

iriver

Astell&Kern

---

**INSTRUCTION BOOK**

User Guide

# CONTENTS

## **Getting Started** \_01

What's in the Box?	02
AK100 at a Glance	02
Powering Up & Charging	04
Connecting & Syncing	05
Using iriver Plus 4	09

## **Basics** \_02

Basic Operation	13
Listening to Music	13
Bluetooth Setup	15
Settings	17

## **Troubleshooting and Other Resources** \_03

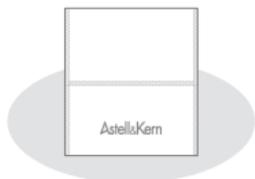
Safety Precautions	19
Troubleshooting	20
Copyright	21
Certification	22
Registered Trademarks	22
Addendum	22

### What's in the Box?

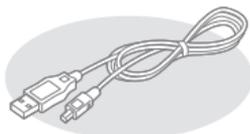
Components may be changed without notice to improve the performance or quality of the product.



**AK100**



**Pouch**



**Micro USB cable**



**Quick start guide & warranty information**

**Pouch:** Use the pouch to protect the AK100 from scratches.

**Micro USB cable:** Connect the Micro USB cable to a PC to charge the AK100.

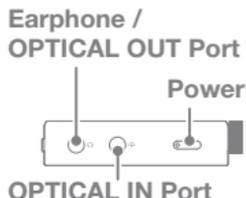
**Quick start guide:** Basic guide to using the AK100.

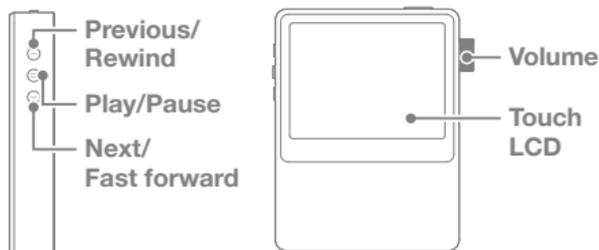
**Warranty information:** Please keep the AK100 warranty in a safe place in the event your AK100 needs servicing.

**Manual:** Please read the manual saved as a PDF file in the AK100 before use.

### AK100 at a Glance

Product appearance, printed and engraved information may vary depending on the model.





### **Earphone / OPTICAL OUT Port:**

Plug in the earphone and output sound through the earphone jack.

Use an optical cable to play music stored in the product on an external device with a SPDIF-IN (Optical Audio) port.

**Power:** Short Press - Power the LCD screen on and off.

Long Press - Power the device on and off.

**OPTICAL IN Port:** Use an optical cable to play music stored in an external device with a SPDIF-OUT (Optical Audio) port on the device.

**Micro SD Card Slot:** Insert a Micro SD card into the device to access its stored files.

**Micro USB Port:** Connect the product to the computer and/or to charge the AK100.

**Previous/Rewind:** One click - Replay previous track.

Press and hold - Rewind.

**Play/Pause:** One click - Play/Pause.

Press and hold - Display the playback screen.

**Next/Fast Forward:** One click - Play the next track.

Press and hold - Fast forward.

**Volume:** Turn the wheel to adjust volume.

**Touch LCD:** Display and touch the screen to start.

# Powering Up & Charging

### Power on/off

1. Press and hold the [⏻] power on/off key to power on.
2. During stand-by mode, Press and hold the [⏻] power on/off key to power off.



This product has an automatic power saving function to prevent excessive battery consumption. If there is no key operation within the prescribed period [Settings - power settings - automatically turn off], the device will be automatically powered off. (See page 18)

### Power on/off the screen

1. During stand-by mode, press and hold the [⏻] power on/off key to power off.
2. Briefly pressing the [⏻] power on/off key once to power on the screen.



This product has an automatic screen off function to prevent excessive battery consumption. According to the [Settings - power settings - turn off the screen] setting, the screen will be automatically powered off if there is no key operation within the prescribed period. (See page 18)

### Using the reset function

1. Should the product stop unexpectedly during operation and the keys are no longer responsive, press the [⏮] previous/rewind key and [⏻] power on/off key simultaneously for 7 seconds to reset the product.



When using the reset function, the current time and memory data will not be deleted. Do not use the reset function while the product is in use. Doing so may seriously damage the memory.

