Panasonic

Basic Operating Instructions

Digital Camera

Model No. DMC-LX7



Before use, please read these instructions completely.







More detailed instructions on the operation of this camera are contained in "Operating Instructions for advanced features (PDF format)" in the supplied CD-ROM. Install it on your PC to read it.



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 unit to rain, moisture, dripping or splashing.
- Use only the recommended accessories.
- · Do not remove covers.
- Do not repair this unit by yourself. Refer servicing to qualified service personnel.

The socket outlet shall be installed near the equipment and shall be easily accessible.

■ Product identification marking

Product	Location
Digital camera	Bottom
Battery charger	Bottom

■ About the battery pack

CAUTION

- Danger of explosion if battery is incorrectly replaced. Replace only with the type recommended by the manufacturer.
- When disposing the batteries, please contact your local authorities or dealer and ask for the correct method of disposal.
- Do not heat or expose to flame.
- Do not leave the battery(ies) in a car 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!

To reduce the risk of fire, electric shock or product damage,

- Do not install or place this unit in a bookcase, built-in cabinet or in another confined space. Ensure this unit is well ventilated.
- 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 USB connection cables except the supplied one or a genuine Panasonic USB connection cable (DMW-USBC1: optional).
- Always use a genuine Panasonic HDMI mini cable (RP-CDHM15, RP-CDHM30: optional).
 Part numbers: RP-CDHM15 (1.5 m), RP-CDHM30 (3.0 m)
- Always use a genuine Panasonic AV cable (DMW-AVC1: optional).

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

- If you use this unit on top of or near a TV, he pictures and/or sound on this unit may be disrupted by electromagne ic wave radiation.
- Do not use this unit near cell phones because doing so may result in noise adversely affecting the pictures and/or 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 this unit, disturbing the pictures and/or sound.
- If this unit is adversely affected by electromagnetic equipment and stops functioning properly, turn this unit off and remove the battery or disconnect AC adaptor (DMW-AC5G: optional). Then reinsert the battery or reconnect AC adaptor and turn this unit on.

Do not use this unit near radio transmitters or high-voltage lines.

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

The optional AC adaptor, USB connection cable, HDMI mini cable, and AV cable are available only for DMC-LX7GC and DMC-LX7GH.

For information about the software used for this product, press [MENU/SET] and select [Setup] to display [Version Disp.] before pressing [MENU/SET] again.

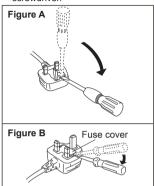
This product is licensed under the AVC patent portfolio license for the personal and non-commercial use of a consumer to (i) encode video in compliance with the AVC Standard ("AVC Video") and/or (ii) decode AVC Video that was encoded by a consumer engaged in a personal and non-commercial activity and/or was obtained from a video provider licensed to provide AVC Video. No license is granted or shall be implied for any other use. Additional information may be obtained from MPEG LA, LLC.

See http://www.mpedla.com.

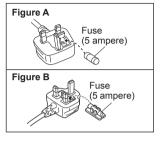
How to replace the fuse

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

Open the fuse cover with a screwdriver



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



-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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Before use

■ Camera handling

- Keep the camera away from excessive v bration, force, or pressure.
- The camera is not dust resistant, splash resistant, or waterproof.
 Avoid using the camera in places with excessive dust or sand, or where water can come into contact with the camera.

■ Condensation (When the lens or the LCD monitor is fogged up)

- Condensation may occur when the camera is exposed to sudden changes of temperature or humidity. Avoid these conditions, which may make the lens or LCD monitor dirty, cause mould, or damage the camera.
- If condensation does occur, turn off the camera and wait about two hours before using it. Once the camera adjusts to the surrounding temperature, the fogging will clear naturally.

Standard accessories

Check that all the accessories are supplied before using the camera. Part numbers are as of July 2012. These may be subject to change.

