

LDC-828Z3 Digital Camera User Guide



http://www.lumicron.net

Read First

Warnings & Cautions

Before using the camera, please make sure that you read and understand all the following safety precautions. Always ensure that the camera is operated correctly. The safety precautions will instruct you in the safe and correct operation of the camera and its accessories, preventing injury or damage to yourself, other persons and equipment.

In the following pages, the term "equipment" refers mainly to the camera and its power supply accessories.

MARNINGS

To prevent possible injury, please observe the following warnings when using this product.

• Do not aim the viewfinder at the sun or other intense light.

Aiming at the sun through the viewfinder could damage your eyesight.

• Do not use the flash too close to eyes

Using the flash too close to your subject's eyes can damage the eyesight. Especially, remain at least one meter (39 inches) away from infants when you use the flash.

• Do not place camera strap around neck

The strap could cause suffocation when accidentally wound around neck.

• Do not open or disassemble

Disassembling the equipment may cause high-voltage electric shock. Interior inspections, modifications and repairs should be conducted by qualified service staff. Please take the product to an authorized service center for inspection.

• Turn off immediately when if malfunction occurs

If you notice unusual smell or smoke coming from the equipment, please unplug the AC adaptor and remove the battery immediately. Proceed swiftly but with caution to avoid being burnt. Take the equipment to an authorized service center for inspection.

• Unplug the adaptor when the camera is not in use

If you use the adaptor as the power source, unplug the adaptor when the camera is not in use to prevent fire and other dangers. Continuous use over a period of time may lead to overheating, deformation and fire.

Battery

Observe the following instructions when handling the battery used in this product. Improper use of battery may lead to leakage or explosion.

- Recharge only Li-ion rechargeable batteries. Recharging batteries that are not rechargeable may lead to leakage or explosion.
- Check battery polarity before inserting. Do not attempt to insert the battery upside down or backward.
- Do not disassemble or short circuit the battery.
- Do not expose battery to fire or excessive heat.
- Do not immerse or contact with water or other liquids.
- Stop using the battery immediately if you notice any deformation or changes in color.
- Do not put the batteries together with metal objects such as coins, keys or hairpins in your pocket.
- Keep battery out of the reach of children. Seek medical attention right away if a child swallows a battery.

Observe and exercise the following cautions to avoid damage and keep your camera in an optimum working status.

Keep Dry

This camera is not waterproof, and may malfunction if immersed in water, or any liquids enter the interior of the camera

• Keep away from Moisture, Salt or Dust

Wipe off salt or dust with a slightly dampened soft cloth after using your camera at the beach or seaside, then, dry your camera thoroughly.

• Keep away from Strong Magnetic Fields

Never put the camera too close to any equipment producing strong electromagnetic fields, such as electric motor. Strong electromagnetic fields could lead to camera malfunctions or interfere with the data recording.

Avoid Intense Heat

Do not use or store the equipment under sunlight or high temperatures. Such exposure could lead to the leakage of the batteries or deformation of the casing.

• Avoid rapid temperature changes

Rapidly moving the equipment between hot and cold temperatures may cause water droplets to form on its exterior and interior. To prevent condensation, place the equipment in its carry case or a plastic bag before exposing it to a rapid temperature change.

• Do not drop

Strong shock or vibration of dropping could cause malfunction. Keep the strap around your wrist when carrying the camera.

• Do not unplug or remove the battery when processing data

When image data is being recorded or deleted from memory cards, cutting off power could result in data loss or damage the internal circuitry or memory.

• Handle the lens and all moving parts with care

Do not touch the lens or lens barrel. Be careful in handling the memory card and battery. These parts are not designed to withstand force greater than regular use.

Battery

In low temperature circumstances, the battery's capacity may decrease significantly due to the inactive chemical reaction. When taking pictures in cold weather, keep a warm backup battery on hand.

Should the battery terminals become dirty, wipe them with a dry, clean cloth or use an eraser to remove the stains.

• Memory cards

Turn off the power before inserting or removing the memory card. Otherwise, the memory card could become unstable.

Memory cards may getting hot during use, remove memory card from the camera with care.

Digital Camera LDC-82823 Tested To Comply With FCC Standards FOR HOME OR OFFICE USE

- F

This mark on your camera certifies that this camera meets the requirements of the EU (European Union) concerning interference causing equipment regulations. CE stands for Conformité Européenne (European Conformity).

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference recieved, including interference that may cause undesired operation.

This Class B digital apparatus complies with Canadian ICES-003. Do not remove the ferrite cores from the cables.

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Unpacking the Camera

Digital camera Rechargeable Li-ion Battery Pouch Wrist Strap Video/USB combo cable Quick Start Guide Driver Software CD-ROM Warranty card AC adapter

Quick Start



Turn on the camera. See page 18.



Slide the mode switch to **D** and frame your subjects with the viewfinder or the LCD monitor.

Insert a Li-ion battery. See page 17.

Insert a SD memory card. See page 17.



5 Slightly press the shutter release button halfway down and hold it to set the focus and exposure.



 $6 \, \frac{1}{100} \,$

Chapter 1 Getting Started

Camera Parts





<u>Set Up</u>

Attaching the Wrist Strap



Insert the small loop of the wrist strap into the strap eyelet.



2 Insert the long loop of the wrist strap into the small loop of the strap and then tighten it.

Charging the Battery

The supplied rechargeable Li-ion battery pack should be charged before using.



Check that the camera is turned off. Plug the AC adapter connector into the "DC IN 5V" socket on the camera.



- Then plug the adapter itself into the main power outlet.
 - Disconnect the AC adaptor when finishing charging.
 - Note : To increase the efficiency of battery charging, you can turn off the camera power after connecting the USB cable/AC adaptor.

Installing the Battery & the Memory Card



- Put the camera upside down with the front of the camera facing you.
- 2
- Open the battery / memory card cover.
- Insert the battery according to the indicators on the battery chamber.

- Insert a SD memory card into the memory card slot and make sure it is in place as shown.



- 5
- Close the battery/ memory card cover.

Using the AC Adaptor

When reviewing pictures or operating the camera indoors, you can use the AC adaptor as the power source to save the battery power.



Connect the AC adaptor connector to the AC adaptor terminal of the camera.



- 2 Connect the other end of the AC adaptor to the electrical outlet.
- Note : Make sure to use only the AC adapter (5V) specified for the camera. Damage caused by use of an incorrect adapter is not covered under the warranty.

Turning on Power

Press the $\boldsymbol{\mho}$ "Power" button to turn the camera on.

Note: To turn off the camera, press the power button again.



