

# SONY®

4-267-070-51(1)

## IC Recorder

### Operating Instructions

---

Getting Started

---

Basic Operations

---

Other Recording Operations

---

Other Playback Operations

---

Editing Files

---

Listening to the FM Radio

---

About the Menu Function

---

Utilizing Your Computer

---

Additional Information

---

Troubleshooting

## ***IC RECORDER***

ICD-PX312/PX312F

- The recorded music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.
- Sony is not responsible for incomplete recording/ downloading or damaged data due to problems of the IC recorder or computer.
- Depending on the types of the text and characters, the text shown on the IC recorder may not be displayed properly on device. This is due to:
  - The capacity of the connected IC recorder.
  - The IC recorder is not functioning normally.
  - Content information is written in the language or the character that is not supported by the IC recorder.

## Notice for users

All rights reserved. This manual or the software described herein, in whole or in part, may not be reproduced, translated or reduced to any machine readable form without prior written approval from Sony Corporation.

IN NO EVENT SHALL SONY CORPORATION BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, WHETHER BASED ON TORT, CONTRACT, OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THIS MANUAL, THE SOFTWARE OR OTHER INFORMATION CONTAINED HEREIN OR THE USE THEREOF.

Sony Corporation reserves the right to make any modification to this manual or the information contained herein at any time without notice. The software described herein may also be governed by the terms of a separate user license agreement.

- This software is for Windows and cannot be used for Macintosh.
- The supplied connecting cable is for the IC recorder ICD-PX312/PX312F. You cannot connect other IC recorders.


What you record is for personal enjoyment and use only. Copyright laws prohibit other forms of use without the permission of the copyright holders. The use of Memory Stick™ media for recording copyright-protected graphics or other data is limited to the restrictions specified under applicable copyright laws. Any use beyond those restriction is prohibited.

This product supports “Memory Stick Micro™ (M2™)” media. “M2™” is an abbreviated form of “Memory Stick Micro™.” Hereinafter, “M2™” is used in this document.

## Trademarks

- Microsoft, Windows, Windows Vista and Windows Media are registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.
- Macintosh and Mac OS are trademarks of Apple Inc., registered in the USA and other countries.
- Pentium is a registered trademark of Intel Corporation.
- MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.
- microSD and microSDHC logos are trademarks of SD-3C, LLC.



- “Memory Stick Micro,” “M2” and  are trademarks or registered trademarks of Sony Corporation.
- “MagicGate” is a trademark of Sony Corporation.
- Nuance, the Nuance logo, Dragon, Dragon NaturallySpeaking, and RealSpeak are trademarks and/or registered trademarks of Nuance Communications Inc., and/or its affiliates in the United States and/or other countries.

All other trademarks and registered trademarks are trademarks or registered trademarks of their respective holders. Furthermore, “™” and “®” are not mentioned in each case in this manual.

The “Sound Organizer” uses software modules as shown below:  
Windows Media Format Runtime

# Table of Contents

## Getting Started

Step 1: Checking the Contents of the Package .....	7
Index to parts and controls .....	8
Preventing unintentional operations (HOLD) .....	10
Step 2: Preparing a Power Source .....	11
When to replace the batteries .....	12
Step 3: Turning the IC Recorder On .....	13
Turning the power on .....	13
Turning the power off .....	13
Step 4: Setting the Clock .....	14
Step 5: Setting the Language to Be Used in the Display Window .....	16

### Basic Operations

Recording .....	18
Listening .....	23
Erasing .....	28

## Other Recording Operations

Changing the Recording Settings .....	30
Selecting a recording scene for each situation .....	30
Adding a recording to a previously recorded file .....	33

Adding an overwrite recording during playback .....	35
Starting to record automatically in response to sound – the VOR function .....	37
Recording on a Memory Card .....	39
Recording via Other Devices .....	43
Recording with an external microphone .....	43
Recording from other equipment .....	45
Operation during Recording .....	47
Monitoring the recording .....	47

## Other Playback Operations

Changing the Playback Settings .....	48
Convenient playback methods .....	48
Reducing noise in the playback sound and making the human voice clearer – the noise cut function .....	49
Adjusting the playback speed – the DPC (Digital Pitch Control) function .....	50
Selecting the playback mode .....	52
Playing Back a File at a Desired Time with an Alarm .....	55
Playback via Other Devices .....	58
Recording with other equipment .....	58

## Editing Files

Arranging Files in a Folder .....	59
Moving a file to a different folder .....	59
Copying a file to the other memory ....	60
Erasing all files in a folder .....	62
Using a Track Mark .....	63
Adding a track mark .....	63
Erasing a track mark .....	64
Erasing all the track marks in the selected file at one time .....	65
Dividing a File .....	67
Dividing a file at the current position .....	67
Dividing a file at all the track mark positions .....	68
Protecting a File .....	71

## Listening to the FM Radio (for ICD-PX312F only)

Tuning in an FM Radio Station .....	73
Tuning in a radio station by scanning frequencies .....	73
Tuning in a preset radio station .....	74
Recording FM broadcasts .....	75
Presetting FM Radio Stations .....	76
Presetting FM radio stations automatically .....	76
Presetting FM radio stations manually .....	77
Erasing preset FM radio stations .....	77

Changing the FM Radio Reception Settings .....	79
Switching the receiver sensitivity of the FM radio .....	79
Switching the scanning sensitivity .....	80
Switching the FM radio output between speaker and headphones .....	81

## About the Menu Function

Making Settings for the Menu .....	82
Menu Settings .....	84

## Utilizing Your Computer

Using the IC Recorder with Your Computer .....	96
Connecting the IC recorder to your computer .....	96
Structure of folders and files .....	97
Disconnecting the IC recorder from your computer .....	101
Copying Files from the IC Recorder to Your Computer .....	103
Copying MP3 Files from Your Computer to the IC Recorder and Playing Them Back .....	104
Copying an MP3 file from your computer to the IC recorder (drag and drop) .....	104
Playing back MP3 files copied from your computer using the IC recorder .....	104

Using the IC Recorder as USB Memory .....	106
Using the Supplied Sound Organizer Software .....	107
What you can do using Sound Organizer .....	107
System requirements for your computer .....	108
Installing Sound Organizer .....	109
The Sound Organizer window .....	111

## **Additional Information**

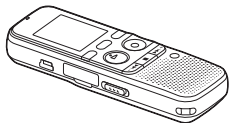
Using a USB AC Adaptor .....	112
Disconnecting the IC recorder from the AC outlet .....	112
Precautions .....	114
Specifications .....	117
System requirements .....	117
Design and specifications .....	118
Battery life .....	121

## **Troubleshooting**

Troubleshooting .....	122
Message List .....	131
System Limitations .....	136
Display Window Guide .....	137
Index .....	142

# Step 1: Checking the Contents of the Package

### IC Recorder (1)

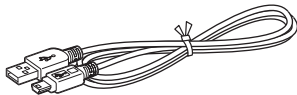


Remove the film on the display window before you use the IC recorder.

### Stereo headphones (1) (for ICD-PX312F only)



### USB connecting cable (1)



To connect the IC recorder to a computer, make sure to use the supplied USB connecting cable.

### LR03 (size AAA) alkaline batteries (2)

### Note

When you charge batteries, purchase NH-AAA-B2KN rechargeable batteries (not supplied).

### Application software, Sound Organizer (CD-ROM) (1)

### Application software, Dragon NaturallySpeaking (DVD-ROM)\*

### Operating Instructions

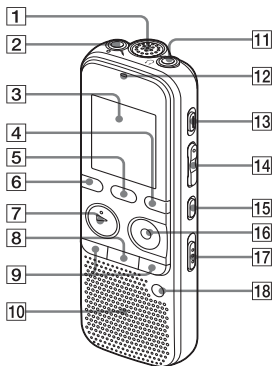
The operating instructions are stored as PDF files in the built-in memory of the IC recorder.

\* The application software, Dragon NaturallySpeaking (DVD-ROM) is supplied with some models in some regions only.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

# Index to parts and controls

## Front

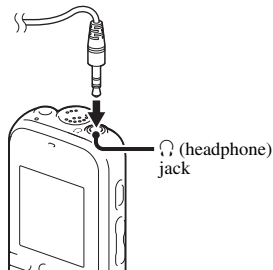


- 1 Built-in microphone
- 2 (microphone) jack\*1
- 3 Display window
- 4 DISP/MENU button
- 5 SCENE button
- 6 (folder) button
- 7 ► PLAY/STOP•ENTER\*1 button
- 8 ■ (stop) button
- 9 ◀◀ (review/fast backward), ▶▶ (cue/fast forward) buttons
- 10 Speaker

- 11 (headphone) jack\*2
- 12 Operation indicator
- 13 ERASE button
- 14 VOL (volume) +/-\*1 button
- 15 ⇄ (repeat) A-B button
- 16 ● REC/PAUSE button
- 17 NOISE CUT switch
- 18 T-MARK (track mark) button

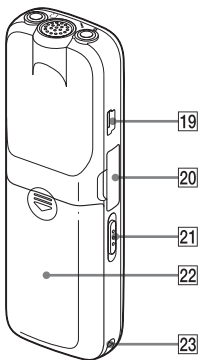
\*1 These buttons and the jack have a tactile dot. Use it as a reference point for operations, or to identify each terminal.


\*2 Connect the headphones to the (headphone) jack. When noise is heard, clean the plug of the headphones.





## Rear

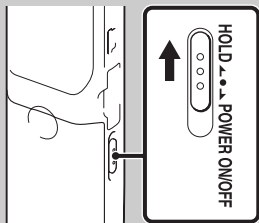


- 19  (USB) connector
- 20 M2™/microSD memory card slot
- 21 HOLD•POWER ON/OFF switch
- 22 Battery compartment
- 23 Strap hole (A strap is not supplied.)

## Preventing unintentional operations (HOLD)

You can disable all the buttons (HOLD) in order to prevent unintentional operations when you carry the IC recorder, etc.

### To put the IC recorder in the HOLD status



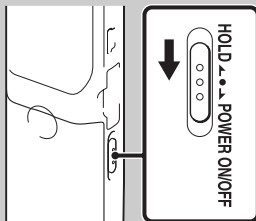
Slide the HOLD•POWER ON/OFF switch in the direction of “HOLD.”

“HOLD” will appear for approximately 3 seconds, indicating that all the button operations are disabled.

HOLD

“HOLD” appears if you press any button when the HOLD function is activated.

### To release the IC recorder from the HOLD status



Slide the HOLD•POWER ON/OFF switch towards the center.

#### Note

When the HOLD function is activated during recording, all the button operations are disabled. To stop recording, cancel the HOLD function first.

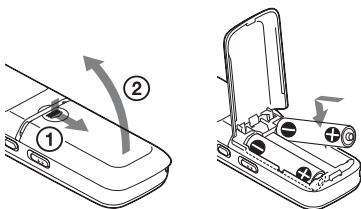
#### Tip

Even if the HOLD function is activated, you can stop the alarm playback by pressing any button. (You cannot stop normal playback.)

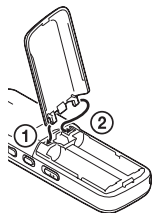
## Step 2: Preparing a Power Source

Remove the film on the display window before you use the IC recorder.

Slide and lift the battery compartment lid, insert LR03 (size AAA) alkaline batteries with correct polarity, and close the lid.



If the battery compartment lid is accidentally detached, attach it as illustrated.



The clock setting window appears and the year section flashes when you insert batteries for the first time, or when you insert batteries after the IC recorder has been without batteries for a certain period of time. See “Step 4: Setting the Clock” on page 14 to set the date and time.

### Tips

- When replacing the batteries, files recorded or alarm settings are not erased even when you remove the batteries.
- When replacing the batteries, the clock continues moving for about 1 minute after you remove the batteries.
- You can use two NH-AAA-B2KN rechargeable batteries (not supplied).


### Notes

- Do not use manganese batteries for this IC recorder.
- When replacing the batteries, be sure to replace both batteries with new ones.
- Do not charge dry batteries. You cannot charge the supplied LR03 (size AAA) alkaline batteries.
- When you are not going to use the IC recorder for a long time, remove the batteries to prevent damage from battery leakage and corrosion.


## When to replace the batteries

The battery indicator in the display window shows the battery condition.

### Battery remain indicator

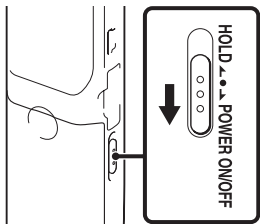
 : “Low Battery Level” appears.  
Replace the old batteries with new ones.



 : “Low Battery” appears and the IC recorder will stop operation.

## Step 3: Turning the IC Recorder On

### Turning the power on



Slide the HOLD•POWER ON/OFF switch in the direction of “POWER ON/OFF” for more than 1 second. The IC recorder is turned on, and the “Accessing...” animation is displayed.

### Turning the power off

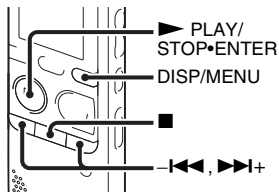
Slide the HOLD•POWER ON/OFF switch in the direction of “POWER ON/OFF” for more than 2 seconds, and “Power Off” is displayed.

The IC recorder turns off within a few seconds.

### 💡 Tips

- When you are not going to use the IC recorder for a long time, we recommend to turn off the IC recorder.
- When the IC recorder is in the stop mode, and you leave the IC recorder without attempting an operation for a certain length of time, the auto power off function will take effect. (The length of time before auto power off is set to “10min” when you purchase the IC recorder.) You can select the length of time before auto power off takes effect in the menu (page 94).

## Step 4: Setting the Clock

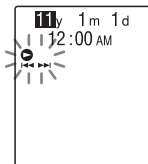


You need to set the clock to use the alarm function or record the date and time. When you insert batteries for the first time, or when you insert batteries after the IC recorder has been without batteries for more than 1 minute, “Set Date&Time” appears, and then the clock setting window appears.

Set the clock as follows:

### 1 Set the year.

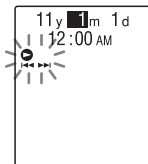
Press **-|<<<** or **>>>|+** to set the year, and then press **▶ PLAY/STOP•ENTER**. Select the last two digits of the year.



When you press **▶ PLAY/STOP•ENTER**, the cursor moves to the month section.

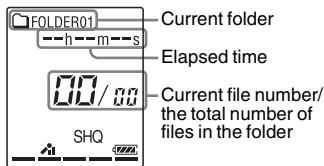
### 2 Set the month, day, hour, and minute in sequence in the same way.

Press **-|<<<** or **>>>|+** to select the desired figures, and then press **▶ PLAY/STOP•ENTER**.



When you set the minute, the “Executing...” animation is displayed, and then the stop mode window appears.

When you use the IC recorder for the first time or when no file is recorded, the following window may be displayed.



### ■ Notes

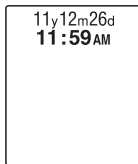
- If you do not press ► PLAY/ STOP•ENTER within 1 minute of entering the clock setting data, the clock setting mode is canceled and the stop mode window will be displayed.
- When any button not intended for use in setting the clock is pressed during the clock setting mode, the clock setting is canceled. To set the clock, use the menu.

### To set the clock using the menu

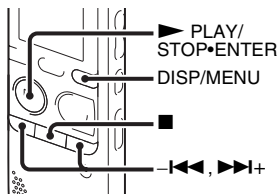
While the IC recorder is in the stop mode, you can set the clock using the menu. Press and hold DISP/MENU to enter the menu mode. Then select “Detail Menu,” then “Date&Time” to set the clock (page 93).

### To display the current date and time

While the IC recorder is in the stop mode, press ■ (stop) to display the current date and time for about 3 seconds.



## Step 5: Setting the Language to Be Used in the Display Window

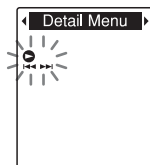


You can select the language to be used for messages, menus, etc. from 3 languages.

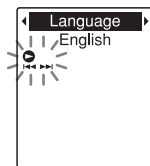
- 1 Press and hold DISP/MENU to enter the menu mode.

The menu mode window will be displayed.

- 2 Press -◀◀ or ▶▶+ to select “Detail Menu,” and then press ▶ PLAY/ STOP•ENTER.



- 3 Press -◀◀ or ▶▶+ to select “Language,” and then press ▶ PLAY/ STOP•ENTER.



- 4 Press -◀◀ or ▶▶+ to select the language that you want to use, and then press ▶ PLAY/ STOP•ENTER.



You can select the following languages.  
English, Español (Spanish), Français  
(French)

**5** Press ■ (stop) to exit the menu mode.

# Recording

### ■ Notes

- Before making a recording, be sure to check the battery indicator (page 12).
- Noise may be recorded if an object, such as your finger, etc., accidentally rubs or scratches the IC recorder during recording.

### 💡 Tip

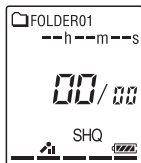
Before you start recording, we recommend you make a trial recording first, or monitor the recording (page 47).

## Starting to record

---

- 1 Slide the HOLD•POWER ON/OFF switch towards the center to release the IC recorder from the HOLD status (page 10).

The stop mode window appears.



- 2 Select the folder in which you want to record files (page 24).

- 3** Place the IC recorder so that the built-in microphone face the direction of the source to be recorded.

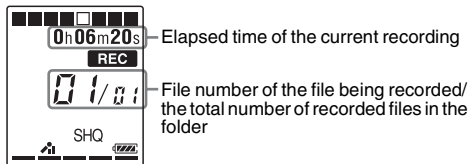
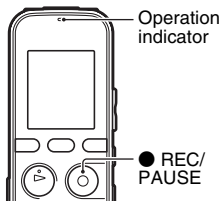


- 4** Press ● REC/PAUSE in the stop mode.

The operation indicator flashes in orange, and then lights up in red. (When “LED” is set to “OFF” in the menu (page 93), the indicator does not light.)

You do not need to press and hold ● REC/PAUSE while recording.

The new file will be automatically recorded after the last recorded file.



**Tip**

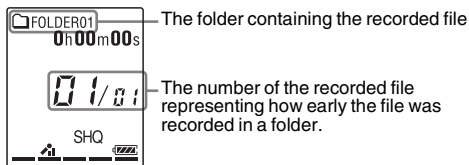
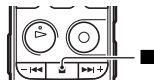
You can switch the elapsed time display to remaining time, or another display by pressing DISP/MENU (page 27).

## To stop recording

1 Press ■ (stop).

The “Accessing...” animation appears and the IC recorder stops at the beginning of the current recording file.

You can locate the recorded file using its folder name and file number for playback later.



The folder containing the recorded file

The number of the recorded file representing how early the file was recorded in a folder.

## Note while accessing

The IC recorder is recording data and storing it on the memory media when the “Accessing...” animation appears in the display window or the operation indicator flashes in orange. While the IC recorder is accessing data, do not remove the batteries or connect or disconnect the USB AC adaptor (not supplied). Doing so may damage the data.

## Other operations

pause recording*	Press ● REC/PAUSE. During recording pause, the operation indicator flashes in red and “PAUSE” begins to flash in the display window.
release pause and resume recording	Press ● REC/PAUSE again. Recording resumes from that point. (To stop recording after pausing recording, press ■ (stop).)
review the current recording instantly	Press ► PLAY/STOP•ENTER. Recording stops and playback starts from the beginning of the file just recorded.
review during recording	Press and hold - ◀◀ during recording or recording pause. Recording stops and you can search backwards while listening to fast playback sound. After you release - ◀◀, playback starts from that point.

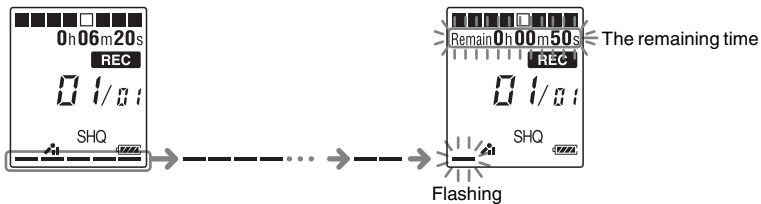
\* One hour after you pause recording, recording pause is automatically released and the IC recorder enters the stop mode.

