

**OLYMPUS®**

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DIGITAL VOICE  
RECORDER  
**DS-2000**

**INSTRUCTIONS**

Thank you for purchasing an Olympus  
Digital Voice Recorder.

Please read these instructions for information about using  
the product correctly and safely.

Keep the instructions handy for future reference.

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To ensure successful recordings, we recommend that  
you test the record function and volume before use.

**EN**

# For Safe And Correct Usage

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Thank you for purchasing the Olympus Digital Voice Recorder DS-2000. Before using your new recorder, read this manual carefully to ensure that you know how to operate it safely and correctly. Keep this manual in an easily accessible location for future reference.

- The warning symbols indicate important safety related information. To protect yourself and others from personal injury or damage to property, it is essential that you always heed the warnings and information provided.

# General Precautions

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- Do not leave the recorder in hot, humid locations such as inside a closed automobile under direct sunlight or on the beach in the summer.
- Do not store the recorder in places exposed to excessive moisture or dust.
- Do not use organic solvents such as alcohol and lacquer thinner to clean the unit.
- Do not place the recorder on top of or near electric appliances such as TVs or refrigerators.
- Avoid recording or playing back near cellular phones or other wireless equipment, as they may cause interference and noise. If you experience noise, move to another place, or move the recorder further away from such equipment.
- Avoid sand or dirt. These can cause irreparable damage.
- Avoid strong vibrations or shocks.
- Do not disassemble, repair or modify the unit yourself.
- Do not operate the unit while operating a vehicle (such as a bicycle, motorcycle, or go-cart).
- Keep the unit out of the reach of children.

## <Warning regarding data loss>

Recorded content in memory may be destroyed or erased by operating mistakes, unit malfunction, or during repair work. It is recommended to back up and save important content to other media such as a computer hard disk.

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## **Batteries**

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### **⚠ Warning**

- **Batteries should never be exposed to flame, heated, short-circuited or disassembled.**
- **Do not attempt to recharge alkaline, lithium or any other non-rechargeable batteries.**
- **Never use any battery with a torn or cracked outer cover.**
- **Keep batteries out of the reach of children.**
- **If you notice anything unusual when using this product such as abnormal noise, heat, smoke, or a burning odor:**
  - ① remove the batteries immediately while being careful not to burn yourself, and;
  - ② call your dealer or local Olympus representative for servicing.

## **AC Adapter**

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### **⚠ Warning**

- **Do not attempt to disassemble, repair or modify the AC adapter in any way.**
- **Keep foreign objects including water, metal, or flammable substances from getting inside the product.**
- **Do not moisten the AC adapter or touch it with a wet hand.**
- **Do not use the AC adapter in the vicinity of flammable gas (including gasoline, benzene and lacquer thinner).**

### **In case**

- ... the internal parts of the AC adapter are exposed because it has been dropped or otherwise damaged:
- ... the AC adapter is dropped in water, or if water, metal flammable substances or other foreign objects get inside it:
- ... you notice anything unusual when using the AC adapter such as abnormal noise, heat, smoke, or a burning odor:
  - ① do not touch any of the exposed parts;
  - ② immediately disconnect the power supply plug from the power outlet, and;
  - ③ call your dealer or local Olympus representative for servicing. Continued use of the AC adapter under these circumstances could result in electric shock, fire or injury.

# Main Features

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- The DS-2000 digital voice recorder stores highly compressed DSS audio files on SmartMedia cards.
- The DS-2000 supports two recording modes: SP (Standard Playback) mode and LP (Long Playback) mode (see P.22). The included 16MB SmartMedia card records approximately 2 hours and 35 minutes\* in SP mode and approximately 5 hours and 30 minutes\* in LP mode. An optional 128MB SmartMedia card can hold up to 44 hours and 40 minutes\* of recordings.
- The Variable Control Voice Actuator (VCVA) reduces memory usage by turning the recorder off when it senses silence (see P.28).
- Recorded audio files can be stored in three separate folders for easy identification at a later time.
- The LCD screen displays file numbers, a real-time counter, remaining recording time, current time and date, operating mode, and warnings in a clear format.
- The editing capability allows you to insert additional recording into previously recorded audio files (see P.20).
- In combination with IBM's ViaVoice speech recognition software (optionally available from IBM), the voice data can automatically converted to text.

\* The recording time available may be shorter than specified if a large number of short recordings are made. (Use the remaining time and recorded time only as references.)

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# SmartMedia

## What is SmartMedia?

SmartMedia is a type of removable IC memory card. With more memory than a floppy disk, SmartMedia cards facilitate data exchange with personal computers, and can be used to store data. Optional SmartMedia cards are available to add capacity as needed, in addition to the included 16MB SmartMedia card.

**When purchasing SmartMedia cards of various memory capacities, specify 3 V (3.3 V) SmartMedia cards (in memory sizes of 4, 8, 16, 32, 64 and 128MB) for the Olympus CAMEDIA digital camera series.**

## Notes

- Commercial 5 V SmartMedia cards cannot be used.
- This product is compatible with SmartMedia cards that have the copyright protection ID feature, and with SmartMedia cards without the ID feature. (Audio files recorded with this product are not protected by copyright law.)
- **Never use SmartMedia cards with products that are not compliant with the SSFDC Forum\* (including certain models of MP3 players).**

\* The SSFDC Forum is a voluntary organization committed to promoting SmartMedia as a de facto standard in the industry. The DS-2000 adheres to a format recommended by the SSFDC Forum.

## Memory Sizes of SmartMedia Cards and Approximate Recording Times\*

Memory Size	SP Mode	LP Mode
4MB	35 min.	1 hr.20 min.
8MB	1 hr.15 min.	2 hr.45 min.
16MB	2 hr.35 min.	5 hr.30 min.
32MB	5 hr.10 min.	11 hr.10 min.
64MB	10 hr.25 min.	22 hr.20 min.
128MB	22 hr.50 min.	44 hr.40 min.

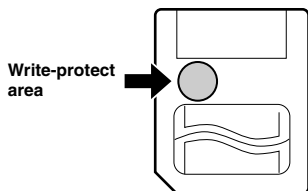
\* Recording time is calculated using a single audio file recorded continuously. If audio files are recorded intermittently, recording time may be shorter than indicated.

## Audio Recording Format

The DS-2000 stores highly compressed DSS (Digital Speech Standard) audio files on SmartMedia cards.

## Write-protect SmartMedia

A write-protect seal (supplied with SmartMedia card) can be attached to a SmartMedia card to guard against accidental recording, erasing, and formatting.



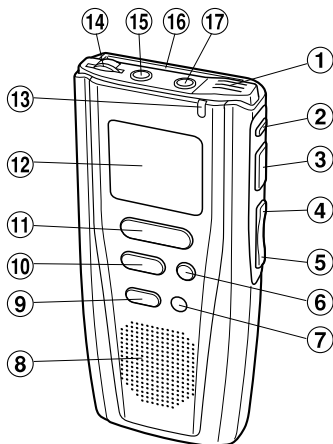
Attach the write-protect seal to the write-protect area to prevent valuable data from being erased accidentally.

Remove the write-protect seal before recording or erasing.

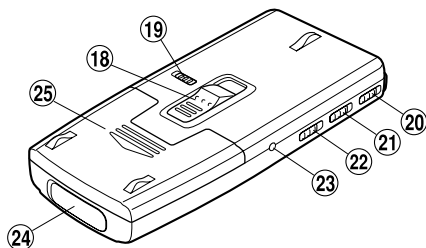
### Notes

- Attach the write-protect seal to the write-protect area carefully, without letting the seal stick out, lift, or peel.
- Do not use commercial seals.
- Write-protect seals cannot be reused.
- A dirty write-protect seal may disable the write-protect feature. Wipe it with a soft, dry cloth.
- A SmartMedia card with a write-protect seal attached to it may not be write-protected when using the card with other products.

