

Ever wonder
how people
got along before
computers?

Apparently, some people got along just fine. No doubt, Charles Dickens would have appreciated a good word processor when writing his famous novels. And Raymond Loewy could have used a whizzy graphics application to prepare his award-winning designs for presentation.

But still, judging from the accomplishments of these two people, the world doesn't seem to have suffered that much—not creatively, anyway. Of course, there's no way to know if people like Dickens and Loewy would have produced more and maybe even better work had they had a little technology at their fingertips. They certainly would have worked differently—if, that is, they had bothered to work on a computer at all.

For instance, it's kind of tough to imagine Dickens trudging through the misty streets of London lugging a PC—or even a state-of-the-art laptop. And Loewy, well, it's difficult to envision this consummate artist trading his nice white sketchpad for a multi-tasking workstation computer.

Chances are, these aren't tradeoffs either artist would likely have gone for. In fact, they're not even tradeoffs business people today are particularly happy about—at least not according to recent surveys. Apparently, most people are only using their computers an average of an hour a day.* The rest of the time the little marvels sit idly on desktops while their owners bustle back and forth between meetings, airplanes, and presentations.

How could this be, after all these years of technological revolution? Because as “user friendly” and “intuitive” as computers have tried to become, they still haven't quite hit the mark. They still force us to speak their cold and cryptic language. If it's not codes and commands, then it's mice and menus we're forced to contend with just to express our thoughts on screen.

Thoughts that, surprisingly enough, still come most naturally through pen and paper. Even for the best of thinkers.

Office of **All the Year Round**,
 A WEEKLY JOURNAL CONDUCTED BY CHARLES DICKENS.

No. 26, Wellington Street, Strand, London W.C.

Thursday Twenty-fourth March 1870
 Dear Collopy.

I have this day paid into
 your bankers £ 31.. 6.. 0; being the odd
 £ 25 due on Veronica after repaying Chapman,
 and £ 6.. 6.. 0 due for the Swiss Song
 Festival.

I make no claim on the right
 of translation into German; but in this case,
 and in all others, leave the privilege with
 the writer, as being a writer myself.

Yours truly

Charles Dickens

At first glance, they seem an unlikely pairing: Charles Dickens, famed English novelist, and Raymond Loewy, pioneer of American industrial design. However, both were amazingly prolific and popular in their day. Author of more than 15 highly acclaimed novels and 23 Christmas books, Dickens often watched as 20 different London theatres simultaneously produced his stories. To Loewy's credit are designs for everything from watches to automobiles, including the 1962 Studebaker Avanti. In the early seventies, just as the cold war was thawing, Loewy received a rare invitation to Moscow to design the Moskvich, pictured below. To Loewy's way of thinking, his design blended "the strength of a Russian Olympic athlete with the gracefulness of a star ballerina."

AD
 May 4-74
 3/4

Black Polyurethane

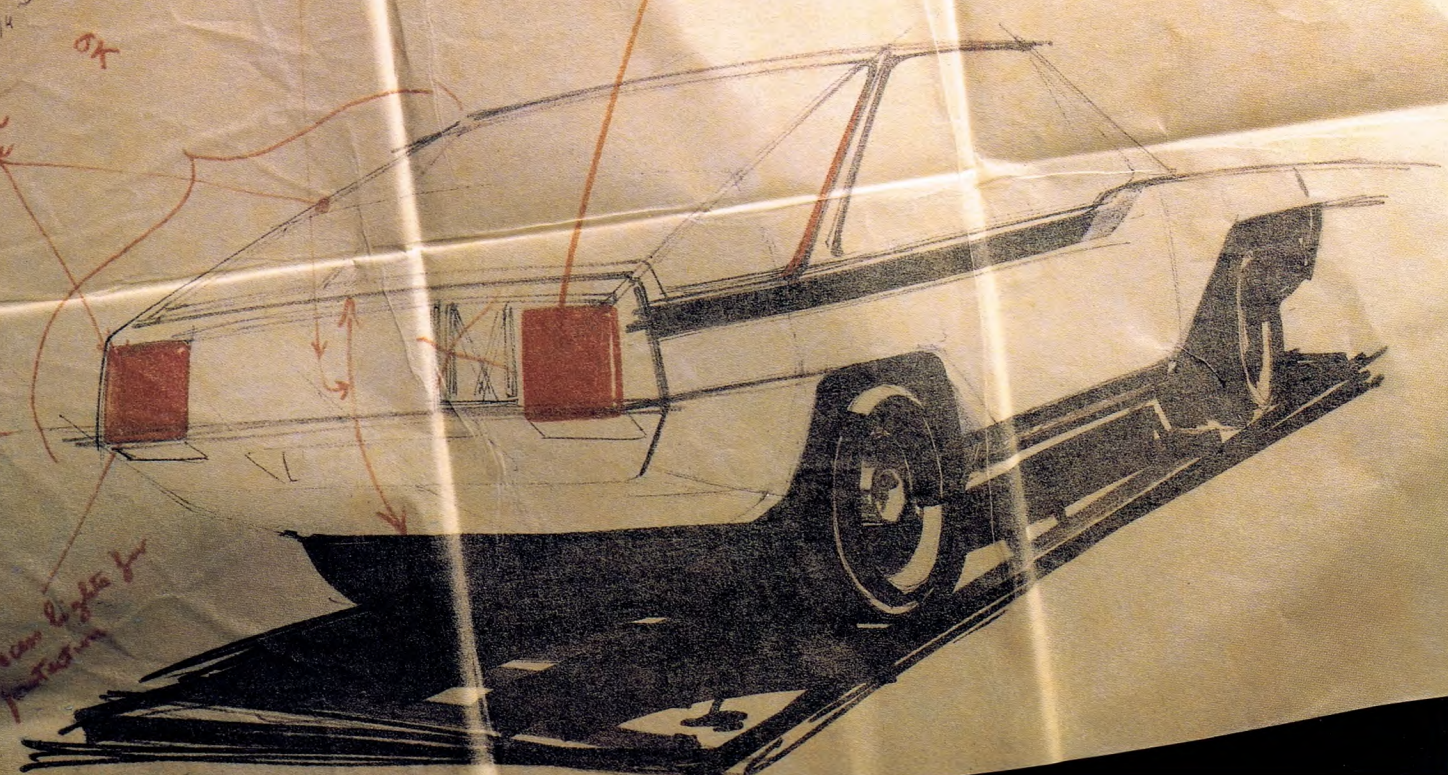
Backup light
 ABS in center

one of a series of X (A B C D)
 S E



Chrome
 frame

Recess light for
 protection





momenta





No bigger than a three-ring notebook and utterly bare of all the usual switches and keys,

the Momenta™ doesn't look much like a computer.

But then looks can be deceiving. Packed neatly within this nine-by-twelve-inch space is virtually every business computing and communication tool you need—and probably a few you didn't know you needed, but will soon come to appreciate.

The first Momenta feature that'll capture your attention is the pen—or the electronic stylus, as some people call it. Watch this pen. It's the feature that will eventually close the gap between what you prefer to do by hand (write memos, edit reports, sketch charts) and what you can only do on a computer (type documents, prepare presentations, crunch numbers).

With this pen, you can write directly on screen just as you're accustomed to writing on paper. You can take notes in meetings. Run spreadsheets in restaurants. Create overhead transparencies on flights. Even receive, edit, and transmit faxes from your hotel room—the Momenta comes with its own built-in fax modem.

