

DIGITAL VOICE RECORDER & AUDIO PLAYER

MODEL : DDR-3032/DDR-3064/DDR-3128/DDR-3256

DDR-3032R/DDR-3064R/DDR-3128R/DDR-3256R

User's Manual



Thank you for choosing our DIGITAL VOICE RECORDER & MUSIC PLAYER from DIASONIC TECHNOLOGY CO. LTD. Before use, read through the User's Manual carefully. We advise you to keep this user's manual to avoid possible technical difficulties.

COPYRIGHT

- Copyright © 2001, DIASONIC TECHNOLOGY CO. LTD. All rights reserved.
No part of this User's Manual may be reproduced, translated or used for profits. It is against copyright law to violate these rules. The content of this User's Guide is produced under the greatest care of our company. To improve the quality and function of the product, the content of manual can be modified without any advance notice. Our company does not take any responsibility for the loss or damage by the modification of the manual.
- MP3 files should not be used for the purpose of commercial use or service other than personnel use. It is in conflict with the domestic copyright law in case of below.
- It is prohibited to copy recorded matter other than the purpose of personnel enjoyment by law.

CONTENTS

1. DDR-3000 SERIES

1) Suggestions for Users	1
2) About DDR-3000 SERIES	2
3) Functions and Features	3
4) Names of Each Part/ LCD Screen	5
5) Use of Battery and Components in Package	6
6) Basic Directions for Use	8
7) How to Use Buttons	9
8) How to Set Menu in VOICE/MP3/FM Part	12
9) Operation of Playback Dial	13
10) How to Record and to Set Up Mode	15
11) Various Methods for Playback	17
12) Deleting and Organizing Data	19
13) TIMER/REC & ALARM/PLAY Function	20
14) How to Connect with External Appliances	24
15) FM Signal-Receiving Function	26

2. DDR-3000 Series Software & Mail Manager

1) DDR-3000 Series software & mail manager	27
2) Connecting DDR-3000 SERIES and set up	28
3) Composition of Software	30
4) Spectrum screen and sound effect	33
5) Transferring MP3	34
6) Sending DVF files to computer	35
7) Deleting MP3 and DVF files	37
8) Resetting flash memory	38
9) Managing files by using Software	39
10) Mail Manager	40

3. General Specifications 43

4. Warranty Card / Limited Coverage 50

Suggestions for users

- Do not drop or shock the device. It can cause technical trouble.
- Please try to avoid such places.
 - In hot, humid environments, such as in a closed automobile under direct sunlight. (above 60°C)
 - Under direct sunlight or next to a heating appliance
 - Areas of excessive dust or moisture.- Humid places(bathrooms)
- Overpressure can cause damage on the liquid crystal display(LCD).
- DIASONIC TECHNOLOGY CO. LTD. can not be held responsible for any kind of damage by the use of this product or reparation for injury by a third party [or individuals].
- DIASONIC TECHNOLOGY CO. LTD. does not accept any responsibility for the loss of data in the memory
- Users should not repair, remodel or take the product apart by themselves.
- Do not use the device on such places where the use of electrical machines is prohibited.
- While operating one function of the product, do not try other functions.
- Applying heat to the body of the product or to batteries can cause irreversible damage.
- If a customer or a third party [or individuals] uses the device in an inappropriate way, or if main device get shocked, data in a memory can be changed or lost without warning.
 - ※ Save important data onto the computer.

About DDR-3000 SERIES

DDR-3000 SERIES is a digital audio recorder and player offering high quality sound, with the latest in digital technology from Cubig Group. It provides consumers with various record modes / functions (SHQ / HQ / SP / Timer Recorder Function) and various playback modes / functions (Alarm Playback / Speaker Playback / Earphone playback / real time playback.) It can also store and playback MP3 files, which are digitally compressed music files. Also receiving, listening and recording FM radio signals / broadcast can also be done. DDR-3000 Series is a portable digital audio device for the next generation.

- Polished, Sophisticated, Extremely Small Size & Solid Exterior
DDR-3000 SERIES adopted the function of SAMPLING with high quality of sound such as SHQ/HQ/SP so that it supports high quality-voice recording and playback technology. We guarantee that additional MP3 technology satisfies consumers' demands.
- Extension of Additional MP3/HD Function
Voice recorder together with various function of MP3 player (equalizer/repeat function) can correspond to the advantage of MP3 players, and you can enjoy portable data-storage system or portable hard disk-storage system.
- FM Radio Broadcast-Receiving & recording(optional function)
You can enjoy both receiving and recording FM radio signals and broadcast and real time FM recording.
- BACKLIGHT
Even at night, JOG button will help users set menu easily so that they can see and check the display of LCD of DARK-BLUE colors with attached BACKLIGHT on the back.

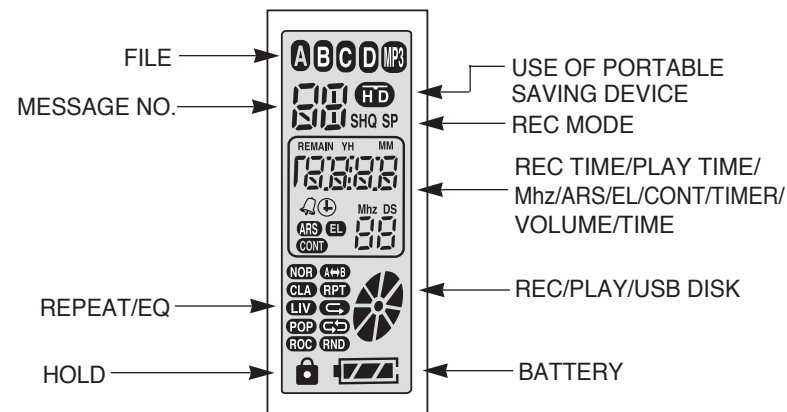
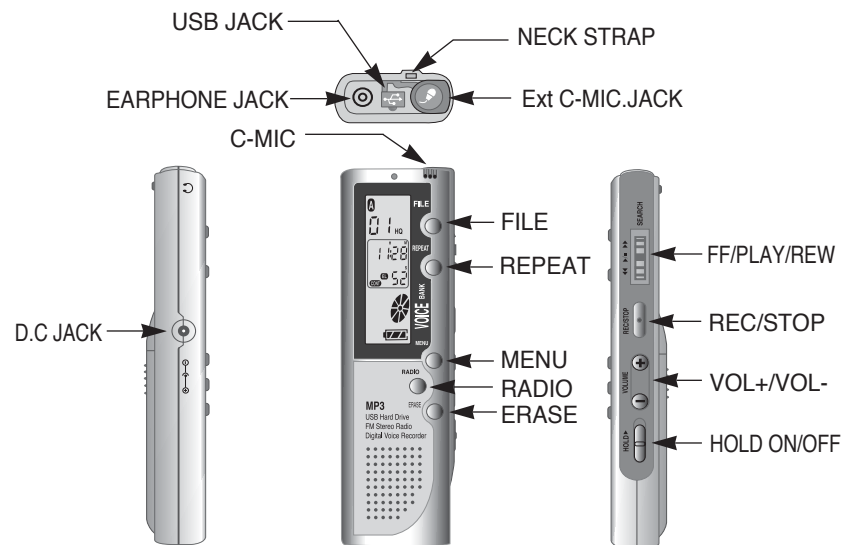
-
-
- Additional DVR-EXPLORER / MAIL MANAGER
DDR-3000 SERIES is the player, which is convenient when transmitting recorded data, and MP3 files from one PC to another, and which helps regenerating, managing saved data and sending data through e-mail.
 - ALARM/PLAY, TIMER/REC, SETTING UP TIMER
DDR-3000 SERIES sets up timer or alarm to record or play messages or songs at any time, and it helps recording or playback be processed smoothly.

Functions and Features

- USB INTERFACE: supports quick uploading and downloading.
- Display of time on LCD screen
- Saved calendars up to year of 2099
- Thin & slim design for portable and convenient use
- Hidden high quality-microphone inside of the device
- Total 396 messages with 4 separate files (99 messages in each file)
- ARS (Automatic Recording System): prevents unnecessary recording when there is no sound or voice so that maximizes the time of recording (A/B/OFF).
- KEY HOLD FUNCTION: prevents accidental operation when not in use.
- REC MODE: for appropriate quality, time and purpose (SHQ/HQ/SP)
- RECORD DATE FUNCTION: shows time, date, and year of recording.
- REMAIN FUNCTION: shows remain time for recording and playback.

