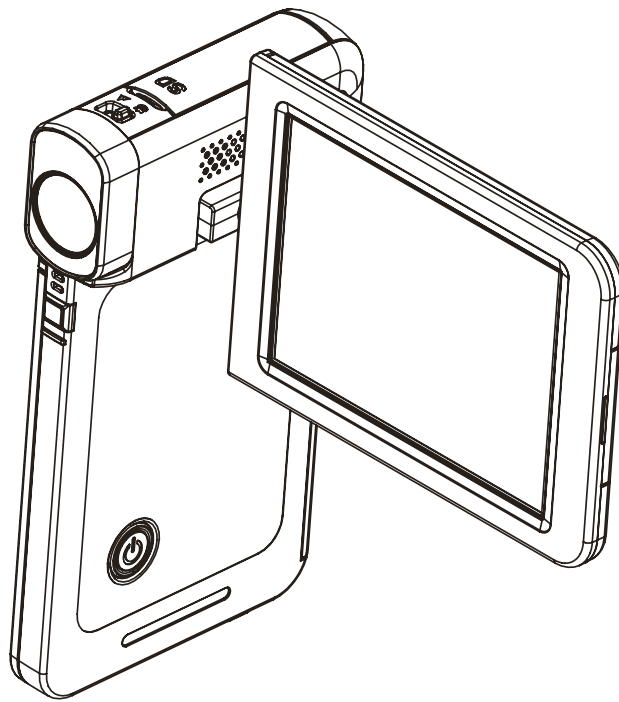


High Definition Digital Video Camera



User's Manual

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Section 1

Getting to Know Your Camera

Overview

The camera with 5 Mega Pixel sensor can take H.264 movies. By way of using H.264 technology, more videos can be taken within certain amount of memory. High quality images with up to 16 mega-pixels can also be delivered smoothly. With a color LCD monitor, users can compose images and examine them easily.

The camera also features movie 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 websites more effortlessly .

ISO sensitivity and color balance can either be adjusted automatically or changed manually. A 4x digital zoom helps you to control over the movies and pictures 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 pictures and to record movies without a memory card. The memory card slot allows users to increase the storage capacity.



Note

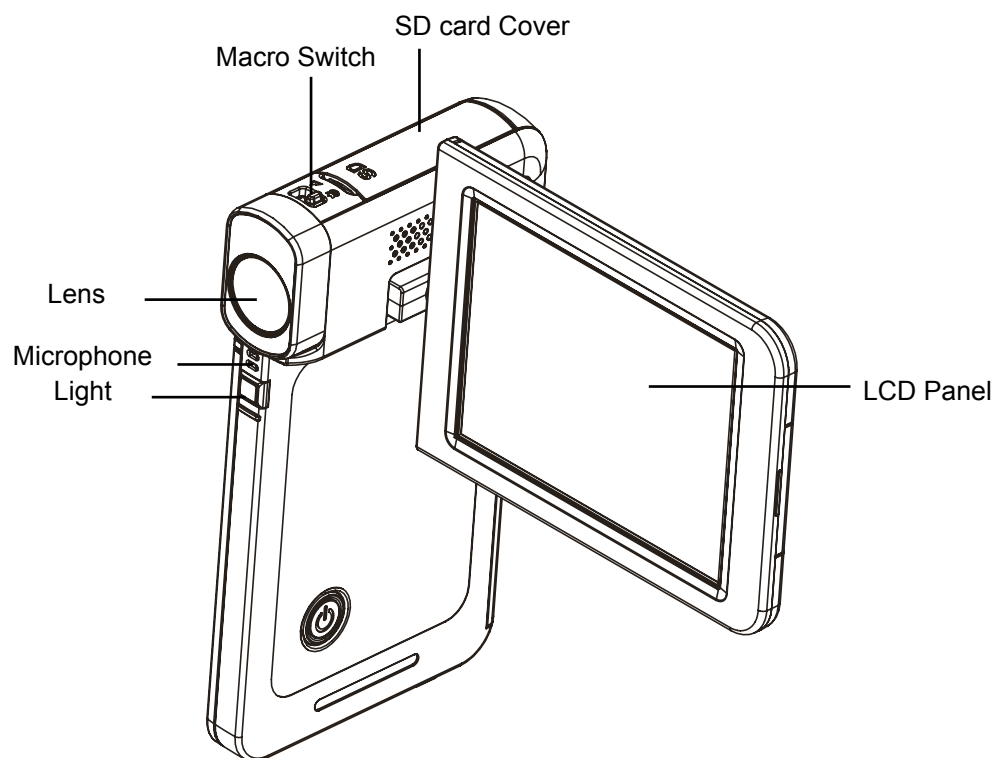
Partial memory of the built-in memory is used for the camera's Firmware code.

Standard Accessories

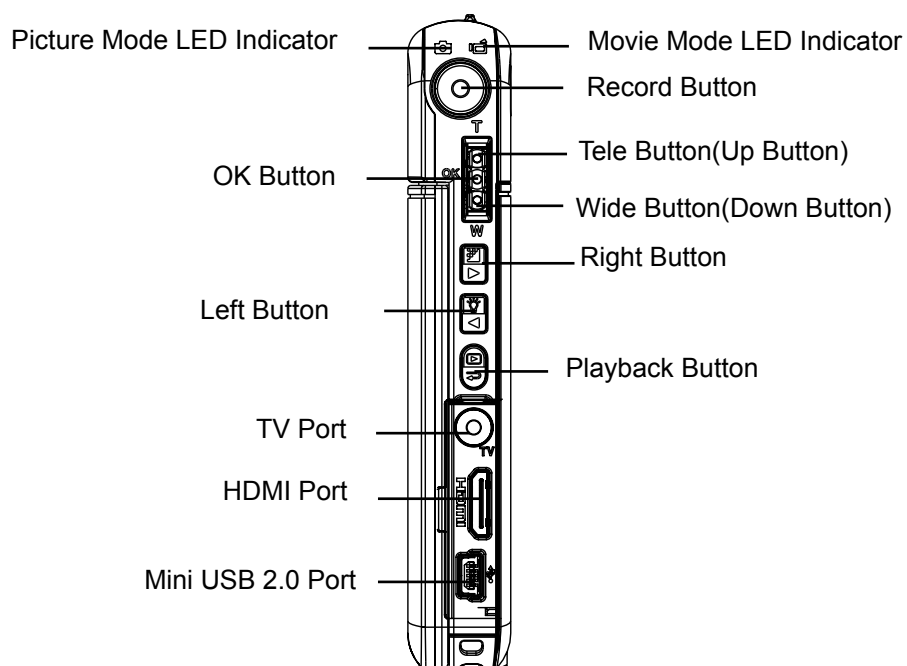
Unpack the package and make sure all standard accessories listed are included:

