INTERNET RADIO APPLIANCES: BACK TO THE FUTURE

Back in June of 2000, Internet radio appliances looked pretty hot, so much so that networking giant 3Com spent $80M on a small company that had developed a prototype product called *Kerbango*. The *Kerbango* Internet radio was to be the first one that could connect directly to the Internet (through an Ethernet port – no computer required!), but it was not to be – in March of 2001 3Com shut its newly formed "Internet Appliance Division" down.

In 2004 the *Kerbango* dream is not yet realized but the future of the Internet radio appliance seems to be getting closer and closer. A British company called Reciva has developed a wireless, portable household Internet radio (see picture) which uses a "Wi-Fi" (IEEE 802.11b) wireless Internet connection – no computer required! While not yet available for sale to consumers, Reciva indicates (on their web site, http://www.reciva.com/) an intention to bring this product to market directly, and is also seeking opportunities to license their hardware and software technology for use in third party products and OEM applications. Using the Reciva browser, a listener will select Internet-based radio stations from "…a comprehensive list categorized by name, geography, genre and favorites." Reciva intends for its product to be able to receive broadcasts from any radio station on the Internet, and has a link on their web site where radio broadcasters are invited to add their station's stream to the Reciva database free of charge.

Two other Internet radio appliances which make use of Wi-Fi, but do require a computer for connecting to the Internet, are the Linksys Wireless B and the Philips Streamium (see pictures). In addition to being able to access audio sources on the Internet these devices can also serve as audio "jukeboxes," allowing for access to a listener's PC-based audio collection. The features of these two computer-based products as well as the Reciva are compared in the table.

Recent FCC action regarding the use of unlicensed devices in the TV frequency band may serve to accelerate the

development and proliferation of appliances like these wireless Internet Radios. In a *Notice of Proposed Rulemaking* released May 25, 2004, the Commission proposes to allow a new generation of unlicensed devices to transmit and receive on unused TV channels. The NPRM discusses requirements for two different types of unlicensed operations in the TV bands: wireless portable computing devices, such as laptops and PDAs, wireless home and local area networks (LANs), and other short-range applications within a home or a business; and longer range broadband services to homes and businesses. The NPRM seeks comment on all the proposals and also asks for suggestions on how to ensure that no interference is caused to TV broadcasters. A copy of the NPRM is available on the FCC web page at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-113A1.pdf.

PARAMETER	RECIVA	LINKSYS® Wireless-B Music System	streamium MC-i250
Manufacturer	(none yet)	Linksys	Philips
Price	(Not available yet)	$264 (list; available for $150)	$499 (list; available for $280)
Audio decoder(s)	MP3, RealAudio, WMA, Vorbis	MP3, WMA	MP3, MP3pro (RealAudio support upgrade planned)
Companion PC	None required	Microsoft Windows only	Microsoft Windows only
Display	Blue LCD panel	Blue LCD panel	Character-based 5-line
Wireless connection	802.11b	802.11b	802.11b
Wired connection	Ethernet, USB (optional)	Ethernet	(Available in MC-i200 mode)
FM/AM tuner	FM (optional)	None	FM/AM
CD player	No	No	Yes
Power	120-240V AC, Ni-MH battery pack	120-240V AC	120-240V AC
Miscellaneous	Output for second stereo speaker; optional FM tuner; optional USB port	Allows access to RealNetworks' Rhapsody digital music service (free trial included)	Upgradeable software; wired-only version available too (MC-i200)
For more information	www.reciva.com/	www.linksys.com/products/product.asp?grid=33&scid=38&prid=631	www.streamium.com/products/mc-i250/

For information on the HD Radio Certification Workshops at the NAB Radio Show

THE NAB RADIO SHOW®
October 6-8, 2004 • San Diego, CA
Manchester Grand Hyatt