NAME
> **mixer** - manipulate soundcard mixer controls

SYNOPSIS
> **mixer** [**-f** *device*] [**-d** *unit*] [**-os**] [*dev*[**.***control*[=*value*]]] ...
> **mixer** [**-d** *unit*] [**-os**] **-a**
> **mixer -h**

DESCRIPTION
> The **mixer** utility is used to set and display soundcard mixer device controls.
>
> The options are as follows:
>
> **-a**   Print the values for all mixer devices available in the system (see *FILES*).
>
> **-d** *unit*   Change the default audio card to *unit*. The unit has to be an integer value. To see what unit values are available, look at the number each mixer device has by running **mixer**.
>
> **-f** *device* Open *device* as the mixer device (see *FILES*).
>
> **-h**   Print a help message.
>
> **-o**   Print mixer values in a format suitable for use inside scripts. The mixer's header (name, audio card name, ...) will not be printed.
>
> **-s**   Print only the recording source(s) of the mixer device.
>
> The list of mixer devices that may be modified are:
>
> > **vol**, **bass**, **treble**, **synth**, **pcm**, **speaker**, **line**, **mic**, **cd**, **mix**, **pcm2**, **rec**, **igain**, **ogain**, **line1**, **line2**, **line3**, **dig1**, **dig2**, **dig3**, **phin**, **phout**, **video**, **radio**, and **monitor**.
>
> Not all mixer devices are available.
>
> Without any arguments, **mixer** displays all information for each one of the mixer's supported devices to *stdout*. If the *dev* argument is specified, **mixer** displays only the values for *dev*. More than one device may be specified.
>
> Commands use the following format:

Name	Action
dev	Display all controls
dev.control	Display only the specified control
dev.control=*value*	Set control value

The available controls are as follows (replace *dev* with one of the available devices):

Name	Value
dev.**volume**	*vol*|[+|-]*lvol*[%][**:**[+|-]*rvol*[%]]
dev.**mute**	**0|1|^**
dev.**recsrc**	**^|+|-|=**

The *dev*.**volume** control modifies a device's volume. The optional *lvol* and/or *rvol* values have to be specified. The values should typically be decimal numbers between 0 and 1 with at most 2 digits after the decimal point. A trailing percent sign indicates that the value should be treated as a percentage of 1.0, rather than an absolute value. Thus, 70% means the same as 0.7. If the left or right volume values are prefixed with + or **-**, the value following will be used as a relative adjustment, modifying the current settings by the amount specified. Note that relative percentages are still relative to 1.0, not to the current value. If the volume is currently 0.40 and an adjustment of +20% is specified, then thet final volume will be set to 0.60.

Volume can also be set using the shorthand *dev*=**value**. This syntax does not apply to other controls.

The *dev*.**mute** control (un)mutes a device. The following values are available:

0 unmutes *dev*

1 mutes *dev*

^ toggles the mute of *dev*

The *dev*.**recsrc** control modifies the recording sources of a mixer. **mixer** marks devices which can be used as a recording source with **rec**. Recording sources are marked with **src**. To modify the recording source you can use one of the following modifiers on a **rec** device:

^ toggles *dev* of possible recording devices

+ adds *dev* to possible recording devices

- removes *dev* from possible recording devices

           = sets the recording device to *dev*

FILES

/dev/mixerN The mixer device, where *N* is the number of that device, for example */dev/mixer0*. PCM cards and mixers have a 1:1 relationship, which means that */dev/mixer0* is the mixer for */dev/pcm0* and so on. By default, **mixer** prints both the audio card's number and the mixer associated with it in the form of *pcmN:mixer*. The */dev/mixer* file, although it does not exist in the filesystem, points to the default mixer device and is the file **mixer** opens when the **-f** *device* option has not been specified.

EXAMPLES

Change the volume for the **vol** device of the */dev/mixer0* mixer device to 0.65:

```
$ mixer -f /dev/mixer0 vol.volume=0.65
```

Increase the **mic** device's left volume by 0.10 and decrease the right volume by 0.05:

```
$ mixer mic.volume=+0.10:-0.05
```

Toggle the mute for **vol**:

```
$ mixer vol.mute=^
```

Set **mic** and toggle **line** recording sources:

```
$ mixer mic.recsrc=+ line.recsrc=^
```

Dump */dev/mixer0* information to a file and retrieve back later:

```
$ mixer -f /dev/mixer0 -o > info
...
$ mixer -f /dev/mixer0 'cat info'
```

SEE ALSO

mixer(3), sound(4), sysctl(8)

HISTORY

The **mixer** utility first appeared in FreeBSD 2.0.5 and was rewritten completely in FreeBSD 14.0.

AUTHORS

Christos Margiolis *<christos@FreeBSD.org>*