Selecting the Language



 ♥| "SET

 pressing

 ♥| setup

| ۴ | LANGUAGE | | | |
|---|-------------|---|---|--|
| | ENGLISH 🔳 | | | |
| | DEUTSCH | | | |
| | FRANCAIS | | | |
| | ESPAÑOL | | | |
| | NETHERLANDS | • | | |
| | D Q 💹 | ľ | 4 | |

ISO LEA

2 On the "LANGUAGE" submenu, use ▲ /▼ on the four-way button to select the language you need and then press "OK" to confirm the setting.

Setting the Date/Time

Set the date and time so that they appear correctly when you are reviewing the images with your camera.



- In **Y**I "SETUP" menu, select I "DATE/ TIME". Enter the submenu by pressing "OK".
- 2 Move to the item you want to adjust by using \checkmark > on the four-way button, and adjust the value of the item by using \checkmark / \checkmark on the four-way button.
 - **?** Press "OK" button to confirm the setting.

Chapter 2 Taking Pictures and Recording Video Clips

Using the LCD Display

When you turn the camera on, the LCD monitor turns on automatically. With the LCD monitor, you can frame images that you want to capture or record as video clips. You can also view the menus of each mode. The following figures give you the information of the indicators and icons shown on the LCD monitor.

- Note 1 : You may not be able to see the LCD display clearly when using the LCD monitor under intense light, such as sunlight. You can adjust the LCD brightness to improve the situation. See page 82.
- Note 2 : You may turn off LCD display and use optical viewfinder to save the battery power for taking more pictures.
- Note 3 : Note that the following figures are for illustrative purposes only. They do not exactly match the LCD display content actually produced on the camera.

Capture Mode



Video Mode



Changing the Contents on the LCD Monitor



Each press in button to change the contents on the LCD monitor as shown below.

• Capture Mode



Video Mode



Using Zoom

This camera provides you with 3x optical zoom and 8x digital zoom.

Optical Zoom



- Press " **** in.
- You can see the zoom in / out indicator on 2 the LCD monitor. The optical zoom range is from 1 0x to 3 0x





Digital Zoom

To activate the function of digital zoom, you have to set the digital zoom to "On". (See page 79).





Press " • " switch to optically zoom in to the maximum level (3X), then release " • " switch and press it again to activate digital zoom function.



A green frame surrounds the area of the image to be captured.

Note: You can change the digital zoom setting during video recording, but not the optical zoom setting.

Taking Still Pictures Using Auto Focus

Press the shutter release button halfway down to set the focus and exposure. The camera will automatically focus on the subject in the center of the frame.



Frame your subject with the viewfinder or the LCD monitor. Slightly press the shutter release button halfway down and hold it to set the focus and exposure.



You will hear a sound, and indicator will light when the auto focus is set.

Press the shutter release button down fully to take the picture.

Note: Auto focus might fail in some circumstances:

- * When you shoot behind a sheet of glass.
- * When you shoot subjects that have low contrast in color (eg: sky, white walls and so on).
- * When there is a long distance between two subjects in the same frame (the camera might mistakenly focus on the wrong subject).
- * When there is only horizontal line in the frame.

Using Focus Lock

If your subject is not in the center of the frame, the picture may be out of focus when you press the shutter release button halfway down. Focus lock allows you to focus on an off-center subject.





- Frame your subjects in the center of the frame with the viewfinder or the LCD monitor. Slightly press the shutter release button halfway down and hold it to set the focus and exposure.
- 2 Keep pressing the shutter release button halfway down and recompose your picture.





Press the shutter release button all the way down to take the picture.

Note : Different colors of focus brackets stand for different focus condition.

| AF success | When color of focus bracket is | |
|------------|----------------------------------|--|
| | changed from "white" to "green". | |
| AF fail | When color of focus bracket is | |
| | changed from "white" to "red" . | |

Chapter 2: Taking Pictures and Recording Video Clips

Shooting Images

If you are a first-time user of a digital camera or just want to take pictures in the easiest way, you can use this 🛤 "AUTO" mode. In this mode, the camera controls most of the settings.



Slide the mode switch to ♀ , check the ♠ icon on the LCD monitor before shooting. If not, press SP "SP/Delete" button and use ◀ / ▶ on the four-way button to select ♣



Frame your subjects with the viewfinder or the LCD monitor by moving the camera or using " +++/+ " buttons.





Slightly press the shutter release button halfway down and hold it to set the focus.



- Press the shutter release button all the way down and take the picture.
- Note : When (*) appears on the LCD monitor, we recommend you use a tripod to avoid taking blurry pictures caused by hand shake.

■ Shooting ♥ Close-Ups/∞ Infinity/MF (Manual Focus) Modes

• Close-Ups/∞ Infinity Mode

To shoot a close-up picture, use 📽 "Macro" function to get the detail and sharpness of the subject.

To shoot infinity shots, use ∞ "Infinity" function to shoot landscapes and distant objects. It can also be used for compositions combining both near and distant objects.



Press ▲ on the four-way button to select ♥/
∞ mode. The selected item will appear on the right side of the LCD monitor.



- 2 Frame your subject, press shutter release button to take pictures.
- Note: The default flash mode is "Flash Off" in macro mode. You can change the flash mode by using ◀ on the four-way button.

• MF Manual Focus Mode

You can use MF "Manual Focus" function to adjust the focus manually.



Press \blacktriangle on the four-way button to select **MF** mode, and the selected icon will appear on the right side of the LCD monitor.



2 The green frame appears on the center of the LCD monitor. Frame your subject, press shutter release button to take pictures.



Press \triangleleft / \blacktriangleright button to adjust the focus and press "OK" to confirm the value.

Setting Exposure Compensation

In some difficult lighting condition, the automatic exposure may be misled into giving the wrong readings. Exposure compensation allows you to adjust the exposure value and correctly expose your pictures.



In \mathfrak{s} mode, press \checkmark on the four-way button (EV value will be selected and light red).



- 2 Use 4/ to adjust the exposure value (from -2.0 ~ +2.0).
 - Press "OK" button to confirm the setting.

Note : EV setting goes back to default (0.0 EV) after you turn off the camera.

Using Self-timer

Self-timer function allows you to take pictures 2 sec, 5 sec or 10 sec after you press the shutter release button all the way down. When you want to include yourself in the picture, but can find no one to shoot the picture for you, you can use this convenient function. We recommend you use a tripod or place the camera on a steady surface when using self-timer.



Press \blacktriangleright on the four-way key until the icon 2 2 or 3 appears on the LCD monitor.



2 After locking the focus and pressing the shutter release button down fully, the self-timer lamp blinks. The camera will take the picture automatically after the time you set ends.

