| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/LookupTable.html) | [**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 CLASS**](http://docs.google.com/java/awt/image/LookupOp.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/MemoryImageSource.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/LookupTable.html)    [**NO FRAMES**](http://docs.google.com/LookupTable.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

## **java.awt.image**

Class LookupTable

[java.lang.Object](http://docs.google.com/java/lang/Object.html)  
 **java.awt.image.LookupTable**

**Direct Known Subclasses:** [ByteLookupTable](http://docs.google.com/java/awt/image/ByteLookupTable.html), [ShortLookupTable](http://docs.google.com/java/awt/image/ShortLookupTable.html)

public abstract class **LookupTable**extends [Object](http://docs.google.com/java/lang/Object.html)

This abstract class defines a lookup table object. ByteLookupTable and ShortLookupTable are subclasses, which contain byte and short data, respectively. A lookup table contains data arrays for one or more bands (or components) of an image (for example, separate arrays for R, G, and B), and it contains an offset which will be subtracted from the input values before indexing into the arrays. This allows an array smaller than the native data size to be provided for a constrained input. If there is only one array in the lookup table, it will be applied to all bands. All arrays must be the same size.

**See Also:**[ByteLookupTable](http://docs.google.com/java/awt/image/ByteLookupTable.html), [ShortLookupTable](http://docs.google.com/java/awt/image/ShortLookupTable.html), [LookupOp](http://docs.google.com/java/awt/image/LookupOp.html)

| **Constructor Summary** | |
| --- | --- |
| protected | [**LookupTable**](http://docs.google.com/java/awt/image/LookupTable.html#LookupTable(int,%20int))(int offset, int numComponents)            Constructs a new LookupTable from the number of components and an offset into the lookup table. |

| **Method Summary** | |
| --- | --- |
| int | [**getNumComponents**](http://docs.google.com/java/awt/image/LookupTable.html#getNumComponents())()            Returns the number of components in the lookup table. |
| int | [**getOffset**](http://docs.google.com/java/awt/image/LookupTable.html#getOffset())()            Returns the offset. |
| abstract  int[] | [**lookupPixel**](http://docs.google.com/java/awt/image/LookupTable.html#lookupPixel(int%5B%5D,%20int%5B%5D))(int[] src, int[] dest)            Returns an int array of components for one pixel. |

| **Methods inherited from class java.lang.**[**Object**](http://docs.google.com/java/lang/Object.html) |
| --- |
| [clone](http://docs.google.com/java/lang/Object.html#clone()), [equals](http://docs.google.com/java/lang/Object.html#equals(java.lang.Object)), [finalize](http://docs.google.com/java/lang/Object.html#finalize()), [getClass](http://docs.google.com/java/lang/Object.html#getClass()), [hashCode](http://docs.google.com/java/lang/Object.html#hashCode()), [notify](http://docs.google.com/java/lang/Object.html#notify()), [notifyAll](http://docs.google.com/java/lang/Object.html#notifyAll()), [toString](http://docs.google.com/java/lang/Object.html#toString()), [wait](http://docs.google.com/java/lang/Object.html#wait()), [wait](http://docs.google.com/java/lang/Object.html#wait(long)), [wait](http://docs.google.com/java/lang/Object.html#wait(long,%20int)) |

| **Constructor Detail** |
| --- |

### LookupTable

protected **LookupTable**(int offset,  
 int numComponents)

Constructs a new LookupTable from the number of components and an offset into the lookup table.

**Parameters:**offset - the offset to subtract from input values before indexing into the data arrays for this LookupTablenumComponents - the number of data arrays in this LookupTable **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if offset is less than 0 or if numComponents is less than 1

| **Method Detail** |
| --- |

### getNumComponents

public int **getNumComponents**()

Returns the number of components in the lookup table.

**Returns:**the number of components in this LookupTable.

### getOffset

public int **getOffset**()

Returns the offset.

**Returns:**the offset of this LookupTable.

### lookupPixel

public abstract int[] **lookupPixel**(int[] src,  
 int[] dest)

Returns an int array of components for one pixel. The dest array contains the result of the lookup and is returned. If dest is null, a new array is allocated. The source and destination can be equal.

**Parameters:**src - the source array of components of one pixeldest - the destination array of components for one pixel, translated with this LookupTable **Returns:**an int array of components for one pixel.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/LookupTable.html) | [**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 CLASS**](http://docs.google.com/java/awt/image/LookupOp.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/MemoryImageSource.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/LookupTable.html)    [**NO FRAMES**](http://docs.google.com/LookupTable.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#3dy6vkm) | [METHOD](#4d34og8) |

[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.

Copyright 2006 Sun Microsystems, Inc. All rights reserved. Use is subject to [license terms](http://docs.google.com/legal/license.html). Also see the [documentation redistribution policy](http://java.sun.com/docs/redist.html).