

Panasonic®

Basic Operating Instructions

Digital Camera

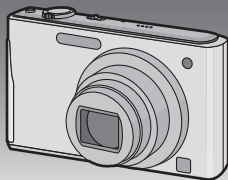
Model No. **DMC-FS35**

DMC-FS18

DMC-FS16

DMC-FS14

LUMIX



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.



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

Model number suffix "EB" denotes UK model.

EB

VQT3D41

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

Product	Location
Digital camera	Bottom
Battery charger	Bottom

Caution for AC mains lead

For your safety, please read the following text carefully.

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

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

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

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

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

CAUTION!

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

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

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

■ IMPORTANT

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

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

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

THIS PLUG IS NOT WATERPROOF-KEEP DRY.

■ Before use

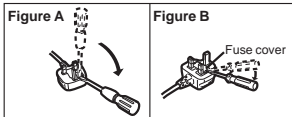
Remove the connector cover.

■ How to replace the fuse

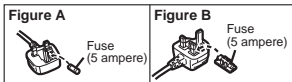
The location of the fuse differ according to the type of AC mains plug (figures A and B). Confirm the AC mains plug fitted and follow the instructions below.

Illustrations may differ from actual AC mains plug.

1. Open the fuse cover with a screwdriver.



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



■ About the battery 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

- 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-AC5E; 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.

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



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste.

For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/96/EC and 2006/66/EC. By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

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

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



For business users in the European Union

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

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

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



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

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

Cd

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■ About illustrations in these operating instructions

The procedure is described for **DMC-FS35** as an example.

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.

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


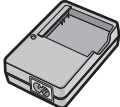





* When purchasing a spare battery, please purchase an optional battery (DMW-BCK7E).

• 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.

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

1  NCA-YN101H	2  DE-A92A
3  K2CT3YY00034	
4 	DMC-FS35 K1HY08YY0019 DMC-FS18 DMC-FS16 DMC-FS14 K1HY08YY0015
5 	DMC-FS35 K1HY08YY0020 DMC-FS18 DMC-FS16 DMC-FS14 K1HY08YY0016
6  VFF0727	7  VFC4297

Sales and Support Information

Customer Care Centre

- For customers within the UK: 0844 844 3852
- For customers within 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 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.

■ **Optional Accessories**

- Battery Pack
DMW-BCK7E
- AC Adaptor*
DMW-AC5EB
- DC Coupler*
DMW-DCC10F
- SDXC Memory Card
64 GB: RP-SDW64GE1K
48 GB: RP-SDW48GE1K
- SDHC Memory Card
32 GB: RP-SDW32GE1K/RP-SDQ32GE1K
24 GB: RP-SDQ24GE1K
16 GB: RP-SDW16GE1K/RP-SDQ16GE1K/RP-SDN16GE1A
8 GB: RP-SDW08GE1K/RP-SDQ08GE1K/RP-SDN08GE1A
4 GB: RP-SDW04GE1K/RP-SDQ04GE1K/RP-SDN04GE1A
- SD Memory Card
2 GB: RP-SDN02GE1A

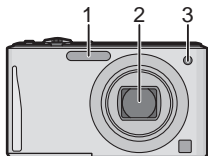
* The AC Adaptor (optional) can only be used with the designated Panasonic DC Coupler (optional). The AC adaptor (optional) cannot be used by itself.

Some optional accessories may not be available in some countries.

Names of the Components

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

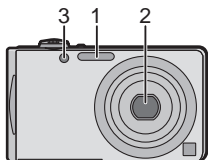
DMC-FS35



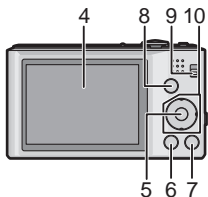
DMC-FS18

DMC-FS16

DMC-FS14

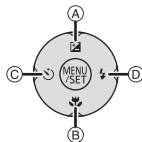


- 4 LCD monitor
- 5 [MENU/SET] button
- 6 [DISP.] button
- 7 [Q.MENU]/Delete/Cancel button
- 8 [MODE] button
- 9 [Rec]/[Playback] selector switch

