

150mm+-2

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Cautions

- Do not try to disassemble the camera by yourself, which may damage the camera or cause electric shock.
- Do not fire the flash in a close distance (less than 1 meter); it may hurt your eyes.
- Keep the camera away from the reach of children or animals to prevent them from swallowing the batteries or small accessories.
- Stop using the camera if any kind of liquid or foreign object enters the camera. If it happens, power off the camera and contact your dealer for help.
- Do not operate this camera with wet hands; it may cause electric shock.
- The camera may be damaged in an environment of high temperature.
- To avoid electricity leakage, please remove the battery if the camera is expected not to be in use for a long period of time.
- It is normal that the temperature of the camera body rises if the camera works for a long period of time.

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Small Tip to Save You Big Headache

A digital camera is in a way very similar to a computer. If the digital camera hangs itself during operation, please follow the procedures below and most likely the camera can be re-activated.

1. Remove the battery.
2. Reload the battery.
3. Switch on the camera.

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Overall Introduction

Accessories

① Digital Camera



② Software CD



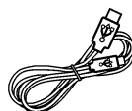
③ Li-ion Battery



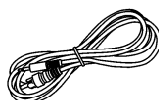
④ Charger & Plug



⑤ USB Cable



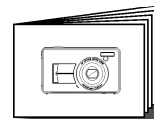
⑥ Video Cable



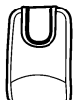
⑦ Wrist Strap



⑧ User Manual



⑨ Camera Pouch



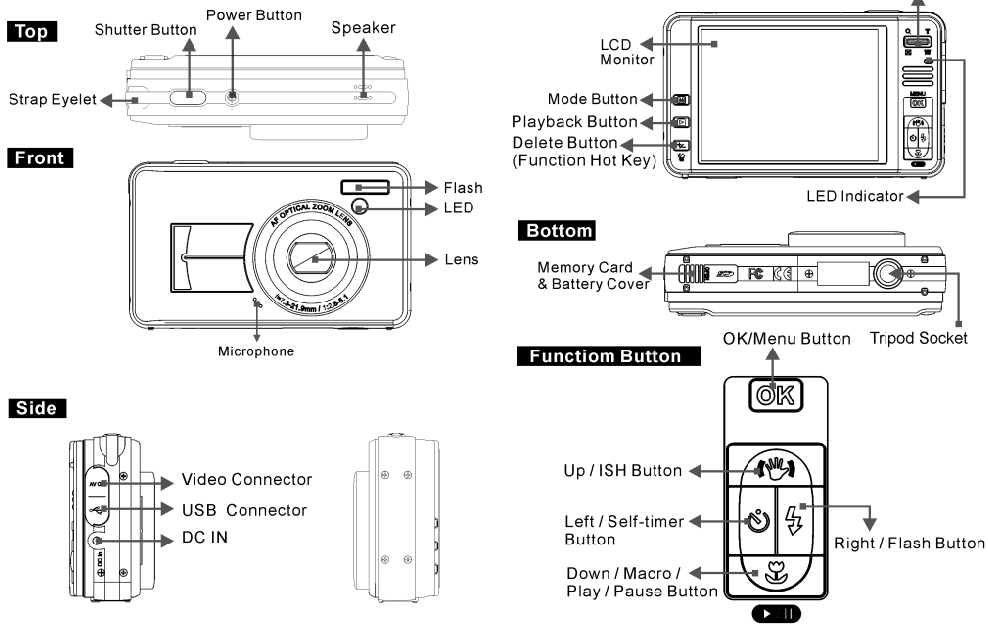
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Overall Introduction

External View

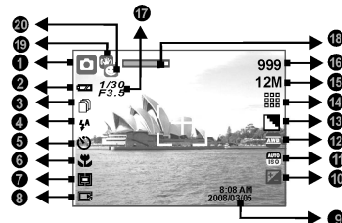


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Overall Introduction

Display Information



- | | | | |
|--|---|--|---|
| <p>1 Working Mode</p> <ul style="list-style-type: none"> () Still Image Shooting Mode () Movie Clip Mode () Voice Recording Mode () Auto () Program () Portrait () Landscape () Night Portrait () Night Landscape () Sunset () BackLight () Fireworks () Candle Light () Beach () SEA & SEA () High Sensitivity <p>2 Battery Status</p> <ul style="list-style-type: none"> () Battery Full () Battery Half Drained () Battery Drained In Charging | <p>3 Shooting Mode</p> <ul style="list-style-type: none"> () Single () Continuous <p>4 Flash mode</p> <ul style="list-style-type: none"> () Auto Flash () Auto Flash with Red-eye Reduction () Fill-in Flash () Slow Sync () Flash Off <p>5 Self-timer</p> <ul style="list-style-type: none"> () 10 Seconds () 2 Seconds () Double <p>6 Focus Range</p> <ul style="list-style-type: none"> () 10cm-60cm <p>7 Metering</p> <ul style="list-style-type: none"> () Spot () Multi <p>8 Memory Status</p> <ul style="list-style-type: none"> () Internal Flash Memory () Memory Card Inserted | <p>9 Time & Date</p> <p>10 Exposure+2EV
(0.5EV/Steps)</p> <p>11 ISO Value</p> <ul style="list-style-type: none"> () Auto () 100 () 200 () 400 () 800 () 1600 () 3200 <p>12 White Balance</p> <ul style="list-style-type: none"> () Auto () Daylight () Cloudy () Sunset () Fluorescent () Tungsten () Custom <p>13 Sharpness</p> <ul style="list-style-type: none"> () Soft () Normal () Vivid | <p>14 Image Quality</p> <ul style="list-style-type: none"> () Super Fine () Fine () Normal <p>15 Image Size</p> <p>Still Image</p> <ul style="list-style-type: none"> (14M) 4344 x 3258 (via interpolation) (12M) 4000 x 3000 (8M) 3264 x 2448 (3M) 2048 x 1536 (1M) 1280 x 960 <p>Movie Clip</p> <ul style="list-style-type: none"> () 1280 x 720 30FPS () 640 x 480 30FPS () 320 x 240 30FPS <p>16 Estimated Available Shots & Video Time</p> <p>17 F No. & Shutter Speed</p> <p>18 Zoom In / Out Indicator</p> <p>19 Image Stabilizing Helper (ISH)</p> <p>20 Face Detection</p> |
|--|---|--|---|

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Getting Ready

▶▶ Turn On Or Off The Camera






- ✦ By pressing the Power Button can turn on the camera
- ✦ By pressing again the Power Button can turn off the camera.

▶▶ Loading The Battery



1. Power off the camera.
2. Slide out Battery Cover to open it.
3. Following the polarity indications and load the battery.
4. Close the Battery Cover.

- ✦ The below symbols on the TFT LCD Monitor are the indication of the battery status.
- (): Battery power is full.
- (): Battery power is half drained. Have new a battery ready.
- (): Battery power is drained. Replace with a new battery.

- ✦ The battery may run out if the battery is kept inside the camera for a long time without using. Please remove the battery when the camera is not in use.
- ✦ The battery may not work normally under 0°C or over 40°C. It's normal that the temperature of the camera rises after used for a long period.

▶▶ Charging The Battery With The Charger

The battery is not charged when the camera is shipped. Charge the battery before use.



