

Graphical Commands

Instructions and functions to draw graphics in AOZ screens

Cls To INK, X1, Y2, X2, Y2

Clear an area of the current screen

Parameters:

- INK: The index of the color in the palette to clear with
- X1: The horizontal coordinate of the top-left pixel of the rectangle to clear
- Y2: The vertical coordinate of the top-left pixel of the rectangle to clear
- X2: The horizontal coordinate of the bottom-right pixel of the rectangle to clear
- Y2: The vertical coordinate of the bottom-right pixel of the rectangle to clear

Cls INK, X, Y, WIDTH, HEIGHT

Clear an area of the current screen

Parameters:

- INK: The index of the color in the palette to clear with (optional, if not specified will use the current INK index)
- X: The horizontal coordinate of the top-left pixel of the rectangle to clear
- Y: The vertical coordinate of the top-left pixel of the rectangle to clear
- WIDTH: The width in pixels of the rectangle to clear
- HEIGHT: The height in pixels of the rectangle to clear

Cls INK

Clear the current screen

Parameters:

- INK: The index of the color in the palette to clear with (optional, if not specified will use the current INK index)

Plot X, Y, INK

Draw a pixel in the current screen

Parameters:

- X: The horizontal coordinate of the point to draw
- Y: The vertical coordinate of the point to draw
- INK: The index of the color in the screen palette (optional, will use the latest Ink value if omitted)

Point X, Y

Return the palette index of a point within the current screen (warning: may return wrong result in PC mode due to anti-aliasing)

Parameters:

- X: The horizontal coordinate of the point to test
- Y: The vertical coordinate of the point to test

Value returned:

- INDEX: integer: The index of the color in the screen palette

Draw To X, Y

Draw a line with the current Ink from the last graphical position

Parameters:

- X: The horizontal coordinate of the point to test
- Y: The vertical coordinate of the point to test

Draw ... To ... X1, Y1, X2, Y2

Draw a line with the current Ink between two points in the current screen

Parameters:

X1: The horizontal coordinate of the first point

Y1: The vertical coordinate of the first point

X2: The horizontal coordinate of the second point

Y2: The vertical coordinate of the second point

Draw X, Y, WIDTH, HEIGHT

Draw a line with the current Ink from the top-left to bottom-right corners of an area in the current screen

Parameters:

X: The horizontal coordinate of the first point

Y: The vertical coordinate of the first point

WIDTH: The width of the area in pixels

HEIGHT: The height of the area in pixels

Ellipse X, Y, XRADIUS, YRADIUS

Draw an ellipse with the current Ink in the current screen

Parameters:

X: The horizontal coordinate of the centre of the ellipse

Y: The vertical coordinate of the centre of the ellipse

XRADIUS: The horizontal radius in pixels

YRADIUS: The vertical radius in pixels

Circle X, Y, RADIUS

Draw a circle with the current Ink in the current screen

Parameters:

X: The horizontal coordinate of the centre of the circle

Y: The vertical coordinate of the centre of the circle

RADIUS: The radius of the circle in pixels

Bar ... To ... X1, Y1, X2, Y2

Draw a filled rectangle with the current Ink, Pattern in the current screen

Parameters:

X1: The horizontal coordinate of the top-left corner of the rectangle

Y1: The vertical coordinate of the top-left corner of the rectangle

X2: The horizontal coordinate of the bottom-right corner of the rectangle

Y2: The vertical coordinate of the bottom-right corner of the rectangle

Bar X, Y, WIDTH, HEIGHT

Draw a filled rectangle with the current Ink, Pattern in the current screen

Parameters:

X: The horizontal coordinate of the top-left corner of the rectangle

Y: The vertical coordinate of the top-left corner of the rectangle

WIDTH: The width of the rectangle to draw in pixels

HEIGHT: The height of the rectangle to draw in pixels

Box ... To ... X1, Y1, X2, Y2

Draw an empty rectangle with the current Ink, Line width and Line Pattern in the current screen

Parameters:

X1: The horizontal coordinate of the top-left corner of the rectangle

Y1: The vertical coordinate of the top-left corner of the rectangle

X2: The horizontal coordinate of the bottom-right corner of the rectangle

Y2: The vertical coordinate of the bottom-right corner of the rectangle

Box X, Y, WIDTH, HEIGHT

Draw an empty rectangle with the current Ink, Line width and Line Pattern in the current screen

Parameters:

X: The horizontal coordinate of the top-left corner of the rectangle

Y: The vertical coordinate of the top-left corner of the rectangle

WIDTH: The width of the rectangle to draw in pixels

HEIGHT: The height of the rectangle to draw in pixels

Paint X, Y, COLOUR

TODO! Performs a flood-paint of a closed area in the current screen

Parameters:

X: The horizontal coordinate where to start the paint process

Y: The horizontal coordinate where to start the paint process

COLOUR: The index in the palette of the screen of the color to use (optional, will use the current Ink index if omitted)

Polyline ... To ... X1, Y1, X2, Y2, X3, Y2

Draw a closed empty shape using the current Ink and line parameters for the outline and the current fill parameters for the inside. The last point is joined to the first point of the list

Parameters:

X1: Horizontal coordinate of the first point

Y1: Vertical coordinate of the first point

X2: Horizontal coordinate of the second point

Y2: Vertical coordinate of the second point

X3: Horizontal coordinate of the third point, etc.

