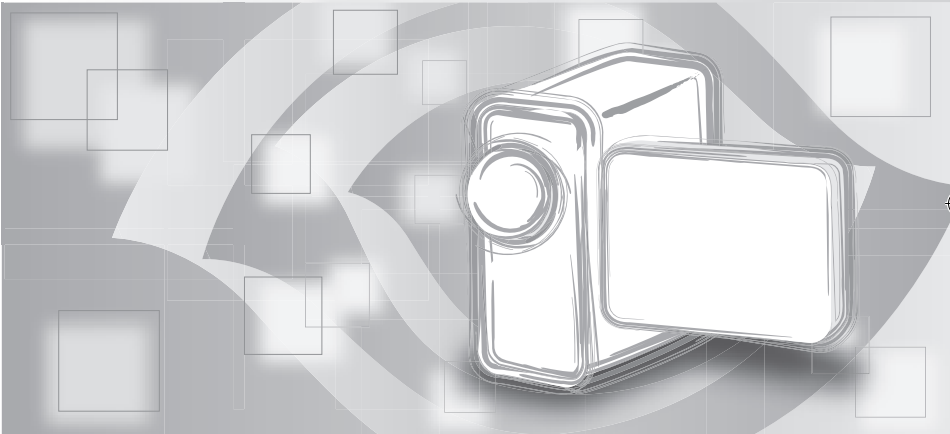




# ***DIGITAL VIDEO***

## ***User Guide***



82-205-00061



## Copyright information

All rights reserved. No part of this publication may be reproduced, transmitted, stored in a retrieval system, or translated into any language in any form by any means, optical, electronic, recording, or otherwise, without the written consent of our company.

We reserved the right to revise this manual and to make changes to any or all parts at any time, without obligation to notify any person or entity of such revisions and changes.





## Reminders



This symbol on the product or in the instructions means that your electrical and electronic equipment should be disposed at the end of its life separately from your household waste. There are separate collection systems for recycling in the EU.

For more information, please contact the local authority or your retailer where you purchased the product.

### CAUTION

Keep product out of direct sunlight. Exposure to direct sunlight or extreme heat may cause damage or malfunction. To prevent fire or shock hazard, do not expose to rain or moisture.

### IMPORTANT BATTERY INFORMATION

The battery used in this device may present a risk of fire or chemical burn if mistreated. Do not separately recharge, disassemble, heat above 60°C (140°F), or incinerate.

Do not attempt to open the unit. No user serviceable parts inside. Keep the unit away from children. Do not disassemble or dispose product in fire.

Use only the charger included in the package. Use of other chargers may result in a risk of fire or explosion.

Keep charger plugged in to device for at least 3 hours before attempting to operate device if battery is completely run down and is insufficient to power up device.



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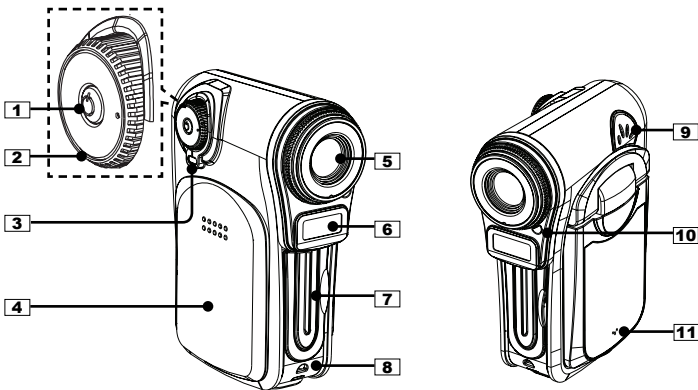


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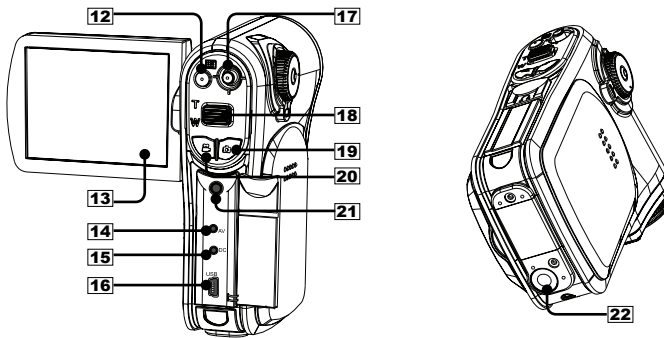
## Getting started

### Getting to know your device



- 1** Power button
- 2** **Mode dial**
  - Record Voice
  - Record Video / Take Photo
  - Playback
  - Music
  - Menu
- 3** Power/charge indicator
- 4** Battery compartment cover

- 5** Lens
- 6** Flash
- 7** MMC/SD slot cover
- 8** Hook for strap
- 9** Built-in speaker
- 10** Status indicator
- 11** Microphone



**12** Menu button

**13** LCD screen

**14** AV OUT jack

**15** DC IN jack

**16** USB port

**17** Control button

**18** Zoom lever

**19**  Shutter button  
For photo taking.

**20**  Record button  
For video and  
audio recording.

**21**  Earphone jack

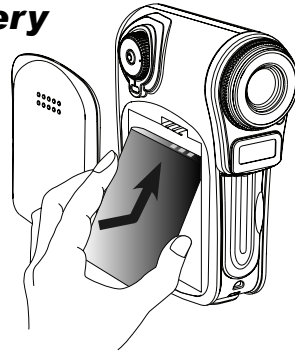
**22** Tripod receptacle



## Getting started

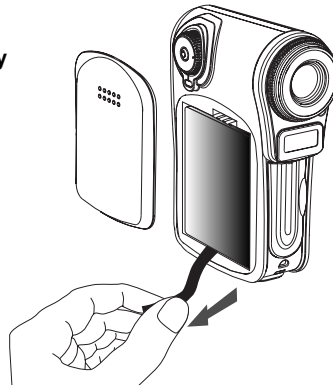
### **Loading/removing battery**

- A** Slide down the battery cover.
- B** Remove the battery cover.
- C** Insert the battery into the battery compartment.
- D** Close the battery cover




To remove battery:

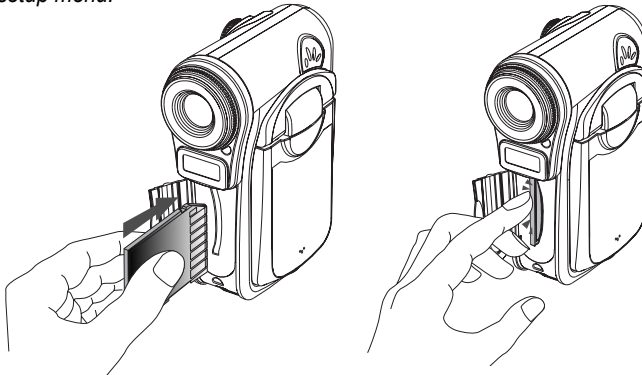
- A** Pull the string to release the battery from the battery compartment.



## Inserting/removing memory card

- A** Flip open the memory card slot cover.
- B** Insert and press the MMC/SD card into the memory slot.  
Tilted-edge side up and towards the memory slot.
- C** Press down to secure the card into the slot.
- D** Close the memory card slot cover.

