

DVR 820HD

Digital Video Camcorder

Owner's Manual



Vivitar®

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Table of Contents

Introduction.....	1
Key Features	2
What your digital video camcorder includes	2
Computer System Requirements for Windows XP	2
Computer System Requirement for Windows Vista.....	3
Computer System Requirements for Macintosh	3
A Quick Look at your Digital Video Camcorder.....	4
Preparing Your Camcorder for Use	5
Inserting a SD Memory Card.....	7
Powering on and setting DVR Function Control	8
Capturing Videos	11
Capturing Still Photos	20
Audio Recording	28
Playback mode	30
AV mode – Using your TV to view images	34
Using your HDTV to view videos.....	36
Connect DVR with PC using USB cable provided	36
Connect DVR with printer using USB cable provided	37
Install the Vivitar Experience Image Manager Software	39
Connect your camera to the computer	41
Get photos and videos from your camera to your computer	41
Get started!.....	42
Transfer media from my camera to my computer manually (Using Windows)	42
Transfer media from my camera to my computer manually (Using Macintosh)...	43
Sakar Warranty Card	44
Technical Specifications	45
Trouble Shooting	46

Introduction

Thank you for purchasing the DVR 820HD Digital Video Camcorder. With your camcorder you can shoot video clips, take individual photos and record audio files. In addition, a SD compatible memory card of up to 8GB can be inserted to expand the memory of your DVR camcorder.

Key Features

- 5 modes – Video, Camera, Audio, Playback and Set Up.
- 3 Digital Video resolutions – 1280x720 HD, 640x480 (VGA), 320x240 (QVGA).
- 3 Digital Camera resolutions – 8M (3400X2550); 5M(2592X1944); 2M(1600X1200)
- 2.7" TFT LCD
- 8 X Digital Zoom
- Supports external SD memory card up to 8GB
- Built-in Microphone
- Takes digital photos, videos and audio files
- Vivitar Experience Image Manager software for uploading and managing photos and videos to or from the most popular photo sharing and social network websites.

What your digital video camcorder includes

- Digital Video Camcorder
- USB and AV Dual Cable
- Vivitar Experience Image Manager software Installation CD
- Quick Start Guide
- Hand strap
- Lithium battery
- AC charger

Computer System Requirements 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 required

Computer System Requirement for Windows Vista

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

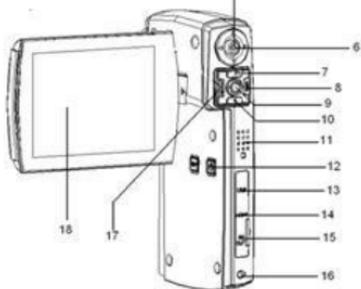
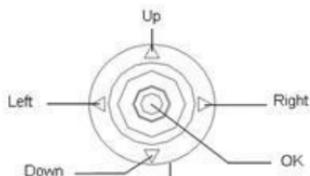
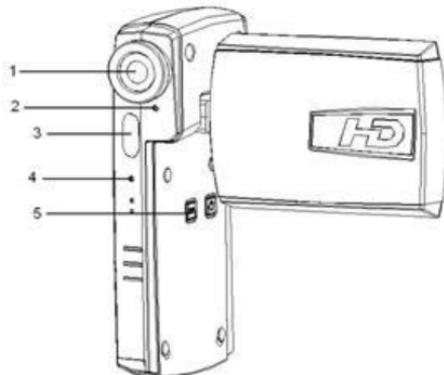
- Windows Vista
- 800MHz processor and 512 MB of system memory
- 20GB hard drive with at least 15GB of available space
- Support for Super VGA graphics
- Available USB Interface
- CD-ROM drive
- QuickTime 6 or higher
- Microsoft Internet Explorer 7 or higher
- Internet connection required

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 required

A Quick Look at your Digital Video Camcorder

1	Lens
2	Self-Timer Lamp
3	Flash Lamp
4	Microphone
5	Display Button
▲	Up
◀	Left
▶	Right
▼	Down
⊙	OK
6	Joystick
7	T / Zoom in Button
8	MENU Button
9	Capture Button
10	W / Zoom out
11	Speaker
12	Power Button
13	USB Jack
14	HDMI Jack
15	AV out
16	Strap Mount
17	MODE Button
18	LCD Monitor
19	Battery Holder
20	SD Card Slot
21	Battery & SD Door
22	Battery Compartment

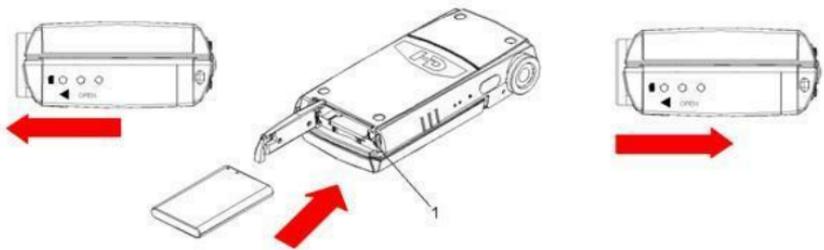


Preparing Your Camcorder for Use

Install lithium battery

Your digital camcorder needs a lithium battery in order to operate. The battery is found separately in the packaging. To install it correctly see the diagram below:

1. Slide the battery cover to the side for it to open.
2. Insert the battery in the battery compartment with the correct polarity facing up.



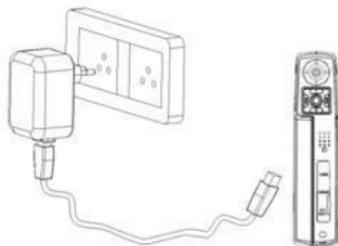
3. Use the battery clip found in the battery compartment to make sure that the battery is sitting firmly and secure.
4. Gently close and slide the battery cover back into place.
5. Once powering on your camcorder the battery icon will appear on the top left of the LCD screen.

Battery Indicator			
Battery Status	Empty battery	Half battery	Full battery

How to charge the battery

Please charge the battery when the indicator shows the Empty battery  icon.

