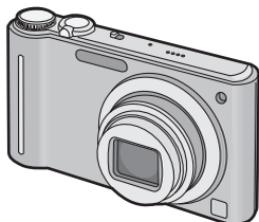


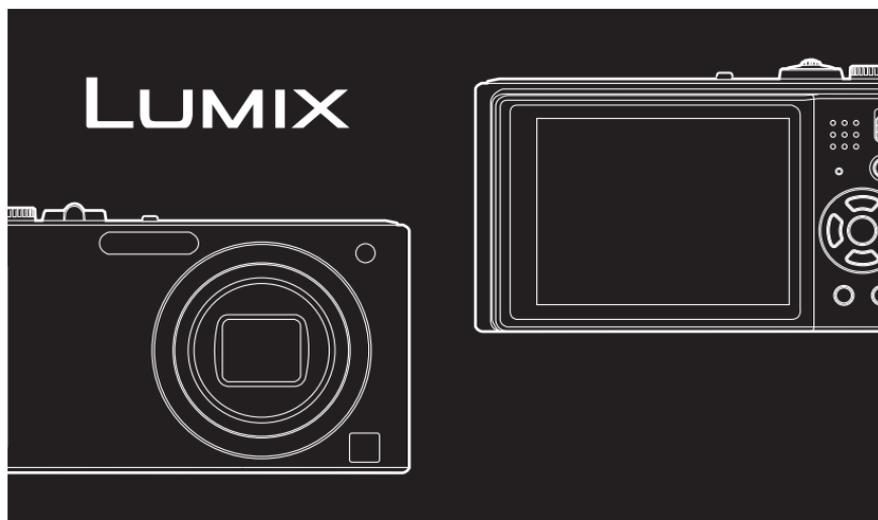
Panasonic®



Basic Operating Instructions

Digital Camera

Model No. **DMC-ZX1**



Before use, please read these 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.



Web Site: <http://www.panasonic-europe.com>

Dear Customer,

We would like to take this opportunity to thank you for purchasing this Panasonic Digital Camera. Please read these Operating Instructions carefully and keep them handy for future reference. 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.

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

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 or incinerate.

Caution for AC mains lead

For your safety, please read the following text carefully.

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 5-ampere fuse is fitted in this plug. Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 5-ampere and that it is approved by ASTA or BSI to BS1362. Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local dealer.

CAUTION!

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY.

THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13-AMPERE SOCKET.

If a new plug is to be fitted please observe the wiring code as stated below. If in any doubt please consult a qualified electrician.

■ IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:
Blue: Neutral, Brown: Live.

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured Blue must be connected to the terminal which is marked with the letter N or coloured Black or Blue.
The wire which is coloured Brown must be connected to the terminal which is marked with the letter L or coloured Brown or Red.

WARNING: DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL WHICH IS MARKED WITH THE LETTER E, BY THE EARTH SYMBOL \perp OR COLOURED GREEN OR GREEN/YELLOW.

THIS PLUG IS NOT WATERPROOF-KEEP DRY.

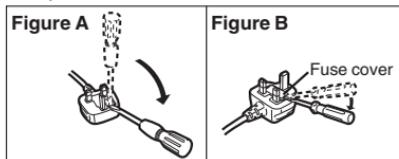
■ Before use

Remove the connector cover.

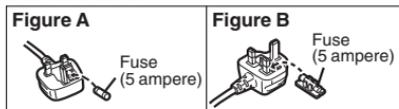
■ How to replace the fuse

The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.
Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



2. Replace the fuse and close or attach the fuse cover.



■ 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.**
- **DO NOT OBSTRUCT THE UNIT'S VENTILATION OPENINGS WITH NEWSPAPERS, TABLECLOTHS, CURTAINS, AND SIMILAR ITEMS.**
- **DO NOT PLACE SOURCES OF NAKED FLAMES, SUCH AS LIGHTED CANDLES, ON THE UNIT.**
- **DISPOSE OF BATTERIES IN AN ENVIRONMENTALLY FRIENDLY MANNER.**

- The battery charger is in the standby condition when the AC power supply cord is connected. The primary circuit is always "live" as long as the power cord is connected to an electrical outlet.