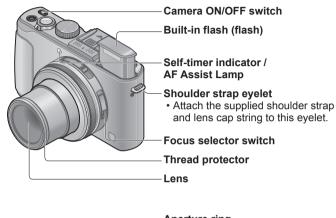
Battery pack DMW-BCJ13E • Charge the battery	Shoulder strap VFC4901
before use. Battery pack is indicated as battery pack or battery in the text.	USB connection cable K1HY08YY0025
Battery charger DE-A82B (DMC-LX7GC/ DMC-LX7GH)	• Software: Use it to install the software on your PC.
DE-A82D (DMC-LX7SG) Battery charger is indicated as battery charger or charger in the text.	CD-ROM VFF1041 Operating Instructions for advanced features
AC cable K2CT3YY00034 (DMC-LX7GC/	Hot shoe cover* VKF4970
DMC-LX7GH) • In Saudi Arabia, always use it.	Thread protector* VGQ1H81 (Black) VGQ1H82 (White)
K2CQ2YY00082 (DMC-LX7GC)	Lens cap* VYK5W85 (Black) VYK5W86 (White)
K2CA2YY00247 (DMC-LX7SG)	Lens cap string VFC4366

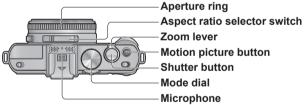
^{*} Already attached to the camera at the time of purchase.

Standard accessories

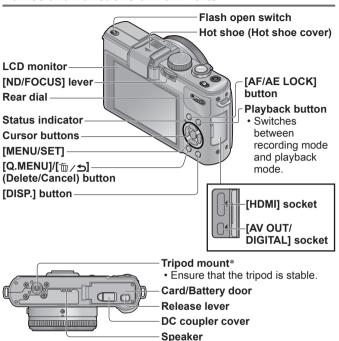
- SD Memory Card, SDHC Memory Card and SDXC Memory Card are indicated as card in the text.
- Cards are optional. You can record or play back pictures on the built-in memory when you are not using a card.
- Consult the dealer or your nearest Service Centre if you lose the supplied accessories. (You can purchase the accessories separately.)
- · Please dispose of all packaging appropriately.
- · Keep small parts in a safe place out of the reach of children.
- The illustrations and screens in this manual may differ from the actual product.

Names and Functions of Main Parts





Names and Functions of Main Parts



- * Do not attach to a tripod with a 5.5 mm or longer screw. Doing so may damage this unit.
- Always use a genuine Panasonic AC adaptor (DMW-AC5G: optional).
- When using an AC adaptor, ensure that the Panasonic DC coupler (DMW-DCC7: optional) and AC adaptor (DMW-AC5G: optional) are used.

The optional AC adaptor and DC coupler are available only for DMC-LX7GC and DMC-LX7GH.

- Keep the hot shoe cover out of reach of children to prevent swallowing.
- Be sure to attach the hot shoe cover when the hot shoe is not in use.

■[ND/FOCUS] lever

To operate this lever, move it left or right, or push it in.

Manual Focus adjustment, etc.



Turning the built-in ND filter on/off, etc. When the built-in ND filter is turned on, you can use even slower shutter speeds or a wider aperture.



■Rear dial

To operate the dial, rotate it left or right, or push it in.

Shutter speed adjustment, etc.

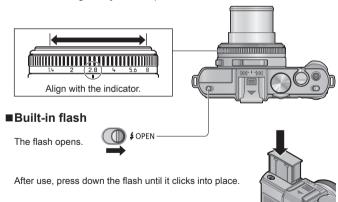


Selecting and setting operation items, etc.



■Aperture ring

Rotate the ring to adjust the aperture value.



Attaching the lens cap and shoulder strap

Cover the lens with the lens cap to protect it when you are not taking pictures. We also recommend attaching the shoulder strap to prevent the camera from being dropped.

Use the supplied string to attach the lens cap to the camera



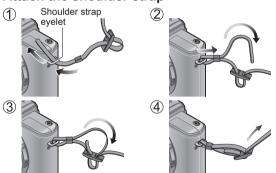
Attach the lens cap

When taking pictures, remove the lens cap and turn on the camera.

To attach and remove the lens cap, press the areas shown by arrows in the illustration.



Attach the shoulder strap



- · Attach the other end of the shoulder strap.
- Make sure that the shoulder strap does not come loose.

Charging the battery

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. 155 min. if fully depleted)

Off: Charging complete



■About batteries that you can use with this unit

The battery that can be used with this unit is DMW-BCJ13E.

