

Digital Voice Recorder

Be sure to read this user manual before using the recorder.
Keep this manual in good custody as it may be useful later.

Please read this manual carefully before use.

MADE IN KOREA
Version 1.0

Main Features

- **High-quality Design**

Comfortable Grip & Dynamic Design

- **Long Recording Time**

In LP mode, 270 hours (4GB).

- **USB Digital Interface**

Download and Upload files Easily through PC connection.

- **TOR (Telephone Operated Recoring) Function**

When you pick up the telephone handset, recording starts automatically.

When you put down the handset, recording ends and is saved automatically.

- **Automatic Power Off**

Power automatically turns off when the recorder is not in use for more than three minutes.

- **Recording Quality Mode**

Recording quality can be selected using four modes, XQ/HQ/SP/LP.

- **VOR (Voice Operated Recording) Function**

When sound is not detected in recording, recording is paused temporarily and when sound is detected, recording is restarted automatically to use memory and battery efficiently.

- **Microphone Sensitivity**

Microphone sensitivity can be adjusted according to the distance from the sound source and the ambient noise level.

- **Repeated Playback**

Any desired recorded file can be played repeatedly.

- **Quick Message Search**

Desired recorded message can be easily searched by scan function while playing back.

- **Beep Sound**

Beep sound can be set to sound at every press of the

- **High quality recording**

You can record the sound to PCM format in XQ recording

- **Section Repeat Playback**

- **Time Indicator for Remained Recording**

- **All in One Menu Button**

- **Recorded Message Monitoring**

Recording can be monitored through earphone during

- **File Search (Intro Scan)**

Intro scan function consecutively plays the first 7 seconds of each recording for easy search of the recorded messages.

- **Playback Speed**

It is possible to set playback speed in 7 steps, 50/70/100(normal)/130/150/175/200%.

- **Hearing Aids**

You can listen to the voice coming from the microphone through earphones and adjust the sound levels without using

- **Firmware Upgrade Function**

- **Time Stamping Function**

Each recording has data & time stamping for convenient file management.

Preparing

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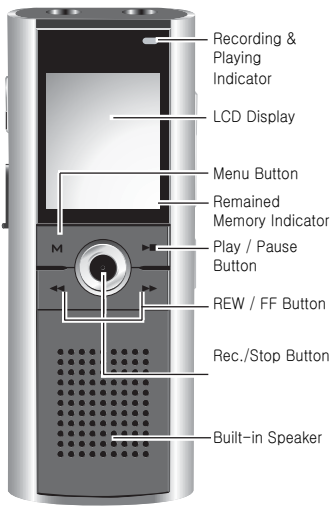
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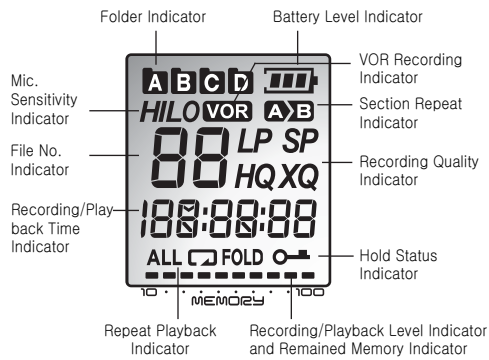
Preparing