### Charging

1. Turn on your PC or Mac.
2. Use the Micro USB cable and connect the AK100 to the computer to automatically charge the built-in battery.



Use only the Micro USB cable included with the product to ensure safe operation.

Check that it is connected to a high-power USB 2.0 port. Connecting to a low-power USB port (some keyboards, USB hubs without their own power supply, etc.), may prevent normal charging.

Once the computer goes into standby mode, the device may not be charged.

Complete charging time is about 5 hours and 30 minutes. (Fully discharged, with power off)

Charge the product while it is powered off. When charging during normal operation, the full charge display may not be shown.

Using the product during charging may require additional time for a full charge or the battery may not fully recharge.

Charge and keep the product at room temperature. Exposure to excessive heat or cold may adversely affect charging performance.

Battery performance may decline with age and number of recharges.

## Connecting & Syncing

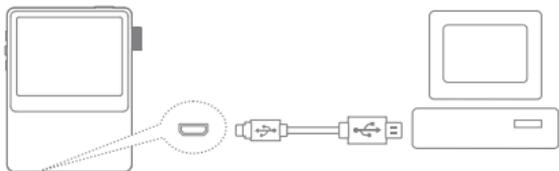
### Connecting the earphone

1. Plug in the earphone to the earphone jack of the AK100.

### Connecting to a computer

1. Power on the AK100 and your computer (PC or MAC).
2. Use the Micro USB cable to connect AK100 to the computer. The connection mode selection window will be displayed on the screen.
  - Charging & playing: The AK100 can function normally while being recharged.

- Connect a removable disk: Transfer data while connected to a computer.



Connect the computer and the AK100 when all functions are stopped.

Use only the Micro USB cable provided with the AK100 to ensure safe operation.

Connect the computer and the Micro USB cable only after all functions of the AK100 have been stopped.

Check that the AK100 is connected to a high-power USB 2.0 port. Connecting to a keyboard or a USB hub without its own power supply may prevent normal operation.

Only the FAT32 file system is supported. Please format the AK100 accordingly.

### Disconnecting from a computer

1. Click the icon displayed in the task bar or desktop of the computer to safely disconnect the AK100.
2. Click [Ok] to ensure the AK100 can be safely removed.



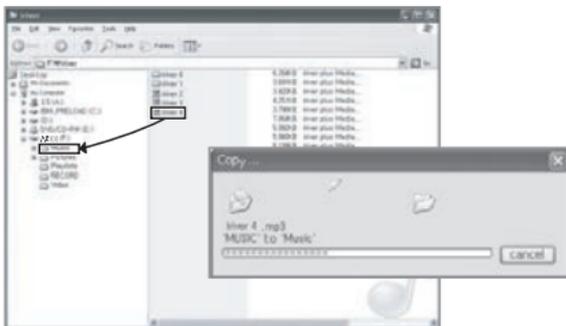
The icon may be hidden in the task bar depending on the operating system. For example: For Windows XP, click the expand icon to display it on the screen.

When using application programs like Windows Explorer or Windows Media Player, it may be unsafe to disconnect the device while using the program.

Remove the AK100 only after exiting all applications and programs. Failure to do so may result in loss of stored data.

### Copy files & folders to the AK100

1. To copy a file/folder from the computer, select the file and use the drag & drop method to add the files to the device.



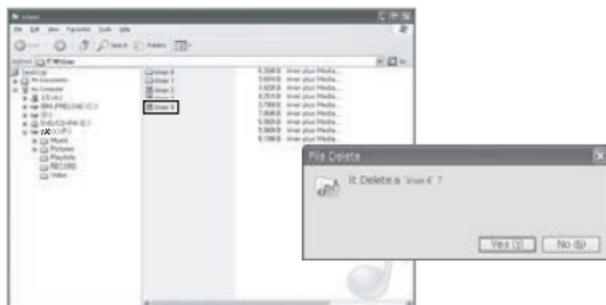
Please connect the Micro USB cable properly.

Please use caution when copying or moving files. If the computer or product is powered off or the Micro USB cable is removed while the file/folder is being copied or moved, data may be lost or become seriously damaged. Transmission speed may vary depending on the computer and the OS environment.

