



D-snap

Panasonic®

SD Multi Camera
Operating Instructions

Model No. **SV-AS10**

Snap • View • Fun



Before use, please read these instructions completely.

For USA assistance, please call: 1-800-211-PANA(7262) or send e-mail to: consumerproducts@panasonic.com

For Canadian assistance, please call: 1-800-561-5505 or visit us at www.panasonic.ca



VQT0F01

Contents

Preparation

Standard Accessories	4
Information for Your Safety	6
Components	8
Insert the Battery	10
Remove the Battery	11
Charging the Battery	12
Charging Information	13
Insert the Card	14
Remove the Card	15
About Cards	16
Basic Menu Operation	17
About the Setup Menu	18
Setting the Date/Time	19

Basic (Recording)

Taking a Picture (Still Picture)	20
Recording Still Picture with Audio	23
Taking Pictures in Burst Mode	24
Recording Motion Images	25
Recording Voice	26

Basic (Play back)

Playing Back Still Pictures	27
Playing Back Still Picture with Audio	28
Playing Back Motion Images	29
Playing Back Voice	30
Playing Back Music	31
Multi File Playback (Thumbnail display)	35
Erasing Files	36

Advanced (Recording)

Setting Flash	37
Changing the Quality and Size of Picture	39
Taking Pictures with the Self Timer	40
Setting the White Balance	41
Setting the White Balance (Manual)	42
Setting the Application Menu	43

Advanced (Play back)

Using the Playback Zoom	45
Marking the Picture as a “Favorite”	46
Playing back Still Pictures on the Slide Show	47
Setting the Still Pictures to be Printed (DPOF print)	48
Preventing Accidental Erasure of Files (Lock setting)	50
Adding Audio to the Still Picture (Audio dubbing)	51
Resizing the Still Picture	52
Altering the Color of the Still Picture (Color Creator)	53
Connecting to PC	54

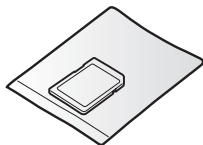
Others

LCD Monitor Display	64
Menu Screen Display	65
Cautions for Use	68
Messages	74
Trouble Shooting	76
Specifications	78
Limited Warranty (For U.S.A. Only)	82
Customer Services Directory (For U.S.A. Only)	84
Index	85
Spanish Quick Use Guide/ Guía rápida para el usuario en español	86

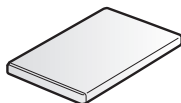
Standard Accessories

Before using your camera, check the contents.

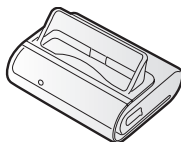
- SD Memory Card (8MB)
RP-SD008BVE0



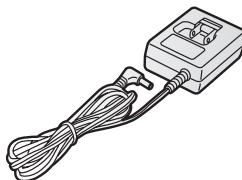
- Battery Pack
CGA-S003



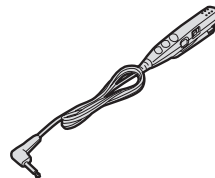
- USB Cradle
VSK0643



- AC Adaptor
VSK0626



- Remote Controller
VYC0902



- Stereo Earphones
L0BAB0000173



- USB Cable
K1HA09BD0001



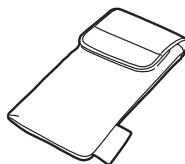
■ CD-ROM
VFF0206



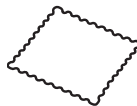
■ Neck Lanyard
VFC4028



■ Carrying Case
VFC4013



■ Cleaning Cloth
VFC1792



Information for Your Safety

Dear Customer,

We would like to take this opportunity to thank you for purchasing this Panasonic SD Multi Camera. Please read these Operating Instructions carefully and keep them handy for future reference.

WARNING

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE ONLY THE RECOMMENDED ACCESSORIES AND DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE. DO NOT REMOVE THE COVER (OR BACK); THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Notice:

This product has parts that contain a small amount of mercury. It also contains lead in some components. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <<http://www.eiae.org>>

Carefully observe copyright laws. Recording of pre-recorded tapes or discs or other published or broadcast material for purposes other than your own private use may infringe copyright laws. Even for the purpose of private use, recording of certain material may be restricted.

- Please note that the actual controls and components, menu items, etc. of your SD Multi Camera may look somewhat different from those shown in the illustrations in these Operating Instructions.



A lithium ion/polymer battery that is recyclable powers the product you have purchased. Please call 1-800-8-BATTERY for information on how to recycle this battery.

FCC Note: (U.S. only)

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 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.

FCC Caution: To assure continued compliance, follow the attached installation instructions and use only shielded interface cables with ferrite core when connecting to computer or peripheral devices.
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Trade Name: Panasonic

Model No.: SV-AS10

Responsible party: Matsushita Electric Corporation of America One Panasonic Way, Secaucus, NJ 07094

Support Contact: Panasonic Consumer Electronics Company 1-800-211-PANA(7262)

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class B digital apparatus
complies with Canadian ICES-003

Panasonic SV-AS10

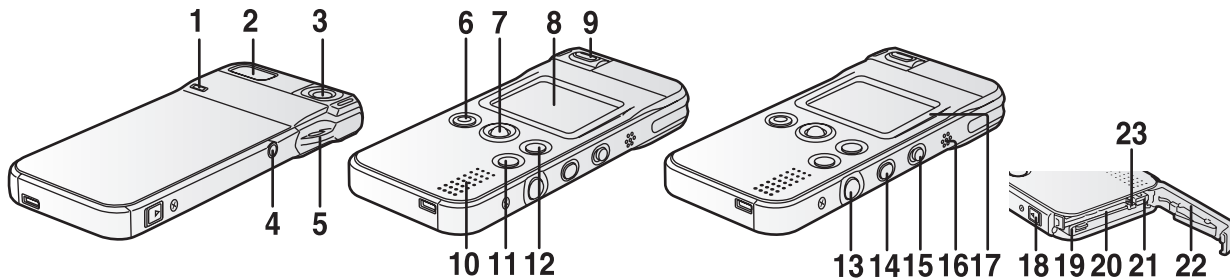


Tested To Comply
With FCC Standards

FOR HOME OR OFFICE USE

Components

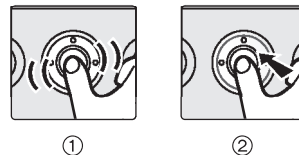
■ Body



- 1 Self timer Lamp
- 2 Flash
- 3 Lens
- 4 Terminal (Headphone/Remote Controller) []
- 5 Strap Attachment
- 6 Shutter Button [●]
- 7 Jog Ball
- 8 LCD Monitor
- 9 Macro Switch [←MACRO]
- 10 Speaker
 - For confirming voice and music.
- 11 Screen Reversal Button/HOLD Button (when playing music) [↻]
- 12 MENU Button [MENU]

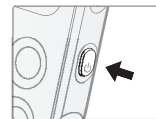
- 13 Shutter Button [●]
- 14 Power Button [⏻]
- 15 Record/Playback mode Switch
[]
- 16 Microphone
- 17 Power/Card Access Lamp
- 18 Lock Release Lever
- 19 Battery Slot
- 20 Card Slot
- 21 Connector for USB Cradle
- 22 Card/Battery Door
- 23 Battery Lock

■ Operating Jog Ball



- Roll the ball to select items. ①
- Press to select items. ②

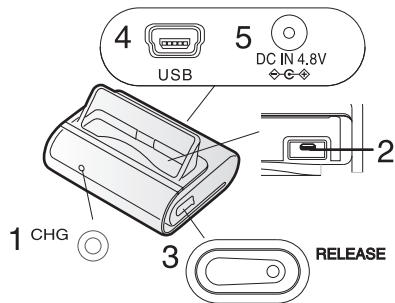
■ Operating Power Button



- Hold for about 1 second to turn the power on.
- Hold for about 2 seconds to turn the power off.

■ USB Cradle

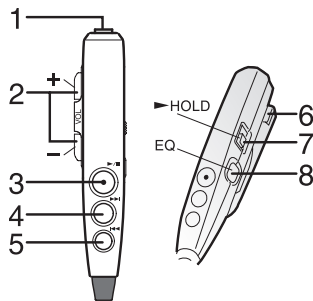
Insert SV-AS10 into cradle to charge the battery. When you connect the cradle to your PC using the supplied USB cable, you can view pictures, edit music or listen to voice recordings.



- 1 Charge Lamp [CHG]
- 2 Connector
- 3 Release Button [RELEASE]
- 4 USB Socket [USB]
- 5 DC Input Socket [DC IN 4.8V]

■ Remote Controller

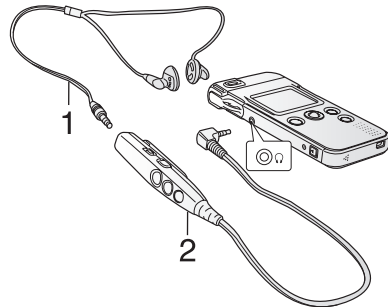
You can play back pictures, sounds and music, and control the volume of the sound and music. You can also take pictures by using this remote controller.



- 1 Stereo Earphone Socket
- 2 Volume Button [- VOL +]
- 3 Playback/Stop/Shutter Button [▶/■/●]
- 4 Fast-forward Button [▶▶]
- 5 Fast-rewind Button [◀◀]
- 6 Clip
- 7 Hold Switch [HOLD]
- 8 Equalizer Button [EQ]

■ Stereo Earphones

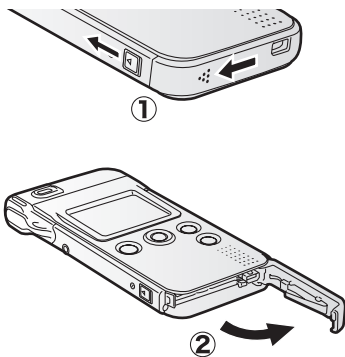
When using earphones, be sure to connect to the supplied remote controller.



- 1 Stereo Earphones
 - 2 Remote Controller
- If you use earphones other than the ones supplied, use 9.84 feet (3 m) or less length of earphones (including the remote controller).

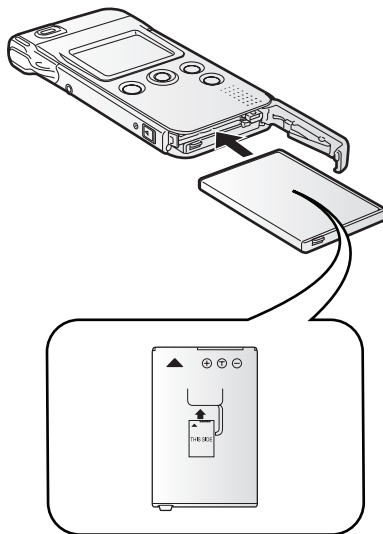
Insert the Battery

1



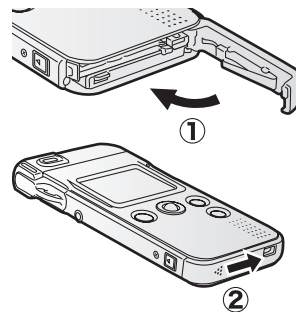
Slide the door while releasing the lock. ①
Open the door. ②

2



Insert the battery all the way.
• Confirm the direction of the battery.

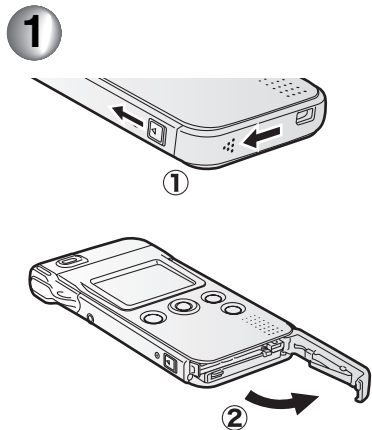
3



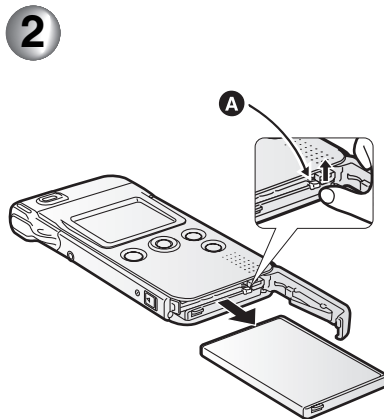
Close the door. ①
Lock the door while sliding it. ②

Remove the Battery

Be sure to turn the power off when you remove the battery.

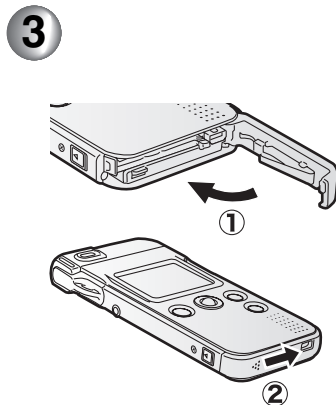


Slide the door while releasing the lock. ①
Open the door. ②



Release the Battery lock **A** to remove the battery.

- When you do not use the camera for a long time, remove the battery.
- Never open the Card/Battery door during the access. (P16) Otherwise, the data on the card may be damaged.
- The supplied battery is only for this camera. Do not use it for other devices.



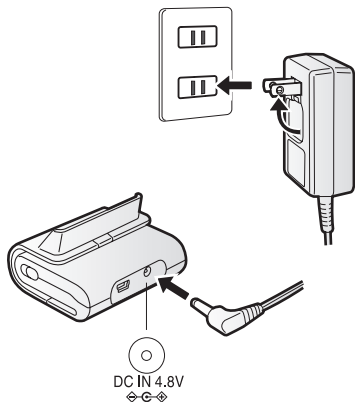
Close the door. ①
Lock the door while sliding it. ②

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Charging the Battery

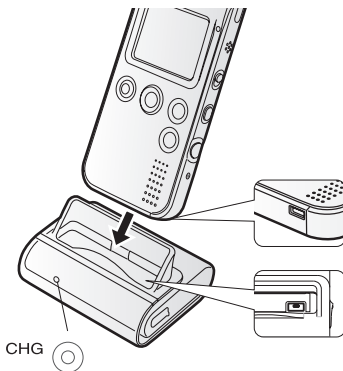
1



Connect the plug of AC adaptor to the outlet and connect the DC plug to the USB cradle.

