# Operating Instructions

# **IC** Recorder

#### ICD-BX112

© 2011 Sony Corporation Printed in China

http://www.sony.net/

Risk of explosion if battery is replaced by an incorrect Dispose of used batteries according to the

Notice for the customers in Canada This Class B digital apparatus complies with Canadian ICES-003.

#### FOR UNITED STATES CUSTOMERS. NOT APPLICABLE IN CANADA, INCLUDING IN THE PROVINCE OF **QUEBEC.**

POUR LES CONSOMMATEURS AUX **ÉTATS-UNIS. NON APPLICABLE AU CANADA, Y COMPRIS LA PROVINCE** DE QUÉBEC.

The following FCC statement applies only to the USA. Other versions may not comply with FCC

### INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device. pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna. Increase the separation between the equipment and Connect the equipment into an outlet on a circuit

different from that to which the receiver is connected. Consult the dealer or an experienced radio/TV

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

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

# For the customers in Europe

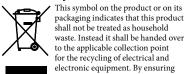
To prevent possible hearing damage, do not listen at high volume levels for long periods.



# WARNING

Do not expose the batteries (battery pack or batteries installed) to excessive heat such as sunshine, fire or the like for a long time.

#### Disposal of Old Electrical & **Electronic Equipment (Applicable** in the European Union and other **European countries with separate** collection systems)



waste. Instead it shall be handed over electronic equipment. By ensuring this product is disposed of correctly,

you will help prevent potential negative consequence for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased

#### Disposal of waste batteries (applicable in the European Union and other European countries with separate collection systems)

/ This symbol on the battery or on the packaging indicates that the battery rovided with this product shall not be treated as household waste.

On certain batteries this symbol might be used in combination with a chemical symbol. The chemical symbols for mercury

(Hg) or lead (Pb) are added if the battery contains more than 0.0005% mercury or 0.004% lead. By ensuring these batteries are disposed of correctly, you will help prevent potentially negative consequences for the environment and human health which could otherwise be caused by inappropriate waste handling of the battery. The recycling of the In case of products that for safety, performance or data integrity reasons require a permanent connection with an incorporated battery, this battery should be replaced by qualified service staff only. To ensure that the battery will be treated properly hand over the product at end-of-life to the applicable collection point for the recycling of electrical and electronic equipment.

• Batteries are exhausted. Replace the old

# SET DATE

• Set the clock; otherwise, you cannot set the

# FULL (REC flashes at the same time)

 $\bullet$  The remaining memory capacity of the IC recorder is insufficient. Erase some message before recording.

### FULL ("99" flashes at the same time) • As there are already 99 messages in the

current folder, you cannot record a new message. Erase some messages before

### FULL (folder indicator flashes at the same

• As there are already 99 messages in the folder to which you want to move a message, you cannot move the message. Erase some messages before moving.

# **NO DATA**

• The selected folder does not have any messages. You cannot move a message or set the alarm, etc., because of this.

#### PRE SET

 You set the alarm to play back a message at a date and time previously set on another message. Check the setting and set the appropriate date and time.

### BACK-D

• You set the alarm when the time has already passed. Check it and set the appropriate date

# LOCK ( flashes at the same time)

 You selected a message that has been locked. You cannot move it, erase it, add a new message to it, add an overwritten message to it, or divide it. Set "LOCK" to "OFF" in the menu before editing the message

### OFF REC-OP • You cannot add a recording or overwrite a recording because "REC-OP" is set to "OFF."

Set it to "ON." ERR ACCESS ERR 01 - ERR 06

• A system error other than the above has

# occurred. Remove the batteries and re-insert

HOLD • The HOLD function is activated. Slide the HOLD switch in the direction opposite that of the arrow. For details on the HOLD function, see "Preventing Accidental Operation (HOLD)."

**System Limitations** 

malfunctions of the IC recorder.

maximum recording time.

recording time.

positions move a little

positions may move.

**Getting Started** 

**Package** 

IC Recorder (1)

There are some system limitations of the IC

recorder. Items as mentioned below are not

You cannot record messages up to the

• If you record messages in a mixture of

• The sum of the number on the counter

recording time may be less than the IC

You cannot specify the finishing point B.

You cannot specify the finishing point B

before the starting point A has been set.

**Step 1: Checking the** 

LR03 (size AAA) alkaline batteries (2)

Stereo microphone with shirt-clip\*

\* The stereo headphones, carrying pouch

and stereo microphone with shirt-clip are

supplied with some models in specified

You are cautioned that any changes or

modifications not expressly approved in

this manual could void your authority to

Index to parts and controls

Contents of the

Stereo headphones\* (1)

Carrying pouch\* (1)

**Operating Instructions** 

operate this equipment.

**1** Built-in microphone

2 (microphone) jack\*

4 (folder)/MENU button

3 Display window

**5** DIVIDE button

**6** ■ (stop) button

regions only.

