

# **Bob Commands**

Instructions and functions to display moveable objects inside AOZ screens (Bitmap Objects)

## **Bob INDEX, IMAGE**

Changes the image of a bob

*Parameters:*

INDEX: Index of the bob in the list of bobs of the screen

IMAGE: Index of the image in the "Images" bank

## **Bob INDEX, IMAGE\$**

Changes the image of a bob

*Parameters:*

INDEX: Index of the bob in the list of bobs of the screen

IMAGE\$: Name of the image in the "Images" bank

## **Bob INDEX, X, Y, IMAGE**

Creates or sets the position of a bob

*Parameters:*

INDEX: Index of the bob to create or modify

X: Horizontal position of the bob in the screen

Y: Vertical position of the bob in the screen

IMAGE: index of the image in the "Images" bank

## **Bob INDEX, X, Y, IMAGE\$**

Creates or sets the position of a bob

*Parameters:*

INDEX: Index of the bob to create or modify

X: Horizontal position of the bob in the screen

Y: Vertical position of the bob in the screen

IMAGE\$: Name of the image in the "Images" bank

## **Bob Off INDEX**

Destroys all or one bob

*Parameters:*

INDEX: Index of the bob to destroy. If absent, will destroy all the bobs in the current screen

## **Bob Update Off**

Turns off the automatic bob coordinate update system. After it, all "Bob" instruction will no longer have a visible effect until an "Bob Update" instruction is used

## **Bob Update On**

Turns on the automatic bob coordinate update system. After it, the effect of all "Bob" instructions will be visible on display

## **Bob Clear**

This AMOS-compatible instruction has no other effect in AOZ than to call "Bob Update"

## **Bob Draw**

This AMOS-compatible instruction has no effect in AOZ

### **Limit Bob**

Turns off all previous Limit bob instructions

### **Limit Bob X1, Y1, X2, Y2**

Clip the display of all bobs to a limited area in the current screen

*Parameters:*

X1: Horizontal coordinate of the top-left corner of the bounding box

Y1: Vertical coordinate of the top-left corner of the bounding box

X2: Horizontal coordinate of the bottom-right corner of the bounding box

Y2: Vertical coordinate of the bottom-right corner of the bounding box

### **Limit Bob INDEX, X1, Y1, X2, Y2**

Clip the display of a specific bob to a limited area in the current screen

*Parameters:*

INDEX: Index of the bob to clip in the list of active bobs

X1: Horizontal coordinate of the top-left corner of the bounding box

Y1: Vertical coordinate of the top-left corner of the bounding box

X2: Horizontal coordinate of the bottom-right corner of the bounding box

Y2: Vertical coordinate of the bottom-right corner of the bounding box

### **Limit Bob X, Y, WIDTH, HEIGHT**

Clip the display of all bobs to a limited area in the current screen

*Parameters:*

X: Horizontal coordinate of the left of the bounding box

Y: Vertical coordinate of the top of the bounding box

WIDTH: Width of the bounding box

HEIGHT: Height of the bounding box

### **Limit Bob INDEX, X, Y, WIDTH, HEIGHT**

Clip the display of a specific bob to a limited area in the current screen

*Parameters:*

INDEX: Index of the bob to clip in the list of active bobs

X: Horizontal coordinate of the left of the bounding box

Y: Vertical coordinate of the top of the bounding box

WIDTH: Width of the bounding box

HEIGHT: Height of the bounding box

### **Bob Alpha INDEX, ALPHA#**

Set the transparency of a bob, also called "Alpha"

*Parameters:*

INDEX: Index of the bob in the list of active bobs

ALPHA#: Value of Alpha, from 0 (fully opaque) to 1 (fully transparent)

### **Bob Show INDEX**

Make a bob visible on screen

*Parameters:*

INDEX: Index of the bob in the list of active bobs

### **Bob Hide INDEX**

Make a bob invisible

*Parameters:*

INDEX: Index of the bob in the list of active bobs

### **Bob Scale INDEX, SCALEX#, SCALEY#**

Changes the scale (zoom) of a bob

*Parameters:*

INDEX: Index of the bob in the list of active bobs

SCALEX#: Horizontal scale, 1 displays the bob at original size, 0.5 reduces it by half, 2 multiplies by two etc. Negative values will mirror the bob horizontally

SCALEY#: Vertical scale, 1 displays the bob at original size, 0.5 reduces it by half, 2 multiplies by two etc. Negative values will mirror the bob vertically

### **Bob Rotate INDEX, ANGLE#**

Rotates a bob around it's hot-spot

*Parameters:*

INDEX: Index of the bob in the list of active bobs

ANGLE#: Angle to rotate with, either in degrees or radian depending on the use of the "Degree" or "Radian" instruction. AOZ use radians by default