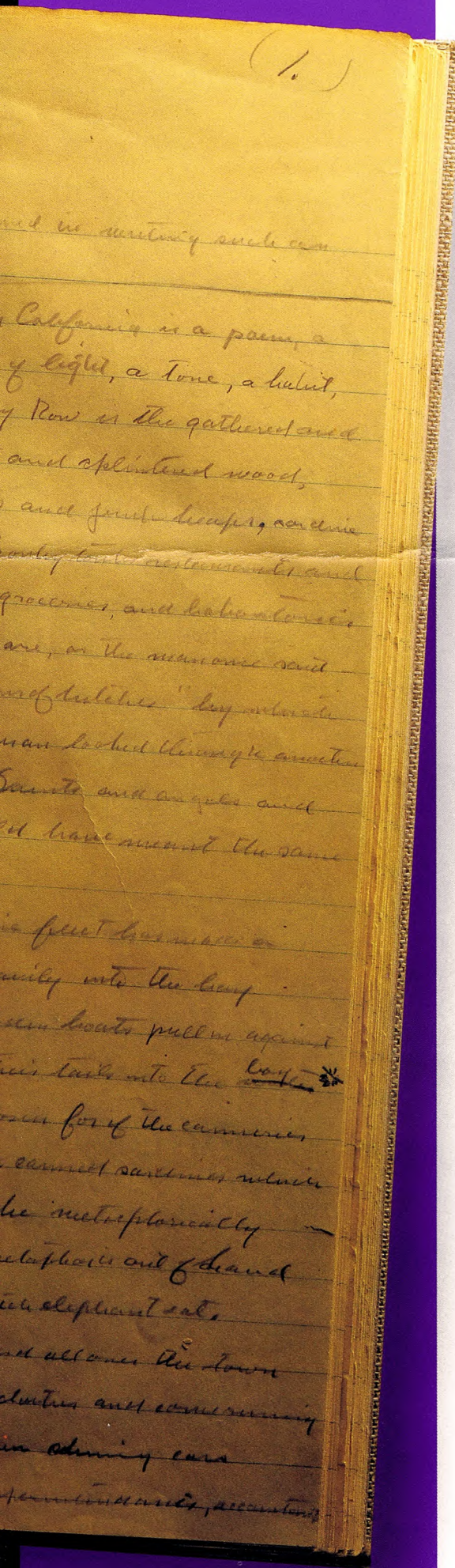
It also includes the MS-DOS® operating system and an attachable keyboard, which means you can run just about any standard DOS or Windows™ application you can pick off your shelf or anybody else's. Powered by a 386 microprocessor, it has an engine fast enough to hold its own against the most popular desktop PCs. And equipped with a 40-megabyte hard disk, it has enough space to store far more paperwork than you could ever stuff into a filing cabinet.

For all this capability, the Momenta still weighs in at just around six pounds, and works for a good six-hour stretch on nothing more than AA batteries. All of which means, of course, that you can also work for a good six-hour stretch. No matter where you happen to be.

Cruising 30,000 feet above the Atlantic. Cooling your heels in a client's lobby. Or lying prone on some white sandy beach, just this side of nowhere.



Apparently, John Steinbeck was not a writer who required a great deal of editing. For example, he wrote his draft of *Cannery Row* in this simple little yellow notebook. And when his publisher first finished reading the manuscript of *Grapes of Wrath*, he had only one comment, "I would not change a single comma in the whole book." Steinbeck won the Pulitzer for *Grapes of Wrath* in 1940 and the Nobel Prize for Literature in 1962.



THE INTERFACE

First, PCs introduced you to codes and commands. Next came mice and menus. And now, here comes Momenta with its pen. You can't help but wonder if the silicon revolution has finally come full circle.

Fortunately, we know a bit more now than we did when PCs made their debut.

More about how people think and work. And not just how, but when and where.

The fact of the matter is that much of the work we do—sometimes even our best work—doesn't take



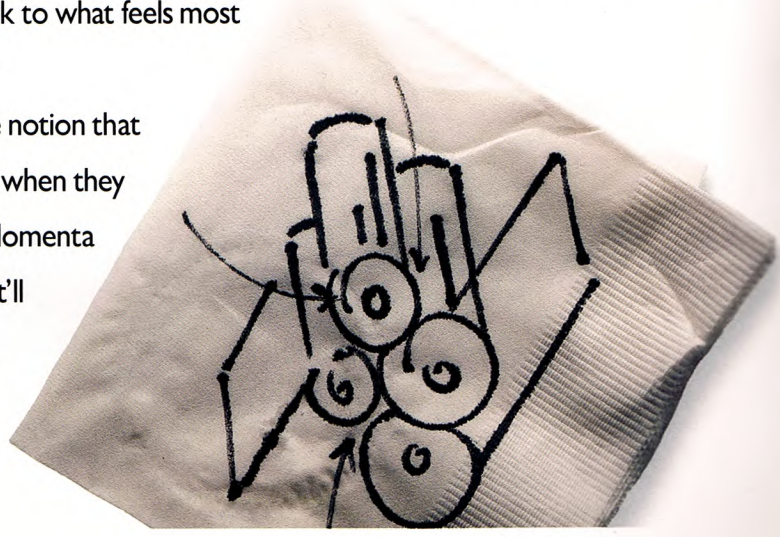
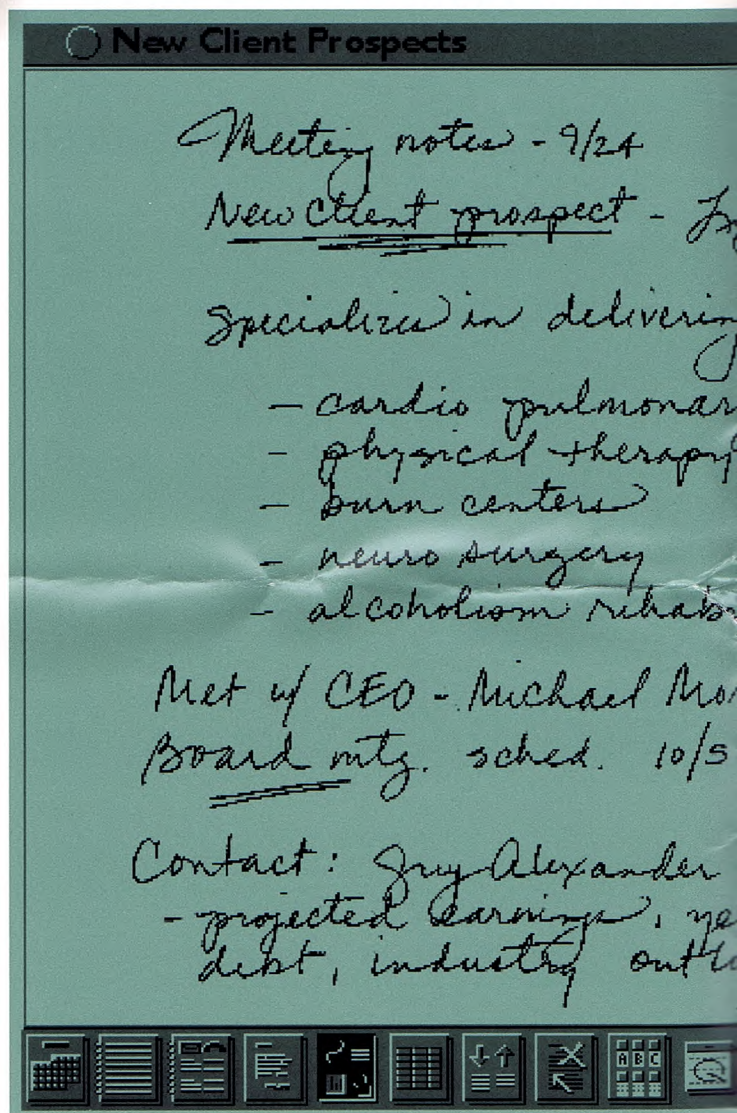
place behind a desk. Or even in front of a computer. A fair portion of it takes place outside the office. In meetings, conferences, and brainstorming sessions.

And in various other settings where even the best laptops seem intrusive.

Not only because a laptop's too awkward to carry, or too noisy to operate. But because its only input device is a keyboard. As practical as keyboards can be for a great many tasks, they're not always the best way to do everything.

