

# Songlib: blue icicle

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## Introduction

This tutorial assumes Ubuntu Linux running the ALSA Sound Server, although this should work for other versions of Linux and other sound servers, with appropriate modifications.

You should have a shell script named *record* that uses the alsa audio driver. You will also need to install *ecasound* and *sox*:

```
sudo apt-get install ecasound sox
```

**Step 1** Using a USB cable, connect the Blue Icicle unit to your laptop. If you run the following command:

```
dmesg
```

you should see some reassuring messages about the a new USB device. You can also run this command:

```
cat /proc/asound/cards
```

In the output, you should see the built-in sound device (as card 0) and the Blue Icicle (as card 1) listed.

**Step 2** Hook a microphone up to Blue Icicle unit using an XLR cable and the Blue Icicle to a USB port using a USB cable. The Blue Icicle supports both condensor and dynamic mics; when a condensor mic is detected, the Blue Icicle automatically feeds it phantom power.

Turn the volume button on the Blue Icicle all the way up (clockwise).

**Step 3** Now you need to set the levels. In one terminal window, run the command:

```
alsamixer -c 1
```

In another window, run the command:

```
monitor 1
```

Plug in some good headphones into your computer and then speak into the mic. You should hear your voice through the headphones, with a slight delay. Using *alsamixer*, make sure your master, pcm, and headphones are near 100%. Now you want to adjust the volume control on the Blue Icicle until you have the loudest result in your headphones WITHOUT any annoying buzz or hiss. Note that only one side of your head phones will change during this volume adjustment since the mic is monophonic. Stop monitoring in the monitoring window with a **<Ctl>-c**.

**Step 4** To record, enter the command:

```
record 1
```

At the *ecasound* prompt, press **t** to start recording, **s** to stop recording, and **q** to quit. Note that if you want to record with the built-in device, you would enter the command:

```
record 0
```

After recording, play the file *track.wav* back through the laptop speakers to make sure you have recorded properly:

```
play track.wav
```

If you experience clipping, reduce the loudness of your voice or reduce the volume control on the Blue Icicle. If you want to save the recording, save *track.wav* under another name, since subsequent recordings will overwrite *track.wav*.