Note: The self-timer mode will not be cancelled after taking a picture. Use ▶ on the fourway button again to turn off the self-timer function.

Using Built-in Flash

When taking pictures in difficult lighting conditions, you may need the flash to get correct exposure. The camera provides you with built-in flash modes.



Press ◀ on the four-way button to display the flash settings.

Use \triangleleft / \triangleright button to change the setting.

3 Pre

2

Press "OK" to confirm the setting.

| Mode | Function |
|---------------------|--|
| Flash Off | Flash is turned off. |
| | Flash fires automatically when the lighting con- |
| 4 Auto Flash | dition is dark. |
| 🗳 Auto Flash with | Reduces the "red-eye" effect resulting from the |
| Red-eye Reduction | flash. |
| Fill in Elach | Flash fires whenever you take a shot, regardless |
| | of the lighting condition. |
| 48 Slow Sync | Flash fires with slow shutter speed to get |
| | natural exposure. |

Chapter 2: Taking Pictures and Recording Video Clips

Scene Modes



In 💭 mode, press "SP/Delete" button to display capture modes.

Use \blacktriangleleft / \blacktriangleright on the four-way button to change the setting.

Press "OK" button to confirm the setting.

Note: In scene modes, camera settings are automatically adjusted to suit the selected scene, sparing you the necessity of adjusting each setting separately. Only "SETUP", "IMAGE SIZE", and "QUALITY" functions can be changed on the 😭 menu.

Auto (🔒)



"AUTO" mode is the simplest way to take pictures without setting any functions. The camera automatically chooses the optimal settings for the shooting scene when the shutter release button is pressed halfway.

<u>Scene Modes</u>

Program (P)



The camera sets the optimum aperture values and shutter speed automatically according to the brightness of the subject.

AV (Av)



In this mode, pictures are taken with the priority given to aperture value. The camera sets the shutter speed automatically.

■ TV (Tv)



In this mode, pictures are taken with the priority given to shutter speed. The camera sets the aperture value automatically.



Portrait ()

Suitable for shooting a portrait-style image of a person. Only the subject is brought into focus with a blurred background.

Chapter 2: Taking Pictures and Recording Video Clips

🔳 Landscape (🝙)



Suitable for shooting landscapes and other outdoor scenes. Vivid reproduction of blues and greens.

🛛 Night Scene (୯)



With a slow shutter speed in order to obtain the correct exposure. We recommend using a tripod.





Suitable for capturing fast-moving action without blurring.

Snow/Beach (📷)



Vividly captures the brightness of such subjects as snowfields, beaches, or sunlit expanses of water.




Let you reproduce the beautiful colors of the sunset.

🔳 Text (🔳)



Suitable for shooting documents. Increases contrast between letters and background.

🛯 Panorama (💻)



You can take a number of images and join them together to form a panoramic picture. The Panorama mode enables you to overlap mulitiple images so that it is easier to join them together into a panoramic picture.

Note: See page 38 to use this funtion.

How to use Panorama mode



In 🛄 mode, frame your subjects with the viewfinder or the LCD monitor by moving the camera or using " ****



Use the darker image area on the left side of the LCD monitor to overlap with the previouse image you took.



- Maximum number of images that can be joined together is 3.



Press "OK" button to complete and wait a moment for panorama to be written into memory.





5 In mc mode, use " + + + " buttons to show the index and press " mc " button to choose the panorama image.

Note 1: The image size is "1600x1200(2M)" when using "Panorama mode" .

Note 2: The image is only enlarged 1.0X when using "Panorama mode" .

Recording Video Clips



Slide the mode switch to 🕮.



Prame your subjects by using " +++/+ " buttons before you start recording.



Slightly press the shutter release button half way down and hold it to set the focus and exposure delete.





Press the shutter release button all the way down to start recording.



Press the shutter release button again to stop recording.

Using the Capture / Video Menu

The capture / video menu allow you to adjust various camera settings that affect the quality of the images and video clips you capture with your camera.



- Slide the mode switch to 🛤 , or 🕮 .
- Press I "Menu" button to enter the capture or video menu.



Scroll through the menu by using ◀ / ► on the four-way button.



- Use ▲ / ▼ on the four-way button to highlight the option you want to select.
- 5

Press "OK" button to confirm the setting. Press I "Menu" button or shutter release button halfway down and the screen returns to capture / video live view.

Setting Image Size (Resolution)

Changing the image size affects the number of images which can be stored in a memory card. You can achieve detailed images with high resolutions. The larger file size is, the more memory space you require, and vice versa.

• Setting Image Size (for Still Pictures)



- In 요 "CAPTURE" menu, select 🗔 "IMAGE SIZE".
- Select "3296x2472(8M)", "2816x2112(6M)", "2304x1728(4M)", "1600x1200(2M)", or "640x480(VGA)".

Press "OK" button to confirm the setting.

• Setting Image Size (for Video Clips)



- In 📽 "VIDEO" menu, select 🗔 "IMAGE SIZE".
- Select "640x480", "320x240", or "160x120".
- Press "OK" button to confirm the setting.

Setting Quality

The image quality is related to the compression rate of the image. In order to reduce the size of the files and to have more memory storage space, files are compressed. However, compression leads to the loss of image quality. In other words, the less you compress the file, the better the quality is, and the more memory space you require.





Setting White Balance

White Balance allows you to correct color shifts that result from different lighting conditions.



- In 흤 or 🖷 menu, select 📼 "WHITE BALANCE".
- 2 Select "CLOUDY", "TUNGSTEN", "FLUORESCENT", "DAYLIGHT", or "AUTO".

| Setting | Function |
|---------------|--|
| CLOUDY | Setting for shooting in overcast condition. |
| - TUNGSTEN | Setting for shooting in incandescent or halogen |
| | condition. |
| 票 FLUORESCENT | Setting for shooting in fluorescent condition |
| 🔅 DAYLIGHT | Setting for shooting in sunny condition. |
| AUTO | The camera will automatically adjust the setting according |
| | to the lighting condition. |

Setting ISO (Sensitivity)

ISO value affects the camera's sensitivity to light. The default ISO setting is "Auto", but you can also adjust the setting manually. Use low ISO value in bright condition, and high ISO value when light is insufficient.





