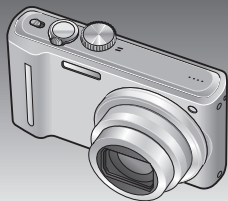# Panasonic®

Basic Operating Instructions
Digital Camera

Model No. DMC-TZ9
DMC-TZ8

LUMIX

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

Model number suffix "EB" denotes UK model.

EB EC

VQT2T02

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.

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 ⏚ 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.

Figure A	Figure B
	Fuse cover
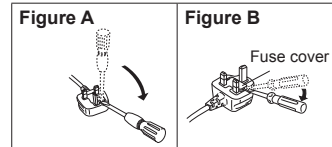
2. Replace the fuse and close or attach the fuse cover.

Figure A	Figure B
Fuse (5 ampere)	Fuse (5 ampere)
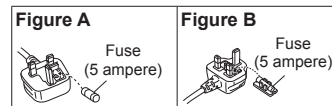
■About the battery pack

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.

■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

- 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 USB connection cables except the supplied one.
- Do not use any other cables except a genuine Panasonic HDMI mini cable (RP-CDHM15/RP-CDHM30; optional). TZ9

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.

Contents

Information for Your Safety 2

This manual provides operating instructions for the DMC-TZ9/DMC-TZ8. The appearance, specifications, and screen display vary depending on the model that is used. The descriptions in this manual are primarily based on the DMC-TZ8.
Details about functions specific to each model are indicated by symbols added to headings or at the end of descriptions, etc.

(Example)
Functions available in the DMC-TZ9 only: TZ9
Functions available in the DMC-TZ8 only: TZ8

Standard accessories

Check that all the accessories are included before using the camera. Part numbers are as of January 2010.

☐ **Battery Pack**
DMW-BCG10E
• Charge the battery before use.
Battery Pack is indicated as battery pack or battery in the text.

☐ **Battery Charger**
DE-A66A

Battery Charger is indicated as battery charger or charger in the text.

☐ **Battery Carrying Case**
VGQ0E45

☐ **AC Mains Lead**
K2CT39A00002

☐ **Hand Strap**
VFC4297

☐ **USB Connection Cable**
K1HA14AD0003 TZ9

K1HA08AD0002 TZ8

☐ **AV Cable**
K1HA14CD0004 TZ9

K1HA08CD0028 TZ8

☐ **CD-ROM**
VFF0599
• Software:
Use it to install the software on your PC.
• Operating Instructions

• Cards are 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 servicentre if you lose the supplied accessories. (You can purchase the accessories separately.)
• Please dispose of all packaging appropriately.

■ **Optional Accessories**
• Lithium Ion Battery: DMW-BCG10E
• AC Adaptor: DMW-AC5EB
• SDXC Memory Card
  48 GB RP-SDW48GE1K
  64 GB RP-SDW64GE1K
• SDHC Memory Card
  4 GB RP-SDW04GE1K
  4 GB RP-SDP04GE1K
  4 GB RP-SDR04GE1A
  8 GB RP-SDW08GE1K
  8 GB RP-SDP08GE1K
  8 GB RP-SDR08GE1A
  16 GB RP-SDW16GE1K
  16 GB RP-SDP16GE1K
  24 GB RP-SDP24GE1K
  32 GB RP-SDW32GE1K
  32 GB RP-SDP32GE1K
• SD Memory Card
  2 GB RP-SDP02GE1K
  2 GB RP-SDR02GE1A
• Some optional accessories may not be available in some countries.

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   www.panasonic.co.uk
• 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.pas-europe.com
• 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.

Names of parts

The illustrations and screens in this manual may differ from the actual product. The illustration is of the DMC-TZ8.

