

Digital **3.3 Megapixel camera**

KDC-330

User's Manual

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This User's Manual describes the correct use of KOCOM DIGITAL CAMERA KDC330. Please read carefully all instructions in this User's Manual before using the camera.



Warranty

Warranty Time Period

Kocom Warrants this camera to be free from malfunctions and defects in both materials and workmanship for one year from the date of purchase.

Warranty Repair Coverage

This product is manufactured through rigid quality control and test processes.

In case this product is defective, it will be replaced or repaired free of charge for one year after purchasing date.

In case of the following, KOCOM will replace or fix the camera at the customers cost, even though it is still under warranty.

- (a) Mishandled by user.
- (b) Damaged by modification of inner part or wrong repair.
- (c) Natural disaster or disorder in power source.
- (d) Case of omission, correction without confirmation, or loss of warranty card.

Keep the warranty card in a safe place.

Will not be reissued in case of loss.

Present the warranty card for after service.

MODEL	KDC-330	WARRANTY TIME PERIOD	1 year from the date of purchase
		DATE OF PURCHASE	20 . .
CUSTOMER	ADDRESS		
	PHONE		
	NAME		
SALES AGENT			

Before Using the Camera

Thank you for purchasing KOCOM Digital Camera KDC330. This product is a 3.34 mega-pixel digital camera with a high-performance 1.6-inch color LCD monitor. You can capture desired images freely and easily with this digital camera, and view still images and moving images captured from a computer by using USB cables. Through the use of software in the CD-ROM, store, process and edit still images and moving images and enjoy video conference.

* Before using the camera, please read this User's Manual carefully.

Notes

- We recommend using a chargeable battery (Nickel hydrogen battery) in KDC-330.
 - Usable batteries in KDC-330
 - Chargeable (Nickel hydrogen battery) battery: AA size
 - Lithium battery: 3V digital camera-only battery
- * Recommended to use a nickel battery and 2 lithium batteries when using a disposable battery
- Nickel battery: AA size (Basically 2 batteries are provided)
 - Alkaline battery: AA size
 - Usable for about 20 minutes
 - 10 minutes more may be used, although battery capacity indicator flickers (Flash capturing cannot be used).

Features of KDC330

- Superb high quality images of 3.34 mega pixel
- mages up to 2040x1530 pixel resolution
- High performance 1.6-inch color LCD monitor
- CompactFlash? memory card, easy data transmission and storage
- 6X zoom capture (optical 3x/digital 2x)
- Various capture functions such as moving images capture (movies), self-timer movies capture and convenient operation
- USB connection enabling simple and high-speed transmission of image data (using enclosed cables)
- Various software such as world's best selling photo software of Ulead Photo Express and Ulead Photo Explorer

System Specifications (Figure Omitted)

Windows® 98	Windows® SE/ME	Windows® 2000	Windows® XP	· Pentium® MMX 200MHz or higher recommended · 32MB RAM or higher · Available USB Port · 4x CD-ROM Driver
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Cautions

Safety caution

- Be careful while wearing the camera strap or the USB cable around your neck.
- Do not use the optical viewfinder to look directly at the sun or any source of intense light.
- Do not put the camera in a place under intense direct light or in the sealed car during the summer. The image sensor may be discolored and deteriorated, if you leave the lens towards a direct sunlight for a long period of time.
- Since children may put the battery in their mouth, it could be harmful to their health. Do not place your KDC330 in a place where infants under the age of 3 can reach it.
- In the event that the liquid of the battery comes in contact with your eyes, you should wash your eyes with clear water and consult your physician. When the leaked battery liquid is in contact with your skin or clothes, you should wash it out.
- Do not use the flash at a close distance from a person. If shot close to somebody's eyes, non-recoverable vision damage may occur. Do not take a picture within a meter from an infant.

Caution when using the camera

- Do not use or store your KDC330 in places with high temperature and humidity, highly volatile temperature and humidity, direct sunlight, a lot of sand and dust (beach), great black dirt or water vapor (kitchen sink and bathroom), fire-generating equipment and explosives and in the places close to air conditioners or heaters and hydrators. Fire, shock and failures may occur.
- Do not use or store your KDC330 in a place where strong electrostatic, electric noise (close to motor, transmitter and magnet) and vibration may be generated.
- Do not drop or give an excessive shock to the KDC330.

- Do not put excessive weight on the body, switch, lens or cable of KDC330.
- Do not rebuild or disassemble on your own. High voltage and electric shock may occur.
- Inadequate use of battery may cause liquid leakage, heat, fire or explosion. Make sure to comply with the cautions.
- When liquid leaks from the battery, clean the battery compartment and insert a new battery.
- When the battery liquid has contacted your hands or clothes, you should clean them out. You can lose your vision, if the battery liquid goes into your eyes.
- Do not use organic solvents such as thinner or benzene on to KDC330.
- Taking a picture of a person without permission may violate the person's right. So, do not make the picture public or distribute it without the concerned person's permission.

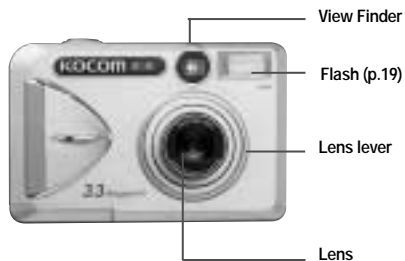
Caution when taking pictures

- The pictures taken under the fluorescent tube many have yellow stripes.
- When the background and subject are too dark, take a picture in flash setting mode, but use the camera in a bright place, if possible (Luminous intensity of 50 Lux or more).
- The picture may be blurry if you use a low battery. Replace it with a new battery.
- When taking a picture of a bright subject, the bright part may appear white.

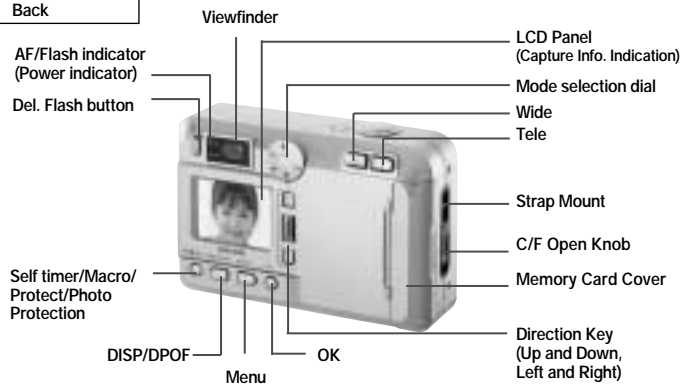
Before using the camera

Name of Each Part

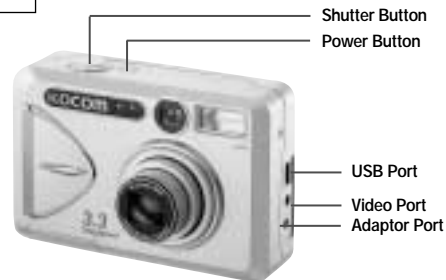
Front



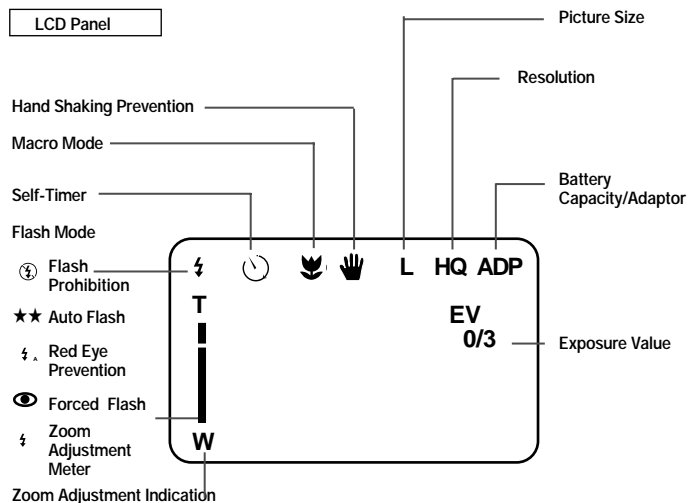
Back



Side



LCD Panel



Using manipulation buttons



Wide/Tele Button: Adjusts optical/digital zoom of the lens.

