# **Panasonic**

Basic Owner's Manual Digital Camera

Model No. DMC-FH27



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: lumixconcierge@ca.panasonic.com



#### Dear Customer.

### Thank you for choosing Panasonic!

You have purchased one of the most sophisticated and reliable products on the market today. Used properly, we're sure it will bring you and your family vears of enjoyment. Please take time to fill in the information below. The serial number is on the tag located on the underside of your Camera. Be sure to retain this manual as your convenient Camera information source. Please note that the actual controls and components, menu items, etc. of your Digital Camera may look somewhat different from those shown in the illustrations in these 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

Model No.	
Serial No.	



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

### Information for Your Safety

### WARNING:

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PRODUCT DAMAGE.

- DO NOT EXPOSE THIS APPARATUS TO RAIN, MOISTURE, DRIPPING OR SPLASHING AND THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
- USE ONLY THE RECOMMENDED ACCESSORIES.
- DO NOT REMOVE THE COVER (OR BACK): THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

THE SOCKET OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

### ■ Product identification marking

Product	Location
Digital camera	Bottom
Battery charger	Bottom

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

### ■ About the battery pack

#### CAUTION

Battery pack (Lithium ion battery pack)

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

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

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

#### CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

- Do not heat or expose to flame.
- Do not leave the battery(ies) in an automobile exposed to direct sunlight for a long period of time with doors and windows closed.

### Warning

Risk of fire, explosion and burns. Do not disassemble, heat above 60 °C (140 °F) or incinerate.

### ■ About the battery charger

### CAUTION!

DO NOT INSTALL OR PLACE THIS UNIT IN A BOOKCASE, BUILT-IN CABINET OR IN ANOTHER CONFINED SPACE. ENSURE THE UNIT IS WELL VENTILATED. TO PREVENT RISK OF ELECTRIC SHOCK OR FIRE HAZARD DUE TO OVERHEATING, ENSURE THAT CURTAINS AND ANY OTHER MATERIALS DO NOT OBSTRUCT THE VENTIL ATION VENTS

### Battery charger

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

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

#### ■ Cautions for Use

- Do not use any other AV cables except the supplied one.
- Do not use any other USB connection cables except the supplied one.

### 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: 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.

### -If you see this symbol-

### Information on Disposal in other Countries outside the European Union

This symbol is only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



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### Standard Accessories

Check that all the accessories are supplied before using the camera. Product numbers correct as of January 2011. These may be subject to change.

- Battery Pack\* (Indicated as battery pack or battery in the text) Charge the battery before use.
  - Battery Charger
- (Indicated as battery charger or charger in the text)
- **USB** Connection Cable 3
- AV Cable

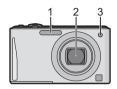
2

- CD-ROM
  - · Software: Use it to install the software to your PC.
  - Owner's Manual
- Hand Strap 6
- Stylus Pen 7
- When purchasing a spare battery. please purchase an optional battery (DMW-BCK7PP).
- · SD Memory Card, SDHC Memory Card and SDXC Memory Card are indicated as card in the text.
- . The card is optional. You can record or play back pictures on the built-in memory when you are not using a card.
- For information about optional accessories, refer to the "Digital Camera Accessory System".
- If any accessories are lost, customers in Canada should contact 1 800 99-LUMIX (1-800-995-8649) for further information about obtaining replacement parts.

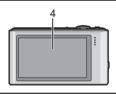


# Names of the Components

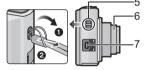
- Flash
- 2 Lens
- 3 Self-timer indicator AF Assist Lamp



4 Touch panel/LCD monitor



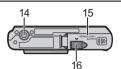
- 5 Strap eyelet
  - Be sure to attach the strap when using the camera to ensure that you will not drop it.
- Lens barrel 6
- [AV OUT/DIGITAL] socket



- 8 Camera ON/OFF switch
- 9 Zoom lever
- 10 Speaker
- 11 Microphone
- 12 Shutter button 13 [E.ZOOM] button

8 10 11

- Tripod receptacle 14
- 15 Card/Battery door
- 16 DC coupler cover
  - · When using an AC adaptor. ensure that the Panasonic DC coupler (DMW-DCC10; optional) and AC adaptor (DMW-AC5PP: optional) are used.
  - Always use a genuine Panasonic AC adaptor (DMW-AC5PP; optional).
  - · It is recommended to use a fully charged battery or AC adaptor (DMW-AC5PP: optional) and DC coupler (DMW-DCC10; optional) when recording motion pictures.
  - If while recording motion pictures using the AC adaptor and the power supply is cut off due to a power outage or if the AC adaptor is disconnected etc., the motion picture being recorded will not be recorded



### How to Use the Touch Panel

This touch panel is a type that detects pressure.

