

# Going down low

Steven Helstrip has some ideas for programming 303 basslines without a 303. A new sound card from Creative Labs and books about MIDI and dance music come under scrutiny, too.

When I first took an interest in MIDI, eleven years ago, the idea of picking up a book to learn the ins and outs was out of the question. There just weren't any. It has taken some time, but at last it looks as though some worthwhile publications are beginning to filter through, two of which are reviewed later. Also in this month's Hands On Sound, we'll be taking a look at Creative's AWE-64 Gold sound card to see if it really is the answer to every bedroom producer's prayers.

## Programming 303 basslines

Having indulged in TB-303 clones last month, it's time now to impart a few tips to help in the programming department.

The 303 is an incredibly versatile instrument which can be treated in all kinds of ways. You don't actually need a 303 to try the ideas I have come up with here; they will work just as well using any clone, including the demo of Rebirth 383 (RB-383) previewed last month. With any luck, the demo will appear on our CD-ROM next month, and it has a couple of new features: a step counter on each 303 panel, and a manually adjustable sound buffer to cure glitches on slower machines. In the

meantime, it can be downloaded from the Propellerheads web site at [www.propellerheads.se/products/rebirth.html](http://www.propellerheads.se/products/rebirth.html).

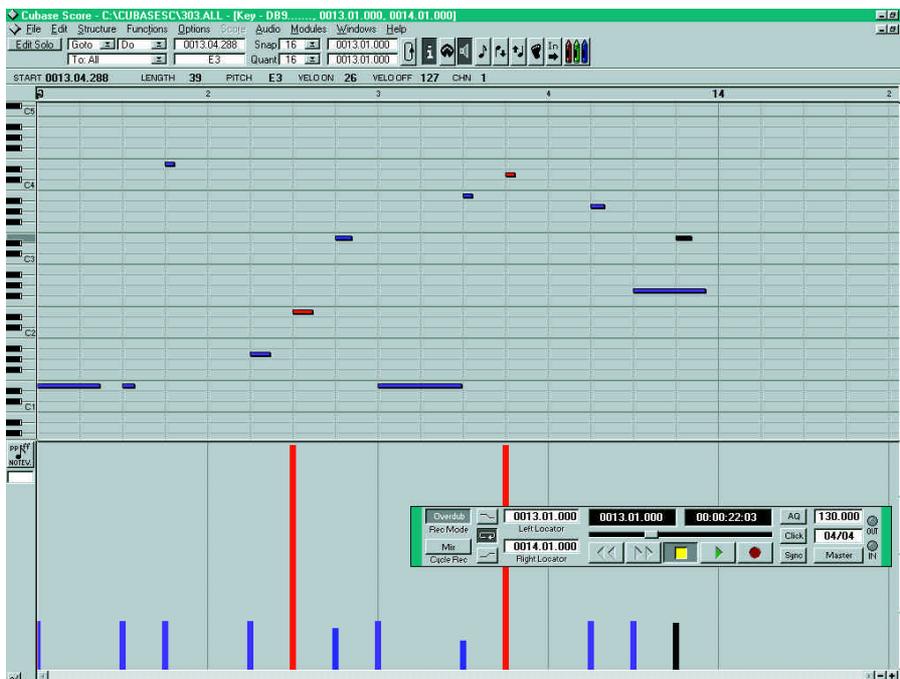
The ideas which follow are illustrated using Cubase but they can just as easily be implemented using RB-383. Before starting,

you to see the notes appear as they come. Likewise, they are just as easily removed.

If you have an idea for the bassline, get it down. If not, select the pencil tool and, based on one note, insert a random syncopated rhythm. If you loop the

sequence over a one-bar loop, you'll soon get an idea for the bits that work. With a rhythm in place, adjust the note lengths to further hone the overall sound, then try moving individual notes so that a melody emerges. Popular intervals worth trying are octaves, minor sevenths and minor thirds.

