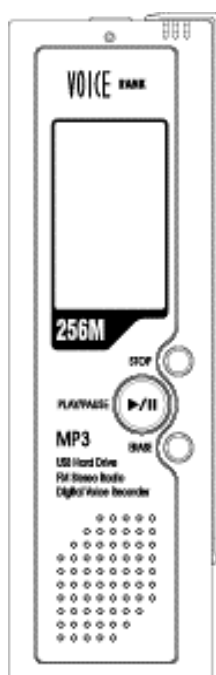




DIGITAL VOICE RECORDER

MODEL : DDR-5100

User Guide manual



Thank you for purchasing PORTABLE DIGITAL AUDIO PLAYER from DIASONIC TECHNOLOGY Co. Please carefully read the Instruction manual for safe use of the product. We recommend that you to keep this instruction manual for future reference.

INFORMATION TO THE USER

WARNING

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

This device complies with Part 15 of the FCC Results. Operation is subject to the following two conditions:

- (1) This Device may not cause harmful interface, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Preface

Thank you for purchasing Diasonic MP3 Player.

Please read this instruction manual carefully before use.

If you find any defect during the use of this unit, please contact A/S Center [Tel 031-474-0852; Head Office].

Precautions:

- Do not repair, disassemble or modify the unit at your own discretion.
- The memory content may be changed or lost due to misuse, static electricity or electric shock during the repair or battery change. **Be sure to make a note of important content.**
- Diasonic assumes no responsibility for any damage caused by change or loss of memory content.
- Do not drop the unit in the water or keep it in any damp environment.
- This instruction manual is subject to change without notice for the purpose of product improvement.

Copyright

- The MP3 files created for MP3 conversion shall not be used for any commercial or public purposes. Any violation of the prohibition may be a breach of copyright laws.
- Any unauthorized reproduction of recorded files for any other purposes than personal use is strictly prohibited by the relevant laws and regulations.

Note

This instruction manual is required for the effective use of Diasonic MP3 Player. Pay special attention not to lose the manual as it is not provided separately from the unit.

Safety Precautions

Warning

- Keep the batteries out of reach of the children. If a child swallowed a battery, please consult a doctor immediately.
- Do not have the battery shorted, disassembled, heated or put in fire. This may cause leakage, heat, explosion or fire.
- If the battery leakage gets in your eyes, wash it off with clean water, and seek immediate medical treatment. If not, you may lose your sight.
- If the LCD is damaged, do not touch the liquid. If the liquid contacts your eyes or skin, wash it off with clean water, and seek immediate medical treatment.
- If you use the rechargeable batteries, read the user's manuals for batteries and chargers carefully before use.
- Read this instruction manual carefully before use.

Using earphones

Road safety

- Do not use earphones while driving, cycling or operating any motorized vehicle. It may cause a traffic hazard and is illegal in some areas. It can also be dangerous to play your earphones at high volume while walking, especially at pedestrian crossings.

Preventing hearing damage

- Avoid using earphones at high volume.
Hearing experts advise against continuous, loud and extended play.
- If you experience a ringing in your ears, reduce the volume or discontinue use.

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Functions and Features

■ DIGITAL VOICE RECORDER

- UP TO 16,960 MIN RECORDING TIME(SP MODE AND 1GB)
- 8FOLDERS TO ORGANIZE FILES
- STORE UP TO 128 FILES FOR EACH FOLDER
- CONTINUE FOLDER FUNCTION: AUTOMATICALLY MOVE TO NEXT FOLDER IF INDEX IS FULL.
- VARIABLE RECORDING MODE (SHQ/HQ/SP IN MP3 FORMAT AND USER MODE IN MPEG1 LAYER3)
- MIC SENSITIVITY ADJUSTABLE IN RECORDING.
- PLAY BACK OPTION IN SLOW/STANDARD/FAST WITHOUT SOUND DISTORTION.(SPEED CONTROL IS NOT AVAILABLE FOR WMA, VBR FORMAT FILE.)
- RECORDING INDICATOR WITH RED LED
- TIMER RECORDER UP TO 3 DAILY, WEEKLY AND SPECIFIC DATE
- 2 MODES OF ARS(AUTOMATIC RECORDING SYSTEM)
MODE A: ALL MESSAGES ARE RECORDED INTO 1 INDEX FILE.
MODE B: EACH MESSAGE HAS ITS OWN INDEX FILE IN SEQUENCE AFTER 3 SECONDS WITH NO SOUND BETWEEN PREVIOUS AND NEXT FILE.
- PAUSE AND RESUME
- MONITORING: MONITORING THE RECORDING BY EARPHONE ON RECORDING.

■ MASS STORAGE

- SIMPLY CONNECT IT TO PC. NO REQUIRED OPERATING PROGRAM & DRIVER CD(EXCEPTING WIN98SE)
- PC AND MAC COMPATIBLE
- EASY DRAG AND DROP FILE TRANSFERENCE

■ FM RADIO

- ENCODING FM BROADCASTING
- 10 FREQUENCY PRESET

■ MP3/WMA PLAYER & ENCODER

- ID3 TAG SUPPORT(ARTIST/TITLE)
- SCROLL SPEED CONTROLLING
- MULTI LANGUAGE SUPPORT
- 5EQ (NORMAL/CLASSIC/LIVE/POP/ROCK)
- SYNC FUNCTION: AUTOMATICALLY RECOGNIZE THE END AND BEGINNING OF THE MUSIC FROM EXTERNAL AUDIO DEVICE IN RECORDING THRU CONNECTING AUDIO CABLE AND RECORD.

USER EASILY UPGRADES NEW FIRMWARE PROVIDED BY MAKER

EASY-TO-USE BUTTON FOR QUICK NAVIGATION THROUGH FOLDERS AND OPTIONS

SET UP THE ALARM TO PLAY AUTOMATICALLY AS A REMINDER TO MEETING, BIRTHDAY AND MORE.

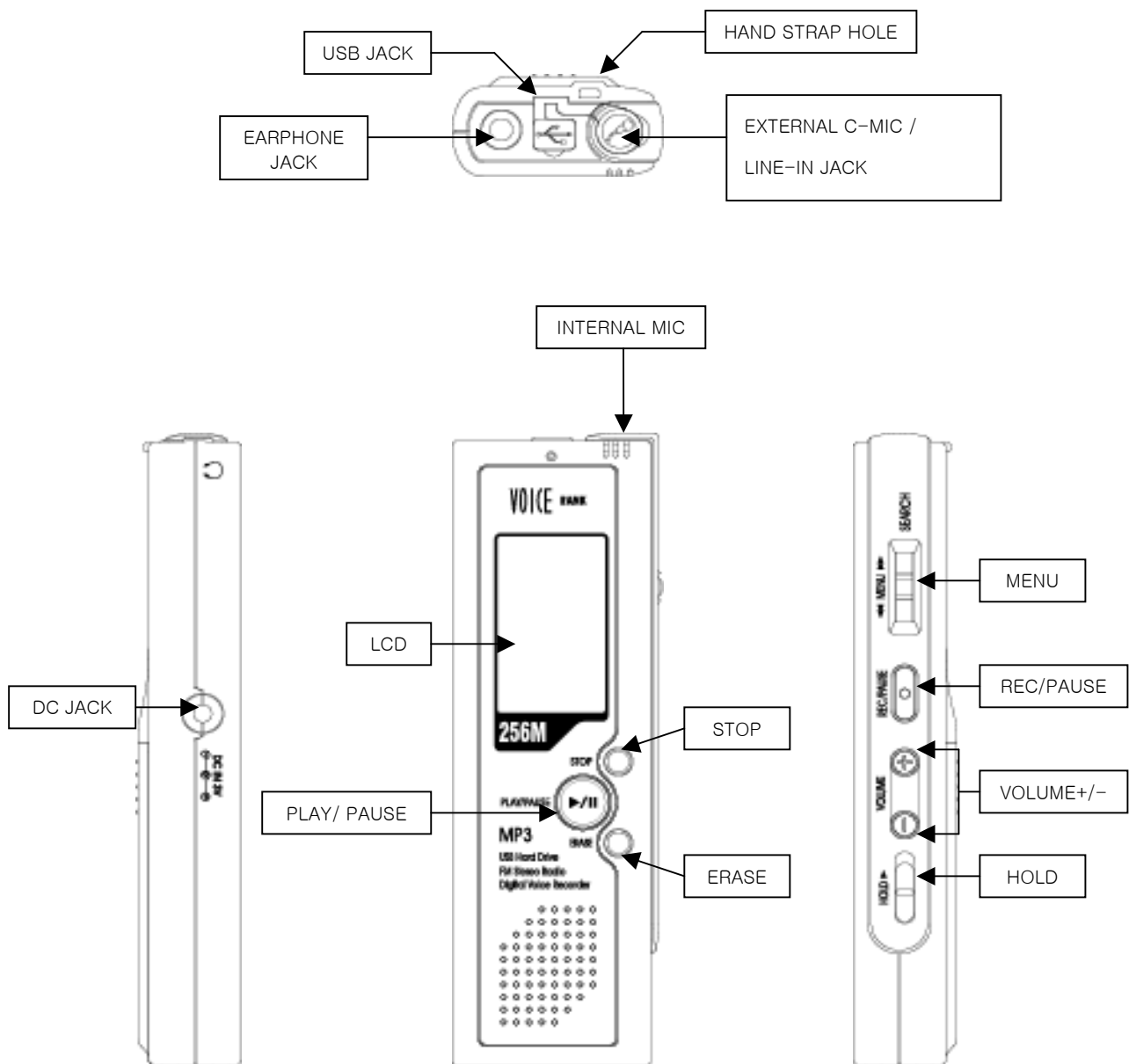
EASY-TO-READ ALL STATUS ON THE LARGE BACKLIGHT LCD DISPLAY WITH DOT MATRIX

VARIABLE FLASH MEMORY UP TO 1G(64MB/128MB/256MB/512MB/1GB)

23HOURS PLAY BACK WITH 2 AAA BATTERIES

Parts and Components

(1) Main set



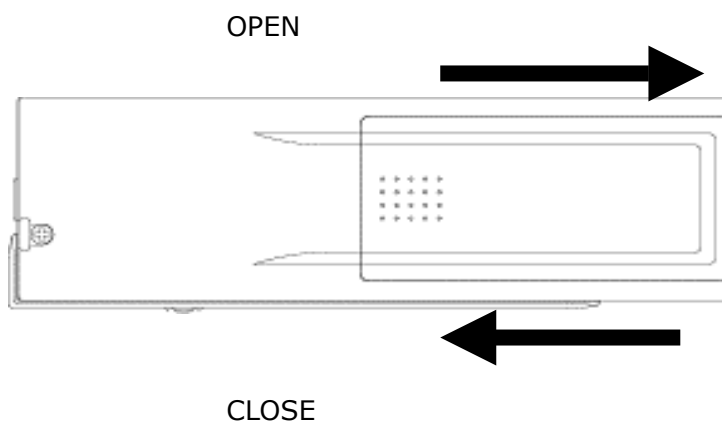
(2) LCD

	MODE
	INDEX INFORMATION
	FILE INFORMATION SYNC/BIT RATE/EQ/SPEED KEY/REPEAT
	TIME ALRAM ON/OFF ARS INTRO PLAY REPEAT 3D SOUND EFFECT VOLUME LEFT/RIGHT HOLD BATTERY STATUS

	TIMER ON/OFF		ALARM ON/OFF
	ARS ON/OFF		3D SOUND ON/OFF
	REPEAT		INTRUCTION PLAY BACK
	L/R SPECTRUM		
	BATTERY STATUS		

(3) BATTERY

1) PUT BATTERIES (LR03 TYPE)



2) BATTERY POWER STATUS INDICATOR

	FULL CHARGED
	SOME POWER CUSTOMED
	THINKING OF CHANGING BATTERY
	CHANGE BATTERY

☞ CHECK THE POLARITIES OF THE BATTERIES IF LCD DISPLAY DOESN'T TURN ON AFTER INSERTING NEW BATTERIES.

