Panasonic



Basic Operating Instructions

Digital Camera

Model No. DMC-F2



Before connecting, operating or adjusting this product, please read the instructions completely.



Please also refer to Operating Instructions (PDF format) recorded on the CD-ROM containing the Operating Instructions (supplied).



You can learn about advanced operation methods and check the Troubleshooting.

For USA and Puerto Rico assistance, please call: 1-800-211-PANA(7262) or, contact us via the web at: http://www.panasonic.com/contactinfo

Dear Customer.

Thank you for choosing Panasonic!

You have purchased one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family years of enjoyment. Please take time to fill in the information in the box below.

The serial number is on the tag located on the underside of your Camera. Be sure to retain this manual as your convenient Camera information source.

		,
	Model No.	
	Serial No.	
ď		



A lithium ion battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

Information for Your Safety

WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE,

- DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
- USE ONLY THE RECOMMENDED ACCESSORIES.
- DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

THE SOCKET OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

Product Identification Marking is located on the bottom of units.

Carefully observe copyright laws. Recording of pre-recorded tapes or discs or other published or broadcast material for purposes other than your own private use may infringe copyright laws. Even for the purpose of private use, recording of certain material may be restricted.

- · Please note that the actual controls and components, menu items, etc. of your Digital Camera may look somewhat different from those shown in the illustrations in these Operating Instructions.
- SDHC Logo is a trademark.

- Microsoft product screen shot(s) reprinted with permission from Microsoft Corporation.
- Other names, company names, and product names printed in these instructions are trademarks or registered trademarks of the companies concerned.

FCC Note:

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.

FCC Caution: To assure continued compliance, follow the attached installation

instructions and use only shielded interface cables with ferrite core when

connecting to computer or peripheral devices.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Declaration of Conformity Trade Name: Panasonic

Model No · DMC-F2

Responsible party: Panasonic Corporation of North America One Panasonic Way, Secaucus, NJ 07094

Support Contact: Panasonic Consumer Electronics Company

1-800-211-PANA (7262)

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.



About the battery pack

CAUTION

Battery pack (Lithium ion battery pack)

- Use the specified unit to recharge the battery pack.
- Do not use the battery pack with equipment other than the specified unit.
- Do not get dirt, sand, liquids, or other foreign matter on the terminals.
- Do not touch the plug terminals (+ and -) with metal objects.
- Do not disassemble, remodel, heat or throw into fire.

If any electrolyte should come into contact with your hands or clothes, wash it off thoroughly with water.

If any electrolyte should come into contact with your eyes, never rub the eyes. Rinse eves thoroughly with water, and then consult a doctor.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer.

Dispose of used batteries according to the manufacturer's instructions.

- Do not heat or expose to flame.
- Do not leave the battery(ies) in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

Warning

Risk of fire, explosion and burns. Do not disassemble, heat above 60 °C (140 °F) or incinerate.

■ About the battery charger

CAUTION

DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING. ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTILATION VENTS.

Battery charger

This battery charger operates on AC between 110V and 240V. But

- In the U.S.A. and Canada, the battery charger must be connected to a 120V AC power supply only.
- When connecting to an AC supply outside of the U.S.A. or Canada, use a plug adaptor to suit the AC outlet configuration.

- If you see this symbol -

Information on Disposal in other Countries outside the European Union



This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.

■ Cautions for Use

- Do not use any other cables except a genuine Panasonic AV cable (DMW-AVC1: optional).
- Do not use any other USB connection cables except the supplied one.
- Always use a genuine Panasonic AC adaptor (DMW-AC5PP: optional).

Keep the camera as far away as possible from electromagnetic equipment (such as microwave ovens, TVs, video games etc.).

- If you use the camera on top of or near a TV, the pictures and sound on the camera may be disrupted by electromagnetic wave radiation.
- Do not use the camera near cell phones because doing so may result in noise adversely affecting the pictures and sound.
- Recorded data may be damaged, or pictures may be distorted, by strong magnetic fields created by speakers or large motors.
- · Electromagnetic wave radiation generated by microprocessors may adversely affect the camera, disturbing the pictures and sound.
- If the camera is adversely affected by electromagnetic equipment and stops functioning properly, turn the camera off and remove the battery or disconnect AC adaptor (DMW-AC5PP: optional). Then reinsert the battery or reconnect AC adaptor and turn the camera on

Do not use the camera near radio transmitters or high-voltage lines.

 If you record near radio transmitters or high-voltage lines, the recorded pictures and sound may be adversely affected.

