

Basic Owner's Manual Digital Camera Model No. DMC-FH6 DMC-FH4





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

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

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

VQT4G39 M1211KZ0



Dear Customer, Thank you for choosing Panasonic!

You have purchased one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family years of enjoyment. Please take time to fill in the information on the below. The serial number is on the tag located on the underside of your camera. Be sure to **retain this manual** as your convenient camera information source.

Date of Purchase	Dealer Phone No.
Dealer Purchased From	Model No.
Dealer Address	Serial No.

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 this Owner's Manual.

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.



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

Information for Your Safety

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

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

WARNING:

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

- Do not expose this unit to rain, moisture, dripping or splashing.
- Do not place objects filled with liquids, such as vases, on this unit.
- · Use only the recommended accessories.
- Do not remove covers.
- Do not repair this unit by yourself. Refer servicing to qualified service personnel.

Product identification marking

Product	Location
Digital camera	Bottom
Battery charger	Bottom

About the battery pack

CAUTION

Battery pack (Lithium ion battery pack)

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

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

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

CAUTION

- Danger of explosion if battery is incorrectly replaced. Replace only with the 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 $^{\circ}$ C (140 $^{\circ}$ F) 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.
- Do not obstruct this unit's ventilation openings with newspapers, tablecloths, curtains, and similar items.
- Do not place sources of naked flames, such as lighted candles, on this unit.

Battery charger

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

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

Cautions for Use

- Do not use any other USB connection cables except the supplied one.
- 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, the pictures and/or sound on this unit may be disrupted by electromagnetic 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-AC5PP: for dealer display purpose only). 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.

-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.

Contents

Information for Your Safety2	Sequence of operations12
Before use6	Reading the Owner's Manual
Standard accessories7	(PDF format)13
Names and Functions of	Installing supplied software
Main Parts8	(PHOTOfunSTUDIO)14
Charging the battery10	Specifications15
Inserting and removing the	Digital Camera Accessory
card (optional)/the battery 11	System18

Please note that the actual controls and components, menu items, and other information for your digital camera may differ from those in the illustrations and screens provided in this manual. When operation or other information is more or less the same between models, DMC-FH6 is used as examples for the instructions provided in this manual.

 The operations, procedures, or functions that differ among models are indicated separately, together with the relevant model number.

(Example) DMC-FH6 DMC-FH4

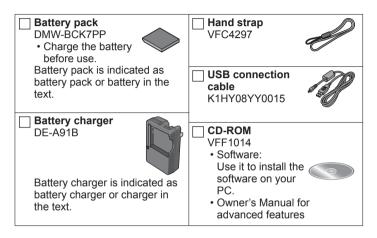
Before use

Camera handling

- Keep the camera away from excessive vibration, 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 mold, 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

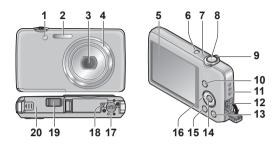
Check that all the accessories are supplied before using the camera. Part numbers are as of January 2012.



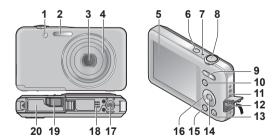
- SD Memory Card, SDHC Memory Card and SDXC Memory Card are indicated as card in the text.
- Memory cards are optional. You can record or play back pictures on the built-in memory when you are not using a card.
- For information about optional accessories, refer to the "Digital Camera Accessory System".
- If any accessories are lost, customers in Canada should contact 1 800 99-LUMIX (1-800-995-8649) for further information about obtaining replacement parts.
- Please dispose of all packaging appropriately.
- Keep small parts in a safe place out of the reach of children.

