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086-003403-012

Model: DS6688

User Manual
Manuale d'uso
Manuel d'utilisation

3.0 MEGA-PIXEL SLIM CARD-SIZED DIGITAL CAMERA
USER MANUAL

USER MANUAL CONTENTS

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INTRODUCTION

Thank you for selecting the Oregon Scientific™ 3.0 Mega-Pixel Slim Card-Sized Digital Camera as your personal product of choice. It features 2x digital zoom and comes with 16MB of internal memory, and is compatible with Secure Digital (SD) memory cards. Your camera is designed to give you many years of reliable service.

Other features include:

- Self-timer
- Movie mode
- Home / world time
- Video output
- USB 1.1 interface
- White Balance and manual exposure compensation settings
- Spot / evaluative / center light meter modes

IMPORTANT NOTICE

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

- 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 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 molding.

CLEANING THE DIGITAL CAMERA

Use a damp cloth to clean your camera body; dry immediately. To clean your camera lens / viewfinder:

1. Use a blower or a lens brush to remove dirt or dust.
2. Wipe carefully with a soft cloth to remove fingerprints and other stains. Do not touch with fingers.

NOTE: Do not use benzene, thinner, or similar cleaning agents to clean your camera, as these may cause permanent damage not covered by the warranty.

NOTE: Do not scratch hard objects against the lens, LCD or viewfinder as these surfaces are easily damaged.

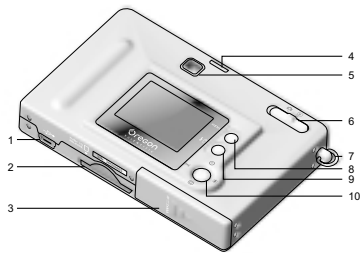
EN

FRONT VIEW



1. Shutter Release Button
2. Power Button
3. Built-In Flash
4. Self-Timer Lamp
5. Viewfinder
6. Lens
7. Focus Switch
8. Video Socket

BACK VIEW



1. USB Terminal
2. Memory Card Slot
3. Battery Door
4. Status Lamp
5. Viewfinder
6. Mode Switch
7. Strap Ring
8. Menu
9. Flash/Delete
10. 4-Way Controller

3

MODE SWITCH



1. Record Mode
2. Playback Mode

EN

4-WAY CONTROLLER



1. Self-Timer
2. Digital Zoom-Out
3. Digital Zoom-In
4. Instant Review Function

FOCUS SWITCH



1. Landscape
2. Group
3. Portrait

4

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 return it for servicing. In the box, you will find:

- Digital Camera (DS6688)
- Video Cable and USB Cable
- Two Batteries (AAA x 2)
- Hand Strap
- Software CD-ROM and User Manual

INSTALLING THE BATTERIES



To prevent damage, correctly insert the batteries as shown.

TIP: To maximize the performance of your camera and for greater battery life, it is highly recommended to use NiMH rechargeable type batteries.

ATTACHING THE STRAP

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

MEMORY STORAGE

The SD is an external memory card that can be plugged into your digital camera for storing images and movies. Below is a list of compatible SD cards that have been tested and verified for use with the DS6688:

SanDisk: 64MB, 128MB, 256MB

Panasonic: 32MB, 64MB, 128MB, 256MB

Toshiba: 32MB, 64MB, 128MB, 256MB

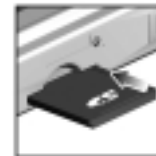
Operation is not guaranteed for other, unlisted memory cards. For more details on the above cards, please contact the manufacturer directly. The DS6688 also supports the use of Multi-Media cards (MMCs). The type of memory currently used by the camera is indicated on the On-Screen Display (OSD):

ICON	MEMORY TYPE	DESCRIPTION
	Internal	Files are stored in the camera's internal memory.
	External	Either a SD card or a MMC has been installed. Files are stored on the card's memory.

NOTE: When the SD card or MMC is installed, all images and movies taken are automatically stored on the card. Images and movies stored in the internal memory can be viewed from the camera, TV or computer, but cannot be copied or transferred to the computer.

NOTE: The SD card or MMC 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 SD / MMC



1. Turn off the camera.
2. Slide the card into the memory slot until it clicks into position.

REMOVING THE SD / MMC



1. Turn off the camera.
2. Push against the card lodged inside the memory slot.
3. The card automatically ejects itself out of the slot.

