

PreSonus CDL12 CDL12 Constant Directivity Sound Reinforcement Loudspeaker (Single)

Constant Directivity: Consistent, Coherent Sound

The PreSonus® CDL12 is the result of years of research and development, combining the best attributes of point source and line array technology into a unique patent-pending design. Based on the Constant-Directivity Two-Way Loudspeaker System design presented at the 143rd AES Convention in New York by Hugh Sarvis and Don Keele, the CDL12 radiates a highly focused pattern with consistent SPL throughout the frequency response range, both on- and off-axis. The result is clear, articulate speech intelligibility and natural music reproduction.

A unique look with a unique result

Each CDL12 consists of eight 2-inch drivers aligned in a segmented circular-arc high-frequency array centered in front of a 12-inch woofer. The output of the low-frequency driver travels from the same acoustic axis as the high-frequency array so that the pattern always radiates from the center of the CDL12. This is true whether the CDL12 is used individually on a tripod speaker stand or as part of an acoustically coupled vertical array with up to six enclosures. Because of this, the CDL12 avoids the near-field anomalies that can interfere with the sound quality of a traditional line array. This makes the CDL12 ideally suited for a broader range of venue sizes, creating a far-field response almost immediately as the sound is projected from the center of the enclosure.

Symmetrical dispersion matters.

Traditional line array loudspeakers typically place a high-frequency horn on one side of the enclosure and a woofer on the other. To obtain a symmetrical image with those loudspeakers, you'd have to flip one over—something they aren't designed to do in the first place—and you'd still have phase issues. With the CDL12, the eight 2-inch high-frequency drivers arc over a single 12-inch woofer, comparable to the coaxial driver configuration found on top studio monitors. The result is better sonic coherence across the entire venue, with no anomalies to compensate for via time-consuming room correction. Regardless of how many CDL12s you stack, you're working with a shared acoustic axis—and non-turbulent sound propagating throughout the room.

Scalable vertical coverage.

The CDL12's hybrid point source/line array design delivers focused sound with consistent SPL coverage both on- or off-axis, making it an excellent choice for mobile and installed applications. Rigging CDL12 enclosures is made easier, thanks to integrated pin-loaded rigging hardware. A dual-angle pole mount is provided, supporting the use of one or two enclosures when pole mounted on a tripod stand, or atop the companion CDL18s subwoofer, allowing the system to adapt to varying audience sizes. When vertically arrayed for suspended applications, up to five CDL12 enclosures can be flown beneath one or two CDL18s subwoofers. When flown without a subwoofer, six CDL12 loudspeakers can be arrayed to create a truly symmetric 120° x 120° design.

Onboard processing power.

The CDL12's integrated PDA-1000 500W x 500W Class D power amplifier features onboard DSP presets to facilitate and simplify arrayed configurations. For more advanced applications, each CDL12 can be connected to a standard LAN network and remotely controlled using Worx Control software for macOS® and Windows®. When combined with the CDL12, Worx Control provides speaker-management tools that include compression, limiting, and 800 ms of delay. An 8-band EQ with individually selectable filters (High Pass, Low Pass, High Shelf, Low Shelf, Notch, All Pass, Band Pass) is also provided to compensate for room anomalies. Speakers can be grouped and managed individually or together. Performance monitoring indicators allow you to monitor temperature and signal levels remotely.

Dante® spoken here.

Dante® spoken here. The locking Ethernet connection on the CDL12's integrated PDA-1000 power amplifier also provides audio networking capability via Dante. Dante's multi-channel digital media networking technology delivers near-zero latency and synchronization and has been adopted by many pro-audio manufacturers, facilitating the CDL12 loudspeaker's interoperability with a wide range of equipment.

Now hear this.

The patent-pending Constant Directivity design of the PreSonus CDL12 delivers exceptional performance and versatile configuration options in a visually stunning, compact form factor. Superior phase coherence and controlled dispersion result in an articulate, natural listening experience, making the CDL12 an outstanding choice for both portable PA and installed sound applications. The result of years of research and development, the CDL12 combines the directivity of a point-source design with the scalable coverage of a line array to create a unique loudspeaker that provides the flexibility demanded by modern sound reproduction applications. Hear it now at your authorized PreSonus dealer.

Trouble-free performance guaranteed-for six years.

Quality runs deep in our corporate culture and we strive to build feature rich, the best sounding, and most reliable products available anywhere. We're confident you'll love the PreSonus CDL12. By choosing PreSonus, you're assured of robust, trouble-free performance—for six years. In the unlikely event you do experience an issue, you can count on us to make it right. This is our commitment to you.