


## How to use this manual

This document has been designed to provide you with complete product knowledge. You can resize the document window or print this document, access linked web sites and get information from specially prepared graphics.

- To jump to a linked topic or a web site, click the underlined blue text, or the hand symbol  whenever it appears.
- To show a short description (tooltip) of an object, move your mouse cursor over it. A tooltip appears after a few seconds.

You can choose to print portions of this document:

1. On the Contents tabbed page to your left, click a topic heading.
2. On the menu, click the Print button.
3. In the dialog box that appears, click the option to print one topic only, or all topics under a heading.

# Introduction

Thank you for purchasing Creative's new multi-format digital audio player, ZEN Nano Plus. Your player can store hundreds of songs in its music library, and comes equipped with a USB 2.0 port, so you can transfer music and data quickly and easily.

Note

- Your player plays back MP3 and WMA files, including those protected with Digital Rights Management (DRM) technology.

## Minimum System Requirements

- Microsoft® Windows® XP or Windows 2000
- Intel® Pentium® II 350 MHz, AMD® K6-2® 450 MHz or better processor (Pentium III 450 MHz or higher recommended for MP3 encoding in Creative MediaSource™)
- CD-ROM or DVD-ROM drive with digital audio extraction support
- USB 1.1 port (USB 2.0 port recommended)
- 64 MB RAM (128 MB recommended)
- 10 MB available hard disk space (more space needed for storing audio)
- SVGA graphics adapter (256 colors, 800 x 600 resolution or better)

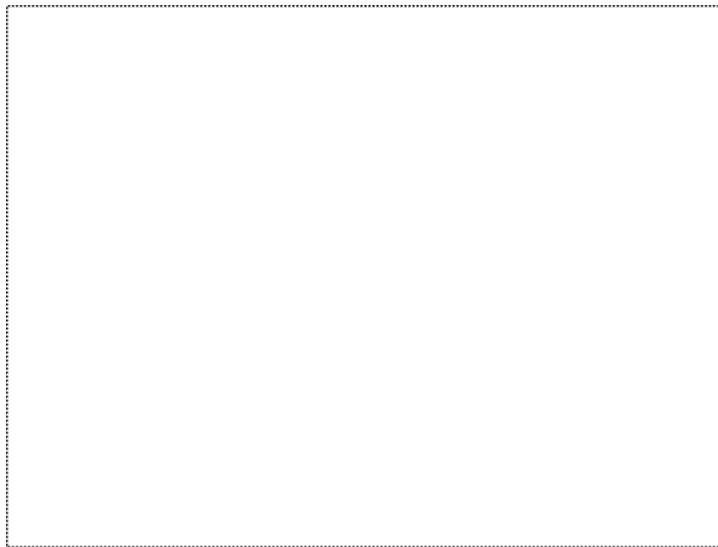
### Note

- The software applications on the ZEN Nano Plus CD may have higher requirements for basic functionality. Refer to each application's documentation for details.

# Your Player At A Glance

- [Overview](#)
- [Using the Scroller](#)
- [LCD Guide](#)

# Overview



Component		Usage
1	Play/Pause button	<ul style="list-style-type: none"> <li>• Press and hold to turn the player on and off.</li> <li>• Press once to start playing tracks, and press again to pause playback.</li> <li>• When your player is locked, press to turn on the LCD backlight.</li> </ul>
2	Microphone	<ul style="list-style-type: none"> <li>• A built-in microphone that lets you make digital voice recordings.</li> </ul>
3	LCD (Liquid Crystal Display)	<ul style="list-style-type: none"> <li>• Displays menu options.</li> </ul>
4	Volume Decrease button	<ul style="list-style-type: none"> <li>• Press to decrease the volume.</li> </ul>
5	Volume Increase button	<ul style="list-style-type: none"> <li>• Press to increase the volume.</li> </ul>
6	Scroller	<ul style="list-style-type: none"> <li>• Turn the Scroller to scroll through menu options and press the Scroller to select them. This action is also referred to as "Scroll Select".</li> <li>• During playback, turn the Scroller to move between tracks, or turn and hold the Scroller to move within a track.</li> <li>• For more information, see "Using the Scroller" on page 2-3.</li> </ul>



<b>Component</b>		<b>Usage</b>
7	Headphone jack	<ul style="list-style-type: none"><li>• Connect headphones to this jack.</li></ul>
8	Line In jack	<ul style="list-style-type: none"><li>• Connect external stereo sources, such as cassette players, CD players and MiniDisc players, to this jack.</li></ul>
9	USB port	<ul style="list-style-type: none"><li>• Connect your computer to this port using the supplied USB cable.</li></ul>

## Using the Scroller

Most of the player's functions are accessed using the scroller. It is therefore important that you learn how to use the Scroller.