- · Use the dedicated charger and battery.
- 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 to 30 °C).

Inserting and removing the card (optional)/the battery

Check that this unit is turned off

Slide the release lever (A) to the [OPEN] position and open the card/battery door



- Insert the battery and card, making sure that their orientation is correct
 - · Battery: Insert the battery all the way firmly until a locking sound is heard, and check that it is locked by lever (B).
 - · Card: Insert the card all the way firmly until it clicks.



Close the card/battery door Slide the release lever to the [LOCK] position.

■To remove

 To remove battery: Move lever in direction of arrow.



 To remove card: Push the card until it clicks. then pull the card out.



- Always use genuine Panasonic batteries (DMW-BCJ13E).
- If you use other batteries, we cannot guarantee the quality of this product.
- Keep the Memory Card out of reach of children to prevent swallowing.
- We recommend using a Panasonic card.

Setting the clock

The clock is not set when the camera is shipped. Before using the camera, remove the lens cap.

- Turn the camera on (A)
- Press [MENU/SET] (B)
- Press ▲ ▼ to select the language, and press [MENU/SET]
 - [Please set the clock] message appears.



- Press [MENU/SET]
- Press ◀▶ to select the items (year, month, day, hour, minute, display order or time display format), and press ▲ ▼ to set
- 6 Press [MENU/SET]
- Press [MENU/SET] to set
 - To return to the previous screen, press [button.
- **■**Changing time settings

Select [Clock Set] from [Rec] or [Setup] menu, perform $\boxed{5}$ and $\boxed{6}$. For details about how to set the menu (\rightarrow 20)

Taking pictures

Before using the camera, remove the lens cap.

- Turn the camera on (A)
- Rotate the mode dial to select the recording mode (B)

Motion picture button Shutter hutton

■Recording mode

- Take pictures with automatic settings.
- Р Take pictures with automatic shutter speed and aperture value settings.
- The shutter speed is automatically determined by the aperture value Α vou set.
- The aperture value is automatically determined by the shutter speed S vou set.
- The exposure is adjusted by the shutter speed and the aperture value M that are manually adjusted.
- Record motion pictures with manual operations.
- C1 Use his mode to take pictures with previously registered setting.
- SCN Take pictures according to the scene.
 - Take pictures using your preferred picture effects such as [Dynamic do Monochrome] or [Miniature Effect].

Take pictures

■ Taking still pictures (Shutter button)



Press halfway (press lightly and focus)



Press fully (press the button all the way to record)

■ Recording motion pictures (Motion picture button)



Press (Start recording) (End recording)



Press

■Use the zoom lever to adjust the range of the picture to be captured

Capture a wider area (wide-angle)



Enlarge the subject (telephoto)

- ■Select the combination of shutter speed and aperture value (Mode dial: P)
 - ① Press the shutter button halfway to measure the exposure



Press halfway

- ② Rotate the rear dial to select the combination of shutter speed and aperture value
 - Perform this step while the shutter speed and aperture value are displayed (about 10 seconds).



- Select the aperture value (Mode dial: A / M)
 - ① Rotate the aperture ring to select the aperture value
 - You can set the aperture values between [1.4] and [8] in 1/3-stop increments. (Set the aperture ring to a click stop.)



- ■Select the shutter speed (Mode dial: S / M)
 - ① Rotate the rear dial to select the shutter speed



Taking pictures

■About recording motion pictures

- •We recommend you use a battery with sufficient battery power or the AC adaptor when recording motion pictures.
- If the power supply is cut off due to a power cut or the AC adaptor being disconnected, the motion picture being recorded using the AC adaptor will not be recorded.
- About recording time
 - You can continuously record a motion picture in [MP4] for up to 29 minutes 59 seconds or approx. 4 GB. (Since recording in [MP4] with [FHD] creates larger files, the recording time for such motion pictures will be shorter than 29 minutes 59 seconds.)
 - If [Rec Quality] of [AVCHD] motion pictures is set to [PSH] or [FSH], you can continuously record a motion picture for up to 29 minutes 59 seconds.
 - You can continuously record [AVCHD] motion pictures for up to 29 minutes 59 seconds. (DMC-LX7GC)
- You can record a motion picture to the built-in memory only in [MP4] using the [VGA] setting.

