**NAME**

    XkbPtrActionX - Returns the high_XXX and low_XXX fields of act converted to a signed int

**SYNOPSIS**

    **int XkbPtrActionX (XkbPtrAction** *act***);**

**ARGUMENTS**

    *act*  action from which to extract X

**DESCRIPTION**

    Actions associated with the XkbPtrAction structure move the pointer when keys are pressed and released.

    If the MouseKeys control is not enabled, KeyPress and KeyRelease events are treated as though the action is XkbSA_NoAction.

    If the MouseKeys control is enabled, a server action of type XkbSA_MovePtr instructs the server to generate core pointer MotionNotify events rather than the usual KeyPress event, and the corresponding KeyRelease event disables any mouse keys timers that were created as a result of handling the XkbSA_MovePtr action.

    The *type* field of the XkbPtrAction structure is always XkbSA_MovePtr.

    The *flags* field is a bitwise inclusive OR of the masks shown in Table 1.

Table 1 Pointer Action
Types

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| Action Type | Meaning |
|---|---|
| XkbSA_NoAcceleration | If not set, and the MouseKeysAccel control is enabled, the KeyPress initiates a  mouse keys timer for this key; every time the timer expires, the cursor moves. |
| XkbSA_MoveAbsoluteX | If set, the X portion of the structure specifies the new pointer X coordinate.  Otherwise, the X portion is added to the current pointer X coordinate to  determine the new pointer X coordinate. |
| XkbSA_MoveAbsoluteY | If set, the Y portion of the structure specifies the new pointer Y coordinate.  Otherwise, the Y portion is added to the current |

pointer Y coordinate to  determine the new pointer Y coordinate.

Each of the X and Y coordinates of the XkbPtrAction structure is composed of two signed 16-bit values, that is, the X coordinate is composed of *high_XXX* and *low_XXX,* and similarly for the Y coordinate. Xkb provides the following macros, to convert between a signed integer and two signed 16-bit values in XkbPtrAction structures.

**STRUCTURES**

```
typedef struct _XkbPtrAction {
    unsigned char   type;        /* XkbSA_MovePtr */
    unsigned char   flags;       /* determines type of pointer motion */
    unsigned char   high_XXX;    /* x coordinate, high bits*/
    unsigned char   low_XXX;     /* y coordinate, low bits */
    unsigned char   high_YYY;    /* x coordinate, high bits */
    unsigned char   low_YYY;     /* y coordinate, low bits */
} XkbPtrAction;
```