
WEEE Warning Message

Symbol for Separate Collection in European Countries

This symbol indicates that this product is to be collected separately.

The following apply only to users in European countries:

- This product is designated for separate collection at an appropriate collection point.
Do not dispose of as household waste.
- For more information, contact the retailer or the local authorities in charge of waste management.



FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1). This device may not cause harmful interference, and
- (2). This device must accept any interference received, including interference that may cause undesired operation.

Note:

This equipment has been tested and found to comply with the limits for Class B digital devices, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the

following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected

Use of shielded cable is required to comply with Class B limits in Subpart B of Part 15 of the FCC rules.

Do not make any changes or modifications to the equipment unless otherwise specified in the manual. If such changes or modifications should be made, you could be required to stop operation of the equipment.

Product Information








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

5. For driver updates, you can check the “Download” section of our website, www.geniusnet.com

SAFETY INSTRUCTIONS

Read and understand all Warnings and Cautions before using this product.

Warnings

- If foreign objects or water have entered the camera, turn the power OFF and remove the batteries.
Continued use in this state might cause fire or electric shock. Consult the store of purchase. 
 - If the camera has fallen or its case has been damaged, turn the power OFF and remove the batteries.
Continued use in this state might cause fire or electric shock. Consult the store of purchase. 
 - Do not disassemble, change or repair the camera.
This might cause fire or electric shock. For repair or internal inspection, ask the store of purchase. 
 - Do not use the camera in areas near water.
This might cause fire or electric shock. Take special care during rain, snow, on the beach, or near the shore. 
 - Do not place the camera on inclined or unstable surfaces.
This might cause the camera to fall or tilt over, causing injury. 
 - Keep the batteries out of the reach of children.
Swallowing batteries might cause poisoning. If the battery is accidentally swallowed, immediately consult a physician. 
 - Do not use the camera while you are walking, driving or riding a motorcycle.
This might cause you to fall over or result in traffic accident. 
-

Cautions

- Insert the batteries paying careful attention to the polarity (+ or -) of the terminals.

Inserting the batteries with its polarities inverted might cause fire and injury, or damage to the surrounding areas due to the battery rupturing or leaking.



- Do not fire the flash close to anyone's eyes.

This might cause damage to the person's eyesight.



- Do not subject the LCD monitor to impact.

This might damage the glass on the screen or cause the internal fluid to leak. If the internal fluid enters your eyes or comes into contact with your body or clothes, rinse with fresh water.



If the internal fluid has entered your eyes, consult a physician to receive treatment.

- A camera is a precision instrument. Do not drop it, strike it or use excessive force when handling the camera.

This might cause damage to the camera.



- Do not use the camera in humid, steamy, smoky, or dusty places.

This might cause fire or electric shock.



- Do not remove the battery immediately after long period of continuous use.

The battery becomes hot during use. Touching a hot battery might cause burns.



- Do not wrap the camera or place it in cloth or blankets.

This might cause heat to build up and deform the case, resulting in fire. Use the camera in a well-ventilated place.



- Do not leave the camera in places where the temperature may rise significantly, such as inside a car.

This might adversely affect the case or the parts inside, resulting in fire.



- Before you move the camera, disconnect cords and cables. Failure to do this might damage cords and cables, resulting in fire and electric shock.



Notes on Battery Usage

When you use the battery, carefully read and strictly observe the Safety Instructions and the notes described below:

- Different battery types and surrounding temperatures may affect the battery performance.
- Avoid using batteries in extremely cold environments as low temperatures can shorten the battery life and reduce camera performance.
- The battery may feel warm when using the camera for an extended period of time or using the flash continuously. This is normal and not a malfunction.
- The digital video camera may feel warm when being used continuously or for an extended period of time. This is normal and not a malfunction.
- If you will not be using the batteries for an extended period of time, remove them from the camera to prevent leakage or corrosion.
- Always keep the terminals in a clean state.
- Never use manganese batteries.
- Risk of explosion if battery is replaced by an incorrect type.
- Dispose of used batteries according to the instructions.
- The video camera can be used with either a Li-ion or four AAA size batteries. Li-ion battery is recommended to use for longer operation time.

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Getting to Know Your Camera

Overview

Congratulations on your purchase of this advanced HD video camera.

This high definition digital video camera provides a variety of features and functions that use the latest technology. It not only functions as a digital camera for taking pictures, but is also able to record video, audio and output it to HD TV. Additionally, the camera also features 3x digital zoom, USB mass storage, and two SD card reader slot.

This manual will show you how to use your digital video camera and how to install the accompanying software.

Standard Accessories

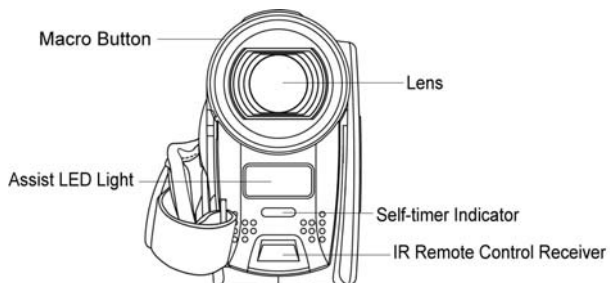
Unpack the package and make sure all standard accessories listed are included: Contact your retailer if you are missing any of the following components.

- ☐ Digital Video Camera
- ☐ USB Cable
- ☐ HDMI Cable
- ☐ AV Cable
- ☐ Power Adaptor
- ☐ AC Plug Adaptor for EU to US
- ☐ NP40 Li-ion Battery
- ☐ Quick Guide
- ☐ Pouch
- ☐ CD-ROM (Quick Time, PDF Reader, Web Cam Driver, User Manual)

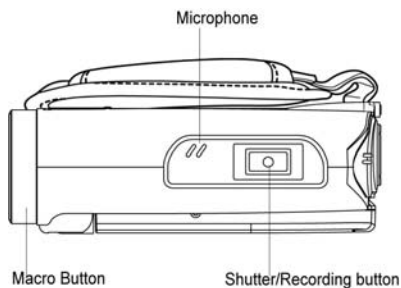
Refer to the following illustrations to familiarize yourself with the buttons and controls of this video camera.

External View

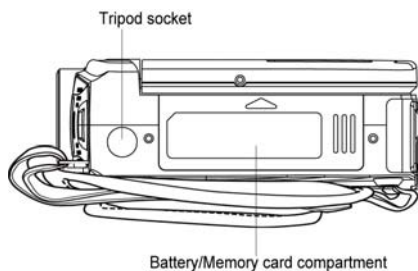
Front View



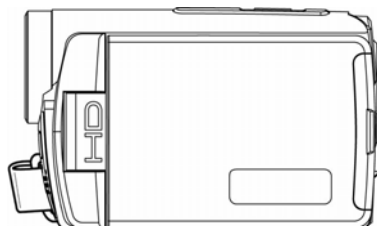
Top View



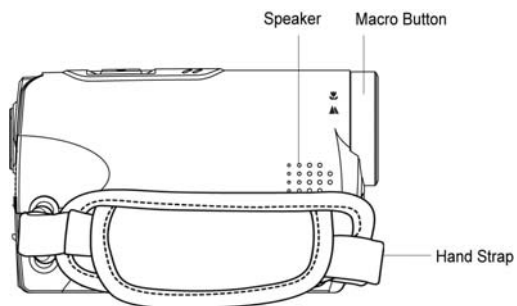
Bottom View



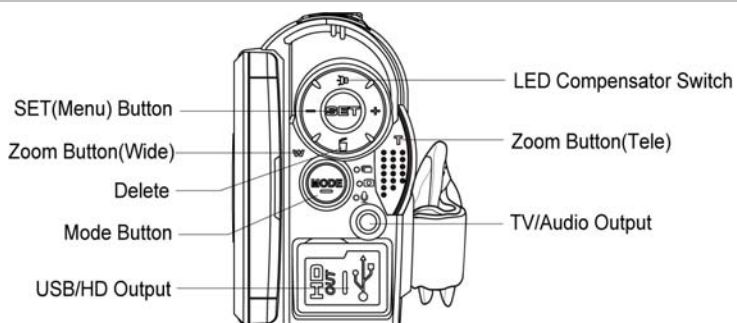
Right View



Left View

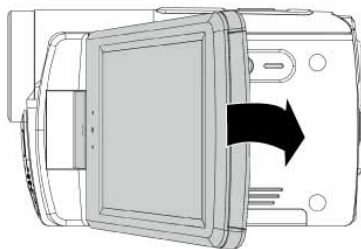
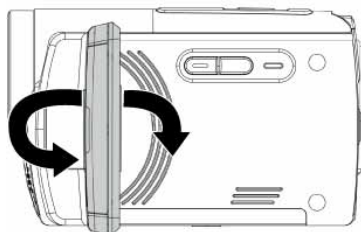
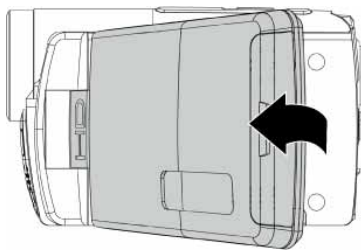