Most 303 clones respond to high-velocity notes (over 100) with an accent. Using the pencil tool, change the velocities to



An emergent 303 riff created entirely with the pencil tool

set up a TR-909 drum loop. This helps set the scene, since the two instruments go hand in hand. Next, route the 303 through a stereo delay.

At 130bpm, try settings of 231 and 462ms, which correspond to eighth and whole-note delays. This creates a wide, full sound and adds to the overall vibe.

Since the 303's internal sequencer was based on 16-step patterns, the piano role editor, with a 16-snap value, seems a good place to record your bass line. This enables

create a simple sub-rhythm within the bassline. Slides, or portamento, between notes also define that 303 sound.

Next month, we'll be digging deeper into this subject. Until then, get pencilling — it's a great way to come up with new ideas.

## Creative AWE-64 Gold

There is little doubt that Creative Labs' AWE-32 changed the way in which thousands of so-called "bedroom artistes" now create music. The whole concept was

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## Music books

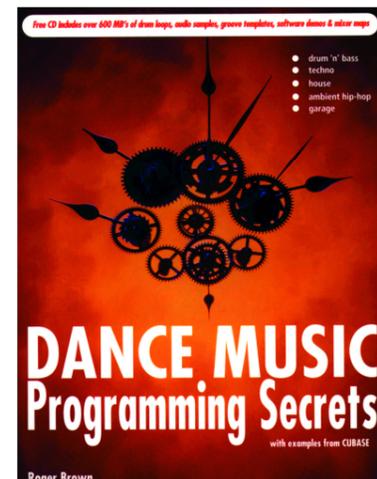
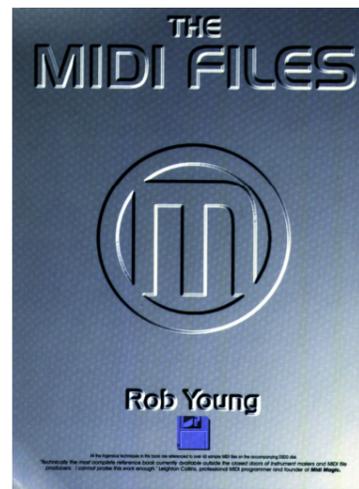
## The MIDI Files

I am often asked to recommend a book to newcomers to MIDI — *The MIDI Files* has just become it. Written in an entertaining, jargon-free style, it begins by telling you what MIDI is, how it works and answering any questions you're likely to have. It intends to guide you through every aspect of the Musical Instrument Digital Interface. If you're thinking about setting up a basic MIDI studio, advice is given on choosing the right sequencer (the pros and cons of hardware and software-based types) and how to go about setting up your equipment.

The main thrust of *The MIDI Files* is honing your programming skills, from learning how to program better drum patterns and create realistic guitar, bass and string arrangements, through to improving your mixing technique. The pages are crammed with valuable hints and tips, many of which are referenced to the accompanying floppy disc containing 60 MIDI files. These include sequencer tricks such as MIDI gating effects, stereo delays, use of portamento, complex percussion fills and song arrangements.

Many of the techniques described have evolved only after many years of experience with sequencers, so this book should give you a useful head start. Well worth the investment, whether you're a novice or think you already know a thing or two.

■ Price £19.95 Rating ★★★★★



## Dance Music Programming Secrets

"The hidden art of programming brilliant, sophisticated, contemporary dance music" is what's written on this book's back cover. Aimed primarily at the novice programmer, it sets out to introduce the basics of programming drum and bass, techno, house, garage and ambient hip-hop styles. There are more than 464 pages with as many Cubase screenshots. Separate chapters deal with programming basslines, rhythmic effects, chords and MIDI effects. There's many a tip to be had, although it's not as thorough as *The MIDI Files* [see above]. The accompanying mixed-mode CD contains five audio tracks that were produced during the writing of the book, and over 600Mb of Atari, PC and Mac files. These include software demos and mixermaps for Cubase and MIDI files to illustrate some of the techniques covered.

