APPENDIX H

: USER'S MANUAL

Sensitive Design
With a sophisticated and luxuriously design, you feel the easy of the use.

Mass Storage
Connected to a computer, it's recognized as a removable storage disk in "Windows Explorer," enabling you to upload and download files easily.

Complete Implementation of OGG Codec
You can play OGG files as well as general MP3 and WMA files with the player. Since the OGG files have an excellent compression quality, you can enjoy almost as good as the original sound quality of your music.

One-Touch SRS
Without having to do a complex button operation, you can experience 3D Surround Sounds by just pressing the One-Touch button of the player.

Display Lyrics during play mode
You can see the lyrics of the song on the LCD during playing the music file.

Distinctive EQ
Equipped with 5-band equalizers (Live, Classic, Jazz, Dance, and Rock), you can enjoy various tones of music just the way you want to listen to by adjusting the equalizers.

Firmware Upgrade
By upgrading firmware, users will get the most recent OS updates through the Internet, giving them additional functions and file format support.

MP3 Direct Encoding (Music Recording)
Since, without having to connect to any PCs, you can directly save and record data to the player as digital files in real-time while enjoying FM Radio, CDs and music or contents in an audiocassette tape, this is a must-have for students and workmen who not only want to enjoy music but also need a repeat function for studying TOEIC and TOEFL and practicing Conversational Skills.

Voice Recording
With a high-sensitive built-in microphone, it can be used as professional voice recorder having versatile functions.

FM Radio Listening and Recording
You can enjoy FM radio programs as well as digital music such as MP3, WMA, and OGG. You can even record a part of the music that you are listening to directly from the radio to the player, which you can listen to repeatedly and save into your PC.

