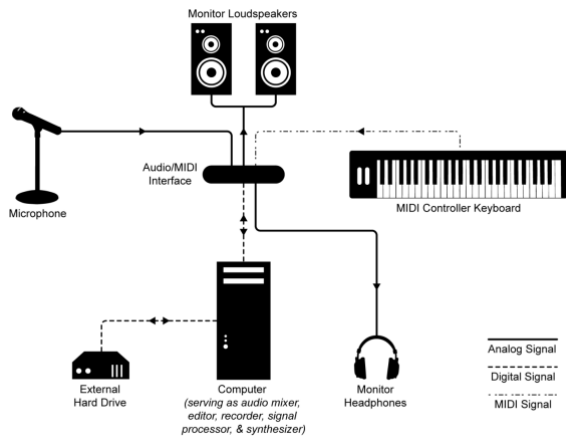


## Retrieval

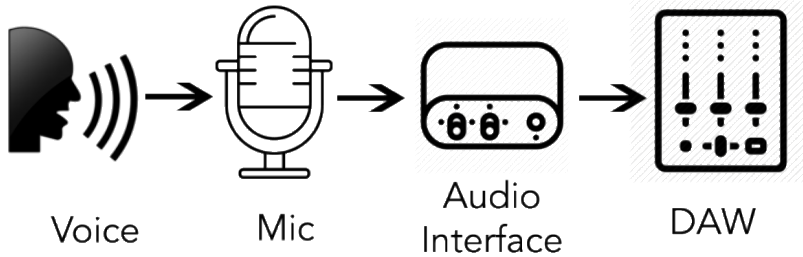
### Signal Flow



All sound you record must go through a chain, which we call the **signal flow**. A variety of analogue, digital and MIDI cables are used for these



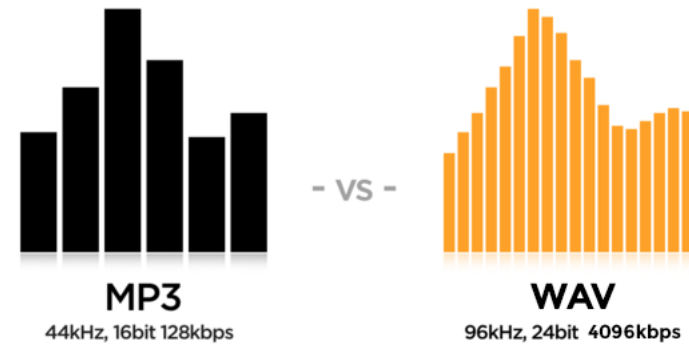
### Recording



## Unit 3: Studio Recording



### Types of audio tracks



When you bounce down a project, you will get asked which format you want to bounce to. This will allow you to turn your Logic/Cubase/Soundtrap file into an audio file. There are two main types of stereo tracks.

MP3	WAV
<ul style="list-style-type: none"> <li>• Small and compressed format</li> <li>• Lower quality</li> <li>• Easier to share, quick to download</li> <li>• You can fit more on a phone</li> </ul>	<ul style="list-style-type: none"> <li>• Higher quality, uncompressed</li> <li>• This is the type of file that you would use for a CD</li> <li>• They sound better, although most people can't tell the difference!</li> <li>• Usually 10 times bigger files than Mp3</li> <li>• Usually too big to be attached to an email</li> </ul>

## Effects

Effects can be applied to all tracks, both audio and MIDI. They are types of plugins. They usually include a Wet/Dry mix function, which allows you to control how much of the effect you want on your track.



Reverb.

Reverb recreates a **large space** such as a room, chamber or hall. They allow your sound to carry on for longer. It is used on most instruments when mixing.



Delay

Delay creates **distinct repeats** of the sound. It is also called echo. It is often used on vocals, synths and guitars.



Compression

Compression **makes the sound more even** by making the loud sounds quieter. The volume of the compressor can then be brought up with Make-Up gain, making the overall track louder.

A compressor is a **dynamic processor**.



**Noise gate**

A noise gate **removes quiet sounds** in between louder sounds. They are particularly useful on vocal parts (to get rid of any background noise) or on guitar parts to get rid of line noise.

A gate is a **dynamic processor**.



**Phaser**

A phaser copies the sound and **makes it slightly out of phase**, which creates an interesting 'swooshy' or 'underwater' type of effect



Chorus

A chorus is very similar to a phaser, although it puts the copied sound **slightly out of time & tune** with the original, making it sound like there are multiple of the same track.



Distortion

Distortion drives the gain (or volume) of the track up until it gets gritty. Distortion can also happen if you have recorded a track too loud.

## Recording Techniques

### Close mic'ing

- Placing the microphone close to the sound source
  - **Vocals**, saxophone, flute: 6 inches



- Amp, snare drum: 1inch



- Acoustic guitar: 12 inches



### Accessories for mic'ing vocals

- Headphones (to hear back the track and reduce spill)
- Pop filter (to reduce excess syllables -p's and s's etc)
- Cradle (to reduce vibrations)



### Spaced pair

- Using **two mics** to get a stereo image
- Best for recording **piano & drums overheads**



- Place the mics at equal distance from the sound and 3 times as far from each other

### Mic'ing the drum kit.

1. Kick drum– Dynamic
2. Snare & toms – Dynamic
3. Overheads – Condenser

