Guest Editorial

By Bill Buxton

why not design synthesizers a pro can tour with?

MAYBE MOST KEYBOARD players only worry about whether their synthesizer will work after it accidentally topples to the floor. But when I dropped my DX7 while setting up for a concert at the Pompidou Center in Paris, I couldn't help but wonder *why* I dropped it.

My train of thought went something like this. If I have a particular accident, chances are that someone else has had the same one as well. And if several people have had the same problem under similar circumstances, then perhaps the fault lies not with us, but with the design of the instrument. This might seem like passing the buck, saying that it was the DX7's fault rather than mine. But that's just the argument I'm going to make here.

It was a hot, humid afternoon in Paris, one of those days when, after carrying the umpteenth road case into the performance space, I kept asking myself why I ever gave up the sax. By the time I got to the DX7, my hands were coated with perspiration. The instrument just slipped out of my hands as if it had been greased.

The point is that this scenario was predictable. Inevitably, lots of people with slippery sweaty hands will be handling DX7s. But are there any grips on the DX7? No. What you have is a smooth glossy surface which looks good in the store and in your living room, but feels like a banana peel when the instrument starts sliding from your fingers. Why didn't Yamaha incorporate some hand-holds, or finish the DX7 with a less slippery surface? The only answer I can come up with is a lack of foresight, otherwise known as bad design.

To its credit, the instrument still worked. But the incident brought to mind a whole bevy of thoughts about how many current instruments seem designed to exacerbate, rather than alleviate, the frustrations of touring.

For example, there is Buxton's Law of AC Power Outlets, which stipulates that the number of AC outlets available is always less than the number needed. Some have tried to counter the effect of this law by carrying AC power bars, but I don't consider that a solution. First, power bars take up space and weight, which can be quite valuable, especially when you're flying to your gigs. Second, no matter how many power bars I have, I still seem to run out of outlets. Third, power bars contribute to the "cable spaghetti" so prevalent among synthesizer players.

Here's an alternative: Why can't my synthesizers have auxiliary AC power outlets on their back panels, just as my stereo does? It would be so simple, cheap, and *convenient*. For one thing, it would help clear up the cable spaghetti. Anyone who has been on the road for more than five minutes can tell you that the number of technical problems you have will be proportional to the number of cables and connections in your setup. Problems are generally low-tech (cables and connectors) rather than high-tech (synthesizer electronics). Auxiliary AC outlets will allow equipment to be daisy-chained together, resulting in a cleaner installation—one that is less prone to problems and easier to trouble-shoot. And if our objective is to clean up cabling and daisy-chain the AC, why not have retractable AC cords on our instruments, like the ones on vacuum cleaners? All those dangling coils of cable would be greatly reduced. You would just pull out enough cable to get to the closest available AC outlet.

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Another source of irritation involves transporting your equipment. I travel frequently by air. In doing so, I have two options on how to move my instruments: as air freight, or as regular checked baggage. Sending my equipment via air freight costs more, and that additional cost can make the difference between profit or loss on a gig. Couple this with the fact that musicians often want, or need, to have their instruments travel on the same flight with them, and the choice seems obvious.

But there are two big stumbling blocks: weight and baggage handling. Weight is important because there is an international agreement requiring that any piece of baggage weighing more than 70 pounds be sent air freight. This means that if your instrument, along with its road case, weighs more than 70 pounds, you can't take it with you. You must pay the expense and take the extra time to send it air freight.

This brings up the issue of baggage handling. I am sure that baggage handlers are nice people who live creative and useful lives. But they seem to have one peculiar quirk. They behave in a strange manner when they see a road case, especially if it is marked *Fragile*. On a recent trip to Vancouver, I shipped the Apple that drives my Syntauri via air freight in a custom-made Anvil case—you know, the kind you can drive a tank over. Needless to say, it was covered with *Fragile* stickers. Well, on my arrival, I could only marvel at the creativity of the handlers who had discovered a way to bash the instrument so hard that *every* ROM chip in the computer had been knocked out of its socket! Not to be outdone, the handlers on the route to Paris found a way to puncture the same road case with a quarter-inch hole (which missed the instrument—better luck next time, folks).

In airport baggage claim areas or on the Pompidou Center floor, the problems are similar. Flying instruments is as much a fact of life for the touring musician as sweaty hands. The lesson in either case is the same: Professional instruments should be designed for travel, in terms of both handling ease and durability. As air freight regulators and baggage handlers can attest, separate road cases are not the answer. I can see no reason why a synthesizer cannot be designed to travel lighter than a road case, yet offer as much protection. Look at the Bose 802 loudspeaker. Its designers understood that it not only has to function as a speaker, but also has to be transported. Hence, the speaker enclosure was designed to serve double duty as a road case. The net result is decreased bulk, weight, and expense. In my opinion, synthesizer manufacturers can, and should, learn from this example.

When I buy a synthesizer, I am not buying a piece of furniture. I am buying a tool for my trade. The fancy wood trim may look great, but it doesn't make the instrument sound or carry any better. As the Bose cabinet proves, you can structurally integrate your road case into the synthesizer cabinet and still have a handsome axe. And as a bonus, it might be easier to include some of the other features mentioned here, such as AC power outlets and retractable cords, or even some modular system that enables you to lock your instruments together without having to rely on stands or tables.

The point of all this is that we can come up with solutions to some of the shortcomings of current designs. True, designers have been working hard, and we have benefitted. Just look at the recent improvements in cost/performance, and the smaller package sizes of today's instruments. But there is a ways to go yet, and we users can play a major role in this progress. It is amazing how receptive manufacturers are to good ideas—ideas gleaned from insights gained on the road. If you have some insight, then share it. Someone may listen—maybe even the marketing manager of your favorite synthesizer manufacturer. By speaking out, you will not only be helping us all; you may be saving the floor of the Pompidou Center from further abuse.