

Audio Signaling & Notification Speaker

Features:

- Industry Leading Voice Intelligibility for Reverberant Spaces
- 123dB Max SPL @ 1 Meter
- Rated for Indoor or Outdoor Applications
- Universal Mounting Interface
- 25V, 70V, & 100V or 4/8/16Ω Configurable
- Durable Environmental Resistant Construction



Specifications (90243A-804):

Power Rating	Up to 200W continuous
Frequency Response	250Hz – 15kHz (nominal)
Sensitivity	103.1dB @ 2.83V/1m
Dispersion Angle	187° (Horiz.) x 10° (Vert.) @ -9dB
Weight	14.7lbs
Dimensions	46.5”H x 4.9”W x 2.9”D
Temperature Range	-20°C - 60°C

Description:

Designed with the latest technology in line array speaker systems, the HyperSpike® LineWave is optimized to produce clear and authoritative voice commands and powerful tones never before possible within reverberant environments. The beam forming capability of the LineWave speaker allows even coverage across the listening plane while focusing the acoustic pattern away from surfaces that cause unwanted reflections. This technology is essential for achieving optimum levels of speech intelligibility within reverberant spaces. The result is clear and intelligible direct sound that ensures critical messages are heard and understood.

Architect and Engineer Specifications:

Voice paging and tone signaling loudspeaker shall be Ultra Electronics Model _____ (see Model numbers above). Unit shall be weather resistant and constructed of powder coated aluminum and steel. The loudspeaker shall be able to operate within any ambient temperature environment ranging from -20°C to 60°C. The speaker shall have a sensitivity of _____ (see sensitivity measurements below) when measured at 1m (AVG 250-15,000Hz), and a horizontal beam width of 187° (AVG 1kHz to 4kHz). The transducer coils shall have a nominal 8 ohm impedance. When applicable, a minimum of four transformer power settings shall be selectable for each speaker, and it shall operate on 25V, 70V, or 100V distributed audio systems. Transformers shall contain an in-line capacitor to allow DC supervision of wiring. Frequency response shall be 250Hz-15kHz. Dimensions shall be 4.9”W x 2.9”D x _____ ”H.

Models:

90243A-80X-0X

COLOR CODE:

- 01 – Black
- 05 – Red (RAL 3001)
- 06 – White (RAL 9003)
- 07 – Silk Grey (RAL 7044)

CONFIGURATION:

- 801 – 2 Speaker
- 802 – 4 Speaker
- 803 – 8 Speaker
- 804 – 16 Speaker

Accessories:

- 72575B-801 25V/70V/100V Transformer
- 72542B-801 25V/70V/100V Transformer
- 72575B-802 25V/70V/100V Transformer
- 72581B-801 Pole Mount Adapter

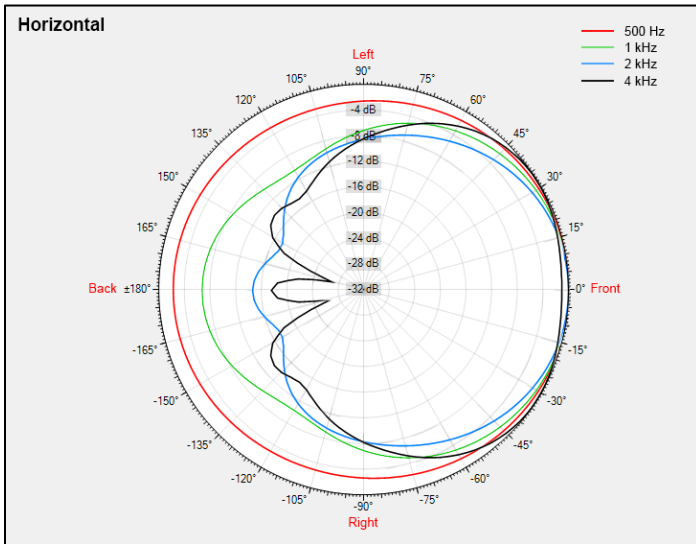
Technical Specifications:

System	90243A-801	90243A-802	90243A-803	90243A-804
Type	Full Range, Column Loudspeaker			
Operation Mode	16/8/4Ω Loudspeaker with Optional Line Matching Transformer			
Number of Speakers in Array	2	4	8	16
Maximum Power Draw: 16Ω, 8Ω, and 4Ω Models	20W	40W	80W	160W
Frequency Response (+/- 6dB)	250Hz-15kHz			
Required Input Signal Processing	High Pass at 200Hz – Direct Drive Models Only			
Input Sensitivity (2.83Vrms/1m)	85dB	91dB	97dB	103dB
Nominal Impedance	16Ω	8Ω	4Ω	4Ω, 2 Channel
Vertical Coverage -9dB (Avg. 1kHz-4kHz)	99°	45°	21°	10°
Horizontal Coverage -9dB (Avg. 1kHz-4kHz)	187°			
Model Number of Optional 25V/70V/100V Transformer	72575B-801	72575B-801	72542B-801	72542B-802
Maximum Supervisory Voltage: 25V/70V/100V Models	32V DC			
Maximum Input Voltage: 16Ω, 8Ω, and 4Ω Models	18V RMS, 36V Peak			
Maximum Input Voltage: 25V RMS Distributed Audio	25V RMS, 50V Peak			
Maximum Input Voltage: 70V RMS Distributed Audio	70V RMS, 140V Peak			
Maximum Input Voltage: 100V RMS Distributed Audio	100V RMS, 200V Peak			
Max SPL @ 1m 18V Direct Drive	105dB	111dB	117dB	123dB
Peak SPL @ 1m	113dB	119dB	125dB	131dB
Usable Range @ 80dB, A-Weighted	17m (56ft)	35m (115ft)	70m (230ft)	141m (463ft)
Color	Black, Red, White, Silk Gray			
Enclosure Material	Aluminum			
Grille Material	Steel			
Input Connection	SJOOW Cable, 6ft. Provided			
Ingress Protection	Indoor and Outdoor Damp Applications			
Product Dimensions, HxWxD (in)	6.6 x 4.9 x 2.9	12.3 x 4.9 x 2.9	23.7 x 4.9 x 2.9	46.5 x 4.9 x 2.9
Net Weight	2.6lbs	4.3lbs	7.5lbs	14.7lbs
Warranty Period	1 Year			

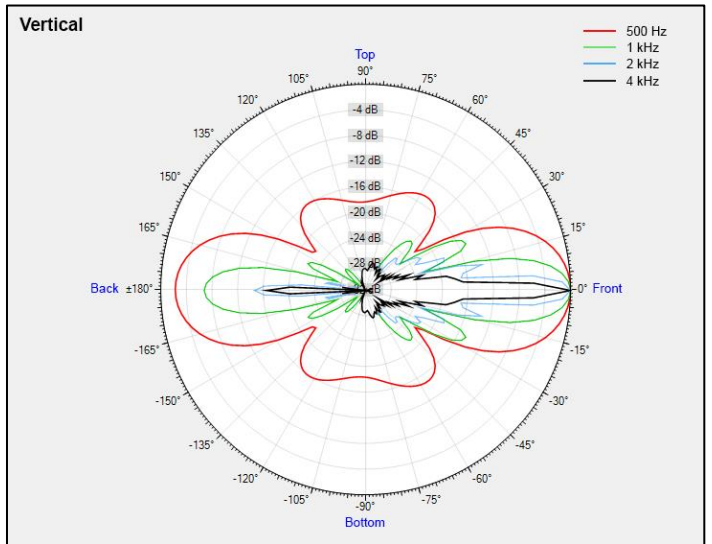
25V/70V/100V Available Power and SPL Settings:

Model	Input Voltage (V)	Power Draw (W)	SPL Max @ 1m
90243A-801 LineWave 72575B-801 Transformer	25	0.25	86
	25	1.0	91
	25	1.25	92
	25	2.0	94
	70	2.5	95
	70	7.5	100
	70	10.0	101
	70	15.0	103
	100	5.0	98
	100	15.0	103
90243A-802 LineWave 72575B-801 Transformer	25	0.5	92
	25	2.0	97
	25	2.5	98
	25	4.0	100
	70	5.0	101
	70	15.0	106
	70	20.0	107
	70	30.0	109
	100	10.0	104
	100	30.0	109
90243A-803 LineWave 72542B-801 Transformer	25	2.0	101
	25	3.0	103
	25	5.0	105
	25	10.0	108
	70	15.0	110
	70	24.0	112
	70	40.0	114
	70	80.0	117
	100	30.0	113
	100	50.0	115
90243A-804 LineWave 72542B-802 Transformer	25	3.0	106
	25	6.0	109
	25	10.0	111
	25	20.0	114
	70	24.0	115
	70	45.0	118
	70	80.0	120
	70	160.0	123
	100	50.0	118
	100	90.0	121
100	160.0	123	