Rear View



Adjusting LCD Display

Before taking picture or recording movie clips, please rotate according to the illustrations below.



Getting Started

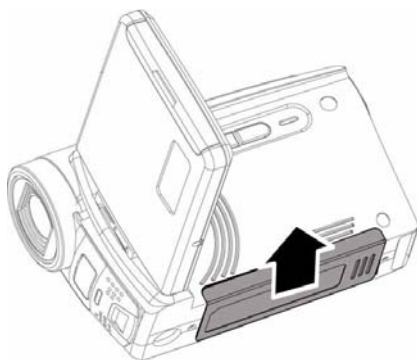
Loading Batteries

The battery is not charged so you should charge it before using the camera.






Please use only batteries provided or recommended by the manufacturer or dealer. This package is supplied with Li-ion battery.

Note: Insert batteries correctly according to this description. Error in inserting batteries could result in damage to this Digital Video Camera and result in fire.

1. Open LCD panel and open battery cover.

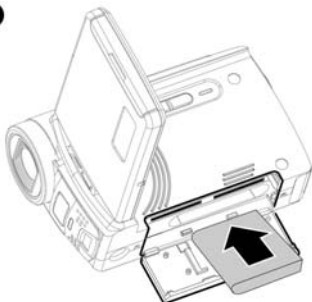


Battery Status Indicator:

	Batteries full
	Batteries half full
	Battery empty
	Charging battery (A new battery should be charged at least 2 hours.)
	The device power is supplied by DC input. (No batteries inside.)

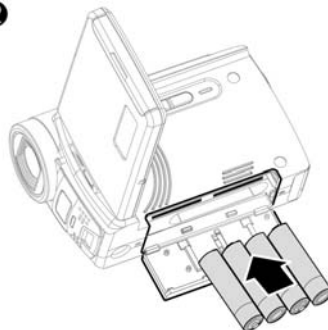
2. Insert batteries according to the illustration.

①



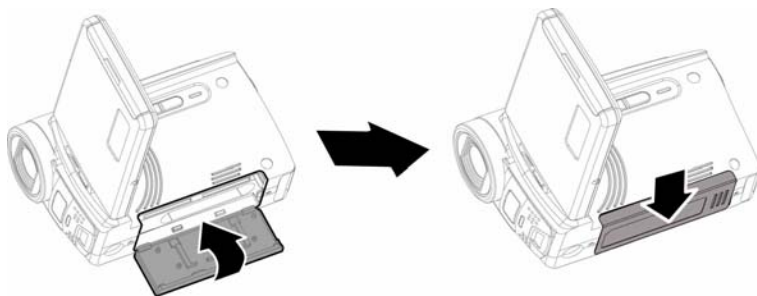
Lithium battery is included.

②



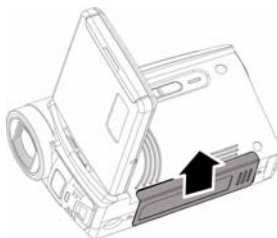
AAA alkaline batteries insert way.

3. Close battery cover.

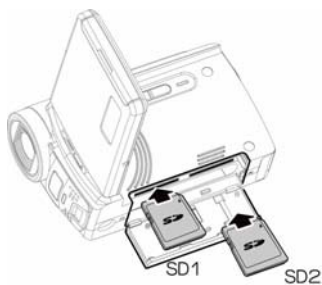


Inserting SD Card(s)

1. Open LCD panel and open the battery cover.



2. Insert an SD card and make sure the contacts are facing downwards.

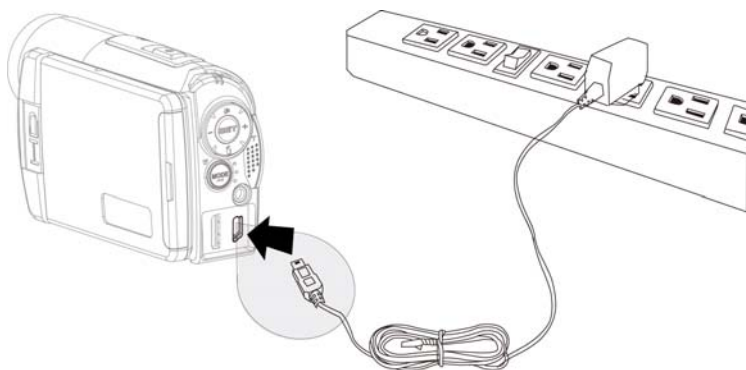


Note:

Do not remove or insert SD cards when the power of the Digital Video Camera is on to avoid damaging files.

Charging the Battery

1. Insert the adaptor jack to the USB socket by the polarity indications.
2. Connect the adaptor into a power outlet.
 - ☐ The LED charger indicator lights red and battery charging begins. When charging is completed, the indicator light will off.
3. Remove the adaptor jack when charging is completed.

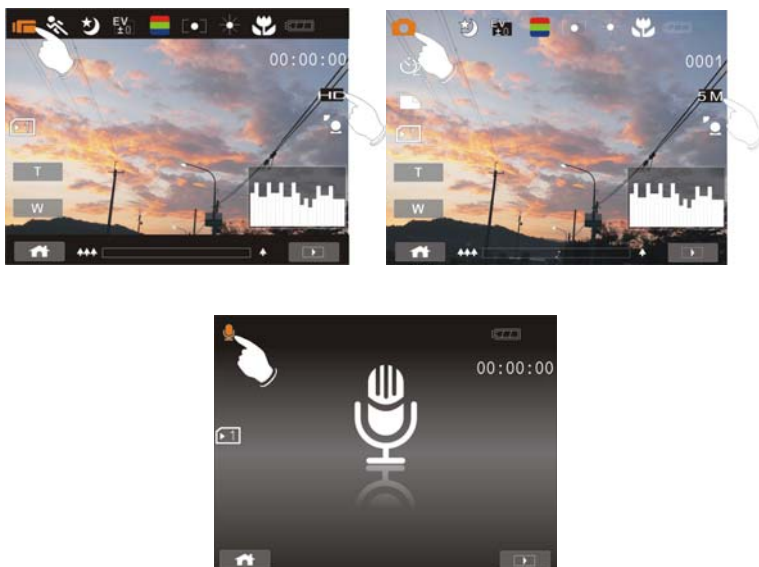


The gestures of using the touch screen

Single touch

Single touch for the below touchable hotkeys:

1. Mode change (DV, DSC and Voice Recording)
2. Resolution change (HD, WVGA, WEB or 12M, 8M, 5M, 3M)



Slide

Slide right or left to view the previous file or the next file under the Playback Mode.




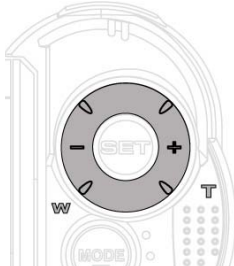



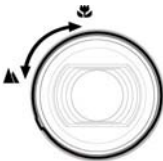


Rotate

Under Playback Mode, you can rotate the image by 90°/step as shown below.