# Identification of Parts



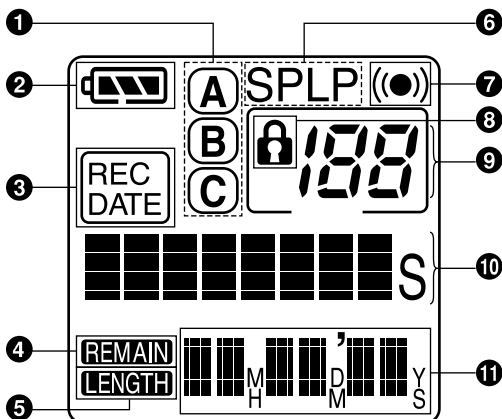
- ① Built-in microphone
- ② FOLDER button
- ③ PLAY button
- ④ REW (Rewind) /- button
- ⑤ FF (Fast Forward) /+ button
- ⑥ INDEX button
- ⑦ ERASE button
- ⑧ Built-in speaker
- ⑨ MENU button
- ⑩ STOP button
- ⑪ REC (Record) button
- ⑫ Display (LCD panel)
- ⑬ Record/Play indicator lamp



- ⑭ VOLUME control
- ⑮ Earphone jack
- ⑯ SmartMedia slot
- ⑰ Microphone jack
- ⑱ SmartMedia ejection switch
- ⑲ POWER/LOCK switch
- ⑳ MICSENS (Microphone sensitivity) switch
- ㉑ VCVA switch
- ㉒ HOLD switch
- ㉓ Power jack
- ㉔ PC (USB) terminal
- ㉕ Battery cover

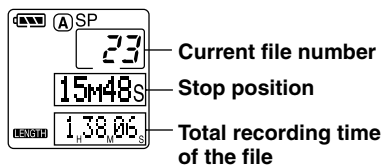


## Display (LCD Panel)



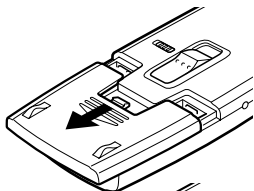
- ① Folder
- ② Battery indicator
- ③ Recording date/time mark
- ④ Remaining memory mark
- ⑤ Total file time mark
- ⑥ Record mode
- ⑦ Alarm mark
- ⑧ Erase lock mark
- ⑨ Current file
- ⑩ Current time, elapsed time, recording time, operation guides, menu display, etc.
- ⑪ Date, remaining memory, total recording time of the playing file, operation guides, etc.

### Stopped State

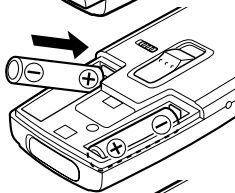


The display appears as shown above when recording or playback is stopped.

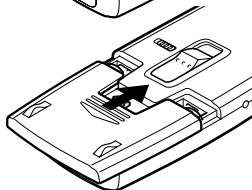
# Inserting Batteries



**1** Slide open the battery cover.



**2** Insert two AAA alkaline batteries, observing the correct polarity.

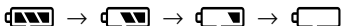


**3** Close the battery cover completely.


An optional Ni-MH Rechargeable Battery from Olympus can be used for the recorder (P.26). However, the battery level may not be indicated correctly when the Ni-MH Rechargeable battery is used.

# Replacing Batteries

The battery indicator on the display changes as the batteries lose power.



When the batteries are too weak, the recorder shuts down and “BATTERY LOW” appears on the display.

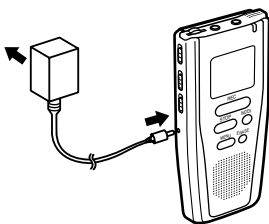
When  appears on the display, replace the batteries as soon as possible. AAA alkaline batteries\* are recommended.

\* The two AAA alkaline batteries provide approximately 11 hours of continuous recording and playback. Battery life depends on the operating environment and other conditions.

## Notes

- **Be sure to stop the recorder before replacing the batteries.** Unloading the batteries while the recorder is recording, erasing or otherwise accessing an audio file may corrupt the file.
- Be sure to replace both batteries at the same time.
- **Never mix old and new batteries, or batteries of different types and/or brands.**
- If it takes longer than 3 minutes to replace dead batteries, the internal rechargeable backup battery will be exhausted, so you may have to reset the time when you load fresh batteries.
- Remove the batteries if you are not going to use the recorder for an extended period of time.

# Using the AC Adapter



Plug the optional AC adapter (Olympus Model A321 or A322) into household power outlet and connect the power plug to the recorder's power connector (DC 3 V) as shown in the illustration. Always stop recording before connection. Otherwise it may not be possible to play back the voice data being recorded.

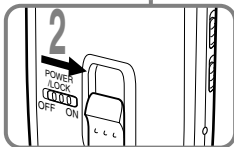
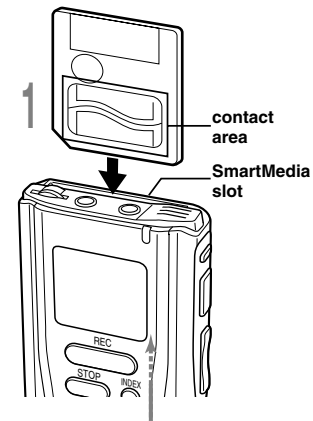
- **Always stop recording before connection or disconnection.**
- **When the AC adapter is not in use, disconnect the power supply plug from the power outlet.**
- **Use only the correct power supply voltage as indicated on the adapter.**
- **Do not use the AC adapter when connecting the recorder to the USB port.**

# Inserting and Ejecting SmartMedia cards

## Inserting SmartMedia cards

Insert the SmartMedia card into the slot as shown below.

Inserting and Ejecting SmartMedia cards

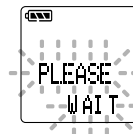


### 1 Insert the SmartMedia in the correct direction.

Push the SmartMedia card fully into position.

### 2 Set the POWER/LOCK switch to ON.

The display appears.

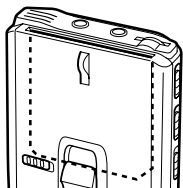


When the SmartMedia card is inserted properly, "PLEASE WAIT" flashes on the display.

## Notes

- If an unformatted SmartMedia card is inserted, "FORMAT YES?" will display automatically. Format the SmartMedia card (P.38).
- Never use any SmartMedia card other than one that has been formatted on this unit or on a CAMEDIA series Olympus digital camera (P.6).

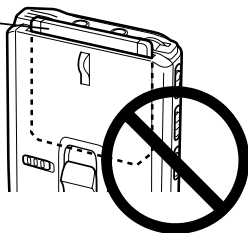
## SmartMedia inserted fully into the slot



When you set the POWER/LOCK switch to the ON position, “PLEASE WAIT” flashes on the display.

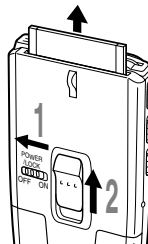
## SmartMedia not inserted fully into the slot

Bottom side of SmartMedia projecting from the slot



When you set the POWER/LOCK switch to the ON position, “INSERT CARD” flashes on the display for 2 seconds. Pressing any button with no SmartMedia card inserted causes “INSERT CARD” to appear again. Push the SmartMedia card fully into position.

## Ejecting SmartMedia cards



- 1 **Set the POWER/LOCK switch to OFF.**  
The display disappears.
- 2 **Raise the SmartMedia ejection switch.**  
Pull the SmartMedia card out with your fingers.

.....  
The SmartMedia ejection switch won't work if the POWER/LOCK switch is set to ON.

