# Rer's Guide Forge



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# Chapter 1

# **Getting Started**

#### :: Welcome

Thank you for purchasing the Rio Forge. The Rio Forge is a portable digital audio player that provides many hours of MP3 and WMA playback. The Rio Forge features a lighted LCD, a memory expansion slot, a stopwatch, and an FM radio tuner.

#### **Learning More**

- Refer to the Quick Start poster for the basics on how to set up and start using the Rio Forge.
- Visit the Rio website at www.rioaudio.com.

# :: Tour of the Rio Forge

#### **MENU**

In Player mode, press to enter Menu mode.

In Menu mode, press to return to Player mode.

#### **POWER**

Press to power the Rio Forge on.

Press and hold to power the Rio Forge off.

#### LOCK/UNLOCK

Slide into the LOCK position to disable buttons and prevent accidental operation.

#### **STOP**

Press to stop playback.



#### **VOLUME** + and -

Press to adjust volume level.

#### **PLAY/PAUSE**

Press to play or pause playback.

#### **CENTER**

In Menu mode, press to select options.

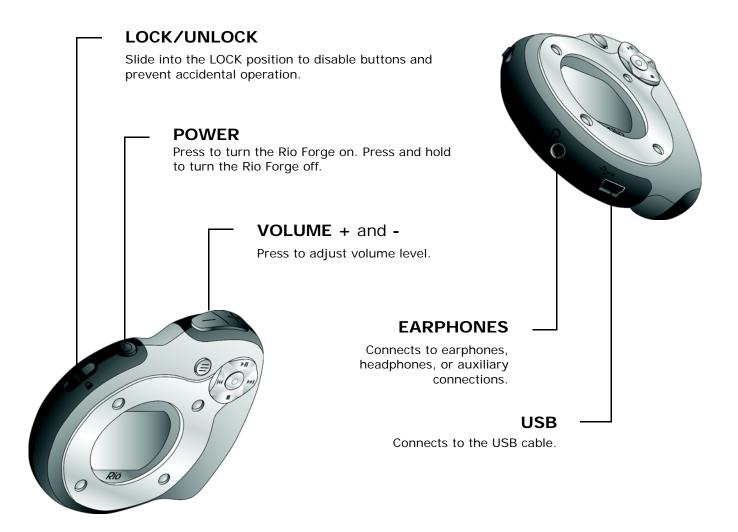
In Player mode press to cycle through Time Code View, Track Format View, and Date View.

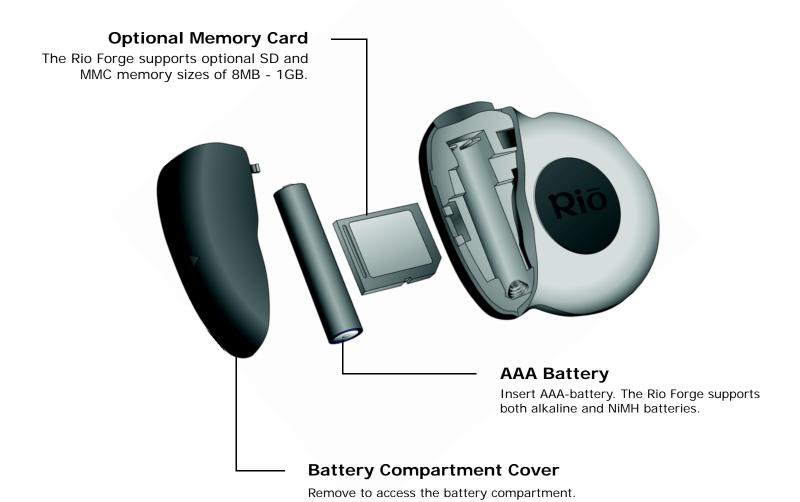
Press and hold to quickly set Bookmarks.

# FORWARD and REVERSE

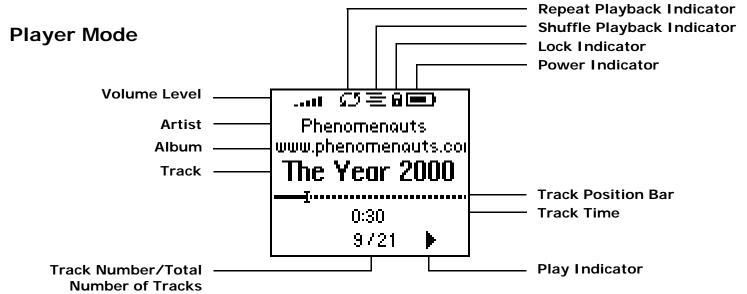
Press to skip to the next or previous track.

Press and hold to scan forward or reverse.