- [Selecting menu options](#)
- [Controlling playback](#)



## Selecting menu options

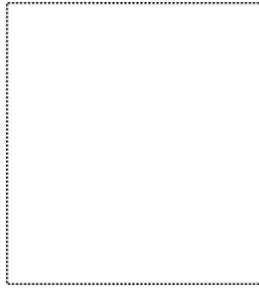
You can use the scroller to select menu options. In this User's Guide, we use the term "Scroll Select" when we want you to use the Scroller to scroll to a menu option, and then select it by pressing the Scroller.



1. Turn the Scroller to scroll through menu options on your LCD until the option that you want, such as Play Mode , is highlighted.
2. Press the Scroller to select this menu option.



## Controlling playback



During playback, you can use the Scroller to move between tracks, or to move quickly within a track.

To go to the next or previous track during playback

Turn the Scroller up or down respectively

To move forward or back within a track during playback

Turn and





hold the Scroller up or down respectively

## **LCD Guide**

- [Battery Icons](#)
- [Status Diagrams](#)
- [Play Status Icons](#)
- [Play Mode Icons](#)
- [Information Diagrams](#)

## Battery Icons



After inserting the battery, your player displays one of the following icons, depending on the battery's status.

This icon	Means this
	Battery is full
	Battery is 60% full
	Battery is 30% full
	Battery is nearly empty. Change the battery at the earliest opportunity









### Tip

- Playback time depends on factors like the volume level. For more information, see [Usage](#).









## Status Diagrams

This diagram	Means this
	Your player is connected to your computer. To use your player, disconnect it from your computer.
	Files are being transferred to your player.

## Play Status Icons





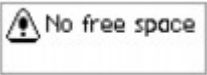

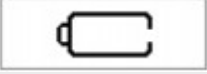
This icon	Means this
	Play
	Pause
	Stop
	Record
	Move forward within a track
	Move back within a track
	Next track
	Previous track

## Play Mode Icons

This icon	Means this
	Repeat track
	Repeat folder
	Repeat all
	Shuffle once
	Shuffle repeat
	Shuffle folder
	Track once
	Repeat selected section of a track

## Information Diagrams

If an error occurs, you may see one of the following information diagram, indicating the general nature of the problem.

This diagram	Means this	Advice
	<ul style="list-style-type: none"> <li>Physical defects</li> <li>Numerous high-impact shocks</li> </ul>	<ul style="list-style-type: none"> <li>Contact Customer Support Services</li> </ul>
	<ul style="list-style-type: none"> <li>Unexpected power loss while saving settings</li> </ul>	<ul style="list-style-type: none"> <li>Download a newer firmware version</li> <li>Reload firmware</li> <li>Contact Customer Support Services</li> </ul>
	<ul style="list-style-type: none"> <li>Player is unable to perform the selected task, such as deleting a file</li> </ul>	<ul style="list-style-type: none"> <li>Clear your player's memory</li> <li>Contact Customer Support Services</li> </ul>
	<ul style="list-style-type: none"> <li>Unsupported file system</li> <li>Corrupted file system</li> </ul>	<ul style="list-style-type: none"> <li>Check that the file system you selected during formatting is FAT, FAT16 or FAT32</li> <li>Use ScanDisk to scan your player</li> </ul>
	<ul style="list-style-type: none"> <li>The player's remaining storage space is low or depleted; recording cannot proceed</li> </ul>	<ul style="list-style-type: none"> <li>Delete some files to free storage space</li> </ul>
	<ul style="list-style-type: none"> <li>Low battery power</li> </ul>	<ul style="list-style-type: none"> <li>Insert a new battery</li> </ul>
	<ul style="list-style-type: none"> <li>Battery is depleted, player cannot start up</li> </ul>	<ul style="list-style-type: none"> <li>Insert a new battery</li> </ul>

# Getting Started

- [Step 1: Set up computer](#)
- [Step 2: Insert battery](#)
- [Step 3: Transfer music](#)
- [Step 4: Disconnect player](#)
- [Step 5: Play music](#)



## Step 1: Set up computer

DO NOT connect your player to your computer before setting up the software.