**Important:** Make sure to select  Memory Card as the saving location from the setup menu.



### Notes

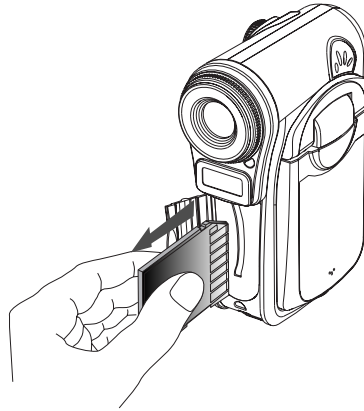
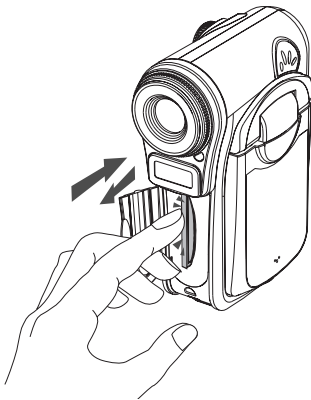
- When the MMC/SD card is correctly inserted a “click” sound will be heard.
- This device has a 32 MB built-in memory, inserting an external memory card is not mandatory for basic operations. However, we strongly recommend users to use a higher capacity memory card when making extensive recordings.



## Getting started

To remove memory card:

- A** Flip open the memory card slot cover.
- B** Press and release the MMC/SD card.
- C** Withdraw the MMC/SD card from the slot.







## Charging the device

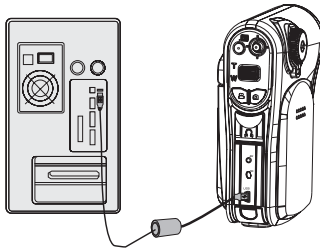
There are two ways to charge this device. First, charge it via USB cable. Second, charge it via an AC adapter. For first time users, be sure to charge the device for about 3 to 4 hours to have the battery fully charged.

### Charging the device via USB cable

1. Connect the device to a computer with the USB cable.
2. The charge indicator blinks in red and starts charging. When the battery is fully charged, the charge indicator will turn off automatically.



**Note:** To shorten charging time, charge the DV via an AC adapter. Charging via an USB cable will require more time than charging via an AC adapter.

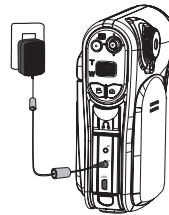




## Getting started

### Charging the device via AC adapter

1. Connect the AC adapter to the DC IN jack on the device and connect the power adapter to a power outlet.
2. The charge indicator blinks in red and starts charging. Turning on the device during charging stage will increase the charge time.

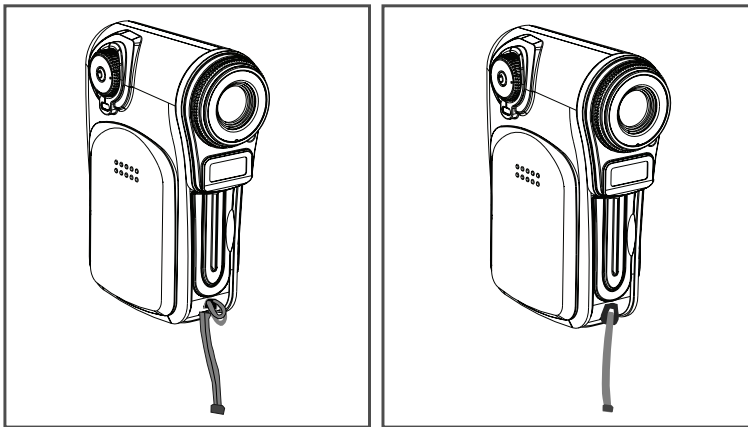


**Attention:** Use only the power adapter that came with this device. Adapters for other electronic devices may affect its performance or damage it

#### For your reference:

When the battery is **charging**, the charge indicator is **RED**. Turning **ON** the device **while charging**, the charge indicator will change to **ORANGE**.  
When the battery is **fully charged**, **RED** LED will turn **OFF**.  
When the device is **ON**, the charge indicator is **GREEN**.

## Attaching the strap



- A** Insert the thin end of the strap into the strap hook.
- B** Pass the other end of the strap through the loop of thin cord and pull tight.








## Getting started

### **Basic operations**

#### **How to use the mode dial**

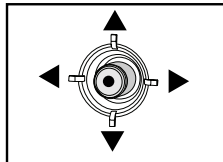
The mode dial is a switch between five different modes: Photo taking/video recording, audio recording, playback/editing, music playing, and system setup.









- : For audio recording.
- : For photo taking and video recording.
- : For file playback and file editing.
- : For music playing.
- : For system and various setup.

#### **How to use the control button**

The control button has different functions for each mode. Refer to the corresponding chapters for more details.



-  mode (photo taking & video recording)
- : AE Lock (photo only) or backlight compensation (video & photo)
- : Display options (Guideline on → OSD off → OSD/LCD on)
- : Self-timer
- : Flash options ( Off → Auto → Red eye reduction) (photo only)
- : Not applicable



## Getting started



mode (audio recording):

- : Not applicable
- : Not applicable
- : Not applicable
- : Not applicable
- : Pause/resume

mode (setup menu):

- : Up
- : Down
- : Left
- : Right
- : Enter

mode (playback):

- : Up
- : Down
- : Left
- : Right
- : Play file (photo, video, audio)/  
pause/resume (video, audio)

mode (music player):

- : Up
- : Down
- : F.Bwd
- : F.Fwd
- : Pause/resume

## How to adjust volume

1. At (Playback) or (Music) mode press (Zoom lever).

2. Use (Zoom lever) to adjust volume.



3. A volume bar will appear on the right side of the screen.



4. Press (Menu button) to exit.

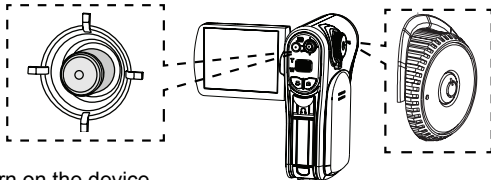
**Note:** To turn off the speaker, press **W** repeatedly until the icon appears.




## Getting started












### Setting the date and time

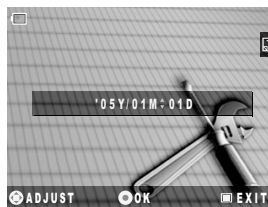
Be sure to set the date and time on the initial use of this DV. This information affects the time display on your LCD screen and on photos with superimpose date/time.



1. Turn on the device.
2. Set the mode dial to  (setup menu).

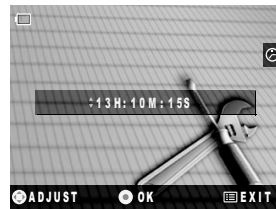
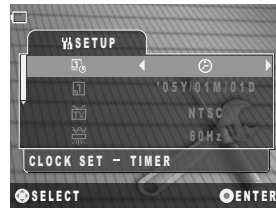


3. Select  (clock set).
4. Use   to navigate to  (set date) then press  to enter.
5. Use   to adjust value or   to go to next/previous item.
6. Press  to confirm or  (Menu button) to exit.