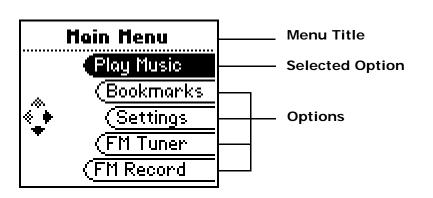


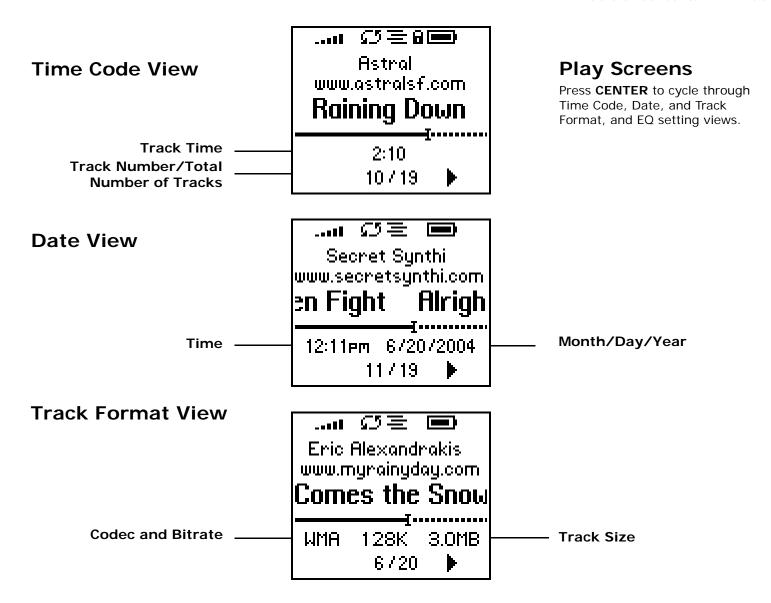


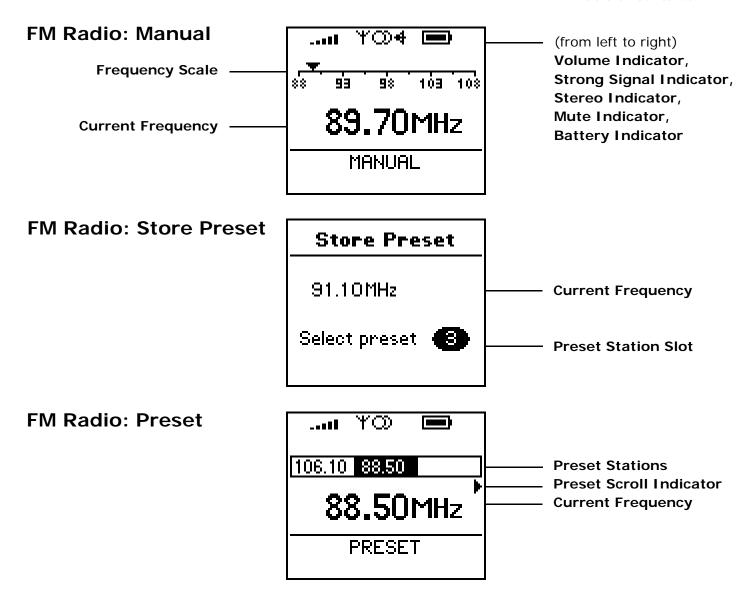
## :: LCD Overview



#### Menu Mode







# Chapter 2

# **Connections**

### :: Basic Connections

This chapter describes how to connect the Rio Forge to earphones, mini USB cables, and alternate devices. Basic connections include:

#### **Battery**

The Rio Forge uses a single AAA-battery that can provide many hours of use. The Battery Compartment Cover must be removed before a battery can be installed.

#### **Earphones**

Connect the supplied earphones to the **EARPHONES** jack on the bottom of the Rio Forge.

#### **USB**

The Rio Forge must be connected using the included USB cable to the USB port on your computer before music or files can be transferred to and from the Rio Forge and your computer.

#### **USB Detection with the Windows Device Driver**

USB connectivity works immediately. Installation of device driver software is not required unless your computer uses the Windows 98 SE operating system.

If using Windows 98 SE the Windows Device Driver Wizard will be displayed after the USB cable has been plugged into both the Rio Forge and the computer. Please follow these steps:

- **1** Confirm the Rio installation CD is in the computer's CD-ROM drive.
- 2 Check the **CD-ROM Drives** box when the Windows Device Driver Wizard requests the location of the Rio Forge drivers.
- 3 Click **Next** and follow the Windows Device Driver Wizard instructions.









#### **Additional Accessories**

Get the most out of your Rio Forge with additional accessories available online at the Rio website. Some of the most popular accessories include the following:

#### Rio Approved External Memory Cards

Add an external memory card to your Rio Forge and significantly increase the number of tracks that can be loaded onto the Rio Forge.



#### Rio Forge Sports Case and Armband

Replace sports cases and armbands that have been worn down by extreme sports and intensely active lifestyles.



#### Rio Car Stereo Adapter

Upgrade your car stereo for hundreds of dollars less than buying a new MP3 CD player. The Rio car stereo adapter connects to the earphone jack on the Rio Forge and lets you play your favorite music in any vehicle equipped with a standard cassette deck.



# Chapter 3

# **Software Setup**

# **Software Setup**

Software found on the Rio installation disc should be installed on a computer before using the Rio Forge. Rio Music Manager should be installed on computers that use the Windows operating systems. iTunes and the Rio iTunes plug-in should be installed on computers that use a Mac operating system.

Windows Mac

## :: Windows

Follow these instructions to load Rio Music Manager onto your PC.

- 1 Place the installation CD label-side up into the computer's CD-ROM drive.
  - The Rio installation software launches automatically.
- 2 Click Rio Music Manager INSTALL NOW (required) and follow the on-screen instructions.
- **3** If prompted, reboot the computer when the installation is complete.



- If Rio installation software does not display automatically, follow these steps to begin the installation manually:
- 4 Double-click the My Computer icon,



, on the Windows desktop.

5 Double-click the CD-ROM icon,



Compact Disc (D:)

6 Double-click the Install icon,



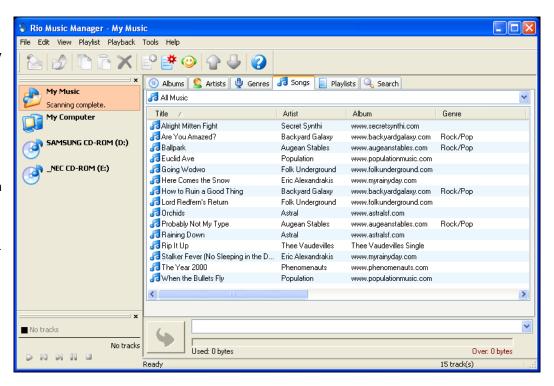
Install

**7** Go to Step 2.

#### **Rio Music Manager**

Rio Music Manager is an all-in-one solution that can rip, encode, and manage entire collections of digital audio tracks. Rio Music Manager provides the following capabilities:

- Save (Rip and Encode) audio CDs into compressed digital audio formats. Rio Music Manager encodes WMA files by default and MP3 via an optional upgrade pack.
- Automatically Synchronize the music collection on your computer with your Rio Forge.
- Edit ID3 Tags and WMA tags on digital audio tracks.
- Organize and manage digital audio tracks on your computer and your Rio Forge.
- Search for tracks on your computer and your Rio Forge.
- Create custom Playlists.
- Transfer tracks from your computer to your Rio Forge.



## :: Mac

#### **iTunes**

Rio Forge is compatible with Macintosh OS X v10.2 systems using Apple's iTunes 4.2 or greater. iTunes is free and available online. Support for iTunes can be found here.

Follow these instructions to load the software that enables your Macintosh to recognize the Rio Forge:

- 1 Place the software CD label-side up into the computer's CD-ROM drive.
- 2 Double-click the **Rio** icon on your computer's desktop.
- 3 Double-click the **Install** icon.