3) TYPICAL BATTERY LIFE TIME

BATTERY TYPE	RECORDING (VOLUME:MEDIUM)	PLAYBACK VIA SPEAKER (VOLUME:MEDIUM)	PLAYBACK VIA EARPHONE (VOLUME:MEDIUM)
2 AAA LR03	APPROX. 13HRS	APPROX. 13HRS	APPROX.23HRS

☞ BATTERY LIFE MAY BE DIFFERENT FROM ABOVE MENTIONED TIME ACCORDING TO BATTERY BRAND & CONDITION.

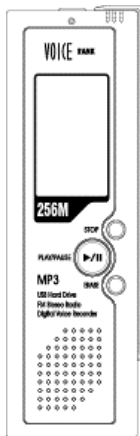
☞ DO NOT USE DIFFERENT TYPE AND BRAND BATTERY TOGATHER.

☞ WHEN THE DEVICE IS LEFT UNUSED FOR A LONG TIME, REMOVE BATTERIES.

(4) ACCESSARY



BASIC FUNCTION

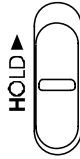


(1) TURN ON/OFF

TO TURN ON, HOLD THE  REC/STOP KEY FOR 2-3 SECONDS.
TO TURN OFF, HOLD THE STOP KEY AGAIN WITH LONG KEY.

- ☞ IF USB CABLE IS CONNECTED, AUTOMATICALLY POWER IS ON.
- ☞ IF YOU PUT THE BATTERY TO SET, "A" FOLDER IN THE VOICE MODE WILL DISPLAY. BEFORE USING IT, WE RECOMMEND TO SET UP THE TIME AND DATE FOR ALARM & RESERVED RECORDING FUNCTIONS.

(2) HOLD KEY

	HOLD ON	ALL KEYS WON'T WORK.  WILL DISPLAY ON THE LCD.
	HOLD OFF	ALL KEYS WORK PROPERLY.

(3) VOLUME

VOLUME UP BY PRESSING "+" KEY.

VOLUME DOWN BY PRESSING "-" KEY.

- ☞ VOLUME CAN BE ADJUSTABLE WITHIN 30 LEVEL(0-30).
- ☞ IF TURN ON, DEFAULT VOLUME(20) IS SET UP AUTOMATICALLY.

(4) CHANGING MODE

MENU BY PRESSING MENU BUTTON FOR 1-2 SECONDS, MODE MENU WILL DISPLAY.
FOR MOVING TO THE MODE WANTED, PRESS "REW/FF" BUTTON.
SELECT THE MODE BY PRESSING "MENU" OR "PLAY/PAUSE" BUTTON.

VOICE	MUSIC	L-IN ENC	FM ENC	FM	B-MARK	FOLDER
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(5) INTRO PLAY

THIS IS FOR PLAYING THE FIRST FEW SECONDS OF EVERY TRACK FOR QUICK REVIEW OF VOICE FILES OR MUSIC. PRESS "PLAY AND PAUSE" BUTTON DURING PLAYING BACK. THE **INTRO** ICON APPEARS ON THE LCD AND THE FIRST 5, 10 OR 15SECONDS OF EVERY TRACK PLAY, DEPENDING ON THE SELECTED TIME.

MENE BUTTON WITH LONG KEY -> TIME -> INTRO TIME(5, 10 OR 15 SECONDS)

(6) A<->B REPEAT PLAY

TO DESIGNATE A SPECIFIC SECTION TO PLAY REPEATEDLY, PRESS THE "REC/PAUSE" BUTTON AT THE BEGINNING OF THE DESIRED SECTION FOR 1SECOND DURING PAYING BACK. IF SO,THE **A↔** IS DISPLAYED AND PRESS "REC/PAUSE" BUTTON AGAIN AT THE ENDING POINT. THE **A↔B** ON APPEARS AND THE SELECTED SECTION REPEATEDLY PLAYS. TO END THE "A<->B PLAY", PRESS "REC/PAUSE" BUTTON AGAIN.

(7) PLAYBACK SPEED CONTROL

A CURRENT SPEED DISPLAYS ON THE LCD BY PRESSING "REC/PAUSE" BUTTON FOR 2-3SECONDS DURING PLAYBACK. TO SELECT DESIRED SPEED (STANDARD(100%), FAST(120%) OR SLOW(80%)) BY PRESSING "REC/PAUSE" BUTTON FOR 2-3 SECONDS. IF STOP, SPEED IS BACK TO STANDARD.

☞ (SPEED CONTROL IS NOT AVAILABLE TO WMA, VBR FILE FORMAT.)

(8) REPEAT

WHEN FILE PLAYS BACK, REPEAT MODE CHANGES BY PRESSING "ERASE" BUTTON FOR 2-3SECONDS.

(9) BOOKMARK SETTING

TO BOOKMARK A SELECTED MP3, WMA FILE, PRESS "STOP" BUTTON IN STOP FOR 1SECOND. FOR RELEASE THIS FUNCTION, PRESS "STOP" BUTTON ONCE AGAIN.

"BOOKMARK" IS AVAILABLE IN THE MUSIC, LINE-IN ENC, FM ENC MODE.

(10) PC CONNECTION

WHEN THE UNIT IS CONNECTED TO A PC VIA USB CABLE, USB ICON APPEARS ON THE LCD. IN THIS CASE, PLAYBACK IS NOT AVAILABLE.

(11) EQUALIZER

ON PLAYING MP3 FILE BACK, USER CAN SELECT NORMAL/CLASSIC/LIVE/POP/ROCK BY PRESSING "ERASE" BUTTON. NORMAL/CLASSIC/LIVE/POP/ROCK IS CHANGED BY PRESSING "ERASE".

BUTTONS

(1) VOICE MODE

BUTTON	OPERATION	THE STATUS OF SET		
		STOP	PLAYBACK	RECORDING
PLAY/ PAUSE	SHORT	PLAYBACK	PAUSE	REMAINING TIME
	LONG	—	INTRO PLAY	—
FF	SHORT	GO TO NEXT FILE	GO TO NEXT FILE AND PLAY	INCREASE INDEX(AFTER 5SECONDS)
	LONG	GO TO NEXT FILE SEQUENTLY	S-FORWARD CURRENT FILE	—
REW	SHORT	GO TO PREVIOUS FILE	GO TO BEGANNING OF THE FILE, IF PLAY CURRENT FILE OVER 5SECONDS. PLAY PREVIOUS FILE, IF PLAY FILE UNDER 5 SECONDS	—
	LONG	GO TO PREVIOUS FILE	S-BACKWARD CURRENT FILE	—
MENU/MODE	SHORT	ENTERING MODE	ENTERING MODE	—
	LONG	ENTERING MENU	ENTERING MENU	—
VOLUME+	SHORT	VOLUME UP	VOLUME UP	VOLUME UP
	LONG	AUTO VOLUME UP	AUTO VOLUME UP	AUTO VOLUME UP
VOLUME-	SHORT	VOLUME DOWN	VOLUME DOWN	VOLUME DOWN
	LONG	AUTO VOLUME DOWN	AUTO VOLUME DOWN	AUTO VOLUME DOWN
REC	SHORT	RECORDING	A-B REPEAT	PAUSE
	LONG	RECORDING	PLAYBACK SPEED CONTROL	—
ERASE	SHORT	ERASE 1 FILE	—	—
	LONG	ERASE ALL FILES (HOLD 2SECOND) ERASE ALL FOLDER (HOLD 2SEC.+2SEC.)	CHANGING REPEAT	—
STOP	SHORT	—	STOP CURRENT FILE	STOP RECORDING FILE
	LONG	POWER OFF	POWER OFF	—
HOLD		HOLD	HOLD	HOLD

(2) FM RADIO MODE

BUTTON	OPERATION	MODE		
		FREQUENCY MODE	PRESET MODE	SET UP THE STATION
PLAY/PAUSE	SHORT	ENTERING SETTING STATION	–	SETTING STATION
	LONG	PRESET MODE	FREQ. MODE	
FF	SHORT	TUNE FM FREQ. SLIGHTLY	FORWARD NEXT PRESET CH.	CHANNEL UP
	LONG	AUTO SEEK +	–	–
REW	SHORT	TUNE FM FREQ. SLIGHTLY	FORWARD PREVIOUS PRESET CH.	CHANNEL DOWN
	LONG	AUTO SEEK –	–	–
VOLUME+	SHORT	VOLUME UP	VOLUME UP	VOLUME UP
	LONG	VOLUME UP AUTOMATICALLY	VOLUME UP AUTOMATICALLY	VOLUME UP AUTOMATICALLY
VOLUME–	SHORT	VOLUME DOWN	VOLUME DOWN	VOLUME DOWN
	LONG	VOLUME DOWN AUTOMATICALLY	VOLUME DOWN AUTOMATICALLY	VOLUME DOWN AUTOMATICALLY
REC		RECORDING	RECORDING	–
ERASE		–	–	–
STOP	SHORT	STOP THE SEEK		
	LONG	POWER OFF	POWER OFF	POWER OFF
HOLD		HOLD	HOLD	HOLD

☞ IF THERE IS NO KEY OPERATION WITHIN 5SECS, THIS FUNCTION WILL BE RELEASED.

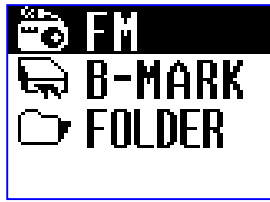
☞ EARPHONE WORK AS AN EXTERNAL ANTENNA FOR INCREASING RECEPTION. STRETCH IT OUT.