■ Cautions for Use

- Always use a genuine Panasonic AC adaptor (DMW-AC5E; optional).
- When using an AC adaptor, use the AC cable supplied with the AC adaptor.
- Do not use any other AV cables except the supplied one.
- Do not use any other cables except a genuine Panasonic component cable (DMW-HDC2; 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-AC5E; 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

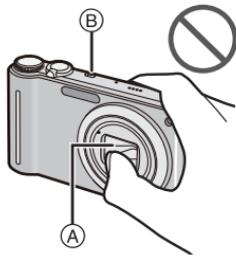
- Do not touch the lens or the sockets with dirty hands. Also, be careful not to allow liquids, sand and other foreign matter to get into the space around the lens, buttons etc.
- Do not touch the lens barrier (A). (Doing so may damage the camera. Be careful when taking the camera out of a bag etc.)
- If the lens gets dirty, turn on the power and deploy the lens barrel. Then hold the lens barrel between your fingers and lightly wipe the lens surface with a soft dry cloth. (If you leave fingerprints on or otherwise dirty the lens, the pictures you take may look whiter than normal.)

(B): Camera ON/OFF switch

- Do not leave the camera with the lens facing the sun.
- 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.
- **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 centre.



■ 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.

- 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.jp/support/global/cs/dsc/>

(This Site is English only.)

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



Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



For business users in the European Union

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

[Information on Disposal in other Countries outside the European Union]

These symbols are only valid in the European Union. If you wish to discard these items, please contact your local authorities or dealer and ask for the correct method of disposal.



Note for the battery symbol (bottom two symbol examples):

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Cd

Contents

Information for Your Safety	2
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Before Use

Accessories	9
Names of the Components	10

Preparation

Charging the Battery	12
Inserting and Removing the Card (optional)/the Battery	14
Setting Date/Time (Clock Set)	15
• Changing the clock setting	15
Setting the Menu	16
• Setting menu items	16
Selecting the [REC] Mode	18

Basic

Taking pictures using the automatic function	
( : Intelligent Auto Mode)	19
• Scene detection	20
• AF Tracking Function	20
Taking pictures with your favourite settings	
( : Normal Picture Mode)	21
• Focusing	21
Playing back Pictures ([NORMAL PLAY])	22
Deleting Pictures	23
• To delete a single picture	23
• To delete multiple pictures (up to 50) or all the pictures	23

Others

Reading the Operating Instructions (PDF format)	24
Specifications	25

Sales and Support Information

Customer Care Centre

- For customers within the UK:
0844 844 3852
- For customers within the Republic of
Ireland: 01 289 8333
- Visit our website for product information
- E-mail: customer.care@panasonic.co.uk

Technical Support for AV Software

- For customers within the UK: 0844 844 3869
- For customers within the Republic of Ireland:
01 289 8333

Direct Sales at Panasonic UK

- For customers: 0844 844 3856
- Order accessory and consumable items for
your product with ease and confidence by
phoning our Customer Care Centre
Monday – Thursday 9.00 a.m. – 5.30 p.m.,
Friday 9.30 a.m. – 5.30 p.m.
(Excluding public holidays)
- Or go on line through our Internet Accessory
ordering application at
www.panasonic.co.uk.
- Most major credit and debit cards accepted.
- All enquiries transactions and distribution
facilities are provided directly by Panasonic
UK Ltd.
- It couldn't be simpler!
- Also available through our Internet is direct
shopping for a wide range of finished
products, take a browse on our website for
further details.

*Interested in purchasing an extended
guarantee?*

*Please call 0870 240 6284 or visit our website
www.panasonic.co.uk/guarantee.*

Accessories

Check that all the accessories are included before using the camera.
Product numbers correct as of July 2009. These may be subject to change.

- 1 Battery Pack
(Indicated as **battery pack** or **battery** in the text)
Charge the battery before use.
- 2 Battery Charger
(Indicated as **battery charger** or **charger** in the text)
- 3 AC Mains Lead
- 4 USB Connection Cable
- 5 AV Cable
- 6 CD-ROM
 - Software:
Use it to install the software to your PC.
- 7 CD-ROM
 - Operating Instructions
- 8 Hand Strap
- 9 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.