Setting Exposure Area

This setting allows you to specify which region of a scene the camera will use to measure the brightness and determine the exposure.



| 1 | In 🛤 or 📽 menu, select 🖽 "EXPOSURE AREA". |
|---|--|
| 2 | Select "FULL", "CENTRAL", or "SPOT". |
| 3 | Press "OK" button to confirm the setting. |

| Setting | Function | | |
|---------|---|--|--|
| FULL | Meters the exposure value from the entire screen. | | |
| | Meters the exposure value from the central area of the | | |
| | screen. | | |
| SPOT | Meters the exposure value from a very small area in the | | |
| | center of screen only. Use this mode to shoot pictures | | |
| | with a specific exposure area. | | |

Setting Focus Area

This setting allows you to change the focus area.



In a or menu, select a "FOCUS AREA".
Select "CENTRAL" or "SPOT".

| Setting | Function |
|---------|--|
| CENTRAL | Focus on your subject in the central area of the screen. |
| SPOT | Focus on your subject in very limited range in the center of the screen. |

Setting Color Style

This function allows you to add special effects to the images.



In 🛤 or 🛍 menu, select 🍩 "COLOR STYLE".

Select "COOL", "WARM", "B&W", "SEPIA", or "NORMAL".

| Setting | Function |
|---------|--|
| COOL | Records in cool tones. |
| WARM | Records in warm tones. |
| B&W | Records in black & white. |
| SEPIA | Make the photographs look like vintage ones. |
| | (reddish-brown) |
| NORMAL | No special effect. |

Setting Sharpness

Adjusting settings of sharpness allows you to emphasize or soften the edge of the image.





| Setting | Function | | |
|---------|---|--|--|
| | Emphasizes the outline. If you want the subjects (such as | | |
| HARD | buildings) to have a clear and sharp outline, we suggest | | |
| | you to use this mode. | | |
| NORMAL | Suitable for ordinary shots. | | |
| | Softens the outline. If you want the subjects (such as | | |
| SOFT | people) to have a soft outline, we recommend you to use | | |
| | this mode. | | |

Chapter 2: Taking Pictures and Recording Video Clips

Setting Contrast

Adjusting settings of contrast (distinction between light and dark) allows you to harden or soften the image.





| Setting | Function |
|---------|---|
| HARD | The light and dark areas are defined more clearly, making the image look crisper. |
| NORMAL | Suitable for ordinary shots. |
| SOFT | The light and dark areas become less defined, giving the image a softer impression. If you want your images to look softer, we suggest you use this mode. |

Setting Saturation

Saturation is the intensity and purity of color. This option allows you to adjust images to be more vivid or dull.



| 1 | In 💭 or 🖷 menu, select "SATURATION". |
|---|---------------------------------------|
| 2 | Select "MORE", "NORMAL" or "LESS". |

| Setting | Function | |
|---------|--|--|
| MORE | Makes image vivid. If you want your image to look more vivid, we recommend you to use this mode. | |
| NORMAL | Suitable for ordinary shots. | |
| LESS | Makes image dull. If you want your image to look gray, we suggest you use this mode. | |

■ Taking a Series of Pictures (🟩 only)

When setting the capture drive mode to "Single", you can capture a single picture each time you press the shutter release button all the way down. If you want to shoot still pictures of moving events, "Continuous" allows you to take a series of pictures.



Only in 💭 menu, select 🖳 "DRIVE MODE". Select "SINGLE" or "CONTINUOUS".

Press "OK" button to confirm the setting.

Note : The flash mode is "Off" when using "CONTINUOUS".

Setting Video Format () only)

The video files supported by the camera are *.avi, *.asf or *.mov. Different file type needs different software to play, here is the list:

| File type | Software | |
|-----------|--|--|
| *.avi | ArcSoft VideoImpression & XviD. See page 71. | |
| *.asf | Media Player 9 or above | |
| *.mov | QuickTime (*.mov is the Mac OS file format) | |



Only in ⊯ menu, select ⊯ "VIDEO FORMAT". Select "AVI", "ASF" or "MOV".

Chapter 3 Reviewing Images and Video Clips

Using the LCD Display

The following figures give you the information about the icons appearing on the LCD monitor.



<u>Using Playback</u>

Playback mode allows you to review the still images and video clips.



Slide the mode switch to Playback mode **D**. The last taken image or the first frame of the video clip appears on the LCD monitor.



3

Use ◀ and ▶ on the four-way button to display the previous or next file.



If you select a video clip, a guide to operation appears on the LCD monitor during playback. Press ▼ on the four-way button to play the video clip. Press ▼ on the four-way button again to pause the video clip.



4

6

Use ◀ and ▶ on the four-way button to play fast backward and fast forward.



Use \blacktriangle on the four-way to stop the playback.



Press " **\ \ ** " button to return to thumbnail display.

Using Index Display

By using the function of index display, you can view up to nine images at a time.



Slide the mode switch to Playback mode E. The last taken image or the first frame of the video clip appears on the LCD monitor.



2 Press " **\ + +** " button to display nine images at the same time, then use A/V/4 / > on the four-way button to select the file you want.



Press "OK" or " I button to display the selected image at its normal size.

Activating Digital Enlargement

You can magnify pictures you have taken for a closer viewing on the LCD monitor. This feature is useful for checking the focus or small details.

Note : This feature only works on still pictures; it does not work with video clips. Also, this feature is for viewing purposes only; it does not permanently alter the image.

Ζ



Press " • " button in single display and then navigate the enlarged image by using the four-way key.





Press " **\ ** " button to return to the original image size step by step.

Using the Playback Menu



Slide the mode switch to 🗈.





Press 🗉 "Menu" button to enter the playback menu.



Scroll through the menu by using ◀ / ► on the four-way button, and use ▲ / ▼ on the four-way button to highlight the option you want to select.



4

Press "OK" button to confirm the setting. After confirming the setting, press I "Menu" button again to exit.

Deleting Images

This function allows you to delete your still pictures and video clips.



- In 🖻 menu, select 🖆 "DELETE".
- 2 Select "ALL" to delete all of the images or select "ONE" to delete the image you selected.



- A confirmation dialogue will be displayed. Press "OK" button to confirm the setting.
- Note 1 : You can also delete single pictures by directly pressing "SP/Delete" button without entering the menu. Select "OK" and then press "OK" button to delete the file you selected.
- Note 2 : If the image is under protection, you have to remove the protection first and then delete it. See page 59.

Protecting Pictures and Video Clips

2

This function prevents the pictures and video clips from being modified or deleted.





In 🖻 menu, select 蜿 "PROTECT".

Select "ALL" to protect all of the files.select "ONE" to protect the file you selected.

- Note 1:A file that has been protected is indicated by the • mark. To remove a protected file or all of the protected files, follow step 3 to remove protected files, and then press "OK" button.
- Note 2: All of the images, including the protected ones, are deleted when you format the memory card.

