

FCC STATEMENT

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.

Note:

This equipment has been tested and found to comply with the limits for Class B digital devices, 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

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules. Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

TRADEMARK INFORMATION

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- Pentium[®] is a registered trademark of Intel Corporation.
- Macintosh is a trademark of Apple Computer, Inc.
- SD[™] is a trademark.
- Other names and products may be trademarks or registered trademarks of their respective owners.

READ THIS FIRST

Notice:

1. Product design and specifications are subject to change without notice. This includes primary product specifications, software, software drivers, and user's manual. This User Manual is a general reference guide for the product.
2. The product and accessories that come with your Vivicam 4000 may be different from those described in this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products will often vary between retailers especially with accessories such as batteries, chargers, AC adapters, memory cards, cables, carrying cases/pouches, and language support. Occasionally a retailer will specify a unique product color, appearance, and internal memory capacity. Contact your dealer for precise product definition and included accessories.
3. The illustrations in this manual are for the purpose of explanation and may differ from the actual design of your Vivicam 4000.
4. The manufacturer assumes no liability for any errors or discrepancies in this user manual.
5. For user manual and driver updates, refer to our website.

WARNING

- Do not use this camera if it is emitting smoke (or an unusual odor), if it becomes unusually hot to the touch, produces a peculiar noise, or exhibits any other abnormal conditions. Operating the camera in any of these circumstances may cause a fire or an electrical shock. Stop using the camera immediately, turn the camera off and remove the battery. Contact your dealer or authorized service facility for repairs. Never attempt to repair this camera by yourself, as this may be dangerous.

- Do not expose the camera to moisture and make sure no water gets into the camera. Take particular care when using the camera under extreme weather conditions, such as rain or snow, or when operating the camera at the beach or near water. Avoid using this camera in places subject to extreme moisture. Do not use the camera if water has entered the camera. Turn the camera off and remove the battery. Contact your dealer or authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.

- Do not use the camera if any foreign objects have entered the camera. Turn the camera off and remove the battery. Contact your dealer or authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.

- Do not place the camera in an unstable location such as on a wobbly table or sloping surface where the camera may fall or tip over and cause injury. If the camera has been dropped or damaged, turn the camera off and remove the battery. Contact your dealer or authorized service facility. Do not continue to use the camera as this may cause a fire or an electrical shock.

- Do not insert or drop metallic or other foreign objects into the camera through access points such as the memory card slot. This may cause a fire or an electrical shock.

- Do not attempt to modify this camera. Do not remove the camera casing. This may cause a fire or an electrical shock. Internal inspection and repairs should only be carried out by an authorized service facility.

- Never operate this camera in any way while driving a vehicle. This may cause a traffic accident.

- Never attempt to use an AC adapter/charger with the Vivicam 4000 if you are using a Duracell CP1 battery.

CAUTION

- Do not place this camera in a location affected by oil fumes or steam, such as near a cooking stove or humidifier. This may cause a fire or an electrical shock.

- Do not leave this camera in a location subject to extremely high temperatures, such as in a sealed vehicle or in direct sunlight. Exposure to high temperatures may adversely affect the camera case and internal components and may cause a fire.

- Do not cover or wrap the camera with a cloth or quilt. This may cause heat to build up and distort the camera case and cause a fire. Always use the camera and accessories in well-ventilated locations.

- Handle the camera carefully and do not expose the camera to shock or vibration. Handling the camera roughly may cause a malfunction.

- Do not use battery other than those specified for use with your camera. Use of unsuitable battery may result in the battery splitting, or leaking and may cause a fire, injury, or soiling of the battery compartment.

- When placing the battery into the camera, check the polarity markings on the battery (- and +) to ensure that the battery is inserted correctly. Incorrect battery polarity will result in camera inoperability and may result in the battery splitting or leaking and causing a fire, injury, or soiling of the battery compartment.

- Remove the battery if the camera will not be used for an extended period of time. The battery may leak and cause a fire, injury or soiling of the battery compartment. If the battery leaks, clean and wipe the battery compartment carefully and install a new battery. Wash your hands carefully if you touch the battery fluid.

- **WARNING:** Handling the USB and AV cables on this product may expose you to lead, a chemical known to the State of California to cause birth defects or other reproductive harm. *Wash hands after handling.*

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INTRODUCTION

Overview

Congratulations on your purchase of the new digital Vivicam 4000.

Capturing high-quality digital images is fast and easy with this state-of-the-art smart camera. Equipped with a 6.3 Mega pixel CCD, this Vivicam 4000 is capable of capturing images with a resolution of up to 2816 x 2112 pixels. The Vivicam 400 is fully automatic. It will adjust focus, exposure, and lighting balance resulting in superior images. The Vivicam 4000 has full manual control, as well. The advanced controls and program-modes allow you to exercise complete control over your photographic settings, allowing for both creativity and precision.

Other outstanding features of the Vivicam 4000 include:

Other cool features provided by the camera include the following:

- | | |
|----------------------------------|---|
| LCD monitor - | The 2.0" TFT color LCD monitor makes it easy to frame your subject when capturing images. It also displays the images you have captured. |
| Memory cards - | The Vivicam can use Secure Digital (SD) memory card up to 512MB capacity. |
| Photography modes - | A variety of photography modes allow you to adjust for the precise circumstances of your particular photographic conditions. |
| Optical zoom - | The 3x optical zoom lens allows you to capture telephoto and wide-angle images. |
| Digital zoom - | 4.4x digital zoom in conjunction with the 3x optical zoom permit zoom photography of up to 13.2 times. Captured images may be reviewed and a selected portion of an image may be enlarged up to 4x. |
| Flexible flash settings - | You may adjust the flash setting according to your lighting environment and photography mode you have selected. |

- Focus mode** - Your images will be sharp and clear with a variety of focus modes. Autofocus provides crisp focus under most conditions, however you may also specify the focal distance using macro (for close-ups), infinity, or fixed focus at 3 m (9 feet), or 1 m (3 feet.)
- Self-timer mode** - The self-timer may set to 2 seconds, 10 seconds, 10+2 seconds, or a defined capture interval allowing for some creative effects.
- Still image burst capture** - Still images may be captured individually or in bursts of three or five allowing you to capture action scenes at just the right moment.
- Auto-exposure bracketing** - For capturing scenes with just the right exposure.
- Movie mode** - In addition to still-images, you may capture video clips with audio (voice.)
- Voice memo** - You may annotate your images with a 30 second voice memo. Images may be voice-annotated at the time of capture, or during playback.
- Thumbnail display** - Display your images in sets of nine on the LCD for quick selection of an particular image.
- TV and PC connection** - You may view your images on a television monitor or a computer using the USB or A/V cables.

Package Contents

Carefully unpack your Vivicam 4000 and ensure that you have the following items.

Common Product Components:

- Digital camera
- A/V cable
- User's manual
- USB cable
- Software CD-ROM
- Camera strap
- Camera pouch

Common (Optional) Accessories:

- SD card
- AC power adapter
- Rechargeable lithium-ion battery
- Battery charger

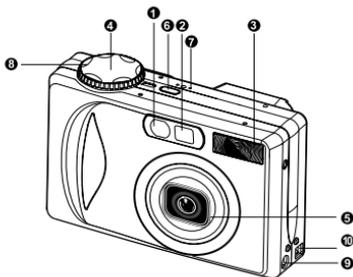


NOTE

- The components and accessories that come with your Vivicam 4000 may be different from those described in this manual. This is due to the fact that different retailers often specify slightly different product inclusions and accessories to suit their market requirements, customer demographics, and geographical preferences. Products will often vary between retailers especially with accessories such as batteries, chargers, AC adapters, memory cards, cables, carrying cases/pouches, and language support. Occasionally a retailer will specify a unique product color, appearance, and internal memory capacity. Contact your dealer for precise product definition and included accessories.

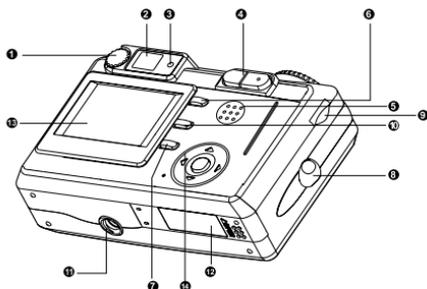
GETTING TO KNOW THE VIVICAM 4000

Front View



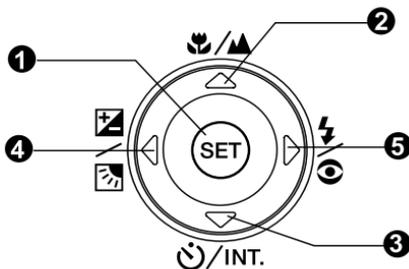
#	Name	Description
1.	Self-timer LED (AF auxiliary light)	Blinks green during Self-timer mode until the image is captured. Effective for still image capture mode when the luminance value of Auto and Macro focus mode is below 6.
2.	Viewfinder window	Allows you to frame the subject of the picture.
3.	Flash	Provides flash illumination in one of several modes.
4.	Shutter button	Focuses and locks both focus & exposure when pressed halfway down. Captures the image when pressed all the way down.
5.	Zoom lens	3x optical zoom lens allows you to capture telephoto and wide-angle images.
6.	POWER button	Turns the Vivicam 4000 power on and off.
7.	MIC (Microphone)	For recording audio with movies clips and voice annotations.
8.	Mode dial	Sets the camera mode.
9.	DC IN 5V terminal	Allows you to connect an AC power adapter to operate the camera without a battery, or to charge rechargeable battery.
10.	USB/A/V OUT terminal	Allows you to connect a USB cable or an A/V cable to the Vivicam 4000.

Rear View



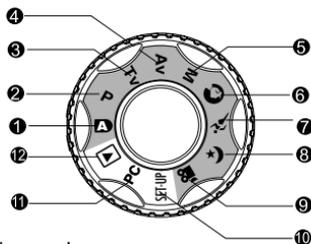
#	Name	Description
1.	Diopter adjustment dial	Provides a clearer image when using the optical viewfinder.
2.	Viewfinder window	Allows you to compose your subject using the optical viewfinder.
3.	Viewfinder LED	Indicates the cameras operational status.
4.	 (Zoom in) button	Zooms the lens to telephoto position.
5.	 (Zoom out) button	Zooms the lens to wide-angle position.
5.	Speaker	For playback or recorded audio.
6.	MENU button	Toggles On-Screen Display (OSD) menu on and off.
7.	 (Display) button	Turns the LCD monitor display, informational icons, and live view on and off.
8.	Strap lug	Camera strap attachment.
9.	Selection wheel	Selects the next/previous image in playback mode. Changes the exposure compensation, shutter speed/aperture setting while in manual or program modes.
10.	 (Erase) button	Allows you to erase an image.
11.	Tripod socket	For tripod mounting.
12.	Battery/SD card cover	Access to the battery and memory card.
13.	LCD monitor	For image preview/review. Displays control menus, camera settings, and operational icons.
14.	SET /Direction button	Allows you to scroll through menus and images, and then select your choices.