- Camera ON/OFF switch
- Shutter button
- Mode dial
- Flash
- Self-timer indicator/AF assist lamp
- Lens barrel
- Lens
- Zoom lever
- Speaker
- Microphone
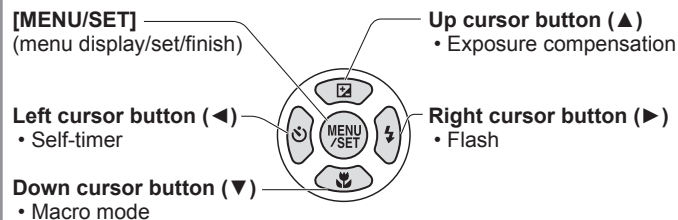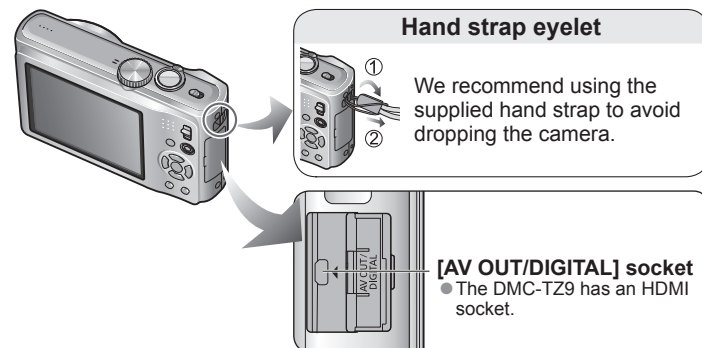 - ● The DMC-TZ9 has a stereo microphone.
- LCD monitor
  - ● The LCD monitor of the DMC-TZ9 is a different size.
- REC/PLAY switch
- [EXPOSURE] button
  - ● DMC-TZ9 has a status indicator.
- [E.ZOOM] button
- [DISPLAY] button
- Q.MENU/delete button
- Tripod receptacle
  - • Ensure that the tripod is stable.
- Card/Battery door
- Release lever
- DC coupler cover

● Always use a genuine Panasonic AC adaptor (DMW-AC5E: optional).
● When using an AC adaptor, ensure that the Panasonic DC coupler (DMW-DCC5; optional) and AC adaptor (DMW-AC5E; optional) are used.

Cursor button

[MENU/SET]
(menu display/set/finish)

Up cursor button (▲)
• Exposure compensation

Left cursor button (◄)
• Self-timer

Right cursor button (►)
• Flash

Down cursor button (▼)
• Macro mode

● In this manual, the button that is used is shaded or indicated by ▲ ▼ ◄ ►.

Hand strap eyelet

① ②

We recommend using the supplied hand strap to avoid dropping the camera.

[AV OUT/DIGITAL] socket
● The DMC-TZ9 has an HDMI socket.

● 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 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 products 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 and set the clock before use.
- Charge the battery with the charger indoors (10 °C - 35 °C).

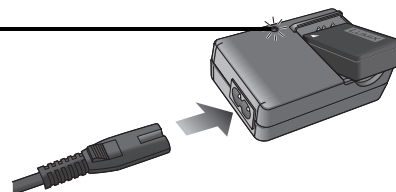### 1 Insert the battery terminals and attach the battery to the charger

Ensure [LUMIX] faces outwards.
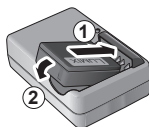
2 Connect the charger to the electrical outlet

Charging light ([CHARGE])	
On:	Charging in progress (approx. 130 min. if fully depleted)
Off:	Charging complete

3 Detach the battery after charging is completed

■Guidelines for number of recordable pictures and recording time

Number of recordable pictures	Approx. 300 pictures TZ9 Approx. 340 pictures TZ8
Recording time	Approx. 150 min TZ9 Approx. 170 min TZ8
Playback time	Approx. 300 min

Recording conditions by CIPA standard
- CIPA is an abbreviation of [Camera & Imaging Products Association].
- [PROGRAM AE] Mode
- Temperature: 23 °C/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 when [LCD MODE] is used.

Inserting and removing the card (optional)/the battery

1 Set the camera ON/OFF switch to OFF and slide the release lever (Ⓐ) to [OPEN] before opening the lid

Ⓐ

[OPEN] [LOCK]

2 Completely insert battery and card

• Battery: Push in until the lever is locked
• Memory card: Push in until it clicks
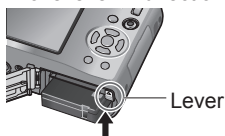
Ⓑ Do not touch terminal

Ⓒ Check orientation

Ⓑ

Ⓒ

3 Close lid

Slide to the [LOCK] position.

■**To remove**

• **To remove battery:** move lever in direction of arrow.

Lever

• **To remove card:** press down in centre.

● Always use genuine Panasonic batteries (DMW-BCG10E).
● If you use other batteries, we cannot guarantee the quality of this product.
● The card may be damaged if it is not fully inserted.