**Front** 

Depending on the messages, the set

When you set A-B repeat playback, the set

SHQ, HQ, SP and LP modes, the recordable

time varies from the maximum SHO mode

recording time to the maximum LP mode

(elapsed recording time) and the remaining

# **Troubleshooting**

For all other batteries, please view the section on how

the battery over to the applicable collection point for

For more detailed information about recycling of this

product or battery, please contact your local Civic

shop where you purchased the produc

Notice for the customers: the

following information is only

applicable to equipment sold

in the countries applying EU

Corporation, 1-7-1 Konan, Minato-ku, Tokyo,

108-0075 Japan. The Authorized Representative for

Hedelfinger Strasse 61, 70327 Stuttgart, Germany

For any service or guarantee matters please refer to

the addresses given in separate service or guarantee

EMC and product safety is Sony Deutschland GmbH.

The manufacturer of this product is Sony

directives

Office, your household waste disposal service or the

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 messages may be erased during service or repair work.

#### Display does not disappear. Display appears blurred.

**Troubleshooting** 

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

# The IC recorder does not operate.

- The batteries have been inserted with
- incorrect polarity.
- The batteries are weak No sound comes from the speaker.

# • The volume is turned down completely.

• Headphones are plugged in.

#### Sound comes from the speaker even when the headphones are plugged in.

• 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.

Recording is interrupted. • The VOR function is activated. Set "VOR" to "OFF" in the menu. For details, see "Menu settings" on the reverse side of this paper

# Noise is heard.

• Plug of the connected microphone was dirty

when recording. Clean the plug.  $\bullet$  The  $\bigcap$  (head phones) plug is dirty. Clean

You cannot divide a message. You need a certain amount of free space in

# the memory to divide a message

• If 99 messages have been recorded in a

#### folder, you cannot divide a message in that folder. Erase some of the messages. You cannot divide a message at the very beginning (0.5 seconds from the beginning)

end) of the message. • If you divide a message frequently, the unit may become unable to divide the message

or at the very end (0.5 seconds prior to the

• You selected a message that has been locked. Set "LOCK" to "OFF" in the menu before

# dividing the message Playback speed is too fast or too slow.

#### • The playback speed is adjusted in DPC. Adjust the speed in DPC again in the menu. For details, see "Menu settings" on the reverse side of this paper

# "--:-" is displayed.

• You have not set the clock

### "--Y--M--D" or "--:--" is displayed on the **REC DATE display.**

 The date of recording will not be displayed if you recorded the message when the clock was not set. For details, see "Menu settings" on the reverse side of this paper.

# The clock setting is reset.

• The clock setting will be reset within about 1 minute. When you replace the batteries,

please provide new batteries quickly. There are fewer menu items displayed in

# • The menu items displayed are different depending on the operation modes (stop mode, playback mode and recording mode).

#### The IC recorder does not operate correctly.

Take out the batteries and insert them again.

#### You cannot erase a message. • You selected a message that has been locked. Set "LOCK" to "OFF" in the menu before

# **Message List**

14 (repeat) A-B button **15** ● REC/PAUSE button \* These buttons and the jack have a tactile dot.

9 Speaker

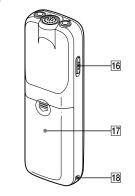
10 (headphone) jack

11 Operation indicator

13 VOL (volume) -/+\* button

to identify each terminal

12 ERASE button



Use it as a reference point for operations, or

7 ► PLAY/STOP•ENTER button\*

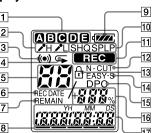
**8** −**I** (review/fast backward), ▶► (cue/fast forward) button

### 16 HOLD switch

17 Battery compartment

[18] Strap hole (A strap is not supplied.)

### **Display window**



## **1** Folder indicator Displays the folder (**A**, **B**, **C**, **D**, or

(a) you have selected.

#### 2 Microphone sensitivity Displays the microphone sensitivity. For details about the settings, see "Menu settings" on the reverse side of this paper.

3 Alarm indicator Appears when the alarm is set for a 4 Repeat play indicator

#### Appears when a message is played back repeatedly.

5 Selected message number 6 REC DATE (recorded date) indicator The recorded date or time is displayed

#### with the REC DATE indicator. **7** REMAIN indicator

When the IC recorder is in the recording or stop mode, the remaining recording time is displayed with the REMAIN indicator, or when the IC recorder is in the playback mode. the remaining time of the current message is displayed with the REMAIN

#### indicator. **8** Remaining memory indicator Displays the remaining memory and decreases one by one during recording.

# **9** Battery indicator

Displays the remaining battery power.

10 Recording mode indicator Displays the recording mode set using the menu when the IC recorder is in the stop mode, and displays the current recording mode when the IC recorder For details about the settings, see "Menu settings" on the reverse side of

### this paper. 11 REC (recording) indicator

Appears while the IC recorder is recording. 12 N-CUT (noise cut) indicator Appears when "N-CUT" is set to "ON"

#### in the menu 13 Lock indicator Appears when "LOCK" is set to "ON"

in the menu. 14 EASY-S (easy search) indicator Appears when the "EASY-S" is set to

#### "ON" in the menu 15 DPC (Digital Pitch Control) indicator Appears when the "DPC" is set to "ON"

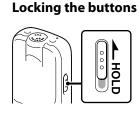
**Preventing Accidental** 

in the menu. **16** Total number of messages in the folder/

#### DPC setting 17 Elapsed time/Remaining time/Recorded date or time

indication/Message

# **Operation (HOLD)**



Slide the HOLD switch in the direction of the arrow in the recording or playback mode. When the HOLD function is activated, the yellow marking appears beside the switch.

