DVR 410
Digital Video Camera
User's Manual

Vivitar®

Table of Contents

Introduction

Thank you for purchasing the DVR 410 Digital Video Camera. With this camera you can shoot quality Videos (AVI) and Photos (JPG).

This camera requires an SD card (up to 16GB) for normal use. You will not be able to capture videos and photos without the SD card inserted.

Please read this manual carefully before using.

Key Features

- Digital Video resolution - 640x480pixels (VGA), 320x240pixels (QVGA).
- Digital Photo resolution - 1280 x 1024 pixels (1.3M), 640x480pixels (VGA)
- 1.8'' LCD screen
- 4 X Digital Zoom
- Built-in microphone and speaker
- NTSC TV out function
- SD memory card up to 16GB is needed in order to capture videos and photos
- Vivitar Experience Image Manager software for uploading and managing photos and videos to or from the most popular photo sharing and social network websites

Camera Maintenance and Care

- Do not wrap the camera in cloth or other materials when operating the camera. Doing so will raise the internal temperature and cause overheating hazards.
- Do not attempt to disassemble or alter any part of the equipment not expressly described in this manual.
- Avoid using and storing your camera in extremely hot and cold places, as well as humid and dusty environments.
- Protect the equipment from strong shocks and impacts.
- Be careful to prevent metal objects or others from contact with any plug/slot of the device.
- Do not try to use the camera during driving.
- When not using the camera for extended periods of time, remove the batteries from the camera.

What your Camera Includes

- Digital Video Camera
- TV cable
- Strap
- Built-in USB connector
- Vivitar Experience Image Manager software Installation CD
- User`s Manual

Computer System Requirement for Windows XP

To be able to download photos and videos to your PC, you will need the following minimum configuration:

- Pentium 4 processor or above with Windows XP service pack 2
- 512 MB RAM, with 100MB of free disk space
- 1024 x 768 Recommended screen resolution
- 16-bit color or higher display adaptor
- CD-ROM Drive
- QuickTime 6 or higher
- Microsoft Internet Explorer 7 or higher
- Windows Media Player 10 or higher
- Internet connection

Computer System Requirement for Windows Vista

To be able to download photos and videos to your PC you will need the following minimum configuration:

- Windows Vista
- 800MHz processor and 512 MB of system memory
- 20GB hard drive with at least 15GB of available space
- Support for Super VGA graphics
- Available USB Interface
- CD-ROM drive
- QuickTime 6 or higher
- Microsoft Internet Explorer 7 or higher
- Internet connection

Computer System Requirements for Macintosh

- Macintosh with Intel processor running Mac OS X v10.4.6 or later
- 256 MB RAM, 100 MB free disk space
- Display: 1024 x 768 or higher-resolution monitor
- QuickTime 6 or higher
- Internet connection

