

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.



Main Features

- **High-quality Design**
Comfortable Grip & Dynamic Design
- **Long Recording Time**
In LP mode, 66 hours and 20 minutes(128MB), 133 hours and 20 minutes(256MB).
- **USB Digital Interface**
Download and Upload files Easily thru PC connection.
- **Telephone Message Recording**
You can record the important telephone conversation and messages.
- **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 Recording**
The Recorder activates when sound is present, so that it may save memory space for eliminating blank space in recording.
- **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.
- **Section Repeat Playback**
- **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 button.
- **Vibration Mode on Recording**
Secret Recording with Vibration on Recording On & Off.
- **Additional Recording (Appendix)**
You can add the recording to the same file number without affecting the original.
- **Time Indicator for Remained Recording**
- **All in One Menu Button**
- **Recorded Message Monitoring**
Recording can be monitored through earphone during recording.
- **File Search (Intro Scan)**
Intro scan function consecutively plays the first 7 seconds of each file for easy search of the recorded messages.
- **Playback Speed**
It's possible to set playback speed in 7 steps, 50/70/100(normal)/130/150/170/200%.
- **Hearing Aids**
You can listen to the voice coming from the microphone on earphones and adjust the sound levels without using the recording function.
- **Firmware Upgrade Function**

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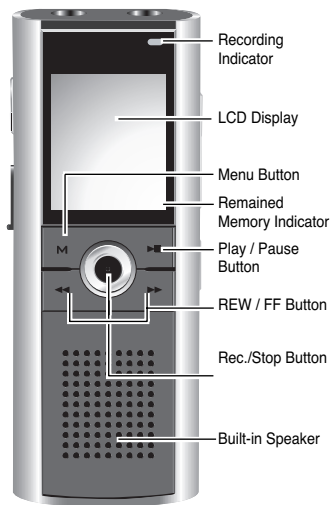
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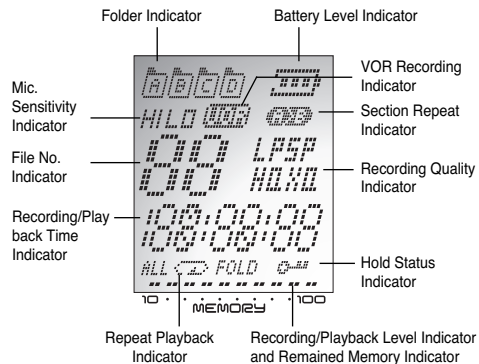
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| Name of Each Part |

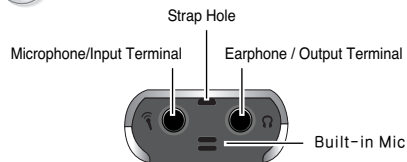
▶ Front View



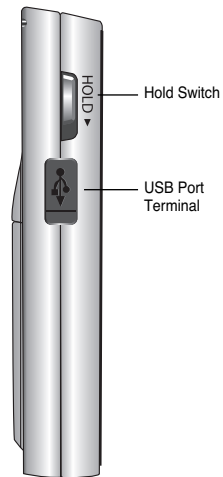
▶ LCD Display



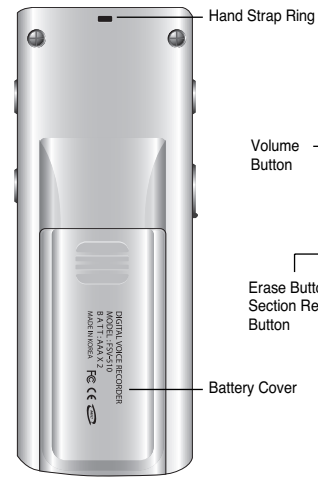
▶ Top View



▶ Left View



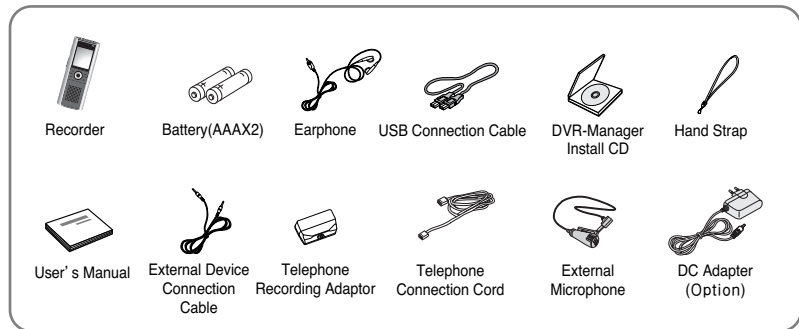
▶ Back View



▶ Right 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.