### 💡 Tips

- Files recorded using this IC recorder will be recorded as MP3 files.
- You can record up to 199 files in each folder.
- You can make new folders or erase unwanted folders using the supplied Sound Organizer software (page 107).

## Remaining memory indicator

During recording, the remaining memory indicator decreases one by one. When the remaining time of recording reaches 10 minutes, the last one of the indicator flashes. When the remaining time reaches 1 minute, the display will be changed automatically to the remaining time display, and the remaining recording time display will also flash. To continue recording, first erase some of the files.



### To record according to each recording situation (scene selection)

According to various recording scene, you can change the recording items, such as REC Mode (page 91), Mic Sensitivity (page 91), etc., to the recommended settings in bulk. For details on scene selection, see page 30.

# Listening

## Starting playback

---

- 1** Slide the HOLD•POWER ON/OFF switch towards the center to release the IC recorder from the HOLD status (page 10).

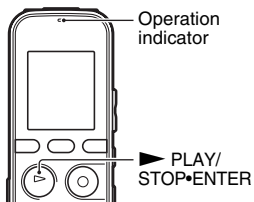
The stop mode window appears.

---

- 2** Select the file you want to play (page 24).
- 

- 3** Press ► PLAY/STOP•ENTER.


Playback will start soon, and the operation indicator will light in green. (When “LED” is set to “OFF” in the menu (page 93), the indicator does not light.)



- 4** Press VOL -/+ to adjust the volume.




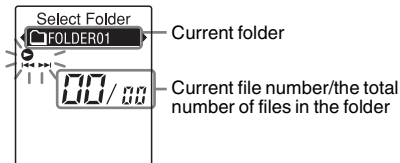
## To stop playback

- 1 Press  (stop).




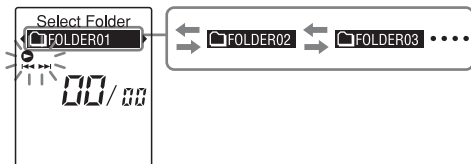
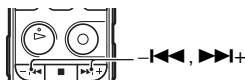
## To select a folder and file

- 1 Press  (folder) to display the folder selection window.



- 2 Press  or  to select a folder.

When you purchase the IC recorder, there are 5 folders already available ( FOLDER01-05).

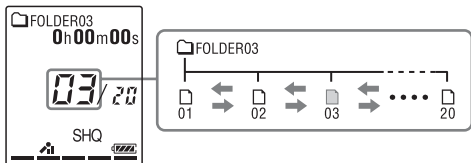
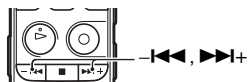




**3** Press ► PLAY/STOP•ENTER.



**4** Press -◀◀ or ▶▶+ to select a file.



Press ▶▶+ to select a file with a larger number.

Press -◀◀ to select a file with a smaller number.

## Other operations

---

stop at the current position (Playback Pause function) Press ► PLAY/STOP•ENTER. To resume playback from that point, press ► PLAY/STOP•ENTER again.

---

go back to the beginning of the current file Press -◀◀ once.\*1\*2

---

go back to previous files Press -◀◀ repeatedly. (During the stop mode, keep the button pressed to go back the files continuously.\*3)

---

skip to the next file Press ►►+ once.\*1\*2

---

skip to the succeeding files Press ►►+ repeatedly. (During the stop mode, keep the button pressed to skip the files continuously.\*3)

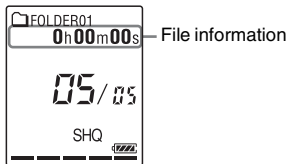
---

\*1 When a track mark is set, the IC recorder goes backward or forward to the track mark before or after the current point (page 63).

\*2 These operations are for when “Easy Search” is set to “OFF” (page 48).

\*3 In the continuous searching mode, the IC recorder does not locate track marks.

## About the display



Press DISP/MENU briefly to switch and check the file information.


A file recorded using the IC recorder is displayed as follows.


Elapsed time: The elapsed playback time of one file


Remaining time: The maximum recording time during recording

The remaining playback time of one file (in the stop mode or playback mode)

Recording date/time: Date/time recorded

 : File name (in the stop mode or playback mode): Date\_file number (e.g. 110101\_001 or FM\_110101\_001)

 : Title (in the stop mode or playback mode): Date\_file number (e.g. 110101\_001 or FM\_110101\_001)

 : Artist name (in the playback mode): Artist name (e.g. My Recording)

# Erasing

## Note

Once a recording has been erased, you cannot retrieve it.

## Selecting a file and erasing it

---

- 1** Slide the HOLD•POWER ON/OFF switch towards the center to release the IC recorder from the HOLD status (page 10).

The stop mode window appears.

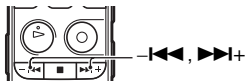
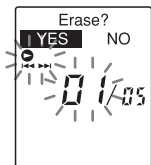
---

- 2** Select the file you want to erase when the IC recorder is in the stop or playback mode (page 24).
- 

- 3** Press ERASE.  
“Erase?” is displayed and the specified file is played back for confirmation.



- 4** Press -I◀◀ or ▶▶+ to select “YES.”



## 5 Press ► PLAY/STOP•ENTER.

The “Erasing...” animation appears in the display window and the selected file will be erased.

When a file is erased, the remaining files will advance so that there will be no space between files.



The 1st file has been erased and the following files have had their numbers reduced by 1.  
The total number of files in the folder is reduced from 05 to 04.



## To cancel erasing

- 1 Select “NO” in step 4 of “Selecting a file and erasing it,” and then press ► PLAY/STOP•ENTER.



## To erase another file

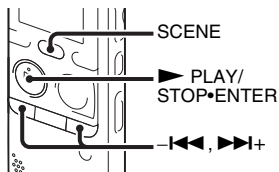
Proceed with steps 2 through 5 in “Selecting a file and erasing it.”

## To erase a part of a file

Divide the file into two files first (page 67), and then proceed with steps 3 through 5 in “Selecting a file and erasing it” after selecting the file you want to erase.

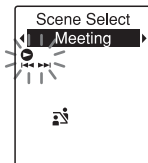
# Changing the Recording Settings

## Selecting a recording scene for each situation



According to various recording scene, you can change the items for recording, such as REC Mode (page 91), Mic Sensitivity (page 91), etc., to the recommended settings in bulk.

- 1 Press **SCENE** in the stop mode.  
The Scene Select window will be displayed.
- 2 Press **-◀◀** or **▶▶+** to select a scene you want, and then press **▶ PLAY/ STOP•ENTER**.



The indicator corresponding to the selected scene is displayed.

Meeting (🗨️)	To record in a variety of situations, such as recording in a conference room.
Voice Notes (☺)	To record dictation with a microphone in front of your mouth.
Interview (🗨️)	To record human voice at a distance of 1 to 2 meters.
Lecture (🗨️)	To record a wide range of sound, such as a lecture in a classroom or a chorus lesson.
Audio IN (🔊)	To record from external equipment, such as a portable CD/MD player or a tape recorder, connected to the IC recorder via an audio output connector (stereo mini-jack). Also used for dubbing.

## Notes

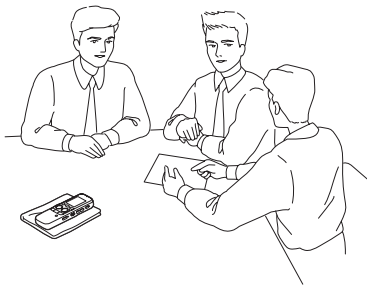
- You cannot set a scene during recording.
- When 60 seconds have passed without any operation after the Scene Select window appeared, the stop mode window will be displayed.

## Tips for better recording

There are ways of making better recordings other than using scene selection.

### Recording at a meeting

By placing the IC recorder on a stand or a handkerchief substituting for a stand, you can record with clear, low-noise sound, without vibration noise from the desk.



### Recording a voice note

By placing the IC recorder close to one side of your mouth, you can prevent breathing on the built-in microphone, and record with clear sound.



### Recording an interview

Place the IC recorder so that the built-in microphone face the interviewee.









## Recording a music performance

By attaching a tripod (not supplied) or placing the IC recorder on a stand or table, you can adjust the angle of the IC recorder and the built-in microphone more precisely. When recording a chorus or piano performance, for example, place the IC recorder on a table approximately 2 to 3 meters from the performer(s). Set up the IC recorder with the display window facing up, and with the built-in microphone pointing towards the sound source.







## Scene Select settings

For details on the menu items and settings, see pages 86 through 92.

	Meeting (  )	Voice Notes (  )	Interview (  )
VOR	OFF	OFF	OFF
REC Mode	192kbps (MONO) (SHQ)	128kbps (MONO) (HQ)	192kbps (MONO) (SHQ)
Mic Sensitivity	Medium (  )	Low (  )	Medium (  )
LCF(Low Cut)	ON	ON	ON
Select Input	MIC IN	MIC IN	MIC IN

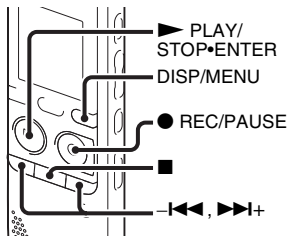


	Lecture (  )	Audio IN (  )
VOR	OFF	OFF
REC Mode	192kbps (MONO) (SHQ)	192kbps (MONO) (SHQ)
Mic Sensitivity	Medium (  )	Low (  )
LCF(Low Cut)	OFF	OFF
Select Input	MIC IN	Audio IN

### Note

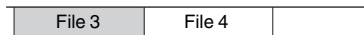
You cannot modify the Scene Select settings. If you want to change the setting items, such as REC Mode (page 91), Mic Sensitivity (page 91), etc., for recording situations, use the menu to change each item of recording settings.

## Adding a recording to a previously recorded file



When “Add/Overwrite” in the menu is set to “Add,” you can add a recording to the file being played back. The added recording will be placed after the current file, and will be counted as a part of the file.

During playback of file 3



After adding a recording



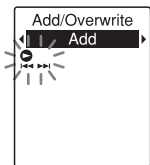
Select the file to which you want to add a recording first.

**1** Press and hold DISP/MENU in the stop mode to enter the menu mode.  
The menu mode window will be displayed.

**2** Press **←|←|** or **▶|▶|+** to select “Add/Overwrite,” and then press **▶** PLAY/STOP•ENTER.

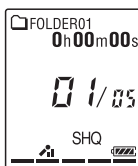


**3** Press **←|←|** or **▶|▶|+** to select “Add,” and then press **▶** PLAY/STOP•ENTER.



“Add/Overwrite” is set to “OFF” when you purchase the IC recorder.

**4** Press **■** (stop) to exit the menu mode.



**5** When the file to be added is played back, press **●** REC/PAUSE.

“Add REC?” will be displayed.

For details on playback, see page 23.

**6** While “Add REC?” is displayed, press **●** REC/PAUSE.

The operation indicator will turn red.  
Then recording starts.

**7** Press **■** (stop) to stop recording.



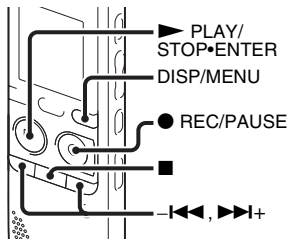
Recording is added to the current file. The file number and the total number of files in the folder remain unchanged.

#### **■** Notes

- You cannot add a recording when the file has reached the maximum size limit (500 MB).

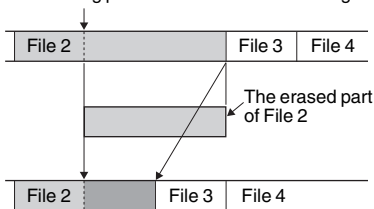
- You cannot add a recording to an MP3 file that was not recorded using the IC recorder. Moreover, when you edit files using the supplied Sound Organizer software, adding a recording to the files may not be possible.
- The REC Mode of an additional recording is the same as the added file.
- If 10 minutes have passed after step 5, you must start the procedure again from step 5.

## Adding an overwrite recording during playback



When “Add/Overwrite” in the menu is set to “Overwrite,” you can add an overwrite recording after a selected point in a recorded file. The part of the file after the selected point is erased.

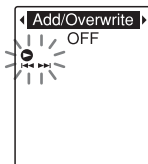
The starting point of an overwrite recording



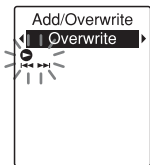
Added overwrite recording in File 2

Select the file to which you want to add an overwrite recording first.

- 1 Press and hold DISP/MENU in the stop mode to enter the menu mode. The menu mode window will be displayed.
- 2 Press -<<< or >>>+ to select “Add/Overwrite,” and then press ► PLAY/STOP•ENTER.



- 3** Press **◀◀** or **▶▶+** to select “Overwrite,” and then press **▶** PLAY/STOP•ENTER.



“Add/Overwrite” is set to “OFF” when you purchase the IC recorder.

- 4** Press **■** (stop) to exit the menu mode.



- 5** When the file to be added is played back, press **●** REC/PAUSE at the position where you want to overwrite the file. “Overwrite REC?” will be displayed. For details on playback, see page 23.
- 6** While “Overwrite REC?” is displayed, press **●** REC/PAUSE.

The operation indicator will turn red. Then recording starts.

- 7** Press **■** (stop) to stop recording.

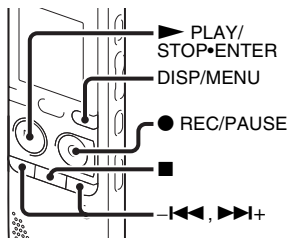


Recording overwrites the current file. The file number and the total number of files in the folder remain unchanged.

## ■ Notes

- You cannot add an overwrite recording to an MP3 file when the file has reached the maximum size limit (500 MB). However, you can add an overwrite recording to a file, even if the file has reached the maximum size limit, when the beginning of the point to the overwritten has not reached the maximum size limit.
- You cannot add an overwrite recording to an MP3 file which was not recorded using the IC recorder. Moreover, when you edit files using the supplied Sound Organizer software, adding an overwrite recording to the files may not be possible.
- The REC Mode of an additional overwrite recording is the same as the added file.
- If 10 minutes have passed after step 5, you must start the procedure again from step 5.

## Starting to record automatically in response to sound – the VOR function

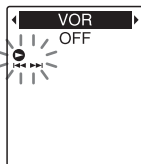


You can set the VOR (Voice Operated Recording) function to “ON,” to make the IC recorder start recording when the IC recorder detects sound, and pause when no sound is heard, eliminating recording during soundless periods.

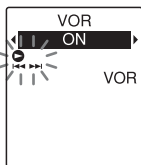
- 1 Press and hold DISP/MENU in the stop or recording mode to enter the menu mode.

The menu mode window will be displayed.

- 2 Press **←←** or **→→** to select “VOR,” and then press **▶** PLAY/STOP•ENTER.



- 3 Press **←←** or **→→** to select “ON,” and then press **▶** PLAY/STOP•ENTER.



“VOR” is set to “OFF” when you purchase the IC recorder.

- 4 Press **■** (stop) to exit the menu mode.
- 5 Press **●** REC/PAUSE.

“VOR” and “**REC**” appear in the display window.



The recording pauses when no sound is detected and “PAUSE” flashes. When the IC recorder detects sound again, the recording starts again.

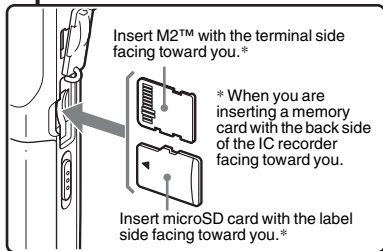
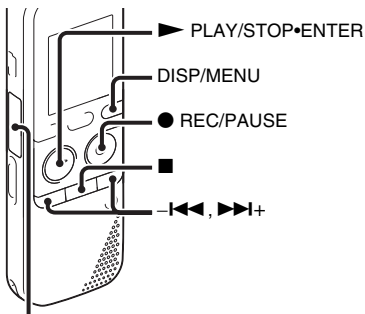
## To cancel the VOR function

Set “VOR” to “OFF” in step 3.

### **■ Notes**

- The VOR function is affected by the sound around you. Set “Mic Sensitivity” in the menu (page 91) according to the recording conditions. If recording is not satisfactory after you have changed the “Mic Sensitivity” setting, or for an important recording, set “VOR” to “OFF” in the menu.
- During the FM recording (page 75), the VOR function does not work.

# Recording on a Memory Card



In addition to the built-in memory, you can record files on a memory card.

## About compatible memory cards

Memory cards that you can use with the IC recorder are as follows:

- Memory Stick Micro™ (M2™) media: Up to 16 GB is supported.
- microSD card: A microSD (FAT16) card smaller than 2 GB and a microSDHC (FAT32) card from 4 GB to 32 GB are supported.

A memory card of 64 MB or less is not supported.

The microSD/microSDHC cards that have been tested according to our standards are as follows.

microSD/microSDHC cards

Supplier	2 GB	4 GB	8 GB	16 GB	32 GB
SONY	○	○	○	—	—
Toshiba	○	○	○	○	—
Panasonic	○	○	○	○	—
SanDisk	○	○	○	○	○

○: Operation tested

—: Operation not tested

As of January 2011

For ICD-PX312/PX312F, the operational tests performed were using memory cards available as of January 2011.

For the latest information about the memory cards that have been tested, please access the support home page for the IC recorder:

<http://www.sony-latin.com/index.crp>

In this manual, M2™ and microSD cards are generally referred to as a “memory card.”

The M2™/microSD card slot is referred to as the “memory card slot.”

Due to the file system specifications of the IC recorder, you can record and play back a file smaller than 500 MB using a memory card.

You can record up to 4,074 files on an M2™ media.

### **Note**

Operations of all types of compatible memory cards are not guaranteed.

### **To insert a memory card**

Before recording, be sure to copy all the data stored on the memory card to your computer and format the memory card on the IC recorder (page 95) so it contains no data.

- 1** Open the cover of the memory card slot in the stop mode.

- 2** Insert an M2™ or microSD card, in the direction shown in the illustration on page 39, securely to the end of the slot until it clicks into place. Then close the cover.

### **To remove a memory card**

Push the memory card into the slot. When it pops out, remove it from the memory card slot.

### **Structure of folders and files**

5 folders are created in a memory card in addition to those in the built-in memory. The structure of folders and files is somewhat different from that of the built-in memory (page 99).

### **Notes**

- Do not insert or remove a memory card during recording/playback/formatting. Doing so may cause a malfunction of the IC recorder.
- Do not remove a memory card while the “Accessing...” animation appears in the display window. Doing so may damage the data.
- If a memory card is not recognized, remove it and then insert it into the IC recorder again.
- Close the cover of the memory card slot firmly. Also, do not insert any liquid, metal, flammable or any object other than a



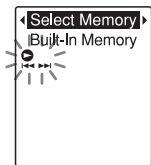
memory card into the slot. Doing so may cause fire, electric shock, or malfunctions.

## To switch the IC recorder destination to the memory card

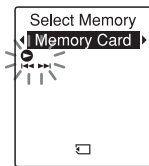
- 1 Press and hold DISP/MENU in the stop mode to enter the menu mode.

The menu mode window will be displayed.

- 2 Press **←|←|←|** or **▶|▶|▶|+** to select “Select Memory,” and then press **▶ PLAY/ STOP•ENTER**.



- 3 Press **←|←|←|** or **▶|▶|▶|+** to select “Memory Card,” and then press **▶ PLAY/ STOP•ENTER**.

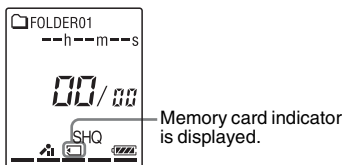


“Select Memory” is set to “Built-In Memory” when you purchase the IC recorder.

If the memory card has already been formatted, proceed to step 7.

- 4 When the memory card is not formatted, press **←|←|←|** or **▶|▶|▶|+** to select “Detail Menu,” and then press **▶ PLAY/ STOP•ENTER**.
- 5 Press **←|←|←|** or **▶|▶|▶|+** to select “Format,” and then press **▶ PLAY/ STOP•ENTER**.  
“Erase All Data?” will be displayed.
- 6 Press **←|←|←|** or **▶|▶|▶|+** to select “YES,” and then press **▶ PLAY/ STOP•ENTER**.

