: 3,348×2,432 • **M** **4:3**: 2,592×1,944 • **S** **4:3**: 2,048×1,536
File size	See page 104
Lens **Focal length**	Two Fujinon 3× optical zoom lenses, F/3.7 (wide angle) – 4.2 (telephoto) f=6.3 mm–18.9 mm (35-mm format equivalent: 35 mm–105 mm)
Zoom	**3D/ADV. 2D**: Combined optical and digital zoom up to approx. 3.8× (35-mm format equivalent: 39 mm–149 mm) **ADV. 3D**: 3× optical zoom **2D**: 3× optical zoom with up to approx. 5.7× digital zoom (maximum combined zoom approx. 17.1×)
Digital zoom	Approx. 5.7× (up to 17.1× when combined with optical zoom)
Aperture	F3.7/F5/F8 (wide angle), F4.2/F5.6/F9 (telephoto)
Focus range (distance from front of lens)	Approx. 60 cm (2.0 ft.)–infinity **Macro (2D)**: Approx. 8 cm–80 cm/0.3 ft.–2.6 ft. (wide angle); 60 cm–3 m/2.0 ft.–9.8 ft. (telephoto) **Quick AF**: Approx. 1 m (3.3 ft.)–infinity
Point of convergence (3D)	Approx. 2 m/6.6 ft. (wide angle); 6.5 m/21.3 ft. (telephoto) (pg. 102)
Recommended shooting distance (3D)	**Auto parallax off**: Approx. 1.3 m/4.3 ft.–infinity (wide angle; point of convergence at 2 m/6.6 ft.); 4.1 m/13.5 ft.–infinity (telephoto; point of convergence at 6.5 m/21.3 ft.) **Auto parallax on** (as measured by FUJIFILM): Approx. 1 m/3.3 ft.–infinity (wide angle); 2 m/6.6 ft.–infinity (telephoto)

System	
Sensitivity	Standard output sensitivity equivalent to ISO 100, 200, 400, 800, 1600; **AUTO**
Metering	256-segment through-the-lens (TTL) metering; MULTI, SPOT, AVERAGE
Exposure control	Program and aperture-priority autoexposure; manual exposure
Exposure compensation	−2 EV – +2 EV in increments of ⅓ EV (**P** and **A** modes)
Scene modes	○�� (NATURAL AND FLASH LIGHTING; in **3D** mode, images are recorded at size **S**), ◑ (NATURAL LIGHT), ● (PORTRAIT), ▲ (LANDSCAPE), ☀ (SPORT), ☽ (NIGHT), ☽ (NIGHT TRIPOD), ☀ (SUNSET), ☀ (SNOW), ☀ (BEACH), ◑ (UNDERWATER), ☗ (PARTY), ☀ (ANTI-BLUR)
Picture stabilization	None
Intelligent Face Detection	Available (**2D** only)
Shutter speed	• ☽: ⅛ s–1/500 s • ☽: 3 s–1/500 s • **M**: ½ s–1/1,000 s • **Other modes**: ¼ s–1/1,000 s
Continuous	• ☐ (**3D**): Up to 2 fps (size **S**); max. 40 frames • ☐ (**2D**): Up to 1 fps; max. 40 frames • ☐ (**2D**): Up to 3 fps (size **S**); max. 40 frames
Focus	• **Mode**: Single AF • **Autofocus system**: Contrast-detect TTL AF • **Focus-area selection** (Intelligent Face Detection off): Center (**3D**/**2D**), auto-area (**2D**)
White balance	Auto; seven manual preset modes for direct sunlight, shade, daylight fluorescent, warm white fluorescent, cool white fluorescent, incandescent, and underwater lighting
Self-timer	Off, 2 sec., 10 sec.
Flash	Auto flash; effective range when sensitivity is set to **AUTO** is approx. 60 cm–3.7 m/2 ft.–12.1 ft. (wide angle), 60 cm–3.3 m/2 ft.–10.8 ft. (telephoto), or in macro mode (**2D** only) 30 cm–80 cm/1 ft.–2.6 ft. (wide angle), 60 cm–1.6 m/2 ft.–5.2 ft. (telephoto)
Flash modes	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)
Monitor	2.8-in., 230k-dot color LCD monitor; frame coverage approx. 100%
Movies	Frame size 640 × 480 (memory card only) or 320 × 240 pixels; 30 fps; stereo sound; zoom not available

