

R R E T R O G E N E R A T O R

Feedback can be your friend. Get more out of signal processors with this simple, clever, low-cost circuit.

BY DAVID SNOW

ALTHOUGH I'M ALWAYS ON THE LOOKOUT for gear with the best price/performance ratio, I'm usually compelled to sacrifice features for the sake of my budget. One of those sacrifices is knobs: Even though a device like the Alesis MIDiverb II has a large number of reverb, delay, flange, chorus, and stereo generation programs, I always want more. There isn't much you can do about modifying the MIDiverb's presets short of reprogramming its ROM (kids, don't try this at home), but as anyone who ever owned a spring reverb or a monophonic synth can tell you, there are innumerable ways to expand the application of any piece of equipment.

The May 1990 **EM** covered a MIDiverb-specific mod for adding *regeneration*, the technique of feeding a portion of the unit's output back into its input. But regeneration is just as applicable to plate reverbs, filters, vocoders, wa-wa pedals...you name it. Regeneration will turn a graphic equalizer into a nifty tone generator, and do things to spring reverbs that may be illegal in some states. The sonic results of regeneration depend upon the type of effect with which it is used: With simple delay, the input will echo, echo, echo and gradually fade away; with reverb, regeneration will introduce a metallic, artificial resonance. More commonly, adding regeneration to flangers produces an aggressive, swept-filter effect (and yes, using the exclusive secrets revealed herein you can psychedelice the MIDiverb's ten flanging programs).

Best of all, this trick is easy to accomplish without modifying your equipment. All that's required is a mixer to combine the unit's output with its input, and a Y-connector to tap the output for monitoring (Fig. 1). While you could set up this configuration using mixer bus patching and a preamp or two, it's more convenient to build a small outboard mixer for this purpose and keep it hooked up to your unit. That's what the Retro-Regenerator project is all about.