(3) MP3/ L-IN/EM ENC MODE

BUTTON	OPERATION	THE STATUS OF SET		
		STOP	PLAY	RECORDING
PLAY/PAUSE	SHORT	PLAY	PAUSE	REMAIN TIME
	LONG	TURN OFF	INTRO PLAY	-
FF	SHORT	GO TO NEXT FILE	GO TO NEXT FILE AND PLAY	INDEX UP AFTER 5 SECS.
	LONG	GO TO NEXT FILE SEQUENCE	S-FORWARD CURRENT FILE	-
REW	SHORT	GO TO PREVIOUS FILE	GO TO BEGANNING OF THE FILE, IF PLAY CURRENT FILE OVER 5SECONDS. PLAY PREVIOUS FILE, IF PLAY FILE UNDER 5 SECONDS	-
	LONG	GO TO PREVIOUS FILE SEQUENTLY	S-BACKWARD CURRENT FILE	-
MENU/MODE	SHORT	MODE	MODE	-
	LONG	MENU	MENU	-
VOLUME+	SHORT	VOLUME UP	VOLUME UP	VOLUME UP
	LONG	AUTO VOLUME UP	AUTO VOLUME UP	AUTO VOLUME UP
VOLUME-	SHORT	VOLUME DOWN	VOLUME DOWN	VOLUME DOWN
	LONG	AUTO VOLUME DOWN	AUTO VOLUME DOWN	AUTO VOLUME DOWN
REC/PAUSE	SHORT	REC	A-B REPEAT	PAUSE
	LONG	REC	PLAY SPEED CONTROL	-
ERASE	SHORT	ERASE 1 FILE	EQUALIZER	-
	LONG	ERASE ALL FILES (HOLD 2SECOND) ERASE ALL FOLDER (HOLD 2SEC.+2SEC.)	CHANGING REPEAT	-
STOP	SHORT	BOOKMARK	STOP	STOP RECORDING
	LONG	POWER OFF	POWER OFF	-
HOLD		HOLD	HOLD	HOLD

FM Radio

(1) TURN ON FM



TURN ON THE SET AND SELECT FM IN THE MENU.

(2) AUTOMATIC TUNEING



FOR The AUTOMATIC TUNEING. PRESS AND HOLD FORWARD OR REWIND BUTTON FOR 2SECONDS. THE TUNNER AUTOMATICALLY SCAN AND STOP ON THE NEXT STATION WITH A STRONG SIGNAL. IN AREA WITH WEAK RECEPTION, PRESS THE FAST FORWARD OR REWIND BUTTON TO FIND A CLEAR STATION.

(3) PRESET STATION

AFTER SELECTING THE WANTED FREQUENCY BY "REW/FF", PRESS "PLAY/PAUSE". IF SO, THE CHANNEL 1 IS BLIKING. AT THIS TIME, MOVE TO THE CHANNEL TO SAVE BY PRESSING REW/FF AND SAVE IT BY PRESSING "PLAY/PAUSE".

□ CHANNEL CAN BE CHECKED BY PRESSING "PLAY/PAUSE" AT THE FREQUENCY MODE.

(4) RECORDING FM

IF YOU WOULD LIKE TO RECORD THE PRESENT STATION, PRESS "REC" BUTTON.

THE RECORDED FILE IS STORED TO FM ENC FOLDER WITH FM001-48KBPS_20040101_010101.MP3 AND THE FILE NAME IS SEQUENTLY ADDED ACCORDING TO RECORDED ORDER.

🔊 NOISE MAY OCCUR WHEN RECORDING FM IN WEAK COVERAGE OR INSIDE OF THE BUILDING. IF SO, MOVE TO STRONG COVERAGE TO RECEIVE BETTER FM QUALITY.

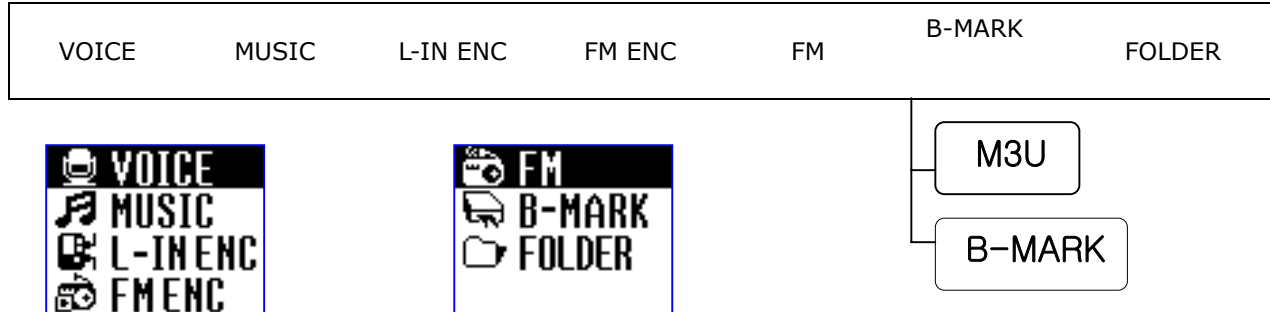
THE EARPHONE CAN BE USED AS AN ANTENNA, SO EXTEND AS LONG AS IT CAN.

FOR BETTER QUALITY IN LISTING TO FM, USE EARPHONE AND IN LISTING TO FM THRU EXTERNAL SPEAKER, PULG PROVIDED EXTERNAL ANETNNA.

MODE MENU

YOU CAN GO TO "MODE MENU" BY PRESSING "MENU" BUTTON FOR 1 SECOND.

MODE MENU IS CONSIST OF BELOW MODE. TO MOVE TO ANOTHER MODE, USE "REW/FF" BUTTON.



(1) VOICE

PLAY BACK VOICE FILE RECORDED IN VA001-008KBPS_20040101_010101.MP3 TYPE. FILE NAME IS STAMPED IN SEQUENCE.

VOICE MODE HAS 8 SUBORDINATE FOLDERS AND WITHOUT APPOINTING THE SPECIFIC FOLDER, FILE RECORDS FROM A FOLDER. EACH FOLDER CAN HAVE 128FILES.

(2) MUSIC

MP3 AND WMA PLAY IN THE SET, BUT IN VOICE, L-IN ENC AND EM ENC FOLDER IS NOT PLAYED.

BOOKMARK ON PLAYING FILE IS AVAILABLE.

999 FILES CAN BE RECORDER AS MUCH AS MEMORY IS AVAILABLE.

(3) L-IN ENC

PLAY THE FILE IN L-IN ENC FOLDER.

FILE IS STAMPED IN LI001-128KBPS_20040101_010101.MP3. IN SEQUENCE.

256FILES CAN BE RECORDED AS MUCH AS MEMORY IS AVAILABLE.

(4) FM ENC

PLAY THE FILE IN FM ENC FOLDER.

FILE IS STAMPED IN FM001-128KBPS_20040101_010101.MP3. IN SEQUENCE.

256FILES CAN BE RECORDED AS MUCH AS MEMORY IS AVAILABLE.

(5) FM

RECEIVING RADIO STATION.

(6) B-MARK

* B-MARK

STORE FAVORITE SONGS.(20FILES ARE AVAILABLE.)

BOOKMARK IS SET BY PRESSING STOP BUTTON ON THE MUSIC, L-IN ENC, FM_ENC MODE.

BOOKMARK IS DISPLAYED ON THE FILE INFORMATION.

* M3U(WIN AMP)

INITIALY PLAYLIST FOLDER EXISTS AND M3U FORMAT FILE CAN BE SAVED AND PLAYED.

32 FILES CAN BE STORAGED.

☞ THE FONT IN THE SET MUST BE SAME AS THE FONT SELECTED IN M3U FILE.

(7) FOLDER

IF SET THIS MENU, ALL FOLDERS ARE DISPLAYED EXCEPTING VOICE, FM_ENC, LINE_ENC, PLAYLIST FOLDER.

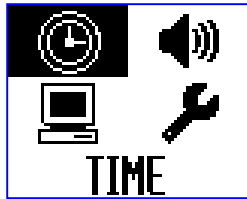
IN SETING THE FOLDER, YOU CAN SEE FILE INFORMATION AND ONLY PLAY MP3/WMA FILE IN THE APPOINTED FOLDER.

☞ FOLDER SUPPORT SPEC.

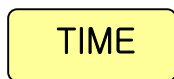
- ROOT:256ENTRY(FOLDER+FILE)
- SUB DIRECTORY DEPT: 10DEPT INCLUDING ROOT
- LIMITATION OF SUB DIRECTORY: 512(EXCLUDING ROOT AND RECORD FOLDER)

MAIN MENU

TO ENTER INTO “MAIN MENU”, PRESS “MENU” BUTTON FOR 2-3SECONDS.
 “REW/FF” BUTTON WORKS AS A MOVING BUTTON TO ANOTHER FUNCTION AND PRESS
 “MENU” OR “PLAY/PAUSE” BUTTON FOR SELECTION OF THE FUNCTION YOU WANT. BY
 PRESSING “REC/PAUSE” BUTTON AGAIN, YOU CAN GO OUT OF SUBORDINATE MENU. IF
 YOU DO NOT OPERATE ANY BUTTON AFTER ENTERING INTO MENU FOR 30 SECONDS,
 AUTOMATICALLY MENU FUNCTION WILL BE RELEASED.



1.



USER CAN SET UP THE TIME RELATED TO PLAYER’S SYSTEM ON THIS MENU.

THIS MENU CONSISTS OF SET DATE, TIMER REC, ALARM PLAY, POWER OFF TIME, SLEEP TIME, INTRO TIME.



SET DATE :

USER SETS UP DATE AND TIME.

※ SET UP DATE

- ENTER INTO TIME MENU AND SELECT “SET DATE”.
- SET UP THE YEAR, MONTH, DAY WHEN YOU WANT BY PRESSING “REW/FF” BUTTON FOR MOVEMENT AND “MENU” OR “PLAY/PAUSE” BUTTON FOR SELECTION.

②



TIMER REC : RESERVATION RECORDING .

(UP TO 10 AVAILABLE)

☞ USER MUST SET UP “SET DATE” FIRST.

- ON THE SETTING DISPLAY, NO. 1 CHANNEL WILL BE BLINKING.
- MOVE TO THE SPECIFIC NO. YOU WANT TO SET UP BY PRESSING "REW/FF" BUTTON AND PRESS "MENU" OR "PLAY/PAUSE" BUTTON FOR SELECTION.

※ SETTING UP TIMER REC

- THE FUNCTION HAS DATE/DAILY/WEEKLY, 3 MODES.

1. DATE (1 TIME)

- a. ENTER INTO DATE.

SET UP YEAR, MONTH, DAY BY PRESSING "REW/FF" FOR MOVING AND "MENU" OR "PLAY/PAUSE" FOR SELECTION.

- b. IF IT IS COMPLETED, AUTOMATICALLY DISPLAY TRANSFERS TO TIME SETTING DISPLAY.

TIME SETTING IS SAME AS THE PROCEDURE OF DATE.

2. DAILY (PLAYBACK AT THE SAME TIME EVERYDAY)

- a. ENTER INTO DAILY.

SET UP HOUR, MINUTE AND SECOND BY PRESSING "REW/FF" FOR MOVING AND "MENU" OR "PLAY/PAUSE" FOR SELECTION.

3. WEEKLY (PLAYBACK AT THE SAME TIME PER WEEK)

- a. ENTER INTO WEEKLY.

SET UP HOUR, MINUTE AND SECOND BY PRESSING "REW/FF" FOR MOVING AND "MENU" OR "PLAY/PAUSE" FOR SELECTION AND THEN SET UP AS SAME AS PROCEDURE OF DAILY.

- AFTER COMPLETING, "TIME" MARK WILL DISPLAY AND THEN IT WILL BE TRANSFERED TO INITIAL DISPLAY AND BLINKING NO.2 OR THE CHANNEL WHICH DOES NOT SET.

YOU CAN SET UP TO SAME FILE UP TO 10.

IF YOU WANT DELETE THE CHANNEL SET, PRESS "ERASE" BUTTON ON THE CHANNEL SETTING DISPLAY.

