XSetDeviceButtonMapping, XGetDeviceButtonMapping – query or change device button mappings

int XSetDeviceButtonMapping(display, device, map, nmap)
   Display *display;
   XDevice *device;
   unsigned char map[];
   int nmap;

int XGetDeviceButtonMapping(display, device, map_return, nmap)
   Display *display;
   XDevice *device;
   unsigned char map_return[];
   int nmap;

display Specifies the connection to the X server. device Specifies the device whose button mapping is to be queried or changed. map Specifies the mapping list. map_return Returns the mapping list. nmap Specifies the number of items in the mapping list.

The XSetDeviceButtonMapping request sets the mapping of the specified device. If it succeeds, the X server generates a DeviceMappingNotify event, and XSetDeviceButtonMapping returns MappingSuccess. Element map[i] defines the logical button number for the physical button i+1. The length of the list must be the same as XGetDeviceButtonMapping would return, or a BadValue error results. A zero element disables a button, and elements are not restricted in value by the number of physical buttons. However, no two elements can have the same nonzero value, or a BadValue error results. If any of the buttons to be altered are logically in the down state, XSetDeviceButtonMapping returns MappingBusy, and the mapping is not changed.

XSetDeviceButtonMapping can generate BadDevice, BadMatch, and BadValue errors.

The XGetDeviceButtonMapping request returns the current mapping of the specified device. Buttons are numbered starting from one. XGetDeviceButtonMapping returns the number of physical buttons actually on the device. The nominal mapping for a device is map[i]=i+1. The nmap argument specifies the length of the array where the device mapping is returned, and only the first nmap elements are returned in map_return.

XGetDeviceButtonMapping can generate BadDevice or BadMatch errors.

BadDevice An invalid device was specified. The specified device does not exist or has not been opened by this client via XOpenInputDevice. This error may also occur if the specified device is the X keyboard or X pointer device. BadMatch This error may occur if an XGetDeviceButtonMapping or XSetDeviceButtonMapping request was made specifying a device that has no buttons. BadValue Some numeric value falls outside the range of values accepted by the request. Unless a specific range is specified for an argument, the full range defined by the argument’s type is accepted. Any argument defined as a set of alternatives can generate this error.

XChangeDeviceKeyboardControl(3X),
XChangeDeviceKeyMapping(3X)
XChangeDeviceModifierMapping(3X)
Programming With Xlib