■ Care of the camera

- Do not strongly shake or bump the camera by dropping it etc.
 - This unit may malfunction, recording pictures may no longer be possible or the lens or the LCD monitor may be damaged.
- We strongly recommend you do not leave the camera in your trousers pocket when you sit down or forcefully insert it into a full or tight bag etc.
- Damage to the LCD monitor or personal injury may result.
- Be particularly careful in the following places as they may cause this unit to malfunction
 - Places with a lot of sand or dust.
 - Places where water can come into contact with this unit such as when using it on a rainv dav or on a beach.
- Do not touch the lens or the sockets with dirty hands. Also, be careful not to allow liquids, sand and other foreign matter to get into the space around the lens. buttons etc.
- If water or seawater splashes on the camera, use a dry cloth to wipe the camera body carefully.

■ About Condensation (When the lens is fogged up)

- Condensation occurs when the ambient temperature or humidity changes. Be careful of condensation since it causes lens stains, fungus and camera malfunction.
- If condensation occurs, turn the camera off and leave it for about 2 hours. The fog will disappear naturally when the temperature of the camera becomes close to the ambient temperature.

About cards that can be used in this unit

You can use an SD Memory Card and an SDHC Memory Card.

- When the term card is used in these operating instructions this refers to the following types of Memory Cards.
 - -SD Memory Card (8 MB to 2 GB)
- -SDHC Memory Card (4 GB to 32 GB)

More specific information about memory cards that can be used with this unit.

 When you use a card of 4 GB or more capacity, you can use only the SDHC Memory Card with SDHC logo that is based on the SD Standard





Please confirm the latest information on the following website.

http://panasonic.jp/support/global/cs/dsc/

(This Site is in English only.)

Keep the Memory Card out of reach of children to prevent swallowing.

■ About illustrations in these operating instructions

 Please note that the appearance of the product, the illustration or the menu screen are a little different from those in actual use

Contents

Information for Your Safety	2
Standard Accessories	
Names of the Components	9
Charging the Battery	
Inserting/Removing the Battery/Card (Optional)	12
Setting Date/Time (Clock Set)	
About the Mode and Menu Operation	
Mode switching	
About the menu operation	
Taking Pictures Using the Automatic Function(Auto Scene Mode)	
Scene detection	
Taking Pictures with Your Favorite Settings (Normal Picture Mode)	
Focusing	
Playing Back Pictures (Normal Playback Mode)	
Deleting Pictures	
To delete a single picture	
To delete multiple pictures (up to 50) or all the pictures	21
Reading the Operating Instructions (PDF format)	22
Specifications	
Digital Camera Accessory System	27
Digital Camera Accessory Order Form	
Limited Warranty (ONLY FOR U.S.A. AND PUERTO RICO)	29

Standard Accessories

Check that all the accessories are included before using the camera. Product numbers are correct as of January 2010. These may be subject to change.

- 1 Battery Pack (Indicated as battery in the text) Charge the battery before use.
- 2 Battery Charger (Indicated as charger in the text)
- 3 USB Connection Cable
- 4 CD-ROM
 - · Software:
 - Use it to install the software to your PC.
 - Operating Instructions
- 5 Hand Strap
- 6 Battery Case
- SD Memory Card and SDHC Memory Card are indicated as card in the text.
- · Card is optional. You can record or play back pictures on the built-in memory when you are not using a card.
- For information about optional accessories, please refer to "Digital Camera Accessory System".
- If any of the accessories are lost, customers in the USA and Puerto Rico should contact Panasonic's parts department at 1 800 833-9626 for further information about obtaining replacement parts.



CGA-S/106B



DE-A59B



K1HA08AD0001



4 VFF0625



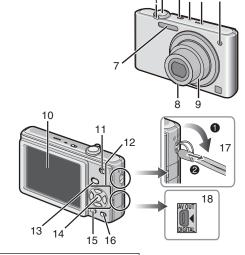
VFC4297



VGQ0D56

Names of the Components

- Zoom lever
- 2 Shutter button
- 3 Camera ON/OFF switch
- 4 Microphone
- 5 Speaker
- 6 Self-timer indicator AF assist lamp
- 7 Flash
- 8 Lens part
- 9 Lens barrel
- 10 LCD monitor
- 11 Recording/playback switch
- 12 Cursor buttons
 - ⊕: ▲ /Exposure compensation
 - ®: ▼ /Macro button
 - © · ◀ /Self-timer button



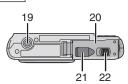
In these operating instructions, operations using the cursor buttons are described as follows.

e.g.: When you press the ▼ (🖏) button.