The Rio Installation Screen will display.

4 Click iTunes Plug-in.

The Plug-in Installation Screen will display.

- 5 Click Install.
- 6 Click Done.

# Chapter 4

# **Basic Operations**

# :: Basic Operations

Enjoying music on the Rio Forge is easy. Basic operations of the Rio Forge include:

Copy Tracks Transfer Tracks Control the Player Play Music

# :: Copy Tracks

#### **Copying Tracks with Rio Music Manager**

Copying tracks from Audio CDs involves two steps commonly known as ripping and encoding. Ripping and encoding refers to the process of ripping (copying) audio from a CD and encoding (saving) the audio content into a compressed digital audio format like MP3 or WMA.

- **1** Launch the Rio Music Manager.
- 2 Insert an Audio CD into your CD-ROM drive.
- 3 Click the CD-ROM icon on the Rio Music Manager Device List.
- **4** Use any of the following techniques to select tracks:

Track Type	Technique
Single track.	Click the track.
Multiple tracks.	Press SHIFT+Click or CTRL+Click.
All tracks.	• Press CTRL+A.
No tracks.	• Press CTRL+N.
Every track except for the currently selected tracks.	Select Edit, Invert Selection.

5 Click



to begin copying tracks to your computer.

## :: Transfer Tracks

#### Rio Music Manager

Transferring tracks from the PC to the Rio Forge with the Rio Music Manager involves selecting tracks, then transferring them to the Rio Forge.

- 1 Launch the Rio Music Manager.
- 2 Click **My Music** in the left frame to access tracks. Rio Music Manager will scan the computer's hard drives for digital audio files that are compatible with the Rio Forge. Files are automatically categorized by album title and displayed in the Track List.
- **3** Select tracks within a category of tracks. Categories include Albums, Artists, Genres, Songs, and Playlists.

For example, if you wish to copy all tracks from a favorite artist onto the Rio Forge, click the Artists tab and then use any of the techniques in **Step 4** to select the desired tracks.

**4** Use any of the following techniques to select files:

File type	Technique
Single track, album, or artist.	Click the track, album, or artist.
Multiple tracks, albums, and/or artists.	Press SHIFT+Click or CTRL+Click.
All tracks, albums, and artists.	• Press CTRL+A.
No tracks, albums, or artists.	• Press CTRL+N.
Every track except for the currently selected tracks.	Select Edit, Invert Selection.

5 After the tracks have been selected they can be copied to the Rio Forge by clicking



#### **Transferring Tracks using Windows Explorer**

Transferring tracks from the PC to the Rio Forge using Windows Explorer is as easy as Copy and Paste.

- 1 Connect the Rio Forge to a computer using the supplied USB cable.
- 2 Double-click **My Computer** on the Windows Desktop or in the Start Menu.
- 3 Locate MP3 or WMA audio files on the computer.
- 4 Highlight files and/or folders to transfer to the Rio Forge.
- 5 Click Edit.
- 6 Click Copy.
- 7 Double-click **My Computer** on the Windows Desktop or in the Start Menu to open another window.
- 8 In the new window, locate the **Rio Forge** (X:) icon that is associated with the Rio Forge. (X equals the drive letter assigned to the Rio Forge.)



- A **Removable Disk** (X:) icon will also be displayed if your player supports expansion memory cardseven if no expansion memory card is present.
- If no expansion memory card is present, double-clicking the associated **Removable Disk (X:)** icon will generate a message that reads: **Please insert a disk into drive "X"**:
- 9 Double-click Rio Forge (X:) or Removable Disk (X:).
- 10 Click Edit.
- 11 Click Paste.

Any type of file can be transferred using this method but to assure full functionality, Playlists and copy protected music using Digital Rights Management (DRM) should be transferred to Rio players using Rio Music Manager.



Files and folders can also transferred to the Rio Forge using drag-and-drop techniques.

#### **iTunes**

- 1 Launch iTunes.
- **2** Connect the Rio Forge to a USB port on the computer.
- **3** Power the Rio Forge on.
- 4 Click **Library** in the iTunes Source frame.
- **5** Select tracks to transfer.
- **6** Drag and drop selected tracks to the **Rio Forge Player** in the iTunes Source frame.



• iTunes will only refresh the audio contents located on the Rio Forge after all selected tracks have been transferred.

# :: Control the Player

The controls on the Rio Forge work as follows:

#### POWER

Press and hold to power the Rio Forge on or off.

#### MENU

In Player mode, press to enter Menu mode. In Menu mode, press to return to Player mode.

#### CENTER

In Player mode, press to cycle through Play Screens. In Menu mode, press to select menu options.

#### PLAY/PAUSE

In Player mode, press to play or pause playback. In Menu mode, press to control menu navigation.

#### FORWARD and REVERSE

In Player mode, press to skip to the next or previous track. Press and hold to scan forward or reverse through a track. In Menu mode, press to control menu navigation.

#### STOP

In Player mode, press to stop playback. In Menu mode, press to control menu navigation.

#### VOLUME + and -

Press to adjust volume level.

#### LOCK/UNLOCK

Slide into the **LOCK** position to disable buttons and prevent accidental operation.



Controls

Locations of all controls can be found on pages 2 and 3.

# :: Play Music

The Rio Forge plays digital audio tracks in Player mode and FM radio in FM Tuner mode. Modes can be changed at anytime through the Main Menu.



Play Music FM Tuner

# :: Play Music

In Player mode (the default mode), any track or preset customized Playlist can be played within a matter of seconds so you can spend more time enjoying tracks and less time finding them.



Play All

Album

Artist

Genre

Track

Year

**New Music** 

Playlist

Spoken Word

FM Recordings (Rio Forge 256 and 512 Only)



If the Rio Forge does not power on after **POWER** has been pressed, check the **LOCK/UNLOCK** switch and confirm it is in the **UNLOCK** position.

#### **Play All**

Follow these steps to play all tracks on the Rio Forge:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Play All.

#### **Album**

To play tracks from specific albums please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Album.
- 4 Select Play All or a specific album.
- 5 If a specific album is selected, select **Play All** or a specific track.

#### **Artist**

To play tracks from a specific artist please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Artist.
- 4 Select Play All or a specific album.
- 5 If a specific album is selected, select **Play All** or a specific track.

#### Genre

To play tracks from a specific genre please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Genre.
- 4 Select Play All, a specific genre, or [none].
- 5 If a specific genre is selected, select Play All or a specific track.

