

Sampled Versus Real Instruments

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What are sampled instruments?

Sampled instruments are electronically reproduced replications of the instrument that was sampled. For example, a sampled electric bass guitar is actually a sampler playing note recordings of a real bass guitar in a defined sequence, as if a bass guitarist were playing the line. Each sample typically has one note, and samples are taken across the range of the instrument at regular intervals, then laid out in a sampler with the necessary pitch shifting to simulate the notes in between the sampled notes (ie: a G sample, followed by the same G sample tuned up to G#, followed by an A sample and so on.) We are then able to play the sampler as if it were a bass guitar. However, sampled instruments do lack performance nuances and timbral shifts produced by real instruments, despite great developments in the area.

Why use sampled instruments?

The most beneficial feature of sampled instruments is the cost saving. That's not to say session musicians are too expensive, but if for example a film requires a one-minute piece of the score to be played by a symphony orchestra, the cost of hiring so many musicians for such a small piece of the score is likely to be unaffordable for many projects. Another benefit is the range of instruments available, including rare ethnic instruments. In short, sampled instruments provide a cost effective alternative to using real instruments and they provide a wider selection of instruments to use. But with the lack of performance nuances mentioned before, are sampled instruments always a practical alternative?

Why not use sampled instruments?

There are times when sampled instruments are simply unsuitable. To objectively state when this is so is difficult, but when selecting to use real or sampled, you should consider the following.

The Style: First of all, consider whether you want the instruments to sound real. Our producers are well experienced in synthesising waveforms that can resemble real instruments, or be entirely original. The style of the required music will largely dictate how the instruments should sound. For example, a rock track would call for guitars and drum-kit, whereas an electro track would sound more authentic with synthesised sounds and drum-machines. Many styles, such as hip hop and dub, work best with combinations of real and synthetic sounds. If your not sure what your chosen style would sound best with, ask one of our expert producers here – contact us. The

following pointers are for music with at least some real sounding instrumentation (sampled or live), not entirely synthesised tracks. Synthesised tracks are meant to sound unreal.

The Position: If the music is primarily in the background, sampled instruments are generally okay, but if the music is a primary focus, consider using real instruments or at least a real instrument playing the melody to aid listenability.

The Tempo: If the music is fast, performance nuances aren't as obvious nor are they as necessary, so sampled instruments are better suited to fast music. Slow music requires more timbral shifts and so it's most effective with real performers.

The Length: If you want a very short section of instrumental music, consider sampled. For example, a single guitar chord with a synthesised backing is more practically achieved by using a sampled guitar, and our producers know how to make sampled instrumental sections come alive.

The Instrument(s): Is the instrument commonly known and played in Australia? If not, chances are sampled is your only option, but we do have a number of ethnic musicians available. If you're after something unique, please contact us to request an instrument and we'll let you know whether we have a performer available.

If you're still unsure whether to opt for sampled or real instruments, allow us to create the first version of your soundtrack with entirely sampled instruments. It will then be obvious what needs to be performed live, if anything.