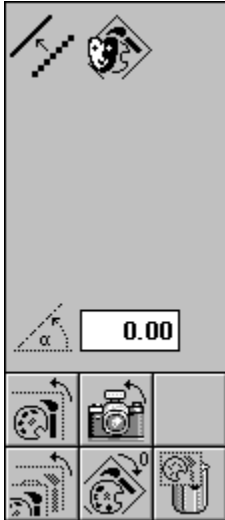# Contents

For Help on Help, Press F1

Rotation Module

The Rotate Frame function in the Frame module will rotate raster graphic frames but only in 90 degree increments. The Rotation module, on the other hand, is designed to provide precise rotation of raster graphics, to any degree.

Moiré effects are minimized when rotating raster graphics with the Rotation module. This module also contains an option to reduce aliasing or jaggies caused by such rotations. There is also a masking function in the Rotation module.
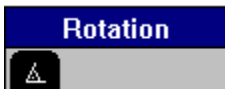
The Rotation module will load when Calamus is launched if it has been saved in the CALAMUS.SET file. If it does not load, select Modules from the File menu. When the Modules dialog box appears, load ROTATE.CXM. The Rotation module icon will appear in the Module Row.

To save the Rotation module in the system setup file, click Save System Setup from the Options menu. As with all modules, the Rotation module can be deleted when not in use.

Rotate Graphic Command Group

Rotate Graphic Command Group

Functions:
AntiAliasing
Create Mask
Rotation Angle
Rotate Image
Copy and Rotate Image
Rotate Image and Cut Original Image
Paste Original Image
Delete Saved Image

This command group contains a number of functions to produce clean rotations of raster graphic frames. The icons at the top are AntiAliasing and Create Mask. You may have these icons on or off while rotating images.

The icons at the bottom of the command group provide options for rotating an original frame or a copy of it. As you become more familiar with the effects, you will select the option that best suits your needs.

AntiAliasing

Click this icon before rotating a frame and its contents will be smoothly rotated. AntiAliasing corrects the steplike effect which is created along straight lines during the rotation of a frame's contents. As the icon illustrates, jagged edges are smoothed during the rotation process. The AntiAliasing option is only for monochrome   images.

Create Mask

When a raster graphic is rotated, its edge can take on a steplike appearance due to the transposition of pixels. If you apply a masking technique, the edges are smoothed significantly since the mask uses a vectorization process to stamp out a masked image.

When using the Create Mask function, it is recommended that you first optimize the graphic; see Raster Graphic Special Functions in the Frame Module, chapter 5. Calamus alters the graphic's pixel data to recompute and refresh the rotated image. The frame created is a special type of group frame that cannot be ungrouped. You may, however, use the Mask module to remove the mask from the rotated frame.

It is not possible to reverse a rotation when using this function because the graphic's data has been changed. You may use Copy and Rotate Image to retain the original image.

Rotation Angle

Click the Rotation Angle input field and enter the desired degree of rotation.

Rotate Image

This function will rotate an original raster graphic; a new frame will be created at the selected angle. Select the raster graphic frame to be rotated and click the Rotate Image icon. Depending on the size and complexity of the original graphic, and the speed of your computer, it may take several minutes to generate the rotated image. To abort rotation, press [Ctrl][Shift][Alt].

When the calculation is complete, a new raster graphic frame will appear on your screen. You will notice that the frame border has been enlarged to handle the diagonal dimensions of the rotated graphic.

You cannot reverse the rotation when you use the Rotate Image function. If you are unsure about the degree of rotation, use one of the next two functions.

Copy and Rotate Image

This function will copy a raster graphic frame and then rotate the copy while leaving the original unaffected. As with Rotate Image, it takes time to calculate and draw the new image. When it appears, you will see two overlapping   frames - the original and the larger, rotated copy.

You can select the original frame and use the Copy and Rotate Image function to create another rotated frame at a different angle. You can also use the original raster graphic frame, or another rotated copy, elsewhere in your document.

Rotate Image and Cut Original Image

Unlike the Rotate Image function, this function saves the original pixel data so that you can return a rotated image to its original angle by clicking the Paste Original Image icon. However, unlike the Copy and Rotate Image function, only the rotated raster graphic frame will be displayed. If you wish to change the rotation angle, you have to use Paste Original Image and repeat the rotation.

If the Create Mask function has been activated, the Paste Original Image function will not return the image to the original angle.

Paste Original Image

This function will return a rotated image to its original angle. It will only do so if you have used the Rotate Image and Cut Original Image function to do the rotation. Calamus will delete the rotated frame and use the data saved from the original graphic to refresh it.

Select the rotated raster graphic frame and then click this icon. The original image will be refreshed inside the rotated frame. If necessary, use the Optimize functions in the Frame module to restore height and width proportion.

Delete Saved Image

When you use the Rotate Image and Cut Original Image function, the data of the original image is saved in memory. If you are satisfied with the rotated graphic, you can delete the data. However, the Paste Original Image function will not work after you have clicked this icon.