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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/decoder/BitstreamErrors.html) | [**FRAMES**](http://docs.google.com/index.html?javazoom/jl/decoder/Bitstream.html)    [**NO FRAMES**](http://docs.google.com/Bitstream.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3dy6vkm) | [METHOD](#1t3h5sf) | DETAIL: FIELD | [CONSTR](#2s8eyo1) | [METHOD](#3rdcrjn) |

## **javazoom.jl.decoder**

Class Bitstream

java.lang.Object  
 **javazoom.jl.decoder.Bitstream**

**All Implemented Interfaces:** [BitstreamErrors](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html), [JavaLayerErrors](http://docs.google.com/javazoom/jl/decoder/JavaLayerErrors.html)

public final class **Bitstream**extends java.lang.Objectimplements [BitstreamErrors](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html)

The Bistream class is responsible for parsing an MPEG audio bitstream. **REVIEW:** much of the parsing currently occurs in the various decoders. This should be moved into this class and associated inner classes.

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| **Field Summary** | |

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| **Fields inherited from interface javazoom.jl.decoder.**[**BitstreamErrors**](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html) |
| [BITSTREAM\_LAST](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html#BITSTREAM_LAST), [INVALIDFRAME](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html#INVALIDFRAME), [STREAM\_EOF](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html#STREAM_EOF), [STREAM\_ERROR](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html#STREAM_ERROR), [UNEXPECTED\_EOF](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html#UNEXPECTED_EOF), [UNKNOWN\_ERROR](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html#UNKNOWN_ERROR), [UNKNOWN\_SAMPLE\_RATE](http://docs.google.com/javazoom/jl/decoder/BitstreamErrors.html#UNKNOWN_SAMPLE_RATE) |

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| **Fields inherited from interface javazoom.jl.decoder.**[**JavaLayerErrors**](http://docs.google.com/javazoom/jl/decoder/JavaLayerErrors.html) |
| [BITSTREAM\_ERROR](http://docs.google.com/javazoom/jl/decoder/JavaLayerErrors.html#BITSTREAM_ERROR), [DECODER\_ERROR](http://docs.google.com/javazoom/jl/decoder/JavaLayerErrors.html#DECODER_ERROR) |

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| **Constructor Summary** | |
| [**Bitstream**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#Bitstream(java.io.InputStream))(java.io.InputStream in)            Construct a IBitstream that reads data from a given InputStream. |

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| **Method Summary** | |
| void | [**close**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#close())()            Close the Bitstream. |
| void | [**closeFrame**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#closeFrame())()            Close MP3 frame. |
| int | [**get\_bits**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#get_bits(int))(int number\_of\_bits)            Read bits from buffer into the lower bits of an unsigned int. |
| java.io.InputStream | [**getRawID3v2**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#getRawID3v2())()            Return raw ID3v2 frames + header. |
| int | [**header\_pos**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#header_pos())()            Return position of the first audio header. |
| boolean | [**isSyncCurrentPosition**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#isSyncCurrentPosition(int))(int syncmode)            Determines if the next 4 bytes of the stream represent a frame header. |
| boolean | [**isSyncMark**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#isSyncMark(int,%20int,%20int))(int headerstring, int syncmode, int word) |
| protected  [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html) | [**newBitstreamException**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#newBitstreamException(int))(int errorcode) |
| protected  [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html) | [**newBitstreamException**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#newBitstreamException(int,%20java.lang.Throwable))(int errorcode, java.lang.Throwable throwable) |
| int | [**readBits**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#readBits(int))(int n) |
| int | [**readCheckedBits**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#readCheckedBits(int))(int n) |
| [Header](http://docs.google.com/javazoom/jl/decoder/Header.html) | [**readFrame**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#readFrame())()            Reads and parses the next frame from the input source. |
| void | [**unreadFrame**](http://docs.google.com/javazoom/jl/decoder/Bitstream.html#unreadFrame())()            Unreads the bytes read from the frame. |

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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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| **Constructor Detail** |

### Bitstream

public **Bitstream**(java.io.InputStream in)

Construct a IBitstream that reads data from a given InputStream.

**Parameters:**in - The InputStream to read from.

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| **Method Detail** |

### header\_pos

public int **header\_pos**()

Return position of the first audio header.

**Returns:**size of ID3v2 tag frames.

### getRawID3v2

public java.io.InputStream **getRawID3v2**()

Return raw ID3v2 frames + header.

**Returns:**ID3v2 InputStream or null if ID3v2 frames are not available.

### close

public void **close**()  
 throws [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html)

Close the Bitstream.

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

### readFrame

public [Header](http://docs.google.com/javazoom/jl/decoder/Header.html) **readFrame**()  
 throws [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html)

Reads and parses the next frame from the input source.

**Returns:**the Header describing details of the frame read, or null if the end of the stream has been reached. **Throws:** [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html)

### unreadFrame

public void **unreadFrame**()  
 throws [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html)

Unreads the bytes read from the frame.

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

### closeFrame

public void **closeFrame**()

Close MP3 frame.

### isSyncCurrentPosition

public boolean **isSyncCurrentPosition**(int syncmode)  
 throws [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html)

Determines if the next 4 bytes of the stream represent a frame header.

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

### readBits

public int **readBits**(int n)

### readCheckedBits

public int **readCheckedBits**(int n)

### newBitstreamException

protected [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html) **newBitstreamException**(int errorcode)

### newBitstreamException

protected [BitstreamException](http://docs.google.com/javazoom/jl/decoder/BitstreamException.html) **newBitstreamException**(int errorcode,  
 java.lang.Throwable throwable)

### isSyncMark

public boolean **isSyncMark**(int headerstring,  
 int syncmode,  
 int word)

### get\_bits

public int **get\_bits**(int number\_of\_bits)

Read bits from buffer into the lower bits of an unsigned int. The LSB contains the latest read bit of the stream. (1 <= number\_of\_bits <= 16)

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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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