

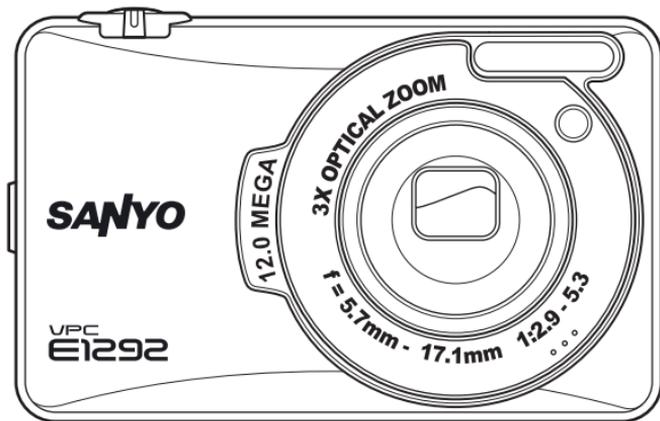
SANYO

INSTRUCTION MANUAL

VPC-E1292

Digital Camera

12 Mega Pixels



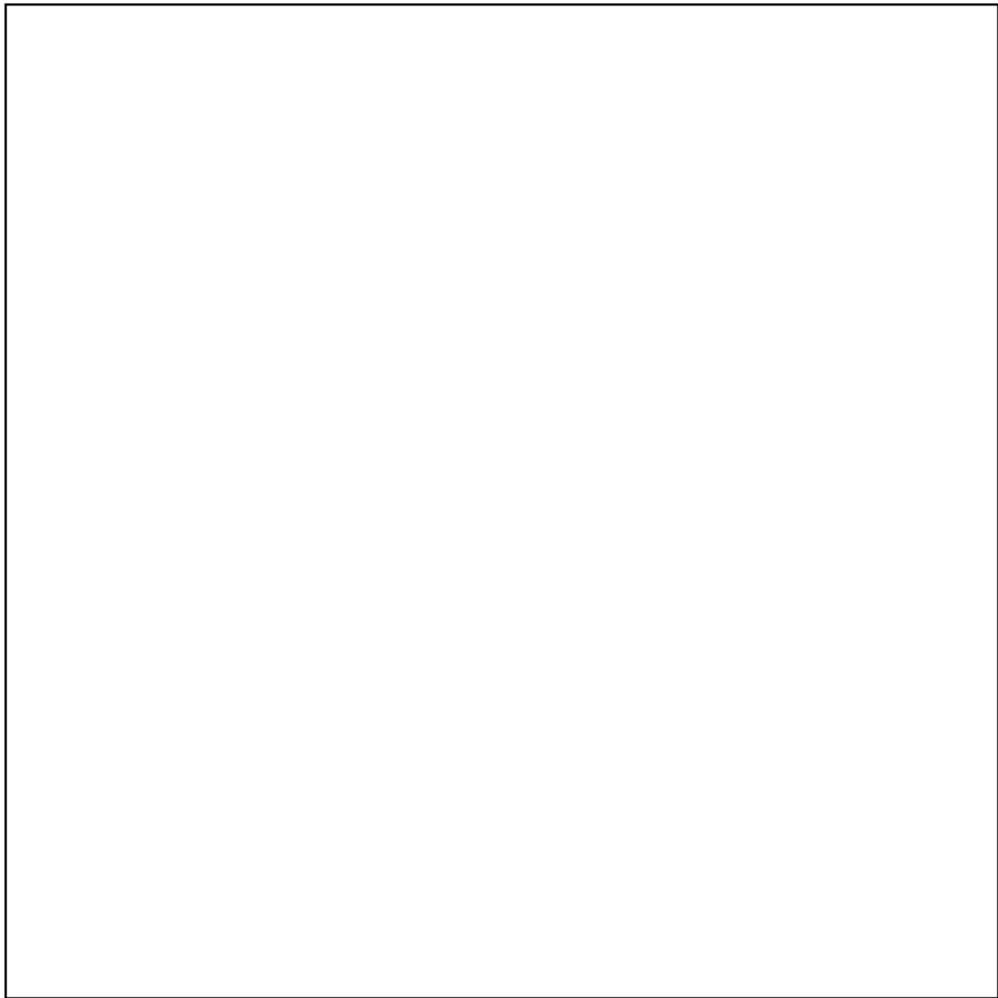


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Preface

About this Manual

This manual is designed to assist you in using your new digital camera. All information presented is as accurate as possible but is subject to change without notice.

Copyright

This manual contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic or other means, in any form, without prior written permission of the manufacturer.

© Copyright 2009

Federal Communications Commission (FCC) Compliance

This equipment has been tested and found to comply with the limits for a Class B digital device, 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 distance between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

A shielded-type power cord is required in order to meet FCC emission limits and to prevent interference to radio and television reception. Use only shielded cable to connect I/O devices to this equipment.

Any changes or modifications not expressly approved by the manufacturer may void your warranty and service agreement.

Declaration of Conformity

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

- This device may not cause harmful interference.
- This device must accept any interference received, including interference that may cause undesired operation.

Trademark Recognition

Windows 2000/XP/Vista are registered trademarks of Microsoft Corporation in the United States and/or other countries. Windows is an abbreviated term referring to the Microsoft Windows Operation System. Adobe is a trademark of Adobe Corporation. ArcSoft is the trademark of ArcSoft System, Inc. All other companies or product names are trademarks or registered trademarks of their respective companies.

Safety and Handling Precautions

Camera Information

- Do not take apart or attempt to service the camera yourself.
- Do not expose the camera to moisture, or extreme temperatures.
- Allow the camera to warm up when moving from cold to warm temperatures.
- Do not touch the camera lens.
- Do not expose the lens to direct sunlight for extended periods.
- Do not use abrasive chemicals, cleaning solvents or strong detergents to clean the product.
- Wipe the product with a slightly damp soft cloth.

Battery Information

- Turn off the camera before installing or removing the battery.
- Use only the type of battery (SANYO Li-ion battery, Type NP40, 3.7V, 720mAh). Using other types of battery or charger may damage the equipment and invalidate the warranty.
- Inserting the battery upside down can cause damage to the product and possibly start a fire.
- Download all pictures and remove the battery from the camera if you are going to store the camera for long periods.

Safety Instructions

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

WARNING

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 batteries are accidentally swallowed, immediately consult a physician.



Do not use the camera while you are walking, driving or riding a vehicle.

This might cause you to fall over or result in traffic accident.



CAUTION

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 batteries 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 batteries immediately after long period of continuous use.

The batteries become 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.



Warning:

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE

FOR AMERICAN USERS

The following advisory is included in accordance with the laws of the State of California (USA):

WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

- This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designated 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 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.
 - * Consult the dealer or an experienced radio/TV technician for help.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FOR CANADIAN USERS

This Class B digital apparatus complies with Canadian ICES-003

FOR EU USERS



The symbol mark and recycling systems described below apply to EU countries and do not apply to countries in other areas of the world.

Your SANYO product is designed and manufactured with high quality materials and components which can be recycled and/or reused.

The symbol mark means that electrical and electronic equipment, batteries and accumulators, at their end-of-life, should be disposed of separately from your household waste.

Note:

If a chemical symbol is printed beneath the symbol mark, this chemical symbol means that the batteries or accumulator contains a heavy metal at a certain concentration. This will be indicated as follows: Hg: mercury, Cd: cadmium, Pb: lead

In the European Union there are separate collection systems for used electrical and electronic equipment, batteries and accumulators.

Please, dispose of them correctly at your local community waste collection/recycling centre. Please, help us to conserve the environment we live in!

Manufacturer and Address

SANYO Electric Co., Ltd.
5-5, Keihan-hondori, 2-chome,
Moriguchi City, Osaka, Japan

Authorized Representative and Address

SANYO Sales & Marketing Europe GmbH
Stahlgruberring 4, D-81829 Munich, Germany

Symbols used in this manual



NOTE

Points giving some extended instructions or special points to pay attention to.

You may find the answers to questions or problems concerning camera operation in the sections "Troubleshooting".

FCC Information



Tested To Comply with FCC Standards
FOR HOME OR OFFICE USE

Declaration of Conformity

Model number: VPC-E1292

Trade name: SANYO

Responsible party: SANYO FISHER COMPANY

Address: 21605 Plummer Street

Chatsworth, California 91311

Telephone No.: (818) 998-7322

This device complies with Part 15 of the FCC Rules. Operation is subject to the following 2 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.

Canadian ICES-003 Information

This class B digital apparatus complies with Canadian ICES-003.

