# LINEAR PCM RECORDER



# **Owner's Manual**

# **INFORMATION FOR YOUR SAFETY!**

#### PRECAUTIONS PLEASE READ CAREFULLY BEFORE PROCEEDING

Please keep this manual in a safe place for future reference.

#### **Power Supply**

Please connect the designated AC adaptor to an AC outlet of the correct voltage.

Do not connect it to an AC outlet of voltage other than that for which your instrument is intended.

Unplug the AC power adaptor when not using the instrument, or during electrical storms.

#### Connections

Before connecting the instrument to other devices, turn off the power to all units. This will help prevent malfunction and / or damage to other devices.

#### Location

Do not expose the instrument to the following conditions to avoid deformation, discoloration, or more serious damage:

- Direct sunlight
- Extreme temperature or humidity
- · Excessive dusty or dirty location
- Strong vibrations or shocks
- Close to magnetic fields

#### Interference with other electrical devices

Radios and televisions placed nearby may experience reception interference. Operate this unit at a suitable distance from radios and televisions.

#### Cleaning

Clean only with a soft, dry cloth. Do not use paint thinners, solvents, cleaning fluids, or chemical-impregnated wiping cloths.

#### Handling

Do not apply excessive force to the switches or controls. Do not let paper, metallic, or other objects into the instrument. If this happens, unplug the AC adaptor from the wall outlet. Then have the instrument inspected by qualified service personnel.

Disconnect all cables before moving the instrument.

#### CAUTION

The normal function of the product may be disturbed by Strong Electro Magnetic Interference. If so, simply reset the product to resume normal operation by following the owner's manual. In case the function could not resume, please use the product in other location.

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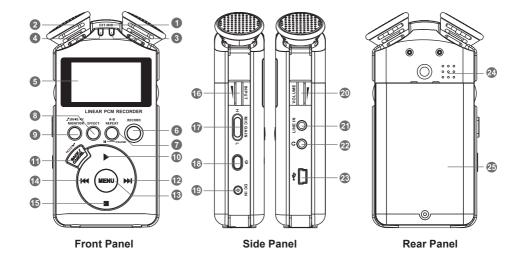
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#### EXT MIC Jack

Use this stereo microphone jack to connect external microphone.

#### Built-in Stereo Microphones

Use the stereo microphones as the input source, select "MIC IN" in the RECORD SETUP menu. If you connect an external microphone to the EXT MIC jack, the built-in microphones become inactive.

#### 8 PEAK Indicator

This indicator lights when the selected input signal exceeds the maximum level.

#### CHARGE Indicator

This indicator lights green when the battery installed in this unit is charging. The light turns OFF when the battery is fully charged.

#### 6 LCD Display

Please refer to LCD DISPLAY section.

#### 6 RECORD Button

When playback is stopped, press this button to put the unit into the Record Standby. When in Standby, press this button to start recording. When in recording, press this button to stop recording.

#### REPEAT A-B Button

Press this button to specify the repeat start point A and repeat end point B or cancel the repeat.

#### 8 EFFECT Button

Press this button to choose the effect types or turn the effect function ON or OFF.

#### MONITOR Button

Press this button to turn headphones monitor ON or OFF. Press and hold this button for a while to turn the speaker ON or OFF while playing.

#### ●/II Button

When playback is stopped, press this button to start playback. During playback, press this button to stop playback at the current point.

#### BACK/CANCEL Button

Press this button to return to the previous screen or cancel an operation. Press and hold this button for a while to turn the HOLD function ON or OFF. All keys are inoperative when HOLD is ON.

#### 12 Image: Button

Press and hold this key to search forward.

#### 

Press this button to enter the menu screen or the various settings screens.

#### 🚺 < Button

Press and hold this key to search backwards.

# **Panel & Display Description**

#### 🚯 🗏 Button

Press this key to stop recording and playback or to end recording standby

#### 10 INPUT Wheel

Use this to adjust the input signal level of the built-in microphones.

#### MIC GAIN H-L Switch

Switch the microphones input level between high and low.

#### POWER ON/OFF Switch

Turn the power ON or OFF.

