

alsamixer (audio mixer)

Applications that output sound, such as media players or web browsers, send their audio stream to the Linux sound server. The server mixes the different streams, combining them into a unified output that is emitted through the computer's loudspeakers. Mixer controls are provided by various programs. One such program is the volume control of your graphical desktop environment.

In many Linux distributions, sound does not work "out of the box" for particular hardware combinations, which is a common problem for Linux beginners. For example, there may be no sound at all, or the microphone doesn't work. A good tool for troubleshooting such issues is *alsamixer*. Call it without arguments:

```
alsamixer
```

The interactive program will show volume controls for *all* the channels that your sound card provides. In many cases, the Master volume is high but another essential channel such as PCM or Speaker is mute. Use the left and right arrow keys to select a channel and press *m* to mute or unmute it. Try unmuting all channels for test purposes. This will solve 90% of all sound problems in Linux.

Why not use a graphical mixer for troubleshooting? In my experience, graphical volume controls tend to be buggy and do not show all channels by default. Once you have solved your sound problem with *alsamixer*, you can go back to using a more convenient graphical tool. By the way, *alsamixer* has a non-interactive cousin called *amixer* that lends itself to all kinds of volume-related hacks and shortcuts.