

Guitars And Sampling



How to use the old-fashioned plank in a hi-tech environment

It's a familiar story: you started playing guitar, did the rounds in a few dodgy local bands, played to 'select' audiences in the Dog & Arse and, to the endless stream of drummers your combo digested, described Sony's rejection letter as 'record company interest'.

Ready to throw in the bandana, you boxed up the gig-scarred geetar and thumbed through the dreaded Sits Vac, fearing the inevitable. Then, from nowhere, MIDI came to you, along with samplers, synths, sequencers, the full monty. Band schmand! You could suddenly do it all on your own. At home. Yesssss!

So, while you lavished creativity with all the verve of a born-again bandmeister on the MIDI set-up, your guitar gent wept in the corner, gathering dust and untouched, aside from the occasional late night, half-cut discordant strum. You rotten sod. How could you neglect the very thing that gave you your start in music?

Time to make some reparations... In truth, there's far more scope between guitars and sequencer/sampler set-ups than you might imagine. Beyond the use of short loops and effected noises, which, with a little imagination, can yield a host of interesting results, a sampler with a reasonable amount of memory can also take the rôle of a mastering device for extended sections of audio.

Sample examples

If you play guitar to any reasonable extent, you'll doubtless be familiar with the general restrictions of analogue recording getting a good take can be a painstaking task in itself but drop a sampler into the equation and you'll quickly find there's a lot more room to manoeuvre. One of the simplest examples of the benefits of sampling guitar parts is explained thus: imagine you want to record a lead guitar part, but, as ever, the playing is inconsistent. Sometimes it begins well, but you lose it halfway through.

Then again, on that wild take there were some fantastic moments, but the mistakes and timing problems render it unusable. You get the picture. Supposing you record a number of takes into the sampler the rigid, note-perfect version; the wild, improvised job, and so on. If you had enough channels on an analogue multitracker, you'd probably work out a composite take, made up of the best sections edited together, but your sampler will allow you to do this in the same way or, even better to run, for example, four separate takes set to different MIDI channels and triggered from your sequencer. You could then use MIDI volume controller information to cut between them.

Obviously you'll need to insert the initial volume commands before the note trigger to ensure that the tracks you don't want to hear are set to 0, but from then on in you can switch between takes with ease. In this way you avoid all the fiddly editing and note shifting that a composite sample track would require, and retain all the original takes, in case you decide to change the configuration.

Chorus and flanging effects are easy to achieve if you double up a sample and play both at once. Panning the two samples left and right and modulating pitch on one will give you a good repro of chorus, with more modulation taking you into flanging.

Alternatively, you can pitch one of the samples up or down a tad and timestretch it to maintain the timing consistency between the two samples. Simultaneous triggering of a single sample throws up some interesting results, often creating an out-of-phase sound run three or four triggers of the same sample concurrently, or build up the layers over a longer period for a gradually swelling sound.

Vacuum packing

If you do find yourself in a momentary creative vacuum, it's always worth playing around with reversed samples. OK, so it's a well trodden path, but there's more to it than backward bloody cymbals. Psychedelic loons used to reverse tapes on multitrackers to get those oddball lead riffs that your old man lost it listening to, but with the sampler, push one button to get the same effect.

The chord from nowhere is a great way of introducing a track, or leading into a wild section, and if you've laid down a riff or lead part that lacks the verve that you anticipated, try copying and reversing it. Timing the reversed piece in and running it simultaneously with the normal part can throw up some intriguing developments, or alternatively, work on a composite of the two, intermingling the normal and reversed parts.

Copying parts and shifting the pitch in octaves is another way of adding depth to a sound. Obviously, the outcome is dependant on the nature of the part; a single note will simply be thickened by an upward or downward octave shift on the copy, whereas a riff will gain a double or half-tempo counter riff, depending on whether you shift it up or down. Pitch shifting can, of course, be taken further, and not necessarily restricted to octave shifts experimentation can lead you to a harmonised counter-rhythmic accompaniment to your original part, and why stop at one copy? Take it as far as you can and edit back to the parts you like.

Chord sequence

Sampled guitars also respond well to effects your sequencer can generate. Tremoloes, delays, flanging and phasing, volume-based effects and layering all produce interesting results. You can create a range of delay effects from reverb simulation to intricate multi-taps quite simply by multi-triggering your samples. Experimenting with the timings and velocity values of the re-triggered sample will give you an infinite scope of delay possibilities. If you're using Cubase, the List or Key edit pages allow simple, graphical drawing-in of controller values; 'ramp' and 'v' shaped velocity settings, for example, will throw up some neat variations; offsetting the placement of your trigger notes lets you formulate more complex rhythmic effects.

Using MIDI to control effects

If you possess a multi-effects unit that has MIDI capabilities, then acquiring a MIDI foot controller can open up a host of possibilities for guitarists, maximising the instantaneous control you can have over the unit.

The universal standardisation of MIDI 'language' means that any MIDI foot switch will be compatible with any MIDI effects unit, so buying this extra won't depend on your purchase of an expensive dedicated piece of kit there are cheaper products to be bought on the market.

The simplest function a MIDI foot controller allows is a program change message. This gives you the ability to assign certain effects patches or programmes to the switches on your foot controller, providing instant and ordered access to the effects you wish to use. Mapping the program change information lets you place the effects switching in a logical order for the particular track you're playing essential if you want to avoid any mis-selections during live playing.

Getting more involved, a foot controller can also be employed to alter parameter information, such as overdrive intensity, compression, feedback on delays, repeat speed and so on. Using the standard 0-127 controller message values, the degree of parameter change can be altered via a rocking foot pedal assigned to the parameter of your choice, and with a foot pedal switch assigned to parameter changes, you can stomp to any of up to 128 parameters (depending on the complexity of your effects unit). EQ frequency, master volume, wah-wah swell and other effects can all be assigned to the foot pedal and selected at will.

The results can be enhanced further by copying a sample and assigning the two to left and right pan positions to produce ping-pong effects. Vary the frequency filters between the two samples and you'll arrive at a different effect again interesting if you record sweeping filter data. Running two complementary guitar phrases, panned left and right, with the filter sweep of one ascending from a low frequency to a high one and the other doing vice-versa, can work well with strummed chords or single bass notes.

For tremolo, repeat a short trigger note at chosen points to dictate speed. Ping-pong and velocity effects can enhance results in the same way as with delay sounds, as can any filter sweeping effects you add. Chopping the sample up on your sequencer brings more rhythmic possibilities, so don't shy from trying un-guitarish sequencer tricks, particularly in combination with the original part.