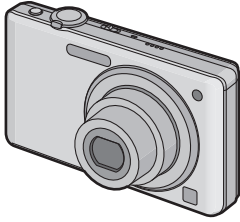


Panasonic®



Basic Operating Instructions Digital Camera Model No. **DMC-FS12**



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 section.

For Canadian assistance, please call: 1-800-99-LUMIX (1-800-995-8649) or
send e-mail to: lumixconcierge@ca.panasonic.com

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 on the 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. 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.

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.

Model No. _____

Serial No. _____



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.

■ 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 eyes 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 110 V and 240 V.

But

- In the U.S.A. and Canada, the battery charger must be connected to a 120 V 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.

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

■ Cautions for Use

- Always use a genuine Panasonic AC adaptor (DMW-AC5PP; optional).
- 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.

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 or hitting it. Do not subject to strong pressure.

The camera may malfunction, recording pictures may become impossible, or the lens, the LCD monitor or the external case 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.
- Do not attach any other items to the hand strap that's included with your camera. While being stored, that item can rest against the LCD monitor and damage it.
- **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 rainy day 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.**
- **This camera is not waterproof. If water or seawater splashes on the camera, use a dry cloth to wipe the camera body carefully.**
If the unit does not operate normally, please contact the dealer where you purchased the camera or the repair service center.



■ 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 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.

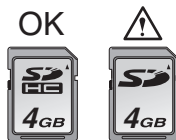
- You can only use an SDHC Memory Card if using cards with 4 GB or more capacity.
- A 4 GB (or more) Memory Card without an SDHC logo is not based on the SD Standard and will not work in this product.

Please confirm the latest information on the following website.

<http://panasonic.co.jp/pavc/global/cs>

(This Site is English only.)

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



-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.



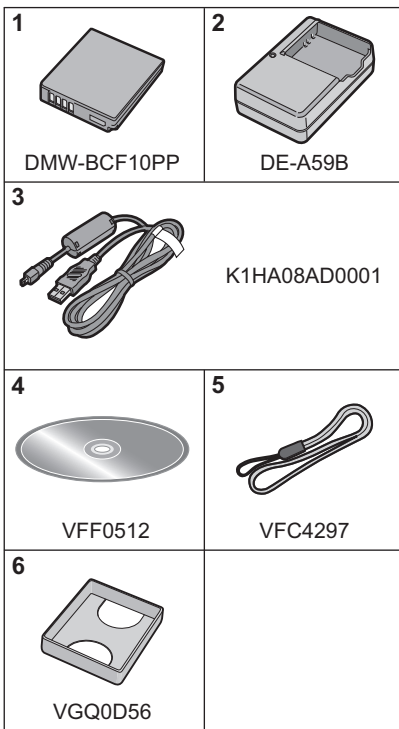
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Standard Accessories

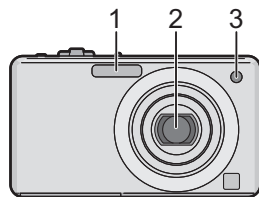
Check that all the accessories are included before using the camera.

- 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.
 - **The 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, refer to the "Digital Camera Accessory System".
 - If any accessories are lost, customers should contact 1 800 99-LUMIX (1-800-995-8649) for further information about obtaining replacement parts.

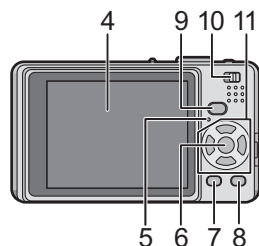


Names of the Components

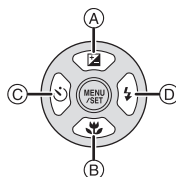
- 1 Flash
- 2 Lens
- 3 Self-timer indicator
AF assist lamp



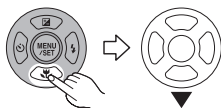
- 4 LCD monitor
- 5 Status indicator
- 6 [MENU/SET] button
- 7 [DISPLAY] button
- 8 [Q.MENU]/Delete button
- 9 [MODE] button
- 10 [REC]/[PLAYBACK] selector switch
- 11 Cursor buttons



- 11 Cursor buttons
 - A: ▲/Exposure compensation/Auto bracket
 - B: ▼/Macro mode
 - C: ◀/Self-timer button
 - D: ▶/Flash setting button