Some people, for instance, still can't "think" with keys the way they can with a pen. The pen has an intimacy and immediacy that a keyboard can't match. Invariably, the keys end up playing middlemen between our thoughts and the page. And inevitably, we revert back to what feels most natural—pen and paper.

At least this was the notion that intrigued our engineers when they first began to develop Momenta computers. No doubt, it'll intrigue you, too, once you've had the chance to take the Momenta pen in hand and



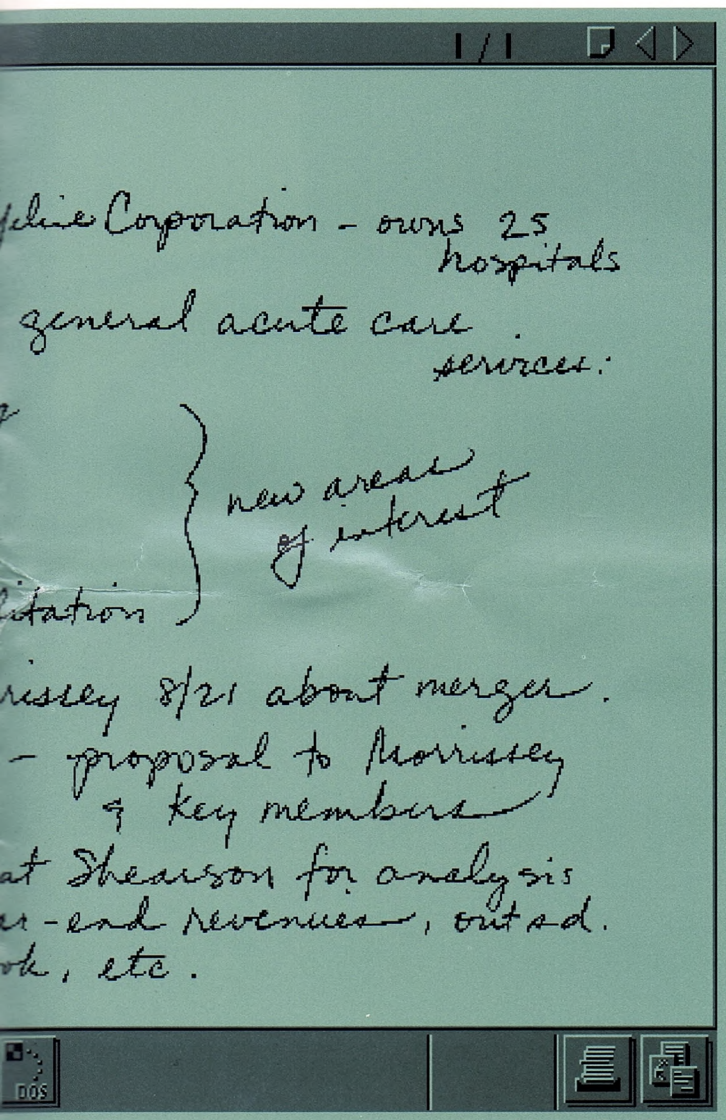
put your first mark on the screen.

You'll probably be surprised by how similar it feels to writing on a pad of paper—with one notable exception: the pen itself. In addition to being an electronic writing instrument, it's also a powerful control device. This pen assumes all the functions normally performed by mice and keys—accessing files, editing text, modifying graphics, dialing distant networks, and transmitting electronic mail.



Of course the pen doesn't manage such a workload single-handedly. It gets help from another Momenta innovation called the "Command Compass." You can guess how this tool works just by looking at it.

To make the compass appear, you merely put the pen directly on the object you're working with—be it a word, a sentence, a circle, a sketch, or a doodle. Then all you have to do is stroke in a specified direction. To move a block of text or a graphic to a new location, you stroke to the right. To



delete, you stroke to the upper right.

In essence, what used to require a slow series of steps can now be accomplished in a few quick strokes of the pen. And what before could only be done with pen and paper can now be done just as comfortably and far more efficiently on a computer.

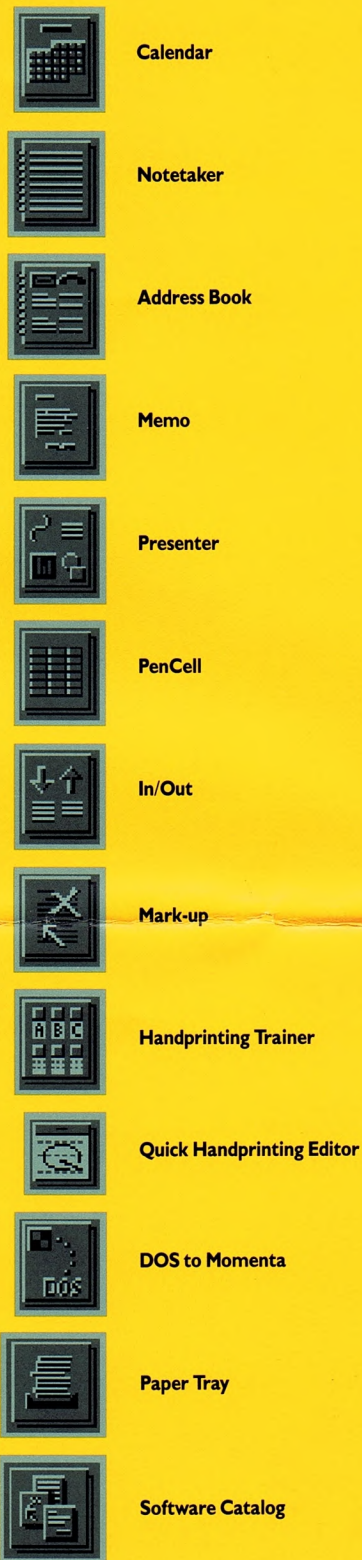
All of which means that now you can stop dividing your attention between a keyboard and a monitor. And you can quit rolling a mouse around on a pad just to move a cursor on a screen.

With Momenta, you finally have a computer that frees you to focus *all* your attention where it can do the most good.

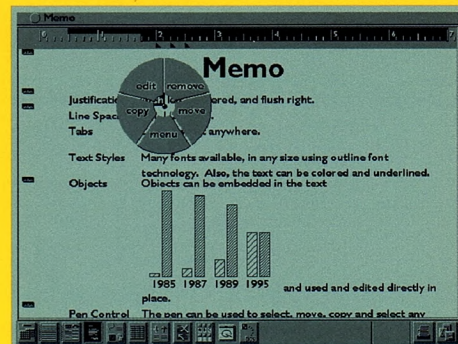
Not on your computer, but on your thoughts.



The Momenta interface is simple, graphic, and customizable. You can arrange the screen icons to suit your way of working. You can even add new ones to symbolize new applications.



Here's an example of Momenta's inventive "command compass" in action. To make the compass appear you merely touch the pen to the screen. Then all you have to do is stroke in the specified direction.



The same little girl who saw her first airplane at the Iowa State Fair in 1908, later, in 1932, became the first woman to fly the Atlantic solo. Before Amelia Earhart's fateful flight in 1937, she achieved numerous aviation firsts. She also designed a clothing line, wrote books, and won

the Harmon Trophy as America's Outstanding Airwoman. As Amelia once explained, "Whether it was considered the thing to do or not was irrelevant...I knew there was more fun and excitement in life than I would have time to enjoy."

THERSFIELD

TOTAL AMT FUEL 550 #

OUND SPEED	EST LEG REMAIN	ACTUAL FUEL REMAIN
130	2650	
	4700	
	440	415
	4300	
	350	
	4000	
	460	
	3600	
	440	
	3150	
	450	
	2660	
	150	270
	2500	
	600	
	1980	
	400	
	1600	

NAME *Amelia Earhart*

NEXT FIX

PILOT'S FLIGHT PLAN AND FLIGHT LOG

THE COMPATIBILITY

Inevitably, whenever some hot new technology comes along that rocks the computer world, people go dashing off to the store to get their hands on it. Once they do, they start fiddling with it, and liking it, and wanting to box it up and take it home.