## Getting started

7. Use ◀▶ to navigate to ⌚ (set time) then press ⏎ to enter.
8. Use ▲▼ to adjust value or ◀▶ to go to next/previous item.
9. Press ⏎ to confirm or ☰ (Menu button) to exit.



To change the display format of date:

1. Use ▲▼ to scroll and select ☰ (date format).
2. Use ◀▶ to select a format.
3. Press ⏎ to confirm.





## Getting started

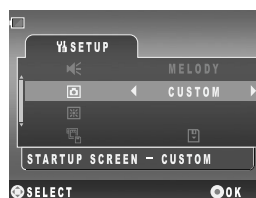
### **Customizing startup screen**

You may use default startup screen or customize your own startup screen. To customize, follow the procedures below.

1. Turn on the device.
2. Set the mode dial to **W** (setup menu).



3. Use **▲▼** to select  (startup screen).



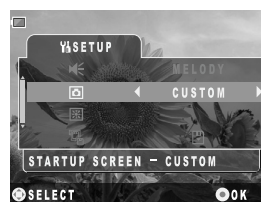
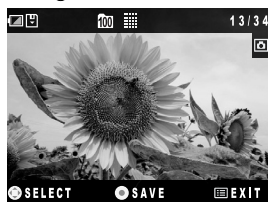
4. Use **◀▶** to select **CUSTOM**.

5. Press **⊙** to confirm.

6. Use **▲▼** to select **NEW** and press **⊙**.







7. Use **▲▼◀▶** to select a photo you want for startup screen.

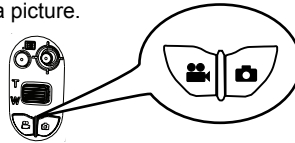
8. Press **⊙** to confirm.





## Recording video/taking picture

1. Set the **Mode dial** to .
2. Press  (**Record button**) to record video or  (**Shutter button**) to take a picture.
3. Press  to pause recording.
4. Press  (**Record button**) again or  (menu button) to stop recording.



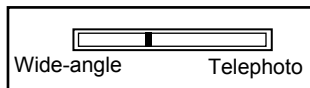
### Convenient features

#### Zoom feature


Adjust the ZOOM lever to move your object closer or farther.

W side: wide-angle (subject appears farther)

T side: telephoto (subject appears closer)



#### Power save

The device provides a power saving mechanism that will turn off your LCD screen automatically after the device has been idled for 60 seconds. The device will also power off automatically according to your setting in **Auto Power Off** under  (setup). The default is 2 minutes, you may also set the timer to 5 minutes or off.




## Recording video




### Using stabilizer




This feature will reduce shaking during video recording.

1. Set the **Mode dial** to .





2. Press  (Menu button).

3. Use   to select the  **VIDEO** tab.

4. Use   to navigate to  (Stabilizer).



5. Use   to toggle to **ON**.

6. Press  to confirm.

#### NOTE:

This feature may magnify your frame depending on your current magnification level.



Original frame with zoom off



Preview area with stabilizer feature on





Actual frame during video recording

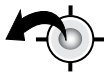


Taking photo 

### Using self-timer


**Self-timer** allows the device to capture photos 10 seconds after the  (**Shutter button**) is pressed.


1. Use  to set self-timer.



2. **Self-timer** icon  displays on screen.



3. Press , camera will capture a photo after 10 seconds count-down.

4. To turn off self-timer, press  again.

10 seconds count-down



Photo captured






## Taking photo

### Using flash

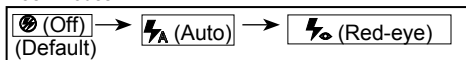
**Flash** is effective when taking photos under poor lighting conditions. The default setting is **OFF**, however you may manually switch the **Flash** to **AUTO** or to **Red-Eye Reduction**.




#### How to set **Flash**

1. Press  repeatedly to select the Flash option.
2. **Flash** icon displays on screen.



Flash modes



-  (Off): Flash does not strobe regardless of surroundings brightness.
-  (Auto): Detects surrounding brightness and determines whether Flash is required.
-  (Red-eye): Strobes once prior to shooting to reduce red-eye phenomenon.


**Note:** Flash requires to be charged after each time used, a green LED and a flash icon will blink while it is charging. Both indicators will return to steady mode when the flash is ready to use again.

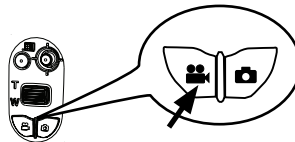



## **Recording audio**



1. Set the **Mode dial** to .



2. Press  (**Record button**) to start audio recording.






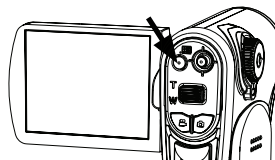
3. Press  to pause recording.

4. Press  (**Record button**) again or  (Menu button) to stop audio recording.

## **Changing audio recording quality**

There are two quality selections for audio recording: SP and LP. SP is set as default. To change the audio quality:

1. Press  (Menu button) at  (audio recording mode).
2. Select the audio quality and press .



**SP** (Standard Play): Higher audio quality, but larger file size.

**LP** (Long Play): Longer recording time, but lower audio quality.




## Playback

### ▶ **Playing back recorded files**


1. Set the **Mode dial** to .




Recorded files display in thumbnail on the LCD screen.

2. Use  to navigate through the index.



3. Press  once to enter and twice to play video or audio file.



4. Press  (Menu button) to stop video or audio play.

## Viewing on a computer

### Installing CD

The installation CD contains software and information needed for operation. Please follow the instructions below to complete the software installation.

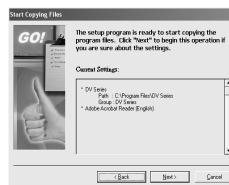
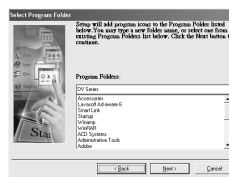
1. Insert the Software CD to your CD-ROM drive or DVD-ROM drive. The **Select Language** dialogue box appears.
2. Select your preferred language and press **OK** to continue.
3. A **Welcome** dialogue box appears, press **Next**.





## Playback

4. The **Select Components** dialogue box appears. Select the software you wish to install and press **Next**.
5. The **Select Program Folder** dialogue box appears telling you that setup program is about to add a program icon to your system, you can change the folder name listed in the text box, or simply press **Next** to continue.
6. The **Start Copying Files** dialogue box appears confirming that the listed software will be installed. Press **Next** to continue.
7. Follow the on-screen instructions to continue and complete the installation.
8. Restart your computer.




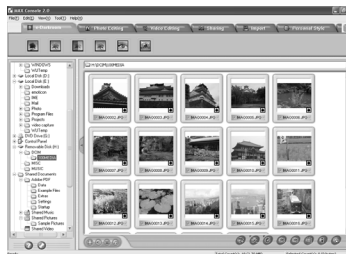


## Playback

### Mass storage

Through mass storage mode, the device becomes a storing device that allows to store, access, and delete data similar to your local hard disk. To setup **MASS STORAGE** follow the instructions below.