SET /Direction button



#	Name	Description
1.	SET button	Enters the menu page and confirms the chosen setting.
2.	▲ button 🌸/▲ (Focus) button	Scrolls upwards. Allows you to choose the appropriate focus setting.
3.	▼ button 🕒/INT. (Self-timer) button	Scrolls downwards. Allows you to toggle the self-timer on/off, selects the desired self-timer mode or choose the interval photography.
4.	◀ button 📷/📷 (Exposure compensation / Backlight correction) button	Scrolls left. Allows you to toggle the exposure compensation/ backlight correction on and off.
5.	▶ button ⚡/🕒 (Flash) button	Scrolls right. Allows you to choose the appropriate flash setting.

Mode dial



■ : photography mode

#	Mode	Description
1.	A Auto photography	The Vivicam 4000 is automatically sets for exposure, etc.
2.	P Program (auto exposure)	In program mode the shutter speed and aperture will be set automatically, but other parameters may be set manually.
3.	Tv Shutter speed priority	You may specify the shutter speed while the camera sets the corresponding aperture value.
4.	Av Aperture priority	You may specify the aperture value while the camera sets the corresponding shutter speed.
5.	M Manual photography	For full manual control over exposure, aperture and other settings.
6.	 Portrait	To photograph a person and defocus (blur) the background.
7.	 Sports	For photographing fast-moving subjects.
8.	 Night scene	For photographing evening or night scenes.
9.	 Movie	For recording video clips.
10.	SET-UP Set-up	Specify your camera's settings.
11.	PC PC	For downloading images to a computer.
12.	 Playback	For image playback and review.

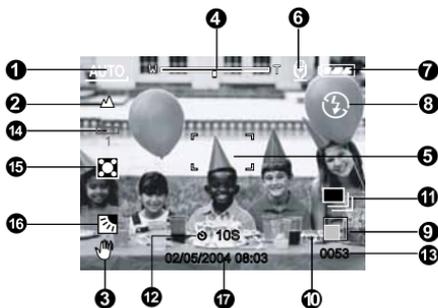
Viewfinder LED Indicator

The viewfinder LED indicates the current operational status of the camera. The meaning of the LED changes depending upon what the camera is doing (powered-off, capturing, re-playing, or downloading.)

Color	Status	During power off	During photography	During playback	During connection to a PC
Green	On	The battery is charging.	Auto focusing successful. (AF is locked)	-	The Vivicam 4000 is connected to a PC.
	Flashing	-	-	-	-
Red	On	Camera is operating from AC adapter.	Image is being processed and stored to SD card	Image is being processed for replay.	SD card access in progress. PC mode stand by.
	Flashing	-	Auto focus failure, or Interval photography stand by.	-	-
Orange	On	Battery-charging is being initialized.	Processing image. Flash charging in progress.	-	Not recognized by the PC, or other status.
	Flashing	-	Insufficient battery power, camera malfunction, battery cover open, or SD card write-protected.	Insufficient battery power.	Insufficient battery power. No SD card.

LCD Monitor Icons

For Photography modes: [**A**] [] [] []



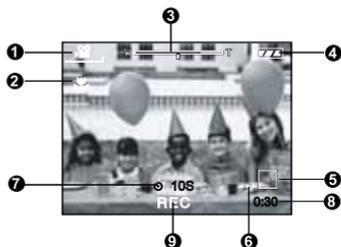
- | | |
|--|--|
| 1. Mode | 8. Flash-mode |
| 2. Focus setting | 9. Image size (resolution) |
| 3. Long-exposure time warning icon (potential for hand-shake blur) | 10. Image quality setting |
| 4. Zoom status | 11. Burst-mode |
| 5. Focus area (When the shutter button is pressed halfway.) | 12. Self-timer icon |
| 6. Voice memo | 13. Possible number of shots remaining |
| 7. Battery condition | 14. White balance |
| | 15. Metering |
| | 16. Backlight correction |
| | 17. Date and time |



NOTE

- Pressing the  button changes the LCD display in the sequence of: display with icons, display without icons, LCD monitor OFF.

For Movie mode: []



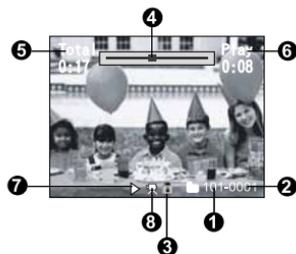
1. Movie-mode icon
2. Focus setting
3. Zoom status
4. Battery condition
5. Movie resolution
6. Movie quality
7. Self-timer icon
8. Possible recording time/ elapsed time
9. Recording indicator

Playback mode []-Still Image Playback



1. Folder number
2. File number
3. Voice memo
4. Protect icon
5. Mode

Playback mode []-Video Playback

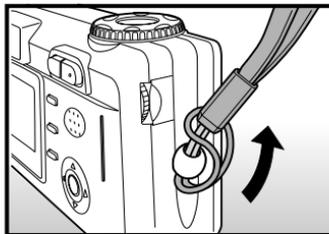
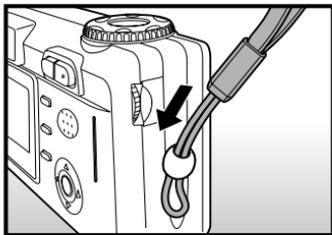


1. Folder number
2. File number
3. Protect icon
4. Movie status bar
5. Total time
6. Elapsed time
7. Play mode
8. Mode

GETTING STARTED

Attaching the Camera Strap

Attach the camera strap as shown in the illustration.

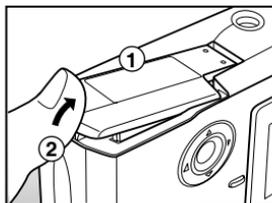


Inserting and Removing the Battery (Optional Accessory)

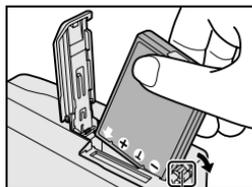
It is highly recommend using the original rechargeable lithium-ion battery to fully demonstrate the camera's full functionality. Charge the battery fully before using the Vivicam 4000. Make sure that the camera is off and the AC adapter line is disconnected before inserting or removing the battery.

Inserting the Battery

1. Open the battery/SD card cover.

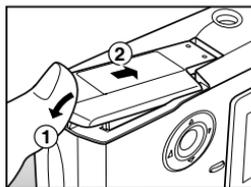


2. Insert the battery in the correct orientation shown.
 - Tilt the battery lock lever in the direction of the arrow and orient the battery so that its label is facing the front side of the camera, and then insert the battery.



Battery lock lever

3. Close the battery/SD card cover.



Removing the Battery

Open the battery/SD card cover and then release the battery lock lever. When the battery has come out a little, slowly pull it out the rest of the way.

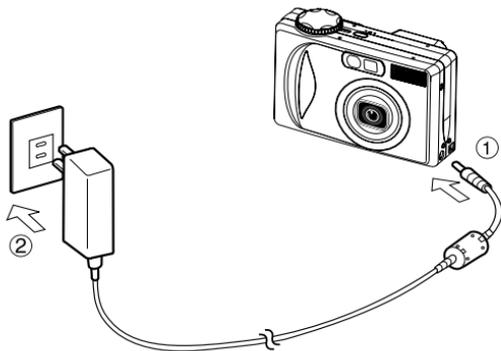


NOTE

- If you are not going to use the battery for an extended period of time, remove it from the camera to prevent leakage or corrosion.
- Avoid using the battery in extremely cold environments as low temperatures can shorten the battery life and reduce the camera performance.
- You may also use a non-rechargeable Duracell CP1 Lithium battery. Never attempt to use an AC adapter/charger with a CP1.

Charging the Battery

To maximize performance and lifetime, we recommend that you fully charge the battery and discharge it for at least one complete cycle before use. Using the optional AC power adapter charges the battery while the battery is inside the camera. Make sure that the camera is powered off and the AC adapter is disconnected from the camera before inserting or removing a battery.



1. Insert one end of the AC power adapter into the DC IN 5V terminal of the camera.
2. Insert the other end of the AC power adapter into a wall outlet.
 - The viewfinder LED lights orange momentarily when an AC adapter is connected to the camera and a battery is inside the camera. The viewfinder LED will then turn green while charging is in progress. The LED goes off when charging is completed. If the LED remains orange a charging error has occurred.
 - It is recommended to fully discharge the battery before recharging.
 - Charging time varies according to the ambient temperature and the status of battery.
 - You may use the Vivicam 4000 while the battery is charging, with the AC power adapter connected.



NOTE

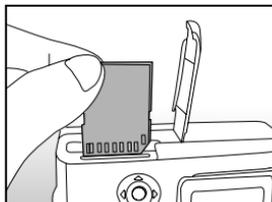
- Use only the specified AC power adapter. Damage caused by the use of an incorrect adapter is not covered under the warranty.
- The battery may feel warm after it has been charged or immediately after being used. This is normal and not a malfunction.
- When using the camera in cold conditions, keep the camera and battery warm by storing it in a warm place such as an interior pocket between shots.
- If you open the battery/memory card cover without removing the battery, the battery power will not be disconnected. If you remove the battery for more than two hours the date and time must be reset.
- Never attempt to use an AC adapter/charger with the Vivicam 4000 if you are using a Duracell CP1 battery.

Inserting and Removing an SD Memory Card (Optional Accessory)

Images captured with the Vivicam 4000 will be stored on a Secure Digital (SD) memory card. You must have an SD card in place to use the Vivicam 4000. Before inserting or removing the SD card, make sure that the power of the camera is off.

Inserting an SD card

1. Open the battery/SD card cover.
2. Insert the SD card in the correct orientation as shown.
 - Hold the SD card with the contact pins facing the rear side of the camera. Insert the card as far as it can go. There will be a distinct click as the card seats fully into the card slot.
3. Close the battery /SD card cover.



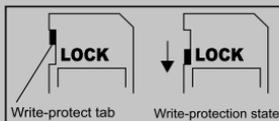
Removing an SD card

Open the battery/SD card cover, press lightly on the edge of the SD card and it will eject.