1. Power your camcorder off.
2. Make sure the battery is inserted correctly and then connect your camcorder either to:
 - A running PC with the USB cable provided, or
 - use the AC charger provided in the package. Plug the AC charger cord into the USB jack of the camera.
3. The red LED will light up indicating that your camcorder is in charging mode. The LED will switch off when your camcorder is fully charged after a few hours (approx. 4 hours).



Note:

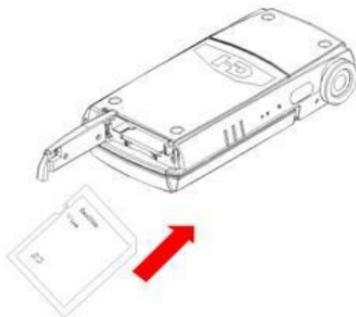
1. The camcorder should not be on while charging.
2. Use only the recommended power accessories. Use of power sources not expressly recommended for this equipment may lead to overheating, distortion of the equipment, fire, electrical shock or other hazards.
3. A red battery icon will flash on the LCD when the battery power is insufficient. Shortly thereafter your camcorder will power off.
4. The battery can be re-charged even when it has some power left. However we recommend re-charging it when it is empty.
5. When the operating time of the camcorder becomes extremely short even after proper battery-charging, this indicates that the life of the battery may be expired. You will need to buy a new battery.
6. Please remove your battery when you don't intend to use your camcorder for a long time.
7. Video camera becomes warm during charging – this is normal.
8. Limited internal memory is provided in order to take photos, videos and audio files.
9. Use a SD Memory card to expand the memory in order to capture and record many more images. All the media in the built-in memory will not be lost if no SD Memory Card has been inserted in the DVR when

- battery power is low or when you change your battery.
10. Do not open the battery door to take out the battery or SD card while media is being saved to the camcorder. Doing so may cause the photos, video or audio files to be lost or damaged.
 11. We strongly recommend downloading your media regularly to your computer.
 12. DO NOT leave any metal items (such as clips) near the contact areas of the power plug. Otherwise a fire and/or electric shocks may be caused by short-circuiting or the resulting heat generated.

Inserting a SD Memory Card

Your camcorder has limited internal memory. To expand the amount of memory, a SD compatible memory card of up to 8GB (not included) should be inserted into your DVR camcorder. SD Memory cards increase the number of videos, photos and audio files that can be captured with the camcorder before transferring them to a computer.

Media sitting on the memory card is not lost when your camcorder's power runs low or on replacing the battery.



1. Locate the SD card slot in the battery compartment.
2. Insert the SD memory card correctly in the direction shown.

3. Press the memory card until you hear a “Click” sound.

Note: After you insert an SD memory card, the SD card icon will appear on the top left of the LCD, indicating that your SD memory card has been installed successfully. The media you capture will now be stored on the card and not in the internal memory.

- This product supports SD cards of up to 8GB.
- Make sure that the card is not locked. Locked cards do not allow images to transfer to the card.
- Formatting will delete all data on the SD Memory Card.
- Download all the media to your computer before you format the card.
- Do not remove the SD Memory Card during formatting as this may damage the card and render it unusable.
- Before using the camcorder, be sure to format the card with the camcorder (see the Setup section further on in the manual for instruction on how to format the card).

Powering on and setting DVR Function Control

To power on the camcorder, flip open the LCD Screen. The camcorder automatically powers on. The Power button is situated on the inside of the camcorder facing the LCD screen.

Power on

Press the Power button to turn on your DVR.

Power off

Press the Power button to turn your DVR camcorder off. The DVR camcorder will switch off.

If you close the LCD screen, this will also turn the DVR camcorder off.

By default if the DVR camcorder is not in use or in an operational mode for 3 minutes (180 seconds) it will automatically switch off.

When there is insufficient battery power, a red battery icon will appear on the LCD screen. The camcorder will automatically power off a few moments later.

Setting the Language

When using the video camcorder for the first time after purchasing it, be sure to choose a language and set the date & time before use.



1. Turn the **Power** on to enter the Video mode.
2. Press the **MENU** button.
3. Push the **OK/Joystick** button to the **Left/Right/Up/Down** to select the **Setup**  icon from the menu icons that appear.
4. Press the **OK/Joystick** button.
5. Push the **OK/Joystick** button to the **Left/Right/Up/Down** and select the **Language**  icon submenu option.
6. Press the **OK/Joystick** button.
7. Push the **OK/Joystick** button to the **Left/Right/Up/Down** button to highlight and select the language you desire.

English / German / French / Spanish / Portuguese / Italian / Dutch /

Russian / Turkish

8. Press the **OK/Joystick** button to save your choice. The interface of the camcorder will change to the language you selected.
9. Press the **MENU** button to close the language submenu and press it again to exit the Setup mode function.

Setting the Date and Time

To set the time and date that will appear on the photos you capture.

1. Turn the **Power** on to enter the DV mode.
2. Press the **MENU** button.
3. Push the **OK/Joystick** button to the **Left/Right/Up/Down** to select the **Setup** icon from the menu icons that appear.
4. Press the **OK/Joystick** button.
5. Push the **OK/Joystick** button to the **Left/Right/Up/Down** and select the **Date/Time**  icon submenu option.
6. Press the **OK/Joystick** button.
7. Push the **OK/Joystick** button to the **Left/Right** button to highlight and select the **Year, Month, Day, 24H, Hour and Minutes** options you desire to change.
8. Push the **OK/Joystick** button **Up/Down** to change the digits for each of the date or time options you desire to update.
9. Press the **OK/Joystick** button to save the date and time you selected.
10. Press the **MENU** button to close the Date/Time submenu and press it again to exit the Setup mode function.

Changing the camcorder`s modes

There are four modes in this DVR camcorder.

1. Press the **Power** button to turn on the camcorder.
2. The **Video** default capture mode icon appears on the LCD .
3. Press the **MODE** button to change from the video to the **Camera** mode .
4. Press the **MODE** button again to enter the **Audio** mode.
5. Press the **MODE** button again to enter the **Playback** mode to preview all the images and audio files you captured.
6. Press the **MENU** button to open the main menu with Setting and Setup modes appearing for each mode respectively.