Wide: Zoom Out / Tele: Zoom In

OK
MENU

OK Button: Saves the setting selected in the camera menu.

Menu Button: Goes to Menu mode adjusting manipulation/
setting of the camera.

DISP/DPOF

Display: Turns off or on the LCD in front of the camera.

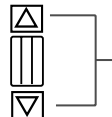
DPOF: Prints photos (Excluding in the Playback)



Self-timer/Macro Button/Protect Button: Converts capture mode into Self-timer/Macro mode or sets the Protect on the saved pictures.



Flash/Delete Button: Determines Flash mode and deletes the saved pictures.



Direction Key: Moves the cursor to up and down or right and left on the Menu.

KDC330 Camera & Accessories

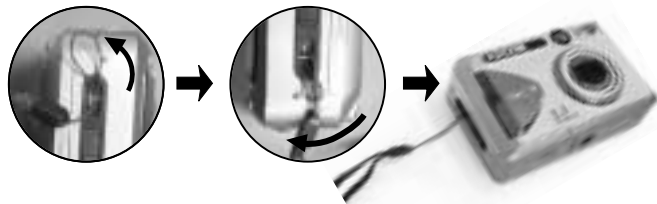


- KDC-330
- Soft case
- Memory Card
- S/W CD-ROM
- Video Cable
- Hand Strap
- USB Cable
- AA-size 2
Nickel Batteries



- Adaptor (optional), Camera User's Manual, S/W User's Manual

Attaching the Strap



- 1 Pass the loop of this cord on the end of the strap through the strap mount.
- 2 Then pass the other end of the strap through the loop of the thin cord and pull the strap tight.

Installing Batteries

- Your camera comes with two AAA batteries so you can start taking pictures immediately.
- Before you start taking pictures, you need to install the batteries and insert a CompactFlash™ Card (memory card) into the Camera.



- 1 Press OPEN and slide the battery compartment cover in the direction of the arrow, then lift the cover.
- 2 Place the batteries in the compartment as indicated by the polarity symbols marked inside.
- 3 Replace the cover.

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.
- If you do not plan to use the camera for a long time, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.
- Battery life is about one week in standby and 2 hours in continuous shooting mode (using alkaline batteries). When batteries become weak, the power indicator blinks. Wait until the camera automatically shuts off in 30 seconds, then replace the batteries.
- We do not recommend using Ni-Cd rechargeable batteries. They discharge power quickly and might result in unexpected loss of the pictures.
- When you use the USB cable to connect the camera to a computer and the computer is turned on, the computer supplies power to the camera and the batteries are disconnected.
- In low temperatures (below 32°F), battery efficiency lowers and camera operation time is reduced. When using the camera in cold environments, keep it warm by covering it while not in use.
- Dispose of old batteries promptly and properly. Do not burn or bury them.

Batteries in use

- A chargeable (Nickel hydrogen battery) battery is recommended for KDC330.
- Batteries for KDC330.

- Chargeable (Nickel hydrogen battery) battery: AA size
- Lithium battery: 3V digital camera-only battery (figure)



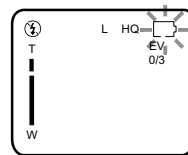
* When using a disposable battery, a nickel battery and 2 combined lithium batteries recommended

- Nickel battery: AA size (2 batteries are basically supplied with KDC330)



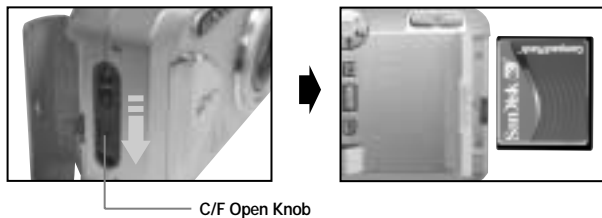
- Usable supplementary batteries on KDC330

- Alkaline battery: AA size
- Usable for about 20 minutes
- Although the battery capacity indicator flickers, the battery can be used for more 10 minutes (However, flash capture is not possible).



Inserting a Memory Card

- The CompactFlash™ Card (memory card) is removable and reusable for easy storage and transfer of your pictures.
- You must insert a memory card into the camera before you take pictures.
- Use only certified cards that carry the CompactFlash™ logo.



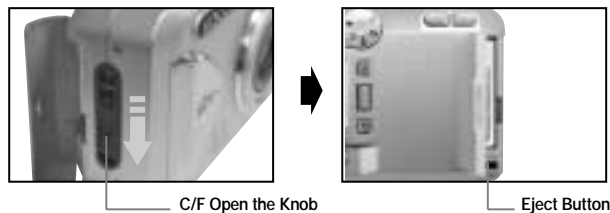
- 1 After checking whether or not the camera is switched off, open the slot cover by pulling down the C/F open the knob under the strap mount.
- 2 Hold the memory card by the lip so the connection end is pointed at the camera, and the lip is facing the back of the camera.

Ⓢ **The memory card will not slide fully into the slot if it is inserted facing the wrong way. Forcing the card may damage your camera.**

- 3 Slide the memory card all the way into the card slot and close the door.

Removing a Memory Card

- 1 After checking whether or not the camera is switched off, open the slot cover by pulling down the C/F open knob under the strap mount.
- 2 By pushing the Eject button under the Memory Card and push the Memory Card out.
- 3 Remove the memory card and close the cover.



Ⓢ **Do not separate the memory card during capture so that image data being stored is not erased and the memory card does not encounter a failure.**

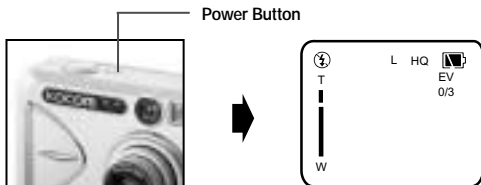
Utilizing A Memory Card

- The data of the memory card may be read in the card reader of USB support type (Separately sold).
- The memory card is used to copy and save data in the computer like an external disk or to move it to another computer.

Getting Ready

Switching On and Off

- Switching On: The LCD panel is turned on, when you press the Power button.
- Switching Off: The LCD panel is turned off, when you press the Power button while the power is turned on.



Setting The Date and Time

- When you turn on the camera as soon as you purchase KDC330, a window to set the date and time appears on the LCD display.
- After removing the battery and start the operation of the camera again, the date and time setting window is always displayed.
- After setting the current date and time by using the Direction key, press the OK button.
- TYPE indicates the sequence of date:

YMD	Year, Month, Day
MDY	Month, Day, Year
DMY	Day, Month, Year

TIME AND DATE	
2003	YEAR
01	MONTH
01	DAY
01	HOUR
07	MIN
YMD	TYPE

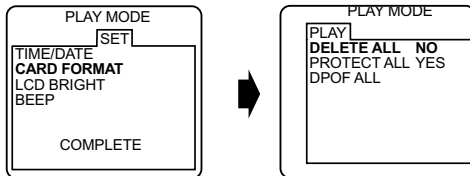
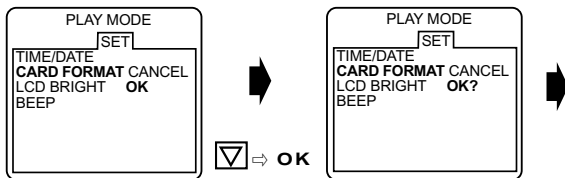
C/F Card Format

- To use the C/F Card for the first time, you need to format the C/F Card.



- 1 Set the location of the Mode Selection Dial to Playback mode.
- 2 Press the Menu button, then format the card through the Direction key.

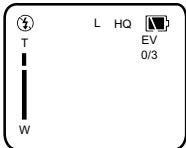
[CARD FORMAT]



- ◎ Even though you purchase a new C/F card, you need to format the card when you use it at the initial stage.