#### DC IN 5V Jack

Connect an AC adaptor to this jack.

# Display

- Elapsed Time
- 2 Remaining Time
- B Playback Position Display Bar
- 4 File Name
- 5 Level Meter
- 6 The Current Operation Status
- Effect Status
- 8 Power Indicator

#### 20 VOLUME Wheel

Use this to adjust the volume of phone and speaker.

#### 2 LINE IN Jack

Connect any other audio device such as MP3, CD player to this jack.

#### 2 Phones Jack

Connect a pair of stereo headphones to this jack.

#### USB Port

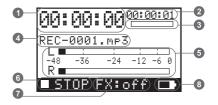
Use the included USB cable to connect with a computer USB port.

#### O SPEAKER

Give the user auditory feedback.

#### BATTERY LID

This holds the specialized lithium ion battery.



#### About SD Cards

Since this unit uses an SD card for recording and playback, insert an SD card into the unit before use. You can use SD/SDHC card (up to 16GB).

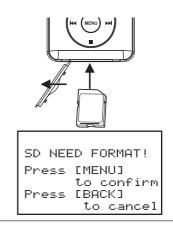
#### Inserting the SD card

The SD card slot is under the cover on the bottom side of the unit. Pull the cover in the direction of the arrow to open it. Insert the SD card in the SD card slot and push it until it clicks fully into place. If you insert a SD card that was formatted by a device other than this recorder, the following screen will appear. Press the [MENU] button to format the card.

#### Removing the SD card

Press the inserted SD card in gently and it will disengage from the unit so that you can completely pull it out.

Do not remove the SD card during recording or playback, or when the unit is connected to the computer by USB.



#### Note:

Make certain that you have copied any files that you want to save from the card before formatting it.

## Preparation

#### Connecting Other Equipments Connecting a pair of stereo headphones You can connect a pair of stereo headphones

You can connect a pair of stereo headphones (optional) to the Phones jack.

#### Note:

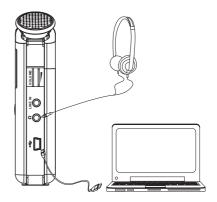
If you insert the headphones, the speaker of this record will not sound.

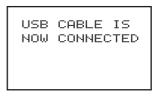
#### Connecting with a Computer

By connecting this unit with a computer, you can copy WAV or MP3 music files from the computer to this unit. From the computer you can also erase files on this unit and manipulate folders. To connect to a computer, use the included USB cable to connect the USB ports of the recorder and the computer. When connected, the following screen appears.

#### Disconnecting from a computer

To end the USB connection, first disconnect the recorder and then remove the USB cable. The recorder automatically restarts.





#### Connecting EXT MIC & Other Audio Devices

You can connect an external microphone to EXT MIC jack.

You can connect an MP3/CD player to LINE IN jack.

#### Note:

Your equipment must be powered off when making connections.

#### **Powering The Unit**

The recorder can be operated using a special lithium ion battery or an AC adaptor. One battery is included with the unit and the AC adaptor and additional batteries are available for purchase separately. You can charge the battery by connecting the unit to a computer by USB or using an AC adaptor.

#### Note:

Charge the battery or connect the AC adaptor before using the unit.



## Preparation

#### Changing the battery

- 1. Undo the nut
- 2. Slide the battery cover on the back of the unit to open it
- 3. Insert the battery
- 4. Hold the nut

#### Charging the battery

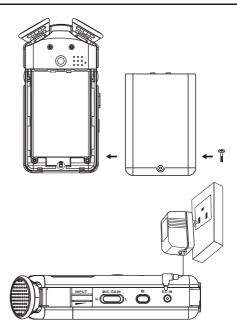
- Use the included USB cable to connect the unit's USB port to a USB port on a computer.
- Connect an AC adapter to the DC IN 5V jack to charge the unit.

#### Note:

When being charged by a computer, the unit (POWER ON) automatically enters USB connect mode (refer to Connecting with a computer).

