

## Options for Recording Audio to a Digital Format

The first step in creating any digital audio project is to capture the audio into a digital format that can be brought into the audio editing software. There are many ways to capture audio, what you choose depends on the quality you want and the equipment you have available. For all of these processes, you will need access to a computer (desktop or laptop) which has audio input jacks and audio recording or software (we recommend *Garageband* on MacOS or *Audacity* on PC.)

### USB Headset Microphone

A USB microphone headset is the optimal tool for capturing high-quality voice recordings on your computer (available for 30-40 dollars). The proximity of the microphone to the speaker's mouth reduces unwanted ambient sounds and the USB connection means the audio is recorded directly to digital. To record and edit audio using a USB headset:

1. Connect the USB headset to the computer's USB port.
2. Configure the computer to access the USB port for audio input (this may be done under System Preferences on a Mac, or in the Control Panel on a PC).
3. Open the audio editing software (such as GarageBand on Mac, or Audacity on a PC).
4. Record your audio and save it in MP3 format.

### Handheld MP3 Recorder (or MP3 Player with microphone attachment)

Using a digital voice recorder or an MP3 player means that the recording can take place away from the computer. Ideally, the recorder will interface with the computer and allow for direct transfer of files over a USB connection (when purchasing a digital recorder for use with a Mac, make sure it will be compatible). Most recorders will record and store recorded audio in a common format such as AIFF, MP3, DSS, or WMA (MP3 is the most compatible). Attachable microphones are also available for some MP3 players (such as the iPod). These allow the user to record audio in a generic (yet lower quality) format. To record and edit audio using a USB-enabled digital recording device:

1. Record your audio on device (attach microphone if necessary).
2. Connect the digital recording device to the computer's USB port.
3. Download the audio recording to your computer. Convert to MP3 format if necessary.

### Standard Microphone with Mini Audio Cable

A standard audio input device (such as a microphone) can be used to record audio on computers equipped with an audio input jack (usually the size of a typical headphone jack). To record and edit audio using a standard audio input device:

1. Connect the microphone (or other audio device) to the computer's audio input jack.
2. Configure the computer to access the audio input jack for audio input.
3. Open audio editing application.
4. Record audio, save in MP3 format.

## Cassette Recorders (and other analog recording devices)

Some audio devices may not be USB-ready, such as mini-cassette recorders or cassette tape players. In most cases, such devices will have an analog output: usually stereo-mini (i.e., the size of a typical headphone jack). To capture audio from a non-USB device, you will need a microphone and a cable to connect the audio device to the computer. Typically, a male stereo-mini to male stereo-mini cable will suffice (available at audio or electronics stores). To record and edit audio using a non-USB ready recording device:

1. Connect microphone to recording device (if necessary).
2. Record your audio.
3. Configure the computer to access the audio input jack for audio input.
4. Connect the recording device's output to the audio input jack on your computer (usually the same jack as is used to connect a microphone to your computer).
5. Open your preferred audio editing software.
6. Start recording in the audio software, press "Play" on the recording device.  
(Check settings in the software so that you can hear the audio while it is being recorded).
7. Save or convert your audio file to MP3 format.

## *Useful Links*

### Podcasting Overviews

#### **Ten Tips for Improving Your Podcasts, Jack Herrington**

<http://digitalmedia.oreilly.com/2005/08/10/improvingpodcasts.html>

#### **Creating a Podcast, Bart G. Farkas.**

<http://www.informit.com/articles/article.asp?p=605039&rl=1>

#### **Podcast Tools, S. Housley**

<http://www.rss-specifications.com/podcast-tools.htm>

#### **General Recording Advice, Librivox**

<http://librivox.org/about-recording/>

<http://librivox.org/wiki/moin.cgi/NewbieGuideToRecording>

<http://librivox.org/wiki/moin.cgi/ImproveYourRecording>

### Garageband Documentation

#### **Garageband Manuals, Apple**

<http://www.apple.com/support/manuals/garageband/>

#### **Garageband Tutorial, Penn State Faculty Media Center**

<http://tlt.its.psu.edu/fmc/tutorials/garageband.pdf>

### Audacity Links

#### **Download Audacity**

<http://audacity.sourceforge.net/>

#### **Audacity Tutorial, UPenn**

<http://www.sas.upenn.edu/computing/instructional/lrc/documentation/audacity/>