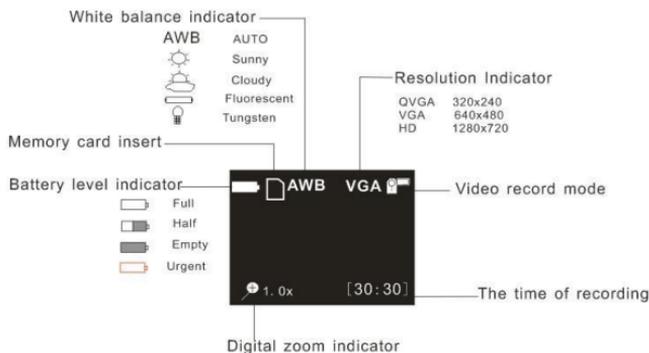
7. Select the mode you wish to enter by pushing the **OK/Joystick** button **Right/Left/Up/Down** and pressing the **OK/Joystick** button to enter the submenu.

Capturing Videos

In order to capture videos (with audio) using your camcorder you need to select the **Video** mode. On turning on your camcorder the first mode to appear is the **Video** mode. To change between the function modes on your DVR, press the **MODE** buttons.

The camcorder has limited built in memory. Use a compatible SD card of up to 8 GB to expand the memory capacity to capture even more and longer videos than can be captured using internal memory only.

The video icon will now appear on the top right corner of the LCD.



1. The amount of time left at that resolution and memory appears on the bottom right of the LCD.
2. Aim the camcorder at the subject or object you wish to capture. The image appear in the LCD screen.
3. Press the **Capture** button (located between the MENU and MODE buttons) to start recording your video.

4. The elapsed time of the video will appear in red font on the bottom right on the LCD.
5. Press the **Capture** button again to stop the recording.
6. The recorded file will be saved to your memory (internal or SD card) in MP4 format.

Note:

1. Press the **Up** button to **Zoom In** or the **Down** button to **Zoom Out** of the subject during the shooting to focus in on your subject.
2. The Zoom icon appears on the bottom left of the LCD screen.
3. You can view the MP4 files in playback mode.
4. Once they are downloaded to the PC view them using QuickTime and Windows Media Player.
5. As the internal memory of the camcorder is limited, the size of the videos are limited if no external memory is used.
6. Please insert a SD memory card of up to 8 GB to capture longer videos.
7. When the internal memory is full, a red “F” icon will appear in the center of the LCD screen.

Video Setting options

In Video mode there are three video resolutions for you to choose from before capturing your video (HD - 1280x720, VGA – 640x480, QVGA – 320x240 pixels). The higher the resolution selected the better the quality of the video, however higher quality videos use up more memory. You can also enter and change the White Balance/Exposure/Setup Mode.

Movie Size (Resolution)

White Balance

EV Setup (Exposure)

Setup

To enter the Settings submenu options for the Video mode:

1. Press the **MENU** button.
2. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the Setting you wish to change from the main menu that appears.

Resolution

You can select different Video resolutions – HD 1280x720 pixels / VGA 640x480 pixels / QVGA 320x240 pixels. Using the smaller resolution allows you to take longer videos. Videos captured at higher resolution are of better quality.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Resolution**  menu icon.
2. Press the **OK/Joystick** button to open the **Resolution** submenu.
3. Push the **OK/Joystick** button to the **Right/Left** to highlight and select the resolution option:
320x240, 640x480, 1280x720
4. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.
5. Press the **MENU** button to revert back to the Video capture mode to start capturing videos with the new resolution selected.

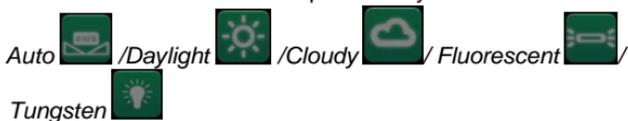
Note: After selecting your resolution, the corresponding icon (HD/VGA/QVGA) will appear on the top right of the LCD.

White Balance

This setting is used to adjust the color of your videos as per your light source.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **White Balance**  menu icon.

2. Press the **OK/Joystick** button to open the **White Balance** submenu.
3. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to highlight and select the White Balance option icon you desire:



4. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.
5. Press the **MENU** button to revert back to the Video capture mode to start capturing videos with the new white balance setting selected.

Note:

After selecting your White Balance choice, the corresponding icon will appear on the top of the LCD screen.

Exposure

This setting allows you to manually compensate for unusual lighting conditions such as indirect indoor lighting, dark backgrounds, and strong backlighting. The exposure value range is -2.0 (Dark) to 2.0 (Bright).

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Exposure** menu icon.
2. Press the **OK/Joystick** button to open the **Exposure** submenu.
3. Push the **OK/Joystick** button to the **Left/Right** to select the exposure setting as per the present light condition:

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

4. The Exposure effect selected automatically appears on the LCD.
5. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.

6. Press the **MENU** button to revert back to the Video capture mode to start capturing videos with the new exposure setting selected.

Short-cut buttons

The following modes can be activated by pushing the **OK/Joystick** button while in the Video mode:

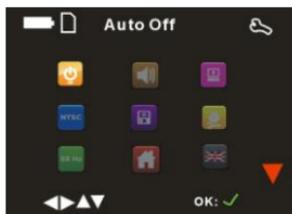
- **White Balance** – Pushing the **OK/Joystick** button to the left will toggle between the different White Balance options. The options will appear on the LCD screen and the screen will automatically change per the option selected.
- **Resolution** - Pushing the **OK/Joystick** button to the right will toggle between the different Resolution options. The resolution icon appears on the top right of the LCD screen. Videos captured will be per the resolution selected.

Setup Mode

The setup mode appears and can be adjusted in both the Video as well as the Camera setting menu.

In Setup mode you can adjust the way the camcorder is setup.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Setup Mode**  menu icon.
2. Press the **OK/Joystick** button to open the **Setup Mode** submenu.
3. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to highlight and select the Setup Mode option icon you desire:





Auto Power Off – this power saving mode allows you to select the stand-by time that is activated automatically if the camcorder is left inactive.

