

### **ZX3-90PI**

12-inch Two-Way Passive 90° x 50°, 600W Weather-Resistant Loudspeaker System



### **Key Features:**

- DVX3121 12" LF Transducer with Forced Air Cooling
- ND2 2" Voice Coil, 1" Exit Neodymium Compression Driver
- 90° x 50° Coverage Pattern
- 600W Continuous (2400W Peak) Power Handling
- High Sensitivity, 131 dB Maximum SPL
- Adjustable Monitor Angle (45° or 55°)
- 2 Anchor Plates for Single Stud Fittings and 7 Integral Suspension Points
- Available in Black or White
- All Weather IEC 529, IP44, & MIL810 Environmental Specs
- Full Line of Accessories

### **General Description:**

The Electro-Voice Zx3 is the new standard of no compromise audio performance and versatility in a simple to use, compact package. The ZX3-90PI features a molded polymer enclosure that is inherently water resistant. The addition of a multilayer grille with hydrophobic cloth and a gland nut input connection allows for a highly weather resistant system.

At its heart are the transducers. First is the DVX3121 high performance low frequency transducer. EV used advanced computer aided design techniques to create forced air, directional voice coil cooling for high power and efficiency. Finite element analysis was used to optimize the suspension and magnetic structure for long, linear travel to provide low distortion and greater LF extension. These features and details, such as forged magnetic components and special materials, provide reliability with a 500W power rating in a lightweight transducer. Next is the ND2, a 2-inch voice coil compression driver based on neodymium motor structure to allow for maximum output while reducing size and weight to a minimum. Its precision phasing plug and titanium diaphragm provide better HF performance, while the integral heatsink provides cooling for high power output.

The high tech enclosure uses injection-molded high-impact polypropylene structural foam to make the Zx3 incredibly durable. The enclosure geometry elements have been carefully designed to provide maximum rigidity and bass response. By design the Zx3 is also a perfect solution for stage monitors by allowing two angles (45° or 55°) without any additional accessories.

Two coverage patterns are available;  $60^{\circ} \times 60^{\circ}$  coverage for long-throw and cluster applications,  $90^{\circ} \times 50^{\circ}$  coverage for wider coverage or shorter distances.

The Zx3 is equipped with two anchor plates for rigging with single studfittings, along with two more possible anchor plate attachment points on the bottom. For permanent suspension or attaching brackets, the Zx3 also has two M8 inserts on the top and bottom, two under the handle, and one on the back of the enclosure, for a total of 7. All versions are available in black or white.



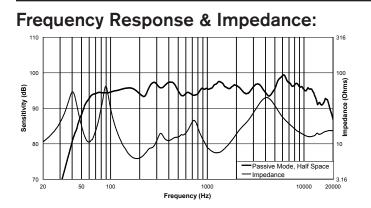
### **Technical Specifications:**

| Freq. Response <sup>1</sup> (-3 dB): |   |
|--------------------------------------|---|
| ried Respense ( e ab)                | 58 Hz - 15 kHz  |
| Freq. Range <sup>1</sup> (-10 dB):   | 48 Hz - 20 kHz  |
| Rec. Hipass Frequency:               | 50 Hz   |
| Axial Sensitivity1:                  | 97 dB (1W/1m)   |
| Max. Calculated SPL:                 | 131 dB  |
| Coverage (Horiz. x Vert.):           | 90° x 50°   |
| Power Handling (Passive):            | 600W Continuous, 2400W Peak   |
| LF Power Handling (Biamp):           | 500W Continuous, 2000W Peak   |
| HF Power Handling (Biamp):           | 40W Continuous, 160W Peak   |
| LF Transducer:                       | DVX3121, 12 in (305mm) Driver   |
| HF Transducer:                       | ND2, 1 in (25.4mm) exit Neodymium<br>Compression Driver   |
| Crossover Frequency:                 | 2 kHz   |
| Nominal Impedance:                   | 8 Ohms  |
| Minimum Impedance:                   | 6.2 Ohms  |
| Connectors:                          | 2 Conductor SJO Cable and Gland Nut   |
| Enclosure Material:                  | Polypropylene Structural Foam   |
| Suspension:                          | Enclosure has locations for 4 Single-Stud<br>Attachment Plates and 7 Forged Steel Eye-<br>bolts - 2 on Top, 2 on Bottom, 2 on Side,<br>and 1 on Rear of Enclosure |
| Grille:                              | Polyester Powder Coated, 16GA<br>Galvanized Steel, with Rotatable Logo  |
| Environmental Spec:                  | IEC 529 IP24 / IP44   |
| Dimensions (H x W x D):              | 613mm x 397mm x 362mm<br>(24.14" x 15.64" x 14.26")   |
| Net Weight:                          | 19.8 kg (43.7 lbs)  |
| Shipping Weight:                     | 22.1 kg (48.6 lbs)  |

