

MOST INNOVATIVE LOUDSPEAKER FOR COMMERCIAL INSTALLATION

ELECTRO-VOICE EVA SERIES

Part of the EV-Innovation (EV-I) family, Electro-Voice's EVA (Expandable Vertical Array) series of loudspeakers for installed sound offer the benefits of concert line arrays in a new, simpler format. EVA modules can quickly and easily be assembled into full-bandwidth line arrays with well-defined coverage, without the rigging and drive complexities of conventional concert line array products.

EVA is a modular system, with four two-way models available to provide a range of directivities from 90° x 6° to 120° x 20°. The attractive units may be assembled in various configurations to provide the required coverage.

The EVA series uses advanced transducer and crossover techniques to provide surprising low-frequency response without compromising midrange quality. In many EVA applications, subwoofers will not be required to provide a full musical experience.

EVA modules use passive crossovers and have 16-ohm impedances. Thus, a complete two-channel EVA system can be driven by a single two-channel amplifier of sufficient output.

The EVA loudspeaker model is designated EVA-2082S. It has four versions to provide a choice of directivity characteristics. The two vertical coverage angles (6° and 20°) can be combined to create

line arrays optimized for spaces ranging from 12 m (40 ft) to more than 60 meters (200 feet) deep. The two horizontal coverage options (90° and 120°) provide a match for any space.

Each module contains two EVS2008 8-inch woofers and four DH2005 1.25-inch high-frequency compression drivers on Hydra plane wave generators. The loudspeakers are arranged in two sets, with a slight inclination angle between sets. This angle is engineered to provide optimum vertical wavefront shape for EVA arrays.

EVA rigging uses simple and attractive coupling plates to join modules. The resulting array is smooth-sided and unobtrusive. There are no box angle adjustments.

Each module contains a complex and sophisticated passive crossover network that eliminates the need for loudspeaker DSP and multiple amplifier channels. Six EVA modules can be operated in parallel from a single amplifier channel capable of driving 2.7 Ohm nominal impedance (e.g. EV CPS 2.12).

Each module has switchable frequency-shading and attenuation options that are used to adjust the



Electro-Voice's
EVA

array uniform audience coverage. For each installation, the array design, including module switch settings, is done using EVADA (EVA Design Assistant) software, an easy to use array modeling program downloadable from electrovoice.com.

EVA For Salem High School

Electro-Voice EVA line array loudspeakers are providing exceptional style and sound quality as part of an installation at Salem High School (Salem, OH). Jay Dunkle, design engineer with regional installation contractors Radi-O-Sound Communications described the project: "The auditorium at Salem High School is an unusual shape; it's only 19 feet high but 90 feet deep, which is why I decided to go with a single-point source. The school also asked that their new system not look like a large concert rig—they wanted the sight-lines to remain as clear as possible, keeping a nice clean look in the room. We sampled many different loudspeakers and nothing came close to the new EVA in terms of audio quality and aesthetics. They look and sound beautiful."

Dunkle installed a tidy central array comprising one EVA EVA-2082S/906 (90°H x 6°V) over one EVA-2082S/1220 (120°H x

20°V). Both modules are powered by a single CPS 2.9 MK II amplifier and processed via a DC-One. In addition to the main array, Dunkle filled-in the front and side rows with

two ZX1 loudspeakers; two FRI-28LPM serve as low-profile stage monitors. The EV spec also features four new PL37 cardioid condenser microphones. A selection of