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Right/Left** to highlight and select one of the icons:
1 min / 3 min / Never
- Press the **OK/Joystick** button to confirm, save your choice and exit to the Setup mode submenu.
- The camcorder will automatically power off if inactive for the time selected.



Buzzer – activate or inactivate the beep sound that is emitted when pressing a button

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Right/Left** to highlight and select one of the icons:
ON/ OFF
- Press the **OK/Joystick** button to confirm, save your choice and exit to the Setup mode submenu.
- If OFF is selected the camcorder will be silent and not emit beeps when buttons are pressed.



Brightness – adjust the brightness of the LCD screen

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Right/Left** to select the brightness option:
-2.0 (dark) / -1.0 / 0.0 / 1.0 / 2.0 (bright)

- The LCD screen will automatically adjust as the option is selected.
- Press the **OK/Joystick** button to confirm, save your choice and exit to the Setup mode submenu.



Display – You can use your bigger TV screen to playback and view the images and videos on the camcorder instead of using the LCD screen. Before connecting the cable to your TV you need to select the TV system for the TV you are connecting to.

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Right/Left** to highlight and select one of the icons:
NTSC / PAL
- Press the **OK/Joystick** button to confirm, save your choice and exit to the Setup mode submenu.



Format – Using this option you can format the built-in memory and SD Card if inserted.

Caution: Formatting the memory will erase all the images. Please download and save all the images to your computer before formatting.

- Press the **OK/Joystick** button.
- A “FORMAT WILL ERASE ALL DATA CONTINUE?” message appears on the LCD screen with 2 options.
- Press the **Up/Down** button to select the format option
NO / YES
- If you select YES the memory will be formatted on pressing the **OK/Joystick** button.
- If you select NO the memory will not be formatted and the

camcorder will revert to the Setup mode submenu on pressing the **OK/Joystick** button.



Date / Time – To set the Date and Time that will appear on images.

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Right/Left** to select each of the date and time options:

YEAR / MONTH / DAY / 24H / HOUR / MINUTE

- Push the **OK/Joystick** button to the **Up/Down** to adjust the digits per each date and time option selected.
- Press the **OK/Joystick** button to confirm, save your choice and exit to the Setup mode submenu.



Light Frequency – Fluorescent lighting flickers very quickly at the same frequency as the mains supply. This can affect the quality of your photos and videos. The anti-flicker frequency can be changed when taking pictures in fluorescent light to correspond with the frequency of the mains supply. 60Hz is used in USA. 50Hz is used in Europe.

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Right/Left** to select one of the icons:

50Hz / 60 Hz

- Press the **OK/Joystick** button to confirm, save your choice and exit to the Setup mode submenu.



Default Settings – You can restore your camcorder to the default factory settings.

- Press the **OK/Joystick** button.
- A “RESTORE DEFAULT ARE YOU SURE?” message appears

on the LCD with 2 options.

- Push the **OK/Joystick** button to the **Up/Down** to select the default option:
NO / YES
- If you select YES, the default factory setting will be reset on pressing the **OK/Joystick** button.
- If you select NO, the camcorder will revert to the Setup mode submenu.



Language – adjust the camcorder's language that appears for the menus on the LCD screen

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Right/Left** to select the language option:

English / Traditional Chinese / Simple Chinese / German / French / Spanish / Portuguese / Italian / Japanese

- Press the **OK/Joystick** button to confirm, save your choice and exit to the Setup mode submenu.
- The LCD menu screens will now appear in the language option selected.

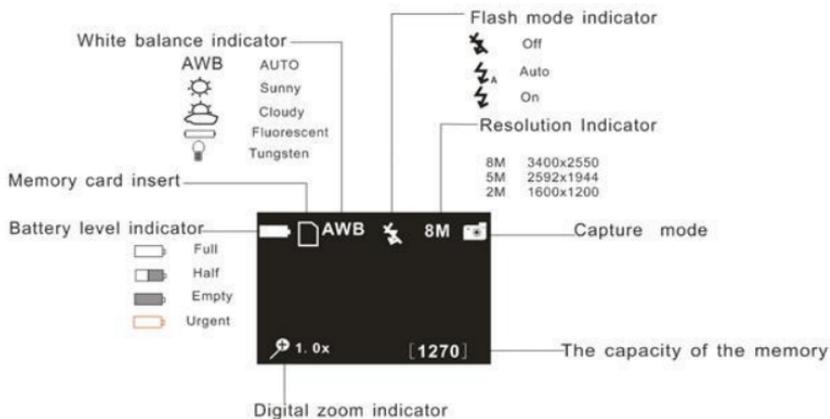
Version – read the version number of the firmware

- Press the **OK/Joystick** button.
- Push the **OK/Joystick** button to the **Up/Down/Right/Left** to select the version option.
- Press the **OK/Joystick** button.
- The version number appears on the LCD screen.
- Press the **OK/Joystick** button to exit to the Setup mode submenu.

Capturing Still Photos

In order to capture still photos using your camcorder you need to select the **Camera** mode. On turning on your camcorder the first mode to appear is the **Video** mode. To change between the function modes on your DVR, press the **MODE** button.

The camcorder has limited built in memory. Use a compatible SD card of up to 8 GB to expand the memory capacity to capture even more memorable photos.



The photo icon will now appear on the top right corner of the LCD.

1. The amount of photos left to take at that resolution and memory appears on the bottom right of the LCD.
2. Aim the camcorder at the subject or object you wish to capture.
3. Use the image that appears in the LCD to compose your shot.
4. Hold the camcorder steady and press the **Capture** button to capture the shot.

5. The camcorder will emit a capture sound as the photo is saved to memory.
6. After the shot is taken the number is reduced by one.
7. The photo file will be saved to your memory (internal or SD card) in JPEG format.
8. The number of photos that can be captured not only depends on the internal memory or the SD card's capacity but also on the resolution selected. Better quality photos are taken at higher resolutions but these will also take up more memory on the card.