### "HOLD" will flash, indicating that all the functions of the buttons are locked.

# Unlocking the buttons

Slide the HOLD switch in the opposite direction from that of the arrow so that all buttons will be unlocked.

# **□** Note

When the HOLD function is activated during recording, all the functions of the buttons are locked to prevent accidental operation. To stop recording, cancel the HOLD function first.

Ϋ́ 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**

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



• Messages recorded or alarm settings are not erased even when you replace the batteries.

• When replacing the batteries, the clock continues moving for a certain period of

time after you remove the batteries. • Even if you do not use the IC recorder, the batteries are consumed slightly. The battery life in this case varies depending on humidity or other environmental conditions. Usually, the batteries last about 2 months. 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 or remove the batteries

# **■** Notes

• Do not use manganese batteries for this IC

• When replacing the batteries, be sure to replace both batteries with new ones.

When to replace the batteries

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

**Battery remain indication** : Replace the current batteries with

: "LO BATT" flashes and the IC

recorder will stop operation.

# **Step 3: Turning the IC**



new ones.

Slide the HOLD switch in the opposite direction from that of the arrow. The IC

# recorder turns on, and "ACCESS" flashes.

To turn the power off When you are not using the IC recorder, you can prevent the batteries from getting weak quickly by turning the power off.

#### the arrow in the stop mode. "OFF" flashes. The IC recorder turns off within a few seconds

ʹ̈̈́gʻ Tips • When you are not going to use the IC recorder for a long time, we recommend to

Slide the HOLD switch in the direction of

turn off the IC recorder. • When 10 minutes have passed after you have turned on the IC recorder and leave it without doing anything, the display goes off automatically. (Press any button to show the

## **Step 4: Setting the** Clock

Remove the protective film on the display

window before you use the IC recorder. You need to set the clock to use the alarm function or record the date and time. Clock setting display appears 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, the year section flashes in the display window.

### Setting the clock after preparing a power source

**1** Set the year.

Press  $[-\mathbb{H}]$  or  $[\mathbb{H}]$  to set the year. 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 minutes in sequence in the same way. Press  $[- \blacktriangleright \blacktriangleright +]$  to select the desired figures, and then press [► PLAY/STOP•ENTER].

When any button not intended for use in setting the clock is unintentionally pressed during clock setting mode, the clock setting is canceled. Use the menu to set the clock.

# Setting the clock using the

While the IC recorder is in the stop mode, you can set the clock using the menu.

**1** Press and hold [ (folder)/MENU] to enter the menu mode. The menu mode will be displayed.

**2** Press [-**|**←**|**] or [**>**→**|**+] to select "SET DATE," and then press [► PLAY/STOP•ENTER]

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

minute in sequence, and then press

**3** Press [-**I◄4**] or [**▶I**+] to set

[► PLAY/STOP•ENTER].

the year, month, day, hour, and

#### Ϋ́ Tip Press [ (folder)/MENU] to return to the previous operation.

### **■** Notes

• You can set the time display for the clock to "12H" (12-hour display) or "24H" (24-hour display) in the "HOUR" menu. When "12H" (12-hour display) is set, "AM" or "PM" appears in the display window

STOP•ENTER] within 1 minute of entering

### the clock setting data, the clock setting mode is canceled and the window will return to the stop mode display.

If you do not press [► PLAY/

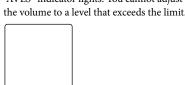
# Maintaining the moderate volume

level (AVLS)

Using AVLS (For European

The AVLS (Automatic Volume Limiter System) function allows you to listen to the sound at a moderate volume level when using headphones (not supplied). The AVLS function limits the maximum volume to prevent auditory issues or distraction

and to maintain a moderate volume level. When the "AVLS" is set to "ON" in the menu, and you try to adjust the volume to a level that exceeds the AVLS-specified level, "AVLS" indicator lights. You cannot adjust



8415

When "AVLS" is set to "OFF" To disable the AVLS function, do the

**1** Press and hold [☐ (folder)/MENU] to enter the menu mode. Press [-**I**◀◀] or [►►+] to select "AVLS," and press [► PLAY/STOP•ENTER].

**2** Press [-**I**← ] or [**>**⊢ +] to select "OFF," and press [► PLAY/STOP•ENTER]. "AVLS" and "OFF" will flash with a beeping sound.

**3** Press [► PLAY/STOP•ENTER].

To enable the AVLS function again, please select "ON" in step 2. If you play back messages with using headphones (not supplied) at a volume that exceeds the AVLS-specified level for

specified period of time, "AVLS" and "ON"

will be displayed and the "AVLS" in the

menu is automatically set to "ON."