7 Press ■ (stop) to exit the menu mode.



### To use the built-in memory

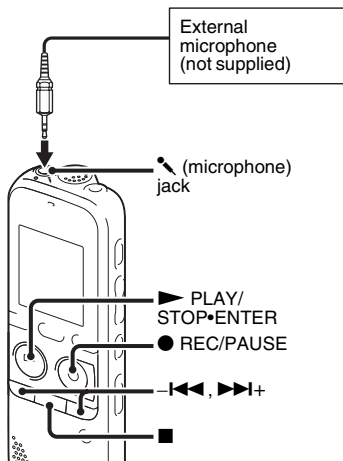
Select “Built-In Memory” in step 3.

### To start recording

Select the folder and then press ● REC/ PAUSE. For details on recording, see page 18.

# Recording via Other Devices

## Recording with an external microphone

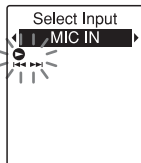


When you connect a stereo microphone (not supplied) to the IC recorder and the recording mode is set to “SHQ” or “HQ” mode, you can record sound in stereo.

You can play back the sound in stereo using the stereo headphones.

- 1 Connect an external microphone (not supplied) to the (microphone) jack when the IC recorder is in the stop mode. “Select Input” appears in the display window.  
If “Select Input” is not displayed, set it in the menu (page 92).

- 2 Press or to select “MIC IN,” and then press PLAY/STOP•ENTER.



“Select Input” is set to “MIC IN” when you purchase the IC recorder.

- 3 Press (stop) to exit the menu mode.

**4** Press ● REC/PAUSE to start recording.

The built-in microphone is automatically cut off, and the IC recorder starts recording sounds from the external microphone.

If the input level is not strong enough, adjust the “Mic Sensitivity” setting on the IC recorder (page 91).

When a plug in power type microphone is connected, power is automatically supplied to the microphone from the IC recorder.

**5** Press ■ (stop) to stop recording.

#### **Recommended microphones**

You can use the Sony ECM-CS10, ECM-CZ10, ECM-DS70P, ECM-DS30P electret condenser microphone (not supplied).

#### **To record sound from a telephone or a cell phone**

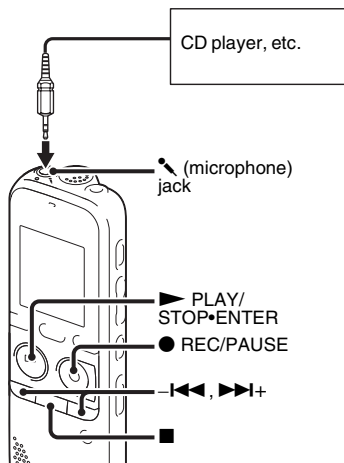
You can use the ECM-TL1 headphone-type electret condenser microphone (not supplied) to record sound from a telephone or a cell phone.

For details on how to make the connection, refer to the operating instructions supplied with the ECM-TL1 microphone.

#### **Notes**

- After you have made the connection, check the sound quality of the conversation and the recording level before you start recording.
- If the beep of the telephone or a dial tone is recorded, the conversation may be recorded with lower level of sound. In this case, start recording after the conversation has started.
- The VOR function (page 37) may not work, depending on the kind of telephone or the line condition.
- We assume no responsibility whatsoever for any inconvenience, even if you cannot record a conversation using the IC recorder.

## Recording from other equipment



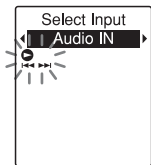
You can make music files without using the computer by recording sound from other equipment connected to the IC recorder. When you select “Audio IN” in the “Scene Select” menu, the settings suitable for recording from other equipment are already selected. For details on setting, see page 30.

### 💡 Tips

- Before you start recording, we recommend you make a trial recording first, or monitor the recording (page 47).
- If the input level is not strong enough, connect the headphone jack (minijack, stereo) of other equipment to the (microphone) jack of the IC recorder and adjust the volume level on the piece of equipment connected to the IC recorder.

- 1 Connect other equipment to the IC recorder when the IC recorder is in the stop mode.  
Connect the audio output connector (stereo mini-plug) of other equipment to the (microphone) jack of the IC recorder using an audio connecting cable (page 119).  
“Select Input” appears in the display window.  
If “Select Input” is not displayed, set it in the menu (page 92).

- 2** Press **◀◀** or **▶▶** to select “Audio IN,” and then press **▶** PLAY/STOP•ENTER.



“Select Input” is set to “MIC IN” when you purchase the IC recorder.

- 3** Press **■** (stop) to exit the menu mode.
- 4** Press **●** REC/PAUSE to start recording. The built-in microphone is automatically cut off and the IC recorder starts recording sounds from the connected equipment.
- 5** Start playback on the piece of equipment connected to the IC recorder.
- 6** Press **■** (stop) to stop recording.

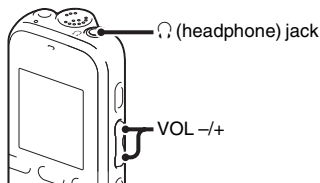
#### **■ Note**

When audio output of an external device connected to the IC recorder is monaural and the recording mode is set to “192kbps(MONO)” (SHQ) or “128kbps(MONO)” (HQ), sounds are

recorded only in one channel. In this case, set the recording mode to “48kbps(MONO)” (SP) or “8kbps(MONO)” (LP) in the menu (page 91).

# Operation during Recording

## Monitoring the recording



If you connect the headphones to the (headphone) jack, you can monitor the recording. You can adjust the monitoring volume by pressing VOL -/+, but the recording level is fixed.



### **Note**

When the cord of the headphones touches the IC recorder while you are monitoring the recording, the IC recorder may record a rustling noise. The rustling noise can be reduced by holding the cord away from the IC recorder.





# Changing the Playback Settings

## Convenient playback methods



### Listening with better sound quality

- To listen with headphones:  
Connect the headphones to the  (headphone) jack. The built-in speaker will be automatically disconnected.
- To listen from an external speaker:  
Connect an active or passive speaker to the  (headphone) jack.

### Quickly locating the point you wish to start playback (easy search)


When “Easy Search” is set to “ON” (page 87) in the menu, you can quickly locate the point at which you wish to start playback by pressing  or  repeatedly during playback. You can go back approx. 3 seconds by pressing  once, or advance approx. 10 seconds by pressing  once. This function is useful for locating a desired point in a long recording.

### Searching forward/backward during playback (cue/review)

- To search forward (cue):  
Press and hold + during playback and release it at the point you wish to resume playback.
- To search backward (review):  
Press and hold - during playback and release it at the point you wish to resume playback.

The IC recorder searches at slow speed with playback sound. This is useful to check one word forward or back. Then, if you press and hold the button, the IC recorder starts to search at higher speed.

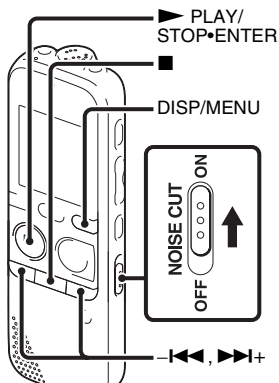
### When files are played back to the end of the last file

- When you play back or fast play back to the end of the last file, “FILE END” lights up for approx. 5 seconds.
- When “FILE END” and the operation indicator go off, the IC recorder will stop at the beginning of the last file.
- If you press and hold - while “FILE END” is lit, the files are played back rapidly, and normal playback will start at the point you release the button.



- If the last file is long and you wish to start playback at a later part of the file, press and hold ►►►+ to go to the end of the file, and then press -◄◄◄ while “FILE END” is lit to go back to the desired point.
- For files other than the last one, go to the beginning of the next file and play backward to the desired point.

## Reducing noise in the playback sound and making the human voice clearer – the noise cut function



When you slide the NOISE CUT switch to “ON” in the playback mode, ambient noise other than the human voice is reduced. A file is played back with clear sound quality because the noise of all frequency bands including a human voice is reduced.

### ■ Notes

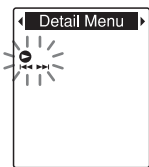
- The effect of the noise cut function may be different depending on the condition of the recorded voice.
- When you are using the built-in speaker, the noise cut function does not work.
- When you are listening to the FM radio, the noise cut function does not work.

### To set the noise cut level

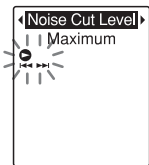
- 1 Press and hold DISP/MENU in the stop or playback mode to enter the menu mode.

The menu mode window will be displayed.

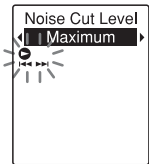
- 2 Press -◄◄◄ or ►►►+ to select “Detail Menu,” and then press ► PLAY/STOP•ENTER.



- 3** Press **◀◀** or **▶▶** to select “Noise Cut Level,” and then press **▶** **PLAY/STOP•ENTER**.



- 4** Press **◀◀** or **▶▶** to select “Maximum” or “Medium,” and then press **▶** **PLAY/STOP•ENTER**.



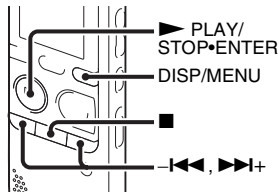
“Noise Cut Level” is set to “Maximum” when you purchase the IC recorder.

- 5** Press **■** (stop) to exit the menu mode.

## To cancel the noise cut function

Slide the NOISE CUT switch to “OFF.”

## Adjusting the playback speed – the DPC (Digital Pitch Control) function

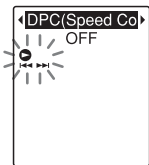


You can adjust the playback speed in a range from 0.50 times to 2.00 times. The file is played back in natural tones by means of a digital processing function.

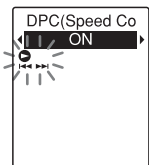
- 1** Press and hold **DISP/MENU** in the stop or playback mode to enter the menu mode.

The menu mode window will be displayed.

- 2 Press **◀◀◀** or **▶▶▶+** to select “DPC(Speed Control),” and then press **▶ PLAY/STOP•ENTER**.

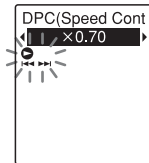


- 3 Press **◀◀◀** or **▶▶▶+** to select “ON,” and then press **▶ PLAY/STOP•ENTER**.



- 4 Press **◀◀◀** or **▶▶▶+** to adjust the playback speed.
- ◀◀◀**: Decreases the speed by 0.05 times each time this button is pressed (from  $\times 0.50$  to  $\times 1.00$ ).
  - ▶▶▶+**: Increases the speed by 0.10 times each time this button is pressed (from  $\times 1.00$  to  $\times 2.00$ ).

When you press and hold each button, you can change the speed continuously.



The playback speed is set to “ $\times 0.70$ ” when you purchase the IC recorder.

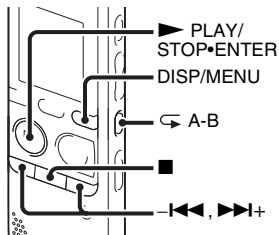
### To resume normal playback speed

Select “OFF” in step 3.

#### **Note**

The noise cut function (page 49) does not work if you set “DPC(Speed Control)” to “ON.”

## Selecting the playback mode



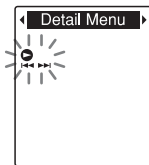
You can use the menu or operate buttons to select the playback mode according to the playback situations.

### To play back all files in a folder continuously – the continuous play

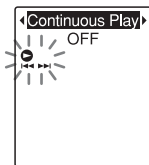
- 1 Press and hold DISP/MENU in the stop or playback mode to enter the menu mode.

The menu mode window will be displayed.

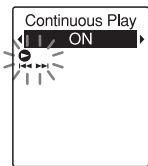
- 2 Press -I◀◀ or ▶▶+ to select “Detail Menu,” and then press ▶ PLAY/ STOP•ENTER.



- 3 Press -I◀◀ or ▶▶+ to select “Continuous Play,” and then press ▶ PLAY/STOP•ENTER.



- 4 Press -I◀◀ or ▶▶+ to select “ON,” and then press ▶ PLAY/STOP•ENTER.



“Continuous Play” is set to “OFF” when you purchase the IC recorder.

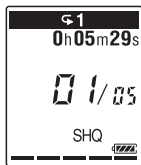
**5** Press ■ (stop) to exit the menu mode.

### To resume normal playback mode – the single file play

Select “OFF” in step 4.

### To play back a file repeatedly

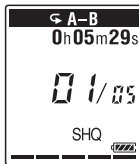
During playback, press and hold ► PLAY/STOP•ENTER until “↶ 1” appears. The selected file will be played back repeatedly.



To resume normal playback, press ► PLAY/STOP•ENTER again.

### To play back a specified section repeatedly – A-B repeat

- 1** During playback, press ↶ (repeat) A-B to specify the starting point A. “A-B B?” is displayed.
- 2** Press ↶ (repeat) A-B again to specify the finishing point B. “↶ A-B” is displayed and the specified section is played back repeatedly.



To resume normal playback:  
Press ► PLAY/STOP•ENTER.

To stop A-B repeat playback:  
Press ■ (stop).

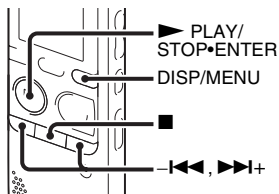
To change the segment specified for A-B repeat playback:  
During A-B repeat playback, press ↶ (repeat) A-B again to specify a new

starting point A. Then specify a new finishing point B, as in step 2.

**Note**

You cannot set the points A and B near the beginning or the end of a file, and around track marks.

# Playing Back a File at a Desired Time with an Alarm

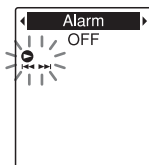


You can sound an alarm and start playback of a selected file at a desired time. You can have a file played back on a specified date, once every week, or at the same time every day. You can set an alarm for a file.

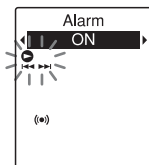
**1** Select the file you want to play back with an alarm.

**2** Enter the alarm setting mode.

- ① Press and hold DISP/MENU in the stop mode to enter the menu mode. The menu mode window will be displayed.
- ② Press -◀◀ or ▶▶+ to select "Alarm," and then press ▶ PLAY/STOP•ENTER.



- ③ Press -◀◀ or ▶▶+ to select "ON," and then press ▶ PLAY/STOP•ENTER.



"Alarm" is set to "OFF" when you purchase the IC recorder.

**3** Set the alarm date and time.

- ① Press -◀◀ or ▶▶+ to select "Date," a day of the week, or "Daily," and then press ▶ PLAY/STOP•ENTER.

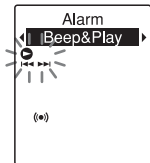
② **When you select “Date”:**

Set the year, month, day, hour, and minute in sequence, as described in “Step 4: Setting the Clock” on page 14.

**When you select a day of the week or “Daily”:**

Press **←|←|←|** or **▶▶▶+** to set the hour, and then press **▶ PLAY/STOP•ENTER**, press **←|←|←|** or **▶▶▶+** to set the minute, and then press **▶ PLAY/STOP•ENTER**.

- 4 Press **←|←|←|** or **▶▶▶+** to select a favorite alarm pattern, and then press **▶ PLAY/STOP•ENTER**.



The alarm pattern is set to “Beep&Play” when you purchase the IC recorder.

The “Executing...” animation is displayed.

- 5 Press **■** (stop) to exit the menu mode.



Beep&Play	The selected file will be played back after the alarm.
Beep	Only the alarm will sound.
Play	Only the selected file will be played back.

## To change the alarm setting

Select the file you want to change its alarm setting, and then follow steps 2 through 5.

## To cancel the alarm setting

Follow steps 1 and 2. In step 2-③ select “OFF” and press **▶ PLAY/STOP•ENTER**. The alarm will be canceled and the alarm indicator will disappear from the display window.



## When the set date and time comes

At the set time, “ALARM” is displayed in the display window and the alarm and the selected file will be played back using the selected alarm pattern.



When the playback ends, the IC recorder will stop automatically. (When the alarm pattern is set to “Beep&Play” or “Play,” the IC recorder will stop at the beginning of the selected file.)

## To stop the alarm playback

Press any button other than VOL -/+ while the alarm sound is heard. If the HOLD function is activated, you can stop the alarm playback by pressing any button.

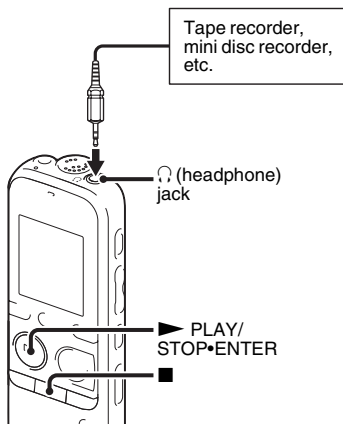
### ■ Notes

- You can set only one alarm each one file.
- When the clock has not been set or no files are recorded, you cannot set the alarm.
- The alarm sounds even if you set “Beep” to “OFF” in the menu (page 94).

- If the alarm time comes while the IC recorder is accessing data, etc., the alarm may be canceled automatically.
- If more than one alarm time comes, only the first file will be played back with an alarm.
- If you divide a file you have set an alarm for, the alarm setting remains on only the first part of the divided file.
- If you erase a file in which you have set an alarm, that alarm will be also canceled.
- You cannot set alarm in podcast files.
- You cannot set an alarm in the files stored on a memory card.

# Playback via Other Devices

## Recording with other equipment



You can record the sound of the IC recorder with other equipment.  
Before you start recording, we recommend you make a trial recording first.

**1** Connect the Ⓜ (headphone) jack of the IC recorder to the external input terminal of other equipment using an audio connecting cable (page 119).

**2** Press ▶ PLAY/STOP•ENTER to start playback and at the same time set the connected equipment to the recording mode.  
A file from the IC recorder will be recorded on the equipment connected.

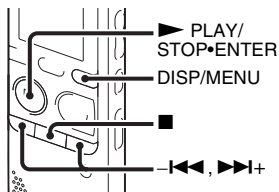
**3** Press ■ (stop) on the IC recorder and the connected equipment at the same time to stop recording.

### Tip

If the volume of the recorded sound is not strong enough, adjust the playback sound of the IC recorder (page 23).

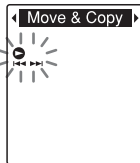
# Arranging Files in a Folder

## Moving a file to a different folder

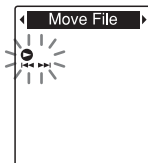


- 1 Select the file you want to move.
- 2 Press and hold DISP/MENU in the stop mode to enter the menu mode. The menu mode window will be displayed.

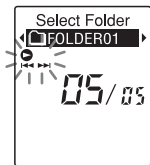
- 3 Press -◀◀ or ▶▶+ to select "Move & Copy," and then press ▶ PLAY/ STOP•ENTER.



- 4 Press -◀◀ or ▶▶+ to select "Move File," and then press ▶ PLAY/ STOP•ENTER.



- 5 Press **◀◀** or **▶▶+** to select the folder that you want to move the file into, and then press **▶ PLAY/STOP•ENTER**.



The “Moving File...” animation is displayed and the file is moved to the last position in the destination folder.

When you move a file to another folder, the original file in the previous folder will be erased.

- 6 Press **■** (stop) to exit the menu mode.

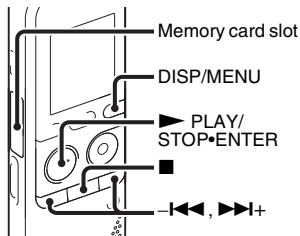
### To cancel moving the file

Press **■** (stop) before step 5.

#### ■ Notes

- You cannot move podcast files.
- You cannot move protected files (page 71).
- You cannot move files to the other memory media.

## Copying a file to the other memory



You can copy files between the built-in memory and a memory card, which is useful in saving a backup. Before starting the operation, insert a memory card to be used for copying into the memory card slot.

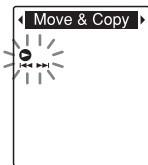
- 1 Select the file you want to copy.

When you want to copy a file from a memory card to the built-in memory, set the source memory media to “Memory Card” (page 41).

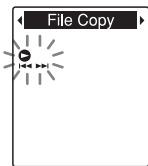
- 2 Press and hold **DISP/MENU** in the stop mode to enter the menu mode.

The menu mode window will be displayed.