TRADEMARK INFORMATION

- Microsoft® and Windows® are U.S. registered trademarks of Microsoft Corporation.
- Pentium® is a registered trademark of Intel Corporation.
- SD™ is a trademark.
- SDHC™ is a trademark. 
- Other names and products may be trademarks or registered trademarks of their respective owners.

READ THIS FIRST

Notice:

- 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.
- 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, 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.
- The illustrations in this manual are for the purpose of explanation and may differ from the actual design of your camera.
- The manufacturer assumes no liability for any errors or discrepancies in this user manual.

Introduction

Congratulations on the purchase of your new digital camera. This manual provides step-by-step instructions on how to use your camera, and is intended for your reference only.

System Requirements

In order to get the most out of your camera, your computer must meet the following system requirements:

- OS: Windows 2000/XP/Vista
- Memory: 128 MB or above
- HDD space: 40 MB or above
- USB port

Package Contents

Check the contents of your camera package. It should contain:

- Digital camera
- USB/AV 3-in-1 cable
- Wrist strap
- 1 Li-ion battery
- Adapter
- Camera pouch
- Quick start guide for all regions
- Bundled CD-ROM (Application Software and INSTRUCTION Manual for all regions)

Main Features

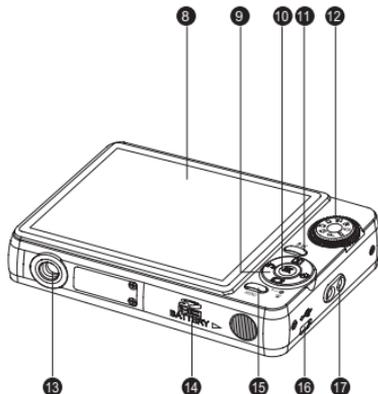
- 12 mega pixels resolution
- 15x zoom (Up to 3x optical zoom and 5x digital zoom)
- 1/2.33 inch CCD image sensor
- 3.0 inch TFT LCD monitor
- 32 MB internal flash memory; support SD/SDHC memory card up to 16 GB
- Sleek and slim design
- Easy-to-use button interface

Camera Views



Front View

-
1. Zoom switch
 2. Shutter button
 3. POWER button
 4. Zoom Lens
 5. Flash
 6. Self-timer LED
 7. Microphone



Rear View

-
8. LCD screen
 9. 4-way navigation buttons
 10. OK button
 11. Delete/Anti-shake button
 12. Mode dial
 13. Tripod mount
 14. BATTERY/SD card compartment
 15. MENU button
 16. USB/AV port
 17. Wrist strap loop

The Mode Dial

The camera is equipped with a convenient **Mode Dial** that allows you to switch between different modes with ease. The function of each mode is as follows:

Mode Type	Icon	Function
Auto		Switch to select Auto mode.
Auto Scene		Switch to select Auto Scene mode.
P-Mode (Program Mode)		Switch to select Program mode.
Panorama		Switch to select Panorama mode.
SCENE		Switch to select SCENE mode. Here you can set a pre-programmed Scene mode.
Macro		Switch to select Macro mode.
Video		Switch to select Video mode.
Playback		Switch to select Playback mode to review photos/videos/audios clips saved in the internal memory or on the memory card.

Buttons and Navigation Pad

Your camera is equipped with an  **Delete**/ **Anti-shake** button, a **MENU** button, and a navigation pad. The **4-way** navigation buttons and the **OK** button allow you to access the various options available from the On Screen Display (OSD) menu. You can configure a wide range of settings to ensure maximum results from your photos and videos. Further functions of these buttons are as follows:

Icon	Button	Function
	Delete/Anti-Shake	<ol style="list-style-type: none"> In Capture mode: <ul style="list-style-type: none"> Press to enable anti-shake function Press to delete the captured image when using Quick Review In Playback mode: <ul style="list-style-type: none"> Press to display the DELETE menu
MENU	Menu	<p>Opens or exits the OSD menus.</p> <ol style="list-style-type: none"> Confirms a selection when using the OSD menus. In Capture mode: <ul style="list-style-type: none"> Press to enable AF area selection when SELECTED AREA is selected in FOCUS ZONE submenu In Playback mode: <ul style="list-style-type: none"> Press to start and pause the audio/video playback Press to stop the voice memo playback
OK	OK	<ol style="list-style-type: none"> Moves up in the OSD menus. In Capture mode: <ul style="list-style-type: none"> Press to pan up in AF area selection Scroll through the flash mode options (Auto, Off, Fill and Anti Red-eye) In Playback mode: <ul style="list-style-type: none"> Press to pan up in magnify/crop mode Press to move up in the thumbnail display
	Up/Flash	

Icon	Button	Function
	Right/Self-timer/ Burst mode	<ol style="list-style-type: none"> 1. Moves right in the OSD menus. 2. In Capture mode: <ul style="list-style-type: none"> • Press to pan right in AF area selection • Press to scroll through the Self-timer/Burst/M-Burst mode 3. In Video mode: <ul style="list-style-type: none"> • Press to scroll through the Self-timer options 4. In Playback mode: <ul style="list-style-type: none"> • Press to pan right in magnify/crop mode • Press to move right in the thumbnail display • Press to navigate to next image in single up • Press to fast forward video/audio playback
  	Down/ Screen/ Face detection/ Smile detection	<ol style="list-style-type: none"> 1. Moves down in the OSD menus. 2. In Capture mode: <ul style="list-style-type: none"> • Press to pan down in AF area selection • Press to enable the following functions: full icon, full icon with histogram, face detection, smile detection, and simple display (hide all icons except the mode icon and focus bracket). Press again to turn all icons back on the LCD screen. <p>Note: Face and smile detection functions are not available in Macro, Auto scene, Panorama, Sport, Landscape, Night Landscape, Foliage, Aquarium, Fireworks, Copy, Audio and Video modes.</p> 3. In Video mode: <ul style="list-style-type: none"> • Press to turn off extra icons on the LCD screen, press again to turn all icons back on the LCD screen 4. In Playback mode: <ul style="list-style-type: none"> • Press to pan down in magnify/crop mode • Press to move down in the thumbnail display • Press to show the file information

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Icon	Button	Function
	Left/ Quick Review	<ol style="list-style-type: none">1. Moves left in the OSD menus.2. Goes up to the previous level in the OSD menus.3. In Capture mode:<ul style="list-style-type: none">• Press to pan left in AF area selection• Press to display the previously captured photo4. In Video mode:<ul style="list-style-type: none">• Press to display the first frame of the last video recorded5. In Playback mode:<ul style="list-style-type: none">• Press to pan left in magnify/crop mode• Press to move left in the thumbnail display• Press to navigate to previous image in single up• Press to fast rewind video/audio playback

LED Indicators

LED	LED Status	Camera Status
	Off	Power Off.
Power/Flash LED	Blue (steady)	Ready to take pictures.
	Blue (blinking)	Camera busy.
	Off	Self-timer off.
Self-timer LED	Red (blinking) (10 sec)	Timer count down, flash after 10 seconds.
	Red (blinking) (2 sec)	Timer count down, flash after 2 seconds.

LED Indicators

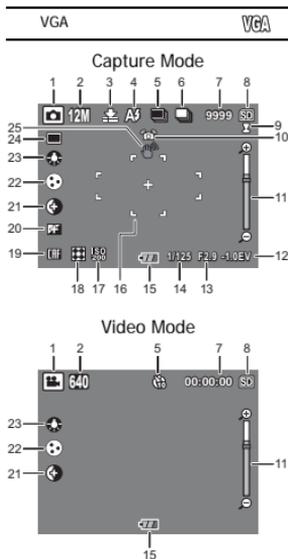
LCD screen

The high resolution 3.0" TFT LCD screen shows all important information regarding camera settings as well as the visual image for your photo or video.

Use the **Mode Dial** to switch between screen modes. Press the **DOWN** / **SCREEN** / **FACE DETECTION** / **SMILE DETECTION** button to switch among a Full display with histogram and without histogram, Face detection, Smile detection or a Simple display (only mode icon and focus area are shown while other icons are hidden).