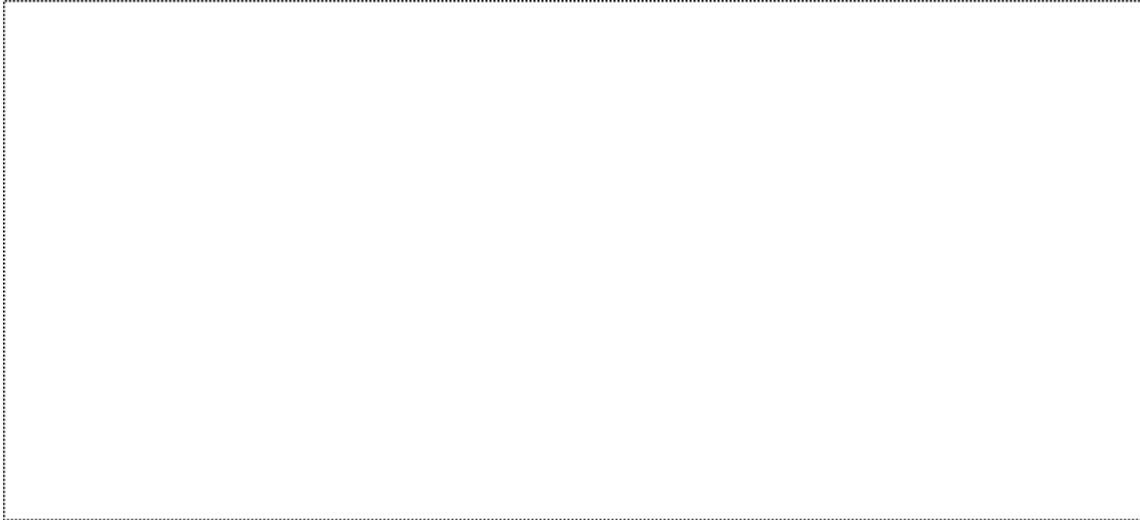
1. Turn on your computer.
1. If you have Windows XP or Windows 2000, you must log in as an administrator in Windows before you can set up the software. For more information, refer to your operating system's online Help.
2. Insert the Installation and Applications CD into your CD-ROM/DVD-ROM drive. Your CD should start automatically. If it does not, follow the steps below:
  - i. On your desktop, right-click the My Computer icon and select Explorer.
  - i. Alternatively, click Start → My Computer.
  - ii. Right-click the CD-ROM/DVD-ROM drive icon, and then click AutoPlay.
3. Follow the instructions on the screen and when prompted, restart your computer.

### Note

- Windows 98 SE users must install a device driver before using the player. This driver is automatically installed when you set up the software on Windows 98 SE.



## Step 2: Insert battery

Use an alkaline battery with your player.



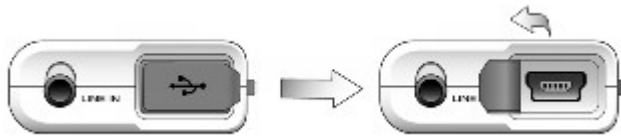
When you turn on your player for the first time, the menu will be in English.

To change the language

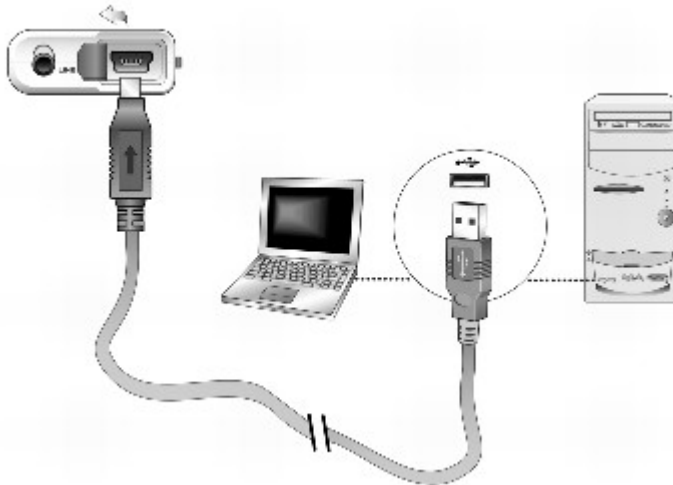
1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Settings option .
3. Scroll Select the Language option .
4. Scroll Select the language that you want.


## Step 3: Transfer music

1. Flip open the rubber cover of your player's USB port.



- 1.
2. Connect your player to your computer's USB port using the supplied USB cable.
2. Your computer's USB port may be located on the front, back or side panels.



- 2.
3. Start Windows Explorer on your computer.
3. You will notice that your player is recognized as a Removable Disk in Windows Explorer.
4. Transfer audio files (MP3 or WMA files) to your player using a drag-and-drop operation.
4. You can also transfer data files using Windows Explorer. For more information about using Windows Explorer, refer to its online Help.
5. For more advanced song management tasks, you can use Creative Media Explorer or Creative MediaSource Player/Organizer. Creative MediaSource Player/Organizer is your digital music center for playing, creating, organizing and transferring digital music. To launch Creative MediaSource Player/Organizer, double-click the Creative MediaSource Player/Organizer shortcut icon  on your desktop.
5. For more information about using Creative MediaSource Player/Organizer, refer to its online Help.


### Note

- Do not press the buttons on your player while connecting it to your computer.
- WMA files with Digital Rights Management (DRM) cannot be copied to your player using Windows Explorer. You can only do so with applications that support this technology, such as Creative Media Explorer, Creative MediaSource Player/Organizer, or Windows Media Player.

## Step 4: Disconnect player

Before disconnecting your player from your computer, use the Windows Eject or Safely Remove Hardware icon on the Taskbar to safely disconnect your player. If not, your player may not be able to function normally. Follow these steps below to safely disconnect your player.

