| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ByteLookupTable.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/BufferStrategy.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/ColorConvertOp.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/ByteLookupTable.html)    [**NO FRAMES**](http://docs.google.com/ByteLookupTable.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#17dp8vu) |

## **java.awt.image**

Class ByteLookupTable

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

public class **ByteLookupTable**extends [LookupTable](http://docs.google.com/java/awt/image/LookupTable.html)

This class defines a lookup table object. The output of a lookup operation using an object of this class is interpreted as an unsigned byte quantity. The lookup table contains byte data arrays for one or more bands (or components) of an image, and it contains an offset which will be subtracted from the input values before indexing 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.

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

| **Constructor Summary** | |
| --- | --- |
| [**ByteLookupTable**](http://docs.google.com/java/awt/image/ByteLookupTable.html#ByteLookupTable(int,%20byte%5B%5D))(int offset, byte[] data)            Constructs a ByteLookupTable object from an array of bytes representing a lookup table to be applied to all bands. |
| [**ByteLookupTable**](http://docs.google.com/java/awt/image/ByteLookupTable.html#ByteLookupTable(int,%20byte%5B%5D%5B%5D))(int offset, byte[][] data)            Constructs a ByteLookupTable object from an array of byte arrays representing a lookup table for each band. |

| **Method Summary** | |
| --- | --- |
| byte[][] | [**getTable**](http://docs.google.com/java/awt/image/ByteLookupTable.html#getTable())()            Returns the lookup table data by reference. |
| byte[] | [**lookupPixel**](http://docs.google.com/java/awt/image/ByteLookupTable.html#lookupPixel(byte%5B%5D,%20byte%5B%5D))(byte[] src, byte[] dst)            Returns an array of samples of a pixel, translated with the lookup table. |
| int[] | [**lookupPixel**](http://docs.google.com/java/awt/image/ByteLookupTable.html#lookupPixel(int%5B%5D,%20int%5B%5D))(int[] src, int[] dst)            Returns an array of samples of a pixel, translated with the lookup table. |

| **Methods inherited from class java.awt.image.**[**LookupTable**](http://docs.google.com/java/awt/image/LookupTable.html) |
| --- |
| [getNumComponents](http://docs.google.com/java/awt/image/LookupTable.html#getNumComponents()), [getOffset](http://docs.google.com/java/awt/image/LookupTable.html#getOffset()) |

| **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** |
| --- |

### ByteLookupTable

public **ByteLookupTable**(int offset,  
 byte[][] data)

Constructs a ByteLookupTable object from an array of byte arrays representing a lookup table for each band. The offset will be subtracted from input values before indexing into the arrays. The number of bands is the length of the data argument. The data array for each band is stored as a reference.

**Parameters:**offset - the value subtracted from the input values before indexing into the arraysdata - an array of byte arrays representing a lookup table for each band **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if offset is is less than 0 or if the length of data is less than 1

### ByteLookupTable

public **ByteLookupTable**(int offset,  
 byte[] data)

Constructs a ByteLookupTable object from an array of bytes representing a lookup table to be applied to all bands. The offset will be subtracted from input values before indexing into the array. The data array is stored as a reference.

**Parameters:**offset - the value subtracted from the input values before indexing into the arraydata - an array of bytes **Throws:** [IllegalArgumentException](http://docs.google.com/java/lang/IllegalArgumentException.html) - if offset is is less than 0 or if the length of data is less than 1

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

### getTable

public final byte[][] **getTable**()

Returns the lookup table data by reference. If this ByteLookupTable was constructed using a single byte array, the length of the returned array is one.

**Returns:**the data array of this ByteLookupTable.

### lookupPixel

public int[] **lookupPixel**(int[] src,  
 int[] dst)

Returns an array of samples of a pixel, translated with the lookup table. The source and destination array can be the same array. Array dst is returned.

**Specified by:**[lookupPixel](http://docs.google.com/java/awt/image/LookupTable.html#lookupPixel(int%5B%5D,%20int%5B%5D)) in class [LookupTable](http://docs.google.com/java/awt/image/LookupTable.html) **Parameters:**src - the source array.dst - the destination array. This array must be at least as long as src. If dst is null, a new array will be allocated having the same length as src. **Returns:**the array dst, an int array of samples. **Throws:** [ArrayIndexOutOfBoundsException](http://docs.google.com/java/lang/ArrayIndexOutOfBoundsException.html) - if src is longer than dst or if for any element i of src, src[i]-offset is either less than zero or greater than or equal to the length of the lookup table for any band.

### lookupPixel

public byte[] **lookupPixel**(byte[] src,  
 byte[] dst)

Returns an array of samples of a pixel, translated with the lookup table. The source and destination array can be the same array. Array dst is returned.

**Parameters:**src - the source array.dst - the destination array. This array must be at least as long as src. If dst is null, a new array will be allocated having the same length as src. **Returns:**the array dst, an int array of samples. **Throws:** [ArrayIndexOutOfBoundsException](http://docs.google.com/java/lang/ArrayIndexOutOfBoundsException.html) - if src is longer than dst or if for any element i of src, (src[i]&0xff)-offset is either less than zero or greater than or equal to the length of the lookup table for any band.

| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ByteLookupTable.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*** |
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[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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