Checking Battery Capacity Indication

When the power is supplied to the camera, you can see an indication in the shape of a battery on the LCD panel.



- Full — fully charged.
- low — not fully charged.
- Exhausted (blinking) — The Camera stop working. Replace the batteries.

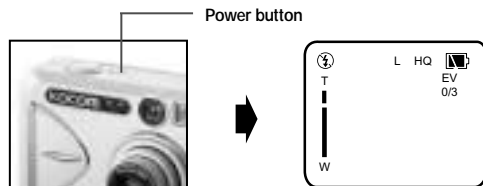
- ◎ We recommend using a rechargeable battery (nickel hydrogen), and an alkaline battery may be used as a supplementary battery.
- ◎ If the power is turned off while a new battery has not been replaced in the case of using the nickel hydrogen battery, the power may be turned off when the lens has been protruded.

Checking Available Memory

- If there is no sufficient memory, Memory Full is displayed in the LCD screen, and taking pictures is impossible.

In this case, take pictures by inserting a new C/F card after turning off the power, or take pictures when the capacity of memory is sufficient by deleting pictures saved in the C/F card, after saving them in other devices (Computer hard disk and other storage units).

Normal Shooting



- 1 Switch the camera on by pressing the Power On button for about 1 sec. Set the mode selection dial to auto still capture mode
- 2 After waiting for a while until power indicator (flash) is turned on, determine a picture frame through either the viewfinder window or the LCD display.



- Set the subject within the square of the LCD monitor when taking pictures.
- By using zoom or you can zoom in or out the screen to capture.

Button The subject is closer in the ZOOM IN (TELE) status.

Button The subject is further in the ZOOM OUT (WIDE) status

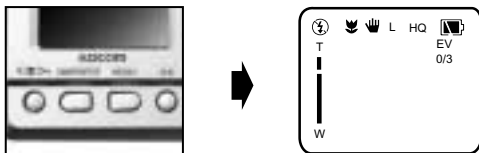
Digital Zoom If you set digital zoom in camera setting mode, the subject will be twice the size with added digital movie effect as well as 3 times larger optical zoom in case of pressing the Button.

- 3 When you press gently the Shutter button halfway, the focus is set (Auto Focus).
- 4 Press the above-mentioned shutter a little harder for about 1 second.



Short-distance Capture (Macro)

- Is used for a short-distance capture within the range of 0.2m-0.5m.
- When pressing twice the button under the LCD monitor, appears and thus short-distance capture is undertaken.
- If pressing and among the Zoom buttons, TELE mode and WIDE mode of zoom is set.



- Button** The subject is closer in the ZOOM IN (TELE) status.
- Button** The subject is further in the ZOOM OUT (WIDE) status.
- Digital Zoom** If you set digital zoom in camera setting mode, the subject will be twice the size with added digital movie effect as well as 3 times larger optical zoom in case of pressing the Button (Magnified up to 6 times larger).

- Upon a short-distance capture, you cannot use the flash.
- Since the images on the View Finder and LCD are different, you need to take pictures through the LCD monitor.
- Upon a short-distance capture, a flash capture may damage one's eyesight, and the quality of an image may not be good. When using short-distance capture mode, always take pictures in the flash prohibition state.

Flash Setting

Flash is required when taking a picture at night, indoors or in the shade.

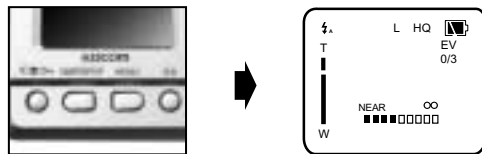
The distance in which the flash is used is restricted: Wide - 0.5m ~3.0m and Tele-0.5m~2.0m.

- 1 Turn on the power of the camera.
- 2 Select adequate flash mode according to capture condition by pressing the button. The desired flash mode below should be indicated in the upper LCD monitor.
- 3 Flash mode is set as below, whenever the button is pressed:
Flash prohibition ->Night flash ->Auto flash ->Red eye prevention ->
Forced flash -> Flash prohibition

- ⓧ **Flash prohibition** The flash does not work. Use this when you want an ambient capture such as the dusk or night view.
- ★★ **Night flash** Is used when capturing a subject at night. This makes the speed of the shutter slow along with the flash.
- ⚡ **Auto flash** When the subject or background is dark, the flash of the camera is automatically activated.
- 👁 **Red eye prevention** Preliminary light is emitted before main light is emitted to prevent red eye effect.
- ⚡ **Forced flash** Light is emitted irrespective of dark places or bright places. The brightness is also adjusted according to the brightness of the surrounding environment.

- ⓧ **Take pictures within the range of 0.5 –3m which is the flash capture range. When an image is captured at a short-distance, the image may not be clear.**
- ⓧ **Flash emission prohibition mode emits a natural light when taking pictures under the indoor light in a too far away distance where the flash effect is difficult to be exerted, i.e., theater performances or indoor sports games. When taking pictures in flash prohibition mode in the dark, a tripod is recommended to keep the camera steady.**
- ⓧ **When taking pictures without flash under the dark lighting, the shutter speed automatically slows down; therefore, you should be careful not to move the camera. If possible, use the tripod or fix the camera on the flat surface.**
- ⓧ **Do not use the flash toward a person at a short distance. The person's eyesight may be severely damaged to the extent of losing their eyesight. Do not take pictures within a meter from an infant.**

Self-timer



- The self-timer function makes it possible to take pictures automatically, after a short period of time, when you want to take your own picture.
- 🕒📷📸 icon appears on the LCD monitor, when you press the 🕒 button once.
- When you press the shutter in this mode, flickering lasts for 10 seconds and then the capture is made.

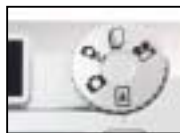
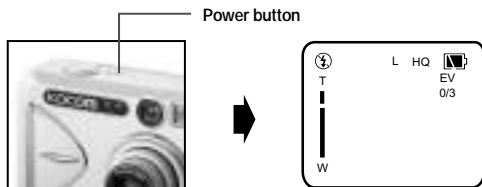
Self Timer	Macro	Screen Icon	Details
ON	OFF	🕒	Self Timer
ON	ON	🕒📷	Macro Self Timer
OFF	ON	📷	Macro
OFF	OFF		OFF

- ⓧ **Specification of Hand Shaking Indication 🖐**
When the shutter speed lowers to 1/60s or less, the hand shaking warning icon appears.

Playback

Setting Basic Playback Mode

You may check still pictures or moving images in a simple way.



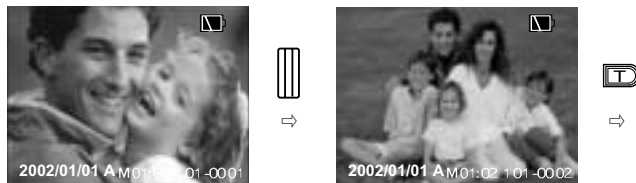
- 1 Switch the camera on by pressing the Power button for about 1 second.
- 2 Set the location of the Mode Selecting Dial to Playback mode.

Picture Playback



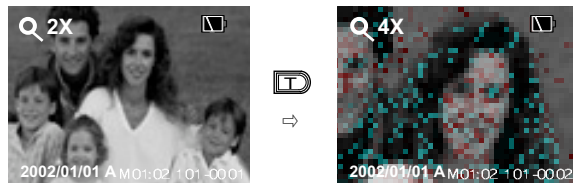
Direction Key
(Navigator)

- 1 By using the navigator, you can preview a selection of still pictures.
- 2 If you want to enlarge or reduce the playback pictures, use Wide/Tele mode.
- 3 You may check up and down or right and left in the enlarged pictures by using the Navigator.






