



PUSHING THE ENVELOPE

Atmosphere and FX



A little atmosphere goes a long way, and with the right effects you can elevate the most mundane of tracks

On the DVD

TUTORIAL FILES
Hear the results of our tripped-out experiments for yourself with the audio samples in the **Tutorial files** folder on the DVD-ROM.

What have Russ Abbot and Autechre got in common? The answer, aside from an obsession with Bella Emborg, is atmosphere. And who can blame them – the right background sounds and effects can transform a track from an average, pedestrian piece into a trip through the furthest corners of the imagination. More than just mere sound

► Here's a plug-in that'll certainly help when it comes to FX. The name says it all...

air, but today, with so many high concept productions and big-budget blockbuster tracks around, you need a little something extra to draw the listener in. Don't just take our word for it – since The Beatles' *Tomorrow Never Knows* introduced the idea of abstract and atmospheric sounds to the mainstream, you can't move for epic intros, enormous breakdowns and 'will it never end?'-style outros.

The main watchword with atmospheric FX is subtlety. While common or garden sound effects should be as big and bashy as possible, those atmospherics should be able to sit in the background of the mix, quietly enticing the listener with their delicate beauty and fragility, even if they do sound like kittens being poured into a wood chipper.

In this month's *Pushing the*



Envelope, we demystify the arcane world of atmospheric FX and show you how to lace your track with beautiful noises that'll turn it from a ditty into a piece full of majesty and awe. Grab your favourite reverb and delay units and leave your preconceptions at the door as we journey to the freaky side of music production... **cm**

GRAB YOUR FAVOURITE REVERB AND DELAY UNITS AS WE JOURNEY TO THE FREAKY SIDE OF PRODUCTION

effects, atmospheric noises help place tracks in a world of their own.

This is where the worlds of music composition and movie-style sound design meet; you may well be able to summon up a catchy little melody and sweeping chord sequence out of thin

STEP BY STEP Stereo shenanigans



1 Grab the nearest swooshy sound effect sample and load it into your sequencer. We're going to use a pair of free plug-ins by Voxengo to create a stereo effect that'll leave your listeners entranced. The plug-ins are available from www.voxengo.com/downloads and on this month's DVD. >>



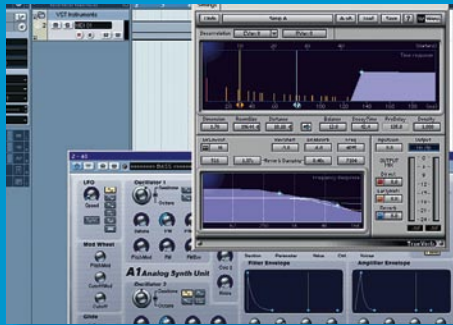
2 Add the OldSkoolVerb plug-in to your track and create a nice big reverb like the one we've got here. Keep the **Damp** value up quite high for a spacey effect, or lower down for a more intimate vibe. Set the **Dry** level down low so that you're left with just reverb. >>



3 After the reverb plug-in, add an instance of the StereoTouch plug-in. Automate the **Width** control so that it moves from minimum to maximum width at an appropriate moment. Listen back, and... yes! The very doors of perception have been flung open by our stereo chicanery.

1 Lost in reverberation

One of the best and most useful tools in the atmospheric engineer's box is the humble reverb. By whacking up the reverb time control, it's possible to create atmospheric sounds that last longer than a particularly intense Viagra overdose. Any old synth will do for this trick – just set an oscillator to a triangle waveform with short amp attack and decay times. Put it through a reverb effect, with the reverb time set to more than two seconds, then set the wet amount to full. Now simply



The secret is in the quality of the reverb sequence a few short notes and you'll be rewarded with haunting, Air-esque chords. The higher quality the reverb you use, the more beautiful this effect will sound, so bring out the big guns!

2 The gates of heaven

For this trick, you'll need a synth with a white noise generator. Make sure the noise generator's oscillator is turned on, and add a pulse wave if you're feeling adventurous.

