



User Manual
Mode d'emploi
Bedienungsanleitung
Manuale dell'utente
Manual del Usuario
Manual do Utilizador



086-002861-054



OREGON
SCIENTIFIC

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INTRODUCTION

BRIEF DESCRIPTION

Thank you for selecting the Oregon Scientific 2.1 Mega-Pixels Digital Camera as your personal product of choice. Your digital camera is designed to give you many years of reliable service. It includes the following features:

- **Great Image Quality**
With 2.1 Mega-Pixels resolution, you are assured of clear, natural-looking images every time you take a photo.
- **Multimedia Features**
You can shoot movie clips (without sound) with your digital camera for up to the available space of the camera's internal memory or the installed CompactFlash card.
- **Advanced Camera Functions**
In addition to the Auto Flash and 2x Zooming functions, you can take advantage of advanced functions such as White Balancing, Manual Exposure Compensation, and Metering Setting.
- **Connection to External Devices**
Your digital camera can be connected to external devices such as your PC or TV. The camera is compatible with Windows 98, 98SE, ME, 2000, XP, and Mac OS X.

IMPORTANT NOTICE

Disposing of these Products

When disposing of these products, do so in accordance with your local waste disposal regulations.

Statement of Responsibility

Oregon Scientific assumes no responsibility for any incidental losses (such as the costs of photography or the loss of income from photography) incurred as a result of faults with this product.

Notes on Copyright

Images recorded using your digital camera cannot be used in ways that infringe copyright laws without the consent of the owner, unless intended only for personal use. Note that some restrictions apply to the photographing of stage performances, entertainments and exhibits, even when intended purely for personal use. Users are also asked to note that the transfer of memory containing images or data protected under copyright laws is only permissible within the restrictions imposed.

SAFETY NOTES

To ensure that you use your camera correctly, read these Safety Notes and your User Manual carefully beforehand. The warnings given here provide important safety information and should be observed at all times.

△ GENERAL WARNINGS

- The enclosed disc is a computer CD-ROM disc. Never attempt to play this disc on an ordinary music CD player, as it can produce extremely high noise levels that could damage your hearing or your audio system.
- Do not immerse the device in water or subject the camera to impact or shock.
- Do not, under any circumstances, touch the exposed electronic circuitry of the device, as there is a danger of electric shock.
- Take special care when handling a damaged LCD display, as the liquid crystals can be harmful to your health.
- Do not use or store the device, including the remote sensor, in locations that may adversely affect the product such as rain, snow, desert, and magnetic fields.
- Check all major functions when the device is unused for a long period of time. This is to ensure its full operation. Maintain regular testing and cleaning of your device.
- Do not look through the viewfinder at the sun or other strong lights. This could damage your eyesight.
- Avoid leaving the camera exposed to direct sunlight, as the action of the lens could cause fires.
- Remove the batteries and memory card before storing the camera for long periods of time. Then, keep it in a well-ventilated place in order to prevent moulding.

NOTES ON THE DIGITAL CAMERA

Cleaning your Camera

Lens / Viewfinder	Use a blower or a lens brush to remove dirt or dust. Wipe carefully with a soft cloth to remove fingerprints and other stains. Do not touch with fingers.
Body	Clean with a damp cloth; dry immediately.

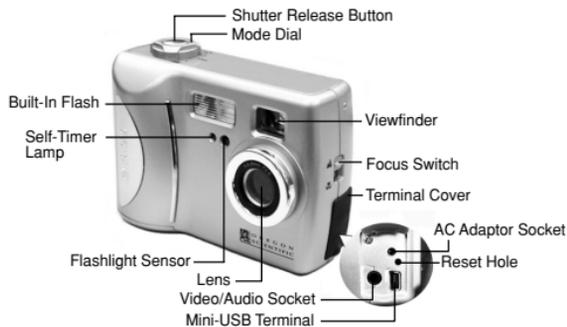
- Do not use benzene, thinner, or similar cleaning agents to clean your camera, as these may cause permanent damage not covered by the warranty.
- Do not scratch hard objects against the lens, LCD or viewfinder as these surface are easily damaged.

Handling your Camera

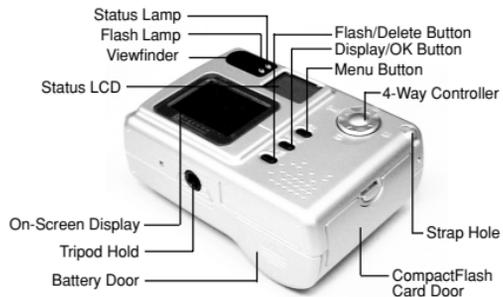
- For important photographs (such as weddings and overseas trips), always take a test photograph and view the image to make sure that the camera is functioning normally.
- Do not use the camera while you are walking, running, driving or operating machinery. This can result in serious accidents.
- Do not use this device in aircrafts or hospitals. It can cause malfunctions in the control devices of other equipment.
- If the camera is carried suddenly from a cold location into a warm place, condensation may form inside the device. Switch the camera off in such cases and wait an hour before using it again.