- 13 [MODE] button
- 14 [MENU/SET] button
- 15 [DISPLAY] button
- 16 [Q.MENU]/Delete button
- 17 Hand strap evelet
 - Attach the strap when using the camera to prevent it from dropping.
- 18 [AV OUT/DIGITAL] socket
- 19 Tripod receptacle
 - When you use a tripod, make sure the tripod is stable with the camera attached to it.
- 20 Card/Battery door
- 21 DC coupler cover
 - When using an AC adaptor, ensure that the Panasonic DC coupler (DMW-DCC4; optional) and AC adaptor (DMW-AC5PP; optional) are used.
- 22 Release lever



Charging the Battery

About batteries that you can use with this unit Supplied battery or dedicated optional batteries (DMW-BCF10PP) can be used with this camera.

It has been found that counterfeit battery packs which look very similar to the genuine product are made available to purchase in some markets. Some of these battery packs are not adequately protected with internal protection to meet the requirements of appropriate safety standards. There is a possibility that these battery packs may lead to fire or explosion. Please be advised that we are not liable for any accident or failure occurring as a result of use of a counterfeit battery pack. To ensure that safe products are used we would recommend that a genuine Panasonic battery pack is used.

- Use the dedicated charger and battery.
- The camera has a function for distinguishing batteries which can be used safely. The dedicated battery supports this function. The only batteries suitable for use with this unit are genuine Panasonic products and batteries manufactured by other companies and certified by Panasonic. (Batteries which do not support this function cannot be used). Panasonic cannot in any way guarantee the quality, performance or safety of batteries which have been manufactured by other companies and are not genuine Panasonic products.
- The battery is not charged when the camera is shipped. Charge the battery before use.
- Charge the battery with the charger indoors.
- Charge the battery in a temperature between 10 °C to 35 °C (50 °F to 95 °F). (The battery temperature should also be the same.)



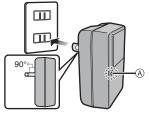
Attach the battery paying attention to the direction of the battery.





Connect the charger to the electrical outlet.

- Charging starts when the [CHARGE] indicator ® lights green.
- Charging is complete when the [CHARGE] indicator (after approx. 100 min).





Detach the battery after charging is completed.



■ When the [CHARGE] indicator flashes

- The battery temperature is excessively high or low. The charging time will be longer than normal. Also, charging may not be completed.
- The terminals of the charger or the battery are dirty. In this case, wipe them with a dry cloth.

Note

- After charging is completed, be sure to disconnect the power supply device from the electrical outlet
- The battery becomes warm after using it, and while and after charging. The camera also becomes warm during use. This is not a malfunction.
- The battery will be exhausted if left for a long period of time after being charged.
- The battery can be recharged even when it still has some charge left, but it is not recommended that the battery charge be frequently topped up while the battery is fully charged. (The battery has characteristics that will reduce its operating duration and cause the battery to swell up.)
- When the operating time of the camera becomes extremely short even after properly charging the battery, the life of the battery may have expired. Buy a new battery.
- Do not leave any metal items (such as clips) near the contact areas of the power plug. Otherwise, a fire and/or electric shocks may be caused by short-circuiting or the resulting heat generated.

■ Battery life

The number of recordable pictures (By CIPA standard in Normal Picture Mode [1])

	Supplied battery	Optional battery
Number of recordable pictures	Approx. 300 pictures	Approx. 390 pictures
Recording time	Approx. 150 min	Approx. 195 min

Recording conditions by CIPA standard

- Temperature: 23 °C (73.4 °F)/Humidity: 50% when the LCD monitor is on.
- Using a Panasonic SD Memory Card (32 MB)
- Starting recording 30 seconds after the camera is turned on.
- Recording once every 30 seconds, with full flash every second recording.
- Rotating the zoom lever from Tele to Wide or vice versa in every recording.
- Turning the camera off every 10 recordings. Leaving the camera until the battery cools down.
- CIPA is an abbreviation of [Camera & Imaging Products Association].

The number of recordable pictures varies depending on the recording interval time. If the recording interval time becomes longer, the number of recordable pictures decreases. (e.g. When recording once every 2 minutes: about 1/4 of the number when recording once every 30 seconds)

Supplied battery		Optional battery	
Playback time	Approx. 330 min	Approx. 420 min	

The number of recordable pictures and playback time will vary depending on the operating conditions and storing condition of the battery.

Charging

	Supplied battery	Optional battery
Charging time*	Approx. 100 min	Approx. 130 min

* with the supplied charger

The charging time will vary slightly depending on the status of the battery and the conditions in the charging environment.

When the charging has been completed successfully, the [CHARGE] indicator turns off.