- 3 Press **←|←|←|** or **▶|▶|▶|+** to select “Move & Copy,” and then press **▶ PLAY/STOP•ENTER**.

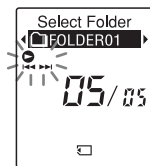


- 4 Press **←|←|←|** or **▶|▶|▶|+** to select “File Copy,” and then press **▶ PLAY/STOP•ENTER**.



“Copy to Memory Card” or “Copy to Built-In Memory” appears and the folder selection window is displayed.

- 5 Press **←|←|←|** or **▶|▶|▶|+** to select the folder that you want to copy the file into, and then press **▶ PLAY/STOP•ENTER**.



The “Copying...” animation appears and the file is copied as the last file in the destination folder. A file will be copied with the identical file name.

- 6 Press **■** (stop) to exit the menu mode.

### To cancel the copy operation

Press **■** (stop) before step 5.

### To cancel the copy operation during copying

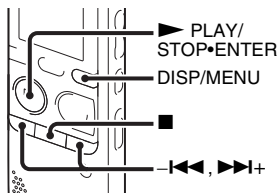
While the “Copying...” animation is displayed in step 5, press **■** (stop).

### ■ Notes

- Before starting to copy the target file, make sure to check the battery indicator (page 12). If the batteries are weak, you may not be able to copy files.
- If the remaining memory capacity of the destination memory media is insufficient, you may not be able to copy files.
- You cannot copy the podcast files.

- Do not remove or insert a memory card, or turn off the IC recorder while copying. Files may be damaged.

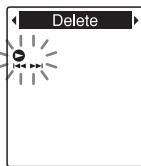
## Erasing all files in a folder



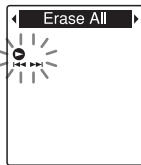
### Note

If the selected folder contains a protected file (page 71), you cannot erase the protected file in that folder.

- 1 Select the folder containing the files you want to erase when the IC recorder is in the stop mode.
- 2 Press and hold DISP/MENU to enter the menu mode.  
The menu mode window will be displayed.
- 3 Press  $\blacktriangleleft\blacktriangleleft$  or  $\blacktriangleright\blacktriangleright+$  to select “Delete,” and then press  $\blacktriangleright$  PLAY/STOP•ENTER.



- 4 Press  $\blacktriangleleft\blacktriangleleft$  or  $\blacktriangleright\blacktriangleright+$  to select “Erase All,” and then press  $\blacktriangleright$  PLAY/STOP•ENTER.



“Erase All?” will be displayed.

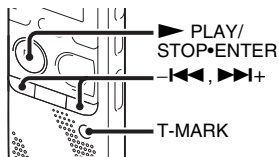
- 5 Press  $\blacktriangleleft\blacktriangleleft$  or  $\blacktriangleright\blacktriangleright+$  to select “YES,” and then press  $\blacktriangleright$  PLAY/STOP•ENTER.  
The “Erasing...” animation appears in the display window and all files in the selected folder will be erased.
- 6 Press  $\blacksquare$  (stop) to exit the menu mode.

### To cancel erasing


Select “NO” in step 5, and then press  $\blacktriangleright$  PLAY/STOP•ENTER.

# Using a Track Mark

## Adding a track mark



You can add a track mark at a point at which you would like to divide a file later or locate during playback. You can add a maximum of 98 track marks to each file.





During recording, playing back, or recording pausing, press T-MARK at the position you want to add a track mark. The  (track mark) indicator flashes, and a track mark is added.



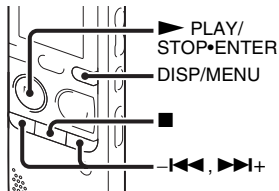
## Notes

- You can add a track mark only to files recorded using the IC recorder. However, when you edit files using the supplied Sound Organizer software, adding a track mark to the files may not be possible.
- You cannot add a track mark at a point within 0.5 seconds from another track mark.
- You cannot add a track mark at the very beginning or at the very end of the file.
- If there are already 98 track marks in a file, you cannot add any more track marks.
- When a track mark is added during playback, the playback stops.

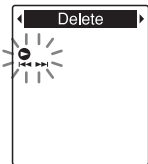
## To locate a track mark and starting playback at the track mark

Press  or  in the stop mode. When the  (track mark) indicator flashes once, press  PLAY/STOP•ENTER.

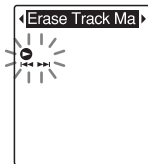
## Erasing a track mark



- 1 Stop at a position after the track mark you want to erase.
- 2 Press and hold DISP/MENU in the stop mode to enter the menu mode. The menu mode window will be displayed.
- 3 Press -<<< or >>>+ to select “Delete,” and then press ► PLAY/STOP•ENTER.



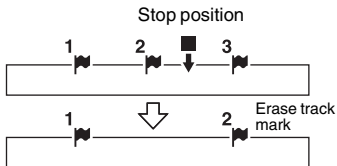
- 4 Press -<<< or >>>+ to select “Erase Track Mark;” and then press ► PLAY/STOP•ENTER.



“Erase Track Mark?” is displayed and the track mark indicator and the track mark number to be erased will flash.

- 5 Press -<<< or >>>+ to select “YES,” and then press ► PLAY/STOP•ENTER.

The “Erasing...” animation appears in the display window and the selected track mark will be erased.



The track mark just before the stop position will be erased.



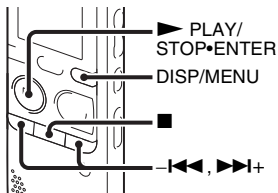
- 6 Press ■ (stop) to exit the menu mode.



### To cancel erasing

Select “NO” in step 5, and then press  
▶ PLAY/STOP•ENTER.

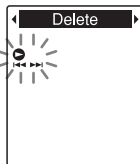
## Erasing all the track marks in the selected file at one time



- 1 Select a file from which you want to erase the track marks.

- 2 Press and hold DISP/MENU in the stop mode to enter the menu mode.  
The menu mode window will be displayed.

- 3 Press -<<< or >>>+ to select “Delete,”  
and then press ▶ PLAY/STOP•ENTER.



- 4 Press -<<< or >>>+ to select “Erase All  
Track Marks,” and then press ▶ PLAY/  
STOP•ENTER.



“Erase All Track Marks?” will be displayed.

- 5** Press **←|←** or **▶▶|+** to select “YES,”  
and then press **▶** PLAY/  
STOP•ENTER.

The “Erasing...” animation appears in the display window and all the track marks will be erased at one time.

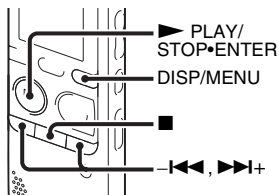
- 6** Press **■** (stop) to exit the menu mode.

### **To cancel erasing**

Select “NO” in step 5, and then press  
**▶** PLAY/STOP•ENTER.

# Dividing a File

## Dividing a file at the current position

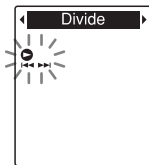


You can divide a file in the stop mode, so that the file is divided into two parts and a new file number is added to the newer part of the divided file. By dividing a file, you can easily find the point from which you want to play back when you make a long recording such as at a meeting. You can divide a file until the total number of files in the folder reaches the maximum number allowed.

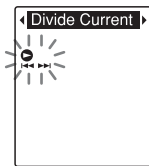
- 1 Stop the file at the position where you want to divide a file.

- 2 Press and hold DISP/MENU in the stop mode to enter the menu mode.  
The menu mode window will be displayed.

- 3 Press -<<< or >>>+ to select “Divide,” and then press ► PLAY/STOP•ENTER.



- 4 Press -<<< or >>>+ to select “Divide Current,” and then press ► PLAY/STOP•ENTER.



“Divide?” will be displayed.

- 5 Press **←←** or **→→+** to select “YES,” and then press **▶ PLAY/STOP•ENTER**.

The “Dividing...” animation appears, and the divided files will be suffixed with a sequential number (“\_1” for the original file, and “\_2” for the new file).

File 1	File 2	File 3	
	▲ ↓ A file is divided.		
File 1	File 2_1	File 2_2	File 3

A suffix made up of a sequential number is added to each of the divided files.

- 6 Press **■** (stop) to exit the menu mode.

### ■ Notes

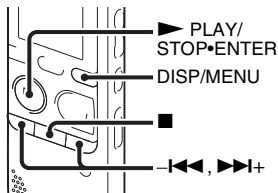
- You need a certain amount of free space in the memory media to divide a file.
- When you divide a file with a title and artist name, the newer part has the same title and artist name.
- You cannot divide files other than those recorded using the IC recorder (e.g., a file transferred from a computer). Moreover, when you edit files using the supplied Sound Organizer software, dividing files may not be possible.
- Once a file is divided, you cannot return it to the original status again.

- If you divide a file at the position within 0.5 seconds from a track mark, the track mark will be erased.
- Because of the system limitations, you cannot divide a file at the very beginning or at the very end of the file.

### To cancel dividing

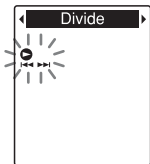
Select “NO” in step 5, and then press **▶ PLAY/STOP•ENTER**.

## Dividing a file at all the track mark positions



- 1 Select the file you want to divide.
- 2 Press and hold **DISP/MENU** in the stop mode to enter the menu mode. The menu mode window will be displayed.

- 3 Press **←|←|←|** or **▶▶▶+** to select “Divide,” and then press **▶ PLAY/STOP•ENTER**.



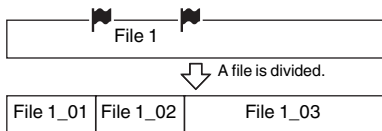
- 4 Press **←|←|←|** or **▶▶▶+** to select “Divide All Track Marks,” and then press **▶ PLAY/STOP•ENTER**.



“Divide All Track Marks?” will be displayed.

- 5 Press **←|←|←|** or **▶▶▶+** to select “YES,” and then press **▶ PLAY/STOP•ENTER**.  
The “Dividing...” animation appears, and the file is divided at all the track mark

positions. All the existing track marks in the files will be erased.



A suffix made up of a sequential number is added to each of the divided files.

- 6 Press **■** (stop) to exit the menu mode.

### To cancel dividing

Select “NO” in step 5, and then press **▶ PLAY/STOP•ENTER**.

### Tip

To cancel division during the operation at all the remaining track marks, press **■** (stop). The files that have been divided before the cancellation remain divided.

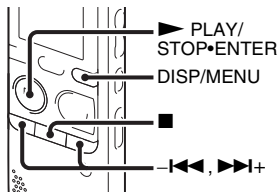
### Notes


- You need a certain amount of free space in the memory media to divide a file.
- When you divide a file with a title and artist name, the newer part has the same title and artist name.
- You cannot divide files other than those recorded using the IC recorder (e.g., a file transferred from a computer). Moreover, when you edit files using the supplied Sound




Organizer software, dividing files may not be possible.

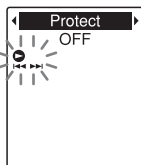
- Once a file is divided, you cannot return it to the original status again.




# Protecting a File

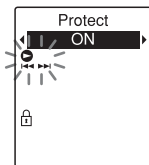



To prevent a file from being accidentally erased or edited, you can protect an important file. A protected file is marked with the  (protect) indicator and is regarded as a read-only file you cannot erase or edit.

- 1 Display the file which you want to protect.
- 2 Press and hold DISP/MENU in the stop mode to enter the menu mode.  
The menu mode window will be displayed.
- 3 Press  or  to select “Protect,” and then press  PLAY/STOP•ENTER.



- 4 Press  or  to select “ON,” and then press  PLAY/STOP•ENTER.



- 5 Press  (stop) to exit the menu mode.



## To release protection

Select the protected file, and then follow steps 2 through 5.

In this case, select “OFF” in step 4, and then press ► PLAY/STOP•ENTER.

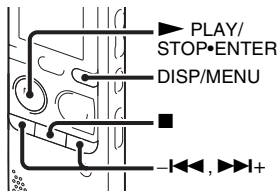
### **Note**


You cannot set protection to the podcast files.



## Tuning in an FM Radio Station

### Tuning in a radio station by scanning frequencies






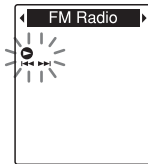
The headphone cord of the headphones is an FM antenna, therefore, connect the headphones to the  (headphone) jack when listening to the FM radio.

#### Note



During FM reception, the DPC function and noise cut function do not work.

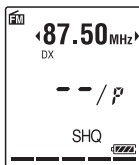
- 1 Press and hold DISP/MENU in the stop mode to enter the menu mode.  
The menu mode window will be displayed.

- 2 Press  or  to select “FM Radio,” and then press  PLAY/STOP•ENTER.



The IC recorder enters the FM radio mode.

- 3 Press DISP/MENU briefly to move the cursors (, ) to both sides of the frequency display on the upper line in the display window.



The IC recorder is now ready for tuning in a station by scanning frequencies.

4 Press **◀◀** or **▶▶+** repeatedly to tune in a station.

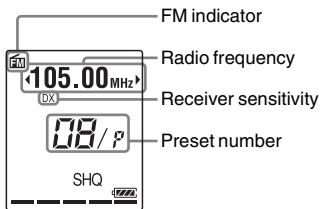
5 Press **■** (stop) to turn the FM radio off.

## To scan radio frequencies automatically

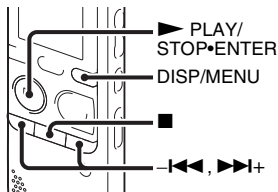
In step 4, press and hold **◀◀** or **▶▶+** until the frequency digits begin to change in the display window. The IC recorder automatically scans the radio frequencies and stops when it finds a clear station.

If you cannot tune in a station, press **◀◀** or **▶▶+** repeatedly to change the frequency step by step.

## Display when listening to the FM radio



## Tuning in a preset radio station

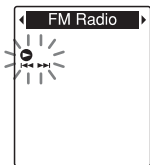


When you have already preset FM radio stations (page 76), you can tune in a station by selecting a preset number.

1 Press and hold **DISP/MENU** in the stop mode to enter the menu mode.

The menu mode window will be displayed.

- 2 Press **◀◀** or **▶▶** to select “FM Radio,” and then press **▶** PLAY/STOP•ENTER.



The IC recorder enters the FM radio mode.

- 3 Press DISP/MENU briefly to move the cursors (**◀**, **▶**) to both sides of the preset number display on the lower line in the window.

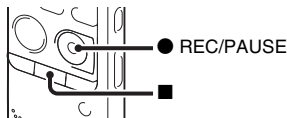


The IC recorder is now ready for tuning in a radio station by selecting a preset number.

- 4 Press **◀◀** or **▶▶** repeatedly until the preset (P) number you want is displayed.

- 5 Press **■** (stop) to turn the FM radio off.

## Recording FM broadcasts



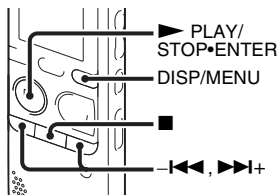
- 1 Tune in the station you want to record.
- 2 Press **●** REC/PAUSE to start recording.
- 3 Press **■** (stop) to stop recording.

### Notes

- While the FM radio is activated, you cannot change memory media or select a folder. Before starting FM radio recording, select the memory media and folder you want to use to record the FM broadcast in advance.
- During FM recording, the “Mic Sensitivity” (page 91), “VOR” (page 37), and “LCF(Low Cut)” (page 92) settings are disabled.

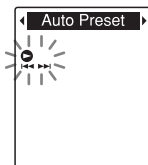
# Presetting FM Radio Stations

## Presetting FM radio stations automatically



You can automatically tune in radio stations and then register them with preset numbers. You can preset up to 30 FM radio stations automatically using the preset menu.

- 1** Press and hold DISP/MENU during FM reception to enter the menu mode. The menu mode window will be displayed.
- 2** Press -<<< or >>>+ to select “Auto Preset,” and then press ► PLAY/STOP•ENTER.



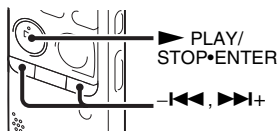
“Auto Preset?” will be displayed.

- 3** Press -<<< or >>>+ to select “YES,” and then press ► PLAY/STOP•ENTER. The IC recorder automatically scans for available radio frequencies and the stations will be stored in memory from the lower frequencies to the higher ones. While presetting FM radio stations automatically, the preset number ready to be assigned flashes.

### To stop the automatic presetting

Press ■ (stop). The preset numbers stored until you press the ■ (stop) button remain in memory.

## Presetting FM radio stations manually



You can store an unregistered FM radio station on a preset number. You can preset up to 30 FM radio stations.

- 1 Follow steps 1 through 4 of “Tuning in a radio station by scanning frequencies” on page 73 and tune in the station you want to preset. When the station is not a preset station, “- /P” is displayed. You can register it with a new preset number.
- 2 Press ► PLAY/STOP•ENTER.  
The preset number and “Assign to Preset?” will be displayed.
- 3 Press -<<< or >>>+ to select “YES,” and then press ► PLAY/STOP•ENTER.

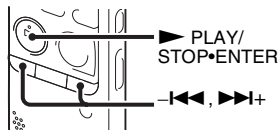


The station will be stored in memory on the preset number.

### Note

If 10 seconds have passed after “Assign to Preset?” appears, the setting operations are canceled.

## Erasing preset FM radio stations



- 1 Follow steps 1 through 4 of “Tuning in a preset radio station” on page 74 and tune in the station to display the preset number you want to erase.

**2** Press ► PLAY/STOP•ENTER.

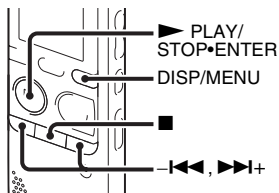
The preset number and “Erase Preset?” will be displayed.

**3** Press -|◀◀ or ▶▶|+ to select “YES,” and then press ► PLAY/STOP•ENTER.

The preset number will be changed to “ - /P.”

# Changing the FM Radio Reception Settings

## Switching the receiver sensitivity of the FM radio

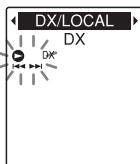


You can set the receiver sensitivity when listening to the FM radio.

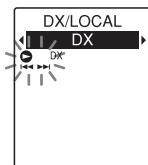
- 1 Press and hold DISP/MENU during FM reception to enter the menu mode.

The menu mode window will be displayed.

- 2 Press **←|←|** or **→|→|** to select “DX/LOCAL,” and then press **▶ PLAY/STOP•ENTER**.



- 3 Press **←|←|** or **→|→|** to select “DX” or “LOCAL,” and then press **▶ PLAY/STOP•ENTER**.



- 4 Press **■** (stop) to exit the menu mode.

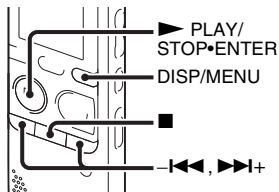
DX	Normally, select this setting.
LOCAL	When there is interference or collapsing caused by an intense electric field around the transmitting antenna of the broadcasting station, etc., select this setting.

“DX/LOCAL” is set to “DX” when you purchase the IC recorder.

### Note

Select “DX” when the IC recorder reception status is not good due to a weak signal.

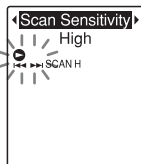
## Switching the scanning sensitivity



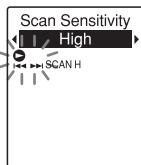
You can set the scanning sensitivity when presetting FM radio stations.

- 1 Press and hold DISP/MENU during FM reception to enter the menu mode. The menu mode window will be displayed.

- 2 Press **-<<<** or **>>>+** to select “Scan Sensitivity,” and then press **▶ PLAY/STOP•ENTER**.



- 3 Press **-<<<** or **>>>+** to select “High” or “Low,” and then press **▶ PLAY/STOP•ENTER**.

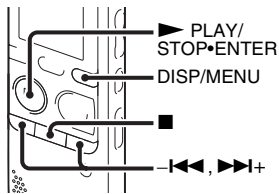


The scanning sensitivity is set to “High” when you purchase the IC recorder.

- 4 Press **■** (stop) to exit the menu mode.



## Switching the FM radio output between speaker and headphones



During FM reception or FM recording, you can switch between the sound from the speaker and the sound from the headphones using the menu.