A Quick Look at Your Digital Video Camera

USB Port

LENS

Speaker

Battery Cover

TV Out Port

Power

SD/MMC Socket
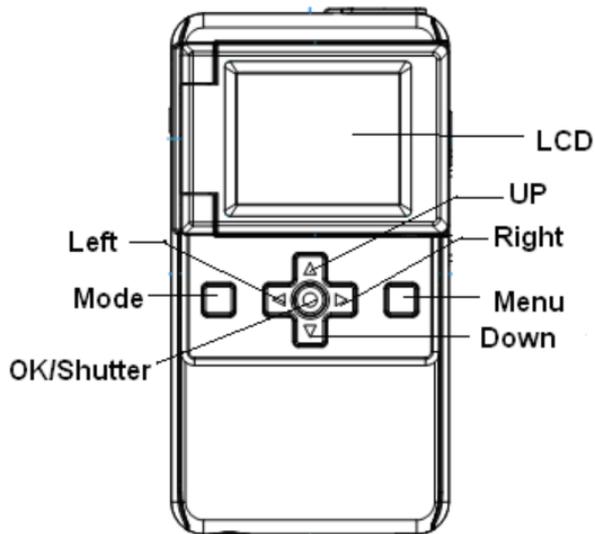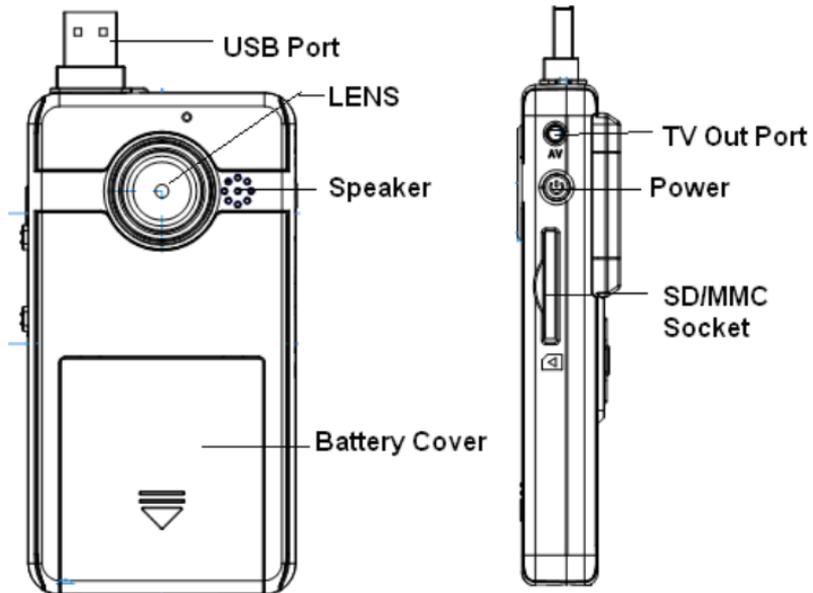
Prepare Your Digital Video Camera for Use

Battery Installation

Your Digital Video Camera requires 3 AAA batteries (alkaline batteries are recommended).

Insert the batteries into your Digital Video Camera as directed below:

1. Slide the battery cover on the front of the camera in a downward direction to open the cover.
2. Insert the batteries with the correct polarity (positive pole/negative pole) as appears in the battery compartment.
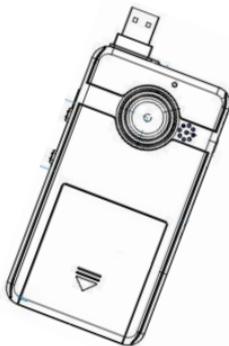
3. Replace and slide the battery cover up to close.

Note:

1. Do not mix old and new batteries.
2. Do not mix alkaline, standard (carbon-zinc), or rechargeable (nickel-cadmium metal hydride) batteries**.**
3. If the camera locks or freezes and does not respond to any button, remove and reinstall the batteries.

Insert SD/MMC Memory Card

Important: A compatible SD/MMC memory card up to 16GB needs to be inserted into the SD card slot on the side of the camera in order to capture videos and photos. After you insert the memory card, all the videos and photos you shoot will automatically be stored on the memory card.
(SD cards are not included and need to be purchased separately).
Note: Power off the camera before inserting or removing the memory card.

Please follow these steps to insert the memory card:

1. Locate the memory card slot on the side of your Digital Video Camera.

2. Insert the memory card correctly as directed on the side of the camera at the opening of the slot.

3. Press the memory card until you hear a "Click" sound. The memory card when properly inserted will be flush with the surface of your camera.

Note: After you insert the memory card, the card icon will appear on the LCD, indicating that your memory card has been installed successfully, and the videos and photos you shoot will be stored on the card.

Starting Your Digital Video Camera

Power on

Press the Power button on the side of the camera to power on the camera.

The LCD will light up and the Video mode will appear by default indicating that you camera is ready to use to capture videos.

If you have not inserted a compatible SD memory card, a "NO CARD" message will appear in the center of the LCD screen. Please insert an SD card in order to continue using the camera.

Power off

Press the Power button to power off your camera.

Auto Power off

Your camera will automatically power off if idle for 60 seconds or if there is insufficient battery power.

Change Camera Mode

Press the Mode button to change between the 3 camera options - Video, Camera and Playback.

The icon of the selected mode will appear on the LCD.