Buttons & Functions

Description	Button	Function
Power Button		Press the button to turn ON/OFF the Digital Video Camera.
SET (Menu) Button		Press the button to display the main OSD menu.
MODE Button		There are three operating modes for the Digital Video Camera: DV Mode, DSC Mode, and Voice Recording Mode. Press the Mode button to change to different modes.
4-Way Direction Button		<p>1. Under video mode:</p> <ul style="list-style-type: none"> ● This Digital Video Camera is equipped with 3X digital zoom function. <p>2. Under Video mode:</p> <ul style="list-style-type: none"> ● Press the 4-way Direction Button Right (T) to pull in the distance of the subject, or press the button Left (W) to move away the distance from the object. <p>3. Under playback mode:</p> <ul style="list-style-type: none"> ● Press the 4-Way Direction Button UP to turn on/off the

		<p>Assist LED light; press DOWN to delete the file.</p> <ul style="list-style-type: none">● Press Right/ Left to rewind or forward 2x ~8x
Shutter button		<p>Press the button to take or viewing images, movie clip and voice recording.</p>
Macro button		<p>Macro function allows you to shoot image of an object at very close distance. In the Macro Mode, you can pull in the focusing distance to 20 cm. (Normal focus range: 1.2m ~ infinity)</p> <p>The icon  will be displayed on the LCD screen when the Macro mode is selected.</p>
Playback Button		<p>Press the Playback button to enter Playback mode and playback the last file.</p>

About LED Indicators

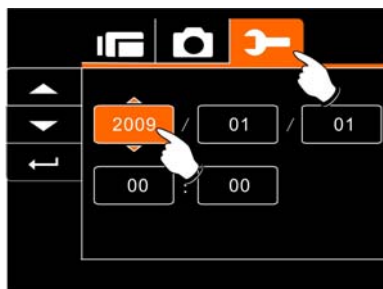
Below table describes the meaning of the camera LED indicators:

Indicator	Color	Position
Power	Green	on mode button
Recording	Red blinking	on front view
Self-timer	Red blinking	on front view

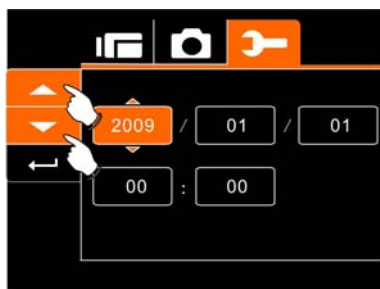
Initial settings before use


Setting Date and Time

1. Turn on the Digital Video Camera to set up the screen for the first time. Set the date and time by moving up/down button or touch the screen to select.



2. Press the 4-Way Direction Button left/right or touch screen to highlight each column. Then press up/down or touch the screen to adjust value.








3. After adjust the value. Press SET (Menu) Button to store you changes or touch the screen to the Return Button () to store the value and leave the setting.








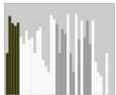







LCD Display Information

In Movie Clip Mode


The following table regarding the description of each icon and symbol will be shown when the Digital Video Camera is in DV Mode (📹).

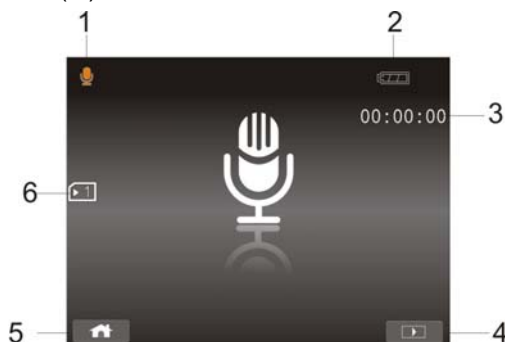










1		Movie Clip recording indicator
2		Motion Detection
3		Night Mode indicator
4		Exposure compensation indicator
5		Color effect indicator

6		Metering Mode
7		White balance indicator
8		Macro indicator
9		Battery status indicator
10		Remaining recording time indicator
11		Resolution indicator
12		Compensation indicator
13		Histogram indicator
14		Playback indicator
15		Digital Zoom indicator
16		Menu Button
17		<p>Memory Status indicator</p> <p> : SD card 1 indicator;</p> <p> : SD card 2 indicator</p> <p> : Internal memory indicator (displayed when there is no SD card)</p>

In Voice Recording Mode

The following table regarding the description of each icon and symbol will be shown when the Digital Video Camera is in Voice Recording Mode ()

















1		Voice Recording Mode indicator
2		Battery status indicator
3	00:00:00	Recording time left indicator
4		Playback Button
5		Menu Button
6		Memory Status indicator  1 : SD card 1 indicator;  2 : SD card 2 indicator  INT : Internal memory indicator (displayed when there is no SD card)

In DSC Mode

The following table regarding the description of each icon and symbol will be shown when the Digital Video Camera is in DSC Mode (📷).



1		DSC Mode indicator
2		Night Mode indicator
3		EV compensation indicator
4		Effect indicator
5		Metering Mode

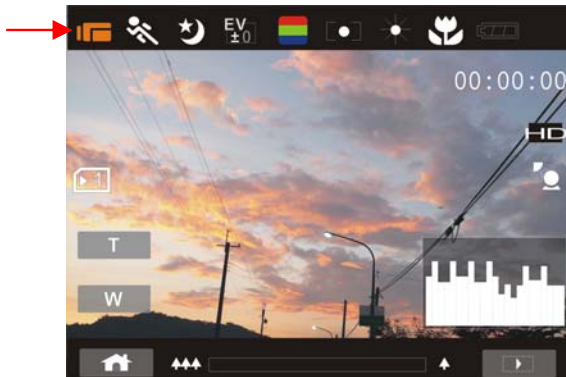
6		White balance indicator
7		Macro indicator
8		Battery indicator
9	0003	Number of pictures left.
10	5 M	Resolution indicator
11		Backlight compensation
12		Histogram indicator
13		Playback Button
14		Digital zoom indicator
15		Menu Button
16		Memory Status indicator  : SD card 1 indicator;  : SD card 2 indicator  : Internal memory indicator (displayed when there is no SD card)
17		Continuous Shot Mode
18		Self timer indicator

Using the Camera

Shooting a Movie Clip

1. DV mode is the default setting after you power on the Digital Video Camera.
2. Press the Shutter button to start or stop moving recording.
3. The Digital Video Camera will store the Movie clip automatically.

**DV Mode
Indicator**



4. LCD screen ratio will be different depending on the setting of Movie Clip resolution. Please refer to the table shown below: 25p
5. Setting Video resolution by pressing SET mode, selected Resolution.

Video Resolution	Preview
HD (1280 x 720) WVGA (848x480)	16:9 ratio 
WEB (320 x 240)	4:3 ratio 

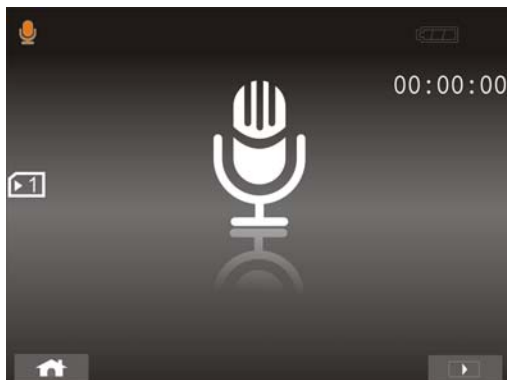
Note:

1. Maximum capacity of each recorded file is 4GB.
2. Setting of high resolution will result in larger file and therefore shorter recording time.