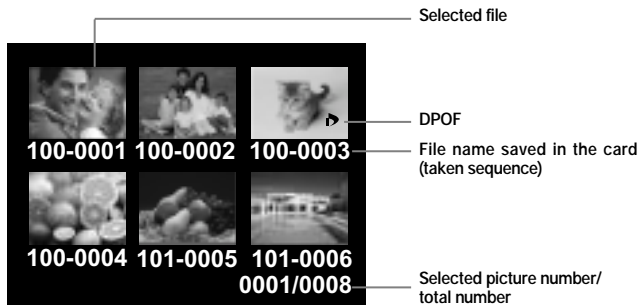
Zoom In

- After playing back still pictures, you may zoom in them.
- When you press the button once, the picture is enlarged twice its size with 2X display on the top.
- If you press the button once more, the picture is quadrupled as 4X is displayed on the top.
- You can check the picture by moving the screen with the Direction key.
- Then, press the button to return to 2X and actual size.





Viewing with Multi 6 Screens

- When you press the  button in  mode, the stored files of the 6 screens are displayed in the LCD window.
- After selecting a desired screen by using the Direction key, press the  button to display it in full on the screen.







DPOF (Direct print)

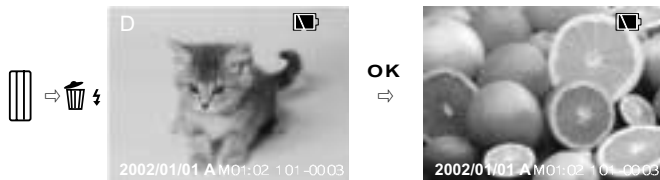
- You may directly print the pictures without using a computer.
- When you press the DPOF button for the desired picture, the print reservation is made with "  " indicated on the full screen. In the Multi Screen (View with 6 screens), when you press the DPOF button, the print reservation is made with "  " indicated at the right side bottom of the screen.
- By putting the C/F card in the printer, you may print the picture.





Delete

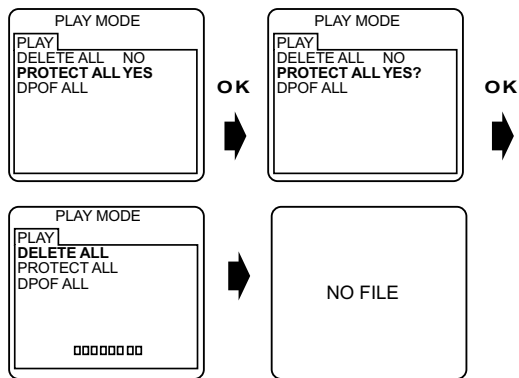
Delete pictures

- 1 After moving to the picture to delete, press the  button once. 
- 2 On the top-left side of the picture, ∞D^{\pm} is displayed. The pictures with "D"ndication are deleted, when you press the **OK** button.
- 3 If you press the  button once, the picture is set to delete pending. If you press the button once more, delete pending is cleared.
- 4 To delete a picture, press the  button for about a second.



Delete All

- 1 Press the Menu button in  mode.
- 2 After selecting Delete All under the Play, press  once to the right.
- 3 After selecting Yes, press the **OK** button.
- 4 Press the **OK** button once more, when $\infty?$ appears.
- 5 "No File" message appears the moment the pictures are deleted.

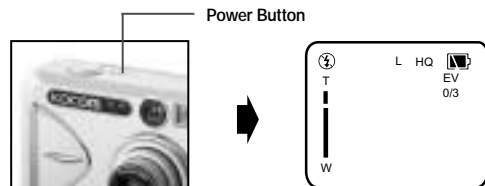





Application (Setting by Mode)

Still Automatic Capture Mode

Basic Capture


You can take pictures according to the value automatically set.



- 1 Switch camera on by pressing the Power On button for about 1 second and set the Mode Selection Dial to Still Automatic Capture Mode .
- 2 After waiting for a while until indicated on the power indicator (Flash), determine a picture frame through either the View Finder window or the LCD monitor.
 - Set the subject within the square of the LCD monitor when taking pictures.
 - By using the zoom  or , you can zoom in or zoom out the screen to capture.

 **Button** The subject is closer in the ZOOM IN (TELE) status.

 **Button** The subject is further in the ZOOM OUT (WIDE) status.

Digital Zoom In camera setup mode,  if you choose digital zoom, the subject becomes twice its size with added digital movie effect as well as 3 times larger with the optical zoom.

③ When you gently press about half the Shutter button, the focus is automatically set (Auto focus).

④ Press the above-mentioned shutter a little harder for about 1 second.



Menu setup

① Press the Menu BUTTON for camera setup.

② Rec/More/Set menus are in the Menu window. Select a setting in each menu. When you select the Menu, use the Navigator (Direction key).

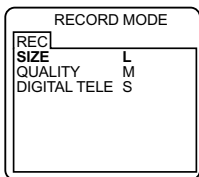


③ Press **OK**, if you want to save the setup menu.

④ When the value to set is saved, return to the reset (initial) screen by pressing the Menu button.

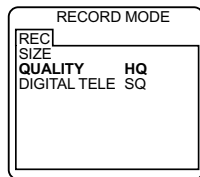
Rec Setting

[Picture size setting]

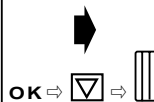
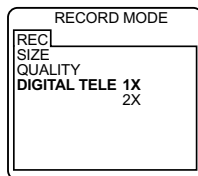


- Size: Determines the size of a picture
 - L: 2032x1520
 - M: 1280x960
 - S: 640x480
- Quality: Determines the quality of pictures.
 - HQ: Compressed to about 1/5.
 - SQ: Compressed to about 1/10
- Digital tele: Selects digital zoom.
 - 1x: Setting the same size
 - 2x: Setting 2 times larger

[Picture quality setting]

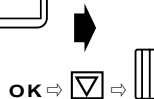
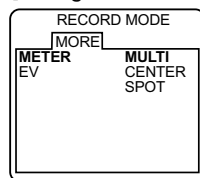


[Digital zoom setting]

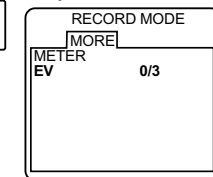


More Setting

[Sidelight Mode Setting]



[Exposure Value Setting]



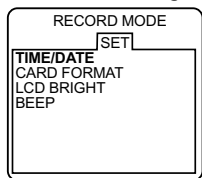
- Meter: Sets focus setting method when capturing pictures.
 - Multi: Selects multi sidelights.
 - Center: Selects central focused sidelight.
 - Spot: Selects spot sidelight.
- Ev: Sets the Exposure value. You may change from +2 to -2 by 1/3 step.

Set Setting

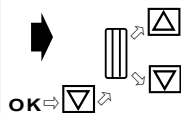
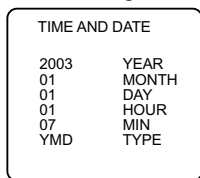
- Time/Date: Sets the current time and date on the camera.
- Card format: This function is not supported in the continuous capture mode.
- Card format: This function is not supported in the continuous capture mode.
- Beep: Turns on or turns off the beep sound.

- □ □ +	Dark,
- ■ □ +	Intermediate brightness,
- ■ ■ +	the most bright

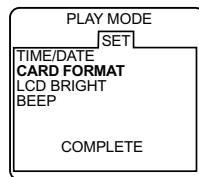
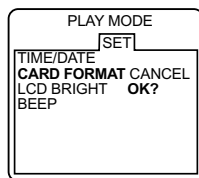
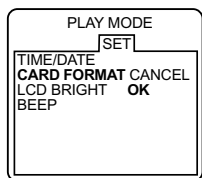
[Set Mode Setting]



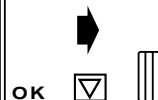
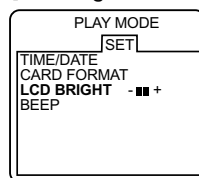
[Time Setting]



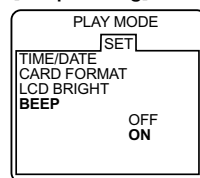
[Card Format]



[LCD Brightness Setting]



[Beep Setting]



Returning to capture mode

- Return to Capture mode by pressing the Menu button.

