

SOLUTIONS

Dance

THE POWER OF TEN

Ten years. That's how long I've been writing the Dance column for *Keyboard*. It has enabled so much for me—from meeting heroes, to receiving letters thanking me for my insights, to compiling dozens of columns for my book, *The Remixer's Bible* (Hal Leonard), that I'm truly humbled by the opportunities this column has afforded. In honor of this occasion, I've assembled a grab bag of ten timeless synth and production techniques every dance producer should know. Enjoy. Francis Preve

1. Know Thy Roland Drum Machines

In '80s pop, the sampled sounds of the LinnDrum, Oberheim DMX, and E-mu Drumulator reigned supreme, but in electronica of *all* types, the crown is Roland's. Here are the modern genres associated with each—these are just guidelines and there's tons of room to quibble over details.

- CR-78: Retro synth pop, IDM (intelligent dance music), clever techno.
- TR-808: Hip-hop, retro synth pop, techno, and tech-house.
- TR-909: Rave classics, '90s house, techno, and tech-house.
- TR-606: Techno, tech-house, and IDM.
- TR-707: Retro synth pop.



Roland's legendary TR-808.

2. Roland TB-303 Acid Leads

In addition to forming the basis for the entire acid-house genre and a massive chunk of '90s rave material, Roland's TB-303 Bass Line rose from being a failed attempt at a bass guitar synth to bona fide legend status—right up there with the Minimoog. It also inspired Propellerhead ReBirth, which opened the floodgates to a deluge of dance-oriented soft synths.

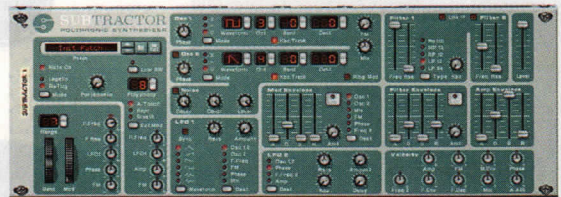


Propellerhead ReBirth, a TB-303 clone.

3. The Nintendo Square

Probably the simplest sound ever, this patch always seems to revive itself and remain relevant, regardless of the genre. I've dubbed it "the Nintendo square" because of the thousands of video games that relied on its sound. Here's how it's done.

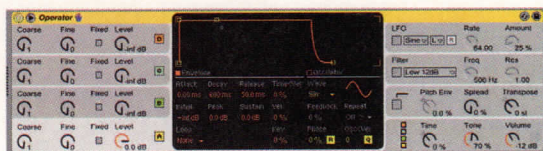
Using just one oscillator of a virtual or real analog synth, select the square waveform. Open a lowpass filter to maximum, then set the volume envelope to immediate attack, full sustain, and immediate release. For extra street cred, add a touch of bit-crushing to the results.



4. That Trance Sound

It's amazing that a sound can define a genre with minimal adaptation for over a decade. Even if you have only a passing familiarity with trance, you've heard that machine-gunning "dee-dee-dee, dee-dee-dee" riff. This sound evolved out of Roland's "supersaw" waveform, but it's easy to create using more standard means.

Start with two or more sawtooth oscillators, then detune them all in equal amounts—in opposite directions to maintain overall tuning. From there, lower the filter cutoff and add some filter envelope modulation with short decay and no sustain. As your riff plays, simultaneously open up the filter and increase the amp envelope's release time. Slather on some chorus and dotted eighth-note delay for added atmosphere.



5. Sine Wave Bass

Whether it's hip-hop, techno, or house, a sine wave bass is the macho equivalent of the little black dress—essential and eternally in style. For everything from 808-style kicks to booty-shaking bass, the simplest waveform is often the best.

Start with a single oscillator. Set the wave to sine (or triangle if that's all you have, but it's not as pure). Open the lowpass filter to max; if using a triangle wave, close it down a bit to more closely emulate a sine. Lay down a simple drum groove and start playing a bass line. See? For added funk, add some LFO or pitchbend swoops.