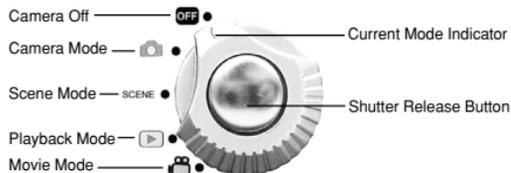
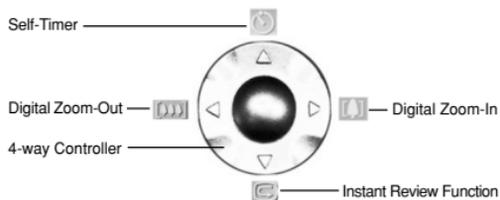
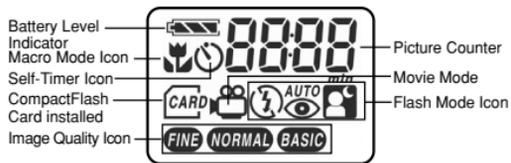
KEY FEATURES

FRONT VIEW



BACK VIEW



MODE DIAL**4-WAY CONTROLLER****LIQUID CRYSTAL DISPLAY****BATTERY LEVEL INDICATOR****GETTING STARTED****PACKAGE CONTENTS**

When you unpack your Digital Camera, make sure to keep all the packing materials in a safe place, in case you need to later transport the device or return it for servicing.

In the box, you will find:

- Digital Camera (DS8228)
- Two Batteries (AA x 2)
- A Lens Cover with Strap
- A Hand Strap
- One Video Cable
- One USB Cable
- One Software CD-ROM
- One User Manual
- One Quick Start Guide

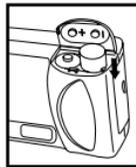
INSTALLING THE BATTERIES

Your camera is shipped with two AA-sized batteries. You may also use one CRV3 battery (sold separately).

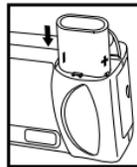
(NOTE) Incorrectly installing the batteries may damage your digital camera.

Using 2 x AA Batteries

Insert the batteries as shown on the compartment lid.

**Using 1 x CRV3 Battery**

Insert the battery with its polarity REVERSED.

**USING AN AC ADAPTER (OPTIONAL)**

If you intend to leave the camera on for a long period of time, you may opt to use an AC adapter. Connect the AC adapter to your Digital Camera's AC Adapter Socket (→ p.3).

Caution: Make sure the camera is turned off before connecting the AC adapter.

⚠ An AC adapter of **DC3V +/- 10% (Voltage)** and **1.5A (Current)** MUST be used. Using adapters other than indicated may cause fires or electric shocks.

(NOTE) Please only use adapters with the following polarity: ⊖ ⊕

ATTACHING THE STRAP AND LENS CAP**Attaching the Strap**

1. Pass the short, thin loop of the strap through the camera's strap hole.
2. Pass the other end of the strap through.
3. Tighten by pulling the loop.

**Attaching the Lens Cap**

1. Pull the lens cap cord through the camera's strap hole.
2. Pass the lens cap through the loop.
3. Tighten by pulling.
4. Fit the lens cap onto the lens.

**COMPACTFLASH (CF) CARD**

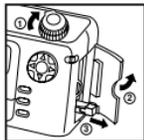
The CompactFlash (CF) Card is an external memory card that can be plugged into your Digital Camera to extend its memory capacity.

(NOTE) When the CF card is installed, all images and movies taken are automatically stored on the card. Images and movies in the internal memory cannot be accessed until the card is removed.

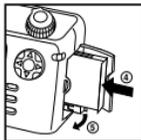
⚠ The CF card will not insert fully into the slot if it is facing the wrong way. Be careful not to apply undue force to the card.

Installing the CompactFlash Card

1. Turn off the camera.
2. Open the CompactFlash compartment lid.
3. Pull out the eject button until it is fully extended.



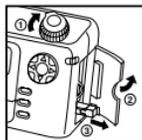
4. Insert the card with the pin connector edge in first. Use the protruding edge to push the card in.
5. Flip the eject button back into the compartment. Close the lid.



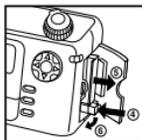
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Removing the CompactFlash Card

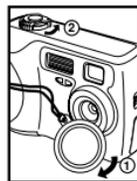
1. Turn off the camera.
2. Open the CompactFlash compartment lid.
3. Pull out the eject button until it is fully extended.



4. Press the eject button.
5. Pull out the card by grabbing the protruding.
6. Flip the eject button back into the compartment. Close the lid.

**BASIC PHOTOGRAPHY****QUICK START****Preparing the camera**

1. Remove the lens cover from the lens.
2. Turn the Mode Dial to Camera Mode.
3. Check the battery indicator, making sure there is enough power (→ p.4).

**Holding the camera**

1. Loop the strap over your wrist.
2. Hold the camera.
3. Avoid blocking the lens and flash.
4. Do not move nor remain in motion while taking pictures. Use a tripod if necessary (→ p.26).

**Taking Basic Pictures**

1. Frame your subject in the viewfinder. The frame in the middle of the viewfinder indicates the zone of automatic focusing. You can also view the subject on the OSD (→ p.8).
2. Press the Shutter Release Button.
3. The image taken is displayed on the OSD for about a second (Auto Review).
4. Once the Auto-Review has finished, you may proceed to take the next picture.

