Electro-Voice | XLD291-FG Fiberglass 3-Way, High-Output, Very Compact Line-Array Element

XLD291-FG Fiberglass 3-Way, High-Output, Very Compact Line-Array Element

- Very Compact, Lightweight
- CCT (Coverage Control Technology)
- Simple, Quick Integrated Rigging
- Bi-Amp or Tri-Amp Operation
- Neodymium Transducers

The XLD291-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 90° 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 XLD291-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 XLD291-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 XLD281-FG with a 120° horizontal coverage pattern and the XLD291-FG with a 90° horizontal coverage pattern. The single-woofer versions include the XLE181-FG with a 120° horizontal coverage pattern and the XLE191-FG with a 90° horizontal coverage pattern. The subwoofer module is the XCS312-FG. Most applications using flown very compact elements require subwoofers integrated into the same array as the full-range systems. XLVC provides three methods to conveniently do this. The XCS312-FG subwoofer module can be directly arrayed above, or below XLD291-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>
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<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>138 dB Cont., 144 dB Peak²</td>
</tr>
<tr>
<td>Horizontal Coverage</td>
<td>90°</td>
</tr>
</tbody>
</table>

¹ In airborne condition
² In close proximity
**System overview**

**Beamwidth:**

![Beamwidth Graph](image)

<table>
<thead>
<tr>
<th>Impedance:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HF</strong></td>
</tr>
<tr>
<td><strong>LF1 &amp; LF2</strong></td>
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</tbody>
</table>

**Grid Drawing:**

![Grid Drawing Image](image)

**Block Diagram:**

![Block Diagram Image](image)

**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>
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**Vertical Coverage:** Array Dependant, Software Definable

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

**LF1 Power Handling:** 200 W Cont., 800 W Peak

**LF2 Power Handling:** 200 W Cont., 800 W Peak

**HF Power Handling:** 80 W Cont., 320 W Peak

**Biamp LF1/HF Power Handling:** 200 W Cont., 800 W Peak

**Bandpass Frequency:** 50 - 250 Hz

**LF1 to HF Crossover Frequency:** 1760 Hz

**LF1 Passband:** 1 x 8" 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 30ft 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):** 9.90 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)

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

XLD281-FG 90° Full-Range Line Array Element

XCS312-FG Triple 12 inch Cardioid Compact Controlled-Coverage Bass Element

Compatible System Solutions, Electronics:

CP3000S Precision Series Power Amplifier

CP4000S Precision Series Power Amplifier

TG5 Tour Grade Power Amplifier

TG7 Tour Grade Power Amplifier

Dx46 Digital Sound System Controller

N8000 NetMax 300 MIPS Digital Matrix Controller

Ordering information

**XLD291-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, 90° H/10° V, integrated rigging system, black

Order number XLD291-FG

**XLD291-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, 90° H/10° V, integrated rigging system, white

Order number XLD291-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