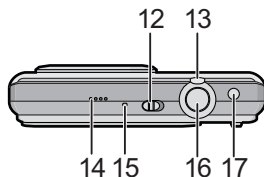
In these operating instructions, the cursor buttons are described as shown in the figure below or described with ▲/▼/◀/▶.
e.g.: When you press the ▼ (down) button



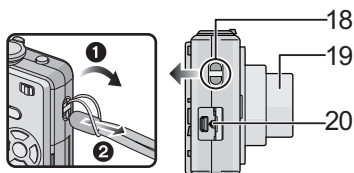
or

Press ▼

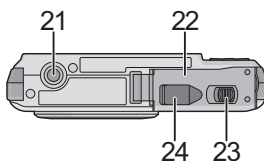
- 12 Camera ON/OFF switch
- 13 Zoom lever
- 14 Speaker
- 15 Microphone
- 16 Shutter button
- 17 Intelligent auto button



- 18 Hand strap eyelet
- Be sure to attach the hand strap when using the camera to ensure that you will not drop it.
- 19 Lens barrel
- 20 [AV OUT/DIGITAL] socket



- 21 Tripod receptacle
- When you use a tripod, make sure the tripod is stable when the camera is attached to it.
- 22 Card/Battery door
- 23 Release lever



- 24 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.
- We recommend you use a battery with sufficient battery power or the AC adaptor when recording motion pictures.
- If while recording motion pictures using the AC adaptor the power supply is cut off due to a power cut or if the AC adaptor is disconnected etc., the motion picture being recorded will not be recorded.

Charging the Battery

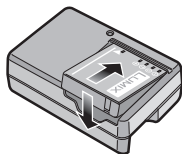
■ About batteries that you can use with this unit

The battery that can be used with this unit is DMW-BCF10PP.

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.

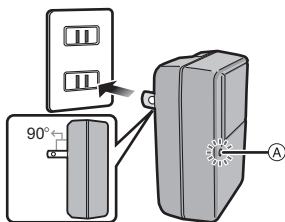
- Use the dedicated charger and battery.
- This unit has a function that can distinguish useable batteries. Exclusive batteries (DMW-BCF10PP) are supported by this function. (Conventional batteries not supported by this function cannot be used.)
- The battery is not charged when the camera is shipped. 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.)

- 1 Attach the battery paying attention to the direction of the battery.**

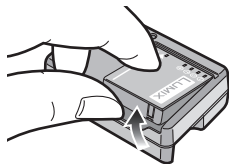


- 2 Connect the charger to the electrical outlet.**

- Charging starts when the [CHARGE] indicator (A) lights green.
- Charging is complete when the [CHARGE] indicator (A) turns off (after approx. 130 min).



- 3 Detach the battery after charging is completed.**



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 during 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.**

■ The battery life

Number of recordable pictures	Approx. 330 pictures	By CIPA standard in Normal picture mode
Recording time	Approx. 165 min	

Recording conditions by CIPA standard

- CIPA is an abbreviation of [Camera & Imaging Products Association].
- Temperature: 23 °C (73.4 °F)/Humidity: 50% when LCD monitor is on.*
- Using a Panasonic SD Memory Card (32 MB).
- Using the supplied battery.
- Starting recording 30 seconds after the camera is turned on. (When the Optical image stabilizer function is set to [AUTO].)
- **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 and leaving it until the temperature of the battery decreases.
- * The number of recordable pictures decreases in Auto Power LCD mode, Power LCD mode and High angle mode.

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, the number of recordable pictures decreases to about 82.)

Playback time	Approx. 360 min
----------------------	------------------------

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

■ Charging

Charging time	Approx. 130 min
----------------------	------------------------

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

Inserting and Removing the Card (optional)/the Battery

- Check that this unit is turned off.
- We recommend using a Panasonic card.

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

- Always use genuine Panasonic batteries (DMW-BCF10PP).
- If you use other batteries, we cannot guarantee the quality of this product.

2 **Battery:** Insert until it is locked by the lever (A) being careful about the direction you insert it. 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 you insert it. To remove the card, push the card until it clicks, then pull the card out upright.