• Consult the dealer or your nearest Service Centre if you lose the supplied accessories.
(You can purchase the accessories separately.)

■ **Optional Accessories**

- Battery Pack
DMW-BCG10E
- Marine Case
DMW-MCZX1E
- Component Cable
DMW-HDC2E
- AC Adaptor
DMW-AC5EB
- DC Coupler*
DMW-DCC5F
- SDHC Memory Card
32 GB: RP-SDW32GE1K
16 GB: RP-SDW16GE1K/RP-SDP16GE1K
12 GB: RP-SDP12GE1K
8 GB: RP-SDW08GE1K/RP-SDP08GE1K/RP-SDR08GE1A
4 GB: RP-SDW04GE1K/RP-SDP04GE1K/RP-SDR04GE1A
- SD Memory Card
2 GB: RP-SDP02GE1K/RP-SDR02GE1A
- CardBus PC Card Adapter
BN-SDPC3E

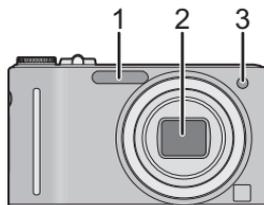
* Ensure that the AC adaptor and DC coupler are purchased in a set. Do not use if sold separately.

Some optional accessories may not be available in some countries.

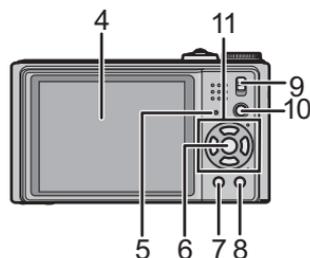
1  DMW-BCG10E	2  DE-A66A
3  K2CT39A00002	4  K1HA08AD0003
5  K1HA08CD0020	6 
7  VFF0524	8  VFC4297
9  VGQ0E45	

Names of the Components

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

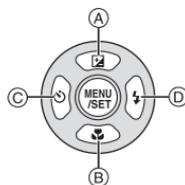


- 4 LCD monitor
- 5 Status indicator
- 6 [MENU/SET] button
- 7 [DISPLAY] button
- 8 [Q.MENU]/Delete button
- 9 [REC]/[PLAYBACK] selector switch
- 10 [E.ZOOM] button

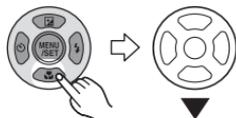


11 Cursor buttons

- (A): ▲/Exposure compensation/Auto Bracket/White balance fine adjustment
- (B): ▼/Macro Mode AF Tracking
- (C): ◀/Self-timer button
- (D): ▶/Flash setting button



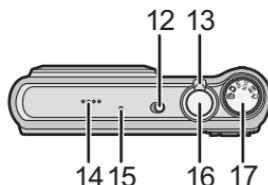
In these operating instructions, the cursor buttons are described as shown in the figure below or described with ▲/▼/◀/▶.
e.g.: When you press the ▼ (down) button



or

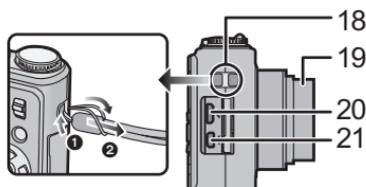
Press ▼

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



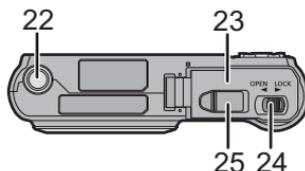
- 18 Hand strap eyelet
 - Be sure to attach the hand strap when using the camera to ensure that you will not drop it.

- 19 Lens barrel
- 20 [COMPONENT OUT] socket
- 21 [AV OUT/DIGITAL] socket



- 22 Tripod receptacle
 - When you use a tripod, make sure the tripod is stable when the camera is attached to it.

- 23 Card/Battery door
- 24 Release lever



- 25 DC coupler cover
 - When using an AC adaptor, ensure that the Panasonic DC coupler (DMW-DCC5; optional) and AC adaptor (DMW-AC5E; 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

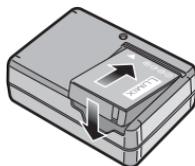
■ About batteries that you can use with this unit

The battery that can be used with this unit is DMW-BCG10E.

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.