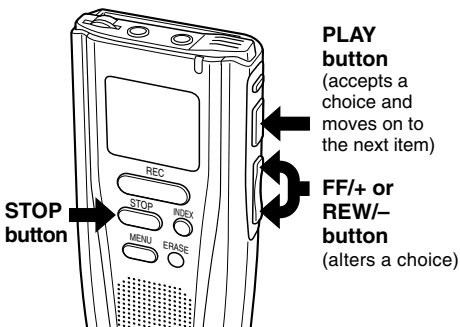
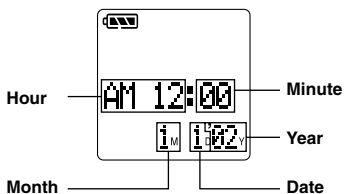
### Attention

- SmartMedia cards are precision devices. Never force the cards when inserting them, or subject them to sharp blows.
- Avoid handling and storing SmartMedia cards in a hot, damp environment.
- Do not touch the contact area (gold electrodes) of the SmartMedia card with bare hands.  
If a SmartMedia card gets dirty, wipe it with a soft, dry cloth.
- SmartMedia cards may be vulnerable to electrostatic data corruption. When carrying a SmartMedia card, put it in its case.  
Remember to back up data from SmartMedia cards to a PC or other storage medium from time to time (P.39).
- Corrupted, lost, or erased data cannot be restored.

# Setting Time/Date

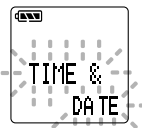
If you have set the time and date, information as to when an audio file is recorded is stored automatically with that file. The time and date should be set to ease audio file management tasks. The time and date setting is also needed to perform the alarm playback function (P.32, 33).

## Time/Date Screen



**1 Press the MENU button.**  
The menu opens (P.42).

**2 Press the FF/+ or REW/- button until "TIME&DATE" flashes on the display.**



**3 Press the PLAY button.**  
Time/Date screen appears. The hour indicator flashes, indicating the start of the time/date setup process.

**4 Repeat steps ① and ② to set the time and date:**

Time/date setup proceeds in the order of hour, minute, year, month, and date.

- ① Press the FF/+ button or REW/- button to set a value.
- ② Press the PLAY button to accept the value.

**5 Press the STOP button to end.**

This completes the time setup procedure.

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## Notes

- If you press the STOP button during the setup operation, the clock will use the items that were set to that point.
- Each press of the FOLDER button during setting toggles the display between the 12-hour and 24-hour system.

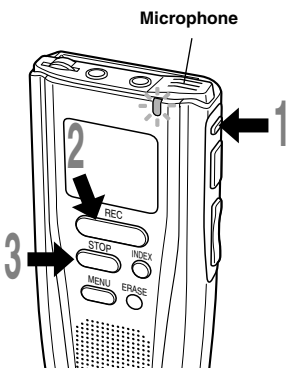
# Recording

The recorder provides three folders, **[A]**, **[B]**, and **[C]**, and each message recorded in a folder is saved as a Digital Speech Standard (DSS) file. These three folders can be selectively used to distinguish the kind of recording; for example, folder **[A]** might be used to store private information, while folder **[B]** might be dedicated to holding business information (see P.36, 37). Up to 199 messages can be recorded per folder. Four recording modes are available: new, append, overwrite, and insert.

## New Recording

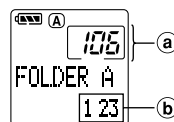
Create a new file to record in.

Recording



### 1 Press the FOLDER button to choose a folder.

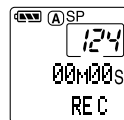
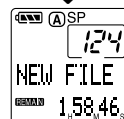
The folder name is displayed for 2 seconds.



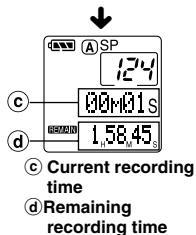
- a Current file number
- b Total number of files recorded in the folder

### 2 Press the REC button to start recording.

The record/play indicator lamp glows red. Aim the microphone at the sound source.



### 3 Press the STOP button to stop recording.



- c Current recording time
- d Remaining recording time



## Notes

- A beep will sound when remaining recording time reaches 60 seconds, 30 seconds, and 10 seconds while recording.
- “MEMORY FULL” or “FOLDER FULL” will be displayed when the memory or file capacity is full. Delete any unnecessary files before recording any further<sup>(P.26)</sup> or transfer voice files to your computer using DSS Player Software.
- You cannot select a different mode than that of the original file before append recording<sup>(P.22)</sup>.

## Pause Recording

### Pause

Press the REC button while recording.

➡ “REC PAUSE” will flash on the display.

### Resume Recording

Press the REC button again.

➡ Recording will resume at the point of interruption.

## Note

The recorder stops when it has been left paused for 10 minutes or longer.

## To instantly review a recording (Quick review)

Press the REW/- button while recording, and release it when you want to start playing a file.

The recorder plays up to the quick review point, then stops.

You can append additional recordings in the same file from that point.

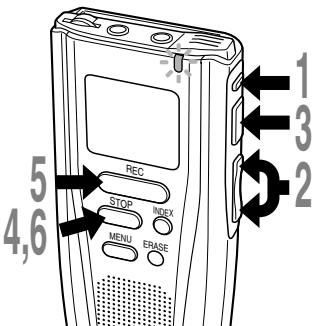
## Listening While Audio Is Recorded (Recording Monitor)

Insert the earphone into the earphone jack to monitor what is being recorded. (The volume is fixed.).

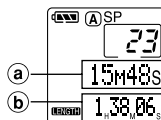
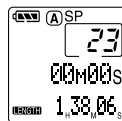
## Overwrite Recording

You can overwrite a previously recorded file from any point within the file. Note that the overwritten recordings will be erased.

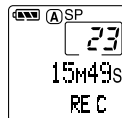
Recording



- 1 Press the **FOLDER** button to choose a folder.
- 2 Press the **FF/+** or **REW/-** button several times to choose the file into which you want to overwrite. See “To fast-forward,” “To skip,” and “To rewind” on page 24.
- 3 Press the **PLAY** button to play the file.
- 4 Press the **STOP** button where you want to start overwriting.
- 5 Press the **REC** button to start overwriting.  
The record/play indicator lamp glows red.
- 6 Press the **STOP** button to stop overwriting.



- a Current playback time
- b Total recording time of the file being played

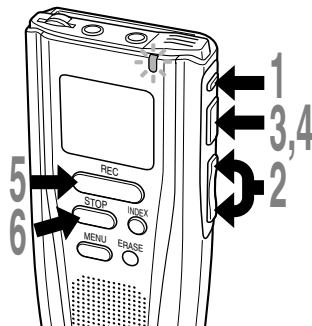


## Notes

- When you are overwriting and reach the end of the file, the recorder begins to append the additional recording.
- Append recording does not erase the next previously recorded file.
- Locked files cannot be overwritten (☞ P.30, 31).
- A SmartMedia card with a write-protect seal attached to it cannot be overwritten.
- You cannot select any recording mode other than that of the original file before overwrite recording (☞ P.22).

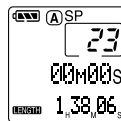
### Insert Recording

Additional recordings can be inserted into previously recorded files.



Recording

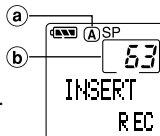
- 1 Press the **FOLDER** button to choose a folder.
- 2 Press the **FF/+** or **REW/-** button to choose the file into which you want to insert additional recordings. See “To fast-forward,” “To skip,” and “To rewind” on page 24.



- 3 Press the **PLAY** button to start playback.

- 4 Press the **PLAY** button at the point where you want to insert a recording. Playback pauses.

- 5 Press the **REC** button to start inserting additional recording. The record/play indicator lamp glows red.



- 6 Press the **STOP** button to stop inserting additional recording.

- a Current folder
- b Existing file into which data is to be inserted

## Pause Insert Recording

### Pause

Press the PLAY button.

➡ "INSERT PAUSE" flashes on the display.

### Resume Insert Recording

Press the PLAY button again.

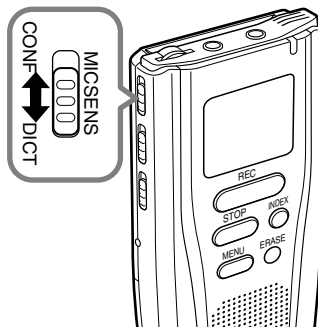
➡ Insert recording resumes.

