The **Logical** conclusion

Steven Helstrip winds up his tips on Logical Edit. There's news of the latest Logic Audio release, and there's a Chinese Candle Snuffer on the Cuckooland CD.

Last month we began to unravel the workings of Cubase's Logical Edit. So let's carry on from where we left off, digging further into Logical's Expert Mode and into some of the more advanced functions within Easy Mode. If you didn't see last month's column, we talked about the three elements of Logical Edit (Filter, Processing and Functions) and ways to utilise them. It is important to grasp how these work before moving on to more complex topics.

While on the subject of Logic, Emagic's long-awaited Logic Audio for Windows 95 has finally arrived. You can check out its main features below, or see the full review in this month's *First Impressions*.

More 'easy' Logical Edits

It is often necessary to thicken textures by doubling notes over an octave. Most do this by copying the part to another track, transposing it and then lowering its velocity. A simple Logical Edit routine can perform this task much quicker. Fig 1 shows you how.

Select the part and open Logical Edit. We're transposing notes, so the Event Type must be set to Notes. No more filters need to be set. In the processing section, value one (notes) is set to plus 12, or 24, should you want to add a part two octaves higher, and value two (velocity) is set to a minus value. If "Insert" is selected in the functions dialogue, the notes will be copied when "Do It" is clicked. If Transform is selected, the
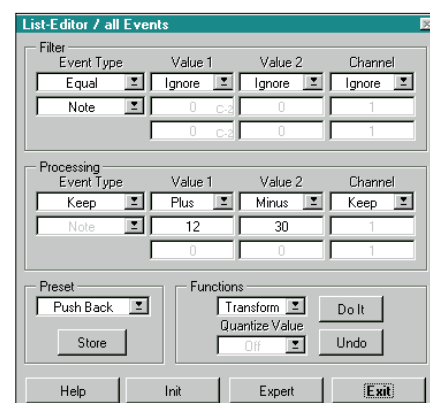

Fig 1 Logical Edit provides simple routines for transposing and changing the velocity of notes

notes will not be copied, just transposed.

When working with Logical Edit, it often helps to have the List Editor open in the
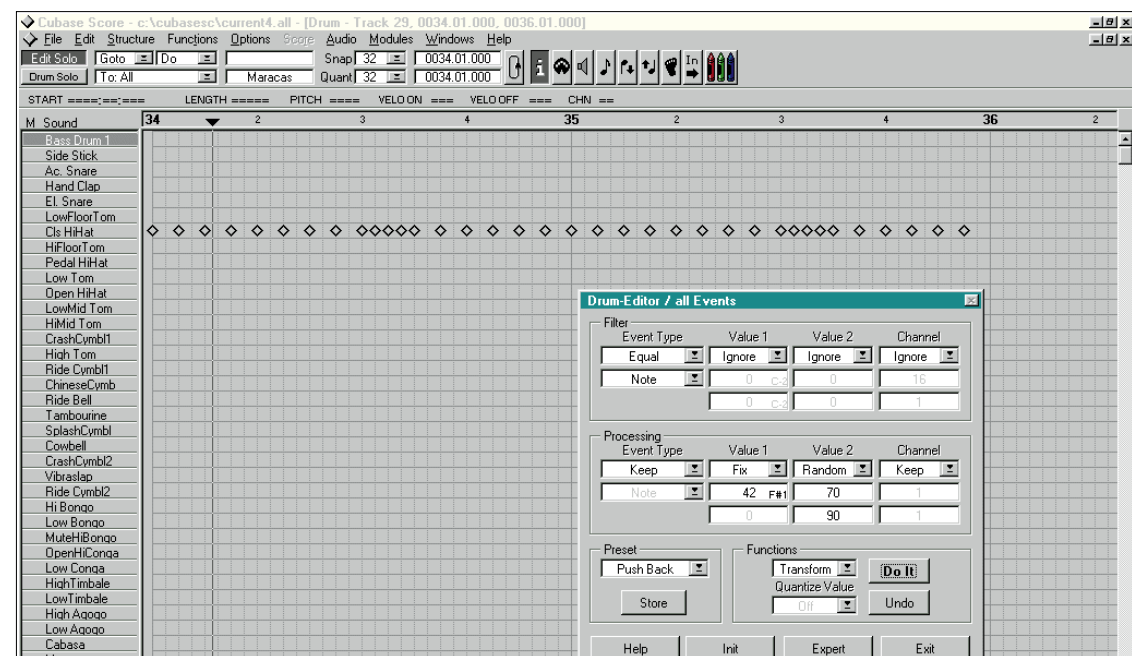
background. This way you can see, as well as hear, the effect it is having. Set it up to delete everything, other than notes. This is quite a useful routine to store in the preset menu.

When recording complicated hi-hat or percussion tracks on a single instrument that includes 32nd notes, or demi-semi-quavers, they can be recorded on several keys and later fixed to the correct key. Fig 2 is set up to fix random notes to play back on F#1, the key for closed hi-hats. It also applies random velocity to each note but within the range 70 to 80. To copy the same pattern to, say, a tambourine, use Logic Edit as shown in Fig 1.

