# High Definition Digital Video Camera



**User's Manual** 

## **Read This Before Using the Camera**

#### SAFETY INSTRUCTIONS

- Do not drop, puncture or disassemble the camera.
- Use the camera with care. Rough handling may damage the internal components.
- Do not expose the camera to high temperature. Avoid contact with water.
- Please notice that the camera body may become warm when operating it for an extended period.
- Test for proper operation before using the camera.
- Only use accessories supplied by the manufacturer.
- Use only the type of battery that came with your camera.
- Remove the battery if the camera is not going to be used for long periods.

#### **Product Information**

- Designs and specifications of the camera are subject to change without notice. This includes primary product specifications, software, and this user's manual.
- · This User's Manual is a general reference guide for the camera.
- The illustrations in this manual may not be the same as the actual design of your camera and those you see on the LCD screen.

## **Contents**

Read This	Before Using the Camera	2
Section 1	Getting to Know Your Camera	4
Section 2	Getting Started	7
Section 3	Enjoying the Record Mode	9
Section 4	Enjoying the Playback Mode	20
Section 5	Setting Your Camera	25
Section 6	Viewing Photos and Videos on TV	29
Section 7	Viewing Video & Photo on PC	30
Section 8	Uploading Files to Internet	31
Section 9	Specifications and System Requirements	34
Section 10	Troubleshooting	36

## Section 1 Getting to Know Your Camera

#### **Overview**

The camera equipped a 5 Mega Pixel sensor that can take H.264 format videos. The H.264 technology allows for extended video recording with less memory. High quality images up to 16 mega-pixels can also be delivered smoothly. With a color LCD monitor, you can view and examine the videos and photos easily.

The 3" LCD touch panel is an ideal platform for you to operate your camera. The menu options are accessible with your finger. With the touch panel, you can select the options directly and quickly.

The camera also features video recording at an HD resolution of 1920x1080. You can also connect it to an HDTV via an HDMI cable, and easily playback the recorded high-definition videos on the wide screen HDTV.

Moreover, the camera has an advanced uploading feature. With the exclusive built-in **Internet Direct** application, you can upload the videos captured by the camera to the web site more effortlessly.

ISO sensitivity and color balance can either be adjusted automatically or changed manually. A 16x digital zoom helps you to control over the videos and photos you take.

The varied effect options, such as Time Lapse and Slow Motion, make recording more fun.

The built-in memory allows you to take photos and to record videos without a memory card. The memory card slot allows users to increase the storage capacity.



#### Note

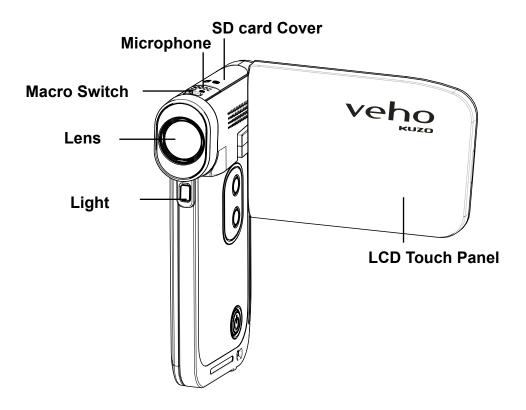
- · Partial memory of the built-in memory is used for the camera's Firmware code and software.
- Install the bundled software application on the CD, ArcSoft MediaImpression, for viewing the videos correctly on a PC.

#### **Standard Accessories**

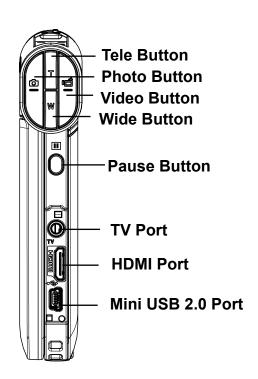
Unpack the package and make sure all standard accessories listed are included:

- Camera
- · USB Cable
- AV Cable
- Adaptor
- Lithium-ion Rechargeable Battery
- · Quick Guide
- CD-ROM (Software, User's Manual)
- Pouch
- Strap

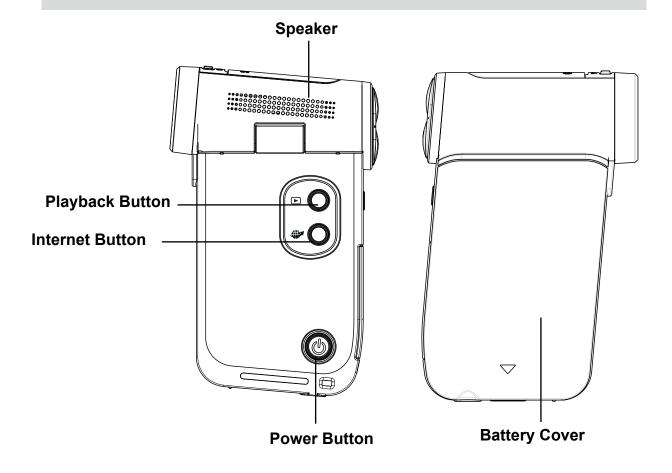
## **Front View**



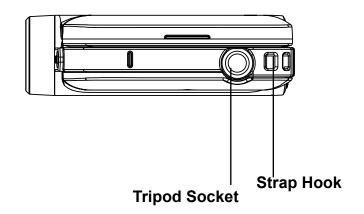
## **Rear View**



## **Side View**



## **Bottom View**

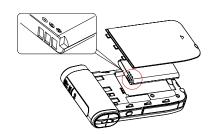


# Section 2 Getting Started

#### **Loading the Battery**

Before using the camera, you must load the supplied Lithium-ion rechargeable battery.

