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| |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | |  |
| [**PREV CLASS**](http://docs.google.com/javazoom/jl/player/AudioDevice.html)   [**NEXT CLASS**](http://docs.google.com/javazoom/jl/player/AudioDeviceFactory.html) | [**FRAMES**](http://docs.google.com/index.html?javazoom/jl/player/AudioDeviceBase.html)    [**NO FRAMES**](http://docs.google.com/AudioDeviceBase.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#2s8eyo1) |

## **javazoom.jl.player**

Class AudioDeviceBase

java.lang.Object  
 **javazoom.jl.player.AudioDeviceBase**

**All Implemented Interfaces:** [AudioDevice](http://docs.google.com/javazoom/jl/player/AudioDevice.html) **Direct Known Subclasses:** [JavaSoundAudioDevice](http://docs.google.com/javazoom/jl/player/JavaSoundAudioDevice.html), [NullAudioDevice](http://docs.google.com/javazoom/jl/player/NullAudioDevice.html)

public abstract class **AudioDeviceBase**extends java.lang.Objectimplements [AudioDevice](http://docs.google.com/javazoom/jl/player/AudioDevice.html)

The AudioDeviceBase class provides a simple thread-safe implementation of the AudioDevice interface. Template methods are provided for subclasses to override and in doing so provide the implementation for the main operations of the AudioDevice interface.

**Since:** 0.0.8

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| **Constructor Summary** | |
| [**AudioDeviceBase**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#AudioDeviceBase())() |

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| **Method Summary** | |
| void | [**close**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#close())()            Closes this audio device. |
| protected  void | [**closeImpl**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#closeImpl())()            Template method to provide the implementation for closing the audio device. |
| void | [**flush**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#flush())()            Waits for any buffered audio samples to be played by the audio device. |
| protected  void | [**flushImpl**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#flushImpl())()            Template method to provide the implementation for flushing any buffered audio data. |
| protected  [Decoder](http://docs.google.com/javazoom/jl/decoder/Decoder.html) | [**getDecoder**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#getDecoder())()            Retrieves the decoder that provides audio data to this audio device. |
| boolean | [**isOpen**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#isOpen())()            Determines if this audio device is open or not. |
| void | [**open**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#open(javazoom.jl.decoder.Decoder))([Decoder](http://docs.google.com/javazoom/jl/decoder/Decoder.html) decoder)            Opens this audio device. |
| protected  void | [**openImpl**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#openImpl())()            Template method to provide the implementation for the opening of the audio device. |
| protected  void | [**setOpen**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#setOpen(boolean))(boolean open)            Sets the open state for this audio device. |
| void | [**write**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#write(short%5B%5D,%20int,%20int))(short[] samples, int offs, int len)            Writes audio data to this audio device. |
| protected  void | [**writeImpl**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html#writeImpl(short%5B%5D,%20int,%20int))(short[] samples, int offs, int len)            Template method to provide the implementation for writing audio samples to the audio device. |

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| **Methods inherited from class java.lang.Object** |
| clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait |

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| **Methods inherited from interface javazoom.jl.player.**[**AudioDevice**](http://docs.google.com/javazoom/jl/player/AudioDevice.html) |
| [getPosition](http://docs.google.com/javazoom/jl/player/AudioDevice.html#getPosition()) |

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| **Constructor Detail** |

### AudioDeviceBase

public **AudioDeviceBase**()

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| **Method Detail** |

### open

public void **open**([Decoder](http://docs.google.com/javazoom/jl/decoder/Decoder.html) decoder)  
 throws [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

Opens this audio device.

**Specified by:**[open](http://docs.google.com/javazoom/jl/player/AudioDevice.html#open(javazoom.jl.decoder.Decoder)) in interface [AudioDevice](http://docs.google.com/javazoom/jl/player/AudioDevice.html) **Parameters:**decoder - The decoder that will provide audio data to this audio device. **Throws:** [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

### openImpl

protected void **openImpl**()  
 throws [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

Template method to provide the implementation for the opening of the audio device.

**Throws:** [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

### setOpen

protected void **setOpen**(boolean open)

Sets the open state for this audio device.

### isOpen

public boolean **isOpen**()

Determines if this audio device is open or not.

**Specified by:**[isOpen](http://docs.google.com/javazoom/jl/player/AudioDevice.html#isOpen()) in interface [AudioDevice](http://docs.google.com/javazoom/jl/player/AudioDevice.html) **Returns:**true if the audio device is open, false if it is not.

### close

public void **close**()

Closes this audio device. If the device is currently playing audio, playback is stopped immediately without flushing any buffered audio data.

**Specified by:**[close](http://docs.google.com/javazoom/jl/player/AudioDevice.html#close()) in interface [AudioDevice](http://docs.google.com/javazoom/jl/player/AudioDevice.html)

### closeImpl

protected void **closeImpl**()

Template method to provide the implementation for closing the audio device.

### write

public void **write**(short[] samples,  
 int offs,  
 int len)  
 throws [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

Writes audio data to this audio device. Audio data is assumed to be in the output format of the decoder. This method may return before the data has actually been sounded by the device if the device buffers audio samples.

**Specified by:**[write](http://docs.google.com/javazoom/jl/player/AudioDevice.html#write(short%5B%5D,%20int,%20int)) in interface [AudioDevice](http://docs.google.com/javazoom/jl/player/AudioDevice.html) **Parameters:**samples - The samples to write to the audio device.offs - The offset into the array of the first sample to write.len - The number of samples from the array to write. **Throws:** [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html) - if the audio data could not be written to the audio device. If the audio device is not open, this method does nthing.

### writeImpl

protected void **writeImpl**(short[] samples,  
 int offs,  
 int len)  
 throws [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

Template method to provide the implementation for writing audio samples to the audio device.

**Throws:** [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

### flush

public void **flush**()

Waits for any buffered audio samples to be played by the audio device. This method should only be called prior to closing the device.

**Specified by:**[flush](http://docs.google.com/javazoom/jl/player/AudioDevice.html#flush()) in interface [AudioDevice](http://docs.google.com/javazoom/jl/player/AudioDevice.html)

### flushImpl

protected void **flushImpl**()

Template method to provide the implementation for flushing any buffered audio data.

### getDecoder

protected [Decoder](http://docs.google.com/javazoom/jl/decoder/Decoder.html) **getDecoder**()

Retrieves the decoder that provides audio data to this audio device.

**Returns:**The associated decoder.

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| |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-all.html) | [**Help**](http://docs.google.com/help-doc.html) | | |  |
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