- The battery may swell and its operating time may become shorter as the number of times it is charged increases. For long term battery use, we recommend you do not frequently charge the battery before it is exhausted.
- The performance of the battery may temporarily deteriorate and the operating time may become shorter in low temperature conditions (e.g. skiing/snowboarding).

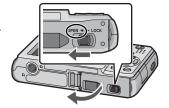
Inserting/Removing the Battery/Card (Optional)

- Check that the camera is turned off.
- We recommend using a Panasonic card.



Slide the release lever in the direction of the arrow and open the card/battery door.

- Always use genuine Panasonic batteries (CGA-S/106B: supplied or DMW-BCF10PP: optional).
- If you use other batteries, we cannot guarantee the quality of this product.





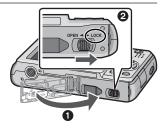
Battery: Insert it fully being careful about the direction for insert. Pull the lever (A) in the direction of the arrow to remove the battery. Card: Push it fully until it clicks being careful about the direction for insert. To remove the card, push the card until it clicks, then pull the card out upright.

- ® Do not touch the connection terminals of the
- The card may be damaged if it is not fully inserted





- 1: Close the card/battery door.
- 2: Slide the release lever in the direction of the arrow.
- If the card/battery door cannot be completely closed, remove the card, check its direction and then insert it again.



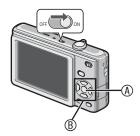
Setting Date/Time (Clock Set)

The clock is not set when the camera is shipped.



Turn the camera on.

- When you turn the camera on, [PLEASE SET THE CLOCK] message appears. (It does not appear in Playback Mode.)
- [MENU/SET] button
- ® Cursor buttons





Press [MENU/SET].



Press **◄/>** to select the items (year, month, day, hour, minute, display sequence or time display format), and press ▲/▼ to set.

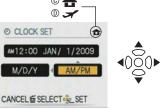
- © Time at the home area
- Time at the travel destination
- in: Cancel without setting the clock.
- · Select either [24HRS] or [AM/PM] for the time display format.
- AM/PM is displayed when [AM/PM] is selected





Press [MENU/SET].

- · After completing the clock settings, turn the camera off. Then turn the camera back on, switch to Recording Mode, and check that the display reflects the settings that were performed.
- When [MENU/SET] has been pressed to complete the settings without the clock having been set, set the clock correctly by following the "Changing the clock setting" procedure.



Changing the clock setting

- Press [MENU/SET] in Normal Picture Mode.
- Press ▲/▼ to select [CLOCK SET].
- Press ► and perform steps 3 and 4 for setting.
- Press [MENU/SET] to close the menu.
- You can also set the clock in the [SETUP] menu.
- The clock setting is maintained for 3 months using the built-in clock battery even without the battery. (Leave the charged battery in the unit for 24 hours to charge the built-in battery.)

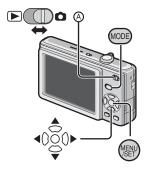
About the Mode and Menu Operation

Mode switching



Slide the recording/playback switch (A) to (right) or (left).

: Recording Mode ▶ : Playback Mode



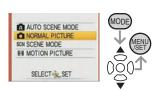


Press [MODE] to display the mode selection screen.

(Example: Normal Picture Mode)



Press ▲/▼ to select a mode and press [MENU/SET] to close the menu.



List of Recording Modes

A Auto Scene Mode Taking pictures easily.		
Normal Picture Mode Taking pictures in the desired setting.		
SCN Scene Mode Taking pictures according to the scene.		
	This mode allows you to record motion pictures with audio.	

■ List of Playback Modes

▶ Normal Play Mode	Playing back the pictures normally.	
Slide Show Mode	Playing back the pictures continuously.	
	Playing back the pictures set as your favorite. • Pictures do not appear when the [FAVORITE] is set to [OFF].	

About the menu operation

The camera comes with menus that allow you to set the settings for taking pictures and playing them back just as you like.

In particular, the [SETUP] menu contains some important settings relating to the camera's clock and power. Check the settings of this menu before proceeding to use the camera.

■ In Recording Mode

- iii rissorumg meus	- III I Idybaok ilload
	▶ [PLAYBACK] menu
This menu lets you set the coloring, sensitivity, or number of pixels, etc. of the pictures you are recording.	

- This menu lets you perform the clock settings, select the operating beep tone settings and set other settings which make it easier for you to operate the camera.
- Available in Recording or Playback Mode.

How to use the menu



Press [MENU/SET] to display the menu.

 You can switch menu screens by the page from any menu item by rotating the zoom lever. (Example: Selecting the Normal Picture Mode







Press ▲/▼ to select a menu item.

(Example: Selecting [AF MODE])

 You can move to the next page by pressing ▼ at the very bottom.