Name of Each Part

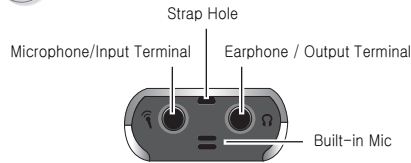
▶ Front View



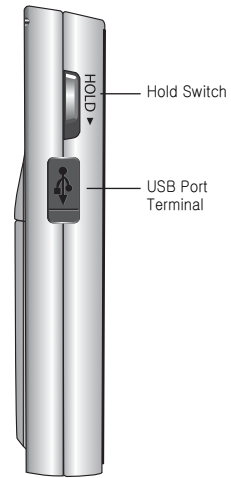
▶ LCD Display



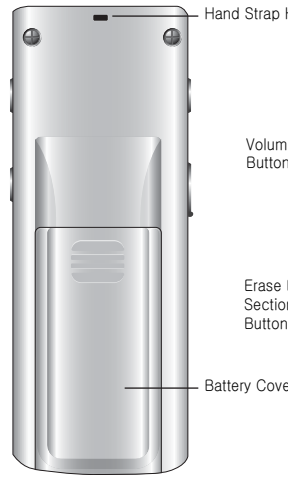
▶ Top View



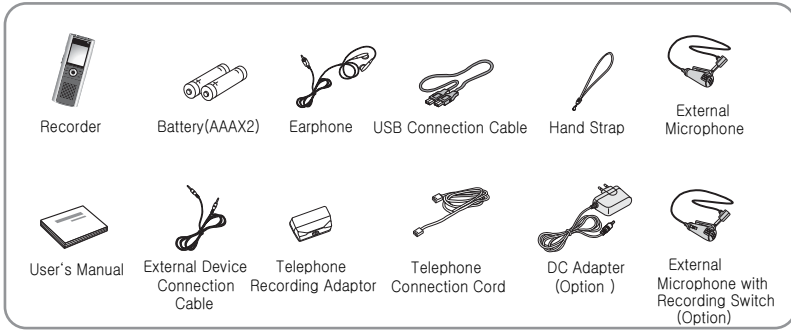
▶ Left View



▶ Back View



Package Contents



Putting the batteries



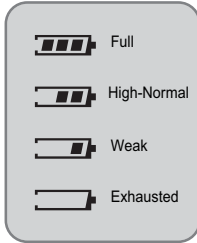
1. Push the Battery cover downside.

2. Insert two batteries with the correct polarity as indicated by the + and - symbols and close the cover.

Notes Recorded files will not be erased during replacing the batteries.

Warning In case of malfunction, please remove the batteries out of the recorder and put the batteries into the recorder again.

Checking the batteries Level



Current Time Setting (Time stamping Function)



- 1 Press MENU button 10 times at STOP mode.
- 2 Press <</> button and set 'Year'.



- 3 Press <||> button after setting 'Year'.

- 4 Set Month, Date, Hour, Minute, Second by repeating the above procedure



If you set up the current time, the file name of each recording is the date when recording begins.

So you can see when you record each file. This is a time stamp.

Power ON/OFF

Power ON



Slide the HOLD switch in the ↑ direction, and press the REC/STOP button to turn the power on.

Power OFF



- Automatic Power OFF - The power automatically turns off when the recorder is not in use for more than 3 minutes.
- Manual Power OFF - Slide HOLD switch in the ↓ direction.

Preparing

HOLD Setting

HOLD function locks all the button functions to prevent unwanted use and the discharge of the batteries.

To Set HOLD



Slide HOLD switch in the ↓ direction during recording or playback.

- The symbol flickers at one second intervals, and HOLD is set.



To Release HOLD



Slide HOLD switch in the ↑ direction during recording or playback.

- Flickering of the symbol disappears and HOLD is cancelled.



- HOLD switch performs locking function during playback or recording and manual power off function at STOP mode.

Volume Adjustment

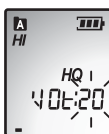
Volume can be adjusted from level 0 to 20 at STOP mode or during Playback.

To Turn Up the Volume



Press '+' symbol of the VOL button.

- As the number on the LCD display increases, the volume increases.



To Turn Down the Volume



Press '-' symbol of the VOL button.

- As the number on the LCD display decreases, the volume decreases.



Recording

In recording, please position the built-in microphone toward the speaker.

Press REC/STOP button.



Recording begins with the red light on the recording indicator. The display shows the current folder, file number, recording elapsed time and the recording sound level. The recorder automatically selects the file number next to the previously recorded file in current folder.



- Please check the recording sound level works while recording.
- When the recording sound level does not work on recording with loud voice, press the REC/STOP button on the recorded file to check whether recording works well. Then continue to record.

To Record into the Next File Number during recording



Press >> button while recording.

- The recorder stops at the current file number and continues recording into the next file number.

To Stop Recording



Press REC/STOP button once again.

- The red light goes off and recording stops.