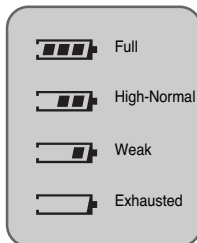


Notes Recorded files will not be erased during replacing the batteries.



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



External Power Supply Setting

1 Select "DC" at the menu of USB Mode in General.

2 Connect the Recorder to PC by USB cable.

- Recorder operates with PC power supply.



Using Direct USB port from the PC is highly recommended rather than using USB hub due to weak voltage.



You can use external power supply by connecting DC adaptor(Optional)

- Using External Power thru PC connection could cause some noisy on telephone recording and it could prevent VOR function from working properly. In this case, using DC adaptor(optional) is recommended.



Power ON/OFF

▶ Power ON

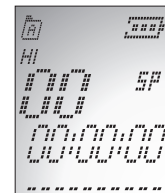


Slide the HOLD switch in the ↑ direction, and press the REC/STOP button to turn the power on.

▶ Power OFF



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



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.



Using

Recording

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

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, stop recording and play back the recorded file to check whether recording works well. Then continue to use if there is no problem.

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.

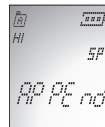
- The red light goes off and recording stops.

To Add Recording



Press and hold REC/STOP button for more than 3 seconds at STOP mode.

- The recorder attaches the message to the current file number.



- Press the Play/Pause button while recording to display the recording remaining time and if you press once more, the current recording time is displayed.
- Press MENU button while recording in order to change the previous setting of VOR function.

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 speed also.



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 follows (50, 70, 100(normal), 130, 150, 170, 200%).



To search the desired section within a file during playback



Press and hold >> button during playback.

- The file is fast forwarded and playback resumes when you release the button.

Press and hold << button during playback

- The file is rewind and playback resumes when you release the button.

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 of 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 during the selected file number is flickering or the ERASE button is not pressed again in 5 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.

Recovery of Erased File

This function enables to recovers the erased file by mistake of user.



- In case of recording after deleting a recorded file, Recovery is not available.



1 Press MENU(M) button over five seconds at STOP mode.

- FRCV:No appears on the display.



2 Press ◀/▶ button and Select 'FRCV: YS



3 Press 'Play/Pause(▶■)' button and erased files are recovered.



- In case of erasing by using Reset mode(Low Format), the recovery function is not available.

Quick Format Setting

This function is used to erase the recorded files quickly.



- 1 Press MENU button over five seconds at STOP mode.
● FRCV:No appears on the display.



- 2 Press Menu(M) button again shortly.
● FA-For appears on the display.



- 3 Press 'Play/Pause(▶||)' button and 'No' appears on the display.



- 4 Press ◀/ ▶ button and Select 'YES' .



- 5 Press 'Play/Pause(▶||)' button and all files are erased.



- In case of erasing by using Reset mode(Low Format), the recovery function is not available.

Low Format Setting

In case of erasing the recorded file by using this function, the recorded file is erased completely and it's not possible to recover.



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



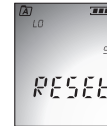
- 1 Press MENU button over five seconds at STOP mode.
● FRCV:No appears on the display.



- 2 Press Menu(M) button again shortly.
● FA-For appears on the display.



- 3 Press Menu(M) button again shortly.
● RESET appears on the display.



Using



4 Press 'Play/Pause(▶■)' button and 'No' appears on the display.



5 Press ◀◀/▶▶ button and Select 'YES' .



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



- In case of erasing the recorded file by using this function, the recorded file is erased completely and it's not possible to recover.
- Low formatting restores the recorder to the default mode.