THE SOCKET OUTLET SHALL BE INSTALLED NEAR THE EQUIPMENT AND SHALL BE EASILY ACCESSIBLE.

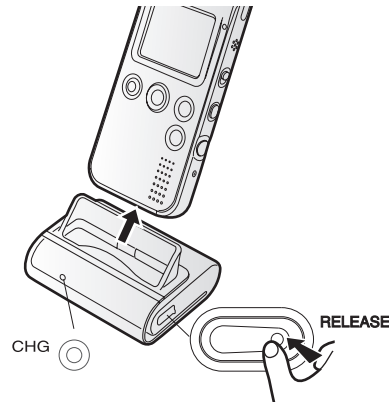
2



Charge the battery.

- Align the connections.
- Be sure to turn the power off when charging the battery.
- Do not insert this unit in a wrong direction.
- The charge lamp blinks in about 3 seconds after connecting this unit with USB cradle.

3



When the charge lamp turns off, the battery is charged fully.

- It takes about 120 minutes.
- Remove this unit from the cradle while pressing the **RELEASE** button.

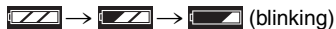
Charging Information

- It's normal for the battery and the camera to be warm following normal use and charging. This is not a malfunction.
- Use the supplied cradle or AC adaptor for this unit.
- Pull the plug out of the electrical outlet after completing the charge.
- Do not disassemble or alter the cradle or AC adaptor.

■ Battery indicator

The remaining battery power is displayed on the LCD monitor in use.

The indication is changed as follows



according to the consumption of the battery.

When the indicator is shown as



(blinking), the battery will be exhausted in a few minutes. Charge the battery.

■ Charging time and available recording time

(Recording condition)

- Shooting once every 30 seconds, flash every other shot
- Temperature 77°F (25°C)/Humidity 60%
- Using the supplied battery and the SD Memory Card

Charging time	Approx. 120 minutes
Continuous recording time (recordable number)	Approx. 59 minutes (Approx. 110 still pictures)
Playback time (Still Picture)	Approx. 121 minutes
Continuous music playback time	Approx. 10 hours (When setting the power save and using stereo earphones.)

The times shown above may vary depending on the condition.

■ Charging environment and charging error

- Charge the battery in a place with the temperature 50 - 95°F (10 - 35°C). (The battery should also be the same temperature)
- The charge Lamp blinks while charging. (Blinks approx. every 2 seconds when charging is normal.) When the charge Lamp blinks more quickly or slowly (or turns off), some abnormality may have occurred. The blinking speed suggests the following states.

Blinking approx. every 6 seconds:

- The ambient temperature or that of the battery itself is too high or too low. Charging proceeds, but will take a longer time.

Blinking approx. every 0.5 seconds:

Refer to P70.

Turning off:

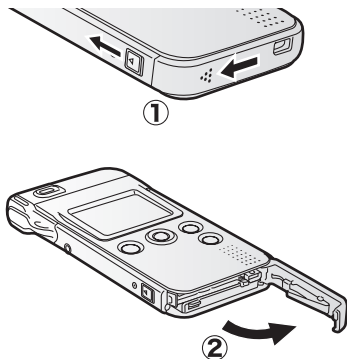
Charging is completed.

- If the charge Lamp turns off when charging is not completed, the AC Adaptor or the battery is probably defective. Contact your nearest Panasonic dealer.
- For details, refer to P69.

Insert the Card

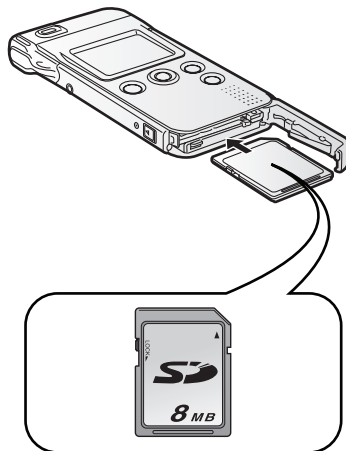
Be sure to turn the power off when you insert the card.

1



Slide the door while releasing the lock. ①
Open the door. ②

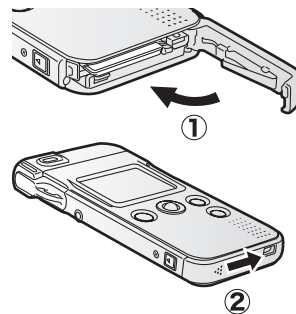
2



Insert the card all the way in until it clicks.

- Check the direction of the card.
- Do not touch the connecting terminal on the rear of the card.
- If you do not insert the card all the way, it may be broken.

3



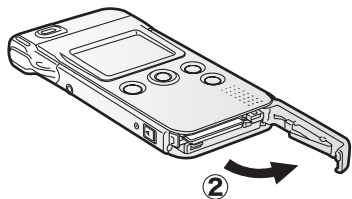
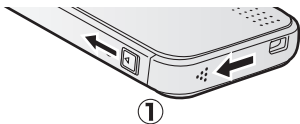
Close the door. ①
Lock the door while sliding it. ②

- If you cannot close the Card/Battery door completely, remove the card once, then insert it again.
- We recommend using the cards made by Panasonic. (Use genuine card only)

Remove the Card

Be sure to turn the power off when you remove the card.

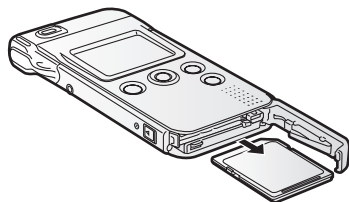
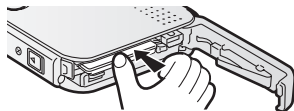
1



Slide the door while releasing the lock. ①

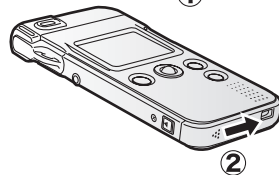
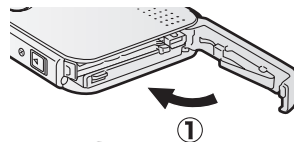
Open the door. ②

2



Press the card until it clicks to release and pull out the card.

3



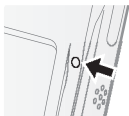
Close the door. ①

Lock the door while sliding it. ②

About Cards

■ Access to the card

When you access the card, (recognition/recording/reading/deleting) the Power/Card Access lamp blinks quickly.



When the Power/Card Access lamp is blinking, do not turn the power off or do not remove the battery and the card. Otherwise, the card or its contents may be damaged, or the camera may not work properly.

The data of the card may be damaged or lost because of the electrical noise, static or breakdown of the camera or the card. Save your precious data to your PC. (P54)

■ SD Memory Card (supplied)

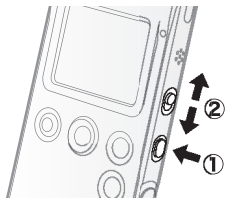
The SD Memory Card is a small, lightweight, removable external card. The SD Memory Card is equipped with a write-protect switch ① that can inhibit writing and formatting. (When the switch is moved towards the **LOCK** side, it is not possible to write or delete data on the card and format it. When the switch is unlocked, these functions become available.)



- Keep the Memory Card out of reach of children to prevent swallowing.

Basic Menu Operation

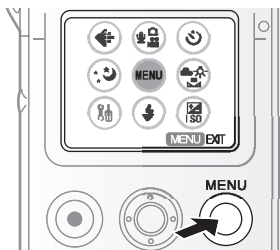
1



Press the Power Button for 1 second to turn the power on. ①

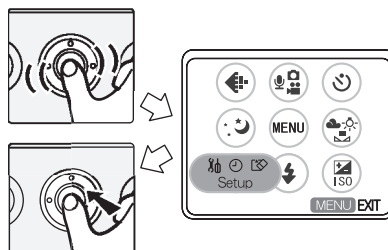
Select the recording mode [] or playback mode []. ②

2



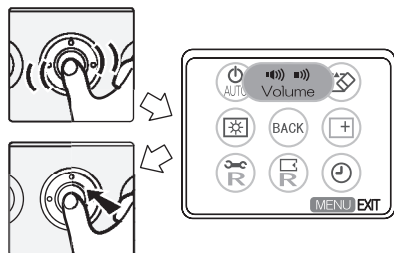
Press the **MENU** button to access the menu.

3



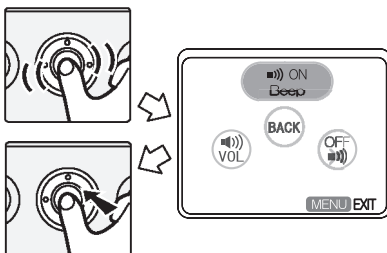
Select the menu item using the Jog Ball.

4



Select the desired feature using the Jog Ball.



5



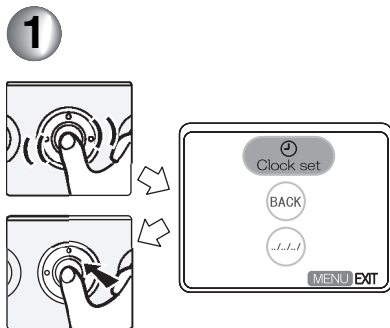
Press the Jog Ball to set.

- To stop the operation, Press the **MENU** button.
- If the Jog Ball is left without any operation for about 30 seconds, the unit exits the menu automatically.
- When you press the **MENU** button for about 1 second, the short cut menu appears. (P65, 66, 67)

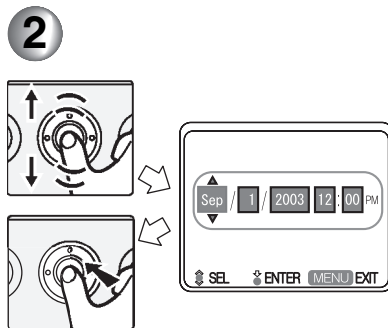
About the Setup Menu

Items	Details of the setting
Volume [🔊]	<ul style="list-style-type: none"> • Beep ON: The operational sound turns on. • Beep OFF: The operational sound turns off. • Main volume: Adjust the volume of the speaker.
Format card [🗑️]	<ul style="list-style-type: none"> • Warning: If the SD Memory Card is formatted, all data, including locked data, will be lost. Please review the contents of the SD Memory Card before formatting.
Icon display [📺]	<ul style="list-style-type: none"> • ON: Display the icon on the LCD monitor.  A: Recording mode B: Playback mode • OFF: Does not display the icon on the LCD monitor.  A: Recording mode B: Playback mode
Clock set [🕒]	<ul style="list-style-type: none"> • Change the date and display style. (P19)
Reset file No. [📁 R]	<ul style="list-style-type: none"> • The numerical designation the files are stored as will be reset. The next file will start from "0001".
Reset settings [🔄 R]	<ul style="list-style-type: none"> • Reset to the initial setting of recording and setup menu. The clock setting does not change.
Display setup [📺]	<ul style="list-style-type: none"> • Brightness: Adjust the brightness of the LCD monitor. • Color: Adjust the saturation of the LCD monitor.
Auto power off [⏻ AUTO]	<ul style="list-style-type: none"> • 5 min: No operation for about 5 minutes leads to power off. • Cancel: The unit will remain on until the battery is exhausted. <ul style="list-style-type: none"> • This function does not work when connecting to PC, recording/playing back the motion image, playing the slideshow or music, or recording/playing back the voice memo.

Setting the Date/Time



1
Access the menu. (P17)
Select **Clock set** from **Clock set**
[] on the **Setup** menu.



2
Set the year, month, day and time.

- When pressing the jog ball, year, month, day and time is set. When rolling it up and down, the number is set.
- Press the **MENU** button to exit from the menu.

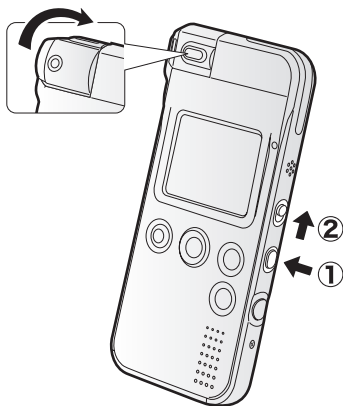
■ Initial Use

The clock is not set when shipping. When you turn the power on, the clock setting screen appears. Adjust the time here.

- If you do not set the clock here, the clock is automatically set to “January 1st, 2000 0:00”.
- You can set the year from 2000 to 2099.
- When you select **Display style** from **Clock set** in step 1, you can choose the indication style from the following. (e.g. September 1st, 2003 PM12:00)
 - [Y/M/D]:2003/9/1 12:00
 - [D/M/Y]:1/9/2003 12:00
 - [M/D/Y]:Sep/1/2003 12:00PM
- **When the fully charged battery is inserted in the camera for 1 hour or more, the clock setting is stored in the camera for about 10 hours even after the battery is removed.** (It is stored for about a maximum of 3 months according to the time when the battery is inserted. If a battery which is not fully charged is inserted, time may become shorter.)
However, the clock setting is cancelled if more time has passed without the battery inserted. In this case, please set the date/time again.

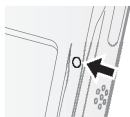
Taking a Picture (Still Picture)


1



Turn the power on. ①

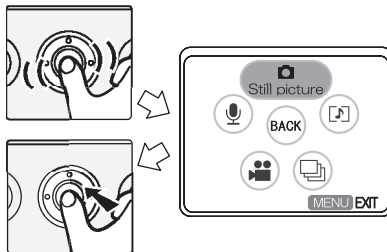
- The power/card access lamp is lit in red.



Switch to the recording mode [].

②

2



Access the menu. (P17)

Select **Still picture** from **REC mode**

[  ].

3



Press the shutter button to take a picture.

■ Self-Recording



1

Turn the lens.

- Do not touch the lens.

2

Press the screen reversal button to reverse a picture.

- If you take a picture without pressing the button, the picture is displayed upside down.

3

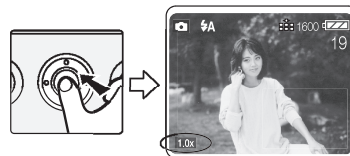
Take a picture.

- The recorded picture is horizontally reversed.
- You can take reverse the picture only in still picture mode.
- The flash setting is fixed to **Flash off**.

■ Digital zoom

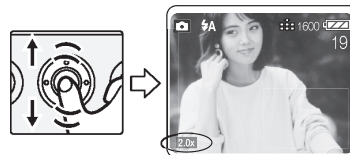
You can play back the picture enlarging it up to 4 times.

