

## 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. Furthermore, IP-55 rated Weather-resistant Models (WR) are perfect for outdoor applications. 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 outdoor applications.



## Features

---

- Weather-resistant model
- IP55
- 1.5 inch (3.75 cm) full-range speaker units with neodymium magnets
- Wide horizontal dispersion for uniform SPL over a wide area
- Slim design complements any interior décor
- Available in basic black or white
- Enclosures can be painted to match surroundings
- Optional dedicated bracket for outdoor installations

## Specifications

### General Specifications

|                            |                   |                                                                                                                              |
|----------------------------|-------------------|------------------------------------------------------------------------------------------------------------------------------|
| Speaker type               |                   | Full-range, Acoustic suspension                                                                                              |
| Frequency range (-10dB)    |                   | 128 Hz – 18 kHz *1                                                                                                           |
| Nominal coverage           | H                 | 170° *2*3                                                                                                                    |
|                            | V                 | 20° (+10° – -10°) (NORMAL)                                                                                                   |
|                            |                   | 25°(+10° – -15°) (WIDE) *2*3                                                                                                 |
| Effective coverage (-10dB) | H                 | 180° *2*3                                                                                                                    |
|                            | V                 | 25° (+12.5° – -12.5°) (NORMAL)                                                                                               |
|                            |                   | 40° (+12.5° – -27.5°) (WIDE) *2*3                                                                                            |
| Components                 |                   | 1.5" (3.75 cm) Cone × 16                                                                                                     |
| Power rating               | NOISE             | 80 W                                                                                                                         |
|                            | PGM               | 160 W                                                                                                                        |
|                            | PEAK              | 320 W                                                                                                                        |
| Nominal impedance          |                   | 12 Ω                                                                                                                         |
| SPL                        | Sensitivity       | 90 dB SPL *1*4                                                                                                               |
|                            | (1W; 1m on axis)  |                                                                                                                              |
|                            | Peak (Calculated) | 115 dB SPL (1 m) *5                                                                                                          |
| I/O connectors             |                   | Euroblock (2 pin) × 2 (input: +/-) Max. wire size AWG 12 (3.3 mm <sup>2</sup> )                                              |
| Protection circuit         |                   | Load protection                                                                                                              |
| Finish                     |                   | VXL1B-16-WR: Black painting (approximate value: Munsell N3.0), VXL1W-16-WR: White painting (approximate value: Munsell N9.0) |
| Dust and water resistant   |                   | IP55                                                                                                                         |
| Packaging                  |                   | Packaged in 1 pc                                                                                                             |
| Dimensions (W x H x D)     |                   | W54 × H846 × D104 mm (Speaker only)                                                                                          |
| Net weight                 |                   | 3.9 kg (Speaker only)                                                                                                        |

\*1 Half-space (2π)

\*2 Average in 1 kHz – 4 kHz

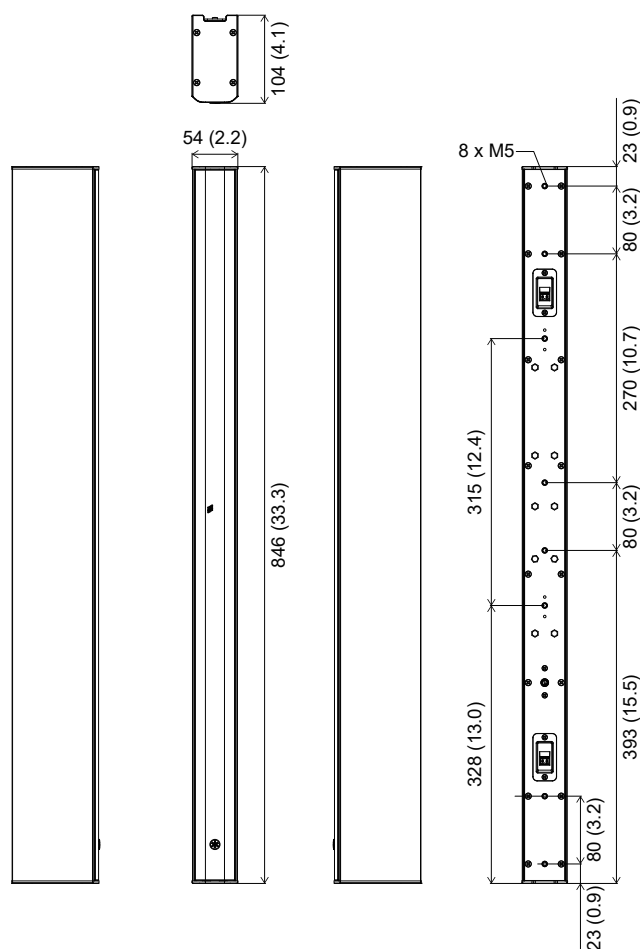
\*3 -6dB

\*4 Measured at 2 m; value converted to 1 m is shown (frequency range: 100 Hz – 10 kHz)

