



# PreSonus® CDL12

Hybrid Point Source/Line Array  
Constant Directivity Loudspeaker

## Key Features

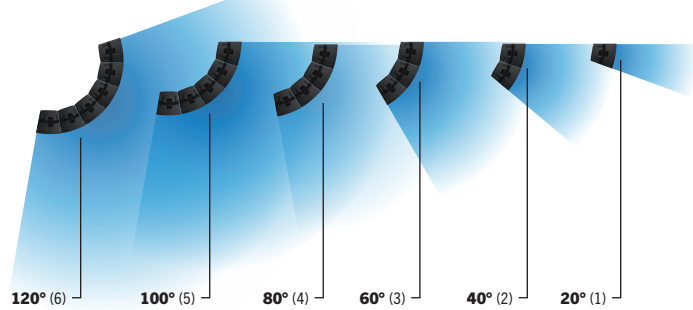
- Each CDL12 consists of eight 2-inch drivers aligned in a segmented circular-arc high-frequency array centered in front of a 12-inch woofer creating a focused pattern that always radiates from the center, whether used individually or in a vertical array.
- Hybrid point source/line array design delivers focused sound with consistent SPL coverage both on- and off-axis.
- Dante™ networking capability provides easy integration into established audio networks.
- Integrated PDA-1000 amplifier provides 2000W of peak power.
- Onboard DSP can be remotely controlled via Worx Control software for system optimization, EQ, and speaker grouping. Presets are provided for quick configuration of up to six CDL12 loudspeakers in a vertical array.
- Integrated pin-loaded rigging hardware provides simple connection to other CDL-series enclosures and CDL Rigging Grid (sold separately). Dual angle pole socket provides flexible aiming for pole-mount applications.

## Applications

- Mobile sound reinforcement
- Permanent installation
- Sound reinforcement for mid-sized venues

## Constant Directivity: Consistent, Coherent Sound

The result of years of research and development, the PreSonus® CDL12 combines the best attributes of point source and line array technology into a unique patent-pending design that 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.



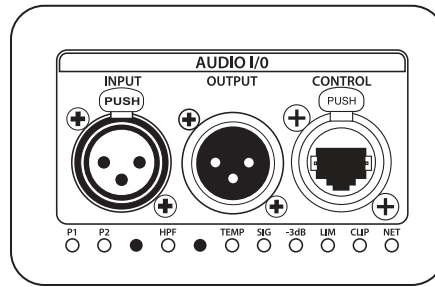
Each CDL12 consists of eight 2-inch drivers aligned in a segmented circular-arc high-frequency array centered in front of a 12-inch woofer. The combined output of the high- and low-frequency drivers travel from the same acoustic axis so that the pattern always radiates from the center of the CDL12. This 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, making 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.

The high-frequency array curve was designed so that as multiple CDL12 enclosures are stacked, the entire array maintains consistent center-to-center spacing among all the high- and low-frequency drivers. This creates a seamless transition from one cabinet to the next while

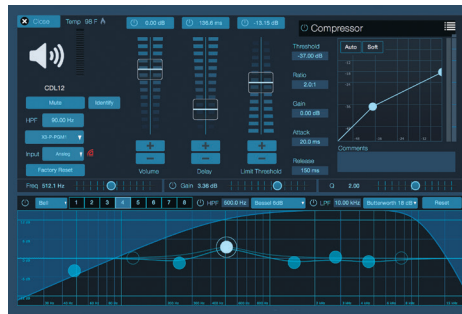
minimizing comb filtering to maintain the controlled 120° horizontal coverage pattern while the vertical coverage is expanded by 20° per box deployed. The result is a system that can be scaled from 20° to 120° of vertical coverage, making the CDL12 an ideal choice for array use.

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.

## Customizable Array Presets



The CDL12's integrated PDA-1000 500W x 500W Class D power amplifier features onboard DSP presets to facilitate and simplify arrayed configurations. When used individually or combined with another CDL12, two presets are available via the rear panel for quick configuration. Use Preset 1 when using one CDL12 loudspeaker and Preset 2 on both loudspeakers in a two CDL12 array. When using three or more CDL12 loudspeakers in an array, simply connect every CDL-series loudspeaker to a standard LAN network and launch Worx Control software to load the presets for larger 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



The onboard locking Ethernet connection supports both Control via Worx Control Software as well as Dante audio networking. Dante's

multi-channel digital media networking technology delivers near-zero latency and synchronization. As an audio networking solution that has been adopted by many pro-audio manufacturers, it facilitates interoperability with a wide range of equipment—ensuring the CDL12 will integrate well into numerous installed sound environments.

## Application and Deployment

The CDL12 can be configured as an individual point-source loudspeaker or in a vertical array with other CDL12 loudspeakers and the CDL18s Subwoofer. Integrated pin-loaded rigging hardware makes easy and secure box-to-box deployment. When suspending CDL-series loudspeakers, PreSonus requires the CDL Rigging Grid. This separately-sold rigging grid allows up to (6) CDL12 loudspeakers, (5) CDL18s subwoofers, or a number of combinations (see below) to be suspended in a vertical array.