Voice Recording:

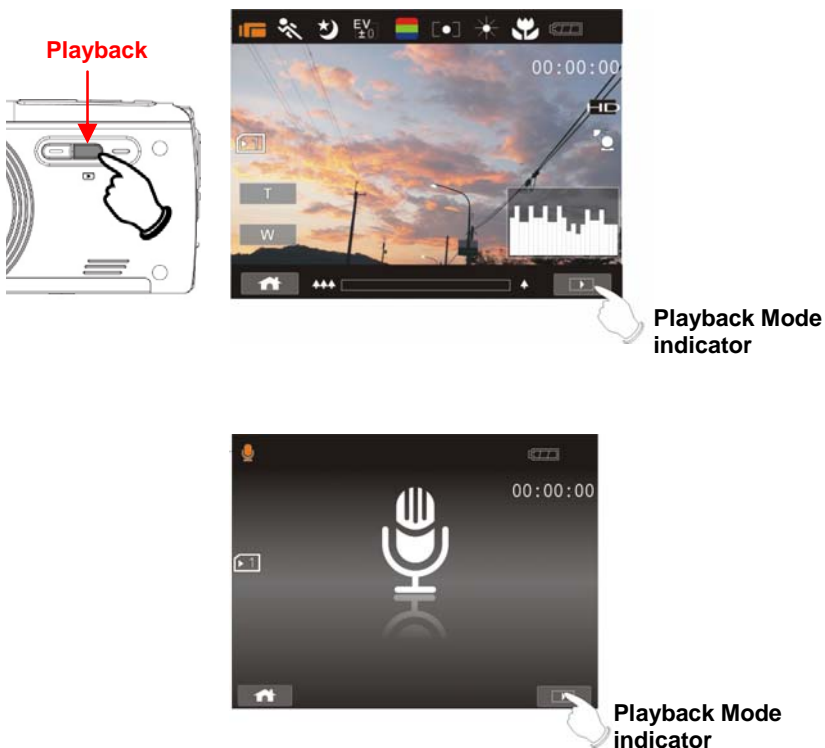
1. Turn on the Digital Video Camera.
2. Press the MODE button to enter Voice Recording mode or touch the screen hotkey.
3. Press the Shutter button to start or stop Voice recording.

Voice
Recording
Mode

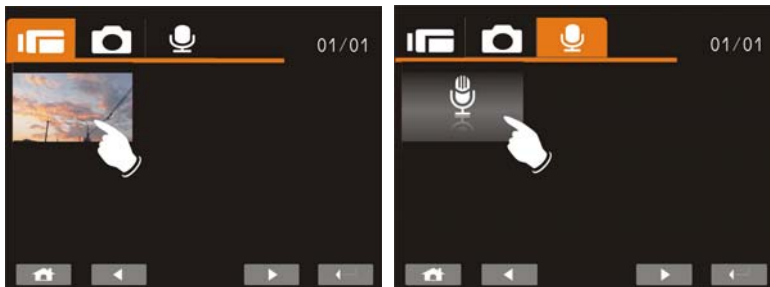


Movie Clip / Voice Clip Playback

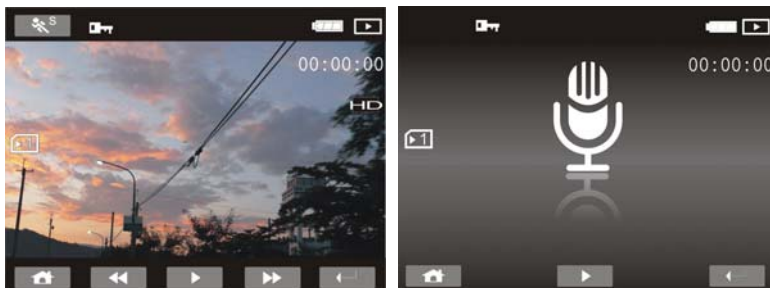
1. In Movie/Voice Recording Mode, press Playback Button to display recently stored file on the LCD screen.




2. Press 4-Way Direction Button up/down, left/right to view the stored file. Press SET (Menu) Button to playback or touch the screen to select Playback of the file.

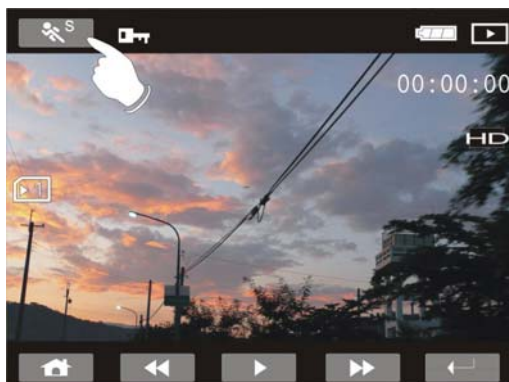


3. To view and phase the Playback of video file, press the Shutter Button or touch the screen icon (▶/⏸).



4. Press the Playback Button to return to Movie/Voice Recording Mode.

5. You can also playback the movie clip by different speed by touching (ON/OFF) the screen icon ().



Playback speed is as below when the Slow Motion is **"OFF"** :



Rewind	2X play	Forward
Rewind	4X play	Forward
Rewind	8X play	Forward
Rewind	16X play	Forward



Playback speed is as below when the Slow Motion is **"ON"**:



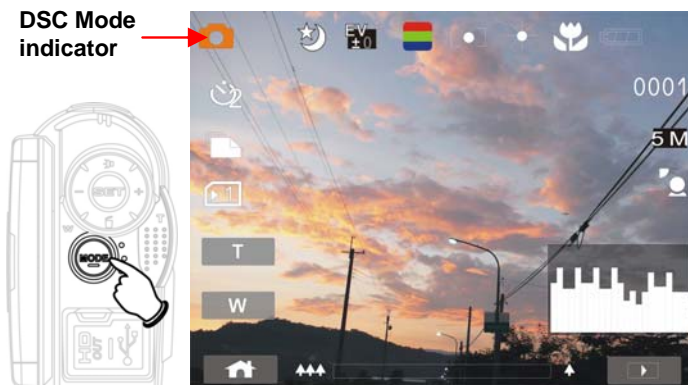
Rewind	1/2X play	Forward
Rewind	1/4X play	Forward
Rewind	1/8X play	Forward
Rewind	1/16X play	Forward




Shooting / Playback images

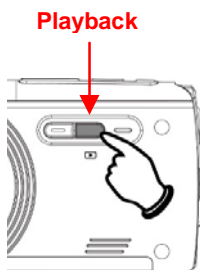
Taking a picture

1. Turn on the power and adjust the Mode Button to DSC Mode or touch the screen hotkey to set up.
2. Press Shutter Button to capture images.



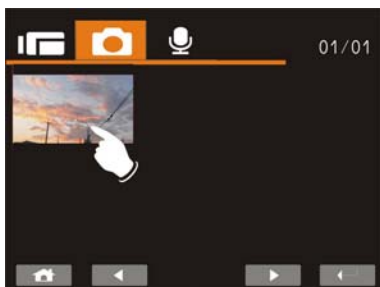
Images Playback

1. In DSC Mode, press Playback Button or touch screen  to display the all stored thumbnails on the LCD screen.

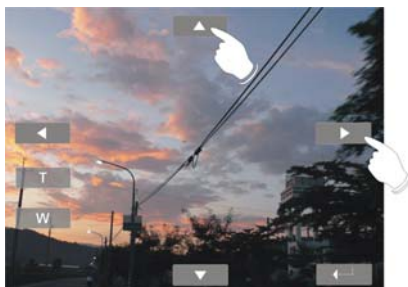


Playback Mode Indicator

2. Press 4-Way Direction Button up/down or left/right to select the stored files. Press SET (Menu) Button or touch the screen to review.



3. Touch the panel icon (**T** or **W**) to enlarge or shrink the image. Then you can move the image up/down or left/right by direction button or touch panel.



4. Touch the screen to return to full screen for viewing images.





5. Press Playback Button again to return to DSC Mode.










LCD Display Information

1.Movie Clip Recording Mode:

Please refer to the following table regarding the description of each icon and symbol.













1		File Protect indicator
2		Battery status indicator
3		Playback Mode icon
4	00:00:00	Length of each Movie Clip
5		Resolution indicator
6		Return Button

7		Fast forward Playback Button
8		Playback/Pause button
9		Fast rewind Playback Button
10		Menu Button
11		<p>Memory Status indicator</p> <p> 1 : SD card 1 indicator;</p> <p> 2 : SD card 2 indicator</p> <p> INT : Internal memory indicator (displayed when there is no SD card)</p>
12		Slow motion Playback

2. Voice Recording Mode:

Please refer to the following table regarding the description of each icon and symbol.