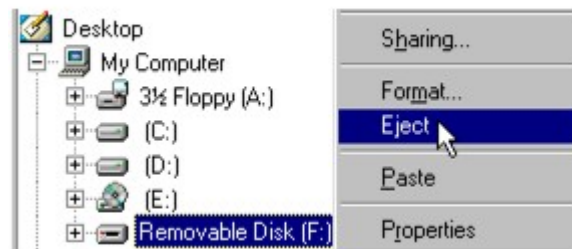
To stop your player in Windows XP, Windows 2000 or Windows Me

Click the Safely Remove Hardware icon  on the Taskbar, click Safely remove USB Mass Storage Device, and disconnect your player when you are prompted to do so.



To stop your player in Windows 98 SE

In Windows Explorer, right-click the Removable Disk icon, click the Eject option, and disconnect your player when you are prompted to do so.





Tip

- Make sure that the following status diagram appears on the LCD for at least five seconds before disconnecting your player.



•

## Step 5: Play music

1. Press and hold the Play/Pause button  until your player turns on.
1. The CREATIVE logo appears on the LCD, followed by the ZEN Nano Plus logo. Music stored in your player starts playing automatically. Note that your player comes preloaded with some music to get you started.
2. Press the Volume Increase and Volume Decrease buttons to adjust the volume.
3. After you have finished using your player, press and hold the Play/Pause button  until the Power off message disappears.



### Warning!

- Remember to set the volume at a moderate level. Listening to music at high volumes can impair your hearing.
- For your safety and the safety of others, do not use headphones while driving, cycling or any other activity that requires your full attention.

# Using Your Player

- [Turning your player on and off](#)
- [Transferring music and data](#)
- [Playing music](#)
- [Listening to FM radio](#)
- [Playing recorded tracks](#)
- [Recording with the built-in microphone](#)
- [Line-in encoding](#)
- [Locking your player](#)
- [Deleting tracks](#)
- [Formatting your player](#)

## Turning your player on and off

1. Press and hold the Play/Pause button  until your player turns on.
1. The CREATIVE logo appears on the LCD, followed by the ZEN Nano Plus logo. Music stored in your player starts playing automatically.
2. After you have finished using your player, press and hold the Play/Pause button  until the Power Off message disappears.

## Transferring music and data



Audio selections have been preloaded to your player to get you started quickly. If you wish to listen to music immediately, see [Playing music](#)

If you wish to download music tracks to your player, you can download music from Internet music sites (see [Downloading from the Internet](#)), rip them from your audio CDs to create digital files on your computer (see [Ripping audio CDs](#)), or encode them directly into your player (see [Line-in encoding](#)).

You can also use your player as a portable data storage device to transfer large files from one computer to another. Use Windows Explorer or Creative Media Explorer to transfer data files.



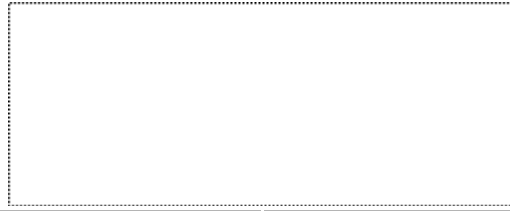
## Playing music

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Music option .
3. Scroll to the audio track that you want to play and press the Play/Pause button .

### Note



- You can select different play modes to vary the playback order. For more information, see [Play mode](#).

## Overview of the Music screen



	Description
1	Elapsed time
2	Play status
3	Track title
4	EQ setting
5	Play mode

## Playing MP3 encoded tracks


1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Skip Folder option .
3. Press the Scroller and Scroll Select the Encoded Tracks option.
3. Note that the Encoded Tracks option is only available if you have encoded tracks.
4. Scroll to an encoded track that you want to play and press the Play/Pause button .

### Note

- The track names of encoded tracks start with "EN".
- For information about creating MP3 encoded tracks, see [Line-in encoding](#).

## Skipping Folders

During music playback, you can choose between different folders of music tracks.

1. During music playback, press the Scroller and Scroll Select the Skip Folder option . Alternatively, press and hold the Scroller.
2. Scroll to the folder that you want to go to.
3. To resume normal playback, press the Scroller again.

Note

- Your player can only recognize up to three subfolder levels from the root directory.
- You cannot skip folders when playing back microphone recordings.




## Listening to FM radio

Your player's default FM region is International.

You can manually scan for FM radio stations one at a time, or automatically scan for all available stations. You can save up to 32 radio presets.

FM Radio has two views: Tuning and Preset. To manually scan for FM radio stations, you have to be in the Tuning view. If you have saved radio presets, you can select them by switching to the Preset view.

To switch between Tuning and Preset views

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the FM Radio option .
2. A radio frequency appears on the LCD.
3. Press the Play/Pause button  to switch between views.
3. Alternatively, press the Scroller and Scroll Select the Scroller: Tuning or Scroller: Preset option .