### **Bob Skew INDEX, SKEWX#**

Distorts a bob horizontally or vertically

*Parameters:*

INDEX: Index of the bob in the list of active bobs

SKEWX#: Horizontal skew, values should be experimented. 1 displays the bob in original proportions

### **Put Bob INDEX**

Draws the bob in in the current screen as a stamp, at its current position with it's current scale, rotation and skew

*Parameters:*

INDEX: Index of the bob in the list of active bobs

### **Put Bob X, Y, IMAGE, SCALEX#, SCALEY#, ANGLE#**

Draws an image from the image bank in the current screen

*Parameters:*

X: Horizontal coordinate of the paste

Y: vertical coordinate of the paste

IMAGE: Index of the image in the "Images" bank

SCALEX#: Horizontal scaling, identical to the bob Scale parameter

SCALEY#: Vertical scaling, identical to the bob Scale parameter

ANGLE#: Angle of rotation of the image around it's hot-spot

### **Priority On**

Turns on automatic sorting of the Z-order of the bobs in the current screen

### **Priority Off**

Turns off automatic sorting of the Z-order of the bobs in the current screen

### **X Bob**

Returns the horizontal coordinate of the bob

*Value returned:*

integer: Horizontal coordinate

## **Y Bob**

Returns vertical coordinate of the bob

*Value returned:*

integer: Vertical coordinate

## **I Bob**

Returns the index of the current image displayed by the bob

*Value returned:*

integer: Index of the image in the "image" bank

## **I Bob\$**

TODO! Returns the name of the current image displayed by the bob

*Value returned:*

integer: Index of the image in the "image" bank

## **Priority Reverse On**

Inverts the Z-Order of the bobs in the current screen if Priority is activated. After this instruction, bobs with the highest Y coordinate will be displayed in the back of others

## **Priority Reverse Off**

Stops the inversion of the Z-Order of the bobs in the current screen if Priority is activated. After this instruction, bobs with the lowest Y coordinate will be displayed in the back of others

## **IsBob**

Checks if a bob is defined without generating an error

*Value returned:*

boolean: true if the bob exists, false if not.

## **Get Bob ... To ... BOBINDEX, X1, Y1, X2, Y2, TAGS\$**

Captures a portion of the current screen, create a transparency mask out of true black (RGB #000000) and add the image to the Images bank. (Deprecated, use "Get Image")

*Parameters:*

BOBINDEX: Index of the image to insert in the Images bank

X1: Horizontal coordinate of the top-left corner of the capture area

Y1: Vertical coordinate of the top-left corner of the capture area

X2: Horizontal coordinate of the bottom-right corner of the capture area

Y2: Vertical coordinate of the bottom-right corner of the capture area

TAGS\$: Unused for the moment

## **Get Boob ... To ... SCREENINDEX, BOBINDEX, X1, Y1, X2, Y2, TAGS\$**

Captures a portion of the given screen, create a transparency mask out of true black (RGB #000000) and add the image to the Images bank. (Deprecated, use "Get Image")

*Parameters:*

SCREENINDEX: Index of the screen to capture from

BOBINDEX: Index of the image to insert in the Images bank

X1: Horizontal coordinate of the top-left corner of the capture area

Y1: Vertical coordinate of the top-left corner of the capture area

X2: Horizontal coordinate of the bottom-right corner of the capture area

Y2: Vertical coordinate of the bottom-right corner of the capture area

TAGS\$: Unused for the moment

**Get Bob BOBINDEX, X, Y, WIDTH, HEIGHT, TAGS\$**

Captures a portion of the current screen, create a transparency mask out of true black (RGB #000000) and add the image to the Images bank. (Deprecated, use "Get Image")

*Parameters:*

- BOBINDEX: Index of the image to insert in the Images bank
- X: The horizontal coordinate of the top-left pixel of the capture rectangle
- Y: The vertical coordinate of the top-left pixel of the capture rectangle
- WIDTH: The width of the capture rectangle
- HEIGHT: The height of the capture rectangle
- TAGS\$: Unused for the moment

**Get Bob SCREENNUMBER, BOBINDEX, X, Y, WIDTH, HEIGHT, TAGS\$**

Captures a portion of the given screen, create a transparency mask out of true black (RGB #000000) and add the image to the Images bank. (Deprecated, use "Get Image")

*Parameters:*

- SCREENNUMBER: Index of the screen to capture from
- BOBINDEX: Index of the image to insert in the Images bank
- X: The horizontal coordinate of the top-left pixel of the capture rectangle
- Y: The vertical coordinate of the top-left pixel of the capture rectangle
- WIDTH: The width of the capture rectangle
- HEIGHT: The height of the capture rectangle
- TAGS\$: Unused for the moment

**Get Bob Palette MASK**

Copy the colour palette from the Images bank to the current screen. (Deprecated, use "Get Images Palette")

*Parameters:*

- MASK: Mask of bits where each bit set to one represent a colour to capture and 0 a colour to ignore, up to 32 (optional)