- Insert the battery according to the correct polarity marks ( + or -).
- 2. Close the battery cover firmly.



#### Charge your battery

You must use the supplied AC charger or the USB cable.

The camera must be turned OFF; blinking light confirms charging, and the light becomes constant when the charging has been completed.

In AC charging Mode, the light will turn itself off automatically after 3~5 minutes . The full charge time is about 3.5 to 4.5 hours. (Actual charging time may vary. It depends on the battery conditions.)



## **Inserting and Removing an SD Card (Optional)**

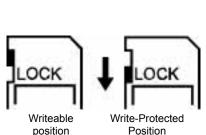
The camera comes with an internal memory which allows you to store photos and videos. You can expand the memory capacity by using an optional SD memory card.

- 1. Insert the memory card into the slot. Please refer to the figure on the right side.
- 2. To remove an installed SD card, press the card inwards to release it.
- 3. When the card pops out, gently remove it from its slot.
- 4. Recommended memory capacity: 1GB or above.



#### Note

- When a memory card is fitted, videos/photos are saved on the card rather than on the built-in memory.
- Protecting Data on an SD Card: SD Card is read-only when it is locked. No photos or videos can be recorded when the SD card is locked. Make sure the lock is on the writeable position before recording any media.

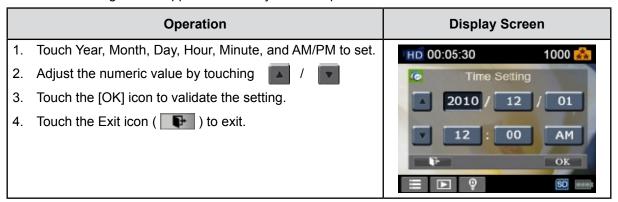


#### **Turning the Camera On**

- · To turn on the camera:
  - 1. Flip out the LCD panel; the camera will turn on automatically.
  - 2. Or press [Power Button] for one second to turn it on.

#### **Configuring the Initial Date and Time Setup**

• The time setting screen appears to allow you to setup date and time:



## **Getting Started**

- To record video: Press [Video Button] to record video. To stop recording, press it again.
- To pause recording: Press [Pause Button] to pause recording. To continue the recording, press it again.
- To take a photo: Press [Photo Button] to take photo.
- To view stored videos and photos: Press [Playback Button] or touch on the screen to switch to the Playback mode.

#### **Turning the Camera Off**

• To turn off the camera: You can either press [Power Button] for one second, or you can place the LCD panel back to its original position.

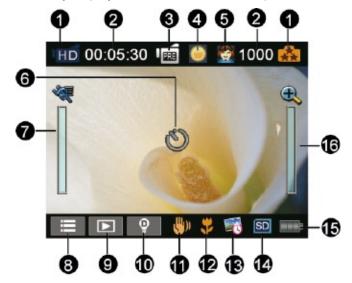
# Section 3 Enjoying the Record Mode

## **Button Function**

	Video Button:
	1. Press to take video.
	2. To stop recording, press it again.
<i>                                   </i>	
	Photo Button:
	Press to take photo.
Π	Tele Button:
T	1. Zoom In.
l H	Wide Button
	1. Zoom out.
U	
П	Pause Button:
	Press to pause the recording.
	2. To continue the recording, press it again.
	Power Button:
	Press down for one second to turn on or turn off the camera.
	Playback Button:
	1. Switch to the Playback Mode.
	2. For quick review, press it after recording.
Macro Switch:	
1. Switch between Macro Mode and Normal Mode.	
	1

## **LCD Monitor Information**

The indicators shown below may display on LCD when video and photo are recorded:



	Video Resolution	
	(FHD	Full HD (1080p 30 fps)
	(HD+	HD (720p 60 fps)
	ŒП	HD (720p 30 fps)
(1)	<b>ŪVGĀ</b>	VGA (640X480)
(')		Slow Motion (Record video at QVGA resolution.)
	Photo Resolution	
	<b>.</b>	16MP
	**	5MP
	€	ЗМР
(2)	00:05:30	Recording time of the video that can still be taken at current resolution
		Number of images that can still be taken at current resolution
(3)	PRE	Pre-Record Mode (Video Recording Only)
(3)	<b>24H</b>	Time Lapse (Video Recording Only)
	White Balance	
(4)		Daylight
(4)		Fluorescent
	•	Tungsten

Scene			
	<b>©</b>	Skin	
	7	Night	
(5)		Backlight	
	•	Black/White	
	2	Classic	
	8	Negative	
(6)	ల	Self-timer enabled	
(7)	Ĩ	Motion Detection (Video Recording Only)	
(8)	≡	Menu On	
(9)	D	Playback Mode On	
	<b>©</b>	Digital Light On	
(10) Light On		Light On	
	•	Light Off	
(11)	<b>(</b> ))	Stabilization (Video Recording Only)	
(12)	*	Macro Focusing On	
(13)	<b>©</b>	Date Printing On (Photo Only)	
(14)	SD	SD Card Inserted	
Battery: full power  Battery: medium power		Battery: full power	
		Battery: medium power	
(15)		Battery: low power	
		Battery: empty power	
	<b>≯</b> −	DC power mode	
(16)	•	Zoom meter: 1X~16X (16X Digital zoom)	

- Note
  Stabilization, Pre-record, and Slow Motion functions can not be used simultaneously.
  Pre-Record, Motion Detect, Slow Motion, and Time Lapse functions can not be used simultaneously.