But just when they start to reach for the old checkbook—ouch—they're overcome with an impending sense of doom. Not because they forgot their wallet—or even their account balance.

What they forgot, briefly, is the



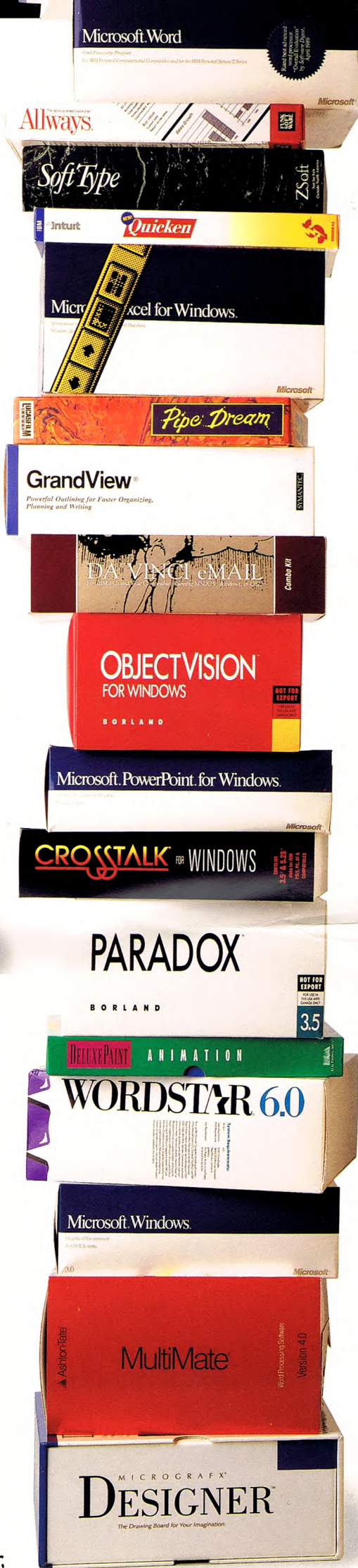
unfortunate compromise that usually goes along with being among the first to sample new technologies: For everything you get, there's something you have to give up. New technologies typically don't speak the same language as existing technologies. That's why they're new, and why they're innovative.

But allow us to back up a sentence to the word "typically." And to one very pleasant aspect of owning a Momenta. You don't have to give up a thing. Really.

With MS-DOS 5.0® built into Momenta's ROM, it's capable of running any DOS or Windows application. Moreover, you can use these programs just as you've always used them—with a keyboard. Or you can use them in a way you've never considered—with a pen.

Even when you're using the Momenta pen, your DOS or Windows applications will look and behave just as they always have. The only difference is that you won't—especially if you happen to be in a meeting.

Instead of rifling through files of papers or typing like the dickens on a noisy





keyboard, you'll casually lean back and quietly tap your way through the files stored in the Momena on your lap.

Instead of saying, "Can I get back to you? Those files are on my computer back at the office," when somebody asks for something critical, you'll merely touch your pen to the screen a couple of times and say, "I have it right here."

When you're running DOS or Windows on the Momena, you enter data by typing on the attachable keyboard, or by gently tapping on a "soft keyboard" displayed at the bottom of the screen. In a matter of pen strokes you can call up spreadsheets, faxes, meeting notes, even your marketing files—files that would otherwise be sitting two floors up or two thousand miles away in your office.

As convenient as all this sounds, DOS is only part of what the Momena can do. You can also run a growing list of new applications designed specifically for Momena's pen-optimized environment. Some of which, you'll be pleased to know, are already built into the Momena system. For example, powerful spreadsheet and word processing software capable of responding, on demand, to either a pen or a keyboard.

Momena will also run other pen-

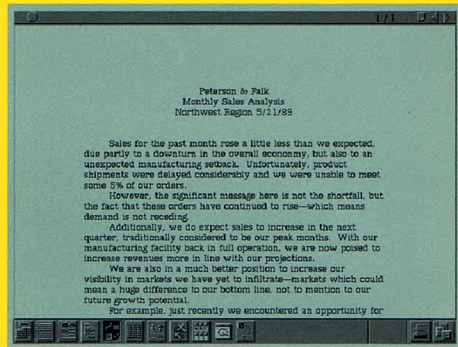
based programs, for instance, Microsoft's® new "Windows for Pen Computing," designed to take advantage of all the new opportunities pen systems can offer.

The point is, with Momena, you don't have to give up any portion of your past. Just to get a taste of your future.

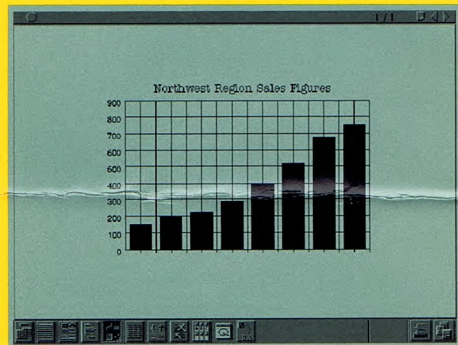


With MS-DOS built into Momena's ROM, you can work with both your past and your future at your fingertips. For example, say you're unexpectedly asked to draft your division's sales report for next week's conference. To produce the piece—and do it right—you need to draw from past reports and files stored on office PCs. However, you're scheduled to be out of the office the coming week. So, before you leave, you sort through the directory of company files and import the documents you need into your Momena.

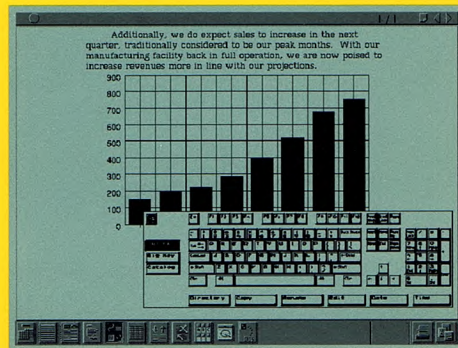
For example, an earlier report drafted in WordPerfect.



And a sales graph produced in Lotus 1-2-3.



Using Momena's "soft keyboard," you can use the pen to combine and edit these two documents and work them into your own draft. The nice part is, you can do all this while in flight between cities, in a client's office, in a hotel room, in a restaurant, in a cab, wherever.



The pen is attached to the Momena by a "tether" which plugs into either the left or right side. Compared to a cordless pen, the tethered version reduces power consumption overall. It also provides higher resolution for all handwritten or hand-drawn documents—which means they look better on the screen and print at a higher quality. ▼