1. Connect the device to a computer with the USB cable provided in the package.
2. Power **ON** the device.
3. Select **MASS STORAGE** from the OSD menu press  to enter.
4. The following screen will appear for 2 seconds before entering **MASS STORAGE**.
5. Launch **MAX Console**, from the left panel select **DCIM/100MEDIA** folder for audio clips, videos and pictures and select the **MUSIC** folder for music files.
6. Use Drag and Drop method to copy files to your computer or vice versa.




4. The following screen will appear for 2 seconds before entering **MASS STORAGE**.

### IMPORTANT!

Please do not copy any files into the DCIM folder of your camera. Otherwise it may cause the camera unstable or crash. We strongly recommend you to move your images to your hard disk before applying any change.





Playback 

### File storage destination

Folder	File	Description
100MEDIA	IMAG0001.JPG ~ IMAG9999.JPG	Photo file
	IMAG0001.WAV ~ IMAG9999.WAV	Audio file (recorded in audio recording mode)
	V0001.WAV ~ V9999.WAV	Audio file (recorded in audio attaching mode)
	IMAG0001.ASF ~ IMAG9999.ASF	Video file
MISC	AUTPRINT.MRK	System marker for DPOF file
	AUTXFER.MRK	
MUSIC	*.MP3	Music file
	*.WMA	

\* : User defined



## Music

### 🎵 **Playing music**

1. Set the **Mode dial** to 🎵 (music).  
Music list displays on the LCD screen.
2. Use ▲▼ to toggle through the music list.



3. Press ● twice to play the music file.

### **While playing**

4. Use ◀▶ to fast backward or fast forward.
5. Use ▲▼ to skip to next file or return to previous file



6. Press ● to pause or ☰ (Menu button) to stop.

### **During pause**




7. Use ◀▶ to fast backward or fast forward.
9. Use ▲▼ to skip to next file or return to previous file




8. Press ● to resume play.
10. Press ☰ (Menu button) to stop.




## Setup menu

The setup menu allows users to set up various settings such as time, TV system, frequency, speaker tone and etc.

1. Set the **Mode dial** to  (Setup) mode.
2. Use  to navigate through the menu and  to confirm.







3. Press  (Menu button) to exit.

Option	Item	Description
<b>Clock set</b> 	<b>Date</b> 	Sets the date and time. <i>(Please refer to page 18)</i>
	<b>Timer</b> 	



## Setup menu












<b>Date format</b> 	<b>DD/MM/YY</b>	Sets the date display format. <i>(Please refer to page 19)</i>
	<b>YY/MM/DD</b>	
	<b>MM/DD/YY</b>	
<b>TV system</b> 	<b>NTSC</b>	Sets the output signal to TV. - NTSC for USA, Japan, Taiwan, etc.* - PAL for Australia, China, Europe, etc.**
	<b>PAL</b>	
<b>Frequency</b> 	<b>50Hz</b>	Sets the displaying frequency.
	<b>60Hz</b>	
<b>Beeper</b> 	<b>Melody</b>	Sets startup and warning tones.
	<b>Off</b>	
	<b>Normal</b>	

### \*NTSC system

Canada, Central America, Japan, Korea, Mexico, Panama, Taiwan, U.S.A., etc.

### \*\*PAL system

Australia, Austria, Belgium, China, Denmark, Finland, Germany, Greece, Netherlands, Hong Kong, Malaysia, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, Thailand, Turkey, United Kingdom, Yugoslavia, etc.

<b>Startup screen</b> 	<b>Default</b>	Changes the startup screen.
	<b>OFF</b>	
	<b>Custom</b>	
<b>LCD brightness</b> 		Adjusts the brightness on the LCD screen.
<b>Storage</b> 	<b>Memory Card</b> 	Changes the storage and playback path of recording files.
	<b>Internal Memory</b> 	
<b>Auto power off</b> 	<b>Never</b>	Sets the time for the device to auto shutdown for power conservation
	<b>5 Min</b>	
	<b>2 Min</b>	
<b>Silence</b> 	<b>Off</b>	Sets system sound and LED indicators - Off will turn off all sound and LED indicators
	<b>On</b>	
<b>Reset</b> 		Restores device back to factory default settings
<b>Format</b> 	<b>Memory Card</b> 	Formats MMC/SD card or internal memory - All data including protected files will be erased
	<b>Internal Memory</b> 	



## Advanced operations

### Advanced options

#### Adjusting the white balance

The default setting automatically detects and adjusts white balance level depending on surrounding lighting condition, however for optimal result, user can manually set the white balance level according to the lighting condition.

1. Set the **Mode dial** to
2. Press the (Menu button).
3. Use the to navigate to **MANUAL**.
4. Use to navigate to (white balance adjustment).
5. Choose the proper white balance level for your surrounding lighting condition.

**Auto**

Determines the best white balance level automatically.

**Daylight**

Recording under sunlight conditions.

**Cloudy**

Recording under cloudy conditions.

**Fluorescent**

Recording under fluorescent lighting or neon signs.

**Tungsten**

Recording under bluish lighting conditions.

6. Press to confirm.











7. Press (Menu button) to exit.





### Adding effect

This option enriches your images by adding digital effects.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use the   to navigate to  **MANUAL**.
4. Use     to navigate to  (**Effect**).
5. Choose your preferred effect.

#### **Negative**

Reverses the color and brightness of the photo like the negative.

#### **Sepia**

Takes the sepia-toned photo like an old photo.

#### **B&W**

Takes the photo in black and white color.

#### **Solarize**



Increases the light contrast.

#### **Pastel**

(photo only)  
Sharpens the outline of an object like the hand-drawn photo.

#### **Sketch**

(photo only)  
Takes sketch-effect photo.

6. Press  to confirm.
7. Press  (Menu button) to exit.



## Advanced operations

### Backlight compensation

**Backlight** compensation is effective when capturing or recording a backlit subject or when the background exposure is too strong.

1. Press **▲** twice to activate Backlight compensation.
2. **Backlight** compensation icon displays on screen.




















## Various video options















### Setting video resolution

The image resolution directly correlates to the file size, therefore higher resolution will have larger file size.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use   to navigate to  **VIDEO** tab.
4. Use   to navigate to  (video resolution).
5. Use   to choose a video resolution.  
 : Fine video resolution  
 : High video resolution  
 : Normal video resolution
6. Press  to confirm.
7. Press  (Menu button) to exit.

### Setting video quality

The video quality directly correlates to the size of the file. High quality requires larger file size.













1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use   to navigate to  **VIDEO** tab.
4. Use   to navigate to  (video quality).
5. Use   to choose video quality.  
 : Fine video quality  
 : Normal video quality
6. Press  to confirm.
7. Press  (Menu button) to exit.



## Advanced operations

### Applying fader to video









This feature allows user to add fader to video.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use   to navigate to  **VIDEO** tab.
4. Use   to navigate to  (fader).
5. Use   to choose a fader. A preview will appear on the LCD screen.
6. Press  to confirm.
7. Press  (Menu button) to exit.



### Motion detect recording

This feature allows user to set the camera at one location and records when it detects motion and stops when no motion is detected.

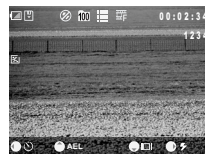
1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use   to navigate to  **VIDEO** tab.
4. Use   to navigate to  (motion detect).





