

# Creating Special Effects with Text

## Introduction

With FrameMaker<sup>®</sup> publishing software, you can create special effects such as large, rotated, outlined, or color characters by putting PostScript code in a text column. Although not all special effects may appear when you view the document, they do appear when you print. You need a color monitor to view the color special effects, and you need a color printer to print the color special effects.

You can create some of these color and rotation effects directly in FrameMaker without using PostScript code. This document explains how to create these effects with PostScript code only.

For more information on using PostScript code in a text column, see your user's manual.

## About BigRGB.ps

FrameMaker includes the PostScript program `BigRGB.ps`, which produces color or gray-scale text and outlined letters. You can rotate the text to any angle. The program is in the directory

```
install_dir/fminit/usenglish/Samples/PostScript
```

where *install\_dir* is the directory in which FrameMaker was installed.

## Before you start

Before you use the `BigRGB.ps` program in your own documents, do one of the following:

- If you are working in a personal directory, copy `BigRGB.ps` to the directory from which you start FrameMaker (normally your home directory). Make sure the `#include` statement in each of the columns containing PostScript code looks like this:  
`#include "BigRGB.ps"`
- If you are working in a group directory, copy the `BigRGB.ps` program to a directory accessible to all users or leave it where it was installed. Change the `#include` statement in each of the columns containing PostScript code to specify the full pathname of the PostScript program, like this:

```
#include "/usr/local/BigRGB.ps"
```

Do not use an environment variable in the pathname. (If you copy this document to a different directory, change all the `#include` statements to specify the full pathname, so you can see or print the special effects.)

For more information about the `#include` statement, see “Using `BigRGB.ps`” on page 2.

To use the `BigRGB.ps` program in your own documents or to see the special effects when you print this document, Frame recommends that you:

1. Open and print this document with FrameMaker to see the special effects.
2. Study the contents of the columns that contain PostScript code to see how the effects are achieved.

3. Create a new document and experiment with the `BigRGB.ps` program to create the effects you want.
4. To share your special effects with others, copy or move the new document to a shared directory.

## Using BigRGB.ps

To use the `BigRGB.ps` program:

1. Draw a text column with the Text Column tool.

For best results, make sure that the column's pen and fill patterns are set to None.

2. Type arguments to the program in the text column as described in "Arguments to BigRGB.ps" on page 3.
3. Type the `#include` statement in the text column on a line by itself.

This statement tells FrameMaker the name and location of the PostScript program. If the program is in the directory from which you start FrameMaker, you don't need to specify its full pathname. For example, you can specify simply:

```
#include "BigRGB.ps"
```

If the PostScript program is in a shared directory available to all users, specify its full pathname. For example, specify:

```
#include "/usr/local/BigRGB.ps"
```

4. Put an insertion point in the text column and choose Flow from the Format menu.
5. In the Flow Properties dialog box, turn on PostScript Code and click Set.

The position and size of the text column determine the position and size of the printed text, as described in the following sections.

To edit the code in a PostScript code column, you must first use the Flow command on the Format menu to turn off PostScript Code. After you edit the code, use the Flow command to turn it on again.

For example, the text column

```
(NEWSLETTER) /Times-Roman /B 0 /LL 0 [ ] 0%  
#include "BigRGB.ps"  
§
```

produces this effect on the printed page:

# NEWSLETTER

## Arguments to BigRGB.ps

The `BigRGB.ps` program requires the following arguments, in order:

(String) /Font /FillMode ±Rotation /Alignment FillColor LineColor LineWidth

Separate the arguments with one or more spaces; the arguments can wrap to the next line. You must type a slash before the Font, FillMode, and Alignment arguments, with no space between the slash and the argument.

### String

The String argument specifies the text you want to print. You must include the parentheses.

### Font

The Font argument specifies the font for the text. For LaserWriter fonts, choose one of the following:

|                    |                        |         |
|--------------------|------------------------|---------|
| /Times-Roman       | /Helvetica-Bold        | /Symbol |
| /Times-Italic      | /Helvetica-BoldOblique |         |
| /Times-Bold        | /Courier               |         |
| /Times-BoldItalic  | /Courier-Bold          |         |
| /Helvetica         | /Courier-Oblique       |         |
| /Helvetica-Oblique | /Courier-BoldOblique   |         |

For LaserWriter Plus fonts or other PostScript fonts, type the official PostScript font name after the slash.