NOTE

- If the Vivicam 4000 is powered on without an SD card inserted, a message "NO CARD" appears on the LCD monitor.
- To prevent valuable data from being accidentally erased from an SD card you can slide the write-protected tab (on the side of the SD card) to "LOCK".
- However, to save, edit or erase data on an SD card, you must unlock the card.
- The Vivicam 4000 cannot use MultiMediaCard™ (MMC) memory cards.
- Removing a memory card when the camera power is on may potentially corrupt the memory card.



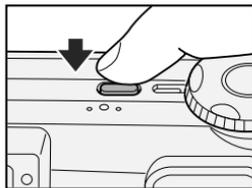
Turning the Power On/Off

Load the battery and insert an SD card before starting.

Turning the power on

Press the **POWER** button to turn the power on.

- The viewfinder LED lights green and the camera is initiated.
- When the power is turned on, the camera will start in the mode that is currently selected by the mode dial.



Turning the power off

Press the **POWER** button to turn the power off.



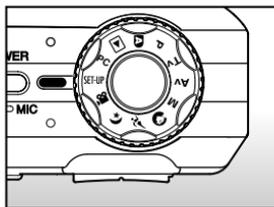
NOTE

- The camera will automatically power-off if the camera has not been used for a defined period of time (one minute.) To resume operation, turn the power on again. Refer to the section in this manual titled "**Auto PoFF**" in the **Setup Menu (Basic tab)** for further details.
- When the power is turned on, it may take several seconds to charge the flash. While the flash is being charged, the viewfinder LED lights orange. The camera is not ready until the flash has charged. The camera is ready when the viewfinder LED is off.

Formatting an SD Card

Formatting a SD card will erase all of the images and folders that have been recorded on the SD card. Formatting is not possible when the SD card is in the locked condition.

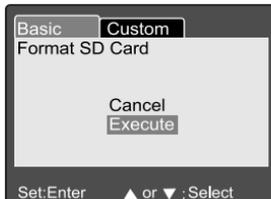
1. Set the mode dial to [SET-UP].
 - [Basic] of the set-up menu is displayed.



2. Select [Format] with the ▲ / ▼ buttons from [Basic] of the set-up menu, then press the **SET** button.



3. Select [Execute] with the ▲ / ▼ buttons, and press the **SET** button.
 - To cancel formatting, select [Cancel] and press the **SET** button.



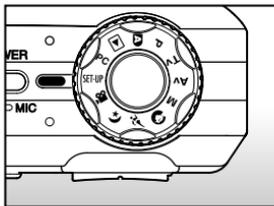
NOTE

- You should format an SD card before using it in this camera.
- Formatting an SD card erases everything from the memory card including images, videos, and also non-image data. Before formatting a card, make sure to extract all valuable data from it.
- Formatting is an irreversible action and data cannot be recovered at a later time.
- It is good practice to format a memory card occasionally. If you use your SD memory card with another digital camera or another electronic device it is best to reformat the memory card before using it in the Vivicam 4000.

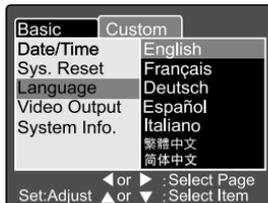
Choosing the OSD Language

When you first turn the Vivicam 4000 on, choose an On-Screen Display (OSD) language for information displayed on the LCD monitor.

1. Set the mode dial to [**SET-UP**] and press the
 - ▶ button
 - [Custom] of the set-up menu is displayed.



2. Select [Language] with the ▲ / ▼ buttons and press the **SET** button.
 - The available OSD languages will be displayed.
 - Select the displayed language using the ▲ / ▼ buttons and press the **SET** button. The setting will be stored.
 - The selected language will be used for the OSD.



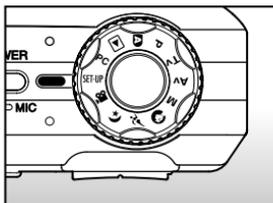
Setting the Date and Time

The date/time needs to be set if/when:

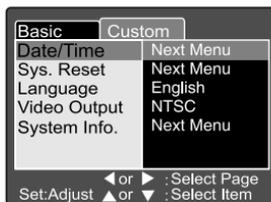
- Camera is turned on for the first time.
- Camera is turned on after leaving the camera without a battery for an extended period of time.

When the date and time information is not displayed on the LCD monitor, follow these steps to set the correct date and time.

1. Set the mode dial to [SET-UP] and press the **▶** button.
 - [Custom] of the set-up menu is displayed.



2. Select [Date/Time] with the **▲** / **▼** buttons and press the **SET** button.
 - The Date/Time setting screen will be displayed.



3. Select the item's field with the **◀** / **▶** buttons and adjust the value for the date and time with the **▲** / **▼** buttons.



4. After confirming all settings are correct, press the **SET** button.
 - The setting will be stored and the screen will return to the set-up menu.
 - The date and time is set in the order year-month-day-hour-minute.

Setting Image Resolution and Quality

Resolution and quality settings determine the pixel size (dimension), image file size, and compression ratio for your images. These settings affect the number of images that can be stored on a memory card. As you get to know the Vivicam 4000, it is recommended that you try each quality and resolution setting to get an appreciation for the effects that these settings will have on your images.

Higher resolution and higher quality images offer the best photographic results but produce large file sizes. Therefore, few images will take up a lot of memory space.

High resolution and quality settings are recommended for printed output and situations requiring the finest detail. Lower resolution/quality images take up less memory space and may be quite suitable for sharing images via e-mail, in a report, or on a web page.

To change image resolution or image quality, perform these steps below:

1. Set the mode dial to one of the photography modes.
2. Press the **MENU** button.
 - [Picture] of the photography menu is displayed.
3. Select [Size] with the ▲ / ▼ buttons, and press the **SET** button.
4. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
5. Select [Quality] with the ▲ / ▼ buttons, and press the **SET** button.
6. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
7. To exit from the photography menu, press the **MENU** button.



Possible number of shots (Still images)

The following table shows the approximate shots that you can capture at each setting based on an optional SD card from 32MB to 512MB.

Image size	Quality	SD card capacity				
		32MB	64MB	128MB	256MB	512MB
 (6M) 2816 x2112	★★★ (Fine)	11	22	45	91	183
	★★ (Standard)	18	38	77	154	311
	★ (Economy)	34	70	142	283	571
	TIFF	2	5	10	21	43
 (4M) 2272 x1704	★★★ (Fine)	18	37	76	151	305
	★★ (Standard)	30	61	124	247	498
	★ (Economy)	59	121	244	487	981
 (2M) 1600 x1200	★★★ (Fine)	37	76	153	306	616
	★★ (Standard)	59	121	244	487	981
	★ (Economy)	118	242	489	975	1963
 (VGA) 640 x 480	★★★ (Fine)	145	298	602	1200	2417
	★★ (Standard)	210	430	870	1734	3491
	★ (Economy)	379	775	1566	3121	6284

Possible recording time/sec (Video clip)

Image size	Quality	SD card capacity				
		32MB	64MB	128MB	256MB	512MB
 320 x 240	★★★ (Fine)	01:45	03:34	07:13	14:23	28:59
	★★ (Standard)	02:36	05:20	10:46	21:28	43:13

* The data shows the standard testing results. The actual capacity varies according to the shooting conditions and scene content.

**NOTE**

- The memory card testing results for 512MB are based on Toshiba, Panasonic, and San Disk SD memory cards.

PHOTOGRAPHY MODE

[**A**] Auto Mode

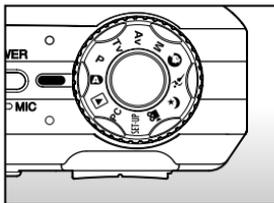
Auto photography mode is perhaps the most commonly used photography mode. Images can be captured simply because the exposure (the combination of shutter speed and aperture setting) is determined automatically to suit the photographic conditions.

You can use either the optical viewfinder and/or the 2.0" LCD monitor to compose your images. Capturing images using the optical viewfinder will conserve the battery power. If the battery power is low, it is recommended that you only compose images using the viewfinder. Using the LCD monitor, you can compose images more accurately, but at the cost of the battery consumption. Always use the LCD display for close-up macro shots.

Using the Optical Viewfinder

Make sure that the battery and SD card are inserted before capturing images.

1. Press the **POWER** button to turn the power on.
2. Set the mode dial to [**A**].

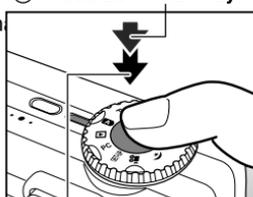


3. Compose your image in the viewfinder.
- Turn the “diopter adjustment dial” until the image is clear in the viewfinder.

4. Press the shutter button.

- Pressing the shutter button down halfway automatically focuses and adjusts the exposure. Pressing the shutter button down fully captures the images.
- The focus-area frame turns blue and the viewfinder LED lights green when the camera is focused and exposure is determined.
- When the focus or exposure is not suitable, the frame of the focus area turns yellow and the viewfinder LED flashes red.
- Images (The captured image) will be displayed while the image is being recorded onto the memory.
- When the voice memo is set to “ON”, [VOICE RECORDING] will be displayed on the screen immediately after the image is captured and voice memo recording will start.
- Press the shutter button one more time during recording, or wait for 30 seconds, [VOICE RECORD END] will be displayed and the recording will end. A [] icon is displayed with images that have been recorded with a voice memo.

① Press down halfway.

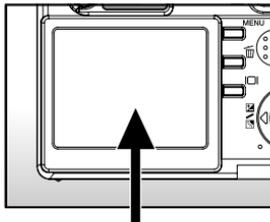


② Press down fully.

Using the LCD Monitor

Make sure that the battery is inserted before capturing images.

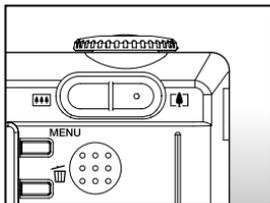
1. Press the **POWER** button to turn the power on.
2. Set the mode dial to [**A**].
 - By default, the LCD monitor setting is on.
3. Compose your image in the LCD monitor.
4. Press the shutter button down halfway, then press it down fully.



Using the Optical Zoom

Zoom photography allows you to capture images magnified up to 3 times or wide-angle photography depending on the distance up to the subject. You can also enlarge the center of the scene and capture images in the digital zoom mode.