## Advanced operations

5. Use ◀▶ to turn on or off motion detect function.
6. Press ● to confirm.
7. Press ☰ (Menu button) to exit.



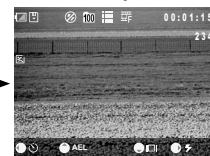
Motion detected, 3 seconds count-down



Recording initiated





Motion exited, switches back to standby mode



## Interval recording

This feature sets a time interval on the device to record video with a set length on every other interval.

1. Set the **Mode dial** to .
2. Press the ☰ (Menu button).
3. Use ◀▶ to navigate to  **VIDEO** tab.
4. Use ▲▼ to navigate to **INT. REC.**
5. Use ◀▶ to turn on or off the interval record feature.
6. With the function on, use ▲▼ to navigate to **INTERVAL**.
7. Use ◀▶ to choose time between each interval.
8. Press ● to confirm.



## Advanced operations

9. Use ▲▼ to navigate to **REC. TIME**.
  10. Use ◀▶ to choose a record time.
  11. Press ○ to confirm.
  12. Use ▲▼ to navigate to **ELAPSE**.
  13. Use ◀▶ to choose elapse time.
  14. Press ○ to confirm.
  15. Press ☰ (Menu button) twice to exit.
- Note:** To avoid power shortage, make sure to plug in your power adapter for extensive recordings.

Interval	1 Min
	5 Min
	10 Min
	30 Min

Rec. Time	5 Sec
	10 Sec
	15 Sec
	30 Sec

Elapse	1 Hour
	2 Hour
	6 Hour
	12 Hour
	24 Hour
	Full

Interval recording set to record every 30 minutes for duration of 5 seconds with elapse time of 12 hours

A frame from the video clip recorded 2 hours later

A frame from the video clip recorded 6 hours later














A frame from the video clip recorded 12 hours later



## Various photo options













### Setting photo resolution

The image resolution directly correlates to the file size, therefore higher resolution will have larger file size.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use the  to navigate to  **PHOTO** tab.
4. Use  to navigate to  (photo resolution).
5. Use  to choose a photo resolution.
  -  : XGA (Economic)
  -  : 3M (Normal)
  -  : 6M (High)
  -  : 9M (Fine)
6. Press  to confirm.
7. Press  (Menu button) to exit.

### Setting photo quality

The quality of the photo or video is directly correlated to the size of the file. Hence higher quality will have larger file size.












1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use the  to navigate to  **PHOTO** tab.
4. Use  to navigate to  (photo quality).
5. Use  to select a photo quality.
  -  Fine
  -  High
  -  Normal
6. Press  to confirm.
7. Press  (Menu button) to exit.



## Advanced operations

### Applying scene to photo

By default this device automatically detects and adjusts the photo scenario, however for optimal results, you may select a scene manually that best fit your condition.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use   to navigate to  **PHOTO** tab.
4. Use   to navigate to **SCENE**.
5. Use   to select a scenario.
6. Press  to confirm.
7. Press  (Menu button) to exit.



#### **Auto**

Adjusts scene automatically.

#### **Landscape**

Enhances the contrast of image color for the vivid landscape photo.

#### **Sports**

Captures fast-moving subject.



#### **Night Shutter**

Sharpens the portrait with dark background in dark places.

#### **Beach & Ski**

Captures objects under bright sunlight.













#### **Sunset & Moon**

Captures objects under sunset or moon lighting environments



### Attaching audio to photo













This feature allows you to add audio recording to a photo.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use the   to navigate to  **PHOTO** tab.
4. Use   to navigate to  (attach audio).
5. Use   to toggle the feature on or off.
6. Press  to confirm.
7. Press  (Menu button) to exit.

**Note:** You may also add audio to existing photos, for more detail refer to the *Edit* section.

### Superimposing date on photo

This option allows you to superimpose date on photos.













1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use the   to navigate to  **PHOTO** tab.
4. Use   to navigate to  (superimpose date).
5. Use   to toggle the feature on or off.
6. Press  to confirm.
7. Press  (Menu button) to exit.



## Advanced operations

### Quick review












This option allows you to review the last photo you captured.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use the   to navigate to  **PHOTO** tab.
4. Use   to navigate to  (quick review).
5. Use   to toggle the feature on or off.
6. Press  to confirm.
7. Press  (Menu button) to exit.



### Interval shutter

This feature sets a time interval on the device to take number of photos on every other interval.

1. Set the **Mode dial** to .
2. Press the  (Menu button).
3. Use the   to navigate to  **PHOTO** tab.
4. Use   to navigate to **INT. SHUT.**
5. Use   to turn on or off the interval shutter feature.
6. With the function turned on, use   to navigate to **INTERVAL.**







## Advanced operations

7. Use ◀▶ to choose time between each interval.
8. Press ○ to confirm.
9. Use ▲▼ to navigate to **ELAPSE**.
10. Use ◀▶ to choose an elapse time.
11. Press ○ to confirm.
12. Press ☰ (Menu button) twice to exit.

Interval	1 Min
	5 Min
	10 Min
	30 Min

Elapse	1 Hour
	2 Hour
	6 Hour
	12 Hour
	24 Hour
	Full

Interval shutter sets to capture picture every 30 minutes with elapse time of 24 hours

→ Photo taken 6 hours later → Photo taken 12 hours later → Photo taken 24 hours later





## Advanced operations

### Using automatic exposure lock

**AEL** (Automatic Exposure Lock) allows the device to lock the exposure while taking a photo.

#### How to set **AEL**

Focus on the object which you wish to lock the exposure, then select **AEL** to lock the exposure.

1. Use ▲ to activate **AEL**.



2. **AEL** icon displays on screen.



## Various playback options


### Displaying single or multiple images

1. Set the **Mode dial** to .




Recorded files display an index of six on the LCD screen.



2. Press  to display image .



3. Press  (Menu button) to return to index.



## Advanced operations

### Enlarging or reducing photo viewing size

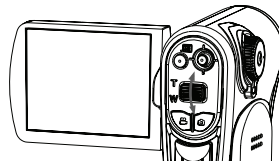
1. Set the **Mode dial** to



2. Use to navigate to the photo you wish to view.

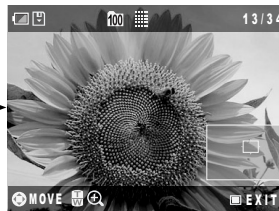
3. Press to switch to single photo viewing.

4. Press **ZOOM** lever to zoom in/out of the photo. **T** zooms into the photo, **W** zooms out of the photo.



5. Use to move to portion of the photo.

6. Press (Menu button) to return to original size.







### Turning off information icons



This feature allows the device to turn off the information icons automatically while playing back files.

1. Set the **Mode dial** to .



2. Press the  (Menu button) to bring up the menu.

3. Use   to navigate to  (Information).

4. Use   to switch it auto off or on.


5. Press  confirm.




### Searching video or audio files


This feature allows users to play the first 10 seconds of all playable (video & audio) files.



1. Set the **Mode dial** to .




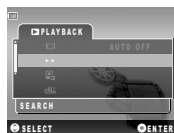
2. Press the  (Menu button) to bring up the menu.