## Notes

- The recording time and date of the file into which recording has been inserted is updated to the time and date of when the inserted recording was recorded.
- You cannot select any recording mode other than that of the original file before insert recording (☞ P.22).

# Microphone Sensitivity

Microphone sensitivity is adjustable to meet recording needs.



**Using the MICSENS switch, choose between the CONF and DICT positions.**

CONF : High-sensitivity mode that records sounds in all directions.

DICT : Low-sensitivity mode suited for dictation.

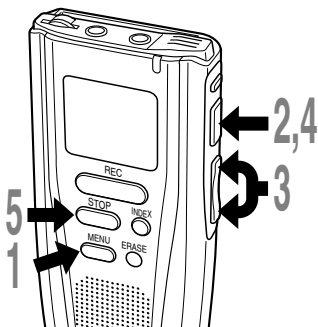
## Notes

- If you want to clearly record dictation, switch to DICT mode and place the internal microphone close (5 to 10 cm) to the speaker.
- If the ambient (background) noise is too loud to get a clear recording even in DICT mode, we recommend that you use an ME-12 single directional microphone (sold separately).

# Recording Modes

You can choose between two recording modes: SP (Standard Playback) mode and LP (Long Playback) mode. Once you choose a mode, files are recorded in the selected mode as long as you do not change the mode.

The included 16MB SmartMedia card holds approximately 2 hours and 35 minutes in SP mode and approximately 5 hours and 30 minutes in LP mode.



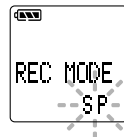
## 1 Press the MENU button.

The menu opens (see P.42).



## 2 Press the PLAY button.

The recording mode setup process begins.



## 3 Press the FF/+ or REW/- button to choose between SP and LP.

## 4 Press the PLAY button to complete the setup screen.

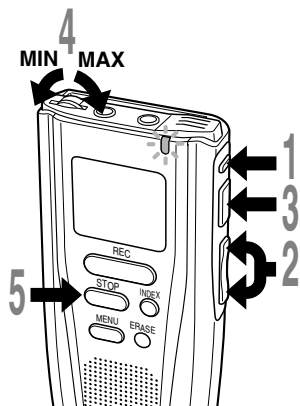
## 5 Press the STOP button to close the menu.

### Notes

- Choose SP mode for recording meetings or lectures with crisp clarity.
- Use SP mode in conjunction with voice recognition software.
- You cannot select a different mode than that of the original file before append, overwrite, or insert recording.

# Playing

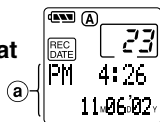
You can start playing a file at any point. The recorder stops automatically when it finishes playing each file.



**1 Press the FOLDER button to choose a folder.**

**2 Press the FF/+ or REW/- button several times to choose the file that you want to play.**

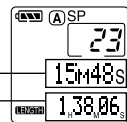
See “To fast-forward,” “To skip,” and “To rewind” on page 24.  
The time and date when the file was recorded are displayed.



**a Recorded time and date of the selected file**

**3 Press the PLAY button to start playback.**

The record/play indicator lamp glows green.



**b Current playback time**  
**c Total recording time of the file being played**

**5 Press the STOP button at any point you want to stop the playback.**

Resume playback by pressing PLAY button again.

### Canceling Playback

#### Pause

Press the PLAY button.

➡ “PLAY PAUSE” flashes on the display.

#### Resume Playback

Press the PLAY button again.

➡ Playback will resume at the point of interruption.

#### Note

The recorder stops when it has been left paused for 10 minutes or longer.

### Playback Functions

#### To fast-forward

Press the FF/+ button once while stopped.

➡ The recorder stops when it reaches the end of the file.

#### Note

If the FF/+ button is pressed at the end of a file, the recorder stops at the beginning of the next file, and the recording date/time of the file flash for 2 seconds. And if the FF/+ button is pressed while the recording date/time are flashing, the recorder skips to the beginning of the next file.

#### To skip

Press the FF/+ button once while fast-forwarding.

or

Press the FF/+ button twice while stopped.

➡ The recorder skips to, and stops at, the end of the file and displays the recording time and date.

#### Note

If there is an index mark in the middle of a file, the recorder stops at the position of the index mark, and displays the index number. If the FF/+ button is pressed again, the recorder skips to the next index mark if there is another one, or to the end of the file.

#### To skip continuously

Continue pressing the FF/+ button while fast-forwarding.

#### To rewind

Press the REW/- button once while stopped.

➡ The recorder stops when it reaches the beginning of the file.



**To skip backward**

Press the REW/- button once while rewinding.  
or

Press the REW/- button twice while stopped.  
➡ The recorder skips to, and stops at, the beginning of the file, and the recording date/time flash for 2 seconds and then are displayed.

**Notes**

- If the REW/- button is pressed while the recording are date/time flashing, the recorder skips to the beginning of the previous file.
- If there is an index mark in the middle of the file, the recorder stops at the position of the index mark, and displays the index number. If the REW/- button is pressed again, the recorder skips to the previous index mark if there is one, or to the beginning of the file.

**To continuously skip backward**

Continue pressing the REW/- button while rewinding.

**Fast Playback**

Hold the PLAY button for 1 second or longer while the recorder is stopped or while playing a file.

- ➡ The recorder plays back at approximately 50% faster than normal rate.
- After fast playback is canceled, playback returns to normal rate.

**Canceling Fast Playback**

Hold the PLAY button for 1 second or longer again\*.

- ➡ Playback returns to normal rate.
- \* Press the PLAY button momentarily (for less than 1 second) to pause with fast playback enabled.

**Cue (Fast Forward While Playing)**

Hold the FF/+ button while the recorder is stopped or playing a file.

- ➡ The recorder stops when it reaches the end of the file.

**Note**

If an index mark is encountered in the middle of the file, the recorder stops at that point, the index number flashes momentarily, and then cueing proceeds when the FF/+ button is still pressed.

**Canceling a Cue**

Release the FF/+ button where you want the file played.

- ➡ Playback begins.

**Review (Fast Rewind While Playing)**

Hold the REW/- button while the recorder is stopped or playing a file.

- ➡ The recorder starts playback automatically when it reaches the beginning of the file.

**Note**

If an index mark is encountered in the middle of the file, the recorder stops at that point, but will proceed with the review if the REW/- button is pressed.

**Canceling the Review**

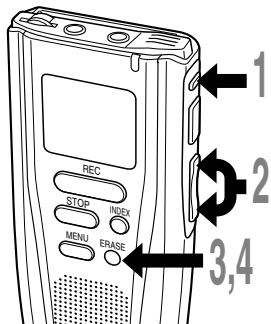
Release the REW/- button where you want the file played.

- ➡ Playback begins.

# Erasing

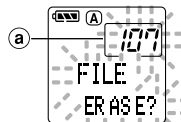
## Erasing One File at a Time

A selected file can be erased from a folder.



Erasing

- 1 Press the FOLDER button to choose a folder.**
- 2 Press the FF/+ or REW/- button to choose the file you want to erase.**
- 3 Press the ERASE button.**  
“FILE ERASE?” flashes on the display for 8 seconds.
- 4 Press the ERASE button again.**  
The display lights continuously to indicate erasing has started.



a) File to be erased



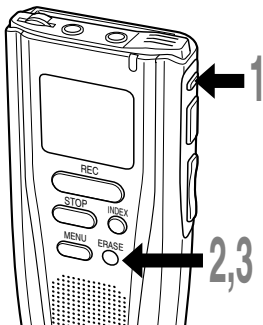
“ERASE OK” is displayed when the file is erased. File numbers are incremented automatically.

### Notes

- An erased file cannot be restored.
- Locked files cannot be erased (P.30, 31).
- Files stored on a SmartMedia card with a write-protect seal attached to it cannot be erased (P.7).

