

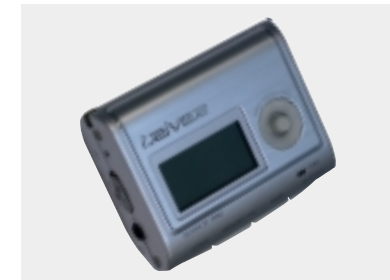
iRiver
iFP-500 Series

www.iRiverAmerica.com



Instruction Manual

MP3 PLAYER/FM TUNER
Model iFP-500 Series



Firmware Upgradable

Thank you for your purchase.
Please read this manual carefully
before using your new player.

www.iRiverAmerica.com

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:
(1) THIS DEVICES MAY NOT CAUSE HARMFUL INTERFERENCE, AND
(2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE, RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIREED OPERATION.

Note : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures :

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

NOTE: THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

1. Getting started.....	1
2. Locating the controls.....	2
3. Basic Operation.....	3
4. Convenient Functions.....	4
5. Using Programs.....	5
6. Others.....	6

1. GETTING STARTED

CONTENTS.....	1
INTERNET.....	1-1
UNIQUE FEATURE.....	1-2

- URL : www.iRiverAmerica.com
- Find information on our company, products, and customer and technical support.
- Update your player with firmware downloads. Firmware upgrades offer support for new CODECS and deliver new product features.
- Consult the product FAQ.
- Register your iRiver product online so that our Customer Service is able to provide support as efficiently as possible.
- All contents contained in this manual subject to change without notice to improve ability of this player or according to changing of specification.

iRiver Limited does not assume any responsibility for errors or omissions in this document or make any commitment to update the information contained herein.

iRiver is a registered trademark of iRiver Limited in the Republic of Korea and /or other countries and is used under license. Microsoft Windows Media and the Windows Logo are trademarks or registered trademarks of Microsoft Corporation in the United States and /or other countries. All other brand and product names are trademarks of their respective companies or organization. All other product names may be trademarks of the companies with which they are associated.

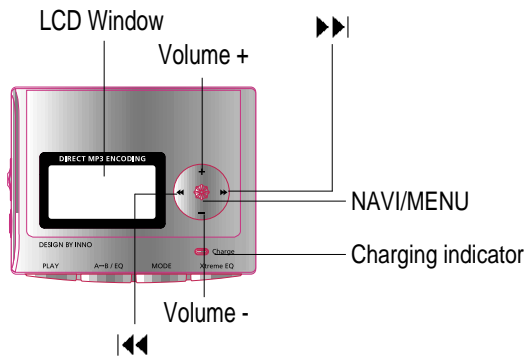
© 1999-2003 iRiver Limited. All rights reserved.

- **User Interface Design**
- **Multi-Codec Player**
: Supports MP3, WMA, ASF formats.
- **Firmware Upgrade**
: Provides the latest updated features via firmware upgrade.
- **Graphic LCD supporting Multiple Languages**
: iFP-500 Series comes with graphic LCD which can support multiple languages (39 languages).
- **FM Function**
You can easily listen to FM stations and set your favorite stations by using Auto Preset and Frequency Memory functions.
- **6 Preset EQ** : Normal, Rock, Jazz, Classic, U Bass, Metal
- **Xtreme EQ 및 Xtreme 3D 기능**
Post DSP 채용으로 강력해진 사용자 설정 Equalizer 5개 대역의 미세조정으로 사용자의 취향에 따라 풍부한 저음등 다양한 음향효과를 얻을 수 있습니다. Xtreme 3D 기능의 채용으로 콘서트 현장의 입체 음향을 즐길 수 있습니다.
- **GUI (Graphic User Interface) Menu System**
- **Easy Navigation**
The simple navigation makes it easy to find any song.
- **Supports 8 levels of subfolders, 500 folders total and up to 1500 files at one time.**
- **Create your own playlists.**
- **MP3 Direct Encoding (not supported on iFP-340):**
11.025KHz ~44.1KHz, 8Kbps ~ 320Kbps
- **Record FM Radio, Voice, or line-in from another device**
Voice record level is automatically controlled by AGC function.
- **Convenient neck strap.**
- **Built-in Rechargeable battery and Charge by connecting USB**

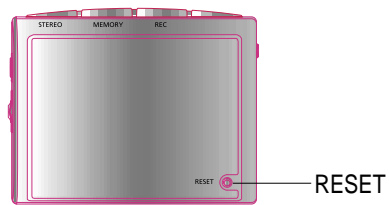
2. Locating the Controls

Contents.....	2
Front View, Rear View.....	2-1
Side View.....	2-2
LCD Window.....	2-3

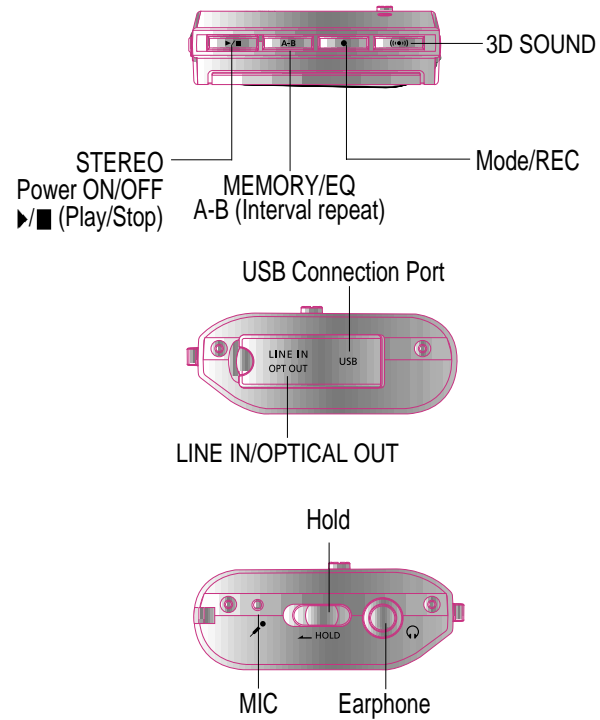
FRONT VIEW



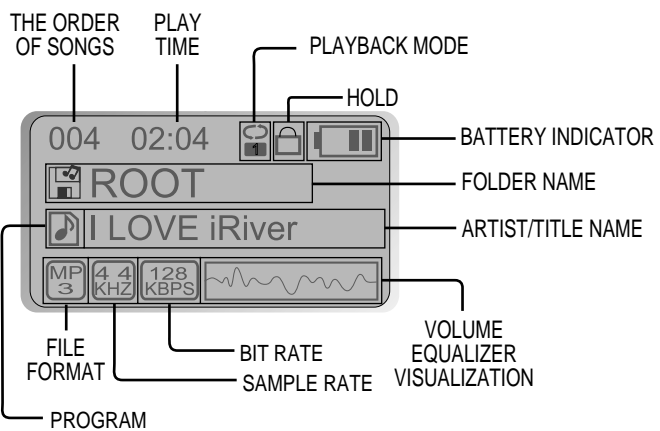
REAR VIEW



SIDE VIEW

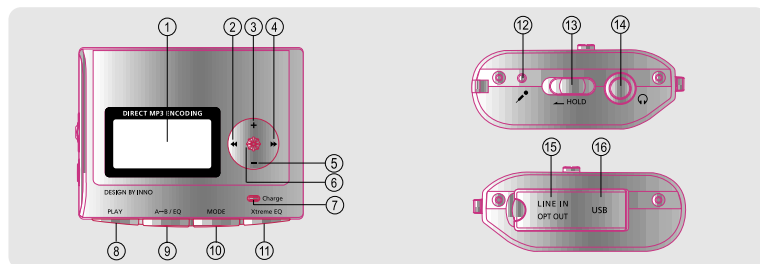


LCD Window



3. Basic Operation

Contents.....	3
Basic Operation.....	3-1/3-4
Listening to Music.....	3-5/3-6
Operating the FM Tuner.....	3-7/3-10
Recording FM.....	3-11
Recording Voice.....	3-12/3-13
Recording External Audio source.....	3-14/3-17



Navigation



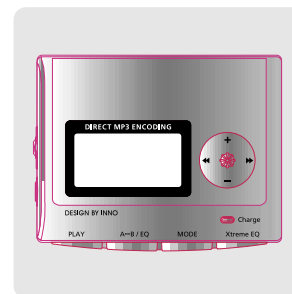
1. LCD window : Displayed operating status of the player.
2. To select the previous music for MP3 or station for FM.
3. To increase volume.
4. To select the next music for MP3 or station for FM.
5. To decrease volume.
6. To select NAVI/MENU function.
7. Charging Indicator : Charging status is displayed. (Red : Green :)
8. To start or stop playback for MP3, to select mode for FM or turn off.
9. To select EQ mode, A-B repeat or memory stations for FM automatically.
EQ : NORMAL → ROCK → JAZZ →

Menu

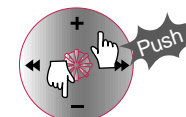


10. To select function, playback mode, or record/stop recording.
11. 3D Sound : You can enjoy live surround sound like hall or stadium.
12. Microphone : To record Voice
13. HOLD : Enable or disable HOLD function. Buttons do not work when HOLD is enabled.
14. Headphone Jack
15. LINE-IN/OPTICAL OUT Jack : To record the signal from the external audio equipment(or external microphone) or the signal output from the player transfer to the external audio equipment with the optical input jack.
16. USB Connection Port

Basic Operation



- To adjust the volume
Press + on volume button to increase volume and press – on button to decrease volume.



- Selecting FM Mode when listening FM :
(Refer to page 47)



- To change Functions
MP3 Playback ↔ FM Receiving ↔ Voice Recording ↔ LINE IN Conversion



NAVIGATION

Press NAVI/MENU button and find the desired track by pressing the VOL + or VOL – button. To select the track, press the NAVI/MENU button, ►► or the PLAY/STOP button.

To move to the upper folder, push the ◀◀ switch. If there is no upper folder, NAVIGATION stops.

MENU

A long press of the **NAVI/MENU** button will enter the menu system.

- ① Scrolling between menus : Press **⏪** and **⏩**.
- ② Exit : Push the **VOL -** switch down or hold down the **NAVI/MENU** button.
- ③ Select Function: Press the **NAVI/MENU** button.

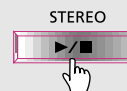
MODE

While an MP3 file is playing or the player is in stop mode, press **MODE/REC** to activate selected modes, such as Repeat or Shuffle.