Y2: Vertical coordinate of the third point, etc.

Polyline X1, Y1, WIDTH1, HEIGHT1, WIDTH2, HEIGHT2

Draw a closed empty shape using the current Ink and line parameters for the outline and the current fill parameters for the inside. The last point is joined to the first point of the list

Parameters:

X1: Horizontal coordinate of the first point

Y1: Vertical coordinate of the first point

WIDTH1: Horizontal signed displacement from the first point to the second

HEIGHT1: Vertical signed displacement from the first point to the second

WIDTH2: Horizontal displacement from the second point to the third, etc.

HEIGHT2: Vertical displacement from the second point to the third, etc.

Polygon ... To ... X1, Y1, X2, Y2, X3, Y2

Draw a closed empty shape using the current Ink and line parameters for the outline and the current fill parameters for the inside. The last point is joined to the first point of the list

Parameters:

X1: Horizontal coordinate of the first point

Y1: Vertical coordinate of the first point

X2: Horizontal coordinate of the second point

Y2: Vertical coordinate of the second point

X3: Horizontal coordinate of the third point, etc.

Y2: Vertical coordinate of the third point, etc.

Polygon X1, Y1, WIDTH1, HEIGHT1, WIDTH2, HEIGHT2

Draw a closed empty shape using the current Ink and line parameters for the outline and the current fill parameters for the inside. The last point is joined to the first point of the list

Parameters:

X1: Horizontal coordinate of the first point

Y1: Vertical coordinate of the first point

WIDTH1: Horizontal signed displacement from the first point to the second

HEIGHT1: Vertical signed displacement from the first point to the second

WIDTH2: Horizontal displacement from the second point to the third, etc.

HEIGHT2: Vertical displacement from the second point to the third, etc.

Gr Locate X, Y

Position the graphical cursor in the current screen. Next instructions like "Draw To" (or any graphical instruction where the X and Y coordinates are omitted) will start from this position

Parameters:

X: The horizontal coordinate in pixels

Y: The horizontal coordinate in pixels

Text Length TEST\$

Calculate the width in pixels of a string when draw in the current screen with the current selected font and font size

Parameters:

TEST\$: The text to evaluate the width from

Value returned:

integer: The width in pixels of the text on screen using the current font and font-size

Text Base

Return the position of the base line of a graphical text displayed on the current screen with the current font attributes name and size

Value returned:

integer: The position of the base line of the text calculated from the top of the characters

Text X, Y, TEXT\$, TAGS\$

Draw a graphical text on the current screen using the current font and font size

Parameters:

X: The horizontal position of the text in pixels

Y: The vertical position of the text in pixels

TEXT\$: The text to draw

TAGS\$: A string containing tags facilitating the display of the text. Tags can be any logical combination of the following tags and have the same meaning as their Javascript equivalents: '#left', '#center', '#right', '#start' or '#end' for horizontal alignment, '#top', '#hanging', '#middle', '#alphabetic', '#ideographic' or '#bottom' for vertical alignment, '#ltr', '#rtl' or '#inherit' for drawing direction

Set Paint ONOFF

Set the painting mode for filled drawing forms like "Polygon" and "Bar"

Parameters:

ONOFF: True to fill the area with the current paint pattern and inks, False to leave them empty and only draw the borders

Set Pattern PATTERN

Set the filled area painting pattern

Parameters:

PATTERN: If positive, a number from 0 to 34 indicate the default pattern to use, if negative, the inverse value

represents the index of an image in the Images bank to use as drawing pattern

Set Line PATTERN

Set the pattern of the future lines drawn by the "Draw", "Draw To", "Box" etc. instructions

Parameters:

PATTERN: A binary mask of bits where each bit set to one will be visible and invisible if zero, repeated along the line

Ink INDEX, PATTERN, NUMBER

Set the index of the colour from the palette of the current screen to use in all future graphical operations

Parameters:

INDEX: The index of the colour in the palette to use

PATTERN: An optional pattern to use

NUMBER: TODO! find what this parameter is cannot remember and AMOS manual is confusing

Gr Writing STYLE

Set all graphical operations drawing mode. Warning work in progress incomplete support TODO!

Parameters:

STYLE: A set of bits indicating the process. Bit 0 = 0 only draw graphics using the current ink colour, Bit 0 = 1 replace any existing graphics with new graphics (default condition), Bit 1 = 1 change old graphics that overlap with new graphics, using XOR, Bit 2 = 1 reverse ink and paper colours, creating inverse video effect

Clip ... To ... X1, Y1, X2, Y2

Clip all further graphical operations in the current screen to a rectangle

Parameters:

X1: The horizontal coordinate of the top-left corner of the clipping rectangle

Y1: The vertical coordinate of the top-left corner of the clipping rectangle

X2: The horizontal coordinate of the bottom-right corner of the clipping rectangle

Y2: The vertical coordinate of the bottom-right corner of the clipping rectangle

Clip X, Y, WIDTH, HEIGHT

Clip all further graphical operations in the current screen to a rectangle

Parameters:

X: The horizontal coordinate of the top-left corner of the clipping rectangle

Y: The vertical coordinate of the top-left corner of the clipping rectangle

WIDTH: The width of the clipping rectangle

HEIGHT: The height of the clipping rectangle

Clip

Removes the clipping rectangle and allow drawing on the whole surface of the screen

Set Tempas. (deprecated, has no effect)