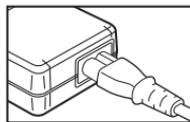
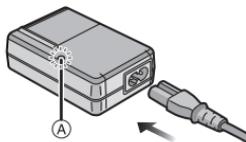
- Use the dedicated charger and battery.
- The camera has a function for distinguishing batteries which can be used safely. The dedicated battery (DMW-BCG10E) supports this function. The only batteries suitable for use with this unit are genuine Panasonic products and batteries manufactured by other 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.)

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

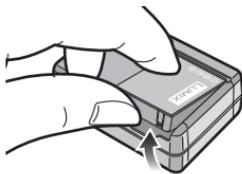


2 Connect the AC mains lead.

- The AC mains lead does not fit entirely into the AC input terminal. A gap will remain as shown right.
- Charging starts when the [CHARGE] indicator (A) lights green.
- Charging is complete when the [CHARGE] indicator (A) turns off.



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. (Since characteristic swelling may occur.)
- 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 and Power LCD 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. 300 min
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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
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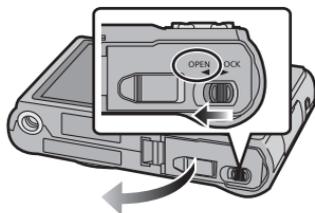
- The indicated charging time is for when the battery has been discharged completely. The charging time may vary depending on how the battery has been used. The charging time for the battery in hot/cold environments or a battery that has not been used for long time may be longer than normal.

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.

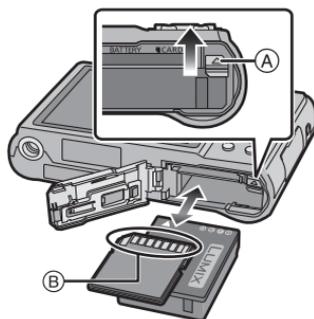
- Always use genuine Panasonic batteries (DMW-BCG10E).
- If you use other batteries, we cannot guarantee the quality of this product.



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.

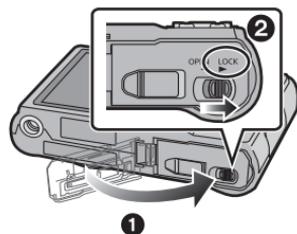
- (B): Do not touch the connection terminals of the card.
- The card may be damaged if it is not fully inserted.



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.

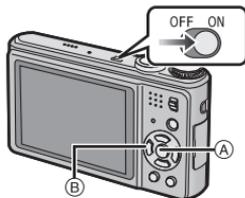


Setting Date/Time (Clock Set)

- 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.)
- Ⓐ [MENU/SET] button
- Ⓑ 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 choose 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.

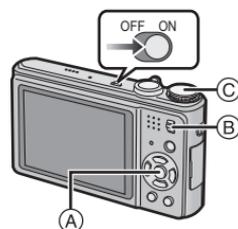
Setting menu items

Here, the method for making settings in the normal picture mode is described, but settings can be made in a similar way on the playback menu, the setup menu etc.

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 dial



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

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

3 Set the mode dial to [📷].

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

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



Switching to other menus

e.g.: 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 ▶.

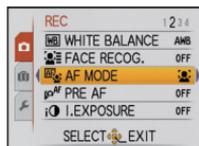
- Depending on the item, its setting may not appear or it may be displayed in a different way.



7 Press ▲/▼ to select [⌂].



8 Press [MENU/SET] to set.



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

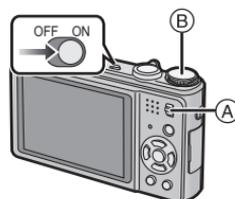
Mode switching

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) [REC]/[PLAYBACK] selector switch
- (B) Mode dial

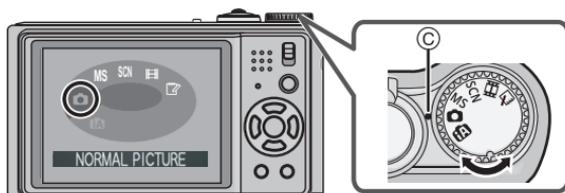


2 Slide the [REC]/[PLAYBACK] selector switch to [ON].

3 Switching the mode by rotating the mode dial.

Align a desired mode with part (C).