Now stick the signal through a low-pass filter with the cutoff frequency modulated by an LFO. Set it so that when the filter is at the low part of the pulse, the audio signal gets totally filtered out. Now automate the filter cutoff so that it sweeps through the frequencies, creating a pleasing rhythmic atmosphere. Add chorus, delay and reverb as necessary.

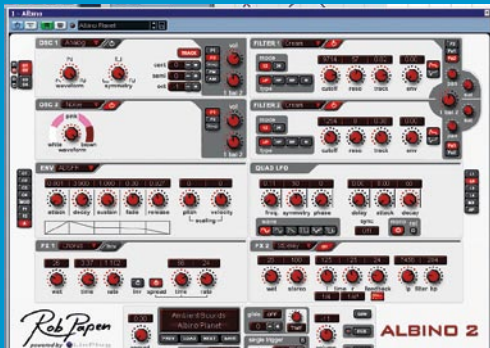


Chill right out with a bit of white noise

3 The laziest effect

Although it won't win any awards for innovation, for sheer cheek the 'Lazy Wind Generator' is hard to beat – it's the ultimate in effortless atmosphere creation. Load up any old synth with any kind of noise generator. Put it through a filter with a slow sine wave LFO modulating the cutoff at about 0.1Hz. With a little fiddling and a delay inserted

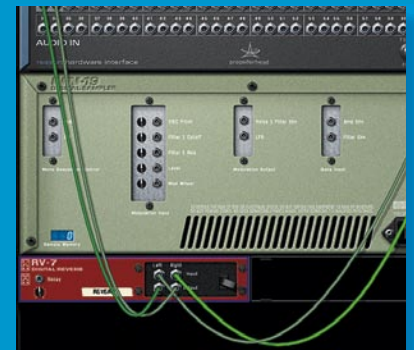
you should have the world's quickest semi-convincing whistling wind. Turn up the resonance for extra whistle, and automate the cutoff for added wind-chill factor.



Sound design in seconds!

4 Boom shake the room

It's easy to underestimate the value of workhorse effects in dance music production, but thankfully it's even easier to create an eminently useful 'boom' noise – perfect for adding extra emphasis to your breakdowns or just throwing in randomly, *a la* Tim Westwood. Simply grab the nearest kick drum sample, and route it through a big reverb effect set to 100% wet. The kick drum is mere percussion no more; it's now an enormous explosion that punctuates the start of a new bar in a manner that even the mighty cymbal crash can't match.



Embroider your breakdowns with a mighty boom by sending a kick through a reverb

5 Enjoy the ambience

If you'd like to create the kind of dark, oppressive atmosphere that pervades the *Computer Music* office, grab your microphone, get your pale ass outside and record some

background ambience. If you live in a built-up area you may struggle to get a sound completely free from traffic noise, so take a day trip to the country and get some fresh air while you're at it. Now, sample your ambience and put it through a low-pass filter. With a little adjustment this creates the sort of sinister background bed that wouldn't be out of place in any pseudo-intellectual horror movie.



Fashion a sinister background ambience

6 The sounds of life

While you're out in the country, you may as well take the time to get some nice real-world sounds. With a decent microphone, it's possible to get

some great noises out of mother nature herself. Running water and insect noises are always good for a bit of new age mysticism, and by pitching them down you can create some truly bizarre and/or horrifying effects. Before you put your expensive mic near anything unsavoury, ensure you wrap a plastic bag around it. The audio example is a babbling brook pitch shifted down by a couple of octaves... squidjy!



There's a whole world out there waiting to be sampled

7

Out-take recycling

If you've got tracks-full of unwanted clunks, buzzes and pick-up noise from guitars or other instruments, don't chuck them out. You can bring out these sounds' harmonic properties by putting them through a delay, then a reverb with a long reverb time. You can use an automated high-pass filter to bring out the sweet spots. In the audio

example, we've used this technique to turn a bit of tuneless string planking into something a lot more tantalising. For more examples of this, seek out a copy of Photek's splendid remix of Therapy?'s *Loose*.