- **TIMER RECORDER FUNCTION:** can receive and record radio broadcast automatically -daily, weekly or monthly.
- **ALARM PLAY FUNCTION:** can play messages automatically at requested time after setting time and date.
- **Repeat & A-B Repeat function:** can play as long as you want to, and you choose the intervals between two part that you want to listen.
- **AUTO OFF FUNCTION:** turns off power automatically after one minute with no other work or operation.
- **POWER OFF:** Turn off the power by pressing the "RADIO/OFF" button manually.(Only Applicable in Voice Mode and DDR-3000 with FM Radio)
- **SEARCH PLAY FUNCTION:** searches(forward, backward) the part that you want to listen fast and easily.
- **SPEED CONTROL:** 3Steps Playback Speed Control(Fast/Normal/ Slow) by pressing "FILE/SPEED" button.
- **MONITOR FUNCTION:** you can listen to the contents with earphones while recording.
- **H/D(32M/64M/128M/256M) FUNCTION:** can substitute for portable hard disks.
- Digital output Volume control(30 levels)
- Various equalizer modes(normal, rock, live, classic, pop)
- Various repeat function (NORMAL/INTERVAL REPEAT/1 TRACK/ ALL TRACK/RANDOM)
- On/off function of backlight on LCD (dark-blue)
- Downloading MP3 & WMA files / playback with various modes.
- Simultaneous recording function: can receive and record radio broadcast (TIMER/REC): optional.

Names of Each Part/LCD Indicator



Use of Battery and Components in Package

- Slide open the battery cover.



- Put two LR 03 type batteries in accordance with (+) (-) diagram inside of the device, and slide the cover back on.

Battery: LR 03 or similar batteries of same kind (size "AAA" or UM-4)



- Check the battery life by pressing the PLAY/STOP button or REC button.



Battery Full



Battery partially consumed



Battery mostly consumed



Battery completely consumed

※ Caution

If LCD screen does not work even with new batteries, check polarity of batteries immediately.

In the case that LCD screen does not work in spite of appropriate setting of polarity, remove the batteries and ask for repair.

※ Note

If you leave batteries unused in the device for a long time, it would be wasted.

4. Lifetime of Battery

Battery in use	Recording	Playback through speaker (Level of Volume: Medium)	Playback through earphone (Level of Volume: Medium)
Alkaline Battery Size "AAA" LR-03	About 15 hr.	About 9 hr.	About 15 hr.

5. Suggestions when using batteries

- Do not mix and use different kinds of batteries at the same time.
- Remove batteries when you do not use the device for a long time.
- If you use charging battery, read the direction of a battery and/or a charger carefully before use.

6. Components of Package

STEREO EARPHONE, TELEPHONE ADAPTER, INSTALL CD, LINE-IN CABLE, USB CABLE, EXTERNAL MIC, BATTERY (2 AAA / LR-03type), NECK STRAP, AC ADAPTOR (OPTION), REMOTE CONTROLLER(OPTION)

Basic Directions for Use

● Power ON/OFF

Press Playback or REC button for 2seconds, device will power up and LCD screen will be displayed as shown below.

If no buttons are pressed within 1 minute, device will power off automatically to conserve power.

Power off manually: Press "RADIO/OFF" for 5 seconds.



※ We recommend that you to set up the time right after inserting the supplied batteries.

If you do not set time, you cannot access certain functions such as ALARM/PLAY, TIMER/REC and etc.

With only one setting, you can see time on screen by using the backup function (30 minutes) even if power is off. It needs to be reset when device is not in use for a long time.

(Go to No. 8 on User's Manual to see how to set up SET mode)

● How to Use HOLD Switch

If HOLD switch is placed upward, all buttons will be locked out except the DISPLAY switch.

Slide HOLD switch upward if you want to insure recording or when you want to lock all buttons.

Before use, check the HOLD switch and slide it downward, and then, turn on the power.



HOLD
OFF



HOLD ON
All buttons will be locked out.

How to Use Buttons

● VOICE FILE SECTION(A/B/C/D)

Key Action: — means short press, and ——— means long press(more than 1 second).

BUTTON	KEY ACTION	WHEN PLAYER IS NOT WORKING	WHEN PLAYER IS RECORDING	WHEN PLAYER IS PLAYING
▶/■	—	Start playing current index	Check the memory capacity	Stop playing index
	———	Start scanning and playing from current index	X	Stop playing index
▶▶	—	Forward to next index	Start recording on next index	Start playing next index
	———	Automatic conversion to search index	X	Current index search & consecutive search
◀◀	—	Conversion to previous index	X	Playing previous index in case less than 5 seconds, Playing the first part of playing index in case over 5 seconds
	———	Automatic conversion to search index	X	Playing from the beginning after searching current index contrarily and return to the beginning
●/■	—	Start recording after conversion to +index	Stop recording	Stop playing current index
	———	Start recording after conversion to +index	Stop recording	Stop playing current index
MENU		Set menu	X	X
VOL+		Turn up the volume	Turn up the volume in case of motoring	Turn up the volume
VOL-		Turn down the volume	Turn down the volume in case of motoring	Turn down the volume
REPEAT	—	X	X	Repetitive playback of current index
	———	X	X	A-B repeat & playback current index
ERASE	—	Erase index	X	X
	———(5sec)	Delete indexes of all files	X	X
FILE/SPEED		Change of sections-A/B/C/D/MP3/HD	X	FAST/NORMAL/SLOW
RADIO/OFF	—	Receive FM radio signals	X	X
	———(5sec)	Power OFF	X	X

Note) Instant recording function: For your convenience, after pressing REC button for 2 seconds, it turns on power and starts recording at the same time even when power is off.

● FM RADIO SECTION(RADIO KEY)

BUTTON	KEY ACTION	WHEN RECEIVING FM SIGNALS	WHEN RECORDING FM RADIO BROADCAST
▶/■	—	Start to create and set channels for each FM station	X
▶▶	—	Select channel memory(01~10) and frequency	X
◀◀	—	Select channel memory(01~10)and frequency	Increase +index
●/■	—	Start to record FM radio broadcast	Stop recording FM radio broadcast and start receiving FM signals
MENU	—	Set menu	X
	—	Change to FM memory channel mode and release	X
VOL+	—	Turn up the volume	Turn up the volume
VOL-	—	Turn down the volume	Turn down the volume
REPEAT	—	X	X
ERASE	—	X	X
FILE	—	X	X
RADIO	—	Stop receiving FM signals	X

Note) Earphone works as an antenna.
The longer, straighter the line of earphone is, the more clearer the quality of the sound will be.

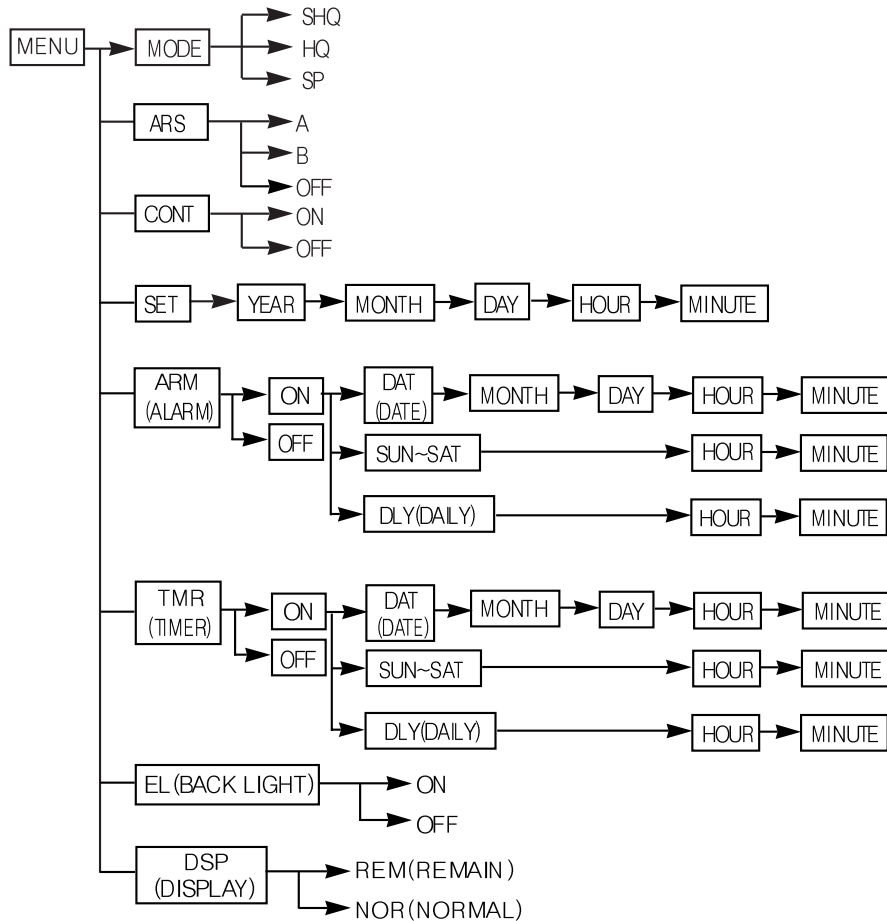
● MP3 FILE SECTION(MP3)

