HIGH-DEFINITION TELEVISION (HDTV) is the Rolls-Royce of digital viewing and has been quick to make its mark on tech-savvy Hong Kong. HDTV is the ticket to having the true cinema experience in your living room and with the Beijing Olympics just around the corner, FORTRESS, Hutchison’s electronic appliance retailer, is more than ready to meet demand.

“There has been a lot of interest from the public, especially from people who love to keep up with new advances in technology. People can really see the difference,” says Ken Ng, Merchandising Controller for FORTRESS. “I think this summer’s Olympic Games in Beijing will see the level of interest spread to people who love to watch sports on television. It was the same story with flat screen televisions at the last World Cup soccer finals in Germany in 2006.”

So what is it that makes HDTV so great? Put simply, HDTV is a brand new digital television system that boasts the highest quality pictures ever seen by consumers on commercial television. Currently, most households have cathode ray tube televisions with a display resolution of 720 lines (horizontal) x 576 lines (vertical). With HDTV, display resolution can reach up to 1,920 (horizontal-
tal) x 1,080 (vertical), resulting in a picture more detailed than conventional television.

Why does the amount of lines matter? The number of lines on a television is important because it allows for greater detail in the image. This is a similar concept to digital photos and how dots per inch (dpi) determine print quality.

In addition, HDTV displays wide-screen pictures with a 16:9 aspect ratio capable of "cinema-quality" sound, eliminating a variety of imperfections found in conventional television.

Why is aspect ratio important? The aspect ratio is the relation of the width of a video image compared to its height. The two most common aspect ratios in home video are 4:3 (standard) and 16:9 (wide-screen). All the older TVs and computer monitors had the squarer 4:3 shape – only 33 per cent wider than it was high. On the other hand, 16:9 is the aspect ratio of most HDTV programming; it is 78 per cent wider than it is tall, or fully one third wider than 4:3. The wide-screen image is a distinct improvement as it offers a larger image, and the horizontal orientation is more in line with how our eyes view objects.

The HDTV concept came from wide-screen movies. When they were first introduced to the public, film makers soon realised that the audience had a much better watching experience than those sitting in front of traditional narrow screens. And now, with advanced technologies, consumers are enjoying all the benefits of this viewing experience in the comfort of their own homes.

In Hong Kong, the attraction to HDTV has been helped by the city’s entry into terrestrial digital broadcasting and the launch of several HD broadcast channels. In general, digital broadcasting has a number of other advantages over analogue television. Traditionally, Hong Kong’s television services have always been broadcast via analogue signals and then converted back into pictures and sound for viewing at home. Noise is common in this form of transmission, causing interference to the picture. With digital broadcast, noise and ghost images are eliminated.

Around the world, digital broadcasts have made many innovations possible. It can provide programme guides with multiple functions. Using a digital decoder, programme details, previews and subtitles can be easily accessed with a remote control. As content developers get more creative, it may also be possible for the audience to adjust camera angles or read electronic magazines.

Some television platforms even allow viewers to enjoy interactive services and also use telephones or remote controls to handle interactive functions such as stocks. Because digital signals can pack more information than the traditional analogue ones, digital can support HD quality pictures that are five times the resolution of conventional TV or DVD.

To watch digital TV programmes, viewers need to connect their existing television sets to a digital set-top box or buy an integrated digital television set with a built-in decoder. Not all consumers will switch over at once, as the planned migration from analogue to digital in Hong Kong is due for completion in 2012.

“It will be a gradual process,” says Mr Ng. “What we normally see with innovations like this is people start talking about it with colleagues at work or visit a friend who has HDTV and think ‘that looks really good, I want one too.’ I think this retail pattern will start to emerge, especially with the Olympics coming up.”