Press and hold the **MODE/REC** button:
You can select MP3 or FM, Voice or Line-in recording functions
(Play mode is automatically activated when MP3 is selected).

DELETING FILES ON THE PLAYER

- 1 Stop playback.



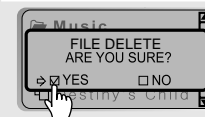
- 2 Click the "NAVI/MENU" button.



- 3 Select the files to delete by using VOL + or VOL -.



- 4 Click the "MODE" button. "FILE DELETE ARE YOU SURE?" is displayed on the LCD. Select "YES" by using **⏪** and **⏩** to delete. Then click NAVI/MENU button.



DELETING FOLDERS ON THE PLAYER

- 1 Stop playback.



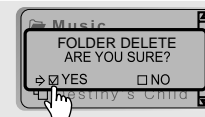
- 2 Click the "NAVI/MENU" button.



- 3 Select the folder to delete.

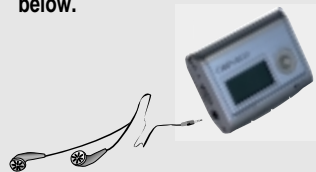


- 4 Click the "MODE" button. "FOLDER DELETE ARE YOU SURE?" is displayed on the LCD. Select "YES" by using **⏪** and **⏩** to delete. Then click NAVI/MENU button.

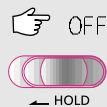


NOTE You can only delete a blank folder. In order to delete a folder, you must first delete the files in the folder.

1 Connect the earphones as shown below.



2 Put the HOLD switch to "OFF".



3 Press the PLAY/STOP button to turn on the player. Press it again to play.



4 To select music
 ◀◀ : To select previous music
 ▶▶ : To select next music

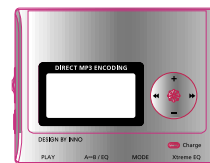


5 To adjust the volume
 + : To increase volume
 - : To decrease volume



NOTE

- When "Hold" is ON, the buttons on the player will not function.
- In case of stop status of MP3 or standby status of Voice recording, the player automatically turns off according to the setting of "STOP POWER OFF" on the MENU. (Refer to page 71)



■ To turn on the player



■ To play



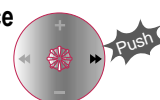
■ To change the function (MP3 ↔ FM
 ↔ Voice recording ↔ LINE IN)



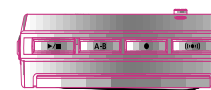
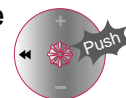
■ To stop



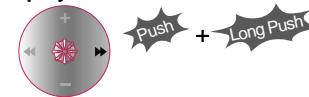
■ To advance



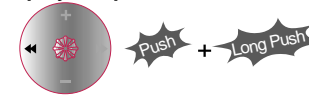
■ To reverse



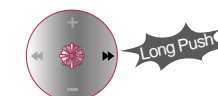
■ To play the next folder



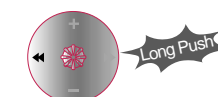
■ To play the previous folder



■ To fast forward



■ To fast reverse



■ To turn off the player



■ While playing MP3, Press and hold the MODE/REC button.



The function selection graphic displays on the LCD.



■ Push the **NAV/MENU** button to select FM RADIO. Press the **NAV/MENU** button to confirm.



■ Press the **STEREO/PLAY/STOP** button to select Stereo/Mono.



Tune to your favorite station (FM 87.5~108MHz)

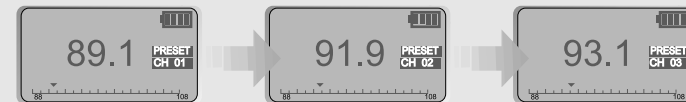
1 To change frequency, push the **◀◀** or **▶▶** switch to the left or the right.
(ex : 87.5 → 87.6)



2 **Auto Scan function:** To select a memorized station, press the Navi/Menu button and find the station by pushing the **◀◀** or **▶▶** switch to the left or the right.

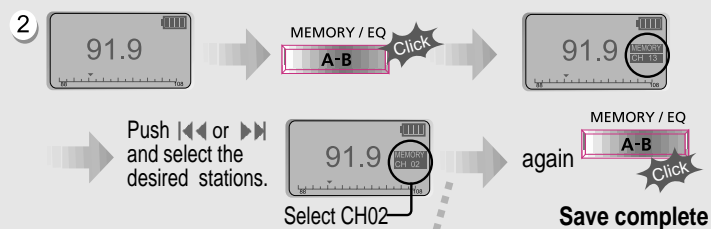


3 **PRESET Mode :** To select a station saved in memory, press the Navi/Menu button and find the station by pushing the **◀◀** or **▶▶** switch to the left or the right.

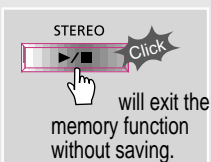


Memory Function (Save stations)

- 1 Select the station by pushing the ◀◀ or ▶▶ switch to the left or the right.

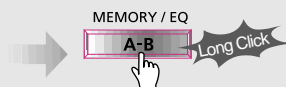


- 3 Up to 20 stations can be saved.



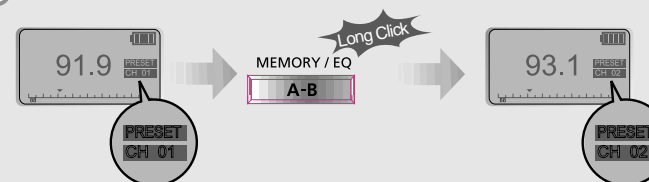
- 4 **Auto memory function :**
Automatically select stations and save them in sequential order.
(It only activates while the player is not in PRESET mode)

- ▶ Auto memory may not work within weak transmission areas.



Memory delete function (Delete saved stations)

- 1 Select the station to be deleted at preset mode
- 2 Press and hold the memory button.



- The next station will appear when station delete is completed.
Push the memory button if you also want to delete the next station.


NOTE

- ▶ FM Tuner reception may vary in different areas.
- ▶ While in Preset mode, auto scan and auto memory functions are not available.
- ▶ When the player doesn't have any preset stations, EMPTY will be displayed at preset mode then fade out.

- Press the PLAY/STOP button to turn the player off.



To record FM

Press  the MODE/REC button during FM reception.



To stop FM recording

Press  the MODE/REC button again to stop recording.

The recorded file is saved as TUNER000.REC. It is saved in the RECORD folder.



To play a recorded file

After changing to MP3 mode, select a Tuner file in the RECORD folder, press the PLAY/STOP button.

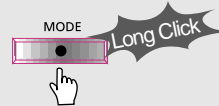
To pause FM recording



Press  button to pause the recording process. Press  button again to restart recording.

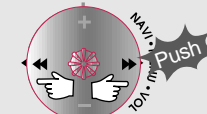
NOTE Volume can not be controlled while recording.

Recording Voice

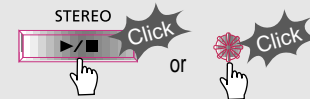
1 Press and hold the MODE/REC button.



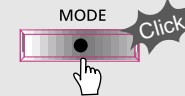
2 Press the  or  switch to select Voice mode.



3 Press the NAVI/MENU button (or PLAY/STOP) to go to Voice recording mode.

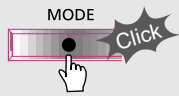


4 Press the MODE/REC button and voice recording starts.



To stop recording

Press the MODE/REC button.



To play a recorded file

Press the PLAY/STOP button.



To pause voice recording

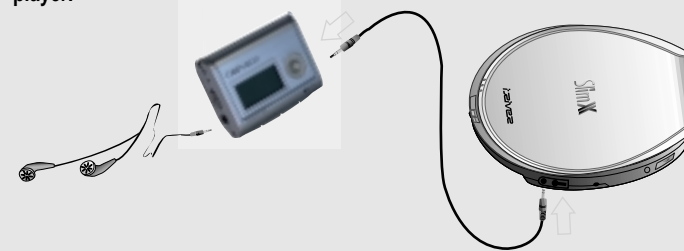
Press >/■ button during recording.
Press >/■ button again to restart recording.

NOTE

- The recorded file is saved as VOICE00.REC in the VOICE folder.
- If "00:00:00" is displayed on the LCD, the player's memory is full. To record, delete files and/or folders on the player to make some space available. (Refer to page 11, 26)
- Keep the player far enough away from the source to avoid distortion in the recording.

Recording from the external audio source

1 Connect LINE OUT jack of the external equipment to LINE IN jack of the player.



NOTE When recording by using the external microphone, try it in the Line-In Mode.

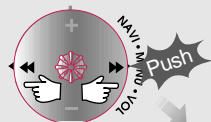
2 Set "Line In Recording Mode" in the MENU. (Refer to p. 73 for details)



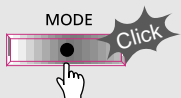
3 Press and hold the MODE/REC button.



- 4 Press the or switch to select Line-In mode.



- 6 Press the MODE/REC button and voice recording is started.

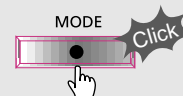


- 5 Press the NAVI/MENU button (or PLAY/STOP) to go to Line-In recording mode. (Record Standby Mode)



To stop recording

- 1 Press the MODE/REC button.



- NOTE** - The recorded file is saved as AUDIO000.REC, AUDIO001.REC... in sequential order. Files are saved in the RECORD folder.
- The recorded file by using an external microphone is saved as EXMIC000.REC.

To play a recorded file

< Method 1 >

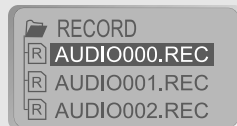
- Press the PLAY/STOP button.



To play a recorded file

< Method 2 >

1 After pressing the NAVI/MENU button, select a recorded file using VOL + or VOL - button.



2 Press the PLAY/STOP button.



4. Convenient Functions

Contents.....	4
Navigation (Searching).....	4-1
Playback Mode.....	4-2/4-3
Program Mode.....	4-4/4-6
EQ Mode.....	4-7
MEMU.....	4-8/4-21

■ Navigation is the function used to search for tracks.

1 NAVI/MENU button

• You can select a song by pressing the NAVI/MENU button and using the VOL +, VOL - buttons.

2

3 Select Folder or Scroll to Upper Folder

4 Select the track





MODE (Playback Mode)

You can set various Repeat and Shuffle options by choosing these selections under Mode.