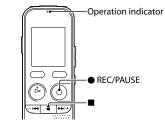
**4** Press [■ (stop)] to exit the menu mode.

# ■ Notes

• When using the built-in speaker or recording a message, the AVLS function

• When the IC recorder is turned off, the IC recorder is set to a moderate volume level

# Recording



### Selecting a folder

**1** Press [☐ (folder)/MENU] to select the folder in which you want to record messages  $(\mathbf{A}, \mathbf{B}, \mathbf{C}, \mathbf{D}, \text{ or } \mathbf{E})$ . There are 5 folders already available

when you purchase the IC recorder. If you do not change the folder after you stop recording, the next time you record

# Starting to record

you will record in the same folder.

**1** Turn the built-in microphone in the direction of the source to be recorded.

**2** Press [● REC/PAUSE] in the stop mode. The operation indicator lights in red. (When "LED" is set to "OFF" in the menu, the operation indicator does not

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

#### When "REC-OP" is set to "ON," the new message overwrites a previously recorded

initial settings.

**■** Note

To stop recording **1** Press [**■** (stop)]. The IC recorder stops at the beginning of

message. "REC-OP" is set to "OFF" in the

### Other operations

the current recording.

To pause recording\* Press [● REC/PAUSE]. During recording pause, the operation indicator flashes in red and "PAUSE" flashes in the display window.

Press [● REC/PAUSE] again. Recording resumes from that point. (To stop recording after pausing recording, press [**■** (stop)].) To review the current recording instantly Press [► PLAY/STOP•ENTER].

To release pause and resume recording

from the beginning of the message just recorded. To review during recording Press and hold [-I◀◀] during recording or recording pause. Recording stops and you can search backwards while listening

Recording stops and playback starts

#### to fast playback sound. After you release [-**I**→ ], playback starts from that point. \* 1 hour after you pause recording, recording pause is automatically released and the IC

recorder enters the stop mode. Ϋ́ Tips • Messages recorded using this IC recorder

will be recorded as MP3 files. You can record up to 99 messages in each • Before you start recording, we recommend you make a trial recording first, or monitor

• If the recorded sound is too loud and

#### distorted, set the microphone sensitivity to / (Low). On the other hand, if the recorded sound is too little, set the

the recording

**■** Notes • While the operation indicator is flashing in orange, do not remove the batteries. Doing so may damage the data.

• Before making a recording, be sure to check the battery indicator. • If the IC recorder is accidentally rubbed or scratched with an object, such as your finger

recording ends.

• Keep the IC recorder away from an AC power source, a fluorescent lamp or a mobile phone during recording or playback. **Remaining memory indication** 

During recording, the remaining memory

indicator decreases one by one.

etc., during recording, noise is recorded. Try

to avoid touching the IC recorder until the



When the remaining time of recording

reaches 10 minutes, the last one of the indication flashes If the remaining recording time display mode is selected, the remaining recording time display will also flash when the remaining time reaches 1 minute. The display will be changed automatically to the remaining time display. When the memory is full, recording automatically stops and REC and "FULL" will flash in the display window for about 3 seconds. To continue recording, erase some

of the messages first.

# Listening

### Starting playback

**1** Press [ (folder)/MENU] to select the folder  $(\mathbf{A}, \mathbf{B}, \mathbf{C}, \mathbf{D}, \text{ or } \mathbf{E})$ 

**2** Press  $[-I \triangleleft \triangleleft]$  or  $[\triangleright \triangleright I +]$  to select the

**3** Press [► PLAY/STOP•ENTER].

message you want to play.

Playback will start soon, and the operation indicator will light in green. (When "LED" is set to "OFF" in the menu, the operation indicator does not

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

### To stop playback

**1** Press [**■** (stop)].

## Other operations

\* The following operations are for when "EASY-S" (Easy Search function) is set to

To stop at the current position (Playback

Pause function) Press [► PLAY/STOP•ENTER] or [ $\blacksquare$  (stop)]. To resume playback from that point, press [► PLAY/STOP•ENTER]

To go back to the beginning of the current

To skip to the next message

Press [►►+] once\*.

Press [-I◀◀] once\*. To go back to previous messages Press [-**I**◀◀] repeatedly. (During stop mode, keep the button pressed to go back the messages continuously.)

Press [►►+] repeatedly. (During stop mode, keep the button pressed to skip the messages continuously.)

Searching forward/backward

during playback (Cue/Review)

To skip to the succeeding messages

### To search forward (Cue): Press and hold [▶▶1+] during playback and

playback.

Erasing

Notes

playback. To search backward (Review): Press and hold [-◄◄] during playback and release it at the point you wish to resume

The IC recorder searches at slow speed with

playback sound first. This is useful to check

release it at the point you wish to resume

press and hold the button, the IC recorder starts to search at higher speed.

one word forward or back. Then, if you

#### Once a recording has been erased, you cannot retrieve it. • If the message you want to erase is locked in

playback mode.