- Rotate the mode dial slowly and surely to adjust to each mode.



■ List of [REC] Modes

fA Intelligent Auto Mode

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

📷 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.

📽 Motion Picture Mode

This mode allows you to record motion pictures with audio.

📄 Clipboard Mode

Record as a memo.

[REC] Mode: **iA**

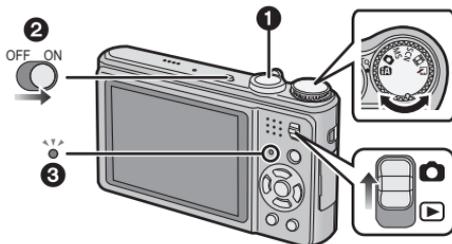
Taking pictures using the automatic function

(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/Quick AF/[I.EXPOSURE]/Digital Red-eye Correction/Backlight Compensation
- The status indicator **3** lights when you turn this unit on **2**. (It turns off after about 1 second.)

1: Shutter button

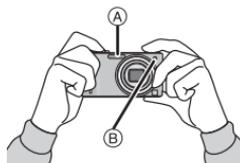


1 Slide the [REC]/[PLAYBACK] selector switch to **[CAMERA]**.

2 Set the mode dial to **[iA]**.

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

- A** Flash
- B** 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 3 cm (0.10 feet) (Wide)/1 m (3.28 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-AC5E; 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 colour changes to the usual red.

	[i- PORTRAIT]	• Only when [i/A] is selected
	[i- SCENERY]	
	[i- MACRO]	
	[i- NIGHT PORTRAIT]	
	[i- NIGHT SCENERY]	
	[i- BABY]*	

- [i/A] is set if none of the scenes are applicable, and the standard settings are set.
- When [i/P], [i/S] or [i/M] is selected, the camera automatically detects a person's face, and it will adjust the focus and exposure. (**Face detection**)
- 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/S], the shutter speed will be set to a maximum of 8 seconds. Take care not to move the camera while taking pictures.
- When [FACE RECOG.] is set to [ON], and the face similar to the registered face is detected, [R] is displayed in the top right of [i/P], [i/S] and [i/M].
- * When [FACE RECOG.] is set to [ON], [i/B] will be displayed for birthdays of registered faces already set only when the face of a person 3 years old or younger is detected.

AF Tracking Function

It is possible to set the focus to the specified subject. Focus will keep following the subject automatically even if it moves.

1 Press ▲.

- [AF-ON] is displayed in the upper left of the screen.
- AF Tracking frame is displayed in the centre of the screen.
- Press ▲ again to cancel.



2 Bring the subject to the AF tracking frame, and press ▼ to lock the subject.

- AF tracking frame will turn yellow.
- An optimum scene for the specified subject will be chosen.
- Press ▲ to cancel.



[REC] Mode: 

Taking pictures with your favourite settings

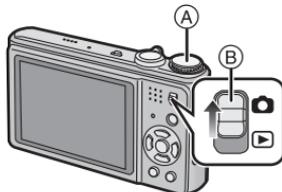
: Normal Picture Mode

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 .

- (A) Mode dial
- (B) [REC]/[PLAYBACK] selector switch



2 Set the mode dial to .

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) (Wide)/2 m (6.56 feet) (Tele) to ∞.



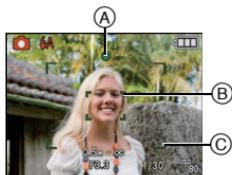
5 Press the halfway pressed shutter button fully to take a picture.

- 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

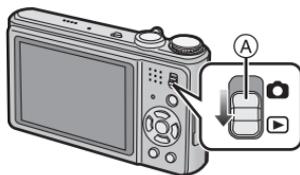
- (A) Focus indication
- (B) AF area (normal)
- (C) AF area (when using the digital zoom or when it is dark)

[PLAYBACK] Mode: 

Playing back Pictures ([NORMAL PLAY])

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

- Normal playback is set automatically in the following cases.
 - When the mode is switched from the [REC] to [PLAYBACK].
 - When the camera is 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  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 / , the number of pictures forwarded/rewound increases.



[PLAYBACK] Mode: 

Deleting Pictures

Once deleted, pictures cannot be recovered.

