# Adjusting the ALSA Mixer

You shouldn't need to do this, but if you replace the card with a new image, or something else somehow alters the audio mixer settings of the machine, you may need to look at and adjust the output levels. An indicator of this could be unreasonably low volume.

ALSA Mixer is a Linux utility used to "mix" the audio IO of the machine's "audio bus".

> WARNING:
>
> These instructions will have you logging in to the Ovation using SSH as the "root" user. This means you can do ANYTHING to the unit. Do NOT execute random commands on the command line or you risk breaking things.
>
> That being said, doing what this document says to do is not going to break anything and the worst case scenario is you need to revert to previous settings.

Step 1) Enable SSH on the Ovation

In the Configuration Utility choose "Manage SSH..." from the Utilities menu.
Check the box to enable SSH and "Apply"
Note: You only need to keep it enabled for the initial log-in, so the default 5 minutes of time will be plenty. If you are still logged in after SSH is disabled, you will NOT be disconnected.

Step 2) Use a terminal (TTY) emulator

You will need a terminal emulator like PuTTY or KiTTY.
I prefer KiTTY which you can get here: http://www.9bis.net/kitty/#!pages/download.md
Any TTY software should do the job, but you'll need to give it the Ovation IP address to connect.

Step 3) Log In

Once your terminal emulator is connected to the Ovation, you'll get a log in prompt.
Log in using the credentials below:
Username : root
Password : fusionMVX

Step 4) Run the ALSA Mixer utility

At the command prompt, type the following:
alsamixer

The screen will change to an ASCII interface displaying devices across the bottom (like Line Out and

DAC. Use the left and right arrows to select the device and the up and down arrows to adjust the level.

The top indicates what function keys will perform what operations. You do NOT have to "save" anything. All changes you make are real-time and not "undo-able" so try to remember where things started out in case you need to "recover" to a previous state. In fact, I recommend taking a few screen shots before you start editing so you know where everything was before you start.
Step 5) Adjust the Volume Levels

If you are playing music while you adjust the settings, you may be able to hear changes (I think… I don't remember for sure, It may need a stop/restart of a player to hear the changes though).

Generally I'd recommend setting the levels in the top of the white band, but maybe you need to go higher or lower. Turn your speakers down first to protect them from unexpected volume changes.

Concentrate on Line Out and DAC or other obviously "output" items.

Note, you may need to switch devices using F6 and/or focus on Capture using F3

Step 6) Finish

When done, exit ALSA Mixer using the Esc key.
That's it. Again, you may need to stop and re-start a player for the changes to take effect, but I'm not certain about that.