Perfect for Studying Languages (Playing Speed & A-B Section Repeat)
Supports a tool for studying foreign languages by providing a Section Repeat A-B, which is very comfortable for studying languages, and an adjustable speed for the songs played.
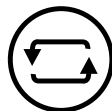
Seconds-Based Resume Function
When you turn off the player and turn it on later, the player will resume back to the same status. In addition, the volume, EQ, and Play List of the last music you listened to, will also resume back to the same status.
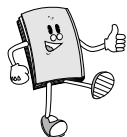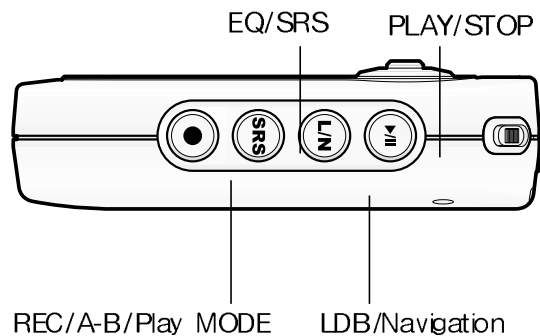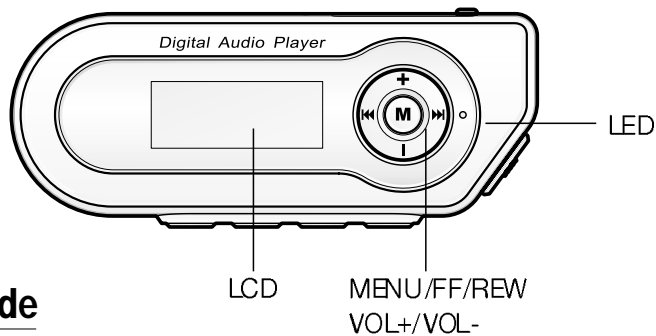
Knowledge Bank!!
What is Ogg Vorbis? It is a new format of digital music, which is opposed to charge money for using MP3 files. One of the features is that, without taking much space, it enables you to enjoy a quality of music, which is as good as the original one. It also supports VBR (Variable Bit Rate).
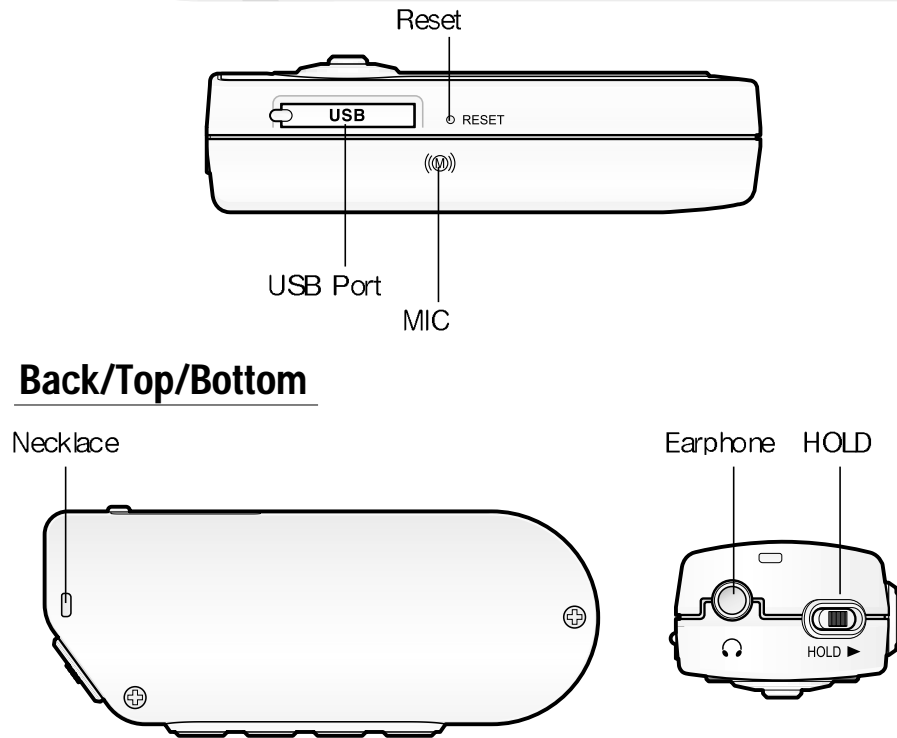
Description	Items	Specs
FM TUNER	Frequencies	87.5MHz ~ 108.0MHz
	Headphone Output	Max. 7mW (16Ohm) Volume
	S/N Ration	50 dB
	Antenna	Headphone Output
Audio	Frequencies	20Hz ~ 20KHz
	Headphone Output	Max. 15mW (16 Ω)
	S/N Ration	90 dB
Files Support	Format	MP3, WMA, OGG
	Bit Rate	MP3:16~320Kbps, WMA:32~160Kbps OGG:80~320Kbps
USB	Download speed	Max. 6Mbps(USB Version 1.1)
Recordable Time		Voice: 1040 Min/256MB
Max. Playback Time		About 12 Hrs
Range of Operating Temperatures		-5$℃$~70$℃$
Dimensions (W $\times$ H $\times$ D)		38 $\times$75 $\times$20mm
Weight (except battery)		38g
Battery		1.5V Alkaline Battery

Digital Audio Player

LED

LCD

MENU/FF/REW
VOL+/VOL-

Front/Side

EQ/SRS

PLAY/STOP

SRS

L/N

REC/A-B/Play MODE

LDB/Navigation

Reset

USB

RESET

USB Port

MIC

Back/Top/Bottom

Necklace

Earphone

HOLD

HOLD ▶

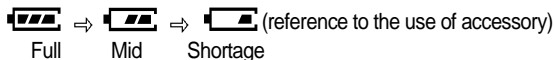## ⊙ Display Of The Remaining Power

❶ The display of battery's residue capacity can be variable at opening period after the power on. It will be stabilized after 5 to 6 seconds from the power on displaying the real amount of battery residue.

[Full] ⇨ [Mid] ⇨ [Shortage] (reference to the use of accessory)

Full   Mid   Shortage

❷ Due to the characteristics of the normal battery the display shows more powers than it really has in the battery when it has been already exhausted. Replace the battery in this case.

(Alkaline battery lasts longer than manganese battery.)

※ Replace the battery to the new one in the following cases;

1. LCD displays "Low Battery".

2. The product does not respond to the button pressing.

3. LCD does not respond to the button pressing.

Battery Type	Elapsing Time
Alkaline Battery	12hours with one 1.5v alkaline battery (AAA)

1. Conditions of Continuous Playback Time

1) 1EA: 12hrs (AAA Alkaline Battery)   2) MP3 128Kbps

3) Volume Levels: 16 (Basic) 4) Output: Max. 15mW

The above result is tested by using alkaline batteries sold in the streets, and is subject to change according to the kind of battery used, manufacturers, and conditions of use.