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

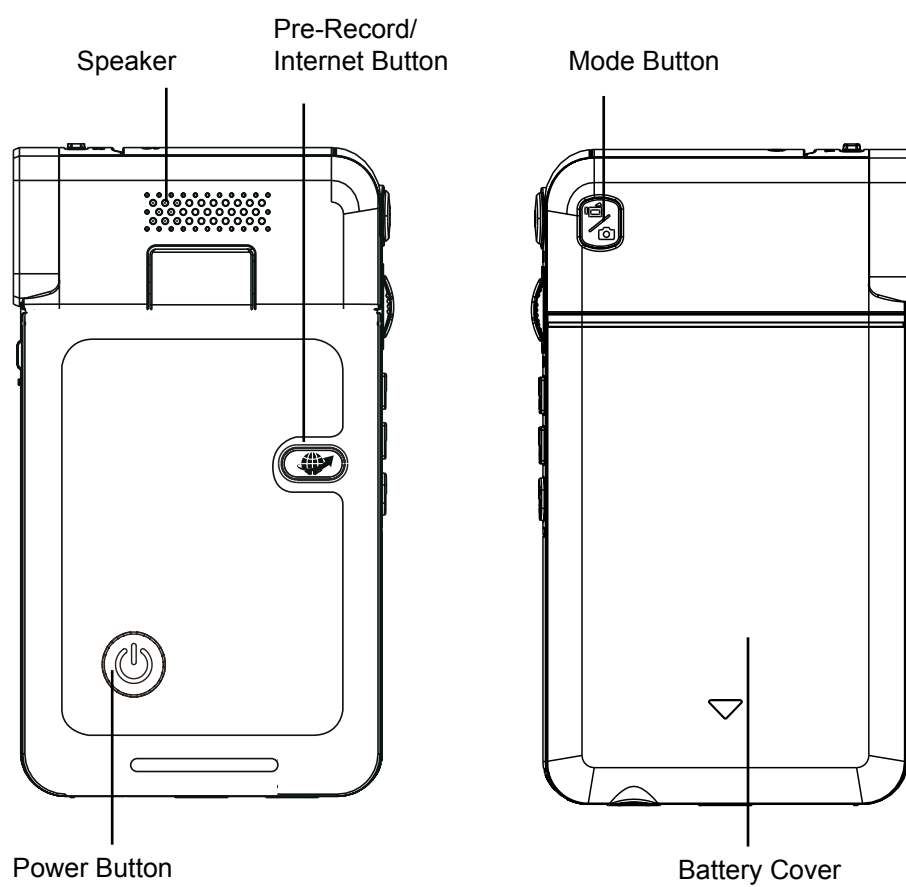
Front View



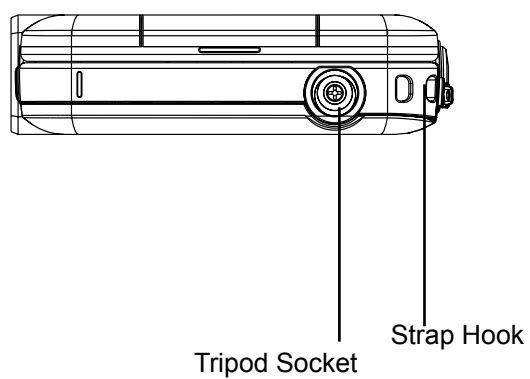
Rear View



Side View



Bottom View



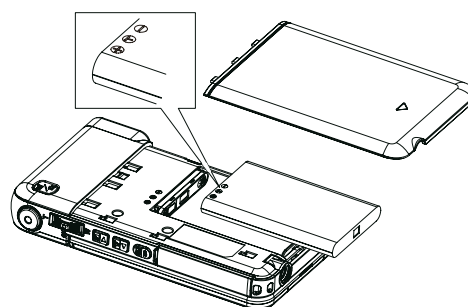
Section 2

Getting Started

Loading the Battery

Before using the camera, users must load the Lithium-ion rechargeable battery come within the package.

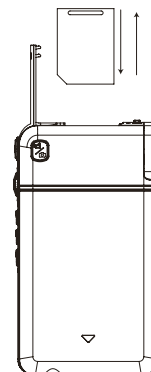
1. Insert the battery according to the correct polarity marks (+ or -).
2. Close the battery cover firmly.



Inserting and Removing an SD Card (Optional)

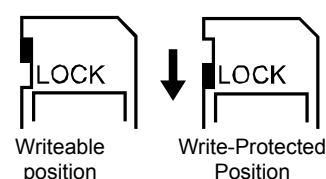
The camera comes with an internal memory which allows you to store pictures and movies. You can expand the memory capacity by using an optional SD/SDHC memory card.

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, movies/pictures 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 pictures or movies 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 and Getting Started

- 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.
- To record movies: Press Mode Button to switch to the Movie Record mode. (The Movie Mode LED Indicator  will light up.) Press Record Button to record movies.
- To take a picture: Press Mode Button to switch to the Picture Record mode. (The Picture Mode LED Indicator  will light up.) Press Record Button to take pictures.
- To take a picture during movie recording: When recording movies, press Mode Button () to capture the image. The Dual record icon () appears on the LCD monitor.
- To view stored movies and pictures: Press Playback Button to switch to the Playback mode. Press Mode Button to switch between Movie Preview Screen and Picture Preview Screen.


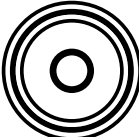

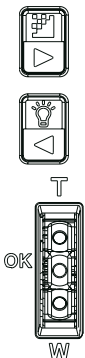


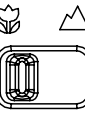
Turning the Camera Off

- To turn off the camera: You can either press the 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



















	<p>Mode Button:</p> <ol style="list-style-type: none"> 1. Switch between Movie Mode and Picture Mode. 2. When recording movies, press to capture the image.
	<p>Record Button:</p> <ol style="list-style-type: none"> 1. In Movie Record Mode, press to take movies. To stop recording, press it again. 2. In Picture Record Mode, press to take pictures.
	<p>Playback Button:</p> <ol style="list-style-type: none"> 1. Switch between Record / Playback Mode. 2. For quick review, press it after recording. 3. In Record menu, press to exit.
	<p>Direction Button:</p> <p>Right Button: Resolution Switch(FHD(1080p30)/WVGA 60) (High (16MP)/Std (5MP)). In Record menu, press to switch to the submenu.</p> <p>Left Button: Light ON/Digital Light ON/ OFF. In Record menu, press to return to the main menu.</p> <p>Tele Button(Up Button):Zoom In. Move between the option items.</p> <p>Wide Button(Down Button): Zoom out. Move between the option items.</p> <p>OK Button: Menu On / Validate the setting.</p>
	<p>Power Button: Press down for one second to turn on or turn off the camera.</p>
	<p>Pre-Record/Internet Button:</p> <p>In Record Mode, press to activate the Pre-Record function and the movies will be recorded 3 seconds before the Record Button is pressed.</p>
	<p>Macro Switch: Switch between Macro Mode and Normal Mode.</p>

LCD Monitor Information

The indicators shown below may display on LCD when movies and pictures are recorded:



(1)	Movie Resolution	
		FHD (1080p 30)
		HD (720p 30)
		WVGA60
		VGA(4:3)
		Slow Motion (Record movies at 320x240(QVGA) resolution.)
	Picture Resolution	
		High (16MP)
		Standard (5MP)
		Low (3MP)
(2)	00:05:30	Recording time of the movie that can still be taken at current resolution
	71	Number of images that can still be taken at current resolution
(3)		Self-timer enabled
		Dual Record
(4)		Stabilization




(5)		Pre-Record Mode
		Time Lapse
(6)	Scene	
		Skin
		Night
		Backlight
(7)		Macro Position Focusing
(8)		Manual White Balance
(9)		Motion Detection
(10)		FHD(1080p 30):1X (1X Digital zoom)
		Zoom meter: Other video resolution:1X~4X (4X Digital zoom)
(11)		Light On
		Digital Light On
(12)		SD Card Inserted
(13)		Battery: full power
		Battery: medium power
		Battery: low power
		Battery: empty power
		DC power mode







Note

Scene: B/W / Classic / Negative effect can be previewed immediately without indicator on the LCD.

Movie Recording

- In Movie Record Mode (The Movie Record LED Indicator  lights up), press Record Button to start recording. When a movie is being recorded, a time indicator will display on the LCD monitor. To stop recording, press Record Button again.
- Optional function: Dual record: press Mode Button () to capture the image. The Dual record icon() appears on the LCD monitor.
- Press Playback Button to view the recorded movies.
- Four resolution settings are available:



Video Quality	
	FHD (1080p 30)
	HD (720 p30)
	WVGA60
	VGA (4:3)



Note

- The image resolution captured during movies recording is the same as the video resolution.