✦ Charging Procedure

- (a) Insert the battery to the battery slot by the polarity indications.
- (b) Connect the charger to the electrical outlet.
- (c) The LED will light up in red color when charging.
- (d) The charging is completed when the LED turns green.
- (e) Remove the battery when the charging is completed.

- ✦ It is recommended to charge a new battery for more than 4 hours.

- ✦ It's normal that the temperature of the battery and camera body rises after a period of time of using.

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Getting Ready

▶▶ Inserting Or Removing A Memory Card



1. Power off the camera.
2. Open the Battery / Memory Card Cover.
3. Insert the memory card into the card slot and press it down until a click sound happens. (Please press the memory card again to get it out once a click sound happens.)
4. Close the Memory Card Cover.

Formatting a brand new memory card is strongly recommended for first use.

- ✦ The image(s) can be stored either in built-in flash memory or in memory card. When the memory card is inserted, the images will be stored in the memory card rather than the built-in flash memory. On the other hand, the images will be stored in the built-in flash memory when a memory card is not inserted.

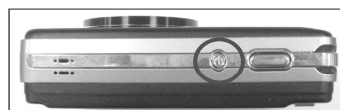
Kindly note:

- ✦ Do not support Memory Card under 128MB
- ✦ When using 8G SD Card, the single file is up to 4G.
- ✦ Playback result will be affected by different brand of memory card. Various delays might occur during playback HD file.

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Button & Function

▶▶ Power Button



1. By pressing the Power Button can turn on the camera.
2. By pressing again the Power Button can turn off the camera.
3. If there is no operation during the specified time, the camera will power off automatically to save battery life.

▶▶ Shutter



Press the shutter button half way to do the focusing and then press the shutter button fully down to capture an image.

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Buttons & Function

Tele / Wide Button

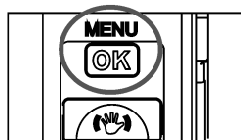
Zoom in / Zoom out



- ✦ Push up the Tele Button, the Zoom Bar Indicator appearing on the top side of the LCD Monitor and it shows the current zoom status.
- ✦ Push down the Wide Button, the Zoom Bar Indicator will go back to the Wide view.

Menu / OK Button

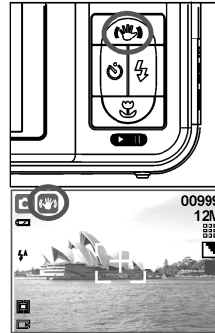
Menu / OK Button



- ✦ Press Menu/OK Button to go to the menu selection.
- ✦ When the menu is displayed on the LCD monitor, the Menu/OK Button is used for confirming data.

Function Button

Up Button / ISH (Image Stabilizer Helper)



In Menu Mode, press the Up Button (↑) to move up to the sub menu.

- ✦ Pressing the ISH Button (ISH) can activate this function.

This function will only help to "reduce" the chance of blurred image due to unsteady holding of the camera.

Note

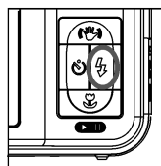
1. Image noise may occur with this feature.
2. When you prefer the next image or movie clip not to be with ISH feature, please press the ISH Button (ISH) again.
3. It is suggested to use this feature under low light conditions when the object is beyond 3.0m from the camera.

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Buttons & Function

Right Button/ Flash Button



- ✦ In Menu Mode, press the Right Button (→) to move the cursor to the right tab.
- ✦ When the menu is not displayed on the LCD monitor, the Right Button (→) operates as Flash function.

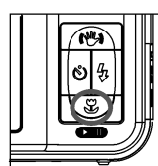
Flash Button



By pressing the Flash Mode Button (⚡) you can select different flash options as follows.

⚡	Auto Flash	The flash fires automatically as required under shooting mode.
👁	Auto Flash with Red-eye Reduction	To avoid the subject's eyes appearing red in the image, this mode can effectively minimize the likelihood of the red-eye effect.
⚡	Fill-in Flash	This mode will enable the flash to fire in any circumstances.
⚡S	Slow Sync	The flash will fire and the camera will set the shutter speed at a proper speed.
🚫	Flash Off	The mode will disable the flash.

Down Button / Macro Button



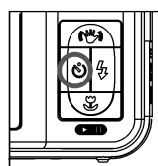
- ✦ In Menu Mode, press the Down Button (↓) to move down the submenu cursor.
- ✦ When the menu is not displayed on the LCD monitor the Down Button operates as Play & Pause function, for play the voice & movie clip file in Playback Mode.

Macro Mode



- ✦ The focus range is 10~60cm.
- ✦ A Macro icon will display on the LCD monitor when you select Macro Mode.
- ✦ Please press the Macro Button (📷) to cancel the macro setting if you prefer the next image in Auto Focus.

Left Button/ Self-Timer Button



- ✦ In Menu Mode, press the Left Button (←) to move the cursor to the left tab.
- ✦ When the menu is not displayed on the LCD monitor, the Right Button operates as Self-time function.

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Buttons & Function

Self-timer



✦ **With the 10 sec. Self-timer (10s):**
The image will be taken after an interval of 10 seconds once the DSC Button (10s) is released.

✦ **With the 2 sec. Self-timer (2s):**
The image will be taken after an interval of 2 seconds once the DSC Button (2s) is released.

✦ **With the Double self-timer (2s):**
The image will be taken twice once the DSC Button (2s) is released. The first image will be taken after 10 seconds and the second image 2 seconds after the first.

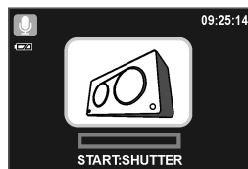
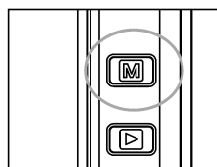
✦ Under Movie Clip Mode (Movie Clip Mode) ✦ Under Still Image Shooting Mode



Mode Button

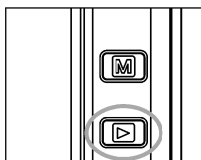
Still Image/ Movie Clip/ Voice Recording

✦ Under Voice Recording Mode (Voice Recording Mode)



Under Playback Mode (Playback Mode)

Playback Of Still Image, Movie Clip And Audio Clip



- ✦ Select the Playback Mode by pressing the Playback (Playback Mode) button.
- ✦ The last image stored on the memory is displayed on the LCD Monitor and the Playback Mode will show still images, movie clips and voice clips.
- ✦ Select an image that you want to playback by pressing the Left Button and Right Button.
- ✦ Press and hold the Left or Right Button to fast forward the images played.

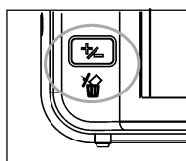
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Buttons & Function

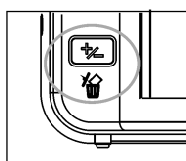
Delete & (Delete Button)

Exposure Value (Default:0)



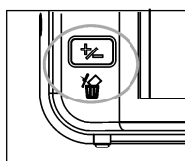
- ✦ In Shooting Mode and press Delete Button (Delete Button) to adjust the exposure.
- ✦ Press Left/Right Button to set the Exposure Value.
- ✦ You can adjust the value of the exposure compensation which is ranged from -2.0EV to +2.0EV (at 0.5EV increment).
- ✦ Button to confirm the setting.
- ✦ Exposure (EV) will be shown on the bottom right of LCD monitor.
- ✦ The higher the EV value, the brighter the image will be.