9

Function Buttons on the camera

Button	Function	Button	Function
Power	Power on/off camera	**Up and Down button**	Go to previous or the next photos/videos when in playback mode. In the Menu mode to select the submenu option.
Menu	Open menus of Camera mode, Video mode and Playback mode	**Right and left button**	Zoom in and out in the camera mode and of the photos in playback mode.
OK/Shutter	Take Photo/ Start or stop to record video clips. Play and pause videos in Playback mode	**Mode**	Shift between Camera, Video and Playback modes.

Video Mode

Shooting Videos

1. Turn on your Digital Video Camera.

2. The first mode to appear is the Video mode.

3. The amount of recording time available for the resolution selected will appear on the LCD screen.

4. Compose your object with the LCD screen.

5. Press the OK/Shutter button to start shooting your video. The built-in microphone enables you to record your video with sound.

6. The elapsed time will begin to appear on the bottom right corner of the LCD screen.

7. Press the OK/Shutter button again to stop shooting and save your video as an AVI video file on the memory card.

8. The amount of time that you can capture videos depends on the size of the SD memory card inserted and the video resolution selected.

   Note: The lower the resolution setting the more recording time is available. However videos recorded at lower resolution are of less quality than videos recorded at the higher quality.

Changing the Video settings

1. Press the Menu button in the Video mode.

2. The "AVI Option" menu will appear on the LCD with the following options:

   EXIT, RESOLUTION, FREQUENCY, SPEAKER and LANGUAGE

Resolution settings

Your Digital Video Camera supports 2 video resolutions – VGA and QVGA.

1. Press the Menu button in the Video mode.
2. Press the Up or Down button to select the RESOLUTION option
3. Press the OK/Shutter button to open the submenu options.

    VGA (640x480), QVGA (320x240)

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the resolution.

Note: Videos captured in VGA are of a better quality than QVGA videos and therefore take up more of the camera`s memory.

Frequency setting

Generally speaking, 60HZ is for the countries such as U.S. and 50HZ for countries such as Japan. The default setting is 60HZ. Select the frequency setting that best suits your present location

1. Press the Menu button in the Video mode.
2. Press the Up or Down button to select the FREQUENCY option
3. Press the OK/Shutter button to open the submenu options.

    50 Hz, 60 Hz

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the frequency.

Speaker setting

You can choose to turn the camera`s speaker on or off.

1. Press the Menu button in the Video mode.
2. Press the Up or Down button to select the SPEAKER option.
3. Press the OK/Shutter button to open the submenu options.

    ON, OFF

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the speaker status on or off.

Language

You can select the language in which the camera menus will display.

1. Press the Menu button in the Video mode.
2. Press the Up or Down button to select the LANGUAGE option
3. Press the OK/Shutter button to open the language submenu options.

    English, French, Portuguese, Spanish, German and Italian

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the language selected.
6. All the camera messages and menus will not be displayed in the language selected.

13

Camera Mode

Taking Photos :

1. Turn on your digital video camera.
2. Press the Mode button to select and enter the Camera mode.
3. The camera icon will appear on the LCD.
4. The amount of photos that can be captured with the available memory and as per the selected resolution will appear on the bottom right corner of the LCD screen.
5. Compose your object with the LCD screen.
6. Press the Right button to Zoom in and the Left button to Zoom out of the object.
7. Press the OK/Shutter button to capture and save your photo to the memory card.

Note: The lower the resolution setting the more photos can be taken. However lower resolution photos are of less quality than photos taken at higher quality.

Changing the Camera settings

1. Press the Menu button in the Camera mode.
2. The "DSC Option" menu will appear on the LCD with the following options:

    EXIT, CAPTURE, RESOLUTION, FREQUENCY, SPEAKER and LANGUAGE

14

Capture settings

Your Digital Video Camera has 3 photo capture options.

- Select the SINGLE option to capture single shots,
- CONT option to take 3 continuous shots, and
- SELF option to set the camera to the 10 second self-timer option to include yourself in the photo. In all instances, clicking the Shutter button will capture the photo(s).

1. Press the Menu button in the Camera mode.
2. Press the Up or Down button to select the CAPTURE option
3. Press the OK/Shutter button to open the submenu options.
    SINGLE, CONT or SELF
4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the capture setting.
6. Press the Shutter button to capture the photo(s).