(NOTE) When memory is full, no more images can be stored. The word "FULL" will appear on the LCD if you press the Shutter Release Button.

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Shutting Off the Camera

When you have finished taking your pictures:

1. Turn to Mode Dial to Off.
2. Place the lens cover securely over the lens.

BASIC FUNCTIONS AND SETTING

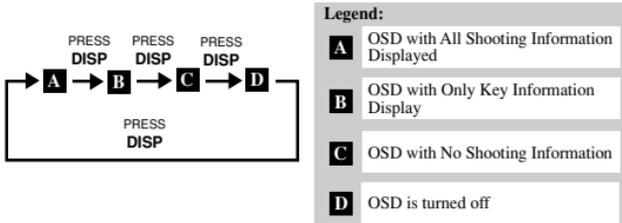
Toggleing On-Screen Display Information

When your Mode Dial is turned to any shooting modes, the On-Screen Display (OSD) is automatically switched on.

Camera Modes On-Screen Display



Toggleing Between On-Screen Display Settings



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Selecting a Scene Setting

When you turn the Mode Dial to Scene Mode, the Scene Setting menu automatically appears. Use the 4-Way Controller and press **OK** to choose and accept the selected option.

Scene Setting Options Table

Icon	Scene Type	Description
	Portrait	Used to obtain portrait photographs.
	Landscape	Used for vivid landscape photographs to enhance outlines, colors, & contrast such as open fields & forests.
	Night Portrait	Used for photographs where the subject is against a backdrop of night time scenery.
	Night Landscape	Used for photographs while employing slow shutter speeds to produce stunning night landscapes.
	Backlight	Used when light is coming from behind your subject. The flash will fire automatically.
	Sepia	Used to give images a golden brown hue that resembles old photographs.
	B&W	Used to give images a black and white contrast.
	Sports	Used when the subject is moving fast.

Selecting a Focus Mode

Your digital camera has two different Focus Modes: Scene Mode and Macro mode. You can select between the two options by using the Focus Switch (→ p.3).

NOTE When the focus mode is set on the range of the resulting picture may differ from what is seen in the viewfinder.

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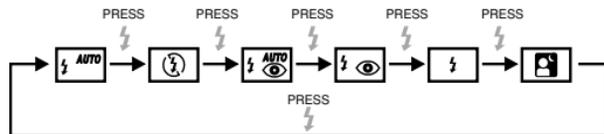
Focus Options Table

Icon	Mode	Description
	Scene	This mode is used when the subject is far. The camera will focus on the subject in the viewfinder's frame when the Shutter Release Button is pressed halfway. Range: 60cm to ∞.
	Macro	This mode is used when the subject is near. Range: approx. 18cm to 60cm.

Selecting a Flash Mode

To toggle between Flash Modes, press the button on the camera and observe the Flash Icon on the LCD Display. The Flash Lamp on the camera lights up when flash is enabled, signalling that the flash is ready for use. When a picture with flash is taken, the Flash Lamp will blink for a second to recharge. Once it lights up, flash can be used again.

Toggling Between Flash Modes



Flash Mode Options Table

Icon	Function	Description
	Auto	The flash may discharge automatically, depending on the light conditions.
	Flash Off	The flash will not discharge.
	Auto + Red Eye Reduction	This mode reduces "red eye" caused by the flashlight reflecting in the subject's eyes. The flash may discharge, depending on the light condition.
	Flash On + Red Eye Reduction	This mode reduces "red eye" caused by the flashlight reflecting in the subject's eyes. The flash discharges automatically, regardless of lighting condition.

Continued:

Icon	Function	Description
	Flash On	The flash discharges regardless of lighting condition
	Slow Synchronous Flash	This mode uses a slow shutter speed in combination with flash. The fired flash freezes the subject in the foreground while capturing the background scene.

NOTE In and modes, there will be a brief initial flash before the main flash is emitted. This is done to reduce the "red eye" effect in images.

Zooming

Your digital camera comes with a 2X zooming function. By default, the zooming is not enabled.

- In Camera, Scene, or Movie mode, enable zooming by pressing on the 4-Way Controller (→ p.4).
- A Digital Zoom Icon, , appears on the OSD to indicate that the 2X zoom is in effect.
- To cancel the 2X zoom, press on the 4-Way Controller (→ p.4). The camera then returns to normal shooting range.

Using the Shutter Release

The Shutter Release button has two different functions:

Action	Function	Description
Pressed Halfway	Lock Subject within Viewfinder	Focus, exposure, an white balance of the scene within the viewfinder is locked. If the subject is in focus, the green status LED lights up.
Pressed Fully	Take picture	The scene within the viewfinder is taken and stored in memory. If the scene has not been locked, the image taken may be blurry.

Using the Self-Timer

The Self-Timer function counts down before the camera automatically takes a picture by itself. This is useful when you want to be in the picture, and there is no one else to press the Shutter Release Button.

- Turn the Mode Dial to Camera or Scene Modes.
- Press on the 4-Way Controller. The Self-Timer will engage.

- Press & hold the Shutter Release Button. An audible "beep" is heard, and the Self-Timer Lamp will start blinking. The seconds displayed next to the OSD's Self-Timer icon will start counting down.

(NOTE) To hasten the countdown to 3 seconds, press the Shutter Release Button once again.