- 1 Press and hold DISP/MENU during FM reception to enter the menu mode.  
The menu mode window will be displayed.
- 2 Press **◀◀** or **▶▶** to select “Audio Output,” and then press **▶** PLAY/STOP•ENTER.



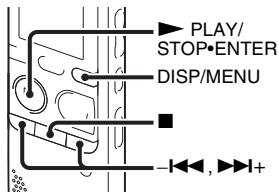
- 3 Press **◀◀** or **▶▶** to select “Headphones” or “Speaker,” and then press **▶** PLAY/STOP•ENTER.



The FM radio output is set to “Headphones” when you purchase the IC recorder.

- 4 Press **■** (stop) to exit the menu mode.

# Making Settings for the Menu



- 1 Press and hold DISP/MENU to enter the menu mode.

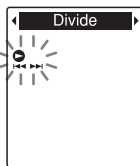
The menu mode window will be displayed.



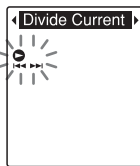
- 2 Press -<<< or >>>+ to select the menu item for which you want to make setting, and then press ► PLAY/STOP•ENTER.

When you select “Divide,” “Move & Copy,” “Delete,” or “Detail Menu,”

press -<<< or >>>+ to select their sub menu item for which you want to make setting, and then press ► PLAY/STOP•ENTER.



- 3 Press -<<< or >>>+ to select the setting you want to set, and then press ► PLAY/STOP•ENTER.



- 4 Press -<<< or >>>+ to make the setting, and then press ► PLAY/STOP•ENTER.

- 5 Press ■ (stop) to exit the menu mode.

**Note**

If you do not press any button for 60 seconds, the menu mode is automatically canceled and the window will return to the normal display.

**To return to the previous window**

During menu operations, press DISP/  
MENU.

When the selection screen of the sub menu screen is displayed after you select “Divide,” “Move & Copy,” “Delete,” or “Detail Menu,” press **◀◀** or **▶▶** to select “[Back],” and then press **▶** PLAY/  
STOP•ENTER to return to the main menu window.

**To exit the menu mode**

Press **■** (stop).

# Menu Settings

Menu items	Operation mode				
	(○: the setting can be made /—: the setting cannot be made)				
	Stop mode	Playback mode	Recording mode	FM radio reception mode*	FM radio recording mode*
Add/Overwrite	○	—	—	—	—
VOR	○	—	○	—	—
DPC(Speed Control)	○	○	—	—	—
Easy Search	○	○	—	—	—
Alarm	○	—	—	—	—
Protect	○	—	—	—	—
Divide	○	—	—	—	—
Divide Current Position	○	—	—	—	—
Divide All Track Marks	○	—	—	—	—
[Back]	○	—	—	—	—
Move & Copy	○	—	—	—	—
Move File	○	—	—	—	—
File Copy	○	—	—	—	—
[Back]	○	—	—	—	—
Delete	○	—	—	—	—
Erase Track Mark	○	—	—	—	—
Erase All Track Marks	○	—	—	—	—
Erase All	○	—	—	—	—
[Back]	○	—	—	—	—

\* For ICD-PX312F only

Menu items	Operation mode				
	(○: the setting can be made /—: the setting cannot be made)				
	Stop mode	Playback mode	Recording mode	FM radio reception mode*	FM radio recording mode*
Select Memory	○	—	—	—	—
FM Radio*	○	—	—	—	—
Auto Preset*	—	—	—	○	—
DX/LOCAL*	—	—	—	○	○
Scan Sensitivity*	—	—	—	○	—
Audio Output*	—	—	—	○	○
Detail Menu	○	○	○	○	—
REC Mode	○	—	—	○	—
Mic Sensitivity	○	—	○	—	—
LCF(Low Cut)	○	—	○	—	—
Select Input	○	—	—	—	—
Continuous Play	○	○	—	—	—
Noise Cut Level	○	○	—	—	—
LED	○	—	—	—	—
Language	○	—	—	—	—
Date&Time	○	—	—	—	—
Time Display	○	—	—	—	—
Beep	○	—	—	—	—
Auto Power Off	○	—	—	—	—
Format	○	—	—	—	—
[Back]	○	○	○	—	—


\* For ICD-PX312F only

Menu items	Settings (*: Initial setting)	See page
<b>Add/Overwrite</b>	<p>Allows you to add a recording to a previously recorded file or an overwrite recording during playback.</p> <p>Add: You can add a recording.</p> <p>Overwrite: You can overwrite a recording.</p> <p>OFF*: You cannot add or overwrite a recording.</p>	33, 35
<b>VOR</b>	<p>Sets the VOR (Voice Operated Recording) function.</p> <p>ON: Recording starts when the IC recorder detects sound and pauses when no sound is heard, eliminating recording during soundless periods. The VOR function is activated when ● REC/PAUSE is pressed.</p> <p>OFF*: The VOR function does not work.</p> <p><b>Note</b> During FM recording (page 75), the VOR function does not work (for ICD-PX312F only).</p>	37
<b>DPC(Speed Control)</b>	<p>Sets the DPC (Digital Pitch Control) function.</p> <p>ON: You can adjust the playback speed in a range from 0.50 times to 2.00 times.</p> <p>OFF*: The DPC function is canceled.</p>	50




Menu items	Settings (*: Initial setting)	See page
Easy Search	<p>Sets the easy search function.</p> <p>ON:            You can go forward for about 10 seconds by pressing ►►+ and go back for about 3 seconds by pressing -◄◄. This function is useful when attempting to locate desired point in a long recording.</p> <p>OFF*:            The easy search function does not work. When you press ►►+ or -◄◄, a file will be moved forward or backward.</p>	48
Alarm	<p>Sets the alarm.</p> <p>ON:            The alarm function is effective. Set the date, time or day of the week or choose daily for playback, and set the following alarm pattern.                Beep&amp;Play: The selected file is played back after the alarm sounds.                Beep: Only the alarm sounds.                Play: Only the selected file is played back.</p> <p>OFF*:            The alarm function is canceled.</p>	55
Protect	<p>Protects the selected file to prevent the file from being erased, divided, or being moved.</p> <p>ON:            The protect function is activated.</p> <p>OFF*:            The protect function is canceled.</p>	71


<b>Menu items</b>		<b>Settings (*: Initial setting)</b>	<b>See page</b>
<b>Divide</b>	<b>Divide Current Position</b>	Divides a file into two. YES: A file will be divided into two. NO: Division is not executed.	67
	<b>Divide All Track Marks</b>	Divides a file at all the track mark positions. YES: The track mark division is executed. NO: The track mark division is not executed.	68
<b>Move &amp; Copy</b>	<b>Move File</b>	Moves the selected file to the selected folder. Before attempting to move a file, select the file to be moved, and then go to the menu window.	59
	<b>File Copy</b>	Copies the selected file from the built-in memory to the desired folder on a memory card, or from a memory card to the desired folder on the built-in memory. Before attempting to copy a file, select the file to be copied and then go to the menu window.	60
<b>Delete</b>	<b>Erase Track Mark</b>	Erases the track mark just before the current position. YES: The track mark will be erased. NO: The track mark will not be erased.	64
	<b>Erase All Track Marks</b>	Erases all the track marks of the selected file. YES: All the track marks will be erased. NO: All the track marks will not be erased.	65



Menu items	Settings (*: Initial setting)	See page
Delete Erase All	Erases all files in the selected folder. Press  (folder) to display the folder selection window before erasing the files and select a folder from which all files are to be erased, and then go to the menu window. YES: All files in the selected folder will be erased. NO: All files will not be erased.	62
Select Memory	Selects the memory media on which you want to store a file, or which contains the file you want to play, edit, or copy. Built-In Memory*: The built-in memory of the IC recorder is selected. Memory Card: The memory card inserted in the memory card slot is selected.  <b>Note</b> When no memory card is currently inserted in the IC recorder, the built-in memory is automatically selected.	41
FM Radio (for ICD-PX312F only)	The IC recorder enters the FM radio mode.	73
Auto Preset (for ICD-PX312F only)	Scans automatically for available frequencies. The stations will be stored in memory. YES: The automatic presetting is activated. NO: The automatic presetting is canceled.	76

Menu items	Settings (*: Initial setting)	See page
<b>DX/LOCAL</b> (for ICD-PX312F only)	Sets the receiver sensitivity when listening to the FM radio. <b>DX*:</b> Normally, select this setting. <b>LOCAL:</b> When there is interference or collapsing caused by a intense electric field around the transmitting antenna of the broadcasting station, etc., select this setting.	79
<b>Note</b>		
Select “DX” when the IC recorder reception status is not good due to a weak signal.		
<b>Scan Sensitivity</b> (for ICD-PX312F only)	Sets the scanning sensitivity when presetting FM radio stations. <b>High*:</b> The scanning sensitivity is set to high. <b>Low:</b> The scanning sensitivity is set to low.	80
<b>Audio Output</b> (for ICD-PX312F only)	During FM reception or recording, switches between the sound from the speaker and the sound from the headphones. <b>Headphones*:</b> The sound comes out from the headphones. <b>Speaker:</b> The sound comes out from the speaker(s).	81

Menu items	Settings (*: Initial setting)	See page
<b>Detail Menu</b>	<p><b>REC Mode</b></p> <p>Sets the recording mode including sound quality. 192kbps(MONO)*: Super high-quality monaural recording mode (displayed as “SHQ” in the window) 128kbps(MONO): High-quality monaural recording mode (displayed as “HQ” in the window) 48kbps(MONO): Standard play monaural recording mode (displayed as “SP” in the window) 8kbps(MONO): Long play monaural recording mode (displayed as “LP” in the window)</p>	–
<b>Mic Sensitivity</b>	<p>Sets the microphone sensitivity.</p> <p>High: To record a sound far away from the IC recorder or a low sound, such as recording in a spacious room (displayed as “” in the window).</p> <p>Medium*: To record the sound of a normal conversation or meeting, such as recording in a meeting space or during interview (displayed as “” in the window).</p> <p>Low: To record dictation with a microphone in front of your mouth, a sound near the IC recorder, or a loud sound (displayed as “” in the window).</p>	–
<p><b>Note</b></p> <p>During FM recording (page 75), the Mic Sensitivity setting is disabled (for ICD-PX312F only).</p>		

Menu items	Settings (*: Initial setting)	See page
Detail Menu	<p><b>LCF(Low Cut)</b> Sets the LCF (Low Cut Filter) function to cut a low frequency to reduce the roaring noise from wind; therefore you can record a file more clearly.</p> <p>ON: The LCF function is activated.</p> <p>OFF*: The LCF function is canceled.</p> <p><b>Note</b> During FM recording (page 75), the LCF function does not work (for ICD-PX312F only).</p>	–
<b>Select Input</b>	<p>Selects the external input to be recorded that is connected to the  (microphone) jack.</p> <p>MIC IN*: Select when you record files using an external microphone.</p> <p>Audio IN: Select when you record using other equipment.</p>	43, 45
<b>Continuous Play</b>	<p>Sets the continuous playback mode.</p> <p>ON: Files in one folder are played back continuously.</p> <p>OFF*: A file is played back and the IC recorder stops at the beginning of the next file.</p>	52
<b>Noise Cut Level</b>	<p>Sets the noise cut level to use when the IC recorder plays a file back which is recorded with the noise cut function.</p> <p>Maximum*: The noise cut level will be more intense.</p> <p>Medium: The noise cut level will be weakened. Select when you cannot catch the sound easily by setting “Noise Cut Level” to “Maximum.”</p>	49

Menu items	Settings (*: Initial setting)	See page
<b>Detail Menu</b> <b>LED</b>	<p>Turns the operation indicator on or off during operation.</p> <p>ON*: During accessing to the memory, recording or playback, the indicator lights or flashes.</p> <p>OFF: The indicator does not light or flash, even during operation.</p> <p><b>Note</b></p> <p>When the IC recorder is connected to a computer, the operation indicator lights or flashes even if “LED” is set to “OFF.”</p>	–
<b>Language</b>	<p>Sets the language to be used for messages, menus, folder names, file names, etc.</p> <p>English*, Español (Spanish), Français (French)</p>	16
<b>Date&amp;Time</b>	<p>Sets the clock to use the alarm function or record the date and time.</p> <p>① Press and hold DISP/MENU to enter the menu mode. Select “Detail Menu,” then “Date&amp;Time.”</p> <p>② Press <b>←</b> or <b>→</b> to select “Auto(Synchronizing)” or “Manual,” and then press <b>▶</b> PLAY/STOP•ENTER.</p> <p>Auto(Synchronizing)*: When the IC recorder is connected to a computer that is running the Sound Organizer software, the clock will be automatically adjusted according to that computer.</p> <p>Manual: Sets the clock by setting year, month, day, hour, and minute in sequence.</p> <p>③ When you select “Manual,” press <b>←</b> or <b>→</b> to set the year, month, day, hour, and minute in sequence, and then press <b>▶</b> PLAY/STOP•ENTER. Select the last two digits of the year when you set the year. When you set the minute, the “Executing...” animation is displayed.</p>	14

Menu items		Settings (*: Initial setting)	See page
Detail Menu	Time Display	Sets the clock display. 12-Hour*: 12:00AM = midnight, 12:00PM = noon 24-Hour: 0:00 = midnight, 12:00 = noon	–
	Beep	Sets whether a beep will be heard or not. ON*: A beep will sound to indicate that an operation has been accepted or an error has occurred. OFF: No beep sound will be heard.  <b>Note</b> The alarm sounds even if you set “Beep” to “OFF” in the menu.	–
Auto Power Off	If the IC recorder is on and left for the period you have set, the IC recorder turns off automatically. 5min: The IC recorder will be turned off after approx. 5 minutes. 10min*: The IC recorder will be turned off after approx. 10 minutes. 30min: The IC recorder will be turned off after approx. 30 minutes. 60min: The IC recorder will be turned off after approx. 60 minutes. OFF: The IC recorder will not be turned off automatically.	–	

---

Menu items	Settings (*: Initial setting)	See page
Detail Menu	Formats the memory media currently selected (the built-in memory or the memory card), erasing all the data in the memory and resetting the folder structure to its default status. YES: The “Formatting...” animation appears and the memory media will be formatted. NO: The memory media will not be formatted.	–
<b>■ Notes</b>		
<ul style="list-style-type: none"><li>• Use the IC recorder formatting function to format the memory media.</li><li>• Switch the memory media to the one to be formatted before you start the format operation (page 41).</li><li>• When you format the memory media, all the data which you have stored on the IC recorder will be erased. Once the memory media has been erased, you cannot retrieve the data that was erased.</li><li>• When you format the built-in memory, the operating instructions stored in the built-in memory will also be erased. To get another copy of the operating instructions, please visit the Sony support home page: <a href="http://www.sony-latin.com/index.crp">http://www.sony-latin.com/index.crp</a></li></ul>		

---

# Using the IC Recorder with Your Computer

When the IC recorder is connected to your computer, you can transfer data between them.

## Copying files from the IC recorder to your computer to store them (page 103)

## Copying MP3 files from your computer to the IC recorder to play them back (page 104)

## Using the IC recorder as USB memory (page 106)

You can store image data or text data stored on the computer temporarily in the IC recorder.

## Managing and editing files using the Sound Organizer software (page 107)

The supplied Sound Organizer software allows you to transfer the files that you have recorded using the IC recorder to your computer to manage and edit them. You can also transfer MP3 files and podcast files stored on your computer to the IC recorder.

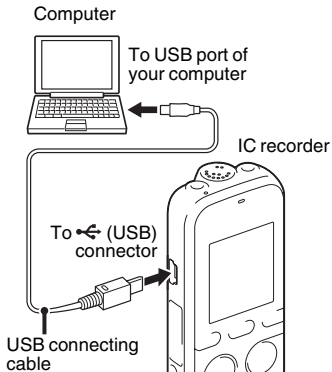
## System requirements for your computer

For details on the system requirements for your computer, see page 108, 117.

### **Note**


While the IC recorder is connected with your computer, the IC recorder operations and FM reception are disabled.

## Connecting the IC recorder to your computer





To exchange files between the IC recorder and your computer, connect the IC recorder to your computer.

**1** Connect the  (USB) connector of the IC recorder with the USB port of your running computer with the supplied USB connecting cable inserted into the connectors securely until each plug stops to the end.

**2** Make sure the IC recorder has been recognized properly.

On the Windows screen; open “My Computer” or “Computer,” and make sure that “IC RECORDER” or “MEMORY CARD” has been recognized.

On the Macintosh screen; make sure that an “IC RECORDER” or “MEMORY CARD” drive is displayed on the desktop.

The IC recorder is recognized by the computer as soon as the connection is made. While the IC recorder is connected to the computer, “Connecting” is displayed in the display window of the IC recorder.

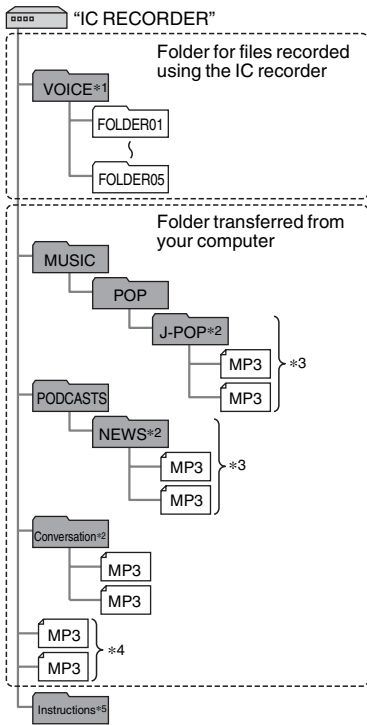
## ■ Notes

- If you connect more than two USB devices to your computer, normal operation will not be guaranteed.
- Use of this IC recorder with a USB hub or a USB connecting cable other than the supplied cable is not guaranteed.
- A malfunction may occur depending on the USB devices connected at the same time.
- Before connecting the IC recorder to your computer, check that the batteries are inserted in the IC recorder.
- It is recommended that you disconnect the IC recorder from the computer when you are not using the IC recorder connected to the computer.

## Structure of folders and files

The folders and files are displayed on the computer screen as shown. On a Windows screen using Explorer, and on a Macintosh screen using Finder, folders and files can be displayed by opening “IC RECORDER” or “MEMORY CARD.”

## Built-in memory



\*1 When a file is transferred directly under the VOICE folder, the IC recorder recognizes and handles it as a file transferred from the computer. When you transfer a file from your computer to the IC recorder, put the file in the folders under the VOICE folder.

\*2 The name of a folder in which MP3 files are stored will be displayed on the IC recorder as it is, so it is convenient if you put an easy-to-remember name on the folder in advance.

Folders shown in the illustration are examples of folder names.

\*3 The IC recorder can recognize up to 8 levels of folders transferred to the IC recorder.

\*4 If you transfer MP3 files separately, they are classified as being in "No Folder."

\*5 The operating instructions of the IC recorder are stored in the "Instructions" folder directly under the "IC RECORDER" folder.

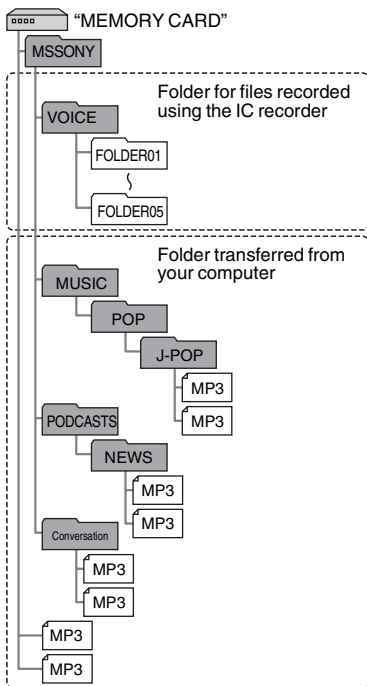
### 💡 Tips

- The title or artist name, etc., registered in the MP3 files, can be displayed on the IC recorder. It is useful if you input the ID3 tag information using the software you use to make the MP3 files on your computer.
- If no title, or artist name has been registered, "No Data" will be displayed in the display window of the IC recorder.

