| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | **Use** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
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| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?javax/sound/sampled//class-useAudioFormat.html)    [**NO FRAMES**](http://docs.google.com/AudioFormat.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

**Uses of Class**

**javax.sound.sampled.AudioFormat**

| Packages that use [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | |
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| [**javax.sound.sampled**](#3znysh7) | Provides interfaces and classes for capture, processing, and playback of sampled audio data. |
| [**javax.sound.sampled.spi**](#2et92p0) | Supplies abstract classes for service providers to subclass when offering new audio devices, sound file readers and writers, or audio format converters. |

| Uses of [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) in [javax.sound.sampled](http://docs.google.com/javax/sound/sampled/package-summary.html) | |
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| Fields in [javax.sound.sampled](http://docs.google.com/javax/sound/sampled/package-summary.html) declared as [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | |
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| protected  [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | **AudioInputStream.**[**format**](http://docs.google.com/javax/sound/sampled/AudioInputStream.html#format)            The format of the audio data contained in the stream. |

| Methods in [javax.sound.sampled](http://docs.google.com/javax/sound/sampled/package-summary.html) that return [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | |
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| [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | **DataLine.**[**getFormat**](http://docs.google.com/javax/sound/sampled/DataLine.html#getFormat())()            Obtains the current format (encoding, sample rate, number of channels, etc.) of the data line's audio data. |
| [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | **AudioFileFormat.**[**getFormat**](http://docs.google.com/javax/sound/sampled/AudioFileFormat.html#getFormat())()            Obtains the format of the audio data contained in the audio file. |
| [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | **AudioInputStream.**[**getFormat**](http://docs.google.com/javax/sound/sampled/AudioInputStream.html#getFormat())()            Obtains the audio format of the sound data in this audio input stream. |
| [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] | **DataLine.Info.**[**getFormats**](http://docs.google.com/javax/sound/sampled/DataLine.Info.html#getFormats())()            Obtains a set of audio formats supported by the data line. |
| static [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] | **AudioSystem.**[**getTargetFormats**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getTargetFormats(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the formats that have a particular encoding and that the system can obtain from a stream of the specified format using the set of installed format converters. |

| Methods in [javax.sound.sampled](http://docs.google.com/javax/sound/sampled/package-summary.html) with parameters of type [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | |
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| static [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) | **AudioSystem.**[**getAudioInputStream**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getAudioInputStream(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.AudioInputStream))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat, [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) sourceStream)            Obtains an audio input stream of the indicated format, by converting the provided audio input stream. |
| static [SourceDataLine](http://docs.google.com/javax/sound/sampled/SourceDataLine.html) | **AudioSystem.**[**getSourceDataLine**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getSourceDataLine(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format)            Obtains a source data line that can be used for playing back audio data in the format specified by the AudioFormat object. |
| static [SourceDataLine](http://docs.google.com/javax/sound/sampled/SourceDataLine.html) | **AudioSystem.**[**getSourceDataLine**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getSourceDataLine(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.Mixer.Info))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, [Mixer.Info](http://docs.google.com/javax/sound/sampled/Mixer.Info.html) mixerinfo)            Obtains a source data line that can be used for playing back audio data in the format specified by the AudioFormat object, provided by the mixer specified by the Mixer.Info object. |
| static [TargetDataLine](http://docs.google.com/javax/sound/sampled/TargetDataLine.html) | **AudioSystem.**[**getTargetDataLine**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getTargetDataLine(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format)            Obtains a target data line that can be used for recording audio data in the format specified by the AudioFormat object. |
| static [TargetDataLine](http://docs.google.com/javax/sound/sampled/TargetDataLine.html) | **AudioSystem.**[**getTargetDataLine**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getTargetDataLine(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.Mixer.Info))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, [Mixer.Info](http://docs.google.com/javax/sound/sampled/Mixer.Info.html) mixerinfo)            Obtains a target data line that can be used for recording audio data in the format specified by the AudioFormat object, provided by the mixer specified by the Mixer.Info object. |
| static [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] | **AudioSystem.**[**getTargetEncodings**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getTargetEncodings(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the encodings that the system can obtain from an audio input stream with the specified format using the set of installed format converters. |
| static [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] | **AudioSystem.**[**getTargetFormats**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#getTargetFormats(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the formats that have a particular encoding and that the system can obtain from a stream of the specified format using the set of installed format converters. |
| static boolean | **AudioSystem.**[**isConversionSupported**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#isConversionSupported(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Indicates whether an audio input stream of the specified encoding can be obtained from an audio input stream that has the specified format. |
| static boolean | **AudioSystem.**[**isConversionSupported**](http://docs.google.com/javax/sound/sampled/AudioSystem.html#isConversionSupported(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Indicates whether an audio input stream of a specified format can be obtained from an audio input stream of another specified format. |
| boolean | **DataLine.Info.**[**isFormatSupported**](http://docs.google.com/javax/sound/sampled/DataLine.Info.html#isFormatSupported(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format)            Indicates whether this data line supports a particular audio format. |
| boolean | **AudioFormat.**[**matches**](http://docs.google.com/javax/sound/sampled/AudioFormat.html#matches(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format)            Indicates whether this format matches the one specified. |
| void | **TargetDataLine.**[**open**](http://docs.google.com/javax/sound/sampled/TargetDataLine.html#open(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format)            Opens the line with the specified format, causing the line to acquire any required system resources and become operational. |
| void | **SourceDataLine.**[**open**](http://docs.google.com/javax/sound/sampled/SourceDataLine.html#open(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format)            Opens the line with the specified format, causing the line to acquire any required system resources and become operational. |
| void | **Clip.**[**open**](http://docs.google.com/javax/sound/sampled/Clip.html#open(javax.sound.sampled.AudioFormat,%20byte%5B%5D,%20int,%20int))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, byte[] data, int offset, int bufferSize)            Opens the clip, meaning that it should acquire any required system resources and become operational. |
| void | **TargetDataLine.**[**open**](http://docs.google.com/javax/sound/sampled/TargetDataLine.html#open(javax.sound.sampled.AudioFormat,%20int))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, int bufferSize)            Opens the line with the specified format and requested buffer size, causing the line to acquire any required system resources and become operational. |
| void | **SourceDataLine.**[**open**](http://docs.google.com/javax/sound/sampled/SourceDataLine.html#open(javax.sound.sampled.AudioFormat,%20int))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, int bufferSize)            Opens the line with the specified format and suggested buffer size, causing the line to acquire any required system resources and become operational. |