Using the Pre-Record Function

- The Pre-record function ensures that you will not miss any critical recording opportunities, The movies are recorded 3 seconds before the Record Button is pressed.
- To use the Pre-Record function:
 1. Press the Pre-Record Button () in Record Mode. The Pre-Record icon() appears on the LCD monitor.
 2. Aim the camera at the subject and position it securely.
 3. Press the Record Button to start recording. (The camera records 3 seconds before you actually press the Record Button.)
- To use the function again, set it again.



Note

- Time Lapse function can not be used when the Pre-Record function is activated.

Picture Recording







- In Picture Record Mode (The Picture Record LED Indicator  lights up), press Record Button to take pictures.
- Press Playback Button to view the picture.
- Three resolution settings are available:


Image Quality	
	High Quality: 16 Mega Pixels
	Standard Quality: 5 Mega Pixels
	Low Quality: 3 Mega Pixels

Taking Close up Pictures/Movies



- Slide the macro switch to change the focus range for different distances of objects.
- To take close-up pictures:
 1. Slide the macro switch to Macro ().
 2. Press Record Button to start recording or to take picture.
- In Macro Mode, the macro icon() will appear on the LCD monitor.



Note

Remember to turn the macro switch back to Normal () when you are not taking close-up pictures.

Using Light or Digital Light Function

1. Press Left Button, the Light icon() will appear on the screen. The light will be turned on and keep providing light.
2. Press again, the Digital Light icon() will appear on the screen. It will extend the dynamic range for backlight and high contrast sense, so that the objects will be brighter and clearer.
3. Press Record Button to start recording or to take picture.

Using Digital Zoom

- The digital zoom magnifies images when recording movies or taking pictures.
 1. To zoom in/out, press the Tele/Wide Button.
 2. The digital zoom can be set from 1x (FHD 1080p 30)/ 1x to 4x(for other video resolution).

Options for Record Menu



Movie Record Mode Menu

Movie Resolution	White Balance	Scene	Effect
<ul style="list-style-type: none"> FHD (1080p 30) HD (720p 30) WVGA 60 VGA (4:3) 	<ul style="list-style-type: none"> Auto Daylight Fluorescent Tungsten 	<ul style="list-style-type: none"> Auto Skin Night Backlight B/W (Black/White) Classic Negative 	<ul style="list-style-type: none"> Stabilization Motion Detect. (Motion Detection) Slow Motion Time Lapse

Picture Record Mode Menu

Picture Resolution	White Balance	Scene	Effect
<ul style="list-style-type: none"> High (16MP) Std (5MP) Low (3MP) 	<ul style="list-style-type: none"> Auto Daylight Fluorescent Tungsten 	<ul style="list-style-type: none"> Auto Skin Night Backlight B/W (Black/White) Classic Negative 	<ul style="list-style-type: none"> Self-Timer ISO


Operations for Record Mode

Operation	Screen
1. Press OK Button in Record Mode. The wheel menu will show on the screen.	
2. Use Right/Left Buttons to move between the wheel menu options, which are Resolution, White Balance, Scene, Effect, and Setting. 3. The option submenu will pop up while stopping on each option. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option, and then press OK Button to validate. 5. Or press Playback Button to exit to Record Mode without any change.	

Movie Resolution

Four resolution settings are available.


- **FHD (1080 p30)** Record movies at 1920x1080p 30 resolution.
- **HD (720 p30):** Record movies at 1280x720p 30 resolution.
- **WVGA60:** Record movies at 848x480p 60 resolution.
- **VGA(4:3):** Record movies at 640x480p 30 resolution.

Operation	Display Screen
<ol style="list-style-type: none"> 1. In Movie Record Mode, press OK Button to show the wheel menu. 2. Use Up/Down Buttons to select [Resolution]. The submenu of Resolution pops up. 3. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option. 5. Press OK Button to validate the setting. 	

Picture Resolution

Three resolution settings are available.

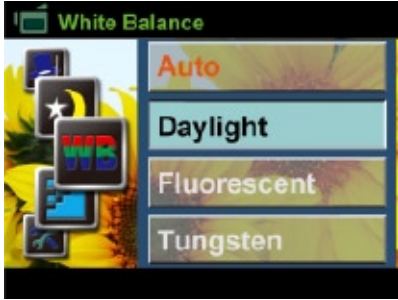
- **High (16MP):** Shoot picture at 4608 x 3456, 16MP quality.
- **Std (5MP)(Standard):** Shoot picture at 2592 x 1944, 5MP quality.
- **Low(3MP):** Shoot picture at 2048 x 1536, 3MP quality.

Operation	Display Screen
<ol style="list-style-type: none"> 1. In Picture Record Mode, press OK Button to show the wheel menu. 2. Use Up/Down Buttons to select [Resolution]. The submenu of Resolution pops up. 3. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option. 5. Press OK Button to validate the setting. 	

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
<ol style="list-style-type: none"> 1. In Movie/Picture Record Mode, press OK Button to show the wheel menu. 2. Use Up/Down Buttons to select [White Balance]. The submenu of White Balance pops up. 3. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option. 5. Press OK Button to validate the setting. 	

Scene

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.
- **B/W:** 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.

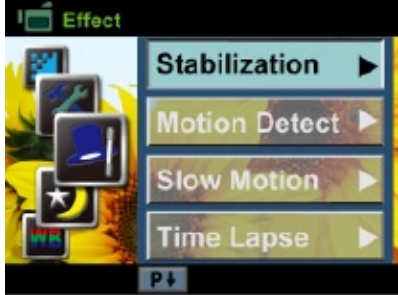
Operation	Display Screen
<ol style="list-style-type: none"> 1. In Movie/Picture Record Mode, press OK Button to show the wheel menu. 2. Use Up/Down Buttons to select [Scene]. The submenu of Scene pops up. 3. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option. 5. Press OK Button to validate the setting. 	



Note

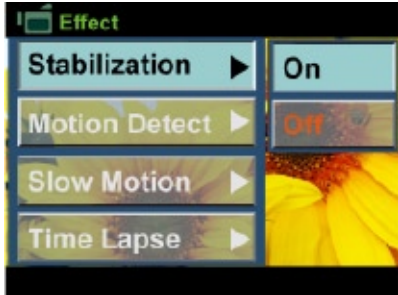
To avoid blurry pictures, place the camera on a flat, steady surface, or use a tripod when taking shots in the Night Mode.

Movie Effect

Operation	Display Screen
<ol style="list-style-type: none"> 1. In Movie Record Mode, press OK Button to show the wheel menu. 2. Use Up/Down Buttons to select [Effect]. The submenu of Effect pops up. 3. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option , and then press Right Button to enter its option screen. 5. The Movie Effect submenu contains 4 options-- Stabilization, Motion Detection, Slow Motion, and Time Lapse --for you to adjust the camera's settings. 	

Stabilization

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

Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Effect submenu, use Up/Down Button to select [Stabilization]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	

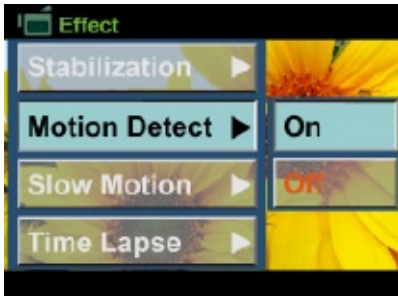


Note

Stabilization doesn't apply on FHD (1080p 30) and WVGA 60.

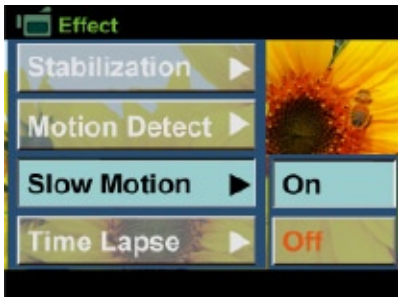
Motion Detection

Record videos automatically when the camera detects a movement.

Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Effect submenu, use Up/Down Button to select [Motion Detect]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 4. Camera will start to record video automatically if it detects a movement. Stop recording if it does not detect a movement. 	