Capture/Video Mode Display

1. Mode indicator		Foliage	
Auto		Aquarium	
Auto Scene		Kids & Pets	
P-Mode		Copy	
Panorama		Backlight	
SCENE	SCN	Audio	
Sport		Marco	
Landscape		Video	
Night Landscape		Playback	
Portrait		2. Image Resolution	
Self Portrait		12 M	
Night Portrait		10 M	
Museum		8.9 M 3:2	
Snow		8 M	
Sunset		5 M	
Firework		3 M	
Beach		2.1 M 16:9	
Party		2 M	



LCD screen

8 Introduction

3. Image Quality

BEST



BETTER



GOOD



4. Flash

Auto Flash



Flash Off



Fill Flash



Anti Red-eye



5. Self-Timer/Burst Mode

Self Timer



10 Seconds



2 Second



Burst Mode



M-burst Mode



6. Auto Exposure Bracketting

AEB Mode



7. Image Counter

Capture Mode

Quantity

9999

Video Mode

Time

00:00:00

8. Memory Interface

SD Card



Internal Memory



9. Date Stamp



10. Anti-Shake



11. Zoom Bar



12. EV Compensation

-2.0EV
+2.0EV

13. Aperture Value

F2.9/F5.3

14. Shutter Speed

2~1/2000sec

15. Battery Indicator

Battery Full



Battery Medium



Battery Low



Battery Insufficient



16. AF Frame

17. ISO Speed

Auto



ISO 80



ISO 100



ISO 200



ISO 400



ISO 800



ISO 1600



ISO 3200



18. Focus Zone

MULTI-ZONE



CENTER



SELECTED AREA



19. CONTINUOUS AF



20. Sharpness

HIGH



NORMAL



LOW



21. Contrast

HIGH



NORMAL



LOW



22. Saturation

HIGH



NORMAL



LOW



23. White Balance

AUTO



SUNNY



TUNGSTEN



FLUORESCENT



CLOUDY



24. AE Metering

MATRIX



CENTER WEIGHTED



SPOT



25. Camera Steady Warning



Camera Setup

Attaching the Wrist Strap

Follow these instructions to attach the wrist strap to your camera to facilitate easy carrying:

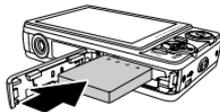
1. Insert the short loop of the strap in the strap eyelet.
2. String the larger loop of the strap through the short loop and pull tight to attach the strap to the camera.



Inserting the Battery

Follow these instructions to insert the Li-ion battery into the battery compartment.

1. Open the battery compartment at the bottom of the camera.
2. Insert the battery into the compartment observing the correct polarity.
3. Close the battery compartment.

**Note:**

The Li-ion battery should be fully charged more than 4 hours before using for the first time.

Inserting an SD/SDHC Memory Card

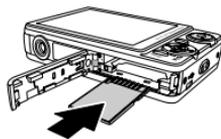
The camera features 32 MB internal flash memory but you may also use an optional SD/SDHC memory card for additional storage.

Follow these instructions to insert the SD/SDHC card.

1. Open the battery compartment at the bottom of the camera.



2. Insert the SD/SDHC card into the memory card slot as shown.



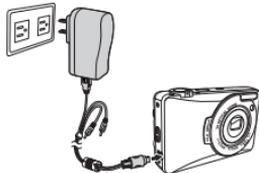
3. Close the battery compartment.



To remove the SD/SDHC card, gently push the card until it pops out. Pull out the card carefully.

Charging the Battery

1. Insert the battery into the camera and connect the USB/AV 3-in-1 cable with the power adapter as shown in the picture.
2. Connect the power adapter to a live household outlet to start charging. The power LED will blink during the charging process.
3. Disconnect the USB/AV 3-in-1 cable when the charging is done. When the charging is done, Power LED still turns on.



Charging the Battery with USB power

1. Turn the power off and connect the USB/AV 3-in-1 cable with the camera and the computer.
2. The power LED will blink during the charging process.
3. The Power LED will keep steady blue when charging is done.
4. Disconnect the USB/AV 3-in-1 cable.

Note:

1. The room temperature suitable for charging the camera is 6°C ~ 36°C. Power LED blinks during the charge and keep steady blue automatically after the charge.
2. The battery will not be charged when the room temperature is above 36°C or below 6°C. Also, Power LED will not blink. The battery will be continually charged till the temperature is between 6°C ~ 36°C.
3. All Modes are disable when charging the camera. If power on the camera, LCD will show "Turn Off when charging".

Turning On

Press and hold the **POWER** button to turn on the camera. To turn off the camera, press the **POWER** button again.

First Time Use

Press the **POWER** button as described in "Turning On" on page 11, a welcome screen displays on the LCD screen.



If the camera is turned on for the first time, the **LANGUAGE** menu pops up automatically after powering on the camera. Press the **OK** button and select the desired language by **Up/Down** navigation buttons, then press the **OK** button to confirm.



After the desired language is selected, the **DATE & TIME** menu pops up. Press the **OK** button. Select each field and adjust the value using the navigation buttons. Press the **OK** button to confirm.



Note:

If the Date & Time is reset (when running out the battery and not in use for a long period), the DATE & TIME setup screen displays automatically.

Getting Started

Now that you are familiar with the layout of your camera, you are ready to start taking photos and movies.

Taking your First Photo

Taking a photo with the camera is very simple.

1. Turn the camera on and turn the **Mode Dial** to  **Auto** mode.
2. Frame the shot on the LCD screen and press the **Shutter** button halfway. The camera automatically adjusts the focus and exposure. The focus bracket turns green when ready.
3. Press fully and hold the **Shutter** button to capture the image.

When a camera steady warning icon  appears, hold the camera as still as possible, as a longer exposure time (more than 1/40 second) is required.

Anti-Shake Function

This function is only available in  **Auto** capture mode. Press the  button to enable the Anti-Shake function, and press again to disable it. An  **Anti-Shake** icon displays on the LCD screen when the function is activated.



Using Quick Review

To delete a photo when using Quick Review:

1. Press the **Left/** **Quick Review** navigation button.
2. Press the  button, a confirmation screen is displayed. Select **THIS IMAGE** to delete the photo or **CANCEL** to keep it.
3. Press **OK** to confirm your selection.

You can also delete photos from the Playback menu. See "Deleting Photos/Videos/Audios" on page 32 for more detailed information.

14 Getting Started

Using Macro Mode

Macro mode is designed for close-up photography and can capture all detail even when your subject is very close to the camera. Turn the **Mode Dial** to  **Macro** mode. The Macro icon  displays on the LCD screen.

Macro mode range: 10-70 cm (Wide)
35-70 cm (Tele)

Setting the Flash Mode

You can choose from four flash modes to suit various lighting conditions.

Press the **Up**/ **Flash** navigation button to scroll through the 4 modes on the LCD screen. The flash setting remains the same for subsequent photos until you change it as described above.

-  **Auto flash:** The flash fires automatically when needed.
-  **Flash off:** The flash is turned off.
-  **Fill flash:** The flash always fires.
-  **Anti Red-eye:** The flash fires twice so as to reduce the red-eye effect.

Using the Zoom in/out Function

The camera comes equipped with 3x optical zoom and 5x digital zoom that allows you to zoom in on your subject.

To use the zoom:

1. Slide the **Zoom switch** to the right  to zoom in on your subject.
2. Slide the **Zoom switch** to the left  to zoom out from your subject.

Using the Self-timer and Burst Photography

The camera comes equipped with a self-timer which allows you to take photos after a pre-defined delay. The burst photography feature allows you to take multiple consecutive photos by pressing and holding the **Shutter** button. The multi-burst photography feature allows you to take multiple (16) consecutive VGA photos by pressing the **Shutter** button once.

To set the self-timer/burst mode:

1. Press the **Right/**  **Self-timer/**  **Burst Mode** navigation button to cycle through the self-timer ( or ) and burst photography options ( or ) on the LCD screen.
2. Once you have selected an option, frame and take your shot. In self-timer mode, the icon will flash until the time expires and the photo is taken.
3. After taking a photo, the Self-timer automatically exits. If you want to use these functions for the next photo, press the **Right/**  **Self-timer/**  **Burst Mode** navigation button again to activate the function.

Note:



Burst Mode

Take photos until shutter is released.



Multi-Burst Mode

16 photos continuously by 1 press of the Shutter button.

Using Auto Scene Mode

When **Auto Scene** mode is enabled, the camera will automatically detect the proper scene modes you may want to switch, such as Auto, Backlight, Macro, Copy, Landscape, Night Landscape, Portrait, Foliage, Night Portrait. However, the image resolution and quality, and the exposure compensation are still controllable in this function.

