

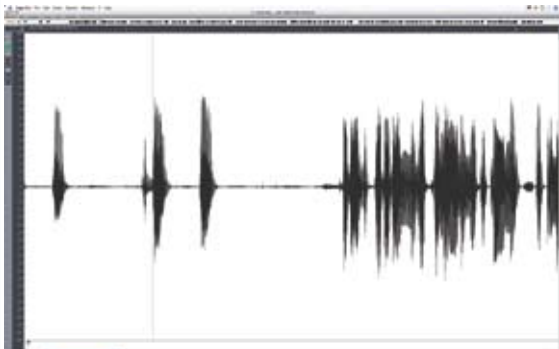
Sampling has become a huge part of music making since the introduction of the sampler. The sampler is a basic recording and playback machine that allows you to record and reproduce a sound triggered by a midi signal. Sampling is simply recording an already existing sound and using that in your musical arrangement. As a general rule, the more complex the sampler, the more you can manipulate your sound. A true sampler will always have recording capabilities. However, common software samplers such as the samplers in Reason do not have recording capabilities and you have to load up pre recorded samples. All samplers allow you to change the pitch of your sample so that you can play it back across one or more octaves. This will in turn enable you to create your own musical score using the recorded sample. Many samplers also have synthesiser capabilities which allow you to manipulate your original sample in an infinite number of ways.

### Sampling a sound

When sampling a particular musical part, drum hit or sound all you are doing is recording an original sound onto your sampler (a sampler can be anything from an actual "sampler" to your MPC, Logic, Cubase, Pro Tools or other programs with recording capabilities). When recording your sample, as with recording vocals, you need to ensure that the output of your sample playing device/instrument is not peaking. For example, if sampling from a vinyl record plugged into your computer, in order to prevent the sound distorting on input, you must ensure that the output of the mixer is not in the red. Conversely, having the signal too low on either the output of your original sound or the input of your sampler will also be counter productive. If your sample is recorded too low it will then force you to boost the signal post recording which will increase the noise level and spoil the quality of the overall sound. By following these instructions you are avoiding distorting your sample during the recording process, which will vastly improve the quality of your sound.

Once you have recorded your sample into your sampler/software you will be left with a wave file that represents your sound. This is the visual representation of the sound and once you have your sound recorded you are most likely going to need to cut (edit) it so that it starts and ends at the exact time you need. Normally, when recording you will set it up so that the sampler is recording just before the sound you are recording starts.

Here we have a simple audio recording we wish to sample, the first couple of parts of the recording are unwanted. In most samplers or audio hardware/software recorders you will have a simple option to highlight the part of the recording you do not want, then all you have to do is cut/delete that section of the audio file.



Once you have the sample you want cut to the specific start and end point, you can now begin to make this sample your own by exploring the digital processing options you have within your sampler. Pitch shifting, reverse, spreading the sample across a musical scale and adding oscillators are just a few of these options. Like many processing and audio procedures, once you learn the basics, the rest will come through experience and experimentation, as no one musical arrangement or sampled sound will ever be identical.