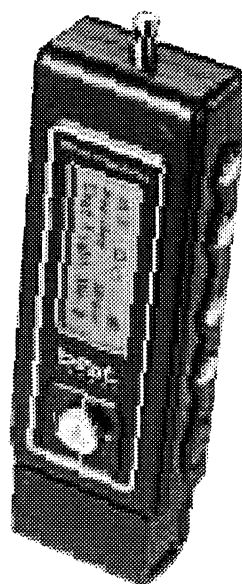




User's guide

Digital Audio Player (EMP-100)



• Before Using

Preface

- Thank you for purchasing this digital audio player.
- Please read this manual carefully before using the player.
- Please be noted that this user's manual is subject to change without notice for improving product performance.

• Before Using

Precautions

- Please comply with the following instructions to prevent a risk or a physical damage through improper product usage.

1. Safety precautions

- ① Do not leave the player in the following places.
 - Place with high temperature (over 60°C)
 - Inside the window-closed vehicle
 - Place with high humidity like a bathroom
 - Place under the direct sunlight or close to heating material
 - Place with much dust
 - ② Do not drop or apply strong shock.
 - ③ Do not disassemble, repair or modify the product at your own discretion.
 - ④ Do not use the player in the restricted area like inside the aircraft.
 - ⑤ If you apply excessive power to the LCD, it can be broken.
2. If the battery is totally flat during recording, the player will be automatically stopped. Make sure to check the available battery capacity before recording.

• Before Using

Product Features

This Digital audio player is a multiple codec player that supports various formats such as MP3, WMA and ASF.

What is MP3?

MP3 is short for MPEG1 (Motion Picture Experts Group) Audio Layer 3. It is one of the file formats that save various audio data with digital method. MP3 maintains the sound quality similar to that of CD while compressing the audio data by 1/12 of the WAV file.

What is WMA?

WMA (Windows Media Audio) is the Microsoft's multimedia compression method. It can compresses the audio data only and provides higher compression ratio (1/22) than MP3 by two times, while providing the similar sound quality.

What is ASF?

ASF (Advanced Streaming Format) is the multimedia file transmission data format developed by Microsoft. Its application scope is getting wider now.

• Before Using

Product Features

- **Large-capacity USB removable storage device**
 - The player has a built-in USB connector. Therefore, you can use the player safely and conveniently without separate USB cable or manager program.
 - You can connect the USB adapter of player to the PC without manager program.
- **Navigation (Search) function**

Using the navigation function, you can search for and select the file to playback easily and conveniently.
- **6-type equalizer**

You can select six tones - Normal, Pop, Rock, Classic, Live and User EQ.
- **5-band user equalizer**

You can set the tone as you want (5 band +/- 13 steps).
- **Convenient file management using folder function**

By default, the RADIO folder and VOICE folder are separated. You can also create or delete the folder for your convenience in file management.
- **MP3 format voice recording**

Recorded voice is saved with a MP3 file format, which enables repetitive playback with the clear sound quality and permanent storage at a PC.
- **FM radio reception and recording**

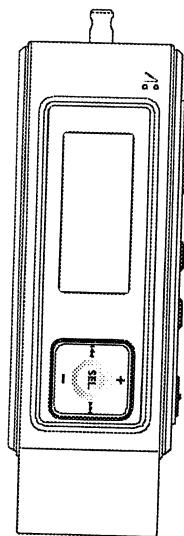
The player supports stereo radio reception, real-time recording and playback.
- **12-hour consecutive playback**

The internal battery lasts with up to 12 hour-long consecutive playbacks.
- **Multilingual support**

The player supports multilingual such as Korean, Chinese characters, English, Japanese, Chinese and European special characters.

• Before Using

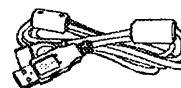
Composition of EMP-100



EMP-100



Neckband Earphone



USB Extension Cable



NUGGET



User Manual



Installation CD

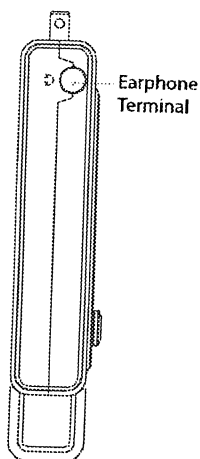
• Installation CD

- Neckband Earphone
- Recharging Conversion Jack
- DC Adaptor
- Carrying Case
- Arm Band