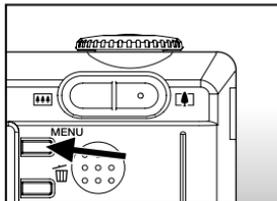
1. Set the mode dial to one of the photography modes.
2. If required, turn on the LCD monitor by pressing the  button.
3. Compose the image with the zoom button.
 - Pressing the  button zooms in on the subject, and enlarges the subject on the LCD monitor.
 - Pressing the  button provides a wider-angle image.
 - The lens position moves according to the zoom setting.
4. Press the shutter button down halfway to set the focus and exposure, then press it down fully to capture the image.



Using the Digital Zoom

Using a combination of 3 times optical zoom and 4.4 times digital zoom permits zoom photography up to 13.2 times to suit the subject and the distance. Digital zoom is a compelling feature, however, the more an image is enlarged (zoomed), the more pixilated (grainer) the image will appear.

- Set the mode dial to one of the photography modes.
- Turn on the LCD monitor by pressing the  button.
- To enable the digital zoom:
 - Press the **MENU** button.
 - Select [Function] with the  /  buttons.
 - Select [Digital Zoom] with the  /  buttons, and press the **SET** button.
 - Select [ON] with the  /  buttons again, and press the **SET** button.
 - Press the **MENU** button to exit from the menu screen.
 - To activate the digital zoom, press the  button completely and hold it until the image on the LCD monitor expands.
- Press the shutter button to capture a “zoomed” image.



Picture	Function	AE/AWB
Capture Mode	Single	
Voice Memo	ON	
LCD Bright.	+1	
Digital Zoom	ON	
Preview	OFF	
Date Print	OFF	
Interval/Count	Next Menu	
Menu:Exit	 or 	Select Page
Set:Adjust	 or 	Select Item

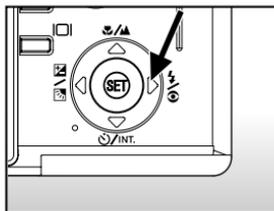


- Digital zoom is cancelled when the  button is pressed and the LCD monitor is turned off.
- The zoom setting is automatically cancelled by either turning the camera off or the activation of the Auto Power Off function.

Setting the Flash

Set the flash for capturing images. The flash mode can be selected for the particular photographic conditions.

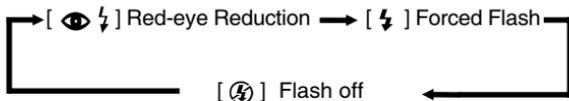
- Set the mode dial to one of the photography modes.
 - The available flash modes are dependant on the selected photography mode, scene mode, and capture mode.
- Toggle the  button to select the desired flash mode.
 - Each press of the  button moves the icon one step through the sequence and displays it on the screen.



- For the automatic mode [**A**]:



- For the modes [**P**], [**Tv**], [**Av**] and [**M**]:



The table below will help you choose the appropriate flash mode:

Flash mode	Description
[Blank] Auto	The flash fires automatically to suit the photographic conditions. This flash mode is only available when the camera is set to the [A] mode.
[] Red-eye Reduction	Use this mode to reduce the red-eye phenomenon when you want to capture natural-looking photographs of people and animals in low-light conditions. When capturing photographs, the red-eye phenomenon can be reduced by asking the subject (person) to look at the camera or get as close to the camera as possible. The flash always fires twice, and the image is captured at the second firing. When the camera mode is [A] and [P], the flash will fire to suit the brightness of the subject. When the camera mode is [Tv], [Av] and [M], the flash will always fire.
[] Forced Flash	In this mode, the flash always fires. Use this mode for photographing under artificial light such as backlighting, fluorescent lighting, etc.
[] Flash Off	Use this mode when capturing images using indoor lighting, for stages and indoor competitions, and when the subject is too far away for the flash to be effective.



NOTE

- In [] portrait mode, the flash mode is fixed to [] Red-eye Reduction.
- In [] sports mode, the flash mode is fixed to [] Off.
- In [] night-scene mode, the flash mode is fixed to [] Forced Flash.
- In [] landscape-focus mode, the flash mode is fixed to [] Off.
- The flash cannot be used in the [] movie mode and burst mode [Continuous] and [Auto Exp.].

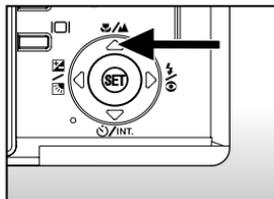
Setting the Focus

Images can be captured with the focus determined automatically using auto focus []. You may over-ride the auto focus and specify macro, [] infinity, [**3M**] fixed at 3 m (9 feet), or [**1M**] fixed at 1 m (3 feet). Specifying the focus manually can give you precise focus control and it also reduces the shutter latency-time slightly. (The time delay between pressing the shutter button and the time of actual image capture.)

The focus setting will be maintained even when the power is turned off or when Auto Power Off is activated. The available focus settings will depend on the selected photography mode.

1. Set the mode dial to one of the photography modes.
2. Toggle the  button to select the desired focus mode.

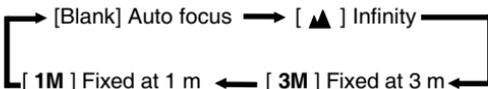
- Each press of the  button moves the icon one step through the sequence and displays it on the screen.



- For the modes of [**A**], [**P**], [**Tv**], [**Av**], [**M**], [] and []:



- For the modes of [] and []:



The table below will help you choose the appropriate focus mode:

Focus mode	Description
[Blank] Auto Focus	Select auto focus for most occasions when you want the camera to automatically determine the focus setting. Using auto focus any object at a range of focus is 80 cm (32 inches) or greater can be in focus.
[] Macro	Select macro to capture close-up images. When the lens is zoomed to its widest position you may focus objects as close as 9 cm (4 inches). When the lens is zoomed to its telephoto position (3 x zoom) you may focus objects as close as 30 cm (12 inches).
[] Infinity	Select the infinity-focus setting when you want to capture images of objects at a distance of 5 m (15 feet) or more from the camera.
[3M] Fixed at 3 m	Select the 3 meter-focus setting when you want to capture objects of at a distance of about 3 m (9 feet) from the camera.
[1M] Fixed at 1 m	Select the 1 meter-focus setting when you want to capture objects of at a distance of about 1 m (3 feet) from the camera.



NOTE

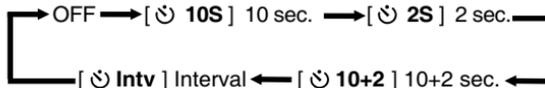
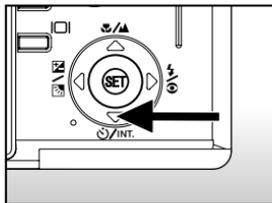
- When [], [**3M**] or [**1M**] is set, the Vivicam 4000 captures images with the focus fixed at those distances.

Self-timer/Interval Photography

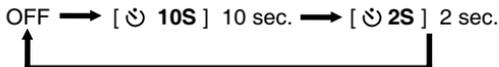
This setting allows images to be captured with the self-timer and allows interval photography.

1. Set the mode dial to one of the photography modes.
2. Toggle the /INT. button to select the setting.

- Each press of the /INT. button moves the icon one step through the sequence and displays it on the screen.



- For the [] movie mode and burst mode ([Continuous] and [Auto Exp.]



3. Compose the images, press the shutter button down halfway, then press it down fully.
 - The self-timer LED flashes and the image will be captured after the preset time has elapsed.
 - The countdown is displayed on the LCD monitor.
 - To cancel the self-timer during operation, press the **SET** button.

The table below will help you choose the appropriate self-timer mode:

Self-timer mode	Description
[ 10S] 10 sec.	The image is captured about 10 seconds after the shutter button is pressed.
[ 2S] 2 sec.	The image is captured about 2 seconds after the shutter button is pressed.
[ 10+2] 10+2 sec.	The first image is captured about 10 seconds after the shutter button is pressed. Then the camera prepares for a second image by charging the flash, if required. The second image is captured 2 seconds later. The 10+2 mode is convenient when capturing group images in succession.
[ Intv] Interval	This mode allows a specified number of images to be captured over a fixed time-interval. The interval can be set to 1, 3, 10, or 60 minutes, and the number of images can be set from 2 to 99. Between shots, the viewfinder LED flashes red and the LCD monitor is automatically turned off. (standby mode)



NOTE

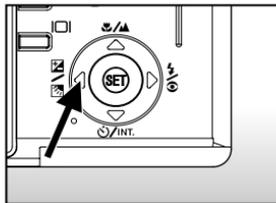
- The self-timer setting is automatically cancelled after an image is captured.
- Use of the [ **2S**] self-timer setting is effective in preventing motion-blur that can result when the shutter button is pressed at long exposure times. Use this mode and a tripod for best results..
- The number of images that can be captured will differ depending on the capacity of the SD card, the image settings, and other factors.
- Interval photography is not available for when shooting TIFF images.

Exposure Compensation/Backlight Correction

Your camera automatically adjusts the exposure for each scene. However, there may be situations where you wish to manually override the automatic determination of the camera and under- or over- expose the image. This is called EV compensation. The EV compensation can be adjusted from [-2.0 EV] to [+2.0 EV] in 0.3 EV steps. EV compensation is used when a suitable brightness (exposure) cannot be obtained in circumstances of high contrast (the difference in brightness between the subject and the background) is large, or when the subject that you want to photograph is very small within the screen.

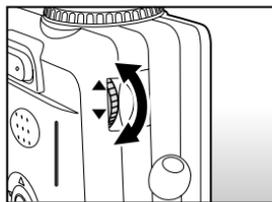
1. Set the mode dial to one of [P], [Tv] or [Av] and press the  /  button.

- Each press of the  /  button displays the setting in the order of [Blank],  Backlight Correction, and  Exposure Compensation.



2. Set the exposure value using the selection wheel.

- Turn the selection wheel in the ▲ direction to decrease the value.
- Turn the selection wheel in the ▼ direction to increase the value.
- The setting range of the exposure compensation is as follows.
-2.0, -1.7, -1.3, -1.0, -0.7, -0.3, 0, +0.3, +0.7, +1.0, +1.3, +1.7, +2.0
- The larger the value, the brighter the image. The smaller the value, the darker the image. The set value is displayed on the screen.



Effective Subjects and Set Values

- + (positive) compensation
 - * Printed matter comprising black text on whitish paper
 - * Backlighting
 - * Bright scenes or strong reflected light such as ski slopes
 - * When the sky accounts for a large area on the screen
- - (negative) compensation
 - * People illuminated by a spotlight, in particular, against dark background
 - * Printed matter comprising white text on blackish paper
 - * Weak reflecting bodies such as evergreen trees or darkish leaves
- Backlight correction (+1.3, fixed)
 - * When the background is bright and the subject is dark.
 - * When subjects (people) have a light source such as the sun to their backs.