Resolution settings

Your Digital Video Camera supports 2 camera resolutions – 1.3M and VGA.

1. Press the Menu button in the Camera mode.

2. Press the Up or Down button to select the RESOLUTION option
3. Press the OK/Shutter button to open the submenu options.

    1.3M, VGA

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the resolution.

Note: Photos taken in 1.3M (1280 x 1024) are of a better quality than VGA (640 x 480) photos and therefore take up more of the memory on the SD memory card.

Frequency setting

Generally speaking, 60HZ is for the countries such as U.S. and 50HZ for countries such as Japan.

The default setting is 60HZ. Select the frequency setting that best suits your present location

1. Press the Menu button in the Camera mode.
2. Press the Up or Down button to select the FREQUENCY option
3. Press the OK/Shutter button to open the submenu options.

    50 Hz, 60 Hz

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the frequency.

Speaker setting

You can choose to turn the camera`s speaker on or off

1. Press the Menu button in the Camera mode.
2. Press the Up or Down button to select the SPEAKER option.
3. Press the OK/Shutter button to open the submenu options.

    ON, OFF

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the speaker status on or off.

Language

You can select the language in which the camera menus will display.

1. Press the Menu button in the Video mode.
2. Press the Up or Down button to select the LANGUAGE option
3. Press the OK/Shutter button to open the language submenu options.

    English, French, Portuguese, Spanish, German and Italian

4. Press the Up or Down button to select the option you wish to choose.
5. Press the OK button to confirm and save the language selected.
6. All the camera messages and menus will not be displayed in the language selected.

Playback Mode

In this mode you can view, playback, delete and/or format the images that you captured with your camera with the SD memory card inserted.

1. Press the Mode button to set the camera to the Playback mode.
2. The last picture taken or video captured will appear on the LCD screen.
3. In this mode, you can view all the photos and play the video files taken with the camera and saved to the memory card.

Note: if there are no photos or videos on the SD Card once inserted in the camera a "NO FILE" message will appear on the LCD screen on entering this mode.

View Photos

If the ▶ icon and the letters **JPG** appear on top left of the screen, this means you are viewing a picture.

1. Press the Up button to view the previous file.
2. Press the Down button to view the next file.
3. Press the Right button to zoom into the selected photo.
4. Press the Left button to zoom back out of the selected photo.

Playback Videos

If the icon ▶ and the letters **AVI** appear together on the top left of the screen, this means you are viewing the image of a video file.

1. Press on the OK/Shutter button to playback the current video file with sound.
2. Press the OK/Shutter button again to pause the video.
3. Press the Up key to view the previous file.
4. Press the Down key to view the next file.

Delete or Format

You can delete unwanted files or format the SD memory card inserted in the camera from the Playback mode.

1. In the Playback mode, search and select the AVI video or JPEG photo file you wish to delete by pressing the Up or Down buttons.
2. Press the Menu button.
3. The DELETE MENU will appear with 4 options:
   - **EXIT** – select Exit to close the menu
   - **FORMAT** - Format the SD memory card inserted in your camera
   - **DELETE ALL**- delete all files from the SD memory card in your camera.
   - **DELETE ONE** - delete the current file you selected.
   .
4. Press the Up/Down button to select your choice.
5. Press the OK/Shutter button.

6. A Confirmation screen will appear with 'Yes' or 'No' options.
7. Press the Up/Down button to select the option to wish to perform.
8. Select 'Yes', to either delete the photo(s) or format the card. Select 'No' to cancel without deleting.
9. Press the OK/Shutter button to execute the command.

Note:
The Format option will delete all data on your SD memory card. Videos or Photos that you have not downloaded to your computer will be erased forever. Please be sure of your choice before using this function.

TV out function

Your Digital Video Camera supports an NTSC TV out function.
This function can only be used on TV sets that support NTSC format.
You can use the TV screen instead of your Digital Video LCD Screen to view your videos or photos.

