

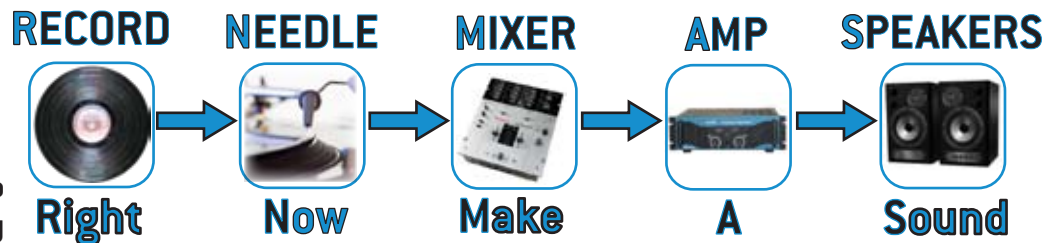
Dj'ing is the art of playing records to an audience. As the art evolved, mixing or beat matching became a huge part of the process. Later on techniques such as scratching and beat juggling were added and new and improved skills are continually invented regularly. In order to understand the standard set up for a DJ it is useful to try and grasp the sound circuit theory for the following common set up.

## DJ SET UP

Just like a studio, a working DJ set up will include all the audio components and units required to reproduce and playback the sound from the vinyl or nowadays more commonly the cds you are using to mix. This is known as the sound circuit, which is the path that the sound travels through in order to be heard by the human ear at the end of its path. You must learn how to set up a working DJ Station. The sound circuit is an easy way to identify the way in which it should be set up. Knowing and understanding the principles of the sound circuit will also help you identify problems once you have set up a workstation.

### Common DJ set up sound circuit

Here we illustrate a simple DJ set up. The sound begins at the vinyl and travels through the turntable circuit. In this case the needle then goes onto the mixer, through the amp and finally on to the speakers and out into your ear. In order to help you remember the order of this set up, you can use the easy to remember sentence; RIGHT NOW MAKE A SOUND, if you take the initial of each word it represents RECORD, NEEDLE, MIXER, AMP, SPEAKERS.



The first thing to learn when Dj'ing is to play two records at the same time, in time. What this means is, if you have a song playing on one turntable or CD deck, that song will be playing at a specific tempo. Now you have to start the other song at the right time and also you have to make adjustments to it's speed using the pitch in order to get it to play together in time with the other. The first thing to do to start off this process is to have one deck playing out loud and the second deck playing in your earphones so that you can hear both songs at the same time. Once you can comfortably hear both songs you must identify the first beat of a bar of the song that is playing out loud. This first beat of a bar is known as the 1 (most songs are built on sets of 4 beats to a bar.). This is not as complicated as it sounds, (if you listen to a song and count along to it to 4, you will soon find yourself tapping in time and the most prominent beat on that count of 4 will be the 1). Once You have identified the 1 on the song playing out loud you can now find the 1 in your headphones on the song you are about to bring in. Now the way to line the tunes up is to release the record or CD to play so that the 1 of the song playing on the headphones begins at the same time as the 1 playing out loud. If this is done correctly the first beat (the 1) of each track will be in sync.



**PITCH**  
use this to slow down or speed up the tune in order to achieve your mix



Now the songs will start in sync but will quickly go out of time as their tempos (speed) are likely to be different. So what you have to do now is listen to the song that you are bringing in (in your headphones) and work out if the song is going out of time because it is too fast or too slow and then you can adjust the speed of the tune using the pitch control or your hands. If the song you are bringing in is too slow, then you must speed the song up using the pitch and vice versa if the song is too fast. Alternatively you can also use your hand to slow down the record or speed it up if you are using a vinyl turntable. Most CD dj'ing products have a similar function allowing you to push the wheel as though it was a vinyl turntable to speed up and slow down the song to match it up exactly or put it back in sync. Once you have both songs lined up and in sync you can now start thinking about mixing the two together, this is done with the crossfader of the mixer you are using. If the left hand turntable is playing the song out loud through the speakers, once synced you will start moving the fader from the far left of the mixer to the middle. Once the cross fader is in the middle you will be able to hear both tunes playing out loud through the speakers, once you are satisfied that the songs are still in sync you can continue the mix by moving the cross fader until it reaches the far right hand side. By now you will only be able to hear the right turntable (the one you had on your headphones earlier) out loud and the mix is complete.