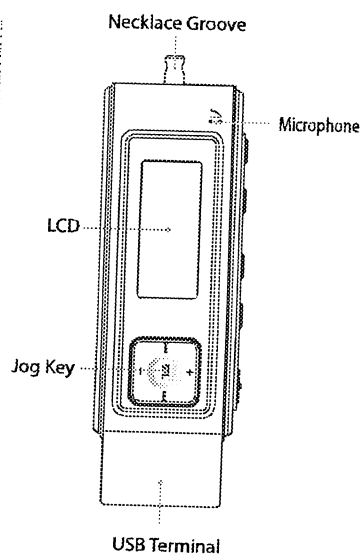
• Before Using

Name of EMP-110 Components

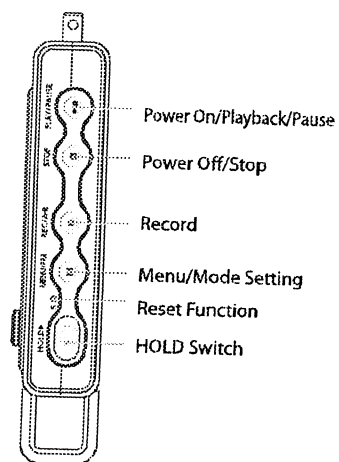
Left Side



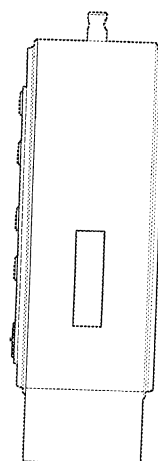
Front Side



Right Side



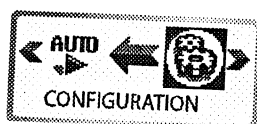
Rear Side



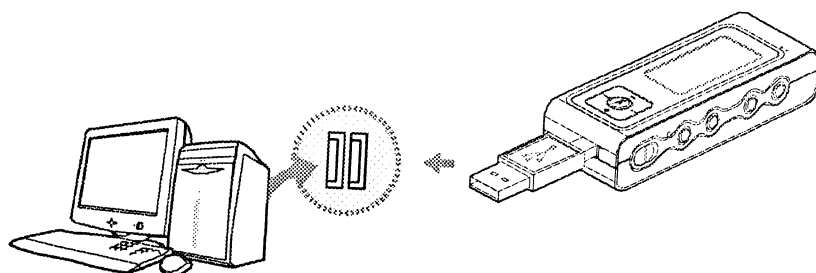
Setting the Menu

- System (Environment Setting)

This function is available only when the provided software is installed in the PC.
You can download fonts or upgrade the firmware using software.



1. Select [] from the [Menu] - [].

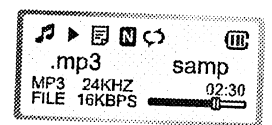
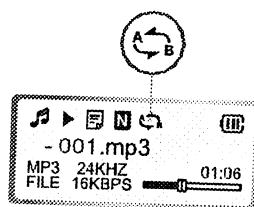
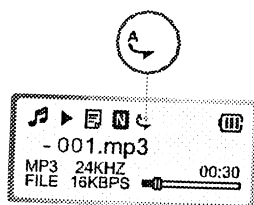


2. Connect the USB port that is integrated with the player to the PC.

Setting the Function

• Setting the Function

Repetitively plays back the certain sector of the file during playback.



1. Playback the file in the audio mode and press the (●) to mark the beginning of the sector (A).

2. Set the end of the sector (●) by pressing the (↔) button again. Then, the selected sector will be played back indefinitely.

3. Press the (●) button to clear sector repetition.

• Press the ⏮, ⏭ or (■) button to cancel sector repetition.

• Media Sync (optional)

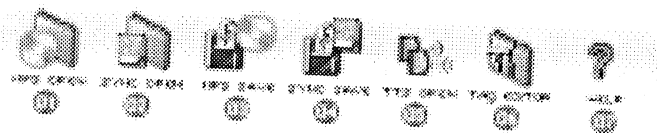
• Media Sync

Media Sync is the synchronization software that plays back music or language study MP3 files, or enables to input the synchronization information to the lyrics and the text. When playing back the file that was created using Media Sync, the contents of the file can be displayed as a text on the LCD of the device that supports the synchronization function. Other editing functions are also provided such as file editing, deleting, pasting and saving.

• Operating environment of Media Sync

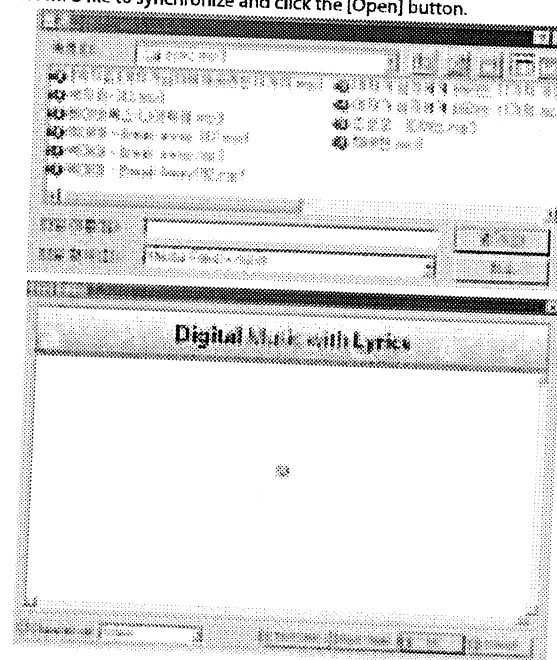
- Computer: IBM compatible computer with Pentium 133 MHz or later CPU and
- USB support.
- Memory: 64MB or more.
- Operating System: Windows 98/ME/NT/2000 (professional)/XP
- Hard disk: 640MB free hard disk space