Expert mode

In Expert Mode, you have more parameters to play with. In the Filter section, two new fields are added, namely Length and Bar Range. The length field is very useful since it allows you, for instance, to select crotchets and convert them to minims.

You can also set up an edit to delete or copy notes above or below a certain length. Bar Range enables you to change things that occur within a given region: for example, between the first and third beats. Fig 3 is set up to copy all hi-hat events that occur after the third beat to a snare drum, key D1.
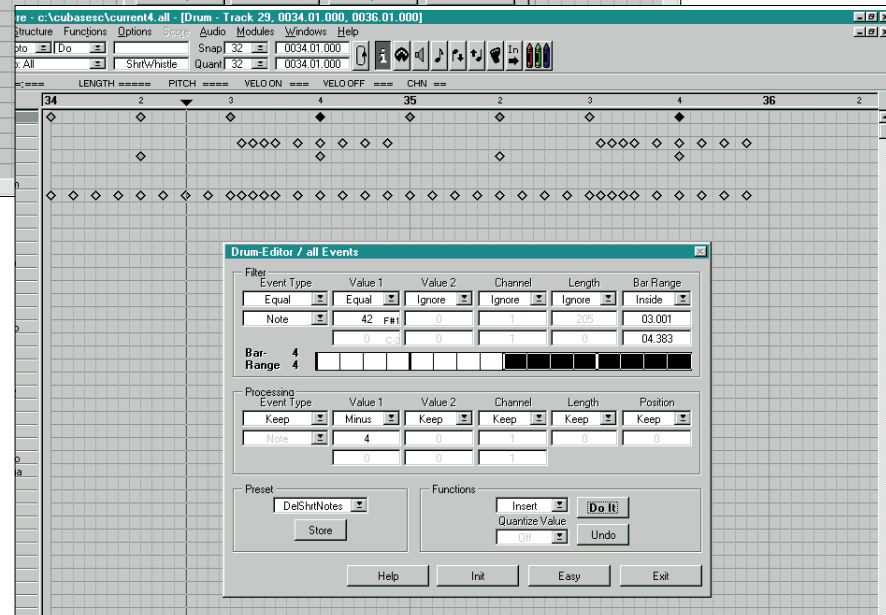

Fig 2 (left) Here, random notes are fixed so that they play back on F#1, the key for closed hi-hats

Fig 3 (below) Expert mode allows more complex edits as there are more parameters to play with
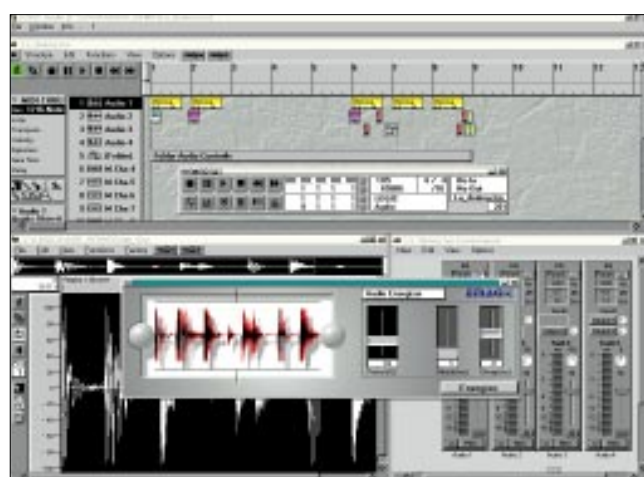

Logic Audio arrives for Win95

Logic's success on the PC hasn't been overwhelming, partly because it has always been considered an over-complex sequencer suitable for the most demanding programmer or producer. If your demands are high, and you need total integration with your studio, then it makes sense to buy a Macintosh system, simply because it has better hardware support. So, Logic is a massive success on the Mac.

This could soon change as professional hardware from the likes of Digidesign becomes available: its AudioMedia III is now shipping for the PC and provides digital-in, digital-out, stereo-analogue-in and stereo-analogue-out (£599 plus VAT). Each can be used independently and

configured in various send/return combinations. Coupled with its Session software, AudioMedia III is a professional, 8-track digital workstation. The whole package costs around £900 (plus VAT).

The latest release of Logic supports AudioMedia hardware and enables environments to be set up to control audio mixing, including EQ settings. All mixes can be automated and edited as MIDI messages in the Hyper Editor. Logic is the first Win95 enhanced sequencer, so at last you can save your songs with long filenames. All audio processing is 32-bit, which means you don't have to wait a lifetime just to normalise a take. You can also process audio parts as they are playing.

Logic Audio is still a complex

Here's the latest version of Logic Audio, in full 32-bit glory

package, although overall navigation has been made easier. You'll still need to invest a lot of time getting to know the package. It's a bit like chess in that it only takes a few hours to grasp the

basic principles, but it could take many years to master. If you have the time, and need, for what is probably the most advanced sequencer around, Logic is worth the investment.

