product specifications



Y-18

- SEAMLESS WAVE FRONT
- EXTREMELY HIGH SPL
- FOR USE IN 3- or 4-WAY SYSTEMS
- PRECISE ANGULAR CONTROL



The Adamson Y18 - the original and most powerful enclosure of the Y-Axis series - continues to be the favorite in line arrays. The Y-Axis series' superior design - the subject of several patents - was developed to eliminate mid lobing and comb filtering, with far greater control and coverage than any conventional PA system.



The Y18 produces a perfectly curved co-linear ribbon of mid <u>and</u> high energy with Adamson's proprietary Co-Linear sound chamber technology, virtually eliminating time smear. The Y-Axis is the only line array with a co-linear sound chamber and far field sonic accuracy that sounds like "near field monitors at 50 meters."

The Y-Axis series allows the end user a completely scalable system solution using 5-degree vertical elements and 100-degree horizontal coverage. Adamson's easy rigging gets the Y18 out of the truck and into the air quickly and easily - and more importantly, with no gaps in the array.

Optional Y-Axis underhang rigging offers the most comprehensive and versatile approach to system configuration, allowing for a range of Y-Axis and SpekTrix enclosure models to be utilized in a single array.



technical specifications





DESCRIPTION

The Y18 is a high power, 3-way line array featuring two proprietary Adamson mid/high drive modules. The Adamson drive module has a co-axial entrance and a co-linear exit comprised of a high frequency sound chamber mounted within a mid frequency sound chamber. The drive module is powered by a proprietary 9" Kevlar mid and a JBL 2451 compression driver. Together, the drive module and trapezoidal cabinet design create a smooth, slightly curved, seamless wave front with no gaps between cabinets. The Y-Axis has a defined coverage pattern of 90 degrees (-3dB) - 100 degrees (-6dB) by 5 degrees. The vertical coverage is determined by the number of cabinets added to the array.

The Y-Axis comes complete with a sliding hinge rigging system that is fast and efficient. With eleven half-degree increments, you can achieve precise angular positioning by adjusting the extension of the sliding hinge while the front of the array remains closed. Light, durable aluminum dollies and all the components for rigging the Y-Axis come standard. Aluminum rigging frames to support 16 or 24 Y-Axis are available as optional accessories.

APPLICATIONS

- Live Concert Reproduction
- Theaters
- Houses of Worship
- Large Clubs

FEATURES

- Adamson Co-Linear Drive Module
- Two Adamson 18" Kevlar L F Drivers
- Two Adamson 9" Kevlar MF Drivers
- Two JBL 2451 HF Drivers
- Aluminum Dolly Board
- Proprietary Stainless/Aluminum Slide Hinge Rigging

PRODUCT DATA

| Dimensions & Weight | |
|----------------------|--------------------------------|
| Height (cm) | 18 3/8" (46.7) |
| Width (cm) | 57.3/4" (146.6) |
| Depth (cm) | 26.5" (67.3) |
| Weight (kg) | 270 lbs (122.7) |
| Dolly (kg) | 35 lbs (15.9) |
| Finish | Black Dual Component |
| | Polyurethane Resin |
| Rigging | Stainless/Aluminum Slide Hinge |
| | Rigging |
| Cabinet Construction | Rugged 11-ply Baltic Birch |
| Accessories | Aluminum Dolly |
| Optional Accessories | Aluminum Rigging Frame |

TECHNICAL DATA

| TECHNICAL DATA | |
|-------------------------------|----------------------------------|
| Frequency Response (+/-3dB) | |
| with Full Range Preset | 40 Hz – 18 kHz |
| Frequency Range | |
| with Xover Preset | 70 Hz – 18 kHz |
| Maximum SPL (Continuous) | |
| with Preset Xover mode | 138.5dB |
| with preset Full Range | 138dB |
| Maximum SPL (Peak) | 444.5.10 |
| with Preset Xover mode | 144.5dB 144dB |
| with preset Full Range | 144ub |
| Sensitivity (2.83v/1m) | 104 dB |
| MF | 110 dB |
| HF | 116 dB |
| Directivity | 110 05 |
| Horizontal | 100°@ -6dB / 90° @ -3dB |
| Vertical (one enclosure) | 5° (prolate-spheroidal horn) |
| Vertical (several enclosures) | defined by the array |
| LF Section (Impedance) | 2 x AW18 18" Kevlar Low |
| | Frequency Drivers (2 x 8 ohms) |
| MF Section (Impedance) | 2 x YX9 9" Kevlar Drivers (2 x 8 |
| | ohms) |
| HF Section (Impedance) | 2 x JBL 2451 (2 x 8 ohms) |
| Power Handling (Watts RMS) | |
| LF | 600 (2) |
| LF Peak | 1200 (2) |
| MF | 350 (2) |
| MF Peak | 700 (2) |
| HF | 75 (2) |
| HF Peak | 150 (2) |
| Connection | Neutrik Speakon™ NL8 |
| Electronic Processing | Settings available for XTA |
| | DP224, XTA DP226, BSS 366 |