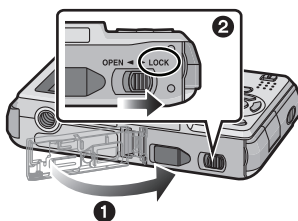
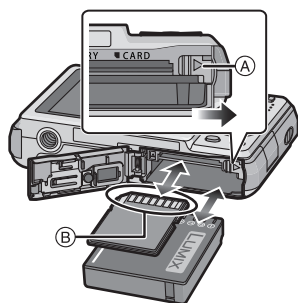
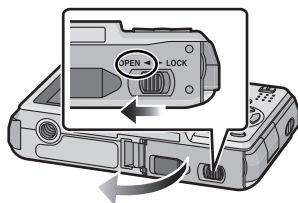
(B): Do not touch the connection terminals of the card.

- The card may be damaged if it is not fully inserted.

3 **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.

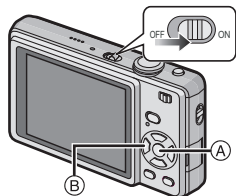


Setting Date/Time (Clock Set)

- The clock is not set when the camera is shipped.

1 Turn the camera on.

- The [PLEASE SET THE CLOCK] message appears. (This message does not appear in [PLAYBACK] mode.)
 - (A) [MENU/SET] button
 - (B) Cursor buttons



2 Press [MENU/SET].



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



⏏: Cancel without setting the clock.

4 Press [MENU/SET] to 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 below.

Changing the clock setting

Select [CLOCK SET] in the [REC] or [SETUP] menu, and press ▶.

- It can be changed in steps 3 and 4 to set the clock.
- 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.)

Setting the Menu

The camera comes with menus that allow you to set the settings for taking pictures and playing them back just as you like and menus that enable you to have more fun with the camera and use it more easily.

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.

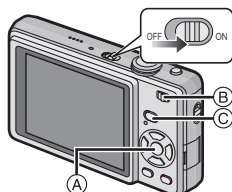
Setting menu items

This section describes how to select the Normal picture mode settings, and the same setting can be used for the [PLAYBACK] menu and [SETUP] menu as well.

Example: Setting [AF MODE] from [□] to [👤] in the Normal picture mode

1 Turn the camera on.

- (A) [MENU/SET] button
- (B) [REC]/[PLAYBACK] selector switch
- (C) [MODE] button



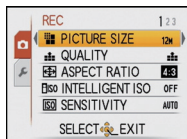
2 Slide the [REC]/[PLAYBACK] selector switch to [📺], and then press [MODE].

- When selecting the [PLAYBACK] mode menu settings, set the [REC]/[PLAYBACK] selector switch to [▶], and proceed to step 4.

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

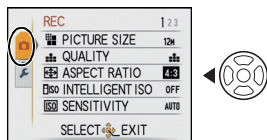
4 Press [MENU/SET] to display the menu.

- You can switch menu screens from any menu item by rotating the zoom lever.

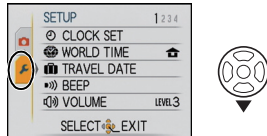


Switching to the [SETUP] menu

1 Press ◀.



2 Press ▼ to select the [SETUP] menu icon ⚙.



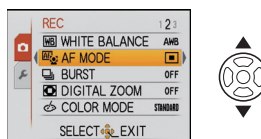
3 Press ▶.

- Select a menu item next and set it.



5 Press ▲/▼ to select [AF MODE].

- Select the item at the very bottom, and press ▼ to move to the second screen.



6 Press ▶.

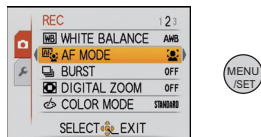
- Depending on the item, its setting may not appear or it may be displayed in a different way.



7 Press ▲/▼ to select [⚙].



8 Press [MENU/SET] to set.



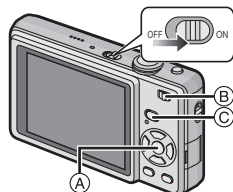
9 Press [MENU/SET] to close the menu.

Selecting the [REC] Mode

When the [REC] mode is selected, the camera can be set to the Intelligent auto mode in which the optimal settings are established in line with the subject to be recorded and the recording conditions, or to the Scene mode which enables you to take pictures that match the scene being recorded.

1 Turn the camera on.

- (A) [MENU/SET] button
- (B) [REC]/[PLAYBACK] selector switch
- (C) [MODE] button

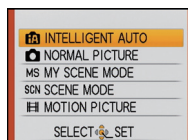


2 Slide the [REC]/[PLAYBACK] selector switch to [RECORDING].

3 Press [MODE].

4 Press ▲/▼ to select the mode.

5 Press [MENU/SET].



■ List of [REC] modes

IA Intelligent auto mode

The subjects are recorded using settings automatically selected by the camera.

