PRESENTED AT **INFOCOMM 2005**

Tools Of The Trade Honored At InfoComm Banquet



Randal A. Lemke, executive director of ICIA and one of the hosts at the InfoComm Awards Banquet, addressed the show's biggest crowd to date for the AV Communications Excellence Awards Banquet and Opening Ceremony.

by Margot Douaihy

Scores of enthusiastic InfoComm attendees were on hand on the eve of the first day of InfoComm 2005 at the AV Communications Excellence Awards Banquet and Opening Ceremony.

The festive gala recognized industry achievement and celebrated the pioneers who continue to raise the technological bar. ICIA, *Systems Contractor News, Rental & Staging Systems*, and *ARCHI-TECH* magazine bestowed individual honors to manufacturers and integrators.

InfoComm officials said that this exciting banquet allows the ICIA to honor its own through awards like the Volunteer of the Year award. ICIA also recognizes the role of communication publishers by partnering with the channel's top magazines. Visual Solution's Randy Pagnan was the illustrious emcee of the awards.

InfoComm 2005 Award winners include Harald Thiel, CTS, recipient of the Distinguished Achievement Award; Terry Friesenborg, CTS, recipient of the Fred Dixon Award; Roy A. Hermanson, Jr., CTS-I, CTS-D, recipient of the ICIA Educator of the Year Award; and Greg Bronson, CTS-D, winner of the Harald Thiel Volunteer of the Year Award.

THE WINNERS OF THE SCN INSTALLATION PRODUCTS AWARDS ARE:

Best Control Product For Commercial Installation
Crestron UPX2

Best Video Emissive Display Product For Commercial Installation
Samsung PPM50H3Q Plasma Display

Best DSP Product For Commercial Installation
Biamp Nexia DSP Family

Best Audio/Loudspeaker Product For Commercial Installation
JBL PD5322/43 Series

Best Audio/Mixing Product For Commercial Installation
Yamaha PM5D Series Digital Mixing Console

Best Video Projection Product For Commercial Installation
Barco iCon H600

Best Rack/Mount Product For Commercial Installation
Middle Atlantic DWR Series Wall Cabinet

Best Projection Screen Product For Commercial Installation
Da-Lite Multi-Mask Imager

Best Software Product For Commercial Installation
AMX MeetingManager 2.0

Best Video Signal Processing Or Distribution Product For Commercial Installation
Extron MGP 462

Best Audio Routing Product For Commercial Installation
TOA Electronics NX-100S

Best Audio/Videoconferencing Product For Commercial Installation
Tandberg T6000 MXP Codec

Best Innovative AV Product For Commercial Installation
WolfVision VZ-C30 3CCD Ceiling Visualizer

SCN editor Kirsten Nelson presents trophies to winners of the SCN InfoComm Installation Product Awards:


R. Randal Riebe, Tandberg's director, integrator channel sales


Mark Gander, JBL Professional's vice president of marketing


Lee Dodson, Extron's vice president of marketing


Scott Norder, AMX's vice president of business development


George Feldstein, Crestron's president


Mike Jones, Barco Events USA's general manager


Matt Teevan, Da-Lite's marketing manager

TOA

Best Audio Routing Product For Commercial Installation

TOA NX-100S

The TOA NX-100S network audio adapter was awarded "Best Audio Routing Product For Commercial Installation" at the AV Communications Excellence Awards Banquet held June 7, 2005 at InfoComm 2005 in Las Vegas.

"We're extremely pleased and appreciative to be recognized by the industry with this award," said Steve Mate, Sr. marketing manager at TOA Electronics, Inc. "With over two years of successful installations, the NX-100 technology has proven to be a solid, reliable solution for distributing audio over IP networks."

PRODUCT OVERVIEW

TOA NX-100 series network audio is a reliable and easy to use method for transporting mic or line-level audio signals over IP-based local and wide area networks (LAN/WAN), as well as the internet. Applications include wide area paging, background music or messaging audio distribution for airports, corporate campuses, convention centers, railway stations and transit systems.



TOA NX-100S

FEATURES

The NX-100 Series Network Audio converts a mic or line level analog audio signal to digital packets for transport over IP-based networks to other network-connected NX-100's for conversion back to analog. The NX-100 significantly reduces installation and operational costs when distributing audio signals to multiple remote locations by allowing the use of existing data networks (LAN, WAN and the internet).