ISO Value (Default:AUTO)



- ✦ To adjust the ISO value, you will need to set at Program Mode and press Delete Button (Delete Button).
- ✦ Press Right/Left Button to set the ISO Value and select the Menu/OK Button to confirm.

White Balance (Default:AWB)



- ✦ To adjust the white balance, you will need to set the working mode at Program Mode (Program Mode) and press the Delete Button (Delete Button) first. You can select the most appropriate white balance setting for a given shooting environment by "Custom" setting.
- 1. Choose the CUSTOM setting.
- 2. Put a sheet of white in front of the camera, and then press the shutter button.
- 3. Press ok/Menu Button to confirm.

Auto	Adjusting the white balance automatically
Daylight	Under the strong light environment
Cloudy	Under the cloudy light environment
Sunset	Under the sunset light environment
Fluorescent	Under the fluorescent light environment
Tungsten	Under the tungsten light environment
Custom	Under uncertain light environment

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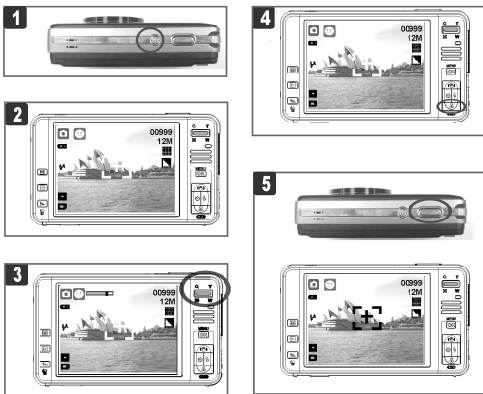
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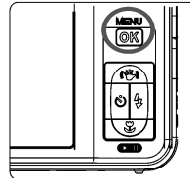
Still Image Mode

▶ Shooting

1. Press the Power Button to turn on the camera.
2. Make sure the camera is set at Still Image Shooting Mode.
3. Use Tele/Wide Button to zoom in and zoom out.
4. Press the Macro Button () if required (closer than 60cm).
5. Press the Shutter Button halfway for focusing and then press the Shutter Button fully down to capture the image.



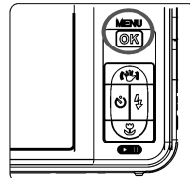
▶ Auto Mode



Under this mode the following settings will be automatically locked at the factory default settings and cannot be adjusted.

- (a). Metering: Multi
- (b). Sharpness: Normal
- (c). Effect: Normal
- (d). Shooting (Continuous Shooting): Single
- (e). Flash: (1) Auto Flash (2) Red-eye Reduction (3) Flash Off are available.

▶ Program Mode



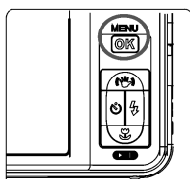
- ★ After the above procedure, you can press the Menu/OK Button again to set up your own settings for the image.
- ★ In program mode, the Metering, Shooting, Sharpness, Effect, Frame, OSD Information, Face Detection, WB, ISO, Exposure can be adjusted.

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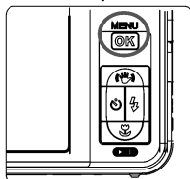
Still Image Mode

▶ Portrait Mode



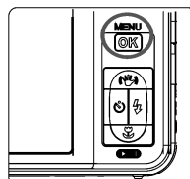
- ★ Under this mode the settings will be locked up as below.
- (a). Metering: Spot
- (b). Sharpness: Normal
- (c). Shooting (Continuous Shooting): Single
- (d). Flash: (1) Auto Flash (2) Red-eye Reduction (3) Flash Off are available.

▶ Landscape Mode



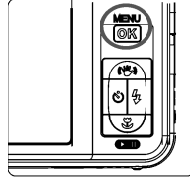
- ★ Under this mode the settings will be locked up as below.
- (a). Metering: Multi
- (b). Sharpness: Normal
- (c). Effect: Normal
- (d). Shooting (Continuous Shooting): Single
- (e). Flash: (1) Auto Flash (2) Red-eye Reduction (3) Flash Off are available.

▶ Night Portrait Mode



- ★ Under this mode the settings will be locked up as below.
- (a). Metering: Multi
- (b). Sharpness: Normal
- (c). Effect: Normal
- (d). Shooting (Continuous Shooting): Single
- (e). Flash: (1) Slow Sync (2) Flash Off

▶ Night Landscape Mode



- ★ Under this mode the settings will be locked up as below.
- (a). Metering: Multi
- (b). Sharpness: Normal
- (c). Effect: Normal
- (d). White Balance: Auto
- (e). Shooting (Continuous Shooting): Single
- (f). Flash: (1) Slow Sync (2) Flash Off are available

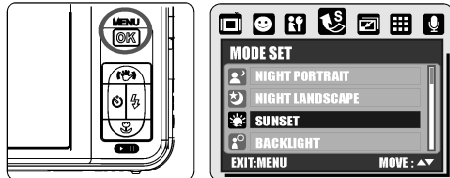
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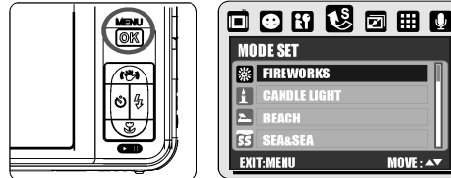
Still Image Mode

» Sunset Mode



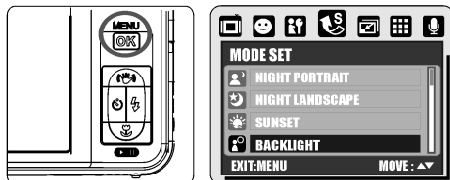
- ✦ Under this mode the settings will be locked up as below.
- (a) Metering : Multi
 - (b) Sharpness : Normal
 - (c) Effect : Normal
 - (d) White Balance : Sunset
 - (e) Shooting(Continuous Shooting) : Single
 - (f) Flash : Off

» Fireworks Mode



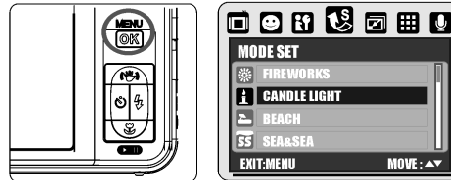
- ✦ Under this mode the settings will be locked up as below.
- (a) Metering : Multi
 - (b) Sharpness : Normal
 - (c) Effect : Normal
 - (d) Shooting(Continuous Shooting) : Single
 - (e) Flash : Off

» Backlight Mode



- ✦ Under this mode the settings will be locked up as below.
- (a) Metering : Spot
 - (b) Sharpness : Normal
 - (c) Effect : Normal
 - (d) Shooting(Continuous Shooting) : Single
 - (e) Flash : Fill-In

» Candle Light Mode



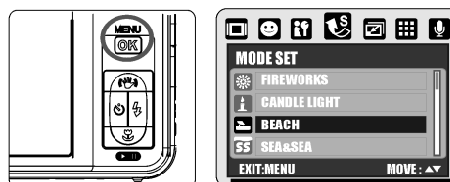
- ✦ Under this mode the settings will be locked up as below.
- (a) Metering : Multi
 - (b) Sharpness : Soft
 - (c) Effect : Normal
 - (d) White Balance : Daylight
 - (e) Shooting(Continuous Shooting) : Single
 - (f) Flash : Off