1



Press the jog ball.

2



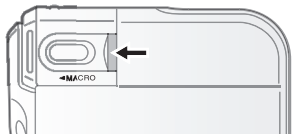
Roll the jog ball up and down to set the zoom magnification.

- Press the jog ball again to cancel the digital zoom.
- The more the picture is enlarged, the more the picture quality is deteriorated.
- You can zoom only in still picture mode.

Taking a Picture (Still Picture) (Continued)

■ Macro

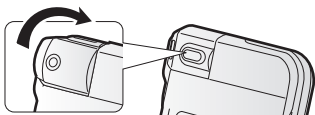
Slide the Macro switch to left side to take pictures of the subjects at a distance of about 0.33 feet (10 cm).



- If you slide the Macro switch to the left but the subject is further away than 0.33 feet (10 cm), you cannot focus on the subject sharply.

■ When the lens is facing down

Rotate the lens to prepare for taking pictures.



- At purchase, the lens is facing down.

■ How to hold the camera



■ When taking a horizontal picture

It is convenient to use the shutter button on the side of the camera.



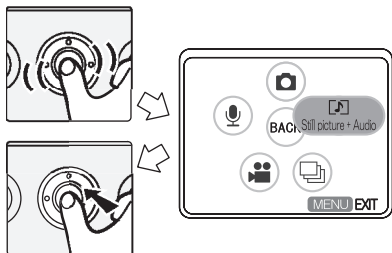
- Be careful not to touch the lens or flash when taking pictures using the shutter button on the side of the camera.




- Distances for optimum focus
Normal: About 1.65 feet (50 cm) - ∞
Macro: About 0.33 feet (10 cm)
- The brightness of the LCD monitor may differ from the actual recorded image. It's important to note the following points.
 1. The factory default setting for LCD brightness and color will generally display an image closest to the actual photo.
 2. Taking a picture in very dark places, using long exposure times, will produce a photo that is somewhat brighter than the image displayed on the LCD monitor.
 3. Any adjustment of LCD color or brightness will not affect the actual photo.
- When you press the shutter button, be careful not to shake the camera.
- When taking the picture from a distance, it is more convenient to use the shutter button on the remote controller.



Recording Still Picture with Audio

1



Access the menu in the recording mode. (P17)
Select **Still picture + Audio** from
REC mode [  ].

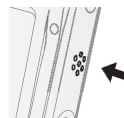
2



Take a picture.

- You can record audio for about 10 seconds. (The recording is automatically stopped.)
- You can also stop recording of the audio by pressing the shutter button within 10 seconds. You cannot stop recording within 2 seconds after recording has started.

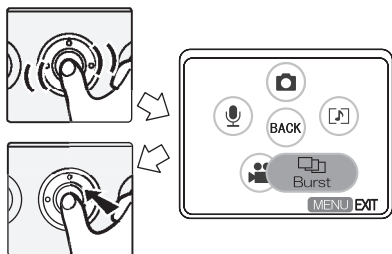
- You do not have to keep the shutter button pressed.
- The audio is recorded with the microphone on this unit. Do not cover it with your finger.



- **Auto review** (P44) does not work in this mode.
- Be careful not to touch the jog ball or any other buttons. The noise may be recorded.
- When recording still pictures with audio, the audio content will use an additional small amount of memory. This may result in a slight reduction in the number of photos your SD card can store.

Taking Pictures in Burst Mode

1



Access the menu in the recording mode. (P17)

Select **Burst** from **REC mode**

[  ].

2



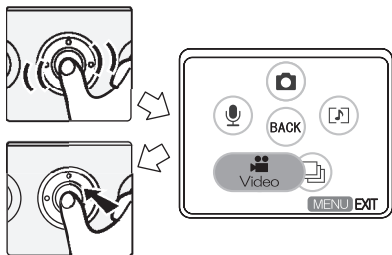
Take a picture.

Burst speed	3 frames/sec.
Burst number	Max. 3 frames

- **Flash** setting is fixed to **Flash off**.
- **Self timer** (P40) does not work in this mode.
- **Auto review** does not work in this mode.

Recording Motion Images

1



Access the menu in the recording mode. (P17)

Select **Video** from **REC mode**

[  ].

2



Start recording.

- ● this symbol is displayed.
- The audio recording starts simultaneously from the microphone. (The audio is recorded with the microphone on this unit.)
- You can record up to about 60 seconds.

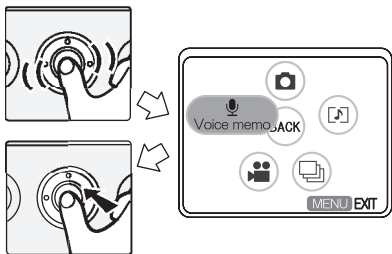
Stop recording.

- □ this symbol is displayed.
- If the memory of the card becomes full during the recording, the recording is stopped automatically.

- The remaining time displayed on the LCD monitor is an approximation.
- When the motion image recorded with this unit is played back on other equipment, the quality of pictures and sounds may be deteriorated or pictures may not be able to be played back.
- When setting **REC mode** to **Video**
 - **Flash** setting is fixed to **Flash off**.
 - **Digital zoom** does not work in this mode.
 - **Night mode** (P44) does not work in this mode.
 - **Auto review** does not work in this mode.
 - The picture size is fixed to 320×240 pixels.
 - You cannot use the Screen Reversal Button/HOLD Button.
- Be careful not to touch the jog ball or any other buttons. The noise may be recorded.
- When the remaining time is lower than 1 minute, R 00m00s is displayed in red.

Recording Voice

1




Access the menu in the recording mode. (P17)

Select **Voice memo** from **REC mode** [  ].


2



Start recording.

-  this symbol is displayed.
- The audio is recorded from the microphone on this unit.
- The LCD monitor is turned off within about 5 seconds after recording has started. Roll the jog ball gently to turn it on.

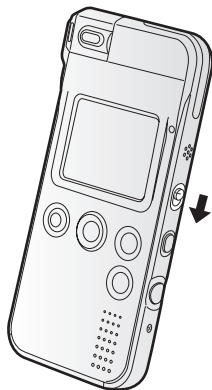
Stop recording.


- The LCD monitor is turned on again.
-  this symbol is displayed.
- You cannot stop recording within 2 seconds after recording has started.
- If the memory of the card becomes full during the recording, the recording is stopped automatically.

- The remaining time displayed on the LCD monitor is an approximation.
- Recording could suddenly stop when recording voice depending on the brand of card.
- The audio recorded with this unit cannot be played back by other equipment.
- Be careful not to touch the jog ball or any other buttons. The noise may be recorded.

Playing Back Still Pictures

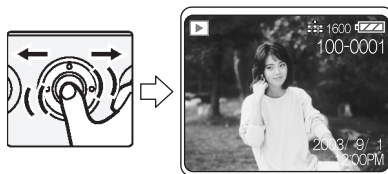
1



Switch to the playback mode [].

- The file recorded last is displayed.

2



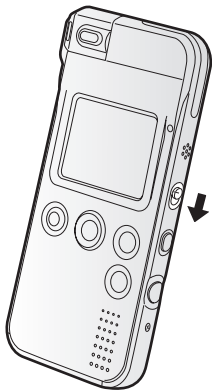
Select the still pictures.

- When rolling the jog ball to the left, the previous picture is displayed. When rolling the jog ball to the right, the next picture is displayed.

- This unit complies with DCF standards (Design rule for Camera File system) established by the Japan Electronics and Information Technology Industries Association (JEITA).
- If you change the folder name or the file name of a picture on your PC, the picture may not be played back.
- The file format that can be played back with this unit is JPEG. (There are also pictures that cannot be played back in JPEG format.)
- When the still picture recorded with other equipment is played back on this unit, the following may occur.
 - The quality of pictures may be deteriorated.
 - The picture cannot be played back.
 - The file size may not be displayed.

Playing Back Still Picture with Audio

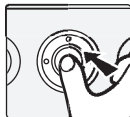
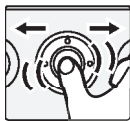
1





Switch to the playback mode [].

- The file recorded last is displayed.

2



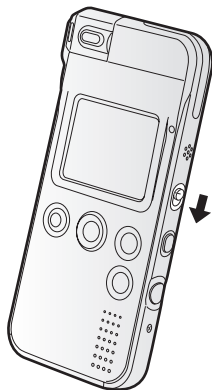
Select the picture with the audio icon [] and press the jog ball to play back the audio.

-  this symbol is displayed.
- To adjust the volume, refer to P30.

- The still picture with audio recorded with other equipment cannot be played back by this unit.

Playing Back Motion Images

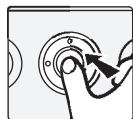
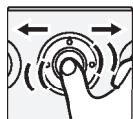
1



Switch to the playback mode [▶].

- The file recorded last is displayed.

2



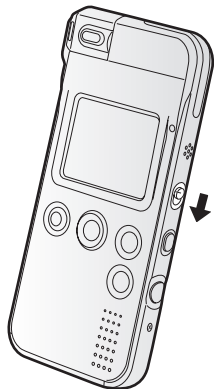
Select the picture with the motion image icon [▶] and press the jog ball to play back the motion image.

- ▶ this symbol is displayed.
- During playback, the motion image stops when pressing the jog ball. Press it again to play back.
- You cannot use fast-forward or fast-rewind.
- To adjust the volume, refer to P30.
- After finishing playback, the motion image stops at the beginning of the file.

- The file format which can be played back on this unit is QuickTime Motion JPEG.
- The QuickTime Motion JPEG files recorded by PC or other equipment may not be played back.
- When the motion image recorded with other equipment is played back on this unit, the quality of pictures may be deteriorated or pictures may not be able to be played back.

Playing Back Voice

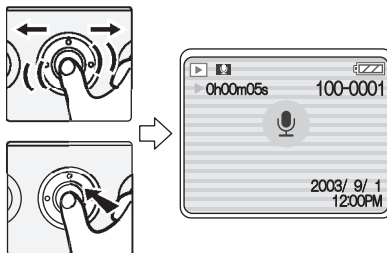
1



Switch to the playback mode [▶].

- The file recorded last is displayed.

2

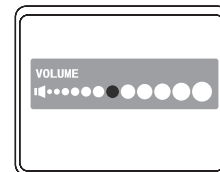


Select the picture with the voice icon [U] and press the jog ball to play back the voice.

- ▶ this symbol is displayed.
- During playback, the motion image stops when pressing the jog ball. Press it again to playback.
- You cannot use fast-forward or fast-rewind.
- After finishing playback, the audio stops at the beginning of the file.
- The LCD monitor is turned off within about 5 seconds after recording has

started. Roll the jog ball gently to turn it on.

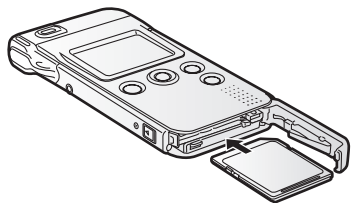
■ Adjusting the volume



- You can adjust the volume on the **Setup** menu (P17, 18). Turn the jog ball right and left to adjust the volume.
- The volume adjustment screen also appears when pressing the **MENU** button during playback.
- If the volume adjustment screen is not operated for a while after adjustment, it will automatically disappear.
- You can also adjust the volume on the remote controller. (P32)

Playing Back Music

1

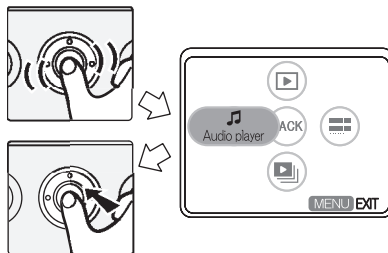


Insert the card which includes music files.

Connect the remote controller and the stereo earphones to this unit. (P9)

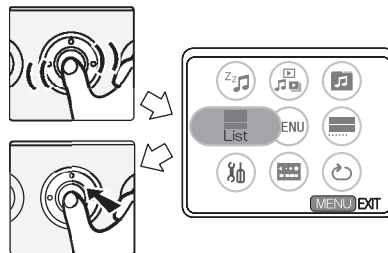
- The MPEG2-AAC files, MP3 files or WMA files recorded with SD-Jukebox Ver.4 (supplied) can be played. (Depending on the quality of the files, they may not be played even if they are recorded under MPEG2-AAC, MP3 or WMA format.)
- This device supports MPEG2-AAC files, MP3 and WMA file formats. The files must be recorded to this device using the SD Jukebox software that comes with SV-AS10. Files obtained or created by other means, copied to the SD card, will not play on this unit.

2



Access the menu in the playback mode. (P17)
Select **Audio player** from **Play mode** [▶ 🎵 📄].

3

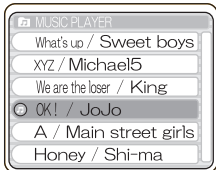
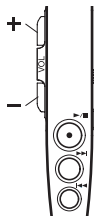


Select **List** from the menu.

- When you do not select the List, the music is played back from the track displayed.

Playing Back Music (Continued)

4



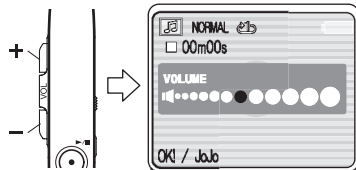
■ With the remote controller
Select the file and play it back.

- ▶: Playback
- ■: Stop
- ◀◀, ▶▶: Index search
(Press the button gently)
- ◀◀◀, ▶▶▶: fast-rewind/forward
(Keep pressing the button)
 - You can fast-forward or fast-rewind in 1 track.

■ With this unit
Roll the jog ball up and down to select the file and play it back.

- Playback Press the jog ball. (Stop):
- Index search: Roll the jog ball right and left.

■ Adjusting the volume using Remote Controller



- Turn up the volume with +, turn down the volume with -.
- If the volume adjustment screen is not operated for a while after adjustment, it will automatically disappear.

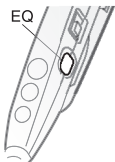
■ Saving power consumption (Power save)

Select **Power save** [♪:2] from the menu in **Audio player** mode and then select **ON**.

If you operate nothing after the setting, the LCD monitor is turned off in about 5 seconds.