Slow Motion

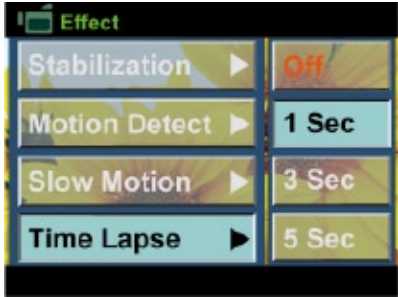
Record videos with slow motion effect. When the video is played, the playback time will be longer than the actual recording time.

Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Effect submenu, use Up/Down Button to select [Slow Motion]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	 <p>The screenshot shows the 'Effect' menu with four options: Stabilization, Motion Detect, Slow Motion, and Time Lapse. The 'Slow Motion' option is highlighted, and its corresponding setting 'On' is displayed on the right side of the screen.</p>

Time Lapse

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

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


Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Effect submenu, use Up/Down Button to select [Time Lapse]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	 <p>The screenshot shows the 'Effect' menu with four options: Stabilization, Motion Detect, Slow Motion, and Time Lapse. The 'Time Lapse' option is highlighted, and its corresponding setting '1 Sec' is displayed on the right side of the screen.</p>



Note


- Stabilization function can not be used when Time Lapse function is activated.

Picture Effect

Operation	Display Screen
<ol style="list-style-type: none"> 1. In Picture Record Mode, press OK Button to show the wheel menu. 2. Use Up/Down Buttons to select [Effect]. The submenu of Effect pops up. 3. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option , and then press Right Button to enter its option screen. 5. The Picture Effect submenu contains 2 options -- Self-Timer and ISO-- for you to adjust the camera's setting. 	


Self-Timer

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

Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Effect submenu, use Up/Down Button to select [Self-Timer]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	

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
<ol style="list-style-type: none"> 1. In the Effect submenu, use Up/Down Button to select [ISO]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	



Note


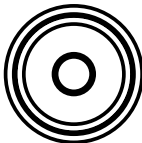



The image may become noisy when the ISO number is large.

Section 4

Enjoying the Playback Mode

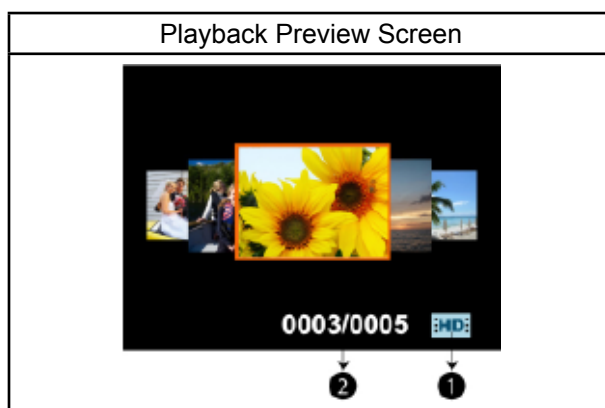
Button Function

The Buttons have the following functions in Playback Mode.

	<p>Mode Button:</p> <ol style="list-style-type: none"> 1. Switch between Movie Preview Screen and Picture Preview Screen.
	<p>Record Button:</p> <ol style="list-style-type: none"> 1. Press to view the movies/ picture. 2. In Movie Playback Mode, press to play and pause the recorded movies. 3. In Picture Playback Mode, press to start/stop the slideshow.
	<p>Playback Button:</p> <ol style="list-style-type: none"> 1. Switch between Record /Playback Mode. 2. Return to the previous screen.
	<p>Direction Button:</p> <p>Right Button: Go to the next movie/picture. Fast forward.</p> <p>Left Button: Go to the previous movie/picture. Fast rewind.</p> <p>Tele Button (Up Button): Volume increase. Zoom In.</p> <p>Wide Button (Down Button): Volume decrease. Zoom out.</p> <p>OK Button: Delete the current or all movies/pictures. Validate the setting.</p>
	<p>Pre-Record/Internet Button:</p> <p>In Movie Playback Mode, press to select the current movie to upload to the Internet.</p>







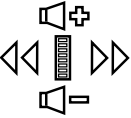
LCD Monitor Information

Indicators on the LCD screen while in Playback Mode:








Movie Playback Mode	Picture Playback Mode
<p>The diagram shows the 'Movie Playback Mode' interface. It features a video frame with a sunflower. Various icons are overlaid: a star icon (1), a play button icon (2), a list icon (3), a play button icon (4), a play button icon (5), a play button icon (6), a play button icon (7), and a play button icon (8). Arrows point from the numbers 1 through 8 to the corresponding icons.</p>	<p>The diagram shows the 'Picture Playback Mode' interface. It features a video frame with a sunflower. Various icons are overlaid: a star icon (1), a play button icon (2), a play button icon (3), a play button icon (4), a play button icon (5), a play button icon (6), a play button icon (7), and a play button icon (8). Arrows point from the numbers 1 through 8 to the corresponding icons.</p>

(1)	Movie Resolution	
		FHD (1080 p30)
		HD (720 p30)
		WVGA60
		VGA(4:3)
		Slow Motion (320x240)
	Picture Resolution	
		High
		Standard
		Low
		Dual Record (The image resolution captured during movies recording is the same as the video resolution.)
(2)	0003/0005	Current number/ Total number of picture/movie.
	00:05:30	Movie playback time counter.
(3)		Upload selected movies to the Internet

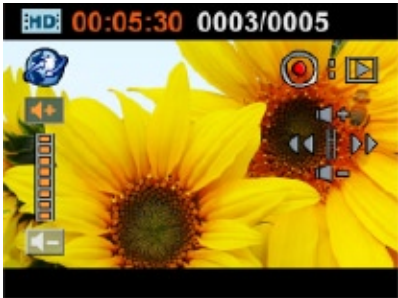
(4)		Volume
(5)		Indicate the screen is in movie playback mode: Play/Pause
(6)		Press OK Button to go to the Delete option.
(7)		Press Record Button to start the slide show
		Press Record Button to stop the slide show
(8)		Magnification Indicator
(9)		Right Button: Fast forward. Left Button: Fast rewind. Tele Button(Up Button): Volume increase. Wide Button(Down Button): Volume decrease.

Operations for Playback Mode

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

Operation	Display Screen
1. Press Playback Button () to switch to the Playback mode.	
2. In the Playback preview screen, press Mode Button () to switch between the Movie mode and the Picture mode. 3. Press Left Button to go to the previous picture/movie. Press Right Button to go to the next picture/movie. 4. Press Record Button to view the movies/ picture.	 

Movie Playback


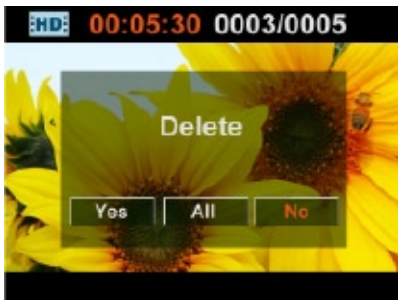
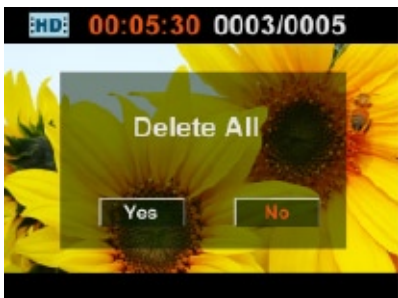
Operation	Display Screen
<ol style="list-style-type: none"> 1. When in Movie Playback mode, press Record Button to play/pause the movies. 2. While playing movie, press Right/Left Buttons to fast forward/rewind, then release the button to stop. 3. Use Up/Down Buttons to adjust volume. 	