※ CAUTION

- RESEVATION MODE IS OPERATED IN VOICE AND FM MODES.

FOR RESEVATION RECORDING THRU LINE-IN, PLUG LINE-IN CABLE AND THEN SELECT THE LINE-IN ON THE SYSTEM/INPUT SELECTOR MENU.

- IF DO NOT SETTING UP "SET DATE", THIS MENU IS NOT DISPALYED.

- THE PASSED TIME CAN NOT BE SET UP.

- CHECK THE TIME AVAILABLE FOR RECORDING BEFORE DOEN THIS.

- IF THE SELECTED FOLDER IS FULL OR MEMORY FULL, IT WON'T WORK.

(VOICE MODE: 128PCS EACH FOLDER / FM ENC: 256PCS)

- RESERVATION RECORDING IS FIRST THAN OTHER FUNCTIONS EXCEPTING RECORDING.

③



ALARM PLAY : THE FILE SELECTED PLAYS BACK ON TIME WHEN IS SET UP IN ADVANCE.
(10PCS AVAILABLE)

※ SET UP THE ALARM PLAY

– THIS FUNCTION HAS DATE/DAILY/WEEKLY MODE.

1. DATE (1 TIME)

a. ENTER INTO DATE.

SET UP YEAR, MONTH, DAY BY PRESSING “REW/FF” FOR MOVING AND “MENU” OR “PLAY/PAUSE” FOR SELECTION.

b. IF IT IS COMPLETED, AUTOMATICALLY DISPLAY TRANSFERS TO TIME SETTING DISPLAY.

TIME SETTING IS SAME AS THE PROCEDURE OF DATE.

2. DAILY (PLAYBACK AT THE SAME TIME EVERYDAY)

a. ENTER INTO DAILY.

SET UP HOUR, MINUTE AND SECOND BY PRESSING “REW/FF” FOR MOVING AND “MENU” OR “PLAY/PAUSE” FOR SELECTION.

3. WEEKLY (PLAYBACK AT THE SAME TIME PER WEEK)

a. ENTER INTO WEEKLY.

SET UP HOUR, MINUTE AND SECOND BY PRESSING “REW/FF” FOR MOVING AND “MENU” OR “PLAY/PAUSE” FOR SELECTION AND THEN SET UP AS SAME AS PROCEDURE OF DAILY.

– AFTER COMPLETING, “ALARM” MARK WILL DISPLAY AND THEN IT WILL BE TRANSFERED TO INITIAL DISPLAY AND BLINKING NO.2 OR THE CHANNEL WHICH DOES NOT SET.

YOU CAN SET UP TO SAME FILE UP TO 10.

IF YOU WANT DELETE THE CHANNEL SET, PRESS “ERASE” BUTTON ON THE CHANNEL SETTING DISPLAY.

※ CAUTION

– IN ALARM PLAY, ONLY THE FILE WHICH IS SET PLAYS AND THEN STOPS.

IN CASE OF FM MODE, THE STATION WHICH IS SET IS ON AIR WITH BLINKING ALARM MARK.

– SETTING UP THE ALARM PLAY CAN BE DONE UNDER ALL MODES IS STOPPED EXCEPTING “B-MARK” MODE.

– IF DO NOT SET UP “SET DATE”, IT WON’T WORK.

– IF YOU WANT TO SET UP THE PASSED TIME, IT WON’T WORK.

– IF IT IS TIME FOR RESERVATION RECORDING IN ALARM PLAY, ALARM PLAY WILL BE STOPPED.

– ALARM PLAY IN OPERATING IS OPERATED FIRST THAN OTHER FUNCTIONS EXCEPTING RECORDING.

④

POWER OFF

POWER OFF TIME : 1MIN, 3MIN, 5MIN, ALWAYS ON



AUTOMATIC POWER OFF TIME

⑤

SLEEP TIME

SLEEP TIME : OFF, 15MIN, 30MIN, 45MIN, 60MIN,



75MIN, 90MIN, 105MIN, 120MIN

AUTOMATICALLY TURN OFF AFTER THE TIME YOU SET UP.

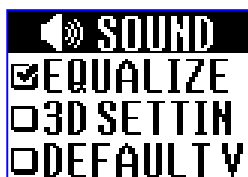
- ⑥ **INTRO TIME** INTRO TIME : 5SEC, 10SEC, 15SEC



PLAYING FILE BACK FOR THE TIME YOU SET UP.

2.

SOUND



THIS MENU HAS EQUALIZER, 3D SETTING, DEFAULT VOLUME.



- ① **EQUALIZER** EQUALIZER : NORMAL, CLASSIC, LIVE, POP, ROCK

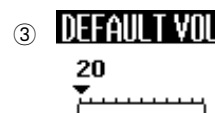
YOU CAN SELECT THE EQUALIZER YOU WANT.



- ② **3D SETTING** 3D SETTING :

BASS/TREBLE AT 1,3,5,7,9,11,13,15 STEP PER EACH

ADJUST THE 3D-SOUND EFFECT LEVEL.



- ③ **DEFAULT VOL** DEFAULT VOLUME : 20~29, OFF

IF SET UP THIS FUNCTION, THE DEFAULT VOLUME IS ON AT THE LEVEL AFTER TURN ON.

3.

DISPLAY



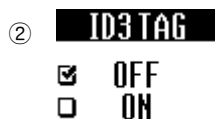
THIS MENU IS FOR SETTING UP DISPLAY AND CONSISTS OF FONT, ID3 TAG, SCROLL SPEED, BACKLIGHT TIME, LCD CONTRAST.



- ① **FONT** FONT: KOREAN, ENGLISH, JAPANESE, CHINESE(SIMPLIFY + TRADITIONAL),

EUROPE, RUSSIAN

YOU CAN SELECT THE LANGUAGE YOU WANT FOR ID3 TAG ON.



- ② **ID3 TAG** ID3 TAG : ON, OFF

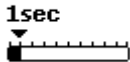
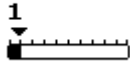
DISPLAY FILE INFORMATION

1. ON : DISPLAY Title, Artist

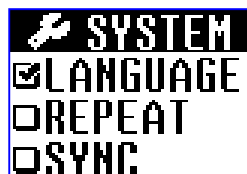
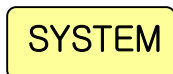


- ③ **SCR. SPEED** SCROLL SPEED : 0~10

SPEED CONTROL FOR FLOWING FILE INFORMATION ON THE LCD UP TO 10LEVEL.

- ④ **BACKLIGHT** BACKLIGHT TIME : OFF, 1~9 SEC, ALWAYS ON
 TIME FOR BACKLIGHT ON AND OFF(OFF-9SEC)
- ⑤ **LCD CONT.** LCD CONTRAST : 1~10
 LEVEL FOR BRIGHTNESS OF LCD(1-10LEVEL)

4.



THIS IS FOR PLAYER'S SYSTEM CONTROL.

THIS CONSISTS OF LANGUAGE, REPEAT, SYNC, ARS, INPUT SELECTOR, MIC SENSITIVITY, RESUME, BITRATE, FM BAND, CONTINUE FOLDER, FORMAT, DEFAULT.

- ① **LANGUAGE** LANGUAGE: ENGLISH, GERMAN, JAPANESE, CHINESE(SIMPLIFY + TRADITIONAL)
 YOU CAN SELECT THE LANGUAGE YOU WANT FOR MODE/MENU.

- ② **REPEAT** REPEAT : NORMAL, REPEAT ONE, REPEAT ONE ALL, REPEAT ALL, SHUFFLE


NORMAL: ALL FILES PLAY BACK IN SEQUENCE.
 REPEAT ONE: ONLY CURRENT FILE PLAYS BACK ONE TIME.
 REPEAT ONE ALL: ONLY CURRENT FILE PLAYS BACK REPEATEDLY
 REPEAT ALL: ALL FILES PAY BACK REPEATEDLY
 SHUFFLE: PLAY BACK RANDOMLY

- ③ **SYNC** SYNC (ONLY IN LINE-IN RECORDING) : AUTO SYNC, OFF


- AUTO SYNC : IN RECORDING THE SOUND FROM EXTERNAL DEVICE THRU LINE-IN,
CREATING NEW FILE WITH STAMPING FILE NAME BY RECOGNIZING
AUTOMATICALLY THE END AND BEGINNING OF THE SONG.
- OFF : IN RECORDING THE SOUND FROM EXTERNAL DEVICE THRU LINE-IN, ALL SOUNDS
OR SONGS ARE RECORDED INTO ONE FILE, IF YOU SEPARATE.

- ④ **ARS** ARS : A, B, OFF


IN RECORDING, IF THERE IS SOUND AT A WEAK SOUND FOR A CERTAIN TIME,
RECORDING PAUSES AUTOMATICALLY FOR SAVING MEMORY, BUT IF THERE IS
SOUND AT SPECIFIC LEVEL AGAIN, START RECORDING AGAIN.
 (AUTOMATIC RECORDING SYSTEM)
- A : ALL SOUNDS ARE RECORDED INTO ONE FILE.
 - B : THE SOUND AFTER PAUSING FOR 3 SECONDS, AUTOMATICALLY IT HAS ITS OWN INDEX.

- ⑤ **INPUT SEL.** INPUT SELECTOR : **LINE-IN / EXTERNAL-MIC**
☒ EXT-MIC
☐ LINE IN
 IN RECORDING, SELECT THE RECORDING METHOD.

- ⑥ **MIC SENS.** MIC SENSITIVITY : **MIC LOW, MIC HIGH**
☒ MIC LOW
☐ MIC HIGH
 SET UP THE SENSITIVENESS OF MICROPHONE.

- ⑥ **RESUME** RESUME : **ON, OFF**
☒ OFF
☐ ON
 WHEN TURNING ON AGAIN, THE SET RETURNS TO ITS CONDITION BEFORE TURNING OFF.
 FOR SETTING, PRESS "PAUSE" BUTTON IN PLAYING BACK AND THEN PRESS "PLAY/PAUSE" FOR 2-3SECONDS.

- ON : PLAYING BACK FROM THE COUNTER WHERE IT STOPPED AT THE LAST.

- OFF : PLAYING BACK FROM THE INDEX WHERE IT STOPPED AT THE LAST.

- ⑦ **BITRATE** BIT RATE : **VOICE BITRATE, MP3 BITRATE**
☒ VOICE
☐ MP3
 SET UP THE BIT RATE IN VOICE RECORDING, LINE IN AND FM RECORDING.
 - VOICE RECORDING : SHQ(32Kbps), HQ(16Kbps), SP(8Kbps)
 - MP3 ENCODE : 48Kbps, 64Kbps, 96Kbps, 128Kbps, 192Kbps, 256Kbps

- ⑧ **FM BAND** FM BAND : **WORLD, JAPAN, EUROPE**
☒ WORLD
☐ JAPAN
☐ EUROPE
 YOU CAN SELECT FM BAND YOU WANT.
1. WORLD: 87.50MHz ~ 108.00MHz, 100KHz STEP
 2. JAPAN: 76.00MHz ~ 108.00MHz, 100KHz STEP
 3. EUROPE: 87.50MHz ~ 108.00MHz, 50KHz STEP
- (DEFAULT: 87.50MHz)

- ⑨ **CONT. FOL.** CONTINUE FOLDER : **ON, OFF**
☒ OFF
☐ ON
 IT WORKS IN VOICE MODE RECORDING.
- ON : IF INDEX RECORDED(128PCS) IS FULL FOR A FOLDER, AUTOMATICALLY MOVE TO NEXT FOLDER AND RECORDING CONTINUOUSLY.
 - OFF : IF INDEX RECORDED(128PCS) IS FULL FOR A FOLDER, STOP RECORDING AND DISPLAY "INDEX FULL" ON THE LCD.