The following are samples of LaserWriter fonts.

NEWSLETTER

Times-Roman

NEWSLETTER

Helvetica

NEWSLETTER

Times-Bold

NEWSLETTER

Helvetica-Oblique

NEWSLETTER

Courier

πΣΩιβ

Symbol

## FillMode

The FillMode argument specifies which dimension of the text column to use when scaling the text.

### This argument:

/W

/H

/B

/E

### Scales the text to match the column's:

Width

Height

Width *and* height

Width *or* height, without distorting the font's aspect ratio

/W (width)



NEWSLETTER

/H (height)



NEWSLETTER

/B (both width and height)



NEWSLETTER

/E (either width or height)



NEWSLETTER



ABC

## Rotation

The Rotation argument specifies the number of degrees, in the range  $-180$  to  $+180$  degrees, to rotate the text. A positive value rotates the text counterclockwise; a negative value rotates it clockwise. The text rotates around its alignment point, specified with the Alignment argument. (See “Alignment” on page 6.)

In the following examples, the alignment point is at the lower left, so the text rotates around the lower-left corner of the text column.

Rotation = 0 degrees

The word "NEWSLETTER" is displayed horizontally in a bold, serif font. It is positioned above a rectangular box that serves as its alignment point.

Rotation = +180 degrees

The word "NEWSLETTER" is rotated 180 degrees, appearing upside down and mirrored. It is positioned above a rectangular box that serves as its alignment point.

Rotation =  $-90$  degrees

The word "NEWSLETTER" is rotated 90 degrees clockwise, appearing vertically. It is positioned to the right of a rectangular box that serves as its alignment point.

Rotation =  $+90$  degrees

The word "NEWSLETTER" is rotated 90 degrees counter-clockwise, appearing vertically. It is positioned to the left of a rectangular box that serves as its alignment point.

Rotation =  $-45$  degrees

The word "NEWSLETTER" is rotated 45 degrees clockwise. It is positioned above and to the right of a rectangular box that serves as its alignment point.

Rotation =  $+45$  degrees

The word "NEWSLETTER" is rotated 45 degrees counter-clockwise. It is positioned above and to the left of a rectangular box that serves as its alignment point.

## Alignment

The Alignment argument specifies where the text appears in relation to the text column. You can align the text's lower-left edge with a corner of the text column, or you can center the text within the column.

### This argument:

/LL

/LR

/UL

/UR

/CE

### Aligns the text with the column's:

Lower-left corner

Lower-right corner

Upper-left corner

Upper-right corner

Center

To center the text on a page, use /CE to center the text in the column; then use the Align command on the Graphics menu to center the text column on the page.

/LL (lower-left alignment)



NEWSLETTER

/LR (lower-right alignment)



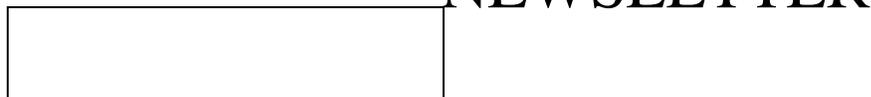
NEWSLETTER

NEWSLETTER

/UL (upper-left alignment)



/UR (upper-right alignment)



NEWSLETTER

/CE (centered alignment)



NEWSLETTER

## FillColor and LineColor

The FillColor argument specifies the color of the inside of the text; the LineColor argument specifies the color of the text's outline.

Both arguments are specified with up to three numbers indicating the color's red, green, and blue components. Use numbers between 0 (dim) and 1 (bright). Separate the numbers with a space and enclose them in square brackets. (For some common color values, see "Color Values" on page 9.)

To specify a gray-scale fill or outline, you can use a single number without the brackets. For example, for a 80 percent gray fill, specify FillColor as .20 (20 percent of all three components). This is the same as specifying FillColor as [.20 .20 .20].

To create text without a fill or outline, use brackets without any numbers; that is, for text without an outline, specify LineColor as [ ].