- To cancel the Self-Timer:
 - Press the Shutter Release Button once more after the 3-second countdown.
 - Switch the Mode Dial to any other modes.
- Once the picture has been taken, the Self-Timer will be disabled.

Playing Back Last Picture Taken

You can display the last still picture taken by pressing . When viewing the last image, you may choose to delete it by pressing . Press again to return to shooting.

INTRODUCTION TO CAMERA MENUS

GUIDE TO MENUS

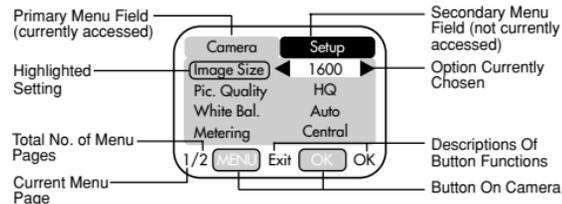
Press **MENU** to access the menu screens, where settings can be specified.

Mode	Primary Menu	Secondary Menu	Description
	Camera Menu	Setup Menu	Basic photography mode in which the camera automatically adjusts all settings for you.
SCENE	Scene Menu	Setup Menu	Asks you to choose the scene setting before entering the shooting mode.
	Playback Menu	Setup Menu	Lets you play back all images & movies recorded onto the camera's internal memory or CompactFlash card.
	Movie Menu	Setup Menu	Allows you to shoot simple movies with the camera.

To switch between Primary and Secondary Menus, highlight the top menu fields.

(NOTE) Use the 4-Way Controller to navigate the menu screen.

Example of a Menu Screen



Setup Menu

Under the Setup Menu, which is available in all modes, the basic settings of the camera can be adjusted.

Setup Menu Settings and Options

(NOTE) The options underlined and in *italics* are initial defaults.

Settings	Page	Options
P.Counter	→ p.14	<i>Down / Up</i>
Set Clock	→ p.14	Adjust date and time settings
Language	→ p.14	<i>English</i> / Français / Deutsch / Español / Italiano / Português
Beep Tone	→ p.14	<i>On</i> / Off
Auto Off	→ p.15	None / 1 min. / <i>3 min.</i> / 5 min.
Logo	→ p.15	<i>On</i> / Off
File Number	→ p.15	<i>New</i> / Continue
Format	→ p.16	Format internal memory or memory card
Reset	→ p.16	<i>Cancel</i> / Reset

P. Counter Setting (Picture Counter)

The Picture Counter can count the number of images already taken (count up) or available to be saved at current settings (count down).



Set Clock Setting

This setting lets the user adjust the Current Date and Time of the camera. When accessed, a new Set Clock configuration screen will appear.

Press ▲ or ▼ to adjust the values of each field below.



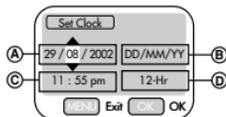
A Current Date Field

Adjust the current date of the camera.

B Date Format

Choose from the following date formats:

- DD/MM/YY (date, month, year)
- MM/DD/YY (month, date, year)
- YY/MM/DD (year, month, date)



C Current Time Field

Adjust the current time of the camera.

D Time Format

Choose between 12-hr (AM/PM) or 24-hr display.

Language Setting

Choose your menu language: English, French, German, Spanish, Italian, and Portuguese. The default language is English.



Beep Tone Setting

The camera will make "beeping" sounds during certain functions, such as the Set Timer function's countdown. This "beeping" sound can be turned on or off.



Auto Off Setting (Auto Power-Off)

You can set the camera to turn off automatically when no operation is performed. The period of time before shut-down can be adjusted.

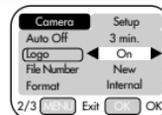
NOTE To turn on the camera after it has been automatically shut down, push **MENU** or **DISP** on the camera.

NOTE Auto Off is not available in slideshow mode or when the camera is connected to a PC.



Logo Setting

When the camera is turned on, the opening logo will appear briefly by default. You can choose to switch off this opening logo.



File Number Setting

Your camera keeps an internal file counter for every image and movie taken that can be reset. The setting options are Continue and New.

Continue

Under this default option, the internal file counter is first set to "0000". Every subsequent picture is assigned an incremental File Number.

NOTE The internal file counter increments by 1 regardless of the media type, unless it is reset.

New

Under this option, the internal file counter resets to "0000". The **File Number** setting then returns to the **Continue** option after the reset.

NOTE It is advisable to only set the **File Number** setting to **New** in the following cases:

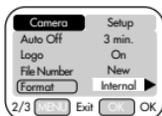
- Either the internal memory or CF card has been newly formatted (→ p.16).
- A completely new CF card has been installed.

Format

This option will format all data in either the internal memory or the CF card, including all protected image files.

Caution: Do not eject the CF card while the card is being formatted, as this may damage the card.

⚠ Formatting deletes all data from the memory device chosen. The images and files will not be recoverable.



Reset

You can reset all the settings to factory default. Refer to the Setup Menu table to see the defaults for each setting (→ p.13).



Camera / Scene Menu

Both the Camera and Scene modes share common settings within their menus. However, in the Scene mode, there is one extra setting that can be accessed: the Scene Setting.

Camera / Scene Menu Settings and Options

(NOTE) The options underlined and in italics are initial defaults.