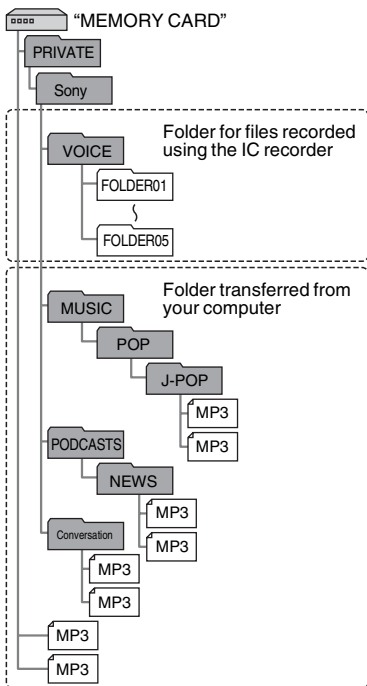
When connecting the IC recorder with your computer after the destination memory

media has been set to “Memory Card” (page 41), the structure of folders is different from that when the destination memory media is set to “Built-In Memory.”

## Memory Stick Micro™ (M2™)






## microSD card






## Structure of folders displayed in the display window of the IC recorder

The display of the structure of the folders seen in the display window of the IC recorder is different from that seen on the display of a computer.

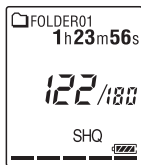
The folder indicators in the display window of the IC recorder are as follows:

-  Folder for files recorded using the IC recorder
-  Folder transferred from a computer (They are displayed when MP3 files have been transferred from a computer.)
-  Folder for podcast files transferred from a computer (These folders are displayed when podcast files have been transferred from a computer.)

### Note

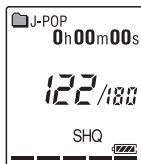
If  or  folders have no files that can be played back using the IC recorder, those folders will not be displayed in the display window of the IC recorder. Even if  folders have no files inside, however, those folders can be displayed.

## Display of a file recorded with the IC recorder



Folders for files recorded using the IC recorder (folders under the VOICE folder) will be displayed.

## Display of an MP3 file transferred from the computer



The following folders will be displayed among the folders forwarded from a computer.

- Folders under the MUSIC folder which contains a file (when some folders have multiple levels, all folders will be displayed in parallel.)

- Folders transferred to places other than under the MUSIC folder or the PODCASTS folder
- A folder called “No Folder” (If you transfer MP3 files separately, those files will be displayed under this folder.)

## Display of a podcast file transferred from the computer



Folders for podcast files transferred from a computer will be displayed. When you transfer podcast files from your computer to the IC recorder, use the supplied Sound Organizer software.

## Disconnecting the IC recorder from your computer

Follow the procedures below; otherwise, data may be damaged.

**1** Make sure that the operation indicator of the IC recorder does not light.

**2** Perform the following operation on your computer.

On a Windows screen, left-click the icon at the bottom of the desktop of the computer.



→ Left-click “Eject IC RECORDER.”

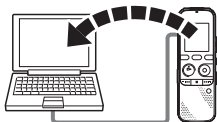
The icon and menu displayed can be different on different operating systems.

On a Macintosh screen, drag “IC RECORDER” on the desktop to “Trash” and drop it there.

For details on disconnecting the IC recorder from your computer, refer to the operating instructions supplied with your computer.


**3** Disconnect the USB connecting cable connected to the IC recorder from the USB port of the computer.

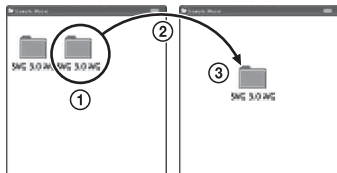
# Copying Files from the IC Recorder to Your Computer



You can copy the files and folders from the IC recorder to your computer to store them.

- 1** Connect the IC recorder to your computer (page 96).
- 2** Copy files or folders you want to transfer to your computer.  
Drag and drop the files or folders you want to copy from “IC RECORDER” or “MEMORY CARD” to the local disk on your computer.

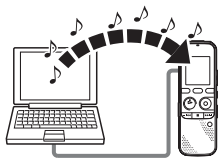
 **To copy a file or folder (drag and drop)**



- 1** Click and hold,
- 2** drag,
- 3** and then drop.

- 3** Disconnect the IC recorder from your computer (page 101).

# Copying MP3 Files from Your Computer to the IC Recorder and Playing Them Back



You can copy MP3 files from your computer to the IC recorder by dragging and dropping them, and you can play them back using the IC recorder.

## Copying an MP3 file from your computer to the IC recorder (drag and drop)



- 1 Connect the IC recorder to your computer (page 96).
- 2 Copy the folder in which the MP3 files are stored to the IC recorder.  
On a Windows screen using Explorer, or on a Macintosh screen using Finder, drag and drop the folder containing the MP3

files onto “IC RECORDER” or “MEMORY CARD.”

The IC recorder can recognize up to 400 folders. You can copy up to 199 files to one folder. Moreover, the IC recorder can recognize up to a total of 4,095 folders and files for one memory media.

- 3 Disconnect the IC recorder from your computer (page 101).

## Playing back MP3 files copied from your computer using the IC recorder

- 1 Press  (folder).
- 2 Press **←|←** or **▶|▶** to select the folder () in which MP3 files are stored, and then press **▶ PLAY/STOP•ENTER**.
- 3 Press **←|←** or **▶|▶** to select the MP3 file you want to play.
- 4 Press **▶ PLAY/STOP•ENTER** to start playback.



5 Press ■ (stop) to stop playback.

### ■ Notes

- An MP3 file copied from your computer can be played back with the IC recorder. Dividing a file and setting a track mark, however, may not be performed.
- If you have copied MP3 files using your computer, those files may not be copied in order of transfer because of system limitations. If you copy MP3 files from your computer to the IC recorder one by one, you can display and play back the MP3 files in copied order.

## Display when playing back an MP3 file

Press DISP/MENU to check the MP3 file information during playback.



📁 : Folder name

📄 : File name

🎵 : Title

👤 : Artist name

# Using the IC Recorder as USB Memory

When the IC recorder is connected to your computer, image data or text data on the computer, as well as files recorded using the IC recorder can be temporarily stored on the IC recorder.

Your computer must meet the specified system requirements to use the IC recorder as USB memory.

For details on the system requirements, see page 117.

# Using the Supplied Sound Organizer Software

## What you can do using Sound Organizer

Sound Organizer allows you to exchange files with an IC recorder or memory card. The songs imported from music CDs and other media, MP3 and other audio files imported from a computer, and podcasts can also be played and transferred to an IC recorder. Various operations can be performed for imported files, including playback, editing and conversion to MP3 and other formats. You can also burn CDs of the music you like, and send audio files by mail.

### Importing files recorded with an IC recorder

You can import recording files that were recorded with an IC recorder into Sound Organizer. The imported files are saved to the computer.

### Importing songs from a music CD

You can import the songs of a music CD into Sound Organizer.

The imported songs are saved to the computer.

### Importing songs on the computer

You can import music and other files saved to the computer into Sound Organizer.

### Subscribing to and updating podcasts

You can subscribe to podcasts in Sound Organizer. Subscribing to and updating podcasts enables you to download (subscription) and enjoy the latest data from the Internet.

### Playing files

You can play the files imported into Sound Organizer.

### Changing the file information of files

You can change the title name, artist name, and other file information displayed in the file list.

### Dividing files

You can divide one file into multiple files.

## Combining files

You can combine multiple files into one file.

## Deleting files from an IC recorder

You can delete a file saved to an IC recorder.

Use this operation to delete files in the IC recorder when you want to increase the amount of free space in the IC recorder or there are unnecessary files.

## Transferring files to an IC recorder

You can transfer a file from Sound Organizer to an IC recorder or memory card.

You can enjoy transferred music, podcasts, and other content on your IC recorder.

## Burning a music CD

You can select your favorite songs from the songs imported into Sound Organizer and then burn your own original music CD.

## Other convenient uses

- You can start the mail software and send a recording file attached to mail.
- You can use the voice recognition software Dragon NaturallySpeaking\* which is compatible with Sound

Organizer to perform voice recognition for a file and convert the voice to text.

- \* The application software, Dragon NaturallySpeaking (DVD-ROM) is supplied with some models in some regions only.

## System requirements for your computer

The following shows the system requirements for using Sound Organizer.

### Operating systems

- Windows 7 Ultimate
- Windows 7 Professional
- Windows 7 Home Premium
- Windows 7 Starter (32 bit version)
- Windows Vista Ultimate Service Pack 2 or higher
- Windows Vista Business Service Pack 2 or higher
- Windows Vista Home Premium Service Pack 2 or higher
- Windows Vista Home Basic Service Pack 2 or higher
- Windows XP Media Center Edition 2005 Service Pack 3 or higher
- Windows XP Media Center Edition 2004 Service Pack 3 or higher

- Windows XP Professional Service Pack 3 or higher
  - Windows XP Home Edition Service Pack 3 or higher
- Pre-installed.

### ■ Notes

- Operation is not guaranteed if any operating system other than those indicated listed is used (page 108).
- 64 bit versions of Windows XP are not supported.

## IBM PC/AT or compatible

- CPU
  - Windows XP: Pentium III processor of 500 MHz or faster
  - Windows Vista: Pentium III processor of 800 MHz or faster
  - Windows 7: Pentium III processor of 1 GHz or faster
- Memory
  - Windows XP: At least 256 MB
  - Windows Vista: At least 512 MB (In the case of Windows Vista Ultimate/Business/Home Premium, at least 1 GB is recommended.)
  - Windows 7: At least 1 GB (32 bit version)/At least 2 GB (64 bit version)
- Free hard disk space
  - At least 400 MB is required.

Depending on the version of Windows, more than 400 MB may be used. Also, free space for handling music data is required.

- Display settings
  - Screen resolution: 800 × 600 pixels or higher (1,024 × 768 pixels is recommended)
  - Screen color: High Color (16 bit) or higher
- Sound card
  - A SoundBlaster compatible card is recommended.
- USB port
  - A compatible USB port is required to use devices and media.
  - Operation via a USB hub is not guaranteed except for models for which operation has been specifically guaranteed.

## Installing Sound Organizer

Install Sound Organizer on your computer.

### ■ Notes

- When installing Sound Organizer, log in to an account with administrator privileges. Also, if you are using Windows 7 and the [User Account Control] screen appears, confirm the contents of the screen and then

click [Yes] ([Continue] in the case of Windows Vista).

- Sound Organizer cannot be started by a user with limited privileges in Windows XP.
- To use the software update function in Windows XP, you must log on to an account with computer administrator privileges.
- The Windows Media Format Runtime module is added by the installer of Sound Organizer. This module is not removed when Sound Organizer is uninstalled. However, it may not be installed if it has been preinstalled.
- The data in the content storage folders is not deleted when Sound Organizer is uninstalled.
- In an installation environment in which multiple operating systems are installed on one computer, do not install Sound Organizer in each of the operating systems. Doing so may result in data inconsistencies.

**1** Make sure that the IC recorder is not connected, then turn on your computer and start up Windows.

**2** Insert the supplied CD-ROM into the CD-ROM drive.  
The [Sound Organizer - InstallShield Wizard] menu starts up automatically and the [Welcome to Sound Organizer Installer] window appears.

If the [Welcome to Sound Organizer Installer] menu does not start up, open Windows Explorer, right-click the CD-ROM drive, double-click [SoundOrganizerInstaller.exe], and then follow the instructions on the screen.

**3** Make sure that you accept the terms of the license agreement, select [I accept the terms in the license agreement], then click [Next].

**4** When the [Setup Type] window appears, select [Standard] or [Custom], and then click [Next].

Follow the instructions on the screen and set the installation settings when you select [Custom].

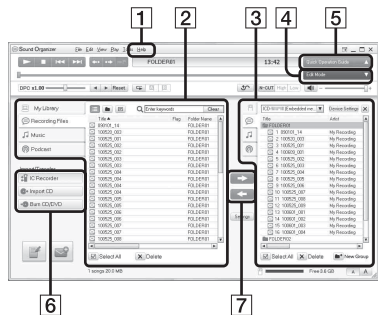
**5** When the [Ready to Install the Program] window appears, click [Install].  
The installation starts.

**6** When [Sound Organizer has been installed successfully.] window appears, check [Launch Sound Organizer Now], and then click [Finish].

#### **■ Note**

You may need to restart your computer after installing Sound Organizer.

## The Sound Organizer window



### 1 Help

Displays the help of Sound Organizer. For details on each operation, refer to these help files.

### 2 The file list of Sound Organizer (My Library)

Displays a list of files included in My Library of Sound Organizer in accordance with the operation.

**Recording Files:** Displays a list of recording files.

Recording files that were recorded with an IC recorder appear in this library when they are imported.

**Music:** Displays a list of music files. Songs imported from a music CD appear in this library.

**Podcast:** Displays a list of podcasts.

**3** The file list of the IC recorder  
Displays the files saved to the connected IC recorder or memory card.

### 4 Edit Mode button

Displays the edit area so that you can edit a file.

### 5 Quick Operation Guide button

Displays the Quick Operation Guide to receive guidance on the basic features of Sound Organizer.

### 6 Sidebar (Import/Transfer)

**IC Recorder:** Displays the transfer screen. A list of files on a connected device appears.

**Import CD:** Displays the screen for importing music CDs.

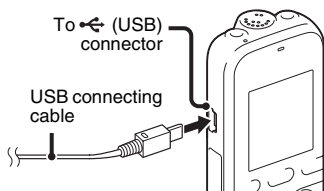
**Burn CD/DVD:** Displays the screen for burning discs.

### 7 Transfer buttons

**➡:** Transfers the files of Sound Organizer to an IC recorder or memory card.

**⬅:** Imports the files of an IC recorder or memory card to My Library of Sound Organizer.

# Using a USB AC Adaptor



You can use the IC recorder while it is connected to an AC outlet using an AC-U50AG or an AC-U501AD USB AC adaptor (not supplied). This is useful when you want to record for a long time.

- 1** Connect a USB AC adaptor (not supplied) to an AC outlet.
- 2** Connect the USB AC adaptor to the supplied USB connecting cable.
- 3** Connect the USB connecting cable to the (USB) connector of the IC recorder.

## Disconnecting the IC recorder from the AC outlet

Follow the procedures below; otherwise, when the IC recorder contains data files, the files may be damaged or become unplayable.

- 1** If you are recording or playing back a file, press **■** (stop) to put the IC recorder into the stop mode.
- 2** Make sure that the operation indicator of the IC recorder does not light.
- 3** Disconnect the USB connecting cable from the (USB) connector of the IC recorder, then disconnect the USB AC adaptor from the USB connecting cable, and then disconnect the USB AC adaptor from the AC outlet.

### Notes

- During recording (the operation indicator lights or flashes in red) or accessing data (the operation indicator flashes in orange),
  - the IC recorder should not be connected to or disconnected from the USB AC adaptor connected to the AC outlet.



– the USB AC adaptor connected to the IC recorder should not be connected to or disconnected from the AC outlet.

Doing so may damage the data. If the IC recorder is required to process a large amount of data, the start-up window may be displayed for an extended period of time. This is not a malfunction of the IC recorder. Wait until the start-up display disappears from the display window.

- While a USB AC adaptor is being used, the battery indicator does not appear in the display window.

# Precautions

## On power

Operate the unit only on 3.0 V or 2.4 V DC. Use two LR03 (size AAA) alkaline batteries or two NH-AAA-B2KN rechargeable batteries.

## On safety

Do not operate the unit while driving, cycling or operating any motorized vehicle.

## On handling

- Do not leave the unit in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.
- Should any solid object or liquid fall into the unit, remove the batteries and have the unit checked by qualified personnel before operating it any further.
- Be careful not to allow water to splash on the unit. The unit is not water-proof. In particular, be careful in the following situations.
  - When you have the unit in your pocket and go to the bathroom, etc.  
When you bend down, the unit may drop into the water and may get wet.

- When you use the unit in an environment where the unit is exposed to rain, snow, or humidity.
- In circumstances where you get sweaty. If you touch the unit with wet hands or if you put the unit in the pocket of sweaty clothes, the unit may get wet.
- You may feel pain in your ears if you use the headphones when the ambient air is very dry. This is not because of a malfunction of the headphones, but because of static electricity accumulated in your body. You can reduce static electricity by wearing non-synthetic clothes that prevent the emergence of static electricity.

## On noise

- Noise may be heard when the unit is placed near an AC power source, a fluorescent lamp or a mobile phone during recording or playback.
- Noise may be recorded when an object, such as your finger, etc., rubs or scratches the unit during recording.

## On maintenance

To clean the exterior, use a soft cloth slightly moistened in water. Then use a soft dry cloth to wipe the exterior. Do not use alcohol, benzine or thinner.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

### Backup recommendations

To avoid potential risk of data loss caused by accidental operation or malfunction of the IC recorder, we recommend that you save a backup copy of your recorded files to a computer, etc.

## On using a memory card

### ■ Notes

- When formatting (initializing) a memory card, make sure to use the IC recorder to format it. Operations of the memory cards formatted with Windows or other devices are not guaranteed.
- If you format a memory card containing recorded data, the recorded data will be deleted. Be careful not to delete important data.
- Do not leave a memory card within the reach of small children. They might accidentally swallow it.
- Do not insert or remove a memory card during recording/playback/formatting. Doing so may cause a malfunction of the IC recorder.
- Do not remove a memory card while the “Accessing...” animation appears in the display window or the indicator is flashing in orange. Doing so may damage the data.
- We do not guarantee the operations of all types of compatible memory cards with the IC recorder.
- For compatible M2™, please refer to the Sony web site (page 117).
- “MagicGate™” is the collective name of content protection technologies developed by Sony. The IC recorder does not support data recording/playback that requires MagicGate™ functions.
- The IC recorder does not support parallel data transfer.
- You cannot use a ROM (read-only-memory) type or write-protected memory card.
- Data may be corrupted in the following cases:
  - When a memory card is removed or the IC recorder is turned off during a read or write operation.
  - When a memory card is used in locations subject to static electricity or electrical noise.
- We assume no responsibility for any loss or damage of recorded data.

- We recommend that you save a backup copy of the important data.
- Do not touch the terminal of a memory card with your hand or a metal object.
- Do not strike, bend or drop a memory card.
- Do not disassemble or modify a memory card.
- Do not expose a memory card to water.
- Do not use a memory card under the following conditions:
  - Locations beyond the required operating conditions, including locations, such as the hot interior of a car parked in the sun and/ or in the summer, the outdoors exposed to direct sunlight, or a place near a heater.
  - Humid locations or locations with corrosive substances present.
- When using a memory card, make sure to check the correct insertion direction into the memory card slot.

# Specifications

## System requirements

### To use your computer with the Sound Organizer software

To use your computer with the Sound Organizer software, see “System requirements for your computer” on page 108.

### To use your computer without the Sound Organizer software

To use your computer with the IC recorder without the Sound Organizer software, or to use the IC recorder as a USB mass storage device, your computer must meet the operating system requirements and port environment described below.

### Operating systems:

- Windows 7 Ultimate
- Windows 7 Professional
- Windows 7 Home Premium
- Windows 7 Home Basic
- Windows 7 Starter
- Windows Vista Ultimate Service Pack 2 or higher
- Windows Vista Business Service Pack 2 or higher

- Windows Vista Home Premium Service Pack 2 or higher
- Windows Vista Home Basic Service Pack 2 or higher
- Windows XP Media Center Edition 2005 Service Pack 3 or higher
- Windows XP Media Center Edition 2004 Service Pack 3 or higher
- Windows XP Media Center Edition Service Pack 3 or higher
- Windows XP Professional Service Pack 3 or higher
- Windows XP Home Edition Service Pack 3 or higher
- Mac OS X (v10.2.8-v10.6)  
Pre-Installed

### ■ Notes

- Operation is not guaranteed if any operating system other than those indicated on the left (Windows 98, Windows 2000 or Linux, etc.) is used.
- 64 bit versions of Windows XP are not supported.
- For the latest version information and compatibility with your operating system, please access the support home page for the IC recorder:  
<http://www.sony-latin.com/index.crp>

## Hardware environment:

- Sound board: Sound cards compatible with any of the supported Microsoft Windows operating systems
- Port: USB port

### **Note**

- The following systems are not supported:
  - Operating systems other than the ones indicated on page 117
  - Personally constructed computers or operating systems
  - Upgraded operating systems
  - Multi-boot environment
  - Multi-monitor environment

## Design and specifications

### IC recorder section

Capacity (User available capacity)

2 GB

(approx. 1.80 GB = 1,932,735,283 Byte)

A part of the memory capacity is used as a management area.