### This argument:

0

.30

[ 1 0 0 ]

[ .5 0 .5 ]

1

### Prints as:

Black

70% gray

Red (100% red, 0% green, 0% blue)

50% magenta (50% of red and blue)

White

NEWSLETTER

FillColor = 0

LineColor = [ ]

NEWSLETTER

FillColor = .75

LineColor = [ 0 0 1 ]

NEWSLETTER

FillColor = [ .25 .25 0 ]

LineColor = [ 1 0 0 ]

NEWSLETTER

FillColor = [ 1 0 1 ]

LineColor = [ 0 1 0 ]

NEWSLETTER

FillColor = 1

LineColor = 0

NEWSLETTER

FillColor = [ ]

LineColor = 0

## LineWidth

The LineWidth argument specifies the width, in points, of the text's outline.

If you use a width of less than .001 points, you probably won't be able to see the outline when you print. If you use a width of greater than 3 points, the text will probably appear filled in. You can, however, use a thick outline and a white fill to create hollow text with a thick border.

You can also print the outline on top of the fill by specifying a negative width. (The absolute value of the argument is used as the line width.)



LineWidth = .5 (no fill)



LineWidth = 1.0 (no fill)



LineWidth = -2.0 (green fill, outline on top)



LineWidth = 2.0 (green fill, outline on bottom)



LineWidth = 3.0 (no fill)



LineWidth = 9.0 (white fill, outline on bottom)

## Color Values

Table 1 lists a few colors and their red, green, and blue components. To create text in one of these colors, use the three values listed in this table in the FillColor and LineColor arguments.

Depending on your window system, you can find additional color values online.

**For this window system:**                      **Look in this location:**

X Window    /usr/lib/X11/rgb.txt

OpenWindows                                        /usr/openwin/lib/rgb.txt

You must convert the numbers in `rgb.txt` to a format that `BigRGB.ps` uses. To do so, divide the numbers by 255, to obtain red, green, and blue values between 0 and 1.

**Table 1: Common Color Values**

| Color Name   | Red Value  | Green Value | Blue Value |
|--------------|------------|-------------|------------|
| White        | 1.00000000 | 1.00000000  | 1.00000000 |
| Red          | 1.00000000 | 0.00000000  | 0.00000000 |
| Green        | 0.00000000 | 1.00000000  | 0.00000000 |
| Blue         | 0.00000000 | 0.00000000  | 1.00000000 |
| Cyan         | 0.00000000 | 1.00000000  | 1.00000000 |
| Magenta      | 1.00000000 | 0.00000000  | 1.00000000 |
| Yellow       | 1.00000000 | 1.00000000  | 0.00000000 |
| Black        | 0.00000000 | 0.00000000  | 0.00000000 |
| Ivory        | 1.00000000 | 1.00000000  | 0.94117647 |
| Lavender     | 0.90196078 | 0.90196078  | 0.98039216 |
| Gray         | 0.75294118 | 0.75294118  | 0.75294118 |
| Royal blue   | 0.25490196 | 0.41176471  | 0.88235294 |
| Turquoise    | 0.25098039 | 0.87843137  | 0.81568627 |
| Aquamarine   | 0.49803922 | 1.00000000  | 0.83137255 |
| Forest green | 0.13333333 | 0.54509804  | 0.13333333 |
| Gold         | 1.00000000 | 0.84313725  | 0.00000000 |
| Beige        | 0.96078431 | 0.96078431  | 0.86274510 |
| Tan          | 0.82352941 | 0.70588235  | 0.54901961 |
| Brown        | 0.64705882 | 0.16470588  | 0.16470588 |

**Table 1: Common Color Values**

| Color Name | Red Value  | Green Value | Blue Value |
|------------|------------|-------------|------------|
| Orange     | 1.00000000 | 0.64705882  | 0.00000000 |
| Coral      | 1.00000000 | 0.49803922  | 0.31372549 |
| Pink       | 1.00000000 | 0.75294118  | 0.79607843 |
| Maroon     | 0.69019608 | 0.18823529  | 0.37647059 |
| Violet     | 0.93333333 | 0.50980392  | 0.93333333 |
| Purple     | 0.62745098 | 0.12549020  | 0.94117647 |