Note

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

Delete Movies


Operation	Display Screen
<ol style="list-style-type: none"> 1. Use Right/Left Buttons to select the movies. 2. Press OK Button to go to the Delete option. 	
<ol style="list-style-type: none"> 3. Move between [Yes], [All] and [No] by using Right/Left Buttons. 4. Before all movies are deleted, a confirmation screen will appear; choosing "Yes" will execute the operation and "No" will cancel the operation 5. Press OK Button to validate the setting. 	
	



Note

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

Picture Playback


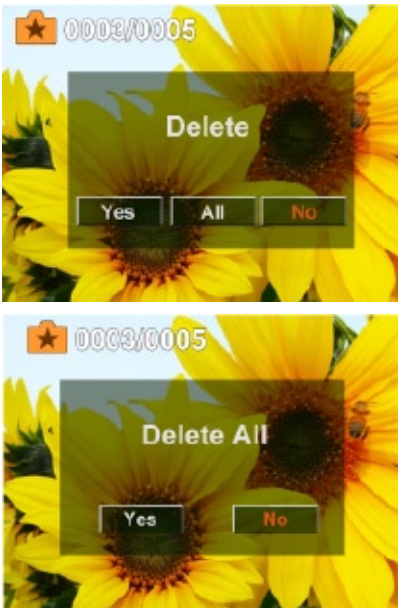
Operation	Display Screen
<ol style="list-style-type: none"> 1. When in the Picture Playback mode, use Right/Left Buttons to go to the next or previous picture. 2. While the picture is selected, press Tele Button to magnify. (The magnification Indicator appears on the screen) 3. To navigate the magnified picture, press OK Button to enter navigation mode (The inner Magnification Indicator turns red). 4. Use Direction Button to navigate the magnified picture. Press OK Button to exit navigation mode. 	



Note

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

Delete Picture

Operation	Display Screen
<ol style="list-style-type: none"> 1. Use Right/Left Buttons to select the picture. 2. Press OK Button to go to the Delete option. 	
<ol style="list-style-type: none"> 3. Move between [Yes], [All] and [No] by using Right/Left Buttons. 4. Before all movies are deleted, a confirmation screen will appear; choosing "Yes" will execute the operation and "No" will cancel the operation 5. Press OK Button to validate the setting. 	




Note

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

Section 5

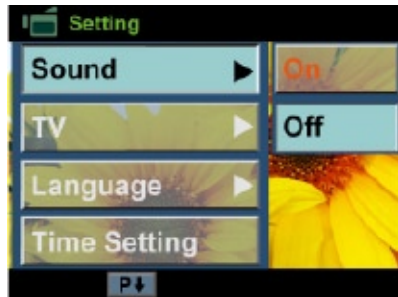
Setting Your Camera

Setting Menu

Operation	Display Screen
<ol style="list-style-type: none"> 1. In Movie/Picture Record Mode, press OK Button to show the wheel menu. 2. Use Up/Down Buttons to select [Setting]. The submenu of Setting pops up. 3. Press Right Button to enter the submenu. 4. Use Up/Down Buttons to select the desired option , and then press Right Button to enter its option screen. 5. The Setting submenu contains 6 options for configuring your camera setup. They are Sound (operation sound), TV, Language, Time Setting, Format, and Default Setting. 	

Sound

Enable or disable the keypad tone and the operation sound.


Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Setting submenu, use Up/Down Button to select [Sound]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	

TV

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



Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Setting submenu, use Up/Down Button to select [TV]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	

Language

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

Operation	Display Screen
<ol style="list-style-type: none"> 1. In the Setting submenu, use Up/Down Button to select [Language]. Then press Right Button to enter its option screen. 2. Use Up/Down Buttons to select the desired option. 3. Press OK Button to validate the setting. 	


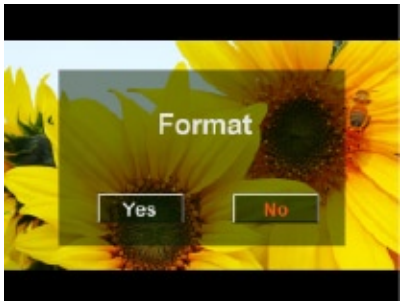
Time Setting

Operation	Display Screen
1. In the Setting submenu, use Up/Down Button to select [Time Setting]. Then press Right Button to enter time setting screen.	
2. Move between Year, Month, Day, Hour and Minute by using Right/Left Buttons. Adjust the numeric value by using Up/Down Buttons. 3. Press OK Button to validate the setting. Or press Playback Button to leave without any change.	

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).

Operation	Display Screen
1. In the Setting submenu, use Up/Down Button to select [Format]. Then press Right Button to enter the confirmation screen.	
2. Use Right/Left Buttons to choose Yes or No. 3. Choosing “Yes” will execute the operation, “No” will cancel the operation. 4. Press OK Button to validate the setting. Or press Playback Button to leave without any change.	

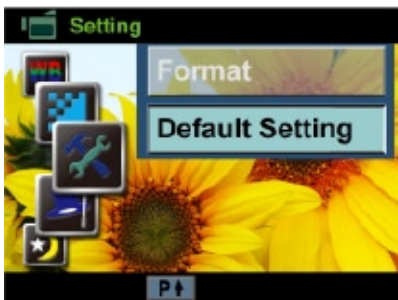
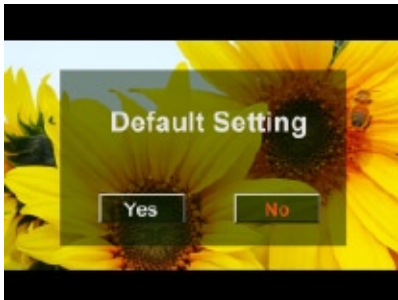


Note

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.

Operation	Display Screen
1. In the Setting submenu, use Up/Down Button to select [Default Setting]. Then press Right Button to enter the confirmation screen.	
2. Use Right/Left Buttons to choose Yes or No. 3. Choosing “Yes” will execute the operation, “No” will cancel the operation. 4. Press OK Button to validate the setting. Or press Playback Button to leave without any change.	

The following table indicates the camera's default settings

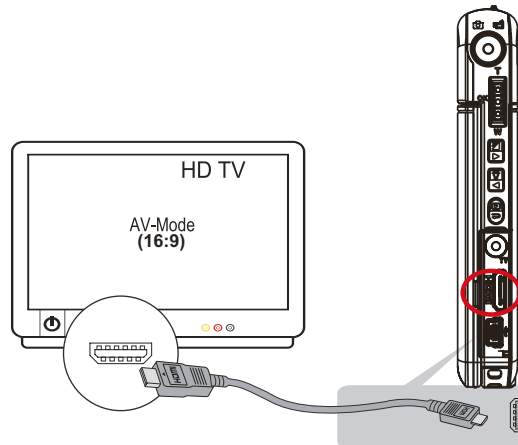
Setting	Default Factory Setting
Resolution	FHD (1080p 30) for Movie Std (5MP) for Picture
Scene	Auto
Stabilization	Off
Motion Detection	Off
Slow Motion	Off
Time Lapse	Off
White Balance	Auto
ISO	Auto
Self-Timer	Off
Sound	On
TV	Depends on shipping area
Language	Depends on shipping area
Volume	Level 6

Section 6

Viewing Pictures and Movies on TV

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

1. Connect the HDMI cable 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 pictures and movie on a TV are exactly the same as for viewing them on the LCD monitor.

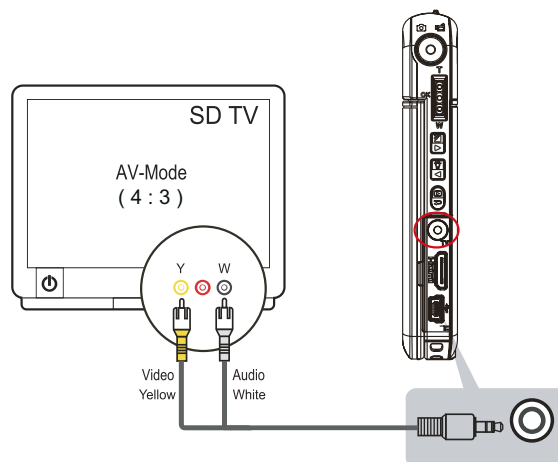


Note

The LCD Panel does not display when 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 pictures and movie on a TV are exactly the same as for viewing them on the LCD monitor.