Names and Functions of Main Parts

DMC-FH6



(DMC-FH4)



- 1 Self-timer indicator/AF Assist Lamp
- 2 Flash
- 3 Lens
- 4 Lens barrel
- 5 LCD monitor
- 6 Power button
- 7 Microphone
- 8 Shutter button
- 9 DMC-FH6 Zoom lever
 - DMC-FH4

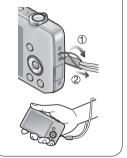
Zoom button

- 10 [MODE] button
- 11 Hand strap eyelet
- 12 [AV OUT/DIGITAL] socket
- 13 [窗 / 5] (Delete/Return) button
- 14 [MENU/SET] button
- 15 Playback button
- 16 Cursor button
- 17 Tripod receptacle
- 18 Speaker
- 19 DC coupler cover

For dealer display purpose only

- When using an AC adaptor, ensure that the Panasonic DC coupler (DMW-DCC10: for dealer display purpose only) and AC adaptor (DMW-AC5PP: for dealer display purpose only) are used.
- Always use a genuine Panasonic AC adaptor (DMW-AC5PP: for dealer display purpose only).
- 20 Card/Battery door
- The illustrations and screens in this manual may differ from the actual product.
- Do not block the microphone when recording motion pictures.
- Some tripods or unipods, and some methods of holding the camera may block the speaker, making it difficult to hear the beep, etc.

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





Insert the battery terminals and attach the battery to the charger

Ensure [LUMIX] faces outwards.



Connect the charger to the electrical outlet

Charging light ([CHARGE])

On: Charging in progress (approx. 120 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-BCK7PP.

- · 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 (50 °F to 86 °F)).

Inserting and removing the card (optional)/ the battery

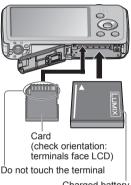
Turn off the power and slide the card/battery door out (①) before opening the door (②) as illustrated



2

Insert the battery and card, making sure that their orientation is correct

- Battery: Insert all the way firmly until a locking sound is heard, and check that the lever is hooked over the battery.
- Card: Insert all the way firmly until it clicks.



Charged battery (check orientation)

■To remove

• To remove battery: Move lever in direction of arrow.





• To remove card: Press down in center.



- Always use genuine Panasonic batteries (DMW-BCK7PP).
- 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.

Sequence of operations



1

Press the Power button (A)

The clock is not set when the camera is shipped. Set the date and time before using the camera.

Press the shutter button (B) and take pictures

 Press halfway (press lightly to focus)
Press fully

(press the button all the way to record)



Selecting the Recording Mode

Press [MODE] button to select the Recording Mode.

- Taking pictures with automatic settings.
- Take pictures with your own settings.
- SCN Take pictures according to scene.
- Take motion pictures.

Setting the menu

Press [MENU/SET] to display the menu screen to change the recording function, camera settings, and other settings.

■Viewing your pictures

- ① Press the Playback button
- 2 Press (to select the picture

Deleting pictures

- ① Press [前 / 5] button to delete the displayed picture
- 2 Press on to select [Yes] and then press [MENU/SET]

In this manual, the button that is used is shaded.

Reading the Owner's Manual (PDF format)

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

For Windows

- 1
- Turn the PC on and insert the CD-ROM containing the Owner's Manual (supplied)



Click the "Owner's Manual"

Select the desired language and then click "Owner's Manual" to install

A To return to the install menu.

Double click the "Owner's Manual" shortcut icon on the desktop



■When the Owner's Manual (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 Owner's Manual (PDF format). Insert the CD-ROM containing the Owner's Manual (supplied), click (B) 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 Web Site. http://get.adobe.com/reader/otherversions/

Installing supplied software (PHOTOfunSTUDIO)

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

· Before inserting the CD-ROM, close all running applications.

Check the environment of your PC Operating environment of PHOTOfunSTUDIO 8.0 LE

OS	Windows XP (32 Windows Vista (3 Windows 7 (32 bi	2 bit) SP2
	Windows XP	Pentium III 500 MHz or higher
CPU	Windows Vista	800 MHz or higher
	Windows 7	1 GHz or higher
Display	1024 × 768 pixels or more (1920 × 1080 pixels or more recommended)	
	Windows XP	512 MB or more
RAM	Windows Vista	ST2 MB OF HIDLE
	Windows 7	1 GB or more (32 bit) 2 GB or more (64 bit)
Free hard disk space	450 MB or more f	or installing software

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



Insert the CD-ROM with the supplied software

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



Click on the [Applications] on the install menu



Click on the [Recommended Installation]

Proceed with installation according to messages appearing on the screen.

• The software compatible with your PC will be installed.

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

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

PHOTOfunSTUDIO is not compatible with Mac.

