#### **NAME**

ums - USB mouse driver

### **SYNOPSIS**

To compile this driver into the kernel, place the following lines in your kernel configuration file:

device ums

device hid

device uhci

device ohci

device usb

Alternatively, to load the driver as a module at boot time, place the following line in loader.conf(5):

```
ums_load="YES"
```

### DESCRIPTION

The **ums** driver provides support for mice that attach to the USB port. Supported are mice with any number of buttons and mice with a wheel.

The /dev/ums0 device presents the mouse as a sysmouse or mousesystems type device. See moused(8) for an explanation of these mouse types.

# SYSCTL VARIABLES

The following variables are available as both sysctl(8) variables and loader(8) tunables:

hw.usb.ums.debug

Debug output level, where 0 is debugging disabled and larger values increase debug message verbosity. Default is 0.

### **FILES**

/dev/ums0 blocking device node

### **EXAMPLES**

Use the first USB mouse on the system as your console mouse:

```
moused -p /dev/ums0 -t auto
```

To be able to use the USB mouse under X, change the "Pointer" section in **xorg.conf** to the following:

Device /dev/ums0 Protocol Auto

If you want to be able to use the mouse in both virtual consoles as well as in X change it to:

Device /dev/sysmouse Protocol Auto

# **SEE ALSO**

ohci(4), sysmouse(4), uhci(4), usb(4), xorg.conf(5) (ports/x11/xorg), moused(8)

### **AUTHORS**

The **ums** driver was written by Lennart Augustsson < augustss@cs.chalmers.se> for NetBSD and was adopted for FreeBSD by MAEKAWA Masahide < bishop@rr.iij4u.or.jp>.

This manual page was written by Nick Hibma <*n\_hibma@FreeBSD.org*> with input from Kazutaka YOKOTA <*yokota@zodiac.mech.utsunomiya-u.ac.jp*>.