Recording Voice Memo for Still Pictures

You can record a voice memo up to about 15 seconds in length for each still picture.







To record a voice memo, select "RECORD" and then press "OK".

Press ▲ on the four-way button to start
 recording. When the voice memo starts to record, the indicator on the LCD monitor changes from II● (green) to ●REC (red).
 Press ▲ again to stop recording and return to the previous menu.







To playback a voice memo, select "PLAY" and then press "OK". Press ♥ on the fourway button to start playing. Press♥ again to stop playing and return to the previous menu.



5 To delete a voice memo, select "Delete" and then press "OK".



6 A confirmation dialogue will be displayed. Select "OK" to delete memo.

Note 1 : A still picture that has recorded a voice memo is indicated by the $\$ mark. Note 2: All of the images, including the memo ones, are deleted when you format the memory card.

Setting DPOF (Digital Print Order Format)

This function helps you to print out your pictures at a professional print service or on a DPOF (Digital Print Order Format) compatible printer directly, without any computer.



In Decide The menu, select " "DPOF". To decide which pictures are to be printed and the number of copies, select "STANDARD" and then press "OK" to enter the submenu.



In the submenu, select "STANDARD" andthen press "OK" to start setting.





Use
 ↓ > on the four-way button to display
 the picture you want to print and use
 /▼
 on the four-way button to specify the
 number of copies. After all the settings are
 the way you want, press
 "Menu" button
 to exit the setting screen.



To cancel the setting of "STANDARD", select "REMOVE" and a confirmation dialogue will be displayed. Select "OK", then press "OK" button to remove print settings.





To print index of pictures, follow step 1. Then select "INDEX" and press "OK" button.



| | Ø SET | MENUD |
|-------|--------|-------|
| INDEX | REMOVE | Þ |
| | | |

- Use ◀/ ► on the four-way button to select "ADD" or "REMOVE". Press "OK" button to complete DPOF setting.
- Note : A still picture that has had DPOF settings added to it is indicated by the 🕒 mark.

| Setting | Function |
|----------|---|
| STANDARD | Prints one image per page. |
| INDEX | Prints the selected images in a single sheet. |

Displaying a Slide Show

Slide show allows you to playback the still pictures one by one automatically on the LCD monitor or a TV. To connect your camera to a TV, see page 79.

(3~10sec).



| ۰. |
|----|
| |

| | I | MENUS |
|---------------------------------|--------------------------|-------|
| INTERVAL DIRECTION REPEAT | 3 SEC. FORWORD OFF | • |
| or start | | |

INTE DIRE

K START

| | | MENUS | | 2 | Use ▲/▼ |
|-------------|--------|-------|---|---|-----------|
| | | | _ |) | "DIRECTIO |
| VAL TION | 3 SEC. | • | | | button to |
| AT | OFF | | | | ("Forward |

/

| Use $\blacktriangle/\checkmark$ on the four-way button to select |
|--|
| "DIRECTION". Use \triangleleft / \blacktriangleright on the four-way |
| button to select the displaying direction |
| ("Forward" or "Backward"). |

Use $\blacktriangle/\checkmark$ on the four-way button to select

"INTERVAL". Use \triangleleft i on the four-way button to select the interval setting



Use ▲/▼ on the four-way button to select
"REPEAT". Use ◀/ ▶ on the four-way button to activate "REPEAT" function ("ON" or "OFF").



Press "OK" to confirm the setting and start displaying a slide show. Press "OK" again to stop displaying and return to the previous menu.

| Setting | Function |
|-----------|---|
| INTERVAL | Adjusts the interval (3~10sec) between each picture dur- |
| | ing the display. |
| | Decides in which direction ("Forward" or "Backward") to |
| Direction | display the pictures. |
| REPEAT | Repeats the slide show and starts from the selected file. |

5

Editing Still Pictures

This function allows you to rotate, resize, or crop images and remove red eyes from images on the LCD monitor.

Note : This function is only available for still pictures.

• Rotate





In 🖻 menu, select 🗹 "IMAGE EDIT".

To rotate a image, select "ROTATE" and then press "OK".

Each press ◀ or ▶ on the four-way button to rotate 90° clockwise or counterclockwise.
Press "OK" and return to the previous menu.

• Resize



- In 🗈 menu, select 🗹 "IMAGE EDIT".
- To resize an image, select "RESIZE" and then press "OK".

Use \triangleleft / \triangleright on the four-way button to select the size. Press "OK" to confirm the setting and return to the previous menu.

In 🗈 menu, select 🗹 "IMAGE EDIT".

To delete unwanted areas from a image, select "CROPPING" and then press "OK".

Use $\land/ \checkmark/ \land \land$ on the four-way button to move the cropping boundary until the area of the image you want to extract is within the boundary.

Press " **** " button to make the cropping boundary smaller or larger and then press "OK".

Select "NEW" to save the cropped image as a new file. Or select "REPLACED" to save the cropped image to replace the original image. Press "OK" to confirm the setting and return to the previous menu.

Note : Cropping can not be specified for 640x480 pixel images.









Crop

► IMAGE EDIT

• Remove red eyes



In 🖻 menu, select 🗹 "IMAGE EDIT".

To remove red eyes from an image, select "REMOVE RED EYES" and then press "OK". The red-eye removal process takes a few seconds.



Select "NEW" to save the changes as a new file. Or select "REPLACED" to save the changes to replace the original image.



Press "OK" button to confirm the setting.

Note : The removal red eyes option is only available for still pictures that are taken with a flash.

| Setting | Function |
|------------|--|
| | Images can be rotated 90° clockwise or counterclockwise |
| ROTATE | on the LCD monitor. This is useful for viewing pictures |
| | that were taken with the camera held vertically. |
| RESIZE | Converting images to a size smaller than original. |
| CROPPING | To crop an area from an image. |
| REMOVE RED | To remove red eyes from the subjects in images that were |
| EYES | taken with a flash. |

Chapter 4 Installing the Software

The software CD supplied with the camera includes the driver and the application (PhotoImpression, and VideoImpression). The application allows you to upload the images from the camera, view them, print them, and e-mail them. So please install the software before you connect the camera to computer.

Windows System Requirements

- Windows 98SE, ME, 2000, and XP
- Pentium II processor or greater
- 32MB of available RAM
- 110MB of available hard disk space
- CD-ROM drive
- USB port
- Color Monitor with a minimum resolution of 800 x 600 pixels

Installing the Software

Installing the Driver

If you use Windows 98 SE, please install the driver first before you connect the camera to the computer. Please follow the instruction below:









Insert an installation CD-ROM. After you insert the CD into the CD-ROM drive, the first Install window will appear. If the install window does not appear, click "Start" and then "Run". Type "E:\LUMICRON.exe" E is the drive letter that contains the software CD. And then choose the OS you use.