Menu Setup

- 1 Press the Menu button for camera setup.
- 2 Rec/More/Set menus are in the Menu window. Select a setting in each menu. When you select the Menu, use the Navigator (Direction key).



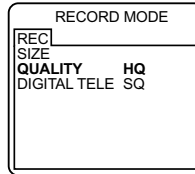
Press **OK**, if you want to save the setup menu.

When the value to set is saved, return to the reset (initial) screen by pressing the Menu button.

Setting

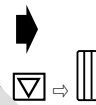
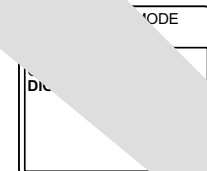
SIZE
QUAL
DIGITAL

[Digital Zoom Setting]



OK → ▾ → ▮

Quality Setting]



More Setting (Manual and Continuous Capture)

- Meter: Sets focus setting method when taking pictures.

- Multi: Selects the Multi sidelights.
- Center: Selects the central focused sidelight.
- Spot: Selects the spot sidelight.

- Ev: Sets the Exposure value.


You may change from +2 to -2 by 1/3 step.


- ISO: Adjusts the brightness of picture.

Taking pictures in a dark place as the value is higher.

- WHITE BAL: Adjusts the White Balance.

AUTO : Auto set.

 : Select this when the weather is clear under the sunlight.

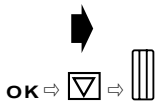
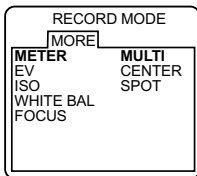
 : Select this when it is cloudy.

 : Select this when taking pictures indoor.

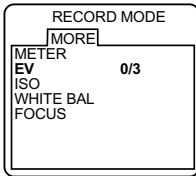
 : Select this when taking pictures under the fluorescent tubes.

- Focus: Sets the Lens Focus whether or not to adjust as auto or manual.

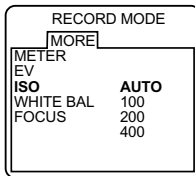
[Metering Setting]



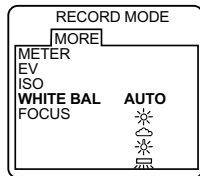
[Exposure Value Setting]



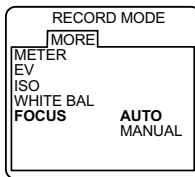
[ISO Setting]



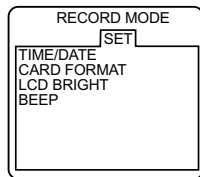
[White Balance Setting]



[Focus Setting]



[Set Mode Setting]

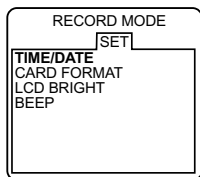


Set Setting

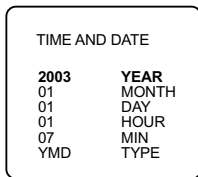
- Time/Date: Sets the current time/date on the camera.
- Card Format: This function is not supported in moving picture mode.
- LCD Bright: Adjusts the brightness of LCD.
- Beep: Turns on and off the beep sound.

- □ □ +	Dark
- ■ □ +	Intermediate brightness
- ■ ■ +	Most bright

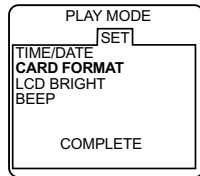
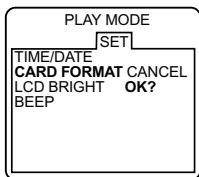
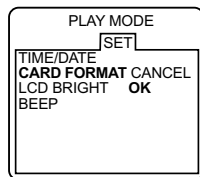
[Set Mode Setting]



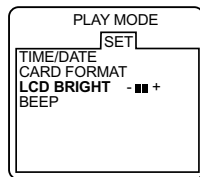
[Time Setting]



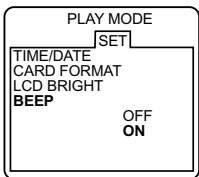
[Card Format]



[LCD Brightness Setting]



[Beep Setting]



Returning to capture mode

- Return to capture mode by pressing the Menu button

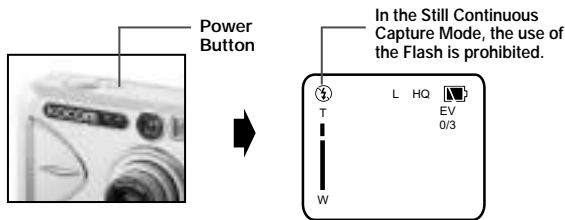
※ Specifications of AF / Flash Indicator




LED	Indicator	Function status
AF	On	when the AF finishes and when the Focus is OK by pressing the shutter halfway,
Flash	Flickering	When the AF finishes and when the Focus is not suitable by pressing the shutter halfway (taking pictures possible)
Two ways	On	Always after finishing charging
	Flickering	During charging (Temporary taking pictures possible)
	Flickering	When pressing the shutter halfway, during storing or full buffering (Temporary taking pictures impossible)

Still Continuous Capture Mode

Basic Capture

- Refers to capturing images continuously, when you press the Shutter button.
- Continuous capturing is possible until the buffer reaches the maximum



- 1 By pressing the Power Onbutton for about 1 second, switch the camera on. Set the Mode Selection Dial to Still Continuous Capture Mode 
- 2 Decide the capturing composition with either the View Finder Window or LCD Monitor
 - Set the subject within the square of the LCD monitor when taking pictures.
 - By using zoom  or , you can zoom in or zoom out the screen to capture.
- 3 When you gently press the Shutter button halfway, the focus is automatically set (Auto focus).
- 4 Press the above-mentioned shutter a little harder for about 1 second.
- 5 After capturing 4 frames consecutively, conduct storing

Menu setup

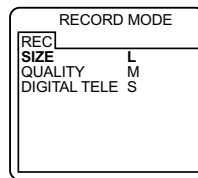
- 1 Press the Menu button for camera setup.
- 2 Rec/More/Set menus are in the Menu window. Select a setting to select on each menu. When you select a menu, use the Navigator (Direction key).
- 3 Press **OK** to save the menu
- 4 When the value to set is saved, return to the reset (initial) screen by pressing the Menu button.



Rec setting

- Size: Determines the size of a picture
 - L: 2040x1530
 - M: 1280x960
 - S: 640x480

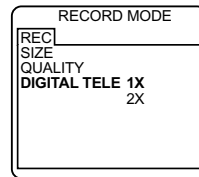
[Picture size setting]



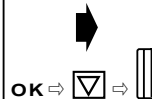
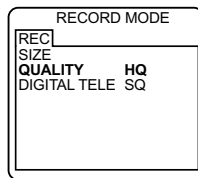
- Quality: Determines the quality of pictures
 - HQ: Compressed to about 1/5.
 - SQ: Compressed to about 1/10

- Digital tele: Selects digital zoom.
 - 1x: Setting the same size
 - 2x: Setting 2 times larger

[Digital zoom setting]



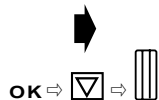
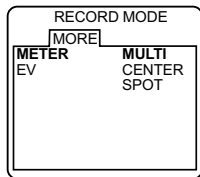
[Picture quality setting]



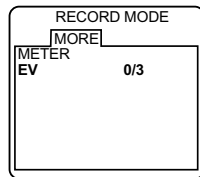
More Setting

- Meter: Sets a focus setting method when taking pictures.
 - Multi: Selects multi sidelights.
 - Center: Selects central focused sidelight.
 - Spot: Selects spot sidelight.
- Ev: Sets the Exposure value. You may change from +2 to-2 by 1/3 step

[Sidelight Mode Setting]



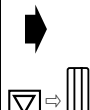
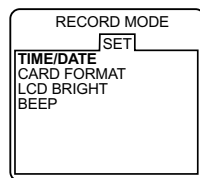
[Exposure Value Setting]