⑩

FORMAT	
☒	NO
☐	YES

FORMAT : YES, NO

FORMAT ALL DATA RECORDED ON MEMORY.

☞ IT WON'T WORK IN PLAY/PAUSE & FM MODE.

DO IT WITH ENOUGH BATTERY POWER.

DO NOT TAKE THE BATTERY OUT IN FORMATING.

⑪

DEFAULT	
☒	NO
☐	YES

DEFAULT : YES, NO

INITIALIZE ALL SETTING AND RETURN TO DEFAULT.

Recording in RECORD Mode

(1) RECORDING METHOD

THE SET HAS 4 WAYS TO RECORD AS BELOW.

- 1) RECORDING THRU INTERNAL MIC: JUST PRESS "REC" BUTTON.
- 2) RECORDING THRU EXTERNAL MIC: PLUG EXTERNAL MIC INTO LINE IN JACK.
SELECT EXTERNAL MIC ON SYSTEM/INPUT SELECTOR.
PRESS "REC"
- 3) RECORDING THRU LINE IN FROM EXTERNAL DEVICE: PLUG LINE-IN CABLE INTO LINE IN JACK.
SELECT LINE-IN ON SYSTEM/INPUT SELECTOR. PRESS "REC"
REFER TO "CONNECTING EXTERNAL DEVICE"
- 4) RECORDING FM RADIO: REFER TO "FM RECORDING".

(2) MAIN FEATURES

1) MONITORING RECORDING STATUS

IN RECORDING, YOU CAN CHECK WHAT IS RECORDING THRU EARPHONE.

2) CHECK REMAINNING TIME TO BE ABLE TO RECORD

YOU CAN CHECK THE REMAINNING TIME BY PRESSING "PLAY/PAUSE" BUTTON IN RECORDING.

3) SEPARATING FILE IN RECORDING

YOU CAN SEPARATE FROM THE CURRENT RECORDING FILE RECORDED OVER 5 SECONDS BY PRESSING "FF" BUTTON IN RECORDING AND CREATING NEW INDEX.

□ IF THERE IS NO ENOUGH SPACE FOR RECORDING, THE FUNCTION WON'T WORK.

IF RECORDING TIME IS FULL, "MEMORY FULL" IS DISPLAYED.

UP TO 256PCS AVAIABLE FOR RECORDING.

IN RECORDING, BACKLIGHT WON'T WORK.

CONNECTING EXTERNAL DEVICE

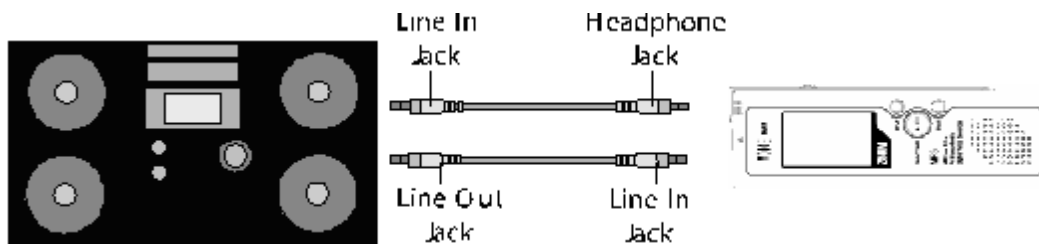
(1) RECORDING FROM EXTERNAL DEVICE OR SET

1) RECORDING EXTERNAL DEVICE TO DDR-5100

CONNECT THE PROVIDED AUDIO CABLE TO LINE IN JACK ON THE SET.

2) RECORDING DDR-5100 TO EXTERNAL DEVICE

CONNECT THE PROVIDED AUDIO CABLE TO EARPHONE JACK ON THE SET AND MICROPHONE OR LINE IN ON THE EXTERNAL DEVICE.



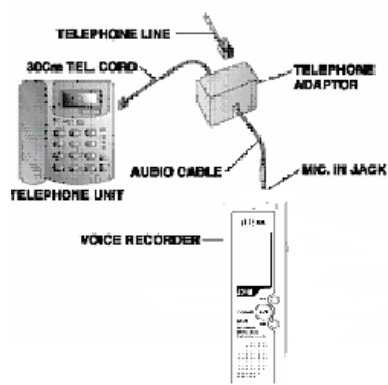
□ WHEN CONNECTING EXTERNAL DEVICE, TURN OFF THE DEVICE AND SET.

READ AN EXTERNAL DEVICE'S MANUAL YOU WOULD LIKE TO CONNECT WITH ENOUGH TIME AND CAREFUL.

WHEN RECORDING FROM EXTERNAL DEVICE TO SET, VOLUME DOWN THE EXTERNAL DEVICE.

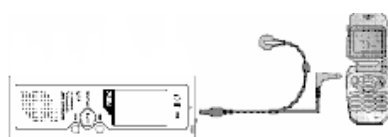
WHEN RECORDING FROM SET TO EXTERNAL DEVICE, SET THE VOLUME OF THE SET AT THE MIDDLE.

(2) RECORDING FROM TELEPHONE AND MOBILE PHONE



CONNECT LINE-IN CABLE TO THE MICROPHONE JACK ON THE VOICE RECORDER AND TELEPHONE ADAPTOR. CONNECT TELEPHONE CABLE TO TELEPHONE ADAPTOR.

PRESS "REC" BUTTON FOR RECORDING. IF YOU SET UP THE "ARS", AUTOMATICALLY START RECORDING AND PAUSING ACCORDING TO THE SOUND LEVEL.



CONNECT "CELLULAR EAR MICROPHONE" ONTO EXTERNAL MICROPHONE ON THE SET AND EARPHONE JACK ON THE MOBILE PHONE.

☞ CELLULAR EAR MICROPHONE IS OPTIONAL ITEM AND YOU MAY ASK RETAILER THAT YOU CAN PURCHASE.

IF YOU CELLULAR IS NOKIA BRAND, YOU MUST CHECK “CELLULAR EAR MICROPHONE” IS COMPATIBLE OR NOT.

INSTALLATION OF WIN98SE DRIVER

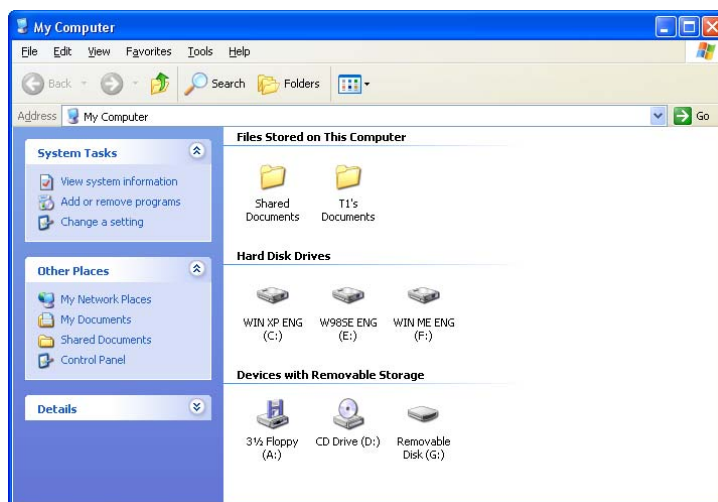
It supports USB Mass Storage and it can be used as hard drive. It can be connected to PC directly without any application by Plug & play method on Window Me, 2000, XP except for Windows 98SE.

☞ How to install Drive

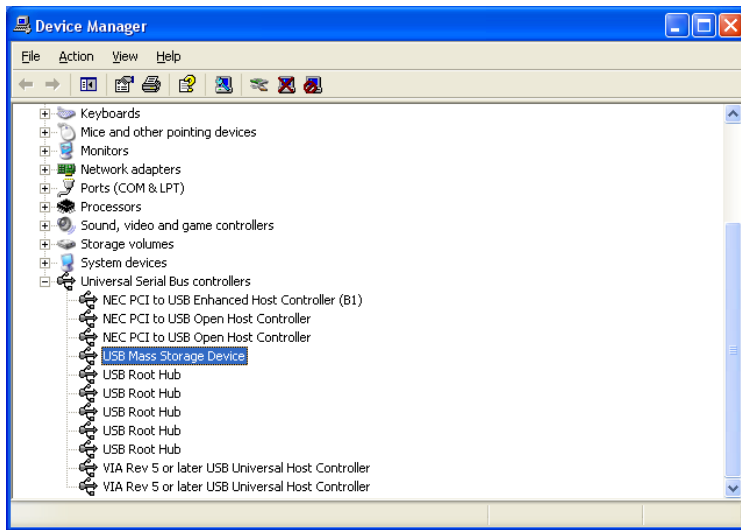
(1) In case of WIDOWS ME, 2000, XP

When connecting device to PC by USB port, “new hardware detected” is shown and installation begins automatically.

* If you click [My Computer], the set is recognized as a portable disk (F:) on [My Computer] window. (*WINDOWS XP).

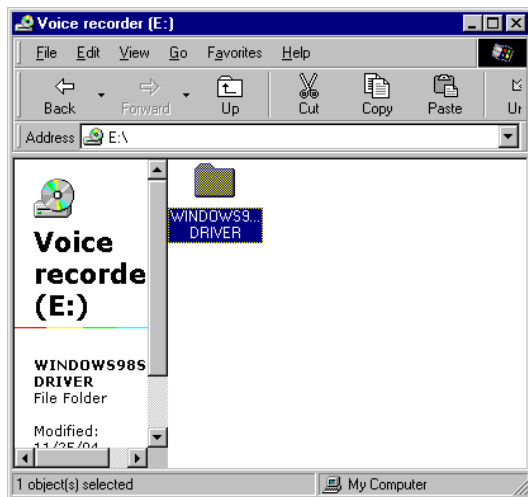


* WHEN THE USB DRIVER IS INSTALLED NORMALLY, IT IS RECOGNIZED AS A USB MASS STORAGE DEVICE AT DEVICE MANAGER IN MY COMPUTER.



(2) In case of WINDOW 98 SE

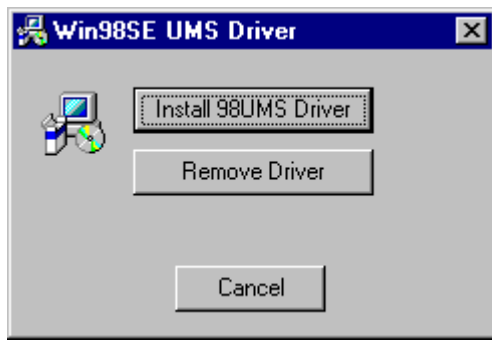
❶ INSERT THE PROVIDED CD & IT WILL INDICATE HOW TO INSTALL.