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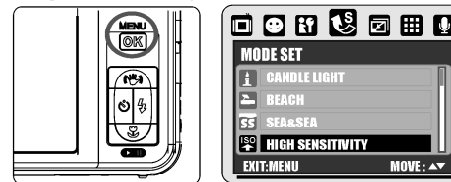
Still Image Mode

» Beach Mode



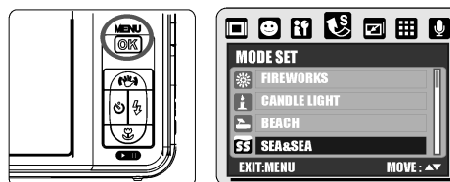
- ✦ Under this mode the settings will be locked up as below.
- (a) Metering : Multi
 - (b) Sharpness : Normal
 - (c) Effect : Normal
 - (d) Shooting(Continuous Shooting) : Single
 - (e) Flash : Off

» High-Sensitivity mode



- ✦ Under this mode the settings will be locked up as below.
- (a) Metering : Multi
 - (b) Sharpness : Soft
 - (c) Effect : Normal
 - (d) Shooting(Continuous Shooting) : Single
 - (e) Flash : Off

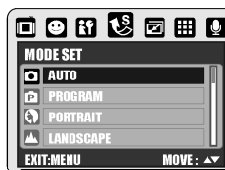
» SEA & SEA Mode



- ✦ Use when taking picture underwater.

» Menu Mode

» Mode Set



Operation Steps

1. MENU
2. ▶ or ◀
3. ▲ or ▼
4. OK

- ✦ This feature is for you to choose the scene of the image from the following options.

- (A) Auto
- (P) Program
- (B) Portrait
- (L) Landscape
- (N) Night Portrait
- (S) Sunset
- (F) BackLight
- (F) Fireworks
- (C) Candle Light
- (B) Beach
- (SS) SEA&SEA
- (HS) High Sensitivity

15

105
mm+-2

150mm+-2

Still Image Mode

IMAGE SIZE (Default: 12M)



Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

† This feature is for you to choose the image resolution.

(14M) 4344 x 3256 (by interpolation)
(12M) 4000 x 3000
(8M) 3264 x 2448
(3M) 2048 x 1536
(1M) 1280 x 960

QUALITY (Image Quality) (Default : FINE)



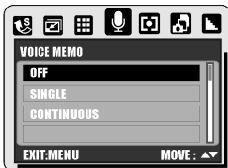
Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

† This feature is for you to choose the scenes are for image&video from the following options.

(S) S. FINE (Super Fine)
(F) FINE
(N) NORMAL

VOICE MEMO (Default : OFF)



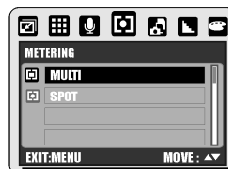
Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

† There are 2 ways to add the voice memo to an image:

1. At Mode
 - (1) Press OK/Menu Button and choose "VOICE MEMO"
 - (2) Choose "SINGLE" to enable a voice memo for this image you are going to take or choose "CONTINUOUS" to have voice memos for the images from now on (you can cancel the voice memo function by choosing "OFF").
 - (3) 10 seconds of voice memo will be recorded.
2. At Playback Mode (P)
 - (1) Choose the image to which you wish to add a voice memo.
 - (2) Press Up Button and press the video clip recording Button to start the voice memo.
 - (3) 10 seconds of voice memo will be recorded.

METERING (Default : MULTI)



Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

This feature can only be used under Program Mode. With Metering Setting, you can get more superior exposure condition and take a picture with brightness.

† Multi Metering:

Exposure will be evaluated according to the average of the available light sources in the image area. This is suitable for general use.

† Spot Metering:

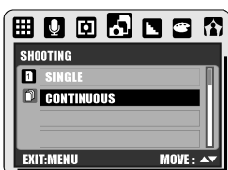
If the subject is against the light source or has little contrast, you can use this function to have the subject be brighter.

16

105
mm+-2

Still Image Mode

SHOOTING (Default : SINGLE)



Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

1. SINGLE: No continuous shooting.
2. CONTINUOUS: You can have the continuous shooting function starting by pressing the Shutter Button and on hold and ending by letting go of the Shutter Button.

Note:
The continuous shooting function will not be canceled until "SINGLE" is chosen.

SHARPNESS (Default : NORMAL)

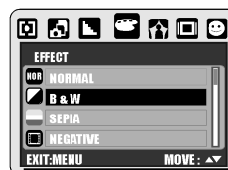


Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

	SOFT	This effect can make the edge of the captured image look smoother, which is suitable for image editing on PC.
	NORMAL	This effect can make the edge of the captured image look sharp, which is suitable for printing out.
	VIVID	This effect can make the edges of your captured image look sharper but may result in more image noise.

EFFECT (Default: NORMAL)

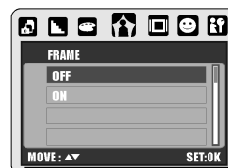


Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

Normal		No special effect is added to the picture.	SEPIA		Turn the image into yellowish brown.
B & W		Turn the image into black and white.	NEGATIVE		Turn the image into negative film effect.

FRAME (Default : OFF)



Operation Steps

1. MENU
2. \blacktriangleright or \blacktriangleleft
3. \blacktriangleup or \blacktriangledown
4. OK

- † You can put the selected photo frame to the image you capture.
- † Cancel the Photo Frame function after use if you prefer the next image not to be with Photo Frame.

17

105
mm+-2

150mm+-2

Still Image Mode

OSD Information(Default:DETAIL)



Operation Steps

- | | |
|-----------|-----------|
| 1. MENU | 2. ▶ or ◀ |
| 3. ▲ or ▼ | 4. OK |

- There are 5 options for the OSD information.
- 1.OFF: No OSD information is displayed.
- 2.BASIC: Only basic information is displayed.
- 3.DETAIL: Detailed information is displayed.
- 4.GRID 3X3: Grid lines for 9 grids will show on the LCD Monitor for you to compose the image.
- 5.GRID 6X4: Grid lines for 24 grids will show on the LCD Monitor for you to compose the image.

Note

Please choose "OFF" to cancel the grid lines if you prefer not to use them for the next image.

FACE DETECTION (Default : ON)



Operation Steps

- | | |
|-----------|-----------|
| 1. MENU | 2. ▶ or ◀ |
| 3. ▲ or ▼ | 4. OK |

What You Should Know Before Using Face Detection

Face Detection allows you to focus on human faces. It is effective with the camera held horizontally or vertically.

- Face Detection can only be used with still image.
- Face Detection is effective within a distance of 2.5m.
- Subjects not suitable for Face Detection:
 - The face is obscured by glasses, a hat or hair.
 - A person turned sideways, or who has their head tilted.
 - The subject is too far to recognize a face.

105
mm+-2

18

Movie Clip Mode

Please press the Mode Button (M) and choose Movie Clip Mode ().