- If you turn the LCD monitor on again, operate the button of this unit (except for the jog ball and the power button).
- If you want to cancel the power save mode, select **OFF** from **Power save**.

■ Switching the sound quality (EQ) using Remote Controller



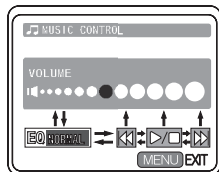
The indication changes as follows each time you press the Equalizer [EQ] button.

NORMAL → S-XBS1 → S-XBS2 →
TRAIN → NORMAL

- **NORMAL:** The sound quality is normal.
- **S-XBS1:** The audio sounds lower and heavier.
- **S-XBS2:** The audio sounds even lower and heavier than when in S-XBS1.
- **TRAIN:** The audio sounds soft and will not be heard by those around you.

■ Controller

Select **Controller** [] from the menu when in **Audio player** mode and then roll the jog ball to adjust the volume and switch the sound quality. You can also select Playback, Stop, Index search.



- **Volume:** Roll the jog ball right and left to adjust the volume.
- **Sound quality (EQ):** Press the jog ball to switch the sound quality.
- **Operation:** Press the jog ball to operate playback (Stop), Index search.

■ Playing back repeatedly (Repeat play)


Select **Repeat play** [] from the menu in **Audio player** mode and then select the desired setting.

- **OFF:** Does not repeat playback.
- **Single song repeat:** Repeats the music being played only.
- **All song repeat:** Repeats all music tracks.
(When selecting a playlist, all music in the playlist is played)

Playing Back Music (Continued)

■ Selecting playlist

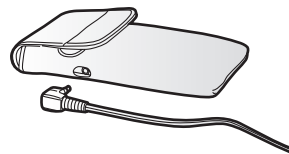
You can select and play back the playlist set on SD-Jukebox Ver.4 (supplied).

Select **Playlist** [] from the menu in **Audio player** mode and then select the desired playlist.

- When you select the item on the top of the list, all music files recorded are played back.

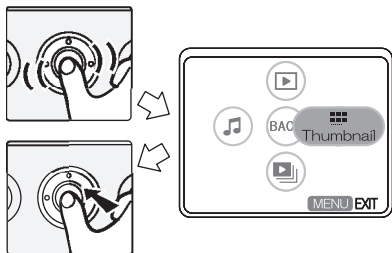
- For details about recording of music file and playlist, refer to the operating instructions of SD-Jukebox Ver.4 (supplied).
- When adding picture files to a music file on SD-Jukebox Ver.4, the first added picture is displayed as a thumbnail of the music file.
- This unit is not capable of recording and deleting music.
- Using its formatting function, all the data on the card can be deleted.
- A title and an artist name may not be displayed in some cases.
- When pressing Screen Reversal Button/HOLD Button for about 2 seconds or more, HOLD appears on the display and then the button operations of this unit (except for the power button) are disabled. When you repeat the same procedure, the button operations are enabled. When you turn the power on again, the button operations are enabled.

- The remote controller can be connected even when using the carrying case (supplied).



Multi File Playback (Thumbnail display)

1



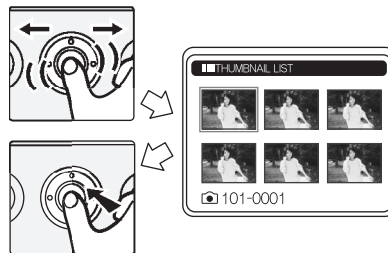
Access the menu in the playback mode. (P17)
Select **Thumbnail** from **Play mode** [▶ 🎵 📷].

Select the type of the file.

- Select the item from the table on the right.
- 6 thumbnails appear on the LCD monitor.

Item	Details of Setting
All files [📄 ALL]	All kinds of files (except for music files) are displayed as thumbnails.
Still picture [📷]	Still picture files are displayed as thumbnails.
* Mark [📄 * 🎵]	Files with * mark (P46) are displayed as thumbnails.
DPOF print [📄 🖨]	Files with DPOF printing (P48) are displayed as thumbnails.
★ Mark [📄 ★]	Files with ★ mark (P46) are displayed as thumbnails.
Video [📄 🎬]	Movie files are displayed as thumbnails.

2

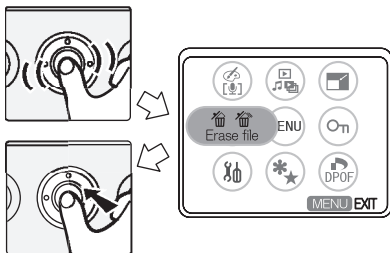


Select the file and press the jog ball.

- The selected file appears on the LCD monitor.
- When displaying the music file as thumbnail, select **Audio player** from **Play mode** and then select **Thumbnail**.

Erasing Files

1



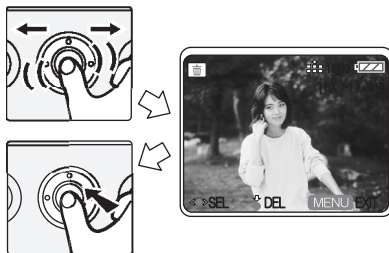
Access the menu in the playback mode. (P17)

Select the desired setting from **Erase file**.

- Select the item from the following items.

Item	Details of Setting
Erase one [𠮟]	Erases only 1 file.
Erase all [𠮟ALL]	Erases all files (except for music files) in a card.

2



Select the file. (Only when selecting **Erase one**)

Select **Yes** on the confirmation

screen and then press the jog ball.

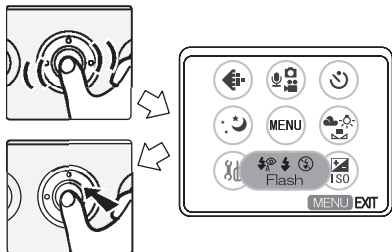
- Once deleted, pictures cannot be recovered. Check the picture before deleting.

- You cannot delete protected files. Cancel the protection before deleting files. (P50)
- Be sure to delete audio files with this unit only.
- When you delete files on this unit, the DPOF information set on other equipment can be also deleted.
- Still pictures which cannot be played on this unit (other than JPEG) can be deleted.
- Do not turn the power off or remove the card when deleting.
- When you delete many files at the same time, use a fully charged battery.
- Even if selecting **Erase all**, locked files (P50) or out of DCF standards are not deleted.
- Still pictures can be deleted during auto review in recording mode. (P44)

Setting Flash

Confirm that the lens is facing the front. Otherwise, the flash does not fire.

1



Access the menu in the recording mode. (P17)


Select the desired item from **Flash**.

- Select the item from the table on the right.

Item	Details of Setting
Auto [⚡]	The flash fires automatically according to the lighting conditions.
Reduced red eye [⚡ A ⦿]	<p>The flash fires automatically according to the recording situation. It reduces the red eye phenomenon (When a subject's eyes appear red in flash light).</p> <p>Use it when you take pictures of people or animals in low lighting conditions.</p>
Flash off [⦿]	<p>Even in dark places, the flash does not fire.</p> <p>Use it when you take pictures in places where using flash is not allowed.</p>

Flash on [⚡]	The flash fires every time a picture is captured.
	Use it when your subject is back-lit or under fluorescent light.

Setting Flash (Continued)

- When setting **REC mode** to **Video** or **Burst**, the flash setting is fixed to **Flash off**.
- When rotating the lens, an orange flash off mark [] appears. When setting to **Auto** or **Reduced red eye** in the bright place, flash off mark appears.

When using the flash,

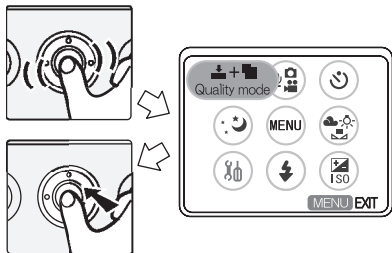
- Do not stare at the flash light from close proximity.
- Do not use the flash if taking a picture in the close proximity of the subject. The amount of light may overexpose the image causing color or image degradation.
- Do not cover the flash with your fingers.

- The available flash range is about 1.64 feet (50 cm) - 3.28 feet (1 m). If the subject is too close to the camera when taking a picture, the exposure value may not be set properly and the picture may appear washed out.
- The flash indication blinks red during charge. You cannot take a picture even when you press the shutter button.
- When taking a picture with the flash, the white balance will be automatically adjusted, but the white balance may not be properly adjusted when the flash light is insufficient.
- When taking a picture with the flash after setting the white balance manually (P42), the white balance may not be properly adjusted. We recommend setting the white balance to **Auto** when using the flash. (P41)

Changing the Quality and Size of Picture

You can change quality and size of a picture according to its use (e.g. printing, e-mail, etc.).

1



Access the menu in the recording mode. (P17)
Select the desired item from **Quality mode**.

Quality	Size
Fine [■■■]	1600×1200
	1280×960
	640×480
Normal [■■]	1600×1200
	1280×960
	640×480

2

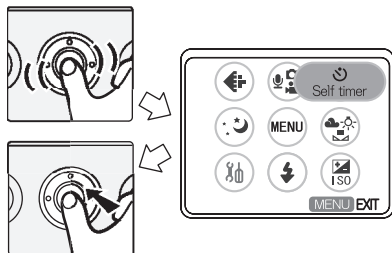


Take a picture.

- **Fine** gives priority to picture quality to record high quality pictures.
- **Normal** gives priority to the number of recordable pictures and records standard quality pictures.
- The smaller the picture size you select, the more pictures you can store on the card. In addition, a small data volume allows you to attach the picture to an e-mail or post it on a website.
- If you select a larger picture size, the printed picture will be clearer, especially with larger sized prints.
- When setting **REC mode** to **Video**, you cannot change the quality and size of picture. (The picture size is fixed to 320×240 pixels.)
- Pictures may be shown in mosaic-like pattern depending on the scene.

Taking Pictures with the Self Timer

1



Access the menu in the recording mode. (P17)
Select **ON** from **Self timer**.

2



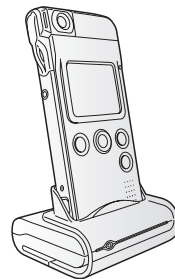
Take a picture.

- The self timer lamp blinks.



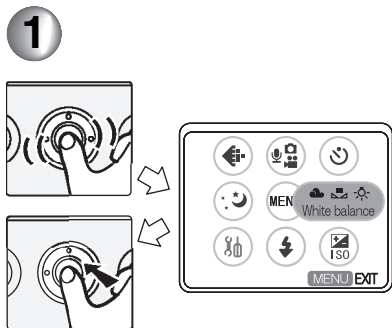
- This unit start taking a picture in about 10 seconds.

- If you press the **MENU** button while the self timer is activated, the self timer is cancelled.
- When setting **REC mode** to **Video** or **Burst**, you cannot set the self timer.
- Use USB cradle when taking pictures with the self timer.



Setting the White Balance

Use this function to adjust the whiteness when a recorded scene looks bluish or reddish.



Access the menu in the recording mode. (P17)

Select the desired item from **White balance**.

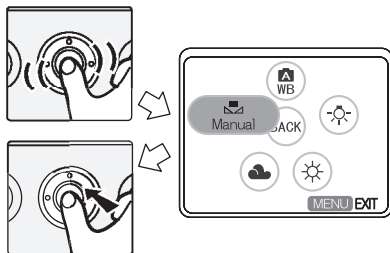
- Select the item from the table on the right.

Item	Details of Setting
Auto [WB]	It is designed to automatically adjust the camera to produce natural tones. In most situations it works fine. In some situations where several different types of lighting are present, enhanced performance can be achieved by setting the white balance manually.
Incandescent []	For recording under incandescent lighting
Daylight []	For recording outdoors on a bright day
Cloudy []	For recording under a cloudy and shady sky
Manual []	For manual setting (Read the following page where the manual setting is explained in detail)

- **The setting of the white balance is reflected to other REC mode. And it is retained even if the power is turned off. When turning the power on again in different lighting conditions, set the white balance again.**
- When taking a picture with the flash, the white balance will be automatically adjusted, but the white balance may not be properly adjusted when the flash light is insufficient.
- The white balance may not be adjusted correctly in dark places.
- Adjustment of white balance in Manual (P42) is effective under the following conditions.
 - When recording under reddish lighting (halogen light bulb, incandescent light bulb, etc.).
 - When recording under multiple light sources.
 - When recording a picture of mono-tone color.

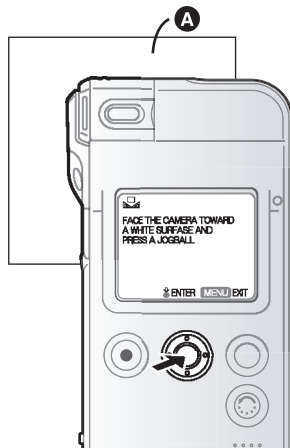
Setting the White Balance (Manual)

1



Access the menu in the recording mode. (P17)
Select **Manual** from **White balance**.

2



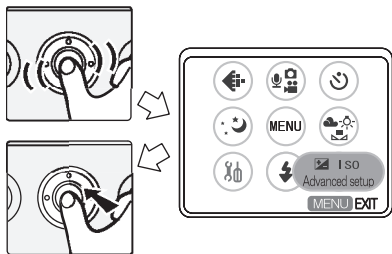
Aim the unit at a sheet of white paper **A** or similar object so that it completely fills the frame to white on the LCD monitor and press the jog ball.

- White balance is set.

- When taking a picture with the flash after setting the white balance manually, the white balance may not be properly adjusted. We recommend setting the white balance to **Auto** when using the flash.

Setting the Application Menu

1



Access the menu in the recording mode. (P17)

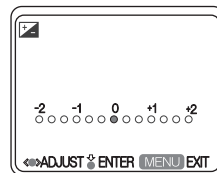
Select the desired item from **Advanced setup**.

- Select the item from the table on the right.

■ Exposure Compensation []

In some situations the illumination of the background and your subject may differ. Auto exposure systems may not always calculate the exposure correctly. This feature allows you to manually compensate the exposure.

Item	Details of Setting
EV auto [AUTO]	The compensation is automatically adjusted according to the brightness of the subject and the background.
EV manual [SET]	You can compensate from -2 EV to +2 EV with 1/3 EV step by rotating the jog ball. Compensating to + side brightens the picture and to - side darkens it.