2

Click "Driver".



1 ^{The i}

The installation starts.



Click "Finish " to complete the installation. Windows ME, 2000, XP and Mac OS 9.X, 10.X don't need the driver.





Installing the XviD Software

For getting optimum effect when you display videos on your computer, please install the XviD Software first no matter what OS you use. Xvid uses a video codec and is based on MPEG-4 compression format.







Click "Next".

| ease read of a national program in constant before constantly. | Q |
|--|---|
| Aren you are ready to continue with Setup, click Next. | |
| SviD-1.0.3-20122004 _Final Release_ | |
| Based on CVS Irom 20.12.2004 08:00h MET | |
| Jangelog | |
| VeD 1.0.3.20122004: - Inviduoe Fixed tredin optimization overflow for quark (= 2. - Sevidoaito Dark valida to short streams. This prevents from reading useless: - stream gabages. - fexidoaito P Fixed 64 bit cashes because of addressing assuming 32bit integer Invid. | _ |
| vertman) (ovidoon) Fixed 2 diamond search bugs (one was causing searches in wrong lections, | |



| Where should XviD be installed? | Ċ |
|-------------------------------------|---|
| Setup will install XviD into | the following folder. |
| To continue, click Next. If you wou | id like to select a different folder, click Browse. |
| C-Program FilmsWorlD | Bjoesse |
| | |
| | |
| | |
| | |
| | |



| The formation of the second se | Nect Start Menu Folder Where should Setup place the progra | an's shoricuts? |
|--|---|---|
| construint, dich Heel. If you would like its indeet a offeneret bidier, cick Donnee. | Setup will create the program | n's shortcuts in the following Start Menu folder. |
| 255 Direct. | To continue, click Next. If you would I | like to select a different folder, click Browse. |
| | 1000 | Bjowse |
| | | |
| | | |
| | | |
| | | |
| | | |


| | - | | - | |
|--------|------|-----|----|--------|
| Instal | lina | the | Sa | ftware |
| msiui | ung | ine | SU | ivvure |
| | 0 | | | |



| Setty - XviD | × |
|--|---|
| Installing Please wait while Setup installs XvD on your computer. | |
| Creating INI entries | |
| - | |
| | |
| | |
| | |
| | |

Settep - XviD



Click "Finish " to complete the installation.

Installing the Application (Windows)

| | LDC-828z3 |
|-------------------|--|
| | Trelber/Driver Kameratreiber/Storage Driver Windows 9858 Windows 2000 Windows XP/ME XviD |
| < | Anwendung/Application PhotoImpression |
| | Anwendung/Application VideoImpression |
| | Gebrauchsanweisungen/User guide Digitalkamera • Bidbearbeitungsprogramme Digital Camera • Software User Guide |
| | Internetseite/Web site http://www.lumicron.net/ |
| drimunito Wenn Si | de Kanen at einen IX anchlefen nüchter, müssen Se auert der Treber installers (Notiker) To use the camera with PC, install Driver first |

| - | Calculate a second second second second second |
|---|--|
| 5 | the choices below. |
| | |
| | Person (2 |
| | OK Cancel |



| ose Destination Location | | - |
|---|-------------------|-------------------------|
| Select folder where Setup will install files. | | Arcs |
| Setup will install PhotoImpression in the following | g folder. | |
| To install to this folder, click New, To install to a profiler folder. | different folder. | click Browse and select |
| | | |
| | | |
| | | |
| | | |
| | | |
| Destination Folder | | |
| Destination Folder CVPtogram Files/AucSolVPhotoImpression 3 | | Bjowse |
| Destination Folder CVProgram Files/Au/Sof/PhotoImpression 3 Third | | Вјоние. |
| Destination Folder | | |

Turn on the computer and then insert the software CD into the CD-ROM drive.

After you insert the CD into the CD-ROM drive, the first Install window will appear. If the install window doesn't appear, click "Start" and then "Run". Type "E:\ Lumicron. exe" E is the drive letter that contains the software CD.

Click "PhotoImpression".

2

The computer proceeds to install PhotoImpression. Select a language and click "OK". Follow the on-screen instruction to continue the installation.



Accept the license agreement and then click "Yes".

Click "Next".



6 Click "Next". Follow the on-screen instruction to continue and finish the installation.

Select Program Folder.



8

Setup complete. Restart the computer.

Note: Follow step 3~8 to install "VideoImpression".

Using the Application

PhotoImpression



Connect the camera to the computer. See page 79.

Launch PhotoImpression.

2

3

To download the images from the camera, select "From Folder", "Browse", "Removable Disk", "Dcim", "100xxxxx", and click "Ok". Click the image that you want to edit in the frame.





You can open two images at the same time.

VideoImpression



- Connect the camera to the computer. See page 79.
 - Launch VideoImpression and then select "add".



Select "DCIM" to download the video clips from the camera.



4

Z

Double-click to select the video chips.



Click "Play" to play the video clips.



Note: When you play video clips with VideoImpression software, a warning message may be displayed. You can solve this problem in 2 ways: 1. Visit <u>http://sourceforge.net/projects/ffdshow/</u> to download the "ffdshow" software for updating the OS vfw (video for windows) driver. (The ffdshow version must be 2004-03-04 and above) 2. Click "Start" and then run "Windows Update" to visit Windows website to get the latest updates available for your computer's operating system.

Chapter 5 Uploading, Printing and Displaying Images

After you take pictures, you can upload images to a computer from your camera, print them with a printer, and display them on a TV.

Uploading to a Computer



Connect the larger end of the USB cable to the USB slot of a computer.



- Then connect the small end of the USB cable to the camera.
- The computer automatically detects the camera as a mass storage device so that you can copy the image file from your camera to the hard drive of a computer.
- Note 1: Upon connecting the camera to a computer, the LCD monitor turns off automatically.
- Note 2: If you use Windows 98SE as the OS in your computer, you have to install USB driver from the software CD-ROM.

Printing Images

After uploading the images to a computer, you can print them by using the software packed with the camera. You can also connect the camera directly to some specific printers (such as Olympus P400 Photo Printers). To connect the printer:



Get the USB cable and connect the larger end of it to the printer.



- Then connect the small end of the USB cable to the camera.
- Adjust the settings of DPOF in Playback Menu.See page 62.

Displaying Images on a TV

By connecting to a TV, you can view images as a slide show and play video clips.



Select a compatible TV system in **¥** "SETUP" menu.