Save media files through iriver plus 4. If the files were saved in the removable disk through file copy, re-generate the DB in the Settings menu. [Settings -> Advanced -> Auto Library Scan]. (See page 18)

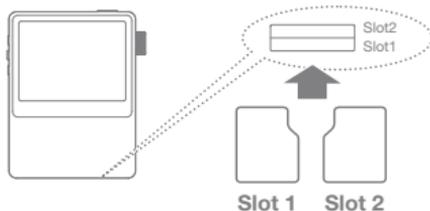
### Delete files & folders in the AK100

1. Select the file/folder to delete, right-click, and select [Delete].
2. Click [Yes] in the [check file/folder/deletion] window to delete the selected file/folder.



### Insert/remove the Micro SD card

1. Gently insert and push the Micro SD card in the card slot shown in the figure below while the product is powered off.
2. Gently press the Micro SD card again to remove it.



### Recommended SD Cards

Brand: SanDisk, Transcend



Insert/remove the Micro SD card when the product is powered off.

To avoid damage, do not apply excessive force when inserting the Micro SD card.

Do not remove the Micro SD card while in use. Doing so may delete data, damage the AK100 or cause damage to the Micro SD card.

Do not repeatedly insert/remove the Micro SD card.

Improper handling of the Micro SD card may cause damage to the AK100 or to the Micro SD card.

Use of an unauthorized Micro SD card may result in malfunction of the AK100.

Transfer speed of the Micro SD card may vary depending on the PC status.

Formatting the Micro SD card deletes all data. Please back up the card before formatting it.

Please format the Micro SD card as FAT.

Please format any Micro SD card that is not recognized or may cause damage to the AK100 or to the Micro SD card.

The Micro SD card is not included in the components and must be purchased separately.

Micro SD cards up to 32GB are supported with the AK100.

### Connecting OPTICAL OUT

1. Use the optical cable to connect an external device with a SPDIF-IN port, to the AK100 to listen to music through an external device.

### Connecting OPTICAL IN

1. Use the optical cable to connect an external device with a SPDIF-IN port, to listen to music through the AK100.



Optical In supported sample rate: 44.1kHz ~ 192kHz except for 176.4kHz

## Installing iriver plus 4

iriver plus 4 is an integrated software that can manage multiple multimedia files. Use iriver plus4 to save files to the AK100 or automatically upgrade the software.

### Installing

1. Run the iriver plus 4 installation program stored in the internal memory of the device. The program installation instruction dialog will be displayed.
2. Follow the instructions to complete the iriver plus 4 installation.



iriver plus 4 may also be downloaded from the iriver homepage ([www.iriver.com](http://www.iriver.com)).

The computer must have the following specifications:

Windows® XP specifications

- Intel® Pentium®|I 233MHz or faster
  - 64MB memory or larger
  - 30MB or more free space
  - Sound card and speaker with 16-bit support
  - Microsoft Internet Explorer version 6.0 or newer
  - SVGA or high-resolution monitor (at least 1024x768)
- Windows® Vista specifications (Windows® Vista supports only the 32-Bit version.)

- Intel® Pentium®|I 800MHz or faster
  - 512MB memory or larger
  - 20MB or more free space
  - Sound card and speakers supporting 16bit
  - Microsoft Internet Explorer version 6.0 or newer
  - SVGA or high-resolution monitor (at least 1024x768)
- Windows® 7 specifications
- 1GHz or faster 32-Bit processor
  - 1GB memory or larger
  - 16MB or more free storage space
  - DirectX 9 graphic device using WDDM 1.0 or newer driver
  - SVGA or high-resolution monitor (at least 1024x768)
- Only files smaller than 4 GB can be transferred.

### Adding media to the library

1. Follow the media wizard when running iriver plus 4 for the first time.
2. Follow the instructions on the screen to add media files like music, videos, photos and text files from the computer to the library.

### Extracting media from CD

1. Insert a music CD in the CD drive, and run iriver plus 4.
2. Select the check box for the music to extract from the [CD] tab of iriver plus 4, and select [CD ripping] at the bottom of the window.
3. When music extraction is completed, select [All music] to check that the extracted music has been added to the library.

### Sending media to the product

1. Use the Micro USB cable to connect the AK100 to the computer's USB terminal and run iriver plus 4.
2. Select the file's check box to send from the computer to the AK100, then click the [Send] button or drag & drop the file to the device icon or AK100 window at the bottom. Check the file transfer progress in the [File transfer] tab.
3. When transfer is completed, check that the selected music has been added to the AK100's library.