Press ▶.

· Depending on the item, the settings may not appear or it may be displayed in a different way.







Press ▲/▼ to select a setting.

(Example: Selecting [2])







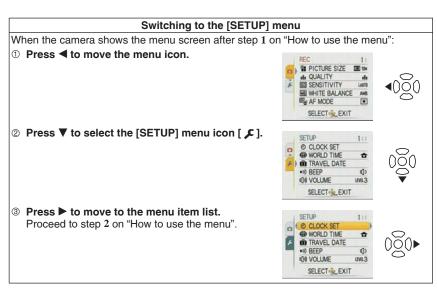
Press [MENU/SET] to confirm your setting.







Press [MENU/SET] to close the menu.



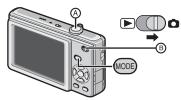
Recording Mode: A

Taking Pictures Using the Automatic Function

(Auto Scene Mode)

The camera automatically sets the appropriate settings according to the subject and recording condition. This mode is recommended for beginners to take pictures easily.

- The following functions are activated automatically.
 - -Scene detection/Face detection/Motion detection/Backlight Compensation
 - Shutter button
 - ® Recording/playback switch





Slide the recording/playback switch to [1 and press [MODE].



Press ▲/▼ to select [AUTO SCENE MODE] and then press [MENU/SET].





Hold this unit gently with both hands, keep your arms still at your side and stand with your feet slightly apart.

- © Flash
- AF assist lamp





Press the shutter button halfway to focus.

- The focus indication © lights green when the subject is focused.
- The AF area © is displayed around the subject's face by the face detection function. In other cases, it is displayed at the point on the subject which is in focus.
- The focus range is 5 cm (0.17 feet) (Wide)/50 cm (1.64 feet) (Tele) to ∞ .
- The maximum close-up distance (the shortest) distance at which the subject can be taken) differs depending on the zoom magnification.





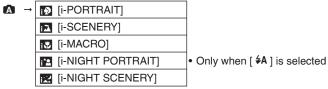
Press the shutter button fully (push it in further), and take the picture.

• The access indication lights red when pictures are being recorded on the built-in memory (or the card).



Scene detection

When the camera identifies the optimum scene, the icon of the scene concerned is displayed in blue for 2 seconds, after which its color changes to the usual red.



• [A] is set if none of the scenes are applicable, and the standard settings are set.

■ Face detection

When []] or [] is selected, the camera automatically detects a person's face, and it will adjust the focus and exposure.



- Due to conditions such as the ones below, a different scene may be identified for the same subject.
 - Subject conditions: When the face is bright or dark, The size of the subject, The
 distance to the subject, The contrast of the subject, When the subject is moving, When
 zoom is used
 - Recording conditions: Sunset, Sunrise, Under low brightness conditions, When the camera is shaken
- To take pictures in an intended scene, it is recommended that you take pictures in the appropriate Recording Mode.

■ The backlight compensation

Backlight refers to when light comes from the back of a subject.

In this case, the subject will become dark, so this function compensates the backlight by brightening the whole of the picture automatically.

Recording Mode:

Taking Pictures with Your Favorite Settings

(Normal Picture Mode)

This mode allows you to take pictures freely as more options are available than Auto Scene Mode [A].



and press [MODE].

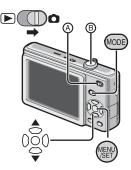
Recording/playback switch



Press ▲/▼ to select [NORMAL PICTURE] and press [MENU/SET].



Aim the AF area to the point you want to focus on.





Press the shutter button ® halfway to focus.

- The focus indication (green) lights when the subject is focused.
- The focus range is 50 cm (1.64 feet) to ∞ .





Press the shutter button fully (push it in further), and take the picture.



• The access indication lights red when a picture is being recorded on the built-in memory (or the card).

Focusing

Aim the AF area at the subject, and then press the shutter button halfway.



Focus		When the subject is not focused	
Focus indication	On	Blinks	
AF area	White→Green	White→Red	
Sound	Beeps 2 times	Beeps 4 times	

- © Focus indication
- AF area (normal)
- © AF area (when using the digital zoom or when it is dark)

Playback Mode: F

Playing Back Pictures (Normal Playback Mode)



Slide the recording/playback switch (4) to [].

- Normal playback is set automatically in the following cases:
 - -When the mode was switched to the Playback Mode.
 - -When the camera was turned on while the recording/ playback switch was at [].



Press **◄/**▶ to select the picture.

- Play back the previous picture
- >: Play back the next picture
- Speed of picture forwarding/rewinding changes depending on the playback status.



■ Fast forwarding/Fast rewinding

Press and hold <a>/> during playback.