⊙ Music Mode Display
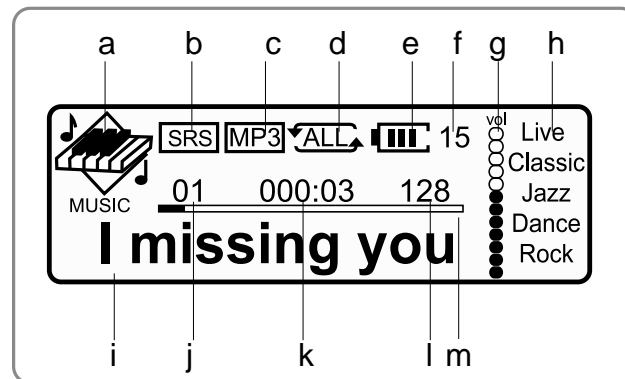
a. MUSIC/VOICE/LINE Mode   h. Equalizer
b. WOW, SRS, T.B   i. Title of Files
c. File Formats To Play   j. Song Number
d. Play Mode   k. Elapsed Playback Time
e. Battery Status   l. File Compression Rate (Bitrate) /LDB
f. Volume Changes By Number   m. Playback Position
g. Volume Changes By Picture

⊙ FM Radio Mode display

a   b   c   d   e   f   g   h

A.T   P2   S.T   ⊞ 15   vol
Live
Classic
FM   **FM   087. 50 MHz**   Jazz
Dance
87.5   108   Rock

i   j
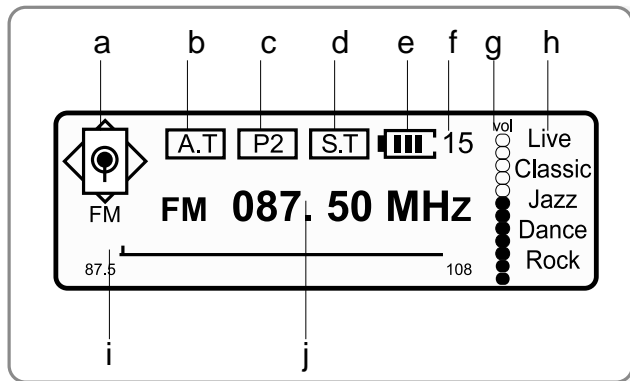
a. FM Mode
b. Auto/Manual
c. Preset Number 1 – 20
d. Mono/Stereo
e. Remaining Battery
f. Volume Changes displayed with a number
g. Volume Changes displayed with a picture
h. Equalizer
i. Frequency Bar
j. Frequency

⊙ Music Mode Display

Button	Pressed Time	Stop State	Playing
Playback /Pause	▮	Plays a current song	Pauses the current song
	▬	Power Off	Power Off
↑ FF	▮	Moves to the next track.	Moves to the next song
	▬	Successive Forward Track Search	Forward Fast Search from the current position.
↓ REW	▮	Moves back to the previous song.	Within 5 seconds after play: Moves back to the previous song. 5 seconds after play: Plays at the beginning of the current song
	▬	Successive Backward Track Search	Backward Fast Search from the current position
SRS	▮	WOW->SRS->T.B	WOW->SRS->T.B
	▬	Navigation starts	Navigation Starts
REC	▮	Shows Bookmark lists	Repeats "A-B"
	▬	Ready for Voice Record	Sets a bookmark
MENU	▮	Selects Menu	Selects Menu
	▬	Selects Mode (MUSIC/VOICE/Line In/FM)	Selects Mode (MUSIC/VOICE/Line In/FM)

Button	Pressed Time	Stop State	Playing
↑ VOL+		Volumes 1 level up	Turns up the volume 1 level
		Volumes up successively	Turns up the volume successively
↓ VOL-		Volumes 1 level down	Turns down the volume 1 level
		Volumes down successively	Turns down the volume successively

⦿Music/Voice Record Mode

Button	Pressed Time	Rec Ready	Recording
REC		Voice Record/Music Record Start	Voice Record/Music Record Stop

⦿FM Radio Mode

Button	Pressed Time	Stop State	Preset Mode
Playback/ Pause		Receive	Receive/Ready to receive
		Power Off	Power Off