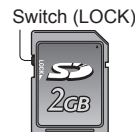## Picture save destination (cards and built-in memory)

■**Built-in memory (approx. 40 MB)**
● The built-in memory can be used as a temporary storage device when the card being used becomes full.
● The access time for the built-in memory may be longer than the access time for a card.

■**Compatible memory cards (optional)**
The following SD standard-based cards
(Panasonic brand recommended)

Switch (LOCK)

2GB

Type of Card	Capacity	Notes
SD memory cards	8 MB – 2 GB	• Can be used with devices compatible with the respective formats. • Before using SDXC memory cards, check that your computer and other devices support this type of card. http://panasonic.net/avc/sdcard/information/SDXC.html • Cards in capacities not listed at left are not supported.
SDHC memory cards	4 GB – 32 GB	
SDXC memory cards	48 GB – 64 GB	

● If the write-protect switch is set to 'LOCK', the card cannot be used to record or delete pictures, and it cannot be formatted.
● Latest information:
http://panasonic.jp/support/global/cs/dsc/
(This Site is English only.)

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

Setting the clock

The clock is not set when the camera is shipped.

1 **Turn on the power (Ⓐ)**

2 **Press [MENU/SET] (Ⓑ) while the message is displayed**

3 **Press ◄ ► to select the items (year, month, day, hour, minute, display order or time display format), and press ▲▼ to set**

• To cancel → Press 🗑.

4 **Press [MENU/SET]**

5 **Confirm the setting and press [MENU/SET]**

• To return to the previous screen, press 🗑.
• Turn on power again and check time display.

■To change time setting

Select [CLOCK SET] from [REC] or [SETUP] menu, perform **3** and **4**.

Setting the menu

Refer to the following procedures to operate menus such as the [SETUP] menu, [REC] menu, [TRAVEL MODE] menu and [PLAYBACK] menu.
Example: Setting [LCD MODE] from [OFF] to Ａ☀ in the [PROGRAM AE] Mode
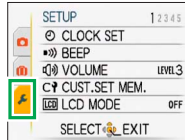
1 **Press [MENU/SET] to display the menu** (MENU/SET)

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.

2 **Press ▲▼ to select [LCD MODE] and then press ►**

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

3 **Press ▲▼ to select Ａ☀ and then press [MENU/SET] to set**

4 **Press [MENU/SET] to close the menu**

Selecting the [REC] mode

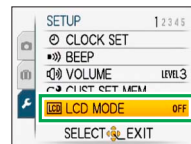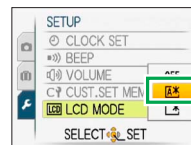**1** Turn on the power (Ⓐ)

2 Slide the [REC/PLAY] switch (Ⓑ) to 📷

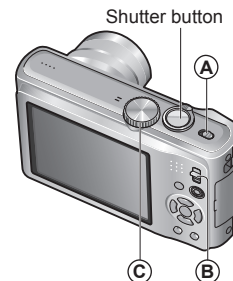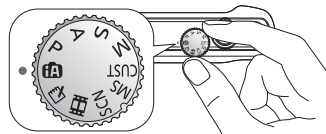**3** Switching the mode by rotating the mode dial (Ⓒ)

🅸🅰	**[INTELLIGENT AUTO] Mode** Take pictures with automatic settings.
P	**[PROGRAM AE] Mode** The subjects are recorded using your own settings.
A	**[APERTURE-PRIORITY] Mode** The shutter speed is automatically determined by the aperture value you set.
S	**[SHUTTER-PRIORITY] Mode** The aperture value is automatically determined by the shutter speed you set.
M	**[MANUAL EXPOSURE] Mode** The exposure is adjusted by the aperture value and the shutter speed which are manually adjusted.
CUST	**[CUSTOM] Mode** Use this mode to take pictures with previously registered setting.
MS	**[MY SCENE MODE]** Take pictures in frequently-used scene modes.
SCN	**[SCENE MODE]** Take pictures according to scene.
🎬	**[MOTION PICTURE] Mode** Take motion pictures.
📝	**[CLIPBOARD] Mode** Take pictures as memos.

Taking pictures with automatic settings
[INTELLIGENT AUTO] Mode   Recording mode: 🅸🅰

Optimum settings are made automatically from information such as 'face,' 'movement,' 'brightness,' and 'distance' just by pointing the camera at the subject, meaning that clear pictures can be taken without the need to make settings manually.