1. Turn **Mode Dial** to  **Auto Scene** mode.
2. The detected scene icon will be displayed on the LCD.



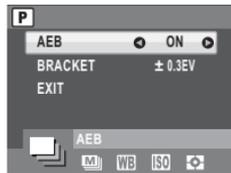
Using the AEB (Auto Exposure Bracketing) Function

When using the **AEB (Auto Exposure Bracketing)** function, the camera automatically takes 3 consecutive photos with different exposures by pressing the **Shutter** button once. For example, when the current EV compensation value is 0 EV and the AEB bracket interval value is set to ± 0.3 , the camera takes shots of the same scene with 3 varying levels of exposure: -0.3 EV, 0 EV and +0.3 EV.

This function is only available in **Auto**, **P-Mode** and **Macro** modes. To set the AEB mode:

1. Press the **MENU** button to display menu options.
2. Press the **Left/Right** navigation buttons to select **AEB** setting.
3. Press the **Up/Down** navigation buttons to select from the available options:

- **AEB:** Select to enable (ON) or disable (OFF) the AEB function.
- **BRACKET:** Select to set the bracket interval value ranging from ± 0.3 to ± 2.0 EV in 0.3 or 0.4 EV increments.
- **EXIT:** Select to apply new settings to the camera and return to the SETUP menu.



Note:

1. When taking AEB shots, hold the camera steadily. For the best result, use the tripod.
2. Flash, Burst, and M-Burst modes are not allowed when the AEB function is enabled.

Setting the SCENE Mode

The camera supports various preset modes for shooting in different environments and conditions. Each setting is configured automatically by the camera.

To select scene modes:

1. Turn the **Mode Dial** to **SCN SCENE** mode to display the Scene menu options.
2. Use the **4-way** navigation buttons to scroll through the modes:

•  Sport	•  Fireworks
•  Landscape	•  Beach
•  Night Landscape	•  Party
•  Portrait	•  Foliage
•  Self-Portrait	•  Aquarium
•  Night Portrait	•  Kids&Pets
•  Museum	•  Copy
•  Snow	•  Backlight
•  Sunset	•  Audio
3. Press **OK** to confirm your selection.



Face and Smile Detection AF/AE Function

The face () and smile () detection functions can be toggled on and off with each press of the **Down/|O| Screen** navigation button in most capture modes. When the subject's face/ smile is detected, the white bracket appears to track faces/smiles while the camera or people are moving.

When the **Shutter** button is pressed halfway, the green focus frames appear on the LCD screen. Then the camera automatically adjusts the focus point and exposure to the optimized value. Press the **Shutter** button all the way to take pictures with detected face. When a detected face smiles, the shutter automatically fires.



18 Getting Started

However, when the camera fails to detect your subject's face, a white focus bracket will be displayed according to the selected focus mode.

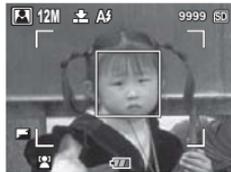
To disable the smile detection function, press the **Down/**  **Screen** navigation button again.

Using the Self Portrait Mode

The up-to-date Self Portrait function allows you to take self-portrait shots. When enabling the Self Portrait function, a white detection frame will appear and track your face automatically. After focus on, it will take a shot without pressing the **Shutter** button.

To take a self-portrait shot:

1. Turn the **Mode Dial** to  **Self Portrait** mode, and then press the **OK** button to confirm. The Self Portrait icon  displays on the LCD screen.
2. Turn the camera lens toward your face.
3. The camera will automatically take a picture. This function is available in any flash mode.



Note:

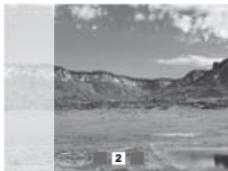
1. The **Shutter** button, Macro mode, Self-timer and Burst functions could not work when enable the Self Portrait mode. Also, the **DOWN** navigation button is only for switching between Simple and Face modes.
2. The white focus frame only works within the effective blue frame.

Taking Panoramic Pictures

Panorama mode allows you to shoot ultra wide panoramic shots. You can create wide-view photos by stitching three images into a single panoramic scene.

To take a panoramic picture:

1. Turn the **Mode Dial** to  **Panorama** mode. The Panorama icon  displays on the LCD screen.
2. You can take panoramic shots in either () left-to-right or () right-to-left sequence. Press the **Up/Down** navigation buttons to select the direction in which the sequence will be taken. Then press the **OK** button.
3. Frame the first view on the LCD screen and press the **Shutter** button. The frame record icon is displayed to indicate the location of frame is going to take for the panorama image.
4. After a quick preview, the LCD screen shows an overlay from the first picture.
5. Capture the second and third views as taking the first view, making sure that the edges of pictures overlap.
6. You can press the  button to retake the picture. If you are taking only 2 pictures, press the **OK** button to stitch them together.
7. After you take 3 pictures, the camera will automatically stitch them together into one panorama shot.



- Turn the **Mode Dial** to  **Playback** mode to view the result.



Recording your First Video

You can also record video clips with the camera.

To record a video clip:

- Turn the camera on and turn the **Mode Dial** to  **Video** mode.
- Frame your subject using the LCD screen and press the **Shutter** button to start recording. The self-timer LED is steady on to indicate recording is in progress.
- Press the **Shutter** button again to stop recording. If not, recording will continue until all free memory space is used.
- In playback mode, press the **OK** button to playback the recording. Press the  button to delete the recording if needed.

Recording Audio Files

You can also record audio files with the camera.

To record an audio file:

- Turn the **Mode Dial** to **SCN** mode and select the  **Audio** mode with **4-way** navigation button.
- Press the **Shutter** button to start recording. A counting up timer will be displayed during audio recording.
- Press the **Shutter** button again to stop recording. If not, recording will continue until all free memory space is used.
- Start recording screen is displayed after recording is stopped.
- In playback mode, press the **OK** button to playback the recording. Press the  button to delete the recording if needed.

Recording Voice Memos

You can add a **20 sec** voice memo to an image right after it's taken.

To record a voice memo:

1. Hold the **Shutter** button to start recording and release the **Shutter** button to stop recording.
2. While recording, the taken image is shown on the LCD screen.
3. The elapsed time screen shows the length of a voice memo.

Note:

A Voice Memo can also be added in Playback mode.

Capture Settings

This section describes the various settings you can modify to get better results when taking photos and video clips.

The Capture Menu

To access the Capture menu:

1. Turn the **Mode Dial** to select a desired image capture mode.
2. Press the **MENU** button to display menu options and use the **Left/Right** navigation buttons to select the function you need, then press the **OK** button to enter the selection function.
3. Press the **Up/Down** navigation buttons to highlight an option and press the **OK** button to confirm.



Refer to the following sections for more detailed information about each setting.

Note:

All the options in this section may vary according to the different modes.

Image Resolution

The **IMAGE RESOLUTION** setting refers to the size of the image in pixels. Use the **Up/Down** navigation buttons to select from the options. 9 settings for image resolution are available:

- 12 M (4000 x 3000)
- 10 M (3664 x 2748)
- 8.9 M 3:2 (3664 x 2442)
- 8 M (3264 x 2448)
- 5 M (2576 x 1932)
- 3 M (2048 x 1536)
- 2.1 M 16:9 (1920 x 1080)
- 2 M (1600 x 1200)
- VGA (640 x 480)



Image Quality

The **IMAGE QUALITY** setting refers to the compression ratio of the JPG. The higher image quality, more memory space is required. Use the **Up/Down** navigation buttons to select from the options. 3 settings for image quality are available:

- BEST (default)
- BETTER
- GOOD

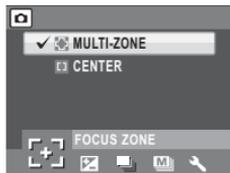


Focus Zone

Auto Mode

The **FOCUS ZONE** setting allows you to select the number of zones the camera will focus on when taking a photo. Use the **UP/DOWN** navigation buttons to select from the options and press the **OK** button to enter. 2 settings for focus zone are available:

- MULTI-ZONE (default)
- CENTER



24 Capture Settings

P-Mode

The **FOCUS ZONE** setting allows you to select the number of zones the camera will focus on when taking a photo. Use the **UP/DOWN** navigation buttons to select from the options and press the **OK** button to enter. 3 settings for focus zone are available: SELECTED AREA:

- MULTI-ZONE (default)
- CENTER
- SELECTED AREA



EV Compensation

The **EV COMPENSATION** menu allows you to adjust the exposure or amount of light that enters the lens while capturing photos. Use this feature to lighten or darken the image when the brightness between the subject and background is not balanced or when the subject occupies only a small part of the photograph. Use a positive (+) EV compensation for spotlight subjects, especially against dark backgrounds or scenes with low reflectivity, such as green or dark foliage.

Use the **Up/Down** navigation buttons to modify the value. This setting can be modified from -2.0 to +2.0 in a 0.3/0.4 increment/decrement.