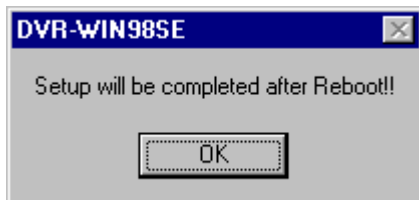
❷ Check "DVR-WIN98SE.EXE"



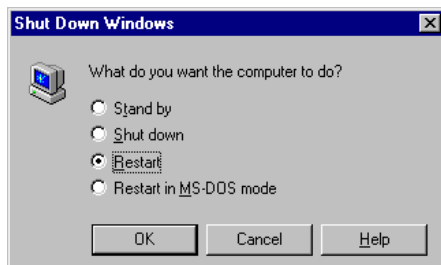
❸ CLICK "INSTALL 98UMS DRIVER" AND AUTOMATICALLY INSTALL.



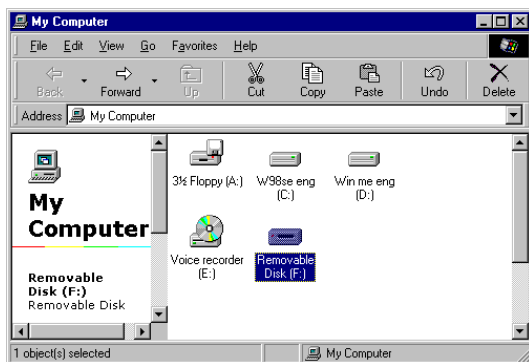
☑ WHEN IT IS COMPLETED, BELOW POP-UP WILL APPEAR. CLICK "YES"



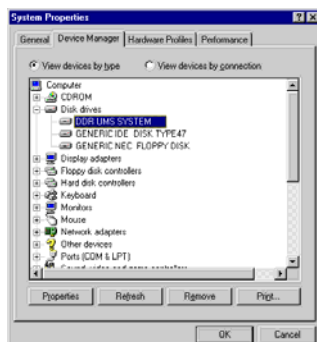
☐ CLICK FOR REBOOTING THE COMPUTER.



☐ AFTER REBOOTING, CONNECT THE SET & PC THRU USB CABLE. BELOW WINDOW WILL APPEAR.



☑ EVERYTHING IS SUCCEED, IT CAN BE APPEARED AT SYSTEM PROPERTIES.



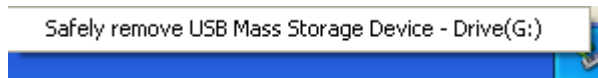
* REMOVING USB MASS STORAGE SAFELY.

(1) WIN ME, 2000, XP

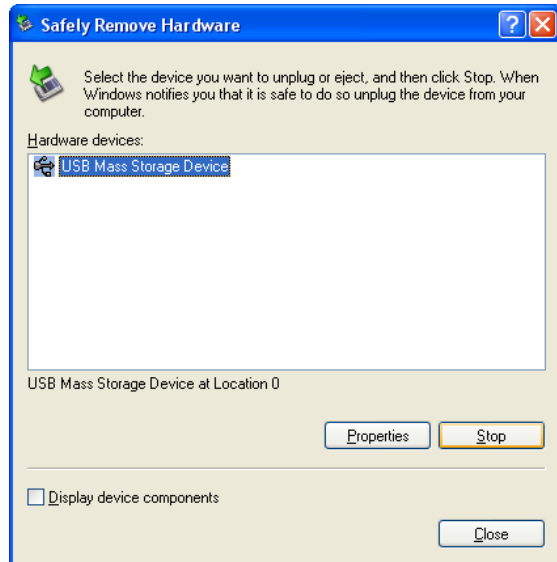
WHEN THE SET REMOVE FROM CONNECTION, IT SHOULD DO IT THRU PROPER PROCEDURE AS BELOW. IF NOT, IT MIGHT CAUSE SERIOUS PROBLEM IN DATA.

☒ CLOSE THE FILE TO OPEN.

☐ CLICK "  ' BELOW THE WINDOW OF PC. IF SO, TOOL BAR AS BELWO WILL APPEAR AND CLICK THE TOOL BAR.



☐ BELOW WINDOW WILL APPEAR, SO FOLLOW UP THE DIRECTION.



☐ CLICK "DDR UMS SYSTEM USB DEVICE.



☐ WHEN BELOW TOOL BAR APPEAR, REMOVE THE SET FROM PC.



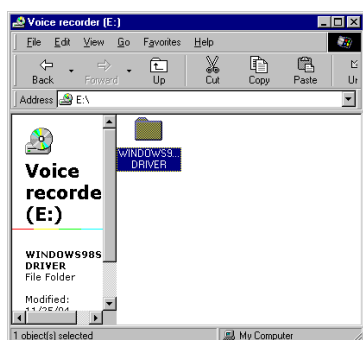
(2) WIN 98SE

REMOVE IT FROM PC WITHOUT ANY PROCEDURE. AS WIN ME, 2000, XP.

USB Driver Auto Removing Program

THE PROVIDED CD CONTAINS UNINSTALLING PROGRAM AUTOMATICALLY.

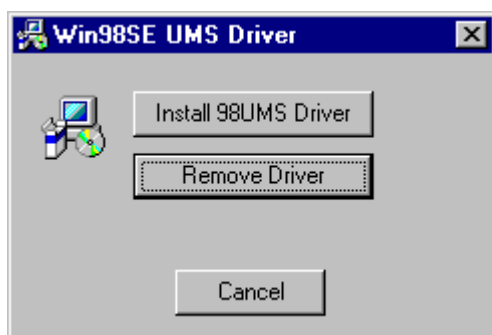
1 INSERT THE PROVIDED CD.



2 DOUBLE CLICK "DVR-WIN98SE.EXE"



3 CLICK "REMOVE DRIVER"

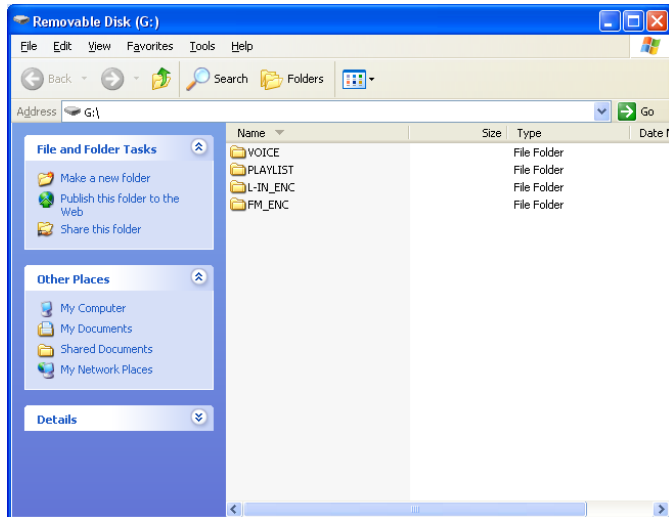


4 WHEN IT COMPLETE, BELOW WILL APPEAR AND CLICK "OK".



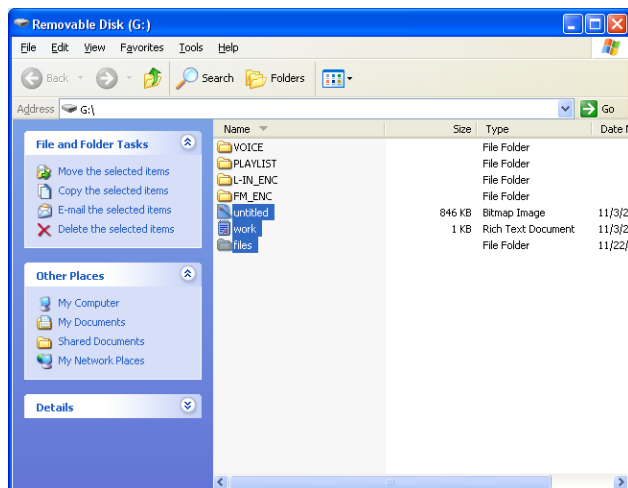
Managing Folders and Files

(1) Default folders

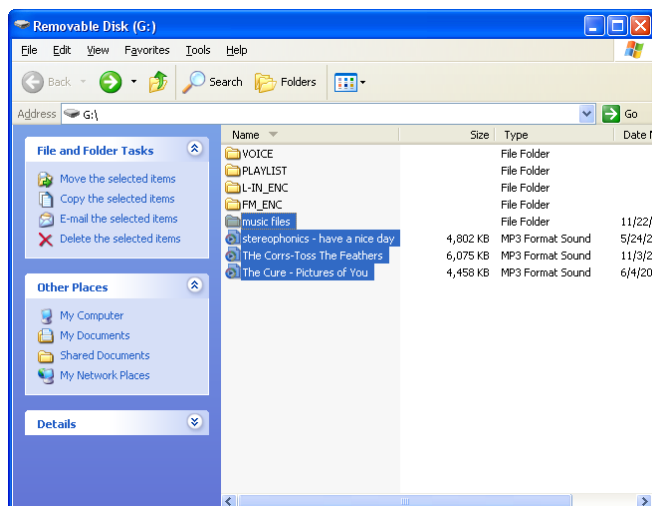


- ◆ When you connect the unit to PC, you can find that the VOICE, L-IN_ENC, FM_ENC & PLAYLIST folders are created as a default.

(2) ALL FILE FORMATS CAN BE STORED AND REMOVED.

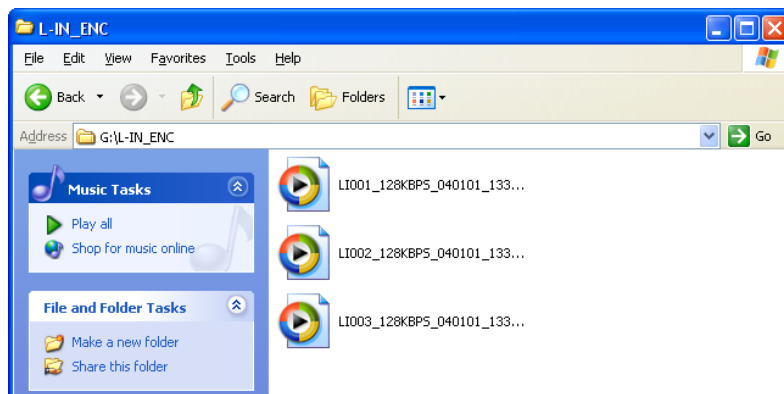


(3) AUDIO MODE IS NOT DEFAULTED LIKE VOICE, L-IN_ENC, FM_ENC. CREATE IT ON THE PC AND CAN CHECK IT AT FOLDER PLAY & MUSIC MODE.



THE CREATED FOLDER BY USER CAN BE CHECKED AT FOLDER ON THE MODE MENU AND ONLY MUSIC FILE IS DISPLAYED ON MUSIC MODE. FOLDER DOES NOT APPEAR.

