| | [**Overview**](http://docs.google.com/overview-summary.html) | [**Package**](http://docs.google.com/package-summary.html) | **Class** | [**Use**](http://docs.google.com/class-use/ShortLookupTable.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/SampleModel.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/SinglePixelPackedSampleModel.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/ShortLookupTable.html)    [**NO FRAMES**](http://docs.google.com/ShortLookupTable.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 ShortLookupTable

[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.ShortLookupTable**

public class **ShortLookupTable**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 short quantity. The lookup table contains short 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:**[ByteLookupTable](http://docs.google.com/java/awt/image/ByteLookupTable.html), [LookupOp](http://docs.google.com/java/awt/image/LookupOp.html)

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

| **Method Summary** | |
| --- | --- |
| short[][] | [**getTable**](http://docs.google.com/java/awt/image/ShortLookupTable.html#getTable())()            Returns the lookup table data by reference. |
| int[] | [**lookupPixel**](http://docs.google.com/java/awt/image/ShortLookupTable.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. |
| short[] | [**lookupPixel**](http://docs.google.com/java/awt/image/ShortLookupTable.html#lookupPixel(short%5B%5D,%20short%5B%5D))(short[] src, short[] 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** |
| --- |

### ShortLookupTable

public **ShortLookupTable**(int offset,  
 short[][] data)

Constructs a ShortLookupTable object from an array of short arrays representing a lookup table for each band. The offset will be subtracted from the 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 short arrays representing a lookup table for each band

### ShortLookupTable

public **ShortLookupTable**(int offset,  
 short[] data)

Constructs a ShortLookupTable object from an array of shorts representing a lookup table for each band. The offset will be subtracted from the 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 arraysdata - an array of shorts

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

### getTable

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

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

**Returns:**ShortLookupTable data array.

### 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]&0xffff)-offset is either less than zero or greater than or equal to the length of the lookup table for any band.

### lookupPixel

public short[] **lookupPixel**(short[] src,  
 short[] 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]&0xffff)-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/ShortLookupTable.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/SampleModel.html)   [**NEXT CLASS**](http://docs.google.com/java/awt/image/SinglePixelPackedSampleModel.html) | [**FRAMES**](http://docs.google.com/index.html?java/awt/image/ShortLookupTable.html)    [**NO FRAMES**](http://docs.google.com/ShortLookupTable.html)     [**All Classes**](http://docs.google.com/allclasses-noframe.html) |
| SUMMARY: NESTED | FIELD | [CONSTR](#3znysh7) | [METHOD](#2et92p0) | DETAIL: FIELD | [CONSTR](#1t3h5sf) | [METHOD](#17dp8vu) |

[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).