Please refer to the function controls (page 74) for user-defined configuration.

◀ When the MODE/REC button is pushed, the icon in the playback mode indicator is changed.


REPEAT

	Play a single track repeatedly.
	Play all tracks in the folder and stop.
	Play all tracks in the folder repeatedly.
	Play all tracks in the player repeatedly.

SHUFFLE

SFL	Randomly play all tracks in the player and stop.
SFL 	Play a single track repeatedly. Skip forward will select a new random track to play repeatedly.
SFL 	Randomly play all tracks in the folder and stop.
SFL 	Randomly play all tracks in the folder repeatedly.
SFL 	Randomly play all tracks in the player repeatedly.

INTRO

	INTRO: Plays the beginning 10 seconds of each track in sequential order. INTRO HIGHLIGHT: Plays 10 seconds from 1 minute into each track in sequential order. You can set this function in the MENU function.
---	--

MEMORY / EQ
A-B

● Program mode: Create your own playlists.


Activating Program mode




- At stop mode**

MEMORY / EQ
A-B Click

Scroll to Program mode ▶

PROGRAM
001
002
003

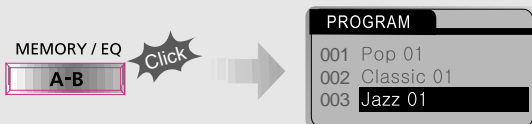
▶ Program mode is activated while in Stop Mode.
▶ Repeat A-B is activated while playing. 
- Press the NAVI/MENU button, then select the music to program by using the VOL+, VOL - switch.

 →  → 

▶ Push the VOL + or VOL - switch to select a folder, then press the MEMORY/EQ button to save all files in the folder. Sub folders are not added.

▶ VOL + 또는
VOL - 누르면 폴더

3 Press the MEMORY/EQ button to save the program list.



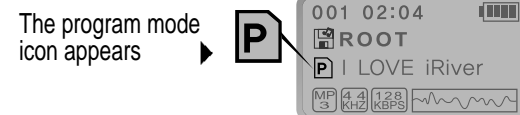
To remove files from the program list.

Press the MODE/REC button after selecting the file to be deleted using the MEMORY/EQ button. The program list is automatically changed.

■ To delete all programmed songs, press MEMORY/EQ button for a while.

Program Play

After programming, press to play the tracks in sequential order.



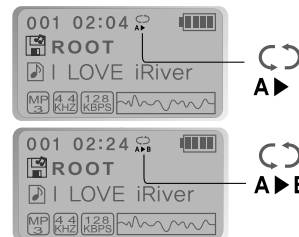
Cancel Program Mode

Press stop then



Interval Repeat

● Play a selected interval repeatedly

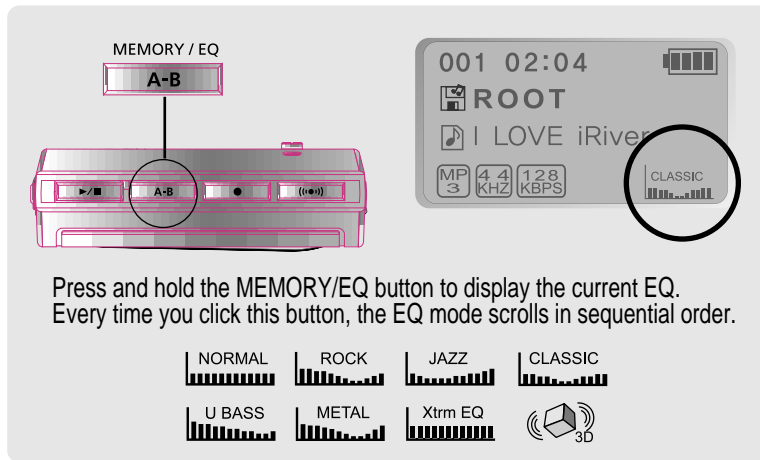


MEMORY / EQ Press button once to select the beginning <A> Point.

MEMORY / EQ Press button again to select the ending Point.

▲ A-B interval will be repeated.
▷ Press button again to cancel.

EQ MODE



NOTE Please refer to the Function Control (Page 75) for configuring Xtreme EQ.

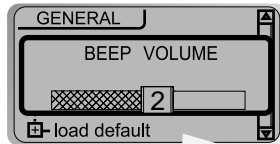
Menu is subject to change with different firmware versions.
Users can configure their own settings.

CONFIGURATION

- | | | |
|---|---|---|
| GENERAL <ul style="list-style-type: none"> ⊞ beep volume ⊞ resume ⊞ fade in ⊞ language ⊞ load default | DISPLAY <ul style="list-style-type: none"> ⊞ back light ⊞ lcd contrast ⊞ visualization ⊞ scroll speed ⊞ tag information ⊞ time | TIMER <ul style="list-style-type: none"> ⊞ sleep ⊞ pwr off |
| CONTROL <ul style="list-style-type: none"> ⊞ fast skip ⊞ scan speed ⊞ voice recording mode ⊞ voice auto detection ⊞ tuner recording mode ⊞ line-in recording mode ⊞ line-in recording volume ⊞ line-in auto-sync ⊞ ext mic ⊞ download activity | MODE <ul style="list-style-type: none"> ⊞ repeat ⊞ shuffle ⊞ intro ⊞ study ⊞ name | SOUND <ul style="list-style-type: none"> ⊞ Xtreme EQ ⊞ Xtreme 3D ⊞ sound balance ⊞ eq limit ⊞ eq select |

MENU OPERATION

- Press and hold the NAVI/MENU button to display the menu system.
- It is composed of 6 main menus with sub-menus.

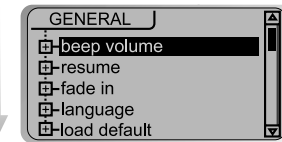
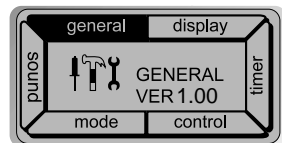
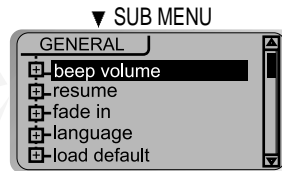
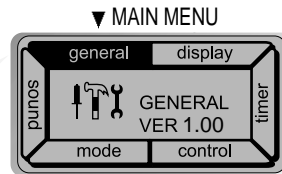
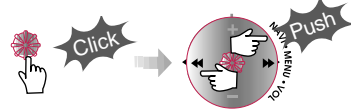


When you select a sub menu, you can set your preference to be displayed.

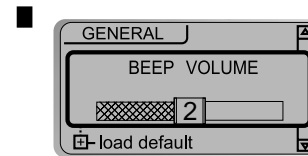
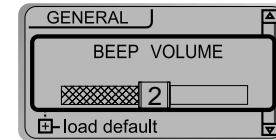
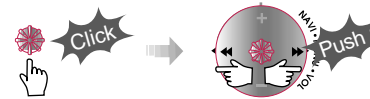
Shift between Menus

Press the ◀◀ or ▶▶ button to move between main menu and sub menu.

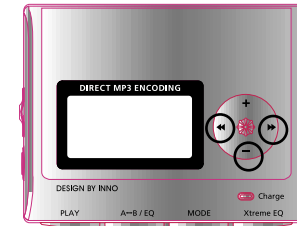
From Main Menu to Sub Menu



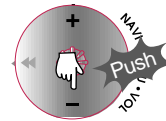
Enter Sub Menu



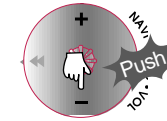
▽ Each control option is configured by following buttons.



Exit Sub Menu



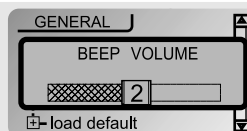
Exit Main Menu



GENERAL

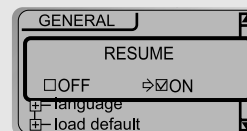
■ BEEP VOLUME

: Set beep volume level. Set to "0" for OFF.



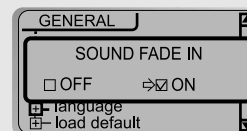
■ RESUME

: When ON, player resumes to previous place in song after STOP or Power OFF.



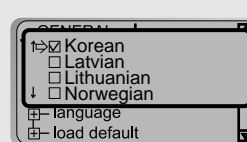
■ FADE IN

: When activated, volume increases gradually at playback mode to prevent sudden loudness.



■ LANGUAGE (Supports 39 languages)

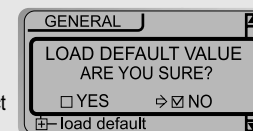
: Song title and ID3 tag information for the MP3 files is dependent on the version of the PC operating system that was used to create it. (For example, if an MP3 files is created in a Korean version of Windows, the language setting should be Korean for proper title display)



■ LOAD DEFAULT VALUE

: Initialize Menus to the original factory settings. Button operation order is as below.

Click NAVI/MENU (select default menu) → |◀◀ (select YES) → Click NAVI/MENU (select YES : Initialization)



DISPLAY

■ BACK LIGHT

: You can adjust the time that the Backlight stays on.

SEC : Backlight stays on from 0 to 30 seconds.
MINUTE : Backlight stays on from 0 to 30 minutes.
Press the NAVI/MENU button to set SEC/MINUTE.



■ LCD CONTRAST

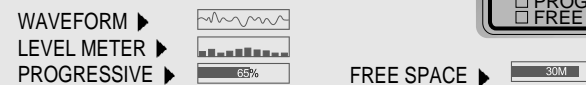
: Adjust LCD contrast of remote control.

Contrast can be adjusted by using the |◀◀ and ▶▶| buttons.



■ VISUALIZATION

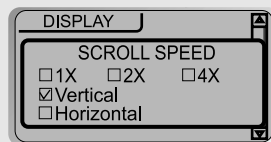
: You can display the visualization of the audio signal in play mode, the elapsed time of a track, or the free space in memory.



■ SCROLL SPEED

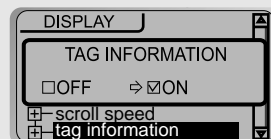
Adjust scroll speed by
1x/2x/4x/Vertical/Horizontal.

Vertical : The scroll goes up and down
Horizontal : The scroll goes from the left to
the right.



■ TAG INFORMATION

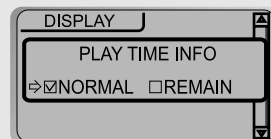
On : Display track with ID3 tag information
Off : Display track with filename



■ TIME

Normal : display elapsed time.
Remain : display remaining time.