• Using User-Friendly Functions •

▶ Menu function chart

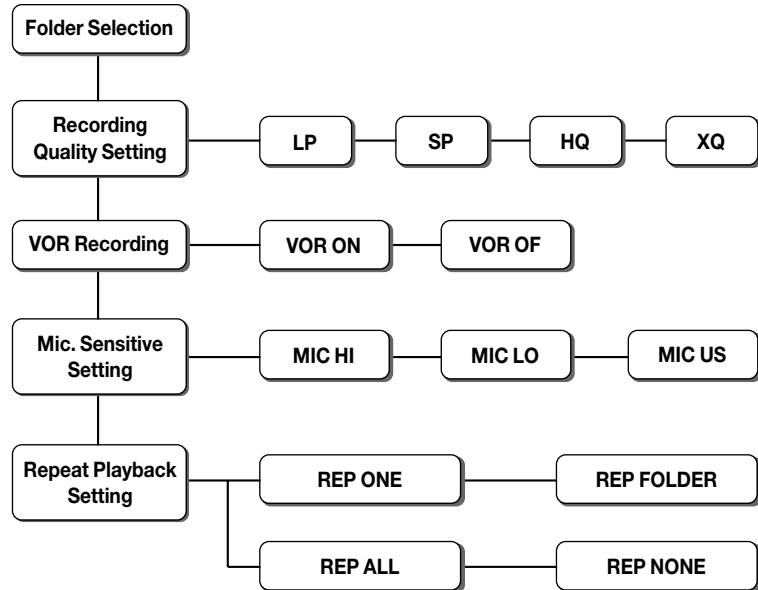
▶ Setting Menu

▶ Connecting to an External Device

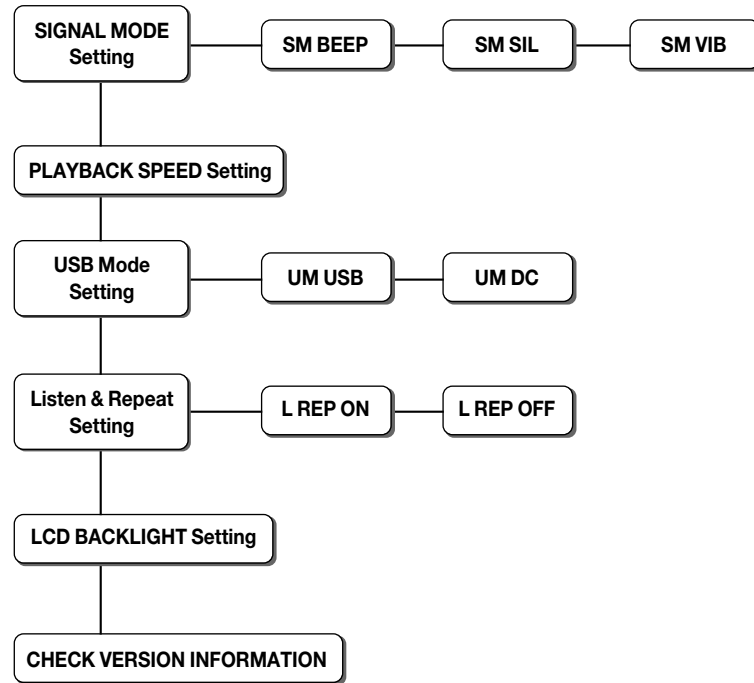
▶ Others

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.

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
3	VOR Recording	VOR (Voice Operated Recording) With VOR mode, the recorder activates only when sound is present and pauses when no sound is detected.
4	Mic. Sensitivity Setting	You can control Mic. Sensitivity according to sound level and noise neighborhood. Press ◀/ ▶ button and select sensitivity among Hi,Lo,US. • High : Select in case the sound source is distant or the ambient noise level is low.

