

# EDITORIAL

## THOUGHTS ON THE LIMITS OF TECHNOLOGY

The advance of technology has been nothing short of breathtaking over the past decade. This fleeting ten-year span has seen the advent of the fax machine, the proliferation of the personal computer, and the development of the portable video camera. What's more, just over the horizon, more breakthroughs are in the works in the form of interactive media.

Within the music products industry, technological progress has been equally compelling. Thanks to micro-processor technology, today's \$1,000 synthesizer is more powerful than anything available, at any price, 15 years ago. Technology has also given us the affordable digital multi-track tape recorder, which enables anyone to make a CD quality recording in their living room. Space precludes a conclusive listing of noteworthy technological breakthroughs here. But suffice it to say that digital technology showcased market forces working at their best. The buying public has benefited with a flood of better and more affordable products, and retailers and manufacturers have been enriched by growing sales.

Any reflection on the wonders of technology would not be complete without a few thoughts on its limitations. For all our scientific prowess, sound, and how people perceive it, remains a mysterious thing that is not completely understood. Thus, we have yet to create an electronic instrument capable of capturing the nuance and subtlety of a vibrating string. Electronic musical instruments can provide rich and layered accompaniments, but they are no substitute for a good guitar or violin soloist. Similarly, while today's digital pianos are wonderful instruments, no one would say that they are a true substitute for a fine grand. In guitar amplifiers, with all of the industry's mastery of digital electronics, we have yet to devise a substitute for that enduring technological antique,

the vacuum tube. For discerning guitarists, the ultimate in sound requires tubes.

Will technology ultimately provide solutions to a few of the challenges provided above? It's hard to say. We think that in some instances, no one is particularly interested in a solution. There is no question that thousands of musicians, producers, and sound men are thrilled by the prospect of digital multi-track recording because it expands their horizons. Similarly, thousands of consumers have purchased digital pianos because of their cost, features, and practicality. However, is there a similar demand for an electronic substitute for the acoustic guitar, assuming it were technically feasible right now? We think the answer is no. The instruments that are part of our musical culture are desirable not only because of their sound quality, but because of social and visual factors, image, tradition, and a larger sense of fashion. Microprocessors can address sound quality, but they are not so powerful yet that they can alter people's frame of mind or expectations.

On another different, but related subject, the upcoming NAMM show highlights some of the limitations of technology. We all live in the era of instantaneous communication, thanks to computers, faxes, and the telephone. Yet in spite of all these marvels, when it comes to really understanding what's going on, we rely on a business practice first developed in the 9th century: the trade fair. Technology is great, but there is still no substitute for bringing people together on a face-to-face basis, for building relationships and getting a handle on market trends. We hope that all our readers will make an effort to go to the show; what you learn there could be the difference between a successful and not so successful 1994. And, while you are at the show, make a point of attending Bob Popyk's presentation on another aspect of business that has resisted the advances of technology: selling at outside events. He promises to offer a host of useful suggestions for increasing sales without adding to your overhead. The seminar is on Friday at 8:00 a.m.

**Brian T. Majeski**  
Editor