- Press the Play/Pause button while recording to display the recording remaining time. Press once more, the current recording time is displayed.
- Press MENU button while recording in order to change the previous settings.

Playback

To Start Playback



- 1 Press Menu(M) Button and Select the folder which contains the file to play.
 - For folder selection, pls. refer to page 23



- 2 In stop mode, press the FF/REW(<</>>) button to select the file number to play back.
 - For careful search, press the button briefly. For quick search, press and hold the button for a few seconds.



- 3 Press Play/Pause(>■) button.
 - The Recorder starts playback with the file number, playback elapsed time and playback sound level.



To Stop Playback



- Press Play/Pause(>■) button.
- Playback stops. Now, press Play/Pause(>■) button again to resume playback from the previous stop position.

To playback other recorded file during playback of current file



- Press FF(>>) button shortly during playback.
- The playback of current file stop and playback of next file starts Press REW (<<) button shortly during playback.
 - The playback of previous file starts.

Playback Speed Adjustment

To start play back



- 1 Press Play/Pause(>■) button.
 - Play back starts.



- At stop mode, you can adjust play back



- 2 Press Menu(M) button seven times.
 - Default speed is set as '100' (Normal).



- 3 <</>> button with direction of right or left.
 - Playback speed can be adjusted in 7 levels as follow 70, 100(normal), 130, 150, 175, 200%.

To search the desired section within a file during



- Press and hold >>> button during playback.
- The file is fast forwarded and playback resumes when y

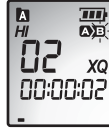


- Press and hold <<< button during playback
- The file is rewind and playback resumes when you rele

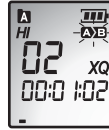
Section Repeat Playback



- 1 Press A > B button at the starting point of the desired section.
 - 'A' appears and 'B' flickers.



- 2 Press A > B button again at the ending point of the desired section.
 - 'B' appears and the section from 'A' to 'B' is repeated. Press A > B button once again to cancel Section Repeat Playback and then, normal playback continues.



Intro Scan



- Press and hold Play/Pause(▶|) button for more than 3 seconds at STOP mode.
- This function enables fast file search by playing back the first 7 seconds of each file.



- For playback the file during scanning, press JOG button in.
- Press REC/STOP button in while playback to display the playback remaining time and if you press once more, the current playback time is displayed.
- Pressing Menu(M) button twice while playback shows the status of repeat playback, you can change the status with ◀/▶ buttons.
- Pressing Menu(M) button four times shows 'SR:100' on display. If you don't want to change playback speed, simply press other buttons except for ◀/▶ buttons.

Deleting the Recorded File

- ▶ To delete a recorded file



- 1 Press Menu(M) button and Select the folder that contains the file to be deleted.
 - For folder selection, pls. refer to page 23.



- 2 In stop mode, press ◀/▶ button with direction right or left to select the recorded file to delete.
 - For careful search, press the button briefly. For quick search, press and hold the button for a few seconds.



- 3 Press ERASE button briefly.
 - The selected file number flickers and the selected file is played back.



- 4 Press ERASE button again briefly.
 - The selected file is deleted and file numbers are automatically rearranged.



- The ERASE operation is cancelled if any other button is pressed. If the selected file number is flickering or the ERASE button is pressed for more than 3 seconds.

► To delete all the files in the selected folder



- 1 Press Menu(M) button and Select a folder to be deleted.
 - For folder selection, pls. refer to page 23.



- 2 Press ERASE button more than 5 seconds.
 - The selected folder flickers and 1-FOLDER and ERASE is displayed.



- 3 Press ERASE button for more than 5 seconds again.
 - All the selected folder is deleted.



- The ERASE operation is cancelled if any other button is pressed during the selected file number is flickering or the ERASE button is not pressed again in 5 seconds.

Quick Format Setting

This function is used to erase the recorded files quickly.



- 1 Press MENU button over five seconds at STOP m. 'FA-For' appears on the display.



- 2 Press Menu(M) button again shortly. 'No' appears on the display.



- 3 Press <</>> button and Select 'YES'.