NP Normal picture mode

The subjects are recorded using your own settings.

MS My scene mode

Pictures are taken using previously registered recording scenes.

SCN Scene mode

This allows you to take pictures that match the scene being recorded.

MP Motion picture mode

This mode allows you to record motion pictures with audio.

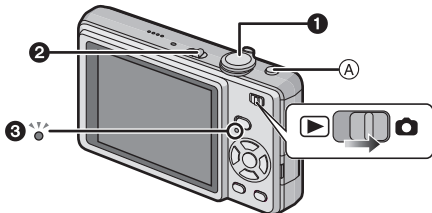
[REC] mode: **iA**

Taking pictures using the automatic function

iA: Intelligent Auto Mode

The camera will set the most appropriate settings to match the subject and the recording conditions so we recommend this mode for beginners or those who want to leave the settings to the camera and take pictures easily.

- The following functions are activated automatically.
 - Scene detection/[STABILIZER]/[INTELLIGENT ISO]/Face detection/Backlight Compensation/Digital Red-eye Correction
- The status indicator **3** lights when you turn this unit on **2**. (It turns off after about 1 second.)
1: Shutter button



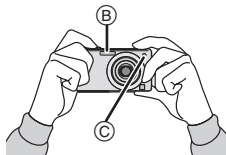
1 Slide the [REC]/[PLAYBACK] selector switch to **[CAMERA]**, and then press [MODE].

2 Press **▲/▼** to select [INTELLIGENT AUTO], and then press [MENU/SET].

- You can quickly switch to Intelligent auto mode by pressing **[iA]** **(A)** when the [REC]/[PLAYBACK] selector switch is set to record. Pressing **[iA]** again takes you back to the previous mode.

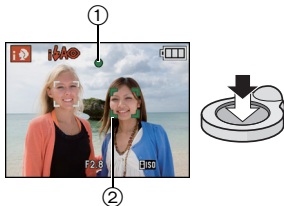
3 Hold the camera gently with both hands, keep your arms still at your side and stand with your feet slightly apart.

- (B)** Flash
- (C)** AF assist lamp



4 Press the shutter button halfway to focus.

- The focus indication **1** (green) lights when the subject is focused.
- The AF area **2** 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 ∞ .





5 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).
- **Do not turn this unit off, remove its battery or card, or disconnect the AC adaptor (DMW-AC5PP; optional) when the access indication is lit [when pictures are being written, read or deleted, or the built-in memory or the card is being formatted]. Furthermore, do not subject the camera to vibration, impact or static electricity. The card or the data on the card may be damaged, and this unit may no longer operate normally. If operation fails due to vibration, impact or static electricity, perform the operation again.**

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.

	→		[i- PORTRAIT]	
			[i- SCENERY]	
			[i- MACRO]	
			[i- NIGHT PORTRAIT]	• Only when [A] is selected
			[i- NIGHT SCENERY]	• Only when [S] is selected

- [i-A] is set if none of the scenes are applicable, and the standard settings are set.
- If a tripod is used, for instance, and the camera has judged that camera shake is minimal when the Scene mode has been identified as [i-A], the shutter speed will be set to a maximum of 8 seconds. Take care not to move the camera while taking pictures.

■ Face detection

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


Note

- 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.

[REC] mode: 

Taking pictures with your favorite settings

: Normal picture mode

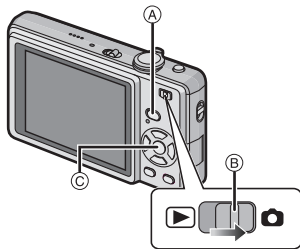
The camera automatically sets the shutter speed and the aperture value according to the brightness of the subject.



You can take pictures with greater freedom by changing various settings in [REC] menu.

1 Slide the [REC]/[PLAYBACK] selector switch to , and then press [MODE].

(A) [MODE] button

(B) [REC]/[PLAYBACK] selector switch



2 Press / to select [NORMAL PICTURE], and then press [MENU/SET].

(C) [MENU/SET] button

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

4 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 ∞.