- When compensating the exposure, the brightness of the LCD monitor may differ from that of the recorded pictures. Check the brightness by playing back the picture.

Setting the Application Menu (Continued)

■ ISO Sensitivity [ISO]

ISO is the sensitivity to light. It is convenient to take pictures without the flash.

Item	Details of Setting
Auto [ ISO]	The ISO setting is automatically increased according to the brightness. If the picture is still dim, use the flash.
ISO 100/ ISO 200/ ISO 400	Increasing the ISO value will make the camera more sensitive in low light.

- When you take a picture in high ISO sensitivity, picture noise appears and the picture quality is deteriorated.

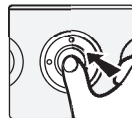
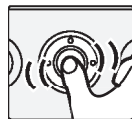
■ Auto Review []

When setting the **Auto review** to **ON**, you can check the picture for about 2 seconds after taking the picture. You can delete the picture by pressing the jog ball and selecting **Yes** on the confirmation screen.

- Auto review is not activated for the following materials.
 - **Video**
 - **Burst**
 - **Still Picture with Audio**

■ Night mode

1



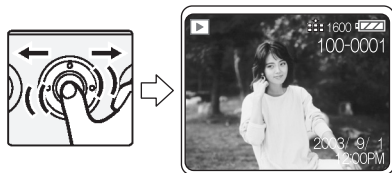
Access the menu in the recording mode. (P17)

Select **ON** from **Night mode**.

- While using Night mode, the length of the exposure is increased to allow more of the natural nighttime lighting to be seen. Since the exposure duration is increased, it is highly recommended that you steady this unit against some stationary object to minimize any motion blur that can occur.
- When the **REC mode** is set to **Video**, you cannot select the **Night mode**.
- When taking pictures outdoors at night, be careful of camera shake.
- You can take a picture of people with the night view background using the flash.

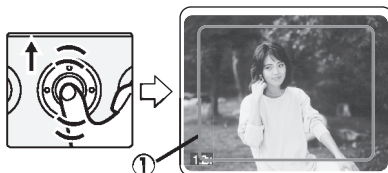
Using the Playback Zoom

1



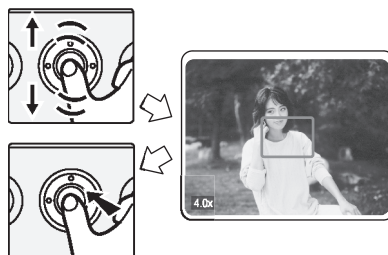
Select the picture in the playback mode. (P27)

2



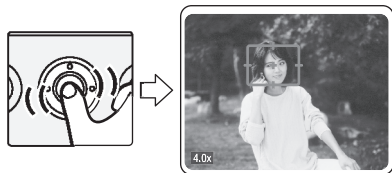
Roll the jog ball upwards to display the target zoom frame ①.

3



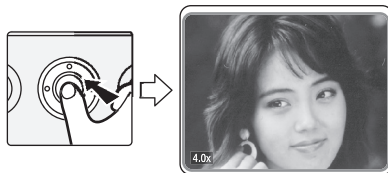
Set the zoom magnification.

4



Move the target zoom frame to the position to magnify.

5



Press the jog ball.

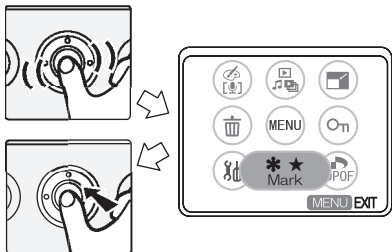
- The picture in the target zoom frame is enlarged on the whole of LCD monitor.

- After enlarging the picture, The magnification is restored by pressing the jog ball.
- You can playback the picture enlarging up to 10 times.
- The more the picture is enlarged, the more the picture quality is deteriorated.
- You can cancel the playback zoom by pressing the **MENU** button.
- Playback zoom may not be done on a picture recorded with other equipment.

Marking the Picture as a “Favorite”

Pictures registered as a Favorite can be displayed as thumbnails (P35) or watched on the Slide show (P47).

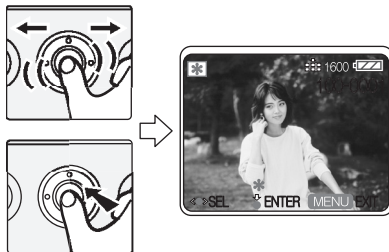
1



Access the menu in the playback mode. (P17)
Select the desirable setting from **Mark**.

Item	Details of Setting
★Select/Unselect [□★]	You can register the picture as favorite. 999 files can be registered.
Select/Unselect [□+♪]	You can attach the Background music to the picture. 36 files can be registered.

2



Select the picture and press the jog ball. (Only when selecting **★**, ***** **Select/Unselect**)

- **★** or ***** appears on the LCD monitor. If you select the picture again, the marking is cancelled.
- Press the **MENU** button to exit from the menu.

■ Attaching the Background music

After selecting *** Select/Unselect** in step 1, select **Yes** in Background music select screen.

If you are inserting the card with music files, the list of the Background music appears. Select 1 Background music and press the jog ball.

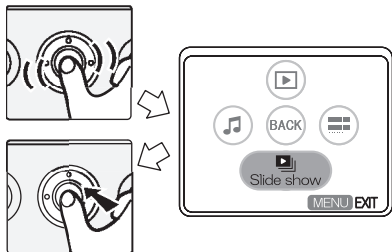
■ Cancelling all marks

Select the mark [**★ R**] [***+♪ R**] to be deleted in step 1. All pictures registered in **★** or ***** are cancelled.

Playing back Still Pictures on the Slide Show

Sequentially playing back the pictures allows you to tell a story using a Slide Show feature.

1



Access the menu in the playback mode. (P17)

Select **Slide show** from **Play mode**

[> | 🎵 | 🖼️].

Select the desired item from **Slide show**.

- Select the item from the table on the right.

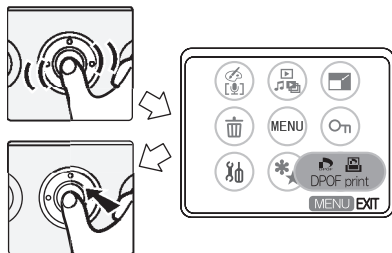
Item	Details of Setting
Slide show [🖼️ ALL]	All the pictures are played back for about 5 seconds per 1 picture in the order of the file number.
*Slide show [🖼️ + 🎵]	The pictures set on *Mark are played back for about 5 seconds per 1 picture. Background music can be attached. (P46)
SD slide show [🖼️ SD]	The pictures set by SD Viewer (supplied software on the CD-ROM) are played back for about 5 seconds per 1 picture.
★Slide show [🖼️]	The pictures set on ★Mark are played back for about 5 seconds per 1 picture.

- You cannot watch a slide show of the motion image.
- You can stop slide show when pressing the jog ball during slide show.
- You can adjust the volume with the volume button on the remote controller during the ***Mark** slide show with Background music. (The volume control screen does not appear. You cannot adjust the volume by keeping the button pressed.)
- Still pictures recorded with other equipment may not be displayed on the Slide show or they may take time to be displayed.
- It may take time to display the ***Mark** slide show with Background music. But this is not a malfunction.

Setting the Still Pictures to be Printed (DPOF print)

DPOF allows you to select which pictures you would like to print and how many of each you would like.

1

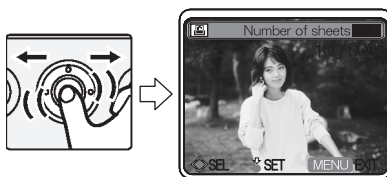


Access the menu in the playback mode. (P17)

Select the desired item from **DPOF print**.

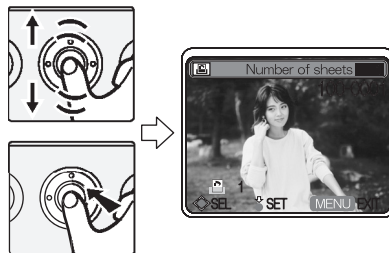
Item	Details of Setting
Single print [<input type="checkbox"/>]:	Set DPOF printing for each files.
All prints [ALL]:	Set DPOF printing for all files in the card.
Print date [<input type="checkbox"/> DATE]	Refer to P49.

2



Select the picture. (Only when selecting **Single print**)

3



Select the number of printing and press the jog ball.

- You can set the number up to 999.
- When setting to 0, DPOF setting is cancelled.

■ About printing with date

When selecting **ON** from **Print date** of Step 1, you can print the picture with the date and time.

- All pictures will print with the date. You cannot choose which pictures are printed without the date when it is set to **ON**.
- You cannot print the date on the file without setting of the recording date.
- The date may be cut or not be displayed depending on the printer.
- When selecting **OFF**, the setting of all pictures is cancelled.

■ About DPOF

DPOF is the abbreviation for **Digital Print Order Format**. This feature allows you to designate which pictures will be printed. Some photo printers as well as many commercial photo-processing companies support DPOF.

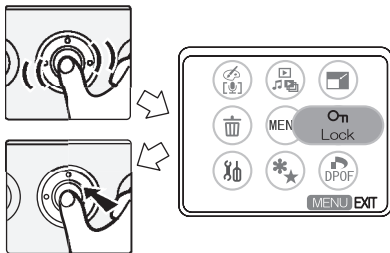
If the DPOF setting is determined, you do not need to indicate which or how many pictures are to be printed.

- If the file is not based on the **DCF** standard, the DPOF setting cannot be designated.
DCF is the abbreviation for **Design rule for Camera File system**, stipulated by **JEITA (Japan Electronics and Information Technology Industries Association)**.
- When using the DPOF feature, this unit will overwrite any previous DPOF settings made by other products.
- When the message of **CARD FULL** is displayed, delete the unnecessary files and designate DPOF again.
- When designating or cancelling many files, use a fully charged battery or AC adaptor and USB cradle.
- DPOF setting may not be added on a picture recorded with other equipment.

Preventing Accidental Erasure of Files (Lock setting)

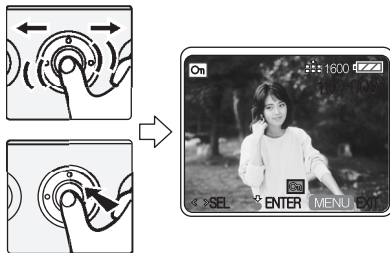
To prevent accidentally erasing precious photos, we strongly recommend using this feature.

1



Access the menu in the playback mode. (P17)
Select **Lock/Unlock** from **Lock**.

2



Select the file and press the jog ball.

- **[On]** is displayed on the LCD monitor. The setting is cancelled when selecting the picture again.

■ To cancel all locked files

When you select **Unlock all** in step 1 and then select **Yes** on the confirmation screen, all the lock settings are cancelled.

- Formatting the card will delete all the data on the card, even if you protect the files in this procedure. (P18)
- You cannot delete the locked files. If you want to delete the file, cancel the lock setting first.
- The lock setting may not be effective in other products.
- Sliding the SD Memory Card Write-Protect switch to **LOCK** prevents the picture from deletion even if the protection is not set. (P16)
- Audio dubbing, resizing and altering the color cannot be done with locked pictures. (P51, 52, 53)

Adding Audio to the Still Picture (Audio dubbing)


This is an enjoyable function to add a narration or sound to still pictures.

1



Select the desired picture and then access the menu in the playback mode. (P17)

Select **Add audio** from **Arrange** [].


Select **Recording** [ REC] from **Add audio**.

2



Press the shutter button to start.

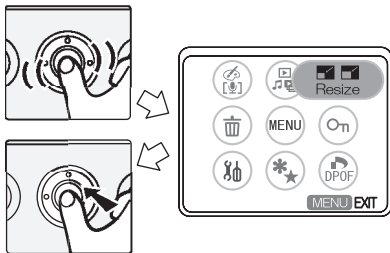
- When audio has already been recorded, the message is displayed. Select **Yes** to start recording. The audio that has already been recorded will be overwritten. Select **No** to cancel the recording.

- When you delete the audio added or already included in the picture, select **Erase** [] on Step 1. And then select **Yes**.
- You can record up to a 10-second narration to a recorded picture.
- You can stop recording when pressing the shutter button again.
- The audio dubbing cannot be used with the motion images or locked pictures.
- Be careful not to touch the jog ball or any other buttons. The noise may be recorded.
- The audio you add will use a small amount of additional memory. This may slightly decrease the total amount of pictures that can be stored on the SD Memory Card.

Resizing the Still Picture

This function is useful when you want to reduce the volume of still pictures for e-mail or website.

1

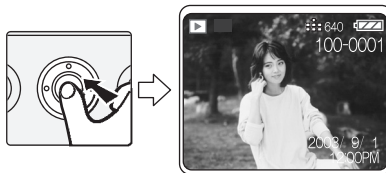


Select the desired picture and then access the menu in the playback mode. (P17)

Select the desirable size from **Resize**.

- 640×480
- 320×240

2



Press the jog ball to resize it.

- Confirm the message and select **Yes** or **No**.

When selecting **Yes**, the source picture is deleted.

When selecting **No**, the source picture is not deleted.

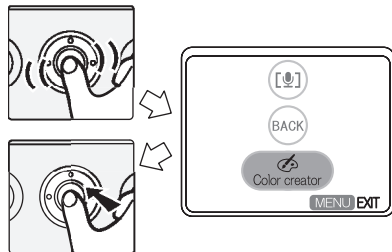
- You cannot retrieve the original state after resizing pictures.

- It is not possible to resize pictures in a size lower than/equal to 320×240 or with an aspect ratio that is not 4:3.
- It is not possible to resize motion images, still pictures with audio or a locked picture.
- It may not be possible to resize pictures recorded with other equipment.
- The quality of resized picture may be deteriorated.
- The date and time when a picture is resized is recorded.

Altering the Color of the Still Picture (Color Creator)

You can add a nostalgic effect to still pictures with this function.

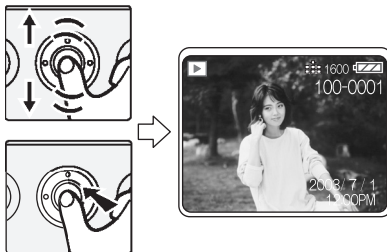
1



Select the desired picture and then access the menu in the playback mode. (P17)

Select **Color creator** from **Arrange** [].