## **Video Recording**

- Press [Video Button] to start recording. When a video is being recorded, a time indicator will display
  on the LCD monitor ( 0000025). To stop recording, press it again.
- To pause recording: Press [Pause Button] to pause recording ( 回00:00:36 ). To continue the recording, press it again.
- Press [Playback Button] or touch on the screen to view the recorded video.
- · Four resolution settings are available:

Video Quality		
(FHD Full HD (1080p 30 fps)		
ŒĐ+	HD (720p 60 fps)	
(HD	HD (720p 30 fps)	
<b>QVGA</b>	VGA (640X480)	



#### Note

Pause function can not be used when Time Lapse function is activated.

#### **Photo Capturing**

- · Press [Photo Button] to take photo.
- Press [Playback Button] or touch on the screen to view the photo.
- · Three resolution settings are available:

Image Quality		
*	16 Mega Pixels	
**	5 Mega Pixels	
₹	3 Mega Pixels	

## Taking Close up Photo/Video

- Slide the macro switch to change the focus range for different distances of objects.
  - 1. Slide the macro switch to Macro ( ).
  - 2. Press [Video Button] to start recording or press [Photo Button] to take photo.
- In Macro Mode, the macro icon( ) will appear on the LCD monitor.



#### Note

Remember to turn the macro switch back to Normal ( \( \sum\_{\text{\chi}} \)) when you are not taking close-up photo.

## **Using Zoom Function**

- · The zoom magnifies images when recording video or taking photo.
- 1. To zoom in/out, press the Tele/Wide Button.
- 2. It can be set from 1X~16X (16X Digital zoom)

## **Using Light Function**

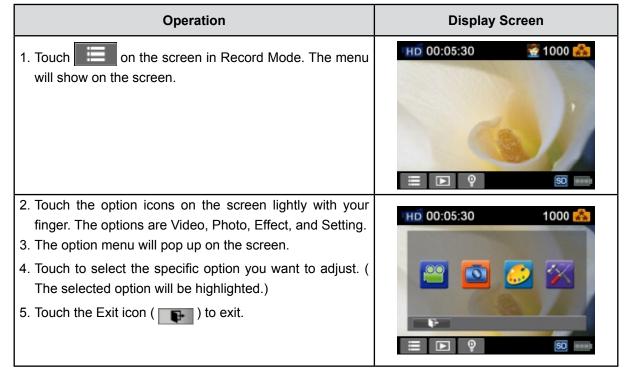
- The setting allows you to extend the brightness of the objects that are dark or in the shadow. Using the on-screen button to change the settings.
  - 1. **Digital Light On ( Parties)** ): To extend the dynamic range for backlight and high contrast sense so that the <u>objects</u> will be brighter and clearer.
  - 2. Light On( ): The light will be turned on and keep providing light.
  - 3. Light Off ( ): The light is turned off.
  - 4. Press [Video Button] to start recording or press [Photo Button] to take photo.

## **Options for Record Menu**

Video	Photo	Effect	Setting*
			<b>%</b>
<ul><li>Resolution</li><li>Stabilization</li><li>Motion Detect</li><li>Slow Motion</li><li>Time Lapse</li><li>Pre-record</li></ul>	<ul><li>Resolution</li><li>ISO</li><li>Self-Timer</li></ul>	<ul><li>Light</li><li>Scene</li><li>WB(White Balance)</li><li>Face Tracking</li></ul>	<ul> <li>Sound</li> <li>TV</li> <li>Language</li> <li>Time Setting</li> <li>Date Printing</li> <li>Format</li> <li>Default Setting</li> </ul>

<sup>\*</sup> Please refer to Section 5 for the detailed information about [Setting].

## **Operations for Record Mode**



## Video

	Operation	Display Screen	
1.	Touch on the screen in Record Mode. The menu will show on the screen.	HD 00:05:30 1000 🚵	
2.	Touch the [Video] icon on the screen. Submenu of Video will pop out on the screen.	<b>20</b> 💯 🕿	
3.	The Video submenu contains 6 options Resolution, Stabilization, Motion Detect, Slow Motion, Time Lapse, and Pre-recordfor you to adjust the camera settings.		



## **Video Resolution**

Four resolution settings are available.

- FHD (1080p 30) (Full HD (1080p30)):Record videos at 1920x1080p 30 fps resolution.
- HD+ (720p 60):Record videos at 1280x720p 60 fps resolution.
- HD (720p 30):Record videos at 1280x720p 30 fps resolution.
- VGA (640X480): Record videos at 640x480p 30 fps resolution.

Operation	Display Screen
<ol> <li>In the Video menu, touch the [Resolution] icon on the screen.</li> <li>Touch to select the desired option.</li> <li>Touch the Exit icon ( ) to exit.</li> </ol>	HD 00:05:30 1000 ♣ Full HD (1080p30)    FHD



## 쀐 Stabilization

Record with an effect of reducing camera shake to result in more stable video.