#### Turning the power on and off

- To turn the power ON, press and hold the POWER button on the left side panel until "Digital Recorder" appears on the display.
- To turn the power OFF, press and hold the POWER button until "POWER OFF" appears on the display.



In addition to using the built-in microphone, you can record using an external microphone or record the output signal from other audio source. Follow these procedures to enter the RECORD SETUP menu.

- 1. Press the [MENU] button on the home screen to enter the MENU screen.
- 2. Use the ► or button to select the RECORD SETUP menu, the part highlighted in inverse.
- 3. Press the [MENU] button to enter this menu.

#### Selecting the Sample Rate

Follow these procedures to select the sample rate.

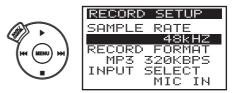
- In RECORD SETUP menu, use the ▶ or button to select the SAMPLE RATE item (the part highlighted in inverse).
- 2. Use the ►► or I ded button to select a sampling rate of 44.1 kHz or 48 kHz (Default)

#### Selecting the File Type

Follow these procedures to select the audio file type.







- In RECORD SETUP menu, use the ▶ or button to select the RECORD FORMAT item (the part highlighted in inverse).
- Use the ▶▶ or I◄ button to select the file type from the following options: WAV at 16-bit or 24-bit, or MP3 at 64 kbps, 96kbps, 128 kbps,160 kbps, 192 kbps, 224 kbps, or 320 kbps (Default).

#### Selecting the Input Source

Follow these procedures to select the input source.

- In RECORD SETUP menu, use the ▶ or button to select the INPUT SELECT item (the part highlighted in inverse).
- 2. Use the ▶ or I de button to select the input source you want to use.
- LINE IN: Sets the input source as the line input to the side panel LINE IN jack (stereo mini-jack).
- MIC IN (Default): Sets the input source as the built-in microphones.





MIC & LINE: Sets the input source as the built-in microphones and the line input.

#### Turning the Auto Gain function ON and OFF

Follow these procedures to turn the auto gain function ON and OFF.

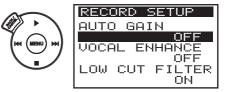
- In RECORD SETUP menu, use the ▶ or button to select the AUTO GAIN item (the part highlighted in inverse).
- 2. Use the ► or K button to turn it ON and OFF.

AUTO GAIN ON (Default): Boost the level of input automatically.

#### **Enhancing the Voice**

Follow these procedures to enhance the voice of input.

- In RECORD SETUP menu, use the ▶ or button to select the VOCAL ENHANCEMENT item (the part highlighted in inverse).
- Use the ►► or I<</li>
  button to set the values from following options: OFF, LEVEL ONE, LEVEL TWO.





#### Turning Off the Low Cut Filter

Follow these procedures to turn off the low cut filter to make the low frequency input better.

- 1. In RECORD SETUP menu, use the ▶ or button to select the LOW CUT FILTER item (the part highlighted in inverse).
- 2. Use the boll or I button to turn it ON and OFF.

#### **Recording Operations**

Before starting the following operation procedures, input selection should be completed, and the Home Screen should be open.

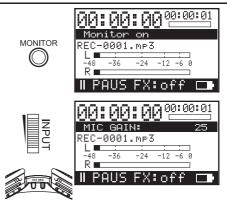
- 1. Press the [RECORD] button to begin recording standby. The RECORD led flashes. The screen shows the recording file name, the recording audio file type.
- 2. Press the [RECORD] button again or press the ▶ button to start recording. When recording starts, the RECORD led lights continuously, and the display shows the elapsed recording time and the remaining recording time.





-12 -6

- Press the ► button to pause recording, the RECORD led flashes. Press the ► button again to restart recording.
- Press the [RECORD] button or press the button to stop recording during recording and create the audio file on the SD card. The RECORD led lights off.
- 5. Press the [MONITOR] button to turn the headphone monitor on and off.
- 6. L and R level meter show the combined level of the selected input signal. Use the INPUT wheel to adjust the input signal level of the microphones. If the selected input signal exceeds the maximum level, the PEAK indicator will light



#### Note:

- If you begin recording standby, the effect will be turned OFF automatically.
- If you select the MIC IN input, the sound of pressing the buttons will be recorded simultaneously.