I feel the book tries to cover too much ground and doesn't quite get into the heart of programming. If you want to learn how to use Cubase, this book makes a good companion to the Cubase manual: it certainly explains the Interactive Phrase Synth in more detail. There's a section on mixing, and an introduction to digital audio which makes a more interesting read but which has little to do with the title of the book. There's good advice on seeking a record deal with independent labels, too. The same chapter also explores the possibility of pressing and distributing your own work.

I was quite taken aback when I listened to the audio tracks/demos. They are not brilliant or sophisticated and only bear a faint resemblance to contemporary dance music. Has this guy [Roger Brown] been to a club in the last five years? It doesn't sound as if he has.

■ Price £29.95 Rating ★★★

sure to be a success: an affordable card that integrates a sampler, a half-decent synth, a MIDI interface and the ability to record direct to disc.

Although no-one could complain about the AWE-32's feature set, one common criticism was that it was just too noisy.

Creative's new range of audio cards have been designed with a little more thought and with the music enthusiast in mind.

Noise output has been reduced significantly now that the engineers have had a chance to sit down and rethink the board design. The next obvious

improvement is 64-voice polyphony handling and the introduction of Acoustic Physical Modelling. This is achieved with software synthesis, a technology which although still in its infancy is nevertheless something we're going to be seeing a lot more of in the future.

Acoustic Physical Modelling has been available in professional synthesisers for some time now. Yamaha uses it within its range of wind synths to add greater realism and expression to "live" instruments. By

mathematically modelling the characteristics of acoustic instruments (wind, strings and brass), the AWE-64 begins to touch the tip of the iceberg but still falls short of anything realistic. Still, there is a definite improvement in overall realism.

More importantly for the musician, the AWE-64 Gold is supplied with 4Mb of RAM as standard, accompanied by 2Mb, 3.5Mb and 4Mb GM sound banks. This massively improves the synthesiser department. Using Vienna, the sound banks can be stripped down to use only those instruments you require, thus freeing up memory for your own samples.

The Gold edition is supplied with an SP/DIF digital out, which enables the hardware synth/sampler to be plumbed into an external DAC, significantly improving the audio quality and further reducing noise. The analogue outputs have been upgraded to gold-plated RCA connectors (the theory being that gold doesn't oxidise, resulting in better contact with the phono cables). You also receive a MIDI interface kit, a huge wad of Creative software, and a copy of Cubasis Audio on CD-ROM.

At around £199, the AWE-64 Gold is a superb buy: there's nothing around at the moment with quite so many features at anything like this price. If you own an AWE-32, it is certainly worth upgrading.

## Sampling CD: Strictly 12 Inch

If you want to improve your dance floor tunes by any order of magnitude, the first area of production in which to invest is drum and percussion samples. The samples that form the basis of WaveTable drum sets can be effective, given the resources to process, compress and EQ



each sound individually, but this requires a professional studio setup. In the absence of a 96-input desk and rows of rack-mounted effects, why not consider buying a sampling CD, where all the hard work has been done for you?

There is no shortage of CDs providing pre-processed loops and individual samples, but they don't get much better than this. Strictly 12 Inch is an up-to-date, no-nonsense collection of four-on-the-floor loops, which is also supplied with the samples that were used to create the loops.

The CD focuses on house and garage styles, covering tempos from 121 to 130bpm, and is organised so that stripped-down rhythms and individual sounds follow loops of up to 16 bars long. The loops are well constructed and can be used as they come, or for inspiration for new grooves.

Tracks 87 to 98 comprise one-shot samples of kicks, snares, hi-hats, tambourines and various percussion — in fact, all you're every likely to need in the drum department. The people responsible for this CD certainly knew what they were doing. Check out the samples in the hands/sound folder on this month's cover-mounted CD.

## PCW Contacts

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The MIDI Files and Dance Music Programming Secrets are available from any bookshop or directly from Prentice Hall 01442 881900. Creative Labs AWE-64 Gold costs £199 (£169.36 ex VAT). Additional memory: 4Mb £35, 8Mb £60, from Creative Labs 01245 265265. Strictly 12 Inch costs £59.95 (£51.02 ex VAT) from Time + Space 01442 870681.