Settings	Page	Options
Scene*	→ p.17	<i>Portrait</i> / Landscape / Night Portrait / N.Landscape (Night Landscape) / Back light / Sepia / B&W / Sports * available in SCENE mode only.
Image Size	→ p.17	<i>Fine 1600</i> / Normal 1280 / Basic 640
Pic. Quality	→ p.17	ECO (Economy) / STD (Standard) / <i>HQ (High Quality)</i> / TIFF
White Bal.	→ p.18	<i>Auto</i> / Sun light / Shade / Yellow F.L. (Fluorescent Lamp) / White F.L. (Fluorescent Lamp) / Tungsten
Metering	→ p.18	<i>Central</i> / Spot / Matrix
ISO	→ p.19	<i>Auto</i> / 100 / 200 / 400
Con. Shoot	→ p.19	<i>Off</i> / On
EV	→ p.19	+2.0 / +1.7 / +1.3 / +1.0 / +0.7 / +0.3 / <i>0.0</i> / -0.3 / -0.7 / -1.0 / -1.3 / -1.7 / -2.0

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Scene Setting

To choose a different Scene Setting, access the Scene Setting selection menu (→ p.9).

(NOTE) This setting is only available in Scene Mode.

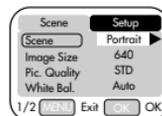
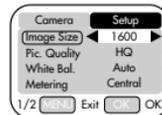


Image Size Setting

You can choose the resolution size of your images from Fine (1600 x 1200), Normal (1280 x 960) and Basic (640 x 480).

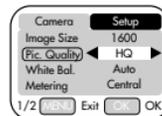
(NOTE) The higher the resolution size of an image, the larger the memory space it occupies.



Picture Quality Setting

You can choose the picture quality of your Images.

(NOTE) The higher the picture quality of an image, the larger the memory space it occupies.



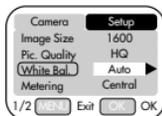
Picture Quality Options

Name	Option	Description
TIFF	TIFF format	The camera's best quality format. It also takes the most memory space. *only available if "Image Size" is set to "Fine" (→ p.17)
<i>HQ</i>	High Quality	Good image quality, high amount of image data.
STD	Standard	Standard quality, medium amount of image data.
ECO	Economy	Lowest quality, taking up the least memory space. *only available if "Image Size" is set to "Fine" or "Normal" (→ p.17).

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White Balance Setting

You can take pictures according to the light conditions by setting the white balance. By using this, the images will have the correct balance of colour.



White Balance Options

Icon	Settings	Options
	Auto	Adjusts the white balance automatically.
	Sunlight	Use outside in sunlight.
	Shade	Use outside in the shade.
	Yellow F.L. (Fluorescent Lamp)	Use under yellow fluorescent lamp.
	White F.L. (Fluorescent Lamp)	Use under white fluorescent lamp.
	Tungsten	Use under electric or other tungsten light.

Metering Setting

Metering is a setting that determines your subject's correct exposure. The camera will compute the brightness levels, contrast, and amount of bright to dark parts in the scene automatically.



Metering Options

Icon	Settings	Options
	Matrix (Multi-segment)	Evaluate by splitting the scene into multiple zones, then calculate each zone's exposure via the camera's computations.
	Central (Centre-Weighted)	Averages the exposure of the entire scene but gives extra weight to the centre.
	Spot	Only the small area at the centre of the screen determines the exposure.

ISO Setting

The ISO setting affects the camera's sensitivity to light.

(NOTE) An image taken at higher ISO speeds may contain more "noise" or graininess than an image taken at lower speeds.



ISO Options

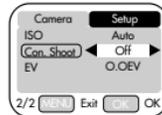
Speed	Description
Auto	The camera sets the speed automatically.
100	ISO rating 100. Use for brightly lit scenes.
200	ISO rating 200. Use for normally lit scenes.
400	ISO rating 400. Use for sports, subjects in motion, or low-lit scenes.

Continuous Shooting Setting (Con.Shoot)

With this setting, pictures can be taken continuously when you hold down the Shutter Release button. A maximum of 6 continuous pictures can be taken, with brief pauses between each shot.

(NOTE) The time intervals between shots vary according to the Image Size and Picture quality.

(NOTE) Continuous Shooting cannot be used when the Self-Timer is set. Moreover, it may not be suitable for night time or dark scenes because flash is disabled.



Exposure Compensation Setting (EV)

Exposure compensation is required when there is an extreme difference in brightness between the background and the subject.

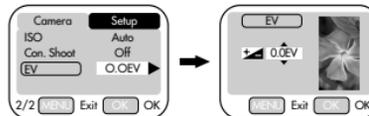


Image Indicator Descriptions

Icon	Type of Media	Descriptions
	Fine Image	Highest detail and resolution (1600x1200).
	Normal Image	Good clarity and resolution (1280x960).
	Basic Image	Basic quality and resolution (640x480).

ZOOMING FUNCTIONS

(NOTE) Movies cannot be zoomed in Playback Mode.