#### Touch the screen

To touch and release the touch panel.

#### Drag

A movement without releasing the touch panel.





Use this to perform tasks such as selecting icons or images displayed on the touch panel.

• It may not operate properly when multiple icons are touched simultaneously, so try to touch the center of the icon.

This is used when performing tasks such as moving to the next image by dragging horizontally, or changing the range of the displayed image. This can also be used to perform tasks such as switching the screen by operating the slide bar.

### Note

• If you use a commercially available liquid crystal protection sheet, please follow the instructions that accompany the sheet. (Some liquid crystal protection sheets may impair visibility or operability.)



 Apply a little extra pressure when touching if you have a commercially available protection sheet affixed or if you feel it is not responding well

- Touch panel will not operate properly when the hand holding this unit is pressing on the touch panel.
- Do not press using anything with a sharp tip or anything hard, except for the supplied stylus pen.
- Do not operate with your fingernails.
- Wipe the LCD monitor with dry soft cloth when it gets dirty with finger prints and others.
- Do not scratch or press the LCD monitor too hard.

### ■ About the Stylus pen

It is easier to use the stylus pen (supplied) for detailed operation or if it is hard to operate with your fingers.

- Do not place it where small children can reach.
- Do not place the stylus pen on the LCD monitor when storing. LCD monitor may break when the stylus pen is pressed strongly against the LCD monitor



## Charging the Battery

■ About batteries that you can use with this unit Supplied battery or dedicated optional batteries (DMW-BCK7PP) can be used with this unit.

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.

### Charging

- The battery is not charged when the camera is shipped. Charge the battery before use.
- · Charge the battery with the charger indoors.



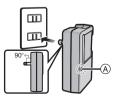
Attach the battery paying attention to the direction of the battery.



Connect the charger to the electrical outlet.

· Disconnect the charger from the electrical socket and detach the battery after charging is completed.





### ■ About the [CHARGE] indicator

#### The [CHARGE] indicator turns on:

The [CHARGE] indicator (A) is turned on during charging.

#### The [CHARGE] indicator turns off:

The CHARGE indicator (a) will turn off once the charging has completed without any problem.

#### When the ICHARGE1 indicator flashes

- The battery temperature is too high or too low. It is recommended to charge the battery again in an ambient temperature of between 10 °C to 30 °C (50 °F to 86 °F).
- The terminals of the charger or the battery are dirty. In this case, wipe them with a dry cloth.

### ■ Charging time

	Supplied battery	Optional battery
Charging time	Approx. 115 min	Approx. 120 min

# Approximate operating time and number of recordable pictures

	Supplied battery	Optional battery
Capacity of the battery	660 mAh	680 mAh
Number of recordable pictures	Approx. 250 pictures	Approx. 255 pictures
Recording time	Approx. 125 min	Approx. 127 min

### Recording conditions by CIPA standard

- CIPA is an abbreviation of [Camera & Imaging Products Association].
- Normal Picture Mode
- Temperature: 23 °C (73.4 °F)/Humidity: 50%RH when LCD monitor is on.
- Using a Panasonic SD Memory Card (32 MB).
- Starting recording 30 seconds after the camera is turned on. (When the Optical Image Stabilizer function is set to [ON].)
- 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.

	Supplied battery	Optional battery
Playback time	Approx. 200 min	Approx. 205 min

# About the Built-in Memory/the Card

### **Built-in Memory**

- Memory size: Approx. 70 MB
- The access time for the built-in memory may be longer than the access time for a card

#### Card

The following cards which conform to the SD video standard can be used with this unit

(These cards are indicated as card in the text.)

Type of card which can be used with this unit	Remarks	
SD Memory Card (8 MB to 2 GB)	Use a card with SD Speed Class* with "Class 6" or higher when recording motion pictures.     SDHC Memory Card can be used with SDHC Memory	
SDHC Memory Card (4 GB to 32 GB)	Card or SDXC Memory Card compatible equipment.  • SDXC Memory Card can only be used with SDXC	
SDXC Memory Card (48 GB, 64 GB)	Memory Card compatible equipment.  Check that the PC and other equipment are compatible when using the SDXC Memory Cards.  http://panasonic.net/avc/sdcard/information/SDXC.html  Only the cards with capacity listed left can be used.	