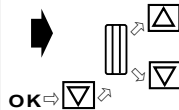
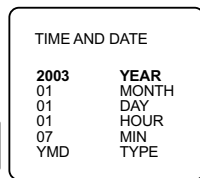
Set Setting

- Time/Date: Sets the current time and date on the camera.
- Card format: This function is not supported in continuous capture mode.
- LCD bright: Adjusts the brightness of LCD.
 - □ □ + Dark
 - ■ □ + Intermediate brightness
 - ■ ■ + the Most bright
- Beep: Turns on or turns off the beep sound.
 - OFF
 - ON

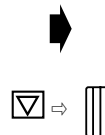
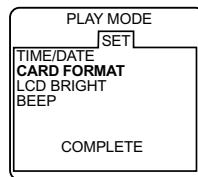
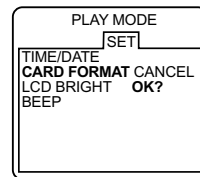
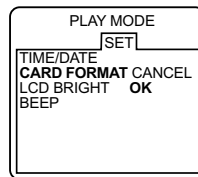
[Set Mode Setting]



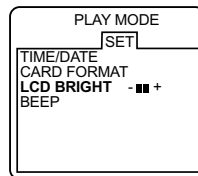
[Time Setting]



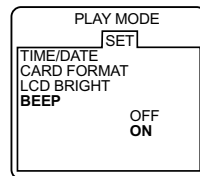
[Card Format]



[LCD Brightness Setting]



[Beep Setting]



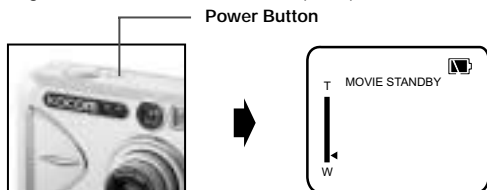
Returning to capture mode




- Return to Capture mode by pressing the Menu button.

Moving Image (Movie) Capture

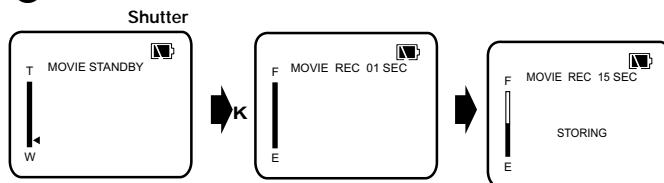
Basic Capture

- Function to capture moving images for a designated time (15 seconds).
- 320x240 resolution in AVI mode.
- Capturing for about 15 seconds with 15fps is possible.




- 1 By pressing the Power On button for about a second, this switches the camera on. Set the Mode Selection Dial to Motion (movie) Capture mode. 
- 2 Determine a picture frame through either the View Finder window or the LCD monitor.
 - Set the subject within the square of the LCD monitor when taking pictures.
 - By using zoom  or , you can zoom in or out the screen to capture.
- 3 When you gently press the Shutter button halfway, the focus is automatically set (Auto focus).
- 4 Press the above-mentioned shutter a little harder for about 1 second.
- 5 When you press the Shutter button once more, the capture forcefully ends.

- 6 Press the **OK** button to cancel the recording itself.

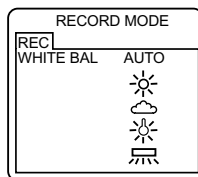






Menu Setup

- 1 Press the Menu button for camera setup.
- 2 Rec/More/Set menus are in the Menu window. Select a setting in each menu. When you select the Menu, use the Navigator (Direction key). 
- 3 Press **OK**, if you want to save the Setup menu. (Figure)
- 4 When the value to set is saved, return to the reset (initial) screen by pressing the Menu button.

Rec Setting

[Picture Size Setting]



- White Bal: Adjusts the White Balance.
 - AUTO : Auto set.
 -  : Selects when the weather is clear under the sunlight.
 -  : Selects when it is cloudy.
 -  : Selects when taking pictures indoor.
 -  : Selects when taking pictures under the fluorescent tubes.

Set Setting

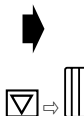
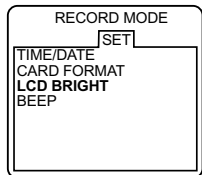
- Time/Date: Sets the current time and date on the camera.
- Card format: This function is not supported in continuous capture mode.
- LCD bright: Adjusts the brightness of LCD.

- □ □ +	Dark
---------	------
- Beep: Turns on or turns off the beep sound.

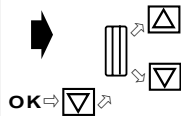
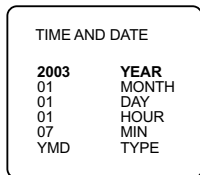
- ■ □ +	Intermediate brightness
---------	-------------------------

- ■ ■ +	the Most bright
---------	-----------------

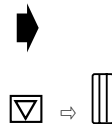
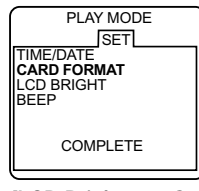
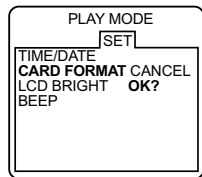
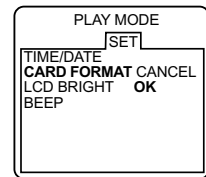
[Set Mode Setting]



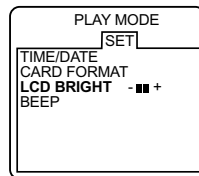
[Time Setting]



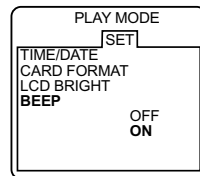
[Card Format]



[LCD Brightness Setting]



[Beep Setting]



Returning to capture mode

- Return to Capture mode by pressing the Menu button.

Playback Mode


Basic Playback

You may check still pictures or moving images in a simple way.

Power Button



① By pressing the Power On button for about a second, this switches the camera on

② Set the Mode Selection Dial to Playback mode 


③ By using the left and right buttons of the Navigator (Direction key), conduct a preview through the selection of the pictures taken.



④ If you want to enlarge or reduce the pictures, use W/T (Wide/Tele).

⑤ You may check the up and down or left and right by using the Navigator in an enlarged picture.

Slide Show

-  If you press the Shutter switch in (Symbol) mode, stored screens pass by one by one.
- When you find a desired screen, you may stop the screen by pressing the Shutter switch once more.

Menu Setup

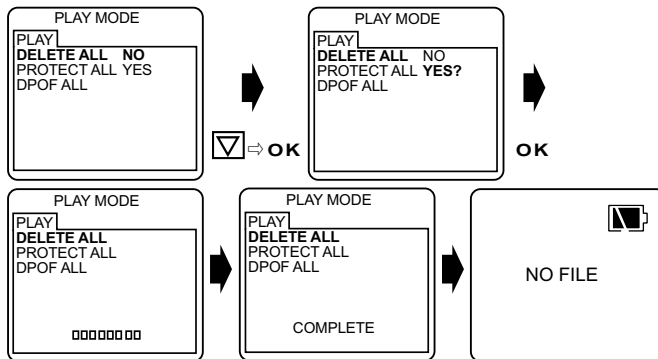
- ① Press the Menu button for camera setup.
- ② Rec/More/Set menus are in the Menu window. Select a setting to select on each menu. When you select a menu, use the Navigator (Direction key).
- ③ Press **OK**, if you want to save the setup menu



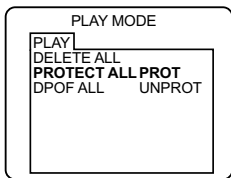
Play Mode

- Delete All: Deletes the entire pictures stored.
- Protect all: Protects the entire pictures stored.
If you set Protect mode, you cannot delete the picture randomly.
- DPOF all: Prints out the entire pictures stored.