Video Size (Default:640x480 30FPS)



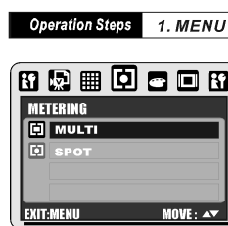
Operation Steps

- | | |
|-----------|-----------|
| 1. MENU | 2. ▶ or ◀ |
| 3. ▲ or ▼ | 4. OK |

- The video size options are provided as follows:

1280 x 720	30FPS
640 x 480	30FPS
320 x 240	30FPS

Metering (Default:MULTI)



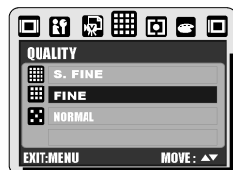
Operation Steps

- | | | | |
|---------|-----------|-----------|-------|
| 1. MENU | 2. ▶ or ◀ | 3. ▲ or ▼ | 4. OK |
|---------|-----------|-----------|-------|

- With Metering Setting, you can get more superior exposure condition and take a picture with brightness.
- Multi Metering:** Exposure will be evaluated according to the average of the available light sources in the image area. This is suitable for general use.
 - Spot Metering:** If the subject is backlit or has little contrast, you can use this function to have the subject appear brighter.

105
mm+-2

QUALITY (Image Quality) (Default : FINE)

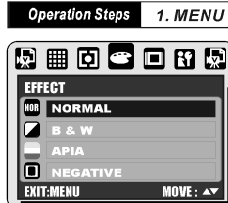


Operation Steps

- | | |
|-----------|-----------|
| 1. MENU | 2. ▶ or ◀ |
| 3. ▲ or ▼ | 4. OK |

- This feature is for you to choose the scenes are for image&video from the following options.
- S. FINE (Super Fine)
 - FINE
 - NORMAL

Effect (Default: NORMAL)



Operation Steps

- | | | | |
|---------|-----------|-----------|-------|
| 1. MENU | 2. ▶ or ◀ | 3. ▲ or ▼ | 4. OK |
|---------|-----------|-----------|-------|

- | | | |
|----------|-------------------------------------|--|
| Normal | <input checked="" type="checkbox"/> | No special effect is added to the picture. |
| B & W | <input type="checkbox"/> | Turn the image into black and white. |
| SEPIA | <input type="checkbox"/> | Turn the image into yellowish brown. |
| NEGATIVE | <input type="checkbox"/> | Turn the image into negative film effect. |

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150mm+-2

Movie Clip Mode

▶ OSD Information (Default:DETAIL)

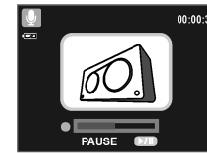
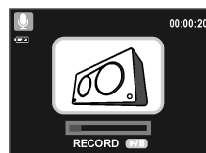
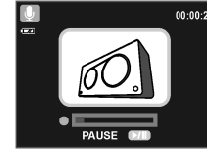




Operation Steps

1. MENU 2. ▶ or ◀
3. ▲ or ▼ 4. OK

- ✦ There are 3 options for the OSD information.
- 1.OFF: No OSD information is required.
- 2.BASIC: Only basic information is required.
- 3.DETAIL:Detailed information is required.

Voice Recording Mode()




1. Press the Mode Button and choose Voice Recording Mode ().
2. Press the Shutter Button to start the recording and press the Shutter Button again if you'd like to stop the recording.
3. Press the Play/Pause Button () during the recording can put the recording on hold and press the same button again and re-activate the recording.

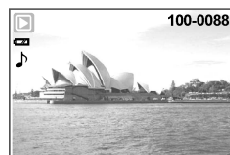
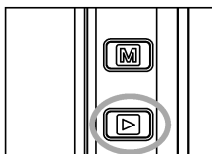
105
mm+-2






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Playback Mode()

To playback Still Image, Movie clips and Audio Clips,Please press Playback Button () and the camera will show the stored still images, movie clips and audio clips (voice recording). Use the Right and Left Button to choose the file you would like to play.

Operation Steps 1. ▶ 2. ▶ or ◀ 3. ▲ or ▼



1. Still Image
Still images are the images with no special signs such like () and (). () represents that the images are with voice memos.
2. Movie Clip: Movie clips are the ones with ().
3. Audio Clip (voice recording): Audio clips are the ones with ().

▶ Slide

- ✦ Press Menu/OK Button to enter the menu and choose SLIDE.
- ✦ There are three options in this feature which are:



■ SHOW

This option is to start the slideshow after you set up the settings of INTERVAL and EFFECT. In this option you can also choose to play the slideshow just once or repeatedly.

■ INTERVAL

This option is to choose the interval time between each still image.

■ EFFECT

This option is to choose the effect of the slideshow.






Note

After you complete the setting of INTERVAL and EFFECT, please go to SHOW and select PLAY/ REPEAT to start the slideshow.




▶ Protect



✦ Set Selected Image(s) With Protection

- 1 Press the OK/Menu Button and choose "PROTECT".
- 2 Choose "SELECT" and press OK/Menu Button.
- 3 Choose one image and press T Button ().
- 4 Choose another image and press T Button () or W Button ().
- 5 Press OK/Menu Button to confirm the request for the protection of the selected image(s).
- 6 To cancel the protection, please press T Button () or W Button ().

✦ Set All Images With Protection

1. Press the OK/Menu Button and choose "PROTECT".
2. Choose "ALL" and press OK/Menu Button to confirm the request. () will show on the TFT LCD Monitor when the protection is set.
3. To cancel the protection, please press T Button () and W Button ().

105
mm+-2

21

150mm+-2

Playback Mode

Delete



Operation Steps
1. OK / MENU
2. ► or ◀
3. ▲ or ▼

You can delete the selected image(s) or all images with this function. Please press OK/Menu Button and choose "DELETE" and following the steps below.

- ✦ Delete Single Image
 1. Select the image you'd like to delete and press the Delete Button (🗑️).
 2. Select "YES" to proceed or select "NO" to cancel the request.
- ✦ Delete All Image(s)
 1. Choose "ALL" and press the OK/Menu Button.
 2. Choose "YES" to confirm the deleting request or choose "NO" to cancel the request. Press the OK/Menu Button again to proceed.

Resize



Operation Steps
1. OK / MENU
2. ► or ◀
3. ▲ or ▼

This function allows you to resize a still image.
1. Choose the image you would like to resize.
2. Press OK/Menu Button and choose "RESIZE".
3. Choose the image size you prefer and press OK/Menu Button to confirm.
4. The resized image will be stored as a new image.

Rotate

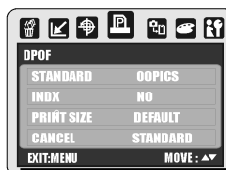


Operation Steps
1. OK / MENU
2. ► or ◀
3. ▲ or ▼

With this setting you can rotate the image RIGHT 90°, LEFT 90°, 180°, HORIZONTAL and VERTICAL.

1. Choose the image you would like to rotate.
2. Press OK/Menu Button and choose "ROTATE".
3. Choose the rotation you prefer and press OK/Menu Button.
4. The image after rotation will be stored as a new image.

DPOF



Operation Steps
1. OK / MENU
2. ► or ◀
3. ▲ or ▼

22

105
mm+-2

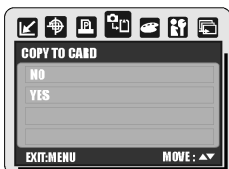
Playback Mode

- ✦ This function can only be used when a memory card is inserted.

This option allows you to put the print quantity (MAX. 30 pcs) on your memory card.
[ONE PIC] - specifies the number of copies for a selected image and you can press LEFT/RIGHT Button to go to next image.
[ALL PICS] - specifies the number of copies for all pictures apart from movie clips and voice recording files.