Note

The LCD Panel does not display when the camera is connected to a TV.

Section 7

Viewing Movie & Picture on PC

Installing Bundled Software

The CD-ROM supplied with this camera contains 3 pieces of software.

- **ArcSoft MediaImpression** is a user-friendly application that helps you managing your media and burning your video into a DVD.
- **ArcSoft MediaConverter** is a powerful application that converts multiple video formats into compatible format with your camera.
- **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 Application Software**". Follow the on-screen instructions to complete the installation.



Note

- *The detailed information can be found in online help of all the bundled software.*

Transferring Pictures or Movies to a Computer

You can transfer pictures or movies stored on your camera to a computer and send them in e-mails to friends or post them on the websites.

To do this you should:

1. Connect the computer and camera with the supplied mini USB 2.0 cable. .
2. The movies and pictures can be found on your computer at "My Computer\Removable Disk\DCIM\100MEDIA".
3. Under this folder, you can view, delete, move, or copy any movie/picture you want.
4. Use the bundled ArcSoft application software to edit the movies or pictures.

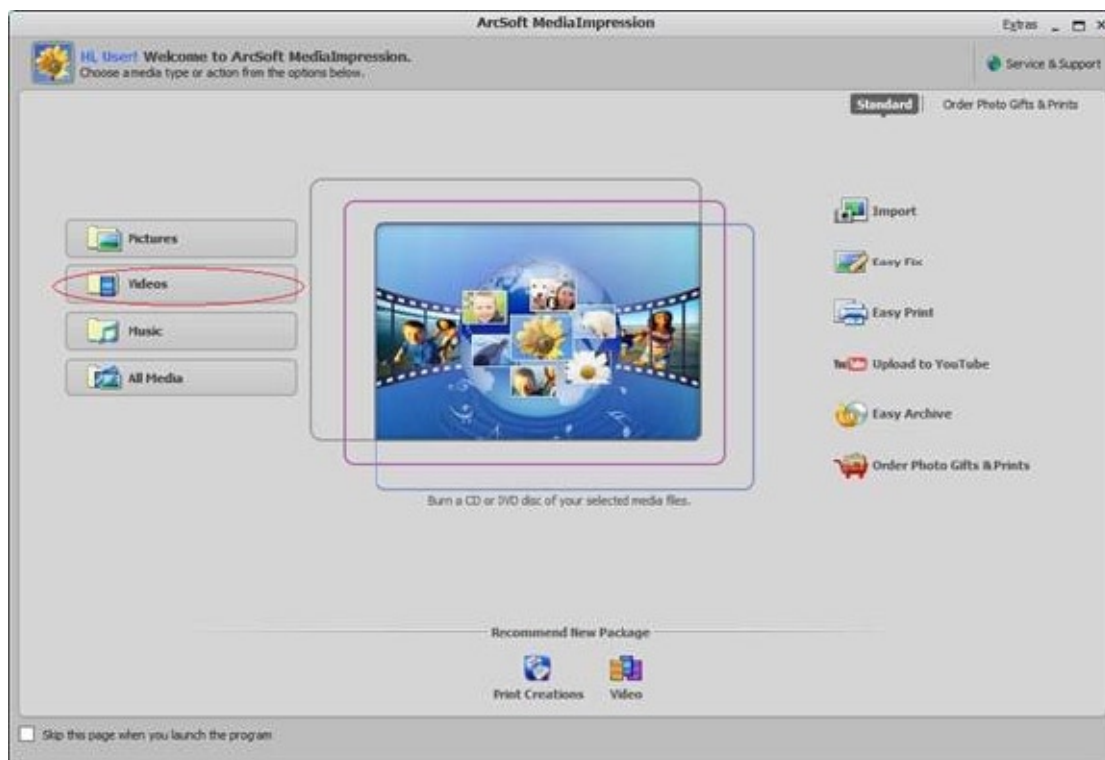
Section 8

Burning the Recorded Clip into a DVD

The bundled software CD contains ArcSoft MediaImpression which can be used to burn movie clips onto a DVD. You can share this DVD movie with your family or friends by using a regular DVD player.

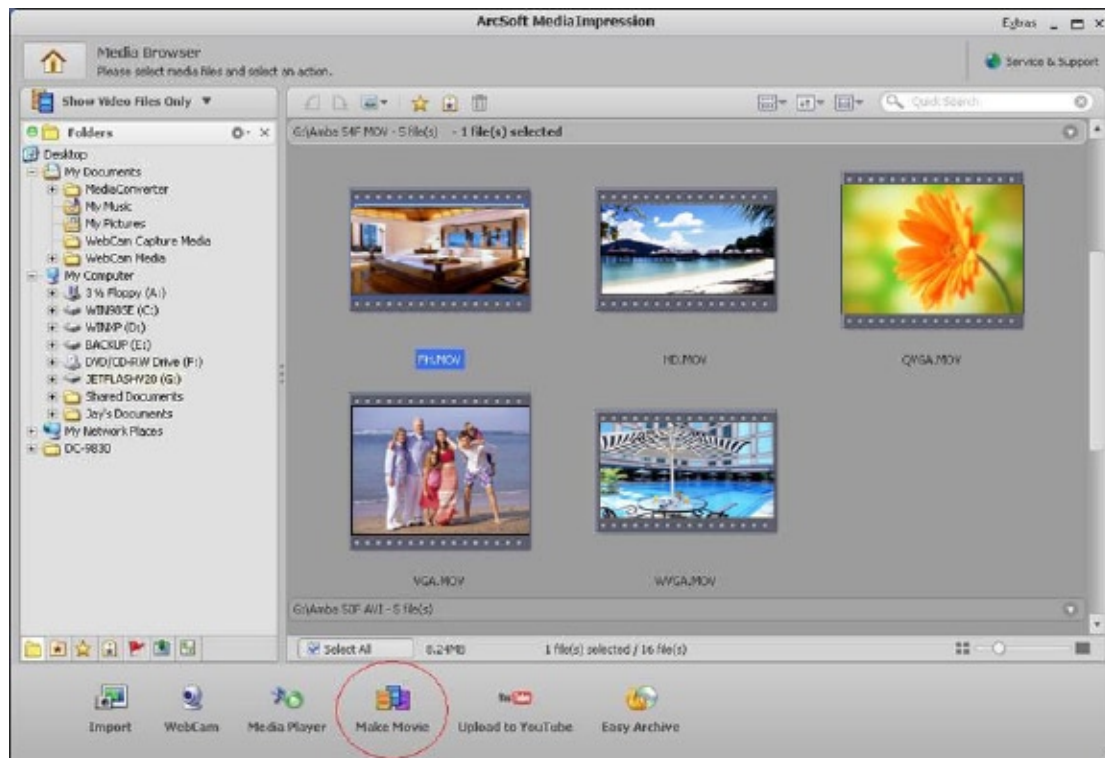
To create a DVD:

1. Install ArcSoft MediaImpression (Refer to Section 7).
2. Click on Windows [Start] → [(All) Programs] → [ArcSoft MediaImpression].
3. The ArcSoft MediaImpression main screen will appear on your desktop.
4. Click on [Videos] .



