

# Class `java.awt.image.DirectColorModel`

```
java.lang.Object
|
+----java.awt.image.ColorModel
|
+----java.awt.image.DirectColorModel
```

---

public class **DirectColorModel**  
extends [ColorModel](#)

A `ColorModel` class that specifies a translation from pixel values to alpha, red, green, and blue color components for pixels which have the color components embedded directly in the bits of the pixel itself. This color model is similar to an X11 `TrueColor` visual.

**See Also:**  
[ColorModel](#)

**Version:**  
1.9 09/08/95

**Author:**  
Jim Graham

---

## Constructor Index

- o **[DirectColorModel](#)**(int, int, int, int)  
Construct a `DirectColorModel` from the given masks specifying which bits in the pixel contain the red, green and blue color components.
- o **[DirectColorModel](#)**(int, int, int, int, int, int)  
Construct a `DirectColorModel` from the given masks specifying which bits in the pixel contain the alpha, red, green and blue color components.

## Method Index

- o **[getAlpha](#)**(int)  
Return the alpha transparency value for the specified pixel in the range 0–255.
- o **[getAlphaMask](#)**()  
Return the mask indicating which bits in a pixel contain the alpha transparency component.

- o **getBlue**(int)  
Return the blue color component for the specified pixel in the range 0–255.
- o **getBlueMask**()  
Return the mask indicating which bits in a pixel contain the blue color component.
- o **getGreen**(int)  
Return the green color component for the specified pixel in the range 0–255.
- o **getGreenMask**()  
Return the mask indicating which bits in a pixel contain the green color component.
- o **getRed**(int)  
Return the red color component for the specified pixel in the range 0–255.
- o **getRedMask**()  
Return the mask indicating which bits in a pixel contain the red color component.

## Constructors

### o **DirectColorModel**

```
public DirectColorModel(int bits,
                        int rmask,
                        int gmask,
                        int bmask)
```

Construct a DirectColorModel from the given masks specifying which bits in the pixel contain the red, green and blue color components. Pixels described by this color model will all have alpha components of 255 (fully opaque). All of the bits in each mask must be contiguous and fit in the specified number of least significant bits of the integer.

### o **DirectColorModel**

```
public DirectColorModel(int bits,
                        int rmask,
                        int gmask,
                        int bmask,
                        int amask)
```

Construct a DirectColorModel from the given masks specifying which bits in the pixel contain the alpha, red, green and blue color components. All of the bits in each mask must be contiguous and fit in the specified number of least significant bits of the integer.

## Methods

### o **getRedMask**

```
public int getRedMask()
```

Return the mask indicating which bits in a pixel contain the red color component.

### o **getGreenMask**

```
public int getGreenMask()
```

Return the mask indicating which bits in a pixel contain the green color component.

### o **getBlueMask**

```
public int getBlueMask()
```

Return the mask indicating which bits in a pixel contain the blue color component.

### o **getAlphaMask**

```
public int getAlphaMask()
```

Return the mask indicating which bits in a pixel contain the alpha transparency component.

### o **getRed**

```
public int getRed(int pixel)
```

Return the red color component for the specified pixel in the range 0–255.

**Overrides:**

getRed in class ColorModel

### o **getGreen**

```
public int getGreen(int pixel)
```

Return the green color component for the specified pixel in the range 0–255.

**Overrides:**

getGreen in class ColorModel

### o **getBlue**

```
public int getBlue(int pixel)
```

Return the blue color component for the specified pixel in the range 0–255.

**Overrides:**

getBlue in class ColorModel

### o **getAlpha**

```
public int getAlpha(int pixel)
```

Return the alpha transparency value for the specified pixel in the range 0–255.

**Overrides:**

getAlpha in class ColorModel

---

[All Packages](#)

[This Package](#)

[Previous](#)

[Next](#)