

# product specifications



## Y18

SEAMLESS WAVE FRONT

EXTREMELY HIGH SPL

FOR USE IN 3- OR 4-WAY SYSTEMS

PRECISE ANGULAR CONTROL



The Adamson Y18 is the original and most powerful enclosure of the Y-Axis series. The Y-Axis series' design was developed to eliminate mid lobing and comb filtering, with far greater control and coverage than any conventional PA system.

The Y-Axis boasts far field sonic accuracy that sounds like "near field monitors at 50 meters."

The Y18 is a high power, 3-way line array cabinet employs two Adamson mid/high Co-Linear drive modules (with 2 patents granted and 2 pending applications). 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 single 1.5" HF compression driver. Together, the drive module, trapezoidal cabinet design with a wrap around grill - deliver a single, uniform, slightly curved, and seamless wavefront of mid and high frequency sound, with no gaps between cabinets. The Y18 LF section features two Adamson's proprietary AW18 18" Kevlar drivers.

The Y-Axis Series are the only line arrays that create iso-phase sound sources in the high and mid frequency sections. Mid lobing, comb filtering and time-smear are virtually eliminated, giving the Adamson Y-Axis line array unrivaled far field sonic accuracy.

The Y-Axis series allows the end user a completely scalable system solution using 5-degree vertical elements and 100-degree horizontal coverage. The total vertical coverage is determined by the number of cabinets added to the array.

Adamson's Slide Hinge rigging gets the Y18 out of the truck and into the air quickly and easily; and with optional underhang kits, the Y18 offers the most comprehensive and versatile approach to system configuration, allowing for a range of Y-Axis and SpekTrix enclosures to be utilized in a single array. The Slide Hinge rigging system features six one-degree increments, allowing precise angular positioning by adjusting the extension of the sliding hinge.

When coupled with the Adamson T-21Sub, the Y18 is the absolute must have for arena and stadium venues, as well as medium to large outdoor festivals.

Light aluminum dollies come standard. Optional waterproof soft covers with customized silkscreening and black powder coated aluminum rigging frames to support 16 or 24 Y10's are available as optional accessories.

Product Code 900049



# technical specifications

## Y18

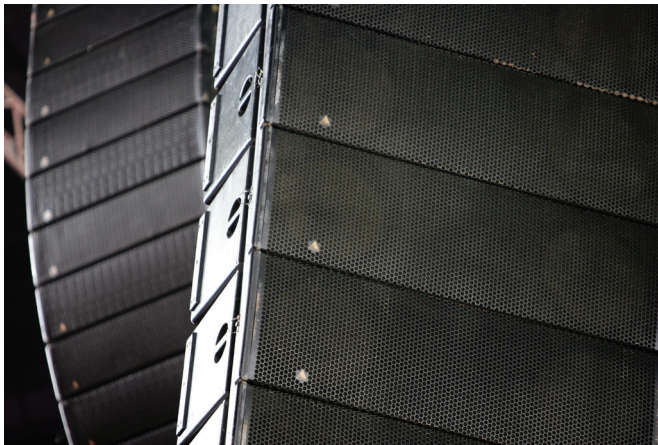


### APPLICATIONS

- Concerts
- Outdoor Festivals
- Large Theaters
- Large Clubs
- Houses of Worship

### COMPONENTS

- Adamson Co-Linear Drive Module
- Two Adamson AW 18 - 18" Kevlar LF Drivers
- Two Adamson YX9 - 9" Kevlar MF Drivers
- Two 1.5" exit JBL 2451 HF Drivers
- Aluminum Dolly Board
- Proprietary Stainless/Aluminum Slide Hinge Rigging



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### PHYSICAL DATA

Dimensions & Weight		
Height	18.3/8." (46.7 cm)	
Width	57.3/4" (146.6cm)	
Depth	26.5" (62.3cm)	
Weight	270lbs. (122.7kg)	
Dolly	35lbs. (15.9kg)	
Box Finish	Textured Water Borne Acrylic	
Hardware Finish	Polyester Sandtex™ Powder	
Rigging	Stainless/Aluminum Slide Hinge	
Protective Grille	14 gauge cold rolled steel	
Cabinet Construction	Rugged 5/8", 11 ply Baltic Birch	
Accessories	Aluminum dolly	
Optional Accessories	Powdercoated Black Aluminum Rigging Frame, Waterproof Custom Soft Cover	
Connectors	Neutrik Speakon™ NL8	

