

MONITOR

Background illumination

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Consumer electronics: Could everyday household furnishings be the unobtrusive information-display devices of the future?

IT IS an experience often likened to drinking from a fire hose. The proliferation of broadband internet connections, cable-news channels and mobile phones has made it easier than ever to access all the information you could possibly want. But technologies to filter this information when you are busy, and give you just the information you actually need, have not kept up. Ambient Devices, a start-up company spun out of the Massachusetts Institute of Technology, is taking a novel approach to solving this problem. It has devised a subtle way to embed the display of information in a range of household objects that would not look out of place in a funky furnishings catalogue.

It sells a frosted-glass orb, for example, that can change colour in line with a stockmarket index, and a glass brick that pulses and changes colour to indicate the weather. And in August it will launch the Dashboard, a desktop ornament with three large meters that resembles a retro-styled stereo. Each meter can be set to display one of a range of variables, from the pollen count to sports scores to the weight of traffic on a particular route. As with Ambient's other products, the meters are updated every few minutes over a national wireless network.



The market is up—or it's mild outside

The problem with existing information-display systems, says David Rose, the firm's chief executive, is that they provide too much detail and are too intrusive. By mapping information on to visual clues that can be taken in at a glance, Ambient's products are intended to provide an unobtrusive alternative. "There's a fallacy that more details are better," he says. "What you actually want is awareness first and details on demand." Mr Rose has one of his firm's weather bricks in his hall so that he knows which coat to wear, for example. He knows to wear a particular coat if the brick is dark blue, and to carry an umbrella if it is pulsing. But he does not need to know the exact details of the forecast to make this decision.

Filtering information in this way makes sense, says David Lewis, a psychologist who advises aircraft-makers on cockpit design, since trying to process too much information is a source of stress and can lead to mistakes. "Taking a burden off people may free up their thinking capacity to make more decisions and consider more options," he says.

The Dashboard will offer a wider range of information sources than any of Ambient's previous products, including forecasts for skiers, sailors and fishing enthusiasts. But even that is not enough for some people, who are creating custom data feeds using a developer kit. One would-be parent is using an orb to track his wife's fertility; another user is tracking the energy use in his Manhattan apartment relative to similar apartments, to see if he is being an energy hog. There are even plans to link orbs to satellite-tracking devices carried by family members, so that their loved ones can see how far they are from home.

For his part, Mr Rose is experimenting with the use of ambient information in business, using an orb to track daily sales. The Dashboard can also be configured to monitor the volume of traffic to a corporate website. And the company has installed motor-driven windmills to display the relative performance of five sales teams at a financial-services company: the more they sell, the faster the windmills spin.

But Ambient Devices expects the greatest demand for its products to come from money-rich but time-poor consumers. "The cost of your attention is what is at a premium here," says Mr Rose. The firm has licensed its technology to consumer-electronics firms including Sony, Samsung and Philips, and will launch a desktop weather station in conjunction with Radio Shack, an American gadget retailer, this summer. It also plans to enable its devices to work in Britain later in the year, using a radio network provided by O2, a mobile-network operator. The company believes its novel approach to information display has a bright, but unobtrusive, future.