BASIC PHOTOGRAPHY

PREPARING THE CAMERA

1. Slide the Mode Switch to Camera Mode.
2. Press and hold the Power button to turn the camera on.
3. Slide the Focus Switch to the desired setting.
4. Check the battery indicator to make sure there is enough power.

ICON	DESCRIPTION
	Adequate power remains
	Battery is running low
	Battery is running very low
	Battery is exhausted

TAKING BASIC PICTURES

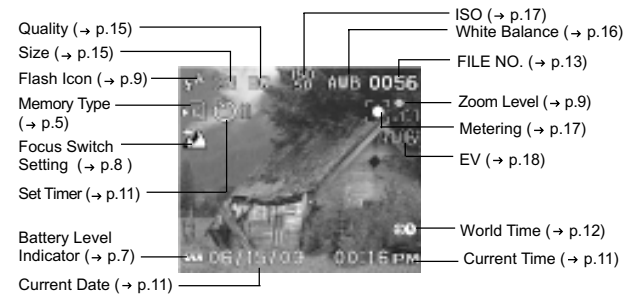
1. Frame your subject in the viewfinder. You can also view the subject on the OSD.
2. Press the Shutter Release button.
3. The image taken is displayed on the OSD for approximately a second (Auto Review).
4. Once the Auto Review has finished, you may proceed to take the next picture.

NOTE: When memory is full, no more images can be stored. The camera will beep and the words "Internal Memory Full" or "Memory Card Full" will appear on the LCD.

BASIC FUNCTIONS AND SETTINGS

TOGGLING BETWEEN ON-SCREEN DISPLAY SETTINGS

When you slide the Mode Switch to any mode, the OSD is automatically switched on.



Use to toggle between 3 levels of display settings:

- A. OSD with all shooting information displayed.
- B. OSD with only key information displayed.
- C. OSD is turned off.

SELECTING A FOCUS MODE




Your digital camera has three different Focus Modes. You can select between the three options by using the Focus Switch.

ICON	FOCUS MODE	DESCRIPTION
	Landscape	Used when the subject is far away. The focus range is 2.8 meters to ∞.
	Group	Used when taking pictures of a group of subjects. The focus range is 1.2-3 meters.
	Portrait	Used when taking portraits. The focus range is 1 - 1.3 meters.

SELECTING A FLASH MODE




To toggle between Flash Modes, press the **Flash / Delete** button on the camera and observe the Flash Icon on the OSD. When a picture with flash has been taken, the Status Lamp will blink while the flash is recharging. Once it stops blinking, you can resume taking pictures again.

NOTE: When taking pictures with flash on, the camera's battery life will be shorter so you will need to keep an eye on the battery status.



ICON	FUNCTION	DESCRIPTION
	Auto	The flash may go off automatically, depending on light conditions.
	Flash On	The flash goes off regardless of lighting condition.
	Flash Off	The flash will not go off (default setting)

ZOOMING



Your digital camera comes with a 2x zooming function (this is described as x2 in the camera). By default, the zooming is not enabled.

- In Camera or Movie Mode, increase zooming by pressing . The Digital Zoom Icon on the OSD, , indicates the current zoom level.
- To decrease the zooming, press .

Camera Mode Zooming Options:

Default Zoom Larger
 
 x1.0 / x1.1 / x1.2 / x1.3 / x1.4 / x1.5 / x1.6 / x1.7 / x1.8 / x1.9 / x2.0


Movie Mode Zooming Mode Options:

Default Zoom Larger
 
 x1.0 / x1.2 / x1.4 / x1.6 / x1.8 / x2.0




NOTE: In Movie Mode, once the shutter button is pressed and recording starts, zooming cannot be further adjusted for the duration of the recording.

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.




- Slide the Mode Switch to Camera Mode.
- Press the  button. The Self-Timer will engage. The front Self-Timer lamp lights up.
- Press the **Shutter Release** button. Audible beeps can be heard, and the front Self-Timer lamp will start blinking. The number displayed next to the OSD's Self-Timer icon will appear and start counting down.
- To hasten the countdown to 3 seconds, press the **Shutter Release** button once again.
- To pause / unpause the Self-Timer, press the **Shutter Release** button once more after the 3-second countdown.