BUTTON	KEY ACTION	WHEN PLAYER IS NOT WORKING	WHEN PLAYER IS PLAYING
▶/■	—	Start playing current track	Stop playing track
	—	Start scanning/playing from current track	Stop playing track
▶▶	—	Conversion to next track	Start playing the next track
	—	Automatic conversion to search track	Current track search & consecutive track search
◀◀	—	Conversion to previous track	Playing previous track in case less than 5 seconds, Playing the first track in case over 5 seconds
	—	Automatic conversion to search track	Playing from the beginning after searching current track contrariwise and return to the beginning
●/■	—	Start recording +index after changing A FIEL	Stop playing current track
	—	Start recording +index after changing A FIEL	Stop playing current track
MENU	—	Set menu	Perform equalizer
VOL+	—	Turn up the volume	Turn up the volume
VOL-	—	Turn down the volume	Turn down the volume
REPEAT	—	X	Repetitive playback of current track(NOR/RND/ONE/ALL)
	—	X	A-B repeat & playback current track
ERASE	—	Delete current track	X
	—(5sec)	Delete tracks of MP3 files	X
FILE	—	Change of sections-A/B/C/D/MP3/HD	X
RADIO	—	Receive FM radio signals	X

Note) WMA files can only be applied to DDR-3000 SERIES MODELS

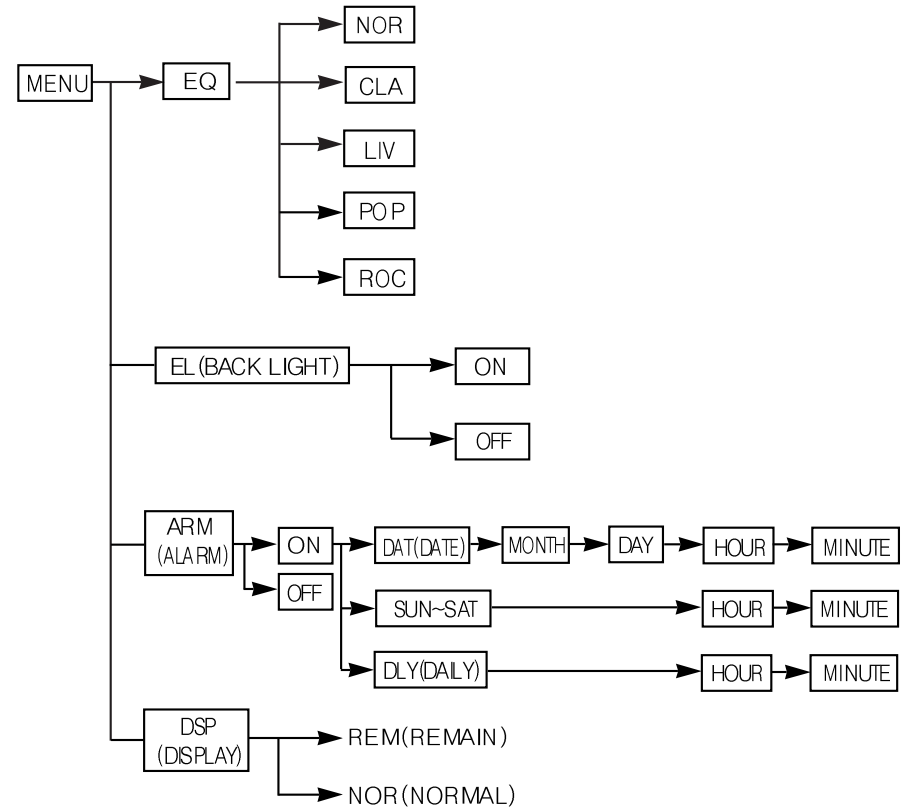
How to set Menu in VOICE/MP3/FM Part

1. Map of menu-Voice section



※ When pressing menu button, choose MODE. Then LCD screen displays the content of MODE. After you choose the part that you want by moving PLAYBACK button upward and/or downward, then press the button in to save it in the memory.

2. Map of Menu-MP3 Part



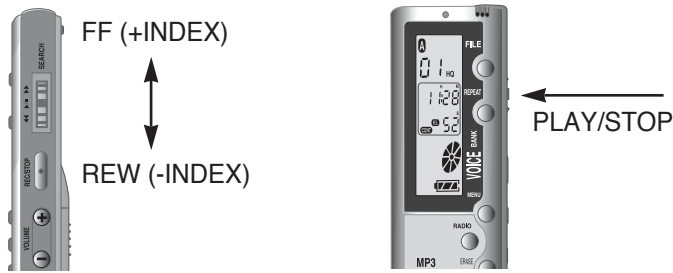
※ When pressing MENU button, choose EQ. Then LCD screen displays the contents of EQ. After you choose the section that you want by moving PLAYBACK button upward and/or downward, then press the button in to save it in memory.

Operation of Playback Dial

Move Playback dial upward and downward, (2) press button in
When setting menu, (1) move the button up and down (when it is moving up and down, playback dial does not work), and (2) press button in. Then the section of menu is set.

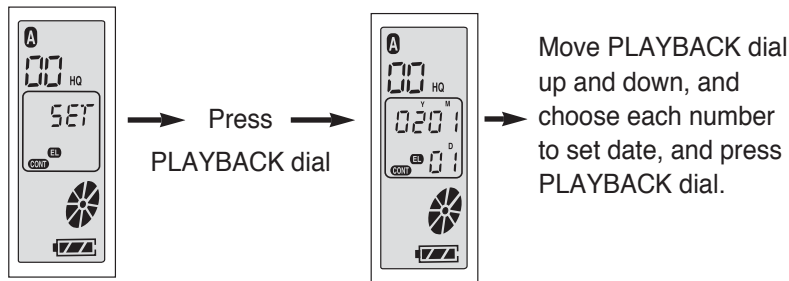
(1) Move the button up and down

(2) Press button in.



● Before you start recording, you need to set date and time first.

- ① Press MENU button. It will show you "MODE" sign.
- ② Move PLAYBACK dial up and/or down, and choose SET mode, then press PLAYBACK dial in. Number of year will flash. Choose each number of year and press PLAYBACK dial in. Repeat the procedure to set month, day and time.



SET DATE MODE

- ③ When you finish setting time and date, press MENU button, and go back to first stage.

How to Record and to Set Up Mode

● How to record

You can record up to 99 messages (files) in each of the four (A, B, C and D) folders.

- ① Press the file button to select the appropriate folder that you want to record to. (Choose one among A/B/C/D)
- ② Place the device or microphone to face the source of the sound, then press REC/STOP button for 1 second. As soon as the recording process begins, LCD screen will display the number, mark and time of recording, and red LED light will flash.
- ③ If you want to stop recording, press REC/STOP button again.

※ It is impossible to stop the recording within 5 seconds after you press REC/STOP button.

It does not stop even if you press STOP button.

※ When you press REC/STOP button, the content of recording will be saved as the last taken number so that you don't have to search for unrecorded parts as done with tape recorders.

※ Don't forget to change the batteries to new ones when you want to record for a long time.

※ Check the remaining battery icon before you start recording.

※ Caution

For successful recording, conduct mock recordings as a pretest.

If batteries are used up while recording, LCD screen will display "LO.BT(low battery)" sign, and power will be turned off automatically.

Then, change batteries.

● How to Set REC Mode

Press MENU button when player is not playing/recording, MODE will appear on LCD screen.

Move PLAYBACK dial up and/or down to choose the desired record mode (SHQ/HQ/SP), then press the dial in. Highest quality of recording can be achieved by setting the record mode to SHQ.

● How to Set ARS

Press MENU button and select ARS while player is in the stopped position, When ARS is ON, recoding will pause automatically when there is no sound present so that you can save and minimize recording time ("ARS PAUSE" will appear repetitively while it is in action). When ARS is set to A-mode, the record process is performed within the current index one after another. When ARS is set to, B-mode, the record process is performed with next index one after another. New recoding will start after each pause.

● How to Check Remaining Recording Time

In MENU, you can set the list of playback or recording in the order of playing time. The list of playing will appear in the order of amount of playback or remaining time during playback, and the list of recording will appear in the same order while recording.

● Recording Monitor Function

If you connect an earphone with a player, you can monitor the content or sound during the recording process. Adjusting volume of a player cannot control volume of recording.

● Separating Files While Recording

As for user's demand, files can be separated from each file.

By pressing FF/KEY, you can record in the next index continuously so that you can easily distinguish from one index after another.

※ Caution

- Do not take out batteries during the process. Details of recording can be erased or be worked irregularly. You must take out them after you check the device stops working completely.
- If there are no more available numbers to save details of recording, you cannot record any more. If available amount of time that you can use for recording is filled up, it says "FULL" and lets you know immediately.

Before recording, please check the available space, file or time that the player can offer, and erase unnecessary parts. (See No. 10 to learn how to erase recorded details)

- You cannot record as the route of MP3 or H/D. When the recording process once starts, the previous recording convert into A FILE of VOICE part, and then the process begins. (MP3 is only available for playback)

Various Methods for Playback

● How to Play Voice Part

- ① Choose the message that you want to listen.
- ② Choose one file among A, B, C and D, and select the file with FILE button.
- ③ By moving PLAYBACK dial up and down, select the number of the message.
- ④ It starts to play after pressing PLAYBACK dial.
- ⑤ Adjust the volume with DIGITAL VOLUME button.
- ⑥ Since it is super-mini speaker, you should be careful to listen to the messages in quiet places.
- ⑦ If you are interrupted by noise, use an earphone.
- ⑧ If you want to stop the player, press REC/STOP button.