- 4 Press 'Play/Pause(▶||)' button and all files are erased. Also memory format is proceeded.



- Please make sure that file recovery is not available in case this function.

TOR(Telephone Operated Recording) Mode Setting

You can record your telephone conversation automatically just by picking up the telephone handset.

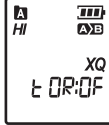
For automatic telephone recording, TOR mode has to be set to ON.



- 1 Press MENU button over 8 times at STOP mode.
 - 'TOR mode' setting appears on the display.



- 2 Press <left>/<right> button and Select 'ON' or 'OFF'.
 - 'TOR:ON' is set to start recording automatically when you pick up the phone.



- 3 Press 'Play/Pause(▶|◀)' button after setting.



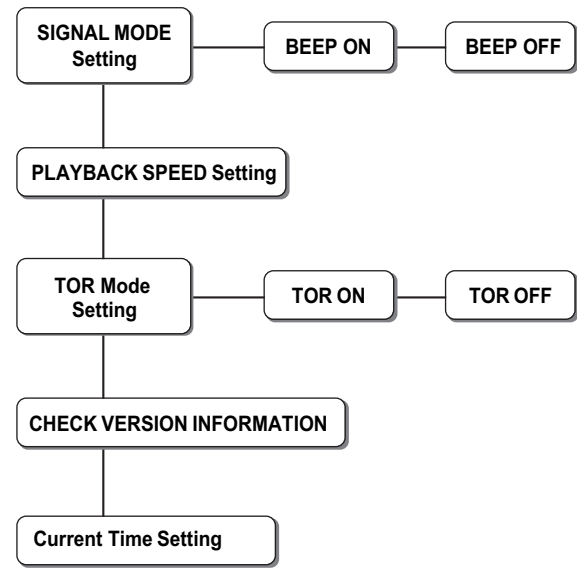
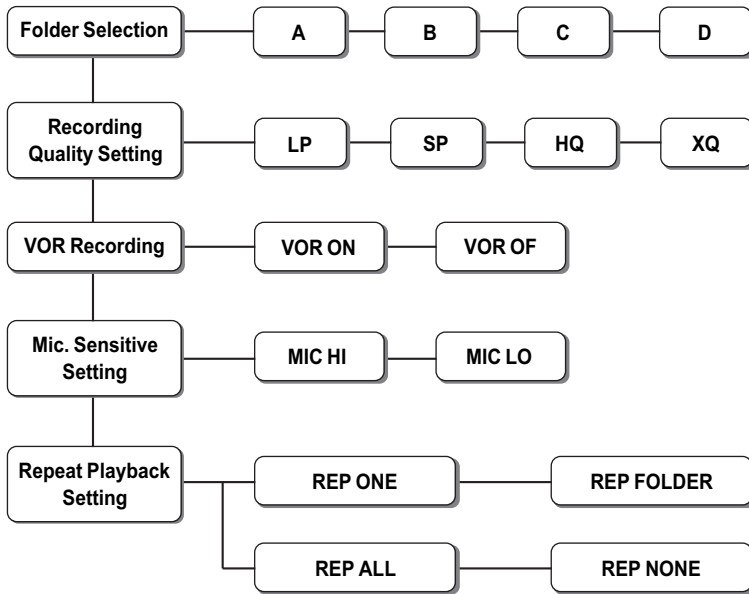
- Please note that TOR function can work with tel adaptor only supplied by FORUS ELECTRONICS.

• Using User-Friendly Functions

- ▶ Menu function chart
- ▶ Setting Menu
- ▶ Connecting to an External Device
- ▶ Others

Set Up Menu

Menu Structure



Set Up Menu

Set Up Menu

- 1 At stop mode, press Menu(M) button to move into each menu mode.
- 2 Press ◀/▶ button and Select each function on the mode.
- 3 Press ▶■ button to confirm the mode setting and escape from menu mode.