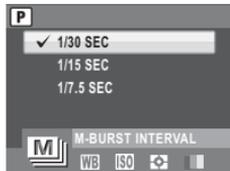
AEB

See "Using the AEB (Auto Exposure Bracketing) Function" on page 16 for more detailed information.

M-Burst Interval

The **M-BURST INTERVAL** setting allows you to adjust the burst interval when the multi-burst function is enabled. Use the **Up/Down** navigation buttons to select from the options. 3 settings for M-Burst Interval are available:

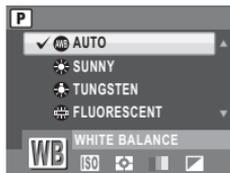
- 1/30 SEC (default)
- 1/15 SEC
- 1/7.5 SEC



White Balance

The **WHITE BALANCE** setting allows you to adjust the camera setting according to the ambient white light when shooting. White balance represents the degree of coolness of the light. If the light has a yellowish or reddish tinge, it is said to be warm; if it has a bluish tinge, it is said to be cool. You can select the setting and preview it on screen before confirming your choice. Use the **Up/Down** navigation buttons to select from the options. 5 white balance settings are available:

- AUTO (default)
- SUNNY
- TUNGSTEN
- FLUORESCENT
- CLOUDY



ISO Speed

The **ISO SPEED** setting allows you to adjust the CCD light-sensitivity. Use the **Up/Down** navigation buttons to select from the options. 8 ISO settings are available:

- AUTO (default)
- ISO 80: For outdoor photography in bright sunlight.
- ISO 100: For outdoor photography in bright sunlight.
- ISO 200: For outdoor or indoor photography in bright light.
- ISO 400: For indoor photography or low light environments.
- ISO 800: For moving object photography or low light environments without using flash.
- ISO 1600: For moving object photography or low light environments without using flash.
- ISO 3200: For moving object photography or low light environments without using flash.



Note:

ISO 3200: Only capture at 3M image resolution when you select ISO 3200. If you wish to select larger image resolution, ISO will go to default setting at Auto ISO.

AE Metering

The **AE METERING** allows you to select the area of the subject or frame by which the camera measures light. Use the **Up/Down** navigation buttons to select from the options. 3 AE metering settings are available:

- **MATRIX** (default): Camera metering is set for evaluating 16 zones of objects with intelligent weighting in the frame.
- **CENTERWEIGHTED**: The metering puts more emphasis on the center of the image while still looking at the entire scene.
- **SPOT**: Camera metering is set for the brightness of a single object in the center of the frame.



Color

The **COLOR** setting allows you to take photos and apply different colors or color tones for an artistic effect. Use the **Up/Down** navigation buttons to select from the options. 4 color settings are available:

- VIVID
- COLOR (default)
- BLACK & WHITE
- SEPIA



Sharpness

The **SHARPNESS** setting allows you to enhance the finer details of your photos. Use a higher setting for very sharp photos and a lower setting for a soft-toned photo. Use the **Up/Down** navigation buttons to select from the options. 3 sharpness settings are available:

- HIGH
- NORMAL (default)
- LOW



Saturation

The **SATURATION** setting allows you to adjust the saturation of the colors in your photos. Use a high saturation setting for rich colors and a lower

saturation setting for more natural tones. Use the **Up/Down** navigation buttons to select from the options. 3 saturation settings are available:

- HIGH
- NORMAL (default)
- LOW



Contrast

The **CONTRAST** setting allows you to adjust the contrast of your photos. Use the **Up/Down** navigation buttons to select from the options. 3 contrast settings are available:

- HIGH
- NORMAL (default)
- LOW



Setup

See "The SETUP Menu" on page 41 for more details on the setup menu options.

Video Capture Menu

To access the video menu:

1. Turn the **Mode Dial** to  **Video** mode.
2. Press the **MENU** button to display the menu options.
3. Use the **Left/Right** navigation buttons to highlight an option and press the **OK** button to enter the submenu. Refer to the following sections for more detailed information about each setting.



Video Resolution

The **VIDEO RESOLUTION** setting allows you to adjust the resolution at which your videos are recorded. 2 video size settings are available:

- 640 x 480
- 320 x 240

White Balance

See "White Balance" on page 25 for more details on the setup menu options.

Color

See "Color" on page 26 for more details on the setup menu options.

Saturation

See "Saturation" on page 27 for more details on the setup menu options.

Contrast

See "Contrast" on page 27 for more details on the setup menu options.

Setup

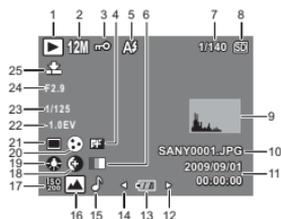
See "The SETUP Menu" on page 41 for more details on the setup menu options.

Photo, Video & Audio Playback

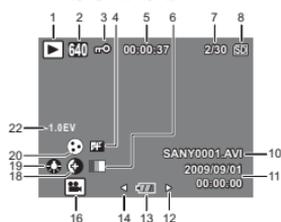
Playback Mode Display

1. Playback mode	
2. Image resolution	Photo mode: 12M 10M 8M 5M 3M 169 2M VGA Video mode: 640 (640 x 480), 320 (320 x 240)
3. Protect	
4. Sharpness	
5. Flash mode	Photo mode: Video mode: 00:00:00 (Length of the video clip.)
6. Color mode	
7. Quantity	1/140, 2/30
8. SD card / Internal memory	
9. Histogram	
10. File Name	Photo mode: SANY0001.JPG Video mode: SANY0001.AVI
11. Date and Time	2009/09/01 00:00:00
12. Next	Move to next image.
13. Battery status	
14. Previous	Move to previous image.
15. Voice memo	
16. Mode icons	Please see "Capture/Video Mode Display" on page 7 for detailed information.

Photo Playback



Video Playback



17. ISO Speed	
18. Contrast	
19. White balance	
20. Saturation	
21. AE Metering	
22. EV Compensation	+2.0 EV ~ -2.0 EV
23. Shutter speed	1/2000 sec. ~ 2 sec.
24. Aperture value	F2.9 ~ F5.3
25. Image quality	

Viewing Photos/Videos/Audios on the LCD Screen

To view your photos and video files on the LCD screen:

1. Turn the **Mode Dial** to  **Playback** mode. The most recent photo or Video/Audio clip is displayed.
2. Use the **Left/Right** navigation buttons to scroll through Photos/Videos/Audios.
3. Press the **OK** button to begin playback of a Video/Audio clip.
4. Press the **Left/Right** navigation buttons at any time during playback to skip to the previous/next Photos/Videos/Audios.
5. Press the **OK** button and press the **Left/Right** navigation buttons to fast-rewind/fast-forward during Video/Audio playback.
6. Press the **OK** button at any time during playback to pause the Video/Audio.
7. After the video clip finishes playing, the LCD screen displays the first frame of the clip.

Viewing M-Burst Photos

To view your multi-burst photos on the LCD screen:

1. Turn the **Mode Dial** to  **Playback** mode. The most recent photo or Video/Audio clip is displayed.
2. Use the **Left/Right** navigation buttons to scroll through photos.
3. When reviewing a multi-burst image, it will be displayed from the 1st frame to the 16th frame at 2 frames/per second like a slideshow.
4. To stop the M-Burst slideshow, press **Left/Right** navigation buttons and skip to the previous/next image.

Listening to Audio Files

To listen to audio files:

1. Turn the **Mode Dial** to  **Playback** mode. The most recent photo, audio or video clip is displayed.
2. Use the **Left/Right** navigation buttons to scroll through the files.
3. Press the **OK** button to begin playback of an audio file.
4. Press the **Left/Right** navigation buttons at any time during playback to skip to the previous/next audio file.

5. Press the **OK** button and press the **Left/Right** navigation buttons to fast-rewind/fast-forward during audio playback.
6. Press the **OK** button at any time during playback to pause.

Listening to Voice Memo

A voice memo plays simultaneously when playing a saved image with voice memo.

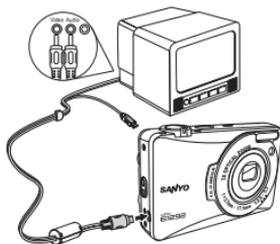
To stop a voice memo while reviewing an image, press **OK** button.

To skip to previous/next image, press **Left/Right** navigation buttons.

