



NAB "Embedded Exporter" Project, Products Unveiled at the 2008 NAB Show

Announcement of the results of a NAB technology development initiative was made on Sunday, April 13 at the 2008 NAB Show in Las Vegas, NV (see www.nabshow.com for additional information). NAB, in an unprecedented partnership with iBiquity Digital Corporation and four broadcast equipment manufacturers, funded the accelerated development of products based on next-generation HD Radio "Exporter" technology.

These products (see photos below, taken on the 2008 NAB Show exhibit floor), which significantly reduce a radio station's cost to upgrade to HD Radio, were introduced and made available for purchase during the NAB Show. Attending the press conference to announce this were (in photo, from left) David Rehr, President and CEO of NAB; Robert Struble, President and CEO of iBiquity Digital Corporation; Ted Lantz, manager of HD Radio



products for Broadcast Electronics (BE); Dan Dickey, vice president of engineering for Continental Electronics; Tim Anderson, product manager of digital radio for Harris Corporation; and Scott Martin, head of data systems for Nautel. Also speaking at the press conference were NAB HD Radio Technology Advancement Task Force Chair Caroline Beasley, executive vice president and CFO for Beasley Broadcast Group, and NAB Radio Board Vice Chair Steve Newberry, president and CEO of Commonwealth Broadcasting Corporation.

The project began in 2006 and was overseen by the NAB HD Radio Technology Advancement Task Force. This new technology, called the "Embedded Exporter," reduces the size and cost of HD Radio transmission facilities by eliminating the PC-based design of first-generation Exporter technology and replacing it with a

firmware-based "embedded" implementation. In addition to the lower cost, the Embedded Exporter hardware is significantly more reliable and stable than its predecessors, and it now becomes possible for manufacturers to incorporate Exporter functionality in other products such as excitors.

Because of NAB's contribution to this effort, NAB members receive



an additional discount on these already cost-reduced products.

Also at the 2008 NAB Show, The Digital Radio Broadcasting (DRB) Subcommittee of the National Radio Systems Committee (NRSC) adopted an updated version of its in-band/on-channel (IBOC) digital radio broadcasting standard. NRSC-5-B, In-band/on-channel Digital Radio Broadcasting Standard was adopted by the Subcommittee at its April 12, 2008 meeting, co-chaired by Andy Laird, vice president and chief technology officer, Journal Broadcast Group; and Mike Bergman, vice president, New Digital Technology, Kenwood USA.

This latest version includes some editorial updates as well as a revised FM IBOC RF mask which was submitted to the NRSC by iBiquity Digital Corporation, developers of the HD Radio technology upon which NRSC-5-B is based. The document will be available to the public through the NRSC's Web site (www.nrscstandards.org) following a final, procedural review which will take approximately four weeks.

iBiquity put together an impressive display of HD Radio receiver technology in their exhibit both at the show (see photo). Over 60 different receivers were on display including the portable and bookshelf receivers shown in the photo inset. In addition to participating in the unveiling of the Embedded Exporter, iBiquity brought broadcasters at the show up-to-date on other aspects of the transition including:

- **Automobile industry** – currently HD Radio receivers are a factory-installed option on all new BMWs and MINIs; HD Radio receivers are currently a dealer-installed option on all Fords, Lincolns and Mercurys; and, in 2009, the technology will be factory-installed on those vehicles. Volvo has also announced that HD Radio technology will be a factory-installed standard across its product line. Hyundai, Jaguar and Mercedes have also announced that HD Radio receivers will be available in select vehicles.

- **Retail outlets** – HD Radio receivers are available at thousands of stores across the country, including national retailers Apple, Best Buy, BJ's, Circuit City, RadioShack, Target and Wal-Mart. Regional and local chains include 6th Avenue, ABC Warehouse, Abt Electronics, Bjorn's, Car Toys, Entertainment Solutions, Flanner's World Wide Stereo, Huppins, Ken Crane, Listen Up, Myer-Emco, Ovation, Stereo Advantage, Ultimate; and online at Amazon.com and Crutchfield.com.