NOTE

- The backlight correction setting can be set in the [**A**], [**P**], [**Tv**], [**Av**], [**M**] and [**Fn**] modes.

[P] Program (Automatic Exposure) Photography Mode

The Vivicam 4000 automatically sets the shutter speed and the aperture to suit the brightness of the subject. This allows you to capture image with ease just like when the [**A**] mode is selected.

1. Set the mode dial to [**P**].
2. Compose the image, press the shutter button down halfway, then press it down fully.



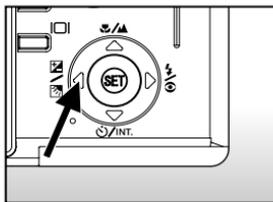
NOTE

- Exposure compensation can be set.

[Tv] Shutter Speed Priority Photography Mode

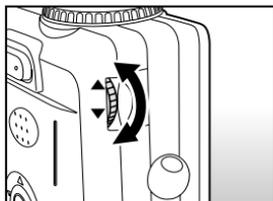
In this mode, images are captured with the priority given to shutter speed. The aperture is automatically set according to the shutter speed. If you set a fast shutter speed, you can capture images of moving subjects that look as if they are still. If you set a slow shutter speed, you can capture images that give the impression that the subject is in motion.

1. Set the mode dial to [Tv] and press the  /  button.



2. Set the shutter speed with the selection wheel.

- Turn the selection wheel in the ▲ direction (faster shutter speeds)
- Turn the selection wheel in the ▼ direction (slower shutter speeds)
- The shutter-speed range is as follows.
 1/1500, 1/1250, 1/1000, 1/800, 1/650,
 1/500, 1/400, 1/320, 1/250, 1/200,
 1/160, 1/125, 1/100, 1/80, 1/64, 1/50,
 1/40, 1/32, 1/25, 1/20, 1/16, 1/13, 1/10,
 0.13s, 0.16s, 0.20s, 0.25s, 0.3s, 0.4s,
 0.5s, 0.6s, 0.8s, 1s, 1.3s, 1.6s, 2s, 2.5s,
 3.2s, 4s, 5s, 6.4s, 8s



- The shutter speed and corresponding aperture value are displayed on the screen. If an appropriate combination cannot be set, the aperture value is displayed in red, but images can be captured regardless.
3. Compose the image, press the shutter button down halfway, then press it down fully.

**NOTE**

- Setting the shutter speed slower than 0.5 second will result in long exposure photography and the [] will be displayed on the screen.
- In the flash photography mode, when [] and [ ] are set, the fastest shutter speed is 1/250 second.
- In the burst capture mode [Continuous] and [Auto Exp.], the shutter speed cannot be set slower than 0.5 second.

[Av] Aperture Priority Mode

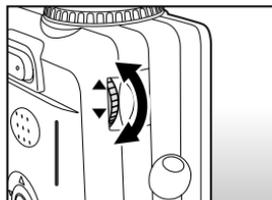
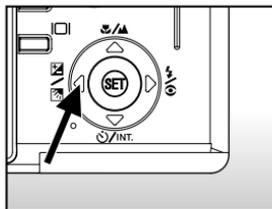
In this mode, images are captured with the priority given to aperture. The shutter speed is automatically set according to the aperture. The aperture will affect the depth-of-field of the camera.

If you set a small aperture (higher F value), you can capture portrait images with an out-of-focus background. Alternatively, if you set a large aperture (lower F value), both close objects and distant objects will be in focus, for example when capturing landscape images.

1. Set the mode dial to [Av] and press the  button.
2. Set the aperture value with the selection wheel.

- Turn the selection wheel in the ▲ direction to increase the value.
- Turn the selection wheel in the ▼ direction to decrease the value.

- The aperture settings are as follows.
F/6.7, F/5.6, F/4.8, F/4.0, F/3.5, F/2.8
- The aperture and corresponding shutter speed are displayed on the screen. If an appropriate combination cannot be set, the shutter speed value is displayed in red, but images can be captured regardless.



3. Compose the image, press the shutter button down halfway, then press it down fully.



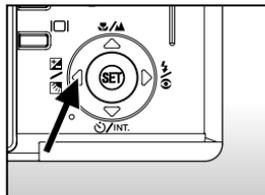
NOTE

- The aperture value varies depending on the position of the zoom lens.

[M] Manual Mode

In manual mode, the aperture value and the shutter speed can be varied individually.

1. Set the mode dial to [M].
2. Select the shutter speed or the aperture with the  /  button.
3. Set the shutter speed or the aperture value with the selection wheel.
4. Compose the image, press the shutter button down halfway, then press it down fully.



NOTE

- In the flash photography mode, when [] and [] are set, the fastest shutter speed is 1/250 second.
- Setting the shutter speed slower than 0.5 second will result in long exposure photography and the [] will be displayed on the screen.

Setting the Scene Mode

This sets the scene setting such as [] portrait, [] sports or [] night scene and captures the image.

1. Set the mode dial to one of the scene modes.
 - When the camera mode is set to the [] or [], [] macro cannot be selected.
2. Compose the image, press the shutter button down halfway, then press it down fully.

The table below will help you choose the appropriate scene mode:

Scene Mode	Description
[] Portrait	Select portrait mode when you want to capture an image that makes the person stand out against a defocused (blurred) background. The flash setting is fixed at [] which is effective in reducing the red-eye phenomenon.
[] Sports	Select sports mode when you want to photograph fast-moving subjects. In sports mode, the flash mode cannot be used.
[] Night scene	Select night-scene mode when you want to photograph people with an evening or night scene background. The flash is fixed at [] on.



NOTE

- The description of each scene serves as a general guide. Set the camera to suit your own preferences.

[] Movie Mode

This mode is for recording video clips. Voice can also be recorded.

1. Set the mode dial to [].
2. Compose the image with the zoom button.
 - Optical zoom and/or digital zoom should be set while composing the scene.
 - Optical zoom cannot be used during movie capture.
3. Fully pressed the shutter button.
 - The recording of the video clip will start.
 - Pressing the shutter button again will end the recording and save the video on the SD card.
 - The recording time depends on the storage size and the subject of the image to be recorded.



NOTE

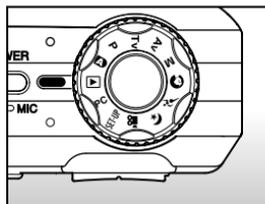
- In [] mode, the LCD monitor cannot be turned off.
- When recording video clips, the flash cannot be used.
While the image is being recorded into the SD card, do not open the battery/SD card cover, nor remove the battery or SD card. Doing so might damage the SD card or destroy the data.

[] PLAYBACK MODE

Playing Back Still Images

You can play back the still images on the LCD monitor. Insert the SD card into the camera and turn on the power before starting.

1. Set the mode dial to [].
 - The last image appears on the screen.



2. Turn the selection wheel dial to move forward or reverse.
 - Turn to the ▲ direction: go back to the previous frame.
 - Turn to the ▼ direction: advance to the next frame.
 - The images can also be advanced forward or reverse by pressing the ▲ / ▼ buttons.

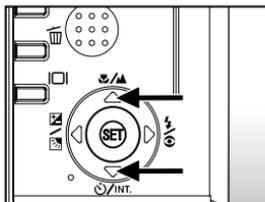
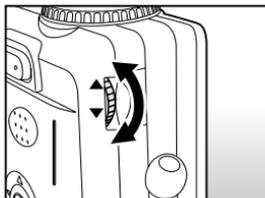
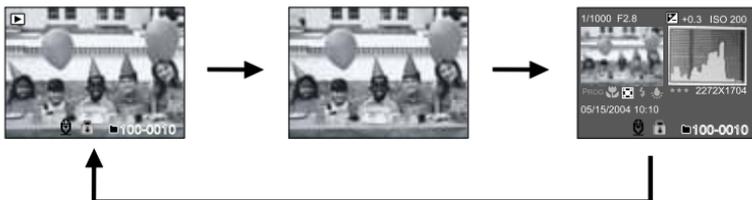
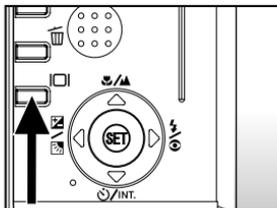


Image Display Information

You can switch the state of the information display by pressing the  button when playing back images. Each press of the  button switches the information display state in the following order:



NOTE

- Pressing the  /  buttons during image playback will rotate the image 90 degrees. The  button rotates the image clockwise, whereas the  button rotates the image counterclockwise. Pressing the opposite button will return the image to the normal display.
- A  icon is displayed with the video data. Video clips cannot be rotated.
- A  icon is displayed with images which have an audio memo recorded.
- Press the **SET** button to playback voice memos.
- In zoom playback, the display is switched between normal and non-display.

Playing Back Video Clips

You can play back video clips recorded on the Vivicam 4000. You can also play back voice.

1. Set the mode dial to [].
 - The last image appears on the screen.
2. Select the desired video clip with the selection wheel.
 - You can also select the desired video clip with the ▲ / ▼ buttons.
3. Press the SET button to playback a movie clip.
 - Pressing the ► / ◀ buttons during playback initiates fast forward / fast reverse.
 - To stop video playback:
Press the ▼ button.
This stops playback and returns to the start of the video clip.
 - To pause video playback
Press the ▲ button.
This pauses video playback.
To cancel pause, press the ▲ button again.

Button Operations

	During playback	During pause	During a Stop
▶ button	(Forward play) Pressing the ▶ button will sequentially invoke 2X fast-forward, 4X fast-forward, regular play.	2x-speed playback	
◀ button	(Reverse play) Pressing the ◀ button will sequentially invoke 2X fast-reverse, 4X fast-reverse, regular play	Reverse playback	
▲ button	Pause	Cancels pause	The previous image is displayed.
▼ button	Stop (The display returns to the 1st frame playback)		The next image is displayed.
SET button	Regular forward play	Cancels pause	Regular forward play



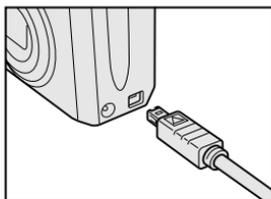
NOTE

- Video clips cannot be displayed rotated or enlarged.
- Scrolling the selection wheel during a pause, steps the video forward or backward, respectively, one frame at a time. Scrolling the selection wheel in the ▼ direction steps the video forward, scrolling in the ▲ direction steps the video backward.