#### Track

To play a specific track please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Track.
- 4 Select Play All or a specific track.

#### Year

To play tracks from a specific year please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Year.
- 4 Select Play All, a specific year, or [none].

#### **New Music**

Select to compose a running order composed of the tracks that have most recently been added to the Rio Forge during a set amount of time. The most recently played tracks are played first. To play tracks using **New Music** please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select New Music.
- 4 Select 1 day (the default setting), 2 days, 1 week, or 1 month.

#### **Playlist**

To play tracks from playlists created in Rio Music Manager please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Playlist.
- 4 Select Play All or a specific playlist.

#### **Spoken Word**

Select to play tracks formatted using the Audible #2 and #3 formats. To play spoken word tracks please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Spoken Word.
- 4 Select an Audible track.



- When in spoken word mode, the Rio Forge display's the following icon: [1]
- When in spoken word mode, press **FORWARD** or **REVERSE** to skip from one section of the track to another.

#### FM Recordings (Rio Forge 256 and 512 Only)

To play FM recordings created using FM Record, please follow these steps:

- 1 Press MENU.
- 2 Select Play Music.
- 3 Select Recording.
- 4 Select Play All or a specific recording.

#### :: FM Tuner

To access **FM Tuner** mode:

- 1 Press MENU.
- 2 Select FM Tuner.

FM Control Manual Preset Store Preset

#### **FM Control**

When in Tuner mode, the following controls function differently:

#### CENTER

Press to enter Preset mode. Press and hold to enter Store Preset mode.

#### PLAY/PAUSE

Press and release to mute the FM radio. Press and hold to start or stop FM Record (Rio Forge 256 and 512 Only).

#### FORWARD and REVERSE

In Manual mode, press to tune up or down the frequency range. In Manual mode, press and hold to search up or down the frequency range for particularly strong signals.

#### STOP

Press and hold to turn off the Manual mode strong signal search. When turned off, **no search** is displayed and selecting and holding **FORWARD** or **REVERSE** will scan up or down the frequency range manually.



• When in Tuner mode, the earphone wire acts as the antenna for the FM radio. For best reception, keep the earphones plugged into the **EARPHONE** jack whenever the FM radio is in use.

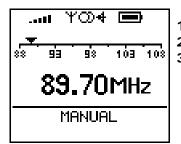


Controls

Locations of all controls can be found on pages 2 and 3.

#### Manual

Follow these steps to enter the manual Tuner mode:



- Press **MENU**.
- 2 Select Tuner.
- 3 Press CENTER.

#### **Store Preset**

The Rio Forge allows programming of up to 8 FM preset slots.



- 1 When in Manual mode, tune to a frequency you wish to store to a preset slot.
- 2 Press and hold **CENTER** to enter **Store Preset** mode.
- 3 Press **FORWARD** or **REVERSE** to cycle to the desired preset station slot.
- 4 Press **CENTER** to store the frequency to the selected FM preset slot. After a frequency has been stored to a slot the Rio Forge will enter Preset mode.

#### **Preset**

FM preset slots can be accessed within seconds using Preset mode.



- 1 When in Manual mode, press **CENTER** to enter Preset mode.
- 2 Press **FORWARD** or **REVERSE** to cycle to the desired preset station slot.
- 3 Press **CENTER** to return to Manual mode.

# **Chapter 5**

# **Advanced Features**

## :: Advanced Features

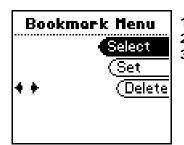
Advanced features of the Rio Forge include:

Bookmarks Settings FM Record (Rio Forge 256 and 512 Only) Stopwatch About

## :: Bookmarks

Bookmarks store specific player settings, including the current running order, the current track, the current time position of the track, and the Playback settings. Users can save these settings in a bookmark and restore them whenever they use the Rio Forge. Bookmarks are great for:

- Placing digital bookmarks in digital audio books or other extended length tracks.
- Maintaining positions in long term running orders.
- Sharing your player with others without losing personal settings.



- 1 Press MENU.
- Select Bookmarks.
- 3 Select a Bookmark option.

#### Bookmark options include:

Select

Select a bookmark. Press **CENTER** to restore the selected bookmark settings.

Set

Select a bookmark. Press **CENTER** to save the current settings to a bookmark.

Delete

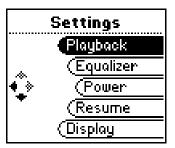
Select a bookmark. Press **CENTER** to delete the selected bookmark.



- In Player mode, press and hold CENTER to quickly bookmark the current settings.
- The Rio Forge automatically saves user settings when it is turned off. These settings are automatically restored when the Rio Forge is turned on. Settings saved automatically are not saved as a bookmarks.

# :: Settings

Rio Forge settings include:



Playback Equalizer Power Resume Display Time Language FM Tuner Lock Setup Tags

#### **Playback**

Various playback settings can be set to modify the way the Rio Forge plays tracks. Tracks can be shuffled at random and/or repeated continuously.



- 1 Press MENU.
- 2 Select **Settings**.
- 3 Select Playback.
- 4 Select Playback options.
- **5** Press **CENTER** to apply settings.

#### Plackback options include:

#### Shuffle

Set selected tracks to play in standard or random order. Settings include **Off** (the default setting) and **On**.

#### Repeat

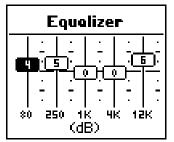
Set selected tracks to repeat playback of all tracks or the current track. Settings include **Off** (the default setting), **All**, and **One**.

#### **Equalizer**

The sound of tracks played on the Rio Forge can be adjusted using various preset and fully customizable equalizer options. Equalizer settings include:

#### Custom

Custom mode allows the Rio Forge's settings to be adjusted according to personal preferences.



- 1 Press MENU.
- 2 Select Settings.
  - Select Equalizer.
- 4 Select Custom.
- 5 Adjust 5-band equalizer. Press **FORWARD** or **REVERSE** to navigate between frequencies. Press **PLAY/PAUSE** or **STOP** to boost or cut the Gain of the frequency.
- **6** Press **CENTER** to save settings and return to Player mode.

#### Normal

Select the **EQ Off** equalizer option to apply no equalizer adjustments to audio content on the Rio Forge.