Selecting a message and erasing it

1 Select the message you want to erase

when the IC recorder is in the stop or

the menu, you cannot erase the message

**2** Press [ERASE] while you are playing back the message you want to erase, or press and hold [ERASE] during the stop

A beep will sound and the message

When "BEEP" in the menu is set to

number and "ERASE" will flash.



To cancel erasing **1** Press [■ (stop)] before step 3 of

To erase a part of one message Divide the message into two messages first, and then proceed with the same steps from

"Selecting a message and erasing it."

### remaining messages will advance and be renumbered so that there will be no space between messages.

## **3** Press [ERASE] again. "ERASE" appears in the display window and the selected message will be erased. When a message is erased, the

### **About the Menu Function**

# **Making Settings for** the Menu

**1** Press and hold [ (folder)/MENU] to enter the menu mode The menu mode window will be

displayed. **2** Press [-**I** or [**▶▶**I+] to select the menu item for which you want to set, and then press

[► PLAY/STOP•ENTER]. **3** Press  $[-I \triangleleft \blacktriangleleft]$  or  $[\triangleright \triangleright I +]$  to select the setting that you want to set, and then

press [► PLAY/STOP•ENTER]. **4** Press [**■** (stop)] to exit the menu mode.

### Note

If you do not press any button for 1 minute, the menu mode is automatically canceled and the window will return to the normal display.

To return to the previous window Press [ (folder)/MENU] during menu

To exit the menu mode Press [ (stop)].

# Menu settings

\*: Initial setting

Sets the recording mode. SHQ\*: Super high-quality monaural recording mode (44.1 kHz/192 kbps) You can record with monaural super highquality sound.

HQ: High-quality monaural recording mode (44.1 kHz/128 kbps) You can record with monaural high-quality

SP: Standard play monaural recording mode (44 1 kHz/48 kbps)

You can record with standard quality

LP: Long play monaural recording mode (11.025 kHz/8 kbps) You can record for a longer time with monaural sound.

#### **∏** Note You cannot change the recording mode while recording.

Sets the microphone sensitivity. → H\*: To record a sound far away from the IC recorder or a low sound, such as a recording ade in a spacious room. ▶ L: To record dictation with a microphone

in front of your mouth, a sound near the IC recorder, or a loud sound.

# Sets the VOR (Voice Operated Recording)

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. OFF\*: The VOR function does not work.

REC-OP Adds a recording to a previously recorded message or adds an overwrite recording during playback. ON: You can add a recording or overwrite a

ADD\*: You can add a recording. OVER: You can overwrite a recording.

OFF\*: You cannot add a recording or overwrite a recording.

### Sets the DPC (Digital Pitch Control) function ON: You can adjust the speed of the playback in a range from +100% to -50%, by 10%

increments for the + setting and by 5% decrements for the - setting. OFF\*: The DPC function is canceled Sets the noise cut function ON: The distortion of very low and high

#### frequencies which are outside the human voice range is reduced, therefore you can hear the human voice more clearly. OFF\*: The noise cut function does not work.

The effect of the noise cut function may be different depending on the condition of the

EASY-S Sets the easy search function. ON: You can go forward for about 10 seconds by pressing [►►+] and go back for about 3 seconds by pressing [−I◄◄]. This function

is useful when attempting to locate desired

point in a long recording.

OFF\*: The easy search function does not work. When you press  $[\blacktriangleright \blacktriangleright I+]$  or  $[-I \blacktriangleleft \lnot]$ , a message will be moved forward or backward.

# Plays back the messages in the selected folder

ON: The CONT function is activated. OFF\*: A message is played back and the IC recorder stops at the beginning of the next

# DISPLAY

ELAPSE\*: During recording, the recording time of the current message During playing back, the elapsed playback

### time of one message REMAIN: During recording or being stopped, the available recording time During playing back, the remaining time of

REC DATE: Recording date REC TIME: Recording time

# SET DATE

Sets the year, month, day, hour, and minute in sequence.

# HOUR

Sets the clock display. 12H: AM12:00 = midnight, PM12:00 = noon 24H\*: 0:00 = midnight, 12:00 = noon

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

The alarm and AVLS beep sound even if you

OFF: No beep sound will be heard. ■ Note

set "BEEP" to "OFF" in the menu

ALARM Sets the alarm. ON: To set the alarm, select "ON" and set the date, time or day of the week, or choose

Turns the operation indicator on or off during

operation.
ON\*: During recording or playback, the

flash, even during operation.

operation indicator lights or flashes.

OFF: The operation indicator does not light or

"DAILY" for playback. B-PLAY\*: The selected message will be played back after the alarm when the

BEEP: Only the alarm will sound when the alarm time comes. PLAY: Only the selected message will be played back when the alarm time

OFF\*: The alarm setting is canceled.

