

Overview

VXL series line array speakers offer a unique combination of outstanding sound quality and slim form that is ideal for a variety of environments. The VXL series includes three models with different numbers of speaker units. Models can be combined to optimally serve a variety of spaces and situations. Slim 54-millimeter-wide cabinets and elegantly curved grille designs blend beautifully with any décor while delivering uniform, top-quality sound for speech and music reproduction in a wide range of applications.



Features

- 16 x 1.5 inch (3.75 cm) full-range speaker units with neodymium magnets
- Wide horizontal dispersion for uniform SPL over a wide area
- The vertical coverage can be selected from two modes, Normal and Wide
- Slim design complements any interior décor
- Available in basic black or white
- Enclosures can be painted to match surroundings
- Wall mount bracket supplied
- Optional hardware for a wide range of installation needs

Specifications

General Specifications

Speaker Type		Full-range, Bass reflex
Frequency Range (-10 dB)		81 Hz – 20 kHz ^{*1} , 108 Hz – 20 kHz ^{*1} (with port cover)
Nominal Coverage	H	170°
	V	25°(+12.5° – -12.5°) (NORMAL), 30°(+12.5° – -15°) (WIDE)
Effective Coverage (-10 dB)	H	180°
	V	30°(+15° – -15°) (NORMAL), 45°(+15° – -30°) (WIDE)
Components	LF-HF	1.5" (3.75 cm) Cone x 16
Power Rating	NOISE	80 W
	PGM	160 W
	MAX	320 W
Nominal Impedance		12 Ω
SPL	Sensitivity (1 W; 1 m on axis)	91 dB SPL (1 m/1 W) ^{*1} ^{*2} (90 dB SPL with port cover)
	Peak (Calculated)	116 dB SPL (1 m) ^{*3}
I/O Connectors		Euroblock (2 pin) x 2 (input: +/-) Max. wire size AWG 12 (3.3 mm ²)
Protection Circuit	Load Protection	Full-range power limiting to protecting network and transducers
Finish		VXL1B-16: Black painting (approximate value: Munsell N3.0) VXL1W-16: White painting (approximate value: Munsell N9.0)
Dust and Water Resistant		IP34 (IP35 with port cover)
Packaging		Packaged in 1 pc
Dimensions (W x H x D)		W54 mm x H846 mm x D104 mm (Speaker only)
		W54 mm x H846 mm x D111.5 mm (With included bracket)
Net Weight		3.9 kg (Speaker only)

^{*1} Half-space (2 π)

^{*2} Measured at 2 m; value converted to 1 m is shown (frequency range: 100 Hz – 10 kHz)

^{*3} Calculated based on power rating and sensitivity, exclusive of power compression.