Note: You cannot see the "PRINT" function on the TFT LCD Monitor if a memory card is not inserted.

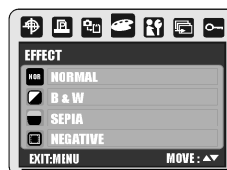
COPY TO CARD



Operation Steps
1. OK / MENU
2. ► or ◀
3. ▲ or ▼

This function allows you to copy the images stored in the internal flash memory into the memory card.

EFFECT



Operation Steps
1. OK / MENU
2. ► or ◀
3. ▲ or ▼

- ✦ This function allows you to set an image with special effect.
 1. Choose the image you would like to set with a special effect.
 2. Press OK/Menu Button and choose "EFFECT".
 3. Choose the special effect you prefer and press OK/Menu Button.
 4. The image with the special effect will be stored as a new image.

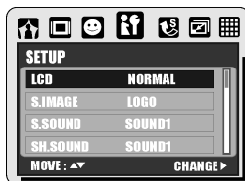
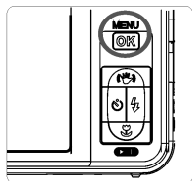
105
mm+-2

23

150mm+-2

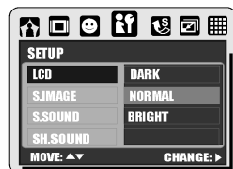
SETUP Setting

» General Introduction



- | | | |
|----------------|----------------|--------------|
| 1. LCD | 6. Q.VIEW | 11. FILE |
| 2. S. IMAGE | 7. PWR SAVE | 12. RESETALL |
| 3. S. SOUND | 8. IMPRINT | 13. USB |
| 4. SH. SOUND | 9. DATE & TIME | 14. VIDEO |
| 5. SYS. VOLUME | 10. LANGUAGE | 15. FORMAT |

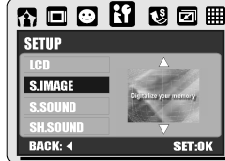
» LCD (Default: NORMAL)



There are 3 options of the LCD brightness to select DARK, NORMAL and BRIGHT.

1. DARK
2. NORMAL
3. BRIGHT

» START-UP IMAGE

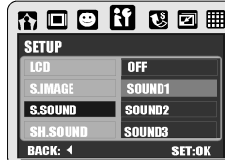


The camera has the space for default start-up image or user start-up images. To set up the start-up image, please follow the steps below.

1. Press OK/Menu Button and choose "SETUP".
2. Choose "S. IMAGE".
3. Select the image you prefer and press OK/Menu Button to confirm the setting. Or you can select "OFF" to not have a start-up image.

To set an image as a user start-up image option, please refer to "Resize under Playback Mode".

» START-UP SOUND (Default: SOUND1)



To set up the Start-up sound please follow the steps below.

1. Press OK/Menu Button and choose "SETUP".
2. Choose "S. SOUND".
3. Select the sound you prefer and press OK/Menu Button to confirm the setting. Or you can choose "OFF" to turn off the a start-up sound.

» SHUTTER SOUND (Default: SOUND1)



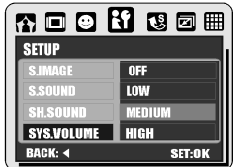
To set up the shooting sound please follow the steps below.

1. Press OK/Menu Button and choose "SETUP".
2. Choose "SH. SOUND".
3. Select the sound you prefer and press OK/Menu Button to confirm the setting. Or you can choose "OFF" to turn off the shooting sound.

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SETUP Setting

» SYSTEM VOLUME (Default: MEDIUM)

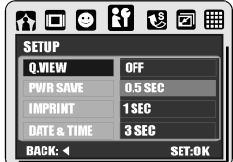


To set up the System sound please follow the steps below.

1. Press OK/Menu Button and choose "SETUP".
2. Choose "SYS. VOLUME".
3. Select the sound volume you prefer and press OK/Menu Button to confirm the setting. Or you can choose "OFF" to turn off System sound.

Note: The system sound includes the start-up sound and shooting sound.

» QUICK VIEW (Default: 0.5 SEC.)



To set up the quick view time please follow the steps below.

1. Press OK/Menu Button and choose "SET UP".
2. Choose "Q. VIEW".
3. Select the time you prefer and press OK/Menu Button to confirm the setting or you can choose "OFF" to have no Quick View Time.

» POWER SAVE (Default: 3 MIN.)

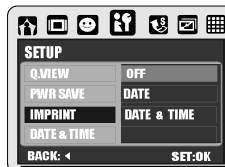


To set up the power saving time please follow the steps below.

1. Press OK/Menu Button and choose "SETUP".
2. Choose "PWR SAVE".
3. Select the time you prefer for the power saving and press OK/Menu Button to confirm the setting. Or you can choose "OFF" to not have the power saving function.

Note: If it is set at "OFF", the camera will not turn off automatically. The battery may get drained soon if the camera is being on for a long time.

» IMPRINT (Default: OFF)



This function allows you to print the date or date & time on the image.

» DATE & TIME



This function allows you to choose the type of the date & time.

» LANGUAGE



There are 12 languages available to choose which are English, Japanese, French, German, Spanish, Italian, Turkish, Russian, Thai, Portuguese, Simplified Chinese and Traditional Chinese.

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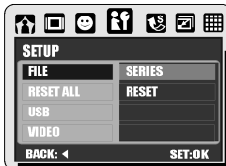
105
mm+-2

105
mm+-2

150mm+-2

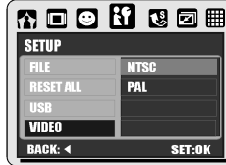
SETUP Setting

FILE (Default: SERIES)



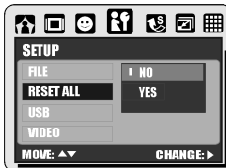
- † This setting allows you to name the files.
- † If RESET is selected, the next file name will be set from 0001 even after formatting, deleting all, or inserting a new memory card.
- † If SERIES is selected, the file name will directly follow the latest stored file name instead.

VIDEO



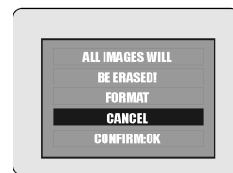
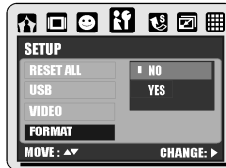
- † NTSC: U.S.A, Canada, Japan, South Korea, Taiwan, Mexico, ,
- † PAL: Australia, Austria, Belgium, China, Denmark, Finland, Germany, U.K., Holland, Italy, Kuwait, Malaysia, New Zealand, Singapore, Spain, Sweden, Switzerland, Thailand, Norway.

RESET ALL (Default: No)

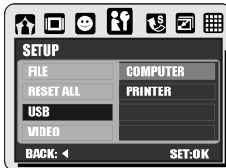


- † This option provides the function of recalling all default values except the Date, Time, Language, and Video Out.

FORMAT (Default: No)



USB (Default: COMPUTER)



- † With the connection of the printer for PictBridge function, you have to select the option of printer for correct driver support.