The table below shows the maximum suspended loudspeaker load configurations.

### Supported Suspended Loudspeaker Configurations

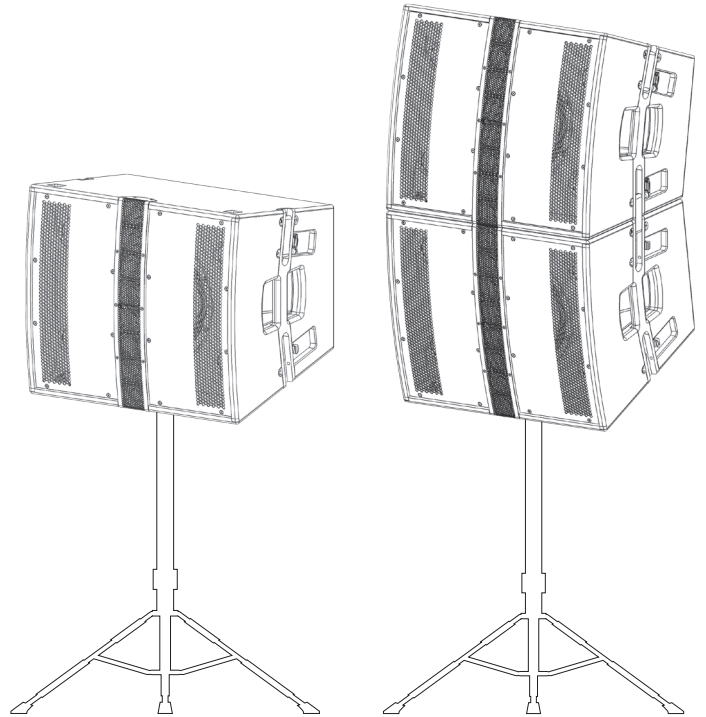
Maximum Number of CDL12 Loudspeakers	0	2	3	4	5	6
Maximum Number of CDL18s Loudspeakers	5	2	2	2	2	0

### Individual Component Weight

CDL12	CDL18s	CDL Rigging Grid	CDL Rigging Grid Extension Bar
65 lbs (29.5 kg)	105 lbs (47.6 kg)	24 lbs (10.9 kg)	5.8 lbs (2.6 kg)

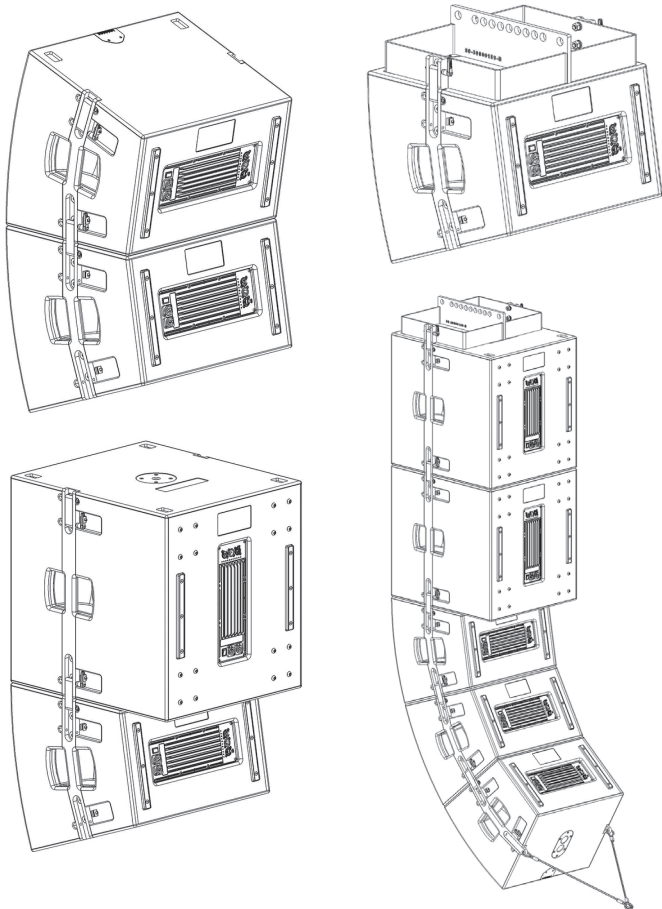
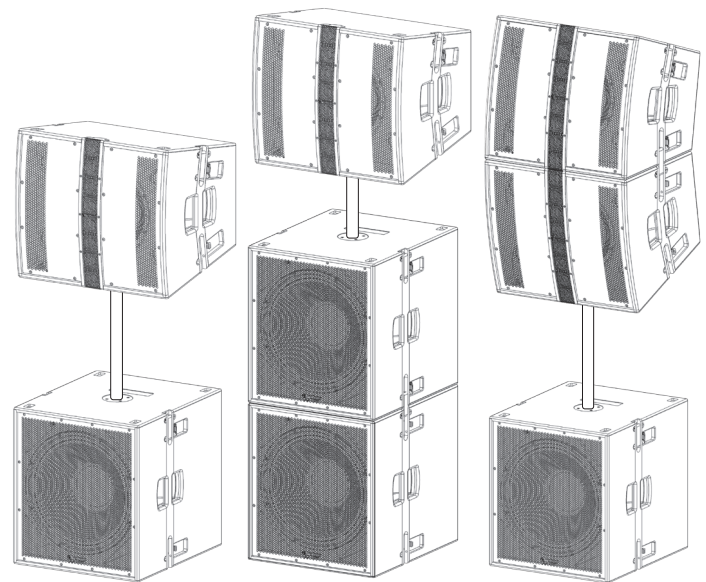
All PreSonus CDL-series rigging and rigging accessories are rated for a 10:1 load. Structural suspension supports must also be rated for a 10:1 load.