Playing Back Still Images/Video Clips on a TV

You can playback your images on a TV. Before connecting your camera to any video devices, make sure to select NTSC / PAL to match the broadcast standard of the video equipment to which you are going to connect to the camera. It is recommended to use the AC power adapter while transferring the recorded images and video files.

1. Set the mode dial to [].
2. Connect one end of the A/V cable to the A/V OUT terminal of the camera.
3. Connect the other end to the A/V input socket of the TV set.
4. Turn the TV and camera on.
5. Play back the still images / video clips.
 - The method of operation is the same as playing back still images and video clips on the camera.



NOTE

- On PAL systems, images are surrounded by a black frame.
- Refer to section in this manual titled **"Video Output"** in the **Setup Menu (Custom tab)** for further details.

Recording Voice Memos

A maximum of 30 seconds of audio can be recorded as a memo annotation for each still image. A voice memo can be recorded only once.

1. Set the mode dial to [].
 - The last image appears on the screen.
2. Select the image with the selection wheel.
3. Press the shutter button.
 - [VOICE RECORDING] is displayed on the screen and recording starts.
4. To stop recording voice memo during recording, press the shutter button again.
 - [VOICE RECORD END] will be displayed and the recording will end.
 - A [] icon is displayed with images that have been recorded with a voice memo.

Playing back voice memo

Pressing the **SET** button displays [VOICE PLAYBACK] and plays back the voice memo.



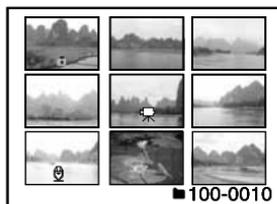
NOTE

- Voice memo is available at the time of still single image capture mode as well as during playback.

Thumbnail Display

This function allows you to view nine thumbnail images on the LCD monitor simultaneously, so you can quickly search for the image that you want.

1. Set the mode dial to [].
 - The images appears on the screen.
2. Press the  button once.
 - The images are displayed in the thumbnail display.
 - Images that have been selected with the  /  /  /  buttons or the selection wheel will be indicated by a green frame.
 - When there are ten or more images, scroll the screen with the  /  buttons or the selection wheel
3. Press the  /  /  /  buttons to select the image to be displayed at regular size.
4. Press the **SET** button.
 - The selected image is displayed at its regular size.



NOTE

- As appropriate, the [], [], [] icon will be displayed in a thumbnail display.

Zoom Playback

Images that are played back can be enlarged by a factor of two, or four times. This allows you to enlarge a selected portion of an image to examine fine details.

1. Set the mode dial to [].
2. Press the  /  buttons to select the image you want to enlarge.
 - You can also select the image you want to enlarge with the selection wheel or from the thumbnail display.
3. Adjust the enlargement ratio with the  /  buttons.
 - Pressing the  button enlarges the image.
 - To return to normal magnification, press the  button.
 - The image is displayed enlarged, and a white frame and green frame are displayed on the LCD monitor.
 - The white frame indicates the entire image, while the green frame shows the location of the currently enlarged area within the context of the entire image.
4. Press the  /  /  /  buttons to select the area to enlarge.
5. To return to regular display, toggle the  button until the regular display appears on the screen.



Entire image Current position of enlargement



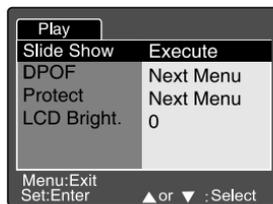
NOTE

- Pressing the  button enlarges the image from 1x → 2x → 4x.
- Pressing the  button reduces the image from 4x → 2x → 1x.

Slideshow Display

The slideshow function enables you to playback your still images automatically in sequential order as a slideshow.

1. Set the mode dial to [].
2. Press the **MENU** button.
 - The playback menu is displayed.
3. Select [Slide Show] with the **▲** / **▼** buttons, and press the **SET** button.
 - The slideshow starts.
4. To stop the slide show during playback, press the **SET** button.
 - The image is displayed on screen when you press the **SET** button.



NOTE

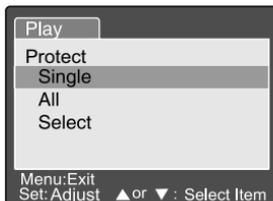
- The Auto Power Off function is disabled during a slide show.
- All images in the folder are automatically played back.

Protecting Images

You may protect an image from accidental deletion, or erasure.

Protecting Images

1. Set the mode dial to [].
2. Select the image that you want to protect with the selection wheel.
3. Press the **MENU** button.
 - The playback menu is displayed.
4. Select [Protect] with the **▲** / **▼** buttons, and press the **SET** button.



6. Select [Set] with the **▲** / **▼** buttons, and press the **SET** button.
 - Protection is applied to the image and the camera returns to playback mode.
 - The protect icon [] is displayed with protected images. When [All] has been selected, [] is displayed with all images.



Canceling Protection

To cancel protection for only one image, display the image that you want to remove the image protection.

1. Select [Protect] with the ▲ / ▼ buttons from the playback menu, and press the **SET** button.
2. Select [Single] or [All] with the ▲ / ▼ buttons, and press the **SET** button.
3. Select [Cancel Protect] with the ▲ / ▼ buttons, and press the **SET** button.
 - The image is no longer protected and the camera returns to the play mode.

Protecting multiple images

1. Select [Protect] with the ▲ / ▼ buttons from the playback menu, and press the **SET** button.
2. Select [Select] with the ▲ / ▼ buttons, and press the **SET** button.
 - The images are displayed in the thumbnail display.
3. Select the image you want to protect with the ▲ / ▼ / ◀ / ▶ buttons, and press the [□] button.

The protect icon [] is displayed with protected images. Selecting a protected image and pressing the [□] button again will cancel the protection.

4. Press the **SET** button.
 - The camera returns to playback mode.



NOTE

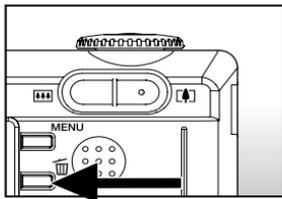
- Formatting an SD card overrides protection, and erases all images regardless of their protected status.
- When there are multiple image folders on an SD card, the images of all of the folders can be selected with the ▲ / ▼ buttons or the selection wheel.

[] Erasing Images

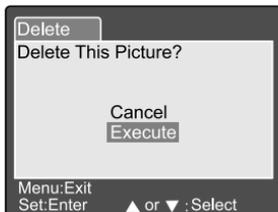
Immediate Erasure (Quick Delete Function)

The quick delete function enables you to erase the last-captured image during capture.

1. Set the mode dial to one of the photography modes.
2. Press the  button.
 - The last image and quick delete menu appear on the screen.



3. Press the **SET** button to erase the image.
 - To not erase, select [Cancel], and press the **SET** button.

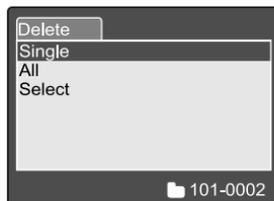


Erasing in Playback Mode

Erasing a single image / Erasing all images

1. Set the mode dial to .
 - The last image will be displayed on the screen.
2. Select the image you want to erase with the selection wheel.
3. Press the  button.
 - The deletion menu will be displayed.
4. Select [Single] or [All] with the  /  buttons, and press the **SET** button.

- **Single:** Erases the selected image or the last image.
- All:** Erases all of the images on the SD card except for protected images.
- Select:** Erases a set of selected images.



5. Select [Execute] with the ▲ / ▼ buttons, and press the **SET** button.
 - To not erase, select [Cancel], and press the **SET** button.

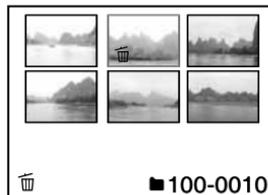
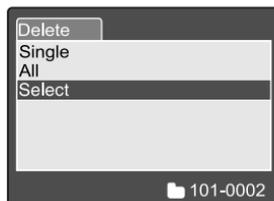
**NOTE**

- Erasing an image will not affect sequential image numbering. For example, if you erase image number 240 the next captured image will be numbered 241 even though 240 no longer exists. In other words, an image-number is retired when an image is erased and will not be reused or reassigned to another subsequently captured image.

Erasing selected images.

This erases a number of selected images.

1. Set the mode dial to .
2. Press the  button.
 - The deletion menu will be displayed.
3. Select [Select] with the ▲ / ▼ buttons, and press the **SET** button.
 - The images are displayed in the thumbnail display.
4. Select the image you want to erase with the ▲ / ▼ / ◀ / ▶ buttons, and press the  button.
 - The  icon will be displayed. One more press of the erase button will cancel the operation. Repeat this procedure and select all the images that you want to erase.
5. Press the **SET** button.

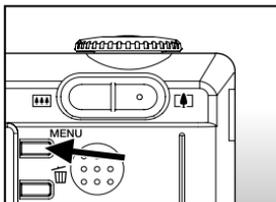


MENU OPTIONS

Photography Menu (Picture tab)

This menu is for basic settings used when capturing images in the photography modes. These settings are retained even if the camera is turned off or the Auto Power Off function is activated.

1. Set the mode dial to one of the photography modes.
2. Press the **MENU** button.
 - The [Picture] tab of the photography menu is displayed.
3. Select the desired [Picture] option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
5. To exit from the photography menu, press the **MENU** button.



Size (resolution)

This sets the resolution of the still-image that will be captured.

[Still image]

- 2816 x 2112:** 2816 x 2112 pixel
(6 Megapixel resolution)
- 2272 x 1704:** 2272x1704 pixel
(4 Megapixel resolution)
- 1600 x 1200:** 1600x 1200 pixel
(2 Megapixel resolution)
- 640 x 480:** 640 x 480 pixel
(VGA resolution)



[Video clip]

- 320 x 240 :** 320 x 240 pixel

Quality

This sets the quality (compression rate) at which the image is captured.

- Fine:** Low compression
Standard: Normal
Economy: High compression
TIFF: Lossless compression (the absolute highest image quality and the largest file sizes.)



NOTE

- The economy setting is not available in the movie [] mode.
- TIFF setting is only available at resolution 2816 x 2112.
- TIFF uses lossless compression for the absolute finest possible image detail

Sharpness

The ViviCam 4000 can automatically emphasize the borders between light and dark areas of the image. This will make the image's edges look sharper. In some scenes you may prefer sharper edge detail. In other scenes you may prefer softer edge detail.

This sets the sharpness of the image that will be captured.

- Hard:** Hard
Normal: Normal
Soft: Soft



NOTE

- Sharpness cannot be set in the [] mode.