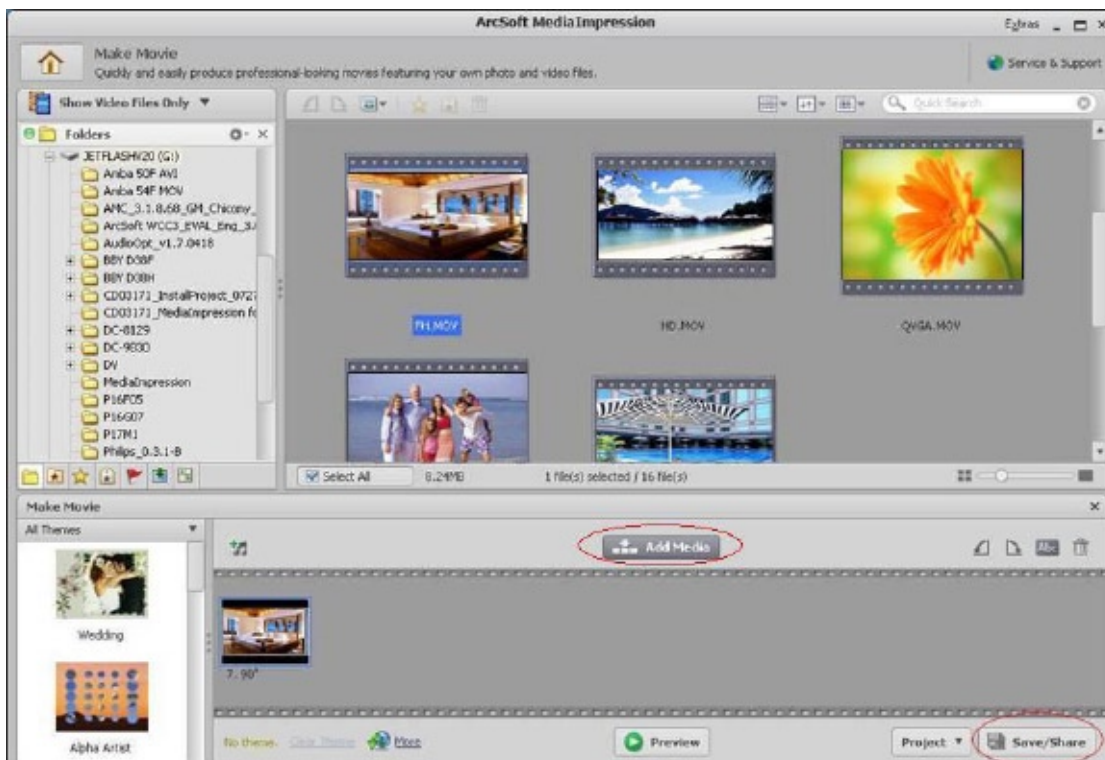
5. The operation screen will appear:

- Select the folder that contains the video files you want to burn.
- Select the files in the display area.
- Click on [Make Movie] at the bottom menu.

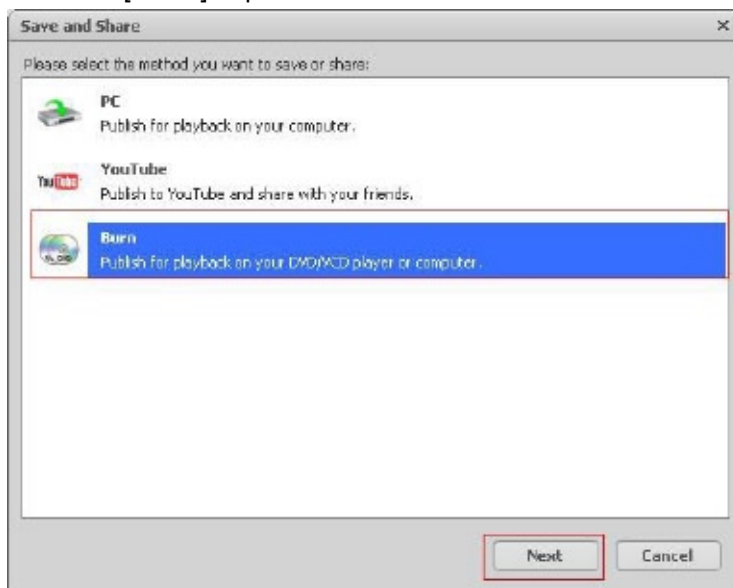


6. Click on [Add Media] () to add the files into slide.

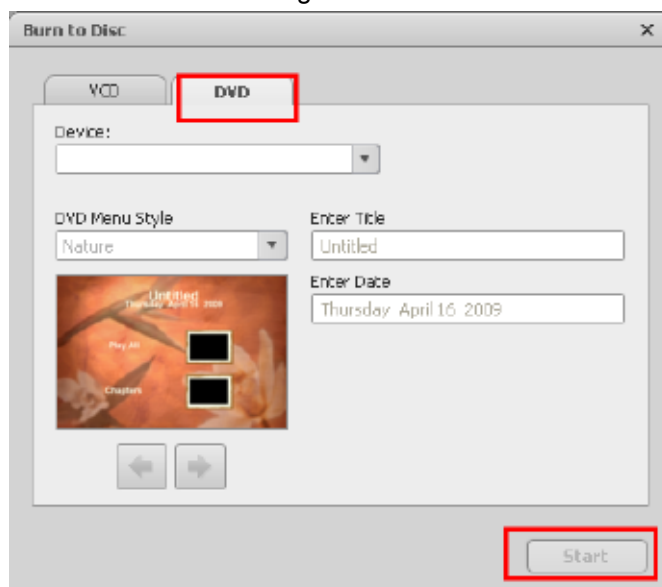
7. Click on [Save/Share].



8. Select [Burn] and click on [Next] to proceed.



9. Click on [Start] to start the VCD/DVD burning.



Note


Please insert a blank, writable VCD or DVD into the CD/DVD Writer before clicking on [Start].

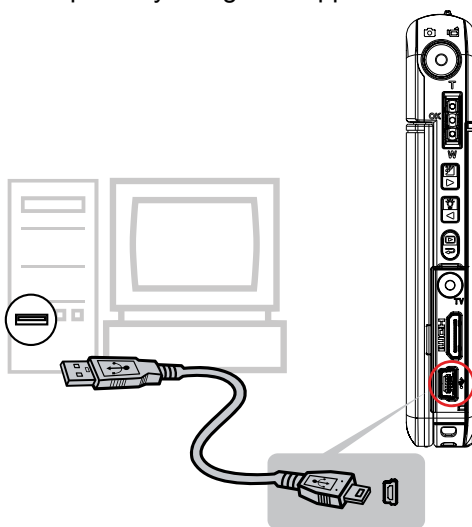
Section 9


Uploading Video Files to Internet

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

To upload video files marked with  to Internet:




1. Select the video clips in Movie Playback Mode by pressing Internet Button .
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. (Before the computer launches Internet Direct, you have to install the application included in the CD first.)



4. Upload video clips:

1. Press Internet Button  on the camera again.
2. The videos clips marked with  will be uploaded to the website automatically. (You may be asked to fill in your account information before uploading or you can fill in the information firstly by click on )
3. Click on “CANCEL” to stop uploading.





To upload video files selected manually to Internet:

1. Follow the step 2 and 3 on page 33.
2. On the thumbnail screen, click on the up/down icon to change the 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 on 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 website:

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 a account, please sign up on the website first.)