Viewing Photos/Videos/Audios on your TV

To view images stored on the camera on your TV, you must connect via the USB/AV (⚡-USB/AV) port on the side of the camera. To connect your camera to a TV:

1. Turn on the camera and make sure that the camera's video out format is set to the same as that of the TV. See "Video Out" on page 44 for more information.
2. Connect the USB/AV 3-in-1 cable to the ⚡-USB/AV port on the camera.
3. Connect the other end of the cable to the TV's AV input port.
4. The LCD screen turns blank and all images and Video/Audio clips are displayed on the TV screen. Follow the same steps described in "Viewing Photos/Videos/Audios on the LCD Screen" on page 30.



Zooming In During Playback

The camera's zoom feature can also be used during playback. This allows you to view photos in greater detail.

To zoom in on saved photos:

1. Slide the **[Z]** **Zoom In** and **[Z]** **Zoom Out** switches to zoom in and out of the photo.
2. Use the navigation buttons to pan across the image.
3. When zoomed in on a photo, press the **OK** button to crop the image. When zoomed out to the maximum, the LCD screen will display all photos and videos as a series of thumbnails.

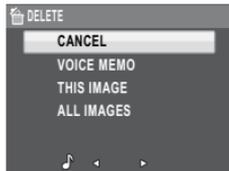
Deleting Photos/Videos/Audios

The **DELETE** function allows you to remove unwanted files stored on internal memory or a memory card.

To delete a photo/video/audio:

1. Press the  button to display the **DELETE** menu.
2. Press the **Up/Down** navigation buttons and the **OK** button to select from the available options:

- **CANCEL:** Select to cancel the action and exit to the main menu.
- **VOICE MEMO** (only available for images with voice memos attached): Select to delete the voice memo.
- **THIS IMAGE/VIDEO/AUDIO:** Select to delete the current image/video/audio.
- **ALL IMAGES:** Select to delete all images.

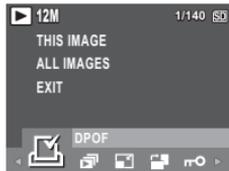


Using the Playback Menu

Access the Playback menu to view further information, configure printing settings, view a slideshow, or delete photos or movies.

To access the Playback menu:

1. Turn the **Mode Dial** to select  **Playback** Mode.
2. Press the **MENU** button to display the menu options.
3. Use the **Left/Right** navigation buttons to highlight an option and press the **OK** button to confirm.



DPOF

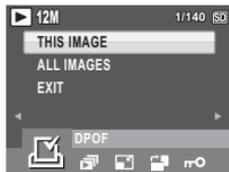
DPOF (Digital Print Order Format) allows you to specify the number of copies of a certain image that you want to print at a later date.

Use this function to tag pictures stored in your memory card with print information. You can tag all pictures to be printed or just the current picture. You can also select how many copies print.

When all images to be printed are tagged, remove the memory card and take it to a photographic shop for printing, or use it with a DPOF compatible printer.

To set DPOF:

1. Press the **MENU** button to select **DPOF** from the menu.
2. Press the **Up/Down** navigation buttons and the **OK** button to select from the available options:
 - **THIS IMAGE**: Select to print the current image.
 - **ALL IMAGES**: Select to print all images.
 - **EXIT**: Select to exit to the main menu.
3. Use the **Up/Down** navigation buttons to set the number of copies you wish to print.



Slideshow

The **SLIDESHOW** function allows you to view all stored photos in a continuous sequence.

To view a slideshow:

1. Press the **MENU** button to select **SLIDESHOW** from the menu, then press the **OK** button to enter the SLIDESHOW function.
2. Press the **Up/Down** navigation buttons and the **OK** button to select from the available options:

- **START:** Select to start the slideshow.
- **INTERVAL:** Select to set the interval time between each photo during the slideshow. Use the Left/Right navigation buttons to set a value in seconds.
- **LOOP:** Select to enable/disable a continuous loop of the slideshow. Select On or Off (default) from the submenu.
- **EXIT:** Select to exit to the main menu.

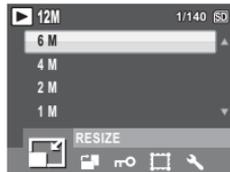


Resize

The **RESIZE** function allows you to change the image resolution.

To resize a photo:

1. Press the **MENU** button to select **RESIZE** from the menu, then press the **OK** button to enter the Resize function.
2. Press the **Up/Down** navigation buttons and the **OK** button to select the resize ratio you require: 6 M, 4 M, 2 M, 1 M, and VGA.
3. Select **EXIT** to return to the main menu.



Note:

It is only possible to scale-down image resolutions. If the current image resolution is VGA, this menu item is disabled in the Resize submenu. The ratio of the image (4:3 or 3:2) remains unchanged after resizing.

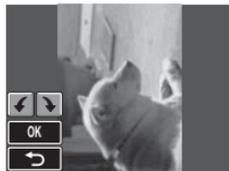
- This function only supports native pictures
- Cropped images cannot be resized
- If there is not sufficient storage space, images cannot be resized
- If the SD/SDHC card is locked, images cannot be resized
- VGA images cannot be resized

Rotate

The **ROTATE** function allows you to change the orientation of a saved photo.

To rotate an image:

1. Press the **MENU** button to select **ROTATE** from the menu.
2. Press the **OK** button to enter the edit mode.
3. Press the **Left/Right** navigation buttons to rotate the selected image.
4. Press the **Up/Down** navigation buttons and the **OK** button to confirm or cancel the rotation.
 - **OK**: Confirm selection and save image.
 - **↶**: Select to discard the changes and return to the main menu.



Protect

You can lock a photo or video to protect it from being accidentally erased.

To lock a photo or video:

1. Press the **MENU** button to select **PROTECT** from the menu and press the **OK** button to enter.
2. Use the **Up/Down** navigation buttons to select **Lock** or **EXIT**, then press the **OK** button to confirm the one you needed.
3. A key **🔒** icon displays at the top of the screen to indicate the photo/video/Audio is now locked.
4. To unlock a photo or video, perform the steps 1 and 2 again.



Red-Eye Removal

The **RED-EYE REMOVAL** function allows you to perform red-eye reduction on a saved photo.

To remove red-eye from a photo:

1. Press the **MENU** button to select **RED-EYE REMOVAL** from the menu and press the **OK** button to enter.
2. Use the **Left/Right** navigation buttons to select an image and select **YES** to start compensation process.
3. Press the **Up/Down** navigation buttons and the **OK** button to select from the three available options:
 - **NEW FILE:** Select to save the fixed image to a new file.
 - **OVERWRITE:** Select to overwrite the original image.
 - **EXIT:** Select to discard the changes to the image and return to the main menu.



Note:

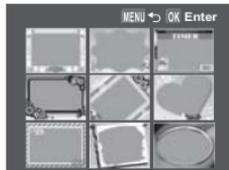
1. If the image is protected, the fixed image will be saved as a new file directly without asking.
2. If no red-eye is found, the message "Cannot process correctly" appears on the screen.

Frame Composite

The **FRAME COMPOSITE** function supports 9 various decoration frame types to make your captured pictures more funny. Please note the image resolution of the picture that you want apply the frame needs being higher than 3 M.

To add a frame on your picture:

1. Press the **MENU** button to select the **IMAGE RESOLUTION** from menu. Make sure the current resolution is higher than 3M and then press the **OK** button to confirm.
2. After taking pictures, Turn the **Mode Dial** to select **▶ Playback Mode** and select the image you want to apply a frame.
3. Press the **MENU** button again and use the **Left/Right** navigation buttons to select the **FRAME COMPOSITE** from the menu and then press the **OK** button to confirm.
4. Use the 4-way navigation (**Left/Right/Up/Down**) button to select the frame type you like and press the **OK** button.
5. Press the **OK** button to save the picture as **NEW FILE** or **OVERWRITE** the original one, and then press the **OK** button again.
6. You may press the **MENU** button to return to the previous menu during the operation.



Note:

1. The function is unavailable when the storage space is not enough.
2. All images' size will be changed to 3 M after applying the Frame Composite function; even you take the pictures' size higher than 3 M.
3. The function does not support cropped or rotated images.

Move

The **MOVE** function allows you to move images stored in internal memory to a memory card. To move an image:

1. Press the **MENU** button to select **SETUP** from the menu. Press the **OK** button to confirm.
2. Select the **IMAGE STORAGE** from the menu. Press the **OK** button to confirm. Select the **INTERNAL MEMORY** from the menu. Press the **OK** button to confirm. Press the **MENU** button to select **MOVE** from the menu. Press the **OK** button to confirm.
3. Press the **UP/DOWN** navigation buttons and the **OK** button to select from the 3 available options:
 - **THIS IMAGE**: Select to move the current image to a memory card.
 - **ALL IMAGES**: Select to move all images to a memory card.
 - **EXIT**: Select to exit to the main menu.