Contrast

This allows you to specify the color mode and saturation properties of the images that will be captured.

- Hard:** Increases the contrast.
Normal: Set the contrast automatically.
Soft: Decreases the contrast.

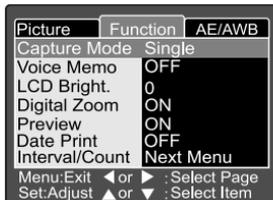
Color

This allows you to specify the color mode and saturation properties of the images that will be captured.

- Standard:** Standard color
Vivid: Bright color (more color saturation)
Sepia: Sepia (brown-tones with the effects of early 1800's photography)
Monochrome: Black-and-white (grayscale images with the effect of black and white film)

Photography Menu (Function tab)

1. Set the mode dial to one of the photography modes.
2. Press the **MENU** button, and select the [Function] menu with the **▶** button.
 - The [Function] tab of the photography menu is displayed.
3. Select the desired [Function] option item with the **▲** / **▼** buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the **▲** / **▼** buttons, and press the **SET** button.
5. To exit from the photography menu, press the **MENU** button.



Capture Mode

Capture mode is an option that allows you to capture a rapid sequence of images with one press of the shutter. There are two distinctly different aspects to this option - Continuous (burst) capture, and AEB (automatic exposure bracketing)

- (**Blank**) **Single**: In this setting the feature is not invoked and the camera takes single-shots.
- () **Continuous**: In this setting, the camera will capture a sequential burst of five images (maximum) at an interval of 0.62 seconds (maximum rate.) The continuous burst mode is very useful for photographing objects in motion where it is difficult to determine the precise moment of capture. Afterwards, you may review the sequence of shots to select the best one.
- (**AEB**) **Auto Exp.:** Auto-exposure bracketing is an effective technique when it is difficult to determine the precise exposure of

a scene. Using AEB the camera will capture a sequential burst of three images at three different exposure settings. One shot will be at the level of exposure automatically determined by the camera, eV0. The two complementary shots will be underexposed (eV -0.67), and overexposed (eV +0.67) respectively. Afterwards, you may review the sequence of shots to select the best exposure.



NOTE

- For continuous (burst) photography, press and hold the shutter button until all five images have been captured. If the shutter button is released earlier, the burst will end at that point.
- When shooting TIFF images, the maximum number of shots in a burst is three.

Voice Memo

A voice memo can be recorded for 30 seconds immediately following still image capture. This feature is also available during playback mode.

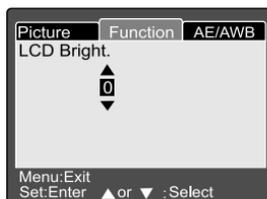
Refer to section in this manual titled "[**A**] Auto Photography Mode" for further details.

ON: Enable voice memo.

OFF: Disable voice memo.

LCD Bright.

Select a brightness level for the LCD monitor. The LCD becomes brighter with the ▲ button and darker with the ▼ button. The adjustment range is from -5 to +5.



Digital Zoom

This enables or disables digital zoom.

ON: Enable digital zoom.

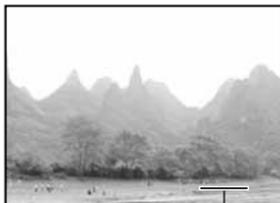
OFF: Disable digital zoom.

Date Print

The date of recording can be printed directly on still images. This function must be activated before the image is captured.

ON: Imprints the date on still images when capturing images.

OFF: Does not imprint the date on the still images when capturing images.



Date imprinted here.

Interval/Count

Automatically captures a specified number of images over a fixed interval. This is effective when the [ Intv] is set with the  button.

1 Min.: Captures at a 1-minute interval.

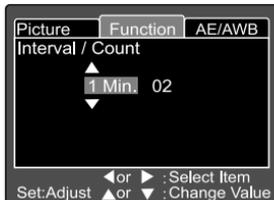
3 Min.: Captures at a 3-minute interval.

10 Min.: Captures at a 10-minute interval.

60 Min.: Captures at a 60-minute interval.

Number of images: Can be set from 2 to 99 times.

Refer to section in this manual titled “**Self-timer/Interval Photography**” for further details.

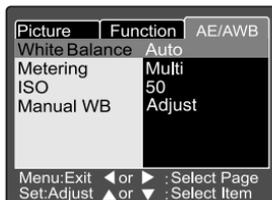


NOTE

- The number of images that can be captured will differ depending on the capacity of the SD card, the image settings, and other factors.
- During the interval between one image and the next, the viewfinder LED flashes red and the LCD monitor is automatically turned off. The camera will power-up again to capture the next image.

Photography Menu (AE/AWB tab)

1. Set the mode dial to one of the photography modes.
2. Press the **MENU** button, and select the [AE/AWB] menu with the ► button.
 - The [AE/AWB] tab of the photography menu is displayed.
3. Select the desired [AE/AWB] option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
5. To exit from this menu, press the **MENU** button.



White Balance

This specifies the white balance settings to be used by the camera for particular lighting conditions.

- Auto:** The camera will determine white balance automatically.
- Incandescent:** For photography under incandescent lighting.
- Fluorescent 1:** For photography under a daylight fluorescent tube with a bluish cast.
- Fluorescent 2:** For photography under a daylight white fluorescent tube with a reddish cast.
- Day Light:** Outdoor photography.
- Cloudy:** For photography under a cloudy sky.
- Manual:** For photography with a Manual WB.

Metering

This sets the exposure-metering method for calculating proper exposure.

Multi: The entire area of the screen is measured, and the exposure is calculated.

Spot: A very small portion of the center of the screen is measured, and the exposure is calculated.

ISO

This sets the light sensitivity for capturing images. When the sensitivity is raised (the ISO figure is increased), the camera sensitivity is enhanced for low-lighting, but your images will appear more pixilated (grainy).

50: Equivalent to ISO50.

100: Equivalent to ISO100.

200: High-sensitive photography equivalent to ISO200.

Auto: Automatic setting in the range of ISO 50 to 200 (Auto ISO is available only in the portrait [**P**] mode.)

Manual WB

This allows for manually setting the white balance. Manual WB is convenient when the white balance presets do not offer a good match to your specific lighting conditions.

Before selecting [Execute] select a white subject (such as a white paper) that will be used to set the white balance.

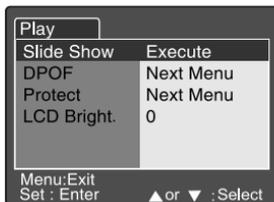
Cancel: Disable manual white balance.

Execute: Enable manual white balance.

Playback Menu

In the [] mode, you may adjust playback settings. These settings are not canceled even if the camera is turned off or the Auto Power Off function is activated.

1. Set the mode dial to [].
2. Press the **MENU** button.
 - The playback menu is displayed.
3. Select the desired option item with the **▲ / ▼** buttons, and press the **SET** button to enter its respective menu.
4. Select the desired setting with the **▲ / ▼** buttons, and press the **SET** button.
5. To exit from the playback menu, press the **MENU** button.



Slide Show

Automatic sequential play back of still images.

Refer to section in this manual titled “**Slideshow Display**” for further details.

Protect

Protect an image to prevent accidental erasure.

Refer to section in this manual titled “**Protecting Images**” for further details.

LCD Bright.

Adjust the brightness of the LCD monitor. This function does not adjust the brightness of your captured images.

Refer to section in this manual titled “**LCD Bright.**” in **Photography Menu (Function)** for further details.

Setup Menu (Basic tab)

In the setup menus you may adjust your Vivicam 4000's operating environment. The settings will be retained after the power has been turned off or Auto Power Off is activated.

1. Set the mode dial to [SET-UP].
 - The [Basic] tab of the set-up menu is displayed.
2. Select the desired [Basic] option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
3. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
4. To exit from the set-up menu, change the mode dial setting.



Card Info.

This will display the total capacity of your memory card as well as the remaining (unused) capacity. Note that the stated capacity may be less than the advertised (labeled) capacity of your SD memory card. This is attributable to the difference between binary (base 2) and engineering (base 10) methods of capacity calculation.

Fr. No. Reset

This creates a new folder on your memory card. From this point forward, newly captured images are stored in the newly created folder starting with image number 0001.

Cancel: Does not reset the file number.

Execute: Resets the file number and creates a new folder.

Format

This function reformats the SD card loaded in your camera and thereby erases all images as well as any other non-image data on the memory card. Even protected images are. An SD card cannot be formatted if it is write-protected. Refer to section in this manual titled “**Formatting an SD Card**” for further details.

Sound

Enables or mutes playback sound portion of voice memos and video clips.

ON: Enables playback-sound.

OFF: Mutes playback-sound.

Beep

Enables or disables the sounds (beeps) associated with camera button functions.

ON: Enables sounds/beep tones.

OFF: Disables sounds/beep tones.

Auto PoFF

If no operation is performed for a specific period of time, the camera will automatically turn off. This feature is useful to reduce battery consumption.

1 Min.: When the camera has not been operated, it turns the power off after 1 minute.

2 Min.: When the camera has not been operated, it turns the power off after 2 minutes.

3 Min.: When the camera has not been operated, it turns the power off after 3 minutes.

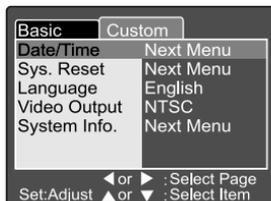


NOTE

- The auto power-off function is disabled during a slideshow or in the [PC] mode and during PC connection.

Setup Menu (Custom tab)

1. Set the mode dial to [SET-UP], and select the [Custom] menu with the ► button.
 - The [Custom] tab of the set-up menu is displayed.
2. Select the desired [Custom] option item with the ▲ / ▼ buttons, and press the **SET** button to enter its respective menu.
3. Select the desired setting with the ▲ / ▼ buttons, and press the **SET** button.
4. To exit from the set-up menu, change the mode dial setting.



Date/Time

This sets the date and the time.

Refer to section in this manual titled “**Setting the Date and Time**” for further details.

Sys. Reset

This returns all basic settings to the camera's default settings. Note that the date and time setting will not be reset, however.

Cancel: Does not reset the camera to the factory default settings.

Execute: Resets the camera to its original factory default settings.

Language

This sets the language that is displayed on the LCD monitor.

Refer to section in this manual titled “**Choosing the OSD Language**” for further details.

English: English

Français: French

Deutsch: German

Español: Spanish

Italiano: Italian

繁體中文: Chinese (Traditional)

简体中文: Chinese (Simplified)

Video Output

This sets video output standard of the camera so you may connect your camera to video equipment.