The NX-100 can simultaneously send and receive audio to/from single or multiple NX-100's at remote locations. In addition to the audio stream, the NX-100 can simultaneously transport RS-232 serial data and contact closures for remote control of peripheral equipment.

The NX-100 significantly reduces installation and operational costs by allowing the use of existing data networks (LAN, WAN and the internet).

The flagship model NX-100 transports variable bandwidth, bi-directional audio, up to 14 kHz, as well as serial RS-232 and contact closure data. Each half-rack sized unit includes a balanced mic/line input and output and a 10/100BaseT Ethernet jack for connection to standard network hardware. The rear panel includes eight programmable trigger inputs to initiate and terminate audio transmissions, eight programmable open collector control outputs and an RS-232 serial port for data transmission/reception.

The NX-100 also has a built-in web server to support browser-based programming, control and monitoring from any network-connected PC. Other features include multiple error correction modes, external 24 VDC input, and Flash-upgradeable firmware.

The new streamlined and cost-effective NX-100S includes all of the same features as the NX-100 minus the RS-232 transport and external 24 VDC capability. Enhancements include front panel signal and peak LED's plus phantom power for condenser microphones.

Both the NX-100 and NX-100S are backed with a five year warranty.

Transmission Method

Each NX-100 has a fixed MAC address and requires a static IP address. Each NX-100 communicates with single or multiple NX-100's in Unicast or Multicast modes. In Unicast mode, the NX-100 can send up to four identical streams to up to four NX-100's over LAN, WAN or the internet. In Multicast mode, the NX-100 can send a single stream to up to sixty-four NX-100's within a multicast-capable LAN or WAN.

Front and Rear Panel Features

The NX-100 front panel includes Link/Activity, Full-Duplex/Collision, Status, Error and Run LED indicators plus a recessed hardware Reset button. The NX-100 rear panel includes a balanced mic/line input with adjustable volume control and a balanced line output. A standard Ethernet port (10/100BaseT) allows connection to Ethernet-based network hubs or switches. An RS-232 serial port is configurable as a TCP client/server or for UDP data transport with adjustable baud rate up to 115200 bps. Eight programmable contact inputs can be used to trigger Broadcast Patterns (described below) as well as activate single or multiple contact outputs on remote NX-100s. The NX-100 is powered with the AD-246 AC adapter or external 24 VDC power supply. Alternative versions of the AD-246 are available for worldwide use.

Sampling Rates And Audio Quality

The NX-100 provides three audio quality modes: 50 Hz to 14 kHz (32 kHz sampling), 50 Hz to 8 kHz (16 kHz sampling) and 50 Hz to 4 kHz (8 kHz sampling)—analogous to FM radio, AM radio and telephone quality respectively. The network bandwidth for each mode depends on packet size, compression on/off and packet loss recovery settings.

Delay Time

The delay time (latency) of a point-to-point NX-100 transmission depends on several factors including sampling frequency (audio quality), packet size, compression and packet loss recovery settings. The minimum delay possible is 20 milliseconds. Because of this, the NX-100 is not intended for use in live sound or similar applications but is instead well-suited for paging, messaging or background music distribution over existing data networks.

Broadcast Patterns

You can store up to 20 broadcast patterns or "audio distribution presets" in each NX-100. A broadcast pattern can be configured to transmit audio to single or multiple units or to receive audio from a specific unit. Patterns can be activated using the eight contact inputs, or with the included operation software as described below.

Contact Inputs And Outputs

Eight contact inputs are assignable to activate broadcast patterns and/or contact outputs on other units. The eight contact outputs are open collector type with adjustable contact off delay time from 0 to 60 sec. Each contact input and output is individually configurable as momentary/latch and normally open/closed. Each contact output can also be configured to activate to indicate an error condition.

Built-In Web Server And Browser Programming

Each NX-100 has a built-in web server allowing configuration and monitoring via common web browsers.

Transmission Data Format

The NX-100's audio stream uses the User Datagram Protocol (UDP). The serial RS-232 and contact closure data are transported using the Transmission Control Protocol (TCP).

TOA is dedicated to the development, manufacturing and distribution of premier audio and security products. TOA Corporation was founded in Kobe, Japan over 70 years ago. TOA operates in over 100 countries worldwide, with more than 1,500 employees and sales greater than $300 million dollars. TOA manufacturing facilities are found in nearly every major market area. These facilities have a reputation for precision design and fabrication, resulting in a proven track record of TOA product reliability.