5 Press the halfway pressed shutter button fully to take a picture.

- The access indication lights red when pictures are 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 focused	When the subject is not focused
Focus indication	On	Blinks
AF area	White → Green	White → Red
Sound	Beeps 2 times	Beeps 4 times

(A) Focus indication


(B) AF area (normal)

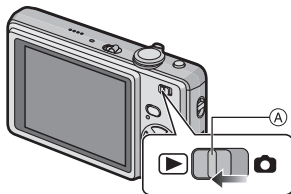
(C) AF area (when using the digital zoom or when it is dark)

[PLAYBACK] mode: 



Playing back Pictures ([NORMAL PLAY])

1 Slide the [REC]/[PLAYBACK] selector switch **A** to .

- Normal playback is set automatically in the following cases.
 - When the mode was switched from the [REC] to [PLAYBACK]
 - When the camera was turned on while the [REC]/[PLAYBACK] selector switch was at .









2 Press / to select the picture.

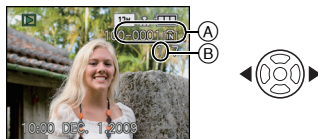
- : Play back the previous picture
- : Play back the next picture

■ Fast forwarding/Fast rewinding

Press and hold /  during playback.

- : Fast rewind
- : Fast forward

- The file number **A** and the picture number **B** only change one by one. Release /  when the number of the desired picture appears to play back the picture.
- If you keep pressing / , the number of pictures forwarded/rewound increases.



[PLAYBACK] mode: 

Deleting Pictures

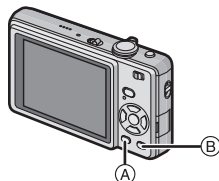
Once deleted, pictures cannot be recovered.

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

To delete a single picture

1 Select the picture to be deleted, and then press .

- A [DISPLAY] button
- B  button



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




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

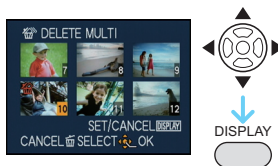
1 Press .

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

• [DELETE ALL] → step 5.

3 Press /// to select the picture, and then press [DISPLAY] to set. (Repeat this step.)

•  appears on the selected pictures. If [DISPLAY] is pressed again, the setting is canceled.



4 Press [MENU/SET].

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

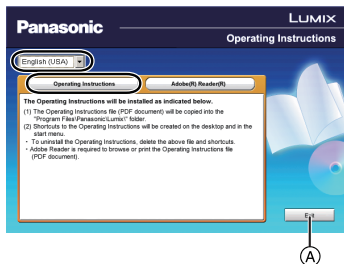
Reading the Operating Instructions (PDF format)

- 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).

■ For Windows

- 1 Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).**
- 2 Click the [Operating Instructions/ Manuel d'utilisation].**
- 3 Select the desired language and then click [Operating Instructions] to install.**
 - Ⓐ To return to the install menu.
(Example: When an English language OS)
- 4 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 4.0 or later or Adobe Reader 6.0 or later to browse or print the Operating Instructions (PDF format).

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

http://www.adobe.com/products/acrobat/readstep2_allversions.html

If using Windows 2000 SP4/Windows XP SP2 or SP3/Windows Vista and SP1

Insert the CD-ROM containing the Operating Instructions (supplied), click [Adobe(R) Reader(R)] and then follow the messages on the screen to install.

■ 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.

■ For Macintosh

- 1 Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).**
- 2 Open the “Manual” folder in the CD-ROM and then copy the PDF file with the desired language inside the folder.**
- 3 Double click the PDF file to open it.**

Specifications

Digital Camera: Information for your safety

Power Source: DC 5.1 V
Power Consumption: 1.35 W (When recording)
0.6 W (When playing back)

Camera effective pixels: 12,100,000 pixels
Image sensor: 1/2.33" CCD, total pixel number 12,700,000 pixels, Primary color filter
Lens: Optical 4× zoom, f=5.5 mm to 22 mm (35 mm film camera equivalent: 31 mm to 124 mm)/F2.8 to F5.9
Digital zoom: Max. 4×
Extended optical zoom: Max. 7.8×
Focus: Normal/AF macro/Macro zoom/Face detection/9-area-focusing/1-area-focusing
Focus range: Normal: 50 cm (1.64 feet) to ∞
Macro/Intelligent auto:
5 cm (0.17 feet) (Wide)/50 cm (1.64 feet) (Tele) to ∞
Scene mode: There may be differences in the above settings.
Electronic shutter+Mechanical shutter
Shutter system:
Motion picture recording: 848×480 pixels (30 frames/second, only when using a Card)/
640×480 pixels (30 frames/second, only when using a Card)/
320×240 pixels (30 frames/second)
Burst recording
Burst speed: 1.8 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).
(Performance in Burst recording is only with SD Memory Card/SDHC Memory Card.)