1		File Protect indicator
2		Battery status indicator
3		Playback Mode icon
4	00:00:00	Length of each voice recording.
5		Playback mode indicator
6		Playback/Pause Button
7		Menu Button
8		Memory Status indicator  1 : SD card 1 indicator;  2 : SD card 2 indicator  INT : Internal memory indicator (displayed when there is no SD card)

3. DSC Playback Mode

Please refer to the following illustration to familiarize yourself with icons and symbols of DSC Playback Mode.



1		DPOF (Digital Print Order Format) indicator
2		File Protect indicator
3		Exposure compensation indicator
4		White balance
5		Battery status indicator
6		Image Playback Mode icon
7	0003	Number of pictures left

8		Resolution indicator
9		Return Button
10		Menu Button
11		Zoom- Out indicator
12		Zoom- In indicator
13		<p>Memory Status indicator</p> <p> 1 : SD card 1 indicator;</p> <p> 2 : SD card 2 indicator</p> <p> INT : Internal memory indicator (displayed when there is no SD card)</p>

Menu Mode

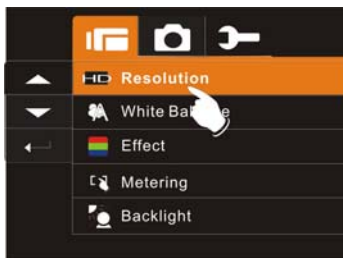
When the menu appears on the LCD display, the SET (Menu) button is used to move through the highlighted items in the submenu or to select a menu item.




Menu options of Movie Clip Mode

When in Movie Clip mode, press the SET(Menu) Button to show the Movie options menu.

Movie Clip Resolution

1. Turn on the Digital Video Camera and make sure it is in the DV Mode.
2. Press SET (Menu) Button and press the 4-Way Direction Button to highlight the Resolution item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select HD, WVGA or WEB. Press SET (Menu) Button to confirm; or touch the screen to select the item.



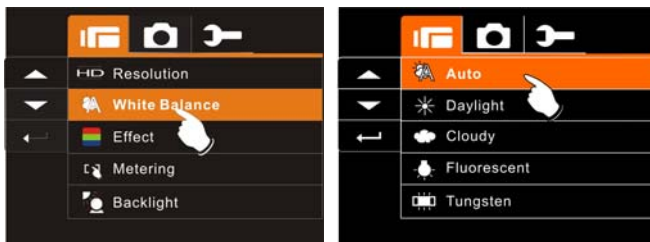
 HD	1280 x 720
 WVGA	848 x 480
 WEB	320 x 240






Note: 1.When setting to HD or WVGA resolution, the LCD display aspect ratio is 16:9.

2.When setting to WEB video resolution, the LCD display aspect ratio is 4:3.

White Balance

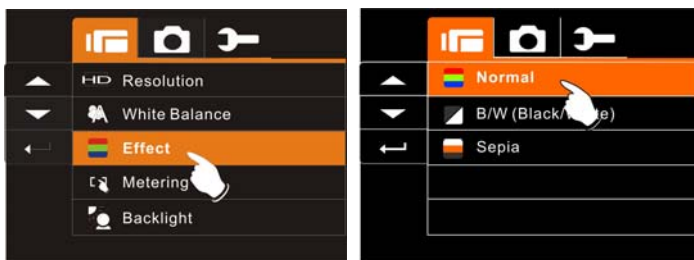
1. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the White Balance item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
2. Press 4-Way Direction Button to select Auto, Daylight, Cloudy, Fluorescent or Tungsten. Press SET (Menu) Button to confirm; or touch the screen to select the item.






 Auto	The Digital Video Camera automatically adjusts white balance.
 Daylight	The setting is suitable for outdoor recording in daylight.
 Cloudy	The setting is suitable for recording in cloudy or shady environments.
 Fluorescent	The setting is suitable for indoor with fluorescent lamp lighting, or environments with high color temperature.
 Tungsten	The setting is suitable for indoor with incandescent lamp light, or environments with low color temperature.

Effect

1. Press SET (Menu) Button and press the 4-Way Direction Button to highlight the Effect item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
2. Press 4-Way Direction Button to select Normal, B/W or Sepia. Press SET (Menu) Button to confirm; or touch the screen to select the item.






 Normal	Make recordings in nature color
 B&W	Make recordings in B&W (Black and White) color
 Sepia	Make recordings in Sepia-toned color

Metering

1. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Metering item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
2. Press 4-Way Direction Button to select Spot, Center or Touch AE. Press SET (Menu) Button to confirm; or touch the screen to select the item.



 Spot	This setting is to ensure correct exposure for the object even if the background is very bright or
--	--

	very dark.
 Center	Use this setting to preserve background details while letting lighting conditions at the center of the frame define exposure.
 Touch AE	Touch the object to make it with suitable light.

Backlight

1. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Backlight item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
2. Press 4-Way Direction Button to select On or Off. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Night Mode

1. Press SET (Menu) Button and press the 4-Way Direction Button to highlight the Night Mode item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.

2. Press 4-Way Direction Button to select On or Off. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Motion Detection

When Motion Detection is turned on, the camera will detect the motion for Movie Clip recording without human intervention. When the AE variation is detected, the recording will start immediately.



1. Turn on the Digital Video Camera and make sure it is in the DV Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Motion Detection item. Press SET

(Menu) Button to display submenu; or touch the screen to select the item.

3. Press 4-Way Direction Button to select On or Off. Press SET (Menu) Button to confirm; or touch the screen to select the item.



EV Compensation

You can adjust the value of the exposure compensation which is ranged from -2.0EV to +2.0EV (at 0.5EV increment). The higher the EV value, the brighter the image will be.

1. Turn on the Digital Video Camera and make sure it is in the DV Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the EV Compensation item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to adjust the Exposure value (-2.0 ~ + 2.0). Press SET (Menu) Button to confirm; or touch the screen to select the item.



Menus of playback in Movie Clip/Voice

Press the SET(Menu) Button to show the Movie Clip options menu.
46p



Delete

1. Turn on the Digital Video Camera and make sure it is in the Movie Clip/Voice Playback Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Delete item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button to select Delete One or Delete All. Press SET (Menu) Button to confirm; or touch the screen to select the item.



4. Press 4-Way Direction Button to select "O" Yes or "X" NO. Press SET (Menu) Button to confirm; or touch the screen to select the item.



 Delete One	Delete the current file
 Delete All	Delete all files stored in the Digital Video Camera

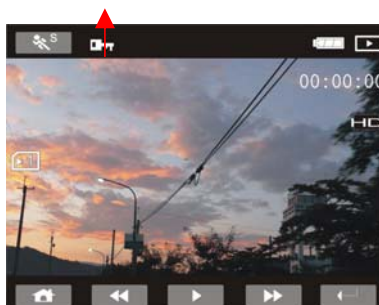
Note: The file cannot be recovered once it is deleted. Therefore, please make sure you have backed up the file before Delete. Protect files cannot be deleted. Before delete, you must unlock the file.


Protect

1. Turn on the Digital Video Camera and make sure it is in the Movie Clip/Voice Playback Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Protect item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button to select Lock One, Local All, Unlock One or Unlock All. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Protect Lock



Note: To unlock the file from Protect, repeat steps stated above. When the Protection is relieved from Protect mode, the locked  icon will disappear.





Menu options of Camera Mode

When in DSC Mode, press SET (Menu) Button to display camera mode option Menu.

Still Image Resolution

1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Resolution item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select 12M, 8M, 5M or 3M. Press SET (Menu) Button to confirm; or touch the screen to select the item.