3. Use   to navigate to  (search).

4. Press  to start to search.

5. Use   to skip to next or return to previous file.










6. Press  (Menu button) to stop.





## Advanced operations










### Playing back photos (slide show)

1. Set the **Mode dial** to .
2. Press the  (Menu button) to bring up the menu.
3. Use   to navigate to  (slide show).
4. Press  to start the slide show.
5. Use   to skip to next or return to previous file.
6. Press  (Menu button) to stop.



### Playing back all files

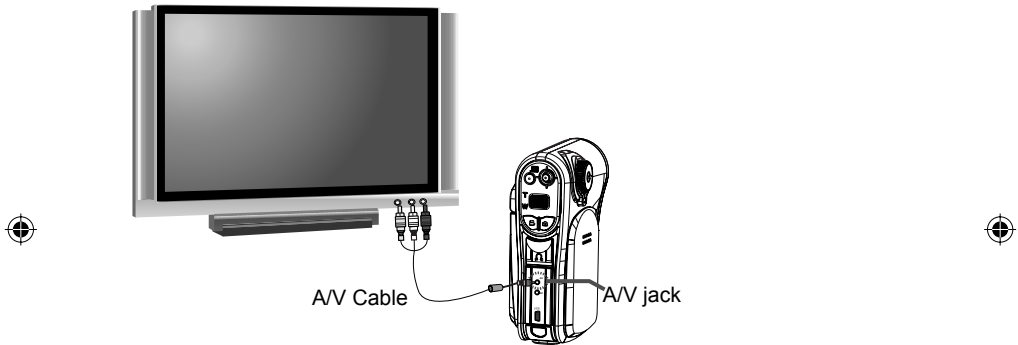
This feature allows users to play all recorded files (photo, video, audio). Photo will display for 5 seconds and video & audio will be played at their full lengths.

1. Set the **Mode dial** to .
2. Press the  (Menu button) to bring up the menu.
3. Use   to navigate to  (play all).
4. Press  to start to play.
5. Use   to skip to next or return to previous file.
6. Press  (Menu button) to stop.



### Playing back files on TV screen

Users have the option to playback photos or videos on the LCD screen for convenient reviewing or on your TV screen for broad audience viewing. To playback files on TV, follow the procedures below.



1. Connect the device to a TV set with the AV cable.
2. Connect yellow end of the cable to the Video input (yellow) jack on your TV set.
3. Connect the red and white ends of the cable to the Audio input (red, white) jacks on your TV set.




















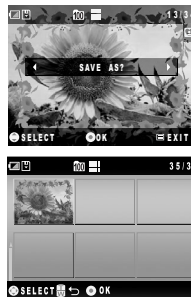
## Advanced operations

### Editing

#### Applying a theme to photo (memory mix)

This option digitally applies decoration effects to photos.

1. Set the **Mode dial** to .
2. Press the  (Menu button) to bring up the menu.
3. Use   to navigate to  (memory mix).
4. Press  to enter.
5. Use   to choose a photo and   to change theme.
6. Press  to save the photo as a new file.
7. Use     to select other photos or press  (zoom lever) to return to source file or  to enter current photo.









### Rotating photo





1. Set the **Mode dial** to .




2. Press the  (Menu button) to bring up the menu.

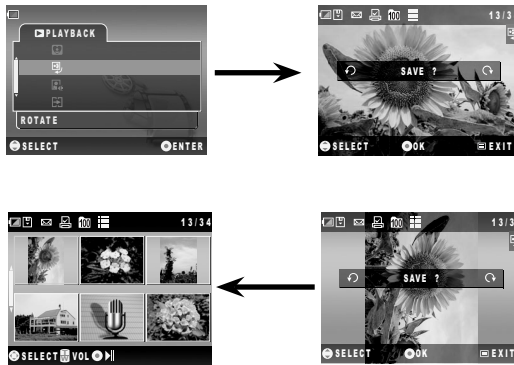
3. Use   to navigate to  (rotate).

4. Press  to enter.

5. Use   to choose a photo and   to rotate it 90 degree each time.

6. Press  confirm and save.

7. Press the  (Menu button) to exit.

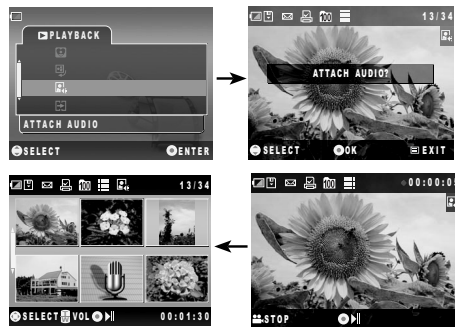




## Advanced operations

### Attaching audio to photo





1. Set the **Mode dial** to .
2. Press the (Menu button) to bring up the menu.
3. Use to navigate to (attach audio).
4. Press to enter.
5. Use to choose a photo you wish to attach audio.
6. Press (**Record button**) or to start audio recording.
7. Press to pause or resume recording.
8. Press (**Record button**) or (Menu button) to stop and save audio to photo.






### Marking photo for print

1. Set the **Mode dial** to .



2. Press the  (Menu button) to bring up the menu.
3. Use  to navigate to **DPOF** then select  (print mark).
4. Press  to enter.





5. Use  to choose a photo to mark or unmark.


6. Press  to confirm.
7. Press  (Menu button) to exit.



### Marking photo for E-mail

1. Set the **Mode dial** to .



2. Press the  (Menu button) to bring up the menu.
3. Use  to navigate to **DPOF** then select  (E-mail mark).
4. Press  to enter.

5. Use  to choose a file to mark or unmark.

6. Press  to confirm.
7. Press  (Menu button) to exit.




## Advanced operations




### Protecting file from accidental delete

This allows you to protect a file from being accidentally deleted.



1. Set the **Mode dial** to .




2. Press the  (Menu button) to bring up the menu.

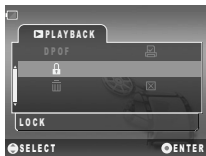
3. Use   to navigate to  (lock).

4. Press  to enter.

5. Use   to choose a file to lock or unlock.

6. Press  to confirm.

**Note:** Press  (Menu button) at any time to abort.




or










### Deleting file

1. Set the **Mode dial** to .





2. Press the  (Menu button) to bring up the menu.


3. Use   to navigate to  (delete file).


4. Use   to choose to delete a  (single file) or  (all files) within the folder.

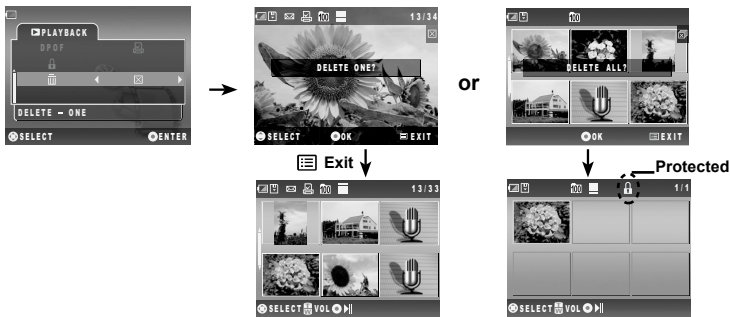
5. Press  to enter.