2



Select the effect (Monochrome, Sepia) and press the jog ball.

- Monochrome: The picture turns black and white.
- Sepia: The picture turns brownish/red to create an aged look.
- Confirm the message and select **Yes** or **No**.
When selecting **Yes**, the source picture is deleted.
When selecting **No**, the source picture is not deleted.

- Motion images, still pictures with audio or Locked picture cannot be altered.
- Pictures recorded with other equipment may not be altered.
- The quality of altered picture may be deteriorated.
- The date and time when a picture has been altered is recorded.

Connecting to PC

■ Operating Environment

SD Viewer Ver.2.1	
OS	Windows 98SE, Windows Me, Windows 2000, Windows XP
CPU	Intel® Pentium® II 300 MHz or higher
RAM	64 MB or more (Windows 98SE, Me) (128 MB or more recommended) 128 MB or more (Windows 2000, XP) (256 MB or more recommended)
Display	High Color (16 bit) or more Desktop resolution of 800 × 600 pixels or more (True Color (24 bit) or more recommended) (1024 × 768 pixels or more recommended)
Free hard disk space	40 MB or more
Drive	CD-ROM drive - required to install this program
Interface	USB port

SD-Jukebox Ver.4	
OS	Windows 98SE, Windows Me, Windows 2000 SP2 or later, Windows XP
CPU	(Windows 98SE, Me) Intel® Pentium® II 333 MHz or higher (Windows 2000, XP) Intel® Pentium® II 500 MHz or higher
RAM	128 MB or more (Windows 98SE, Me) 256 MB or more (Windows 2000, XP)
Display	High Color (16 bit) or more Desktop resolution of 800 × 600 pixels or more (True Color (24 bit) or more recommended) (1024 × 768 pixels or more recommended)
Free hard disk space	100 MB or more
Necessary software	DirectX 8.1 or later
Sound	Creative Labs Sound Blaster 16 or compatible device
Drive	CD-ROM drive (required to install this program) / A CD-ROM drive capable of digital recording is required. Four-speed or higher is recommended. (Recording may not work properly with CD-ROM drives connected through an IEEE1394 or USB connection.)
Interface	USB port

- Even if the system requirements mentioned in these operating instructions are fulfilled, some personal computers cannot be used.
- This software cannot be used on Microsoft Windows 3.1, Windows 95, Windows 98, Windows NT and Macintosh.
- Operation on an upgraded OS is not guaranteed.
- Operation on an OS other than the one pre-installed is not guaranteed.
- Multi-CPU environment is not supported.
- Multi-boot environment is not supported.

■ Installing the USB driver (Only for Windows 98SE/Me)

Be sure to install the USB driver from the provided CD-ROM before connecting this unit to the PC. Close all software programs (even permanently resident software) running on Windows.

1

Insert the CD-ROM.

- The Set Up menu starts automatically.
- If the Set Up menu does not start automatically, double-click on the [Autorun.exe] from the CD-ROM.

2



Click on [USB Driver].

3

If the [Restarting Windows] dialog box appears, click on [Finish].

- After restarting the PC, installation of the driver will be finished.

- If you click on icons other than the USB driver, installation of the respective software begins.
- For details about how to use the supplied software, please refer to the Help for the respective software.
- When starting [SD Viewer], if a message stating that there is no supported Memory Card is displayed, confirm whether installation of the USB driver has been finished.

Connecting to PC (Continued)

■ Installing the SD Viewer

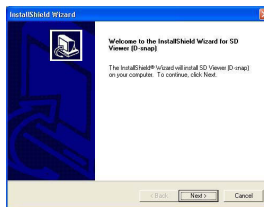
1



When the Set Up menu started, click on [SD Viewer Ver.2.1E]

- The Set Up menu starts automatically.
- If the Set Up menu does not start automatically, double click on the [Autorun.exe] from the CD-ROM.

2

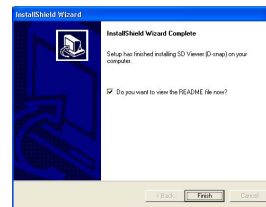


Click on [Next].

3

Carefully read End User Licence Agreement, and click on [I agree]. Then choose the target folder and click on [Next].

4



Click on [Finish].

- The installation of SD Viewer is completed.
- The "SD Viewer Font" and the "SD Viewer Edge Font" installed with SD Viewer are only used for SD Viewer. If they are used in other software, some characters may not be displayed.

■ Features of SD-Jukebox Ver.4

- Records high quality music onto an SD Memory Card that can be played back on this unit.
- Allows Playlists to be created containing your favorite tracks. (If a Playlist is selected, only the tracks in the Playlist are played back.)
- Allows a still picture to be associated with the music data.

■ Installing SD-Jukebox Ver.4

1

Insert the supplied CD-ROM into the personal computer's CD-ROM drive.

- The launcher for the installation is activated automatically.

2

Click [SD-Jukebox Ver.4].

- When [Welcome] screen appears, click [Next].
- If the confirmation whether you have the right to administrate the personal computer is displayed, click [OK] and continue with installation.

3

Read License Agreement carefully, and click [Yes], if you accept the terms of the agreement.

4

Enter your name and the serial No. described on the CD-ROM casing and click [Next].

5

Complete the installation according to the message.

- When the setup screen for the Media Format 7.1 is displayed, install the Media Format 7.1 according to the message.
- When the DirectX 8.1 setup screen appears, install it. (Failure to install DirectX 8.1 disables you from using SD-Jukebox Ver.4.)
- After rebooting the computer, the SD-Jukebox Ver.4 is enabled.

■ Uninstalling the software

1

Click on [Start] → [Control Panel], and select [Add/Remove Programs].

2

Select the software you want to uninstall and click on [Add/Remove].

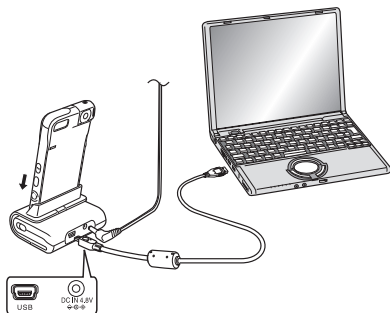
- Depending on the OS, the uninstallation procedure may vary. For details, please refer to operating instructions of the OS used.

Connecting to PC (Continued)

■ Connecting this unit to PC

When using Windows 98SE/Me, connect only after installing the driver. (P55)

Be sure to insert the battery and connect the AC adaptor.



1

Connect the USB cable and the AC adaptor to the USB cradle.

- Be sure to insert the AC adaptor in a outlet.

2

Insert the card in this unit. (P14)

3

Turn this unit on, and set to the playback mode.

4

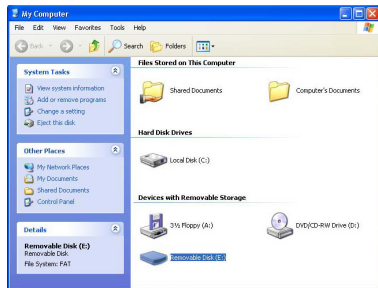
Attach this unit to the USB cradle.

- This unit turns to the USB connection mode.

- When the Power/Card Access Lamp of this unit is blinking, do not remove this unit from the USB cradle nor disconnect the USB cable. The software may not function correctly and the transmitting data may be damaged.
- Use the supplied USB cable only.
- Do not disconnect the AC adaptor from the PC during connection.
- When the USB connection mode (displayed as **PC ACCESSING**) is not canceled even if you turn the PC off, disconnect the USB cable.
- If the PC is in the Standby mode while connecting to the camera, the PC may not recognize the camera when recovering from the Standby mode. In this case, restart the PC.

- Checking that this unit is recognized correctly by the PC

1



Ensure that the [Removable Disk] is included in [My Computer].


- Drive name (E: etc.) varies with the PC being used.
- If this unit does not operate correctly, please check the connection again.

- Removing the USB connection cable safely

If the USB connection cable is removed or the power switched off while the PC is working, an error dialog box may appear. In such cases, click on [OK] to close the dialog box. To remove the USB connection cable without the error dialog box being displayed, proceed as follows.

1



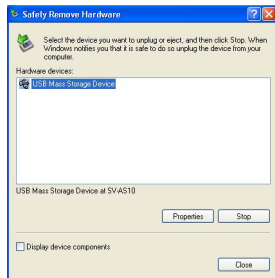
Double click  icon on the task tray.

- The Hardware removal dialog box appears.
- Depending on OS Windows 98SE, etc. the icon for safe removal may not be displayed in the task tray. (There will be no display depending on the set up of the OS)

Make sure that the Power/Card access lamp of this unit is off, then remove the cable.

Connecting to PC (Continued)

2



Click on [USB Mass Storage Device], and click on [Stop].

3



Confirm that the [USB Mass Storage Device] is selected, click on [OK].

4

Click on [OK].

- The USB connection cable can be safely removed.

Starting SD Viewer

- Thumbnail of the pictures in the Memory Card can be displayed.
- You can input the recorded date to the still pictures.
- Pictures in a memory card can be copied to a PC.
- You can create slide shows easily.
- You can change the brightness and the hue of the pictures, and add some characters to the pictures.
- You can print out pictures checking them on a display of a PC.

- Install the SD Viewer from the Set Up menu (P55) before starting. Before using for the first time, click on [Readme] from [Start] → [All Programs] → [Panasonic] → [SD Viewer (D-snap)], please read the supplementary explanation or updated information.

1



Select [Start] → [All Programs] → [Panasonic] → [SD Viewer (D-snap)] → [SD Viewer for DSC].

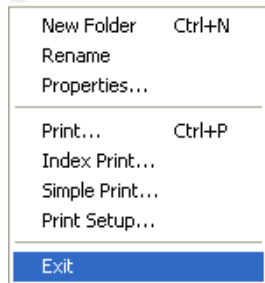
Or when the removable disc display appears after connecting, select [View all images] and then click on [OK].

Connecting to PC (Continued)

■ Closing the SD Viewer

1

File



Click on [File] → [Exit].

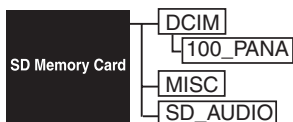
- It is also possible to close by clicking on the [X] in the top right-hand corner of the SD Viewer.

If the Memory card has been inserted, the pictures in the Memory card are displayed.

- If the Memory card is not inserted, this message “**There is no supported memory card**” is displayed. Click on [OK] to start the SD Viewer.
- It is also possible to start by double-clicking on the short cut icon on the desktop.
- Do not remove this unit from the USB cradle nor disconnect the USB cable when SD Viewer is in use. The software may not function correctly and the transmitting data may be damaged.

■ About data in the card

The following files are included in the folders on the card.



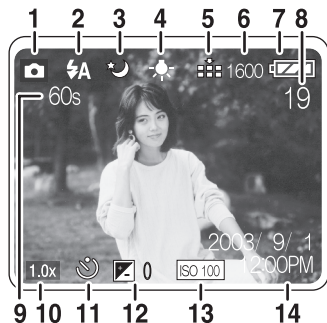
[DCIM] : Still pictures recorded under JPEG format (P1000001.JPG, etc.)
Motion image data, voice data recorded under MOV format (P1000001.MOV, V1000001.MOV, etc.)

[SD_AUDIO] : Music data (AOB001.SA1, etc.) recorded by SD audio PC recording software such as SD-Jukebox Ver.4 (supplied), etc.

- You can record up to 9999 pictures in the folders such as 100_PANA folder.
- The files in DPOF setting are recorded in MISC folder.
- Format the card with this unit or SD-Jukebox Ver.4.
- [SD_AUDIO] folder are set as hidden files. Therefore, they may not be displayed on the Explorer or [My Computer].
- If you recorded data not compatible with this unit on the PC, this unit cannot recognize the data.
- Do not delete the folders in the card on the PC. You may not be able to read the card with this unit.
- To read the PDF operating instructions, Adobe Acrobat Reader 5.0 or higher is needed. (It is included in the supplied CD-ROM.) If it is not installed in the PC used, double-click [AcroReader505_ENU.exe] in [Acrobat Reader] folder on the supplied CD-ROM and follow the displayed message to install it.
- To play motion images or voice memo, install QuickTime from the supplied CD-ROM.
- If malfunctions occur when playing back motion pictures or audio, uninstall Quicktime in the PC (P57), then reinstall QuickTime in the supplied CD-ROM before playing them. (However, some functions in QuickTime may be disabled.)
- When using SD Viewer, if you save still pictures with audio or voice memos recorded by this unit to PC and then copy them onto the SD Memory Card again, they may be recognized as motion image files. However, you can play back them as usual. If you edit files with a software other than SD Viewer, they may not be played on this unit.
- To create the music, install SD-Jukebox Ver.4. from the supplied CD-ROM.

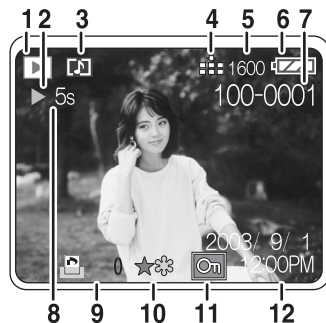
LCD Monitor Display

■ When taking pictures



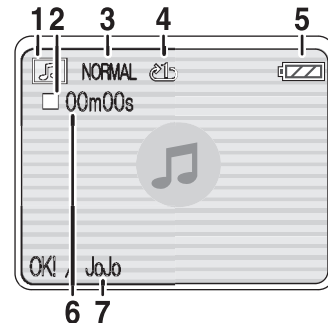
- 1 Recording mode
- 2 Flash mode
- 3 Night mode
- 4 White balance
- 5 Picture quality setting
- 6 Picture size
- 7 Battery remaining
- 8 Remaining pictures/time
- 9 Counter display
- 10 Digital zoom
- 11 Self timer mode
- 12 Exposure compensation
- 13 ISO Sensitivity
- 14 Date/Time (It is displayed for about 5 seconds after turning on the power or setting the clock.)

