

COINC - Subprogram—Coincidence

COINC

Format

Two sprites

CALL COINC(#sprite-number1,#sprite-number2,tolerance,numeric-variable)

A Sprite and a screen pixel

CALL COINC(#sprite-number,pixelrow,pixelcol,tolerance,numeric-variable)

All Sprites

CALL COINC(ALL,numeric-variable)

CALL COINC(ALL,numeric-variable,pixelrow,pixelcol)

Cross Reference

SPRITE

Description

The COINC subprogram enables you to ascertain if sprites are coincident (in conjunction) with each other or with a specified screen pixel.

The exact conditions that constitute a coincidence vary depending on whether you are testing for the coincidence of two sprites, a sprite and a screen pixel, or all sprites.

If the sprites are moving very quickly, coinc may occasionally fail to detect a coincidence.

Two Sprites

Two sprites are considered to be coincident if the upper-left of the sprites are within a specified number of pixels (tolerance) of each other.

The values of the numeric-expression sprite-number1 and sprite-number2 specify the numbers of the two sprites as assigned in the SPRITE subprogram.

A coincidence exists if the distance between the pixels in the upper-left corners of the two sprites is less than equal to the value of the numeric-expression tolerance.

The distance between two pixels is said to be within tolerance if the difference between pixelrows and the difference between pixelcols are both less than or equal to the specified tolerance. Note that this is not the same as the distance indicated by the DISTANCE subprogram.

COINC returns a value in the numeric-variable indicating whether or not the specified coincidence exists. The value is -1 if there is a coincidence or 0 if there is no coincidence.

A Sprite and a Screen Pixel

A sprite is considered to be coincident with a screen pixel if the upper-left corner of the sprite is within a specified number of pixels (tolerance) of the screen pixel or if any pixel in the sprite occupies the screen pixel location.