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

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

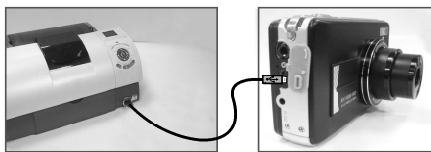
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PictBridge Mode

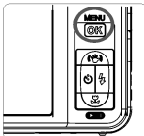
PICTBRIDGE MODE

If the printer you have supports the interface of PictBridge, then you can have your camera connected with the printer by the supplied USB cable to have the stored images print out directly.



1. Have both the camera and the printer powered on.
2. Press the Menu/OK Button to go to SETUP Mode.
3. Go to USB and select PRINTER for printer connection.
4. Use the supplied USB cable to connect the camera to the PictBridge-supported printer as shown above.

Select pictures to print



Operation Steps
1. OK / MENU
2. ⬅ or ➡
3. OK / MENU



[ONE PIC]: The PictBridge function will be applied only to the picture currently displayed.

[ALL PICS]: The PictBridge function will be applied to all pictures.

Setting the Number of Copies to Print

1. Select [ONE PIC] or [ALL PICS]. A screen where you can set the number of copies to print will appear as shown above.
2. Press the Up/Down Button to select the number of prints. Maximum 30 prints.
3. Use the Left/Right Button to select another picture and select the number of prints for another picture.
4. After setting the number of prints, press the Menu/OK Button to save.
5. Press the Shutter Button to return to the menu without setting the number of prints.

AUTO SET



- † [YES]: All values in the [CUSTOM SET] are automatically changed.
- † [NO]: [CUSTOM SET] values are kept.

CUSTOM SET



- † You can select the Paper Size, Print Format, Paper Type, Print Quality, Date Print, and File Name Print menus for printed pictures.

SIZE	Sets the size of the printing paper
LAYOUT	Sets the number of pictures to be printed on a sheet of paper
TYPE	Sets the type of the printing paper
QUALITY	Sets the quality of the picture to be printed
DATE	Sets whether to print the date
FILE NAME	Sets whether to print the file name

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PictBridge Mode

PRINT



- ✦ [STANDARD]: Print the pictures stored in the memory card in set number. Each picture will be printed on one piece of paper.

- ✦ [INDEX]: Print multiple images on one sheet of paper. Please press OK/Menu Button to stop printing.

RESET



- ✦ This function allows you to initialize user-changed configurations.

- ✦ [YES]: All print and image settings will be reset back to the default.

- ✦ [NO]: Settings will not be reset.

All default printer settings are based on the those of the printer manufacturer.

DPOF PRINT



- ✦ This allows you to directly print the files with DPOF information.

- ✦ [YES]: Directly print the file with the DPOF information

- ✦ [NO]: Cancel the printing

- ✦ Depending on the manufacturer and printer model, some menus may not be available.

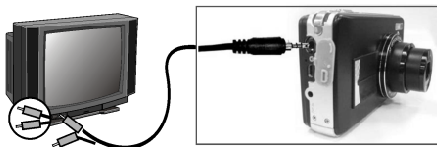
- ✦ If the camera is connected to a printer without supporting the DPOF, the menu is still displayed but the function is not available.

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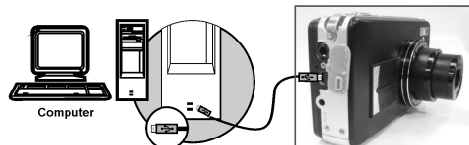
TV / PC Connection

General Introduction



- ✦ Connect the USB/Video connector of the camera to video input ports of the TV set with the supplied Video/USB Cable.
- ✦ Turn on the TV and switch the TV/Video switch to A/V Mode.
- ✦ Power on the camera and then switch to the Playback Mode.
- ✦ Press down the LEFT or RIGHT direction Button to go to the next or last image for TV reviewing.

Computer / Notebook Connection



- ✦ When the USB/Video Cable is in connection with the computer while the camera is on, the camera will automatically go to the PC Mode from any working mode and turn off TFT LCD monitor.

- ✦ In this Mode, you can download images to your computer.

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Software Application

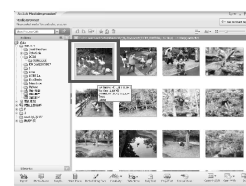
ArcSoft MediaImpression™

1 Introduction



Manages your media for you, and gives you tons of fun and exciting ways to create and share projects featuring your photo and video. Create your own movies or photo slide shows, complete with soundtrack; edit, enhance, and add fun creative effects to your photos; and share your files easily through simple email attachments or popular photo printing and video sharing websites!

2 Browse your photo files



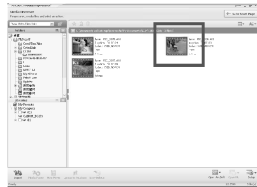
1. Open ArcSoft MediaImpression and then click on "Pictures".
2. Select the photo that you would like you browse.

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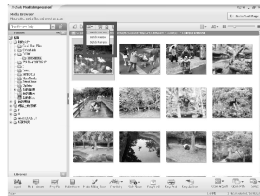
Software Application

3 Browse your video files



1. Open ArcSoft MediaImpression and then click on "Videos".
2. Select the Video that you would like you browse.

4 Photo Convert:



1. Select photo you prefer to convert.
2. Click on "Batch", then choose "Batch Convert".

Photo Convert



3. Select photo you prefer to convert.
4. Click "Convert" to make photo convert.
(Please select JPEG as file format; otherwise the file cannot play correctly.)

5 Video Convert



1. Select video you prefer to convert.
2. Click on "Make Movie", then choose "Batch Convert".

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Software Application

Video Convert



3. Select "Save AS" to convert

6 Default of File Format



Click "OK" to finish convert.
(The default of file format is MPEG4-AVI. If you change setting of Advanced, the video cannot play correctly.)

Easy Link With YouTube by ArcSoft

1 Click "Extra"



2 Choose "YouTube Account Setup"



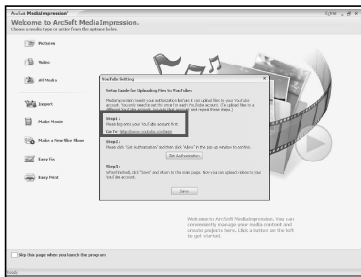
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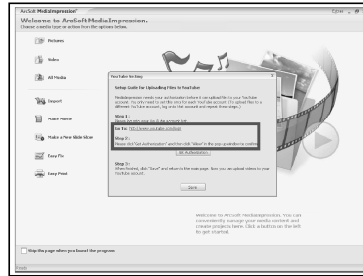
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Software Application

- 3 Choose "Step 1" to log-in YouTube account

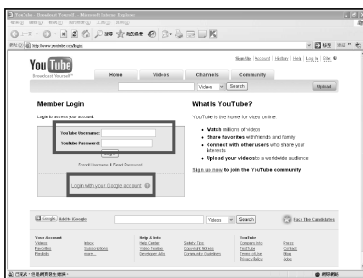


- 5 Choose "Step 2" to get authorization

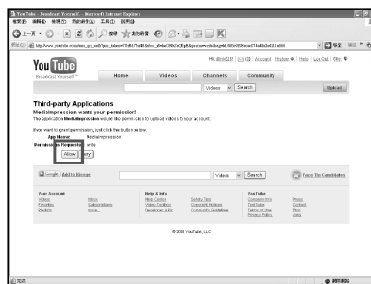


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- 4 Choose "YouTube Account" or "Google Account" to log-in