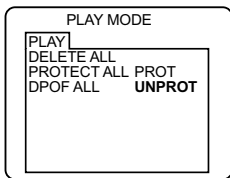
[Delete All]



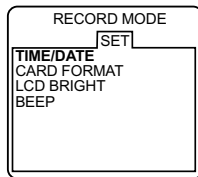
[Selecting Protect All]



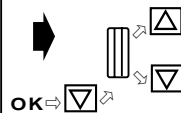
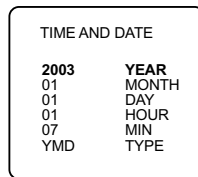
[Removing Protect All]



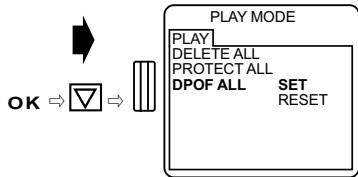
[Set Mode Setting]



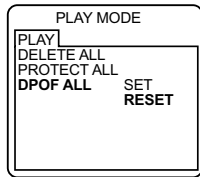
[Time Setting]



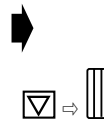
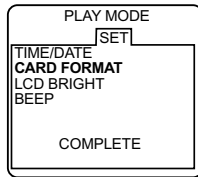
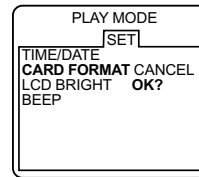
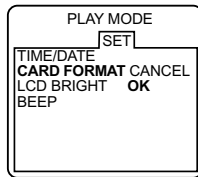
[Selecting DPOF All]



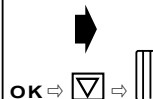
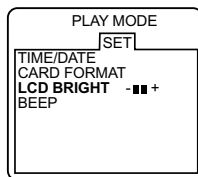
[Removing DPOF All]



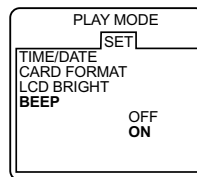
[Card Format]



[LCD Brightness Setting]



[Beep Setting]



Set Setting

- Time/Date: Sets the current time and date on the camera.
- Card format: This function is not supported in the continuous capture mode.
- LCD bright: Adjusts the brightness of LCD.
- Beep: Turns on or turns off the beep sound.

8.Details of Each Function

Sidelight Method

- In KDC330, conversion to sidelight mode in Still Automatic Capture mode, Still Manual Capture mode and Still Continuous Capture mode is possible.

- Multi sidelights

Determines the optimum exposure value by dividing the capture scope of CCD and side lighting. You may get precise capture in a variety of scenes. In a usual picture capturing, we recommend multi sidelights capturing.

- Center sidelight

By giving 80% to ⑧ scope of the center of the screen and side lighting, the exposure value is determined. This mode is suitable when capturing pictures based on the center exposure value, according to the intention of the person taking pictures.

- Spot sidelight

By side lighting only 1/32 scope of the entire central part of the screen, the exposure value is determined. The sidelight scope is indicated in the center of the LCD monitor. This mode is suitable, when you want to capture pictures based on partial exposure of the screen: e.g. - When there is reverse light or severe difference in contrast.

EV Setting

- EV refers to exposure value, in other words, exposure calibration value.
- Exposure calibration can brighten or darken the screen according to capture conditions and purposes.

- In KDC330, the conversion is possible in Still Automatic Capture mode, Still Manual Capture mode and Still Continuous Capture mode.

◎ The following are available exposure calibration devices:

Use Up and Down  of the Direction key for conversion. 

13-step conversion is possible with 1/3 step.

◎ When you cancel exposure calibration, set it to 0/3.

ISO Setting

- ISO refers to film sensitivity, which is the international standard.

ISO refers to sensitivity toward light. In a digital camera, which does not have film, conversion value is used.

- The standard sensitivity is 100. However, in a low brightness, sensitivity becomes higher. A photographer may set higher than standard, or take pictures brightly in a dark place.

- Conversion in Still Manual Capture mode is possible in KDC330.

Auto: Standard sensitivity is set in a usual photographing; however, in a low brightness, the sensitivity increases.

100: Standard sensitivity (Equivalent to ISO 100)

200: ISO 200

400: ISO 400

- If sensitivity is higher, take pictures in a place where the amount of light is not sufficient.


White Balance

- Adjusts balance in line with the color of lighting surrounding the subject. Through this adjustment, a white subject is viewed as white.
- In most cases, auto capture is possible. However, this mode is used when you want to fix to a specified lighting or condition.
- Conversion in Still Manual Captured mode and Motion (Movie) Capture mode is possible in KDC330.
- Spot sidelight

AUTO : Automatic adjustment.

 : Selects when the weather is clear under the sunlight.

 : Selects when it is cloudy.

 : Selects when taking pictures under the light bulb.



 : Selects when taking pictures under the fluorescent tubes.

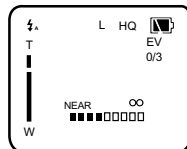
Focus

- Refers to adequately sets the focus of the subject to be photographed.
- The types of focus are selected in Still Manual Capture mode in KDC330.
 - Auto: Refers to focusing automatically.

When you press half the shutter, AF green lamp beside the View Finder is lit and focus is automatically set.

- Manual: A user sets the focus at random.

By using the Direction key   the focus adjustment is possible.

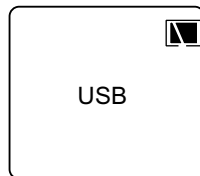


Connection to External Equipment

Connection to Computers

You may check the saved image data through a computer by connecting KDC330 to the computer.

The original images can be expressed at random by the user through application software-Ulead Photo Express and Ulead Photo Explorer (See 11. Application Software).



USB케이블 연결시

© Recommended computer specifications

- Pentium®MMX 200MHz or higher
- 32MB RAM or higher
- Available USB Port
- 4x CD-ROM Driver

Printer (DPOF)

- Printing the pictures is possible without a computer.
- The setting contents of the Printer Default are in the memory and stored in C/F Card as a Printer setup file.
- The selected data is saved in the C/F Card and can be printed through C/F Card direct printing.

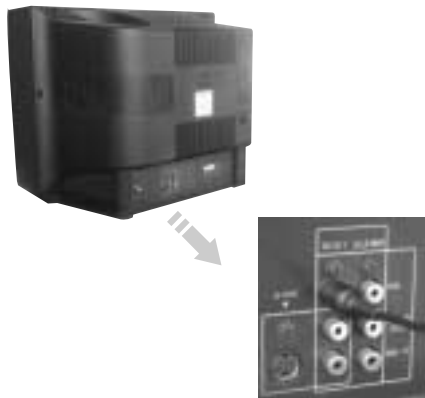
© Digital Print Order Format (DPOF)

Digital Print Order Format is DPOF to automatically print the images photographed through the digital camera in a printer. This is standardized print information, which enables more convenient image print.

- ※ Before using the camera, check whether or not the printer supports DPOF.

Focus

- The types of focus are selected in Still Manual Capture mode in KDC330.



10. Use of Software

The following is the description regarding the picture downloading process from the camera by using the USB mass storage of the KDC330 digital camera.

Functions of USB Mass Storage

- You may use the digital camera like a USB storage unit by using the USB Mass Storage Class Driver. The operating system supporting the USB Mass Storage Class Driver is as follows:
 - Windows ME (Millennium Edition)
 - Windows 2000
 - Windows XP
- You may enjoy a net meeting as well as saving, processing, editing of still images and moving images.

© For Windows 98/98SE, use it after installing the driver for KDC330 Windows 98/98SE of supplied bundle CD.

Description of the Function of USB Mass Storage

- 1 Switch on the camera.
- 2 Connect the camera to the USB port of a PC.



3 When the camera is connected to the PC, the camera is converted to PC-connected mode. Then, the USB Mass Storage Driver of the camera is automatically installed in the operation system of the PC. Thus, you may use it immediately.



4 Open "Windows Search" to look into the contents of the camera.



5 In the Windows Search, the portable mobile disk drive is connected as in the Figure. This driver is connected to the Compact Flash card of the camera. The pictures saved in the card can be copied through



a PC, or the pictures from the PC can be copied to the card of the camera.