Operation	Display Screen
<ol> <li>In the Video menu, touch the [Stabilization] icon on the screen.</li> <li>Touch to select [On] or [Off] ( ).</li> <li>Touch the Exit icon ( ) to exit.</li> </ol>	HD 00:05:30 1000 ♣ Stabilization

## Motion Detection

Record videos automatically when the camera detects a movement.

	Operation	Display Screen	
1.	In the Video menu, touch the [Motion Detect] icon on the screen.	HD 00:05:30 1000 🚓	
2.	Touch to select [On] or [Off] (	U Do Co	
3.	Touch the Exit icon ( ) to exit.		
4.	Camera will start to record video automatically if it detects a movement. Stop recording if it does not detect a movement.	COTTO DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DE LA CONTRA DEL CONTRA DE LA CON	



## **Slow Motion**

Record videos with slow motion effect. When the video is played, the playback time will be longer than the actual recording time.

Operation	Display Screen
In the Video menu, touch the [Slow Motion] icon screen.	on the HD 00:05:30 1000 🚵
<ol> <li>Touch to select [On] or [Off] ( ).</li> <li>Touch the Exit icon ( ) to exit.</li> </ol>	Slow Motion  Slow Motion

## 24H

## **Time Lapse**

Record still images at specific intervals you can set and play them as one video file.

- Off: Disable Time Lapse.
- 1 Second.: Record one frame per second.
- 3 Seconds: Record one frame every 3 seconds.
- 5 Seconds: Record one frame every 5 seconds.

	Operation	Display Screen	
1.	In the Video menu, touch the [Time Lapse] icon on the screen.	HD 00:05:30 1000 🚵	
2.	Touch to select the desired option.		
3.	Touch the Exit icon ( ) to exit.		



#### Note

Pause function can not be used when Time Lapse function is activated.

ΕN

## Pre-record

The Pre-record function ensures that you will not miss any critical recording opportunities. The video is recorded 1 second more before the [Video Button] is pressed.

	Operation	Display Screen
1.	In the Video menu, touch the [Pre-record] icon on the	HD 00:05:30 1000 🚵
2.	screen.  Touch to select [On] or [Off] (	Pre-record
3.	Touch the Exit icon ( ) to exit.	
		<b>□</b> • • • • • • • • • • • • • • • • • • •



#### Note

• Aim the camera at the subject and position it securely before the [Video Button] is pressed.

#### **Photo**

	Operation	Display Screen	
1.	Touch on the screen in Record Mode. The menu will show on the screen.	□HD 00:05:30	
2.	Touch the [Photo] icon on the screen. Submenu of Photo will pop out on the screen.		
3.	The Photo submenu contains 3 options Resolution, ISO, and Self-Timerfor you to adjust the camera settings.		



## **Photo Resolution**

Three resolution settings are available.

- 16MP:Shoot photo at 4608 x 3456, 16MP quality.
- **5MP:**Shoot photo at 2592 x 1944, 5MP quality.
- **3MP:**Shoot photo at 2048 x 1536, 3MP quality.

	Operation	Display Screen	
1.	In the Photo menu, touch the [Resolution] icon on the screen.	HD 00:05:30	
2.	Touch to select the desired option.  Touch the Exit icon ( ) to exit.	★★ ★★ ★★ 5MP 5MP 5MP	

## ISO ISO

The camera adjusts the ISO sensitivity of its images automatically. Two manual ISO sensitivity settings are available. (800/1600). The larger the number is, the higher the ISO sensitivity is set to. Select a small number to shoot a smoother image. Select a large number to shoot an image in a dark location or to shoot a subject moving at high speed.

	Operation	Display Screen
1.	In the Photo menu, touch the [ISO] icon on the screen.	HD 00:05:30 1000 ∰
2.	Touch to select the desired option.	1600
3.	Touch the Exit icon ( ) to exit.	Auto 800 1600



#### Note

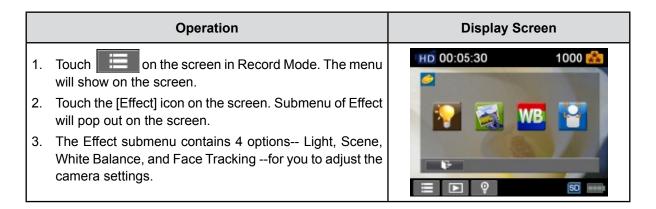
The image may become noisy when the ISO number is large.



The self-timer allows you to take photos with a ten-second time delay. The LED light on the front of the camera will also blink. The speed of blinking will increase just before the photo is taken.

	Operation	Display Screen
1.	In the Photo menu, touch the [Self-timer] icon on the screen.	HD 00:05:30 1000 🚵
2. 3.	Touch to select [On] or [Off] ( ).  Touch the Exit icon ( ) to exit.	ISO S

#### **Effect**





Three light settings are available.

- Light On: The light will be turned on and keep providing light.
- **Digital Light:** To extend the dynamic range for backlight and high contrast sense so that the objects will be brighter and clearer.
- Light Off: The light is turned off.

	Operation	Display Screen	
1.	In the Effect menu, touch the [Light] icon on the screen.	HD 00:05:30 1000 🚵	
2.	Touch to select the desired option.	Digital Light	
3.	Touch the Exit icon ( ) to exit.		



You can select the mode according to the scene condition.