\*5 Calculating based on power rating and sensitivity, exclusive of power compression

## Dimensions

Unit: mm (inch)



## Options

- Speaker transformer ST-L1a
- Pole and wall mount bracket PWMB-L1B-WR/PWMB-L1W-WR

## Architectural and Engineering Specifications

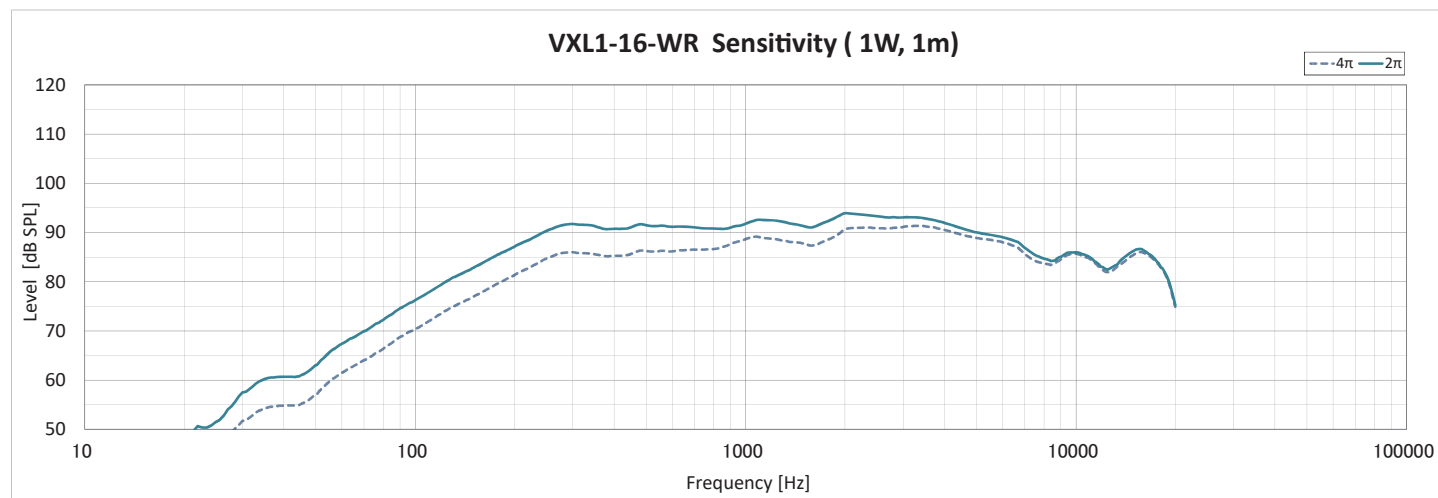
---

The Yamaha VXL1-16-WR shall be a weather-resistant version of the VXL1-16, 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-WR 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 an acoustic suspension type, with a dust and water resistance rating of IP55. The cabinet shall be made from aluminium extrusion.

