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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   [**NEXT CLASS**](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html) | [**FRAMES**](http://docs.google.com/index.html?javazoom/jl/player/AudioDevice.html)    [**NO FRAMES**](http://docs.google.com/AudioDevice.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | CONSTR | [METHOD](#3znysh7) | DETAIL: FIELD | CONSTR | [METHOD](#2et92p0) |

## **javazoom.jl.player**

Interface AudioDevice

**All Known Implementing Classes:** [AudioDeviceBase](http://docs.google.com/javazoom/jl/player/AudioDeviceBase.html), [JavaSoundAudioDevice](http://docs.google.com/javazoom/jl/player/JavaSoundAudioDevice.html), [NullAudioDevice](http://docs.google.com/javazoom/jl/player/NullAudioDevice.html)

public interface **AudioDevice**

The AudioDevice interface provides an abstraction for a device capable of sounding audio samples. Samples are written to the device wia the write() method. The device assumes that these samples are signed 16-bit samples taken at the output frequency of the decoder. If the decoder outputs more than one channel, the samples for each channel are assumed to appear consecutively, with the lower numbered channels preceeding higher-numbered channels. E.g. if there are two channels, the samples will appear in this order:

l0, r0, l1, r1, l2, r2...  
   
 where   
 l*x* indicates the *x*th sample on channel 0  
 r*x* indicates the *x*th sample on channel 1

**Since:** 0.0.8

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| **Method Summary** | |
| void | [**close**](http://docs.google.com/javazoom/jl/player/AudioDevice.html#close())()            Closes this audio device. |
| void | [**flush**](http://docs.google.com/javazoom/jl/player/AudioDevice.html#flush())()            Blocks until all audio samples previously written to this audio device have been heard. |
| int | [**getPosition**](http://docs.google.com/javazoom/jl/player/AudioDevice.html#getPosition())()            Retrieves the current playback position in milliseconds. |
| boolean | [**isOpen**](http://docs.google.com/javazoom/jl/player/AudioDevice.html#isOpen())()            Retrieves the open state of this audio device. |
| void | [**open**](http://docs.google.com/javazoom/jl/player/AudioDevice.html#open(javazoom.jl.decoder.Decoder))([Decoder](http://docs.google.com/javazoom/jl/decoder/Decoder.html) decoder)            Prepares the AudioDevice for playback of audio samples. |
| void | [**write**](http://docs.google.com/javazoom/jl/player/AudioDevice.html#write(short%5B%5D,%20int,%20int))(short[] samples, int offs, int len)            Writes a number of samples to this AudioDevice. |

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| **Method Detail** |

### open

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

Prepares the AudioDevice for playback of audio samples.

**Parameters:**decoder - The decoder that will be providing the audio samples. If the audio device is already open, this method returns silently. **Throws:** [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

### isOpen

boolean **isOpen**()

Retrieves the open state of this audio device.

**Returns:**true if this audio device is open and playing audio samples, or false otherwise.

### write

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

Writes a number of samples to this AudioDevice.

**Parameters:**samples - The array of signed 16-bit samples to write to the audio device.offs - The offset of the first sample.len - The number of samples to write. This method may return prior to the samples actually being played by the audio device. **Throws:** [JavaLayerException](http://docs.google.com/javazoom/jl/decoder/JavaLayerException.html)

### close

void **close**()

Closes this audio device. Any currently playing audio is stopped as soon as possible. Any previously written audio data that has not been heard is discarded. The implementation should ensure that any threads currently blocking on the device (e.g. during a write or flush operation should be unblocked by this method.

### flush

void **flush**()

Blocks until all audio samples previously written to this audio device have been heard.

### getPosition

int **getPosition**()

Retrieves the current playback position in milliseconds.

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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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