- The file number ® and the picture number © only change one by one.
- Release ◀/▶ when the number of the desired picture appears to play back the picture.
- If you keep pressing
 If you keep pressing
 If you keep pressing

Playback Mode: 🕒 ★

Deleting Pictures

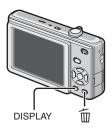
Once deleted, pictures cannot be recovered.

Pictures on the built-in memory or the card, which are being played back, will be deleted.

To delete a single picture



Select the picture to be deleted, and then press [而].



Press ◀ to select [YES] and then press [MENU/SET].





To delete multiple pictures (up to 50) or all the pictures



Press [m].



Press ▲/▼ to select [DELETE MULTI] or [DELETE ALL] and then press [MENU/SET].

[DELETE ALL] → step 5.



Press $\triangle/\nabla/\blacktriangleleft/\triangleright$ to select the picture and then press [DISPLAY] to set. (Repeat this step.)

• The selected pictures appear with [А]. When [DISPLAY] is pressed again, the setting is canceled







Press [MENU/SET].



Press ▲ to select [YES] and then press [MENU/SET] to set.

Reading the Operating Instructions (PDF format)

- You have practised the basic operations introduced in these operating instructions and want to progress to advanced operations.
- You want to check the Troubleshooting.

In these kinds of situations refer to Operating Instructions (PDF format) recorded on the CD-ROM containing the Operating Instructions (supplied).

[Windows]



Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).



Click the [Operating Instructions].



Select the desired language and then click [Operating Instructions] to install.

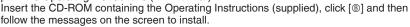
To return to the install menu



Double click the "Operating Instructions" shortcut icon on the desktop.

■ When the Operating Instructions (PDF format) will not open

You will need Adobe Acrobat Reader 5.0 or later or Adobe Reader 7.0 or later to browse or print the Operating Instructions (PDF format).



(Compatible OS: Windows 2000 SP4/Windows XP SP2 or SP3/Windows VISTA SP1 or SP2/Windows 7)

 You can download and install a version of Adobe Reader that you can use with your OS from the following Web Site.

http://get.adobe.com/reader/otherversions

■ To uninstall the Operating Instructions (PDF format)

Delete the PDF file from the "Program Files\Panasonic\Lumix\" folder.

• When the contents in the Program Files folder cannot be displayed, click the [Show the contents of this folder] to display them.

[Macintosh]



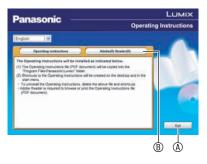
Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).



Open the "Manual" folder in the CD-ROM and then copy the PDF file with the desired language inside the folder.



Double click the PDF file to open it.



Specifications

Digital Camera: Information for your safety

Power Source: DC 5.1 V

Power Consumption: 1.1 W (When recording)

0.5 W (When playing back)

Camera Effective pixels: 10,100,000 pixels

1/2 5" CCD Image sensor:

Total pixels: 10,300,000 pixels

Primary color filter

Lens: Optical 4 × zoom, f=5.5 to 22 mm [35 mm film camera

equivalent: 33 to 132 mm] / F2.8 to F5.9

Max 4 x Digital zoom: Extended optical zoom: Max. 7.1 ×

Normal / Macro Focus:

Face detection / 9-area-focusing / 1-area-focusing

Normal · Focus range:

50 cm (1.64 feet) to ∞ Macro / Auto scene :

5 cm (0.17 feet) (Wide) / 50 cm (1.64 feet) (Tele) to ∞ Scene mode: settings may be different to those shown above

Shutter system: Electronic shutter+Mechanical shutter

Motion picture recording: [WVGA] 848 × 480 pixels (30 frames/second) (When a card

is used.)

[VGA] 640 × 480 pixels (30 frames/second) (When a card is

used.)

[QVGA] 320 × 240 pixels (30 frames/second)

With audio

Burst recording

Burst speed: Approx. 2.3 pictures/second (NORMAL)

Approx. 1.7 pictures/second (Unlimited)

Number of recordable

pictures: Max. 5 pictures (Standard),

Max. 3 pictures (Fine),

Depends on the remaining capacity of the built-in memory or

the card (Unlimited).

Hi-speed burst

Burst speed: Approx. 6 pictures/second

Picture size: [4:3 3M], [3:2 2.5M] or [16:9 2M] is selected as the picture

size.