HOW TO CONNECT TO TV

Please follow the below steps:

1. Power on your Digital Video Camera.
2. Turn on your TV.
3. Ensure that your TV is set to NTSC mode.
4. Connect your Digital Video Camera to the TV with the special TV cable supplied.
5. Connect the White cable to the Audio slot and the Yellow cable to the Video slot.
6. The LCD screen of your Digital Video Camera will now turn off and the image will now appear on the TV screen.
7. To see a video being captured in real time on your TV, point the camera at the object and begin to record as described in the Shooting Videos section above.
8. The image being recorded appears on your TV screen (instead of the camera`s LCD)
9. You can also use the TV screen instead of your camera screen to playback and view your videos and photos.

Note: Ensure your Digital Video Camera has sufficient battery power before using this function.

The LCD screen of your Digital Video Camera will be turned off (blank) after you connect it to the TV.

Install the Vivitar Experience Image Manager Software

Warning: Do not plug your camera into the computer until the software installation is complete.

1. Insert the installation CD into your CD-ROM drive. The Vivitar Experience Image Manager will begin to install.
2. Please review the license terms.
   On PC and Macintosh: Click the "I accept the terms of this license agreement" and then click "Next" to continue.
3. On PC only: Let the "Vivitar Experience Image Manager" installer create the folder to where the program will be installed, and then click "Install".
4. Please wait while the application continues the installation process on your computer.
5. Follow all instructions.
6. On PC: Click the "Close" button when the installation is complete.
   On Macintosh: Click the "Quit" button when the installation is complete.
   The application automatically opens.
7. If you closed the application, click on the Vivitar Experience Image Manager desktop icon (PC) or from the Programs or Applications menu on your computer to open and run the application.

22

Connect your Camera to the Computer

1. Push the built-in USB connector out to connect your camera to the USB port of your computer.

2. Turn the camera on.

3. The first time you connect the device to the computer you will have to wait a few seconds until the computer recognizes the device.

4. As your camera is a mass storage device "**MSDC**" will appear on the LCD, indicating that your camera is in Mass Storage Mode.

Get photos and videos from your camera to your computer

An SD/MMC card needs to be inserted into the camera. Do not disconnect the camera during file transfer. Doing so will cancel the transfer of any files on their way to your computer.

1. Select the "Get Images" button from the Home window.

23

2. The "Get media from device" window opens.

3. You can select to download photos, videos or both.

4. Select your camera (removable disk) from the device window. If your camera is the only USB device connected then it will be selected automatically.

5. Select a location on the computer where to place the new photo and video files.

6. Add the new photo and video files to albums if desired.

7. Select to remove the media files from the selected device (removable disk) after the import.

8. Click the "Get media" button to transfer the photos and videos from your camcorder to your computer.

    A media download progress bar appears on the bottom left showing the number of media files downloading to your computer. A message appears when the download is complete.

9. The photo and video files that you selected are now downloaded to your computer to the selected folder and albums ready for your use.

Get started!

Using the Vivitar Experience Image Manager you can:

- Organize your images by creating offline and online albums.
- When connected to the internet you can upload and manage photos and videos to and from the most popular photo sharing and social networking sites - Facebook, Flickr, MySpace, Picasa YouTube and Photobucket.
- Seamlessly transfer photos and videos from one social network to another.
- Edit images using automatic and manual tools.
- Use automatic "Geotagging" with built in Google Maps.

For more details on how to use the Vivitar Experience Image Manager open the Help file or click the "Take the Tour" button on the application`s Home page.

Transfer media from my camera to my computer manually (Using Windows)

1. Use the USB built-in connector on your camera to connect your camera to the USB port on your computer.

2. "**MSDC**" will appear on the LCD, indicating that your camera is in Mass Storage Mode.

3. A window appears with a list of options, select Open folder to view files and click OK.

4. Open the DCIM folder and the folder inside to view the media files.

5. Select the media and copy the files from this folder into your computer. Optionally, select the files and choose Copy from the Edit menu. Then select a folder and choose Paste from the Edit menu.

6. We recommend that you copy the images into the Pictures/My Pictures folder and the videos into the Videos/My Videos folder.

7. Do not disconnect the cable during transfer. Doing so will cancel the transfer of any files on their way to your computer.