※ If batteries are used up completely, LCD will let you know it with "BAT (low battery)", and power will be turned off automatically after warning. Then, change batteries and start the player again. At first stage, you can listen to every message in the recorder from the first to the last one by pressing PLAYBACK button. If you want to listen to just one of messages and stop, press MENU button when the player does not work. And then if MODE appears on screen, choose "OFF" by selecting "CONT" with PLAYBACK dial.

● Playback of MP3

- ① Convert to MP3 by using FILE button.
- ② If you do not have any downloaded songs through USB, "MP3" sign will be on your LCD screen.
- ③ MP3 music files can be played by PLAYBACK dial after downloading through USB.

● Backward and Forward Playback While Playing

You can check both next and previous messages by moving PLAYBACK dial upward and downward while it plays one message.

To keep pressing PLAYBACK dial can bring messages forward or backward fast. (SEARCH function)

● Search & Play

If you press PLAYBACK dial for 2 seconds, the recorder will play its every message for just 10 seconds orderly.

While the recorder is scan-playing, if you press PLAYBACK dial one more time, you can hear the message of the number you chose.

As for playback of MP3, its Search & Play function also works.

● Repetitive Playback of VOICE files

By pressing REPEAT button while playing, LCD screen will let you see "RPT", And that is going to make one message repeat forever unless you stop it by pressing REPEAT button one more time.

● Repetitive Playback of MP3 Files

If you press REPEAT button when the device plays, you can choose one of various kinds of repeat mode (NORMAL/1 TRACK/ALL TRACK/RANDOM).

NORMAL: Playback of all songs and stop

1 TRACK (RPT): repetitive playback of one song

ALL TRACK: Repetitive playback of all songs

RANDOM: Playback of all songs by random choice

● A↔B Repeat Playback

"A↔B" sign shows up when you press REPEAT button for more than 1 second whenever you want to repeat the playback.

If you press REPEAT button again, "A↔B" sign shows up, and the part that you choose starts playing repetitively.

By pressing REPEAT button again, it stops playing.

※ You cannot choose more than 2 messages subsequently with REPEAT playback.

※ MP3 files can be played by the way of A↔B repeat playback.

● Various Equalizer Function

If you play MP3 music files, Equalizer Function will help the player play different genres-NORMAL, ROCK, JAZZ, CLASSIC, POP and etc.

Select one of MP3 files and choose Equalizer function as your menu by moving the button back and forth.

Deleting and Controlling Data

※ Deleting messages is only possible when the player stops its work completely.

● Deleting Messages One by One

① Choose one message that you want to erase.

Select the message by moving FILE button and PLAYBACK dial.

② Push ERASE button for 1 second, and LCD will display "ERS". The recorder plays the message to make you sure.

While "ERASE" is flickering on LCD screen, the message is erased completely, Once message is deleted, numbers of messages on LCD are shifted for each message.

※ While "ERASE" sign is blinking, if you press other buttons, Delete function is cancelled.

※ Caution: You can never restore deleted messages.

● Deleting All Files and Messages

① Select the file that you want to delete.

② To press ERASE button and FILE button together for 1 second erases selected file and "FL.ER" sign.

All files are deleted by pressing ERASE button again.

● VOICE FILES/ ALL ERASE

① "AL.ER" sign appears by pushing ERASE button for 5 seconds.

If you push ERASE button again when "AL.ER" sign disappears, recorded messages on files are all deleted.

② ALL ERASE deletes not MP3, H/D files but A/B/C/D files among VOICE files

③ MP3 DELETE can erase not only a single music file but also all MP3 files, and H/D DELETE can be removed through USB.

※ Caution

If you used up all of memory of hard disk, it is impossible to save recorded or MP3 files. Please clear off useless files before use.

TIMER/REC & ALARM/PLAY Function

※ For TIMER/REC, SET mode and time need to be fixed.

- ① Press MENU buttons, "MODE" appears on LCD screen.
Set "TMR(Timer)" by moving and pushing PLAYBACK dial.
 - ② Delete "ON" by shifting PLAYBACK dial and set PLAYBACK dial.
 - ③ DAT(DATE) flickers.
 - ④ Each number for year (Y), month (M) and day (D) will flicker one by one by pressing PLAYBACK dial so that select numbers by moving the button. Press PLAYBACK dial and fix the number.
 - ⑤ "STRT(START)" sign will appear on LCD, and then specific time for TIMER/REC will flicker. Press PLAYBACK dial in the same way of 4.
 - ⑥ "END" sign is on LCD now, and end time for TIMER/REC will flicker. Then, do it in the same way of 5.
 - ⑦ Finally, if you press MENU button again, a small picture of watch ⌚ will be on LCD screen.
- In case that you want to record weekly (at same time)
 - ① Recall DATE of TIMER/REC on the LCD screen.
 - ② Move PLAYBACK dial upward and downward, and select day.
SUN...Sunday, MON...Monday, TUE...Tuesday, WED...Wednesday,
THU...Thursday, FRI...Friday, SAT...Saturday
 - ③ Set it up with the PLAYBACK dial.
 - ④ Set time of TIMER/REC.
 - In case that you want to record at the same time everyday
 - ① Recall TMR(TIMER) on LCD screen in order(1~2).
 - ② Move PLAYBACK dial upward and downward, and select DLY(DAILY).
 - ③ Set up the time you want to record with PLAYBACK dial.
 - ④ Set it up TIMER/REC.


- Cancel of TIMER/REC
 - ① Change "ON" to "OFF" in the second step of TIMER/REC (Cancel)
- Stop during TIMER/REC
 - ① Press REC button

※ Caution

- Only one item of TIMER/REC is possible -one for each VOICE files/FM radio
- Before you start TIMER/REC, check amount of possible time.
If time for recording takes longer than available time, TIMER/REC is impossible.
However, if you set the schedule every week or everyday for TIMER/REC, it is possible to set TIMER/REC mode even though recording time is shorter than available amount of time for recording.
- If selected files are filled with 99 recorded messages already, and memory is full, TIMER/REC cannot operate its function appropriately.
- TIMER/REC should be set for less than 24 hours.
- If the start time of recording is before 23: 59, and the ending time is later than 00: 00, the ending time is set as the next day.
- If TIMER/REC starts its process while ALARM/PLAY function is working, press the stop button and start TIMER/REC function again.
- If TIMER/REC starts to record a message while other function is on except recording, press stop button and start TIMER/REC function again.
If TIMER/REC function starts its work when the player is already recording something else, recording process keeps working, and TIMER/REC function stops.

● How to Set ALARM/PLAY Function

ALARM/PLAY is the function which automatically starts the message that you selected before.

- ① Bring the message that you want to play with ALARM/PLAY function on LCD screen.(See No. 1 of How to Play to know specifically)
- ② By moving PLAYBACK dial up and down, bring "ARM(ALARM)" sign on screen and set the function. (By moving MENU button, "MODE" sign will show up)
- ③ When "On" and "OFF" signs flicker together on screen, choose "ON" and set up "ON".
- ④ Then, "DAT(DATE)" sign shows up.
- ⑤ When "Y(year)", "M(month)", "D(date)" appear on screen in order, select numbers and press PLAYBACK dial.
- ⑥ Do it in same way to set time when "TIME" sign appear on screen.
- ⑦ By pressing MENU button, alarm sign,  " will be in sight on LCD screen.
- ⑧ Play the selected message when time has come.

When the player stops playing, it stops its whole function automatically and go back to the beginning part of the message.

★ If you want to listen to the message again, press PLAYBACK dial.

● If you want to play the same message at the same time once in every week

- ① Follow the same steps and procedures of 1~3 on setting ALARM/PLAY function, and set ARM(ARAM) up "ON".
- ② By moving PLAYBACK dial up and down, select days of the week. SUN...Sunday, MON...Monday, TUE...Tuesday, WED...Wednesday, THU...Thursday, FRI...Friday, SAT...Saturday
- ③ Set days of the week you want with PLAYBACK dial.
- ④ Set up ALARM/PLAY time in the same way with the step 7~8 of setting ALARM/PLAY function.

● If you want to play messages at the same time everyday

- ① Set ARM(ARAM) up "ON" in the same way with step 1~3 of setting ALARM/PLAY function.
- ② By moving PLAYBACK dial up and down, select "DLY(DAILY)" and set up
- ③ Set up the time you want to record with PLAYBACK dial.
- ④ Set up ALARM/PLAY time in the same way with the step 7~8 of setting ALARM/PLAY function.

● When You Want to Cancel ALARM/PLAY function

- ① If you want to cancel, select "OFF" in the third procedure of setting ALARM/PLAY function.
- ② If you want to make changes, follow the procedure for setting ALARM/PLAY function.

※ Caution

- If ALARM/PLAY and TIMER/REC function are set to start at the same time, LCD screen displays "RESET", and ALARM/PLAY function will not operate correctly.
- If requested time of ALARM/PLAY plays during the normal recording process, ALARM/PLAY function will start to work after all the normal recording process is completed.
- When requested time of ALARM/PLAY functions plays while the player is in the MENU mode, MENU mode disappears, and ALARM/PLAY starts the process.
- If you delete the selected ALARM/PLAY message, the alarm function becomes disabled.
- If requested time has come while you are deleting the message, the message will be played while the deleting process stops.
- If you set up the schedule to play once every day or every week, the order is not cancelled even after you stop ALARM/PLAY function.

