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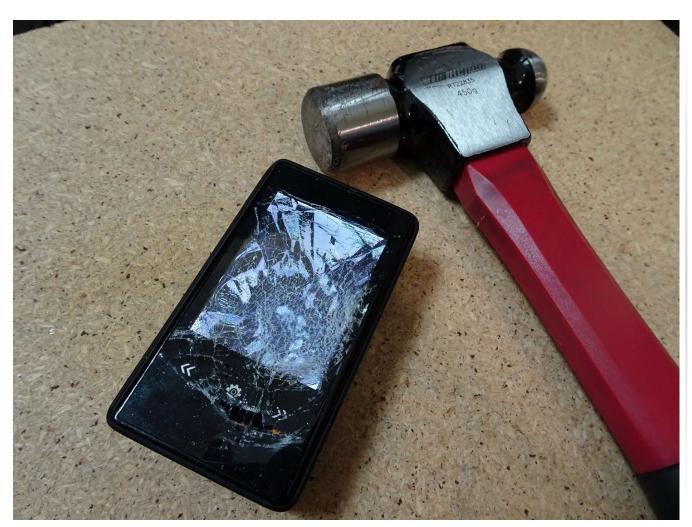
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Knobs vs touchscreens
A letter to Bob Pease points out the frustrations and downsides to our menu-driven world.

Back around the year 2000, electronics guru Bob Pease got a letter from a concerned reader. You can read the original here. I reproduce it here, since it is so darn important to understand. The letter writer was a musician that watched the advent of electronic instruments that had menu-driven screens. Back then these were not touch-screens, but some button or joystick made you scroll though dozens of menus to set up the instrument.

These days the programmers and finance types have removed the scroll and menu buttons and put in a touch-screen, which is even worse.

I have machinist buddies that despise touch-screens on milling machine controls. They want a real button that you can feel for while you look at the tool. not an icon on a flat featureless screen. I hate touch screens on test equipment for the same reason. Here's the letter.

Dear Bob:

Re: your comments about "menus vs. knobs" in "Bob's Mailbox" (electronic design, Feb. 21, p. 133). So you think you're frustrated with menus too? So are a lot of musicians out there.

There's an interesting parallel between musicians and engineers and the tools they use. Like many engineers, I have had a lifelong fascination with analog synthesizers because they're the perfect bridge between my profession (electronic engineering) and my hobby (music).

I play piano and analog synthesizers. I've been a performing musician by night and an engineer by day for the last 20 years. Back in the '70s and early '80s, synthesizers came standard with a panel full of knobs and buttons. I cut my teeth on instruments from that era. Incidentally, your friend Al Pearlman was a big contributor to this area with his ARP instruments until they were liquidated in 1981. His instruments were brilliant!

In the early '80s, knobs and buttons were replaced by menus to cut down on cost or to provide more bells and whistles at the same price. I absolutely detested that interface and hung onto my "antique equipment." When you're really interested in creating sounds, like I am, a real-time interface with knobs and buttons is far more efficient to work with. I can create the sound I want 10 times faster with knobs than with menus, and that means making the most of that moment of inspiration.

Other musicians laughed at me. While everybody else was buying the latest and greatest digital dinner bell with menus, I bought up their "obsolete" analog synthesizers that they were dumping (at bargain-basement prices) so they could finance their new purchase. (Smart man! /rap)

Then they wised up. One, they got tired of the constant debt from buying the new-model-year keyboard that was rendering their previous purchase obsolete (for which they hadn't finished paying yet). Two, they were tired of the learning curve associated with each new interface--lost time learning a new system. Three, in the frustration of dealing with menus, they were reduced to using the presets in the machines. Suddenly everyone sounded the same and there was no individuality--something that is sacred to the art of music. (Why would musicians be SLOW to understand that? Digital seduction, I guess... /rap)

I stuck out like a sore thumb. People suddenly noticed that I had a unique voice when I played in clubs, and I started getting calls to write songs and make money using my "antique equipment"--an unplanned but fortunate consequence of my stubbornness. (Nicely put! /rap) I could provide clients with exactly what they wanted in less time than my other musician friends.

Starting about 1990, musicians caved in to their frustrations with menus. They rediscovered the knobs on the old stuff and fell in love again. Old analog synthesizers became the rage. The value of my collection has increased at least 500%, while the digital dinner bells fell to rock-bottom market prices. This has been happening all over the world. Now who's laughing?

But those old pieces come with a price of admission. Most are over 20 years old and are malfunctioning, and there are precious few people left with the knowledge to fix them. The knowledgeable techs still in business are swamped with work.

Engineering does have its rewards, however. Over the years, I learned to keep my machines running (on multimeters and analog scopes with no menus, of course). Now musicians are calling me for repairs. Now who's REALLY laughing?

The manufacturers heard our cry and wised up. Today, knobs and buttons are coming back. A musician can find plenty of new keyboards with a generous set of controls and can happily tweak sounds to their delight. No more frustrations with menus! Now if the test industry would just wise up and make engineers' lives easier....

MICHAEL E. CALOROSO
via e-mail

Hello, Michael C. At first I thought I'd have a LOT of comments on your letter, here. But I have almost NOTHING to add. YOU have said it all. You know the value of good analog interaction--intuitive interactions--between people and systems, using analog controls, sliders, knobs, etc. You're right to point out how many people foolishly went AWAY from that. If they're coming back now, then they are getting smart even though it's a bit LATE.

I know (knew) some of the guys who made analog electronic music instruments--Lyricon, Novaline, and ARP. They were KEENLY-- almost fanatically-- interested in those intuitive interactions. So we are preaching to the choir. I just hope other guys have not thrown away their scopes with six (or more) knobs.--RAP