## Erase All Files from a Folder

All files in a folder can be erased simultaneously, except for locked files (P.30, 31).



**1 Press the FOLDER button to choose the folder in which you want to erase all files.**

**2 Press the ERASE button for 3 seconds or longer.**  
“ALL ERASE?” flashes on the display for 8 seconds.

**3 Press the ERASE button again.**  
The display lights continuously to indicate erasing has started.



Erasing

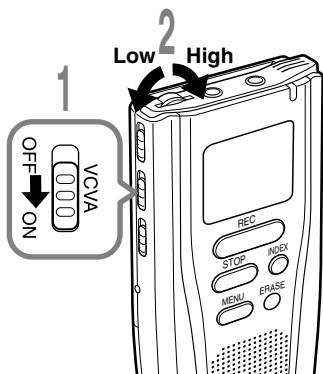
“ERASE OK” is displayed when the files are erased. Locked files are reassigned file numbers in ascending order.

### Notes

- It might take more than 10 seconds to complete erasing tracks. Do not eject the SmartMedia card before erasing is finished.
- Files stored on a SmartMedia card with a write-protect seal attached to it cannot be erased (P.7).

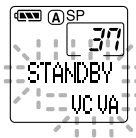
# Using the Variable Control Voice Actuator (VCVA)

When the microphone senses that sounds have reached a preset volume, the built-in Variable Control Voice Actuator (VCVA) starts recording automatically, and stops when the volume drops. Particularly helpful for extended recording, the VCVA not only conserves memory by turning off recording during silent periods, but also makes playback more efficient and convenient.



## 1 Start recording with the VCVA switch set to ON.

When the volume falls to a preset level or lower, recording automatically pauses, and “STANDBY VCVA” flashes on the display. The record/play lamp glows when recording starts and flashes when recording pauses.



## 2 Using the VOLUME control, adjust the start/stop actuation level.

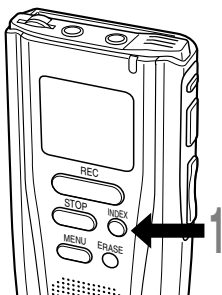
The higher the VOLUME control is set, the more sensitive the start/stop level becomes, allowing recording to automatically begin at a quieter level.

### Notes

- The start/stop actuation level also varies depending on the selected microphone sensitivity mode (see P.21).
- To ensure successful recordings, prior testing and adjustment of the start/stop actuation level is recommended.

# Index Marks

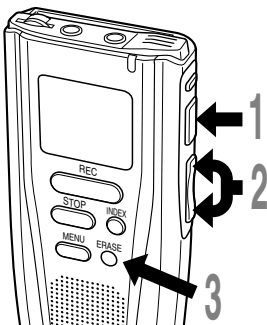
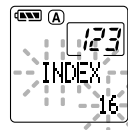
Index marks can be incorporated into a file during recording or playback to make it easy to locate interesting information. Index marks enable faster access to important information by pressing the FF/+ or REW/- button.



## Setting an Index Mark

- 1 Press the INDEX button during recording or playback to set an index mark.**

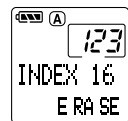
An index mark is set and the index number appears on the display.



## Clearing an Index Mark

- 1 Play the file with the index mark you want to clear.**
- 2 Press the FF/+ or REW/- button to choose the index mark to be cleared.**
- 3 Press the ERASE button while the index number appears for about 2 seconds on the display.**

The index mark is erased.



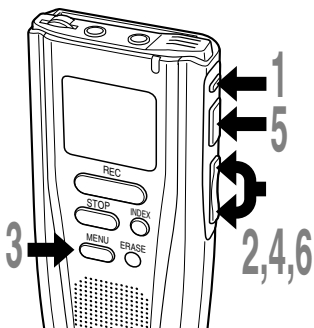
Index numbers are reassigned automatically.

## Notes

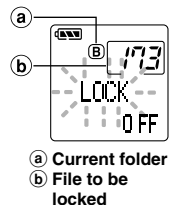
- Up to 16 index marks can be set in a file. Attempting to set more index marks will cause "INDEX FULL" to appear on the display.
- Index marks cannot be set or cleared in a file stored on a SmartMedia card with a write-protect seal attached to it (see P.7).
- Index marks cannot be set or cleared in a locked file (see P.30, 31).

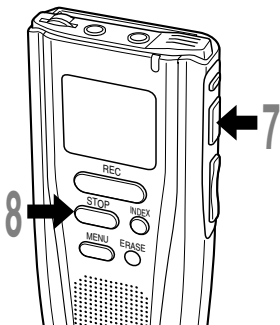
# Locking Files

Locking a file keeps important data from being accidentally erased.  
Locked files are not erased when you choose to erase all files from a folder (P.27).



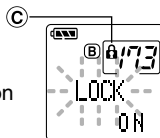
- 1 Press the FOLDER button to choose a folder.**
- 2 Press the FF/+ or REW/- button to choose the file you want to lock.**
- 3 Press the MENU button.**  
The menu opens (P.42).
- 4 Press the FF/+ or REW/- button until “LOCK” flashes on the display.**
- 5 Press the PLAY button.**  
The file locking setup process begins.
- 6 Press the FF/+ or REW/- button to choose between ON and OFF.**  
ON : Locks the file and prevents it from being erased.  
OFF : Unlocks the file and allows it to be erased.





## 7 Press the **PLAY** button to complete the setup screen.

If you select ON, the lock mark appears on the display.



© Lock mark

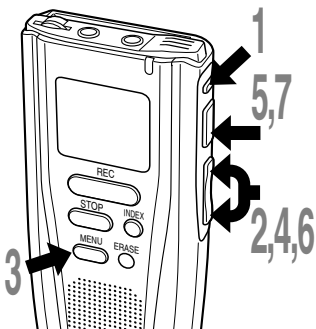
## 8 Press the **STOP** button to close the menu.

### Notes

- You cannot insert additional recordings into locked files or set index marks in locked files.
- Files stored on a SmartMedia card with a write-protect seal attached to it cannot be locked.
- Locked files are erased when a SmartMedia card is formatted.

# Alarm Playback Function

The alarm playback function can be set to play a selected file at a pre-set time.



**1 Press the FOLDER button to choose a folder.**

**2 Press the FF/+ or REW/- button to choose the file to be played when the alarm sounds.**

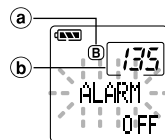
**3 Press the MENU button.**  
The menu opens (☞ P.42).

**4 Press the FF/+ or REW/- button until “ALARM” flashes on the display.**

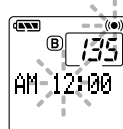
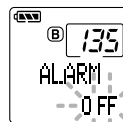
**5 Press the PLAY button.**  
The alarm playback setup process begins.

**6 Press the FF/+ or REW/- button to choose between ON and OFF.**  
ON: Enables alarm playback.  
OFF: Disables alarm playback.

**7 Press the PLAY button to complete the setup screen.**  
When you choose ON, the alarm mark lights and the scheduled time setup process begins. The time indicator will flash. ☞ Step 8

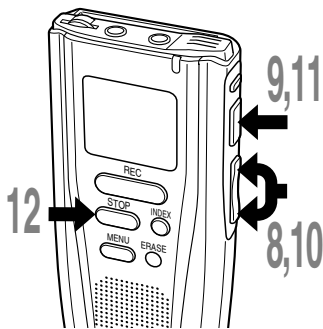


a Current folder  
b File to be played when alarm sounds



When you choose OFF, the alarm playback setup process ends, and the alarm mark disappears. ☞ Step 12





**8** Press the FF/+ or REW/- button to set the hour.

**9** Press the PLAY button to accept the hour.

The minute indicator flashes.



