## NAME

mouse_x, mouse_y, mouse_z, mouse_w, mouse_b, mouse_pos − Global variable with the mouse position/button state. Allegro game programming library.

## SYNOPSIS

**#include <allegro.h>**

**extern volatile int mouse_x;**

**extern volatile int mouse_y;**

**extern volatile int mouse_z;**

**extern volatile int mouse_w;**

**extern volatile int mouse_b;**

**extern volatile int mouse_pos;**

## DESCRIPTION

Global variables containing the current mouse position and button state. Wherever possible these values will be updated asynchronously, but if mouse_needs_poll() returns TRUE, you must manually call poll_mouse() to update them with the current input state. The ‘mouse_x’ and ‘mouse_y’ positions are integers ranging from zero to the bottom right corner of the screen. The ‘mouse_z’ and ‘mouse_w’ variables hold the current vertical and horizontal wheel position, when using an input driver that supports wheel mice. The ‘mouse_b’ variable is a bitfield indicating the state of each button: bit 0 is the left button, bit 1 the right, and bit 2 the middle button. Additional non standard mouse buttons might be available as higher bits in this variable. Usage example:

```
if (mouse_b & 1)
  printf("Left button is pressed\n");

if (!(mouse_b & 2))
  printf("Right button is not pressed\n");
```

The ‘mouse_pos’ variable has the current X coordinate in the upper 16 bits and the Y in the lower 16 bits. This may be useful in tight polling loops where a mouse interrupt could occur between your reading of the two separate variables, since you can copy this value into a local variable with a single instruction and then split it up at your leisure. Example:

```
int pos, x, y;

pos = mouse_pos;
x = pos >> 16;
y = pos & 0x0000ffff;
```

## SEE ALSO

**install_mouse**(3alleg), **poll_mouse**(3alleg), **mouse_needs_poll**(3alleg), **exalpha**(3alleg), **exlights**(3alleg), **exmouse**(3alleg), **exshade**(3alleg), **exspline**(3alleg), **extrans**(3alleg)