### TECHNICAL DATA

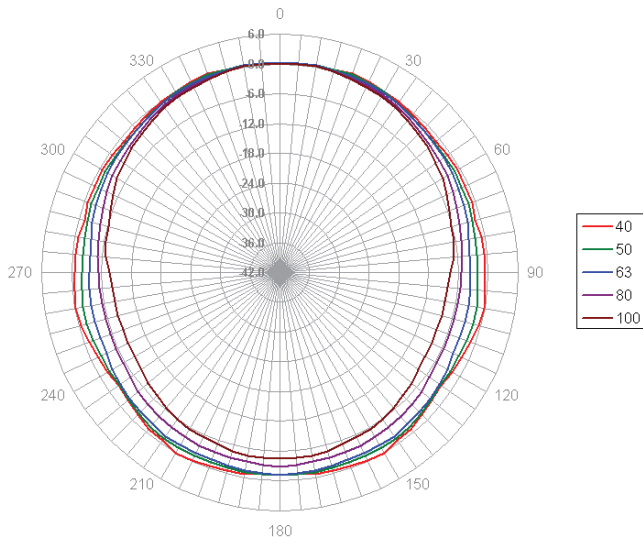
Full Range Preset	40Hz to 18kHz
Xover Preset	70Hz to 18kHz
Maximum SPL (Continuous)	
with xover preset	138.5dB
with full range preset	138.0dB
Maximum SPL (Peak)	
with xover preset	144.5dB
with full range preset	144.0dB
Directivity	
Horizontal	100° @ -6dB / 90° @ -3dB
Vertical (per element)	5° (prolate-spheroidal sound chamber)
Sensitivity (2.83v/1m)	
LF	104dB (105dB using 2 units)
MF	110dB (110dB using 2 units)
HF	116dB (116dB using 2 units)
LF Section (Impedance Ω)	2 x AW18 18" Kevlar Drivers (2 x 8Ω)
MF Section (Impedance Ω)	2 x YX9 9" Kevlar Driver (2 x 8Ω)
HF Section (Impedance Ω)	2 x JBL 2451 (2 x 8Ω)
Power Handling	(AES / Program / Peak)
LFx 2	3600 / 1200 / 2400
MF x 2	350 / 700 / 1400
HF x 2	150 / 300 / 600
Connection	Neutrik Speakon™ NL8
Processor Presets	XTA, Lake, PLM