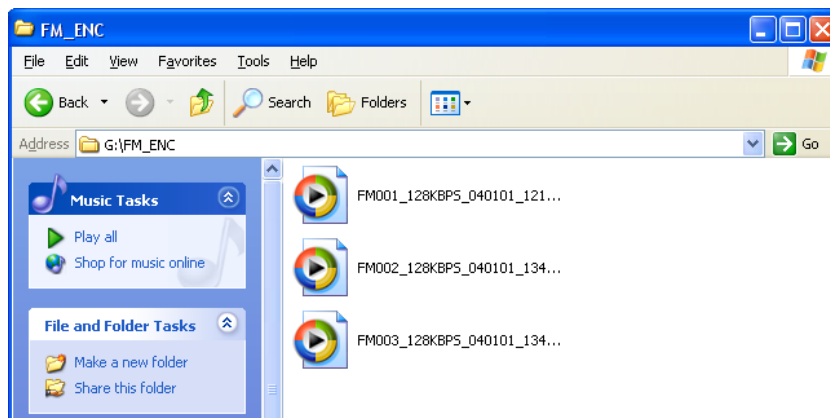
(4) LINE IN MODE



LINE IN MODE contains the recorded files from external devices through the line-in cable.

When recording data, up to 256 files can be created in sequence. If the number of files exceeds 256, the "INDEX FULL" message is displayed.

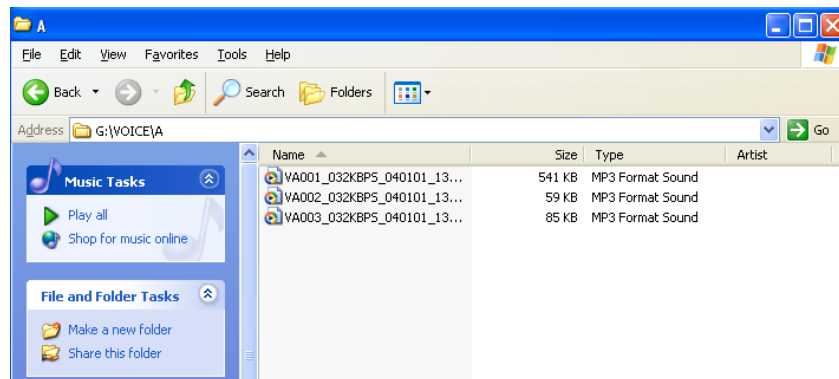
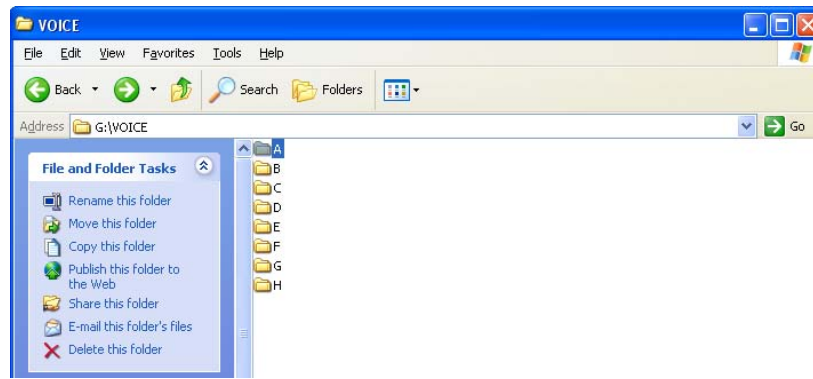
(4) FM_ENC MODE



FM_ENC MODE contains the files recorded IN LISTENING TO radio.

When recording data, up to 256 files can be created in sequence. If the number of files exceeds 256, the "INDEX FULL" message is displayed.

(5) VOICE MODE

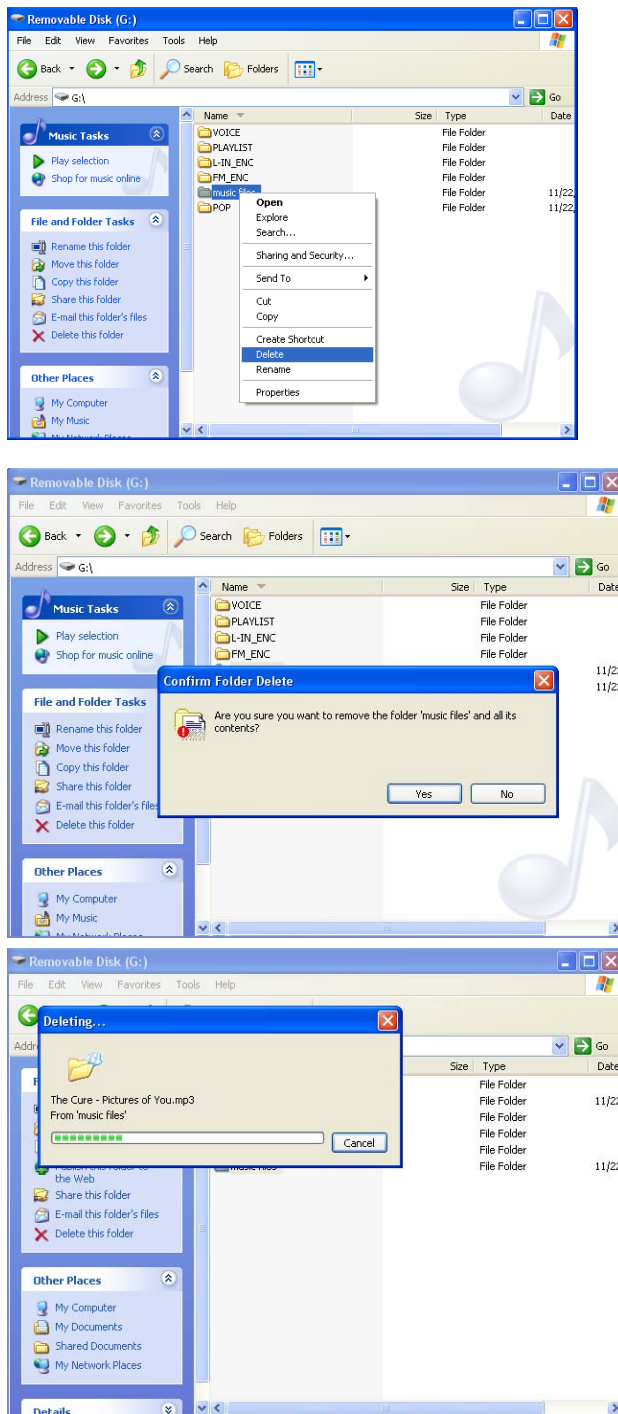


VOICE MODE contains the voice recording files.

When recording data, up to 1024 files can be created in sequence. If the number of files exceeds 1024, the "INDEX FULL" message is displayed.

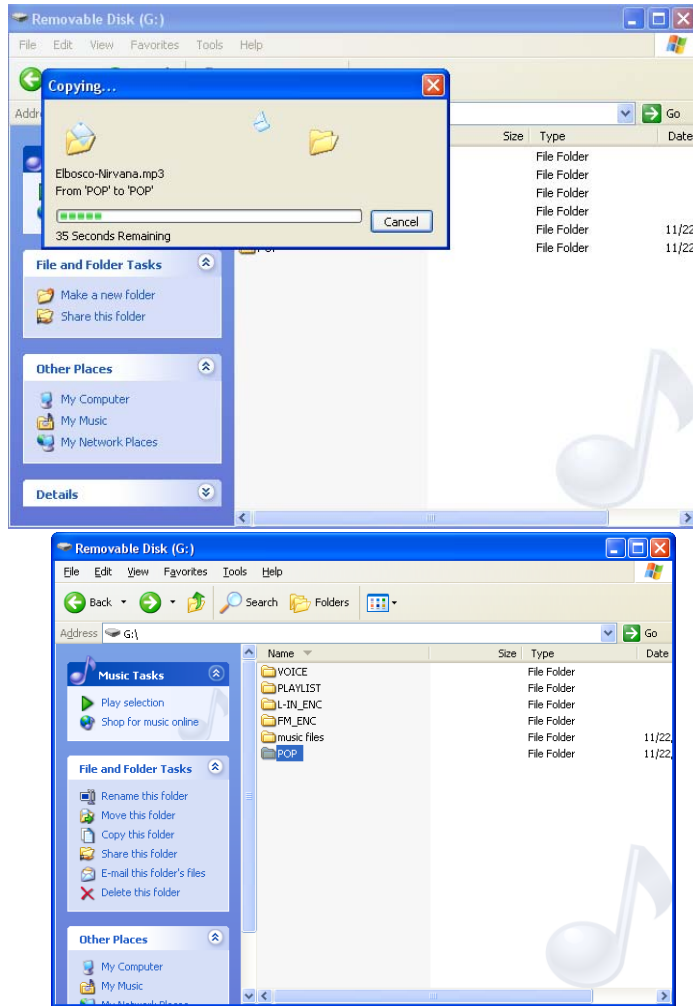
DELETING THE FILE

THIS WORK IS SAME AS DONE IN PC.



Downloading Files

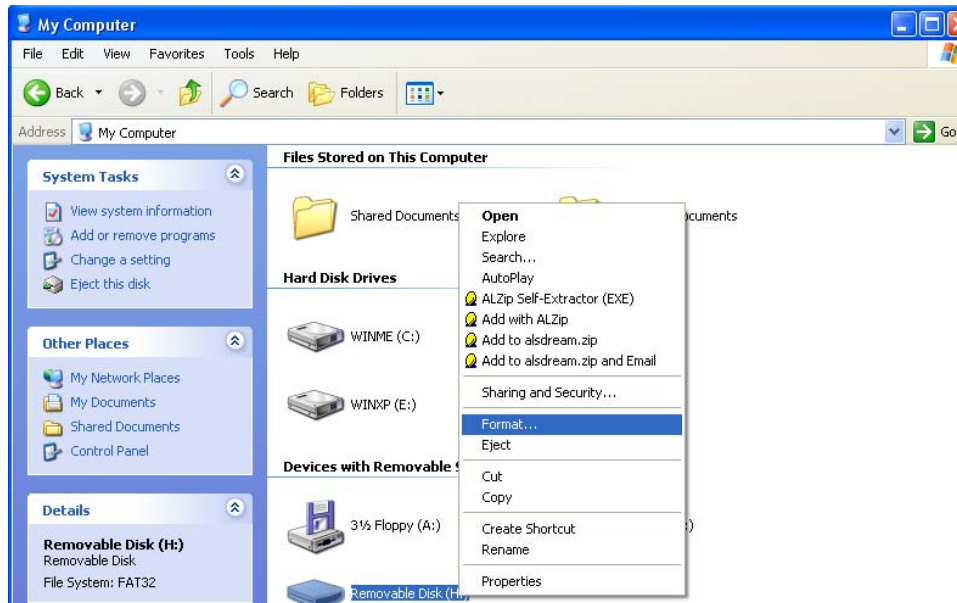
- (1) Copy music files or data from PC folder and download them to device.