- If you record a wav file, you can mark the file using the → button, MARKER XX (20) will appear. The maximum of marker is 20.
- If you want to start recording a new file immediately during recording, press and hold the I44 button until the new file name appears.





#### **Recording without SD card**

You can record a file (about 70 seconds) without SD card. The file type is MP3 320kbps, the sample rate is 48kHZ. The operation is similar to normal recording operation mentioned above.

- Press the [RECORD] button to begin recording standby, the RECORD led flashes.
- 2. Press the [RECORD] button again to start recording.
- 3. Press the [RECORD] button or press the button to stop recording.





# **Playing Back**

On the Home Screen, you can use the ▶ or ◄ button to select the playback file.

- 1. Press the [MENU] button on the home screen to enter the MENU screen.
- 2. Use the ▶ or button to select the PLAY SETUP menu, the part highlighted in inverse.
- 3. Press the [MENU] button to enter this menu.

#### Selecting the Track of Playback

Follow these procedures to select the track.

- In PLAY SETUP menu, use the ► or button to select the TRACK SELECT item (the part highlighted in inverse).
- 2. Use the ►► or I<< button to select the track such as STEREO (Default), LEFT, RIGHT, VOCAL CUT. If you choose VOCAL CUT, Sounds that are heard from the center (such as vocals) will be eliminated. This is helpful if you want to practice playing along with the backing instruments.





#### Note:

Depending on the recorded audio, it may not be possible to completely eliminate the center sound.

# **Playing Back**

**Turning the Bass Comp ON and OFF** Follow these procedures to turn the bass compensation ON and OFF.

- In PLAY SETUP menu, use the ▶ or button to select the BASS COMP item (the part highlighted in inverse).
- 2. Use the ►► IorI◄ button to turn the bass compensation ON (emphasize the bass sound) or OFF (Default).

#### Selecting the Playback Mode

Follow these procedures to select the playback mode.

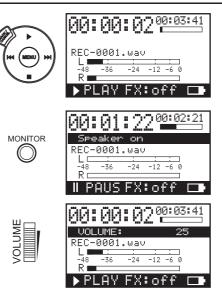
- In PLAY SETUP menu, use the ▶ or button to select the PLAY MODE item (the part highlighted in inverse).
- 2. Use the ▶▶ or I◀◀ button to select the playback mode such as ONCE (Default) , LOOP, LOOP ALL.





#### **Playback Operations**

- When playback is stopped, use the ► or button to select the playback file in the current directory.
- 2. Press the ▶ button to start playing back the selected file. During playback, press the ▶ I button to start the next file and press the I ◄ button to restart the current file. Press and hold the I ◄ button to search backwards or the ▶ I button to search forwards.
- Press the ▶ button again to pause it at the current position during playback.
- Press the button to stop playing back it during playback.
- 5. Press the [MONITOR] button and hold it for a while to turn the speaker on and off.
- **6.** L and R level meter show the combined level of the audio file. Use the VOLUME wheel to adjust the output signal level of the headphones and speakers.

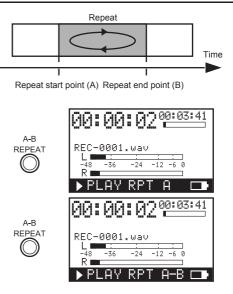


# **Playing Back**

#### Playing back repeatedly

The "repeat" function lets you play back a specified region repeatedly.

- 1. Press the [REPEAT A-B] button to specify repeat start point A during playback.
- 2. Press the [REPEAT A-B] button again to specify repeat end point B. The file will be played back from A to B.
- 3. Press the [REPEAT A-B] button a third time to cancel the repeat.



# **Using the Effects**

The recorder has built-in effects that can be applied to the input signal during monitoring and playing back.

#### Turning the Effect ON and OFF

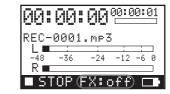
There are two ways to turn the effect ON and OFF.

- **1.** Press the [EFFECT] button to turn the effect OFF or select the different effect type.
- 2. Refer to Selecting the Effect Type section.