Frequency range

- SHQ: 75 Hz - 20,000 Hz
- HQ: 75 Hz - 17,000 Hz
- SP: 75 Hz - 14,000 Hz
- LP: 75 Hz - 3,500 Hz

Bit rate and sampling frequencies for MP3 files\*1

Bit rate: 32 kbps - 320 kbps, VBR

Sampling frequencies:

16/22.05/24/32/44.1/48 kHz

File extension: .mp3

\*1 The playback of MP3 files recorded using the IC recorder is also supported. Not all encoders are supported.

### FM radio section (for ICD-PX312F only)

Frequency range

87.50 MHz - 108.00 MHz

IF 128 kHz

Antenna

Stereo headphones cord antenna

### General

Speaker

Approx. 28 mm dia.

Input/Output

- Microphone jack (minijack, stereo)
  - input for plug in power, minimum input level
  - 0.6 mV
- Headphone jack (minijack, stereo)
  - output for 8 ohms - 300 ohms impedance headphones
- USB connector (USB Mini-B jack)
  - High-Speed USB compatible

- Memory Stick Micro™ (M2™)/microSD memory card slot

### Playback speed control (DPC)

2.00 times - 0.50 times

### Power output

300 mW

### Power requirements

Two LR03 (size AAA) alkaline batteries (supplied): 3.0 V DC

Two NH-AAA-B2KN rechargeable batteries (not supplied): 2.4 V DC

### Operating temperature

5°C - 35°C

### Dimensions (w/h/d) (not incl. projecting parts and controls) (JEITA)\*2

Approx. 37.5 mm × 114 mm × 20.9 mm

### Mass (JEITA)\*2

Approx. 74 g including two LR03 alkaline batteries

\*2 Measured value by the standard of JEITA (Japan Electronics and Information Technology Industries Association)

### Supplied accessories

See page 7.

### Optional accessories

Memory Stick Micro™ (M2™) MS-A16GN, MS-A16GU2, MS-A8GN, MS-A8GU2, MS-A4GN, MS-A4GU2, MS-A2GN, MS-A2GU2

microSD/microSDHC SR-8A4, SR-4A4, SR-2A1

Active speaker SRS-M50

Electret condenser microphone ECM-CS10, ECM-CZ10, ECM-DS70P, ECM-DS30P, ECM-TL1

Audio connecting cable RK-G136

Rechargeable battery NH-AAA-B2KN

USB AC adaptor AC-U50AG, AC-U501AD

Battery charger BCG-34HS2KAN

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information.

Design and specifications are subject to change without notice.

## Maximum recording time\*3\*4

The maximum recording time of all the folders is as follows.

REC Mode	Recording scene	Built-in memory	Memory card				
			2 GB	4 GB	8 GB	16 GB	32 GB
192kbps(MONO) (SHQ)	Meeting (🗣️)	22 hr.	22 hr.	44 hr.	89 hr.	178 hr.	357 hr.
	Interview (🎤)	20 min.	20 min.	40 min.	25 min.	0 min.	0 min.
	Lecture (📺)						
	Audio IN (🔊)						
128kbps(MONO) (HQ)	Voice Notes (🗨️)	33 hr. 30 min.	33 hr. 30 min.	67 hr. 5 min.	134 hr. 0 min.	268 hr. 0 min.	536 hr. 0 min.
48kbps(MONO) (SP)	—	89 hr. 25 min.	89 hr. 25 min.	178 hr. 0 min.	357 hr. 0 min.	715 hr. 0 min.	1,431 hr. 0 min.
8kbps(MONO) (LP)	—	536 hr. 0 min.	536 hr. 0 min.	1,073 hr. 0 min.	2,147 hr. 0 min.	4,294 hr. 0 min.	8,589 hr. 0 min.

(hr.: hours/min.: minutes)

\*3 When you are going to record continuously for a long time, you may have to replace the batteries with new ones in the midst of recording. For details on the battery life, see the next table.

\*4 The maximum recording time varies if you record files in mixed recording mode.



## Battery life

### When using Sony LR03 (SG) (size AAA) alkaline batteries\*1

REC Mode	Recording	Playback through speaker*2	Playback using the headphones	FM recording*3
192kbps(MONO) (SHQ)	55 hr.	16 hr.	41 hr.	20 hr.
128kbps(MONO) (HQ)	55 hr.	16 hr.	41 hr.	20 hr.
48kbps(MONO) (SP)	60 hr.	16 hr.	41 hr.	20 hr.
8kbps(MONO) (LP)	72 hr.	16 hr.	41 hr.	20 hr.
FM reception*3: 22 hr.				(hr.: hours)

### When using Sony NH-AAA-B2KN rechargeable batteries\*1

REC Mode	Recording	Playback through speaker*2	Playback using the headphones	FM recording*3
192kbps(MONO) (SHQ)	37 hr.	11 hr.	30 hr.	14 hr.
128kbps(MONO) (HQ)	37 hr.	11 hr.	30 hr.	14 hr.
48kbps(MONO) (SP)	39 hr.	11 hr.	30 hr.	14 hr.
8kbps(MONO) (LP)	50 hr.	11 hr.	30 hr.	14 hr.
FM reception*3: 14 hr.				(hr.: hours)

\*1 The battery life is measured in testing using methods proprietary to Sony. The battery life may shorten depending on how you operate the IC recorder.

\*2 When playing back music through the internal speaker with the volume level set to 14

\*3 For ICD-PX312F only

# Troubleshooting





Before taking the IC recorder for repair, check the following sections. Should any problem persist after you have made these checks, consult your nearest Sony dealer.

Please note that recorded files may be deleted during service or repair work.

Symptom	Remedy
Noise is heard.	<ul style="list-style-type: none"><li>• An object, such as your finger, etc., accidentally rubbed or scratched the IC recorder during recording so that noise was recorded.</li><li>• The IC recorder was placed near an AC power source, a fluorescent lamp or a mobile phone during recording or playback.</li><li>• The plug of the connected microphone is dirty. Clean the plug.</li><li>• The plug of the connected headphones is dirty. Clean the plug.</li><li>• Noise may be heard during recording pause of a file or VOR recording.</li></ul>
The IC recorder cannot be turned off.	<ul style="list-style-type: none"><li>• Slide the <b>HOLD•POWER ON/OFF</b> switch in the direction of “POWER ON/OFF” for more than 2 seconds when the IC recorder is stopped (page 13).</li></ul>
The IC recorder cannot be turned on.	<ul style="list-style-type: none"><li>• The power to the IC recorder is off. Slide the <b>HOLD•POWER ON/OFF</b> switch in the direction of “POWER ON/OFF” for more than 1 second (page 13).</li><li>• The batteries have been inserted with incorrect polarity (page 11).</li></ul>
The IC recorder is powered off automatically.	<ul style="list-style-type: none"><li>• When the IC recorder is in the stop mode and you leave the IC recorder without attempting an operation for a certain length of time, the auto power off function will take effect. (The length of time before auto power off is set to “10min” when you purchase the IC recorder.) You can select the length of time before auto power off takes effect in the menu (page 94).</li></ul>
The IC recorder does not operate correctly.	<ul style="list-style-type: none"><li>• Take out the batteries and insert them again.</li></ul>


Symptom	Remedy
It takes a long time for the IC recorder to start.	<ul style="list-style-type: none"> <li>• If the IC recorder is required to process a large amount of data, it may take longer for the IC recorder to start. This is not a malfunction of the IC recorder. Wait until the start-up display disappears.</li> </ul>
The IC recorder does not operate.	<ul style="list-style-type: none"> <li>• You may have formatted the memory of the IC recorder using the computer. Use the IC recorder formatting function to format the memory (page 95).</li> </ul>
The IC recorder does not operate, even if you press any button.	<ul style="list-style-type: none"> <li>• The batteries are weak (page 12).</li> <li>• The power to the IC recorder is off. Slide the HOLD•POWER ON/OFF switch in the direction of “POWER ON/OFF” for more than 1 second (page 13).</li> <li>• The HOLD function is activated. Slide the HOLD•POWER ON/OFF switch in the center direction (page 10).</li> </ul>
No sound comes from the speaker.	<ul style="list-style-type: none"> <li>• The volume is turned down completely (page 23).</li> <li>• Headphones are plugged in (page 48).</li> <li>• When you are listening to the FM radio, “Audio Output” is set to “Headphones.” Set it to “Speaker” (page 81) (for ICD-PX312F only).</li> </ul>
Sound comes from only one channel.	<ul style="list-style-type: none"> <li>• When audio output of an external device connected to the IC recorder is monaural and the recording mode is set to “192kbps(MONO)” (SHQ) or “128kbps(MONO)” (HQ), sounds are recorded only in one channel. In this case, set the recording mode to “48kbps(MONO)” (SP) or “8kbps(MONO)” (LP) in the menu (page 91).</li> </ul>
Sound comes from the speaker even when the headphones are plugged in.	<ul style="list-style-type: none"> <li>• If you plug in the headphones not securely during playback, the sound may come from the speaker. Unplug the headphones, and then insert them securely.</li> <li>• When you are listening to the FM radio, “Audio Output” is set to “Speaker.” Set it to “Headphones” (page 81) (for ICD-PX312F only).</li> </ul>

Symptom	Remedy
The operation indicator does not light.	<ul style="list-style-type: none"> <li>• “LED” is set to “OFF.” Display the menu and set “LED” to “ON” (page 93).</li> </ul>
“Memory Full” is displayed and you cannot start recording.	<ul style="list-style-type: none"> <li>• The memory is full. Erase some of the files (page 28) or erase all the files after you store them on the other memory media or on your computer.</li> </ul>
“File Full” is displayed and you cannot operate the IC recorder.	<ul style="list-style-type: none"> <li>• 199 files have been recorded in the selected folder (📁) or 4,074 files (when there are 21 folders) in total have been recorded. Therefore you cannot record another file, or move a file. Erase some of the files (page 28) or erase all the files after you store them on the other memory media or on your computer.</li> </ul>
You cannot record a file.	<ul style="list-style-type: none"> <li>• The remaining memory capacity is insufficient.</li> <li>• You cannot record a file when you select a 🎵 (music) or 🎧 (podcast) folder in the playback-only area.</li> </ul>
The playback volume is low.	<ul style="list-style-type: none"> <li>• The volume is turned down completely. Press VOL – or + to adjust the volume (page 23).</li> <li>• The recording scene is set to “Voice Notes” (🗣️) or “Audio IN” (🎧). Select a recording scene depending on the current situation (page 30).</li> <li>• “Mic Sensitivity” is set to “Low” (🔊). Set it to “High” (🔊), or “Medium” (🔊) (page 91).</li> </ul>

Symptom	Remedy
You cannot add a recording or an overwrite recording.	<ul style="list-style-type: none"> <li>• “Add/Overwrite” is set to “OFF” in the menu. Set “Add/Overwrite” to “Add” or “Overwrite” (page 33, 35).</li> <li>• The remaining memory capacity is insufficient. The overwritten part will be deleted after the overwriting part finishes recording. Therefore, you can only overwrite within the remaining recording time.</li> <li>• You cannot add or overwrite a recording to a file which was not recorded using the IC recorder.</li> <li>• You cannot add or overwrite a recording to a file in a folder in the playback-only area (the  (music) folder and the  (podcast) folder).</li> </ul>
Recording is interrupted.	<ul style="list-style-type: none"> <li>• The VOR function is activated. Set “VOR” to “OFF” in the menu (page 37).</li> </ul>
The VOR function does not work.	<ul style="list-style-type: none"> <li>• During FM recording, the VOR function does not work (for ICD-PX312F only).</li> </ul>
When recording from other equipment, the input level is too strong or not strong enough.	<ul style="list-style-type: none"> <li>• Connect the headphone jack of other equipment to the  (microphone) jack of the IC recorder and adjust the volume level on the piece of equipment connected to the IC recorder.</li> </ul>
Playback speed is too fast or too slow.	<ul style="list-style-type: none"> <li>• The playback speed is adjusted in DPC. Adjust the speed in DPC again in the menu (page 50).</li> </ul>
You cannot divide a file.	<ul style="list-style-type: none"> <li>• You need a certain amount of free space in the memory to divide a file.</li> <li>• 199 files have been recorded in the selected folder (). Erase some of the files (page 28) or erase all the files after you store them on the other memory media or on your computer.</li> <li>• Because of the system limitations, you may not be able to divide a file at the very beginning or at the very end of the file.</li> <li>• You cannot divide files other than those recorded using the IC recorder (e.g., a file transferred from a computer).</li> </ul>

<b>Symptom</b>	<b>Remedy</b>
The memory card is not recognized.	<ul style="list-style-type: none"> <li>• Since the memory card may contain image data or other files, the memory required for creating initial folders is insufficient. Use Windows Explorer, Macintosh desktop, or other tools to erase unwanted files or initialize the memory card on the IC recorder.</li> <li>• Switch the memory media of the IC recorder to “Memory Card” (page 41).</li> <li>• Remove a memory card and check the side of the memory card. Then insert it with correct side and direction.</li> </ul>
“--:--” is displayed.	<ul style="list-style-type: none"> <li>• You have not set the clock (page 14).</li> </ul>
“--y--m--d” or “--:--” is displayed on the recording date display.	<ul style="list-style-type: none"> <li>• The date of recording will not be displayed if you recorded the file when the clock was not set.</li> </ul>
There are fewer menu items displayed in the menu mode.	<ul style="list-style-type: none"> <li>• The menu items displayed are different depending on the operation modes (stop mode, playback mode, recording mode or FM radio mode (for ICD-PX312F only)) (page 84).</li> </ul>
The remaining time displayed in the display window is shorter than that displayed in the supplied Sound Organizer software.	<ul style="list-style-type: none"> <li>• The IC recorder requires a certain amount of memory for system operation. That amount is subtracted from the remaining time, which is the reason for the difference.</li> </ul>
The battery life is short.	<ul style="list-style-type: none"> <li>• The battery life on page 121 is based on playback with the volume level set to 14. The battery life may shorten depending on the operation of the IC recorder.</li> </ul>
There is no battery power remaining after you have left the batteries inserted for long time without using the IC recorder.	<ul style="list-style-type: none"> <li>• Even if you do not use the IC recorder, the batteries are consumed slightly. If you do not intend to use the IC recorder for an extended period of time, it is recommended that you turn the power off (page 13) or remove the batteries. Moreover, if you set “Auto Power Off” to a short span in the menu (page 94), you can prevent the batteries from being consumed due to forgetting to turn the IC recorder off.</li> </ul>

<b>Symptom</b>	<b>Remedy</b>
The battery life of the rechargeable batteries is short.	<ul style="list-style-type: none"> <li>• You are using the rechargeable batteries in an environment with a temperature of under 5 °C. Charge the batteries in an environment with a temperature of 5 °C - 35 °C.</li> <li>• The IC recorder has not been used for a certain time. Charge and discharge the rechargeable batteries using the IC recorder several times.</li> <li>• Replace the old rechargeable batteries with new ones.</li> <li>• The battery indicator is displayed only for a short time, however, the rechargeable batteries are not charged completely. Charge the batteries fully.</li> </ul>
Menu does not reflect the change in settings.	<ul style="list-style-type: none"> <li>• If the batteries are removed just after the menu setting is changed, or the menu setting is changed using “IC Recorder Settings” of the Sound Organizer software with the exhausted batteries inserted, the menu setting may not function.</li> </ul>
A character in a folder or file name is displayed in unreadable characters.	<ul style="list-style-type: none"> <li>• The IC recorder cannot support or display some special characters and symbols that are entered on a computer using Windows Explorer or the Macintosh desktop.</li> </ul>
The “Accessing...” animation display does not disappear.	<ul style="list-style-type: none"> <li>• If the IC recorder is required to process excessive amount of data, the animation may be displayed for an extended period of time. This is not a malfunction of the IC recorder. Wait until the message disappears.</li> </ul>
It takes a long time to copy a file.	<ul style="list-style-type: none"> <li>• If the file size of a file is large, it takes a considerable time to finish copying. Wait until the copying is finished.</li> </ul>
The transferred files are not displayed.	<ul style="list-style-type: none"> <li>• The IC recorder can recognize up to 8 levels of folders transferred to the IC recorder.</li> <li>• If files are incompatible, other than an MP3(.mp3) file that the IC recorder supports, they may not be displayed. See page 118.</li> </ul>

<b>Symptom</b>	<b>Remedy</b>
<p>The IC recorder is not recognized by your computer. A folder/file cannot be transferred from your computer.</p>	<ul style="list-style-type: none"> <li>• Disconnect the IC recorder from your computer and reconnect it.</li> <li>• Do not use a USB hub or USB extension cable other than the supplied USB connecting cable.</li> <li>• Operation is not guaranteed if you use any system requirements other than those described on page 117.</li> <li>• Depending on the USB port position, the IC recorder may not be recognized. If this happens, try another port.</li> </ul>
<p>The file transferred from your computer cannot be played back.</p>	<ul style="list-style-type: none"> <li>• The file format may differ from those that can be played back using the IC recorder (MP3(.mp3)). Check the file name (page 118).</li> </ul>
<p>The computer cannot start.</p>	<ul style="list-style-type: none"> <li>• If you reboot the computer with the IC recorder connected to the computer, the computer may freeze or may not start properly. Disconnect the IC recorder from the computer and reboot the computer again.</li> </ul>
<p>The audio is weak or has poor quality when listening to the radio. (for ICD-PX312F only)</p>	<ul style="list-style-type: none"> <li>• The batteries are weak. Replace the batteries with new ones (page 11).</li> <li>• Move the unit away from the TV.</li> </ul>
<p>The picture of your TV becomes unstable. (for ICD-PX312F only)</p>	<ul style="list-style-type: none"> <li>• If you are listening to an FM program near the TV with an indoor antenna, move the IC recorder away from the TV.</li> </ul>
<p>You cannot receive FM radio stations, or a lot of static is heard. (for ICD-PX312F only)</p>	<ul style="list-style-type: none"> <li>• The headphones are not connected (the headphone cord is the FM antenna). Connect the headphones to the  (headphone) jack and extend the headphone cord.</li> <li>• “DX/LOCAL” has been set to “LOCAL.” Set it to “DX” (page 79).</li> </ul>
<p>You cannot preset an FM radio station. (for ICD-PX312F only)</p>	<ul style="list-style-type: none"> <li>• You have already preset 30 FM radio stations. Erase unwanted preset stations (page 77).</li> <li>• “Scan Sensitivity” has been set to “Low.” Set it to “High” (page 80).</li> </ul>



## Sound Organizer

Refer to the help files of the Sound Organizer software, too.