Hi-speed burst

Burst speed:	Approx. 5 pictures/second (3M (4:3), 2.5M (3:2) or 2M (16:9) is selected as the picture size.)
Number of recordable pictures:	When using the built-in memory: Approx. 10 pictures (immediately after formatting) When using a Card: Max. 100 pictures (differs depending on the type of Card and the recording conditions)
ISO sensitivity:	AUTO/80/100/200/400/800/1600 [HIGH SENS.] mode: 1600 to 6400
Shutter speed:	8 seconds to 1/2000th of a second [STARRY SKY] mode: 15 seconds, 30 seconds, 60 seconds
White balance:	Auto white balance/Daylight/Cloudy/Shade/Incandescent lights/White set
Exposure (AE):	Program AE Exposure compensation (1/3 EV Step, -2 EV to +2 EV)
Metering mode:	Multiple
LCD monitor:	2.7" TFT LCD (Approx. 230,000 dots) (field of view ratio about 100%)
Flash:	Flash range: [ISO AUTO] Approx. 30 cm (0.99 feet) to 6.3 m (20.7 feet) (Wide) AUTO, AUTO/Red-eye reduction, Forced flash ON (Forced ON/Red-eye reduction), Forced flash OFF (, Slow sync./Red-eye reduction)
Microphone:	Monaural
Speaker:	Monaural
Recording media:	Built-in Memory (Approx. 50 MB)/SD Memory Card/SDHC Memory Card
Picture size	
Still picture:	When the aspect ratio setting is [4:3] 4000×3000 pixels, 3264×2448 pixels, 2560×1920 pixels, 2048×1536 pixels, 1600×1200 pixels, 640×480 pixels When the aspect ratio setting is [3:2] 4000×2672 pixels, 3264×2176 pixels, 2560×1712 pixels, 2048×1360 pixels When the aspect ratio setting is [16:9] 4000×2248 pixels, 3264×1840 pixels, 2560×1440 pixels, 1920×1080 pixels
Motion pictures:	848×480 pixels (Only when using a Card)/ 640×480 pixels (Only when using a Card)/ 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:	Approx. 97.0 mm (W)×54.4 mm (H)×21.7 mm (D) [Approx. 3 13/16" (W)×2 1/8"(H)×7/8" (D)] (excluding the projecting parts)
Mass (weight):	Approx. 117 g/4.13 oz (excluding card and battery) Approx. 139 g/4.90 oz (with 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 ~ 50/60 Hz, 0.2 A
Output:	CHARGE 4.2 V \approx 0.65 A



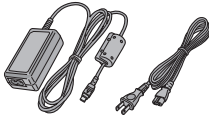




Equipment mobility: Movable

Battery Pack (lithium-ion)

(Panasonic
DMW-BCF10PP): Information for your safety

Voltage/capacity (Minimum):	3.6 V/940 mAh
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Digital Camera Accessory System

Accessory#	Illustration	Description
DMW-BCF10PP		Battery Pack
DMW-AVC1		AV Cable
DMW-AC5PP		AC Adaptor*
DMW-DCC4		DC Coupler*
DMW-CS5		Soft Case
DMW-CHFX30		Semi Hard Case
RP-SDV32GU1K RP-SDV16GU1K RP-SDM12GU1K RP-SDV08GU1K RP-SDM06GU1K RP-SDM04GU1K RP-SDV04GU1K RP-SDM02GU1A RP-SDV02GU1A RP-SDR01GU1A		32 GB SDHC Memory Card 16 GB SDHC Memory Card 12 GB SDHC Memory Card 8 GB SDHC Memory Card 6 GB SDHC Memory Card 4 GB SDHC Memory Card 4 GB SDHC Memory Card 2 GB SD Memory Card 2 GB SD Memory Card 1 GB SD Memory Card

* Ensure that the AC adaptor (DMW-AC5PP; optional) and DC coupler (DMW-DCC4; optional) are purchased as a set. Do not use if sold separately.

• NOTE: Accessories and/or model numbers may vary between countries. Consult your local dealer.

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