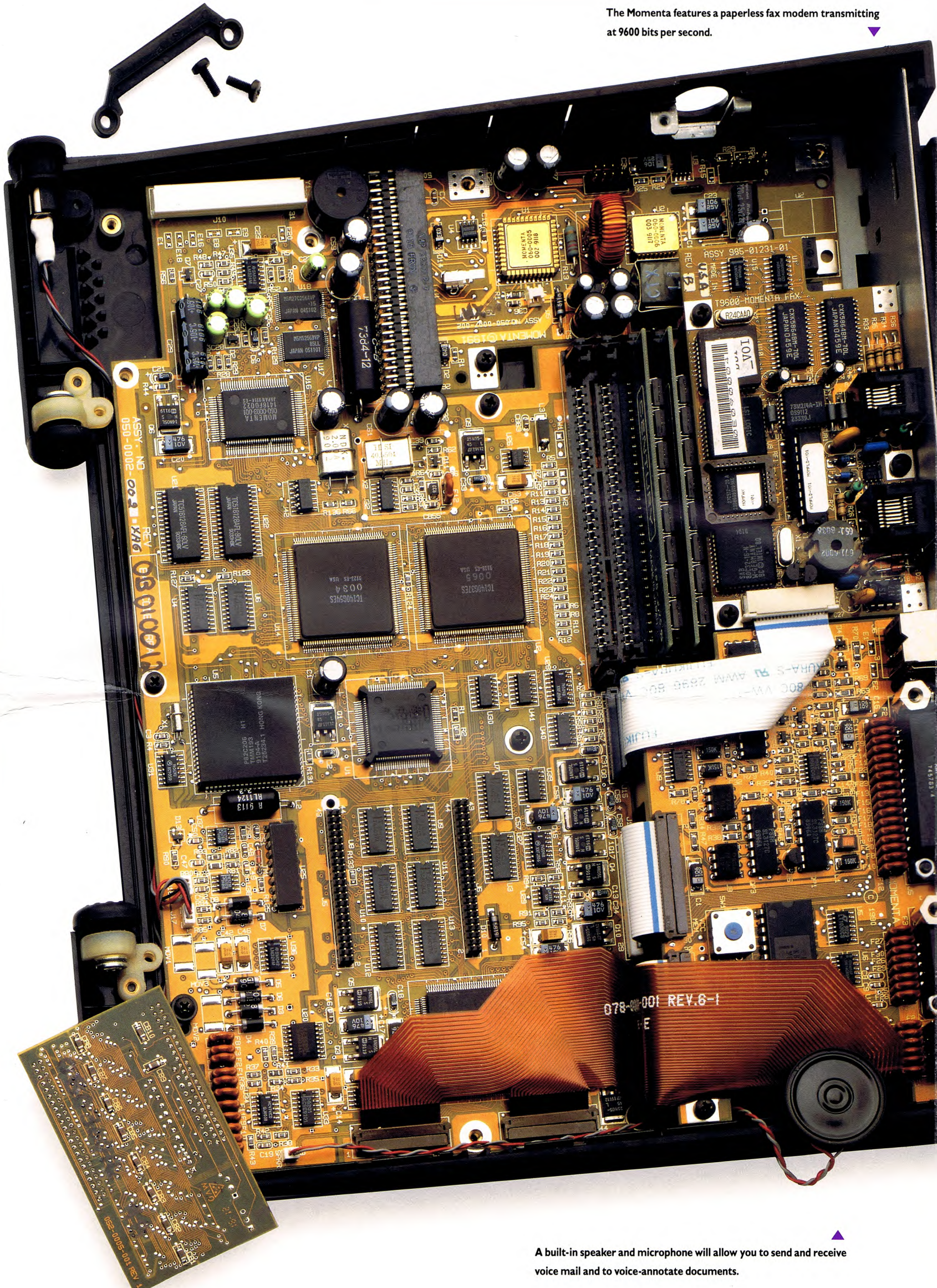
▲ The keyboard includes all the features necessary for running DOS and Windows software.

▲ The digitizer provides a fast processing rate (400 points per second) and a high resolution display (400 dots per inch)—both essential to quickly process penstrokes and to support high-quality printing of handwritten or hand-drawn documents.



◀ The liquid crystal display measures 6x8 inches and 10 inches diagonally. The screen is specially treated to reduce glare and to mute any click from the pen tip. When you're using the pen, the screen rests at a slight incline, like a drawing board. When you're using the keyboard, it tilts upward. With a 640 by 480 pixel display, the LCD features VGA resolution with 16 levels of grey. You may notice that this LCD is a bit more responsive than others — thanks, again, to Momenta's high-speed video controller.

The Momena features a paperless modem transmitting at 9600 bits per second.



▲ The Momena comes with 4 megabytes of RAM (expandable to 8) and .75 megabytes of ROM (expandable to 5).

▲ A built-in speaker and microphone will allow you to send and receive voice mail and to voice-annotate documents.

Now that you know a little about what the Momenta can do, you might want to know how it does it.

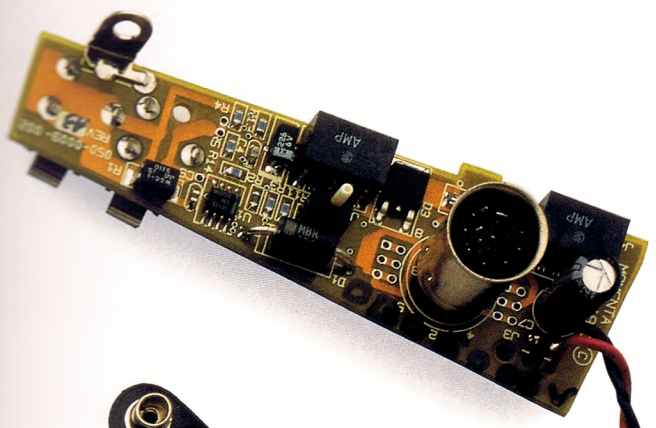
The Momenta is powered by a 386 microprocessor running at 20 MHz and by a team of "custom controllers"—chips designed especially to help manage and expedite various functions. For example, instead of relying solely on "ready-made chips," as is the case with most computers, Momenta built its own. These custom-designed chips assist with critical activities such as video processing, memory, networking, communications, the digitizing of pen inputs, and energy usage.

One chip, for instance, speeds up the transmission of data to and from the Momenta—an exercise that is typically sluggish on laptop and notebook computers.


Another helps make Momenta's liquid crystal display more responsive than others.

And still another chip budgets power by activating and shutting down various systems, depending on whatever is needed at the moment.


Which means that when you add it all up, these custom chips have made quite a bit of difference for the Momenta. They help provide increased performance, better graphics, faster communications, and efficiency ranking higher than any comparable system to date.



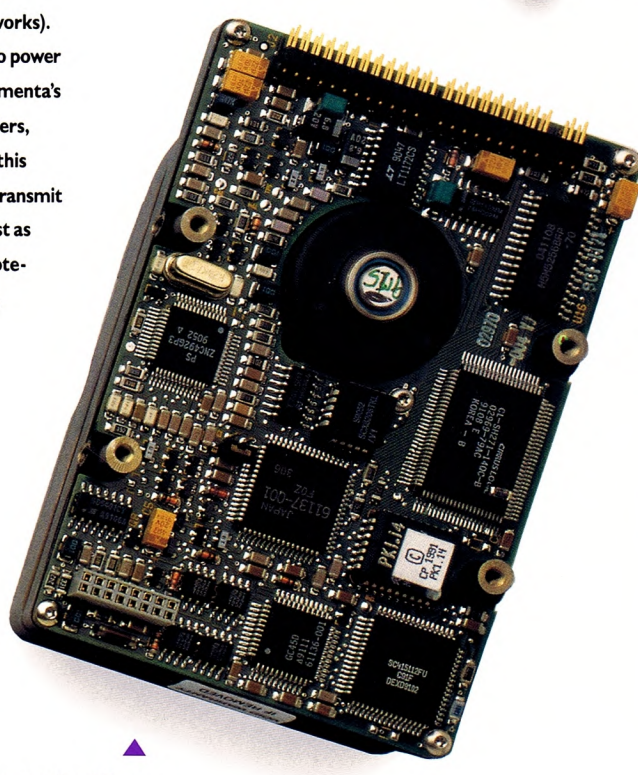
The Momenta uses rechargeable AA batteries, weighing about one-third of those used in most laptops. With Momenta's "fast charge mode" you can recharge in about an hour and a half and do it simultaneously while you work. If you can't stop to recharge, you can stop at the store and buy 10 disposable AA, alkaline, Duracell batteries. ▼



▶ The communication ports are hidden behind a panel in the back of the system. These ports include a keyboard port, a PS/2 compatible serial port (for connecting computers and other peripherals), and a PS/2 compatible parallel port (for connecting to printers, hard drives, tape drives, and networks). Thanks, again, to power provided by Momenta's custom controllers, you can expect this parallel port to transmit data twice as fast as any laptop or notebook computer.