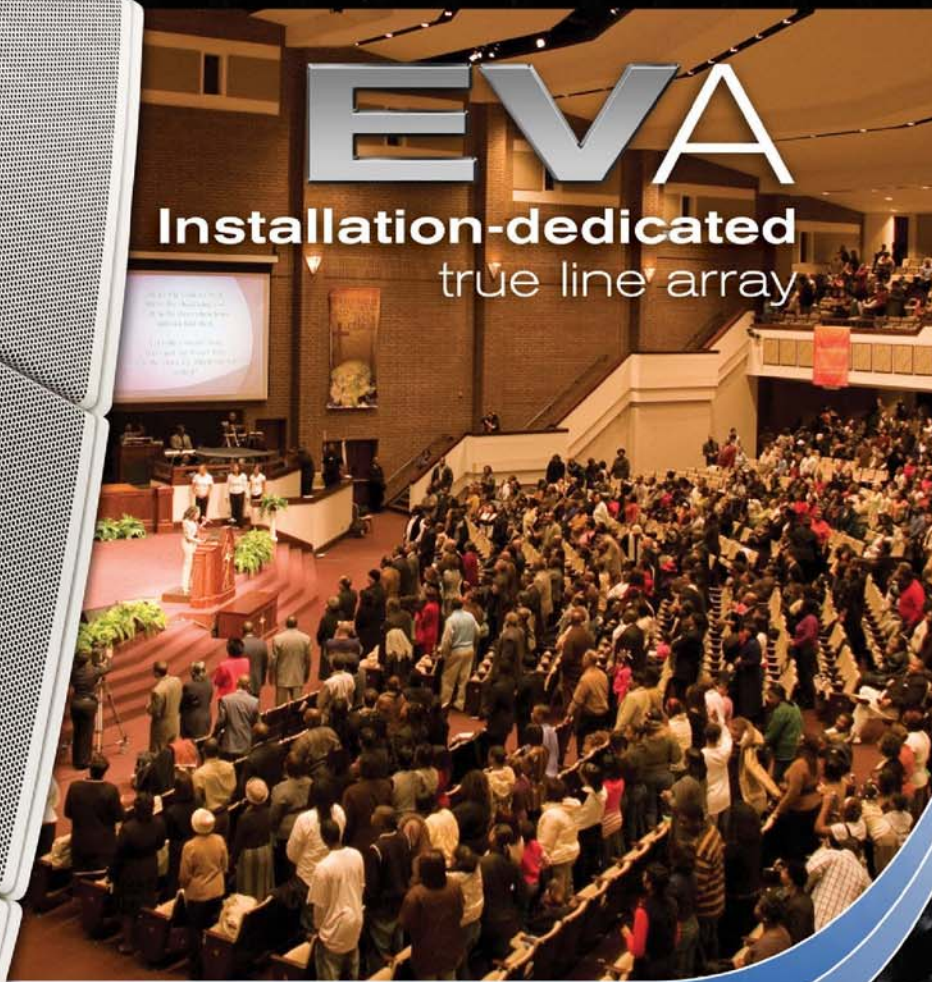
Salem High's auditorium features an EVA as a single-point source.

older EV equipment is sounding great in the system: Two P1200 amps power the fills and monitors; another single P2000 powers two TL18-1 subs under the stage, center-packed to deliver frequencies down to 28 Hz. Monitor EQ is via a Dx34 processor.

"This is an acoustically dead room—we had no positive reflections to work with," Dunkle explained. "So we spec'd this particular combination of EVA modules to keep the sound off the side walls, aiming them directly at the seating areas. We first demo'd the system on the stage for the high school's superintendent and the middle-school principal, and they were very impressed," Dunkle said. "We drove it up to around 95 dB and it was crystal clear and highly intelligible, which is appropriate since the school needed a system for speeches and vocals during theater productions and DVD presentations."

EVA

Installation-dedicated
true line array



New EVA (Expandable Vertical Array) series loudspeakers from Electro-Voice are easily assembled into full-bandwidth line arrays with well-defined coverage – all without the rigging and drive complexities of conventional concert line array products.

EVA is a modular system, with four two-way models available to provide a range of directivities from 90° x 6° to 120° x 20°. Modules may be combined in various configurations to precisely provide the required coverage for many applications. Clean lines and unique internal rigging hardware mean EVA arrays look as good as they sound.

EVA uses advanced transducer and crossover technologies to provide impressive low-frequency response without compromising mid-range quality. Passive crossovers and 16-Ohm impedance allow two EVA arrays to be driven by a single, two-channel amplifier of sufficient output power.

Drive up to 16 cabinets with only one TG-7 amplifier.

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