### ■ Notes

- $\bullet$  You can set only one alarm for each one
- The alarm and AVLS beep sound even if you set "BEEP" to "OFF" in the menu.
- If the alarm time comes during recording, the alarm will sound after the recording is finished. "(\*\*)" will flash when the alarm time
- · If more than one alarm time comes, only the first message will be played back with an alarm.
- Once the alarm is set, the alarm will not be canceled, even after the message is played
- . If the alarm time comes while another message is being played back with an alarm, the playback stops and the new message will
- be played back. • If you divide a message you have set an alarm for, the alarm setting remains on only
- the first part of the divided message. • If the alarm time comes during erasing operation, alarm will sound for 10 seconds after the erasing is finished and playback
- If the alarm time comes while you are updating data, the alarm will be canceled automatically
- If you delete a message on which you have set an alarm, that alarm will be also canceled.

### AVLS (For European model only) Sets the AVLS (Automatic Volume Limiter

System) function ON\*: The AVLS function that maintains a moderate volume level is effective when

listening with the headphones. OFF: The AVLS function does not work and the sound is played back at the original volume. When you set the function to "OFF," beeps will sound and a message will be displayed for your confirmation

### ■ Notes

• The alarm and AVLS beep sound even if you set "BEEP" to "OFF" in the menu.

• When you listen the sound using the headphones for the specified period of time the AVLS function is automatically turned

• When you turn off the function, please be careful not to listen to an excessive volume of the sound.

Locks the message so that you cannot move it, erase it, add a new message to it, add an overwritten message to it, or divide it. ON: The lock function is activated. OFF\*: The lock function is canceled.

selected folder (A, B, C, D, or E). Before attempting to move a message, select the message to be moved, and then go to the menu window.

All messages in the selected folder will be Select a folder from which all messages are to be erased, and then go to the menu window and press [► PLAY/STOP•ENTER] while "ALL ERASE" is flashing.

# **Other Recording Operations**

# Monitoring the Recording

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

When you are using the built-in speaker or monitoring the recording, the noise cut function may not be effective.

# Dividing a Message **During Recording**

You can divide a message during recording so that the message is divided into two parts, and a new message number is added to the newer part of the divided message. Once a message is divided, you cannot recombine the divided messages.

# **1** Press [DIVIDE] during recording.

"DIVIDE" and a new message number flash in the display window and the new message number is added at the point you pressed the button. The message will be recorded as two messages, however recording continues without stopping. Message 1 Message 2 Message 3

Message is divided.
Message 2 and Message 3 are recorded

# qiT 🌣

You can divide the currently recorded message during recording pause

# **□** Notes

• When you divide a message into two, at the point of division, the end of the first message and the beginning of the second message may overlap. You may hear the same sounds at these points in both messages.

• If the remaining recording time is less than 3 seconds, you cannot divide a message.

# Recording with an **External Microphone** or from Other Equipment

The starting point of an overwrite recording

Added overwrite recording in Message 2

enter the menu mode

**2** Press [-**I◄4**] or [**▶▶I**+] to

**3** Press [-**I◄4**] or [**▶I**+] to

**4** Press [-**|◄|** or [**▶|**+] to

select "ON," and then press

[► PLAY/STOP•ENTER].

select "OVER," and then press

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

**6** When the message to be overwritten is

played back, press [● REC/PAUSE].

**REC** and "OVER" will flash and the IC

The operation indicator will light in red,

recorder stops in the recording pause

**7** While "OVER" is flashing, press

**8** Press [**■** (stop)] to stop recording.

• You cannot overwrite a recoding if the

recorded in the same recording mode

**Other Playback Operations** 

Methods

Search)

playback.

**Convenient Playback** 

To listen with better sound quality

Connect a supplied or commercially

will be automatically disconnected.

• To listen from an external speaker:

Quickly locating the point you

wish to start playback (Easy

supplied) to the ∩ (headphone) jack.

(headphone) jack. The built-in speaker

Connect an active or passive speaker (not

When "EASY-S" is set to "ON" in the menu,

you can quickly locate the point at which

you wish to start playback by pressing

[-

You can go back approx. 3 seconds by

pressing [-**I** once, or advance approx.

10 seconds by pressing [►►+] once. This

To play back a message repeatedly

function is useful for locating a desired

point in a long recording

played back repeatedly.

During playback, press and hold

[► PLAY/STOP•ENTER] until "¬"

appears. The selected message will be

To resume normal playback, press

[► PLAY/STOP•ENTER] again.

**Specified Section** 

Repeatedly – A-B

to specify the starting point A.

**1** During playback, press [(repeat) A-B]

**2** Press [ (repeat) A-B] again to specify

"←" and "A-B" are displayed and

To resume normal playback

To stop A-B repeat playback

To change the segment specified

During A-B repeat playback, press [

(repeat) A-B] again to specify a new

starting point A. Then specify a new

You cannot set point A and point B at the very

beginning (0.5 seconds from the beginning) or

Press [► PLAY/STOP•ENTER].

for A-B repeat playback

finishing point B, as in step 2.

the specified section is played back

Playing Back a

repeat

"A-B B" flashes.

repeatedly.

Press [■ (stop)]

the finishing point B.

• To listen with the headphones:

available headphones to the  $\Omega$ 

• If 10 minutes have passed after step 6, you

must start the procedure again from the

• The overwritten portion of a message will be

remaining memory is insufficient

[ REC/PAUSE] again.

and recording starts.