Specifications Are Subject To Change Without Notice







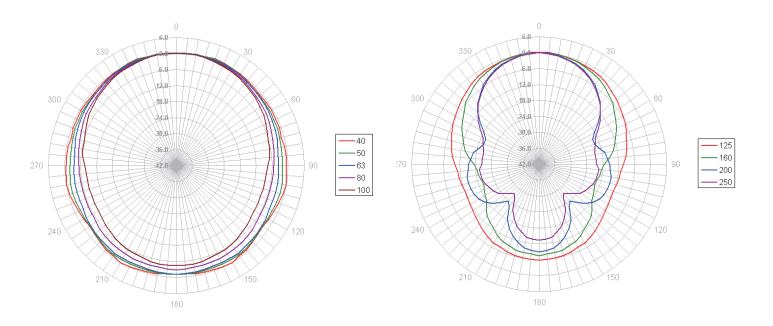
directivity diagrams





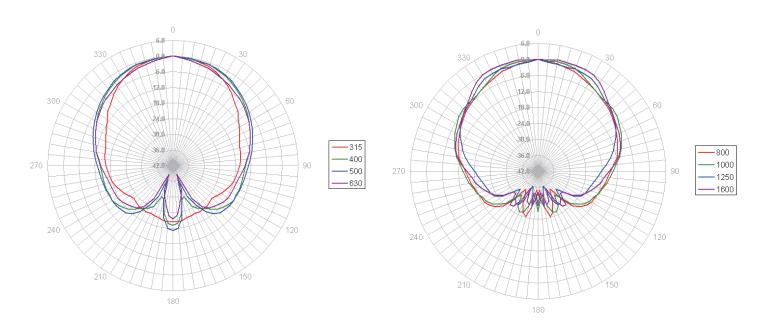
Polar plots 50 - 100 Hz ; 6 dB/div

Polar plots 125 - 250 Hz ; 6 dB/div



Polar plots 315 - 630 Hz ; 6 dB/div

Polar plots 800 Hz - 1K6 ; 6 dB/div





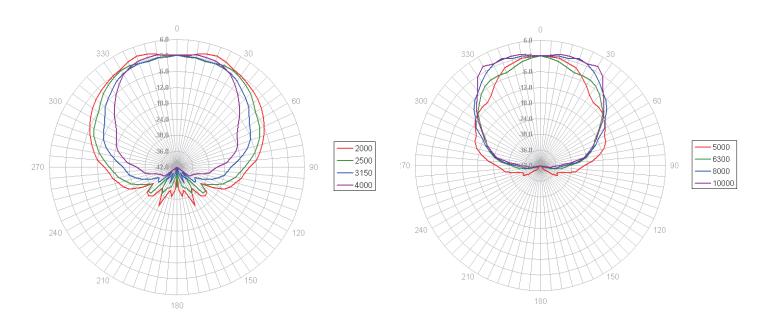
directivity diagrams



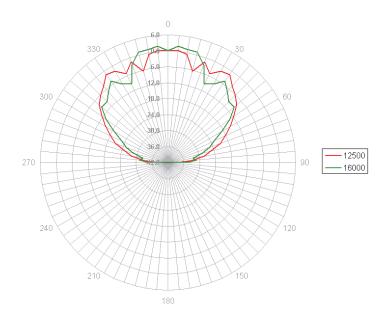


Polar plots 2K - 4K; 6 dB/div

Polar plots 5K - 10K ; 6 dB/div



Polar plots 12K5 - 16K; 6 dB/div



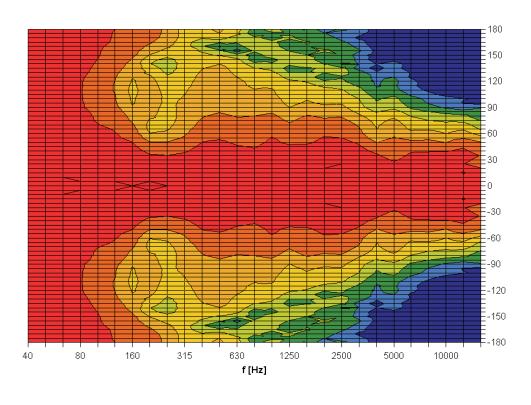


directivity diagrams





2D Directivity Plot





-6dB Isobar