Note : If the track format is VBR, the time
may not be accurate.



TIMER (SET AUTO POWER OFF)

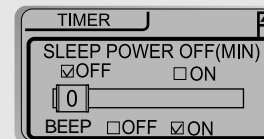
■ SLEEP POWER OFF

: Automatically turns power off after a fixed
time. (Time range can be set from 0 to
180 minutes by a minute)

Use the ◀◀ or ▶▶ button to adjust time.

Set BEEP ON/ OFF by pressing the NAVI/MENU button.

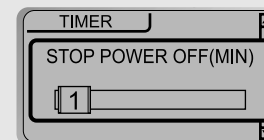
▷ When the power is off, the sleep power off setting goes back to Zero setting.



■ STOP POWER OFF

: Automatically turns power off at stop
mode. (Time range can be set from 1 to 60
minutes by a minute)

Use the ◀◀ or ▶▶ button to adjust time.



CONTROL

■ FAST SKIP

OFF : Skip doesn't activate.

10 : Skip 10 tracks at time.

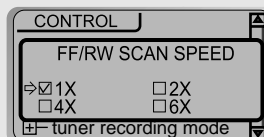
DIRECTORY : Skip to previous or next folder.

This defines the operating method of short or
long click of ◀◀ or ▶▶ lever.



■ FF/RW SCAN SPEED

The fast scan speed can range from 1x/2x/4x/6x.



■ VOICE RECORDING MODE

You can adjust recording quality when recording Voice.

Bit Rate : 8Kbps~160Kbps

Sampling Frequency : 11.025KHz ~44.1KHz



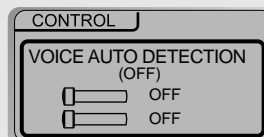
ON : When recording voice, the recording level is automatically controlled and the sound from a long distance is normally recorded.

OFF: AGC Control not activated.

■ VOICE AUTO DETECTION

:

음성 녹음시 녹음할 음원이 없으면 자동으로 녹음을 일시 정지하며 소리가 나면 자동으로 녹음이 다시 시작됩니다. 메모리의 용량을 절약함으로써 장시간동안 녹음이 가능합니다.



OFF : Voice Auto Detection is disable.

Voice Auto Detection Level : Setting the level to start recording. (Level 1~Level 10)

음성 감지 레벨 설정 : 소리의 인식 크기를 설정합니다.(Level 1 ~ Level 10)

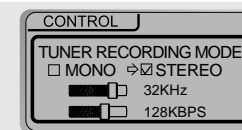
녹음 시간 설정 : 녹음을 일시 중지할 시간을 설정합니다.(1 ~10초)

■ TUNER RECORDING MODE

You can adjust recording quality when recording from the FM Tuner.

Bit Rate : 8Kbps~320Kbps

Sampling Frequency : 11.025KHz ~44.1KHz



■ LINE-IN RECORDING MODE

You can adjust recording quality when recording from External equipment.

Bit Rate : 8Kbps~320Kbps

Sampling Frequency : 11.025KHz ~44.1KHz



■ LINE-IN RECORDING VOLUME

You can adjust recording level when recording from External equipment. (You can set from 0 to 64.)



■ LINEIN AUTO-SYNC

: 오디오 CD를 Line-In으로 입력받아 녹음을 할 경우, 오디오 트랙별로 구분하여 새로운 파일을 생성하는 기능입니다.

- OFF : 오디오 신호 감지 기능 해제

- 감지 시간 (1~5초) : 설정된 시간동안 오디오 신호가 없으면 새로운 파일을 생성합니다.

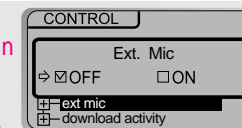


■ EXT MIC

: You can select external microphone or Line-In when recording.

OFF : To record through Line-In

ON : To record through an External microphone

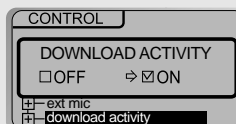


주의

외부 마이크를 선택할 경우, Line-In 모드 화면에서 녹음이 됩니다. 또한 녹음 음질과 녹음 레벨도 Line-In의 설정 값에 따릅니다.

■ DOWNLOAD ACTIVITY

: USB 연결시 PC와 연결하기 위한 모드와 일반 플레이어 모드로 동작할 수 있는 기능입니다.
 OFF : 일반 플레이어 모드로 설정됩니다. 플레이어에서 오디오 재생, 라디오 재생, 녹음 기능 등의 일반적인 동작이 가능합니다.
 ON : PC와 연결하여 데이터를 전송합니다. 일반 플레이어 모드로 동작하지 않습니다.



CAUTION 전원을 켜다가 다시 켤 때 항상 PC와 연결하여 데이터를 전송하는 모드(ON)입니다.

■ Setting the Recording Mode

- Voice recording mode/Tuner recording mode/Linein recording mode



1. Select Recording Mode to set.
2. Press the NAVI/MENU button repeatedly to select item (AGC ON/AGC OFF, Mono/Stereo, Sample rate or Bit rate) to set.
3. Set or select AGC ON/AGC OFF, MONO/STEREO, Sample rate or Bit rate using <<< or >>> button.
4. Push the VOL - lever to EXIT repeatedly.

CAUTION 배터리 표시가 깜빡일 경우에는 녹음이 되지 않으니 USB를 연결하여 플레이어 내에 있는 내장배터리를 충전해 주세요. 내장배터리가 완전히 충전되면 충전LED가 꺼집니다.

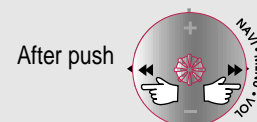
CAUTION You can not record when battery indicator is blinking indicating a low battery. USB가 연결이 되면 자동 충전 기능에 의해 내장 배터리가 충전됩니다.

MODE (PLAYBACK MODE)

■ REPEAT MODE / SHUFFLE MODE

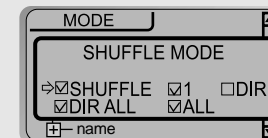
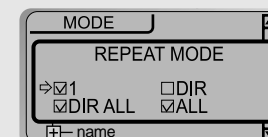
: A number of Repeat and Shuffle modes are available. Select the one you want by pressing MODE button (Multi selecting available)

▼ How to select



And button for selection.

And button to exit.



▷ Only the selected play mode will be available when you press the MODE/REC button (For details, please refer to p. 59~60)

■ INTRO MODE

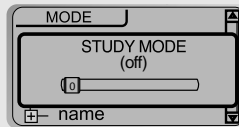
Intro: Plays the beginning 10 seconds of each track.

Intro Highlight: Plays 10 seconds from 1 minute into each track in sequential order.



■ STUDY MODE

재생중에 ◀◀, ▶▶ 버튼을 누르면 설정된 시간만큼 이동하여 재생됩니다.
OFF로 설정시 스테리모드가 해제되며 1~60초까지 설정 가능합니다.

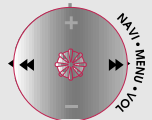


■ NAME

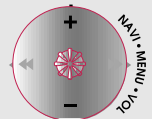
You can input your name or custom text.

- ▶ The saved text is displayed When initial loading ▷
- ▶ The saved text is displayed When Stop during playback ▷

▼ Button Operation



Select the character by using ◀◀ and ▶▶ button and press Navi/Menu button to input the character.



To move the cursor in the name window, use + and - on Volume button.



To scroll between English and your preferred language, use STOP button



To delete the character, push MODE button.



Save and Exit



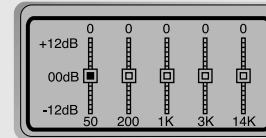
iRiverMan:-)



SOUND

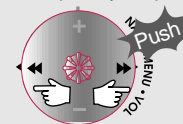
■ Xtreme EQ

You can adjust the sound to your preference.
There are 5 band frequency steps, set from -12dB to +12dB by 3dB step.

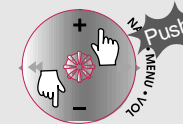


■ HOW TO SET Xtreme EQ

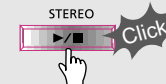
1. Select the Frequency step to set using the ◀◀ or ▶▶ button.



2. Adjust the level using the VOL + or VOL - button.



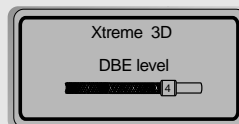
3. To exit Xtreme EQ setting



■ XTREME 3D

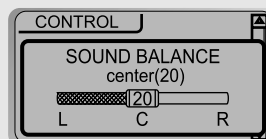
: Set the Concert

: 콘서트 현장의 입체 음향을 설정합니다. DBE level은 0(해제)~5까지 설정할 수 있습니다. DBE level은 3D 사운드의 BASS부분을 강조하기 위한 level값입니다.



■ SOUND BALANCE

Balance your sound to the right or left or keep it in the center according to your preference. When Sound Balance bar is moved to L (Left, 0), the sound outputs at the left earphone. When the lever is moved to R (Right, 40) the sound outputs at the right earphone. The default value is 20 and the sound outputs the same level at both earphones.



■ EQ LIMIT

ON : Limit the control of equalizer frequency to prevent distortion of sound.

OFF : You can enjoy original sound though distortion of sound may occur.



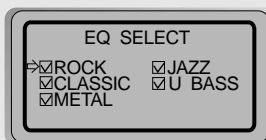
■ EQ SELECT

You can select EQ mode.

Click NAVI/MENU button after selecting EQ by using ◀◀ or ▶▶.

EQ 선택버튼으로 선택할 수 있는 EQ의 종류를 설정합니다.

◀◀와 ▶▶을 이용하여 EQ를 선택한 후 NAVI/MENU버튼을 클릭하여 설정합니다.



참고

NORMAL EQ는 선택이 불가능합니다. Xtrm EQ 또는 Xtrm 3D를 선택하지 않을 경우, 해당메뉴에서 설정값을 변경할 경우, Xtrm EQ 또는 Xtrm 3D가 동작하지 않습니다. EQ SELECT에 의해 다시 선택이 되면 변경했던 설정값으로 동작됩니다.