DISPLAYING LAST IMAGE TAKEN



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

CAMERA MODES

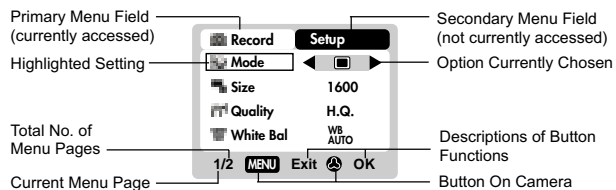
Press **MENU** to access the menu screens, where settings can be specified. To switch between Primary and Secondary Menus, highlight the top menu fields.

MODE	FUNCTION	SECONDARY MENU	DESCRIPTION
 Record Mode	Record	Setup	Can be set as: <ul style="list-style-type: none"> Camera Mode  (digital still images with adjustable settings.) Movie Mode  (allows you to shoot movies).

EN	 Playback Play-back Mode	Setup Play back and review all images recorded onto the camera's internal or external memory card.
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NOTE: Use  to navigate the menu screen. Press directly onto  to confirm setting changes.

Example of a menu screen:

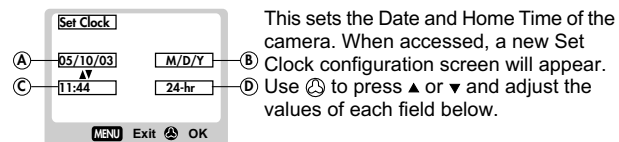


Under the Setup Menu, which is available in all modes, the basic settings of the camera can be adjusted. These are: P. Counter, Set Clock, Set City, Show Time, Language, Beep Tone, Auto Off, TV Out, File Number, Format, Reset, LCD Brightness, and System Information.

P. COUNTER (PICTURE COUNTER)

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

SET CLOCK



- 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.



SET CITY




You can choose to display the current time in two different time zones. Configure the time zone of your Home and World City from a list of city names.

NOTE: The World Time cannot be directly set. It automatically adjusts itself via the time zone offset, using the Home Time values specified in the Set Clock setting. If your city is not selectable, choose another city within your time zone instead.

SHOW TIME

You can choose to display either the Home Time (default setting)  or World Time  on your camera.

NOTE:  icon is shown on the OSD if World Time is selected. However, no Icon is displayed if Home time is selected.

LANGUAGE

Choose your menu language: English (default setting), French, German, Spanish, Italian, and Portuguese.

BEEP TONE

The camera will make "beeping" sounds during certain functions. This "beeping" sound can be turned on (default setting) or off.

AUTO OFF (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 (1 min., 3 min., or 5 min.) The default auto off time setting is 3 min.

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

TV OUT

If connecting the camera to a TV, you can set the camera's TV output system to either the PAL or NTSC standards. The default TV Out setting is set to PAL.

FILE NUMBER

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

NOTE: All files are stored within a designated folder. The initial folder is always numbered at 100.

A. Under the Continue default option, the internal file counter is first set to "0001". Every subsequent picture is assigned an incremental File Number.

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

B. Under the New option, the internal file counter to "0001" for new media only. But in case there are image files already present inside the storage media, it will start counting from the highest file number of the media.

NOTE: The File Number setting should be set to New only if either the internal memory or SD card has been newly formatted, or a completely new SD card has been installed.

FORMAT

This option will format all data in either the internal memory or the external SD card / MMC, including all protected files.

CAUTION: Do not eject the SD card / MMC while the card is being formatted, as this may damage the card. Formatting deletes all data from the memory device chosen. Files will not be recoverable.

RESET

You can reset all camera settings to factory default. Refer to the Setup Menu table to see the defaults for each setting.

NOTE: The reset function can reset all the settings to factory default except for the current time and date.

LCD BRIGHT (LCD BRIGHTNESS)

You can adjust the LCD brightness level to compensate for different lighting conditions, for example.

- If there is plenty of ambient light such as in bright sunshine, you can adjust the brightness levels higher to make the display easier to see.
- If ambient light levels are relatively low such as indoors or at night, you can adjust the brightness levels lower to make the display easier to see.

TIP: To maximize battery life, keep brightness settings low.

SYSTEM INFORMATION

This option allows you to check the camera model number and current version of firmware installed.