Menu(M) button	Menu Items	Set Up
4		<ul style="list-style-type: none"> • Lo : Select in case the sound source is close or the ambient noise level is high. • User : Select this to manually set the microphone's sensitivity. * Microphone sensitivity can be adjusted in 15 steps and it can be made each 2 step
5	Repeat Playback Setting	Repeat Playback Setting Press ◀/ ▶ button and select repeat mode among REP ONE, REP 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, Vibration modes are available. Press ◀/ ▶ button and select among SM Beep, SM SIL, SM VIB. SM Beep : Beep sounds SM SIL : No sound SM VIB : The recorder vibrates only when recording starts and stops. (Vibration works only at following three operations) Power On: The recorder vibrates for about 2 seconds. REC START: The recorder vibrates twice shortly. REC STOP: The recorder vibrates once shortly.
7	Playback Speed Setup	You can control playback speed with fast or slow speed. Press ◀/ ▶ button and select Playback Speed as follows. SR50, SR70, SR100(NORMAL), SR130, SR150, SR175, SR200

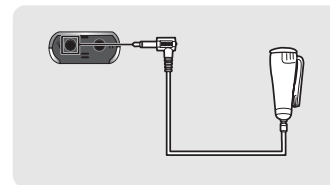
Set Up Menu

Menu(M) button	Menu Items	Set Up
8	USB Mode Setup	By connecting Recorder to PC thru USB cable, USB connection or DC Power Supply can be selectable according to user's choice. Press ◀/ ▶ button and select USB or DC in orders. UM USB: USB connection UM DC: DC Power Supply
9	Listen and Repeat Setup	You can hear and follow-up because the concerned time has no sound after section repeat playback is setup. If you connect earphone to the recorder, you can hear your own voice when you speak at this mode. Press ◀/ ▶ button and select L REP ON, L REP OFF in orders. L REP ON: For this function L REP OFF: No for this function
10	LCD Backlight time setup	Backlight time can be setup. Press ◀/ ▶ button and select Off, 10sec, 20sec, 30sec, 60sec, all in orders.
11	Check Version Information	You can check full memory capacity, version information.

Connecting to an External Device

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.



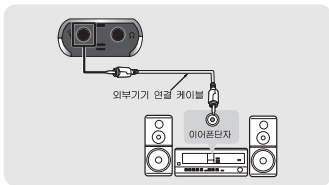
- Please check the recording sound level works while recording.

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.

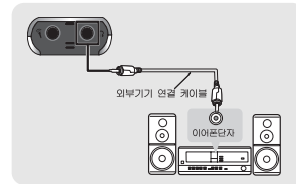
Connecting to an External Device

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 record button of the audio system simultaneously.

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

To finish recording



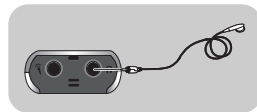
Press ► button of the Voice Recorder and the stop button of the audio system.

- Recording stops.



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

Listening through an Earphone



▶ Plug the earphone to the Earphone/Output terminal.

- The playback sound is automatically routed to the earphone. The playback volume can be adjusted by + and - of VOL button.

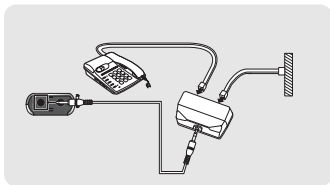
Connecting to an External Device

Recording a Telephone Message

Telephone messages can be recorded on the Voice Recorder.

▶ 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.

To Finish Recording



Press REC/STOP button again.

- Recording stops.



- The digital telephone cannot be connected to the Voice recorder.
- To record only when you talk on the telephone, please select VOR recording and then press REC/STOP button. (For details, pls. refer to page)
- If the VOR function does not work properly, set the MIC sensitivity low. (For details, pls. refer to page)
- 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. (For details, pls. refer to page .)

Connecting to an External Device

Connecting to a PC

DVR-Manager software provides various functions such as file uploading to PC, playback, recording, editing of recorded files and sending recorded files via email.

Installation of DVR-Manager

DVR-Manager should be installed to PC prior to connecting Voice Recorder to PC.

System Requirements

Computer: IBM-compatible, Intel Pentium (or better) based with USB port support

- Memory: More than 64MB of RAM
- OS: Windows 98/Me/2000/XP
- Hard Disk: More than 50MB space
- For Playing: Sound card and speaker
- For Recording: Sound card and microphone



- Caution: Installation should be proceeded without connecting the recorder to PC via USB cable.