2 Connect the A/V (Audio/Video) cable to the A/V inputs of a TV.



- Connect the AV cable to the AV connector of the camera.
- Note 1: When you connect your camera to a TV, the LCD monitor turns off automatically.
- Note 2: The audio terminal is white and the video terminal is yellow.

Chapter 6 Adjusting the Camera Settings

Using the Setup Menu

The Setup menu allows you to adjust the default settings of this camera.





- Slide the mode switch to 💭 , 📽 or 🖻 . Press 🗐 "Menu" button and select ¥i "SETUP". Press "OK" button to enter the "SETUP" menu.
- 2 Scroll through the menu by using ◀/► on the four-way button. Use ▲ / ▼ on the four-way button to highlight the option you want to select.
 - Press "OK" button to confirm the setting. After confirming the setting, press III "Menu" button again to exit "SETUP" menu.

Setting Digital Zoom

This function allows you to activate digital zoom function.





Setting AF Illuminator

Sometimes in low-light situations, the camera will use the red AF illuminator on the front of the camera to aid in focusing. This setting allows you to turn off this light when you do not want the AF illuminator to distract the subject of your picture.



In fi menu, select 3ª "AF ILLUMINATOR".
 Select "AUTO" or "OFF".

Press "OK" button to confirm the setting.

Setting Image Review

This function allows you to review the image for 2 seconds after taking a picture



Formatting the Memory

This function allows you to delete all of the images, data, information, and folders in your memory card or internal memory.



In **Yi** menu, select ④ "FORMAT MEMORY" and then press "OK".

A confirmation dialogue will be displayed.Select "OK" to format memory.

Press "OK" button to confirm the setting.

Imprinting the Date and Time

When printing your pictures out or displaying pictures, you can decide whether to imprint the date and time on the pictures or not.



| Setting | Function |
|---------|---|
| | All the selected pictures are printed with the shooting |
| | date and time. |
| DATE | All the selected pictures are printed with the shooting |
| DATE | date. |
| OFF | The pictures are printed without the date and time. |

Setting LCD Brightness

You can adjust the LCD brightness value here.



Setting Camera Sound

You can adjust the playback volume and the sounds that the camera makes when you turn it on, press a button, or take a picture.





To adjust the volume, select "VOLUME". Use \triangleleft \mid **b** on the four-way button to adjust the volume from 0 (no sound) to 9 (loudest).



Press "OK" button to confirm the setting.

Setting TV System

Both NTSC and PAL are TV broadcast systems. The NTSC system is mainly used in the USA, Japan, Canada, Mexico, the Philippines, Korea and Taiwan. The PAL system is used in western Europe such as Germany, England, Switzerland, Holland, Italy (except for France) and Australia, Singapore, Thailand and China. As these systems have no compatibility, you cannot watch an NTSC system based TV in an area where a PAL system is used.





Setting Power Saving Function

1

To save the battery power, you can set the camera or LCD monitor to turn off automatically when it is not in use for a fixed time.



- In f_i menu, select \vec{a}^z "AUTO POWER OFF" and then press "OK".
- select "OFF","1 MIN", "3 MIN" or "10 MIN".
- Press "OK" button to confirm the setting.

Changing the USB Connection Mode

You can change the USB connection mode depending on whether the USB cable is to be connected to a computer (STORAGE, PC CAM) or a printer (PICTBRIDGE).



Using PC CAM

You can connect this camera to a computer with its supplied USB cable and use it as a PC camera. With a compatible video capture program, for example Yahoo Messenger, *MSN Messenger, ICQ, or Netmeeting,* you can capture images on your computer.

Note : You have to install the storage dirver in all Windows OS before you can use the PC CAM function.



- In **Yi** "SETUP" menu, change the USB connection mode to "PC CAM".
- Press "OK" button to confirm the setting. And you can begin to use your camera as a PC CAM.

Using PictBridge







You can connect the camera directly to a printer that supports PictBridge, and perform image selection and printing using the camera monitor screen and controls.

PictBridge is a standard established by the Camera and Image Products Association (CIPA).

In **f**; "SETUP" menu, change the USB connection mode to "PICTBRIDGE".

Use the USB cable that comes with the camera to connect the camera to a PictBridge compatible printer.

- After you finish connecting, the PictBridge menu appears. Use \triangleleft / \triangleright on the four-way button to choose the option you want and then press "OK".
- If you choose "SELECT", use ◀/ ► on the fourway button to select pictures you want to print and use ▲/▼ on the four-way button to specify the number of copies. After all the settings are the way you want, press "OK" button to confirm the setting.

Chapter 6: Adjusting the Camera Settings







Select "ALL" to print all pictures, then press "OK".



The total number of images appears on the screen. Press "OK" button to print or press
 "Menu" button to return to the PictBridge menu.



| 0 | In the PictBridge menu, select "DPOF" by |
|---|--|
| Ο | using \triangleleft / \blacktriangleright on the four-way button and |
| | then press "OK". |



The message you specified with the "DPOF" procedure displays on the screen. Press "OK" button to print.



10 A message will appear on the screen as left figure, if there are no DPOF settings currently on the camera to control the printing operation. Go to set "DPOF" settings. See page 62.



To stop and cancel printing, press the "OK" button.

Note : Warning message may be displayed during direct printing setting or printing as below. For more details on solutions, refer to the printer's instruction manual.

- * PRINTER PAUSE
- * CHECK PRINTER INK
- * CHECK PRINTER PAPER
- * PRINTER ERROR
- * PRINTER INK ERROR
- * PRINTER PAPER ERROR
- * FILE ERROR
- * FILE DECODE ERROR
- * PRINT INFO TOO LARGE

Resetting Your Camera

You can restore the settings to default by using "LOAD DEFAULT" function.



In **Ŷi** menu, select "RESET" and then press "OK".

- 2 A confirmation dialogue will be displayed. Select "OK" to reset your camera.
 - **D** Press "OK" button to confirm the setting.