Notes

[► PLAY/STOP•ENTER].

[► PLAY/STOP•ENTER].

Message 3

**1** Press and hold [ (folder)/MENU] to

The menu mode window will be

select "REC-OP," and then press

Message 2

displayed.

Message 3 | Message 4

The deleted part of

Message 4

1 Connect an external microphone or other equipment to the \( \) (microphone) jack when the IC recorder is in the stop

When the recording mode is set to "SHQ" or "HQ," and a stereo microphone is used, you can record sound in stereo. When you use an other equipment, connect the audio output connector (stereo mini-plug) of other equipment to the \(^\) (microphone) jack of the IC recorder using an audio connecting cable (not supplied).

For details about the audio connecting cable, see "Specifications."

### **2** Press [☐ (folder)/MENU] to select the folder in which you want to record messages (A, B, C, D, or E).

**3** Press [● REC/PAUSE] to start recording. The built-in microphone is automatically cut off.

If the input level is not strong enough,

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

**4** Press [■ (stop)] to stop recording.

# **□** Note

Before you start recording, we recommend you make a trial recording first.

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

You can use the ECM-TL1 headphonetype electret condenser microphone (not supplied) to record sound from a telephone or a cell phone. For details on how to make the connection.

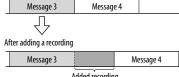
refer to the operating instructions supplied

with the ECM-TL1 microphone.

# Adding a Recording to a Previously Recorded Message

When "REC-OP" in the menu is set to "ADD," you can add a recording to the message being played back. The added recording will be placed after the current message, and will be counted as a part of the message

During playback of Message 3



**1** Press and hold [ (folder)/MENU] to enter the menu mode. The menu mode window will be

displayed. **2** Press [-**I**◀◀] or [▶▶**I**+] to select "REC-OP," and then press

[► PLAY/STOP•ENTER]. **3** Press [-**I◄4**] or [**▶I**+] to select "ON," and then press

[► PLAY/STOP•ENTER]. **4** Press [-**I◄ ]** or [**▶▶I**+] to

select "ADD," and then press [► PLAY/STOP•ENTER].

**6** When the message to be added is played back, press [● REC/PAUSE]. **REC** and "ADD" will flash and the IC

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

recorder stops in the recording pause mode.

**7** While "ADD" is flashing, press [● REC/ PAUSE] again. The operation indicator will light in red,

and the recording will be added at the

end of the current message. **8** Press [**■** (stop)] to stop recording.

**□** Notes • You cannot add a recording if the remaining

memory is insufficient. • The added portion of a message will be recorded in the same recording mode.

• If 10 minutes have passed after step 6, you

must start the procedure again from the

# **Adding an Overwrite Recording during** Playback

at the very end (0.5 seconds prior to the end) When "REC-OP" in the menu is set to "OVER," you can add an overwrite recording after a selected point in a recorded message. The remainder of the message after the selected point is deleted.

# **Recording on Other Equipment**

You can record the message of the IC recorder on other equipment.

Before you start recording, we recommend you to make trial recording first. **1** Connect the ∩ (headphone) jack of the IC recorder to the audio input connector (stereo minijack) of other equipment

using an audio connecting cable (not supplied). For details about the audio connecting cable, see "Specifications."

**2** Press [► PLAY/STOP•ENTER] to start playback and at the same time set the connected equipment to the recording A message from the IC recorder will be

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

recorded on the equipment connected.

When you connect an audio connecting cable to the (headphone) jack of the IC recorder for the specified period of time, the AVLS function is automatically turned on. The AVLS function limits the maximum volume to maintain a moderate volume level (for European model only).

### **Editing Messages**

### Dividing a Message into Two

You can divide a message during playback, so that the message is divided into two parts and a new message number is added to the newer part of the divided message. By dividing a message, 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 message until the total number of messages in the folder

**1** Press [DIVIDE] while you are playing back the message you want to divide. The current message number and "DIVIDE" flash.

**2** Press [DIVIDE] again.

"DIVIDE" appears, a new number is added to the newer part of the divided message, and the message numbers of the following messages will be

		O		
incremen	ted by one	e.		
Message 1	Mess	age 2	Message 3	
	A Mess	age is divided.		
Message 1	Message 2	Message 3	Message 4	
	TI			

### The message numbers are incremented. To cancel dividing the message

# Press [■ (stop)] before step 2.

**■** Notes • When you divide a message with a title and artist name, the newer part has the same title

and artist name • Once a message is divided, you cannot combine divided messages using the IC recorder.

• If more than 10 seconds have passed after step 1, you must start the procedure again from the beginning • If you divide a message during A-B repeat

playback or one message repeat playback,

# **Additional Information**

the repeat setting will be canceled.

# **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 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

• 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.

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

- When you use the unit in an

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 maintenance

To clean the exterior, use a soft cloth slightly moistened in water. 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 messages on a tape recorder, etc.