- 6 Click "Allow" to get permission



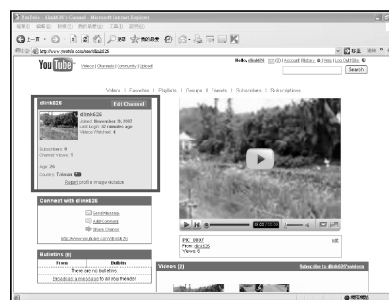
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Software Application

- 7 User will see "User Name" after log-in

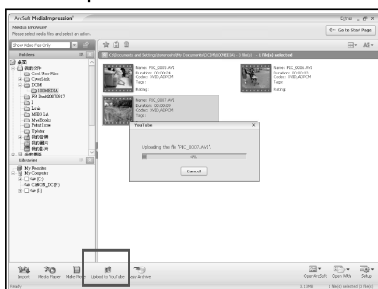


- 9 1 Watch your video in YouTube after upload



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- 8 1. Choose file that you like to upload
2. Click "Upload to YouTube"




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Appendix

» Error Message Table

Messages	Causes	Solutions
CARD FULL	There is insufficient card memory capacity for storing an image.	Delete the stored image(s) in the memory card or insert a new memory card.
MEMORY FULL	There is insufficient internal memory capacity for storing an image.	Delete the stored image(s) in the flash memory.
CARD LOCKED (ICON BLINKING)	The memory card is under protection.	Set the card protection switch at non-protection position.
LOCK	The Image can not be deleted under protection.	Unlock the protected image.
NO IMAGE	There is no image stored in the memory card or built-in flash memory.	
FILE ERROR	File format error.	Insert a new memory card or format the built-in flash memory.
MEMORY ERROR	Memory is damaged or fails.	Format the memory card or built-in flash memory.
CARD ERROR	Card is damaged or fails.	Insert a new memory card.
LOW BATTERY ! (ICON BLINKING)	Battery power is drained.	Insert a new battery.
LOW LIGHT!	The environment is too dark in Flash off or "Night Scene".	Set the flash mode at Auto Flash or Fill-in Flash.
HAND SHAKE ICON 	The environment is too dark in Flash off or "Night Scene".	Avoid shake. Set the flash mode at Auto Flash or Fill-in Flash.
NO PAPER!	Paper has run out.	Please put more paper in the paper tray of the Printer.
Camera Hangs		1. Remove the battery. 2. Reload the battery. 3. Switch on the camera.

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Appendix

» Specifications

Specifications		
Image Sensor	Type	12 Mega Pixels, 1/1.7" CCD Sensor
	Effective Pixels	Approx. 12.19 Mega Pixels (4,032 × 3,024)
	Total Pixels	Approx. 12.43 Mega Pixels (4,088 × 3,040)
Lens	Lens Type	Optical 3x Zoom (35~102mm EQ, for 35mm film)
	F No.	F2.8 (Wide) F5.1 (Tele)
	Digital Zoom	Still Image mode: 1.0X ~ 5.0X Play mode: 1.0X ~ 8X (depends on image size)
LCD Display	3.0" Color TFT LCD	
Focusing	Type	Auto Focus, Face Recognition AF
	Range	Wide: 10cm ~ ∞ Tele: 50cm ~ ∞
Shutter	Type	Mechanical Shutter and Electrical Shutter
	Speed	Normal: 2 sec. 1/2000 sec. Night mode: 8 sec. 1/2000 sec.
Exposure	Control	Programmed AE
	Metering	Multi, Spot
	Compensation	±2EV (0.5EV steps)
Flash	ISO Equivalent	Auto, 130, 200, 400, 800, 1600, 3200
	Modes	Auto, Auto & Red-eye reduction, Fill-in flash, Slow sync, Flash off
	Range	Working range: 0.25 ~ 3.2 m (Wide), 0.5 ~ 1.8 m (Tele)
Sharpness	Recharging Time	Approx. 5 sec.
	Soft, Normal, Vivid	
	JPEG (DCF), EXIF 2.2, DPOF 1.1, PictBridge 1.0	
Effect	Auto, Daylight, Cloudy, Fluorescent, Tungsten, Sunset, Custom	
White Balance	Voice Recording (depends on capacity)	
Voice Recording	Voice Memo in Still Image (max. 10 sec.)	
Date Imprinting	Date, Date & Time, Off (user selectable)	
Shooting	Still Image Mode	Single Image, Continuous Shooting
	Image Size	[14M]: 4344x3256 pixels (Interpolation) [12M]: 4000x3000 pixels, [8M]: 3264x2448 pixels, [3M]: 2048x1536 pixels
	Self-Timer	10sec., 2sec., Double
	Preview	30 fps with Normal Light Level
	Red-Eye Removal	Supported
	Face Detection	Automatically finds faces and optimizes focus, AWR and exposure
	Video Stabilization	Supported
	Movie Size	HD Video: 1280x720, TV: 640x480, Web: 320x240
	Movie Clip Frame Rate	30fps
	Zoom	Optical Zoom: up to 3.0X
Photo Frame	9 options	

Source	Photo Frame	9 options
	Media	Internal memory, 32Mb flash memory (Usable memory capacity 16MB)
	File Format	External memory: MMC/SD (up to 8GB, SDHC supported)
	Still Image	JPEG (DCF), EXIF 2.2, DPOF 1.1, PictBridge 1.0
	Movie Clip	MOV (MPEG-4 SP)
Playback Function	Audio	Audio for Voice Recording and Memo: WAV
	Type	Single image, Thumbnails, Slide show, Movie Clip, Slide show with Effect
Editing	Trimming, Resizing, Rotation	
	Interface	Digital output connector: USB 2.0 (High-Speed) AV output: NTSC, PAL (user selectable) with Audio output DC power input connector (DC5V/1A) MIC input
Power Source	NP40 Li-ion Battery	
Dimensions (WxHxD)	95.4 x 54.9 x 23.9 mm	
Weight	Approx. 136g (Without Battery and Card)	
Software	Camera Driver	Mass Storage Driver (Vista/2000/ME/XP, Mac OS 10.0 ~ 10.3)
	Application	Arcsoft Media Impression, Quick Time 7.2 (Windows: XP/Vista)
System Requirements		
For Windows		
Pentium III 1GHz or equivalent		
Windows 2000 / Windows XP / Windows Vista		
Minimum 512MB RAM		
150MB of available hard-disk space		
USB port (1.1 or 2.0 Standard interface)		
800x600 pixels, 16-bit color display compatible monitor		
(24-bit color display recommended)		
For Macintosh		
Power PC G4 800MHz processor or Intel processor		
Mac OS 10.3-10.4		
Minimum 512MB RAM		
150MB of available hard-disk space		
USB port		
800x600 pixels, 16-bit color display compatible monitor		
Quick Time 7.2 System Requirements (720P Movie Playback)		
For Windows		
Pentium 4 2.4GHz (recommend 3.6GHz)		
Windows XP Service Pack 2 or Vista		
Memory: 1G (recommend 2G)		
DVD-ROM		
4G or above HDD capacity		
For Macintosh		
Power PC G5 dual 2.3GHz or above		
Mac OS X v10.3.9, v10.4.9 or later		
Memory: 2GB or above		
DVD-ROM		

*Specifications and product design are subject to change without any notice for further improvement.

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