| Constructors in [javax.sound.sampled](http://docs.google.com/javax/sound/sampled/package-summary.html) with parameters of type [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | |
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| [**AudioFileFormat**](http://docs.google.com/javax/sound/sampled/AudioFileFormat.html#AudioFileFormat(javax.sound.sampled.AudioFileFormat.Type,%20javax.sound.sampled.AudioFormat,%20int))([AudioFileFormat.Type](http://docs.google.com/javax/sound/sampled/AudioFileFormat.Type.html) type, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, int frameLength)            Constructs an audio file format object. |
| [**AudioFileFormat**](http://docs.google.com/javax/sound/sampled/AudioFileFormat.html#AudioFileFormat(javax.sound.sampled.AudioFileFormat.Type,%20javax.sound.sampled.AudioFormat,%20int,%20java.util.Map))([AudioFileFormat.Type](http://docs.google.com/javax/sound/sampled/AudioFileFormat.Type.html) type, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, int frameLength, [Map](http://docs.google.com/java/util/Map.html)<[String](http://docs.google.com/java/lang/String.html),[Object](http://docs.google.com/java/lang/Object.html)> properties)            Construct an audio file format object with a set of defined properties. |
| [**AudioFileFormat**](http://docs.google.com/javax/sound/sampled/AudioFileFormat.html#AudioFileFormat(javax.sound.sampled.AudioFileFormat.Type,%20int,%20javax.sound.sampled.AudioFormat,%20int))([AudioFileFormat.Type](http://docs.google.com/javax/sound/sampled/AudioFileFormat.Type.html) type, int byteLength, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, int frameLength)            Constructs an audio file format object. |
| [**AudioInputStream**](http://docs.google.com/javax/sound/sampled/AudioInputStream.html#AudioInputStream(java.io.InputStream,%20javax.sound.sampled.AudioFormat,%20long))([InputStream](http://docs.google.com/java/io/InputStream.html) stream, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, long length)            Constructs an audio input stream that has the requested format and length in sample frames, using audio data from the specified input stream. |
| [**DataLine.Info**](http://docs.google.com/javax/sound/sampled/DataLine.Info.html#DataLine.Info(java.lang.Class,%20javax.sound.sampled.AudioFormat))([Class](http://docs.google.com/java/lang/Class.html)<?> lineClass, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format)            Constructs a data line's info object from the specified information, which includes a single audio format. |
| [**DataLine.Info**](http://docs.google.com/javax/sound/sampled/DataLine.Info.html#DataLine.Info(java.lang.Class,%20javax.sound.sampled.AudioFormat%5B%5D,%20int,%20int))([Class](http://docs.google.com/java/lang/Class.html)<?> lineClass, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] formats, int minBufferSize, int maxBufferSize)            Constructs a data line's info object from the specified information, which includes a set of supported audio formats and a range for the buffer size. |
| [**DataLine.Info**](http://docs.google.com/javax/sound/sampled/DataLine.Info.html#DataLine.Info(java.lang.Class,%20javax.sound.sampled.AudioFormat,%20int))([Class](http://docs.google.com/java/lang/Class.html)<?> lineClass, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) format, int bufferSize)            Constructs a data line's info object from the specified information, which includes a single audio format and a desired buffer size. |