Viewing your pictures [Normal Play]

- Press the Playback button (A)
- Press ◀▶ to select a picture to be displayed
 - You can also rotate the rear dial to select a picture.



- To play back a motion picture, select a picture with ◀ or ▶, and then press ▲ to start playback.
- To switch to recording mode, press the playback button again or press the shutter button during playback.

Deleting pictures

Deleted pictures cannot be recovered.

Press [ਜ਼/෮] button (♠) to delete the displayed picture



Press ◀ to select [Yes], and press [MENU/SET] (®)



Setting the menu

Refer to the following procedures to operate the menus.

Example: Setting [AF Mode] from to 2 in the [Program AE] Mode

- Press [MENU/SET] to display the menu
- Press ▲ ▼ to select [AF Mode] and then press ▶
- Press ▲ ▼ to select 🖳 and then press [MENU/SET] to set
- Press [MENU/SET] to close the menu





Switching to other menus

- ① Press [MENU/SET] to display the menu
- ② Press ◀
- ③ Press ▲ ▼ to select a menu icon
- ④ Press ▶



- Depending on the item, its setting may not appear or it may be displayed in a different way.
- The operation of menus varies depending on the menu.

Reading the Operating Instructions (PDF format)

More detailed instructions on the operation of this camera are contained in "Operating Instructions for advanced features (PDF format)" in the supplied CD-ROM. Install it on your PC to read it.

■For Windows

- Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied)
- Select the desired language and then click "Operating Instructions" to install
- 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). Insert the CD-ROM containing the Operating Instructions (supplied), click (A) and then follow the messages on the screen to install. Compatible OS:

Windows XP SP3 / Windows Vista SP2 / Windows 7

 You can download and install a version of Adobe Reader that you can use with your OS from the following Website. http://get.adobe.com/reader/otherversions/

■For Mac

- 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

Supplied software

The supplied CD-ROM contains the following software. Install the software on your computer to use.

■PHOTOfunSTUDIO 8.3 PE

This software allows you to acquire pictures to the PC, and also categorise these acquired pictures by their recording date or the model name of the camera used.

Operating environment

os	Windows® XP (32 bit) SP3 Windows Vista® (32 bit) SP2 Windows® 7 (32 bit/64 bit) and SP1		
CPU	Windows® XP	Pentium® III 500 MHz or higher	
	Windows Vista®	Pentium® III 800 MHz or higher	
	Windows® 7	Pentium® III 1 GHz or higher	
Display	1024 × 768 pixels or more (1920 × 1080 pixels or more recommended)		
RAM	Windows® XP	512 MB or more	
	Windows Vista®	512 IVIB OF MOTE	
	Windows® 7	1 GB or more (32 bit) 2 GB or more (64 bit)	
Free hard disk space	450 MB or more for installing software		

[•] Refer to the Operating Instructions of "PHOTOfunSTUDIO" (PDF) for further information about the operating environment.

■SILKYPIX Developer Studio (Windows XP/Vista/7, Mac OS X v10.4/v10.5/v10.6/v10.7)

This is software to edit RAW format images.

For details on how to use the SILKYPIX Developer Studio, refer to the "Help" or the Ich kawa Soft Laboratory's support website: http://www.isl.co.jp/SILKYPIX/english/p/support/

■LoiLoScope 30-day full-trial version (Windows XP/Vista/7)

This software allows you to make full use of your computer and edit motion pictures easily.

• This will only install a shortcut to the trial version download site.

Installing supplied software

Preparations:

- Check the environment of your PC.
- Before inserting the CD-ROM, close all running applications.

■For Windows



Insert the CD-ROM with the supplied software

 When you insert the supplied CD-ROM, the install menu will start



Click on the [Recommended Installation]

 Proceed with installation according to messages appearing on the screen

■For Mac (SILKYPIX Developer Studio)

- 1) Insert the CD-ROM with the supplied software
- 2 Double-click the folder that automatically appears to open
- 3 Double-click an icon in the folder
 - Proceed with installation according to messages appearing on the screen

PHOTOfunSTUDIO is not compatible with Mac.