 12M	4000 x 3000 pixels (Interpolation)
 8M	3200 x 2400 pixels (Interpolation)
 5M	2560 x 1920 pixels
 3M	2048 x 1536 pixels

White Balance

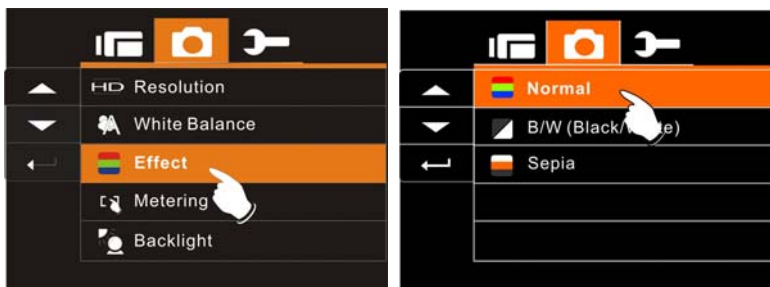
1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the White Balance item. Press SET (Menu Button) to display submenu; or touch the screen to select the item.
3. Use Direction Button to select Auto, Daylight, Cloudy, Fluorescent or Tungsten. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Effect

This Digital Video Camera can take standard color images, Black and White images, or Sepia color tone images.

1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Effect item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button to select Normal, B/W or Sepia. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Metering

Use this function to switch to suitable lighting Mode in order to obtain images with better picture quality.

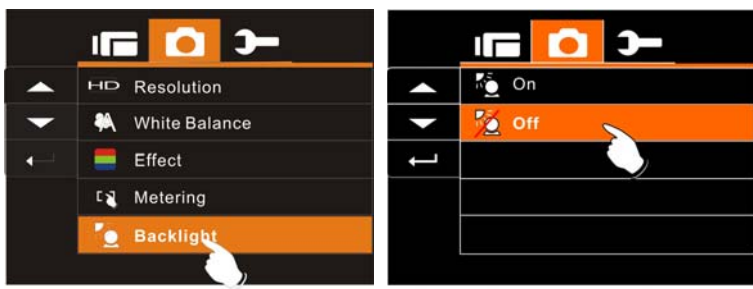
1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Metering item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select Spot, Center or Touch AE. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Backlight

Use this function in the backlight environment to capture images with better quality.

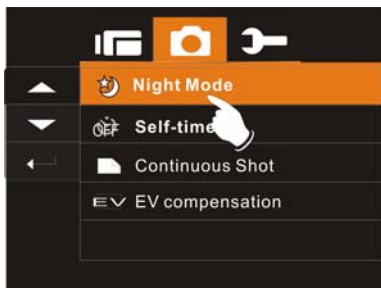
1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Backlight item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select ON or OFF. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Night Mode

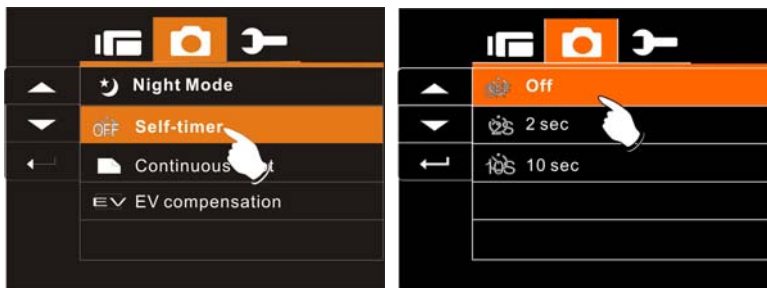
Use this function in the night or low light environment to capture images with better quality.

1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Night Mode item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select On or Off. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Self-timer

1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and use the 4-Way Direction Button to highlight the Self-timer item. Press SET (Menu Button) to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select OFF, 2 Sec or 10 sec. Press SET (Menu) Button to confirm; or touch the screen to select the item.



With 2 sec. Self-timer:

The image will be taken 2 seconds after the shutter is released.

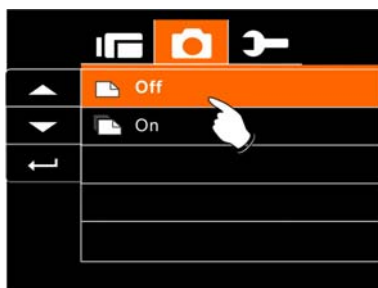
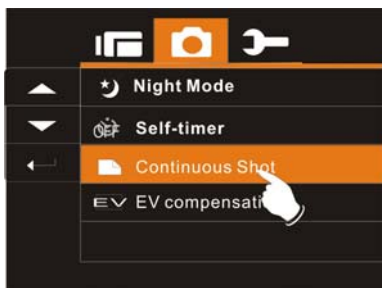
With 10 sec. Self-timer:

The image will be taken 10 seconds after the shutter is released.

Continuous Shot

You can continuously shooting three pictures by turn on this function, started by pressing Shutter Button and ending automatically by taken three pictures. 56p

1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and press the 4-Way Direction Button to highlight the Continuous Shot item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select OFF or ON. Press SET (Menu) Button to confirm; or touch the screen to select the item.



EV compensation

You can adjust the value of the exposure compensation which is ranged from -2.0EV to +2.0EV (at 0.5EV increment). The higher the EV value, the brighter the image will be.

1. Turn on the Digital Video Camera and make sure it is in the DSC Mode.
2. Press SET (Menu) Button and press the 4-Way Direction Button to highlight the EV Compensation item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to adjust the exposure value (-2.0 ~ +2.0). Press SET (Menu) Button to confirm; or touch the screen to select the item.



Menus of Playback in DSC

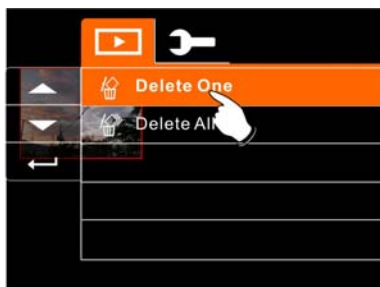
Delete

Use this function to delete the files.

1. Turn on the Digital Video Camera and make sure it is in the still camera' playback Mode.
2. Press SET (Menu) Button and press the 4-Way Direction Button Down; or touch the screen to select the file to be deleted or to delete all files.



3. Press the 4-Way Direction Button or touch the screen to select "Delete one" or "Delete All" to display submenu.




4. Press 4-Way Direction Button or touch the screen to select "O" YES or "X" No and press SET (Menu) Button to delete file(s).



Note: The files cannot be recovered once deleted. Therefore, please make sure you have a backup file before delete. The protect files will not be able to delete. Before delete of Protected file, you must unlock the file.

Protect


Use this function to prevent the accidental deletion of the files.

1. Turn on the power of Digital Video Camera and make sure it is in the Playback Mode.
2. Choose the file which you want to protect.
3. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Protect item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
4. Press 4-Way Direction Button or touch the screen to select item. Press SET (Menu) Button or touch the screen to confirm. The Locked icon  will be displayed to indicate the file is Protected.



Protect Lock

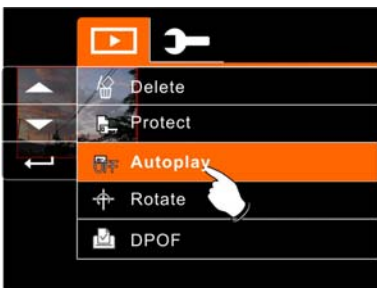


Note: Repeat above steps to unlock the file. When the file is unlocked, the locked icon  will disappear.

Auto play

This Digital Video Camera includes a slide show function that could playback each picture at a regular interval.

1. Turn on the power of Digital Video Camera and make sure it is in the Playback Mode.
2. Press SET (Menu) Button and move the 4-Way Direction Button to highlight the Auto play item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button or touch the screen to select "Off", 1sec., or "3 sec" , The images will be displayed automatically.



Rotate

With this setting, you can rotate the image by 90°/step

1. Turn on the power of the Digital Video Camera and make sure it is in the Playback Mode.
2. Use 4-Way Direction Button to highlight rotate item and press SET (Menu) Button; or touch the screen to select the Left 90 or Right 90.