**10** Press the FF/+ or REW/- button to set the minute.

**11** Press the PLAY button to accept the minute.

**12** Press the STOP button to close the menu.

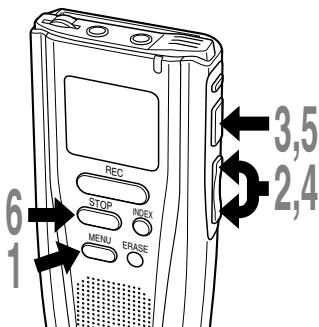
An alarm tone will sound at the scheduled time. Press any button while the alarm sounds to play the file you associated with the alarm.

#### Notes

- The alarm playback function can be set for only one file at a time.
- The alarm will sound at the scheduled time every day unless the alarm playback setting is cleared.
- The alarm will sound for 5 minutes and then stop.
- If you are using the recorder at the scheduled time, the alarm will sound after you're done.
- The alarm will sound at the scheduled time even if the recorder is set to hold. The recorder begins to play the file associated with the alarm when you press any button.
- The alarm playback setting is cleared if the selected file is erased or the SmartMedia card is ejected.
- The alarm won't launch at the scheduled time if the POWER/LOCK switch is set to OFF.

# System Sounds

The recorder beeps to alert you to button operations or warn you of errors. System sounds may be turned off.



- 1 Press the MENU button.**  
The menu opens (see P.42).
- 2 Press the FF/+ or REW/- button until “BEEP” flashes on the display.**
- 3 Press the PLAY button.**  
The system sound setup process begins.
- 4 Press the FF/+ or REW/- button to choose between ON and OFF.**
- 5 Press the PLAY button to complete the setup screen.**
- 6 Press the STOP button to close the menu.**



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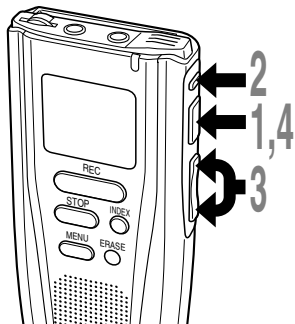
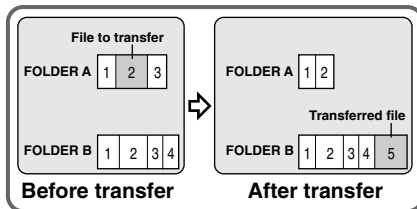
## Note

If the alarm playback function has been set, the alarm will sound at the scheduled time even if system sounds are turned off.

# Moving Files Across Folders

A recorded file can be transferred from one folder to another.

The file is added at the end of existing files in the destination folder.



**1 Choose the file you want to transfer and press the PLAY button to play it.**

**2 Press the FOLDER button while the file is playing.**

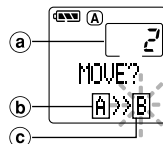
Playback stops and destination folder names flash on the display.

**3 Press the FF/+ or REW/- button to choose the destination folder.**

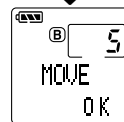
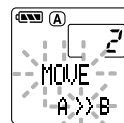
If you choose the current folder as the destination folder, the selected file will move to the end of the existing files in it.

**4 Press the PLAY button to accept the destination folder.**

The file is transferred.



- a File to transfer
- b Current folder
- c Destination folder



## Notes

- If the destination folder is full (a maximum of 199 files), “FOLDER FULL” appears on the display and files cannot be transferred to it.
- The file transfer process is aborted if you press the STOP button or leave the recorder idle for 8 seconds after you choose a destination folder.
- Files cannot be transferred from one folder to another on a SmartMedia card with a write-protect seal attached to it.

# Assigning Folder Names

The three folders can each be assigned a name of up to eight characters.

The recorder comes with the following preset folder names:

FOLDER A : Folder A

FOLDER B : Folder B

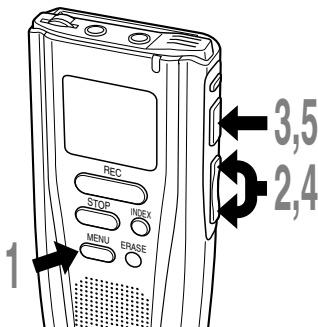
FOLDER C : Folder C

## Example

FOLDER A : MEMO

FOLDER B : MEETING

FOLDER C : TO DO

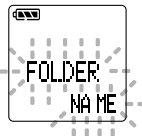


Assigning Folder Names

### 1 Press the MENU button.

The menu opens (P.42).

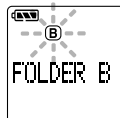
### 2 Press the FF/+ or REW/- button until "FOLDER NAME" flashes on the display.



### 3 Press the PLAY button.

The folder name setup process begins.

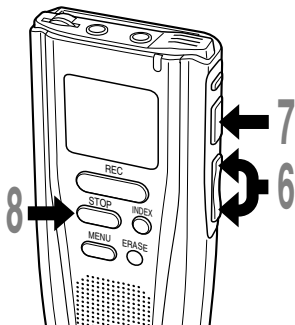
### 4 Press the FF/+ or REW/- button to choose the folder you want to name.



### 5 Press the PLAY button to accept the chosen folder.

The first character of the chosen folder's name flashes.





## 6 Press the FF/+ or REW/- button to choose characters.

Available characters are 0 to 9, A to Z, and space.

**PLAY button:** To input the selected character and advance the input position.

**FOLDER button:** Acts as a backspace.

**ERASE button:** To delete the flashing character.

**INDEX button:** Lets you insert one space.

## 7 When you have finished setting the folder name, press the PLAY button for 1 second or longer.

This completes the folder naming procedure. (If you wish to enter another folder name, press the FF/+ or REW/- button to open the folder name setup screen and repeat the process starting from Step 3.)

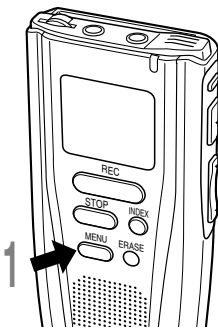
## 8 Press the STOP button to close the menu.

### Notes

- The folder naming process ends automatically when the eighth character is set.
- Folder names can be changed only if a SmartMedia card is inserted.
- A SmartMedia card with a write-protect seal attached to it cannot be changed.
- When a SmartMedia card is formatted, folder names that you assigned will be reset to the initial names.

# Formatting SmartMedia

Formatting prepares SmartMedia cards for recording. SmartMedia cards that have been used on non-Olympus devices, or that can't be accessed by this unit, require formatting. The SmartMedia card that comes with this unit and Olympus SmartMedia cards are preformatted and can be used immediately following purchase.

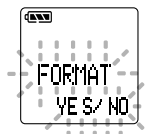


**1 Press the MENU button.**  
The menu opens (see P.42).

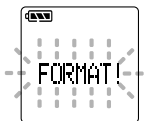
**2 Press the FF/+ or REW/- button until "FORMAT" flashes on the display.**

**3 Press the PLAY button.**  
The formatting process is selected.

**4 Press the FF/+ or REW/- button to choose "YES?".**



**5 Press the PLAY button again.**  
Formatting begins and an indicator flashes on the display.



"FORMAT OK" displays when formatting ends.



# Transferring Data to a PC

## Notes

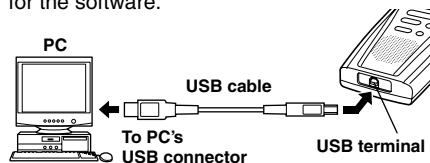
- When a SmartMedia card is formatted, all the stored data, including locked files, is erased.
- A SmartMedia card with a write-protect seal attached to it cannot be formatted (see P.7).
- If an unformatted SmartMedia card is inserted, "FORMAT YES?" will display automatically.



**Never use any SmartMedia card other than one that has been formatted with this unit or with a CAMEDIA series Olympus digital camera.**

Other SmartMedia cards may not perform as expected.

This recorder is equipped with a USB terminal connector to enable recorded voice data to be transferred to a PC. For more details on how to transfer data, refer to the instruction manual for the software.