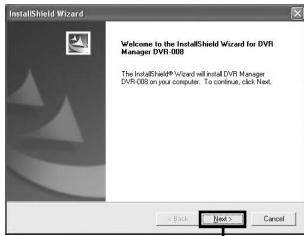
When you insert DVR-Manager CD into CD-ROM drive, the language selection window appears.



1 Select language



Connecting to an External Device



3 Click

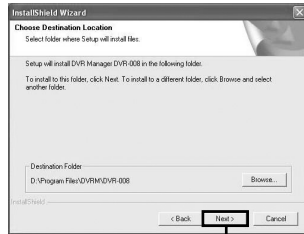


6 Click

5 Type in your name and company name.



4 Click

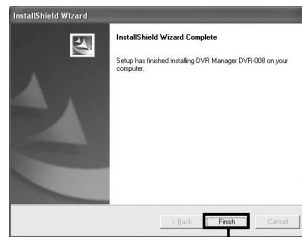
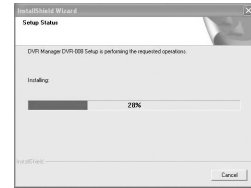


7 Click

Connecting to an External Device



8 Click



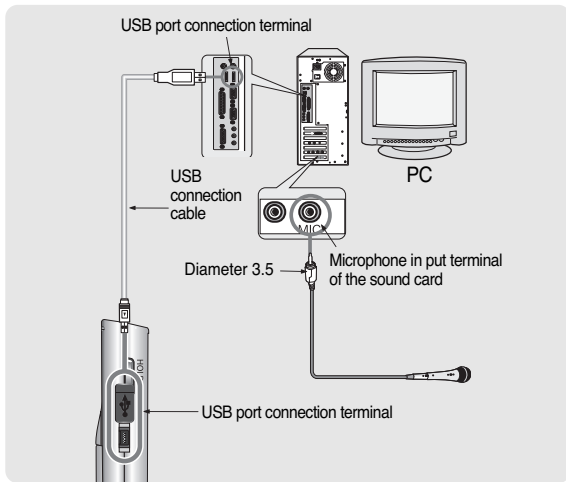
9 Click



● Installation has been completed and the shortcut icon appears on the desktop.

Connecting to PC

First connect Recorder to PC for the better use of the Recorder Manager Pro Software.



- After connecting the Recorder to PC, try not to touch the Recorder since it may cause the malfunction of the device.
- If you have connected USB cable while batteries are installed, you must first press REC/STOP button to power on Recorder.

DVR Manager Installation Guide Win XP User

You should install DVR-Manager Program provided by maker for uploading or downloading a file(s) from computer to the Voice Recorder . Please watch out below procedure before the installation of DVR-Manager Program.

Installation of DVR-Manager

- 1 Insert DVR-Manager CD to CD-Rom
- 2 Complete installation procedure as computer indicates.
- 3 There will be "DVRM-008" icon on the screen if completed installation.
 - Please refer to enclosed User Manual Guide for more detail.

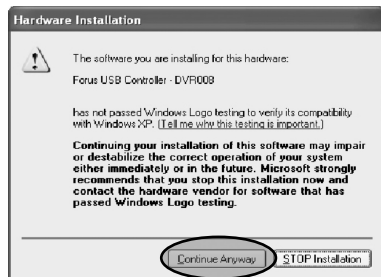
Connection of the Voice Recorder to computer(Installation of Driver)

- 1 Take the batteries out of the Voice Recorder.
- 2 Connect the Voice Recorder to computer by the provided USB cable and then press "REC/STOP" Button.
- 3 Check " the picture shown the connection of Voice Recorder to computer" on the LCD of Voice Recorder.
 - If you can't find out the picture, you are required to select "USB" from "DC" at "USB Mode" Refer to User Guide Manual.
- 4 When you connect the voice recorder to computer first time after purchasing, you can find out "Found New Hardware".
Click the Pop-up Window and then check "Forus USB Controller-DVR008".



