

By Chuck Moss
special writer

I stood in the checkout lane waiting my turn when something to the right caught my ear. There, oblivious to the noise and the bustle and the blue-light specials, a little boy sat fingering an electronic keyboard. He was playing Beethoven's "Ode To Joy."

While few of us get or give free symphonic concerts at the supermarket, most will concede that these little piano-looking things are everywhere. What are they? Tiny pianos? Do they make those weird sounds you hear on MTV and "Miami Vice," or are they user-friendly enough for neophytes?

The answer is none and all of the above. From toy-like starters to expensive professional systems, the electronic keyboard is a unique instrument that has finally come into its own.

"THE ONLY limit is the human imagination," says Tom Hollyer, an owner of the Musical Oasis on South Woodward in Birmingham. Spare, thin, balding, bespeckled, Hollyer looks like a technician, an impression reinforced by the surrounding high-tech devices.

"Our strong point is high-end electronic keyboards and instruments," Hollyer said, pointing to a number of intimidating machines.

Be they computers or toys, all electronic keyboards share certain traits.

"An electronic device creates out of nothing: sound. In, say a trumpet, you blow into the bell, which makes a sound wave. The keyboard does the same, only electronically. The instrument makes an electronic impulse, which goes to a speaker and makes the vibration, the sound. It could be anything.

"In the early days of synthesizers someone decided a keyboard would be the interface where humans could close the switches to make the electric impulses. It could just as easily have been something else. The keyboard had good points, but it's kind of a shame because people think of electronic keyboards as pianos. They don't really sound like pianos, so traditionalists don't approve. Nonsense! These things aren't surrogate pianos; they're a completely new, legitimate instrument.

WE PEER at the array of keyboards, some hooked up to computers. Hollyer smiles.

"There are three branches of electronic instruments: digital synthesizers, analog synthesizers and samplers. The synthesizers make sounds out of the air. We may label them 'trumpet' and so forth, but they are artificial, unique."

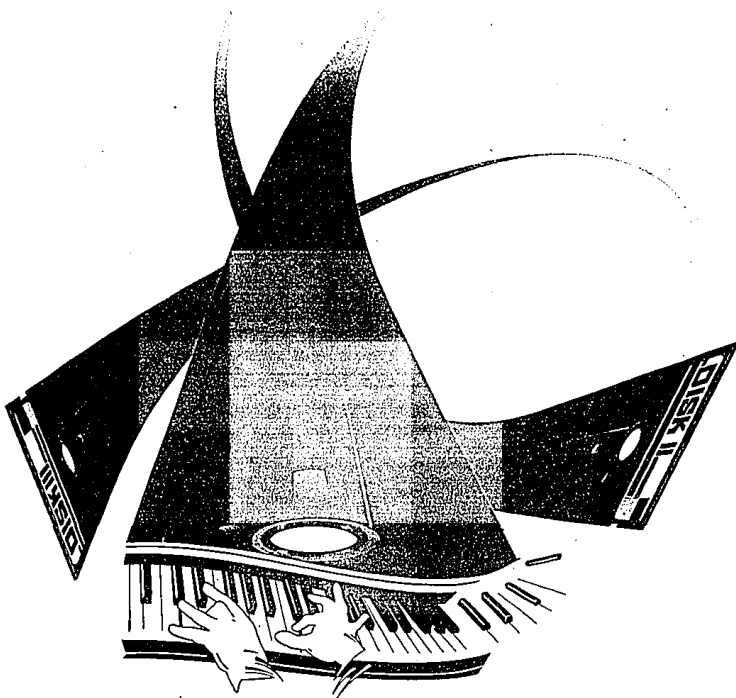
Analog sound is the original technology, with sound tones reproduced by electronic signals that "represent" the waveform of the tone. Digital is all done with software," he said. "It's more computerized. You get a much, much greater variety of wave forms.

"Samplers merely reproduce a particular sound, taking a 'sample' and reproducing it electronically, like an aural camera: a cello, a barking dog, a dishwasher, you name it."

So synthesizers generate their own noises, samplers reproduce sounds. "That's all," Hollyer grins wickedly. "Of course, a good synthesizer lets you alter and modify the sound."

WITH THAT, Hollyer steps to an enormous keyboard, turns on a computer display, clicks on another machine and matter-of-factly says he's brought two synthesizers on line.

"All good instruments, even small keyboards, use MIDI: Musical Instrumental Digital Interface. That's a special computer language that lets devices talk to each other. No matter what you get, make sure it's MIDI.