CAMERA MENU

SWITCHING BETWEEN CAMERA AND MOVIE MODE



Use the menu to switch between Camera and Movie modes. In Movie Mode, you can record movies at 10 frames per second. The duration of the movie will depend on the battery life and memory available.

NOTE: In Movie Mode, you can only adjust the white balance, EV and ISO. In Camera Mode (default setting), all settings will apply.

SIZE

Image size represents picture resolution. The resolution is directly related to the number of pixels of the camera. As such, 3.0 Mega-pixel can be arranged as 2048 x 1536 pixels or lower.

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

ICON	TYPE OF MEDIA	DESCRIPTION
	Super Fine Image (Default setting)	Highest detail and resolution (2048 x 1536, 3.0 Mega-Pixel).
	Fine Image	Very good detail and resolution (1600 x 1200, 2.0 Mega-Pixel).
	Normal Image	Good clarity and resolution (1280 x 1024, 1.3 Mega-Pixel).
	Basic Image	Basic quality and resolution (640 x 480, VGA).

QUALITY (PICTURE QUALITY)

The picture quality represents the compression rate of the images taken.

NAME	OPTION	DESCRIPTION
HQ	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

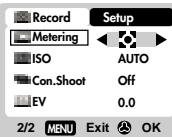
NOTE: The higher image quality and resolution, the larger the memory space it occupies on the memory card.

WHITE BALANCE



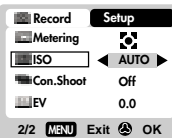
You can take pictures according to light conditions by setting the camera's white balance function. By using this, the images will have the correct balance of colour.

ICONS	SETTINGS	OPTIONS
	Auto (default setting)	Adjusts the white balance automatically
	Sunlight	Use outside in sunlight
	Shade	Use outside in the shade
	Yellow F.L.	Use under yellow fluorescent lamp
	White F.L.	Use under white fluorescent lamp
	Tungsten	Use under electric or other tungsten light

METERING

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.

ICONS	SETTINGS	OPTIONS
	Matrix (multi-segment)	Evaluated by splitting the scene into multiple zones, then calculate each zone's exposure via the camera's computations. Ideal for general picture-taking.
	Central (Centre-weighted)	Averages the exposure of the entire scene but gives extra weight to the centre. Use for backlit subjects (default setting).
	Spot	Only the small area at the centre of the screen determines the exposure. Ideal for highlighting the main subject.

ISO

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.

SPEED	DESCRIPTION
	The camera sets the speed automatically (default setting)
	ISO rating 50. Use for very brightly lit scenes
	ISO rating 100. Use for brightly lit scenes
	ISO rating 200. Use for normally lit scenes

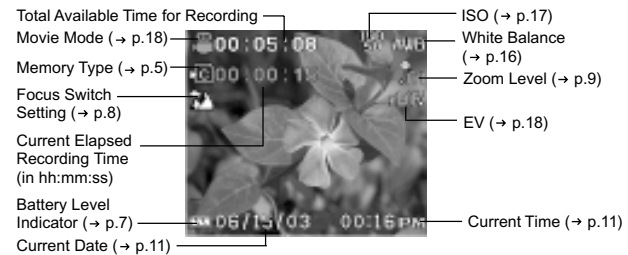
EV (EXPOSURE COMPENSATION SETTING)

Exposure compensation is required when there is an extreme difference in brightness between the background and the subject. Use this setting to manually brighten or darken an image. Default setting is 0.0.

EV	+2.0 / +1.7 / +1.3 / +1.0 / +0.7 / +0.3 / 0.0 / -0.3 / -0.7 / -1.0 / -1.3 / -1.7 / -2.0
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SHOOTING MOVIES

The Movie Mode enables you to take movies. The length of the movie that can be taken depends on the amount of memory available within your camera's current memory storage.






FUNCTION	DESCRIPTION
Toggling OSD Information	Identical procedures to Camera Modes
Zooming	Identical procedures to Camera Modes
Begin Recording Movie	Press the Shutter Release Button
Stop Recording Movie	Press the Shutter Release Button again after recording has started.

MOVIE MENU

1. Press **MENU** to access the Movie Menu.
2. Use  to navigate the menu screen. Press directly onto  to confirm setting changes.