Trouble Shooting

| Problem | Possible Cause | Solution |
|-------------------------|----------------------------|------------------------------|
| The camera does not | The power is off | Press the power button to |
| work | | turn it on |
| | The battery is inserted | Reload the battery correctly |
| | incorrectly | |
| | The battery power is low | Replace battery with new |
| | or drained | one |
| The picture cannot be | The camera is not in | Slide the mode switch to |
| taken when I press the | capture mode | capture mode |
| shutter release button | You did not press the | Press the shutter release |
| of the camera | shutter release button | button all the way down |
| | down enough | |
| | The memory card is full | Replace with another |
| | | memory card, upload the |
| | | images to a computer or |
| | | delete the images |
| | The camera is still saving | Wait until image storing of |
| | the last image you took | the camera is finished |
| | The flash is still | Wait for a few seconds |
| | recharging | until the recharging is |
| | | completed. |
| | The battery power is low | Replace battery with new |
| | | one |
| | You did not insert a | Insert a memory card |
| | memory card | |
| The flash does not fire | The battery power is low | Replace battery with new |
| | | one |
| | The flash is off | Switch to other flash mode |

| Problem | Possible Cause | Solution |
|-----------------------|------------------------------|-----------------------------|
| The images are blurry | The camera is moving | Hold the camera steady or |
| | when you press the | use a tripod when taking |
| | shutter release button. | pictures |
| | The focus brackets are | Position the focus brackets |
| | not positioned on the | on your subject |
| | subject | |
| | Use macro mode to | Set the camera to shoot in |
| | shoot subjects within | normal focus or macro |
| | normal focus, or vice | focus and then take the |
| | versa | picture again |
| | The light is dim and the | Use a tripod and turn on |
| | flash is off | the flash |
| | The lens is dirty | Gently clean the lens |
| The images are too | The flash is on when the | Turn off the flash |
| bright | subject is bright enough | |
| | The camera is too close | Move back from the |
| | to the subject when taking | subject and take the |
| | pictures with the flash on | picture again |
| | Light sources other than | Avoid pointing the camera |
| | the flash provide too | at bright light sources and |
| | much light | use exposure compensation |
| The images are too | The flash is off and the | Turn on the flash |
| dark | subject is in dark | |
| | The flash is on but the | Move closer to the subject |
| | subject is not within the | (The effective range of |
| | effective range of the flash | flash is 1.5M~2M) |
| The camera can not | The camera is not in the | Slide the mode switch to |
| playback | playback mode | |
| No sound in playback | The volume is too low | Adjust the volume |
| mode | | |

Warning Indicators and Messages

| Display | Display When | Solution |
|-------------------|--------------------------------|----------------------------|
| Date/time has | The system detects that the | Reset the date/time. See |
| been lost! | camera has lost date/ time | page 20. |
| | after you turn it on. | |
| | Memory card is locked. | Slide the switch on the |
| Card locked! | | memory card to unlock. |
| | Battery is empty. It will turn | Replace the battery with |
| Change battery! | off automatically after 2 | new ones. |
| | seconds. | |
| | There is insufficient room | Replace another memory |
| Memory full! | to save more images in | card or erase unwanted |
| | internal memory or on the | images. Before erasing, |
| | memory card that is | upload all the images to a |
| | inserted. | computer. |
| | Some problem occurred | Turn off the camera. |
| Memory error! | with the memory card or | Remove and then insert the |
| | internal memory. | memory card again. If the |
| | | same message appears, |
| | | format the memory. See |
| | | page 84. |
| | There are no images recorded | |
| No image | in internal memory or on | |
| | the memory card. | |
| | You attempted to erase the | You have to remove the |
| Image protected | protected images. | protection first and then |
| (All iimages pro- | | delete it. |
| tected) | The function you attempt- | |
| Cannot be effect- | ed to perform can not be | |
| ed | effected for the selected | |
| | image in playback mode. | |

| Display | Display When | Solution |
|-------------------|----------------------------|-------------------------------|
| Not support! | The selected image cannot | Ensure that images are the |
| | be displayed for playback | proper type for your camera. |
| | due to an unsupported | |
| | type with this image. | |
| Image error! ERR! | The selected image cannot | Use image processing soft- |
| | be displayed for playback | ware to view the image on a |
| | due to a problem with this | computer. If that cannot be |
| | image. | done, the image is damaged. |
| Cannot magnify! | You attempted to magnify | Magnification does not work |
| | a video clip. | with video clips. |
| Format fail! | Failed to format. | |
| System error! | Error has occurred in the | Turn the camera off, remove |
| | camera system. | and reinsert the battery, and |
| | | turn the camera on. If the |
| | | same message appears, |
| | | contact your retailer. |
| X | The camera is saving data | Wait a few seconds for the |
| | or turning off. | camera to finish saving or |
| | | turning it off. |

Specifications

<u>Type</u>

• Recording media exchangeable 3x zoom digital camera with monitor LCD.

Effective Pixels

• 8 Mega pixels

Image Capture Unit

Sensor : 1/1.8 inch-type interline CCD
 Image Size : 3296x2472 [8M]

 2816x2112 [6M]
 2304x1728 [4M]
 1600x1200 [2M]
 640x480 [VGA]

<u>Lens</u>

| • Focal length : | f=7.8-23.4mm (35mm camera format |
|------------------|----------------------------------|
| | equivalent : 38 - 114mm) |
| • f/-number : | f/2.88 (Wide) - f/5.23 (Tele) |
| • Distance : | 0.4m-infinity |
| • Macro : | 0.05m - 0.6m (wide only) |

Digital Zoom

•8.0 x

Auto Focus (AF)

- Focusing type : TTL CCD AF
- AF sensing range : From EV8 to EV16
- AF area : Spot metering/ Center metering

Specifications

Viewfinder

• Real image optical viewfinder

LCD Monitor

- •2.0"
- Frame coverage : approx. 90% ~ 100%

Shutter

• 2-1/2000

Exposure

- Exposure mode Program/ Tv/ Av/ Manual
- Metering mode Full Area / Central / Spot
- Exposure Compensation +/- 2.0 Ev (1/3 Ev Step)

Sensitivity

• ISO equivalent approximately 100, 200, 400 or Auto

Self timer

• 2, 5, 10 sec with red eye indicator

Build-in Flash

- Auto control built-in type
- Range Wide: 0.6m 3.0m Tele: 0.6 m – 2.5m

Storage

- Media
 SD/ MMC
- Image file type JPEG (Exif v2.2), DCF v1.0, DPOF v1.1, PictBridge,

I/O External

| DC input | DC 5V adaptor (regular plug) |
|-----------------------------------|---|
| • Video output | NTSC and PAL |
| | (selectable) |
| PC connection | Mini-plug type USB, mini USB connector for serial cable |

Power Sources

- Rechargeable Li-ion batteries.
- AC adaptor (DC 5 volt) ⊖ ⊕

Dimensions

- Size 99.5mm x 56.5mm x 25.7mm
- Weight 169 grams (without battery)

System Requirements: Windows

- CPU Pentium II or more
- Memory At least 32MB
- OS Windows 98SE / Windows ME /
- Windows 2000 / Windows XP
- Interface USB 1.0/1.1
- VGA color monitor
- CD-ROM