#### Selecting the Effect Type

Follow these procedures to select the effect types and adjust their associated parameters.

- Press the [MENU] button and use the ▶ or button to select the EFFECT menu on the home screen.
- Press the [MENU] button to enter the EFFECT menu, and use the ▶ or ■ button to select the EFFECT TYPE item (the part highlighted in inverse) or their associated parameter such as TIME, LEVEL.
- 3. Use the bolor Induction to adjust the values.





EFFECT





NAME	EFFECT	PARAMETERS	
ROOM	Adds short reverberations that	TIME:0-32	LEVEL:0-32
	create the sound of a room.	Default:20	Default:20
HALL	Adds long reverberations that	TIME:0-32	LEVEL:0-32
	create the sound of a large hall.	Default:20	Default:20
PITCH SHIFT	Adds a pitch shift sound playing	PITCH:0-12	MIX:0-32
	with the original sound.	Default:8	Default:20
DELAY	Adds delay sounds	TIME:0-32	FEEDBACK:0-32
		Default:13	Default:13

# **File Operations**

- 1. Press the [MENU] button on the home screen to enter the MENU screen.
- Use the ▶ or button to select the FILE menu on menu screen and press the [MENU] button to enter it.
- Use the ▶ or button to select files and folders, press the [MENU] button to enter file operations screen.

#### Note:

During recording or playback, you can not do file operations.

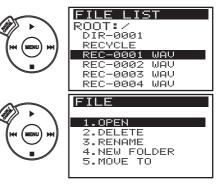
#### Playing a File or Opening a Folder

On the File Operation screen, use the ▶ or ■ button to select OPEN item.

- If you select the file, press the [MENU] button to play it. The Home Screen appears automatically.
- If you select the fold, press the [MENU] button to open it.

#### Note:

When a folder is selected, press the [BACK] button to exit the currently opened folder and go to a higher level in the folder structure.





## **File Operations**

#### Deleting a File or Folder

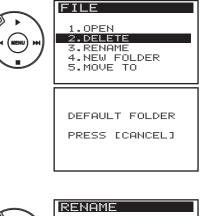
- Use the ► or button to select DELETE item on the File Operation screen.
- Press the [MENU] button to delete a file or folder, "ARE YOU SURE?" appears.
- **3.** Press the [MENU] button to execute it, press the [CANCEL] button to cancel it.

#### Note:

Non-empty and default folder can not be deleted.

#### Renaming a File or Folder

- Use the ▶ or button to select RENAME item on the File Operation screen.
- 2. Press the [MENU] button to rename a file or folder. The name of the selected file or folder appears.
- Use the ▶ or button to select a character that can be changed.
- 4. The highlighted character can be changed using the ►► or I<< button.
- 5. Press the [MENU] button to confirm it.





#### Note:

If there is a file with the same name in the currently open folder, the following screen appears. Press the [MENU] button to re-operate it.

The following character groups:

- Special characters (@, ), (, ', &, %,\$, #, !, \_, ^)
- Numeric (0, 1....9)
- Uppercase (A, B....Z)

#### **Creating a New Folder**

- 1. Use the ▶ or button to select NEW FOLDER item on the File Operation screen.
- Press the [MENU] button to create a new folder. A new fold will be added in the currently open folder.

#### Note:

- If you open an empty folder, only creating a new folder can be executed.
- The new folder name is DIR-xxx.







SAME FILE NAME EXISTS PRESS [BACK] TO CANCEL, PRESS [MENU] TO REEDIT

## **File Operations**

#### Moving a File to the Current Directory

- Use the ▶ or button to select MOVE TO item on the File Operation screen.
- **2.** Press the [MENU] button to confirm it. The folders in the root directory appear.
- **3.** Use the  $\blacktriangleright$  or  $\blacksquare$  button to select the folder.
- 4. Press the ►► button to enter the selected folder, and press the I<< button to return to the parent folder.
- **5.** Press the [MENU] button to move the file to the currently selected folder.

#### Note:

Folders can not be moved.