NTSC: NTSC broadcast standard.

PAL: PAL broadcast standard.

System Info.

This displays the firmware version of the Vivicam 4000.

TRANSFERRING RECORDED IMAGES AND VIDEOS TO YOUR COMPUTER

To transfer images/video clips from the Vivicam 4000 to your computer, follow these steps:

Step 1: Installing the USB driver (Windows 98SE users only)

Step 2: Connecting the Vivicam 4000 to your computer

Step 3: Downloading images and video files

System Requirements (Windows)

- Pentium 400 MHz or higher
- Windows 98SE/Me/2000/XP
- 128 MB RAM
- 300 MB available hard disk space
- CD-ROM drive
- Available USB port or SD card reader

System Requirements (Macintosh)

- PowerMac G3/G4
- OS 9 or later
- 128 MB RAM
- 300 MB hard disk space
- CD-ROM drive
- Available USB port or SD Card reader

Step 1: Installing the USB Driver

For Windows 98 computers only

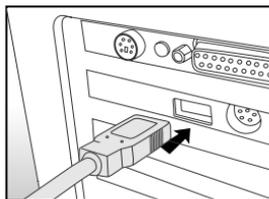
The USB driver on the CD-ROM is exclusively for Windows 98 computers. Installing the USB driver on computers running Windows 2000/ME/XP is not necessary.

1. Insert the CD-ROM that Vivitar 4000 with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "Install USB Driver". Follow the on-screen instructions to complete the installation. After the USB driver has been installed, restart your computer.



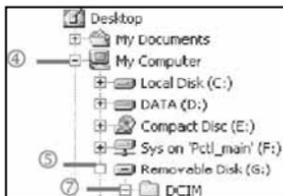
Step 2: Connecting the Vivicam 4000 to Your Computer

1. Set the mode dial to [PC].
2. Connect one end of the USB cable to an available USB port on your computer.
3. Connect the other end of the USB cable to the USB connector on the Vivicam 4000.
4. From the Windows desktop, double click on "My Computer". (Mac users will see a new disk icon directly on the desktop.)
5. Look for a new "Removable disk" icon. This "Removable disk" is actually the memory card in your Vivicam 4000. Typically, the Vivicam 4000 will be assigned drive letter "e" or higher.
6. Double click on the removable disk and locate the DCIM folder.
7. Double click on the DCIM folder to open it



to find more folders.

- Your recorded images and video clips will be inside these folders.
- Copy & Paste or Drag-N-Drop image and video files to a folder on your computer.



Mac users: Double-click the "untitled" or "unlabeled" disk drive icon on our desktop. iPhoto or iPhoto2 should automatically launch.

Step 3: Downloading Images and Video Files

When the Vivicam 4000 is turned on and connected to your computer, it is considered to be a disk drive, just like a floppy disk or CD. You can download (transfer) images by copying them from the "Removable disk" ("untitled" or "unlabeled" disk on a Macintosh) to your computer hard drive.

Windows

Open the "removable disk" and subsequent folders by double clicking on them. Your images are inside these folder(s). Select the images that you want, and then choose "Copy" from the "Edit" menu. Open the destination location (folder) and choose "Paste" from the "Edit" menu. You may also drag and drop image files from the Vivicam 4000 to a desired location.

Macintosh

Open the "untitled" disk icon, and the destination location on your hard disk. Drag and drop from the Vivicam 4000 to the desired destination.



NOTE

- Memory card users may prefer to use a memory card reader (highly recommended).
- A video playback application is not included with the package. Make sure that a video playback application such as Windows Media Player or Apple QuickTime has been installed in your computer.

INSTALLING PRESTO! MR. PHOTO

Presto! Mr. Photo is an ideal program for creating, sharing, and managing digital images and videos. In this new edition, users can add sound to their files for useful real-life effects. The straightforward, powerful photo enhancement functions can make your images come alive. You can also adjust the photo quality and convert the file format for other applications. Mr. Photo also provides fun photo templates, motion shows, slideshows, e-mail, html, and links to other applications. It makes personalized creations easy for everyone.

To install Presto! Mr. Photo:

1. Insert the CD-ROM that Vivitar 4000 with the camera into your CD-ROM drive.

The welcome screen appears.

2. Click "Install Mr. Photo".

Follow on-screen instructions to complete the installation.



NOTE

- For help on using Mr. Photo usage, refer to the Mr. Photo on-line help for more information.
- For Windows 2000/XP users, be sure to install and use the Mr. Photo in "Administrator" mode.
- Mr. Photo is not supported on the Mac.

INSTALLING PRESTO! IMAGE FOLIO

Image Folio is a comprehensive multimedia image-processing program. It enables you to process images, graphics, and drawings captured from scanners, VCRs, a laser discs, digital cameras, video capture boxes and any other location that the computer can capture images from.

You can create new images by using the Image Folio's powerful tools. This sophisticated set of image-editing tools enables you to quickly create new images or enhance pre-existing ones. With this program, your imagination is your only limit!

To install Presto! Image Folio:

1. Insert the CD-ROM that Vivitar 4000 with the camera into your CD-ROM drive. The welcome screen appears.
2. Click "Install Image Folio".
Follow on-screen instructions to complete the installation.



NOTE

- For help on using Image Folio usage, refer to the Image Folio on-line help for more information.
- For Windows 2000/XP users, be sure to install and use the Image Folio in "Administrator" mode.
- Image Folio is not supported on the Mac.

INSTALLING ACROBAT READER

The CD-ROM includes a PDF (portable document format) copy of the user's manual. To view a PDF you must have Acrobat Reader installed in your computer. Acrobat Reader is included on the camera CD ROM. Using Acrobat Reader, you can read the user's manual and print sections of interest.

1. Insert the CD-ROM that came with the camera into the CD-ROM drive. The welcome screen appears.
2. Click "Install Acrobat Reader".
Follow the on-screen instructions to complete the installation.



For Mac users:

1. Insert the CD-ROM that came with the camera into the CD-ROM drive.
2. Select and double-click "Acrobat Reader".
3. Select and double-click the language that you want.
4. Double-click "Reader Installer".
5. Follow the on-screen instructions to complete the installation.

USER'S MANUAL ON CD-ROM

A copy of the user's manual on is provided on the CD-ROM in PDF format. It is a backup copy of the printed manual. If you misplace the printed guide, you may print another copy from the CD-ROM. The only requirement for viewing the User Manual on the CD-ROM is that you have Acrobat Reader installed on your computer. Updates to this manual, and versions in other languages may be found on our website.

1. Insert the CD-ROM that came with the camera into the CD-ROM drive. The welcome screen appears.
2. Click "Install User's Manual". Follow the on-screen instructions to complete the installation.

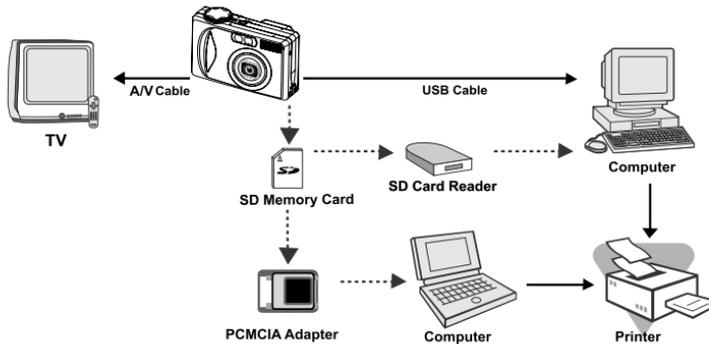


Alternatively, browse the CD-ROM to find the PDF file.

For Mac users:

1. Insert the CD-ROM that came with the camera into the CD-ROM drive.
2. Select and double-click "Manual".
3. Select and double-click the language that you want.
4. Drag and drop the PDF file from the current location to the destination location.
5. View the user's manual by opening it.

CONNECTING THE VIVICAM 4000 TO OTHER DEVICES



VIVICAM 4000 SPECIFICATIONS

Item	Description
Image sensor	1/1.8" CCD sensor Total number of pixels: 6.3 mega pixels Number of effective pixels: 5.95 mega pixels
Image resolution	<Still images> 2816 x 2112, 2272 x 1704, 1600 x 1200, 640 x 480 <Video clip> 320x240
LCD monitor	2.0" low temperature poly silicon TFT color LCD
Viewfinder	Real image optical zoom viewfinder
Image quality	Fine/Standard/Economy/TIFF (selectable at 2816x2112 only)
Recording medium	External memory: Supports SD card (optional, up to 512MB)
Compression formats	JPEG compliant
Image file format	JPG, EXIF 2.2, AVI, TIFF
Lens	F=7.2 mm - 21.6 mm (equivalent to 35 mm - 105 mm on a 35 mm camera) F/2.8 - 4.7
Range of Focus	Autofocus: Approx. 80 cm (32") to infinity (both Wide and Tele) Macro (lens at wide position): Approx. 9 cm (4") minimum Macro (lens at telephoto position): Approx. 30 cm (12") minimum
Auto-Focus	TTL method AF
Shutter speed	Long exposure: 8sec - 0.6 sec. Normal exposure: 1/2 sec.-1/1500 sec.
Capture Modes	Single, AEB with 3 images at -0.67, 0, +0.67EV, 5 image burst

Digital zoom	4.4x (Capture mode) 2x and 4x enlargement (Playback mode)
Metering system	Multi metering, Spot metering
Shooting Modes	Program AE/Shutter speed priority/Aperture priority/ Manual/Portrait /Sports / Night scene
Exposure compensation	-2EV - +2EV (in 0.3EV increments)
White balance	Auto/Incandescent/Fluorescent 1/Fluorescent 2/ Day light/Cloudy/Manual
Flash Modes	Auto/Red-eye reduction/Flash Off/Forced flash
Flash effective range	0.6 m –3.0 m (Wide / ISO=200)
ISO sensitivity	Equivalent to ISO 50/100/200/Auto (ISO 50-ISO 200)
Self-timer	10 sec./2 sec./10+2 sec./Interval (1, 3, 10, 60 min)
Video standards	NTSC/PAL
Interfaces	DC IN 5V terminal A/V OUT terminal USB 1.1
Power supply	Lithium-ion battery (NP-60 3.7V, optional) Duracell Lithium primary battery (CP1, optional) AC power adapter (5V, optional)
Dimensions (WxDxH)	Approx. 3.7" x 2.5" x 1.4"/ 94 x 63 x 35mm (without protruding parts)
Weight	Approx. 6.4 oz/ 180 g (without the battery & SD card)

* Design and specifications are subject to change without notice.