Button	Pressed Time	Stop State	Preset Mode
↑ FF		Increases frequency one level up	Moves 1 station up to the next Preset
		Power Off	Moves successively up to the next presets
↓ REW		Decreases frequency one level down	Moves 1 station down to the previous Preset
		Power Off	Moves 1 station down to the previous Preset
REC		Forward Track Search	Moves successively down to the previous presets
MENU		Selects FM Menu	Selects FM Menu
		Selects Mode (MUSIC/VOICE/LINE/FM)	Selects Mode (MUSIC/VOICE/LINE/FM)
SRS		Selects Mono/Stereo	Selects Mono/Stereo
		Starts Preset Mode	Cancels Preset Mode
↑ VOL+		Volumes 1 level up	Turns up the volume 1 level
		Volumes up successively	Turns up the volume successively
↓ VOL-		Volumes 1 level down	Turns down the volume 1 level
		Volumes down successively	Turns down the volume successively

⊙ Playing Recorded Files

Pressing the [Play] button in a state of Pause or Stop will play the files.

ALL MP3 15
VOICE 01 000:01 128
Live
Classic
Jazz
Dance
Rock
V001.MP3
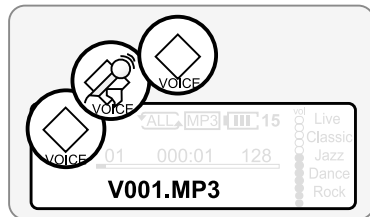
⊙ Stopping Voice Recorded Files

If you press the [Play] button during the play mode, it will stop.

ALL MP3 15
VOICE 01 000:01 128
Live
Classic
Jazz
Dance
Rock
V001.MP3
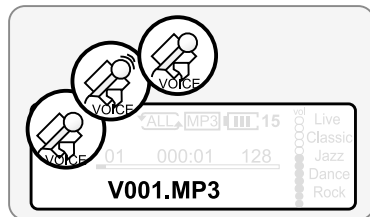
⊙ Recording Music

1 Like the picture below, connect the encoding cable with the player and the headphones port of the audio to record.
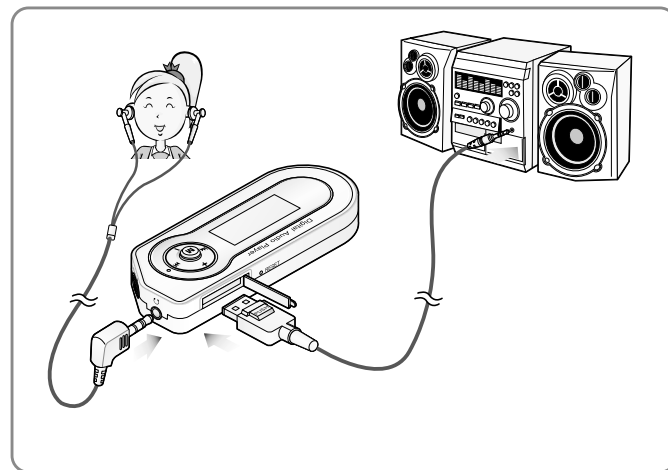
Reference‼

You can listen to your recordings with your earphones.
(Loop Back function)

2 Enter into the Menu mode by pressing the [VOL/MENU] button long.

3 After moving to the "LINE" menu by using the [Play] button, and press the [Play] button again, the player enters into the "LINE" mode.

MUSIC   VOICE   LINE   FM

vol
Live
Classic
Jazz
Dance
Rock

Recording Ready

Rec Ready
01:31:04
000   00:00:00

Live
Classic
Jazz
Dance
Rock
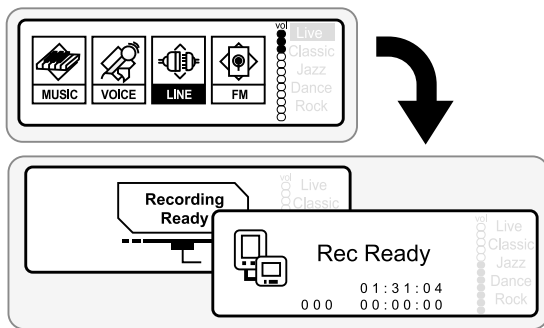
4 Pressing the Rec button briefly on the state of "Rec Ready," recording will start.