# **SD Card Operations**

- 1. Press the [MENU] button on the home screen to enter the MENU screen.
- 2. Use the ▶ or button to select the UTILITY menu on menu screen.
- 3. Press the [MENU] button to enter UTILITY menu and use the ► or button to select SD CARD menu.
- 4. Press the [MENU] button to enter SD CARD menu.

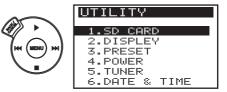
#### Note:

During recording or playback, you can not do SD card operations.

#### Viewing the SD Card Information

Follow these procedures to view the information of SD card.

- In SD CARD menu, use the ▶ or button to select the INFORMATION item (the part highlighted in inverse).
- 2. Press the [MENU] button to view the information.



SD CAR	D
1.INFOF 2.FORMF 3.DELET	
SD INF	ORMATION
SD INFO	ΓY

## **SD Card Operations**

#### Formatting the SD Card

Follow these procedures to format the SD card.

- In SD CARD menu, use the ► or button to select the FORMAT item (the part highlighted in inverse).
- 2. Press the [MENU] button to enter the formatting screen.

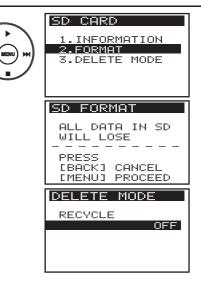
#### Note:

Make certain that you have copied any files that you want to save from the card before formatting it.

#### Selecting the Delete Mode

Follow these procedures to select the delete mode.

- In SD CARD menu, use the ▶ or button to select the DELETE MODE item.
- 2. Press the [MENU] button and use the ►► or I<< button to turn the RECYCLE ON and OFF.
  - **ON:** If you delete a file, move it to RECYCLE folder. The name of the deleted file is changed to RCLYxxx. You can restore it.
  - **OFF:** If you delete a file, erase it from the SD card. You can not restore it.



# **Other Functions**

#### **Factory Reset**

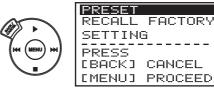
Use the PRESET item to restore the various settings of this unit to their factory settings.

- Press the [MENU] button and use the ▶ or button to select the UTILITY menu.
- Press the [MENU] button and use the ▶ or button to select the PRESET item, press the [MENU] button to enter it.
- 3. Press the [MENU] button, "ARE YOU SURE?" will be displayed. Press the [MENU] button again to reset the unit. Press the [BACK/CANCEL] button to cancel it. The display returns to the UTILITY menu screen.

#### Making System Settings

#### Adjust the display contrast and the backlight

- Press the [MENU] button and use the ▶ or button to select the UTILITY menu.
- Press the [MENU] button and use the ▶ or button to select the DISPLAY item, press the [MENU] button to enter it.





## **Other Functions**

3. Use the ▶ or ■ button to move the cursor (the part highlighted in inverse) and use the ▶>tor II<</td>button to adjust the values.

CONTRAST: 1-32 (Default: 16) LCD BACKLIGHT: LIGHT ON, 15 sec, 30 sec, 1 min, 3 min, ALWAYS ON. (Default: 1 min)



#### Turning the unit power OFF automatically

Use the POWER item to set the time before the unit power automatically turns OFF after the last activity or use when powered by the internal battery.

- Press the [MENU] button and use the ▶ or button to select the UTILITY menu.
- 2. Press the [MENU] button and use the ▶ or button to select the POWER item, press the [MENU] button to enter it.
- 3. Use the ►►I or I<< button to adjust the values. AUTO SHUT DOWN: DISABLE, 5 min, 10 min, 30 min, 60 min. (Default: 30 min)



#### Using the Tuner

This recorder allows you to tune your instrument quickly.

Setting the input source that you are using. (See Selecting the input source)

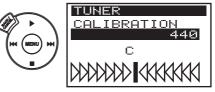
#### Entering the tuner screen.

- Press the [MENU] button and use the ▶ or button to select the UTILITY menu.
- Press the [MENU] button and use the ▶ or button to select the TUNER item, press the [MENU] button to enter it.
- 3. Use the ▶▶Ior I44 button to set the calibration to any value between 435 and 445 Hz.