- 1 Press MENU.
- 2 Select **Settings**.
- 3 Select Equalizer.
- 4 Select EQ Off.
- 5 Press **CENTER** to set the **EQ Off** equalizer option and return to Player mode.

#### **Preset**

Select a **Rock**, **Jazz**, **Classical**, **Pop**, or **Trance** equalizer option to change the sound of tracks according to the selected preset settings.

- 1 Press MENU.
- 2 Select **Settings**.
- 3 Select Equalizer.
- 4 Select Rock, Jazz, Classical, Pop, or Trance.
- **5** Press **CENTER** to set the selected equalizer option and return to Player mode.

#### **Power**

By adjusting the **Power** settings the Rio Forge can conserve energy and extend the amount of playback time during each battery charge.



- 1 Press MENU.
- 2 Select **Settings**.
- 3 Select Power.
- 4 Select **Power** options.
- **5** Press **CENTER** to apply settings and return to Player mode.

#### **Power** options include:

#### Battery

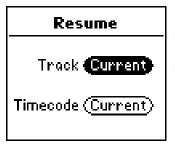
Although the Rio Forge ships with an Alkaline battery, it can also use rechargeable Nickel-Metal Hydride (NiMH) batteries. The **Battery** option must be set to the same battery type that is being used or the battery indicator will not display the correct amount of battery life. Settings include **Alkaline** (the default setting) and **NiMH**.

#### Pwr Save

Set the Rio Forge to enter shutdown after being idle for a specific number of minutes. Settings include **1m**, **5m** (the default setting), **10m**, **30m**, and **Never**.

### Resume

Use the options in the **Resume** menu to set the track that the Rio Forge will play whenever it is powered on.



- 1 Press MENU.
- 2 Select Settings.
- 3 Select Resume.
- 4 Select **Resume** options.
- **5** Press **CENTER** to apply settings and return to Player mode.

### Resume options include:

#### Track

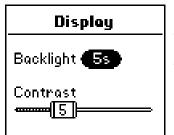
Set the Rio Forge to begin playback of the last track played before shutdown or the first track in the running order when the Rio Forge is powered on. Settings include **Current** (the default setting) and **First**.

### Timecode

Set the Rio Forge to begin playback of the last track played at the point the track was at during shutdown or at the start of the track. Settings include **Current** (the default setting) and **Start**.

# **Display**

Use the **Display** menu to adjust backlight and contrast settings.



- 1 Press MENU.
- 2 Select Settings.
  - Select **Display**.
- 4 Adjust Backlight options and Contrast settings.
- **5** Press **CENTER** to apply settings and return to Player mode.

### **Display** options include:

### Backlight

Set the backlight on the Rio Forge to shut itself off after a specific number of seconds. Settings include **Off**, **2s**, **5s**, (the default setting) **10s**, **20s**, and **On**. **On** sets the backlight to remain lit constantly.



• To conserve battery life, the **On** setting should rarely be used.

### Contrast

Press **FORWARD** and **REVERSE** to control the contrast slider. Use the contrast slider to set how light or dark the images on the LCD will appear. Setting the contrast too high will result in washed out images. Setting the contrast too dark will result in images that are too dark to read.

### **Time**

Use the options in the **Time** menu to set the Rio Forge's internal clock. Time is set automatically every time tracks are transferred to the Rio Forge using Rio Music Manager.



- 1 Press MENU.
- 2 Select **Settings**.
- 3 Select Time.
- 4 Select Set Time, Set Date, or Time Mode options.
- **5** Press **CENTER** to apply settings and return to Player mode.

### **Time** settings include:

- Set Time
   Options include Hour, Minute, and AM / PM.
- Set Date
   Options include Month, Day, and Year.
- Time Mode
   Options include 12 hour (the default setting) and 24-hour time formats and USA (the default setting),
   Europe, and Japan date formats.

### Language

The Rio Forge menus can be set to display in one of five languages.



- 1 Press **MENU**.
- 2 Select **Settings**.
- 3 Select Language.
- 4 Select a Language setting.

### Language settings include:

- **English** (the default setting)
  Set the display language to **English**.
- . 日本 1 1 1 1

Set the display language to **Japanese**.

Deutsch

Set the display language to **German**.

Français

Set the display language to **French**.

Español

Set the display language to **Spanish**.



• To return to the language menu from any language setting, press **MENU**, select the **third** option, select the **seventh** option.

### **FM Tuner**

Use the options in the **FM Tuner** menu to set the Rio Forge's FM radio settings.



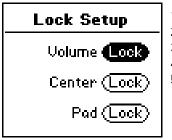
- 1 Press MENU.
- 2 Select **Settings**.
- 3 Select FM Tuner.
- 4 Select Options.
- 5 Adjust FM Stereo Mode and/or Region options.
- **6** Press **CENTER** to apply settings and return to Player mode.

### FM Tuner options include:

- FM Stereo Mode
  Options include On (the default setting), and Off. Selecting Off will place the tuner in mono mode.
- Region
   Options include USA (tunes by .2MHz, the default setting), and Europe (tunes by .05MHz), and Japan (tunes by .05MHz).

### **Lock Setup**

Use the options in the **Lock Setup** menu to enable various controls when the lock is enabled.



- 1 Press MENU.
- 2 Select Settings.
- 3 Select Lock Setup.
- 4 Select Lock Setup options.
- **5** Press **CENTER** to apply settings and return to Player mode.

### **Lock Setup** settings include:

#### Volume

Options include **Lock** (the default setting) and **Off**. When set to **Off**, the volume level can be adjusted even when the Rio Forge has been locked.

### Center

Options include **Lock** (the default setting) and **Off**. When set to **Off**, pressing **CENTER** will scroll through Time Code View, Track Format View, and Date Views even when the Rio Forge has been locked.

### Pad

Options include Lock and \(\big| / || \) (PLAY/PAUSE). When set to \(\big| / || \), any CONTROL PAD movement will be interpreted as the \(\big| / || \) control.

### Tags

Adjust Tags menu settings if the Rio Forge displays random alphabet characters instead of the correct ID3 Tags. The Rio Forge supports Latin- and Japanese-based languages. If ID3 tags are displayed properly then Tags menu settings do not need to be changed.

Rio Music Manager encodes tracks tags using the Unicode method. Properly tagged (Unicode) tracks are unaffected by changes to the Tags menu settings. All WMA tracks are Unicode.