System	
Shooting options	**3D**: Auto parallax, power management, framing guide, and frame number memory
	2D: Intelligent Face Detection with red-eye removal, power management, framing guide, and frame number memory
Playback options	**3D**: Parallax adjustment, micro thumbnails, multi-frame playback, sort-by-date, cropping, resize, and slide show
	2D: Intelligent Face Detection, red-eye removal, micro thumbnails, multi-frame playback, sort-by-date, cropping, resize, slide show, and image rotation
Other options	PictBridge, Exif Print, language selection (Simplified Chinese, Traditional Chinese, Dutch, English, French, German, Italian, Japanese, Korean, Portuguese, Spanish, and Thai), time difference, silent mode

Input/output terminals	
A/V OUT (audio/video output)	8-pin multi-connector for NTSC or PAL output with monaural sound
Digital input/output	USB 2.0 High Speed (shares A/V OUT connector); PTP (Picture Transfer Protocol)/MTP (Media Transfer Protocol)
DC IN	For use exclusively with supplied AC-5VC AC power adapter

Power supply/other		
Power supply	NP-95 rechargeable battery; AC-5VC AC power adapter; charges in about 4 hours at +23 °C (73 °F)	
Guide to the number of available frames for battery operation	**Battery Type**	**Number of frames**
	NP-95	Approx. 230 frames (**3D** **AUTO**)
	CIPA standard, measured 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)	123.6 mm × 68 mm × 25.6 mm/4.9 in. × 2.7 in. × 1.0 in., excluding projections	
Camera weight	Approx. 260 g/9.2 oz., excluding batteries, accessories, and memory cards	
Shooting weight	Approx. 300 g/10.6 oz., including batteries and memory card	
Operating conditions	Temperature: 0 °C to +40 °C (+32 °F to +104 °F) Humidity: 80% or less (no condensation)	

NP-95 rechargeable battery	
Nominal voltage	DC 3.6 V (typ.)
Nominal capacity	1800 mAh
Operating temperature	0 °C – +40 °C/+32 °F – +104 °F
Dimensions (W × H × D)	49.5 mm × 35.2 mm × 10.8 mm/1.9 in. × 1.4 in. × 0.4 in.
Weight	Approx. 39 g/1.4 oz.

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

Color Television Systems

NTSC (**N**ational **T**elevision **S**ystem **C**ommittee) is a color television telecasting specification adopted mainly in the U.S.A., Canada, and Japan. PAL (**P**hase **A**lternation by **L**ine) is a color television system adopted mainly in European countries and China.

Notices

- Specifications subject to change without notice. FUJIFILM shall not be held liable for damages resulting from errors in this manual.
- Although the monitor is manufactured using advanced high-precision technology, small bright points and anomalous colors (particularly in the vicinity of text) may appear. This is normal for this type of 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.

FUJIFILM Digital Camera Worldwide Network

Contact your local distributor (see list below) for repairs and technical support. Please present the warranty and purchase receipt when requesting repairs; refer to the warranty card for the conditions of the warranty. Technical support may not be available for models not handled by the local distributor. The following information is subject to change without notice.

NORTH AMERICA			
Canada	**FUJIFILM Canada Inc.**	Technical support	TEL 1-866-818-FUJI (3854) *http://www.fujihelp.ca*
		Repair service	TEL 1-800-263-5018 *http://www.fujihelp.ca*
U.S.A.	**FUJIFILM U.S.A., Inc.**	Technical support	TEL 800-800-3854 *digitalinfo@fujifilm.com*
		Repair service	TEL 800-659-3854

