

## **Omnia Debuts World's First HD Radio / DAB-Ready AM Processor**

### **Parallel-Output Omnia-5EX HD+AM Helps Broadcasters Prepare for Digital AM**

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Omnia Audio, the Cleveland, Ohio-based audio processing maker known for its ongoing innovation, has announced another in a long line of "firsts": Omnia-5EX HD+AM, the world's first HD Radio & DAB-ready audio processor for AM broadcasters.

Borrowing from the design of the market-leading Omnia-6EX audio processor, Omnia-5EX HD+AM incorporates a unique dual processing structure that routes processed audio from the multiband mixer section to separate, simultaneous output stages — the first optimized for conventional AM broadcasts, the second for HD Radio & DAB, webcasting, satellite and similar digital distribution networks.

"A lot of knowledgeable broadcasters are saying that HD Radio will benefit AM stations the most," says Omnia President Frank Foti. "There's no doubt the fidelity improvement AM will experience with digital transmission will be very dramatic. That's why our new Omnia-5EX HD+AM was designed to do two things at once: help AM stations prepare for the digital future, while offering immediate improvement to conventional AM broadcasts."

Omnia-5EX HD+AM helps broadcasters overcome bandwidth limitations and break free from bland, weak audio. The AM-optimized, distortion-cancelled final limiter employs a unique feedback/feed forward design for larger, warmer sound in the lower frequencies and more open, natural texture in the higher frequencies. A two-band AGC, plus wideband AGC and five-band limiter, help restore warmth, clarity and detail to AM broadcasts. The HD Radio/DAB section features Omnia's unique program-adaptive Look-Ahead limiter, plus adjustable low-pass filtering and high-shelf EQ.

Sophisticated features found in Omnia-5EX HD+AM include:

- Powerful new processing algorithms that provide crystal-clear processing for solo voices and instruments. Legendary Omnia loudness can now be advanced to even greater competitive heights – with even less distortion.
- Omnia's renowned Bass Management controls, with two new Bass Limiter functions, "Tight" and "Girth", which give users fine control over low frequency processing.
- Asymmetrical modulation capabilities with selectable output polarity which allow users to specify modulation of up to 150% (in 1% steps), resulting in more sideband energy for extra dial presence and improved coverage.
- Selectable high-frequency equalization provides compliance with all NSRC and ITU standards.
- Special low frequency equalization to help correct "tilt" in plate-modulated transmitters.
- Dynamic Bass Limiter algorithms that change waveform characteristics based upon frequency, resulting in deeper bass on smaller speakers, and fuller, richer, and cleaner low-end sound overall while audible IMD on stringed instruments and vocals is reduced.

*(more)*

**Omnia Announces Omnia-5EX AM Processor – Continued**

- A wide range of format-specific factory presets specially tuned to help AM stations take advantage of the powerful processing capabilities found in Omnia-5EX HD+AM.
- Selectable phase rotation to help improve overall clarity and low-end punch.
- Linux-based front panel software that provides smooth real-time metering of audio processes. Encrypted password protection for processing presets increases security and prevents tampering.
- Network Time Protocol function that allows Omnia time to be synchronized to a high-accuracy Internet or local external time servers using a network connection.
- Three-way remote control via built-in Ethernet and serial ports or optional PCMCIA modem card.

Leading radio stations around the world prefer Omnia audio processors. Recent surveys find Omnia in use on more than half of the 100 highest-rated FM stations in the US – more than all other brands combined. Internationally, Virgin Radio, NRJ, The BBC, Sony, Deutsche Telekom, Bayerischer Rundfunk, WDR, RTL, Skyrock, NRK, YLE and many other leading broadcasters rely upon Omnia.

AM and FM versions of Omnia-5EX are shipping now. For more details, call Omnia Audio at +1-216-241-7225, or visit [www.omniaaudio.com](http://www.omniaaudio.com) .

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Omnia-5EX HD+AM — *from Omnia Audio*

(You can download a print-quality version of this photo at <ftp://ftp.telos.cc/omnia/pix/O5EX-AM.tif> )

*Omnia, a Telos company, is world-renowned for its digital audio signal processing expertise. Omnia audio processors for FM, AM, TV, HD Radio & DAB, Internet, and audio production are setting new standards for professional audio quality.*