Stop the recorder before plugging in the USB cable. Do not use the AC adapter when connecting the recorder to the USB port. The USB port delivers the required power to the recorder.

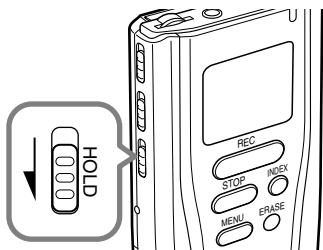
## Note

- When the recorder is connected to a PC, the power will be supplied from the USB cable.

## Tip

When the SmartMedia card is ejected, data can be transferred from the SmartMedia card to a PC via a number of ways. See Page 46 for optional accessories to download SmartMedia through your PCMCIA, USB, or Floppy Disk drives.

# Hold



## Setting the HOLD switch to the HOLD position.

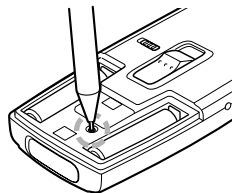
If you set the recorder to HOLD status by sliding the HOLD switch in the direction of the arrow, the current conditions will be preserved, and all buttons and switches except the HOLD switch will be disabled. This feature is useful when the recorder has to be carried in a bag or pocket.

**Remember to reset the HOLD switch when using the recorder.**

### Notes

- If you set the recorder to hold during Stop mode, the display goes dark. If you press any button, the time will flash for about 2 seconds, but the function of the button is disabled.
- The alarm will sound at the scheduled time even if the recorder is set to hold. The recorder begins to play the file associated with the alarm when you press any button.
- If you are recording when you switch the recorder to HOLD, recording will continue until the recorder memory runs out.

# Reset



If the display or the recorder acts strangely, lightly press the reset button in the battery compartment with the tip of a ballpoint pen or a similar object.

### Notes

- Do not use a sharp object such as a needle.
- The time/date setup process launches automatically when you press the reset button. Set the time and date again (P.14).
- Audio data is not erased when the recorder is reset.



# Training your PC for Voice Recognition

When you use voice-recognition software such as IBM ViaVoice, it is recommended that you set the recorder to PC microphone and have the software learn the characteristics of the speaker's voice and the recorder's built-in microphone to maximize the accuracy of voice recognition.



**1** Connect the KP-4 PC connection cable (supplied) to the recorder's earphone jack and the PC microphone jack of your PC.

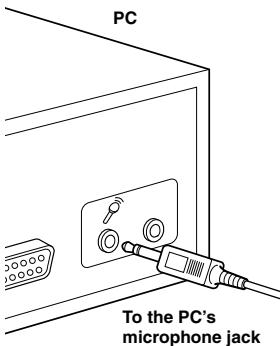
**2** Start the software on your PC and prepare it to receive voice input. (Refer to the User's manual of the software for details.)

**3** Press and hold the FOLDER button to get into PC train mode.

The record/play indicator lamp lights in red, and "TRAIN PC" flashes on the display, while you are holding the FOLDER button pressed.



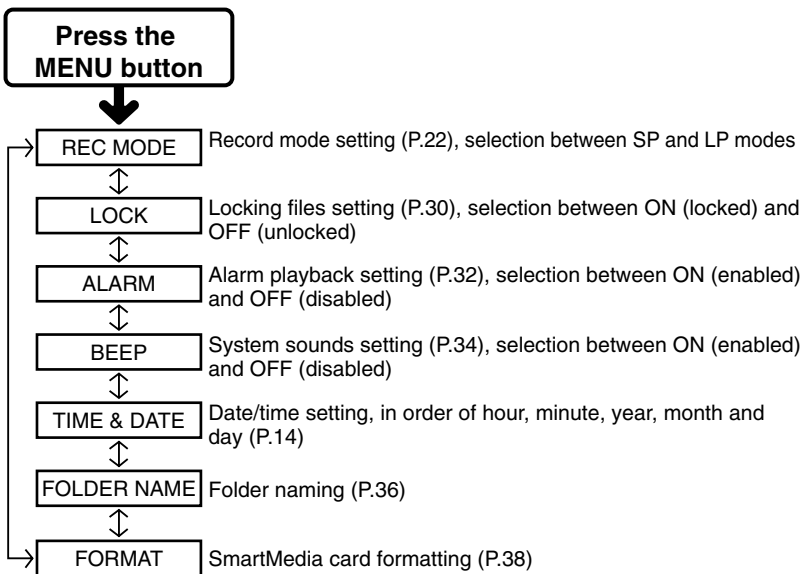
**4** Speak into the recorder's microphone.



## Notes

- When the recorder is connected to a PC with USB connection, you cannot perform these procedures.
- While the recorder is set as PC microphone, the output level of the earphone jack is fixed.
- Refer to the user's manuals of DSS Player 2002 and your voice recognition software for details.

# Menu List



## Notes

- If you press the STOP button, the REC button, or the MENU button during a menu setup operation, the recorder will stop and apply the items that were set to that point.
- The recorder will stop if you leave it idle for 3 minutes during a menu setup operation, when a selected item is not applied.

↕ : Press the FF /+ or  
REW/- button

# Alarm Message List

Message	Meaning	Explanation	Action
<b>BATTERY LOW</b>	<b>Low battery power</b>	Battery power is getting low.	Replace with new batteries (☞ P.11).
<b>Ⓜ CARD LOCK</b>	<b>Write-protected</b>	Tried to record to, or erase from, a SmartMedia card with a write-protect seal attached.	Remove the write-protect seal from the SmartMedia card and try again (☞ P.7).
<b>CARD ERROR</b>	<b>Incompatible SmartMedia</b>	An incompatible SmartMedia card was inserted.	Insert a compatible SmartMedia card (☞ P.6).
<b>EJECT ERROR</b>	<b>SmartMedia ejection error</b>	The SmartMedia card was ejected during an operation.	Reinsert the SmartMedia card.
<b>FOLDER FULL</b>	<b>Folder full</b>	The folder is full of files (maximum of 199 files).	Erase files that are no longer required, or insert another SmartMedia card.
<b>FORMAT ERROR</b>	<b>Formatting error</b>	An error was encountered while formatting.	Reinsert the SmartMedia card and then reformat it (☞ P.38).
<b>INDEX FULL</b>	<b>Index full</b>	The file is full of index marks (maximum of 16 marks).	Erase index marks that are no longer required (☞ P.29).
<b>INSERT CARD</b>	<b>No card</b>	There is no SmartMedia card inserted.	Insert a SmartMedia card (☞ P.12).
<b>Ⓜ LOCK ON</b>	<b>Erase-locked</b>	Tried to insert a recording into a locked file, or tried to erase a locked file.	Unlock the file (☞ P.30, 31).
<b>MEMORY FULL</b>	<b>Zero remaining memory</b>	The SmartMedia card has no remaining memory.	Erase files that are no longer required or insert another SmartMedia card.
<b>NO FILE</b>	<b>No file</b>	No files were found in the folder.	Select another folder.
<b>Ⓜ READONLY</b>	<b>Unrecordable</b>	There is something wrong with the SmartMedia card.	Back up the data (☞ P.39) and format the SmartMedia card.
<b>SAME FILE</b>	<b>File cannot be transferred</b>	A file with the same file name* already exists in the destination folder.	Transfer the file to another folder.
<b>TRAIN PC</b>	<b>PC microphone indicator</b>	The recorder is being used as a PC microphone**.	Refer to page 41.

\* File names are assigned during recording for file management purposes.

\*\*The recorder enters this state when you hold the FOLDER button (☞ P.41).

