iMusic: Inessential Guide to Listening to Music on Athena

The Student Information Processing Board
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May 27, 2001

Contents

1   Introduction

These days most Athena workstations have suitable sound hardware and are quite able to play most music formats. However, each platform has its own peculiarities in the way sound is played, the way volume is controlled, where the headphone jack is located, and various other problems. This document clarifies all of these issues.

If you notice any problems with this document, or have any questions which it doesn't answer, please let us know. You can send email to `sipb@mit.edu`, drop by the office in W20-557, or call us at x3-7788. Thank you.

2   Identifying Athena Platforms

Throughout the rest of the document we presume that you know which Athena platform you are using. Current[1] Athena platforms (and their operating systems) include:

- Dell Optiplex GX1 (Linux)

- Dell Optiplex GX110 (Linux)

- Sun SparcStation 5 (Solaris aka SunOS)

- Sun Ultra 5 (Solaris aka SunOS)

- Sun Ultra 10 (Solaris aka SunOS)

- SGI Indy (Irix)

- SGI O2 (Irix)

It should be possible to determine what sort of machine you are using by reading the label on the case (not the monitor). For the Dell machines, the distinction between GX1 and GX110 is very small, but important for playing sound. If you need extra help, there are pictures in A of the common configurations. If you continue to be unable to identify your Athena machine, you may be using a nonstandard piece of hardware. Try running `machtype -vcLN` at the `athena%` prompt and attempting to deduce the system type from its output.

3   Connecting Headphones and Speakers

3.1   Headphones

Most Athena machines you will be using are located in clusters. In order to not disturb the other people in the cluster, you should use headphones when playing music, rather than any speakers the machine might have. You will have to bring your own headphones in most cases. All Athena platforms have headphone jacks. Many have two. One jack is located on the back of the machine, on the sound card or motherboard. The other (if it exists) is

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[1]Summer of 2001

directly on the CD-ROM drive. The headphone jack on the CD-ROM drive is only useful for listening to CDs, not for playing other sorts of audio. However, it is convient enough that you may want to use it for listening to CDs anyway.

Finding the other headphone jack can be a chore. Some machines have a headphone extension cable already plugged into the headphone jack. If this is the case, you are in luck and can just plug your headphones into the extension cable. If not, then you will have to plug your headphones into the back of the machine. This section contains pictures and instructions to help you find the jack.

3.1.1 Dell GX1

Dell machines (for help identifying your machine, see section 2) come in two different sound configurations. The first configuration, the GX1, has the sound card as part of the motherboard, putting it quite low down on back of the machine.

Location of Dell GX1 headphone jack

3.1.2 Dell GX110

Location of Dell GX110 headphone jack

The GX110 has the headphone jack on an expansion card. There are sometimes audio jacks in the same place as on the GX1, but they will not work. The expansion card is in the middle of the back of the machine, towards the left side.

3.1.3   SGI O2

The SGI O2 is the only common Athena machine without a headphone jack on the CD drive. This means that even Location of SGI O2 headphone jack if you are playing CDs you will have to use the jack on the back of the machine. The jack is located below the camera connector, on the back left side of the case about 2 inches up.

3.1.4   SGI Indy

The SGI Indy has 5 headphone sized jacks in the back Location of SGI Indy headphone jack right corner, below the large monitor connector. The headphone jack is the jack closes to the outside of the case. It is labeled in black, if you can get a look at it.

3.1.5 Sun Sparcstation 5
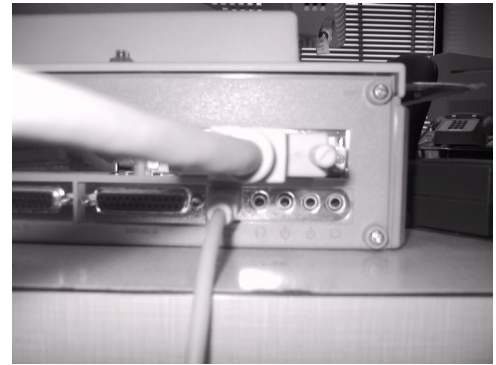
The headphone jack on the Sparc 5 is located on the back left corner of the machine, at the bottom, below the monitor connector. There are four jacks there. The headphone jack is the one nearest the center of the machine.

Location of Sun SparcStation 5 headphone jack

3.1.6 Sun Ultra 5

Location of Sun Ultra 5 headphone jack
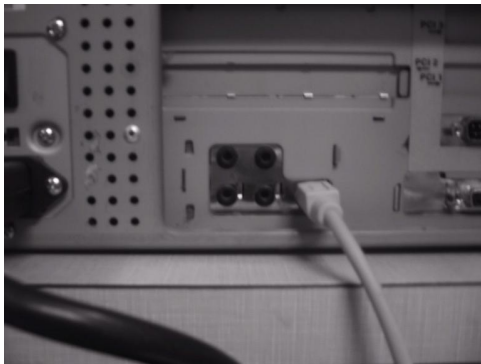
The headphone jack on the Ultra 5 is in the center of the back of the machine, near where the keyboard cable is plugged in. There are 4 jacks here, arranged in a square. The headphone jack is on the bottom, closest to the keyboard cable.

3.1.7 Sun Ultra 10
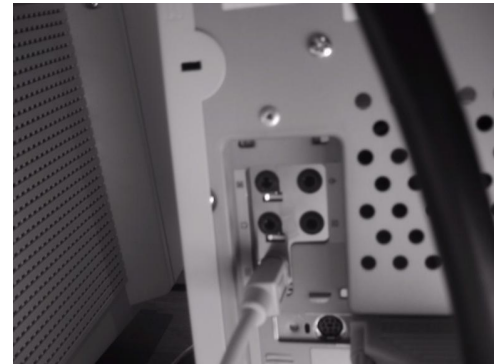
The headphone jack on the Ultra 10 is halfway up on
the left side of the back of the machine, near where the Location of Sun Ultra 10 headphone
keyboard cable is plugged in. It is much like the Ultra 5, jack
but tilted on its side. There are 4 jacks here, arranged
in a square. The headphone jack is on the bottom right,
closest to the keyboard cable.

3.2 Attaching Speakers

Currently this document does not cover using speakers. If this inconveniences you, please
send mail to `tibbetts@mit.edu`.

4 Setting Audio Device and Volume

This section deals with selecting the sound output device and with setting the volume. Many
cluster machines come up with the speakers selected, so you will want to set the machines
to headphone mode before you start playing music.

This section is broken up by machine/operating system type. All Athena-Linux machines
should be able to have their volume and output device set in the same way. Similarly for
Sun and SGI.

4.1 Linux

4.2 SGI

4.3 Sun

5 Playing Music

This section deals with different music formats and the players available on Athena. There
are many more players available on Athena than just those listed here. We attempt only to
give a good solution to common media types on each platform. If you would like to suggest
that a different player be covered, or that an additional media type be discussed, feel free to
send mail to `tibbetts@mit.edu`

6   Miscellaneous Topics

This section covers some things which are related to playing music on Athena, but which do not fit into any of the other sections.

6.1   Accessing Files on an NFS Shared Volume

6.2   Accessing Files on a Windows Shared Drive

This section was created with the help of the document available at `http://www.mit.edu/ iqbal/mp3.html`. It is neither an endorsement of nor endorsed by that document. In fact, we didn't even ask first.

It is possible to access files on a windows shared drive from an Athena Linux machine. This will only work from Linux machines, not from Sun or SGI computers. It is also very much not a supported service. Feel free to let us know if it stops working, but complaining to Athena is unlikely to fix the problem.

First you must create a mountpoint for

A   Identifying Athena Machines