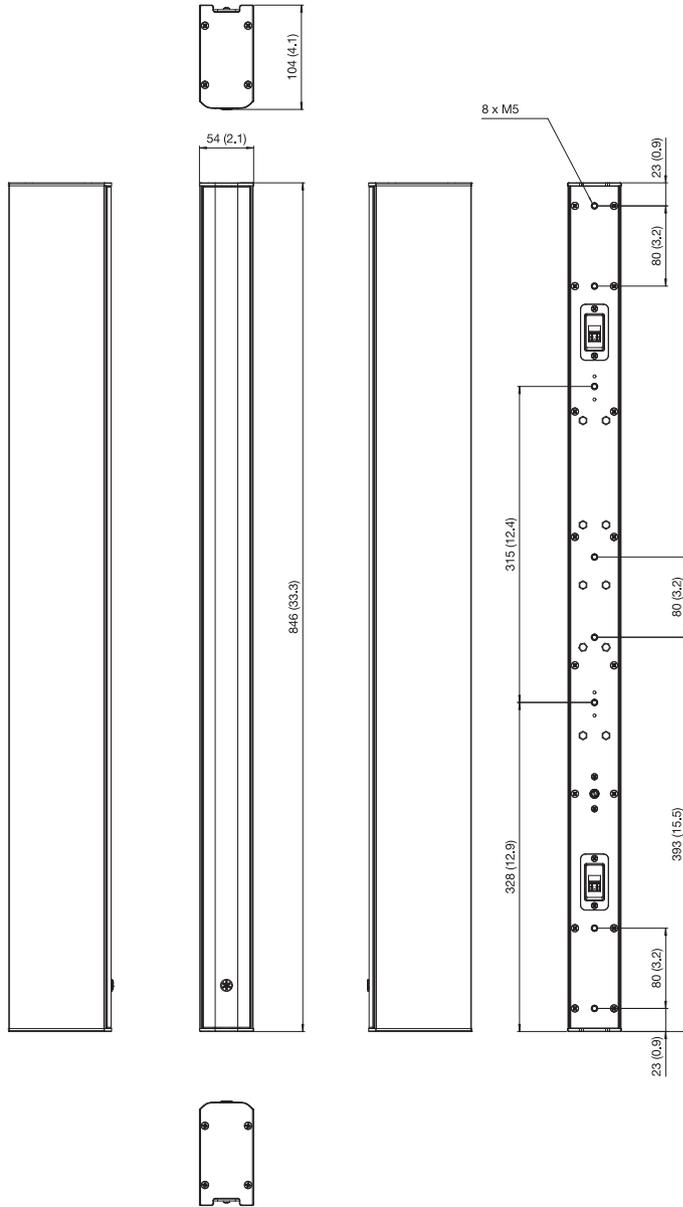
^{*0} dBu is referenced to 0.775 Vrms

Accessories

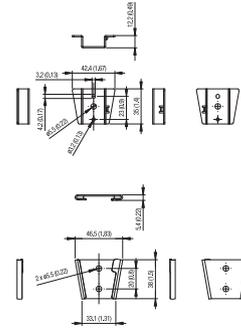
Included Accessories	Mounting Bracket x 2, Bracket Base x 2, Safety Wire x 1, Terminal Cover x 2, Port Cover x 2, Machine Screws (M5 x 10) x 2, Template x 1, Installation Guide x 1
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Dimensions

Unit: mm (inch)



Mount Bracket



Options

- Wall Mount Bracket WMB-L1B / WMB-L1W
- Vertical Coupling Bracket VCB-L1B
- Vertical Coupling Support Bracket VCSB-L1B
- Horizontal Coupling Bracket HCB-L1B
- Pole Mount Bracket PA-L1B
- Speaker Transformer ST-L1B / ST-L1W

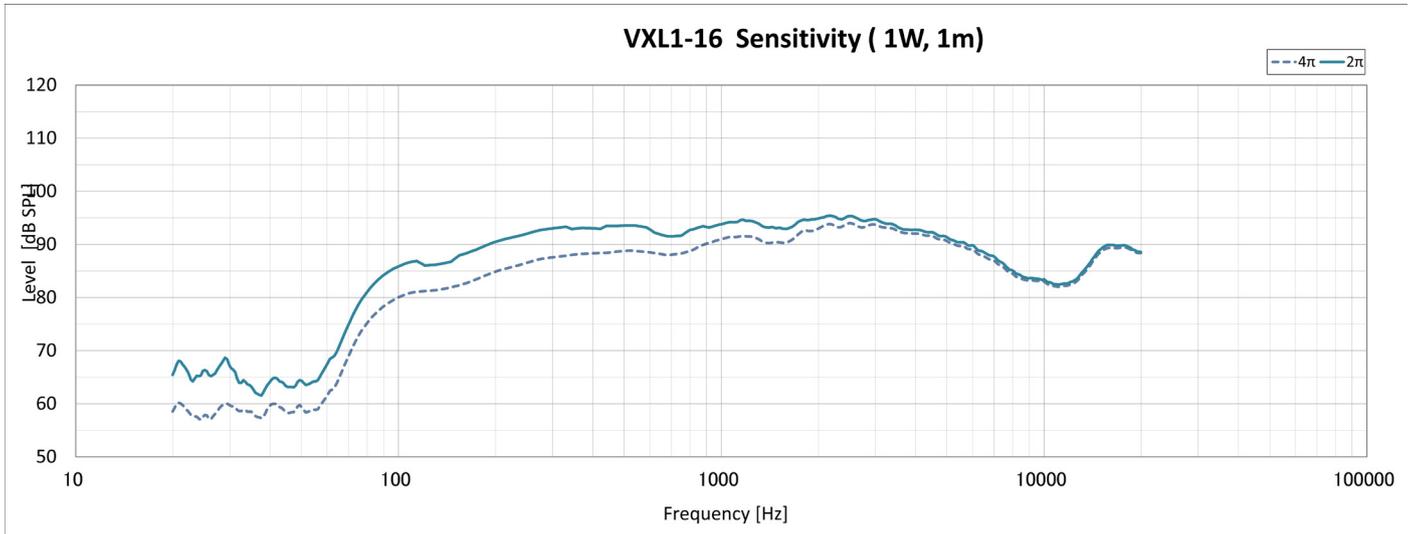
Architectural and Engineering Specifications