When connected to the computer, only slot 1 will be detected.

### Initializing the disk

1. Use the Micro USB cable to connect the AK100 to the computer's USB port and run iriver plus 4.
2. Select [Device - Initialize disk], when the window displayed prompts whether you want to continue, click [Start].
3. When initialization is completed, the completion window will be displayed and the computer will be disconnected.



Once files in the AK100 are deleted, they cannot be recovered. Please back up all files before initializing the disk.

### Upgrading the firmware

1. Use the Micro USB cable to connect the AK100 to the USB port of a computer that has Internet connection, and run iriver plus 4.
2. Select [Device - Update firmware], and update the software according to the information window.



If the battery is low, software update may not be completed.

Do not disconnect the AK100 from the computer while the software update file is being downloaded.

Disconnect the Micro USB cable after download is complete.

When the software of the AK100 is up to date, the latest version will be shown on the information window.

If the software needs to be updated when the AK100 is connected to the computer, the information window will be displayed automatically.

### Basic Operation

#### Using the touch LCD

1. The AK100 incorporates a touchscreen LCD that operates by touching the screen.  
Simply touch the desired icon on the screen to execute.

#### Moving up/down in the list

1. Change the list order by dragging the list screen [down → up] / [up → down].



Using a sharp object or applying excessive force when touching the screen may cause serious damage.

### Listening to Music

#### Selecting Music

1. Touch the screen to display the function window.
2. Press the [ ≡ ] in the lower left corner of the screen to display the track list.
3. Press the desired song in the list.

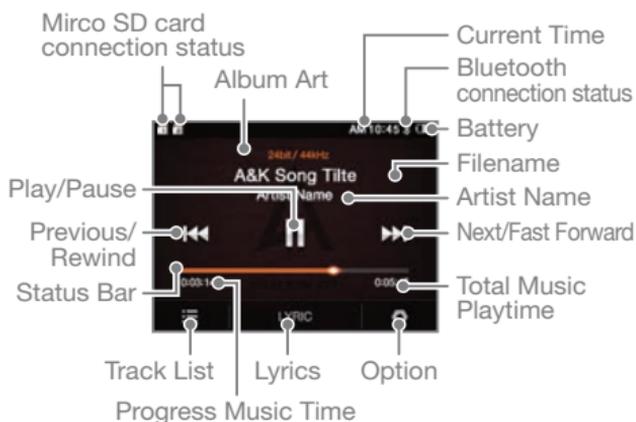


Search music by folder in [Folder].  
Continuous play time: about 16 hours  
(MUSIC : FLAC, 16bit, 44KHz, volume 37, EQ Off, LCD Off)  
Supported file formats: FLAC, WAV, WMA, MP3, OGG, APE  
FLAC, WAV[8~192kHz(8/16/24bit), MP3(8~320kbps), WMA  
(8~320kbps), APE(supported compression level: Normal, Fast, High)  
Use iriver plus 4 to manage the playlist.

### Listening to music

- Turn the [Volume wheel] to adjust the volume.
- Press [ II ] during playback to pause, press [ ► ] to restart.
  - + Press the AK100's [ I ] key to pause/restart.
- Press [ I◀◀ / ▶▶ ] during playback to play the previous /next music.
  - + Alternatively, press the AK100's [ < / > ] key to play the previous/next music.
- Press and hold the [ I◀◀ / ▶▶ ] key during playback to rewind/fast forward.
  - + Alternatively, press the AK100's [ < / > ] key to rewind /fast forward.
- The status bar can be moved to the desired section during playback.
- To display lyrics, press [LYRIC] during playback, press [CONTROL], to discontinue lyrics.

### Music play screen



### Music option

1. Press [  ] in the waiting screen or during playback to display the list of options.
2. Select the desired menu and set up to your preference.
3. Press [  ] to display the previous screen, and press [  ] to display the music playback screen.
  -  Equalizer: Set up the equalizer as desired.
    - + Set up the equalizer by adjusting its add/gain levels.
  -  Playlist: Add the currently playing music to the playlist.
    - + Press [  ] to add to a playlist.
  -  Music Information:
    - Display information on the music currently playing.
  -  Repeat Mode - Change the repeat mode.
    - +  : Repeat - Replay the entire list of currently playing music.
    - +  : Repeat - Replay the currently playing music.
    - +  : Release - Cancel the repeat play mode.
  -  Play Mode - Change Repeat play mode.
    - +  : Play in sequence the music saved in memory.
    - +  : Play music saved from memory in random order.