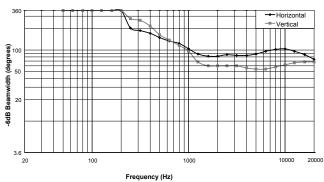
<sup>1</sup> Half Space Measurement.



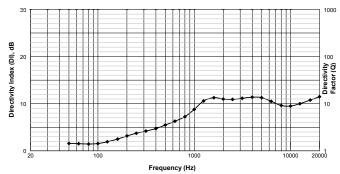
# Zx3-90PI Full Range Loudspeaker



## Beamwidth:

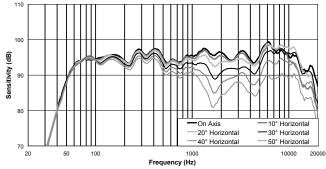


## Directivity:

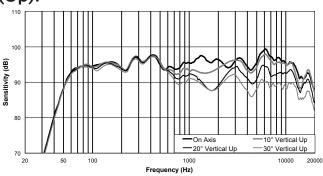


## Block Diagram:

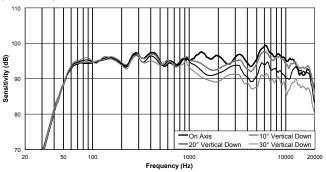


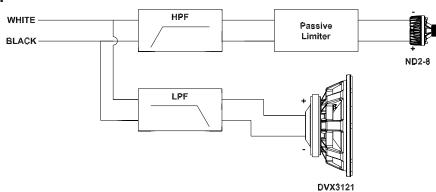


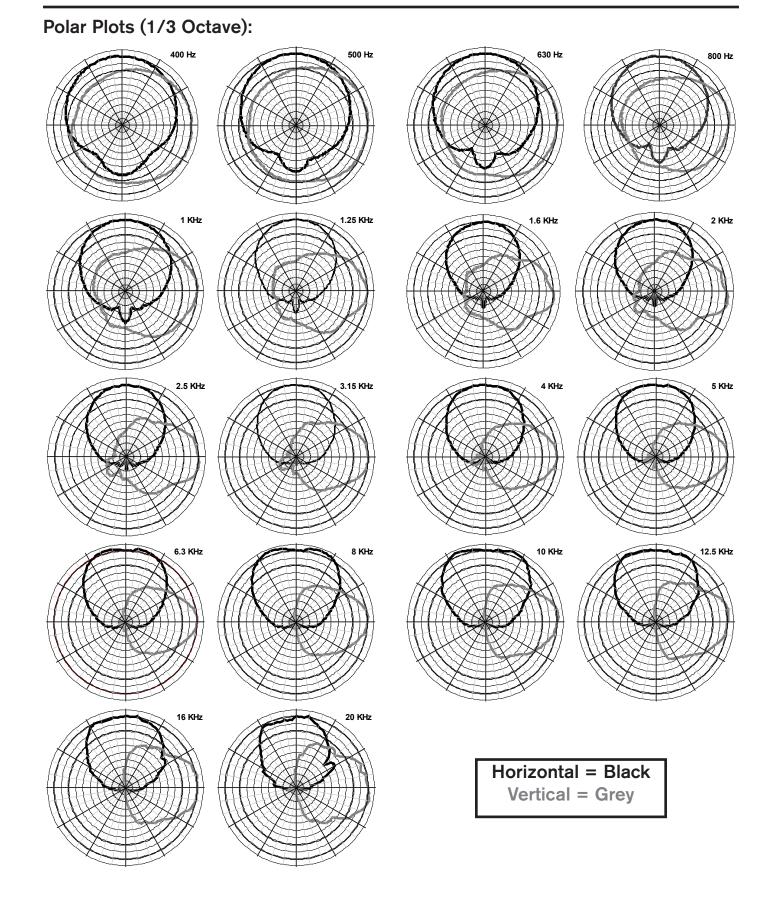
# Vertical Off Axis Frequency Response (Up):