## **Specifications**

### Design and specifications

## IC recorder section

Capacity (User available capacity) application files. Available capacity is approximately 1.79 GB

(1,924,136,960 bytes). Frequency range

• HQ: 75 Hz - 17,000 Hz • SP: 75 Hz - 15,000 Hz

MP3 bit rate and sampling frequency for

• HO: 44.1 kHz, 128 kbps

#### General Speaker

Input/Output

input level 0.4 mV, 3 kilohms or lower impedance microphone • Headphone jack (minijack, stereo)

Playback speed control (DPC)

Power output

Power requirements Two LR03 (size AAA) alkaline batteries (supplied): 3.0 V DC Two NH-AAA rechargeable batteries (not

Dimensions (w/h/d) (not incl. projecting parts and controls) (JEITA)\*  $37.5 \text{ mm} \times 114 \text{ mm} \times 20.9 \text{ mm}$  (1 1/2 in. × 4 1/2 in. × 27/32 in.)

\*1 Measured value by the standard of JEITA (Japan Electronics and Information Technology Industries Association)

Supplied accessories See "Step 1: Checking the Contents of the Package."

Battery charger BCG-34HSN (excluding U.S.A., Canada, Latin America)

mini-plug mini-plug Your dealer may not handle some of the above listed optional accessories. Please ask

Maximum recording time\*2\*3 The maximum recording time of all the

HQ mode	HQ mode	SP mode	LP mode
2 hr. 5 min.	33 hr. 20 min.	89 hr.	534 hr. 25 min.
	(h	r. : hours/m	in. : minutes)

for a long time, you may have to replace the batteries with new ones in the midst of recording. \*3 The maximum recording time varies if you

# Battery life\*4

When using Sony LR03 (SG) (size AAA)

Recording mode*5	SHQ	HQ
Recording	Approx. 34 hr.	Approx. 34 hr.
Playback*6 through speaker	Approx. 12 hr.	Approx. 12 hr.
Playback using the headphones	Approx. 36 hr.	Approx. 36 hr.
		(hr. : hours)

2 GB equals 2,147,483,648 bytes, a portion of which is used for system management and/or

• SHQ: 75 Hz - 20,000 Hz

• LP: 80 Hz - 3,500 Hz

#### recording mode • SHQ: 44.1 kHz, 192 kbps

#### • SP: 44.1 kHz, 48 kbps • LP: 11.025 kHz, 8 kbps

# Approx. 28 mm (1 1/8 in.) dia

• Microphone jack (minijack, stereo) - input for plug in power, minimum

- output for 16 ohms - 300 ohms headphones

300 mW

supplied): 2.4 V DC Operating temperature 5°C - 35°C (41°F - 95°F)

Mass (JEITA)\*1 Approx. 73.0 g (2 3/5 oz) including LR03 (size AAA) alkaline batteries

Optional accessories Active speaker SRS-M50 Electret condenser microphone ECM-CS10, ECM-CZ10, ECM-DS70P, ECM-DS30P, ECM-TL1 Audio connecting cable\* RK-G136, RK-G139 (excluding Europe) Rechargeable battery NH-AAA-B2KN (excluding U.S.A., Canada, Latin America)

# (U.S.A., Canada, Latin America only)

* Audio connecting cable			
	To the IC recorder	To the other equipment	
RK-G139	Stereo mini-plug	Mini-plug (monaural)	
RK-G136	Stereo	Stereo	

Design and specifications are subject to change without notice.

the dealer for detailed information.

folders is as follows.			
SHQ mode	HQ mode	SP mode	LP mode
22 hr. 15 min.	33 hr. 20 min.	89 hr.	534 hr. 25 min.

record messages in mixed recording mode

\*2 When you are going to record continuously

kaline batteries (with continuous use)		
ecording mode*5	SHQ	HQ
ecording	Approx. 34 hr.	Approx. 34 hr.
layback*6 through beaker	Approx. 12 hr.	Approx. 12 hr.
layback using the eadphones	Approx. 36 hr.	Approx. 36 hr.

# (hr.: hours)

When using Sony NH-AAA rechargeable batteries (with continuous use)

Recording mode*5	SHQ	HQ
Recording	Approx. 22 hr.	Approx. 22 hr.
Playback*6 through speaker	Approx. 10 hr.	Approx. 10 hr.
Playback using the headphones	Approx. 25 hr.	Approx. 25 hr.
		(hr. : hours
Recording mode*5	SP	(hr.: hours
	SP Approx. 27 hr.	
Recording mode*5 Recording Playback*6 through speaker	Approx.	LP Approx.

\*4 The battery life is measured in testing using methods proprietary to Sony, and with the initial settings for the IC recorder. However "LED" and "AVLS" are set to "OFF." The battery life may shorten depending on how you operate the IC recorder. \*5 For details about the recording mode, see

\*6 When playing back music through the

(hr.: hours)

# internal speaker with the volume level set to

**Trademarks** 

"Menu settings."

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

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

Recording mode\*5 SP LP Approx. 55 hr. Approx. 39 hr. Playback\*6 through Playback using the headphones