The Momenta features a built-in, high-capacity hard disk in options ranging from 40 megabytes and up. To load software or back up data, you can connect the Momenta to an external floppy disk drive, available from several manufacturers. You can also connect directly to a



▶ hard drive, a tape drive, or even another PC—so that you can access its hard drive or floppy. Or you can access such resources over a network, by connecting directly via Momenta's parallel port or by transmitting over a phone line.

Today, when we get tickets to the symphony, we certainly don't expect the conductor to entertain us with new scores he's composed himself during the past week. We might, however, if the conductor were Johann Sebastian Bach. Though he occasionally performed works of other composers, he usually wrote the music himself for Sunday performances at St. Thomas and St. Nicholas. For example, in the course of a single year, 1725, he composed and conducted no less than 32 brand-new cantatas.

THE CONNECTIVITY

Now instead of looking for the best hotels with 24-hour business services, all you need to look for is the best hotel.

With the Momenta tucked into your briefcase, you travel with your own portable communications center. The built-in data modem gives you instant access to

Send / Receive
FAX

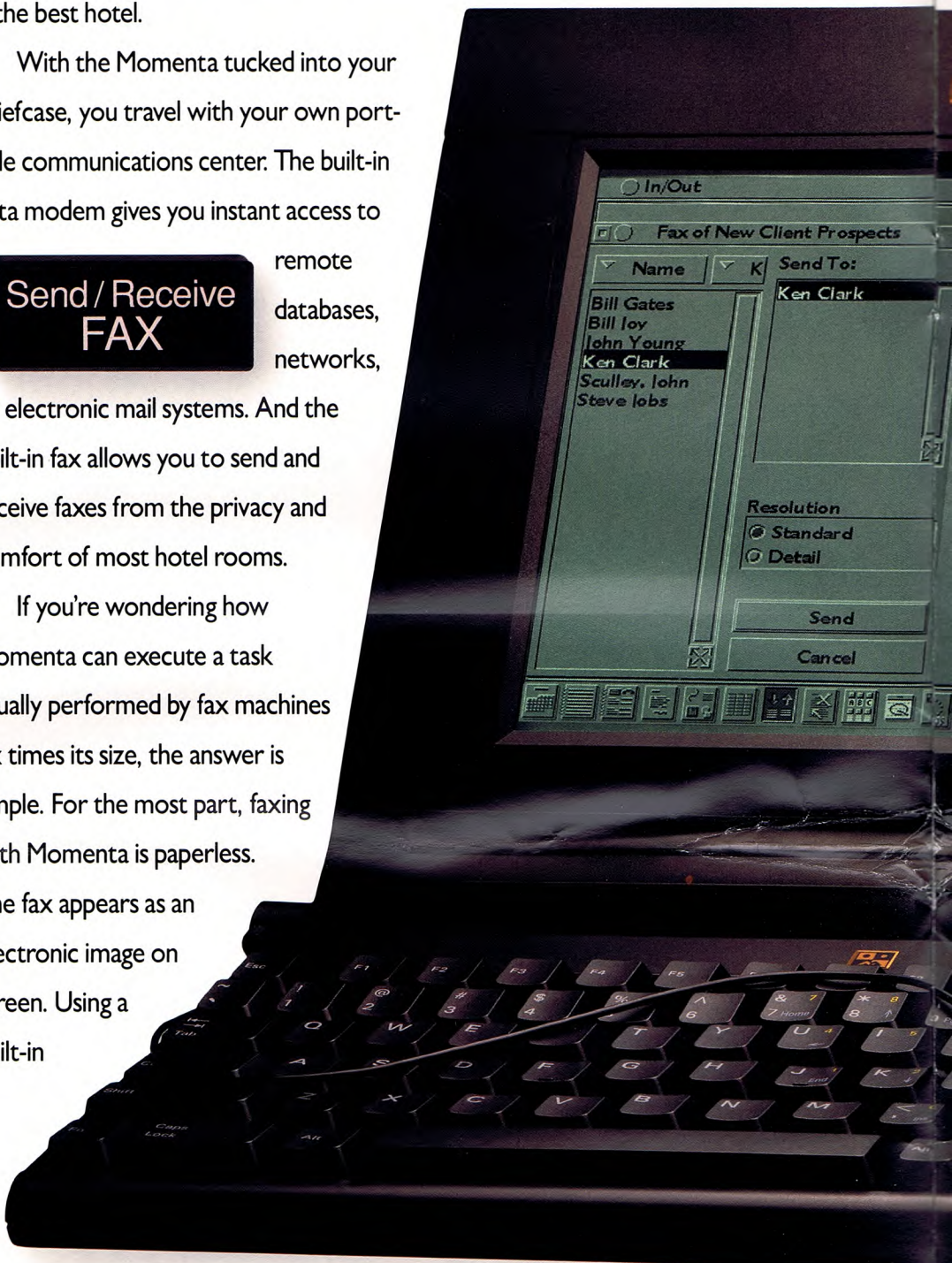
remote
databases,
networks,

or electronic mail systems. And the built-in fax allows you to send and receive faxes from the privacy and comfort of most hotel rooms.

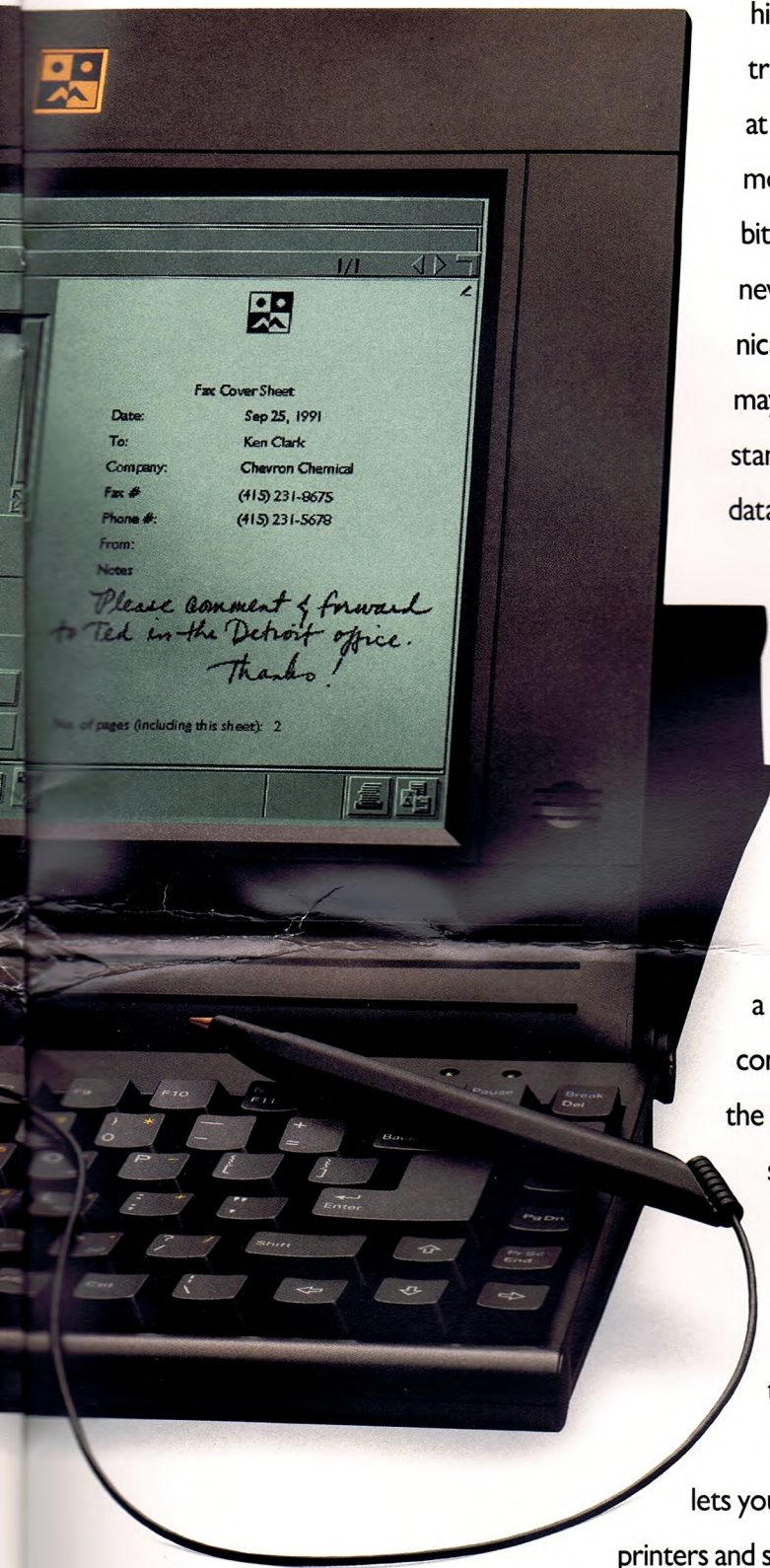
If you're wondering how Momenta can execute a task usually performed by fax machines six times its size, the answer is simple. For the most part, faxing with Momenta is paperless. The fax appears as an electronic image on screen. Using a built-in