FORMATTING File

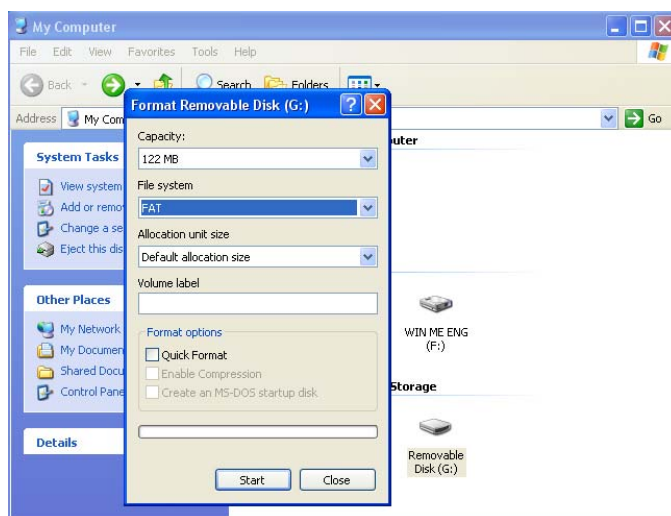
(1) FORMAT on PC

① Go to [My Computer], choose portable disk(F:) and click right button of mouse. Following toolbar appears. At the time, click format.

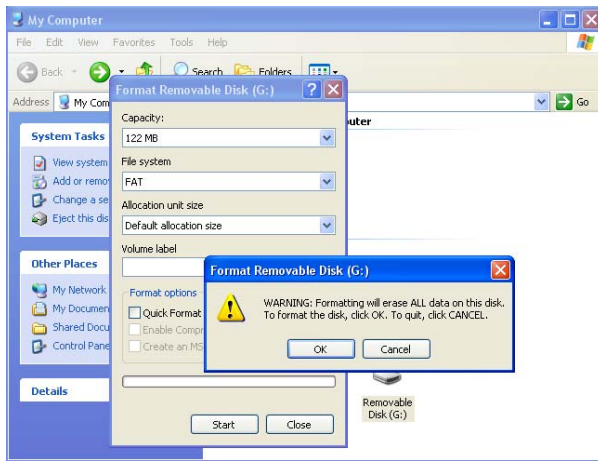


② Click 'start' when following window appears.

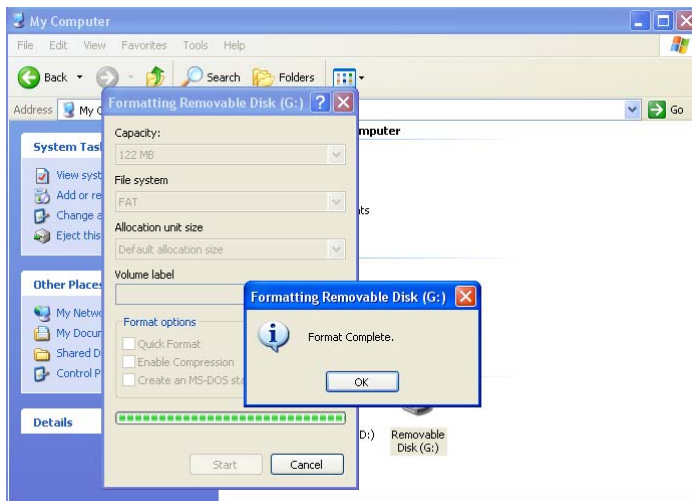
☞ THIS SET DOSE NOT SUPPORT "FAT32". FORMAT MUST DO IN SETTING "FAT".



③ Click 'OK'.



④ Format is completed.



☞ DO NOT TAKE THE SET AWAY DURING FORMATTING. IT MAKE SERIOUS PROBLEM TO SET.

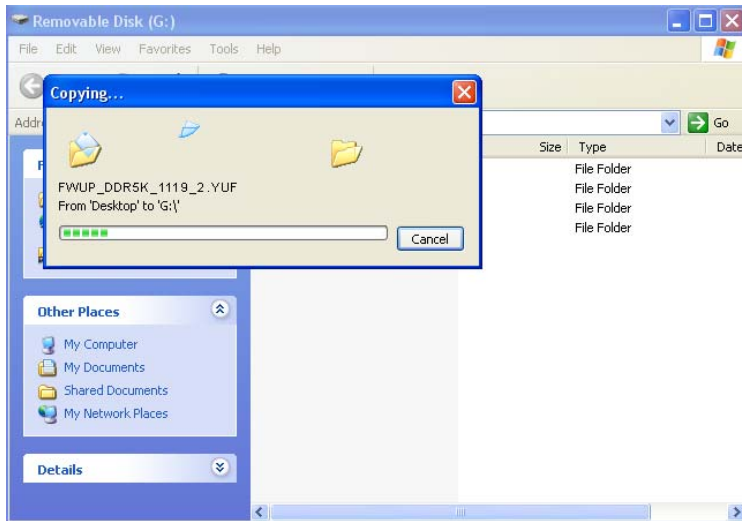
- IF FORMATTING IN FAT32, DO IT BY FAT AT THE PC AGAIN.
- AFTER REMOVING THE SET FROM PC IN FORMATTING WITH FAT32, "SYSTEM ERROR PLEASE FORMAT" WILL BE NOTICED ON THE SET. IF SO, PRESS "MENU" WITH LONG KEY AND THEN GO INTO SYSTEM/FORMAT IN THE MENU AND TRY TO FORMAT AGAIN.

FIRMWARE UPGRADE

This device has the feature which is to improve function and correct error by upgrading firmware.

You can download upgrade file by connecting to website.

- 1) COPY THE FIRMWARE AT THE ROOT DIRECTORY IN THE SET.



- 2) REMOVE THE SET & TURN OFF.
- 3) WHEN TURN ON, IT WILL UPGRADING AUTOMATICALLY AS BELOW.

Firmware
Upgrading
00%

Upgrade
Completed

After completed upgrading, set turn off AND TURN ON automatically

☞ BEFORE UPGRADING, BATTERY STATUS MUST BE CHECK. IF THE STATUS IS LOW, CHANGE IT.
IT MIGHT CASUE SERIOUS PROBLEM TO THE SET.

General Specification

MODEL		DDR-5100R (064)	DDR-5100R (128)	DDR-5100R (256)	DDR-5100R (512)
VOICE RECORD	RECORDING TIME	SHQ:260min, HQ:520min, SP:1040min	SHQ:530min, HQ:1060min SP :2120min	SHQ:1060min, HQ:2120min SP :4240min	SHQ:2120min, HQ:4240min SP :8480min
	RECORDING MODE	MP3 FORMAT : SHQ(32Kbps) / HQ(16Kbps) / SP(8Kbps)			
	FOLDER	A/B/C/D/E/F/G/H (8 FOLDER) Total 1024 Messages with 8 Separate Folder (128 Messages in Each Folder)			
	ARS	Automatic Recording System (A-TYPE: ONE INDEX, B-TYPE: +INDEX)			
	FM RECORDING	World Wide FM band / Japen FM band / Europe FM band			
	EX-MIC	Pin Mic			
	MEMORY TYPE	Built-in Flash Memory (64MB/128MB/256MB/512MB/1GB)			
	S/N	60dB (62dB input 1Khz, speaker output 50mW: SHQ mode)			
	DISTORTION	1.5%±0.2 (62dB input 1KHz , speaker output 50mW : SHQ mode)			
	REQUENCY RESPONSE	300Hz ~ 4.0KHz (-6dB)			
	OUTPUT	Max 80mW(speaker 8ohm)			
	REPEAT MODE	Normal/ One/One repeat/All/Shuffle/A↔B repeat			
	RECODING MDOE	One messages / all messages in file			
	INTRO PLAY	5/10/15 sec in each messages			
	SEARCHING	Easy file search & messages search			
	ALRAM PLAY	10 program (Date / weekly(sun/mon/tue/wed/thu/fri/sat) / daily)			
	TIMER RECORDING	10 program (Date / weekly(sun/mon/tue/wed/thu/fri/sat) / daily)			
FM RADIO	S/N	60dB at 1mv 98.1MHz			
	DISTORTION	0.8%(max) at 1mv 98.1MHz Δf=22.5KHz			
	FREQUENCY RESPONSE	350Hz±30Hz, 3KHz±0.25KHz(100Hz~10KHz, 60dBuV)			
	OUTPUT	Max 80mW (speaker 8ohm)			
	FREQUENCY RANGE	World Standards : 87.5 ~ 108MHz(100Hz step) Europe Standards : 87.5 ~ 108MHz(50Hz step) Japan Standards : 76 ~ 108MHz(100Hz step)			
MP3	BIT RATE	MP3 FORMAT : (256/192/128/96/64/48Kbps)			
	S/N	70dB up (1KHz input 0dB)			
	DISTORTION	0.3%±0.1 (1KHz input 0dB)			
	FREQUENCY RESPONSE	20Hz~20KHz			
	OUTPUT EARPHONE	Max 5mW (16ohm)			
	EQ	EQ : Normal / Classic / Live / Pop / Rock			
	INTRO PLAY	5/10/15 sec in each track			

MP3	SEARCHING	Easy track search & track search
	REPEAT	Normal/ One/ One All/ All/ Shuffle/ A↔B
PC interface	INTERFACE	Mass Storage USB 1.1
	SYSTEM	CPU 200MHz more than , RAM 64MB more than, 20MB of free space
	OS	windows98SE , windows2000 , windows ME , windows XP, OVER Mac OS9.2, OS10
	SOUND CARD	Sound blaster 16 compatible
	DISPLAY	640×480 more than
INPUT/OUTPUT DEVICE	EXT. MIC	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
	USB	Mini jack (PC : A TYPE)
SPEAKER	DIAMETER	φ 23 (IMP 8Ω)
	MAX. OUTPUT	80mW (volume max)
VOLUM LEVEL.		Digital volume (30 step)
BACK LIGHT		COLOR (BLUE)
MEMORY		NAND Flash Memory (64MB/128MB/256MB/512MB/1GB)
LED		Recording indicator display LED (RED)
LCD	DOT	80X64
	ICON DISPLAY	COUNTER,TIMER,ALARM,ARS,3DS,NTRO,L R SPECTRUM,HOLD,BATTERY
	DOT DISPLAY	MODE, MENU, INDEX, FILE NAME, EQ, REPEAT, PLAY SPEED
PALYBACK SPEED		Slow (80%) , Fast (120%)
ADAPTER		DC3V / 300mA (CE,CUL,T,FCC)
OPERATING KEY		FF / PLAY(PAUSE) / REW , MENU / REC(PAUSE) / STOP / ERASE / VOL+ / VOL- , HOLD
POWER		3V , LR03 , two alkaline battery('AAA' size or UM-4)
BATTERY LIFE	VOICE PLAY	Approx. 23hour during the voice play(earphone output: volume middle position)
	VOICE RECORDING	Approx. 13hour during the voice REC(earphone output: volume middle position)
	RADIO RECEPTION	Approx. 23hour during the radio play(earphone output: volume middle position)
	MP3 PLAY	Approx. 18hour during the MP3 play(earphone output: volume middle position)
ACCESSORY		STEREO EARPHONE, LINE-IN CABLE, USB CABLE, TELEPHONE ADAPTOR, HAND STRAP, MANUAL, CD FOR WIN98SE DRIVER, EXTERNAL MIC, EXTERNAL ANTENNA, BATTERY
OPTIONAL ITEM		REMOTE CONTROLLER(MODE/ FF/ PLAY(STOP)/ REW/ REC(PAUSE)/ VOL+/-) DC ADAPTOR
SIZE		H 100 × W 31 × D 14

Information to User

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.