Set Up Menu


Menu(M) button	Menu Items	Set Up
1	Folder Selection	Folder can be selected for playback or recording. Press ◀/▶ button and select folders from A to D.
2	*Recording Quality Setting	You can set up recording quality. Press ◀/▶ button and select recording quality among LP,SP,HQ,XQ. LP: Longtime Recording mode SP: Standard Recording mode HQ: High-quality Recording mode XQ: Ultra high-quality Recording mode : PCM format
3	VOR Recording	VOR (Voice Operated Recording) When sound is not detected in recording, recording is paused temporarily and when sound is detected, recording is restarted automatically. If VOR function does not work properly, set the MIC sensitivity low.
4	Mic. Sensitivity Setting	You can control Mic. Sensitivity according to sound level and noise neighborhood. Press ◀/▶ button and select sensitivity among Hi,Lo. ● High : Select in case the sound source is distant or the ambient noise level is low.

Menu(M) button	Menu Items	Set Up
4		● Lo : Select in case the sound source is close or high.
5	Repeat Playback Setting	Repeat Playback Setting Press ◀/▶ button and select repeat mode among FOLDER REP ALL, REP NONE. REP ONE: To repeat One file REP Folder: To repeat One folder REP All: To repeat all files REP None: No Repeat
6	Signal Mode Setup	Beep, Silent modes are available. Press ◀/▶ button and select among Beep ON Beep ON: Beep sounds Beep OF : No sound
7	Playback Speed Setup	You can control playback speed with fast or slow s Press ◀/▶ button and select Playback Speed among SR50, SR70, SR100, SR130, SR150, SR175, S Slow ◀◀ NORMAL ▶▶ Fast
8	TOR Mode Setup	TOR (Telephone Operated Recording) Press ◀/▶ button and select among TOR ON TOR ON : Automatic telephone conversation recor TOR OFF : Manual telephone conversation recor



Press ▶■ button to confirm the mode setting and escap

Set Up Menu

Menu(M) button	Menu Items	Set Up
9	Information about Memory and Firmware Version	You can check full memory capacity and firmware version information.
10	Current Time Setting	<p>If you set the current time, you can know the recording date and time. Press ◀/▶ button and select number of date and time. Press ► button for confirmind number of date or time and moving to next. ex) R140125-105024 means recording date is 2014. 01. 25 and time is 10:50:24 AM.</p> <p> In this recorder inserted internal battery so you don't need to reset date and time after changing batteries. The life time of internal battery is one hour.</p>



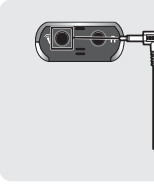
Press ► button to confirm the mode setting and escape from menu mode.

Connecting to an External Microphone

Recording through an External Microphone

▶ Connect external microphone to Voice Recorder.

- Plug the external microphone into the Microphone/Input terminal of the Recorder.



To start Recording



Press REC/STOP button.

- Voice is recorded through the external microphone.

To finish Recording



Press REC/STOP button again.

- Recording stops.



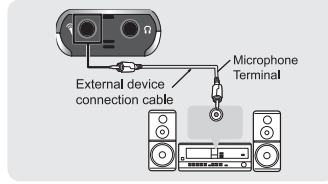
- Please check the recording sound level works while recording.

Connecting to an External Device

Connecting to an Audio System

▶ To Record contents of the Audio into the Voice Recorder,
Connect the Voice Recorder to the audio system.

- Connect the Microphone/Input terminal to the Earphone terminal of the audio system using the supplied external device connection cable.



To start Recording



Press REC/STOP button and the play button of the audio system simultaneously.

- The Voice Recorder starts recording the audio contents. To Finish Recording

To finish Recording



Press REC/STOP button and the stop button of the audio system simultaneously.

- Recording stops.



- Please check the recording sound level works while recording.



- Adjust the recording sound volume with the volume control of the audio system.
- Recording quality may be affected by the performance of the external device.

Connecting to an External Device

Connecting to an Audio System (continued)

▶ To Record Contents of the Recorder into an Audio System.
Connect the Voice Recorder to the audio system.

- Connect the Earphone/Output terminal to the microphone terminal of the audio system using the supplied external device connection cable.

To start recording



- 1 Select the file to be recorded.
- 2 Press ► button of the Voice Recorder and the play button of the audio system simultaneously.