- If "USB Device" on it, disconnect the Voice recorder from USB Cable and then try to connect again. Check "Forus USB Controller-DVR008"
- If you see "USB Device" Constantly, Look at the "Tip for Voice Recorder" in English/Readme/CD.

- 5 If "Forus USB Controller-DVR-008" is detected, click "Next".
- 6 On the Notice about "MS Logo Test" as below, maker recommends to keep the rest procedures of installation because this is no harmful to your PC thru its strict compliance testing with this OS by itself.



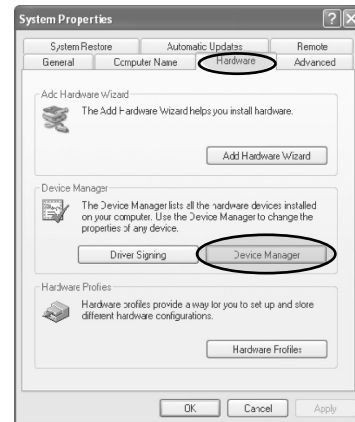
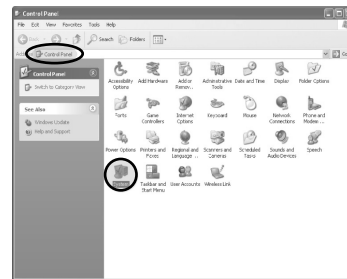
Trouble Shooting in Manager program for Win XP

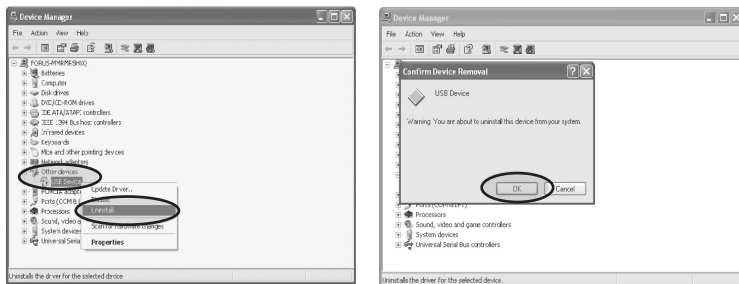
If you won't continuously find out "Forus USB Controller-DVR008" on The Found New Hardware Wizard when the Voice Recorder connects to PC, please check if you installed "Driver" or not in the connection of the Voice Recorder to the PC at the first time.



- Yes. I installed Driver without checking if "USB Driver" or "Forus USB Controller-DVR008" in "The Found New Hardware Wizard"

- 1 Remove abnormal driver installed
 - Place the mouse to "Start" on the Win XP.
 - Control Panel->System->System Properties->Hardware->Device Manager





- If the Driver is installed abnormally, you can find out the above window with "the yellow question mark and USB Device".
- Remove the Driver by clicking the right mouse and "Uninstall".

2 Uninstall DVR-Manager

- Uninstall the installed DVR-Manager Program in the PC.
- Restart the PC.
- Install DVR-Manager Program again. Restart PC.

3 Installation DVR-Manager Program and Driver of the Voice Recorder again.

4 Refer to previous pages about Installation of DVR-Manager and Driver.



- Despite the above procedures, the PC does not detect the Voice Recorder in DVR-Manager Program, follow up the above procedures to remove DVR-Manager & abnormal Driver excepting the Installation Driver at. Get the "USB Driver_XP.exe" from the provided CD or website(Maker or distributor) and install this driver by double-click and then connect the Voice Recorder to PC and follow up the procedures to install the Driver .

Connecting to a PC

Using online Help

Instruction for using DVR-Manager is provided in detail in Help. If installation is finished, shortcut icon is displayed.

- 1 Double click the shortcut icon.
 - DVR-Manager is executed.
- 2 Select Help of main menu
 - Help appears.

Multi-languages Support

In case of managing files in PC, you can use conveniently because multi-language for file name or error message is supported.