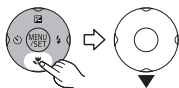


10 Cursor buttons

- (A): ▲/Exposure compensation
- (B): ▼/Macro Mode
AF Tracking
- (C): ◀/Self-timer
- (D): ▶/Flash setting



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



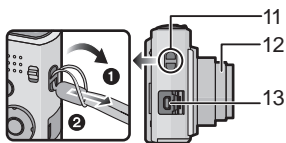
or **Press ▼**

11 Strap eyelet

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

12 Lens barrel

13 [AV OUT/DIGITAL] socket



- 14 Camera ON/OFF switch
- 15 Zoom lever
- 16 Speaker
 - Do not cover the speaker with your fingers.

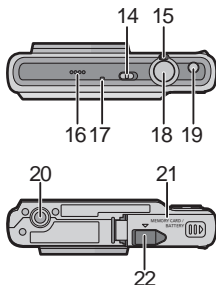
- 17 Microphone
- 18 Shutter button

- 19 **DMC-FS35**
[E.ZOOM] button
- 20 Tripod receptacle
- 21 Card/Battery door

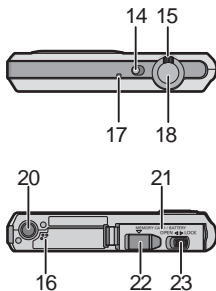
- 22 DC coupler cover
 - When using an AC adaptor, ensure that the Panasonic DC coupler (DMW-DCC10; optional) and AC adaptor (DMW-AC5E; optional) are used.
 - Always use a genuine Panasonic AC adaptor (DMW-AC5E; optional).
 - When using an AC adaptor, use the AC mains lead supplied with the AC adaptor.
 - It is recommended to use a fully charged battery or AC adaptor (DMW-AC5E; 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.

- 23 **DMC-FS18** **DMC-FS16** **DMC-FS14**
Release lever

DMC-FS35



DMC-FS18 **DMC-FS16** **DMC-FS14**



Charging the Battery

■ About batteries that you can use with this unit

Supplied battery or dedicated optional batteries (DMW-BCK7E) 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

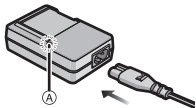
- The battery is not charged when the camera is shipped. Charge the battery before use.
- Charge the battery with the charger indoors.

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



- 2** Connect the AC mains lead.

- 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 [CHARGE] 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

DMC-FS35

	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

DMC-FS18

	Supplied battery	Optional battery
Capacity of the battery	660 mAh	680 mAh
Number of recordable pictures	Approx. 260 pictures	Approx. 265 pictures
Recording time	Approx. 130 min	Approx. 132 min

DMC-FS16

DMC-FS14

	Supplied battery	Optional battery
Capacity of the battery	660 mAh	680 mAh
Number of recordable pictures	Approx. 270 pictures	Approx. 275 pictures
Recording time	Approx. 135 min	Approx. 137 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)	<ul style="list-style-type: none">• 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 Card or SDXC Memory Card compatible equipment.• SDXC Memory Card can only be used with SDXC 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.
SDHC Memory Card (4 GB to 32 GB)	
SDXC Memory Card (48 GB, 64 GB)	

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

e.g.:



- Please confirm the latest information on the following website.
<http://panasonic.jp/support/global/cs/dsc/>
(This Site is English only.)



Note

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

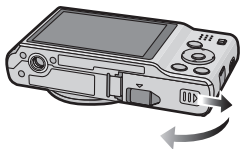
Inserting and Removing the Card (optional)/the Battery

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

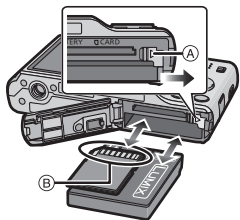
DMC-FS35

1 Slide the card/battery door to open it.

- Always use genuine Panasonic batteries (NCA-YN101H; supplied or DMW-BCK7E; optional).
- If you use other batteries, we cannot guarantee the quality of this product.



2 **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.



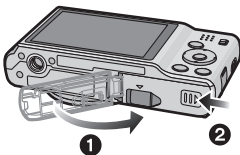
Card: Push it securely all the way until you hear a “click” while being careful about the direction in which you insert it.