- 1 Press MENU.
- 2 Select Settings.
- 3 Select Tags.
- 4 Select ASCII (the default setting), UTF-8, or Shift-JIS.
- Press **CENTER** to apply settings and return to Player mode.

### **Tags** settings include:

#### ASCII

Select to read ID3 tags that are encoded using the ASCII Latin alphabet. ASCII is an acronym for American Standard Code for Information Interchange.

### UTF-8

Select to read ID3 tags that are encoded using the UTF-8/Unicode format. UTF-8 is backwards compatible with ASCII. UTF is an acronym for Unicode Transformation Format

#### Shift-JIS

Select to read ID3 tags that are encoded using the Shift-JIS format. Shift-JIS is a character encoding format created by Microsoft that is based on the Japanese Industrial Standard format.

# :: FM Record (Rio Forge 256 and 512 Only)

Select to create, playback, or delete FM recordings on the Rio Forge 256 or 512. Recording ID3 Tags can be edited using Rio Music Manager.



- 1 Press MENU.
- 2 Select FM Record.
- 3 Select Start (or Stop), Playback, or Delete.

### FM Record options include:

- Start (Only available when in FM Tuner mode)
   Select to begin recording. After recording has started, return to the FM Record menu and select the Stop option to stop recording.
- Playback
   Select an FM recording and press CENTER to play the selected recording.
- Delete
   Select an FM recording and press CENTER to delete the selected recording.



• When in Tuner mode, the earphone wire acts as the antenna for the FM radio. For best reception, keep the earphones plugged into the **EARPHONE** jack whenever the FM radio is in use.

# :: Stopwatch

Use the stopwatch to keep track of time-sensitive events while listening to music.

- 1 Press MENU.
- 2 Select Stopwatch.

Lap statistics are displayed at the bottom of the **Stopwatch** screen. When a new lap is set, the difference, either faster (-) or slower (+) between new lap times and the average laptime is displayed for a few moments.

When in **Stopwatch** mode, the controls work in the following ways:

#### MENU

Press to return to the Main Menu.



Pressing MENU and using other player functions will not turn the timer off.
 The timer will continue to run until PLAY/PAUSE is pressed while in Stopwatch mode.

### PLAY/PAUSE

Press to start and stop the timer.

### CENTER

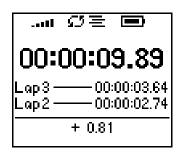
Press to set a lap time. Press and hold to return to single lap display. Multiple laps and lap averages will be lost.

#### STOP

Press to reset timer.



**Average Lap Time** 



Lap Difference

# :: About

The about screen displays information about the Rio Forge. Information includes the total amount of memory on the Rio Forge, the amount of free memory, the number of tracks on the Rio Forge, and the Firmware version.



- Press **MENU**.
- 2 Select About.
- 3 Select **Player** or **Storage**.

### **About** options include:

### Player

Displays firmware version, copyright, and Rio website information.

### Storage

Press **CENTER** to cycle through displays of memory usage graphic bar and memory usage (MB used/MB capacity), the total number of tracks, the total duration of all tracks, the number of playlists, and the number of personal files for both internal and external player memory on the Rio Forge.

# Chapter 6



# :: Troubleshooting

### **Customer Service Information**

The FAQs below will help you solve common issues with your player. If you do not find the answers you need here, you can contact our Customer Service Department via any of the following methods:

Web: www.rioaudio.com/support

Technical Support Telephone (United States): (254) 299-2759 Technical Support Telephone (United Kingdom): 0207-744-0802

Technical Support Telephone (Canada): (905) 305-6565

Customer Service (United States): (254) 299-2759 Customer Service (United Kingdom): 0207-744-0802

Customer Service (Canada): (905) 305-6565

Customer Sales/Presales (United States): (866) 286-3662 Customer Sales/Presales (United Kingdom): 0207-744-0802

Customer Sales/Presales (Canada): (905) 305-6565

### With every Rio product you receive the following support services:

- Unlimited access to the Rio web-based technical information resources, available 24 hours a day every day at http://www.rioaudio.com/support. Here you will find FAQ files, product updates, and other useful information.
- Unlimited e-mail support for the duration of your Rio product hardware warranty period.
- Access to the latest software updates and enhancements for Rio products via our website.

# **Frequently Asked Questions**

Question	Answer
What size and type of external memory cards can my Rio Forge use?	The Rio Forge currently supports SD and MMC memory sizes of 8MB - 1GB. Please visit the Rio support site at www.rioaudio.com/support for more information on external memory cards.
How do I install an external memory card?	<ol> <li>Turn the Rio Forge off.</li> <li>Remove the battery compartment cover on the back of the player.</li> <li>Remove the battery.</li> <li>Gently insert the memory card with the label side up and the notch in the upper right corner into the memory card slot next to the battery compartment. The memory card spring will slightly click when the memory card is in place.</li> <li>Replace the battery.</li> <li>Replace the battery compartment cover.</li> <li>Turn the Rio Forge on.</li> </ol>
How do I remove an external memory card?	<ol> <li>Turn the Rio Forge off.</li> <li>Remove the battery compartment cover on the back of the player.</li> <li>Remove the battery.</li> <li>Gently push the memory card until you hear the memory card spring slightly clicks and releases the memory card.</li> </ol>
What type of files can I play with the Rio Forge?	The Rio Forge can play MP3, WMA, and Audible #2 and #3 format files.
Can I add MP3 and WMA files to the player at the same time?	Yes. You can play MP3 and WMA audio content. They can be mixed together.
What are the differences between MP3 and WMA files?	Because WMA's use a lower bitrate than equivalent MP3's they are generally half as large as MP3 files and you can store more music in less space on CDs, hard drives, or the Rio Forge. The WMA format is exclusive to Windows-based computers.

