XLD281-FG Fiberglass 3-Way, High-Output, Very Compact Line-Array Element

- Very Compact, Lightweight
- CCT (Coverage Control Technology)
- 120° Horizontal Coverage to 200 Hz
- Bi-Amp or Tri-Amp Operation
- Neodymium Transducers

The XLD281-FG is a 3-way design using CCT (Coverage Control Technology) to control horizontal coverage to 200 Hz. It uses an 8 inch neodymium LF transducer, an 8 inch neodymium LF/MB transducer, and two neodymium 2 inch voice coil compression drivers combining through 2 hydra plane wave generators into a 120° x 10° waveguide. CCT uses both 8 inch transducers to provide maximum low frequency output and operating bandwidth while controlling horizontal beam width to 200 Hz by using DSP. The FG models are fully-weatherized and fiberglass-coated. The XLD281-FG can be used in tri-amp mode, or in bi-amp using a sophisticated internal passive network. Designed for use in arrays of four or more elements, the XLD281-FG delivers full bandwidth audio with precise, predictable coverage control. Integrated rigging with hinge points located correctly between array elements is simple to use and quickly provides uncompromised line array performance. The XLVC weatherized family consists of two full-range systems with dual woofers, two full-range systems with single woofers and a subwoofer system. The dual-woofer versions include the XLE181-FG with a 120° horizontal coverage pattern and the XLE191-FG with a 90° horizontal coverage pattern. The single-woofer versions include the XCS312-FG subwoofer module can be directly arrayed above, or below XLD281-FG full-range systems. LAPS2 modeling software quickly provides array configurations and rigging information. X-Line Very Compact weatherized models deliver unprecedented performance in outdoor venues in full exposure.

**Technical specifications**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Response (-3 dB)</td>
<td>75 Hz-18 kHz¹</td>
</tr>
<tr>
<td>Frequency Range (-10 db)</td>
<td>60 Hz-20 kHz²</td>
</tr>
<tr>
<td>Max Calculated SPL</td>
<td>137 dB Cont., 143 dB Peak²</td>
</tr>
<tr>
<td>Horizontal Coverage</td>
<td>120°</td>
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</tbody>
</table>
XLD281-FG Fiberglass 3-Way, High-Output, Very Compact Line-Array Element

Vertical Coverage: Array Dependant, Software Definable

Rigging: Fully Captive Aluminum, 1° increments, 16 elements with 8 to 1 Safety Factor

LF1 Power Handling: 200W Cont., 800W Peak
LF2 Power Handling: 200W Cont., 800W Peak
HF Power Handling: 80W Cont., 320W Peak
Biamp LF1/HF Power Handling: 200W Cont., 800W Peak

Bandpass Frequency: 50 - 250 Hz

LF1 to HF Crossover Frequency: 1760 Hz

LF1 Passband: 1 x 8 inch DVN2080, 16 ohms
LF2 Passband: 1 x 8 inch DVN2080, 16 ohms
HF Passband: 2 x ND2S-8, 16 ohms
Biamp LF1/HF Passband: 16 ohms

Connectors: Gland nut with 30 ft cable

Enclosure: 13-ply birch plywood with fiberglass and EVCoat

Grille: Stainless steel with powder coat paint and hydrophobic cloth

Environmental Specifications: IEC 60529, IP55

Dimensions (H x W x D): 9.9 in x 28.58 in x 14.52 in (251 mm x 726 mm x 369 mm)

Net Weight: 48 lb (21.8 kg)
Shipping Weight: 51 lb (23.1 kg)

1Full Space Measurement of four (4) elements.
2Full Space Measurement of HF section of four (4) elements, SPL adjusted for 1 m distance.
3Use EV signal processing or download presets from Electro-Voice website.

System overview

Beamwidth:

![Beamwidth Chart]

Impedance:

![Impedance Chart]

Grid Drawing:

![Grid Drawing]

Block Diagram:

![Block Diagram]

Wiring Detail:

<table>
<thead>
<tr>
<th>Triamp</th>
<th>Biamp</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange to HF+</td>
<td>NA</td>
</tr>
<tr>
<td>Yellow to HF-</td>
<td>NA</td>
</tr>
<tr>
<td>Blue to LF1+</td>
<td>Blue to LF1/HF+</td>
</tr>
<tr>
<td>Brown to LF1</td>
<td>Brown to LF1/HF-</td>
</tr>
<tr>
<td>Red to LF2+</td>
<td>Red to LF2+</td>
</tr>
<tr>
<td>Black to LF2-</td>
<td>Black to LF2-</td>
</tr>
</tbody>
</table>
Dimensions:

Compatible System Solutions, Installed versions:

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>XLD291-FG 90° Full-Range Line Array Element</td>
<td></td>
</tr>
<tr>
<td>XCS312-FG Triple 12 inch Cardioid Compact Controlled-Coverage Bass Element</td>
<td></td>
</tr>
</tbody>
</table>

Compatible System Solutions, Electronics:

<table>
<thead>
<tr>
<th>Electronics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP3000S Precision Series Power Amplifier</td>
<td></td>
</tr>
<tr>
<td>CP4000S Precision Series Power Amplifier</td>
<td></td>
</tr>
<tr>
<td>TG5 Tour Grade Power Amplifier</td>
<td></td>
</tr>
<tr>
<td>TG7 Tour Grade Power Amplifier</td>
<td></td>
</tr>
<tr>
<td>Dx46 Digital Sound System Controller</td>
<td></td>
</tr>
<tr>
<td>N8000 NetMax 300 MIPS Digital Matrix Controller</td>
<td></td>
</tr>
</tbody>
</table>

Ordering information

**XLD281-FG Fiberglass 3-Way, High-Output, Very Compact Line-Array Element Black**
XLD Full-range cabinet, fiberglass, 2 x 8", 2 x ND2, bi-amp or tri-amp mode switchable, 120° H/10° V, integrated rigging system, black
Order number **XLD281-FGB**

**XLD281-FGW Fiberglass 3-Way, High-Output, Very Compact Line-Array Element White**
XLD Full-range cabinet, fiberglass, 2 x 8", 2 x ND2, bi-amp or tri-amp mode switchable, 120° H/10° V, integrated rigging system, white
Order number **XLD281-FGW**

Accessories

**XLD Grid Fiberglass Black**
XLD system fiberglass grid for up to 16 x XLD281-FG/
XLD291-FG or 8 x XCS312-FG, black
Order number **XLD-GRID-FGB**

**XLD Grid Fiberglass White**
XLD system fiberglass grid for up to 16 x XLD281-FG/
XLD291-FG or 8 x XCS312-FG, white
Order number **XLD-GRID-FGW**

**XLCV-BGK-FGB Fiberglass Bottom Grid Kit Black**
Bottom grid kit for XLD and XLE fiberglass (-FG) systems, black
Order number **XLCV-BGK-FGB**