Even audio rubbish has its uses

8

Sexy effects

If you'd like to make your piece a bit more raunchy, there are plenty of tried and tested audio aphrodisiacs out there. For a start, guitar parts can be gently teased into a frenzy with an auto-wah. Tabla are raunchy and

exotic at the same time, and you can get some free samples from this website: www.platinumloops.com/percussion_samples.shtml. Tinkly bits of percussion such as bell trees and triangles are arousing, too, but when processing these sorts of sounds, remember that less is almost invariably more, so keep that reverb's room size setting down for an appropriately intimate atmosphere.

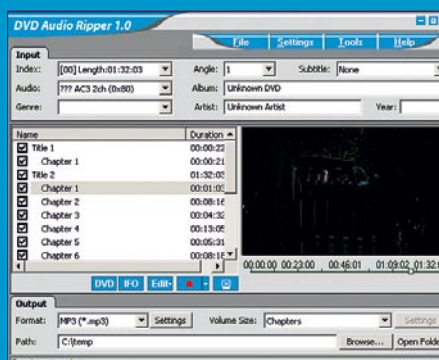


Don't seduce your sounds in too big a room or you'll just turn them off

9

Illicit DVD action

We couldn't possibly condone sampling high quality audio from the latest DVDs, and feel obliged to point out that without permission you can get in trouble if you perform or sell music containing copyrighted material. However, if you do decide to steal dialogue, sound effects or music from your DVD collection you'll be pleased to know that DVD Audio Ripper (available from www.lmtoo.com/dvd-audio-ripper.html) makes plundering your movie collection a snap. If you're a VHS fan, you'll have to connect your video's audio out



Rip dialogue and sounds... legally, please to your computer's line in, or alternatively check out many of the movie sample pages on the web, such as www.moviesounds.com.

10

Digital dub

A useful free plug-in for adding a reggae feel to your tracks is the funky Dub Siren. With this righteous VSTi you can

make all kinds of wobbly noises that may or may not cause Babylon to fall. It's available from www.interruptor.ch/vst_overview.shtml. For a sci-fi feel, add a nice big reverb. Try automating the pitch level and frequency values, or – even better – tweak it with a control surface. The MIDI control numbers are daubed on the user interface to aid your real-time antics.

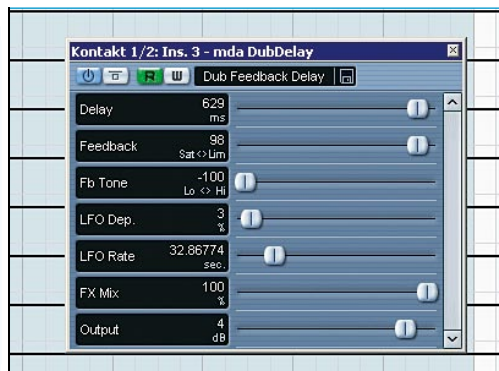


Tear it up with Dub Siren, one of our favourite free plug-ins

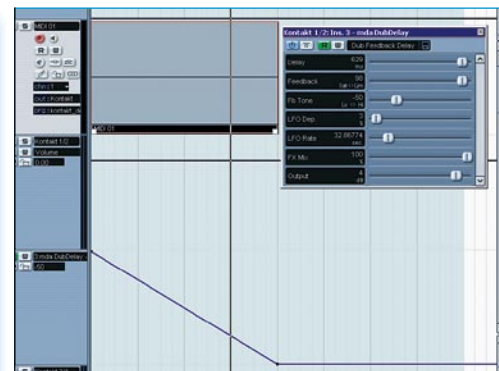
STEP BY STEP Vocal flourish



1 Begin by loading a vocal sample into your sampler and bringing up the waveform. Set it up so that the vocal loops nicely. Waits and suchlike work best for this effect, although it's well worth trying your luck with whatever you have to hand. >>



2 You'll need mda's magic DubDelay plug-in for this trick, and it's available from www.mda-vst.com and on this month's DVD-ROM. Load it up and whack the FX Mix up to 100%, the Feedback to 98%, and the Delay time to around 600ms. >>



3 Play the vocal sample through the delay, and gradually automate the feedback tone from maximum to minimum. Alternatively, if you're lucky enough to own a copy of the freaky OhmBoyz plug-in, you can use that instead – add a bit of delay for gradually churned up rhythms.