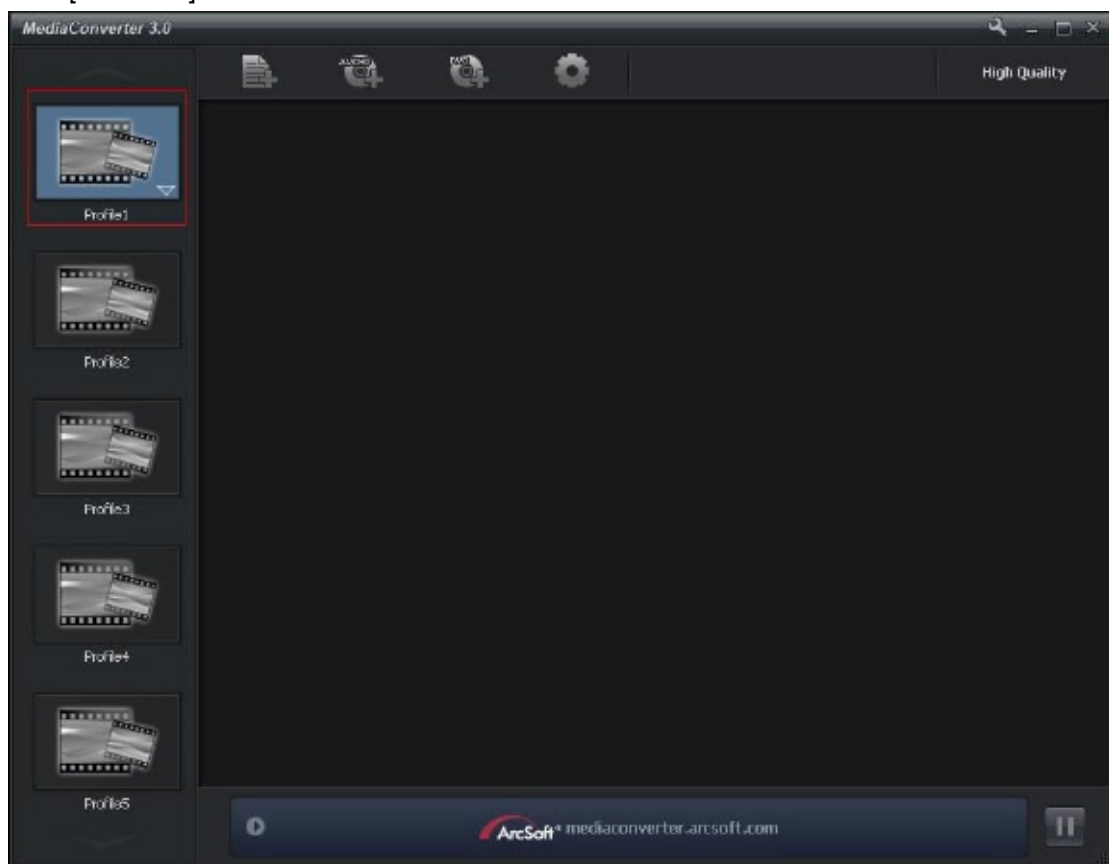
Section 10

Video File Converter

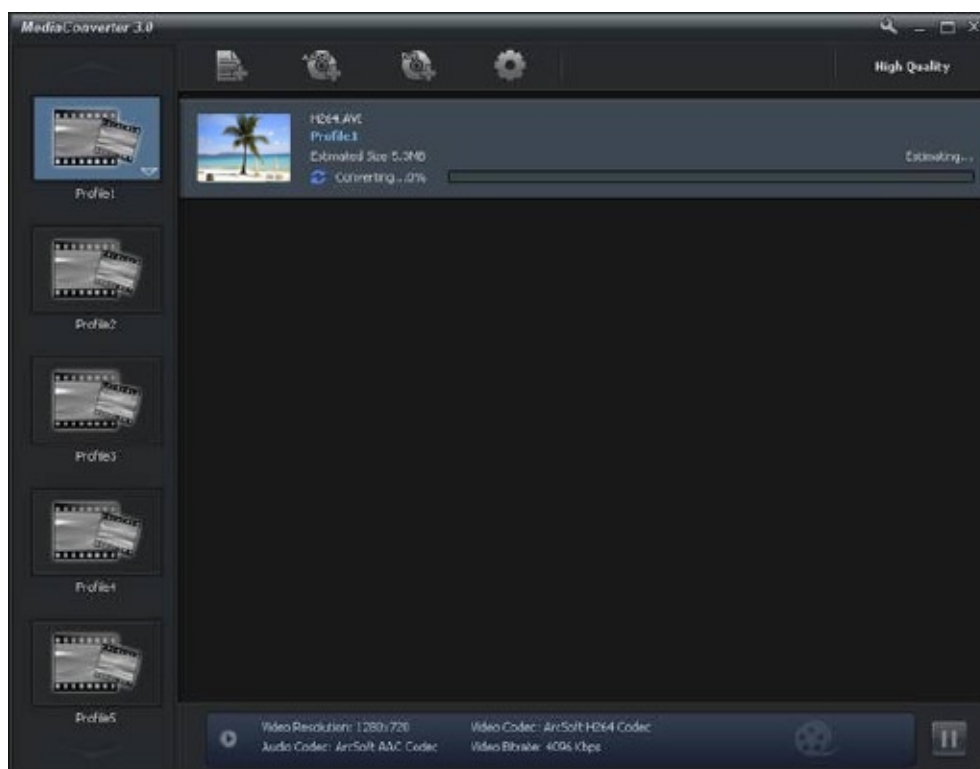
The bundled software CD contains ArcSoft MediaConverter that features video file converter to convert multiple video formats into compatible format with your camera. In this way, you can convert various video files formats and playback your favorite movies on your camera.

To convert a video file:

1. Install ArcSoft MediaConverter (Refer to section 7).
2. Click on Windows [Start] → [(All) Programs] → [ArcSoft MediaConverter].
3. The ArcSoft MediaConverter main screen will appear on your desktop.
4. Select [Profile 1].



5. Select the video file you want to convert. Then, click on [Open] to convert the file.



6. The converted files will be renamed "IMAG0001.avi", "IMAG0002.avi", and so on.
7. Rename the converted file to "IMAGXXXX. avi" before transferring the converted file to your camera. (XXXX should be a four figures, e.g. 0001 to 9999) (Please note that the converted file names can not be the same as the ones having existed in your camera, otherwise the video files in your camera may be overwritten.)
8. Connect your camera to PC and copy the converted videos to "My Computer\Removable Disk\DCIM\100MEDIA" in your camera. (Under the circumstances of within an SD card in the camera and OS of the computer is Windows XP.)
9. After transferring the converted videos to the camera, press Playback Button to enjoy your favorite movies.



Note

"My Computer\Removable Disk" would be different based on OS recognition.

Section 11

Specifications and System Requirements

Specification	
Image sensor	5 Mega pixel CMOS sensor
Operation modes	Movie record, Picture record
Zoom	FHD(1080p30):1X (1X Digital zoom) Other video resolution:1X~4X (4X Digital zoom)
Shutter	Electronic
LCD monitor	3" LCD
Storage media	Built-in 128MB memory (partial memory is used for firmware code); SD/SDHC card slot support (up to 32GB)
Image resolution	High 4608 x 3456 (16M pixels) Standard 2592x1944 (5M pixels) Low 2048x1536 (3M pixels)
Movie resolution	FHD (1080p 30) 1920X1080(30fps) HD (720p 30) 1280X720(30fps) WVGA60: 848X480(60fps) VGA (4:3) 640X480(30fps)
White balance	Auto/Manual (Daylight, Fluorescent, Tungsten)
ISO	Auto/800/1600
Self-timer	10 seconds delay
Light	Light ON/Digital Light ON/ OFF
File format	Picture: JPG Movie: AVI
Image play	Single image/Slideshow
PC interface	Mini USB 2.0 port
TV out	NTSC/PAL selectable, HDMI
Battery	Lithium-ion rechargeable battery
Dimension	59mm(W) x 106mm (H) x 17mm (D)
Weight	95 g (without battery)

System requirements

- Microsoft Windows XP/Vista/7
- Intel Pentium 4, 2.4 GHz or above
- 512 MB RAM
- CD-ROM Drive
- 1 GB free HDD space
- Available USB port
- 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 12

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 Section 5).

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

The camera extends picture exposure time under low light/ indoor condition. Keep the camera (and the target subject) steady for several seconds when taking pictures. The shutter will sound when pictures are 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; blinking light confirms charging, and the light becomes constant when the charging has been completed. Then, the light will turn itself off automatically after 5 minutes (In AC charging Mode).