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.

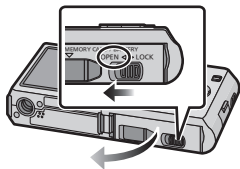
3 **1:** Close the card/battery door.

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



1 Slide the release lever in the direction of the arrow and open the card/battery door.

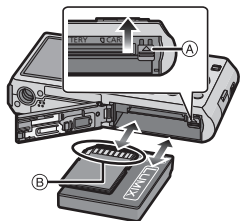
- Always use genuine Panasonic batteries (NCA-YN101H; supplied or DMW-BCK7E; optional).
- If you use other batteries, we cannot guarantee the quality of this product.



2 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.

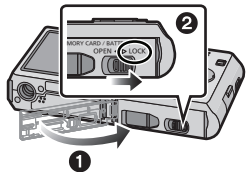
Card: Push it securely all the way until you hear a “click” while being careful about the direction in which you insert it. To remove the card, push the card until it clicks, then pull the card out upright.



(B): Do not touch the connection terminals of the card.

3 ①: Close the card/battery door.

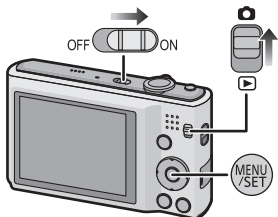
②: Slide the release lever in the direction of the arrow.



Setting Date/Time (Clock Set)

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

1 Slide the [Rec]/[Playback] selector switch to **[📷]** and then turn the camera on.



2 Press [MENU/SET].

3 Press **◀/▶** to select the items (year, month, day, hour, minute, display sequence or time display format), and press **▲/▼** to set.



- You can cancel without setting the clock by pressing [🗑️/↩️].

4 Press [MENU/SET] to set.

5 Press [MENU/SET].

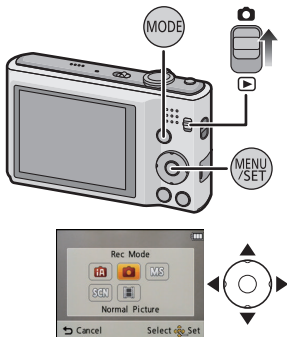
Changing the Clock Setting

Select [Clock Set] in the [Rec] or [Setup] menu, and press [MENU/SET].

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

Selecting the [Rec] Mode

- 1 Slide the [Rec]/[Playback] selector switch to [📷].
- 2 Press [MODE].
- 3 Press ▲/▼/◀/▶ to select the mode.
- 4 Press [MENU/SET].



■ List of [Rec] Modes

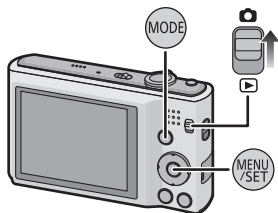
IA Intelligent Auto Mode
The subjects are recorded using settings automatically selected by the camera.
📷 Normal Picture Mode
The subjects are recorded using your own settings.
MS My Scene Mode
Pictures are taken using previously registered recording scenes.
SCN Scene Mode
This allows you to take pictures that match the scene being recorded.
🎞 Motion Picture Mode
This mode allows you to record motion pictures with audio.

[Rec] Mode: **iA**

Taking pictures using the automatic function (**iA**: Intelligent Auto Mode)

The camera will set the most appropriate settings to match the subject and the recording conditions so we recommend this mode for beginners or those who want to leave the settings to the camera and take pictures easily.

- 1** Slide the [Rec]/[Playback] selector switch to **[📷]**, and then press [MODE].



- 2** Press **▲/▼/◀/▶** to select [Intelligent Auto], and then press [MENU/SET].

- 3** 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.

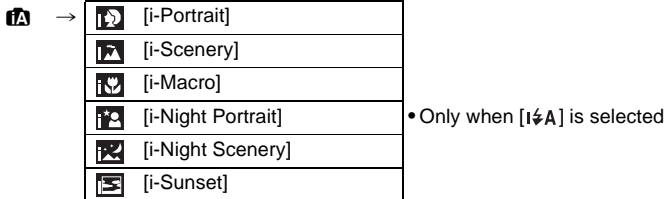


- 4** Press the shutter button fully (push it in further), and take the picture.