● REC 32 Kbps   15   Live
E001.MP3   Classic
                 Jazz
01:31:03   Dance
000   00:00:01 Rock

Current elapsed time for recording

No. of recorded file

Remaining time for recording in the memory
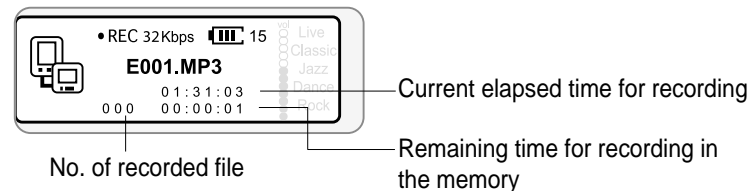
5 If you press the [REC] button again, the following screen will be displayed on the LCD screen and the recording will stop.

Recoding Stop

Live

ALL MP3   15   Live
                 Classic
01   000:01   128   Jazz
LINE   Dance
E001.MP3   Rock
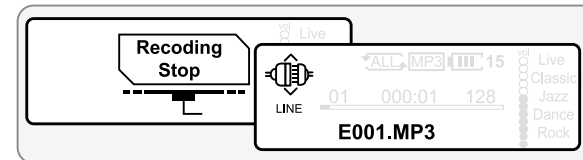
Reference‼

※ Recorded files will be saved into the LINE folder.

◉ Browsing Menus

The Menus of this product are as follows. Refer to the below before use.

MENU ─ Setting ─┬ LDB
                ├ Resume
                ├ Backup Delete
                └ Fade In

      ─ Recording ─┬ Voice
                   ├ Line In
                   └ FM

      ─ Display ─┬ Contrast
                 ├ Scroll Speed
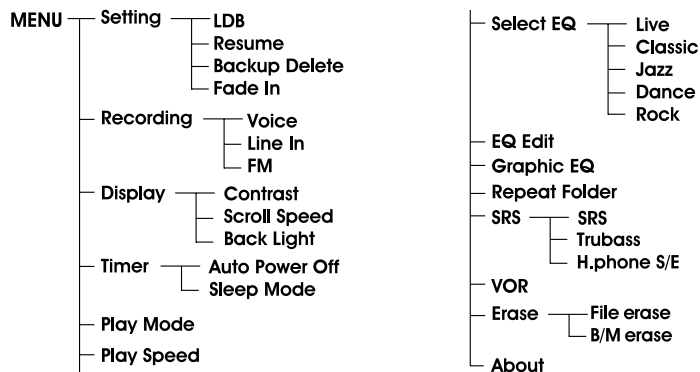   └ Back Light

      ─ Timer ─┬ Auto Power Off
               └ Sleep Mode

      ─ Play Mode

      ─ Play Speed

─ Select EQ ─┬ Live
             ├ Classic
             ├ Jazz
             ├ Dance
             └ Rock

─ EQ Edit
─ Graphic EQ
─ Repeat Folder
─ SRS ─┬ SRS
       ├ Trubass
       └ H.phone S/E

─ VOR
─ Erase ─┬ File erase
         └ B/M erase

─ About

Main Menu	Sub Menu
There are 14 Main Menus	Each main menu has its sub menus.

◉ Using Menu Buttons

To use the Menus of the player, refer to the followings.

Enter into the main menu by pressing the [VOL/MENU] button.
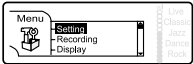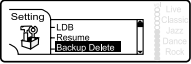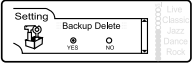
With the help of [Play] button, search the main menus.

Select the main menu after searching.

With the help of [Play] button, search a sub menu.

Select or save the sub menu you searched.

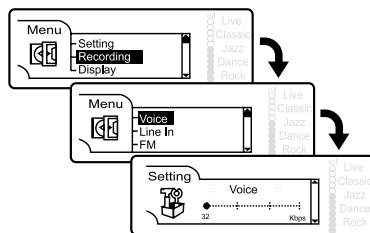Escape from the menu you selected by pressing the [REC] button.