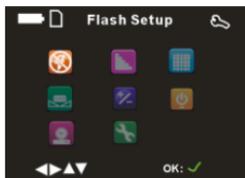
Note:

1. Press the **Up** button to **Zoom In**  or the **Down** button to **Zoom Out**  of the object being photographed.
2. The Zoom icon appears on the bottom left of the LCD screen.
3. You can view the JPEG files in playback mode.
4. As the internal memory of the camcorder is limited, the amount of photos that can be captured is limited.
5. Either download the photos to your computer using the Vivitar Experience Image Manager software as described below in the section "**Transfer photos and videos to your computer**" to free up memory or insert an SD card to continue taking more photos and videos.
6. When the internal memory is full, a red "**F**" icon will appear on the LCD screen when you attempt to capture further photos.

Photo Setting options

In Photo capture mode there are three photo resolutions for you to choose from before capturing your photos (1600x1200 (2M), 2592x1944 (5M) and 3400x2550 (8M)). The higher the resolution selected the better the quality of the photo, however higher quality photos use up more memory. You can also enter and change the Flash Setup / Quality / White Balance /

Exposure / Self Timer / Date Stamp and Setup Mode.



Flash Setup

Quality

Resolution

White Balance

Exposure

Self Timer

Date Stamp

Setup

To enter the Settings submenu options for the Photo mode:

1. Press the **OK/Joystick** button.
2. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the Setting you wish to change from the main menu that appears.

Flash Setup

This setting is used to adjust the flash that can be activated in poor light conditions. The flash is affective when taking photos where the object is within 1.8 to 2.5 meters.

Note: The flash will only operate if there is enough battery power.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Flash Setup**  menu icon.
2. Press the **OK/Joystick** button to open the **Flash Setup** submenu.
3. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to highlight and

select the Flash Setup option icon you desire:



4. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.
5. Press the **MENU** button to revert back to the Photo capture mode.
6. Press the **Capture** button to capture the photo using the flash option you selected.

Note:

After selecting your Flash Setup choice, the corresponding icon will appear on the top of the LCD screen.

Selecting the Auto choice will let the camcorder decide when to use the flash in the present lighting conditions.

Quality

This setting is used to compress the pictures you take in order to make their file size smaller. While this has the advantage of enabling you to squeeze more photos into the available memory, picture quality is sacrificed.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Quality**  menu icon.
2. Press the **OK/Joystick** button to open the **Quality** submenu.
3. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to highlight and select the Quality Setup option icon you desire:



4. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.

5. Press the **MENU** button to revert back to the Photo capture mode.
6. Press the **Capture** button to capture photos using the quality option you selected.

Resolution

You can select different Photo resolutions – 1600x1200 (2M), 2592x1944 (5M) and 3400x2550 (8M). Using the smaller resolution allows you to take more photos. Photos captured at higher resolution are of better quality but take up more memory.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Resolution**  menu icon.
2. Press the **OK/Joystick** button to open the **Resolution** submenu.
3. Push the **OK/Joystick** button to the **Right/Left** to highlight and select the resolution option:
1600x1200  / 2592x1944  / 3400x2550 
4. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.
5. Press the **MENU** button to revert back to the Photos capture mode to start capturing photos with the new resolution selected.

Note:

After selecting your resolution, the corresponding icon (2M / 5M / 8M) will appear on the top right of the LCD.

White Balance

This setting is used to adjust the color of your photos as per your light source.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **White Balance**  menu icon.

2. Press the **OK/Joystick** button to open the **White Balance** submenu.
3. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to highlight and select the White Balance option icon you desire:



4. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.
5. Press the **MENU** button to revert back to the Photo capture mode to start capturing photos with the new white balance setting selected.

Note:

After selecting your White Balance choice, the corresponding icon will appear on the top of the LCD screen.

Exposure

This setting allows you to manually compensate for unusual lighting conditions such as indirect indoor lighting, dark backgrounds, and strong backlighting. The exposure value range is -2.0 (Dark) to 2.0 (Bright)

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Exposure**  menu icon.
2. Press the **OK/Joystick** button to open the **Exposure** submenu.
3. Push the **OK/Joystick** button to the **Left/Right** to select the exposure setting as per the present light condition:

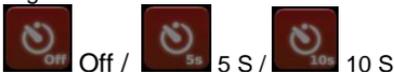
EV-2.0 / EV-1.7 / EV-1.3 / EV-1.0 / EV-0.7 / EV-0.3 / EV+0.0 / EV+0.3 / EV+0.7 / EV+1.0 / EV+1.3 / EV+1.7 / EV+2.0

4. The Exposure effect selected automatically appears on the LCD.
5. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.
6. Press the **MENU** button to revert back to the Photo capture mode to start capturing photos with the new EV exposure setting selected.

Self Timer

You can include yourself in a photo by using this feature to delay the time between your pressing of the shutter button and when the photo is actually taken. Setup and stand your camcorder on a flat and sturdy surface before pressing the Shutter button.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Selftimer**  menu icon.
2. Press the **OK/Joystick** button to open the Self Timer submenu.
3. Push the **OK/Joystick** button to the **Left/Right** to select the self timer setting:



4. Press the **OK/Joystick** button to confirm, save your choice and exit to the Setting menu.
5. Press the **MENU** button to revert back to the Photo capture mode to start capturing photos with the new self timer setting selected.
6. The Self Timer icon appears on the top of the LCD screen.
7. Press the **Capture** button.
8. The countdown icon appears on the LCD screen, the red LED on the front of the camcorder flashes and the camcorder emits loud beeps as it counts down until the photo is captured.
9. After the selected time delay the photo will be taken.

Date Stamp

You can select to have the Date & Time stamp appear on the photos or not.

1. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to select the **Date Stamp**  menu icon.

2. Press the **OK/Joystick** button to open the **Date Stamp** submenu.
3. Push the **OK/Joystick** button to the **Right/Left/Up/Down** to highlight and select the Date Stamp option icon you desire:



4. If you select Disable, no date/time will appear on the photo after it is captured.
5. To set the Date and Time, select the **Enable** option and press the **OK/Joystick** button to open the submenu.
6. Push the **OK/Joystick** button to the **Left/Right** to highlight and select the Year, Month, Day, 24H, Hour and Minutes options you desire to change if you have not yet set the Date and Time as explained in the Setup mode.