- Auto: Shoot without any special effect on the image.
- **Skin:** Shoot with an effect that makes skin tones more natural.
- Night: Use Night Mode for night scenes or low light conditions.
- Backlight: You can take shots when the bright light is behind the subject.
- Black/White: The image is converted to black-and-white.
- Classic: The image is converted to a sepia look.
- Negative: The image is converted as the negative of the normal.

Operation	Display Screen
In the Effect menu, touch the [Scene] icon on the screen.	HD 00:05:30 1000 🐔
<ol> <li>Touch to select the desired option.</li> <li>Touch the Exit icon ( ) to exit.</li> </ol>	Auto P P P



#### Note

To avoid blurry photos, place the camera on a flat, steady surface, or use a tripod when taking shots in the Night Mode.

## WB White Balance

The camera adjusts the color balance of images automatically. Three manual white balance settings are available:

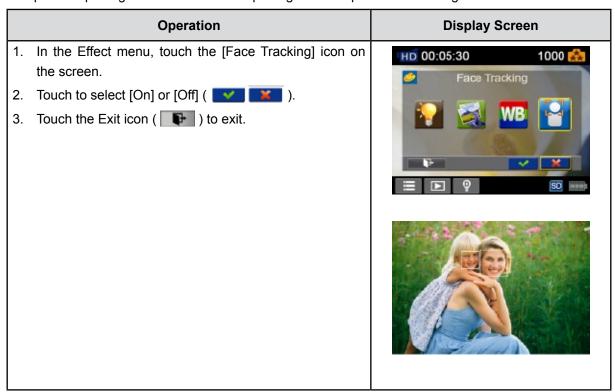
- Auto: The camera automatically adjusts white balance.
- Daylight: Under outdoor condition.
- Fluorescent: Under fluorescent light condition.
- Tungsten: Under tungsten light condition.

	Operation	Display Screen	
1.	In the Effect menu, touch the [White Balance] icon on the screen.	HD 00:05:30 1000 🏡	
2.	Touch to select the desired option.		
3.	Touch the Exit icon ( ) to exit.	Auto So	



## **Face Tracking (Photo Only)**

The camera can detect human face(s) and focus on the face(s) automatically. This function can works with photo capturing. It is wonderful for capturing beautiful portraits in backlight situation.





#### Note

When Face Tracking is activated, aim the camera at the human face(s). The focus frame(s) will show on the LCD before the [Photo Button] is pressed.

# Section 4 Enjoying the Playback Mode

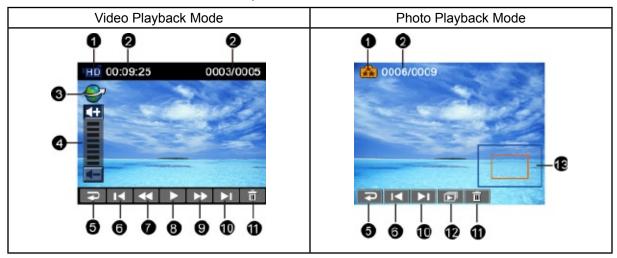
## **Button Function**

The Buttons have the following functions in Playback Mode.

	Video Button:
	1. Press to go the Record Mode
	Photo Button:
	1. Press to go the Record Mode
	Tele Button:
	1. Volume increase.
T	2. Zoom in the photo
w	Wide Button
	1. Volume decrease.
	2. Zoom out the photo
Ш	Pause Button:
	In Video Playback Mode, press to pause the recorded video.
	Playback Button:
	1. Switch to the Playback Mode.
	2. For quick review, press it after recording.
	Internet Button:
	In Video Playback Mode, press to select the current video to upload to the Internet.

## **LCD Monitor Information**

Indicators on the LCD screen while in Playback Mode:

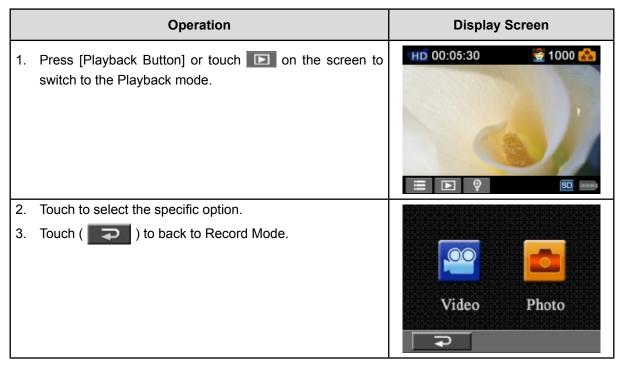


	Video Resolution	
	(FHD	Full HD (1080p 30 fps)
	(HD+	HD (720p 60 fps)
	(HD	HD (720p 30 fps)
(1)	Ū <b>VGĀ</b>	VGA (640X480)
		Slow Motion (QVGA)
	Photo Resolution	
	<b></b>	16MP
	**	5MP
	<b>★</b>	3MP
(0)	00:09:25	Video playback time counter.
(2)	0003/0005	Current number/ Total number of photo/video.
(3)		The current file is selected to upload to the Internet.
(4)	41	Volume
(5)	R	Return
(3)		Video stop
(6)	14	Previous video/photo
(7)	44	Video fast rewind

(8)	•	Video play
(8)	=	Video pause
(9)	<b>*</b>	Video fast forward
(10)	ÞI	Next video/photo
(11)	Ė	Delete
(12)		Slideshow
(12)	-	Slideshow stop
(13)		Magnification Indicator

## **Operations for Playback Mode**

The Playback Mode is for viewing and managing videos and photos on the built-in memory or on an SD Card.