⦿Recording

Select the "Recording" from the main menu.
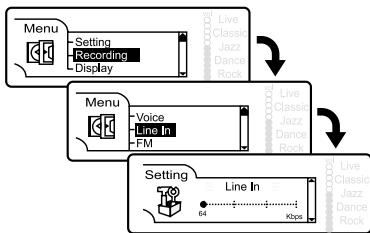
Voice

In a voice recording, you can set up to 32/64/96/128Kbps of bit rate.
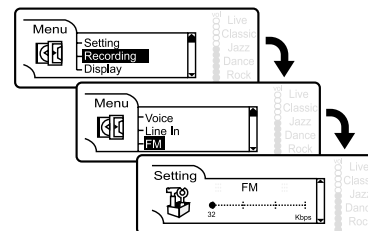
Line in

In a voice recording, you can set up to 64/96/128/192Kbps of bit rate.

FM

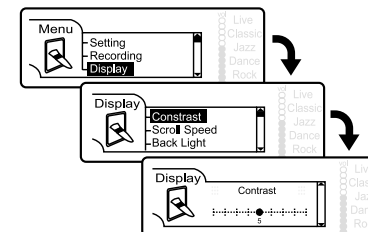In an FM radio recording, you can set up to 32/64/96/128Kbps of bit rate.

⦿Display
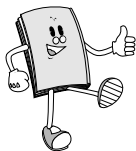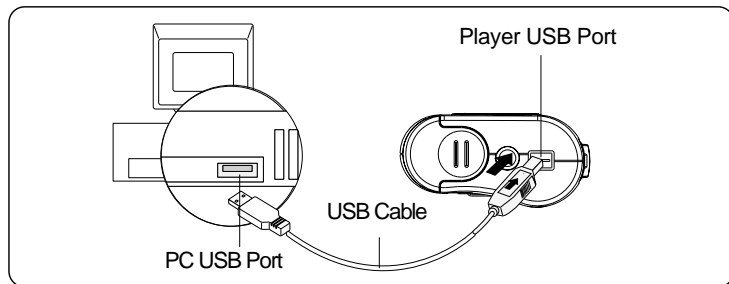
Select "Display" from the main menu.

Contrast

You can adjust the brightness of the LCD screen. (From 1 through 10)

⊙ Connecting Player With PC Using USB Cable

Like the following picture, connect the USB cable at the back of your PC and connect the cable to the USB port of the player.

Player USB Port

USB Cable

PC USB Port

Reference!

■ During the HOLD state, connecting the Player to PC using the USB cable may not work properly.In that case, make sure to release the HOLD switch and try to connect the Player to PC.

■ To use it efficiently, connect the USB cable directly to the USB port located at the back of PC. Connecting it to the USB port at the front of the PC or USB hub may cause a connection failure.

⊙ Disconnecting Player From PC Using USB Cable

1 To disconnect the player from the USB cable, double click the green arrow right below the task bar on the desktop and disconnect the player from the cable.

3:27 AM

Double Click!

2 Select the "Mass Storage Device" and click [Stop] and click [Next].
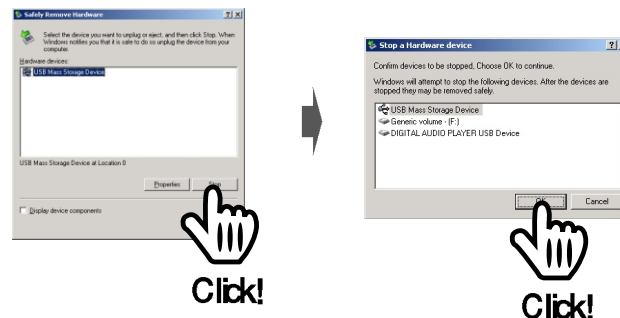
Click!

Click!

3 Click [OK] when you see the message "Safe To Remove Hardware" and disconnect the cable.
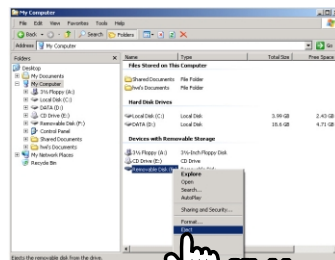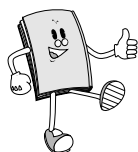

Click!

For Windows 98SE Users

If you cannot see the green arrow icon at the right bottom of your desktop, run "My Computer" or "Windows Explorer" and select the "Removable Disk." And then click the submenu [Eject] from the menu by using the right-click of the mouse. Now disconnect the USB cable.