KEYS to the MIND'S EAR



STEPHEN CAITRELL/Staff photographer
Tom Hollyer sits behind the keys of an electronic keyboard at the Musical Oasis in Birmingham. "These things aren't surrogate pianos; they're a completely new, legitimate instrument," Hollyer says.

Otherwise, you won't be able to grow the thing or trade it in."

With these keyboards hooked up, Hollyer sets up a drum pattern, tapping on electronic pads with his fingers. Then he brings a trumpet, a guitar, and calls up an arrangement from the computer's memory.

"Memory is very important. You can store your creations, play and modify them."

Soon the room is vibrating with an entire, contemporary, full-bodied sound. Where's the orchestra? Hollyer smiles and bows.

WHO BUYS these things?

"Full-time professional musicians, say 20 percent. The rest are part-time professional musicians, students, enthusiasts. This one, a Yamaha DX-7, runs about \$2,000. Systems, with computers and software, can cost much more. Still, the similarities are stronger than the differences. The more you pay for, the more you get."

At Highland Appliance, Brad Morrison services a different clientele.

"It depends," he muses. "on how much you want to spend. You can get keyboards with bigger keys, more functions, more memory."

A tiny Rhapsody "Songmaster" sells for \$19.88. It has a short keyboard with mini keys, a "programmable" memory for recording and playing back tunes. Slightly more expensive is the \$37.88 Yamaha PSS 130. It has big keys, a short board, and can simulate eight instruments like trumpet, guitar and organ. It also has a rhythm section, where eight buttons select automatic, pre-programmed drum rhythms like rock, bossa nova and swing.

The more money, the more features. The Yamaha PSS 11 sells for \$199.86, has 16 rhythm selections and 20 instruments. The Casio Tone CT 310 is the top of the line here, with large key pads for snare, bass drum, etc. You can duplicate Tom Hollyer's drum solo along with 10 different tones in memory for \$329.58.

FOR REAL aficionados, there is the Yamaha PSR 270, with a "voice bank." Ninety-nine numerically selected sounds let you play songs on honky-tonk piano, horn section, "Cosmic" space tones, machine guns, hand saws, barking dogs and quacking ducks: \$128.

Who composes "Cantata in B-Minor for Machine Gun and Duck?"

"I don't ask them what they're going to use it for," says Morrison.

What to look for if you're buying an electronic keyboard?

"Price is a factor," Tom Hollyer advises. "Make sure it's MIDI compatible. For \$200 you can get a good starter keyboard. Use it to see if you or your kid really wants to go with it, and if you're really a musician, junk it, and run with something real."

Choose features you'll want, listen to the machines for a sound you find pleasing. Remember, they are not poor-man's pianos or simulated horn sections, but genuine instruments in their own right. Big keys help in learning and are more compatible with acoustic keyboards (real pianos). Keyboards with canned sound are OK, but for real creativity, you'll want a device that will allow you to modify and shape your own sound.

If after all this, you think you're ready for the 21st Century music, go to it.

"If Beethoven were alive today, he would definitely be composing on electronic keyboards," Hollyer insists.

What about Bach?

"Maybe," Hollyer ponders. "I think if Bach were alive today, he'd probably be a computer programmer."

The receiver revolution

By Wayne Peal
staff writer

You can't always get what you want. Stereo receivers, however, prove a rare exception.

When it comes to modern you receivers, you can get the ones you want. And at an affordable price.

Push-button tuning and other one-time luxury options are now available in moderately priced receivers. That means you can accurately tune in your favorite radio station and efficiently drive your speakers for under \$300.

Sales reps and reviewers agree — comparing today's budget receivers with decade-old counterparts is like comparing a 707 with the Concorde. One's sonic; the other's supersonic. "You get a lot more oomph for the buck," said John O'hannesian, a salesman with Almas Hi-Fi Stereo, Birmingham.

"They're a lot more demanding, they can more readily exceed their listed wattage," he added. "It used to be that what it said was what you got. But now, receivers listed at 40-50 watts can reach 75 watts without distortion."

MICROCHIPS caused the big breakthrough. "I used to take a whole circuit board to perform a function, now it takes just one microchip," said Murray Foreman, co-owner of Advance Electronics, Livonia. "That means there's more reliability. There's less that can go wrong."

Microchips, for instance, have made push-button tuning nearly standard among even the lowest-priced receivers.

Dead-on tuning is the result. That's especially important in major media centers such as metro Detroit, where as many as five radio stations can operate between 100 and 101 kilohertz (or any other two frequencies).

Up to a dozen stations can be preset with push-button quartz tuning.

