

NAME

snd_uaudio - USB audio and MIDI device driver

SYNOPSIS

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

```
device sound
device usb
device snd_uaudio
```

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

```
snd_uaudio_load="YES"
```

DESCRIPTION

The **snd_uaudio** driver provides support for USB audio class devices and USB MIDI class devices.

A USB audio device consists of a number of components: input terminals (e.g. USB digital input), output terminals (e.g. speakers), and a number of units in between (e.g. volume control).

Refer to the ‘USB Audio Class Specification’ for more information.

SEE ALSO

sound(4), usb(4)

USB Audio Class Specifications, http://www.usb.org/developers/docs/devclass_docs/.

HISTORY

The **snd_uaudio** driver first appeared in FreeBSD 4.7.

AUTHORS

This manual page was adopted from NetBSD 1.6 and modified for FreeBSD by Hiten Pandya <hmp@FreeBSD.org>.

BUGS

The PCM framework in FreeBSD only supports synchronous device detach. That means all mixer and DSP character devices belonging to a given USB audio device must be closed when receiving an error on a DSP read, a DSP write or a DSP IOCTL request. Else the USB audio driver will wait for this to happen, preventing enumeration of new devices on the parenting USB controller.

Some USB audio devices might refuse to work properly unless the sample rate is configured the same for both recording and playback, even if only simplex is used. See the *dev.pcm.%d.[play|rec].vchanrate* sysctls.

The PCM framework in FreeBSD currently doesn't support the full set of USB audio mixer controls. Some mixer controls are only available as *dev.pcm.%d.mixer* sysctls.