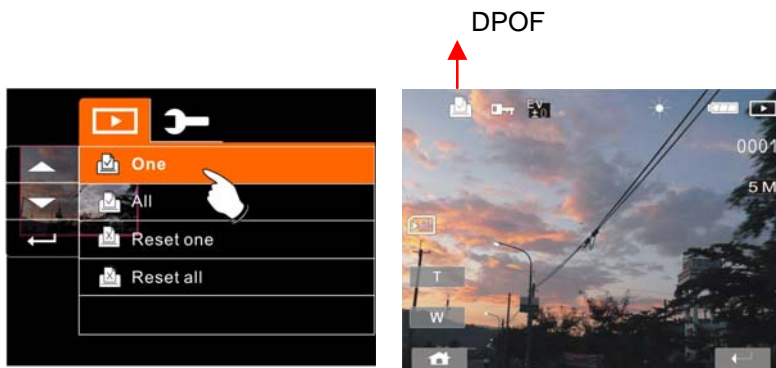
DPOF

Use DPOF (Digital Print Order Format) function to indicate the printing information stored in the memory card.

1. Turn on the power of the Digital Video Camera and make sure it is in the Playback Mode. Press Playback Button and press SET (Menu) Button to display Image Playback Menu; or touch the screen to select the item.
2. Use 4-Way Direction Button to highlight the DPOF item. Press SET (Menu) Button; or touch the screen to display submenu.



3. Use the 4-Way Direction Button and press SET (Menu) Button; or touch the screen to select the item. The DPOF icon  will be shown to indicate the files that are ordered for printing.



4. Press the Playback Button or touch the screen to exit the image.

Note:1. A memory card is required for the DPOF function.
2. If DPOF is set, the pictures to be printed are ordered to print.

Setting Menu

Setting Menu can be used to select all kinds of the Digital Video Camera settings.

Information

This function can be used to display information on the LCD screen to help you in capturing best images and movie clips.

1. Turn On the Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight Information item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select Normal, Histogram, or OFF. Press SET (Menu) Button to confirm; or touch the screen to select the item.

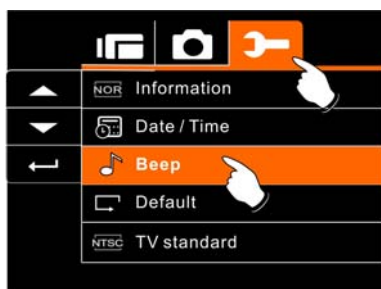


Date / Time

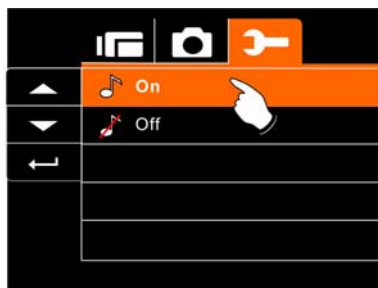
Please refer to initial setting of Date and time on page 19.

Beep

1. Turn on the power of Digital Video Camera and switch to SET Mode. Press the 4-Way Direction Button up or down to highlight the Beep and press SET (Menu) selection Button to confirm or touch the screen to select.



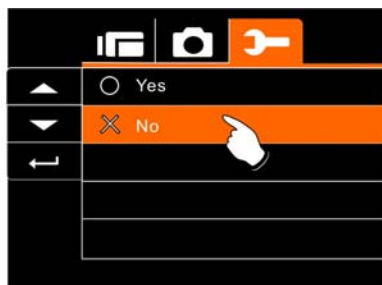
2. Use 4-Way Direction Button or touch the screen to select On or Off.



Default

Use this function to reset all settings to default settings.

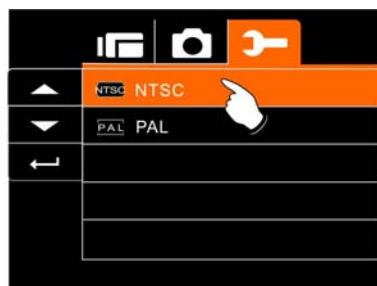
1. Turn on the power of Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight Default item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button or touch the screen to select "O" YES or "X" NO. Press SET(Menu) Button to confirm; or touch the screen to select the item.



TV standard

Use the TV standard to set the TV system for your area.

1. Turn on the power of Digital Video Camera and switch to SET Mode.
2. Use 4-Way Direction Button to highlight the TV standard item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button to select NTSC or PAL. Press SET (Menu) Button to confirm; or touch the screen to select the item.



TV out standard setting reference

 NTSC	USA, Canada, Japan, Korea, Taiwan, Mexico
 PAL	Australia, Austria, Belgium, China, Denmark, Finland, Germany, UK, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway

USB

This setting is for USB output function. You can select an external device to connect the Digital Video Camera by using the supplied USB cable.

1. Turn on the Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight the USB item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button to select PC Camera or Mass Storage. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Auto Power Off

This function can be used to turn off the Digital Video Camera automatically after a period of time not using the Digital Video Camera.

1. Turn on the Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight Auto Power Off item. Press SET(Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select OFF, 3 mins, or 5 mins; or touch the screen to select the item.



Frequency

Use the Frequency option to set the frequency system for your area.

1. Turn on the power of Digital Video Camera and switch to SET Mode.
2. Use 4-Way Direction Button to highlight the Frequency selection item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button to select 50 Hz or 60 Hz. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Frequency setting reference:

50HZ 50HZ	UK, Germany, Spain, Italy, France, Netherlands, Portugal, Russia, China, Japan
60HZ 60HZ	USA, Taiwan, Korea, Japan

Language

1. Turn on the power of the Digital Video Camera. Then select the Mode Button to “SET”. Move 4-Way Direction Button up and down to highlight the Language and press SET (Menu) button to confirm or touch the screen to select.



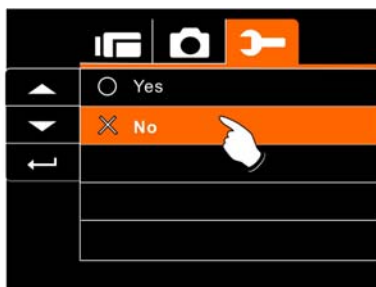
2. Press 4-Way Direction Button or touch the screen to select the following languages: English, German, French, Italian, Japanese, Spanish, Portuguese, Traditional Chinese, Simplified Chinese, Turkish, Russian, Thai, Arabian.



Format

This function allows you to format the memory card or the built-in memory.

1. Turn on the power of Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight Format item. Press SET (Menu) Button or touch the screen to display submenu.
3. Press 4-Way Direction Button to select "O" Yes or "X" NO. Press SET (Menu) Button to confirm; or touch the screen to select the item.



4. The format of the current storage media (memory card or internal memory) is now completed.

Note: All the data stored in the memory card or flash memory will be deleted after formatting.

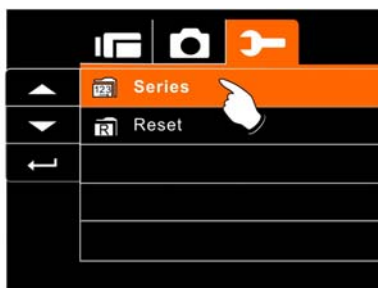
File Number(Default: Series)

This setting allows you to name the files.

If “Series” is selected, the file name will follow the latest stored file instead.

If “Reset” is selected, the next file name will start from 0001 even after formatting, deleting or inserting a new memory card.

1. Turn on the power of Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight File Number item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Use 4-Way Direction Button to select Series or Reset. Press SET (Menu) Button to confirm; or touch the screen to select the item.



LCD brightness

This function can be used to adjust the brightness of the screen.

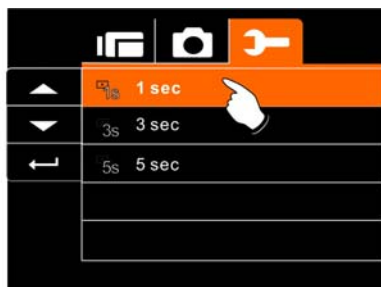
1. Turn on the Digital Video Camera and switch to SET Mode.
2. Use 4-Way Direction Button to highlight LCD brightness item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select High, Medium, or Low. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Instant Review

This function can be used to instantly browse the files after taking the picture.