"mark-up" application, you can edit the fax by writing your comments directly on screen. When you're finished, you can ship the revised fax back to the sender or to someone else, all without ever touching paper. Or, if you're in a hurry, the Momenta will create a coversheet for you, using your address book to fill in all the details. You can even store all your prepared faxes in an electronic "in/out box," and then transmit them later, the next time you connect to a phone line.

Of course, if you're ever in a crunch for hard copy, you can simply transmit the fax image yourself to a nearby fax machine. Don't be surprised, however, when you receive a printed page. The quality of a Momenta fax is superior to that of any conventional fax. In fact, it's close to what you'd see from a laser printer.



Aside from this distinction, you can expect the Momenta fax to work just like any



high-quality fax machine, transmitting and receiving at 9,600 bits per second. The modem operates at 2,400 bits per second and meets the new MNP 5 and V42 communications standards. As you may already know, these new standards help to compress data, thereby speeding up communication and cutting long-distance transmission costs.

The Momenta can also go wireless if you're on the road and nowhere near a phone line. All you have to do is hook up to a portable phone via a cellular connection cable. Here again, the Momenta features built-in support for the new SPCL protocol, which compresses data and saves you a little money on the transmission.



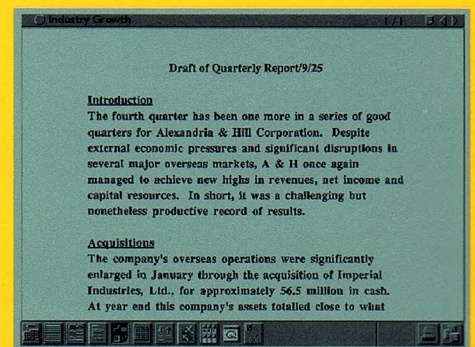
Momenta's built-in fax also lets you use other fax machines as printers and scanners. For example, you

can scan drawings or photographs by transmitting them from an ordinary fax machine to your Momenta. Then you can store them on your hard disk and even use the pen for retouching.

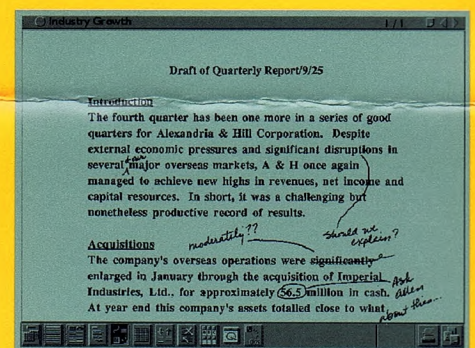
Seems pretty impressive for a computer so compact you can slip it into a briefcase. And it'll seem even more impressive on that first cold dawn when you're standing in a hot shower after a red-eye flight and a five-hour meeting—knowing all the while that the Momenta is out there, sitting on the dresser, transmitting all your efforts back to the office.

With the Momenta fax at your disposal, you can manage crises that otherwise might not be so manageable. Say you're on the road and you get a call at your hotel at 10 PM. Your manager informs you that a major client in Los Angeles is extremely unhappy with a particular document your company recently presented, and he wants you to fly there at 6 AM tomorrow and iron things out.

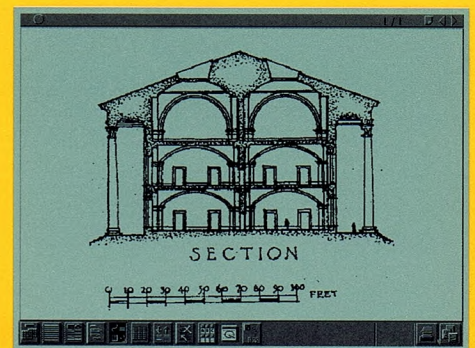
Since you haven't seen the document yourself, you have it faxed to your hotel room and it appears as an image on your Momenta screen.



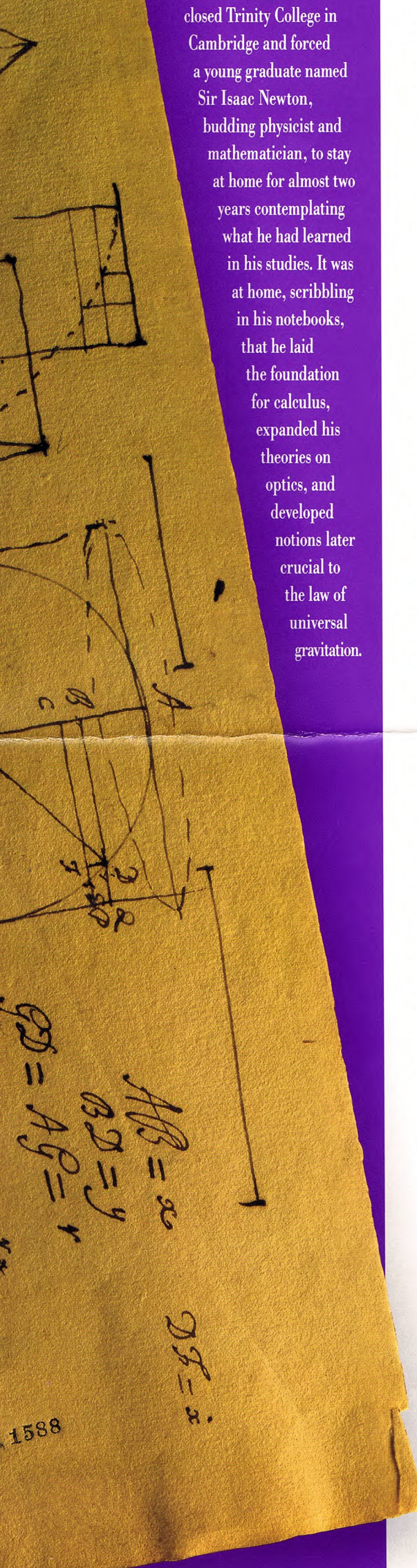
Once you review it, you ask questions and make comments using the pen. Then you transmit your annotated version to a colleague who knows the people involved and can give you some insight as to how you might approach the problem.



Meanwhile, your partner in another city has sent you another fax—an early architectural rendering of a critical design you'll be reviewing next week on yet another project. You quickly view this, make a few comments, and just before turning in, transmit your edited version back to him.



If it hadn't been for the plague that swept through England in 1665, we might not be where we are today. It was this plague that closed Trinity College in Cambridge and forced a young graduate named Sir Isaac Newton, budding physicist and mathematician, to stay at home for almost two years contemplating what he had learned in his studies. It was at home, scribbling in his notebooks, that he laid the foundation for calculus, expanded his theories on optics, and developed notions later crucial to the law of universal gravitation.