- The selected file in the Voice Recorder is recorded into the audio system.

To finish recording



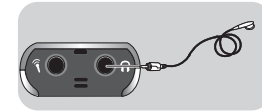
Press ► button of the Voice Recorder and the stop button of the audio system.

- Recording stops.



- The recording sound volume can be adjusted using VOL button.
- Recording quality may be affected by the performance of the external device.

Listening through an Earphone



▶ Plug the earphone to the Earphone terminal.

- The playback sound is automatically muted.
- The playback volume can be adjusted using the volume control button.

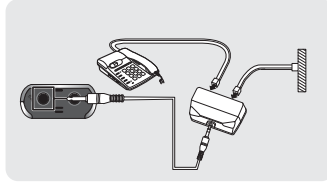
Connecting to an External Device

Recording a Telephone Conversation

Telephone conversation can be recorded on the Voice Recorder automatically.

Connect the Voice Recorder to the telephone.

- Using the external device connection cable, connect the Microphone/Input terminal of the Voice Recorder and the telephone recording adapter as shown in the picture.



To Start Recording



Press REC/STOP button during the telephone conversation.

- The Voice Recorder starts recording the conversation.
- For automatic telephone recording without pressing REC button, set TOR mode to ON at the TOR Mode Setting menu

To Finish Recording



Press REC/STOP button again.

- Recording stops.
- In case of TOR mode "ON", just put down the telephone handset without pressing REC button and recording is saved automatically.

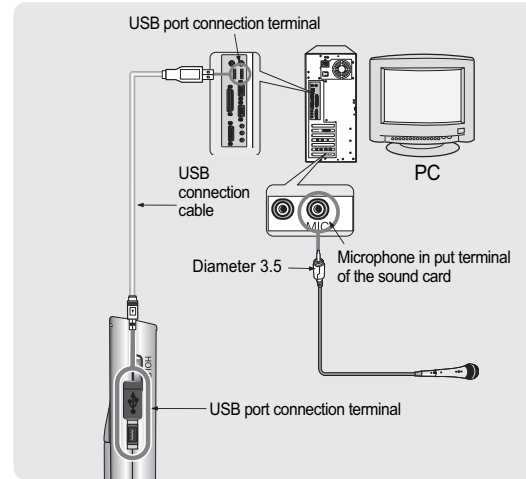


- The digital telephone cannot be connected to the Voice recorder.
- The input volume of the recorded sound is affected by the telephone and phone line condition. If input volume is too low, disable the VOR function.

Connecting to an Ex

Connecting to a PC

To download recording files into PC, please connect the recorder in by using USB cable as below.



- After connecting the Recorder to PC, try not to touch the Recorder may cause the malfunction of the device.
- During downloading and uploading data from/into recorder, do not touch the recorder. It makes your recording data useless or unable to recover.

Precautions

Important information on safe and efficient operation. Read this information before using your voice recorder.

For the unit

1. Do not drop the unit or give a shock to the unit. It may cause a malfunction.
2. Do not leave the unit in such a location as described below.
 - A place of very high temperature (60°C)
 - A place subject to direct sunlight or near heat sources
 - A car with its windows closed (especially in summer)
 - A place subject to excessive moisture like a bathroom
 - A place subject to excessive dust
3. Do not apply heavy forces to the LCD (Liquid Crystal Display) unit, or it may cause breakage or abnormal display taking into account the properties of liquid crystal.
4. If you place cards using magnetism such as cash cards or transportation pass cards near to the speaker of the unit, the magnetism may be transformed due to magnetic influence so that the magnetic cards cannot be used any more.
5. Our company does not reimburse you for any loss from the use of the Voice recorder or any demand of indemnity from a third party.
6. Message loss due to malfunctions, repairs, etc is not a responsibility of ours. Please understand this.

For the Battery

1. Do not short-circuit, disassemble or heat the battery, or do not put the battery in a fire. Electrolyte such as an alkaline solution may flow out, so you may get it in your eyes. This may cause the generation of heat, or the breakdown of the battery.
2. When the skin or clothes are stained with electrolyte such as an alkaline solution, wash it off with water immediately. If you get it in your eyes, seek immediate medical attention after washing out the area of the eye with water.
3. Do not use the different kind of batteries together.
4. When the unit is not in use for a long time, remove the battery from the unit.