## Video Playback

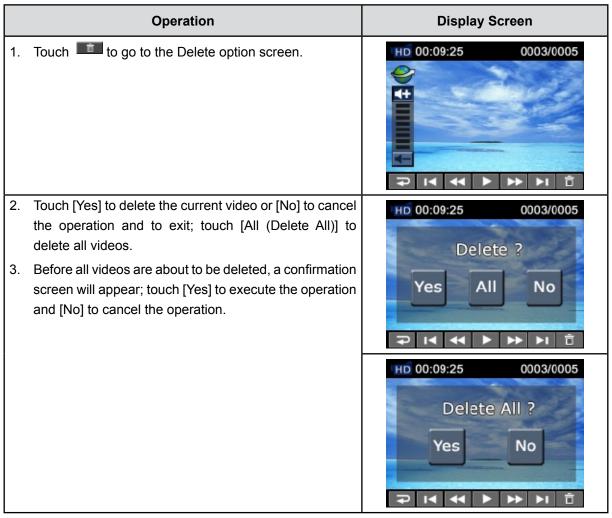
	Operation	Display Screen
1.	In the Video Playback mode, touch or pause the video.	HD 00:09:25 0003/0005
2.	Sweep to the right or touch to go to the previous video; sweep to the left or touch to go to the next video.	
3.	While playing video, touch / to fast rewind/ forward	
4.	Touch to increase the volume; touch to	
	reduce the volume.	<b>—</b>
5.	Touch ( ) to exit.	7 H 4 P P D 1
6.	Press the Internet Button to select the current video to upload to the Internet.	



#### Note

 When the LCD is idle for a few seconds, the playback function icons will disappear automatically.

#### **Delete Videos**





#### Note

- If a memory card has been inserted, you can only delete those videos stored on the card.
- Videos on a written-protected memory card cannot be deleted.

## **Photo Playback**

# Operation 1. In the Photo Playback mode, sweep to the right or touch to go to the previous photo; sweep to the left or touch to go to the next photo. 2. While the photo is selected, press [Tele Button] to magnify. (The magnification Indicator appears on the screen) 3. To navigate the magnified photo, press on the screen and move as well. (The inner Magnification Indicator turns red) 4. Press [Wide Button] to zoom out or exit the magnification mode. 5. Touch to start or to stop the slide show. 6. Touch to exit.



#### Note

 When the LCD is idle for a few seconds, the playback function icons will disappear automatically.

#### **Delete Photo**

	Operation	Display Screen
1. To	uch to go to the Delete option screen.	□    □    □    □    □    □    □
the	uch [Yes] to delete the current photo or [No] to cancel e operation and to exit; touch [All (Delete All)] to delete photos.	<b>A.</b> 00000000
ар	efore all photos are deleted, a confirmation screen will pear; touch [Yes] to execute the operation and [No] to ncel the operation.	
		Delete All ?  Yes No



#### Note

- If a memory card has been inserted, you can only delete those photos stored on the card.
- Photos on a written-protected memory card cannot be deleted.

# Section 5 Setting Your Camera

## **Setting Menu**

# 1. Touch on the screen in Record Mode. The menu will show on the screen. 2. Touch the [Setting] icon on the screen. Submenu of Setting will pop out on the screen. 3. The Setting submenu contains 7 options for configuring your camera setup. They are Sound (operation sound), TV, Language, Time Setting, Date Printing, Format, and Default Setting.



Enable or disable the keypad tone and the operation sound.

Operation	Display Screen	
In the Setting menu, touch the [Sound] icon on the screen.	HD 00:05:30 1000 ♣	
<ul><li>2. Touch to select [On] or [Off] ( ).</li><li>3. Touch the Exit icon ( ) to exit.</li></ul>		



Ensure that the appropriate TV standard of your area is selected – either NTSC or PAL. Wrong TV system setting may cause image flickers.

- NTSC(60Hz):USA, Canada, Japan, South Korea and Taiwan, etc.
- PAL(50Hz):UK, Europe, China, Australia, Singapore and Hong Kong, etc.

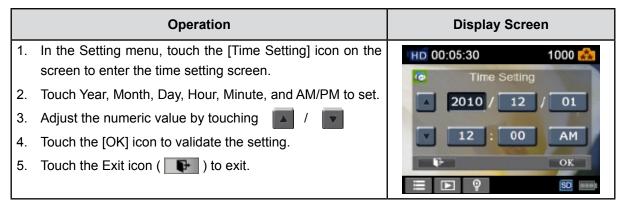
Operation		Display Screen	
1.	In the Setting menu, touch the [TV] icon on the screen.	HD 00:05:30 1000 🏡	
2.	Touch to select [PAL] or [NTSC].	▼ TV	
3.	Touch the Exit icon ( ) to exit.	ABC CO	



Use this option to select the language of the user interface.