■ When playing back pictures



- 1 Playback mode
- 2 Stop/Play/Reading display [▶]
- 3 Still picture with audio/Motion image/Voice
- 4 Picture quality
- 5 Picture size
- 6 Battery remaining
- 7 Folder / File number
- 8 Counter display
- 9 No. of DPOF printing
- 10 ★* mark
- 11 Protected file
- 12 Recorded date and time

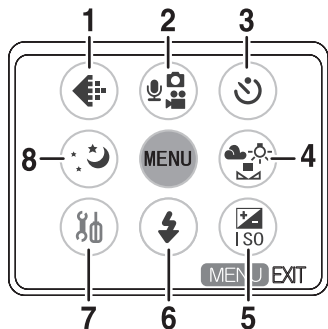
■ When playing back music



- 1 Audio player mode
- 2 Stop/Play/Fast-forward/Fast-rewind
- 3 Audio quality (EQ)
- 4 Repeat playback
- 5 Battery remaining
- 6 Playback time
- 7 Title/Artist name

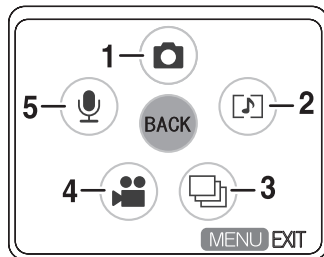
Menu Screen Display

■ Menu in the recording mode



- 1 Quality mode (P39)
 - 2 REC mode (Refer to next column)
 - 3 Self timer (P40)
 - 4 White balance (P41)
 - 5 Advanced setup (P43)
 - 6 Flash (P37)
 - 7 Setup (P18)
 - 8 Night mode (P44)
- Some items may not be displayed on the menu when recording except still pictures.

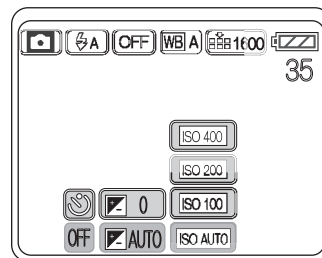
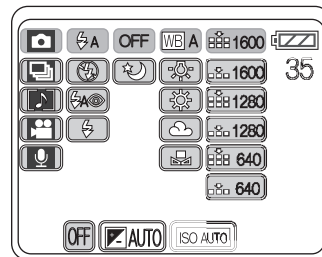
REC mode



- 1 Still picture (P20)
- 2 Still picture + Audio (P23)
- 3 Burst (P24)
- 4 Video (P25)
- 5 Voice memo (P26)

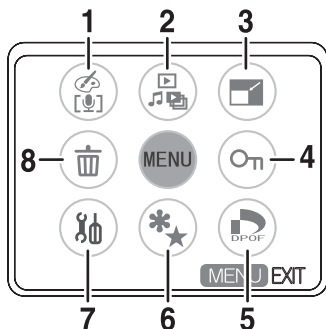
Short cut menu

When you press the **MENU** button for about 1 second, the short cut menu appears. It can carry out menu functions quickly.



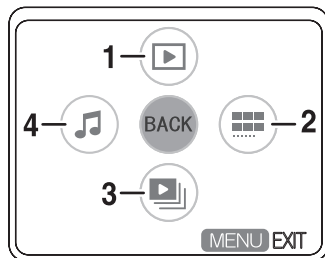
Menu Screen Display (Continued)

■ Menu in the playback mode



- 1 Arrange (P51, 53)
- 2 Play mode (Refer to next column)
- 3 Resize (P52)
- 4 Lock (P50)
- 5 DPOF print (P48)
- 6 Mark (P46)
- 7 Setup (P18)
- 8 Erase file (P36)

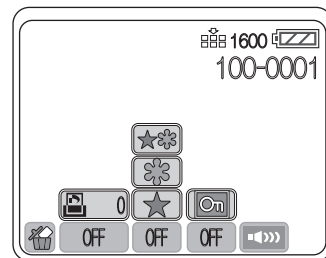
Play mode



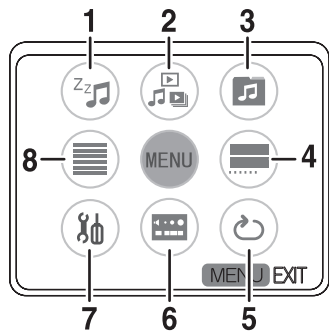
- 1 Play (P27, 28, 29, 30)
- 2 Thumbnail (P35)
- 3 Slide show (P47)
- 4 Audio player (P31)

Short cut menu

When you press the **MENU** button for about 1 second, the short cut menu appears. It can carry out menu functions quickly.



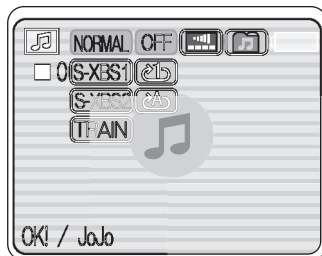
■ Menu in the music playback mode



- 1 Power save (P32)
- 2 Play mode (P66)
- 3 Playlist (P34)
- 4 Thumbnail (P35)
- 5 Repeat play (P33)
- 6 Controller (P33)
- 7 Setup (P18)
- 8 List (P31)

Short cut menu

When you press the **MENU** button for about 1 second, the short cut menu appears. It can carry out menu functions quickly.



Cautions for Use

■ About this unit

Keep this unit away from magnetized equipment

(such as a microwave oven, TV, video game equipment, etc.).

- If you use this unit on or near a TV, images and sounds may be disturbed due to electromagnetic wave radiation.
- Recorded data may be damaged, or images may be distorted by strong magnetic fields created by speakers or large motors.
- Electromagnetic wave radiation generated by a digital circuit (including a microprocessor) may adversely affect this unit, causing the disturbance of images and sounds.
- If this unit is affected by magnetically charged equipment and does not function properly, turn the power off and detach the battery and then connect it again. Thereafter, turn the power on.

Do not use this unit near radio transmitters or high-voltage lines.

- If you record near radio transmitters or high-voltage lines, recorded images or sounds may be adversely affected.

Do not spray insecticides or volatile chemicals onto this unit.

- If this unit is sprayed with such chemicals, the camera body may be damaged and the surface finish may peel off.
- Do not keep rubber or plastic products in contact with this unit for a long period of time.

When you use this unit on a beach or similar place, do not let sand or fine dust get into the camera.

Do not wet this unit with seawater or other liquid.

- Sand or dust may damage this unit. The lens may be scratched, fogged or other damages may be caused.
- In case this unit was drenched with seawater, wipe with a well wrung cloth, and then wipe with a dry cloth.

When carrying this unit, take care not to drop or hit it.

Do not carry this unit in a pocket.

- The outer case may be destroyed by the strong shock, and it may cause malfunction of this unit. Store this unit in the carrying case (supplied). To protect the lens, rotate it.

Do not use benzine, thinner or alcohol for cleaning this unit.

- Detach the battery before cleaning this unit.
- The camera body may be deformed and the surface finish may peel off.
- Wipe this unit with a soft, dry cloth. To remove stubborn stains, wipe with a cloth that is soaked in a detergent diluted with water and afterward finish wiping with a soft, dry cloth.
- When you use a chemical cloth, read the instructions of the cloth.
- Wipe the stains on the lens and the LCD monitor with the cleaning cloth (supplied).

■ Battery

The battery is a rechargeable lithium ion battery. Its ability to generate power is based upon the chemical reaction that takes place inside it. This reaction is susceptible to the surrounding temperature and humidity, and, if the higher or lower the temperature becomes, the more the battery will be affected.

Be sure to detach the battery after use.

- If it is left attached to this unit, a minute amount of current is consumed even when this unit power is off. If it is left for a long time, over discharge takes place. The battery may become unusable even after it is charged.

Have spare batteries on hand when you use this unit outdoors.

- In a cold place, the recordable time will be shorter.
- When you travel, be sure to bring the supplied AC adapter and USB cradle for charging in the place you are visiting.

If the battery is dropped, check that the terminal is not deformed.

- If the battery attached to this unit with the terminal is deformed, it may damage the body of SD Multi Camera.

Be sure to pull out the battery and the card, disconnect the plug after use.

- Store the battery in a cool and dry place with a relatively stable temperature.
(recommended temperature: 59 - 77°F (15 - 25°C),
recommended humidity: 40 - 60%)
- Extremely high or low temperatures will shorten the life of the battery.
- If the battery is kept in hot, humid, smoky or dusty places, the terminals may rust and cause malfunctions.
- Store the battery in a completely discharged state. To store the battery for a long period of time, we recommend charging it once every year and storing it again after you completely use up the charged capacity.

Do not throw the battery into a fire.

- If you heat or burn the battery, it may cause an explosion.
- The battery has a limited life.

Cautions for Use (Continued)

■ AC adaptor

- If you use the AC adaptor near a radio (especially when you are tuning in AM stations), radio reception may be disturbed. Keep the AC adaptor 1 m or more away from radio.
- When the AC adaptor is in use, it may generate whirring sounds. However, this is normal.
- After use, be sure to disconnect the AC adaptor. (If it is left connected, about 0.1 W of current is consumed at most.)
- Keep the electrodes of the AC adaptor clean at all times.

Put this SD Multi Camera near the outlet to make it easy to reach for the interrupting device (plug).

■ Charging error

When the charge lamp blinks approx. every 0.5 seconds, it suggests the following states.

- The ambient temperature or that of the battery itself is too high or too low. Charge the battery after warming the temperature of periphery or battery adequately.
- The SD Multi Camera, battery or AC adaptor may be defective. Contact your nearest Panasonic dealer.

■ Condensation

When using the camera outdoors during very cold weather, dews can be formed on the camera and the lens when you return to a warm place.

If condensation takes place, the lens may be fogged or the camera may not properly operated. Take care not to cause condensation and take the appropriate countermeasures.

Causes of condensation

Differences in temperature and humidity as shown below cause condensation.

- When this unit is brought into a warm room from outdoors in the cold.
- When this unit is brought inside a car from outside.
- When warming a cold room suddenly.
- When cool air from an air conditioner is directly blowing on the unit.
- When the place is humid.

When condensation has taken place:

- Turn the power off and leave this unit in this condition for about 1 hour. When the camera become close to the ambient temperature, the fog disappears naturally.
- When you move this unit from a cold place to a warm place, enclose the camera in a plastic bag, wait until the camera is warmed, and then take it out of the bag.

■ Memory card

When the power/card access lamp is Blinking (when the card is being read), do not remove the card, turn the power off, or subject it to vibration or impact.

Do not leave the card in places where there is high temperature or direct sunlight, or where electromagnetic waves or static electricity are easily generated. Do not bend, drop, or subject it to strong vibration.

- If the above precautions are not taken, the card or the recorded content may be damaged.

Be sure to pull out and store the card after use.

- Keep the card in the storage bag to store or carry the card around.
- Do not allow dirt, dust or water to enter the terminals on the back of the card. Do not touch it with your fingers.

■ Picture data

- As a result of improper operations, recorded data may be damaged or erased. We are not responsible for the loss caused by the erasure of the recording data.
- When this message is displayed “PLEASE WAIT”, never remove the battery or the card, and do not disconnect the AC adapter (supplied) out. It may cause damage to the data and malfunctions.

Cautions for Use (Continued)

■ Maximum number of still pictures recordable on an SD Memory Card

Picture size	1600 × 1200		1280 × 960		640 × 480	
	Fine	Normal	Fine	Normal	Fine	Normal
8MB	8	17	13	27	33	62
16MB	21	42	33	65	78	144
32MB	47	89	71	139	165	304
64MB	102	190	152	294	348	639
128MB	209	388	310	598	707	1299
256MB	419	777	621	1196	1414	2595
512MB	847	1568	1254	2414	2853	5233

- The number of remaining recording indication on the LCD monitor may not be decreased by taking pictures.
- These figures vary depending on the subject being photographed.

■ Maximum recording time of motion picture on an SD Memory Card

Picture size	320 × 240 (QVGA)
8MB	33 sec.
16MB	1 min. 17 sec.
32MB	2 min. 42 sec.
64MB	5 min. 41 sec.
128MB	11 min. 33 sec.
256MB	23 min. 04 sec.
512MB	46 min. 31 sec.

- These figures vary depending on the subject being photographed.

■ Maximum recording time of Voice on an SD Memory Card

8MB	13 min. 17 sec.
16MB	30 min. 10 sec.
32MB	1 h. 02 min. 46 sec.
64MB	2 h. 11 min. 25 sec.
128MB	4 h. 26 min. 25 sec.
256MB	8 h. 51 min. 38 sec.
512MB	17 h. 51 min. 46 sec.

- “1 h. 02 min. 46 sec.” indicates 1 hour 2 minutes and 46 seconds.
- The numbers shown in the table are approximations.

■ LCD monitor

- In a place with drastic temperature changes, condensation may form on the LCD monitor. Wipe it with a soft, dry cloth.
- Do not push the LCD monitor strongly. It may cause unevenness and malfunctions to the monitor.
- If this unit is extremely cold when you turn the power on, the image on the LCD monitor is slightly darker than usual at first. However, as the internal temperature increases, it goes back to the normal brightness.

- Extremely high precision technology is employed to produce the LCD monitor screen featuring a total of approximately 76,800 pixels. The result is more than 99.99% effective pixels with a mere 0.01% of the pixels inactive or always lit. However, this is not a malfunction and does not affect the recorded picture.


■ Format

- Format the card on this unit. If formatting the card using PC, use SD-Jukebox Ver.4 (supplied). Particularly for the Card containing music files, check in the card using SD-Jukebox Ver.4, with which the music files were recorded, then format it. (For details, read the operating instructions for SD-Jukebox Ver.4.)
- Do not use PC (Explorer) to format it. Otherwise, it may not be recognized by this unit.
- When using the card formatted with PC or the other equipment, format the card using this unit again.

Messages

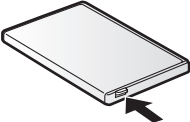
The confirmation/error message is displayed on the LCD monitor.

Messages	Countermeasures
NO CARD	Insert the memory card.
NO TRACK	Insert the card with music files.
NO PICTURE NO VOICE	Insert the card with the file recorded.
CHECK CARD	Remove the card once and then clean its terminal.
CARD ERROR	Remove the card once and then clean its terminal. If the error persists, Check your data, backup the data you need, and format the card with this unit.
UNPLAYABLE FILE	Cannot play back the file which is out of standards.
CARD LOCKED	Release the lock of the write-protect switch on the memory card.
ERROR EMERGENCY STOP	Turn the power off and turn it on again or remove and insert the battery. If the error persists, consult your nearest dealer.

