



# THE WHO'S "BABA O'RILEY"

by Mitchell Sigman

**The pulsating intro to "Baba O'Riley"** ranks among the most instantly recognizable soundbites in rock history. Though many believe it sprung from one of Pete Townshend's massive ARP synthesizers, it was actually a Lowrey Berkshire home organ. Its repeat function added a sixteenth-note pulse to held notes — a gimmick for imitating mandolins and marimbas. With multitracking and clever note phrasing, Townshend made this sound like the future of music.

We'll recreate the "Baba" intro in Apple Logic's ES2. [*The Korg Radia*, reviewed Aug. '06, also has a killer ready-made "Baba" patch called "Hooz Next." —Ed.] The track has two parts: the basic root-fifth-octave figure, and the additional note flourishes, both using the same patch. You can do it on many virtual analog synths, with one condition: The synth must have a low frequency oscillator (LFO) that retriggers with each key press, as opposed to a common, free-running LFO. Why? Most of the flourishes Pete plays are two held notes struck a 32nd-note apart, creating a "bouncing" auditory illusion as one note

plays and the other is silenced. If two notes struck at different times pulse in perfect sync, the Baba patch won't sound right; you want independent pulsing for each note. On synths that let you select poly or mono LFO modes, use poly.

1. Set two oscillators (oscs 2 and 3, in this case) to thin pulse waves for an organ-like sound.
2. Tune the oscillators an octave apart.
3. Detune them by one cent.
4. Mix their volumes equally; in ES2, you place the dot equidistant between the two oscillators on the triangle grid.
5. Use a bandpass filter for a midrangey tone with few extreme highs or lows, and add some resonance.
6. Turn up ES2's Drive knob for more lo-fi vibe. Leave filter envelope settings off.
7. Set the volume envelope as follows: attack at 10ms, decay at zero, sustain at full, and release at 12ms.
8. To get the sixteenth-note pulse, in ES2's first modulation slot, set Target to Amp and Source to LFO1, and move

the green amount slider up to almost full. (If your synth doesn't have an amp or VCA mod destination, you can modulate a lowpass filter whose cutoff frequency is set to zero instead.)

9. Set LFO1's rate to 7.9Hz, and the waveform to a downward saw. Now, held notes will pulse.

As to effects, I added an EQ with 4dB of low cut at 72Hz, 7dB of boost at 2,150Hz, and a high shelf cut of 8.5dB at 4,400Hz for a '70s tape sound. Logic's GoldVerb on a bus provided small-room ambience. I also panned the main sound left and the reverb right.

Now, duplicate the channel strip on two DAW tracks. Set tempo around 117 bpm, and record and quantize the *FC-FC* figure on the first track. Let this play in loop mode while improvising flourishes in the key of *F* on the second track. It's hard to describe, but you'll instantly hear when you have it right. ☑

Hear step-by-step audio examples at [keyboardmag.com/How-To](http://keyboardmag.com/How-To), and download Mitchell's "Baba" patch for ES2 at [celebutantemusic.com/keyboardmag](http://celebutantemusic.com/keyboardmag).