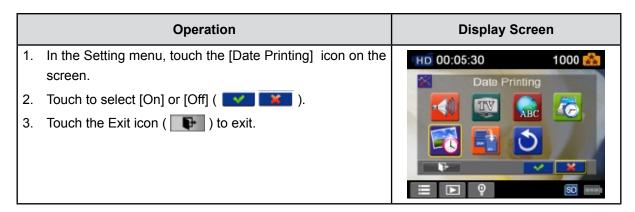
	Operation	Display Screen
1.	In the Setting menu, touch the [Language] icon on the screen.	1000
2.	Touch to select the desired option.	English
3.	Touch the Exit icon (  ) to exit.	
		P+
		<b>□</b> • • • • • • • • • • • • • • • • • • •

## Time Setting



## 📆 Date Printing

Imprint the date and time on the photo.

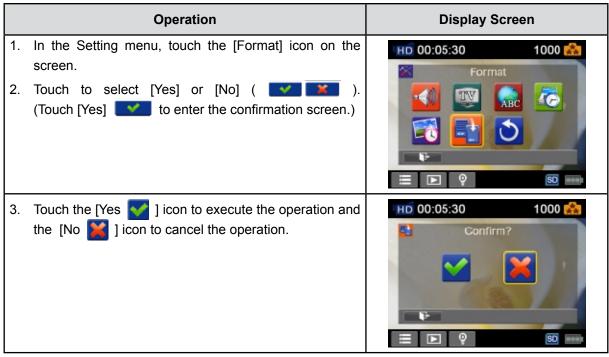




• Date Printing function can not be used in Video Record Mode.

## Format

- **Yes:** Format the built-in memory ( When there is no SD card in the camera ) / SD Card (When there is an SD card in the camera).
- **No:** Do not format the built-in memory ( When there is no SD card in the camera ) / SD Card (When there is an SD card in the camera).





#### Note

All the data will be erased if the SD card is formatted. Make sure all the data are copied to your PC before formatting the SD card.

## Default Setting

To restore the default factory setting, select this option.



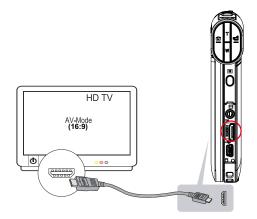
The following table indicates the camera's default settings

Setting	Default Factory Setting
Resolution	FHD (1080p 30) for Video
	5MP for Photo
Stabilization	Off
Motion Detection	Off
Slow Motion	Off
Pre-Record	Off
Time Lapse	Off
Self-Timer	Off
ISO	Auto
Scene	Auto
White Balance	Auto
Light	Off
Sound	On
TV	Depends on shipping area
Language	Depends on shipping area
Date Printing	Off
Volume	Level 6

# Section 6 Viewing Photos and Videos on TV

#### Connecting to a High-Definition 16:9(Wide) TV

- 1. Connect the HDMI cable (sold separately) to your camera's HDMI Out port.
- 2. Connect the other end of the cable to a television.
- 3. Set the video input source of your TV to "HDMI."
- 4. The steps for viewing stored videos and photos on HDTV are exactly the same as for viewing them on the LCD screen.

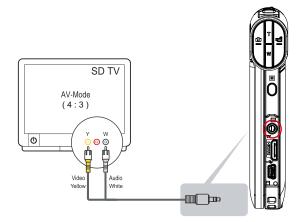


#### Note

- Some icons on the LCD screen do not display when the camera is connected to an HDTV.
- Some functions may not be accessible while the camera is connected to an HDTV.

## Connecting to a non-high-definition 4:3 TV

- 1. Connect one end of the AV cable to your camera's AV out port.
- 2. Connect the other end of the cable to a television.
- 3. The steps for viewing stored videos and photos on TV are exactly the same as for viewing them on the LCD screen.



## Note

- Some icons on the LCD screen do not display when the camera is connected to a TV.
- Some functions may not be accessible while the camera is connected to a TV.

## Section 7 Viewing Video & Photo on PC

## **Installing Bundled Software**

The CD-ROM supplied with this camera contains 2 pieces of software.

- **ArcSoft MediaImpression** is a user-friendly application that helps you managing your media, burning your video into DVD, and uploading your files to the web sites easily.
- Adobe Reader is a popular program that you need to have installed to read the User's Manual. Many computer users will find they already have this software installed on their computer.

To install the bundled software:

- 1. Insert the CD-ROM into your computer's CD-ROM drive. The autorun screen appears.
- 2. Click "Install ArcSoft MediaImpression". Follow the on-screen instructions to complete the installation.



#### Note

- Detailed information can be found in the online help of all the bundled software.
- Install the bundled software application, ArcSoft MediaImpression, for viewing the video correctly on a PC.

#### **Transferring Photos or Videos to a Computer**

You can transfer photos or videos stored on your camera to a computer and send them in e-mails to friends or post them on the web sites.

To do this you should:

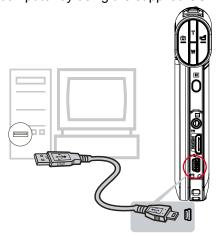
- 1. Connect the computer and camera with the supplied mini USB 2.0 cable. .
- 2. The videos and photos can be found on your computer at "My Computer\Removable Disk\ DCIM\100MEDIA". (On the SD card in the camera)
- 3. Under this folder, you can view, delete, move, or copy any video/photo you want.

# Section 8 Uploading Files to Internet

The built-in **Internet Direct** application offers you an easy way to upload your files to Internet instantly. It helps you share them with your family and friends on the web site.