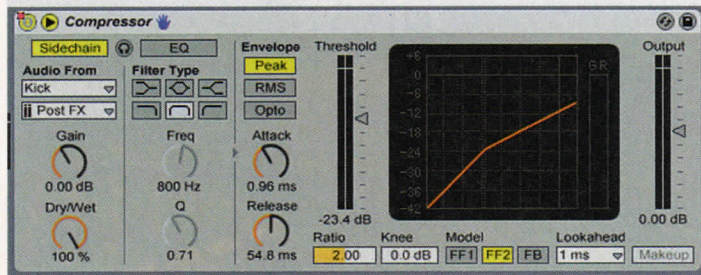
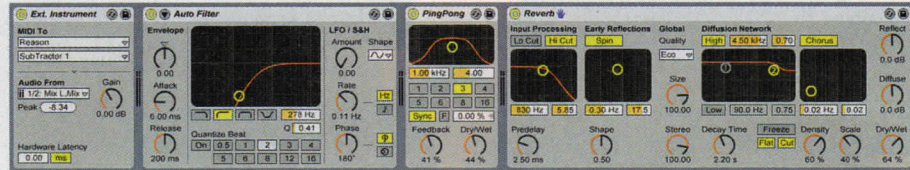
6. Rhodes Comping Chords

Based on jazz and disco, the enduring sound of deep house has remained largely unchanged for nearly three decades. Two key instruments form its basis. One is the Roland MKS-20 digital piano that anchored countless tracks; the other is the Rhodes electric piano. The sound of record labels like Om and Naked often pivoted on the lush sensuality of a great chord progression punctuated by perfectly placed Rhodes stabs. Chorus and delay are the effects of choice here, but to wow your friends with that Steely Dan vibe, try a phaser.

7. White Noise Whooshes

These are a tried-and-true way to add drama to build-ups and breakdowns. In my July '09 Dance column, I gave specific techniques for creating massive noise whooshes. Here's a quick summary of the process.

Start by using a noise generator with no additional pitched oscillators in the mix. Then, create an eight-bar event that plays a single note. The initial result should be an irritating noise blast. From there, use automation to slowly raise the cutoff of the synth's lowpass filter over the course of those eight measures. Adjust resonance to taste—a little goes a long way. Delay and reverb are great ways to thicken the results, and a highpass filter at the end of the chain will tame unwanted lows and chunky lower mids.



8. Sidechain Compression

I'm often asked how to blend kick and bass so that the two don't compete with each other in the mix. Here's the 30-second answer.

If your DAW includes a compressor with a sidechain function, apply it to any bass tracks in your mix. Once the compressors are in place, switch on the sidechain function and assign your kick drum track as its source. Every time the kick hits, the bass will duck in volume slightly. Depending on your genre, you'll need to adjust the compressors' threshold, ratio, and envelopes to taste.

Don't stop at bass, either. Any time you want to reinforce the four-on-the-floor vibe of a track, pads, top loops, drones, and white noise whooshes can all benefit from being ducked by the kick drum.

9. The Eighth-Note Saw Comp

Whether you thank Deadmau5 or blame him, the eighth-note pad/comp is now a staple of EDM vocabulary. Start with a *slightly* detuned (or chorused) sawtooth pad, then lower the filter cutoff and use filter envelope modulation to create a moderately percussive, piano-style envelope. Next, play a simple repeating eighth-note chord progression. Using automation, focus on increasing the following parameters simultaneously: filter envelope amount, filter cutoff, and volume envelope and release. Any subtractive soft synth will do, but for true Deadmau5 authenticity, try FXpansion Strobe (shown) from DCAM Synth Squad.



10. Brian Eno's Oblique Strategies

It's not a synth. Or a DAW. Or a beatbox. But it does come as a website, desktop widget, or even a very expensive deck of cards on eBay, and its usefulness is astonishing. Originally printed in 1975 by Brian Eno and Peter Schmidt, each card gives a tip as to how to bust creative block. The strategies range from "Only one element of each kind" to "Honour thy error as a hidden intention" to "Just carry on." To some, these may seem obvious, or abstract, but when you're banging your head against a remix that's due tomorrow morning, they're worth their weight in rare vinyl.

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Audio examples by Francis Preve.



Great documentary about the Roland TB-303.



Consult Eno's *Oblique Strategies* on the web.