CENTRAL AND SOUTH AMERICA			
Argentina	**Imagen e informacion S.A.**	Technical support & repairs	TEL +54-11-4836-1000 *servtec@imageneinformacion.com.ar*
Bolivia	**Reifschneider Bolivia Ltda.**	Technical support & repairs	TEL +591 33 44 1129 *gciagral@bibosi.scz.entelnet.bo*
Brazil	**FUJIFILM do Brasil Ltda.**	Technical support & repairs	TEL 0800-12-8600 *camarasdigitais@fujifilm.com.br*
Chile	**Reifschneider SA**	Technical support & repairs	TEL 56-2-6781200 *serviciotecnico@reifschneider.cl*
Colombia	**Animex de Colombia Ltda.**	Technical support & repairs	TEL +57 1 338-0299 *animex@etb.net.co*
Ecuador	**Espacri Cia Ltda**	Technical support & repairs	TEL 593-72-835526
	Importaciones Espacri Cia. Ltda.	Technical support & repairs	TEL +593 783 5526 *portiz@fujifilm.com.ec*
Mexico	**Fujifilm de Mexico, S.A. de C.V.**	Technical support	TEL (52-55) 5263-55000 *eizquierdo@fujifilm.com.mx*
		Repair service	TEL (52-55) 5366-5150/56/57 *cpalma@fujifilm.com.mx*
Paraguay	**Errece S.R.L.**	Technical support & repairs	TEL +595 21 444256 *jmarbulo@fujifilm.com.py*
Peru	**Procesos de Color S.A.**	Technical support & repairs	TEL +51 14 33 5563 *jalvarado@fujifilm.com.pe*
Uruguay	**Fotocamara S.R.L.**	Technical support & repairs	TEL +598-2-9002004 *fotocam@adinet.com.uy*
	Kiel S.A.	Technical support & repairs	TEL (05982) 419 4542 *kiel@fujifilm.com.uy*
Venezuela	**C. Hellmund & Cia Sa**	Technical support & repairs	TEL 0212-2022300 *hellmund@hellmund.com*

EUROPE			
Austria	**Fuji Film Oesterreich**	Technical support & repairs	TEL 0043 1 6162606/51 or 52 *kamera.service@fujifilm.at*
Belgium	**Belgian Fuji Agency**	Technical support & repairs	TEL 3210242090 *info@fuji.be*
Croatia	**I&I d.o.o.**	Technical support	TEL 38512319060 *dsaravanja@fujifilm.hr*
		Repair service	TEL 38512316228 *info@fujifilm.hr*