# Troubleshooting

Symptom	Probable cause	Action
<b>Nothing appears on the display</b>	The batteries are not loaded properly.	Verify polarity is correct.
	The batteries are dead.	Replace with new batteries.
	The POWER/LOCK switch is set to OFF.	Set the POWER/LOCK switch to ON.
<b>Won't start</b>	If none of these suggestions works	Reset the recorder (Ⓜ P.40).
	The recorder is in HOLD mode.	Release the recorder from HOLD (Ⓜ P.40).
	The SmartMedia card is not formatted.	Format the SmartMedia card (Ⓜ P.38).
<b>Unable to record</b>	The batteries are dead.	Replace with new batteries.
	The SmartMedia card has a write-protect seal attached to it.	Remove the seal.
	The SmartMedia card is unformatted.	Format the SmartMedia card.
<b>No playback tone heard</b>	The SmartMedia card does not have enough memory.	Erase unnecessary files or insert another SmartMedia card.
	The maximum number of files has been reached.	Check another folder.
	The earphone is connected.	Disconnect the earphone jack.
<b>Unable to erase</b>	The VOLUME control is set to 0.	Adjust the VOLUME control.
	The file is locked.	Unlock the file (Ⓜ P.30, 31).
<b>Noise heard during playback</b>	The SmartMedia card has a write-protect seal attached to it.	Remove the seal.
	The recorder was shaken during recording.	—
	The recorder was placed near a cell phone or fluorescent lamp while recording or during playback.	Move the recorder.
<b>Recording level too low</b>	The microphone sensitivity is too low.	Set the microphone sensitivity to CONF mode and try again.
<b>Unable to set index marks</b>	Erase unnecessary index marks (Ⓜ P.29).	Erase unnecessary index marks (Ⓜ P.29).
	The SmartMedia card has a write-protect seal attached to it.	Remove the seal.
	The file is locked.	Unlock the file (Ⓜ P.30, 31).
<b>Won't work with AC adapter</b>	A non-standard AC adapter is being used.	Use the Olympus A321 (for US, Canada) or A322 (for Europe except U.K) AC adapter (Optional).
<b>Unable to eject the SmartMedia card</b>	The POWER/LOCK switch is set to ON.	Set the POWER/LOCK switch to OFF.

# Specifications

## Recording format

DSS (Digital Speech Standard)

## Recording media

3 V (3.3 V) SmartMedia cards  
(4 to 128MB)

## Card format

SSFDC Forum-compliant  
SmartMedia format

## Input level

-70 dBv

## Sampling frequency

SP mode: 12 kHz

LP mode: 8 kHz

## Overall frequency response

SP mode: 300 to 5,000 Hz

LP mode: 300 to 3,000 Hz

## Recording time

SP mode: 2 hours 35 minutes  
(16MB card)

LP mode: 5 hours 30 minutes  
(16MB card)

## Speaker

Built-in  $\varnothing$ 28 mm round dynamic  
speaker

## Microphone jack

$\varnothing$ 3.5 mm mini-jack, impedance  
2 k $\Omega$

## Earphone jack

$\varnothing$ 3.5 mm mini-jack, impedance  
8  $\Omega$

## Maximum working output (3 V DC)

150 mW or more (8  $\Omega$  speaker)

## Input power requirement

Rated voltage: 3 V

Batteries: Two AAA batteries  
(LR03 or R03) or Two  
Ni-MH rechargeable  
batteries

External power supply:  
AC adapter

## Battery life (Recording or Playback)

Approx. 11 hours (with alkaline  
batteries, based on our standard  
testing procedure)

## External dimensions

109.5 x 50.0 x 16.7 mm (without  
protrusions)

## Weight

86 g (including batteries)

\* Specifications and design are subject to  
change without notice.

\* Battery life varies greatly according to type  
of batteries used and the conditions of use.

# Accessories (optional)

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## **Ni-MH Rechargeable Battery Charger: BU-400**

Charger for AA batteries (1 to 4) or 1 to 2 AAA batteries.

## **Ni-MH Rechargeable Battery: BR401**

High-efficiency rechargeable long life batteries.

## **SmartMedia cards of 16, 32, 64 and 128MB:M-16/32/64/128**

Olympus CAMEDIA digital camera series 3 V (3.3 V) SmartMedia memory cards can be used.

## **PC card adapter:MAPC-10**

Allows files to be transferred to a PC that has a PC card slot or PC card drive.

## **External microphone:ME10\***

A lavalier omnidirectional microphone that clips to clothing. Use to record your own voice or people near you.

## **Headset:E102**

Stereo headset for your PC. A helpful tool for PC based transcription.

## **PC Transcription kit: AS-2000**

The AS-2000 transcription kit (sold separately) provides you with a PC-footswitch, a headset and DSS Player 2002 for easy transcription of DSS recordings.

## **Noise-Cancellation microphone:ME12 (Dictation microphone)**

Use to get crisp recordings of your own voice by reducing the effects of ambient noise. Recommended to improve the accuracy when using voice-recognition software.

## **AC adapter:A321 (US and Canada) or A322 (Europe except U.K.)**

## **Connecting cord:KA232\***

Use to connect the microphone jack of this unit to a radio or other sound source.

## **Plug adapter:PA3**

An adapter that connects devices such as microphones with ø2.5 mm mini-plugs to the unit's ø3.5 mm mini-jack.

\* Use these accessories with the PA3 plug adapter.

# Technical Assistance And Support

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The following are contact information for technical support for Olympus recorders and software only.

◆ Technical Hotline Number in the U.S. and Canada  
1-888-553-4448

◆ User Support E-mail address in the U.S. and Canada  
distec@olympus.com

◆ Technical Hotline Number in Europe  
Toll free number  
00800 67 10 83 00

available for Austria, Belgium, Denmark, Finland, France, Germany, Italy, Luxemburg,  
Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom

Charged numbers for the Rest of Europe  
+49 180 567 1083  
+49 40 23773 899

◆ User Support E-mail address in Europe  
dss.support@olympus-europa.com

◆ The following are for only technical questions and support about IBM ViaVoice.  
<http://www.ibm.com/software/speech/support/faqolympus.html>

## OLYMPUS CORPORATION

Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-chome, Shinjuku-ku, Tokyo 163-0914, Japan. Tel. 03-3340-2111

## OLYMPUS AMERICA INC.

Two Corporate Center Drive, Melville, NY 11747-3157, U.S.A. Tel. 1-800-622-6372

## OLYMPUS EUROPA GMBH

(Premises/Goods delivery) Wendenstrasse 14-18, 20097 Hamburg, Germany. Tel. 040-237730  
(Letters) Postfach 10 49 08. 20034 Hamburg. Germany.


## OLYMPUS UK LTD.

2-8 Honduras Street, London EC1Y 0TX, United Kingdom, Tel. 020-7253-2772  
<http://www.olympus.com>

### Declaration of Conformity

Model Number:	DS-2000
Trade Name:	DIGITAL VOICE RECORDER
Responsible Party:	OLYMPUS AMERICA INC.
Address:	2 Corporate Center Drive, Melville, NY 11747-3157, U.S.A.
Telephone Number:	800-622-6372

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.

 **Tested To Comply**  
**With FCC Standards**

**FOR HOME OR OFFICE USE**

### Canadian RFI

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

Cet appareil numerique ne depasse pas limits de Categorie B pour les emissions de bruit radio emanant d'appareils numeriques, tel que prevu dans les Reglements sur l'Interference Radio du Department Canadian des Communications.



"CE" mark indicates that this product complies with the European requirements for safety, health, environment and customer protection.



L'indication "CE" signifie que ce produit est conforme aux exigences concernant la sécurité, la santé, l'environnement et la protection du consommateur.



Das „CE“ Zeichen bestätigt die übereinstimmung mit den Europäischen Bestimmungen für Betriebssicherheit und Umweltschutz.



Il marchio "CE" indica che questo prodotto è conforme alle norme della comunità europea per quanto riguarda la sicurezza, la salute, l'ambiente e la protezione del consumatore.



La marca "CE" indica que este producto se encuentra de conformidad con las exigencias europeas sobre seguridad, salud, medio ambiente y protección al consumidor.

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