Zooming into Picture

The zooming function can magnify images up to x4.0 on the On-Screen Display:

x1.0 / x1.1 / x1.2 / x1.3 / x1.4 / x1.5 / x1.6 / x1.7 / x1.8 / x1.9 / x2.0 / x3.0 / x4.0

1. Press **[1]** on the 4-Way Controller to zoom in.
2. To zoom out, press **[000]** on the 4-Way Controller.
3. Press **OK** to exit zooming mode.

Scrolling a Magnified Image

While an image is magnified, only a portion of the image will be visible. Press the Shutter Release Button to enable scrolling. Use the 4-Way Controller to scroll to other parts of the image.

(NOTE) All zooming functions are disabled while the Scrolling Mode is enabled.

**Deleting Playback Image**

To delete the image currently being viewed during playback, press **[]**.

(NOTE) Protected images (indicated with **Ⓜ**) cannot be deleted and must be unprotected first (→ p.25).

PLAYBACK OF MOVIES**Movie Playback Mode On-Screen Display**

To playback movies:

1. Press the Shutter Release Button to start playback.
2. Press **OK** to hide the Progress Bar. Press again to restore the Progress Bar.
3. Press the Shutter Release Button again to stop the playback. The movie will then start from the beginning.

(NOTE) All zooming functions are disabled during Movie Playback mode.

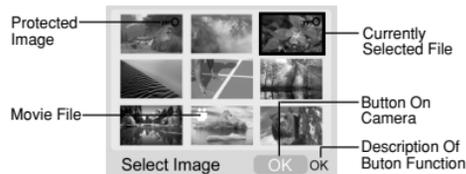
Deleting Playback Movie

To delete the movie currently being viewed, stop the playback and press **[]**.

(NOTE) Protected movies (indicated with **Ⓜ**) cannot be deleted and must be unprotected first (→ p.25).

MULTI-FRAME REVIEW

The Multi-Frame Review shows, as thumbnails, up to nine recorded images and movies on the OSD. For movies, the first frame is displayed.



1. In playback mode, press **DISP**. Thumbnails of images will appear on the OSD.
2. Use the 4-Way Controller to navigate the thumbnails. Press **OK** to view a chosen image or movie fully.

PLAYBACK MENU

Press the **MENU** button to access the Playback Menu.

Function	Options
Delete	Cancel / Selected Image(s) / All Images
Protect	Selected Image(s) / All Images
DPOF (Digital Print Order Format)	Selected Image(s) / All Images
Slide Show	Cancel / Start / Interval / Repeat

Delete

The Delete options within the Playback Menu can delete multiple or all images and movies.

NOTE Protected images and movies (indicated with **Ⓜ**) cannot be deleted and must be unprotected first (→ p.25).



Deleting Selected Images and Movies

1. When "Selected Image(s)" is selected, the OSD displays up to nine thumbnail images similar to the Multi-Frame Review setting (→ p.23). Use the 4-Way Controller to navigate.
2. You can set multiple images or movies for deletion by highlighting an image, then pushing the **OK** button. The **Ⓜ** icon will then indicate that the image is set for deletion. To cancel the deletion, press the **OK** button again.
3. Follow the rest of the on-screen options to confirm deletion.

Deleting All

When "All Images" is selected, follow the rest of the options to confirm the deletion of all images and movies.

Protecting Images

This option can be used to protect images and movies from deletion.

NOTE Protected files will still be erased if the memory is formatted.



Protecting / Unprotecting Selected Images and Movies

1. When "Selected Image(s)" is selected, the OSD displays up to nine thumbnail images similar to the Multi-Frame Review setting (→ p.23). Use the 4-Way Controller to navigate.
2. You can set multiple images or movies for protection by highlighting an image, then pushing the **OK** button. The **Ⓜ** icon will then indicate that the image is set for protection. To cancel the protection, press the **OK** button again.
3. Follow the rest of the on-screen options to confirm protection.

Protecting / Unprotecting All

- When "All Images" is selected, select the "Set Protect All" to On to confirm the protection of all images and movies.
- To unprotect all images and movies, select the "Set Protect All" to Off.

Specifying Digital Print Order Format (DPOF)

The **DPOF** option in the Playback Menu is used to specify the quantity of each image for printing from the CF Card. When used, the CF card can then be used in printers or taken to specialists in order to print the images.



NOTE This function is only used for still pictures. Movies cannot be transferred to digital prints.

NOTE You can only specify the DPOF of the internal memory by transferring the images to a blank CF Card via a CompactFlash card reader (sold separately).

DPOF of Selected Images

1. When "Selected Image(s)" is selected, the OSD displays up to nine thumbnail images similar to the Multi-Frame Review setting (→ p.23). Use the 4-Way Controller to navigate.
2. Select an image to specify the DPOF and press **OK**. Press **▲** or **▼** to set the number of prints for the selected image (up to a maximum of 9 copies).
3. Repeat above to select more images for printing or change the previously specified numbers.
4. Follow the rest of the on-screen options to confirm the DPOF setting.



DPOF of All Images

1. When "All Images" is selected, all images will be set to the same specified printing number.

- Press ▲ or ▼ to set the number of prints of all stored images in the CF card, for up to a maximum of 9 copies.
- Follow the rest of the options to confirm the DPOF setting.

Slideshow Setting (Slide Show)

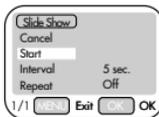
You can play back all the images and movies in a slideshow format. The interval between images can be specified.