5. Using Programs

Contents	5
◆ IBM PC	
PC Software Installation.....	5-1/5-5
Basic Software Operation.....	5-6/5-10
◆ iRiver Music Manager	
Player & File Transferring.....	5-11/5-16
Handling Folders & Files.....	5-17/5-20
Additional Functions.....	5-21/5-25
◆ MACINTOSH	
MAC Software Installation.....	5-26/5-27
Using iRiver Music Manager on MAC.....	5-28/5-31
◆ MOODLOGIC	
What is MoodLogic?.....	5-32
Software Installation	5-33/5-34
Connecting the Player/File Transferring.....	5-35
Player & File Transferring/Deleting.....	5-35/5-38

- Insert the Installation CD into the CD-ROM drive. The following screen appears after inserting the CD.



- If installation doesn't automatically begin, execute the "setup.exe" file of the installation CD. The installation program will begin.
- The installation CD contains the following contents :
 - Device Driver
 - iRiver Music Manager
 - MoodLogic
 - Manager Program for Mac
- The player can store MP3 files or files of any type. You can upload files, other than music (MP3, WMA, ASF), to the PC using the iRiver Music Manager Program.
- Download latest versions of drivers and iRiver Music Manager at www.iRiver.com

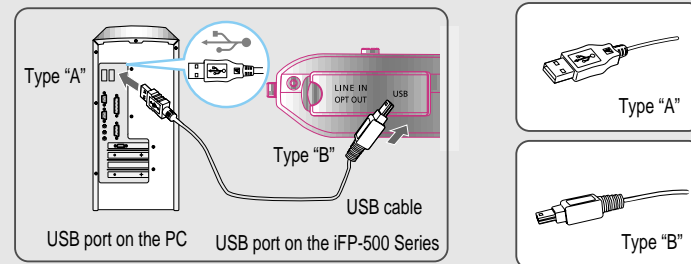
- Please be sure your login has Administrator privileges if using Windows 2000 or Windows XP.

System Requirements (Windows)

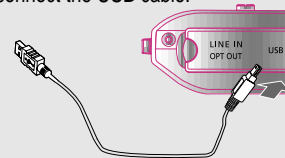
- Pentium 133MHz or faster
- CD-ROM drive
- USB port
- 10MB free hard disk space
- Window 98SE / ME / 2000 / XP

To install "New hardware"

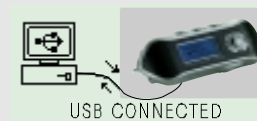
- 1 Connect the USB cable (provided) to the USB port of your computer.



- 2 Turn on the player, remove the protective cover of USB port, and connect the USB cable.



- 3 "USB CONNECTED" will appear on the LCD screen of the player.

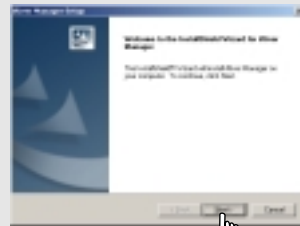


NOTE Connect the USB cable to the PC after playback stops to avoid errors.

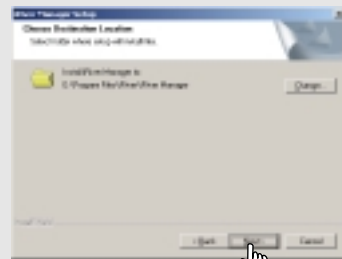
1 Click "Next" after selecting the language to install.



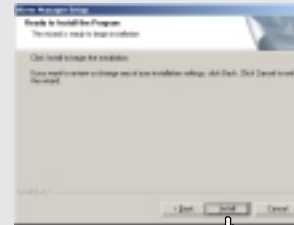
2 Click "Next" to Install iRiver Music Manager.



3 Select the folder to install. Click "Next".



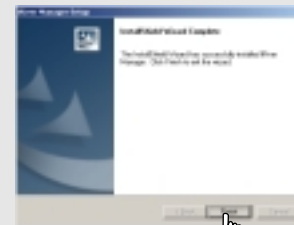
4 Click "Install" to install.



5 Installation is progressing.



6 Click "Finish" Completed the installation of "New hardware".

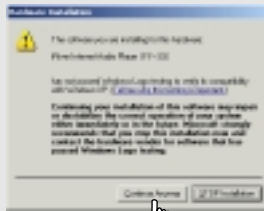


When installing in Windows XP

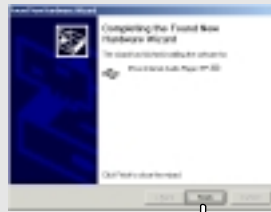


1 After installing iRiver Music Manager from the CD and connecting your player to your PC, Windows XP will display a "New Hardware Found" screen (pictured). Select 'Install the software automatically (Recommended)' and click 'Next'.

2 If a "Hardware Installation" warning message appears, click "Continue Anyway". The iRiver software driver will not cause any damage to your computer.



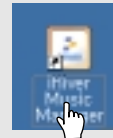
3 Click "Finish" to complete the new hardware installation.



※ windows 98se , windows me, windows 2000의 운영체제는 별도의 디바이스 드라이버 인스톨 과정이 필요 없습니다.

1. Basic operation

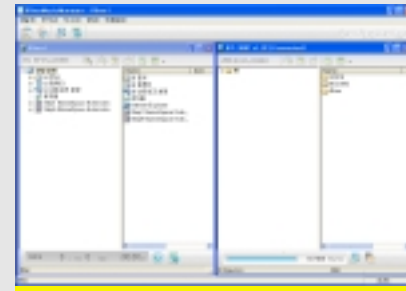
1 Double click the iRiver Music Manager icon on the PC to start the Manager program.



2 iRiver Music Manager version installed is displayed.



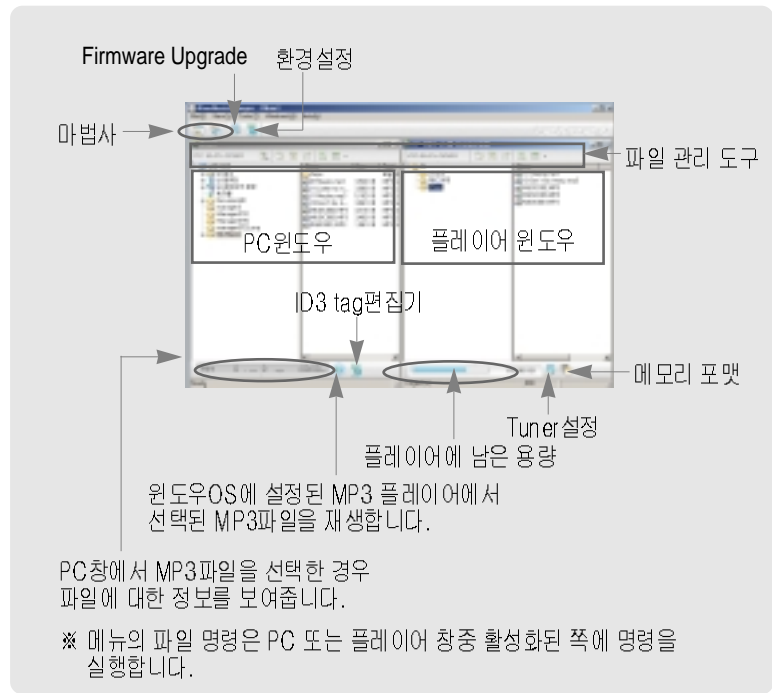
▼ Initial iRiver Music Manager window.



NOTE

MoodLogic can not be open at the same time as iRiver Music Manager. Please close iRiver Music Manager before opening MoodLogic.

1. 기본 화면 설명



1. 메뉴



Toolbar메뉴

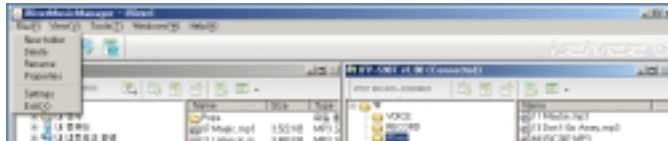
1. 파일전송 마법사 : PC에서 플레이어로 파일을 전송합니다.
2. 파일변환 마법사 : REC파일을 MP3파일로 변환합니다.
3. 펌웨어 업그레이드 : 인터넷 또는 하드디스크에 있는 펌웨어로 플레이어의 펌웨어를 업그레이드합니다.
4. 환경 설정 : 자동 펌웨어 업그레이드에 대한 환경 설정입니다.

파일 관리 도구



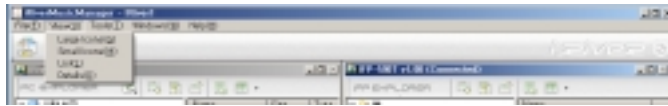
1. 검색 아이콘 : 윈도우내의 파일 또는 폴더를 검색합니다.
2. 상위폴더로 이동 : 현재 선택되어 있는 폴더의 상위 폴더로 이동합니다.
3. 새폴더 : 새로운 폴더를 생성합니다.
4. 등록 정보 : 선택된 폴더나 파일에 대한 상세한 정보를 나타냅니다.
5. 보기 아이콘 : 사용자가 선택한 아이콘으로 파일을 표시합니다.

1. 파일 메뉴 : 두창중 활성화된 쪽에 명령을 실행합니다.



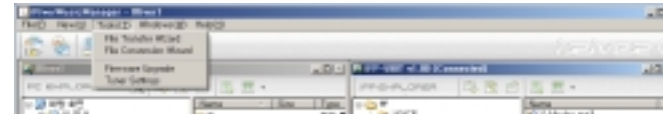
새폴더 : PC 또는 플레이어에 폴더를 생성합니다.
 삭제 : PC 또는 플레이어에서 폴더 또는 파일을 삭제합니다.
 이름바꾸기 : PC의 파일 또는 폴더의 이름을 변경합니다.(플레이어는 불가)
 등록정보 : PC 또는 플레이어의 파일이나 폴더의 상세정보를 보여줍니다.
 환경 : Manager의 기본환경을 설정합니다.
 종료 : Manager를 종료합니다.

2. 보기 메뉴 : 두창중 활성화된 쪽에 명령을 실행합니다.



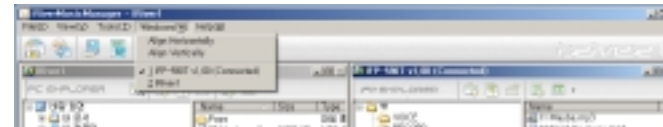
큰 아이콘
 작은 아이콘
 목록
 상세히

3. 도구 메뉴



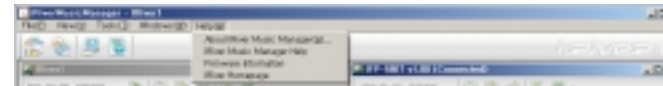
파일 전송마법사 : PC쪽의 파일을 플레이어에 다운로드하는 기능입니다.
 파일 변환마법사 : 플레이어 레코딩 파일(***.REC)을 MP3 파일로 변환을 합니다.
 펌웨어 업그레이드 : 인터넷 또는 하드디스크에 있는 펌웨어로 플레이어의 펌웨어를 업그레이드합니다.
 Tuner설정 : 방송국명과 주파수를 수동으로 설정할 수 있는 기능입니다.