### Note



- If there are no saved presets in your player, the "No preset found" message will appear when you switch to the Preset view.
- In the Preset view, you can see the preset number and scroll from one preset to another. If you need to fine-tune a preset, switch to the Tuning view.

## Overview of the FM Radio screen






	Description
1	Preset view
2	FM radio frequency
3	Preset number (only appears in the Preset view)
4	Stereo/Mono indicator
5	Tuning view

## Automatically scanning and saving radio stations



1. Connect headphones to the Headphone jack.
2. Press the Scroller.
2. The main menu appears.
3. Scroll Select the FM Radio option .
3. A radio frequency appears on the LCD.
4. Press the Scroller and Scroll Select the Autoscan option .
4. The player scans and stores all radio stations that it can receive. At the end of the autoscan, it automatically saves all stations as presets and tunes in to the first preset.

## Manually scanning and saving radio stations




1. Connect headphones to the Headphone jack.
2. Press the Scroller.
2. The main menu appears.
3. Scroll Select the FM Radio option .
3. A radio frequency appears on the LCD.
4. If you see a preset station, press the Play/Pause button  to switch to the Tuning view. The preset station disappears.
5. To scan for a station, turn the Scroller and hold for one second. The player scans for the next available station.
6. Press the Scroller and Scroll Select the Save Preset option .
7. Turn the Scroller to select a preset number. Your station is stored and appears at the bottom-left corner of your LCD.
8. Repeat steps 2 to 6 to store another station.





## Selecting a preset station

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the FM Radio option .
2. A radio frequency appears on the LCD.
3. If you do not see a preset station, press the Play/Pause button  to switch to the Preset view. A preset station appears.
4. Turn the Scroller to select the preset station you want.

## Deleting a radio preset

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the FM Radio option .
2. A radio frequency appears on the LCD.
3. If you do not see a radio preset, press the Play/Pause button  to switch to the Preset view.  
The radio preset appears.
4. Turn the Scroller to select the preset station you want.
5. Press the Scroller and Scroll Select the Delete Preset option .
5. The selected preset is deleted and your player tunes to the next available preset station.

## Playing recorded tracks



1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Recorded Tracks option .
3. Scroll to a recording that you want to play and press the Play/Pause button .

## Overview of the Recorded Tracks screen



	<b>Description</b>
1	Elapsed time
2	Play status
3	Currently playing track
4	Play mode

## Recording with the built-in microphone


1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Microphone option .
3. Press the Play/Pause button  to start recording, and press it again to stop recording.
3. The first recorded track is named VOC001, the second recorded track is named VOC002, the third recorded track is named VOC003, and so on.

## Overview of the Microphone screen



	Description
1	Elapsed recording time
2	Record status
3	Recording progress bar
4	Remaining recording time

### Note




- You cannot pause and continue a voice recording.
- Recorded tracks are saved in the Recorded Tracks folder in your player's root directory.
- To view and play back recordings, Scroll Select the Recorded Tracks option . For more information, see [Playing recorded tracks](#).

## Line-in encoding

You can directly encode or "rip" music to your player, instead of ripping music on your computer first and then transferring it to your player.

1. Connect the Line In jack on your player to the line output of an external stereo source, such as a CD or MiniDisc player, using the supplied Stereo cable.



- 1.
2. Press the Scroller.
2. The main menu appears.
3. Scroll Select the MP3 Encoding option .
4. Press the Play/Pause button  to start the encoding. An encoding progress bar appears on the LCD and encoding starts.
5. On your external stereo source, start playing the song you want to encode.
6. Press the Play/Pause button  to end the encoding.
6. The first encoded track is named EN001, the second encoded track is named EN002, the third encoded track is named EN003, and so on.

## Overview of the MP3 Encoding screen



	Description
1	Elapsed encoding time
2	Record status
3	Encoding progress bar
4	Remaining encoding time
5	Sync Track enabled
6	Encoding bitrate


### Note

- Enable Sync Track ("SYNC") to encode the songs from your source as separate tracks. For more information, see [Synchronizing MP3 encoding](#).
- Encoded tracks are saved in the Encoded Tracks folder in your player's root directory. To view and play back encoded tracks, see [Playing MP3 encoded tracks](#).
- It may be illegal to encode music files for trade or sale unless you have the express or explicit permission of the copyright holder(s).





## **Adjusting sound quality of MP3 encoding**

You can adjust the sound quality of encoded tracks by changing the MP3 encoding bitrate.

1. In the MP3 Encoding screen, press the Scroller.
2. Scroll Select the Encode Bitrate option  and select the bitrate that you want.
2. Note that higher bitrates offer better sound quality but take up more storage space.

## Synchronizing MP3 encoding




If you are encoding songs from a CD or MiniDisc, enable Sync Track ("SYNC") so that your player will encode the songs from your source as separate tracks. Your player will automatically stop when the last song is played. Sync Track is enabled by default.