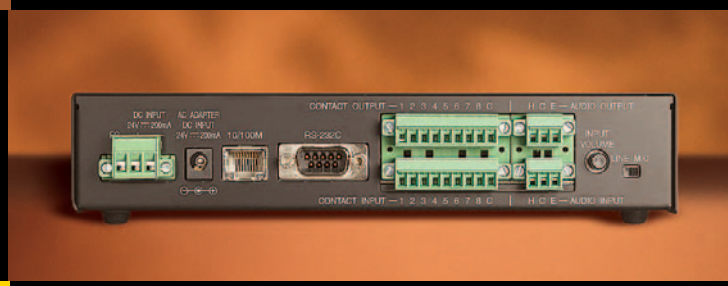
TOA's extensive line of audio products includes amplifiers, speakers, mixers, wireless microphone systems, digital processors and network audio. Security products include CCTV cameras, DVRs and integrated intercom systems used in security and communications applications.



2005 AV Excellence Award Winner!

"Best Audio Routing Product for Commercial Installation"

NX-100 Network Audio



NEED TO GET AUDIO TO A REMOTE SITE A MILE AWAY? How about multiple locations across the country, or on another continent? Your customer already has a data network infrastructure. The world's largest communications network, the Internet, is ready and waiting. Why not use them for commercial audio distribution? Corporate messaging, wide area paging—the possibilities are limitless. TOA NX-100 Network Audio gives you the power to distribute bi-directional audio, contact closure and serial data over LANs, WANs or the Internet. All without eating up your bandwidth or requiring a dedicated network. There's even a built-in web server for browser-based configuration from any PC, anywhere on the network. Cost-effective, easy to setup, with proven TOA reliability.

Audio Quality	Bandwidth (kbps)
50 – 14k Hz	136
50 – 7k Hz	68
50 – 3.4k Hz	34

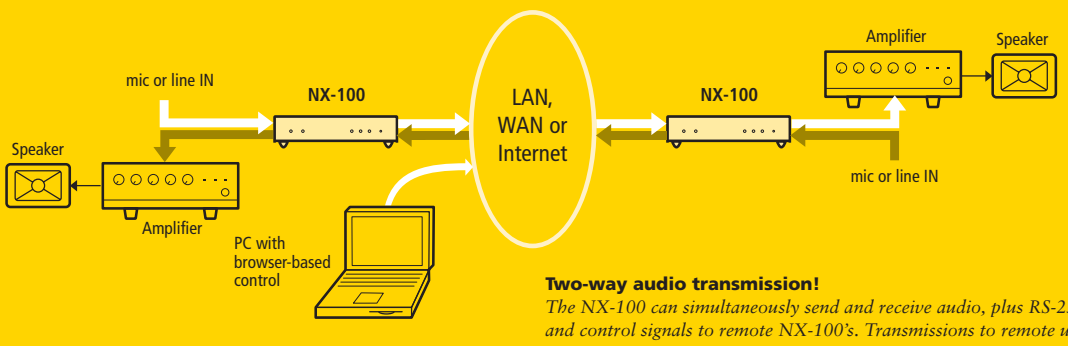
Call us today for more information, or download the NX-100 white paper and application guide from: **www.toaelectronics.com.**

Applications

Anywhere you need to distribute audio to remote locations:

- Airports and Metro Stations
- Corporate Campuses
- Educational Facilities
- Hotels
- Industrial and Warehousing
- Museums
- Paging Distribution
- Railway and Transit Stations
- Retail Chains
- Security Monitoring
- Theme Parks
- Wide Area Paging

- New economy and stereo versions
- Converts analog audio to IP packets for transmission over LANs, WANs or the Internet
- Send & receive audio plus RS-232 and control signals
- Balanced, transformer-isolated mic/line input and line output
- Ethernet port (10/100BaseT)
- Three audio quality modes occupy minimal network bandwidth
- Simultaneous transmission (multicast) to up to 64 locations
- Browser-based control and management from any network-based PC
- Initiate preset broadcasts via software or eight programmable trigger inputs
- Eight control outputs for activating external equipment
- Five year warranty



Two-way audio transmission!
The NX-100 can simultaneously send and receive audio, plus RS-232 and control signals to remote NX-100's. Transmissions to remote units can be activated via software or programmable trigger inputs.



New NX-100 Cookbook!
Download the new 70-page application guide from www.toaelectronics.com!

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