## Using Bluetooth

Use Bluetooth-supported devices to enjoy music wirelessly.

### Connecting Bluetooth

1. Press [  ] in the home screen, and select [Settings - Set Up Bluetooth].
2. Set Bluetooth to [ON] to display the list of Bluetooth supported devices.
3. Select the desired device to connect via Bluetooth.
4. Turn on the device to enjoy music wirelessly.

### Dial and receive calls while Bluetooth is connected

**Receiving:** After displaying the information, it automatically disconnects when accepting calls.

**Calling:** Automatically disconnects it when making a call.

### Disconnecting Bluetooth

1. Press the connected device to disconnect.

### Deleting Bluetooth

1. Select Bluetooth from the Bluetooth list and drag it to the left to display the menu list.
2. Press [ — ] to delete Bluetooth from the list and press [ X ] to hide the menu list.



#### Bluetooth Specifications

- Profile: HFP, A2DP
- High-quality music files may slow down the products (Recommend 48KHz or below)
- EQ does not apply.

Do not turn off the AK100 while connected to Bluetooth.

If Bluetooth support malfunctions, power off the Bluetooth device and power it back on.

As registration methods may vary for different Bluetooth devices, please read the user manual for each device before connecting to the AK100.

When you connect the AK100 to a Bluetooth device, the distance must be within 8 inches.

If the distance between the AK100 and the Bluetooth device increases, the sound quality will deteriorate. Beyond 9 feet, the devices will disconnect. (Distance may vary depending on the use environment and Bluetooth device type.)

Crosstalk may occur while Bluetooth is in use.

When using a multi-point supported audio device, please connect the device to enjoy the music.

Connection to car audio is not supported.

The following malfunctions or noise may occur depending on the use environment and its charging state:

- When the user is wearing a Bluetooth headset while holding the AK100 or holding the AK100 in one hand and a cell phone in the other.
- When a part of the body touches the radio sender and receiver of the AK100 or a Bluetooth headset
- When the received power is changed by obstacles like walls, corners and partitions
- When there is radio interference from devices using the same frequency band for example: medical devices, microwave ovens and wireless LAN devices.
- In areas with a great deal of interference for example, inside elevators and basements.

## Settings

Users can set up the AK100 according to their desire. The structure of the settings menu may vary depending on the version of the software.

### Setup

1. Press [  ] in the home screen and select [Settings].
2. Select the desired item and set up to the user's preferences.
3. Press [  ] to display the previous screen and press [  ] to display the music play screen.

### Date and time

- Set up the current date and time.

### Languages

- Select the preferred language

### Display

- Adjust the screen brightness.

### Power

- Auto Power Off: If the AK100 stays idle for a certain amount of time, power will be automatically turned off.
- Backlight Off: If the device stays idle for a specified period of time, the screen will be turned off.

### Bluetooth

- Use a Bluetooth supported device to enjoy music wirelessly. (For details on setup, see [Connecting Bluetooth] on page 15.)

### Advanced

- System information: The AK100's system information will be displayed.
- Auto Library Scan : The DB of the file will be regenerated.
- Tutorial: View the tutorial on using the AK100.
- Bluetooth Device Name : Change the Bluetooth device name.
- Lock Settings: To lock and unlock the product.
- Reset All Settings: Reset to default settings.

### Safety Precautions

#### Related to the AK100

- Failure to change the screen image may result in permanent discoloration.
- Do not put or drop metals or flammable foreign materials on the AK100 (coins, hairpins, matches, lighter fluid).
- Do not put heavy objects on the AK100.
- If the AK100 becomes wet (beverages, medicines, sweat), DO NOT power on the AK100. Wipe the AK100 dry with a soft cloth and take it to the nearest iriver service center.  
(Problems resulting from exposure to moisture will be repaired for a fee regardless of the warranty period, and in some instances, may not be repairable.)
- Do not expose the product to dusty or moist environments.
- Do not attempt to disassemble, repair or alter the AK100.
- Avoid exposure to direct sunlight or temperatures outside of -5°C ~ 40°C.
- Do not keep the AK100 next to magnets, TVs, monitors or speakers.
- Do not expose the AK100 to chemical or detergents. Doing so may damage the surface of the AK100.
- Do not drop the AK100 or expose it to strong impacts or vibrations.
- Do not press two or more keys simultaneously.
- Do not remove the Micro USB cable while transferring data.
- When connecting the Micro USB cable, please use the USB port on the back of the PC.  
Some PC USB ports may be damaged during assembly.
- Never connect anything other than earphones to the earphone jack.
- Defective screen protection films or stickers attached to the screen may dim the image.