1. In the MP3 Encoding screen, press the Scroller.
2. Scroll Select the Sync Track option  and turn Sync Track on or off. When Sync Track is turned on,  appears at the top right corner of the MP3 Encoding screen.



## Locking your player

Locking your player disables all buttons on your player except the Scroller. Lock your player when you want to prevent buttons from being accidentally pressed.

If you press a button while the player is locked, a popup message prompts you to unlock the player. This window is displayed for five seconds.

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Lock option .
2.  appears at the top right corner of the LCD.
3. To unlock your player, press any button and Scroll Select the Unlock option .

## Deleting tracks

1. During playback, press the Scroller.
1. The main menu appears.
2. Scroll Select the Delete option .
3. Scroll Select  to permanently delete the currently playing audio track or recording.

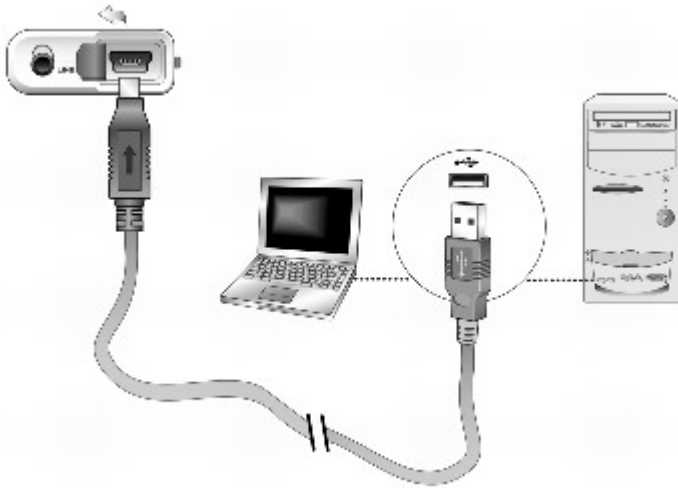
### Note

- For more song management tasks, connect your player to your computer and start Creative MediaSource Player/Organizer. Creative MediaSource Player/Organizer is your digital music center for playing, creating, organizing and transferring digital music.

## Formatting your player

If you need to format your player, backup the files in your player first. When you format your player, all songs and data files will be deleted. All new players are already formatted.

1. Connect your player to your computer's USB port using the supplied USB cable.



- 1.
2. Start Windows Explorer on your computer. Your player is recognized as a Removable Disk in Windows Explorer.
3. Right-click the Removable Disk option, click the Format option, and follow the instructions on the screen to format your player.
3. Make sure you select either FAT, FAT16 or FAT32 when formatting the player. NTFS is NOT supported on your player.



- 3.
4. After the formatting is complete, make sure you stop your player before disconnecting it from your computer. For instructions on stopping your player, see [Step 4: Disconnect player](#).


















### Note

- For more information about using Windows Explorer, refer to its online Help.
- Windows 98 SE users must install the device drivers before formatting the player. For more information on driver installation, see [Step 1: Set up computer](#)".
- Windows XP and Windows 2000 users must select the FAT, FAT16 or FAT32 option in the formatting dialog box before formatting the player.

# Setting Preferences




- [Play mode](#)
- [EQ](#)
- [Settings](#)

## Play mode

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Play mode option .
3. Scroll Select one of the following options:
  - A-B
  - Repeats a selected section of a track. When you select this,  appears at the top right corner of the LCD.
  - Press the Scroller when A is highlighted to mark the start point of the repeat, and press the Scroller again when B is highlighted to mark the end point.
  - Repeat track 
  - Repeats the current song. When you select this,  appears at the top right corner of the LCD.
  - Repeat all 
  - Repeats all songs in your player. When you select this,  appears at the top right corner of the LCD.
  - Repeat folder 
  - Repeats all songs in a folder. When you select this,  appears at the top right corner of the LCD.
  - Track once 
  - Stops playing after the current song ends. When you select this,  appears at the top right corner of the LCD.
  - Shuffle repeat 
  - Plays and repeats all songs, in random order. When you select this,  appears at the top right corner of the LCD.
  - Shuffle once 
  - Plays all songs in random order, once only. When you select this,  appears at the top right corner of the LCD.
  - Shuffle folder 
  - Plays folders of songs in random order. When you select this,  appears at the top right corner of the LCD.
  - Normal 
  - Resumes playing songs in sequence.

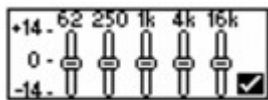
## EQ


EQ is a collection of equalizer settings that can enhance the sound of your music. Select preset settings such as Rock or Jazz, or customize your own setting.