#### Tuning

- Input the sound of the instrument you are tuning through the selected microphone or line input. The name of the closest pitch appears in the middle of the display.
- 2. Tune the instrument until the desired pitch is shown and the center bar is highlighted.

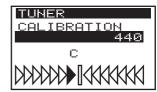
Your instrument is tuned the displayed note



Your instrument is tuned above the displayed note



Your instrument is tuned below the displayed note



### **Other Functions**

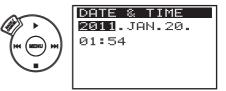
#### Setting the Data & Time

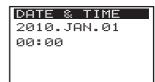
Follow these procedures to set the date and time of the built-in clock. When you create an audio file, date and time information is included in the file data.

- 1. Press the [MENU] button and use the ▶ or button to select the UTILITY menu.
- 2. Press the [MENU] button and use the ► or button to select the DATA & TIME item, press the [MENU] button to enter it.
- 3. Use the ►►I or I<<br/>button to move the cursor (the part highlighted in inverse) and use the ► or button to set the values.
- 4. After making the setting, press the [MENU] button to restart the clock from the newly set value. Press the [BACK/CANCEL] button to cancel the current setting. The display returns to the UTILITY menu screen.

#### Note:

It will restore to factory defaults without battery or when battery state low. (Please see the right picture.)





Menu System

RECORD SETUP	EFFECT	UTILITY
-SAMPLE RATE	-EFFECT TYPE	-SD CARD
-RECORD FORMAT	—TIME/PITCH	
-INPUT SELECT	LEVEL/MIX	FORMAT
-AUTO GAIN	FILE	
-VOCAL ENHANCE	-OPEN	
LOW CUT FILTER	DELETE	-DISPLAY
PLAY SETUP	RENAME	-CONTRAST
TRACK SELECT	-NEW FOLDER	
-BASS COMP		PRESET
		POWER
		AUTO SHUTDOWN
		-TUNER
		DATE & TIME

# **Prompt Messages**

NO SD CARD!	No SD card, please insert a SD card.
SD FOLDER FULL	Exceed the maximum file numbers of the current folder. Please delete some
	unnecessary files or create a new folder.
MP3 NO MARKER!	Mp3 file can not be marked.
MARKER LIMIT!	Mp3 file have already been made enough markers and can not be marked
	again.
HOLD [CANCEL]	Hold function is ON, please hold [CANCEL] to turn the hold function OFF.
LOW BATTERY!	The battery is almost out of power. Use a USB connection or an AC adaptor
	(sold separately) to recharge it.
SD CARD FULL!	Have no capacity to store recorded data. Please delete some unnecessary
	files or change a SD card.
FILE SIZE LIMIT	The file size reaches 2G, which is the maximum size of file that is supported.
MIC IS OFF!	Line In Record Mode, please make sure to plug in the line in audio device.
SD CARD ERROR!	Error in reading or writing the current SD card. Please change a SD card.
SD WR PROTECT!	Write-protection of the SD card is ON. Please pull out the SD card, and turn
	the write-protection switch off.
NOW RECORDING	Can not do file operations during recording.
INVALID FILE	Can not play back the incompatible file.
NOW PLAYING	Can not do file operations during playback.

Audio file compatibility	
MP3 files:	64–320 kbps
	44.1/48 kHz sampling frequency
WAV files:	16/24-bit rate
	44.1/48 kHz sampling frequency
Recording medium SD card:	SD (64 MB–4 GB) or SD HC card (4–16 GB)
File system:	FAT16/32
Physical	
Battery:	3.7 V, 1500 mAh.
	Battery life about 10 hours when recording MP3 format with
	the built-in microphones (varies with operating conditions)
Dimensions:	64 (W) x 117(H) x 27(D) mm
Weight:	134g (with battery)
	103g (without battery)

#### Optional

AC adaptor (DC 5V), SD Card

Specifications and design are subject to change without notice.

# THE FCC REGULATION WARNING (for USA)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the user's authority to operate this equipment.