A dual-angle pole cup 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. Up to (2) CDL12 loudspeakers may be used on a tripod or on a sub pole over the CDL18s subwoofer. The CDL12 is equipped with a two-position pole cup to provide more flexible coverage when pole-mounted (0° or 10° downward).

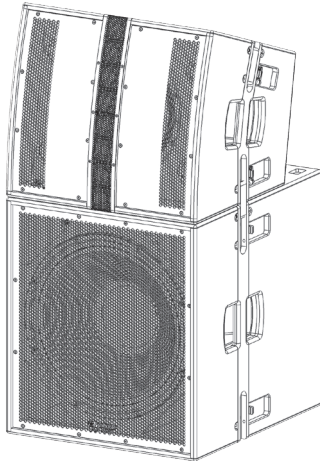


### Supported Pole-Mount Loudspeaker Configurations

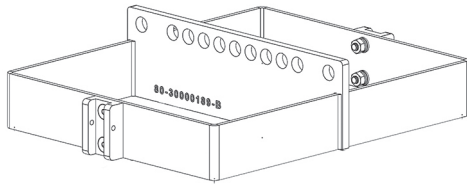
Maximum Number of CDL12 Loudspeakers	1	2
Maximum Number of CDL18s Loudspeakers	2	1



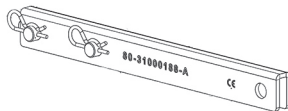
Ground-stacked, upward firing arrays, such as marching band applications that require covering the bleachers from a playing field are also supported. Up to (2) CDL12 loudspeakers can be mounted atop up to (2) CDL18s loudspeakers.



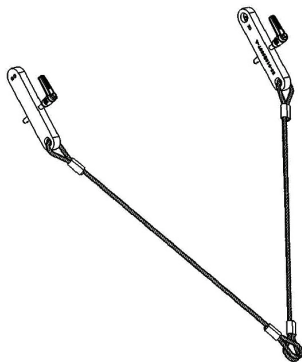
### Rigging Accessories (Sold Separately)



**CDL Rigging Grid.** The CDL Rigging Grid is required when suspending CDL-series loudspeakers. Up to (6) CDL12 loudspeakers, (5) CDL18s subwoofers, or a number of combinations (see chart on previous page) to be suspended in a vertical array.



**CDL Rigging Extension Bar.** The CDL Rigging Extension Bar is an optional accessory for the CDL Rigging Grid that provides upward or downward tilt control for any suspended installation that requires it.



**CDL Rigging Sling.** The CDL Rigging Sling is required on all installations that include 4 or more CDL-series loudspeakers in a vertical array. Additionally, in installations using the CDL Rigging Extension Bar deployed with an upward or downward tilt of 12° or greater, the CDL Rigging Sling must be utilized.

## Technical Specifications

Type	Active 2-way
LF Driver	12" (2.5" Voice Coil)
HF Driver	8x 2" (1" Voice Coil)
Amplifier Type	Class D
Total System Power	2000W Peak, 1000W Program (500W RMS)
LF Driver Power	1000W Peak, 500W Program (250W RMS)
HF Driver Power	1000W Peak, 500W Program (250W RMS)
Frequency Range (+/- 3dB)	48 Hz – 18 kHz
Crossover Frequency	420 Hz
Maximum Peak SPL	131 dB
Horizontal Coverage	120°
Vertical Coverage	20° per enclosure
Input	Line (XLR)
Output	Direct Line Out (XLR)
Networking	Dante® (Audio and Control), Control (only) (Locking Ethernet)
Power Connection	powerCON® In and Out
User Controls	Preset Select, HPF On/Off
Indicators	Over Temperature, Signal, -3 dB, Limiter, Clip, Network Status
Enclosure	15 mm Eucalyptus plywood
Mounting	Dual-position pole mount (0° and 10°), Integrated Rigging (10:1 load)
Dimensions (H x W x D)	18.6" x 20.8" x 17.5" (473 mm x 529 mm x 444.5 mm)
Weight	65 (29.5 kg)
Optional Accessories	CDL12-Tote Tote Bag