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the EQ option .
3. Scroll Select one of the following options:
  - Rock 
  - When you select this, **ROCK** appears at the top right corner of the LCD.
  - Pop **POP**
  - When you select this, **POP** appears at the top right corner of the LCD.
  - Classical **CLASS**
  - When you select this, **CLASS** appears at the top right corner of the LCD.
  - Jazz **JAZZ**
  - When you select this, **JAZZ** appears at the top right corner of the LCD.
  - Custom **CUSTOM**
  - When you select this, **CUSTOM** appears at the top right corner of the LCD.
  - Normal 
  - Plays songs without EQ enhancements.

### Defining Custom EQ



1. Scroll Select the Custom EQ option **CUSTOM**. The Custom EQ settings appear.











- 1.
2. Five vertical control levers appears in the display. Each lever represents successively higher frequencies that can be adjusted.
2. 62 controls bass frequency, 250 adjusts the low mid-range frequency, 1k adjusts the mid-range frequency, 4k adjusts the upper mid-range frequency and 16k adjusts the treble frequency.
3. Scroll Select a vertical control lever. Use the Scroller to move the control knob up or down to vary the amount of boost or reduction in the selected frequency range.
4. Scroll Select the check mark  to exit.



## Settings

1. Press the Scroller.
1. The main menu appears.
2. Scroll Select the Settings option .
3. Scroll Select one of the following options:
  - LCD orientation 
  - Flips the display for right-handed or left-handed orientations. The default orientation is for the right-handed. If you are left-handed, you can switch the orientation if you prefer to use the controls of your player with your left hand.



- Contrast 
- Adjusts the contrast of the LCD.
- Backlight 
- Adjusts backlight duration.
- Language 
- Sets the default language displayed on the LCD.
- FM Region 
- Your player's default FM region is International .
- Idle shutdown 
- Adjusts how long your player remains inactive before it automatically shuts down.
- Cue/Review 
- Sets whether you can use the Scroller to cue or review.
- Information 
- Displays your player's firmware version, total memory space and available memory space.

# About Music Files

You can download music files from Internet music sites, or "rip" music files from audio CDs to your computer. Music files that you transfer to your player must, however, be MP3 or WMA files if you want to play them back.

MP3 and WMA files are music files that have lossy compression encoding, which means that some data is lost during compression. However, using standard sampling rates and bitrates will ensure that your MP3 files retain much of their audio quality. The standard bitrate for most MP3 files is 128 kbps, although some are set higher, at 160 or 192 kbps. The standard bitrate for most WMA files is 64 kbps. Higher bitrates will result in better audio quality, but file sizes will be larger as a consequence.

- [Downloading from the Internet](#)
- [Ripping audio CDs](#)

## **Downloading from the Internet**

To get digital music files from the Internet, use a search engine to locate sites with digital music content. You can use the supplied software to download audio files from any major Internet music download sites. Follow the instructions on the site to download the music files to your computer.

### Note

- It may be illegal to encode music files for trade or sale unless you have the express or explicit permission of the copyright holder(s).
- WMA files with Digital Rights Management cannot be copied to your player using Windows Explorer. You can only do so with applications that support this technology, such as Creative ZEN Nano Plus Media Explorer, Creative MediaSource Player/Organizer, or Windows Media Player.

## Ripping audio CDs

To get music tracks from your CDs to your player, you will need a CD-ROM or DVD-ROM drive that can extract digital audio data, and Creative MediaSource Player/Organizer. Creative MediaSource Player/Organizer will read the audio information on your CD and convert it to WMA files using the bitrate you choose.


The standard bitrate of most WMA files is 64 Kbps. Using the standard bitrate will ensure that your WMA files retain much of their audio quality. Higher bitrates will result in larger WMA file sizes, with better audio quality.


The time needed to successfully extract audio from a CD depends on:

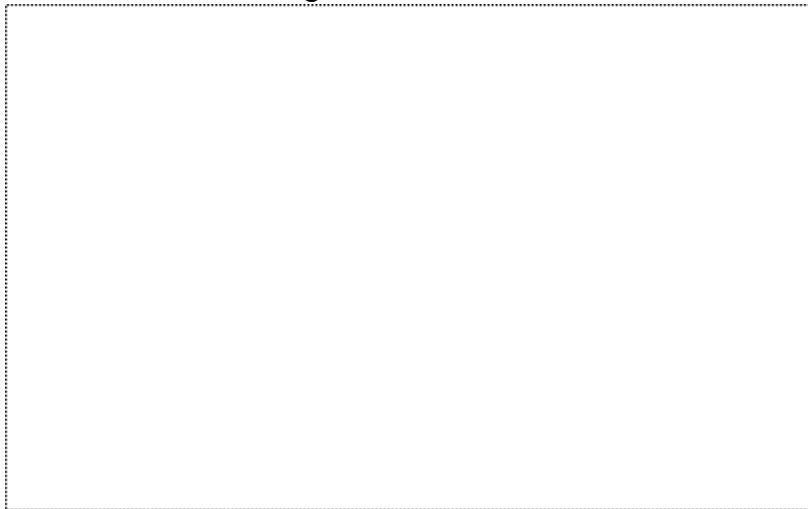
- CD-ROM/DVD-ROM drive speed
- defects, like scratches on the audio CD
- error-checking features on the CD-ROM/DVD-ROM drive
- bitrate selected for encoding

To rip an audio CD using Creative MediaSource Player/Organizer

1. Insert an audio CD into your CD-ROM/DVD-ROM drive.
2. Start Creative MediaSource Player/Organizer by clicking the Creative MediaSource

Player/Organizer shortcut icon  on your desktop.