Scene Detection

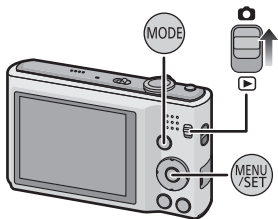
When the camera identifies the optimum scene, the icon of the scene concerned is displayed in blue for 2 seconds, after which its colour changes to the usual red.







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

Motion Picture Mode

1 Slide the [Rec]/[Playback] selector switch to , and then press [MODE].



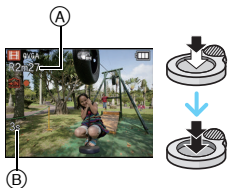
2 Press /// to select [Motion Picture], and then press [MENU/SET].

3 Press the shutter button halfway to focus and then press it fully to start recording.

(A) Available recording time

(B) Elapsed recording time

- The focus and zoom are fixed to the setting when recording starts (the first frame).




4 Press the shutter button fully to stop recording.

Note

- Motion pictures can be recorded continuously for up to 15 minutes. Also, continuous recording exceeding 2 GB is not possible.

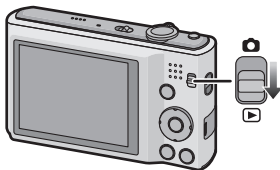
(Example: **DMC-FS35** **DMC-FS18** [10m10s], **DMC-FS16** **DMC-FS14** [8m10s] with [HD])

Remaining time for continuous recording is displayed on the screen.

[Playback] Mode: 

Playing Back Pictures ([Normal Play])


- 1 Slide the [Rec]/[Playback] selector switch to .



- 2 Press ◀ or ▶.

- After selecting the motion picture, press ▲ to start playback.





[Playback] Mode: 

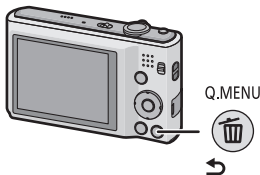
Deleting Pictures

Once deleted, pictures cannot be recovered.

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

Select the picture to be deleted, and then press / .

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

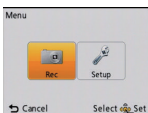


Setting the Menu

1 Press [MENU/SET].

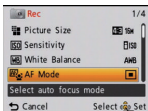


2 Press ◀/▶ to select menu and then press [MENU/SET].



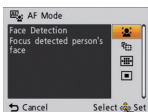
3 Press ▲/▼ to select the menu item and then press [MENU/SET].

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



4 Press ▲/▼ to select the setting and then press [MENU/SET].

- 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] (1-area-focusing) to [Face Detection] (Face Detection).



■ Close the menu

Press [EXIT/BACK] several times or press the shutter button halfway.

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

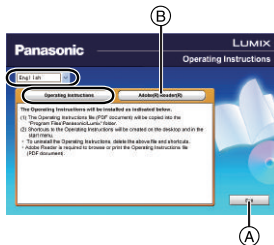
1 Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).

2 Click the [Operating Instructions].

3 Select the desired language and then click [Operating Instructions] to install.


(A) To return to the install menu.

4 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  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 Operating Instructions (PDF format)

Delete the PDF file from the "Program Files\Panasonic\Lumix\" folder.

- When the contents in the Program Files folder cannot be displayed, click the [Show the contents of this folder] to display them.

■ For Macintosh

1

Turn the PC on and insert the CD-ROM containing the Operating Instructions (supplied).

2

Open the "Manual" folder in the CD-ROM and then copy the PDF file with the desired language inside the folder.

3

Double click the PDF file to open it.