4. 창 : PC 또는 플레이어 창의 정렬을 선택합니다.
 (현재 활성화되어 있는 창의 앞쪽 또는 뒷쪽에 위치하게 됩니다.)



가로정렬 : PC 또는 플레이어의 창을 가로로 정렬합니다.
 세로정렬 : PC 또는 플레이어의 창을 세로로 정렬합니다.

5. 도움말



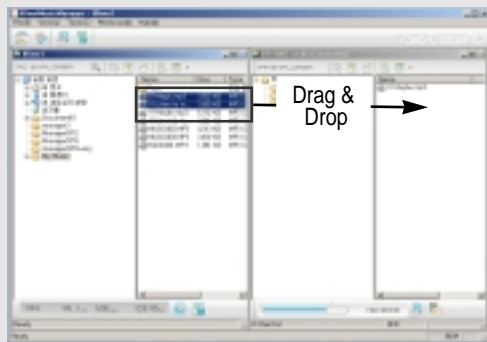
iRiverMusicManager 도움말을 볼 수 있습니다.

2. PLAYER & FILE TRANSFERING

1) Downloading from the PC

Open the Manager program after connecting the USB cable between the player and PC.

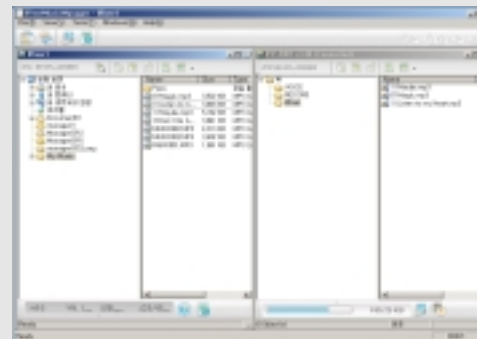
- 1 Select the folders or files on the PC to transfer to the player.
And Click and Drag to move folders or files to the desired location on the player.



- 2 Download is processing.



- 3 Download is completed.



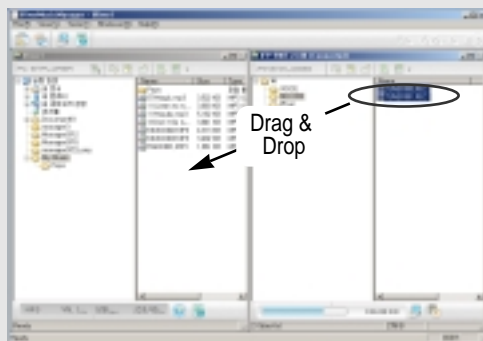
CAUTION

- ※ Files with a name over 127 English characters (Korean: 63 characters) will not transfer.
- ※ Files over 511 English characters (including path name and file names) will not transfer.
- ※ The ROOT folder is limited to 1024 files and folders total.
(File Name ; File name : 8 + File extension : 3)
Subfolders do not have a limit to the number of files.

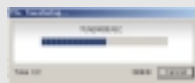
2) Uploading to the PC

Activate the Manager program after connecting the USB cable between the player and PC.

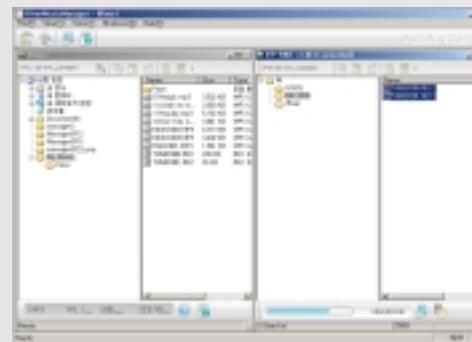
- 1 Select the folders or files on the player to transfer to the PC.
And Click and Drag to move folders or files to the desired location on the PC.



- 2 Upload is processing.



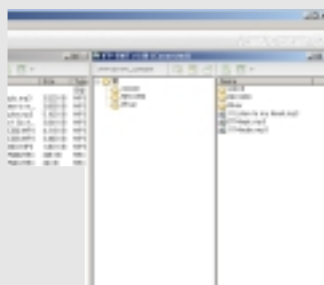
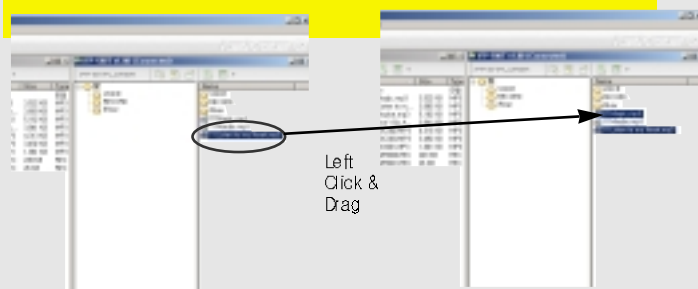
- 3 Upload is completed.

**CAUTION**

- Music Files (MP3, WMA, ASF) can not be uploaded from the player to the PC in accordance with current copyright laws.
- You can upload recorded FM, Line in, or Voice files to your PC as well as any data files. Music files (MP3, WMA, ASF) may not be transferred to your PC from the player.

3) Change position of folders or files on the player

1 Click and Drag to move folders or files to the desired location.

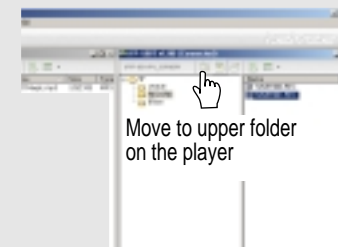
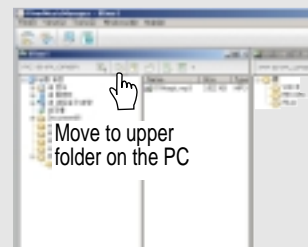


NOTE

- You may only move one file or folder at a time.

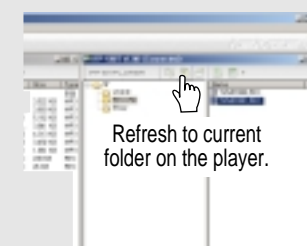
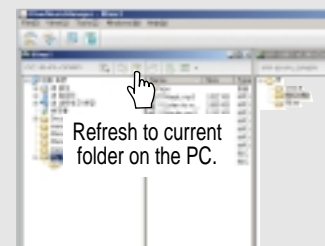
4) Moving to upper folder (PC & Player)

1 Click the move to "upper folder" icon in the menu bar of the iRiver Music Manager.



5) Refresh (PC & Player)

1 Click the "Refresh" icon to display the contents of the PC or player.

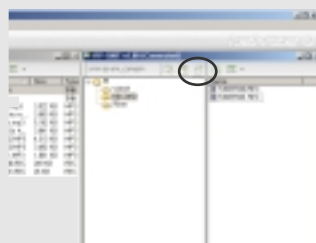


3. Managing files

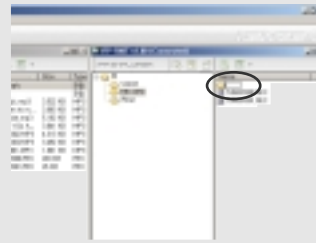
※ Only 8 levels of subfolders are allowed, beginning with the Root folder.

1) To make a new folder on the player

1 Click the "New Folder" icon or select "File-New folder" in the file menu to make a new folder.



2 New folder is created.

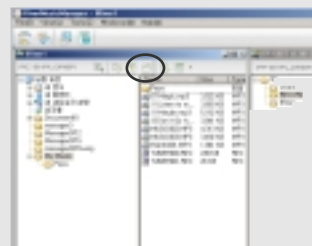


3 Type the name in the new folder.

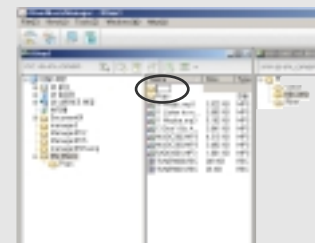


2) Making new folders on the PC

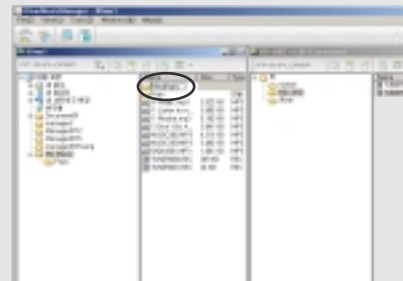
1 Click the "New Folder" icon to make a new folder.



2 New folder is created.



3 Type the name in the new folder.

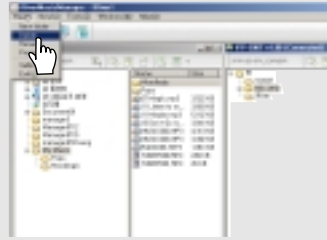


3) Deleting folders or files of the player

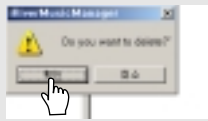
1 After starting the "Manager" program, select the files or folders to delete.



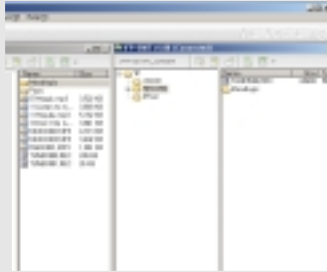
2 Click the "Delete" icon or the menu option "File-Delete".



3 Click "Yes" on the alert display to delete.



4 Files are deleted.

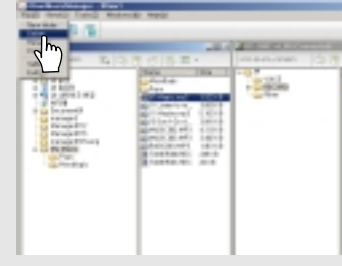


4) Deleting folders or files of the PC

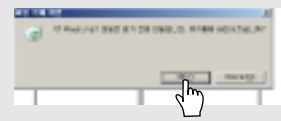
1 After starting the "Manager" program, select the files or folders to delete.