How to Connect with External Appliances

● How to Connect with External Microphone

- Put the plug of a microphone into the external microphone terminal of the player.

※ When the external mike is connected with the microphone terminal of the player, internal microphone does not work.

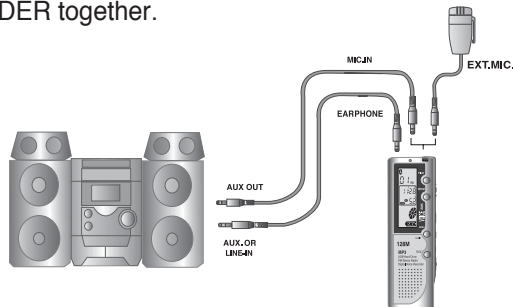
● Connection with external appliances

The message that you recorded with DDR-3000 SERIES through audio cable and telephone adaptor(for either portable or domestic use) can also be recorded with other external appliances such as cassette players or MD. And recording of the messages of wireless or domestic telephones is possible through this player.

● How to Connect with Record Players

① When you want to record in VOICE RECORDER through external appliances: Connect audio cable with the earphone terminal of stereo components and with the microphone terminal of VOICE RECORDER together.

② When you want to record in external appliances through VOICE RECORDER: Connect audio cable with the microphone terminal of external appliances and with the earphone terminal of VOICE RECORDER together.



How to Connect with Stereo Components

※ Caution

★ When you connect to external appliances, turn off the power and start the connection process.

★ When you connect to external appliances, read through the its manual and understand it fully before you start to use and operate them.

● Recording from external appliances

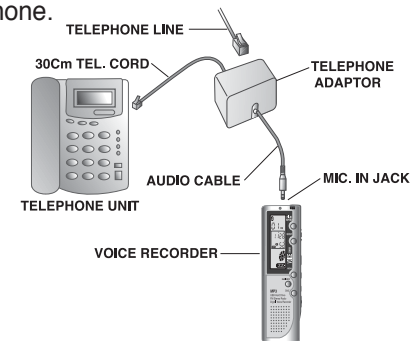
When you record certain messages from external appliances, turn down the volume of the appliance, and then connect audio cable with it and start to record. When recording, set up the volume of the appliance to the medium level, and try not to change it during the recording process.

● When you record through external appliances

Start operating external appliances with VOICE RECORDER. (Starting time of players is all different from each other. Check and understand working and operation of appliances.

● How to Record the Conversation over Telephone

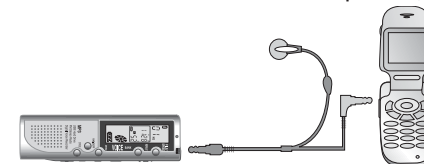
Connect audio cable to the microphone connector of VOICE RECORDER and to the distributor of a component equipment. Connect telephone cable of component equipment to the distributor. Attach a cord, which connects the receiver and telephone, to the distributor. Connect one side of telephone wire to main body of telephone. If you press REC button of VOICE RECORDER, you can record conversation over the telephone.



How to connect the supplied telephone adaptor

● How to Record Conversation over Cellular Phone

Connect the cord of cellular phone to the microphone connector of VOICE RECORDER and to the earphone jack of cellular phone. By the earphone connected with wire of cellular phone, the conversation is recorded.



How to connect the cellular phone adaptor

FM Signal-Receiving Function

- ※ Note: This function is available only for the models that have the radio function. If you want clearer sound when you listen to the FM radio, use the supplied earphones which will act as an antenna.
- ※ AUTO SEEK is convenient function when you listen to the radio. If you press and hold the FF or REW button for 2 seconds, it will stop automatically on the radio stations that the player can receive signals to. Sometimes AUTO SEEK functions cannot TUNE to the stations accurately. In this case, control minutely with the REW or FF button.
- How to Set Radio Channels(Stations)
 - ① Select Radio Mode by pressing RADIO button.
 - ② LCD will display waves. Select the station that you want to listen to by using the FF/REW button.
- How to Save Radio Stations
 - ① Press RADIO button, and select RADIO mode.
 - ② LCD will display waves. Select the station that you want to listen to by using the FF/REW button.
 - ③ If you press PLAY button, "01" sign will flash on the screen where "FM" sign appeared. Then, choose the channel that you want to save to (1~10) by using the FF/REW button, and press PLAY button. "FM" sign shows up as the channel is saved. In the same way, you can save up to 10 channels.
- ※ Confirming saved channels
If you press MENU button for 1 second, saved channels and signals will show up. Then, confirm savings with FF/REW buttons. Again, press MENU button for 1 second and choose signals and stations that you want to save.
- How to Record Radio Broadcast
 - ① Select the radio station that you want to record following the step 1~2 of "How to Save Radio Stations".
 - ② Press REC button and start recording. In this case, the recorded message is saved in the index and VOICE files. If you stop playing MP3 and choose radio mode, the message is recorded in A file of new index.
 - ③ You cannot check the condition of message while recording. After stop recording, you can see the condition in VOICE part.
- ※ If you want to check the condition of recorded message, see 11. of "How to Play in VOICE mode"

DDR-3000 Series Software & Mail Manager

DVR-Explorer is a managing program for DDR-3000 SERIES which transfer or plays MP3 files from computer to DDR-3000 SERIES, it manages recorded voice or FM radio file (DVF) from DDR-3000 SERIES and has following features.

- Transferring(upload/download) file to/from the DDR-3000 Series - MP3,DVF and normal data files
- Similar structure as Window Explorer(r) for file managing
- Plays MP3, MP2, WAV, Audio CD, playlist
- DVF/WAV two way convert
- Convenient transfer of file using transfer list
- Various spectrum, equalizer, effect support
- CDDB feature
- Convenient instruction manual

Minimum System Requirement for the DDR-3000 Series software:

- Pentium 200MHz
- 64MB Memory
- 20MB Empty Hard Disk Space
- 256bit Color
- Window 98/ME/2000/XP(NT Not Supported)
- USB Port
- CD-ROM Drive
- Sound Card, Speaker or Headphone(option)

Connecting DDR-3000 SERIES and setting up DV R-Explorer

- (1) Insert the DDR-3000 Series setup CD into the CD-ROM drive and it will start automatically. If Auto-run doesn't work execute setup file "CD-ROM:\setup.exe" or "CD-ROM:\Voice Bank\setup.exe". Setup will progress automatically. Once setup is completed software icon will be installed in the START Menu.
- (2) Using the supplied USB Cable connect the USB port terminal on the DDR-3000 Series to USB port on the Computer (PC ONLY). Then, "New Hardware detected" will execute and end automatically. Restart System to complete the software setup.
- (3) Connect DDR-3000 SERIES to the PC using the USB cable. 'New Hardware Detected' will run automatically, then click on 'NEXT' button.



- (4) Select 'Search suitable drive for device' and click on 'NEXT' button.



- (5) Select CD ROM drive and click on 'NEXT' button.



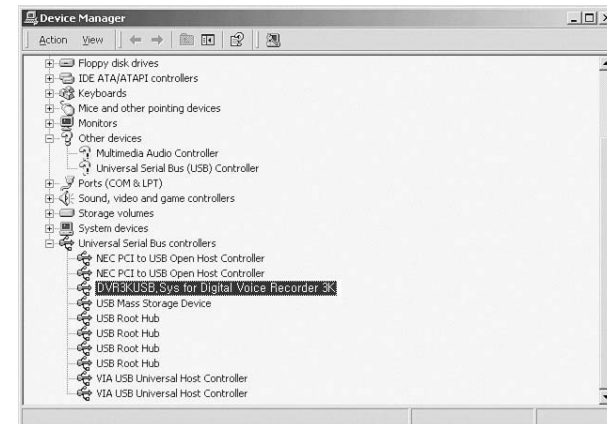
- (6) Searched USB driver file and click on 'NEXT' button.



- (7) Click on 'NEXT' button to finish wizard.



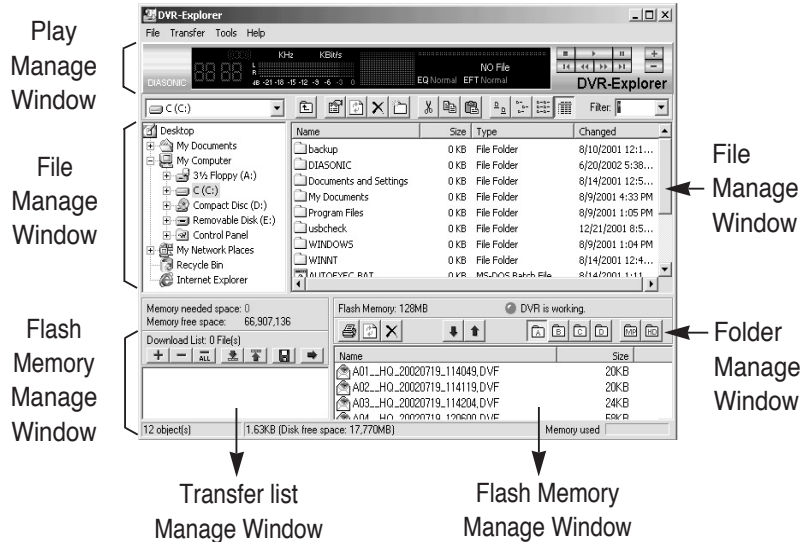
- (8) Once USB drive setup is completed, check for setup progress from device manager at My Computer.