The Yamaha VXL1-16 shall be a full-range line-array speaker for commercial installations that require high sound quality for speech and music reproduction as well as uniform coverage over a wide service area. The VXL1-16 shall comprise sixteen full-range speaker units with 1.5" cones and neodymium magnets in a vertical line array configuration that shall be no more than 54 millimeters wide. The enclosure shall be a bass-reflex type.

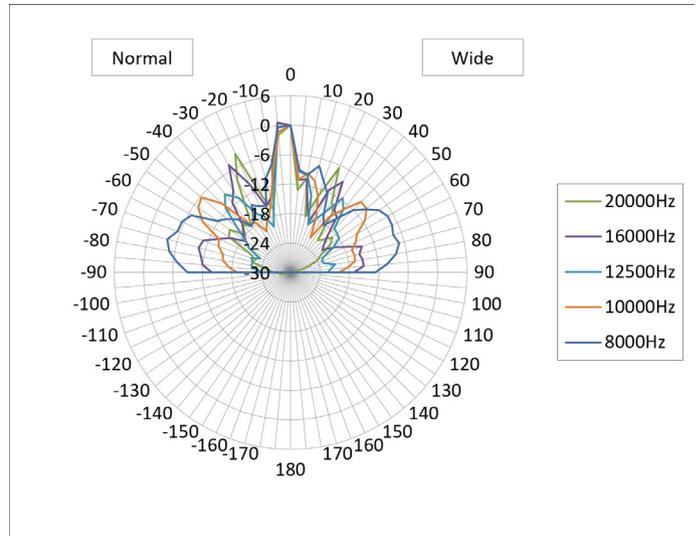
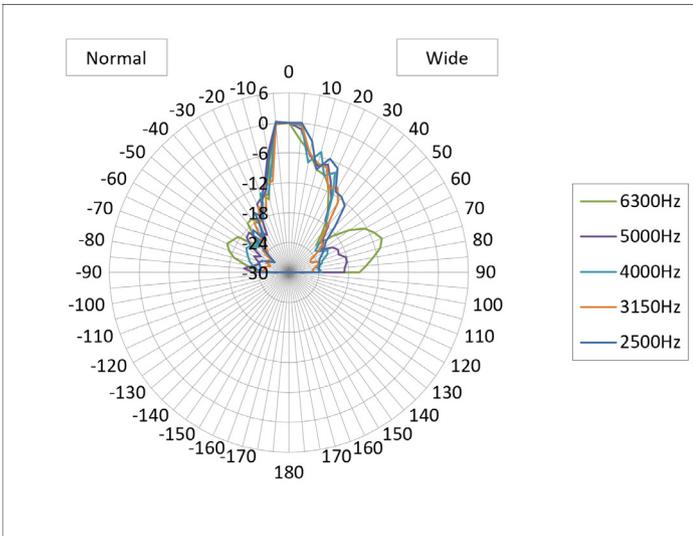
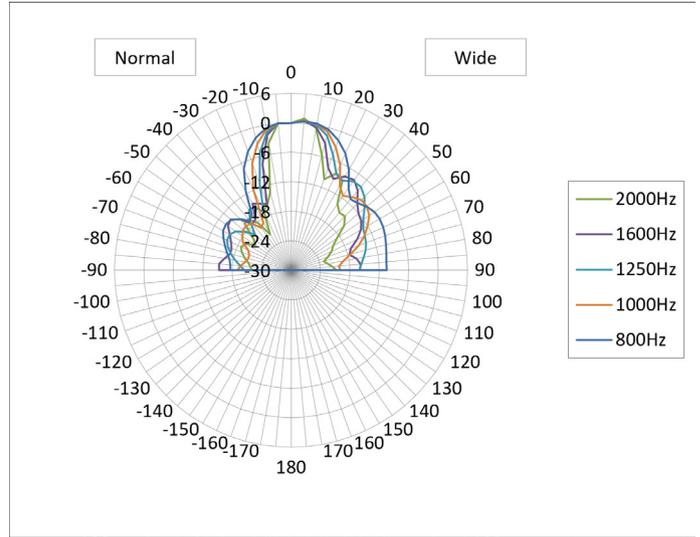
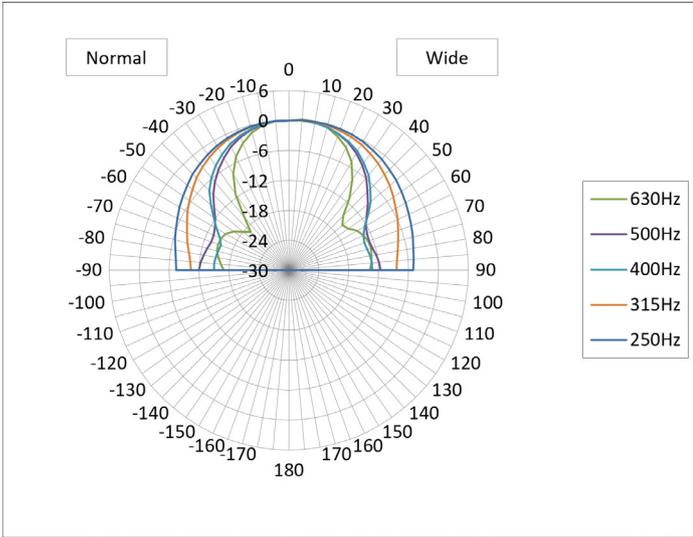
The VXL1-16 shall meet the following performance criteria: Sensitivity shall be 91 dB SPL at 1 watt/1 meter without the supplied port cover, or 90 dB SPL at 1 watt/1 meter when the port cover is attached for maximum dust and moisture resistance. Maximum SPL shall be 116 dB at 1 meter. Frequency response shall be 81 Hz to 20 kHz at 10 dB below rated sensitivity without the port cover, or 108 Hz to 20 kHz when the port cover is attached. Nominal horizontal coverage angle shall be 170°. Nominal vertical coverage angle shall be 25° when the rear-panel VERTICAL COVERAGE switch is set to NORMAL or 30° when the rear-panel VERTICAL COVERAGE switch is set to WIDE. Maximum power ratings shall be 80 watts noise, 160 watts program, and 320 watts peak. Input impedance shall be 12 ohms. Overload protection shall be provided by full-range power limiting. A 2-pin Euroblock connector shall be provided for input connection.

The VXL1-16 shall be available in basic black and white colors designated by VXL1B-16 and VXL1W-16 model numbers, respectively. The enclosures shall be painted, and can be repainted as necessary to match the installation environment. The VXL1-16 shall have a water and dust proof rating of IP34 without the supplied port cover, or IP35 when the port cover is attached. The VXL1-16 shall be supplied with a bracket for seamless wall mounting without angle adjustment. Optional brackets that allow wall mounting with angle adjustment or pole mounting shall be available. An optional transformer box that matches the design of the VXL1-16 shall be available to allow high-impedance connection. Speaker dimensions shall be 54 (W) x 846 (H) x 104 (D) mm (not including wall-mount bracket). Weight shall be 3.9 kg.

Frequency Response



Polar Plots



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