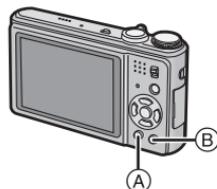
- Pictures on the built-in memory or the card, that are being played back will be deleted.

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 cancelled.



4 Press [MENU/SET].

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

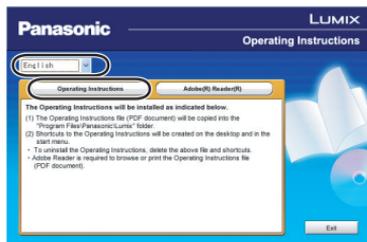
Reading the Operating Instructions (PDF format)

- 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 Select the desired language and then click [Operating Instructions] to install.**
(Example: When an English language OS)
- 3 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).

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:	1.2 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 colour filter

Lens: Optical 8×zoom, f=4.5 mm to 36 mm (35 mm film camera equivalent: 25 mm to 200 mm)/F3.3 to F5.9

Digital zoom: Max. 4×

Extra optical zoom: Max. 15.6×

Focus: Normal/AF Macro/Macro zoom/Face detection/AF Tracking/
11-area-focusing/1-area-focusing (High speed)/
1-area-focusing/Spot-focusing

Focus range: Normal: 50 cm (1.64 feet) (Wide)/2 m (6.56 feet) (Tele) to ∞
Macro/Intelligent auto/Clipboard mode:
3 cm (0.10 feet) (Wide)/1 m (3.28 feet) (Tele) to ∞
Scene mode: There may be differences in the above settings.

Shutter system: Electronic shutter+Mechanical shutter

Motion picture recording: 1280×720 pixels (30 frames/second, only when using a Card)/
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)
With audio
* Motion pictures can be recorded continuously for up to 15 minutes. Also, continuous recording exceeding 2 GB is not possible.
Remaining time for continuous recording is displayed on the screen.

Burst recording

Burst speed: Approx. 2.3 pictures/second

Number of recordable pictures: Max. 5 pictures (Standard), max. 3 pictures (Fine)

Hi-speed burst

Burst speed: Approx. 10 pictures/second (Speed priority)

Approx. 6 pictures/second (Image priority)
(3M (4:3), 2.5M (3:2) or 2M (16:9) is selected as the picture size.)

Number of recordable pictures: Approx. 15 to 100

ISO sensitivity (Standard Output 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):	Programme 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. 60 cm (1.97 feet) to 5.3 m (17.4 feet) (Wide) AUTO, AUTO/Red-eye reduction, Forced flash ON (Forced ON/Red-eye reduction), Slow sync./Red-eye reduction, Forced flash OFF
Microphone:	Monaural
Speaker:	Monaural
Recording media:	Built-in Memory (Approx. 40 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 picture:	1280×720 pixels (Only when using a Card)/ 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
Pictures with audio:	JPEG (based on "Design rule for Camera File system", based on "Exif 2.21" standard)+ "QuickTime" (pictures with audio)
Motion picture:	"QuickTime Motion JPEG" (motion pictures with audio)

Interface

Digital: "USB 2.0" (High Speed)
 * Data from the PC can not be written to the camera using the USB connection cable.

Analogue video/

audio: NTSC/PAL Composite (Switched by menu), Component Audio line output (monaural)

Terminal

[COMPONENT OUT]: Dedicated jack (10 pin)

[AV OUT/DIGITAL]: Dedicated jack (8 pin)

Dimensions: Approx. 97.8 mm (W)×54.6 mm (H)×26.0 mm (D)
 [3 3/4" (W)×2 1/4"(H)×1" (D)]
 (excluding the projecting parts)

Mass: Approx. 138 g/4.868 oz (excluding card and battery)

Approx. 160 g/5.644 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-A66A): Information for your safety

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

Output: CHARGE 4.2 V = 0.65 A

Battery Pack

(lithium-ion)

(Panasonic

DMW-BCG10E): Information for your safety

Voltage/capacity: 3.6 V/895 mAh

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QuickTime

EU



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VQT2F42

F0709NK0 (6500 (A))

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Panasonic Corporation

Web Site: <http://panasonic.net>

Pursuant to at the directive 2004/108/EC, article 9(2)

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