During the slideshow, press **MENU** to pause. From here, you may choose to continue or exit the current slideshow.



Slideshow Options

Settings	Descriptions
Cancel	Return to the Playback Menu.
Start	Start Slideshow according to the specified Interval and Repeat options.
Interval	Specifies to amount of time the camera will display an image before moving on to the next image. The options are 3 sec., 5 sec., and 10 sec.
Repeat	When set to On , the slideshow immediately replays when the final image is displayed.



CONNECTING TO EXTERNAL DEVICES

USING A TRIPOD WITH THE CAMERA

You can secure your digital camera to a tripod to prevent camera shakes. To install, screw the tripod to the Tripod Hole (→ p.3).

CONNECTING TO A TV

You can playback the images and movies you have recorded on your TV. Connect your digital camera to the TV via the video cable included in the camera's gift box.

Caution: Turn off the TV and digital camera before connecting the video cable.

- Plug the video cable into the Video/Audio Socket of the camera (→ p.3).
- Connect the video cable's yellow connector to the yellow AV input terminal of your TV. Refer to your TV's manual for more information.

- Turn the TV and digital camera on. Make sure to switch the TV to the appropriate AV channel display.

(NOTE) The OSD is automatically off when the camera is connected to a TV.

(NOTE) Use an AC Adapter if you intend to connect the camera to a TV for a long period of time.

CONNECTING TO A WINDOWS-BASED PC

Use the USB cable included to connect to your Windows PC. This enables you to upload, download, edit, and playback pictures and movies on your PC. However, the PC software must be installed first.

Pre-Installation Checklist

- Pentium 66MHz
- 64MBytes RAM
- 350MBytes Hard disk space
- CD-ROM drive
- 16-bit colour display at 800x600
- USB 1.1 interface
- Windows 98/98SE/ME/2000/XP

Installing Drivers and Software

- Insert the CD labelled "DS8228" into your CD-ROM drive. The installation will start automatically.

(NOTE) If the "autorun" feature is disabled on your PC, start the installation by running [x:\setup.exe] where "x:" is the drive letter of the CD-ROM drive.

- Follow the on-screen instruction to complete the installation of the camera drivers and the ArcSoft PhotoImpression 3.0 software. When done, click on the [Finish] button on-screen to restart the PC.

Connecting the Camera to the PC

(NOTE) Only the images and movies stored in the camera's current memory device (CF card or internal memory) will be visible on the PC.

(NOTE) The OSD is automatically off when the camera is connected to the PC.

- Turn on your PC and allow your system's Windows operating system to boot up.
- Turn off your digital camera. Connect the camera and your PC via the USB cable. The USB terminal on your camera is located inside the Terminal Cover (→ p.3). Refer to your PC's manual to locate the USB connection on the PC.
- Turn on your digital camera to any Mode. The LCD display on the camera now shows "- PC -".

- The digital camera now appears as Removable Disk drive on your system's [My Computer].
- Double-click on the [Removable Disk] drive. Two folders, [DCIM] and [MISC], are now visible. Ignore the [MISC] file (it contains DPOF information) and double-click on the [DCIM] folder.
- Two new subfolders are now visible - [100DSHOT] and [DTIFF01]. The [100DSHOT] subfolder contains all the Economy, Standard, and High Quality images stored as .JPG files. Movie clips are also stored here as .MOV Quicktime files. The [DTIFF01] subfolder contains all images stored as TIFF images.
- You can double-click on the images and movies to view them (provided the appropriate Picture Viewer and Movie Player are installed). These files can also be deleted, copied, or moved like normal computer files.

Disconnecting from the PC (Windows ME, 2000, and XP users only)

For PC users with Windows ME, 2000, or XP operating systems, the camera device driver has to be stopped before disconnecting the USB cable.

- Find the "Unplug or Eject Hardware" icon in your Windows system tray.
- Right-click on the icon. The "Stop USB Disk" option will pop up. Highlight and left-click on the option.
- Wait for a second. A pop-up window will inform you that the USB Device can now be safely removed.
- Disconnect the USB cable from the camera and/or from the PC.

CONNECTING TO A MACINTOSH

Use the USB cable included to connect to your Macintosh. Your Macintosh will treat the camera as a mass-storage device. The images and movies within the camera can then be uploaded and downloaded. Before connecting to the Macintosh, however, software must be installed.

Pre-Installation Checklist

- Power PC
- 350 MB free hard disk space
- 64 MB RAM
- CD-ROM drive
- 16-bit colour display at 800x600
- USB 1.1 interface
- MAC OS 10.x

Connecting the Camera to the Macintosh

NOTE Only the images and movies stored in the camera's current memory device (CF card or internal memory) will be visible on the Macintosh.

NOTE The OSD is automatically off when the camera is connected to the Macintosh.

- Turn on your Macintosh and allow MAC OS 10 operating system to boot up.
- Turn off your digital camera. Connect the camera and your Macintosh via the USB cable. The USB terminal on your camera is located inside the Terminal Cover (→ p.3). Refer to your Macintosh's manual to locate the USB connection on the Macintosh.
- Turn on your digital camera to any Mode. The LCD display on the camera now shows "- PC -".
- A camera icon will appear on your Macintosh's screen. Click on it to access the images and movies that are stored on your camera.
- You can double-click on the images and movies to view them (provided the appropriate Picture Viewer and Movie Player are installed). These files can also be deleted, copied, or moved just like normal computer files.