# polar plots

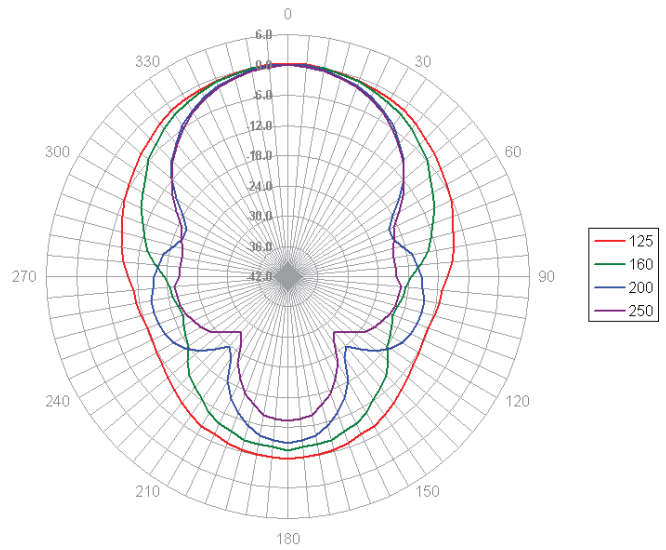
# Y18



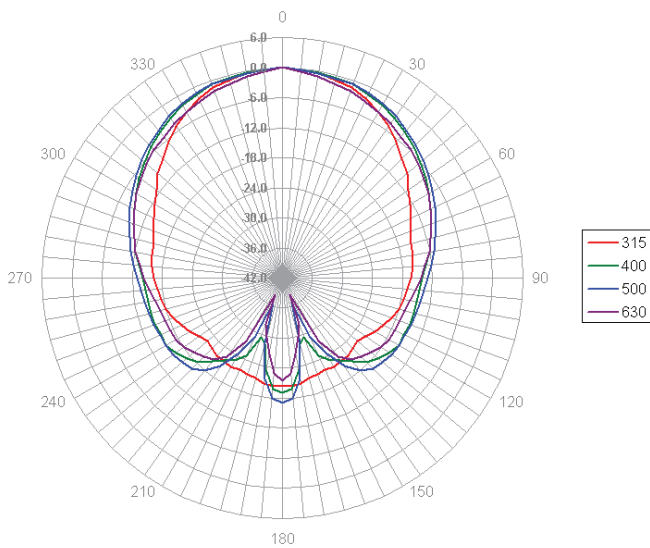
**Polar plots 50 - 100 Hz ; 6 dB/div**



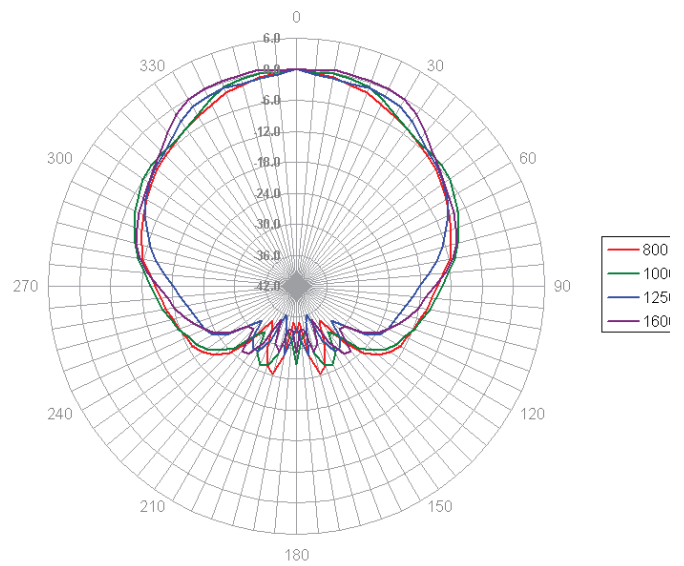
**Polar plots 125 - 250 Hz ; 6 dB/div**



**Polar plots 315 - 630 Hz ; 6 dB/div**



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

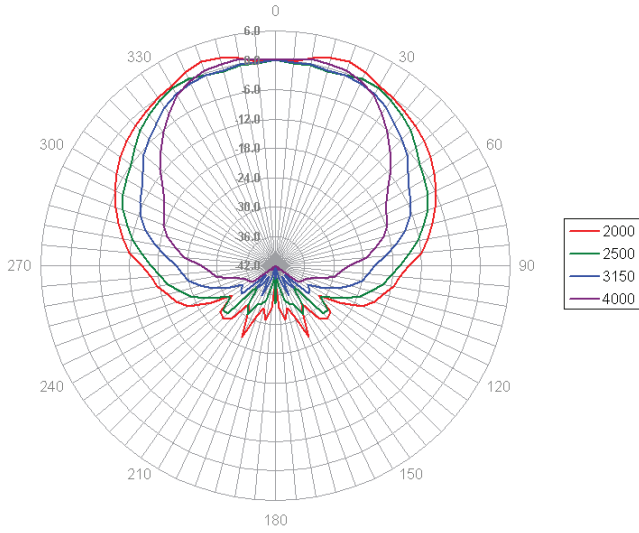


# polar plots

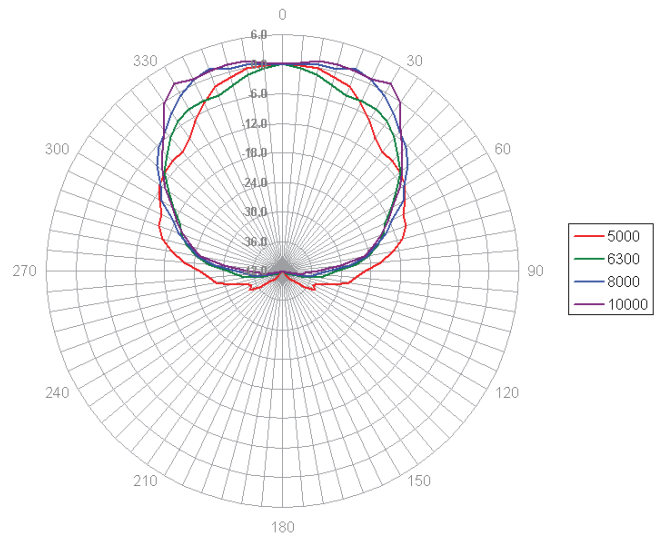
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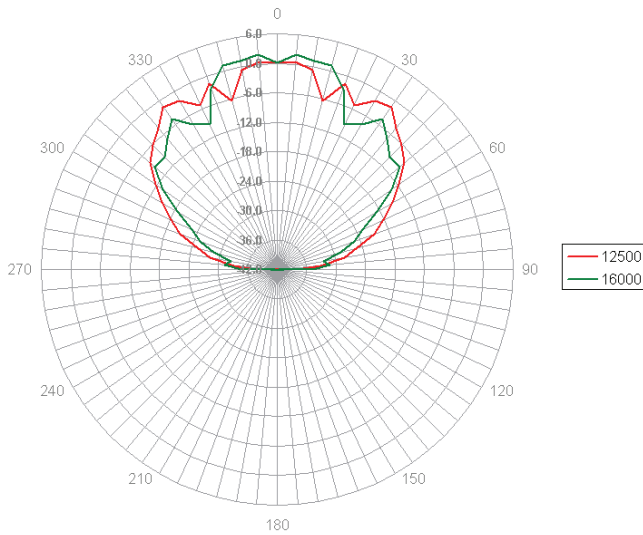
Polar plots 2K - 4K ; 6 dB/div



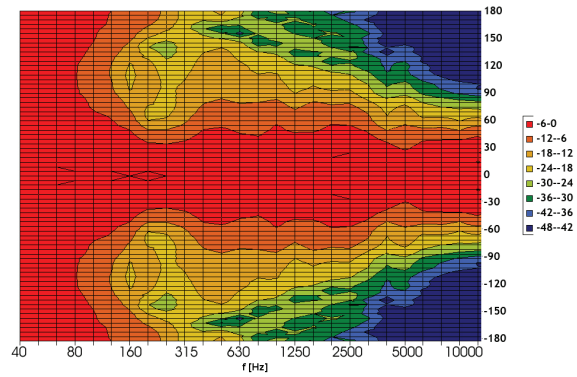
Polar plots 5K - 10K ; 6 dB/div



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



2D Directivity Plot



-3dB & -6dB Isobar