THE SOFTWARE

Even if MS-DOS and Windows were the only software Momenta could run, it would be well worth the purchase price. But the truth of the matter is, these 10,000 or so programs are only the beginning of what you can expect to be doing on a Momenta.

Aside from the DOS-installed base, the Momenta also comes outfitted with its own list of power applications, designed to capitalize on all the advantages offered by using a pen.

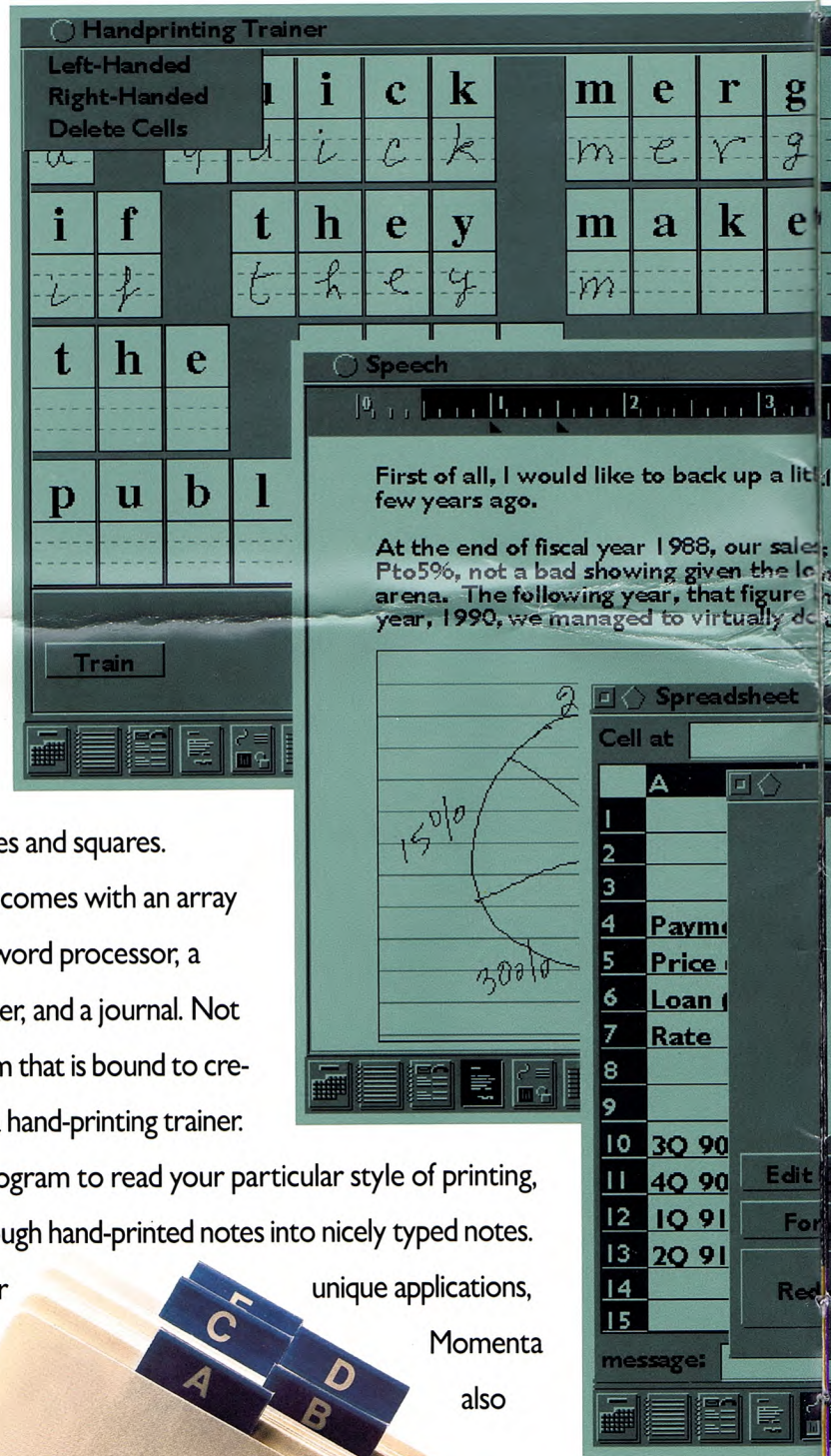
There's a built-in spreadsheet called PenCell,[™] designed to do just about anything Lotus 1-2-3[®] will do—and then some.

There's also a drawing program called Presenter. It's similar to PowerPoint,[®] but considerably more flexible—thanks again to Momenta's pen. With Presenter you can actually sketch a diagram by hand, then watch as your child-like squiggles transform themselves into perfect circles and squares.

The Momenta also comes with an array of other programs—a word processor, a memo writer, a notetaker, and a journal. Not to mention one program that is bound to create a stir in the office—a hand-printing trainer.

Once you teach this program to read your particular style of printing, it will transcribe your rough hand-printed notes into nicely typed notes.

Beyond these rather unique applications, Momenta also



comes with its own version of what computerdom calls "desk accessories." These include an electronic calendar, a calculator, and an address book. All tools designed to help manage the day-to-day mayhem. All tools rendered that much more powerful and useful by virtue of Momenta's pen-based interface.

That's the one thing to keep in mind about Momenta software—the pen interface. It's this interface, combined with the attachable keyboard, that gives you the versatility





to work the way you like to work—
no matter what you're doing or
where you're doing it.
You can write and
draw with all the
freedom and spontaneity

a pen allows. You can also create handwritten, hand-printed, and hand-drawn documents,
then modify them using familiar cut and paste options.

More importantly, you can move quickly and comfortably
between the pen and keyboard worlds. Jot notes by hand or type a
final draft. Run a quick tabulation on a keypad or hand-edit a finished
chart with a pen.

In short, you can do all the jotting, typing, tabulating, sketching,
and mental maneuvering you want without
thinking twice about it. And that's good.
Because as most people will agree, ideas
don't always present themselves in an
organized fashion—or even in the most
convenient settings.

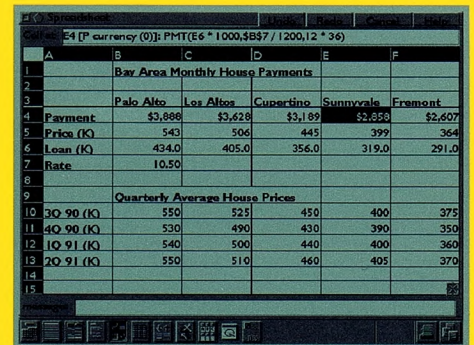
They're much
more likely to come
to mind, say, in a cab
on the way home.
In a restaurant after
a good meal. Sitting
poolside on a Sunday
afternoon. At all
those times when
you're least put upon
by the world around
you. When the mind
has room to stretch.
And when you're

nowhere near your office, or your desk, or the personal computer
shackled to it.

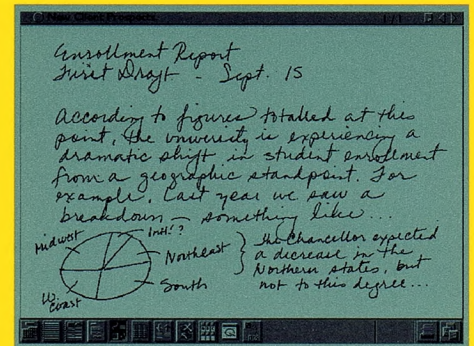
All situations in which the Momena was designed to
work. All situations in which now, finally, you can
also work—except maybe in the pool.

But who knows? Maybe
next year...

It's not merely the pen that renders Momena so useful,
it's the computer's versatility—the ability to move
gracefully between pen and keyboard worlds. For
instance, you can call up Momena's built-in spreadsheet
program, PenCell, and run a few quick tabulations.



Then move within seconds to a note taking application
and draft a memo, using the pen to draw a quick rendition
of the market, as you see it.



Then switch instantaneously to your calendar to check
appointments for the week and to see if you've covered
everything on your daily "To Do" list.

