



In the eye of the beholder

Handheld satellite terminals are becoming consumer commodities, with elements such as appearance and design now as important as the technical characteristics of the terminal itself. **Philippa Smyth**, Correspondent of *Satellite Evolution Asia (SEA)*, reports.



*Satellite radio (and more) on the go!
Photos courtesy of Samsung and Pioneer*

For the best part of forty years, the satellite sector has been the realm of corporate applications, with little or no contact with the wider consumer marketplace. This particular position within the industry was somehow reflected in the nature of the typical satellite terminals: large and sturdy white boxes designed with the only aim to deliver a service rather than please the eye. In the meantime, telecommunications applications such as mobile telephony were transforming themselves into a sort of extension of the fashion industry, in which the success of a particular phone model could even make or break an entire company.

Over the past few years, however, things have been moving on. As the satellite sector tried to widen its reach to include the consumer segment, things began to change. When the first generation of Global Mobile Personal Communication via Satellite (GMPCS) hit the market in the late 1990s, a revolution was already under way. For the first time, in fact, satellite terminals were being designed to appeal to consumers. While still bulky and awkward in many ways, these handheld phones represented a remarkable improvement on old satellite terminals, and with them an entire new perspective on the industry was inaugurated.

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of all sorts have finally become true consumer items. As such, the companies marketing and selling them also have to think about issues such as appearances and design, as these will play a fundamental role in determining the success, or failure, of a service they are launching. Industry experts believe that a great part of the success enjoyed by the iPod, Apple's MP3 player, is down to the elegant lines of its design – a trait of all things produced by Steve Job's Apple.

The rising importance of design within the satellite industry is particularly evident in the case of handheld terminals for satellite radio and multimedia broadcasting, but it also interests all other consumer-oriented applications, from two-way broadband terminals to satellite telephony.

Broadband terminals

When Mobile Satellite Service (MSS) provider Inmarsat officially presented its new Broadband Global Area Network (BGAN) service, a lot of emphasis went into the new family of terminals: a new generation of terminals that are more powerful, lighter and easier to use than the old Inmarsat's. And, more to the point, they are also designed to catch the eye of prospective users. The modern lines of the Nera WorldPro 1000, for example, appear to be studied to appeal the eye of the consumer, being available in several colours as it were a mobile phone.

As the industry is beginning to make an inroad into the consumer market in both the Asia-Pacific region and North America, fixed broadband terminals that are currently retailed are also trying to please the eye of customers. Both IPSTAR's and WildBlue's latest generation of modems, for example, are designed fit in any study alongside today's most stylish personal computers, while even the satellite dishes are made to appear modern and sophisticated.

Multimedia

One of the satellite applications in which we have seen some of the most interesting experiments in terms of design of terminals is Digital Multimedia Broadcasting (DMB) via satellite, an application that brings large-volume multimedia, television and radio content directly to consumers via their mobile handset.

Inaugurated in 2005 in Korea and Japan, DMB operators there had to fight for their space in very competitive markets. In fact, Korea and Japan remain the home nations of electronic gadgets, with no-

toriously demanding customers always on the lookout for cutting-edge technologies and services. Thanks to its experience as mobile phone manufacturer, Samsung Electronics is establishing itself as one of the most interesting players in this arena. The Korean consumer electronic giant has recently unveiled a line-up of seven handsets crossing all types of mobile broadcasting platforms – Terrestrial DMB (T-DMB), Satellite DMB (S-DMB), DVB-H and Media FLO.

Kitae Lee, President of Samsung's Telecommunications Network Business, said: "Samsung continues to develop the premium mobile handsets that give consumers the ultimate multimedia experience and allow them to fully realise the power of mobile broadcasting.

"Our extensive line-up of mobile TV phones at 3GSM illustrates Samsung's success at working across multiple platforms to deliver products that can truly serve as personal multimedia portals for connected consumers."

The company has even launched a dual DMB phone, the B4100, which enables consumers to enjoy both S-DMB and T-DMB in one handset. It also has a Picture-in-Picture (PIP) function allowing consumers to view two channels at the same time while watching S-DMB.

It is arguable that without the availability of such appealing terminals, DMB services would not enjoy the current level of success in the Korean peninsula.

Radio

Another satellite application in which we have seen a rapid and decisive move towards a consumer-oriented approach to the market is satellite radio, or Digital Audio Radio Services (DARS) as it is more properly known. In North America, in fact, satellite radio is now de facto a consumer product with millions of subscribers throughout the US.

The interesting thing about satellite radio is that it has always been a consumer oriented application, as the sleek lines of even the first generation of XM Radio or Sirius Satellite Radio receivers would testify. The two radio operators even signed agreements with radio designers such as Eton Corporation. In fact, one of the most interesting developments taking place in satellite radio is the elevation of radio receivers to the status of fashion items. On the occasion of the Consumer Electronics Show 2006 in Las Vegas, a new breed of satellite radio receivers were presented to the public and the specialised press. At the heart of this revolution (which many a commentator might well prefer to call an evolution) is Eton Corporation, a California-based, design-driven leader in radio and portable audio products. Eton Corporation defines itself by its mission of 're-inventing radio'. According to the company's official statement, by always combining the latest in technology with sensible design, Eton Corporation offers an extensive array of products that speaks to three main categories: design, innovation and necessity. A peculiar trait of this 're-evolution', however, is the fact that Eton Corporation is working together with both US satellite radio operators XM Satellite Radio and Sirius Satellite Radio.

In recent weeks, however, with the launch of handheld receivers integrated with MP3 players, satellite radio has taken the game at an even higher level. XM Satellite Radio is partnering with Samsung to introduce an impressive line of three new portable audio models that combine the content and capabilities of XM radio and a high quality MP3 player for the ultimate digital music experience.

The Samsung XM players offer the full capabilities of satellite radio and MP3 music, the two most popular forms of digital audio entertainment introduced over the past 20 years. Consumers finally have a converged solution that offers XM Satellite Radio's 160 channels of commercial-free music and premier sports, news, and talk radio, and the ability to store and play their MP3 collection, all on one portable Samsung device. The leading product in the Samsung XM product line is the Samsung Helix XM2go player. The Samsung Helix is a major breakthrough in consumer electronics, offering live XM reception for portable listening, and it stores MP3s, WMA files,



*The SCH-B100 phone.
Photo courtesy of Samsung*

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and XM content for playback anywhere, anytime. Plus, Helix has a revolutionary feature that lets the user 'bookmark' songs heard on XM for online purchase from the XM + Napster service.

"For the first time ever, you can listen to live satellite radio and play MP3s on a single, wearable device," said Hugh Panero, President and CEO of XM Satellite Radio. "XM's partnership with Samsung will deliver a portfolio of portable audio products that will fundamentally change the way people listen to music. You can play all of your favourite songs in your MP3 collection, and you can listen to live XM Satellite Radio, which introduces you to new artists and old favourites from all kinds of music genres, plus live sports, breaking news, stand-up comedy, and much, much more."

Conclusion

Ease of use, designer appeal, elevation to commodity and fashion item: what next for the satellite industry? Without fear of erring, it is safe to say that this trend will continue in the foreseeable future. Design is gaining importance in all avenues of the industrial world, from cars to tools and engineering, and the satellite industry is certainly no exception. A new wave of innovation, in this sense, is expected to hit the market when the Galileo satellite navigation system becomes available. By then, Galileo chips will be integrated in so many different types of gadgets and devices that the realm of satellite applications will be expanded immensely. Success is guaranteed, but only if they please the eye of the consumers. ■