

## Applications

### CL35-PreNeo HIGH FREQUENCY LINE ARRAY DEVICES

The P Audio CL35-PreNeo is a high frequency wave guide coupled to a PreNeo-740N high output compression driver. The converging lens wave guide and compression driver are designed for use in line array sound reinforcement systems or whenever planar wave-fronts are required. The CL35- PreNeo produces extremely coherent output with a rated frequency range of 1000Hz to 16kHz. The CL35-PreNeo may be used as a single device in planar front sound reinforcement systems or be stacked vertically in a two high configuration for very high output line array system designs. Applications information may be found in the P Audio white paper titled "CL Wave Guide Applications" in the "High Frequency" section of the P Audio web site. ([www.paudiothailand.com](http://www.paudiothailand.com)). This white paper describes basic 90 degree and 120 degree horizontal pattern control configurations typical in modern line array system designs.

The CL35-PreNeo is a converging acoustic lens design that achieves excellent time coherence over the entire front of the wave guide "mouth". This converging acoustic lens design acts to convert the naturally diverging spherical wave fronts found in typical wave guides to a more planar, time coherent wave front suitable for use in large format or arrayed linear geometry loudspeaker system designs. The physical design of the horizontal exit width allows for the addition of customer configured horizontal radiation control boundaries of up to 120 degrees. The addition of simple mounting holes in the front flanges allow the customer supplied control boundary (horn) to be easily mounted to the CL35-PreNeo. The recommended low frequency limit of the device is 1000Hz. Although the flare rate of the device is a lower frequency, 1000Hz is recommended to provide both good loading and reliability to the selected compression driver.

The CL35-PreNeo is a rugged die cast aluminum design that couples to the large format neodymium based PreNeo-740N. The CL35-PreNeo is an excellent high frequency addition for conventional two way and three way single enclosure designs and can be easily combined to stack in multiple vertical configurations. The edge to edge physical spacing of the wave guide allow for superior coupling at very high frequencies.

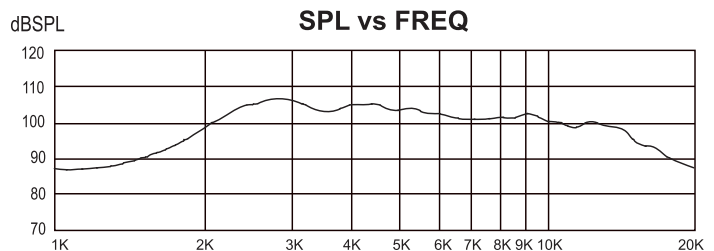
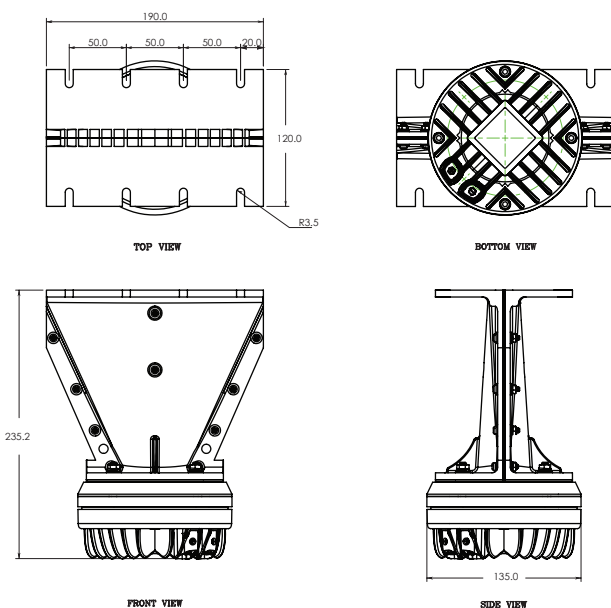


## Specifications

|                          |                       |
|--------------------------|-----------------------|
| Cut Off Frequency ( Hz.) | 1000Hz                |
| Throat Diameter          | 35.5 mm (1.4")        |
| Mounting Type            | BOLT ON               |
| Construction             | Die cast<br>Aluminium |

### OVERALL DIMENSIONS :

|                     |  |
|---------------------|--|
| Mount Height :      | 235.2mm (9.26")                              |
| Mount Width :       | 120mm (4.72")                                |
| Length :            | 190mm (7.48")                                |
| Net Weight :        | 5.0kg (11.0lbs)                              |
| Shipping Weight :   | 5.3kg (11.7lbs)                              |
| Packing Dimension : | 180mm x 205mm x 290mm<br>7.1" x 8.1" x 11.4" |



**Response of horn with PreNeo-740N**

19/4 Moo 2 T.Bangkratuk A. Samparn Nakornpathom 73210 Thailand  
 Tel: +66-2-441-6600 Auto 30 Lines  
 e-mail: [info@paudiothailand.com](mailto:info@paudiothailand.com)  
 Web site: [www.paudiothailand.com](http://www.paudiothailand.com)  
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