7. Push the **OK/Joystick** button **Up/Down** to change the digits for each of the date or time options you desire to update.
8. Press the **OK/Joystick** button to save the date and time you selected and exit to the Setting menu.
9. Press the **MENU** button to revert back to the Photo capture mode.
10. Press the **Capture** button to capture photos with date and time stamps appearing on the photos when viewing the photos in Playback mode or when downloaded to the computer.

Setup Mode

The Setup mode  is found in both the video and photo modes and can be accessed from either the Video menu or the Camera menu.

See the description of the Setup mode as explained at the end of the Video Setting options section of this manual.

Short-cut buttons

The following modes can be activated without going in the Setting menu by pushing the **OK/Joystick** button while in the Camera mode:

- **Flash** - To activate and toggle between the flash options in the Camera mode, push the **OK/Joystick** button **Up**. The LCD screen will go blank for a few seconds and the LED will begin to flash on and off while the flash is being set. The flash icons will appear on the LCD screen. On each consecutive pressing the flash icon on the top of the LCD will change. Select the flash option and press the Capture button to capture the photo.
- **White Balance** – Pushing the **OK/Joystick** button to the **Down** will toggle between the different White Balance options. The options will appear on the LCD screen and the screen will automatically change per the option selected.
- **Resolution** - Pushing the **OK/Joystick** button to the **Right** will toggle between the different Resolution options. The resolution icon appears on the top right of the LCD screen. Photos captured will be per the resolution selected.
- **Self Timer** - Pushing the **OK/Joystick** button **Left** will toggle between the different Self-timer options. The self-timer icon appears on the top of the LCD screen. Photos captured will be per the time selected.

Audio Recording

You can record audio files to playback on your camcorder or copy over to your computer



1. Press the **MODE** button until you see the Audio mode appear on the LCD.
2. The amount of recordable time available per internal or external memory, appears on the bottom right corner of the LCD.
3. Press the **Capture** button (between the MODE and MENU buttons) to start recording.
4. The recording lapsed time appears in red on the bottom right corner.
5. Press the **Capture** button again to stop the recording and save as a WAV file to the camcorder's memory or the SD card if inserted.

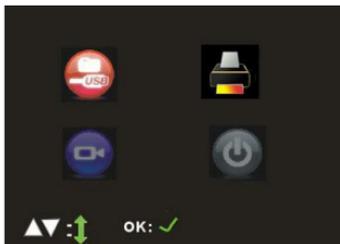
Note:

- The video camera will automatically stop recording when the memory or card capacity is full.

Copy audio files to your computer

To copy the audio WAV files you recorded from your camcorder to your computer please follow the following steps:

- Plug your camcorder into the USB port of your computer using the USB cord provided.
- Push the **OK/Joystick** button to highlight and select the **USB** icon from the icons that appear on the LCD to set your camcorder into USB mode.



- Open the “My Computer” on your computer.
- Select the camcorder that appears as a removable drive.
- Open the “DCIM” folder and then the “100COACH” subfolder.
- The folder will open displaying all the media files you captured with your camcorder. Select the WAV audio file and drag and drop it from your camcorder to your computer.

Playback mode

You can playback the videos and audio files and view photos on your camcorder or attach the TV In cable to preview them on your TV screen.

1. After you open the LCD panel and power on your camcorder, press the **MODE** button until the **Playback**  mode appears.



2. The Playback screen will appear with the Playback  icon appearing on the top right corner of the screen.
3. The Playback mode will appear on the LCD as a 2 X 2 matrix of image thumbnails.
4. Push the **OK/Joystick** button **Left/Right/Up/Down** to toggle through and select the images you wish to view or the video and audio files you wish to play.
5. Photos will appear with a photo icon, Videos with a video icon and Audio with an audio icon on the top left corner of the thumbnails.
6. The number of the media item appears on the bottom right corner of the thumbnail.
7. Press the **OK/Joystick** button for the photo to appear in full screen or to select the video or audio file for playback.
8. Push the **OK/Joystick** button **Right/ Left** to toggle through the images in full screen.
9. Press the **W** button to switch back to the thumbnail mode.

Zoom In and Out of still images:

1. Press the **T** button (above the Capture button) to Zoom In and press the **W** button to Zoom Out of images in full screen.
2. Once you have zoomed into the photo you can push the **OK/Joystick** button to the **Left/Right/Up/Down** to navigate around in the image.
3. Press the **MENU** or **W** button to cancel the navigation feature.

Playback videos:

1. Push the **OK/Joystick** button to toggle through the images.
2. Videos in full screen appear with a red square on the top middle of the LCD.
3. Press the **OK/Joystick** button to Play the video.
4. Press the **OK/Joystick** button to Pause the video and again to continue playing the video.
5. Push the **OK/Joystick** button **Up/Down** to adjust the playback speaker volume of the video.

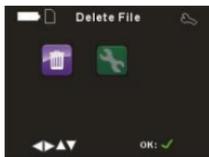
6. Press the **Capture** button to stop the video.

Playback audio:

1. Push the **OK/Joystick** button to toggle through the images.
2. Audio in full screen appear with a red square on the top middle of the LCD.
3. Press the **OK/Joystick** button to Play the audio.
4. Press the **OK/Joystick** button to Pause the audio and again to continue playing the audio.
5. Push the **OK/Joystick** button **Up/Down** to adjust the playback speaker volume of the audio.
6. Press the **Capture** button to stop the audio.

Delete Current or All images using Delete menu mode:

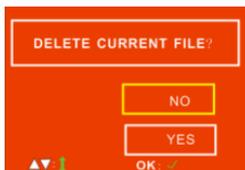
1. Select a video, photo or audio file in the Playback mode.
2. Press the **OK/Joystick** button for the file to appear in full screen.
3. Press the **MENU** button for the Playback setting menu to appear.