APPENDIX

MEMORY CAPACITY, PICTURE SIZE, AND QUALITY

The table below indicates the number of images that can be stored when using a 8MB CompactFlash card.

Resolution	Approximate Number of Pictures Stored under the Following Picture Quality Selections			
	TIFF File Format	High Quality	Standard Quality	Economy Quality
Fine (1600x1200)	1	10	20	33
Normal (1280x960)	N/A	16	33	66
Basic (640x480)	N/A	66	133	N/A

NOTE The above table is based on standard shooting conditions tested by Oregon Scientific and may vary depending on the subject, shooting conditions, capture modes, and CF card memory capacity.

RESET HOLE

If the camera buttons or the menus stop responding, use a blunt stylus to insert into the Reset Hole (→ p.3). The camera will then be reset to its original factory setting.

NOTE All images and moves stored in the internal memory will be erased after the above action.

TROUBLESHOOTING

Problem	Symptom	Check This	Remedy
No Power	Power will not turn on.	Batteries are exhausted.	Replace with new batteries.
		Batteries are inserted incorrectly.	Insert the batteries correctly (→ p.5)
	Power turns off after turning on.	Battery level is too low.	Replace with new batteries.
		Auto Off Function is enabled.	Disable the Auto Off Function (→ p.15)
Taking Pictures	Cannot take pictures when the Shutter Release Button is pressed.	Camera not turned on.	Turn on the camera.
		No space on the CompactFlash card / Internal Memory	Delete unwanted files (→ p.24) or insert a new CompactFlash card.
		Mode Dial is set to Playback mode.	Change the Mode Dial to Camera, Scene, or Movie Mode.
		Check your current Focus Mode.	Switch from your current Focus Mode to either the Macro or the the Scene Mode.
	Flash does not go off as expected.	Flash is set (ⓧ) (no flash)	Enable flash by changing it to another setting (→ p.10).
		Mode Dial is set to Playback or Movie Mode.	Change the Mode Dial to either Camera or Scene Mode.
		Flash has not finished charging.	Wait until the Flashlight Sensor has turned off (→ p.10).
	Image taken appears too dark or blurred.	Check your Flash Mode.	Turn on the flash by changing the Flash Mode (→ p.10).
		The subject is too far away.	Move closer to the subject or choose another Focus Mode (→ p.9).
		The lens is dirty.	Clean the lens with a soft cloth (→ p.2).

Continued:

Problem	Symptom	Check This	Remedy
Playback	Cannot play back images or movies.	Mode Dial is not set to Playback Mode.	Set Mode Dial to Playback Mode.
		No images or movies are recorded.	Images located in internal memory instead. Remove CompactFlash card (→ p.7).
Connecting with External Devices	Picture not shown on TV when connected.	Images or movies are protected.	Unprotect the images or movies (→ p.25).
		Check cable connection.	Make sure yellow video cable is plugged into the TV's AV terminal.
	Check channel on TV.	TV channel should be switched to the appropriate AV channel.	
	Camera or TV is not turned on.	Turn on the camera and TV.	
Camera does not appear as Removable Disk when connected to a PC.	Check the USB cable connection.	Make sure both ends of the USB cable are connected.	
	Camera is not turned on.	Turn the camera on.	

TRADEMARK INFORMATION

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CompactFlash™ and CF™ are trademarks of SanDisk.

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ADDITIONAL RESOURCES

Visit our website (www.oregonscientific.com) to learn more about your digital camera and other Oregon Scientific products such as hand-held organizers, alarm clocks, and weather stations. The website also includes contact information for our customer service department, in case you need to reach us.

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SPECIFICATIONS

Type	Description
Sensor	1 / 2.7" high-density CCD Total number of pixels: 2.02 million
Image size	Selectable from: 1600 x 1200 pixels 1280 x 960 pixels 640 x 480 pixels (VGA)
File Format	DCF-compliant (Exif ver.2.1 JPEG-compliant) or TIFF-YC (uncompressed).
Lens	F = F2.8, F3.4, F4.8, F8.9
Digital zoom	2 x
Shooting distance	Normal F2.8: 1.5 ~ 12m F3.4: 1.3 ~ 45m F4.8: 1.1 ~ ∞ (infinity) F8.9: 0.8 ~ ∞ (infinity) Macro Approx. 24cm
Flashlight Distance	Approx. 0.8m ~ 2m
Operation Environment	Temperature: Approx. 0°C ~ 60°C
Monitor	1.4" TFT LCD
Internal Memory	8MB
Digital Video Recording	320 x 240 pixels (*without audio)
TV Video Output	PAL compatible
Storage Media	CompactFlash memory card (Type 1)
Digital Output	USB1.1 interface to PC
Windows Software	ArcSoft PhotoImpression 3.0
Product Dimension	98 x 67 x 39 mm
Unit Weight	Approx. 153g
Battery Specification	2 AA-sized batteries (LR6) or 1 CRV3 battery

FCC NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

Changes or modifications not expressly approved by Oregon Scientific for compliance could void the warranty and your authority to use this equipment.