Specifications

Digital Camera:

Information for your safety

Power Source:	DC 5.1 V
Power Consumption:	1.1 W (When recording) 0.7 W (When playing back)

Camera effective pixels	DMC-FS35 DMC-FS18 16,100,000 pixels
	DMC-FS16 DMC-FS14 14,100,000 pixels
Image sensor	DMC-FS35 DMC-FS18 1/2.33" CCD, total pixel number 16,600,000 pixels, Primary colour filter
	DMC-FS16 DMC-FS14 1/2.33" CCD, total pixel number 14,500,000 pixels, Primary colour filter
Lens	DMC-FS35 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)
	DMC-FS18 DMC-FS16 DMC-FS14 Optical 4× zoom, f=5 mm to 20 mm (35 mm film camera equivalent: 28 mm to 112 mm)/F3.1 (Wide) to F6.5 (Tele)
Digital zoom	Max. 4×
Extra optical zoom	DMC-FS35 Max. 18× (When set to 3,000,000 pixels [3M] or less)
	DMC-FS18 Max. 9× (When set to 3,000,000 pixels [3M] or less)
	DMC-FS16 DMC-FS14 Max. 8.4× (When set to 3,000,000 pixels [3M] or less)

Focus range	Normal	DMC-FS35 50 cm (1.64 feet) (Wide)/2 m (6.56 feet) (Tele) to ∞
		DMC-FS18 DMC-FS16 DMC-FS14 50 cm (1.64 feet) (Wide)/1 m (3.28 feet) (Tele) to ∞
	Macro/ Intelligent auto/ Motion picture	5 cm (0.17 feet) (Wide)/1 m (3.28 feet) (Tele) to ∞
	Scene Mode	There may be differences in the above settings.
Shutter system	Electronic shutter+Mechanical shutter	
Burst recording		
Burst speed	DMC-FS35	Approx. 1.7 pictures/second
	DMC-FS18 DMC-FS16 DMC-FS14	Approx. 2.0 pictures/second
Number of recordable pictures	Depends on the remaining capacity of the built-in memory/card.	
Hi-speed burst		
Burst speed	DMC-FS35	Approx. 4 pictures/second
	DMC-FS18 DMC-FS16 DMC-FS14	Approx. 6 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)	Programme AE Exposure compensation (1/3 EV Step, -2 EV to +2 EV)	
Metering mode	Multiple	

LCD monitor	2.7" TFT LCD (4:3) (Approx. 230,000 dots) (field of view ratio about 100%)
Flash range	DMC-FS35 Approx. 60 cm (1.97 feet) to 5.8 m (19.0 feet) (Wide, [F IS0] is set)
	DMC-FS18 DMC-FS16 DMC-FS14 Approx. 40 cm (1.32 feet) to 3.3 m (10.8 feet) (Wide, [F 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) * Data from the PC can not be written to the camera using the USB connection cable.
Analogue video/ audio	NTSC/PAL Composite (Switched by menu), Audio line output (monaural)
Terminal	
[AV OUT/ DIGITAL]	Dedicated jack (8 pin)
Dimensions (excluding the projecting parts)	DMC-FS35 Approx. 99.2 mm (W)×56.5 mm (H)×27.8 mm (D) [3.9"(W)×2.2"(H)×1.1"(D)]
	DMC-FS18 DMC-FS16 DMC-FS14 Approx. 94.3 mm (W)×53.5 mm (H)×18.8 mm (D) [3.7"(W)×2.1"(H)×0.7"(D)]

Mass	DMC-FS35 Approx. 152 g/0.33 lb (with card and battery) Approx. 135 g/0.30 lb (excluding card and battery)
	DMC-FS18 Approx. 121 g/0.27 lb (with card and battery) Approx. 104 g/0.23 lb (excluding card and battery)
	DMC-FS16 DMC-FS14 Approx. 118 g/0.26 lb (with card and battery) Approx. 101 g/0.22 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-A92A):

Information for your safety

Input:	AC ~ 110 V to 240 V, 50/60 Hz, 0.2 A
Output:	DC --- 4.2 V, 0.43 A

Battery Pack (lithium-ion) (Panasonic NCA-YN101H):

Information for your safety

Voltage/capacity:	3.6 V/660 mAh
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Pursuant to at the directive 2004/108/EC, article 9(2)
Panasonic Testing Centre
Panasonic Marketing Europe GmbH
Winsbergring 15, 22525 Hamburg, Germany

VQT3D41
F1210NK0

Panasonic Corporation

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

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