Note:

The Move function is only available when you choose internal memory as the storage media and an SD/SDHC card has been inserted into the camera.

Back to AUTO memory mode:

1. Press the **MENU** button. Select **SETUP** from the menu and press the **OK** button to confirm.
2. Select the **IMAGE STORAGE** from the menu. Press the **OK** button to confirm.
3. Select **AUTO** from the menu. Press the **OK** button to confirm.
4. Turn the **Mode Dial** to **AUTO** mode.

Divide

The **DIVIDE** function allows you to cut unnecessary portions of a video. This feature is useful when the memory capacity is insufficient or when users want to trim video clips.

To move an image:

1. Press the **MENU** button to select **DIVIDE** from the menu.
2. Press the **OK** button to enter the edit mode.
3. Use the **Up/Down** navigation buttons to select the portion of the video you want to delete.
 - : Beginning of the new video clip
 - : End of the new video clip
4. Press and hold the **Left/Right** navigation buttons to specify the beginning and end position of the new video clip and release at the frame you want to stop.
5. Press the **Up/Down** navigation buttons and the **OK** button to select from the following options:
 - : Select to review the trimmed video clip.
 - : Select to save the trimmed video clip as a **NEW FILE** or **OVERWRITE** the original video. Select **EXIT** to discard the changes.
 - : Select to return to the main menu.



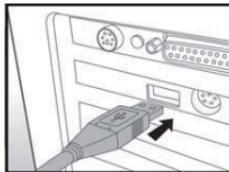
Note:

The **DIVIDE** function is only available when a video file is selected. Video clips shorter than one second cannot be edited.

Transferring Images to your computer

Downloading your images

1. Connect one end of the USB cable to an available USB port on your computer.
2. Connect the other end of the USB cable to the USB terminal on the camera.
3. Turn on your camera.
4. From the Windows desktop, double click on "My Computer"
5. Look for a new "removable disk" drive.
 - This "removable disk" is actually the memory (or memory card) in your camera. Typically, the camera will be assigned drive letter "e" or higher.
6. Double click on the removable disk and locate the DCIM folder.
7. Double click on the DCIM folder to open it to find more folders.
 - Your recorded images and video clips will be inside these folders.
8. Select the images you want to copy to your computer
9. Click EDIT
10. Click COPY
11. Open the existing folder on your computer that you want to save your images to (For example: My pictures folder)
12. Click PASTE



Camera Settings

The SETUP Menu

The **SETUP** menu, available in capture and playback modes, allows you to configure the camera's general settings and according to your preferences.

To access the setup menu:

1. Press the **MENU** button when in **Playback** or any of the capture modes.
2. Select **SETUP** from the menu. The submenu appears.
3. Use the **Left/Right** navigation buttons to scroll through the options and press the **OK** button to enter further submenus and to confirm your selection. Refer to the following sections for more detailed information about each setting.



LCD Brightness

The **LCD BRIGHTNESS** setting allows you to brighten or darken the LCD backlight. Press the **OK** button to enter. Use the **Left/Right** navigation buttons to increase or decrease the brightness.



File Number

The **FILE NO.** setting allows you to reset the file number to 0001 when the camera creates a new folder. Otherwise, the next file number will be used. Select **RESET** to reset or **CONTINUE** to set the file numbers in continuous order.



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Digital Zoom

The **DIGITAL ZOOM** setting allows you to turn the digital zoom function on or off. Press the **OK** button to confirm. Select **ON** to enable the function or **OFF** (default) to disable it.



Quick View

The **QUICK VIEW** setting allows you to view the photo that you have just taken. Once you have taken your photo, it displays on the LCD screen. If you are not satisfied with the result, you can press the button to delete the photo immediately. Select **ON** (default) to enable the function or **OFF** to disable it.



Note:

The Quick View function is not available in M-Burst modes.

Continuous AF

The **CONTINUOUS AF** setting allows you to turn the continuous auto focus function **ON** or **OFF**. Press the **OK** button to enter. Select **ON** to enable the function or **OFF** (default) to disable it.



Camera Sound

The **CAMERA SOUND** setting allows you to adjust the camera sound level. You can also set the start-up and shutter sound when you turn on the camera and press the **Shutter** button. Available options are as follows:

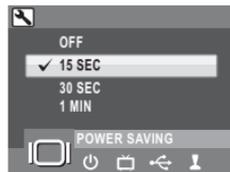
- VOLUME: Off, Low, Normal (default), High
- START-UP: Sound 1 (default), Sound 2, Sound 3
- SHUTTER: Sound 1 (default), Sound 2, Sound 3
- EXIT: Select to exit to the main menu.



Power Saving

The **POWER SAVING** setting allows you to adjust the length of time that LCD screen turn dim to save battery power. 4 options are available:

- OFF
- 15 SEC (default)
- 30 SEC
- 1 MIN



Auto Power Off

The **AUTO POWER OFF** setting allows you to adjust the length of time after which the camera will power down when inactive. Use **Up/Down** navigation buttons to select from the menu options. 2 options are available:

- 5 MIN (default)
- 2 MIN



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Video Out

The **VIDEO OUT** setting allows you to adjust the video output, depending on the type of your TV. Use **Up/Down** navigation buttons to select from the menu options. 2 options are available:

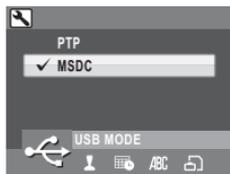
- NTSC
- PAL



USB Mode

The **USB MODE** setting allows you to select the transfer method between your camera and your PC. 2 options are available:

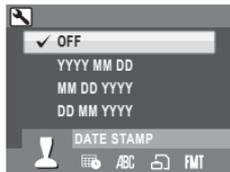
- PTP (PictBridge Print): When the camera is connected to a printer by a USB cable which supports Pictbridge, it can directly print images stored on the media. For details on PTP function, please see "PictBridge Print (PTP)" on page 47.
- MSDC (default): The camera is set up to act as a mass storage device, allowing for only transfer of files between your camera and PC.



Date Stamp

The **DATE STAMP** setting allows you to adjust the format in which the date will appear on each photo or video. You can also deactivate this function if you wish. Setting a date stamp allows for easy sorting and the date will appear on the photo when printed. Press the **OK** button to confirm. Use the **Up/Down** navigation buttons to select from the menu options. 4 options are available:

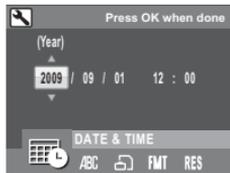
- OFF (default)
- YYYY MM DD: year-month-date format
- MM DD YYYY: month-date-year format
- DD MM YYYY: date-month-year format



Date and Time

The **DATE & TIME** setting allows you to set or adjust the date and time on your camera. To set or adjust the date and time:

- Press the **Left/Right** navigation buttons to select the **Year** field.
- Press the **Up/Down** navigation buttons to adjust the **Year** value.
- In the same way, select the **Month, Date, Hour** and **Minute** fields and adjust them accordingly.



Language

The **LANGUAGE** setting allows you to choose which language the OSD menu uses. Scroll down the list and select your language. Press the **OK** button to confirm. Use the **Up/Down** navigation buttons to select from the menu options.



Image Storage

The **IMAGE STORAGE** setting allows you to specify where photos and video clips will be stored. The camera features 32 MB internal memory but you can also insert an SD/SDHC card (see "Inserting an SD/SDHC Memory Card" on page 10 for more details). 2 options are available:

- **AUTO (default):** When selected, the camera chooses the storage medium automatically. If an SD/SDHC card is inserted in the camera, all photos and videos are stored on the card. If an external card is not detected, all photos and videos are stored in the internal memory.
- **INTERNAL MEMORY:** All photos and videos are stored in the internal memory.



Format

The **FORMAT** setting allows you to erase all data in the internal memory or on the SD/SDHC card. Press the **OK** button to confirm. Use the **Up/Down** navigation buttons to select from the menu options. 3 options are available:

- MEMORY CARD: All data on the SD/SDHC will be formatted.
- INTERNAL MEMORY: All data in the internal memory will be formatted.
- EXIT: Cancel format action.



Reset

The **RESET** setting allows you to reset the camera to the original factory default settings except date&time, language, and video out format. This means all modifications you have made to the camera settings will be cleared.

Once selected, the **RESET** screen displays a confirmation message. Select **YES** to proceed with the reset or **EXIT** (default) to cancel.