### Other

- Do not use the headphone/earphone or operate the product while operating a bicycle, automobile or motorcycle. It is not only dangerous but violates the law in some regions.
- Do not use the AK100 while driving, walking or hiking.
- To avoid accidents, only use the AK100 in a safe place.
- Do not use the AK100 during thunderstorms.
- Use the lowest volume setting that is comfortable. Prolonged exposure to high volume may cause hearing loss.
- Make sure that the headphone/earphone does not get stuck in another object or get caught between other objects.
- Do not fall asleep while using the earphone.

## Trouble-shooting

### **Please try the following if you are having problems with your AK100**

- + The device does not power on.
  - Check the battery power level.  
Use the Micro USB cable for charging and recheck.
- + The AK100 is not charging even when the AK100 is connected to the computer with the Micro USB cable.
  - Check that the Micro USB cable is properly connected to the computer.
- + An error occurs on the PC when the Micro USB is connected.
  - Check that the Micro USB cable is properly connected to the computer.
- + The volume is changed after formatting.
  - The volume may vary slightly depending on the OS of your PC.

- + The screen turns off repeatedly.
  - To reduce power consumption during file playback, the screen will be turned off after a certain period.  
Set up time in [Settings - Power setting - Turn off the screen].
- + The screen does not look normal.
  - Check for any foreign material on the screen.
- + There is no sound or there is static.
  - Check if the volume is set to [0].
  - Check if the earphone terminal is properly connected and remove any foreign material from the terminal.
  - Check the media file for disruptions and integrity.
- + AK100 cannot be connected to the computer.
  - Connect the AK100 to the USB port on the back of the computer.  
Differences may occur in the output voltage of USB ports.
- + The file is not played back or the AK100 is unstable when a certain file is used.
  - The following may occur depending on the file, quality, and damage.
    - Playback may not be smooth or may become difficult.
    - The AK100 may not function normally.
    - It may look different than on the PC.
    - There may be differences in playback speed or other performances.
    - There may be differences in the playable specs.
  - Convert the file or try another file.

## Copyright

iriver has the patent, trademark right, copyright and other intellectual property rights related to this instruction book so no contents may be copied or duplicated in any format or by any means without the prior approval of iriver.

Unauthorized use of all or part of this document may result in legal action. Copyrighted contents like software, sound sources and video are protected by relevant laws like the Copyright Act. The user accepts full legal responsibility for the use of this product to copy or distribute copyrighted contents without permission. The names of companies, institutions, products persons and incidents in this manual are fictional. iriver has no intention to be associated with any company, institution, product, person or incident through this instruction book, and no such inference should be made. The user is responsible for complying with the Copyright Act. ©1999~2012 iriver Limited. All rights reserved.

## Certification

KCC / FCC / CE / TELECOM

Class B device (broadcasting and communication equipment for homes):

This device is EMC equipment for homes (class B). It can be used in all regions.



**FCCID: QDMAK100**

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.

Hereby, iriver Limited., declares that this Astell&Kern AK100 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. The declaration of conformity may be consulted at <http://www.iriver.com/down/file/Down/de/2013090201.pdf>

**Registered trademarks** Windows 2000, Windows XP, Windows Vista, Windows 7, and Windows Media Player are registered trademarks of Microsoft Corp.

**Addendum** The manufacturer, importer, agent, distributor, and retailer will not be responsible for contingent damage including injury or other damage due to improper use and operation of this iriver device. The information contained in this instruction book is based on the current iriver device specifications. iriver, the manufacturer of this device, is adding new functions and will continue to apply new technologies in the future. Specifications are subject to change without any prior notice to the user. There is no warranty against data loss due to the use of this device.