Zero-G Cuckooland Vol.1 - Unhinged

This is one remarkable CD. Its title doesn't give much away, but suggests it may be a little on the strange side. To be honest, it's a lot on the strange side, but that's what makes it so interesting. The first track contains 98 seconds of assorted madness. Madness that is described as "Gravel Brass", "Chinese Candle Snuffer" and "Difficult To Describe". Difficult to describe it may be, but it's fun to listen to and easy to incorporate within ambient and trancy tunes. If you're looking for textures and loops for use in film or games, there's plenty on this CD to get excited about.

Tracks two to 82 contain hundreds of out-of-the-ordinary loops. Some are percussion-based while others are natural ambiences saturated with effects. The rest are impossible to describe. Artistes that come to mind, though, include Leftfield, Massive Attack and Art Of Noise. Many of the tracks are compositions in their own right. When you buy this CD, you license its contents for use in commercial and non-commercial music.

Tracks 83 through to 98 contain musical "one shot" samples. There are basses, snares, kicks and assorted industrial sounds. There's even a sample of a cat on Mars… how very strange. Cuckooland costs just under £60 (incl. VAT), which is a lot to shell out, but it's money well spent if you're looking for something different to spice up your tunes.

Cuckooland is distributed by Time + Space *(see page 311)* and a free 72-page catalogue is available from them, featuring hundreds of CDs and CD-ROMs.
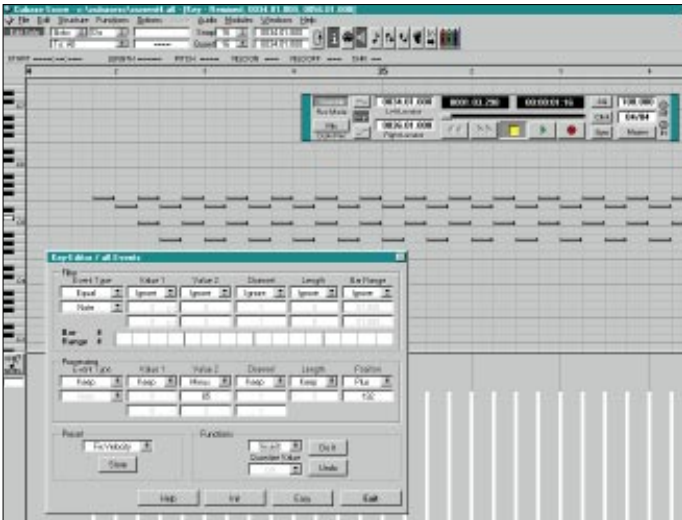
Expert Mode provides more parameters in the Processing section along with three extra Operators. These include Invert, which inverts events, given that value 64 is the axis. Small values become large, and vice-versa. ScaleMap makes notes fit within a given scale, and Flip, which behaves similarly to Invert, allows you to set your own axis.

Fig 4 is set up to create an echo effect. The synth line will repeat an eighth later, with a lower velocity. You can experiment with different delay lengths given that each semi-quaver equals 96 ticks, or points.

Helstrip helps out…

Q *"I'm a DJ who uses CDs. This causes me two problems, as I'm a chart returner who is sent a lot of promo records weeks before commercial release, and occasionally the tracks I want to play either aren't released or aren't available on CD.*

My PC is a Pentium 90 with 16Mb of RAM running Windows 95. I have a Creative Labs SoundBlaster 16 card and a HP4020i CD writer. I have been sampling-in my favourite promo tracks into the PC at the full 44.1kHz, 16-bit quality, and writing the .wav files to CD using the Easy CD Audio software, thus creating a mini promo EP each week to use over the weekend. My Denon DN2700F CD player has no problems reading the CDRs, and will perform all the usual functions on them like looping and sampling.

I use the Creative Wave Studio supplied with the sound card to edit certain tracks to make them more DJ-friendly, and the Easy CD Audio software will allow me to convert a track from CD directly to a .wav file, thus keeping the full digital quality of the track.

I am interested in purchasing a more advanced sound editor and I want it to be able to perform the following functions. Firstly, to perform high-quality time-stretching. I have downloaded a demo copy of Steinberg's Wavelab from the internet and this will indeed do this on a full track with good-quality results.

Secondly, I want to be able to strip out the background noise from my sampled tracks. This noise would include the needle in the record, on the vinyl, any noise from my Citronic mixer and any from my sound card. The sampled CDs actually sound okay in the club, certainly no worse than playing the vinyl, but you can tell when a fully digital CD is played. I can't seem to find software that will fulfil this function, although I am certain it must exist."
Andy Elvers (wooski@dircon.co.uk)

A WaveLab is probably your best bet for time-stretching and editing samples in general. Because it's written in 32-bit code it's extremely fast, and version 1.5, to be released around August/September time, will support real-time plug-in modules. Several modules will ship with the package, including a Delay generator, Chorus, Auto-panner, EQ and a Leveller.

Once registered, users will receive a Reverb module free of charge. Optional plug-ins will include a De-noiser and De-clicker, which are perfect for re-mastering and removing unwanted vinyl crackles.

Another move worth considering might be to upgrade your sound card to, say, a Turtle Beach Tropez. Because it has a greater signal-to-noise ratio, your recording will inherit less hiss. The playback quality will be cleaner, too.