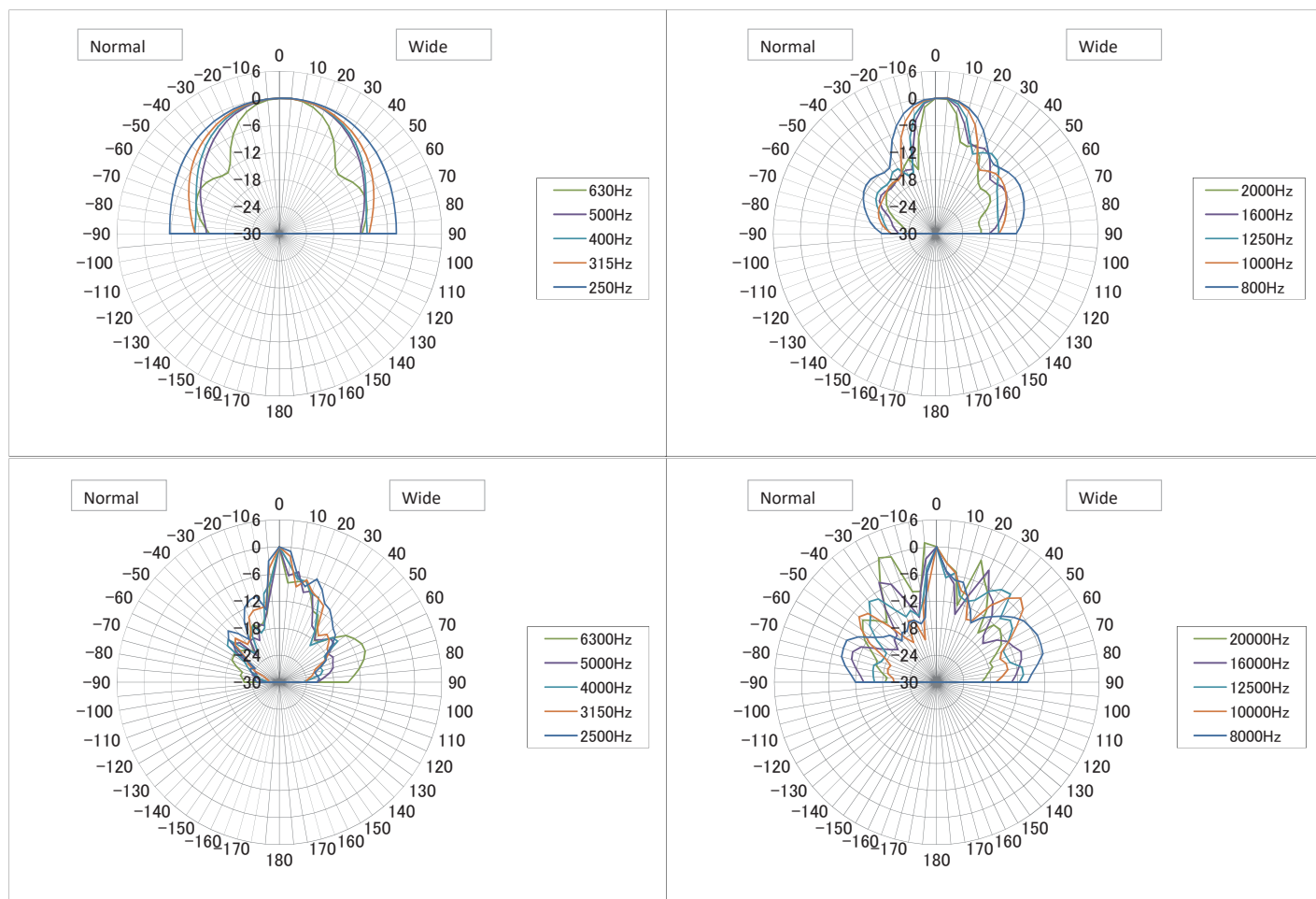
The VXL1-16-WR shall meet the following performance criteria: Sensitivity shall be 90 dB SPL at 1 watt/1 meter. Maximum SPL shall be 115 dB at 1 meter. Frequency response shall be 128 Hz to 18 kHz at 10 dB below rated sensitivity. Nominal horizontal coverage angle shall be 170°. A switch shall be mounted on the rear panel to extend the nominal vertical coverage from 20° to 25°. Maximum power ratings shall be 80 watts noise, 160 watts program, and 320 watts peak. Nominal 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-WR shall be available in basic black and white colors designated by VXL1B-16-WR and VXL1W-16-WR model names, respectively. The enclosures shall be painted, and can be repainted as necessary to match the installation environment. Optional brackets that allow wall or pole mounting with angle adjustment shall be available. An optional transformer box that matches the design of the VXL1-16-WR shall be available to allow high-impedance connection. Speaker dimensions shall be 54 (W) x 846 (H) x 104 (D) mm. Weight shall be 3.9 kg.

## Frequency Response



## Polar Plots



\*All information subject to change without notice.

\*All trademarks and registered trademarks are property of their respective owners.

Created in July, 2024

**YAMAHA CORPORATION**  
P.O.BOX 1, Hamamatsu Japan