SD Speed Class is the speed standard regarding continuous writing. Check via the label on the card. etc.

e.q.:

CLASS(6)

• 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.

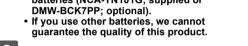
### Inserting and Removing the Card (optional)/the Battery

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



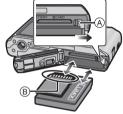
### Slide the card/battery door to open it.

· Always use genuine Panasonic batteries (NCA-YN101G; supplied or DMW-BCK7PP; optional).





Battery: Being careful about the battery orientation, insert all the way until you hear a locking sound and then check that it is locked by lever (A). Pull the lever (A) in the direction of the arrow to remove the battery.



Card: Push it securely all the way until you hear a "click" while

being careful about the direction in which 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.



- 1:Close the card/battery door.
- 2:Firmly slide the card/battery door to the end until you hear a locking sound.



### Setting Date/Time (Clock Set)

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



Touch [Clock Set].



- Touch the items you wish to set (Year/Month/Day/Hours/ Minutes), and set using  $[\blacktriangle]/[\blacktriangledown]$ .
  - Touch [5] to cancel the date and time settings without setting a date and time.
- Touch [Set] to set.
- Touch [Set] in the confirmation screen.

### Changing the Clock Setting

Select [Clock Set] in the [Rec] or [Setup] menu.

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

# Selecting the [Rec] Mode

Touch [ ].



Touch the mode icon.



### ■ List of [Rec] Modes

#### Æ Intelligent Auto Mode

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

#### a 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 H

This mode allows you to record motion pictures with audio.

[Rec] Mode: [iA]

### Taking pictures using the automatic function (A: 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.

- Touch [ Touch [
- Touch [ ].
- 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.





Press the shutter button fully (push it in further), and take the picture.



### **Scene Detection**

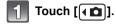
When the camera identifies the optimum scene, the icon of the scene concerned is displayed in blue for 2 seconds, after which its color changes to the usual red.

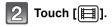
A	$\rightarrow$	I D	[i-Portrait]	
		M	[i-Scenery]	
		칼	[i-Macro]	
		*2	[i-Night Portrait]	<ul> <li>Only when [i≱A] is selected</li> </ul>
		X	[i-Night Scenery]	
		K	[i-Sunset]	

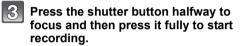
- [1] is set if none of the scenes are applicable, and the standard settings are set.
- When [ ] or [ ] is selected, the camera automatically detects a person's face, and it will adjust the focus and exposure. (Face Detection)

[Rec] Mode: 🔳

### **Motion Picture Mode**







- A Available recording time
- (B) Elapsed recording time
- After pressing the shutter button fully, release it straight away.
- The focus and zoom are fixed to the setting when recording starts (the first frame).





### Press the shutter button fully to stop recording.



• Motion pictures can be recorded continuously up to 2 GB. The maximum available recording time for up to 2 GB only is displayed on the screen.

[Playback] Mode: D

## Playing Back Pictures ([Normal Play])



### Touch [ ].

· The display switches to normal playback.



### Drag the screen horizontally.

 After selecting the motion picture, touch [ ] to start playback.



[Playback] Mode: D

### **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.



Select the picture to be deleted, and then touch [后].



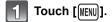


### Touch [Delete Single].

· Confirmation screen is displayed. Picture is deleted by selecting [Yes].



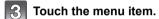
### Setting the Menu





Touch the menu icon.





· Screen at right is an example of selecting [AF Mode] in [Rec] mode Menu.



### Touch the Settings.

- · Depending on the menu item, its setting may not appear or it may be displayed in a different way.
- · Screen at right is an example to set the [AF Mode] from [ ] (1-area-focusing) to [ ] (Face Detection).



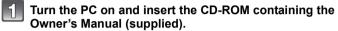
### ■ Close the menu

Touch [5] several times or press the shutter button halfway.

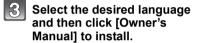
### Reading the Owner's Manual (PDF format)

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.

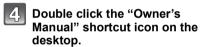
#### For Windows

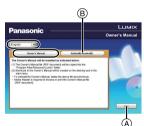






(A) To return to the install menu.