1. Turn on the Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight Instant Review item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press 4-Way Direction Button to select 1 sec, 3 sec, or 5 sec. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Memory

Use this function to select data storage location.

1. Turn on the Digital Video Camera and switch to SET Mode.
2. Press 4-Way Direction Button to highlight Memory item. Press SET (Menu) Button to display submenu; or Touch the screen to select the item.
3. Press 4-Way Direction Button to select Internal, SD1, or SD2. Press SET (Menu) Button to confirm; or touch the screen to select the item.



Note:

The images or movie clips can be stored in a built-in flash memory or external SD cards. When the SD cards are inserted, the files will be stored in the external SD cards rather than the internal flash memory. On the other hand, the files will be stored in the built-in flash memory when SD card(s) is not inserted.

Volume

Use this function to adjust the volume of sound.

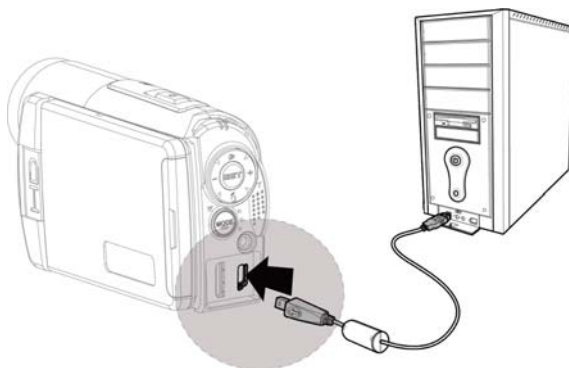
1. Turn on the Digital Video Camera and switch to SET Mode.
2. Press the 4-Way Direction Button to highlight Volume item. Press SET (Menu) Button to display submenu; or touch the screen to select the item.
3. Press the 4-Way Direction Button to select High, Medium, or Low. Press SET (Menu) Button to confirm; or touch the screen to select the item.



PC and TV Connection

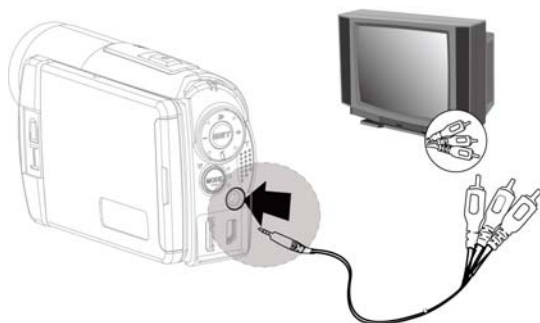
Connecting to the Computer

As shown in the illustration, use the USB cable provided to connect the Digital Video Camera to a PC for file transmission, or use the Digital Video Camera as a Web camera for conferencing purpose.



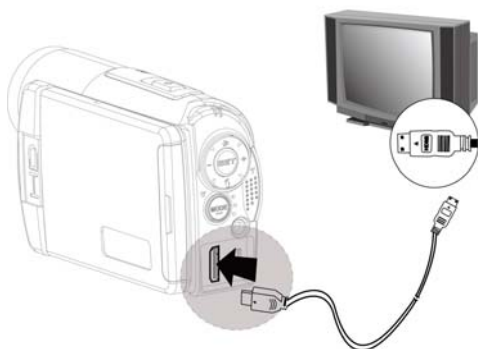
Connecting to a Standard TV

As shown in the illustration, use the video cable to connect the Digital Video Camera to a standard TV.



Connecting a HD TV

As shown in the illustration, use the HDMI cable provided to connect the Digital Video Camera to a HD TV for high resolution picture display.



System Requirements

This Digital Video Camera requires a unit of computer with the following specifications:

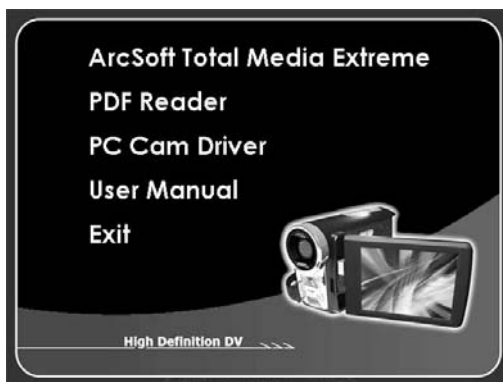
- Windows® Vista / XP / 2000 operating system or Mac OS 10.3 ~10.4
- A CPU of at least the equivalent of Intel® Pentium 4 2.8GHz
- At least 512 MB of RAM
- Standard USB 1.1 connection port or higher
- At least 64MB of display card

Note: USB 1.1 allows you to transmit files to the host, but using USB 2.0 connection port could increase the transmission speed far faster.

Installing the Software

1. Place the CD ROM attached into the CD player.
2. If the CD is not executed automatically, please use Windows File Manager to execute the Install_CD.exe file in the CD.

The following screen will be displayed.



3. Press the Menu item and follow the Installation process and follow the instructions on-screen.

Appendix

Specifications

Image sensor	1/2.5 inch. 5.0 mega pixels CMOS sensor
Effective pixels	5.03 Mega pixels (2592 x 1944)
Storage media	Built-in 32 MB Flash memory SD card and SDHC card Supported to 32GB per each slot.
ISO Equipment	Auto
Color effect	Normal/BW/Sepia
Lens	Fixed lens F/3.2, f=7.1mm
Focus range	Normal: 1.2m~infinity Macro: 20cm
Still image	Format: JPEG (DPOF, EXIF) Resolution: 3MP, 5MP, 8MP, 12MP (Firmware interpolation) Scene Mode: Auto

Movie Clip	Format: H.264 (MOV) Resolution: WEB 、 WVGA 、 HD (1280 x 720 / 30 fps.)
Digital zoom	Still Image mode: 3X Play mode: 8X (depends on image size)
Audio	Audio for Voice Recording: ADPCM
LCD Display	3.0" Touch Panel screen
Assist LED light	Range: < 1.0m Movie Clip: On/Off DSC: On/Off
White balance	Auto / Daylight / Cloudy / Tungsten / Fluorescent
Exposure	-2.0 EV~+2.0 EV
Self-Timer	Off, 2 seconds, 10 seconds.
Interface	Digital output connector: USB 2.0 high- speed (480Mbps Max.) MIC Input + Earphone + AV output: NTSC, PAL (user selectable) with Audi output HDMI USB DC IN
TV output	NTSC/PAL
Shutter	Electronic shutter 1~1/8000 second
Auto Power Off	Off, 3 minutes, 5 minutes

Power Source	CNP-40 Lithium battery or 4 AAA Alkaline batteries
Dimensions	111 (L) x 68 (H) x 41 (W) mm
Weight	About 227g (without battery)

Troubleshooting

Problem	Possible Cause	Solution
Can not turn on the power of Digital Video Camera.	<ol style="list-style-type: none"> 1. Batteries are not inserted correctly. 2. Batteries are exhausted. 	<ol style="list-style-type: none"> 1. Please insert batteries correctly. 2. Replace the batteries.
Camera shutdown suddenly.	<ol style="list-style-type: none"> 1. Power saving mode already activated. 2. Battery exhausted. 	<ol style="list-style-type: none"> 1. Please turn on the power again. 2. Replace the batteries.
Pictures are not stored in the memory.	Power off before storing the images.	Please change to new batteries when the battery indicator turns to red color.

Camera shutdown when using Self-timer shooting picture.	Batteries in camera are exhausted.	Change new batteries.
Images are out of focus	Object exceeds the range of focus.	Please take the picture within the focusing range and select normal or Macro Mode.
Unable to use the external memory card.	<ol style="list-style-type: none"> 1. Memory card is Protected. 2. Memory card contains non-DCF images taken by other cameras. 	<ol style="list-style-type: none"> 1. Unlock the memory card. 2. Reformat the memory card. Please make sure to backup the file before reformatting memory card.
All Buttons can not work or camera hangs.	Short circuit occurred when connecting the camera to other device.	Take out batteries in the camera and re-insert again.