Voice Memo

The **VOICE MEMO** setting allows you to record a voice memo when a photo is taken or in playback mode. Select **ON** to enable the Voice Memo function or **OFF** (default) to disable it.



About

The **ABOUT** screen allows you to check the current firmware version of the camera.



PictBridge Print (PTP)

The **PTP** function allows you to print images captured by the camera directly without connecting the camera to a PC.

If the camera is not connected to a PTP compliant printer, an error message displays on the LCD screen. To enable PTP function, see "USB Mode" on page 44 for detailed information. This error message is processing.

When a PTP compliant printer is connected to the camera, the **Printer Connecting** screen displays on the LCD screen. The Print menu pops up automatically.



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Use the **Left/Right** navigation buttons to select an option and press the **OK** button to enter.



Image Storage

See "Image Storage" on page 45 for detailed information.

This Image

Print the selected image with the current setting.

1. Use the **Left/Right** navigation buttons to select **THIS IMAGE** from the options and press the **OK** button to enter. Use the **Left/Right** navigation buttons to select previous/next file. Press **Up/Down** navigation buttons to set the number of copies. After the number of copies are selected, press the **OK** button to enter the Page Size screen.
2. Press **Up/Down** navigation buttons again to select the paper size. After the paper size is selected, press **OK** button to enter Print Confirmation screen.
 - DEFAULT SIZE
 - 4" x 6"
 - LETTER
 - A4



3. Press **Up/Down** navigation buttons to CONTINUE or CANCEL the action.



Index Print

Use this function to print all images in index format.

1. Press **Up/Down** navigation buttons to select the paper size.
 - DEFAULT SIZE
 - LETTER
 - A4
2. Press **Up/Down** navigation buttons again to CONTINUE or CANCEL the action.



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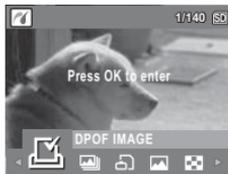
DPOF Image

Print **DPOF** images. If there are selected **DPOF** images with number of copies setting ready, press **OK** button to confirm "**DPOF IMAGE**" selection to enter Paper Size selection submenu. (If there is no selected DPOF image in memory, the "DPOF Image" item will be gone.)

1. Press **Up/Down** navigation buttons to select the paper size.

- DEFAULT SIZE
- 4" x 6"
- LETTER
- A4

Then, press **OK** button to move to the Printer Confirmation screen.



Note:

Please note that only the connected printer supporting paper size items will be shown.

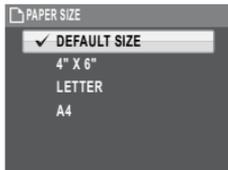
2. Press **Up/Down** navigation buttons to CONTINUE or CANCEL.
Back to Print menu with "DPOF IMAGE" icon enlarged after printing finished.



All Images

Print all images saved in memory.

1. Use **Left/Right** navigation buttons to select **ALL IMAGES** from the options and press the **OK** button to confirm. Press **Up/Down** navigation buttons to set the number of copies. Then press the **OK** button to enter the Paper Size screen.
2. Press **Up/Down** navigation buttons to select the Paper size. Press the **OK** button to enter the Printer Confirmation screen.
 - DEFAULT SIZE
 - 4" x 6"
 - LETTER
 - A4
3. Press **Up/Down** navigation buttons again to CONTINUE or CANCEL this action.



Specifications

General	Resolution / Image Type	12 M Pixels / 1/2.33" CCD
	LCD	3.0" TFT, 230,000 Pixels
	Dimensions	90 (W) x 59 (H) x 19 (D) mm
	Exterior Casing	Metal Housing
	Weight	Approx. 105 g

Optics	Aperture	Wide: F2.9 Tele: F5.3
	Optical Zoom	Up to 3x
	Digital Zoom	Up to 5x
	Focal Length	f=5.7 mm (W), 17.1 mm (T) (f=32 mm~96 mm, 35 mm equivalent)
	Focus Mode	Normal: 10 cm~infinity (Wide), 35 cm~infinity (Tele) Marco: 10~70 cm (Wide), 35~70 cm (Tele)
	Shutter Speed	2 ~ 1/2000 Sec.
	Viewfinder	None
	Field of View	99% by LCD

Camera Features	Auto Power Off / Time Out	Yes
	ISO Equivalent	Auto (ISO 80–320) Manual (ISO80/100/200/400/800/1600/3200) Note:When you select ISO 3200, only capture at 3M image resolution. If you wish to select larger image resolution, ISO will go to default setting at Auto ISO. *Sensitivity is measured in compliance with the ISO standard (ISO 12232:2006)
	Internal Memory	32 MB internal memory Support SD/SDHC memory card up to 16 GB
	Flash Modes	Auto, Off, Fill, Red-eye
	Shooting Mode	Auto, Auto Scene, P-Mode, Panorama, SCENE, Marco, Video, Playback
	Tripod Mount	1/4" Standard
	Preset Scene	Sport, Landscape, Night Landscape, Portrait, Self-Portrait, Night Portrait, Museum, Snow, Sunset, Fireworks, Beach, Party, Foliage, Aquarium, Kids&Pets, Copy, Backlight, Audio
Image Resolution	Image File Formats	Still Image: JPEG (Exif 2.2) Video: MJPEG (with .AVI format)
	Image Quality Mode	Still Image: 4000 x 3000, 3664 x 2748, 3664 x 2442, 3264 x 2448, 2576 x 1932, 2048 x 1536, 1920 x 1080, 1600 x 1200, 640 x 480 Video Mode: 640 x 480@30fps, 320 x 240@30fps
	Quality Levels	Best, Better, Good

54 Specifications

DPOF	Version 1.1
Erase Protection	Yes
Exposure Compensation	Selectable +/-2.0 EV with 0.3/0.4 EV steps
Sharpness	High, Normal, Low
Color	Vivid, Color, Black & White, Sepia
Metering	Matrix, Center Weighted, Spot
Focus	Multi-Zone, Center, Selected Area
Face / Smile Detection	Yes
Flash Range	Wide: Operating Range 0.3 ~ 3 m@ISO Auto Tele: Operating Range 0.5 ~ 1.5 m@ISO Auto
Lens Thread	None
Anti-Shake	Yes, High ISO
Drive Mode	Single Mode, Burst Mode, M-Burst (VGA@16 shots), AEB Mode
Quick Delete	Yes
Quick View	Yes
Quick Review	Yes
Self Timer	2 or 10 seconds
Playback Magnify	Up to 6x (0.5 steps)
White Balance	Auto, Sunny, Tungsten, Fluorescent, Cloudy

Capture Features

Audio/Video	Audio / Video Out	PAL, NTSC
	Stream to SD/SDHC	Yes
	Speaker	Yes, Mono
	Movie File Format	AVI
	Movie Length	Maximum recording size: 4G or <80 min (unlimited until card/internal memory full)
	Microphone	Yes, Mono
	Audio Recording	Yes, Wave format
Power	Battery	NP40
	Battery Life (Li-ion)	CIPA 215 images
Capability	Camera Interface	USB Version 1.1 with ultra mini-pin plug
	Host Platform	Windows 2000/XP/Vista
	Operating Temperature	0°C ~ 40°C
Standards	Language	English, German, French, Italian, Spanish, Portuguese, Russian, Traditional Chinese, Simplified Chinese, Turkish, Dutch, Thai, Korean

Troubleshooting

Problem	Action
Camera does not turn on	<ul style="list-style-type: none"> • The battery may be exhausted. Charge or replace the batteries. • The battery is installed incorrectly. Reinsert the battery observing the correct polarity.
Camera turns off automatically	Press the POWER button again to turn on the camera.
LCD turns dim automatically	Press any button to turn on the LCD when POWER SAVING setting (30 SEC or 1 MIN) is activated.
Empty battery icon is displayed on the LCD then camera turns off	Battery is exhausted. Charge or replace the battery.
LCD screen displays 'Card Requires Formatting'	Memory card format not recognized. Reformat the memory card.
LCD screen displays 'Card is Full'	Memory card is full. Replace the memory card with a new one or delete unnecessary images from the existing card.
LCD screen displays 'Card is Locked'	The card is protected by a protect switch mechanism. Move the switch to the unlock position.
Insufficient memory space to complete request	Insufficient space in memory to rotate an image or divide a video. Delete unnecessary images and videos.
No image displays on the TV screen	Incorrect TV-out type was selected. Set correct TV-out type to match your TV system.
Insufficient space on the card	Delete unnecessary images.
Charging failed or abnormal	Power LED off and "OK" LED always lights.



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