## To upload video files marked with 💞 to Internet:

- 1. Select the video clip files in Video Playback mode by pressing the [Internet Button] ( 0).
- 2. Connect the camera to your computer by using the supplied USB cable.



- 3. Press [Internet Button] ( ) on the camera to launch the Internet Direct application automatically.
- 4. The main screen appears automatically on the desktop. (To view the recorded clips on Internet Direct, it is necessary to install ArcSoft MediaImpression first.)



## ·<u>)</u>:

#### Note

- The social media Web site may not be accessible in certain regions.
- · You must have internet access to upload videos to a Web site.

#### 5. Upload files:

- ◆ Press [Internet Button] ( ♥ ○) on the camera again.
- ◆ The videos clips marked with the icon are uploaded to the website automatically. (You may be asked to fill in your account information before uploading or you can fill in the information before uploading by clicking on the ( icon.
- Click [CANCEL] to stop uploading.



#### To upload video files selected manually to a Web site:

- 1. Follow the steps 2 and 3 on the previous page.
- 2. On the thumbnail screen, click the up/down icon to change pages. Click on the video clips you want to upload.
- 3. Click on "UPLOAD" to start uploading.



#### To playback the video file:

- 1. Double-click the video clip on the thumbnail screen.
- 2. Click on the Play/Pause icon to play/pause. Click on the Return icon to return to the thumbnail preview screen.



#### To setup your account information for the web site:

- 1. Click on 😰 to go to the setup screen.
- 2. Fill in your account information in the blanks. Then click on "Save".



(If you do not have an account, please sign up on the Web site first.)

# Section 9 Specifications and System Requirements

## Specification

Image sensor	5 Mega pixel CMOS sensor	
Operation modes	Video record, Photo record	
Lens	Fixed Focus (F 2.5)	
Focus range	Macro Mode:20cm	
	Normal Mode: 110 cm ~ infinite (HD+(720p 60) & HD(720p 30) )	
	150cm ~ infinite (Photo & Full HD (1080p 30))	
Zoom	1X~16X (16X Digital zoom)	
Shutter	Electronic	
LCD monitor	3" touch LCD	
Storage media	Built-in 128MB memory (partial memory is used for firmware code and software);	
	SD/SDHC/SDXC card slot support (up to 64GB)	
Image resolution	16MP: 4608 x 3456 (16M pixels) (Interpolated)	
	5MP: 2592x1944 (5M pixels)	
	3MP: 2048x1536 (3M pixels)	
Video resolution	Full HD (1080p 30): 1920X1080(30fps)	
	HD+ (720p 60): 1280X720(60fps)	
	HD (720p 30): 1280X720(30fps)	
	VGA (640X480): 640X480(30fps)	
White balance	Auto/Manual (Daylight, Fluorescent, Tungsten)	
ISO	Auto/800/1600	
Self-timer	10 seconds delay	
Light	Light On/ Digital Light / Light Off	
File format	Photo: JPG	
	Video: H.264	
Image play	Single image/Slideshow	
PC interface	Mini USB 2.0 port	
TV out	NTSC/PAL selectable, HDMI	
Battery	Lithium-ion rechargeable battery	
Dimension	60 / 74mm (W) × 111mm (H) × 20 / 22mm (T)	
Weight	128 g ( without battery)	

## **System requirements**

- Microsoft Windows XP/Vista/7
- Intel Pentium 4, 2.4 GHz or above
- 512 MB RAM
- · 1 GB free HDD space
- · Available USB port
- · CD-ROM Drive
- 16-bit Color Display



#### Note

The LCD screen is manufactured using extremely high-precision technology, so over 99.99% of the pixels are operational for effective use. However, some tiny black and/or bright dots (white, red, blue or green) may appear on the LCD screen. These dots are a normal result of the manufacturing process, and do not affect the recording.

# Section 10 Troubleshooting

#### **Troubleshooting**

#### 1. If the LCD preview is not clear while shooting, how can the focus be adjusted?

Try to switch between Macro and Normal Mode.

#### 2. The files on the memory card do not display smoothly when the LCD shows the "!" marking.

The "!" means the SD card is low speed or is having wrong content inside. The way to solve this condition is to format SD card by the camera instead of a PC (Please refer to the detailed Format instruction in User's Manual-Section 5).

Or please change the SD/SDHC/SDXC card to a high speed one.

#### 3. Why do some of my indoor photos look blurry and dark?

The camera extends photo exposure time under low light/ indoor condition. Keep the camera (and the target subject) steady for several seconds when taking photos. The shutter will sound when photo is being taken.

#### 4. How do I charge battery?

You must use the supplied AC charger or the USB cable.

The camera must be turned OFF. A blinking light confirms charging, and the light becomes constant when the charging has been completed. In AC charging Mode, the light will turn itself off automatically after 3~5 minutes The full charge time is about 3.5 to 4.5 hours. (Actual charging time may vary. It depends on the battery conditions.)

#### 5. After connecting the USB cable to the computer, .....

- 1. The disk [DV] indicates the internal memory of the camera. (The disk label may be different according to different model and PC OS.)
- [Removable Disk] indicates the external memory. (Under the circumstances of within the SD/ SDHC/SDXC card in the camera)
- 3. The disk [DVAP] indicates the built-in Internet Direct application is saved at this disk. Please DO NOT format this disk or delete the application inside; otherwise, the Internet Direct application can not function.