2 Click the "Delete" icon.



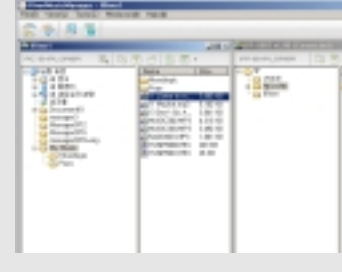
3 Click "Yes" on the alert display to delete.



NOTE

- Note this will delete files permanently from your hard drive. Use with caution.

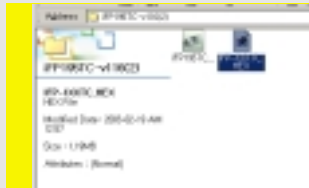
4 Delete is completed.



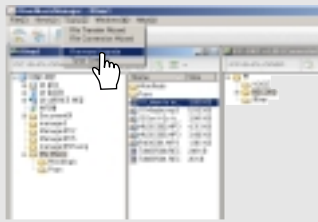
4. Additional functions

1) Upgrading the firmware manually

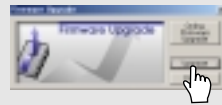
- 1 Visit www.iRiver.com to download the latest firmware for your player. Unzip the downloaded firmware file and double click the EXE file. This will create the firmware file. (IFP-5XXT.HEX)



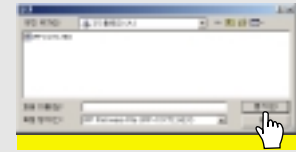
- 2 Click the "Tools-Firmware Upgrade" menu option.



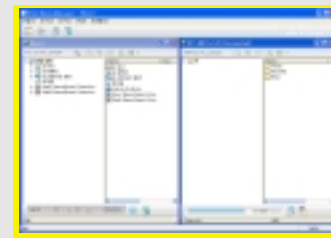
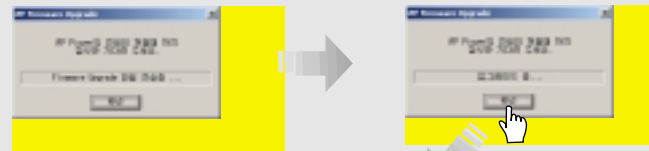
- 3 Click "Upgrade".



- 4 Locate and select the IFP-5XXT.HEX then click Open.

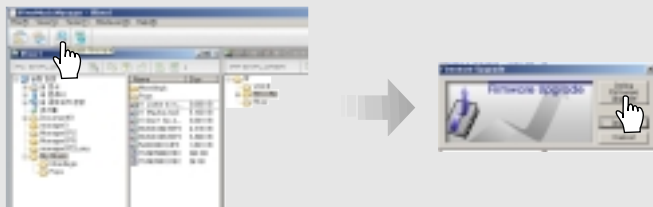


- 5 The window below is displayed as the firmware upgrade is processing. Click "OK" after the player turns off.

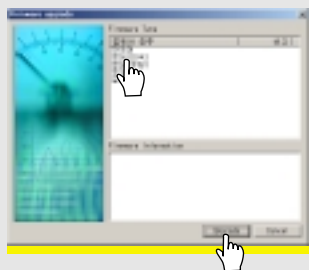


1) Upgrading the firmware through Internet

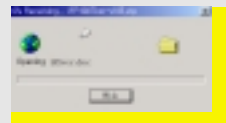
- 1 You can automatically upgrade the latest firmware for your player from iRiver Website. Click "Upgrade" icon on the iRiverMusicManager and click "Upgrade". You can upgrade the firmware after connecting the internet.



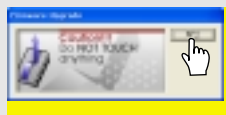
- 2 Click "Upgrade" after selecting the language to Upgrade.



- 3 The firmware Download is processing.



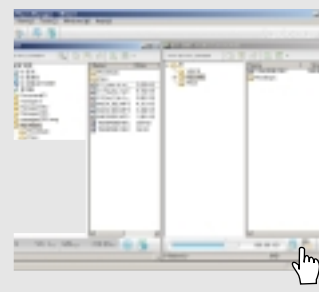
- 4 Click "OK" after the player turns off. Firmware Upgrade is completed.



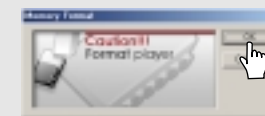
2) Format

Format will erase all the files and folders in your players memory.

- 1 Click the "format" icon on the Toolbox to format.



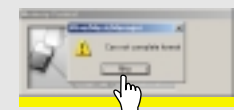
- 2 The alert below is displayed. Click "OK" to initialize.



- 3 Formating is processing.



- 4 Formating is completed. Click "Confirm".



3) Modifying the Radio Stations

You can modify the FM Radio stations with the iRiver Music Manager.

1 Select "Transfer-Tuner Setting" in the menu to modify radio stations.

2 You can edit the list of your FM stations. You can also load and save different preset files.

NOTE The station name can not exceed six characters including alphabet and number.

4) 환경설정

설정 한 펌웨어의 최신버전을 인터넷을 통하여 다운로드하여 업그레이드합니다.
Firmware version to upgrade
업그레이드할 펌웨어 종류

Search and inform the latest firmware version through the Internet when starting the iRiver Music Manager.
Select the language to upgrade.

1. Mac Software Installation

1) Mac OS 9.2

1 Copy the "MAC OS → OS 9 → IRIVER MUSIC MANAGER FOR MAC OS-9.SIT" file on the installation CD-ROM in the MAC-OS folder to your desktop.

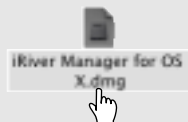
2 Double click the "IRIVER MUSIC MANAGER FOR OS 9.SIT" file to extract the VISE installation file for iRiver Music Manager.

3 Double click the VISE icon to begin the installation.

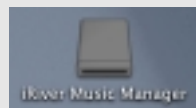
4 Click "Install" after selecting the folder to install.

1) Mac OS X

1 Double click the "MAC OS → OS X → IRIVER MUSIC MANAGER FOR MAC OS X.DMG" in the MAC -OS folder on the installation CD-ROM." The DMG file will mount a temporary "drive" icon called "iRiver Music Manager".



2 Open the iRiver Music Manager "drive" and move the iRiver Music Manger icon to your Dock or Desktop.



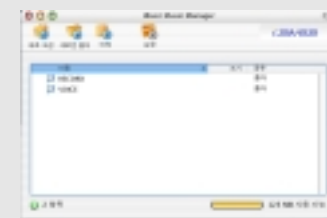
3 Installation of iRiver Music Manager for OS X is completed.

**NOTE****System Requirements (Mac)**

- Mac OS 9.2.2 or later
- Mac OS X 10.1.4 or later
- CarbonLib 1.6 or later
- ◆ CarbonLib Update Method :
OS X : Apple Menu → System Preferences
→ System → Software Update
OS 9 : Control Panels → Software Update

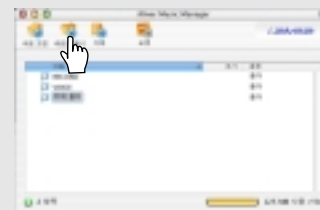
1) Connecting to a Mac

1 Open iRiver Music Manager after connecting the player to a Mac.



2) Making new folders on the Mac

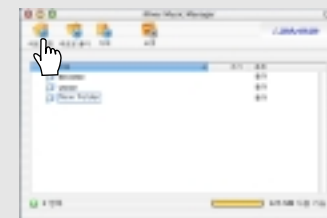
Click the "New Folder" icon iRiver Music Manager.



※ Only 8 levels of subfolders are allowed, beginning with the Root folder.

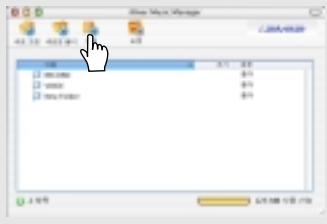
3) Refresh (Player)

Click the "Refresh" icon to display the contents of the player.



4) Deleting folders or files

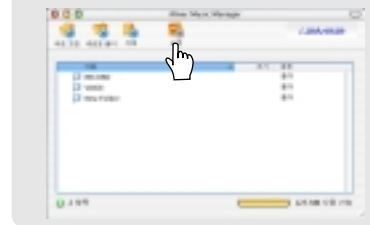
After selecting the files or folders to delete, click "Delete" icon to delete.



5) Format

Format will erase all files in your player memory.

Click the "format" icon to format.



6) Downloading from the Mac

After selecting the files or folders to download, drag and drop them to the folder to download on the player.

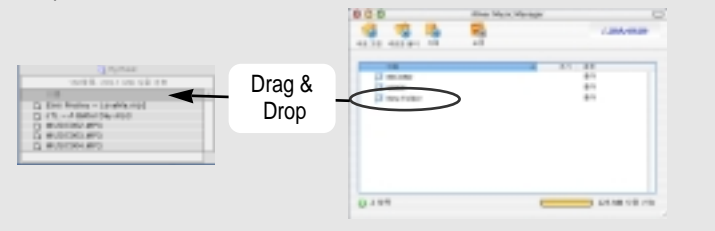


CAUTION

- ※ Files with a name over 127 English characters (Korean: 63 characters) will not transfer.
- ※ Files over 511 English characters (including path name and file names) will not transfer.
- ※ The ROOT folder is limited to 1024 files and folders total.
(File Name ; File name : 8 + File extension : 3)
Subfolders do not have a limit to the number of files.

7) Uploading to the Mac

After selecting the files or folders to upload, drag and drop them to the folder to upload on the Mac.

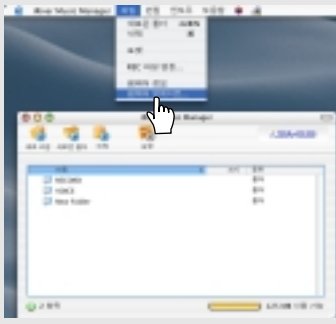


CAUTION

- Music Files (MP3, WMA, ASF) can not be uploaded from the player to the Mac in accordance with current copyright laws.
- You can upload recorded FM, Line in, or Voice files to your Mac as well as any data files. Music files (MP3, WMA, ASF) may not be transferred to your Mac from the player.