Specifications

Specifications are subject to change without notice.

Digital Camera: Information for Your Safety

Power Source	DC 5.1 V
Power Consumption	When recording: 1.6 W When playing back: 1.1 W
Camera effective pixels	10,100,000 pixels
Image sensor	1/1.7" MOS sensor, total pixel number 12,800,000 pixels Primary colour filter
Lens [NANO SURFACE COATING]	Optical 3.8x zoom f=4.7 mm to 17.7 mm (35 mm film camera equivalent: 24 mm to 90 mm) / F1.4 (Max. Wide) to F2.3 (Max. Tele)
Image Stabiliser	Optical method
Focus range	
Normal	50 cm to ∞
AF Macro / MF / Intelligent Auto / Motion pictures	1 cm (Max. Wide) / 30 cm (Max. Tele) to ∞
Scene Mode	The focus ranges listed above may vary depending on the selected Scene Mode.
Shutter system	Electronic shutter + Mechanical shutter
Minimum Illumination	Approx. 3 lx (when i-Low light is used, the shutter speed is 1/25th of a second)
Shutter speed	250 seconds to 1/4000th of a second
Exposure (AE)	Programme AE (P) / Aperture-priority AE (A) / Shutter-priority AE (S) / Manual exposure (M)
Metering Mode	[Multi Metering] / [Center Weighted] / [Spot]

LCD monitor	3.0" TFT LCD (3:2) (Approx. 921,600 dots)
Microphone	Stereo
Speaker	Monaural
Recording media	Built-in Memory (Approx. 70 MB) SD Memory Card / SDHC Memory Card / SDXC Memory Card
Recording file format	
Still picture	RAW / JPEG (based on Design rule for Camera File system, based on Exif 2.3 standard / DPOF corresponding) / MPO
Motion pictures	AVCHD / MP4
Audio compression format	AVCHD: Dolby® Digital (2 ch) MP4: AAC (2 ch)
Interface	
Digital	USB 2.0 (High Speed)
	Data from the PC can not be written to the camera using the USB connection cable. (DMC-LX7GC)
Analogue video	NTSC / PAL Composite (Switched by menu)
Audio	Audio line output (Monaural)
Terminal	HDMI: MiniHDMI TypeC AV OUT/DIGITAL: Dedicated jack (8 pin)
Dimensions	Approx. 110.5 mm (W) x 67.1 mm (H) x 45.6 mm (D) (excluding the projection part)
Mass	With card and battery: Approx. 298 g Excluding card and battery: Approx. 269 g

Specifications

Operating temperature	0 °C to 40 °C
Operating humidity	10%RH to 80%RH

Battery charger

(Panasonic DE-A82B (DMC-LX7GC/DMC-LX7GH)): Information for Your Safety

Input	AC~ 110 V to 240 V, 50/60 Hz, 0.2 A
Output	DC=== 4.2 V, 0.65 A

Battery charger

(Panasonic DE-A82D (DMC-LX7SG)): Information for Your Safety

Input	AC~ 100 V to 240 V, 50/60 Hz, 0.2 A 100 V to 240 V, 50/60 Hz, 15 VA (for Japan)
Output	DC=== 4.2 V, 0.65 A DC4.2 V, 0.65 A (for Japan)

Battery pack (lithium-ion)

(Panasonic DMW-BCJ13É): Information for your safety

Voltage / capacity 3.6 V / 1250 mAh

HDMI









- HDMI, the HDMI Logo, and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.
- HDAVI Control[™] is a trademark of Panasonic Corporation.
- "AVCHD Progressive", "AVCHD", the "AVCHD Progressive" Logo and the "AVCHD" Logo are trademarks of Panasonic Corporation and Sony Corporation.
- Manufactured under license from Dolby Laboratories.
 Dolby and the double-D symbol are trademarks of Dolby Laboratories.
- SDXC Logo is a trademark of SD-3C, LLC.
- QuickTime and the QuickTime logo are trademarks or registered trademarks of Apple Inc., used under license therefrom.
- Windows and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Mac and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries.
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