

NAME

glColor3b, **glColor3d**, **glColor3f**, **glColor3i**, **glColor3s**, **glColor3ub**, **glColor3ui**, **glColor3us**,
glColor4b, **glColor4d**, **glColor4f**, **glColor4i**, **glColor4s**, **glColor4ub**, **glColor4ui**, **glColor4us**,
glColor3bv, **glColor3dv**, **glColor3fv**, **glColor3iv**, **glColor3sv**, **glColor3ubv**, **glColor3uiv**, **glColor3usv**,
glColor4bv, **glColor4dv**, **glColor4fv**, **glColor4iv**, **glColor4sv**, **glColor4ubv**, **glColor4uiv**, **glColor4usv** –
 set the current color

C SPECIFICATION

```
void glColor3b( GLbyte red,
               GLbyte green,
               GLbyte blue )
void glColor3d( GLdouble red,
               GLdouble green,
               GLdouble blue )
void glColor3f( GLfloat red,
               GLfloat green,
               GLfloat blue )
void glColor3i( GLint red,
               GLint green,
               GLint blue )
void glColor3s( GLshort red,
               GLshort green,
               GLshort blue )
void glColor3ub( GLubyte red,
               GLubyte green,
               GLubyte blue )
void glColor3ui( GLuint red,
               GLuint green,
               GLuint blue )
void glColor3us( GLushort red,
               GLushort green,
               GLushort blue )
void glColor4b( GLbyte red,
               GLbyte green,
               GLbyte blue,
               GLbyte alpha )
void glColor4d( GLdouble red,
               GLdouble green,
               GLdouble blue,
               GLdouble alpha )
void glColor4f( GLfloat red,
               GLfloat green,
               GLfloat blue,
               GLfloat alpha )
void glColor4i( GLint red,
               GLint green,
               GLint blue,
               GLint alpha )
void glColor4s( GLshort red,
               GLshort green,
               GLshort blue,
               GLshort alpha )
```

```
void glColor4ub( GLubyte red,
                 GLubyte green,
                 GLubyte blue,
                 GLubyte alpha )
void glColor4ui( GLuint red,
                 GLuint green,
                 GLuint blue,
                 GLuint alpha )
void glColor4us( GLushort red,
                 GLushort green,
                 GLushort blue,
                 GLushort alpha )
```

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PARAMETERS

red, green, blue

Specify new red, green, and blue values for the current color.

alpha

Specifies a new alpha value for the current color. Included only in the four-argument **glColor4** commands.

C SPECIFICATION

```
void glColor3bv( const GLbyte *v )
void glColor3dv( const GLdouble *v )
void glColor3fv( const GLfloat *v )
void glColor3iv( const GLint *v )
void glColor3sv( const GLshort *v )
void glColor3ubv( const GLubyte *v )
void glColor3uiv( const GLuint *v )
void glColor3usv( const GLushort *v )
void glColor4bv( const GLbyte *v )
void glColor4dv( const GLdouble *v )
void glColor4fv( const GLfloat *v )
void glColor4iv( const GLint *v )
void glColor4sv( const GLshort *v )
void glColor4ubv( const GLubyte *v )
void glColor4uiv( const GLuint *v )
void glColor4usv( const GLushort *v )
```

PARAMETERS

v Specifies a pointer to an array that contains red, green, blue, and (sometimes) alpha values.

DESCRIPTION

The GL stores both a current single-valued color index and a current four-valued RGBA color. **glColor** sets a new four-valued RGBA color. **glColor** has two major variants: **glColor3** and **glColor4**. **glColor3** variants specify new red, green, and blue values explicitly and set the current alpha value to 1.0 (full intensity) implicitly. **glColor4** variants specify all four color components explicitly.

glColor3b, **glColor4b**, **glColor3s**, **glColor4s**, **glColor3i**, and **glColor4i** take three or four signed byte, short, or long integers as arguments. When *v* is appended to the name, the color commands can take a pointer to an array of such values.

Current color values are stored in floating-point format, with unspecified mantissa and exponent sizes. Unsigned integer color components, when specified, are linearly mapped to floating-point values such that the largest representable value maps to 1.0 (full intensity), and 0 maps to 0.0 (zero intensity). Signed

integer color components, when specified, are linearly mapped to floating-point values such that the most positive representable value maps to 1.0, and the most negative representable value maps to -1.0. (Note that this mapping does not convert 0 precisely to 0.0.) Floating-point values are mapped directly.

Neither floating-point nor signed integer values are clamped to the range [0,1] before the current color is updated. However, color components are clamped to this range before they are interpolated or written into a color buffer.

NOTES

The initial value for the current color is (1, 1, 1, 1).

The current color can be updated at any time. In particular, **glColor** can be called between a call to **glBegin** and the corresponding call to **glEnd**.

ASSOCIATED GETS

glGet with argument **GL_CURRENT_COLOR**

glGet with argument **GL_RGBA_MODE**

SEE ALSO

glIndex