Transfer media from my camera to my computer manually (Using Macintosh)

1. Use the USB built-in connector on your camera to connect your camera to the USB port on your computer.

2. "**MSDC**" will appear on the LCD, indicating that your camera is in Mass Storage Mode.

3. The camera's device icon appears on the desktop.

4. Click on the device icon and open the DCIM folder and the folder inside to view the media files.

5. Select the files and drag them into your computer. Optionally, select the files and choose Copy from

the Finder's Edit menu. Then select a folder and choose Paste from the Edit menu.

6. We recommend that you copy the images into the Pictures folder and the videos into the Movies folder.

7. Do not disconnect the cable during transfer. Doing so will cancel the transfer of any files on their way to your computer.

Note: After you connect your camera to your computer, the camera will remain on all the while it is plugged into the USB and it won't be switched off. On disconnecting the USB connector the camera will automatically switch off.

Sakar Warranty Card

This warranty covers for the original consumer purchaser only and is not transferable. Products that fail to function properly UNDER NORMAL USAGE**,** due to defects in material or workmanship. Your product will be repaired at no charge for parts or labor for a period of one year.

What Is Not Covered By Warranty:

Damages or malfunctions not resulting from defects in material or workmanship and damages or malfunctions from other than normal use, including but limited to, repair by unauthorized parties, tampering, modification or accident.

What To Do When Service Is Required:

When returning your defective product (postage pre-paid) for service, your package should include:

1. Copy of **original** bill of sale
2. A detailed written description of the problem.
3. Your return address and telephone number (Daytime)

MAIL TO ADDRESS BELOW:

In the US:	In the UK:
Sakar International	Sakar / Vivitar
Attention: Service Department	2D, Siskin Parkway East
195 Carter Drive	4020 Middlemarch Business Park
Edison, NJ 08817	Coventry, CV3 4PE

Technical Support

For technical support issues please visit our website at www.vivitar.com. You can find manuals, software and FAQ's at the website. Can't find what you are looking for? E-mail us at support@vivitar.com and one of our technical support team members will answer your questions. For phone support in the US please call 1-800-592-9541, in the UK call 0800 917 4831. If you would like to call from anywhere else, please visit www.vivitar.com for your local toll free number.

Technical Specifications

Product type	Digital Video Camera
Digital Video resolution	640*480 pixels (30fps) / 320*240 pixels(30fps)
Digital Photo resolution	1280*1024 pixels / 640*480 pixels
Image Sensor	CMOS Sensor
LCD Display	1.8" TFT
Color	24 bit RGB
Shutter Speed	1/8 sec to 1/5000 sec
Internal memory	None
External memory	SD/MMC card (up to 16GB) needs to be inserted to use the camera
Lens	F=2.4 f=3.0mm,
Frequency	50Hz / 60 Hz
Self Timer	10 seconds
Digital Zoom	4 x
White Balance / Exposure	Auto
Speaker	Built-in
File Format	AVI and JPEG
TV out	NTSC

Power saving	60 seconds
Battery	3 AAA batteries (1.5V)
Transmission interface	USB 1.1
Working temperature	0~40℃
Computer system	Window XP/Vista/Mac OS X (10.4.6 or higher)

Troubleshooting

The Camera does not Power on.

1. The Batteries are inserted in the wrong direction.   ★Reload the batteries in the correct direction.

2. The Batteries have insufficient power to power on.   ★Replace the batteries.

The camera does not take pictures.

1. The Memory is full.   ★Download the images to your computer and then delete all the images on the SD Card.

★Insert a new memory card.

2. The Memory card is not formatted correctly.   ★Format the memory card again or use a new card.

30

Image is blurry or out of focus.

1. The camera was moving when the image was captured.

★Hold the camera steady when shooting.

Images were deleted by mistake. Can I retrieve them

1. Images were deleted by mistake and have been removed from where they were located on the computer.

★ All deleted images can be found and retrieved from the Recycle or Trash Bin.

Recorded images are not saved in memory.

1. The camera was turned off before the images were saved to memory.

★If the battery low indicator appears on the LCD monitor, replace the batteries immediately.

A00-091016GES