Number of recordable

When using the built-in memory:

Approx. 10 pictures (immediately after formatting) pictures:

When using a Card:

Max. 100 pictures (differs depending on the type of Card and the recording conditions)

ISO sensitivity: i.AUTO/ 80 / 100 / 200 / 400 / 800 / 1600

[HIGH SENS.] mode: 1600 to 6400

8 seconds to 1/2.000th of a second Shutter speed:

[STARRY SKY] mode:15 seconds, 30 seconds, 60 seconds

White balance: Auto white balance / Davlight / Cloudy / Shade / Halogen /

White set

Exposure (AE): Program AE

Exposure compensation (1/3 EV Step, -2 EV to +2 EV)

Meterina mode: Multiple

TFT LCD 2.5" (Approx. 230,000 dots) (field of view ratio LCD monitor:

about 100%)

Flash: Flash range:

Approx. 30 cm (0.99 feet) to 6.3 m (20.7 feet) (Wide [i.AUTO]) AUTO, AUTO / Red-eye reduction, Forced ON (Forced ON / Red-eye reduction), (Slow sync. / Red-eye reduction), Forced

OFF

Microphone: Monaural Speaker: Monaural

Recording media: Built-in Memory (Approx. 50 MB) / SD Memory Card /

SDHC Memory Card

Picture size

Still picture: [4:3] 10M] 3648 \times 2736 pixels,

[4:3] 5M] 2560 × 1920 pixels, [4:3] 3M] 2048 × 1536 pixels [329M] 3648×2432 pixels, [3:2 2.5M] 2048 × 1360 pixels 7.5M] 3648 × 2056 pixels, [169 2M] 1920 × 1080 pixels

Motion pictures: [WVGA] 848×480 pixels (When a card is used.),

IVGA1 640×480 pixels (When a card is used.).

[QVGA] 320 × 240 pixels

Quality: Fine/Standard

Recording file format

Still Picture: JPEG (based on "Design rule for Camera File system",

based on "Exif 2.21" standard)/DPOF corresponding

Motion pictures: "QuickTime Motion JPEG" (motion pictures with audio)

Interface

Digital: USB 2.0 (Full Speed)

Analog video / audio: NTSC / Audio line output (monaural)

Terminal

AV OUT/DIGITAL: Dedicated jack (8 pin)

Dimensions: $97.6 \text{ mm (W)} \times 55.4 \text{ mm (H)} \times 24.8 \text{ mm (D)}$

> $(3.84" (W) \times 2.18" (H) \times 0.98" (D))$ (excluding the projection part)

Mass (Weight): Approx. 112 g/0.25 lb

(excluding Memory Card and battery)

Approx. 134 g/0.30 lb

(with Memory Card and battery)

Operating Temperature: 0 °C to 40 °C (32 °F to 104 °F)

Operating Humidity: 10% to 80% **Battery Charger**

(Panasonic DE-A59B): Information for your safety

Input: 110 V to 240 V \sim 50/60 Hz, 0.2 A

Output: CHARGE 4.2 V === 0.65 A

Equipment mobility: Movable

Battery Pack (lithium-ion)

(Panasonic CGA-S/106B): Information for your safety

Voltage/capacity

(Minimum): 3.6 V/740 mAh

Digital Camera Accessory System

Battery Pack: DMW-BCF10PP



DC coupler: DMW-DCC4



AC Adaptor: DMW-AC5PP



• Purchase DC coupler and AC adaptor together. You cannot use either of them individually.

AV Cable:

DMW-AVC1



SD Memory Card

2 GBRP-SDP02GU1K 2 GBRP-SDR02GU1A **SDHC Memory Card** 4 GBRP-SDW04GU1K 4 GBRP-SDP04GU1K 4 GBRP-SDR04GU1A

8 GBRP-SDW08GU1K 8 GBRP-SDP08GU1K 8 GBRP-SDR08GU1A 16 GBRP-SDW16GU1K 16 GBRP-SDP16GU1K 32 GBRP-SDW32GU1K





- Refer to P11 for information about the battery charging time and the number of recordable pictures.
- NOTE: Accessories and/or model numbers may vary by country. Please consult your local dealer