Will the Rio Forge play Variable Bitrate (VBR) files?	Yes. Because there are many standards for VBR files, it cannot be guaranteed that every encoding software package will properly function with the Rio Forge. VBR files that do not comply to standards may lack track time, fast forward, and/or rewind capabilities.		
What kind of batteries can I use with the Rio Forge?	The Rio Forge can use either alkaline or Nickel-Metal Hydride (NiMH) batteries. The Power setting <b>Battery</b> option must be set to the same battery type that is being used or the battery indicator will not display the correct amount of battery life.		
Where is the battery indicator on my Rio Forge?	The battery indicator on the Rio Forge is located in the top-right corner of the display. The segments in the battery icon show the remaining battery power. The illumination of all segments indicates a fully charged battery. Non-illuminated segments indicate a run down battery. The battery indicator blinks when less than 20% of the charge on the battery remains.		
What kind of skip protection does the Rio Forge have?	Because the Rio Forge uses no moving parts it will never skip or stutter during audio playback due to physical shock.		
What should I do if my Rio Forge is not detected as a removable drive?	<ul> <li>It is possible that a network drive is preventing the Rio Forge from being mapper properly. This is a known Microsoft problem and has been documented in their knowledge base as KB297694. To resolve this issue and detect the Rio Forge as removable drive:</li> <li>Click the Start Bar.</li> <li>Right-click My Computer on the Windows Desktop or taskbar.</li> <li>Click Manage.</li> <li>Locate Computer Management (Local) and click Disk Management.</li> <li>Right-click the new drive.</li> <li>Click Change Drive Letter and Path(s).</li> <li>Click Change.</li> <li>Use the drop-down box to select a drive letter for the new drive that is not assigned to a mapped network drive.</li> <li>Click OK.</li> <li>Click OK.</li> </ul>		

What should I do if my Rio Forge is not detected by Rio Music Manager?	Your Rio Forge was designed to work with the version of Rio Music Manager that was included on the Installation CD. Previous versions of Rio Music Manager may not be able to detect your Rio Forge.		
What should I do if my Rio Forge is not detected by my computer?	<ul> <li>Verify that the USB cable is securely inserted into the USB port on both the Rio Forge and your computer.</li> <li>Connect the USB cable to a USB port on the back of your computer rather than to a USB port on the front of your computer.</li> <li>If using a USB hub, connect to a powered USB hub. Unpowered USB hubs may not work.</li> <li>Connect the USB cable directly to your PC, bypassing any USB hubs.</li> <li>Remove USB extension cables from the connection path.</li> <li>Disconnect other USB devices.</li> </ul>		
How much music can I store on the Rio Forge?	The amount of music that can be stored on the Rio Forge depends on the bitrate of the files stored.		
	Bitrate	Approximate amount of space required per minute of audio content	
	64 kbps 96 kbps 128 kbps 164 kbps 192 kbps	0.5 MB 0.75 MB 1 MB 1.25 MB 1.75 MB	
Why will the Rio Forge not turn on?	The Rio Forge will no the LOCK/UNLOCK POWER to turn the	t power on if <b>LOCK/UNLOCK</b> is in the lock position. Confirm switch on the Rio Forge is not in the lock position and press Rio Forge on.	

Why would I ever want to reformat my Rio Forge?	<ul> <li>If for any reason you suspect that your Rio player's file system has been corrupted, reformatting the player will restore the file system to its original state.  Use Windows Explorer to format Mass Storage Class compatible Rio players.</li> <li>Double-click My Computer on the Windows Desktop or in the Start Menu.</li> <li>Locate the Removable Disk (X:) or Player (X:) icon that is associated with the player. (X: equals the drive letter assigned to the Rio player.)</li> <li>Right-click the Removable Disk (X:) or Player (X:) icon.</li> <li>Click Format</li> <li>Reformatting your Rio player will result in the deletion of all tracks and settings on the Rio player and any attached Memory Cards (if any). Reformatting your Rio player will immediately cancel any transfers currently in progress.</li> <li>If you are sure you want to reformat your player, click Start.</li> </ul>
Why won't the Rio Forge play secure, dated, or other DRM (digital rights management) encoded files?	<ul> <li>If you are sure you want to reformat your player, click Start.</li> <li>DRM files may not work properly if the Rio Forge's internal clock is no longer accurate. This can happen if the battery loses all charge for more than a few minutes. Make sure the battery is fully charged, then follow these steps:</li> <li>Connect the Rio Forge to the computer using the USB cable.</li> <li>Transfer any track to the player using Rio Music Manager.</li> <li>Connect to the secure service where the DRM encoded files came from.</li> <li>The Rio Forge's clock should now be in sync with your computer's clock.</li> <li>DRM files should now play correctly.</li> </ul>

Why does my Rio Forge
experience errors after I
unplug the USB cable?

 Removing a Mass Storage Class (MSC) compatible Rio player from a USB connection prior to ejecting, stopping, or otherwise closing communication between the player and the computer may result in a corrupting the player's file system.

e.g. All tracks, although different, are assigned the same name; the player will not power off; etc.

To eject or stop an MSC compatible Rio player please follow the instructions applicable to your computer's operating system:

### Windows 98 SE

- 1 Double-click **My Computer** on the Windows Desktop.
- 2 Locate the **Removable Disk** (X:) or **Player** (X:) icon that is associated with the player. (X: equals the drive letter assigned to the Rio player.)
- 3 Right-click the Removable Disk (X:) or Player (X:) icon.
- 4 Click **Eject**.

#### Windows ME

- 1 Double-click the **Unplug or Eject Hardware** icon on the Windows taskbar.
- 2 Select USB Disk.
- 3 Click Stop.
- 4 Select the **Removable Disk** (X:) or **Player** (X:) icon.
- 5 Click **OK**.

#### Windows 2000

- 1 Double-click the **Unplug or Eject Hardware** icon on the Windows taskbar.
- 2 Select USB Mass Storage Device.
- 3 Click Stop.
- 4 Select the **Player USB Device** icon.
- 5 Click **OK**.

### Windows XP

- 1 Double-click the **Safely Remove Hardware** icon on the Windows taskbar.
- 2 Select USB Mass Storage Device.
- 3 Click Stop.
- 4 Select the Player MSC USB Device icon.
- 5 Click OK.

# Can I update the firmware on the Rio Forge?

• Yes. If available, firmware for your Rio can be downloaded online.

**Note:** Quit all applications before running the firmware update. While running the firmware update, do not close the program, turn off the player, or unplug the USB cable.

### Downloading the update

- 1 Click on the following link: Firmware Upgrade.
- 2 Click on the link to the Rio Forge.
- 3 Locate **UPDATES** and click **Firmware**. Select and download the latest software. Download the software that is specific to the operating system you use on your PC:
  - \*.exe (Windows)
  - \*.hqx (Mac)
  - \*.zip (Windows)
  - \*.txt (All operating systems—a text file including update information and instructions.)