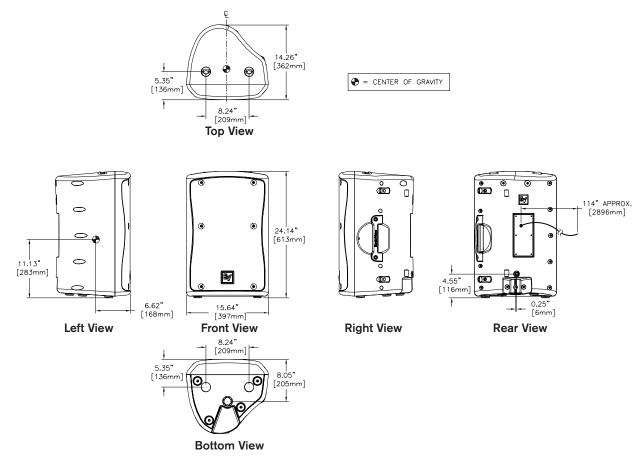
# Vertical Off Axis Frequency Response (Down):







### **Dimension Drawings:**



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This Zx3 Loudspeaker should be suspended overhead only in accordance with the procedures and limitations specified in the *Zx3 Users Manual* and possible manual update notices. This system should be suspended with certified rigging hardware by an authorized rigging professional and in compliance with local, state, and federal overhead suspension ordinances.

### Zx3 Part Numbers

- PRD000117-001 Zx3-90B, 90° x 50° Horn, Black Finish
- PRD000117-002 Zx3-90W, 90° x 50° Horn, White Finish
- PRD000117-003 Zx3-60B, 60° x 60° Horn, Black Finish
- PRD000117-004 Zx3-60W, 60° x 60° Horn, White Finish
- PRD000117-005 Zx3-90PI-B, 90° x 50° Horn, Black Finish, Weather Resistant
   PRD000117-006 Zx3-90PI-W, 90° x 50° Horn, White Finish, Weather Resistant
- PRD000117-007 Zx3-60PI-B, 60° x 60° Horn, Black Finish, Weather Resistant
- PRD000117-008 Zx3-60PI-W, 60° x 60° Horn, White Finish, Weather Resistant

#### **Performance Match**

| <ul> <li>301576-001</li> </ul>    | SbA760, 120V Single 15" Powered Sub, 760W    |
|-----------------------------------|--|
| <ul> <li>D170312</li> </ul>       | CP3000S, 120V Power Amplifier, 2 x 1100W     |
| <ul> <li>D170401</li> </ul>       | CP4000S, 120V Power Amplifier, 2 x 1400W     |
| • D170317                         | CPS2.11, 120V Power Amplifier, 2 x 1100W     |
|                                   |  |
| Accessories                       |  |
| <ul> <li>301625-001</li> </ul>    | CB5-B, Array Bracket Kit (Black)             |
| <ul> <li>301625-002</li> </ul>    | CB5-W, Array Bracket Kit (White)             |
| <ul> <li>301634-000</li> </ul>    | EBK-3, Forged M8 Eyebolt Kit, Set of Three   |
| • 301633-000                      | SSK-1, Single-Stud Rigging Kit, Set of Three |
| <ul> <li>ASY000032-001</li> </ul> | MB3-B, Wall/Ceiling Mount Bracket (Black)    |
| <ul> <li>ASY000032-002</li> </ul> | MB3-W, Wall/Ceiling Mount Bracket (White)    |
| <ul> <li>ASY000031-001</li> </ul> | HDC-3, Heavy-Duty Stackable Cover (Black)    |
| <ul> <li>ACC000012-001</li> </ul> | TCA-1, Truss Clamp Adapter                   |
| <ul> <li>ACC000007-001</li> </ul> | VSA-1, Vertical Strong-Arm Mount             |
| - ACC000033-001                   | HA-3, Handle Mount Adapter                   |
|                                   |  |

# **Electro-Voice**

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www.electrovoice.com

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