NAME

 XkbActionSetCtrls − Sets the *ctrls0* through *ctrls3* fields of *act* from *ctrls*

SYNOPSIS

 void XkbActionSetCtrls (XkbCtrlsAction *act* **, unsigned int** *ctrls* **);**

ARGUMENTS

 act action in which to set ctrls0-ctrls3

 ctrls value to set in ctrls0-ctrls3

DESCRIPTION

 Actions associated with the XkbCtrlsAction structure change the state of the boolean controls.

 The *type* field can have any one of the values shown in Table 1.

Table 1 Controls Action Types

Type	Effect
XkbSA_SetControls	A key press enables any boolean controls specified in the ctrls fields that were not already enabled at the time of the key press. A key release disables any controls enabled by the key press. This action can cause XkbControlsNotify events.
XkbSA_LockControls	If the XkbSA_LockNoLock bit is not set in the flags field, a key press enables any controls specified in the ctrls fields that were not already enabled at the time of the key press.
	If the XkbSA_LockNoUnlock bit is not set in the flags field, a key release disables any controls specified in the ctrls fields that were not already disabled at the time of the key press.
	This action can cause XkbControlsNotify events.

 The *flags* field is composed of the bitwise inclusive OR of the masks shown in Table 2.

Table 2 Control Action Flags

Flag	Meaning
XkbSA_LockNoLock	If set, and the action type is XkbSA_LockControls, the server only disables controls.
XkbSA_LockNoUnlock	If set, and the action type is XkbSA_LockControls, the server only enables controls.

 The XkbSA_SetControls action implements a key that enables a boolean control when pressed and disables it when released. The XkbSA_LockControls action is used to implement a key that toggles the state of a boolean control each time it is pressed and released. The XkbSA_LockNoLock and XkbSA_LockNoUnlock flags allow modifying the toggling behavior to only unlock or only lock the boolean control.

 The *ctrls0, ctrls1, ctrls2,* and *ctrls3* fields represent the boolean controls in the *enabled_ctrls* field of the controls structure. Xkb macros, to convert between the two formats.

 XkbActionSetCtrls sets the *ctrls0* through *ctrls3* fields of *act* from *ctrls.*

STRUCTURES

```
    typedef struct _XkbCtrlsAction {
      unsigned char  type;   /* XkbSA_SetControls, XkbSA_LockControls */
      unsigned char  flags;  /* with type, controls enabling and disabling of controls */
      unsigned char  ctrls3; /* ctrls0 through ctrls3 represent the boolean controls */
      unsigned char  ctrls2; /* ctrls0 through ctrls3 represent the boolean controls */
```

```
        unsigned char    ctrls1;  /* ctrls0 through ctrls3 represent the boolean controls */
        unsigned char    ctrls0;  /* ctrls0 through ctrls3 represent the boolean controls */
    } XkbCtrlsAction;
```