EUROPE			
Cyprus	**PMS IMAGING LTD**	Technical support & repairs	TEL 35722746746 *mariosashiotis@fujifilm.com.cy*
	Doros Neophytou CAMERA REPAIRS	Technical support & repairs	TEL 35722314719 *dorosn@logosnet.cy.net*
Czech Republic	**Fujifilm Cz., s.r.o.**	Technical support	TEL 00420 234 703 411 *petr.barta@fujifilm.cz*
	AWH servis	Repair service	TEL 00420 222 721 525 *awh@awh.cz*
Denmark	**Fujifilm Danmark A/S**	Technical support & repairs	TEL 0045 45662244 *fujifilm@fujifilm.dk*
Finland	**Fuji Finland Oy**	Technical support & repairs	TEL +358 9 825951 *www.fuji.fi fuji@fuji.fi*
France	**FUJIFILM France**	Technical support & repairs	*direction.technique@pm2s.fr*
Germany	**FUJIFILM Electronic Imaging Europe GmbH**	Technical support & repairs	Tel 0180 / 589 89 80* *service@fujifilm-digital.com* *0,14 EUR pro Minute aus dem deutschen Festnetz, abweichende Preise aus Mobilfunknetzen möglich, Stand bei Drucklegung.
Greece	**FUJIFILM HELLAS S.A.**	Technical support & repairs	TEL 0030 210 9404100 *fujifilm@fujifilm.gr*
Hungary	**Fujifilm Hungary Ltd.**	Technical support	TEL 3612389410 *fujifilm@fujifilm.hu*
		Repair service	TEL 3613633777
Iceland	**Icephoto (Ljosmyndavorur)**	Technical support & repairs	TEL 354 568 0450 *framkollun@fujifilm.is*
Italy	**FujiFilm Italia S.r.l.**	Call center	TEL 039-0267978181 *info@fujifilm.it*
		Repair service	TEL 039-6058294 FAX 039-6058295
Lithuania	**Fujifilm Lithuania**	Technical support & repairs	TEL 370-5-2130121 *info@fujifilm.lt*
Malta	**Ciancio (1913) Co.Ltd.**	Technical support & repairs	TEL 0356-21-480500 *info@fujifilm.com.mt*
Norway	**Fujifilm Norge AS**	Technical support	TEL 0047-02273 *http://www.fujifilm.no/ mailto:post@fujifilm.no*
		Repair service	TEL 0047-55393880 *http://www.camera.no/mailto:service@camera.no*
Poland	**Fujifilm Polska Distribution Sp. z o.o.**	Technical support	TEL +48-22-517-66-00 *fujifilm@fujifilm.pl*
		Repair service	TEL +48-22-886-94-40 *serwis@fujifilm.pl*
Portugal	**Fujifilm Portugal, Lda**	Technical support	TEL (351) 226 194 237 *finepix@fujifilm.pt*
		Repair service	TEL (351) 226 194 200 *cameras@fujifilm.pt*
Romania	**CTS-Cardinal Top Systems Ltd**	Technical support & repairs	TEL 4021-230-09-82 *cts_tirla@hotmail.com*
Russia	**Fujifilm Electronic Imaging Europe GmbH**	Technical support & repairs	TEL 8 800 200 3854 (Для бесплатных звонков из России) *Для звонков из других стран набирайте +7 800 200 3854 *http://www.fujifilm-digital.ru/ info@fujifilm-digital.ru*
Slovakia	**Fujifilm Slovakia s.r.o.**	Technical support	TEL 00421 2 33 595 107 *fujifilm@fujifilm.sk*
		Repair service	TEL 00421 2 33 595 119 *servis@fujifilm.sk*
Spain	**Fujifilm España S.A.**	Technical support & repairs	TEL 902012535 *http://www.fujifilm.es/soporte/ tallersat@fujifilm.es*

EUROPE			
Sweden	**Fujifilm Sverige AB**	Technical support	TEL 46 8 506 141 45 *kamera@fujifilm.se*
		Repair service	TEL 46 8 506 141 00 *kameraverkstaden@fujifilm.se*
Switzerland / Liechtenstein	**Fujifilm (Switzerland) AG**	Technical support & repairs	TEL +41 44 855 5154 *RepairCenter@fujifilm.ch*
The Netherlands	**FUJIFILM Electronic Imaging Nederland**	Technical support	TEL +31(0)102812500 *helpdesk@fujifilm-digital.nl*
		Repair service	TEL +31(0)102812520 *camerareparaties@fujifilm-digital.nl*
Turkey	**Fujifilm Turkiye Sinfo A.S.**	Technical support	TEL +90 212 696 5090 *csarp@fujifilm.com.tr*
		Repair service	TEL +90 212 696 5090 *servis@fujifilm.com.tr*
U.K.	**FUJIFILM UK Ltd.**	Technical support	TEL +44 (0)8700 841310 *fujitec@fuji.co.uk*
		Repair service	TEL +44 (0)8700 841314 *fujitec@fuji.co.uk*
Ukraine	**Image Ukraine CJSC**	Technical support & repairs	TEL +380-44-4909075 *d@fujifilm.ua*