1 Turn on the power (Ⓐ)

2 Slide the [REC/PLAY] switch (Ⓑ) to 📷

3 Set the mode dial (Ⓒ) to 🅸🅰

4 Take pictures

Press halfway
(press lightly and focus)

Press fully
(press the button all the way to record)
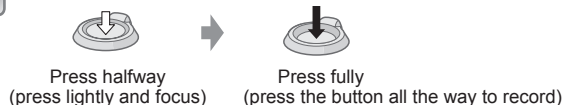
• If jitter becomes noticeable, use both hands, keep your arms close to your body, and stand with your feet at shoulder width.
• **Focus display (Ⓓ)**
  (In focus: lit / Not in focus: flashing)
• The AF area (Ⓔ) is displayed around the subject's face by the face detection function. In other cases, it is displayed at the point on the subject which is in focus.

Shutter button

Taking pictures with automatic settings
[INTELLIGENT AUTO] Mode (Continued)   Recording mode: 🅰

■ Automatic scene detection

Camera identifies scene when pointed at subject, and makes optimum settings automatically. The type of scene detected is indicated by a blue icon for two seconds.

📷	Recognises people [i PORTRAIT]
👶	Recognises babies [i BABY] (When babies (under 3 years) that are registered with the face recognition function are recognised)
🏞	Recognises landscapes [i SCENERY]
🌃	Recognises night scenes and people in them [i NIGHT PORTRAIT] (Only when 🔆 is selected)
🌆	Recognises night scenes [i NIGHT SCENERY]
🌷	Recognises close-ups [i MACRO]
🌅	Recognises sunsets [i SUNSET]
🅰	Reads subject movement to avoid blurring when scene does not correspond to any of the above.

If the camera automatically identifies the scene and determines that people appear as subjects in the picture (📷 or 🌃), face detection is activated, and the focus and exposure are adjusted for the recognised faces.

AF Tracking

Even if a subject where the focus was locked (AF Lock) moves, the camera can continue to keep it in focus.

1 Press▲

Ⓐ AF tracking icon

Ⓑ AF tracking frame

• Press ▲ again to cancel.

2 Align the AF tracking frame with the subject, and then press ▼ to lock

• The optimum scene is detected for the subject where the focus was locked (AF Lock).
• AF Lock successful: Yellow
• AF Lock failed: Red (flash)
• Press ▲ to cancel.

Taking motion pictures [MOTION PICTURE] Mode
Recording mode: 🎬

This records motion pictures with audio. (Recording with muted sound is not possible. Sound recording is monaural `TZ8` or stereo `TZ9`.) Zoom can also be used during recording.

1 Slide the [REC/PLAY] switch to 📷

2 Set the mode dial to 🎬

3 Start recording

Press halfway (Adjust the focus)

Press fully (start recording)

Remaining recording time (approx.)

4 End recording

Press fully

Elapsed recording time

● Immediately release the shutter button after pressing it all the way.
● When there is no space left to store the motion picture, recording automatically ends.
● Motion pictures can be recorded continuously for up to 15 minutes. Also, motion picture recorded continuously is up to 2 GB. To record more than 15 minutes or 2 GB, press the shutter button again. (Remaining time for continuous recording is displayed on the screen.)

Viewing your pictures [NORMAL PLAY]

Playback mode: ▶

1 Slide the [REC/PLAY] switch (Ⓐ) to ▶

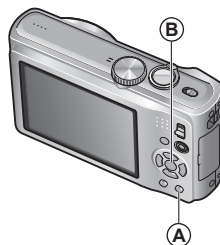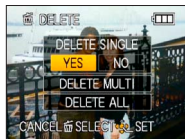**2** Press ◀▶ to select the picture

- To play back a motion picture, select an image with ◀ or ▶, and then press ▲ to start playback.

Deleting pictures

Playback mode: ▶

Deleted pictures cannot be recovered.

1 Press ◯ (Ⓐ) to delete displayed picture

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

3 Select the desired language and then click [Operating Instructions] to install
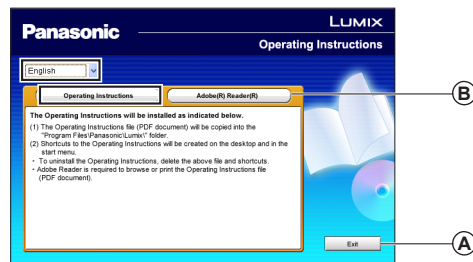
Ⓐ To return to the install menu.
Ⓑ See next page.

