

**NAME**

**uaudio** — USB audio device driver

**SYNOPSIS**

**device pcm**

**device usb**

**DESCRIPTION**

The **uaudio** driver provides support for USB audio 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**

`pcm(4)`, `usb(4)`

*USB Audio Class Specifications*, [http://www.usb.org/developers/devclass\\_docs/](http://www.usb.org/developers/devclass_docs/).

**HISTORY**

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

**BUGS**

The PCM framework in FreeBSD, as of this writing, does not handle device un-registrations in a properly abstracted manner, i.e. a detach request is refused by the PCM framework if the device is in use. For USB and supposedly other detach-able busses, it is necessary to allow the device un-registration to complete successfully, otherwise the driver leaves wild pointers to invalid data structures and thus leading to a panic.