3. If Creative MediaSource Player/Organizer is in Player view, click the Player/Organizer View button  to switch to Organizer view.



- 3.
4. In the Sources window, select [d:] Audio CD (replace d: with your CD-ROM/DVD-ROM drive).
5. In the Task bar, click the Rip Now button.

For more information about using Creative MediaSource Player/Organizer, refer to its online Help.

Tip

- Instead of manually entering track information, retrieve audio CD information from CDDb before ripping tracks.

# Frequently Asked Questions

This section covers questions you might have while using your player. It has been divided into a few categories for your easy reference. For further assistance, you may wish to consult our self-help tool "Knowledge Base". Go to [www.creative.com](http://www.creative.com) and select your region.

- [Usage](#)
- [Updates](#)

## Usage

Why does my player skip certain tracks?

The player will only play valid media formats (MP3 and WMA files). Other types of media formats will be skipped.

Why are some files/tracks corrupted when transferred to my player?

Transfer may have been interrupted. Before disconnecting your player from your computer, stop your player first. For more information on stopping your player, refer to [Step 4: Disconnect player](#)

Why does my player turn off immediately after it is turned on?

The battery may be too depleted to power your player. Replace the battery and try again.

File transfers to the player are very slow (less than 100 KB/Sec). What do I do?

Try formatting your player. For more information, refer to [Formatting your player](#)

Can I use my player as a portable data storage device?

Yes, you can. You can transfer data files using Creative Media Explorer or Windows Explorer.

I have to change the battery quite often. Is there anything I can do to make it last longer?

The following will make your batteries last longer.

- Set a shorter backlight duration.
- Set a lower contrast setting.
- Avoid unnecessarily skipping ahead and back within tracks.
- Avoid unnecessarily turning the player on and off.
- Avoid using passive speakers or high-powered headphones.
- Avoid playing back WMA tracks especially tracks with high bitrates or heavy bass.

Can I play DRM-protected WMA files on my player?

Yes. To transfer DRM-protected WMA files to your player, you can use Creative MediaSource Player/Organizer.

## Updates

Where can I get official information on all ZEN products?

Visit [www.creative.com](http://www.creative.com)

for updates and downloads relating to all ZEN products, Creative's MP3 players and accessories.

# General Specifications

## Size (WxHxD)

- 33.5 mm (1.3") x 65.5 mm (2.6") x 13.0 mm (0.5")

## Weight

- 22 g (0.8 oz)
- 34 g (1.2 oz) with battery

## Capacity

- 128 MB, 256 MB, 512 MB or 1 GB built-in NAND Flash Memory

## Power Source

- Battery: 1 x AAA alkaline battery
- USB bus powered when connected to computer

## Battery Life

- MP3 128 kbps: Up to 18 hours of continuous playback with a new AAA alkaline battery
- FM radio: Up to 12 hours of continuous playtime with a new AAA alkaline battery

## Playback Formats

- MP3: Up to 320 kbps
- WMA: Up to 320 kbps
- WMA with Digital Rights Management

## Recording Formats

- Voice (via built-in microphone): IMA ADPCM (8 kHz, 4-bit, Mono)
- Line In Encoding: MP3 44.1 kHz (96, 128 or 160 kbps)

## FM Radio

- Stereo and Mono
- Up to 32 preset stations
- FM region support
  - International: 87.5 MHz ~ 108.0 MHz, 50 kHz intervals

## MP3 Playback Performance

- Signal-to-Noise Ratio: Up to 90 dB
- Channel Separation: Up to 65 dB
- Frequency Response: 20 Hz ~ 20 kHz
- Harmonic Distortion Output: <0.1%

## Connectors

- Headphone jack: 3.5 mm (1/8") stereo minijack, 5~7 mW per channel
- Line In jack: 2.5 mm (3/32") stereo minijack
- USB port: Standard USB mini-B receptacle
  - USB 2.0 (High speed)
  - USB 1.1 (Full speed)

## LCD

- 96 x 32 pixel blue EL backlit display

## Firmware Support

- Upgradable via USB
- Firmware upgrades are available from [www.creative.com](http://www.creative.com).

## Headphone Specifications

- Frequency Range: 20 Hz ~ 20 KHz
- Sensitivity: 111 dB ±5 dB (I/P Level:1 mW)
- Impedance: 32 W ±15%
- Plug: 3.5 mm (1/8") stereo minijack



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