MIDDLE EAST			
Iran	**Tehran Fuka Co.**	Technical support & repairs	TEL (+98-21)2254810-19 *fuka@neda.net*
Israel	**Shimone Group Ltd.**	Technical support	TEL (+) 972 3 9250666 *digital@fujifilm.co.il*
		Repair service	TEL (+) 972 3 9250666 *khaim@shimone.com*
Jordan	**Grand Stores Al- Abdali, Amman / Jordan**	Technical support & repairs	TEL 009626-4646387 *gstores@go.com.jo*
Lebanon	**Fototek S.A.R.L.**	Technical support & repairs	TEL +961 1 252474 *fototek@antakiholding.com*
Qatar	**Techno Blue**	Technical support	TEL 00974 44 66 175 *prabu@techno-blue.com*
Saudi Arabia	**Emam Distribution Co. Ltd.**	Technical support	TEL 96626978756 *service@fujifilm.com.sa*
Syria	**Film Trading Company**	Technical support	TEL + 963 11 2218049 *f.t.c@Net.SY*
		Repair service	TEL + 963 21 4641903 *filmtradin@Net.SY*
U.A.E.	**Grand Stores**	Technical support & repairs	TEL + 971-4-2823700 *photography@grandstores.ae*
Yemen	**Al-Haidary Trading**	Technical support	TEL 00967-1-503980
		Repair service	TEL 00967-1-503977

AFRICA			
Egypt	**Foto Express Egypt**	Technical support & repairs	TEL (202) 7762062 *fotoegypt@access.com.eg*
Kenya	**Fuji Kenya Ltd**	Repair service	TEL (254-20)4446265-8 *info@fujifilm.co.ke*
South Africa	**Cameratek CC.**	Technical support & repairs	TEL +27 11 251 2400 *www.cameratek.co.za*

OCEANIA			
Australia	**FUJIFILM Australia Pty Ltd**	Technical support & repairs	TEL 1800 226 355 *digital@fujifilm.com.au*
Fiji	**Brijlal & Co. Ltd**	Technical support & repairs	TEL (679)3304133 *kapadia@connect.com.fj*
New Caledonia	**Phocidis SARL**	Technical support & repairs	TEL (00 687) 25-46-35 *phocidis@phocidis.nc*

OCEANIA			
New Zealand	**Fujifilm NZ Ltd**	Technical support & repairs	TEL +64-9-4140400 *glenn.beaumont@fujifilm.co.nz*
Papua New Guinea	**Oceania PNG Limited**	Technical support	TEL +675 3256411 *oceania@daltron.com.pg*

ASIA			
Hong Kong	**Fuji Photo Products Co., Ltd.**	Technical support & repairs	TEL (852)2406 3287 *rsd@chinahkphoto.com.hk*
Indonesia	**PT. Modern Internasional, Tbk.**	Technical support & repairs	TEL +62 021 45867187 *assd_kmrsrv@modernphoto.co.id*
Malaysia	**FUJIFILM (Malaysia) Sdn. Bhd.**	Technical support	TEL 603-55698388 *technical@fujifilm.com.my*
		Repair service	TEL 603-55698388 *camera@fujifilm.com.my*
Philippines	**YKL Development & Trdg. Corp.**	Technical support	TEL 632-7436601~06
			info@yklcolor.com digital@yklcolor.com
		Repair service	TEL 632-7436601~06 *techop_services@yklcolor.com*
Singapore	**FUJIFILM (Singapore) Pte Ltd**	Technical support & repairs	TEL 65-6380 5557 *service@fujifilm.com.sg*
South Korea	**Korea Fujifilm Co., Ltd.**	Technical support	TEL +82-2-3282-7363 *photo@fujifilm.co.kr*
	Yonsan AS Center (Fujidigital)	Repair service	TEL +82-2-701-1472 *1bowl@hanmail.net*
	Kangnam AS Center (Digitalgallery)	Repair service	TEL +82-2-2203-1472 *nurijili@hanmail.net*
	Busan AS Center (Digital-Sewon)	Repair service	TEL +82-51-806-1472 *merahan@yahoo.co.kr*
Taiwan	**Hung Chong Corp.**	Technical support & repairs	TEL 886-2-6602-8988 *dah@mail.hungchong.com.tw*
Thailand	**FUJIFILM (Thailand) Ltd.**	Technical support	TEL +662-2706000 ext. 751,752
			Dusit_Suriyong@fujifilm.co.th yaowarat@fujifilm.co.th
		Repair service	TEL +662-2706000 ext.761,762 *warin@fujifilm.co.th*
Vietnam	**International Minh Viet Co., Ltd.**	Technical support & repairs	TEL +84-8-4135740 ext. 322 *diep.phanthithanh@imv.com.vn*

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