Messages	Countermeasures
PLEASE WAIT	Processing the data. Please wait for a while.
LOW BATTERY	The battery remaining is insufficient. Recharge the battery.
NO SELECTED DATA	There is no data that can be displayed as a thumbnail.
CARD FULL	Change the card or delete unnecessary data.
FILE LOCKED	Delete the file after releasing the protection.
NO TARGET DATA	There is no favorite (mark) on the card.
CANNOT RESIZE FILE	Select the still picture recorded by this unit. The picture should be larger than the size you select.
CANNOT ARRANGE	Select the still picture recorded by this unit.
INSERT BATTERY	Insert the battery and insert this unit into the cradle.
SET TO PLAY MODE	Switch to the playback mode [] when connecting this unit to PC.
CONNECT TO AC ADAPTOR	Connect the AC adaptor to USB cradle when connecting this unit to PC.
CANNOT RESET FILE NUMBER	When 999 folders have been created, you cannot reset the file number. Replace the card.

Trouble Shooting

Question	Answer
The power is not turned on.	Is the battery inserted correctly? Check the direction of the battery.
	Is the battery remained enough?
The power is immediately turned off.	Is the battery exhausted? Recharge the battery or insert the fully charged battery.
Cannot record.	Is the card inserted?
	Is the memory of the card full? Delete some pictures before recording.
The LCD monitor is too bright or dark.	Adjust the brightness of the LCD monitor properly.
The flash does not fire.	Is the flash set to Flash off ? Change the flash mode.
The pictures recorded with a flash are dark.	Is flash covered with your finger?
Cannot playback the card.	Is the card inserted?
	Is there playable pictures on the card?
	Is the mode set to the playback mode?
When connecting to a PC, images cannot be transferred.	Is this unit connected to the PC correctly?
	Does the PC recognize this unit properly?
The clock is not set correctly.	If you do not use this unit for a long time, the clock may be reset. In this case, this message "SET THE CLOCK" will appear. Set the clock again.
	If you record pictures without the clock setting, the date is recorded as [Jan/1/2000 0:00].
Cannot play back music.	Is there any effective music file on the card?

Question	Answer
<p>Cannot remove the battery.</p>	<p>Pull out the projection part to remove it.</p> 
<p>During Playback an [×] Indication is displayed.</p>	<p>The data was either recorded in a different format, or data is damaged.</p>
<p>Playing back or recording do not function and the screen has frozen. The LCD Monitor remains dark when recording the still picture or motion image.</p>	<p>Turn the power off. If this unit is not turned off, remove and insert the battery.</p>
<p>Sound is not heard while a still picture is played back.</p>	<p>Sound is not presented when recording or playing back of still pictures.</p>
<p>While playing back a Voice file or a Music file, the LCD Monitor is suddenly turned off.</p>	<p>The LCD Monitor is automatically turned off approx. 5 seconds after starting playback or recording a Voice file. Rolling the jog ball gently turns on the LCD Monitor. However, in the case of not conducting any operation for approx. 5 seconds, the LCD Monitor is turned off again. (The LCD Monitor is on while stopping playback (or pausing).)</p> <p>When the Power Save is set to ON, the LCD Monitor is turned off 5 seconds after starting playback of a Music file.</p>

Specifications

SD Multi Camera

Information for your safety

Power source	DC 4.8 V (AC Adaptor) DC 3.7 V (Battery)
Power consumption	2.1 W (When recording the still picture) 1.1 W (When playing back the still picture) 0.3 W (When playing back music, setting power save, turning the LCD monitor off)

Image sensor	1/3.2" CCD, Primary color filter
Pixels	Total number of pixels: 2,110,000 Effective number of pixels: 2,000,000
Standard Illumination	3,000 lx
Minimum Required Illumination	80 lx
Lens	F4, Focal Length; 4.5 mm Shortest Image Distance; Approx. 1.64 feet (50 cm) from Lens (Macro: Approx. 0.33 feet (10 cm))
Monitor	1.5-inch LCD
Microphone	Mono
Recording Media	SD Memory Card

Image Compression	JPEG
Video Compression	QuickTime Motion JPEG
Voice Compression	QuickTime Linear PCM
Music Expansion	AAC, MP3, WMA
Dimensions (W×H×D)	Approx. 2-1/32" × 4-3/32" × 17/32" (51.5 × 103.7 × 13.5 mm) (Thinnest part 13/32" (9.9 mm))
Weight	Approx. 2.01 oz. (57 g) (without Battery and Memory Card) Approx. 2.61 oz. (74 g) (with Battery and Memory Card)
Operating Temperature	32°F – 104°F (0°C–40°C)
Operating Humidity	10% - 80%

Specifications (Continued)

USB Cradle: Panasonic VSK0643

Information for your safety

Input	DC 4.8 V 1.0 A
Output	DC 4.8 V 530 mA

AC Adaptor: Panasonic VSK0626

Information for your safety

Power source	AC110-240 V 50/60 Hz
Power consumption	7 W
DC Output	DC 4.8 V 1.0 A

Battery Pack: Panasonic CGA-S003

Information for your safety

Voltage/capacity	3.7 V, 530 mAh
------------------	----------------

Memo

Limited Warranty (For U.S.A. Only)

Panasonic Consumer Electronics Company, Division of Matsushita Electric Corporation of America
One Panasonic Way Secaucus, New Jersey 07094

Panasonic Sales Company, Division of Matsushita Electric of Puerto Rico, Inc.
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

PANASONIC SD Products Limited Warranty

Limited Warranty Coverage

If your product does not work properly because of a defect in materials or workmanship, Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as “the warrantor”) will, for the length of the period indicated on the chart below, which starts with the date of original purchase (“warranty period”), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor.

Product or Part Name	Parts	Labor
SD Multi AV Device, SD Mobile Printer (except items listed below)	One (1) year	Ninety (90) days
CMOS Camera Assembly	Six (6) months	Ninety (90) days
Rechargeable Battery Pack, SD Memory Card, AC Adaptor USB Reader-Writer (in exchange for defective item)	Ninety (90) days	Not Applicable

During the “Labor” warranty period there will be no charge for labor. During the “Parts” warranty period, there will be no charge for parts. You must carry-in or mail-in your product during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold “as is”.

A purchase receipt or other proof of the original purchase date is required for warranty service.

Carry-In or Mail-In Service

For Carry-In or Mail-In Service in the United States call 1-800-211-PANA (1-800-211-7262).

For assistance in Puerto Rico call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

Limited Warranty Limits And Exclusions

This warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or commercial use (such as in a hotel, office, restaurant, or other business), rental use of the product, service by anyone other than a Factory Servicenter or other Authorized Servicer, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER “LIMITED WARRANTY COVERAGE”. THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, travel to and from the servicer, loss of media or images, data or other memory content. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the warrantor's Consumer Affairs Department at the addresses listed for the warrantor.

PARTS AND SERVICE WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

Customer Services Directory (For U.S.A. Only)

Customer Services Directory

For Product Information, Operating Assistance, Literature Request, Dealer Locations, and Customer Service inquiries please visit Web Site:

<http://www.panasonic.com>

You can purchase parts, accessories, locate your nearest servicer and more by visiting our Web Site

or E-mail us via web:

http://www.panasonic.com/consumer_electronics/support/customerfeedback.asp

Contact:

1-800-211-PANA (7262),

Monday–Friday 9 am–9 pm; Saturday–Sunday 10 am–7 pm, EST.

For hearing or speech impaired TTY users, TTY: 1-877-833-8855

Accessory Purchases

1-800-332-5368 (Customer Orders Only)

1-800-237-9080 (Fax Only)

(Monday–Friday 9 am to 8 pm, EST.) Panasonic Services Company

20421 84th Avenue South, Kent, WA 98032

(Accepts Visa, MasterCard, Discover Card, American Express, and Personal Check)

For hearing or speech impaired TTY users,

TTY: 1-866-605-1277

Service in Puerto Rico

Matsushita Electric of Puerto Rico, Inc. Panasonic Sales Company/Factory Servicenter:

Ave. 65 de Infanteria, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Phone (787) 750-4300 Fax (787) 768-2910

Index

A

- Audio dubbing 51
- Audio player 31
- Auto power off 18
- Auto Review 44

B

- Battery 10, 12, 13
- Burst 24

C

- Card 14, 16, 71
- Clock set 19
- Color Creator 53
- Condensation 70
- Connecting to PC 54

D

- Digital zoom 21
- Display setup 18
- DPOF 48

E

- Erasing36
- Exposure Compensation ..43

F

- Flash37
- Format 18, 73

I

- Icon display 18
- ISO Sensitivity44

L

- LCD Monitor64, 73
- Lock50

M

- Mark46
- Microphone23
- Motion Images25, 29

P

- Picture Quality39
- Picture Size39

R

- Reset file No. 18
- Reset settings 18
- Resize 52

S

- Self timer 40
- Short cut menu 65, 66, 67
- Slide show 47
- Sound quality (EQ) 33
- Still Picture 20, 22, 27
- Still Picture
with Audio 23, 28

T

- Thumbnail 35

V

- Voice memo 26, 30
- Volume 18, 30, 32, 33

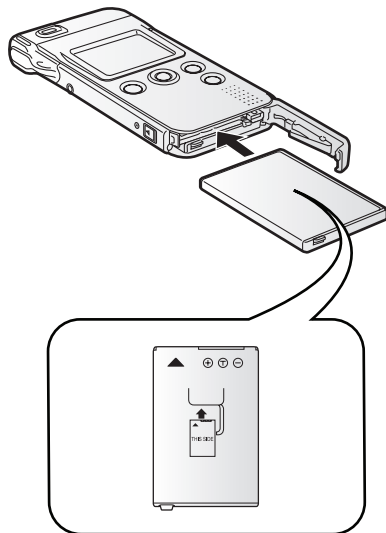
W

- White Balance 41, 42

Spanish Quick Use Guide/ Guía rápida para el usuario en español

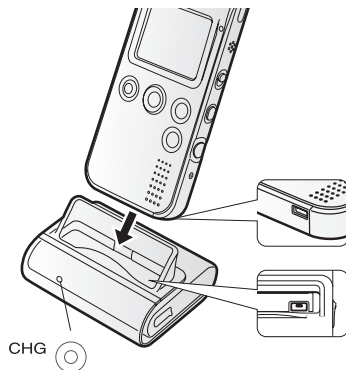
■ Preparación

1



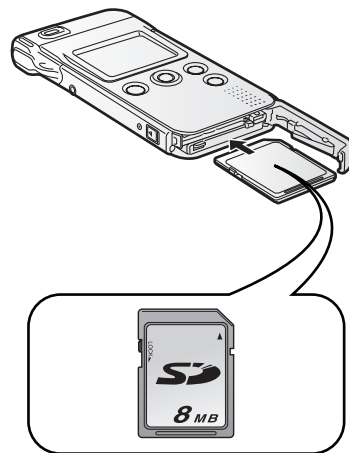
Insertar la batería.

2



Cargar la batería.

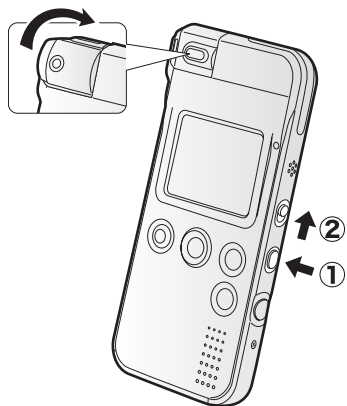
3



Insertar la tarjeta.

■ Grabación

4



Encender. ①

Pasar al modo grabación []. ②

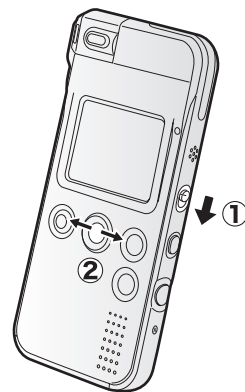
5



Sacar la fotografía.

■ Reproducción

6



Pasar al modo reproducción [].

①
Seleccionar la fotografía que se
desea ver. ②



• SD logo is a trademark.



• Microsoft, Microsoft logo, Windows, Windows logo, Windows Media and DirectX are either trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.



• QuickTime and the QuickTime logo are trademarks used under license. The QuickTime logo is registered in the U.S. and other countries.



• WMA is a compression format developed by Microsoft Corporation. It achieves the same sound quality as MP3 with a file size that is smaller than that of MP3.

• MPEG Layer-3 audio decoding technology licensed from Fraunhofer IIS and Thomson multimedia.

• Portions of this product are protected under copyright law and are provided under license by ARIS/SOLANA/4C.

• Intel and Pentium are trademarks or registered trademarks of Intel Corporation in the United States and other countries.

• Adobe®, the Adobe logos, Acrobat®, and Acrobat Reader™ are trademarks or registered trademarks of Adobe Systems Incorporated.

• CDDB is a registered trademark and Gracenote is a trademark of CDDB, Inc. (dba Gracenote)

• Other names of systems and products mentioned in these instructions are usually the registered trademarks or trademarks of the manufacturers who developed the system or product concerned.

• The ™ and ® marks are not used to identify registered trademarks and trademarks in these instructions.

• Licensed AAC Patents (U.S. patent numbers);

08/937,350	5,752,225	5,235,671	98/03036	08/211,547	5,187,087	5,548,574
08/850,991	5,394,473	07/840,850	5,257,788	5,703,999	5,490,170	08/906,729
5,291,557	5,583,962	5,579,430	5,285,498	08/557,046	5,264,846	08/576,495
5,451,954	5,274,740	08/076,666	5,481,514	08/894,844	5,266,685	5,717,321
5,400,433	5,633,981	98/03037	5,592,584	5,299,238	5,376,189	08/392,756
5,222,189	5,297,236	97/02875	5,781,898	5,299,239	5,581,654	
5,357,594	4,814,701	97/02874	08/036,478	5,299,240	95-183,988	

**Panasonic Consumer Electronics Company,
Division of Matsushita Electric Corporation of America**
One Panasonic Way, Secaucus, NJ 07094

**Panasonic Sales Company ("PSC")
Division of Matsushita Electric of Puerto Rico, Inc.**
Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park, Carolina, Puerto Rico 00985

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga, Ontario, L4W 2T3

© 2003 Matsushita Electric Industrial Co., Ltd.



VQT0F01

F0803Sn0 (50 (A))