※ If DDR-3000 SERIES is not after software is opened. Check for USB device on PC, and for proper connection of Cable.

Composition of software

Figure of Software



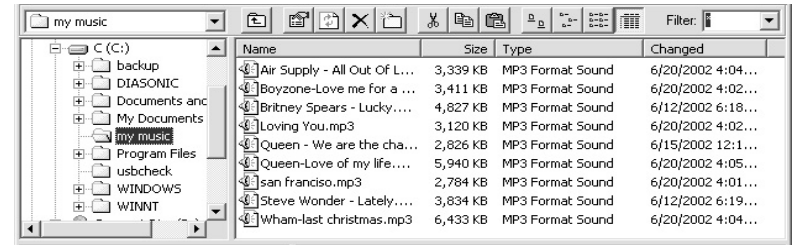
(1) Playing MP3, WAV, CD and DVF



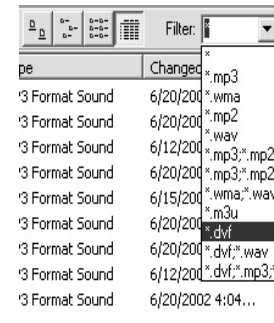
Double click on MP3, WAV, Audio CD Track and DVF file on file control window or use drag and drop to playlist for instant play. Also, you can select file then press play. Through LCD window progress of music and title scrolls right to left, and you can see two kind of magnificence spectrum window.

Play and stop files through control panel on the right side of the screen. Adjust volume by using +, - button. Click on red position bar to move the position of current playing music.

(2) Managing DVF file and MP3 file



File managing using the software is very similar to Window Explorer(r). Left part of the window shows the hard disk (Computer Info) and CD-ROM drive installed in system with its inside folders. Right part of the window shows various files inside folders.

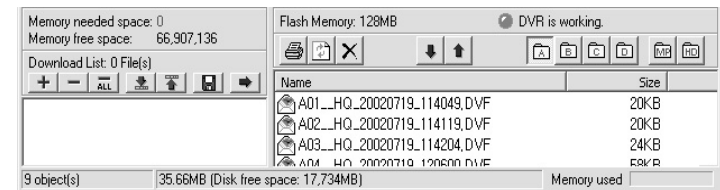


Default setting is set to show all types of files on the screen, but you can select DVF files or other various files by using filter function on the upper right corner

Also, transferring and copying of the files can be used in the same way as explorer.






Using this file managing function separating and keeping DVF files in other folders are possible.

(3) Flash Memory Managing of DDR-3000 SERIES



Bottom section of the Software is the area which manages the flash memory installed in the DDR-3000 Series and also includes the Transfer List. When the DDR-3000 Series is properly connected it will display a red light with a phrase stating 'Voice Bank is Working' just like the picture at the top. The MP3 files (files) which the user sends to the flash memory on the DDR-3000 Series will appear on bottom right window and file size and remaining space of the memory will be marked on the Memory used screen.




(4) Buttons

Button	Function	Particular information
	print	Prints file list in flash memory.
	reload	Re-reads the information on flash screen.
	delete	Choose the file stored in flash memory, then press this button to delete the file.
	Transfer to flash memory	Choose the files to be move to flash memory for file manage window, then click this button to transfer (download) selected file to flash memory.
	Transfer to computer	It is used to move file to computer from flash memory.

※ Can't upload MP3 files.

Just like managing folders in the computer, the memory on the DDR-3000 Series is divided into 6 albums and can be played by each album.

Album select buttons.

Button	Function	Particular information
	Select voice folder	Used only in voice record mode Save/create DVF files
	Select MP3 folder	Used in MP3 mode
	Select HD folder	Used in HD mode(portable HD)

Spectrum screen and sound effect

DDR-3000 Software displays multiple spectrum screens. Default setting is same as the picture at the bottom, but screen can be change in various ways by clicking on the left mouse button.



DDR-3000 series software 1



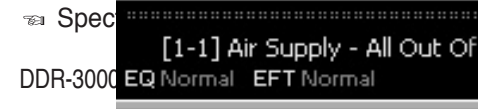
This screen can be changed by users taste. Following



DDR-3000 series software 2



Spectrum screen of



Spectrum screen of



DDR-3000

Spectrum screen of


DDR-3000 series software 5

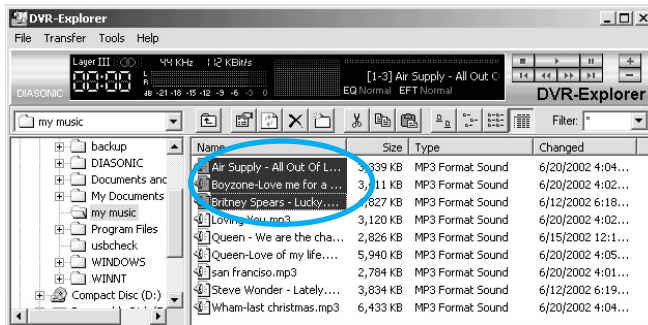
Various Equalizer and Sound Effects can be use to listen to the music/voice file.


Transferring MP3

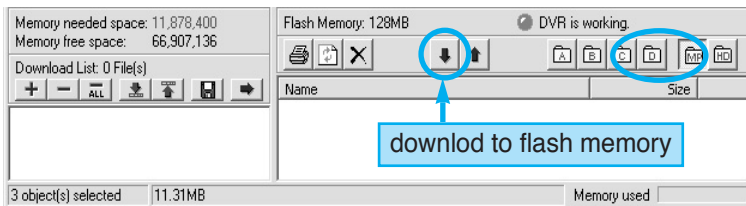
It's very simple to transfer MP3 file to DDR-3000 SERIES. Mentioned up at top, select MP3 files from file manage window and choose  on folder manage window. Then, drag and drop files to flash memory manage window. Also, click on  icon from flash memory managing section for same reaction.

Transferring MP3file as following.

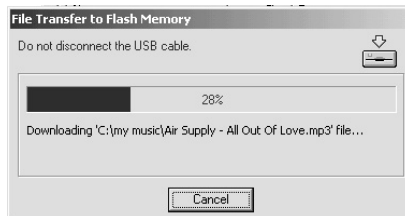
- ① Select  from folder manage window, Select MP3 file from file manage window.




- ② Click 'download to flash memory' .




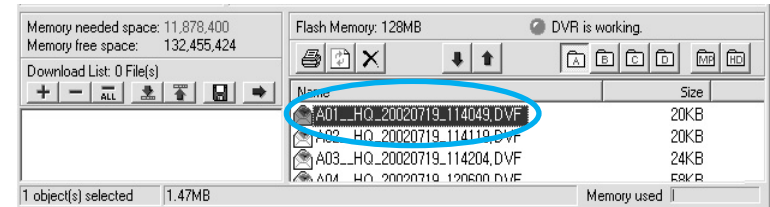
- ③ Selected MP3files are being download to flash memory of DDR-3000 SERIES.




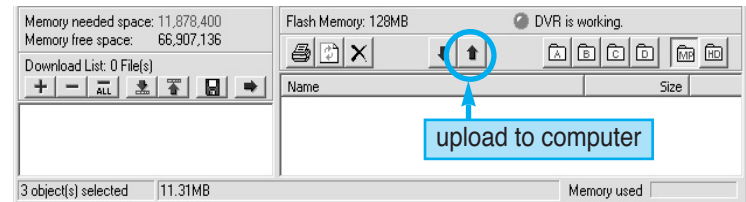
Sending DVF files to computer

● The way to transfer DVF file to DDR-3000 Series is: choose from Album Managing section then left mouse click on the file you want transferred, select  icon. Procedure is same as transferring MP3 file to the DDR-3000 Series.Receiving DVF files to computer.

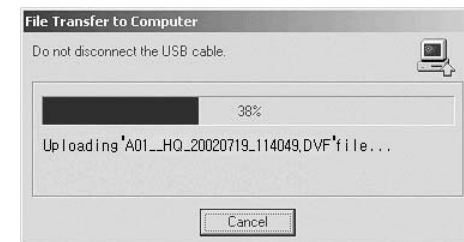
- ① Choose  from folder managing section, and click DVF files that you will transfer to the computer from flash memory managing section.








- ② Click 'upload to computer' .



- ③ Selected DVF file being transfer to computer will displays as follows.