| Uses of [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) in [javax.sound.sampled.spi](http://docs.google.com/javax/sound/sampled/spi/package-summary.html) | |
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| Methods in [javax.sound.sampled.spi](http://docs.google.com/javax/sound/sampled/spi/package-summary.html) that return [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | |
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| abstract  [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] | **FormatConversionProvider.**[**getTargetFormats**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getTargetFormats(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the set of target formats with the encoding specified supported by the format converter If no target formats with the specified encoding are supported for this source format, an array of length 0 is returned. |

| Methods in [javax.sound.sampled.spi](http://docs.google.com/javax/sound/sampled/spi/package-summary.html) with parameters of type [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | |
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| abstract  [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) | **FormatConversionProvider.**[**getAudioInputStream**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getAudioInputStream(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.AudioInputStream))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat, [AudioInputStream](http://docs.google.com/javax/sound/sampled/AudioInputStream.html) sourceStream)            Obtains an audio input stream with the specified format from the given audio input stream. |
| abstract  [AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html)[] | **FormatConversionProvider.**[**getTargetEncodings**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getTargetEncodings(javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the set of target format encodings supported by the format converter given a particular source format. |
| abstract  [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html)[] | **FormatConversionProvider.**[**getTargetFormats**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#getTargetFormats(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Obtains the set of target formats with the encoding specified supported by the format converter If no target formats with the specified encoding are supported for this source format, an array of length 0 is returned. |
| boolean | **FormatConversionProvider.**[**isConversionSupported**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#isConversionSupported(javax.sound.sampled.AudioFormat.Encoding,%20javax.sound.sampled.AudioFormat))([AudioFormat.Encoding](http://docs.google.com/javax/sound/sampled/AudioFormat.Encoding.html) targetEncoding, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Indicates whether the format converter supports conversion to a particular encoding from a particular format. |
| boolean | **FormatConversionProvider.**[**isConversionSupported**](http://docs.google.com/javax/sound/sampled/spi/FormatConversionProvider.html#isConversionSupported(javax.sound.sampled.AudioFormat,%20javax.sound.sampled.AudioFormat))([AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) targetFormat, [AudioFormat](http://docs.google.com/javax/sound/sampled/AudioFormat.html) sourceFormat)            Indicates whether the format converter supports conversion to one particular format from another. |

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | [**Class**](http://docs.google.com/javax/sound/sampled/AudioFormat.html) | **Use** | [**Tree**](http://docs.google.com/package-tree.html) | [**Deprecated**](http://docs.google.com/deprecated-list.html) | [**Index**](http://docs.google.com/index-files/index-1.html) | [**Help**](http://docs.google.com/help-doc.html) | | --- | --- | --- | --- | --- | --- | --- | --- | | | ***Java™ Platform***  ***Standard Ed. 6*** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| PREV   NEXT | [**FRAMES**](http://docs.google.com/index.html?javax/sound/sampled//class-useAudioFormat.html)    [**NO FRAMES**](http://docs.google.com/AudioFormat.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |

[Submit a bug or feature](http://bugs.sun.com/services/bugreport/index.jsp)

For further API reference and developer documentation, see [Java SE Developer Documentation](http://docs.google.com/webnotes/devdocs-vs-specs.html). That documentation contains more detailed, developer-targeted descriptions, with conceptual overviews, definitions of terms, workarounds, and working code examples.

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