DVR-Manager Deleting

- Select menus in the sequence of : Start > Settings > Control panel > Add/Remove Program > DVR-Manager DVR-xxx Ver.1.0 > Add/Remove

Connecting to an External Device

Firmware Upgrade

This unit provides the Firmware Upgrade function to improve the unit functions and to correct errors.

- 1 Connect the recorder to PC thru USB cable



● Caution: DVR Manager should be installed in advance.
(Refer to Installation of DVR Manager)

- 2 Execute DVR Manager and download 'FSV510_FIRMUP.ROM' (UPGRADE FILE) to D folder of the recorder.



● Caution: In case of downloading upgrade file, there should be no file at D folder.

- 3 After download is completed, disconnect USB cable.

- 4 Power on the unit. Then the unit is upgraded automatically. Remove the batteries when 'FINSH' appears on the display and put the batteries on again.



● Do not remove the batteries or drop or give a shock to the unit while upgrading firmware.

Connecting to an External Device

► Trouble shooting in case of error while upgrading firmware

Please adopt temporary measures as follows when upgrading firmware did not be completed normally because of the batteries' separation or shock to the unit.



- 1 Remove the batteries from the unit please.



- 2 Push down Hold key and set up Hold-On mode.



- 3 Press and hold 'REC' button and connect the unit to PC via USB cable.

- 4 Please repeat the above procedures of upgrading firmware from No.2 to No.5.

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 into a fire. Electrolyte such as an alkaline solution may flow out, so you may get it in your eyes, or it 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 the stain out with water immediately. If you get it in your eyes, seek immediate medical treatment 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 battery from the unit immediately.
3. Do not use this unit in an airplane or place where the use of electronic machines are 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

Recording 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 9)
- CHECK2** Is the earphone plugged in? ▶ Pull out the earphone completely.

The earphones do not work.

- CHECK1** Is the volume set to '0'? ▶ Adjust the volume. (Refer to page 9)
- CHECK2** Is the earphone plugged in properly? ▶ Plug the earphone in properly.

For DVR-Manager

REC/PLAY icons are inactive. When using D

- CHECK1** Has the sound card been installed? ▶ Install the sound card first and then reinstall the 'DVR-Manager' software.

Can't hear the voice due to noise.

- CHECK2** Is the volume set excessively high? ▶ Adjust the volume of the DVR-Manager, since the excessively high volume may cause noise.

Can't record with an external microphone

- 확인1** Is the external microphone connected to the PC (Sound Card)? ▶ Connect the external microphone to the sound card and start recording. (Refer to page 33)
- 확인2** Does the MIC IN (Microphone) become active at the Recording Control Window, when you click : Control Panel > Multimedia > Audio > Recording? ▶ Cancel Mute function, if the unit is in the mode, and select the MIC IN.

Specifications

Item	Digital Voice Recorder	
Continuous recording time	128MB	XQ : 15Hours, HQ : 22 Hours, SP : 30 Hours, LP : 65Hours
	256MB	XQ : 30Hours, HQ : 44 Hours, SP : 60 Hours, LP : 130Hours
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. 12 hours / Playback: Approx. 12 hours (E/P normal level)	
Recording medium	Built-in Flash Memory	
Effective maximum output	Speaker: 25mW	
Frequency range	500Hz ~ 3.5KHz	
PC interface	USB (Universal Serial Bus)	
Input	Internal	Omni-directional electret condenser microphone
	External	Plug-in electret condenser microphone
Output	Earphone	Earphones (∅3.5 / mono / 16Ω)
	Speaker	Diameter 20mm, 16Ω
Operational condition	Temperatures: 0 to 40°C	
Accessories	2 AAA battery, Earphone, USB connection cable, DVR-Manager CD, External device connection cable, Telephone recording adapter, Telephone connection cord, External microphone, Hand strap, External Adapter(Optional)	

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 UNDESIRABLE OPERATION.

FCC ID : R28FSV-510

MADE IN KOREA.

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 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.

CAUTION :

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

Warranty

Product	DIGITAL RECORDER	Model		
Assurance period	1 YEAR	Item	Sales date	yy mm dd
Customer	Address Name	tel		
		signature		
Sales agency	Address Agency name	tel		
		signature		