Digital Camera Accessory Order Form

Please photocopy 1 1. Digital Camera N 2. Items Ordered	•	•		
Accessory #	Description	Price Each	Quantity	Total Price
			Subtotal	
		Your State &	Local Sales Tax	
			ping & Handling	6.95
		Onip	Total Enclosed	0.95
			Total Eliciosed	
3. Method of payme	ent (check one)			
☐ Check of M	oney Order enclos	ed (NO C.O.D.SHI	PMENTS)	
□ VISA	Credi	Card #		
	I Expira	ation Date		
Discover	Custo	mer Signature		
	Make (heck or Money O	rder to: PANASON	IC ACCESSORIES
(Please do not sen		of Moricy Of	Idel to: I AIVAGOIV	IO AGGEGGGTIIEG
4. Shipping informa	,	requires complete	e street address)	
Ship To:			,	
Mr.				
Mrs.				
Ms	Last		Phone#:	
1 1151	Lasi		Day ()
Street Add	dress			,
			Night ()
City		State Zip		
TO OBTAIN ANY OF OUR DIGITAL CAMERA ACCESSORIES YOU CAN DO ANY OF				
THE FOLLOWING:				
VISIT YOUR LOCAL PANASONIC DEALER OR				
CALL PANASONIC'S ACCESSORY ORDER LINE AT 1-800-332-5368				
[6 AM-6 PM M-F, PACIFIC TIME]				
OR MAIL THIS ORDER TO: PANASONIC SERVICE AND TECHNOLOGY COMPANY				
WAIL THIS OF		SSORY ORDER O		I CONFAINT
		venue South Kent		

Limited Warranty (ONLY FOR U.S.A. AND PUERTO RICO)

Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America One Panasonic Way, Secaucus, New Jersey 07094

Panasonic Digital Still Camera Products Limited Warranty

Limited Warranty Coverage (For USA and Puerto Rico Only)

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company (referred to as "the warrantor") will, for the length of the period indicated on the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts. (b) replace it with a new or a refurbished equivalent value product, or (c) refund your purchase price. The decision to repair, replace or refund will be made by the warrantor

Product or Part Name	Parts	Labor
Digital Still Camera	1 year	1 year
CCD	6 months	90 days
SD Memory Cards, Rechargeable Battery Pack (defective exchange)	90 days	Not Applicable

During the "Labor" warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. This Limited Warranty excludes both parts and labor for non-rechargeable batteries, antennas, and cosmetic parts (cabinet). This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is".

Mail-In Service

For assistance in the U.S.A. and Puerto Rico in obtaining repairs, please ship the product prepaid to:

Panasonic Exchange Center 4900 George McVay Drive Suite B McAllen, TX 78503 panacare@us.panasonic.com

When shipping the unit, carefully pack, include all accessories, and send it prepaid, adequately insured and preferably in the original carton. If Lithium Ion batteries are shipped by air the package must be labeled "Contains Lithium Ion Battery (No lithium metal)". Damaged batteries are prohibited from shipment by US Mail. Batteries must be securely packed in a manner to prevent short-circuiting and a package cannot contain more than 3 Lithium Ion batteries. Include a letter detailing the complaint, a return address and provide a daytime phone number where you can be reached. A valid registered receipt is required under the Limited Warranty.

IF REPAIR IS NEEDED DURING THE WARRANTY PERIOD, THE PURCHASER WILL BE REQUIRED TO FURNISH A SALES RECEIPT/PROOF OF PURCHASE INDICATING DATE OF PURCHASE, AMOUNT PAID AND PLACE OF PURCHASE. CUSTOMER WILL BE CHARGED FOR THE REPAIR OF ANY UNIT RECEIVED WITHOUT SUCH PROOF OF PURCHASE.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, setup adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, introduction of sand, humidity or liquids, commercial use such as hotel, office, restaurant, or other business or rental use of the product, or service by anyone other than a Factory Service Center or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE".

THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, travel to and from the servicer, loss of or damage to media or images, data or other memory or recorded content. The items listed are not exclusive, but for illustration only.) ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Service Center. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE, WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY, ARE YOUR RESPONSIBILITY.

Customer Services Directory (United States and Puerto Rico)

Obtain Product Information and Operating Assistance: locate your nearest Dealer or Service Center; purchase Parts and Accessories; or make Customer Service and Literature requests by visiting our Web Site at:

http://www.panasonic.com/help

or, contact us via the web at:

http://www.panasonic.com/contactinfo

You may also contact us directly at:

1-800-211-PANA (7262)

Monday-Friday 9am-9pm. Saturday-Sunday 10am-7pm EST

For hearing or speech impaired TTY users, TTY: 1-877-833-8855

Accessory Purchases (United States and Puerto Rico)

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at:

http://www.pstc.panasonic.com

Or, send your request by E-mail to:

npcparts@us.panasonic.com

You may also contact us directly at:

1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only)

(Monday-Friday 9am-9pm EST)

Panasonic Service and Technology Company

20421 84th Avenue South, Kent, WA 98032

(We accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY: 1-866-605-1277

As of November 2009



QuickTime and the QuickTime logo are trademarks or registered trademarks of Apple Inc., used under license therefrom.

Panasonic Consumer Electronics Company, Division of Panasonic Corporation of North America One Panasonic Way, Secaucus, NJ 07094

© Panasonic Corporation 2010