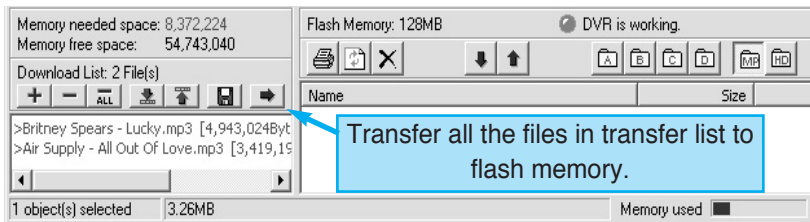


- The way to transfer DVF file to DDR-3000 Series is choose     from Album Managing section then left mouse click on the file you want transferred, select  icon. Procedure is same as transferring MP3 file to the DDR-3000 Series.

Through steps 5). 6), you can easily transfer DVF or MP3 files in the flash memory. Once the transfer is over, status bar displays the size of the transferred file and use of memory.


+To transfer multiple file at once use "+" button or drag and drop to place files in transfer list. It's convenient when sending files from different folders to the DDR-3000 Series.

Transferring files from transfer list is shown below.




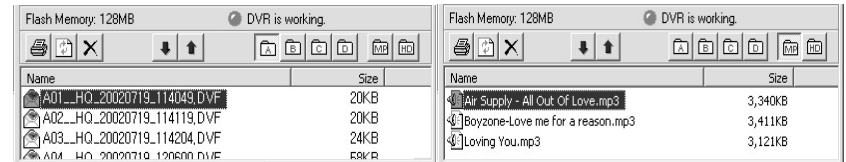
Transfer all the files in transfer list to flash memory.

Deleting MP3 and DVF files

Deleting MP3 or DVF files stored in flash memory in the DDR-3000 Series is same as deleting files in Windows Explorer(r). Select one of the stored file from the flash memory by clicking on the left mouse button, then press 'delete'  button from tool bar in Flash Memory Managing section.

Through following steps, you can delete MP3 and DVF files from flash memory.

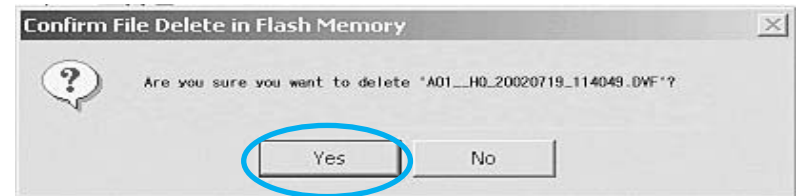
- ① Select file to be deleted, then from click on 'delete'  button from the tool bar.



DVF file

MP3 file

- ② Confirming deletion of file. Choose yes to delete file.



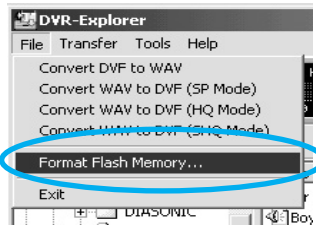
- ③ Now file will be deleted from the flash memory in the DDR-3000 Series.

※ From flash memory managing display, pop-up menu will appear by clicking right button of the mouse. Deleting and transferring is possible from this menu.

Resetting flash memory

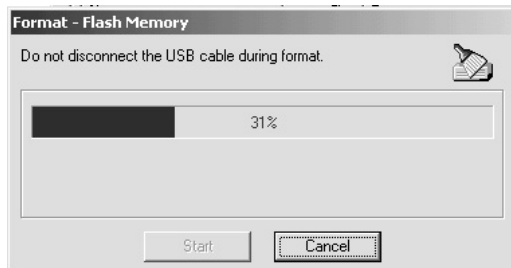
Just like formatting a hard disk on a computer, the flash memory used in the DDR-3000 Series can be reset (formatted). All the data in the flash memory will be lost when formatting.

- ① Select "File" from the main tool bar, then select 'Format Flash Memory' to format the flash memory.



※ From flash memory managing window click on the right button of the mouse for pop-up menu. Flash memory can be deleted from this menu.

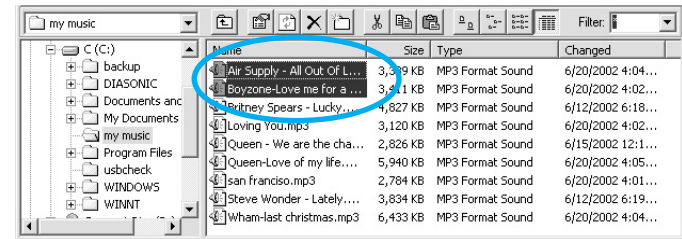
- ② When format window appears press 'start' to start formatting.



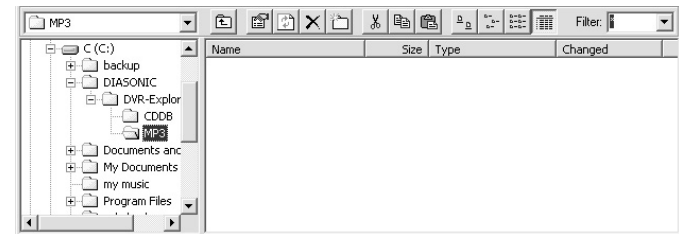
Managing files using the S software

It's easy to manage MP3 and DVF files using the DDR-3000 Series Software. Make a new folder in the location you want (this can be done by right mouse clicking on the New Folder icon), copy and save frequently used MP3 and/or DVF files. And, useless MP3 and DVF files can be easily deleted by using delete button.

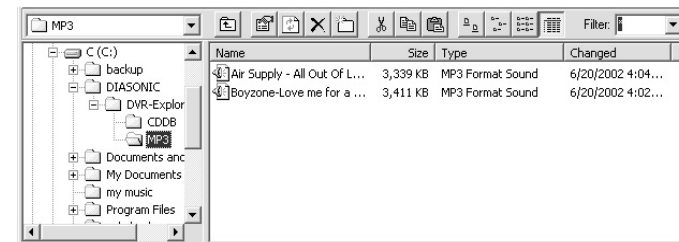
- ① Select file, then click 'copy' from tool menu.



- ② Locate New folder/folder you want to copy files to, then use 'paste' from tool menu.



- ③ Files are copied and saved at designated folder.



Mail Manager

Special Features

- Play/Record DVF file
- Voice mail function: auto appending at mail program
- Creates self play function : voice file+player
- Edit DVF file : delete/insert beginning, ending, and/or middle of recording
- 16various voice effect



Mail Manager is a program that plays self created voice files (DVF files) from the DDR-3000 Series. It can send voice mail or record and store conference meeting and lectures (recording).

Mail Manager allows sending and receiving of voice mail through e-mail or network without typing or writing letters. To send voice mail using Mail Manager use a DVF file recorded from the DDR-3000 Series, or simply press record and send recorded voice file without any difficulties, and if recorded DVF file from mail manager is sent to the DDR-3000 Series, it can be played through the DDR-3000 Series.

Mail Manager supports mail programs like (Exchange, Internet mail, Outlook, Outlook Express, and Netscape)((r)), by using drag and drop/cut and past sending voice mail through other mail program and network program is possible. Mail Manager can create small sized files that combine voice data and player in a executable (.exe) file format, voice mail can be sent and heard even when receiver does not have the Mail Manager software. Changing the original voice through the use of the various Voice Effects like reverb, echo, robot voice, helium voice makes interesting/fun voice mails.

1) Voice Recorder

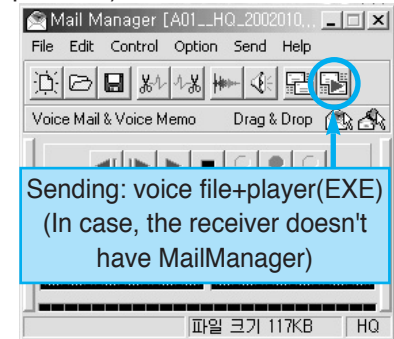
Has Voice mail, Voice memo function, record and play of compressed feature of high sound quality DVF file.

- Play
- Pause/Stop
- Record (Half way insertion record possible)
- Move forward
- Move Backward

2) Convenient use method

Auto-append of voice mail to mail program.

- Press 'record'button
- Say the message
- Press 'Stop' button
- Finally press 'send' button and mail window with voice mail attached will appear.



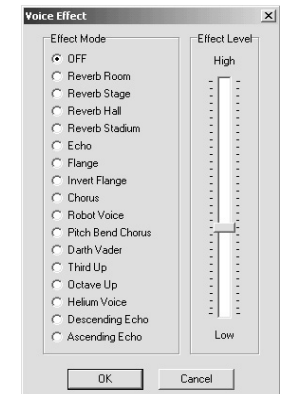
Proper volume level is required for record and play. Adjust wave volume from [control volume] of window to set play volume, and adjust [option]→[properties]→[record] from volume adjust window select [microphone] for microphone record volume.

3) Production of self play function

- Creates a small executable file combined with voice file and player.
- If self player formed mail is sent receiver can listen to it even without mail manager.
- From 'save as' save in 'voice mail+player' from and it will create self player with executable file(.exe)

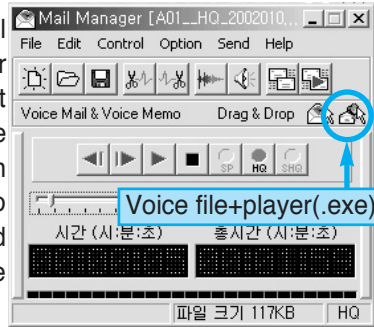
4) 16Digital voice effect

Change recorded voice to various voices.