SETTINGS	OPTIONS
White Balance	Auto (<i>default</i>) / Sun light/ Shade/ Yellow F.L. (Fluorescent Lamp) / White F.L. (Fluorescent Lamp) / Tungsten
ISO	Auto (<i>default</i>) / 50 / 100 / 200
EV	+2.0 / + 1.7 / +1.3 / +1.0 / +0.7 / +0.3 / 0.0 (<i>default</i>) / -0.3 / -0.7 / -1.0 / -1.3 / -1.7 / -2.0

PLAYBACK OF IMAGES AND MOVIES

In Playback Mode, you can review the images and movies stored within your current active storage memory. The last image or movie taken is displayed on the OSD in Playback Mode. Use  and press  or  to view through the images and movies taken.

NOTE: If the SD card / MMC is inserted, Playback Mode will only show images and movies stored on the card. To access data stored within the internal memory, the SD / MMC card must first be removed.

Image Playback Mode On-Screen Display



Movie Playback Mode On-Screen Display





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.




ZOOMING INTO PLAYBACK IMAGES

The zooming function can magnify images up to 5x (this is indicated as x5.0 on the camera) on the OSD:



- x1.0 / x1.5 / x2.0 / x2.5 / x3.0 / x3.5 / x4.0 / x4.5 / x5.0.
1. Wait until the icons disappear from the playback image.
 2. Press **[Z]** to zoom in any image. The  icon appears, as well as the current magnification level.
 3. To zoom out of the image, press **[Z]**.
 4. Press directly onto  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 / disable scrolling, then use  to scroll to other parts of the image.



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

DELETING A PLAYBACK IMAGE

To delete the image currently being viewed during playback, press  and confirm. Protected images (indicated with ) cannot be deleted and must be unprotected first.



MOVIE PLAYBACK




To playback movies:

1. Wait until the icons disappear from the playback movie.
2. The  icon will then appear.
3. Press the Shutter Release button to start playback.
4. Press directly onto the  to hide the Progress Bar.
5. Press again to restore the Progress Bar.
6. Press the **Shutter Release** button again to stop the playback. The movie will return to Movie Playback OSD screen.



NOTE: All zooming functions are disabled during Movie Playback mode.

DELETING A PLAYBACK MOVIE

To delete the movie currently being viewed, stop the playback, press  and confirm. Protected movies (indicated with ) cannot be deleted and must be unprotected first.

1. In playback mode, press directly onto . Thumbnails of images will appear on the OSD.
2. Use  to navigate. Press directly onto  to view a chosen image or movie fully.


PLAYBACK MENU

1. Press the **MENU** button to access the Playback Menu.
2. Use  to navigate the menu screen. Press directly onto  to confirm setting changes.





FUNCTIONS	OPTIONS
Delete	Cancel / Select Images / All Images
Protect	Select Images / All Images
DPOF (Digital Print Order Format)	Select Images / All Images

DELETING MULTIPLE IMAGES AND MOVIES

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.

Deleting Selected Images and Movies

1. When "Select Images" is selected, the OSD displays up to nine thumbnail images similar to the Multi-Frame Review setting. Use  to navigate.
2. Highlight an image, then press directly onto  to confirm your selection.
3. The  icon will then appear to indicate that the image is set for deletion. To cancel the deletion, press directly onto  again.
4. Repeat Step 2 to set multiple images or movies for deletion.
5. Follow the rest of the on-screen options to confirm deletion.

Deleting All Images or Movies

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

PROTECTING IMAGES AND MOVIES



To protect / unprotect selected images and movies from accidental deletion:

1. When "Select Images" is selected, the OSD displays up to nine thumbnail images similar to the Multi-Frame Review setting. Use \odot to navigate.
2. Highlight an image, then press directly onto \odot to confirm your selection. The \odot icon will then appear to indicate that the image is set for protection.
3. To cancel the protection, press \odot directly onto again.
4. Repeat Step 2 to set multiple images or movies for protection.
5. Follow the rest of the on-screen options to confirm protection.

To protect / unprotect all images and movies from accidental deletion:

1. When "All Images" is selected, select the "Set Protect All" to **On** to confirm the protection of all images and movies.
2. 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 SD Card. When used, the SD 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 images. 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 SD /MMC card via an SD card / MMC reader (sold separately).