4 Double click the 'Operating Instructions' shortcut icon on the desktop

Reading the Operating Instructions
(PDF format) (Continued)

■**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). Insert the CD-ROM containing the Operating Instructions (supplied), click Ⓑ and then follow the messages on the screen to install.
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.

■**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	When recording: 1.3 W TZ9/1.1 W TZ8 When playing back: 0.6 W
Camera effective pixels	12,100,000 pixels
Image sensor	1/2.33" CCD, total pixel number 14,500,000 pixels Primary colour filter
Lens	Optical 12 x zoom f=4.1 mm to 49.2 mm (35 mm film camera equivalent: 25 mm to 300 mm)/ F3.3 to F4.9
Digital zoom	Max. 4 x
Extra optical zoom	Max. 23.4 x
Focus range	
P/A/S/M	50 cm (1.64 feet) (Wide)/ 2 m (6.56 feet) (Tele) to ∞
Macro/ Intelligent Auto/ Clipboard/ Motion picture	3 cm (0.10 feet) (Wide)/1 m (3.28 feet) (Tele) to ∞ (5 × to 8 × is 2 m (6.56 feet) to ∞)
Scene mode	There may be difference in above settings.
Shutter system	Electronic shutter + Mechanical shutter
Burst recording	
Burst speed	2.3 pictures/second
Number of recordable pictures	Max. 5 pictures (Standard), max. 3 pictures (Fine)

Specifications (Continued)

Hi-speed burst	
Burst speed	Approx. 10 pictures/second (Speed priority) Approx. 6 pictures/second (Image priority)
Number of recordable pictures	Approx. 15 pictures (When using the built-in memory, immediately after formatting) Max. 100 pictures (When using a card, it may differ depending on the type of card and the recording conditions)
Shutter speed	60 to 1/2000 th [STARRY SKY] Mode: 15 seconds, 30 seconds, 60 seconds
Exposure (AE)	Programme AE (P)/Aperture-priority AE (A)/ Shutter-priority AE (S)/Manual exposure (M) Exposure compensation (1/3 EV Step, -2 EV to +2 EV)
Metering mode	Multiple/Centre weighted/Spot
LCD monitor	3.0" TFT LCD (Approx. 460,800 dots) TZ9 2.7" TFT LCD (Approx. 230,400 dots) TZ8 (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)
Microphone	Stereo TZ9 Monaural TZ8
Speaker	Monaural
Recording media	Built-in Memory (Approx. 40 MB)/SD Memory Card/SDHC Memory Card/SDXC Memory Card
Recording file format	
Still Picture	JPEG (based on Design rule for Camera File system, based on Exif 2.21 standard)/DPOF corresponding
Still pictures with audio	JPEG (based on Design rule for Camera File system, based on Exif 2.21 standard) + QuickTime
Motion pictures	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 Composit (Switched by menu), Audio line output (Stereo TZ9) (Monaural TZ8)
Terminal	HDMI: HDMI mini cable (type C) TZ9 AV OUT/DIGITAL: Dedicated jack (14 pin TZ9) (8 pin TZ8)
Dimensions	Approx. 103.3 mm (W) x 59.6 mm (H) x 32.6 mm (D) [4.07" (W) x 2.35" (H) x 1.28" (D)] (excluding the projection part)
Mass	With card and battery: Approx. 217 g (0.478 lb) TZ9/214 g (0.471 lb) TZ8 Excluding card and battery: Approx. 195 g (0.430 lb) TZ9/191 g (0.421 lb) TZ8
Operating temperature	0 °C to 40 °C
Operating humidity	10 % to 80 %

Battery charger
(Panasonic DE-A66A): Information for your safety

Input	110 V to 240 V 50/60Hz, 0.2 A
Output	4.2 V === 0.65 A (Battery charging)

Battery Pack (lithium-ion)
(Panasonic DMW-BCG10E): Information for your safety

Voltage/capacity	3.6 V/895 mAh

HDMI

VIErA
Link

QuickTime

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EU

Panasonic Corporation
Web Site: http://panasonic.net

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