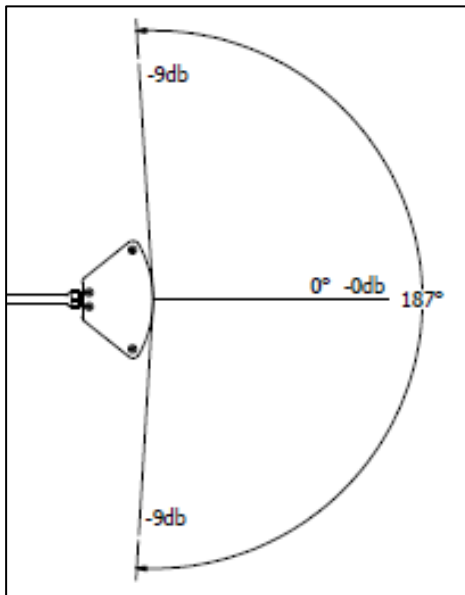
Polar Plots and Beam Width:



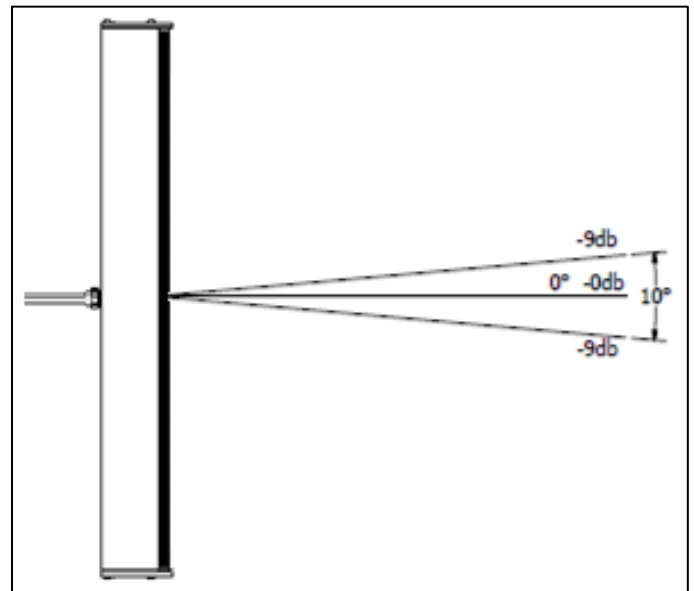
**90243A-804 Horizontal
Polars**



**90243A-804 Vertical
Polars**

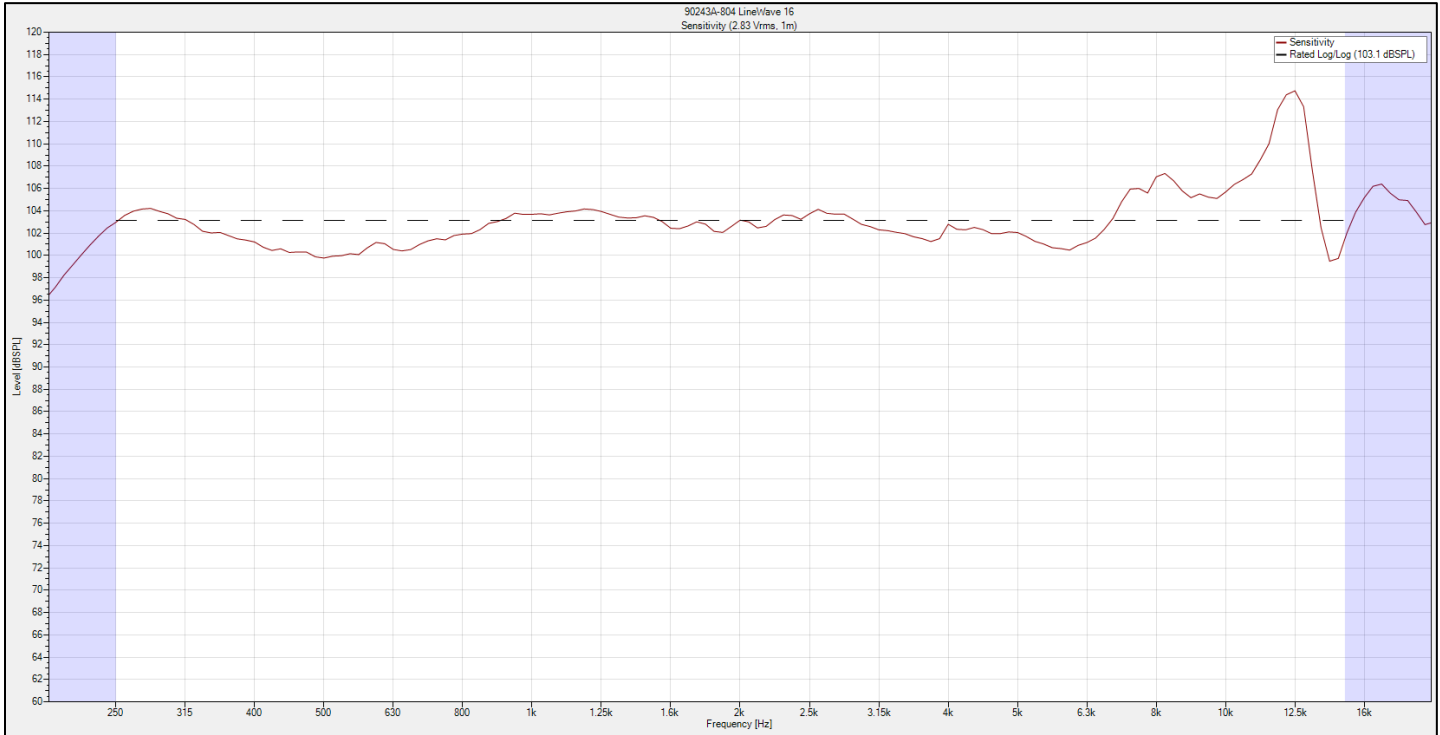


**90243A-804 Horizontal
Beam Width**



**90243A-804 Vertical
Beam Width**

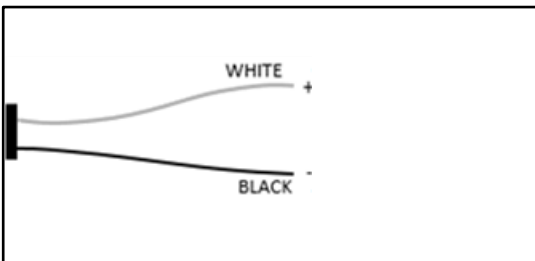
Sensitivity, 90243A-804:



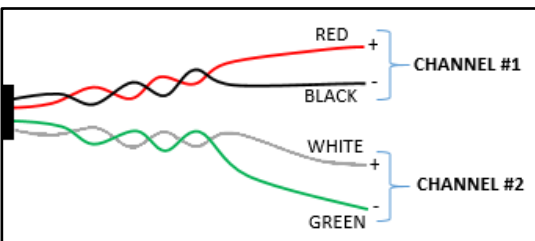
Wiring Reference:

LineWave models 90243A-801, 90243-802, and 90243A-803 (16Ω, 8Ω, and 4Ω respectively) provide a six foot SJOOW-18/2 cable for amplifier interconnection.

LineWave model 90243A-804 provides a six foot SJOOW-18/4 cable wired as two 4Ω channels for amplifier interconnection.



90243A-801, 90243A-802, 90243A-803



90243A-804

Mounting Reference:

All LineWave models include hardware to facilitate Wall Mounting. If it is desired to mount a LineWave to a pole, HyperSpike® Pole Mount 72581B-801 is available. All mounts allow for Pan and Tilt angle adjustment after installation.