To specify DPOF of selected images:

1. When "Select Images" is selected, the OSD displays up to nine thumbnail images similar to the Multi-Frame Review setting. Use \odot to navigate.
2. Highlight an image, then press directly onto \odot to confirm your selection.
3. Press \blacktriangle or \blacktriangledown to set the number of prints for the selected image (up to a maximum of 9 for the selected image. When done, press directly onto \odot once again.
4. Repeat Step 2 to select more images for printing or change the previously specified numbers.
5. Press directly onto \odot and follow the rest of the on-screen options to confirm the DPOF setting.

To specify DPOF of all images:

1. When "All Images" is selected, all images will be set to the same specified printing number.
2. Press \blacktriangle or \blacktriangledown to set the number of prints of all stored images in the SD card, for up to a maximum of 9 copies.
3. Follow the rest of the options to confirm the DPOF setting.

SLIDESHOW

You can play back all images and movies in a slideshow format. The interval between images can be specified. During the slideshow, press **MENU** to stop. From here, you may choose to continue or exit the current slideshow.

SETTINGS	DESCRIPTIONS
Start	Start Slideshow according to the specified Interval and Repeat options.
Interval	Specifies the 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

CONNECTING TO A TV

You can playback the images and movies you have recorded on the camera on your TV. Connect your camera to the TV via the included video cable.

NOTE: Be sure to adjust the TV Out setting to correspond with your country's system (PAL / NTSC) before connecting the camera to the TV.

1. Turn off the TV and camera before connecting the video cable.
2. Plug the video cable into the camera's video socket.
3. Connect the video cable's yellow connector to the yellow AV input terminal of your TV.
4. Turn the TV and camera on. Make sure to switch the TV to the appropriate AV channel display.

NOTE: OSD is automatically off when the camera is connected to a TV.

NOTE: All image / movies can be viewed in Playback Mode or the camera can be used as a TV Cam in Record Mode.

INSTALLING SOFTWARE DRIVERS (WINDOWS-BASED PC)

Use the USB cable included to connect the camera to your Windows-based PC. This enables you to transfer, edit, and playback pictures and movies onto your PC.

Users of Windows 98-based PCs must install the software first before connecting the camera to the computer.

1. Insert the CD labelled "DS6688" into your CD-ROM drive. The installation will start automatically.
2. 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.
3. Follow the on-screen instruction to complete the installation of the camera drivers and software. When done, click on the [Finish] button on-screen to restart the PC.

NOTE: An optional cradle with mini USB connector can be used with this product. Please contact your local distributor for more details about this option.

NOTE: The Macintosh does not require software driver installation.

TRANSFERRING FILES FROM CAMERA TO PC

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

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

1. Turn on your PC or Macintosh and allow your system's operating system to boot up.
2. Turn off your digital camera. Connect the camera and your PC or Macintosh via the USB cable.
3. Turn on your digital camera to any mode. The device's status lamp will blink.
4. The camera will then appear as a Removable Disk drive on your PC's **My Computer**.

NOTE: On the Macintosh, an "Untitled" icon will appear on the screen. Click on it to access the images and movies that are stored on your camera.

5. 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.
6. A new subfolder is now visible, [100DSHOT]. It contains all images stored as .JPG files and movie clips as .AVI files.
7. You can double-click on the images and movies to view them. These files can also be deleted, copied, or moved like normal computer files.

DISCONNECTING THE CAMERA 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 should be stopped before disconnecting the USB cable.

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

NOTE: For Mac users, move the "Untitled" icon to the trash icon to disconnect the camera from the Mac.

ADDENDUM**MEMORY CAPACITY, SIZE AND QUALITY**

The table below indicates the number of images that can be stored when using a 16MB Secure Digital / Multi-Media card.

RESOLUTION	Approximate Number of Pictures Stored under the Following Picture Quality Selections		
	HIGH	STANDARD	ECONOMY
Super Fine (2048 x 1536)	9	16	28
Fine (1600 x 1200)	20	31	37
Normal (1280 x 1024)	29	40	56
Basic (640 x 480)	66	105	205

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 SD card memory capacity.