6 The portable mobile disk provides the function of hard disk of a PC. Therefore, you may use it as you use general disks.



Description of the Function of USB Mass Storage

- 1 Switch on the camera.
- 2 Connect the camera to the USB port of a PC.
- 3 When the camera is connected to the PC, the camera is converted to PC connection mode. Then, the USB Mass Storage Driver of the camera is automatically installed in the operation system of the PC. Thus, you may use it immediately.selection of the pictures taken.
- 4 Open "Windows Search" to look into the contents of the camera.
- 5 In the Windows Search, the portable disk drive is connected as in the Figure. This driver is connected to the Compact Flash card of the camera. The pictures saved in the card can be copied through a PC, or the pictures from the PC can be copied to the card of the camera.
- 6 The portable disk provides the function of hard disk of a PC. Therefore, you may use it as you use general disks.

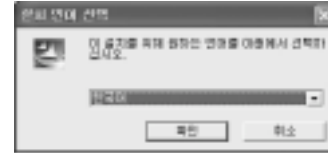


11. Application Software

Installing Bundle Software

Installing Ulead Photo Express 4.0SE

- 1 When you insert the bundle CD in the CD-ROM drive, the following installation image is executed



- 2 Click Installation Photo Express. You see the following installation wizard. Click N (Next)





- 3** After reading the user agreement carefully, click Y (Yes), if you agree with it.



- 4** After reading the user agreement carefully, click Y (Yes), if you agree with it.



- 5** Select a folder to install the Ulead Photo Express 4.0 SE Platinum.



- 6** Select program setting mode, then click N (Next).



- 7** Select where to put the program icon among the folders in the Start menu. Click N (Next).



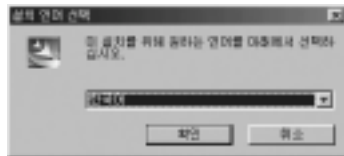
- 8** When the next screen as in the figure appears, carefully read it. If you want to correct what you entered, click B (Back) and select other option. If you cannot find anything wrong, click N (Next) to start the installation.



- 9 When the installation finishes, a message "Installation Wizard has finished" appears. Finish the installation by clicking on "Finish"

Installing Ulead Photo Explorer 7.0 SE Platinum

- 1 When you insert bundle CD in the CD-ROM drive, the following Ulead Photo Explorer installation screen appears. Select "Ulead Photo Explorer 7.0 SE Platinum Installation" in the screen.



- 2 Select Korean as the pertinent language, and click OK.



- 3 When installation wizard appears, click N (Next).



- 4 After reading the user agreement carefully, click Y (Yes), if you agree with it.



- 5 Enter the user information and click N (Next).



- 6 Select the folder to install the Ulead Photo Explorer 7.0 SE platinum. Click N (Next).



- 7 Select a hot key icon option and click N (Next).



- 8 Select a program folder to put Ulead Photo Explorer 7.0 SE Platinum icons and click N (Next).



- 9 Select country. Select currently used TV system if the selected country supports both NTSC/PAL TV system and click N (Next). In Korea, only NTSC system is used



- 10 When asked whether or not to connect the image file to the Photo Explorer, select your desired option and then click N (Next). You may see the saved images by using the Ulead program, when you double click the image file in the Windows Search, if you connect

the image file format to the Ulead program. The installation starts when you click on N (Next).



- 11 When the installation finishes, a window saying the installation wizard has finished appears, and it asks if you want to re-start your computer. Restart your computer after saving all the data and closing all the

executed programs. If you use Alt and Tab on the keyboard, you can move to the current work or executing other programs.

Downloading Pictures from the Camera

Downloading Pictures with Ulead Photo Express 7.0 SE

- 1 Switch your camera on and connect to the USB port of a computer by using the supplied USB cable
- 2 When you connect your camera to a computer, a drive called "Mobile Disk" is created in the Windows Search.
- 3 Execute Ulead Photo Express 4.0 SE.
- 4 When you executing Ulead photo Express 4.0 SE, you see the "Mobile Disk" on the left pane in the following window. In the DCIM/101KOCOM folder within the drive, the saved pictures are stored.



- 5 Select and double click the files to be edited or saved on the hard disk, or copy/move to the hard disk. The outline of the selected pictures looks different. Also, when you simultaneously select many pictures, select "Select All" in the Edit menu, or use "Ctrl" or "Shift" on the computer keyboard to use more conveniently.

Downloading Pictures with Ulead Photo Explorer 7.0 SE Platinum

- 1 Turn your camera on and connect the camera to the USB port of a computer..
- 2 Execute the Ulead Photo Explorer 7.0 SE Platinum.



- 3 "Portable Disk" drive is created in the left pane of the Explorer as in the same manner as the Photo Express. The saved pictures are in the drive.

- 4 Execute edit/copy/move by selecting desired pictures as in the same manner as the Photo Express.

Camera Specifications

Product Type	Optical 3x Zoom Full-automatic Digital Camera
Optical Sensor	Total 3.34 mega pixel/3.24 mega efficient pixel, 1/2.5 inch CCD
No. of Record Pixel	2032x1520/ 1280x960/640x480 Pixel
SO Sensitivity	Auto/Manual (Equivalent to ISO 100, ISO 200 and ISO 400)
Recording Method	Still Image: JPEG (ExiF 2.2 compatible), DCF, DPOF Moving Image: AVI (pursuant to Open DML Motion JPEG), 320x240
Quality of Image (Compression Rate)	HQ: Compressed to about 1/5, SQ: Compressed to about 1/10
Recording Unit	C/F Memory type I (C/F type)
Resolution and Maximum No. of Frames (16MB CompactFlash™)	2032x1520 HQ: About 13 frames / SQ: About 26 frames 1248x960 HQ: about 32 frames SQ: About 65 frames 640x480 HQ: About 200 frames SQ: About 400 frames)
White Balance	Auto/Manual (Sun light, shade, fluorescent tube and light bulb)
Lens	Zoom: x1~x3 non step Zoom F value: F2.8/ F 5.6 Focus: TTL Contrast detection AF (Auto Focus), Manual Focus
Digital Zoom	When picture taking: 2x, When playing back: 4x
Focal Range	Standard mode: 0.5m~Infinity, Macro Mode, Macro Mode: 0.2~0.
Playback Mode	Single/6 screen division/Slide Show/Zoom playback/Motion Playback
Exposure Mode	Auto and manual exposure (EV, 13 steps by 1/3 EV step)
Shutter Speed	1 sec, ①~1/1000 sec
Sidelight Mode	Multi, Center, Spot sidelights
View Finder	Optical Zoom Finder
Strobe Mode	Auto/Manual (red-eye prevention, night view, forced flash, flash prohibition), automatic exposure control by lighting sensor, maximum 3.0m
Capture Mode	Continuons Capture Mode ode 2 commas/sec, maximum 4 commas Moving Image Mode: 15fps (recording time: 15 sec)
Self Time	10 sec
Sound	Optional sound, warning sound
Operating Time	5 sec or less
Playback Time	1 sec or less

Capture Interval	3 sec or less up to 4 frames
LCD Display	1.6 inch, 70,000 pixel D-TFD
Back Light	Back Light: White LED Brightness adjustment: Fixed 3 steps
PC Driver	USB ver 1.1 compatible, USB Mass Storage Driver Windows 98/98SE/ME/2000/XP
Battery Capacity Indication	3 steps indication: 3.0V, 2.2V, 2.0V
Clock Back Up	About 6 minutes
OSD	English
Power	AAx2 (Nickel hydrogen), supplementary battery (Alkaline) exclusive AC adapter (3.0V, 3A)
Power Saving Function	Sleep mode after 1 sec, after that auto power off
TV/Monitor Output	NTSC/PAL (by product)
Conditions to Use	Operating temperature: 0~40°Δ C, humidity: 10% ~ 90% (In case of no dew)

※ The specifications are subject to change without notice for quality improvement.

※ This camera is 2nd grade home equipment: thus not suitable for vehicle monitoring.

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2003.02