Click!

Reference!

■ If you disconnect the cable from your PC without following the instructions above, you will see a warning message and it may cause a serious failure to the player.

■ Disconnecting USB cable while downloading, uploading and formatting may cause a serious failure to the player.

Tips You Must Know!!

◆ This player works not only as a music player, but also as a removable disk, which allow us to download and upload various kinds of data files (*.jpg, *.xls, and *.hwp, and etc.).

1 Select files after connecting the USB cable to PC and click the submenu [Copy] by using the right-click of the mouse.
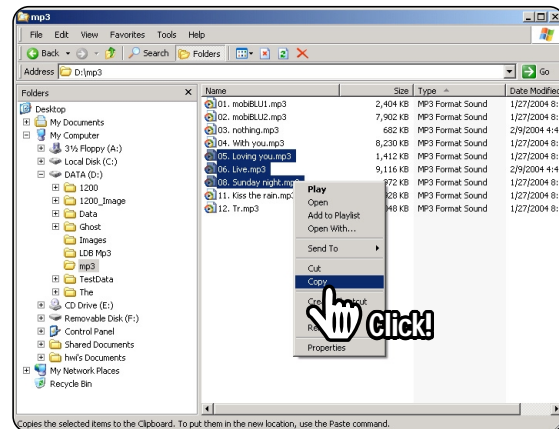
Click!

2 Like the picture below, click [Paste] from the removable disk by using the right-click of the mouse.

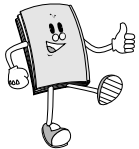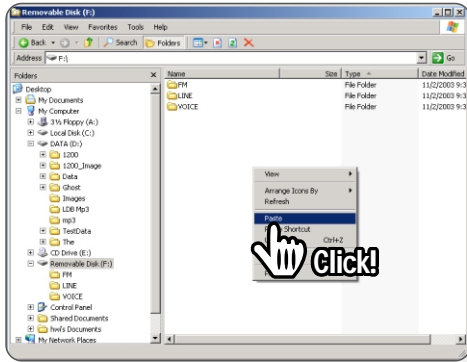### Reference!

- The player will be recognized as a "Removable Disk," a lower disk of hard drive in My Computer.

- Don't disconnect the USB cable during the file transfer. Otherwise it may cause a serious failure to the PC or the player.

3 Like the picture below, saving the file you selected is finished.
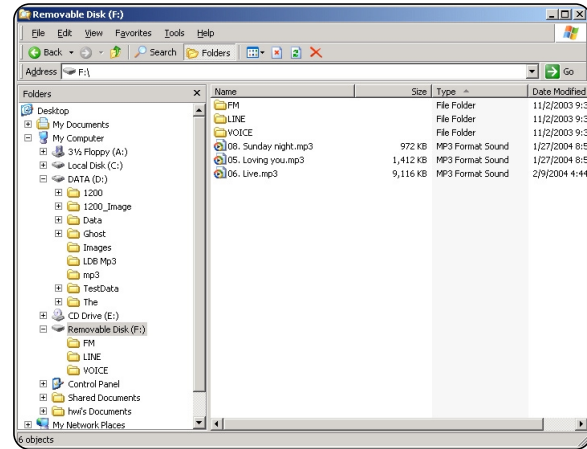
Tips You Must Know!!

- You can apply the previous instructions (on file downloading) by using the reverse directions when you upload the files to PC.

- You can also use "Drag and Drop" menu of your mouse to download and upload files. failure to the PC or the player.

● Customers are entitled to warranty service for a period of one year from the date of purchase. Warranty service does not apply to defects resulting from customer fault or acts of God.

Non-warranty service shall apply to defects resulting from :

1. Infiltration of foreign matter, such as water, liquid, or sand.
2. Breakage due to dropping or severe impact.
3. Damage to or deformation of the outer case caused by organic solvents, such as benzene.
4. Use of parts other than those certified by the manufacturer.
5. Loss or breakage of any parts or components caused by unauthorized disassembly.
6. Repair or modification done by any persons other than manufacturer authorized personnel.
7. Acts of God, such as lightning, storm or flood.
8. Purchase from unauthorized retailers.

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 technical for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment.

CAUTION

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

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