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
	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
Taking Pictures	Cannot take pictures when Shutter Release Button is pressed	Camera not turned on	Turn on the camera.
		No space on the SD card / MMC / internal Memory.	Delete unwanted files or insert a new SD card or MMC
		Mode Switch is set to Playback mode	Change the Mode Switch to Camera or Movie Mode

PROBLEM	SYMPTOM	CHECK THIS	REMEDY
	Flash does not go off as expected.	Flash is set to No Flash Mode	Enable flash by changing it to another setting
		Mode Switch is set to Playback or Movie Mode.	Change the Mode Switch to Camera Mode.
		Flash has not finished charging	Wait until the Status Lamp stops blinking
	Image taken appears too dark or blurred.	Check your Flash Mode	Turn on the flash by changing the Flash Mode
		The subject is too far away.	Move closer to the subject
		The lens is dirty	Clean the lens with a soft cloth
Playback	Cannot play back images or movies	Mode Switch is not set to Playback Mode	Set Mode Switch to Playback Mode.
		No images or movies are recorded	Images located in internal memory instead. Remove SD card / MMC
	Cannot delete images or movies	Images or movies are protected	Unprotect the images or movies
	Connecting with External Devices	Picture not shown on TV when connected	Check cable connection
Check channel on TV.			TV channel should be switched to the appropriate AV channel.
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 or PC is not turned on	Turn on the camera and PC

SPECIFICATIONS

TYPE	DESCRIPTION
Sensor	1 / 2" high-density CMOS Total number of pixels: 3.1 million
Image size	Selectable from: • 2048 x 1536 pixels • 1600 x 1200 pixels • 1280 x 1024 pixels • 640 x 480 pixels (VGA)
File Format	DCF-compliant (Exif ver. 2.2 JPEG-compliant)
Lens	F = 3.0
Digital zoom	2x
Shooting distance	Portrait: 1 - 1.3 meters Group: 1.2 - 3 meters Landscape: 2.8 - ∞ meters
Flashlight Distance	Approx. 1m ~ 3m
Operation Environment	Temperature: Approx. 0°C ~ 40°C
Display	1.5" TFD LCD
Internal Memory	16MB
Digital Video Recording	320 x 240 pixels
TV Video Output	NTSC / PAL compatible
Storage Media	Secure Digital memory card / Multi-Media Card
Digital Output	USB 1.1 interface to PC
Software	ArcSoft PhotoImpression 3.0
Product Dimension	96 x 63.5 x 16 mm
Unit Weight	Approx. 100g (without batteries)

Battery Specification	2 AAA-sized batteries (LR03)
White Balance	1. Auto 2. Sunlight (4800-5400K) 3. Shade / Cloudy (5400K-7000K) 4. Fluorescent (white) (4000-4400K) 5. Fluorescent (yellow) (4400-4800K) 6. Tungsten (2500-3500K)
Metering	1. Matrix (25 zones) 2. Center weighted (central 9 zones) 3. Spot (central 1 zones)
ISO Sensitivity	50, 100, 200

European technical support line +34 902 100 302
UK technical support 0906 752 5600
(Premium Rate line - calls charged at 75p per minute)

ABOUT OREGON SCIENTIFIC

Visit our website (www.oregonscientific.com) to learn more about Oregon Scientific products such as digital cameras; MP3 players; children's electronic learning products and games; projection clocks; health and fitness gear; weather stations; and digital and conference phones. The website also includes contact information for our customer care department in case you need to reach us, as well as frequently asked questions and customer downloads.

We hope you will find all the information you need on our website, however if you'd like to contact the Oregon Scientific Customer Care department directly, please visit www2.oregonscientific.com/service/support or call 949-608-2848 in the US. For international enquiries, please visit <http://www2.oregonscientific.com/about/international/default.asp>.

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Note: "In case of electrostatic discharge, the product may not function properly and requires manual reset by removing the batteries and re-insert them. Upon reset, video messages recorded will remain intact. If a video message is being recorded, the video message will be discarded."

FCC NOTICE

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

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.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Oregon Scientific, Inc.
19861 SW 95th Place
Tualatin, Oregon 97062, USA
Tel: 800-853-8883
Fax: 503-684-8883



Caution:

Modification

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Oregon Scientific, Inc. may void the user's authority to operate the equipment.

Interface cable

Use the shielded cable sold or provided by Oregon Scientific, Inc. for your equipment. Using other interface cable may exceed the limits of Class B Part 15 of the FCC rules.