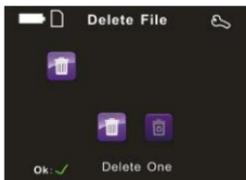
4. Push the **OK/Joystick** button **Left/Right** to select the submenu options:
Delete / Setup
5. Press the **OK/Joystick** button.
6. If Delete is selected the following submenus appear:
Delete One / Delete All
7. To Delete the selected image, Push the **OK/Joystick** button **Left/Right** to select the Delete One icon and then press the **OK/Joystick** button.
8. A “DELETE CURRENT FILE?” message appears on the LCD with NO

and YES choices.

Note: This message will appear for 5 seconds. If you do not make your selection within this time this message will disappear.



9. Push the **OK/Joystick** button **Up/Down** to select the option and then select the **OK/Joystick** button.
10. If YES is selected the selected image is deleted.



11. To Delete ALL the images on the camcorder`s memory, Push the **OK/Joystick** button **Left/Right** to select the Delete All icon and then press the **OK/Joystick** button.
12. A “DELETE ALL ARE YOU SURE?” message appears on the LCD with NO and YES choices.



13. Push the **OK/Joystick** button **Up/Down** to select the option and then select the **OK/Joystick** button.
14. If YES is selected All the images in the memory are deleted.

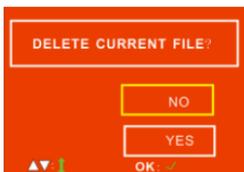
Caution: This process is irreversible and the images will be lost forever if they are not downloaded to the computer before deletion.

Delete Current file only

You can also quickly delete the selected media file

1. Select the media file you wish to delete and press the **OK/Joystick** button for the file to appear in full screen.
2. Press the **Capture** button.
3. The “DELETE CURRENT FILE?” message will appear on the LCD with NO and YES choices.

Note: This message will appear for 5 seconds. If you do not make your selection within this time this message will disappear.



4. Push the **OK/Joystick** button **Up/Down** to select the option and then select the **OK/Joystick** button.
5. If YES is selected the selected image is deleted.

Setup Mode

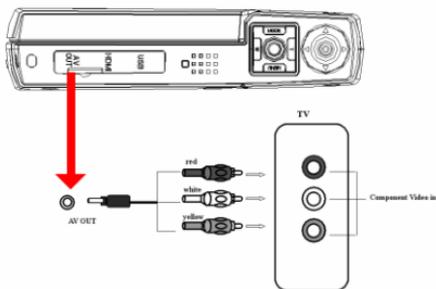
The Setup mode for the camcorder can also be access from the Playback mode.

For details of the Setup options please see a detailed explanation in the Video settings option section of this manual.

AV mode – Using your TV to view images

You can use your TV (instead of the LCD screen) to playback and view the images and playback the videos and audio files on the camcorder.

1. Power off your camcorder before plugging it into your TV using the AV cable provided.



2. Make sure the Display format mode setting on the camcorder is the same as the TV system (NTSC or PAL) you are using.
(See the Setup menu information on how to check and if need be change the Display setting).
3. Turn your TV on and turn to Video In (AV mode)
4. Plug the RED, YELLOW and WHITE connectors into the correct color slots on your TV. Connect the yellow terminal (Video) of the TV cable to VIDEO IN and connect the white terminal (Audio) of the TV cable to AUDIO IN on the TV.
5. Insert the other end of the AV cable into the AV Out slot of the camcorder and turn the camcorder on.
6. Set the camcorder to Playback mode and view the videos, photos and audio files on your bigger TV screen.

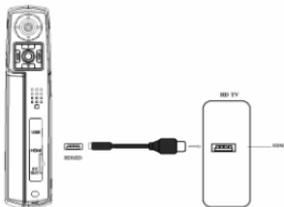
Attention:

- When connecting the video cable to the camcorder, the LCD of the camcorder will be blank.
- When connected to the TV the camcorder will continue to use and consume battery power.
- The TV system may affect the quality of the images. Please remember to adjust the display format of the camcorder to the same as that of the TV. (PAL/NTSC)
- The image may not be displayed on the center of the TV screen. This is caused by the TV setting and not a camcorder malfunction.

Using your HDTV to view videos

This camcorder has a built-in HDTV component allowing you to play your video files on your HDTV. The videos captured using the HD (720P) high resolution and quality setting can be viewed by connecting the camcorder directly to your HDTV using the HDMI cable provided.

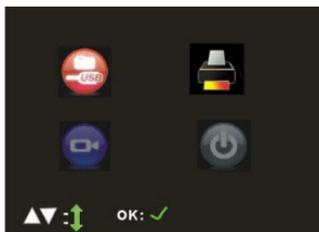
Power Off the camcorder and then connect it to the HDTV with the HDMI-cable.



1. Power on the HDTV and switch to HDMI-mode.
2. Power On the camcorder.
3. Push the **OK/Joystick** button Left/Right to select the video file you wish to view.
4. Press the Capture button to “Play” the selected video file on your HDTV.
5. Press the **OK/Joystick** button to “Pause” the video and again to continue playing.
6. Press the Capture button to “Stop” playing.
7. Push the **OK/Joystick** button Left/Right to select the next or previous video.
8. Push the **OK/Joystick** button Up/Down to adjust the volume.

Connect DVR with PC using USB cable provided

1. Plug one end of the provided USB cable into the USB slot on the back of the camcorder. Plug the other end of the USB cable into a USB port on your computer.
2. Turn your camcorder on.
3. Four icons will appear on the camcorder LCD screen.



4. Push the **OK/Joystick** button **Right/Left /Up/Down** to highlight and select the icon you desire, press the **OK/Joystick** button to activate this mode, or wait for around 10 seconds to activate this mode automatically.



MSDC (Mass storage for downloading files)



Printing function is disabled.

When enter into this mode, an icon  will appear on the screen. After 3 seconds the camcorder will revert back to the four icons screen automatically.



Working mode

In this mode, the camcorder will consume the power of the computer, not the battery power of the camcorder.