5) Drag and Drop

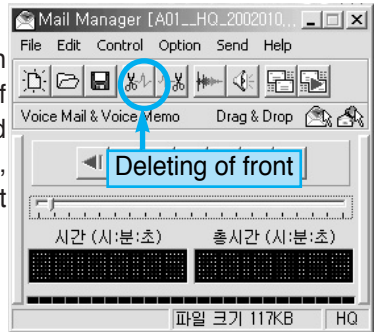
If use drag and drop function of mail manager attaching voice mail to other mail program or network emulator not supported by mail manager will be possible. Press left button of mouse on drag and drop To add voice mail to other program. Now, Use two drag and drop icon, choose between voice file+player.



6) Simple edit function

Deleting of front By simple edit function deleting of front and rear part of recorded messages are possible, and after recording if mis-record is found, delete the error and just record that part again.

- delete front part of current position
- delete rear part of current position



7) Supported mail program

- Exchange
- Internet mail
- Outlook
- Outlook express
- Netscape(manual attack of voice mail)



8) Shorten Keys

Support of shorten keys, control of mail manager is possible while using other program.

- F2 : Play
- F3 : Rewind
- F4 : Fast Forward
- F5 : (Pause/Stop)

GENERAL SPECIFICATIONS (DDR-3000/R)

MODEL		DDR-3032/ 3032R	DDR-3064/ 3064R	DDR-3128/ 3128R	DDR-3256/ 3256R
VOICE RECORD	Recording time	SHQ: 136min HQ : 272min SP : 544min	SHQ: 272min HQ : 544min SP :1088min	SHQ:544min HQ:1088min SP :2176min	SHQ:1088min HQ :2176min SP :4352min
	Recording mode	SHQ(14.8Kbps) / HQ(8Kbps) / SP(6.4Kbps)			
	File	A/B/C/D Total 396 messages with 4 separate files(99 messages in each file)			
	Auto recording	Automatic Recording System(A-Saving in one index after another, B-Saving in next index)			
	cording FM radio	World Standard FM /Japanese FM			
	Wireless mike	76.8or77.6MHz / 88or88.8MHz			
	External mike	Combination of wire and microphone			
	Recording medium	Hidden Flash Memory			
	Signal vs noise rate	60db (62db input 1KHz , speaker output 50mW : 32Kbps)			
	Distortion	1.5% ±0.2 (62db input 1KHz , speaker output 50mW : 32Kbps)			
Frequency respond	300Hz~4.0KHz(-6db)				
Output	Maximum 80mW (Speaker8ohm)				
Repeat	Repeat one message & A-B repeat function				
Continuous play	Playback of one or every message in files				
Search play	Playback of every message for 10 seconds				
search	Search for convenient and easy files or messages				
FM radio (stereo/ option)	Signal vs noise rate	60db at 1mv 98.1MHz			
	Distortion	0.8%(max) at 1mv 98.1MHz ?f=22.5KHz			
	Frequency respond	350Hz ±30Hz,3KHz ±0.25KHz(100Hz~10KHz,60dbuV)			
	Output	Max 80mW(speaker 8ohm)			
Frequency range	World Standards: 87.5 ~ 108MHz Japanese Standards: 76 ~ 90MHz				
MP3	Bit rate	32Kbps~320Kbps(MPEG 1/2 LAYER 3)			
	Signal vs noise rate	85db up (1KHz input 0db)			
	Distortion	0.3% ±0.05 (1KHz input 0db)			
	Frequency respond	20Hz~20KHz			
	earphone	Maximum5mW (16ohm)			
Play mode	EQ: NORMAL, ROCK, POP, CLASSIC, LIVE				
Search play	Playback of each track for 10 seconds				

MP3	Search	Easy to find convenient and easy tracks
	Repeat	Playback of one track or all tracks & optional playback
PC interface	Network	USB 1.1
	System requirement	Hard disk space of more than CPU 200MHz, RAM 64Mb and 20MB
	OS	windows98 , windows2000 , windows ME , windows XP
	Sound card	Sound Bluster 16
In/out put division	Display	More than 640X480
	External mike	φ 3.5 plug-in power microphone(mini plug/stereo) IMP less than 3KΩ
	Earphone	φ 3.5 earphone(mini plug/stereo) IMP less than 16Ω
	DC JACK	HOLE : φ 2.75, Dia : φ 0.65
Speaker	USB	Mini jack (PC : A TYPE)
	Diameter	φ 23(IMP 8 Ω)
	Output	80mw(Maximum Sound)
Volume		Digital Sound(30 Levels)
EL/ BACK LIGHT		BLUE
Hard disk storage		32M/64M/128M/256M
Memory		Nand Flash Memory(32M/64M/128M)
LED		Sign of Recording LED(Red)
LCD (TN)	File	A/B/C/D/MP3/HD
	Message	01~99 voice Indexes and 01~99 MP3 Tracks
	Mode	SHQ/HQ/SP
	Equalizer	NOR ,ROC ,POP ,CLA, LIV. Etc. (5 kinds of equalizer)
	remain/count	0h00m00s
Repeat		A-B REPEAT / ONE REPEAT / NORMAL REPEAT / ALL REPEAT
Adopter		DC3V/200mA(CE,CUL,T,FCC)
Function key		FF, PLAY, REW, MENU, FILE, REC/STOP, RADIO, ERASE, VOLUME, REPEAT, HOLD
Power		DC 3V , LR03 , Alkaline Battery x2EA('AAA' size or UM-4)
Battery period	Play MP3	About 15 hrs. with medium level of volume through earphones
	Play VOICE	About 15 hrs. with medium level of volume through earphones
	Play VOICE	About 9 hrs. with medium level of volume through speaker
	Receiving radio	About 12 hrs. with medium level of volume through earphones
	Receiving radio	About 8 hrs. with medium level of volume through speaker
Accessories		Connecting cable with external appliances (1)/ Installation CD (1)/Adaptor to record the telephone conversation (1)/Stereo Earphone (1)/External microphone (1)/Batteries (2)/USB cable (1)/Manual (1)/Neck strap(1)
Remote controller size		Remote Control (Function/PLAY/FF/REW/REC) 99.8×31×14.1

Inquiry of A/S

When damage to device occurs, stop the use of the product and request for after service from our customer support staff at DIASONIC TECHNOLOGY CO. LTD.

Phone : 82-31-474-0852

Warranty Card(provisions)

We offer free repair service for products that malfunction under normal use, up to 1 year from the original purchase date.

If breakdown occurs during warranty period mail product and the warranty card.

Warranty will be invalid if purchased date, purchase price and place of purchase are missing from the receipt.

Please check and if the information is not written on the product refer to customer service at DIASONIC TECHNOLOGY CO. LTD.

This warranty will not be reissued, so keep it safely.

<Free repair regulation>

- Our product has gone through strict quality control and inspection
 - If breakdown occurs from normal condition during warranty period, you may receive free repair from our customer service department.
- Even during warranty period, following situation will not grant free repair service.
 - If you do not have a warranty card
 - If purchased year, month, day, name of customer and sales market are not written on the warranty card. Or if written information is modified.
 - Breakdown or damage by mishandling of user
 - Breakdown or damage by users own repair or modification.

- 5) Breakdown or damage caused by fire, pollution, and any natural disaster.
- 6) Breakdown or damage caused by leakage from battery.
- 7) When accessories(battery) need replacement.

<Request when mailing>

Please beware of following when mailing.

- 1. Contact our customer service department to receive a RMA # before mailing in the product.
- 2. Please enclose warranty card with the product when mailing during warranty period.
Please wrap in shock absorb material and put in box, mailing fee, wrapping fee, and any damage caused during mailing will be charge to a customer.
- 3. To prevent loss, please use registered mail.

MEMO

A large rectangular area with rounded corners, containing horizontal dotted lines for writing.

MEMO

A large rectangular area with rounded corners, containing 20 horizontal dotted lines for writing.

MEMO

A large rectangular area with rounded corners, containing 20 horizontal dotted lines for writing.

WARRANTY CARD

Product Category: Digital Voice Recorder

Model: DDR-3000 SERIES

The Term of Guarantee: 1 Year

Date of Purchase: . . .

PURCHASER	Name	
	Address	
	Telephone	
SELLER	Name	
	Address	
	Telephone	

- Please refer to our customer service department for any information or breakdown on the product.
- Exchange, repair(charge. free), refund and parts keeping period is depended on regulation of customer protection
- Any questions or if you want to know more information about the product please contact DIASONIC TECHNOLOGY CO. LTD.

DIASONIC TECHNOLOGY CO. LTD.

- #321-43, Suksu-Dong, Manan-Gu, Anyang-City, Gyeonggi-Do, Korea
 - Telephone No.
 - Representative No. : +82-31-474-0852~5
 - FAX No. : +82-31-474-0856
- Homepage : <http://www.diasonic.com>**