### ■ 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 2000 SP4/Windows XP SP3/Windows Vista SP2/ Windows 7)

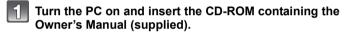
• You can download and install a version of Adobe Reader that you can use with your OS from the following Web Site. http://get.adobe.com/reader/otherversions

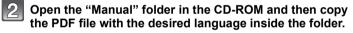
### ■ To uninstall the Owner's Manual (PDF format)

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







# **Specifications**

### Digital Camera:

Information for your safety

Power Source: DC 5.1 V

Power

Consumption: 1.2 W (When recording) 0.7 W (When playing back)

Camera effective pixels	16,100,000 pixels			
Image sensor	,	1/2.33" CCD, total pixel number 16,600,000 pixels, Primary color filter		
Lens	Optical 8×zoom, f=5 mm to 40 mm (35 mm film camera equivalent: 28 mm to 224 mm)/F3.3 (Wide) to F5.9 (Tele)			
Digital zoom	Max. 4×			
Extended optical zoom	Max. 18× (When set to 3,000,000 pixels [3M] or less)			
Focus range	Normal	50 cm (1.64 feet) (Wide)/2 m (6.56 feet) (Tele) to $\infty$		
	Macro/ Intelligent auto/ Motion picture	5 cm (0.17 feet) (Wide)/1 m (3.28 feet) (Tele) to $\infty$		
	Scene Mode	There may be differences in the above settings.		
Shutter system	tter system Electronic shutter+Mechanical shutter			
Burst recording	Burst recording			
Burst speed	Approx. 1.7 pictures/second			
Number of recordable pictures	Depends on the remaining capacity of the built-in memory/card.			

Hi-speed burst	
Burst speed	Approx. 4 pictures/second
	[3M (4:3), 2.5M (3:2) or 2M (16:9) is selected as the picture size.]
Number of recordable pictures	When using the built-in memory: Approx. 15 pictures (immediately after formatting) When using a Card: Max. 100 pictures (differs depending on the type of Card and the recording conditions)
Shutter speed	8 seconds to 1/1600th of a second [Starry Sky] Mode: 15 seconds, 30 seconds, 60 seconds
Exposure (AE)	Program AE Exposure compensation (1/3 EV Step, -2 EV to +2 EV)
Metering mode	Multiple
LCD monitor	3.0" TFT LCD (3:2) (Approx. 230,000 dots) (field of view ratio about 100%) Touch panel
Flash range	Approx. 60 cm (1.97 feet) to 5.8 m (19.0 feet) (Wide, [■ IS0] is set)
Microphone	Monaural
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)/DPOF corresponding
Motion pictures	"QuickTime Motion JPEG" (motion pictures with audio)
Interface	
Digital	"USB 2.0" (High Speed)
Analog video/ audio	NTSC, Audio line output (monaural)
Terminal	
[AV OUT/ DIGITAL]	Dedicated jack (8 pin)

Dimensions (excluding the projecting parts)	Approx. 99.2 mm (W)×56.5 mm (H)×27.7 mm (D) [3.9"(W)×2.2"(H)×1.1"(D)]
Mass (weight)	Approx. 159 g/0.35 lb (with card and battery) Approx. 142 g/0.31 lb (excluding card and battery)
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:	$\sim$ 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 NCA-YN101G):

Information for your safety

Voltage/capacity:	3.6 V/660 mAh

## **Digital Camera Accessory System**

Accessory#	Illustration	Description
DMW-BCK7PP		Battery Pack
DMW-AC5PP		AC Adaptor*
DMW-DCC10		DC Coupler*
RP-SDW64GU1K RP-SDW48GU1K RP-SDW32GU1K RP-SDW16GU1K RP-SDW08GU1K RP-SDW04GU1K	S	Class 10 64 GB SDXC Memory Card Class 10 48 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
RP-SDN16GU1A RP-SDN08GU1A RP-SDN04GU1A RP-SDN02GU1A		Class 4 16 GB SDHC Memory Card Class 4 8 GB SDHC Memory Card Class 4 4 GB SDHC Memory Card Class 4 2 GB SD Memory Card

Product numbers correct as of January 2011. These may be subject to change. The AC Adaptor (optional) can only be used with the designated Panasonic DC Coupler (optional). The AC adaptor (optional) cannot be used by itself.

• NOTE: 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.



- 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**

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