Andrea Electronics Launches Revolutionary SuperBeam® Computer Headsets with “Boom Free” Microphone Noise Cancellation and Unique Surround Sound Recording Capability

A pioneer and world leader in computer voice enhancement software technologies and computer headsets announced today the introduction of its new revolutionary SuperBeam® “boom free” computer headsets. Andrea introduced the first commercially available digital Array Microphone for the PC industry and has subsequently delivered millions of PC voice enhancement software licenses to top name brand PC companies. Now Andrea introduces the SuperBeam® headset, another first for the computer audio industry.

The SuperBeam® is a headphone that works like a headset. Providing new increased convenience, the product eliminates the need to constantly manually position the boom microphone for proper close talking operation. With SuperBeam® headsets, the user looks more natural during video use, with no fuzzy foam ball out in front of their lips. The user also has the convenience and enjoyment to freely eat and drink during conversations and operation, while enjoying exceptional sound quality and intelligibility for communications and multimedia applications.

The portable headphone market has become a very popular and burgeoning segment of the consumer electronics industry. Applications such as iTunes, YouTube, Skype, Game chat, as well as Unified Communications for the workplace, have driven the demand for headphones and headsets for personal listening and communications.

But there still is an awkward image and inconvenience associated with the boom microphone headset. The user can look like a telephone operator or air traffic controller during use, especially while video conferencing. Positioning the close talking microphone is an annoyance and incorrect positioning may result in the microphone being too far away from mouth, producing low output, or if positioned too close to the mouth can yield breath popping noises and distortion. The boom microphone is an appendage to the headset and is a frequent part of the headset that is broken easily.

“Andrea Electronics has reinvented the computer headset market segment with our new SuperBeam® products,” said Douglas Andrea, President of Andrea Electronics Corporation. "Our experience in developing PC headsets for the demanding speech recognition industry, combined with our patented and patent pending digital noise reduction array microphone technology, has culminated into a new revolutionary product. SuperBeam® now provides a ‘boom free’ capability that enhances the user experience providing ‘freedom of voice™’ with a new level of comfort and convenience, increasing user enjoyment and productivity not achieved with existing boom headsets.”

The initial two models, SuperBeam® Buds, an in-ear model, and SuperBeam® Phones, an over the head on-ear headphone, provide exceptional speaker drivers delivering Hi Fidelity sound output while also proving excellent passive noise isolation from ambient background noise. The headsets come with inline volume and microphone mute control. The headset cable is terminated with standard 3.5mm audio plugs for connection to the SuperBeam® systems’ PureAudio® USB audio adapter for use with computers or any portable media device such as an iPod for basic audio listening.

The SuperBeam® headsets incorporate unique far-field stereo array microphones integrated right into the headphone housing providing a boom-free experience by utilizing Andrea’s adaptive beam forming and digital noise reduction that enables more intelligible audio by forming a beam toward the speaker’s mouth while eliminating unwanted background noises that are outside of the beam. The SuperBeam® products enable a more natural look for the user with open-face convenience during communication.
The SuperBeam® headsets connect to Andrea’s PureAudio® USB audio adapter. The adaptor is a High Definition external sound card supporting CD quality digital sample rates with powerful low-noise floor amplified output. The PureAudio® adaptor removes the uncertainty of poor legacy computer audio quality and compatibility issues and provides the stereo microphone input to support SuperBeam® Headsets. The adapter also enables Andrea’s AudioCommander® software suite that empowers the SuperBeam® peripherals. The small form factor is convenient for portability, but the small size packs large performance.

AudioCommander® Software is an intuitive audio dashboard that controls the digital audio enhancements provided by the SuperBeam® headset system. The different feature modes are ideal for improving input and output sound quality for entertainment multimedia applications as well as providing intelligibility for video conferencing and VoIP communications. The AudioCommander® software is compatible with any PC running Windows XP, Vista or Windows 7, as well as any Apple Mac computers running OS X Leopard and Snow Leopard operating systems.

Speaker output features:

Noise Cancellation: Speaker output is enhanced with Andrea's PureAudio® noise reduction for removing noise from your VoIP received audio. By cleaning up the signal you are listening to, you increase intelligibility.

Graphic Equalizer: Software includes a high fidelity 10 band Graphic Equalizer with 22 preset selections for the specific control of bass, mid-range and treble audio levels for customizing the sound tone to fit your music genre.

Microphone input features:

Stereo Noise Cancellation: Microphone input has PureAudio® digital noise reduction on left and right channels removes repetitive and stationary noise from your microphone signals as well as electrical buzz from noisy power sources.

Lite beam forming: DSDA2® is a directional beam forming noise reduction algorithm that provides directional array microphone noise reduction. DSDA2® is designed to enable far-field speech recognition command and control performance.

Aggressive Beam Forming: DSDA3® is an adaptive beam forming noise reduction algorithm that provides extreme noise cancellation performance for canceling directional noises outside the voice beam.

Binaural stereo recording:

A new unique innovative feature, Stereo recording mode enables life like surround sound recordings of the users listening environment. Due to the SuperBeam® stereo microphones placement in close proximity to the user’s ears and head, a “Real Head Transfer Function” is established. Sound arriving at each microphone in natural phase will duplicate the real ear listening experience. Earphone playback will then deliver an identical sound reproduction experience, great for recording live music. With Andrea SuperBeam® headsets, you now have a portable sound studio right on you head that can make stereo surround sound recordings anywhere.

Andrea Electronics will be is launching the new SuperBeam® product line at the January 2011 Consumer Electronics Show in Las Vegas Nevada. The company will occupy Booth # 2650 in the Hilton Pavilion and Ballroom.

About Andrea Electronics
Andrea Electronics Corporation designs, develops and manufactures audio technologies and equipment for enhancing applications that require high performance and high quality voice input. The Company's patented Digital Super Directional Array (DSDA®), patent-pending Directional Finding and Tracking Array (DFTA®), patented PureAudio® and patented EchoStop™ far-field microphone technologies enhance a wide range of audio products to eliminate background noise and ensure the optimum performance of voice applications.