8) Firmware Upgrade

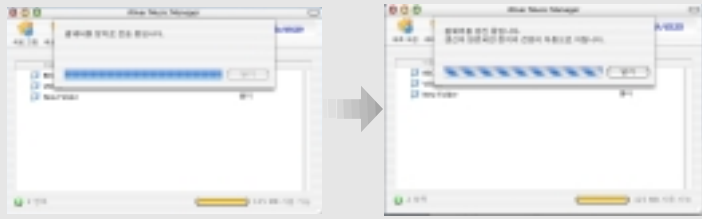
1 Download the latest Firmware from our website. Click "File → Firmware Update" on the menu.



2 Click "Open" after selecting file to update.



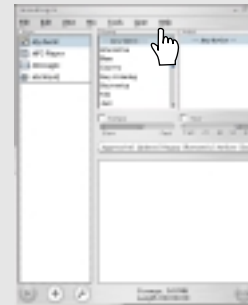
3 While update is completed, player is automatically turned off. Click "Close".



What is MoodLogic?

- 1 With MoodLogic, you can
- easily search for music files on your PC and create custom mixes.
 - easily manage music files.
 - transfer files between the player and the PC.
 - automatically create ID3 tags.

This section is only an introduction to MoodLogic. Many more features are covered in the "Help" section of the software or online at www.MoodLogic.com.



1 Click the "MLIFPGEN" on the installation CD-ROM to install "MoodLogic".



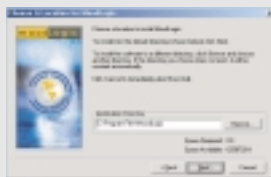
2 Click "Next".



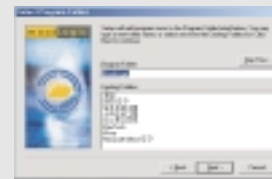
3 Click "Yes" to install.



4 Click "Next" after selecting folder to install.



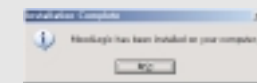
5 Click "Next".



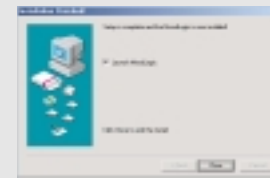
6 Click "Yes".



7 Installation of MoodLogic is completed. Click "OK".



8 Setup is complete.



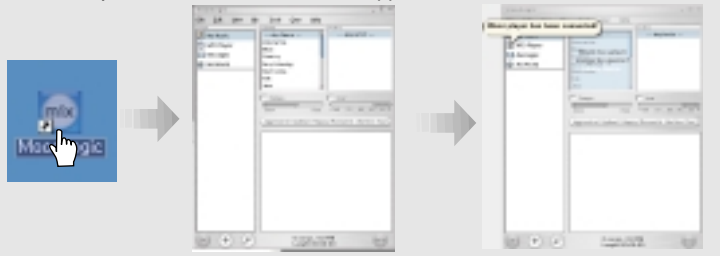
NOTE MoodLogic can not be open at the same time as iRiver Music Manager. Please close iRiver Music Manager before opening MoodLogic.

1. Connecting the player to the PC using MoodLogic

1) Connecting to the PC

NOTE MoodLogic is for the PC only.

- 1 Open MoodLogic. Connect the player to your PC and power it on. "iRiver Player has been connected!" will appear.



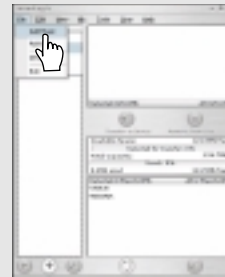
2. Transferring files using MoodLogic

1) Downloading from the PC

- 1 Select "My Music" to add music files on the MoodLogic.



- 2 Select "File → Add Music" to add music files on the MoodLogic.



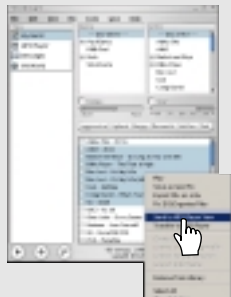
- 3 Select 'Scan My Computer for music files (Recommended)' and click Next.



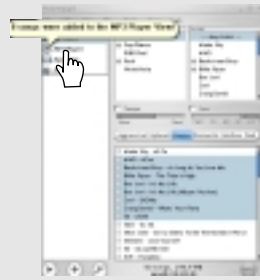
- 4 Click "Finish" after finishing finding Musics on the PC. MoodLogic will take several minutes to search your computer for music files.



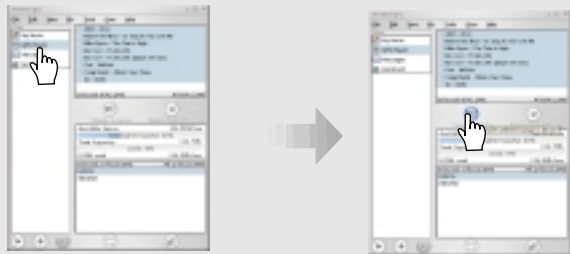
5 Use the panels on the right to navigate your music collection. To transfer songs, highlight them, then right click and choose "Send to MP3 Player view"



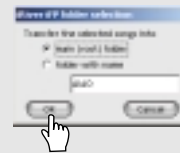
6 To see the list of songs to be transferred to the MP3 player, click "MP3 player" on the left part of the screen.



7 Click the "Transfer to Device" icon to send the songs to your player.



8 Click "OK" after selecting folders to save.



참고 Only 8 levels of subfolders are allowed, beginning with the Root folder.

3) Deleting files of the player using MoodLogic

1 Click "Delete" icon after selecting files to delete.



6. Others

Contents.....	6
Trouble Shooting.....	6-1
Precautions.....	6-2
Accessories.....	6-3
Specifications.....	6-4

- Should any problem persist after you have checked these symptoms, consult your iRiver dealer or contact support at iRiverAmerica.com.

No Power	<ul style="list-style-type: none"> ● Check whether the HOLD switch on the player is ON (Switch to OFF position) ● Battery may be discharged. Charge it after connecting USB cable between the PC and the player.
No sound is heard from the player or distortion is heard during playback.	<ul style="list-style-type: none"> ● Check whether VOLUME is set to "0". ● Connect the earphones/remote plug firmly. ● Check whether plug is dirty. Clean the plug with a dry and soft cloth. ● Corrupted MP3 or WMA files may make a static noise and the sound may cut off. Listen to your files on the PC to see if they are corrupted.
Characters in LCD are corrupted.	<ul style="list-style-type: none"> ● Check out Menu ▸ General ▸ Language and confirm whether the right language has been selected. (Refer to page 68)
Poor FM Reception.	<ul style="list-style-type: none"> ● Adjust the position of the player and earphones. Turn off the power of other electric devices near the player. ● The Earphone cord functions as the antenna, they must be plugged in for best reception.
Failed download of MP3 file	<ul style="list-style-type: none"> ● Check the condition of the battery. ● Check the connection between your computer and the player to ensure that the cable is secure. ● Check the Manager program to make sure it is operating. ● Check whether the player's memory is full.

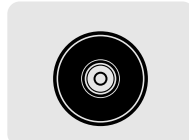
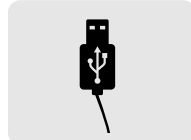
SAFETY

- **Avoid dropping or impacting the player.**
The player is designed to operate while walking or running, but dropping or excessively impacting the player maybe cause damage.
- **Avoid contacting the player with water.**
Damage to the internal parts of the player may occur if the player comes into contact with water. If your player gets wet, dry the outside with a soft cloth as soon as possible.
- **Remove the battery if player is unused for long periods of time.**
Battery left in the player for a long time can corrode and damage the device.

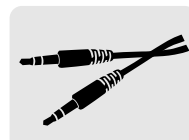
ON HEADPHONES AND EARPHONES

- **Road Safety**
Do not use headphones/earphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your headsets at high volume while walking, especially at pedestrian crossings. You should exercise extreme caution or discontinue use in potentially hazardous situations.
- **Preventing hearing damage**
Avoid using headphones/earphones at high volume. Hearing experts advise against continuously loud and extended play. If you experience a ringing in your ears, reduce volume or discontinue use.
- **Consideration for others**
Keep the volume at a moderate level. This will allow you to hear outside sound and to be considerate of the people around you.

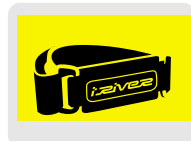
- 1 Earphone/
Earphone cover
- 2 USB cable
- 3 Installation CD



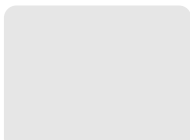
- 4 User Manual/
Warranty card
- 5 Neck strap for
carrying
- 6 Audio Cable



- 7 AC Adapter
- 8 Arm Band
(iFP-595T : Option)
- 9 Carrying Case



10



※ Accessories subject to change without notice and may vary from image shown.

Memory	256 MB	512 MB	1 GB
Model No	iFP-590	iFP-595	iFP-599

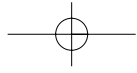
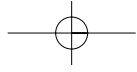
※ Memory Upgrade is not supported.

Category	ITEM	Specifications		
FM TUNER	FM Frequency range	87.5 MHz ~ 108 MHz		
	Headphone Output	(L)12 mW + (R)12 mW (16 Ohm) max. Volume		
	S/N ratio	50 dB		
	Antenna	Headphone/Earphone-Cord Antenna		
Dimension		64 x 51 x 19 mm		
Weight		?? g		
Audio	Frequency range	20 Hz ~ 20 KHz		
	Headphone Output	(L)12 mW + (R)12 mW (16 Ohm) max. Volume		
	S/N ratio	90 dB(MP3)		
FILE SUPPORT	File Type	MPEG 1/2/2.5 Layer 3, WMA, ASF		
	Bit Rate	8 Kbps ~ 320 Kbps		
	Tag Info	ID3 V1, ID3 V2 2.0, ID3 V2 3.0, ID 3 V2 4.0		
MP3 Encoding		MPEG 1/2/2.5 Layer3		
LCD		Full Graphic 4 Line with Backlight		
Language		39 Languages		
Voice Recording		Approx. 72:00 hrs (8kbps, 256 MB)	Approx. 144:00 hrs (8kbps, 512 MB)	Approx. 288:00 hrs (8kbps, 1 GB)
Max. Playtime		Approx. 24 hours(128 kbps, MP3, Volume : 20, EQ Normal)		
USB		USB 1.1		
Operational Temperature		-5 °C ~ 40 °C		

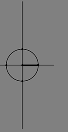
MEMO



6-5



MEMO

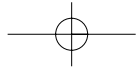
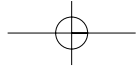


6-6

MEMO



6-7



MEMO



6-8