6. To delete a single file, use   to choose the file you wish to delete.

7. Press  to confirm.

**Note:** You cannot delete the file if it is  locked.

**Note:** Press  (Menu button) at anytime to abort.





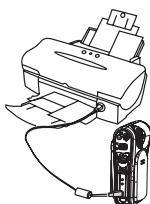
## Advanced operations

### **Direct print**

Direct Print provides a direct connect solution for the device to communicate with printers. If you connect the device to a **PictBridge™ compliant printer**, the photos stored in the device can be printed directly without connecting to any computers or third party devices.

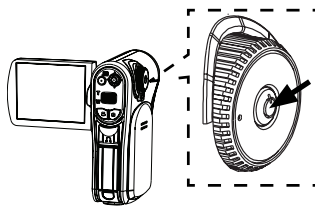
#### Step 1. Connecting to a printer

Connect the device to a printer via an USB cable.




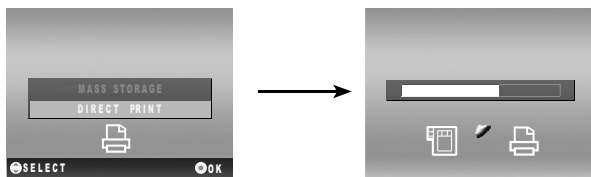
#### Step 2. Turning **ON** the device

Power **ON** the device.



#### Step 3. Selecting **DIRECT PRINT**

Select **DIRECT PRINT** from the OSD menu of the device. Make sure the device is connected to a PictBridge™ compliant printer then press  to enter.



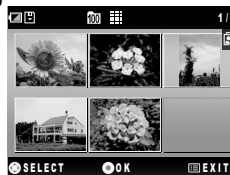
## Photo Set

### Step 4. Selecting Photos

#### Marking Particular Photo for Print



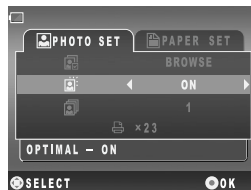
Use ◀▶ to select the PHOTO SET tab then use ▼ to highlight (select photo) from the menu. Use ▶ to change to **BROWSE** then press to enter. An index will appear displaying all files. Press to select a photo, a printer icon will appear on the selected photo. When the selection is done, press (Menu button) to exit.



#### Marking All Photos for Print

Use ◀▶ to select the PHOTO SET tab then use ▼ to highlight (select photo) from the menu. Use ▶ to change to **ALL** then press to confirm.

### Step 5. Enhancing Photo Quality

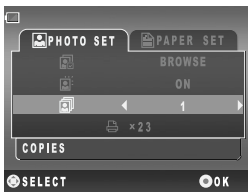



Scroll down to (optimal). The default setting is OFF. To change the setting, use ◀▶ to set optimal option **ON** or **OFF**. Press to confirm.



## Advanced operations

### Step 6. Setting Number of Copies





Scroll down to  (copies). The default setting is 1. To change the value, use ◀▶ to increase or decrease number of copies. Press ○ to confirm.

## Paper Set

### Step 7-1. Setting Paper Size







Select  PAPER SET tab on the top, then use ▼ to highlight  (size) from the menu. Use ◀▶ to change the paper size. Press ○ to confirm.









### Step 7-2. Setting Paper Type



Scroll down to  (paper). Use   to select a paper type then press  to confirm. Please be aware that some paper types are not available to certain paper size.

### Step 7-3. Setting Border



Scroll down to  (border). Use   to set border **ON** or **OFF** then press  to confirm.

### Step 8. Printing



Scroll down to . Press  to print.

**Note:** When the device is connected to a computer under *Direct Print* mode, Windows OS will ask for a device driver. We **do not** provide such driver.



## Advanced operations

### Various music options

#### Repeating music

1. Set the **Mode dial** to (music).



2. Use to select a music.
3. Press (Menu button) to bring up the menu.
4. Use to navigate to (Repeat).

5. Use to choose a repeat mode.

: Normal playback, repeat is off.

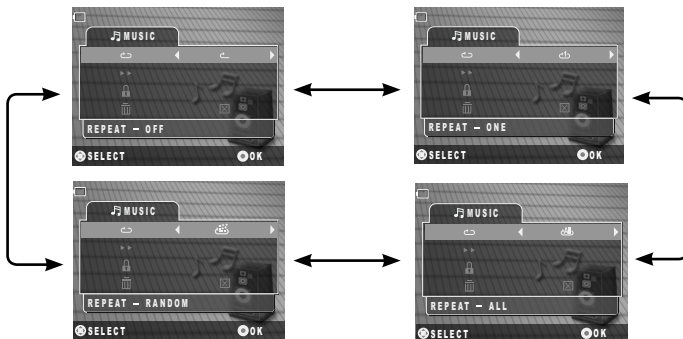
: Repeat current playing music.

: Repeat all of the music within the folder.

: Play music within the folder in random order.

6. Press to confirm.

**Note:** Press (Menu button) at anytime to abort.



### Searching music

This feature allows you to play the first 10 seconds of music files so that you can easily search a music file that you do not recognize by name.


1. Set the **Mode dial** to 🎵 (music).

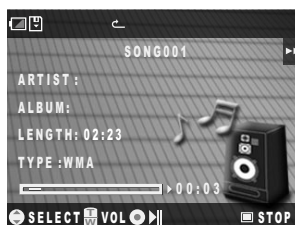
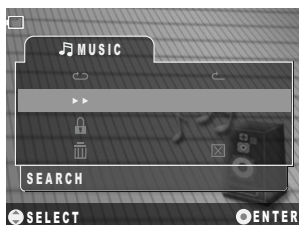


2. Press  (Menu button) to bring up the menu.

3. Use   to navigate to  (search).

4. Press  to confirm.

5. Press  (Menu button) to stop.





## Advanced operations

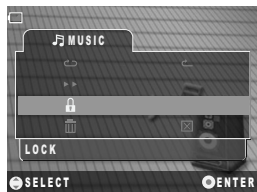
### Protecting music from accidental delete

This feature protects music file from accidental delete.

1. Set the **Mode dial** to (music).
2. Press (Menu button) to bring up the menu.
3. Use to navigate to (lock).
4. Press to enter.
5. Use to select a music.
6. Press to lock or unlock music file.



**Note:** Press (Menu button) at anytime to abort.



Locked



Unlocked



### Deleting music

1. Set the **Mode dial** to (music).



5. Press to display music list.

2. Press (Menu button) to bring up the menu.

6. Use to select a music.

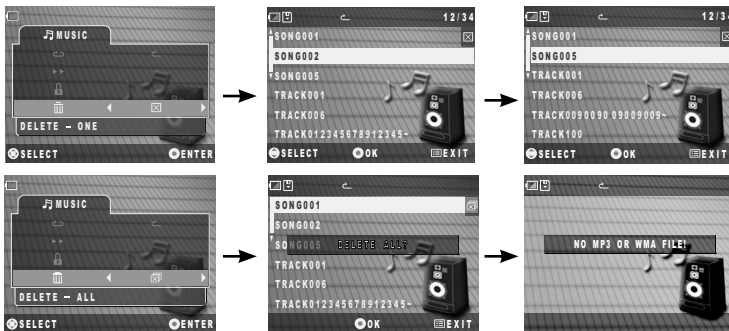
3. Use to navigate to (delete file).