A lot more oomph for the stereo buck

At the touch of a button, WDET-FM could be locked-in at 102. WKSG-FM at 102.7, etc. Audiophiles with unlimited budgets may prefer an integrated unit featuring a separate amplifier for power and tuner to pull in radio signals but all-in-one receivers are far more popular with the rest of the buying public.

"I don't know if it's the convenience, but we just sell a whole lot more of them," O'hannesian said.

DESPITE ADVANCES, it's important to keep performance in perspective. Low to moderately priced receivers won't shake the rafters and rattle the halls with either Beethoven or Bon Jovi. But they generally will provide enough power to satisfy your ears and keep neighbors off your back.

Not every receiver is compatible with every pair of speakers, either. Think of the receiver as the system's heart and the speakers as its body. Pee Wee Herman's heart couldn't drive Refrigerator Perry's body. Or vice versa.

It's best to have an amplifier pumping out wattage that falls well within the speakers' range. Too little power strains the amplifier. Too much damages the speakers.

Not down your speakers' maximum range and ohm rating before going to the stereo store.

As always, you should get hands-on experience. Twiddle the knobs a bit to see whether using your potential new receiver will be a pleasure or pain.

ANOTHER TIP: If you're going to use the receiver to amplify your turntable, tape deck and compact disk player, you should check to see if it has the appropriate number of jacks.

People living in isolated neighborhoods halfway toward Flint or Ann Arbor would be wise to investigate the receiver's ability to pull in weak radio signals.

From there, it's a matter of selecting one with the options you're going to use. Features ranging from push-button volume control, high and low filters, additional jacks for tape-dubbing decks and sliding volume controls are offered on various models.

view to the NAD 7220PE, Acoustic Research Model AR X-046 and Parasound DR 40, but dozens of models are available.

Selecting the right one depends upon use.

Sound quality is of primary importance, but it's hard to determine in the acoustically perfect showroom. See if the store offers a trial period or if the representative can hook the receiver to a pair of speakers matching those at home. Remember, it's your money.

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For once, it's nice to know what you want is what's available.

Wristwatch industry changes with the times

"Your money or your life."
"Here's all the cash I've got on me."
"Hey, Give me the watch too."
"Sure. I was just going to throw it out anyway."

AP — This year marks the 20th anniversary of the quartz movement that has virtually taken over the watch industry.

In so doing, it has revolutionized the function of the wristwatch and its impact on fashion, reports Kae McCulloch, fashion consultant to the Jewelry Industry Council.

On Dec. 19, 1967, the Horological Electronic Center in Geneva, Switzerland, announced the development of a special battery-powered watch. This watch did away with the traditional balance wheel and escapement, thus ushering in a remarkable era in watch development.

THE FIRST prototype, weighing a little more than half a pound, wasn't too unlike the first wristwatch on record.

That one, presented to Queen Elizabeth in 1571, was as large and heavy as an ornate brass doorknob, and even resembled one. Worn on a sturdy chain around the wrist, it didn't keep very good time and was mostly treasured for its novelty.

"Small wonder it took 200 years before the wristwatch emerged again," McCulloch said.

Like early-day wristwatches, the new quartz watch has gone through a series of evolutions. Seiko brought to market on Christmas Day 1969 the first quartz analog (traditional dial with hands and markers) watch for men. It was in 18-karat gold, and cost \$1,250.

In 1972, Hamilton introduced the first digital (displaying time in numbers) on the market, and it cost \$2,100.

THROUGH THE '70s, the race was on among watch companies in producing quartz watches. The LED (light emitting diode) digital readout

"Today, everyone can have a watch that is accurate, durable, water resistant and requires no attention save the addition of a new battery."

— Kae McCulloch
fashion consultant

quartz watch displayed time by dots or bars that glowed at the touch of a button. It was quickly succeeded by the LCD (liquid crystal display) that constantly displayed the digital readout.

Inexpensive, disposable digitals became popular with a public that was hooked on convenience.

Extremely elegant quartz watches have come on the market for both men and women. 14- and 18-karat gold, often richly encrusted with pavés of diamonds or detailing of precious colored stones, the watches are more than simple timepieces, McCulloch points out. They are now functional jewelry.

Quartz has swept the young market also, with bright bands and watch dials for teenagers, geometric patterns and bright colors.

Watch wardrobes have invaded the fashion scene, with all age groups looking for watches to wear at work, play and for dress occasions. Prices range today from extremely expensive down to literally dollars and cents.

"Today, everyone can have a watch that is accurate, durable, water resistant and requires no attention save the addition of a new battery," McCulloch notes. "Meanwhile, watch technology continues to improve."