### Installing the update (PC)

- 1 Connect the player to your computer with the USB cable.
- **2** Wait for **Idle** to be displayed on the player screen.
- 3 Double-click the file that you downloaded from the Rio website. The update should take approximately 30 seconds to load.

### Installing the update (Mac)

- 1 Connect the player to your computer with the USB cable.
- 2 Wait for **Idle** to be displayed on the player screen.
- 3 Double-click the Rio Update you downloaded.
- **4** Follow the instructions to complete the update.

# :: Glossary of Digital Audio Terms

### **Bass**

Bass is the particular low-range area of the sound spectrum where low musical notes and sounds are located. Increasing the bass value will make the low vocals and drums more prominent in your music. You can select the amount of bass in your music by selecting various Equalizer options.

### **Bitrate**

Bitrate denotes the number of bits per second used by a digital music file. The size and quality of a compressed digital audio file is determined by the bitrate used when encoding the file. Generally, the higher the bitrate used, the higher the sound quality, and the larger the file size. For example, a bitrate of 96kbps (96,000 bits per second) is generally thought of as "CD quality" for WMA audio files, and takes up about 0.75 megabytes (MB) per minute of music. At a 64kbps bitrate, the sound quality of WMA is similar to that of an FM radio signal, but approximately two minutes of music will fit in 1MB of space.

### Codec

Depending on the context and kind of technology involved, codec can be defined as a compressed digital audio file format (like MP3, WMA, etc.), a "coding/decoding" chip used to translate between digital and analog transmissions (used in modems), or a compression/decompression algorithm. Codecs compress audio data into a file, often for efficient transmission over a network, and then decode it for playback. While all the codecs perform similar compression of digital audio, there are differences in the technology.

The Rio Forge supports the following digital audio codecs:

- MP3
- WMA
- Audible

### DRM

Digital rights management (DRM) is a type of encryption that is intended to protect copyrighted tracks and is added to many commercially purchased music files during the encoding process. DRM encryption frequently restricts the number of times a file can be downloaded, transferred to portable devices, or burned to CD. Copy protected music using DRM should be transferred to the Rio Forge using Rio Music Manager.

### **Firmware**

Firmware is the read-only software that is installed on the player. Like software it can be updated, but unlike software it can never be deleted from the player.

### Gain

Gain is a measurement of the amplitude of frequency ranges. Gain adjustments boost or reduce frequencies to provide a more desirable audio output.

# **ID3 Tags**

The ID3 tag is the part of the encoded MP3 or WMA file that contains information about the digital music file such as song title, artist, album title, encoding bitrate, track time duration, and so on. ID3 tag information is displayed on the Album/Artist/Track title line on the player's LCD.

# **Mass Storage Class**

Mass Storage Class (MSC) is a transfer protocol that uses USB drivers that are common to many operating systems and devices. No additional software needs to be installed for the MSC transfer protocol to work because MSC uses drivers are already on a computer's operating system. Because MSC compatible Rio players are treated as removable drives, any type of file can be transferred to MSC compatible Rio players using Windows Explorer. Although any type of file can be transferred, to assure full functionality, playlists and copy protected music using Digital Rights Management (DRM) should be transferred to Rio players using Rio Music Manager.

### MP3

MP3 is short for Moving Pictures Experts Group Audio Layer 3. MP3 is the most well known compressed digital audio file format. This format allows for near "CD quality" sound, but at a fraction of the size of normal audio files. MP3 conversion of an audio track from CD-ROM can reduce the file size by approximately a 12:1 ratio with virtually no perceptible loss in quality. MP3 compression removes the redundant and irrelevant parts of a sound signal that the human ear doesn't hear. This digital sound encoding and compression process was developed by the Fraunhofer Institute for Integrated Circuits and Thomson Multimedia.

# **Playlist**

A playlist is a custom grouping of tracks that has been saved for later use. Rather than playing every track on the player playlists can be used to play specific tracks in specific orders. Rio Forge supports .asx, .m3u, and .pls formatted playlists. Tracks that are referenced by a playlist must be present on the Rio Forge. Tracks stored on external memory cannot be played by a playlist. Playlists that are transferred to a Rio player by an application other than Rio Music Manager may not function properly on Rio players.

### Rip and Encode

Rip and encode refers to the process of extracting audio from a music CD (ripping) and encoding it into a compressed digital audio format like MP3 or WMA.

### **Synchronize**

Rio Music Manager can automatically (or manually) delete old content, transfer new audio content, and keep the content on your Rio Forge fresh and dynamic. Rio Music Manager must be open for synchronization to occur.

### **Treble**

Treble notes occupy the higher portion of the sound spectrum. Increasing the treble value will raise the levels of the high sounds in your music files. You can select the amount of treble in your music by selecting various Equalizer options.

### **VBR**

Variable Bitrate (VBR) encoding converts tracks at a variable rate, using higher bitrate encoding for complex portions and lower bitrate encoding for pauses in songs.

### **WMA**

Windows Media Audio (WMA) is a compressed audio format created by Microsoft as an alternative to MP3. The WMA codec offers greater file compression than the MP3 codec, enabling storage of more digital audio tracks in the same amount of space when compared to MP3s at the same level of quality.

# :: ECC, FCC, and Industry Canada Compliance

### **Statement of Compliance**

This product complies with Council Directive 89/336/EEC and Council Directive 72/23/EEC.

# Federal Communications Commission (FCC)

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.

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.

### **Industry Canada**

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

# :: Safety

# Warning

TO REDUCE THE CHANCE OF SHOCK OR INJURY, DO NOT USE or OPERATE THIS DEVICE IN OR NEAR WATER OR WET LOCATIONS.

### **CAUTION**

RISK OF EXPLOSION, DAMAGE OR BATTERY LEAKAGE IS POSSIBLE IF BATTERY IS REPLACED INCORRECTLY OR BY AN INCORRECT TYPE. NEVER ATTEMPT TO CHARGE A NON-RECHARGEABLE ALKALINE BATTERY. DISPOSE OF USED BATTERIES ACCORDING TO INSTRUCTIONS OR LOCAL LAWS.

Use of headphones while operating a vehicle is not recommended and is unlawful in some states and areas. Be careful and attentive while driving. Stop operation of the player if you find it disruptive or distracting while operating any type of equipment. Listening to music at full power over extended periods of time can be damaging to the hearing of the user.

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