7. Press again to delete file.

**Notes:**

- You cannot delete the file that is locked.
- Press (Menu button) at anytime to abort.

4. Use to choose to delete (single file) or (all files) within the folder.

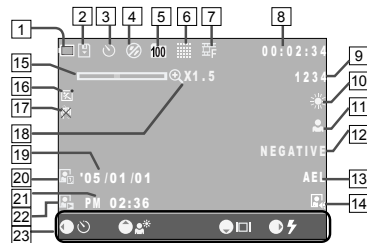




## Additional information

### Understanding screen indicators

#### Indicators for video recording and photo taking



- |   |                                   |
|---|-----------------------------------|
| 1 Battery indicator                                 | 14 Attach audio indicator (photo) |
| 2 Memory locator                                    | 15 Zoom                           |
| 3 Self-timer indicator (photo)                      | 16 Motion detect (video)          |
| 4 Flash indicator (photo)                           | 17 Stabilizer indicator (video)   |
| 5 Current saving folder indicator                   | 18 Zoom ratio                     |
| 6 Photo resolution indicator (photo)                | 19 Date                           |
| 7 Video resolution indicator (video)                | 20 Superimposing date on photo    |
| 8 Time remaining for video recording                | 21 Time                           |
| 9 Picture remaining                                 | 22 Quick review indicator (photo) |
| 10 White balance indicator                          | 23 Menu                           |
| 11 Scene indicator (photo)                          |                                   |
| 12 Effect indicator                                 |                                   |
| 13 AE-lock (photo)/backlight compensation indicator |                                   |



### Indicators for playback



- 1 Battery indicator
- 2 Memory locator
- 3 E-mail mark indicator
- 4 Print mark indicator
- 5 Current folder indicator
- 6 Photo resolution
- 7 Attach audio indicator
- 8 File protection indicator
- 9 Current selected file index
- 10 Total recorded files
- 11 Menu

- 12 Playing progress bar
- 13 Played time
- 14 Video resolution

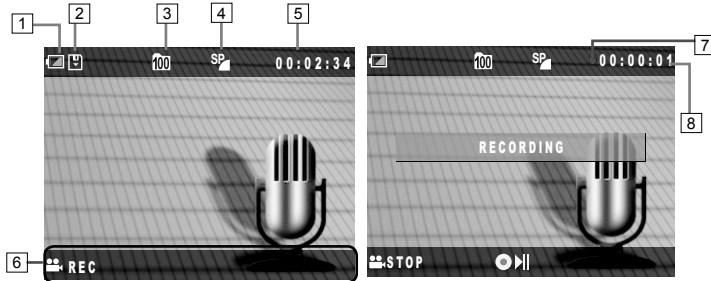


## Additional information

### Indicators for audio recording

Before recording

While recording



1 Battery indicator

2 Memory locator

3 Current folder indicator

4 Record quality indicator

5 Recordable time

6 Menu

7 Recording indicator

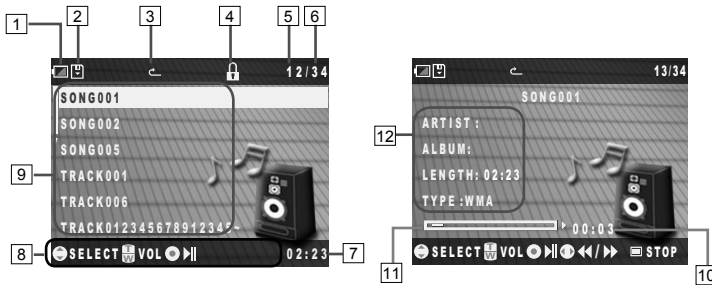
8 Recorded time





Additional information

### Indicators for music playing



- 1 Battery indicator
- 2 Memory locator
- 3 Repeat mode indicator
- 4 File protection indicator
- 5 Current track counter
- 6 Total tracks counter
- 7 Current track length
- 8 Menu
- 9 File name
- 10 Playing time
- 11 Playing bar
- 12 Song information



## Additional information

### Specifications

<b>Function</b>	Digital Camcorder, Digital Still Camera, Digital Voice Recorder, Music Player, Video Camera, MMC/SD Card Reader
<b>Image Sensor</b>	3 Mega CMOS
<b>Lens</b>	Focal Length f = 8.6 mm Aperture Ratio F3.0
<b>Digital Zoom</b>	8X
<b>Display</b>	2.0" TFT LCD
<b>Startup screen setting</b>	Default, Custom, Off
<b>Storage option</b>	Internal/External
<b>MMC/SD card hot swap</b>	Yes
<b>Shutter speed</b>	1/15 sec. ~ 1/2500 sec.
<b>Auto focus</b>	Fixed
<b>Flash</b>	Built-in
<b>Exposure control</b>	Auto
<b>White balance</b>	Auto, Daylight, Cloudy, Fluorescent, Tungsten
<b>Digital effect</b>	Negative Art, Sepia, B&W, Solarize, Pastel, Sketch
<b>Memory card slot</b>	MMC/SD slot
<b>Internal memory</b>	32 MB
<b>Microphone</b>	Built-in
<b>Interface</b>	USB 2.0, A/V Out, Earphone, DC-IN
<b>LCD panel rotation</b>	-90 to 270 degrees
<b>Motion detect</b>	Yes
<b>Television System</b>	NTSC/PAL
<b>Battery Type</b>	Rechargeable Li-ion battery
<b>Power Source</b>	DC-in (Charger inside/power adapter)



### Additional information

#### Digital Camcorder

<b>Resolution</b>	Fine	640 x 480 (30 fps)
	High	352 X 288 (30 fps)
	Normal	320 X 240 (30 fps)
<b>Quality</b>	Fine	Low compression rate
	Normal	High compression rate
<b>File Format (Video)</b>	ASF file (MPEG-4 compatible)	

#### Digital Still Camera

<b>Resolution</b>	Fine	3504 x 2632 [9M] (H/W enhanced)
	High	2832 x 2128 [6M] (H/W enhanced)
	Normal	2048 x 1536 [3M]
	Economic	1024 x 768 [XGA]
<b>Quality</b>	Normal	High compression rate
	High	Normal compression rate
	Fine	Low compression rate
<b>Self-Timer</b>	10 seconds delay	
<b>File Format (Image)</b>	JPEG compatible	
<b>Scene Mode</b>	Auto, Landscape, Sport, Night Shutter, Beach & Ski, Sunset & Moon	



## Additional information

### Digital Voice Recorder

**File Format** WAV compatible

### Music Player

**File Format** MP3 and WMA compatible

### Mass Storage

**System Requirements**

- Pentium 800 MHz processor or higher
- Microsoft Windows 98SE, Me, 2000, XP
- Available USB port
- Super VGA card and color monitor
- CD-ROM or DVD-ROM drive
- At least 128 MB of RAM
- 200 MB of available HD space

**Mass Storage Support**

- Win 98SE (Driver included), Me,
- 2000 SP3 or above, XP
- MAC OS 9.X and OS 10.1 or above