• Basic Functions



 Opens the MP3 file to synchronize.

Select the MP3 file to synchronize and click the [Open] button.



• Media Sync (optional)

- ① Displays the opened lyric file.
 - ② Selects the language for the lyric.
Default (Korean, English)/Japanese/Chinese-I (Simplified)/Chinese-II (Traditional)
 - ③ Retrieves the text-type lyric file.
 - ④ Retrieves the "WMI" format lyric file.
 - ⑤ Pastes the retrieved lyric file into the lyric window of Media Sync.
 - ⑥ Pastes the retrieved lyric file into the lyric window of Media Sync.
- ⑦ Opens the WMI format lyric file to synchronize.
 - ⑧ Saves the lyric file that contains synchronization information and MP3 file.
MP3 file and WMI file will have the same file name.
 - * .MP3: MP3 file + lyric file containing synchronization information.
 - * .WMI: Lyric file containing synchronization information.
 - ⑨ Save the lyric file containing synchronization information as a "WMI" file.
 - ⑩ Invokes TTS Manager Program.
 - ⑪ Inputs or modifies the ID3 tag information such as song title or singer in a MP3 file.
 - ⑫ You can check the information entered by the Tag Editor on the LCD when the music file is played back.

Media Sync

MP3 file path: C:\Music\12345.mp3

ID3 info

① Title

② Artist

③ Album

④ Comment

⑤ Year

⑥ Track #

⑦ Genre

⑧ OK

⑨ CANCEL

- ① Shows the path of the currently opened MP3 file.
- ② Inputs the song title.
- ③ Inputs the singer name.
- ④ Inputs album title name.
- ⑤ Inputs other information.
- ⑥ Inputs the song announcement year.
- ⑦ Inputs the track number
- ⑧ Inputs the music type.

• TTS (Text-to-Speech) PAD (optional)

• Menu system



Setting

Language: You can select English, Chinese, Korean and Japanese voice engine.

Letter: Reads the text by the character unit.

Word: Reads the text by the word unit.

Sentence: Reads the text by the sentence unit.



Speech Control

Volume: You can increase or decrease volume by moving the volume slider to the Low or High direction. (Volume)

Pitch: You can increase or decrease pitch by moving the pitch slider to the Low or High direction. (Tone)

Rate: You can increase or decrease rate by moving the rate slider to the Low or High direction. (Speed)



Dictionary

A dictionary is "definition of reading" on the specific word. For example, to make the computer read "IT" as "Information"

Technology," it should be defined in the corresponding language dictionary.

Source Text: Word to define.

Pronunciation: Word or sentence with the defined meaning.

ADD: Adds new word.

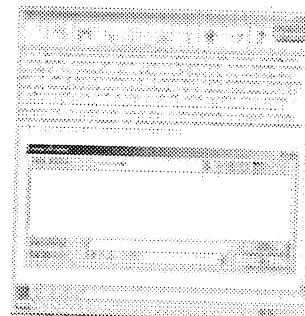
MOD: Modifies word definition.

DEL: Deletes the selected word.

• Generation

This function creates a MP3 file from the text file that can be played back by the Media Player.

Input the file name and press the [Start] button.



- Miscellaneous

Category	Item	Specification
MP3 / WMA / ASF	Channel	MP3 / WMA / ASF
	Frequency Range	20Hz ~ 20KHz
	Earphone Output	6mW(L) + 6mW(R): 16 Ω , Max Volume
	Signal to Noise Ratio	90dB (with A-weight filter)
FM Radio	Frequency Range	87.5 ~ 108Mhz (Worldwide)
	Earphone Output	76 ~ 90 MHz (Japan)
	Signal to Noise Ratio	6mW(L) + 6mW(R) : 16 Ω , Max Volume
		55dB (with A-weight filter)
	Reception Type	Earphone cord antenna
Recording	128MB	16Kbps:1,090Min. ~ 192Kbps:90Min.
	256MB	16Kbps:2,180Min. ~ 192Kbps:180Min.
	512MB	16Kbps:1,090Min. ~ 192Kbps:360Min.