

A brave, new world... iSound?

DENNIS BAXTER ponders the implications of broadcasting to a gadget-armed audience.



On Christmas morning, I unwrapped my newest electronic gadget: an Apple iPad. My wife grinned — she's the one who has always owned the latest Mac computers. It is a wonderful computer. Powerful, capable, wireless. But it's just another example of how personal electronic equipment is forcing old school television and radio broadcasters to decide how they plan to participate in a brave, new world. I believe that in the future most broadcast programming will be 'on-demand' or user programmable, except for time-sensitive events such as sports and news. For example, sports networks such as Sky and ESPN, have already proved the all-sports model works. In fact, sports television has led the way with high definition and 3D production.

And it's a worthy effort. Sporting events create an atmosphere and enthusiasm that is conducive to various levels of enjoyment and experience. From the local pub and sports bar, where you share the ambient entertainment experience with your mates, to HD and 3D systems where you are immersed in the experience — sports fans are drawn to an entertaining experience.

Electronic entertainment offers content over a wide range of deliverable options and this clearly has changed the consumer experience. Mobile devices, such as the iPad and iPhone, have only begun to unleash the next generation of entertainment possibilities.

New wireless devices such as speakers, headsets, remote controls and other interface gadgets will completely change the home entertainment experience. Wireless home equipment allows the consumer to choose the location/space and depth of the entertainment experience. This allows the viewer to completely personalise the experience visually and aurally.

For example, perfect 5.1 surround speaker placement is almost impossible for most home entertainment spaces. But networked wireless speaker arrays are a great solution for challenging acoustic reproduction spaces. Wireless speaker arrays can personalise the sound experience and

make dimensional monitoring possible in many environments. Imagine placing an array of mini speakers around your living room and having them auto calibrate to deliver a correlated dimensional soundfield.

Not only will innovative speaker systems deliver the aural experience but DSP can be used to control the parameters of the experience or even create unique acoustic zones in a space. Sound enhancement and acoustic simulation has been found in entertainment systems for years and DSP audio designers are capable of advanced sound modelling and circuit simulation. Additionally, DSP offers unlimited aural adjustments and user control that is essentially creating an extension of the entertainment experience. We know that sound is subjective and the desired balance and details of a soundmix are individual, and if given a choice, most people will tweak the sound to their preference.

It seems as though 3D glasses of some sort or and personal monitoring devices will be necessary to properly replicate 3D. Think beyond glasses and imagine a personal viewing and listening head-band that is integrated into a single device. Localising the entire experience around your head may solve some of the replication issues and break down the objection to wearing glasses — think DEVO hat.

Now add wireless remote operation from your iPad and the experience is complete. The iPad's computer, touchscreen capabilities and a seemingly endless army of Mac programmers writing an 'app for that' virtually guarantees a personalised entertainment experience you can take with you whenever and wherever you go. And the built-in microphone localises and triangulates the speaker delivery. Think iSound!

Enhanced sound and picture is integral to the television experience, however the debate on proper sound design and surround orientation is far from over. TV adopted the 5.1 surround format from the film industry, but as a practitioner, I am not convinced that 5.1 works for television. The sound of sports is evolving with much discussion about spatial orientation, use of the surround speakers for effects and use of the LFE. The 5.1 orientation is not necessarily the desired or proper norm for all viewers. Surround perspective and orientation is what a sound designer intends for you to hear. Consider that this may not necessarily be a better personal experience for all viewers — so why not empower the consumer to choose their own level of experience?

As audio professionals, we will continue to produce six channels or more of audio. The audio stems will continue to be the sonic foundation for many formats: 5.1 film surround, enhanced surround, enhanced stereo and stereo. Metadata will be used more and more to deliver creative and artistic interpretation from the sound designer, but the consumer will be able to select and audition the preferred reproduction.

It's becoming a brave new world for the content consumer: DSP offers individualised user control and interaction and wireless delivers the entertainment experience — without boundaries — to those who have the newest and shiniest electronic gadgetry. But it's also becoming a realistic frontier for those of us who practice the art and science of broadcasting. We have the challenge — and the opportunity — to create a world of individualised, experiential sound that is unlike anything heard before. ■