Symptom	Cause/Remedy
The Sound Organizer software cannot be installed.	<ul style="list-style-type: none"><li>• The free disk or memory space on the computer is too small. Check the hard disk and memory space.</li><li>• You are trying to install the software into the operating system that the Sound Organizer software does not support. Install the software into the supported operating system (page 108).</li><li>• In Windows XP, you have logged on using a user name belonging to a user account with limitations. Or in Windows Vista or Windows 7, you have logged on using a guest account. Make sure to log on using a user name with computer administrator privileges.</li></ul>
The IC recorder cannot be properly connected.	<ul style="list-style-type: none"><li>• Check that the installation of the software has been successful. Also check the connection as follows:<ul style="list-style-type: none"><li>– When using an external USB hub, use the supplied USB connecting cable.</li><li>– Disconnect and then connect the IC recorder.</li><li>– Connect the IC recorder to another USB port.</li></ul></li><li>• Your computer may be in the system standby/hibernate mode. Do not let your computer enter into the system standby/hibernate mode while being connected to the IC recorder.</li><li>• Save a backup copy of all of the data stored on the built-in memory or the memory card, and then format the built-in memory or the memory card using the formatting function in the menu (page 95).</li></ul>



Symptom	Cause/Remedy
Playback sound from the computer is low./No sound is emitted from the computer.	<ul style="list-style-type: none"> <li>• No sound board is installed.</li> <li>• No speaker is built-in or connected to the computer.</li> <li>• The volume of the sound is turned down.</li> <li>• Turn up the volume on the computer. (Refer to the instruction manual of the computer.)</li> <li>• The volume of WAV files can be changed and saved using the “Increase Volume” feature of the Microsoft Sound Recorder.</li> </ul>
Stored files cannot be played back or edited.	<ul style="list-style-type: none"> <li>• You cannot play back files whose file format the Sound Organizer software does not support. Depending on the file format, you cannot use part of editorial features of the software. Refer to the help files of the Sound Organizer software.</li> </ul>
The counter or slider moves incorrectly, or noise is heard.	<ul style="list-style-type: none"> <li>• This happens when you play back files that you divided. Store a file on your computer first*, and then add it to the IC recorder. (*Select the saving file format that suits the IC recorder you use.)</li> </ul>
Operation is slow when there are many files.	<ul style="list-style-type: none"> <li>• When the total number of files increases, the operation becomes slower, regardless of the length of the recording time.</li> </ul>
Display does not work during saving, adding, or deleting of files.	<ul style="list-style-type: none"> <li>• It takes a longer time to copy or delete long files. Wait until the copying is finished. After completing operations, the display works normally.</li> </ul>
The software ‘hangs’ when the Sound Organizer software starts up.	<ul style="list-style-type: none"> <li>• Do not disconnect the connector of the IC recorder while the computer is communicating with the IC recorder. Otherwise the computer operations become unstable or the data inside the IC recorder may be damaged.</li> <li>• There may be conflict between the software and other driver or application.</li> </ul>

# Message List



Message	Cause/Remedy
HOLD	<ul style="list-style-type: none"><li>All the button operations are disabled because the IC recorder is in the HOLD status to prevent unintentional operations. Slide the HOLD•POWER ON/OFF switch towards the center to release the IC recorder from the HOLD status (page 10).</li></ul>
Low Battery	<ul style="list-style-type: none"><li>The batteries are exhausted. Replace the old LR03 (size AAA) alkaline batteries with new ones (page 11). Or replace the old rechargeable batteries with new ones.</li></ul>
Memory Card Error	<ul style="list-style-type: none"><li>An error occurred while a memory card was being inserted into the memory card slot. Remove and try inserting it again. If this message persists, use a new memory card.</li></ul>
Memory Card Not Supported	<ul style="list-style-type: none"><li>A memory card that the IC recorder does not support is inserted. See “About compatible memory cards” on page 39.</li><li>An M2™ that the IC recorder does not authorize is inserted. See “About compatible memory cards” on page 39.</li></ul>
Read Only Memory Card	<ul style="list-style-type: none"><li>A read-only memory card is inserted. A read-only memory card cannot be used with the IC recorder.</li></ul>
Memory Card Locked	<ul style="list-style-type: none"><li>The memory card is write-protected. A write-protected memory card cannot be used with the IC recorder.</li></ul>
Memory Card Access Denied	<ul style="list-style-type: none"><li>Since a memory card containing an access control function is inserted, you cannot use it.</li></ul>
Memory Full	<ul style="list-style-type: none"><li>The remaining memory capacity of the IC recorder is insufficient. Erase some files before recording.</li></ul>

<b>Message</b>	<b>Cause/Remedy</b>
File Full	<ul style="list-style-type: none"> <li>When there are already the maximum number of files in the selected folder or the total number of files stored on the IC recorder has exceeded the maximum, you cannot record a new file. Erase some files before recording.</li> </ul>
File Damaged	<ul style="list-style-type: none"> <li>You cannot play back or edit files, because the data of the selected file is damaged.</li> </ul>
Format Error	<ul style="list-style-type: none"> <li>The IC recorder cannot be turned on using the computer because there is no copy of the control file required for operation. Format the IC recorder using the formatting function in the menu (page 95). Do not use your computer to format the IC recorder.</li> </ul>
Process Error	<ul style="list-style-type: none"> <li>The IC recorder failed in memory access. Remove and then reinsert the batteries.</li> <li>Save a backup copy of your data and format the IC recorder using the menu (page 95).</li> </ul>
Stop and Reinsert Memory Card	<ul style="list-style-type: none"> <li>A memory card was inserted during recording or playback. Remove the memory card and insert it while the IC recorder is in the stop mode.</li> </ul>
Set Date&Time	<ul style="list-style-type: none"> <li>Set the clock; otherwise, you cannot set the alarm.</li> </ul>
Track Marks are Full	<ul style="list-style-type: none"> <li>You can set up to 98 track marks for a file. Cancel unwanted track marks (page 64).</li> </ul>
No File	<ul style="list-style-type: none"> <li>The selected folder does not have any files. You cannot move a file or set the alarm, etc., because of this.</li> </ul>
No Track Marks	<ul style="list-style-type: none"> <li>There are no track marks when you attempt to erase a track mark or track marks, or divide a file at all the track mark positions.</li> </ul>
Low Battery Level	<ul style="list-style-type: none"> <li>You cannot format the memory or erase all the files in a folder because of insufficient battery power. Replace the old LR03 (size AAA) alkaline batteries with new ones (page 11). Or replace the old rechargeable batteries with new ones.</li> </ul>

<b>Message</b>	<b>Cause/Remedy</b>
Already Set	<ul style="list-style-type: none"> <li>• The selected file has already been set for alarm playback. Select the other file.</li> <li>• You set the alarm to play back a file at a date and time previously set on another file. Change the alarm setting.</li> </ul>
Past Date/Time	<ul style="list-style-type: none"> <li>• You set the alarm when the time has already passed. Check it and set the appropriate date and time (page 55).</li> </ul>
File Protected	<ul style="list-style-type: none"> <li>• The selected file is protected or is a “Read only” file. You cannot erase it. Cancel the protection on the IC recorder or cancel “Read only” on your computer to edit the file using the IC recorder (page 71).</li> </ul>
Settings are Full	<ul style="list-style-type: none"> <li>• When 30 FM stations have already been stored in the IC recorder’s memory, you cannot preset a new FM station (for ICD-PX312F only).</li> </ul>
Set Add/Overwrite	<ul style="list-style-type: none"> <li>• “Add/Overwrite” in the menu is set to “OFF.” You cannot add a recording or an overwrite recording (pages 33, 35).</li> </ul>
Unknown Data	<ul style="list-style-type: none"> <li>• This data is not in a file format that is supported by the IC recorder. The IC recorder supports MP3(.mp3)files only. For details, see “Design and specifications” on page 118.</li> <li>• You cannot play back copyright protected files.</li> </ul>

Message	Cause/Remedy
Invalid Operation	<ul style="list-style-type: none"> <li>• You cannot divide or set a track mark in files in a  (music) or  (podcast) folder in the playback-only area.</li> <li>• When a memory card has a bad block on it, the card cannot be written to. Prepare a new memory card to replace the current one.</li> <li>• The file name has reached the maximum number of characters; you cannot divide the file. Shorten the file name.</li> <li>• The “Divide All Track Marks” function cannot be used because there is a track mark within 0.5 seconds from the dividing position.</li> <li>• The “Divide All Track Marks” function cannot be used because there is a track mark within 0.5 seconds from the beginning of a file or the end of a file.</li> <li>• The file length is less than 1 second; you cannot divide such a short file.</li> <li>• The “Divide Current Position” function cannot be used at a position within 0.5 seconds from the beginning of a file or the end of a file.</li> </ul>
Cannot Divide - Max # Files	<ul style="list-style-type: none"> <li>• When there are already 199 files in the selected folder or the total number of files stored on the IC recorder exceeds the maximum, you cannot divide a file. Erase some files before dividing a file.</li> </ul>
Same File Name Exists	<ul style="list-style-type: none"> <li>• A file of the same file name already exists in the folder when a file is divided, or a file is copied or moved.</li> </ul>
No Memory Card	<ul style="list-style-type: none"> <li>• There is no memory card inserted into the memory card slot when you attempt to set the “Select Memory,” or “File Copy” menus.</li> </ul>
New File	<ul style="list-style-type: none"> <li>• The file being recorded has reached the maximum size limit (500 MB). The file will be divided automatically and recording will continue as a new file.</li> </ul>
Erased-too near Track Marks	<ul style="list-style-type: none"> <li>• When there is a track mark set within 0.5 seconds from the dividing position, the track mark is automatically erased.</li> </ul>
No operation with Memory Card	<ul style="list-style-type: none"> <li>• You cannot set an alarm in a file stored on a memory card. Switch the memory media of the IC recorder to “Built-In Memory” (page 41).</li> </ul>

---

<b>Message</b>	<b>Cause/Remedy</b>
Change Folder	<ul style="list-style-type: none"><li>• If there are no files in a  (music) or  (podcast) folder in the playback-only area, no folders are displayed in the display window. Only a folder with a file will be displayed.</li></ul>
System Error	<ul style="list-style-type: none"><li>• A system error other than the above has occurred. Remove the batteries and re-inert them.</li></ul>

---

# System Limitations

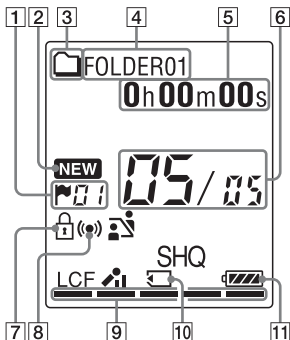
There are some system limitations of the IC recorder. Troubles as mentioned below are not malfunctions of the IC recorder.

Symptom	Cause/Remedy
You cannot record files up to the maximum recording time.	<ul style="list-style-type: none"><li>• If you record files in a mixture of the recording modes, the recordable time varies from the maximum recording time of the highest recording mode to those of the lowest recording mode.</li><li>• The sum of the number on the counter (elapsed recording time) and the remaining recording time may be less than the IC recorder's maximum recording time.</li></ul>
You cannot display or play back MP3 files in order.	<ul style="list-style-type: none"><li>• If you have transferred MP3 files using your computer, those files may not be transferred in order of transfer because of system limitations. If you transfer MP3 files from your computer to the IC recorder one by one, you can display and play back the MP3 files in transferred order.</li></ul>
A file is divided automatically.	<ul style="list-style-type: none"><li>• The file being recorded has reached the maximum size limit (500 MB). Therefore it is automatically divided.</li></ul>
You cannot enter lower-case characters.	<ul style="list-style-type: none"><li>• Depending on the combination of the characters used for the folder name that was made on your computer, those characters may change to all capitals.</li></ul>
“□” is displayed in place of a folder name, title, artist name, or file name.	<ul style="list-style-type: none"><li>• A character which cannot be displayed on the IC recorder has been used. Using your computer, replace it with one which can be displayed on the IC recorder.</li></ul>
When you set A-B repeat playback, the set positions move a little.	<ul style="list-style-type: none"><li>• Depending on the files, the set positions may move.</li></ul>
The remaining recording time becomes shorter when you divide a file.	<ul style="list-style-type: none"><li>• You need a certain amount of free space for a file management area to divide a file, therefore the remaining recording time will be shortened.</li></ul>



# Display Window Guide

## Display when stopped

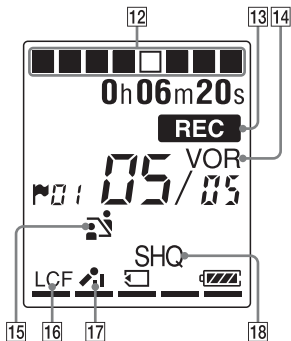


- 1** Track mark indicator  
Displays the track mark number just before the current position. Appears when a track mark is set for a file.
- 2** Newly arriving podcast indicator
- 3** Folder information indicator
  - : A folder where you can record a file
  - : A folder for playback only
  - : A folder for podcast files









- 4** Folder name indicator
- 5** File information indicator  
You can switch the file information display in order by pressing DISP/MENU briefly: Elapsed time → Remaining time → Recording date and time → File name → Title → Artist name
  - : File name
  - : Title
  - : Artist name (during playback only)
- 6** File location indicator  
The selected file number is displayed in the numerator and the total number of files in the folder is displayed in the denominator.
- 7** Protect indicator  
Appears when the protection is set for a file.
- 8** Alarm indicator
- 9** Remaining memory indicator  
Displays the remaining memory and decreases one by one during recording.

- 10** Memory card indicator  
When “Memory Card” is selected as “Select Memory,” the indicator is displayed. When “Built-In Memory” is selected, no indicator is displayed.
- 11** Battery indicator

## Display when recording

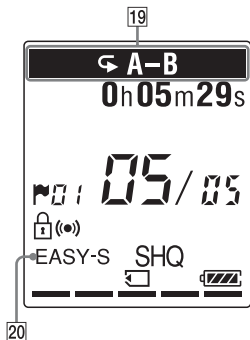


- 12** Recording progress animation display  
Displays the progress of a recording in animation.
- 13** Recording indicator  
Appears while the IC recorder is recording
- 14** VOR recording indicator  
Appears when “VOR” is set to “ON” in the menu.

- 15** Scene select indicator  
Displays the currently selected scene used for recording. Appears when a scene is set.
-  : Meeting
  -  : Voice Notes
  -  : Interview
  -  : Lecture
  -  : Audio IN
- 16** LCF (Low Cut Filter) indicator  
Appears when “LCF(Low Cut)” is set to “ON” in the menu.
- 17** Microphone sensitivity indicator
-  : High
  -  : Medium
  -  : Low
- 18** Recording mode indicator  
Displays the recording mode set in the menu when the IC recorder is in the stop mode, and displays the current recording mode when the IC recorder is in the playback or recording mode:
- SHQ: Super high-quality monaural recording mode (192kbps(MONO))
  - HQ: High-quality monaural recording mode (128kbps(MONO))
  - SP: Standard play monaural recording mode (48kbps(MONO))

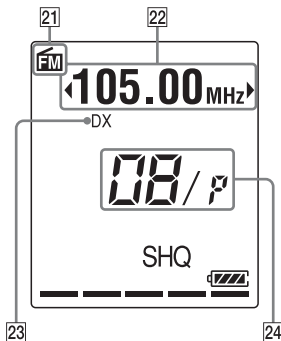
LP: Long play monaural recording mode (8kbps(MONO))

## Display during playback



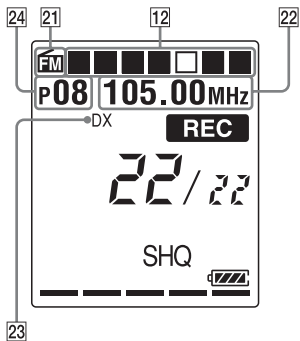
- 19** Playback mode indicator
- ↵ 1: Appears when one file is played back repeatedly.
  - ↵ A-B: Appears when a specified A-B period is played back repeatedly.  
x0.50 to x2.00: DPC playback  
ALARM: Alarm playback
- 20** EASY-S (Easy Search) indicator
- Appears when “Easy Search” is set to “ON” in the menu.

## Display when listening to the FM radio (for ICD-PX312F only)

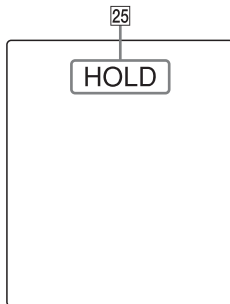


- 21** FM indicator
- 22** Radio frequency
- 23** Receiver sensitivity
- LOCAL: LOCAL  
DX: DX
- 24** Preset number

## Display when recording an FM radio broadcast (for ICD-PX312F only)



## Display in the HOLD status



### 25 HOLD indicator

Appears when the IC recorder is in the HOLD status to prevent unintentional operations.

To release the HOLD status, slide the HOLD•POWER ON/OFF switch towards the center (page 10).

# Index

## A

- A-B repeat ..... 53
- Adding a recording ..... 33
- Adding an overwrite recording ..... 35
- Adjusting the volume ..... 23, 47
- Alarm ..... 55, 84, 87
- Alkaline batteries ..... 11, 121

## B

- Battery indicator ..... 12
- Battery life ..... 121

## C

- Changing the Scene Select settings ..... 30
- Connecting the IC recorder to your computer ..... 96
- Continuous play ..... 52, 85, 92
- Copying a file to the other memory media ..... 60, 84, 88
- Copying files to your computer ..... 103
- Copying MP3 files to the IC recorder ..... 104
- Cue ..... 48

## D

- Display during playback ..... 27
- Display the current date and time ..... 15
- Dividing a file at all the track mark positions ..... 68, 84, 88
- Dividing a file at the current position ..... 67, 84, 88
- DPC (Digital Pitch Control) ..... 50, 84, 86

## E

- Easy search ..... 48, 84, 87
- Editing files ..... 59
- Erasing ..... 28
- Erasing a track mark ..... 64, 84, 88
- Erasing all files in a folder ..... 62, 84, 89
- Erasing all the track marks ..... 65, 84, 88
- External microphone ..... 43

## F

- FM radio
  - Listening to the FM radio ..... 73, 74, 85, 89
  - Presetting the FM stations automatically ..... 76, 85, 89

Presetting the FM stations manually .....	77
Recording FM broadcasts .....	75
Switching the FM radio output .....	81, 85, 90
Switching the receiver sensitivity .....	79, 85, 90
Switching the scanning sensitivity .....	80, 85, 90
Folder .....	24, 59, 97

## H

HOLD .....	10
HOLD•POWER ON/OFF switch .....	10, 13

## I

Index to parts and controls	
Display window .....	137
Front .....	8
Rear .....	9
Input selection .....	43, 45, 85, 92
Inserting batteries .....	11

## M

Maintenance .....	115
Memory card .....	39, 115
Memory Stick Micro™ (M2™) .....	39, 99

## Menu

Add/Overwrite .....	84, 86
Alarm .....	84, 87
Audio Output .....	85, 90
Auto Power Off .....	85, 94
Auto Preset .....	85, 89
Beep .....	85, 94
Continuous Play .....	85, 92
Date&Time .....	85, 93
Delete .....	84, 88
Detail Menu .....	85, 91
Divide .....	84, 88
Divide All Track Marks .....	84, 88
Divide Current Position .....	84, 88
DPC(Speed Control) .....	84, 86
DX/LOCAL .....	85, 90
Easy Search .....	84, 87
Erase All .....	84, 89
Erase All Track Marks .....	84, 88
Erase Track Mark .....	84, 88
File Copy .....	84, 88
FM Radio .....	85, 89
Format .....	85, 95
Language .....	85, 93
LCF(Low Cut) .....	85, 92
LED .....	85, 93

Making settings .....	82
Menu settings .....	84
Mic Sensitivity .....	85, 91
Move & Copy .....	84, 88
Move File .....	84, 88
Noise Cut Level .....	85, 92
Protect .....	84, 87
REC Mode .....	85, 91
Scan Sensitivity .....	85, 90
Select Input .....	85, 92
Select Memory .....	85, 89
Time Display .....	85, 94
VOR .....	84, 86
Message list .....	131
microSD/microSDHC .....	39, 100
Monitoring the recording .....	47
Moving a file .....	59, 84, 88
MP3 files .....	118

## **N**

Noise .....	114
Noise cut .....	49
Noise cut level .....	49, 85, 92

## **O**

Overwrite recording .....	35
---------------------------	----

## **P**

Pause recording .....	21
Playback .....	23, 48
Playback modes .....	52
Podcast .....	107
Precautions .....	114
Protecting a file .....	71, 84, 87

## **R**

Rechargeable batteries .....	121
Recording .....	18, 30
Recording from a telephone .....	44
Recording from other equipment .....	45
Recording time .....	120
Recording with other equipment .....	58
Review .....	21, 48

## **S**

Scene selection .....	30
Selecting a folder and file .....	24
Setting the clock .....	14, 85, 93
Setting the language .....	16, 85, 93
Sound Organizer .....	107
Specifications .....	117
Switching the memory .....	41, 85, 89
System limitations .....	136
System requirements .....	108, 117



## **T**

Track mark .....	63
Troubleshooting .....	122

## **U**

USB AC adaptor .....	112
USB memory .....	106
Using the IC recorder with your computer .....	96

## **V**

VOR (Voice Operated Recording) .....	37, 84, 86
---	------------

<http://www.sony.net/>

© 2011 Sony Corporation