Digital Camera: Information for your safety

Power Source	DC 5.1 V
Power Consumption	When recording: 1.0 W When playing back: 0.6 W
Camera effective pixels	14,100,000 pixels
Image sensor	1/2.33" CCD, total pixel number 14,500,000 pixels Primary color filter
Lens	DMCFH6 Optical 5 x zoom f=4.3 mm to 21.5 mm (35 mm film camera equivalent: 24 mm to 120 mm) / F2.5 (Max. W) to F6.4 (Max. T) DMCFH4 Optical 4 x zoom f=5.0 mm to 20.0 mm (35 mm film camera equivalent: 28 mm to 112 mm) / F3.1 (Max. W) to F6.5 (Max. T)
Image stabilizer	Optical method
Focus range	
Intelligent Auto / Normal / Motion Picture	5 cm (0.16 feet) (Wide) / 1 m (3.3 feet) (Tele) to ∞
Scene Mode	There may be difference in above settings.
Shutter system	Electronic shutter + Mechanical shutter

Specifications

Shutter speed	8 seconds to 1/1600th of a second
Exposure (AE)	AUTO (Program AE)
Metering Mode	Multi metering
LCD monitor	2.7" TFT LCD (4:3) (Approx. 230,400 dots) (field of view ratio about 100%)
Microphone / Speaker	Monaural
Recording media	Built-in Memory (Approx. 70 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 2.3 standard)
Motion pictures	QuickTime Motion JPEG (motion pictures with audio)
Interface	
Digital	USB 2.0 (High Speed)
Analog video	NTSC Composite
Audio	Audio line output (Monaural)
Terminal	AV OUT / DIGITAL: Dedicated jack (8 pin)

Dimensions	DMC=FH6 Approx. 96.4 mm (W) x 55.5 mm (H) x 19.9 mm (D) [3.8" (W) x 2.2" (H) x 0.78" (D)] (excluding the projection part) DMC=FH4 Approx. 97.6 mm (W) x 56.2 mm (H) x 20.8 mm (D) [3.8" (W) x 2.2" (H) x 0.82" (D)] (excluding the projection part)
Mass (weight)	DMC=FH6 With card and battery: Approx. 119 g (0.26 lb) Excluding card and battery: Approx. 103 g (0.23 lb) DMC=FH4 With card and battery: Approx. 113 g (0.25 lb) Excluding card and battery: Approx. 96 g (0.22 lb)
Operating temperature	0 °C to 40 °C (32 °F to 104 °F) (Operating humidity: 10%RH to 80%RH)

Battery charger

(Panasonic DE-A91B): Information for your safety

Input	~ 110 V to 240 V, 50/60 Hz, 0.2 A
Output	=== 4.2 V, 0.43 A

Equipment mobility: Movable

Battery pack (lithium-ion) (Panasonic DMW-BCK7PP): Information for your safety

Voltage / capacity 3.6 V / 680 mAh

Digital Camera Accessory System

Description	Accessory#
Battery Pack	DMW-BCK7
AV Cable	DMW-AVC1
Class 10 64 GB SDXC Memory Card Class 10 32 GB SDHC Memory Card Class 10 16 GB SDHC Memory Card Class 10 8 GB SDHC Memory Card Class 10 4 GB SDHC Memory Card Class 4 16 GB SDHC Memory Card Class 4 8 GB SDHC Memory Card	RP-SDU64GE1K RP-SDU32GU1K RP-SDU16GU1K RP-SDU08GU1K RP-SDU04GU1K RP-SDL16GU1K RP-SDL08GU1K
Class 4 4 GB SDHC Memory Card Class 4 2 GB SD Memory Card	RP-SDL04GU1K RP-SDL02GU1K

 Product numbers are correct as of January 2012. These may be subject to change.

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



- 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.
- Mac and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries.
- Windows and Windows Vista are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- This product uses "DynaFont" from DynaComware Corporation. DynaFont is a registered trademark of DynaComware Taiwan Inc.
- Other names, company names, and product names printed in these instructions are trademarks or registered trademarks of the companies concerned.

Panasonic

Panasonic Canada Inc.

5770 Ambler Drive, Mississauga, Ontario L4W 2T3 (905) 624-5010 www.panasonic.ca

© Panasonic Corporation 2012

Printed in China