For your safety

1. Do not repair, disassemble or modify this unit by yourself.
2. If smoke or deformation occurs due to the generation of heat, remove the unit immediately.
3. Do not use this unit in an airplane or place where the use of electronic mobile phones is prohibited.
4. Do not use during you are driving or walking. It may cause an accident.

Troubleshooting

Check the following items before asking a technical support.

When using Voice Recorder

LCD doesn't work.

- CHECK1** Is the battery's power exhausted? ▶ Replace the battery with a new one. (Refer to page 7)
- CHECK2** Is the battery installed to the correct polarity? ▶ Install the battery to the correct polarity

Recorder doesn't work.

- CHECK1** Is the device locked by the HOLD key? ▶ Release the HOLD key
- CHECK2** Has the memory or file numbers been used up? ▶ Delete unnecessary files. (Refer to pages 14)
- CHECK3** Is the battery's power exhausted? ▶ Replace the battery with a new one. (Refer to page 7)

Playback doesn't work.

- CHECK1** Is the device locked by the HOLD key? ▶ Release the HOLD key
- CHECK2** Is there any recorded file? ▶ Check the folder and file numbers.
- CHECK3** Is the battery's power exhausted? ▶ Replace the battery with a new one. (Refer to page 7)

No sound comes from the speaker.

- CHECK1** Is the volume set to '0'? ▶ Adjust the volume (Refer to page 10)
- CHECK2** Is the earphone plugged in? ▶ Plug the earphone properly

The earphones do not work.

- CHECK1** Is the volume set to '0'? ▶ Adjust the volume (Refer to page 10)
- CHECK2** Is the earphone plugged in properly? ▶ Plug the earphone properly

When using Tel-adapter

Recorder doesn't record Automatically.

- CHECK1** Does the TOR MODE is set to TOR ON? ▶ Press the TOR key and TOR indicator light is lit

Recorded just noise.

- CHECK1** Is the telephone installed is for land line? ▶ This device is for land line only
- CHECK2** Does the External device connection cable connect to Input terminal of voice recorder? ▶ Connect the external device connection cable to Input terminal of voice recorder

Specifications

Item	Digital Voice Recorder	
Continuous recording time	4G	XQ : 24Hours, HQ : 67 Hours, SP : 135Hours, LP : 270Hours
	8G	XQ : 48Hours, HQ : 134 Hours, SP : 270 Hours, LP : 540Hours
Maximum number of recording files	99 files per folder x 4 folders = 396 files	
Dimensions	32 x16 x 86.5mm	
Weight	33.3g(excluding the batteries weight of 24g)	
Power Source	Two DC 3V (Size "AAA", Alkaline) batteries, External Adapter(Optional)	
Battery life	Recording: Approx. 20 hours / Playback: Approx. 20 hours (E/P normal level)	
Recording medium	Built-in Flash Memory	
Effective maximum output	Speaker: 25mW	
Frequency range	500Hz ~ 3.5KHz	
PC interface	USB 2.0(Universal Serial Bus)	
Input	Internal	Omni-directional electret condenser microphone
	External	Plug-in electret condenser microphone
Output	Earphone	Earphones ($\phi 3.5$ / mono / 16 Ω)
	Speaker	Diameter 20mm, 16 Ω
Operational condition	Temperatures: 0 to 40 $^{\circ}$ C	
Accessories	2 AAA battery, Earphone, USB connection cable, External device connection cable, Telephone recording adapter, Telephone connection code, External microphone, Hand strap,	

FCC note :

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 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 area.

If this equipment does cause harmful interference to radio or television reception, you can determine 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 the 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.

CAUTION :

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

Warranty

Product	DIGITAL VOICE RECORDER	
Assurance period	1 YEAR	Purchasing date
Customer	Address	tel
	Name	signature
Sales agency	Address	tel
	Agency name	signature