Power OFF

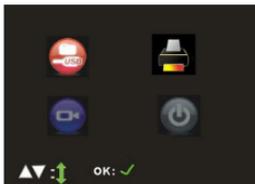
To power off the camcorder and change to the battery charging mode.

Connect DVR with printer using USB cable provided

Be sure you have taken some photos in your camcorder before using this function.

1. Plug one end of the provided USB cable into the USB slot on the back of the camcorder. Plug the other end of the USB cable into the printer's Pictbridge USB slot.

2. Turn your printer on.
3. Turn your camcorder on.
4. The four icons will appear on the camcorder screen. In this mode, Only the **Printer** function is enabled.



5. Push the **OK/Joystick** button **Right/Left /Up/Down** to highlight and select the **Print** icon.
6. Press the **OK/Joystick** button to activate this function. “Connect Printer” will appear on the screen.
7. Push the **OK/Joystick** button **Right** to select the photo you want to print.
8. Press the **OK/Joystick** button. “PRINTING CURRENT PHOTO” will appear on the screen and the current photo will be printed out.
9. Once finished printing, repeat Step 7 to print the next photo.

Note: In this mode, only **Print** mode is enabled. If for any reason you enter into the other three modes, pull out the USB cable from camcorder USB slot, and repeat the steps above to print photos.

Install the Vivitar Experience Image Manager Software

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

You must be connected to the internet to install and run the Vivitar Experience Image Manager software.

1. Insert the installation CD into your CD-ROM drive. The installation screen should automatically open.



2. On PC: The Vivitar Experience Image Manager Installer window appears. If the window does not appear, open the application's CD/DVD drive and click on "Setup.bat" to launch the installer.
3. On Macintosh: Click the icon to install the Vivitar Experience Image Manager.
4. If you do not have internet access at the time of inserting the CD-ROM, connect to the internet and then click the "Install Vivitar Experience Image Manager" button to begin the installation

Note: If you do not have internet access, you can still download media from the camera. Click the "How to transfer photos and videos from my camera to my computer" button for instructions.



5. If you have internet access, the “Choose your language” window opens, choose your language and click “Next” to open the next window.
6. Select your camera model from the list and click “Next” to open the next window.
7. Click “Next” to confirm your camera model selection and to install the application.
8. Please wait while the application is being installed on your computer.
9. Please review the license terms.
On PC: Click the “I Agree” button to continue.
On Macintosh: Click the “I accept the terms of this license agreement” and then click “Next” to continue.
10. On PC only: Let the “Vivitar Experience Image Manager” installer create the folder to where the program will be installed, and then click “Install”.
11. Please wait while the application continues the installation process on your computer.
12. On PC: Click the “Close” button when the installation is complete.
On Macintosh: Click the “Quit” button when the installation is complete.
13. Click the “Launch Vivitar Experience Image Manager” to open the application or close the window and run the Vivitar Experience Image Manager from your computer.



Connect your camera to the computer

1. Use the USB cable that came with your camera to connect your camera to 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 “**USB**” 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 card needs to be inserted. Do not disconnect the cable during transfer. Doing so will cancel the transfer of any files on their way to your computer.

1. Select the “Get Images” button from the Main menu.



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 camera 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 upload and manage photos and videos to and from the most popular photo sharing and social networking sites - Facebook, Flickr, MySpace, Picasa, Photobucket and YouTube. Seamlessly transfer photos and videos from one social network to another. Organize your images by creating offline and online albums. 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 cable that came with your camera to connect your camera to your computer.
2. “USB” 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 cable that came with your camera to connect your camera to your computer.
2. “**USB**” 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 PC, 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 cable 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:

Sakar International
Attention: Service Department
195 Carter Drive
Edison, NJ 08817

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

Image Resolution	8M(3400X2550); 5 M(2592X1944); 2M(1600X1200)
Video Resolution	HD: 1280*720 VGA: 640*480 QVGA: 320*240
LCD Display	2.7" TFT color LCD
Focus range	200cm ~ infinity
Aperture	F3.1, Fixed Focus
Shutter	Electronic Shutter: 1/2 ~ 1/1800 s
Internal Memory	Limited
External Memory	SD card up to 8 GB
Digital Zoom	8x for photo and video taking, 4x for photo playback
Self-timer	5s/10s
File Format	JPEG (Still Image) /MP4 (Video)/ WAV (Audio)
White balance	Auto / Daylight / Tungsten / Fluorescent / Cloudy
Exposure compensation	-2 (Dark) to +2 (Bright)
Flash mode	Forced, auto, off
Language	English, French, German, Italian, Spanish, Portuguese, Chinese Traditional, Chinese Simplified, Japanese
Auto shutoff	Disable, 1 min , 3 min
TV out	NTSC / PAL
Microphone	YES
Speaker	YES
Recorder	YES
ISO	Auto
Interface	USB 2.0
System Requirements	Windows XP, VISTA or MAC OS X 10.4.6 or higher
Battery	Li-ion Lithium battery 3.7V/>900mAh
Storage Temperature	Normal Temperature
Working Temperature	0 - 40° C

Trouble Shooting

Power does not turn on.

- | | |
|--|---|
| 1. The Battery is inserted in the wrong direction. | ★Reload battery in the correct direction. |
| 2. The Battery has insufficient power to power on. | ★Replace or recharge the battery. |

The camcorder does not take pictures.

- | | |
|--|--|
| 1. The Memory is full. | ★Insert a new memory card. |
| 2. The Memory card is not formatted correctly. | ★Format the memory card again or use a new card. |

Image is blurry or out of focus.

- | | |
|--|---|
| 1. The video camcorder was moving when the image was captured. | ★Hold the video camcorder steady when shooting picture. |
|--|---|

Image is not displayed on the LCD monitor.

- | | |
|--|---|
| 1. A memory card with non-PICT images (recorded with other camcorder) is loaded. | ★This video camcorder cannot display non-PICT images. |
|--|---|

Recorded images are not saved in memory.

- | | |
|--|---|
| 1. The video camcorder was turned off before the images are saved in memory. | ★If the battery low indicator appears on the LCD monitor, recharge the battery immediately. |
|--|---|